

Sexual Behavior

Definition: Sexual behaviors are any actions that allow the expressions of one's sexual feelings. These behaviors include holding hands and kissing, as well as masturbation and penetrative intercourse. Healthy sexual behaviors are consensual, non-exploitive, and honest and include actions that protect against unintended pregnancies and sexually transmitted diseases. Measures of healthy sexual behavior include condom use among people with multiple sexual partners and rates of sexually transmitted disease and unintended pregnancy.

Summary

Sexual behavior is part of normal human experience. Unhealthy sexual behaviors can affect physical and mental health, including causing unintended pregnancy, HIV, and other sexually transmitted diseases. These conditions, in turn, can lead to a variety of long-term problems associated with increased health care costs including infertility, ectopic (tubal) pregnancy, depression, substance abuse, cancer, and death.

Because of their personal nature, sexual behaviors are more difficult to measure than the negative outcomes of unhealthy choices. Data are available to measure the number of sexual partners and condom use at last sex. In Washington State, 2006 survey data indicate that approximately half of sexually active adults with multiple sexual partners used a condom the last time they had sex. Since a large proportion of individuals engage in unprotected sex that leaves them vulnerable to disease and unintended pregnancy, it is important for public health providers to educate individuals about methods of protection and to ensure access to them.

Time Trends

Accurate and timely public health information about sexual behaviors and their health impacts allows monitoring of trends over time and identification of high-risk populations. While significant effort has gone into monitoring trends in health effects of unhealthy sexual behavior (such as sexually transmitted diseases and unintended pregnancies), limited information is available on sexual behavior itself. Researchers have made progress in collecting important data in some areas, such as by adding questions about sexual orientation to both national and

state surveys. There continue to be limitations, however, on the types of information that can be asked of adolescents in Washington State. Because sexual behaviors are frequently initiated in the adolescent years, and adolescents bear a heavy burden of the negative consequences of unhealthy sexual behavior, it continues to be important to collect information from this population.

The U.S. Centers for Disease Control and Prevention added an optional module on sexual behavior to the Behavioral Risk Factor Surveillance Survey (BRFSS) in 1997. This module includes questions about number of sexual partners and condom use. Data are available from the module for the 24 states that administered it in 1997, but few states have administered the module in recent years. The Washington BRFSS included the sexual behavior module in 1997 and 1999. The optional module has not been used in recent years. The Washington State HIV Knowledge, Attitudes, and Beliefs (KAB) survey asked identical questions about number of sexual partners and condom use in 2003 and 2006, however. The KAB is a telephone survey that uses methods similar to BRFSS. The following table presents previous BRFSS results as well as KAB results from more recent years.

**Sexual Activity and Condom Use with Multiple Partners, Ages 18-49
BRFSS and KAB, 1997-2006**

	BRFSS			KAB	
	U.S. 1997*	WA 1997	WA 1999	WA 2003	WA 2006
sexually active (had sex in past year)	85%	88% ±1%	89% ±2%	85% ±3%	85% ±3%
sexually active, >1 partner in past year	11%	10% ±3%	14% ±3%	14% ±3%	12% ±3%
with >1 partner using condom at last intercourse	65%	55% ±10%	52% ±10%	46% ±12%	51% ±12%

*Includes 24 states¹

Over time, the proportion of individuals who reported being sexually active and having more than one sexual partner in the past 12 months remained stable. For 1997, the only year for which comparison data are available, Washington was similar to the other states using the optional module. In Washington, approximately half of sexually active adults who had more than one partner in a 12-month period used condoms the last time they engaged in sexual intercourse, indicating an ongoing need to promote healthy sexual behaviors in this population.

Year 2010 Goals

Responsible sexual behavior is one of 10 national leading health indicators in *Healthy People 2010*.² Specific indicators related to responsible sexual behavior include increasing condom use among sexually active, unmarried women and men ages 18-44 to 50% and 54%, respectively.³ The 2006 Washington State KAB survey found that only 25% ($\pm 12\%$) of sexually active, unmarried women ages 18-44 reported using a condom during their most recent intercourse, far from the goal of 50%. At 52% ($\pm 12\%$), Washington's sexually active, unmarried men ages 18-44 might have achieved the goal.

