2007/2008 HIV/AIDS Program Report

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Office of Public Health

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In addition, we wish to acknowledge the contribution of persons with HIV Infection, HIV health care providers, community groups, researchers, and members of the community. Publication of this report would not have been possible without their cooperation, dedication, and hard work.

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Louisiana Office of Public Health HIV/AIDS Program Overview

About the Program

The HIV/AIDS Program (HAP) administers statewide and regional programs designed to prevent the transmission of HIV, to ensure the availability of quality medical and social services for HIV-infected and -affected individuals, and to track the impact of the epidemic in Louisiana. HAP's main programmatic units include:

- Surveillance: This unit is responsible for monitoring the HIV epidemic throughout the state. Surveillance also aids in the planning of prevention efforts and guides the allocation of resources for HIV treatment, care, and other supportive services.
- Prevention: This unit is responsible for behavioral interventions and educational activities that are focused on reducing the spread of HIV in Louisiana. Prevention activities include HIV counseling, testing and referral, prevention with HIV-positive individuals, outreach, partner services, and behavioral interventions.
- Services: This unit provides a variety of patient care services to individuals living with HIV infection such as primary medical care, medications, dental services, assistance with transportation, rent and utilities, assistance with the payment of health insurance premiums, co-payments and deductibles, child care, supplemental food items, and other needed support services.
- Evaluation: This unit is responsible for examining the services provided to persons infected or affected by HIV and the prevention activities targeted at reducing the spread of HIV to ensure the quality, effectiveness, and efficiency of those activities.

About this Report

HIV infection in Louisiana requires responsive interventions to decrease new infections, slow disease progression, increase individual awareness of HIV status, and help ensure access to medical care for persons who have HIV. The *2007/2008 HIV/AIDS Program Report* provides a thorough surveillance profile as well as descriptions of the state's prevention, counseling and testing, care, services, housing, and evaluation programs. While many challenges remain, the report highlights several areas of progress.

Executive Summary

The HIV epidemic continues to have a significant impact on the public health of Louisiana. Although there is still no cure for HIV, recent advances in treatment have significantly slowed the progression from HIV to AIDS and from AIDS to death. As of December 31, 2008, a cumulative total of 28,676 persons were diagnosed with HIV infection in Louisiana, including 312 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 2008 and reported by June 1, 2009. Some of the most significant trends are highlighted below:

- At the end of 2008, 16,277 persons were living with HIV infection in Louisiana, of whom 8,684 (53%) 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. 19), Louisiana ranked 5th highest in state AIDS case rates and 11th in the number of AIDS cases reported in 2007. The metropolitan New Orleans area ranked 2nd and the Baton Rouge metropolitan area ranked 3rd in AIDS case rates in 2007 among the large metropolitan areas in the nation.

- During 2007, 1,137 persons were newly diagnosed with HIV in Louisiana, and in 2008, 1,168 persons were diagnosed. New HIV diagnoses occurred in 62 of Louisiana's 64 parishes in 2008.

- The New Orleans region had both the highest number of new HIV diagnoses and the highest rate of new diagnoses (new cases per 100,000 persons) in 2008 out of all nine public health regions.

- The HIV rate for African Americans continues to be disproportionately high; the rate for African Americans was seven times higher than among whites. Although African Americans make up only 32% of the state's population, 72% of newly-diagnosed HIV cases and 70% of newly-diagnosed AIDS cases were among African Americans in 2008.

- Women represented 33% of new HIV diagnoses in 2008. The HIV rate among men has increased since 2005 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, the number of new AIDS diagnoses decreased but has increased since 2006.

- In 2008, 24% of persons newly diagnosed with HIV had AIDS at the time of their diagnosis, and an additional 9% of persons developed AIDS within six months of their diagnosis. Men, Hispanics, and persons aged 35 and older were most likely to be diagnosed late in the course of their disease.

- Perinatal transmission rates have dropped dramatically from 17% in 1994 to less than 2% in 2006 and 2007 due to increased screening of pregnant women and increased use of antiretroviral therapy by pregnant women with HIV and their infants.

- 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 2008, Louisiana ranked 1st in the nation in primary and secondary syphilis rates (16.5 per 100,000), 1st in congenital syphilis rates (36.3 per 100,000), 2nd in gonorrhea rates (220.2 per 100,000) and 5th in chlamydia rates (528 per 100,000) according to the CDC's *2009 STD Surveillance Report.* The syphilis and gonorrhea rankings have not changed from 2007 but the chlamydia ranking increased from 7th to 5th.

- In 2008, there were a total of 67,730 HIV tests conducted through HAP's HIV Counseling Testing and Referral Program—1.5% of Louisiana's population. Of these tests, 675 were positive, accounting for 1.0% of the total tests.

- In 2003, when rapid testing began in Louisiana, only 2% of all tests were rapid. In 2007, Louisiana began a testing initiative which significantly expanded the locations where rapid tests were available and the number of rapid tests conducted. By 2008, 77% of all tests were rapid tests.

- Of the 67,730 tests conducted, 70% were among blacks and 56% were among females. Males had a higher positivity rate than females, and male-to-female transgender persons and men who have sex with men had the highest percent positivity. HIV specialty clinics, prisons/jails, and emergency rooms had the highest positivity rates of all testing sites in 2008.

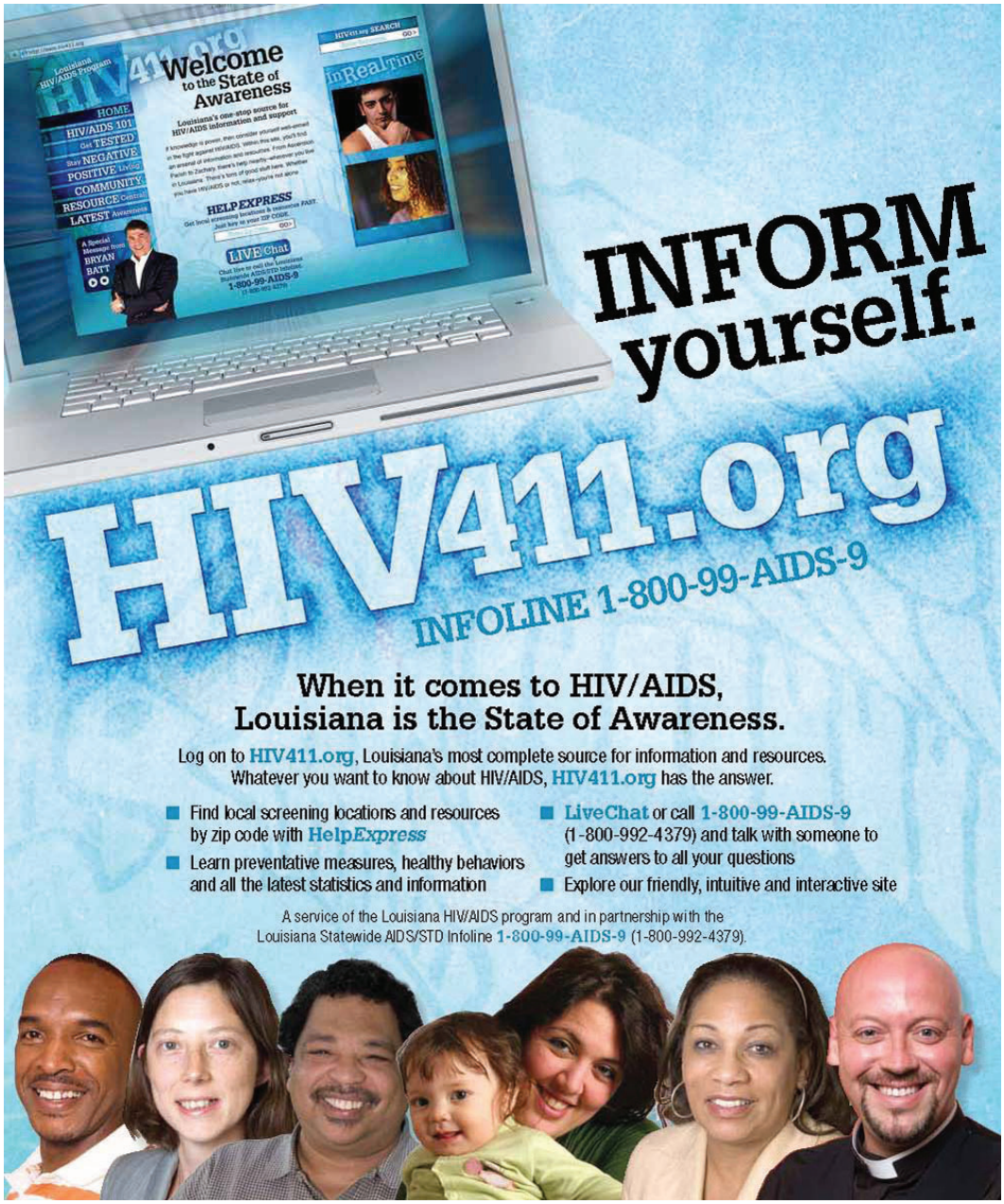
- In 2008, 1,474 persons were referred to the Disease Intervention Specialists in the HIV Partner Services Program. A total of 53 of their partners contacted by DIS were newly-diagnosed with HIV, a positivity rate of 11.5% among partners contacted by DIS.

- In 2008, 41% of all persons living with HIV infection in Louisiana were not in care (did not have a CD4 or viral load test conducted in 2008). Males, Hispanic/Latinos, and persons over the age of 65 years had the highest percentage of unmet need for medical care.

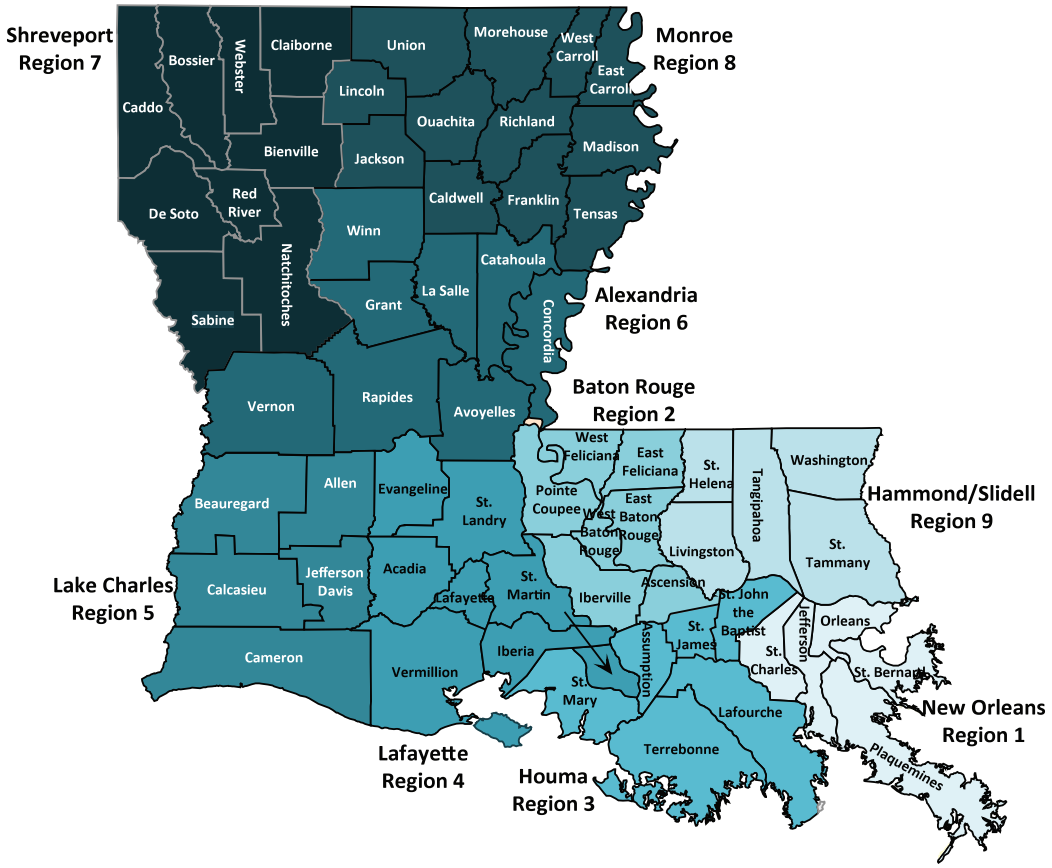
- In 2008, HAP coordinated HIV-related care, treatment and support services for 5,875 people living with HIV infection in Louisiana. These services were sponsored through the Ryan White Part B and Housing Opportunities for Persons with AIDS (HOPWA) funding programs.

Staying Connected with HAP

In August, 2009, HAP launched a new website, HIV411.org, to serve as a comprehensive resource for Louisiana residents about HIV and AIDS and support services for those living with HIV infection in Louisiana. This new website contains a search engine to locate HIV testing locations and HIV-related resources by zip code. Publications, including this Annual Report, can be found under the "Resource Central" tab. An archive of all Annual Reports can be found at HAP's Office of Public Health website, www.hiv.dhh.louisiana.gov.



Geographic Guide to Louisiana's Public Health Regions and Metro Areas



	Parishes in Public Health Region	Parishes in MSA
Region 1:New Orleans	Jefferson, Orleans, Plaquemines, St. Bernard	Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany
Region 2:Baton Rouge	Ascension, E. Baton Rouge, E. Feliciana, Iberville, Pointe Coupee, W. Baton Rouge, W. Feliciana	Ascension, E. Baton Rouge, E. Feliciana, Iberville, Livingston, Pointe Coupee, St. Helena, W. Baton Rouge, W. Feliciana
Region 3:Houma	Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, St. Mary, Terrebonne	Lafourche, Terrebonne
Region 4:Lafayette	Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, Vermillion	Lafayette, St. Martin
Region 5:Lake Charles	Allen, Beauregard, Calcasieu, Cameron, Jefferson Davis	Calcasieu, Cameron
Region 6:Alexandria	Avoyelles, Catahoula, Concordia, Grant, La Salle, Rapides, Vernon, Winn	Grant, Rapides
Region 7:Shreveport	Bienville, Bossier, Caddo, Claiborne, DeSoto, Natchitoches, Red River, Sabine, Webster	Bossier, Caddo, DeSoto
Region 8:Monroe	Caldwell, E. Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, W. Carroll	Ouachita, Union
Region 9:Hammond/Slidell	Livingston, St. Helena, St. Tammany, Tangipahoa, Washington	No MSA

Louisiana's Population and Healthcare Environment

Louisiana's Population

In the 2008 estimated census, the total population of Louisiana was 4,410,796 persons. Louisiana is made up of 64 county-equivalent subdivisions called parishes. In 2008, parish populations ranged from a low of 5,694 persons (Tensas Parish) to a high of 436,181 persons (Jefferson Parish). The New Orleans region (Orleans, Jefferson, Plaquemines, and St. Bernard Parishes) represented 18% of the state's population. The state is considered rural—however, 79% of the population resides in urban areas[i]. The state has nine public health regions and eight metropolitan statistical areas (MSAs).

Distribution of the General Population by Region
Louisiana, 2000, 2006 & 2008

Public Health Region	2000 Total Population[a]	2006 Total Population[b]	% Change from 2000-2006	2008 Total Population[b]	% Change from 2006-2008	% Change from 2000-2008
1-New Orleans	1,034,126	692,775	-33.0%	807,032	16.5%	-22.0%
2-Baton Rouge	603,634	640,950	6.2%	643,525	0.4%	6.6%
3-Houma	383,697	401,260	4.6%	394,884	-1.6%	2.9%
4-Lafayette	548,154	573,858	4.7%	578,133	0.7%	5.5%
5-Lake Charles	283,429	284,311	0.3%	284,732	0.2%	0.5%
6-Alexandria	301,390	299,446	-0.6%	300,160	0.2%	-0.4%
7-Shreveport	522,560	531,548	1.7%	533,539	0.4%	2.1%
8-Monroe	353,865	349,564	-1.2%	347,102	-0.7%	-1.9%
9-Hammond/Slidell	438,121	514,056	17.3%	521,689	1.5%	19.1%
Louisiana	**4,468,976**	**4,287,768**	**-4.1%**	**4,410,796**	**2.9%**	**-1.3%**

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

- In 2008, the New Orleans region (Region 1) had the largest population in the state and the Lake Charles region (Region 5) 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. Between 2006 and 2008 the population of the New Orleans region increased 16.5% but is still 22% below the population in 2000. Each year the population of the New Orleans region continues to increase.
- The Hammond/Slidell region (Region 9) had the largest population increase, 81,761 persons, (19%) from 2000 to 2008.

Demographic Composition

According to the 2008 estimated census data, the racial and ethnic composition of the state was estimated to be 62% white, 32% African American, 1.5% Asian, and 0.6% American Indian. Persons of Hispanic origin were estimated to make up 3.4% of the total population. Almost 80% of persons living in Louisiana in 2008 were born in Louisiana and 3% are foreign born. Of the foreign-born population, 55.5% are non-US citizens.

Age and Sex

In 2008, the median age of Louisiana residents was 35.6 years. Just over 25% of the population was younger than 18 years; more than 12% of the population was 65 years or older. As in previous years, the proportion of females in the overall population was slightly higher than the proportion of males (51.5% vs. 48.5%).

Poverty, Income, and Education

In 2008 the average household size in Louisiana was 2.65 persons and the average family size was 3.26 persons. Of all Louisiana households, 68% are considered family households of which 16% have a female head of house with no husband present. In 2008, the median household income in Louisiana was $42,634. According to the 2008 estimates, approximately 18.5% of the population has an income below the federally defined poverty level, compared with 13% nationally. Louisiana has one of the highest proportions of children living in poverty with 26.2% of all children 18 years or younger in 2008 compared to the national estimate of 17.8% of all US children.[ii] In 2008, Louisiana ranked 46th among states for median family income. In the 2008 estimated census, 80.2% of Louisiana residents aged 25 years and older had attained a high school degree or higher, and 20.4% had a bachelor's degree or higher.[iii] The unemployment rate at the end of 2008 was 5.5% statewide.[iv]

Incarceration

Louisiana ranked 49th in incarceration rates per 1,000 adults with 37,012 persons reported as incarcerated in 2006. The Louisiana incarceration rate was 439.6% higher than the least incarcerated state (Maine) according to Homeland Security.[v]

Health Indicators

In the 2008 United Health Foundation's *America's Health Rankings* report, Louisiana ranked 50th in overall health. This national health survey compares multiple health outcomes and health determinates in all states. The last-place ranking is predominately due to increases in obesity, low high school graduation rates, high infant mortality rates, and preventable hospitalizations.[vi] An estimated 19.3% of Louisiana residents lack health insurance, compared to a national average of 15.4%.[vii]

Public Aid

In 2008 Medicaid covered 15.8% and Medicare covered 12.5% of all persons living in Louisiana.[viii] Medicaid expenditures in Louisiana totaled $5.4 billion in the 2007 fiscal year. In 2008, 35.5% of children ages 0-18 were insured through Medicaid, and 12% of children were uninsured.

Publicly Available Healthcare in Louisiana

The Office of Public Health (OPH) provides free and low-cost basic health services through parish health units in the regions. Services include family planning, HIV testing, STD screening and treatment, maternal and child health, special health services for children, nutrition programs, and immunizations. Regional activities also include sanitation, environmental monitoring, and epidemiologic investigations. (See the Office of Public Health website for additional information about OPH programs www.oph.dhh.louisiana.gov). Comprehensive inpatient and outpatient medical services are also available in each region of the state through regional public medical centers. The three medical centers in the central and northern parts of the state operate under the auspices of the Louisiana State University (LSU) – Shreveport system, and the seven medical centers in the southern part of the state operate under the LSU Health Care Services Division. Individuals may access care at these facilities regardless of insurance status or ability to pay.

Chapter 1

Profile of the HIV Epidemic in Louisiana

Introduction to the Surveillance Unit

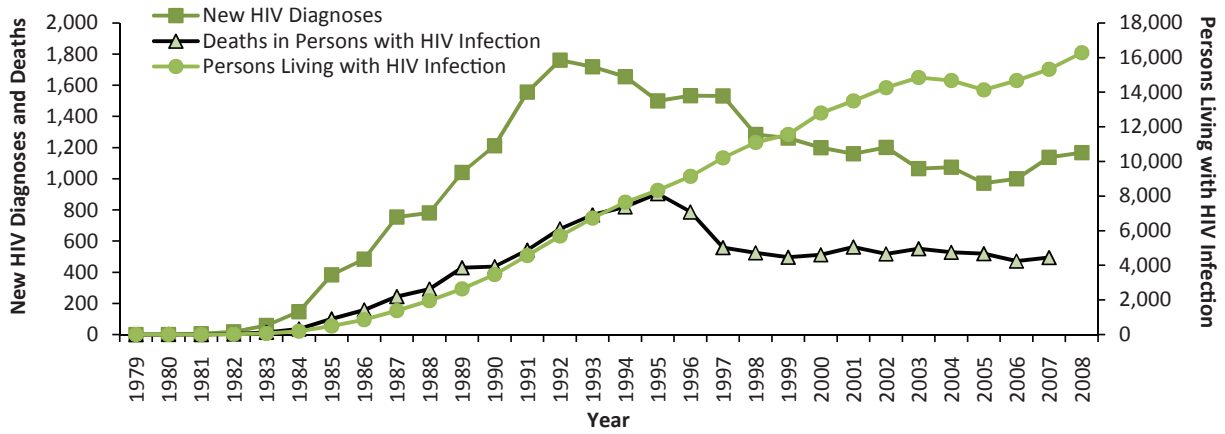
With funding from the Centers for Disease Control and Prevention (CDC) and in accordance with the Louisiana Sanitary Code, the Louisiana Office of Public Health HIV/AIDS Program's (HAP) Surveillance Program conducts general case ascertainment through the receipt of reports of potential cases of HIV infection from clinical providers, laboratories and other public health providers throughout the state. Basic demographic and risk information are also collected. In addition, the program monitors perinatal exposure to and transmission of HIV, HIV incidence, medication resistant strains of HIV, clinical manifestations of HIV disease, mortality, the utilization and impact of care and treatment, and measures of high-risk behavior.

Louisiana began confidential name-based reporting of AIDS cases in 1984 and confidential name-based reporting of HIV (non-AIDS) cases in 1993. In 1999, the Louisiana Sanitary Code was revised to mandate the reporting of all HIV-related laboratory results (e.g., CD4 counts, viral loads, Western blots). All cases of perinatal exposure to HIV are also investigated. The maternal and pediatric medical records are reviewed to assess testing and treatment received. Follow-up occurs until the babies' infection status can be determined.

Data from the surveillance activities are analyzed and non-identifying summaries of this information are provided to public health programs, community-based organizations, researchers, and the general public through reports, presentations, data requests, and regional profiles for the purposes of program planning and education. This information is used to assess the risks for HIV infection and develop effective HIV prevention programs; to help identify where services for people living with HIV infection are needed; and to assist with the allocation of federal and state funding.

This report includes data for persons diagnosed through December 31, 2008 and reported to HAP before June 1, 2009. Data are presented by both *cases* and *rates.* Cases are the number of individuals reported to HAP with HIV infection, and rates are the number of individuals reported per 100,000 persons. Rates take into account different population sizes among different groups or areas, and comparing rates between two or more groups or areas can identify important differences.

Number of HIV Diagnoses, Deaths, and Persons Living with HIV Infection
Louisiana, 1979-2008

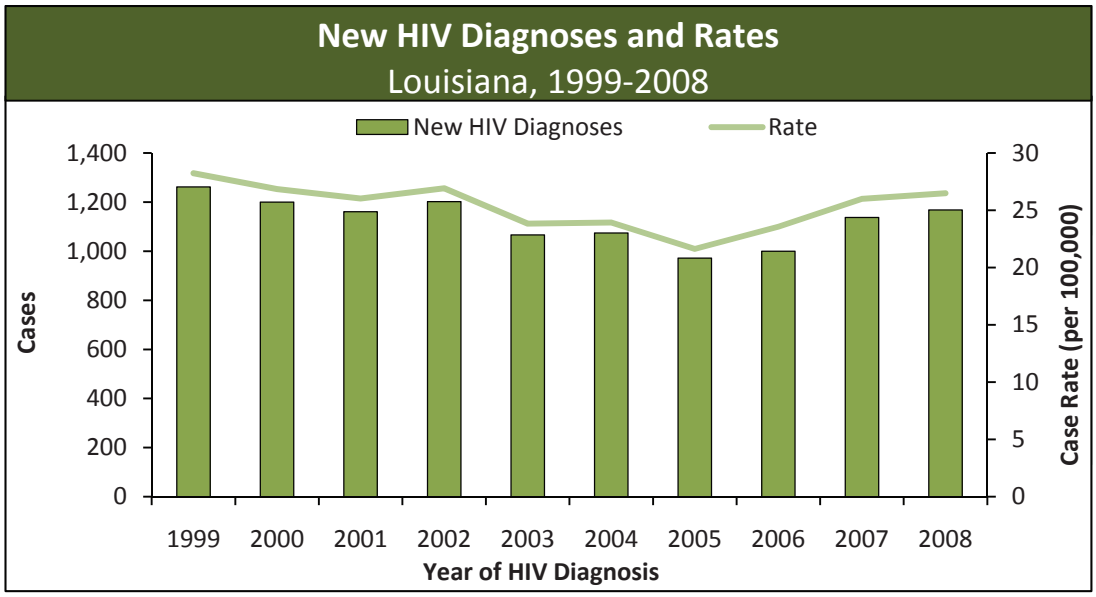


*2008 death data not available

- The first reported Louisiana resident with AIDS was diagnosed in 1979. In the 3 decades since then, the number of persons living with HIV infection in the state has continued to increase. New HIV diagnoses peaked in 1992 and deaths among persons with HIV infection peaked in 1995. Deaths have decreased since 1995 due to the availability of more effective treatments. The decreases in both persons living with HIV infection and new HIV diagnoses seen in 2005 were due to the impact of Hurricane Katrina which resulted in the dislocation of a large number of persons from the New Orleans metropolitan area.

10-Year Trends in New HIV Diagnoses (1999-2008)

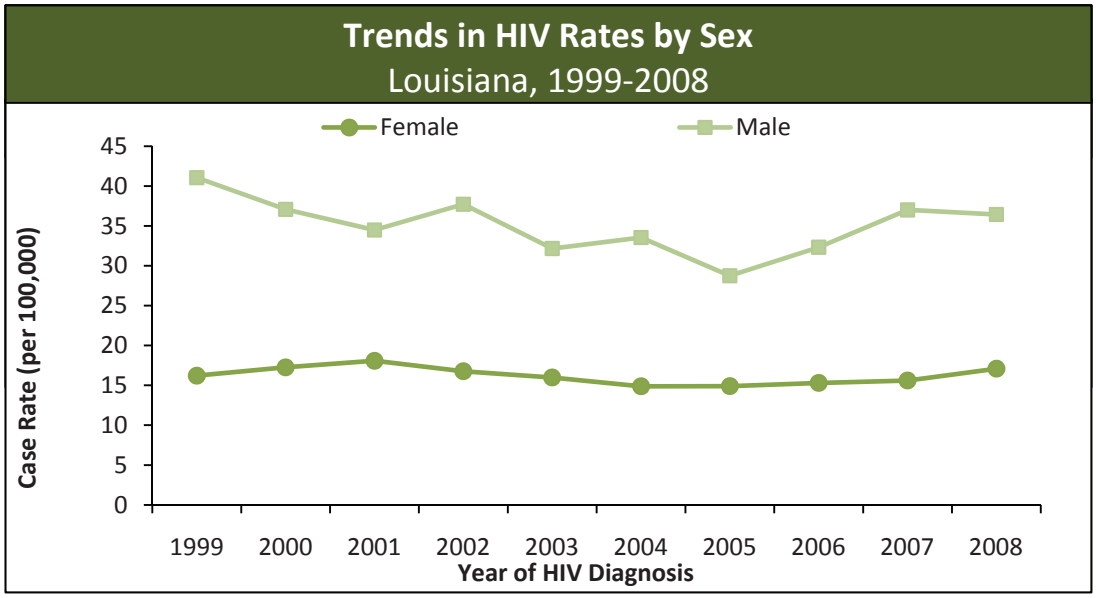
New HIV diagnoses are the number of people diagnosed with HIV at any stage of the disease within the given year. These data have historically served as a measure of new infections (incidence). However, people can be infected with HIV for a long time before they are diagnosed, so counting new HIV diagnoses is not an accurate representation of new infections. Louisiana is one of the states that have been participating in the development of CDC's new national system to measure recent HIV infections (HIV incidence). An overview of this new surveillance system as well as some preliminary data are included later in this report. HIV diagnosis data provide only the minimum estimate of the number of people living with HIV, since persons who have not been tested and those who test anonymously are not included. The CDC estimates that 21% of persons living with HIV are undiagnosed.



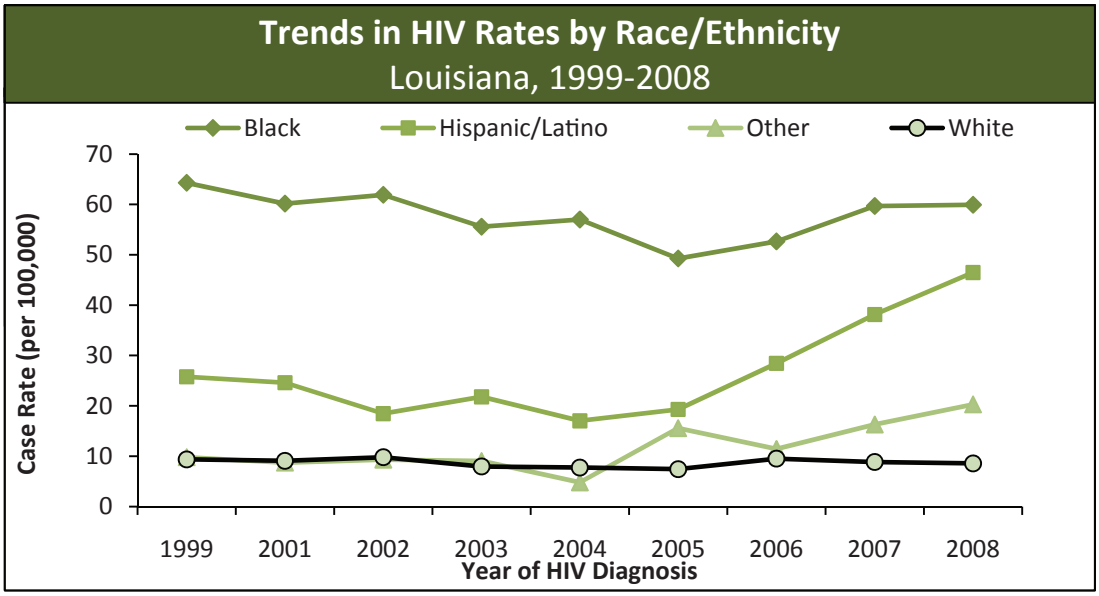
- In 2007, 1,137 individuals were newly diagnosed with HIV infection in Louisiana. In 2008, 1,168 new HIV cases were diagnosed. Although the number of new HIV diagnoses decreased from 1999 to 2005, they have increased each year since then. The lower number of new diagnoses in 2005 and 2006 was due to the impact of Hurricane Katrina in August 2005 which caused a significant dislocation of the population and a disruption of HIV testing services.
- The rate of new HIV diagnoses follows a similar pattern as the actual case count. From 2005 to 2008, the rate (per 100,000 persons) has increased in Louisiana from 22 to 26 per 100,000.

