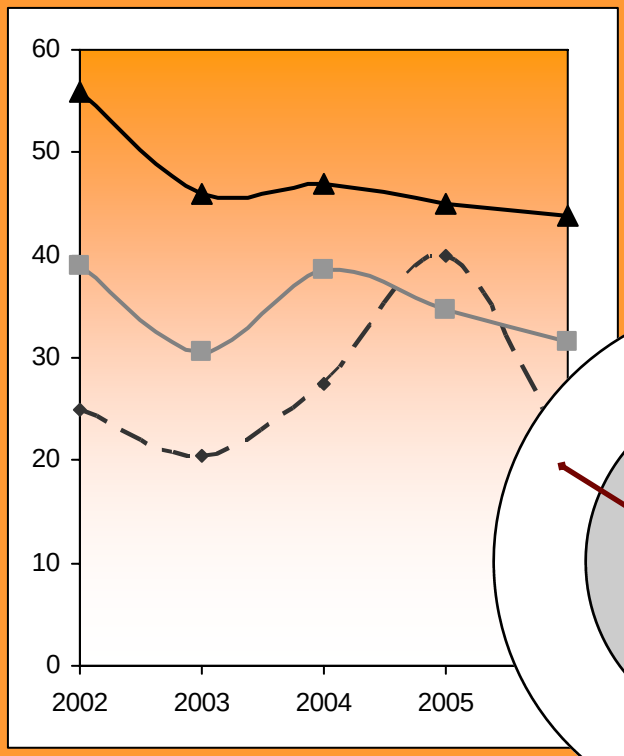
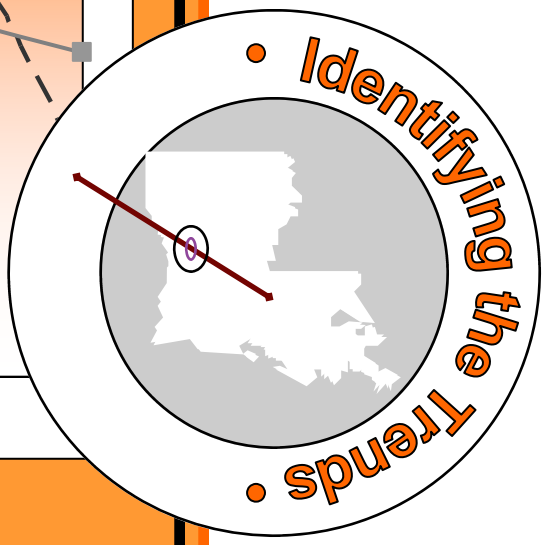
Louisiana HIV/AIDS

2005/2006





Annual Report & Epidemiologic Profile

LOUISIANA HIV/AIDS ANNUAL REPORT AND EPIDEMIOLOGIC PROFILE

2005/2006

Louisiana Department of Health and Hospitals
Office of Public Health
HIV/AIDS Program
1010 Common Street, Suite 1100
New Orleans, LA 70112
(504) 568-7474

www.hiv.dhh.louisiana.gov

Louisiana Office of Public Health

HIV/AIDS Surveillance Program

M. Beth Scalco, LCSW, MPA
HIV/AIDS Program Administrative Director

Amy Zapata, MPH
HIV/AIDS Surveillance Program Manager

Editor/Production:

Debbie Wendell, MPH
William T. Robinson, PhD
Samuel Ramirez, MPH
Jessie Frazier, MPH

HIV/AIDS Surveillance Program:

Tania Bechtel, *Data Manager*
Joseph Foxhood, *Information Systems Developer*
C. Greg Gaines, PhD, *Laboratory Surveillance Coordinator*
Alton Mikkelson, *Systems Administration Support*
Mary Milewski, RN, NNP, MPH, *Perinatal Coordinator*
Samuel Ramirez, MPH, *Epidemiologist/Incidence & Resistance Coordinator*
William T. Robinson, PhD, *Biostatistician*
Josette Russell, *Data Manager*
George Stephens, *System Administrator*
Debbie Wendell, MPH, *Data Management/Analysis Coordinator*

Field Epidemiologists:

Betsy Shepard, MPH, PA-C, *Field Epidemiologist Supervisor*

James Hubbard ..... ***Region 1***
Connie Gordon ..... ***Region 1,3***
Tanya Brown, RHIA ..... ***Region 2***
Cheryl Edney, BS MT(ASCP) ..... ***Region 4,5,6***
Gayle Norris, MA ..... ***Region 7,8***
Gale Terry, LPN ..... ***Region 2,9***

TABLE OF CONTENTS

List of Figures v
List of Tables vi
Overview of HIV/AIDS Surveillance vii
Public Health Regions and MSAs ix

I. EXECUTIVE SUMMARY 1

II. SOCIODEMOGRAPHIC CHARACTERISTICS OF LOUISIANA 2
Summary 3
Demographic Characteristics 4
Socioeconomic Characteristics 6
Estimated Number of Persons Living with HIV/AIDS: New Orleans MSA 7

III. HIV/AIDS TRENDS IN LOUISIANA 8
Overall HIV/AIDS Trends 9
HIV Diagnoses by Mode of Exposure 12
HIV Diagnoses by Race/Ethnicity and Sex 15
HIV Diagnoses by Age Group and Sex 17

IV. GEOGRAPHIC DISTRIBUTION OF HIV/AIDS 18
Geographic Distribution of HIV 19
Trends in New HIV Diagnoses by Region 22

V. AIDS TRENDS 24
National AIDS Trends 25
Louisiana AIDS Trends 26
Mortality 28

VI. HIV TESTING 29
HIV Counseling and Testing Data 31
HIV Testing Delays 32

VII. PERINATAL SURVEILLANCE 33

VIII. OTHER DATA SOURCES 38
Street Outreach Survey 39
Behavioral Risk Factor Surveillance System Survey 40
Unmet Need for Primary Medical Care 41

Technical Notes 42

LIST OF FIGURES

1. New HIV Diagnoses 9
2. Persons Living with HIV/AIDS 9
3. Trends in Exposure Categories 12
4. Trends in Exposure Categories, African Americans 13
5. Trends in Exposure Categories, Whites 13
6. Trends in Exposure Categories, Females 14
7. Trends in Exposure Categories, Males 14
8. Trends in HIV Rates by Race/Ethnicity 15
9. Trends in HIV Rates by Sex 15
10. Trends in HIV Rates Among Females by Race 16
11. Trends in HIV Rates Among Males by Race 16
12. HIV Cases by Age Group and Sex 17
13. Trends in HIV Rates by Age Group 17
14. New HIV Diagnoses and Rates by Region 20
15. New AIDS Diagnoses and Rates by Region 20
16. Persons Living with HIV/AIDS by Parish 21
17. Trends in New HIV Diagnoses by Region 22
18. AIDS Rates Map 25
19. New AIDS Diagnoses 26
20. Trends in AIDS Rates by Sex and Race 26
21. Deaths among Persons with HIV/AIDS 28
22. Death Rates among Females by Race 28
23. Death Rates among Males by Race 28
24. HIV Counseling and Testing Trends 31
25. Babies Born to HIV+ Mothers and Perinatal Transmission Rates 34
26. Timing of Mother's Diagnosis 35
27. Prenatal Care 35
28. Antiretroviral Treatment by Protocol 36
29. Mother's Age at Delivery for Babies Born to HIV+ Mothers 36
30. Babies Born to HIV+ Mothers by Region and Status 37

LIST OF TABLES

1. Distribution of Louisiana Population by Age Group and Sex 4
2. Distribution of Louisiana Population by Race/Ethnicity and Sex 4
3. Distribution of Louisiana Population by Region 5
4. Distribution of Adult Educational Attainment by Sex 6
5. Distribution of Persons Living Below the Poverty Level by Sex and Age Group 6
6. Estimated Number of Persons Living with HIV/AIDS, New Orleans MSA 7
7. Characteristics of Persons Newly Diagnosed with HIV 10
8. Characteristics of Persons Living with HIV and Cumulative Cases 11
9. Louisiana HIV/AIDS Diagnoses and Rates by Region and Parish 19
10. Characteristics of Persons with AIDS in Louisiana 27
11. HIV Counseling and Testing Statistics 30
12. Late HIV Diagnoses 32
13. Sexual Risk Behavior in High Risk Populations 39
14. Sexual Risk Behavior in the General Population 40
15. Unmet Need for Primary Medical Care 41

OVERVIEW OF HIV/AIDS SURVEILLANCE

All state health departments in the United States, including Louisiana, collect information about HIV and AIDS diagnoses among their residents. These activities are supported nationally by the Centers for Disease Control and Prevention (CDC). HIV/AIDS data are used to characterize and forecast the changing epidemic locally, regionally and nationally. Louisiana HIV/AIDS data are summarized quarterly and annually to enable the state's public health system to:

- Assess the risks for HIV infection and develop effective HIV prevention programs;
- Assess the needs of those living with HIV/AIDS and direct medical and supportive resources appropriately;
- Develop novel surveillance methods to allow for a more current estimate and characterization of HIV/AIDS risks and needs;
- Justify necessary federal and state funding to support continued HIV/AIDS prevention, services, and surveillance activities.

The following report includes all HIV/AIDS data for Louisiana residents reported to the Louisiana Office of Public Health, HIV/AIDS Program (HAP) for the reporting period ending December 31, 2006. Consistent with HIV/AIDS surveillance activities in other states, the Louisiana HIV/AIDS surveillance system actively maintains an extensive statewide network of reporting sites in public, private, inpatient, outpatient, clinical, and laboratory settings.

The HIV/AIDS Surveillance System

Adult and Pediatric Case Ascertainment

In Louisiana, AIDS became a reportable condition in 1984, at which time the Louisiana Office of Public Health established a surveillance system to track newly diagnosed AIDS cases. In 1993, HIV (non-AIDS) cases became reportable. Standardized case report forms are used; these forms collect sociodemographic information, mode of exposure, laboratory and clinical information, vital statistics (i.e., living or dead), and referrals for treatment or services. All cases of perinatal exposure to HIV are investigated. The maternal and pediatric medical records are reviewed to assess testing and treatment received. The Surveillance Program attempts to follow up on all exposed infants until their infection status can be determined (or up to 2 years) and to document prophylactic treatments prescribed.

HIV infection reporting is estimated to be >85% complete for persons who have tested positive for HIV. HIV data may underestimate the level of recently-infected persons because some infected persons either do not know they are infected or have not sought testing. Persons who have tested positive in an anonymous test site and have not sought medical care, during which they would be confidentially tested, are not included in HIV surveillance statistics. Therefore, HIV data can only provide minimum estimates of the number of persons living with HIV. Additionally, new cases are reported at all points along the clinical spectrum of disease when first diagnosed. Consequently, HIV infection data may not necessarily represent the characteristics of persons who have been recently infected with HIV.

HIV Incidence and Variant, Atypical and Resistant HIV Surveillance

HAP, with support from the CDC, is taking part in the development of a national surveillance system to estimate HIV incidence and the evolution of drug resistant strains of the virus. In the past, HIV surveillance has been limited to monitoring prevalence—the proportion of individuals with HIV regardless of how long they have been infected. HIV Incidence Surveillance (HIS) monitors the estimated number of persons newly infected, not just newly diagnosed. The objectives of Variant, Atypical and Resistant HIV Surveillance (VARHS) are to monitor the frequency of important antiretroviral resistance mutations, follow the outcomes of those with and without mutations, and measure the prevalence of different HIV-1 viral strains/types. Both surveillance activities use blood left over from HIV-related tests. The test used to assess if an infection is likely to be recent (within 6

months) or long-term (greater than 6 months), is not approved as a diagnostic test, so results are not returned to individuals. The results are only considered to be useful to estimate the number of newly-acquired infections on a statewide, regional, or national basis, and to track population-level transmission patterns of HIV. The results of resistance tests, however, are useful in understanding the epidemic and may also have a benefit to the individual's medical care. As such, the results of any resistance tests completed by the health department may be returned to a patient's medical provider if the health department has received written permission from the patient to do so. As the HIS and VARHS systems develop, they will provide very important information for planning and evaluating programs to prevent HIV transmission and assist persons living with HIV.

Behavioral Surveys

Street Outreach Surveys (SOS)

Street outreach surveys have been administered by community-based organizations (CBOs) statewide since 1995. The survey is a one-page, self-administered questionnaire distributed by outreach workers in areas where they actively conduct street outreach activities. Sites are in neighborhoods with one or more of the following characteristics: high rates of HIV/STDs, high levels of drug use, presence of persons who exchange sex for money or drugs. Respondents are asked about sexual 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.

Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS is a state-based random digit-dialed telephone survey that monitors state-level prevalence of the major behavioral risks among adults associated with premature morbidity and mortality. Respondents to the BRFSS questionnaire are asked a variety of questions about their personal health behaviors and health experiences. A sexual behavior module was added to this survey in 1994-96, 1998 and 2000-03. In this module, adults (ages 18-49) are asked about their number of sexual partners, condom use, and treatment for STDs. Data from the BRFSS survey are population-based; thus, estimates about testing attitudes and practices can be generalized to the adult population in Louisiana, not just to persons at highest risk for HIV/AIDS. However, because BRFSS respondents are contacted by telephone, the data are not representative of households without a telephone.

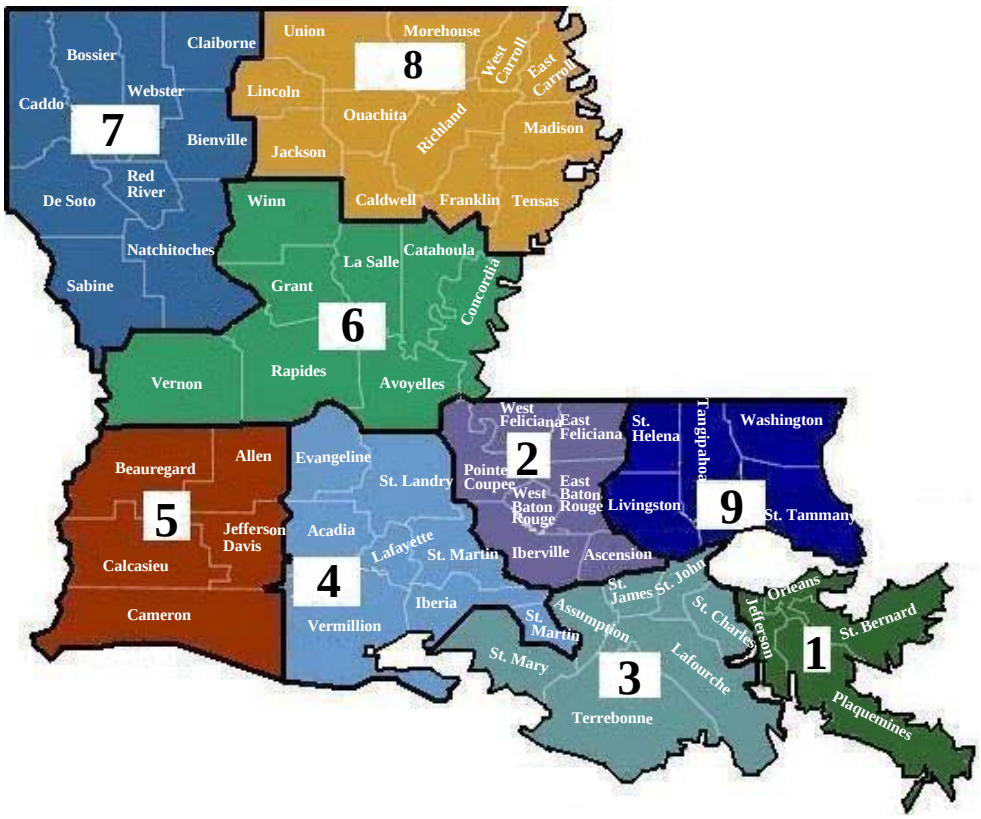
HIV Counseling and Testing Data

The Louisiana Office of Public Health HIV/AIDS Program provides HIV counseling and testing at approximately 178 different sites across Louisiana. These sites include community-based organizations, drug treatment centers, parish health units, and STD, prenatal, family planning, and tuberculosis clinics. In 2006, 91% of persons were tested confidentially.

STD Surveillance

The Sexually Transmitted Disease (STD) Program offers STD clinical services, including testing, diagnosing and treating persons with STDs. The program conducts statewide surveillance to determine STD incidence and monitor trends. In addition, the program conducts partner counseling and referral services for persons with HIV and/or syphilis in order to reduce the spread of HIV and STDs. In Louisiana in addition to HIV/AIDS, chancroid, chlamydia, gonorrhea, lymphogranuloma venereum and syphilis are reportable STDs.

Geographic Guide to Louisiana Public Health Regions and Metropolitan Statistical Areas (MSA)



Public Health Regions

1: NEW ORLEANS
Jefferson, Orleans, Plaquemines, St. Bernard

2: BATON ROUGE
Ascension, E. Baton Rouge, E. Feliciana, Iberville, Pointe Coupee, W. Baton Rouge, W. Feliciana

3: HOUMA
Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, St. Mary, Terrebonne

4: LAFAYETTE
Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, Vermillion

5: LAKE CHARLES
Allen, Beauregard, Calcasieu, Cameron, Jefferson Davis

6: ALEXANDRIA
Avoyelles, Catahoula, Concordia, Grant, La Salle, Rapides, Vernon, Winn

7: SHREVEPORT
Bienville, Bossier, Caddo, Claiborne, De Soto, Natchitoches, Red River, Sabine, Webster

8: MONROE
Caldwell, E. Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, W. Carroll

9: HAMMOND/SLIDELL
Livingston, St. Helena, St. Tammany, Tangipahoa, Washington

Urban Parishes (MSAs)

ALEXANDRIA
Grant Rapides

BATON ROUGE
Ascension Pointe Coupee
E. Baton Rouge St. Helena
E. Feliciana W. Baton Rouge
Iberville W. Feliciana
Livingston

HOUMA/THIBODAUX
Lafourche Terrebonne

LAKE CHARLES
Calcasieu Cameron

LAFAYETTE
Lafayette St. Martin

MONROE
Ouachita Union

NEW ORLEANS
Jefferson St. Charles
Orleans St. John the Baptist
Plaquemines St. Tammany
St. Bernard

SHREVEPORT
Bossier De Soto
Caddo

EXECUTIVE SUMMARY

The HIV/AIDS epidemic continues to have a significant impact on the public health of Louisiana. Although there is still no cure for AIDS, recent advances in treatment have significantly slowed the progression from HIV to AIDS and AIDS to death. As of December 31, 2006, a cumulative total of 26,411 persons were diagnosed with HIV/AIDS in Louisiana, including 297 cases in children under the age of 13.

