Section

1

CORE EPIDEMIOLOGIC QUESTIONS

Question 1: **What are the sociodemographic characteristics of the general population in Louisiana?**

Question 2: **What is the scope of the HIV/AIDS epidemic in Louisiana?**

Question 3: **What are the indicators of risk for HIV/AIDS infection in Louisiana?**

Question 1

What are the sociodemographic characteristics of the general population in Louisiana?

This section provides information on the demographic and socioeconomic characteristics of the state. Regional Implementation Plans, which are included as a separate chapter of the Comprehensive Plan, profile each region in more detail.

SUMMARY

Population: In the 2000 census, the total population reported for Louisiana was 4,468,976 persons. Louisiana comprises 64 county-equivalent subdivisions that are called parishes. Parish populations ranged from a low of 6,618 persons (Tensas Parish) to upwards of a half-million persons in Orleans Parish. The Greater New Orleans area (Orleans, Jefferson, Plaquemines, St. Bernard, and St. Tammany Parishes) represented 30% of Louisiana's population. The major cities in order of descending population are New Orleans, Baton Rouge, Shreveport, Lafayette, and Lake Charles, with populations ranging from 484,674 to 71,757. The state is considered rural; however, 75% of its population reside in urban areas. Overall, the state has 8 metropolitan statistical areas (MSAs).

Public Health Regional Structure: The Louisiana Office of Public Health is divided into 9 distinct geographic regions (see map on page 97). A public health region comprises 4 to 12 parishes surrounding one of the major urban centers in the state. Regional activities include clinical services for family planning, STD screening and treatment, maternal and child health, special health services for children, nutrition programs, and immunizations. Services also include sanitation, environmental monitoring, and epidemiologic investigations. Each region is home to a public hospital where residents may obtain primary care.

Demographic Composition: According to the 2000 census data, the racial and ethnic composition of the state was estimated to be 64% white, 32% black, 1% Asian, and 0.6% American Indian. Persons of Hispanic origin were estimated to make up 2.4% of the total population.

Age and Sex: In 2000, the median age of Louisiana residents was 34 years. More than 25% of the population were younger than 18 years of age; 11% of the population were 65 or older. The proportion of females in the overall population was slightly higher than the proportion of males (52% vs. 48%).

Poverty, Income, and Education: In 2000, the median household income in Louisiana was $31,034. According to the 2000 census, nearly 900,000 residents (20% of the population) for whom poverty status was determined had incomes that fell below the federally defined

poverty level, compared with 13% nationally. Louisiana has one of the highest proportions of children living in poverty: 27% of all children 18 years or younger in 2000. Of the total number of families, 42% had a female head of household (no husband present), and 16% of all families had incomes below the poverty level. The unemployment rate in 2000 was 6% statewide. One of every 5 adults (19–64 years) in Louisiana is uninsured. In 2000, Louisiana ranked 45th among states for per capita income. In the 2000 census, more than 75% of Louisiana residents aged 25 years and older reported educational attainment of high school diploma or higher.

Health Indicators: It was recently reported in *Health Care State Rankings for 2002* that Louisiana ranks 49th in the nation in health indicators. According to this report, prenatal care needs to be improved in the state: Louisiana ranked 2nd in the percentage of low-birthweight babies (10.3% of live births), 4th in the rate of infant mortality (9.3 infant deaths per 1,000 live births), and 15th in the proportion of women receiving late or no prenatal care. Additionally, Louisiana ranks 9th highest in the rate of births to teenagers (62.1 births to mothers aged 15–19 per 1,000 live births vs. 48.5 nationally) and 3rd in the nation for rates of syphilis and gonorrhea. In 2000, the transmission rates for these diseases were at least twice the national rate (5.0 syphilis cases per 100,000 persons vs. 2.5 nationally; 314 gonorrhea cases per 100,000 persons vs. 133.2 nationally). Lastly, the *2002 Louisiana Health Report Card* indicates that many persons in Louisiana seek care at hospital emergency departments in lieu of a primary care physician: Louisiana ranked 17th nationally in the number of visits to emergency departments in hospitals.

Public Aid: In 2000, 16.2% of Louisiana residents were covered by Medicaid, and 13.4% were covered by Medicare. Approximately 502,000 children 20 years of age or younger rely on Medicaid for their health needs.

DEMOGRAPHICS

In 2000, the population of the state of Louisiana was 4,468,976 persons (Table 1). The largest proportion of the population were 25–44 years of age (28.9% overall), and nearly 50% of the population were in the combined age groups 13–24 and 25–44 years. The age distribution among males and females was similar; however, a slightly higher proportion of women, compared with men, were elderly (65 years and older).

Table 1. Percentage distribution of the general population, by age group and sex, Louisiana, 2000

Age group (yrs.)	Males, % (N = 2,162,903)	Females, % (N = 2,306,073)	Total population, % (N = 4,468,976)
< 2	3.0	2.7	2.9
2–12	17.3	15.5	16.4
13–24	19.3	18.0	18.6
25–44	29.2	28.7	28.9
45–64	21.5	21.7	21.6
≥ 65	9.6	13.4	11.6

Source. Census 2000, US Bureau of the Census, and Louisiana Census Data Center Profile.
Note. Percentages may not add to 100% because of rounding.

The collection of race and ethnicity information was expanded in the 2000 census to allow persons the opportunity to report belonging to more than 1 race, as well as to report Hispanic ethnicity. Despite this expansion, more than 60% of men and women in Louisiana reported themselves as non-Hispanic whites (Table 2). Non-Hispanic blacks constituted 32.6% of the population, Hispanics constituted 2.4%, and Asians and American Indians totaled 1.3% and 0.5%, respectively.

Table 2. Percentage distribution of the general population, by race/ethnicity and sex, Louisiana, 2000

Race/ethnicity	Males, % (N = 2,162,903)	Females, % (N = 2,306,073)	Total population (N = 4,468,976)
White, not Hispanic	63.9	62.5	63.2
Black, not Hispanic	31.7	33.5	32.6
Hispanic	2.5	2.3	2.4
American Indian	0.6	0.5	0.5
Asian	1.3	1.2	1.3

Source. Census 2000, US Bureau of the Census, 2001, and Louisiana Census Data Center Profile.
Note. For an explanation of how racial/ethnic groups were combined in this profile, see p. 11.

Louisiana is divided into 9 public health regions for the purpose of public health planning. The regions comprise 4 to 12 parishes surrounding one of the major urban centers in the state: New Orleans (Region I), Baton Rouge (Region II), Houma (Region III), Lafayette (Region IV), Lake Charles (Region V), Alexandria (Region VI), Shreveport (Region VII), Monroe (Region VIII), and Hammond/Slidell (Region IX). Region I has the largest population in the state, and Region V has the smallest. The proportion of persons reporting themselves as non-Hispanic white ranges from a low of 49% in Region I to a high of 81% in Region IX (Table 3).

Table 3. Percentage distribution of the general population, by race/ethnicity and public health region, Louisiana, 2000

Public health region		Race/ethnicity [a]					
		White, not Hispanic %	Black, not Hispanic %	Hispanic %	American Indian %	Asian %	Total population
I	New Orleans	49	43	5	<1	3	1,034,126
II	Baton Rouge	58	39	2	<1	2	603,634
III	Houma	70	25	2	2	<1	383,697
IV	Lafayette	70	27	1	<1	<1	548,154
V	Lake Charles	76	21	2	<1	<1	283,429
VI	Alexandria	70	27	2	<1	<1	301,390
VII	Shreveport	59	38	2	<1	<1	522,560
VIII	Monroe	62	36	1	<1	<1	353,865
IX	Hammond/Slidell	81	16	2	<1	<1	438,121

Source. Census 2000, US Bureau of the Census, and Louisiana Census Data Center Profile.
Note. Percentages may not add to 100% because of rounding.
[a]For an explanation of how racial/ethnic groups were combined in this profile, see p. 11.

Regions I and II have the highest proportions of non-Hispanic blacks (43% and 39%, respectively). In Region I, 5% of persons consider themselves Hispanic and 3% consider themselves Asian; therefore, this area has the highest concentration of both Hispanic and Asian persons in the state. Region III is home to the highest concentration of persons reporting themselves as American Indian.

According to the 2000 census, the distribution of race/ethnicity differed in Louisiana parishes with populations of more than 250,000 (Table 4). In Orleans Parish, the most populous parish, 67.3% of the population indicated their race/ethnicity as non-Hispanic black, compared with 40.1% in East Baton Rouge and only 22.9% in Jefferson. Jefferson Parish reported the highest proportion of Hispanics and non-Hispanic whites. Less than 1% of the population in each of these parishes reported themselves as American Indian. The proportions of persons in the 3 parishes that identified themselves as Asian ranged from 2% to 3%; approximately 1% in each of the areas reported that they were non-Hispanic and belonged to 2 or more races.

Table 4. Percentage distribution of the general population, by race/ethnicity for parishes of >250,000 population compared with population of Louisiana, 2000

	Population, %			
Race/ethnicity[a]	East Baton Rouge (N = 412,852)	Jefferson (N = 455,466)	Orleans (N = 484,674)	State (N = 4,468,976)
White, not Hispanic	56.2	69.8	28.1	63.2
Black, not Hispanic	40.1	22.9	67.3	32.6
Hispanic	1.8	7.1	3.0	2.4
American Indian	0.2	0.4	0.2	0.5
Asian	2.1	3.1	2.3	1.3

Source. Census 2000, US Bureau of the Census, and Louisiana Census Data Center Profile.
[a]For an explanation of how racial/ethnic groups were combined in this profile, see p. 11.

SOCIOECONOMIC STATUS

In 2000, the highest proportion of persons living below the poverty level during the last 12 months—statewide and in the most populous parishes—were less than 25 years of age (Table 5). Nearly 60% of the males and approximately 47% of the females who were living below the poverty level were less than 25 years of age. In each of the 3 parishes and statewide, a greater proportion of women living below the poverty level, compared with men, were older than 25 years. For example, statewide, 25.4% of women aged 26–44 were living below the poverty level, compared with 17.1% of the men in that age group.

Table 5. Percentage distribution of persons living below the poverty level during the past 12 months, by sex and age group for parishes of >250,000 population, Louisiana, 2000

	Below poverty level, %							
	East Baton Rouge		Jefferson		Orleans		Statewide	
Age group (yrs.)	Males (N = 34,201)	Males (N = 34,201)	Males (N = 23,456)	Females (N = 31,162)	Males (N = 57,140)	Females (N = 75,500)	Males (N = 370,499)	Females (N = 505,738)
≤ 25	74.3	74.3	59.4	40.9	56.3	47.6	59.9	46.8
26–44	11.3	11.3	13.2	27.3	22.7	28.2	17.1	25.4
45–64	7.4	7.4	18.8	18.7	18.0	17.1	15.4	16.3
≥ 65	7.0	7.0	8.5	13.1	3.1	7.1	7.6	11.5

Source. Census 2000, US Bureau of the Census, and Louisiana Census Data Center Profile.

The most common level of educational attainment among persons 25 years and older, regardless of location or sex, was a high school diploma or its equivalent (Table 6). Statewide, 32.8% of men and 35.9% of women had earned a high school diploma or its equivalent. Similar percentages were observed in Orleans and Jefferson Parishes. In East Baton Rouge, higher proportions of men reported attending some college or receiving an associate's or a bachelor's degree or a graduate degree compared with statewide estimates or those in Jefferson or Orleans Parishes. Fewer than 10% of men or women received less than a 9th grade education in the most populous parishes or statewide.

Table 6. Percentage distribution of the population 25 years or older, by educational attainment and sex, for parishes of >250,000 population, Louisiana, 2000

	East Baton Rouge		Jefferson		Orleans		Total	
Education	Males, % (N = 112,063)	Females, % (N = 127,597)	Males, % (N = 138,586)	Females, % (N = 156,417)	Males, % (N = 132,414)	Females, % (N = 159,864)	Males, % (N =1,254,831)	Females, % (N =1,436,647)
< 9th Grade	5.7	4.3	7.9	7.4	7.5	9.7	9.7	8.7
High school, no diploma	8.4	10.9	11.2	13.8	11.9	12.1	14.3	13.8
High school, diploma	25.0	31.3	30.7	32.7	30.8	32.9	32.8	35.9
Some college	25.6	20.2	20.3	21.8	18.2	19.0	19.9	19.5
Associate or bachelor's degree	20.8	22.6	21.8	18.3	18.8	18.0	15.8	15.9
Graduate or pro-fessional degree	14.4	10.7	8.0	5.9	12.8	8.3	7.5	6.1

Source. Census 2000, US Bureau of the Census, and Louisiana Census Data Center Profile.

In a population survey conducted in Louisiana in 1999–2000, 24% of the men and the women aged 19–64 years reported that they did not have health insurance coverage (Table 7). Approximately two thirds (65%) of the men received health insurance coverage through their employer; a slightly lower proportion of women obtained their health insurance coverage through an employer (61%). Few persons reported coverage through individual plans, and 5% of men and 8% of women received health coverage from Louisiana's Medicaid Program.

Table 7. Percentage distribution of adults (19–64 years), by health insurance coverage and sex, Louisiana, 1999–2000

Source of insurance	Men, % (N = 1,205,800)	Women, % (N = 1,399,380)
Employer	65	61
Individual plan	6	6
Medicaid	5	8
None/uninsured	24	24

Source. 2001 Current Population Survey, Kaiser Family Foundation.

Question 2 What is the scope of the HIV/AIDS epidemic in Louisiana?

The HIV/AIDS epidemic has affected persons in all sex, age and racial/ethnic groups and all parishes in Louisiana. This effect, however, has not been the same for all groups. In the beginning of the epidemic, the number of cases of HIV infection increased most sharply among white MSM. Although white MSM are still disproportionately affected by the epidemic, recent trends suggest a shift in the HIV/AIDS epidemic toward women, blacks, and high-risk heterosexual adults. To plan for HIV prevention and care and to allocate limited resources as the epidemic continues to change and the number of persons living with HIV continues to grow, it is extremely important to identify those populations most affected and most at risk for HIV infection.

Highlights

- There are persons living with HIV in every parish in Louisiana, and the number continues to increase each year. At the end of 2001, a total of 13,565 persons were known to be living with HIV/AIDS in Louisiana, 6,236 (46%) of whom had a diagnosis of AIDS.
- In 2001, as in past years, the Baton Rouge region surpassed the New Orleans region in the rates of diagnosis of HIV/AIDS (number of cases per population in the region). However, the New Orleans region had the highest number of HIV/AIDS cases diagnosed that year.
- Since 1996, the number of new AIDS cases and deaths of persons with AIDS has decreased dramatically, coinciding with the widespread use of antiretroviral therapy. However, data from recent years indicate a leveling or a reversal of these declines, which may be due to factors such as late testing; limited access to, or use of, health services; and the limitations of current therapies.
- The HIV diagnosis rate for blacks continues to be disproportionately high and, in 2001, was more than 6 times higher than that for whites. In 2001, 74% of newly diagnosed HIV cases and 75% of newly diagnosed AIDS cases were in the black population.
- Among blacks, heterosexual contact has been the predominant mode of exposure since 1996. Among whites, the predominant exposure remains male-male sexual activity, although the number of cases among MSM has declined substantially since 1993.
- For all racial groups in Louisiana, the proportion of newly diagnosed HIV/AIDS cases reported among women has increased steadily since the beginning of the epidemic; women represented 36% of new HIV/AIDS cases in 2001. Although HIV/AIDS rates for men have been declining since 1993, rates for black women have remained relatively stable. Rates for white women have also been stable, but they increased slightly from 2000 to 2001.
- Because of screening programs for pregnant women and the increased use of antiretroviral therapy in pregnant women and their infants, perinatal transmission rates have dropped dramatically, from more than 25% in 1993 to 5% in 2000. However, despite the low transmission rates, the number of HIV-infected infants may continue to increase as the number of infants born to HIV-infected mothers increases because growing numbers of women are living with HIV.

