2017 STD/HIV Surveillance Report

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Office of Public Health

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

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Louisiana Office of Public Health 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 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 conduct surveillance and implement 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). Beginning in 2018, SHP assumed many activities related to viral hepatitis prevention. In January 2019, SHP fully took on Hepatitis B & C surveillance activities.

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 *2017 STD/HIV Surveillance Report* provides a thorough surveillance profile of the HIV and STD epidemics in Louisiana. The diagnoses included in this report include syphilis, congenital syphilis, gonorrhea, chlamydia, HIV and AIDS. A new chapter was added to this report starting in 2016 that addresses HIV co-infection among new diagnoses of P&S syphilis, gonorrhea, chlamydia and hepatitis C.

For More Information:

SHP maintains two websites http://dhh.louisiana.gov/hiv and www.louisianahealthhub.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 2017. Some of the most significant trends are highlighted below:

HIV Surveillance

- At the end of 2017, 21,432 persons were living with HIV in Louisiana, of whom 10,979 (51%) have been previously diagnosed with AIDS. There are persons living with HIV in every parish in Louisiana.
- In the most recent CDC HIV Surveillance Report (Vol. 29), Louisiana ranked 4th in the nation for HIV case rates (22.1 per 100,000 population) and 10th in the number of reported HIV cases. The New Orleans MSA ranked 4th in the nation and the Baton Rouge MSA ranked 5th for HIV case rates (27.0 and 26.9 per 100,000, respectively), among the large metropolitan areas in the nation.
- According to the same report, Louisiana ranked 3rd highest in state AIDS case rates (10.8 per 100,000) and 10th in the number of AIDS cases in 2017. The Baton Rouge MSA ranked 2nd in AIDS case rates (15.3 per 100,000) and the New Orleans MSA ranked 6th in AIDS case rates (12.5 per 100,000) in 2017 among the large metropolitan areas in the nation.
- In 2017, 1,017 individuals were newly diagnosed with HIV in Louisiana.
- The New Orleans region had the highest number and the highest rate of new HIV diagnoses in 2017 out of all nine public health regions. The Baton Rouge region had the 2nd highest number and 2nd highest rate of new diagnoses.
- Women accounted for 24% of new HIV diagnoses in 2017. The HIV diagnosis rate among men was over three times greater than the rate for women in Louisiana.
- Blacks continue to experience severe health inequalities; the HIV diagnosis rate for blacks was over five times higher than among whites in 2017. Although blacks make up only 32% of the state's population, 69% of newly diagnosed HIV cases and 71% of newly diagnosed AIDS cases were among blacks in 2017.
- In 2017, HIV diagnoses in youth aged 13-24 accounted for 25% of all new diagnoses. The majority of new diagnoses among youth are men (82%), black (77%), and are gay, bisexual, or other men who have sex with men (79%).
- In 2017, gay, bisexual, and other men who have sex with men (GBM), accounted for 61% of HIV diagnoses in the state; an additional 2% of HIV diagnoses were among GBM who were also injection drug users (GBM/PWID). The majority of the new diagnoses among GBM in Louisiana were black (66%) and under the age of 35 (70%).
- Of the 1,017 persons diagnosed with HIV in 2017, 16% had an AIDS diagnosis at the time of their initial HIV diagnosis, an additional 2% had an AIDS diagnosis within three months. Overall, 21% of all new HIV diagnoses in 2017 had an AIDS diagnosis within six months and are considered to be "late testers".

HIV Linkage and Retention in Medical Care

- In 2017, 75% of persons newly diagnosed with HIV were linked to HIV medical care within 30 days of their diagnosis.
- In 2017, 26% of all persons living with HIV 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 2017.
- Among persons living with HIV in 2017 who had at least one HIV medical care appointment, 83% were virally suppressed (last viral load < 200 copies/ml).