Another *Healthy People 2010* goal is to increase the percent of adolescents who abstain from sexual intercourse or use condoms if sexually active. National progress is measured using the National Youth Risk Behavior Survey, a school-based, self-administered survey. Washington's equivalent survey, the Healthy Youth Survey, does not include questions on sexual behavior. A provision in the Washington Administrative Code requires written parental permission to include questions about sexual behaviors in surveys given at school.

Geographic Variation

Because of the small numbers of KAB respondents in some counties, it is not possible to describe differences among counties. If King County, other Western Washington counties, and Eastern Washington counties are compared, however, the 2006 KAB data do not show regional differences for reporting sex with more than one partner in the past 12 months or condom use.

Age, Gender, and Marital Status

Results from the 2006 KAB indicate that 73% ($\pm 2\%$) of adults of *all* ages had sex in the previous 12 months, and 10% ($\pm 2\%$) of these adults reported having more than one sexual partner in this period. People who had sex in the past 12 months and were unmarried (single, widowed, divorced, or member of an unmarried couple) were more likely to report two or more partners than those who were married (29% $\pm 6\%$ and 1% $\pm 1\%$, respectively). Unmarried people with two or more partners in the past 12 months were more likely to have used a condom at the time of last intercourse than those who had had only one partner (53% $\pm 12\%$ and 26% $\pm 6\%$, respectively).

Among those who were unmarried and sexually active, 29% ($\pm 6\%$) had two or more partners in the past 12 months, and 34% ($\pm 6\%$) used a condom the last time they had sexual intercourse. Unmarried men were more likely than unmarried women to report having two or more sex partners (37% $\pm 8\%$ compared to 18% $\pm 6\%$). Unmarried men were also more likely than unmarried women to indicate that they had used a condom at last sex (42% $\pm 9\%$ compared to 24% $\pm 6\%$). The proportions of sexually active unmarried people with multiple sexual partners decreased with increasing age: 38% ($\pm 10\%$) of those ages 18-29 reported two or more sex partners in the past 12 months compared to 25% ($\pm 7\%$) of those ages 30-49 and 18% ($\pm 8\%$) of those ages 50 and older. Among unmarried, sexually active adults with more than one partner, condom use decreased with increasing age: 43% ($\pm 11\%$) of 18-29 year-olds indicated using a condom at last sex, compared to 34% ($\pm 9\%$) of 30-49 year-olds and 18% ($\pm 8\%$) of those 50 and older.

Sexual Orientation

Since the 2002 edition of *The Health of Washington State* was published, local and national efforts to collect information about sexual orientation have increased. The 2005 Washington State BRFS included a question about sexual orientation. On that survey, 2% ($\pm 1\%$) of men and 3% ($\pm 1\%$) of women indicated that they were homosexual or bisexual. The 2006 KAB included the same question; 4% ($\pm 2\%$) of men and 4% ($\pm 1\%$) of women considered themselves homosexual or bisexual. These percents are generally similar to national rates; on the 2002 National Survey of Family Growth (NSFG), 4% of both men and women indicated they were homosexual or bisexual.⁴ The 2005 American Community Survey uses NSFG data combined with census data on same-sex households to estimate

the proportion of gay men, lesbians, and bisexuals at the state, metropolitan area, and congressional district levels. According to these estimates, about 6% of Washington State residents, 7% of greater Seattle-Tacoma-Bellevue area residents, and 13% of Seattle residents are homosexual or bisexual.⁵

Race and Hispanic Origin

Because of the small number of respondents in many racial and ethnic groups on the KAB, data to compare condom use among people of different races or Hispanic origin are not available.

Income and Education

When other factors such as gender, age, and marital status are taken into account, Washington State KAB data indicate that there are no significant differences in condom use related to income or education in Washington State.