HIV Diagnoses by Sex, Race/Ethnicity, and Age

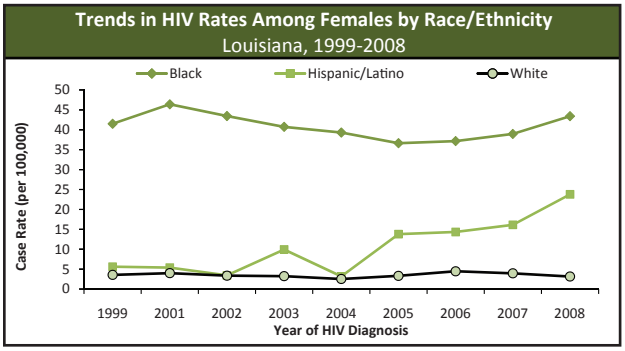
Although the HIV epidemic affects persons of all genders, ages, race/ethnicities and geographic locations in Louisiana, the impact is not the same across all populations. Identifying the populations most at risk for HIV infection helps to plan HIV prevention activities and services, and also helps determine the most effective use of limited resources.

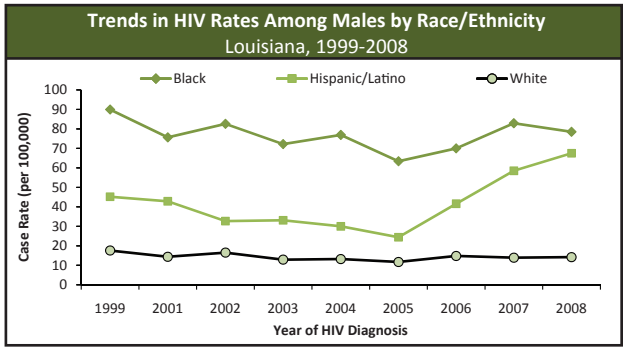


- While the HIV case rate for females in Louisiana has remained relatively stable over the past 10 years (between 15.9 and 18.1 per 100,000), the case rate for men has been more variable (between 28.8 and 41.0 per 100,000). From 1999 to 2005 the case rate for males declined significantly but since then has risen to levels seen at the beginning of this decade.

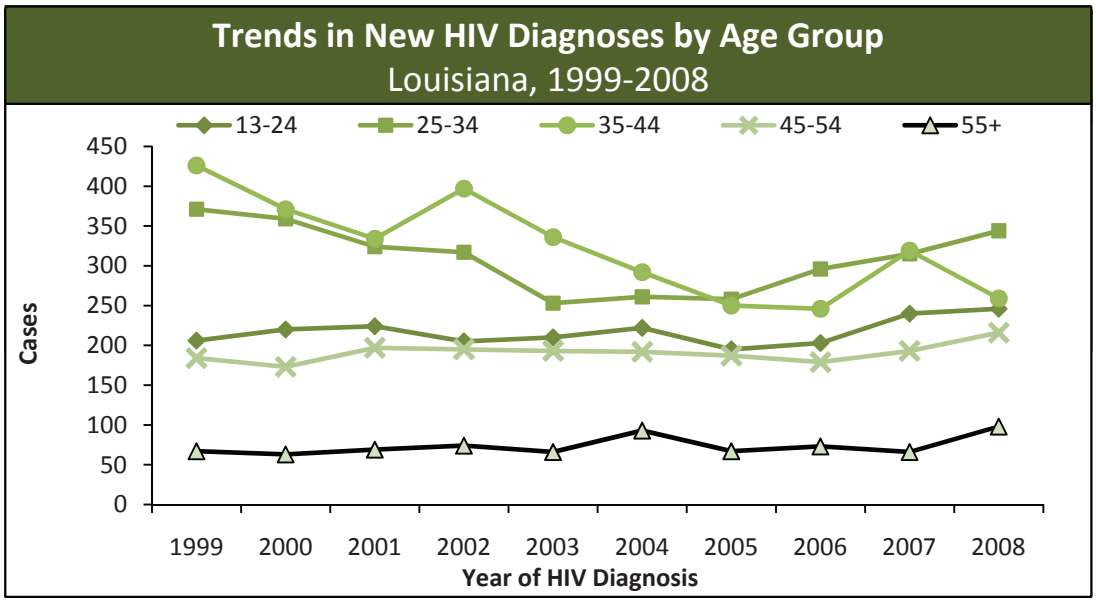


- The HIV case rate among whites has remained stable over the past 10 years. Since 2005, the HIV rates for blacks and Hispanic/Latinos have increased.
- In 2008, blacks made up 32% of Louisiana's population but 71.7% of all new HIV diagnoses. Hispanic/Latinos made up 3.4% of Louisiana's population but 5.9% of all new HIV infections in 2008. Although the HIV rate for the Hispanic/Latino population in Louisiana has significantly increased since 2005, there have been fewer than 70 new cases each year.





- Among both females and males in Louisiana, the majority of new infections are in blacks. The HIV diagnosis rate for Hispanic/Latino women and men is higher than for white females and males, although the case count is higher among whites.
- In 2008, the HIV diagnosis rate in black females was almost 14 times greater than the HIV diagnosis rate for white females, and was almost 2 times greater than the HIV diagnosis rate for Hispanic/Latino females.
- In 2008, the HIV diagnosis rate in black males was over 5.5 times greater than the HIV diagnosis rate for white males, but only 1.2 times greater than the HIV diagnosis rate for Hispanic/Latino males.
- From 2005 to 2008, the HIV diagnosis rate for Hispanic/Latino females has almost doubled and the rate for Hispanic/Latino males has almost tripled. During this same time period, rates have also increased among blacks but have remained stable among whites.



- The majority of all new infections have historically occurred in persons aged 25-44; 51.7% of all new diagnoses in 2008 were in this age group. While the number of new diagnoses in persons 25-34 decreased from 1999 to 2003, it has steadily increased since then to become the age group with the highest number of new diagnoses (29.5% of all new HIV diagnoses in 2008).

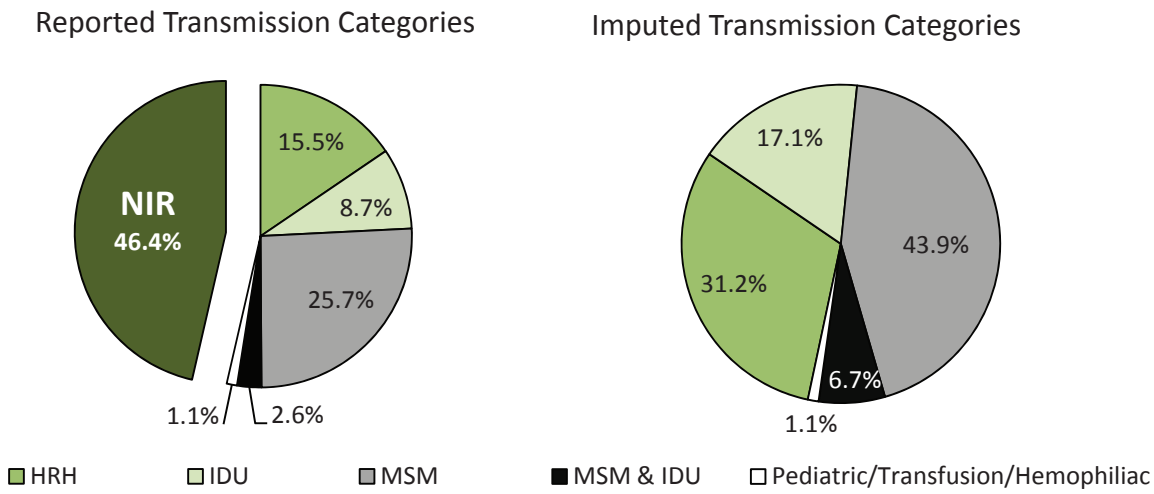
- The number of cases in youth, age 13-24, and the number of cases in persons 45 and older has remained relatively stable over the past 10 years, although small increases have been recorded since 2006.

HIV Diagnoses by Transmission Category

In accordance with the transmission categories used by the CDC, HAP classifies cases into six transmission categories: men who have sex with men (MSM); high-risk heterosexual contact (HRH); injection drug use (IDU); men who have sex with men and inject drugs (MSM/IDU); mother-to-child transmission (Pediatric); and cases who received a transfusion or hemophiliac products (Transfusion/Hemophilia). As illustrated below, many cases do not have risk information reported or do not meet the transmission category criteria and are labeled as no identified risk (NIR). For all cases diagnosed between 1999 and 2008, 46% do not have a reported risk and are labeled 'NIR' as shown in the following pie chart.

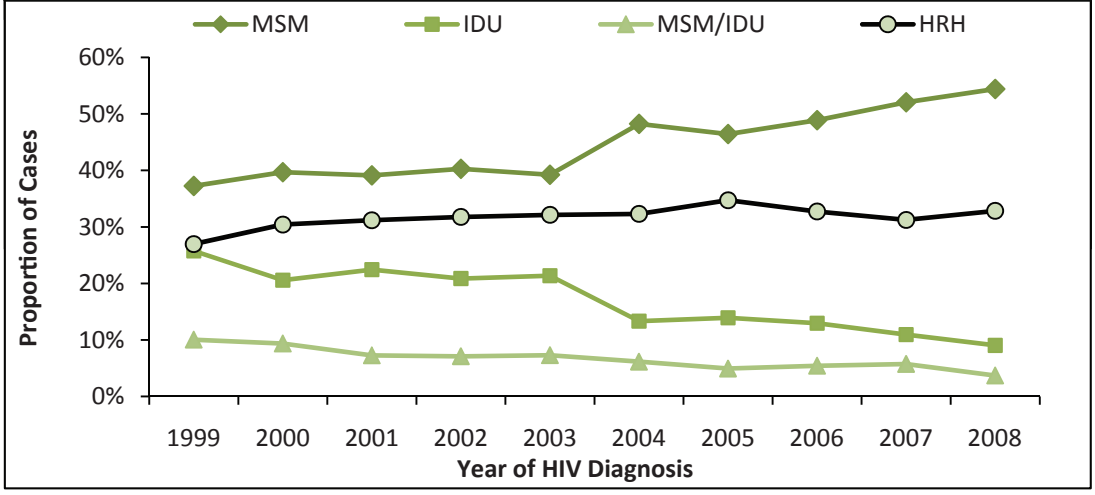
Risk information is difficult to ascertain because individuals may not know how they acquired the infection, their healthcare provider may not feel comfortable collecting the information, or the person may not be willing to share that information possibly due to stigma or fear of discrimination. A person who reports only heterosexual contact is not classified with a transmission category because according to the CDC "persons whose transmission category is classified as high-risk heterosexual contact are persons who report specific heterosexual contact with a person known to have, or to be at high risk for, HIV infection (e.g., an injection drug user)." Due to the large number of NIR cases, HAP uses a statistical method to assign a mode of transmission for NIR cases called "imputation" (described in the Technical Notes located at the end of this report).

HIV Transmission Categories
Louisiana, 1999-2008

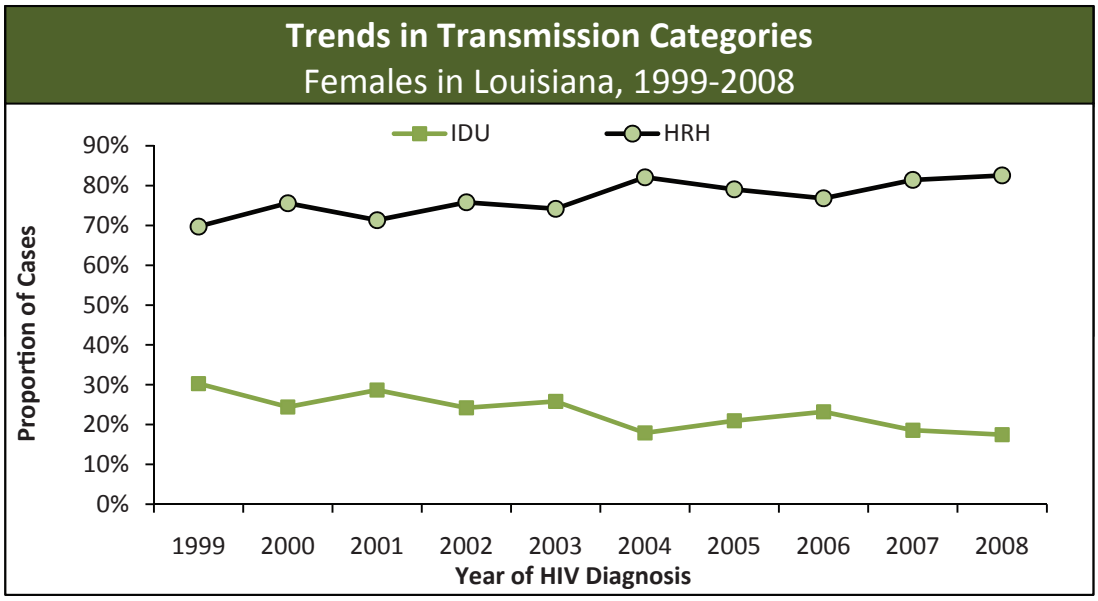


After assigning a transmission category for all NIR cases through imputation, trends in the proportion of cases for each transmission category can be analyzed. The following graphs use imputed transmission categories unless otherwise noted.

Trends in Transmission Categories
Louisiana Adult HIV Cases, 1999-2008

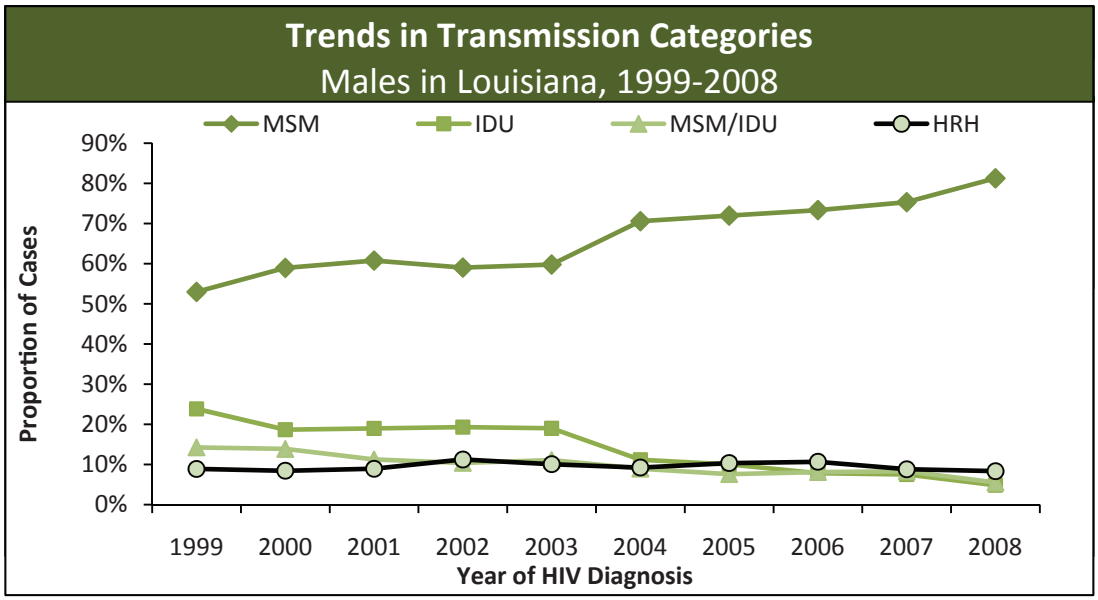


- Over the past 10 years, the proportion of adult HIV cases attributed to MSM has increased from 37% in 1999 to 54% in 2008. The proportion of HRH cases has increased slightly over the past 10 years (27% in 1999 to 33% in 2008). The proportion of cases attributed to IDU and MSM/IDU has declined dramatically over the past 10 years to 9% and 4% respectively in 2008.



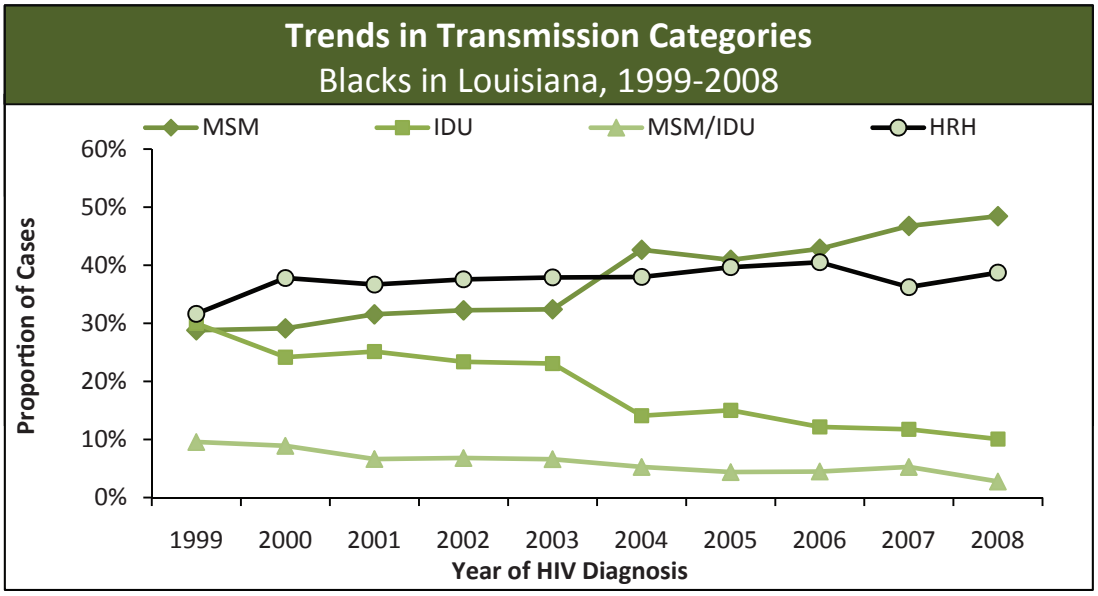
- The primary mode of transmission for women is HRH contact.

- Although there has always been a significant difference in the proportion of female cases attributed to HRH and IDU, the difference was greatest in 2008 when 83% of female cases were high-risk heterosexuals and only 17% were injection drug users.



- The primary mode of transmission for males in Louisiana continues to be MSM, with far fewer cases of IDU, MSM/IDU and HRH. In 2008, the number of MSM cases reached its highest proportion of male cases, 81%. Ten years ago, MSM accounted for only 53% of all male cases.

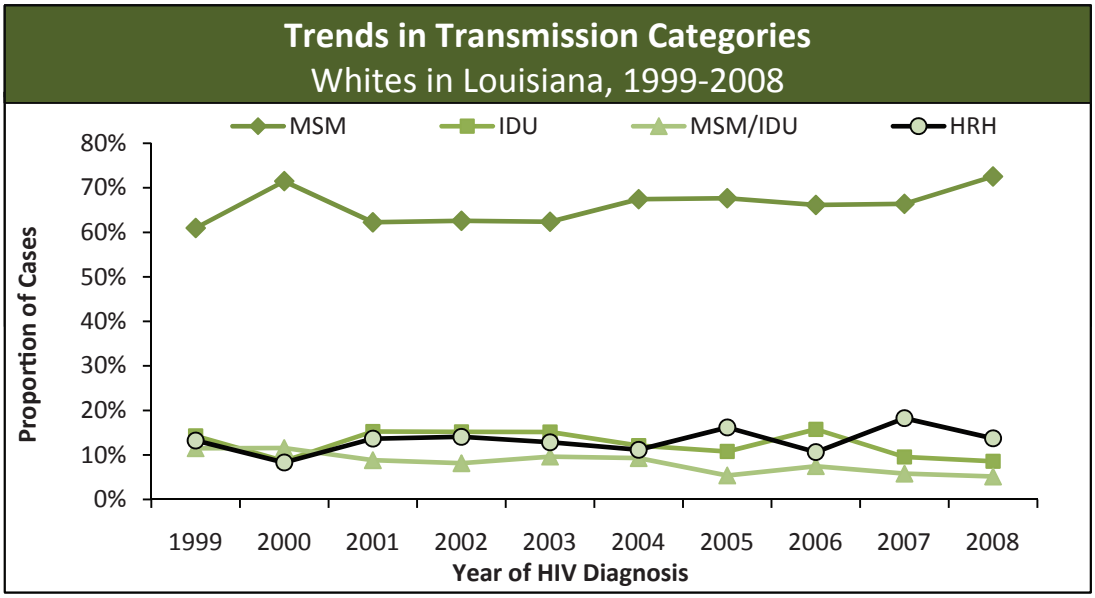
- The proportion of new cases with a transmission category of IDU, MSM/IDU and HRH has declined since 1999 to the lowest proportion since the beginning of the epidemic. In 2008, IDU accounted for 5%, MSM/IDU accounted for 5.5% and HRH for 8% of male cases.



- Until recently, the primary mode of transmission for blacks was HRH contact followed closely by MSM. Since 2004 the proportion of new cases of MSM in blacks has surpassed the proportion of cases attributable to HRH.

- In 2008, 48% of all new black cases were MSM and 39% were HRH.

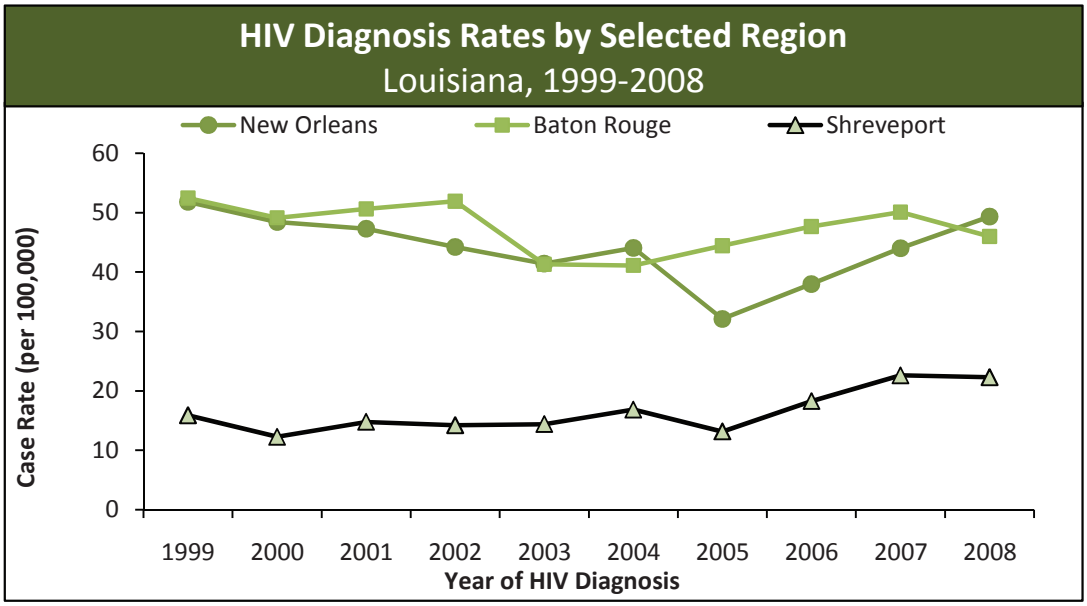
- Since 1999, the proportion of IDU and MSM/IDU cases has steadily declined to their lowest levels yet in 2008 (10% of new cases were IDU and 3% were MSM/IDU).



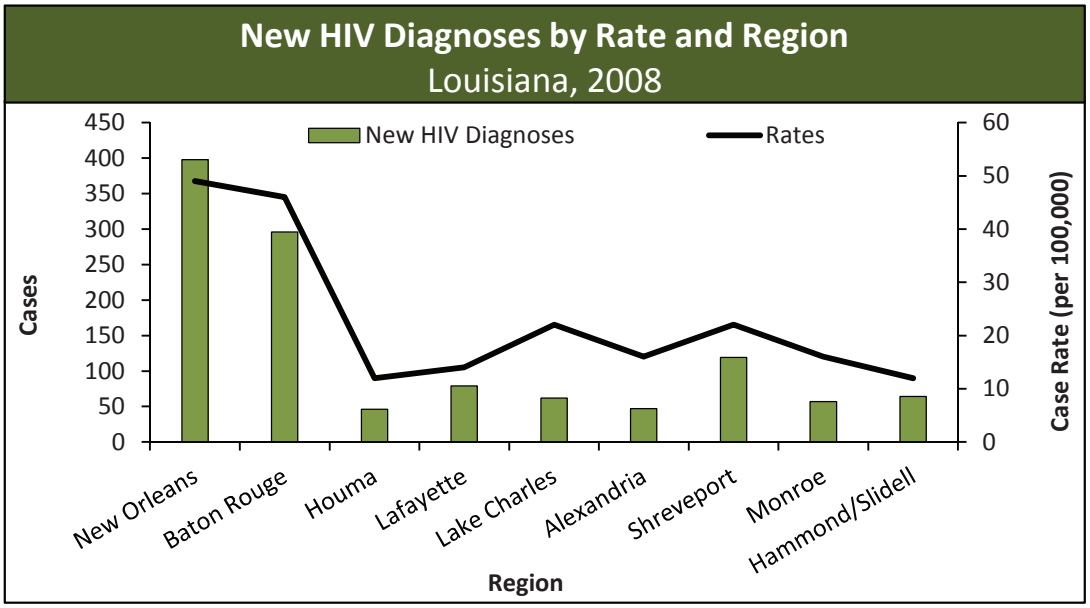
- The predominant mode of transmission among whites has historically been and continues to be MSM. In 1999, 61% of all new white cases were MSM, which has increased to 73% in 2008.

- In 2008, 14% of cases were attributed to HRH, 9% to IDU and 5% to MSM/IDU. These three transmission categories have remained stable over the past 10 years with small fluctuations between years.

HIV Diagnoses by Public Health Region



- The three public health regions in Louisiana with the largest number of new HIV diagnoses in 2008 are New Orleans, Baton Rouge and Shreveport (regions 1, 2, and 7 respectively). The ten-year trends for these three regions are shown above.
- From 2005 to 2007, the HIV diagnosis rate in Baton Rouge was higher than the diagnosis rate in New Orleans, largely due to the impact of Hurricane Katrina in August 2005. In 2008, the HIV diagnosis rate in New Orleans surpassed the diagnosis rate in Baton Rouge (49 and 46 per 100,000 respectively).
- The HIV diagnosis rate in Shreveport was 22 per 100,000 in 2008, which was an increase from 13 per 100,000 in 2005. A table with the HIV case count for each region, 1999-2008, is located in the Appendix.



- In 2008, New Orleans had the highest number of new HIV cases and the highest HIV diagnosis rate. Until Hurricane Katrina, New Orleans historically had the highest number of new HIV diagnoses, but from 2005-2007, the Baton Rouge region had the highest number of HIV diagnoses due to the decrease in the New Orleans population post-Katrina and the rise in the Baton Rouge population.
- The Houma region has the lowest number and lowest rate of new HIV diagnoses.

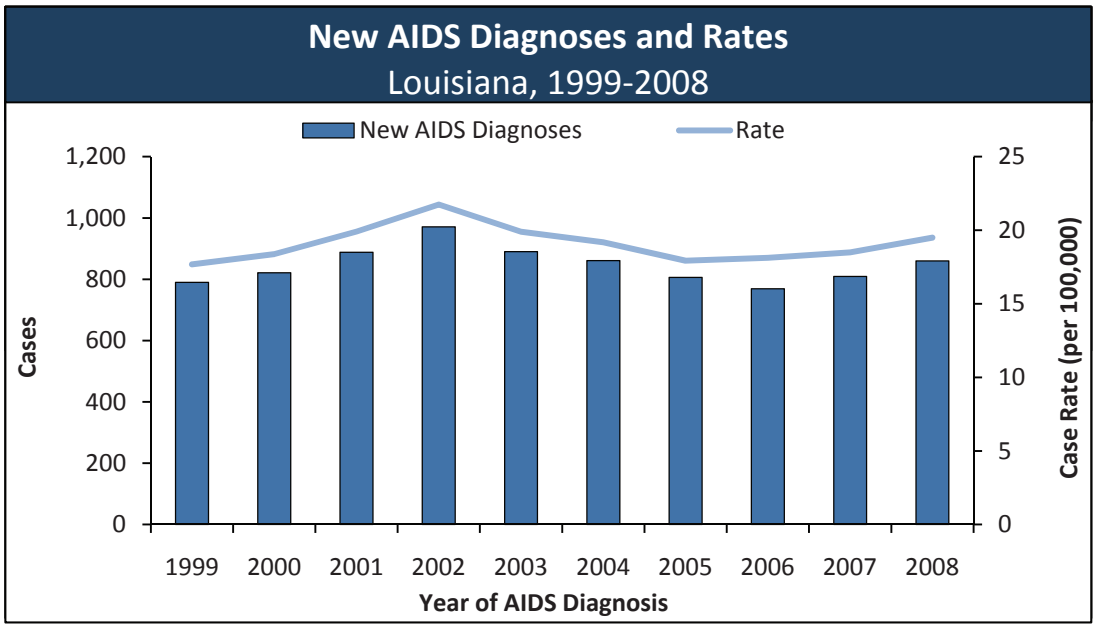
Characteristics of Persons Newly Diagnosed with HIV
Louisiana, 2007-2008

	Persons First Diagnosed with HIV in 2007		Persons First Diagnosed with HIV in 2008	
	Cases	Percent	Cases	Percent
Total	**1,137**	**100%**	**1,168**	**100%**
Sex				
Female	351	30.9%	388	33.2%
Male	786	69.1%	780	66.8%
Race/Ethnicity				
American Indian/Alaska Native	3	0.3%	1	0.1%
Asian/Pacific Islander	4	0.4%	6	0.5%
Black/African American	821	72.2%	838	71.7%
Hispanic/Latino	54	4.7%	69	5.9%
White	241	21.2%	234	20.0%
Other/Unknown/Multi-race	14	1.2%	20	1.7%
Age Group	**Age at HIV Diagnosis**		**Age at HIV Diagnosis**	
0-12	4	0.4%	5	0.4%
13-19	61	5.4%	67	5.7%
20-24	179	15.7%	179	15.3%
25-34	315	27.7%	344	29.5%
35-44	319	28.1%	259	22.2%
45-54	193	17.0%	216	18.5%
55-64	54	4.7%	76	6.5%
65+	12	1.1%	22	1.9%
Imputed Transmission Category				
Men who have sex with men (MSM)	590	51.9%	633	54.2%
Injection Drug User (IDU)	124	10.9%	105	9.0%
MSM/IDU	65	5.7%	43	3.7%
High Risk Heterosexual (HRH)	354	31.1%	382	32.7%
Transfusion/Hemophilia/Other	0	0.0%	0	0.0%
Perinatal/Pediatric	4	0.4%	5	0.4%
Rural/Urban				
Rural	157	13.8%	151	12.9%
Urban	980	86.2%	1,017	87.1%

- In 2008, 1,168 persons were newly diagnosed with HIV; a 3% increase from 2007.
- From 2007 to 2008, the proportion of female cases increased over 2%.
- From 2007 to 2008, the number of black and Hispanic/Latino cases increased while the number of white cases decreased.
- In 2007, the greatest proportion and number of new cases were between the ages of 35-44. In 2008, the predominant age group was age 25-34.
- From 2007 to 2008, the number and proportion of MSM and HRH cases increased.
- In Louisiana, most new diagnoses (87% in 2008) were among persons residing in urban areas.

