

Boynton Health Service

UNIVERSITY OF MINNESOTA
Driven to DiscoverSM

2009 College Student Health Survey Report



Health and Health-Related Behaviors Minnesota Postsecondary Student Veterans



Minnesota
STATE COLLEGES
& UNIVERSITIES

Boynton Health Service

UNIVERSITY OF MINNESOTA

Driven to DiscoverSM

2009 College Student Health Survey Report

Health and Health-Related Behaviors Minnesota Postsecondary Student Veterans



Minnesota
STATE COLLEGES
& UNIVERSITIES

Table of Contents

Introduction	v
Survey	vii
Methodology	vii
Analysis Summary	viii
Results	1
Health Insurance and Health Care Utilization	1
Mental Health	7
Tobacco Use	15
Alcohol Use and Other Drug Use	21
Personal Safety and Financial Health	29
Nutrition and Physical Activity	37
Sexual Health	43
Implications	49
Appendices	51
Appendix 1 Colleges and Universities Participating in the 2009 College Student Health Survey	51
Appendix 2 2009 College Student Health Survey Demographics Based on Student Response	52
Glossary	53
References	55

Introduction

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

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

A: They all affect the health and academic achievement of students, including military veterans returning to college.

In August 2009, when the Post-9/11 Veterans Educational Assistance Act of 2008 took effect, more than 2 million veterans gained access to affordable college education benefits.¹ The bill's passage and subsequent influx of military veterans on college campuses present both a challenge and an opportunity for educational institutions to serve veterans in their transition from service member to student.

For educational institutions to meet the needs of student veterans, issues unique to student veterans must be identified. In spring 2009, Boynton Health Service, in partnership with Minnesota State Colleges and Universities, conducted a comprehensive survey of a randomly selected group of students attending nine colleges and universities in Minnesota and one university in the U.S. Virgin Islands. To gather information specific to veterans attending college, all veterans enrolled at and identified by the nine postsecondary institutions in Minnesota (1,293 veterans) were also invited to complete the survey. Aside from Boynton Health Service's previous report, no information about the health of veterans enrolled in postsecondary institutions has been gathered.²

This report presents the health and health-related behavior data collected from veterans attending the nine Minnesota colleges and universities that participated in the spring 2009 College Student Health Survey. Boynton Health Service and Minnesota State Colleges and Universities administrators hope the information in this report will help college and university leaders develop programs and policies addressing the unique needs of student veterans enrolled in their schools.

This report presents data collected from veterans, not Boynton Health Service's interpretation of the data. In many instances, comparison data based on the aggregate student population that also completed the 2009 College Student Health Survey is included. The general student data are included solely for comparison; the student data have been adjusted to account for the gender and age differences between the veterans and the student population. For unadjusted prevalence rates for the aggregate student population, please refer to the 2009 College Student Health Survey Report: Health and Health-related Behaviors, Minnesota Postsecondary Students.³

The information in this report highlights the health and health-related behaviors of veterans currently enrolled in a Minnesota college or university. Data presented in this report should not be extrapolated to veterans not currently enrolled in a postsecondary institution. Veterans enrolled in a college or university may be at very different points in their transition back to civilian life and therefore may have prevalence rates that are not comparable to veterans not currently enrolled in a postsecondary institution. Additional data analysis to examine whether veteran health profiles differ from those of the general student population is ongoing.

Survey

Methodology

Over 6,000 undergraduate and graduate students enrolled in nine postsecondary institutions in Minnesota and one postsecondary institution in the U.S. Virgin Islands completed the 2009 College Student Health Survey, developed by Boynton Health Service. As an incentive, all students who responded to the survey were entered into a drawing for gift certificates valued at \$3,000 (one), \$1,000 (one), and \$500 (two) at a variety of stores and drawings for six iPod touches™.

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

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

A total of 17,167 undergraduate and graduate students from nine colleges and universities in Minnesota and one university in the U.S. Virgin Islands (not included in this report) were invited to participate in the 2009 College Student Health Survey (see Appendix 1 for a list of participating schools).

In addition to the 17,167 randomly selected students, 1,293 veterans who attended one of those nine Minnesota schools were also invited to participate in the survey. The survey results for veterans will be treated as a separate report.

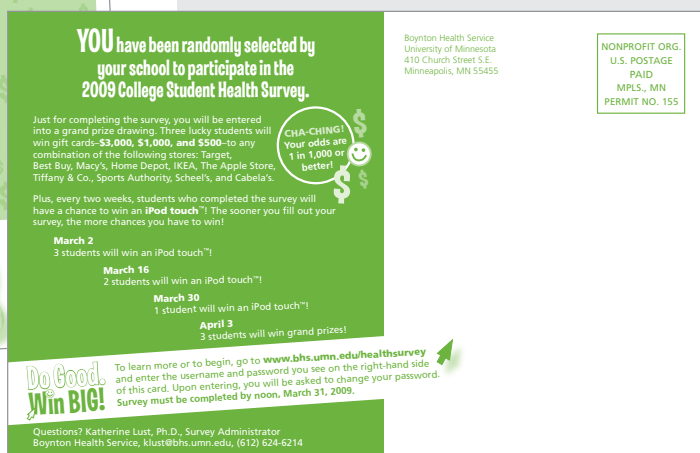
This report is based on the 1,293 identified veterans from the nine participating colleges and universities in the state of Minnesota.

General Student Population Methodology Highlights

- **16,057** students from nine Minnesota colleges and universities were randomly selected to participate in this survey. (University of the Virgin Islands students are not included in this comparison group.)
- **5,692** completed the survey.
- **35.4%** of the students responded.

Veterans Methodology Highlights

- **1,293** veterans attending nine Minnesota colleges and universities were identified to participate in this survey.
- **522** completed the survey.
- **40.4%** of the veterans responded.



2009 College Student Health Survey Postcard

Survey

Analysis Summary

This report documents the prevalence of various diseases, health conditions, and health-related behaviors across seven areas:

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

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

Prevalence is useful because it measures how common a disease, health condition, or health-related behavior is. For example, the 2009 College Student Health Survey asked students if they had ever been diagnosed with depression within their lifetime. For the purpose of this illustration, if 100 students completed the survey and 10 reported they had been diagnosed with depression within their lifetime, then the lifetime prevalence of depression among this population of students would be 10.0% (10/100).

This report presents the actual rates reported among the veterans who participated in the survey. Comparison data collected from the general student population have been adjusted to correct for the differences in age and gender between veterans and the student population. The veteran survey sample comprises approximately 26.0% females and 74.0% males, with an average age of 30.0 years. The aggregate student survey sample comprises approximately 64.0% females and 36.0% males, with an average age of 25.9 years. This adjustment creates a more accurate comparison group for viewing the veteran data.

Unadjusted prevalence rates for the student population can be found in the 2009 College Student Health Survey Report: Health and Health-related Behaviors, Minnesota Postsecondary Students.³

Results

Health Insurance and Health Care Utilization

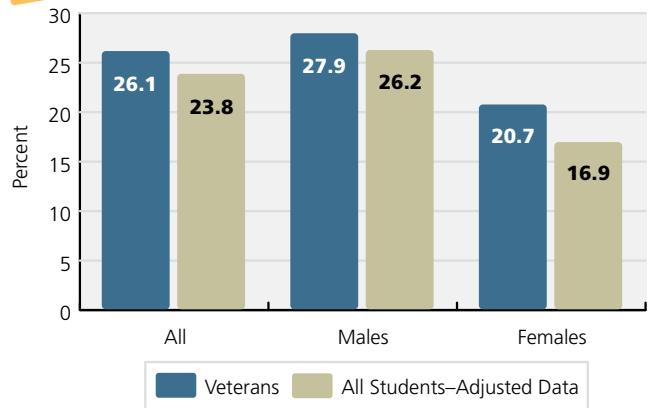
This section examines the areas of health insurance, health services utilization, and preventive care. Recent research indicates that most young adults in the United States, ages 18 to 24 years old, report good health. The majority of young adults in Minnesota (92.4%) and nationwide (90.0%) report excellent, very good, or good health.⁴ At the same time, young adults have relatively low rates of health insurance and preventive care utilization. Among individuals under age 65, 18- to 24-year-olds report the lowest rate of health insurance coverage: in Minnesota 80.9% report some kind of health care insurance, and nationwide the number is 71.4%.^{4,5} More young males (32.3%) than young females (24.9%) lack health insurance coverage.⁵ Among all age groups, young adults (71.1%) are least likely to identify a regular place for medical care.⁵

Information related to health care access among veterans is severely limited. Himmelstein published a study in 2007 documenting that in 2004, 1,768,377 United States veterans had no health insurance and were not being cared for within the Veterans Administration.⁶ According to his study, 12.7% of working-age veterans lack health coverage.⁶ Among these uninsured veterans, 51.4% had no regular source of care (compared to 8.9% of insured veterans) and 26.5% reported failing to get needed care because of the cost (compared to 4.3% of insured veterans).⁶

Veterans who completed the 2009 College Student Health Survey report an overall uninsured rate of **26.1%**, which is higher but not statistically different than the overall uninsured rate obtained from the adjusted aggregate data from all students who completed the survey (**23.8%**).

Health Insurance Status—Uninsured

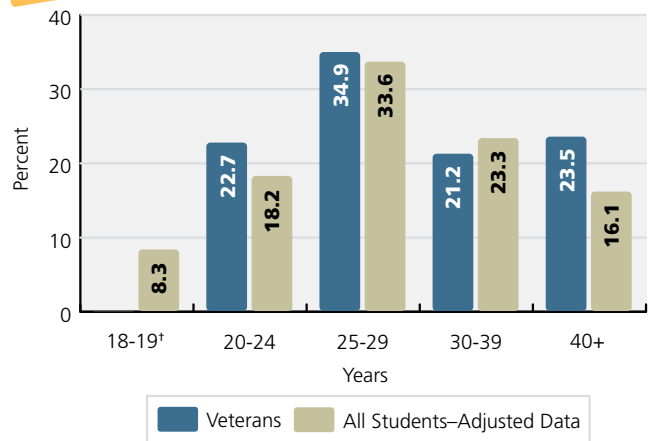
Veterans and All Students by Gender



Veterans ages 25-29 report the highest uninsured rate. The highest uninsured rate obtained from the adjusted aggregate data from all students who completed the 2009 College Student Health Survey also occurs among those ages 25-29.

Health Insurance Status—Uninsured

Veterans and All Students by Age Group



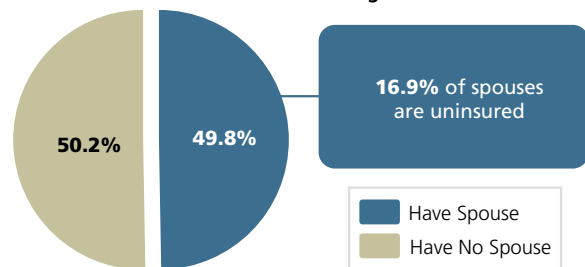
[†] Insufficient data for veterans.

Veterans who obtain health care through the Veterans Administration System may not consider themselves as having health insurance.

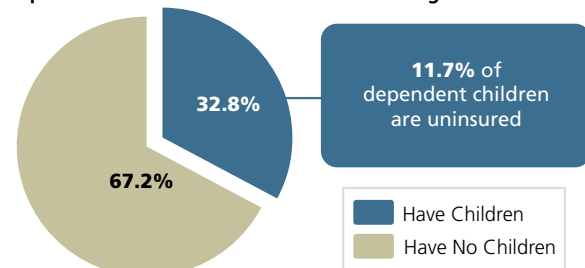
Spouse and Dependent Health Care Coverage

Veterans

Marital Status and Health Care Coverage



Dependent Children and Health Care Coverage

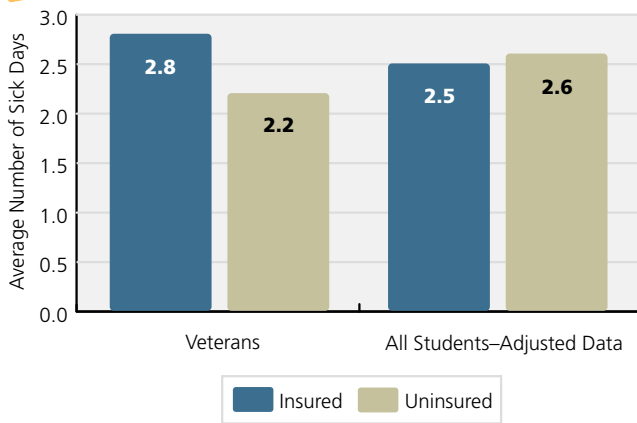


Approximately one-half (**49.8%**) of all veterans report having a spouse, and **16.9%** of these veterans report that their spouse is uninsured. The adjusted aggregate data indicate that slightly less than one-half (**47.5%**) of all students report having a spouse, and **19.9%** of these students report that their spouse is uninsured.

Approximately one-third (**32.8%**) of veterans who completed the survey report having dependent children. Of these dependent children, **11.7%** lack health insurance. In comparison, the adjusted aggregate data show that **29.7%** of all students report having dependent children, and **10.1%** of these dependent children lack health insurance.

Health Insurance and Number of Sick Days—Past 30 Days

Veterans and All Students



Number of sick days is a measure of health-related quality of life. Sick days reflect a personal sense of poor or impaired physical or mental health, or the inability to react to factors in the physical and social environments.⁷

Among veterans who completed the survey, those with health insurance report on average **0.6** more sick days in the past 30 days than those without health insurance. The adjusted aggregate survey data obtained from all students show that those with health insurance report a similar number of sick days in the past 30 days compared to those without health insurance.

Health Care Utilization by Location

Veterans (Includes Only Those Veterans Who Report Obtaining a Service in the Past 12 Months)

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

Health Care Service (Percent of veterans who obtained service)	Percent Who Report Obtaining Service at School Health Service	Percent Who Report Obtaining Service at Student Counseling Service	Percent Who Report Obtaining Service at Hospital	Percent Who Report Obtaining Service at Community Clinic	Percent Who Report Obtaining Service at HMO	Percent Who Report Obtaining Service at Private Practice
Routine Doctor's Visit (87.7)	2.0	0.2	29.9	39.7	10.0	21.2
Dental Care (83.9)	0.5	0.0	6.8	28.3	7.8	58.2
Mental Health Service (32.4)	1.8	2.4	32.0	24.3	9.5	30.2
Testing for Sexually Transmitted Infections (41.6)	3.2	0.0	27.2	40.6	8.8	20.7
Treatment for Sexually Transmitted Infections (25.5)	2.3	0.0	24.8	40.6	7.5	24.8
Testing for HIV (46.0)	2.5	0.0	30.4	34.2	7.9	25.4
Emergency Care (84.3)	0.2	0.0	86.8	7.0	4.8	3.9

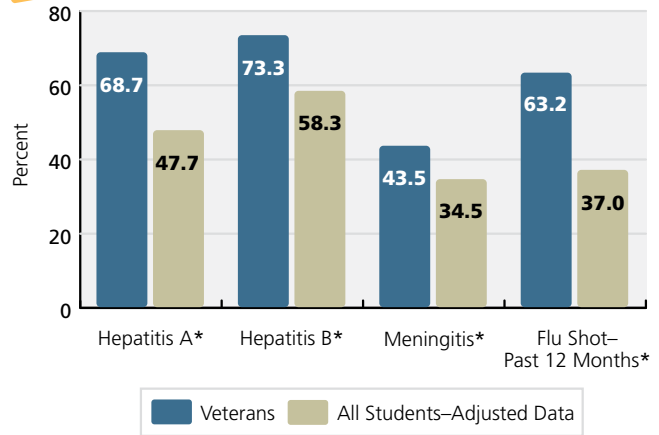
Among veterans who completed the 2009 College Student Health Survey, the primary locations for obtaining many health care services appear to be a community clinic, a private practice, and a hospital.

Examination of the adjusted aggregate data shows that the primary locations for all students to obtain many health care services are a community clinic and private practice.

Analysis of the adjusted aggregate data shows that, compared to all students who completed the 2009 College Student Health Survey, veterans who completed the survey report obtaining flu shots and immunizations for hepatitis A, hepatitis B, and meningitis at higher rates ($p < 0.0001$).

Immunization Status

Veterans and All Students



*Statistically significant.

Compared to male veterans who completed the 2009 College Student Health Survey, female veterans report more days of poor mental health. According to the adjusted aggregate data from all students, females report more days of poor physical health, more days of poor mental health, and more days when poor physical and/or mental health affected daily activities compared to males.

Average Number of Days Affected by Illness

Veterans and All Students by Gender

Illness	Average Number of Days Affected—Past 30 Days			Average Number of Days Affected—Past 30 Days		
	Males	Females	p-value	Males	Females	p-value
Poor Physical Health	3.2	4.4	ns	3.0	3.8	<0.0001
Poor Mental Health	4.6	6.2	<0.05	4.2	6.1	<0.0001
Poor Physical and/or Mental Health Affected Daily Activities	2.5	2.9	ns	2.3	3.2	<0.0001

■ Veterans ■ All Students—Adjusted Data

^{ns} Not statistically significant.

Diagnosed With Acute Condition—Lifetime and Past 12 Months

Veterans and All Students

Acute Condition	Percent Who Report Being Diagnosed Within Lifetime		p-value	Percent Who Report Being Diagnosed Within Past 12 Months		p-value
	Veterans	All Students—Adjusted Data		Veterans	All Students—Adjusted Data	
Chlamydia	6.1	4.3	ns	1.8	0.7	<0.01
Gonorrhea	1.5	1.3	ns	0.2	0.2	ns
Hepatitis A	0.2	0.8	ns	0.0	0.2	ns
Lyme Disease	1.3	1.4	ns	0.0	0.2	ns
Mononucleosis	7.3	9.0	ns	0.4	0.9	ns
Pubic Lice	3.3	2.5	ns	0.0	0.1	ns
Strep Throat	43.4	42.6	ns	5.5	5.7	ns
Syphilis	0.0	0.7	ns	0.0	0.3	ns
Urinary Tract Infection	16.2	15.4	ns	3.7	4.0	ns
Diagnosed With at Least One of the Above Acute Conditions	54.1	51.7	ns	10.5	10.5	ns

■ Veterans
 ■ All Students—Adjusted Data

ns Not statistically significant.

