# 2011 STD/HIV Program Report

State of Louisiana
Department of Health and Hospitals
Office of Public Health



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# Louisiana Office of Public Health STD/HIV Program Overview

#### The History of the STD and HIV Program Offices

The STD Control Program has been in existence for many years to screen and treat persons infected with a sexually transmitted disease, primarily syphilis, gonorrhea, and chlamydia in Louisiana. The STD Control Program staff who are located in the central office are responsible for collaborating with regional staff and community partners to ensure that STD screenings, treatment and partner services are provided, as well as for conducting surveillance and implementing outbreak response initiatives and other special projects.

The Louisiana State University Health Sciences Center (LSUHSC) HIV Program Office was established in 1992 under the LSU School of Medicine, Department of Preventive Medicine. Simultaneously, the Louisiana Department of Health and Hospitals (DHH) was also addressing HIV public health issues through the Office of Public Health (OPH) HIV/AIDS Services. Noting that there were two State agencies addressing the HIV epidemic, LSU and OPH came together as the Department of Health and Hospitals (DHH) Office of Public Health (OPH) HIV/AIDS Program (HAP) in 1998.

In December 2010, the STD Control Program and the HIV/AIDS Program merged to become the STD/HIV Program (SHP).

#### **About the Current STD/HIV Program**

The STD/HIV Program (SHP) administers statewide and regional programs designed to prevent the transmission of STDs and HIV, to ensure the availability of quality medical and social services for those diagnosed with an STD or HIV, and to track the impact of the STD and HIV epidemics in Louisiana.

#### **VISION**

Achieve a state of awareness that promotes sexual health, ensures universal access to care, and eliminates new STD and HIV infections.

#### **MISSION**

SHP's mission is to lead the effort to build a holistic, integrated and innovative system of STD and HIV prevention, care and education that eliminates health inequities. We will do this by utilizing quality data and technology to inform and direct policy and program around sexual health.

SHP's main programmatic units include:

- Data Management/Analysis and Surveillance: This unit is responsible for monitoring the chlamydia, gonorrhea, syphilis and HIV epidemics throughout the state. Surveillance data are used for STD/HIV prevention planning and help guide the allocation of resources for STD/HIV treatment, care, and other supportive services.
- Field Operations: This unit is responsible for educating providers, laboratories and other sites on reporting requirements for STD/HIV; conducting follow-up investigations on syphilis and HIV cases, including perinatal HIV exposures and congenital syphilis; and ensuring individuals diagnosed with syphilis and/or HIV are aware of their status and referred to care for treatment through the provision of partner services.
- Prevention: This unit is responsible for behavioral interventions and educational activities that are focused on reducing the spread of STDs and HIV in Louisiana. Prevention activities include partner services, HIV counseling, testing and referral, prevention with HIV-positive individuals, outreach, and behavioral interventions.
- Services: This unit provides a variety of patient care services to individuals living with HIV infection such as medications, dental services, assistance with transportation, rent and utilities, assistance with the payment of health insurance premiums, co-payments and deductibles, supplemental food items, and other needed support services.

• Evaluation: This unit is responsible for examining the services provided to persons infected or affected by STDs and HIV and the prevention activities targeted at reducing the spread of STDs and HIV to ensure the quality, effectiveness, and efficiency of those activities.

#### **About this Report**

STD and HIV infection in Louisiana requires responsive interventions to decrease new infections, slow HIV disease progression, increase individual awareness of STD and HIV status, and help ensure access to medical care for persons who have HIV or need treatment for an STD. The 2011 STD/HIV 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.

#### For More Information:

SHP maintains two websites http://dhh.louisiana.gov/hiv and www.hiv411.org.

#### **Executive Summary**

The following report provides detailed information regarding demographic and risk characteristics of individuals with HIV and STD infections and trends in the epidemics over time. This report includes cases diagnosed through 2011. Some of the most significant trends are highlighted below:

#### **HIV Summary**

- At the end of 2011, 17,735 persons were living with HIV infection in Louisiana, of whom 9,650 (54%) have been diagnosed with AIDS. There are persons living with HIV in every parish in Louisiana.
- The most recent CDC HIV Surveillance Report (Vol. 23), for the first time, had a national comparison of estimated HIV case rates. Louisiana ranked 3rd in the nation for estimated HIV case rates (30.2 per 100,000 population) and 11th in the estimated number of HIV cases. The New Orleans MSA ranked 2nd in the nation and the Baton Rouge MSA ranked 3rd in the nation for estimated HIV case rates (43.0 and 41.6 per 100,000, respectively), among the large metropolitan areas in the nation.
- According to the same report, Louisiana ranked 4th highest in estimated state AIDS case rates (18.1 per 100,000) and 11th in the number of estimated AIDS cases in 2011. In 2010, Louisiana ranked 4th highest in estimated state AIDS case rates (20.0 per 100,000) and 11th in the number of estimated AIDS cases. The Baton Rouge metropolitan area ranked 1st in estimated AIDS case rates (29.4 per 100,000) and the New Orleans metropolitan area ranked 4th in estimated AIDS case rates (25.3 per 100,000) in 2011 among the large metropolitan areas in the nation.
- In 2011, 1,282 individuals were newly diagnosed with HIV infection in Louisiana, a 13.5% increase from the 1,130 new diagnoses in 2010.
- The New Orleans region had the highest number of new HIV diagnoses and the highest rate of new diagnoses in 2011 out of all nine public health regions. The Baton Rouge region had the 2nd highest number of new diagnoses and the 2nd highest HIV case rate.
- Women represented 29% of new HIV diagnoses in 2011. The HIV rate among men has increased over 40% since 2005, but the rate among women has remained relatively stable over time.
- The HIV rate for blacks continues to be disproportionately high; the rate for blacks was over seven times higher than among whites. Although blacks make up only 32% of the state's population, 74% of newly diagnosed HIV cases and 76% of newly diagnosed AIDS cases were among blacks in 2011.
- The number of diagnoses in youth aged 13-24 has been steadily increasing since 2006. In 2011, new diagnoses in youth aged 13-24 accounted for a quarter of all new diagnoses.
- The percentage of adult HIV diagnoses among MSM has increased from a low of 40% in 2002 to a high of 53% in 2011. An additional 4% of new diagnoses in 2011 were among MSM/IDU. The majority of the new diagnoses among MSM in Louisiana are black and under the age of 34.
- In 2011, 25% of persons newly diagnosed with HIV had AIDS at the time of their diagnosis, and an additional 7% of persons developed AIDS within six months of their diagnosis. Men, injection drug users, and persons aged 35 and older were more likely to be diagnosed late in the course of their disease.
- Perinatal transmission rates have dropped dramatically from 19% in 1994 to less than 3% in 2006 through 2010, due to increased screening of pregnant women and increased use of antiretroviral therapy by pregnant women with HIV and their infants.
- In 2011, there were a total of 102,539 HIV tests conducted through SHP's HIV Counseling Testing and Referral Program. Of these tests, 1,272 were positive, accounting for 1.2% of the total tests. Of the 1,272 positive tests, 565 were new positives reported to the surveillance system.
- Of the 102,539 tests conducted, 71% were among blacks and 48% were among females. Males had a higher positivity rate than females, and male-to-female transgender persons, men who have sex with men

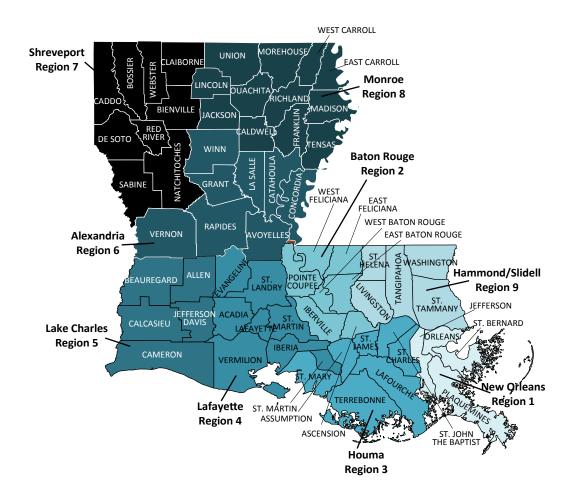
(MSM), injection drug users (IDU), and MSM/IDU had the highest positivity percents. Community-based organizations, emergency departments, and community health clinics had the highest positivity rates of all testing sites in 2011.

- In 2011, 1,607 persons were referred to the Disease Intervention Specialists (DIS) for HIV Partner Services. A total of 648 partners were contacted by the DIS, 52% of whom were tested for HIV. A total of 97 partners contacted by DIS were newly diagnosed with HIV, a positivity rate of 29% among partners tested by DIS.
- In 2011, 32% of all persons living with HIV infection in Louisiana were not in care (did not have a CD4 or viral load test conducted in 2011).
- In 2012, SHP coordinated HIV-related care, treatment and support services for 5,695 people living with HIV infection in Louisiana. These services were supported through the Ryan White Part B and the state formula Housing Opportunities for Persons with AIDS (HOPWA) programs.

#### **STD Summary**

- In 2011, Louisiana ranked 1st in the nation in primary and secondary (P&S) syphilis rates (9.9 per 100,000), 1st in gonorrhea rates (202.3 per 100,000); 3rd in chlamydia rates (697.4 per 100,000); and 3rd in congenital syphilis rates (29.3 per 100,000 live births).
- There were 31,614 new cases of chlamydia, 9,169 cases of gonorrhea, and 447 cases of P&S syphilis diagnosed in Louisiana in 2011.
- The Shreveport region has the highest rates of chlamydia, gonorrhea and P&S syphilis of all nine regions in Louisiana.
- Louisiana has the third highest rate of congenital syphilis in the nation. In 2011, there were 18 cases
  of congenital syphilis reported to the CDC. Only 23 states in the nation reported one or more cases of
  congenital syphilis in 2011.
- In 2011, 447 persons were referred to the Disease Intervention Specialists (DIS) for syphilis Partner Services. A total of 332 partners were contacted by the DIS, 88% of whom were tested for syphilis. A total of 116 partners contacted by DIS were newly diagnosed with syphilis, a positivity rate of 40% among partners tested by DIS.
- Throughout Louisiana, women under the age of 30 are targeted for chlamydia and gonorrhea screenings at
  parish health units and STD and family planning clinics. These facilities had an overall chlamydia positivity
  rate of 14% and a 5% gonorrhea positivity rate in 2011.

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



## Louisiana's Population

	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

In the 2011 census, the total population of Louisiana was 4,574,836 persons. Louisiana is made up of 64 county-equivalent subdivisions called parishes. In 2011, parish populations ranged from a low of 5,066 persons (Tensas Parish) to a high of 441,438 persons (East Baton Rouge Parish). The New Orleans region (composed of the Orleans, Jefferson, Plaquemines, and St. Bernard Parishes) represented 19% of the state's population. While the state is considered rural, 75% of the population resides in urban areas. The state has nine public health regions and eight metropolitan statistical areas (MSAs).

Distribution of the General Population by Region Louisiana, 2002, 2006 & 2011								
Public Health Region 2002 Total Population 2006 Total Population 2002-2006 Total Population 2002-2006 School Population 2006-2011 Popul								
1 - New Orleans	1,016,517	665,017	-34.6%	856,566	28.8%	-15.7%		
2 - Baton Rouge	604,836	640,611	5.9%	667,042	4.1%	10.3%		
3 - Houma	368,204	396,152	7.6%	405,468	2.4%	10.1%		
4 - Lafayette	551,400	570,615	3.5%	588,413	3.1%	6.7%		
5 - Lake Charles	282,191	281,764	-0.2%	294,402	4.5%	4.3%		
6 - Alexandria	299,385	302,252	1.0%	309,773	2.5%	3.5%		
7 - Shreveport	521,695	531,005	1.8%	548,990	3.4%	5.2%		
8 - Monroe	338,003	348,525	3.1%	356,487	2.3%	5.5%		
9 - Hammond/Slidell	469,312	504,386	7.5%	547,695	8.6%	16.7%		
Louisiana	4,451,543	4,240,327	-4.7%	4,574,836	7.9%	2.8%		
Source: <sup>a</sup> Census 2002 US Bui	reau of the Censu	s; bCensus Popula	tion Estimates,	US Bureau of the	Census			

- In 2011, the New Orleans region (Region 1) had the largest population in the state and the Lake Charles region (Region 5) had the smallest.
- From 2002 to 2006, the population of the New Orleans region decreased 35%, largely due to the impact of Hurricane Katrina. The hurricane devastated the New Orleans metropolitan area in August 2005 and caused a massive displacement of the population. Between 2006 and 2011, the population of the New Orleans region increased 29%, but it is still 16% below the population reported in 2002.
- The Hammond/Slidell region (Region 9) had the largest population increase, 78,383 persons, (16.7%) from 2002 to 2011.

#### **Demographic Composition**

According to the 2011 estimated census data, the racial and ethnic composition of the state was estimated to be 63% white, 32% African American, 2% Asian, and <1% American Indian. Persons of Hispanic origin were estimated to make up 4% of the total population. Approximately 78% of persons living in Louisiana in 2011 were born in Louisiana and 3.8% are foreign born. Of the foreign-born population, 60% are non-US citizens.<sup>2</sup>

#### Age and Sex

In 2011, the census estimates that persons under the age of 18 made up 24.5% of the population while persons 65 and older made up 12.5% of the population. As in previous years, the estimated proportion of females in the overall population in 2011 was slightly higher than that of males (51% vs. 49%).<sup>3</sup>

#### Poverty, Income, and Education

In 2011, the average household size in Louisiana was 2.6 persons and the average family size was 3.3 persons. Of all Louisiana households, 66% are considered family households of which 26% have a female head of household with no husband present. An estimated 82.5% of Louisiana residents aged 25 years and older had attained a high school degree or higher, and 21.1% had a bachelor's degree or higher. The estimated median household income in Louisiana was \$41,734 for 2011. Moreover, an estimated 17.9% of the population had an income below the federally defined poverty level, and 16.1% of families have an income below the poverty level. Louisiana has one of the highest proportions of children living in poverty, with an estimated 28.8% of all children 18 years or younger living in households with an income below the federally defined poverty level in 2011 compared to the national estimate of 22.5% of all US children. The unemployment rate as of December 2011 in Louisiana was 7.0%.

#### Incarceration/Crime

In 2011, the crime rate in Louisiana was 5% lower than the national average rate. Property crimes accounted for 92% of the crime rate and violent crimes accounted for 8% of the crime rate. In 2011, Louisiana's incarceration rate (per 100,000 persons) was 2.15 times higher than the national average incarceration rate. Of the 50 states, the Louisiana incarceration rate ranked 1st with 867 per 100,000 adults incarcerated. A total of 39,610 inmates were managed by the Louisiana Department of Public Safety and Corrections in 2011.<sup>6,7</sup>

#### **Health Indicators**

In the 2011 United Health Foundation's America's Health Rankings report, Louisiana ranked 50th out of 50 in overall health. This national health survey compares multiple health outcomes and health determinants in all states. The low-place ranking is predominately due to increases in obesity, low high school graduation rates, high infant mortality rates, high percentage of children in poverty and high infectious disease rate. In 2011, an estimated 20.8% of Louisiana residents lack health insurance, compared to a national average of 15.7%.

#### **Public Aid**

In 2011, Medicaid covered 20% and Medicare covered 13% of all persons living in Louisiana. Medicaid expenditures in Louisiana totaled \$6.9 billion in the 2010 fiscal year. In 2011, 47% of children ages 0-18 were insured through Medicaid, and 10% of children were uninsured.<sup>9</sup>

#### 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, 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.dhh.louisiana.gov/oph). 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.

# **National HIV/AIDS Strategy**

The National HIV/AIDS Strategy (NHAS) was released by the White House on July 13, 2010. This strategy is the first of its kind for the United States. The NHAS, outlines measurable targets to be achieved by 2015. The NHAS was constructed between Federal and community partners to create a common purpose and to determine what strategies and programs are working effectively to reach these common goals.

#### **VISION**

"The United States will become a place where new HIV infections are rare and when they do occur, every person, regardless of age, gender, race/ethnicity, sexual orientation, gender identity or socio-economic circumstance, will have unfettered access to high quality, life-extending care, free from stigma and discrimination."

The NHAS divides 10 goals into three distinct categories. These goals are further outlined in the Surveillance, Services and Prevention sections of this 2011 STD/HIV Program Report with Louisiana specific data.

#### **Reducing New HIV Infections**

- By 2015, lower the annual number of new infections by 25% (from 56,300 to 42,225).
- Reduce the HIV transmission rate, which is a measure of annual transmissions in relation to the number of people living with HIV, by 30% (from 5 persons infected per 100 people with HIV to 3.5 persons infection per 100 people with HIV).
- By 2015, increase from 79% to 90% the percentage of people living with HIV who know their serostatus (from 948,000 to 1,080,000 people).

#### Increasing Access to Care and Improving Health Outcome for People Living with HIV

- By 2015, increase the proportion of newly diagnosed patients linked to clinical care within three months of their HIV diagnosis from 65% to 85% (from 26,824 to 35,078 people).
- By 2015, increase the proportion of Ryan White HIV/AIDS Program clients who are in continuous care (at least 2 visits for routine HIV medical care in 12 months at least 3 months apart) from 73% to 80% (or 237,924 people in continuous care to 260,739 people in continuous care).
- By 2015, increase the number of Ryan White clients with permanent housing from 82% to 86% (from 434,000 to 455,800 people). (This serves as a measurable proxy of our efforts to expand access to HUD and other housing supports to all needy people living with HIV.)

#### **Reducing HIV-Related Health Disparities**

- Improve access to prevention and care services for all Americans.
- By 2015, increase the proportion of HIV diagnosed gay and bisexual men with undetectable viral load by 20%.
- By 2015, increase the proportion of HIV diagnosed Blacks with undetectable viral load by 20%.
- By 2015, increase the proportion of HIV diagnosed Latinos with undetectable viral load by 20%.

# National HIV/AIDS Strategy

The NHAS advocates for a more coordinated national response to the HIV epidemic. In coordination with the release of the NHAS, the White House also released a NHAS Federal Implementation Plan that outlines the activities and steps the Federal government will undertake to meet the goals set forth.

The implementation of NHAS, while spearheaded by the Federal government, will require the efforts of "all parts of society, including state, local and tribal governments, businesses, faith communities, philanthropy, the scientific and medical communities, educational institutions, people living with HIV, and others."

The NHAS outlines 11 Action Steps that the government, communities and agencies can use to help reach the strategy goals.

#### **Reducing New HIV Infections**

- Intensify HIV prevention efforts in the communities where HIV is most heavily concentrated.
- Expand targeted efforts to prevent HIV infection using a combination of effective, evidence-based approaches.
- Educate all Americans about the threat of HIV and how to prevent it.

#### Increasing Access to Care and Improving Health Outcomes for People Living with HIV

- Establish a seamless system to immediately link people to continuous and coordinated quality care when they learn they are infected with HIV.
- Take deliberate steps to increase the number and diversity of available providers of clinical care and related services for people living with HIV.
- Support people living with HIV with co-occurring health conditions and those who have challenges meeting their basic needs, such as housing.

# **Reducing HIV-Related Disparities and Health Inequities**

- Reduce HIV-related mortality in communities at high risk for HIV infection.
- Adopt community-level approaches to reduce HIV infection in high-risk communities.
- Reduce stigma and discrimination against people living with HIV.

#### Achieving a More Coordinated National Response to the HIV Epidemic

- Increase the coordination of HIV programs across the Federal government and between Federal agencies and state, territorial, tribal and local governments.
- Develop improved mechanisms to monitor and report on progress toward achieving national goals.

More information about the National HIV/AIDS Strategy can be found on the AIDS.gov website via the following link: http://www.aids.gov/federal-resources/policies/national-hiv-aids-strategy/.

# **HIV/AIDS Treatment Cascade**

The HIV/AIDS treatment cascade is a way to show, in visual form, the numbers of individuals living with HIV/AIDS who are actually receiving the full benefits of the medical care and treatment they need.

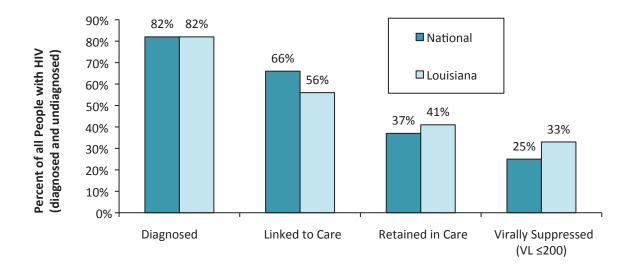
This model was first described by Dr. Edward Gardner and colleagues, who reviewed current HIV research and developed estimates of how many individuals with HIV in the US are engaged at various steps in the continuum of care from diagnosis through viral suppression.

Subsequently, in late 2011 CDC did its own analysis of HIV surveillance datasets, viral load and CD4 laboratory reports, and other published data to develop national estimates of the number of HIV-infected persons at each step of the treatment cascade.

The following graph shows the side by side comparison of the treatment cascade created by the CDC for national data and the Louisiana specific cascade created by the STD/HIV program using data from surveillance and laboratory reporting. The percentage of diagnosed individuals is based on the current estimate from the CDC that 18% of individuals infected with HIV are unaware of their status and are undiagnosed, leaving 82% of the true HIV population diagnosed.

While Louisiana has a lower percentage of linking people into care compared to the national average, once people are in care, Louisiana does a better job of retaining them in care and moving people to viral suppression.

For a full explanation of the analysis conducted to create this treatment cascade, please refer to the Technical Notes at the end of this report.





# Profile of the HIV Epidemic in Louisiana

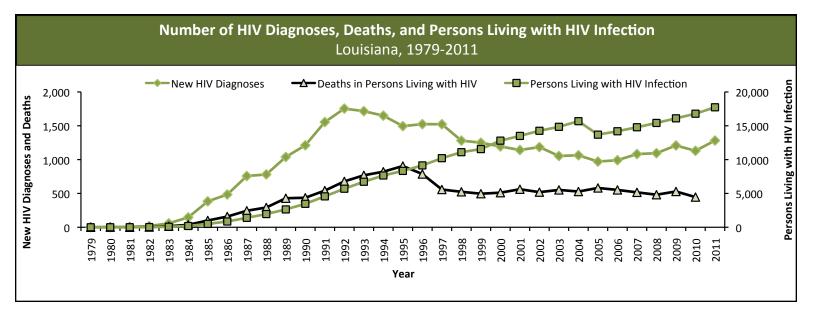
### **Introduction to HIV Surveillance**

The Louisiana Office of Public Health STD/HIV Program's (SHP) HIV 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 with funding from the Centers for Disease Control and Prevention (CDC) and in accordance with the Louisiana Sanitary Code. Basic demographic and risk information are also collected. Additionally, 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 diagnoses in 1984 and confidential name-based reporting of HIV (non-AIDS) diagnoses 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). In 2010, the Sanitary Code was revised to explicitly require the reporting of HIV in pregnancy as well as prenatal exposure to HIV. The maternal and pediatric medical records are reviewed to assess testing and treatment received. Follow-up occurs until the infant's infection status can be determined.

Data from the above surveillance activities are analyzed and non-identifying summary information is provided to public health programs, community based organizations, researchers, and the general public through reports, presentations, data requests, and regional profiles. The information is provided for the purposes of program planning and education, such as 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 with HIV or AIDS through December 31, 2011 and reported to SHP before September 6, 2012. The report presents both numbers and rates of HIV and AIDS diagnoses. New HIV diagnoses are the number of people diagnosed with HIV at any stage of the disease within a given year. Rates take into account differing population sizes among demographic groups or areas, and comparing rates between two or more groups or areas can identify important differences.



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• The first reported Louisiana resident with AIDS was diagnosed in 1979. In the three 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 seen in 2005 in both persons living with HIV infection and new HIV diagnoses 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.

# National HIV/AIDS Strategy Reducing HIV-Related Health Disparities

The national goal is to improve access to prevention and care services for all Americans.

# 2015 Objectives:

- Increase the proportion of HIV diagnosed gay and bisexual men with undetectable viral load by 20%.
- Increase the proportion of HIV diagnosed blacks with undetectable viral load by 20%.
- Increase the proportion of HIV diagnosed Latinos with undetectable viral load by 20%.

Reducing HIV-Related Disparities and Health Inequities  Louisiana, 2010 and 2011							
	Persons Living with HIV Percent with a Viral Load					Percent with Viral Suppression*	
	As of 12/31/2010	As of 12/31/2011	2010	2011	2010	2011	
Total	16,785	17,735	62%	64%	65%	64%	
MSM**	7,509	8,062	61%	63%	69%	67%	
Black/African American	11,383	12,094	63%	65%	60%	59%	
Hispanic/Latino	610	665	41%	45%	76%	73%	

<sup>\*</sup> Of those who had a VL, most recent VL is <=200 copies/ml

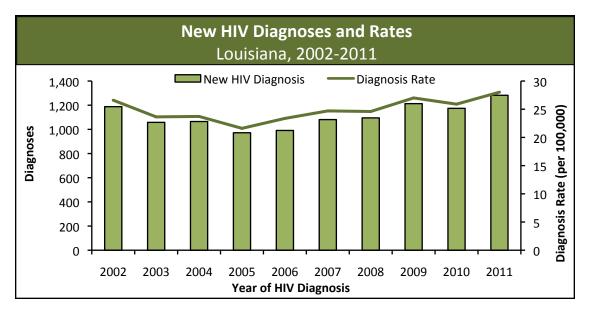
- In Louisiana, of those who had a VL in 2011, 67% of gay/bisexual men, 59% of blacks and 73% of Latinos living with HIV had a viral load <= 200 copies/ml at their most recent visit in 2011. Although a small decrease in the percentage of persons with an undetectable viral load occurred for all three groups from 2010 to 2011, a small increase occurred for all groups in the overall percent of persons living with HIV infection who had a VL test conducted.
- The proportion of persons with viral load suppression will be monitored yearly to determine if there is an annual increase and to see if disparities among subgroups are reduced.

National HIV/AIDS Strategy (www.thewhitehouse.gov)

### 10-Year Trends in New HIV Diagnoses (2002-2011)

The number of new HIV diagnoses in a given year has historically served as a measure of new infections (incidence). However, since individuals can be infected with HIV for a long time before they are diagnosed, counting new HIV diagnoses is not an accurate representation of new infections in a given year. Louisiana is one of 25 selected states and jurisdictions that has been participating in a CDC initiative to develop a new national system to measure recent HIV infections (HIV incidence) as described in the Louisiana 2010 STD/HIV Program Report.

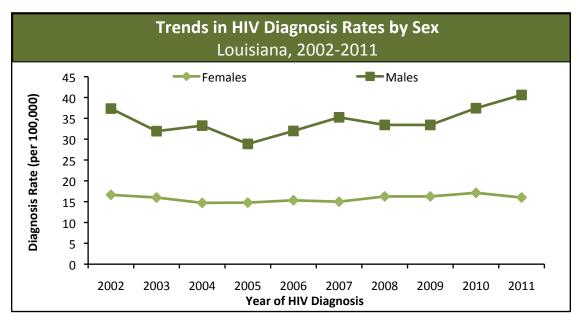
<sup>\*\*</sup> Imputed Risk



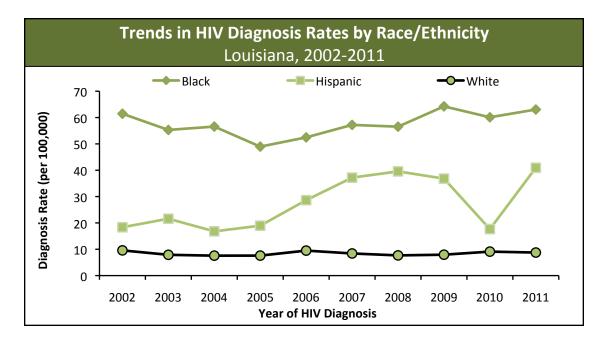
- In 2011, 1,282 individuals were newly diagnosed with HIV infection in Louisiana, a 13% increase from 2010. Although the number of new HIV diagnoses decreased from 2002 to 2005, it has increased by 32% since 2005. The lower number of new diagnoses in 2005 and 2006 was due to the impact of Hurricane 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. From 2005 to 2011, the rate (per 100,000 population) has increased in Louisiana from 22 to 28.

#### HIV Diagnoses by Sex, Race/Ethnicity, and Age

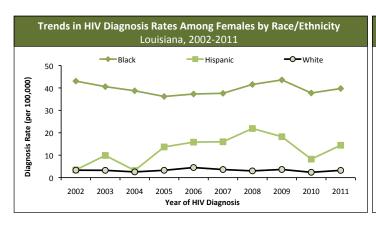
Although the HIV epidemic affects persons of all genders, ages and race/ethnicities in Louisiana, the impact is not the same across all populations. Identifying the populations most at risk for HIV infection helps in planning HIV prevention activities and services, and in determining the most effective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

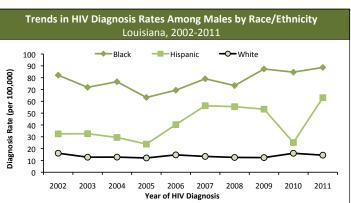


• The HIV diagnosis rate for females in Louisiana has remained relatively stable over the past 10 years (between 14.7 and 17.1 per 100,000 females). In 2011, the HIV diagnosis rate was 16.0 per 100,000 females. The rate for men has been more variable (between 28.9 and 40.6 per 100,000 males). In 2011, the HIV diagnosis rate was 40.6 per 100,000 males. From 2002 to 2005, the diagnosis rate for males declined significantly, but since then has risen to its highest level in the past 10 years. The HIV diagnosis rate for males is over two and a half times the rate for females.