10-Year Trends in New AIDS Diagnoses (1999-2008)

AIDS diagnoses are the number of individuals diagnosed with AIDS within a given time period. An AIDS diagnosis is made as a result of a CD4 cell count <200, a CD4% <14%, or the development of an opportunistic infection (OI) such as *Pneumocystis carinii* Pneumonia (PCP) or wasting syndrome. Once a person is diagnosed with AIDS, they remain categorized as AIDS even if their CD4 count rises above 200, their CD4% above 14%, or they are cured of their OI. The number of AIDS diagnoses has been collected since the beginning of the epidemic both nationally and in Louisiana. AIDS diagnoses are useful for highlighting issues with access to testing, medical care, medication and adherence.



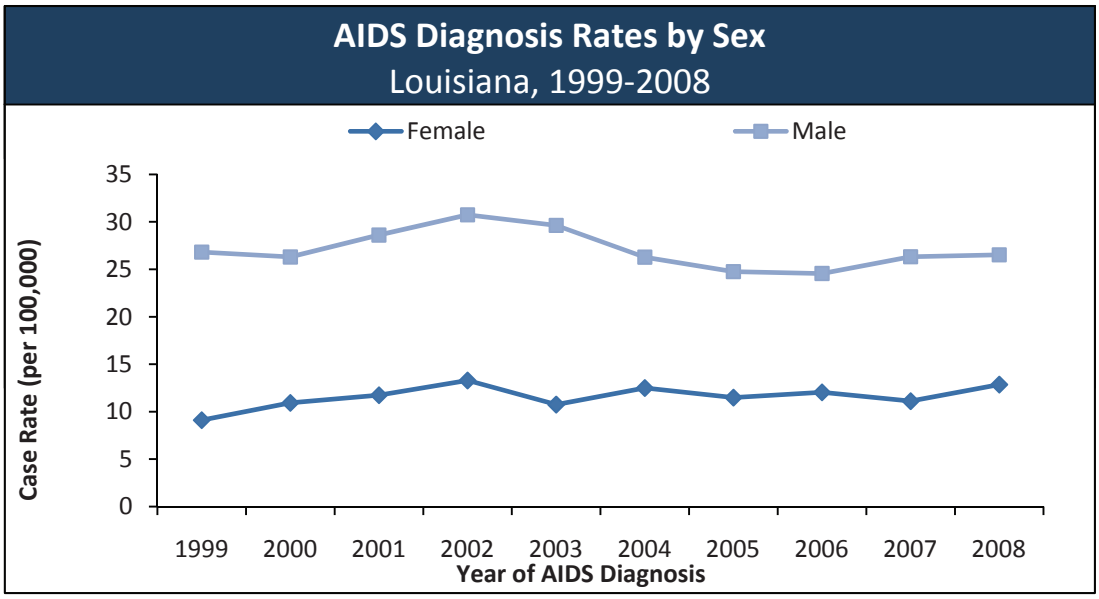
- The number of new AIDS diagnoses in 2008 remains below its highest level in 2002 as a result of the availability of more effective treatments.

- From 2002 to 2006, the number of new AIDS diagnoses decreased but has since increased to 860 cases in 2008. The AIDS diagnosis rate also decreased from 2002 to 2006 but increased to 19.5 (per 100,000 persons) in 2008.

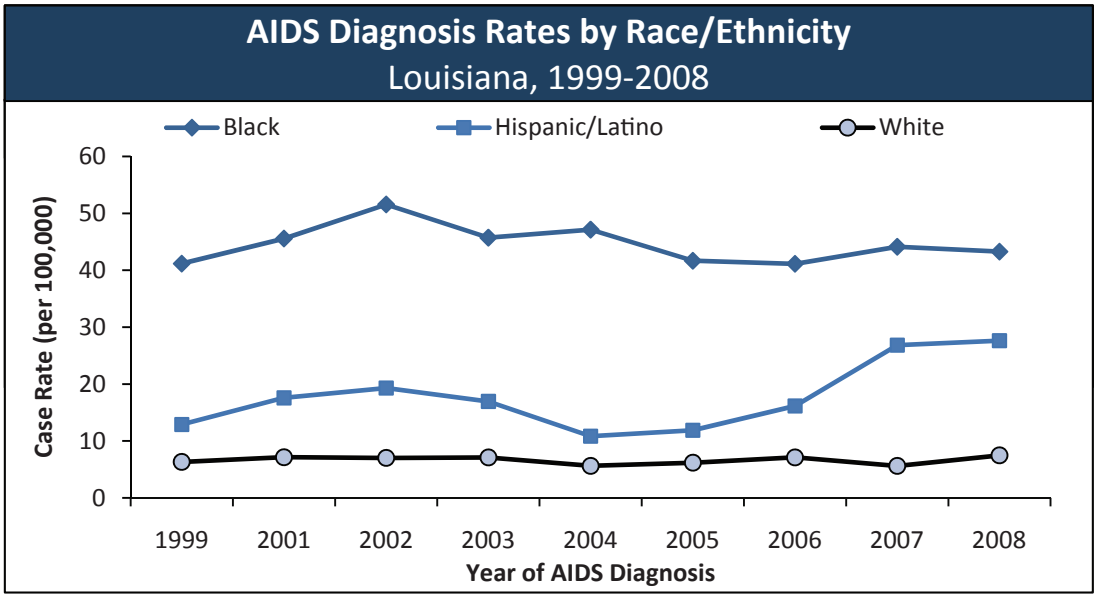
AIDS diagnoses and deaths in the United States

In June 1981, the first cases of what would later be diagnosed as AIDS were reported in the US. During the 1980s, there was a rapid increase in the number of AIDS diagnoses and deaths in persons with AIDS. Cases peaked in 1993 with the expansion of the AIDS case definition. The most dramatic drop in both new diagnoses and deaths began in 1996, with the widespread use of combination anti-retroviral therapy. Since 2000, the annual numbers of AIDS diagnoses have been relatively constant, with an estimated 35,962 new AIDS diagnoses in 2007. The CDC estimates that since the beginning of the epidemic through the end of 2007, approximately 1,018,428 people have been diagnosed with AIDS in the US. By region, the South has the greatest number of people estimated to be living with AIDS, AIDS deaths, and new AIDS diagnoses, followed by the Northeast, West, and Midwest regions.

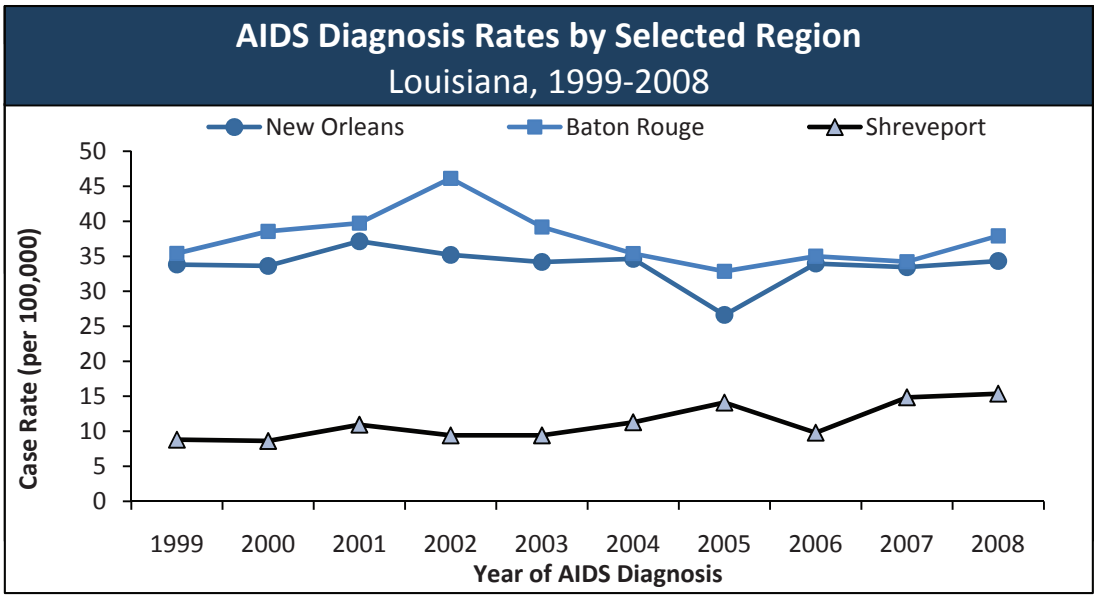
Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report,* 2007. Vol. 19.



- The AIDS diagnosis rate for females has experienced a small increase over the past 10 years from a low of 9.1 per 100,000 in 1999 to a high of 12.9 per 100,000 in 2008.
- The AIDS diagnosis rate for males fluctuated within a relatively small range (high of 30.7 per 100,000 in 2002, and a low of 24.6 per 100,000 in 2006).
- In 1999, the AIDS diagnosis rate in males was three times greater than the rate in females, but in 2008 the male rate was only twice as high as the female rate.

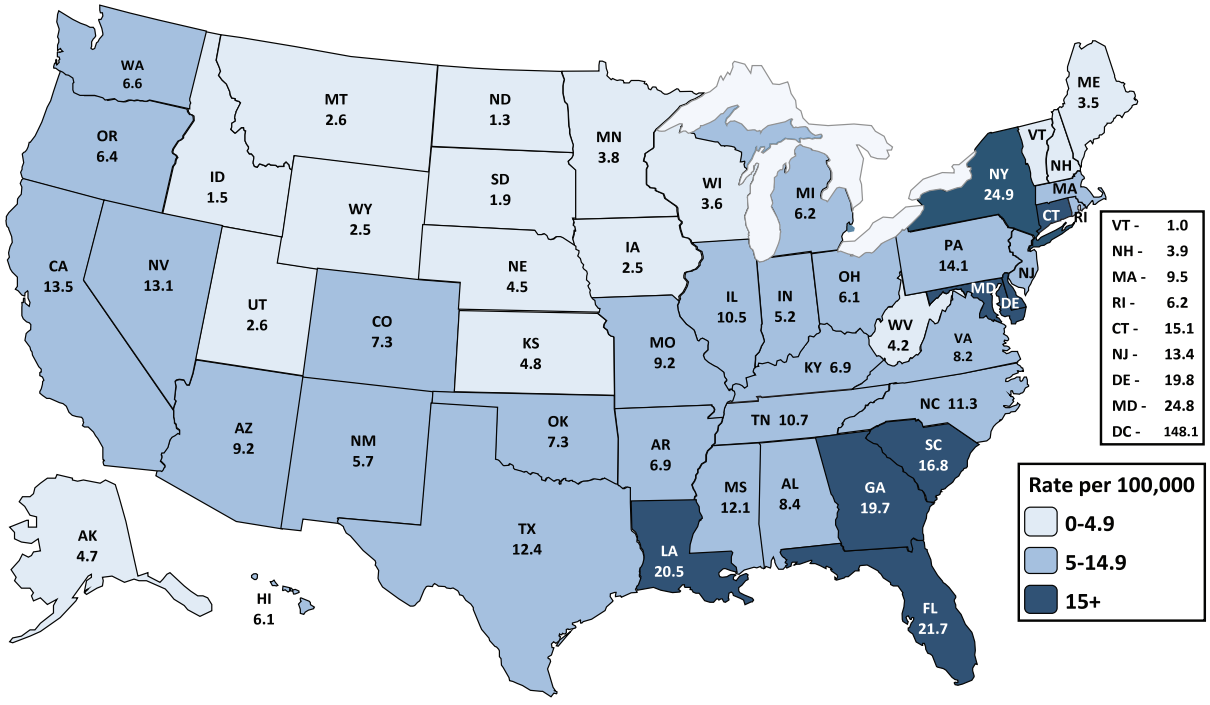


- From 1999 to 2002, the AIDS diagnosis rate for blacks increased by 25% but since then has decreased. In 2008, the AIDS diagnosis rate was 43.3 per 100,000, which was 1.6 times greater than for Hispanic/Latinos and 5.8 times greater than for whites.
- The AIDS diagnosis rate in the Hispanic/Latino population also rose significantly from 1999 to 2002 and since then has risen to 27.6 per 100,000. From 1999 to 2008, the AIDS diagnosis rate among Hispanic/Latinos has more than doubled.
- The AIDS diagnosis rate in whites has remained stable from 1999 to 2008, although the rate in 2008 of 7.5 per 100,000 persons was the highest of the past 10 years.



- The Baton Rouge region continues to have the highest AIDS diagnosis rate of all nine public health regions (37.9 per 100,000) in Louisiana.
- In 2008, the New Orleans region had the second highest AIDS diagnosis rate but highest HIV diagnosis rate.
- The AIDS diagnosis rate in Shreveport continues to be the third highest in the state, and in 2008 reached its highest rate to date (15.4 per 100,000).

AIDS Rates in the United States, 2007[ix]



- In the US, 37,281 new AIDS cases were reported in 2007, for a national rate of 12.4 cases per 100,000 persons.
- In 2007, Louisiana ranked 5th highest in state AIDS case rates (20.5 per 100,000) and 11th in the number of new AIDS cases reported in the US, according to the most recent CDC HIV/AIDS Surveillance Report (Vol 19).

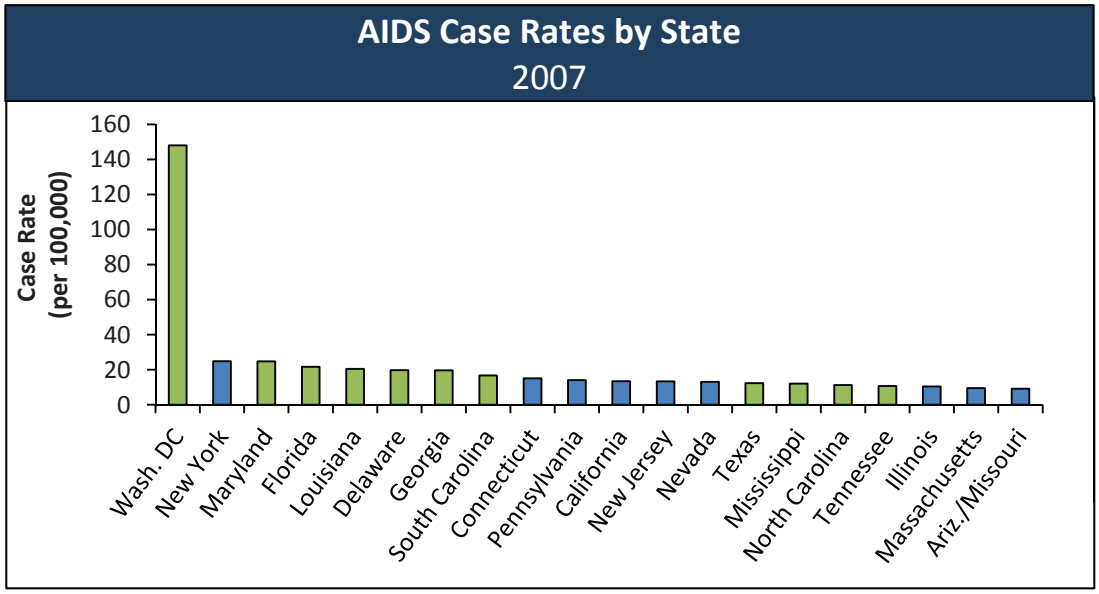
Characteristics of Persons Newly Diagnosed with AIDS
Louisiana, 2007-2008

	Persons First Diagnosed with AIDS in 2007		Persons First Diagnosed with AIDS in 2008	
	Cases	Percent	Cases	Percent
Total	**809**	**100%**	**860**	**100%**
Sex				
Female	250	30.9%	292	34.0%
Male	559	69.1%	568	66.0%
Race/Ethnicity				
American Indian/Alaska Native	2	0.2%	0	0.0%
Asian/Pacific Islander	2	0.2%	4	0.5%
Black/African American	607	75.0%	605	70.3%
Hispanic/Latino	38	4.7%	41	4.8%
White	153	18.9%	204	23.7%
Other/Unknown/Multi-race	7	0.9%	6	0.7%
Age Group	**Age at AIDS diagnosis**		**Age at AIDS diagnosis**	
0-12	0	0.0%	1	0.1%
13-19	13	1.6%	12	1.4%
20-24	71	8.8%	51	5.9%
25-34	220	27.2%	231	26.9%
35-44	257	31.8%	256	29.8%
45-54	181	22.4%	215	25.0%
55-64	54	6.7%	79	9.2%
65+	13	1.6%	15	1.7%
Transmission Category				
Men who have sex with men (MSM)	366	32.2%	386	33.0%
Injection Drug User (IDU)	130	11.4%	158	13.5%
MSM/IDU	62	5.5%	46	3.9%
High Risk Heterosexual (HRH)	246	21.6%	264	22.6%
Transfusion/Hemophilia/Other	3	0.3%	3	0.3%
Perinatal/Pediatric	2	0.2%	3	0.3%
Rural/Urban				
Rural	102	12.6%	117	13.6%
Urban	707	87.4%	743	86.4%

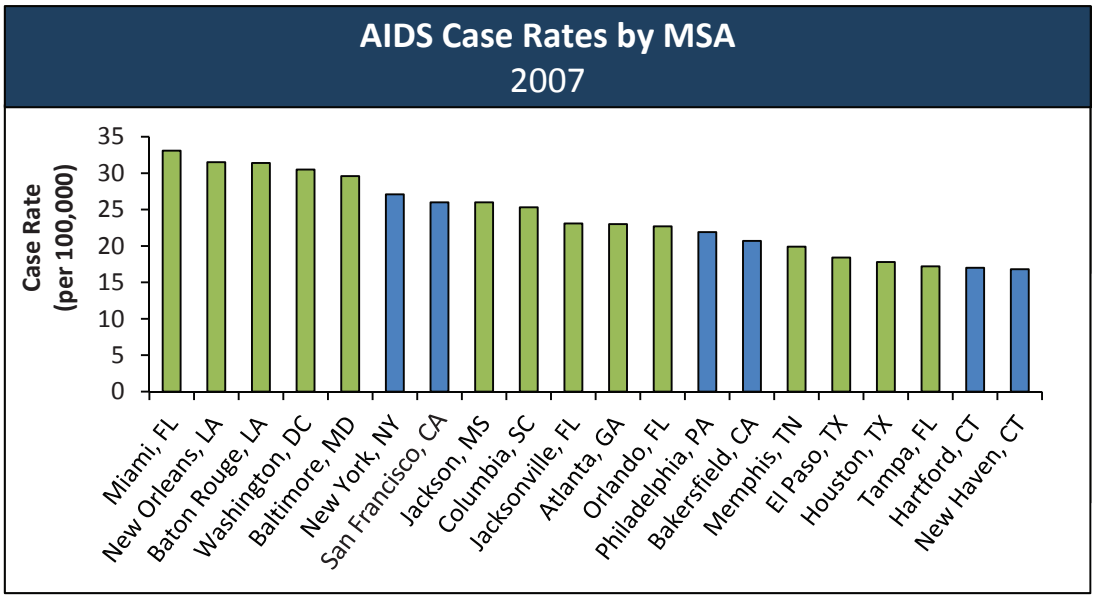
- In 2008, there were 860 new AIDS diagnoses in Louisiana, a 6% increase from 2007.
- From 2007 to 2008, the proportion of new AIDS diagnoses in females increased over 3%.
- The proportion of new AIDS diagnoses among blacks decreased from 2007 to 2008 while the proportion among whites increased.
- In 2007 and 2008, the greatest number and proportion of new AIDS diagnoses were among people age 35-44, followed by people age 25-34.
- In 2007 and 2008, the greatest number and proportion of new AIDS diagnoses were in men who have sex with men, followed by high-risk heterosexuals and injection drug users. All three of these categories increased slightly from 2007 to 2008 in number and proportion.

Southern AIDS Coalition

HAP is an active member of the Southern AIDS Coalition (SAC) which highlights the disproportionate impact that the HIV epidemic has had in the southern United States. Seventeen states are included in the southern region of the US: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia. Southern states are represented in green below.[x]



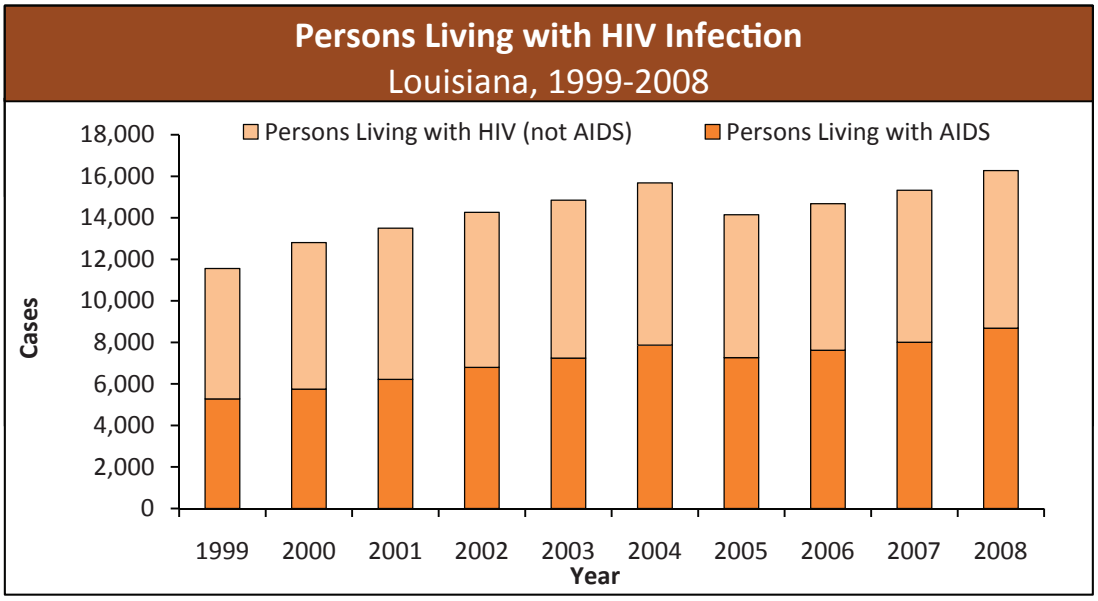
- In 2007, southern states represented 37% of the US population but over 40% of persons living with AIDS and over 46% of new AIDS cases.
- Of the 20 states that had the highest AIDS case rates in 2007, 11 (55%) were in the South.



- Of the 20 metropolitan areas that had the highest AIDS case rates in 2007, 14 (70%) were in the South. According to the CDC, the New Orleans metro area ranked 2nd and the Baton Rouge metro area ranked 3rd in reported AIDS case rates in 2007 among metropolitan areas in the US with >500,000 persons. The New Orleans and Baton Rouge metro areas have both been in the top ten metropolitan areas for AIDS case rates since 2004.

Persons Living in Louisiana with HIV Infection (Prevalence)

Prevalence is a measure of the number of persons living with HIV or AIDS in a given period of time. Prevalence is the accumulation of all the people living with a diagnosis of HIV or AIDS. Prevalence numbers and rates are important for ascertaining the burden of HIV on health care systems, allocating resources and monitoring trends over time.



- The number of persons living with HIV infection increased each year from 1999 to 2004. The decrease from 2004 to 2005 is due to the dislocation of a large number of persons from the New Orleans metropolitan area who left Louisiana following Hurricane Katrina in August 2005. Since then, the number of persons living with HIV infection has risen to pre-Katrina levels.

- At the end of 2008, 16,277 persons were known to be living with HIV infection in Louisiana, of whom 8,684 (53%) had progressed to AIDS.

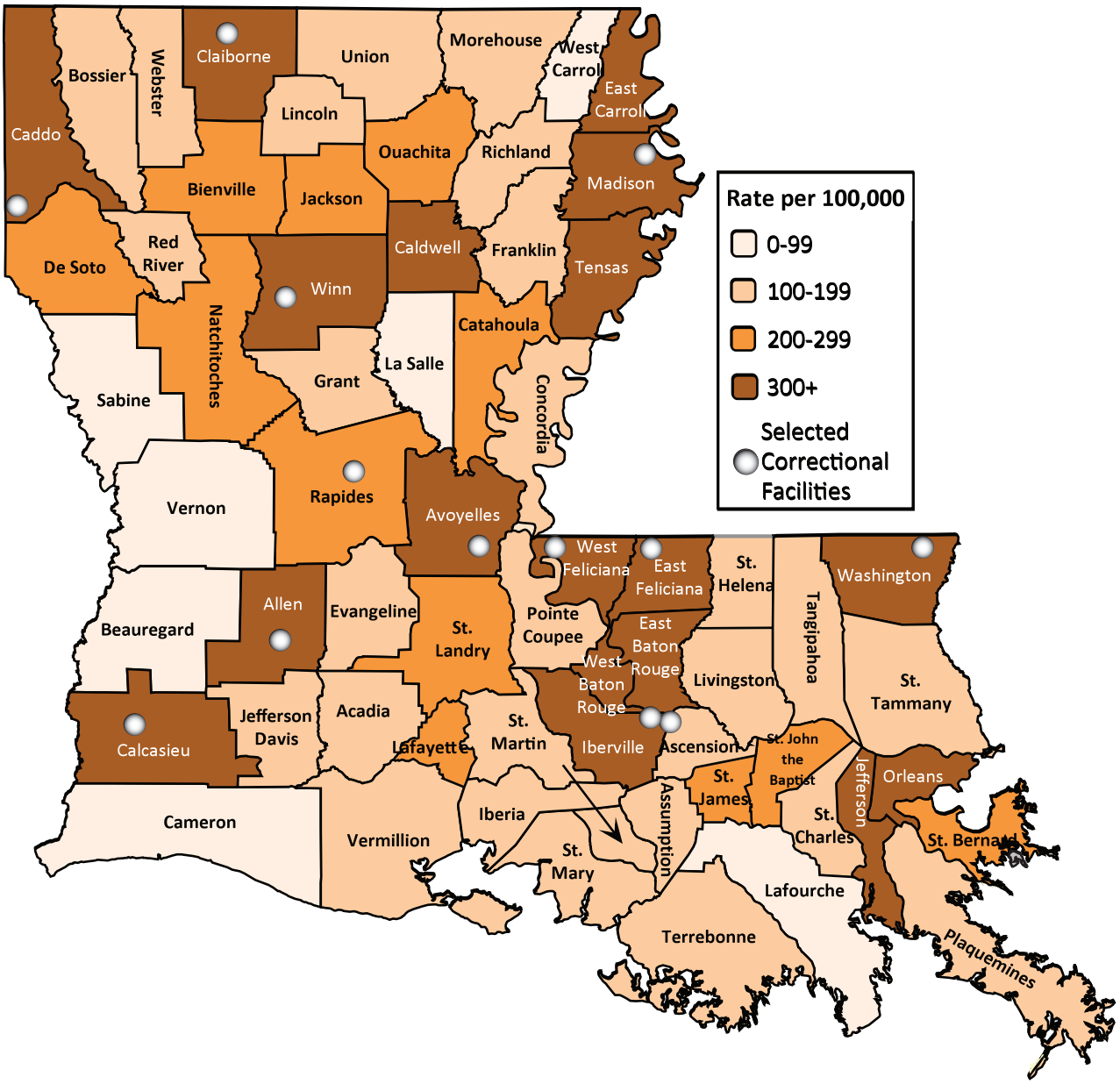
Persons living with HIV Infection in the United States

At the end of 2006, the CDC estimated that the number of people living with HIV infection in the US had reached over 1.1 million adults and adolescents. Of these one million people, gay and bisexual men of all races, blacks, and Hispanics/Latinos were most heavily affected. There has been a steady increase in the US in the number of persons living with HIV infection which is expected, due to the widespread use of antiretroviral treatment and the development of new antiretroviral regimens. In the US more people become infected with HIV than die from the disease each year.

Historically, it has been estimated that 25% of HIV-positive persons are undiagnosed or are unaware of their status. In 2008, the CDC released a new analysis that indicates that the percentage of HIV-positive persons who are unaware of their status has decreased from 25% to 21%.

MMWR 2008; 57(39):1073-1075

Persons Living with HIV Infection by Parish
Louisiana, 2008



- The above map illustrates the geographic distribution of persons living with HIV infection in the state. There are persons living with HIV in every parish in Louisiana.

- At the end of 2008, 18 parishes had greater than 300 persons living with HIV per 100,000 persons living in the parish. Many of the parishes with disproportionate prevalence rates have correctional facilities that have reported a large number of HIV cases.

