College Student Health Survey Report
2007–2011

Health and Health-Related Behaviors
Minnesota Postsecondary Lesbian, Gay, and Bisexual Students

FINAL DRAFT
02/14/13

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Introduction

The Institute of Medicine (IOM) published a report in 2011 highlighting the health of sexual and gender minorities (IOM, 2011). The IOM report presents an assessment of the state of the science on the health status of lesbian, gay, bisexual, and transgender (LGBT) populations; identifies areas of limited research; and outlines a research agenda enhancing research efforts in gathering data from the LGBT population. The report acknowledges the relative dearth of health research among LGBT groups. The report also acknowledges that much of the research on the health status of LGBT groups uses non-probability samples, including such sampling strategies as focus groups, and quota, purposive, and snowball sampling. The report encourages researchers to strengthen their data collection methods, stating "the field of LGBT health would benefit if more data came from probability samples" (IOM, 2011).

Boynton Health Service, University of Minnesota (Boynton) has a unique opportunity to examine and disseminate health data gathered through the College Student Health Survey (CSHS), which utilizes a consistent survey methodology including random sampling. The data presented in this current report is gathered from students enrolled at 40 two- and four-year postsecondary institutions during five survey years (2007–2011). The CSHS is a comprehensive survey developed by Boynton that has been used (with modification) since 1995. The survey collects information from students about their experiences and behaviors in the areas of health insurance and health care utilization, mental health, tobacco use, alcohol and other drug use, personal safety and financial health, nutrition and physical activity, and sexual health. Among the 26,396 students who completed the survey over the five years used for this report, 1,303 identify as lesbian, gay, or bisexual (LGB) (see methodology section for further details). This sample allows us to examine how these students compare to students who identify as heterosexual. For the purpose of this report, due to the small sample size, students who identify as transgender are not included in the analysis.

In our effort to document the health and health-related behaviors among the LGB college student population, we first need to define our population. Sexual orientation is a complex and multifaceted construct, particularly during adolescence and young adulthood when identity and experience are evolving, and there are different ways to measure it (Chung & Katayama, 1996; Sell, 1997; Savin-Williams, 2001; LGB Work Group, 2003; Friedman et al, 2004). The most commonly described domains of sexual orientation are behavior (sex of sexual partners), identity (self-labeling as gay, lesbian, bisexual, queer, etc.), and romantic attraction. However, researchers have found substantial differences in the prevalence of non-heterosexuality based on the way in which it is measured (Remafedi et al, 1992; Laumann et al, 1994; Black et al, 2000; Saewyc et al, 2004; Fergusson et al, 2005; Savin-Williams & Ream, 2007). For example, Savin-Williams & Ream (2007) found prevalence rates for sexual minority status ranged from 1% to 15% depending on gender and the measure used to define minority status. Furthermore, recent research with adult samples has found that associations between sexual orientation and several health behaviors (e.g. cigarette smoking, alcohol use) differed according to the sexual orientation measure used to categorize participants, particularly among women (Bauer, 2006; Midanik et al, 2007).

The present report uses the measure of sexual identity to define the sample of LGB college students for three reasons. First, the "emerging adult" years of 18–29 is a period when young people typically begin to adopt their "adult" social roles and identities (Arnett, 2000). Self-reports of sexual minority identity in this age group are expected to be more substantive, valid, and lasting than those made during the adolescent years. Second, the CSHS's behavioral measure of sexual orientation does not assess the number of male vs. female partners or the number or type of sexual experiences with each. Thus, a student who reported any same-sex experience would be categorized as gay, lesbian, or bisexual even if this experience was relatively minor, short-lived, or an exception to his or her overall pattern of sexual partnerships. In short, this approach risks misclassifying participants and biasing the LGB sample. Finally, student organizations, services, and support systems in college settings target students based on their sexual identity (e.g. "gay student alliances") rather than their sexual behavior. Because an important goal of this report is to inform college administrators, health services, and personnel about the needs of sexual minority students and resources that might benefit them, the use of the sexual identity measure is particularly germane.

With our operational definition for LGB in place, Boynton Health Service aims to address the IOM's request to expand the collection and reporting of the health status of this population. Boynton is particularly positioned to further the knowledge of health and health-related behaviors of the college student population. Through the use of consistent survey methodology and random sampling, Boynton has developed a survey dataset that has the potential for meaningful analysis of these populations.

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Survey

Methodology

In 2007, 2008, 2009, 2010, and 2011, undergraduate and graduate students enrolled in 40 two-year and four-year colleges and universities in Minnesota completed the College Student Health Survey, developed by Boynton Health Service.

As an incentive each year, all students who responded to the survey were entered into a drawing for gift certificates valued at $3,000 (one), $1,000 (one), and $500 (one) at a variety of stores. Various additional incentives were offered each year:

- 2007: All students who responded to the survey received a $5 gift card.
- 2008: No additional incentives were offered.
- 2009: All students who responded to the survey were entered into drawings for six iPod touches™.
- 2010: All students who responded to the survey were entered into drawings for eleven iPod touches™.
- 2011: All students who responded to the survey were entered into five separate drawings for an iPad™ and one drawing for an iPad™ that included just students from their school.

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

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

Data collected during the five years were merged into one database for analysis. If a school participated in multiple years, only the most recent data was included (see Appendix 1 for a list of participating schools).

2007–2011
College Student Health Survey
Methodology Highlights

- **63,915** students from 40 Minnesota colleges and universities were selected to participate in this survey in 2007, 2008, 2009, 2010, and 2011.

- **26,965** completed the survey.

- **42.2%** of the students responded (school response rate=28.7%–64.8%).

2011 College Student Health Survey Postcard
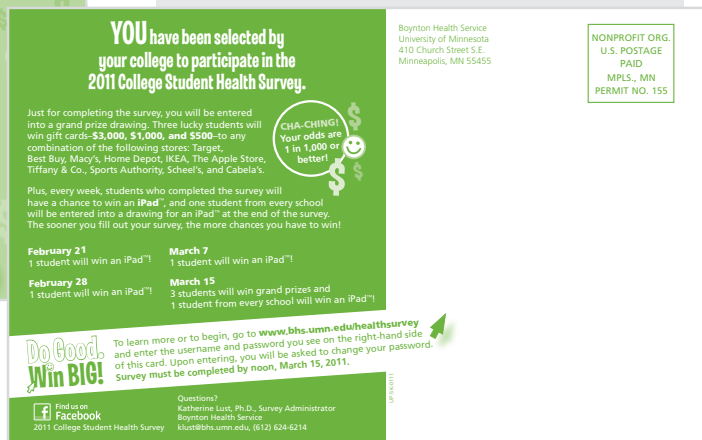
Survey
Analysis Summary

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

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

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

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

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

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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, report good health. The majority of young adults in Minnesota (89.0%) and nationwide (84.4%) report excellent, very good, or good health (CDC, 2010). At the same time, young adults have relatively low rates of health insurance and preventive care utilization. In Minnesota, 83.1% of 18- to 24-year-olds report some kind of health care insurance, and nationwide the number is 73.7% (CDC, 2010; Ward et a., 2011). More young males (28.8%) than young females (23.8%) lack health insurance coverage (Ward et al, 2011). Among all age groups, young adults (73.8%) are least likely to identify a usual place for medical care (Ward et al, 2011).

According to the Institute of Medicine, for most individuals, including lesbian, gay, bisexual, and transgender (LGBT) youth, childhood and adolescence are times of good physical health. As such, few studies have examined the physical health of LGBT youth. However, LGBT youth may lack access to health care professionals who are able to provide LGBT-appropriate care. Additionally, lesbian and bisexual women may use preventive health services less frequently than heterosexual women (IOM, 2011).

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher uninsured rates compared to students who identify as heterosexual (**11.0%**, **9.9%**, and **7.4%**, respectively) (χ^2=14.61, *df*=2, p=0.0007). Gays/lesbians report a higher though not statistically different uninsured rate compared to bisexuals (**11.0%** vs. **9.9%**, respectively) (χ^2=0.40, *df*=1, p=0.53).

Gay males report a higher uninsured rate compared to gay/lesbian females (**14.8%** vs. **6.0%**, respectively) (χ^2=9.07, *df*=1, p=0.003). Female bisexuals report a higher though not statistically significantly different uninsured rate than male bisexuals (**10.5%** vs. **7.4%**, respectively) (χ^2=1.42, *df*=1, p=0.23).

Heterosexual students report a higher though not statistically significantly different rate of having a spouse or domestic partner compared to gay/lesbian and bisexual students (**32.7%**, **31.7%**, and **30.7%**, respectively) (χ^2=1.6, *df*=2, p=0.45).

Among students who report having a partner, the reported rate of their spouse or domestic partner being uninsured is statistically significantly different between heterosexual, gay/lesbian, and bisexual students (**19.4%**, **23.9%**, and **30.5%**, respectively) (χ^2=20.22, *df*=2, p<0.0001). The reported rate of their spouse or domestic partner being uninsured is higher though not statistically significantly different among bisexual students compared to gay/lesbian students (**30.5%** vs. **23.9%**, respectively) (χ^2=2.08, *df*=1, p=0.15). The reported rate of their spouse or domestic partner being uninsured among gay/lesbian students is higher though not statistically significantly different than among heterosexual students (**23.9%** vs. **19.4%**, respectively) (χ^2=2.02, *df*=1, p=0.16).

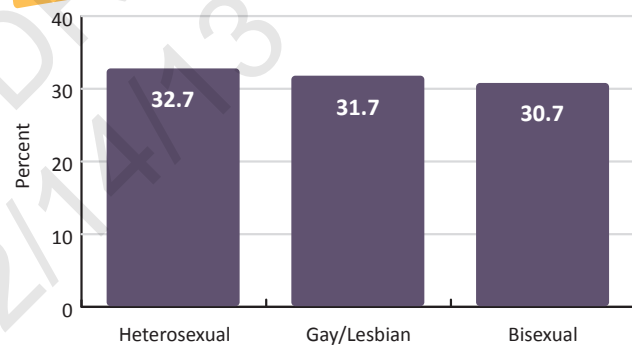**Health Insurance Status—Uninsured***
All Students by Sexual Identity and Gender
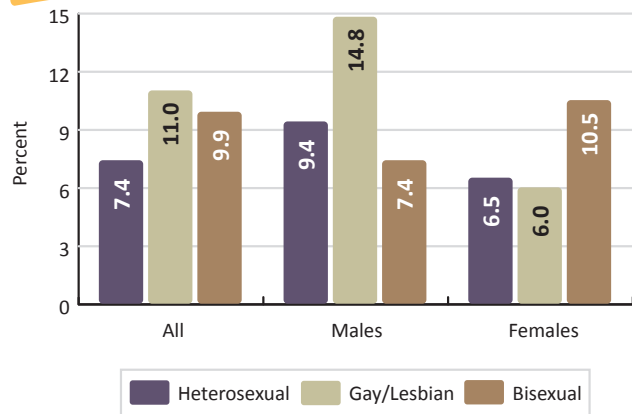
*Includes students who report they do not know their insurance status.
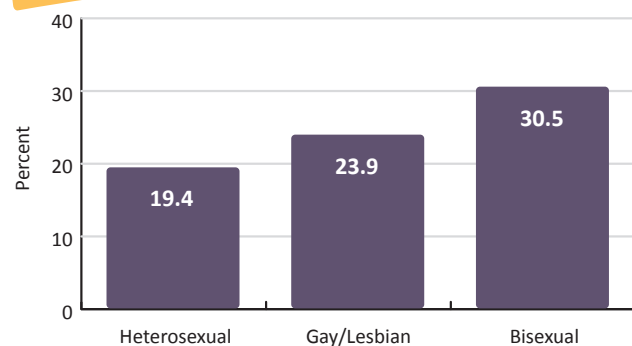
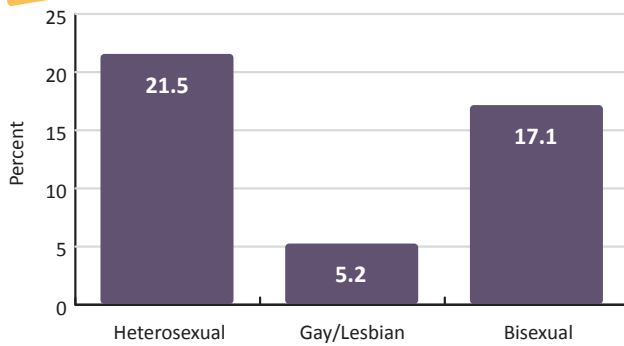**Spouse or Domestic Partner**
All Students by Sexual Identity

Spouse Health Insurance Status—Uninsured*
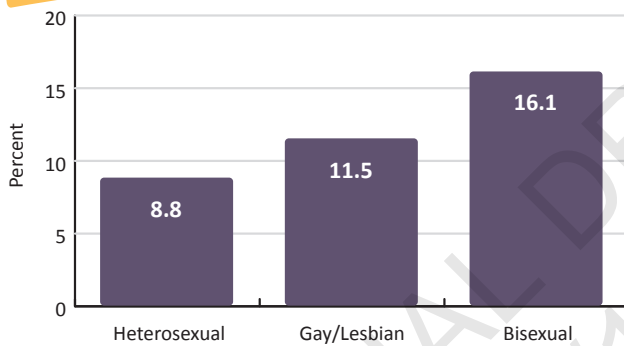All Students by Sexual Identity

*Includes students who report they do not know their insurance status.

Dependent Children
All Students by Sexual Identity

Heterosexual and bisexual students report statistically significantly higher rates of having dependent children compared to gay/lesbian students (**21.5%**, **17.1%**, and **5.2%**, respectively) (χ^2=86.13, *df*=2, p<0.0001).

Dependent Children and Insurance Status—Uninsured*
All Students by Sexual Identity

*Includes students who report they do not know their insurance status.

Among students who report having dependent children, the reported rate of their dependent children being uninsured is statistically significantly different between heterosexual and bisexual students (**8.8%** vs. **16.1%**, respectively) (χ^2=8.51, *df*=1, p=0.004). The reported rate of their dependent children being uninsured among bisexual students is higher though not statistically different than among gay/lesbian students (**16.1%** vs. **11.5%**, respectively) (p[Fishers]=0.77).

Health Care Service Utilization— Routine Doctor's Visit
All Students by Sexual Identity and Insurance Status
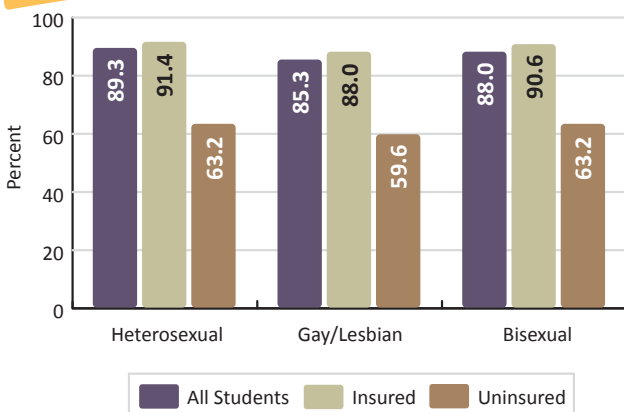
Heterosexual students who are insured report a statistically significantly higher rate of seeking routine doctor's care within the past 12 months compared to gay/lesbian students (**91.4%** vs. **88.0%**, respectively) (χ^2=6.34, *df*=1, p=0.01). This statistically significant difference is not seen between gay/lesbian and bisexual students (**88.0%** vs. **90.6%**, respectively) (χ^2=2.07, *df*=1, p=0.15).

Among the uninsured, the rates of seeking routine doctor's care within the past 12 are similar among heterosexual, gay/lesbian, and bisexual students (**63.2%**, **59.6%**, and **63.2%**, respectively) (χ^2=0.29, *df*=2, p=0.86).

Among the insured, the reported rates of seeking emergency care within the past 12 months among heterosexual, gay/lesbian, and bisexual students are similar (**85.0%**, **81.4%**, and **85.7%**, respectively) (χ^2=4.67, *df*=2, p=0.10).

Among the uninsured, no statistically significant difference in the reported rate of seeking emergency care within the past 12 months is seen between heterosexual, gay/lesbian, and bisexual students (**68.2%**, **80.8%**, and **75.0%**, respectively) (χ^2=5.17, *df*=2, p=0.08).

Health Care Service Utilization— Emergency Care
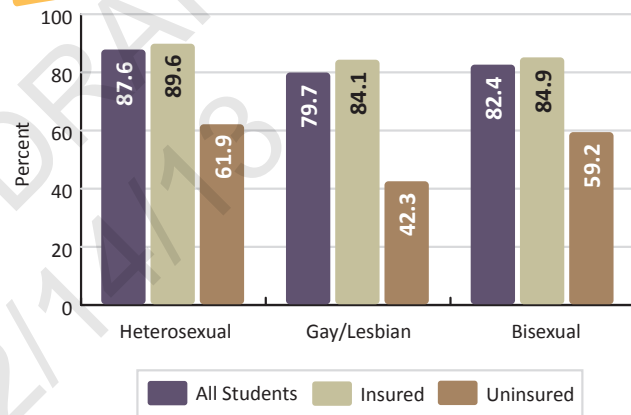All Students by Sexual Identity and Insurance Status
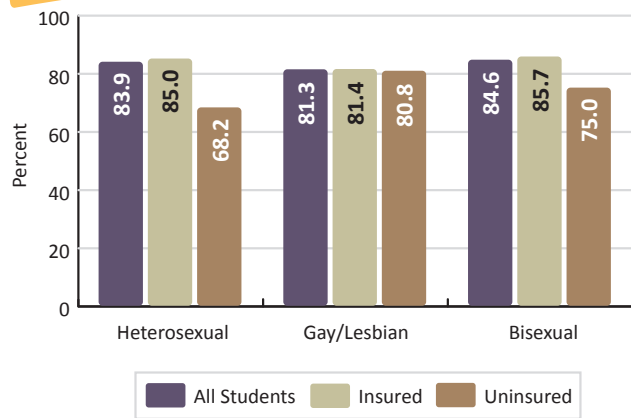
Heterosexual students who are insured report a statistically significantly higher rate of seeking dental care within the past 12 months compared to gay/lesbian and bisexual students (**89.6%**, **84.1%**, and **84.9%**, respectively) (χ^2=28.23, *df*=2, p<0.0001).

Among the uninsured, heterosexual students report a statistically significantly higher rate of seeking dental care within the past 12 compared to gay/lesbian students (**61.9%** vs. **42.3%**, respectively) (χ^2=8.16, *df*=1, p=0.004). A statistically significant difference is not seen between gay/lesbian and bisexual students who report being uninsured (**42.3%** vs. **59.2%**, respectively) (χ^2=3.54, *df*=1, p=0.06).

Health Care Service Utilization— Dental Care
All Students by Sexual Identity and Insurance Status

Gay/lesbian and bisexual students who are insured report statistically significantly higher rates of seeking mental health services within the past 12 months compared to heterosexual students (**42.3%**, **45.0%**, and **25.5%**, respectively) (χ^2=191.20, *df*=2, p<0.0001).

Among the uninsured, gay/lesbian and bisexual students also report statistically significantly higher rates of seeking mental health services within the past 12 months compared to heterosexual students (**32.7%**, **38.2%**, and **19.9%**, respectively) (χ^2=19.15, *df*=2, p<0.0001). A statistically significant difference is not seen between gay/lesbian and bisexual students who report being uninsured (**32.7%** vs. **38.2%**, respectively) (χ^2=0.40, *df*=1, p=0.53).

Health Care Service Utilization— Mental Health Service
All Students by Sexual Identity and Insurance Status

Health Care Service Utilization—
Testing for Sexually Transmitted Infections
All Students by Sexual Identity and Insurance Status

Gay/lesbian and bisexual students who are insured report statistically significantly higher rates of being tested for sexually transmitted infections (STIs) within the past 12 months compared to heterosexual students (**50.9%**, **57.0%**, and **36.2%**, respectively) (χ^2=163.58, *df*=2, p<0.0001). Bisexual students who are insured report a statistically significantly higher rate compared to gay/lesbian students (**57.0%** vs. **50.9%**, respectively) (χ^2=4.00, *df*=1, p=0.045).