This section provides detailed information about demographic and risk characteristics of HIV-infected persons and trends in the statewide epidemic. It describes cases diagnosed through 2001 and reported through May 2002. The regional epidemiologic profiles provide a more detailed description of the epidemic in each public health region. Unless noted, all data come from Louisiana's HIV/AIDS Surveillance Program.

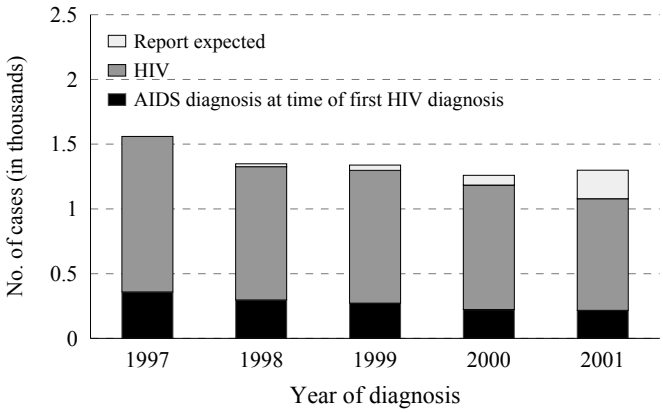
OVERALL HIV/AIDS TRENDS

Statewide during 2001, a total of 1,078 new HIV cases were diagnosed. This number reflects persons whose HIV infection was first diagnosed in 2001 and who were reported to the health department. Because of the potentially long delay from HIV infection to diagnosis, AIDS and HIV infection may be diagnosed at the same time. (Positive results of anonymous tests are not included in the data because of the likelihood of repeat tests.) In recent years, the number of diagnosed cases, including the number of expected cases (for methods of estimating, see *reporting delay* in the Glossary), has remained fairly stable. Reporting delays were estimated by using a maximum likelihood procedure, taking into account possible differences in reporting delays in the exposure, geographic, ethnic, age, and gender categories. The estimated numbers of cases that will be reported are presented as expected cases. Of the newly diagnosed cases in 2001, 20% were simultaneous diagnoses of AIDS and HIV infection (Figure 1).

Figure 1

Trends in Cases of HIV Infection and AIDS

Louisiana, 1997-2001



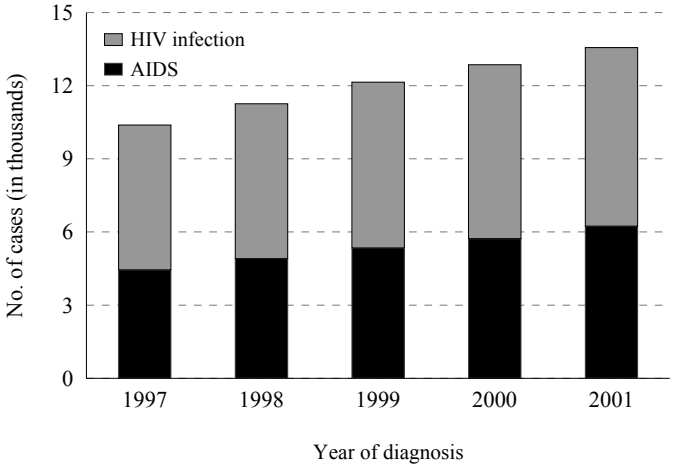
The number of persons living with HIV infection has increased each year (Figure 2). At the end of 2001, a total of 13,565 persons were known to be living with HIV in Louisiana; in 6,236 persons (46%), HIV infection had progressed to AIDS. This number represents a *minimum* estimate of persons living with HIV by the end of 2001 because it does not include HIV-infected persons who have not been tested or who have only been tested anonymously. The HIV/AIDS Surveillance Program estimates that between 18,600 and 20,700 persons were living with HIV at the end of 2001. Of all persons living with HIV infection, the proportion of persons living with AIDS increased from 43% in 1997 to 46% in 2001. This trend is largely due to the introduction

of effective drug treatment and therapies, which can often delay the progression from HIV to AIDS and from AIDS to death.

Figure 2

Persons Living with HIV Infection and Persons Living with AIDS

Louisiana, 1997-2001



Blacks continue to be disproportionately affected by HIV/AIDS. Although only 32% of the state's population is black, this group represented 74% of the new HIV cases diagnosed in 2001 and 64% of all persons living with HIV infection (Table 8). The HIV diagnosis rate for blacks is more than 6 times higher than the rate for whites and 3 times higher than that for Hispanics.

The proportion of new HIV/AIDS cases reported among women in Louisiana has increased steadily. In 2001, 28% of the persons living with HIV were women; however, 36% of new cases diagnosed were in women.

The majority of persons diagnosed with HIV in 2001 and living with HIV at the end of 2001 were between the ages of 25 and 44 (Table 8). Twenty percent of new HIV cases were diagnosed in teenagers or young adults, ages 13-24. In 2001, nine infants were diagnosed with HIV.

In 2001, more cases of HIV were diagnosed in the New Orleans region (Region I) than the other regions. However, that same year, as in past years, the Baton Rouge region (Region II) surpassed the New Orleans region in the rate of diagnosis of HIV infection (number of cases per population in the region). More than two thirds of the persons living with HIV/AIDS in Louisiana reside in either the New Orleans or Baton Rouge regions (Table 8).

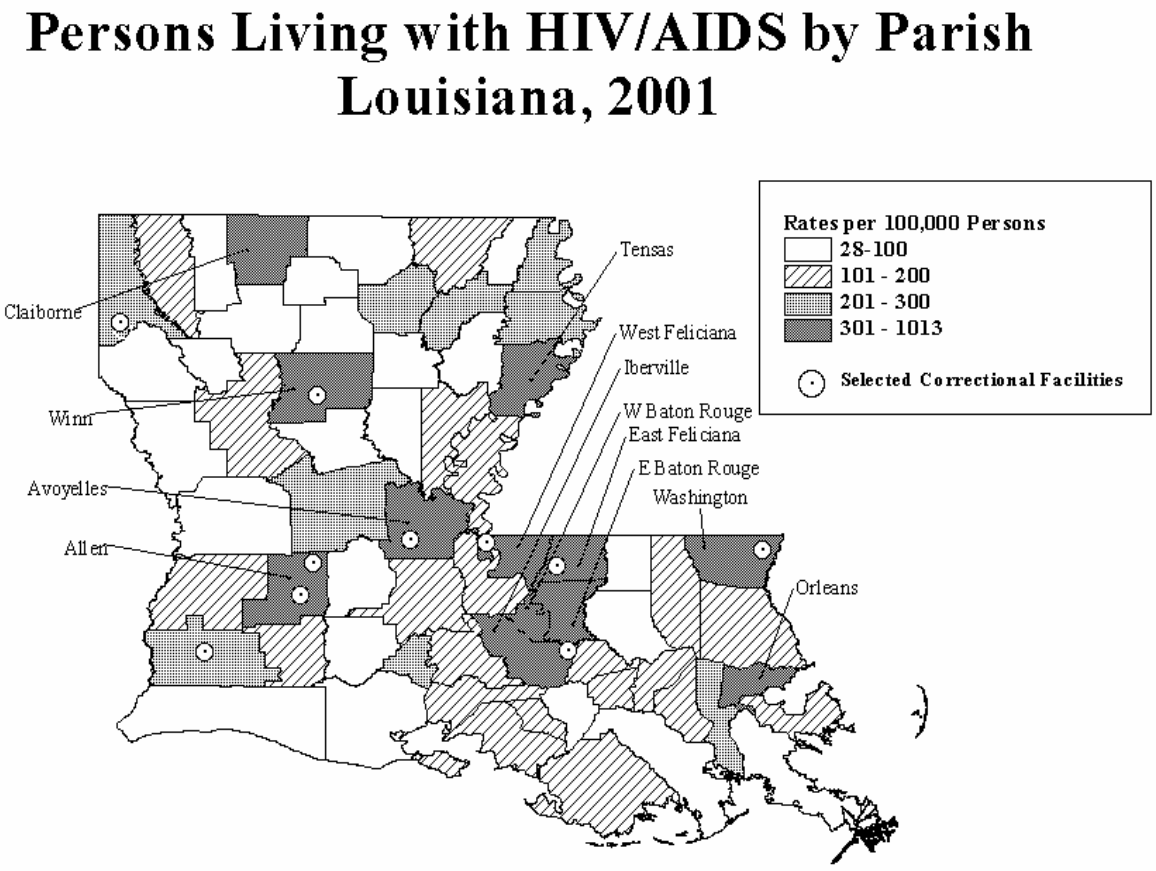
Table 8. Characteristics of persons infected with HIV (HIV/AIDS), Louisiana, 2001

	HIV/AIDS cases diagnosed, 2001			Persons living with HIV/AIDS, through 2001		
	No.	%	Rate[a]	No.	%	Rate[a]
Total	1,078	100	24.1	13,565	100	303.5
Sex						
Male	689	64	31.9	9,823	72	454.2
Female	389	36	16.9	3,742	28	162.3
Race/ethnicity[b]						
White, not Hispanic	243	23	8.6	4,389	32	155.5
Black, not Hispanic	796	74	54.6	8,726	64	598.3
Hispanic	30	3	27.8	374	3	347.1
Other/unknown	9	1	–	76	1	–
Age group (yrs.)						
0–1	9	1	6.9	15	<1	11.6
2–12	1	<1	–	132	1	18.0
13–24	219	20	26.3	866	6	104.2
25–44	601	56	46.5	8,907	66	689.6
45–64	227	21	23.5	3,466	26	359.1
≥ 65	21	2	4.1	179	1	34.3
Public health region						
I	422	39	40.8	6,094	45	589.3
II	281	26	46.6	2,858	21	473.5
III	25	2	6.5	403	3	105.0
IV	68	6	12.4	833	6	152.0
V	48	4	16.9	671	5	236.7
VI	62	6	20.6	591	4	196.1
VII	76	7	14.5	931	7	178.2
VIII	65	6	18.4	604	4	170.7
IX	31	3	7.1	580	4	132.4

Note. Dash indicates the rate could not be calculated because of small numbers.
[a]Per 100,000 persons.
[b] For an explanation of how racial/ethnic groups were combined, see p.11.

As of December 31, 2001, a total of 13,565 persons were reported to be living with HIV/AIDS in Louisiana. This map (Figure 3) illustrates the parishes where these persons reside. Currently, there are HIV-infected persons living in every parish in Louisiana.

Figure 3



As of the end of 2001, there were 12 parishes in which more than 300 persons per 100,000 were living with HIV infection. The reporting of large numbers of HIV cases by correctional facilities accounts for disproportionately high HIV prevalence rates in some of these parishes (e.g., Allen, Avoyelles, West Feliciana, Winn). The Baton Rouge region had the highest concentration of persons per capita living with HIV; prevalence rates for 5 of the 7 parishes in this region were more than 300 per 100,000 (Figure 3). Although most of the persons living with HIV are concentrated in urban areas, 15% live in rural areas.

HIV/AIDS, BY RACE/ETHNICITY AND SEX

The epidemic significantly affects both males and females in the black and Hispanic communities (Table 9). In 2001, the rate of HIV diagnosis for black males was almost 1.5 times the rate for Hispanic males and nearly 5 times the rate for white males. The rate of HIV diagnoses for black women was more than 11 times that for white women. Rates were not calculated for other ethnic groups because of the small number of cases.

Table 9. HIV diagnoses and rates, by race/ethnicity and sex, Louisiana, 2001

	Males			Females			Total		
Race/ethnicity[a]	No.	%[b]	Rate[c]	No.	%[b]	Rate[c]	No.	%[b]	Rate[c]
White, not Hispanic	189	18	13.7	54	5	3.7	243	23	8.6
Black, not Hispanic	468	43	68.2	328	30	42.5	796	74	54.6
Hispanic	26	2	47.4	4	<1	–	30	3	27.8
Other/unknown	6	1	–	3	<1	–	9	1	–
Total	689	64	31.9	389	36	16.9	1,078	100	24.1

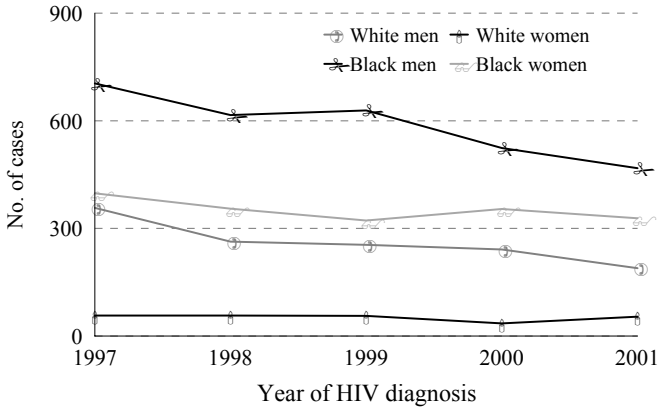
Note. Dash indicates the rate could not be calculated because of small numbers.
[a]For an explanation of how racial/ethnic groups were combined, see p. 11.
[b]Calculated as the percentage of all cases diagnosed in 2001.
[c]Rates per 100,000 persons in racial/ethnic subgroups.

Overall, the number of new HIV cases diagnosed has been declining among white and black men; however, this same decrease in rates has not been seen among black or white women (Figure 4). The annual number of new HIV cases among black women has been higher than that among white men since 1993.

Figure 4

Trends in HIV/AIDS, by Ethnicity and Sex

Louisiana, 1997-2001



HIV counseling and testing data provide information on new HIV diagnoses among persons who are tested at public sites, such as STD, family planning, prenatal, and TB clinics; drug treatment centers; CBOs; parish health units; community health centers; and mobile test sites. Among persons tested for the first time, the percentage of seropositive results was higher among males than females (Figure 5). In 2001, compared with 2000, the percentage of seropositive results among females increased significantly. The percentage of seropositive results among males decreased in 1998 and 1999 and then increased slightly in 2000 and 2001. HIV seropositivity is highest among blacks, and the percentage increased substantially in this population in 2001 (Figure 6).

