

Question 3

What are the indicators of risk for HIV infection and AIDS in Ohio?

This section will examine the trends and characteristics of populations that engage in behaviors that put them at increased risk for acquiring and transmitting HIV infection in Ohio. The focus will be on three high-risk behaviors: male/male sex, injection drug/substance use and heterosexual contact.

The previous section described the trends and distribution of HIV infection among various groups with HIV. This section examines direct and indirect measures of risk behavior in the groups most at risk for acquiring HIV infection. Direct measures of risk provide information about risk behaviors that are directly associated with HIV transmission. Indirect measures of risk do not directly describe HIV risk behaviors, but serve as indicators of risk behaviors that can be monitored to identify the possibility of increases in HIV transmission among certain population groups. For example, an increase in STD rates does not directly indicate an increase in HIV transmission, but might indicate an increase in unprotected sex.

Highlights Risk Indicators for HIV Infection in Ohio

- A substantial proportion of men who have sex with men, who are tested at Counseling and Testing Sites, are not using condoms during intercourse.
- Syphilis among men who have sex with men increased dramatically in Ohio from 1999 to 2002.
- According to the National Household Survey of Drug Abuse, in Ohio, it is estimated that 5.6 percent of the adolescent/adult population reported past month use of *any illicit drug*. *Any illicit drug* includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants or any prescription-type psychotherapeutic used non-medically.
- Among Ohio's high school population, 2.3 percent of high school students reported using a needle to inject any illegal drug into their body one or more times during their life, according to the Youth Risk Behavior Survey.
- Forty-seven percent of high school students reported on the Youth Risk Behavior Survey that they have had sexual intercourse. Sixty percent of students who have had sexual intercourse reported using a condom the last time they had sexual intercourse.
- Increases were seen in chlamydia and gonorrhea rates from 1998 to 2002.

Male/Male Sex

Direct Measures of Risk Behavior

Among men who have sex with men, the following measures of risk behavior are available in Ohio to provide information about risk behaviors that are associated with acquiring or transmitting HIV infection:

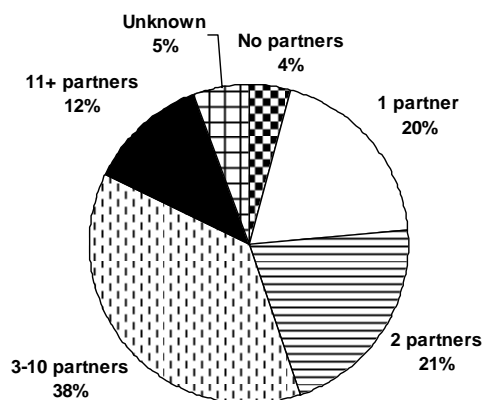
- Number of sex partners
- Frequency of condom use
- Substance use

Men who have sex with men (MSM) are defined as men who acknowledge having had sexual contact with another male regardless of how an individual identifies in terms of sexual orientation and regardless of whether or not they also have had sexual contact with a female.

To address the risk behaviors associated with male/male sex, questions asked of clients who seek HIV counseling and testing at Ohio's HIV Counseling and Testing Sites provide information on these risk behaviors among MSM. HIV Counseling and Testing Sites in Ohio provide low-cost or free-of-charge counseling and testing, referrals and partner notification services to thousands of Ohio residents who are at risk for HIV. HIV Counseling and Testing Sites provide these services for people who might not have access to a medical facility, who might not be comfortable with being tested for HIV in a medical setting or who might not have the money or insurance to have an HIV test. These sites provide either anonymous or confidential HIV tests. The Counseling and Testing Sites database records the number of HIV tests performed, not the number of individuals tested. Therefore, an individual who is tested multiple times at a Counseling and Testing Site will be counted multiple times.

Number of sex partners

Figure 13. Number of sex partners in the past year among MSM (n=5,708)

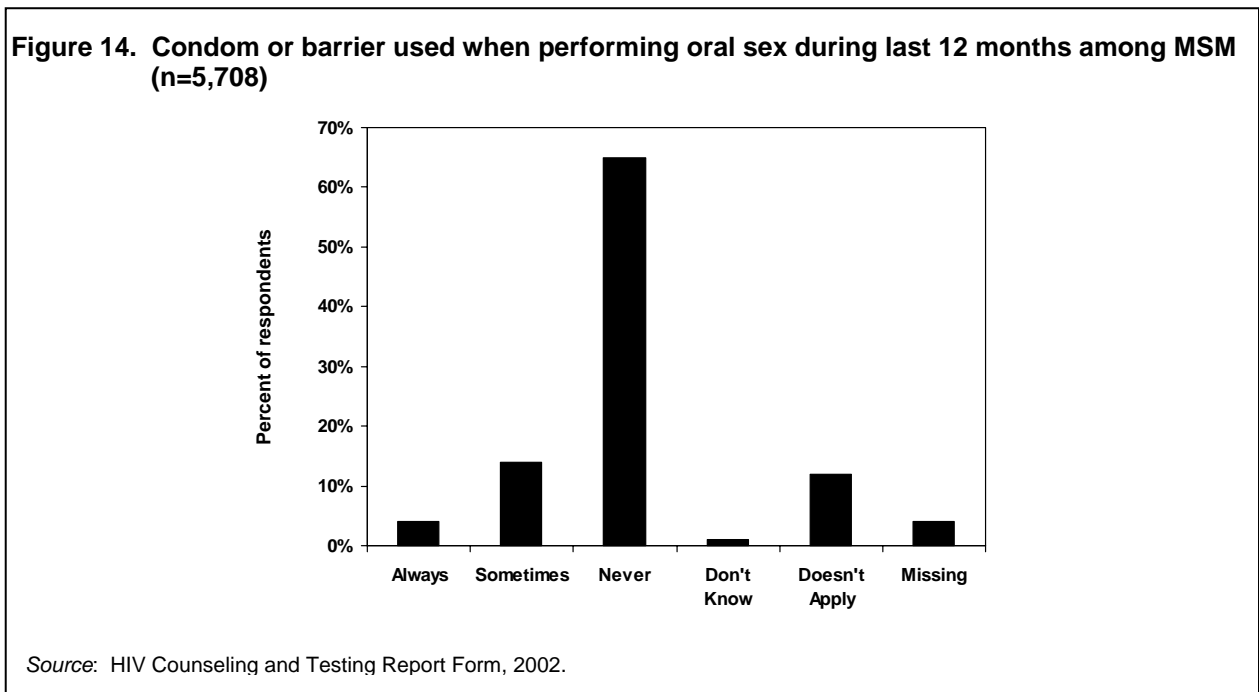


Note: The gender of the sex partners was not asked, therefore, these sex partners can be either male or female.

Source: HIV Counseling and Testing Report Form, 2002.

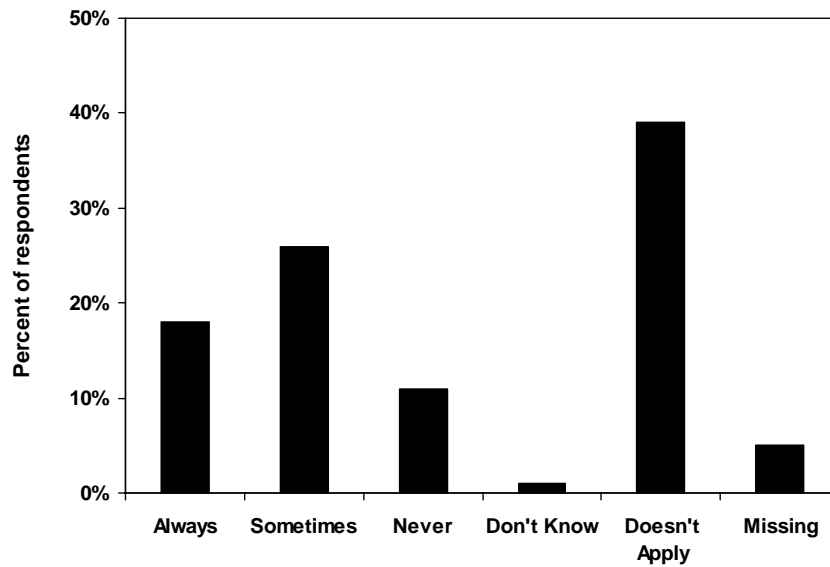
The number of sex partners an individual has is associated with his/her risk of becoming infected with HIV, because the more partners a person has, the greater the chance that one of those partners might be HIV infected. Among men tested at counseling and testing sites in 2002, who acknowledged having had sex with a male since 1978, 71 percent reported having two or more sex partners in the past year. More specifically, 38 percent of clients reported three to 10 partners in the past year and 12 percent reported 11 or more partners (**Figure 13**). The gender of the sex partners was not asked, therefore, these sex partners could have been either male or female.

Frequency of condom use



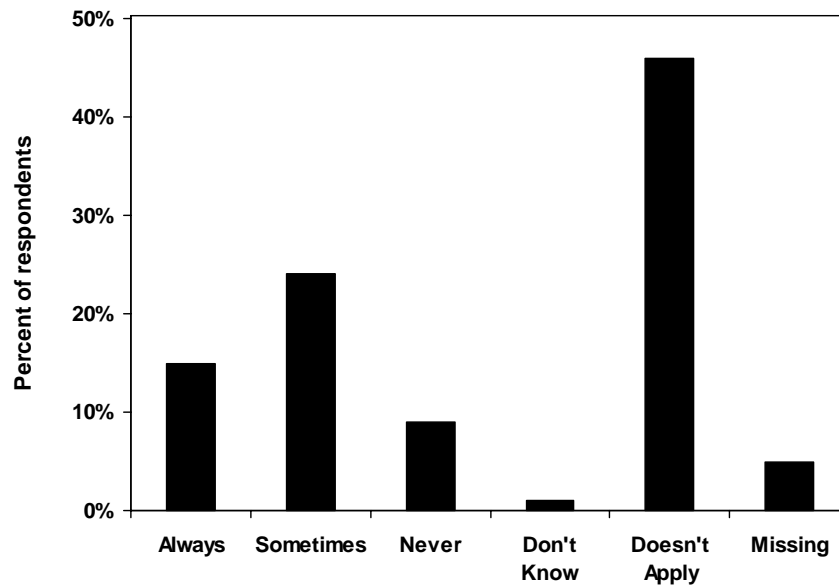
Condom use can prevent the transmission of HIV through sexual contact. Sixty-five percent of MSM tested at Counseling and Testing Sites in 2002 reported never using a condom or barrier when performing oral sex during the last 12 months. Four percent reported always using a condom or barrier and 14 percent reported sometimes using a condom or barrier. (**Figure 14**)

Figure 15. Condom used when inserter in rectal intercourse during last 12 months among MSM (n=5,708)



Source: HIV Counseling and Testing Report Form, 2002.