Among the uninsured, gay/lesbian and bisexual students also report statistically significantly higher rates of being tested for STIs within the past 12 compared to heterosexual students (**69.2%**, **61.8%**, and **35.8%**, respectively) (χ^2=43.57, *df*=2, p<0.0001). A statistically significant difference is not seen between gay/lesbian and bisexual students who report being uninsured (**69.2%** vs. **61.8%**, respectively) (χ^2=0.74, *df*=1, p=0.39).

Health Care Service Utilization—
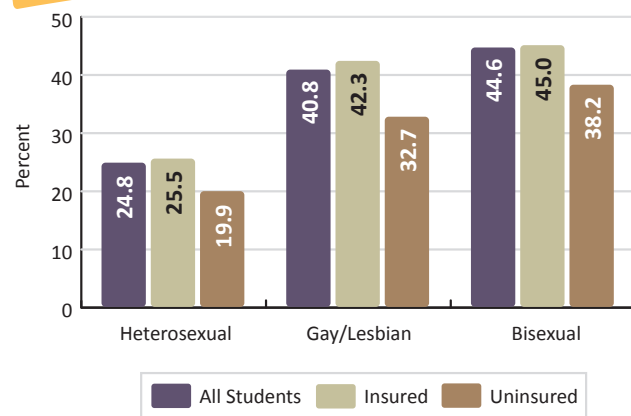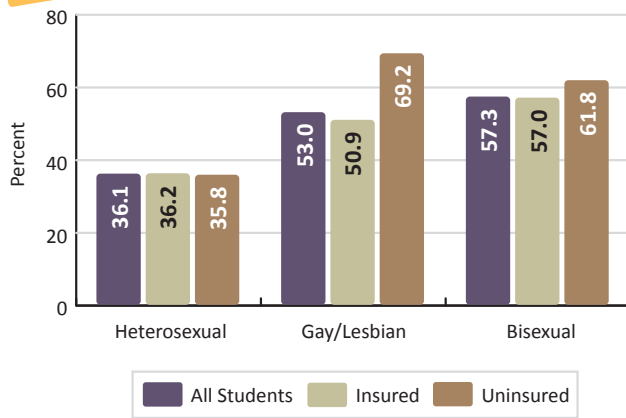### Treatment for Sexually Transmitted Infections
All Students by Sexual Identity and Insurance Status
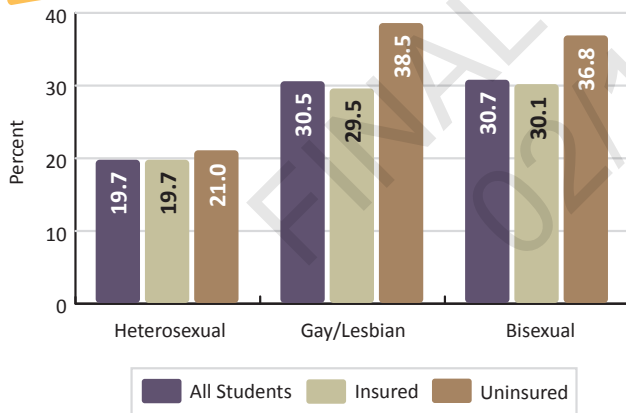
Gay/lesbian and bisexual students who are insured report statistically significantly higher rates of seeking treatment for sexually transmitted infections (STIs) within the past 12 months compared to heterosexual students (**29.5%**, **30.1%**, and **19.7%**, respectively) (χ^2=70.62, *df*=2, p<0.0001). A statistically significant difference is not seen between gay/lesbian and bisexual students who report being insured (**29.5%** vs. **30.1%**, respectively) (χ^2=0.04, *df*=1, p=0.84).

Among the uninsured, gay/lesbian and bisexual students also report statistically significantly higher rates of seeking treatment for STIs within the past 12 months compared to heterosexual students (**38.5%**, **36.8%**, and **21.0%**, respectively) (χ^2=18.9, *df*=2, p<0.0001). A statistically significant difference is not seen among gay/lesbian and bisexual students who report being uninsured (**38.5%** vs. **36.8%**, respectively) (χ^2=0.03, *df*=1, p=0.86).

Gay/lesbian and bisexual students who are insured report statistically significantly higher rates of seeking HIV testing within the past 12 months compared to heterosexual students (**48.2%**, **48.9%**, and **29.4%**, respectively) (χ^2=190.95, df=2, p<0.0001).

Among the uninsured, gay/lesbian and bisexual students also report statistically significantly higher rates of seeking HIV testing within the past 12 compared to heterosexual students (**71.2%**, **52.6%**, and **31.8%**, respectively) (χ^2=47.73, df=2, p<0.0001). Gay/lesbian students who are uninsured report a statistically significantly higher rate compared to bisexual students (**71.2%** vs. **52.6%**, respectively) (χ^2=4.42, df=1, p=0.04).

Health Care Service Utilization— Testing for HIV
All Students by Sexual Identity and Insurance Status

Legend: All Students | Insured | Uninsured
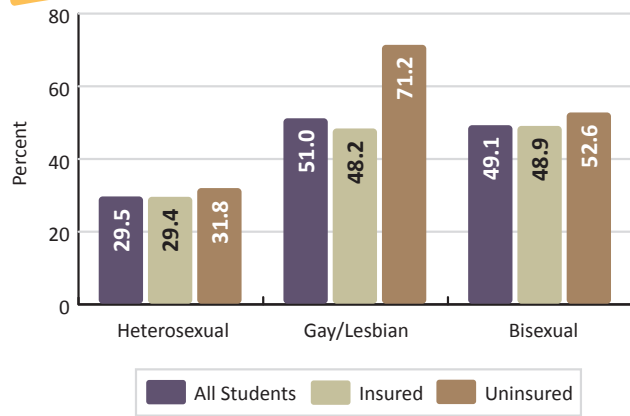
Gay and bisexual males who completed the College Student Health Survey report statistically significantly more days of poor physical health, more days of poor mental health, and more days when poor physical and/or mental health affected daily activities compared to heterosexual males. Bisexual males report more though not statistically significantly different numbers of days of poor health compared to gay males.

Average Number of Days Affected by Illness
Males by Sexual Identity

Illness	Average Number of Days Affected— Past 30 Days			Statistic
Poor Physical Health	2.9	3.4	4.0	F(2,9305)=4.88 **p=0.008**
Poor Mental Health	5.0	6.6	7.3	F(2,9305)=39.84 **p<0.0001**
Poor Physical and/or Mental Health Affected Daily Activities	2.9	3.7	4.4	F(2,9305)=25.95 **p<0.0001**

Legend: Heterosexual | Gay | Bisexual

Gay/lesbian and bisexual females who completed the College Student Health Survey report statistically significantly 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 heterosexual females. Bisexual females report statistically significantly more days of poor mental health and more days when poor physical and/or mental health affected daily activities compared to females who identify as lesbian (p<0.05).

Average Number of Days Affected by Illness
Females by Sexual Identity

Illness	Average Number of Days Affected— Past 30 Days			Statistic
Poor Physical Health	3.9	4.9	5.2	F(2,16908)=19.49 **p<0.0001**
Poor Mental Health	6.2	8.1	9.7	F(2,16908)=72.88 **p<0.0001**
Poor Physical and/or Mental Health Affected Daily Activities	3.1	4.2	5.4	F(2,16908)=58.26 **p<0.0001**

Legend: Heterosexual | Gay/Lesbian | Bisexual

Acute Condition Diagnosis—Lifetime and Past 12 Months
Males by Sexual Identity

Acute Condition	Percent Who Report Being Diagnosed					
	Within Lifetime			Within Past 12 Months		
Chlamydia	1.7	5.3	3.7	0.5	2.9	1.3
Gonorrhea	0.5	6.0	2.5	0.1	1.1	1.3
Hepatitis A	0.4	0.4	0.6	0.1	0.4	0.6
Lyme Disease	1.5	1.4	1.2	0.2	0.7	1.3
Mononucleosis	6.3	8.5	8.6	0.8	1.8	0.6
Pubic Lice	1.2	9.2	3.7	0.1	1.1	0.0
Strep Throat	40.8	47.2	42.0	5.0	7.6	3.1
Syphilis	0.3	2.8	1.2	0.1	0.7	0.6
Urinary Tract Infection	3.2	8.9	6.1	0.6	2.5	1.9
At Least One of the Above Acute Conditions	45.3	57.1	51.5	6.7	14.4	8.9

Legend: ■ Heterosexual ■ Gay ■ Bisexual

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

Male students who identify as gay report a statistically significantly higher rate of being diagnosed with at least one acute condition within their lifetime compared to male heterosexual students (**57.1%** vs. **45.3%**, respectively) (χ^2=15.25, *df*=1, p<0.0001). Gay males report a higher though not statistically significantly different rate of being diagnosed with at least one acute condition within their lifetime compared to bisexual males (**57.1%** vs. **51.5%**, respectively) (χ^2=1.07, *df*=1, p=0.30).

Gay males also report a statistically significantly higher rate of being diagnosed with at least one acute condition within the past 12 months compared to male heterosexual students (**14.4%** vs. **6.7%**, respectively) (χ^2=24.44, *df*=1, p<0.0001). Gay males report a higher though not statistically significantly different rate of being diagnosed with at least one acute condition within the past 12 months compared to male bisexual students (**14.4%** vs. **8.9%**, respectively) (χ^2=2.84, *df*=1, p=0.09).

Acute Condition Diagnosis—Lifetime and Past 12 Months
Females by Sexual Identity

Acute Condition	Percent Who Report Being Diagnosed					
	Within Lifetime			Within Past 12 Months		
Chlamydia	5.1	5.3	7.9	0.9	2.9	1.8
Gonorrhea	0.9	1.0	0.8	0.1	0.0	0.0
Hepatitis A	0.4	1.0	0.2	0.05	0.5	0.2
Lyme Disease	1.4	2.9	1.5	0.3	0.0	0.0
Mononucleosis	11.5	13.0	12.8	1.4	1.5	1.7
Pubic Lice	2.3	2.9	2.7	0.1	0.0	0.0
Strep Throat	52.1	51.2	57.0	9.0	6.9	9.4
Syphilis	0.2	0.0	0.0	0.1	0.0	0.0
Urinary Tract Infection	37.5	30.0	46.0	13.1	6.5	15.6
At Least One of the Above Acute Conditions	67.2	67.6	74.3	21.8	14.1	25.7

Legend: ■ Heterosexual ■ Gay/Lesbian ■ Bisexual

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

Female students who identify as bisexual report a statistically significantly higher rate of being diagnosed with at least one acute condition within their lifetime compared to female heterosexual students (**74.3%** vs. **67.2%**, respectively) (χ^2=14.02, *df*=1, p=0.0002). Female bisexual students report a higher though not statistically significantly higher rate of being diagnosed with at least one acute condition within their lifetime compared to female gay/lesbian students (**74.3%** vs. **67.6%**, respectively) (χ^2=3.48, *df*=1, p=0.06).

Female bisexual students also report a statistically significantly higher rate of being diagnosed with at least one acute condition within the past 12 months compared to female heterosexual students (**25.7%** vs. **21.8%**, respectively) (χ^2=5.22, *df*=1, p=0.02) and female gay/lesbian students (**25.7%** vs. **14.1%**, respectively) (χ^2=11.69, *df*=1, p=0.001).

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

Male students who identify as gay report a statistically significantly higher rate of being diagnosed with at least one chronic condition within their lifetime compared to male heterosexual students (**67.9%** and **54.0%**, respectively) (χ^2=20.90, *df*=1, p<0.0001). Gay male students report a higher though not statistically significantly higher rate of being diagnosed with at least one acute condition within their lifetime compared to bisexual male students (**67.9%** vs. **59.7%**, respectively) (χ^2=2.93, *df*=1, p=0.09).

Gay male students also report a statistically significantly higher rate of being diagnosed with at least one chronic condition within the past 12 months compared to heterosexual male students (**28.4%** vs. **18.7%**, respectively) (χ^2=15.97, *df*=1, p<0.0001). Gay male students report a higher though not statistically significantly different rate of being diagnosed with at least one acute condition within the past 12 months compared to bisexual males (**28.4%** vs. **22.8%**, respectively) (χ^2=1.55, *df*=1, p=0.21).

Chronic Condition Diagnosis— Lifetime and Past 12 Months
Males by Sexual Identity

Acute Condition	Percent Who Report Being Diagnosed					
	Within Lifetime			Within Past 12 Months		
Alcohol Problems	5.2	9.6	6.7	1.5	3.2	4.4
Allergies	35.2	45.7	38.3	8.4	11.5	6.3
Asthma	14.9	16.0	26.4	2.1	2.9	3.2
Cancer	0.8	1.8	0.6	0.2	1.1	0.6
Diabetes Type I	0.7	1.8	0.6	0.3	1.4	0.0
Diabetes Type II	1.0	2.1	2.5	0.6	1.8	1.3
Drug Problems (Other Than Alcohol)	3.6	7.8	6.2	0.6	2.2	1.3
Genital Herpes	0.6	1.8	0.0	0.2	1.8	0.0
Genital Warts/ Human Papilloma Virus	1.6	9.2	3.1	0.5	5.1	1.3
Hepatitis B	0.6	1.8	0.0	0.2	0.7	0.0
Hepatitis C	0.5	1.1	1.2	0.2	0.7	0.0
High Blood Pressure	7.5	9.6	11.1	3.9	4.3	5.1
High Cholesterol	6.1	9.9	6.2	3.0	4.3	2.5
HIV/AIDS	0.3	6.0	0.6	0.2	2.9	0.6
Obesity	4.9	11.3	9.3	2.3	4.3	3.8
Repetitive Stress Injury	2.0	2.2	2.6	0.7	0.4	0.7
Tuberculosis	0.7	0.4	1.9	0.2	0.4	0.6
At Least One of the Above Chronic Conditions	54.0	67.9	59.7	18.7	28.4	22.8

Legend: Heterosexual / Gay / Bisexual

FINAL DRAFT
02/14/13

Chronic Condition Diagnosis—Lifetime and Past 12 Months
Females by Sexual Identity

Acute Condition	Percent Who Report Being Diagnosed					
	Within Lifetime			Within Past 12 Months		
Alcohol Problems	3.3	11.6	9.2	0.8	4.5	2.0
Allergies	40.1	53.6	46.9	11.4	16.8	13.4
Asthma	17.9	28.0	28.3	3.8	5.0	5.6
Cancer	1.9	2.4	2.1	0.4	0.0	0.2
Diabetes Type I	0.6	0.5	0.5	0.1	0.0	0.0
Diabetes Type II	0.9	1.4	1.8	0.4	1.0	0.5
Drug Problems (Other Than Alcohol)	2.6	7.7	9.5	0.5	2.0	1.7
Genital Herpes	2.1	2.4	3.6	0.5	0.5	0.2
Genital Warts/ Human Papilloma Virus	6.1	5.8	10.0	1.7	2.0	2.3
Hepatitis B	0.2	0.0	0.0	0.1	0.0	0.0
Hepatitis C	0.3	0.0	0.6	0.1	0.0	0.0
High Blood Pressure	5.1	7.8	6.3	2.3	2.5	3.2
High Cholesterol	6.3	9.2	6.3	2.8	3.5	2.7
HIV/AIDS	0.1	0.0	0.0	0.1	0.0	0.0
Obesity	9.6	17.4	17.8	5.1	7.0	9.3
Repetitive Stress Injury	4.1	6.3	5.3	1.2	0.6	1.9
Tuberculosis	0.5	0.0	0.5	0.1	0.0	0.0
At Least One of the Above Chronic Conditions	61.7	75.1	71.8	25.4	33.5	31.6

Heterosexual   Gay/Lesbian   Bisexual

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

Gay/lesbian and bisexual female students report statistically significantly higher rates of being diagnosed with at least one chronic condition within their lifetime compared to heterosexual female students (**75.1%**, **71.8%**, and **61.7%**, respectively) (χ^2=39.15, *df*=2, p<0.0001). Gay/lesbian female students report a higher though not statistically significantly higher rate of being diagnosed with at least one acute condition within their lifetime compared to bisexual female students (**75.1%** vs. **71.8%**, respectively) (χ^2=0.81, *df*=1, p=0.37).

Gay/lesbian and bisexual female students also report statistically significantly higher rates of being diagnosed with at least one chronic condition within the past 12 months compared to heterosexual female students (**33.5%**, **31.6%**, and **25.4%**, respectively) (χ^2=16.38, *df*=2, p=0.0003). Gay/lesbian female students report a higher though not statistically significantly higher rate of being diagnosed with at least one acute condition within the past 12 months compared to bisexual female students (**33.5%** vs. **31.6%**, respectively) (χ^2=0.24, *df*=1, p=0.62).

FINAL DRAFT
02/14/13

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. Among all age groups, 18- to 25-year-olds have the highest past-year prevalence of any mental illness, i.e., a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within the Diagnostic and Statistic Manual of Mental Disorders-IV, (29.9%), serious mental illness, i.e., mental illness that results in functional impairment, (7.7%), major depressive episode (8.2%), and having serious thoughts of suicide (6.6%) (SAMHSA, 2012). More than one in ten (10.9%) young adults between the ages of 18 and 25 have received treatment for a mental health problem in the previous year (SAMHSA, 2012).

According to the Institute of Medicine, LGBT youth are typically well adjusted and mentally healthy. Research based on probability samples consistently indicates that the majority of LGBT youth do not report mental health issues. However, compared to their heterosexual peers, LGBT youth and adults appear to experience more mood and anxiety disorders, depression, suicidal ideation and thoughts, and suicide attempts (IOM, 2011).

According to the 2009 American College Health Association-National College Health Assessment that surveyed 27,454 students from 55 U.S. colleges and universities, compared to heterosexual students, bisexual and gay and lesbian students reported higher rates of 10 feelings and behaviors related to poor mental health within the past 12 months: felt things were hopeless, felt exhausted, felt very lonely, felt very sad, felt so depressed that it was difficult to function, felt overwhelming anxiety, intentionally cut, burned, bruised, or otherwise injured yourself, seriously considered suicide, and attempted suicide. Bisexual and gay and lesbian students reported higher rates than heterosexual students of being diagnosed and treated for anxiety, depression, and panic attacks. Additionally, more bisexual and gay and lesbian students than heterosexual students reported receiving psychological or mental health services from a counselor/therapist/psychologist, psychiatrist, other medical provider, and their current college/university's counseling or health services (Oswalt & Wyatt, 2011).

For gay, bisexual, and heterosexual male students who completed the College Student Health Survey, depression, anxiety, and attention deficit disorder are the most frequently reported mental health diagnoses within their lifetime and within the past 12 months.

Gay and bisexual male students report statistically significantly higher rates of being diagnosed with at least one of the listed mental health conditions within their lifetime compared to heterosexual students (**48.4%**, **43.3%**, and **27.2%**, respectively) (χ^2=79.83, *df*=2, p<0.0001). Gay and bisexual male students also report statistically significantly higher rates of being diagnosed with one of the listed mental health conditions within the past 12 months compared to heterosexual male students (**22.4%**, **24.5%**, and **10.2%**, respectively) (χ^2=73.02, *df*=2, p<0.0001).

