# 2013 STD/HIV Surveillance Report

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



Louisiana Department of Health and Hospitals
Office of Public Health
STD/HIV Program
1450 Poydras Street, Suite 2136
New Orleans, LA 70112
(504) 568-7474
http://dhh.louisiana.gov/hiv
http://dhh.louisiana.gov/std
www.hiv411.org

# **Louisiana Office of Public Health**

STD/HIV Program

**DeAnn Gruber, PhD, LCSW** STD/HIV Program Director

> Jeffrey Hitt, MEd Associate Director

Tsegaye Assefa, MBA
Financial Operations Manager

Sam Burgess, MA, MSHCM
Prevention Manager

**Amy Busby** *Regional Operations Manager* 

Joy Ewell
CDC-Lead PHA-Louisiana

Jessica Fridge, MSPH Surveillance Manager

Kira Radtke Friedrich, MPH
Care and Services Manager

**Debbie Wendell, PhD, MPH**Data Management/Analysis Manager

Graphic Design
Jim McGowan, Complete Communications, Inc.

Editor/Production
Jessica Fridge, MSPH
Demerial Banks, MPH
Catherine Desmarais, MPH
Antoine Brantley, MPH

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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.

#### **About this Report**

The 2013 STD/HIV Surveillance Report provides a thorough surveillance profile of the HIV and STD epidemics in Louisiana. Additional STD data from 2013 can be found online in the 2013 Louisiana STD Annual Report.

#### 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 2013. Some of the most significant trends are highlighted below:

#### **HIV Summary**

- At the end of 2013, 18,895 persons were living with HIV infection in Louisiana, of whom 10,284 (54%) have been diagnosed with AIDS. There are persons living with HIV in every parish in Louisiana.
- In the most recent CDC HIV Surveillance Report (Vol. 24), Louisiana ranked 3rd in the nation for estimated HIV case rates (30.3 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 4th in the nation for estimated HIV case rates (43.4 and 36.2 per 100,000, respectively), among the large metropolitan areas in the nation.
- According to the same report, Louisiana ranked 3rd highest in estimated state AIDS case rates (16.9 per 100,000) and 11th in the number of estimated AIDS cases in 2013. In 2012, Louisiana ranked 3rd highest in estimated state AIDS case rates (18.4 per 100,000) and 11th in the number of estimated AIDS cases. The Baton Rouge metropolitan area ranked 3rd in estimated AIDS case rates (25.4 per 100,000) and the New Orleans metropolitan area ranked 5th in estimated AIDS case rates (23.0 per 100,000) in 2013 among the large metropolitan areas in the nation.
- In 2013, 1,298 individuals were newly diagnosed with HIV infection in Louisiana.
- The New Orleans region had the highest number and rate of new HIV diagnoses in 2013 out of all nine public health regions. The Baton Rouge region had the 2nd highest number and rate of new diagnoses.
- Women represented 24% of new HIV diagnoses in 2013. The HIV rate among men has increased over 56% since 2005, but the rate among women has remained relatively stable over time.
- Blacks continue to experience severe health inequalities; the HIV diagnosis rate for blacks was over ten
  times higher than among whites in 2013. Although blacks make up only 32% of the state's population,
  70% of newly diagnosed HIV cases and 75% of newly diagnosed AIDS cases were among blacks in 2013.
- In 2013, new HIV 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 43% in 2005 to a high of 61% in 2013. An additional 4% of new diagnoses in 2013 were among MSM/IDU. The majority of the new diagnoses among MSM in Louisiana are black and under the age of 35.
- Of the 1,298 persons diagnosed with HIV in 2013, 23% had an AIDS diagnosis at the time of their initial HIV diagnosis, an additional 6% had an AIDS diagnosis within three months, and an additional 2% had an AIDS diagnosis between three and six months after diagnosis. Overall, 31% of all new HIV diagnoses in 2013 had an AIDS diagnosis within six months.
- Perinatal transmission rates have declined significantly from a high of nearly 16% in 1994 to nearly 5% in 2012. From 2006-2009, the transmission rate was below 2%.

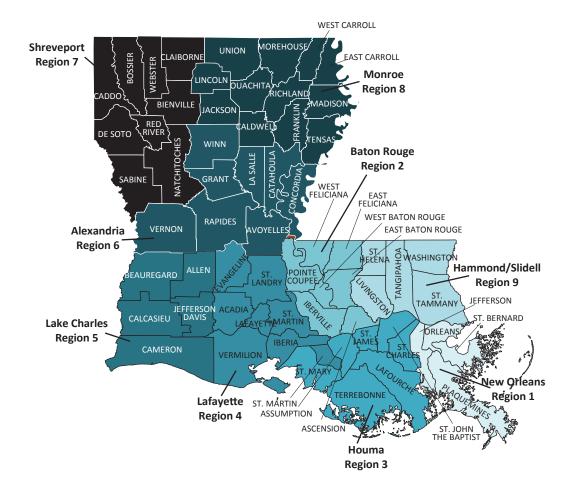
#### **Linkage and Retention in Medical Care**

- In 2013, 79% of persons newly diagnosed with HIV were linked to HIV medical care within three months.
- In 2013, 30% of all persons living with HIV infection in Louisiana were considered to have unmet need for HIV medical care. These persons did not have a single CD4 count or viral load test conducted in 2013.
- 70% of all persons living with HIV infection, who had at least one HIV medical care appointment in 2013, were virally suppressed.

#### **STD Summary**

- In 2013, Louisiana ranked 3rd in the nation in primary and secondary (P&S) syphilis rates (9.1 per 100,000), 1st in gonorrhea rates (187.4 per 100,000), 3rd in chlamydia rates (621.3 per 100,000), and 1st in congenital syphilis rates (63.4 per 100,000 live births).
- There were 28,739 new cases of chlamydia, 8,669 cases of gonorrhea, and 423 cases of P&S syphilis diagnosed in Louisiana in 2013.
- The Shreveport region has the highest rates of P&S syphilis and the Monroe region has the highest rate of gonorrhea and chlamydia of all nine regions in Louisiana.
- Louisiana has the third highest rate of congenital syphilis in the nation. In 2013, there were 40 cases of congenital syphilis reported to the CDC. Only 25 states in the nation reported one or more cases of congenital syphilis in 2013.

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



#### Louisiana's Population

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

#### Louisiana's Population

In the 2013 census, the total population of Louisiana was 4,625,470 persons. Louisiana is made up of 64 county-equivalent subdivisions called parishes. In 2013, parish populations ranged from a low of 4,908 persons (Tensas Parish) to a high of 445,227 persons (East Baton Rouge Parish). 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).

#### **Demographic Composition**

According to the 2013 estimated census data, the racial and ethnic composition of the state was estimated to be 60% white, 32% African American, 2% Asian, and <1% American Indian. Persons of Hispanic origin were estimated to make up 5% of the total population.

#### Age and Sex

In 2013, the census estimates that persons under the age of 18 made up 24.1% of the population while persons 65 and older made up 13.3% of the population. As in previous years, the estimated proportion of females in the overall population in 2013 was slightly higher than that of males (51% vs. 49%).<sup>2</sup>

#### Poverty, Income, and Education

In 2013, the average household size in Louisiana was 2.6 persons and the average family size was 3.2 persons. Of all Louisiana households, 66% are considered family households of which 17% have a female head of household with no husband present. An estimated 82.6% of Louisiana residents aged 25 years and older had attained a high school degree or higher, and 21.8% had a bachelor's degree or higher. The estimated median household income in Louisiana was \$44,874 for 2013. Moreover, an estimated 19.1% of the population had an income below the federally defined poverty level, and 14.8% of families have an income below the poverty level. Louisiana has one of the highest proportions of children living in poverty, with an estimated 22.4% of all children 18 years or younger living in households with an income below the federally defined poverty level in 2013 compared to the national estimate of 17.8% of all US children.<sup>3</sup> The unemployment rate as of December 2013 in Louisiana was 5.6%.<sup>4</sup>

#### Incarceration/Crime

In 2013, the crime rate in Louisiana was 32% higher than the national average rate. Property crimes accounted for 87% of the crime rate and violent crimes accounted for 12% of the crime rate. Of the 50 states, the Louisiana incarceration rate ranked 1st with 847 per 100,000 adults incarcerated. A total of 39,299 inmates were managed by the Louisiana Department of Public Safety and Corrections in 2013.<sup>5,6</sup>

#### **Health Indicators**

In the 2013 United Health Foundation's America's Health Rankings report, Louisiana ranked 48th 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 2013, an estimated 17.1% of Louisiana residents lack health insurance, compared to a national average of 15.7%.

## **Public Aid**

In 2013, Medicaid covered 20% and Medicare covered 15% of all persons living in Louisiana. Medicaid expenditures in Louisiana totaled \$7.1 billion in the 2013 fiscal year. In 2013, 51% of children ages 0-18 were insured through Medicaid.<sup>8</sup>

# **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 infected 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 NAHS 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/.



# Profile of the HIV Epidemic in Louisiana

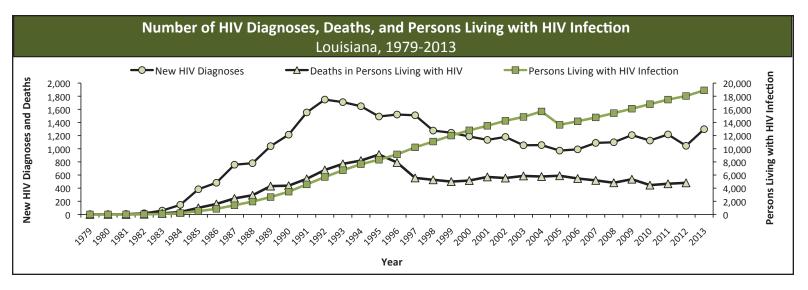
#### Introduction to HIV Surveillance

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, 2013 and reported to SHP before December 23, 2014. 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.

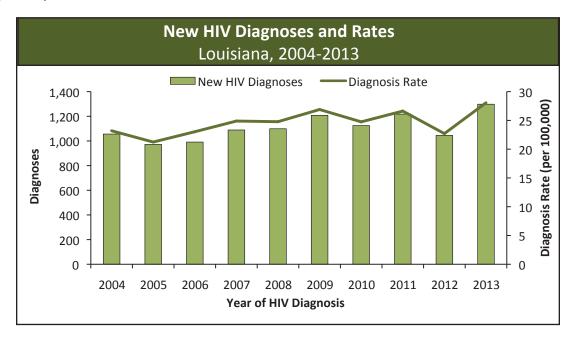


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The first reported Louisiana resident with AIDS was diagnosed in 1979. In the thirty-four years since then, the number of persons living with HIV infection in the state has continued to increase. New HIV diagnoses peaked in 1992 and deaths among persons 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 and disruptions in HIV testing.

# 10-Year Trends in New HIV Diagnoses (2004-2013)

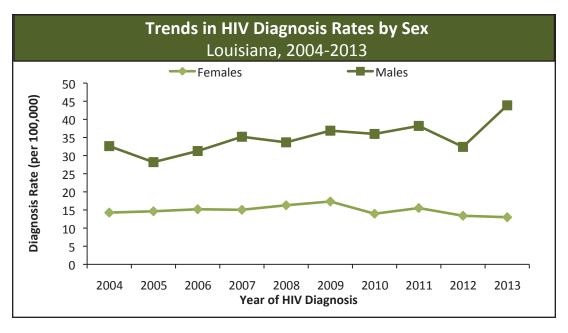
The number of new HIV diagnoses in a given year has historically served as a measure of new infections (incidence). However, since individuals can be infected with HIV for a long time before they are diagnosed, counting new HIV diagnoses is not an accurate representation of new infections in a given year. Louisiana is one of 25 selected states and jurisdictions that have been participating in a CDC initiative to develop a national system to measure recent HIV infections (HIV incidence) as described in the Louisiana 2011 STD/HIV Program Report.



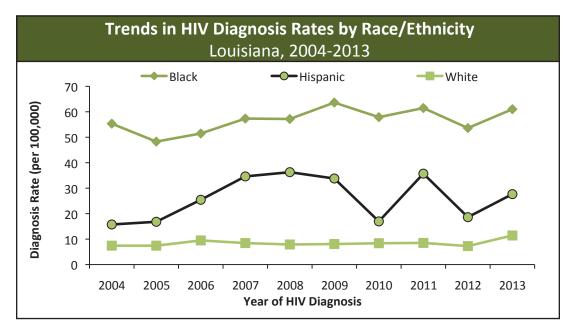
- In 2013, 1,298 individuals were newly diagnosed with HIV infection in Louisiana. Over the past 10 years, the number of new HIV diagnoses has fluctuated from a low of 972 diagnoses in 2005 to a high of 1,298 diagnoses in 2013. In 2005 and 2006, there was a large disruption to HIV testing services due to Hurricane Katrina.
- Over the past 10 years, the HIV diagnosis rate ranged from a low of 21.2 per 100,000 in 2005 to a high of 28.1 per 100,000 in 2013.

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

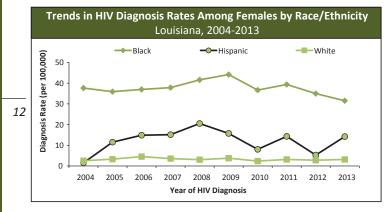
Although the HIV epidemic affects persons of all genders, ages and race/ethnicities in Louisiana, the impact is not the same across all populations. Identifying the populations most at risk for HIV infection helps in planning HIV prevention activities and services, and in determining the most effective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

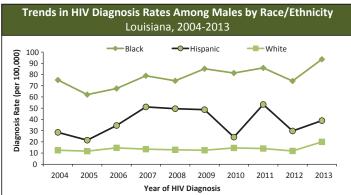


- The HIV diagnosis rate for females in Louisiana has remained relatively stable over the past 10 years. In 2013, the female HIV diagnosis rate was 13.0 per 100,000 females which was the lowest it had been in 10 years.
- The rate for men has been more variable (between 28.2 and 43.9 per 100,000 males). The male HIV rate in 2013 was 43.9 per 100,000 males which was a sharp increase from previous years. Cumulatively, males have accounted for 69% of all new HIV diagnoses in Louisiana over the past 10 years.

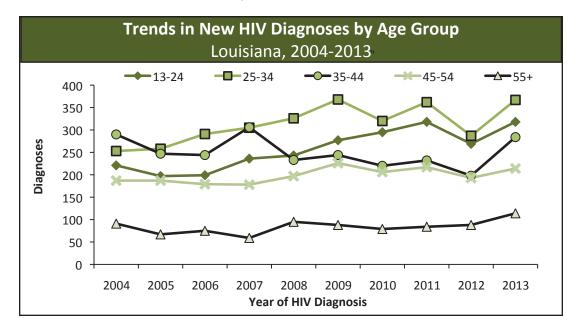


- Although the HIV diagnosis rate among whites has remained stable over the past 10 years, it did increase to 11.4 per 100,000 whites in 2013. The rate for blacks has been more variable and has increased from a low of 48.3 per 100,000 blacks in 2005 to a high of 63.6 per 100,000 blacks in 2009. The 2013 diagnosis rate was 61.0 per 100,000 blacks.
- In 2013, the HIV diagnosis rate for blacks was over five times greater than the rate for whites and over two times the rate for Hispanic/Latinos. The HIV diagnosis rate for Hispanic/Latinos was more than two times greater than for whites; 60 Hispanic/Latino persons were newly diagnosed in 2013.





- Black females and males in Louisiana account for the overwhelming majority of new HIV diagnoses each year. Blacks make up only 32% of Louisiana's population which when taken into account creates exceptionally high diagnosis rates. 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 2013, the HIV diagnosis rate in black females was more than 10 times greater than the rate for white females and was more than two times the rate for Hispanic/Latina females. There has been a rate decrease for black females since 2011.
- In 2013 the HIV diagnosis rate among black males reached a peak of 93.6 per 100,000 black males. In 2013, the HIV diagnosis rate in black males was almost five times greater than the rate for white males, and was more than double the rate for Hispanic/Latino males.