Figure 16. Condom used when recipient of rectal intercourse during last 12 months among MSM (n=5,708)

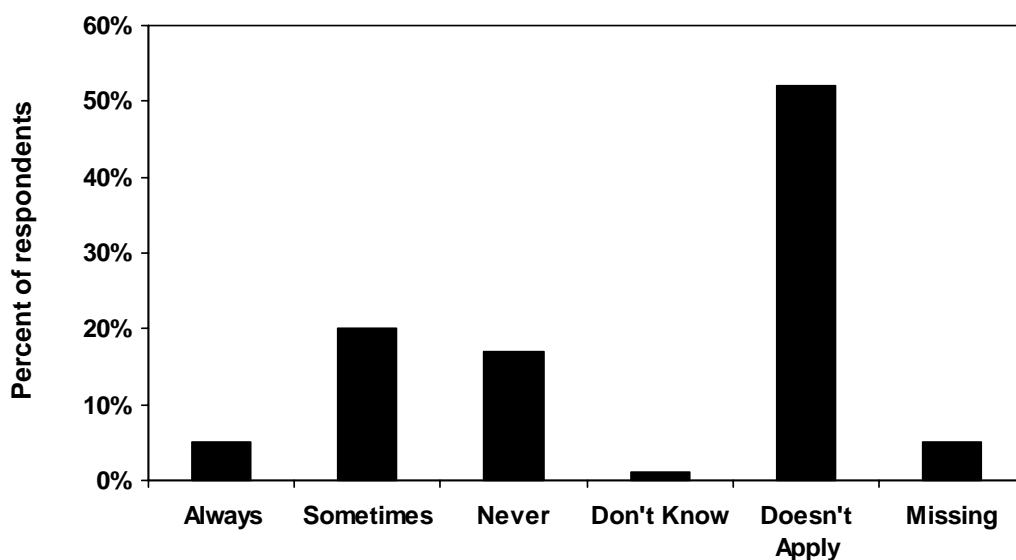


Source: HIV Counseling and Testing Report Form, 2002.

In response to a question regarding condom use when the client was the inserter in rectal intercourse during the last 12 months, 18 percent of MSM questioned in 2002 reported always

using a condom, 11 percent reported never using a condom (**Figure 15**). When asked about condom use when the client was the recipient of rectal intercourse during the last 12 months, 15 percent of MSM reported always using a condom, 9 percent reported never using a condom. (**Figure 16**)

Figure 17. Condom used during vaginal intercourse during last 12 months among MSM (n=5,708)



Source: HIV Counseling and Testing Report Form, 2002.

Forty-two percent of MSM tested at Counseling and Testing Sites reported having sex with a female at some time during their lives. Among MSM tested at Counseling and Testing Sites, 5 percent reported always using a condom during vaginal intercourse during the last 12 months, 17 percent reported never using a condom during vaginal intercourse. (**Figure 17**)

Substance Use

Using contaminated equipment for injecting drugs is a risk factor for transmitting HIV because of the potential for direct contact with HIV-infected blood. In addition, injection drug use and other substance use can impair a person's judgment leading to unprotected sex, which might put a person at risk for becoming infected with HIV, because HIV can be transmitted through sexual contact. Among MSM tested at Counseling and Testing Sites in 2002, 4 percent reported having used injection drugs. Thirty-five percent of MSM tested at Counseling and Testing Sites in 2002 reported having sex while using non-injection drugs. Ten percent of MSM tested at Counseling and Testing Sites in 2002 reported using crack in the last year.

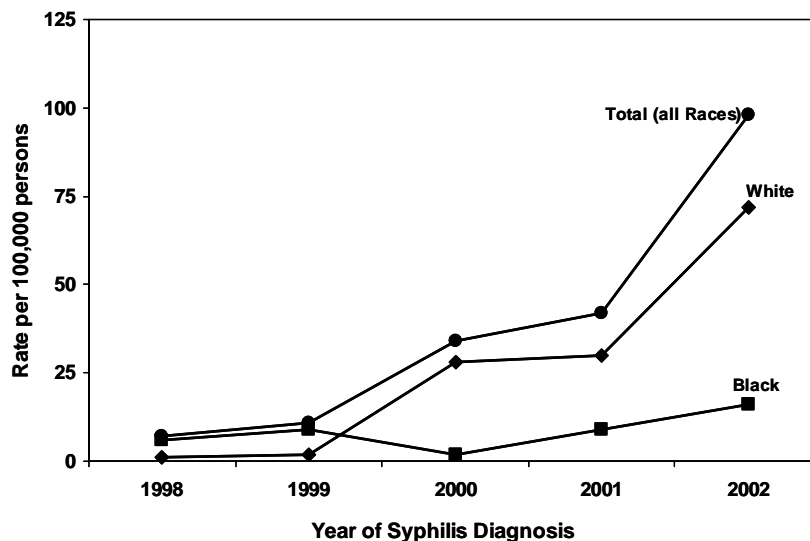
Indirect Measures of Risk Behavior

STD surveillance data and hepatitis surveillance data provide information that might indicate the potential of high-risk behaviors among men who have sex with men. STDs among MSM are an indirect measure of risk behavior for HIV among MSM because STDs are an indicator of unprotected sex and unprotected sex is a risk behavior for HIV. Having an STD can also increase the potential of transmitting or acquiring HIV. Research has demonstrated increased risk of HIV transmission in the presence of STD infections that cause genital ulcers (such as syphilis or herpes) as well as other STDs that are frequently asymptomatic, such as chlamydia and gonorrhea. This is especially true in women. Wasserheit, (1992) found a three-to-five times higher risk of acquiring HIV through sexual transmission if an individual is infected with STDs compared to those not infected with STDs.¹ Further, an individual co-infected with the HIV virus and another STD is three-to-five times more likely than other HIV-infected persons to transmit HIV through sexual contact. Studies in Asia and in Africa have also illustrated the interrelationship between HIV and STD interventions where focus on STD prevention slowed the progress of the HIV epidemic.²

Trends in early syphilis among men who self-report having sex with men

Trends in early syphilis among men who self-report having sex with men provide information to identify any increases in syphilis among MSM.

Figure 18. Trends in early syphilis among MSM, by race, Ohio, 1998-2002



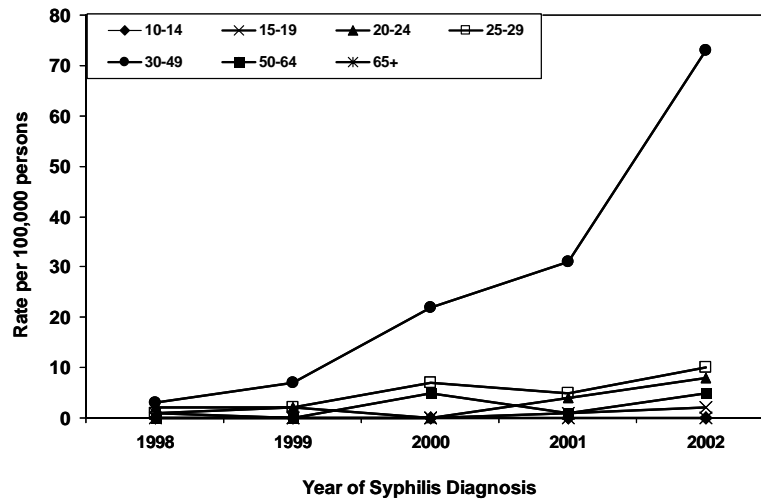
*Early syphilis includes primary, secondary and early latent syphilis

Source: STD Surveillance, HIV/STD Prevention Program, Ohio Department of Health. Data as of May 2003.

¹ Wasserheit JN. 1992. "Epidemiology synergy: interrelationship between human immunodeficiency virus infection and other sexually transmitted diseases." *Sexually Transmitted Diseases* 9:61-77.

² Grosskurth H et al. 1995. "Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tanzania: randomised controlled trial." In: *The Lancet*, 346:530-36.

Figure 19. Trends in early syphilis among MSM by age in Ohio, 1998-2002



*Early syphilis includes primary, secondary and early latent syphilis

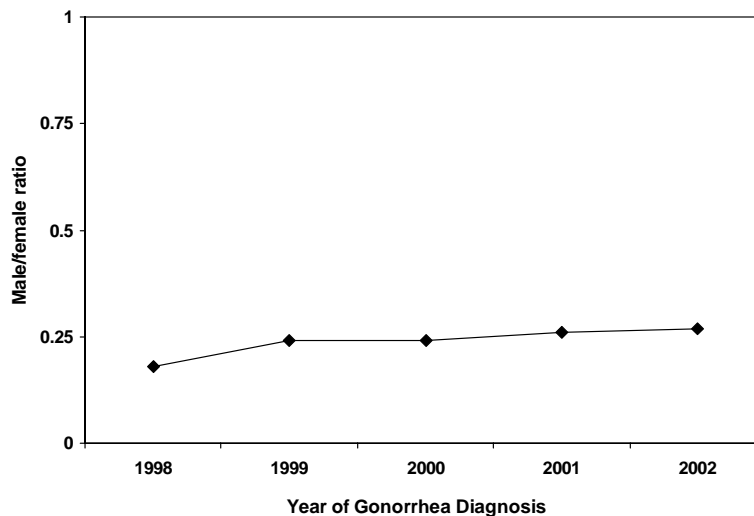
Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

Trends in syphilis among persons who self-reported a history of male/male sex show an increase in the number of syphilis infections (**Figure 18**). An increase was seen for both whites and blacks, but the increase was higher among whites. While an increase was seen across age groups, the greatest increase was seen in persons 30-49 years of age. (**Figure 19**)

Male/Female Ratios of Chlamydia, Gonorrhea, Syphilis, Hepatitis A & Hepatitis B

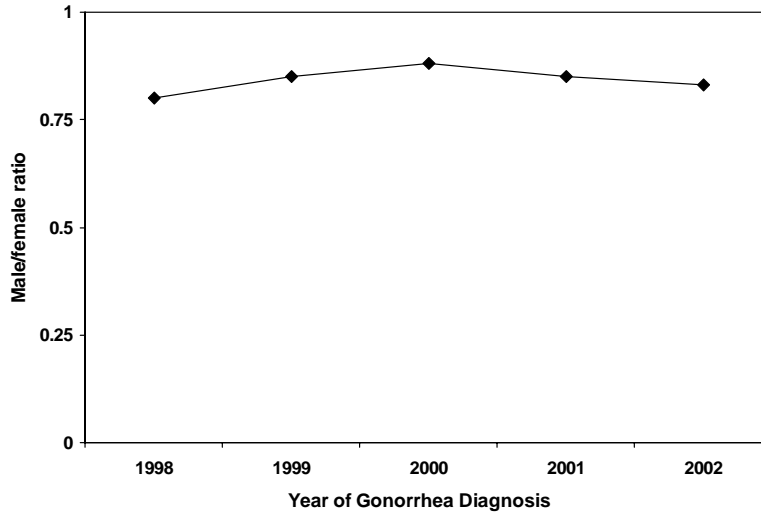
Trends in the male/female ratio of gonorrhea, syphilis, hepatitis A and hepatitis B provide an indirect measure of increasing rates of infection among MSM.