Diagnosed With Chronic Condition—Lifetime and Past 12 Months

Veterans and All Students

Acute Condition	Percent Who Report Being Diagnosed Within Lifetime		p-value	Percent Who Report Being Diagnosed Within Past 12 Months		p-value
	Veterans	All Students—Adjusted Data		Veterans	All Students—Adjusted Data	
Alcohol Problem	13.2	8.5	<0.001	1.6	2.2	ns
Allergies	32.2	35.7	ns	7.3	10.7	<0.05
Asthma	8.8	13.7	<0.01	2.2	2.3	ns
Cancer	1.2	2.2	ns	0.2	0.7	ns
Diabetes Type I	0.6	1.6	ns	0.4	0.6	ns
Diabetes Type II	1.5	2.1	ns	1.4	1.2	ns
Drug Problems (Other Than Alcohol)	5.6	6.1	<0.0001	1.2	1.3	ns
Genital Herpes	2.1	1.9	ns	0.8	0.7	ns
Genital Warts/Human Papilloma Virus	4.6	4.4	ns	0.4	0.9	ns
Hepatitis B	0.6	1.1	ns	0.0	0.4	ns
Hepatitis C	1.2	1.1	ns	0.8	0.6	ns
High Blood Pressure	13.1	10.8	ns	7.3	5.5	ns
High Cholesterol	13.2	10.3	<0.0001	6.9	5.5	ns
HIV/AIDS	0.2	1.1	<0.05	0.2	0.6	ns
Obesity	6.3	7.7	ns	4.7	4.6	ns
Repetitive Stress Injury	6.0	4.0	<0.05	1.6	1.3	ns
Tuberculosis	0.8	1.1	ns	0.0	0.4	ns
Diagnosed With at Least One of the Above Chronic Conditions	54.8	58.8	ns	21.3	25.4	<0.05

■ Veterans
 ■ All Students—Adjusted Data

ns Not statistically significant.

Veterans who completed the 2009 College Student Health Survey were asked to report if they have been diagnosed with selected infectious acute illnesses within the past 12 months and within their lifetime.

The acute condition diagnosed most frequently within veterans' lifetimes is strep throat. Overall, **54.1%** of veterans report being diagnosed with at least one acute condition within their lifetime, and **10.5%** report being diagnosed with at least one acute condition within the past 12 months.

The adjusted aggregate survey data obtained from all students show that **51.7%** report they have been diagnosed with at least one acute condition within their lifetime, and **10.5%** report being diagnosed with at least one acute condition within the past 12 months.

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

The most common chronic condition diagnosed in veterans who completed the 2009 College Student Health Survey is allergies. More than one-half (**54.8%**) of all veterans report being diagnosed with at least one chronic condition within their lifetime, and approximately one-fifth (**21.3%**) report being diagnosed with at least one chronic condition within the past 12 months.

The adjusted aggregate survey data obtained from all students show that **58.8%** report being diagnosed with at least one chronic condition within their lifetime, and **25.4%** report being diagnosed with at least one chronic condition within the past 12 months.

Results

Mental Health

This section examines areas related to the mental and emotional status of college and university students. Recent research shows that young adults in the United States have relatively high rates of mental health problems compared to other age groups. Based on the results of the National Comorbidity Survey Replication Study using the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders-IV criteria, 58.7% of 18- to 29-year-olds have been diagnosed with a mental disorder within their lifetime, and 43.8% of 18- to 29-year-olds have been diagnosed with a mental disorder within the previous year.⁸ Among all age groups, 18- to 25-year-olds have the highest lifetime prevalence of serious psychological distress, i.e., mental illness that results in functional impairment (17.9%), and the highest past year prevalence of major depressive episode (8.9%).⁹ More than one in ten (10.3%) young adults between the ages of 18 and 25 have received treatment for a mental health problem in the previous year.⁹

As a group, veterans may face an even greater challenge in making the adjustments necessary to succeed in college. For some veterans there may be some lingering psychological issues related to their military service, which affect their mental well-being. A recent Department of Defense Task Force report documented that among U.S. troops returning from Iraq and Afghanistan, nearly two-fifths of soldiers, one-third of Marines, and one-half of National Guard members report symptoms of psychological problems.¹⁰ Some veterans choose to struggle with their mental health issues in isolation due to concern over the stigma associated with disclosing mental health symptoms and asking for help within the military culture.¹¹ Offering resources to all students struggling with mental health problems is important, whether or not these students are veterans. However, the unique life experiences of veterans require colleges to think critically about the types of programs and services they offer and whether they meet the particular needs of veterans.

A report published in 2006 presents the results of a population-based analysis of 303,905 Army and Marine troops who completed a Post-Deployment Health Assessment between May 2003 and April 2004.¹² The report documents that 19.1% of Operation Iraqi Freedom (OIF) veterans and 11.3% of Operation Enduring Freedom (OEF) veterans reported some mental health issue (e.g., anxiety, depression, and post-traumatic stress disorder) and 9.8% of OIF veterans and 4.7% of OEF veterans reported symptoms of post-traumatic stress disorder.¹² In addition, the mental health symptoms that many soldiers experience often increase three or four months after their return.¹³

For veterans who completed the 2009 College Student Health Survey, depression, anxiety, and post-traumatic stress disorder are the most frequently reported mental health diagnoses within their lifetime. The adjusted aggregate data show that compared to all students who completed the survey, veterans have similar diagnosis rates for most mental health conditions within their lifetime. However, male and female veterans report being diagnosed with post-traumatic stress disorder within their lifetime at higher rates than all male and female students who completed the survey.

Diagnosed Mental Health Condition—Lifetime

Veterans and All Students by Gender

Mental Health Condition	Percent of Males Who Report Being Diagnosed Within Lifetime		p-value	Percent of Females Who Report Being Diagnosed Within Lifetime		p-value
	Veterans	All Students—Adjusted Data		Veterans	All Students—Adjusted Data	
Anorexia	0.5	0.4	ns	2.2	2.6	ns
Anxiety	17.4	13.6	ns	25.9	27.5	ns
Attention Deficit Disorder	9.3	10.1	ns	6.7	6.6	ns
Bipolar Disorder	2.8	1.9	ns	3.7	3.4	ns
Bulimia	0.3	0.1	ns	3.0	2.1	ns
Depression	20.5	19.9	ns	34.1	33.5	ns
Obsessive-Compulsive Disorder	1.3	2.1	ns	1.5	3.3	ns
Panic Attacks	6.0	4.7	ns	12.6	14.2	ns
Post-Traumatic Stress Disorder	13.5	2.2	<0.0001	14.1	5.3	<0.001
Seasonal Affective Disorder	2.1	1.8	ns	3.0	5.4	ns
Social Phobia/Performance Anxiety	3.9	4.3	ns	5.2	5.2	ns

■ Veterans ■ All Students—Adjusted Data

ns Not statistically significant.

The most frequently reported mental health diagnoses within the past 12 months for veterans who completed the survey are anxiety, depression, and post-traumatic stress disorder. For both males and females, veterans have similar diagnosis rates for most mental health conditions within the past 12 months compared to all students. However, male and female veterans report being diagnosed with post-traumatic stress disorder within the past 12 months at higher rates than all male and female students who completed the survey, and male veterans have a higher rate of anxiety diagnosis within the past 12 months than all male students.

Diagnosed Mental Health Condition—Past 12 Months

Veterans and All Students by Gender

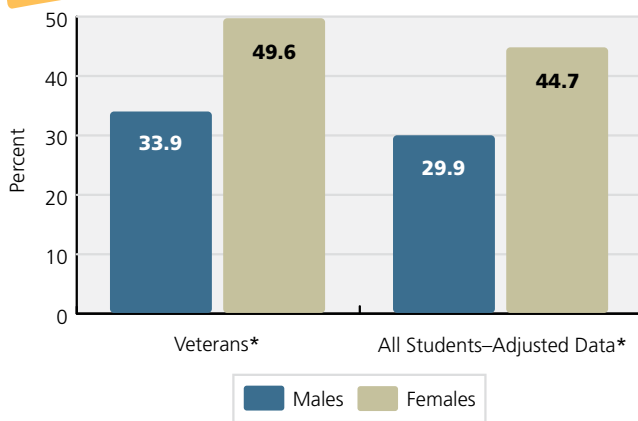
Mental Health Condition	Percent of Males Who Report Being Diagnosed Within Lifetime		p-value	Percent of Females Who Report Being Diagnosed Within Lifetime		p-value
	Veterans	All Students—Adjusted Data		Veterans	All Students—Adjusted Data	
Anorexia	0.3	0.3	ns	0.8	0.4	ns
Anxiety	9.8	6.8	<0.05	14.1	11.5	ns
Attention Deficit Disorder	1.8	2.3	ns	1.6	2.0	ns
Bipolar Disorder	0.8	0.9	ns	1.6	1.0	ns
Bulimia	0.3	0.0	ns	0.0	0.6	ns
Depression	8.7	7.5	ns	7.1	10.7	ns
Obsessive-Compulsive Disorder	0.8	0.7	ns	0.8	1.4	ns
Panic Attacks	3.2	1.7	ns	4.7	5.9	ns
Post-Traumatic Stress Disorder	8.7	1.0	<0.0001	4.7	1.8	<0.05
Seasonal Affective Disorder	0.8	1.0	ns	0.0	2.5	ns
Social Phobia/Performance Anxiety	2.6	2.3	ns	0.8	2.0	ns

■ Veterans ■ All Students—Adjusted Data

ns Not statistically significant.

Diagnosis of Any Mental Health Condition—Lifetime

Veterans and All Students by Gender

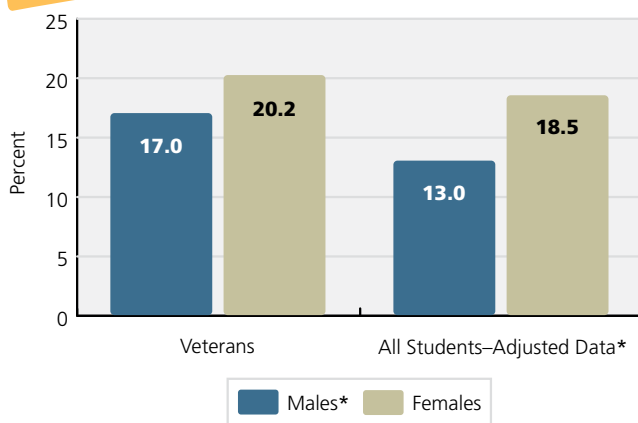


*Statistically significant.

Among all veterans, **38.0%** report being diagnosed with at least one mental health condition within their lifetime. Female veterans report a higher rate of being diagnosed with a mental health condition within their lifetime compared to male veterans ($p=0.001$). The adjusted aggregate survey data show that veterans have a higher but not statistically different rate of being diagnosed with any mental health condition within their lifetime compared to all students.

Diagnosis of Any Mental Health Condition—Past 12 Months

Veterans and All Students by Gender



*Statistically significant.

Female veterans report a higher but not significantly different rate of being diagnosed with a mental health condition within the past 12 months compared to male veterans. The adjusted aggregate data show that male veterans have a higher rate of being diagnosed with any mental health condition within the past 12 months compared to all male students who completed the 2009 College Student Health Survey ($p<0.05$).

The most commonly experienced stressors among veterans who completed the 2009 College Student Health Survey are lack of health care coverage, excessive credit card debt, and the death of someone close to them. A total of **42.5%** of veterans report experiencing one or two stressors within the past 12 months, and **29.5%** report experiencing three or more stressors over that same time period. The adjusted aggregate data from all students who completed the survey show that **41.5%** of all students report experiencing one or two stressors within the past 12 months, and **31.2%** report experiencing three or more stressors within that same time period.

Mental Health Stressors

Veterans and All Students

Stressor	Percent Who Report Experiencing Within Past 12 Months		p-value
Getting Married	5.9	4.3	ns
Failing a Class	14.8	14.1	ns
Serious Physical Illness of Someone Close to You	15.1	16.3	ns
Death of Someone Close to You	17.8	19.6	ns
Being Diagnosed With a Serious Physical Illness	4.0	3.6	ns
Being Diagnosed With a Serious Mental Illness	6.5	4.6	ns
Divorce or Separation From Your Spouse	4.8	2.6	<0.01
Termination of Personal Relationship (Not Including Marriage)	13.4	13.2	ns
Attempted Suicide	1.3	0.6	ns
Being Put on Academic Probation	7.3	9.1	ns
Excessive Credit Card Debt	19.0	19.1	ns
Excessive Debt Other Than Credit Card	16.5	18.1	ns
Being Arrested	4.8	3.0	<0.05
Being Fired or Laid Off From a Job	14.4	15.0	ns
Roommate/Housemate Conflict	14.4	15.1	ns
Parental Conflict	7.7	10.2	ns
Lack of Health Care Coverage	23.9	22.6	ns
Issues Related to Sexual Orientation	2.1	2.5	ns
Not Applicable (None of the Above Happened to Me)	26.4	25.8	ns
One or Two of the Above Stressors	42.5	41.5	<0.001
Three or More of the Above Stressors	29.5	31.2	<0.001

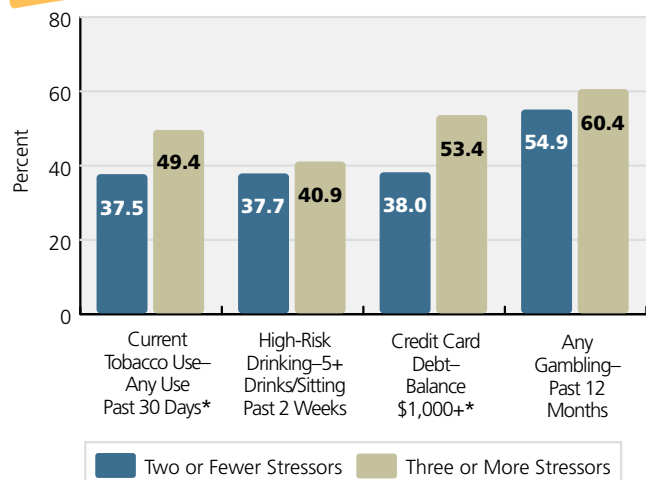
■ Veterans ■ All Students—Adjusted Data

^{ns} Not statistically significant.

Over the same 12-month period, veterans who experienced three or more stressors tend to have significantly higher rates of current tobacco use ($p < 0.05$) and credit card debt ($p < 0.01$) compared to veterans who experienced two or fewer stressors. The adjusted aggregate data obtained from all students who participated in the survey show that students who experienced three or more stressors tend to have significantly higher rates of current tobacco use, high-risk drinking, credit card debt, and gambling compared to students who experienced two or fewer stressors.

Mental Health Stressors and Risky Behavior—Past 12 Months

Veterans

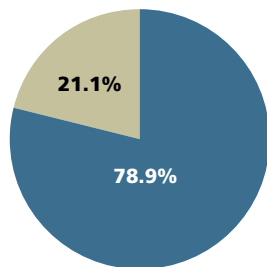


*Statistically significant.

Ability to Manage Stress—Past 12 Months

Veterans

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



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

More than one-fifth (**21.1%**) of veterans who completed the 2009 College Student Health Survey report they are unable to manage their stress level. Additional analysis shows that **17.1%** of male veterans and **32.6%** of female veterans report they are unable to manage their stress level.

The adjusted aggregate survey data show that **20.3%** of all students report they are unable to manage their stress level.

Stress and Mental Health—Acute and Chronic Condition Diagnosis

Veterans

Condition	Percent Among Veterans Who Report Being Diagnosed Within the Past 12 Months		p-value
Any Acute Condition	8.7	17.6	0.01
Any Chronic Condition	18.9	30.8	0.01
Anxiety	6.7	27.2	<0.0001
Depression	4.5	23.1	<0.0001
Obsessive-Compulsive Disorder	0.5	1.9	ns
Panic Attacks	2.0	9.8	<0.001
Social Phobia/ Performance Anxiety	1.0	6.8	<0.01

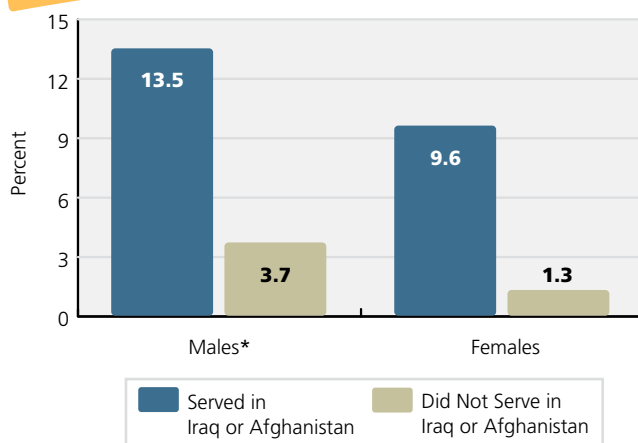
Managed Stress (Index ≤ 1) | Unmanaged Stress (Index > 1)

ns Not statistically significant.

Unmanaged stress levels are associated with rates of diagnosis for various health conditions. For example, **27.2%** of veterans with unmanaged stress levels report being diagnosed with anxiety within the past year compared to only **6.7%** of veterans with managed stress levels reporting the same diagnosis (p<0.0001). The adjusted aggregate data show the same type of relationship between ability to manage stress and various health conditions among all students.

Post-Traumatic Stress Disorder Diagnosis—Past 12 Months

Veterans by Operation Iraqi Freedom and Operation Enduring Freedom Service Status and Gender



*Statistically significant.

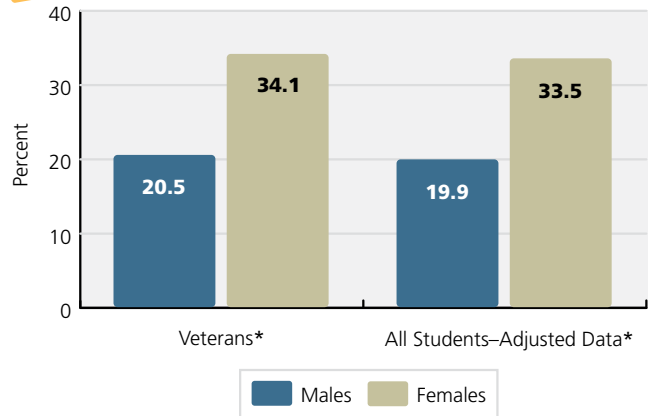
Differences in reported rates of post-traumatic stress disorder diagnosis exist among veterans. Male veterans who served in either Iraq or Afghanistan have a higher past-12-month diagnosis rate of post-traumatic stress disorder compared to males veterans who did not serve in Iraq or Afghanistan (p<0.001).

Among all veterans, **46.7%** report that they served in Iraq or Afghanistan.

Among veterans who completed the 2009 College Student Health Survey, females report being diagnosed with depression within their lifetime at a higher rate compared to males ($p < 0.01$).

Depression Diagnosis—Lifetime

Veterans and All Students by Gender

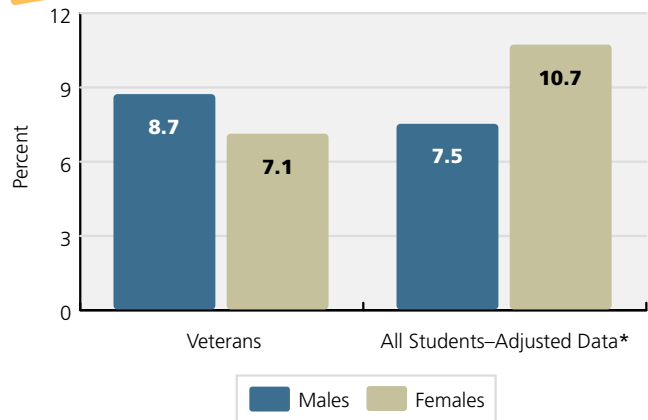


*Statistically significant.

Male veterans report being diagnosed with depression within the past 12 months at a higher but not significantly different rate than female veterans. Analysis of the adjusted aggregate data from the 2009 College Student Health Survey shows that female veterans report being diagnosed with depression within the past 12 months at a slightly lower rate than all female students.