The following report provides detailed information regarding demographic and risk characteristics of individuals with HIV infection and trends in the epidemic over time. This report includes cases diagnosed through 2006 and reported by August 31, 2007. Some of the most significant trends are highlighted below:

- At the end of 2006, 14,917 persons were living with HIV/AIDS in Louisiana, of whom 7,782 (52%) have been diagnosed with AIDS. There are persons living with HIV in every parish in Louisiana, and this number continues to increase each year, largely because of a decrease in mortality due to more effective drug therapies and a steady number of new infections diagnosed each year.

- In the most recent CDC *HIV/AIDS Surveillance Report* (Vol. 18), Louisiana ranked 5th highest in state AIDS case rates and 12th in the number of AIDS cases reported in 2006. The metropolitan Baton Rouge area ranked 4th and the metropolitan New Orleans area ranked 8th in AIDS case rates in 2006 among the large metropolitan areas in the nation.

- During 2005, 979 persons were newly diagnosed with HIV in Louisiana, and in 2006, 1,052 persons were diagnosed. New HIV diagnoses occurred in 58 of Louisiana's 64 parishes in 2006.

- The Baton Rouge region had both the highest number of new HIV diagnoses and the highest rate of new diagnoses (new cases per 100,000 population) in 2006. Previously, the New Orleans region had always had the highest number of new HIV diagnoses. The decrease in new diagnoses in the New Orleans area was primarily due to the large decline in the population following Hurricane Katrina in August 2005.

- The HIV rate for African Americans continues to be disproportionately high; the rate for African Americans was five times higher than that among whites. Although African Americans make up only 32% of the state's population, 68% of newly-diagnosed HIV cases and 71% of newly-diagnosed AIDS cases were among African Americans in 2006.

- Women represented 32% of new HIV diagnoses in 2006. The HIV rate among men has declined since 1997 but among women has remained relatively stable over time.

- The annual number of new AIDS diagnoses increased from 1999 to 2002, which may have been due to factors such as late testing, limited access to or use of health care services, and limitations of available therapies. From 2002 to 2006, new AIDS diagnoses decreased.

- In 2006, 22% of persons newly diagnosed with HIV had AIDS at the time of their diagnosis, and an additional 16% of persons developed AIDS within six months of their diagnosis. Men, Hispanics, and persons aged 34 and older were most likely to be diagnosed late in the course of their disease.

- Perinatal transmission rates have dropped dramatically from 19% in 1994 to 3.4% in 2003 due to increased screening of pregnant women and increased use of antiretroviral therapy by pregnant women with HIV and their infants. However, in 2004 and 2005 perinatal transmission rates increased (to 4.1% and 6.1% respectively).

- Because of the association between sexually transmitted diseases (STDs) and HIV transmission, testing and treatment of STDs is an important factor in preventing the spread of HIV. Louisiana continues to have very high rates of STDs. In 2006, Louisiana ranked 1st in the nation in primary and secondary syphilis rates (7.6 per 100,000), 3rd in gonorrhea rates (240.6 per 100,000) and 13th in chlamydia rates (395.4 per 100,000) according to the CDC's *2006 STD Surveillance Report.*

SOCIODEMOGRAPHIC CHARACTERISTICS OF THE POPULATION OF LOUISIANA

SUMMARY

Population

In the 2000 census, the total population reported for Louisiana was 4,468,976 persons. In the 2006 estimated census, the total population for the state was 4,287,768 persons, a 4% decrease, which may be due in part to the decrease in population in the New Orleans area following Hurricane Katrina. Louisiana comprises 64 county equivalent subdivisions called parishes. Parish populations ranged from a low of 6,138 persons (Tensas Parish) to 431,361 persons in Jefferson Parish. The Greater New Orleans area (Orleans, Jefferson, Plaquemines, St. Bernard, and St. Tammany Parishes) represented 22% of Louisiana's population. The major parishes in order of descending population were Jefferson, East Baton Rouge, Caddo, St. Tammany, and Orleans. The state is considered rural; however, 79% of its population resides in urban areas. The state has eight metropolitan statistical areas (MSAs), as shown in the map on page ix.

Demographic Composition

According to the 2006 estimated census data, the racial and ethnic composition of the state was estimated to be 64% white, 32% African American, 1% Asian and 0.6% American Indian. Persons of Hispanic origin were estimated to make up 2.9% of the total population.

Age and Sex

In 2006, the median age of Louisiana residents was 35.6 years. More than 13% of the population was younger than 18 years of age; 12% of the population was 65 or older. The proportion of females in the overall population was slightly higher than the proportion of males (52% vs. 49%).

Poverty, Income and Education

In 2006, the median household income in Louisiana was $39,337. According to the 2006 estimates, 19% 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, 28% of all children 18 years or younger in 2006. Of the total number of families, 39% had a female head of household (no husband present), and 14% of all families had incomes below the poverty level. In 2006, Louisiana ranked 46th among states for median family income. In the 2006 estimated census, more than 79.4% of Louisiana residents aged 25 years and older reported educational attainment of high school diploma or higher. The unemployment rate in 2006 was 4% statewide. One of every 5 adults (19–64 years) in Louisiana is uninsured.

Health Indicators

In the 2006 United Health Foundation's *America's Health Rankings* report, Louisiana ranked 50th in overall health. Louisiana had high rates of premature deaths, children in poverty, and persons who lacked health insurance compared to other states.

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 relied on Medicaid to meet their health care needs.

Census Information: A comprehensive, detailed examination of the entire population of Louisiana was last conducted in the year 2000. Data from the 2000 census (www.census.gov) were used for all of the statewide graphs showing rates from 1997-2006. The 2006 estimated census data (factfinder.census.gov) was used to calculate rates for the tables that showed regional data for 2006, since Hurricane Katrina had such a significant impact on the population of the New Orleans area.

DEMOGRAPHIC CHARACTERISTICS

Distribution of the General Population by Age Group and Sex
Louisiana, 2000

Age group (years)	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 up to 100% because of rounding.

- In 2000, the population of the state of Louisiana was 4,468,976 persons. The largest proportion of the population were 25-44 years of age (28.9% overall) and nearly 50% of the population was 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).

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
African American, 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 and Louisiana Census Data Center Profile

- The collection of race and ethnicity information was expanded in the 2000 census to allow persons the opportunity to report belonging to more than one 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. Non-Hispanic African Americans constituted 32.6% of the population, Hispanics constituted 2.4%, and Asians and American Indians totaled 1.3% and 0.5%, respectively.

Distribution of the General Population by Region
2000 Compared to 2006

Public Health Region		2000[a] Total Population	2006[b] Total Population	% Change
1	New Orleans	1,034,126	692,775	-33.0%
2	Baton Rouge	603,634	640,950	+6.2%
3	Houma	383,697	401,260	+4.6%
4	Lafayette	548,154	573,858	+4.7%
5	Lake Charles	283,429	284,311	+0.3%
6	Alexandria	301,390	299,446	-0.6%
7	Shreveport	522,560	531,548	+1.7%
8	Monroe	353,865	349,564	-1.2%
9	Hammond/Slidell	438,121	514,056	+17.3%
	Louisiana	4,468,976	4,287,768	-4.1%

Source: [a]Census 2000, US Bureau of the Census; [b]Census Population Estimates, US Bureau of the Census

The Louisiana Office of Public Health is divided into nine distinct geographic regions (see map on p. ix). A public health region comprises four to twelve 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 state-administered public hospital where residents may obtain primary care.

- In 2006, the New Orleans region had the largest population in the state and the Lake Charles region had the smallest.

- From 2000 to 2006, the population of the New Orleans Region decreased 33%, largely due to the impact of Hurricane Katrina which devastated the New Orleans metropolitan area in August 2005 and caused a massive dislocation of the population.

- The Hammond/Slidell region had the largest population increase (17%) from 2000 to 2006.

SOCIOECONOMIC CHARACTERISTICS

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=34,201)	Females, % (N=49,204)	Males, % (N=23,456)	Females, % (N=31,162)	Males, % (N=57,140)	Females, % (N=75,500)	Males, % (N=370,499)	Females, % (N=505,738)
<9th grade	5.7	4.3	7.9	7.4	7.5	9.7	9.7	8.7
High School	8.4	10.9	11.2	13.8	11.9	12.1	14.3	13.8
High School Diploma	25	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	19.9	19.5
Associate or Bachelor's Degree	20.8	22.6	21.8	18.3	18.8	18	15.8	15.9
Graduate or Professional Degree	14.4	10.7	8	5.9	12.8	8.3	7.5	6.1

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 or older, regardless of location or sex, was a high school diploma or its equivalent. 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. Less than 10% of men or women received less than a 9th grade education in the most populous parishes or statewide.

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	Males, % (N=34,201)	Females, % (N=49,204)	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	53.7	59.4	40.9	56.3	47.6	59.9	46.8
26-44	11.3	26.2	13.2	27.3	22.7	28.2	17.1	25.4
45-64	7.4	10.6	18.8	18.7	18	17.1	15.4	16.3
≥65	7	9.5	8.5	8.5	3.1	7.1	7.6	11.5

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

- In 2000, the highest proportion of persons living below the poverty level during the previous 12 months, statewide and in the most populous parishes, were less than 26 years of age. Nearly 60% of the males and approximately 47% of the females who were living below the poverty level were less than 26 years of age. In each of the 3 parishes and statewide, a greater proportion of women who were living below the poverty level were older than 25 years, compared to their males counterparts. 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.

ESTIMATED NO. OF PERSONS LIVING WITH HIV/AIDS: NEW ORLEANS MSA

On August 29, 2005, Hurricane Katrina had a devastating impact on the New Orleans metropolitan area, which includes Orleans, Jefferson, St. Tammany, St. James, St. John the Baptist, Plaquemines, St. Bernard, and St. Charles Parishes. Most of this area was placed under a mandatory evacuation displacing hundreds of thousands of people, many of whom continue to be unable to return to their homes. The hurricane seriously disrupted public health efforts, including HIV/AIDS prevention, services and surveillance. Because such a large percentage of the HIV-infected population left, prevalence information from the HIV/ AIDS Program (HAP) Surveillance database was no longer accurate. Instead, HAP developed HIV prevalence estimates for the New Orleans MSA using two different methods.

Estimates were conducted in January and July 2006 using a method that applied the proportion of the general returning population to pre-Katrina HIV data to derive the predicted number of persons living with HIV/AIDS (PLWH/A) in the New Orleans area (Method 1). Estimates were conducted in March and August 2006 using a second method. Method 2 utilized HIV surveillance information on current residence collected on PLWH/A who were New Orleans residents prior to evacuation (in July 2005). By viewing cases with a confirmed current residence as a sample of the total population who had contact with the surveillance system, current residency was estimated as a proportional change.

Estimated Number of Persons Living with HIV/AIDS
New Orleans MSA

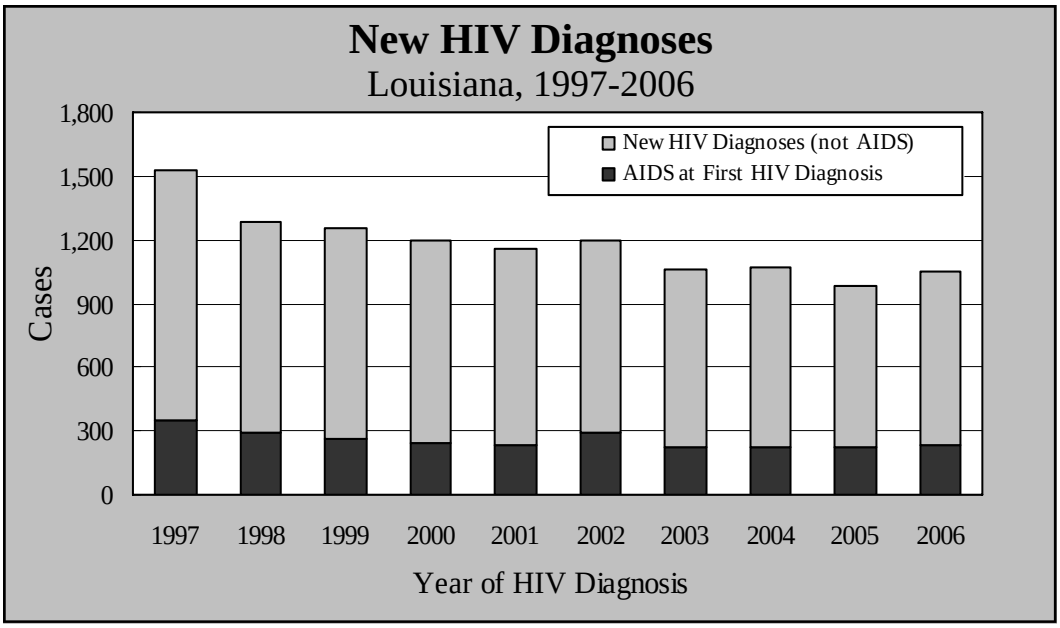
Parish	*Pre-Katrina* July 2005	*Post-Katrina: Method 1* January 2006	July 2006	*Post-Katrina: Method 2* March 2006	August 2006
Orleans	5,224	1,980	2,444	2,089	2,615
Jefferson	1,265	1,108	1,135	1,114	1,254
St. Tammany	251	275	271	282	280
St. Bernard	121	33	36	37	46
St. John the Baptist	68	81	79	136	170
St. Charles	66	78	76	71	73
St. James	43	48	47	86	86
Plaquemines	30	7	16	20	19
New Orleans MSA	7,068	3,610	4,104	3,836	4,543

In July 2005, 7,068 PLWH/A were living in the New Orleans MSA. Using Method 1, 3,610 persons (51% of the pre-Katrina population) were living in the MSA as of January 2006 and 4,104 (58%) were living in the MSA as of July 2006. Using Method 2, 3,836 (54%) were living in the MSA as of March 2006 and 4,543 (64%) were living in the MSA as of August 2006. These estimates are based on several assumptions about the return of PLWH/A. For example, population-based methods assume that the PLWH/A have returned at rates no different than the general population; however, concerns such as access to care, location of residence, and socioeconomic factors could all influence the likelihood of return in PLWH/A differently than the general population. While these estimates are time-sensitive given the rapidly changing landscape of New Orleans, they have provided essential data for planning HIV prevention and services.

Note: this surveillance report uses actual data from the HAP Surveillance database and not the estimated data since updated estimates are not available for parishes outside of the New Orleans EMA or for different demographic subgroups.

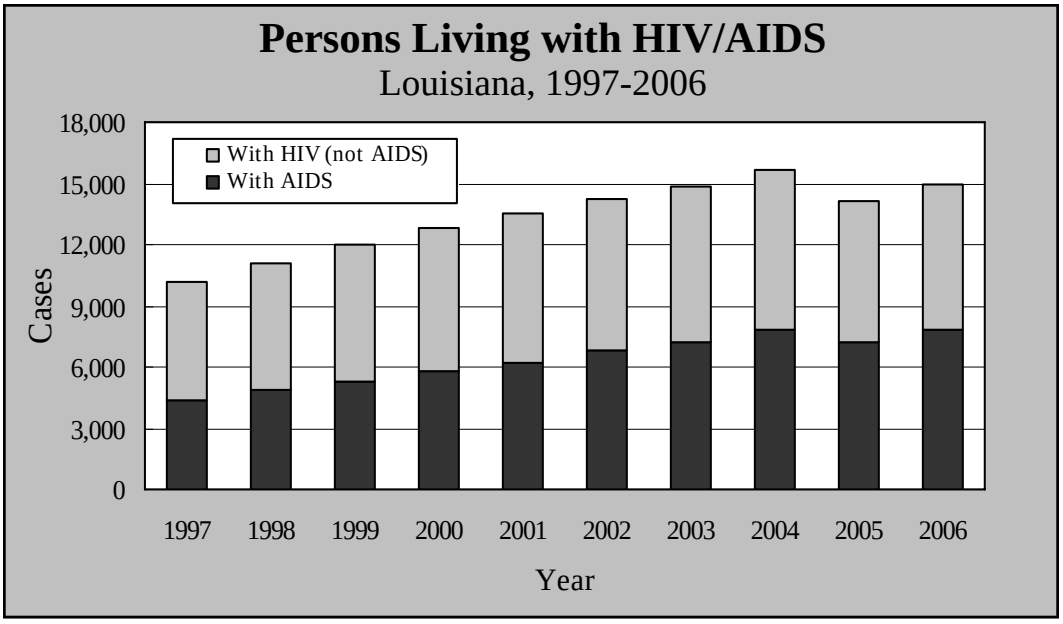
HIV/AIDS TRENDS IN LOUISIANA

OVERALL HIV/AIDS TRENDS



- In 2005, 979 new HIV cases were diagnosed in Louisiana, and in 2006, 1,052 new HIV cases were diagnosed. The number of new HIV diagnoses has declined since 1997.

- Of the newly diagnosed persons in 2006, 22% of new HIV cases also had an AIDS diagnosis at the same time they were first diagnosed with HIV. This indicates that many people are not diagnosed until late in the course of their disease. HIV-infected persons who are unaware of their infection cannot receive appropriate medical treatment and may unknowingly spread HIV to other people.



- The number of persons living with HIV increased each year from 1997 to 2004. The decrease from 2004 to 2005 is due to the large number of persons from the New Orleans metropolitan area who left the state after Hurricane Katrina in August 2005. At the end of 2006, 14,917 persons were known to be living with HIV/AIDS in Louisiana, of whom 7,782 (52%) had progressed to AIDS.