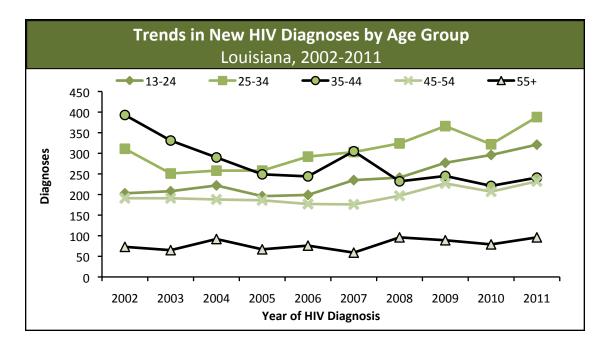


- The HIV diagnosis rate among whites has remained stable over the past 10 years. The rate for blacks has been more variable over the past 10 years and has increased from a low of 49.0 per 100,000 blacks in 2005 to a high of 64.3 per 100,000 blacks in 2009. The current rate is 63.1 per 100,000 blacks.
- In 2011, the HIV diagnosis rate for blacks was over seven times greater than the rate for whites and one and a half times the rate for Hispanic/Latinos. Although the HIV diagnosis rate for Hispanic/Latinos is almost five times greater than for whites, the total HIV case count for Hispanic/Latinos was 81 cases in 2011. This is a significant increase from the 33 diagnoses among Hispanic/Latinos in 2010.





- Since 2005, the HIV diagnosis rate in black males has steadily increased from 63.3 per 100,000 black males in 2005 to 88.6 per 100,000 black males in 2011.
- For both females and males in Louisiana, the majority of new HIV diagnoses are in blacks. The HIV diagnosis rates for Hispanic/Latino females and males are higher than for white females and males, although the diagnosis counts are higher among whites. In 2011, the HIV diagnosis rate in black females was more than 12 times greater than the rate for white females, and was almost three times the rate for Hispanic/Latina females.
- In 2011, the HIV diagnosis rate in black males was six times greater than the rate for white males, and was almost one and a half times greater than the rate for Hispanic/Latino males.

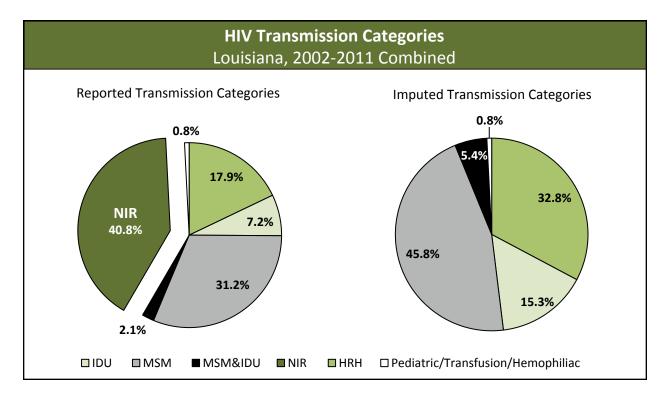


- The majority of all new infections have historically occurred in persons aged 25-44; 49% of all new diagnoses in 2011 were in this age group. While the number of new diagnoses in persons aged 25-34 decreased from 2002 to 2003, it has steadily increased since then to become the age group with the highest number of new diagnoses (30% of all new HIV diagnoses in 2011). The number of new diagnoses in persons aged 35-44 has fluctuated in the past few years, but in 2011 accounted for 19% of all new diagnoses.
- The number of diagnoses in youth aged 13-24 has been steadily increasing since 2006. In 2011, new diagnoses in youth aged 13-24 accounted for 25% of all new diagnoses compared to 18% of all new cases reported in 2008.

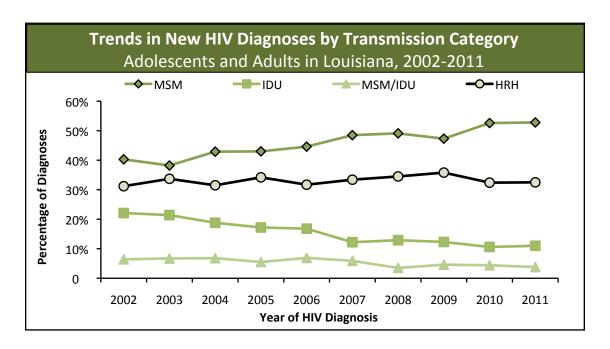
#### **HIV Diagnoses by Transmission Category**

In accordance with the transmission categories used by the CDC, SHP 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 in the graph on the following page, 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 persons diagnosed between 2002 and 2011, 40.8% still do not have a reported risk.

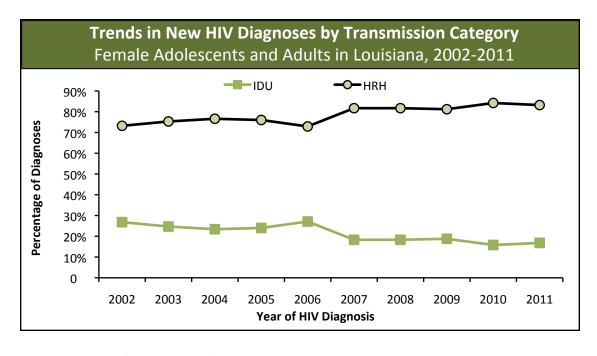
Risk information is difficult to ascertain because individuals may not know how they acquired the infection, their healthcare provider may not feel comfortable collecting the information, or the person may not be willing to share that information possibly due to stigma or fear of discrimination. A person 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, SHP uses a statistical method to assign a mode of transmission for NIR cases called "imputation" (described in the Technical Notes located in the Appendix of this report).



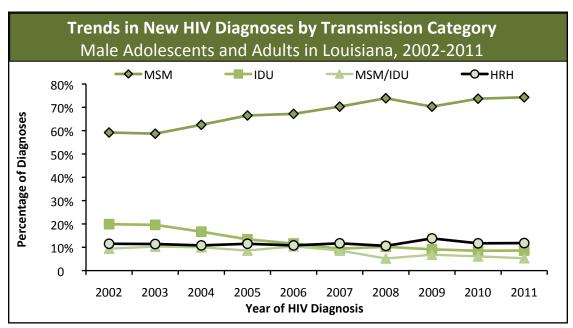
After assigning a transmission category for all NIR cases through imputation, trends in the percentage of cases for each transmission category can be analyzed. The following graphs use imputed transmission categories unless otherwise noted.



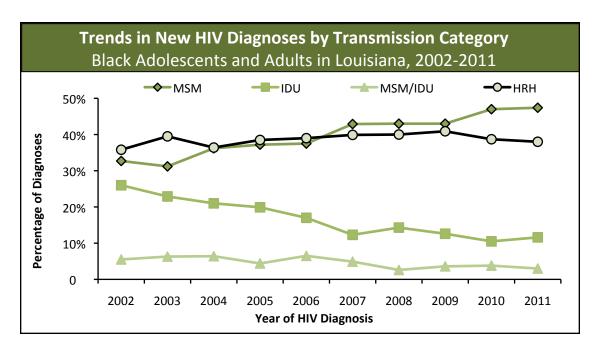
• The percentage of adult HIV diagnoses attributed to MSM has increased from a low of 38% in 2003 to a high of 53% in 2011. The percentage of HRH diagnoses has increased slightly, from 31% in 2002 to 36% in 2009. In 2011, the percentage of HRH diagnoses was 33%. The percentage of diagnoses attributed to IDU and MSM/IDU has declined dramatically over the past 10 years from 22% IDU and 6% MSM/IDU in 2002 to 11% and 4% respectively in 2011.



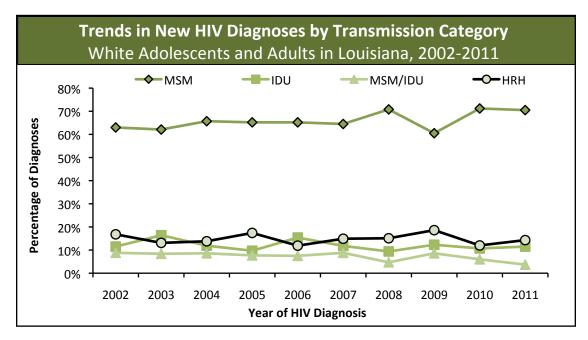
- The primary mode of transmission for women is HRH contact.
- Although there has always been a significant difference in the percentage of female diagnoses attributed to HRH and IDU, the difference was greatest in 2010 when 84% of females were high risk heterosexuals and 16% of females were injection drug users. In 2011, 83% of the female diagnoses were high risk heterosexuals and 17% were injection drug users.



- The primary mode of transmission for males in Louisiana continues to be MSM, with far fewer reports of IDU, MSM/IDU and HRH. In 2011, the percentage of male diagnoses that were MSM was 74%, compared to ten years ago when MSM accounted for only 59% of all newly diagnosed males. The percentage of HRH diagnoses among men has remained consistent with the lowest of 11% in 2008 and the highest of 14% in 2009. In 2011, the percentage of HRH diagnoses among men was 12%.
- The percentage of new diagnoses with a transmission category of IDU and MSM/IDU has declined since 2002 to one of the lowest percentages since the beginning of the epidemic. In 2011, IDU accounted for 9% and MSM/IDU accounted for 5% compared to 20% and 9% in 2002, respectively.

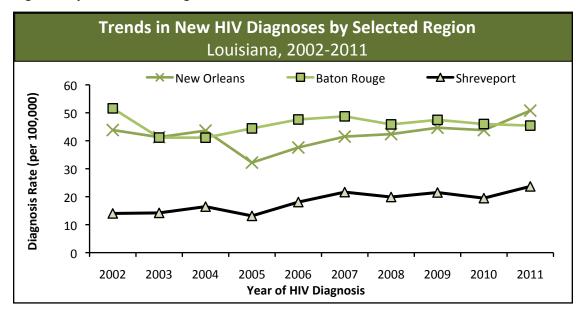


- Historically, the primary mode of transmission for blacks was HRH contact followed closely by MSM. In 2004, the percentage of new diagnoses of MSM in blacks reached and has since surpassed the percentage of diagnoses attributable to HRH.
- In 2011, 47% of all new HIV diagnoses among blacks were MSM and 38% were HRH.
- From 2002 to 2011, the percentage of HIV diagnoses resulting from IDU and MSM/IDU among blacks has declined significantly from 26% to 12% for IDU and 6% to 3% for MSM/IDU.

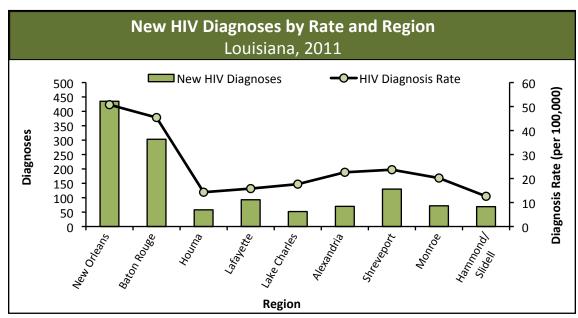


- The predominant mode of transmission among whites has historically been and continues to be MSM. In 2011, 71% of newly diagnosed cases among whites were attributed to MSM.
- In 2011, 14% of diagnoses were attributed to HRH, 12% to IDU and 4% to MSM/IDU.

#### **HIV Diagnoses by Public Health Region**



- The three public health regions in Louisiana with the largest number of new HIV diagnoses in 2011 were New Orleans, Baton Rouge and Shreveport (regions 1, 2, and 7 respectively). The ten year diagnosis rate trends for these three regions are shown above.
- From 2005-2010, the HIV diagnosis rate in Baton Rouge was greater than the rate in New Orleans, largely due to the impact of Hurricane Katrina in August 2005. In 2011, the diagnosis rate in New Orleans was 50.8 per 100,000 population and surpassed the rate in Baton Rouge (45.4 per 100,000 population). The diagnosis rate in Shreveport was 23.7 per 100,000 population in 2011, which was a significant increase from 2005 when it was 13 per 100,000. A table with the number of HIV diagnoses for each region, 2002-2011, is located in the Appendix.



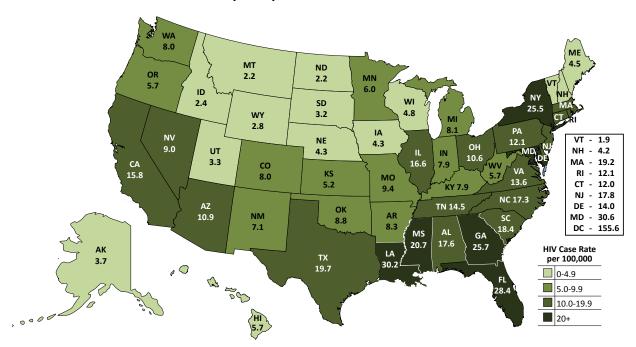
- In 2011, New Orleans had the highest number of new HIV diagnoses and highest HIV diagnosis rate.
- The Lake Charles region had the lowest number of new HIV diagnoses, and the Hammond/Slidell region had the lowest HIV diagnosis rate.

# Characteristics of Persons Newly Diagnosed with HIV

Characteristics of Persons Newly Diagnosed with HIV Louisiana, 2010-2011							
		ns First d with HIV 010	Persons First Diagnosed with HIV in 2011				
	Number	Percent	Number	Percent			
TOTAL	1,130	100.0%	1,282	100.0%			
Sex							
Female	325	28.8%	374	29.2%			
Male	805	71.2%	908	70.8%			
Race/Ethnicity							
Black/African American	842	74.5%	944	73.6%			
Hispanic/Latino	33	2.9%	81	6.3%			
White	233	20.6%	245	19.1%			
Other/Unknown/Multi-race	22	1.9%	12	0.9%			
Age Group	Age at HIV	Diagnosis	Age at HIV	Diagnosis			
0-12	5	0.4%	4	0.3%			
13-19	85	7.5%	92	7.2%			
20-24	211	18.7%	229	17.9%			
25-34	322	28.5%	388	30.3%			
35-44	221	19.6%	241	18.8%			
45-54	207	18.3%	232	18.1%			
55-64	66	5.8%	78	6.1%			
65+	13	1.2%	18	1.4%			
Imputed Transmission Category							
Men who have sex with men (MSM)	592	52.4%	674	52.6%			
Injection Drug User (IDU)	119	10.5%	140	10.9%			
MSM/IDU	49	4.3%	48	3.7%			
High Risk Heterosexual (HRH)	365	32.3%	415	32.4%			
Transfusion/Hemophilia/Other	0	0.0%	0	0.0%			
Perinatal/Pediatric	5	0.4%	5	0.4%			
Rural/Urban							
Rural	178	15.8%	197	15.4%			
Urban	952	84.2%	1,085	84.6%			

- In 2011, 1,282 persons were newly diagnosed with HIV, a 13% increase from 2010.
- From 2010 to 2011, the number of female HIV diagnoses increased 15% and the number of male diagnoses increased 13%.
- From 2010 to 2011, the number of black, white, and Hispanic diagnoses increased, and the proportion of new diagnoses among Hispanic/Latinos increased from 3% to 6%.
- In 2010 and 2011, the greatest number and percentage of diagnoses were in persons age 25-34.
- From 2010 to 2011, the number of MSM diagnoses increased by 14% but the proportion of all cases remained stable
- In Louisiana, most new diagnoses (85% in 2011) were among persons residing in urban areas.

# HIV Rates in the United States (2011)10



- In 2011, the CDC released their *HIV Surveillance Report, Vol 23*, which was the first release that allowed a full national comparison of all 50 states for rates of HIV infection.
- In the US, there were an estimated 49,273 new HIV diagnoses in 2011, for a national HIV diagnosis rate of 15.8 diagnoses per 100,000 population. In 2010, the national HIV diagnosis rate was 15.0 per 100,000 population, but only 46 states were included in the estimate.
- In 2011, Louisiana ranked 3rd highest in state estimated HIV diagnosis rates (30.2 per 100,000 population) and 11th in the number of estimated HIV diagnoses in the US. In 2010, Louisiana ranked 2nd highest in state estimated HIV diagnosis rates (28.5 per 100,000 population), but only 46 states were included in the estimate.

# **HIV Among Men Who Have Sex with Men (MSM)**

Nationally, MSM account for almost half of the one million people living with HIV and more than half of all new HIV infections in the US each year. In 2011, MSM accounted for 62% of all new HIV diagnoses across the nation.

SHP has made a concerted effort to analyze the epidemic among MSM to adequately target prevention efforts. The following table shows the demographics of all new HIV diagnoses in 2011 among MSM who may or may not be injection drug users.

- In 2011, there were 1,282 new HIV diagnoses in Louisiana; 56% (722) were among all MSM.
- The majority of the new diagnoses among MSM in Louisiana are black and under the age of 35.
- 56% of all new diagnoses among MSM occurred in the New Orleans and Baton Rouge regions.
- Persons who identify as MSM/IDU tend to be older than persons who identify as MSM/non-IDU.
- The percentage of late testers who are MSM is similar to that of the overall population.

Demographics of New HIV Diagnoses Among MSM Louisiana, 2011										
	MSM/Non-IDU		MSM/IDU		All MSM					
	Cases	Percent	Cases	Percent	Cases	Percent				
TOTAL	674	100%	48	100%	722	100%				
Race/Ethnicity										
Black/African American	446	66%	28	58%	474	61%				
Hispanic/Latino	50	7%	9	19%	59	8%				
White	172	26%	9	19%	181	23%				
Other/Unknown/Multi-race	6	1%	2	4%	8	1%				
Age at HIV Diagnosis										
13-24	211	31%	5	10%	216	28%				
25-34	221	33%	16	33%	237	31%				
35-44	110	16%	14	29%	124	16%				
45-54	93	14%	11	23%	104	14%				
55-64	33	5%	2	4%	35	5%				
65+	6	1%	0	0%	6	1%				
Region										
1-New Orleans	245	36%	16	33%	261	34%				
2-Baton Rouge	129	19%	12	25%	141	18%				
3-Houma	36	5%	0	0%	36	5%				
4-Lafayette	50	7%	2	4%	52	7%				
5-Lake Charles	29	4%	0	0%	29	4%				
6-Alexandria	31	5%	10	21%	41	5%				
7-Shreveport	82	12%	3	6%	85	11%				
8-Monroe	37	6%	3	6%	40	5%				
9-Hammond/Slidell	35	5%	2	4%	37	5%				
Late Testers										
AIDS at Time of HIV Diagnosis	165	25%	13	27%	178	23%				
AIDS Within 6 Months of HIV Diagnosis	215	32%	15	31%	230	30%				

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## **HIV Among Youth in Louisiana**

In 2011, persons age 13-24 made up 21% of all new HIV diagnoses across the nation. In 2008, this same age group made up only 18% of new diagnoses.

In 2013, the CDC released a supplemental report focused on metropolitan areas across the nation. In 2010, the Baton Rouge MSA ranked 1st in the nation for HIV case rates among 13-24 year old females and 7th among 13-24 year old males. The New Orleans MSA ranked 2nd in the nation among 13-24 year old females and 3rd in the nation for 13-24 year old males.\*

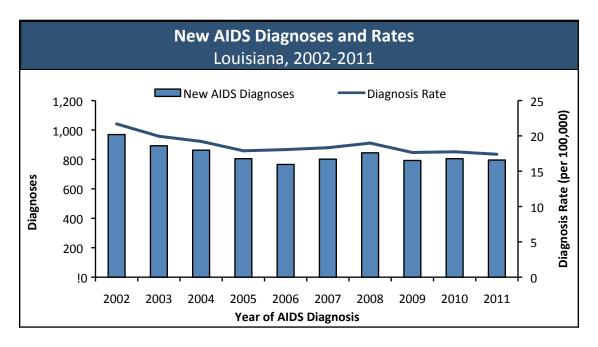
- In 2011, there were 1,282 new HIV diagnoses in Louisiana; 25% (321) were among all youth.
  - ° 229 (71%) of the youth diagnoses were among persons age 20-24 years.
- Among all youth, 75% of the new diagnoses were among males. This percentage was smaller for 13-19 year olds where 66% of the diagnoses were male and 34% were female.
- The majority (86%) of the new diagnoses among all youth were black.
- The majority (69%) of new diagnoses among youth were MSM, though the percentage was lower among 13-19 year olds (62%) and higher among 20-24 year olds (72%). A quarter of all youth diagnoses were among HRH.
- Almost 70% of all new diagnoses among youth occurred in the New Orleans, Baton Rouge, and Shreveport regions.
- The percentage of late testers among youth is much lower than the overall population.

Demographics of New HIV Diagnoses Among Youth										
Louisiana, 2011										
	13-19 Years		20-24 Years		All Youth: 13-24 Years					
	Cases	Percent	Cases	Percent	Cases	Percent				
TOTAL	92	100%	229	100%	321	100%				
Sex										
Female	31	34%	50	22%	81	25%				
Male	61	66%	179	78%	240	75%				
Race/Ethnicity										
Black/African American	80	87%	196	86%	276	86%				
Hispanic/Latino	4	4%	9	4%	13	4%				
White	6	7%	24	10%	30	9%				
Other/Unknown/Multi-race	2	2%	0	0%	2	1%				
Imputed Mode										
MSM	57	62%	166	72%	223	69%				
IDU	3	3%	8	3%	11	3%				
MSM/IDU	0	0%	6	3%	6	2%				
HRH	31	34%	49	21%	80	25%				
Perinatal	1	1%	0	0%	1	0%				
Region										
1-New Orleans	25	27%	65	28%	90	28%				
2-Baton Rouge	20	22%	60	26%	80	25%				
3-Houma	5	5%	16	7%	21	7%				
4-Lafayette	6	7%	13	6%	19	6%				
5-Lake Charles	2	2%	11	5%	13	4%				
6-Alexandria	4	4%	9	4%	13	4%				
7-Shreveport	17	18%	33	14%	50	16%				
8-Monroe	6	7%	14	6%	20	6%				
9-Hammond/Slidell	7	8%	8	3%	15	5%				
Late Testers										
AIDS at Time of HIV Diagnosis AIDS Within 6 Months of HIV Diagnosis	5 7	5% 8%	16 30	7% 13%	21 37	7% 12%				
AIDS Within 6 Months of HIV Diagnosis	7	8%	30	13%	37	12%				

<sup>\*</sup> Centers for Disease Control and Prevention. Diagnosed HIV infection among adults and adolescents in metropolitan statistical areas—United States and Puerto Rico, 2010. HIV Surveillance Supplemental Report 2013;18(No. 1).

# 10-Year Trends in New AIDS Diagnoses (2002-2011)

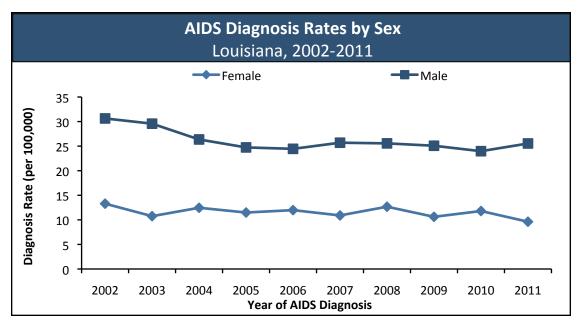
AIDS diagnoses are the number of individuals diagnosed with AIDS within a given time period. An AIDS diagnosis is made when a person has a CD4 cell count <200, a CD4 percentage <14%, or develops an opportunistic infection (OI) such as Pneumocystis carinii pneumonia (PCP) or wasting syndrome. Once a person is diagnosed with AIDS, they remain categorized as AIDS even if their CD4 count rises above 200, their CD4 percentage is 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 regarding access to testing, medical care, medication and treatment adherence.



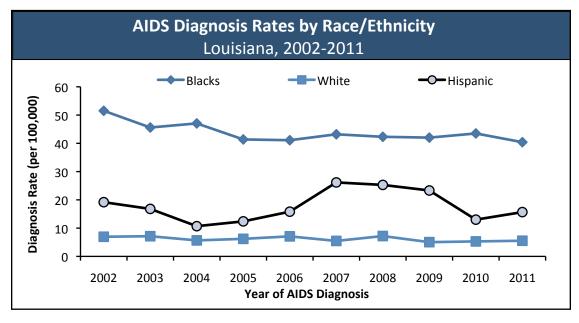
- The number of new AIDS diagnoses in 2011 remains below its highest level in 2002 as a result of the availability of more effective treatments and a higher percentage of persons in care.
- The AIDS diagnosis rate fluctuates slightly each year in accordance with the change in the number of AIDS diagnoses. In 2011, the AIDS diagnosis rate for Louisiana was 17.4 per 100,000 population.

#### AIDS diagnoses and deaths in the United States

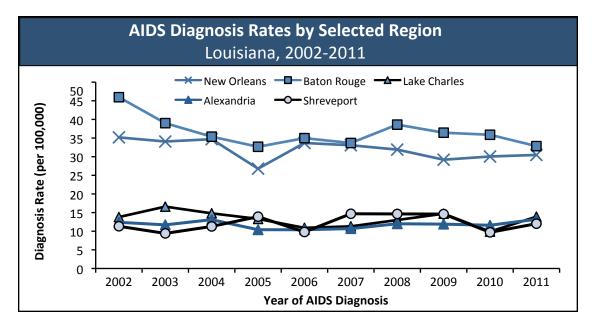
In June 1981, the first cases of what would later be diagnosed as AIDS were reported in the US. During the 1980s, there was a rapid increase in the number of AIDS diagnoses and deaths in persons with AIDS. Cases peaked in 1993 with the expansion of the AIDS case definition. The most dramatic drop in both new diagnoses and deaths began in 1996, with the widespread use of combination antiretroviral therapy. Since 2000, the annual numbers of AIDS diagnoses have been relatively constant, with an estimated 32,052 new AIDS diagnoses in 2011. The CDC estimates that since the beginning of the epidemic through the end of 2011, approximately 1,172,489 people have been diagnosed with AIDS in the US. By region, the South has the greatest number of people living with AIDS, AIDS deaths, and new AIDS diagnoses.



- The AIDS diagnosis rate for females has remained relatively stable over the past 10 years. In 2011, the AIDS diagnosis rate in females was 9.6 per 100,000 females.
- The AIDS diagnosis rate for males has fluctuated within a relatively small range (low of 24.0 per 100,000 males in 2010 and a high of 30.6 per 100,000 males in 2002). In 2011, the male AIDS diagnosis rate was 25.5 per 100,000 males.
- In 2011, the AIDS diagnosis rate in males was almost three times greater than the rate in females.

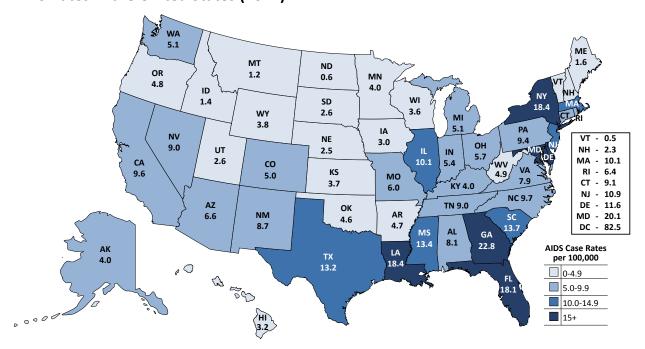


- From 2002 to 2011, the AIDS diagnosis rate for blacks has decreased overall. In 2011, the AIDS diagnosis rate for blacks was 40.4 per 100,000 blacks which was almost three times greater than for Hispanic/Latinos and seven times greater than for whites.
- From 2002 to 2011, the AIDS diagnosis rate among Hispanic/Latinos has fluctuated significantly. The rate has decreased by 18% from 19.2 per 100,000 Hispanic/Latinos in 2002 to 15.7 per 100,000 Hispanic/Latinos in 2011.
- The AIDS diagnosis rate for whites has remained relatively stable over the last decade with a rate of 5.5 per 100,000 whites in 2011.



- The Baton Rouge region continues to have the highest AIDS diagnosis rate in 2011 of all nine public health regions (33 per 100,000 population) in Louisiana. Since 2008 the rate in Baton Rouge has been decreasing and in 2011 was just slightly higher than the AIDS rate in the New Orleans Region (30 per 100,000 population).
- The AIDS diagnosis rates for the Lake Charles, Alexandria and Shreveport regions are very similar each year. In the past 10 years, the Shreveport region has had the 3rd greatest number of AIDS diagnoses rates each year behind New Orleans and Baton Rouge. However, in 2011, the Lake Charles and Alexandria regions have higher AIDS diagnoses rates (13.9 per 100,000 population and 13.2 per population, respectively) than the Shreveport region (12.0 per 100,000 population).