Figure 5

Percentage of Positivity Among Persons Tested for the First Time, by Sex

Louisiana Counseling and Testing Data, 1997-2001

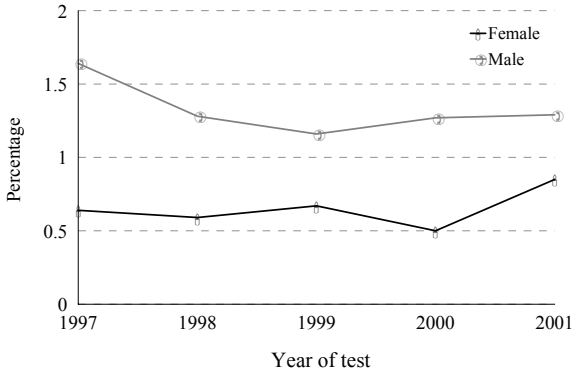
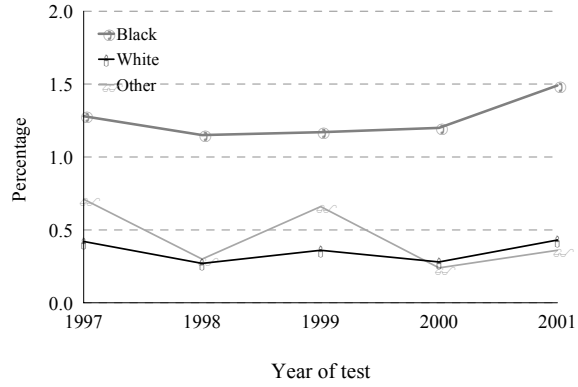


Figure 6

Percentage of Positivity Among Persons Tested for the First Time, by Race

Louisiana Counseling and Testing Data, 1997-2001



HIV/AIDS, BY AGE GROUP

In 2001, persons aged 25–44 years accounted for more than half (56%) of the newly diagnosed cases. Females accounted for a higher proportion of cases among youth (13–24 years) than in any other adult age groups (Table 10). This may be due in part to more opportunities for HIV screening of young women, such as during routine HIV screening of pregnant women.

Table 10. HIV diagnoses, by age group and sex, Louisiana, 2001

Age group (yrs.)	Males		Females		Total	
	No.	%[a]	No.	%[a]	No.	%[a]
0–1	4	<1	5	<1	9	1
2–12	0	0	1	<1	1	<1
13–24	105	10	114	11	219	20
25–44	394	37	207	19	601	56
45–64	170	16	57	5	227	21
≥65	16	1	5	<1	21	2
Total	689	64	389	36	1,078	100

[a]Calculated as the percentage of all cases diagnosed in 2001.

In 2001, as in past years, the highest number of newly diagnosed cases was among persons 25–44 years of age (Figure 7). However, the diagnosis of HIV for persons in this age group has been declining substantially since 1997. The decrease in this age group accounts for much of the decline in the number of new HIV cases seen in recent years.

HIV seropositivity is highest in the age group 35–39 years and lowest in the age group 13–19 years (Figure 8). In 2001, HIV seropositivity increased in almost all age groups, but the most dramatic increase was in the age group 35–39 years.

Figure 7

Trends in HIV/AIDS, by Age Group

Louisiana, 1997-2001

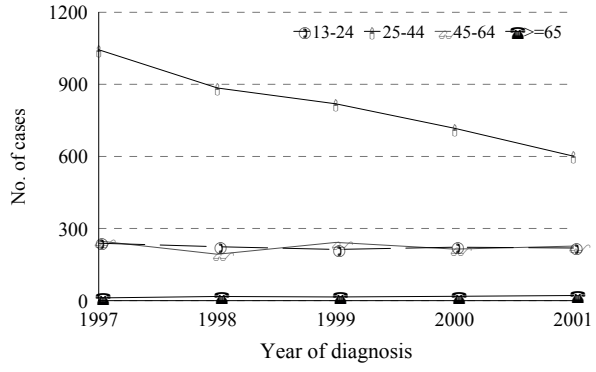
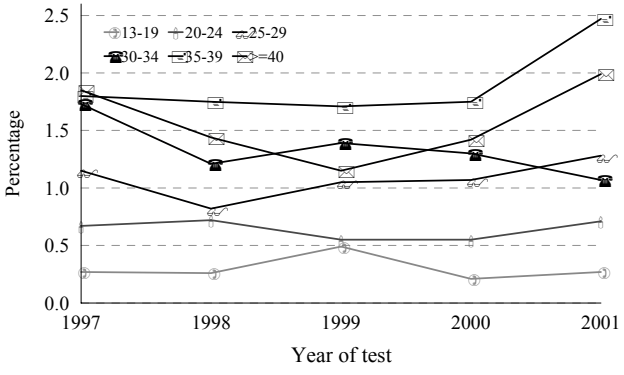


Figure 8

Percentage of Positivity among Persons Tested for the First Time, by Age Group

Louisiana Counseling and Testing Data, 1997-2001

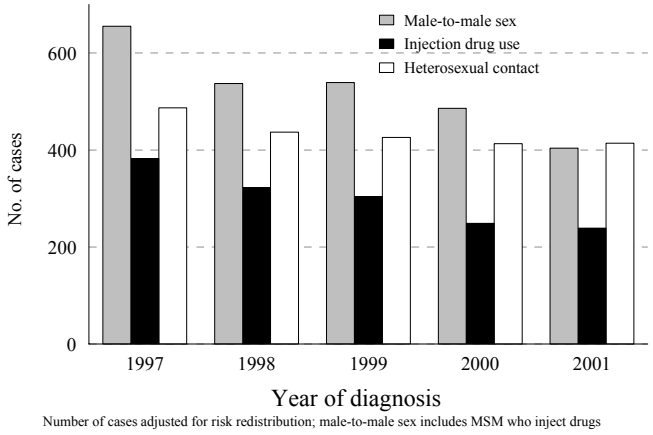


HIV/AIDS, BY MODE OF EXPOSURE

The proportions of cases attributed to specific exposure (i.e., risk) categories have changed significantly in recent years. Throughout the epidemic, most HIV transmission has occurred among MSM; however, the proportion of cases attributed to male-male sexual activity has been declining. The proportion of cases among persons who report specific heterosexual contact with a person with, or at increased risk for, HIV infection (e.g., an IDU) has been increasing, in large part due to the increase in the proportion of cases among women (data not shown). In 2001, the numbers of new HIV cases in MSM and in heterosexual adults were similar (Figure 9).

Figure 9

Trends in Exposure Categories of Cases of HIV/AIDS, Louisiana, 1997-2001



Number of cases adjusted for risk redistribution; male-to-male sex includes MSM who inject drugs

After adjustment for unreported risk, the largest proportion of cases diagnosed in 2001 (38%) was attributed to heterosexual contact (Table 11). Cases among MSM, including MSM who inject drugs, accounted for 37% of all cases diagnosed in 2001; however, nearly half of all persons living with HIV in Louisiana (48%) may have been exposed to the virus through male-male sexual contact. IDUs constitute an important risk group as well, accounting for 22% of newly diagnosed cases and 23% of persons living with HIV/AIDS.

Table 11. Risk characteristics of persons with HIV infection (HIV/AIDS), Louisiana, 2001

	Persons with new diagnoses, 2001		Persons living with HIV/AIDS, 2001	
Exposure category	No.[a]	%	No.[a]	%
Male-to-male sexual activity	367	34	5,366	40
Injection drug use	239	22	3,102	23
Male-to-male sex and injection drug use	37	3	1,023	8
Heterosexual contact	414	38	3,657	27
Transfusion/hemophilia	10	1	220	2
Mother with, or at risk for, HIV infection	10	1	174	1
Risk not reported or not identified	1	<1	23	<1
Total	1,078	100	13,565	100

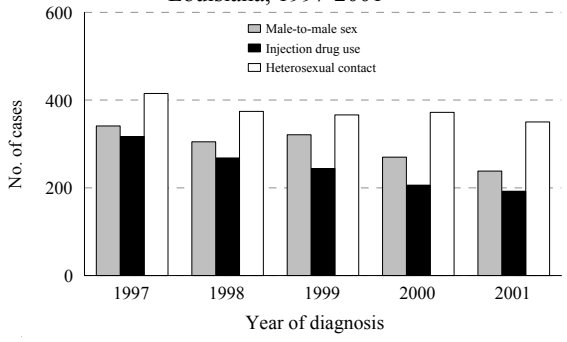
[a]Adjusted for unreported risk.

Among both blacks and whites, the number of new cases diagnosed among MSM has declined during recent years (Figures 10 and 11); however, this decline is more pronounced among whites. Among blacks, heterosexual contact has emerged as the leading exposure category, accounting for nearly half of all newly diagnosed cases (44%) (Table 12). Among whites, the predominant exposure remains male-to-male sexual activity (total of 62%, male-to-male sexual activity and male-to-male sexual activity plus injection drug use) (Table 12), although the number of new cases among MSM has been declining.

Figure 10

Trends in Exposure Categories of Cases of HIV/AIDS in Black Adults

Louisiana, 1997-2001

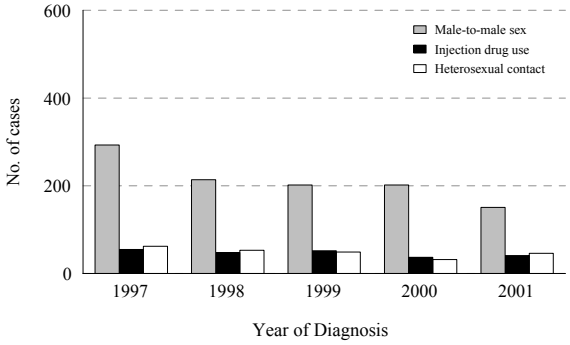


Note: Number of cases adjusted for risk distribution. Male-to-male sex includes MSM who inject drugs.

Figure 11

Trends in Exposure Categories of Cases of HIV/AIDS in White Adults

Louisiana, 1997-2001



Note: Number of cases adjusted for risk distribution. Male-to-male sex includes MSM who inject drugs.

Table 12. HIV diagnoses, by exposure category and race/ethnicity, Louisiana, 2001

	Whites		Blacks		Total[a]	
Exposure category	No.[b]	%	No.[b]	%	No.[b]	%
Male-to-male sexual activity	138	57	215	27	367	34
Injection drug use	41	17	192	24	239	22
Male-to-male sex and injection drug use	13	5	23	3	37	3
Heterosexual contact	46	19	350	44	414	38
Transfusion/hemophilia	3	1	7	1	10	1
Mother with, or at risk for, HIV infection	2	1	8	1	10	1
Risk not reported or not identified	0	0	1	<1	1	<1
Total	243	100	796	100	1,078	100

[a]All racial/ethnic categories, including ones not shown.
[b]Adjusted for unreported risk.

In 2001, 74% of new cases diagnosed among women were attributed to heterosexual contact, and 23% were attributed to injection drug use (Table 13). Among men, more than half of the new cases occurred in MSM (58%, including MSM who inject drugs). Injection drug use was the second most commonly reported risk among men, accounting for 22% of cases diagnosed among men in 2001.

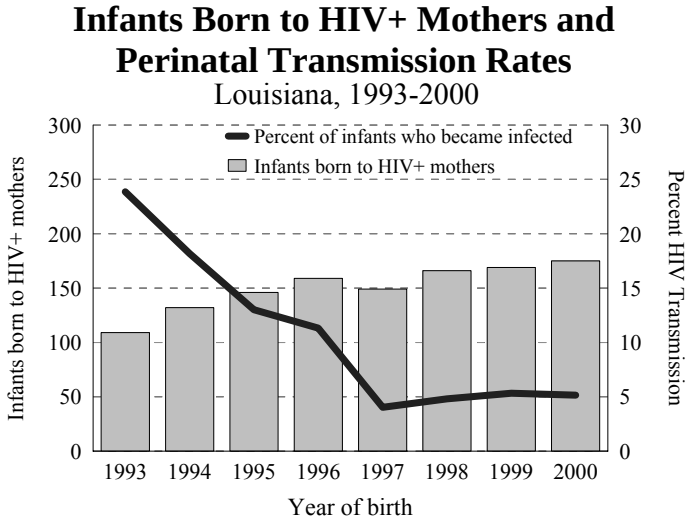
Table 13. HIV diagnoses, by exposure category and sex, Louisiana, 2001

	Males		Females		Total	
Exposure category	No.[a]	%	No.[a]	%	No.[a]	%
Male-to-male sexual activity	367	53	–	–	367	34
Injection drug use	149	22	90	23	239	22
Male-to-male sex and injection drug use	37	5	–	–	37	3
Heterosexual contact	126	18	287	74	413	38
Transfusion/hemophilia	5	1	5	1	10	1
Mother with, or at risk for, HIV infection	4	1	6	2	10	1
Risk not reported/identified	1	<1	1	<1	2	<1
Total	689	100	389	100	1,078	100

Note: Dash indicates not applicable.
[a]Adjusted for unreported risk.

Perinatal transmission dropped dramatically from 1993 to 1997 with the introduction and widespread use of antiretroviral therapy during pregnancy and labor and delivery (Figure 12). In recent years, the perinatal transmission rates have remained fairly stable. Since 1996, the number of infants born to HIV-infected mothers has also leveled. Despite the stable transmission rates, the number of HIV-infected infants may increase as the number of infants born to HIV-infected mothers increases because growing numbers of women are living with HIV infection. Of the 175 infants born in 2000 to HIV-infected mothers, 9 have a diagnosis of HIV infection.
Note: For additional information regarding risk for perinatal HIV exposure, see pp. 82-83, Enhanced Perinatal Surveillance.

Figure 12



AIDS TRENDS AND HIV/AIDS MORTALITY

Highly active antiretroviral therapy (HAART) was introduced in 1996. These medications have been effective in the treatment of HIV infection and, since that time, have altered the natural progression of HIV infection. HAART has delayed the progression from HIV to AIDS and from AIDS to death for many people infected with HIV. Because of the widespread use of these HIV treatments, Louisiana, along with the rest of the nation, has seen declines both in the number of new AIDS cases diagnosed and the number of AIDS-related deaths. For this reason, AIDS surveillance data no longer accurately represent trends in HIV transmission. Rather, AIDS surveillance data now reflect differences in access to testing and treatment, as well as the failure of certain treatments. Consequently, AIDS incidence and deaths, since 1996, provide a measure for identifying and describing the populations for whom treatment may have not been accessible or effective.

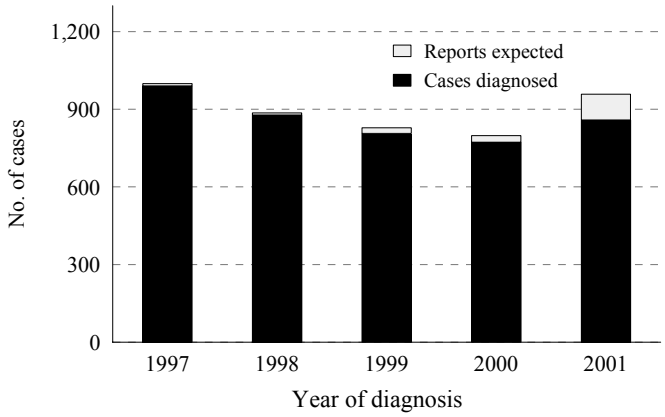
AIDS Trends

From 1997 to 2000, the number of new cases declined steadily each year. However, the number of new AIDS cases increased in 2001 for the first time since the introduction of HAART in 1996 (Figure 13).

Figure 13

Trends in AIDS Cases

Louisiana, 1997-2001



In 2001, most of the new AIDS cases occurred in men (69%), blacks (75%), and persons ages 25–44 (66%) (Table 14). Although progression to AIDS may indicate disparities in access to care or the effectiveness of treatment, the proportional distribution of persons with a new diagnosis of AIDS is also related to the characteristics of persons living with HIV/AIDS. For example, if there were no disparities in the progression of HIV infection to AIDS, one would expect the characteristics of persons with a recent diagnosis of AIDS to resemble the characteristics of persons living with HIV in the preceding calendar year. In 2000, 68% of persons living with HIV (non-AIDS) were black (data not shown); however, blacks represented

75% of persons in whom HIV infection progressed to AIDS in 2001, which may indicate some disparities in access to testing and treatment.