Figure 20. Trends in male/female ratio of chlamydia, Ohio, 1998-2002



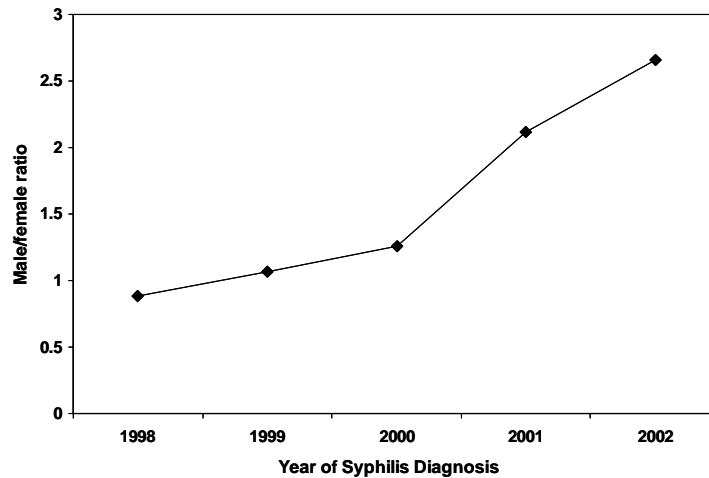
Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

Figure 21. Trends in male/female ratio of gonorrhea, Ohio, 1998-2002



Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

Figure 22. Trends in male/female ratio of early syphilis, Ohio, 1998-2002

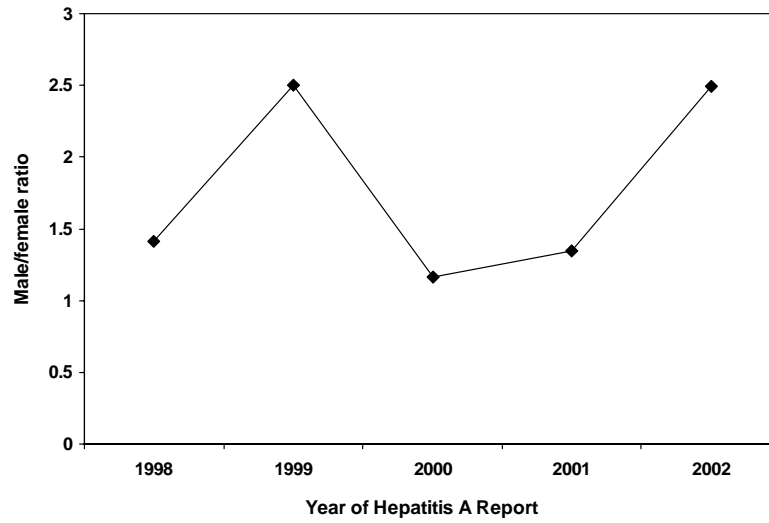


*Early syphilis includes primary, secondary and early latent syphilis

Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

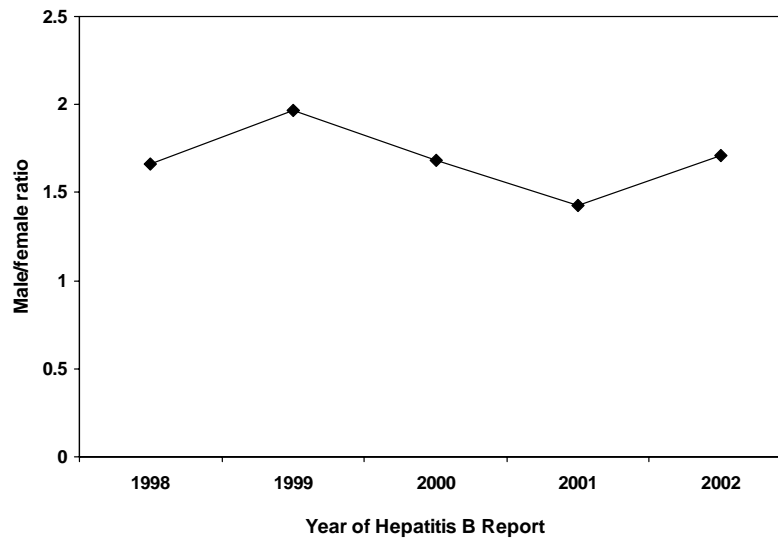
While the male/female ratio of chlamydia has increased slightly from 1998 to 2002, there were substantially more females diagnosed each year than males (**Figure 20**). The male/female ratio of gonorrhea has remained stable with slightly more females diagnosed with gonorrhea each year than males (**Figure 21**). The male/female ratio for syphilis has increased from 0.9 in 1998 to 2.66 in 2002 (**Figure 22**). This is an indicator that syphilis is increasing among MSM.

Figure 23. Trends in male/female ratio of acute hepatitis A, Ohio, 1998-2002



Source: Ohio Department of Health Infectious Disease Surveillance

Figure 24. Trends in male/female ratio of acute hepatitis B, Ohio, 1998-2002



Source: Ohio Department of Health Infectious Disease Surveillance

The male/female ratios among hepatitis A and hepatitis B do not reveal any consistent increases or decreases over time. (Figure 23-Figure 24)

Injection Drug Use/Substance Use

Direct Measures of Risk Behaviors

Among persons using injection drugs or other substances, the following measures of risk behavior are available in Ohio to provide information about risk behaviors that are associated with acquiring or transmitting HIV infection:

- Injection and other substance use
- Exchanging sex for drugs or money
- Number of sex partners

The National Household Survey on Drug Abuse (NHSDA), the Youth Risk Behavior Survey (YRBS) and questions asked of clients who seek HIV testing and counseling at Ohio's HIV Counseling and Testing Sites provide information on behaviors related to substance use.

The NHSDA, sponsored by the Substance Abuse and Mental Health Services Administration (SAMSHA), has been conducted since 1971 and provides information on the prevalence and incidence of illicit drug, alcohol and tobacco use in the civilian, non-institutionalized population of the United States aged 12 years or older. About 70,000 interviews are conducted each year using a computer-assisted interviewing methodology. Beginning in 1999, the NHSDA produced state-level estimates for select variables. Estimates provided in this section are based on 1999 and 2000 annual averages from the NHSDA.

The YRBS is a self-administered questionnaire distributed in public and private high schools containing grades nine, 10, 11 and 12. Schools for incarcerated youth were not included in this survey. The purpose of the survey is to monitor health risk behaviors that contribute to the leading causes of mortality, morbidity and social problems among youth in the United States. The questionnaire contained multiple-choice questions addressing several categories of health-related behaviors, including drug use, sexual behaviors, HIV infection and other sexually transmitted diseases (STDs). The YRBS helps assess HIV risk among high school students because it provides student responses to questions about their sexual and drug use behaviors. Because injection drug use and sexual contact are potential sources of transmission for HIV, having knowledge about the extent to which students are engaging in these behaviors is beneficial for HIV prevention. This analysis is representative only of high school students. Because the survey is based on self-reports there is the potential for reporting bias.

HIV Counseling and Testing Sites in Ohio provide free-of-charge counseling and testing, referrals and partner notification services to thousands of Ohio residents who are at risk for HIV. HIV Counseling and Testing Sites provide these services for people who might not have access to a medical facility, who might not be comfortable with being tested for HIV in a medical setting or who might not have the money or insurance to have an HIV test. These sites provide either anonymous or confidential HIV tests. The Counseling and Testing Sites database records the number of HIV tests performed, not the number of individuals tested. Therefore, an individual who is tested multiple times at Counseling and Testing Sites will be counted multiple times.

Injection and other substance use

Table 143. Percentages reporting substance use in Ohio, 1999-2000

Substance Use	Total	12 - 17	18 - 25	26 or older
	% Estimate (PI)*	% Estimate (PI)	% Estimate (PI)	% Estimate (PI)
Past Month Use of Any Illicit Drug**	5.60% (5.00 - 6.25)	8.57% (7.55 - 9.67)	15.91% (14.43 - 17.48)	3.46% (2.8 - 4.23)
Past Month Use of Marijuana	4.30% (3.79 - 4.86)	6.44% (5.55 - 7.41)	13.77% (12.42 - 15.21)	2.41% (1.87 - 3.07)
Past Month Use of any Illicit Drug other than Marijuana	2.57% (2.20 - 2.97)	4.51% (3.78 - 5.33)	6.08% (5.20 - 7.05)	1.71% (1.29 - 2.23)
Past Year Use of Cocaine	1.51% (1.23 - 1.85)	1.16% (0.83 - 1.58)	4.53% (3.78 - 5.37)	1.05% (0.73 - 1.46)
Past Month Use of Alcohol	45.50% (43.63 - 47.38)	15.81% (14.41 - 17.30)	58.97% (56.97 - 60.95)	47.20% (44.80 - 49.60)
Past Month "Binge" Alcohol Use***	21.91% (20.60 - 23.27)	10.26% (9.08 - 11.53)	41.59% (39.61 - 43.60)	20.14% (18.52 - 21.84)

*PI=Prediction Interval

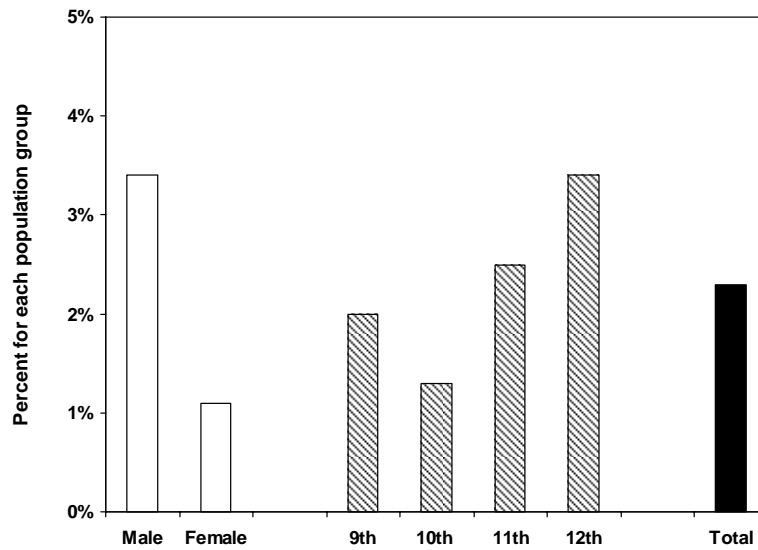
**Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants or any prescription-type psychotherapeutic used non-medically.