Health Effects

While healthy sexual behaviors can contribute significantly to a productive and happy life, unhealthy sexual behaviors can have broad-reaching negative effects, many of which are long-term.

Sexually transmitted diseases. Not using a condom increases the risk of getting sexually transmitted diseases, especially among people with multiple sexual partners. A wide variety of agents cause sexually transmitted diseases, including bacteria (syphilis, gonorrhea, chlamydia), viruses (HIV, hepatitis B, herpes simplex, and human papilloma virus), protozoa (trichomonas), and arthropods (scabies). Sexually transmitted diseases can cause acute illness, long-term health problems, and even death. Pregnant women can transmit some sexually transmitted diseases to their fetuses and neonates, possibly resulting in stillbirth or miscarriage, low birth weight or prematurity, and congenital infection.

Unintended pregnancy. Unhealthy sexual behavior can lead to unintended pregnancy. When people initiate pregnancies without planning and intent and carry them to term, there is less opportunity to prepare for optimal support of the health and well-being of the child and parents.

Psychosocial impact. Having sex at a time or in a way that is not desired can be associated with lower self-esteem and feelings of personal isolation and vulnerability. These feelings can lead to depression and other mental disorders, poor social adjustment, and relationship problems.^{6,7}

High Risk Groups

Youth. According to national 2005 Youth Risk Behavior System (YRBS) data, 47% of adolescents in grades 9-12 reported ever having sex, and of those having sex, 34% were currently sexually active. Survey data collected since 1991 show that initiation of sexual activity among adolescents has been declining. Among those students who were currently sexually active, the proportion using condoms increased from 46% ($\pm 3\%$) in 1991 to 63% ($\pm 2\%$) in 2005.⁸ Even so, some of the highest rates of sexually transmitted diseases are seen among those ages 15-19, and a higher proportion of adolescent pregnancies end in abortion than do pregnancies for women older than 20.⁹ Moreover, young women are more biologically susceptible to chlamydia, gonorrhea, and HIV because changes to the cervix during puberty make it especially sensitive to infection.¹⁰ Teens and young adults can also be reluctant to obtain health services and often encounter barriers in getting care.¹¹

Women of reproductive age. Women, in general, are at higher risk than men for infection with sexually transmitted diseases because most of the diseases, including HIV, are more efficiently transmitted from male to female than female to male. This higher risk results from the anatomy of the vagina, which facilitates prolonged exposure of a woman to the infected secretions of her partner following intercourse. In addition to this increased risk of infection, long-term effects of these diseases among women—such as pelvic inflammatory disease, infertility, and ectopic pregnancies—and the severe consequences of transmitting infection to the fetus or newborn baby can lead to more severe consequences of unhealthy sexual behaviors for women than for men.

Low-income women. Women who are economically disadvantaged are at higher risk for negative outcomes. Data indicate that these women are more likely than other women to have unprotected intercourse.¹² National Survey of Family Growth data show that low-income women had higher rates of unintended pregnancy than did wealthier women, a disparity that increased between 1994 and 2001.¹³

Gay, lesbian, bisexual, or transgender individuals. Although Washington data are limited, nationally high rates of sexually transmitted disease among gay, lesbian, bisexual, and transgender individuals illustrate the high risk sexual behaviors of these populations. For example, data from 35 areas in the United States with long-term, confidential HIV reporting showed that men who have sex with men (MSM) accounted for 70% of all estimated HIV infections in adult and adolescent males in 2004.¹⁴ National data indicate the proportion of positive test results for gonorrhea in MSM have increased, and in Seattle and urban King County, rates of primary and secondary syphilis remain high.