Table 14. Characteristics of persons with AIDS, Louisiana, 2001

	Persons with new diagnoses 2001		Persons living with AIDS through 2001	
	No.	%	No.	%
Sex				
Male	593	69	4,890	78
Female	265	31	1,346	22
Race/ethnicity[a]				
White, not Hispanic	193	22	2,263	36
Black, not Hispanic	643	75	3,756	60
Hispanic	20	2	193	3
Other/Unknown	2	<1	24	<1
Age group (yrs.)				
0–1	0	0	0	0
2–12	0	0	44	1
13–24	58	7	162	3
25–44	566	66	3,992	64
45–64	221	26	1,945	31
≥ 65	13	2	93	1
Public health region				
I	343	40	2,900	47
II	237	28	1,223	20
III	27	3	199	3
IV	49	6	363	6
V	34	4	305	5
VI	35	4	229	4
VII	56	6	444	7
VIII	51	6	278	4
IX	26	3	295	5
Total	858	100	6,236	100

[a]For an explanation of how racial/ethnic groups were combined, see p.11.

The New Orleans region (Region I) is the largest region in the state. This area had the highest number of new AIDS cases diagnosed in 2001, as well as the largest population of persons living with HIV. However, in 2001, as in years past, the Baton Rouge region (Region II) surpassed the New Orleans region in rates of diagnosis of HIV/AIDS. In Louisiana, more than two thirds of persons with a new diagnosis of AIDS and persons living with AIDS reside in either the New Orleans or Baton Rouge regions.

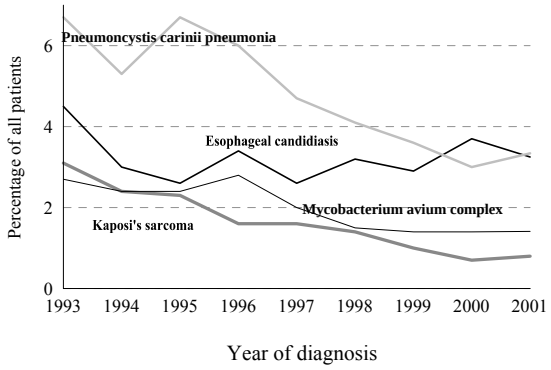
Although the number of new AIDS cases has increased statewide, among patients enrolled in the ASD study in New Orleans, the occurrence of new opportunistic infections has generally

declined over time (Figure 14). Although the proportion of patients with *Pneumocystis carinii* pneumonia (PCP) and Kaposi's sarcoma (KS) has declined significantly since 1995, this decline seems to have moderated in 2001. The proportion of patients with esophageal candidiasis has remained relatively stable.

Figure 14

Trends in Selected Opportunistic Infections

New Orleans, Adult Spectrum of Disease Study, 1993-2001



Mortality Trends

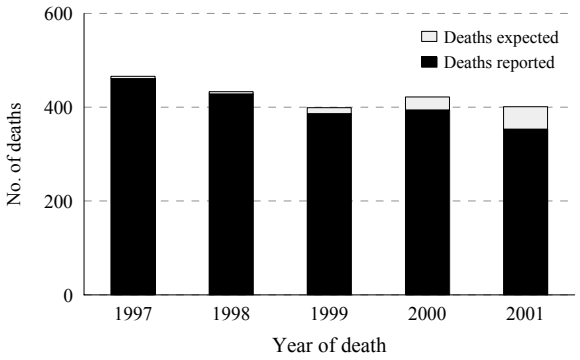
The mortality data that follow are presented in a variety of ways and are drawn both from surveillance data and vital statistics data. In some instances, data on the characteristics of persons living with AIDS has been included to provide context and to assist interpretation.

From 1999 through 2001, the estimated number of deaths of persons with AIDS has remained relatively stable (Figure 15). Since 1996, AIDS-related mortality has declined sharply, coinciding with the emergence of HAART. Although this decline has continued, the slowing of the declines in the number of deaths in recent years may reflect limited access to, or use of, health care services, and the limitations of current therapies among persons in care.

Figure 15

Deaths of Persons with AIDS

Louisiana, 1997-2001



In 2001, most of the persons with AIDS who died were men (72%), which is consistent with the fact that 78% of persons living with AIDS were men (Table 15). Although blacks represented 60% of persons living with AIDS in 2001, they made up 75% of persons who died. This disparity may indicate a disparity in access to, or use of, health care services or differences in the effectiveness of antiretroviral medications. Similarly, 32% of AIDS deaths

were of persons living in Region II, although only 20% of persons living with AIDS reside in this region.

Table 15. Characteristics of persons with AIDS who died and persons living with AIDS, Louisiana, 2001

	Deaths among persons with AIDS, 2001		Persons living with AIDS through 2001	
	No.	%	No.	%
Sex				
Male	255	72	4,890	78
Female	98	28	1,346	22
Race/ethnicity[a]				
White, not Hispanic	88	25	2,263	36
Black, not Hispanic	264	75	3,756	60
Hispanic	1	<1	193	3
Other/unknown	0	0	24	<1
Age group (yrs.)				
0–1	0	0	0	0
2–12	1	0	44	1
13–24	9	3	162	3
25–44	211	60	3,992	64
45–64	125	35	1,945	31
≥ 65	7	2	93	1
Public health region				
I	129	37	2,900	47
II	112	32	1,223	20
III	17	5	199	3
IV	14	4	363	6
V	13	4	305	5
VI	9	3	229	4
VII	29	8	444	7
VIII	16	5	278	4
IX	12	3	295	5
Total	353	100	6,236	100

[a]For an explanation of how racial/ethnic groups were combined, see p. 11.

Data from the Louisiana Office of Vital Statistics on deaths that were attributed to HIV infection or AIDS were not yet available for 2001; therefore, the data in Table 16 are for calendar year 2000. The rates were calculated on the basis of overall population numbers in each group, and they describe the population-level effect of HIV/AIDS mortality on each subgroup. They do not address the differences among HIV-infected persons that could result in higher mortality in some groups than in others. To address this disparity, compare the distribution of deaths (Table 16) with the distribution of persons living with AIDS (Table 17).

Table 16. Deaths due to HIV infection or AIDS, by race and sex, Louisiana, 2000

	Males			Females			Total		
Race	No.	%[a]	Rate[b]	No.	%[a]	Rate[b]	No.	%[a]	Rate[b]
White, not Hispanic	75	19	5.4	6	2	–	81	21	2.9
Black, not Hispanic	219	57	31.9	84	22	13.9	303	78	20.8
Other	–	<1	–	0	0	0.0	–	<1	–
Total	296	77	13.7	90	23	4.8	386	100	8.6

Source. State Center for Health Statistics, Louisiana Office of Public Health.
Note. Dash indicates numbers suppressed because of small cell sizes (≤ 3) or rates could not be calculated because of small numbers.
[a]Each percentage is calculated as the percentage of all deaths in 2000.
[b]Rates per 100,000 persons in racial/ethnic subgroups.

Table 17. Persons living with AIDS, by race and sex, Louisiana, 2000

	Males		Females		Total	
Race	No.	%[a]	No.	%[a]	No.	%[a]
White, not Hispanic	1,960	34	197	3	2,157	38
Black, not Hispanic	2,410	42	961	17	3,371	59
Other	173	3	21	<1	194	3
Total	4,543	79	1,179	21	5,722	100

[a]Each percentage is calculated as the percentage of all persons living with AIDS in 2000.

In 2000, nearly 9 of every 100,000 persons statewide died of a cause related to HIV infection. The AIDS death rate among blacks was more than 7 times that among whites. More than half (57%) of all deaths due to HIV/AIDS were of black men. The death rate among black men was 6 times the rate among white men and more than twice that among black females. Rates were not calculated for other ethnic groups because of the small number of cases.

The greatest disparity in rates of persons living with AIDS and persons dying of AIDS is that between black men and white men. Although more than a third (34%) of persons living with AIDS in 2000 were white men, this group accounted for only 19% of deaths. In contrast, black men accounted for 42% of persons living with AIDS and 57% of AIDS deaths.

In 1999, the most recent year for which these data are available, HIV/AIDS was the 2nd leading cause of death in Louisiana among blacks aged 25–44 years. Statewide, HIV/AIDS was responsible for 13% of all deaths of blacks in this age group (Table 18). Nearly 3 times as many blacks aged 25–44, compared with whites in this age group, died of HIV/AIDS.

Table 18. Comparative ranking of 10 leading underlying causes of death of black persons and white persons aged 25–44 years, Louisiana, 1999

Cause of death	Rank	Deaths	%
	White, not Hispanic		
Unintentional injury	1	373	25.3
Malignant neoplasm	2	215	14.6
Heart disease	3	199	13.5
Suicide	4	154	10.4
HIV/AIDS	***5***	***65***	***4.4***
Homicide	6	56	3.8
Chronic liver disease	7	39	2.6
Cerebrovascular disease	8	27	1.8
Diabetes mellitus	8	27	1.8
Congenital anomaly	10	17	1.2
Deaths of all causes (TOTAL*)*		1,475	100
	Black, not Hispanic		
Heart disease	1	199	14.9
HIV/AIDS	***2***	***178***	***13.3***
Unintentional injury	3	175	13.1
Homicide	4	171	12.8
Malignant neoplasm	5	163	12.2
Cerebrovascular disease	6	42	3.1
Diabetes mellitus	6	42	3.1
Suicide	8	39	2.9
Chronic liver disease	9	31	2.3
Pneumonia and influenza	10	18	1.3
Deaths of all causes (TOTAL)		1,339	100

Source. State Center for Health Statistics, Louisiana Office of Public Health.

References

Fleming PL, Byers RH, Sweeney PA, Daniels D, Karon JM, Janssen RS. HIV prevalence in the United States, 2000. In: Program and abstracts of the 9th Conference on Retroviruses and Opportunistic Infections. February 18–24, 2002; Seattle, Washington. Abstract 11.

Question 3

What are the indicators of risk for HIV/AIDS infection in Louisiana?

The persons most likely to become infected with HIV are those who engage in high-risk behaviors and who live in communities where HIV prevalence is high. To help community planning groups understand the differing risks for HIV infection in Louisiana, this section examines the trends and characteristics of populations that practice high-risk behaviors. The primary focus of this section is 3 high-risk populations: MSM, IDUs, and heterosexual adults. In addition, 2 populations of special interest are examined: perinatally exposed children and persons tested for HIV.

The preceding section addressed the level of HIV infection in various groups affected by HIV. This section examines direct and indirect measures of risk behavior in the groups most at risk of acquiring HIV infection. Direct measures of risk provide information about risk behavior that is directly associated with HIV transmission. Indirect measures do not directly describe HIV risk behaviors; rather, they are indicators of possible HIV risk that may need further investigation. For example, an increase in STD or teen pregnancy rates does not directly indicate that HIV exposure is increasing but may indicate an increase in unprotected sex.

Highlights

- In 2001, 81% of young MSM surveyed in HITS reported having had 4 or more sex partners during the past 12 months. Among all age groups, 54% of MSM reported having 4 or more sex partners.
- Behavioral surveys conducted among MSM indicate high rates of unprotected sex, despite the fact that many MSM are unaware of the HIV status of their casual sex partners.
- Among IDUs surveyed through HITS, 59% reported having shared needles always or some of the time. Needle sharing seems to be more common at younger ages; the age group 18–24 years comprises the largest proportion of IDUs who always share needles (19%) and the smallest proportion, who never share needles (14%).
- Among the 3 risk groups (IDUs, MSM, and heterosexual clients in STD clinics) surveyed in HITS, the rate for *never* using condoms during sex with a casual sex partner was highest for IDUs.
- Behavioral surveys indicate that approximately 40% of persons with 2 or more sex partners did not use a condom during their most recent sexual encounter, and condom use by high-risk populations surveyed through street outreach does not seem to differ from condom use by the general population. Of heterosexual clients in STD clinics, however, 14% of men and 17% of women reported *never* having used condoms during sex with their casual partners.
- Surveillance data indicate that the number of infants born annually to HIV-infected women has increased steadily as more women are living with HIV/AIDS. Currently, 59% of HIV-infected mothers had a diagnosis of HIV infection before they became pregnant. Although some of the pregnancies may represent informed choices by these women, others may represent continued unprotected sexual activity and the need for appropriate prevention interventions.
- In the general population, 36% of persons reported being tested for HIV during the past 12 months. Similarly, a behavioral survey of high-risk populations indicates that 45% were tested during the past year.

MEN WHO HAVE SEX WITH MEN (MSM)

Direct Measures of Risk Behavior

For MSM, the following measures of risk behavior are available in Louisiana to provide important information on factors that may affect the risk of acquiring or transmitting HIV infection:

- number of sex partners (Figure 16)
- condom use or unprotected sex (Figures 17 and 18)
- substance use

Both HITS and MOS (surveys conducted by prevention outreach workers at gay bars) provide information on the risk behaviors of MSM. HITS is an anonymous, cross-sectional survey of populations at high risk for HIV infection, including MSM, which was conducted in 3 cities in Louisiana (New Orleans, Baton Rouge, and Monroe) in 2001. Participants, recruited from gay bars, had to be at least 18 years of age, able to give informed consent, and residents of the state for at least 1 year. In addition, to be considered eligible for the MSM risk group, a man must have had sex with another man within the last 12 months. The MOS is a self-administered survey of MSM in gay bars, which was conducted during 1995–2000 by outreach workers from CBOs. The fact that the surveys were conducted in gay bars may limit their applicability to all MSM. However, these surveys do provide valuable information on risk behaviors in a population at high risk for HIV infection. (For a more detailed description of these surveys and their strengths and limitations, see Appendix A.)

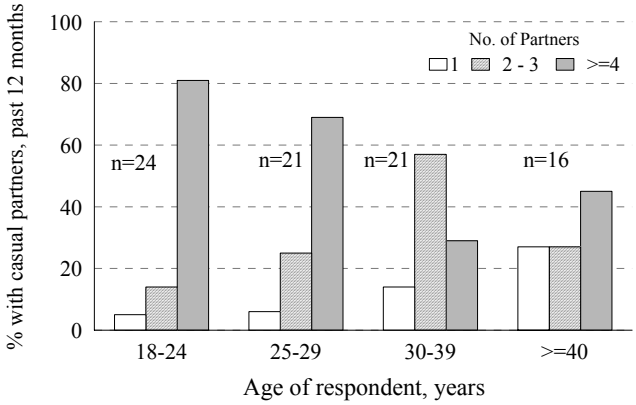
Number of Sex Partners

According to both surveys, most of the men interviewed had 3 or more sex partners during the last 12 months (HITS, 54% had 4 or more; MOS, 57% had 3 or more). Of the men interviewed in HITS, 75% reported having had at least 1 casual (i.e., non-primary) sex partner during the last 12 months. Younger MSM tended to have higher numbers of casual sex partners, and the number of casual partners decreased with age (HITS) (Figure 16).

Figure 16

Casual Sexual Partners Among Men Who Have Sex with Men

Louisiana HIV Testing Survey, 2001



In addition, 45% of the men with at least 1 casual sex partner during the last 12 months were unaware of the HIV status of their most recent partners (HITS). Lastly, according to the MOS, 15% of the men had both male and female sex partners, which means that risk behaviors in the MSM population may also affect the levels of heterosexual transmission.