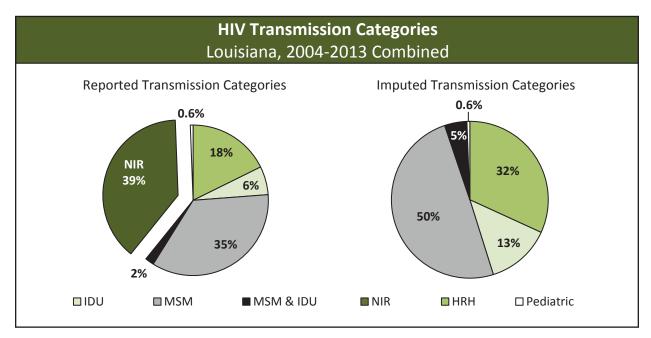


- The majority of all new diagnoses have historically occurred in persons aged 25-44; 50% of all new diagnoses in 2013 were in this age range. The 25-34 year age group has the highest number of new diagnoses (28% of all new HIV diagnoses in 2013). The number of new diagnoses in persons aged 35-44 accounted for an additional 22% of all new diagnoses in 2013.
- The proportion of new diagnoses among youth, age 13-24 years, is of special interest in Louisiana and across the nation. In 2008, the proportion of new diagnoses among 13-24 year olds surpassed the proportion among 35-44 year olds to become the second largest age group for new diagnoses. In 2013, new diagnoses in youth accounted for 25% of all new diagnoses, compared to 20% of all new diagnoses in 2005 and 2006.

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

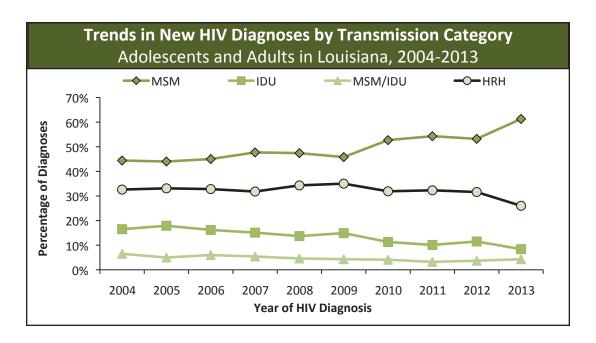
In accordance with the transmission categories used by the CDC, SHP classifies cases into six transmission categories: men who have sex with men (MSM), high risk heterosexual contact (HRH), injection drug use (IDU), men who have sex with men and inject drugs (MSM/IDU), mother-to-child transmission (Pediatric), and cases who received a transfusion or hemophiliac products (Transfusion/Hemophilia). As illustrated in the graph below, many cases do not have risk information reported or do not meet the transmission category criteria and are labeled as no identified risk (NIR). For all persons diagnosed between 2004 and 2013, 39% 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).

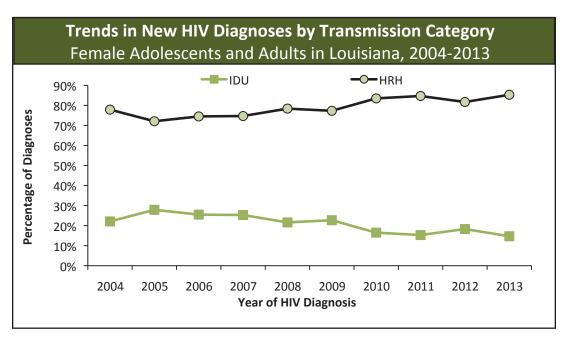


- Of the new diagnoses from 2004 to 2013, 39% do not have a recorded transmission category.
- A risk category is imputed for all cases without a recorded risk; 50% of all cases over the past 10 years were MSM, 32% were HRH, 13% were IDU, 5% were MSM/IDU and 0.6% were perinatally infected.

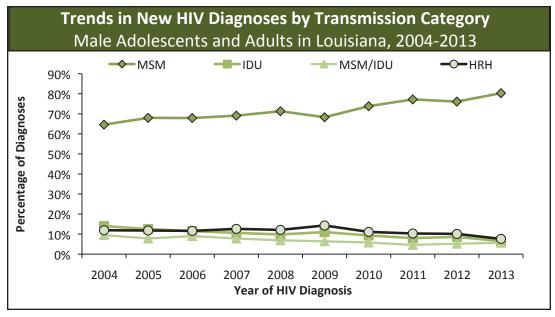
After assigning a transmission category for all NIR cases through imputation, trends in the percentage of cases for each transmission category can be analyzed. The following graphs use imputed transmission categories unless otherwise noted. Transmission category is also calculated using a person's sex at birth.



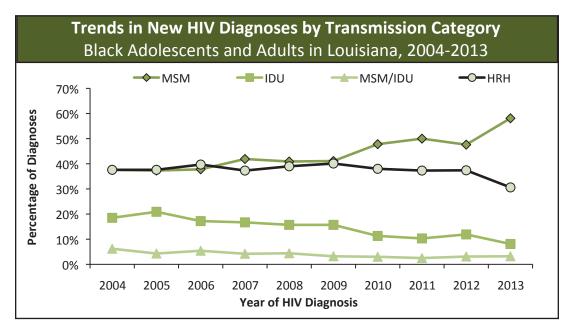
• The percentage of adult HIV diagnoses attributed to MSM has increased significantly from a low of 43% in 2005 to a high of 61% in 2013. The percentage of HRH diagnoses has decreased slightly, from a high of 35% in 2009 to a low of 26% in 2013. The percentage of diagnoses attributed to IDU and MSM/IDU has declined over the past 10 years from 16% IDU and 6% MSM/IDU in 2004 to 8% and 4% respectively in 2013.



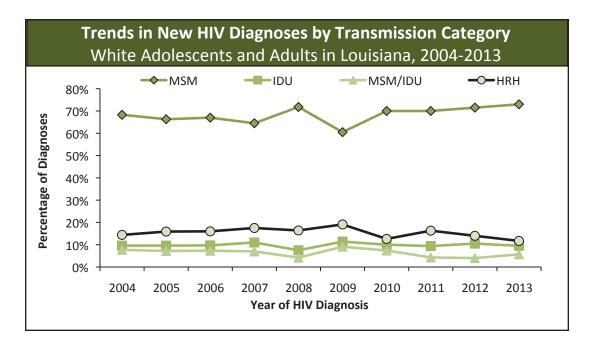
- The primary mode of transmission for women is HRH contact.
- Although there has always been a significant difference in the percentage of female diagnoses attributed to HRH and IDU, the difference was greatest in 2013 when 85% of females were high risk heterosexuals and 15% of females were injection 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 2013, the percentage of male diagnoses that were MSM was 80%, compared to ten years ago when MSM accounted for only 64% of all newly diagnosed males. The percentage of HRH diagnoses among men has remained consistent with the lowest proportion of 8% in 2013.
- The percentage of new diagnoses with a transmission category of IDU and MSM/IDU has declined since 2004 to one of the lowest percentages since the beginning of the epidemic. In 2013, IDU accounted for 7% and MSM/IDU accounted for 6% compared to 14% and 9% in 2004, respectively.



- Historically, the primary mode of transmission for blacks was HRH contact followed closely by MSM.
   In 2008, the percentage of new diagnoses of MSM in blacks surpassed the percentage of diagnoses attributable to HRH.
- In 2013, 58% of all new HIV diagnoses among blacks were MSM and 31% were HRH; 2013 marked a large increase among MSM and decrease among HRH.
- From 2004 to 2013, the percentage of HIV diagnoses resulting from IDU and MSM/IDU among blacks has declined significantly from 18% to 8% for IDU and 6% to 3% for MSM/IDU.

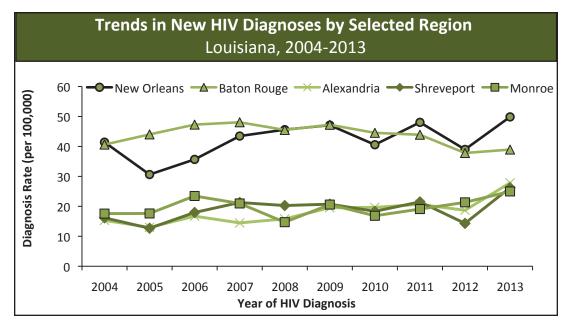


- The predominant mode of transmission among whites has historically been and continues to be MSM. In 2013, 73% of newly diagnosed cases among whites were attributed to MSM.
- In 2013, 12% of diagnoses were attributed to HRH, 10% to IDU and 6% to MSM/IDU.

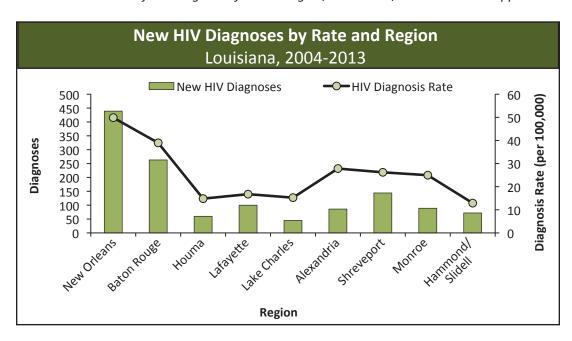
#### **HIV Diagnoses by Public Health Region**

New HIV Diagnoses by Region and Year Louisiana, 2009-2013										
	20	09	20	10	20	11	20	12	20	13
Louisiana	1,208	%	1,125	%	1,218	%	1,045	%	1,298	%
1-New Orleans	384	32%	341	30%	412	34%	339	32%	439	34%
2-Baton Rouge	311	26%	296	26%	293	24%	254	24%	263	20%
3-Houma	41	3%	57	5%	56	5%	53	5%	60	5%
4-Lafayette	86	7%	89	8%	90	7%	79	8%	100	8%
5-Lake Charles	51	4%	49	4%	50	4%	38	4%	45	3%
6-Alexandria	60	5%	61	5%	64	5%	58	6%	86	7%
7-Shreveport	112	9%	100	9%	118	10%	79	8%	144	11%
8-Monroe	73	6%	60	5%	68	6%	76	7%	89	7%
9-Hammond/Slidell	90	7%	72	6%	67	6%	69	7%	72	6%

• The majority of new HIV diagnoses occur in the New Orleans and Baton Rouge regions each year. In 2013, the Shreveport region has the third highest number of new diagnoses followed by Lafayette, Monroe, and Alexandria. From 2012 to 2013, the proportion in Shreveport increased from 8% to 11%, and the proportion in Baton Rouge decreased from 24% to 20%. The proportion of diagnoses in each region has remained relatively stable over the past 5 years.



- The five public health regions in Louisiana with the highest HIV diagnosis rates in 2013 were New Orleans, Baton Rouge, Alexandria, Shreveport, and Monroe (regions 1, 2, 6, 7 and 8 respectively).
- Over the past 10 years the New Orleans and Baton Rouge regions have had the highest rates in the state. From 2006-2010, 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 2013, the diagnosis rate in New Orleans was 49.9 per 100,000 and the rate in Baton Rouge was 38.9 per 100,000. The Shreveport Region had the third highest rate from 2007 to 2011, but in 2013 had the 4th highest rate (26.2 per 100,000). In 2013, the diagnosis rate in Alexandria was 27.8 per 100,000 and the diagnosis rate in Monroe was 25.0 per 100,000. A table with the number of HIV diagnoses for each region, 2004-2013, is located in the Appendix.



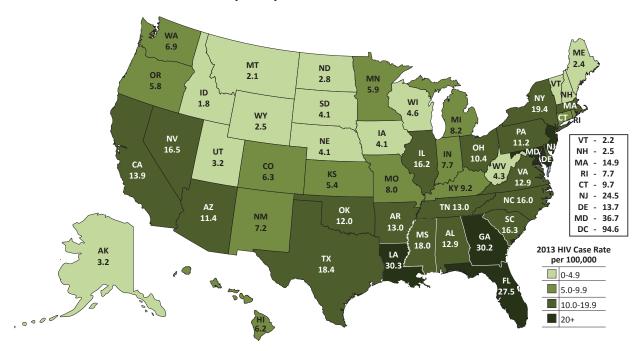
- In 2013, New Orleans had the highest number of new HIV diagnoses and highest HIV diagnosis rate. The Baton Rouge region had the second highest number of new diagnoses and diagnosis rate.
- The Lake Charles region had the lowest number of new HIV diagnoses, and the Hammond/Slidell region had the lowest HIV diagnosis rate.

#### Characteristics of Persons Newly Diagnosed with HIV

Characteristics of Persons Newly Diagnosed with HIV Louisiana, 2012-2013						
	Persons First Diagnosed Persons First Diagnosed with HIV in 2012 with HIV in 2			_		
	Number	Percent	Number	Percent		
TOTAL	1,045	100.0%	1,298	100.0%		
Sex						
Female	315	30.1%	308	23.7%		
Male	730	69.9%	990	76.3%		
Race/Ethnicity						
Black/African American	789	75.5%	904	69.6%		
Hispanic/Latino	39	3.7%	60	4.6%		
White	200	19.1%	315	24.3%		
Other/Unknown/Multi-race	17	1.6%	19	1.5%		
Age Group	Age at HIV	Diagnosis	Age at HIV	Diagnosis		
0-12	10	1.0%	1	0.1%		
13-19	68	6.5%	66	5.1%		
20-24	201	19.2%	252	19.4%		
25-34	287	27.5%	367	28.3%		
35-44	198	18.9%	284	21.9%		
45-54	193	18.5%	214	16.5%		
55-64	71	6.8%	100	7.7%		
65+	17	1.6%	14	1.1%		
Transmission Category						
Men who have sex with men (MSM)	551	52.7%	795	61.2%		
Injection Drug User (IDU)	119	11.4%	109	8.4%		
MSM/IDU	38	3.6%	56	4.3%		
High Risk Heterosexual (HRH)	327	31.3%	337	26.0%		
Transfusion/Hemophilia/Other	0	0.0%	0	0.0%		
Perinatal/Pediatric	10	1.0%	1	0.1%		
Rural/Urban						
Rural	167	16.0%	209	16.1%		
Urban	878	84.0%	1,089	83.9%		

- In 2013, 1,298 persons were newly diagnosed with HIV, a 24% increase from 2012. The number of new diagnoses in 2012 was exceptionally low compared to recent years.
- In 2013, 24% of all HIV diagnoses were female and 76% were male.
- Approximately 70% of all HIV diagnoses in 2013 were among blacks even though blacks make up only 32% of Louisiana's population, representing a large disparity of HIV infections.
- In 2012 and 2013, the greatest number and proportion of diagnoses were in persons age 25-34.
- From 2012 to 2013, the proportion of MSM diagnoses increased from 53% in 2012 to 61% in 2013 and the proportion of persons who were injection drug users decreased from 11% in 2012 to 8% in 2013.
- In Louisiana, most new diagnoses in 2013 (84%) were among persons residing in an urban area. An urban area is defined as a parish that belongs to a metropolitan statistical area (MSA).

# HIV Rates in the United States (2013)9



- In February 2015, the CDC released their *HIV Surveillance Report, 2013*; vol. 25, which provides national and statewide HIV and AIDS data.
- In the US, there were an estimated 47,352 new HIV diagnoses in 2013, for a national HIV diagnosis rate of 15.0 diagnoses per 100,000 population. In 2012, the national HIV diagnosis rate was 15.3 per 100,000 population.
- In 2013, Louisiana ranked 3rd highest in state estimated HIV diagnosis rates (30.3 per 100,000 population) in the US behind the District of Columbia (94.6 per 100,000) and Maryland (36.7 per 100,000). In 2012, Louisiana ranked 4th highest in state estimated HIV diagnosis rates (27.1 per 100,000 population).
- In 2013, Louisiana ranked 11th in the nation for the number of new HIV diagnoses.

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

Nationally, MSM account for almost half of the one million people living with HIV and over half of all new HIV infections in the US each year. In 2013, MSM accounted for 65% 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 2013 among MSM who may or may not be injection drug users.

- In 2013, there were 1,298 new HIV diagnoses in Louisiana; 66% (851) were among all MSM (IDU and non-IDU).
- The majority of the new diagnoses among MSM in Louisiana are black and under the age of 35.
- 54% 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, 2013							
	MSM/Non-IDU MSM/IDU All MSM <sup>3</sup>						
	Diagnoses	Percent	Diagnoses Percent		Diagnoses	Percent	
TOTAL	795	100%	56	100%	851	100%	
Race/Ethnicity							
Black/African American	525	66.0%	29	51.8%	554	65.1%	
Hispanic/Latino	28	3.5%	7	12.5%	35	4.1%	
White	230	28.9%	18	32.1%	248	29.1%	
Other/Unknown/Multi-race	12	1.5%	2	3.6%	14	1.6%	
Age at HIV Diagnosis							
13-24	245	30.8%	12	21.4%	257	30.2%	
25-34	235	29.6%	17	30.4%	252	29.6%	
35-44	147	18.5%	12	21.4%	159	18.7%	
45-54	110	13.8%	10	17.9%	120	14.1%	
55-64	50	6.3%	4	7.1%	54	6.3%	
65+	8	1.0%	1	1.8%	9	1.1%	
Region							
1-New Orleans	288	36.2%	18	32.1%	306	36.0%	
2-Baton Rouge	135	17.0%	14	25.0%	149	17.5%	
3-Houma	38	4.8%	0	0.0%	38	4.5%	
4-Lafayette	65	8.2%	2	3.6%	67	7.9%	
5-Lake Charles	22	2.8%	4	7.1%	26	3.1%	
6-Alexandria	47	5.9%	10	17.9%	57	6.7%	
7-Shreveport	94	11.8%	4	7.1%	98	11.5%	
8-Monroe	54	6.8%	3	5.4%	57	6.7%	
9-Hammond/Slidell	52	6.5%	1	1.8%	53	6.2%	
Late Testers							
AIDS at Time of HIV Diagnosis	173	21.8%	11	19.6%	184	21.6%	
AIDS Within 3 Months of HIV Diagnosis	226	28.4%	13	23.2%	239	28.1%	
AIDS Within 6 Months of HIV Diagnosis	239	30.1%	13	23.2%	252	29.6%	

<sup>\*</sup>All MSM is a cumulative total of MSM/Non-IDU (795) and MSM/IDU (56).