Characteristics of Persons Newly Diagnosed with HIV

Louisiana, 2005-2006

	Persons First Diagnosed with HIV in 2005[a] *This column reflects persons with HIV infection who were first diagnosed in 2005, including persons who had AIDS at time of HIV diagnosis*		Persons First Diagnosed with HIV in 2006 *This column reflects persons with HIV infection who were first diagnosed in 2006, including persons who had AIDS at time of HIV diagnosis*	
	Cases[b]	**Percent[c]**	**Cases**	**Percent**
TOTAL	979	100%	1,052	100%
Sex				
Female	345	35%	339	32%
Male	634	65%	713	68%
Race/Ethnicity				
African American	718	73%	718	68%
Hispanic/Latino	27	3%	36	3%
White	216	22%	278	26%
Other/Unk/Multi-Race	18	2%	20	2%
Age Group				
0-12	14	1%	4	<1%
13-24	178	18%	189	18%
25-34	264	27%	315	30%
35-44	258	26%	263	25%
45-54	194	20%	202	19%
55-64	56	6%	57	5%
65+	15	2%	22	2%
Exposure Category [d]				
MSM[e]	285	52%	301	54%
IDU[e]	63	12%	67	12%
MSM & IDU	23	4%	28	5%
HRH[e]	161	29%	161	29%
Perinatal/ Pediatric	14	3%	5	1%
Unspecified Exposure[f]	*433*	*44%*	*490*	*47%*
Urban/Rural Parishes				
Urban	878	90%	924	88%
Rural	101	10%	128	12%

a HIV data collection started in 1993. Positive results of anonymous tests are not included.
b Cases within subgroups may not add up to totals due to unknowns.
c Percentages may not add up to 100% due to rounding.
d Percentages for identified exposure groups represent the distribution among those who reported a specific exposure. The percentage for the unspecified exposure group represents the percent among the total.
e MSM: men who have sex with men (non-IDU); IDU: injection drug user; HRH: high-risk heterosexual.
f Unspecified Exposure refers to cases whose exposure group is under investigation or unknown.

Characteristics of Persons Living with HIV and Cumulative Cases

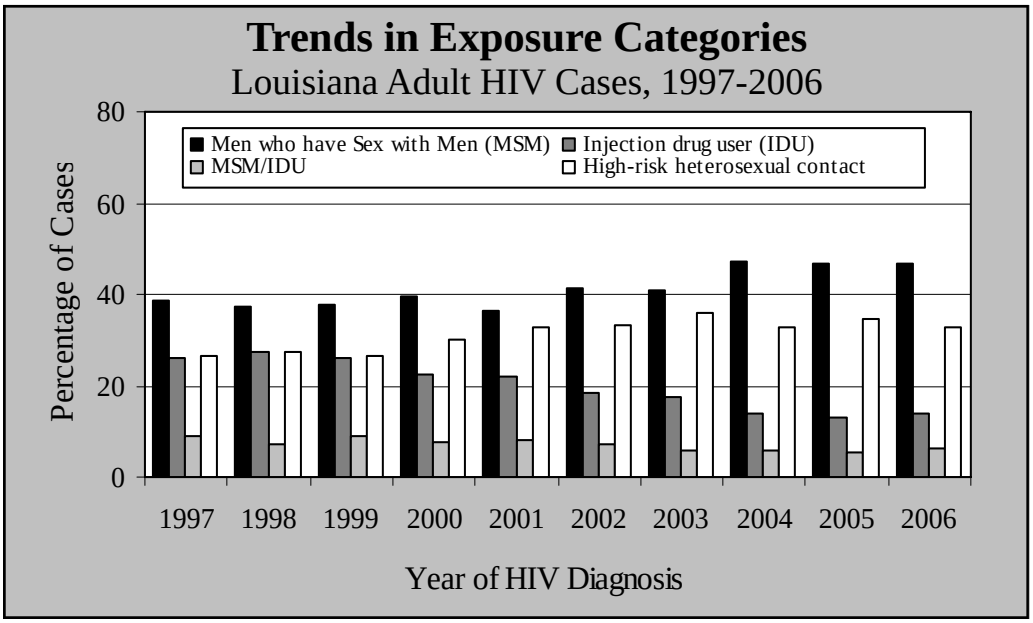
Louisiana, 2005-2006

	Persons Living with HIV/AIDS in 2005[a] *This column reflects the minimum estimate of persons living with HIV/AIDS in Louisiana as of December 31, 2005.*		Persons Living with HIV/AIDS in 2006 *This column reflects the minimum estimate of persons living with HIV/AIDS in Louisiana as of December 31, 2006.*		Cumulative Persons with HIV/AIDS *This column reflects the total number of HIV-infected persons diagnosed in Louisiana, including those who have died.*	
	Cases[b]	**Percent[c]**	**Cases**	**Percent**	**Cases**	**Percent**
TOTAL	14,101	100%	14,917	100%	26,411	100%
Sex						
Female	4,090	29%	4,355	29%	6,564	25%
Male	10,011	71%	10,562	71%	19,847	75%
Ethnicity						
African American	9,308	66%	9,840	66%	16,595	63%
Hispanic/Latino	423	3%	452	3%	652	2%
White	4,267	30%	4,507	30%	8,940	34%
Other/Unk/Multi-Race	103	1%	118	1%	224	1%
Age Group	(Age in 2005)		(Age in 2006)		(Age at HIV Diagnosis)	
0-12	109	1%	98	1%	297	1%
13-24	759	5%	779	5%	4,035	15%
25-34	2,992	21%	3,057	20%	9,510	36%
35-44	5,133	36%	5,150	35%	7,894	30%
45-54	3,779	27%	4,249	28%	3,343	13%
55-64	1,079	8%	1,271	9%	985	4%
65+	250	2%	313	2%	347	1%
Exposure Category [d]						
MSM[e]	4,183	45%	4,449	46%	9,152	48%
IDU[e]	1,815	19%	1,838	19%	3,899	20%
MSM & IDU	825	9%	837	9%	1,803	9%
HRH[e]	2,205	24%	2,337	24%	3,424	18%
Transfusion/ Hemophilia	124	1%	123	1%	483	3%
Perinatal/ Pediatric	165	2%	168	2%	301	2%
Unspecified Exposure[f]	*4,784*	*34%*	*5,165*	*35%*	*7,349*	*28%*
Urban/Rural Parishes						
Urban	12,391	88%	13,101	88%	23,944	91%
Rural	1,710	12%	1,816	12%	2,454	9%

a HIV data collection started in 1993. Positive results of anonymous tests are not included.
b Cases within subgroups may not add up to totals due to unknowns.
c Percentages may not add up to 100% due to rounding.
d Percentages for identified exposure groups represent the distribution among those who reported a specific exposure. The percentage for the unspecified exposure group represents the percent among the total.
e MSM: men who have sex with men (non-IDU); IDU: injection drug user; HRH: high-risk heterosexual.
f Unspecified Exposure refers to cases whose exposure group is under investigation or unknown.

HIV DIAGNOSES BY MODE OF EXPOSURE

The modes of exposure (i.e., persons' risk for HIV transmission) have changed since the beginning of the epidemic. Throughout the epidemic, most HIV transmission has occurred among men who have sex with men (MSM) and injection drug users (IDUs); however, the proportion of cases attributed to IDUs has been decreasing during the past decade. Although the proportion of cases among MSM and the absolute number of cases in MSM is lower than it was in the early years of the epidemic, during the past three years, the proportion of MSM cases has increased. In addition, the proportion of cases among persons who report specific high risk heterosexual contact (as defined on page 41) has increased. A large percentage of cases (47% in 2006) were reported without any mode of exposure; therefore, the data shown in the following graphs have been adjusted using a method developed by HAP to account for unreported risks, as described below and in the technical notes on p. 43.

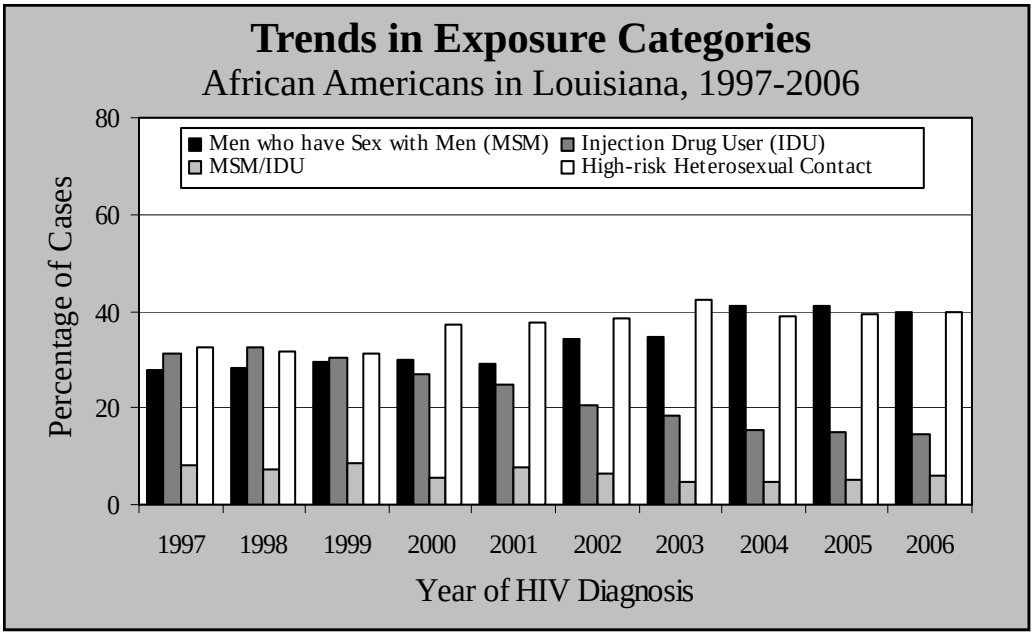


- The largest proportion of cases detected in 2006 (47%) were attributed to MSM after adjusting for unreported risk.

- After adjusting for unreported risk, cases attributed to high-risk heterosexual contact (HRH) accounted for 33% of all cases diagnosed in 2006.

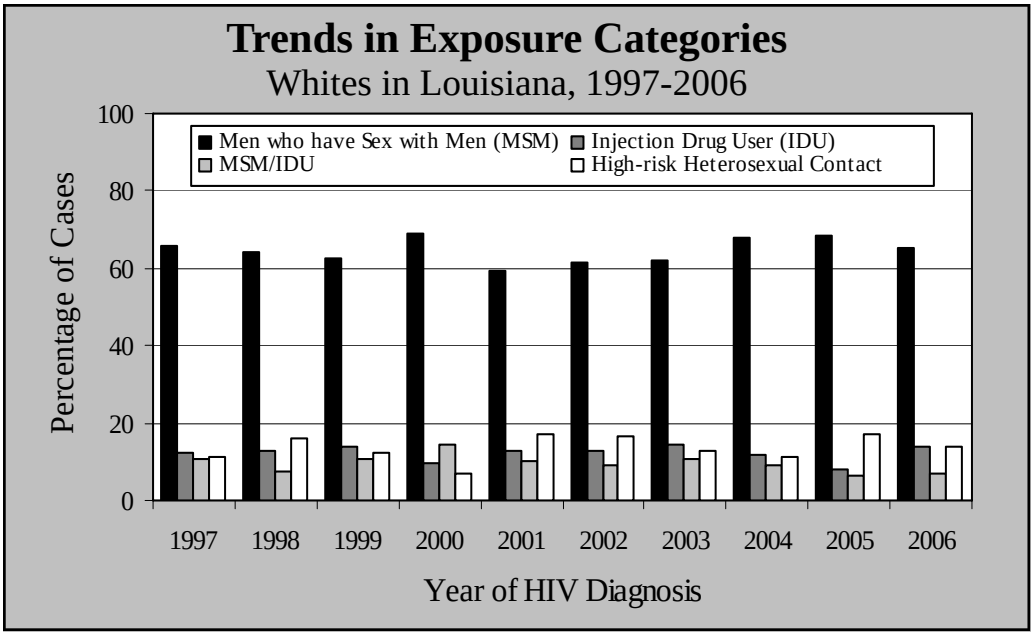
- Injection drug users remain an important risk group, with heterosexual IDUs accounting for 14% of newly-diagnosed cases and MSM/IDUs accounting for 6% of all cases.

Data shown here have been adjusted to account for cases with no identified risk (NIR). Values for mode of exposure for NIR cases were computed using a statistical procedure known as hotdeck imputation. These procedures use information such as age, race, sex, parish of residence, incarceration history, substance use and year of infection to predict an individuals likely risk factors. These hotdeck procedures are similar to methods used by U.S. Census to impute missing values on the American Community Survey (www.census.gov/acs/www/downloads/tp67.pdf). For more information on risk redistribution, see the technical notes on page 43.



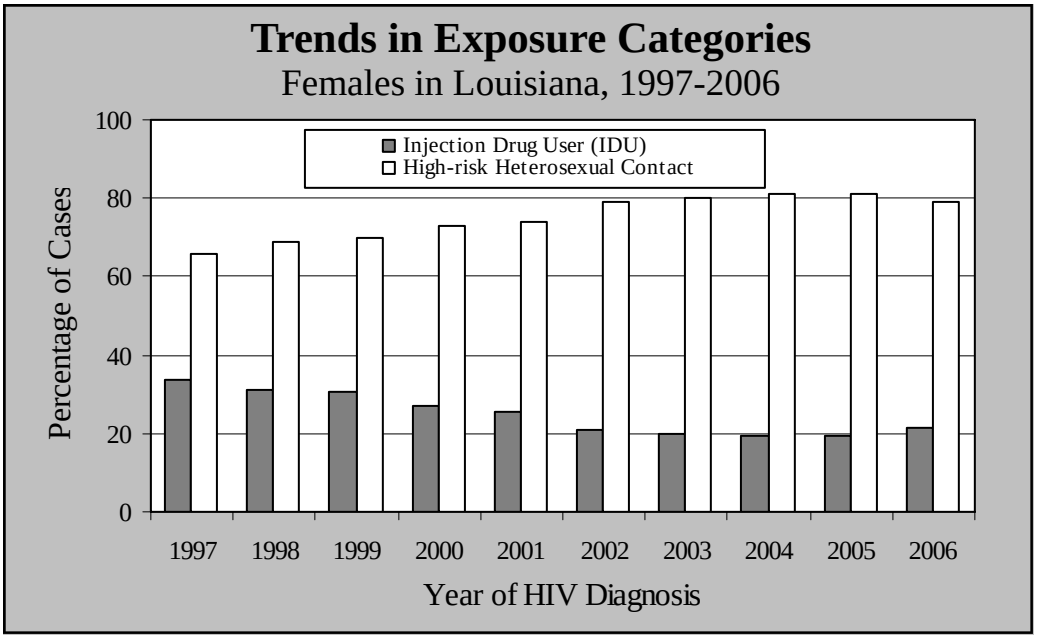
- Among African Americans, high-risk heterosexual (HRH) contact and men who have sex with men (MSM) are the leading exposure categories after redistributing risk, each accounting for 40% of all newly-diagnosed cases. The proportion of both MSM and HRH cases has increased during the past decade.

- The proportion of new cases among injection drug users (IDUs) has decreased over time among African Americans (14% of 2006 cases were heterosexual IDUs and 6% were MSM/IDUs).



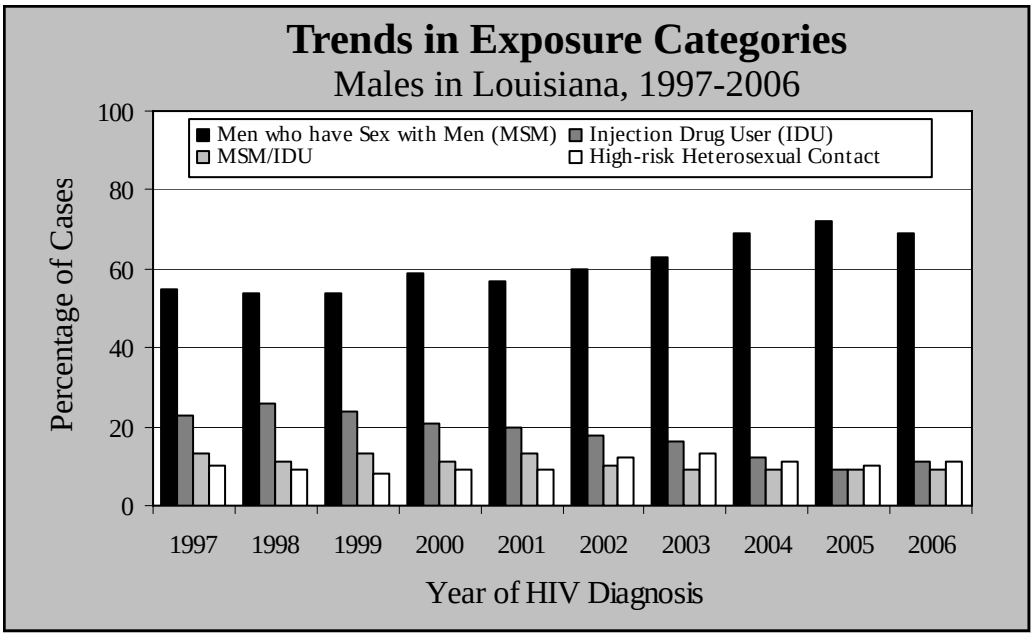
- The predominant exposure among white persons is MSM, accounting for 65% of all cases in 2006.

- In 2006, 14% of cases among white persons were IDUs, 7% were MSM/IDUs, and 14% were HRH.



- From 1997 to 2006, the proportion of females exposed to HIV through high-risk heterosexual contact has increased, while the proportion exposed through injection drug use has decreased.

- In 2006, 79% of cases among females were attributed to high-risk heterosexual contact and 21% to injection drug use.

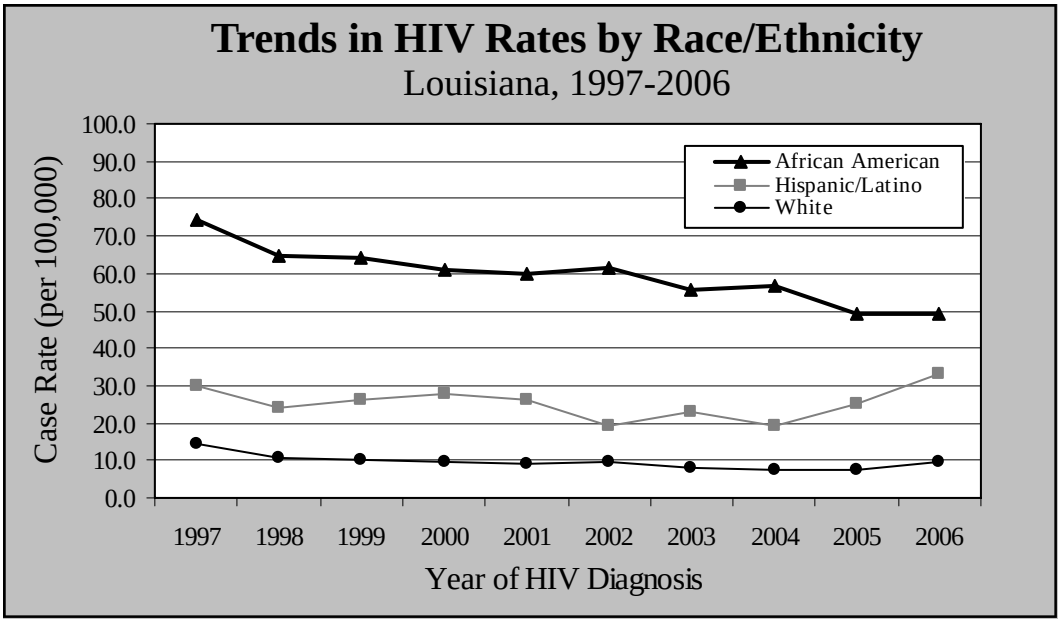


- The predominant exposure category among males continues to be men who have sex with men, accounting for 69% of all cases in 2006.