Condom Use or Unprotected Sex

Both surveys describe high proportions of men who engage in unprotected sex (Figures 17 and 18). A large proportion of men throughout the state reported having had unprotected receptive anal sex during the past 30 days. Since 1997, a larger proportion of men surveyed in New Orleans, compared with men elsewhere in the state, have reported unprotected sex. The rates of unprotected anal sex may have stabilized in recent years in all areas of the state.

Figure 17

Unprotected Receptive Anal Sex During Past 30 Days, Louisiana

MSM Outreach Survey, 1995-2000

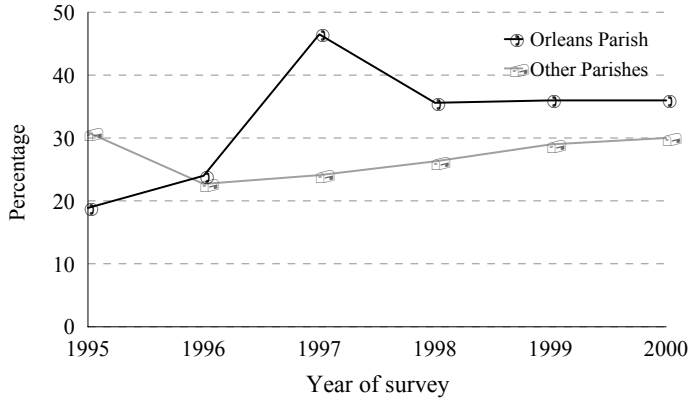
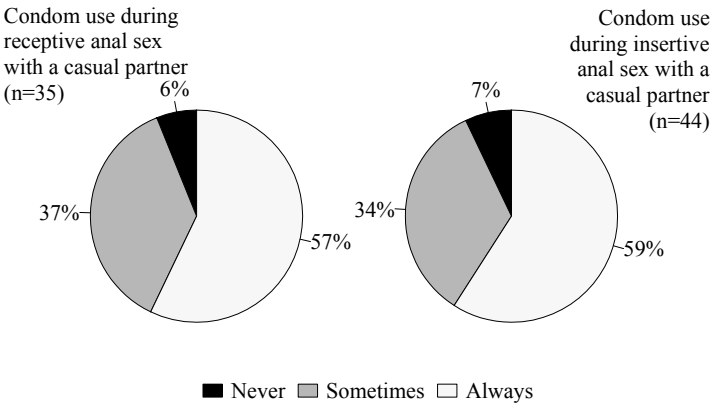


Figure 18

Condom Use Among MSM in Gay Bars

Louisiana HIV Testing Survey, 2001



In HITS, nearly half of the men surveyed did not always use condoms with their casual sex partners (43%, sometimes or never during receptive anal sex; 41%, sometimes or never during insertive anal sex). In MOS, 32% of the men reported having engaged in unprotected receptive anal sex during the past 30 days; 34% had engaged in unprotected insertive anal sex. Although a large proportion of MSM in HITS reported always using a condom during sex with casual partners, 6% to 7% reported never using condoms.

Substance Use

Of the men interviewed in HITS, 59% reported having ever used drugs to get high and having used drugs during the past year. Nearly 1 in 5 (18%) reported having traded money or drugs for sex during the past 12 months.

In HITS, 13% of the men reported having ever injected drugs. Of those, 45% (6% of the total) had injected drugs during the past year. (Note: These results are consistent with surveillance data, which show similar levels of injection drug use among MSM: 9% among MSM whose HIV infection was diagnosed in 2001; 16% among MSM living with HIV infection.)

Indirect Measures of Risk Behavior

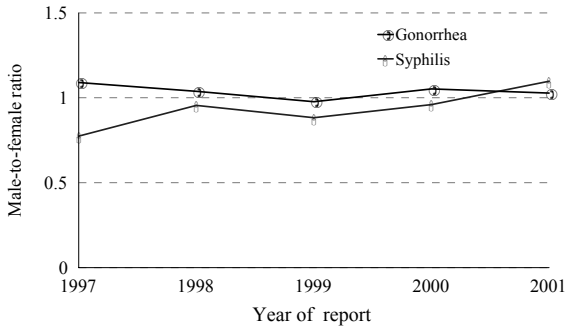
Among MSM, STD surveillance data may provide information about the potential occurrence of high-risk behavior.

One indirect measure that can indicate increasing rates of infections among MSM is the male-to-female ratio of gonorrhea or syphilis in a particular area. In Louisiana, during 1997–2001, the male-to-female ratio of gonorrhea remained stable (Figure 19). The ratio was approximately 1.0 each year (i.e., each year the same number of men and women were reported to have gonorrhea). These data do not indicate an increasing trend in gonorrhea among MSM. The male-to-female ratio of early syphilis increased slightly, from 0.8 in 1997 to 1.1 in 2001 (Figure 19). This increase, although relatively small, may be an early sign of a trend toward more cases of syphilis among MSM.

Figure 19

Trends in Male-to- Female Ratios of STDs

Louisiana, 1997-2001



INJECTION DRUG USERS (IDUS)

Direct Measures of Risk Behavior

Among IDUs, the following measures of risk behavior are available in Louisiana to provide important information on factors that may affect risk of acquiring or transmitting HIV infection:

- injection or other substance use (Figures 20 and 21)
- sharing of needles (Figure 22)
- exchange of money or drugs for sex
- number of sex partners (Figure 23)
- frequency of condom use or unprotected sex (Figure 24)

HITS, NHSDA, and YRBSS provide information on risk behavior related to substance use. HITS is an anonymous, cross-sectional survey of populations at high risk for HIV infection, including IDUs, which was conducted in 3 cities in Louisiana (New Orleans, Baton Rouge, and Monroe) in 2001. Eligible IDUs were recruited from street locations. They had to be at least 18 years of age, able to give informed consent, and residents of the state for at least 1 year. In addition, to be considered eligible for the IDU risk group, a person had to report injection drug use within the past 12 months. NHSDA is an annual nationwide survey designed to collect data on substance abuse patterns and behaviors in the U.S. population aged 12 or older. Youth are oversampled to ensure precise estimates of substance abuse among younger persons. YRBSS is a self-administered questionnaire given to a representative sample of students in grades 9–12 at the state and local levels. In Louisiana, the survey is administered both at the state level and in Orleans Parish public schools; however, only the survey administered to Orleans Parish high school students includes questions related to sexual behavior. Because this survey is administered in school, students at highest risk, who may be more likely to be absent from school or to drop out, may be underrepresented in this survey; students in upper grades are more likely not to be in school. (For a more detailed description of each survey and its strengths and limitations, see Appendix A.)

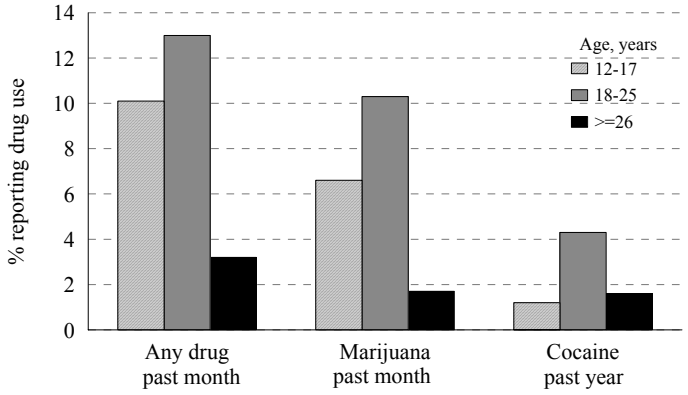
Injection or Other Substance Use

Among the general population in Louisiana interviewed in NHSDA, 5% of persons aged 12 years or older reported having used an illicit drug at least once during the past month. Illicit drugs included marijuana/hashish, cocaine, inhalants, hallucinogens, heroin, and any other prescription-type psychotherapeutic drug used nonmedically. Regardless of the type of illicit drug, drug use was highest among persons 18–25 years of age: 13% reported that they had used illicit drugs during the past month (Figure 20). Reported drug

Figure 20

Substance Use by Age Group, Louisiana

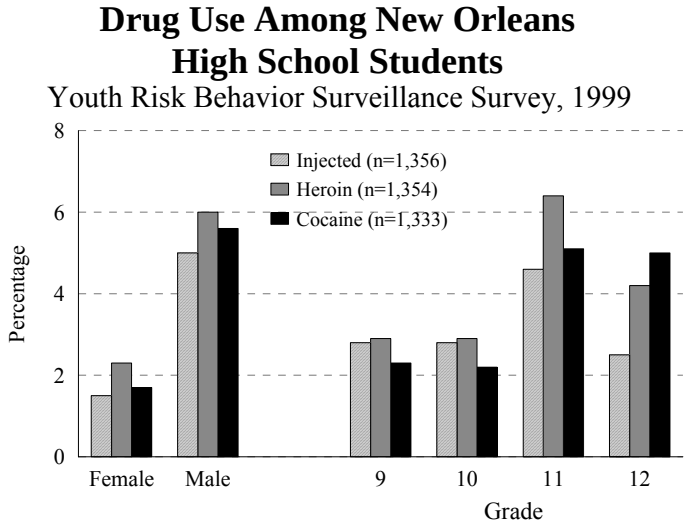
National Household Survey of Drug Abuse, 1999



use was highest in the younger age groups (12–17 and 18–25 years); however, relative to overall drug use, cocaine use seems to be higher in the older age group (≥26 years) than in the age group 12–17 years.

The New Orleans YRBS provides additional insight into drug use among high school students (Figure 21). Although the 1999 NHSDA reported that 10% of persons in Louisiana aged 12–17 had used an illicit drug in the past month, the New Orleans YRBSS for that same year reported that 3% had ever *injected* an illicit drug. Experience with injection drugs was higher among male students than among female students. In addition, 4% of students had used heroin at least once, and 4% had used cocaine (any form). More students reported having used heroin, compared with any injected drug or cocaine, at least once.

Figure 21



Drug use seems to increase according to grade level, with the exception of the 12th grade. However, it is important to keep in mind that one limitation of YRBS is that it is administered in school. Because the students at highest risk may be more likely to be absent from school or to drop out, they may be underrepresented, especially among upper grades.

Because injection drug use during the past year was an eligibility requirement for this risk group in HITS, all the participants had injected drugs during the past year. Heroin was the drug most commonly injected (87% of participants [data not shown]). Next was heroin and cocaine together (speedballs; reported by 61%), followed by cocaine (reported by 65%). Of the participants, 22% had injected amphetamines.

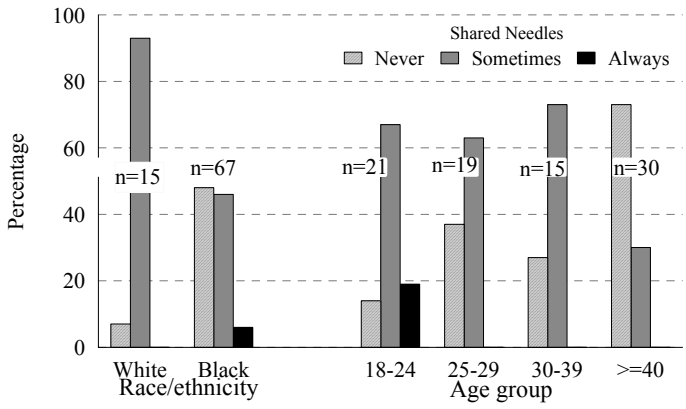
Sharing of Needles

In HITS, 59% of IDUs reported having shared needles always or some of the time. Needle-sharing among whites than among blacks (Figure 22). It also seems to be more common in the younger age groups: the largest proportion who always shared (19%) were persons aged 18–24; the smallest proportion who never shared (14%) were also in this age group. Note that these results are limited by small sample sizes.

Figure 22

Needle Sharing Among Injection Drug Users

Louisiana HIV Testing Survey, 2001



Exchange of Money or Drugs for Sex

Of the IDUs interviewed in HITS, nearly half (44%) reported having exchanged money or drugs for sex during the past 12 months (data not shown).

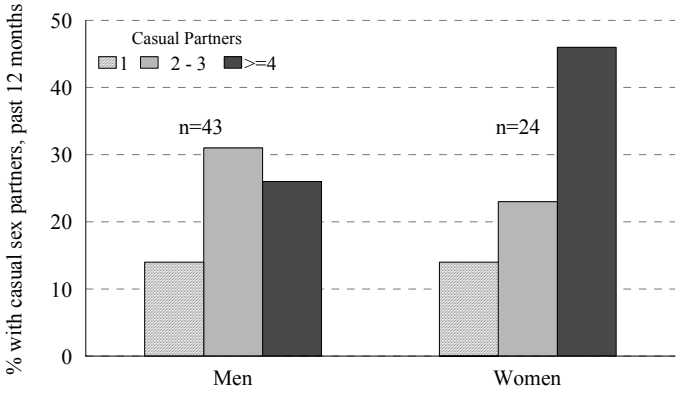
Number of Sex Partners

Of the IDUs interviewed in HITS, 83% of the men and 77% of the women reported that they had been sexually active (heterosexual sex) during the last 12 months. More than half of the sexually active persons had had 2 or more sex partners during the past 12 months (62% of women; 56% of men). Four or more sex partners were reported by 39% of the women and 35% of the men. Of the sexually active IDUs, 83% of the women and 72% of the men reported having had at least 1 casual sex partner (Figure 23). Of those with at least 1 casual sex partner, 61% of the males and 50% of the females reported not knowing the HIV status of their most recent sex partner. These results, too, are limited by small sample sizes.

Figure 23

Casual Sexual Partners of Injection Drug Users

Louisiana HIV Testing Survey, 2001



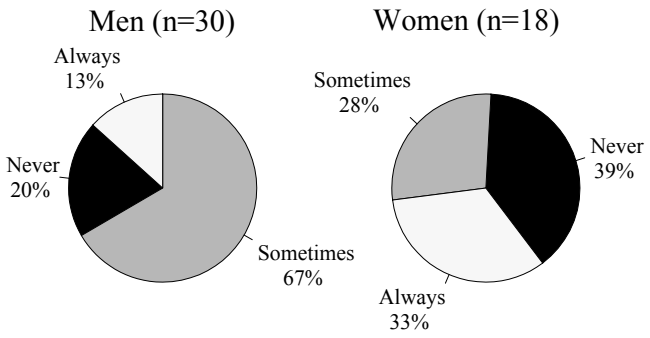
Frequency of Condom Use or Unprotected Sex

Most IDUs in HITS did not always use condoms with their casual sex partners (Figure 24). Sometimes or never using condoms was reported by 87% of the men and 67% of the women. Of the 3 risk groups surveyed in HITS (MSM, IDUs, heterosexual clients at STD clinics), the largest proportions of those who *never* used condoms during sex with a casual partner were IDUs (39% of women; 20% of men). Again, small sample sizes are a limitation.