Mental Health Condition Diagnosis— Lifetime and Past 12 Months
Males by Sexual Identity

Mental Health Condition	Percent Who Report Being Diagnosed					
	Within Lifetime			Within Past 12 Months		
Alcohol Problems	5.2	9.6	6.7	1.5	3.2	4.4
Anorexia	0.4	2.8	1.9	0.1	2.5	0.0
Anxiety	10.8	24.1	24.4	4.8	9.7	15.8
Attention Deficit Disorder	9.2	15.6	14.2	2.1	6.1	4.4
Bipolar Disorder	1.6	6.7	4.3	0.4	1.4	1.9
Bulimia	0.1	1.8	0.6	0.1	1.1	0.0
Depression	14.3	30.9	33.7	4.8	11.9	17.6
Drug Problems (Other Than Alcohol)	3.6	7.8	6.2	0.6	2.2	1.3
Obsessive-Compulsive Disorder	1.3	4.3	6.2	0.4	2.2	1.9
Panic Attacks	4.1	12.1	12.3	1.6	3.6	5.1
Post-Traumatic Stress Disorder	1.9	3.9	3.1	0.9	1.4	1.3
Seasonal Affective Disorder	2.0	9.6	6.2	0.9	4.7	2.6
Social Phobia/ Performance Anxiety	3.0	6.7	6.2	1.5	3.2	1.9
At Least One of the Above Mental Health Conditions	27.2	48.4	43.3	10.2	22.4	24.5

Heterosexual   Gay   Bisexual

For heterosexual and bisexual female students who completed the College Student Health Survey, depression, anxiety, and panic attacks are the most frequently reported mental health diagnoses within their lifetime and within the past 12 months. Among gay/lesbian female students, depression, anxiety, and panic attacks are the most frequently reported mental health diagnoses within their lifetime, and anxiety, depression and attention deficit disorder are the most frequently reported mental health diagnoses within the past 12 months.

Bisexual and gay/lesbian female students report a statistically significantly higher rate of being diagnosed with at least one of the listed mental health conditions within their lifetime compared to heterosexual students (**67.0%**, **67.7%**, and **39.2%**, respectively) (χ^2=255.2, *df*=2, p<0.0001). Bisexual and gay/lesbian female students also report statistically significantly higher rates of being diagnosed with one of the listed mental health conditions within the past 12 months compared to heterosexual female students (**31.4%**, **32.3%**, and **18.0%**, respectively) (χ^2=93.71, *df*=2, p<0.0001).

## Mental Health Condition Diagnosis— Lifetime and Past 12 Months
Females by Sexual Identity

Mental Health Condition	Percent Who Report Being Diagnosed					
	Within Lifetime			Within Past 12 Months		
Alcohol Problems	3.3	11.6	9.2	0.8	4.5	2.0
Anorexia	2.5	1.9	8.7	0.4	0.0	1.7
Anxiety	22.9	37.2	44.5	11.1	15.3	18.3
Attention Deficit Disorder	5.3	16.4	12.0	1.9	7.0	3.3
Bipolar Disorder	1.7	5.8	8.4	0.6	2.5	2.7
Bulimia	2.1	3.4	6.0	0.5	1.0	1.7
Depression	27.5	48.3	52.7	9.9	12.4	17.0
Drug Problems (Other Than Alcohol)	2.6	7.7	9.5	0.5	2.0	1.7
Obsessive-Compulsive Disorder	2.5	6.3	6.0	0.9	3.5	2.7
Panic Attacks	10.8	18.8	27.3	4.2	5.4	11.0
Post-Traumatic Stress Disorder	3.8	13.0	15.2	1.2	5.9	5.7
Seasonal Affective Disorder	4.7	5.3	13.4	2.1	3.5	5.3
Social Phobia/ Performance Anxiety	3.9	7.7	12.8	1.7	2.5	6.0
At Least One of the Above Mental Health Conditions	39.2	67.7	67.0	18.0	32.3	31.4

Heterosexual   Gay/Lesbian   Bisexual
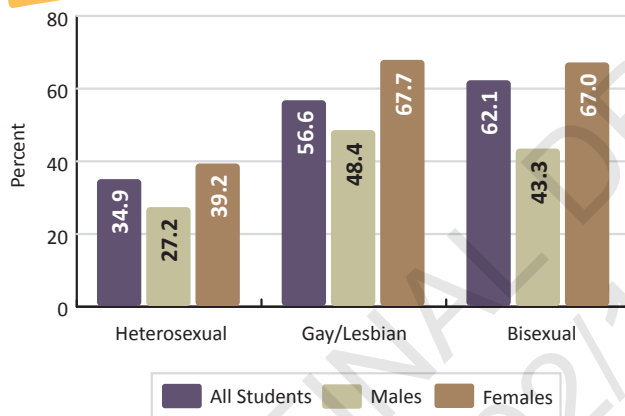
Mental Health Condition Co-Morbidities
All Students by Sexual Identity
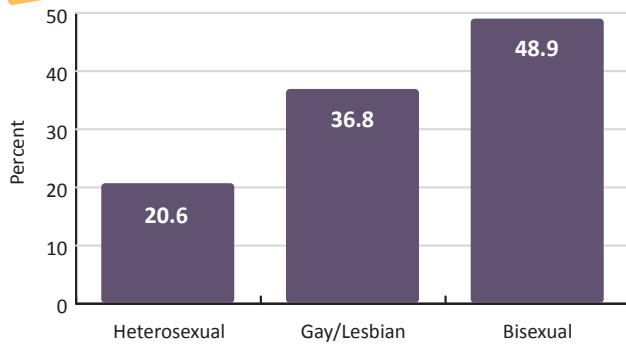
Bisexual and gay/lesbian students report statistically significantly higher rates of being diagnosed with two or more mental conditions within their lifetime compared to heterosexual students (**48.9%**, **36.8%**, and **20.6%**, respectively) (χ^2=429.09, *df*=2, p<0.0001). Bisexual students report statistically significantly higher rates compared to gay/lesbian students (**48.9%** vs. **36.8%**, respectively) (χ^2=18.14, *df*=1, p<0.0001).

Any Mental Health Condition Diagnosis—Lifetime
All Students by Sexual Identity and Gender

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of being diagnosed with a mental health condition within their lifetime compared to students who identify as heterosexual (**56.6%**, **62.1%**, and **34.9%**, respectively) (χ^2=332.72, *df*=2, p<0.0001). The rate of being diagnosed within their lifetime is similar among bisexual and gay/lesbian students (**62.1%** vs. **56.6%**, respectively) (χ^2=3.80, *df*=1, p=0.06). The rate of being diagnosed within their lifetime is statistically significantly higher among gay/lesbian students compared to heterosexual students (**56.6%** vs. **34.9%**, respectively) (χ^2=97.25, *df*=1, p<0.0001).

Gay males report a higher though not statistically significantly different rate compared to bisexual males (**48.4%** vs. **43.3%**, respectively) (χ^2=0.1.09, *df*=1, p=0.30). Gay/lesbian and bisexual female students report similar rates (**67.7%** vs. **67.0%**, respectively) (χ^2=0.06, *df*=1, p=0.81).

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of being diagnosed with a mental health condition within the past 12 months compared to students who identify as heterosexual (**26.6%**, **30.0%**, and **15.2%**, respectively) (χ^2=160.38, *df*=2, p<0.0001). The rate of being diagnosed within the past 12 months reported by bisexuals is higher though not statistically different then the rate reported by gay/lesbians (**30.0%** vs. **26.6%**, respectively) (χ^2=2.01, *df*=1, p=0.16).

Gay males report a lower though not statistically significantly different rate compared to bisexual males (**22.4%** vs. **24.5%**, respectively) (χ^2=0.26, *df*=1, p=0.61). Female bisexuals report a lower though not statistically significantly different rate compared to females who identify as lesbians (**31.4%** vs. **32.3%**, respectively) (χ^2=0.06, *df*=1, p=0.81).
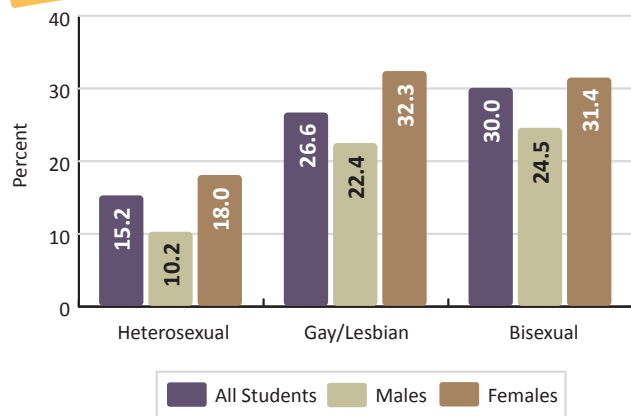
The most commonly experienced stressors within the past 12 months among gay/lesbian students who completed the College Student Health Survey are issues related to sexual orientation, the termination of a personal relationship (not including marriage), and roommate/housemate conflict. Students who identify as bisexual report the termination of a personal relationship (not including marriage), roommate/housemate conflict, and parental conflict as the most commonly experienced stressors. Students who identify as heterosexual report most commonly experiencing the serious physical illness or death of someone close to them and roommate/housemate conflict.

A total of **49.7%** of bisexuals, **43.4%** of gays/lesbians, and **24.2%** of heterosexuals report experiencing three or more stressors within the past 12 months, (χ^2=354.80, *df*=2, p<0.0001).

Any Mental Health Condition Diagnosis— Past 12 Months
All Students by Sexual Identity and Gender

Mental Health Stressors
All Students by Sexual Identity

Stressor	Percent Who Report Experiencing Within Past 12 Months		
Getting Married	3.0	1.8	3.6
Failing a Class	10.5	11.8	16.7
Serious Physical Illness of Someone Close to You	16.4	19.1	23.5
Death of Someone Close to You	20.3	17.9	20.8
Being Diagnosed With a Serious Physical Illness	2.8	6.4	4.4
Being Diagnosed With a Serious Mental Illness	4.1	7.6	12.6
Divorce or Separation From Your Spouse	4.6	7.4	9.6
Termination of Personal Relationship (Not Including Marriage)	16.1	22.5	30.5
Attempted Suicide	0.8	1.4	5.0
Being Put on Academic Probation	7.4	9.4	11.2
Excessive Credit Card Debt	10.7	14.7	12.4
Excessive Debt Other Than Credit Card	12.7	17.5	20.6
Being Arrested	1.5	3.0	2.2
Being Fired or Laid Off From a Job	6.7	8.0	9.5
Roommate/Housemate Conflict	18.2	22.5	30.6
Parental Conflict	13.4	19.5	27.1
Lack of Health Care Coverage	12.9	19.9	22.2
Issues Related to Sexual Orientation	0.6	44.6	23.1
Bankruptcy	0.6	0.8	1.5
Zero of the Above Stressors	31.7	17.3	13.9
One or Two of the Above Stressors	44.1	39.3	36.4
Three or More of the Above Stressors	24.2	43.3	49.7

Heterosexual   Gay/Lesbian   Bisexual

Ability to Manage Stress—Past 12 Months
All Students by Sexual Identity

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


| Heterosexual | Gay/Lesbian | Bisexual |
| 25.8% / 74.2% | 34.7% / 65.3% | 41.8% / 58.2% |
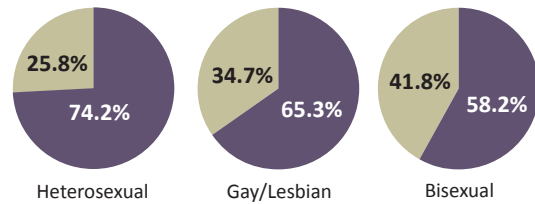
■ Managed Stress (Index≤1)   ■ Unmanaged Stress (Index>1)

More than one-fourth (**25.8%**) of students who identify as heterosexual, more than one-third (**34.7%**) of gay/lesbian students, and more than two in five (**41.8%**) bisexual students who completed the College Student Health Survey report they are unable to manage their stress level (χ^2=118.82, *df*=2, p<0.0001).

Depression Diagnosis—Lifetime
All Students by Sexual Identity and Gender
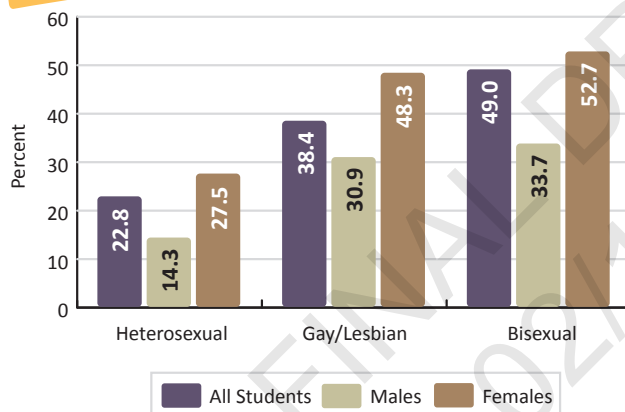
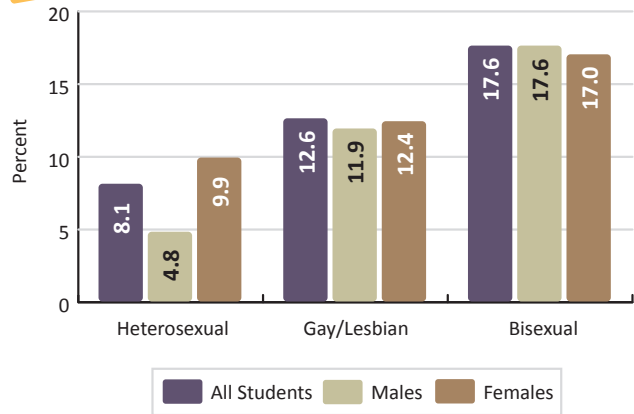■ All Students   ■ Males   ■ Females

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of being diagnosed with depression within their lifetime compared to students who identify as heterosexual (**38.4%**, **49.0%**, and **22.8**%, respectively) (χ^2=352.81, *df*=2, p<0.0001). The rate of being diagnosed within their lifetime reported by bisexuals is statistically significantly higher than the rate reported by gay/lesbian students (**49.0%** vs. **38.4%**, respectively) (χ^2=13.86, *df*=1, p=0.0002). The rate of being diagnosed within their lifetime reported by gay/lesbian students is statistically significantly higher than the rate reported by heterosexuals (**38.4%** vs. **22.8%**, respectively) (χ^2=68.16, *df*=1, p<0.0001).

Bisexual males report a higher though not statistically significantly different rate compared to gay males (**33.7%** vs. **30.9%**, respectively) (χ^2=0.39, *df*=1, p=0.60). Similarly, female bisexuals report a higher though not statistically significantly different rate compared to females who identify as lesbians (**52.7%** vs. **48.3%**, respectively) (χ^2=1.18, *df*=1, p=0.30).

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of being diagnosed with depression within the past 12 months compared to students who identify as heterosexual (**12.6%**, **17.6%**, and **8.1%**, respectively) (χ^2=99.62, *df*=2, p<0.0001). The rate of being diagnosed within the past 12 months reported by bisexuals is statistically significantly higher than the rate reported by gay/lesbian students (**17.6%** vs. **12.6%**, respectively) (χ^2=5.70, *df*=1, p=0.02). The rate of being diagnosed within the past 12 months reported by gay/lesbian students is statistically significantly higher than the rate reported by heterosexuals (**12.6%** vs. **8.1%**, respectively) (χ^2=13.20, *df*=1, p=0.0003).
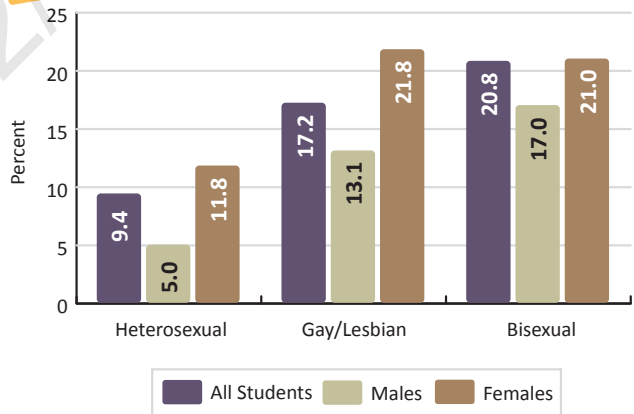
Bisexual males report a higher though not statistically different rate compared to gay males (**17.6%** vs. **11.9%**, respectively) (χ^2=2.77, *df*=1, p=0.10). Female bisexuals also report a higher though not statistically significantly different rate compared to females who identify as lesbians (**17.0%** vs. **12.4%**, respectively) (χ^2=2.4, *df*=1, p=0.12).

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of using medication for depression compared to students who identify as heterosexual (**20.8%**, **17.2%**, and **9.4%**, respectively) (χ^2=142.92, *df*=2, p <0.0001). The rate of using medication for depression reported by bisexuals is higher though not statistically significantly different than the rate reported by gay/lesbian students (**20.8%** vs. **17.2%**, respectively) (χ^2=2.53, *df*=1, p=0.11). The rate of currently taking medication for depression reported by gay/lesbian students is statistically significantly higher than the rate reported by heterosexuals (**17.2%** vs. **9.4%**, respectively) (χ^2=34.45, *df*=1, p<0.0001).

Bisexual males report a higher though not statistically different rate compared to gay males (**17.0%** vs. **13.1%**, respectively) (χ^2=1.24, *df*=1, p=0.27). Female bisexuals report a slightly lower though not statistically significantly different rate compared to females who identify as lesbians (**21.0%** vs. **21.8%**, respectively) (χ^2=0.07, *df*=1, p=0.84).

Depression Diagnosis—Past 12 Months
All Students by Sexual Identity and Gender

Currently Taking Medication for Depression
All Students by Sexual Identity and Gender

Currently Taking Medication for Mental Health Problems Other Than Depression
All Students by Sexual Identity and Gender
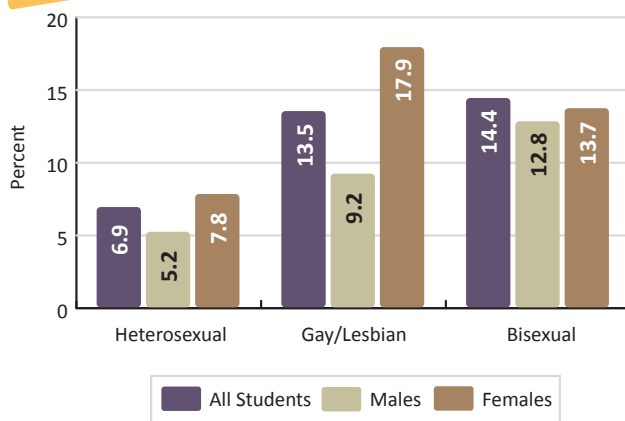
Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of using medication for mental health condition other than depression compared to students who identify as heterosexual (**13.5%**, **14.4%**, and **6.9%**, respectively) (χ^2=95.10, *df*=2, p<0.0001). The rate of using medication for a mental health condition other than depression reported by bisexuals is similar to the rate reported by gay/lesbians (**14.4%** vs. **13.5%**, respectively) (χ^2=0.19, *df*=1, p=0.68). The rate of currently taking medication for a mental health condition other than depression reported by gay/lesbian students is statistically significantly higher than the rate reported by heterosexuals (**13.5%** vs. **6.9%**, respectively) (χ^2=33.31, *df*=1, p<0.0001).

Bisexual males report a higher though not statistically significantly different rate compared to gay males (**12.8%** vs. **9.2%**, respectively) (χ^2=1.41, *df*=1, p=0.24). Female bisexuals report a lower though not statistically significantly different rate compared to females who identify as lesbians (**13.7%** vs. **17.9%**, respectively) (χ^2=2.11, *df*=1, p=0.15).