Depression Diagnosis—Past 12 Months

Veterans and All Students by Gender

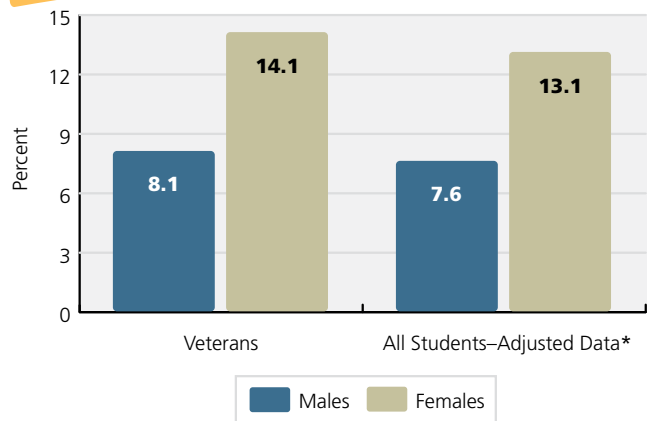


*Statistically significant.

Overall, **9.6%** of veterans who completed the 2009 College Student Health Survey report they currently are taking medication for depression. Female veterans report using medication for depression at a higher but not significantly different rate than male veterans. According to the adjusted aggregate survey data, female students report using medication for depression at a higher rate than male students ($p < 0.0001$).

Currently Taking Medication for Depression

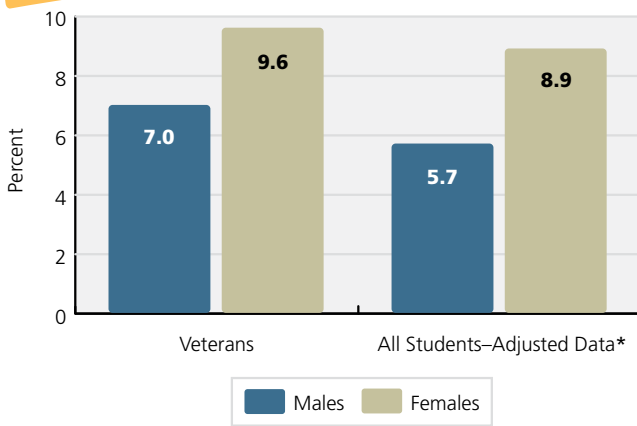
Veterans and All Students by Gender



*Statistically significant.

Currently Taking Medication for Mental Health Problems Other Than Depression

Veterans and All Students by Gender

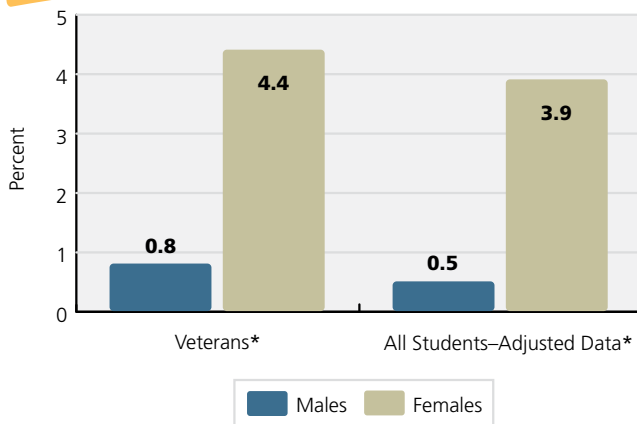


*Statistically significant.

Female veterans report a higher but not significantly different rate of medication use for mental health problems other than depression than male veterans. Overall, **7.7%** of veterans report being on medication for a mental health problem other than depression.

Eating Disorder Diagnosis—Lifetime

Veterans and All Students by Gender

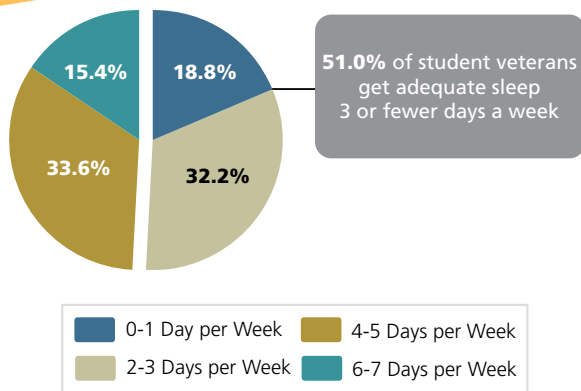


*Statistically significant.

Among veterans who completed the 2009 College Student Health Survey, **0.8%** of males compared to **4.4%** of females report being diagnosed with anorexia and/or bulimia within their lifetime ($p=0.01$). The adjusted aggregate data obtained from all students who participated in the survey show that **0.5%** of all males and **3.9%** of all females report being diagnosed with anorexia and/or bulimia within their lifetime ($p<0.0001$).

Number of Days of Adequate Sleep—Past Seven Days

Veterans

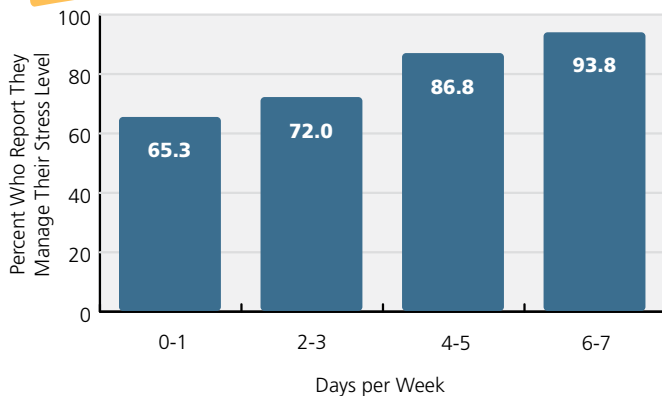


Approximately one-half (**51.0%**) of all veterans report they received enough sleep so they felt rested when they woke up in the morning on three or fewer days over the previous seven days. The adjusted aggregate data show that **50.8%** of all students who completed the 2009 College Student Health Survey report they received adequate sleep on three or fewer days over the previous seven days.

Receiving adequate sleep appears to affect veterans' ability to manage their stress level. Only **65.3%** of veterans who report receiving 0-1 day per week of adequate sleep also report the ability to manage their stress, whereas **93.8%** of veterans who report 6-7 days per week of adequate sleep also report the ability to manage their stress ($p < 0.0001$). A similar association between sleep and stress is seen in the adjusted aggregate survey data from all students.

Adequate Sleep and Stress

Veterans



Results

Tobacco Use

Recent research shows that current cigarette use by Americans of all ages peaks among young adults ages 21 to 25 at 38.5%, and 18- to 20-year-olds are not far behind at 32.7%.⁹ Approximately one in three (30.7%) full-time college students smoked cigarettes at least one time in the previous year, one in five (19.9%) smoked cigarettes at least one time in the previous 30 days, and one in ten (9.3%) smoke cigarettes daily.¹⁴ Among young adults ages 18 to 25, 5.3% used smokeless tobacco in the previous month.⁹ Current cigarette smokers are more likely to use other tobacco products, alcohol, or illicit drugs than nonsmokers.⁹ Among all current smokers, 42.5% have tried to quit and have stopped smoking for at least one day in the preceding 12 months.¹⁵ Of the 15 million college students in the United States, an estimated 1.7 million will die prematurely due to smoking-related illnesses.¹⁶ Clearly, the current level of tobacco use among college students poses a major health risk.

Several studies have documented higher rates of tobacco use among veterans compared to the civilian population. According to the Department of Veterans Affairs (VA) National Smoking and Tobacco Use Cessation Program directive, the prevalence of smokers in the VA is 22.0% compared to 20.9% in the general population.¹⁷ A National Survey on Drug Use and Health report estimates that 18.1% of veterans smoke cigarettes on a daily basis, compared to 14.3% of nonveterans.¹⁸ In a study of U.S. military personnel serving in the first Gulf War, 7.0% of respondents indicated they started smoking for the first time and 56.0% of preexisting regular smokers stated they increased consumption while deployed.¹⁹

The **current tobacco use** rate for all veterans who completed the 2009 College Student Health Survey is significantly higher than the current tobacco use rate among all students who completed the survey (**41.0%** vs. **35.5%**, respectively, $p < 0.05$). Male veterans report a significantly higher rate of current tobacco use compared to female veterans (**44.7%** vs. **30.4%**, respectively, $p < 0.01$).

Definition:

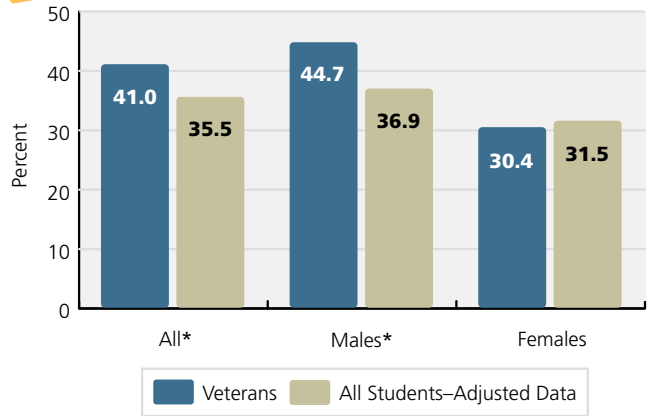
Current Tobacco Use

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

The daily tobacco use rate for all veterans who completed the 2009 College Student Health Survey is significantly higher than the daily tobacco use rate among all students who completed the survey (**21.6%** vs. **17.9%**, respectively, $p < 0.05$). The daily tobacco use rate for male veterans is higher but not significantly different than the rate for female veterans (**22.7%** vs. **18.5%**, respectively).

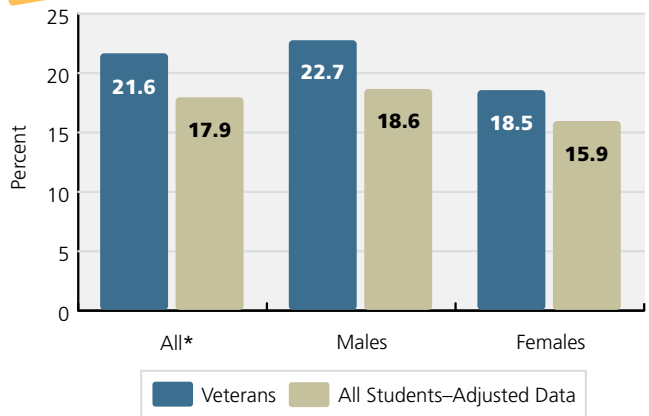
Overall, **19.4%** of male veterans report using smokeless tobacco during the past 30 days compared to **0.7%** of female veterans ($p < 0.0001$). The current smokeless tobacco use rate for all veterans who completed the 2009 College Student Health Survey is significantly higher than the current smokeless tobacco use rate among all students who completed the survey (**14.6%** vs. **8.0%**, respectively $p < 0.0001$).

Current Tobacco Use
Veterans and All Students by Gender



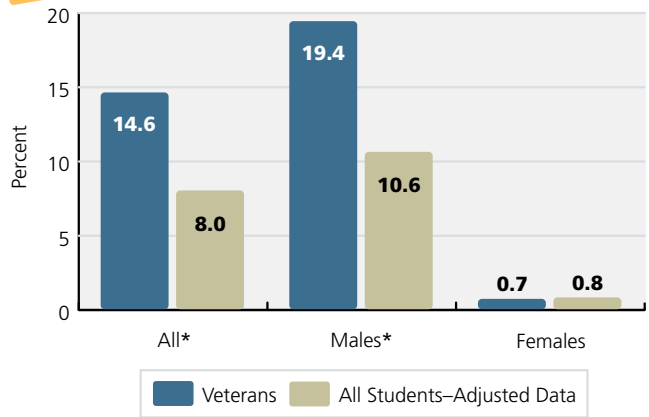
*Statistically significant.

Daily Tobacco Use
Veterans and All Students by Gender



*Statistically significant.

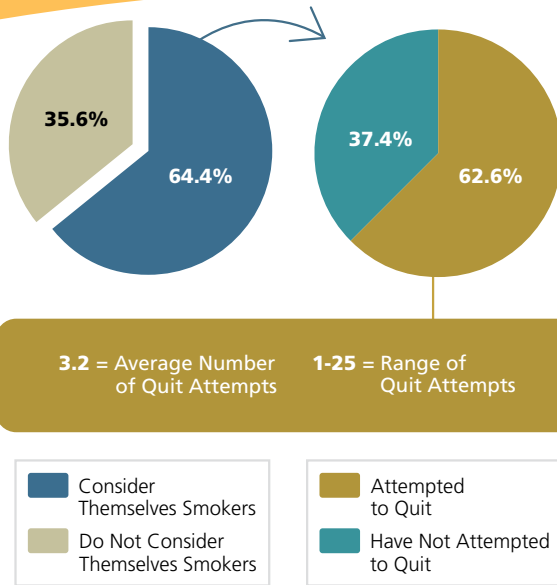
Current Smokeless Tobacco Use
Veterans and All Students by Gender



*Statistically significant.

Quit Attempts—Past 12 Months

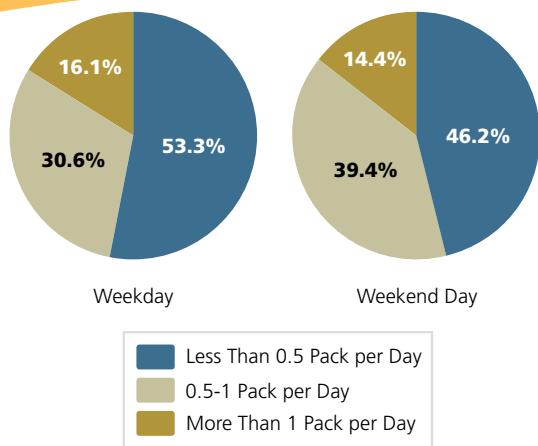
Veterans: Current Cigarette Users



Among those who report using smoking tobacco in the past 30 days, **35.6%** of veterans, compared to **35.8%** of all students who completed the survey, do not consider themselves smokers. Among those who do consider themselves smokers, **62.6%** of veterans, compared to **58.0%** of all students, made at least one attempt to quit smoking over the past 12 months. These veterans made an average of **3.2** quit attempts during that same 12-month period, while all students who consider themselves smokers made an average of **5.1** quit attempts.

Number of Cigarettes Smoked

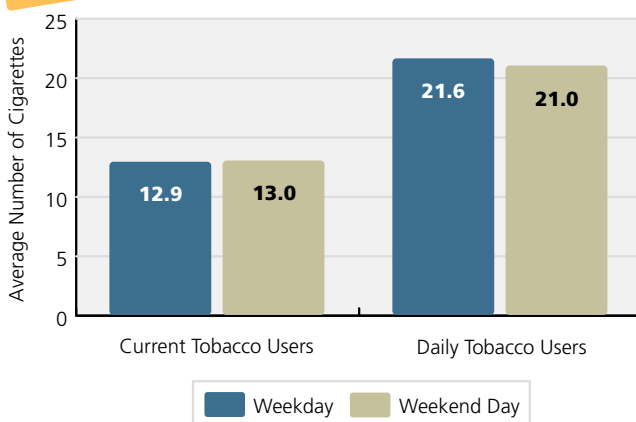
Veterans: Current Tobacco Users



Among veterans who report using tobacco over the past 30 days, the proportion who report smoking half a pack of cigarettes or more per day increases from **46.7%** on a weekday to **53.8%** on a weekend day. The adjusted aggregate survey data from all students who currently use tobacco show that the proportion of students who report they smoke half a pack of cigarettes or more per day increases from **43.9%** on a weekday to **48.9%** on a weekend day ($p < 0.01$).

Average Number of Cigarettes Smoked

Veterans: Current vs. Daily Tobacco Users



Veterans who are current tobacco users smoke similar average numbers of cigarettes per weekday and per weekend day. Veterans who are daily tobacco users also smoke similar average numbers of cigarettes per weekday and per weekend day. The adjusted aggregate survey data from all students show similar relationships for the average number of cigarettes smoked on weekdays and on weekend days for both current and daily tobacco users.

Veterans who used tobacco in the past 30 days report the most common locations of their use are in a car, where they live, at campus events, and in bars/restaurants. The most common locations obtained from the adjusted aggregate data from all students who completed the 2009 College Student Health Survey are in a car, where they live, at campus events, and at private parties.

Location of Tobacco Use

Veterans and All Students: Current Tobacco Users

Location	Percent Who Indicate Use		p-value
	Veterans	All Students-Adjusted Data	
Campus Events	60.6	54.5	ns
Bars/Restaurants	49.4	44.1	ns
In a Car	75.6	72.4	ns
Where I Live	74.4	68.0	ns
Private Party	47.8	52.2	ns
Work Site	43.9	39.4	ns
Residence Hall	3.9	6.0	ns
Fraternity/Sorority	2.8	2.6	ns
Other	26.7	28.5	ns

■ Veterans ■ All Students-Adjusted Data

ns Not statistically significant.

For veterans who are nonsmokers, "other" is the most commonly cited location for exposure to secondhand smoke. In a car is the most frequently reported location for exposure to secondhand smoke by veterans who are smokers. Approximately two in five veterans (39.8%) report never being exposed to secondhand smoke. Adjusted aggregate data from all students who completed the survey show that 39.6% report never being exposed to secondhand smoke.

Exposure to Secondhand Smoke

Veterans

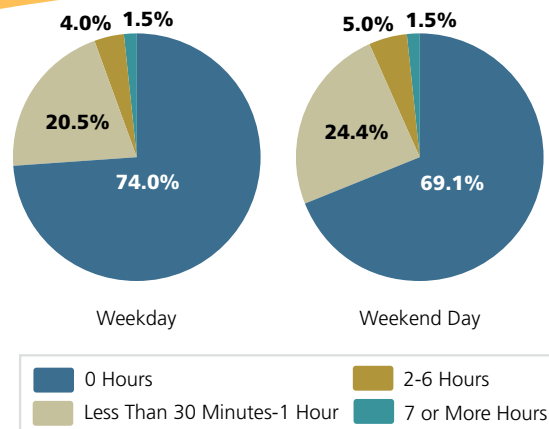
Location	Percent of Nonsmokers Who Indicate Exposure	Percent of Current Smokers Who Indicate Exposure
N/A-Never Exposed	50.3	20.0
Campus Events	6.7	6.1
Bars/Restaurants	11.7	28.3
In a Car	11.4	43.3
Where I Live	9.1	30.0
Private Party	14.9	33.9
Work Site	7.3	17.2
Residence Hall	0.3	1.1
Fraternity/Sorority	0.3	1.1
Other	17.3	22.8

For veterans who are nonsmokers, the hours of exposure to secondhand smoke increase but are not statistically different from a weekday to a weekend day (26.0% vs. 30.9%, respectively).

The adjusted aggregate data from the 2009 College Student Health Survey show that the percentage of all nonsmokers who report they were exposed to secondhand also increases from a weekday to a weekend day (26.2% vs. 29.3%, respectively, $p < 0.01$).