- Although the majority of persons living with HIV reside in urban areas, 12.5% live in rural parishes.

Characteristics of Persons Living with HIV Infection and Cumulative Cases
Louisiana, 2007-2008

	Persons Living with HIV Infection as of 12/31/2007		Persons Living with HIV Infection as of 12/31/2008		Cumulative HIV Diagnoses as of 12/31/2008*	
	Cases	Percent	Cases	Percent	Cases	Percent
Total	**15,323**	**100%**	**16,277**	**100%**	**28,676**	**100%**
Sex						
Female	4,500	29.4%	4,821	29.6%	7,298	25.4%
Male	10,823	70.6%	11,456	70.4%	21,378	74.5%
Race/Ethnicity						
American Indian/Alaska Native	21	0.1%	21	0.1%	23	0.1%
Asian/Pacific Islander	42	0.3%	48	0.3%	66	0.2%
Black/African American	10,088	65.8%	10,767	66.1%	18,235	63.6%
Hispanic/Latino	508	3.3%	564	3.5%	780	2.7%
White	4,586	29.9%	4,781	29.4%	9,381	32.7%
Other/Unknown/Multi-race	78	0.5%	96	0.6%	191	0.7%
Age Group	**Age in 2007**		**Age in 2008**		**Age at HIV Diagnosis**	
0-12	88	0.6%	86	0.5%	312	1.1%
13-19	157	1.0%	173	1.1%	1,324	4.6%
20-24	674	4.4%	700	4.3%	3,537	12.3%
25-34	3,042	19.9%	3,204	19.7%	10,251	35.7%
35-44	5,017	32.7%	4,970	30.5%	8,276	28.9%
45-54	4,551	29.7%	4,990	30.7%	3,552	12.4%
55-64	1,459	9.5%	1,737	10.7%	1,070	3.7%
65+	335	2.2%	417	2.6%	354	1.2%
Imputed Transmission Category						
Men who have sex with men (MSM)	6,734	43.9%	7,290	44.8%	13,090	45.6%
Injection Drug User (IDU)	2,708	17.7%	2,756	16.9%	5,708	19.9%
MSM/IDU	1,367	8.9%	1,387	8.5%	2,725	9.5%
High Risk Heterosexual (HRH)	4,225	27.6%	4,554	28.0%	6,356	22.2%
Transfusion/Hemophilia/Other	115	0.8%	111	0.7%	483	1.7%
Perinatal/Pediatric	173	1.1%	178	1.1%	313	1.1%
Rural/Urban						
Rural	1,922	12.5%	2,040	12.5%	2,768	9.7%
Urban	13,401	87.5%	14,237	87.5%	25,897	90.3%

*Cumulative persons reflects the total number of HIV-infected persons diagnosed in Louisiana, including those who have died.

- In 2008, males made up more than 70% of all people living with HIV infection in Louisiana.
- Although blacks comprised only 32% of Louisiana's population in 2008, they accounted for more than 66% of all people living with HIV infection.
- The majority of people living with HIV infection are between the ages of 25-54, live in urban areas, and are men who have sex with men or high-risk heterosexuals.

Post-Hurricane Katrina Project

Shortly after Hurricane Katrina devastated southeastern Louisiana when it made landfall on August 29, 2005, HAP assembled a team to assess and monitor the impact of this event on HIV rates, shifting population demographics, and health status of persons living with HIV infection.

The New Orleans metropolitan area suffered the greatest impact from the storm. Most of this area was placed under a mandatory evacuation displacing hundreds of thousands of people. 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 HAP surveillance database was no longer accurate. To address this problem, HAP developed HIV prevalence estimates for the New Orleans MSA in early 2006.

Since that time, estimates have been conducted continuously, utilizing HIV surveillance information on current residence collected on persons living with HIV infection 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 Infection in Metro New Orleans Before and After Hurricane Katrina

	Pre-Katrina	Post-Katrina			
Parish	Jul-05	Mar-06	Aug-06	Oct-07	Nov-08
Orleans	5,224	2,089	2,615	3,177	3,596
Jefferson	1,265	1,114	1,254	1,464	1,578
St. Tammany	251	282	280	324	353
St. Bernard	121	37	46	68	82
St. John the Baptist	68	136	170	117	135
St. Charles	66	71	73	82	92
St. James	43	86	86	61	66
Plaquemines	30	20	19	19	27
New Orleans MSA	**7,068**	**3,836**	**4,543**	**5,311**	**5,929**

These estimates are based on several assumptions about the return of persons living with HIV. For example, population-based methods assume that these persons 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 their return 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.

In 2007, increased attention was given to exploring the impact of Hurricane Katrina on the health status of persons living with HIV in Louisiana, particularly those who were residing in the New Orleans area before the storm. Access to medical care and medications became a primary concern following the hurricane. It was theorized that individuals' health status might suffer due to the disruptive nature of being forced to relocate to another region, or as persons returned to New Orleans, the conditions were not ideal for promoting a healthy lifestyle. Throughout 2007 and into 2008, the HAP team developed hypotheses related to morbidity and mortality incidence, identified reliable data sources, and conducted data analysis to determine if individuals' health status had been affected by this event. Results are being finalized and these will be published in subsequent reports.

Late HIV Testing in Louisiana

Since improved antiretroviral medications and preventive therapies are now available for people living with HIV, it is important that people are tested for HIV, and if positive, are referred into care early so that they can benefit from these treatment advances. However, a significant number of people are not tested for HIV until they are symptomatic. In 2006, the CDC released new recommendations for HIV testing of adults, adolescents and pregnant women in health-care settings. HIV screening is recommended for all patients age 13 and older, unless the patient declines testing (opts-out). Persons at high risk of HIV should be tested annually. HIV screening is recommended for all pregnant women as part of their routine prenatal screening tests.

Late HIV Testing
Louisiana, 2007-2008

	Persons Diagnosed with HIV, 2007			Persons Diagnosed with HIV, 2008		
	New HIV Diagnoses	AIDS at Time of Diagnosis*	AIDS Within 6 Months of Diagnosis	New HIV Diagnoses	AIDS at Time of Diagnosis*	AIDS Within 6 Months of Diagnosis**
Total	**1,137**	**26%**	**34%**	**1,168**	**24%**	**33%**
Sex						
Female	351	22%	28%	388	20%	28%
Male	786	28%	37%	780	25%	36%
Race/Ethnicity						
American Indian/Alaskan Native	3	33%	33%	1	0%	0%
Asian/Pacific Islander	4	25%	25%	6	50%	50%
Black/African American	821	26%	32%	838	22%	32%
Hispanic/Latino	54	41%	57%	69	29%	43%
White	241	24%	34%	234	28%	36%
Other/Unknown/Multi-race	14	29%	43%	20	5%	10%
Age Group						
0-12	4	0%	0%	5	20%	20%
13-19	61	10%	15%	67	6%	10%
20-24	179	13%	19%	179	7%	15%
25-34	315	22%	29%	344	17%	26%
35-44	319	34%	42%	259	32%	41%
45-54	193	32%	43%	216	35%	47%
55-64	54	46%	54%	76	46%	58%
65+	12	42%	50%	22	32%	50%
Transmission Category						
Men who have sex with men (MSM)	590	26%	35%	633	24%	34%
Injection Drug User (IDU)	124	31%	39%	105	34%	50%
MSM/IDU	65	46%	52%	43	28%	42%
High Risk Heterosexual (HRH)	354	21%	28%	382	20%	27%
Transfusion/Hemophilia/Other	0	0%	0%	0	0%	0%
Perinatal/Pediatric	4	0%	0%	5	20%	20%
Region						
1-New Orleans	345	28%	32%	398	22%	32%
2-Baton Rouge	322	20%	28%	296	21%	31%
3-Houma	45	38%	42%	46	28%	43%
4-Lafayette	73	27%	42%	78	25%	32%
5-Lake Charles	56	29%	38%	63	31%	34%
6-Alexandria	44	34%	45%	48	9%	30%
7-Shreveport	120	33%	43%	119	29%	39%
8-Monroe	77	19%	31%	56	26%	32%
9-Hammond/Slidell	55	24%	33%	64	31%	38%

*If AIDS diagnosis was within 30 days of the initial HIV diagnosis.

** Persons diagnosed in 12/2008 experienced only 5 months post-diagnosis.

- Of the 1,168 persons diagnosed with HIV in 2008, 24% had an AIDS diagnosis at the time of their initial HIV diagnosis. Males, Hispanic/Latinos, whites, and persons between the ages of 55-64 were more likely to have an AIDS diagnosis at the time of their HIV diagnosis.

- Overall, 33% of persons had an AIDS diagnosis within six months of their HIV diagnosis (including persons with AIDS at the time of HIV diagnosis) in 2008. Males, Hispanic/Latinos and persons over the age of 45 were more likely to have an AIDS diagnosis within six months.

- Injection drug users were far more likely to have AIDS at the time of their HIV diagnosis and to have an AIDS diagnosis within six months of their initial HIV diagnosis compared to persons with other risk factors.

- Of the nine public health regions in Louisiana, Lake Charles and Hammond/Slidell had the greatest percentage of new cases with AIDS at the time of HIV diagnosis, but Shreveport and Houma had the greatest percentage of new cases with an AIDS diagnosis within six months in 2008.

Louisiana Survival Data

The most recent surveillance report from the CDC reported survival data for the nation from 2002.[xi] Below is an analysis of survival data for Louisiana in 2002 to serve as a comparison to the national statistics. Survival data examines how long a person lives once they have received an AIDS diagnosis (more than 12, 24, or 36 months).

Persons Surviving More than 12, 24, and 36 Months After AIDS Diagnosis
Louisiana, 2002

		Survival in Months		
	New AIDS Diagnoses	> 12	> 24	> 36
Total	**972**	**85%**	**80%**	**75%**
Sex				
Female	307	89%	82%	76%
Male	665	84%	78%	75%
Race/Ethnicity				
Black/African American	748	85%	79%	74%
Hispanic/Latino	24	92%	88%	88%
White	195	86%	82%	77%
Other/Unknown/Multi-race	5	80%	60%	60%
Age				
0-12	4	100%	100%	100%
13-19	13	100%	100%	100%
20-24	50	96%	90%	90%
25-34	267	90%	84%	80%
35-44	368	86%	81%	76%
45-54	201	81%	76%	69%
55-64	60	62%	53%	50%
65+	9	78%	67%	67%
Transmission Category				
Men who have sex with men (MSM)	352	89%	86%	82%
Injection Drug User (IDU)	245	80%	72%	64%
MSM/IDU	91	76%	70%	64%
High Risk Heterosexual (HRH)	270	88%	83%	79%
Transfusion/Hemophilia/Other	10	60%	60%	60%
Perinatal/Pediatric	4	100%	100%	100%
Region				
1-New Orleans	358	88%	83%	79%
2-Baton Rouge	279	82%	74%	67%
3-Houma	33	82%	79%	73%
4-Lafayette	77	82%	75%	71%
5-Lake Charles	39	87%	82%	79%
6-Alexandria	38	87%	76%	76%
7-Shreveport	60	82%	80%	78%
8-Monroe	54	87%	87%	81%
9-Hammond/Slidell	34	91%	88%	85%

- Nationally, 82% of people who received an AIDS diagnosis in 2002 survived more than 36 months (3 years) past their diagnosis. In Louisiana, only 75% of persons with an AIDS diagnosis in 2002 survived more than 36 months.

- In the US, males survived at a greater percentage past 24 and 36 months than their female counterparts; 85% of males and 84% of females survived past 24 months, and 82% of males and 80% of females

survived past 36 months. In Louisiana, females had higher survival percentages than males at all three time intervals, which is the opposite of what was seen nationally.

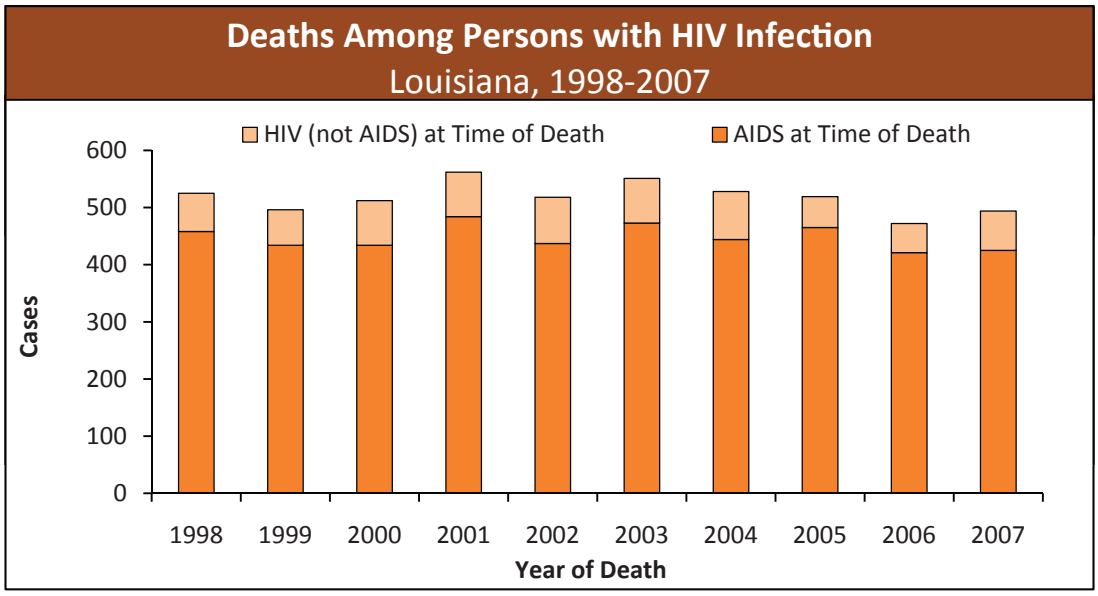
- Hispanic/Latinos had the best survival percentages in 2002 in Louisiana, but the total number of cases was small. Whites had higher survival percentages at all three years than blacks, which is similar to what was seen nationally where 84% of whites survived past 36 months compared to 79% of blacks.

- In Louisiana, persons age 35 and older and persons with a reported history of injection drug use (IDU and MSM/IDU) had poorer survival outcomes.

- Individuals in the Baton Rouge region of Louisiana had the poorest survival outcomes of all 9 public health regions (67% at >36 months); individuals from the Hammond/Slidell region had the best three year survival (85%).

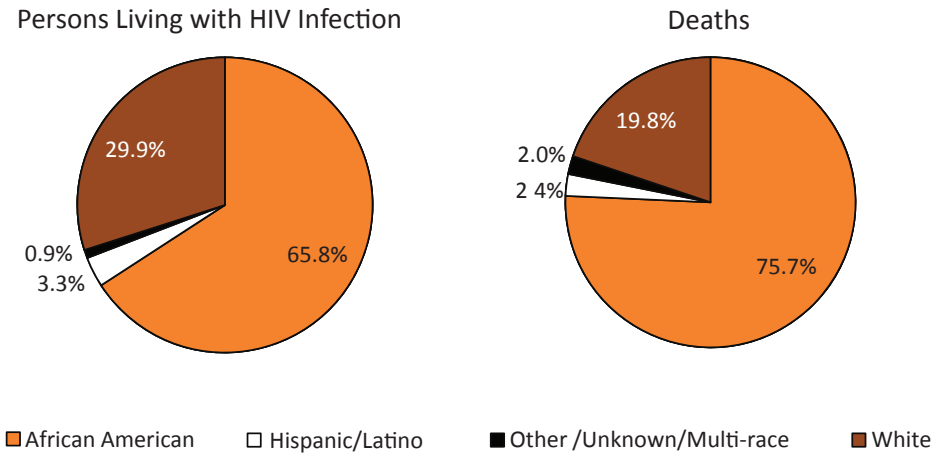
Mortality of Persons with HIV Infection in Louisiana

Data are collected on the number of persons with HIV infection who die each year. While individuals may die from HIV-related illnesses, others may die from other causes such as vehicle accidents, heart disease, or diabetes. Comparisons can be made between the proportions of different demographic groups living with HIV infection versus persons dying with HIV infection to see if certain groups have higher mortality.



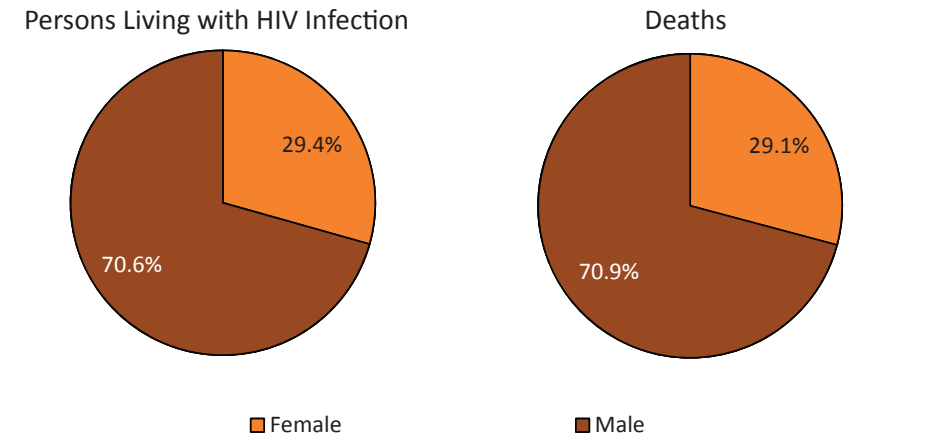
- In 2007, 425 persons with AIDS and 53 persons with HIV died in Louisiana. From 1998-2007 deaths among persons with HIV infection have remained relatively stable and the proportion with an AIDS diagnosis has fluctuated between 81-88%. *Note: mortality data for 2008 are not yet complete.*

Persons Living with HIV Infection and Deaths in Persons with HIV Infection
by Race/Ethnicity, Louisiana, 2007



- In 2007, 66% of persons living with HIV infection were black, and 76% of deaths among persons with HIV infection were black. The opposite trend can be seen in whites. In 2007, 30% of persons living with HIV infection were white, but only 20% of the deaths among persons with HIV infection were among whites. Blacks are experiencing a disproportionate percentage of deaths compared to the percentage of persons living with HIV infection.

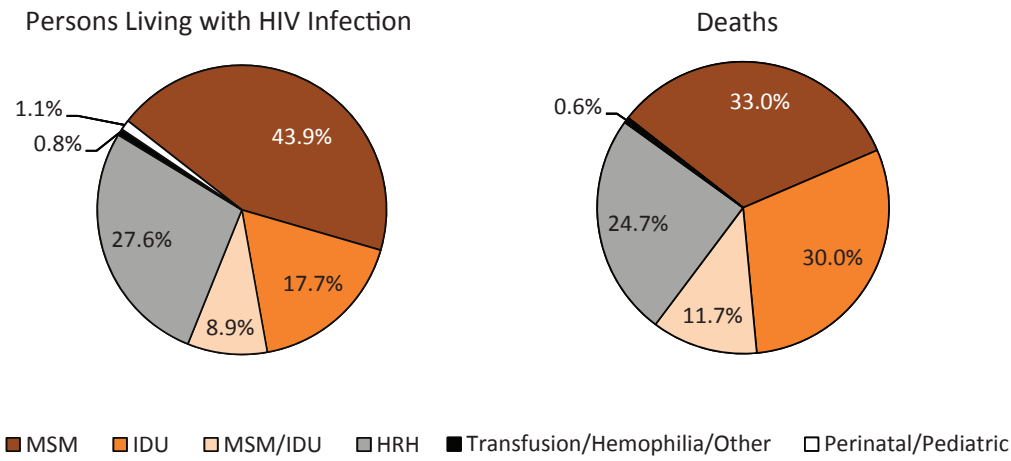
Persons Living with HIV Infection and Deaths in Persons with HIV Infection
by Sex, Louisiana, 2007



- In 2007, females made up 29% of persons living with HIV infection and also 29% of deaths in persons with HIV infection. Males made up 71% of both persons living with HIV infection and deaths.

- Therefore, there is not a disproportionate mortality in males compared to females.

Persons Living with HIV Infection and Deaths in Persons with HIV Infection
by Transmission Category, Louisiana, 2007



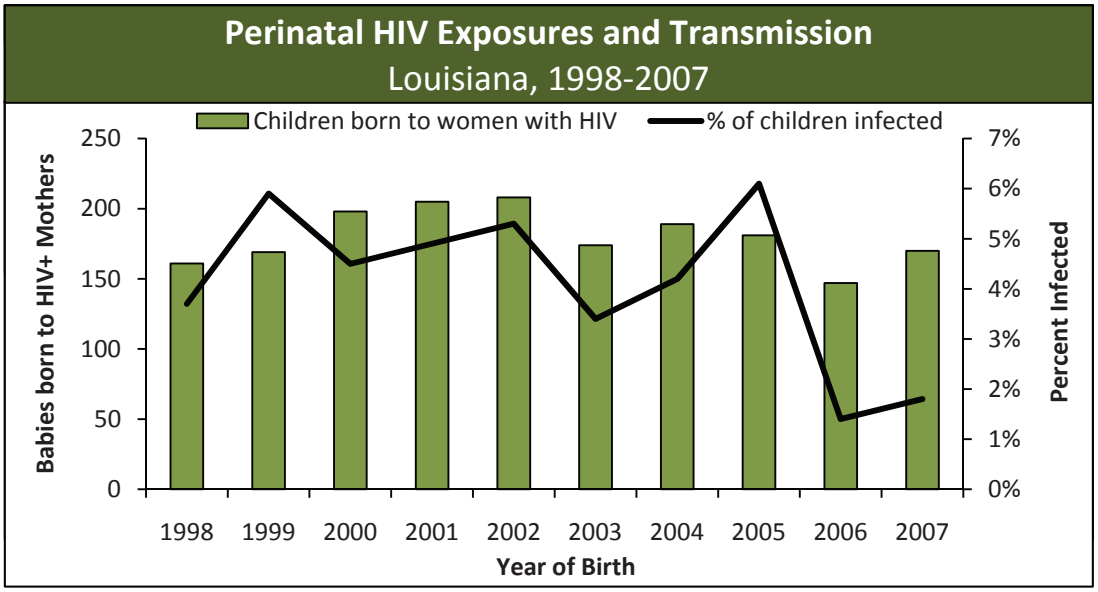
- Men who have sex with men made up 44% of persons living with HIV infection in 2007 but only 33% of the deaths in persons with HIV infection.

- Injection drug users (IDU and MSM/IDU) made up 27% of persons living with HIV infection but 42% of all deaths in persons with HIV infection in 2007.

Surveillance of Perinatal Exposure to HIV

In 1994, the Pediatric AIDS Clinical Trials Group demonstrated that zidovudine (ZDV) could reduce the risk of mother-to-child transmission. As a result, the United States Public Health Service (USPHS) issued recommendations for the use of ZDV to reduce perinatal transmission. These guidelines were updated in July 2008 to include additional treatment guidelines for HIV-infected pregnant women and their infants.[xii] The USPHS has published recommendations for HIV screening as part of the routine screening panel for all pregnant women and repeat testing during the third trimester in areas with high HIV prevalence. The USPHS also recommends a rapid test at delivery for women without documented HIV test results. In FY 2007, Louisiana passed legislation (Louisiana RS 40:1300:13) 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 the patient specifically declines ("opts out"). In addition, the law allows physicians to test children born to women whose HIV status is unknown at the time of delivery.

Between January 1, 1990 and December 31, 2007 an estimated 2,517 infants were born to women with HIV infection in Louisiana, and 175 (6.95%) of these children were infected with HIV via mother-to-child transmission. The implementation of the USPHS guidelines in Louisiana has led to a significant decline in perinatal transmission rates, from a high of nearly 17% in 1994 to 1.8% in 2007.

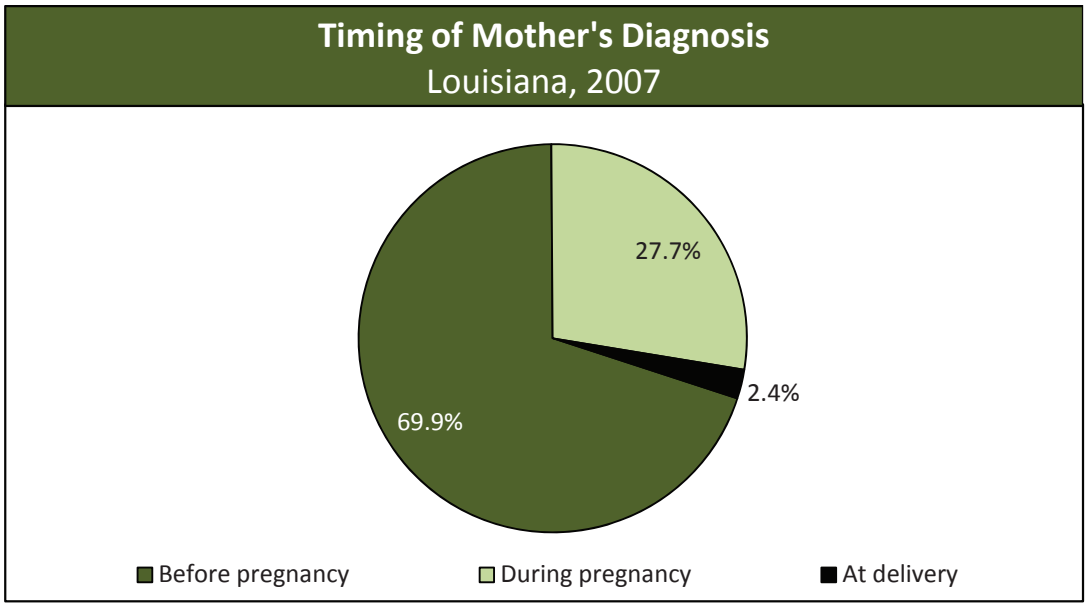


- In Louisiana in 2007, 170 infants were born to women with HIV infection, and 3 of the infants (1.8%) were infected with HIV. The perinatal transmission rates in 2006 and 2007 are the lowest percentages seen in the past 10 years. The lower number of births in 2006 and 2007 is likely due to the large number of women who moved out of state after Hurricane Katrina in 2005.

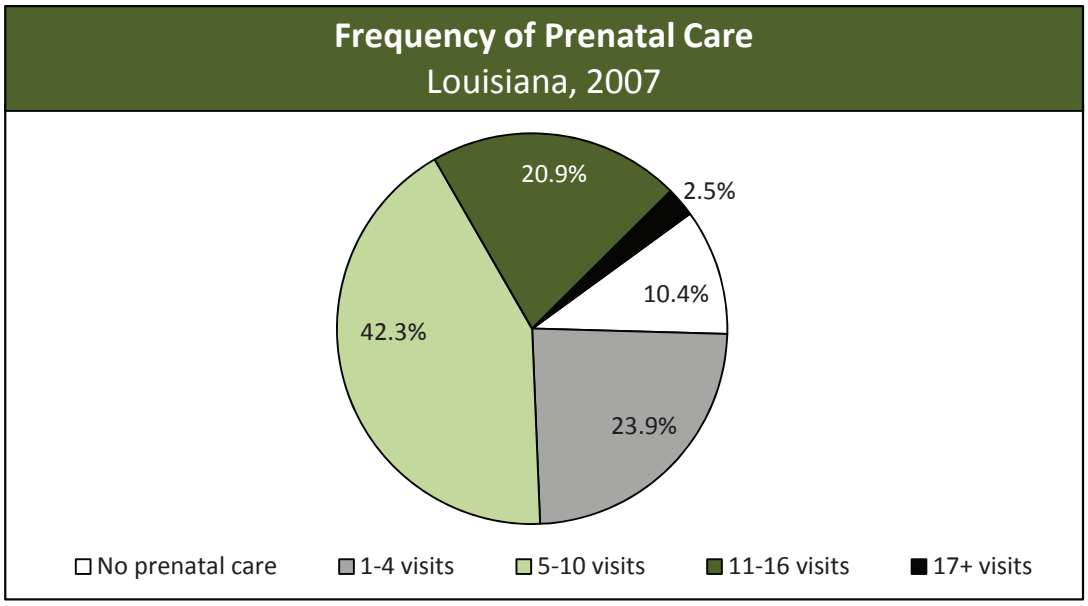
Demographics of Mothers with HIV Infection Louisiana, 2007		
	Women delivering in 2007	**Percent**
Total	**166**	**100.0%**
Race		
American Indian/Alaska Native	1	0.6%
Asian/Pacific Islander	0	0.0%
Black/African American	137	82.5%
Hispanic/Latino	5	3.0%
White	20	12.0%
Other/Unknown/Multi-race	3	1.8%
Age		
13-19	5	3.0%
20-24	57	34.3%
25-34	85	51.2%
35-44	19	11.4%
Transmission Category		
Injection Drug User (IDU)	22	13.3%
High Risk Heterosexual (HRH)	142	85.5%
Perinatal/Pediatric*	2	1.2%
Region		
1-New Orleans	40	24.1%
2-Baton Rouge	73	44.0%
3-Houma	4	2.4%
4-Lafayette	10	6.0%
5-Lake Charles	6	3.6%
6-Alexandria	5	3.0%
7-Shreveport	13	7.8%
8-Monroe	12	7.2%
9-Hammond/Slidell	3	1.8%

* Perinatal transmission is not imputed.

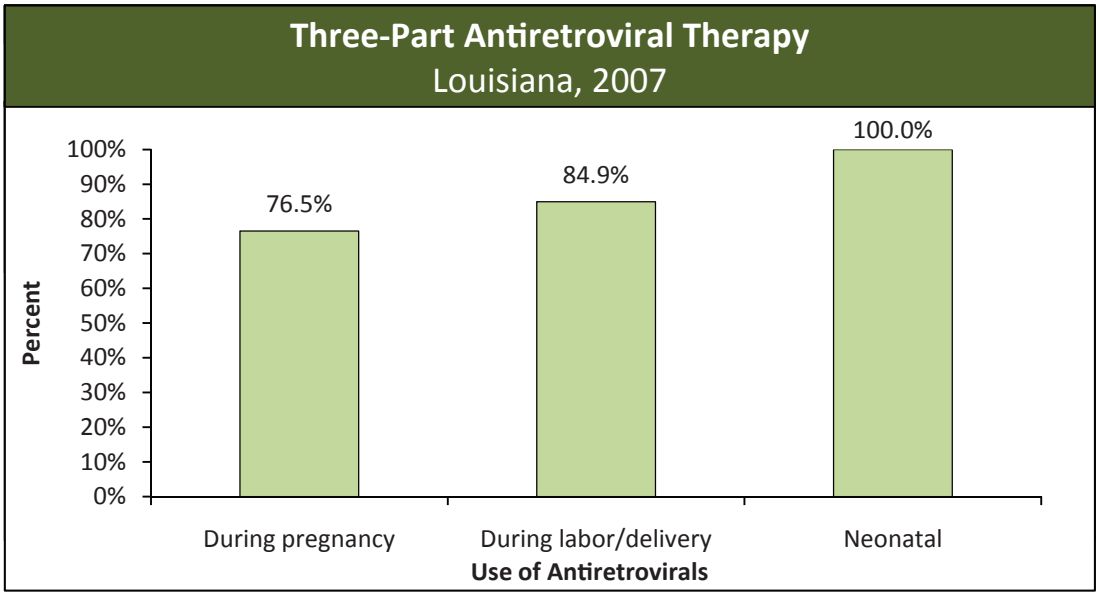
- Mothers with HIV infection were predominately black (82%) and between 25-34 years old (51%). Thirteen percent (13%) of the mothers with HIV infection were likely infected through injection drug use, and two mothers were themselves infected through perinatal transmission.
- In 2007, 44% of the mothers with HIV infection who gave birth lived in the Baton Rouge region, and 24% lived in the New Orleans region.