Eating Disorder Diagnosis—Lifetime
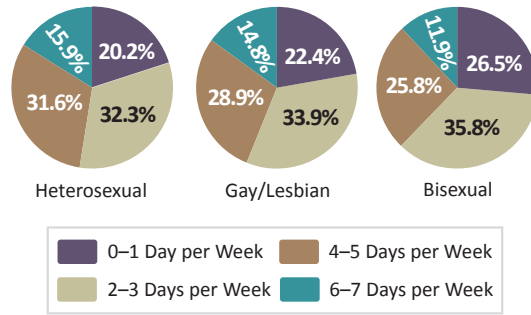All Students by Sexual Identity and Gender
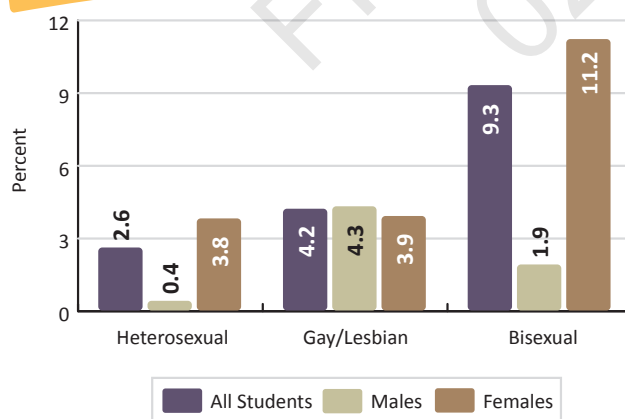
Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of being diagnosed with anorexia and/or bulimia within their lifetime compared to students who identify as heterosexual (**4.2%**, **9.3%**, and **2.6%**, respectively) (χ^2=130.45, *df*=2, p <0.0001). The rate of being diagnosed with anorexia and/or bulimia within their lifetime is statistically significantly higher among bisexuals compared to gays/lesbians (**9.3%** vs. **4.2%**, respectively) (χ^2=11.81, *df*=1, p=0.001). The rate of being diagnosed with anorexia and/or bulimia within their lifetime reported by gay/lesbians is statistically significantly higher than the rate reported by heterosexuals (**4.2%** vs. **2.6%**, respectively) (χ^2=4.98, *df*=1, p=0.03).

Bisexual males report a lower though not statistically significantly different rate compared to gay males (**1.9%** vs. **4.3%**, respectively) (χ^2=1.84, *df*=1, p=0.28). Female bisexuals report a statistically significantly higher rate compared to females who identify as lesbians (**11.2%** vs. **3.9%**, respectively) (χ^2=9.77, *df*=1, p=0.002).

Bisexual students report the highest rate of receiving enough sleep so they feel rested when they woke up in the morning on three or fewer days over the previous seven days compared to heterosexual and gay/lesbian students (**62.3%**, **52.5%**, and **56.3%**, respectively) (χ^2=31.347, *df*=2, p<0.0001).

Number of Days of Adequate Sleep—Past Seven Days
All Students by Sexual Identity

Heterosexual: 20.2%, 32.3%, 31.6%, 15.9%

Gay/Lesbian: 22.4%, 33.9%, 28.9%, 14.8%

Bisexual: 26.5%, 35.8%, 25.8%, 11.9%

- 0–1 Day per Week
- 2–3 Days per Week
- 4–5 Days per Week
- 6–7 Days per Week

Results

Tobacco Use

Recent research shows that approximately one-third of 18- to 20-year-olds (31.9%) and 21- to 25-year-olds (35.8%) report current cigarette use (SAMHSA, 2011). More than one in four (28.1%) full-time college students smoked cigarettes at least one time in the previous year; fewer than one in five (16.4%) smoked cigarettes at least one time in the previous 30 days; and fewer than one in ten (7.6%) smoke cigarettes daily (Johnson et al., 2011). Among young adults ages 18–25, 6.4% used smokeless tobacco in the previous month (SAMHSA, 2011). Current cigarette smokers are more likely to use other tobacco products, alcohol, or illicit drugs than nonsmokers (SAMHSA, 2011). Among all current smokers, 45.3% have stopped smoking for at least one day in the preceding 12 months (CDC, 2009). Of the 15 million college students in the United States, an estimated 1.7 million will die prematurely due to smoking-related illnesses (Halperin, 2002). Clearly the current level of tobacco use among college students poses a major health risk.

According to the Institute of Medicine, LGBT youth and adults may have higher rates of smoking than their heterosexual peers (IOM, 2011). Results from a random sample of college students enrolled at a large metropolitan university in Louisville, Kentucky showed that compared to their heterosexual peers, gay and bisexual males reported similar rates of current smoking while lesbian and bisexual females were 4.9 times more likely to smoke in the past 30 days (Ridner et al, 2006).

Students who report their sexual orientation as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of current tobacco use compared to students who identify as heterosexual (**34.7%**, **35.6%**, and **25.8%**, respectively) (χ^2=56.60, *df* =2, p<0.0001). The rate of current tobacco use reported by bisexuals is slightly higher though not statistically significantly different than the rate reported by gay/lesbian students (**35.6%** vs. **34.7%**, respectively) (χ^2=0.10, *df* =1, p=0.75).
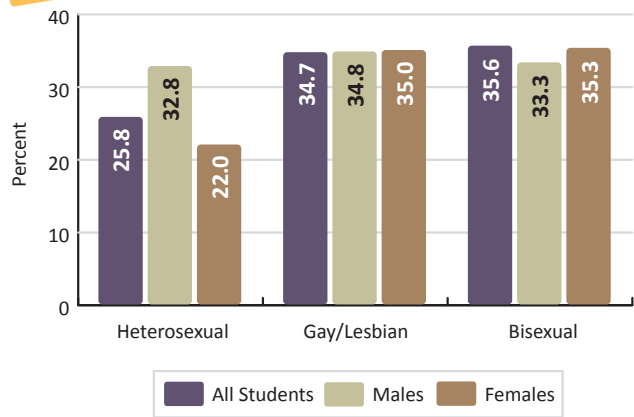
Gay males report a higher though not statistically significantly different rate compared to bisexual males (**34.8%** vs. **33.3%**, respectively) (χ^2=0.093, *df* =1, p=0.836). Female bisexuals report a similar rate compared to females who identify as lesbians (**35.3%** vs. **35.0%**, respectively) (χ^2=0.01, *df* =1, p=0.92).

> **Definition:**
> **Current Tobacco Use**
>
> Any tobacco use in the past 30 days. Tobacco use includes both smoking and smokeless tobacco.
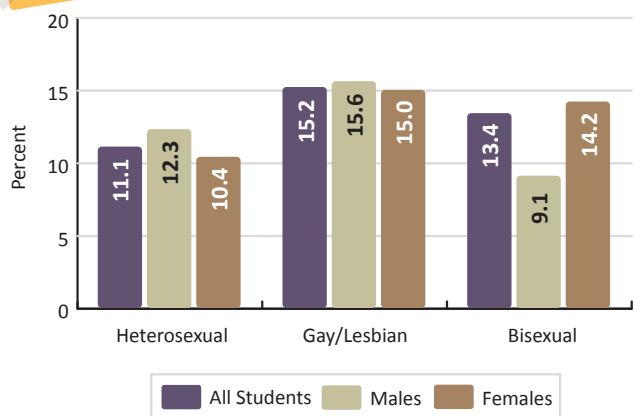
Students who report their sexual orientation as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of daily tobacco use compared to students who identify as heterosexual (**15.2%**, **13.4%**, and **11.1%**, respectively) (χ^2=12.23, *df* =2, p=0.002). The rate of daily tobacco use reported by gay/lesbians is higher though not statistically significantly different than the rate reported by bisexuals (**15.2%** vs. **13.4%**, respectively) (χ^2=0.80, *df* =1, p=0.37).

Gay males report a higher though not statistically significantly different rate compared to bisexual males (**15.6%** vs. **9.1%**, respectively) (χ^2=3.85, *df* =1, p=0.05). Female bisexuals report a lower though not statistically different rate compared to females who identify as lesbians (**14.2%** vs. **15.0%**, respectively) (χ^2=0.08, *df* =1, p=0.78).

Current Tobacco Use
All Students by Sexual Identity and Gender

	All Students	Males	Females
Heterosexual	25.8	32.8	22.0
Gay/Lesbian	34.7	34.8	35.0
Bisexual	35.6	33.3	35.3

Daily Tobacco Use
All Students by Sexual Identity and Gender

	All Students	Males	Females
Heterosexual	11.1	12.3	10.4
Gay/Lesbian	15.2	15.6	15.0
Bisexual	13.4	9.1	14.2

Current Smokeless Tobacco Use
All Students by Sexual Identity and Gender

Chart data — Percent:

	Heterosexual	Gay/Lesbian	Bisexual
All Students	5.2	1.8	2.4
Males	12.9	1.1	6.1
Females	1.0	2.4	1.5

Students who report their sexual orientation as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly lower rates of smokeless tobacco use compared to students who identify as heterosexual (**1.8%**, **2.4%**, and **5.2%**, respectively) (χ^2=24.256, *df* =2, p<0.0001). The rate of smokeless tobacco use reported by gays/lesbians is lower though not statistically significantly different than the rate reported by bisexuals (**1.8%** vs. **2.4%**, respectively) (χ^2=0.50, *df* =1, p=0.48).
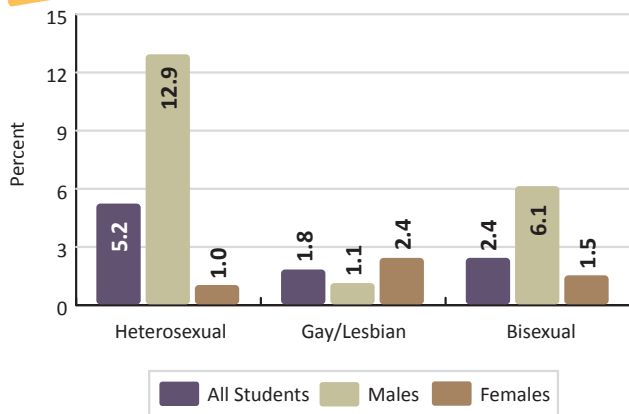
Bisexual males report a statistically significantly different rate compared to gay male students (**6.1%** vs. **1.1%**, respectively) (p[Fishers]=0.006). Female bisexuals report a lower though not statistically significantly different rate compared to females who identify as lesbians (**1.5%** vs. **2.4%**, respectively) (p[Fishers]=0.36).

Average Number of Cigarettes Smoked on an Average Weekday
Tobacco Users by Sexual Identity
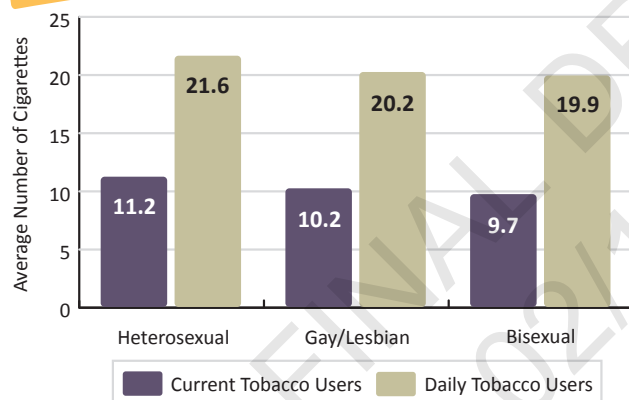
Chart data — Average Number of Cigarettes:

	Heterosexual	Gay/Lesbian	Bisexual
Current Tobacco Users	11.2	10.2	9.7
Daily Tobacco Users	21.6	20.2	19.9

Students who report their sexual orientation as gay/lesbian or bisexual who completed the College Student Health Survey and who are current tobacco users report lower though not statistically different average numbers of cigarettes per weekday compared to students who identify as heterosexual (**10.24**, **9.70**, and **11.17**, respectively) (F(2,6270)=1.18, p=0.31). Gay/lesbian and bisexual students who are daily tobacco users also report lower though not statistically different average numbers of cigarettes per weekday compared to students who identify as heterosexual (**20.23**, **19.87**, and **21.55**, respectively) (F(2,2612)=0.45, p=0.64).

Quit Attempts—Past 12 Months
Tobacco Users by Sexual Identity

Tobacco Use Status	Percent Who Report Making a Quit Attempt Within the Past 12 Months			
	Heterosexual	Gay/Lesbian	Bisexual	Statistic
Current Tobacco Users	53.5	54.2	54.3	χ^2=0.09, *df*=2 **p=0.96**
Daily Tobacco Users	50.5	51.4	53.8	χ^2=0.46, *df*=2 **p=0.79**

Among bisexual students who report using tobacco in the past 30 days, **54.3%** report they made at least one quit attempt within the past 12 months. The quit attempt rate reported among bisexual students is higher though not statistically significantly different compared to the quit attempt rates reported among heterosexual and gay/lesbian students who reported using tobacco within the past 30 days (**54.3%**, **53.5%**, and **54.2%**, respectively) (χ^2=0.09, *df* =2, p=0.96).

The quit attempt rate reported among bisexual students who reported being daily tobacco users is also higher though not statistically significantly different compared to the quit attempt rates reported among heterosexual and gay/lesbian students who reported using tobacco on a daily basis (**53.8%**, **50.5%**, and **51.4%**, respectively) (χ^2=0.46, *df* =2, p=0.79).

The number of quit attempts reported among heterosexual students who reported using tobacco within the past 30 days is higher though not statistically significantly different compared to the number of quit attempts reported among gay/lesbian and bisexual students who reported using tobacco within the past 30 days (**3.79**, **3.43**, and **3.29**, respectively) (F(2,2476)=0.26, p=0.78).

The number of quit attempts reported among bisexual students who reported being daily tobacco users is higher though not statistically significantly different compared to the number of quit attempts reported among heterosexual and gay/lesbian students who reported using tobacco on a daily basis (**3.53**, **2.47**, and **4.09**, respectively) (F(2,1350)=0.47, p=0.62).

Approximately one out of ten (**9.2%**) students who identify as bisexual and a nonsmoker report being exposed to secondhand smoke on average two or more hours per week. This rate of exposure to secondhand smoke is statistically significantly higher than the rate reported among heterosexual and gay/lesbian students who identify as nonsmokers (**9.2%**, **5.2%**, and **5.6%**, respectively) (χ^2=14.14, *df* =2, p≤0.001).

Among current smokers, no statistically significantly different reported rates of exposure to secondhand smoke were seen between heterosexual, gay/lesbian, and bisexual students (**23.8%**, **21.7%**, and **29.4%**, respectively) (χ^2=4.34, *df* =2, p=0.11).

Number of Quit Attempts—Past 12 Months
Tobacco Users by Sexual Identity

Tobacco Use Status	Average Number of Quit Attempts Within the Past 12 Months			
	Heterosexual	Gay/Lesbian	Bisexual	Statistic
Current Tobacco Users	3.79	3.43	3.29	F(2,2476)=0.26 **p=0.78**
Daily Tobacco Users	3.53	2.47	4.09	F(2,1350)=0.47 **p=0.62**

Legend: ■ Heterosexual ■ Gay/Lesbian ■ Bisexual

Secondhand Smoke Exposure—Per Week
All Students by Smoking Status and Sexual Identity

Tobacco Use Status	Percent Who Report Being Exposed to Secondhand Smoke Two or More Hours Per Week			
	Heterosexual	Gay/Lesbian	Bisexual	Statistic
Nonsmoker	5.2	5.6	9.2	χ^2=14.14, *df*=2 **p≤0.001**
Current Smoker	23.8	21.7	29.4	χ^2=4.34, *df*=2 **p=0.11**

Legend: ■ Heterosexual ■ Gay/Lesbian ■ Bisexual
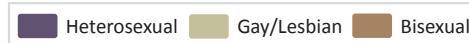
Results

Alcohol Use and Other Drug Use

American college students consume alcohol and other drugs at very high rates. Among full-time college students, more than four in five (82.3%) have consumed alcohol at least one time, nearly four in five (78.6%) have consumed alcohol in the past year, and nearly two in three (65.0%) consume alcohol monthly (Johnston et al, 2011). 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 45.5% and is 33.3% among 18- to 20-year-olds (SAMHSA, 2011). 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 (SAMHSA, 2011).

Approximately one-half (49.1%) of full-time college students have used an illicit drug at least once in their lifetime, more than one-third (35.0%) of full-time college students have used an illicit drug at least once in the past year, and approximately one in five (19.2%) full-time college students have used an illicit drug in the last month (Johnston et al, 2011). Marijuana is the illicit drug of choice for full-time college students, with nearly half (46.8%) of students having used the drug at least once in their lifetime and almost one-third (32.7%) having used it in the past year (Johnston et al., 2011). Among full-time college students, 9.0% have used amphetamines, 3.5% have used cocaine, and 0.2% have used heroin in the previous year (Johnston et al, 2011).

According to the Institute of Medicine, LGBT youth and adults may have higher rates of alcohol use and substance use than their heterosexual peers (IOM, 2011). Results from a random sample of college students enrolled at a large metropolitan university in Louisville, Kentucky showed that compared to their heterosexual peers, gay and bisexual males reported similar rates of current alcohol and marijuana use while lesbian and bisexual females were 10.7 times more likely to use alcohol in the past 30 days and 4.9 times more likely to use marijuana in the past 30 days (Ridner et al, 2006). According to a random sample of students attending a large, urban university in Boston, compared to heterosexual students, GLB students were more likely to report any illicit drug use in the past 30 days, more frequent use of illicit drugs in the past 30 days, a greater number of illicit drugs used in the past 30 days, more frequent negative consequences to alcohol and other drug use, and having seriously thought about or attempted suicide due to alcohol and other drug use in the past 30 days (Reed et al, 2010).

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of past-12-month alcohol use compared to students who identify as heterosexual (**81.1%**, **82.3%**, and **78.4%**, respectively) (χ^2=8.99, *df* =2, p=0.01). The rate of past-12-month alcohol use reported by bisexuals is slightly higher though not statistically significantly different than the rate reported by gay/lesbian students (**82.3%** vs. **81.1%**, respectively) (χ^2=0.22, *df* =1, p=0.64).
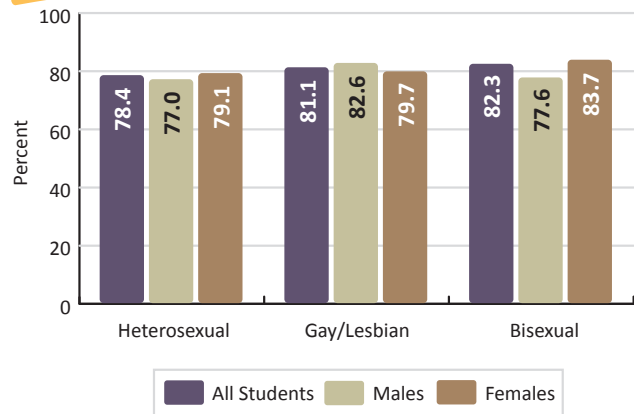
Gay males report a higher though not statistically significantly different rate of past-12-month alcohol use compared to bisexual males (**82.6%** vs. **77.6%**, respectively) (χ^2=1.71, *df* =1, p=0.19). Female bisexuals report a higher though not statistically different rate compared to females who identify as lesbians (**83.7%** vs. **79.7%**, respectively) (χ^2=1.74, *df* =1, p=0.19).

Definition:
Past-12-Month Alcohol Use

Any alcohol use within the past year.

Alcohol Use—Past 12 Months
All Students by Sexual Identity and Gender

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report higher though not statistically significantly different rates for use of alcohol in the past 30 days compared to students who identify as heterosexual (**70.7%**, **68.2%**, and **66.6%**, respectively) (χ^2=4.47, *df* =2, p=0.11). The rate for use of alcohol in the past 30 days reported by gay/lesbian students is similar to the rate reported by bisexuals (**70.7%** vs. **68.2%**, respectively) (χ^2=0.90, *df* =1, p=0.34).
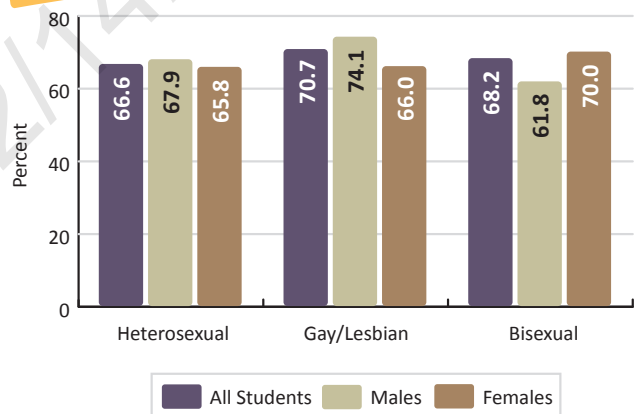
Gay males report a statistically significantly higher rate of current alcohol use compared to heterosexual males (**74.1%** vs. **67.9%**, respectively) (χ^2=4.86, *df* =1, p=0.03). Gay males report a higher though not statistically significantly different rate than bisexual males (**74.1%** vs. **61.8%**, respectively) (χ^2=2.74, *df* =1, p=0.10). Female bisexuals report a higher though not statistically different rate compared to females who identify as lesbians (**70.0%** vs. **66.0%**, respectively) (χ^2=1.15, *df* =1, p=0.28).