# AIDS Rates in the United States (2011)11



- In the US, there were an estimated 32,052 new AIDS cases in 2011, for a national diagnosis rate of 10.3 AIDS diagnoses per 100,000 population. In 2010 the national AIDS diagnosis rate was 9.5 per 100,000 population.
- In 2011, Louisiana ranked 4th highest in state estimated AIDS diagnosis rates (18.4 per 100,000 population) and 11th in the number of estimated AIDS diagnoses in the US, according to the most recent CDC HIV Surveillance Report (Vol 23). In 2010, Louisiana also ranked 4th highest in state estimated AIDS diagnosis rates (20.0 per 100,000 population).

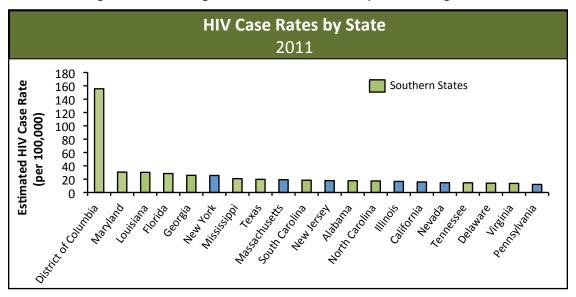
# **Characteristics of Persons Newly Diagnosed with AIDS**

Characteristics of Persons Newly Diagnosed with AIDS Louisiana, 2010-2011						
		t Diagnosed S in 2010	Persons First Diagnosed with AIDS in 2011			
	Number	Percent	Number	Percent		
TOTAL	804	100%	796	100%		
Sex						
Female	273	34.0%	225	28.3%		
Male	531	66.0%	571	71.7%		
Race/Ethnicity						
Black/African American	630	78.4%	605	76.0%		
Hispanic/Latino	24	3.0%	31	3.9%		
White	144	17.9%	155	19.5%		
Other/Unknown/Multi-race	6	0.7%	5	0.6%		
Age Group	Age at AID	S diagnosis	Age at AID	S diagnosis		
0-12	1	0.1%	1	0.1%		
13-19	19	2.4%	19	2.4%		
20-24	70	8.7%	62	7.8%		
25-34	231	28.7%	222	27.9%		
35-44	206	25.6%	214	26.9%		
45-54	192	23.9%	184	23.1%		
55-64	67	8.3%	76	9.5%		
65+	18	2.2%	18	2.3%		
Imputed Transmission Category						
Men who have sex with men (MSM)	323	40.2%	379	47.6%		
Injecting Drug User (IDU)	138	17.2%	132	16.6%		
MSM/IDU	54	6.7%	30	3.8%		
High Risk Heterosexual (HRH)	282	35.1%	247	31.0%		
Transfusion/Hemophilia/Other	0	0.0%	0	0.0%		
Perinatal/Pediatric	7	0.9%	8	1.0%		
Rural/Urban						
Rural	122	15.2%	118	14.8%		
Urban	682	84.8%	678	85.2%		

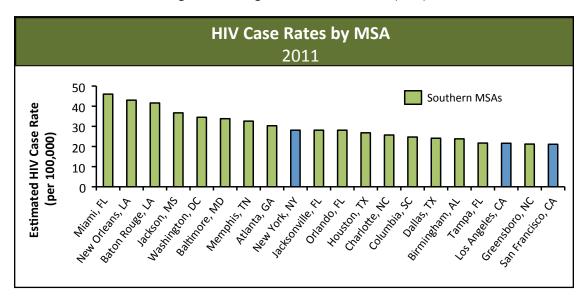
- In 2011, there were 796 new AIDS diagnoses in Louisiana, a 1% decrease from 2010.
- From 2010 to 2011, the number of new female AIDS diagnoses decreased by over 18% and the number of new AIDS diagnoses among males increased by 8%.
- The number of new AIDS diagnoses increased among Hispanic/Latinos and whites and decreased by 4% in blacks.
- In 2010 and 2011, the greatest number of new AIDS diagnoses were among persons age 25-34, followed by persons age 35-44. In 2010 and 2011, the greatest number and percentage of new AIDS diagnoses were in men who have sex with men, followed by high risk heterosexuals and injection drug users.
- The majority of AIDS diagnoses occurred in urban areas in 2011 (85%).

## HIV and AIDS in the South, 2011

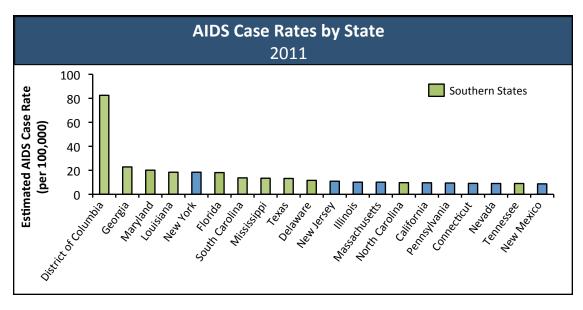
Southern states are disproportionately impacted by HIV infection and AIDS, as shown below. Seventeen states are included in the southern region of the US: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia. Southern states are represented in green below.<sup>12</sup>



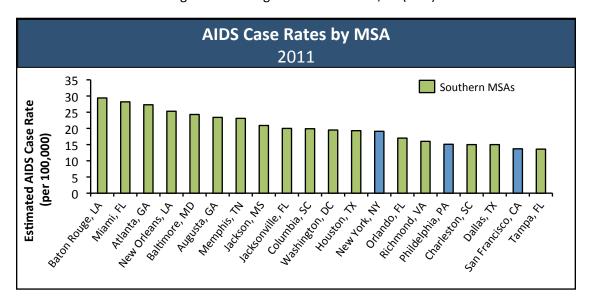
- In 2011, southern states represented 37% of the US population but over 48% of new HIV diagnoses.
- Of the 20 states that had the highest HIV diagnosis rates in 2011, 13 (65%) were in the South.



• Of the 20 metropolitan areas that had the highest HIV diagnosis rates in 2011, 17 (85%) were in the South. According to the CDC, the New Orleans metro area ranked 2nd in estimated HIV diagnosis rates and the Baton Rouge metro area ranked 3rd in estimated HIV diagnosis rates in 2011 among metropolitan areas in the US with more than 500,000 persons.



- In 2011, southern states represented 37% of the US population but over 49% of new AIDS diagnoses. In 2010, southern states represented 40% of person living with AIDS.
- Of the 20 states that had the highest AIDS diagnosis rates in 2011, 11 (55%) were in the South.



• Of the 20 metropolitan statistical areas that had the highest AIDS diagnosis rates in 2011, 17 (85%) were in the South. According to the CDC, the Baton Rouge metro area ranked 1st and the New Orleans metro area ranked 4th in estimated AIDS diagnosis rates in 2011 among metropolitan areas in the US with more than 500,000 persons.

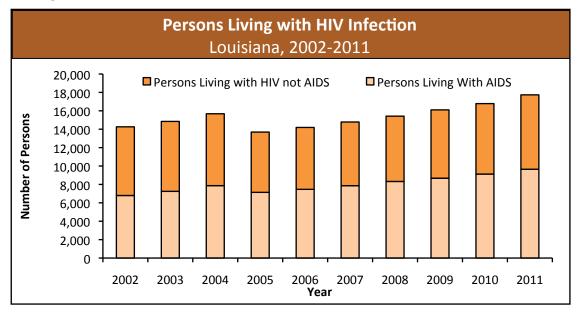
Comparison of 2010 and 2011 National Rankings												
	LOUISIANA NEW ORLEANS MSA BATON ROUGE MSA											
	20	2010 2011		2010 2011		2010		2011				
	#	Rank	#	Rank	#	Rank	#	Rank	#	Rank	#	Rank
Estimated AIDS Case Rate*	20.0	4th	18.4	4th	26.2	5th	25.3	4th	33.7	1st	29.4	1st
Estimated AIDS Case Count	900	11th	842	11th	311	19th	301	20th	265	24th	238	25th
Estimated HIV Case Rate*	28.5	2nd**	30.2	3rd	36.9	3rd**	43	2nd	43	2nd**	41.6	3rd
Estimated HIV Case Count	1,279	10th**	1,381	11th	439	19th**	513	19th	339	27th**	336	30th

<sup>\*</sup> Rates are per 100,000

<sup>\*\*</sup> Only 46 states were included in the analysis for 2010 HIV infection

# Persons Living in Louisiana with HIV Infection (Prevalence)

Prevalence is a measure describing the number of persons living with HIV infection at a certain point in time and includes people living with all stages of HIV or AIDS. Prevalence is the accumulation of diagnoses for people who are still living with the disease. Prevalence numbers and rates are important for ascertaining the burden of HIV on health care systems, allocating resources and monitoring trends over time. Reported HIV case 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 18.1% of persons living with HIV are unaware of their infection status.<sup>13</sup>



- The number of persons living with HIV infection increased each year from 2002 to 2004. The decrease from 2004 to 2005 was 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 surpassed pre-Katrina numbers.
- At the end of 2011, 17,735 persons were known to be living with HIV infection in Louisiana, 9,650 (54%) of whom have progressed from HIV to AIDS.

# Persons living with HIV Infection in the United States

At the end of 2010, an estimated 1,065,922 persons were living with HIV infection in the United States, including 192,932 (18.1%) persons whose infections had not been diagnosed.\* Of these over 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 continued development of new antiretroviral regimens. In the US, more people become infected with HIV than die from the disease each year.

Historically, it was estimated that 25% of HIV-positive persons were undiagnosed or are unaware of their status. Since 2008 when the CDC released a new undiagnosed estimate of 21%, the estimate has continued to decrease to a low of 18.1% as reported by the CDC in 2012.

\* CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 U.S. dependent areas—2010. HIV Surveillance Supplemental Report 2012;17(No. 3, part A).

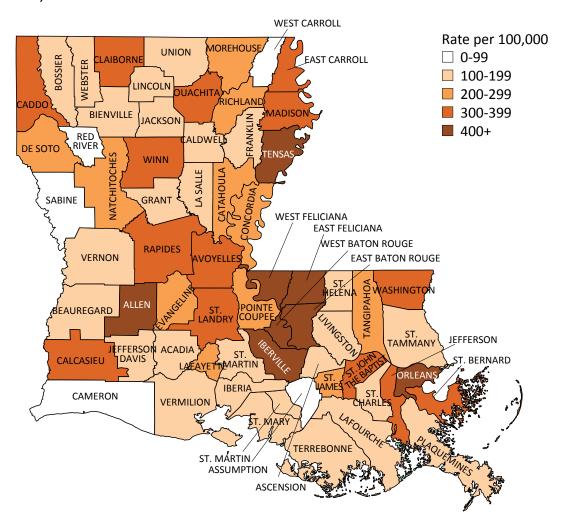
# Characteristics of Persons Living with HIV Infection in Louisiana and Cumulative Louisiana Cases

Characteristics of Persons Living with HIV Infection and Cumulative Cases  Louisiana, 2011						
		ng with HIV f 12/31/2011	Cumulative Persons with HIV Infection as of 12/31/2011*			
	Number	Percent	Number	Percent		
TOTAL	17,735	100%	32,031	100%		
Sex						
Female	5,342	30.1%	8,329	26.0%		
Male	12,393	69.9%	23,702	74.0%		
Race/Ethnicity						
Black/African American	12,094	68.2%	20,782	64.9%		
Hispanic/Latino	665	3.7%	945	3.0%		
White	4,786	27.0%	9,986	31.2%		
Other/Unknown/Multi-race	190	1.1%	318	1.0%		
Age Group	Age ir	2011	Age at D	iagnosis		
0-12	69	0.4%	329	1.0%		
13-19	196	1.1%	1,559	4.9%		
20-24	899	5.1%	4,161	13.0%		
25-34	3,554	20.0%	11,246	35.1%		
35-44	4,493	25.3%	8,901	27.8%		
45-54	5,506	31.0%	4,157	13.0%		
55-64	2,433	13.7%	1,276	4.0%		
65+	585	3.3%	402	1.3%		
Imputed Transmission Category						
Men who have sex with men (MSM)	8,062	45.5%	13,896	43.4%		
Injection Drug User (IDU)	2,690	15.2%	6,058	18.9%		
MSM/IDU	1,325	7.5%	2,816	8.8%		
High Risk Heterosexual (HRH)	5,390	30.4%	7,169	22.4%		
Transfusion/Hemophilia/Other	81	0.5%	484	1.5%		
Perinatal/Pediatric	187	1.1%	326	1.0%		
Rural/Urban						
Rural	2,581	14.6%	3,889	12.1%		
Urban	15,154	85.4%	28,142	87.9%		

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

- In 2011, males made up about 70% of all people living with HIV infection in Louisiana.
- Although blacks only made up 32% of Louisiana's population in 2011, they accounted for 68% of all people living with HIV infection.
- A quarter of all persons living with HIV are under the age of 35, an additional 56% are between 35-54 years of age.
- The majority of people living with HIV infection live in urban areas, and are men who have sex with men or are high risk heterosexuals.

# Persons Living with HIV Infection by Parish Louisiana, 2011



- 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. All persons living with HIV infection in Louisiana are included in the analyses, regardless of their type of residence (correctional facility, nursing home, homeless shelter, etc...).
- At the end of 2011, 8 parishes had a prevalence rate greater than 400 per 100,000 and additional 14 parishes had a rate between 300 and 399 per 100,000.
- Many of the parishes with disproportionate prevalence rates have state correctional facilities that have reported a large number of HIV diagnoses.
- Although the majority of persons living with HIV reside in urban areas, 14.6% live in rural parishes.

# **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 required for all pregnant women as part of their routine prenatal screening tests.

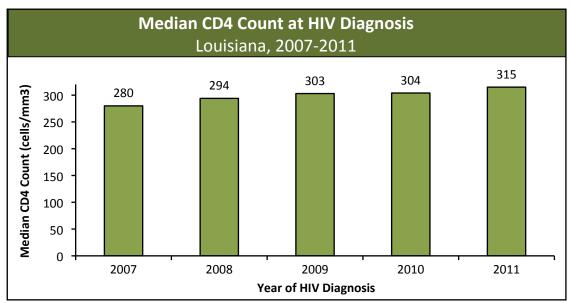
Late HIV Testing Louisiana, 2010-2011						
	1	agnosed wit		Persons Dia	agnosed wit	h HIV, 2011
	New HIV Diagnoses	AIDS at Time of Diagnosis*	AIDS Within 6 Months of Diagnosis	New HIV Diagnoses	AIDS at Time of Diagnosis*	AIDS Within 6 Months of Diagnosis
Total	1,130	24%	34%	1,282	25%	32%
Sex						
Female	325	23%	34%	374	20%	28%
Male	805	24%	34%	908	27%	34%
Race/Ethnicity						
American Indian/Alaskan Native Asian/Pacific Islander Black/African American Hispanic/Latino White	3 6 842 33 233	33% 0% 23% 36% 25%	33% 0% 34% 42% 33%	3 4 944 81 245	0% 50% 22% 25% 35%	0% 50% 30% 31% 39%
Other/Unknown/Multi-race	13	23%	23%	5	20%	20%
Age Group  0-12  13-19  20-24  25-34  35-44  45-54  55-64  65+  Transmission Category  Men who have sex with men (MSM) Injection Drug User (IDU) MSM/IDU High Risk Heterosexual (HRH) Transfusion/Hemophilia/Other	5 85 211 322 221 207 66 13 592 119 49 365 0	20% 6% 8% 20% 32% 37% 44% 62% 22% 29% 41% 23% 0%	20% 11% 18% 30% 45% 46% 53% 77% 31% 44% 45% 34% 0%	4 92 229 388 241 232 78 18 674 140 48 415 0	25% 5% 7% 20% 35% 34% 53% 56% 24% 35% 27% 21% 0%	25% 8% 13% 29% 42% 44% 59% 67% 32% 43% 31% 29% 0%
Perinatal/Pediatric Region	5	20%	20%	5	20%	20%
1-New Orleans 2-Baton Rouge 3-Houma 4-Lafayette 5-Lake Charles 6-Alexandria 7-Shreveport 8-Monroe 9-Hammond/Slidell	345 299 57 88 47 61 102 59	25% 26% 32% 17% 17% 28% 19% 20% 26%	35% 35% 40% 30% 19% 33% 31% 31% 39%	435 303 58 93 52 70 130 72 96	24% 24% 34% 25% 31% 20% 20% 24% 23%	32% 31% 45% 32% 38% 31% 26% 31%

<sup>\*</sup>If AIDS diagnosis was within 1 month of HIV diagnosis

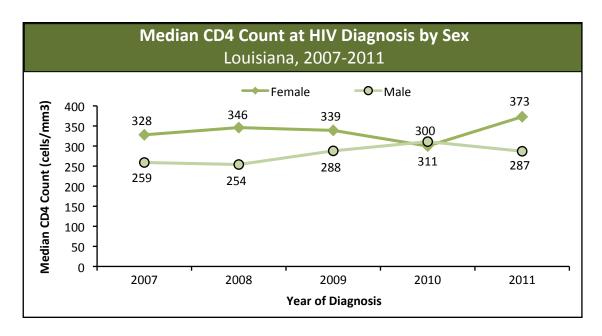
- The proportion of AIDS diagnoses within 6 months is inclusive of the proportion diagnosed with AIDS at the time of the HIV diagnosis.
- Of the 1,282 persons diagnosed with HIV in 2011, 25% had an AIDS diagnosis at the time of their initial HIV diagnosis, and an additional 7% had an AIDS diagnosis within 6 months.
- Overall, 32% of persons had an AIDS diagnosis within six months of their HIV diagnosis. This is a small improvement from 2010 when 34% of new HIV diagnoses had an AIDS diagnosis within six months. Whites, males, and persons over the age of 35 were more likely to have an AIDS diagnosis within six months.
- Injection drug users were 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 9 public health regions in Louisiana, Houma and Lake Charles had the greatest percentage of new diagnoses with AIDS at the time of HIV diagnosis, and the greatest percentages with an AIDS diagnosis within six months.

# Median CD4 Count at Time of HIV Diagnosis

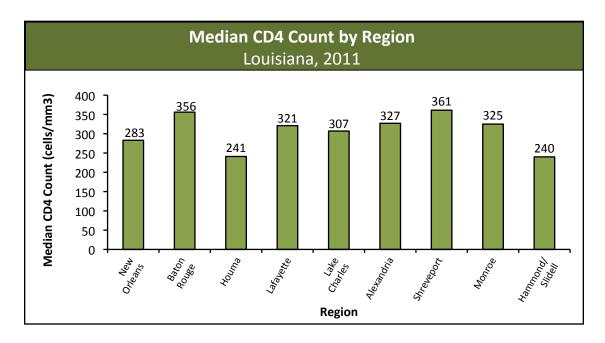
Another indication of persons being diagnosed late in their disease progression is an analysis of the CD4 count collected close to the time of a person's HIV diagnosis. T-cells are a type of white blood cell that plays an important role in a person's immune system. The human immunodeficiency virus specifically attacks and destroys a type of T-cell known as the CD4 cell. A normal CD4 count in a healthy, HIV-negative adult varies between 600-1200 CD4 cells/mm³. Because HIV attacks the CD4 cell, a count of CD4 cells is a good indicator of the progression of a person's disease. A CD4 count below 200 cells/mm³ is defined as an AIDS diagnosis. Although current treatment guidelines recommend antiretroviral therapy (ART) for all HIV-infected individuals to reduce the risk of disease progression, the recommendation is strongest for persons with a CD4 count below 350 cells/mm³.<sup>14</sup>



- In 2011, the median CD4 count for persons diagnosed with HIV in Louisiana was only 315. Although this is a significant improvement since 2007, the fact that the median is below 350, which is an indication of the need for treatment, means that people are being diagnosed late in their disease progression. <sup>15</sup> More work must be done to get people diagnosed earlier and into treatment.
- The median CD4 count increased by 13% from 2007 to 2011.



• The median CD4 count for males has improved since 2007 but decreased by 8% from 2010 to 2011. The median CD4 count for females was higher than the count for males in all years except 2010. From 2010 to 2011, the median CD4 count for females increased 24%.



• The 2011 median CD4 count varies across the nine regions in Louisiana. The Baton Rouge and Shreveport regions had the highest median CD4 counts and were the only regions with median counts above 350. The Houma and Hammond/Slidell regions had the lowest median CD4 counts in 2011.

# **Louisiana Survival Data**

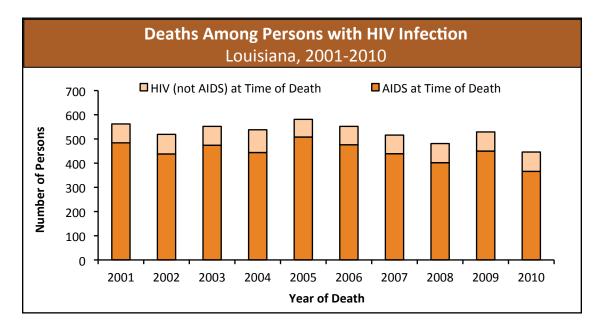
Survival data examines how long a person lives once they have received an AIDS diagnosis (more than 12, 24, or 36 months post diagnosis). The most recent surveillance report from the CDC reported survival data for the nation from 2002-2006. Below is an analysis of survival data for Louisiana in 2002-2006.

Persons Surviving More than 12, 24, and 36 Months After AIDS Diagnosis							
Louis	iana, 2002-2		ırvival in Mont	hs			
	New AIDS Diagnoses	> 12	> 24	> 36			
Total	4,295	85%	80%	75%			
Year of Diagnosis							
2002 2003 2004 2005 2006	969 892 864 804 766	85% 88% 85% 83% 87%	80% 78% 78% 80% 80%	75% 73% 73% 76% 76%			
Sex Female	1,372	85%	81%	75%			
Male	2,923	75%	80%	75%			
Race/Ethnicity Black/African American Hispanic/Latino White Other/Unknown/Multi-race	3,248 94 912 41	85% 89% 87% 76%	79% 85% 83% 71%	73% 84% 80% 63%			
Age	4.0	000/	000/	000/			
0-12 13-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64	10 79 266 474 618 742 807 590 380 180 84 65	90% 94% 92% 90% 91% 87% 85% 80% 81% 73% 67% 62%	90% 94% 87% 86% 86% 82% 80% 76% 77% 63% 61% 48%	90% 91% 83% 81% 82% 76% 75% 69% 70% 57% 55% 42%			
Imputed Transmission Category		2-21					
Men who have sex with men (MSM) Injection Drug User (IDU) MSM/IDU High Risk Heterosexual (HRH) Transfusion/Hemophilia/Other Perinatal/Pediatric	1,636 991 383 1,246 24 15	87% 79% 86% 88% 71% 93%	82% 72% 80% 83% 71% 93%	79% 63% 76% 78% 67% 93%			
Region 1-New Orleans	1,544	88%	83%	78%			
2-Baton Rouge 3-Houma 4-Lafayette 5-Lake Charles 6-Alexandria 7-Shreveport 8-Monroe 9-Hammond/Slidell	1,344 1,157 167 321 201 173 292 248 192	83% 86% 84% 88% 84% 84% 81% 88%	76% 80% 80% 83% 76% 81% 75% 84%	70% 76% 75% 80% 73% 76% 68% 81%			

- Nationally, 83% of people who received an AIDS diagnosis between 2002-2006 survived more than 36 months (3 years) past their diagnosis. In Louisiana, only 75% of persons with an AIDS diagnosis between 2002-2006 survived more than 36 months.
- In the US, males survived at the same percentage past 12 months and a slightly higher percentage past 24 and 36 months then their female counterparts; 89% of males and 89% of females survived past 12 months, 86% of males and 85% of females survived past 24 months, and 83% of males and 82% of females survived past 36 months. In Louisiana, females had the same survival percentages as males past 36 months and higher survival percentages past 12 and 24 months.
- Hispanic/Latinos had the best survival percentages in Louisiana, but the total number of diagnoses was small. Both nationally as well as locally, whites had higher survival percentages than blacks past 12 and 24 months. Nationally, whites and blacks had the same survival percentage past 36 months. Nationally, 81% of whites and 81% of blacks survived past 36 months; in Louisiana, 80% of whites and 73% of blacks survived past 36 months.
- In Louisiana, persons age 45 and older and persons with a reported history of injection drug use (IDU and MSM/IDU) had poorer survival outcomes. Nationally, injection drug users had the lowest survival rates of all transmission categories.
- Individuals in the Monroe region of Louisiana had the poorest survival outcomes of all nine public health regions (68% at >36 months); individuals from the Hammond/Slidell region had the highest survival percentage (81% at >36 months).

# 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 non-HIV related causes such as vehicle accidents, heart disease, or diabetes. The Louisiana death data described throughout this report includes all causes of death in persons living with HIV infection. The cause of death is not limited to HIV or AIDS and may be due to sepsis, cancer, accidental death, or other causes.



• In 2010, 366 persons with AIDS and 80 persons with HIV (not AIDS) died in Louisiana. From 2001-2010, deaths among persons with HIV (not AIDS) have remained relatively stable and the percentage with an AIDS diagnosis has fluctuated between 83-87%. Mortality data for 2011 are not yet complete.

# Mortality and Causes of Death among Persons with HIV Infection in Louisiana

The introduction of Highly Active Antiretroviral Therapy (HAART) after 1995 has led to lower mortality rates and improved quality of life among persons living with HIV in the US. Clinical studies have shown that appropriate HAART initiation and adherence to treatment leads to suppressed HIV viral replication, undetectable HIV viral levels, delayed onset of AIDS, and prolonged survival time. The number of deaths per year among persons with HIV in Louisiana increased steadily from the beginning of the epidemic to a peak in 1995. From 1995 to 1999, the number of deaths per year among Louisiana's HIV population decreased by approximately 50%. Since 1999, the number of deaths has stayed relatively stable. During the same time period, the total number of persons living in Louisiana with HIV per year has continually increased. Taken together, these trends suggest that the HIV population in Louisiana has been living longer than before and mortality rates have fallen due to widespread use of HAART.

Before HAART, the vast majority of deaths among persons with HIV were attributed to HIV-related causes, such as opportunistic infections and AIDS-related malignancies (such as Kaposi's sarcoma and non-Hodgkin's lymphoma). As HAART led to increased survival time and delayed onset of AIDS, an increasingly larger proportion of deaths among persons with HIV were attributed to non-HIV related causes, most often heart and cardiovascular diseases, liver disease, and kidney diseases. As a result, a smaller proportion of deaths among persons with HIV were caused by HIV-related conditions. The same data has highlighted significant disparities in mortality between races, transmission risk groups, and geographic location, despite statewide increases in access to HIV testing and treatment.

The tables below compare mortality and cause of death trends during the period before HAART introduction (1980-1996) and after HAART introduction (1999-2009).

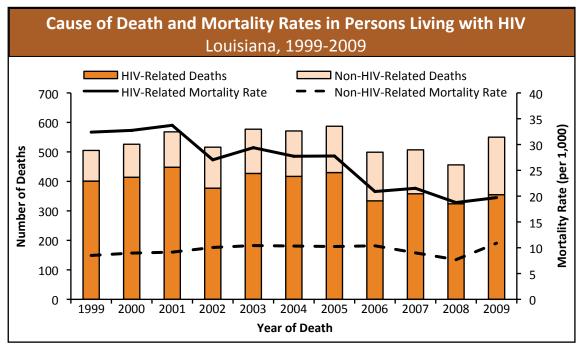
Mortality and Cause of Death Before and After Introduction of HAART						
Louisiana, 1980-1996, 1999-2009						
Pre-HAART Post-HAA (1980-1996) (1999-200						
Number of Deaths (percent of those alive)	5,816 (40%)	5,861 (25%)				
Mean Age at Death (years)	36.8	40.3				
Number of HIV-Related Deaths (percent of all deaths)	4,943 (85%)	4,285 (73%)				
Number of Non-HIV-Related Deaths (percent of all deaths)	873 (15%)	1,576 (27%)				

- The percent of deaths among persons with HIV is 15% lower between the pre-HAART period and the post-HAART period.
- The average age of persons dying with HIV is 3.5 years lower between the pre-HAART period and the post-HAART period.
- The percent of all deaths among persons with HIV that are HIV-related decreased 12% between the pre-HAART period and post-HAART period.