***"Binge" Alcohol Use is defined as drinking five or more drinks on the same occasion on at least one day in the past 30 days. By "occasion" is meant at the same time or within a couple of hours of each other.

Source: SAMHSA, Office of Applied Statistics, National Household Survey of Drug Abuse, 1999 and 2000.

Table 143 provides estimates of substance use in Ohio for the following substances: past month use of any illicit drug; past month use of marijuana; past month use of any illicit drug other than marijuana; past year use of cocaine; past month use of alcohol; past month "binge" alcohol use. Estimates are shown for the entire Ohio population 12 years or older and for the age groups 12-17 years old, 18-25 years old and 26 years or older. For all of the substances shown, the highest estimates are among persons 18-25 years old. In Ohio, it is estimated that 5.6 percent of the adolescent/adult population reported past month use of *any illicit drug*. *Any illicit drug* includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants or any prescription-type psychotherapeutic used non-medically. Past month use of any illicit drug other than marijuana was reported in 2.57 percent of the adolescent/adult population. It is estimated that 1.51 percent of the Ohio adolescent/adult population reported past year use of cocaine.

Figure 25. Injection drug use among high school students (n=2,045), by gender and school grade, Ohio, 1999

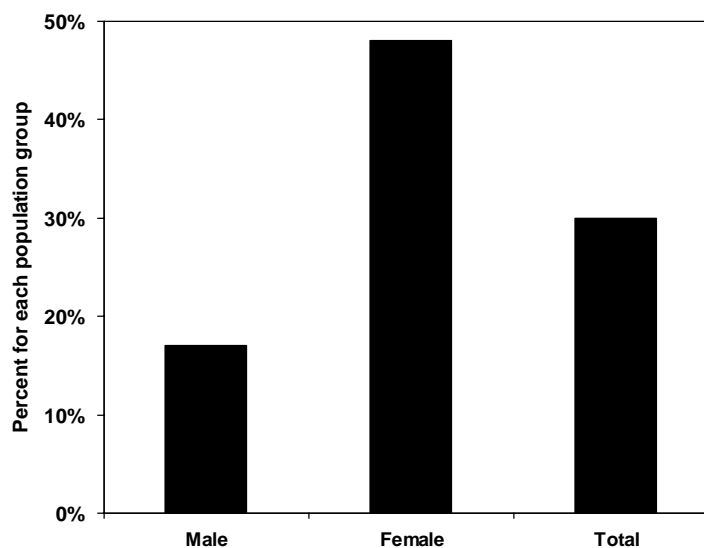


Source: Youth Risk Behavior Survey, 1999.

Among Ohio's high school population, 2.3 percent of high school students reported using a needle to inject any illegal drug into their body one or more times during their life. Injection drug use was highest among male students (3.4 percent) and students in 12th grade (3.4 percent). (Figure 25)

Exchanging sex for drugs or money

Figure 26. Exchanging sex for drugs or money among injection drug users (n=2,435), by gender, Ohio, 2002

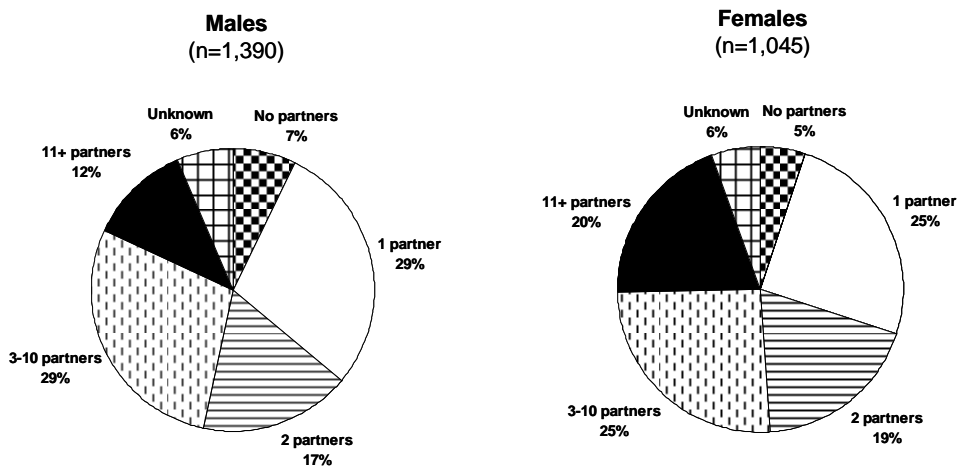


Source: HIV Counseling and Testing Report Form, 2002.

Thirty percent of Counseling and Testing Site clients who acknowledged injection drug use also reported exchanging sex for drugs or money. Exchanging sex for drugs or money was higher among female IDUs (48 percent) than among male IDUs (17 percent). (Figure 26)

Number of sex partners

Figure 27. Number of sex partners in the past year among injection drug users by gender, Ohio, 2002



Source: HIV Counseling and Testing Report Form, 2002.

Fifty-eight percent of male and 64 percent of female IDU clients at Counseling and Testing Sites reported having two or more sex partners in the past year. More specifically, 29 percent of males and 25 percent of females reported three to 10 sex partners in the past year and 12 percent of males and 20 percent of females reported 11 or more partners in the past year. (Figure 27)

Indirect Measures of Risk Behavior

The Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Episode Data Set (TEDS) provides information that might indicate the possible occurrence of behaviors related to injection drug use and other substance use that place an individual at risk for HIV infection. TEDS is a national client-level database on substance abuse treatment. It provides data on substance abuse treatment events that are routinely collected by the states. It primarily includes information on clients admitted to programs that receive public funds. Because TEDS is an admission-based system, it may include duplicated individuals if an individual has multiple admissions in one calendar year.

Treatment Admissions

Table 144. Substance abuse treatment admissions by primary substance of abuse, by selected characteristics, Ohio, 2001

	Total Admissions*	Alcohol	Alcohol w/ Secondary Drug	Cocaine (smoked)	Cocaine (other route)	Marijuana	Heroin
Gender							
Male	63.7%	71.0%	67.5%	44.5%	57.1%	70.0%	65.3%
Female	36.3%	29.0%	32.5%	55.5%	42.9%	30.0%	34.7%
Race							
White	61.3%	78.4%	64.0%	30.0%	59.4%	58.6%	54.7%
Black	34.9%	18.9%	33.6%	67.1%	36.2%	38.3%	30.1%
Asian/Pacific Islander	0.2%	0.1%	0.2%	0.2%	0.4%	0.2%	0.4%
American Indian/ Alaska Native	0.4%	0.5%	0.2%	0.2%	0.3%	0.4%	0.5%
Unknown	3.2%	2.1%	2.0%	2.5%	3.8%	2.5%	14.3%
Ethnicity							
Hispanic	3.0%	2.1%	1.6%	1.2%	100.1%	1.9%	15.1%
Age at admission							
0-11	0.2%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%
12-20	19.6%	10.0%	14.4%	2.0%	7.4%	49.5%	3.1%
21-25	12.5%	10.5%	13.3%	5.1%	12.1%	17.4%	11.3%
26-30	12.0%	11.0%	12.4%	13.9%	18.4%	10.1%	12.0%
31-50	46.8%	54.5%	53.3%	73.3%	51.9%	15.0%	62.2%
51-65	3.8%	7.1%	2.8%	2.8%	2.5%	0.4%	10.4%
66+	0.3%	0.9%	0.1%	0.1%	0.0%	0.0%	0.2%
Unknown	4.7%	6.0%	3.8%	2.9%	7.4%	7.6%	1.0%
Number of Admissions							
	40,097	8,755	7,963	5,940	793	8,873	3,000
Percentage of Admissions							
	100.0%	21.8%	19.9%	14.8%	2.0%	22.1%	7.5%

*In addition to the substances reported above, total admissions also includes other opiates, PCP, hallucinogens, amphetamines, other stimulants, tranquilizers, sedatives, inhalants and other/unknown primary substances.

Source: Treatment Episode Data Set, 2001.

According to TEDS, in 2001, there were 40,097 substance abuse admissions in Ohio. Of these admissions, nearly 15 percent were primarily related to smoking cocaine, 2 percent were primarily related to cocaine use through another route and 7.5 percent were primarily related to heroin use. (Table 144)

The age distribution among treatment admissions differs somewhat by primary substance. Persons admitted for treatment due to cocaine use by a route other than smoking were younger than persons admitted for smoking cocaine or heroin use. Among cocaine smokers, 73 percent were 31-50 years of age, with the remainder under age 31 except for a small percentage over age 50. Sixty-two percent of heroin admissions were among persons 31-50 years of age and 11 percent were over age 50. (Table 144)

Of admissions related to smoking cocaine, 56 percent were among females, 67 percent were among blacks and 30 percent were among whites. In comparison, the demographics among admissions related to cocaine use through another route differ: 57 percent of cases were among males, 59 percent were among whites and 36 percent were among blacks. (**Table 144**)

Of admissions related to heroin use, 65 percent were among males, 55 percent were among whites and 30 percent were among blacks. (**Table 144**)

Heterosexual Contact

Direct Measures of Risk Behaviors

Among persons engaging in high-risk heterosexual contact, the following measures of risk behavior are available in Ohio to provide information about risk behaviors that are associated with acquiring or transmitting HIV infection:

- Number of sex partners
- Frequency of condom use
- Substance use
- Exchanging money or drugs for sex

Questions asked of clients who seek HIV counseling and testing at Ohio's HIV Counseling and Testing Sites, the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Risk Behavior Survey (YRBS) provide information on risk behavior related to heterosexual contact.