Figure 24

Condom Use by Injection Drug Users with Casual Sex Partners

Louisiana HIV Testing Survey, 2001



Indirect Measures of Risk Behavior

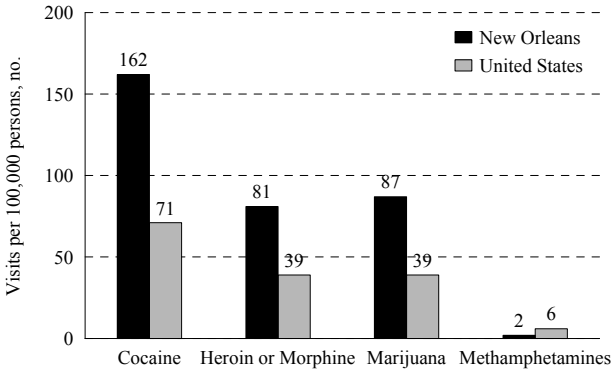
DAWN and TEDS provide information about the potential occurrence of behaviors related to injection drug use. DAWN is an ongoing national drug abuse surveillance system that monitors visits to hospital emergency departments and deaths attributable to drug abuse, which are reviewed by medical examiners and coroners. In addition, DAWN provides population-based estimates for selected metropolitan areas, such as New Orleans. DAWN estimates for New Orleans provide indicators of current and emerging trends in drug abuse in the city. To be reported to DAWN, a person must be aged 6–97 and show evidence, during an emergency department visit, of intentional abuse or misuse of a drug (intentional abuse includes drug abuse, drug dependence, recreational use, or suicide attempt).

TEDS, which is maintained by SAMHSA, offers another way to indirectly measure the prevalence of injection drug use in Louisiana. For this survey, admissions data for substance abuse treatment are compiled from facilities that receive state and federal funding. Because TEDS is an admission-based system, the admissions may represent multiple admissions of a person within a calendar year. (For more detailed descriptions of DAWN and TEDS, see Appendix A.)

Figure 25

Drug Related Emergency Department Visits

Drug Abuse Warning Network, 2000



In New Orleans, population-based estimates of drug-related emergency visits during 2000 were higher than national estimates for cocaine, heroin/morphine, and marijuana (Figure 25). In 2000, DAWN reported 162 cocaine-related

visits per 100,000 population, 81 heroin or morphine visits per 100,000 population, and 87 marijuana visits per 100,000 population. Compared with 20 other metropolitan areas participating in DAWN, New Orleans ranked 8th for cocaine-related visits and 9th for heroin-related visits.

With the exception of methamphetamine, the rates of visits related to "club drugs" (drugs associated with "raves" and dance clubs) in New Orleans were higher than national estimates. In 2000, the rates of emergency department visits for these drugs in New Orleans ranged from 5.6 for gamma-hydroxybutyrate (GHB), 3.6 for Ecstasy (MDMA), 2.8 for LSD, 2.2 for methamphetamine, to less than 1 per 100,000 for ketamine and Rohypnol (national estimates: 2.0 for GHB, 2.0 for MDMA, 2 for LSD, 5 for methamphetamine, <1 per 100,000 for ketamine and Rohypnol).

In 2001, there were 21,005 substance abuse admissions in Louisiana, of which 21.9% were related to smoking cocaine, 4% to cocaine through another route, and 2% to heroin use. Of the admissions due to smoking cocaine, 62% were among persons 26–40 years of age (Figure 26). Men accounted for two thirds of these admissions.

Heroin-related treatment admissions reported through TEDS were primarily among men (78%). The age distribution of persons admitted for heroin use (Figure 27) was younger than that of persons admitted for cocaine treatment. For example, 38% of heroin admissions were among persons aged 18–25 years compared with only 9% of admissions related to smoking cocaine.

Figure 26

Cocaine (Smoked) Treatment Admissions by Age Group, Louisiana (n=4,608)

Treatment Episode Data Set, 2001

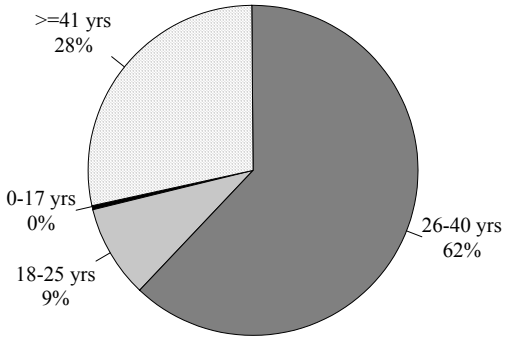
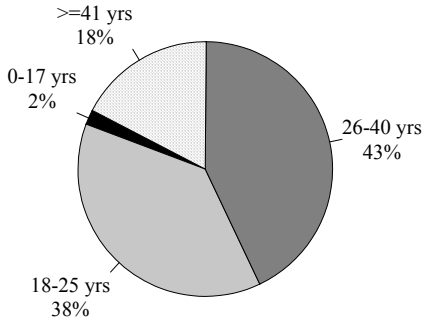


Figure 27

Heroin-related Treatment Admissions by Age Group, Louisiana (n=428)

Treatment Episode Data Set, 2001



HETEROSEXUAL POPULATIONS

Direct Measures of Risk Behavior

Among heterosexuals, the following measures of risk behavior are available in Louisiana to provide important information on factors that may affect the risk of acquiring or transmitting HIV infection:

- number of sex partners and frequency of condom use or unprotected sex (Tables 19 and 20 and Figures 29 and 30)
- substance use, including injection drug use (Figure 31)
- exchanging money or drugs for sex

HITS, BRFSS, SOS, and YRBSS provide information on risk behavior related to sexual activity in heterosexual populations. (For a more detailed description of these data sources, including strengths and limitations, see Appendix A.) HITS is an anonymous, cross-sectional survey of populations at high risk for HIV infection, including heterosexuals, that was conducted in 3 cities in Louisiana (New Orleans, Baton Rouge, and Monroe) in 2001. Eligible heterosexual adults, recruited in STD clinics, had to be at least 18 years of age, able to give informed consent, and residents of the state for at least 1 year. To be eligible for the heterosexual risk group, a person had to have come to the clinic because of a suspected STD, not have been treated for an STD during the past 90 days, not have been at the clinic because of referral or follow-up, and not have had homosexual sex within the past 12 months.

BRFSS is a state-based random-digit-dialed telephone survey that monitors behavioral risks among the general adult population. A sexual behavior module was added to this survey in 1994, 1995, 1996, 1998, and 2000. The questions in this module, which was for adults (aged 18–49), concerned number of sex partners, condom use, and treatment for STDs. Because BRFSS respondents were contacted by telephone, the data are not representative of households that do not have telephones. In addition, BRFSS surveys the general noninstitutionalized adult population in an area, not just the persons at highest risk for HIV/AIDS. This means that the extent of HIV behavioral risk information collected by the BRFSS questionnaire is limited and that inferences can be made only at the state level.

SOS is a self-administered survey conducted each year by CBOs at 3 sites where they actively conduct street outreach. These sites include areas with high rates of HIV/STDs, drug use, or other high-risk behavior. Respondents were asked about sex partners, history of condom use, drug use, HIV testing history, and exposure to prevention programs. These data represent persons at particularly high risk for HIV and are not generalizable to the general population in the local community.

The Youth Risk Behavioral Surveillance System (YRBSS) distributes a self-administered questionnaire to a representative sample of students in grades 9 through 12 at the state and local level. In Louisiana, the survey is administered at the state level and in Orleans Parish public schools; however, only the survey administered to Orleans Parish high school students includes questions related to sexual behavior. In 1999, the survey was conducted in the City of New Orleans school system to obtain information on health behavior and risk behaviors, including sexual behavior and drug-use behavior. Students in New Orleans schools were asked whether

they had sexual intercourse during the past 3 months and whether they had sexual intercourse with 4 or more partners in their lifetime. Respondents who had sexual intercourse within the past 3 months were asked whether they had used a condom during the most recent intercourse and whether they had drunk alcohol or used drugs before the most recent intercourse. Because this survey is administered in school, students at highest risk may be underrepresented because they may be more likely to be absent from school or to drop out of school, especially those in upper grades.

Number of Sex Partners and Frequency of Condom Use or Unprotected Sex

In the general population surveyed by BRFSS, almost all (96%) persons who reported that they had been sexually active at any time during the past 5 years had been sexually active during the past 12 months. Overall, only 13% of the general population aged 18–49 had had 2 or more sex partners during the past year (Table 19). Larger proportions of males (17%), younger age groups (20% among persons aged 18–24), and blacks (19%) had 2 or more sex partners.

Table 19. Sexual risk behavior of persons aged 18–49 years in the general population, Behavioral Risk Factor Surveillance System, 2001

	≥2 Partners, %[a] (n = 862)	Condom use, %[b] (n = 117)
Overall	13	56
Sex		
Male	17	63
Female	10	45
Age group (yrs.)		
18-24	20	55
25-34	16	56
35-44	10	57
≥ 45	6	55
Race/ethnicity		
Black, not Hispanic	19	52
White, not Hispanic	10	56
Other	11	86

[a]All respondents, past 12 months.
[b]Respondents with ≥2 partners during past 12 months.

Overall, in BRFSS, 56% of persons with 2 or more partners during the past year had used a condom during their most recent sexual encounter. Condom use was lowest among women (45%) and blacks (52%); however, it did not differ much according to age group.

The percentages of condom use by persons with 2 or more sex partners were similar in BRFSS (56%) and SOS (58%) (Tables 19 and 20). However, females and youth in the SOS reported higher rates of condom use.

In general, high-risk heterosexual behavior (i.e., having 2 or more sex partners during the past 12

months) was nearly 5 times higher in SOS than in BRFSS (60% vs. 13%) (Tables 19 and 20). The differences between BRFSS and SOS in the proportions of groups that reported high-risk heterosexual behavior were greatest among whites (10% in BRFSS vs. 67% in SOS) and females (10% in BRFSS vs. 49% in SOS). Having multiple sex partners was only about 3 times more common among blacks surveyed in SOS than among blacks surveyed in BRFSS. These results indicate that in street outreach programs, specific groups would probably benefit more from specifically focused interventions.

In SOS, condom use among persons with 2 or more sex partners remained stable during 1997–2001 (data not shown).

Table 20. Sexual risk behavior in high-risk populations, Street Outreach Survey, 2001

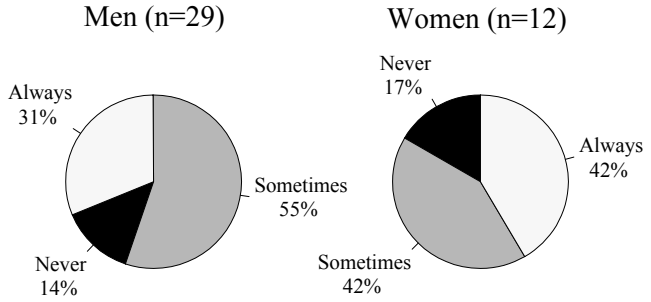
	≥2 Partners,[a] % (n = 5,655)	Condom use, most recent sex,[b] % (n = 3,359)
Overall	60	58
Sex		
Male	69	61
Female	49	55
Age group (yrs.)		
≤ 19	63	65
20–24	64	57
25–29	68	59
30–34	58	51
≥ 35	47	49
Race/ethnicity		
Black, not Hispanic	59	60
White, not Hispanic	67	51

[a]All respondents, past 12 months.
[b]Respondents with ≥2 partners during past 12 months.

The women interviewed in HITS (≥ 18 years of age, at STD clinics) seemed to be at greater risk of having had 2 or more sex partners during the past 12 months (67%), compared with those surveyed in SOS (49%). Similar proportions of men in both surveys reported having had 2 or more sex partners (HITS, 69%; SOS, 69%). Of persons in HITS, 17% of the women and 40% of the men had had *4 or more* sex partners during the past 12 months. (Data for these HITS results are not shown.)

Of the heterosexuals surveyed in HITS, 67% of the men and 43% of the women reported having had at least 1 casual sex partner during the past 12 months (data not shown). Of those with at least 1 casual sex partner, 20% of the men and 31% of the women reported not knowing the HIV status of their most recent sex partner (data not shown). Moreover, most of the persons interviewed indicated that they did not always use condoms with their casual sex partners (69% of men sometimes/never vs. 59% of women sometimes/never) (Figure 28). Of the STD clinic patients, 14% of men and 17% of women *never* used condoms during sex with their casual partners.

Figure 28
Condom Use with Casual Sex Partners Among Heterosexuals at STD Clinics
Louisiana HIV Testing Survey, 2001



Of New Orleans high school students, 24% reported in 1999 that they had had sexual intercourse with 4 or more persons in their lifetime, compared with 15% of high school students nationwide. Reports of 4 or more lifetime partners were 3.4 times higher among male students than among female students (Figure 29). The proportion who had had sexual intercourse with 4 or more partners increased with age, as shown in the linear increase by grade.

Although a higher proportion of New Orleans students (43%), compared with students nationwide (36%), reported having had sexual intercourse during the past 3 months (data not shown) more New Orleans students reported condom use during most recent intercourse (Figure 30). In 1999, more than 60% of female students and 75% of male students said they had used a condom during their most recent sexual intercourse. The largest proportion of condom users was 9th graders (81%); by 12th grade, the proportion declined to 59%. This decline was observed nationally as well.

Figure 29
Percentage of High School Students with 4 or More Lifetime Sex Partners
Youth Risk Behavior Surveillance Survey, 1999

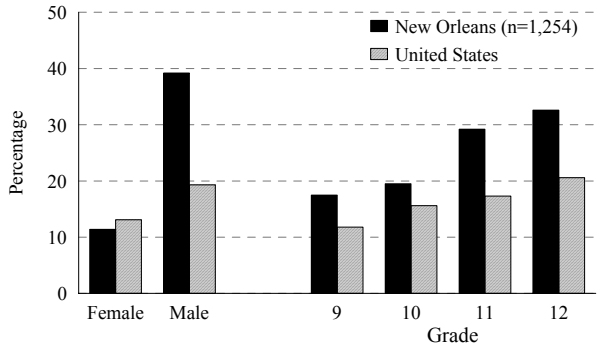
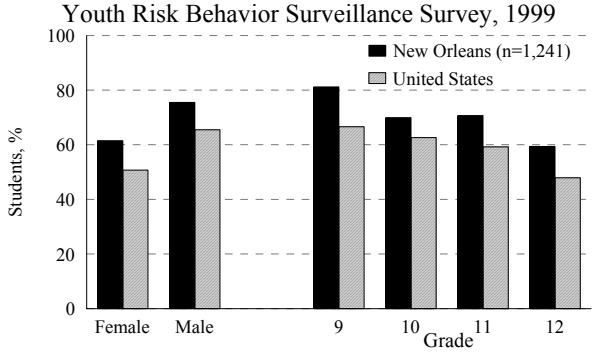


Figure 30
Condom Use During Most Recent Sex Among High School Students Having Sex During Past 3 Months
Youth Risk Behavior Surveillance Survey, 1999



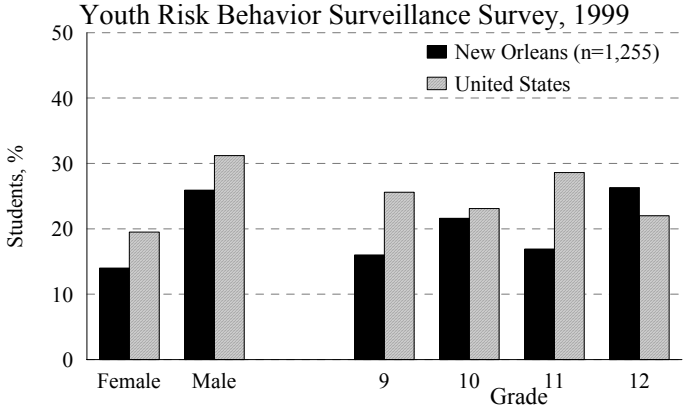
Substance Use

Of New Orleans students who had had sexual intercourse during the past 3 months, 20% reported having drunk alcohol or used drugs before their most recent sexual intercourse. A higher proportion of male students, compared with female students, said that they had drunk alcohol or used drugs before intercourse (26% vs. 14%); however, the proportions of male and female students who reported substance use were 5% lower than the proportions nationwide (Figure 31). The use of substances before sexual intercourse increased from 15% among 9th graders to 26.3% among 12th graders, but the increase did not follow a linear pattern. In addition, although alcohol and drug use were less common among New Orleans students in grades 9–11 compared with national percentages, the proportion of New Orleans 12th graders who reported substance use was larger compared with 12th graders nationwide.