# **HIV Among Youth in Louisiana**

In 2013, persons age 13-24 made up 21% of all new HIV diagnoses in the United States.

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 2013, there were 1,298 new HIV diagnoses in Louisiana; 25% (318) were among youth 13-24.
   252 (79%) of the youth diagnoses were among persons age 20-24 years.
- Among all youth, 81% of the new diagnoses were male. This percentage was smaller for 13-19 year olds where 77% of the diagnoses were male and 23% were female.
- The majority (83%) of the new diagnoses among all youth were black. The proportion was higher among 13-19 year olds (88%) then it was among 20-24 year olds (82%).
- The majority (77%) of new diagnoses among youth were MSM.
- Among all youth, 58% of all new diagnoses occurred in the New Orleans and Baton Rouge regions.
- The percentage of late testers among youth is much lower than the overall population.

Demographics of New HIV Diagnoses Among Youth Louisiana, 2013								
13-19 Years 20-24 Years All Youth: 13-24 Years								
TOTAL	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent		
TOTAL Sex	66	100%	252	100%	318	100%		
Female	15	22.7%	44	17.5%	59	18.6%		
Male	51	77.3%	208	82.5%	259	81.4%		
Race/Ethnicity	31	77.570	200	02.570	233	01.470		
Black/African American	58	87.9%	206	81.7%	264	83.0%		
Hispanic/Latino	1	1.5%	2	0.8%	3	0.9%		
White	5	7.6%	38	15.1%	43	13.5%		
Other/Unknown/Multi-race	2	3.0%	6	2.4%	8	2.5%		
Transmission Category								
MSM	49	74.2%	196	77.8%	245	77.0%		
IDU	0	0.0%	9	3.6%	9	2.8%		
MSM/IDU	2	3.0%	10	4.0%	12	3.8%		
HRH	15	22.7%	37	14.7%	52	16.4%		
Region								
1-New Orleans	20	30.3%	86	34.1%	106	33.3%		
2-Baton Rouge	18	27.3%	59	23.4%	77	24.2%		
3-Houma	2	3.0%	11	4.4%	13	4.1%		
4-Lafayette	5	7.6%	18	7.1%	23	7.2%		
5-Lake Charles	0	0.0%	8	3.2%	8	2.5%		
6-Alexandria	3	4.5%	9	3.6%	12	3.8%		
7-Shreveport 8-Monroe	11	16.7%	33	13.1%	44	13.8%		
9-Hammond/Slidell	6	9.1% 1.5%	19 9	7.5% 3.6%	25 10	7.9% 3.1%		
Late Testers	1	1.5%	9	3.0%	10	3.170		
AIDS at Time of HIV Diagnosis	5	7.6%	24	9.5%	29	9.1%		
AIDS Within 3 Months of HIV Diagnosis	8	12.1%	38	15.1%	46	14.5%		
AIDS Within 6 Months of HIV Diagnosis	9	13.6%	45	17.9%	54	17.0%		

<sup>\*</sup> Centers for Disease Control and Prevention. Monitoring selected national HIV prevention and care objectives by using HIV surveillance data—United States and 6 dependent areas—2012. HIV Surveillance Supplemental Report 2014;19(No. 3).

## **HIV Among African Americans in Louisiana**

In 2013, African Americans made up 46% of all new HIV diagnoses in the United States.

- In 2013, there were 1,298 new HIV diagnoses in Louisiana; 70% (904) were among African Americans.
- Among all African Americans, 73% of the new diagnoses were male.
- Youth, age 13-24, made up 29% of all diagnoses among African Americans. This age group had the greatest proportion of new diagnoses. An additional 28.5% of all diagnoses among blacks were 25-34 years old.
- The majority (58%) of new diagnoses among African Americans were MSM.
- More than half (57%) of all new diagnoses among African Americans occurred in the New Orleans and Baton Rouge regions.
- The percentage of late testers among African Americans is the same as the overall population.

Demographics of New HIV Diagnoses Among African Americans Louisiana, 2013					
	Diagnoses	Percent			
TOTAL	904	100%			
Sex					
Female	245	27.1%			
Male	659	72.9%			
Age at HIV Diagnosis					
0-12	1	0.1%			
13-24	264	29.2%			
25-34	258	28.5%			
35-44	171	18.9%			
45-54	134	14.8%			
55-64	65	7.2%			
65+	11	1.2%			
Transmission Category					
MSM	525	58.1%			
IDU	73	8.1%			
MSM/IDU	29	3.2%			
HRH	276	30.5%			
Perinatal	1	0.1%			
Region					
1-New Orleans	287	31.7%			
2-Baton Rouge	226	25.0%			
3-Houma	37	4.1%			
4-Lafayette	66	7.3%			
5-Lake Charles	25	2.8%			
6-Alexandria	44	4.9%			
7-Shreveport	112	12.4%			
8-Monroe	61	6.7%			
9-Hammond/Slidell	46	5.1%			
Late Testers					
AIDS at Time of HIV Diagnosis	198	21.9%			
AIDS Within 3 Months of HIV Diagnosis	257	28.4%			
AIDS Within 6 Months of HIV Diagnosis	275	30.4%			

#### **HIV Among Transgender Persons in Louisiana**

Since data for transgender people is not collected uniformly, overall new infections in the United States is not available. According to the Center of Excellence for Transgender Health, there are numerous social and contextual issues that impact the ascertainment of risk behaviors reported among transgender people, including stigma, discrimination, alienation, poverty, and victimization. (http://transhealth.ucsf.edu/).

- In 2013, there were 1,298 new HIV diagnoses in Louisiana; 12 diagnoses were among transgender women.
- As of December 31, 2013, there were 18,895 persons living with HIV infection, 151 persons were transgender. Of the 151 transgender people living with HIV infection in Louisiana, 99.3% (150) were transgender women.
- 83.3% of new diagnoses among transgender people and 78.8% of transgender persons living with HIV infection were African American.
- In 2013, 42% of the new diagnoses among transgender people were among youth age 20-24 years.
- Of the transgender persons living with HIV in Louisiana, almost half (48%) were 25-34 year olds.
- The majority (75%) of new diagnoses among transgender individuals' reported engaging in sex with men; 17% of transgender people reported engaging in sex with men and injection drug use, and 8% did not report a risk.
- In 2013, 85% of transgender persons living with HIV infection reported having sex with men and 10% reported having sex with men and also injection drug use; 5% did not report risk.
- The majority of new diagnoses among transgender people occurred in New Orleans (58%), while the Baton Rouge had 25%, and the Lafayette and Hammond/Slidell regions each had one new diagnosis.
- More than half (57%) of transgender persons living with HIV infection reside in New Orleans and 21% reside in Baton Rouge.

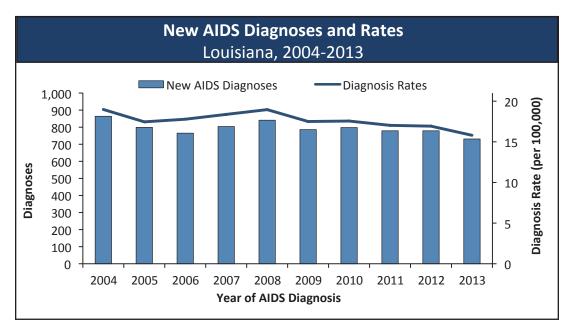
# Demographics of New HIV Diagnoses and Persons Living with HIV Infection Among Transgender Persons Louisiana, 2013

Louisiana, 2015							
	Number of New Diagnoses	Percent	Persons Living with HIV Infection	Percent			
TOTAL	12*	100.0%	151*	100.0%			
Transgender Women	12	100.0%	150	99.3%			
Transgender Men	0	0.0%	1	0.7%			
Race/Ethnicity							
Black/African American	10	83.3%	119	78.8%			
Hispanic/Latino	1	8.3%	9	6.0%			
White	1	8.3%	20	13.2%			
Multi/Unknown/Other	0	0.0%	3	2.0%			
Age at HIV Diagnosis							
20-24	5	41.7%	20	13.2%			
25-34	1	8.3%	72	47.7%			
35-44	3	25.0%	34	22.5%			
45-54	2	16.7%	20	13.2%			
55-64	1	8.3%	5	3.3%			
Transmission Category							
Sex with Men	9	75.0%	129	85.4%			
Sex with Men & Injection Drug Use	2	16.7%	15	9.9%			
No Risk Indicated	1	8.3%	7	4.6%			
Region							
1-New Orleans	7	58.3%	86	57.0%			
2-Baton Rouge	3	25.0%	31	20.5%			
3-Houma	0	0.0%	4	2.6%			
4-Lafayette	1	8.3%	7	4.6%			
5-Lake Charles	0	0.0%	4	2.6%			
6-Alexandria	0	0.0%	2	1.3%			
7-Shreveport	0	0.0%	7	4.6%			
8-Monroe	0	0.0%	3	2.0%			
9-Hammond/Slidell	1	8.3%	1 7	4.6%			

<sup>\*</sup>These individuals are included by their birth sex throughout the report. Please review the technical notes at the conclusion of this report for a full explanation of transmission risk categorization.

# 10-Year Trends in New AIDS Diagnoses (2004-2013)

AIDS diagnoses are the number of individuals diagnosed with AIDS within a given time period. The surveillance case definition for an AIDS diagnosis is: a CD4 cell count <200, a CD4 percentage <14%, or the diagnosis of an opportunistic infection (OI) such as Kaposi Sarcoma 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. *In 2014, the AIDS surveillance case definition was altered to no longer define an AIDS case based on CD4 percentage. This change in case definition only impacts AIDS cases diagnosed after 2013.* 

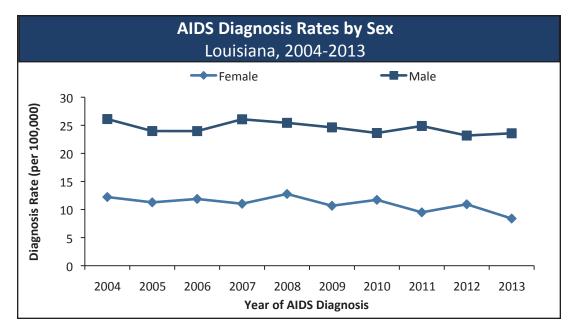


- Since 1997, the number of new AIDS diagnoses in Louisiana has remained below 1,000. Over the past 10 years the number of new AIDS diagnoses has fluctuated from a high of 864 diagnoses in 2004 to a low of 731 AIDS diagnoses in 2013.
- The AIDS diagnosis rate fluctuates slightly each year in accordance with the change in the number of AIDS diagnoses. In 2013, the AIDS diagnosis rate for Louisiana was 15.8 per 100,000 population.

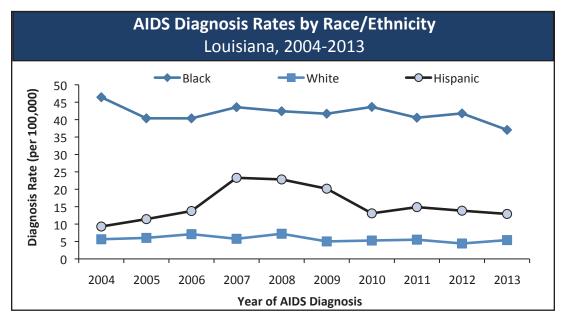
# AIDS diagnoses and deaths in the United States

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 26,688 new AIDS diagnoses in 2013. The CDC estimates that since the beginning of the epidemic through the end of 2013, approximately 1,229,711 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.

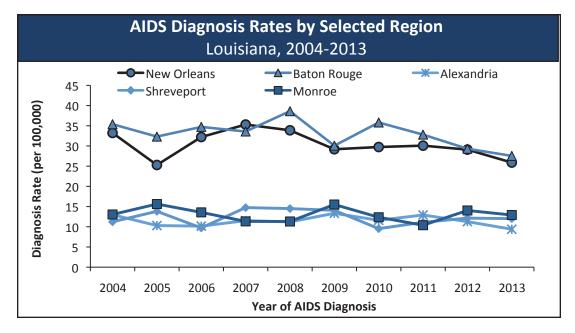
Centers for Disease Control and Prevention. HIV Surveillance Report, 2013; vol. 25



- The AIDS diagnosis rate for females has remained relatively stable over the past 10 years. In 2013, the AIDS diagnosis rate declined to 8.4 per 100,000 females.
- The AIDS diagnosis rate for males has fluctuated within a relatively small range (low of 23.2 per 100,000 males in 2012 and a high of 26.1 per 100,000 males in 2004).
- In 2013, the AIDS diagnosis rate in males (23.6 per 100,000 males) was almost three times greater than the rate in females (8.4 per 100,000 females).

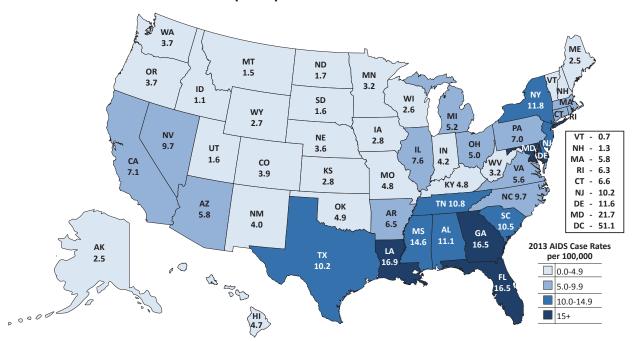


- In 2013, the AIDS diagnosis rate for blacks (37.1 per 100,000 blacks) was almost three times greater than for Hispanic/Latinos and over seven times greater than for whites. The AIDS diagnosis rate among blacks decreased 11% from 2012 to 2013.
- From 2004 to 2013, the AIDS diagnosis rate among Hispanic/Latinos has fluctuated significantly. Following higher AIDS rates from 2007 to 2009, the Hispanic/Latino rate decreased to 12.9 per 100,000 Hispanics in 2013.
- The AIDS diagnosis rate for whites has fluctuated within a relatively small range (low of 4.4 per 100,000 whites in 2012 and a high of 7.1 per 100,000 whites in 2006). The 2013 rate was 5.4 per 100,000 whites.



- For the majority of the past 10 years, the Baton Rouge region has had the highest AIDS diagnosis rate among all nine public health regions. In 2013, the Baton Rouge and New Orleans regions had the highest AIDS diagnosis rates (27.6 per 100,000 population and 25.9 per 100,000 population respectively). Since 2010 the rate in Baton Rouge has been decreasing.
- The AIDS diagnosis rates for the Monroe, Shreveport, and Alexandria regions are very similar each year. In 2013, the AIDS rate in Monroe, Shreveport, and Alexandria were 12.9 per 100,000, 12.0 per 100,000, and 9.4 per 100,000 respectively.

# AIDS Rates in the United States (2013)<sup>10</sup>



- In the US, there were an estimated 26,688 new AIDS cases in 2013, for a national diagnosis rate of 8.4 AIDS diagnoses per 100,000 population. In 2012 the national AIDS diagnosis rate was 8.9 per 100,000 population.
- In 2013, Louisiana ranked 3rd highest in state estimated AIDS diagnosis rates (16.9 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, 2013*; vol. 25. Louisiana's AIDS rate was twice as high as the national rate.