There is only a small body of information available about the lesbian and transgender populations, but more studies are being conducted. Increasing evidence shows that the rate of HIV infection is high in the transgender population.¹⁵ Lesbians are more likely to engage in behaviors such as heavy alcohol use, which can increase the risk of unsafe sexual activity, and they are more likely to have poor health care access.¹⁶

People of color. Rates of most sexually transmitted disease are higher among blacks, Native Americans, and people of Hispanic origin than among whites.¹⁷ In Washington, HIV disproportionately affects people of color. In addition, unintended pregnancy is more common among black and Hispanic women than white women.¹³ Race and Hispanic origin are likely markers for more fundamental determinants of health status such as poverty, lack of access to quality health care, and health-care-seeking behaviors.¹⁸

Substance abusers. People with impaired decision-making abilities, whether due to legal drugs such as alcohol or illegal drugs such as methamphetamines and cocaine, are at increased risk for engaging in unsafe sexual behaviors such as exchanging sex for drugs, having anonymous sex partners, not using condoms, and not seeking appropriate medical treatment. Individuals at high risk of infection also put their sexual partners at risk of disease. The association between methamphetamine use and sexual risk behavior has been well documented among MSM.¹⁹

Having a history of family abuse or violence. Based on 2004 Washington BRFSS data, men who reported childhood sexual abuse were

seven times more likely to report HIV risk-related behaviors, and women who reported childhood sexual abuse were twice as likely to report HIV risk-related behaviors than those who did not report childhood sexual abuse. Data from the 2005 Washington BRFSS indicate that 16% ($\pm 1\%$) of women and 3% ($\pm 1\%$) of men had unwanted sex. National YRBS data from 2003 indicate that adolescents reporting physical dating violence were more likely to be currently sexually active.²⁰

Other Measures of Burden

Rates of sexually transmitted disease, unintended pregnancy, and adolescent pregnancy provide measures of the burden of unhealthy sexual behavior. For information on these factors in Washington, see *Health of Washington State, 2007* chapters on HIV/AIDS, Sexually Transmitted Diseases, Cervical Cancer, Unintended Pregnancy, and Adolescent Pregnancy and Childbearing.

Intervention Points, Strategies, and Effectiveness

Because the effects of unhealthy sexual behavior are so broad, promotion of healthy sexual behaviors can have a major impact on the health and well-being of a community.

Education and skills building. For decades, public support for sexuality education in public schools has been widespread.²¹ This support has continued, particularly since the emergence of the HIV epidemic. Data from the 2006 KAB indicate that 96% (± 1) of adults supported sex education in school; 98% (± 1) supported education about sexually transmitted diseases; and 98% (± 1) supported education about HIV/AIDS. Approximately 75% of respondents believed these issues should be discussed in grades four through seven.

Sex education in the schools has been controversial in some communities, however. In particular, some people have been concerned that discussion of sexual behavior and contraceptive use will increase sexual activity among youth. Evaluation data show that comprehensive sex education and HIV/STD prevention programs do not increase rates of sexual initiation, lower the age of sexual initiation, or increase the frequency of sex or the number of sex partners among sexually active youth.^{22,23}

Access to health care. Access to sexual and reproductive health services is cost-effective and reduces unhealthy sexual behavior. To be most effective, preventive and clinical services should be sensitive, confidential, affordable, and accompanied

by counseling that is appropriate in terms of age, sexual orientation, and culture and that addresses HIV and other sexually transmitted diseases and sexual behavior.²⁴

Targeted behavioral interventions for specific high risk populations. While providing comprehensive sex education for youth and improving access to health care are important strategies to help individuals achieve and maintain good sexual health, it is also important to provide targeted interventions for people who have sexually transmitted diseases, including HIV, or are at high risk of becoming infected.

See Related Chapters: [Sexually Transmitted Infections](#), [HIV/AIDS](#), [Unintended Pregnancy](#), and [Adolescent Pregnancy and Childbearing](#).

Data Sources (For additional detail, see [Appendix B](#).)

Behavioral Risk Factor Surveillance System (BRFSS), 1997, 1999

The Pregnancy Risk Assessment Monitoring System (PRAMS), 2004

For More Information

Washington State Department of Health:

- Infectious Disease and Reproductive Health Assessment Unit, (360) 236-3455
- Office of HIV/AIDS Prevention and Education Services, (360) 236-3434
- Sexually Transmitted Disease/Tuberculosis Services, (360) 236-3460
- Family Planning and Reproductive Health, (360) 236-3471
- Child and Adolescent Health, (360) 236-3515.