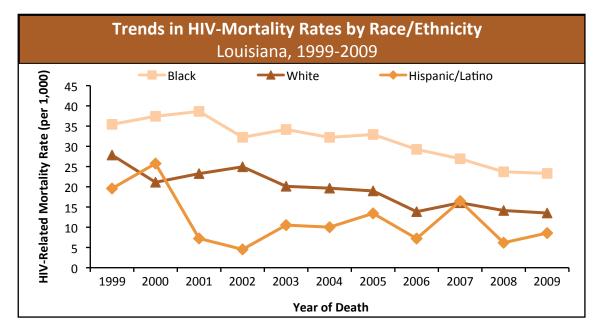
	Top Ten Causes of Death among Persons with HIV Louisiana, 1980-1996, 1999-2009								
	Pre-HAART (1980	-1996)		Post-HAART (1999	9-2009)				
		No.	% of all Deaths		No.	% of all Deaths			
	TOTAL	5,816	100%		5,861	100%			
Rank	Cause of Death			Cause of Death					
1	HIV unspecified	2,364	40.7%	HIV unspecified	1,630	27.8%			
2	Opportunistic infections	2,331	40.1%	Opportunistic infections	1,489	25.4%			
3	HIV-related malignancies	229	4.0%	Other HIV-related causes	841	14.4%			
4	Non-HIV-related malignancies	214	3.7%	Cardiovascular disease	384	6.6%			
5	Infectious diseases	202	3.5%	Non-HIV-related malignancies	337	5.8%			
6	Other non-HIV-related causes	128	2.2%	HIV-Related malignancies	232	4.0%			
7	Cardiovascular disease	101	1.7%	Other non-HIV-related causes	204	3.5%			
8	Liver diseases	70	1.2%	Accidents	155	2.7%			
9	Violence	67	1.2%	Infectious diseases	134	3.8%			
10	Accidents	44	0.8%	Substance abuse	47	3.8%			

- In Louisiana, the proportion of deaths due to opportunistic infections experienced the greatest decrease of all causes of death between the pre-HAART and post-HAART periods.
- The proportion of deaths due to cardiovascular disease almost quadrupled between the pre-HAART era and the post HAART era.

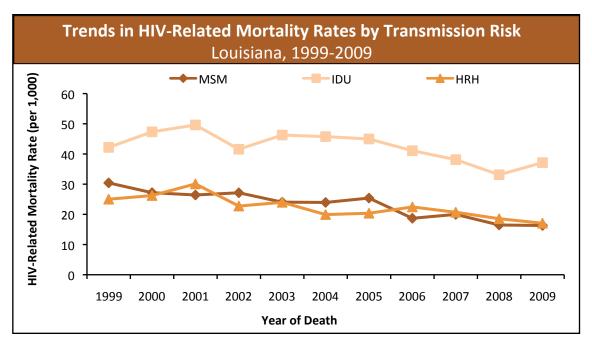
The following graph presents trends in cause of death and mortality rates among persons living with HIV from 1999 to 2009.



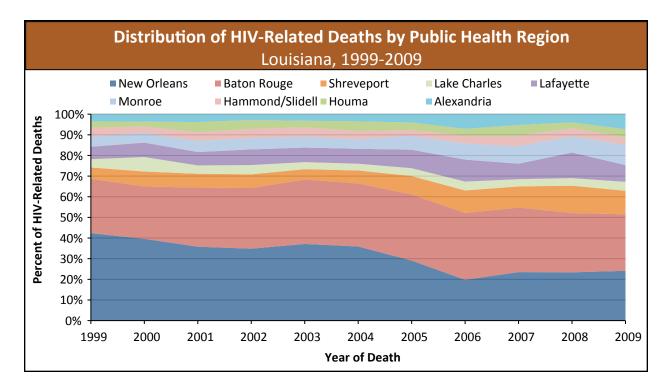
- In 1999, HIV-related deaths accounted for 79% of all deaths among persons with HIV. By 2009, deaths due to HIV-related causes accounted for 65% of all deaths occurring among persons with HIV.
- From 2001 to 2009, the HIV-related mortality rate in persons with HIV decreased 42% overall.
- In 1999, the HIV-related mortality rate was almost 4 times the non-HIV-related mortality rate in persons with HIV. In 2009, the HIV-related mortality rate was 1.8 times the non-HIV related mortality rate in persons with HIV.



- Mortality rates for both blacks and whites have decreased significantly since 1999. From 2008 to 2009, the HIV-related mortality rate in blacks with HIV was almost twice that of whites and almost three times that of Hispanic/Latinos.
- From 1999-2009, blacks with HIV consistently had a larger percentage of HIV-related deaths than whites. In 2009, 75% of blacks with HIV died from HIV-related causes whereas 49% of whites with HIV died of HIV-related causes.



- Injection drug users with HIV are at higher risk than the other transmission risk groups of dying from both HIV-related causes and non-HIV related causes. Between 1999 and 2009, IDU had an HIV-related mortality rate that was approximately twice that of both MSM and HRH. During the same period, IDU had non-HIV related mortality rates almost 3 times that of both MSM and HRH (not displayed in the above chart).
- From 1999-2009, MSM experienced the largest decrease in the proportion of HIV-related deaths compared to the other risk groups. During this period, the proportion of HIV-related deaths in MSM fell from 80% to approximately 60% overall.
- From 1999-2009, HRH have had the highest proportion of deaths that were HIV-related for most years. In 1999, almost 90% of deaths in HRH with HIV were HIV-related. In 2009, about 75% of deaths in HRH were HIV-related.



- From 1999-2009, the proportion of HIV-related deaths in Louisiana occurring in Alexandria, Shreveport, Lafayette, and Monroe increased more than in any other region.
- Historically, persons in New Orleans and Baton Rouge regions with HIV have been disproportionately
  affected by mortality. In 1999, both regions accounted for 56% of people living with HIV and 69% of all
  HIV-related deaths. By 2009, both regions accounted for 54% of all people living with HIV and 55% of all
  HIV-related deaths.
- From 2001-2009, New Orleans was disproportionately affected by non-HIV related mortality (not displayed in the above chart). In 2001, New Orleans accounted for 38% of all deaths and accounted for 48% of all non-HIV-related deaths. In 2009, New Orleans accounted for 27% of all deaths and accounted for 32% of non-HIV related deaths.
- All regions experienced declines in HIV-related mortality rates from 1999-2009 (not displayed in the above chart). Baton Rouge, New Orleans, and the Lake Charles regions experienced the greatest declines. From 1999 to 2007, Baton Rouge had the highest HIV-related mortality rates. From 2008-2009, the HIV-related mortality rate in Alexandria, Shreveport, and Monroe regions surpassed that of Baton Rouge.

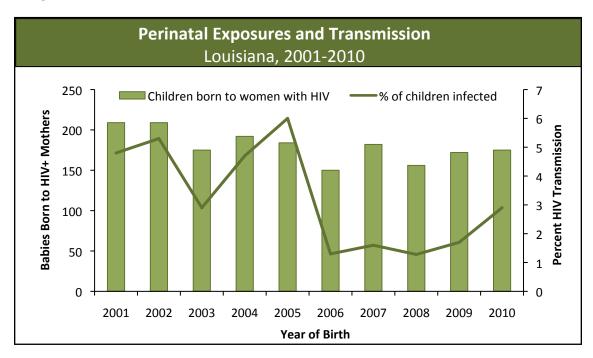
Overall, the HIV population in Louisiana has seen a significant decline in mortality due to HIV-related causes after widespread use of HAART treatment; however, significant disparities in HIV-related mortality exist regarding race, transmission risk, and region. Increased HIV testing, linkage to care, and adherence to treatment are all critical to further reducing HIV-related mortality and eliminating disparities.

## **Surveillance of Perinatal Exposure to HIV**

## **Background on Perinatal 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 are continuously updated to include additional treatment guidelines for HIV-infected pregnant women and their infants (available at: http://aidsinfo.nih.gov/ContentFiles/PerinatalGL.pdf). The CDC has published recommendations to include HIV screening as part of the routine screening panel for all pregnant women, as well as repeat testing during the third trimester in areas with high HIV incidence, which includes Louisiana. The CDC also recommends a rapid test at delivery for women without documented HIV test results. 17 Louisiana law (Louisiana RS 40:1300:13) 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 a child born to a woman whose HIV status is unknown at the time of delivery, without parental consent. In 2010, Louisiana updated Title 51 of the Louisiana Administrative Code: Public Health--Sanitary Code (available at: http://doa.louisiana.gov/osr/lac/ books.htm ) to require the explicit reporting of pregnancy in an HIV positive woman, as well as all HIV tests performed on children aged 0-6 regardless of result (positive or negative). Surveillance requires several rounds of tests to determine whether an infant is HIV positive or HIV negative. Changes to the Sanitary Code were necessary to ensure effective monitoring of all perinatal HIV transmissions.

The implementation of the USPHS guidelines in Louisiana has led to a significant decline in perinatal transmission rates, from a high of nearly 16% in 1994 to 2.9% in 2010. From 2006-2009, the transmission rate was below 2%. While this is the *2011 Louisiana STD/HIV Program Report*, perinatal cases are followed for up to two years to confirm a definitive negative status. For this reason, the data presented in this report are through 2010.



• In Louisiana in 2010, 175 infants were born to 173 women with HIV infection and five of the infants (2.9%) were infected with HIV.

The following table shows demographic information for the mothers with HIV infection who gave birth in 2010. There were two sets of twins born in 2010 and therefore, a total of 173 mothers are included below.

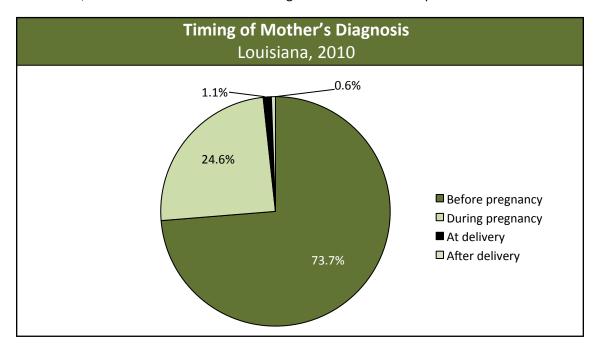
Demographics of Mothers with HIV Infection Louisiana, 2010					
	Women delivering in 2010	Percent			
Total	173	100.0%			
Race					
Black/African American	148	85.5%			
Hispanic/Latino	4	2.3%			
White	21	12.1%			
Age					
13-19	4	2.3%			
20-24	52	30.1%			
25-34	98	56.6%			
35-44	19	11.0%			
Transmission Category					
High Risk Heterosexual (HRH)	151	87.3%			
Injection Drug User (IDU)	18	10.4%			
Perinatal/Pediatric*	4	2.3%			
Delivery Type					
Elective C-Section	90	52.0%			
Vaginal	58	33.5%			
Non-Elective C-Section	22	12.7%			
Unknown C-Section	3	1.7%			
Region					
1-New Orleans	46	26.6%			
2-Baton Rouge	54	31.2%			
3-Houma	5	2.9%			
4-Lafayette	12	6.9%			
5-Lake Charles	8	4.6%			
6-Alexandria	11	6.4%			
7-Shreveport	16	9.2%			
8-Monroe	9	5.2%			
9-Hammond/Slidell	12	6.9%			

<sup>\*</sup> Perinatal transmission is not imputed.

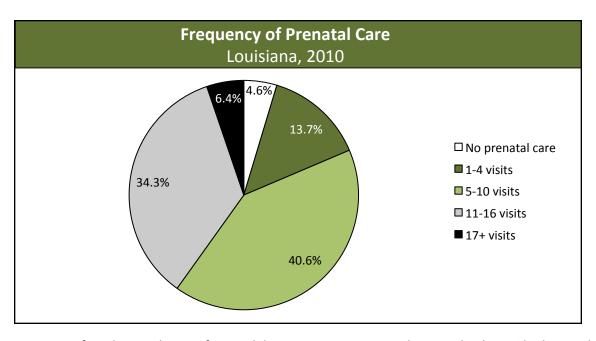
- Mothers with HIV infection were predominately black (86%) and between 20-34 years old (87%). Over 10% of the mothers with HIV infection were likely infected through injection drug use and four mothers were themselves infected through perinatal transmission.
- The American College of Obstetricians and Gynecologists (ACOG) recommends that HIV-infected pregnant
  women with plasma viral loads of >1000 copies per milliliter be counseled regarding the benefits of
  elective cesarean delivery as a method to reduce HIV transmission.<sup>18</sup> In 2010, 52% of HIV positive women
  delivered via an elective c-section and 33.5% delivered vaginally.
- In 2010, 31% of women with HIV infection who gave birth lived in the Baton Rouge region, and 27% lived in the New Orleans region.

Birth Outcomes of HIV Exposed Infants Louisiana, 2010						
Infants born in 2010 Percent						
Total	175	100.0%				
Birth Weight						
Very Low	7	4.0%				
Low	31	17.7%				
Normal	137	78.3%				
Gestational Age						
Preterm	45	25.7%				
Normal	130	74.3%				

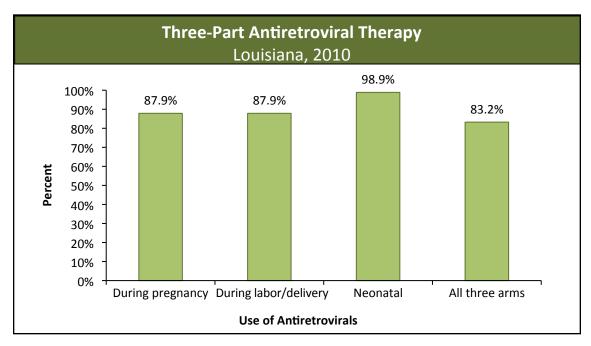
• Infants exposed to HIV had worse birth outcomes compared to state and national percentages. Among HIV exposed infants in Louisiana, 22% of infants were low or very low birth weight (<2500g), and 26% were born preterm (before 37 weeks gestational age). This is compared to all infants born in Louisiana in 2010 where 10.2% of babies were low or very low birth weight and 15.1% were born preterm. In 2010 in the United States, 8.2% of infants were low birth weight and 12% were born preterm. <sup>19</sup>



• In Louisiana, 74% of the women with HIV infection who delivered in 2010 were diagnosed with HIV prior to their delivery, and 25% were diagnosed during their pregnancy. One percent were diagnosed with HIV at the time of delivery and one mother was diagnosed after delivery. 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.

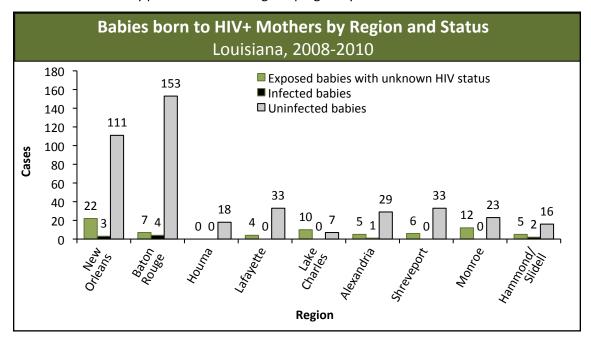


In 2010, 5% of mothers with HIV infection did not receive any prenatal care and only 41% had more than
ten visits. Lack of prenatal care is one of the factors that most significantly impacts perinatal transmission
since women who are not in prenatal care are less likely to get tested for HIV and receive antiretroviral
therapy during their pregnancy.



- Antiretroviral therapy administered to women with HIV during pregnancy, labor and delivery, and then
  to the newborn can reduce the rate of perinatal HIV transmission to 2% or less. In 2010, 88% of mothers
  received antiretroviral therapy (ARVs) during pregnancy; 88% received ARVs during labor and delivery; and
  99% of infants received prophylactic ZDV shortly after birth. Overall, 83% of mother-infant pairs received
  all three recommended components of the antiretroviral prophylaxis protocol.
- Of the five infants born in 2010 who were infected with HIV, only one of the mothers received all three
  arms of the three-arm antiretroviral therapy. Three of the mothers did not receive ARVs during pregnancy
  or labor and delivery, and one mother received ARVs during labor and delivery but not during pregnancy.
  Four of the babies received ARVs after delivery and one baby did not receive ARVs because its mother's

HIV status was unknown until after delivery. All of the mothers had less than ten prenatal visits and one mother did not have any prenatal visits during her pregnancy.



- Births to women with HIV infection occurred in every region of the state. The Baton Rouge region had the highest number of births between 2008 and 2010, but the New Orleans and Baton Rouge regions had comparable perinatal transmission rates (2.2% and 2.4% respectively).
- The Hammond/Slidell region had 2 infected babies born in this time period out of just 23 births. Both of these babies received ARVs after delivery, but only one of the mothers received all three arms of therapy while the other mother did not receive ARVs during pregnancy or labor and delivery. The Houma, Lafayette, Lake Charles, Shreveport, and Monroe regions had no cases of perinatal HIV transmission during this time period and the Alexandria Region had one infected baby.
- Fourteen percent of HIV exposed infants born during 2008-2010 continue to have an indeterminate HIV status. More work must be done to improve reporting, create better access to testing, and conduct better follow-up on infants to decrease the number of perinatal exposure cases with an indeterminate status.

#### **Fetal Infant Mortality Review (FIMR)**

Since 2009, the Louisiana STD/HIV Program along with the Louisiana Maternal and Child Health Program were funded to carry out a perinatal HIV prevention methodology, based upon the Fetal Infant Mortality Review (FIMR), in the New Orleans metro area. The FIMR/HIV Prevention Methodology is an action-oriented community process that continually assesses, monitors, and works to improve service systems and community resources for women, infants, and families. The goal of the FIMR/HIV Prevention Methodology is to improve perinatal HIV prevention systems by using the FIMR case review and community action process. The FIMR/HIV Methodology follows a five-step process for data collection, review, and community action:



The New Orleans FIMR/HIV Prevention Methodology was initiated in October 2009 and the grant was renewed in October 2010. Cases reviewed to date include all cases of perinatal HIV transmission from 2009 onward, as well as other cases with noted gaps in HIV or prenatal care. Louisiana was funded for 2011-2012 to continue the FIMR/HIV Prevention Methodology in New Orleans and to expand to review cases in Baton Rouge.

# **National HIV Behavioral Surveillance Survey**

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."<sup>20</sup> New Orleans was among the 21 US metropolitan areas conducting NHBS in 2011. This study collects data from three target populations: men who have sex with men (MSM), injection drug users (IDU), and heterosexuals living in areas at high risk for HIV/AIDS (HRH), each in discrete annual cycles. The NHBS survey instrument contains items regarding sexual behavior, substance use, and HIV testing behaviors. In 2007, anonymous HIV testing of participants was added to NHBS.

Because many of the behaviors are highly stigmatized or illegal, the populations surveyed are considered hard to reach using traditional probability-based sampling methods. Each cycle therefore utilizes specialized sampling methods for recruitment of participants in order to yield the most valid population estimates. MSM are recruited using a venue-based time-space sampling procedure, where individuals are approached within venues that are attended by MSM. Injection drug users are recruited using a modified chain referral strategy known as respondent-driven sampling (RDS) wherein a small number of known injectors are recruited and interviewed by staff and asked to recruit other injectors from within their own social network. These respondents are then subsequently interviewed and offered a similar opportunity to recruit their peers. Recruitment then continues in this fashion until a desired sample size is reached. HRH recruitment is conducted using a similar RDS procedure; however, the initial recruits or "seeds" are individuals who reside in areas that have been identified by staff as having high local rates of HIV infection and poverty.

#### **Key Findings from the New Orleans NHBS Surveys:**

#### Sexual Orientation and Disclosure

- A substantial portion of males in all three samples who identified as heterosexual were found to have been behaviorally bisexual by virtue of having had sex with both men and women. Approximately one in four men in the HRH and IDU samples had ever had sex with a man.
- Conversely, some 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 (30%) than white MSM (18%).

#### Substance Use

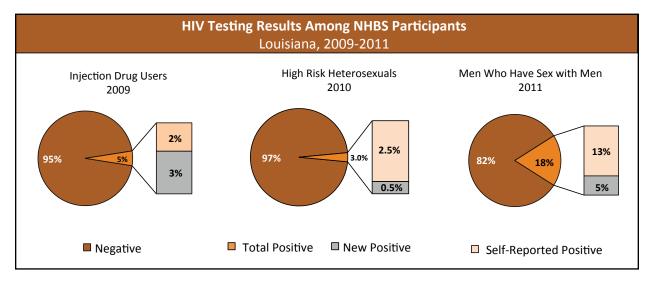
- Participants in the injection drug use cycle were most likely (87%) to also have used non-injection drugs during the previous 12 months followed by MSM (48%) and HRH (41%) participants.
- Among those who used non-injection drugs in the past 12 months, marijuana was the most commonly
  used substance in all populations: MSM (88%), HRH (80%), and IDU (74%). Crack (67%) and powdered
  cocaine (65%) were also commonly used in the IDU sample.
- Consistent with other national reports of methamphetamine use among MSM, 19% of MSM who were substance users had used methamphetamine in the past 12 months.
- Among those who injected drugs, heroin was the most commonly used injection drug among MSM (59%), HRH (73%) and IDU (77%).
- A total of 64% of IDU participants reported having shared injection equipment (cooker, works, cotton) and 41% of the IDU respondents reported sharing needles in the past 12 months.

#### **Hepatitis**

 Among those who had been told they have had hepatitis, hepatitis C was the most common diagnosis for both IDU (80%) and HRH (66%), while hepatitis B was more common (49%) than hepatitis C (33%) among MSM.

#### **Testing**

- Many MSM reported receiving their last HIV test at an HIV counseling and testing site or street outreach location (41%). IDU reported being initially tested within a hospital or emergency room setting (30%) or in a correctional facility (18%) and HRH reported being initially tested at public health clinics (15%), a hospital (13%) or a STD clinic (10%).
- IDU and HRH were significantly less likely to have been tested at a private doctor's office (5% and 6% respectively) than MSM (25%).



- Of the IDUs who were tested in 2009, 95% were negative and 5% were positive. Of the IDUs who were positive, only 40% were previously aware of their positive status.
- Of the HRHs who were tested in 2010, 97% were negative and 3% were positive. Of the HRHs who were positive, 83% were previously aware of their positive status.
- Of the MSM who were tested in 2011, 82% were negative and 18% were positive. Of the MSM who tested positive, 72% were previously aware of their positive status.
- Over 19% of the IDU participants reported having never been tested, while 20% of the HRH participants and only 7% of the MSM participants reported never being 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.

National HIV Behavioral Surveillance (NHBS) Louisiana, 2009-2011						
	Injectio Us	ction Drug High-Risk Men Who Users Heterosexuals Sex With (2009) (2010) (2011)		High-Risk Heterosexuals		th Men
Category	No.	%	No.	%	No.	%
Race/Ethnicity						
Black/African American	344	56%	538	82%	166	30%
White	229	37%	70	11%	357	65%
Other	41	7%	48	7%	30	5%
Sex						
Male	504	82%	320	49%	553	100%
Female	111	18%	336	51%	N/A	
Age						
18-24	13	2%	97	15%	132	24%
25-29	33	5%	72	11%	108	20%
30-34	59	10%	57	9%	66	12%
35-39	47	8%	46	7%	47	8%
40-44	89	14%	79	12%	47	8%
45-50	171	28%	129	20%	75	14%
51+	203	33%	176	27%	78	14%
Sexual Identity						
Heterosexual or "Straight"	540	88%	591	90%	21	4%
Homosexual, Gay, or Lesbian	11	2%	2	0%	413	75%
Bisexual	63	10%	62	9%	115	21%
Other	0	0%	0	0%	4	1%
Sex	Average	e number (	of sex part	ners in the	e past 12 r	months*
Males						
Male Partner	5.	20	3.	76	6.	09
Female Partner	9.	43	5.	69	1.26	
Females						
Male Partner	9.	38	2.	81	N	/A
Sexual Activity—Vaginal Sex	Proportio	n reporting	unprotected	d sex during	the last 12	months**
M-F	89	9%	90	)%	53	3%
F-M	90	0%	88	3%	N	/A
Injection Drug Use						
Ever Injected Drugs	613	100%	123	19%	67	12%
Injected in the Past 12 Months	613	100%	45	7%	25	5%
Shared Needle in Past 12 Months***	250	41%	27	60%	12	48%
Shared Works/Equipment in Past 12 Mos.***	392	64%	36	80%	12	48%
Non-Injection Drug Use						
In Past 12 Months	536	87%	266	41%	264	48%
Hepatitis						
Physician Diagnosed any Hepatitis	179	29%	74	11%	70	13%
Self Reported HIV Test						
Never Been Tested	116	19%	133	20%	39	7%
Negative	430	70%	461	70%	436	79%
Positive	15	2%	17	3%	71	13%
Did not return/Unknown/Other	51	8%	45	7%	7	1%

<sup>\*</sup>Among those who reported sex specific to gender \*\*Among those who reported having sex \*\*\*Among those who injected in past 12 months



# HIV Care and Services

#### Introduction to the Care and Services Unit

The Louisiana Office of Public Health STD/HIV Program (SHP) 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 medications and to a continuum of high-quality community-based supportive social services. In 2012, SHP coordinated HIV-related care, treatment and support services for 5,695 people living with HIV infection in Louisiana. SHP's Care and Services Unit receives funding from two primary sources:

- For medical and supportive service programs, SHP receives an annual grant from the Health Resources and Services Administration (HRSA) through the federal Ryan White HIV/AIDS Treatment Extension Act of 2009. Ryan White resources are available through several programs or "Parts" that are awarded to states, cities, medical providers, and community-based organizations to assist low-income individuals living with HIV disease in accessing medical care and treatment (See "What is Ryan White Funding?"). SHP's funding is awarded 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 determined primarily by a federal formula that uses data collected through SHP's Surveillance Unit.
- For housing related services, SHP receives funds from 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 HIV-infected persons living in areas of the state outside of the greater New Orleans and Baton Rouge metropolitan areas, as these cities receive direct awards of HOPWA funds. The annual State Formula HOPWA award to Louisiana is also impacted by the number of AIDS cases reported by SHP's Surveillance Unit.

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

- assistance in obtaining HIV medications;
- · payment of health insurance premiums, co-payments and deductibles;
- provision of medical and non-medical case management;
- provision of support services: medical transportation, nutritional services, oral health care services, mental health and substance use treatment services, and emergency assistance;
- short-term and tenant-based housing assistance and support of community residences.

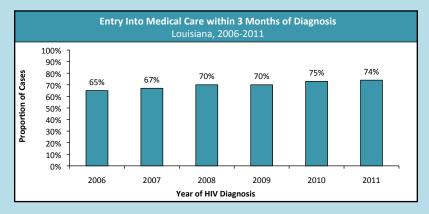
SHP's Care and Services Unit works with other programs that provide similar services with state or federal funding throughout the state in order to reduce gaps in services for clients. Specifically, SHP works closely with the state's other HRSA-funded Ryan White grantees, Louisiana Medicaid, DHH Office of Behavioral Health, the Louisiana State University (LSU) regional public medical centers, and other entities that provide services to low-income persons with HIV. These efforts are undertaken to reduce fragmentation in service delivery and to strengthen the continuum of care.

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# National HIV/AIDS Strategy Increasing Access to Care and Improving Health Outcomes for People Living with HIV

## 2015 Objectives:

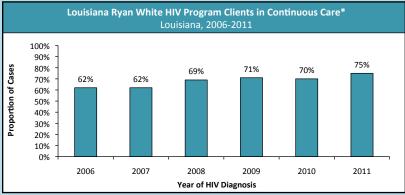
- By 2015, increase the proportion of newly diagnosed patients linked to clinical care within three months of their HIV diagnosis from 65% to 85%.
  - ° In 2011, 74% of newly-diagnosed persons entered care within 3 months, which is above the national average of 65% but below the 2015 goal of 85%.



Males, blacks and Hispanics were less likely to enter care within 3 months.

Newly Diagnosed Persons Entering Care in Three Months Louisiana, 2009-2011						
2009 2010 2011						
Sex						
Female	74%	83%	81%			
Male	68%	69%	71%			
Race/Ethnicity						
Black/African American	66%	70%	72%			
Hispanic/Latino	82%	79%	69%			
White	82%	82%	83%			

- By 2015, increase the proportion of Ryan White HIV/AIDS Program clients who are in continuous care (at least 2 visits for routine HIV medical care in 12 months at least 3 months apart) from 73% to 80%.
  - Among Ryan White clients, the percent in continuous care has increased from 62% in 2006 to 75% in 2011 but is still below the 2015 goal of 80%.



\*>=2 visits in 12 months at least 3 months apart

- By 2015, increase the number of Ryan White clients with permanent housing from 82% to 86%.
  - The Louisiana Ryan White Part B program has achieved stable housing for 90% of its clients in 2011 and 91% of its clients in 2012.

# Primary Medical Care, Medications and Support Services Coordinated through SHP: Louisiana's Ryan White "Part B" Program

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

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 three medical centers in Shreveport, Monroe, and Pineville that provide similar medical services in the northern and central part of the state. 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, 60% access care through the ten LSU regional public medical centers.