Figure 31

Alcohol or Drug Use Before Most Recent Sex Among High School Students Having Sex During the Past 3 Months

Youth Risk Behavior Surveillance Survey, 1999



In the HITS study, 43% of respondents reported having ever used drugs to get high; nearly all (97%) also reported that they had used drugs during the past year. A small proportion (4%) reported having injected drugs. Of those with a history of injection drug use, only two thirds were considered current IDUs (i.e., persons who had injected drugs during the past year). Overall, 5% of the respondents reported having exchanged money or drugs for sex during the past 12 months.

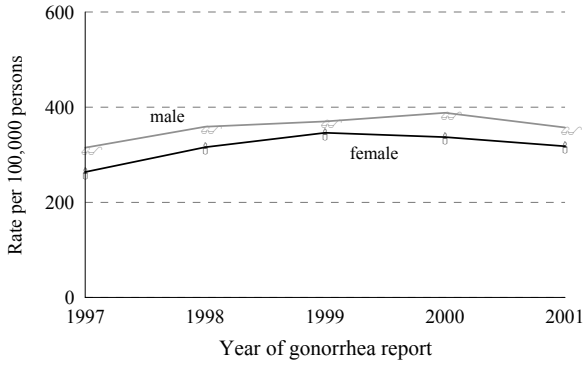
Indirect Measures of Risk Behavior

STD surveillance data and vital statistics data on pregnancy rates among teenagers provide information that may help to identify the potential occurrence of high-risk heterosexual behavior. Although increases in STD or teen pregnancy rates do not directly indicate that HIV exposure is increasing, these measures may indicate an increase in unprotected sex.

Figure 32

Trends in Gonorrhea Rates, by Sex

Louisiana, 1997-2001



Gonorrhea

During 1997–2001, gonorrhea rates for males were consistently higher than those for females (Figure 32). Rates for both

males and females increased during that period. Although gonorrhea rates for blacks were approximately 25 times greater than those for whites, rates for both groups increased from 1997 through 2001 (Figure 33).

Gonorrhea rates were highest for persons aged 20–29 years, followed by persons aged 13–19 (Figure 34). In 2001, gonorrhea rates were highest in Region 7 (Shreveport), followed closely by Region 1 (New Orleans). Although gonorrhea rates in all regions generally decreased from 2000 to 2001, rates in the New Orleans region seem to be increasing (Figure 35).

Figure 33

Trends in Gonorrhea Rates, by Ethnicity

Louisiana, 1997-2001

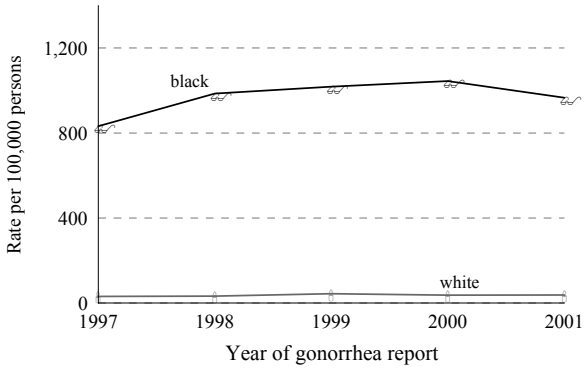


Figure 34

Trends in Gonorrhea Rates, by Age Group

Louisiana, 1997-2001

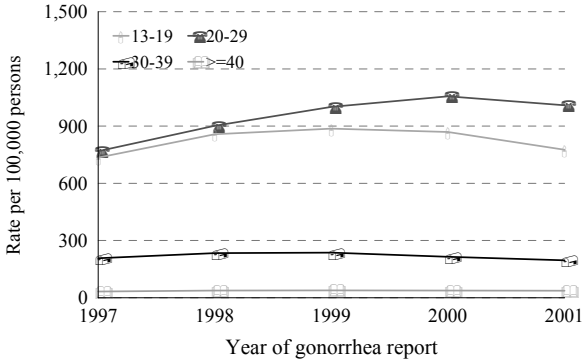
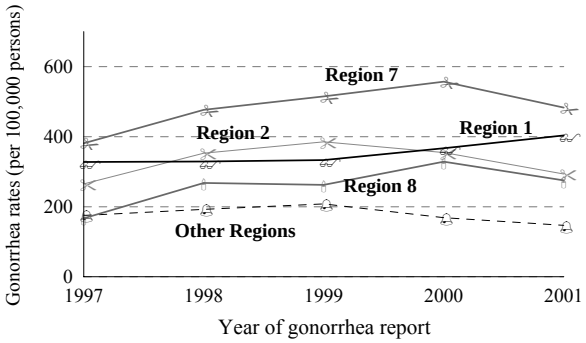


Figure 35

Trends in Gonorrhea Rates, by Public Health Region

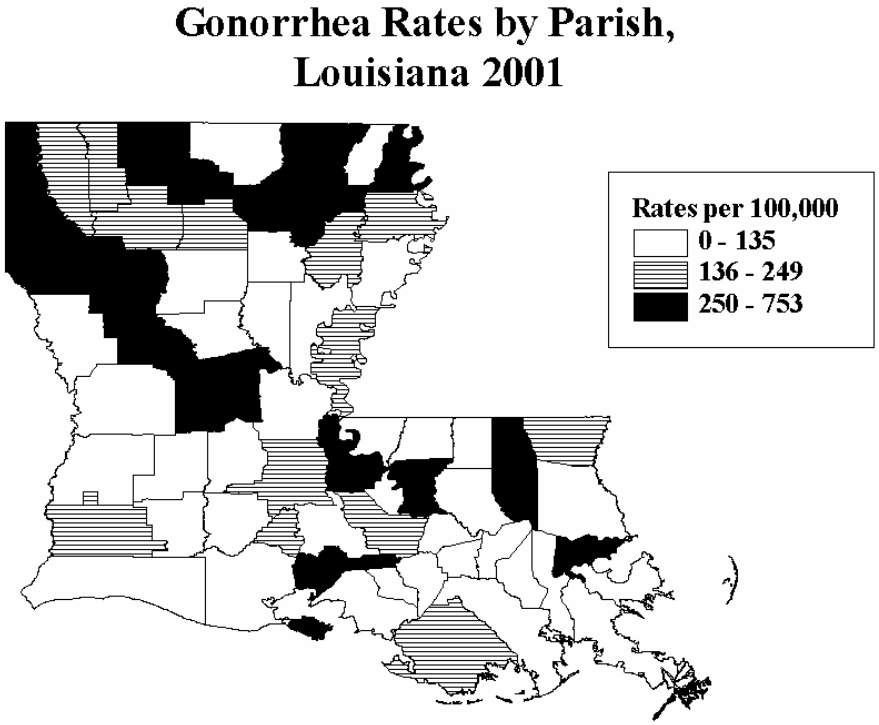
Louisiana, 1997-2001



In 2001, new cases of gonorrhea were diagnosed in every parish in the state: 16 parishes had more than 250 new gonorrhea cases per 100,000 persons in the parish (Figure 36).

The Shreveport region had the highest concentration of new gonorrhea cases: 5 of the 9 parishes had more than 250 new cases. Caddo Parish had the highest gonorrhea case rate of all parishes in the state (753 cases/100,000 persons), followed closely by Orleans Parish (715 cases/100,000 persons).

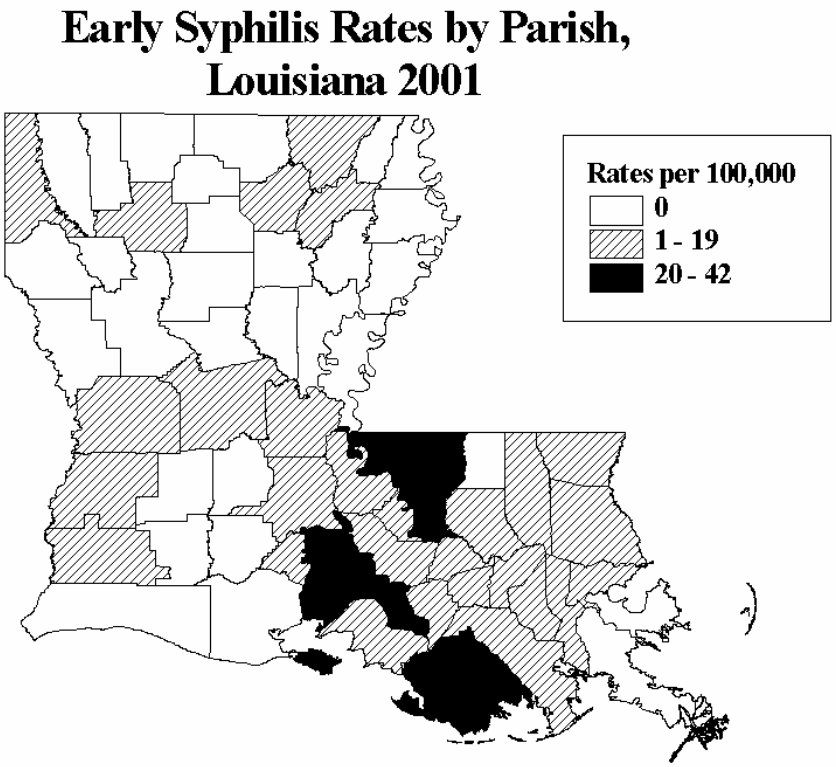
Figure 36



Syphilis

In 2001, a total of 367 persons statewide were reported with early syphilis (primary, secondary, or early latent), which represented a 17% decrease from the number of cases reported in 2000. Cases were reported in 33 of the 64 parishes and were concentrated in the southeastern part of the state. Seven parishes reported more than 20 cases of early syphilis per 100,000 residents (Figure 37).

Figure 37



During 1998–2001, the rates of primary and secondary syphilis were higher for males than for females (Figure 38). However, syphilis rates for males and females have decreased significantly since 1998. This decrease may be due in part to enhanced outreach, screening, and partner notification, which are part of Louisiana's CDC-funded Syphilis Elimination Project.

Figure 38

Trends in Syphilis Rates, by Sex

Louisiana, 1997-2001

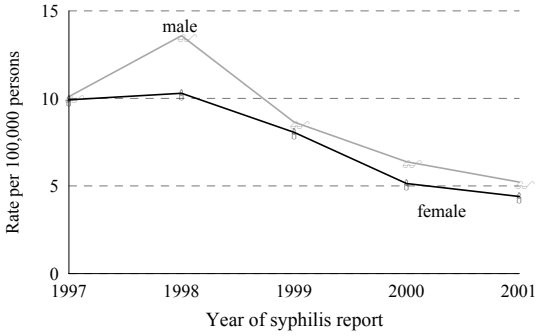
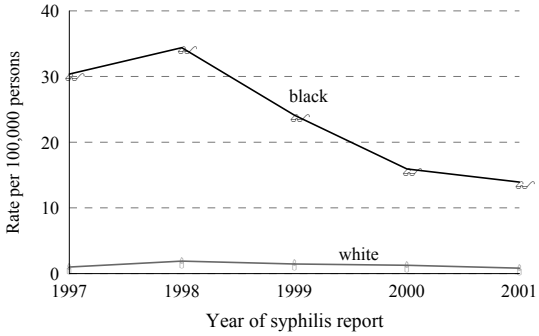


Figure 39

Trends in Syphilis Rates, by Ethnicity

Louisiana, 1997-2001



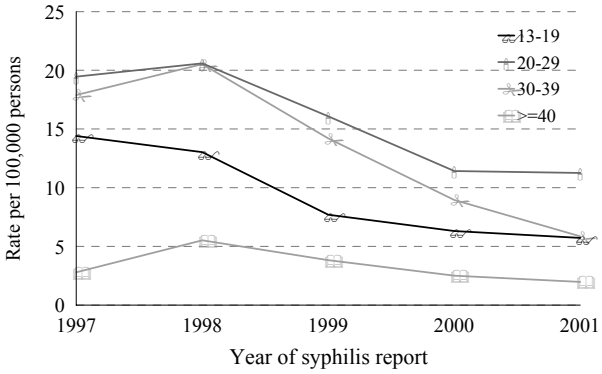
Historically, the rates of syphilis in Louisiana have been much higher for blacks than for whites; however, the disparity in rates has narrowed in recent years (Figure 39). In 1997, rates were 31 times higher for blacks than for whites. In 2001, rates were 17 times higher for blacks. Rates in both groups decreased during 1999–2001.

Syphilis rates were highest for persons aged 20–29 years and lowest for persons aged 40 or more. Rates for persons in all age groups decreased from 1998 through 2001 (Figure 40).

Figure 40

Trends in Syphilis Rates, by Age Group

Louisiana, 1997-2001



Pregnancy Rates for Teenagers

During 1996–2000, overall pregnancy rates for teenagers decreased 6% (data were not available for 2001). However, in 2000, the pregnancy rate of 62.5 per 1,000 in Louisiana was still well above the national rate of 48.5 per 1,000. The pregnancy rate has decreased more for white teenagers (8%) than for black teenagers (5%). Pregnancy rates for black teenagers continue to be twice as high as rates for white teenagers.

PERINATALLY EXPOSED INFANTS

As of December 31, 2001, an estimated 1,577 infants have been born in Louisiana to women with HIV. Of these infants, 16% were infected with HIV perinatally (i.e., through mother-to-child transmission). Each year, perinatal transmission accounts for most of the pediatric HIV cases in Louisiana. In 2001, perinatal transmission accounted for 100% of all HIV cases in children under the age of 13.

The number of infants born annually to HIV-infected mothers has steadily increased as more women are living with HIV/AIDS. In 2001, after delays in reporting were accounted for, approximately 184 HIV-exposed infants were born in Louisiana (Figure 41). Although the numbers of HIV-exposed infants has increased, perinatal transmission rates have decreased (See Figure 12); both of these trends have been due in large part to the increased use of antiretroviral therapy. In 2001, 94% of HIV-positive mothers had received antiretroviral therapy during pregnancy or during labor and delivery. (Note: This percentage may be an overestimate of antiretroviral use because not all cases of HIV exposure have been reported to the Office of Public Health. Cases not yet reported are more likely to be associated with unknown infection status at the time of delivery, hence, with the absence of antiretroviral medications for the mother.)

Nearly half (41%) of the women with HIV who gave birth in recent years have been 20–24 years of age (Figure 42). Almost all (93%) were black.