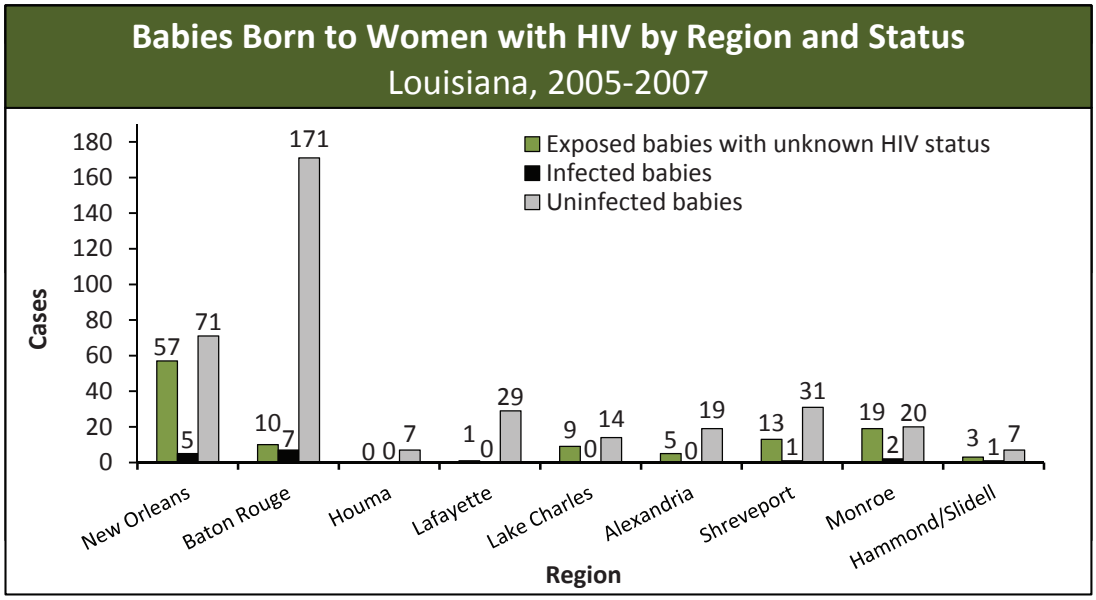
- In Louisiana, 70% of the women with HIV infection who delivered in 2007 were diagnosed with HIV prior to their pregnancy, and 28% were diagnosed during their pregnancy. The percentage of women who know their HIV status prior to delivery has increased over time due to the increased emphasis on screening pregnant women.



- In 2007, 10% of mothers with HIV infection did not receive any prenatal care, and only 23% had more than 10 visits. Lack of prenatal care is one of the factors that most significantly impacts perinatal transmission since women who are not in prenatal care are less likely to get tested for HIV or receive antiretroviral therapy during their pregnancy.



- Antiretroviral therapy administered to the mother during pregnancy, labor and delivery, and then to the newborn, can reduce the rate of perinatal HIV transmission to 2% or less. In 2007, 77% of mothers received antiretroviral therapy (ARVs) during pregnancy; 85% received ARVs during labor and delivery; and all infants received prophylactic ZDV shortly after birth. Overall, 71% of mother-infant pairs received all three recommended components of the antiretroviral prophylaxis protocol.
- Of the three infants born in 2007 who were infected with HIV, none of the mothers had any record of prenatal care, and two of the mothers did not receive ARVs during pregnancy or at delivery. Two of the mothers were diagnosed with HIV before their pregnancy, and one mother was diagnosed with HIV at delivery.



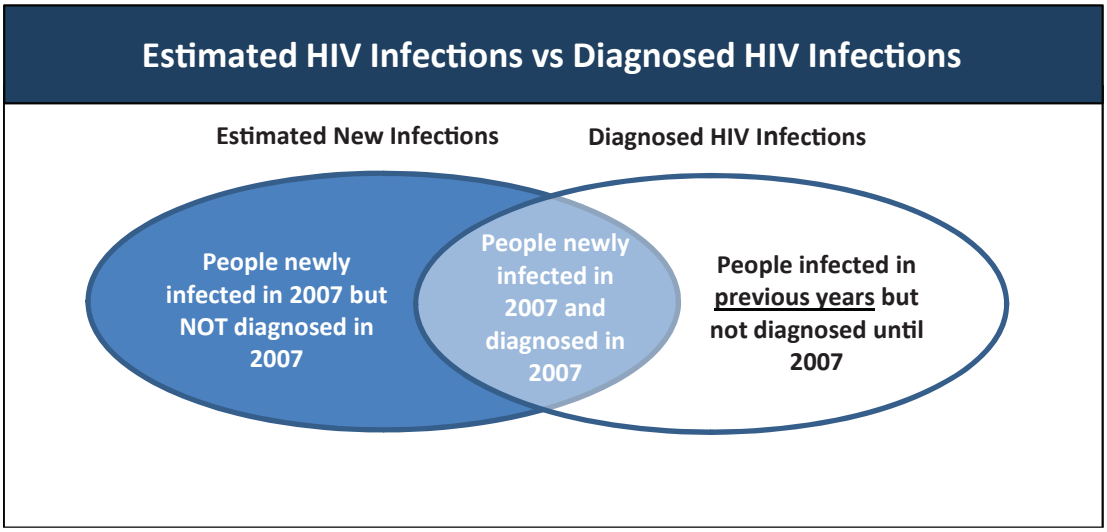
- Births to women with HIV infection occurred in every region of the state. The Baton Rouge region had the highest number of births between 2005 and 2007, but the New Orleans and Baton Rouge regions had comparable perinatal transmission rates (3.8% and 3.7% respectively). The Houma, Lafayette, Lake Charles, and Alexandria regions had no cases of perinatal HIV transmission during this time period.
- Nearly 29% of HIV-exposed infants born during 2005-2007 continue to have an indeterminate HIV status. This may be due to reporting delays, incomplete testing, and infants being lost to follow-up.

HIV Incidence Surveillance

Historically, HIV surveillance data have been able to describe "who was newly-diagnosed with HIV this year" or "who is currently living with HIV"—however, individuals may be diagnosed many years after they were infected, as shown in the *Late HIV Testing* section of this report. HIV incidence surveillance is intended to answer "who is becoming infected right now." In August 2008, the CDC published an updated national estimate of incident infections in the US—the estimate showed that approximately 56,300 (±8,100) people became infected with HIV in 2006.[xiii] The national estimate indicates that 73% of the newly infected persons were male, 45% were black, 15% were Hispanic, and 53% were among MSM.

The 2006 estimate was based on data from 22 jurisdictions, including Louisiana, and utilized a testing technology called Serological Testing Algorithm for Recent HIV Seroconversion (STARHS) that can help distinguish recent and long-term infections among newly-diagnosed individuals. The results of that test, in combination with information about testing history, treatment history, and other surveillance data, are analyzed using a statistical estimation methodology developed by CDC and form the foundation of CDC's new HIV Incidence Surveillance (HIS) system. The system was developed to generate timely and relevant estimates of the annual number of new HIV infections.

Using the CDC methodology, HAP's preliminary estimate suggested that 1,332 (±510) people became infected with HIV in Louisiana in 2007. In 2007, 1,137 individuals were diagnosed in the state, with the majority likely infected in previous years. The HIV incidence estimation includes people who have recently become HIV infected but who have not yet been diagnosed. Conversely, the number of diagnoses in a year contains people who were infected in previous years. The diagram below shows how new infections relate to new diagnoses. It is estimated that only 37% of individuals newly infected in 2007 were diagnosed in 2007 and that 63% of people who became infected in 2007 were unaware of their serostatus, though they may have since been tested and diagnosed.



Because the HIS system is new and the methodology to estimate incidence is very complicated, analyzing state-level data has been challenging and is not yet considered to be fully reliable. For the purposes of planning programs and allocating resources, HAP continues to rely primarily on data from the program's long-standing surveillance system that monitors new diagnoses, prevalence, and mortality. However, data from the state's incidence surveillance system may provide some insights into gaps in testing and issues in access to care and may ultimately help to inform prevention efforts to target populations most at risk currently.

National HIV Behavioral Surveillance

Initiated in 2003, the National HIV Behavioral Surveillance (NHBS) system collects behavioral data among people at highest risk for HIV infection in the United States. The rationale for this surveillance system is to "provide ongoing, systematic collection of data on behaviors related to HIV acquisition, which addresses CDC's strategic goal of strengthening the capacity nationwide to monitor the epidemic."[xiv] New Orleans was among the twenty-five U.S. metropolitan areas conducting NHBS in 2007. This study collected data from three target populations: men who have sex with men (MSM), injection drug users (IDU), and heterosexuals at high-risk (HRH), each in discrete annual cycles. Surveys were administered to participants to collect information regarding sexual behavior, substance use, and HIV testing behaviors. The 2005-2008 cycle for this project focused on one target audience per year: 2004/2005 – injection drug use; 2006 – study suspended for one year for Hurricane recovery; 2007 – high-risk heterosexuals; and 2008 – men who have sex with men.

Individuals were sampled from these populations through either a modified chain-referral approach or recruited from within venues that are frequented by the specific population. The following table illustrates the population surveyed, year of the data collection, number of surveys conducted, and sampling strategies of NHBS.

NHBS Survey by Sampling Method
Louisiana, 2005-2008

Transmission Category	Year	Number Surveyed	Sampling Methodology
Injection Drug Use	2005	372	Chain Referral
Project Suspended	2006	0	Suspended due to Hurricane Recovery
High-Risk Heterosexual	2006/2007	926	Connection to High-Risk Areas
Men Who Have Sex with Men	2008	528	Venue/Time-Based Sampling

Key Findings from the New Orleans NHBS Surveys:

Sexual Preference and Disclosure

- Eight of the 528 men included in the analysis of the 2008 MSM survey identified themselves as straight or heterosexual.
- A portion of males in all three samples who identified as heterosexuals were found to have been behaviorally bisexual by virtue of having had sex with both men and women in the last 12 months.
- Conversely, a percentage of individuals in all three cycles who identified as homosexual, gay or lesbian had had sex with both men and women in the past 12 months.
- Black MSM were more likely to identify as being bisexual (23%) than white (13%) and other race/ethnicity (18%) MSM.

Drug Use

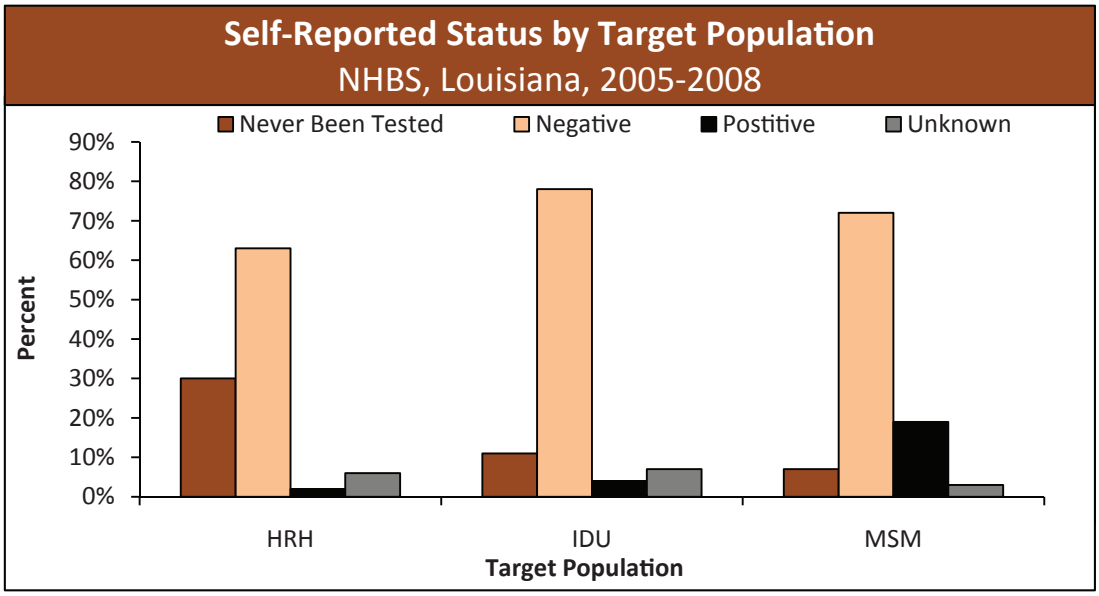
- Among those who used non-injection drugs in the past 12 months, marijuana was the most commonly used substance in the HRH (76%) and MSM (80%) samples; crack (72%) and powdered (69%) cocaine were more commonly used in the IDU sample.
- Among those who injected drugs, heroin was the most commonly used injection drug among MSM (66%) and IDU (77%), while cocaine was most common injection drug in the HRH sample (76%).
- 49% of the IDU respondents reported sharing needles and/or injection equipment (cooker, works, cotton) with another person in the previous 12 months.

Hepatitis

- Among those who had been told they have hepatitis, hepatitis C was the most common diagnosis for both IDU (57%) and HRH (57%), while Hepatitis B was more common (57%) than Hepatitis C (20%) among MSM.

Testing

- MSM were most likely to have received their last HIV test at an HIV counseling and testing site or street outreach location (43%). IDU were initially tested in a correctional facility (35%), and HRH were initially tested at a public health clinic or community health center (30%).
- IDU were significantly less likely to have been tested at a private doctor's office (4%) than MSM (25%) or HRH (24%).



- Almost 20% of the MSM surveyed reported being HIV positive, while less than 5% of the IDU and HRH participants reported being positive.
- Over 30% of the HRH participants reported having never been tested, while 11% of the IDU participants and 7% of the MSM participants reported having never been tested for HIV.

The table on the following page is a demographic breakdown of the NHBS participants as well as survey responses from the three groups.

Key Points:

- The majority of IDU and HRH participants were black but the majority of MSM participants were white.
- People over the age of 50 were excluded from participation in the HRH survey.
- Female participants were more highly represented in the HRH surveys.
- IDU participants reported the greatest percentage of unprotected sex and the greatest percentage of non-injection drug use.

NHBS Survey Demographics
Louisiana, 2005-2008

	Injection Drug Use (2005) N=372		High-Risk Heterosexual (2006/2007) N=926		Men Who Have Sex With Men (2008) N=528	
	Number	%	Number	%	Number	%
Race/Ethnicity						
Black/African American	283	76%	792	86%	151	29%
White	50	13%	110	12%	306	58%
Other	39	10%	24	3%	71	13%
Sex						
Male	314	84%	436	47%	528	100%
Female	58	16%	490	53%	n/a	n/a
Age						
18-24	30	8%	190	21%	83	16%
25-34	57	15%	205	22%	146	28%
35-44	100	27%	266	29%	161	30%
45-50	91	24%	265	29%	71	13%
51+	94	25%	n/a	n/a	67	13%
Sexual Identity						
Heterosexual or "Straight"	342	92%	846	91%	8	2%
Homosexual, Gay, or Lesbian	5	1%	1	0%	431	82%
Bisexual	23	6%	76	8%	89	17%
Other	2	1%	3	0%	0	0%
Average Number of Sex Partners (12mths)*						
Male with Male Partner	0.46		2.2		9.97	
Male with Female Partner	8.56		4.23		1.82	
Female with Male Partner	6.78		1.84		n/a	
Proportion Unprotected Sex (12mths)**						
Male with Male Partner	11	65%	19	63%	251	57%
Male with Female Partner	234	83%	324	75%	34	53%
Female with Male Partner	44	96%	368	79%	n/a	n/a
Injection Drug Use						
Ever Injected Drugs	372	100%	93	10%	62	12%
Injected in the Past 12 Months	372	100%	17	2%	18	3%
Shared Needle in Past 12 Months	114	31%	7	41%	8	44%
Shared Works/Equipment in Past 12 Mos.	183	49%	10	58%	8	44%
Non-Injection Drug Use						
In Past 12 Months	277	74%	350	38%	275	52%
Methamphetamines	53	14%	17	2%	53	10%
Hepatitis						
Physician Diagnosed any Hepatitis	30***	25%	68	7%	84	16%
Self Reported HIV Test						
Never Been Tested	41	11%	279	30%	35	7%
Negative	291	78%	579	63%	379	72%
Positive	14	4%	14	2%	98	19%
Did not return/Unknown/Other	26	7%	51	6%	16	3%

* Average number of sex partners for those who reported any sex, by specified gender.

** Number of persons reporting unprotected sex with specific gender. Percent is the number of those who reported unprotected sex out of the total number who reported any sex.

*** In the IDU cycle, only 114 participants were asked this question due to changes in the survey.

Chapter 2

Care and Services

Introduction to the Care and Services Unit

The Louisiana Office of Public Health HIV/AIDS Program (HAP) Care and Services Unit coordinates programs throughout the state for low-income individuals living with HIV infection to help ensure ongoing access to primary medical care and to a continuum of high-quality community-based supportive social services. In 2008, HAP coordinated HIV-related care, treatment and support services for 5,875 people living with HIV infection in Louisiana. HAP's Care and Services Unit receives funding from two primary sources:

- For medical and supportive service programs, HAP receives an annual grant from the Health Resources and Services Administration (HRSA) through the federal Ryan White HIV/AIDS Treatment and Modernization Act. Ryan White resources are available through several programs or "Parts" that are awarded to states, cities, medical providers, and community-based organizations to help ensure that low-income individuals living with HIV disease have access to medical care and treatment (See "What is Ryan White Funding?" on page 49). HAP's grant is through "Part B" of HRSA's Ryan White Program. The City of New Orleans and the City of Baton Rouge receive separate funding from HRSA under "Part A" of the Ryan White Program to administer medical and support programs in those jurisdictions. The amount of funding allocated to Louisiana each year is largely determined by a federal formula that uses data collected through HAP's Surveillance Unit.

- For housing related services, HAP receives funds through the federal Department of Housing and Urban Development (HUD) through the State Formula Housing Opportunities for Persons with AIDS (HOPWA) program. These resources support a continuum of housing options for persons living in areas of the state outside of the greater New Orleans and Baton Rouge metropolitan areas as these cities receive a direct award of HOPWA funds. The annual State Formula HOPWA award to Louisiana is also determined by the number of AIDS cases reported by HAP's Surveillance Unit.

HAP contracts with medical centers and community-based agencies throughout the state to provide the following services at low or no cost to eligible clients:

- outpatient/ambulatory medical care for HIV
- assistance in obtaining HIV medications
- the provision of medical case management
- support services: medical transportation, nutritional services, and emergency assistance
- the payment of health insurance premiums, co-payments and deductibles
- home- and community-based care services
- legal services
- short-term and tenant-based housing assistance and support of community residences

Another responsibility of HAP's Care and Services Unit is to coordinate with programs that receive separate funding to provide similar services throughout the state. Specifically, HAP works closely with the state's other HRSA-funded Ryan White grantees, the Louisiana Medicaid program, the Louisiana State University (LSU) regional public medical centers, and other entities that provide services to low-income persons with HIV to reduce gaps in services and strengthen the continuum of care.

Primary Medical Care and Support Services Coordinated through HAP:
Louisiana's Ryan White "Part B" Program

Louisiana's Care and Services Unit administers Ryan White Part B grant funding for the provision of medical and social support services for low-income HIV-infected persons living throughout the state (see "What is Ryan White Funding?" on page 49 for an overview of the federal Ryan White Program and Parts). These resources primarily ensure ongoing access to medical care and treatment. Support services are intended to reduce barriers to accessing medical care.

Currently Louisiana's Ryan White Part B programs serve eligible clients in every parish of the state. Below is an overview of the major components of HAP's Ryan White Part B program and how those services complement and are coordinated with HIV medical care and support services available through other programs for persons living with HIV infection in Louisiana.

Outpatient/Ambulatory Medical Care

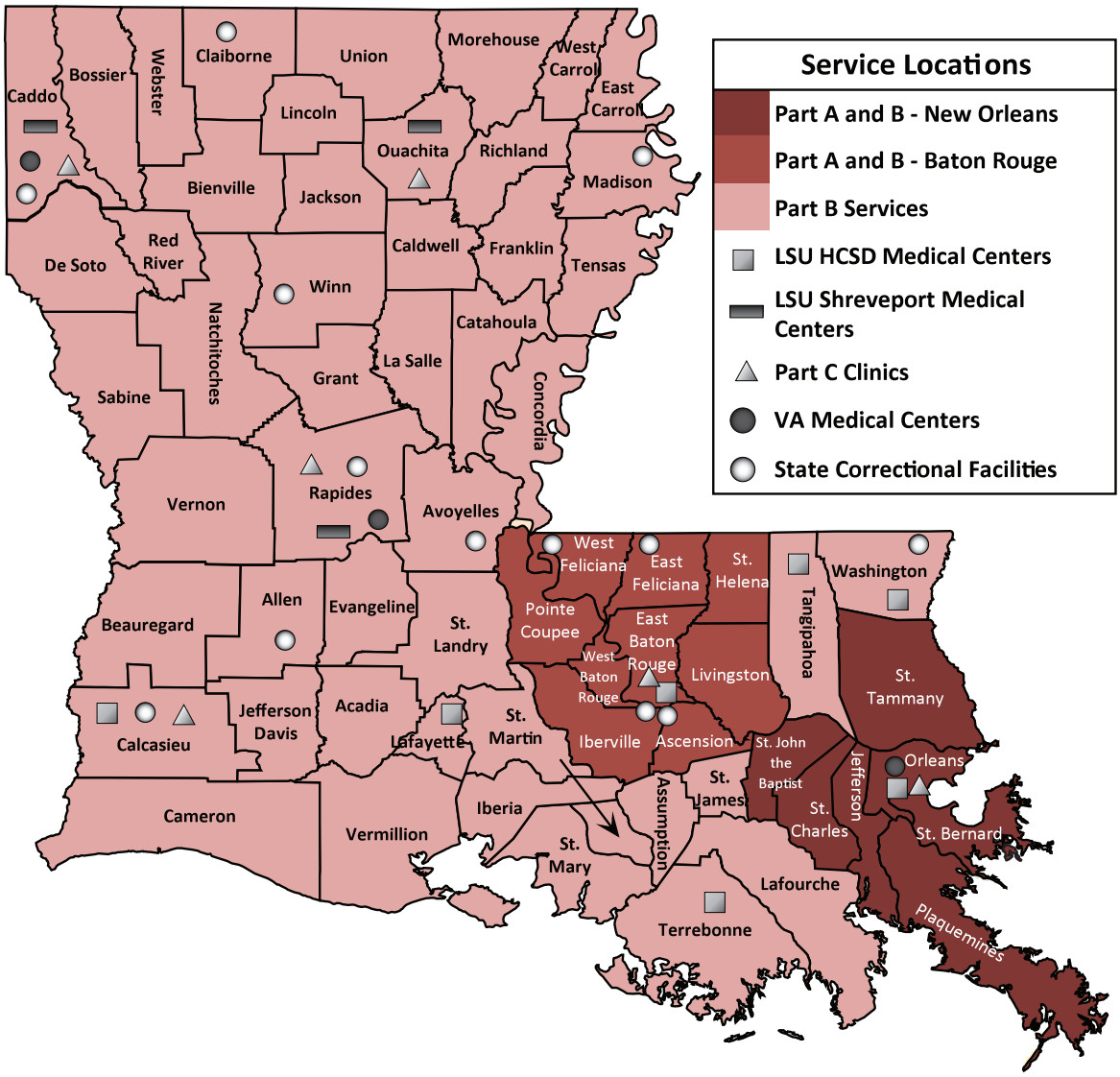
What does HAP do?	*Supplements funding for primary HIV care services in areas of the state where there is an identified need to support those services*
Area covered:	*Select areas of the state, based on need and available resources*

In 2008, HAP utilized more than $500,000 in Part B funding to augment ambulatory/outpatient medical care services in New Orleans, Baton Rouge, Lafayette, Shreveport, Monroe and the north shore of Lake Pontchartrain. Part B resources have previously been provided to other areas of the state as needs have been identified. However, the Part B funding utilized to support HIV primary medical care in Louisiana is very limited when compared to state funds supporting the LSU regional public medical centers, federal reimbursements from Medicaid and Medicare, and the Ryan White Part C awards from HRSA to outpatient HIV clinics.

Louisiana has a unique healthcare infrastructure that provides an array of medical services to residents through a partnership between public and private providers. In addition to many for-profit hospitals and private infectious disease specialists throughout the state, the LSU Health Care Services Division (HCSD) operates seven state-funded medical centers in the southern half of the state which primarily provide care to low income individuals who are uninsured or underinsured. Additionally, LSU-Shreveport oversees the three medical centers in Shreveport, Monroe, and Pineville that provide similar medical services. All ten of these regional medical centers operate clinics that offer HIV-specific medical services. Of all persons living with HIV in Louisiana who are in care, eighty-two percent access care through the regional public medical centers. In addition, primary care is provided by independent community-based outpatient clinics supported with Ryan White Part A, B, and/or C resources; 13 facilities operated by the Louisiana Department of Public Safety and Corrections; and three Veterans Affairs Medical Centers (see map on opposing page).

HAP's Care and Services Unit works very closely with medical providers throughout the state to help connect the systems of care together through coordinated program implementation, collaboration, and where possible, program integration. Community-based HIV medical case management agencies (primarily funded through Medicaid or Ryan White Part A, B, or D programs) help link clients to the most appropriate medical care services in their local area.

Ryan White Coverage and Service Locations, Louisiana



Managing HIV Disease: Resources for HIV Primary Care Providers

HIV is a complicated disease to manage – both for patients and their providers. Due to the complex nature of the medications and their interactions with other HIV and non-HIV pharmaceuticals, the U.S. Public Health Service (USPHS) provides a variety of treatment guidelines for physicians and prescribers. These guidelines are tailored for specific populations (adults, pediatric patients, pregnant females, etc.) and are "living documents" that are continuously updated to provide the most updated treatment information to practitioners. (http://aidsinfo.nih.gov/guidelines)

The federal Ryan White HIV/AIDS Program Part F component funds technical assistance to medical care providers through regional AIDS Education and Training Centers (AETC). For Louisiana clinicians, support and training resources can be accessed through the Delta Region AETC in New Orleans. (www.deltaaetc.org)

Assistance Obtaining HIV Medications

What does HAP do? *Contracts with the 10 LSU regional public medical center pharmacies to provide HIV-related formulary medications and laboratory tests to qualifying clients*

Area covered: *Statewide*

The Louisiana AIDS Drug Assistance Program (ADAP) helps to ensure that low-income qualifying clients can access specific FDA-approved HIV medications. These pharmaceutical interventions have been proven to slow disease progression, enhance quality of life, and extend life. The allocation of resources to Louisiana ADAP comprises the greatest percentage of the Ryan White Part B award. Clients can access the program through private providers, the regional public medical centers, and medical case management service providers. The Louisiana ADAP currently has 63 FDA-approved medications and four diagnostic laboratory tests supported by the ADAP formulary.

Persons Utilizing ADAP and Persons Living with HIV Infection by Region
Louisiana, 2008

	Number Utilizing ADAP	%	Persons Living with HIV Infection	%
Total	**3,403**	**100.0%**	**16,277**	**100.0%**
1-New Orleans	1,303	38.3%	5,836	35.9%
2-Baton Rouge	758	22.3%	3,903	24.0%
3-Houma	125	3.7%	598	3.7%
4-Lafayette	243	7.1%	1,198	7.4%
5-Lake Charles	197	5.8%	873	5.4%
6-Alexandria	168	4.9%	783	4.8%
7-Shreveport	278	8.2%	1,349	8.3%
8-Monroe	180	5.3%	872	5.4%
9-Hammond/Slidell	151	4.4%	865	5.3%

- Approximately 60% of ADAP clients are from the New Orleans and Baton Rouge regions.
- The percentage of individuals receiving ADAP services in each region is comparable to the percentage of persons living with HIV infection in each region.

Who pays for HIV medications in the U.S.?

According to the *Kaiser Family Foundation*, the national HIV-related medication payor sources for 2008 were: private insurance (9%); Medicaid (35%); Medicare (39%); and the Ryan White HIV/AIDS Program (17%).

The main components of the federal Ryan White HIV/AIDS Program that pay for medications are the AIDS Drug Assistance Program (ADAP) and the Local AIDS Pharmaceutical Assistance Programs (LAPA). ADAP is available in every U.S. State and Territory for persons who are low income, living with HIV and uninsured—although eligibility criteria and formulary medications vary from state to state.