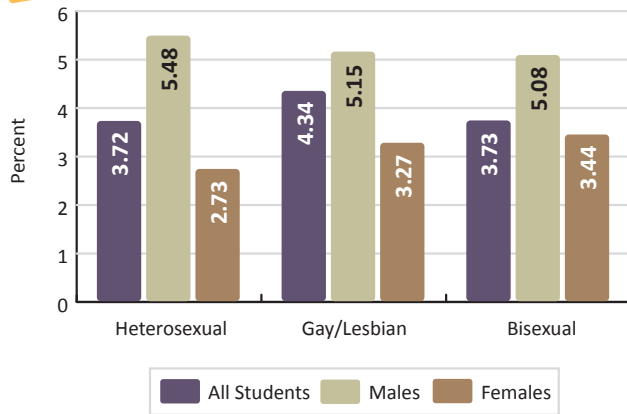**Definition:**
Current Alcohol Use

Any alcohol use within the past 30 days.

Current Alchol Use
All Students by Sexual Identity and Gender

Results

Alcohol Use and Other Drug Use

Average Number of Drinks Per Week
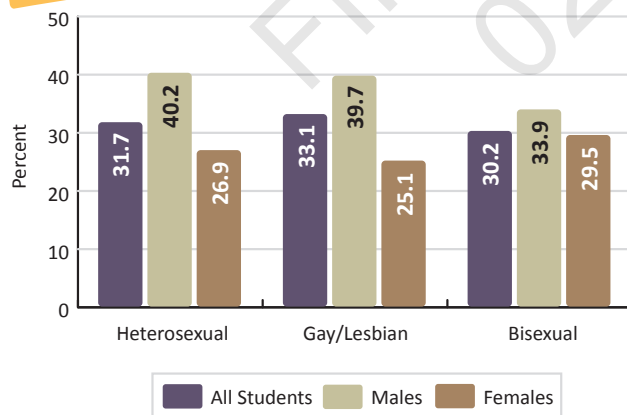All Students by Sexual Identity and Gender

Students who report their sexual identity as gay/lesbian who completed the College Student Health Survey report a statistically significantly higher average numbers of drinks per week compared to students who identify as heterosexual (**4.34** vs. **3.72**, respectively) (F(1,25328)=4.56, p=0.03).

Female bisexuals report a statistically significantly higher average number of drinks per week compared to heterosexual females (**3.44** vs. **2.73**, respectively) (F(1,16555)=13.58, p<0.0001). Female bisexuals report a higher though not statistically significantly different average number of drinks per week compared to lesbian females (**3.44** vs. **3.27**, respectively) (F(1,818)=0.12, p=0.73).

Male heterosexuals report a higher though not statistically significantly different average number of drinks per week compared to gay males and male bisexuals (**5.48** vs. **5.15**, respectively) (F(1,9138)=0.42, p=0.51) and (**5.48** vs. **5.08**, respectively) (F(1,9019)=0.36, p=0.55).

High-Risk Drinking
All Students by Sexual Identity and Gender

Students who report their sexual identity as gay/lesbian who completed the College Student Health Survey report a higher though not statistically significantly different rate of high-risk drinking compared to students who identify as being heterosexual or bisexual (**33.1%**, **31.7%**, and **30.2%**, respectively) (χ^2=1.24, *df* =2, p= 0.54).

Gay males report a higher though not statistically significantly different rate of high-risk drinking compared to bisexual males (**39.7%** vs. **33.9%**, respectively) (χ^2=1.48, *df* =1, p=0.22). Female bisexuals report a higher though not statistically different rate compared to females who identify as lesbians (**29.5%** vs. **25.1%**, respectively) (χ^2=1.47, *df* =1, p=0.22).

> **Definition:**
> **High-Risk Drinking**
>
> Consumption of five or more alcoholic 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.

The blood alcohol content (BAC) 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 formula that takes into account the following factors:
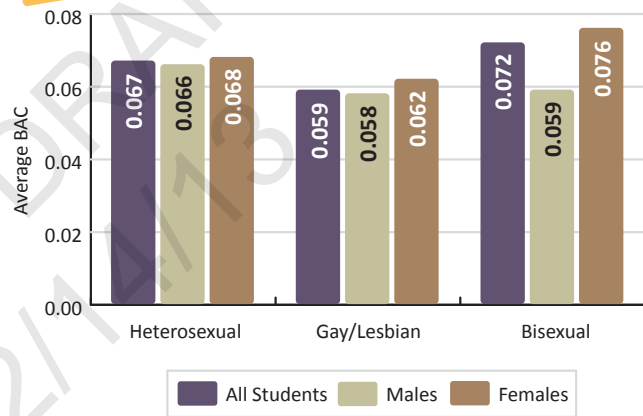
- Gender
- Current body weight
- Amount of alcohol consumed (number of drinks)
- Time period of consumption
- Concentration of alcohol in the beverage consumed (based on the alcohol content of one typical can of beer containing 4.5% alcohol)

Students who report their sexual identity as heterosexual who completed the College Student Health Survey report a statistically significantly higher average estimated blood alcohol content compared to students who identify as gay/lesbian (**0.067** vs. **0.059**, respectively) ($F_{(1,25400)}=5.36$, $p=0.02$). Bisexual students also report a statistically significantly higher average estimated BAC compared to students who identify as gay/lesbian (**0.072** vs. **0.059**, respectively) ($F_{(1,1271)}=8.19$, $p=0.004$).

Female bisexuals report a statistically significantly higher average estimated BAC compared to heterosexual females (**0.076** vs. **0.068**, respectively) ($F_{(1,16613)}=6.66$, $p=0.01$). Female bisexuals also report a statistically significantly higher average estimated BAC compared to females who identify as lesbian (**0.076** vs. **0.062**, respectively) ($F_{(1,819)}=4.51$, $p=0.03$).

Average Estimated Blood Alcohol Content
All Students by Sexual Identity and Gender

	All Students	Males	Females
Heterosexual	0.067	0.066	0.068
Gay/Lesbian	0.059	0.058	0.062
Bisexual	0.072	0.059	0.076

Results

Alcohol Use and Other Drug Use

Marijuana Use—Past 12 Months
All Students by Sexual Identity and Gender
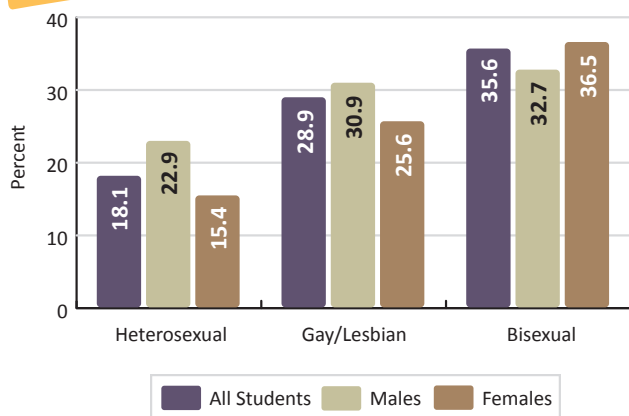
Students who report their sexual Identity as bisexual or gay/lesbian who completed the College Student Health Survey report statistically significantly higher rates for any marijuana use within the past 12 months compared to students who identify as heterosexual (**35.6%**, **28.9%**, and **18.1%**, respectively) (χ^2=190.87, *df* =2, p<0.0001). The rate of past-12-month marijuana use reported by bisexuals is statistically significantly higher than the rate reported by gay/lesbian students (**35.6%** vs. **28.9%**, respectively) (χ^2=6.34, *df* =1, p=0.01).

Bisexual males report a higher though not statistically significantly different rate of past-12-month marijuana use compared to their gay males (**32.7%** vs. **30.9%**, respectively) (χ^2=0.170, *df* =1, p=0.68). Bisexual females report a statistically significantly higher rate compared to females who identify as lesbians (**36.5%** vs. **25.6%**, respectively) (χ^2=8.25, *df* =1, p=0.004).
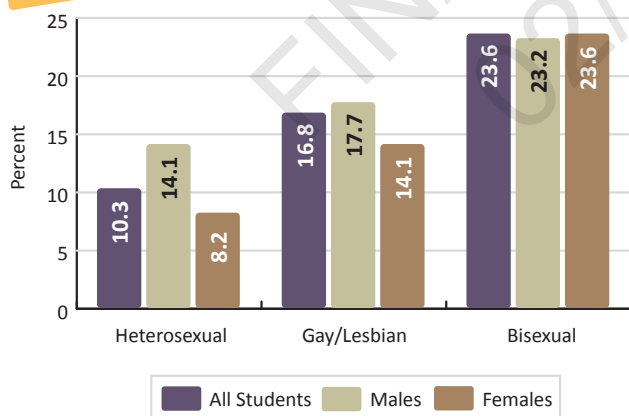
Definition:
Past-12-Month Marijuana Use

Any marijuana use within the past year.

Current Marijuana Use
All Students by Sexual Identity and Gender

Students who report their sexual identity as bisexual or gay/lesbian who completed the College Student Health Survey report statistically significantly higher rates for any marijuana use within the past 30 days compared to students who identify as heterosexual (**23.6%**, **16.8%**, and **10.3%**, respectively) (χ^2=159.96, *df* =2, p<0.0001). The rate of current marijuana use reported by bisexuals is statistically significantly higher than the rate reported by gay/lesbian students (**23.6%** vs. **16.8%**, respectively) (χ^2=8.58, *df* =1, p=0.003).

Bisexual males report a higher though not statistically significantly different rate of current marijuana use compared to gay males counterparts (**23.2%** vs. **17.7%**, respectively) (χ^2=1.94, *df* =1, p=0.16). Bisexual females report a statistically significantly higher rate compared to females who identify as lesbians (**23.6%** vs. **14.1%**, respectively) (χ^2=8.42, *df* =1, p=0.004).

Definition:
Current Marijuana Use

Any marijuana use within the past 30 days.

Gay/lesbian and bisexual students report statistically significantly higher rates of having used at least one of the listed illicit drugs within the past 12 months compared to heterosexual students (**15.2%**, **14.9%**, and **6.0%**, respectively) (χ^2=167.07, *df* =2, p<0.0001).

Gay/lesbian and bisexual students also report statistically significantly higher rates of using another person's prescription drugs within the past 12 months compared to heterosexual students (**9.5%**, **12.2%**, and **5.5%**, respectively) (χ^2=76.13, *df* =2, p<0.0001).

Selected Drug Use—Past 12 Months
All Students by Sexual Identity

Drug	Percent Who Report Using Within Past 12 Months			Statistic
Cocaine	1.6	4.0	4.4	
Amphetamines	0.8	4.2	2.8	
Sedatives	2.9	9.0	7.5	
Hallucinogens	1.6	3.8	5.7	
Opiates	0.6	2.4	1.9	
Inhalants	0.3	2.4	0.8	
Ecstasy	1.6	4.0	4.5	
Steroids	0.1	1.0	0.3	
GHB/Rohypnol	0.1	1.5	0.4	
Used at Least One of the Drugs Listed Above	6.0	15.2	14.9	χ^2=167.07, *df*=2 **p<0.0001**
Other Person's Prescription Drugs	5.5	9.5	12.2	χ^2=76.13, *df*=2 **p<0.0001**

■ Heterosexual ■ Gay/Lesbian ■ Bisexual

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 (Tjaden & Thoennes, 2006). 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 (Fischer et al, 2000).

According to the Institute of Medicine, LGBT youth report experiencing higher rates of violence, victimization, and harassment compared with heterosexual youth (IOM, 2011). Results from a random sample of students attending a large, urban university in Boston showed that compared to heterosexual students, GLB students were more likely to report threats or experience of physical and sexual violence and were less likely to report feeling safe on campus (Reed et al, 2010).

Financial health is another area of concern. According to the U.S. Department of Education, the average price of college attendance was $14,000 for all undergraduates and $22,400 for all full-time, full-year undergraduate students in 2007–2008 (US Dept of Ed, 2011). In 2007–2008, 65.6% of all undergraduates received some type of financial aid, and the average amount of aid received was $9,100 (US Dept of Ed, 2011). Nearly two in five (38.5%) undergraduate students borrowed money through a school loan, and the average loan amount was $7,100 (US Dept of Ed, 2011). More than four in five (84.0%) college students in the United States have at least one credit card, and one-half (50.0%) have four or more credit cards (Sallie Mae, 2009). The average credit card debt per U.S. college student is $3,173 (Sallie Mae, 2009). More than two-fifths (41.9%) of college students report that they participated in some type of gambling activity during the previous school year (LaBrie et al, 2003).

Students who report their sexual identity as gay/
lesbian or bisexual who completed the College Student
Health Survey report experiencing sexual assault within
their lifetime at higher rates compared to students
who identify as heterosexual (**32.7%**, **47.3%**, and
17.3%, respectively) (χ^2=528.70, *df* =2, p<0.0001). The
rate of experiencing sexual assault within their lifetime
reported by bisexuals is statistically significantly higher
than the rate reported by gay/lesbian students (**47.3%**
vs. **32.7%**, respectively) (χ^2=27.19, *df* =1, p<0.0001).

Gay males report a similar rate of sexual assault within
their lifetime compared to bisexual males (**22.7%** vs.
21.3%, respectively) (χ^2=0.11, *df* =1, p=0.74). Bisexual
females report a statistically significantly higher rate
compared to females who identify as lesbians (**53.8%**
vs. **44.9%**, respectively) (χ^2=4.89, *df* =1, p=0.03).

Sexual Assault—Lifetime
All Students by Sexual Identity and 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?
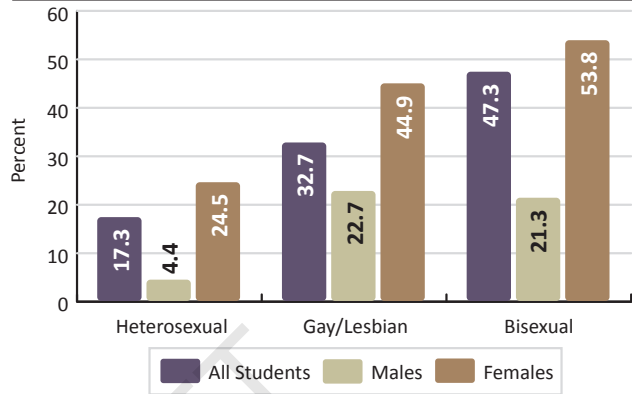
Students who report their sexual identity as gay/
lesbian or bisexual who completed the College
Student Health Survey report experiencing sexual
assault within the past 12 months at higher rates
compared to students who identify as heterosexual
(**6.9%**, **11.9%**, and **3.3%**, respectively) (χ^2=179.30,
df =2, p<0.0001). The rate of experiencing sexual
assault within the past 12 months reported by
bisexuals is statistically significantly higher than the
rate reported by gay/lesbian students (**11.9%** vs.
6.9%, respectively) (χ^2=8.60, *df* =1, p=0.003).

Gay males report a higher though not statistically
significantly different rate of sexual assault within
their lifetime compared to bisexual males (**7.2%** vs.
6.9%, respectively) (χ^2=0.02, *df* =1, p=0.89). Bisexual
females report a statistically significantly higher rate
compared to females who identify as lesbians (**13.1%**
vs. **6.4%**, respectively) (χ^2=6.70, *df* =1, p=0.01).

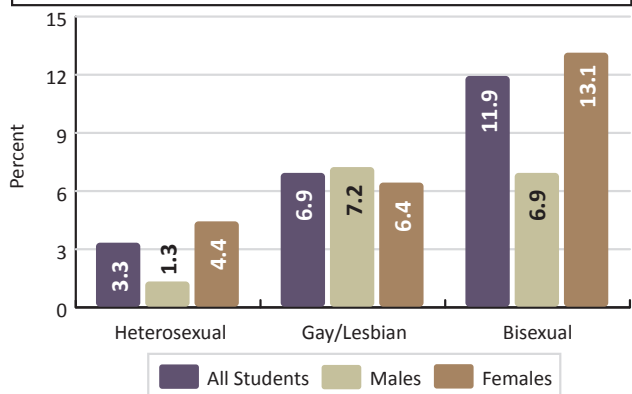## Sexual Assault—Past 12 Months
All Students by Sexual Identity and Gender

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?
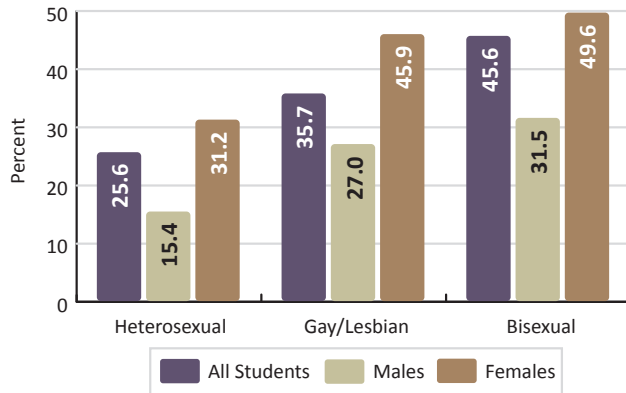
Domestic Violence—Lifetime
All Students by Sexual Identity and Gender

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?

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report experiencing domestic violence within their lifetime at higher rates compared to students who identify as being heterosexual (**35.7%**, **45.6%**, and **25.6%**, respectively) (χ^2=182.91, df =2, p<0.0001). The rate of experiencing domestic violence within their lifetime reported by bisexuals is statistically significantly higher than the rate reported by gay/lesbian students (**45.6%** vs. **35.7%**, respectively) (χ^2=12.60, df =1, p<0.0004).

Bisexual males report a higher though not statistically significantly different rate of domestic violence within their lifetime compared to gay males (**31.5%** vs. **27.0%**, respectively) (χ^2=1.06, df =1, p=0.30). Bisexual females report a higher though not statistically significantly different rate compared to females who identify as lesbians (**49.6%** vs. **45.9%**, respectively) (χ^2=0.85, df =1, p=0.36).
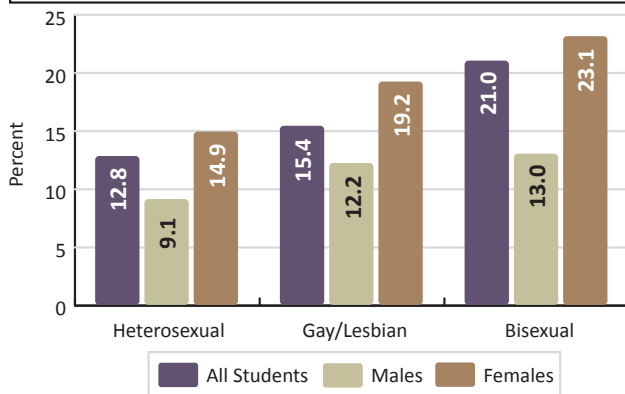
Domestic Violence—Past 12 Months
All Students by Sexual Identity and Gender

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?

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report experiencing domestic violence within the past 12 months at higher rates compared to students who identify as heterosexual (**15.4%**, **21.0%**, and **12.8%**, respectively) (χ^2=46.32, df =2, p<0.0001). The rate of experiencing domestic violence within the past 12 months reported by bisexuals is statistically significantly higher than the rate reported by gay/lesbian students (**21.0%** vs. **15.4%**, respectively) (χ^2=5.88, df =1, p=0.02).

Bisexual males report a higher though not statistically significantly different rate compared to gay males (**13.0%** vs. **12.2%**, respectively) (χ^2=0.06, df =1, p=0.81). Bisexual females report a higher though not statistically significantly different rate compared to females who identify as lesbians (**23.1%** vs. **19.2%**, respectively) (χ^2=1.36, df =1, p=0.24).