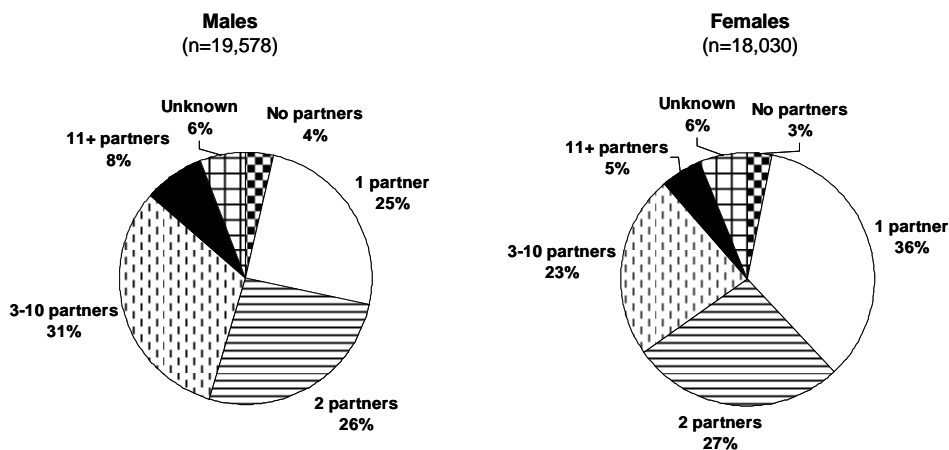
HIV Counseling and Testing Sites in Ohio provide low-cost or free-of-charge counseling and testing, referrals and partner notification services to thousands of Ohio residents who are at risk for HIV. HIV Counseling and Testing Sites provide these services for people who might not have access to a medical facility, who might not be comfortable with being tested for HIV in a medical setting or who might not have the money or insurance to have an HIV test. These sites conduct both anonymous and confidential HIV tests. The Counseling and Testing Sites database tracks the number of HIV tests performed, not the number of individuals tested. Therefore, an individual who is tested multiple times at Counseling and Testing Sites will be counted multiple times.

The BRFSS is conducted to monitor the prevalence of lifestyle risk factors associated with the major causes of premature morbidity and mortality in Ohio's adult populations. This information is collected using random digit dial telephone interviews. The sexual behavior module of the BRFSS examines sexual behaviors of the general population and can be used to determine to what extent the general population is engaging in behaviors that could put them at risk for HIV infection and other sexually transmitted diseases (STDs).

The YRBS is a self-administered questionnaire distributed in regular and non-public high schools containing grades nine, 10, 11 and 12. Schools for incarcerated youth were not included in this survey. The purpose of the survey is to monitor health risk behaviors that contribute to the leading causes of mortality, morbidity and social problems among youth in the United States. The questionnaire contained multiple-choice questions addressing several categories of health related behaviors, including drug use, sexual behaviors, HIV infection and other STDs. The YRBS helps assess HIV risk among high school students because it provides student responses to questions about their sexual and drug use behaviors. Because injection drug use and sexual contact are potential sources of HIV transmission, having knowledge about the extent to which students are engaging in these behaviors is beneficial for HIV prevention. This analysis is representative only of high school students. Because the survey is based on self-reports, there is the potential for reporting bias.

Number of sex partners

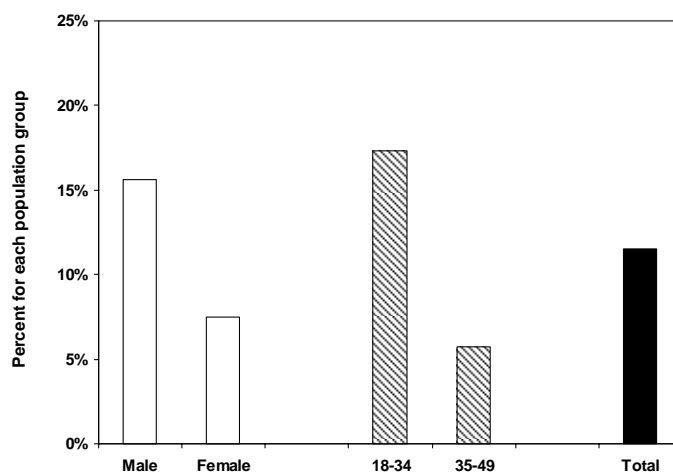
Figure 28. Number of sex partners in the past year among persons who have had heterosexual contact, by gender, Ohio, 2002



Source: HIV Counseling and Testing Report Form, 2002.

Sixty-five percent of male and 55 percent of female heterosexual and bisexual clients at Counseling and Testing Sites reported having two or more sex partners in the past year. More specifically, 26 percent of males and 27 percent of females reported three to 10 sex partners in the past year and 8 percent of males and 5 percent of females reported 11 or more partners in the past year (Figure 28).

Figure 29. Percentage of adults 18-49 years of age reporting two or more sex partners during the past 12 months, by gender and age, Ohio, 2000

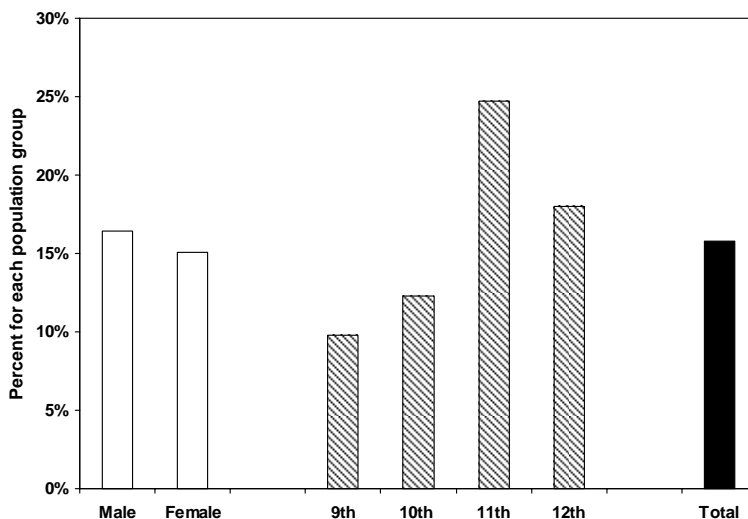


Source: Behavioral Risk Factor Surveillance System, 2000.

According to the BRFSS, 11.5 percent of adults 18-49 years old in Ohio reported two or more sex partners in the past 12 months. This is highest among males (15.6 percent) and persons 18-34 years old (17.3 percent). (**Figure 29**)

Forty-seven percent of high school students reported on the YRBS that they have had sexual intercourse. Sixty-three percent of 12th grade students reported that they have had sexual intercourse, suggesting that the majority of students will have sex while in high school.

Figure 30. Percentage of high school students (n=1,697) reporting four or more lifetime sex partners, by gender and school grade, Ohio, 1999

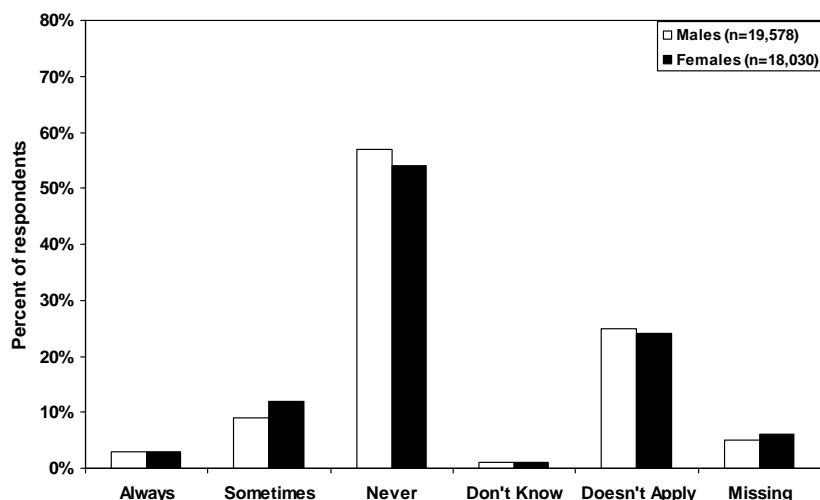


Source: Youth Risk Behavior Survey, Ohio 1999.

Nearly 16 percent of high school students reported four or more sex partners during their lifetime, according to the YRBS. Slightly more males than females had four or more sex partners and 24.7 percent of 11th graders reported four or more sex partners. (**Figure 30**)

Frequency of condom use

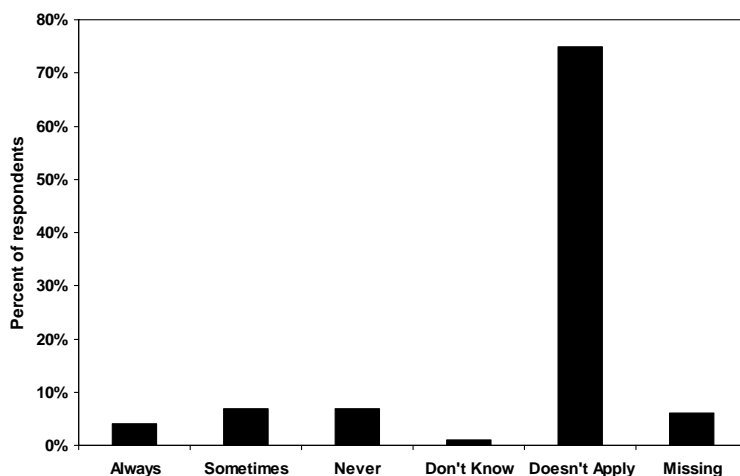
Figure 31. Condom or barrier used when performing oral sex during last 12 months among persons who have had heterosexual contact, Ohio, 2002



Source: HIV Counseling and Testing Report Form, 2002.

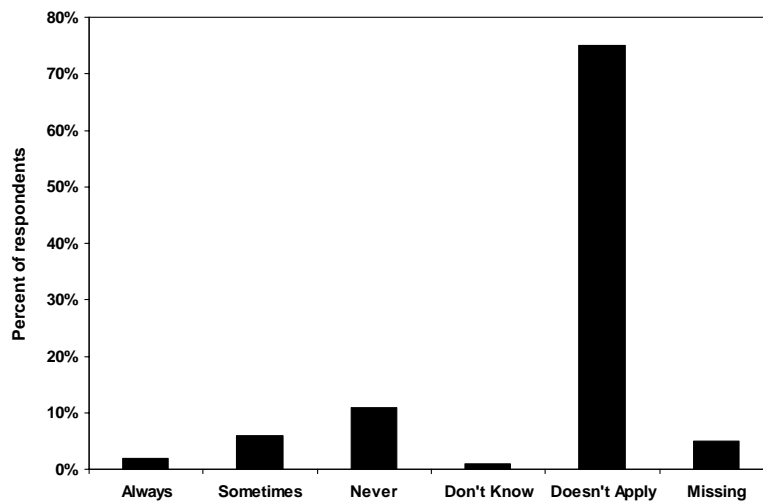
Fifty-seven percent of male and 54 percent of female heterosexuals and bisexuals tested at Counseling and Testing Sites reported never using a condom or barrier when performing oral sex during the last 12 months. Three percent of both males and females reported always using a condom or barrier and 9 percent of males and 12 percent of females reported sometimes using a condom or barrier. (Figure 31)

Figure 32. Condom used when insert in rectal intercourse during last 12 months among males who have had heterosexual contact (n=19,578), Ohio, 2002



Source: HIV Counseling and Testing Report Form, 2002.