Perinatal HIV Exposure and Congenital Syphilis

- Perinatal HIV transmission rates have declined significantly from a high of nearly 16% in 1994 to less than 2% in 2016.
- In 2016, 94% of mothers living with HIV in Louisiana received ARV therapy during pregnancy; 97% received appropriate care and treatment during labor/delivery; and 99% of newborns received prophylactic zidovudine shortly after birth. Ninety-one percent of mother-infant pairs received all three recommended components of the antiretroviral prophylaxis protocol. Increased effort must be made to intervene during pregnancy, labor/delivery, and after the birth of the child to reduce the transmission rate below 1%.
- In 2017, 59 congenital syphilis cases in Louisiana were reported to the CDC. Although congenital syphilis is on the rise across the country, Louisiana's congenital syphilis case rate in 2017 ranked 1st in the US for congenital syphilis with a case rate of 93.4 cases per 100,000 live births, four times the national rate of 23.3 cases per 100,000 live births.
- As of June 2014, Louisiana state law requires that pregnant women are screened for HIV and syphilis at the beginning of their third trimester of pregnancy, in addition to screening at their first prenatal care visit. All pregnant women should receive this repeated testing and timely treatment for HIV and syphilis to reduce the number of perinatal transmissions of HIV and syphilis.

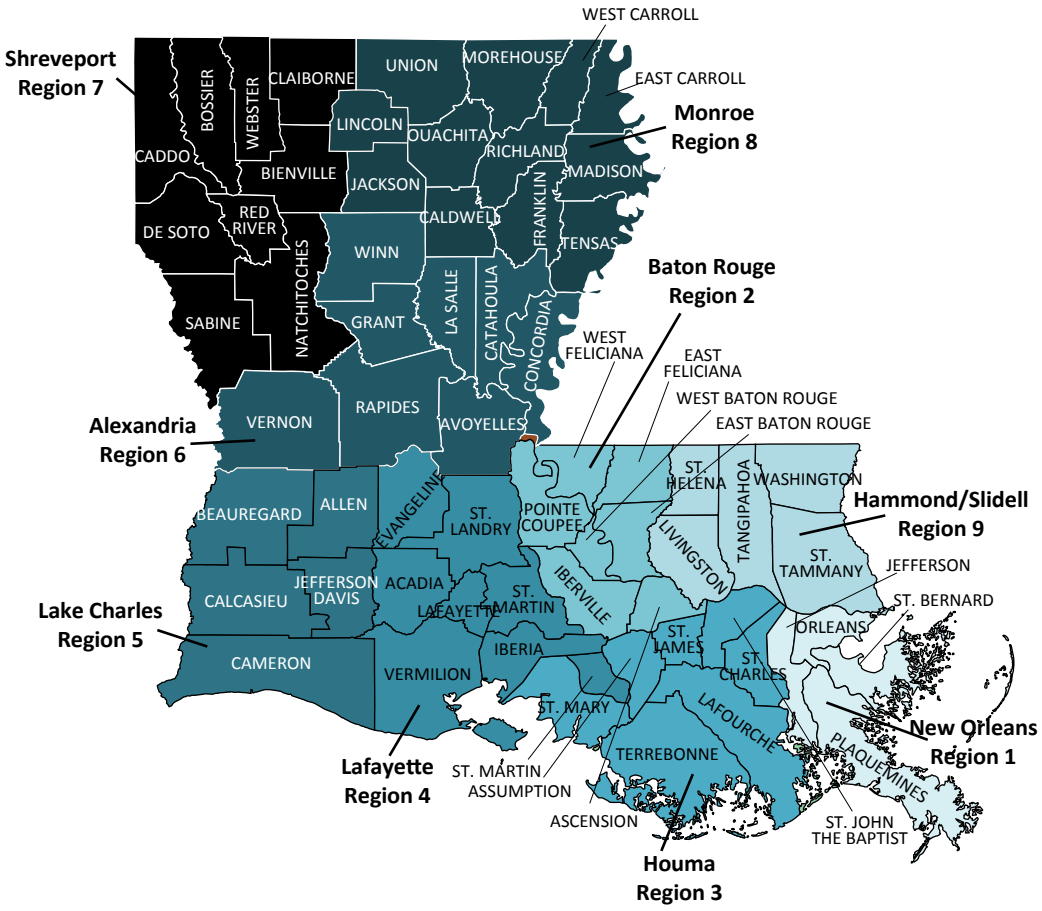
STD Surveillance

- In 2017, Louisiana ranked 2nd in the nation in chlamydia rates (741.8 per 100,000), 3rd in primary and secondary (P&S) syphilis rates (14.5 per 100,000) and 3rd in gonorrhea rates (256.5 per 100,000).
- There were 34,749 new cases of chlamydia, 12,014 cases of gonorrhea, and 679 cases of P&S syphilis diagnosed in Louisiana in 2017.
- The Monroe region had the highest rates of chlamydia and P&S syphilis, and the New Orleans region had the highest rate of gonorrhea out of all nine public health regions in Louisiana.
- Women accounted for 71% of chlamydia diagnoses, 50% of gonorrhea diagnoses, and 27% of P&S syphilis diagnoses in 2017.
- New STD diagnoses among blacks is a significant health disparity. Blacks accounted for 70% of chlamydia diagnoses, 76% of gonorrhea diagnoses, and 68% of P&S syphilis diagnoses in 2017.
- Persons under the age of 25 account for the majority of STD diagnoses in Louisiana: 70% of chlamydia diagnoses and 58% of gonorrhea diagnoses. Persons 15-29 years old accounted for 58% of P&S syphilis diagnoses.