Students who report their sexual identity as heterosexual, gay/lesbian, or bisexual who completed the College Student Health Survey who indicate they have experienced a sexual assault within their lifetime reported the incident at similar rates (**33.3%**, **32.9%**, and **35.2%**, respectively) (χ^2=0.60, *df* =2, p=0.74).

Among students who completed the College Student Health Survey who indicated they reported being sexually assaulted, gay/lesbian and bisexual students state they reported their experience to a health care provider at a statistically significantly higher rate compared to heterosexual students (**44.4%**, **40.6%**, and **25.8%**, respectively) (χ^2=21.31, *df* =2, p<0.0001).

Sexual Assault Reporting by Victims—Lifetime
Sexual Assault Victims by Sexual Identity

	Percent Among Sexual Assault Victims Who Reported Assault			
				Statistic
Reported the Sexual Assault	33.3	32.9	35.2	χ^2=4.60, *df*=2 **p=0.74**
Did Not Report the Sexual Assault	66.9	67.1	64.8	

Reported the Assault to*	Percent Among Sexual Assault Victims Who Reported Assault			
				Statistic
Health Care Provider	25.8	44.4	40.6	
Hall Director or Community Adviser	2.5	3.7	5.3	
Campus Sexual Violence Office	2.8	1.9	6.8	χ^2=21.31, *df*=2 **p<0.0001**
Police	26.7	24.1	24.1	
Other	51.6	44.4	47.4	

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

Legend: ■ Heterosexual ■ Gay/Lesbian ■ Bisexual

Students who report their sexual identity as heterosexual who completed the College Student Health Survey indicate they have access to firearms at a statistically significantly higher rate compared to students who identify as gay/lesbian or bisexual (**11.9%**, **5.4%**, and **7.4%**, respectively) (χ^2=34.95, *df* =2, p<0.0001).

Students who report their sexual identity as heterosexual, gay/lesbian, or bisexual who completed the College Student Health Survey and indicated they have access to a firearm report similar rates of having access to a handgun (**43.2%**, **37.0%**, and **49.2%**, respectively) (χ^2=1.27, *df* =2, p=0.53).

Firearm Access
All Students by Sexual Identity

	Percent Who Report Access to Firearms			
				Statistic
All Students	11.9	5.4	7.4	χ^2=34.95, *df*=2 **p<0.0001**
Males	18.2	5.0	11.5	χ^2=37.08, *df*=2 **p<0.0001**
Females	8.4	5.8	6.3	χ^2=5.28, *df*=2 **p=0.072**

Type of Firearm	Percent Among Students With Firearm Access			
				Statistic
Handgun	43.2	37.0	49.2	
Rifle	70.4	63.0	69.5	χ^2=1.27, *df*=2 **p=0.53**
Shotgun	76.9	55.6	61.0	
Other	7.6	3.7	15.3	

Legend: ■ Heterosexual ■ Gay/Lesbian ■ Bisexual

Results

Personal Safety and Financial Health

Physical Fight—Past 12 Months
All Students by Sexual Identity and Gender
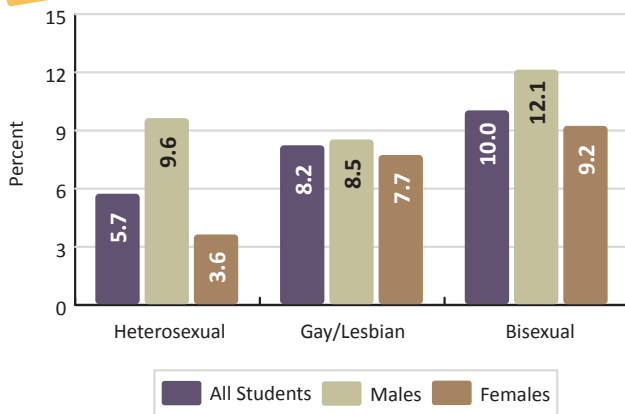
Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report having engaged in a physical fight over the past 12 months at higher rates compared to students who identify as heterosexual (**8.2%**, **10.0%**, and **5.7%**, respectively) (χ^2=30.27, *df* =2, p<0.0001). Bisexual students report having engaged in a physical fight in the past 12 months at a higher though not statistically significantly different rate compared to gay/lesbian students (**10.0%** vs. **8.2%**, respectively) (χ^2=1.23, *df* =1, p=0.27).

Bisexual males report a higher though not statistically significantly different rate compared to heterosexual and gay males (**12.1%**, **9.6%**, and **8.5%**, respectively) (χ^2=1.58, *df* =2, p=0.45). Bisexual females report a higher though not statistically significantly different rate compared to females who identify as lesbians (**9.2%** vs. **7.7%**, respectively) (χ^2=0.41, *df* =1, p=0.52).

Injuries—Past 12 Months
All Students by Sexual Identity

Injury	Percent Who Report Experiencing Within Past 12 Months			
				Statistic
Assaulted by Another Person (Nonsexual)	1.4	3.4	3.7	
Burned by Fire or a Hot Substance	5.8	8.0	10.5	
Motor Vehicle Related	2.5	4.2	3.9	
Team Sports	8.3	4.8	6.5	
Individual Sports	6.5	6.0	7.5	
Bicycle Related	1.6	3.6	2.9	
Falls	11.7	15.3	18.4	
Other	11.0	11.6	17.0	
Report Experiencing at Least One of the Above Injuries	34.7	39.0	46.2	χ^2=48.554, *df*=2 **p<0.0001**

Legend: Heterosexual, Gay/Lesbian, Bisexual

More than one-third (**34.7%**) of heterosexual students, **39.0%** of gay/lesbian students, and **46.2%** of bisexual students report experiencing at least one injury in the past 12 months (χ^2=48.55, *df* =2, p<0.0001). The injury most commonly reported during this period was due to falls.

More than one-third (**36.4%**) of heterosexual students report carrying some level of credit card debt over the past month, which is a rate similar to that among bisexual students (**35.1%**) (χ^2=0.52, *df* =1, p=0.47). Gay/lesbian students report a statistically significantly higher rate of carrying some level of credit card debt over the past month than heterosexual or bisexual students (**42.8%**, **36.4%**, and **35.1%**, respectively) (χ^2=9.49, *df* =2, p=0.009).

Among those who report carrying some monthly credit card debt, heterosexual students report a higher though not statistically significantly different rate of carrying a debt of $5,000 per month or more compared to gay/lesbian and bisexual students (**24.4%**, **19.5%** and **17.1%**, respectively) (χ^2=10.47, *df* =2, p=0.005).

Definition:
Current Credit Card Debt
Any unpaid balance at the end of the past month.

Bisexual students report a statistically significantly higher rate of engaging in gambling over the past 12 months than heterosexual or gay/lesbian students (**61.2%**, **54.5%**, and **57.4%**, respectively) (χ^2=15.80, *df* =2, p=0.0004).

Among those who report gambling within the past 12 months, a similar rate of spending $100 or more per month is seen among heterosexual, gay/lesbian, and bisexual students (**7.0%**, **10.5%**, and **6.1%**, respectively) (χ^2=4.23, *df* =2, p=0.12).

Current Credit Card Debt
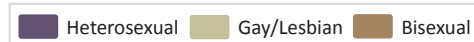All Students by Sexual Identity

Credit Card Status	Percent Who Report Within the Past 30 Days			
				Statistic
Do Not Have a Credit Card	37.6	34.1	44.0	χ^2=9.49, *df*=2 **p=0.009**
None— Pay in Full Each Month	26.0	23.1	20.9	
Carry Credit Card Debt	36.4	42.8	35.1	

Legend: ■ Heterosexual ■ Gay/Lesbian ■ Bisexual

Gambling—Past 12 Months
All Students by Sexual Identity

Gambling Frequency	Percent Who Report Gambling Within Past 12 Months			
				Statistic
Never	54.5	57.4	61.2	
Once per Year	16.9	14.5	14.8	χ^2=15.80, *df*=2 **p=0.0004**
2–6 Times per Year	20.8	18.9	16.6	
Once per Month	4.4	4.2	4.1	
More Than Once per Month	3.4	5.0	3.3	

Legend: ■ Heterosexual ■ Gay/Lesbian ■ Bisexual

Results

Personal Safety and Financial Health

Student Loan Balance
All Students by Sexual Identity

	Percent Who Report Student Loan Balance			Statistic
Percent With $20,000 Student Loan Balance or Higher	21.3	27.8	25.5	χ^2=18.2, *df*=2 **p<0.0001**
Average Estimated Loan Balance	$12,200.88	$14,746.99	$13,491.94	

■ Heterosexual ■ Gay/Lesbian ■ Bisexual

More than one-fourth of gay/lesbian (**27.8%**) and bisexual (**25.5%**) students report a student loan balance of $20,000 or more. About one-fifth (**21.3%**) of heterosexuals report a student loan balance of $20,000 or more. The estimated average student loan balance is $14,747.99 for gay/lesbian students, $13,491.94 for bisexual students, and $12,200.88 for heterosexual students.

Gay/lesbian and bisexual students report a statistically significantly higher rate of having a student loan balance of $20,000 or more compared to heterosexual students (**27.8%** vs. **21.3%**, respectively) (χ^2=11.18, *df*=1, p=0.0008) and (**25.5%** vs. **21.3%**, respectively) (χ^2=7.56, *df*=1, p=0.006). A similar rate of having a student loan balance of $20,000 is seen among gay/lesbian and bisexual students (**27.8%** vs. **25.5%**, respectively) (χ^2=0.72, *df*=1, p=0.40).

> **Definition:**
> **Student Loan Balance**
> A student loan balance of $20,000 or more.

FINAL DRAFT
02/14/13

Results

Personal Safety and Financial Health

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 (CDC, 2010). Young adults between the ages of 18 and 24 (20.3%) are slightly less likely than all adults (23.4%) to eat fruits and vegetable five or more times per day (CDC, 2010). 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 (Niemeier et al, 2006). The rate of obesity among young adults ages 18 to 24 is 16.7% (CDC, 2010).

Nationwide, 83.7% of young adults between the ages of 18 and 24 compared to 76.1% of all adults report participating in at least one physical activity during the last month (CDC, 2010). Approximately three out of five (61.4%) 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 49.0% (CDC, 2010).

Results from a random sample of more than 20,000 females living in California show that those with a female sexual partner were significantly more likely overweight and obese than women with a male sexual partner. In this sample, fruit and vegetable consumption, diet attempts, and physical activity were not related to gender of sexual partner (Boehmer & Bown, 2009). Additionally, according to a sample of 7,643 women who completed the National Survey of Family Growth, compared to heterosexuals (25.6% and 24.7%, respectively), lesbian women (but not bisexual women) were more likely to be overweight and move likely to be obese (35.3% and 34.2%, respectively) (Boehmer et al, 2007). Results from a random sample of 14<982 males who completed the 2005 California Health Interview Survey, Sexual minority men (i.e., men who reported gay/homosexual or bisexual orientation) had a significantly lower prevalence of overweight and obesity (34% and 16%, respectively) compared to heterosexual men (44% and 23%, respectively) (Deputy & Boehmer et al, 2010).

Body mass index (BMI) is a common and reliable indicator of body fatness (CDC, 2007). BMI equals the weight in kilograms divided by the height in meters squared (BMI = kg/m^2). This table presents weight categories based on BMI ranges.

Male students who report their sexual identity as gay who completed the College Student Health Survey report a statistically significantly lower rate of being classified within the overweight and obese/extremely obese categories compared to male students who identify as being heterosexual or bisexual (**42.2%**, **51.3%**, and **53.4%**, respectively) (χ^2=9.35, *df* =2, p=0.009).

Average BMI for heterosexual, gay, and bisexual males is similar (**26.05**, **25.49**, and **26.62**, respectively) (F(2,9334=2.39), p=0.09).

BMI Category
Males by Sexual Identity

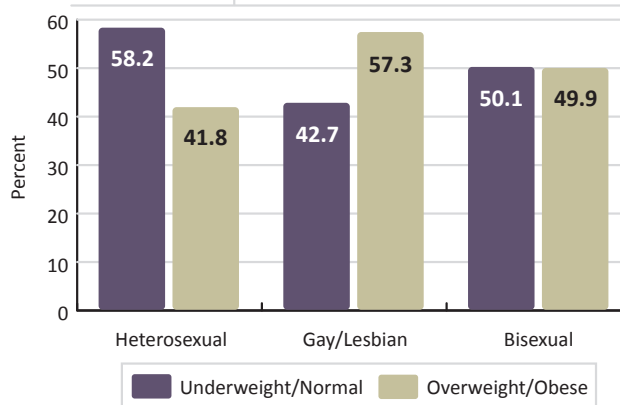| BMI Range	Weight Category
Less Than 18.5	Underweight
18.5–24.9	Normal Weight
25.0–29.9	Overweight
30.0–39.9	Obese
40.0 and Greater	Extremely Obese
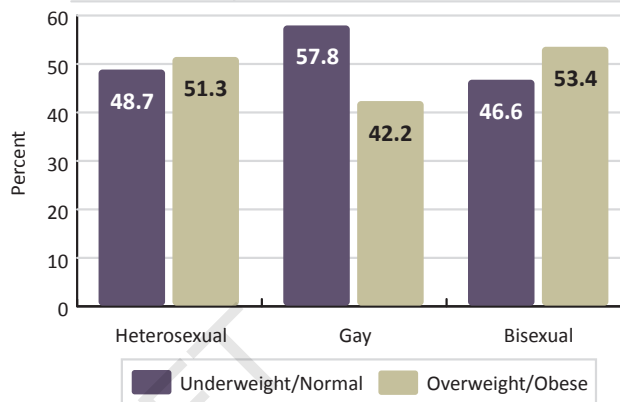
Female students who report their sexual identity as heterosexual who completed the College Student Health Survey report a statistically significantly lower rate of being classified within the overweight and obese/extremely obese categories compared to female students who identify as gay/lesbian or bisexual (**41.8%**, **57.3%**, and **49.9%**, respectively) (χ^2=35.44, *df* =2, p<0.0001).

Average BMI for heterosexual, gay/lesbian, and bisexual females is statistically significantly different (**25.61**, **27.48**, and **26.99**, respectively) (F(2,16802)=22.88, p<0.0001).

BMI Category
Females by Sexual Identity
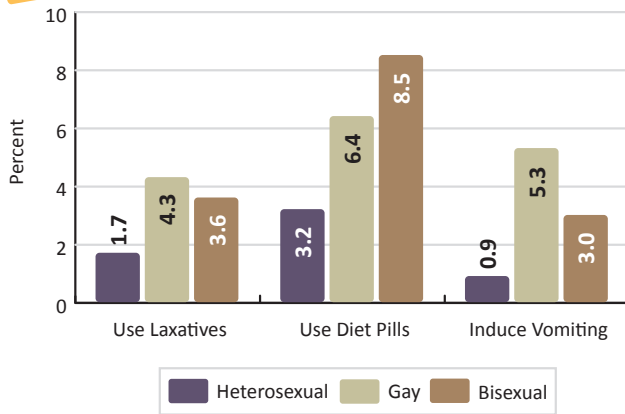
BMI Range	Weight Category
Less Than 18.5	Underweight
18.5–24.9	Normal Weight
25.0–29.9	Overweight
30.0–39.9	Obese
40.0 and Greater	Extremely Obese

Results

Nutrition and Physical Activity

Weight-Related Behaviors
Males by Sexual Identity

Percent (y-axis, 0 to 10)

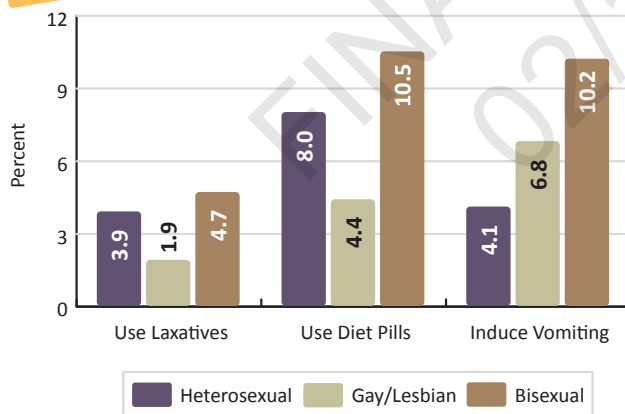| Behavior	Heterosexual	Gay	Bisexual
Use Laxatives	1.7	4.3	3.6
Use Diet Pills	3.2	6.4	8.5
Induce Vomiting	0.9	5.3	3.0

Students 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 heterosexual males, gay males engage in a statistically significantly higher rate of laxative use (**1.7%** vs. **4.3%**, respectively) (χ^2=10.53, *df* =1, p=0.001). Bisexual males report a higher though not statistically significantly different rate of laxative use compared to heterosexual males (**3.6%** vs. **1.7%**, respectively) (χ^2=3.69, *df* =1, p=0.055).

Gay and bisexual males engage in higher rates of diet pill use compared to heterosexual males (**6.4%**, **8.5%**, and **3.2%**, respectively) (χ^2=22.36, *df* =2, p<0.0001). Gay and bisexual males also engage in higher rates of induced vomiting to control weight compared to heterosexual males (**5.3%**, **3.0%**, and **0.9%**, respectively) (χ^2=57.19, *df* =2, p<0.0001).

Weight-Related Behaviors
Females by Sexual Identity

Percent (y-axis, 0 to 12)

Behavior	Heterosexual	Gay/Lesbian	Bisexual
Use Laxatives	3.9	1.9	4.7
Use Diet Pills	8.0	4.4	10.5
Induce Vomiting	4.1	6.8	10.2

Compared to heterosexual and bisexual females, gay/lesbian females engage in a lower though not statistically different rate of laxative use (**3.9%**, **4.7%**, and **1.9%**, respectively) (χ^2=3.09, *df* =2, p=0.21).

Bisexual females engage in a statistically significantly higher rate of diet pill use compared to gay/lesbian and heterosexual females (**10.5%**, **4.4%**, and **8.0%**, respectively) (χ^2=8.78, *df* =2, p=0.012). Bisexual females engage in a statistically significantly higher rate of induced vomiting to control weight compared to heterosexual females (**10.2%** vs. **4.1%**, respectively) (χ^2=53.10, *df* =1, p<0.0001).

Results

Nutrition and Physical Activity

Gay/lesbian and bisexual students who completed the College Student Health Survey report statistically significantly higher rates of engaging in binge eating behavior compared to students who identify as heterosexual (**22.2%**, **27.0%**, and **14.7%**, respectively) (χ^2=140.17, *df* =2, p<0.0001).

Gay and bisexual males report engaging in statistically significantly higher rates of binge eating compared to heterosexual males (**22.4%** vs. **11.3%**, respectively) (χ^2=32.52, *df* =1, p<0.0001) and (**19.4%** vs. **11.3%**, respectively, χ^2=10.37, *df* =1, p=0.001). Gay males report engaging in a higher though not statistically significantly different rate of binge eating compared to bisexual males (**22.4%** vs. **19.4%**, respectively) (χ^2=0.57, *df* =1, p=0.45).

Lesbian and bisexual females report engaging in statistically significantly higher rates of binge eating compared to heterosexual females (**21.8%** vs. **16.5%**, respectively) (χ^2=4.28, *df* =1, p=0.039) and (**29.3%** vs. **16.5%**, respectively) (χ^2=69.63, *df* =1, p<0.0001). Bisexual females report engaging in a statistically significantly higher rate of binge eating compared to students who identify as lesbian (**29.3%** vs. **21.8%**, respectively) (χ^2=4.3, *df* =1, p=0.038).

Heterosexual students who completed the College Student Health Survey report the highest rate of consuming breakfast 4 to 7 days during an average week compared to students who identify as gay/lesbian or bisexual (**63.8%**, **59.5%**, and **57.4%**, respectively) (χ^2=17.45, *df* =2, p<0.001).

Gay/lesbian students report the highest though not statistically significantly different rate of fast food consumption once a week or more during the past 12 months compared to heterosexual and bisexual students (**43.8%**, **40.6%**, and **39.8%**, respectively) (χ^2=2.36, *df* =2, p=0.31).