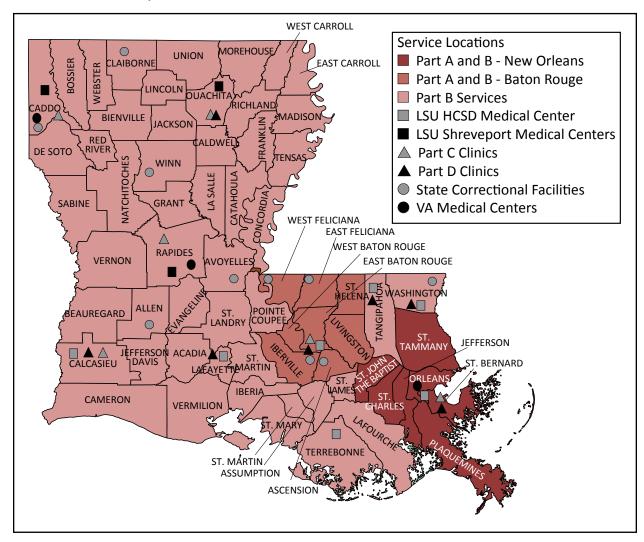
To further strengthen the public/private partnership endeavors throughout the state and generate self-sustaining revenue for regional medical centers, in 2012, the Department of Health and Hospitals made several announcements related to the integration of daily operations, facility management and human resources administration. Under the current agreements, the state would retain ownership of the LSU facilities and lease them to its non-profit partners. A list of the current partnerships are noted below:

Area	LSU Hospital (Public)	Private Hospital
New Orleans	Interim LSU Public Hospital, which will be named University Medical Center once construction is completed.	Louisiana Children's Medical Center (which runs Children's Hospital, Touro Infirmary in NOLA)
Baton Rouge	Earl K. Long	The Franciscan Ministries of Our Lady - Our Lady of the Lake Regional Medical Center
Houma	Leonard Chabert Hospital	Ochsner Health System, Terrebonne General Medical Center
Lafayette	University Medical Center	Lafayette General Medical Center
Lake Charles	Walter O. Moss Regional Medical Center	Lake Charles Memorial Hospital, West Calcasieu Cameron Hospital

In addition, primary care is provided by independent community-based outpatient clinics supported with Ryan White Part A, C, and/or D resources; nine facilities operated by the Louisiana Department of Public Safety and Corrections; and three Veterans Affairs Medical Centers (see map on following page). It is important to note that the Ryan White funding available to support HIV primary medical care in Louisiana is very limited when compared to federal reimbursements from Medicaid and Medicare.

SHP's Care and Services Unit works very closely with medical providers throughout the state to help connect these systems of care 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 and supportive services in their local area.

# Ryan White Coverage and Service Locations, Louisiana As of December 31, 2012



## **Managing HIV Disease: Resources for HIV Primary Care Providers**

HIV is a complicated disease to manage – for both 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 current treatment information to practitioners.

(http://aidsinfo.nih.gov/guidelines)

The federal Ryan White HIV/AIDS Program Part F component also 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)

#### What is Ryan White Funding?

The Ryan White HIV/AIDS Program was first authorized by federal legislation in 1990 and was funded at \$2.3 billion in 2011. The program is for those who do not have sufficient health care coverage or financial resources for coping with HIV disease. 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 cities, states, and local community-based organizations to provide HIV-related services to more than half a million people each year, 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 formula-driven Base award, ADAP earmark, and ADAP supplemental allocation, as well as a competitive Part B supplemental grant. These annual awards are made directly to the state of Louisiana and are administered through SHP.

- 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.
  Eight 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 Healthcare for Women, Infants, Children, and Youth
  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 which are 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 received funding through SPNS in 2011 (OLOL, Metro Health, and Policy and Research Group (PRG)).
- 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.
- Dental Programs

Provides funding for oral health care services 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.

Minority AIDS Initiative (MAI)
 Provides funding to evaluate and address the disproportionate impact of HIV on African Americans and other minorities. In Louisiana, MAI funding is allocated annually to the Part A grantee (New Orleans), the TGA (Baton Rouge) and Part B (SHP).

#### **Assistance Obtaining HIV Medications**

What does SHP do? In 2012, SHP contracted with the 10 LSU regional public medical center pharmacies to

provide HIV-related formulary medications to qualifying clients. SHP also contracted with a single community-based provider to screen eligible clients for enrollment into the Health Insurance Program (HIP) for the payment of monthly insurance premiums and all related cost shares (co-payments and deductibles). These policies included

pharmacy benefits.

*Area covered:* Statewide

The Louisiana AIDS Drug Assistance Program (LA ADAP) helps ensure that eligible low-income clients can access specific FDA-approved HIV medications. These pharmaceutical interventions have been proven to slow disease progression, reduce the risk of HIV transmission, 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 apply to the program through private providers, the ten LSU regional public medical centers, and medical case management service providers. The Louisiana ADAP currently has 63 FDA-approved medications supported by the formulary.

SHP's Ryan White Part B program also supports comprehensive health insurance services to assist eligible clients maintain or obtain health insurance coverage. These services are provided through the Louisiana Health Insurance Program (HIP). Clients access these services by applying directly to the entity that administers the program or through the local agency that provides HIV medical case management services. In 2012, SHP expended nearly \$8,600,000 to provide insurance premium assistance and cost share assistance (i.e., co-payments or payments toward a deductible requirement) to 2,267 persons. Without this resource, the cost of their comprehensive HIV care would have been absorbed by other federal and state resources.

#### 2012: Continued Challenges for the Louisiana ADAP (LA ADAP) Program

As has been noted in previous editions of this report, the LA ADAP has been managing an "Unmet Need" list for all individuals newly eligible for LA ADAP after June 1, 2010 who have not been able to access ADAP because of the capped enrollment. All persons on this "Unmet Need" list have been referred to Patient Assistance Programs (PAPs) administered by pharmaceutical manufacturers. While maintained on the "Unmet Need" list, these individuals are using the PAPs as their primary source of no-cost or low cost HIV-related medications for the duration of capped enrollment to LA ADAP.

During 2010, 2011 and 2012, SHP staff has diligently received referrals to the "Unmet Need" list from all regions of the state. As new federal resources have been received from HRSA due to the documented unmet need for ADAP medications for eligible low income HIV-infected persons (\$3 million in August 2011 and \$3.5 million in August 2012), as additional rebates from pharmaceutical manufacturers have been sought and received, and as slots open up through routine attrition, individuals have been removed from the Unmet Need list and re-screened for enrollment into LA ADAP. At the end of December 2012, 3,158 individuals had been referred to the Unmet Need list since June 1, 2010. Of those, 1,304 have been enrolled into LA ADAP as resources and slots became available. A vast majority (1,671) of the remainder were no longer eligible for LA ADAP services because they had qualified for another payer source (primarily Medicaid or Medicare), had moved out of state, had become incarcerated, or were no longer taking HIV-related medications covered by the LA ADAP formulary.

# Persons Accessing Medication Through ADAP Insured and ADAP Uninsured Client Programs Louisiana, 2011 & 2012

	2011				2012			
	Persons Utilizing ADAP Uninsured Drug Services	Percent	Persons Utilizing ADAP Insured Drug Services	Percent	Persons Utilizing ADAP Uninsured Drug Services	Percent	Persons Utilizing ADAP Insured Drug Services	Percent
Louisiana	2,491*	100.0%	918**	100.0%	2,700*	100.0%	1,800**	100.0%
1-New Orleans	984	39.5%	2	0.2%	1,031	38.2%	628	34.9%
2-Baton Rouge	639	25.7%	387	42.2%	669	24.8%	447	24.8%
3-Houma	70	2.8%	29	3.2%	87	3.2%	64	3.6%
4-Lafayette	205	8.2%	107	11.7%	222	8.2%	141	7.8%
5-Lake Charles	149	6.0%	80	8.7%	181	6.7%	105	5.8%
6-Alexandria	98	3.9%	37	4.0%	109	4.0%	52	2.9%
7-Shreveport	154	6.2%	107	11.7%	174	6.4%	117	6.5%
8-Monroe	135	5.4%	89	9.7%	157	5.8%	108	6.0%
9-Hammond/Slidell	86	3.5%	80	8.7%	103	3.8%	138	7.7%

<sup>\*</sup> Region by dispenser, not client address

- Almost 65% of the uninsured ADAP clients reside in the New Orleans and Baton Rouge regions for both 2011 and 2012.
- Based on a policy change implemented on January 1, 2012 that allowed Ryan White Part B to cover related
  cost shares for PLWH residing in Region 1, the New Orleans Region had a significant increase in the number
  of insured ADAP clients from 2011 to 2012.

# Who pays for HIV care and treatment in the U.S.?

According to the *Kaiser Family Foundation*, the major payer sources in 2011 for HIV-related care and treatment, including medications, were private insurance and federal funding sources such as Medicaid (\$5.1 billion, or 36% of the federal share), Medicare (\$5.4 billion, or 38% of the federal share), the Ryan White HIV/AIDS Program (\$2.3 billion, or 16% of the federal share) and Other sources (such as the Veterans Administration) at \$1.3 billion (9% overall).

The main components of the federal Ryan White HIV/AIDS Program that pay for medications are the AIDS Drug Assistance Program (ADAP), programs to purchase commercial and public insurance assistance 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 do not have a third party payer source—although eligibility criteria and formulary medications vary from state to state.

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

<sup>\*\*</sup> Region by client address

# **Provision of Medical Case Management and Support Services**

What does SHP do? Contracts with community-based agencies to provide medical and non-medical case

management and other critical supportive services to assist people living with HIV

access medical care.

Area covered: Statewide, but excludes the New Orleans and Baton Rouge areas where Ryan White

resources for similar services are awarded to these cities directly by HRSA.

Medical and non-medical case management is a service that helps eligible clients navigate HIV medical care systems and access other support resources. Case managers help clients access supportive services through federal, state, and local community-based programs. When available, Ryan White Part B funding may be utilized when there are no other resources to pay for oral health care services, transportation to medical appointments, mental health and substance use treatment services, emergency assistance payments and nutritional services.

- Of those persons known to be living with HIV infection outside of the Baton Rouge and New Orleans metropolitan areas, 2,069 persons received medical case management in 2011 and 1,874 received medical case management in 2012 supported by Ryan White Part B resources.
- In addition, 1,733 people received non-medical case management in 2011 and 1,687 people received non-medical case management in 2012.

#### Measuring the Service Needs of Persons Living with HIV

The 2011 Needs Assessment was designed to gain a greater understanding of the current care service needs of low income persons residing in the New Orleans EMA and Regions 3 - 9, estimate the Unmet Need in primary medical care and HIV-related support services, and illuminate barriers to clients accessing and receiving those services. Similar to the 2008 Needs Assessment, the 2011 Needs Assessment consisted of a facility-based survey to consumers of HIV services using a self-administered instrument in both English and Spanish in the New Orleans EMA, and Regions 3 through 9. Peer coordinators were used to assist consumers in completing the survey instrument and to coordinate the return of completed surveys.

The 2011 survey instrument is a revised and adapted version of the 2008 Needs Assessment. Revisions to the instrument were made by SHP, with input from the New Orleans Regional AIDS Planning Council (NORAPC) and consumers. The instrument covers eight domains: general information; employment and income; medical care; housing; incarceration; mental health services; substance use services; and, supportive services. The full report of the results and notable findings is at http://dhh.louisiana.gov/hiv.

Efforts are already underway to revise the consumer survey instrument and implement a Needs Assessment in 2013. Unlike the survey implementation in 2011, the 2013 Needs Assessment will truly be statewide; thus, the results should be comparable between and among the Part B grantee and the two Part A grantees. In a time of scarce federal, State and local resources and a rapidly changing healthcare landscape, the results will be invaluable as a planning resource.

# Housing and Housing-Related Services: Louisiana's Formula Housing Opportunities for Persons with AIDS Program

SHP 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 ensure stable housing for people living with HIV to prevent homelessness.

SHP's HOPWA services are available to eligible clients (those living at or below 80% of the Area Median Income or AMI) living outside of the New Orleans and Baton Rouge metropolitan statistical areas (MSAs). Similar services are available in those areas through HOPWA resources that are awarded directly to those city governments. SHP's main HOPWA services include:

- Short-term rent, mortgage, and/or utility payments to support eligible clients in their current housing;
- Tenant-based rental subsidies to maintain long-term housing;
- Operating costs and supportive services for residential facilities that are providing comprehensive housing services to persons with HIV;
- Permanent Housing Placement Services that help to pay rent and utility deposits and some moving expenses; and
- Identification of other housing resources within a community.

The federal HOPWA administration has set a goal for 2010 and beyond that 80% of all persons served through the State Formula HOPWA will be stably housed by the end of that program year. Currently, SHP estimates that Louisiana's State Formula HOPWA program has achieved stable housing for 91% of individuals served by the program. In 2011, there were 724 persons living with HIV infection who received housing services through State Formula HOPWA and an additional 541 family members who benefited from this assistance, for a total of 1,265 unduplicated individuals.

- Of the 724 HIV-infected clients who received housing services in 2011:
  - 7 were Veterans
  - 17 met the HUD definition of being chronically homeless
  - ° The vast majority (85%) had an income at or below 50% of the median income for their parish of residence
- Of the 1,265 beneficiaries of HOPWA-funded services in 2011:
  - ° 54% were male and 46% were female
  - ° 72% identified themselves as black/African American
  - ° 33% were dependent minors under the age of 18, 38% were persons between the age of 31-50, and 18% 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. Additionally, 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 qualifying cities that are 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:

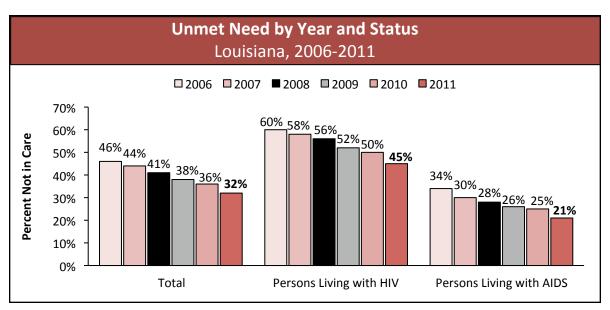
- identify new housing options;
- pay rent, mortgage, and utilities in specific circumstances;
- support the operating costs of housing programs for persons living with HIV;
- provide supportive services that maintain persons in housing; and
- support the acquisition, rehabilitation, and development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

#### 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 a set geographic area who know their HIV status but have not accessed HIV-related primary medical care in a 12-month period, as measured by lack of evidence of a CD4 or viral load (VL) test result in the last 12 months. Please note, this is different than the "Unmet Need" list maintained by Louisiana ADAP between June 1, 2010 and February 28, 2013.

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 Extension Act of 2009. 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 medical transportation.

In Louisiana, SHP's Surveillance Unit manages and calculates the data needed to estimate unmet need for the state's Ryan White grantees. Persons who had at least one CD4 or VL test within a 12-month period are considered to have been "in care" during that year. Persons who did not are considered "out of care," and are deemed as having an "unmet need" for care and treatment. 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 SHP's Surveillance Unit can be used to assess whether a person is in care or not in care during a specified time period.



- The overall percentage of persons with unmet need has steadily decreased since 2006 to 32% of all persons living with HIV infection in 2011.
- 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, 2011 2011 **Percent Not Percent in Care** in Care (Unmet Need) Overall 68% 32% Persons living with HIV 55% 45% Persons living with AIDS 79% 21% Sex Female 72% 28% Male 66% 34% Race/Ethnicity Black/African American 68% 32% Hispanic/Latino 47% 53% White 71% 29% Age Group 0-12 81% 19% 13-24 68% 32% 25-44 66% 34% 45-64 70% 30% 65+ 65% 35% Region 1-New Orleans 67% 33% 2-Baton Rouge 73% 27% 75% 25% 3-Houma 4-Lafayette 67% 33% 5-Lake Charles 58% 42% 6-Alexandria 63% 37% 7-Shreveport 62% 38% 8-Monroe 66% 34% 9-Hammond/Slidell 71% 29%

- Of persons living with HIV infection in 2011, only 68% had at least one primary medical care visit during the year.<sup>21</sup> Persons living with AIDS were more likely to have a medical visit (79%) compared to persons living with HIV (non-AIDS) (55%).
- Females, non-Hispanics, and persons under the age of 13 were also more likely to be receiving medical care.
- Persons residing in the Baton Rouge, Houma and Hammond/Slidell regions were most likely to be in care, while persons in the Lake Charles, Shreveport and Alexandria areas were least likely to be in care.

Case management and supportive services provided to eligible clients through Ryan White and HOPWA resources are critical in linking HIV-positive persons to medical care and helping them access HIV-related care routinely. A very high percentage of clients who received Ryan White services in 2011 were successfully maintained in care during the program year.

Ryan White Part B Clients in Care Louisiana, 2011							
Total Client Number Number in Care * In Care %							
All Part B Clients**	5,450	5,028	92%				
Health Insurance Program (HIP)	1,348	1,272	94%				
AIDS Drug Assistance Program (ADAP)	2,489	2,385	96%				
State Corrections Program	223	199	89%				
Other Part B Program	2,739	2,469	90%				

<sup>\*</sup>had a CD4 and/or viral load in 2011

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 SHP monitors lab reporting carefully and updates out of state information and vital
status, this information is not complete.

### Special Projects of Public Health Significance (SPNS)

Systems Linkages and Access to Care for Populations at High Risk of HIV Infection

Louisiana is one of seven states to be the recipient of a Ryan White Part F Special Projects of National Significance (SPNS) grant award for Systems Linkages and Access to Care for Populations at High Risk of HIV Infection. This grant initiative period is four years, 2011-2014, with the first two years devoted to pilot testing proposed interventions through a collaborative learning model and the last two years focused on expanding the interventions and conducting a local and national cross-site evaluation.

For this SPNS initiative, Louisiana is focusing on creating linkages within two systems with hard to reach or otherwise at risk populations: the corrections setting and the health care setting. The SPNS interventions for the correctional setting include HIV testing at the East Baton Rouge parish jail, and facilitating linkage services to HIV positive offenders housed in four Louisiana Department of Corrections facilities in the Baton Rouge area and East Baton Rouge parish jail, by conducting video conferencing sessions between HIV positive offenders and case managers at Ryan White agencies across the state.

The SPNS intervention for the healthcare setting is targeting HIV positive persons who have fallen out of care. Under a previous SPNS project, the Louisiana State University Health Sciences Center, in conjunction with OPH, developed the Louisiana Public Health Information Exchange or LaPHIE. LaPHIE is a secure bi-directional electronic information exchange between the Louisiana State University's hospital system and OPH. The purpose of LaPHIE is to improve the timeliness of disease reporting and access to care and treatment for persons with HIV, syphilis, and tuberculosis. LaPHIE matches LSU's patient records with SHP's surveillance and treatment records to identify persons who are out of care. When a patient is matched, a clinical message is posted in the patient's electronic medical record prompting the medical provider to take recommended actions. Under the SPNS Systems Linkages Project, LaPHIE will be expanded to Our Lady of the Lake Regional Medical Center's emergency room in Baton Rouge.

<sup>\*\*</sup>Note: Ryan White Part B clients may have received services in more than one program

#### Care and Services Challenges and Accomplishments

AIDS Drug Assistance Program: Without a doubt, the most significant challenge faced by the Louisiana Ryan White Part B Program in 2010, 2011 and 2012 was the projected shortfall of funding for LA ADAP, resulting in capped enrollment starting June 1, 2010. However, after securing additional federal resources through HRSA and additional private resources through pharmaceutical rebates, the STD/HIV Program was pleased to announce that as of February 28, 2013, the LA ADAP Unmet Need list has closed and open enrollment for ADAP medications has begun again statewide.

Changes in State and federal health care systems: During 2011 and 2012, massive changes in coverage options and service delivery infrastructure have made systems navigation confusing for medical and community-based providers, as well as for persons living with HIV. Louisiana Medicaid launched a managed care model of service in 2012 (Bayou Health) for nearly 2/3 of all Medicaid recipients, while the public LSU Medical Center system began the process of implementing the public/private partnerships in 2012 that were referenced earlier in this report. Simultaneous changes at the federal level included the availability of insurance coverage for persons living with HIV through the Pre-existing Condition Insurance Plan (PCIP), discussions about how and when to implement the local Health Insurance Market (HIM) and a local debate on whether or not to expand Medicaid coverage in accordance with the Patient Protection and Affordable Care Act.



# **HIV Prevention**

#### Introduction to HIV Prevention

The Louisiana Office of Public Health STD/HIV Program (SHP) Prevention Unit is responsible for behavioral interventions, educational activities and HIV testing/screening services that are focused on reducing the spread of HIV in the state. The program is primarily supported with funding from the National Centers for Disease Control and Prevention (CDC). The Prevention Unit is also charged with STD prevention activities discussed in the STD Prevention and Services chapter of this report.

Since the onset of the HIV epidemic during the early 1980s, targeted populations and interventions for reducing the spread of HIV have changed in response to shifts in the epidemic. HIV prevention is not a stagnant set of activities. Instead, HIV prevention has and will continue to change throughout the epidemic. SHP's HIV prevention activities currently focus on several areas:

- working with HIV-positive individuals to support and nourish their overall health and well-being, as well as empowering them to prevent the transmission of HIV;
- reducing stigma and understanding the impact it has on prevention efforts and those impacted by HIV;
- conducting recruitment/outreach in priority neighborhoods as a means to locate high risk individuals and connect them to prevention services;
- · implementing evidence-based, high impact interventions; and
- providing a continuum of interconnected prevention programs and services rather than isolated programs, and addressing the range of issues that put individuals at risk of becoming infected with HIV or transmitting HIV, such as mental health issues, substance abuse, partner violence, unemployment, poverty, homelessness and other social and health issues (social determinants of health).

In accordance with the National HIV/AIDS Strategy, the Prevention Unit will focus efforts to:

- intensify HIV prevention efforts in communities where HIV is most heavily concentrated;
- expand targeted efforts to prevent HIV infection using a combination of effective, evidence-based approaches; and
- educate persons in Louisiana about the threat of HIV and how to prevent it.

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HIV prevention activities are focused on conducting or coordinating the following activities:

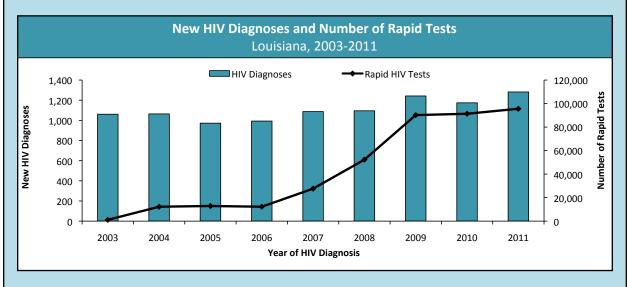
- HIV counseling, testing, referral and linkage services (CTRLS)
- recruitment of high-risk individuals
- condom availability
- programs working with HIV-positive individuals (prevention with positives)
- dissemination of HIV educational materials
- training and technical assistance on prevention interventions
- a statewide toll-free information line, "Infoline," for HIV, STD, hepatitis, and TB-related information and referrals (1-800-99-AIDS-9)
- a website with population specific information, local resources and referrals www.HIV411.org
- a statewide, integrated planning process that includes statewide and metropolitan Ryan White jurisdictions, as well as all CDC funded HIV prevention organizations in the state
- HIV awareness raising, stigma reducing events/activities
- integrated prevention services (i.e., LA Wellness Center Project)
- process and outcome evaluation of prevention programs to ensure their effectiveness

## National HIV/AIDS Strategy Reduce New Infections

#### 2015 Objectives:

- Lower the annual number of new infections by 25%.
- Reduce the HIV transmission rate by 30%.
- Increase from 70%-90% the percentage of people living with HIV who know their serostatus.

In 2007, there was a large expansion of HIV rapid testing, particularly in emergency departments and correctional facilities. The CDC estimates that 18.1% of people who are infected with HIV are unaware of their status. Applying this percentage to the approximately 17,735 persons known to be living with HIV in Louisiana at the end of 2011, there are an estimated 3,920 persons either unaware of their status or undiagnosed living in Louisiana. Continued support of expanded rapid testing will increase the number of HIV diagnoses and decrease the number of people living with HIV who are unaware of their status.



National HIV/AIDS Strategy (www.thewhitehouse.gov)

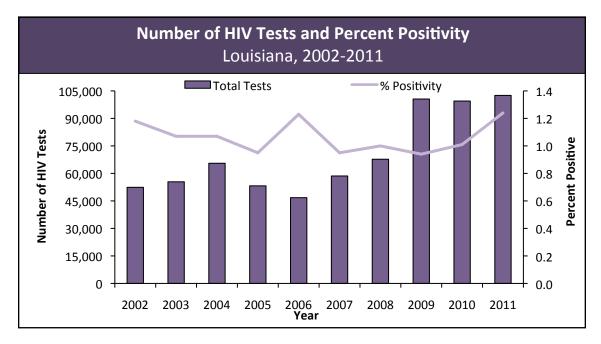
#### HIV Counseling, Testing, Referral and Linkage Services

What does SHP do? Ensures access to no-cost HIV testing

*Area covered:* Statewide

SHP supports HIV testing through contracts with CBOs and through partnerships with parish health units (STD, family planning, TB, and prenatal clinics), hospital emergency departments, correctional facilities, substance abuse treatment programs, Federally Qualified Health Centers (FQHCs), and school-based health clinics. Persons who test positive are provided prevention counseling, referral and linkage to care services (CTRLS) to connect them to medical care and other support services.

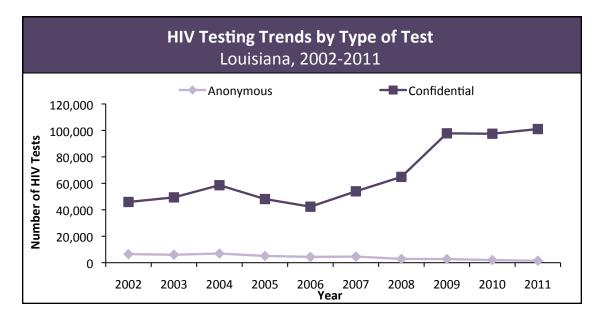
The graph below illustrates the number of HIV tests conducted through SHP's HIV CTRLS program. In 2011, there were a total of 102,539 HIV tests conducted, of which 1,272 tests (1.2%) were positive.



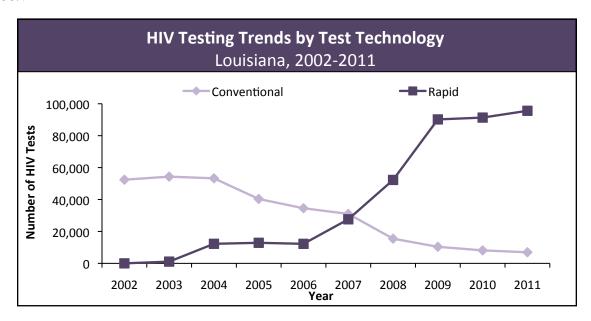
• Between 2002 and 2011, the number of HIV tests conducted has increased significantly, from a low of 46,769 tests in 2006 following testing disruption due to Hurricane Katrina, to a high of 102,539 tests in 2011. Over the past ten years, the percent positivity rate has fluctuated around 1.0% with a peak of 1.2% in 2006 and 2011.

In Louisiana, both 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 appropriate testing site personnel and appropriate
  SHP staff. Confidential testing is encouraged, as it facilitates entry into care for HIV-positive persons and
  allows for more accurate monitoring of the testing program, as well as patterns in risk behaviors reported
  by patients/clients.
- 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 2002. From 2002 to 2011, the percentage of all tests that were confidential increased from 86% to 98%.



• In October 2007, Louisiana began an HIV testing initiative with the main goal of increasing the number of African Americans who are tested. Through this initiative, the use of rapid HIV tests and the locations where these tests were available was significantly expanded. The rapid HIV test allows individuals to receive their results in 10-20 minutes (depending on the device used and testing protocol at the site) and can easily be done at different testing locations that lack laboratory facilities required for conventional tests. In 2003, when rapid HIV testing began in Louisiana, 2% of the total tests were rapid and by 2011, 93% of the total tests were rapid tests.

The table below provides the characteristics of those receiving a SHP-funded HIV test in 2011.

HIV Tests by Characteristic Louisiana, 2011							
	Total Number Of Tests (% of Tests)	Number of Positive Results	% Positivity Total Positives	Number of New Positives	% Positivity Total Positives		
Total	102,539	1,272	1.2%	565	0.6%		
Gender							
Female	48,783 (48.0%)	266	0.5%	116	0.2%		
Male	52,758 (51.9%)	997	1.9%	443	0.8%		
Transgender - M to F	116 (0.1%)	9	7.8%	6	5.2%		
Transgender - F to M	5 (0.0%)	0	0.0%	0	0.0%		
No Gender Specified	877	0	0.0%	0	0.0%		
Race/Ethnicity							
American Indian/Alaska Native	129 (0.1%)	2	1.6%	1	0.8%		
Asian/Pacific Islander	712 (0.7%)	0	0.0%	0	0.0%		
Black/African American	68,370 (71.3%)	1,063	1.6%	441	0.6%		
Hispanic	2,035 (2.1%)	43	2.1%	30	1.5%		
White	24,542 (25.6%)	161	0.7%	91	0.4%		
Multi-race	105 (0.1%)	2	1.9%	2	1.9%		
No Race/Ethnicity Specified	6,646	1	0.0%	0	0.0%		
Age Group							
13-19	10,324 (10.7%)	40	0.4%	27	0.3%		
20-29	42,551 (44.1%)	442	1.0%	246	0.6%		
30-39	20,573 (21.3%)	355	1.7%	137	0.7%		
40-49	12,363 (12.8%)	279	2.2%	97	0.8%		
50+	10,690 (11.1%)	156	1.5%	58	0.5%		
No Age Specified	6,038	0	0.0%	0	0.0%		
Transmission Category							
Men Who Have Sex with Men (MSM)	4,311 (9.0%)	487	11.3%	283	6.6%		
Heterosexual	42,649 (88.8%)	243	0.6%	99	0.2%		
Heterosexual/Injection Drug User (IDU)	949 (2.0%)	120	12.6%	21	2.2%		
MSM/IDU	106 (0.2%)	61	57.5%	9	8.5%		
No Risk Specified	16,698	361	2.2%	153	0.9%		
Risk Information Not Reported	37,826						

- Overall, 1,272 tests were positive in 2011; however, only 562 tests were new positives (i.e., persons who had not been previously diagnosed with HIV). The percent positivity for new positives in 2011 was 0.6%
- Of the tests with reported gender, males accounted for 52% of the total tests while accounting for 70% of total persons living with HIV infection and 71% of total new diagnoses.
- Of the tests with a reported race, blacks accounted for 71% of total tests, compared to 68% of total persons living with HIV infection and 75% of total new diagnoses in 2011.
- Over 50% of all tests did not have a reported risk. Of the 48,015 tests that were reported with a risk, MSM accounted for only 9% of the tests while accounting for 46% of total persons living with HIV and 52% of total new diagnoses; heterosexuals accounted for 89% of the tests that had a risk, while accounting for only 30% of total persons living with HIV and 32% of new diagnoses. More work must be done to test a greater percentage of males and specifically MSM; however, risk information is not collected at emergency departments or correctional facilities, so the true number of MSM tested is greater than the number reported here.