HIV Co-Infection

- In 2017, coinfection with HIV was identified in 2% of chlamydia diagnoses (n=837), 7% of gonorrhea diagnoses (n=729), 30% of P&S syphilis diagnoses (n=203), and 3% of hepatitis C virus diagnoses (n=205).
- The number of persons identified with P&S syphilis/HIV co-infection has increased by 80% between 2013 and 2017, from 113 co-infections in 2013 to 203 co-infections in 2017.
- From 2013 to 2017, the gonorrhea/HIV co-infection rate more than doubled from a low of 6.0 per 100,000 in 2013 to a high of 15.6 per 100,000 in 2017. During the same period, the gonorrhea/HIV co-infection rate in black males almost tripled from 24.7 per 100,000 black males to 81.1 per 100,000 black males.
- Gay, bisexual and other men who have sex with men (GBM), accounted for the greatest proportion of HCV/HIV co-infections in 2017 (32% of HCV/HIV co-infections), closely followed by persons who inject drugs (30% of HCV/HIV co-infections).

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



Louisiana's Population

	Parishes in Public Health Region	Parishes in MSA
Region 1: New Orleans	Jefferson, Orleans, Plaquemines, St. Bernard	Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, 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	Acadia, Iberia, Lafayette, St. Martin, Vermillion
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, Webster
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	Tangipahoa

Louisiana's Population and Healthcare Environment

Louisiana's Population

In the 2017 census, the total population of Louisiana was 4,684,333 persons. Louisiana is made up of 64 county-equivalent subdivisions called parishes. In 2017, parish populations ranged from a low of 4,615 persons (Tensas Parish) to a high of 446,268 persons (East Baton Rouge Parish). While the state is considered rural, 84% of the population resides in urban areas[i]. The state has nine public health regions and nine metropolitan statistical areas (MSAs). The largest MSA is the New Orleans Metro Area (1,275,762) followed by the Baton Rouge Metro Area (834,159). The Lafayette MSA, has the third largest population in the state; 491,558.

Demographic Composition

According to the 2017 census data, the racial and ethnic composition of the state was estimated to be 59% white, non-Hispanic, 32% black, non-Hispanic, 2% Asian, and <1% American Indian. Persons of Hispanic origin make up an additional 5% of the total population.