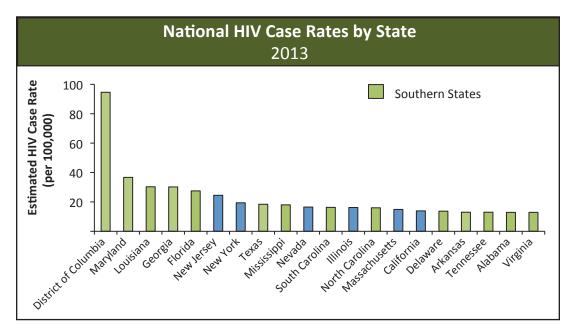
## **Characteristics of Persons Newly Diagnosed with AIDS**

Characteristics of Persons Newly Diagnosed with AIDS Louisiana, 2012-2013						
	Persons First Diagnosed with AIDS in 2012		Persons First Diagnosed with AIDS in 2013			
	Diagnoses	Percent	Diagnoses	Percent		
TOTAL	779	100.0%	731	100.0%		
Sex						
Female	257	33.0%	199	27.2%		
Male	522	67.0%	532	72.8%		
Race/Ethnicity						
Black/African American	615	78.9%	549	75.1%		
Hispanic/Latino	29	3.7%	28	3.8%		
White	122	15.7%	149	20.4%		
Other/Unknown/Multi-race	13	1.7%	5	0.7%		
Age Group	Age at AIDS diagnosis Age at AIDS of		S diagnosis			
0-12	2	0.3%	2	0.3%		
13-19	19	2.4%	3	0.4%		
20-24	86	11.0%	66	9.0%		
25-34	212	27.2%	193	26.4%		
35-44	188	24.1%	213	29.1%		
45-54	195	25.0%	161	22.0%		
55-64	60	7.7%	77	10.5%		
65+	17	2.2%	16	2.2%		
Transmission Category						
Men who have sex with men (MSM)	365	46.9%	378	51.7%		
Injecting Drug User (IDU)	111	14.2%	98	13.4%		
MSM/IDU	29	3.7%	30	4.1%		
High Risk Heterosexual (HRH)	268	34.4%	219	30.0%		
Transfusion/Hemophilia/Other	0	0.0%	2	0.3%		
Perinatal/Pediatric	6	0.8%	4	0.5%		
Rural/Urban						
Rural	113	14.5%	126	17.2%		
Urban	666	85.5%	605	82.8%		

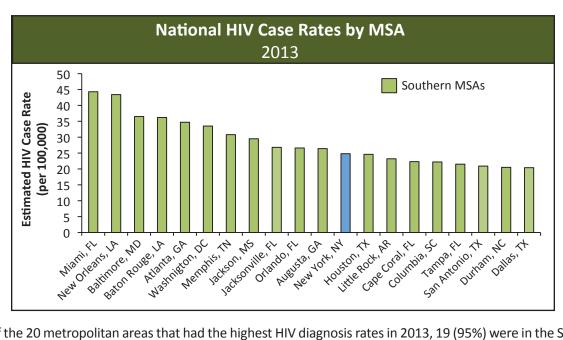
- In 2013, there were 731 new AIDS diagnoses in Louisiana, a 6% decrease from 2012.
- From 2012 to 2013, the proportion of AIDS diagnoses among males increased 6%. There was a large decline in the number of AIDS diagnoses among women.
- In 2013, 75% of all AIDS diagnoses were among blacks. From 2012 to 2013, the proportion of new AIDS diagnoses increased among whites and decreased among blacks and Hispanics.
- In 2013, the greatest number of new AIDS diagnoses were among persons age 35-44, followed by persons age 25-34.
- In 2012 and 2013, the greatest number and percentage of new AIDS diagnoses were among MSM, followed by high risk heterosexuals.
- The majority of AIDS diagnoses occurred in urban areas in 2013 (83%).

# HIV and AIDS in the South, 2013

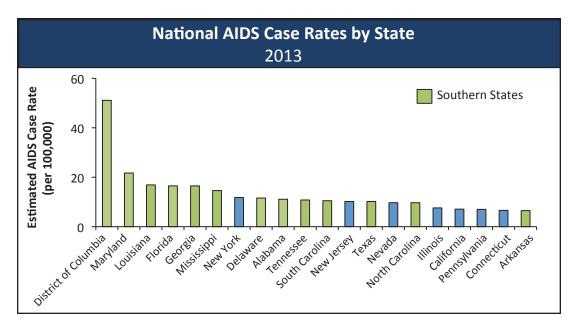
Southern states are disproportionately impacted by HIV infection and AIDS, as shown below. Seventeen states are included in the southern region of the United States: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia. Southern states are represented in green below:<sup>11</sup>



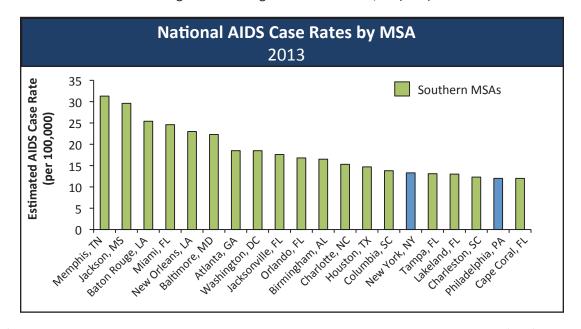
- In 2013, southern states represented 37% of the US population but over 51% of new HIV diagnoses.
- Of the 20 states that had the highest HIV diagnosis rates in 2013, 14 (70%) were in the South.



Of the 20 metropolitan areas that had the highest HIV diagnosis rates in 2013, 19 (95%) 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 4th in estimated HIV diagnosis rates in 2013 among metropolitan areas in the US with more than 500,000 persons



- In 2013, southern states represented 37% of the US population but over 54% of new AIDS diagnoses.
- Of the 20 states that had the highest AIDS diagnosis rates in 2013, 13 (65%) were in the South.



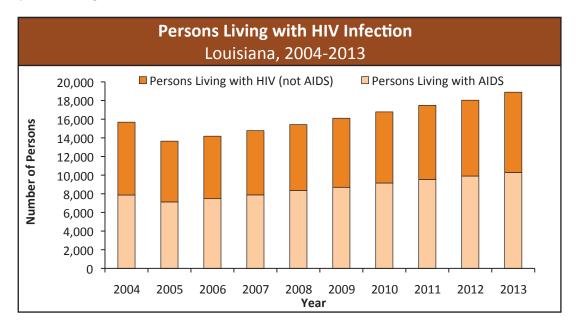
• Of the 20 metropolitan statistical areas that had the highest AIDS diagnosis rates in 2013, 18 (90%) were in the South. According to the CDC, the Baton Rouge metro area ranked 3rd and the New Orleans metro area ranked 5th in estimated AIDS diagnosis rates in 2013 among metropolitan areas in the US with more than 500,000 persons.

Comparison of 2012 and 2013 National Rankings												
		LOUISIANA				NEW ORLEANS MSA			BATON ROUGE MSA			
	2012 2013		20	2012 2013		2012		2013				
	#	Rank	#	Rank	#	Rank	#	Rank	#	Rank	#	Rank
Estimated AIDS Case Rate*	18.4	3rd	16.9	3rd	25.1	4th	23.0	5th	27.5	2nd	25.4	3rd
Estimated AIDS Case Count	845	11th	783	11th	308	17th	286	19th	224	24th	208	25th
Estimated HIV Case Rate*	27.1	4th	30.3	3rd	37.3	5th	43.4	2nd	38.1	4th	36.2	4th
Estimated HIV Case Count	1,247	11th	1,399	11th	457	22nd	538	19th	311	31st	297	31st

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

#### 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 diagnosis data provide only the minimum estimate of the number of people living with HIV, since persons who have not been tested and those who test anonymously are not included. The CDC now estimates that 14% of persons living with HIV are unaware of their infection status.<sup>12</sup>



- The number of persons living with HIV infection increased each year in Louisiana from the beginning of the epidemic. 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 2013, 18,895 persons were known to be living with HIV infection in Louisiana, 10,284 (54%) of whom have progressed from HIV to AIDS.

#### Persons living with HIV Infection in the United States

At the end of 2011, an estimated 1,201,100 persons were living with HIV infection in the United States, including 168,300 (14%) 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 14% 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—2012. *HIV Surveillance Supplemental Report* 2012;19(No. 3).

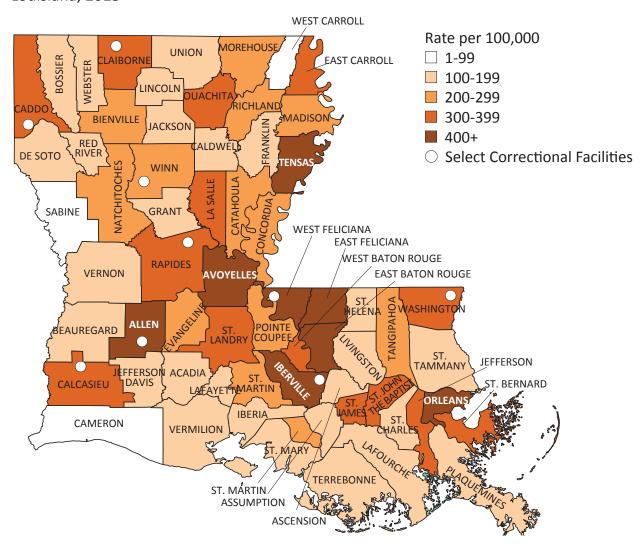
#### Characteristics of Persons Living with HIV Infection in Louisiana and Cumulative Louisiana Cases

Characteristics of Persons Living with HIV Infection and Cumulative Cases								
Louisiana, 2013								
		ing with HIV of 12/31/2013		rsons with HIV f 12/31/2013*				
	Number	Percent	Number	Percent				
TOTAL	18,895	100%	34,243	100%				
Sex								
Female	5,614	29.7%	8,926	26.1%				
Male	13,281	70.3%	25,317	73.9%				
Race/Ethnicity								
Black/African American	12,923	68.4%	22,381	65.4%				
Hispanic/Latino	729	3.9%	1,033	3.0%				
White	5,022	26.6%	10,467	30.6%				
Other/Unknown/Multi-race	221	1.2%	362	1.1%				
Age Group	Age ir	2013	Age at D	iagnosis				
0-12	70	0.4%	352	1.0%				
13-19	166	0.9%	1,686	4.9%				
20-24	978	5.2%	4,606	13.5%				
25-34	3,661	19.4%	11,843	34.6%				
35-44	4,658	24.7%	9,352	27.3%				
45-54	5,670	30.0%	4,540	13.3%				
55-64	2,952	15.6%	1,432	4.2%				
65+	740	3.9%	432	1.3%				
Transmission Category								
Men who have sex with men (MSM)	9,035	47.8%	15,915	46.5%				
Injection Drug User (IDU)	2,649	14.0%	6,404	18.7%				
MSM/IDU	1,281	6.8%	2,901	8.5%				
High Risk Heterosexual (HRH)	5,658	29.9%	8,186	23.9%				
Transfusion/Hemophilia/Other	73	0.4%	484	1.4%				
Perinatal/Pediatric	199	1.1%	353	1.0%				
Rural/Urban								
Rural	2,741	14.5%	4,249	12.4%				
Urban	16,154	85.5%	29,994	87.6%				

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

- In 2013, males made up 70% of all people living with HIV infection in Louisiana.
- Although blacks only made up 32% of Louisiana's population in 2013, they accounted for 68% of all people living with HIV infection.
- Over a quarter of all persons living with HIV are under the age of 35, 25% are between 35-44 years of age, and 49% are 45 and older.
- Over 48% of all people living with HIV infection are MSM, 30% are HRH, 14% are IDU, and 7% are MSM/ IDU. Less than 0.5% of people living with HIV in Louisiana were infected via transfusion or from the use of hemophiliac products and just over 1% were perinatally infected.
- The majority of people living with HIV infection live in urban areas of the state.

## Persons Living with HIV Infection by Parish Louisiana, 2013



- 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 2013, eight parishes had a prevalence rate greater than or equal to 400 per 100,000 and an 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% 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, 2013								
		Pers	ons Diagi	nosed with	n HIV, 201	3		
	New HIV AIDS at Time Diagnoses of Diagnosis*		AIDS Within 3 Months of Diagnosis		AIDS Within 6 Months of Diagnosis			
	#	#	%	#	%	#	%	
TOTAL	1,298	299	23%	379	29%	400	31%	
Sex					2.22/			
Female	308	64	21%	85	28%	91	30%	
Male	990	235	24%	294	30%	309	31%	
Race/Ethnicity								
Black/African American	904	198	22%	257	28%	275	30%	
Hispanic/Latino	60	18	30%	21	35%	21	35%	
White	315	80	25%	98	31%	101	32%	
Other/Unknown/Multi-race	19	3	16%	3	16%	3	16%	
Age Group			00/		1000/		4000/	
0-12	1	0	0%	1	100%	1	100%	
13-19	66	5	8%	8	12%	9	14%	
20-24	252	24	10%	38	15%	45	18%	
25-34	367	65	18%	92	25%	96	26%	
35-44 45-54	284 214	94	33% 32%	110	39% 47%	111	39% 50%	
55-64	100	69 36	36%	101 45	45%	106 46	46%	
65+	100	6	43%	9	64%	9	64%	
Transmission Category	14	0	43/0	9	0470	9	0470	
Men who have sex with men (MSM)	795	173	22%	226	28%	239	30%	
Injection Drug User (IDU)	109	38	35%	42	39%	44	40%	
MSM/IDU	56	11	20%	13	23%	13	23%	
High Risk Heterosexual (HRH)	337	77	23%	97	29%	103	31%	
Region	337		2070	<u> </u>	2373		02,0	
1-New Orleans	439	98	22%	123	28%	131	30%	
2-Baton Rouge	263	68	26%	81	31%	86	33%	
3-Houma	60	18	30%	26	43%	26	43%	
4-Lafayette	100	29	29%	33	33%	36	36%	
5-Lake Charles	45	10	22%	10	22%	11	24%	
6-Alexandria	86	14	16%	21	24%	21	24%	
7-Shreveport	144	25	17%	31	22%	33	23%	
8-Monroe	89	18	20%	24	27%	25	28%	
9-Hammond/Slidell	72	19	26%	30	42%	31	43%	

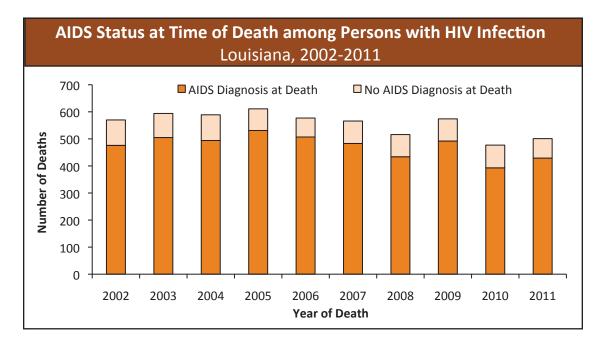
- Of the 1,298 persons diagnosed with HIV in 2013, 23% had an AIDS diagnosis at the time of their initial HIV diagnosis, an additional 6% had an AIDS diagnosis within three months, and an additional 2% had an AIDS diagnosis between three and six months after diagnosis. Overall, 31% of all new HIV diagnoses in 2013 had an AIDS diagnosis within six months.
- The proportion of late testers was not significantly different by sex.
- Hispanics did have higher proportions of AIDS at six months after diagnosis then whites and blacks.
- Persons diagnosed with HIV after the age of 44 were more likely to be diagnosed with AIDS at the time of their HIV diagnosis, and in the subsequent six months.
- Injection drug users were more likely to have AIDS at the time of their HIV diagnosis and within the following six months after their diagnosis, compared to persons with other risk factors.
- The proportion of late testers varies by region throughout the state. The Lake Charles, Alexandria, and Shreveport regions had the lowest proportion of persons with an AIDS diagnosis within six months, and the Houma, Lafayette, and Hammond/Slidell regions had the highest proportion.

#### 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.

#### AIDS Status at Time of Death among Persons with HIV Infection in Louisiana

AIDS is the most advanced stage of HIV infection. The development of AIDS may be prevented by early HIV diagnosis and ongoing treatment with Highly Active Antiretroviral Therapy (HAART). Persons who develop AIDS are at an increased risk of death.

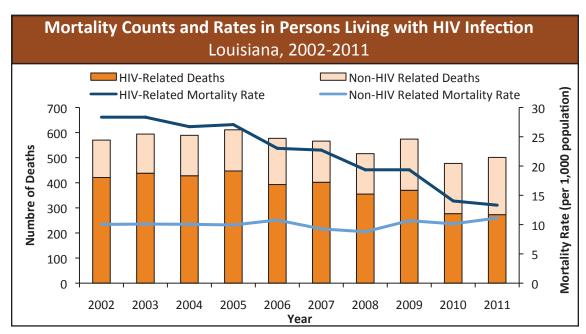


• From 2002 to 2011, the number of deaths occurring in persons diagnosed with AIDS has been 5-7 times higher than the number of deaths occurring in persons only diagnosed with HIV.