- Males had a higher positivity rate than females, and male-to-female transgender persons and MSM and MSM/IDUs had the highest percent positivity among both total positives and new positives.
- Parish Health Units, which include STD clinics, family planning/reproductive health clinics, and TB clinics, accounted for 44% of all of the HIV tests and 22% of all positive tests in 2011.

HIV Tests by Characteristic Louisiana, 2011								
	Total Number Of Tests (% of Tests)	Number of Positive Results	% Positivity Total Positives	Number of New Positives	% Positivity Total Positives			
Total	102,539	1,272	1.2%	565	0.6%			
Testing Site Type								
Community Based Organizations	15,170 (14.8%)	264	1.7%	176	1.2%			
Community Health Clinics	1,054 (1.0%)	24	2.3%	12	1.1%			
Emergency Departments	19,312 (18.8%)	260	1.3%	140	0.7%			
Parish Health Units	44,763 (43.7%)	285	0.6%	172	0.4%			
Prisons/Parish Jails	19,430 (18.9%)	435	2.2%	61	0.3%			
School/University	1,278 (1.2%)	0	0.0%	0	0.0%			
State Drug Treatment Programs	1,532 (1.5%)	4	0.3%	4	0.3%			
Region								
1-New Orleans	44,066 (43.0%)	734	1.7%	247	0.6%			
2-Baton Rouge	16,786 (16.4%)	241	1.4%	118	0.7%			
3-Houma	2,241 (2.2%)	19	0.8%	14	0.6%			
4-Lafayette	9,577 (9.3%)	59	0.6%	31	0.3%			
5-Lake Charles	5,944 (5.8%)	40	0.7%	27	0.5%			
6-Alexandria	3,345 (3.3%)	19	0.6%	14	0.4%			
7-Shreveport	8,417 (8.2%)	80	1.0%	54	0.6%			
8-Monroe	6,938 (6.8%)	46	0.7%	37	0.5%			
9-Hammond/Slidell	5,225 (5.1%)	34	0.7%	23	0.4%			

- Prisons/Parish jails accounted for 19% of the total HIV tests and had the largest number (435) of positive results.
- CBOs, community health clinics, and emergency departments were among the testing sites with the highest percent of new positives in 2011.
- The New Orleans region conducted the greatest number of tests and had the highest positivity rate (1.7%) of all nine public health regions. The Baton Rouge region conducted the second highest number of HIV tests and had the second highest positivity rate (1.4%) and the highest rate of new positives (0.7%).

### 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 SHP'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, without the mother's consent.
- 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 SHP'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.

#### Partner Services (PS)

What does SHP 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 anonymously inform partners of possible exposure to HIV and offer testing and referral to services.

Area covered: Statewide

Partner Services (PS) is a high priority intervention in the CDC HIV Strategic Plan. PS 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. PS provides an important opportunity to link HIV-positive individuals to care and case management, if needed. PS also reaches persons not receiving HIV CTRLS in other venues and provides HIV prevention education for both high-risk negative and HIV-positive individuals. Persons who test positive for syphilis are also contacted through PS as detailed in the STD Prevention and Services Chapter.

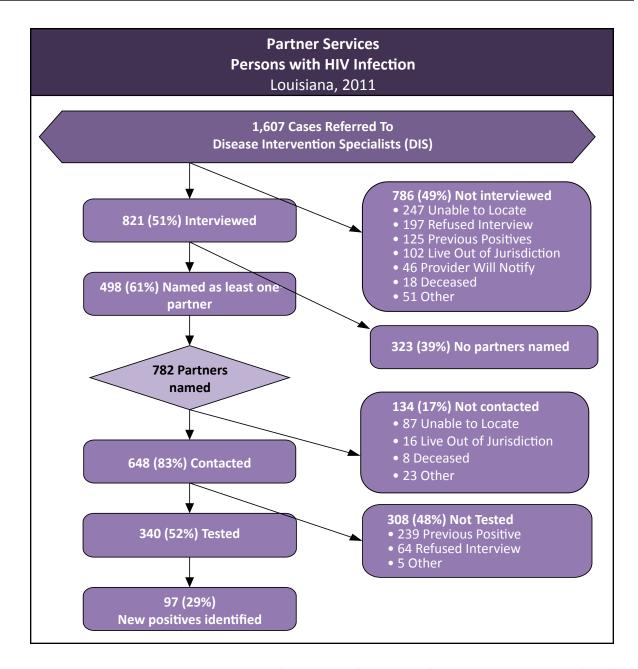
SHP maintains a cohesive, working relationship with CBOs, hospitals, and other health care providers to ensure all individuals newly diagnosed with HIV are offered PS, provided by trained Disease Intervention Specialists (DIS). Individual cases are assigned to a DIS, who is then responsible for offering PS following CDC standards and guidelines, as well as Louisiana's Sanitary Code.

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

- <u>OPH/DIS referral</u> DIS notifies partners and refers them for testing without revealing the original patient's identity. This is the most frequently used option and the preferred option.
- <u>Client referral</u> 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, it is not preferable.
- Provider referral the physician agrees to notify partners following CDC guidelines.
- <u>Contract referral</u> DIS completes the notification when the infected person fails to contact their partner within an agreed upon amount of time.

If clients agree to have a DIS contact their partners, they voluntarily disclose 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 is the gender, type of exposure, or exposure dates.

The CDC released revised recommendations for Partner Services in November 2008 and Louisiana's policies and protocols have been updated in response to these new recommendations (www.cdc.gov/nchhstp/partners/Recommendations.html).



- In 2011, 1,607 HIV-positive persons were referred to DIS for PS, 821 of whom were interviewed (51%).
- From the 821 HIV-infected persons who were interviewed, a total of 782 partners were identified who may have been exposed to HIV. This resulted in 340 partners being tested, 97 (29%) of whom were positive.
- DIS often have trouble locating persons who are referred to them because individuals have moved, disconnected phone lines, provided incorrect addresses when they received their HIV test, or are homeless. People may also refuse assistance from DIS and, therefore, will not be interviewed. Efforts to increase the interview percentage are under way.
- The percentage of persons who newly tested positive in the partner-identified group has ranged from 10% to 29% during the last ten years.

#### Recruitment to High-Risk Individuals

What does SHP do? Contracts with CBOs to conduct recruitment of high-risk individuals living in priority

neighborhoods.

Area covered: Statewide

Recruitment is the means by which an organization brings members of a population into HIV prevention interventions, programs, and services. Populations recruited (target populations) can be persons living with HIV or persons whose HIV serostatus is negative or unknown and who are at high risk for HIV. The ultimate goal is to have persons tested for HIV and become aware of their status.

The goals of Recruitment are to:

- Intensify HIV prevention efforts in communities where HIV is most heavily concentrated;
- Expand targeted efforts to prevent HIV infections using a combination of effective evidence based approaches;
- Establish a seamless system to immediately link people to continuous and coordinated care when they learn they are infected;
- Support people living with HIV with and co-occurring health conditions and those who have challenges meeting their basic needs; and
- Adopt community level approaches to reduce HIV infection in high-risk communities.

The priority target populations for HIV Recruitment are determined by using HIV surveillance information, CDC guidelines, and the community-based planning process.

Recruitment is conducted in fixed and active sites in which Recruitment Specialists screen and engage clients for the purposes of delivering risk reduction information, making available materials, such as brochures, prevention materials, making referrals, and actively ensuring clients access services to which they have been referred. Information and referrals are offered to promote healthy behaviors and reduce the risk of acquiring or transmitting HIV and other STDs.

On a yearly basis, a subsample of individuals is surveyed in the areas where recruitment is conducted. On the next page are some of the highlights of the 2011 survey. A total of 777 persons completed the survey.

Outreach Survey Results Louisiana, 2011				
	Percent			
Sex				
Female	41%			
Male	57%			
Race/Ethnicity				
Black/African American	71%			
Hispanic	4%			
White	20%			
2+ Partners in Prior 12 Months				
Males Reporting	54%			
Females Reporting	44%			
Condom Use				
Always	31%			
Rarely or Never	24%			
Used Condom at Last Sex	51%			
Did Not Use Condom While Drunk or High	27%			
Condom Availability				
Aware of Location of No-Cost Condoms	88%			
Available at Home	71%			
Bought Last Condom Used	22%			
HIV Testing History				
Ever Tested	74%			
Of Those Ever Tested, Tested in Last 12 Months	63%			
Had Contact with Recruitment Worker in Last 6 Months	67%			
High Risk Behavior in Last 12 Months				
Exchanged Sex for Money or Drugs	10%			
Had a Sexually Transmitted or Venereal Disease	9%			
Shot Drugs with a Needle	9%			

- Blacks and males accounted for the overwhelming majority surveyed through recruitment.
- More males than females reported having multiple sex partners in the last 12 months.
- 24% of participants responded that they "Rarely or Never" used a condom, and 49% did not use a condom the last time they engaged in sex, despite the fact that 88% indicated they knew where to get a free condom.
- 74% of participants reported being previously tested for HIV and 63% of those who had been tested, were tested in the last 12 months.
- 10% reported exchanging sex for money or drugs in the past 12 months, 9% reported having an STD in the past 12 months, and 9% reported injection drug use in the past 12 months.

#### Prevention with HIV-Positive Persons

What does SHP do? Provide programs that assist HIV-positive persons in becoming educated about HIV,

encouraging them to enter or stay connected to care and overcome barriers that inhibit healthy decision making and risk reduction. Additionally, it helps HIV-positive persons who are at high risk for HIV transmission or other STD acquisition to reduce risk behaviors and address the psychosocial and medical issues that contribute to risk

behavior or poor health outcomes.

Area covered: Statewide

The CDC has prioritized HIV-positive individuals as the number one target population for prevention. In Louisiana, several interventions are implemented for this population: Healthy Relationships, Project Respect, and Thrive.

Healthy Relationships is a small-group session intervention consisting of five interactive sessions for men and women living with HIV infection based on the Social Cognitive Theory. During sessions, participants develop skills and build self-efficacy and positive expectations about new behaviors through modeling and practicing these behaviors and skills. Each objective of this Effective Behavior Intervention (EBI) has corresponding activities. The expectation and outcome of this intervention is that HIV-positive individuals incorporate the skills and knowledge into their lives and reduce and/or eliminate opportunities for transmitting HIV to a partner.

The objectives of Healthy Relationships are as follows:

- 1. Reduce unprotected anal, vaginal and oral intercourse
- 2. Increase correct and consistent use of condoms
- 3. Increase disclosure to sexual partners
- 4. Increase refusal of unsafe sex
- 5. Increase perception of social support

**Project RESPECT** is an individual level, two-session intervention that supports attainable risk reduction behaviors by increasing a client's perception of personal risks and emphasizes risk-reduction strategies. Trained in project RESPECT, the counselor works one-on-one with clients utilizing a 'teachable moment' to motivate clients to change behaviors, explore circumstances and context of risk behavior, and instigate an achievable step which supports a larger risk reduction goal. The counselor engages the client in role plays to increase the client's self-efficacy and provides the appropriate referrals for services not rendered through project RESPECT.

Thrive is a one-day program for people who are infected with or affected by HIV that promotes the message that they may not only survive, but thrive while living with HIV. This is a behavioral intervention consisting of informative presentations and support groups, and serves to support those who are HIV-positive to take care of themselves and their partners physically, mentally, emotionally, and spiritually. Focusing on holistic health in this manner leads to retention in medical care and a connection to the HIV organization(s) in the HIV-positive individual's area. During 2010-11, there were three Thrive events in three Louisiana cities, reaching more than 90 consumers. Since the primary goal for Thrive is to identify and facilitate opportunities for consumers to engage in peer and advocacy activities, which provide them with holistic wellness strategies, by 2015, SHP plans to implement ten Thrive events each year, reaching 500 consumers. All of these Thrive events will continue to be planned by a group of volunteer HIV-positive steering committee members with the support of SHP staff to coordinate the logistical requirements for each event.

#### **Condom Availability**

What does SHP do? Makes no-cost condoms available to priority neighborhoods through three different

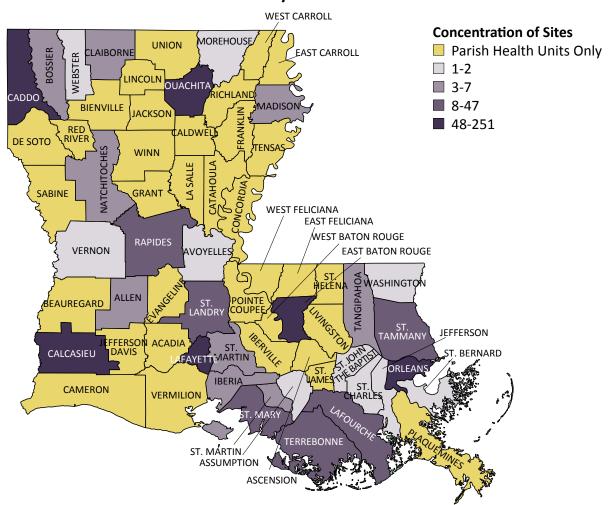
methods: 1) through 758 sites in high priority zip codes in each region; 2) through 60 parish health units and ten HIV clinics throughout the state, and 3) through one-on-one

outreach activities conducted in high priority zip codes in each region.

Area covered: Statewide

Condom availability is an effective evidence-based intervention that is linked to structural- and community-level interventions implemented throughout the state. Condom availability is efficacious in increasing condom use, increasing condom acquisition and condom carrying, and thereby reducing the incidence of new STD and HIV infections. Condom availability is intended to reduce new STD and HIV infections by correlating the location and volume of condom distribution in each region of the state according to the prevalence and incidence of STDs and HIV.

# **Number of Condom Distribution Sites by Parish**



- Of the 64 parishes in Louisiana, CBOs distribute condoms to those sites in parishes with the highest HIV prevalence (parishes highlighted in purple).
- Parish Health Units (PHUs) serve as condom availability sites throughout the state and overlap as condom sites in areas of high prevalence, as well as provide no-cost condoms in areas of low prevalence (parishes highlighted in yellow).

#### STD/HIV Social Marketing and Awareness

What does SHP do? Increase the awareness of Louisiana residents on the impact of STDs and HIV in

Louisiana and services available to them.

Area covered: Statewide

The Prevention Unit works with its partners to raise awareness of STDs and HIV throughout the state by the observance of national HIV awareness days, large scale testing events, and special displays and activities.

In 2011, the Prevention Unit participated in National HIV Counseling and Testing Day; National Black HIV/ AIDS Awareness Day; Latino AIDS Awareness Day; World AIDS Day; and the Kaiser Family Foundation's We Are Greater Than AIDS (WE>AIDS) Campaign targeting African Americans. SHP coordinated HIV awareness and testing activities for the Bayou Classic and the Essence Music Festival, which are large scale events that attract thousands of African Americans to the city of New Orleans each year.

"WE>AIDS": SHP continues to partner with the Kaiser Family Foundation's www.greaterthan.org to maintain the "Louisiana>AIDS" social marketing campaign. HIV testing at the Bayou Classic and Essence Music Festival were two of the most significant events in which SHP utilized the "WE>AIDS" and "Louisiana>AIDS" new media and social marketing materials.

**Bayou Classic** is an annual football game held in New Orleans over Thanksgiving weekend. In 2011, that weekend served as an opportunity to increase HIV awareness. This event involved collaboration between SHP, Bickers Staff Group (BSG), the Kaiser Family Foundation, and Orasure Technologies Inc.

The Essence Music Festival, which takes place during the 4th of July weekend in New Orleans, was another successful testing collaboration with the Black AIDS Institute. Over a 3-day period, 923 attendees were tested for HIV, of which 95% were African American.

#### **Programs Targeting Special Populations**

What does SHP do? Target increased efforts at populations of special interest.

Area covered: Statewide

The Prevention Unit coordinates a number of programs that target populations of special interest because of the disproportionate impact the epidemic is having on them or the need for special emphasis to adequately reach them. Currently, these populations include pregnant women, African Americans, and men who have sex with men (MSM).

**Preventing mother-to-child transmission of HIV (perinatal transmission):** Louisiana has made great strides decreasing the perinatal infection rate from 4.5% in 2000 to less than 3% from 2006-2010. SHP continues to engage in the following two initiatives to move towards the elimination of perinatal HIV infection in Louisiana:

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

Louisiana Wellness Center Project - Promoting total wellness among gay and bisexual men: The goal of the Louisiana Wellness Center Project is to prevent HIV and STD transmission among gay and bisexual men and transgender individuals by offering holistic health, wellness, and clinical services in a safe and welcoming environment. In 2011, Wellness Centers were located in Monroe, Lafayette and Baton Rouge. In 2011, 305 clients attended at least one Wellness Center clinical session; over 50% of these were returning clients. All three Wellness Centers provided STD and HIV screening and referrals to mental health and substance abuse services.

Clinical Services Provided at Wellness Centers Louisiana, 2011							
	Total Number of Tests	Positive Test Results	Percent Positivity				
HIV Tests	99	3	3.0%				
Syphilis VDRL Screens	134	3	2.2%				
Chlamydia/Gonorrhea Urine Tests	128	2	1.6%				
Chlamydia/Gonorrhea Oral/Anal Swabs	236	15	6.4%				
Hepatitis B Screens	102	-	-				
Hepatitis C Screens	126	-	-				

The 2011 Wellness Center sites began implementation at varying points during the year; however, the Monroe Wellness Center was the only site that provided services in the year's entirety. Monroe's 2011 Wellness Center programming including community led social events, wellness activities such as yoga and meditation, and safer sex discussions. The primary care HIV physician in Monroe volunteered her services and provided 150 general health exams. Of the clients served, approximately 44% had no health insurance, 31% of the clients said they had not used a condom the last time they had sex, and 35% had sex with two or more partners in the past three months. The table below includes the psychosocial characteristics of the clients and demonstrates a need for mental health and substance use interventions. The Monroe Wellness Center recruited a psychologist who volunteered her services each month and helped in providing mental health care and making appropriate referrals.

Psychosocial Characteristics of Monroe Wellness Center Clients at Intake Louisiana, 2011								
	Total Number of Responses	Number Responding "YES"	Percent Responding "YES"					
Currently Smoke	116	72	62%					
2X or more in past mo. had 5 or more drinks on the same occasion	100	44	40%					
Used illegal drugs in past year	135	23	17%					
Past year been in a relationship where physically, verbally or emotionally abused	139	13	9%					
Ever forced to have sex against one's will	138	18	13%					
Ever attempted suicide	135	19	14%					
Ever diagnosed with depression and anxiety	99	45	45%					
Ever hospitalized for a mental health condition	135	23	17%					

#### **Adolescent Health**

What does SHP do? Contracts with CBOs to provide evidence-based HIV, STD and pregnancy prevention

interventions through the Personal Responsibility Education Program (PREP). Works with Infertility Prevention Program sites to increase targeted chlamydia and gonorrhea

screening for females under 26.

*Area covered:* Statewide

Adolescents are a priority population statewide, due to extremely high STD rates, as well as teen pregnancy rates. SHP is addressing this priority population through evidence-based interventions for HIV, STD and pregnancy prevention, as well as targeted STD screening for females under 26.

**PREP** is a statewide teen pregnancy and HIV/STD program funded by the Administration for Children, Youth and Families, and the Family Youth Services Bureau. The PREP project replicates and adapts effective, evidence-based programs that have been proven to delay sexual activity, increase condom or contraceptive use for sexually active youth, or reduce pregnancy among youth. The PREP program also incorporates Adult Education Topics that encourage skill-building in areas including healthy relationships, adolescent development and education and career success. SHP is currently implementing two evidence-based curricula:

**SIHLE** (Sistas Informing, Healing, Living & Empowering) is a peer-led, social skills training intervention aimed at reducing HIV sexual risk behavior among African American teenage females, ages 14-18. The SIHLE program emphasizes ethnic and gender pride, and enhances awareness of HIV risk reduction strategies such as abstaining from sex, using condoms consistently, and having fewer sex partners. SIHLE is currently implemented in seven regions statewide (excluding New Orleans and Houma).

**Project AIM** is a youth development intervention designed to reduce HIV risk behaviors among African-American youth, ages 14-18. It is based on the "Theory of Possible Selves" and encourages at-risk youth to imagine a positive future and discuss how current risk behaviors can be a barrier to a successful adulthood. Project AIM uses group discussions, interactive small group activities and role playing to encourage youth to explore their personal interests, social surroundings, and what they want to become as an adult. These activities allow youth to envision a future self, and to safeguard that future self through healthy decision making.



# Profile of STDs in Louisiana

### **Introduction to STD Surveillance**

The Louisiana Office of Public Health STD/HIV Program's (SHP) Sexually Transmitted Disease (STD) Surveillance Program collects and analyzes data on cases of syphilis (all stages), congenital syphilis, gonorrhea, and chlamydia. Louisiana's Sanitary Code mandates that all medical providers and laboratories report these STDs to SHP along with basic demographic and residence information. Funding for STD Surveillance comes from the Centers for Disease Control and Prevention.

Reports of positive syphilis tests are sent to the field staff in each region for evaluation and follow-up investigations, when needed. Positive chlamydia and gonorrhea tests are reviewed in the state central office and do not receive additional follow-up by regional staff except through two specifically funded small scale projects.

Data from STD surveillance activities are analyzed and non-identifying summary information is provided to public health programs, medical providers, researchers, and the general public through reports, presentations, data requests, and fact sheets. The information is provided for the purposes of program planning, education, and evaluation.

The data presented below represent all new cases of primary and secondary (P&S) syphilis, congenital syphilis, gonorrhea, and chlamydia diagnosed from 2002 to 2011 and reported to SHP before May 4, 2012. The report presents both counts of STD cases and STD case rates.

Louisiana consistently experiences some of the highest rates of STDs in the United States. Syphilis, chlamydia, and gonorrhea are three commonly reported STDs. In 2011, Louisiana had the highest rate in the nation for primary and secondary syphilis and the highest gonorrhea rate according to the CDC's 2011 STD Surveillance Report. Additionally, Louisiana had the 3rd highest rate in the nation for chlamydia and for congenital syphilis.<sup>22</sup>

In January 2013, SHP released the Sexually Transmitted Diseases, Louisiana 2011 Annual Report with extensive data analysis for P&S and early latent syphilis, congenital syphilis, chlamydia, and gonorrhea. This full report can be found online at www.std.dhh.louisiana.gov.

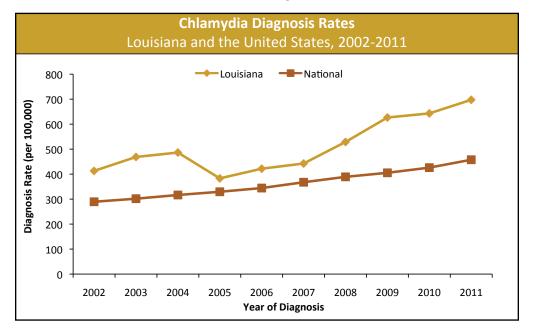
Trends in STD Cases Louisiana, 2002-2011										
Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Chlamydia	18,442	20,970	21,837	17,227	17,885	19,362	23,536	28,148	29,151	31,614
Gonorrhea	11,387	11,850	10,538	9,572	10,883	11,137	9,766	9,150	8,912	9,169
P&S Syphilis	152	183	332	278	342	533	721	742	547	447

In 2011, 31,614 chlamydia cases, 9,169 gonorrhea cases and 447 P&S syphilis cases were diagnosed in Louisiana.

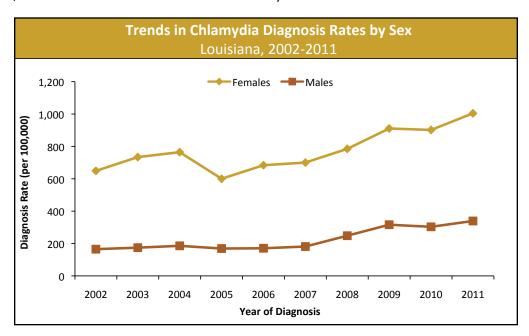
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# Chlamydia

There were 31,614 cases of chlamydia diagnosed in Louisiana in 2011. This represents an 8.4% increase in the number of cases from 2010, when 29,151 cases were diagnosed.

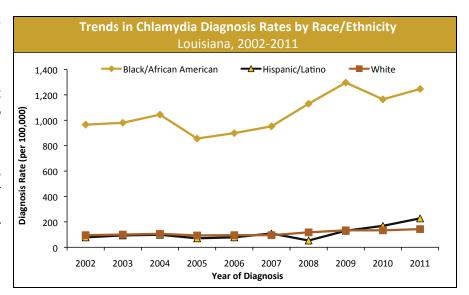


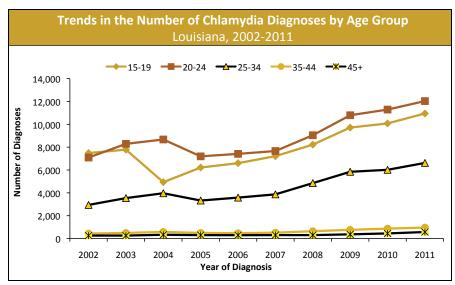
- In 2011, the chlamydia case rate in Louisiana was 697.4 per 100,000 population, which was significantly higher than the national rate of 457.6 per 100,000 population.
- The chlamydia rate in Louisiana has almost doubled since 2005.
- In 2011, Louisiana ranked 3rd in the nation for chlamydia case rates.



 The 2011 female chlamydia rate of 1,010.8 per 100,000 females was almost three times the male rate of 341.0 per 100,000 males. Over 75% of all new cases in 2011 were female. Females traditionally represent the population who access reproductive health care and, therefore, have more opportunities to receive chlamydia screening.

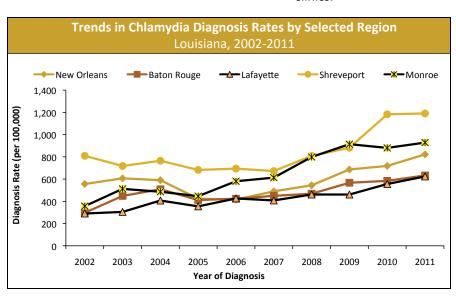
- Blacks represent the majority of new chlamydia diagnoses in 2011 (80%).
   This is a significant racial disparity, considering that blacks make up only 32% of Louisiana's population.
- The rate of new chlamydia diagnoses among blacks is over five times higher than among Hispanics and over eight times higher than among whites.





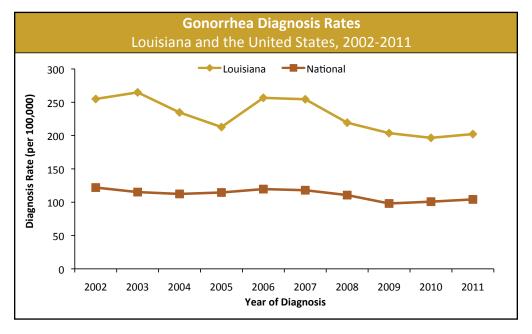
- The majority of cases were in persons aged 15-24 years.
   Many chlamydia testing services target women within this age group.
- The number of new diagnoses among 15-34 year olds has been steadily increasing since 2005, while the number of cases in persons 35 and older has remained relatively stable.
- Louisiana has targeted testing campaigns to test young women who attend STD and family planning clinics.

- The New Orleans region had the greatest number of new chlamydia diagnoses, but the Shreveport region had the highest chlamydia case rate in 2011.
- The chlamydia case rate remains the 2nd highest in the Monroe region although the region ranks
   5th for the number of chlamydia diagnoses out of all nine regions.