Figure 41

Antiretroviral Therapy (ART) During Pregnancy or Labor and Delivery

Louisiana, 1993-2001

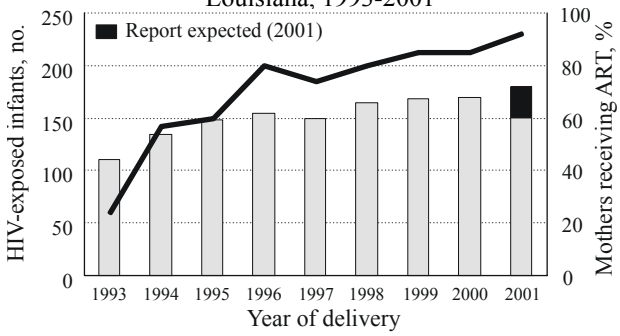
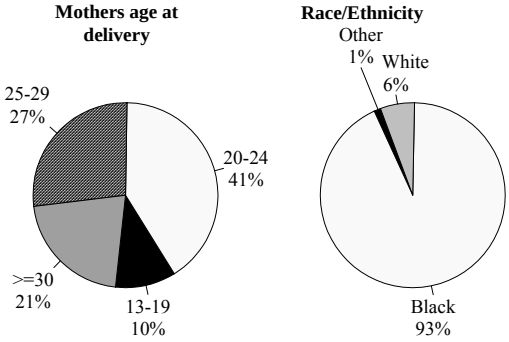


Figure 42

Infants Born to Mothers with HIV Infection, by Age and Race/Ethnicity (N=498)

Louisiana, 1999-2001



Among mothers whose mode of HIV exposure has been identified, most had contracted HIV infection through heterosexual activity; approximately 1 in 5 had contracted HIV through injection drug use (data not shown). HIV infection in nearly all mothers (96%) had been diagnosed before delivery, which maximizes the opportunities for antiretroviral intervention (Figure 43).

However, HIV infection had been diagnosed in 59% of the mothers before they became pregnant. Although some of these pregnancies may represent informed choices, others may represent continued unprotected sexual activity and the need for appropriate prevention interventions.

Geographically, most births to HIV-positive mothers occur in Regions 1 and 2 (the New Orleans and Baton Rouge regions); however, births to HIV-positive mothers have occurred in all parts of the state (Figure 44).

Figure 43
Infants Born to Mothers with HIV Infection, by Timing of Diagnosis for Mother (N=498)
Louisiana, 1999-2001

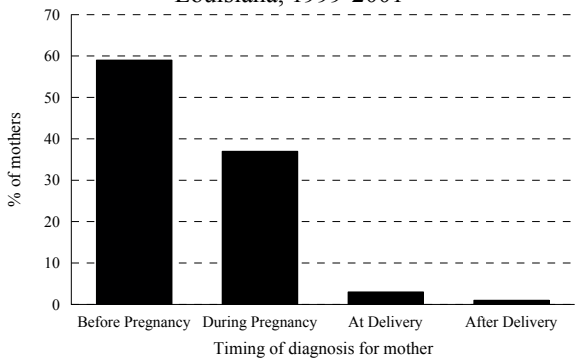


Figure 45 highlights HIV prevalence among black women who gave birth, as most HIV-exposed births (93%) occur in this population. Although Region II accounts for a smaller number of births to HIV-infected mothers than Region I (Figure 44), births to HIV-positive mothers in Region II made up a much higher proportion of all live births to black women than anywhere else in the state. In 2000, in the Baton Rouge region, approximately 1 in 63 black women aged 25–29 who gave birth had HIV infection.

Figure 44
Infants Born to Mothers with HIV Infection, by Region (N=655)
Louisiana, 1997-2000

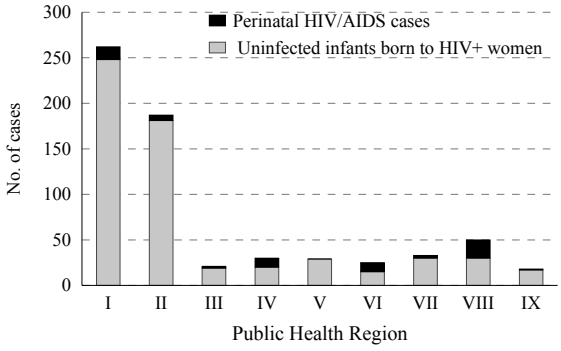
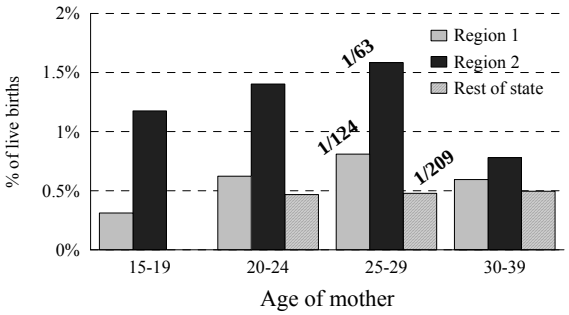


Figure 45
Percentage of Live Births to HIV-Infected Black Women
Louisiana, 2000



HIV TESTING

Data on HIV testing patterns provide information that is helpful in focusing HIV counseling and testing programs. The data may also be used to help identify potential gaps in HIV surveillance data, which represent only persons who have been tested for HIV infection. HIV testing data are available from surveys conducted in the general population (BRFSS) and in high-risk populations (HITS and SOS), and from publicly funded HIV counseling and testing sites.

Testing in the General Population (BRFSS)

Overall in 2001, less than half (46%) of the persons surveyed in BRFSS reported having ever been tested for HIV (Table 21). Persons who reported having had 2 or more sex partners during the past 12 months were more likely to have been tested for HIV than persons (particularly women) with only 1 partner.

Whites were less likely to have been tested than blacks or persons of other racial/ethnic groups.

In the age group 18–24 years, persons with 2 or more sex partners during the past 12 months were least likely to have been tested (only 37% had ever been tested). In contrast, among all persons in this age group (including those at lower risk), the reported rate of HIV testing during the past 12 months was higher than in the other age groups (48% had been tested). These data may indicate that HIV screening should be focused on persons aged 18–24.

Table 21. HIV testing in the general population, Behavioral Risk Factor Surveillance System, Louisiana, 2001

	Ever tested, %		Tested, past 12 months, %
	Total[a] (n = 5,011)	≥ 2 Partners[b] (n = 117)	Total[a] (n = 1,942)
Tested	46	59	36
Sex			
Male	45	49	34
Female	47	76	38
Age group (yrs.)			
18–24	49	37	48
25–34	62	70	41
35–44	47	67	30
≥ 45[a]	33	65	27
Race/ethnicity			
Black, not Hispanic	56	67	43
White, not Hispanic	41	50	31
Other	49	86	36

[a]Includes persons aged 18–64 years.

[b] Persons with ≥2 partners includes persons aged 18-49.

Among men surveyed in BRFSS, the most common reason for being tested was a routine checkup; among women, pregnancy was the most common reason (Table 22). Only 8% of persons reported that they had been tested to find out whether they were infected. Among persons aged 18–24 years, pregnancy was the most common reason for being tested; most persons in all other age groups were tested during a routine checkup. More blacks, compared with persons of other races/ethnicities, had been tested during a routine checkup.

Table 22. Six most commonly listed reasons for HIV testing, general population (n = 678), Behavioral Risk Factor Surveillance System, Louisiana, 2001

	Routine checkup, %	Pregnancy %	To learn HIV status, %	Job-related %	Hospitali-zation, %	Other %
Overall	30	18	8	7	7	7
Sex						
Male	35	1	8	9	6	9
Female	25	32	8	6	8	6
Age group (yrs.)						
18–24	30	36	10	4	1	6
25–34	26	22	9	8	4	9
35–44	25	9	6	7	11	4
≥ 45	41	0	6	10	15	9
Race						
Black, not Hispanic	39	19	10	7	4	7
White, not Hispanic	23	19	8	8	9	7
Other	28	11	5	9	3	12

Note. Percentages do not add to 100% because less commonly listed reasons are not included.

Most BRFSS respondents had been tested most recently at a private physician's office or an HMO (43%) (Table 23). The second most common location was a hospital (23%). Responses did not differ by race, although slightly more blacks, compared with other racial groups, had been tested most recently at a hospital rather than at a physician's office.

Table 23. Locations of HIV testing, general population (n = 670), Behavioral Risk Factor Surveillance System, Louisiana, 2001

	Private physician or HMO, %	Hospital or outpatient clinic,[a] %	Clinic or counseling & testing site,[b] %	Military site, %
Overall	43	23	17	6
Sex				
Male	40	22	13	12
Female	45	24	21	1
Age group (yrs.)				
18–24	40	18	31	4
25–34	45	21	18	7
35–44	36	28	10	8
≥ 45	50	29	5	4
Race/ethnicity				
Black, not Hispanic	36	28	25	4
White, not Hispanic	48	20	11	6
Other	43	22	12	13

Note. HMO, health maintenance organization.
[a]Includes emergency department.
[b]Includes health department or AIDS clinic, family planning clinic, STD clinic, community health clinic, and other public health clinic.

Testing in High-Risk Populations (HITS and SOS)

In 2001, HITS was conducted among persons at increased risk for HIV infection (IDUs, clients at STD clinics, and MSM) in New Orleans, Baton Rouge, and Monroe. More of the persons surveyed by HITS reported that they had been tested for HIV than had persons in the general population. More MSM (82%) indicated that they had been tested than had IDUs (55%) or heterosexual clients at STD clinics (60%) (Table 24). More female IDUs and heterosexuals said they had been tested than had male heterosexuals or IDUs. A higher proportion of white MSM reported that they had been tested than had black MSM. However, among IDUs, more blacks responded that they had been tested.

Table 24. Percentages of high-risk populations ever tested for HIV, HIV Testing Survey, Louisiana, 2001

	Men who have sex with men, % (n = 82)	Injection drug users (n = 85)	Heterosexual STD clients, % (n = 75)
Overall	82	55	60
Sex			
Male	82	52	51
Female	n/a	58	73
Race/ethnicity			
Black, not Hispanic	73	58	57
White, not Hispanic	86	43	100

Note. STD, sexually transmitted disease; n/a, not applicable.

Overall, 45% of high-risk persons surveyed in SOS reported that they had been tested for HIV during the past 12 months (Table 25), a percentage that is higher than that of the general population (36%) in the BRFSS survey. More of the women in SOS had been tested than had men. Testing rates were the same for whites and blacks.

Table 25. HIV testing of high-risk persons (n = 5,655), Street Outreach Survey, Louisiana, 2001

	Tested, past 12 months, %
Overall	45
Sex	
Male	43
Female	47
Race/ethnicity	
Black, not Hispanic	45
White, not Hispanic	45

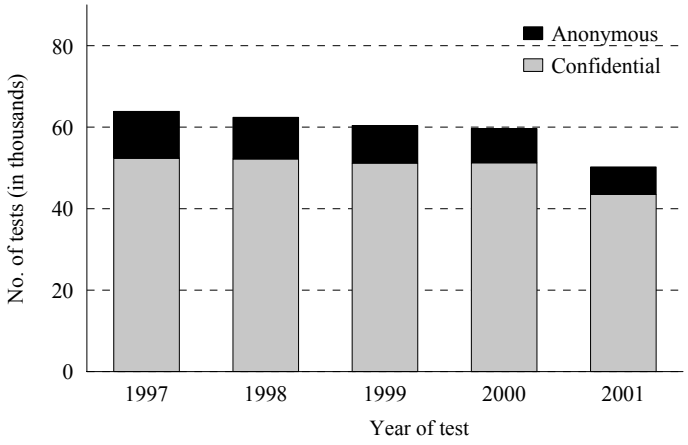
Testing at Publicly Funded Counseling and Testing Sites (Louisiana Counseling and Testing Program)

Currently, Louisiana has more than 150 organizations that provide publicly funded HIV counseling and testing services. These sites include Louisiana Department of Health and Hospitals clinic sites, including Office for Addictive Disorder clinics (drug treatment centers), Office of Public Health clinics (STD, family planning, prenatal and tuberculosis clinics); CBOs; community health centers; and mobile test sites. The number of HIV tests conducted each year at publicly funded counseling and testing sites decreased steadily, from a high of 63,849 tests in 1997 to 50,211 tests in 2001 (Figure 46). This decline in the number of tests may be due to diverse factors such as the implementation of risk-based testing criteria for clinic clients, decreases in funding, decreases in clinic census, and declines in STD rates.

Figure 46

Trends in HIV Counseling and Testing, by Type of Testing

Louisiana, 1997-2001



Louisiana Office of Public Health clinics offer both anonymous and confidential testing; however, most of the tests have been confidential. The proportion of tests that were anonymous decreased from 20% in 1997 to 13% in 2001. The characteristics of persons tested anonymously differ from those tested confidentially. Most of the persons who were tested anonymously were

white or male. More of the persons who were tested confidentially were female or black. Also, more older persons were tested anonymously; more younger persons were tested confidentially. However, this pattern may be due to the fact that more of the younger persons seeking an HIV test are black or female, whereas more of the older persons may be white or male. More than three fourths of all anonymous tests in 2001 were performed in CBOs (51%) or drug treatment centers (26%).

Overall, in 2001, 57% of the tests were provided for females, 61% for blacks, and 35% for whites. Most of the tests were performed for persons aged 13–29 years (65%). Nearly half (44%) of the HIV tests were performed in STD clinics, and another 14% were performed in CBOs (Table 26). The demographic characteristics of the persons tested were relatively stable during 1997–2001.

Table 26. HIV Counseling and Testing data, by demographics and type of test, Louisiana, 2001

	Confidential		Anonymous		Total	
	No.	%	No.	%	No.	%
Sex						
Male	17,004	39	3,984	59	20,988	42
Female	26,471	61	2,384	35	28,855	57
Unknown	0	0	368	6	368	1
Race/ethnicity						
White, not Hispanic	14,084	32	3,515	52	17,599	35
Black, not Hispanic	27,943	64	2,544	38	30,487	61
Hispanic	828	2	134	2	962	2
Other	610	1	115	2	725	1
Age (yrs.)						
<5	47	<1	398	6	445	1
5–12	77	<1	19	<1	96	<1
13–19	10,480	24	596	9	11,076	22
20–29	19,550	45	2,269	34	21,819	43
30–39	7,416	17	1,768	26	9,184	18
40–49	4,180	10	1,212	18	5,392	11
≥ 50	1,724	4	473	7	2,197	4
Unknown	1	<1	1	<1	2	<1
Public health region						
I	11,097	26	2,522	37	13,619	27
II	4,992	11	996	15	5,988	12
III	3,492	8	715	11	4,207	8
IV	3,955	9	1,098	16	5,053	10
V	3,296	8	151	2	3,447	7
VI	3,120	7	81	1	3,201	6
VII	3,840	9	576	9	4,416	9
VIII	7,124	16	270	4	7,394	15
IX	2,559	6	327	5	2,886	6
Site						
STD clinic	21,329	49	875	13	22,204	44
Community-based organization	3,599	8	3,464	51	7,063	14
Family planning clinic	5,381	12	71	1	5,452	11
Drug treatment center	3,318	8	1,753	26	5,071	10
Prenatal, OB/GYN	4,855	11	65	1	4,920	10
TB clinic	2,443	6	44	1	2,487	5
Parish health clinic	828	2	76	1	904	2
Community health clinic	399	1	157	2	556	1
Field visit	381	1	155	2	536	1
Prison or jail	5	<1	0	0	5	<1
Other	937	2	76	1	1,013	2
Total	43,475	100	6,736	100	50,211	100