 Gay/lesbian students report the highest rate of eating at a restaurant once per week or more during the past 12 months compared to heterosexual and bisexual students (**49.6%**, **37.0%**, and **37.4%**, respectively) (χ^2=33.48, *df* =2, p<0.0001).

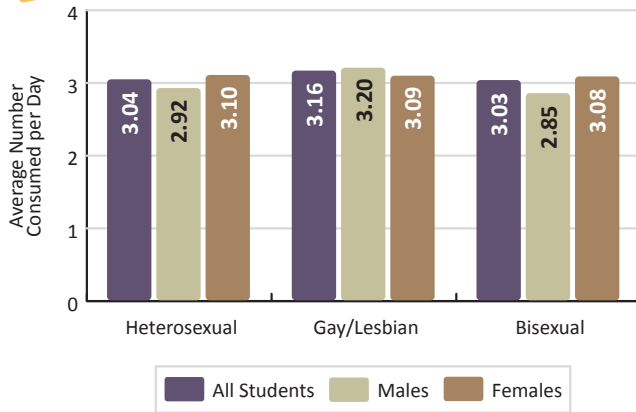**Binge-Eating Behavior—Past 12 Months**
All Students by Sexual Identity
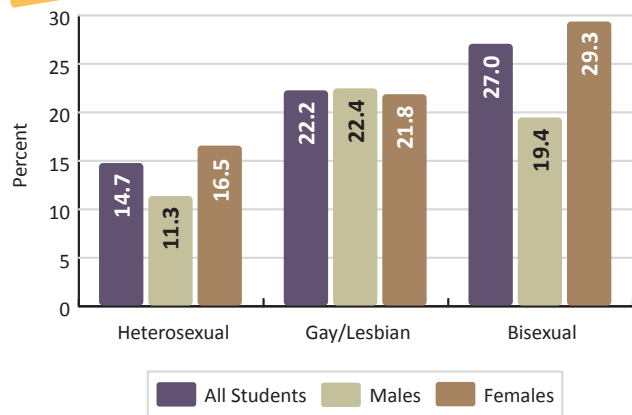
Meal Patterns
All Students by Sexual Identity

Behavior	Percent			Statistic
Breakfast Consumption (Past 7 Days)				
4–7 Days per Week	63.8	59.5	57.4	χ^2=17.45 *df*=2 **p<0.001**
Fast Food Consumption (Past 12 Months)				
Once per Week or More	40.6	43.8	39.8	χ^2=2.36 *df*=2 **p=0.307**
Eat at Restaurant (Past 12 Months)				
Once per Week or More	37.0	49.6	37.4	χ^2=33.48 *df*=2 **p<0.0001**

Legend: ■ Heterosexual ■ Gay/Lesbian ■ Bisexual

Results

Nutrition and Physical Activity

Fruit and Vegetable Consumption—Per Day
All Students by Sexual Identity and Gender

Gay/lesbian students consume fruits and vegetables on average **3.16** times per day, which is higher though not statistically significantly different than heterosexual students (**3.04** times per day) ($F(1,25366)=1.32$, p=0.25). Gay/lesbian students also consume fruits and vegetables at a higher though not statistically different rate than bisexual students (**3.16** vs. **3.03** times per day, respectively) ($F(1,1293)=0.92$, p=0.33).

Daily Regular Soda Consumption
All Students by Sexual Identity
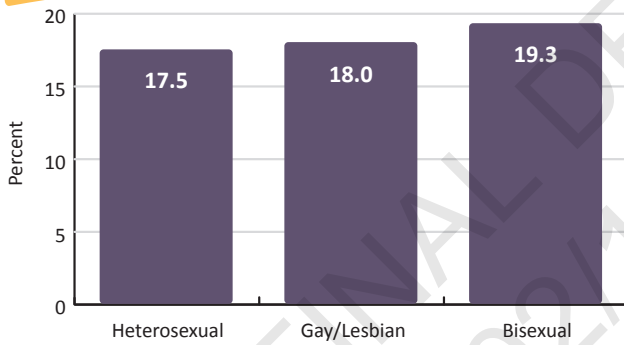
The rate of daily consumption of regular soda is similar among heterosexuals, gays/lesbians, and bisexuals (**17.5%**, **18.0%**, and **19.3%**, respectively) ($\chi^2=1.79$, *df* =2, p=0.41).

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.

A statistically significant difference in the rate of engaging in moderate to high levels of physical activity is seen based on sexual identity (χ²=8.89, *df* =2, p=0.012). More than three in five (**64.2%**) heterosexual students, **59.0%** of gay/lesbian students, and **61.0%** of bisexual students report levels of physical activity that place them in the moderate or high classification, meeting the CDC's recommendations.

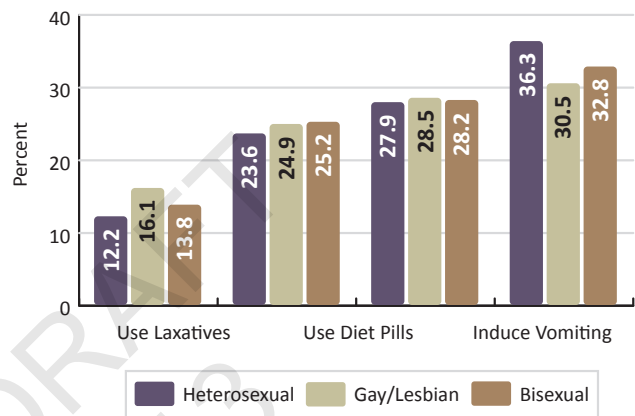## Physical Activity Level
All Students by Sexual Identity

Students were asked several questions related to their physical activity level. The two survey questions that relate to recommendations outlined by the Centers for Disease Control and Prevention (CDC) 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)

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 (CDC, 2008).

Chart: Percent by category and sexual identity

Category	Heterosexual	Gay/Lesbian	Bisexual
Use Laxatives	12.2	16.1	13.8
Use Diet Pills	23.6	24.9	25.2
Induce Vomiting	27.9	28.5	28.2
	36.3	30.5	32.8

Results

Nutrition and Physical Activity

Results

Sexual Health

The majority of young adults in the United States are sexually active. Among males, 60.9% of 18- to 19-year-olds and 70.3% of 20- to 24-year-olds report that they have engaged in vaginal intercourse within their lifetime, 59.4% of 18- to 19-year-olds and 73.5% of 20- to 24-year-olds report that they received oral sex from a partner of the opposite sex within their lifetime, and 9.7% of 18- to 19-year-olds and 23.7% of 20- to 24-year-olds report that they engaged in insertive anal intercourse within their lifetime (Herbenick et al, 2010). Among females, 64.0% of 18- to 19- year-olds and 85.6% of 20- to 24-year-olds report that they have engaged in vaginal intercourse within their lifetime, 62.0% of 18- to 19-year-olds and 79.7% of 20- to 24-year-olds report that they received oral sex from a partner of the opposite sex within their lifetime, and 20.0% of 18- to 19-year-olds and 39.9% of 20- to 24-year-olds report that they engaged in anal intercourse within their lifetime (Herbenick et al, 2010). During their most recent vaginal intercourse event, 42.6% of 18- to 24-year-old males and 36.7% of 18- to 24-year-old females used a condom (Sanders et al, 2010).

Due to a combination of behavioral, biological, and cultural reasons, sexually active young adults are at increased risk for acquiring sexually transmitted infections (STIs) (CDC, 2011). The higher prevalence of STIs among young adults reflects multiple barriers to accessing quality STI prevention services, including lack of health insurance or other ability to pay, lack of transportation, and concerns about confidentiality (CDC, 2011). Among all males, 20- to 24-year-olds have the highest rates of chlamydia (1,187.0 cases per 100,000 people), gonorrhea (421.05 cases per 100,000 people), and syphilis (21.9 cases per 100,000 people) (CDC, 2011). Among all females, 20- to 24-year-olds have the highest rate of syphilis (4.5 cases per 100,000 people) (CDC, 2011). They have rates of chlamdyia (3,407.9 cases per 100,000 people) and gonorrhea (560.7 cases per 100,000 people) that are lower only than the rates among 15- to 19-year-olds (CDC, 2011).

According to a random sample of over 10,000 students from 116 U.S. colleges, female students with both male and female sex partners and males with both male and female sex partners and only male sex partners were more likely to report two or more sexual partners in the previous 30 days than students with only opposite-sex experiences. Additionally, males with only same-sex partners were less likely to report consistent condom use than males with only opposite-sex partners (Eisenberg, 2001). Results from a convenience sample of self-identified LGBT college students recruited through LGBT college student organizations and resource centers, 72.4% of LGBT students reported that they did not use any barrier during their last sexual encounter and 44.6% reported that they have ever been tested for HIV during their lifetime (Lindley et al, 2003).

Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of sexual activity within their lifetime compared to students who identify as heterosexual (**88.8%**, **88.8%**, and **81.9%**, respectively) (χ^2=40.65, *df* =2, p<0.001).

Gay males report a statistically higher rate of being sexually active within their lifetime compared to heterosexual males (**88.3%** vs. **79.7%**, respectively) (χ^2=12.718, *df* =1, p<0.0001). Gay/lesbian and bisexuals females report statistically significantly higher rates compared to females who identify as heterosexual (**90.8%**, **90.9%**, and **83.2%**, respectively) (χ^2=34.09, *df* =2, p<0.0001).

Sexually Active—Lifetime
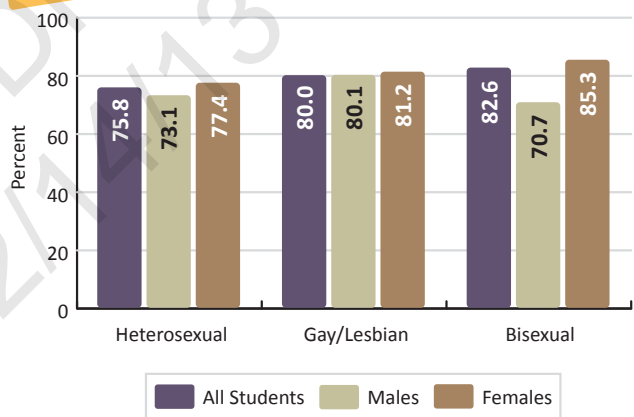All Students by Sexual Identity and Gender
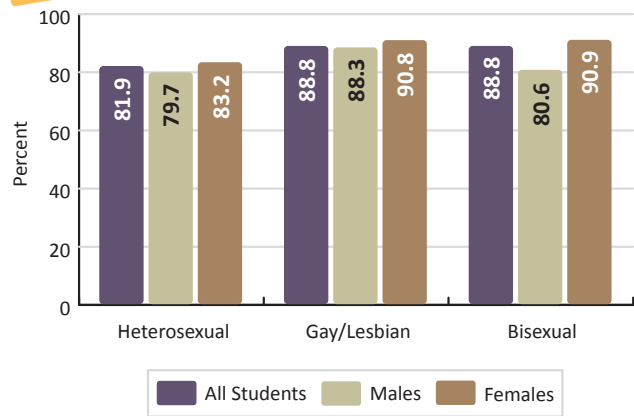
Students who report their sexual identity as gay/lesbian or bisexual who completed the College Student Health Survey report statistically significantly higher rates of sexual activity within the past 12 months compared to students who identify as heterosexual (**75.8%**, **80.0%**, and **82.6%**, respectively) (χ^2=23.50, *df* =2, p<0.0001).

Gay males report a statistically significantly higher rate of sexual activity within the past 12 months compared to bisexual males (**80.1%** vs. **70.7%**, respectively) (χ^2=5.04, *df* =1, p=0.025). Gay males also report a statistically significantly higher rate of sexual activity within the past 12 months compared to their heterosexual males (**80.1%** vs. **73.1%**, respectively) (χ^2=6.81, *df* =1, p=0.009).

Bisexuals females report a statistically significantly higher rate of sexual activity within the past 12 months compared to females who identify as heterosexual (**85.3%** vs. **77.4%**, respectively) (χ^2=21.55, *df* =1, p<0.0001).

Sexually Active—Past 12 Months
All Students by Sexual Identity and Gender

Number of Sexual Partners—Past 12 Months
All Students by Sexual Identity and Gender
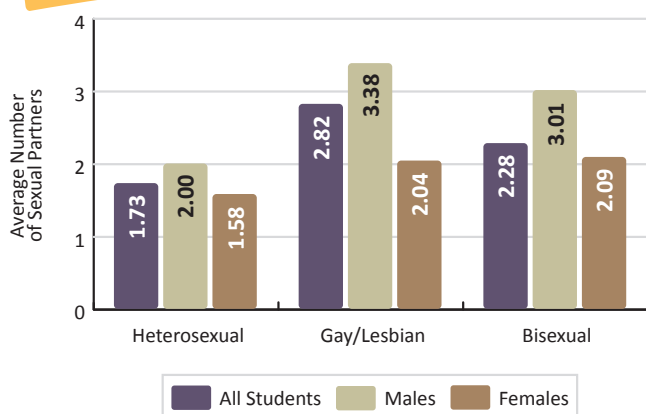
Students who report their sexual identity as gay/lesbian who completed the College Student Health report a statistically significantly higher average number of sexual partners within the past 12 months compared to students who identify as heterosexual or bisexual (**2.82**, **1.73**, and **2.28**, respectively) (F(2,26258)=12.09, p<0.0001). The average number is based on the experience of all students, both those who were sexually active and those who were not sexually active.

Gay males report a statistically significantly higher number of sexual partners within the past 12 months compared to heterosexual males (**3.38** vs. **2.00**, respectively) (F(1,9174)=11.34, p<0.001). Gay males also report a higher though not statistically significantly different average number of sexual partners compared to bisexual males (**3.38** vs. **3.01**, respectively) (F(1,444)=0.23, p=0.63).

Bisexual females report a statistically significantly higher number of sexual partners within the past 12 months compared to heterosexual females (**2.09** vs. **1.58**, respectively) (F(1,16655)=6.32, p=0.012). Females who identify as lesbian report a higher though not statistically significantly different average number of sexual partners compared to heterosexual females (**2.04** vs. **1.58**, respectively) (F(1,16244)=1.69, p=0.19).

More than three-fourths (**79.0%**) of heterosexual students, **63.5%** of gay/lesbian students, and **59.7%** of bisexual students report they had zero or one sexual partner within the past 12 months.

Most Recent Sexual Partner—Past 12 Months
Sexually Active Students by Sexual Identity

Most Recent Sexual Partner	Percent Who Report Sexual Partner Within Past 12 Months			
				Statistic
Stranger	0.7	5.0	1.5	χ²=95.90, *df*=2 **p<0.001**
Casual Acquaintance	5.1	11.8	8.1	
Close but Not Exclusive Dating Partner	10.5	14.5	15.5	
Exclusive Dating Partner	42.9	38.7	40.7	
Fiancé(e)/Spouse	39.9	28.0	32.1	χ²=38.86, *df*=2 **p<0.001**
Other	0.9	2.0	2.1	

Heterosexual · Gay/Lesbian · Bisexual

Among those who were sexually active within the past 12 months, gay/lesbian and bisexual students report higher rates of their most recent sexual partner within the past 12 months being either a casual acquaintance or stranger compared to heterosexual students (**16.8%**, **9.6%**, and **5.8%**, respectively) (χ²=95.90, *df* =2, p<0.0001).

Gay/lesbian students report a statistically significantly higher rate of their most recent sexual partner within the past 12 months being either a casual acquaintance or stranger compared to bisexual students (**16.8%** vs. **9.6%**, respectively) (χ²=11.82, *df* =1, p=0.001).

Heterosexual and bisexual students report statistically significantly higher rates of their most recent sexual partner within the past 12 months being a fiancé(e) or spouse compared to gay/lesbian students (**39.9%**, **32.1%**, and **28.0%**, respectively) (χ²=38.86, *df* =2, p<0.0001).

Among sexually active males students, bisexual and gay males report higher though not statistically significantly different rates of condom use during last oral sex compared to heterosexual students (**12.9%**, **10.2%**, and **8.6%**, respectively) (χ^2=2.82, *df* =2, p=0.24).

The highest rates of condom use during last vaginal intercourse were found among sexually active male students who identified as bisexual or heterosexual compared to gay students (**64.4%**, **62.1%**, and **35.7%**, respectively) (χ^2=12.59, *df* =2, p=0.002).

The rates of condom use during last anal intercourse were statistically significantly higher among sexually active male bisexual and gay students compared to sexually active heterosexual students (**55.9%**, **54.4%**, and **26.7%**, respectively) (χ^2=82.03, *df* =2, p<0.0001).

Condom Use
Males by Sexual Identity: Sexually Active Within Lifetime
(Does Not Include Those Who Are Married or
With a Domestic Partner)

Sexual Activity	Percent Who Reported Use			Statistic
Oral Sex				
Used a Condom	8.6	10.2	12.9	χ^2=2.82 *df*=2 **p=0.24**
Did Not Use a Condom	89.7	89.3	86.1	
Don't Know	1.7	0.5	1.0	
Engage in Activity	90.4	97.3	92.7	
Vaginal Intercourse				
Used a Condom	62.1	35.7	64.4	χ^2=12.59 *df*=2 **p=0.002**
Did Not Use a Condom	36.8	54.8	35.6	
Don't Know	1.1	9.5	0.0	
Engage in Activity	93.7	19.0	82.6	
Anal Intercourse				
Used a Condom	26.7	54.4	55.9	χ^2=82.03 *df*=2 **p<0.001**
Did Not Use a Condom	68.9	44.1	41.2	
Don't Know	4.4	1.5	2.9	
Engage in Activity	27.0	88.2	62.4	

■ Heterosexual ■ Gay ■ Bisexual

Sexually active heterosexual, lesbian, and bisexual females report similar rates of condom use during last oral sex (**7.7%**, **7.7%**, and **6.3%**, respectively) (χ^2=1.17, *df* =2, p=0.56).

The highest rates of condom use during last vaginal intercourse are seen among sexually active female students who identified as heterosexual or bisexual compared to lesbian students (**51.6%**, **46.2%**, and **22.2%**, respectively) (χ^2=41.21, *df* =2, p<0.001).

The highest rates of condom use during last anal intercourse are seen among sexually active female heterosexual and bisexual students compared to sexually active lesbian students (**19.9%**, **19.0%**, and **11.4%**, respectively) (χ^2=2.05, *df* =2, p=0.36).

Condom Use
Females by Sexual Identity: Sexually Active Within Lifetime
(Does Not Include Those Who Are Married or
With a Domestic Partner)

Sexual Activity	Percent Who Reported Use			Statistic
Oral Sex				
Used a Condom	7.7	7.7	6.3	χ^2=1.17 *df*=2 **p=0.56**
Did Not Use a Condom	91.1	89.2	93.0	
Don't Know	1.2	3.1	0.7	
Engage in Activity	86.8	94.2	94.3	
Vaginal Intercourse				
Used a Condom	51.6	22.2	46.2	χ^2=41.21 *df*=2 **p<0.001**
Did Not Use a Condom	47.6	75.0	53.1	
Don't Know	0.8	2.8	0.7	
Engage in Activity	94.7	78.3	94.7	
Anal Intercourse				
Used a Condom	19.9	11.4	19.0	χ^2=2.05 *df*=2 **p=0.36**
Did Not Use a Condom	77.8	81.8	77.9	
Don't Know	2.3	6.8	3.1	
Engage in Activity	25.9	31.9	41.4	

■ Heterosexual ■ Gay/Lesbian ■ Bisexual

Results

Sexual Health

Pregnancy Prevention Methods
All Students by Sexual Identity

Pregnancy Prevention Methods	Percent Who Report Using Method		
Birth Control Pills	39.4	4.3	30.0
Depo-Provera	2.6	0.2	3.0
Intrauterine Device	4.9	0.2	6.5
Condoms	39.1	7.4	39.1
Diaphragm	0.4	0.2	0.7
Fertility Awareness	1.8	0.2	3.1
Withdrawal	11.6	0.4	11.3
Ortho Evra	0.6	0.2	1.0
NuvaRing	3.8	0.2	4.9
Emergency Contraception	1.4	0.0	2.7
Other	9.9	6.5	8.2
Don't Know/Can't Remember	0.6	0.9	0.7
Did Not Use Any Method	10.2	24.4	12.6

■ Heterosexual ■ Gay/Lesbian ■ Bisexual

The three most common methods that students report using to prevent pregnancy the last time they engaged in vaginal intercourse are birth control pills, condoms, and withdrawal.