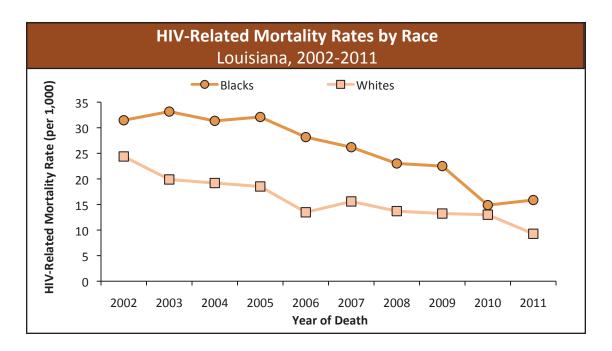
#### Mortality and Causes of Death among Persons with HIV Infection in Louisiana

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 continual adherence to the treatment leads to repressed HIV viral replication, undetectable HIV viral levels in the blood, delayed onset of AIDS, and prolonged survival time. When HAART was introduced in 1995, the number of deaths per year among persons with HIV in Louisiana, and in the entire US, had peaked. In the years after HAART introduction, from 1996 to 1999, the number of deaths per year among Louisiana's HIV population plummeted 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.

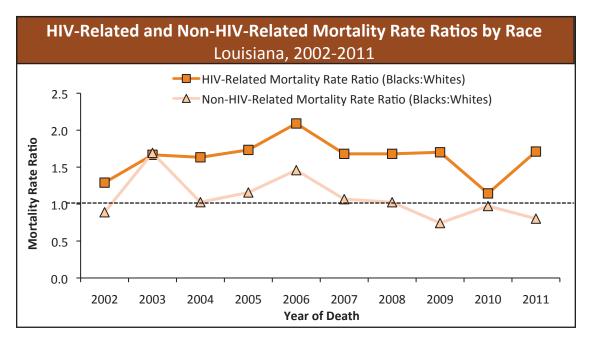
Before the introduction HAART, the vast majority of deaths among persons with HIV in Louisiana were attributed to HIV-related causes, such as opportunistic infections and AIDS-related malignancies (such as Kaposi's sarcoma and non-Hodgkin's lymphoma). As HAART led to increased survival time and delayed 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. However, despite statewide increases in access to HIV testing and treatment, significant disparities exist in HIV-related mortality rates between races, transmission risk groups, and geographic location. Blacks, injection drug users, and persons living in northern Louisiana are at increased risk of HIV-morality. These disparities in HIV-related mortality may be reflective of disparities in timely HIV diagnosis, linkage to HIV-related care, and adherence to HIV-related treatment. An analysis of cause of death among persons with HIV before and after the introduction of HAART is presented in the 2011 STD/HIV Program Report.



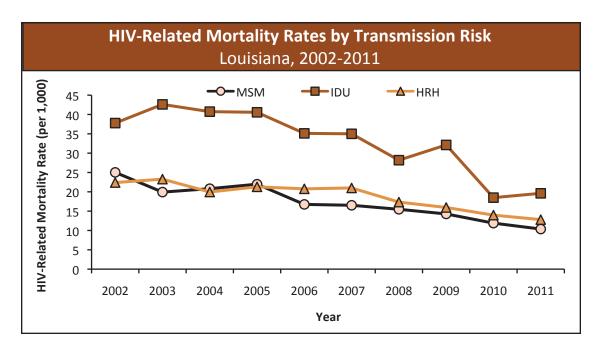
- In 2002, HIV-related deaths accounted for 74% of all deaths among persons with HIV. By 2011, deaths due to HIV-related causes decreased to 55% of all deaths occurring among persons with HIV.
- From 2002 to 2011, the HIV-related mortality rate in persons with HIV decreased 53% overall.
- In 2002, the HIV-related mortality rate was almost three times the non-HIV-related mortality rate in persons with HIV. In 2011, the HIV-related mortality rate was 20% higher than the non-HIV related mortality rate in persons with HIV.



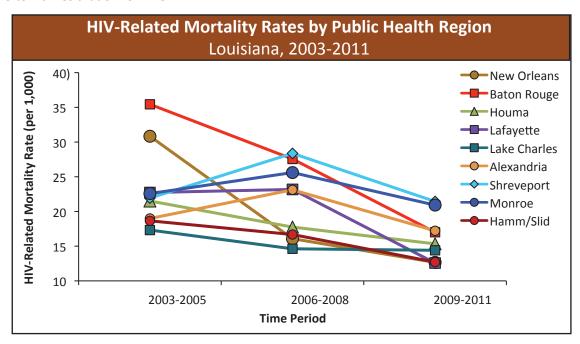
• From 2002 to 2011, the HIV-related mortality rate in blacks decreased by 50%, from 31.5 deaths per 1,000 persons with HIV to 15.9 deaths per 1,000 persons with HIV. During the same time period, the HIV-related mortality rate in whites decreased by 38%, from 24.4 deaths per 1,000 persons with HIV to 9.3 deaths per 1,000 persons with HIV.



• From 2009 to 2011, the average HIV-related mortality rate in blacks with HIV was around 1.5 times that of whites. During the same time period, the average non-HIV-related mortality rate between blacks and whites with HIV was similar.



• Injection drug users (IDU) with HIV are at higher risk than the other transmission risk groups of dying from both HIV-related causes and non-HIV related causes. Non-HIV-related deaths among IDU with HIV may partly be due to illicit drug use. Between 2002 and 2011, IDU had an HIV-related mortality rate that was 1.5 to 2 times that of non-IDU.



- Regions in northern Louisiana (Shreveport, Monroe, Alexandria), had the highest HIV-related mortality rates of the 2009-2011 time period. During the same period, the HIV-related mortality rates in the Shreveport and Monroe regions were about 1.6 times that of the New Orleans, Hammond/Slidell, and Lafayette regions.
- From 2003 to 2011, the regions of New Orleans, Baton Rouge and Lafayette experienced the biggest overall decrease in HIV-related mortality; the HIV-related mortality rates in New Orleans, Baton Rouge, and Lafayette fell 60%, 52%, and 47% respectively.

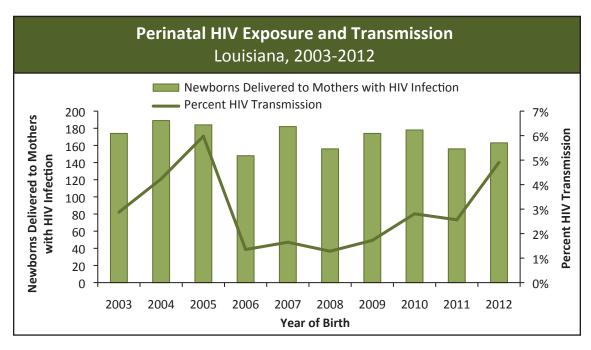
#### **Surveillance of Perinatal HIV Exposure**

#### **Background and Overview**

In 1994, the Pediatric AIDS Clinical Trials Group demonstrated that zidovudine (ZDV) administered to HIV-infected pregnant women could reduce the risk of perinatal transmission of HIV. As a result, the United States Public Health Service (USPHS) issued recommendations for the use of ZDV during pregnancy to reduce perinatal transmission. Subsequent clinical trials and observational studies demonstrated that combination antiretroviral (ARV) medication given to a mother was associated with further declines in transmission. The recommendations for prevention of perinatal transmission are continuously updated and are available from the NIH's AIDS Info website (http://aidsinfo.nih.gov/).<sup>13</sup>

The CDC has published recommendations to include HIV testing 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. Louisiana law (Louisiana RS 40:1091) requires any physician providing medical care to a pregnant woman to offer an HIV test as a component of her routine laboratory panel at her first prenatal care visit and at the first prenatal care visit of the third trimester unless she 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. Title 51 of the Administrative Code (Public Health -- Sanitary Code, available at: http://doa.louisiana.gov/osr/lac/books.htm ) also requires the explicit reporting of pregnancy in an HIV-infected woman, as well as all HIV tests performed on children aged 0-6 years regardless of test result (positive or negative). Surveillance requires several rounds of testing to determine whether an infant is HIV positive or HIV negative. Reporting of this information ensures effective monitoring of all perinatal HIV exposures.

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 nearly 5% in 2012. From 2006-2009, the transmission rate was below 2%. Perinatal exposures are followed for up to two years to confirm a definitive negative status and consequently the latest data presented in this report are from 2012.



• In Louisiana in 2012, 158 women with HIV infection delivered 163 newborns, and eight of the infants (nearly 5%) were infected with HIV. This was the highest positivity rate Louisiana had experienced since 2005.

#### **Maternal Demographics**

The following table shows demographic information for mothers infected with HIV who delivered a newborn in 2012. There were four sets of twins born in 2012 and one mother gave birth on two separate occasions during the year. A total of 158 mothers are included below.

Demographics of Mothers with HIV Infection Louisiana, 2012						
	Mothers with HIV Infection	Percent				
TOTAL	158	100.0%				
Race/Ethnicity						
Black/African American	135	85.4%				
Hispanic	4	2.5%				
White	16	10.1%				
Multiple Races	3	1.9%				
Age						
13-19	14	8.9%				
20-24	42	26.6%				
25-34	83	52.5%				
35-44	19	12.0%				
Transmission Category						
Injection Drug User (IDU)	21	13.3%				
High Risk Heterosexual (HRH)	134	84.8%				
Perinatal/Pediatric*	2	1.3%				
Blood Transfusion*	1	0.6%				
Region						
1-New Orleans	50	31.7%				
2-Baton Rouge	46	29.1%				
3-Houma	8	5.1%				
4-Lafayette	10	6.3%				
5-Lake Charles	5	3.2%				
6-Alexandria	9	3.8%				
7-Shreveport	20	12.7%				
8-Monroe	6	3.8%				
9-Hammond/Slidell	7	4.4%				

<sup>\*</sup> Perinatal/transfusion transmission are not imputed.

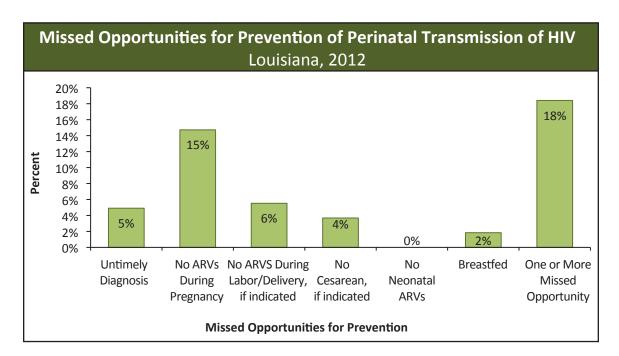
- Mothers with HIV infection were predominately black (85%) and between 20-34 years old (79%). Just over 13% of the mothers with HIV infection were likely infected through injection drug use, two mothers were infected themselves through perinatal transmission, and one mother was infected through a blood transfusion early in the HIV epidemic.
- In 2012, 32% of HIV-infected women who delivered a newborn lived in the New Orleans region, and 29% lived in the Baton Rouge region.

#### Perinatal HIV Exposure Risk and Missed Opportunities

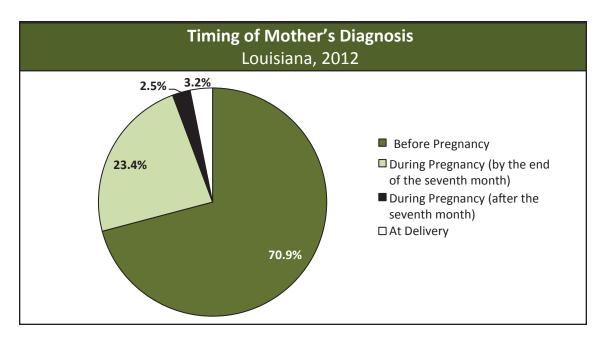
Risk of perinatal transmission of HIV depends on fetal/infant exposure to maternal virus. This exposure can be reduced by adhering to the following recommendations:

- The mother's infection is diagnosed early (by the end of the seventh month of pregnancy)
- The mother receives and adheres to ARVs during pregnancy
- The mother receives ARVs during labor/delivery (recommended if the maternal viral load is over 1,000 copies/mL)
- The newborn is delivered by cesarean section (recommended if the maternal viral load is over 1,000 copies/mL)
- The newborn receives ARVs after delivery
- The newborn/infant is not breastfed

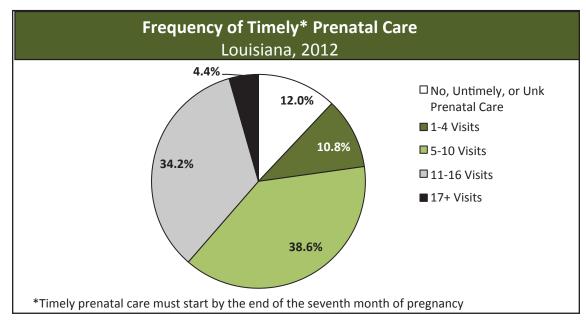
Following all of these recommendations can reduce the rate of perinatal transmission to less than 1%. Although prenatal care is not listed among these Missed Opportunities because it does not directly increase fetal exposure to maternal virus, it is a crucial component of the prevention of perinatal transmission and facilitates testing and treatment for pregnant women.



• In 2012, the most prevalent missed opportunity was no ARVs during pregnancy. 15% of mothers did not receive ARVs during pregnancy. The use of ARV medication during pregnancy depends on several factors including timing of diagnosis, prenatal care, and mother's access to ARVs. Overall, 18% of mother-infant pairs had one or more missed opportunities for prevention of perinatal transmission.



In Louisiana, 71% of mothers with HIV infection who delivered a newborn in 2012 were diagnosed with HIV prior to their pregnancy, 23% were diagnosed with HIV early in their pregnancy (by the end of the seventh month), and 2.5% were diagnosed with HIV late in pregnancy (after the seventh month). The percentage of mothers who know their HIV status prior to delivery has increased over time due to the increased emphasis on screening pregnant women. In 2012, 3% of the mothers were diagnosed at delivery.

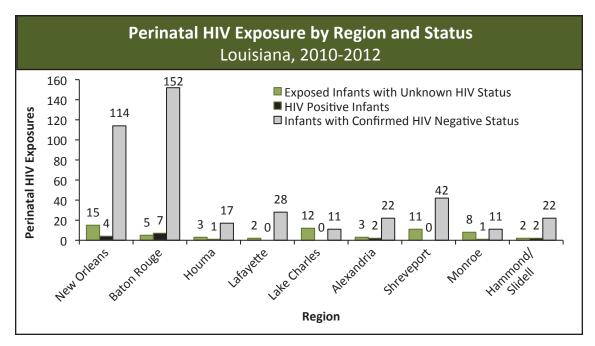


- In 2012, 12% of mothers with HIV infection did not receive timely prenatal care and only 39% had eleven or more visits. 'Timely' prenatal care is defined as prenatal care which started by the end of the seventh month of pregnancy to allow a period of time before delivery so maternal viral load can be reduced. Preconception care and prenatal care are essential for HIV-infected women to reduce the risk of perinatal transmission and should be started as soon as possible. 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 ARVs during their pregnancy.
- Of the eight infants born in 2012 who were infected with HIV, two of the mothers were diagnosed at delivery; seven of the eight infants did not receive ARVs during pregnancy. Three of the mothers did not have any prenatal care and three of the mothers had limited prenatal care (less than ten visits).