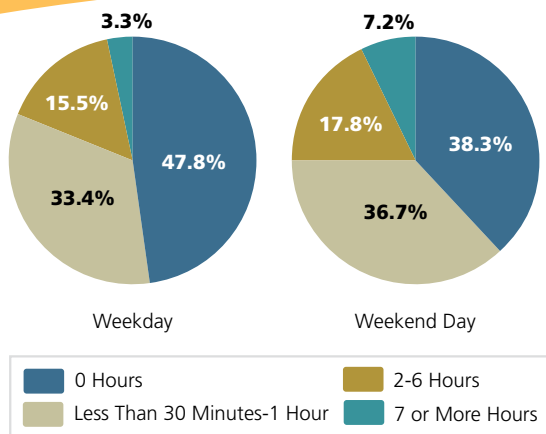
Number of Hours Exposed to Secondhand Smoke

Veterans: Nonsmokers



Number of Hours Exposed to Secondhand Smoke

Veterans: Current Smokers

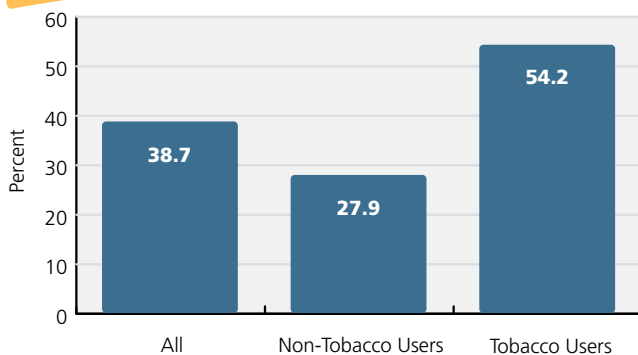


Among veterans who are current smokers, exposure to secondhand smoke increases from a weekday to a weekend day but the difference is not statistically significant (**52.2%** vs. **61.7%**, respectively).

The adjusted aggregate data from all students who completed the 2009 College Student Health Survey show a similar trend, with **56.9%** of smokers reporting exposure to secondhand smoke on a weekday and **67.4%** citing exposure on a weekend day ($p < 0.0001$).

Tobacco Use Status and High-Risk Drinking

Veterans



Veterans who use tobacco have a higher rate of *high-risk drinking* compared to veterans who are non-tobacco users (**54.2%** vs. **27.9%**, respectively, $p < 0.0001$).

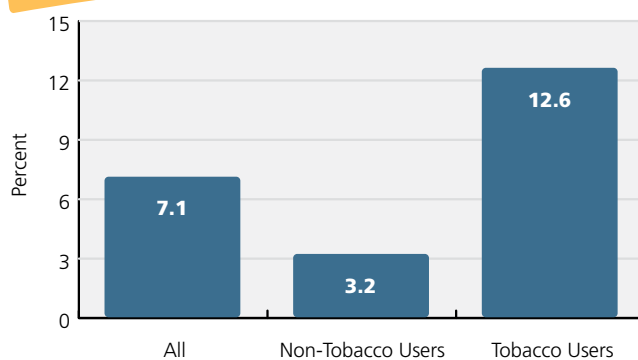
This same relationship between tobacco use and high-risk drinking is seen in the adjusted aggregate data from all students who completed the 2009 College Student Health Survey.

Definition:
High-Risk Drinking

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

Tobacco Use Status and Current Marijuana Use

Veterans



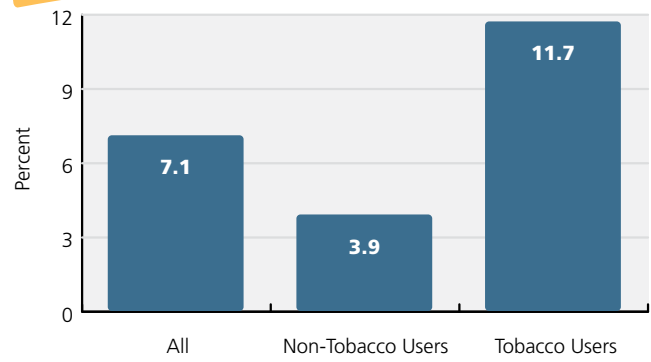
Similar to the relationship between high-risk drinking and tobacco use, the use of marijuana in the past 30 days is higher among veterans who are tobacco users (**12.6%**) compared to veterans who are non-tobacco users (**3.2%**) ($p < 0.0001$).

A similar relationship between tobacco use and current marijuana use is seen in the adjusted aggregate data from all students who completed the survey.

The use of other illegal drugs is also associated with tobacco use. Veterans who are tobacco users use illegal drugs other than marijuana at more than twice the rate of non-tobacco users (**11.7%** vs. **3.9%**, respectively, $p < 0.001$).

The relationship between tobacco use and other illegal drug use seen in the adjusted aggregate data from all students who completed the survey is similar to that seen among the veterans.

Tobacco Use Status and Other Illegal Drug Use (Not Marijuana)—Past 12 Months Veterans



Results

Alcohol Use and Other Drug Use

American college students consume alcohol and other drugs at very high rates. More than four in five (83.1%) full-time college students have consumed alcohol at least one time, and approximately two in three (66.6%) full-time college students consume alcohol monthly.¹⁴ The rate of binge drinking (consuming five or more alcoholic beverages in a row in the previous two weeks) peaks between ages 21 and 25 at 45.9% and is 35.7% among 18- to 20-year-olds.⁹ 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.⁹

Approximately one-half (50.5%) of college students have used an illicit drug at least once in their lifetime, about one-third (35.0%) have used an illicit drug at least once in the past year, and nearly one in five (19.3%) have used an illicit drug in the last month.¹⁴ Marijuana is the illicit drug of choice for college students, with nearly half (47.5%) of students having used the drug at least once in their lifetime and almost one-third (31.8%) having used it in the past year.¹⁴ Among full-time college students, 6.9% have used amphetamines, 5.4% have used cocaine, and 0.2% have used heroin in the previous year.¹⁴

The National Survey on Drug Use and Health, an annual survey sponsored by the Substance Abuse and Mental Health Services Administration, examined differences in alcohol and drug use among veterans and nonveterans in two separate reports released in November 2005. The rates of alcohol and marijuana use were higher among veterans compared to nonveterans. The report estimated a past-month alcohol use rate among veterans of 56.6%, compared to a rate of 50.8% among nonveterans, with 22.6% of veterans also reporting they consumed five or more drinks at one sitting over that same time period and 21.6% of nonveterans reporting having engaged in that same type of behavior.¹⁸ The second report, which highlighted the use of marijuana and other illicit drugs, estimated the rates of marijuana use within the past 30 days to be 3.5% among veterans and 3.0% among nonveterans. The use of illicit drugs within the past 30 days was slightly lower among veterans than among nonveterans (1.7% vs. 1.9%, respectively).²⁰

The rates for any use of alcohol in the past 12 months are similar for male and female veterans who completed the 2009 College Student Health Survey (**84.5%** vs. **83.7%**, respectively).

The rate for any use of alcohol within the past year is significantly higher among veterans (**84.3%**) compared to the adjusted aggregate data from all students who completed the survey (**79.2%**) ($p < 0.01$).

Definition:
Past-12-Month Alcohol Use

Any alcohol use within the past year.

Among veterans who completed the 2009 College Student Health Survey, the rate for use of alcohol in the past 30 days is higher but not significantly different for males compared to females (**75.5%** vs. **68.9%**, respectively). Analysis of the adjusted aggregate data shows that veterans report a higher rate of alcohol use within the past 30 days compared to all students who completed the survey (**73.8%** vs. **68.7%**, respectively, $p < 0.05$).

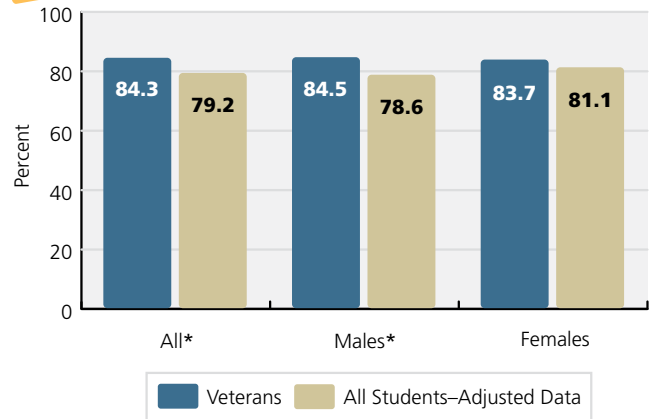
Definition:
Current Alcohol Use

Any alcohol use within the past 30 days.

Male veterans who completed the 2009 College Student Health Survey consume more than three times the number of drinks per week than female veterans consume (**6.3** vs. **2.0**, respectively, $p < 0.0001$).

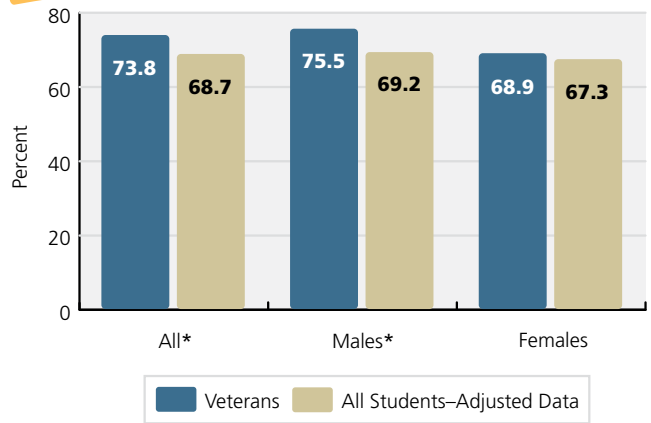
Analysis of the adjusted aggregate data shows that male veterans report consuming a higher average number of drinks per week compared to all males who completed the survey (**6.3** vs. **5.4**, respectively, $p < 0.0001$). However, female veterans report consuming a lower average number of drinks per week compared to all females who completed the survey (**2.0** vs. **2.9**, respectively, $p < 0.0001$).

Alcohol Use—Past 12 Months
Veterans and All Students by Gender



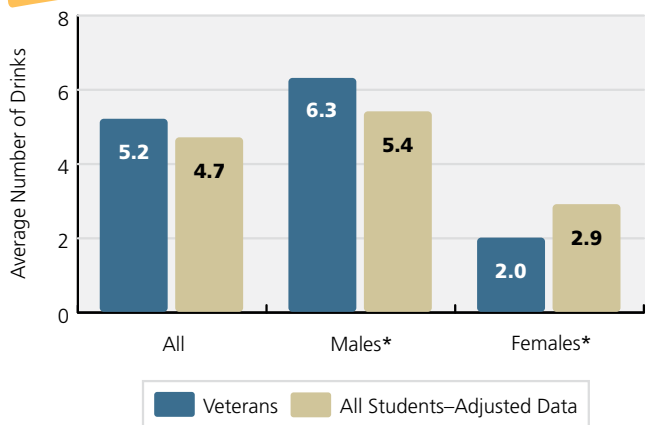
*Statistically significant.

Current Alcohol Use
Veterans and All Students by Gender



*Statistically significant.

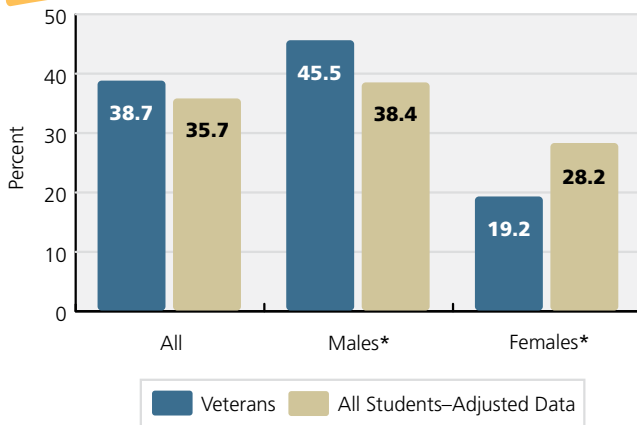
Average Number of Drinks per Week
Veterans and All Students by Gender



*Statistically significant.

High-Risk Drinking

Veterans and All Students by Gender



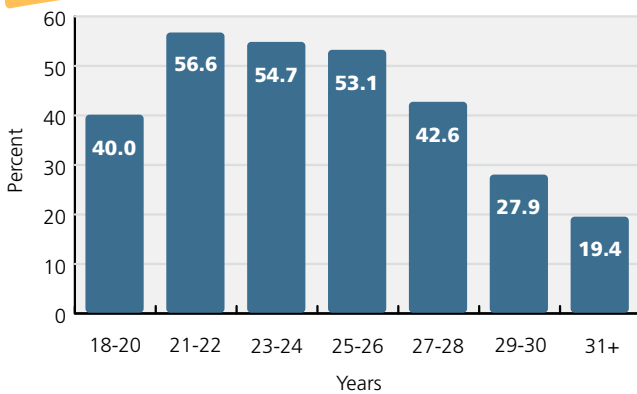
*Statistically significant.

Male veterans report a higher rate of high-risk drinking compared to female veterans (**45.5%** vs. **19.2%**, respectively, $p < 0.0001$). Among all students who completed the 2009 College Student Health Survey, males report a higher rate of high-risk drinking compared to females ($p < 0.0001$).

Analysis of the adjusted aggregate data shows that male veterans report a higher high-risk drinking rate compared to all males who completed the survey (**45.5%** vs. **38.4%**, respectively, $p < 0.01$). However, female veterans report a lower high-risk drinking rate compared to all females who completed the survey (**19.2%** vs. **28.2%**, respectively, $p < 0.05$).

High-Risk Drinking

Veterans by Age Group



Among veterans who completed the 2009 College Student Health Survey, the peak years for engaging in high-risk drinking are between ages 21 and 26. Among all students who completed the survey, the peak years for engaging in high-risk drinking are also between ages 21 and 26.

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.

Blood Alcohol Content

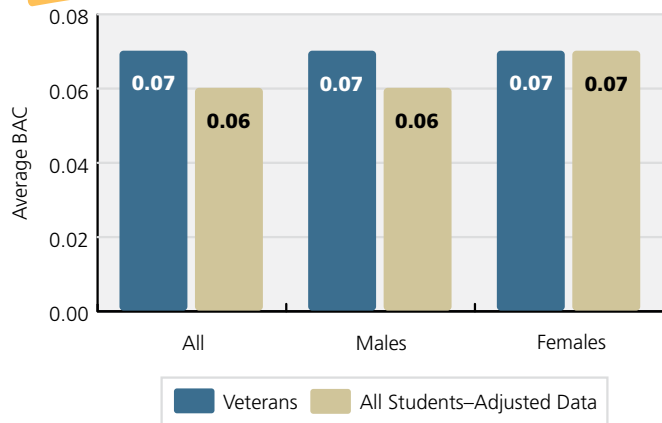
Blood alcohol content (BAC) measures the percentage of alcohol in a person's blood. The calculation of BAC is based on a simple formula that takes into account the following factors:

- 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 average estimated blood alcohol content for both male and female veterans who completed the 2009 College Student Health Survey, based on the last time they partied/socialized, is **0.07**.

For both males and females, the average estimated BAC levels obtained from the adjusted aggregate data from all students who completed the survey are similar to those reported by the veterans.

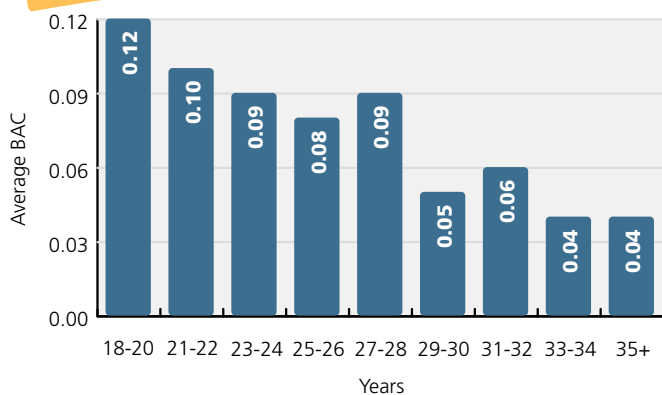
Average Estimated Blood Alcohol Content Veterans and All Students by Gender



The average estimated BAC levels for veterans range from **0.04** to **0.12**. Veterans ages 18-24 and 27-28 all report estimated BAC levels that exceed the legal driving limit of 0.08 for individuals of legal drinking age.

The adjusted aggregate data from all students who completed the 2009 College Student Health Survey show that the average estimated BAC level ranges from **0.04** to **0.09**.

Blood Alcohol Content Veterans by Age Group



Negative Consequences of Alcohol/Drug Use

Veterans and All Students

Negative Consequences Due to Alcohol/Drug Use	Percent Who Report Experiencing Within Past 12 Months		p-value
	Veterans	All Students—Adjusted Data	
Had a Hangover	59.4	53.6	<0.05
Performed Poorly on a Test or Important Project	17.6	19.7	ns
Been in Trouble with Police, Residence Hall, or Other College Authorities	5.6	6.0	ns
Damaged Property, Pulled Fire Alarms, etc.	0.8	1.8	ns
Got Into an Argument or Fight	19.2	18.1	ns
Got Nauseated or Vomited	32.6	31.4	ns
Driven a Car While Under the Influence	21.8	19.2	ns
Missed a Class	20.5	20.5	ns
Been Criticized by Someone I Know	19.0	19.9	ns
Thought I Might Have a Drinking or Other Drug Problem	7.9	10.0	ns
Had a Memory Loss	17.2	18.4	ns
Done Something I Later Regretted	9.6	22.5	ns
Been Arrested for DWI/DUI	2.1	1.6	ns
Have Been Taken Advantage of Sexually	2.9	2.2	ns
Have Taken Advantage of Another Sexually	0.8	0.6	ns
Tried Unsuccessfully to Stop Using	3.6	4.3	ns
Seriously Thought About Suicide	3.3	3.3	ns
Seriously Tried to Commit Suicide	0.4	0.6	ns
Been Hurt or Injured	7.5	7.9	ns

■ Veterans
 ■ All Students—Adjusted Data

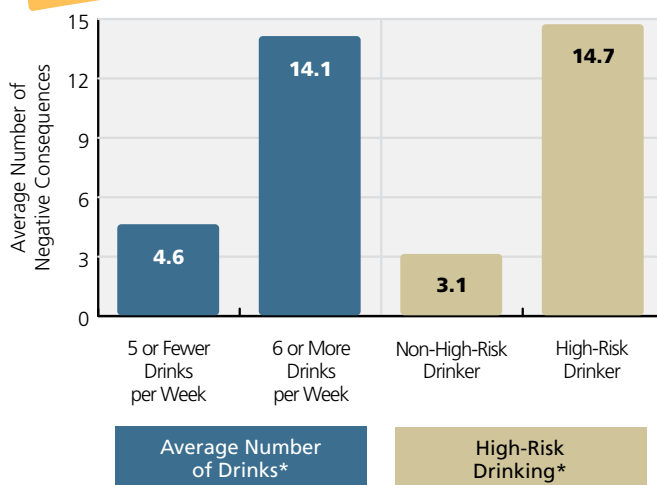
ns Not statistically significant.