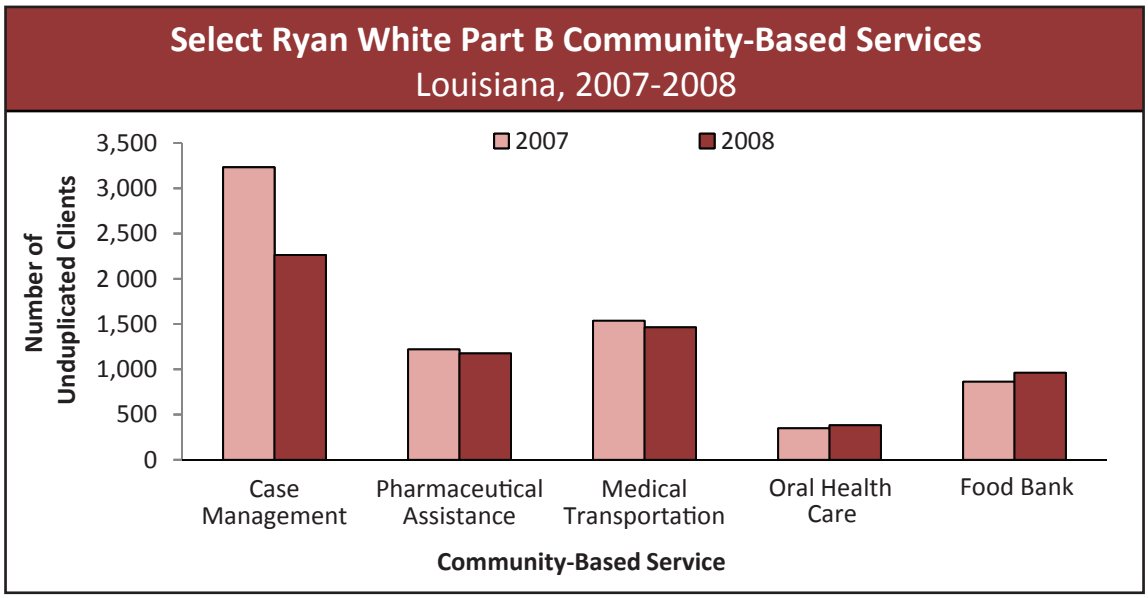
Kaiser Family Foundation
http://www.kff.org

Provision of Medical Case Management and Support Services

What does HAP do? *Contracts with community-based agencies to provide medical case management services to help people living with HIV stay in medical care.*

Area covered: *Statewide, but excludes the New Orleans and Baton Rouge areas where similar services are administered by the Ryan White Part A programs awarded to these cities.*

Medical case management is a service that helps qualifying clients navigate HIV medical care systems and access other support resources. Case managers can help clients access supportive services through federal, state, and local community based programs. Ryan White Part B assistance is also available when there are no other resources to pay for medications not covered through ADAP, oral health care services, transportation to medical appointments, and nutritional services. Below is a summary of the number of clients served and Units of service provided for some of the Ryan White Part B-funded services in Louisiana.

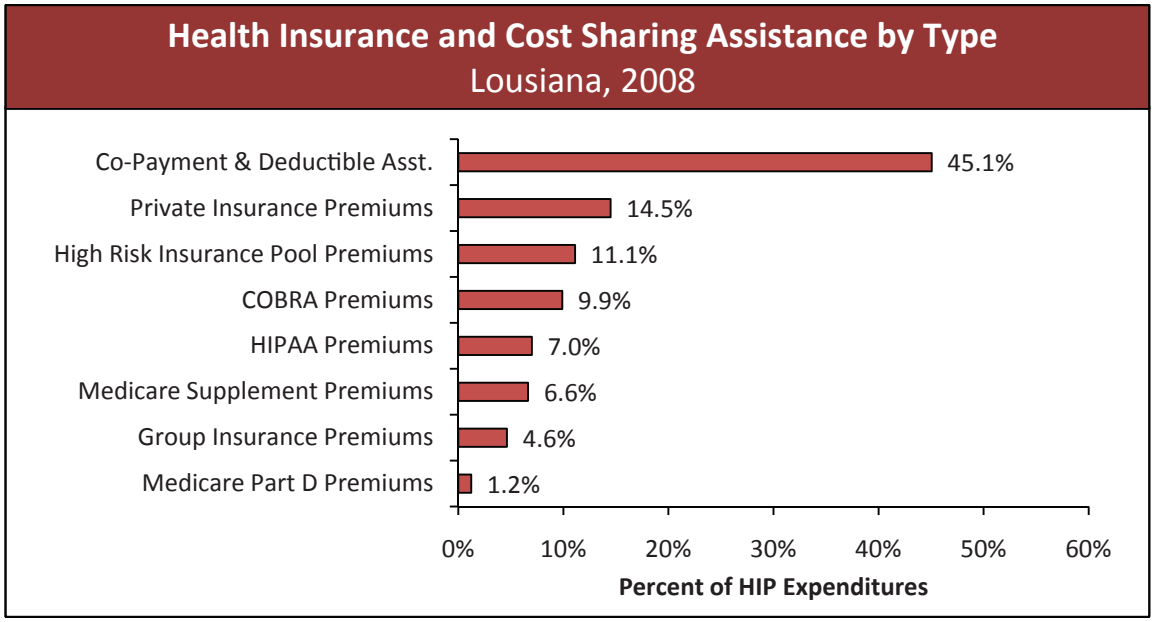


- The number of unduplicated clients receiving Ryan White Part B case management services decreased from 2007 to 2008 as a result of Baton Rouge's conversion to a Ryan White Part A Transitional Grant Area.
- Of those persons known to be living with HIV infection outside of the Baton Rouge and New Orleans metropolitan areas, 2,263 persons received Medical Case Management in 2008 supported by Ryan White Part B.
- The Local AIDS Pharmaceutical Assistance Program (LAPA) provides HIV-related medications that are not on the Louisiana ADAP formulary and are not available from the regional LSU medical centers.
- Oral healthcare needs for persons with HIV can be more pronounced than those of the general population due to side effects of the prescribed medications and other factors. When combined with poor oral health care histories, those persons seeking dental care may have more severe or more urgent needs.[xv]
- The availability of Medical Transportation to low-income persons living with HIV infection is crucial to their access to medical care, especially in rural areas. Transportation to and from medical appointments was identified by respondents of the 2008 Statewide Needs Assessment as the top service needed to assist in accessing HIV-related medical services.

Payment of Health Insurance Premiums, Co-payments and Deductibles

What does HAP do?	*Contracts with two entities that pay the health insurance premiums, co-payments, or deductibles for qualifying clients.*
Area covered:	*Health insurance premiums are paid for clients statewide, but the co-payment and deductible program currently excludes the New Orleans area where similar services are administered by the Ryan White Part A program.*

HAP's Ryan White Part B program supports comprehensive health insurance services that are intended to help eligible clients maintain or obtain health insurance coverage. These services are provided through two programs: HAP's Louisiana Health Insurance Continuation Program (HICP) and the Co-payment and Deductible Assistance Program (CDAP). Clients access these services by applying directly to the entities that administer the programs, or through the local agency that provides HIV medical case management services. The graph below shows the type of payments HICP and CDAP supported through Ryan White Part B resources in 2008.



In 2008, HAP allocated slightly more than $1,300,000 for HICP to provide insurance coverage to 466 persons. Without this resource, the cost of their comprehensive HIV care would have been absorbed by other federal and state resources.

In 2008, approximately $1,100,000 was allocated to the annual CDAP budget to assist 663 persons with their co-payments and deductibles, including 125 persons with prescription drug coverage through Medicare Part D.

What is Ryan White Funding?

The Ryan White HIV/AIDS Program was first authorized by federal legislation in 1990 and is currently funded at $2.1 billion. The program is for those who do not have sufficient health care coverage or financial resources for coping with HIV disease. Ryan White fills the gaps in care not covered by these other resources. The majority of Ryan White HIV/AIDS Program funds support primary medical care and essential support services. A smaller but equally critical portion is used to fund technical assistance, clinical training and research on innovative models of care. Federal funds are awarded to agencies located around the country, which in turn deliver care to eligible individuals under funding categories called Parts, as outlined below.

- *Part A: Grants to Eligible Metropolitan Areas (EMAs) and Transitional Grant Areas (TGAs)*
  Provides grants to areas most severely affected by the HIV epidemic. In Louisiana, the cities of New Orleans and Baton Rouge receive awards directly from HRSA under Part A.
- *Part B: Grants to States and Territories*
  Provides grants to all 50 states, the District of Columbia, Puerto Rico, Guam, the U.S. Virgin Islands, and five U.S. Pacific Territories or Associated Jurisdictions. Part B grants include a Base award, the ADAP earmark and ADAP Base supplemental allocations. This annual award is made directly to the State of Louisiana and is administered through HAP.
- *Part C: Early Intervention Services (EIS) through Community-Based Non-Profit Entities*
  Funds comprehensive primary health care in an outpatient setting for people living with HIV infection. Nine clinics in Louisiana are currently supported through this resource. Part C funding from HRSA is the state's third major funding source for primary medical care for HIV-infected individuals living in Louisiana, after the allocation of state funds and federal reimbursements through Medicare and Medicaid.
- *Part D: HIV/AIDS Healthcare for Women, Infants, Children, Youth and Affected Family*
  Provides for family-centered outpatient or ambulatory care and support services for women, infants, children, and youth with HIV. In Louisiana there are three awards for services to be delivered in eight regions of the state.
- *Part F: Special Projects of National Significance (SPNS) Program*
  SPNS grants fund innovative models of care and support the development of effective delivery systems for HIV care. In Louisiana, three entities are currently funded through SPNS.
- *Part F: AIDS Education and Training Centers (AETC) Program*
  Supports a network of 11 regional centers that conduct targeted, multidisciplinary education and training programs for health care providers treating people living with HIV infection. The AETC for Louisiana, Mississippi and Arkansas is based in New Orleans, LA.
- *Part F: Dental Programs*
  Provides specific funding for oral health care for people with HIV through the Dental Reimbursement Program (DRP) and the Community-Based Dental Partnership Program (CBDPP). The LSU School of Dentistry is the single grantee for the provision of these services in the state.
- *Part F: Minority AIDS Initiative (MAI)*
  Provides funding to evaluate and address the disproportionate impact of HIV on women and minorities. In Louisiana, MAI funding is allocated annually to the Part A grantee (New Orleans), the TGA (Baton Rouge) and Part B (HAP).

Housing and Housing-Related Services:

Louisiana's Formula Housing Opportunities for Persons with AIDS Program

HAP administers the State Formula Housing Opportunities for Persons with AIDS (HOPWA) program, funded by the federal Department of Housing and Urban Development (HUD) (see "What is the State Formula HOPWA Program?" on the next page for an overview of the federal program). The primary goal of HOPWA is to help ensure stable housing for people living with HIV to prevent homelessness.

HAP's HOPWA services are available to eligible clients statewide living outside of the New Orleans and Baton Rouge metropolitan statistical areas (MSAs). Similar services are available in those areas through HOPWA programs that are awarded directly to those city governments. HAP's main HOPWA services include:

- Short-term rent, mortgage, and/or utility payments to eligible clients in their current housing
- Tenant-based rental subsidy to maintain long-term housing
- Operating and supportive services for residential facilities that are providing housing to persons with HIV
- The identification of other housing resources in a community

The federal HOPWA program has set a goal of 80% of all persons living with HIV and served through the State Formula HOPWA will be stably housed by 2010. Currently, HAP estimates that Louisiana's State Formula HOPWA program has achieved stable housing for 51% of individuals served by the program. HAP continues to work towards meeting the 2010 HUD goal even with reduced housing stock in many of the hurricane-impacted areas of the state. In 2008, there were 768 persons living with HIV infection who received housing services and an additional 741 family members who benefited from this assistance (a total of 1,509 individuals who received housing services).

- Of the 768 HIV-infected clients who received housing services in 2008:
    - 13 were Veterans
    - 57 met the HUD definition of being chronically homeless
    - 21 were survivors of domestic violence
    - A vast majority of the 768 HIV-infected clients (75%) had an income at or below 50% of the median income for their parish of residence

- Of the 1,509 beneficiaries of HOPWA-funded services in 2008:
    - 56% were male and 44% were female
    - 65% identified themselves as black
    - 17% were dependent minors under the age of 18, 69% were persons between the age of 18-50, and 14% were 50 or older

How does stable housing affect health for people living with HIV?

The Community Health Advisory & Information Network (CHAIN) project is an ongoing prospective study of persons living with HIV in greater New York City conducted by the Mailman School of Public Health at Columbia University. This study has consistently found over the past 10 years that homeless individuals accessing supportive housing were more likely to engage in primary medical care than individuals who only accessed case management services. Stable housing was also shown to increase the possibility of being prescribed anti-retroviral medications**.** Those who received housing assistance were 2.5 times more likely to retain appropriate medical care as those who did not receive the assistance.

What is the State Formula HOPWA Program?

The U.S. Department of Housing and Urban Development (HUD) began the Housing Opportunities for Persons with AIDS (HOPWA) program in 1992 to address the specific needs of persons living with HIV and their families. This program is guided by the Fair Housing Act of 1968, as amended in 1990 to include the Americans with Disabilities Act. HOPWA distributes 90% of its program funds using a statutory formula that relies on AIDS statistics from the Centers for Disease Control and Prevention (CDC). Three quarters of HOPWA formula funding is awarded to qualified states and metropolitan areas with the highest number of AIDS cases. One quarter of the formula funding is awarded to metropolitan areas that have a higher-than-average per capita incidence of AIDS.

HOPWA State Formula Grants are awarded upon submission and HUD approval of a Consolidated Plan pursuant to the Code of Federal Regulations (24 CFR Part 91), which is published by the Office of the Federal Register. Metropolitan areas with a population of more than 500,000 and at least 1,500 cumulative AIDS cases are eligible for HOPWA Formula Grants. In these areas, the largest city serves as the Formula Grant Administrator. States with more than 1,500 cumulative AIDS cases (in areas outside cities eligible to receive HOPWA funds) are eligible to receive HOPWA State Formula Grants. Louisiana is a qualifying state.

HOPWA makes grants to local communities, states, and nonprofit organizations for projects that benefit low-income persons medically diagnosed with HIV infection and their families. The funds can be utilized to:

- identify new housing options
- pay rent, mortgage, and utilities in specific circumstances
- support operations of HIV/AIDS housing programs
- provide supportive services that maintain persons in housing
- support acquisition, rehabilitation, and development of housing specifically for persons living with HIV and their families

Assessing Consumer Needs and Prioritizing the Care and Services Funding Allocations

Legislative language in section 2617(b)(6) of the Ryan White HIV/AIDS Treatment and Modernization Act of 2006 (Ryan White HIV/AIDS Program) requires grantees to conduct activities to enhance coordination across Ryan White HIV/AIDS Program Parts by mandating participation in the development every three years of a Statewide Coordinated Statement of Need (SCSN). The purpose of the SCSN is to provide a collaborative mechanism to identify and address significant HIV care issues related to the needs of people living with HIV infection and to maximize the coordination, integration and effective linkages across the Ryan White HIV/AIDS Program Parts. The SCSN process is expected to result in a document that reflects the input and approval of all Ryan White Program Parts and guides the creation of the Comprehensive Plans developed by the Part A, Part B and TGA grantees.

Comprehensive Plans, as described in 2617(b) (5), are also submitted to HRSA every three years. The Plans are required to address the organization and delivery of health and support services in each jurisdiction and should include strategies, goals and timelines that focus on 1) primary care and treatment, 2) efforts to increase flexibility to target Ryan White resources, and 3) accountability through sound fiscal management and evaluation of program effectiveness.

A copy of the 2009 Statewide Comprehensive Statement of Need (SCSN) and the 2009 Part B Comprehensive Plan are available at: www.hiv.dhh.louisiana.gov.

2008 Statewide Needs Assessment of Persons Living with HIV/AIDS

In preparation for the creation of the 2009 SCSN and Comprehensive Plan, in June 2008 HAP released a call for proposals for the coordination and implementation of the 2008 Statewide Needs Assessment. Staff from the successful proposer worked closely with members of HAP, representatives from the Part A grantee and the New Orleans Regional AIDS Planning Council, staff from the Office of Community Development in Baton Rouge, and employees of the Part D grantee to revise and edit the previous survey instrument. Several meetings and conference calls were held to develop a tool that truly assessed current consumer need and was able to be scanned. The 16-page survey was then field tested with consumers and revised again based on their suggestions.

The contractor trained more than a dozen Peer Advocates to work closely with Case Managers at the community based organizations and Ambulatory Site Coordinators at the LSU regional public medical centers to assist in administering the Needs Assessment survey. They educated consumers about the purpose of the survey, stressed the importance of consumer input, encouraged each client to complete the survey, assisted consumers with reading or understanding the questions and collected the completed surveys in a confidential manner.

The facility-based survey was promoted to persons living with HIV infection over a four-week period, from September 22nd through October 17th, 2008, using a self-administered instrument in both English and Spanish. The survey was also made available online in English. The survey instrument covered twelve domains: general information; health insurance; employment; income and resources; primary medical care; housing; childcare; transportation; mental health and substance use; other services; support services; and positive prevention.

HAP set a statewide goal of 2,250 completed surveys, which would represent approximately 13% of all persons known to be living with HIV in Louisiana. Upon receipt, surveys were counted and inspected for errors that could be corrected prior to scanning. Surveys that were at least 50% complete were considered useable.

A total of 1,944 surveys were returned during the data collection period. Of the 1,944 surveys returned, 111 were deemed unusable because they were incomplete. Regions 5, 7, and 8 exceeded their targets during the first three weeks of data collection and did not have to continue into the fourth week. The lowest response rate came from Region 3, which was severely affected by Hurricane Gustav.

However, in terms of regional representation, the 2008 Needs Assessment Survey sample of 1,833 responses closely reflects the distribution of people living with HIV across the state. For every region except one, the regional sample proportion is within two percentage points of the number of people living with HIV infection in that region. Descriptive statistics of demographic data likewise show that in terms of observable characteristics the 2008 Needs Assessment sample is reflective of the HIV-infected population in Louisiana. Survey respondents were predominantly in their forties (48%), of African-American ethnicity (70%), and male (60%), which is also reflective of the population in Louisiana living with HIV. Women are slightly overrepresented in the sample, as are African Americans, and Hispanics/Latinos. By age groups, however, the sample represents the population very closely.
Below are some of the select findings from the 2008 Statewide Needs Assessment:

Primary Medical Care and Medications

- The top three barriers to receiving HIV-related medical services are lack of transportation, lack of knowledge about where to get services, and lack of funds to pay for services.
- The top three reported reasons for not seeking HIV-related medical care are lack of knowledge about where to get care, not feeling sick and feeling depressed.
- Dental and eye care are the most identified unmet HIV-related medical service needs.
- 32% of respondents report being out of treatment for at least 12 months, with the most commonly reported reason that they were not ready to deal with their HIV status.
- The top three reasons for not taking medications are that they make the respondent feel bad, respondents have trouble remembering to take them, or respondents do not like taking the medications.

Mental Health and Substance Use

- Very few respondents (<7%) indicate an unmet mental health need or unmet substance abuse assistance. However, about half of respondents report having little interest or pleasure in doing things and feeling down, depressed or hopeless during the last two weeks.
- 62% of substance-using respondents express a desire to stop using.
- 4% of respondents have used injection drugs in the past three months. Of these respondents, 56% shared a needle with others in the last three months. Twenty-three percent of injection drug users report not using a clean needle the last time, and 35% say they do not know where to get clean needles.

Supportive Services

- The top barrier to accessing support services is lack of knowledge about where to get services, even though 72% of the respondents have been HIV positive for at least five years and 82% of respondents were living in Louisiana at the time of their HIV diagnosis.
- The most commonly reported unmet support service need is food bank/food vouchers.
- 11% say they do not have enough food to eat and that this stops them from taking care of their HIV infection, even though 42% of the respondents receive food stamps.
- Financial assistance with utilities and other critical needs were the two most identified unmet “other service” needs.
- The top three barriers to getting to places in general are not being able to afford transportation, being without personal transportation, and living too far to walk or bike.

- The top three most mentioned barriers to HIV-related services early in HIV diagnosis are that the respondent didn't know where to go, felt healthy (tie), wasn't ready (tie), and didn't want anyone to know that she/he was HIV positive (tie).
- Over half of the respondents have disclosed their HIV status within one month of their HIV diagnosis; however, 60% report they did not disclose earlier out of fear of rejection.

Health Insurance

- 59% of respondents have some type of health insurance: Medicaid (60%), Medicare (40%) or coverage through work (9%) – respondents were able to select more than one type of insurance.
- For those without coverage, the most identified barrier to getting insurance is that it is unaffordable.
- 58% of respondents are not working; of those, 62% were on disability.
- 66% of respondents have a total household monthly income of $1,000 or less.

Housing

- The three most identified barriers to receiving HIV-related housing services are that respondents do not know where to get services, do not qualify for services, or were put on a waiting list.
- The top two unmet HIV-related housing service needs are money to pay utilities and money to pay the rent.
- 49% of respondents have lived in their current residence for less than a year.
- 14% of respondents did not have enough money to pay rent and say that this stops them from taking care of their HIV infection.
- 26% of respondents say they have had problems obtaining housing in the last six months.
- The most commonly identified barriers to obtaining housing include not having enough money for the deposit, being unable to find affordable housing, and lacking transportation to search for housing.
- 28% of respondents have spent at least one night without a place to sleep in the last year.
- 11% of respondents were incarcerated in the past 12 months. Of these respondents, 82% said they received HIV medical care while in prison or jail.

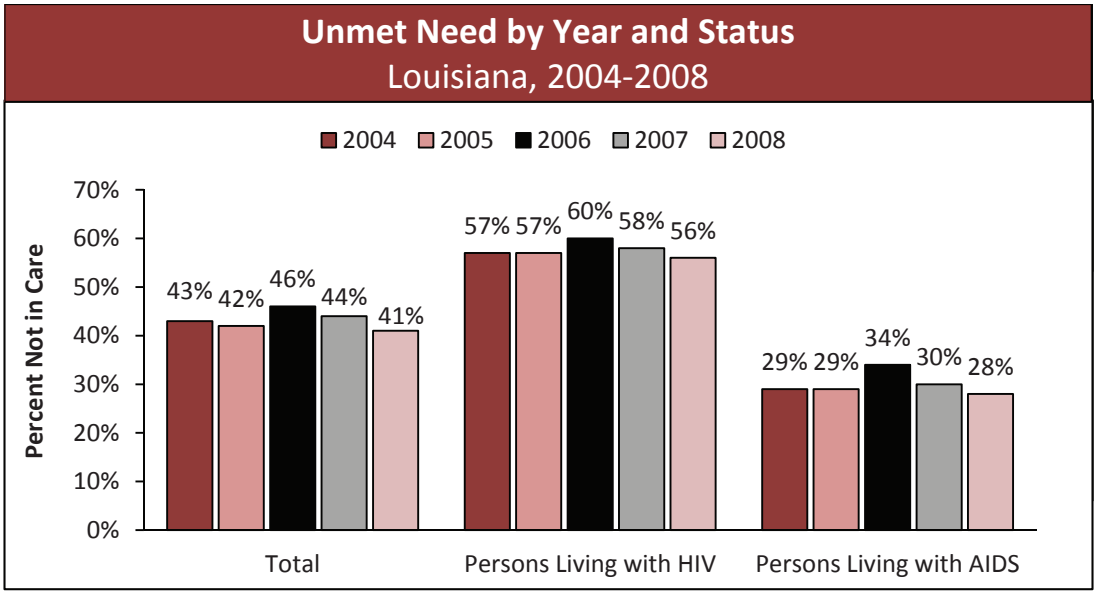
For additional findings and regional results, the 2008 Statewide Needs Assessment and regional reports can be found in their entirety at http://www.dhh.louisiana.gov/offices/reports.asp?ID=264&Detail=612.

Assessing "Unmet Need" and Allocating Resources in Louisiana

The primary focus of the Ryan White HIV/AIDS Program is to help ensure that individuals living with HIV routinely access primary medical care and medications in order to maintain their health and delay progression to an AIDS diagnosis or death. There are, however, many people who are living with HIV infection who do not regularly access medical care. As part of the annual resource planning and allocation processes, the federal Ryan White HIV/AIDS Program requires that Part A and B grantees take into consideration "unmet need" for primary medical care in their jurisdiction. "Unmet need" is defined as the number of individuals in the defined geographic area who know their HIV status but have not accessed HIV-related primary medical care in a 12-month period.

The allocation of resources to reduce the amount of consumer "unmet need" is further supported by the current legislative requirements in the Ryan White HIV/AIDS Treatment and Modernization Act of 2006. Both Part A and Part B grantees must allocate a minimum of 75% of their annual award to Core Services in an effort to link low income HIV-infected persons into primary medical care and maintain them in those crucial services. Core Services for Part B include ADAP, Health Insurance Premium and Cost-Sharing Assistance, Core Medical Services (i.e., Ambulatory/Outpatient Medical Care, Local AIDS Pharmaceutical Assistance, Medical Case Management, Mental Health Services, Substance Use Treatment Services and Oral Health Care), Home- and Community-Based Care, Early Intervention Services and Medical Nutrition Therapy. Support services may not exceed 25% of the annual Ryan White resource allocation and must be utilized to fund services that will engage a client with an HIV-related health care provider and support them in remaining in care, such as transportation.

In Louisiana, HAP's Surveillance Unit provides the data for estimating "unmet need" for the state's Ryan White grantees. Louisiana's Public Health Sanitary Code requires that laboratories report all test results indicative of HIV infection for persons residing in Louisiana. As a result, laboratory data received by HAP's Surveillance Unit 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 test within a 12-month period are considered to have been "in care" during that year. Persons who do not are considered "out of care," and are deemed as having an "unmet need" for care and treatment.



- The overall percentage of persons not in care has decreased since 2006 to 41% of all persons living with HIV infection.

- Persons living with AIDS continue to have lower percentages of unmet need than persons living with HIV. People living with AIDS may require more medications and may have more symptoms, leading them to seek out more frequent medical visits.

Unmet Need for Primary Medical Care
Louisiana, 2007-2008

	2007		2008	
	Percent in Care	Percent Not in Care (Unmet Need)	Percent in Care	Percent Not in Care (Unmet Need)
Overall	**56%**	**44%**	**59%**	**41%**
Persons living with HIV	42%	58%	44%	56%
Persons living with AIDS	70%	30%	72%	28%
Sex				
Female	60%	40%	64%	36%
Male	55%	45%	57%	43%
Race/Ethnicity				
Black/African American	56%	44%	59%	41%
Hispanic/Latino	41%	59%	43%	57%
White	60%	40%	62%	38%
Age Group				
0-12	67%	33%	74%	26%
13-24	59%	41%	60%	40%
25-44	55%	45%	58%	42%
45-64	59%	41%	61%	39%
65+	55%	45%	56%	44%
Region				
1-New Orleans	49%	51%	52%	48%
2-Baton Rouge	64%	36%	67%	33%
3-Houma	70%	30%	70%	30%
4-Lafayette	59%	41%	61%	39%
5-Lake Charles	48%	52%	50%	50%
6-Alexandria	60%	40%	62%	38%
7-Shreveport	56%	44%	60%	40%
8-Monroe	60%	40%	60%	40%
9-Hammond/Slidell	66%	34%	68%	32%

- Of the persons living with HIV infection in 2008, only 59% had at least one primary medical care visit during the year.[xvi] Persons living with AIDS were more likely to have a medical visit (72%) compared to persons living with HIV (44%).
- Females and younger persons were also more likely to be receiving medical care.
- Persons residing in the Houma and Hammond/Slidell regions were most likely to be in care, while persons in the Lake Charles and New Orleans area were least likely to be in care.

NOTE: The unmet need estimate should be considered a maximum estimate. While Louisiana has comprehensive laboratory reporting requirements, laboratory reporting is not 100% complete. In addition, some people included in the surveillance system as living in Louisiana may have moved out of state or died. While HAP monitors the lab reporting carefully and updates out of state information and vital status, this information is not complete.

Care and Services Challenges and Accomplishments

The greatest overall change to the Louisiana Ryan White Part B Program in FY 2007 was the discontinuation of Emerging Communities funding dedicated to the greater Baton Rouge metropolitan area. When the Ryan White CARE Act was reauthorized in 2006 (legislatively renamed the Ryan White HIV/AIDS Treatment and Modernization Act of 2006), many programmatic and fiscal changes were incorporated into this new law. One of them was that Baton Rouge (and four other metropolitan areas) became a TGA eligible for Part A funding, and resources from Emerging Communities were no longer allocated through the Part B grantee.

On March 1, 2007, this service area officially moved under the management of the Baton Rouge Office of Community Development (OCD). However, in order to facilitate a smooth transition, HAP established limited contracts with existing providers and continued to fund these agencies for the first quarter of the Ryan White Part B FY 2007 grant year. The Baton Rouge OCD prepared a competitive request for proposals, trained staff, and developed their administrative infrastructure. Starting July 15, 2007, the OCD had contracts in place with agencies to provide services in the greater Baton Rouge area and became the sole administrator of Ryan White resources in the TGA.

There were notable challenges in both 2007 and 2008 to maintain Home- and Community-Based Care services in all Part B-funded areas of the state. In addition to the three regions that did not have consistent home health services in FY 2007, another four home health agencies indicated that they were not interested in continuing their Ryan White services contract in FY 2008. Several agencies indicated that the reimbursement rates were too low to support the current salaries of staff, the costs of travel and service delivery (Ryan White Part B has utilized Louisiana Medicaid Home Health reimbursement rates), while others indicated that the HIV service population was becoming too medically complex, too concentrated in lower income/high drug use areas, and too non-compliant for staff to feel comfortable providing services in the home setting. Despite these issues, HAP staff continued to pursue possible providers for this service area.

Some of the greatest accomplishments of 2007 and 2008 occurred with the Louisiana ADAP. In 2007 HAP was able to update the ADAP formulary to include newly approved FDA HIV-related medications Selzentry (Maraviroc), the first new class of CCR5 inhibitors, and Isentress (Raltegravir), the first antiretroviral in the integrase inhibitor drug class.

On February 1, 2008 HAP was able to expand the Louisiana ADAP formulary to cover pharmaceuticals for the prevention and treatment of opportunistic infections (OIs). This expansion was the result of a successful request in FY 2007 for carryover funding, avid pursuit of rebates negotiated by the ADAP Task Force and notification of an FY 2008 ADAP Supplemental award of $3,615,855. These additions doubled the number of medications available to eligible persons through ADAP from 31 up to 62. All OI medications were selected based on the current recommendations of the US Public Health Services guidelines, with input and concurrence from the local ADAP Advisory Committee and the HAP Continuous Quality Improvement Medications Access Subcommittee.

In addition to expanding drug availability, the carryover funding was also utilized to support diagnostic laboratory tests for persons who were ADAP-eligible. From February 1, 2008 through June 30, 2008 genotype, phenotype, Trofile, HLA-B*5701, CD4 and viral load testing were provided to 1,408 eligible persons. This initiative was extremely helpful in determining which clients were clinically “ready” for antiretroviral medications, as well as to which medications the HIV virus had developed a detectable resistance. Increasing capacity of providers to prescribe the most effective medication contributed to more efficient use of resources. HAP was pleased that approval was granted on the requested ADAP

Flexibility Policy for FY 2008, and the level of overall ADAP expenditures allowed four of those six laboratory tests (genotype, phenotype, Trofile and HLA-B*5701) to remain available throughout the grant year.