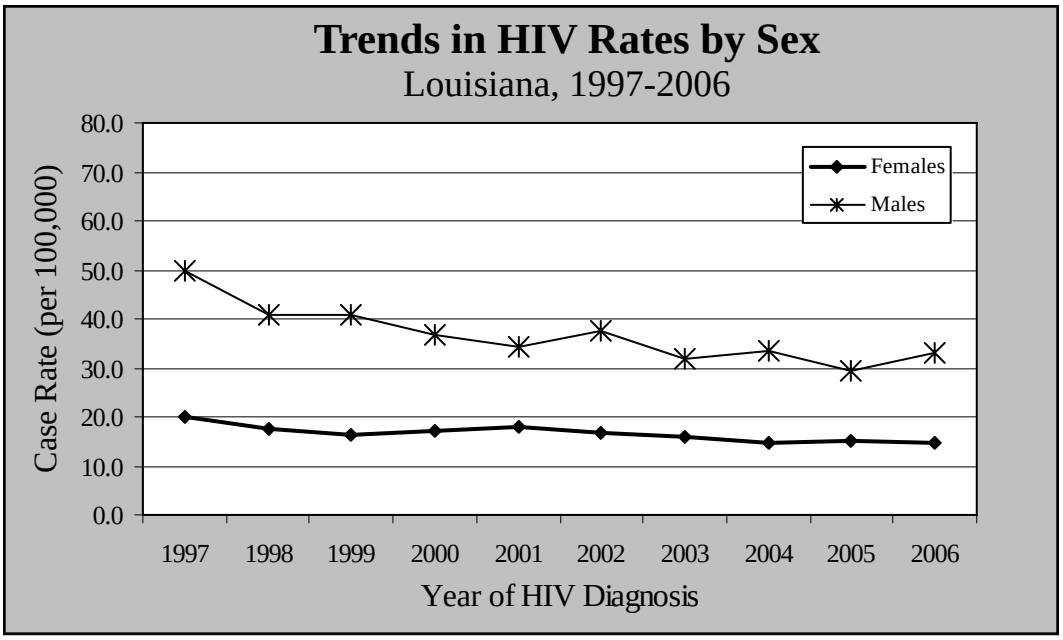
- While the proportion of cases attributed to MSM has increased since 1997, the proportion of cases among IDUs has decreased, with heterosexual IDUs accounting for 11% of new cases and MSM/IDUs accounting for 9% of new cases in 2006. High-risk heterosexual activity accounted for 11% of new cases.

HIV DIAGNOSES BY RACE/ETHNICITY AND SEX

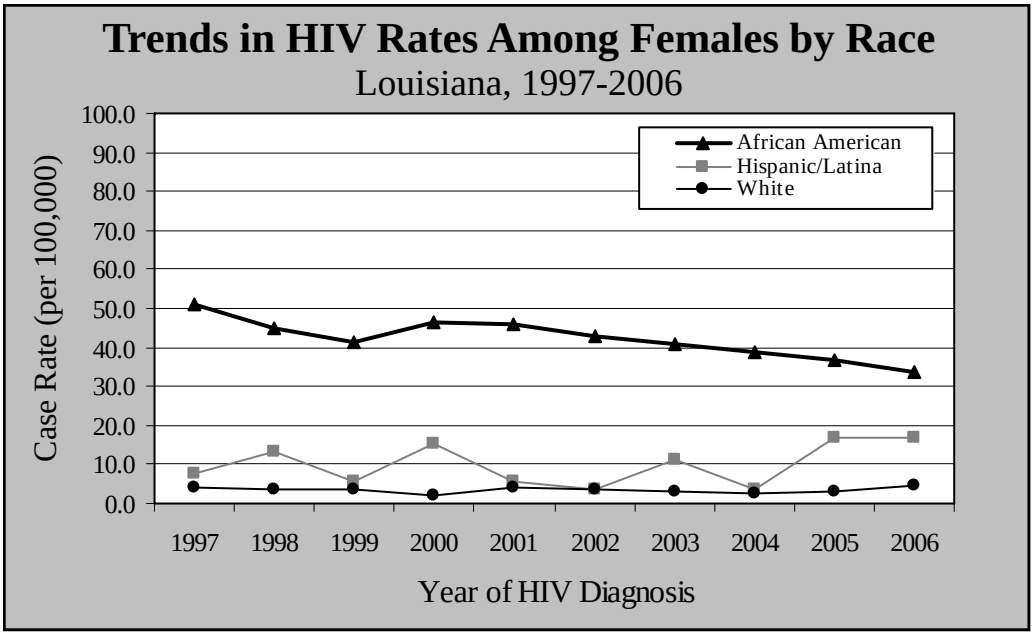
The HIV/AIDS epidemic impacts persons of all genders, ages, race/ethnicities, and geographic locations in Louisiana. This impact, however, is not consistent across all population groups. As the epidemic continues to change and the number of persons living with HIV continues to grow, it is extremely important to identify those populations most at risk for and impacted by HIV infection to plan for HIV prevention and allocate limited resources most effectively.



- African Americans continue to be impacted disproportionately by HIV/AIDS. Although African Americans make up only 32% of the state's population, 68% of the new HIV cases diagnosed in 2006 and 66% of all persons living with HIV/AIDS are African American.

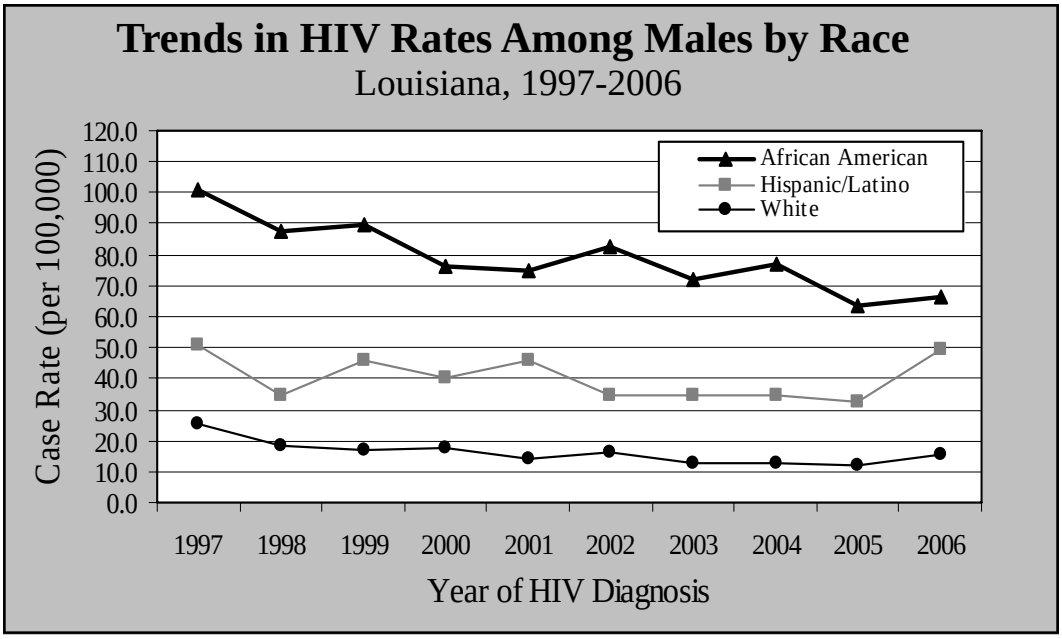


- The HIV rate for males decreased from 49.6 per 100,000 in 1997 to 33.0 in 2006. Among females, rates have remained stable over time.

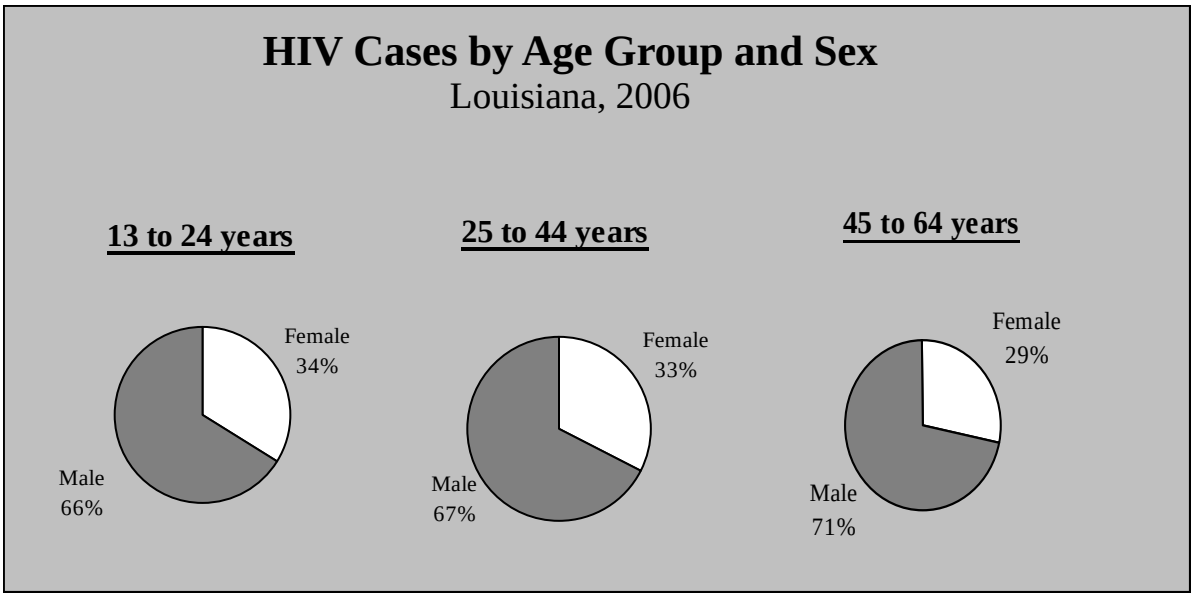


- The HIV epidemic significantly affects both males and females in the African American and Hispanic/Latino communities. In 2006, the HIV diagnosis rate in African American females was twice the rate in Hispanic females and almost eight times greater than the rate in white females. The HIV diagnosis rate among African American males was over 4 times greater than that of white males.

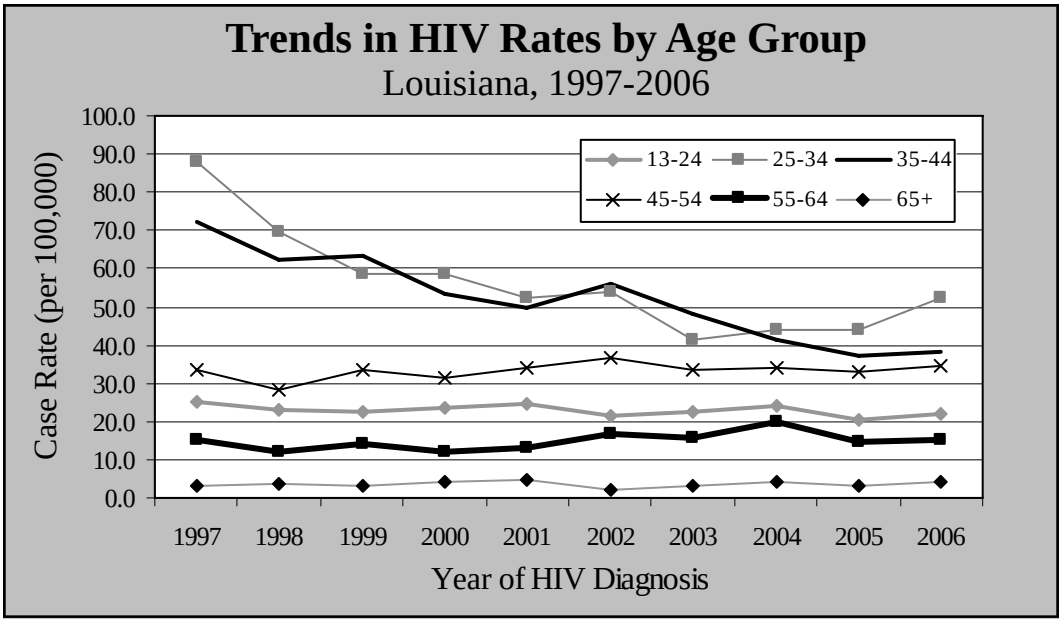
- Overall, HIV/AIDS rates have declined in African American men and women since 1997, while rates in white men and women have remained stable and rates among Hispanic/Latinos have increased, particularly in 2006.



HIV DIAGNOSES BY AGE GROUP AND SEX



- Historically the 13-24 year age group has had a higher proportion of new cases in females compared to the older age groups. In 2006, however, all age groups had a higher proportion of cases in males.



- Since 1997, the HIV rate among persons in the 35-44 year age group decreased significantly. From 1997 to 2003, the rate among 25-34 year olds also decreased significantly; however, since 2003, the rate in this age group has increased. Rates in all other age groups have remained relatively stable during the past 10 years.

GEOGRAPHIC DISTRIBUTION OF HIV/AIDS

GEOGRAPHIC DISTRIBUTION OF HIV

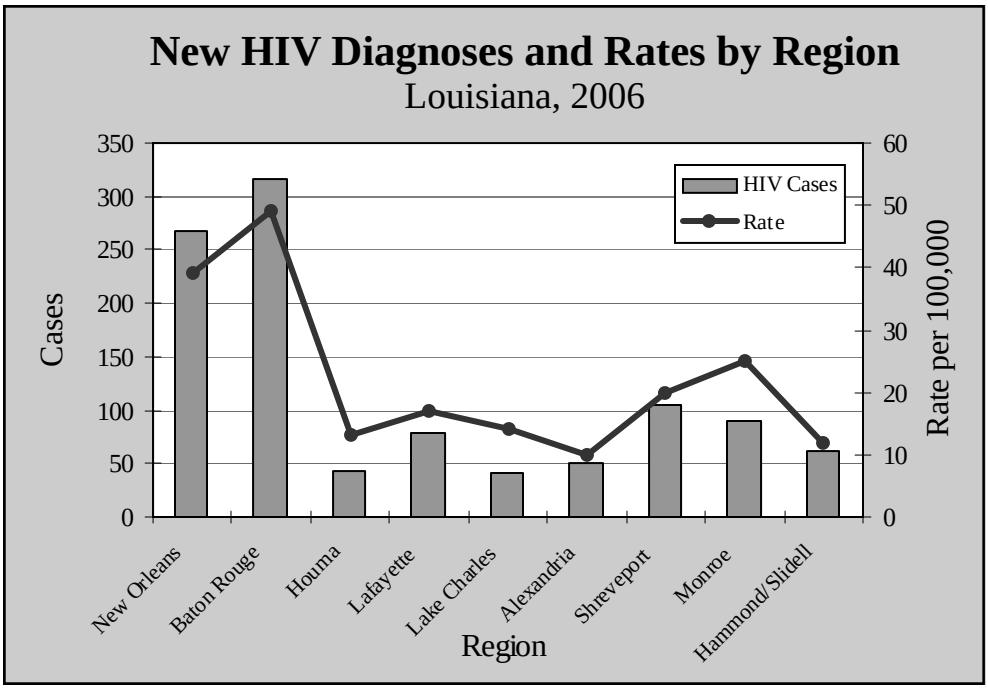
- In 2006, new cases of HIV/AIDS were diagnosed in 58 of Louisiana's 64 parishes. The highest rates of new cases were in Orleans, Tensas, and West Feliciana parishes.