More than one-fifth (**21.8%**) of all veterans report having driven a car while under the influence of alcohol or drugs. Among all veterans, **20.5%** report missing a class and **17.6%** report performing poorly on a test or project as a result of alcohol/drug use.

For the majority of the reported negative consequences, the difference in rates between veterans and the adjusted student data is not statistically significant.

Average Number of Negative Consequences

Veterans by Average Number of Drinks and High-Risk Drinking



*Statistically significant.

A strong association exists between the average number of drinks veterans consumed per week and the total number of reported negative consequences they experienced over the past 12 months ($p < 0.0001$). An association also exists between engaging in high-risk drinking within the past two weeks and reported negative consequences ($p < 0.0001$).

The adjusted aggregate survey data from all students show the same relationships between average number of drinks consumed per week, engagement in high-risk drinking, and reported negative consequences.

The rates for the negative consequences identified are generally two to four times higher among veterans who have engaged in high-risk drinking compared to veterans who have not engaged in high-risk drinking. Approximately two out of five (**41.6%**) veterans who have engaged in high-risk drinking have driven while intoxicated one or more times in the past 12 months.

Similar results are seen in the adjusted aggregate data from the 2009 College Student Health Survey, with **40.4%** of all students who engage in high-risk drinking behavior also reporting they have driven while intoxicated within the past 12 months.

Veterans 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, **58.8%** of all veterans report they would be “very likely” to call for emergency assistance.

According to the adjusted aggregate survey data, **61.8%** of all students report they would be “very likely” to call for emergency assistance if they found someone passed out due to alcohol/drug use.

The rate for any marijuana use within the past 12 months is **12.3%** for all veterans who completed the 2009 College Student Health Survey. This rate is lower than the *past-12-month marijuana use* rate reported among all students in the adjusted aggregate data ($p < 0.0001$).

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

High-Risk Drinking and Selected Consequences[†] Veterans

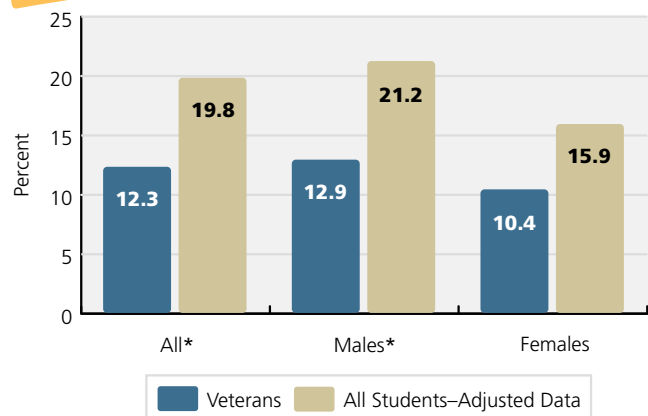
Negative Consequences	Percent of All Veterans	Percent Among Non-HRD Veterans	Percent Among HRD Veterans
Driven While Intoxicated	21.8	9.4	41.6
Argument	19.2	10.6	32.7
Poor Test/Project	17.6	10.0	29.7
Missed Class	20.5	11.0	34.2
Been Taken Advantage of Sexually (includes Males and Females)	2.9	1.9	4.5

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

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

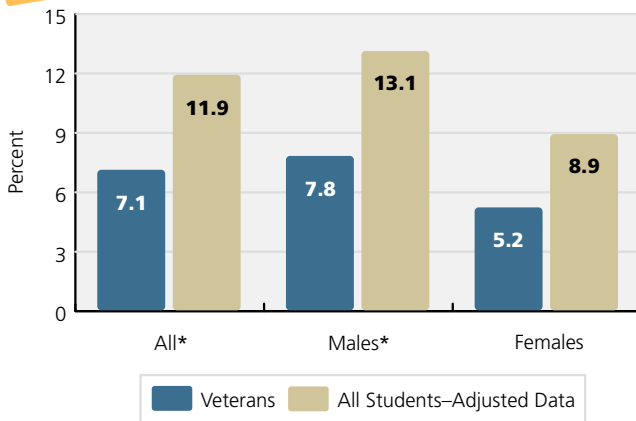
Response	Percent of All Veterans	Percent Among Veterans Who Did Not Use Alcohol Within the Past 30 Days	Percent Among Veterans Who Did Use Alcohol Within the Past 30 Days
Very Likely	58.8	75.9	52.7
Somewhat Likely	23.4	13.1	27.0
Somewhat Unlikely	12.3	8.0	13.8
Very Unlikely	5.5	3.0	6.5

Marijuana Use—Past 12 Months Veterans and All Students by Gender



*Statistically significant.

Current Marijuana Use Veterans and All Students by Gender



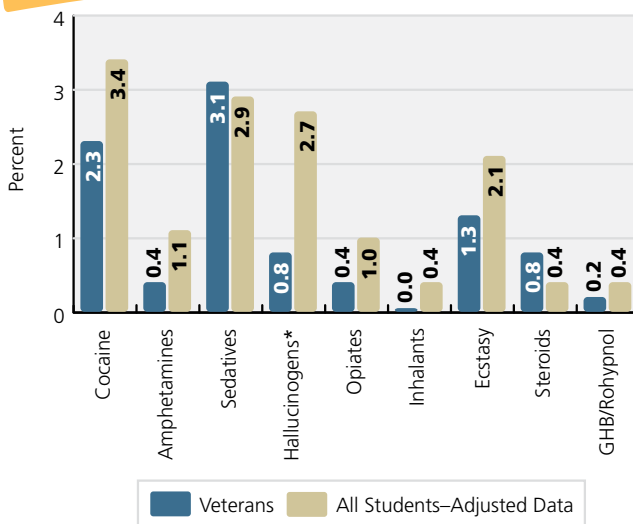
*Statistically significant.

The *current marijuana use* rate is lower among veterans compared to the rate obtained from the adjusted aggregate data from all students who completed the 2009 College Student Health Survey (**7.1%** vs. **11.9%**, respectively, $p < 0.001$).

Definition:
Current Marijuana Use

Any marijuana use within the past 30 days.

Selected Drug Use—Past 12 Months Veterans and All Students



*Statistically significant.

The illicit drugs most commonly used by veterans are sedatives (**3.1%**), cocaine (**2.3%**), and ecstasy (**1.3%**). Among veterans, **7.1%** report having used at least one of the nine listed illicit drugs. In addition, **5.4%** of veterans report using another person's prescription drugs.

Veterans have lower rates of using all other drugs except sedatives compared to all students in the adjusted aggregate survey data. Among all students, **8.4%** report having used at least one of the listed illicit drugs within the past 12 months.

Results

Personal Safety and Financial Health

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.²¹ 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.²²

According to the 2006 Gender Relations Survey of Active Duty Members, 6.8% of female active-duty members and 1.8% of male active-duty members reported experiencing unwanted sexual contact.²³ Of the active-duty members who indicated experiencing unwanted sexual contact, 16.0% of women and 16.0% of men sought professional help and 21.0% of woman and 22.0% of men discussed the incident with an authority or organization but the majority (79.0% of women and 78.0% of men) chose not to report it.²³

Financial health is another area of concern. More than four in five (83.0%) college students in the United States have at least one credit card, and nearly one half (47.0%) have four or more credit cards.²⁴ The average credit card debt per U.S. college student is \$2,327.²⁴ Unfortunately, research and statistics related to credit card use and credit card debt among veterans are lacking.

Gambling represents one possible obstacle to achieving and maintaining financial health. Gambling is a form of entertainment for many people. Approximately 68.0% of the U.S. adult population has gambled legally within the past year, and more than two-fifths (41.9%) of college students report participating in some type of gambling activity in the previous school year.^{25,26} However, for some individuals, gambling becomes a problem. Nationally, between 1.6% and 3.4% of the general population may experience a gambling problem within their lifetime.²⁷ The rates of problem gambling are even higher among veterans of a similar age, especially among veterans being treated for post-traumatic stress disorder.²⁷

Based on data from the 2009 College Student Health Survey, female veterans report experiencing sexual assault within their lifetime at a higher rate than male veterans (**34.8%** vs. **9.0%**, respectively, $p < 0.0001$).

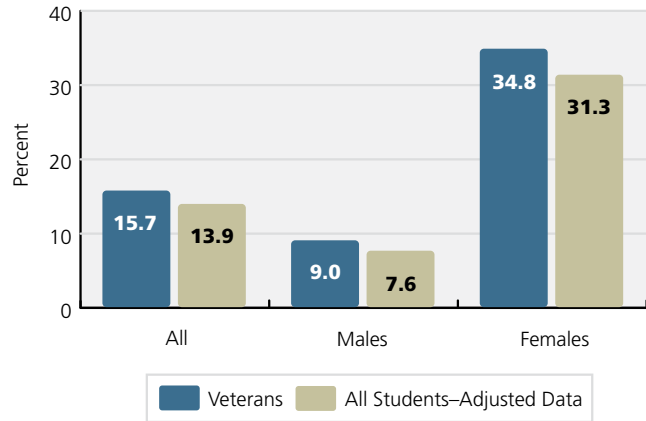
Sexual Assault—Lifetime

Veterans and All Students by Gender

Sexual assault is defined as answering yes to at least one of the following two questions:

Within your lifetime, 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?



The past-12-month rate for experiencing a sexual assault is higher but not significantly different among female veterans compared to male veterans (**4.6%** vs. **1.9%**, respectively).

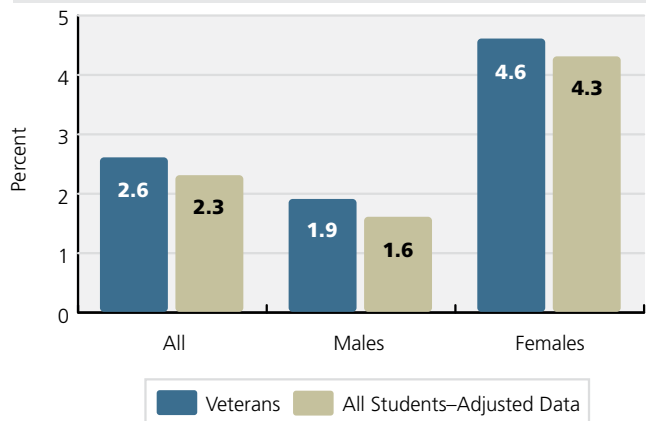
Sexual Assault—Past 12 Months

Veterans and All Students by Gender

Sexual assault is defined as answering yes to at least one of the following two questions:

Within the past 12 months, have you:

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



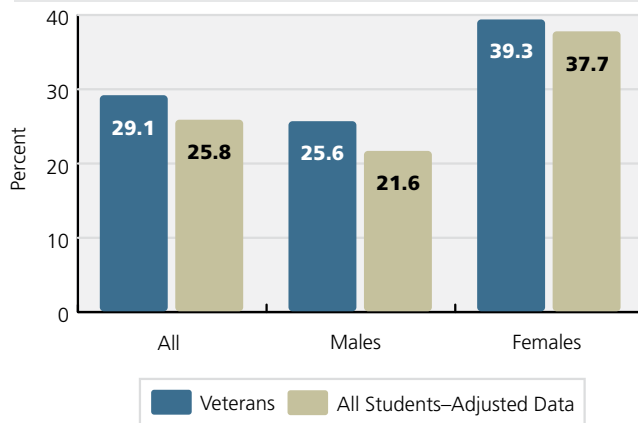
Domestic Violence—Lifetime

Veterans and All Students by Gender

Domestic violence is defined as answering yes to at least one of the following two questions:

Within your lifetime, 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?



Based on data from the 2009 College Student Health Survey, female veterans report experiencing domestic violence within their lifetime at a higher rate than male veterans (**39.3%** vs. **25.6%**, respectively, $p < 0.01$).

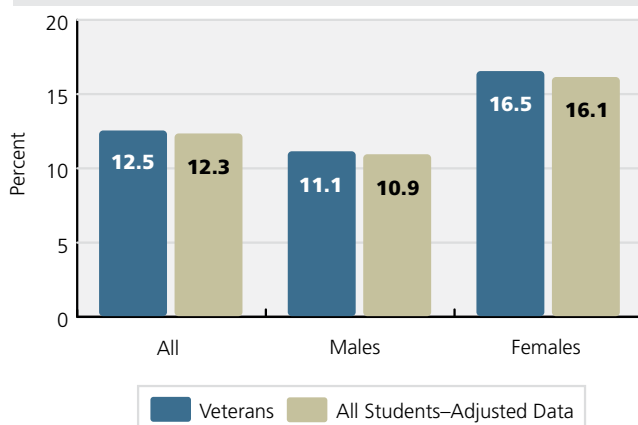
Domestic Violence—Past 12 Months

Veterans and All Students by Gender

Domestic violence is defined as answering yes to at least one of the following two questions:

Within 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?

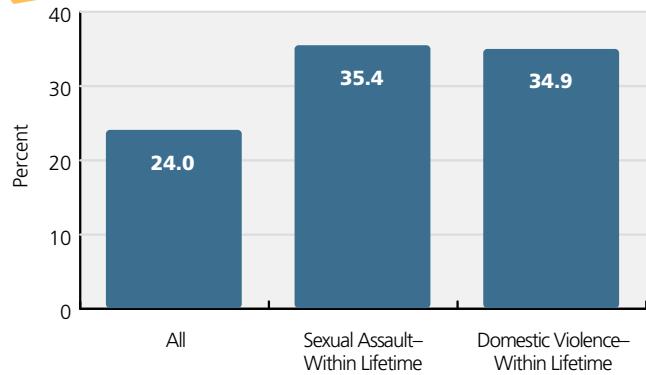


The past-12-month rate for experiencing a domestic violence is higher but not significantly different among female veterans compared to male veterans (**16.5%** vs. **11.1%**, respectively). Analysis of the adjusted aggregate data shows that for both males and females, veterans and all students who completed the survey report experiencing domestic violence within the past 12 months at similar rates.

The rates of depression diagnosis within their lifetime are higher for both veterans who report being victims of sexual assault (**35.4%**) and veterans who report being victims of domestic violence (**34.9%**) than for all veterans (**24.0%**). This same relationship between experiencing sexual assault or domestic violence and depression diagnosis is seen in the adjusted aggregate data from all students who completed the 2009 College Student Health Survey data.

Depression Rates—Lifetime

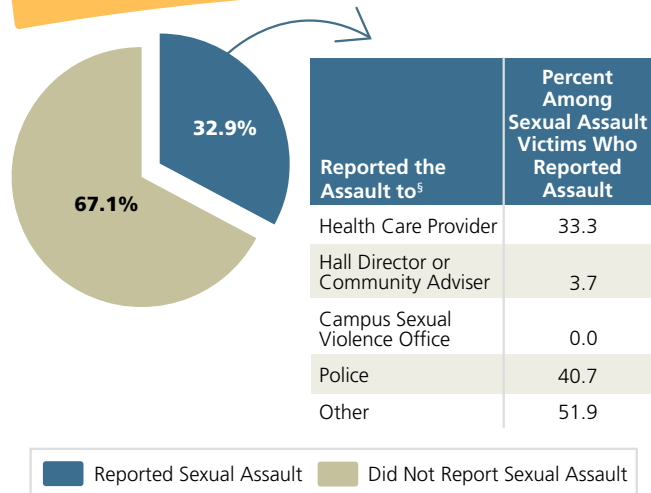
Veterans by Sexual Assault/Domestic Violence



Of the veterans who indicate they have experienced a sexual assault within their lifetime (15.7%), only **32.9%** state they reported the incident. Of the veterans who reported the incident, **40.7%** reported it to the police and **33.3%** reported it to a health care provider.

Sexual Assault Reporting by Victims—Lifetime

Veterans: Sexual Assault Victims



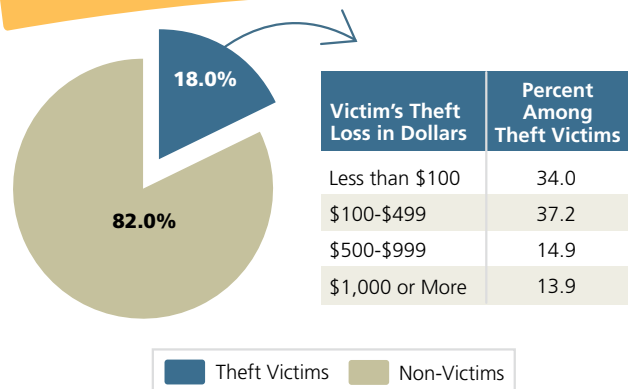
[§] Note: Veterans may have reported incident to individuals in more than one category.

According to the adjusted aggregate survey data, among all students who report they have experienced a sexual assault within their lifetime (13.9%), only **31.1%** indicate they reported the incident.

More than one in six (**18.0%**) veterans who completed the 2009 College Student Health Survey report being a theft victim within the past 12 months. Of those who report experiencing a theft, **71.2%** cite the amount of the theft was \$499 or less.

Victim of Theft—Past 12 Months

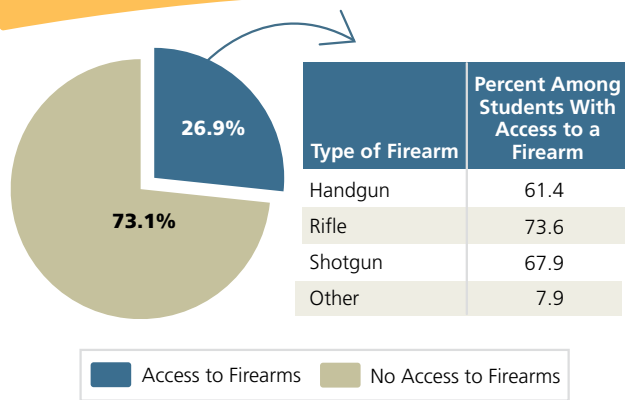
All Students



According to the adjusted aggregate survey data, **16.4%** of all students indicate they were theft victims within the past 12 months.

Access to Firearms

All Students



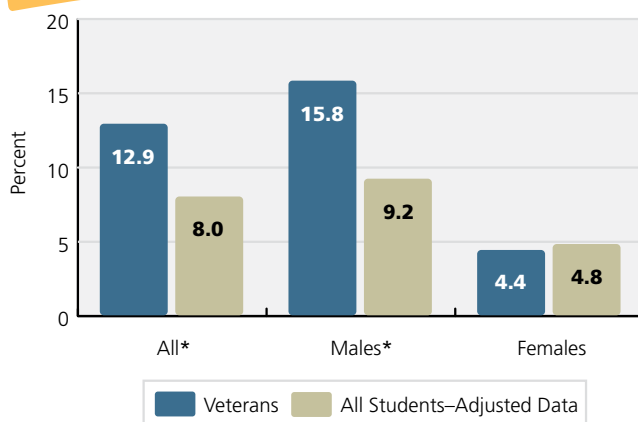
More than one-fourth (**26.9%**) of veterans report they have immediate access to a firearm, **28.8%** for males and **21.5%** for females.

The adjusted aggregate survey data show that **16.9%** of all students report having immediate access to a firearm.

Among those who report having access to a firearm, veterans report a higher rate of access to a handgun compared to all students who completed the survey (**61.4%** vs. **42.6%**, respectively, $p < 0.0001$).