HAP was able to increase the amount of funding allocated to Ambulatory/Outpatient Medical Care in FY 2008 by initiating first-time contracts with three of the LSU regional public medical centers. The largest of the three contracts went to the University Medical Center in Lafayette to support a full-time family Nurse Practitioner and Mental Health Counselor and a part-time Data Entry Assistant. This region has continued to experience an increase in the number of persons living with HIV infection (with 232 persons newly diagnosed with HIV between January 1, 2006 and December 31, 2008), but they have not had the benefit of Ryan White Part C funding to support additional primary medical care services. The two other contracts were established with the LSU-Shreveport Viral Disease Clinic and the Huey P. Long Medical Center in Pineville to support noted gaps in the services for HIV-infected persons—a Registered Dietician at LSU-Shreveport and a Psychiatrist at Huey P. Long.

In the fall of 2008, HAP developed a new position, a Corrections Specialist, to work closely with incarcerated persons living with HIV who were being discharged from any of the 11 state correctional facilities within 180 days. This position has re-established a statewide coordinated approach to assist HIV-infected inmates to successfully return to their communities and become connected to medical care and support services. A standard protocol has been developed to assist the staff at the correctional facility with discharge planning. In conjunction with linkages to primary medical care and support services, the medication needs of all HIV-infected inmates are assessed within 30 days prior to release. Coordination with Louisiana ADAP and the appropriate LSU regional medical center pharmacies occurs to ensure that an adequate supply of HIV-related medication is available upon the inmate's release.

Chapter 3

Prevention

Introduction to the Prevention Unit

The Louisiana Office of Public Health HIV/AIDS Program (HAP) Prevention Unit is responsible for behavioral interventions and educational activities that are focused on reducing the spread of HIV in the state. The program is supported with funding from the Centers for Disease Control and Prevention (CDC) and State General Funds.

The primary activities conducted by or coordinated through the Prevention Unit include:

- HIV counseling, testing, and referral services
- HIV partner services
- outreach to high-risk individuals
- behavioral interventions
- programs targeting HIV-positive individuals
- dissemination of HIV/STD educational materials
- training about HIV counseling, testing and referral services and other prevention interventions
- statewide toll-free information line, "Infoline," for HIV, STD, hepatitis, and TB-related information and referral
- website with population specific information and referrals
- statewide planning process for HIV prevention

Over the course of the HIV epidemic, targeted populations and interventions for reducing the spread of HIV have changed in response to shifts in the epidemic. Prevention is not a stagnant activity and has and will continue to change throughout the epidemic. Through the activities listed above, HAP's HIV prevention activities focus on several areas:

- prevention with HIV-positive individuals to increase their skills and address barriers to reducing the risk of transmission of HIV,
- reducing stigma and understanding the impact it has on prevention efforts and those impacted by HIV,
- utilizing holistic outreach as a means to connect individuals to needed services,
- implementing evidence-based interventions,
- providing a continuum of prevention programs and services rather than isolated programs, and dealing with the range of issues that put individuals at risk of becoming infected with HIV or transmitting HIV, such as partner violence, unemployment, poverty, homelessness and other social and health issues.

The following sections will describe several of the Prevention Unit's key activities including: HIV counseling, testing, and referral services (CTRS); HIV Partner Services (HPS); outreach to high-risk individuals; and special initiatives for reducing mother-to-child transmission of HIV and for reaching the growing Latino population.

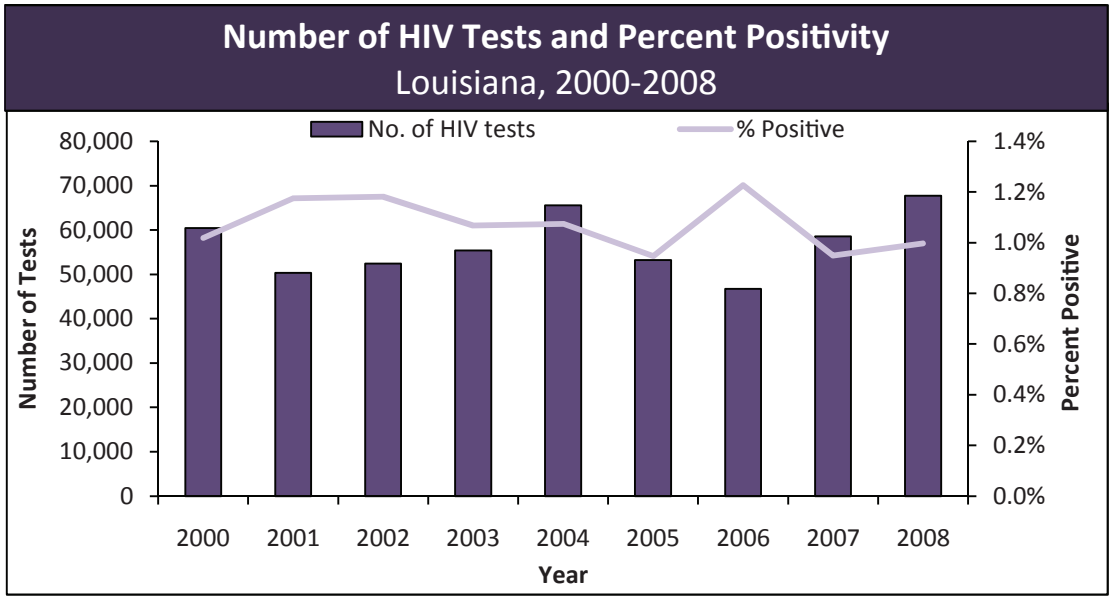
HIV Counseling, Testing, and Referral Services (CTRS)

What does HAP do? *Ensures access to low or no-cost HIV testing*
Area covered: *Statewide*

HAP supports HIV testing through contracts with community-based organizations (CBOs) and partnerships with public health unit clinics (STD, family planning, prenatal and TB), hospital emergency rooms, substance abuse treatment programs, and school-based health clinics. For persons who test positive, counseling and referral services are provided to link individuals to medical care and other support services.

Testing for HIV is most effective when it is targeted to individuals at high risk as identified by HIV surveillance data. Increasing the number of new testers who are at risk of HIV infection will a) engage them in healthcare earlier where quality and quantity of life are both increased;[xvii] b) reduce overall costs of healthcare for HIV-positive persons entering treatment earlier, delaying or avoiding severe illnesses;[xviii] and c) prevent transmission to others through individual and group counseling and education.

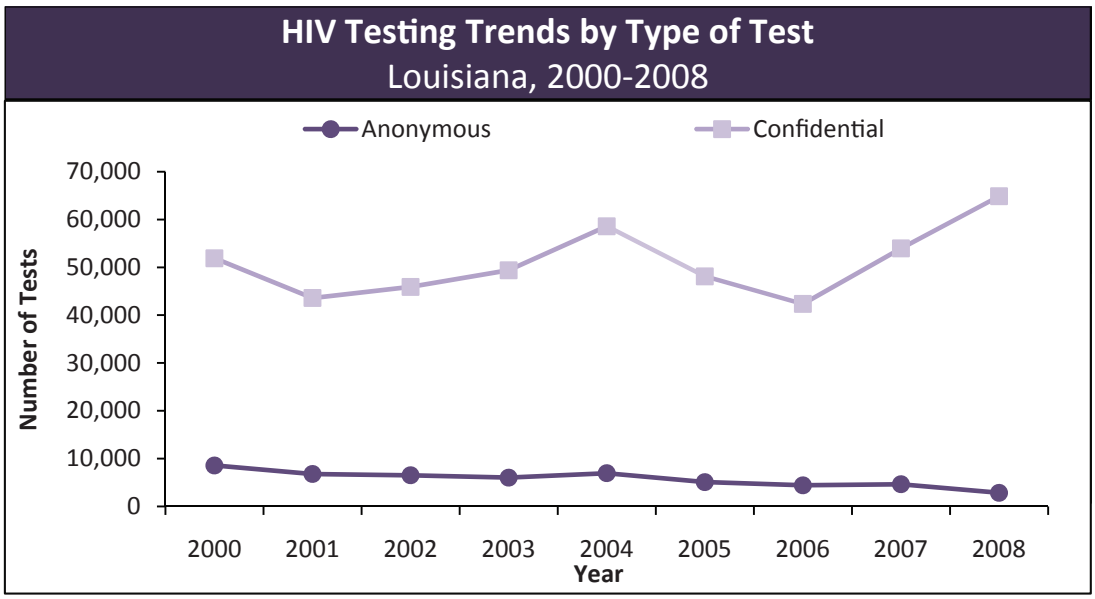
The graph below illustrates the number of HIV tests conducted through HAP's CTRS program. In 2008, there were a total of 67,730 HIV tests conducted through HAP's HIV Counseling/Testing Program—1.5% of Louisiana's population. For comparison, several states have varying total numbers of tests when compared with population: North Carolina tested 147,000 persons in 2006 (1.7% of the population), Pennsylvania tested 64,050 persons in 2007 (0.5% of the population), and Florida tested 373,100 persons in 2008 (2.0% of the population).[xix, xx, xxi] Louisiana has similar HIV epidemics to these three states.



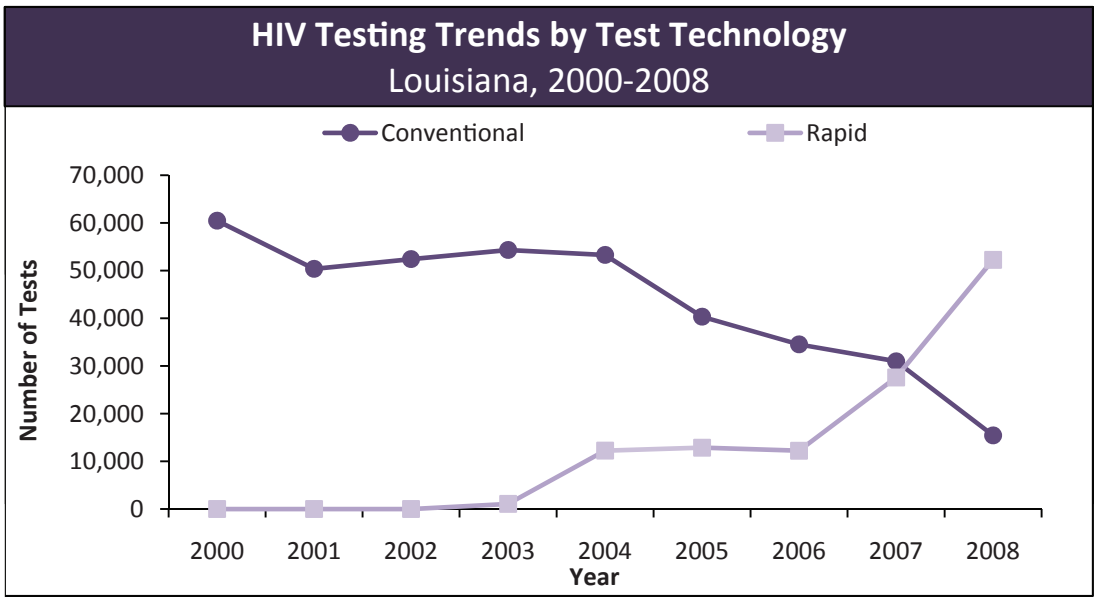
- Between 2000 and 2008, the number of HIV tests conducted has varied between a low of 46,769 tests in 2006 following testing disruption due to Hurricane Katrina, to a high of 67,730 tests in 2008. Over the past eight years, the percent positivity rate has fluctuated around 1.0% with a peak of 1.2% in 2006.
- There were 675 persons found to be HIV positive in 2008 through the state's publicly funded programs, accounting for 1.0% of the total tests. By comparison to other states, in recent years Maryland had an HIV positivity rate of 2.2%, Florida had a 1.5% positivity rate, and Pennsylvania had a 0.7% positivity rate.[xxii, xxiii, xxiv] These three states have HIV and AIDS case rates similar to Louisiana.

In Louisiana, confidential and anonymous testing are offered.

- Confidential testing - the testing center records the person's name along with the results of his/her test. The only people with access to the test results are medical personnel and HAP. Confidential testing is encouraged, as it facilitates entry into care for HIV-positive persons.
- Anonymous testing - the tester's name is not given to the testing center, and only the person who is having the test is aware of the results.



- The vast majority of tests in Louisiana are confidential, and the number of anonymous tests has decreased since 2000.
- From 2000 to 2008, the percentage of all tests that were confidential increased from 86% to 96%.
- In 2007, Louisiana began a testing initiative with the main goal of increasing the number of African Americans who are tested. Through this initiative, the use of rapid tests and the locations where these tests were available was significantly expanded. The rapid test allows people to receive their results in 10-20 minutes and can easily be done at different testing locations that lack laboratory facilities required for conventional tests. A positive rapid test does require a laboratory confirmatory test to meet the CDC case definition. In 2003, when rapid testing began in Louisiana, 2% of the total tests were rapid, and by 2008, 77% of the total tests were rapid tests.



The table below provides the characteristics of those receiving a HAP-funded HIV test in 2008.

HIV Tests by Characteristic
Louisiana, 2008

	Total Number Of Tests	% of Total Tests	Number of Positive Results	% Positivity Rate
Total	**67,730**	**100%**	**675**	**1.0%**
Gender				
Female	37,985	56.1%	202	0.5%
Male	29,669	43.8%	468	1.6%
Transgender - M to F	28	0.0%	5	17.9%
Transgender - F to M	4	0.0%	0	0.0%
No Gender Specified	44	0.1%	0	0.0%
Race/Ethnicity				
American Indian/Alaska Native	112	0.2%	1	0.9%
Asian/Pacific Islander	421	0.6%	3	0.7%
Black Non-Hispanic	46,638	68.9%	511	1.1%
Hispanic	2,426	3.6%	30	1.2%
White	16,774	24.8%	114	0.7%
Multi-race	315	0.5%	2	0.6%
Unspecified Race/Ethnicity	1,044	1.5%	14	1.3%
Age Group				
0-12	108	0.2%	0	0.0%
13-19	10,641	15.7%	45	0.4%
20-29	30,678	45.3%	258	0.8%
30-39	11,710	17.3%	169	1.4%
40-49	7,613	11.2%	133	1.7%
50+	5,045	7.4%	60	1.2%
No Age Specified	1,935	2.9%	10	0.5%
Transmission Category				
Men Who Have Sex with Men (MSM)	4,409	6.5%	184	4.2%
Heterosexual	45,834	67.7%	261	0.6%
Heterosexual/Injection Drug User (IDU)	1,144	1.7%	18	1.6%
MSM/IDU	130	0.2%	4	3.1%
No reported risk/Other	16,213	23.9%	208	1.3%

- Blacks accounted for 70% of total tests, compared to 66% of total persons living with HIV infection and 72% of total new diagnoses in 2008.
- Males accounted for only 44% of the total tests while accounting for 71% of total persons living with HIV infection and 70% of total new diagnoses.
- Of the 51,517 tests that were reported with a risk, MSM accounted for only 9% of the tests with a reported risk while accounting for 45% of total persons living with HIV and 54% of total new diagnoses; heterosexuals accounted for 89% of the total tests while accounting for only 28% of total persons living with HIV and 33% of total new diagnoses.
- Males had a higher positivity rate than females, and male-to-female transgender persons and men who have sex with men had the highest percent positivity.

HIV Tests by Characteristic (Continued) Louisiana, 2008				
	Total Number Of Tests	**% of Total Tests**	**Number of Positive Results**	**% Positivity Rate**
Total	**67,730**	**100%**	**675**	**1.0%**
Testing Site Type				
Sexually Transmitted Disease Clinics	27,215	40.2%	220	0.8%
Community Testing Sites	14,928	22.0%	221	1.5%
Parish Health Units	6,863	10.1%	29	0.4%
Emergency Rooms	6,706	9.9%	123	1.8%
Family Planning Clinics	4,879	7.2%	9	0.2%
State Drug Treatment Programs	2,174	3.2%	11	0.5%
Prisons/Parish Jails	1,488	2.2%	29	1.9%
Prenatal/OB-GYN Clinics	793	1.2%	3	0.4%
Tuberculosis Clinics	750	1.1%	6	0.8%
Community Health Clinics	703	1.0%	8	1.1%
HIV Specialty Clinics	615	0.9%	14	2.3%
School/University	218	0.3%	0	0.0%
Inpatient Facility	205	0.3%	0	0.0%
Other	193	0.3%	2	1.0%
Region				
New Orleans	21,817	32.2%	340	1.6%
Baton Rouge	11,584	17.1%	131	1.1%
Houma	2,372	3.5%	11	0.5%
Lafayette	6,620	9.8%	26	0.4%
Lake Charles	3,306	4.9%	21	0.6%
Alexandria	4,586	6.8%	34	0.7%
Shreveport	6,591	9.7%	55	0.8%
Monroe	7,777	11.5%	37	0.5%
Hammond/Slidell	3,054	4.5%	20	0.7%
Site not specified	23	0.0%	0	0.0%

- Persons testing in sexually transmitted disease (STD) clinics and community testing sites accounted for 62% of all of the HIV tests and 64% of all of the positive tests in 2008.
- HIV specialty clinics, prisons/jails, and emergency rooms had the highest positivity rates in 2008 of all testing sites. Emergency rooms at LSU medical centers and selected prisons/jails have recently rolled out large-scale rapid testing programs on an “opt-out” basis.
- The New Orleans region conducted the greatest number of tests and also had the highest positivity rate of all nine public health regions.

HIV Partner Services (HPS)

What does HAP do?	*Outreach to individuals newly-diagnosed or newly-reported with HIV to help ensure awareness of diagnosis and access to care, as well as to identify and inform partners of possible exposure to HIV and offer testing and referral to services.*
Area covered:	*Statewide*

HIV Partner Services is a high priority intervention in the CDC HIV Prevention Initiative. HPS is offered to persons who test positive for HIV to provide post-test counseling and referral into care, assist them in contacting their sexual and/or needle-sharing partners, as well as ensure that people are not only aware of their status but also understand what it means. HPS provides an important opportunity to link HIV-positive individuals to care and case management, if needed. HPS also accesses persons not receiving HIV counseling and testing in other venues and provides HIV prevention education for both high-risk negatives and HIV-positive individuals.

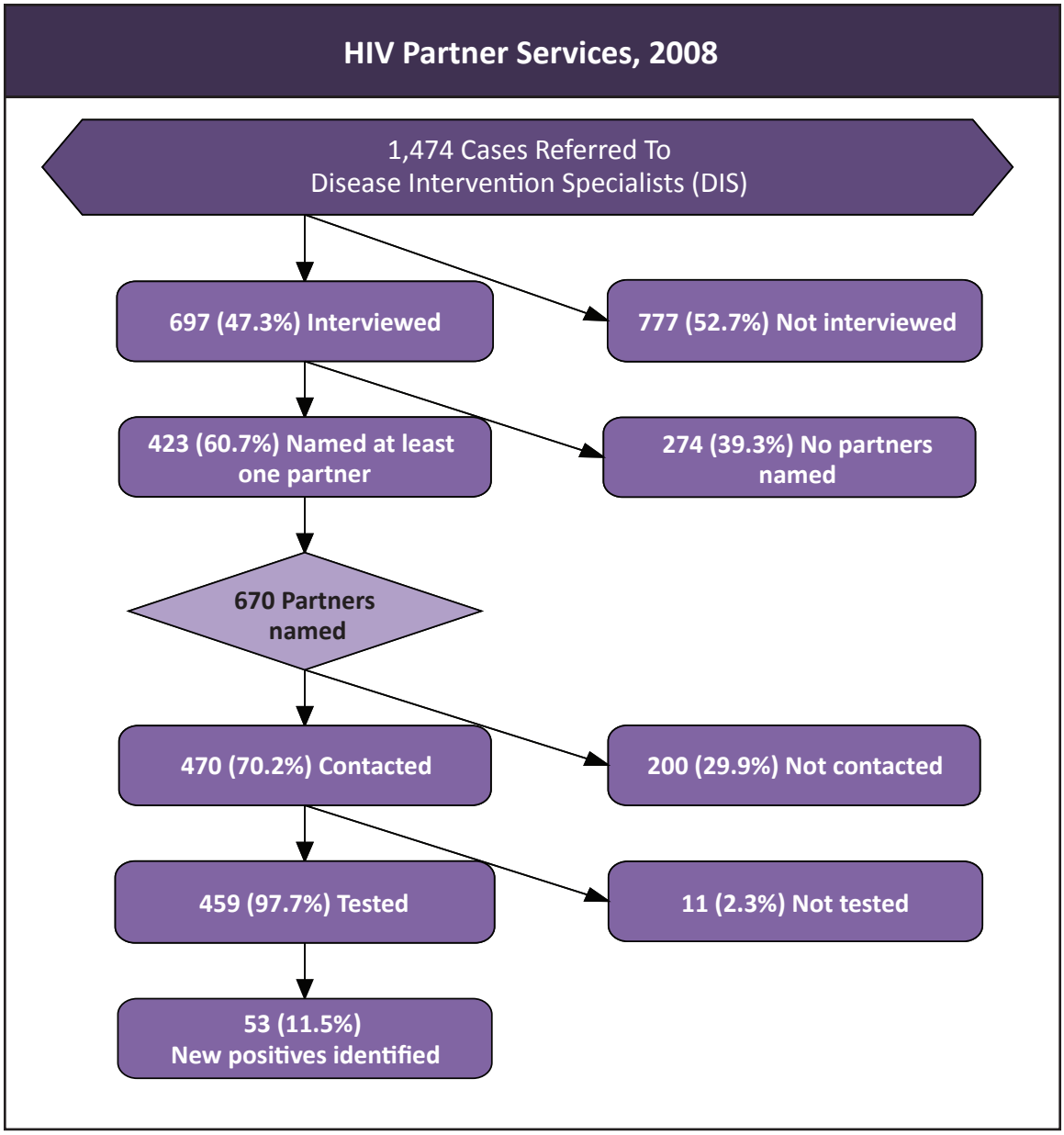
HAP maintains a cohesive, working relationship with the STD Program, community-based organizations, hospitals, and other health care providers to ensure all individuals newly diagnosed with HIV are offered HPS. Through a partnership between HAP and the STD Program, HPS are provided by Disease Intervention Specialists (DIS). Individual cases are assigned to a DIS, who is then responsible for offering Partner Services following CDC standards and guidelines as well as the State of Louisiana Sanitary Code.

When an individual is located, the DIS interviews and counsels the client to inform him/her of Partner Services and, if the client agrees to receive these services, his/her partner referral options are discussed. The options are as follows:

- Office of Public Health (OPH)/DIS-referral - DIS notifies partners and refers them for testing. This is the most frequently used option and the preferred option.
- Client-referral - the patient agrees to notify partners him/herself and refer them for testing. It is difficult to verify if a partner has been notified with this method and, therefore, is not preferable.
- Provider-referral - the physician agrees to notify partners following CDC guidelines.

If the client agrees to have a DIS contact his/her partners, he/she voluntarily discloses information to aid in locating them. The DIS then confidentially locates and counsels partners regarding their possible exposure to HIV and provides HIV counseling, testing and referral services. During the process, the identity of the original patient is never revealed, nor are the gender, type of exposure, or exposure dates.

The CDC released revised recommendations for Partner Services in November, 2008. Louisiana is up to date on these recommendations (www.cdc.gov/nchhstp/partners/Recommendations.html).



- In 2008, 1,474 persons were referred to DIS for HPS, of whom 697 were interviewed (47.3%).
- Of the 697 HIV-infected persons who were interviewed, 670 partners who may have been exposed to HIV were identified. This resulted in 459 partners being tested, and 53 (11.5%) were positive.
- A major increase in the number of persons interviewed has occurred since 2001, when 31% of persons were interviewed compared with 47% in 2008. DIS often have trouble locating persons who are referred to them because people have moved, disconnected phone lines, provided false addresses when they received their HIV test, or are homeless. People may also refuse assistance from DIS and, therefore, will not be interviewed. Future projects look to increase the interview percentage in the coming years.
- The percentage of persons who tested positive in the partner-identified group has ranged from 10% to 23% during the last eight years.

Outreach to High-Risk Individuals

What does HAP do?	*Contracts with community-based agencies to conduct holistic outreach to high-risk individuals and persons living with HIV infection.*
Area covered:	*Statewide*

Outreach, a community-level intervention and one of HAP's most important prevention activities, occurs on the street and/or in community settings rather than at clinics or agency offices. Over the last two years, a new model of outreach has begun to be implemented in Louisiana based on the health agent model utilized in Brazil.[xv] The Brazilian model of outreach involves conducting an in-depth assessment of a community, including high-risk areas, current services, locations where high-risk individuals congregate, and meeting and connecting with residents.

The goal of outreach is to:

- develop on-going relationships with target area residents/visitors to provide information and referrals that will promote healthy behaviors and reduce the risk of acquiring or transmitting HIV and other STDs,
- connect agencies providing services to residents who need them, and
- develop collaborations with other HIV providers and other social service agencies to establish holistic referral networks.

The priority target populations for HIV outreach have been determined using HIV and STD surveillance information, CDC guidelines, and the community-based planning process. Outreach is concentrated among priority populations which include:

- persons infected with HIV
- men who have sex with men
- high-risk heterosexuals
- injection drug users
- special populations (homeless, migrant workers, people with Hepatitis C, youth, transgender, incarcerated/newly released)
- women with or at risk for HIV infection

Louisiana utilizes several activities to reach high-risk individuals, including outreach and referral, small groups, prevention materials availability, and promotion of national HIV awareness days and events. Outreach and referral are conducted in fixed and active sites and consists of one-on-one interactions with individuals from targeted populations. Information and referrals are offered during outreach to promote healthy behaviors and reduce the risk of acquiring or transmitting HIV and other STDs. The Louisiana HIV Infoline is printed on all educational materials and prevention materials; individuals can call that number to get general information about HIV and other STDs as well as further referrals to testing or case management. Social marketing of national events serves as a platform to advertise the State Infoline, raise awareness, decrease stigma and promote rapid test screenings in high-risk populations.

There are several CDC-recommended Diffusion of Effective Behavioral Interventions (DEBIs) that the Prevention Unit utilizes. The Prevention Unit oversees two peer programs; Mpowerment and SISTAH. Mpowerment is a community level intervention for young men who have sex with men. Mpowerment uses a combination of outreach, discussion groups, social interactions, and social marketing in order to spread messages related to harm reduction, safer sex, and HIV prevention. SISTAH is a peer-led program to prevent HIV infection among African American young adult women. In addition, prevention with HIV-positive persons includes small group sessions, (Project AYA targeting African American women, and Project ALIVE! targeting MSMs), risk management, and regional education and support groups for HIV-

positive persons. The state contracts with agencies statewide to implement these and other strategies to target high-risk individuals.

The CDC has developed a *Compendium of HIV Prevention Interventions with Evidence of Effectiveness* to aid in the design and implementation of HIV-prevention activities.[xxvi]

Reaching Louisiana's growing Latino population: Following Hurricanes Katrina and Rita, HAP established the Latino Outreach Program. This program, which began providing direct CTRS and outreach to Latinos in New Orleans, has expanded and now provides technical assistance and capacity building to community-based agencies and clinics across the state that want to expand services to reach Latinos.

Preventing mother-to-child transmission of HIV (perinatal transmission): Since its inception in early 2000, the Perinatal HIV Prevention Program in Louisiana has made great strides in bringing the perinatal infection rate down from 4.5% in 2000 to less than 2% in 2007. To move towards the elimination of perinatal HIV infection in Louisiana, HAP has undertaken two initiatives:

- Promoting routine, universal HIV screening for all pregnant women on an opt-out basis and repeat HIV testing in the third trimester and
- Ensuring that appropriate HIV prevention counseling, testing, and therapies are provided for HIV-infected women to reduce the risk of perinatal transmission.

HAP has worked to ensure that women of child-bearing age are encouraged to be tested. This has been achieved through the continued implementation of opt-out testing in STD clinics, prenatal clinics, family planning clinics, LSU hospital emergency rooms, and testing through community based organizations. Women who are HIV positive are referred to medical care and other support services. These referrals are followed-up to ensure successful connections with the appropriate services. In addition to modifying legislation in 2006 to mandate the provision of "opt-out" testing for pregnant women, HAP has also partnered with health care providers to promote HIV screening of pregnant women through mailings to all OB/GYNS with the American College of Obstetricians and Gynecologists with detailed information about preventing perinatal HIV transmission.

What are the Current CDC Testing Guidelines?

In 2006, the CDC released "*Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health Care Settings.*" The CDC and the U.S. Preventive Services Task Force recommends that screening for HIV should be performed routinely for all patients aged 13-64 years; all patients initiating treatment for TB should be screened routinely for HIV; all patients seeking treatment for STDs should be screened routinely for HIV during each visit for a new complaint; and all pregnant women should be screened, regardless of risk. The goal of these recommendations is to increase the number of HIV-positive persons who know their HIV status.

Louisiana responded to these recommendations in 2007 with House Bill 512, now signed into Louisiana's Revised Statue Chapter 40, sections 1300.12-13. Louisiana's HIV testing and counseling legislation now stipulates:

- HIV diagnostic testing offered as a routine medical screening will now be "opt-out" in certain settings such as hospital emergency rooms, STD clinics, correctional facilities, and drug treatment programs. This means persons certified to offer HIV tests will inform the person that an HIV test will be performed unless the patient refuses. If the patient decides to "opt out," it will be recorded in their medical record.
- The legislation now also stipulates that the opt-out testing can take place in healthcare settings, substance abuse treatment facilities, mental health treatment facilities, and correctional settings. Community-based settings must follow all of HAP's protocols.
- Opt-out testing will also be performed on all women who are pregnant.
- Physicians have the option of testing newborns who they feel are at high risk of having been exposed to HIV and whose mother does not have an HIV test result on record.
- Anyone receiving a positive HIV antibody test must be referred to follow-up medical services.

This expansion of legal authority allows Louisiana to further focus and expand HIV testing initiatives. The statutory changes also led to a complete revision of HAP's *Prevention Policies and Procedure Manual* detailing protocols, methods, and reporting requirements for all testing sites across the state. There are ongoing training programs for all persons involved in HIV testing.