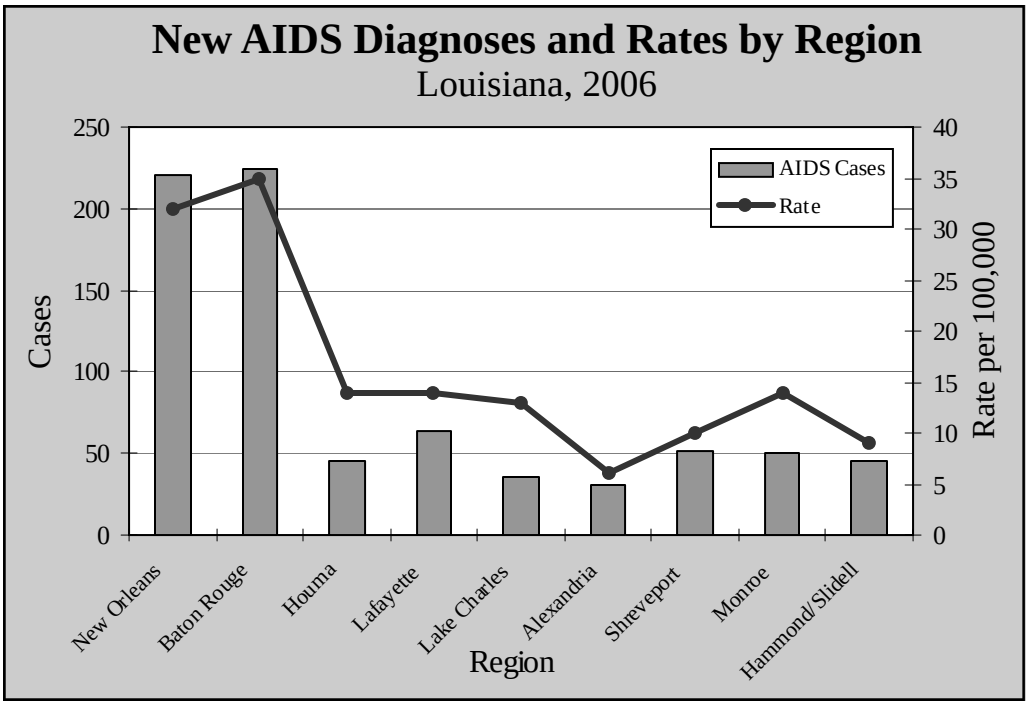
Louisiana HIV/AIDS Diagnoses and Rates by Region and Parish, 2006

PARISH	AIDS Dx[a] in 2006	HIV Dx in 2006	HIV Dx Rate 2006[b]	Persons Living with HIV/AIDS 2006
Statewide	**767**	**1,052**	**25**	**14,917**
Region 1	**220**	**268**	**39**	**5,394**
Jefferson	75	72	17	1,343
Orleans	139	193	86	3,937
Plaquemines	3	1	n/a	25
St. Bernard	3	2	n/a	89
Region 2	**224**	**317**	**49**	**3,602**
Ascension	10	17	17	139
East Baton Rouge	187	254	59	2,807
East Feliciana	5	5	24	118
Iberville	8	15	45	258
Pointe Coupee	1	6	26	43
West Baton Rouge	6	9	40	88
West Feliciana	7	11	71	149
Region 3	**45**	**43**	**13**	**552**
Assumption	6	4	n/a	30
LaFourche	6	9	64	98
St. Charles	4	3	n/a	68
St. James	2	2	n/a	50
St. John the Baptist	9	9	19	95
St. Mary	5	2	n/a	62
Terrebone	13	14	13	149
Region 4	**64**	**78**	**17**	**1,101**
Acadia	4	8	13	77
Evangeline	2	4	n/a	49
Iberia	6	6	8	89
Lafayette	26	30	32	532
St. Landry	13	17	19	195
St. Martin	6	7	14	84
Vermilion	7	6	11	75
Region 5	**36**	**41**	**14**	**794**
Allen	8	5	20	219
Beauregard	1	2	n/a	36
Calcasieu	26	34	18	492
Cameron	0	0	0	3
Jefferson Davis	1	0	0	44
Region 6	**31**	**51**	**10**	**729**
Avoyelles	8	5	12	171
Catahoula	3	2	n/a	29
Concordia	1	3	n/a	29
Grant	1	1	n/a	25
La Salle	0	0	0	9
Rapides	14	34	26	336
Vernon	1	2	n/a	43
Winn	3	4	n/a	87
Region 7	**52**	**104**	**20**	**1,181**
Bienville	2	5	33	18
Bossier	18	21	20	138
Caddo	27	63	25	779
Claiborne	3	4	n/a	75
De Soto	1	6	23	48
Natchitoches	1	3	n/a	64
Red River	0	0	0	9
Sabine	0	0	0	16
Webster	0	2	n/a	34
Region 8	**50**	**89**	**25**	**780**
Caldwell	5	5	47	33
East Carroll	1	2	n/a	38
Franklin	2	2	n/a	11
Jackson	2	6	39	22
Lincoln	3	4	n/a	41
Madison	2	6	49	50
Morehouse	7	6	20	44
Ouachita	21	45	30	425
Richland	0	2	n/a	40
Tensas	1	5	81	32
Union	5	4	n/a	36
West Carroll	1	2	n/a	8
Region 9	**45**	**61**	**12**	**784**
Livingston	14	15	13	137
St. Helena	0	0	0	14
St. Tammany	13	15	7	290
Tangipahoa	11	27	24	201
Washington	7	4	n/a	142

[a] AIDS diagnoses will be included in counts of HIV diagnosis (2nd column) for persons first detected with HIV at an AIDS diagnosis; therefore numbers from the two columns should not be added.

[b] Rates per 100,000 persons in parish. Rates are unstable and not available (n/a) for parishes with low case counts. Population data are from *Annual Estimates of the Population for Counties of Louisiana:* July 1, 2006, Population Division, U.S. Census Bureau

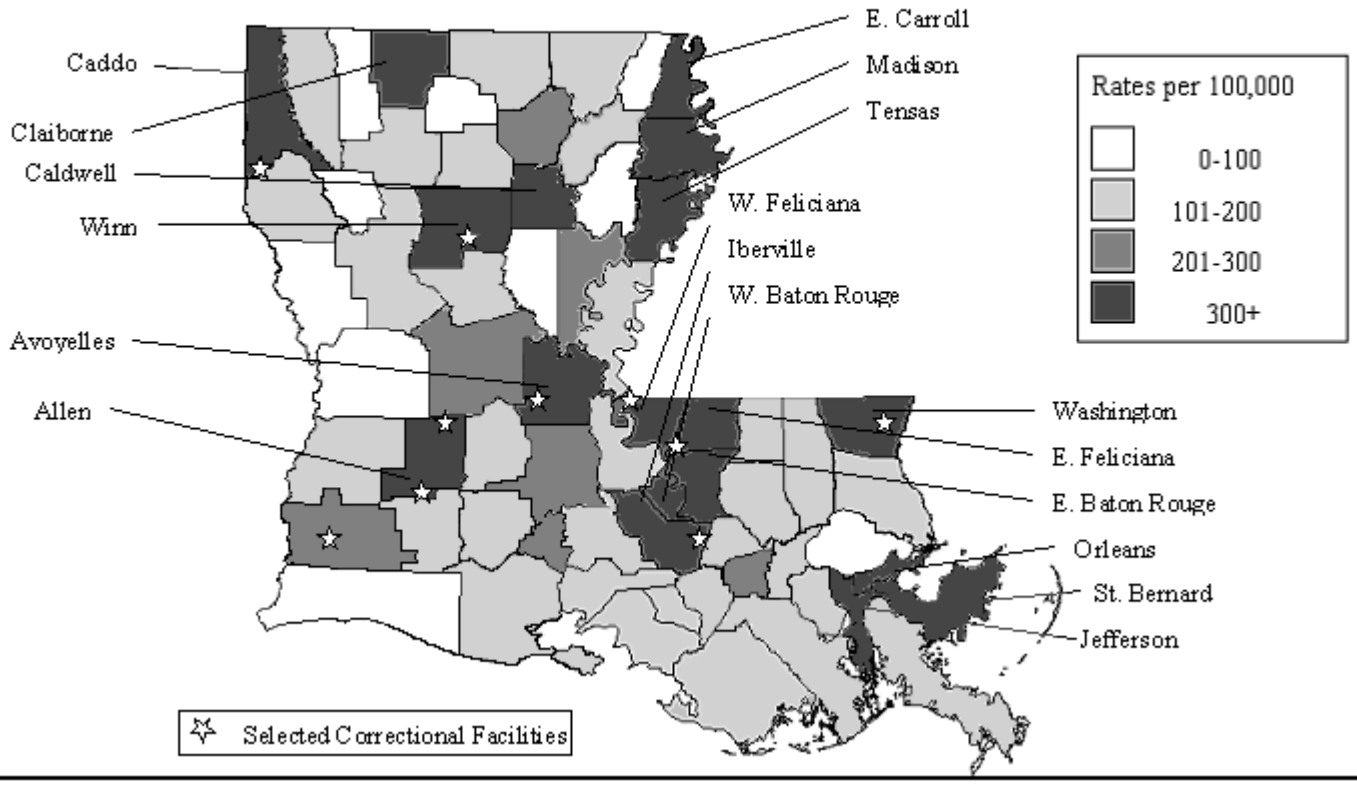




- In 2006, the Baton Rouge region had the highest number of both new HIV and new AIDS diagnoses. The Baton Rouge region also had the highest rate of new HIV and AIDS diagnoses (number of new cases per 100,000 population). Until 2006, the New Orleans region has always had the highest number of new HIV and AIDS diagnoses. However, Hurricane Katrina caused a population decrease in the New Orleans area which contributed to the lower numbers in 2006.

Persons Living with HIV/AIDS by Parish

Louisiana, 2006



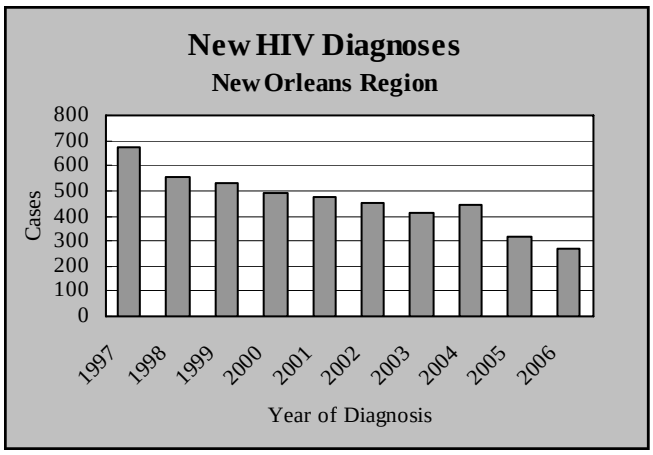
- As of December 31, 2006, a total of 14,917 persons were reported as living with HIV/AIDS in Louisiana. The above map illustrates the geographic distribution of persons living with HIV/AIDS in the state. There are persons living with HIV/AIDS in every parish in Louisiana.

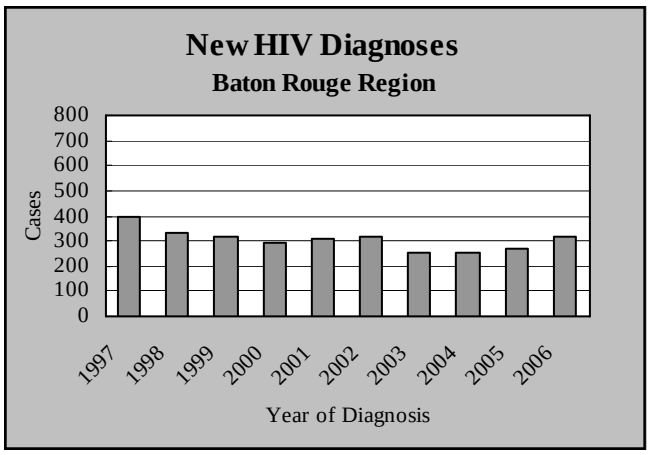
- By the end of 2006, 18 parishes had greater than 300 persons living with HIV per 100,000 persons in the parish. Many of the parishes with disproportionate HIV/AIDS prevalence rates have correctional facilities that have reported large numbers of HIV/AIDS cases.

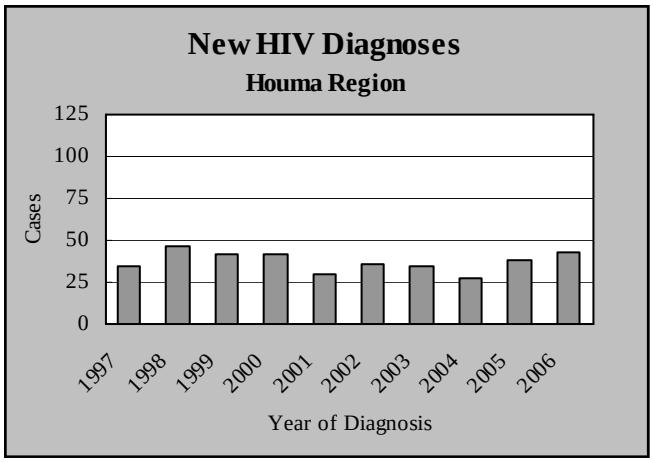
- Although the majority of persons living with HIV are concentrated in urban areas, 12% of HIV-infected persons live in rural parishes.

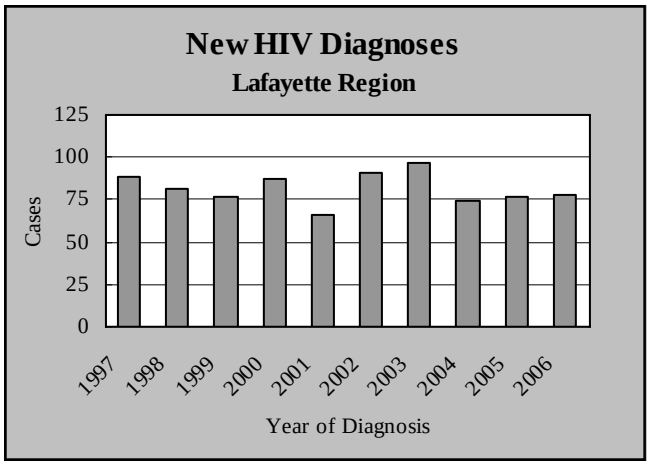
TRENDS IN NEW HIV DIAGNOSES BY REGION

Regions 1-4



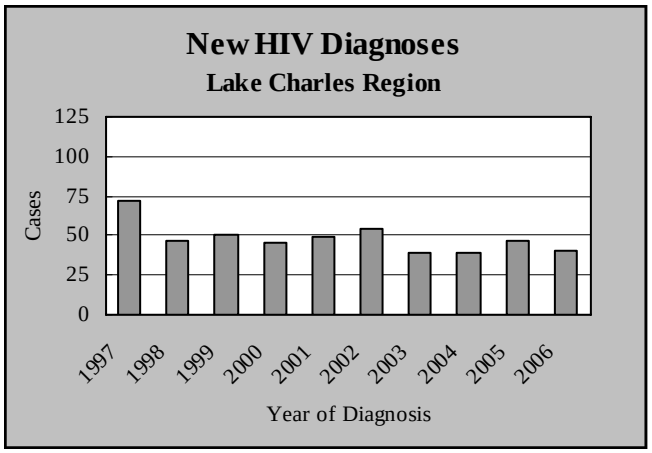


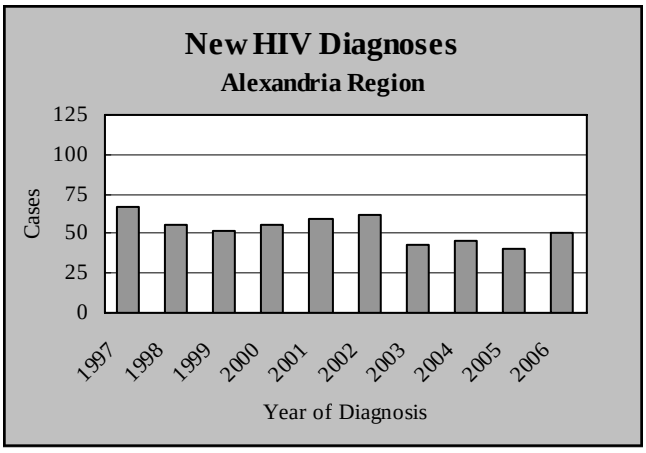


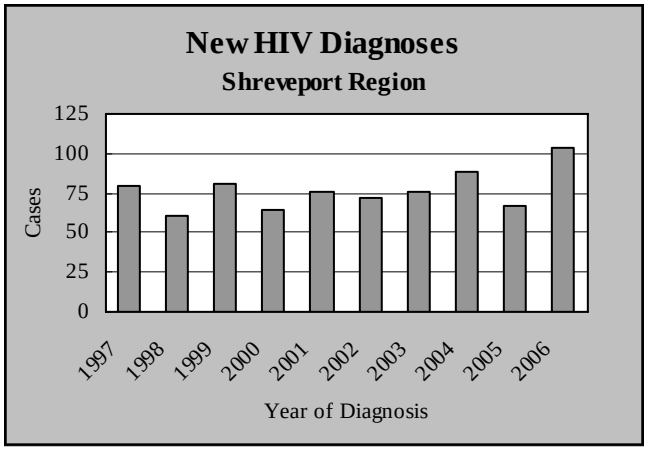


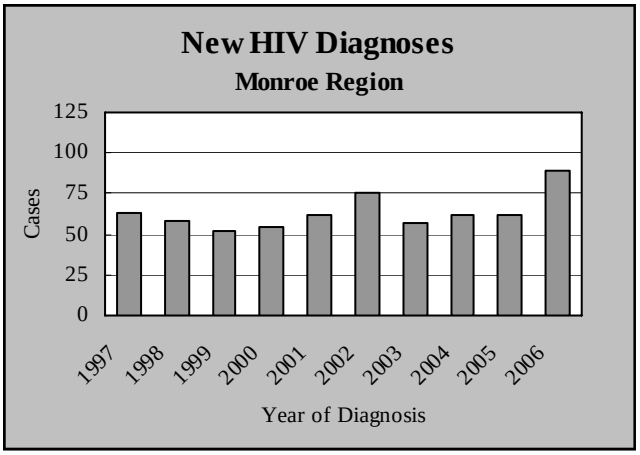
- From 2005 to 2006, seven of the nine public health regions had an increase in new HIV diagnoses.
- Since 1997, the annual number of new diagnoses in the New Orleans region has decreased. The even larger decrease in 2005 and 2006 is due to a smaller population and decreased testing as a result of Hurricane Katrina.
- In the Baton Rouge and Monroe regions, the number of new diagnoses has increased each year since 2003. In the Shreveport region, with the exception of 2005, cases have increased each year since 2002.
- In the Houma and Hammond/Slidell regions, new diagnoses increased in both 2005 and 2006.