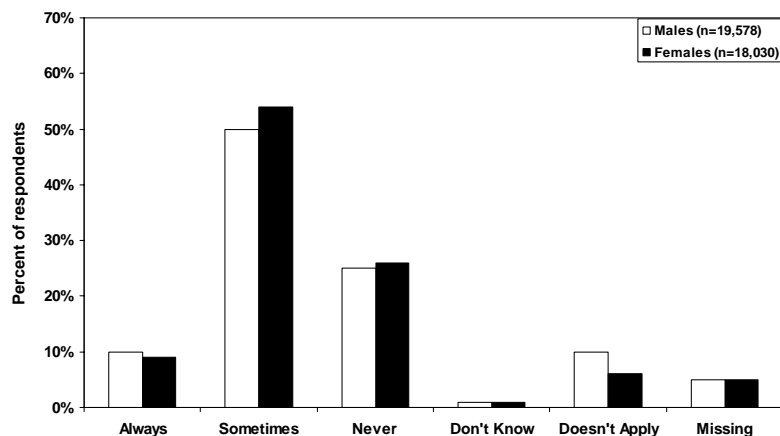
Figure 33. Condom used when recipient of rectal intercourse during last 12 months among females who have had heterosexual contact (n=18,030), Ohio, 2002



Source: HIV Counseling and Testing Report Form, 2002.

In response to a question regarding condom use when the client was the inserter in rectal intercourse during the last 12 months, 4 percent of male heterosexuals and bisexuals reported always using a condom, 7 percent reported never using a condom (**Figure 32**). When asked about condom use when the client was the recipient of rectal intercourse during the last 12 months, 2 percent of female heterosexuals and bisexuals reported always using a condom, 11 percent reported never using a condom. (**Figure 33**)

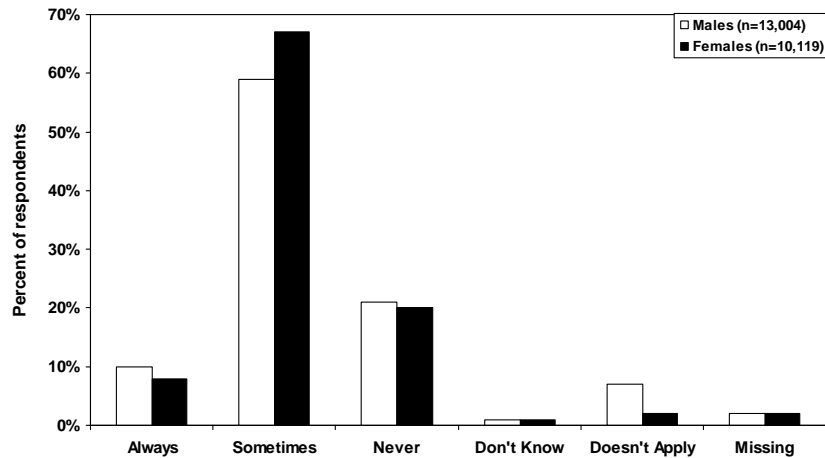
Figure 34. Condom used during vaginal intercourse during last 12 months among persons who have had heterosexual contact, Ohio, 2002



Source: HIV Counseling and Testing Report Form, 2002.

Among persons tested at Counseling and Testing Sites who have had heterosexual contact, 10 percent of males and 9 percent of females reported always using a condom during vaginal intercourse during the last 12 months, 25 percent of males and 26 percent of females reported never using a condom during vaginal intercourse. (Figure 34)

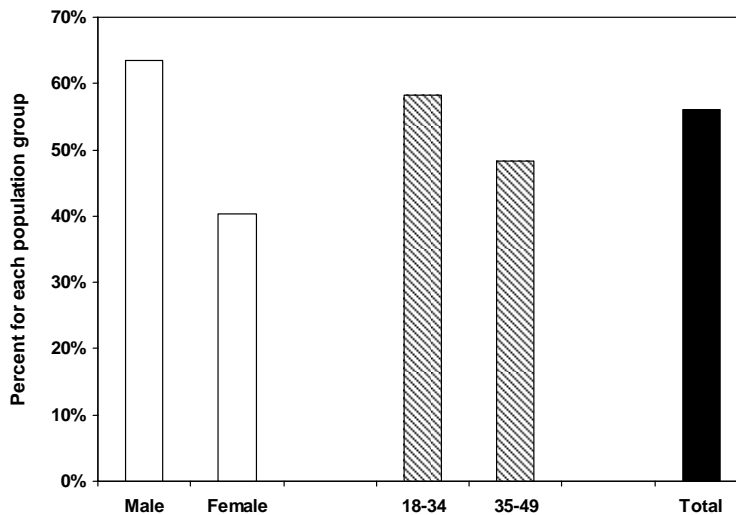
Figure 35. Condom used during vaginal intercourse during last 12 months among persons who have had heterosexual contact and who have had two or more sex partners, Ohio, 2002



Source: HIV Counseling and Testing Report Form, 2002.

Among persons tested at Counseling and Testing Sites who have had heterosexual contact and have had two or more sex partners, 10 percent of males and 8 percent of females reported always using a condom during vaginal intercourse during the last 12 months, 21 percent of males and 20 percent of females reported never using a condom during vaginal intercourse. (Figure 35)

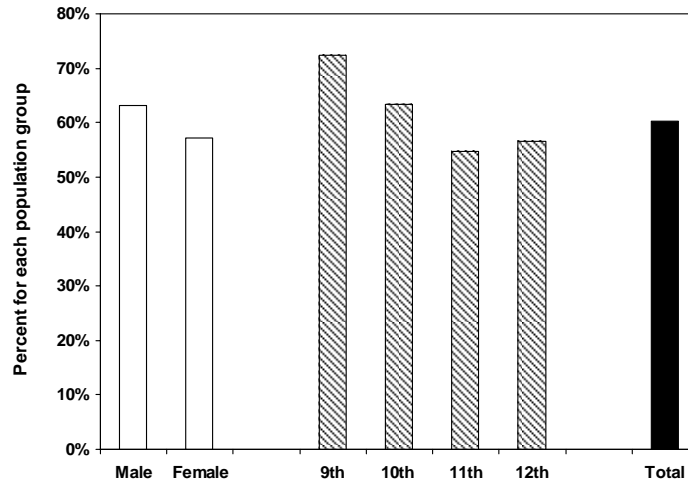
Figure 36. Condom use at last sexual intercourse among adults 18-49 years of age with two or more sex partners (n=201) during the past 12 months, Ohio, 2000



Source: Behavioral Risk Factor Surveillance System, 2000.

According to BRFSS, in Ohio, 56 percent of adults 18-49 years of age who had two or more sex partners in the past 12 months used a condom the last time they had sexual intercourse. Males were more likely to have used a condom than females (64 percent vs. 40 percent) and adults aged 18-34 were more likely to have used a condom than adults aged 35-49 (58 percent vs. 48 percent). (Figure 36)

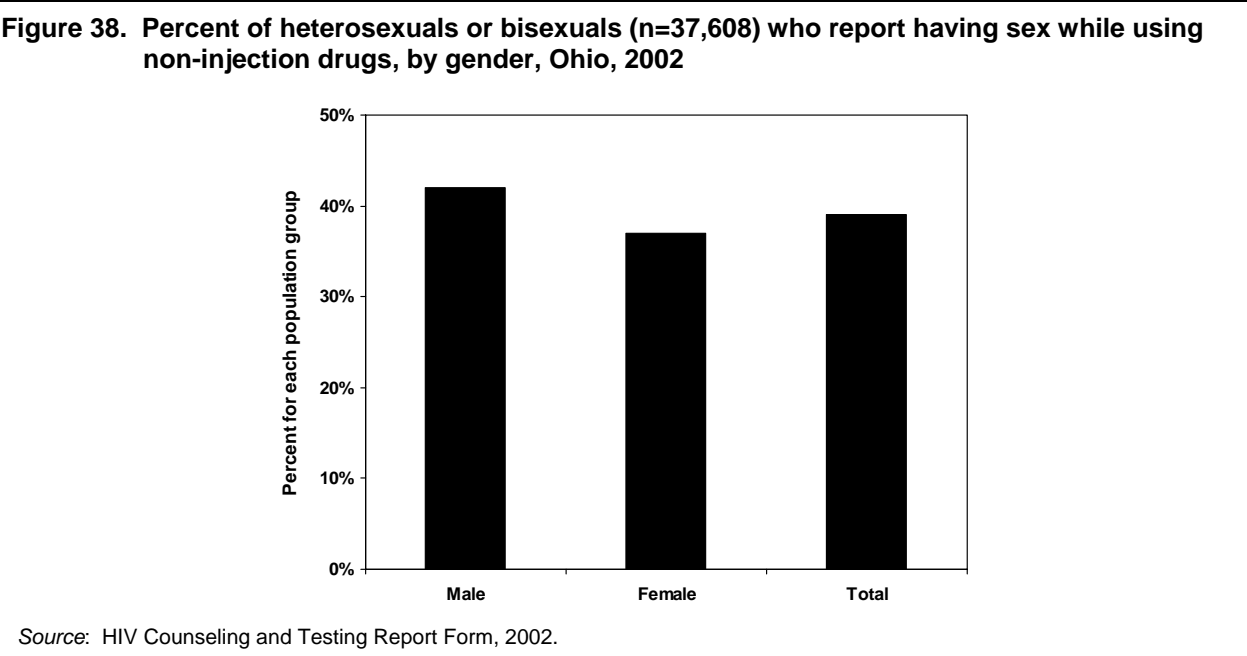
Figure 37. Condom use at last sex among high school students who have had sexual intercourse (n=733) by gender and school grade, Ohio, 1999