Age and Sex

In 2017, the census estimates that persons under the age of 18 made up 23.7% of the population while persons 65 and older made up 14.9% of the population. The median age in Louisiana is 37 years. As in previous years, the estimated proportion of females in the overall population in 2017 was slightly higher than that of males (51% vs. 49%).[ii]

Education, Income, Poverty and Unemployment

An estimated 84.3% of Louisiana residents aged 25 years and older had attained a high school degree or higher, compared to 87.3% nationally. Additionally, 23.4% of Louisiana adults had a bachelor's degree or higher compared to 30.9% nationally. The estimated median household income in Louisiana was $46,710 for 2017 compared to $57,652 nationally. Moreover, an estimated 19.7% of Louisiana's population was living below the poverty level, compared to 12.3% of the national population. Louisiana has one of the highest proportions of children living in poverty, with an estimated 27.7% of all children 18 years or younger living in households with an income below the federally defined poverty level in 2017 compared to the national estimate of 20.0% of all US children.[iii] During 2017, the average unemployment rate in Louisiana was 5.2%.[iv]

Incarceration/Crime

In 2016, the crime rate in Louisiana was 35% higher than the national average rate. Property crimes accounted for 85% of the crime rate and violent crimes accounted for 15% of the crime rate. The National Institute of Corrections ranks Louisiana's incarceration rate 1st among all 50 states with 760 incarcerated adults per 100,000. Louisiana's incarceration rate was nearly double the national rate of 397 incarcerated adults per 100,000. As of December 31, 2016, the Louisiana prison population was 35,682 among nine state facilities. An additional 30,950 inmates can be found in the parish jail system.[v]

Health Indicators

IIn the 2017 United Health Foundation's America's Health Rankings report, Louisiana ranked **49th** 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 the state having a high percentage of adults who smoke, high percentage of children in poverty, high rates of obesity, high rates of premature death, and high infant mortality rates.[vi]

Public Aid

In 2017, Medicaid covered 28% and Medicare covered 13% of all persons living in Louisiana. An additional 8% of the population was considered to be uninsured. Medicaid expenditures in Louisiana totaled $11 billion in the 2017 fiscal year.[vii] In 2017, 52% of children ages 0-18 were insured through Medicaid.[viii]

National HIV/AIDS Strategy for the United States: Updated to 2020

The National HIV/AIDS Strategy (NHAS) was released by the White House on July 13, 2010. This strategy was the first of its kind for the United States. The NHAS outlined measureable 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. This strategy helped change the way that people talk about HIV and prioritize services and prevention activities.

On July 30, 2015, the NHAS was updated to look ahead to 2020 and incorporate new scientific advances for testing, treatment and prevention.

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."

There are four goals embedded in the Strategy with 2-3 unique actions steps:

GOAL 1: Reduce New HIV Infection

Focus on: Gay, bisexual and other men who have sex with men of all races and ethnicities, Black women and men, Latino women and men, People who inject drugs, Youth age 13 to 24 years, People in the Southern United States, and Transgender women.

- Intensify HIV prevention efforts in communities where HIV is most heavily concentrated.
- Expand efforts to prevent HIV infection using a combination of effective, evidence-based approaches.
- Educate all Americans with easily accessible, scientifically accurate information about HIV risks, prevention, and transmission.

GOAL 2: Increase Access to Care and Improve Health Outcomes for People Living with HIV

- Establish seamless systems to link people to care immediately after diagnosis, and support retention in care to achieve viral suppression that can maximize the benefits of early treatment and reduce transmission risk.
- Take deliberate steps to increase the capacity of systems as well as the number and diversity of available providers of clinical care and related services for people living with HIV.
- Support comprehensive, coordinated patient-centered care for people living with HIV, including addressing HIV-related co-occurring conditions and challenges in meeting basic needs, such as housing.