#### Birth Outcomes and Follow-Up

Birth Outcomes of HIV Exposed Newborns Louisiana, 2012							
HIV Exposed Newborns Percen							
TOTAL	163	100.0%					
Birth Weight							
Very Low (<1,500g)	11	6.8%					
Low (>= 1,500g and <2,500g)	35	21.5%					
Normal (>=2,500g)	117	71.8%					
Gestational Age							
Preterm(<37 weeks)	45	27.6%					
Early Term (>=37 weeks and <39 weeks)	74	45.4%					
Full Term (>=39 weeks and <41 weeks)	43	26.4%					
Late Term/Postterm (>=41 weeks)	1	0.6%					

Newborns exposed to HIV had worse birth outcomes compared to state and national percentages. Among
HIV exposed newborns in Louisiana, 28% were low or very low birth weight (<2500g), and 28% were born
preterm (before 37 weeks gestational age). This is compared to all newborns born in the United States in
2012 where 8% of newborns were low or very low birth weight and 12% were born preterm.<sup>15</sup>



- Between 2010 and 2012, women with HIV infection delivered newborns in every region of the state.
  The Baton Rouge region had the highest number of perinatal exposures (164 exposures) and the highest
  number of perinatal transmissions with seven transmissions. The New Orleans region had 133 exposures
  and four perinatal transmissions during this period.
- Between 2010 and 2012, the Hammond/Slidell and Alexandria regions each had two perinatal transmissions. The Houma and Monroe regions each had one perinatal transmission. And there were no transmissions in Lafayette, Lake Charles and Shreveport.
- Infants born to HIV-infected women need a recorded negative result on HIV tests conducted at one month
  and four months of age to be confirmed as HIV negative. Until an infant receives adequate HIV testing,
  that infant is considered to have an indeterminate HIV status. Twelve percent of HIV exposed infants born

during 2010-2012 continue to have an indeterminate HIV status. More work must be done to improve reporting of negative test results, improve 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/HIV (FIMR/HIV)

In 2009, the Louisiana STD/HIV Program and the Louisiana Bureau of Family Health partnered and were funded to carry out a perinatal HIV prevention methodology, based upon the Fetal Infant Mortality Review (FIMR), in the New Orleans region. 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 transmission of HIV from 2009 onward, as well as other cases with noted gaps in HIV or prenatal care. Louisiana is no longer funded specifically for FIMR/HIV, but continues to implement this methodology in the New Orleans and Baton Rouge regions with resources from the STD/HIV Program and the Bureau of Family Health. Below are several recent recommendations from the FIMR/HIV Case Review Team.

#### **FIMR/HIV Recommendations**

- Third Trimester: Third trimester testing for HIV has been recommended by the CDC in areas of high incidence of HIV (such as Louisiana) since 2006. Several mothers of the cases reviewed in the past few years received a negative HIV test during the first trimester but were found to be HIV-infected at or after delivery. Legislation requiring physicians to offer HIV testing for women during the first prenatal care visit of their third trimester passed in June, 2014.
- HIV Testing for Emergency Departments: If a mother does not have prenatal care during her
  pregnancy, a visit to the Emergency Department may be the only contact she has with the health care
  system. HIV testing for women, especially pregnant women, during Emergency Department visits
  would provide a testing opportunity for women who do not otherwise utilize the healthcare system.
- Home Support for Mothers with HIV Infection: Delivery and hospitalization can be a stressful
  experience, especially if a new mother learns about her HIV diagnosis during this time. Home support
  during the postpartum period would provide additional opportunities for a mother to learn how to
  take care of an HIV exposed baby and herself and complete the six week course of ARVs for the
  newborn.

#### National HIV Behavioral Surveillance Survey 2011-2013

Initiated in 2003, the National HIV Behavioral Surveillance (NHBS) system collects behavioral data among people at high 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>16</sup> New Orleans was among 20 US metropolitan areas conducting NHBS in 2013. 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, NHBS added anonymous HIV testing of participants, followed by hepatitis C testing in 2012 study cycle. During each annual cycle, NHBS staff conduct ethnographic research and in-depth surveys, which include locally developed questions concerning key issues for each target population.

Because many of the behaviors surveyed are highly stigmatized or illegal, the populations are considered hard to reach using traditional probability-based sampling methods. Each cycle utilizes specialized sampling methods for recruitment of participants in order to yield the most valid population estimates.

#### Men who have sex with men (2011 Study Cycle)

Men who have sex with men (MSM) are recruited using a venue-based time-space sampling procedure, where individuals are approached within venues that are attended by MSM.

- HIV testing is high within the MSM community with 93% having been tested for HIV in their lifetime. Of those, 26% reportedly received their last HIV test at an HIV counseling and testing site, followed by a public health clinic (20%), or private health clinic (21%).
- Only 38% of the MSM interviewed had been tested for other STDs in the past 12 months. Of those who had been tested for gonorrhea 11% were positive. Of those who had been tested for chlamydia 7% were positive. Of those who had been tested for syphilis 6% were positive.

#### Injection drug users (2012 Study Cycle)

Injection drug users (IDU) 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 continues until a desired sample size of 500 is reached.

- The majority of the IDU sample (87%) had been tested for HIV in their lifetime. Of those, 30% received their last HIV test in a correctional facility, followed by a public health clinic (21%) or hospital (15%).
- Only 21% of the IDU sample had been tested for gonorrhea, chlamydia, or syphilis in the past 12 months. Of those who had been tested for gonorrhea 22% were positive. Of those who had been tested for chlamydia 16% were positive. Of those who had been tested for syphilis 16% were positive.
- When asked what drug they primarily injected, 69% of participants reported heroin by itself or a combination of heroin and cocaine (speedball), 21% reported cocaine by itself, 5% crystal meth, and 3% crack. Heroin was the most commonly used injection drug (72%).
- Additional hepatitis C testing was provided to the IDU sample participants in 2012; 55% screened positive for hepatitis C antibodies. Among those, 55% were unaware of their HCV status before NHBS screening.

#### Heterosexuals living in high risk areas (2013 Study Cycle)

High risk heterosexual (HRH) recruitment is conducted using a similar RDS procedure; however, the initial recruits or "seeds" are individuals who reside in areas with high rates of HIV infection and poverty. Key qualitative and quantitative findings from the New Orleans NHBS surveillance during 2013 are presented below:

- The majority of participants during the HRH cycle (84%) had been tested for HIV in their lifetime. Of those, 25% reportedly received their last HIV test at public health clinic followed by the hospital (15%), or correctional facility (12%).
- Only 29% (152) of the HRH sample had been tested for gonorrhea, chlamydia, or syphilis in the past 12 months. Of those who had been tested for gonorrhea 10% were positive. Of those who had been tested for chlamydia 18% were positive. Of those who had been tested for syphilis 8% were positive.

#### Additional topics

In each cycle additional topics of interest and/or importance to the population are asked.

- Beliefs about stigma and discrimination surrounding HIV are asked during all cycles. Across all cycles many participants agreed that "most people in New Orleans would discriminate against someone with HIV" (45% of MSM, 66% IDU, 62% HRH). However, the majority of participants (52%-67%) agreed that most people in New Orleans would support the rights of a person with HIV to live and work wherever they wanted and about two thirds (62%-65%) think that people would be friends with someone with HIV. From 17%-24% agreed that most people in the city think that individuals who got HIV through sex or drug use have gotten what they deserve.
- When asked about personal negative experiences due to being attracted to men during the past 12 months, 15% of MSM participants reported receiving poorer services than other people in restaurants, stores, other businesses or agencies and 38% had been called names or insulted.
- Compared to the general population of Louisiana, MSM are much more likely to be current smokers. More
  than half of the MSM participants were current tobacco smokers. In addition, 84% reportedly had friends
  who are MSM that smoke and 58% of those who currently smoke reported being interested in quitting.
- Twenty nine percent of IDU surveyed experienced an overdose in their lifetime and 64% of IDU had been around someone else while they were overdosing. Only in about half of those instances did they or someone else call for medical assistance.

#### National HIV Behavioral Surveillance (NHBS) Louisiana, 2011-2013 Men Who Have **Injection Drug** High-Risk Sex With Men Users Heterosexuals (2011) (2012)(2013)Number Number % Number Category % % Race/Ethnicity Black/African American 30% 56% 475 91% 166 268 White 357 65% 182 38% 6% 31 30 5% 17 3% Other 25 5% Gender Male 553 100% 397 80% 280 53% 47% Female N/A 96 19% 244 Transgender N/A 2 <1% 0 0% Age 18-24 134 24% 25 5% 56 11% 25-29 108 19% 47 9% 45 9% 30-34 12% 53 14% 68 11% 71 35-39 9% 48 55 10% 49 10% 40-44 47 8% 56 11% 47 9% 45-50 77 14% 104 21% 102 19% 51+ 78 14% 33% 28% 162 148 **Sexual Identity** Heterosexual or "Straight" 21 4% 420 85% 469 90% Homosexual, Gay, or Lesbian 413 75% 3% 52 10% 16 Bisexual 115 21% 57 12% 2 <1% **Substance Use** Ever Injected Drugs 67 12% 495 100% 103 20% Injected Any Drug (past 12 months) 100% 7% 25 5% 495 35 Shared Needle (past 12 months) 12 48% 218 56% 15 3% Shared Works/Equipment (past 12 months) 12 48% 311 63% 22 4% Used Non-Injection Drugs (past 12 months) 264 48% 427 86% 268 51% **HIV Testing History and Positivity Never Previously Tested** 39 7% 62 13% 84 16% 14% Self-Reported Positive 72 36 8% 22 5% **Newly Detected Positive** 28 6% 13 3% 10 2%

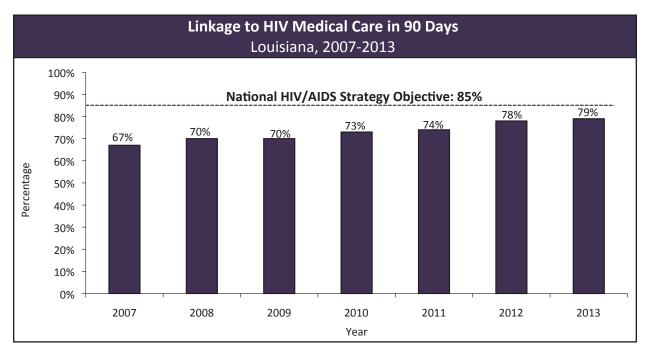


# Linkage and Retention in HIV Care

#### **Linkage to HIV Medical Care**

Following a person's HIV diagnosis, patients should be immediately linked into HIV medical care. Linkage into HIV medical care allows for proper monitoring of a person's health and well-being. Linkage to care also provides opportunities for intervention to prevent HIV transmission. Early initiation of HIV treatment and long-term adherence leads to better health outcomes and reduces transmission of infection. Initiation of HIV treatment is dependent on linkage to medical care.

Louisiana's surveillance system is able to monitor linkage to care rates for newly diagnosed persons, using HIV laboratory and surveillance data. Linkage to care within 90 days is defined as having a CD4 count or viral load (VL) test conducted within 90 days of HIV diagnosis. If the diagnosis and the CD4 count or viral load test are conducted on the same day, those persons are considered to be linked to care.



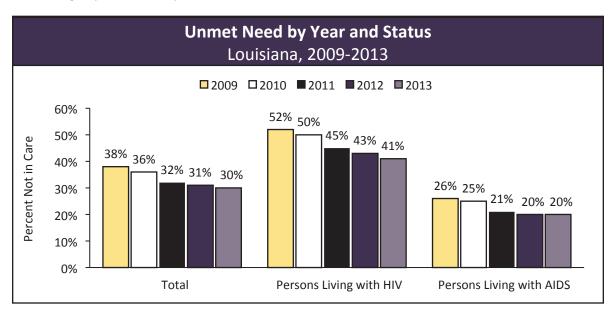
- Louisiana's linkage to care within 90 days rate has increased substantially over the past seven years. In 2007, only two-thirds of newly diagnosed persons were linked to care within 90 days. The linkage to care rate in 2013 reached a height of 79%.
- In the National HIV/AIDS Strategy (NHAS), a national goal of 85% was selected to be attained by 2015. Louisiana does currently fall short of that NHAS goal, but linkage to care rates are improving.

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#### **Unmet Need: Percentage of Persons out of HIV Medical Care**

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. 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 VL test result in the last 12 months.

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 been steadily decreasing and in 2013 reached a low of 30%.
- 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 frequent medical visits.

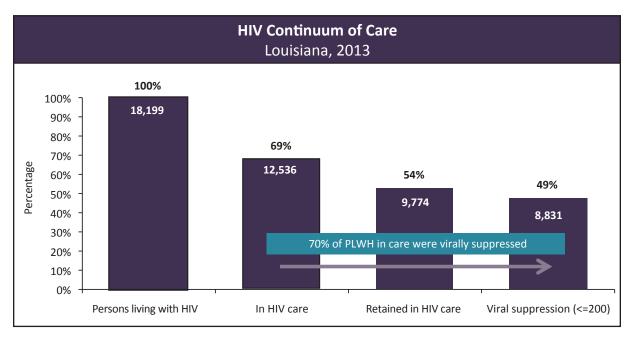
Unmet Need for Primary HIV Medical Care Louisiana, 2012 and 2013							
		12	20	13			
	Percent in Care	Percent Not in Care (Unmet Need)	Percent in Care	Percent Not in Care (Unmet Need)			
Overall	69%	31%	70%	30%			
Persons living with HIV	57%	43%	59%	41%			
Persons living with AIDS	80%	20%	80%	20%			
Sex							
Female	74%	26%	75%	25%			
Male	67%	33%	68%	32%			
Race/Ethnicity							
Black/African American	69%	31%	70%	30%			
Hispanic/Latino	49%	51%	49%	51%			
White	71%	29%	72%	28%			
Other	65%	35%	64%	36%			
Age Group							
0-12	84%	16%	90%	10%			
13-24	69%	31%	71%	29%			
25-44	68%	32%	69%	31%			
45-64	70%	30%	71%	29%			
65+	64%	36%	65%	35%			
Region							
1-New Orleans	69%	31%	70%	30%			
2-Baton Rouge	74%	26%	75%	25%			
3-Houma	75%	25%	74%	26%			
4-Lafayette	67%	33%	68%	32%			
5-Lake Charles	59%	41%	60%	40%			
6-Alexandria	65%	35%	67%	33%			
7-Shreveport	62%	38%	63%	37%			
8-Monroe	67%	33%	66%	34%			
9-Hammond/Slidell	71%	29%	72%	28%			

- Of persons living with HIV infection in 2013, only 70% had at least one primary medical care visit during the year. Persons living with AIDS were more likely to have a medical visit (80%) compared to persons living with HIV (non-AIDS) (59%).
- Females and non-Hispanics were 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 and Shreveport regions were least likely to be in care.

#### Louisiana's Continuum of Care

The HIV continuum of care is a way to show, in visual form, the numbers of individuals living with HIV 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. The following graph shows the Louisiana-specific continuum created by the STD/HIV program using data from surveillance and laboratory reporting.

- Column 1: The number of persons living with HIV infection (PLWH) includes people living with HIV infection as of 12/31/2013, but who were diagnosed before 01/01/2013 and whose current address is in Louisiana. This number is smaller than the overall number of persons living with HIV infection presented in Chapter 1 because it removes anyone newly diagnosed in 2013. In 2013, there were 18,199 persons in Louisiana who met these criteria.
- Column 2: The number of people in HIV care includes all PLWH who had at least one CD4 count or VL test conducted in 2013. In 2013, 69% of Louisiana's PLWH had at least one medical care visit.
- Column 3: The number of people retained in HIV care includes the number of PLWH who had two or more CD4 counts or VL tests conducted in 2013 at least 90 days apart. In 2013, 54% of Louisiana's PLWH were retained in HIV medical care.
- Column 4: The number of people who are virally suppressed are the number of PLWH whose most recent
  VL test in 2013 was less than or equal to 200 copies/ml. In 2013, 49% of Louisiana's PLWH were virally
  suppressed at their most recent VL.
- An additional feature that Louisiana has added is the connection between Column 2 and Column 4. If viral suppression is assessed for people who have at least one VL test conducted in 2013, 70% of the persons living with HIV infection in care are virally suppressed.





# Profile of STDs in Louisiana

#### Introduction to STD Surveillance

The Louisiana Department of Health and Hospitals Office of Public Health STD/HIV Program's (SHP) Sexually Transmitted Disease (STD) Surveillance Program collects and analyzes data on diagnoses 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 presently do not receive additional follow-up by regional staff.

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 diagnoses of primary and secondary (P&S) syphilis, congenital syphilis, gonorrhea, and chlamydia diagnosed from 2004 to 2013 and reported to SHP before May 2, 2014. 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 2013, Louisiana had the highest rate in the nation for congenital syphilis and gonorrhea, the 2nd highest chlamydia rate, and the 3rd highest rate in the nation for P&S syphilis according to the CDC's 2013 STD Surveillance Report.

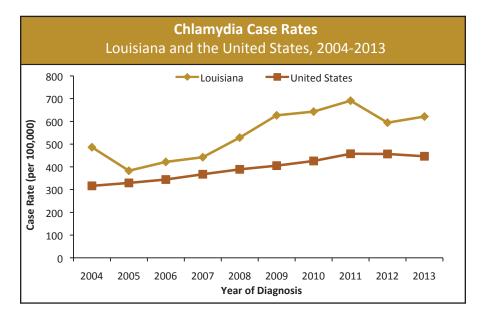
In January 2015, SHP released the *Sexually Transmitted Diseases, Louisiana 2013 Annual Report* with extensive data analysis for P&S and early latent syphilis, congenital syphilis, chlamydia, and gonorrhea. This full report can be found online at www.std.dhh.louisiana.gov.