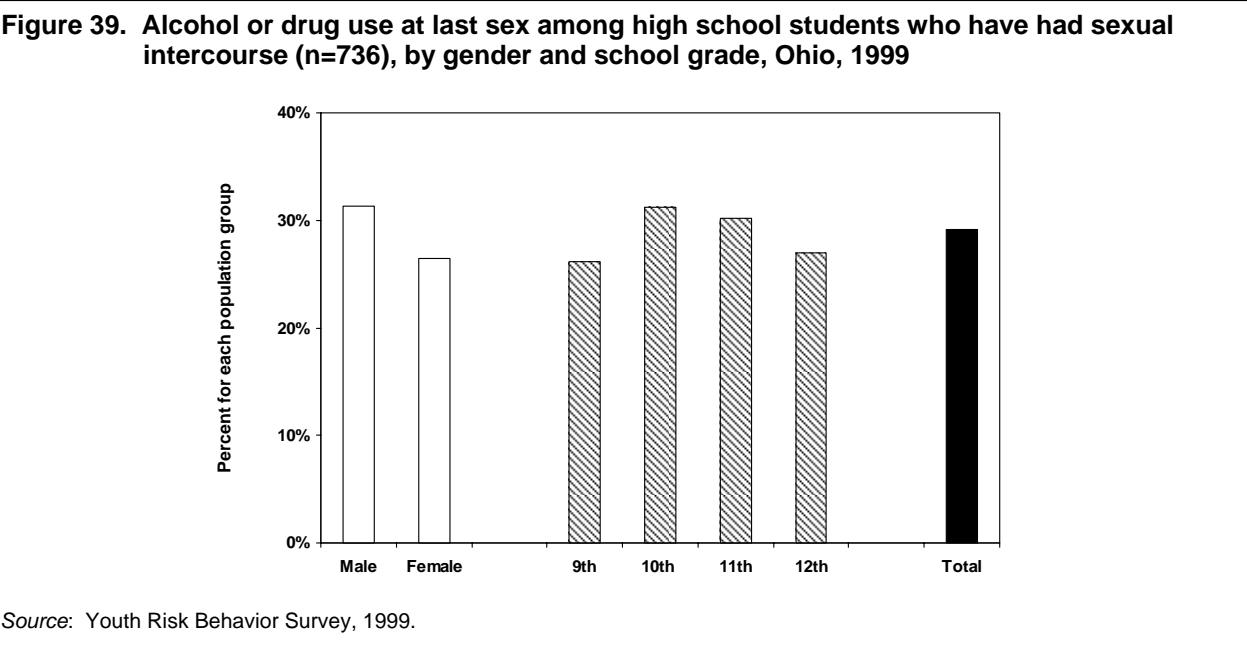
Source: Youth Risk Behavior Survey, 1999.

Among youth, 60 percent of high school students who have had sexual intercourse reported using a condom the last time they had sexual intercourse. This was higher among males (63 percent) than females (57 percent). Condom use decreased with grade level. (Figure 37)

Substance use



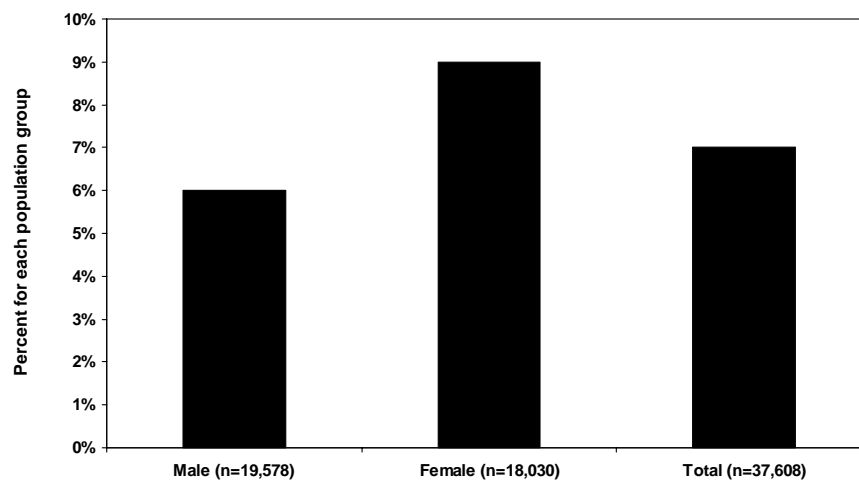
Thirty-nine percent of heterosexuals and bisexuals tested at Counseling and Testing Sites reported having sex while using non-injection drugs. This was slightly higher among males than among females. (Figure 38)



Among youth, 29 percent of high school students reported using alcohol or drugs before their last sexual intercourse. Alcohol and drug use before sexual intercourse was highest among males (31 percent) and 10th graders (31 percent). (Figure 39)

Exchanging money or drugs for sex

Figure 40. Percent of heterosexuals or bisexuals who report exchanging sex for drugs or money, by gender, Ohio, 2002



Source: HIV Counseling and Testing Report Form, 2002.

Seven percent of heterosexual and bisexuals tested at Counseling and Testing Sites reported exchanging sex for drugs or money. A larger percentage of females than males reported exchanging sex for drugs or money. (Figure 40)

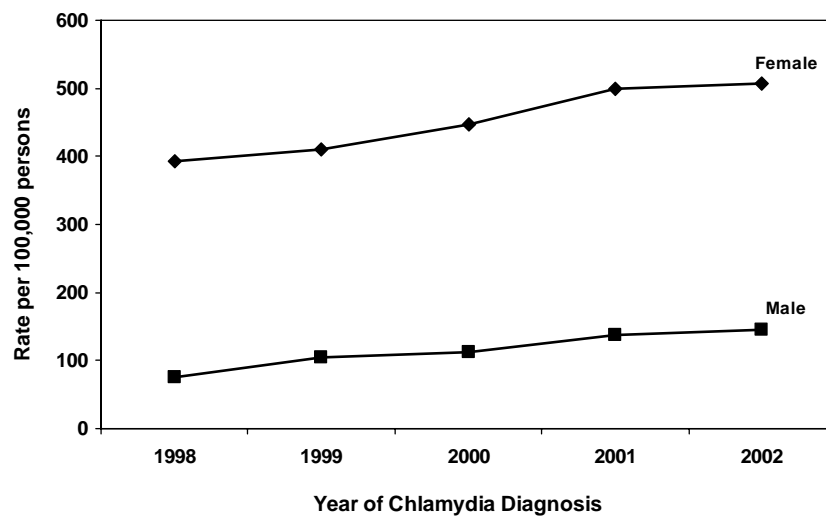
Indirect Measures of Risk Behavior

STD Surveillance data and Vital Statistics data on teen pregnancy rates provide information that might indicate the potential of high-risk heterosexual behaviors. Increases in STD or teen pregnancy rates do not directly indicate an increase in HIV infections, but they might indicate an increase in unprotected sex.

STD Rates

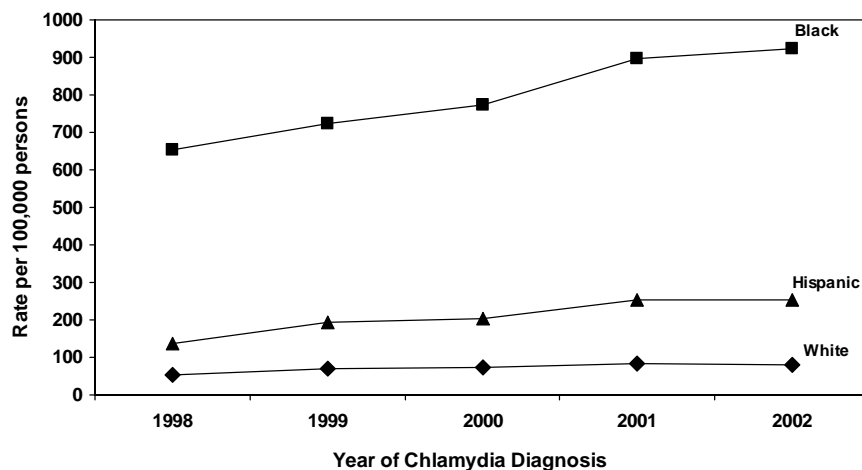
Chlamydia

Figure 41. Trends in chlamydia rates, by gender, Ohio, 1998-2002



Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

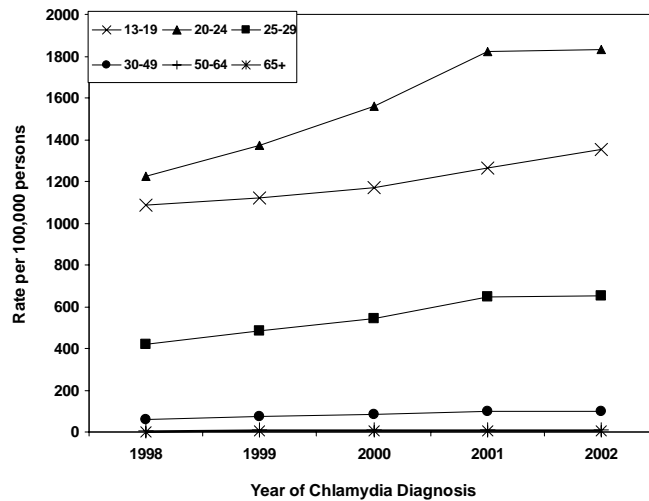
Figure 42. Trends in chlamydia rates, by race/ethnicity, Ohio, 1998-2002



Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

From 1998 to 2002, chlamydia rates increased for males and females in Ohio, with rates consistently higher among females than among males (**Figure 41**). Chlamydia rates are 12 times higher among blacks than among whites (**Figure 42**). Rates increased among blacks and Hispanics each year from 1998 to 2002. Among whites, rates increased from 1998 to 2001, with a slight decrease in 2002.

Figure 43. Trends in chlamydia rates, by age, Ohio, 1998-2002

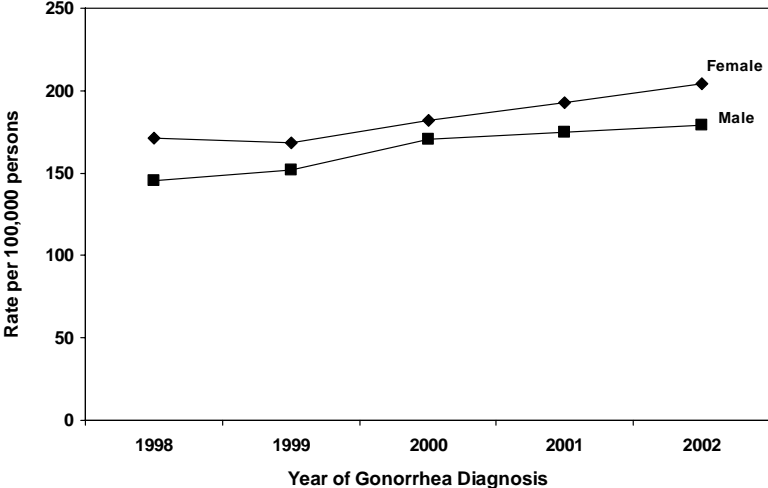


Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003

The rates of chlamydia were consistently highest among persons 20-24 years old, followed by persons 13 to 19 years old (**Figure 43**). All age groups experienced an increase in chlamydia rates from 1998 to 2002.