GOAL 3: Reduce HIV-Related Disparities and Health Inequities

- Reduce HIV-related disparities in communities at high-risk for HIV infection which include: Black, Latino, and American Indian/Alaska Native people, transgender people, and young people.
- Adopt structural approaches to reduce HIV infections and improve health outcomes in high-risk communities.
- Reduce stigma and eliminate discrimination associated with HIV status.

GOAL 4: Achieve 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.

National HIV/AIDS Strategy (NHAS) Indicators	Louisiana Data by Year									NHAS 2020 Goal
	2010 Baseline	2011	2012	2013	2014	2015	2016	2017	2017 Target	Annual Progress	
Goal 1: Reduce New Infections											
Increase the percentage of people living with HIV who know their serostatus to at least 90%	78.5%	79.6%	78.5%	79.4%	80.1%	80.0%	**81.3%**	--	83.7%[a]	✗	90%
Reduce the number of new diagnoses by at least 25%	1,121	1,211	1,054	1,143	1,213	1,111	1,129	**1,017**	967	✗	841
Reduce the percentage of young gay and bisexual men who have engaged in HIV-risk behavior by at least 10%	--	--	--	--	--	--	--	--	--	○	--
Goal 2: Increase Access to Care and Improve Health Outcomes for PLWH											
Increase the percentage of newly diagnosed persons linked to HIV medical care within one month of their HIV diagnosis to at least 85%	53.1%	55.1%	56.0%	56.5%	65.0%	67.0%	69.7%	**74.5%**	70.6%	✓	85%
Increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90%	49.3%	49.8%	52.4%	52.9%	54.5%	54.5%	56.5%	**58.0%**	71.7%	↗	90%
Increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 80%	39.9%	40.4%	43.2%	47.8%	52.4%	55.9%	59.7%	**61.2%**	62.0%	↗	80%
Reduce the percentage of persons in HIV medical care who are homeless to no more than 5%	6.8%	5.8%	6.5%	4.3%	3.8%	2.7%	2.1%	**3.4%**	5.8%	✓	5%
Reduce the death rate among persons with diagnosed HIV infection by at least 33%[b]	26.2	26.1	25.5	21.2	20.9	19.8	**20.0**	--	22.3[c]	✓	17.6
Goal 3: Reduce HIV-Related Disparities and Health Inequities											
Reduce disparities in the rate of new diagnoses by at least 15% among gay and bisexual men[d]	19.4	19.2	19.2	22.7	22.2	22.3	22.6	**22.4**	17.8	✗	16.5
Reduce disparities in the rate of new diagnoses by at least 15% among young Black gay and bisexual men[d]	70.8	75.1	80.3	89.1	90.6	86.3	85.8	**75.5**	65.0	✗	60.2
Reduce disparities in the rate of new diagnoses by at least 15% among Black females[d]	0.88	0.87	0.89	0.54	0.58	0.46	0.58	**0.36**	0.81	✓	0.75
Reduce disparities in the rate of new diagnoses by at least 15% among persons living in the Southern United States (i.e. Louisiana)[e]	0.74	0.96	0.75	0.98	1.07	0.92	0.96	**0.84**	0.63	✗	0.63
Increase the percentage of youth with diagnosed HIV infections who are virally suppressed to at least 80%	21.2%	28.5%	29.9%	33.8%	41.4%	47.6%	52.1%	**52.8%**	53.5%	↗	80%
Increase the percentage of persons who inject drugs with diagnosed HIV infections who are virally suppressed to at least 80%	39.3%	39.3%	41.5%	45.3%	48.8%	51.6%	54.8%	**54.9%**	61.7%	↗	80%

[a] 2016 Annual Target listed as 2017 data unavailable
[b] Death rate is per 1,000 persons diagnosed with HIV infection
[c] Due to delays in death reporting, the most recent year for complete death data is 2016
[d] Measures shown are the ratios of the disparity rate in specified group to the overall rate in Louisiana
[e] Measures shown are the ratios of the disparity rate in Louisiana to the overall U.S. HIV diagnosis rate