Prevention Challenges and Accomplishments

Accomplishments

- Successfully competed for several CDC initiatives, including a $1.4 million initiative to increase testing among blacks, and $870,000 to expand testing among pregnant women, and clients of STD clinics and substance abuse treatment programs. Louisiana was one of only six states to receive this funding to expand testing among pregnant women.
- Converted all community and STD/HIV testing sites to rapid HIV testing, allowing clients to receive test results in 20 minutes or less, as opposed to conventional testing methods that require a minimum of two weeks for results.
- Collaborated with the Louisiana Department of Corrections to begin opt-out HIV testing of all incoming inmates.
- Expanded rapid testing to LSU hospital emergency rooms, Orleans Parish Prison, Jefferson Parish Prison, and added new partnerships with community clinics, colleges, and universities.
- Began the implementation of holistic outreach and developed a comprehensive referral documentation and follow-up protocol.
- Opened a wellness center in Monroe targeting MSMs, and piloting wellness centers targeting MSMs and transgender individuals in New Orleans and Baton Rouge.

Challenges

- The continued promotion of HIV testing as a routine part of medical care for all persons 13-64 and adequate funding to support this level of testing.
- Addressing the issue of stigma which impacts an individual's perception of risk and testing behaviors, as well as accessing medical care for persons living with HIV infection.
- Focus on prevention education, awareness, outreach, and counseling and testing efforts are far from adequate to meet the basic Healthy People 2010[xxvii] objectives to:
    - Increase the proportion of young adults who have received formal instruction before turning age 18 on safer sex to prevent HIV;
    - Reduce AIDS among adolescents and adults;
    - Reduce the number of new HIV cases among adolescent and adult men who have sex with men;
    - Reduce the number of new HIV infections among females and males who inject drugs;
    - Reduce the number of new HIV infections among adolescent and adult men who have sex with men and inject drugs; and
    - Increase the number of HIV-positive persons who know their serostatus.

Chapter 4

Evaluation

Introduction to the Evaluation Unit

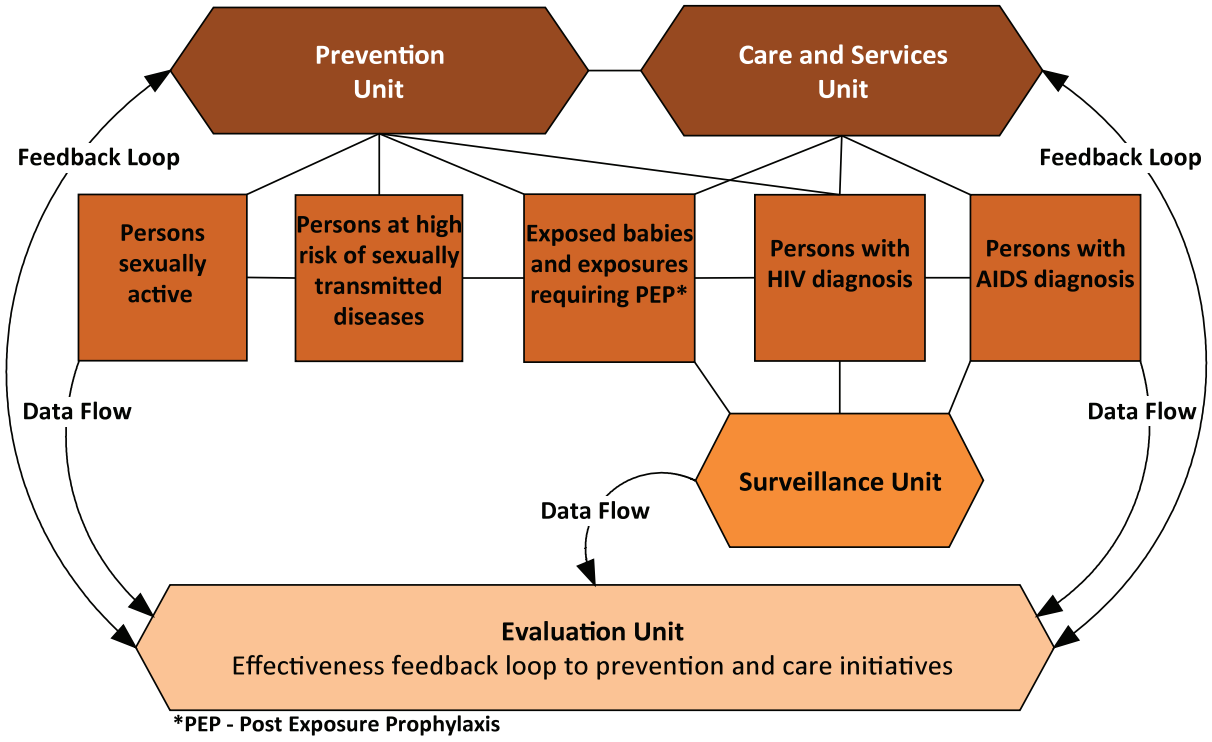
The Louisiana Office of Public Health HIV/AIDS Program (HAP) Evaluation Unit collaborates with HAP's Prevention, Services, and Surveillance Units to review program activities, measure program effectiveness, and continually apply these results for program improvement. The Evaluation Unit assists with the creation of evaluation plans for each program, the design of data collection protocols, and the training of staff regarding evaluation techniques and principles. The Evaluation Unit conducts the following types of evaluation activities:

Evaluation Activities Louisiana HAP Office	
Formative Research	**What have we learned in the past and how can we design a program to best address the needs of the population?** • Review existing research • Assist with designing intervention • Develop data collection forms • Gather data in the early stages of the intervention or program implementation
Process Monitoring	**What services were delivered and what populations were served?** • Review program activities • Determine the populations served • Determine the services provided • Analyze trends to inform program planners
Process Evaluation	**Were the programs implemented as intended and did they reach the intended population?** • Assess planned versus actual program performance over a period of time for the purpose of program improvement and future planning
Outcome Monitoring	**Did the expected outcomes occur?** • Collect and summarize outcome data • Review program-associated outcomes in order to determine the extent to which program objectives are being met
Outcome Evaluation	**Did the intervention cause the expected outcomes?** • Collect data before and after an intervention (or from persons who had an intervention, and those who did not) • Determines whether behaviors, attitudes, or health outcomes changed as a result of the intervention
Impact Evaluation	**What long-term effects did the program or intervention have on HIV infection?** • Examine trends in new HIV diagnosis, health status, morbidity, and mortality of HIV-infected persons

The above table was modified from CDC's NHM&E Workshop "Evaluation Terms, Explanations, and Sample Questions."

Where and how are evaluation data obtained?

The Evaluation Unit oversees the National HIV Behavioral Surveillance (NHBS) project, the Continuous Quality Improvement (CQI) activities, and collects and summarizes data from the Prevention, Care and Services, and Surveillance Units of HAP. Data for some programs are collected by HAP staff, but HAP also relies on service providers throughout the state to collect and submit process-level data to HAP on an ongoing basis. The figure below provides a graphic model of the data exchange between the HAP units, and the populations served by HAP programs.



Evaluation of Prevention Interventions

The Prevention Unit funds HIV counseling, testing and referral services; contacts partners of HIV-infected persons for education, testing and referral; and implements targeted prevention activities through its subcontractors. In 2007 and 2008, HAP funded 19 contracts to 12 community-based organizations to implement CDC-approved interventions across Louisiana. Interventions were targeted to groups identified as high-risk, including men who have sex with men, high-risk heterosexuals, in particular black and Latino persons who engage in high-risk behaviors. Evaluation data collected for prevention programs include client-level data on HIV-testing sessions, referrals, partner services, and small group session attendance, and aggregate-level data on outreach activities. A summary of client-level data for several programs is presented in the Prevention section of this report on pages 62-65. The process and outcome measures for selected prevention interventions that are monitored on an ongoing basis are shown in the table on the following page.

Evaluation of Prevention Interventions	
Program	**Process and Outcome Measures**
HIV Counseling, Testing and Referral Services	• Number of HIV tests conducted annually and percent seropositive • Percentage of clients who receive their test results • Percentage of HIV-negative clients who receive an appropriate referral to needed services • Percentage of HIV-positive clients who receive an appropriate referral to HIV medical care and other needed services and the percentage who access HIV medical care
HIV Partner Services	• Percentage of newly-diagnosed persons who are interviewed by a Disease Intervention Specialist • Percentage of persons interviewed who name at least one partner • Percentage of named partners who receive an HIV test • Number of new HIV-positive persons identified through HIV Partner Services
Outreach and Referral	• Number of referrals made during outreach and the percentage of referrals that were successfully accessed

Evaluation of Care and Services

The major goals for evaluation of care and services for persons living with HIV infection include:

- Evaluating and revising care systems to meet emerging needs
- Ensuring access to quality HIV care
- Evaluating the impact of Ryan White program funds

Evaluating and revising care systems to meet emerging needs

The Evaluation and Care and Services Units routinely review data collected by each contracted agency to ensure contract objectives are being met. In 2008, the Care and Services Unit provided 36 contracts to 21 organizations in Louisiana for care and treatment services, including primary medical care; assistance in obtaining HIV medications; oral health care; medical case management; support services, such as medical transportation, nutritional services, and emergency assistance; legal services; and short-term and tenant-based housing assistance. Each of these contracts specified process and outcome reporting requirements for all services provided. HAP staff also continuously assess the overall service needs of persons living with HIV/AIDS and modify systems as needed to improve service delivery. For example, following extensive review of ADAP service utilization and expenditure data, as well as collecting the projected number of persons living with HIV infection who did not qualify for ADAP due to income (more than 200% of the federal poverty level), but who may benefit from receiving ADAP-funded medications, HAP implemented a significant systems change by increasing ADAP's eligibility criteria to 300% poverty level.

A significant evaluation component for the Care and Services Unit was the implementation of the Continuous Quality Improvement (CQI) plan. The CQI Steering Committee meets routinely to review quarterly services data and make recommendations for performance improvement. In addition, three CQI Subcommittees were established to assess existing systems of care, determine quality of services, and recommend activities that would improve access, increase utilization, and enhance quality.

- The Medication Access Subcommittee developed a survey to collect information regarding barriers and challenges faced by clients when accessing medications. Of the 202 surveys completed during a two-month period, 31% indicated that clients had experienced challenges when accessing HAART (highly-active antiretroviral therapy), and 75% reported that clients had difficulty accessing non-HAART medications. Recommendations included ADAP drug expansion to include opportunistic infection medications, which was implemented in 2009.

- The Dental Subcommittee conducted a resource inventory of available oral health services in the State. Limited number of providers and funds were identified as key challenges. Determining client needs was identified as a priority, and a client survey was developed and administered in 2008.

- The Mental Health/Substance Use Subcommittee also conducted a resource inventory of mental health and substance use treatment options for persons living with HIV infection in the State. The need to develop an adequate brief screening tool to be administered during initial enrollment of case management services was identified. The Subcommittee developed and piloted a screening tool, and case management providers implemented the tool in 2008.

Ensuring access to quality HIV care

The primary focus of Part B Medical Case Management and Ryan White-funded supportive services is to facilitate access to and retention in care. Programmatic objectives are tied to improving the timeliness and effectiveness with which a newly identified person can be enrolled and maintained in medical care and case management with the theory that persons fully engaged in routine care will experience fewer medical complications and a slower immune system decline. The Evaluation and Surveillance Units review laboratory data to routinely monitor whether persons living with HIV infection are accessing primary medical care. Persons who do not have at least one primary medical care visit in a 12-month period are considered to have "unmet need." Persons who have at least one CD4 or viral load test result in a calendar year are considered to be "in care," and those who do not are considered to be "out of care." Historically, an estimated 40-55% of the population living with HIV infection in Louisiana appears to be "out of care" when using this annual unmet need indicator.

Another concern is that persons enter the care system much too late and in a state of physical decline. In 2008, 23.7% of newly identified persons living with HIV infection received an AIDS diagnosis simultaneously with their HIV diagnosis, and an additional 9.7% progressed to AIDS within six months of their HIV diagnosis. The 2008 HIV surveillance data of newly diagnosed persons were also analyzed in order to determine the percentage of those who had ever entered care and what percentage had entered care within 6 months of diagnosis. The overall percentage of those ever entering care was 83%, and those who entered care within six months was 78%.

Evaluating the impact of Ryan White Program funds

The Evaluation Unit routinely reviews program indicators in order to evaluate the impact of Ryan White program funds on the health status of persons living with HIV infection. These include reviewing trends in new AIDS diagnoses, late diagnosis of HIV, and mortality. In December 2008, HAP developed four additional indicators as part of a HRSA Performance Review that will be updated on an annual basis. The indicators include both process and outcome measures.

- Percentage of HIV-infected persons receiving Louisiana Ryan White Part B services who had two or more CD4 T-cell counts (>90 days apart) performed in the measurement year.

- Percentage of HIV-infected persons newly enrolled in Louisiana Ryan White Part B (HAP)-funded case management in the measurement year who had a care plan completed within 30 days following initial assessment.

- Percentage of HIV-infected persons newly enrolled in HAP-funded case management services in the measurement year who received a mental health/substance use screening upon intake.

- Percentage of persons newly enrolled in Louisiana ADAP in the measurement year who had at least one viral load (VL) result of <400 within the 12 months after ADAP enrollment.

Antiretroviral Treatment Access Study (ARTAS) II

A variety of barriers that prevent HIV-infected persons from accessing care have been identified, including lack of knowledge of available resources, stigma and fear, and absence of physical symptoms. From 2004-2007, HAP participated in a study to determine the effectiveness of providing intense linkage coordination to facilitate entry into primary medical care. The CDC-funded ARTAS II focused on identifying newly diagnosed HIV-infected persons and facilitating their entry into care. The methodology utilized a strengths-based case management approach through the employment of two full-time Linkage Coordinators. Louisiana was one of 10 sites selected in the United States for this specific study, and one of five selected for a qualitative follow-up study once the project was complete. This demonstration project was implemented in the Baton Rouge region, which was selected in part because this area has been disproportionately impacted by the HIV epidemic.

The goals of ARTAS II were to link recently diagnosed HIV-infected persons with HIV primary medical care to:

- encourage clients to identify his/her strengths and resources,

- identify potential barriers to obtaining medical care and strategies to overcome them,

- assist clients to achieve personal goals and objectives, and

- develop a respectful, trusting relationship with the Linkage Coordinator and medical provider.

The methodology provided a trained Linkage Coordinator to be linked with the person testing positive at the time of the test result and to provide an intense, short-term intervention with that person to facilitate linkage into primary medical care. A total of 116 persons were referred, and 78 enrolled in the project. Prior to ARTAS II, 62% of newly diagnosed persons entered primary medical care within six months of their diagnosis. Post-ARTAS II, this percentage increased to 76% among those who received the intervention. A year after the project ended (Summer 2008), the HAP Evaluation Unit reviewed data to determine the number of ARTAS II clients who were still enrolled in medical care after ARTAS II formally ended (6/07-3/08). Overall, 71.6% continued medical care (removing deceased clients).

Chapter 5

Appendices

The appendix contains additional tables relevant to the Surveillance chapter of this report, Chapter 1. Immediately following the tables are the Technical Notes.

Included Tables

Trends in HIV Infection, Louisiana, 1979-2008

- This table includes the number of HIV Diagnoses, AIDS Diagnoses, Persons Living with HIV Infection, and Deaths in Persons with HIV Infection from 1979 to 2008.

New HIV Diagnoses by Region and Year, Louisiana, 1999-2008

- This table includes the number of New HIV Diagnoses from 1999 to 2008, for each of the nine public health regions in Louisiana.

New AIDS Diagnoses by Region and Year, Louisiana, 1999-2008

- This table includes the number of New AIDS Diagnoses from 1999 to 2008, for each of the nine public health regions in Louisiana.

Geographic Distribution of HIV in Louisiana, 2008

- This two page long table includes new AIDS Diagnoses in 2008, HIV Diagnoses in 2008, HIV Diagnosis Rate in 2008, Persons Living with HIV Infection in 2008, and Deaths in Persons Living with HIV Infection in 2007 for each of the nine public health regions and the 64 parishes of Louisiana.

Deaths among Persons with HIV Infection, Louisiana, 2006-2007

- This table contains the demographic breakdown of Persons with HIV Infection who died in 2006 and 2007 in Louisiana.

Trends in HIV Infection
Louisiana, 1979-2008

Year	New HIV Diagnoses	New AIDS Diagnoses+	Persons Living with HIV Infection	Deaths in Persons with HIV Infection
1979	1	1	2	0
1980	1	1	2	1
1981	5	0	5	0
1982	17	10	27	3
1983	59	27	86	15
1984	146	84	230	36
1985	383	151	534	100
1986	484	242	726	158
1987	755	417	1,172	244
1988	781	450	1,231	292
1989	1,041	613	1,654	429
1990	1,211	709	1,920	436
1991	1,557	936	2,493	542
1992	1,761	1,065	2,826	678
1993	1,718	1,135	2,853	768
1994	1,655	1,104	2,759	820
1995	1,499	1,043	2,542	905
1996	1,533	1,128	2,661	787
1997	1,531	946	2,477	558
1998	1,285	847	11,097	525
1999	1,262	790	11,555	496
2000	1,200	821	12,805	512
2001	1,161	888	13,502	562
2002	1,202	972	14,260	518
2003	1,066	890	14,848	551
2004	1,074	861	15,680	528
2005	972	806	14,127	519
2006	1,000	769	14,680	472
2007	1,137	809	15,323	494
2008	1,168	860	16,277	218*

+ AIDS diagnosis will be included in counts of HIV diagnosis (2nd Column) for persons first detected with HIV at an AIDS diagnosis or within the same year; therefore numbers from the two columns should not be added.
* Data are not complete.

New HIV Diagnoses by Region and Year
Louisiana, 1999-2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Louisiana	**1,262**	**1,200**	**1,161**	**1,202**	**1,066**	**1,074**	**972**	**1,000**	**1,137**	**1,168**
1-New Orleans	535	500	484	450	419	444	321	254	345	398
2-Baton Rouge	317	297	306	314	251	251	272	305	322	296
3-Houma	42	41	30	36	35	27	35	37	45	46
4-Lafayette	77	88	67	92	98	76	77	73	73	78
5-Lake Charles	50	48	47	54	40	39	42	40	56	63
6-Alexandria	52	55	59	62	42	46	39	50	44	48
7-Shreveport	83	64	77	74	75	88	69	97	120	119
8-Monroe	51	55	62	76	56	63	61	84	77	56
9-Hammond/Slidell	55	52	29	44	50	40	56	60	55	64

New AIDS Diagnoses by Region and Year
Louisiana, 1999-2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Louisiana	**790**	**821**	**888**	**971**	**890**	**861**	**806**	**769**	**809**	**860**
1-New Orleans	349	347	380	358	346	349	266	227	262	277
2-Baton Rouge	214	233	240	279	238	216	201	224	220	244
3-Houma	20	34	30	33	35	27	29	42	31	32
4-Lafayette	44	50	42	77	57	56	65	65	59	64
5-Lake Charles	26	28	36	39	47	42	38	35	42	39
6-Alexandria	24	34	34	38	35	39	30	31	33	36
7-Shreveport	46	45	57	59	49	59	74	52	79	82
8-Monroe	41	25	43	54	43	45	59	48	40	43
9-Hammond/Slidell	26	25	26	34	40	28	44	45	43	43

Geographic Distribution of HIV in Louisiana, 2008

Region	Parish	AIDS Diagnoses in 2008*	HIV Diagnoses in 2008	HIV Diagnosis Rate 2008**	Persons Living with HIV Infection 2008	Deaths 2007
Statewide		**860**	**1,168**	**26**	**16,277**	**494**
Region 1		**277**	**398**	**49**	**5,836**	**130**
	Jefferson	66	119	27	1,494	40
	Orleans	202	271	87	4,210	89
	Plaquemines	5	3	n/a	32	1
	St. Bernard	4	5	13	100	0
Region 2		**244**	**296**	**46**	**3,903**	**161**
	Ascension	8	9	9	150	5
	East Baton Rouge	203	255	60	3,076	145
	East Feliciana	1	5	24	110	4
	Iberville	13	13	40	272	4
	Pointe Coupee	5	6	27	44	0
	West Baton Rouge	8	7	31	105	0
	West Feliciana	6	1	n/a	146	3
Region 3		**32**	**46**	**12**	**598**	**23**
	Assumption	1	1	n/a	30	2
	Lafourche	5	7	8	95	3
	St. Charles	7	9	17	79	2
	St. James	0	1	n/a	52	5
	St. John the Baptist	3	8	17	104	3
	St. Mary	5	8	16	71	2
	Terrebonne	11	12	11	167	6
Region 4		**64**	**78**	**13**	**1,198**	**40**
	Acadia	6	6	10	92	3
	Evangeline	4	4	n/a	55	2
	Iberia	9	6	8	100	7
	Lafayette	18	30	14	559	16
	St. Landry	20	25	27	222	8
	St. Martin	2	4	n/a	92	1
	Vermilion	5	3	n/a	78	3
Region 5		**39**	**63**	**22**	**873**	**16**
	Allen	6	8	31	231	0
	Beauregard	0	1	n/a	34	2
	Calcasieu	28	48	26	557	12
	Cameron	1	1	n/a	5	1
	Jefferson Davis	4	5	16	46	1

* AIDS diagnosis will be included in counts of HIV diagnosis (2nd Column) for persons first detected with HIV and AIDS concurrently or within the same calendar year; therefore numbers from the two columns should not be added.

**Rates per 100,000 persons in parish. Rates derived from numerators less than 20 may be unreliable and are not available (n/a) for numerators less than 5.

Geographic Distribution of HIV in Louisiana, 2008

Region 6		**36**	**48**	**16**	**783**	**19**
	Avoyelles	6	6	14	187	7
	Catahoula	0	0	0	24	0
	Concordia	4	3	n/a	36	2
	Grant	0	2	n/a	26	1
	La Salle	3	11	78	14	1
	Rapides	17	21	16	368	5
	Vernon	1	1	n/a	39	2
	Winn	5	4	n/a	89	1
Region 7		**82**	**119**	**22**	**1,349**	**50**
	Bienville	3	5	34	29	2
	Bossier	11	7	6	165	7
	Caddo	43	81	32	865	31
	Claiborne	5	4	n/a	76	4
	De Soto	5	4	n/a	56	2
	Natchitoches	8	9	23	83	4
	Red River	1	2	n/a	11	0
	Sabine	4	1	n/a	22	0
	Webster	2	6	15	42	0
Region 8		**43**	**57**	**16**	**872**	**32**
	Caldwell	5	1	n/a	58	11
	East Carroll	3	2	n/a	38	0
	Franklin	1	4	n/a	21	0
	Jackson	0	0	0	34	0
	Lincoln	1	5	12	49	2
	Madison	2	2	n/a	52	1
	Morehouse	1	5	17	57	1
	Ouachita	23	25	17	448	11
	Richland	1	2	n/a	34	1
	Tensas	2	1	n/a	35	2
	Union	2	3	n/a	39	3
	West Carroll	2	6	52	8	0
Region 9		**43**	**64**	**12**	**865**	**23**
	Livingston	7	8	7	136	7
	St. Helena	1	1	n/a	19	1
	St. Tammany	8	17	7	318	6
	Tangipahoa	21	28	24	240	6
	Washington	6	10	22	152	3

* AIDS diagnosis will be included in counts of HIV diagnosis (2nd Column) for persons first detected with HIV and AIDS concurrently or within the same calendar year; therefore numbers from the two columns should not be added.

**Rates per 100,000 persons in parish. Rates derived from numerators less than 20 may be unreliable and are not available (n/a) for numerators less than 5.

Deaths Among Persons with HIV Infection Louisiana, 2006-2007				
	2006 Deaths	Percent	2007 Deaths	Percent
Total Deaths	**472**	**100%**	**494**	**100%**
Diagnosis at Death				
AIDS	421	89.2%	425	86.0%
HIV	51	10.8%	69	14.0%
Sex				
Female	146	30.9%	144	29.1%
Male	326	69.1%	350	70.9%
Race/Ethnicity				
Black/African American	377	79.9%	374	75.7%
Hispanic/Latino	6	1.3%	12	2.4%
White	79	16.7%	98	19.8%
Other	10	2.1%	10	2.0%
Age at Death				
0-12	1	0.2%	0	0.0%
13-19	1	0.2%	1	0.2%
20-24	13	2.8%	7	1.4%
25-34	56	11.9%	74	15.0%
35-44	162	34.3%	154	31.2%
45-54	159	33.7%	161	32.6%
55-64	53	11.2%	66	13.4%
65+	27	5.7%	31	6.3%
Transmission Category				
Men who have sex with men (MSM)	147	31.1%	163	33.0%
Injection Drug User (IDU)	157	33.3%	148	30.0%
MSM/IDU	45	9.5%	58	11.7%
High Risk Heterosexual (HRH)	119	25.2%	122	24.7%
Transfusion/Hemophilia/Other	2	0.4%	3	0.6%
Perinatal/Pediatric	2	0.4%	0	0.0%
Region				
1-New Orleans	107	22.7%	130	26.3%
2-Baton Rouge	160	33.9%	161	32.6%
3-Houma	15	3.2%	23	4.7%
4-Lafayette	39	8.3%	40	8.1%
5-Lake Charles	17	3.6%	16	3.2%
6-Alexandria	22	4.7%	19	3.8%
7-Shreveport	49	10.4%	50	10.1%
8-Monroe	34	7.2%	32	6.5%
9-Hammond/Slidell	29	6.1%	23	4.7%
Rural/Urban				
Rural	52	11.0%	69	14.0%
Urban	420	89.0%	425	86.0%

Annual Report Technical Notes

Tabulation of Data

This report includes all information received at the HIV/AIDS Program office as of June 1, 2009. HIV and AIDS cases diagnosed through 2008 are included in this report. Due to reporting and collection delays, death and pediatric surveillance data are reported through 2007.

HIV and AIDS Terminology

Previously the term *HIV/AIDS* was used to refer to 3 categories of diagnoses collectively: a diagnosis of HIV (not AIDS), a diagnosis of HIV infection with a later diagnosis of AIDS within the same year, and concurrent diagnoses of HIV and AIDS. For this report, the term *HIV Infection* was substituted for *HIV/AIDS* to represent the same three categories.

In previous reports, risk categories were referred to as *Mode of Exposure or Exposure Categories*. For this report, risk categories are now referred to as *Transmission Categories*. All of the transmission categories selected for this report are described below under "Definitions of Transmission Categories."

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 an 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 Transmission Categories

For the purposes of this report, HIV and AIDS cases were classified into one of several hierarchical transmission (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/NIR: 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. These cases are traditionally marked as No Identified Risk Factor (NIR). NIR 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. For this report, all cases with an unspecified transmission category were assigned an imputed transmission category. Imputation procedures are described below under *Imputed Transmission Category.*

Case Definition Changes

The CDC HIV and AIDS case definitions have changed over time based on knowledge of HIV disease and physician practice patterns. The original definition for AIDS was modified in 1985[xxviii]. The 1987 definition[xxix] 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 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[xxx]. 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 to include reports of detectable quantities of HIV virologic (non-antibody) tests[xxi]. 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.

Most recently, the surveillance case definitions were revised in 2008 for adults and adolescents (age ≥13 years) [xxxii]. A single case definition was created that incorporates AIDS and an HIV classification system. HIV infection is now categorized into four stages based on severity. Stage 1 is HIV infection

with no AIDS-defining conditions and either the CD4+ T-lymphocyte count is >500 cells/µl or the lymphocyte percentage is ≥29%. Stage 2 is HIV infection with no AIDS-defining conditions and either the CD4+ T-lymphocyte count is between 200-499 cells/µl or the lymphocyte percentage is between 14-28%. Stage 3 is AIDS where one of the following three conditions is met: CD4+ T-lymphocyte count is <200 cells/µl, or the lymphocyte percentage <14%, or there is documentation of an AIDS-defining condition. An AIDS-defining condition supersedes the CD4 count or percentage. Stage 4 is an unknown stage where no information has been collected on AIDS-defining conditions, CD4 count, or percentage. Once a person is classified as Stage 2 or 3, they cannot be reclassified at a lower stage.

The case definition for children less than 18 months of age has also been revised. The only category that was revised was "presumptively uninfected" with HIV. Additional laboratory criteria were added. In children age 18 months to <13 years, the surveillance case definition requires laboratory-confirmed evidence of HIV infection.

Imputed Transmission Category

Recently reported cases, especially HIV (non-AIDS) cases, are often reported without a specified risk exposure, thereby causing a distortion of trends in exposure categories. Thus, statistical procedures to provide or impute predicted values of transmission category were used. A graphical representation of the transmission categories before and after risk imputation is available on page 14. All other data in the graphs and tables throughout the surveillance section of the report represent imputed transmission categories. Values for transmission category for cases with no known risk were estimated using a statistical procedure known as hotdeck imputation, similar to methods used by the U.S. Census on the American Community Survey (www.census.gov/acs/www/Downloads/tp67.pdf). The Louisiana hotdeck imputation method was locally developed and validated against the CDC methodology. 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). Next, a profile for each case was constructed using information from these variables, including age, race, sex, parish of residence, incarceration history, substance use, and year of infection. Finally, a predicted value for risk was then obtained by matching cases with no known risk to cases with a known risk along this profile and substituting the missing risk value.

Census Data and Rate Calculation

Mid-year population estimates for the state of Louisiana and each parish are obtained from the U.S. Census Bureau. These estimates are used to calculate changes in the population, and incidence and prevalence rates. All rates are calculated per 100,000 persons except for death rates, which are calculated per 1,000 persons. An example of how rates are calculated is as follows. For the HIV diagnosis rate in 2008 for the New Orleans Public Health Region 1, the July 1, 2008 populations for the four parishes within Region 1 are added together equaling a regional population of 806,762 persons. Then the number of new HIV diagnoses in Region 1 in 2008, 393 new diagnoses, is divided by the totaled population, 806,762 persons to get 0.000487. This number is multiplied by 100,000 to result in an HIV case rate of 48.7 per 100,000 for Region 1 in 2008.

Additional Notes

- HIV data collection began in 1993 in the state of Louisiana.
- All percentages displayed in this report are rounded to either one or zero decimal points. Due to this rounding, they may not equal 100% when summed.
- When calculating rates, if the numerator was <5, the rate is unstable and marked as 'n/a.'

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[iii] http://factfinder.census.gov/servlet/GCTSubjectShowTablesServlet?_lang=en&_ts=276005202204

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