Physical Fight—Past 12 Months

Veterans and All Students by Gender



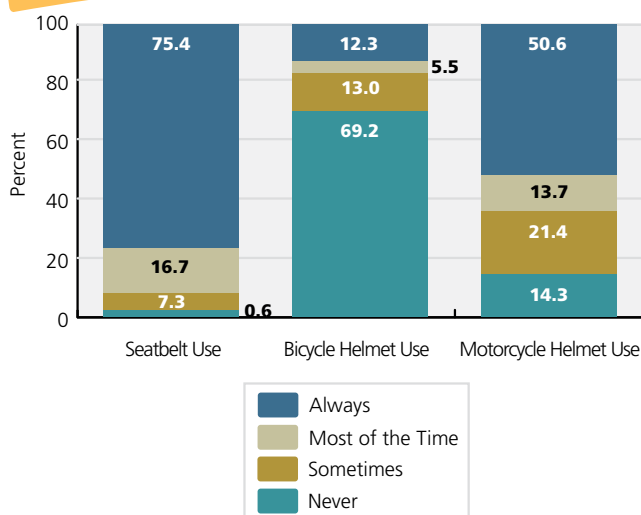
*Statistically significant.

Male veterans are more likely to report having engaged in a physical fight over the past 12 months than female veterans (**15.8%** vs. **4.4%**, respectively, $p < 0.001$).

The rate of engaging in a physical fight within the past 12 months is higher among veterans than among all students in the adjusted aggregate survey data (**12.9%** vs. **8.0%**, respectively, $p < 0.001$).

Helmet and Seatbelt Use—Past 12 Months

Veterans



Among veterans who rode in a car, **92.1%** report wearing a seatbelt always or most of the time while in the car. Only approximately two-thirds (**64.3%**) of veterans who rode a motorcycle report they wear a helmet always or most of the time while on the motorcycle.

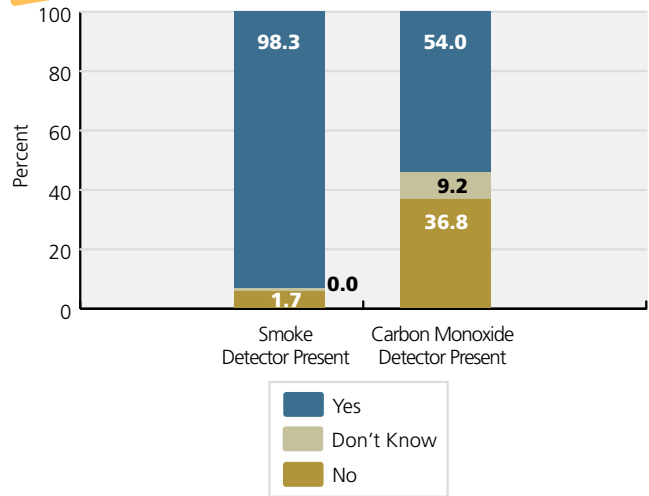
According to the adjusted aggregate survey data, **90.5%** of all students report wearing a seatbelt always or most of the time while in a car.

Nearly all (**98.3%**) veterans who completed the 2009 College Student Health Survey report having a smoke detector in their place of residence, whereas only **54.0%** of veterans report having a carbon monoxide detector.

According to the adjusted aggregate survey data, **97.4%** of all students report having a smoke detector in their place of residence, and **53.9%** of all students report having a carbon monoxide detector.

Smoke Detector and Carbon Monoxide Detector Present in Residence

All Students



More than two-thirds (**36.8%**) of veterans report experiencing at least one injury over the past 12 months. The injuries most commonly reported during this period are due to falls and miscellaneous causes.

Analysis of the adjusted aggregate data from the 2009 College Student Health Survey indicates that **37.5%** of all students report experiencing at least one injury over the past 12 months.

Injuries Sustained—Past 12 Months

Veterans

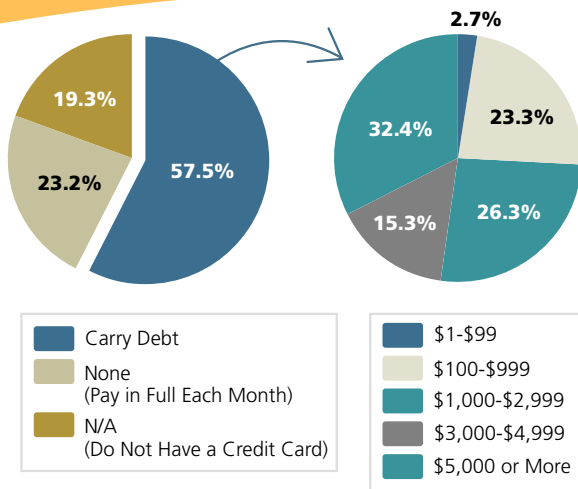
Type of Injury	Percent Who Report Experiencing Within Past 12 Months		p-value
Assaulted by Another Person (Nonsexual)	3.8	2.7	ns
Burned by Fire or a Hot Substance	7.1	6.6	ns
Motor Vehicle Related	3.4	3.2	ns
Team Sports	4.4	7.4	0.01
Individual Sports	6.7	6.2	ns
Bicycle Related	2.5	2.3	ns
In-line Skating	0.8	0.7	ns
Skate Boarding	0.2	0.9	ns
Falls	10.9	11.5	ns
Other	15.3	13.6	ns
Not Applicable—I Was Not Injured	63.2	62.5	ns

Legend: Veterans (Dark Blue), All Students—Adjusted Data (Light Blue)

^{ns} Not statistically significant.

Current Credit Card Debt

Veterans



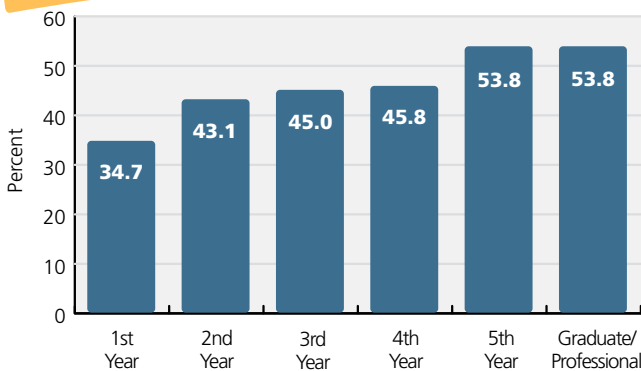
Almost three-fifths (**57.5%**) of all veterans report carrying some level of credit card debt over the past month, which is a rate similar to that found in the adjusted aggregate survey data among all students (**53.4%**). Among those who report carrying some monthly credit card debt, veterans report a higher but not significantly different rate of carrying a debt of \$1,000 per month or more compared to all students (**74.0%** vs. **72.3%**, respectively).

Definition:
Current Credit Card Debt

Any unpaid balance at the end of the past month.

High Credit Card Debt and Class Status

Veterans



The rate of *high credit card debt* for veterans who completed the 2009 College Student Health Survey increases from **34.7%** among first-year students to **53.8%** among fifth-year students and graduate/professional students.

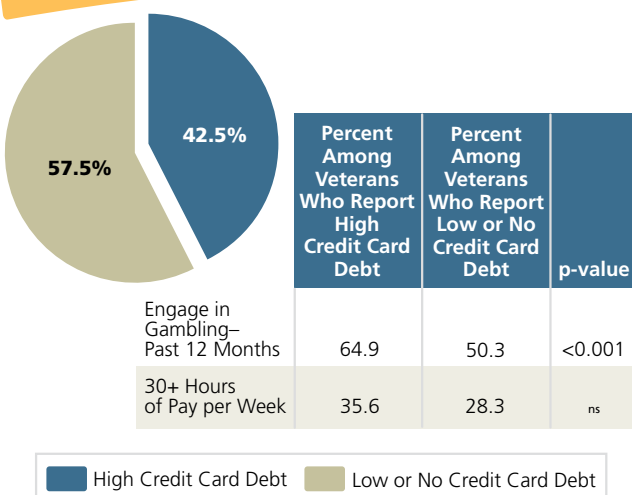
The adjusted aggregate data from all students who completed the survey shows that the rate of high credit card debt ranges from **35.5%** among first-year students to **44.1%** among fifth-year students.

Definition:
High Credit Card Debt

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

Impact of High Credit Card Debt

All Students



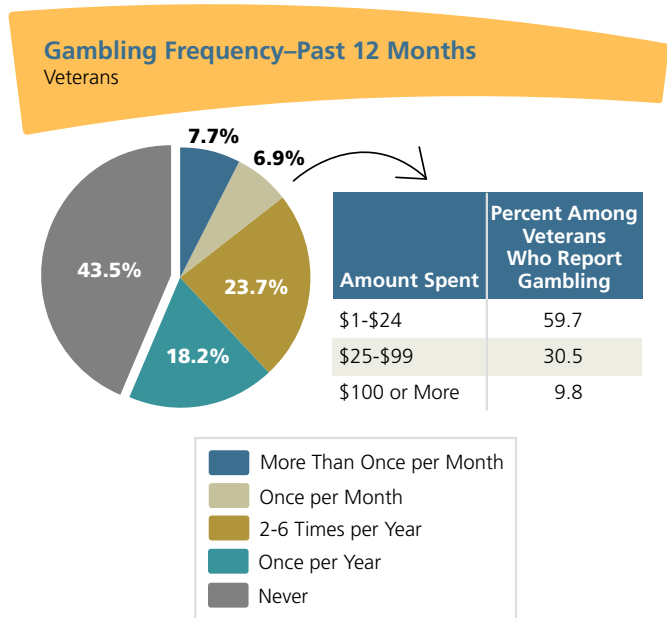
Veterans who carry high credit card debt have a higher rate of engaging in gambling than veterans who carry no or low credit card debt.

According to the adjusted aggregate data, students who carry no or low credit card debt report lower rates of engaging in gambling and fewer hours worked for pay per week.

^{ns} Not statistically significant.

More than one-half (**56.5%**) of veterans who completed the 2009 College Student Health Survey report engaging in gambling over the past 12 months. According to the adjusted aggregate survey data, veterans report engaging in gambling over the past 12 months at a higher rate than all students who completed the survey (**56.5%** vs. **50.5%**, respectively, $p < 0.01$).

Among those who report gambling within the past 12 months, **9.8%** of veterans, compared to **8.7%** of all students who completed the survey, report spending \$100 or more per month.



Results

Nutrition and Physical Activity

Research shows that young adults in the United States generally eat fewer fruits and vegetables but are more physically active compared to older adults.^{4,28} 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.²⁸ Fewer young adults (20.9%) than all adults (27.2%) eat vegetables three or more times per day.²⁸ Young adults between the ages of 18 and 27 report consuming breakfast an average of 3.1 days per week and consuming fast food an average of 2.5 days per week.²⁹ The rate of obesity among young adults ages 18 to 29 is 19.1%.³⁰

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%.⁴ 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%.⁴ Young adults 18 to 24 (40.0%) also are more likely to engage in at least 20 minutes of vigorous physical activity three or more days per week than all adults (27.4%).⁴

According to data from the 2003 and 2004 Behavioral Risk Factor Surveillance System surveys, 28.3% of veterans had a body mass index (BMI) that placed them in the normal weight category, 23.9% were obese, and 47.6% were overweight. After adjustment for age, gender, race, education, and smoking status, obesity prevalence in veterans and nonveterans was similar.³¹ Only 37.4% of overweight veterans and 65.5% of obese veterans reported they were trying to lose weight.³¹ When adjusted for age, gender, diabetes, personal doctor status, the rates for trying to lose weight were similar among veterans and nonveterans.³¹

Among those who completed the 2003 Behavioral Risk Factor Surveillance System survey, when adjusted for age and gender, more veterans than nonveterans reported 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 (46.0% vs. 42.0%, $p < 0.001$).³²

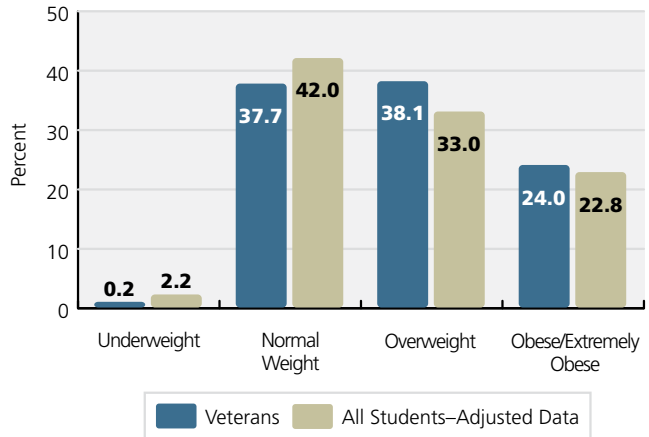
Body mass index (BMI) is a common and reliable indicator of body fatness.³³ BMI equals weight in kilograms divided by height in meters squared (BMI = kg/m²). This table presents weight categories based on BMI ranges.

More than three-fifths (**62.1%**) of all veterans who completed the 2009 College Student Health Survey fall within the overweight and obese/extremely obese categories compared to **55.8%** of all students who completed the survey (p<0.01). Calculated BMI is based on self-reported height and weight.

BMI Category

Veterans and 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

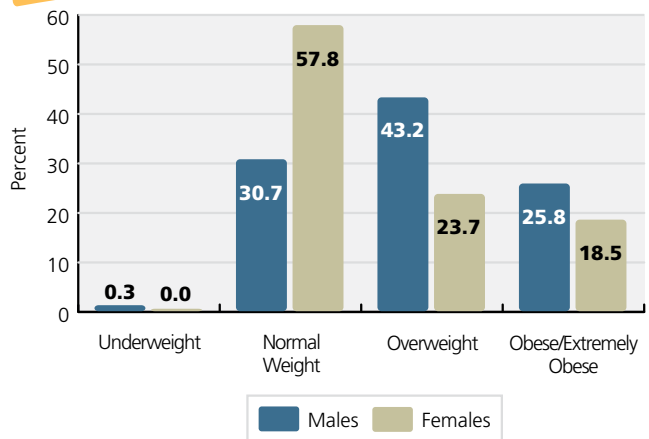


The average body mass index for male veterans is **27.6** compared to **25.5** for female veterans (p<0.0001). Both these averages fall within the overweight category. More than two-thirds (**69.0%**) of male veterans and more than two-fifths (**42.2%**) of female veterans fall within the overweight or obese/extremely obese categories.

According to the adjusted aggregate survey data, the average BMI for all males is **26.9**, and the average BMI for all females is **26.5** (p<0.05).

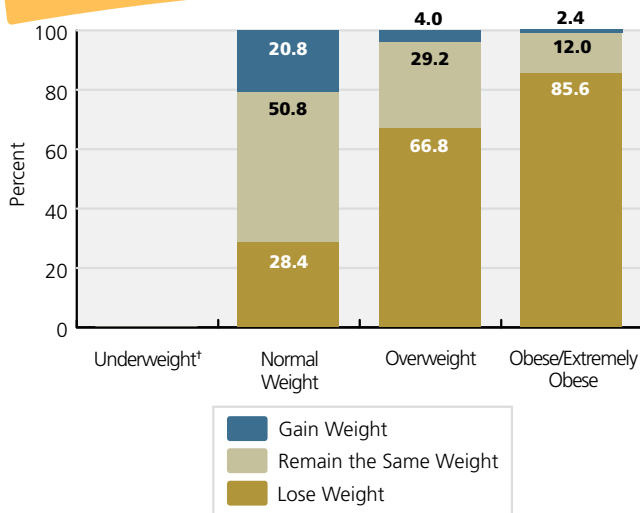
BMI Category

Veterans by Gender



Weight-Related Goals

Veterans by BMI Category



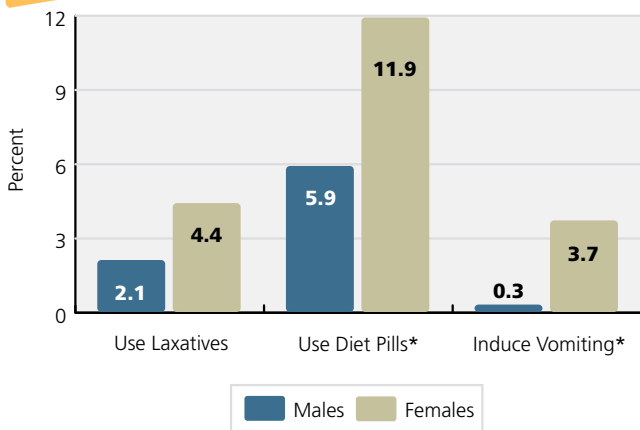
* Insufficient data.

As BMI increases, the proportion of veterans who report they are attempting to lose weight also increases.

This same relationship between BMI and reported effort to lose weight also exists in the adjusted aggregate data from all students who completed the 2009 College Student Health Survey.

Engagement in Weight-Related Behavior

Veterans by Gender



*Statistically significant.

Veterans 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 male veterans, female veterans engage in diet pill use and induced vomiting at significantly higher rates ($p < 0.05$ and $p < 0.01$, respectively). Among all students who completed the 2009 College Student Health Survey, females engage in laxative use, diet pill use, and induced vomiting at significantly higher rates than males ($p < 0.0001$).

Engagement in Weight-Related Behavior

All Veterans by BMI Category

Behavior	Percent Among Underweight Veterans [†]	Percent Among Normal Weight Veterans	Percent Among Overweight Veterans	Percent Among Obese/Extremely Obese Veterans
Use Laxatives	-	2.0	1.0	6.4
Use Diet Pills	-	5.6	7.5	10.4
Induce Vomiting	-	1.5	1.0	0.8

[†] Insufficient data.

Veterans classified as obese/extremely obese report the highest rates of laxative use and diet pill use. The highest rate of induced vomiting is found among veterans within the normal weight category.

Analysis of the adjusted aggregate data from the 2009 College Student Health Survey shows that students classified as obese/extremely obese report the highest rate of diet pill use, while students classified as underweight report the highest rates of laxative use and induced vomiting.

Male and female veterans who completed the 2009 College Student Health Survey report engaging in binge eating at similar rates.

Examining the adjusted aggregate data from all students who completed the survey shows that females report engaging in binge eating at a higher rate than males (**18.1%** vs. **11.1%**, respectively, $p < 0.0001$).

As BMI increases, the rate of report binge eating behavior among veterans also increases.

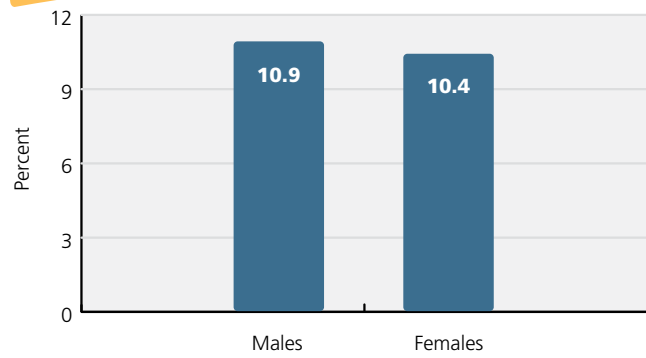
According to the adjusted aggregate survey data, the rate of reported binge eating behavior among all students who completed the 2009 College Student Health Survey also increases as BMI increases.