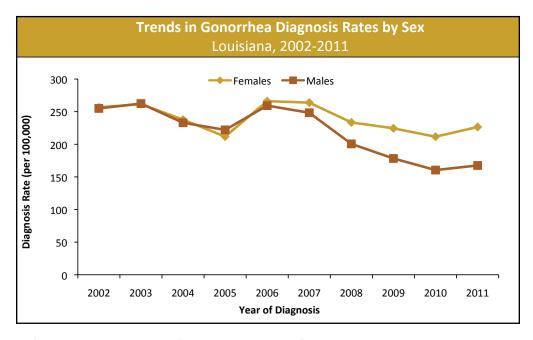


#### Gonorrhea

There were 9,169 cases of gonorrhea diagnosed in Louisiana in 2011. This represents a 3% increase in the number of cases from 2010, when 8,912 cases were diagnosed.

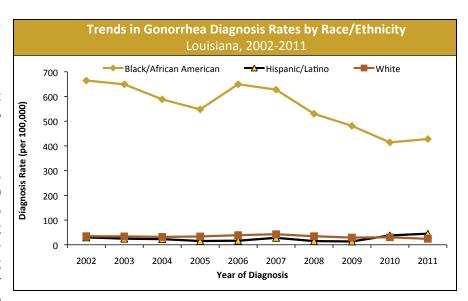


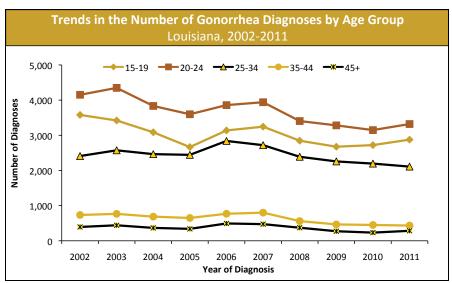
- In 2011, the gonorrhea case rate in Louisiana was 202.3 per 100,000 population which was almost double the national rate of 104.2 per 100,000 population.
- The gonorrhea rate in Louisiana remains lower than the rate in 2006, when the case rate was 265.7 per 100,000 population.
- In 2011, Louisiana ranked 1st in the nation for gonorrhea case rates.



• The 2011 female gonorrhea rate of 227.4 per 100,000 females was 35% greater than the male rate of 168.5 per 100,000 males. Females traditionally represent the population who access reproductive health care and, therefore, have more opportunities to receive screening.

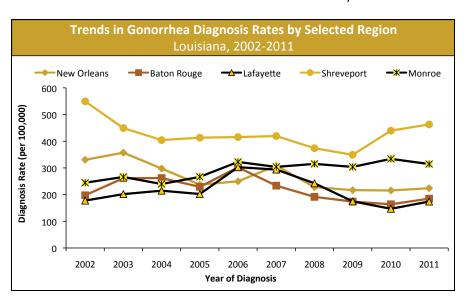
- Blacks represent the majority of new gonorrhea diagnoses in 2011 (89%).
   This is a significant racial disparity, considering that blacks make up only 32% of Louisiana's population.
- The rate of new gonorrhea diagnoses among blacks is 423.2 per 100,000 population, over 16 times higher than among whites and over nine times higher than among Hispanics. The rate for blacks has decreased 34% from 2006 to 2011.





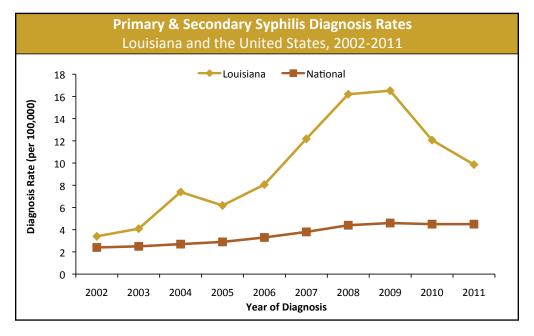
- The majority of cases were in persons aged 15-24 years.
   Many gonorrhea testing services target women within this age group.
- The number of diagnoses among 15-24 year olds increased slightly from 2010 to 2011. The number of new diagnoses among 25-34 year olds has been steadily decreasing since 2006 while the number of cases in persons 35 and older has remained relatively stable.

- The Shreveport region had the greatest number of new gonorrhea diagnoses and the highest gonorrhea case rate in 2011.
- The gonorrhea case rate remains the 2nd highest in the Monroe region although the region ranks 4th for the number of gonorrhea diagnoses out of all nine regions.

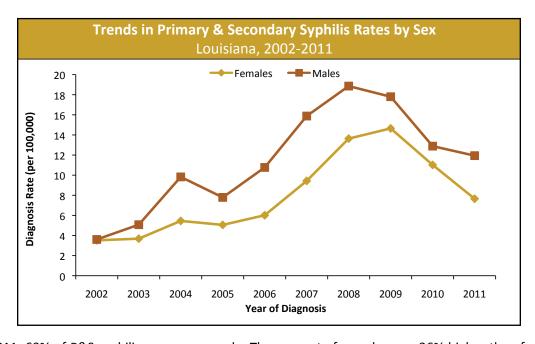


# **Primary & Secondary Syphilis**

In 2011, there were 447 P&S syphilis cases diagnosed in Louisiana, an 18% decrease compared to 547 cases diagnosed in 2010.

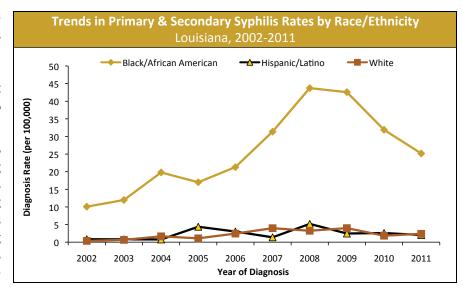


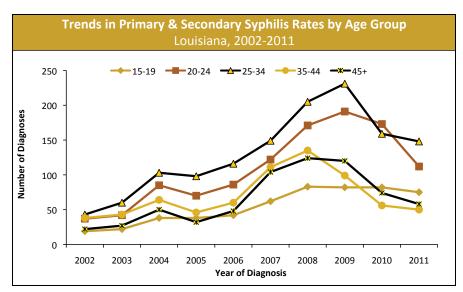
- In 2011, the P&S syphilis case rate in Louisiana was 9.9 per 100,000 population, which was over two times the national rate of 4.5 per 100,000 population.
- The P&S syphilis rate in Louisiana increased dramatically from 2003 to 2009, but since 2009, there has been a 40% rate decrease from the rate of 16.5 per 100,000.
- In 2011, Louisiana ranked 1st in the nation for P&S syphilis case rates.



• In 2011, 60% of P&S syphilis cases were male. The case rate for males was 36% higher than females in 2011.

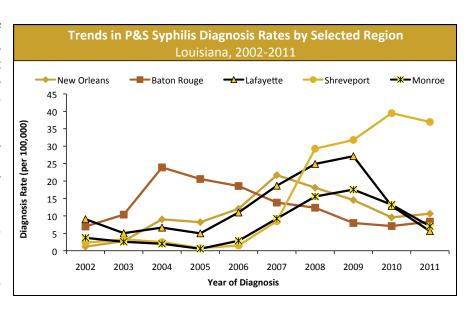
- Blacks represent the majority of the P&S syphilis diagnoses in 2011 (84%).
   This is a significant racial disparity, considering that blacks make up only 32% of Louisiana's population.
- The rate of new P&S syphilis diagnoses among blacks is over 12 times higher than among Hispanics and 10 times higher than among whites. The rate for blacks has decreased 42% since 2008.





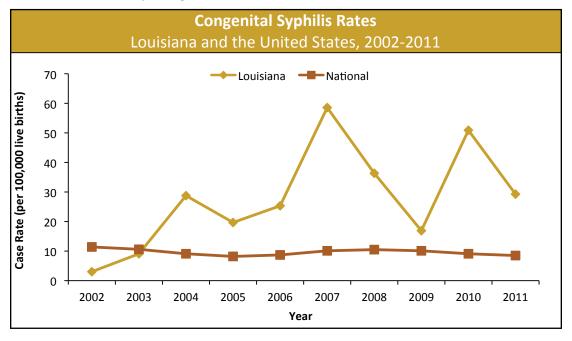
- 18% of cases occurred in adolescents under the age of 20, 25% of cases occurred in persons between the age of 20 and 24, 33% occurred in persons aged 25 to 34, and 24% occurred in persons 35 and older.
- The number of new diagnoses has decreased among all age groups since 2009.

- The greatest number of new P&S syphilis cases occurred in the Shreveport region which has had the highest P&S syphilis case rate since 2008.
- In 2011, the New Orleans region had the 2nd highest number of new P&S syphilis cases and the 2nd highest case rate. The Lafayette and Monroe regions experienced significant declines in their case counts and case rates from 2009 to 2011.

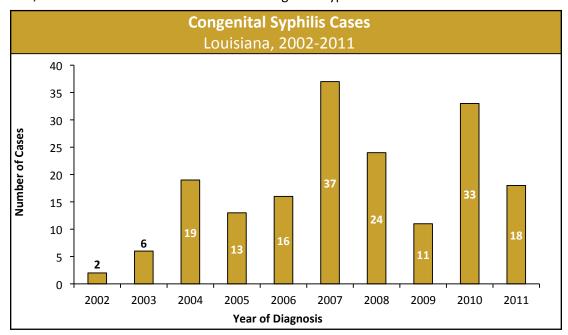


# **Congenital Syphilis**

Congenital syphilis cases occur when a pregnant woman with syphilis passes the infection on to her infant *in utero* or during delivery. Congenital syphilis can be prevented by early detection of maternal infection and treatment at least 30 days before delivery. Trends in congenital syphilis tend to follow trends for early syphilis in women with a one to two year lag.



- Louisiana's congenital syphilis rate has historically been greater then the national rate. In 2011, Louisiana's congenital syphilis rate of 29.3 per 100,000 live births was over three times the national rate of 8.5 per 100,000 live births. Only 23 states in the nation reported one or more cases of congenital syphilis.
- In 2011, Louisiana ranked 3rd in the nation for congenital syphilis case rates.



• In Louisiana, there were a total of 18 congenital syphilis cases reported in 2011. This was a 45% decrease in cases compared to 2010 in which 33 cases were reported. The number of congenital syphilis cases has drastically fluctuated since 2002.

Congenital Syphilis Louisiana, 2011							
	Number	Percent					
Total	18	100%					
Case Definition							
Presumed Case	17	94.4%					
Syphilitic Stillbirth	1	5.6%					
Maternal Race/Ethnicity							
Black/African American	15	83.3%					
White	3	16.7%					
Maternal Age Group							
13-19	4	22.2%					
20-24	6	33.3%					
25-34	6	33.3%					
35+	2	11.1%					
Region							
1-New Orleans	1	5.6%					
2-Baton Rouge	5	27.8%					
3-Houma	0	0.0%					
4-Lafayette	4	22.2%					
5-Lake Charles	0	0.0%					
6-Alexandria	2	11.1%					
7-Shreveport	5	27.8%					
8-Monroe	1	5.6%					
9-Hammond/Slidell	0	0.0%					
Frequency of Prenatal Care							
No Prenatal Care	2	11.1%					
1-4 Prenatal Visits	4	22.2%					
5-10 Prenatal Visits	7	38.9%					
11+ Prenatal Visits	5	27.8%					

- In 2011, 83% of mothers of congenital syphilis cases were black, and the remaining three mothers were white.
- The majority (67%) of the mothers were between 20-34 years of age.
- The highest percentage of congenital syphilis cases were born in the Shreveport region (28%), and the Baton Rouge region (28%), followed by the Lafayette region (22%).
- A lack or insufficient amount of prenatal care is evident among the mothers. Of the 18 mothers, 11% did not have a single prenatal care visit, 22% had only 1-4 visits, and 39% had between 5 and 9 visits.



# **STD Prevention and Services**

Sexually Transmitted Disease (STD) prevention operations are based on the Centers for Disease Control and Prevention's (CDC) eight essential functions.

### 1) Leadership and Program Management:

Louisiana STD prevention systems are developed, implemented and supported with funding from the CDC and the State of Louisiana. The STD/HIV Program (SHP) office, in collaboration with health care and community partners, provide leadership to determine and define STD prevention needs and priorities. The program routinely reviews, revises or develops systems to ensure reporting laws and reporting requirements affecting STDs are current. Partnerships and collaborations with public and private health agencies and medical providers, community-based organizations and with correctional facilities are important to accomplishing STD prevention goals and objectives.

### 2) Evaluation:

STD priorities are in part based upon data analyses, related research, and other relevant information. The SHP office oversees program operations and evaluation activities to ensure high quality targeted STD prevention efforts in the state.

# 3) Training and Professional Development:

Training addresses the continuing evolution and challenges of public health. STD resources are used to provide training for program staff and other professionals involved in the efforts to control STDs. Clinical training is offered to public health clinicians to enhance their ability to evaluate and manage STD patients.

#### 4) Surveillance and Data Management:

Surveillance is essential to a STD prevention program and is considered one of the highest priority public health functions. Surveillance can assist programs to better plan, implement, and evaluate efforts to control STDs. STD Surveillance is described in the previous chapter of this report.

# 5) Partner Services:

Partner services (PS) are offered and provided to help persons infected with syphilis. Partner services are a clinical tool for identifying a patient's needs and connecting the patient to appropriate care. Additionally, PS involves conducting follow-up of partners who are at risk of exposure to infection and it is a powerful tool for understanding the dynamics of disease transmission. PS can also provide the basis for assessing local epidemiologic conditions, targeting resources, and evaluating program performance.

#### 6) Medical and Laboratory Services:

Services for STDs involve clinical operations, screening, diagnosis and treatment services for individuals infected with an STD or suspected of exposure to an STD. High quality laboratory services are provided to public health programs and community health care partners.

# 7) Community and Individual Behavior Change:

Behavior change initiatives are identified and implemented in collaboration with HIV prevention services.

### 8) Outbreak Response:

STD prevention programs create and utilize plans to rapidly detect and respond to outbreaks. Outbreak plans are created based on assessments of disease trends, established disease thresholds and availability of resources with assistance from community partners. STD outbreak response plans are ideally evaluated annually.

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# **Areas of Special Emphasis**

In 2011, the Louisiana STD prevention program was involved in several special projects funded by CDC, the state of Louisiana or outside funders.

- The Gonorrhea and Chlamydia Partner Notification Project is an evaluation of the cost effectiveness of partner notification, funded by Robert Wood Johnson Foundation in collaboration with Tulane University (ended in March 2012).
- Internet Partner Services (IPS) is a web-based partner notification project (ongoing).
- The Infertility Prevention Project (IPP) promotes chlamydia and gonorrhea screening for young women and monitors the incidence of these STDs (ongoing).
- The STD Surveillance Network (SSuN) Project is a network of 12 states and independently funded cities collecting enhanced information on a representative sample of reported gonorrhea cases (ongoing).
- The Gonococcal Isolate Surveillance Project (GISP) monitors antibiotic resistant gonorrhea (ongoing).
- Syphilis Elimination includes contracts with several CBOs in high morbidity areas to increase syphilis testing and conduct education to high risk populations (ongoing).

# **Partner Services**

Partner Services (PS) are a broad array of services that are offered to persons with syphilis, HIV or other STDs and their sexual partners. By identifying infected persons, confidentially notifying their partners of possible exposure, and providing infected persons and their partners a range of medical, prevention, and psychosocial services, partner services can improve the health not only of individuals, but of communities as well.<sup>23</sup> Even though partner notification is considered the most effective means of identifying and treating infection among exposed partners, it is extremely resource intensive.<sup>24</sup> In Louisiana, PS is focused on syphilis and HIV cases only. Despite the high incidence of gonorrhea and chlamydia, partner notification for these two STDs has not been adopted as a routine practice in Louisiana. A small scale PS research project for gonorrhea and chlamydia is discussed in the *Gonorrhea and Chlamydia Partner Services* section below.

In Louisiana, PS are offered to persons who test positive for syphilis to determine whether they have received and understood their test results, whether they have received referrals to medical care and other needed social services, and whether they have accessed medical services, including treatment. Also discussed is the need for an individual to notify his/her sexual partners about their possible exposure to syphilis and offer PS as a means of assisting the individual with such notifications. PS are also offered to persons who test positive for HIV, as discussed in the *HIV Prevention* chapter of this report.

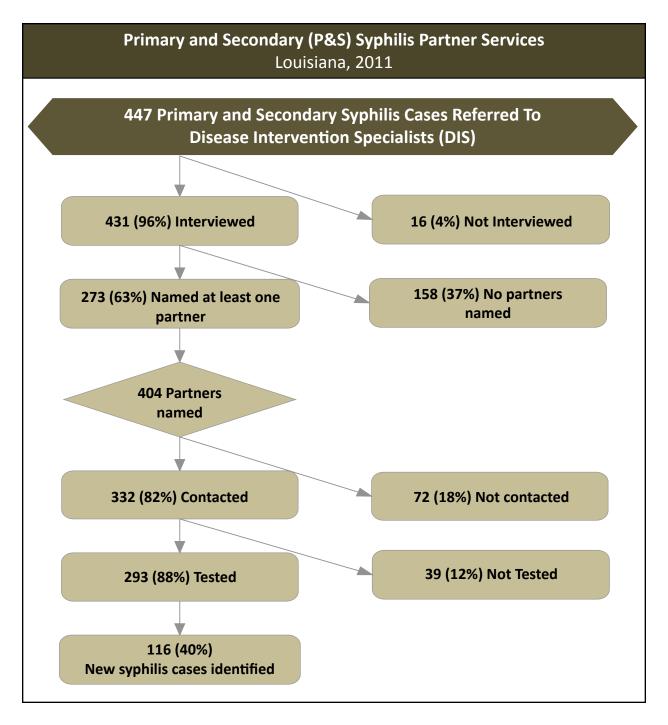
Partner services are provided by trained Disease Intervention Specialists (DIS). Individual cases are assigned to a DIS, who is then responsible for offering PS following CDC standards and guidelines, as well as the State of Louisiana Sanitary Code.

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

- <u>OPH/DIS referral</u> DIS notifies partners and refers them for testing without revealing the original patient's identity. This is the most frequently used option and the preferred option.
- <u>Client referral</u> 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, it is not preferable.
- Provider referral the physician agrees to notify partners following CDC guidelines.
- <u>Contract referral</u> DIS completes the notification when the infected person fails to contact their partner within an agreed upon amount of time.

If clients agree to have a DIS contact their partners, they voluntarily disclose information to aid in locating them. The DIS then confidentially locates and counsels partners regarding their possible exposure to syphilis and provides syphilis counseling, testing and referral services. During the process, the identity of the original patient is never revealed, nor is the gender, type of exposure, or exposure dates.

The CDC released revised recommendations for Partner Services in November 2008 and Louisiana's policies and protocols have been updated in response to these new recommendations (www.cdc.gov/nchhstp/partners/Recommendations.html).



- In 2011, 447 persons were referred to the DIS for syphilis partner services, 431 (96%) of whom were interviewed.
- From the 431 persons who were interviewed, a total of 404 partners were identified who may have been exposed to syphilis. This resulted in 332 partners being contacted and 293 (88%) of those contacted partners were tested for syphilis.
- Of the 293 partners tested for syphilis, 116 (40%) were newly diagnosed with syphilis.

# **Gonorrhea and Chlamydia Partner Services**

In July 2010, SHP collaborated with Tulane University on a two-year partner services project funded by the Robert Wood Johnson Foundation. As part of this project, gonorrhea and chlamydia cases detected at the Delgado STD clinic in New Orleans and the parish health unit in Shreveport were selected for telephone interviews regarding partner services. Three trained telephone interviewers were provided with the contact information of the positive gonorrhea or chlamydia cases selected by systematic random sampling from all positive cases detected in the two facilities. The interviewers made up to seven attempts to contact and interview the patient to elicit sex partners and obtain the partners' contact information. Information regarding sex partners was collected if the interaction took place within 60 days from the date the test specimen was collected. If an index case did not have any sex partners within 60 days of specimen collection, then information on the most recent sex partner was obtained. Once partner information was obtained from the index cases, the partners were contacted by the interviewers and referred for medical evaluation and treatment. Data were collected from November 2010 to March 2012. A total of 2,160 cases were attempted for interview.

Gonorrhea and Chlamydia Partner Services Interview Outcomes November 2010 - March 2012									
No. of cases % of cases									
Cases Assigned for Contact	2,160	100.0%							
Cases Unable to Contact	975	45.1%							
Cases Contacted	1,185	54.9%							
Complete Interview	909	76.7%							
Partial Interview	231	19.5%							
Refused Interview	34	2.9%							
Unable to Interview (language barrier)	7	0.6%							
Unable to interview (out of jurisdiction)	4	0.3%							

- 55% of all cases assigned for contact were contacted by the study interviewers.
  - ° Of those that were contacted, 77% completed a full interview and an additional 20% completed a partial interview (provided partner details but did not complete other parts of the interview).
- A total of 495 partners were elicited from the 1,140 interviewed cases. The outcomes from the partner referrals are described in the following table.

#### **Gonorrhea and Chlamydia Partner Services Partner Contact Outcomes** November 2010 - March 2012 **Partner Disposition** No. of partners % of partners 495 100% Infected, Brought to Treatment 218 44% **Received Preventive Treatment** 88 18% **Previously Treated** 71 14% Unable to Locate 50 10% **Insufficient Information** 46 9% Not Infected 12 2% **Refused Examination** 4 1% Infected, Not Treated 3 1% Out of Jurisdiction 2 0% **Refused Preventive Treatment** 1 0%

• 322 (65%) of the 495 partners sought some medical treatment after being contacted by the study and 95% were subsequently treated. An additional 71 partners had already been treated prior to contact by study personnel. A total of 10% of the partners could not be located.

Even though partner notification for gonorrhea and chlamydia is not routinely conducted in high morbidity syphilis states due to limited resources, this study showed that telephone based partner notification can be an effective strategy in identifying and treating infected partners.

# **Internet Partner Services**

The internet is a powerful medium for communication and a valuable tool for facilitating STD/HIV Partner Services. Research has shown the internet to be a venue for risky behaviors which facilitate STD/HIV transmission, as well as for disease control and health promotion. Access to the internet has become nearly universal for most Americans, and program areas and health departments have been encouraged to incorporate the internet into their prevention efforts. With the rise of internet-based social networking and dating sites, increasing numbers of high-risk populations are meeting online to arrange anonymous sexual encounters. As a result, individuals who are newly diagnosed with STDs/HIV may know only the screen names and/or email addresses of their sex partners.

SHP is using the internet to contact partners of individuals who test positive for syphilis, gonorrhea, chlamydia, and HIV, who met their partners via the web. Modeled after successful launches by other states and following national guidelines, SHP has laid the groundwork for reaching at-risk residents in Louisiana and other states to provide STD/HIV services via the internet. Patients who test positive for any of these four infections are counseled about the need for their partners to be tested. Many patients have stated that they meet partners online and do not have other locating information. These partners are contacted anonymously via the internet by the Louisiana Internet Partner Services Coordinator.

# Infertility Prevention Program (IPP)

The Infertility Prevention Program (IPP) is a national data collection campaign for public health surveillance purposes, primarily to monitor chlamydia and gonorrhea prevalence and guide STD prevention and control efforts. IPP was developed to protect the reproductive futures of young women by providing screening and treatment options. IPP is a collaboration between the CDC and the Office of Population Affairs (OPA) of the Department of Health and Human Services (HHS). The federal funds from IPP help support chlamydia and gonorrhea screening and treatment services for low-income, sexually active women attending family planning, STD and other women's health care clinics. This program has demonstrated that routine screening of women can reduce chlamydia and gonorrhea prevalence and the complications caused by these STDs.<sup>25</sup>

Chlamydia is the most frequently reported communicable disease in the US. Since 1984, reported cases have increased dramatically, reflecting the growing availability of inexpensive and accurate screening tests. Collaboration between Family Planning, STD programs and Public Health Laboratories is integral to removing barriers to effective screening and early prevention. Between 20-40% of untreated chlamydia infections lead to Pelvic Inflammatory Disease (PID), of which 20% develop infertility. Untreated gonorrhea infection can also lead to PID.

IPP screening sites in Louisiana include STD clinics, reproductive health clinics, parish health units, detention centers, school based health clinics, drug treatment centers and community health centers. A total of 142 IPP sites in Louisiana collected specimens in 2011.

Chlamydia Positivity at Infertility Prevention Program (IPP) Screening Sites Louisiana, 2011									
Screening Site	Total Tests	Positive	Positivity (%)						
Total	74,777	10,317	14%						
Parish Health Unit (all)	55,649	7,907	14%						
Parish Health Unit (Reproductive Health visit type only)	24,124	2,310	10%						
Parish Health Unit (STD visit type only)	31,352	5,580	18%						
Parish Health Unit (other visit type only)	173	17	10%						
STD Clinic	7,230	1,064	15%						
Reproductive Health Clinic	1,998	168	8%						
Other*	9,900	1,178	12%						

<sup>\*</sup>Includes detention centers, school based health clinics, drug treatment centers and community health centers

- In 2011, the Louisiana Office of Public Health tested 74,777 persons for chlamydia and gonorrhea as part of IPP. From 2010 to 2011, there was an 8% decrease in number of screenings.
- Of those tested, 10,317 cases of chlamydia were identified, a 14% positivity rate. In addition 3,415 cases of gonorrhea were identified, a 5% positivity rate. Of all specimens submitted, 1,490 individuals were infected with both gonorrhea and chlamydia, a 2% positivity rate.

# STD Surveillance Network (SSuN)

The STD Surveillance Network (SSuN) is a dynamic network of 12 state and local health department-based STD prevention and control programs following common protocols to address surveillance and program evaluation issues of national, state, and local interest.

There are two data collection components included in SSuN: 1) A clinic component where data such as demographics, STD history, exam findings, lab results, and risk behaviors are collected from 100% of patient visits at a STD clinic in New Orleans; and 2) An interview component which includes data collection from interviews of patients diagnosed with gonorrhea who live in Orleans or Jefferson Parish.

SSuN Clinic Findings									
Demographic Characteristics of Patient Population									
Louisiana and National Data, 2011									
	National SSuN Cases	National SSuN %							
Total	5,875	100%	199,690	100%					
Gender									
Male	3,418	58%	122,482	61%					
Female	2,447	42%	76,952	39%					
Transgender	10	0%	241	0%					
Unknown	0	0%	15	0%					
Sex of partners among males									
Men	445	13%	24,314	20%					
Women	2,881	84%	75,829	62%					
Unknown	88	3%	22,330	18%					
Age Group									
≤14	9	0%	434	0%					
15-19	548	9%	19,612	10%					
20-29	3,095	53%	96,186	48%					
30-39	1,239	21%	44,526	22%					
≥40	984	17%	38,902	20%					
Unknown	0	0%	29	0%					
Race/Ethnicity									
White, non-Hispanic	569	10%	39,124	20%					
Black, non-Hispanic	5,082	87%	106,485	53%					
Asian, non-Hispanic	23	0%	6,571	3%					
Hispanic	165	3%	36,488	19%					
American Indian/Alaska Native	2	0%	420	0%					
Other/Multi-Racial	15	0%	6,067	3%					
Unknown	19	0%	4,535	2%					
Prevalence of Selected STDs									
HIV	91	2%	4,210	2%					
Gonorrhea	308	5%	10,235	5%					
Chlamydia	502	9%	17,037	9%					
Syphilis	115	2%	2,499	2%					
Genital Warts	70	1%	5,388	3%					

- The percentages of male and female clinic patients and the age distribution of patients in Louisiana are similar to the national SSuN data.
- In Louisiana, 87% of the clinic patients are black, non-Hispanic, while nationally, it was 53% in 2011.
- The prevalence of all STDs in the Louisiana STD clinic is equivalent to the national SSuN prevalence; however, the prevalence of genital warts in Louisiana was lower than the national rate.

The second component of the SSuN project involves conducting interviews with patients diagnosed with gonorrhea who live in Orleans or Jefferson Parish, regardless of the facility where they were diagnosed. These interviews are conducted over the phone by trained interviewers. The table below compares the interviews conducted in Louisiana to the interviews conducted nationally for this time period. In 2011, a total of 224 interviews were conducted.

SSuN Population-based Findings  Demographic Characteristics of Interviewed Patients with Gonorrhea  Louisiana and National Data, 2011							
20 41014114 41	Louisiana Louisiana SSuN Cases SSuN %		National SSuN Cases	National SSuN %			
Total	224	100%	4,614	100%			
Gender							
Male Female Transgender	124 100 0	55% 45% 0%	2,454 2,145 6	53% 47% 0%			
No answer/Default	o o	0%	9	0%			
Sex of partners among males		3,1		3,0			
Men Women	21 99	17% 80%	969 1,402	40% 57%			
No answer/Default	4	3%	83	3%			
Age Group	1	40/	32	40/			
≤14 15-19	36	1% 16%	1,111	1% 24%			
20-29	135	60%	2,324	50%			
30-39	38	17%	678	15%			
≥40	14	6%	467	10%			
No answer/Default	0	0%	2	0%			
Race/Ethnicity							
White, non-Hispanic	17	7%	838	18%			
Black, non-Hispanic	203	91%	2,653	58%			
Asian, non-Hispanic	0	0%	112	2%			
Hispanic	3	1%	749	16%			
American Indian/Alaska Native	0	0%	16	1%			
Other/Multi-Racial	0	0%	186	4%			
No answer/Default	1	1%	60	1%			

- In 2011, 55% of interviewed Louisiana gonorrhea patients were male and 45% were female. Nationally, 53% of the interviewees were male.
- Of men interviewed in Louisiana, 17% of men reported having a male sex partner in the last 3 months compared to 40% of male patients interviewed nationally.
- The age distribution of interviewed patients in Louisiana was similar to the national results; however, the race distribution differed with 91% of interviewed patients in Louisiana being black compared to 58% nationally.