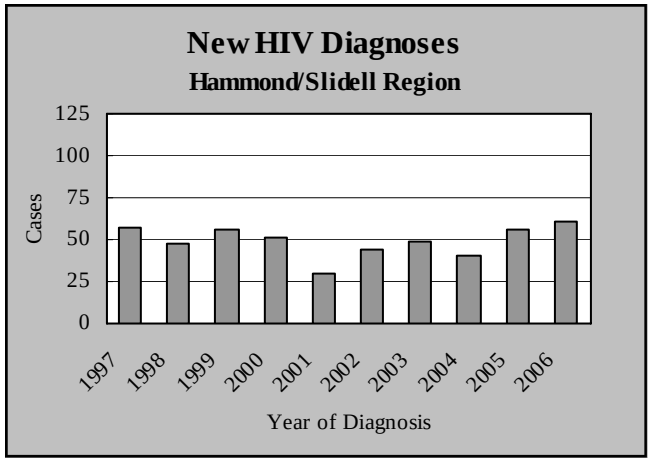
Regions 5-9


New HIV Diagnoses
Lake Charles Region
125
100
75
50
25
0
Cases
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Year of Diagnosis


New HIV Diagnoses
Alexandria Region
125
100
75
50
25
0
Cases
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Year of Diagnosis


New HIV Diagnoses
Shreveport Region
125
100
75
50
25
0
Cases
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Year of Diagnosis

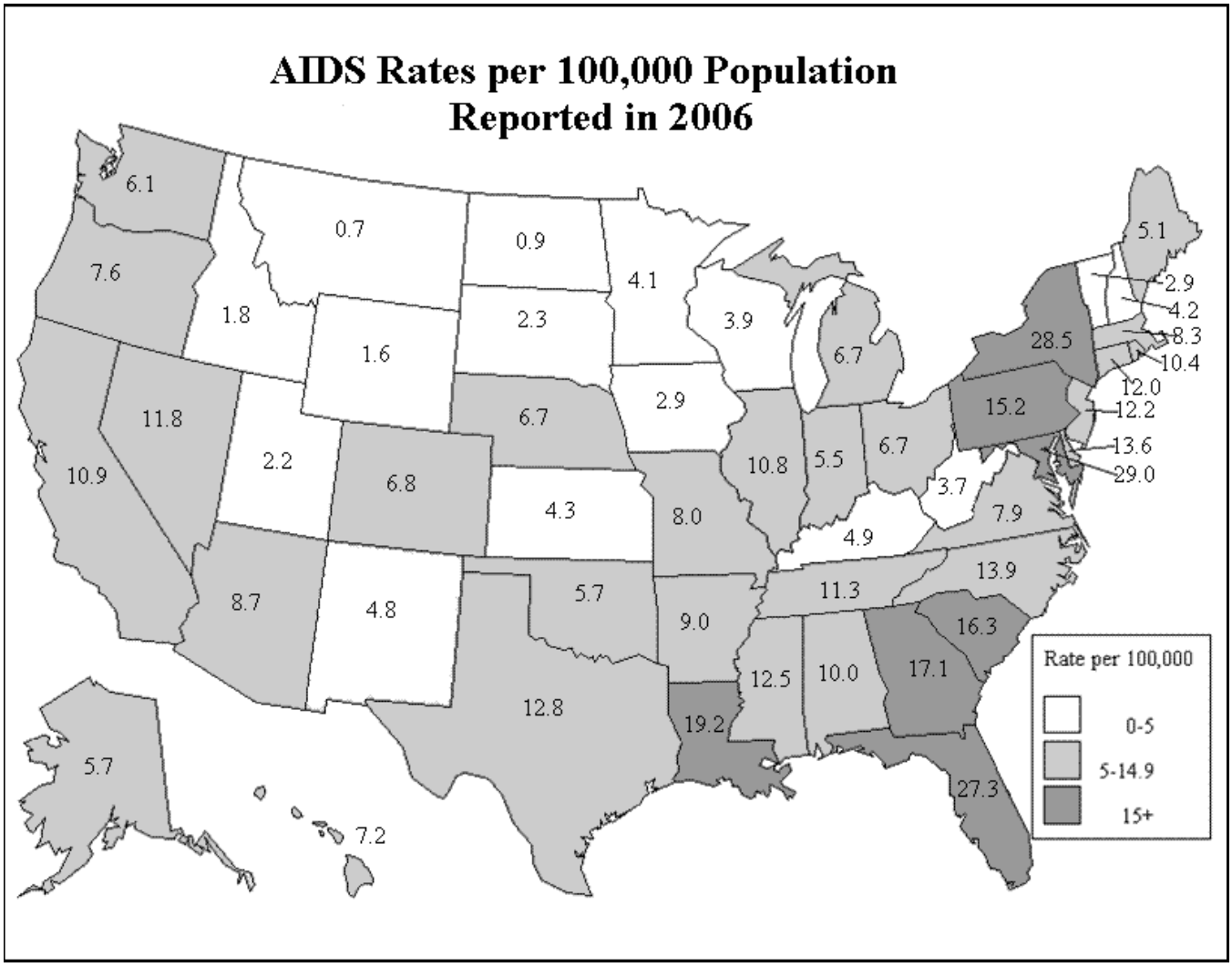

New HIV Diagnoses
Monroe Region
125
100
75
50
25
0
Cases
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Year of Diagnosis


New HIV Diagnoses
Hammond/Slidell Region
125
100
75
50
25
0
Cases
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
Year of Diagnosis

AIDS TRENDS

NATIONAL AIDS TRENDS

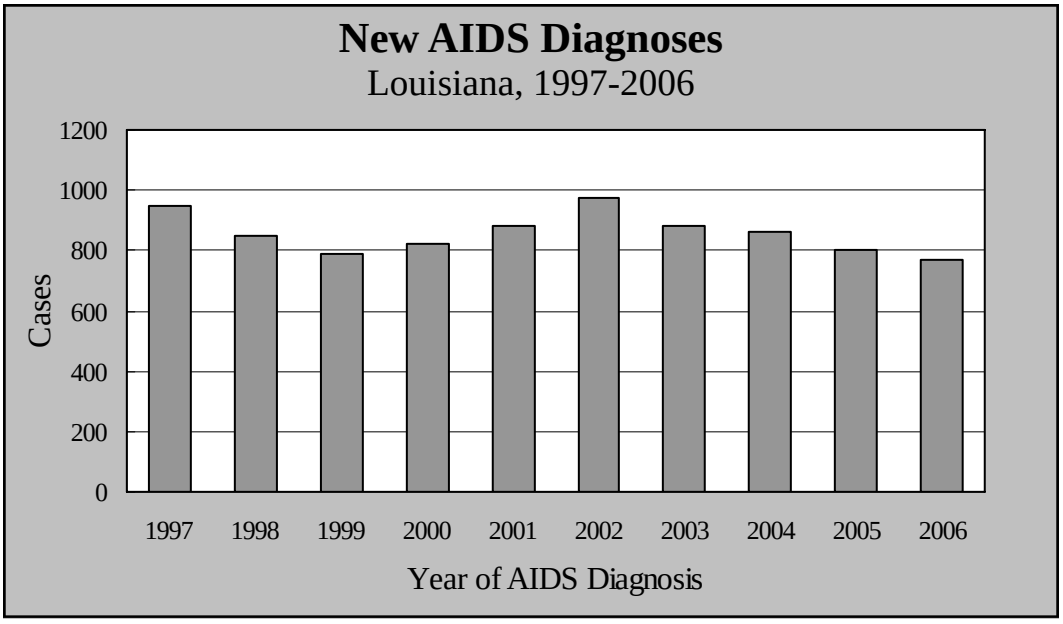
Highly-active antiretroviral therapies (HAART), which have been shown to be effective in the treatment of HIV infection, have altered the natural history of HIV disease. These new therapies have delayed the progression from HIV to AIDS and from AIDS to death for many people infected with HIV. Due to the widespread use of these new treatments, Louisiana, as well as the rest of the nation, has seen declines in both the number of new AIDS cases diagnosed and 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 and the potential failure of certain treatment regimens.



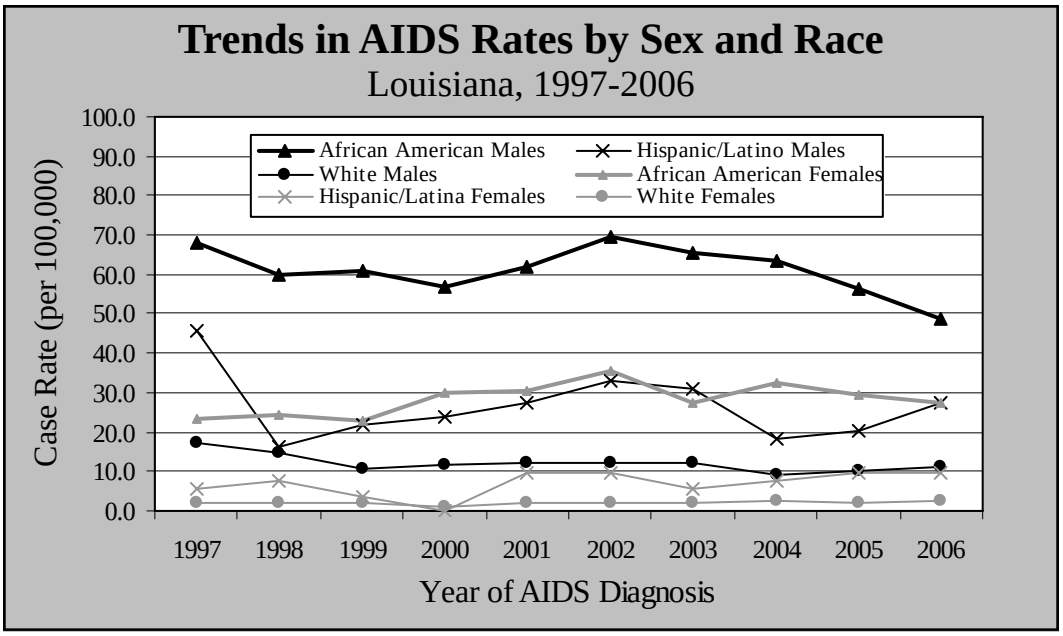
- In the United States, 37,911 new AIDS cases were reported in 2006, for a national rate of 12.7 cases per 100,000.

- Louisiana ranked 5th highest in state AIDS case rates (19.2 per 100,000) and 12th in the number of new AIDS cases reported in the United States in 2006, according to the most recent CDC HIV/ AIDS Surveillance Report (Vol. 18).

LOUISIANA AIDS TRENDS



- An increasing trend in the number of new AIDS diagnoses occurred from 1999 to 2002 for the first time since the introduction of new drug therapies in 1996, which may have been due to factors such as late testing, limited access to or use of health care services, and limitations of current therapies. Since 2002, the number of new AIDS diagnoses has decreased.



- Males have consistently had higher AIDS case rates than females. African American males and females have the highest AIDS case rates, followed by Hispanic/Latino males and females.

- Rates among white and African American males have declined, while rates among African American women have increased over time.

Characteristics of Persons With AIDS in Louisiana

	Persons First Diagnosed with AIDS in 2005		Persons First Diagnosed with AIDS in 2006		Persons Living with AIDS in 2006	
	Cases[a]	**Percent[b]**	**Cases**	**Percent**	**Cases**	**Percent**
TOTAL	803	100%	767	100%	7,782	100%
Sex						
Female	264	33%	260	34%	1,975	25%
Male	539	67%	507	66%	5,807	75%
Ethnicity						
African American	610	76%	544	71%	4,999	64%
Hispanic/Latino	16	2%	20	3%	234	3%
White	169	21%	190	25%	2,496	32%
Other/Unk/Multi-Race	8	1%	13	1%	53	1%
Age Group	(Age at AIDS Diagnosis)		(Age at AIDS Diagnosis)		(Age in 2006)	
0-12	1	<1%	1	<1%	17	<1%
13-24	61	8%	57	7%	210	3%
25-34	208	26%	193	25%	1,184	15%
35-44	267	33%	265	35%	2,843	37%
45-54	197	25%	185	24%	2,555	33%
55-64	55	7%	47	6%	795	10%
65+	14	2%	19	2%	178	2%
Exposure Category [c]						
MSM[d]	203	42%	187	43%	2,566	46%
IDU[d]	87	18%	85	19%	1,100	20%
MSM & IDU	36	8%	29	7%	534	10%
HRH[d]	149	31%	136	31%	1,221	22%
Transfusion/Hemophilia	3	1%	0	0%	78	1%
Perinatal/Pediatric	1	<1%	1	<1%	52	1%
Unspecified Exposure [e]	*324*	*40%*	*329*	*43%*	*2,231*	*29%*
Urban/Rural Parishes						
Urban	706	88%	667	87%	6,812	88%
Rural	97	12%	100	13%	970	12%

a Cases within subgroups may not add up to totals due to unknowns.

b Percentages may not add up to 100% due to rounding.

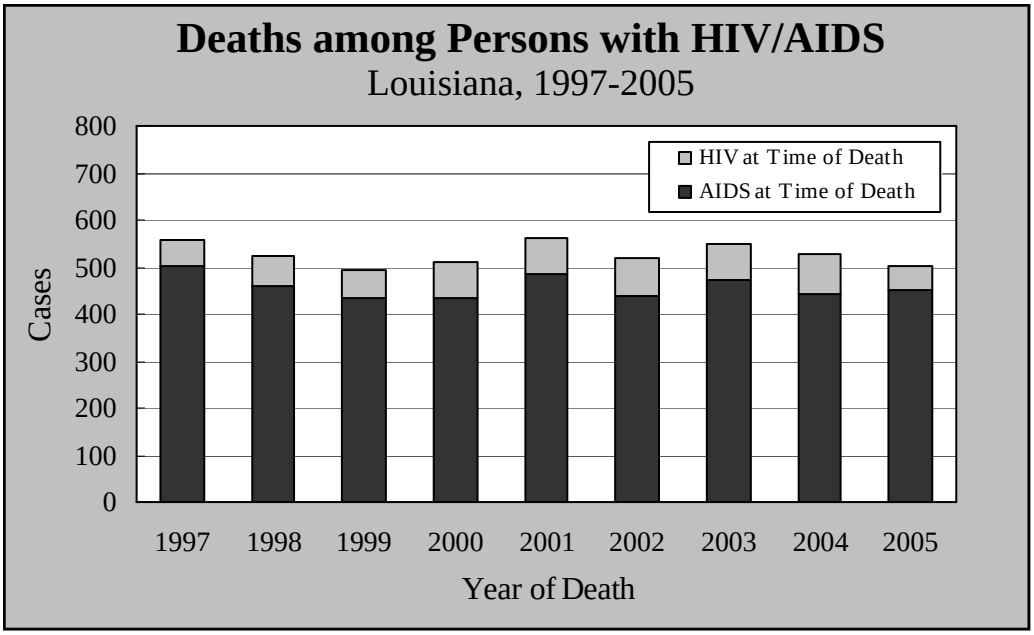
c Percentages for identified exposure groups represent the distribution among those who reported a specific exposure. The percentage for the unspecified exposure group represents the percent among the total.

d MSM: men who have sex with men (non-IDU); IDU: injection drug user; HRH: high-risk heterosexual.

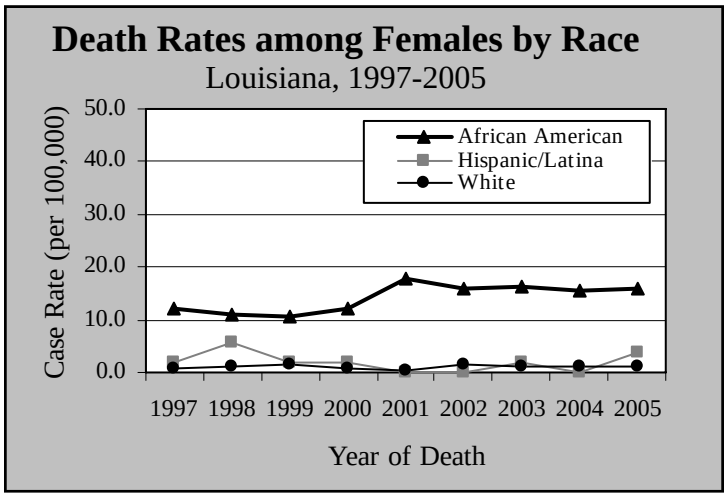
e Unspecified Exposure refers to cases whose exposure group is under investigation or unknown.

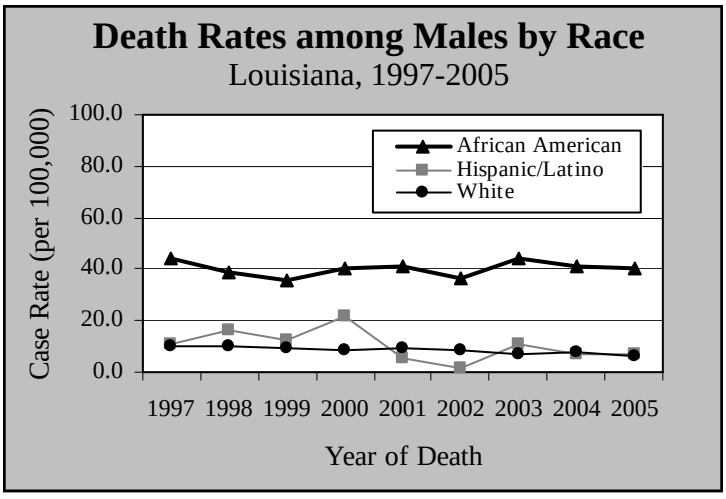
- Persons diagnosed with AIDS are most likely to be male and African American. Although African Americans make up 64% of persons living with AIDS, they represented 71% of new AIDS diagnoses in 2006, and although women represented 25% of persons living with AIDS, they represented 34% of new AIDS diagnoses in 2006.

MORTALITY



- In 2005, 451 persons with AIDS and 53 persons with HIV died in Louisiana. From 1997 to 2005, the number of deaths among person with HIV/AIDS has remained relatively stable.
  Note: mortality data for 2006 are not yet complete.





- Death rates in African American females have increased since 1997, while rates among Hispanic/ Latina and white females have remained stable and much lower than in African American females. Death rates among African American males are also much higher than in Hispanic/Latino or white males; however, death rates among all males have remained stable over the past decade.

HIV TESTING

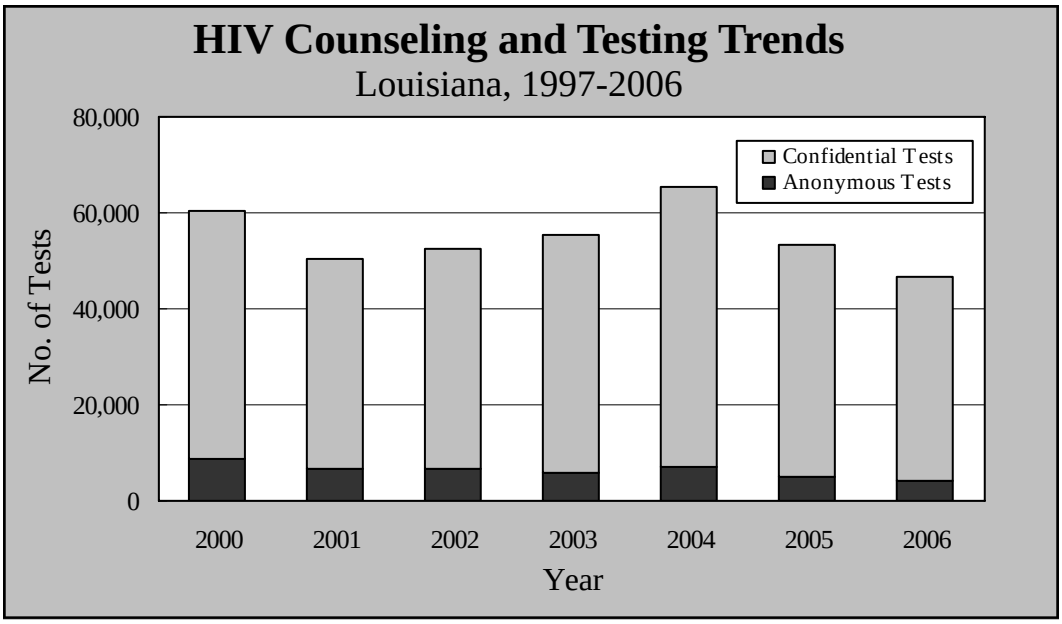
In September 2006, the Centers for Disease Control and Prevention (CDC) released the agency's "Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health Care Settings."[1] These recommendations, which can be found at www.cdc.gov, promote the incorporation of voluntary HIV screening into routine care and practices in health care settings. The recommendations also promote HIV testing on an "opt-out" basis in healthcare settings. With opt-out testing, patients are notified that the testing will be conducted unless the patient declines. *It is important to note that the national recommendations represent suggested practices. State laws, regulations, and local and institutional policies may have more stringent requirements, in particular as they relate to when opt-out testing may be conducted and when informed consent is required*.