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

The adjusted aggregate data show that among all students who completed the 2009 College Student Health Survey, students classified as obese/extremely obese have the highest rates of never eating breakfast within the past seven days and of fast food consumption and eating at a restaurant once a week or more within the past 12 months.

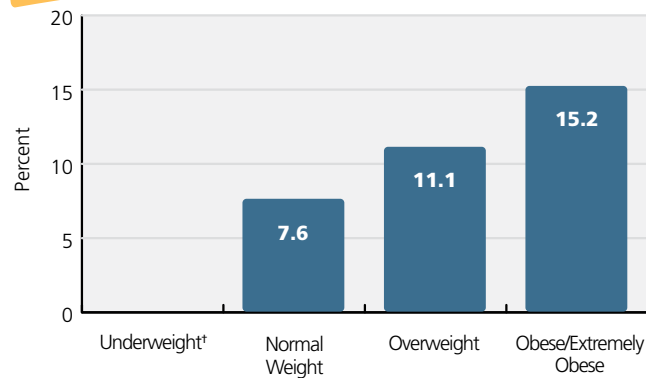
Engagement in Binge Eating Behavior—Past 12 Months

Veterans by Gender



Engagement in Binge Eating Behavior—Past 12 Months

Veterans by BMI Category



† Insufficient data.

Meal Patterns

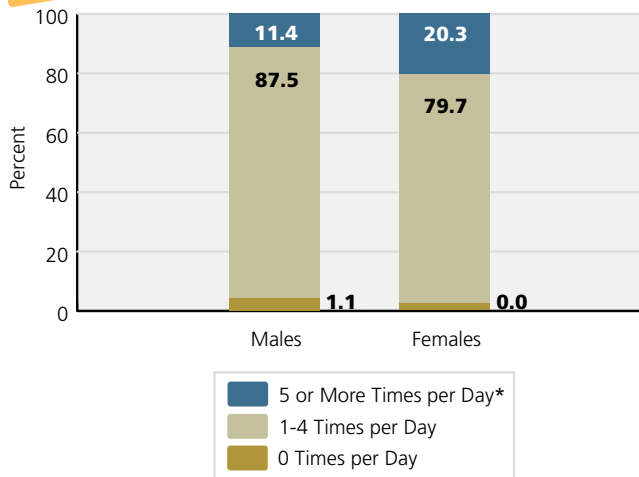
Veterans by BMI Category

Behavior	Percent Among Underweight Veterans†	Percent Among Normal Weight Veterans	Percent Among Overweight Veterans	Percent Among Obese/Extremely Obese Veterans
Breakfast Consumption (Past 7 Days)				
0 Days per Week	-	8.1	9.5	7.2
1-3 Days per Week	-	30.4	32.2	39.2
4-7 Days per Week	-	61.5	58.3	53.6
Fast Food Consumption (Past 12 Months)				
1-2 Times per Month or Less	-	57.1	45.7	35.2
Once per Week or More	-	42.9	54.3	64.8
Eat at Restaurant (Past 12 Months)				
1-2 Times per Month or Less	-	57.6	57.8	53.2
Once per Week or More	-	42.4	42.2	46.8

† Insufficient data.

Fruit and Vegetable Consumption—Per Day

Veterans by Gender



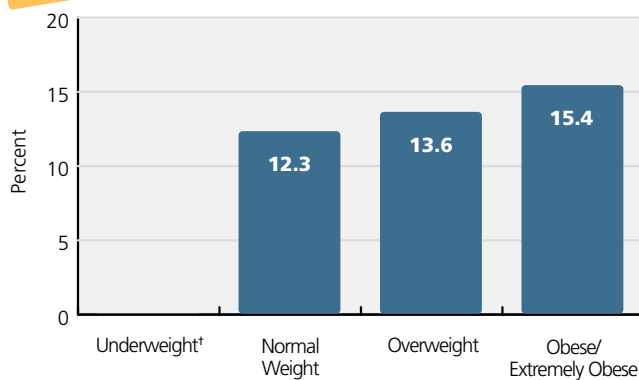
*Statistically significant.

Only **11.4%** of male veterans and **20.3%** of female veterans consume fruits and vegetables five or more times per day ($p < 0.05$). Male veterans consume fruits and vegetables on average **2.7** times per day, and female veterans consume them on average **3.3** times per day ($p < 0.05$).

The adjusted aggregate survey data show that the average number of times per day fruits and vegetables were consumed is **3.0** times for all males and **3.0** times for all females.

Fruit and Vegetable Consumption 5 or More Times Per Day

Veterans by BMI Category



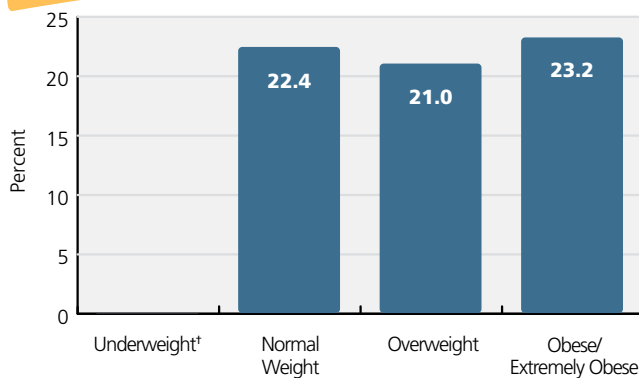
*Insufficient data.

Across all BMI categories, the majority of veterans eat less than the recommended amount of fruits and vegetables per day. Only **15.4%** of obese/extremely obese veterans eat fruits and vegetables five or more times per day.

According to the adjusted aggregate survey data, the percentage of all students that eat fruits and vegetables five or more times per day ranges from **13.6%** among overweight students to **19.5%** among underweight students.

Daily Consumption of Regular Soda

Veterans by BMI Category



*Insufficient data.

Across all BMI categories, veterans report similar rates of daily consumption of regular soda.

The number of students who consume regular soda on a daily basis does not reflect the actual quantity of soda consumed per day.

The adjusted aggregate survey data from all students shows that the rate of daily consumption of regular soda ranges from **21.0%** among normal weight students to **28.5%** among obese/extremely obese students.

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

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

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

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

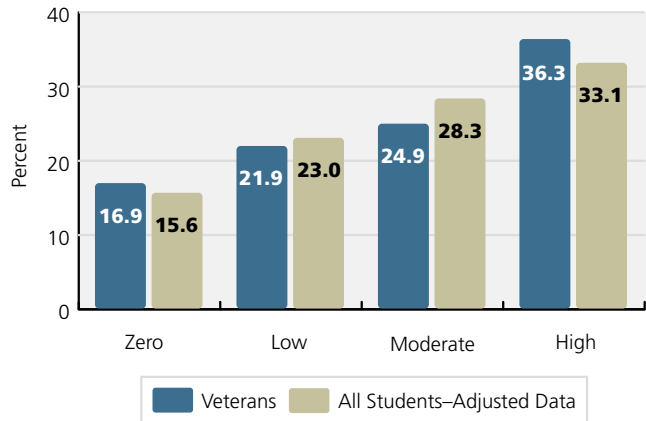
Approximately two-thirds (**61.2%**) of all veterans report levels of physical activity that place them in the moderate or high classification, meeting the CDC's recommendations, compared to **61.4%** of all students who completed the survey.

Physical Activity Level

Veterans and 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.³⁴

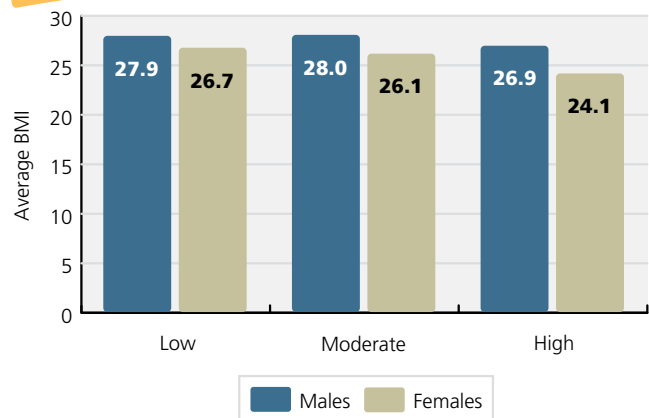


For female veterans, average BMI decreases as physical activity level increases. Male veterans who engage in a high level of physical activity have a lower average BMI than male veterans who engage in a low or moderate level of physical activity.

According to the adjusted aggregate data, average BMI for female students who completed the 2009 College Student Health Survey decreases as physical activity level increases. Male students who engage in a moderate or high level of physical activity have lower average BMIs than male students who engage in a low level of physical activity.

Average BMI

Veterans by Physical Activity Level and Gender



Results

Sexual Health

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.³⁵ 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.³² Due to a combination of behavioral, biological, and cultural reasons, sexually active young adults are at increased risk for acquiring sexually transmitted infections.³⁶ The higher prevalence of sexually transmitted infections (STIs) among young adults is the result of multiple barriers to quality STI prevention services, including lack of health insurance, inability to pay, lack of transportation, and concerns about confidentiality.³⁶

Among 20- to 24-year-olds, 7.1% of males and 13.4% of females report having a sexually transmitted disease other than HIV within their lifetime.³⁵ 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.³⁷

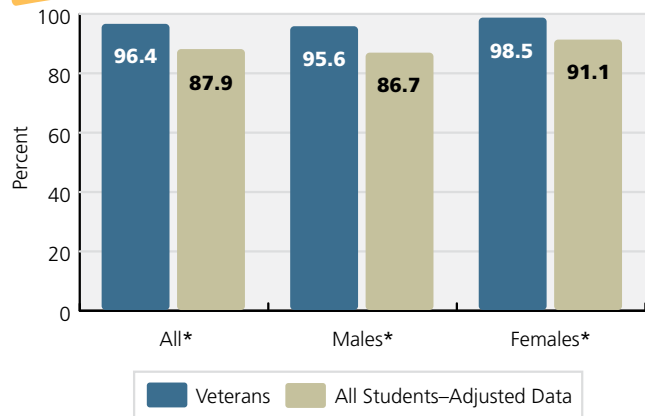
Choices relating to sexual behavior have the potential for significant, and often long-term, consequences. So important is the issue of sexual health that in 2001 the U.S. Surgeon General listed “responsible sexual behavior” as one of the 10 leading health indicators for the nation.⁷

Female veterans who completed the 2009 College Student Health Survey report a slightly higher but not statistically different rate of sexual activity within their lifetime compared to male veterans (**98.5%** vs. **95.6%**, respectively).

The adjusted aggregate data collected from all students who completed the survey show that **87.9%** of all students report engaging in sexual activity within their lifetime compared to **96.4%** among veterans ($p < 0.0001$).

Sexually Active—Lifetime

Veterans by Gender



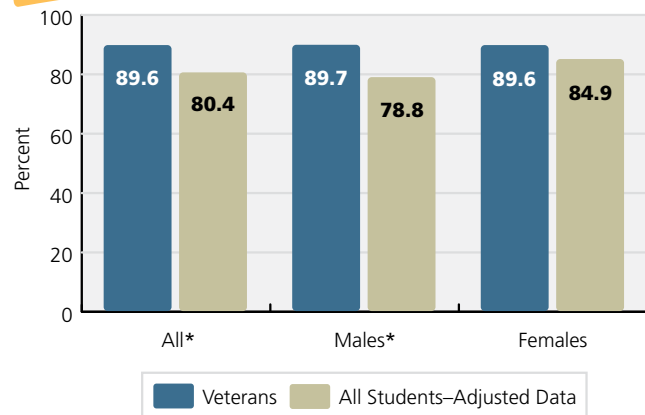
*Statistically significant.

Male veterans and female veterans who completed the survey report similar rates of sexual activity within the past 12 months.

The adjusted aggregate data collected from all students who completed the 2009 College Student Health Survey shows that **80.4%** of all students report engaging in sexual activity within their lifetime compared to **89.6%** of veterans ($p < 0.0001$).

Sexually Active—Past 12 Months

Veterans by Gender

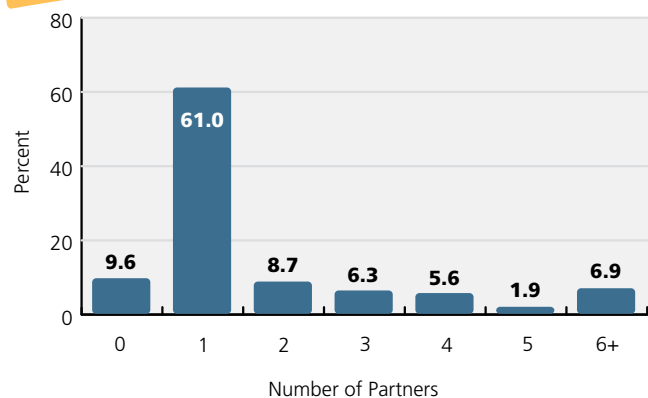


*Statistically significant.

On average, veterans had **2.6** sexual partners over the past 12-month period compared to **2.5** sexual partners among all students who completed the 2009 College Student Health Survey. The average number of sexual partners is based on the experience of all veterans and students, both those who were sexually active and those who were not sexually active.

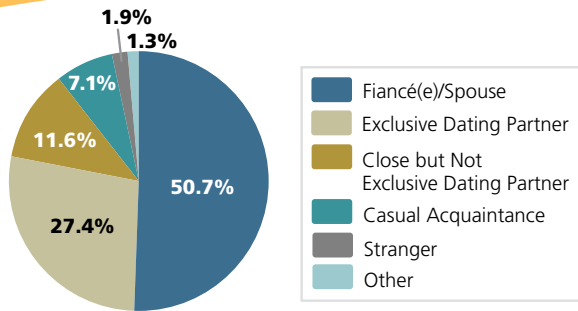
Number of Sexual Partners—Past 12 Months

Veterans



Most Recent Sexual Partner—Past 12 Months

Veterans, Sexually Active

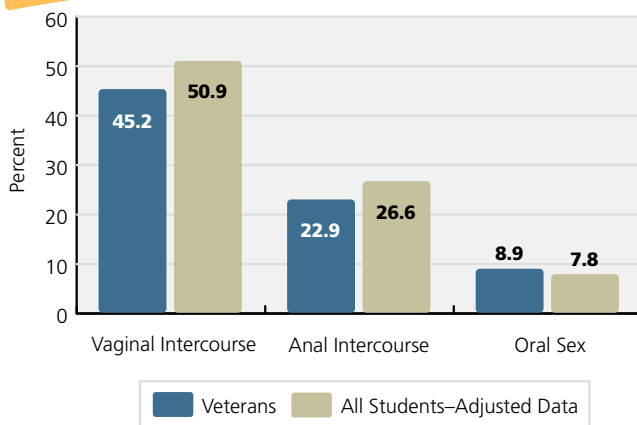


Among veterans who were sexually active within the past 12 months, more than three out of four (**78.1%**) report that their most recent sexual partner was either a fiancé(e)/spouse or an exclusive dating partner.

The adjusted aggregate survey data show that **83.1%** of all students report their most recent sexual partner was either a fiancé(e)/spouse or an exclusive dating partner.

Condom Use

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



According to the adjusted aggregate data, the rates of condom use during last vaginal intercourse, last anal intercourse, and last oral sex were slightly higher but not significantly higher among all sexually active students compared to sexually active veterans.

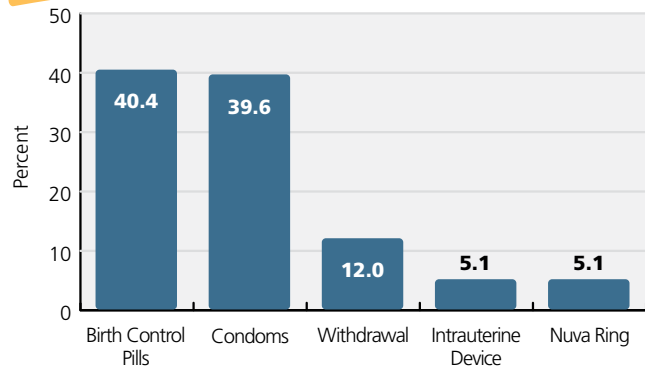
Of the 96.4% of veterans who report being sexually active within their lifetime, **96.9%** engaged in vaginal intercourse, **91.0%** engaged in oral sex, and **40.7%** engaged in anal intercourse.

The most common methods that veterans report using to prevent pregnancy the last time they engaged in vaginal intercourse are birth control pills (**40.4%**) and condoms (**39.6%**). The withdrawal method is reported by **12.0%** of veterans. Other methods of pregnancy prevention reported by veterans are identified in the table.

The adjusted aggregate data from the 2009 College Student Health Survey shows that among all students, the most common methods used to prevent pregnancy the last time they engaged in vaginal intercourse are condoms (**42.8%**) and birth control pills (**37.5%**).

Pregnancy Prevention Methods

Veterans: Sexually Active Within Lifetime



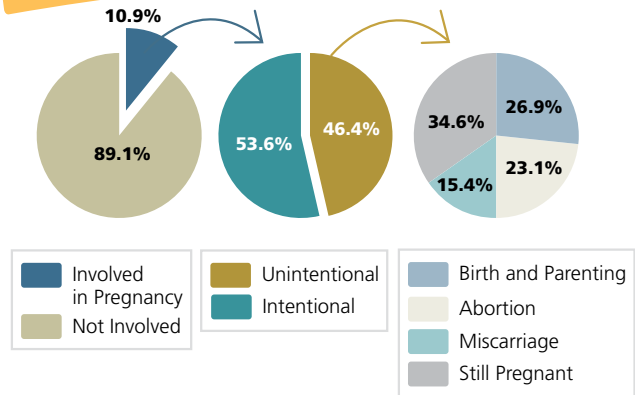
Type of Method	Percent Who Report Using Method
Depo Provera	2.8
Fertility Awareness	2.0
Emergency Contraception	1.3
Ortho Evra	0.8
Diaphragm	0.5
Sponge	0.0
Other	15.9
Don't Know/Can't Remember	2.3

A total of **10.9%** of veterans who completed the 2009 College Student Health Survey has been involved in a pregnancy within the past 12 months, which is higher than the **6.6%** of all students who completed the survey ($p < 0.001$). Of those involved in a pregnancy, **46.4%** of veterans and **40.9%** of all students state it was unintentional.

Among the unintentional pregnancies reported by veterans, **26.9%** resulted in birth and parenting, **23.1%** resulted in abortion, and **15.4%** resulted in miscarriage. Among the unintentional pregnancies reported by all students who completed the survey, **38.4%** resulted in birth and parenting, **18.8%** resulted in abortion, **16.8%** resulted in miscarriage, and **0.8%** resulted in birth and adoption.