# **Gonococcal Isolate Surveillance Project (GISP)**

The Gonococcal Isolate Surveillance Project (GISP) was established in 1986 to monitor trends in antimicrobial susceptibilities of strains of N. gonorrhoeae which is the bacterium that causes gonorrhea. These data are collected in the U.S. in order to establish a basis for the selection of therapies to treat gonorrhea. GISP is a collaborative project among selected STD clinics, five regional laboratories, and the CDC. Data from this project have been used to revise the CDC's STD Treatment recommendations.

In GISP, isolates are collected from the first 25 men with urethral gonorrhea attending STD clinics each month in approximately 28 cities in the U.S. At regional laboratories, the susceptibilities of these isolates to various medications (penicillin, tetracycline, spectinomycin, ciprofloxacin, ceftriaxone, cefixime, and azithromycin) are determined.<sup>26</sup>

Louisiana has participated in GISP since 1998, with the Delgado STD clinic in New Orleans designated as the sentinel site. Each month, urethral smears are collected from men complaining of urethral discharge. Louisiana contributed 250 samples to this national study in 2011.

## **Other Prevention Activities**

# Syphilis Outbreak Response

Syphilis Outbreak Response is a three-phase plan to address an outbreak of syphilis. The plan includes activities by staff in the following sections: Surveillance, Epidemiology, Data Management, Clinical/Laboratory, Prevention/Health Promotion, Field Services and Central Office. The three phases are as follows:

- 1. Outbreak Detection
- 2. Outbreak Investigation and Response
- 3. Outbreak Closure and Evaluation

In 2011, there were no outbreak response efforts.

# **Syphilis Elimination**

The Syphilis Elimination Effort (SEE) is a national initiative that brings together health care providers, policy makers, community leaders and state and local public health agencies to reduce syphilis rates in the United States. In Louisiana, during HIV prevention and services planning meetings, SHP staff contributed by providing guidance on STD and HIV morbidity, co-infections, and opportunities for collaboration. In 2011, SHP continued to participate in the Tri-State (Arkansas-Louisiana-Texas) syphilis elimination work group. This workgroup holds quarterly conference calls amongst various staff in the three states to discuss activity and morbidity trends, as well as efforts within the states to address these trends.

SHP's Laboratory Supervisor contacts laboratories and promotes electronic laboratory reporting (ELR). The supervisor works closely with the regional surveillance staff to monitor and address issues in lab reporting. The goal of the Laboratory Supervisor is to have SHP receive 100% of positive syphilis tests results conducted in the state.

SHP also contracted with two CBOs in New Orleans and Baton Rouge. These organizations scheduled outreach screening activities in identified areas or venues to recruit high-risk individuals, including a screening program at East Baton Rouge Parish Prison. The CBOs reported the number of people screened and the positivity rate/number of new cases identified. SHP's surveillance staff routinely conducts provider visitations to inform new and current medical providers of disease reporting requirements and to promote state and federal recommendations for the testing and treatment of STDs.



# **Evaluation**

# **Introduction to the Evaluation Unit**

The Louisiana Office of Public Health STD/HIV Program (SHP) Evaluation Unit collaborates with SHP's Prevention, Services, Regional Operations, 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 SHP 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	<ul> <li>What services were delivered and what populations were served?</li> <li>Review program activities</li> <li>Determine the populations served</li> <li>Determine the services provided</li> <li>Analyze trends to inform program planners</li> </ul>
Process Evaluation	<ul> <li>Were the programs implemented as intended and did they reach the intended population?</li> <li>Assess planned versus actual program performance over a period of time for the purpose of program improvement and future planning</li> </ul>
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	<ul> <li>Did the intervention cause the expected outcomes?</li> <li>Collect data before and after an intervention (or from persons who had an intervention, and those who did not)</li> <li>Determine whether behaviors, attitudes, or health outcomes changed as a result of the intervention</li> </ul>
Impact Evaluation	<ul> <li>What long-term effects did the program or intervention have on HIV infection?</li> <li>Examine trends in new HIV diagnosis, health status, morbidity, and mortality of HIV-infected persons</li> </ul>

<sup>\*</sup>Modified from CDC's NHM&E Workshop "Evaluation Terms, Explanations, and Sample Questions"

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#### Where and how are evaluation data obtained?

The Evaluation Unit oversees the National HIV Behavioral Surveillance (NHBS) project and Continuous Quality Improvement (CQI) activities, and collects and summarizes data from the STD/HIV Prevention, Care and Services, and Surveillance Units of SHP. Data for some programs are collected by SHP staff, but SHP also relies on service providers throughout the state to collect and submit process-level data to SHP on an ongoing basis.

#### **Evaluation of HIV Prevention Interventions**

The Prevention Unit funds HIV counseling, testing and referral services; contacts partners of HIV-infected persons for education, testing and referral; implements targeted prevention activities through its subcontractors, and supports community-wide awareness events, including social marketing and media. In 2011, SHP funded nine community-based organizations (CBOs) to implement CDC-approved interventions across Louisiana. Interventions were targeted to select groups, including men who have sex with men (MSM), high-risk heterosexuals and blacks 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. The process and outcome measures for selected prevention interventions that are monitored on an ongoing basis are shown below.

	Evaluation of HIV Prevention Interventions
Program	Process and Outcome Measures
	Number of HIV tests conducted annually and percent seropositive
HIV Counceling	Percentage of clients who receive their test results
HIV Counseling, Testing and Referral	<ul> <li>Percentage of HIV-negative clients who receive an appropriate referral to needed services</li> </ul>
Services	<ul> <li>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</li> </ul>
	<ul> <li>Percentage of newly-diagnosed persons who are interviewed by a Disease Intervention Specialist</li> </ul>
HIV Partner Services	Percentage of persons interviewed who name at least one partner
Services	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

In 2011, the Evaluation Unit also supported evaluation activities of several special projects to enhance prevention activities. Some of these projects included:

- Evaluating HIV Partner Services and Internet Partner Services (IPS) focusing on partner elicitation and use
  of IPS in the field, including client satisfaction
- Evaluating the cultural competency of CBO and SHP staff
- Evaluating the 2011 Street Outreach Survey results
- Evaluating large-scale testing events, such as the 2011 Essence Festival and the Bayou Classic
- Evaluating the Prevention with Positives Risk Management intervention
- Evaluating services provided through an MSM Wellness Center in Monroe, Louisiana
- Evaluating the Thrive! Workshop for HIV+ participants at baseline and follow-up
- Ensuring that the five-year (2012-2016) CDC HIV Prevention grant application includes a Monitoring and Evaluation (M&E) plan which is consistent with the National HIV/AIDS Strategy.

# **Evaluation of STD Prevention Interventions**

The STD/HIV Program, through the collaborative efforts of staff in the Data Management/Analysis, Regional Operations and Evaluation Units, developed an STD-specific Performance Measures Report that lists key national (federally funded) and state performance indicators. This quarterly assessment is a performance and communication tool to regional administrative and program staff providing: a) a snapshot of progress being made in reaching performance measures in each region; b) comparison against the program's objectives; and c) opportunity for discussion with staff and partners from each region to better assist with monitoring and improved performance measures. The report includes morbidity trends, case management and disease intervention index, field outcomes, and user system status for both P&S syphilis and HIV cases that are assigned and investigated. Future discussions and flexibility of variables are inherent within the report as the Louisiana STD/HIV Program looks toward the improvement and accomplishment of its overall objectives.

The CDC Performance Measures for selected STD prevention interventions that are monitored on an ongoing basis are shown in the table below.

	Evaluation of STD Prevention Activities
Program	Process and Outcome Measures
Treatment of Chlamydia	<ul> <li>Among clients of Infertility Prevention Program (IPP) designated family planning clinics, the proportion of women with positive CT tests who are treated within 14 and 30 days of the date of specimen collection.</li> <li>Among clients of STD clinics, the proportion of women with positive CT tests who are treated within 14 and 30 days of specimen collection.</li> </ul>
Treatment of Gonorrhea	<ul> <li>Among clients of Infertility Prevention Program (IPP) designated family planning clinics, the proportion of women with positive GC tests who are treated within 14 and 30 days of the date of specimen collection.</li> <li>Among clients of STD clinics, the proportion of women with positive GC tests who are treated within 14 and 30 days of specimen collection.</li> </ul>
Treatment of P&S Syphilis	<ul> <li>Proportion of P&amp;S syphilis cases treated within 14 and 30 days of specimen collection.</li> </ul>
Syphilis Partner Services	<ul> <li>Proportion of P&amp;S syphilis cases interviewed within 7, 14 and 30 calendar days from date of specimen collection.</li> <li>Number of contacts prophylactically treated within 7, 14 and 30 calendar days from days of interview of index case of P&amp;S syphilis.</li> <li>Number of contacts newly diagnosed and treated within 7, 14 and 30 calendar days from day of interview of index case, per case of P&amp;S syphilis.</li> </ul>

# **Evaluation of HIV 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 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.

	Evaluation of HIV Care and Services Activities
Program	Process and Outcome Measures
ADAP and HIP	<ul> <li>Percentage of program participants who are reviewed for continued eligibility at least two or more times in the measurement year.*</li> <li>Percentage of new anti-retroviral classes included in the ADAP formulary within 90 days of the date of inclusion of new anti-retroviral classes in the PHS Guidelines for the Use of Antiretroviral Agents in HIV-positive adults and Adolescents during the measurement year.*</li> <li>Percentage of enrollees who were in medical care during the measurement year.</li> </ul>
Dowt D Divost	Percentage of Part B clients who had two or more medical visits in an HIV care     setting in the measurement year *
Part B Direct Services	<ul> <li>setting in the measurement year.*</li> <li>Percentage of Ryan White Part B clients who had permanent housing during the measurement year.</li> </ul>
HOPWA	Percentage of HOPWA clients seen at Part B providers who were in medical care during the measurement year.
Assessment and Referrals	<ul> <li>Percentage of new Ryan White Part B case management clients who were screened for mental health and/or substance use referral need.</li> <li>Percentage of new Ryan White Part B case management clients who needed and accepted a mental health treatment referral.</li> <li>Percentage of new Ryan White Part B case management clients who needed and accepted a substance use treatment referral.</li> <li>Percentage of Ryan White Part B case management clients who had an unmet need for transportation services to facilitate access to medical care and related services at least once in the preceding 12 months.</li> <li>Proportion of Ryan White Part B case management clients who experienced food or nutrition insecurity at least once in the preceding 12 months.</li> <li>Percentage of new Ryan White Part B case management clients who were assessed for adherence and counseled two or more times at least three months apart in the measurement year.</li> </ul>
Corrections	Percentage of HIV-positive clients newly discharged from the Louisiana     Department of Corrections who entered medical care within six months of discharge
Mortality	All cause mortality rate among people diagnosed with HIV infection.

<sup>\*</sup>HRSA HIV/AIDS Bureau Indicators

# Evaluating and revising care systems to meet emerging needs

The Evaluation Unit routinely reviews data documented by each contracted agency with staff from the Care and Services Unit to ensure that contract objectives are being met. In 2011, the Care and Services Unit contracted with 19 organizations in Louisiana for the provision of care and treatment services, including assistance in paying for health insurance premiums and all related cost share expenses (co-payments, deductibles, etc.); obtaining HIV medications through the AIDS Drug Assistance Program (ADAP); oral health care; medical and non-medical case management; support services, such as medical transportation, nutritional services, and emergency assistance; as well as short-term and tenant-based housing assistance. Each of these contracts specified process and outcome reporting requirements for all services provided, and SHP staff continuously assess the overall service needs of persons living with HIV disease and modify systems and resources allocations as needed to improve service delivery.

A significant evaluation component for the Care and Services Unit was the implementation of the Clinical Quality Management (CQM) program. The mission of the CQM program is to drive continual improvement of high quality medical care and support services for people living with HIV disease in Louisiana. The Continuous Quality Improvement (CQI) Steering Committee provides oversight of the CQM program and meets routinely to ensure that service delivery meets Ryan White Program Part B and Public Health Service standards and to assess the degree to which Ryan White services are accessible, coordinated, comprehensive, patient-centered, effective and efficient. The CQI Steering Committee is representative of many individuals and disciplines across the state that provide medical and supportive services to low income persons who are living with HIV disease in Louisiana. The 2012 CQM program's three overall goals included:

- 1. Revise and implement the statewide Ryan White Program Part B quality management plan,
- 2. Improve the efficiency of the Louisiana ADAP, and
- 3. Strengthen the quality of supportive services to improve clinical outcomes of PLWH.

In 2012, the CQM plan was revised to include new goals and objectives and meetings with the CQI Steering Committee members were resumed. In addition, site visits to provider organizations across the state were conducted and SHP staff provided technical assistance to provider organization on quality management. A more detailed review of service delivery practices across the state has led to the development of the following quality improvement initiatives for 2013:

- Revision and standardization of the patient acuity scale and care plan formats for more strategic service planning and delivery,
- Provision of ongoing technical assistance for the inclusion of HAB performance measures at the provider level,
- Identification and promotion of additional housing resources to increase the number of RW clients with permanent housing,
- Provision of health literacy and health systems navigation capacity building activities for clients to increase the number of clients in continuous care,
- Elimination of health disparities through capacity building activities for service providers to address disparities and
- Identification of barriers to care via client surveys and small focus groups, to assist in establishing a more targeted service delivery model for the most at risk populations (based on the Louisiana HIV epidemiological profile).

### 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. In 2011, the percent of persons with unmet need dropped to 32%.

Another concern is that persons enter the care system much too late and in a state of physical decline. In 2011, 25% of newly identified persons living with HIV infection received an AIDS diagnosis simultaneously with their HIV diagnosis and an additional 7% progressed to AIDS within six months of their HIV diagnosis. The 2011 HIV surveillance data of newly diagnosed persons were also analyzed in order to determine the percentage of those who entered care within three months of diagnosis. The overall percentage of those entering care within three months was 74%, which was a small increase from 2010 when the percentage who entered care was 73%.

# Chapter 7

# **Appendices**

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

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#### **Included Tables**

Trends in HIV Infection, Louisiana, 1979-2011

• 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 2011.

New HIV Diagnoses by Region and Year, Louisiana, 2002-2011

• This table includes the number of New HIV Diagnoses from 2002 to 2011, for each of the nine public health regions in Louisiana.

New AIDS Diagnoses by Region and Year, Louisiana, 2002-2011

• This table includes the number of New AIDS Diagnoses from 2002 to 2011, for each of the nine public health regions in Louisiana.

Geographic Distribution of HIV in Louisiana, 2011

• This two-page table includes new AIDS Diagnoses in 2011, HIV Diagnoses in 2011, HIV Case Rate in 2011, Persons Living with HIV Infection in 2011, and Deaths in Persons Living with HIV Infection in 2010 for each of the nine public health regions and the 64 parishes of Louisiana.

Deaths among Persons with HIV Infection, Louisiana, 2010

• This table contains the demographic breakdown of Persons with HIV Infection who died in 2010 in Louisiana.

Trends in HIV Infection Louisiana, 1979-2011								
Year	New HIV Diagnoses	New AIDS Diagnoses	Persons Living with HIV Infection	Deaths				
1979	1	1	1	0				
1980	1	1	1	1				
1981	5	0	7	0				
1982	17	10	22	3				
1983	58	27	70	15				
1984	146	84	187	36				
1985	383	151	498	100				
1986	484	242	852	158				
1987	757	417	1,391	244				
1988	781	450	1,954	292				
1989	1,039	613	2,638	429				
1990	1,212	708	3,466	436				
1991	1,555	937	4,568	542				
1992	1,754	1,065	5,698	678				
1993	1,716	1,134	6,726	768				
1994	1,650	1,105	7,653	821				
1995	1,495	1,043	8,330	905				
1996	1,524	1,123	9,144	787				
1997	1,523	944	10,213	558				
1998	1,281	846	11,097	524				
1999	1,250	790	11,555	496				
2000	1,194	823	12,805	515				
2001	1,142	888	13,502	567				
2002	1,185	969	14,260	553				
2003	1,054	892	14,848	580				
2004	1,064	864	15,680	569				
2005	971	804	13,689	581				
2006	991	766	14,192	552				
2007	1,082	802	14,784	516				
2008	1,095	844	15,419	481				
2009	1,209	792	16,102	529				
2010	1,130	804	16,785	446				
2011	1,282	796	17,735	n/a*				

<sup>\*</sup>Data are not complete

New HIV Diagnoses by Region and Year Louisiana, 2002-2011										
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Louisiana	1,185	1,054	1,064	971	991	1,082	1,095	1,209	1,130	1,282
1-New Orleans	443	415	440	321	247	323	356	384	345	435
2-Baton Rouge	311	249	251	271	306	310	297	311	299	303
3-Houma	36	35	27	34	38	45	42	40	57	58
4-Lafayette	90	97	75	77	72	67	75	87	88	93
5-Lake Charles	53	39	38	43	39	54	56	51	47	52
6-Alexandria	61	40	46	39	51	44	49	61	61	70
7-Shreveport	73	74	85	68	96	115	106	114	102	130
8-Monroe	74	56	63	62	83	74	52	72	59	72
9-Hammond/Slidell	44	49	39	56	59	50	62	89	72	69

New AIDS Diagnoses by Region and Year Louisiana, 2002-2011										
	2002 2003 2004 2005 2006 2007 2008 2009 2010 201									
Louisiana	969	892	864	804	766	802	844	792	804	796
1-New Orleans	358	345	351	267	223	263	268	238	252	261
2-Baton Rouge	278	238	216	200	225	221	251	201	238	219
3-Houma	33	35	28	29	42	31	32	34	49	31
4-Lafayette	77	57	56	66	65	57	62	51	61	56
5-Lake Charles	39	47	42	38	35	39	37	42	29	41
6-Alexandria	37	35	39	31	31	32	36	41	36	41
7-Shreveport	59	49	59	73	52	78	78	78	53	66
8-Monroe	53	45	45	57	48	39	40	55	44	38
9-Hammond/Slidell	35	41	28	43	45	42	40	52	42	43

#### **Geographic Distribution of HIV** Louisiana, 2011 HIV **AIDS** HIV **Persons Living Diagnosis** Deaths Diagnoses with HIV Region **Parish Diagnoses** Rate in 2011\* in 2011 Infection 2011 2011\*\* Statewide 1,282 17,735 5,934 **Region 1** Jefferson 1,629 Orleans 4,137 Plaquemines St. Bernard Region 2 4,570 Ascension East Baton Rouge 3,505 East Feliciana Iberville Pointe Coupee West Baton Rouge West Feliciana **Region 3** Assumption Lafourche St. Charles St. James St. John the Baptist St. Mary Terrebonne **Region 4** 1,371 Acadia Evangeline Iberia Lafayette St. Landry St. Martin Vermilion Region 5 Allen Beauregard Calcasieu Cameron Jefferson Davis

Geographic Distribution of HIV Louisiana, 2011						
Region	Parish	AIDS Diagnoses in 2011*	HIV Diagnoses in 2011	HIV Diagnosis Rate 2011**	Persons Living with HIV Infection 2011	Deaths 2010
Statewide		796	1,282	28	17,735	446
Region 6		41	70	23	767	17
	Avoyelles	6	8	19	138	2
	Catahoula	1	1	10	26	0
	Concordia	1	3	14	43	0
	Grant	4	24	108	29	1
	La Salle	5	27	180	15	0
	Rapides	19	0	0	406	11
	Vernon	2	6	12	57	2
	Winn	3	1	7	53	1
Region 7		66	130	24	1,441	45
	Bienville	3	1	7	28	0
	Bossier	2	9	8	154	8
	Caddo	47	92	36	947	26
	Claiborne	2	2	12	64	0
	De Soto	2	5	19	56	3
	Natchitoches	5	12	30	109	4
	Red River	2	2	23	8	0
	Sabine	2	2	8	21	2
	Webster	1	5	12	54	2
Region 8		38	72	20	939	26
	Caldwell	0	2	20	17	0
	East Carroll	0	1	13	29	1
	Franklin	0	2	10	29	2
	Jackson	1	2	12	30	0
	Lincoln	3	6	13	74	0
	Madison	1	2	17	39	3
	Morehouse	5	4	14	59	1
	Ouachita	23	46	30	536	11
	Richland	2	5	24	43	1
	Tensas	0	0	0	34	2
	Union	3	1	4	38	4
	West Carroll	0	1	9	11	1
Region 9		43	69	13	1049	28
	Livingston	9	11	8	164	5
	St. Helena	0	2	18	19	1
	St. Tammany	14	20	8	368	10
	Tangipahoa	16	28	23	326	11
	Washington	4	8	17	172	1

<sup>\*</sup>AIDS diagnoses will be included in counts of HIV diagnosis (3rd 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.
\*\*Rates per 100,00 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, 2010				
	2010 Deaths	Percent		
Total Deaths	446	100%		
Diagnosis at Death				
AIDS	366	82.1%		
HIV	80	17.9%		
Sex				
Female	138	30.9%		
Male	308	69.1%		
Race/Ethnicity				
Black/African American	307	68.8%		
Hispanic/Latino	10	2.2%		
White	127	28.5%		
Other	2	0.4%		
Age at Death				
0-12	1	0.2%		
13-19	1	0.2%		
20-24	4	0.9%		
25-34	47	10.5%		
35-44	97	21.7%		
45-54	167	37.4%		
55-64	97	21.7%		
65+	32	7.2%		
Imputed Transmission Category				
Men who have sex with men (MSM)	158	35.4%		
Injection Drug User (IDU)	127	28.5%		
MSM/IDU	39	8.7%		
High Risk Heterosexual (HRH)	115	25.8%		
Transfusion/Hemophilia/Other	5	1.1%		
Perinatal/Pediatric	2	0.4%		
Region				
1-New Orleans	136	30.5%		
2-Baton Rouge	124	27.8%		
3-Houma	15	3.4%		
4-Lafayette	32	7.2%		
5-Lake Charles	23	5.2%		
6-Alexandria	17	3.8%		
7-Shreveport	45	10.1%		
8-Monroe	26	5.8%		
9-Hammond/Slidell	28	6.3%		
Rural/Urban				
Rural	61	13.7%		
Urban	385	86.3%		

# **Program Report Technical Notes**

### **Report Format**

The 2011 Program Report is the second effort to combine HIV, AIDS and STD data into a single report. More complete 2011 STD data is available in detail in the STD Annual Report, released in January 2013. The STD Annual Report can be found on the DHH website, http://dhh.louisiana.gov/std. This STD/HIV Program Report is divided into six chapters, Introduction to the HIV Epidemic, HIV Care and Services, HIV Prevention, Introduction to the STD Epidemics, STD Prevention and Services, and Evaluation.

# **Tabulation of Data**

This report includes all STD information entered at the STD/HIV Program office as of May 4, 2012 and all HIV information entered as of September 06, 2012. Chlamydia, gonorrhea, syphilis, congenital syphilis, HIV and AIDS cases diagnosed through 2011 are included in this report. The 2011 data are very complete and are not adjusted for a potential reporting delay. Due to reporting and collection delays for deaths and pediatric HIV cases, those data are reported only through 2010 to ensure complete data.

#### Census Data and Rate Calculation

For all 2011 rates, the 2011 census data was obtained from the U.S. Census Bureau. For all rates calculated for years 2002-2009, mid-year estimates for populations were obtained from the U.S. Census Bureau. The census estimates for 2010 are from the census data completed in 2010. These populations 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, and congenital syphilis rates which are calculated per 100,000 live births. An example of how rates are calculated is as follows. For the HIV diagnosis rate in 2010 for the New Orleans Public Health Region 1, the 2010 Census populations for the four parishes within Region 1 are added together equaling a regional population of 835,320 persons. Then the number of new HIV diagnoses in Region 1 in 2010, 366 new diagnoses, is divided by the totaled population, 835,320 persons to get 0.000438. This number is multiplied by 100,000 to result in an HIV case rate of 43.8 per 100,000 population for Region 1 in 2010.

# Recent Changes in HIV and AIDS Terminology

Previously the term HIV/AIDS was used to refer to three 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 were 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, and 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 a true measure of 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.

# **HIV 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.<sup>27</sup> The 1987 definition<sup>28</sup> 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.<sup>29</sup> 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.<sup>30</sup> 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). 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.

# **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.

# **HIV Imputed Transmission Category**

Newly 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. All 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. Transmission categories are not imputed for STD data.

### **Treatment Cascade**

The treatment cascade in the introduction of this report was created using data from multiple sources.

-HIV-diagnosed. Number of persons diagnosed with HIV with a current address in Louisiana. For 2011, N=17,735. The number of people diagnosed with HIV account for 82% of all people living with HIV infection. The current CDC estimate is that 18% of persons living with HIV infection are unaware of their status.

**Source**: STD/HIV Program, HIV Surveillance Data

-Linked to Care. Persons who had at least one care visit in 2011 (defined as a CD4 count or VL collected in 2011).

**Source**: STD/HIV Program Laboratory Database.

-Retained in Care. Persons who had at least two care visits in 2011 that were more than 90 days apart.

**Source**: STD/HIV Program Laboratory Database.

-Suppressed VL. Persons whose most recent VL was ≤ 200 copies/ml.

**Source**: STD/HIV Program Laboratory Database.

National data source: CDC. Vital Signs: HIV Prevention Through Care and Treatment – United States. MMWR 2011; 60(47);1618-1623.

# **Additional Notes**

- 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 considered unstable and marked as 'n/a.'

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# **Works Cited**

- 1. U.S. Census Bureau, 2011 Population Estimates
- 2. U.S. Census Bureau, 2011 American Community Survey
- 3. IBID
- 4. IBID
- 5. U.S. Bureau of Labor Statistics: http://www.bls.gov/eag/eag.la.htm
- 6. National Institute of Corrections: http://nicic.gov/features/statestats/?State=LA
- 7. Department of Public Safety and Corrections: http://doc.la.gov/wp-content/uploads/stats/1g.pdf
- 8. U.S. Census Bureau and U.S. Bureau of Labor Statistics: 2011 Current Population Survey
- 9. Kaiser Family Foundation statehealthfacts.org, site accessed February 27, 2013. http://www.statehealthfacts.org/profileglance.jsp?rgn=20&rgn=1
- 10. Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report, 2011*. Vol 23. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2013
- **11. IBID**
- **12. IBID**
- 13. CDC. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 U.S. dependent areas—2010. *HIV Surveillance Supplemental Report* 2012;17(No. 3, part A).
- 14. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. Available at http://aidsinfo.nih.gov/contentfiles/lvguidelines/AdultandAdolescentGL.pdf. Section accessed [March 20, 2013] [pg 3]
- 15. Mascolini, M. *CD4 Count at HIV Diagnosis Slowly Climbing Across USA and Canada*. Clinical Infectious Diseases. 2010
- 16. Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report, 2010*. Vol 22. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2012
- 17. CDC. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health care settings. *MMWR* 2006;55(RR-14):1–17.
- 18. American College of Obstetricians and Gynecologists. ACOG committee opinion scheduled Cesarean delivery and the prevention of vertical transmission of HIV infection. Number 234, May 2000 (replaces number 219, August 1999). *Int J Gynaecol Obstet*. 2001;73(3):279-281.
- 19. National Vital Statistics System: Births, Final Data for 2011. http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61\_01.pdf
- 20. Gallagher, K.M., Sullivan, P.S., Lansky, A., Ornorato, I.M., *Behavioral surveillance among people at risk for HIV infection in the U.S.: The national HIV behavioral surveillance system*, Public health reports, 2007, vol. 122, SUP1, 32-38.
- 21. Kahn, JG, MD, MPH, Janney, J, MPH, and Franks, PE, *A Practical Guide to Measuring Unmet Need for HIV-Related Primary Medical Care: Using the Unmet Need Framework*, Institute for Health Policy Studies, University of California, San Francisco, May, 2003.
- 22. Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance, 2011. Atlanta, GA:

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- U.S. Department of Health and Human Services, 2012
- 23. Centers for Disease Control and Prevention. *Partner Services FAQs*. http://www.cdc.gov/nchhstp/partners/FAQ-public.html
- 24. Macke BA, Maher JE. *Partner notification in the United States: An evidence-based review*. AM J Prev Med 1999; 17:230-242.
- 25. Centers for Disease Control and Prevention. *Infertility Prevention Project (IPP)*. http://www.cdc.gov/std/infertility/ipp.htm
- 26. Centers for Disease Control and Prevention. *Gonococcal Isolate Surveillance Project (GISP)*. http://www.cdc.gov/std/gisp/
- 27. MMWR 1985; 34: 373-75.
- 28. MMWR 1987; 36 [Supp no.1S]: 1S-15S.
- 29. MMWR 1992; 41[RR-17]: 1-19.
- 30. CDC 1999; 48[RR13]: 1-27.
- 31. MMWR 2008; 57[RR-10]: 1-12