Trends in STD Cases Louisiana, 2004-2013										
Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Chlamydia	21,837	17,227	17,885	19,362	23,536	28,148	29,151	31,614	27,353	28,739
Gonorrhea	10,538	9,572	10,883	11,137	9,766	9,150	8,912	9,169	8,873	8,669
P&S Syphilis	332	278	342	533	721	742	547	447	339	423
Early Latent Syphilis	331	275	498	741	883	805	740	488	343	276

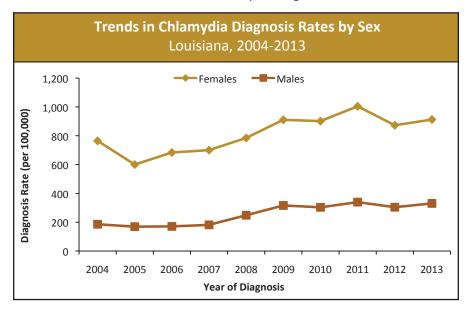
In 2013, 28,739 chlamydia cases, 8,669 gonorrhea cases, 423 P&S syphilis cases, and 276 early latent syphilis cases were diagnosed in Louisiana.

#### Chlamydia

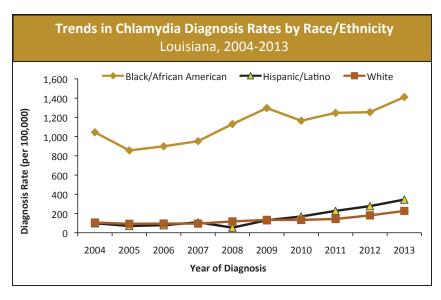
There were 28,739 cases of chlamydia diagnosed in Louisiana in 2013. This represents a 5% increase in the number of cases from 2012, when 27,353 cases were diagnosed.



- In 2013, the chlamydia diagnosis rate in Louisiana was 621.3 per 100,000 population, a 4.5% increase from the 2012 rate of 594.4 cases per 100,000. The 2013 Louisiana rate was 39% higher than the 2013 national rate of 446.6 per 100,000 population.
- Chlamydia rates in Louisiana increased significantly from 2005 to 2011. Although a rate decrease occurred in 2012, the rate once again increased in 2013. A steady increase has been seen across the nation since 2004, but a small decrease occurred nationwide from 2012 to 2013.
- In 2013, Louisiana ranked 2nd in the nation for chlamydia diagnosis rates.

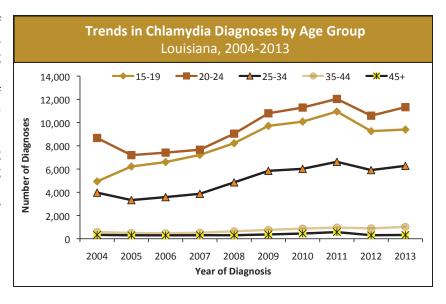


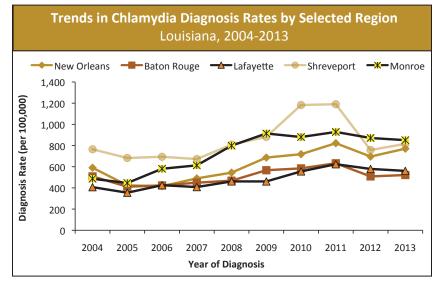
 The 2013 female chlamydia rate of 912.5 per 100,000 females was almost three times the male rate of 330.4 per 100,000 males. Seventy-four percent of all new cases in 2013 were female. Females traditionally represent the population who access reproductive health care and, therefore, have more opportunities to receive chlamydia screening.



- Blacks represented the majority of new chlamydia diagnoses in 2013 (75%). This is a significant racial disparity, considering that blacks make up only 32% of Louisiana's population.
- In 2013, the rate of new chlamydia diagnoses among blacks was four times higher than among Hispanics, and over six times higher than among whites.

- In 2013, the majority of diagnoses were in persons aged 15-24 years, making up 72% of all chlamydia diagnoses. The number of new diagnoses among all age groups increased.
- Louisiana has targeted testing campaigns to test young women who attend STD and family planning clinics for chlamydia.

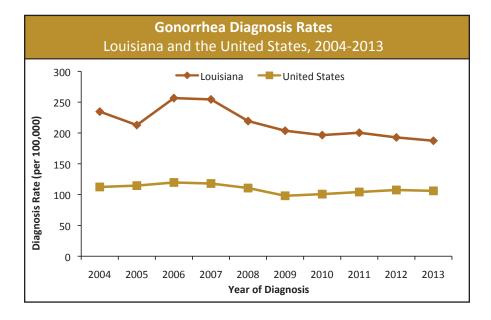




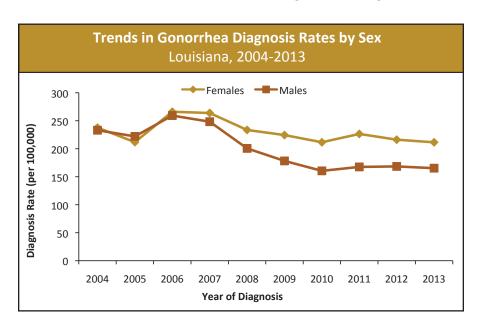
- The New Orleans region had the greatest number of new chlamydia diagnoses, but the Monroe region had the highest chlamydia diagnosis rate in 2013. The Monroe region saw a small decrease in the diagnosis rate from 2012.
- The Shreveport region ranked 2nd for both the number of cases and the chlamydia diagnosis rate in 2013. In 2010 and 2011, the Shreveport region had the highest chlamydia rate in the state.

#### Gonorrhea

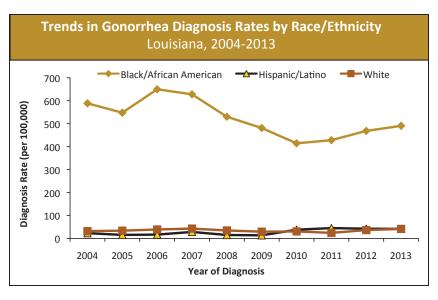
There were 8,669 cases of gonorrhea diagnosed in Louisiana in 2013. This represents a 2% decrease in the number of cases in 2012, when 8,873 cases were diagnosed.



- In 2013, the gonorrhea diagnosis rate in Louisiana was 187.4 per 100,000 population, a 3% decrease from 192.8 cases per 100,000 in 2012. The 2013 Louisiana rate was almost double the national rate of 106.1 per 100,000 population.
- Since 2006, the gonorrhea rate in Louisiana has declined from a peak of 265.7 per 100,000 population. In 2013, Louisiana's gonorrhea diagnosis rate was the lowest it had been in a decade.
- Despite this decrease, Louisiana ranked 1st in the nation for gonorrhea diagnosis rates in 2013.

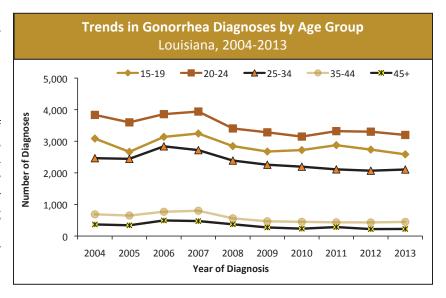


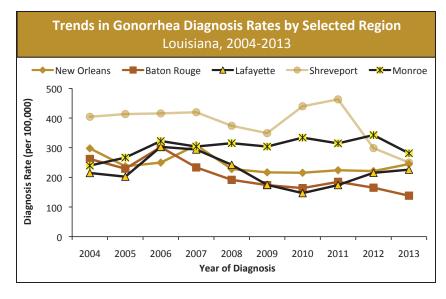
• The 2013 female gonorrhea diagnosis rate of 211.5 per 100,000 females was 28% greater than the male rate of 165.3 per 100,000 males. Since 2006, the female and male diagnosis rates have become exceedingly disproportionate.



- Blacks represented the majority of new gonorrhea diagnoses in 2013 (86%). This is a significant racial disparity, considering that blacks make up only 32% of Louisiana's population.
- In 2013, the rate of new gonorrhea diagnoses among blacks was 490.5 per 100,000, 11 times higher than among Hispanics and whites. The rate for blacks has increased steadily since 2010.

- The majority of diagnoses (67%) were in persons aged 15-24 years. Many gonorrhea testing services target women within this age group.
- Historically, the number of new diagnoses has always been highest among 20-24 year olds, followed closely by 15-19 year olds. The number of new diagnoses among persons 25 years old and higher has remained steady since 2011.

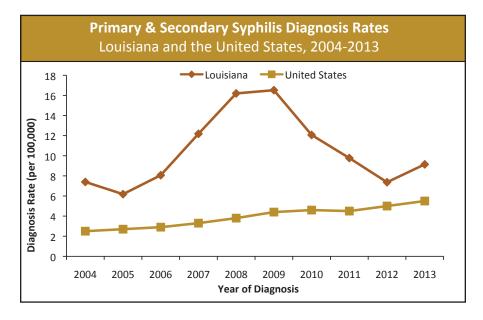




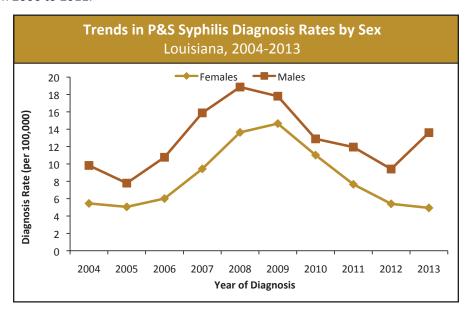
- The New Orleans region had the highest number of new gonorrhea diagnoses and the 3rd highest gonorrhea diagnosis rate in 2013.
- The gonorrhea diagnosis rate was highest in the Monroe region although the region ranked 4th for the number of gonorrhea diagnoses.
- Until 2012, the gonorrhea diagnosis rate was highest in the Shreveport region. In 2012 and 2013, the gonorrhea rate in Shreveport was 2nd overall.

#### **Primary & Secondary Syphilis**

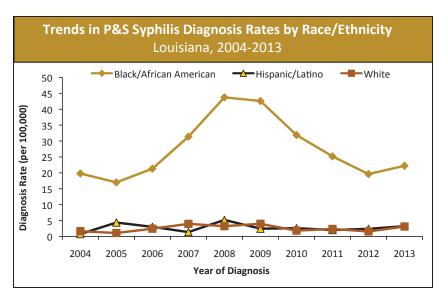
In 2013, there were 423 P&S syphilis cases diagnosed in Louisiana, a 25% increase compared to 339 cases diagnosed in 2012. This was the first rate increase since 2009.



- In 2013, the P&S syphilis diagnosis rate in Louisiana was 9.1 per 100,000 population, which was 1.7 times the national rate of 5.5 per 100,000 population.
- From 2004 to 2009, the P&S syphilis rate in Louisiana more than doubled. From 2009 to 2012, the rate decreased over 50%. This trend was reversed with a 23% rate increase in 2013.
- In 2013, Louisiana ranked 3rd in the nation for P&S syphilis diagnosis rates. Louisiana ranked 1st in the nation from 2006 to 2011.

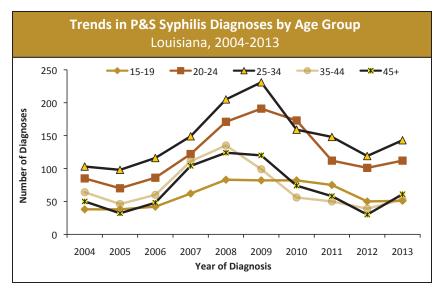


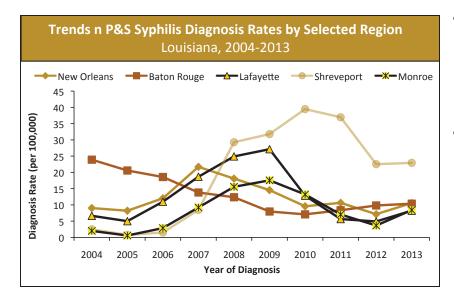
- In 2013, 73% of P&S syphilis cases were male.
- Historically, the diagnosis rate for males has been higher than for females. From 2012 to 2013, the diagnosis rate decreased slightly for females but increased sharply for males. The diagnosis rate for males was almost three times the female rate in 2013.



- Blacks represented the majority of the P&S syphilis diagnoses in 2013 (78%). This is a significant racial disparity, considering that blacks make up only 32% of Louisiana's population.
- In 2013, the rate of new P&S syphilis diagnoses among blacks was seven times higher than among Hispanics and whites. The rate for blacks increased 13% from 2012.

- In 2013, 13% of diagnoses occurred in adolescents under the age of 20, 26% occurred in persons between the age of 20 and 24, 34% occurred in persons aged 25 to 34, and 27% occurred in persons 35 and older.
- In 2013, the number of new diagnoses increased among all age groups.

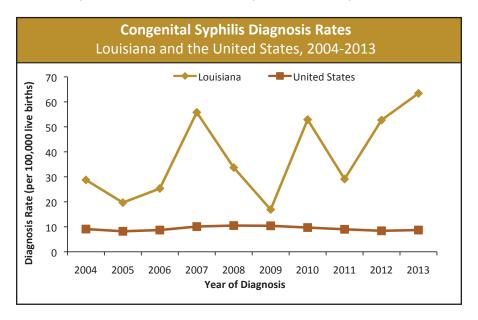




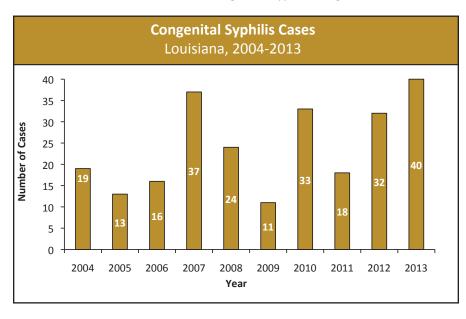
- The greatest number of new P&S syphilis diagnoses occurred in the Shreveport region which had maintained the highest P&S syphilis diagnosis rate since 2008.
- In 2013, the New Orleans region had the 2nd highest number of new P&S syphilis diagnoses and the 2nd highest diagnosis rate. The diagnosis rate in Baton Rouge closely followed New Orleans. Monroe and Lafayette had the same diagnosis rate in 2013.

#### **Congenital Syphilis**

A case of congenital syphilis occurs when a pregnant woman with a syphilis infection passes the infection on to her infant *in utero* or during delivery. This may result in stillbirth, death of the newborn or significant future health and developmental problems for the infant. Congenital syphilis can be prevented by early detection of maternal syphilis and adequate treatment at least 30 days before delivery.

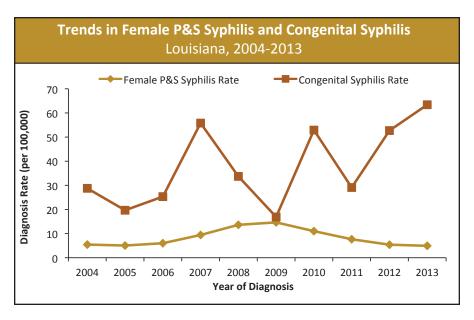


- Louisiana's congenital syphilis diagnosis rate has historically been greater then the national rate. In 2013, Louisiana's congenital syphilis diagnosis rate of 63.4 per 100,000 live births was over seven times the national rate of 8.7 per 100,000 live births.<sup>17</sup> Only 30 states in the nation reported one or more cases of congenital syphilis in 2013. Louisiana reported 40 cases.
- In 2013, Louisiana ranked 1st in the nation for congenital syphilis diagnosis rates.