Technical Notes

The Washington State HIV Knowledge, Attitudes, and Beliefs (KAB) survey is a random digit dial telephone survey of Washington State residents ages 18 and older that occurs approximately every three years. The purpose of the survey is to collect information about respondents' knowledge, attitudes, and beliefs about HIV transmission and HIV-related policies, as well as information about HIV-related risk behaviors and testing behaviors.

Marital status—It should be noted that categorizing individuals into categories of “married” and “unmarried” makes it difficult to describe the complexity of relationships. “Unmarried” people can be in mutually monogamous, long-term committed relationships analogous to marriage but would not be reported as “married.” This is especially problematic for gay and lesbian people who cannot legally marry. In addition, “married” people are not necessarily monogamous.

Endnotes.

¹ U.S. Centers for Disease Control and Prevention. (2001). Prevalence of risk behaviors for HIV infection among adults—United States, 1997. *Morbidity and Mortality Weekly Report*, 50(14), 262-265.

² U.S. Department of Health and Human Services. (2000). *Healthy People 2010: Understanding and Improving Health* (2nd edition). Washington, DC: U.S. Government Printing Office.

³ This objective (13-6) was changed at the midcourse correction and so is different from the goal in the original *Healthy People 2010*. See <http://www.healthypeople.gov/Data/midcourse/comments/fabjective.asp?id=13&subid=6>.

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⁵ Gates, G.J. (2006). *Same-sex couples and the gay, lesbian, bisexual population: New estimates from the American Community Survey*. The Williams Institute.

⁶ Dube, S. R., Anda, R. F., Whitfield, C. L., Brown, D. W., Felitti, V. J., Doug, M., & Giles, W. H. (2005). Long-term consequences of childhood sexual abuse by gender of victim. *American Journal of Preventive Medicine*, 28(5), 430-438.

⁷ Kaltman, S., Krupnick, J., Stockton, P., Hooper, L., & Green, B. L. (2005). Psychological impact of types of sexual trauma among college women. *Journal of Traumatic Stress*, 18(5), 547-555.

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¹¹ U.S. Institute of Medicine. (1997). *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*. Washington, DC: National Academy Press.

¹² Mosher, W. D., Martinez, G. M., Chandra, A., Abma, J. C., & Wilson, S. J. (2004). *Use of contraception and use of family planning services in the United States: 1982–2002*. Advance Data from Vital and Health Statistics, Centers for Disease Control and Prevention, Number 350, 1-46.

¹³ Finer, L. B., & Henshaw, S. K. (2006). Disparities in rates of unintended pregnancy in the United States, 1994 and 2001. *Perspectives on Sexual and Reproductive Health*, 38(2), 90-96.

¹⁴ U.S. Centers for Disease Control and Prevention. (2005). *HIV/AIDS surveillance report, 2004*. Vol. 16, 1-46. Retrieved October 18, 2006 from <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2004report/default.htm>.

¹⁵ Aaron, D. J., Markovic, N., Danielson, M. E., Honnold, J. A., Janosky, J. E., & Schmidt, N. J. (2001). Behavioral risk factors for disease and preventive health practices among lesbians. *American Journal of Public Health*, 91(6), 972-975.

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- ¹⁷ U.S. Centers for Disease Control and Prevention. (n.d.). STD surveillance 2004. Retrieved October 18, 2006 from <http://www.cdc.gov/std/stats/trends2004.htm>.
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- ²⁰ Black, M. C., Noonan, R., & Legg, M. (2006). Physical dating violence among high school students—United States, 2003. *Morbidity and Mortality Weekly Report, 55*(19), 532-535.
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- ²² Kirby, D. (2001). *Emerging answers: research findings on programs to reduce teen pregnancy*. Washington DC: National Campaign to Prevent Teen Pregnancy.
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- ²⁴ U.S. Institute of Medicine. (2001). *No Time to Lose: Getting More from HIV Prevention*. Washington DC: National Academy Press.