In Louisiana, CDC's new HIV testing recommendations prompted several changes to the State's laws. In 2007, Louisiana adopted revisions to several statutes in order to facilitate implementation of the national guidelines. Excerpts from the amended laws are provided below (see www.legis.state.la.us for the complete version of the statutes):

- "…in the event that HIV diagnostic testing is offered to a person as a part of a routine medical screening in health care settings, substance abuse treatment facilities, mental health treatment facilities, and correctional settings, the patient shall be informed orally or in writing that HIV testing shall be performed unless the patient declines or "opts out" of the testing. Oral or written information shall include an explanation of HIV infection and the meanings of positive and negative test results, and the patient shall be offered an opportunity to ask questions. Consent for HIV testing shall be incorporated into the patient's general informed consent for medical care on the same basis as are other screening or diagnostic tests; a separate consent form for HIV testing shall not be necessary. If a patient declines testing, it shall be noted in the medical record." [2]
- "…Community-based organizations that are funded by the Office of Public Health to conduct HIV testing services will be required to follow all HIV testing protocols established by the HIV/AIDS Program of the Office of Public Health." [2] Currently, written informed consent is still required for testing conducted by these entities. The HIV/AIDS Program protocols can be found at www.hiv.dhh.louisiana.gov.
- "…If an individual tests positive for HIV infection, the individual shall be referred to a health care provider for appropriate HIV-related primary medical care." [2]
- The informed consent requirements outlined in the law do not apply to "…the performance of any HIV-related test…on any child when the child's attending physician reasonably believes such test to be necessary in order to properly diagnose or treat the child's medical condition and documents such reason in the child's medical record, including all newborns whose mothers present for delivery without a diagnostic HIV test on record…" [2]
- "…Every physician who attends any pregnant woman for conditions relating to pregnancy during the period of gestation or at delivery shall offer to take or have taken a sample of her blood at the time of her first examination or as soon as possible thereafter. If no objection is made by the woman, a blood sample shall be taken and submitted to any approved laboratory for a standard test for syphilis…and for a standard diagnostic HIV test…"[3]

[1] CDC. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health Care Settings. *MMWR* 2006;55(RR14):1-17
[2] La. Rev. Stat. § 40:1300.12-.13
[3] La. Rev. Stat. § 40:1091

HIV COUNSELING AND TESTING DATA



- The number of HIV tests conducted at publicly funded counseling and testing sites decreased from 65,530 in 2004 to 46,534 in 2006 primarily due to the impact of Hurricane Katrina on testing in the New Orleans metro area. The majority of tests were conducted confidentially (91% in 2006).

HIV Counseling and Testing Statistics
Louisiana, 2005-2006

	2005 Tests			2006 Tests		
	Total	**% of Total**	**N (% Positive)**	**Total**	**% of Total**	**N (% Positive)**
Sex						
Female	30,972	59%	152 (0.5%)	27,293	59%	163 (0.6%)
Male	21,740	41%	328 (1.5%)	19,058	41%	384 (2.0%)
Unknown	186	<1%	0 (0.0%)	183	<1%	1 (0.5%)
Race/Ethnicity						
African American	34,808	66%	375 (1.1%)	29,112	63%	404 (1.4%)
Hispanic/Latino	1,362	3%	8 (0.6%)	1,450	3%	12 (0.8%)
White	15,364	29%	90 (0.6%)	14,524	31%	115 (0.8%)
Other/ Unknown	1,364	3%	7 (0.5%)	1,448	3%	17 (1.2%)
Exposure Category						
MSM	2,911	6%	150 (5.1%)	2,838	6%	189 (6.6%)
MSM & IDU	95	<1%	5 (5.2%)	84	<1%	8 (9.5%)
IDU	1,227	2%	13 (1.0%)	1,013	2%	16 (1.6%)
Sex Partner at Risk	1,370	3%	57 (4.1%)	1,285	3%	66 (5.1%)
STD Diagnosis	4,740	9%	27 (0.6%)	3,813	8%	37 (1.0%)
Sex for Drugs/$	472	1%	6 (1.3%)	461	1%	8 (1.7%)
None of the Above	42,083	80%	222 (0.5%)	37040	80%	224 (0.6%)
Total	52,898	100%	480 (0.9%)	46,534	100%	548 (1.2%)

- Persons testing in publicly funded sites are more likely to be female and African American. In both 2005 and 2006, males had a higher percent positivity. African Americans had a higher percent positivity than whites or Hispanics. Men who have sex with men and persons who had a sex partner at risk for HIV had the highest percent positivity (>4.0% in both years).

HIV TESTING DELAYS

Since improved antiretroviral medications and preventive therapies are now available for HIV-infected persons, it is important that people are tested for HIV and referred into care early so that they can benefit from these treatment advances. However, a significant number of people do not undergo testing for HIV until they are symptomatic. Of the 1,052 persons diagnosed with HIV in 2006, 22% had an AIDS diagnosis at the time of their first HIV diagnosis. Males, Hispanics/Latinos and persons 55 and older were more likely to have AIDS at the time of their HIV diagnosis. Overall, 38% of persons had an AIDS diagnosis within six months of their HIV diagnosis (including the persons with AIDS at the time of HIV diagnosis). Half of Hispanic persons and 61% of persons residing in the Houma region had an AIDS diagnosis within six months of their HIV diagnosis.

Late HIV Diagnosis
Louisiana, 2006

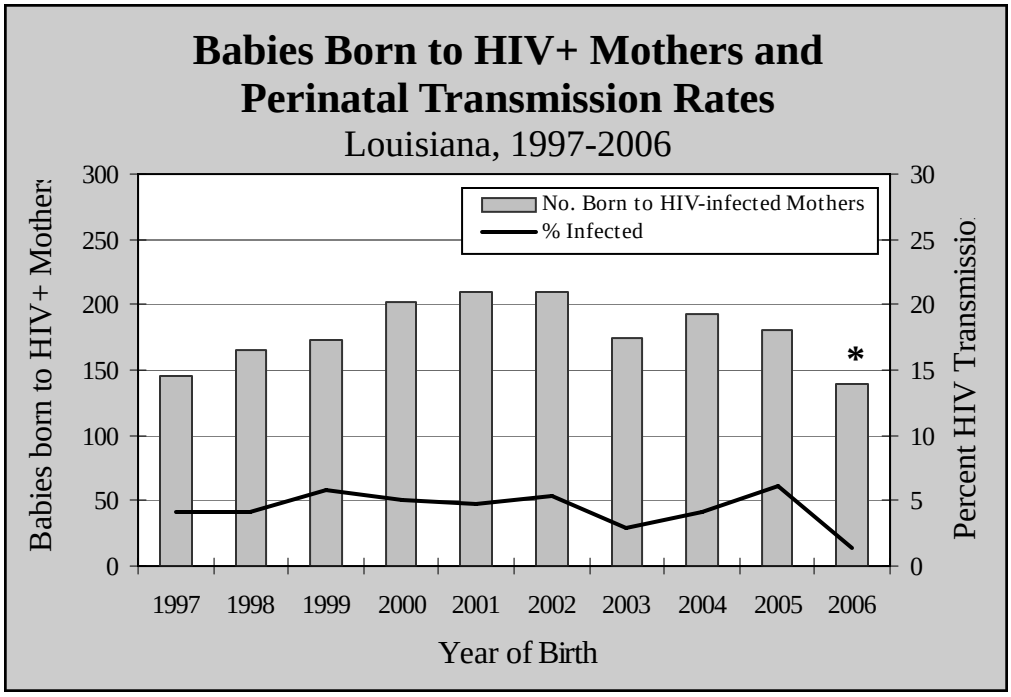
	Persons Diagnosed with AIDS at the time of HIV Diagnosis			Persons Diagnosed with AIDS within 6 months of HIV Diagnosis		
	No. with AIDS	Total	Percent	No. with AIDS	Total	Percent
Overall	232	1,052	22%	396	1,052	38%
Sex						
Female	50	339	15%	105	339	31%
Male	182	713	26%	291	713	41%
Race/Ethnicity						
African American	147	718	21%	271	718	38%
Hispanic/Latino	12	36	33%	18	36	50%
Other	4	20	20%	7	20	35%
White	69	278	25%	100	278	36%
Age Group						
0-12	0	4	0%	1	4	25%
13-24	11	189	6%	32	189	17%
25-34	48	315	15%	89	315	28%
34-44	80	263	30%	124	263	47%
45-54	60	202	30%	102	202	51%
55-64	21	57	37%	32	57	56%
65+	12	22	55%	16	22	73%
Public Health Region						
1: New Orleans	62	268	23%	109	268	41%
2: Baton Rouge	58	317	18%	105	317	33%
3: Houma	14	43	33%	26	43	61%
4: Lafayette	25	78	32%	31	78	40%
5: Lake Charles	11	41	27%	19	41	46%
6: Alexandria	9	51	18%	15	51	29%
7: Shreveport	21	104	20%	31	104	30%
8: Monroe	17	89	19%	33	89	37%
9: Hammond/Slidell	15	61	25%	27	61	44%

PERINATAL SURVEILLANCE

PERINATAL SURVEILLANCE

Between January 1, 1990 and December 31, 2006 an estimated 2,524 babies were born to women with HIV infection in Louisiana; 10.1% of the children were infected with HIV via mother to child transmission. The introduction and widespread use of prophylactic antiretroviral drug protocols led to a decline in annual perinatal transmission rates from nearly 19% in 1994 to 3% in 2003. In 2004 and 2005, the annual rate of maternal to child transmission of HIV increased. Factors that appear to have contributed to the increase include insufficient or no prenatal care, inadequate HIV testing of pregnant women, and failure of mothers to receive appropriate antiretroviral drug regimens during pregnancy and labor and delivery.

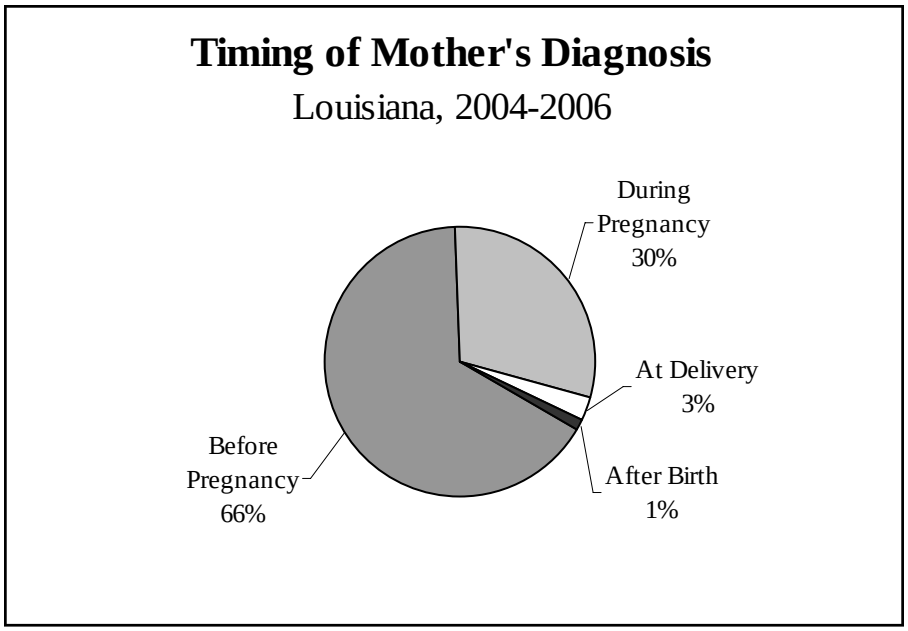
The Louisiana Office of Public Health HIV/AIDS Program (HAP) has been working for several years to promote the testing and treatment guidelines recommended by the United States Public Health Service (USPHS). In addition, HAP's Prevention and Services programs include concerted efforts to outreach to women at risk for HIV infection, women living with HIV, and perinatally exposed children to promote access to medical care and supportive services. For additional information about HAP's programs visit www.hiv.dhh.louisiana.gov.



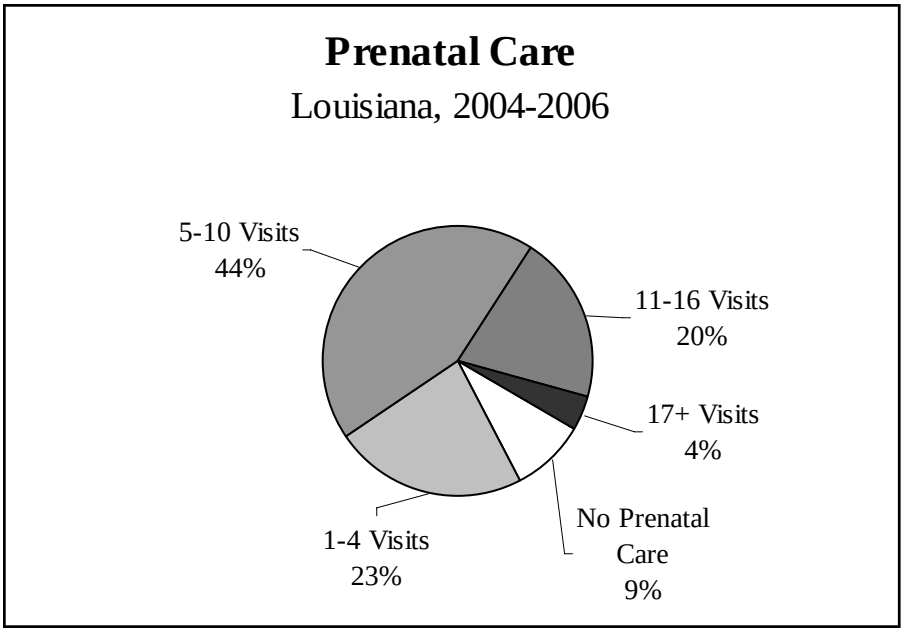
*2006 data are incomplete.

- In 2005, 180 babies were born to mothers with HIV and 11 were diagnosed with HIV (perinatal transmission rate of 6.1%). Although 2006 date are incomplete, of the 130 mothers with HIV who delivered in 2006 and have been reported so far, only 2 babies are HIV-infected (perinatal transmission rate of 1.4%).

- The number of babies born to HIV-infected mothers has decreased over the last two years, which is likely related to the population displacements that occurred because of Hurricane Katrina.

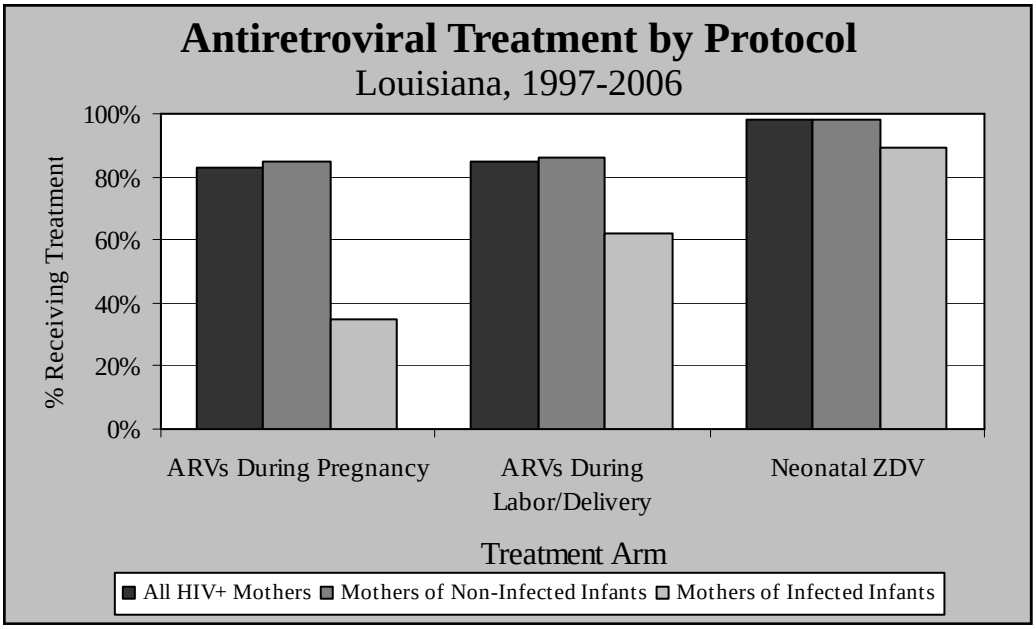


- In Louisiana, 96% of HIV+ mothers were diagnosed with HIV prior to their delivery. Of note, however, is that of the five mothers who learned of their diagnoses after delivery, three transmitted HIV to their infants.