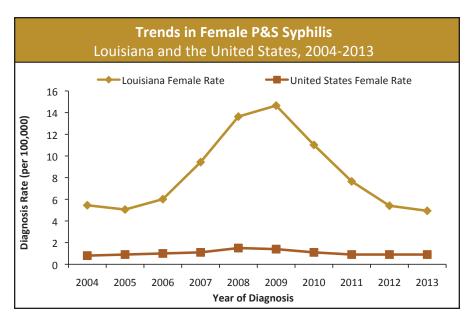


Congenital Syphilis Louisiana, 2013							
	Number	Percent					
Total	40	100%					
Case Definition							
Presumed Case	39	97.5%					
Syphilitic Stillbirth	1	2.5%					
Maternal Race/Ethnicity							
Black/African American	37	92.5%					
Hispanic/Latino	1	2.5%					
White	2	5.0%					
Maternal Age Group							
15-19	6	15.0%					
20-24	20	50.0%					
25-29	6	15.0%					
30-34	7	17.5%					
35+	1	2.5%					
Region							
1-New Orleans	9	22.5%					
2-Baton Rouge	2	5.0%					
3-Houma	2	5.0%					
4-Lafayette	2	5.0%					
5-Lake Charles	3	7.5%					
6-Alexandria	4	10.0%					
7-Shreveport	12	30.0%					
8-Monroe	5	12.5%					
9-Hammond/Slidell	1	2.5%					
Frequency of Prenatal Care							
No Prenatal Care	13	32.5%					
1-4 Prenatal Visits	7	17.5%					
5-10 Prenatal Visits	9	22.5%					
11+ Prenatal Visits	11	27.5%					

- In 2013, 93% of mothers of congenital syphilis cases were black, two mothers were white, and one mother was Hispanic/Latina.
- 50% of the mothers were between 20-24 years of age and 15% of mothers were between 15-19 and 25-29 years of age each.
- The highest percentage of congenital syphilis cases were born in the Shreveport Region (30%), followed by the New Orleans Region (23%) and the Monroe Region (13%).
- A lack or insufficient amount of prenatal care is evident among the mothers. Of the 40 mothers, 33% did not have a single prenatal care visit, 18% had only 1-4 visits, and 23% had between 5 and 10 visits.



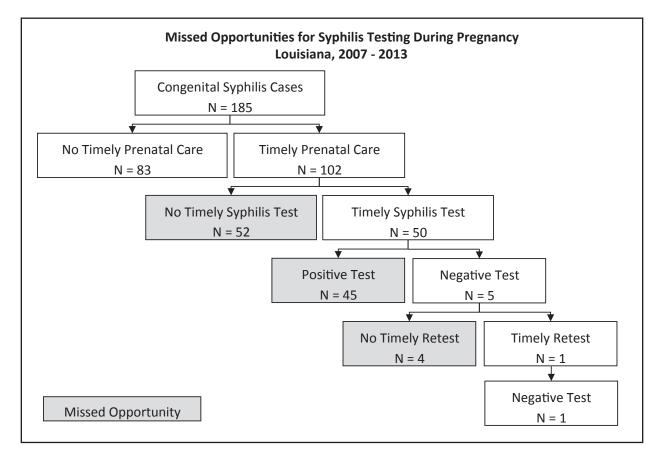
- Trends in congenital syphilis tend to follow trends for early syphilis in women with a one to two year lag. However, in Louisiana, the congenital syphilis rate has fluctuated widely.
- Louisiana's P&S syphilis rate among females did increase significantly from 2006 to 2009, and the congenital syphilis rate increased in 2010, 2012 and 2013.



• The syphilis rate among women in Louisiana is significantly higher than the national average, and this high rate contributes to the high rate of congenital syphilis in Louisiana.

### **Missed Opportunities for Syphilis Testing**

Syphilis testing during pregnancy is a crucial aspect of preventing cases of congenital syphilis. In 2007, Louisiana enacted a law requiring that physicians offer opt-out syphilis testing during a woman's first prenatal care visit. In 2014, Louisiana extended the law to require that physicians offer opt-out syphilis testing at the first prenatal care visit of the third trimester. In the chart below, 'Timely Prenatal Care' is prenatal care that starts at least 60 days before delivery and a 'Timely Syphilis Test' is a syphilis test conducted at least 45 days before delivery. This timing allows ample time for a woman to be treated for syphilis before delivery.



Over half (51%) of the women who delivered a newborn with congenital syphilis and who had timely prenatal care were never tested for syphilis during pregnancy. Although these women may have had limited prenatal care, a physician is required to offer a syphilis test at the first prenatal care visit, which could have prevented these cases of congenital syphilis. A large proportion (44%) of the women who delivered a newborn with congenital syphilis and who had timely prenatal care did have a timely, positive syphilis test. These women may not have been adequately treated for syphilis during pregnancy or were adequately treated but re-infected. Finally, several women received timely, negative syphilis tests but were not retested later in pregnancy. Third trimester syphilis testing is essential for preventing cases in which syphilis infection or seroconversion occurs late in pregnancy.



## Chapter 4

# **Appendices**

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

#### **Included Tables**

Trends in HIV Infection, Louisiana, 1979-2013

 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 2013. The number of deaths in 2013 are not finalized and are therefore not available.

New HIV Diagnoses by Region and Year, Louisiana, 2004-2013

• This table includes the number of New HIV Diagnoses from 2004 to 2013, for each of the nine public health regions in Louisiana.

New AIDS Diagnoses by Region and Year, Louisiana, 2004-2013

• This table includes the number of New AIDS Diagnoses from 2004 to 2013, for each of the nine public health regions in Louisiana.

Geographic Distribution of HIV in Louisiana, 2013

• This two-page table includes new AIDS Diagnoses in 2013, HIV Diagnoses in 2013, HIV Diagnosis Rate in 2013, Persons Living with HIV Infection in 2013 and Deaths in Persons Living with HIV Infection in 2012 for each of the nine public health regions and the 64 parishes of Louisiana.

Deaths among Persons with HIV Infection, Louisiana, 2012

• This table contains the demographic breakdown of Persons with HIV Infection who died in 2012 in Louisiana, regardless of cause of death.

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Trends in HIV Infection									
	Louisiana, 1979-2013								
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	16					
1984	146	84	187	36					
1985	383	151	498	100					
1986	482	241	852	159					
1987	757	417	1,391	244					
1988	780	450	1,954	292					
1989	1,040	611	2,638	431					
1990	1,214	707	3,466	438					
1991	1,553	937	4,568	542					
1992	1,749	1,065	5,698	677					
1993	1,710	1,133	6,726	770					
1994	1,648	1,106	7,653	820					
1995	1,491	1,047	8,330	912					
1996	1,521	1,127	9,144	791					
1997	1,510	942	10,213	556					
1998	1,277	844	11,097	527					
1999	1,244	789	12,005	500					
2000	1,187	822	12,805	516					
2001	1,135	886	13,502	571					
2002	1,180	969	14,260	554					
2003	1,053	890	14,848	586					
2004	1,056	864	15,680	577					
2005	972	799	13,645	589					
2006	991	765	14,179	547					
2007	1,089	804	14,773	518					
2008	1,099	841	15,422	482					
2009	1,208	786	16,103	536					
2010	1,125	798	16,783	446					
2011	1,218	779	17,489	467					
2012	1,045	779	18,036	481					
2013	1,298	731	18,895	n/a*					

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

New HIV Diagnoses by Region and Year Louisiana, 2004-2013										
2004 2005 2006 2007 2008 2009 2010 2011 2012 2013									2013	
Louisiana	1,056	972	991	1,089	1,099	1,208	1,125	1,218	1,045	1,298
1-New Orleans	435	322	248	325	358	384	341	412	339	439
2-Baton Rouge	249	271	305	312	297	311	296	293	254	263
3-Houma	27	35	38	45	42	41	57	56	53	60
4-Lafayette	75	77	72	71	75	86	89	90	79	100
5-Lake Charles	38	43	39	54	57	51	49	50	38	45
6-Alexandria	46	39	51	44	48	60	61	64	58	86
7-Shreveport	85	67	96	114	109	112	100	118	79	144
8-Monroe	62	62	83	74	52	73	60	68	76	89
9-Hammond/Slidell	39	56	59	50	61	90	72	67	69	72

New AIDS Diagnoses by Region and Year										
Louisiana, 2004-2013										
2004   2005   2006   2007   2008   2009   2010   2011   2012   2013									2013	
Louisiana	864	799	765	804	841	786	798	779	779	731
1-New Orleans	349	266	224	264	266	238	250	258	253	228
2-Baton Rouge	217	199	224	218	252	198	238	219	197	186
3-Houma	28	29	42	32	32	34	49	30	37	40
4-Lafayette	56	66	65	56	63	50	58	55	59	65
5-Lake Charles	42	38	34	39	36	42	29	38	33	28
6-Alexandria	39	31	31	35	34	41	36	40	35	29
7-Shreveport	59	73	52	79	78	76	52	61	67	66
8-Monroe	46	55	48	40	40	55	44	37	50	46
9-Hammond/Slidell	28	42	45	41	40	52	42	41	48	43

#### **Geographic Distribution of HIV** Louisiana, 2013 HIV **AIDS** HIV **Persons Living** Deaths Diagnosis Diagnoses with HIV Region **Parish** Diagnoses Rate 2013\* Infection 2013 2013\*\* Statewide 1,298 18,895 **Region 1** 6,592 Jefferson 1,735 Orleans 4,645 Plaquemines n/a St. Bernard Region 2 4,694 Ascension East Baton Rouge 3,656 East Feliciana n/a Iberville Pointe Coupee n/a West Baton Rouge West Feliciana **Region 3** Assumption n/a Lafourche St. Charles St. James St. John the Baptist St. Mary n/a Terrebonne Region 4 1,436 Acadia Evangeline Iberia Lafayette St. Landry St. Martin Vermilion **Region 5** Allen Beauregard n/a Calcasieu Cameron Jefferson Davis n/a

Geographic Distribution of HIV Louisiana, 2013								
Region	Parish	AIDS Diagnoses 2013*	HIV Diagnoses 2013	HIV Diagnosis Rate 2013**	Persons Living with HIV Infection 2013	Deaths 2012		
Statewide		731	1,298	28	18,895	481		
Region 6		29	86	28	864	27		
	Avoyelles	7	9	22	189	3		
	Catahoula	0	1	n/a	27	1		
	Concordia	1	3	n/a	47	2		
	Grant	0	7	32	39	1		
	La Salle	5	23	156	25	0		
	Rapides	10	35	26	433	16		
	Vernon	4	6	11	60	1		
	Winn	2	2	n/a	44	3		
Region 7		66	144	26	1,499	43		
	Bienville	2	4	29	31	1		
	Bossier	11	23	19	177	1		
	Caddo	39	89	35	976	29		
	Claiborne	1	1	n/a	52	1		
	De Soto	1	5	18	50	2		
	Natchitoches	4	7	18	107	8		
	Red River	1	3	n/a	12	0		
	Sabine	0	1	n/a	19	1		
	Webster	7	11	27	75	0		
Region 8		46	89	25	955	31		
	Caldwell	0	3	n/a	15	1		
	East Carroll	0	0	0	26	1		
	Franklin	3	7	34	38	1		
	Jackson	0	1	n/a	28	0		
	Lincoln	7	11	23	86	3		
	Madison	1	3	n/a	32	3		
	Morehouse	5	3	n/a	61	1		
	Ouachita	23	54	35	555	13		
	Richland	5	5	24	43	2		
	Tensas	0	1	n/a	33	1		
	Union	2	1	n/a	28	5		
	West Carroll	0	0	0	10	0		
Region 9	11.1	43	72	13	1,128	31		
	Livingston	9	14	10	186	6		
	St. Helena	1	1	n/a	17	2		
	St. Tammany	14	28	12	399	8		
	Tangipahoa	12 7	23	18	350	9		
******	Washington		6	13	176	6		

<sup>\*</sup>AIDS diagnoses will be included in counts of HIV diagnosis (3rd Column) for persons first diagnosed 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.

Deaths Among Persons with HIV Infection Louisiana, 2012						
2012 Deaths Perce						
Total Deaths	481	100%				
Diagnosis at Death						
AIDS	395	82.1%				
HIV	86	17.9%				
Sex						
Female	144	31.4%				
Male	337	73.4%				
Race/Ethnicity						
Black/African American	346	71.9%				
Hispanic/Latino	7	1.5%				
White	123	25.6%				
Other	5	1.0%				
Age at Death						
0-12	0	0.0%				
13-19	0	0.0%				
20-24	3	0.7%				
25-34	53	11.5%				
35-44	98	21.4%				
45-54	148	32.2%				
55-64	122	26.6%				
65+	57	12.4%				
Imputed Transmission Category						
Men who have sex with men (MSM)	162	33.7%				
Injection Drug User (IDU)	134	27.9%				
MSM/IDU	40	8.3%				
High Risk Heterosexual (HRH)	143	29.7%				
Transfusion/Hemophilia/Other	2	0.4%				
Region						
1-New Orleans	140	29.1%				
2-Baton Rouge	131	27.2%				
3-Houma	18	3.7%				
4-Lafayette	39	8.1%				
5-Lake Charles	21	4.4%				
6-Alexandria	27	5.6%				
7-Shreveport	43	8.9%				
8-Monroe	31	6.4%				
9-Hammond/Slidell	31	6.4%				
Rural/Urban		10.00				
Rural	78	16.2%				
Urban	403	83.8%				

#### **Program Report Technical Notes**

#### Report Format

The 2013 STD/HIV Surveillance Report includes only HIV and STD surveillance data and does not include HIV/ STD prevention and services data. More complete 2013 STD surveillance data is available in detail in the STD Annual Report, released in January 2015. The STD Annual Report can be found on the DHH website, http://dhh.louisiana.gov/std. This STD/HIV Surveillance Report is divided into three chapters, Profile of the HIV Epidemic in Louisiana, Linkage and Retention in HIV Care, Profile of STDs in Louisiana and an Appendix.

#### **Tabulation of Data**

This report includes all STD information entered at the STD/HIV Program office as of May 2, 2014 and all HIV information entered as of December 22, 2014. Chlamydia, gonorrhea, syphilis, congenital syphilis, HIV and AIDS cases diagnosed through 2013 are included in this report. The 2013 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 2012 to ensure complete data.

#### Census Data and Rate Calculation

For all rates calculated for years 2004-2013, 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 2013 for the New Orleans Public Health Region 1, the 2013 Census populations for the four parishes within Region 1 are added together equaling a regional population of 880,514 persons. Then the number of new HIV diagnoses in Region 1 in 2013, 439 new diagnoses, is divided by the totaled population, 880,514 persons to get 0.000449. This number is multiplied by 100,000 to result in an HIV case rate of 49.9 per 100,000 population for Region 1 in 2013.

#### 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, HIV-1 positive Multispot, two concurrent positive rapid tests, a physician diagnosis, 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>18</sup> The 1987 definition<sup>19</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>20</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>21</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.

More recently, the surveillance case definitions were revised in 2008 for adults and adolescents (age  $\geq$ 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/ $\mu$ l or the lymphocyte percentage is  $\geq$ 29%. Stage 2 is HIV infection with no AIDS-defining conditions and either the CD4+ T-lymphocyte count is between 200-499 cells/ $\mu$ l 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/ $\mu$ l, 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 persons whose birth sex is male who report sexual contact with other men, i.e. homosexual contact or bisexual contact. The CDC does calculate a risk of MSM for transgender women who report male sex partners, because the birth sex is collected as male.

**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.

#### **Works Cited**

- 1. U.S. Census Bureau, 2013 Population Estimates
- 2. IBID
- 3. IBID
- 4. U.S. Bureau of Labor Statistics: http://www.bls.gov/eag/eag.la.htm
- 5. National Institute of Corrections: http://nicic.gov/features/statestats/?State=LA
- 6. Department of Public Safety and Corrections: http://doc.la.gov/wp-content/uploads/stats/1g.pdf
- 7. Kaiser Family Foundation statehealthfacts.org, site accessed April 15, 2014. http://www.statehealthfacts.org/profileglance.jsp?rgn=20&rgn=1
- 8. IBID
- 9. Centers for Disease Control and Prevention. *HIV/AIDS Surveillance Report,* 2013. Vol 25. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2015.
- 10. IBID
- **11. IBID**
- 12. 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).
- 13. Panel on Treatment of HIV-Infected Pregnant Women and Prevention of Perinatal Transmission. Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States. Department of Health and Human Services. Available at http://aidsinfo.nih.gov/contentfiles/lvguidelines/perinatalgl.pdf. Accessed [March 12, 2014]
- 14. CDC. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health care settings. *MMWR* 2006;55(RR-14):1–17.
- 15. National Vital Statistics System: Births, Final Data for 2012. http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62\_09.pdf Accessed [February 3, 2014]
- 16. Gallagher, K., Sullivan, P., Lansky, A., Onorato, I. (2007). Behavioral Surveillance Among People at Risk for HIV Infection in the U.S.: The National HIV Behavioral Surveillance System. Public Health Rep 122: pp. 48.
- 17. Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance, 2013*. Atlanta, GA: U.S. Department of Health and Human Services, 2015.
- 18. MMWR 1985; 34: 373-75.
- 19. MMWR 1987; 36 [Supp no.1S]: 1S-15S.
- 20. MMWR 1992; 41[RR-17]: 1-19.
- 21. CDC 1999; 48[RR13]: 1-27.
- 22. MMWR 2008; 57[RR-10]: 1-12.