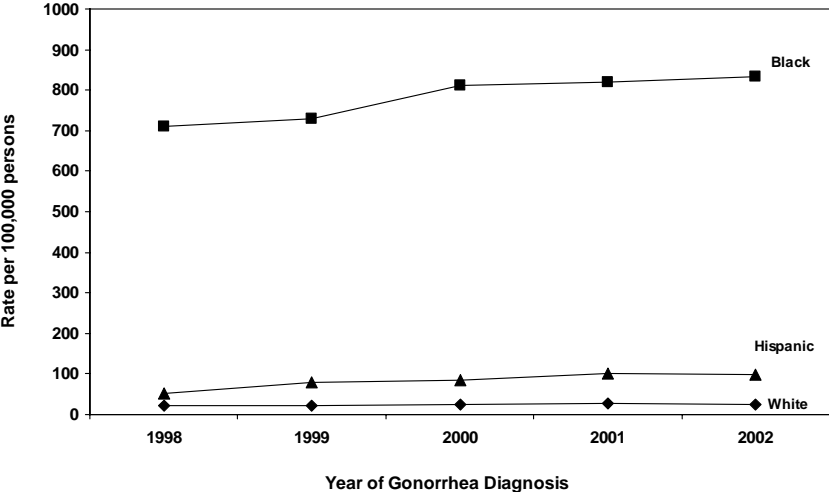
Gonorrhea

Figure 45. Trends in gonorrhea rates, by gender, Ohio, 1998-2002



Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

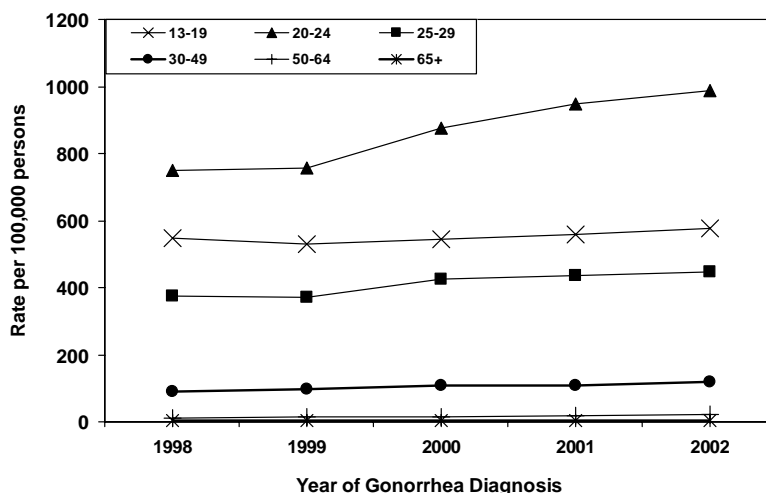
Figure 46. Trends in gonorrhea rates, by race/ethnicity, Ohio, 1998-2002



Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

From 1998 to 2002, gonorrhea rates increased for males and females in Ohio, with rates consistently higher among females than among males (Figure 45). Gonorrhea rates were 33 times higher among blacks than among whites (Figure 46). Rates increased among blacks and Hispanics each year from 1998 to 2002. Among whites, rates increased from 1998 to 2001 with a slight decrease in 2002.

Figure 47. Trends in gonorrhea rates, by age, Ohio, 1998-2002

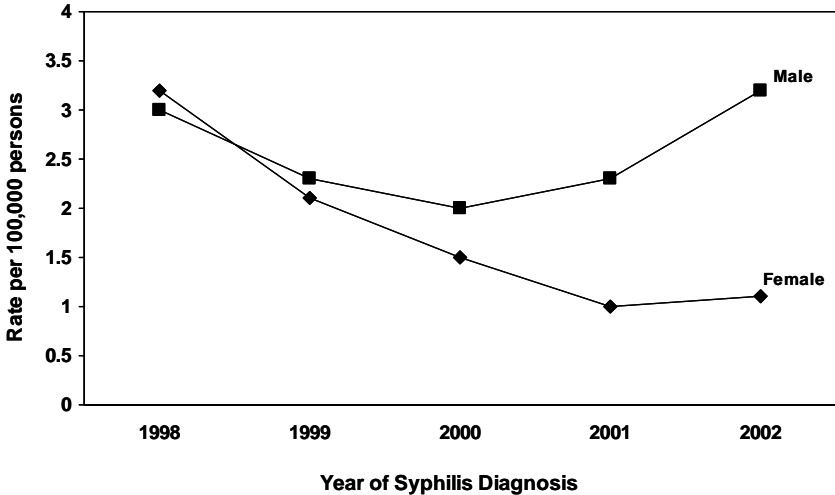


Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

The rates of gonorrhea were consistently highest among persons 20-24 years old, followed by persons 13 to 19 years old (**Figure 47**). Among the 20-24-year-olds, the rates increased 32 percent from 1998 to 2002, while the rates among the 13-19-year-olds remained stable. Rates among persons 25-29 years old increased 33 percent during this time period. While the rates among persons 50-64 years old were not very high compared to the younger age groups, this group experienced a 70 percent increase in rates from 1998 to 2002 (1998 rate=12.0, 2002 rate=20.5).

Syphilis

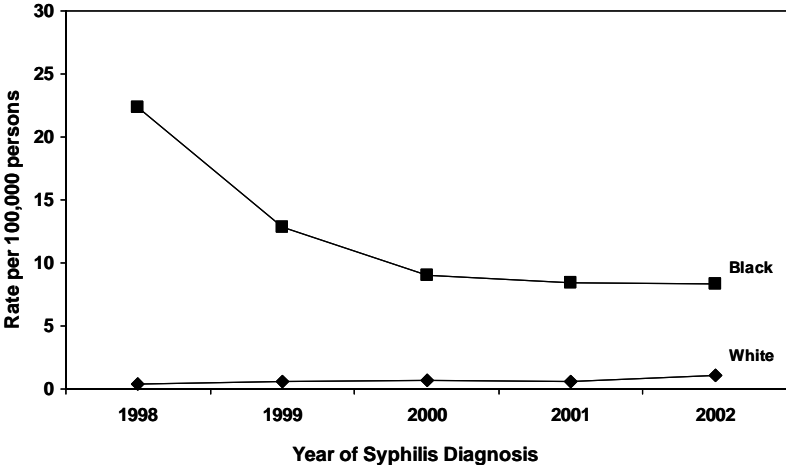
Figure 49. Trends in early syphilis rates, by gender, Ohio, 1998-2002



*Early syphilis includes primary, secondary and early latent syphilis

Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

Figure 50. Trends in early syphilis rates, by race, Ohio, 1998-2002



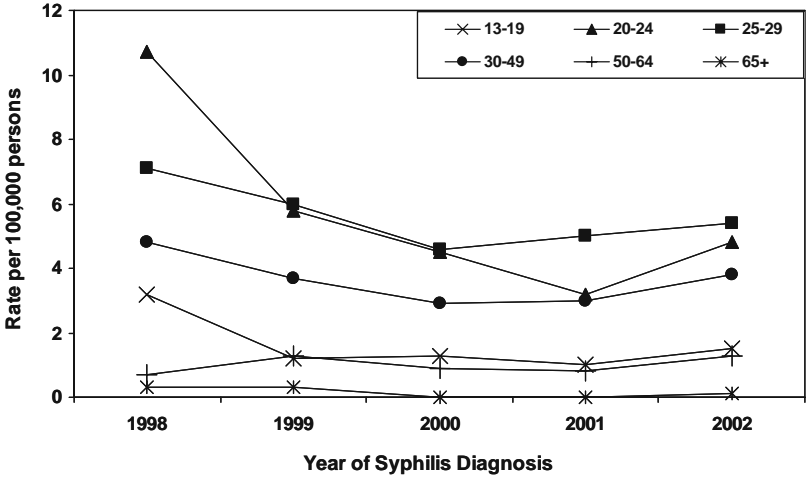
*Early syphilis includes primary, secondary and early latent syphilis

Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

In 1998, syphilis rates were higher among females than among males. Rates among females declined steadily through 2001, with a slight increase in 2002 (Figure 49). Since 1999, syphilis rates remained higher among males than among females. Rates among males declined from 1998-2000 and then increased in 2001 and 2002. Syphilis rates were consistently higher among blacks than among whites (Figure 50). Syphilis rates among blacks declined from

1998-2000 and have since remained stable. There was an increase in rates among whites in 1999, then fairly stable rates through 2001 and then an increase in 2002.

Figure 51. Trends in early syphilis rates, by age, Ohio, 1998-2002



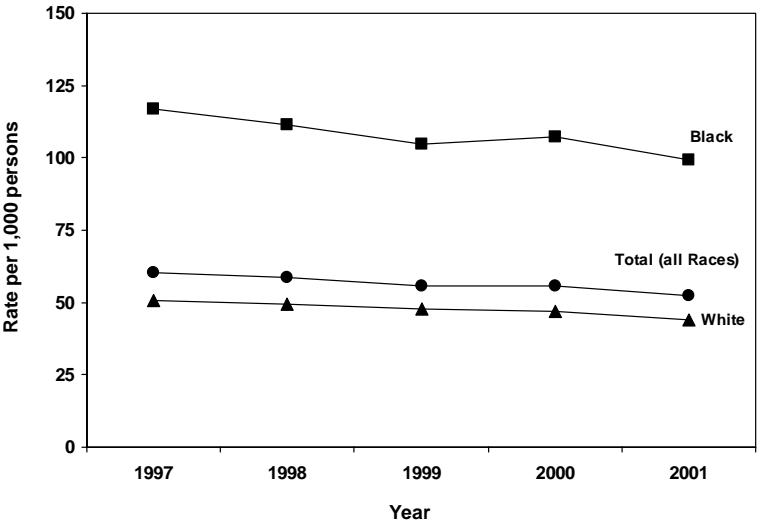
*Early syphilis includes primary, secondary and early latent syphilis

Source: STD Surveillance, HIV/STD Prevention, Ohio Department of Health. Data as of May 2003.

Syphilis rates are highest among persons 20-24 years old and among persons 25-29 years old. Rates declined among all age groups in 1999 with the exceptions of persons 50-64 years old, where there was an increase, and persons 65, and older where the rate remained stable (Figure 51). From 1999-2001, there were increases and decreases in rates among the age groups. In 2002, all age groups experienced an increase.

Teen Pregnancy Rates

Figure 52. Estimated trends in teen pregnancy rates (13-19 years), Ohio, 1997-2001



Source: Ohio Department of Health: Center for Vital and Health Statistics, 1997-2001.