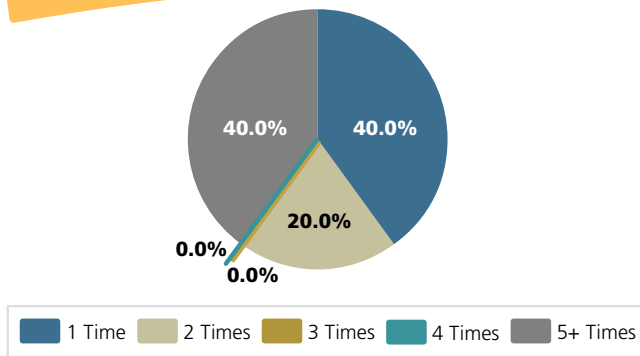
Outcome of Unintended Pregnancy—Past 12 Months

Veterans



Emergency Contraception Use—Past 12 Months

Female Veterans: Sexually Active

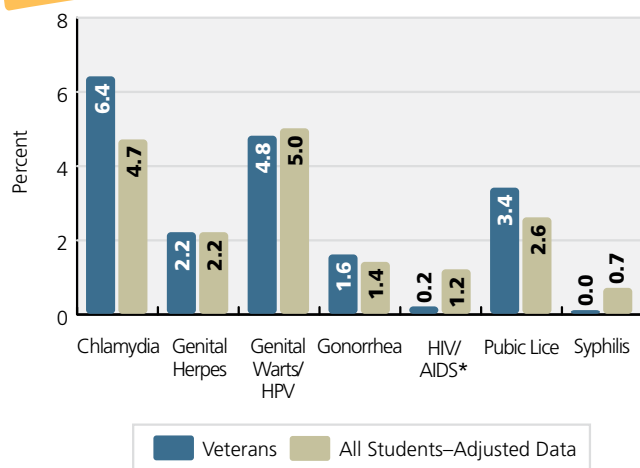


Within the past 12 months, **4.5%** of sexually active female veterans have used emergency contraception. Among those who used emergency contraception, **40.0%** have used it once, **20.0%** have used it twice, and **40.0%** have used it five or more times within the past 12 months.

The adjusted aggregate survey data show that **11.4%** of all sexually active female students report having used emergency contraception within the past 12 months, and among those who have used emergency contraception, **67.4%** have used it once, **20.6%** have used it twice, and **12.0%** have used it three or more times within the past 12 months.

Sexually Transmitted Infections—Lifetime

Veterans and All Students, Sexually Active

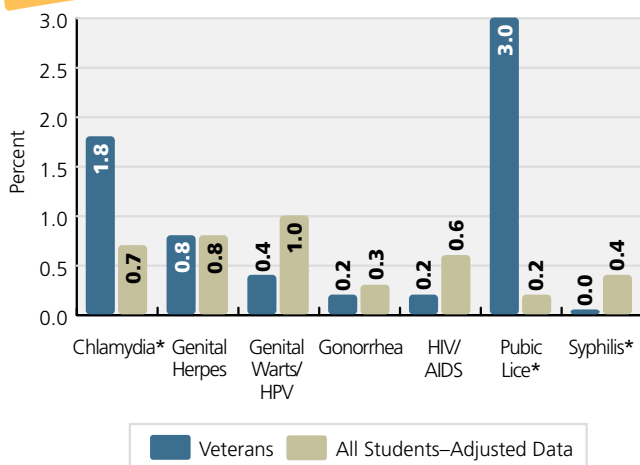


*Statistically significant.

Among veterans who have been sexually active within their lifetime, **15.0%** report being diagnosed with a sexually transmitted infection within their lifetime compared to **12.9%** of all students who completed the survey. Chlamydia (**6.4%**) and genital warts/human papilloma virus (**4.8%**) are the two most commonly diagnosed sexually transmitted infections among veterans.

Sexually Transmitted Infections—Past 12 Months

Veterans and All Students, Sexually Active



*Statistically significant.

Analysis shows that a total of **3.3%** of veterans who report having been sexually active within their lifetime also report having been diagnosed with a sexually transmitted infection within the past 12 months compared to **3.0%** of all students who completed the survey.

Implications

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

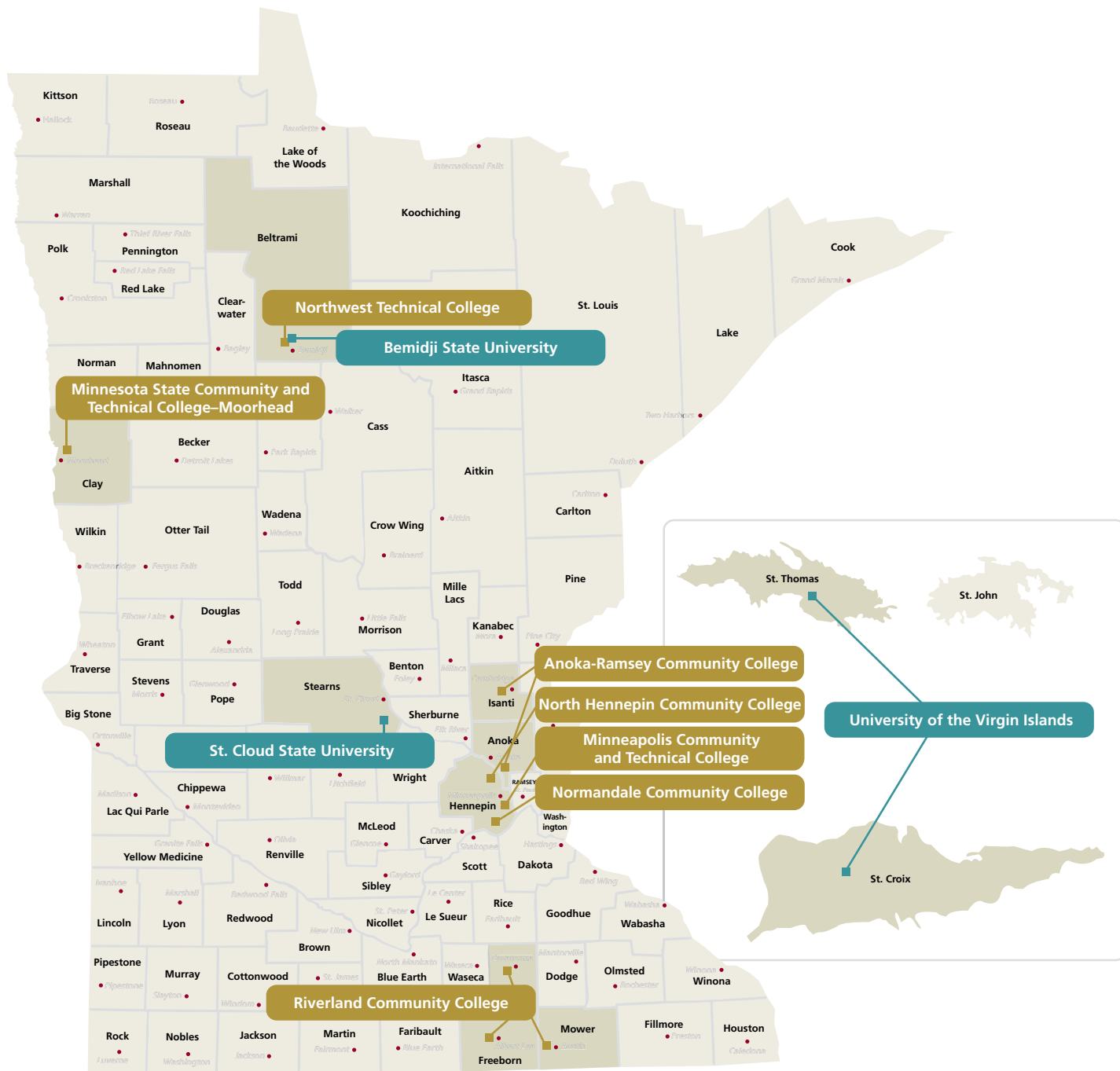
Results from the 2009 College Student Health Survey document the health and health-related behaviors of veterans enrolled in participating Minnesota postsecondary institutions. These data offer a comprehensive look at the diseases, health conditions, and health-related behaviors of student veteran respondents.

The data show that health-related issues among student veterans are similar to those of the general student body, but there are key differences that should be noted. More research in this area is needed to determine why these differences exist. Colleges and universities should consider developing groups to address the unique needs of student veterans on their campuses.

Creating a college environment that supports veterans through coordinating services to address the academic, financial, physical, health-related, and social needs of student veterans will help veterans succeed academically and in their lives beyond postsecondary education.

Appendix 1

Colleges and Universities Participating in the 2009 College Student Health Survey



Two-Year Schools	Location	Enrollment-Spring 2009*
Anoka-Ramsey Community College	Cambridge, MN Coon Rapids, MN	10,265
Minneapolis Community and Technical College	Minneapolis, MN	11,886
Minnesota State Community and Technical College-Moorhead	Moorhead, MN	2,550
Normandale Community College	Bloomington, MN	12,848
North Hennepin Community College	Brooklyn Park, MN	9,229
Northwest Technical College	Bemidji, MN	1,892
Riverland Community College	Albert Lea, MN Austin, MN Owatonna, MN	4,664

Four-Year Schools	Location	Enrollment-Spring 2009*
Bemidji State University	Bemidji, MN	6,533
St. Cloud State University	St. Cloud, MN	20,208
University of the Virgin Islands	St. Croix, USVI St. Thomas, USVI	2,500

*Includes full-time and part-time students.

Appendix 2

2009 College Student Health Survey Demographics Based on Student Response

	Veterans	All Students-Adjusted Data	All Students-Unadjusted Data
Average Age (Years)	30.0	29.3	25.9
Age Range (Years)	18-65	18-88	18-88
18-24 Years	32.0%	32.4%	61.4%
25 Years or Older	68.0%	67.6%	38.6%
Average GPA	3.23	3.25	3.22
Class Status			
First-Year Undergraduate	27.6%	23.5%	29.8%
Second-Year Undergraduate	32.0%	30.4%	30.0%
Third-Year Undergraduate	19.1%	17.0%	17.0%
Fourth-Year Undergraduate	11.3%	9.0%	9.5%
Fifth-Year Undergraduate	5.0%	11.0%	7.7%
Graduate or Professional	5.0%	9.1%	6.0%
Gender			
Male	74.1%	73.7%	36.1%
Female	25.9%	26.3%	63.7%
Transgender/Other	0.0%	0.0%	0.1%
Unspecified	0.0%	0.0%	0.1%
Ethnic Origin			
American Indian/Alaska Native	5.4%	3.4%	3.3%
Asian/Pacific Islander	2.9%	6.8%	6.4%
Black-Not Hispanic	6.3%	8.1%	6.2%
Latino/Hispanic	3.4%	2.9%	3.1%
White-Not Hispanic (includes Middle Eastern)	84.5%	80.0%	82.8%
Other	2.7%	2.5%	2.5%
Current Residence			
Residence Hall or Fraternity/Sorority	2.3%	3.9%	7.5%
Other	97.7%	96.1%	92.5%

Glossary

Current Alcohol Use

Any alcohol use within the past 30 days.

Current Credit Card Debt

Any unpaid balance at the end of the past month.

Current Marijuana Use

Any marijuana use within the past 30 days.

Current Tobacco Use

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

High Credit Card Debt

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

High-Risk Drinking

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

Past-12-Month Alcohol Use

Any alcohol use within the past year.

Past-12-Month Marijuana Use

Any marijuana use within the past year.

References

1. American Council on Education. (2008). *ACE issue brief: Serving those who serve: Higher education and America's veterans*. Retrieved November 2, 2009, from http://www.acenet.edu/Content/NavigationMenu/ProgramsServices/MilitaryPrograms/serving/Veterans_Issue_Brief_1108.pdf.
2. Boynton Health Service. (2009). *Health and health-related behaviors, Minnesota postsecondary student veterans*. Minneapolis, MN: Boynton Health Service, University of Minnesota.
3. Boynton Health Service. (2009). *Health and health-related behaviors, Minnesota postsecondary students*. Minneapolis, MN: Boynton Health Service, University of Minnesota.
4. Centers for Disease Control and Prevention. (2008). *Behavioral Risk Factor Surveillance System* [survey data]. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved November 2, 2009, from <http://apps.nccd.cdc.gov/brfss>.
5. Barnes PM, Schiller JS, Heyman KM. (2009). *Early release of selected estimates based on data from the January-September 2008 National Health Interview Survey*. Hyattsville, MD: National Center for Health Statistics. Retrieved November 2, 2009, from <http://www.cdc.gov/nchs/nhis.htm>.
6. Himmelstein DU, Lasser KE, McCormick D, Bor DH, Boyd JW, Woolhandler S. (2007). Lack of health coverage among US veterans from 1987 to 2004. *American Journal of Public Health*, 97(12), 2199-2203.
7. U.S. Department of Health and Human Services. (2000). *Healthy People 2010: Understanding and improving health*. 2nd ed. Washington, DC: U.S. Government Printing Office.
8. Harvard School of Medicine. (2007). *National Comorbidity Survey-Replication* [survey data]. Retrieved November 2, 2009, from <http://www.hcp.med.harvard.edu/ncs/index.php>.
9. Substance Abuse and Mental Health Services Administration. (2008). *Results from the 2007 National Survey on Drug Use and Health: National findings* (NSDUH Series H-34, DHHS Publication No. SMA 08-4343). Rockville, MD: Office of Applied Studies.
10. Department of Defense Task Force on Mental Health. (2007). *An achievable vision: Report of the Department of Defense Task Force on Mental Health*. Falls Church, VA: Defense Health Board. Retrieved November 2, 2009, from <http://www.health.mil/dhb/mhtf/MHTF-Report-Final.pdf>.
11. American Psychological Association Presidential Task Force on Military Deployment Services for Youth, Families, and Service Members. (2007). *Military Deployment Services Task Force report: The psychological needs of U.S. military service members and their families: A preliminary report*. Retrieved November 2, 2009, from <http://www.apa.org/releases/MilitaryDeploymentTaskForceReport.pdf>.
12. Hoge C, Auchterlonie J, Milliken C. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Journal of the American Medical Association*, 295(9), 1023-1032.
13. Grieger TA, Cozza SJ, Ursano RJ, Hoge C, Martinez PE, Engel CC, Wain HJ. (2006). Post-traumatic stress disorder and depression in battle-injured soldiers. *American Journal of Psychiatry*, 163, 1777-1783.
14. Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. (2008). *Monitoring the Future national survey results on drug use, 1975-2007. Vol. II: College students and adults ages 19-45* (NIH Publication No. 08-6418B). Bethesda, MD: National Institute on Drug Abuse.
15. 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.
16. Halperin AC. (2002, March). *State of the union: Smoking on US college campuses. A report for the American Legacy Foundation*. Washington, D.C. (unpublished, internal report).
17. Department of Veterans Affairs. (2008). *National Smoking and Tobacco Use Cessation Program*. VHA Directive 2008-081. Washington, DC: Department of Veterans Affairs. Retrieved November 2, 2009, from http://www1.va.gov/VHAPUBLICATIONS/ViewPublication.asp?pub_ID=1809.
18. Substance Abuse and Mental Health Services Administration. (2005). *The National Survey on Drug Use and Health report: Alcohol use and alcohol-related risk behaviors among veterans*. Rockville, MD: Office of Applied Studies. Retrieved November 2, 2009, from <http://www.oas.samhsa.gov/2k5/vetsAlc/vetsAlc.htm>.
19. Forgas L, Meyer D, Cohen M. (1996). Tobacco use habits of naval personnel during Desert Storm. *Military Medicine*, 161, 165-168.
20. Substance Abuse and Mental Health Services Administration. (2005). *The National Survey on Drug Use and Health report: Substance use, dependence, and treatment among veterans*. Rockville, MD: Office of Applied Studies. Retrieved November 2, 2009, from <http://www.oas.samhsa.gov/2k5/vets/vets.htm>.
21. 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.
22. Fischer BS, Cullen FT, Turner MG. (2000). *The sexual victimization of college women*. Washington, D.C.: National Institute of Justice, Report NCJ 182369.
23. Lipari RN, Cook PJ, Rock LM, Matos K. (2008). *2006 Gender Relations Survey of active duty members* (DMDC Report No. 2007-022). Arlington, VA: Defense Manpower Data Center. Retrieved November 2, 2009, from http://www.sapr.mil/contents/references/WGRA_OverviewReport.pdf.
24. Nellie Mae. (2002). *Undergraduate students and credit cards: An analysis of usage rates and trends*. Retrieved November 2, 2009, from http://www.nelliemae.com/pdf/ccstudy_2001.pdf.
25. LaBrie RA, Shaffer HJ, LaPlant DA, Wechsler H. (2003). Correlates of college student gambling in the United States. *Journal of American College Health*, 52(2), 53-62.

References

26. National Research Council. (1999). *Pathological gambling: A critical review*. Washington D.C.: National Academy Press.
27. McCormick R. (2007). *Position paper on gambling problems among veterans*. Retrieved November 2, 2009, from <http://www.standup4vets.org/userfiles/file/9-17-07%20-%20Gambling%20Problem%20in%20Veterans%20-%20RM.pdf>.
28. 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.
29. Niemeier HM, Raynor HA, Lloyd-Richardson EE, Rogers ML, Wing RR. (2006). Fast food consumption and breakfast skipping: Predictors of weight gain from adolescence to adulthood in a nationally representative sample. *Journal of Adolescent Health*, 39(6), 842–849.
30. 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.
31. Koepsell TD, Forsberg CW, Littman AJ. (2009). Obesity, overweight, and weight control practices in U.S. veterans. *Preventive Medicine*, 48, 267-271.
32. Littman AJ, Forsberg CW, Koepsell TD. (2009). Physical activity in a national sample of veterans. *Medicine & Science in Sports & Exercise*, 41(5), 1006-1013.
33. Centers for Disease Control and Prevention. (2007). *About BMI for adults*. Retrieved November 2, 2009, from http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm#Interpreted.
34. Centers for Disease Control and Prevention. (2008). *Physical activity for everyone*. Retrieved November 2, 2009, from <http://www.cdc.gov/nccdphp/dnpa/physical/everyone/recommendations/>.
35. Mosher WD, Chandra A, Jones J. (2005). *Sexual behavior and selected health measures: Men and women 15-44 years of age, United States, 2002*. Advance data from vital and health statistics (No. 362). Hyattsville, MD: National Center for Health Statistics.
36. Centers for Disease Control and Prevention. (2008, December). *Sexually transmitted disease surveillance, 2007*. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved November 2, 2009, from <http://www.cdc.gov/std/stats07/main.htm>.
37. Centers for Disease Control and Prevention. (2006, June 9). Youth risk behavior surveillance—United States, 2005. *Morbidity and Mortality Weekly Report Surveillance Summaries*, 55(SS-5), 1-108.

Principal Investigator

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

Co-Investigators

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

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

Collaborator

Steve Frantz, Ed.D.
Minnesota State Colleges and Universities
(651) 296-0672 • Steve.Frantz@so.mnscu.edu

Publication Coordinator/Editor

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

Writer/Editor

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


Designer

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

Published March 2010

The University of Minnesota is an equal opportunity educator and employer.

This publication is available in alternative formats upon request.

 Contains a minimum of 10% post-consumer waste.

For more information, or additional copies, contact the Boynton Health Service Marketing Department at (612) 625-6410 or cuchal@bhs.umn.edu.

©2010 Regents of the University of Minnesota. All rights reserved.

Partial funding was provided by a 2008 congressionally directed grant award to the Minnesota State Colleges and Universities (P116Z080299). The contents do not necessarily represent the policy of the U.S. Department of Education nor imply endorsement by the federal government.