Pregnancy and Pregnancy Outcome—Past 12 Months
All Students by Sexual Identity

	Percent		
Involvement in Pregnancy			
Yes	5.1	0.6	4.5
No	94.9	99.4	95.5
Of Those Involved in a Pregnancy			
Pregnancy was Intentional	56.1	66.7	33.3
Pregnancy was Not Intentional	43.9	33.3	66.7
Among Those With Unintentional Pregnancies–Outcome			
Birth and Parenting	33.8	100.0	40.9
Birth and Adoption	0.5	0.0	0.0
Abortion	23.9	0.0	18.2
Miscarriage	18.3	0.0	27.3
Still Pregnant	22.4	0.0	13.6
Don't Know	1.3	0.0	0.0

■ Heterosexual ■ Gay/Lesbian ■ Bisexual

A total of **5.1%** of heterosexuals, **0.6%** of gays/lesbians, and **4.5%** of bisexuals who completed the College Student Health Survey have been involved in a pregnancy within the past 12 months. Of those involved in a pregnancy, **43.9%** of heterosexuals, **33.3%** of gays/lesbians, and **66.7%** of bisexuals state the pregnancy was unintentional.

Results

Sexual Health

Among all students who have been sexually active within their lifetime, the most commonly reported diagnosed sexual transmitted infections both within their lifetime and within the past 12 months are genital warts/human papilloma virus, chlamydia, and pubic lice.

Sexually Transmitted Infection Diagnosis—Lifetime and Past 12 Months
All Students by Sexual Identity

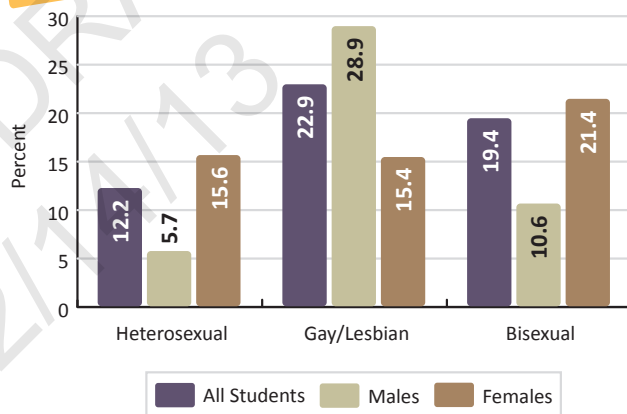| Sexually Transmitted Infection	Percent Who Report Being Diagnosed					
	Within Lifetime			Within Past 12 Months		
Chlamydia	4.7	5.8	7.8	0.8	1.8	1.8
Genital Herpes	1.9	2.2	3.4	0.5	1.4	0.3
Genital Warts/HPV	5.4	8.5	9.8	1.5	4.1	2.5
Gonorrhea	0.9	4.3	1.3	0.1	0.7	0.3
HIV/AIDS	0.2	3.8	0.1	0.1	1.8	0.1
Pubic Lice	2.1	7.4	3.1	0.1	0.9	0.0
Syphilis	0.3	1.8	0.3	0.1	0.5	0.1
At Least One of the Above Sexually Transmitted Infections	12.2	22.9	19.4	2.9	8.3	4.4

■ Heterosexual ■ Gay/Lesbian ■ Bisexual

Gay/lesbian and bisexual students who have been sexually active within their lifetime report being diagnosed with a sexually transmitted infection (STI) within their lifetime at statistically significantly higher rates compared to heterosexual students (**22.9%**, **19.4%**, and **12.2%**, respectively) (χ^2=75.35, *df* =2, p<0.0001).

Gay males report statistically significantly higher rates of being diagnosed with an STI within their lifetime compared to heterosexual males (**28.9%** vs. **5.7%**, respectively) (χ^2=213.44, *df* =1, p <0.0001). Gay males also report a higher rate compared to bisexual males (**28.9%** vs. **10.6%**, respectively) (χ^2=16.55, *df* =1, p <0.0001).

Bisexual females report a statistically significantly higher rate of being diagnosed with an STI within their lifetime compared to heterosexual females (**21.4%** vs. **15.6%**, respectively) (χ^2=13.56, *df* =1, p=0.0002). Bisexual females report a higher though not statistically significantly different rate of being diagnosed with an STI within their lifetime compared to females who identify as lesbian (**21.4%** vs. **15.4%**, respectively) (χ^2=3.18, *df* =1, p=0.08).
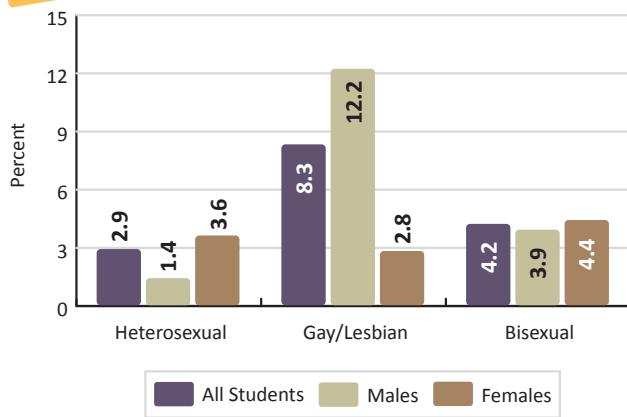
Sexually Transmitted Infection Diagnosis—Lifetime
All Students by Sexual Identity and Gender

■ All Students ■ Males ■ Females

Results

Sexual Health

Sexually Transmitted Infection Diagnosis—Past 12 Months
All Students by Sexual Identity and Gender

Gay/lesbian and bisexual students who have been sexually active within their lifetime report being diagnosed with a sexually transmitted infection (STI) within the past 12 months at higher rates compared to heterosexual students (**8.3%**, **4.2%**, and **2.9%**, respectively) (χ^2=46.64, *df* =2, p<0.0001).

Gay males report a statistically significantly higher rate of being diagnosed with an STI within the past 12 months compared to heterosexual males (**12.2%** vs. **1.4%**, respectively) (χ^2=155.84, *df* =1, p<0.0001). Gay males also report a statistically significantly higher rate compared to bisexual males (**12.2%** vs. **3.9%**, respectively) (χ^2=6.98, *df* =1, p=0.008).

Bisexual females report a higher though not statistically significantly different rate of being diagnosed with an STI within the past 12 months compared to their heterosexual counterparts (**4.4%** vs. **3.6%**, respectively) (χ^2=0.56, *df* =1, p=0.45). Bisexual females report a higher though not statistically significantly different rate of being diagnosed with an STI within the past 12 months compared to females who identify as lesbian (**4.4%** vs. **2.8%**, respectively) (χ^2=0.81, *df* =1, p=0.37).

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Results

Sexual Health

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Implications

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

Results from the College Student Health Survey presented in this report document the health and health-related behaviors of students enrolled in the participating institutions. These data, therefore, offer an opportunity to look at the diseases, health conditions, and health-related behaviors that disproportionately impact gay, lesbian, and bisexual students attending postsecondary schools in Minnesota. Identification of these health-related issues is critical because the health of college students in Minnesota affects not only their academic achievement but also the overall health of our society.

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

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Appendix 1

Colleges and Universities Participating in the 2007–2011 College Student Health Survey

School	Location
Alexandria Technical and Community College	Alexandria, MN
Anoka Technical College	Anoka, MN
Anoka-Ramsey Community College	Cambridge, MN
	Coon Rapids, MN
Augsburg College	Minneapolis, MN
Bemidji State University	Bemidji, MN
Carleton College	Northfield, MN
Central Lakes College	Brainerd, MN
	Staples, MN
Century College	White Bear Lake, MN
Concordia College	Moorhead, MN
Hibbing Community College	Hibbing, MN
Inver Hills Community College	Inver Grove Heights, MN
Itasca Community College	Grand Rapids, MN
Lake Superior College	Duluth, MN
Metropolitan State University	Minneapolis, MN
	St. Paul, MN
Minneapolis Community and Technical College	Minneapolis, MN
Minnesota State College-Southeast Technical	Winona, MN
Minnesota State Community and Technical College—Detroit Lakes	Detroit Lakes, MN
Minnesota State Community and Technical College—Fergus Falls	Fergus Falls, MN
Minnesota State Community and Technical College—Moorhead	Moorhead, MN
Minnesota State Community and Technical College—Wadena	Wadena, MN
Minnesota State University Moorhead	Moorhead, MN
Minnesota State University, Mankato	Mankato, MN
Normandale Community College	Bloomington, MN
North Hennepin Community College	Brooklyn Park, MN
Northwest Technical College	Bemidji, MN
Riverland Community College	Albert Lea, MN
	Austin, MN
	Owatonna, MN
Rochester Community and Technical College	Rochester, MN
South Central College	Faribault, MN
	North Mankato, MN
Southwest Minnesota State University	Marshall, MN
St. Catherine University	Minneapolis, MN
	St. Paul, MN
St. Cloud State University	St. Cloud, MN
St. Cloud Technical and Community College	St. Cloud, MN
University of Minnesota—Crookston	Crookston, MN
University of Minnesota—Duluth	Duluth, MN
University of Minnesota—Morris	Morris, MN
University of Minnesota—Rochester	Rochester, MN
University of Minnesota—Twin Cities	Minneapolis, MN
	St. Paul, MN
Winona State University	Winona, MN

Appendix 2

2007–2011 College Student Health Survey Demographics Based on Student Response

	Heterosexual N=25,093	Gay/Lesbian N=502	Bisexual N=801
Average Age (Years)	25.8	27.2	24.3
Age Range (Years)	18–99	18–63	18–61
18–24 Years	62.8%	53.9%	67.7%
25 Years or Older	37.2%	46.1%	32.3%
Average GPA	3.31	3.36	3.26
Class Status			
Undergraduate—Enrolled One Year	18.6%	18.5%	20.8%
Undergraduate—Enrolled Two Years	16.5%	15.3%	16.9%
Undergraduate—Enrolled Three Years	15.5%	17.5%	16.9%
Undergraduate—Enrolled Four Years	11.6%	10.2%	12.0%
Undergraduate—Enrolled Five or More Years	11.1%	13.1%	11.7%
Master's, Graduate, or Professional Program	8.1%	11.6%	6.7%
Unspecified	15.3%	11.2%	12.2%
Non-degree Seeking	3.4%	2.6%	2.7%
Gender			
Male	35.7%	56.2%	20.6%
Female	64.2%	41.2%	77.4%
Transgender/Other	0.0%	2.6%	1.7%
Unspecified	0.1%	0.0%	0.2%
Ethnic Origin			
American Indian/Alaska Native	2.4%	3.4%	4.2%
Asian/Pacific Islander	5.8%	3.6%	5.0%
Black—Not Hispanic	4.5%	4.2%	5.2%
Latino/Hispanic	2.6%	4.0%	4.7%
White—Not Hispanic (Includes Middle Eastern)	86.6%	87.5%	86.6%
Other	2.0%	3.2%	3.5%
Current Residence			
Residence Hall or Fraternity/Sorority	15.5%	21.1%	19.2%
Other	84.5%	78.9%	80.8%

Among the 26,965 respondents:

• 93.1% (25,093) identify as heterosexual

• 1.9% (502) identify as gay/lesbian

• 3.0% (801) identify as bisexual

• 1.8% (481) identify as being unsure of their sexual orientation

• 0.3% (88) declined to answer

The report is based only on those respondents who identified as being heterosexual, gay/lesbian, or bisexual and indicated their gender as male or female. Final sample size is 26,396.

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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-Risk Drinking
Consumption of five or more alcoholic 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.

Student Loan Balance
A student loan balance of $20,000 or more.

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References

Arnett JJ. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–80.

Bauer GR. (2006). *Are lesbians really women who have sex with women (WSW)?* Methodological issues in defining sexual orientation for health research. Session presented at the American Public Health Association Annual Meeting, Boston, MA.

Black D, Gates G, Sanders S, Taylor L. (2000). Demographic of the gay and lesbian population in the United States: Evidence from available systematic data sources. *Demography*, 37(2), 139–154.

Boehmer U, Bowen D. (2009). Examining factors linked to overweight and obesity in women of different sexual orientations. *Preventive Medicine*, 48. 357-361.

Boehmer U, Bowen D, Bauer G. (2007). Overweight and obesity in sexual-minority women: evidence from population-based data. *American Journal of Public Health*, 97(6), 1134-1140.

Centers for Disease Control and Prevention. (2007). *About BMI for adults*. Retrieved October 24, 2012, from http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm#Interpreted.

Centers for Disease Control and Prevention. (2008). *Physical activity for everyone*. Retrieved March 12, 2012, from http://www.cdc.gov/nccdphp/dnpa/physical/everyone/recommendations/.

Centers for Disease Control and Prevention. (2009). Cigarette smoking among adults and trends in smoking cessation—United States, 2008. *Morbidity and Mortality Weekly Report*, 58(44), 1227–1232.

Centers for Disease Control and Prevention. (2010). *Behavioral Risk Factor Surveillance System* [survey data]. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved March 12, 2012, from http://apps.nccd.cdc.gov/brfss.

Centers for Disease Control and Prevention. (2011). *Sexually transmitted disease surveillance 2010*. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved March 12, 2012, from http://www.cdc.gov/std/stats10/default.htm.

Chung YB, Katayama M. (1996). Assessment of sexual orientation in lesbian/gay/bisexual studies. *Journal of Homosexuality*, 39, 49–62.

Deputy B, Boehmer U. (2010). Determinants of body weight among men of different sexual orientation. *Preventive Medicine*, 51, 129-131.

Eisenberg M (2001). Differences in sexual risk behaviors between college students with same-sex and opposite-sex experience: Results from a national survey. *Archives of Sexual Behavior*, 30(6), 575-589.

Eisenberg ME, Wechsler H. (2003). Social influences on Substance-use behaviors of gay, lesbian, and bisexual college students: Finding from a national survey. *Social Science & Medicine*, 57, 1913-1923.

Fergusson DM, Horwood LJ, Ridder EM, Beautrais AL. (2005). Sexual orientation and mental health in a birth cohort of young adults. *Psychological Medicine*, 35, 971–981.

Fischer BS, Cullen FT, Turner MG. (2000). *The sexual victimization of college women* (Report NCJ 182369). Washington, DC: National Institute of Justice.

Friedman MS, Silvestre AJ, Gold MA, Markovic N, Savin-Williams RC, Huggins J, Sell RL. (2004). Adolescents define sexual orientation and suggest ways to measure it. *Journal of Adolescence*. 27(3), 303–317.

Halperin AC. (2002, March). *State of the union: Smoking on US college campuses. A report for the American Legacy Foundation*. Washington, DC. (unpublished, internal report).

Herbenick D, Reece M, Schick V, Sanders SA, Dodge B, Fortenberry JD. (2010). Sexual behavior in the United States: Results from a national probability sample of men and women ages 14–94. *Journal of Sexual Medicine*, 7(suppl 5), 255–265.

Institute of Medicine. (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding* (ISBN 978-0-309-21061-4). Washington DC: Committee on Lesbian, Gay, Bisexual, and Transgender Health Issues and Research Gaps and Opportunities, Board on the Health Of Select Populations, Institute of Medicine of the National Academies.

Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. (2011). *Monitoring the Future national survey results on drug use, 1975–2010. Vol. II: College students and adults ages 19–45*. Bethesda, MD: National Institute on Drug Abuse.

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.

Laumann EO, Gangnon JH, Michael RT, Michaels S. (1994). *The Social organization of sexuality: Sexual practices in the United States*. Chicago, IL: University of Chicago Press.

Lesbian, Gay, and Bisexual Youth Sexual Orientation Measurement Work Group. (2003). *Measuring sexual orientation of young people in health research*. San Francisco, CA: Gay and Lesbian Medical Association.

Lindley LL, Kerby MB, Nicholson TJ, Lu N. (2007). Sexual behaviors and sexually transmitted infections among self-identified lesbian and bisexual college women. *Journal of LGBT Health Research*, 3(3), 41-54.

Lindley LL, Nicholson TJ, Kerby MB, Lu N. (2003). HIV/STI associated risk behaviors among self-identified lesbian, gay, bisexual, and transgender college students in the United States. *AIDS Education and Prevention*, 15(5), 413-429.

References

Midanik LT, Drabble L, Trocki K, Sell RL. (2007). Sexual orientation and alcohol use: identity versus behavior measures. *Journal of LGBT Health Research*, 3(1), 25–35.

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.

Oswalt SB, Wyatt TJ. (2011). Sexual orientation and differences in mental health, stress, and academic performance in a national sample of U.S. college students. *Journal of Homosexuality*, 58, 1255-1280.

Reed E, Prado G, Matsumoto A, Amaro H. (2010). Alcohol and drug use and related consequences among gay, lesbian, and bisexual college students: Role of experiencing violence, feeling safe on campus, and perceived stress. *Addictive Behaviors*, 35, 168-171.

Remafedi G, Resnick M, Blum R, Harris L. (1992). Demography of sexual orientation in adolescence. *Pediatrics*, 89(4), 714–721.

Ridner SL, Frost K, LaJoie AS. (2006). Health information and risk behaviors among lesbian, gay, and bisexual college students. *Journal of the American Academy of Nurse Practitioners*, 18, 374-378.

Saewyc EM, Bauer GR, Skay CL, Bearinger LH, Resnick MD, Reis E, Murphy A. (2004). Measuring sexual orientation in adolescent health surveys: Evaluation of eight school-based surveys. *Journal of Adolescent Health*, 35(4), 345.e1–15.

Sallie Mae. (2009). *How undergraduate students use credit cards. Sallie Mae's national study of usage rates and trends 2009*. Retrieved April 2, 2010, from http://www.salliemae.com/NR/rdonlyres/0BD600F1-9377-46EA-AB1F-6061FC763246/10744/SLMCreditCardUsageStudy41309FINAL2.pdf.

Sanders SA, Reece M, Herbenick D, Schick V, Dodge B, Fortenberry JD. (2010). Condom use during most recent vaginal intercourse event among a probability sample of adults in the United States. *Journal of Sexual Medicine*, 7(suppl 5), 362–373.

Savin-Williams RC. (2001). A critique of research on sexual-minority youths. *Journal of Adolescence*, 24, 5–13.

Savin-Williams RC, Ream GL. (2007). Prevalence and stability of sexual orientation components during adolescence and young adulthood. *Archives of Sexual Behavior*, 36(3), 385-94.

Sell RL. (1997). Defining and measuring sexual orientation: A review. *Archives of Sexual Behavior*, 26(6), 643–658.

Substance Abuse and Mental Health Services Administration. (2011). *Results from the 2010 National Survey on Drug Use and Health: Summary of national findings* (NSDUH Series H-41, DHHS Publication No. (SMA) 11-4658). Rockville, MD: Office of Applied Studies.

Substance Abuse and Mental Health Services Administration. (2012). *Results from the 2010 National Survey on Drug Use and Health: Mental health findings* (NSDUH Series H-42, DHHS Publication No. (SMA) 11-4667). Rockville, MD: Office of Applied Studies.

Tjaden P, Thoennes N. (2006). *Extent, nature, and consequences of rape victimization: Findings from the National Violence Against Women Survey* (Report NCJ 210346). Washington, DC: National Institute of Justice.

U.S. Department of Education. (2011, January). *Trends in student financing of undergraduate education: Selected years, 1995–96 to 2007–08* (NCES 2011-218). Washington DC: National Center for Education Statistics.

Ward BW, Barnes PM, Freeman G, Schiller JS. (2011). *Early release of selected estimates based on data from the January–June 2011 National Health Interview Survey*. Hyattsville, MD: National Center for Health Statistics. Retrieved March 12, 2012, from http://www.cdc.gov/nchs/nhis.htm.

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