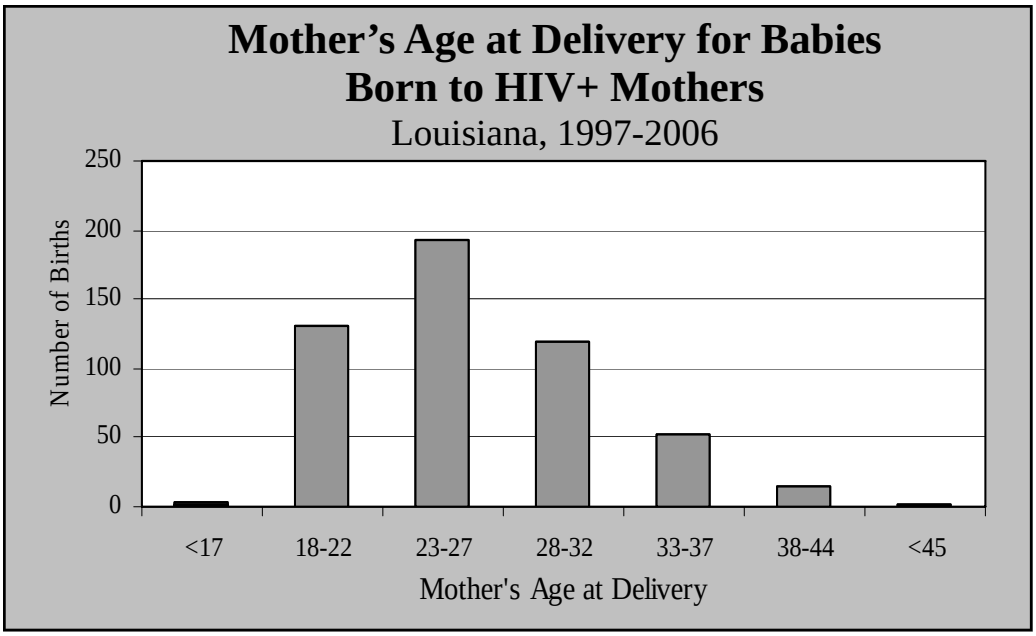
*Note: 14% of women had missing or unknown prenatal care status.

- Of the HIV-infected mothers who delivered between 2004 and 2006, 32% received either no prenatal care or minimal prenatal care (fewer than five visits).

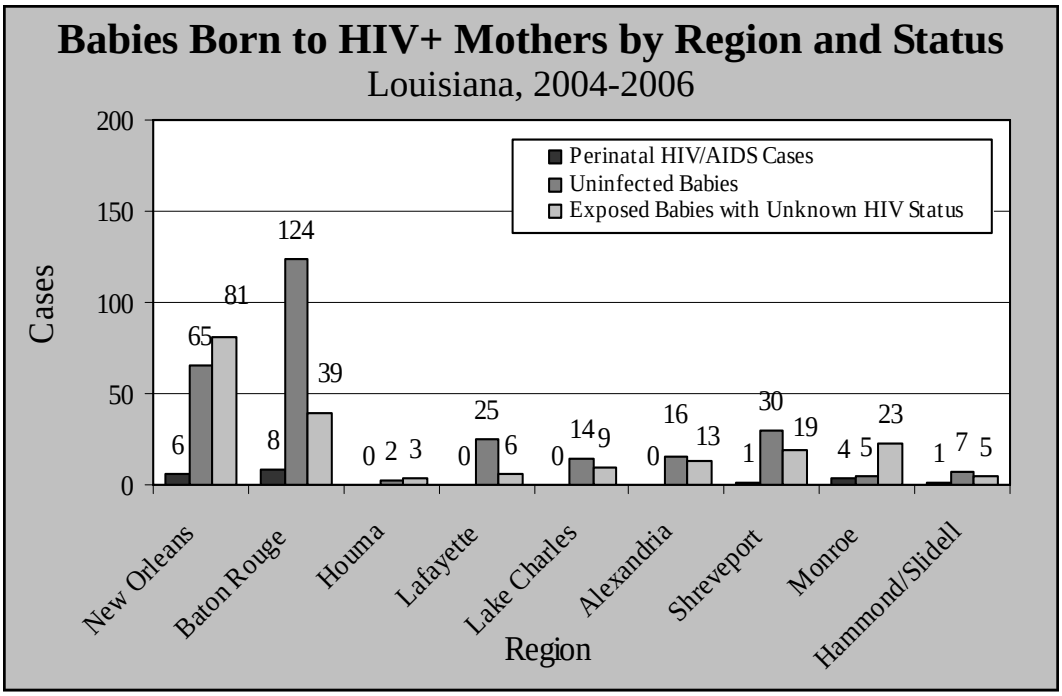


- In Louisiana between 2004-2006, 83% of HIV-infected women giving birth received some antiretroviral therapy (ARVs) during pregnancy; 85% received ARVs during labor and delivery; and 98% of infants known to be HIV-exposed at birth received prophylactic Zidovudine (ZDV) shortly after birth. Only 66% of HIV-infected women/infant pairs received all three arms of the ARV prophylaxis protocol.

- Among the mothers whose infants were HIV-infected, the percentages receiving ARVs in each treatment arm were much lower (only 35% during pregnancy, 62% during labor/delivery and 89% of infants received ZDV).



- Between 2004 and 2006, 86% of HIV-infected mothers delivering babies were between the ages of 18 and 32. African Americans made up 92% of the HIV-infected mothers who delivered during this time period in Louisiana.



- Births to HIV+ mothers occurred in every region of the state. The New Orleans and Baton Rouge regions had the greatest number of births to HIV-infected mothers. The New Orleans, Baton Rouge and Monroe regions had the highest number of perinatally-acquired infections. The Houma, Lafayette, Lake Charles, and Alexandria regions had no cases of perinatal HIV transmission during 2004-2006.

- Nearly 39% of HIV exposed infants born between 2004 and 2006 continue to have indeterminate HIV status. This may be due to reporting delays, lack of follow-up, and/or incomplete testing. Also, due to Hurricane Katrina in the New Orleans area, some medical records are not available and some infants who evacuated out of state have not yet been located. Efforts are underway to locate these children's health care providers to determine whether adequate testing was performed and, if not, to have the necessary testing done.

- In FY 2007 the State of Louisiana passed legislation that requires any physician providing medical care to a pregnant woman to conduct an HIV test as a component of her routine prenatal laboratory panel unless she specifically declines ("opts out"). (See Louisiana RS 40:1300.13.) In addition, the law allows physicians to test children born to women whose HIV status is unknown at the time of delivery. Many states have adopted similar laws in an effort to encourage HIV screening as a part of routine prenatal care, as is the current standard for medical care. With appropriate medical care during pregnancy for women with HIV, and prophylactic treatments for perinatally exposed children, mother-to-child transmission can be virtually eliminated.

OTHER DATA SOURCES

STREET OUTREACH SURVEY

In order to evaluate HIV prevention programs, there is a need to monitor not just the rates of new HIV cases, but also trends in the behaviors that lead to transmission. Risk behaviors are monitored in the general population through the Behavioral Risk Factor Surveillance System (BRFSS) and in high-risk populations through the Street Outreach Survey. The two HIV-related risk behaviors that are monitored in both surveys are number of sexual partners in the last twelve months and condom use at last sex. Differences in risk behaviors across different demographic groups are analyzed to determine how resources for interventions should be targeted.

Sexual Risk Behavior in High Risk Populations
Street Outreach Survey, Louisiana, 2001-2005

	Percent with 2 or More Partners[a] (among all respondents)					Percent Condom Use at Last Sex [b] (among those with 2 or more partners)				
	2001 *(n=5630)*	2002 *(n=5953)*	2003 *(n=3701)*	2004 *(n=2650)*	2005 *(n=1326)*	2001 *(n=3343)*	2002 *(n=3315)*	2003 *(n=2185)*	2004 *(n=1697)*	2005 *(n=768)*
Overall	60%	56%	62%	68%	60%	58%	60%	60%	59%	63%
Sex										
Female	49%	46%	50%	59%	48%	55%	58%	56%	59%	58%
Male	69%	65%	72%	75%	69%	61%	61%	63%	61%	69%
Age Group										
< 18	58%	53%	55%	65%	57%	68%	74%	69%	72%	64%
18-24	66%	64%	71%	76%	69%	60%	59%	61%	64%	66%
25-29	68%	62%	66%	78%	65%	59%	58%	59%	54%	62%
30-34	58%	57%	69%	68%	60%	51%	53%	55%	53%	60%
35+	45%	43%	46%	52%	45%	48%	55%	50%	53%	58%
Race										
African American	59%	55%	60%	66%	58%	60%	62%	62%	62%	65%
White	67%	63%	67%	73%	79%	52%	45%	45%	49%	56%

a. Respondents having two or more sexual partners in the last 12 months.
b. Condom use during the last sexual encounter among those with two or more partners within the last 12 months

- Among persons who were surveyed through street outreach in 2005, 60% had two or more sexual partners in the past 12 months. Males, persons aged 18-24 and whites were more likely to have multiple sexual partners.

- The proportion of persons with two or more sexual partners was higher in the populations surveyed through street outreach than in the general population surveyed through BRFSS (62% in the 2003 Street Outreach Survey versus 12% from BRFSS).

- Condom use among those with two or more sexual partners was relatively consistent between 2001 and 2004 (between 58% and 60%), with a slight increase in 2005 (63%). Condom use is highest among males, younger persons, and African Americans.

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS) SURVEY

Sexual Risk Behavior in the General Louisiana Population, Ages 18- 50

Statewide Telephone Survey (BRFSS, 2003)

	Number of Sex Partners		Percent Condom Use at Last Sex[b] (among those with 2 or more partners)
	Persons with 0-1 Partners	Persons with 2 or more Partners	
Overall (N= 2,614)	87%	12%	53%
Sex			
Female	92%	8%	48%
Male	81%	19%	57%
Age Group			
18-24	73%	27%	73%
25-34	87%	13%	44%
35-44	91%	9%	41%
45-64	93%	7%	46%
Race/Ethnicity			
African American	85%	15%	58%
White	89%	11%	49%

a Respondents reporting having two or more sexual partners in the last 12 months.

b Condom use during the last sexual encounter among those with two or more partners within the last 12 months.

- In the general population surveyed by BRFSS, almost all persons (95%) with any sexual partners in the past five years were also sexually active in the last twelve months. Overall, only 12% of the general population aged 18-49 reported having two or more sexual partners in the past year.

- Overall, 53% of persons with two or more partners in the past year used a condom during their last sexual encounter. Condom use was lowest among women (48%) and persons 35-44 years of age (41%).

- Seventy-three percent (73%) of persons between the ages of 18 and 24 with two or more partners surveyed through BRFSS reported using condoms.

- Condom use among persons with two or more sexual partners was higher among high risk populations surveyed through street outreach (60%) as compared to the general population (53%), in 2003.

UNMET NEED FOR PRIMARY MEDICAL CARE

Louisiana's Sanitary Code requires that laboratories report all test results indicative of HIV infection for persons residing in Louisiana. Laboratory data can be used to assess whether a person is in care or not in care during a specified time period. Persons who had at least one CD4 test or viral load conducted during 2006 are considered to have been "in care" during that year.

Unmet Need for Primary Medical Care
Louisiana, 2005-2006

	2005		2006	
	Percent in Care	**Percent not in Care**	**Percent in Care**	**Percent not in Care**
Overall	58%	42%	54%	46%
Persons living with HIV	43%	57%	40%	60%
Persons living with AIDS	71%	29%	66%	34%
Sex				
Female	61%	39%	57%	43%
Male	56%	44%	52%	48%
Race/Ethnicity				
African American	58%	42%	53%	47%
Hispanic/Latino	35%	65%	36%	64%
White	59%	41%	58%	42%
Age Group				
<13	80%	20%	73%	27%
13-19	72%	28%	63%	37%
20-29	53%	47%	49%	41%
30-39	55%	45%	51%	49%
40+	59%	41%	56%	44%
Public Health Region				
1: New Orleans	49%	51%	42%	58%
2: Baton Rouge	66%	34%	64%	36%
3: Houma	69%	31%	69%	31%
4: Lafayette	59%	41%	57%	43%
5: Lake Charles	51%	49%	48%	52%
6: Alexandria	63%	37%	60%	40%
7: Shreveport	61%	39%	57%	43%
8: Monroe	61%	39%	60%	40%
9: Hammond/Slidell	63%	37%	62%	38%

- Of the persons living with HIV/AIDS in Louisiana at the end of 2005, 58% received primary medical care. In 2006, only 54% of persons were in primary medical care. Persons with AIDS were significantly more likely to be in care than persons with HIV.

- Unmet need was higher in males compared to females and in persons older than 19. Hispanic persons were less likely to be in care than whites or African Americans. The New Orleans and Lake Charles regions had the highest unmet need, and the Baton Rouge and Houma regions had the lowest unmet need.

TECHNICAL NOTES

Interpretation of HIV Data

Antiretroviral treatment regimens are initiated earlier in the course of HIV infection than in the past. These therapies postpone and/or prevent the onset of AIDS, resulting in a decrease in AIDS incidence. Consequently, recent AIDS incidence data can no longer provide the basis of HIV transmission estimates and trends and the dissemination of surveillance data now places an emphasis on the representation of HIV-positive persons. Throughout this report, all AIDS data are depicted by characteristics at year of AIDS diagnosis under the 1993 AIDS case definition, whereas HIV data are characterized at year of HIV diagnosis (earliest positive Western blot or detectable viral load reported to the health department).

HIV data are not without limitations. Although HIV diagnosis is usually closer in time to HIV infection than is an AIDS diagnosis, data represented by the time of HIV diagnosis must be interpreted with caution. HIV data may not accurately depict trends in HIV transmission because HIV data represent persons who were reported with a positive confidential HIV test, which may first occur several years after HIV infection. In addition, the data are underreported because only persons with HIV who choose to be tested confidentially are counted. HIV diagnoses do not include persons who have not been tested for HIV or persons who have only been tested anonymously.

Therefore, HIV diagnosis data do not necessarily represent characteristics of persons who have been recently-infected with HIV nor do they provide true HIV incidence. Demographic and geographic subpopulations are disproportionately sensitive to differences and changes in access to health care, HIV testing patterns, and targeted prevention programs and services. All of these issues must be considered when interpreting HIV data.

Definitions of the Exposure Categories

For the purposes of this report, HIV/AIDS cases were classified into one of several hierarchical exposure (risk) categories, based on information collected. Persons with more than one reported mode of exposure to HIV were assigned to the category listed first in the hierarchy. Definitions are as follows:

- **Men who have Sex with Men (MSM)**: Cases include men who report sexual contact with other men, i.e. homosexual contact or bisexual contact.
- **Injection Drug User (IDU)**: Cases who report using drugs that require injection - no other route of administration of illicit drugs at any time since 1978.
- **High-Risk Heterosexual Contact (HRH)**: Cases who report specific heterosexual contact with a person who has HIV or is at increased risk for HIV infection, e.g., heterosexual contact with a homosexual or bisexual man, heterosexual contact with an injection drug user, and/or heterosexual contact with a person known to be HIV-infected.
- **Hemophilia/Transfusion/Transplant (Hemo/Transf)**: Cases who report receiving a transfusion of blood or blood products prior to 1985.
- **Perinatal**: HIV infection in children that results from transmission from an HIV-infected mother to her child.

- **Unspecified**: Cases who, at the time of this publication, have no reported history of exposure to HIV through any of the routes listed in the hierarchy of exposure categories. "Unspecified" cases include: persons for whom risk behavior information has not yet been reported and are still under investigation; persons whose exposure history is incomplete because they have died, declined risk disclosure, or were lost to follow-up; persons who deny any risk behavior; and persons who do not know the HIV infection status or risk behaviors of their sexual partners.

Case Definition Changes

The CDC AIDS case definition has changed over time based on knowledge of HIV disease and physician practice patterns. The original definition was modified in 1985[1]. The 1987 definition[2] revisions incorporated a broader range of AIDS opportunistic infections and conditions and used HIV diagnostic tests to improve the sensitivity and specificity of the definition. In 1993, the definition was expanded[3] to include HIV-infected individuals with pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer, or CD4 T-lymphocyte counts of less than 200 cells per ml or a $CD4^+$ percentage of less than 14. As a result of the 1993 definition expansion, HIV-infected persons were classified as AIDS earlier in their course of disease than under the previous definition. Regardless of the year, AIDS data are tabulated in this report by the date of the first AIDS defining condition in an individual under the 1993 case definition.

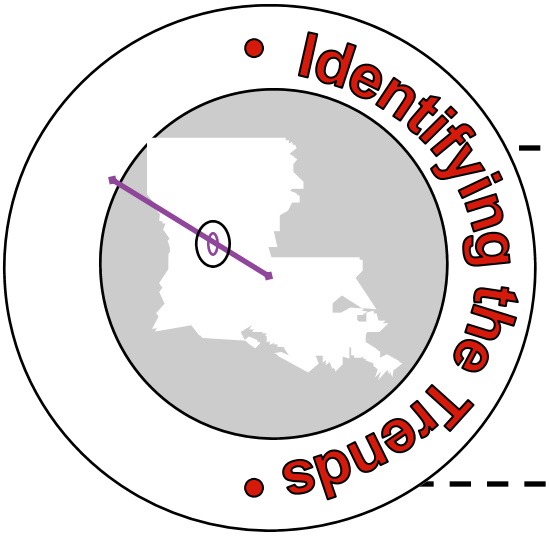
The case definition for HIV infection was revised in 1999[4] to include reports of detectable quantities of HIV virologic (non-antibody) tests. The revisions to the 1993 surveillance definition of HIV include additional laboratory evidence, specifically detectable quantities from virologic tests. The perinatal case definition for infection and seroreversion among children less than 18 months of age who are perinatally-exposed to HIV was changed to incorporate the recent clinical guidelines and the sensitivity and specificity of current HIV diagnostic tests in order to more efficiently classify HIV-exposed children as infected or non-infected.

Risk Redistribution Techniques

Recently reported cases, especially HIV (non-AIDS) cases, are more likely to be reported without a specified risk exposure, thereby causing a distorting decrease in trends in exposure categories. Thus, graphical representations of trends over time among risk groups use estimated cases based on risk redistribution. The data shown on pages 12-14 have been adjusted to account for cases with no identified risk (NIR). Logistic regression models were developed to identify those variables that are highly correlated with either a) missingness or b) one of the three chief risk factors for HIV infection (MSM, IDU, HRH). Values for mode of exposure for NIR cases were estimated using a statistical procedure known as hotdeck imputation. In short, a profile for each case was constructed using information from other variables, such as age, race, sex, parish of residence, incarceration history, substance use, and year of infection. A predicted value for risk was then obtained by matching cases with no known risk to cases with a known risk along this profile. These hotdeck procedures are similar to methods used by the U.S. Census to impute missing values on the American Community Survey (www.census.gov/acs/www/Downloads/tp67.pdf).

.

[1] MMWR 1985; 34: 373-75.
[2] MMWR 1987; 36 [Supp no.1S]: 1S-15S.
[3] MMWR 1992; 41[RR-17]: 1-19.
[4] CDC 1999; 48[RR13]; 1-27.



Louisiana Department of Health and Hospitals
Office of Public Health
HIV/AIDS Program
1010 Common Street, Suite 1100
New Orleans, LA 70112
(504) 568-7474