✓ Met or exceeded Annual Target
↗ Annual Target not met, moving in direction of target
✗ Annual Target not met, fluctuating progress towards target
○ Unable to assess target at this time

Understanding HIV Disparities in Louisiana

Research has shown that a person's social circumstance has the single largest impact on their HIV outcomes.[1] While it is important to encourage individual responsibility for one's health, it is also critical to address the social and economic factors that may limit a person's opportunity to routinely engage in healthy behaviors. In the sections below, we identify populations that are disproportionately affected by HIV in Louisiana and the specific social circumstances that are driving these disparities.

In Louisiana and across the US, Black, gay, bisexual and other men who have sex with men (GBM), and transgender persons have the highest rates of HIV infection and HIV-related mortality compared to their counterparts. Studies show that these disparities stem from a complex combination of interrelated social factors that have largely resulted from an extensive history of institutional oppression. These social factors act as a barrier to routine HIV screening and sustained engagement in HIV medical treatment, which are two critical methods of preventing new HIV infections and HIV-related mortality. In recent years, Louisiana's STD/HIV Program (SHP) has increasingly focused on crafting policies and public health interventions to break down institutional barriers to HIV prevention and treatment in order to lower HIV infection and HIV-related mortality rates among these groups.

Causes of HIV Disparities among Blacks

A common misconception is that Blacks have higher rates of engaging in individual risky behaviors than other populations (*e.g.,* unprotected sex, high number of sexual partners, drug use) and consequently, are at greater risk of being infected with HIV. Data from numerous studies have debunked this myth and show that Blacks actually tend to have lower rates of individual risky behaviors compared to their White counterparts. Furthermore, Blacks have higher rates of HIV infection even when engaging in behaviors of similar risk as Whites.[2-17] Taken together, these data suggest that the causes of HIV disparities among Blacks cannot be explained by differences in rates of individual risky behaviors.

Studies show the actual causes of HIV disparities among Blacks are complex and involve interrelated social factors that are largely tied to the effects of historical and present-day institutionalized racism. A selection of these factors are discussed below.

Stigma and a Lack of Social Support. Studies have shown that stigma tied to race, HIV, same-sex sexuality and non-conforming gender identity has played a critical role in the development of HIV disparities.[18-21] Stigma generates psychological distress, internalized shame, loss of self-worth, fear of being ostracized by society, and discriminatory treatment by others among persons associated with a marginalized population.[22-24] Racial stigma against Blacks is fueled by an extensive history of institutional attitudes and policies that have systematically devalued, stereotyped, and excluded Blacks. Sources of racial stigma include the dehumanization of Blacks during slavery; denying Blacks equal rights; laws permitting and/or requiring racial segregation; unequal protection and treatment from police; housing discrimination and the isolation of Blacks in impoverished neighborhoods; inequitable access to education and employment; and inequities in incarceration rates. Furthermore, Blacks are often portrayed by the media and community leaders as being criminals, violent, promiscuous, lazy, and unintelligent. These institutional policies and practices reinforce the devaluation and stereotyping of Blacks in communities across the US.[25-31]

The effects of multiple stigmas have been shown to be additive; thus, Blacks are more sensitive to other stigmas that have been shown to be associated with HIV disparities such as HIV stigma.[32-33] HIV stigma also stems from the institutional marginalization and discrimination of persons with HIV infection that has existed in the US since the beginning of the epidemic. HIV infection is often involuntarily associated with other stigmatizing attributes (such as promiscuity, drug use, and same-sex sexuality) and myths regarding how it can be transmitted.[34] Other related stigmas that are associated with HIV disparities include homosexuality stigma and gender-related stigma against effeminate men and transgender women (these stigmas are discussed below in *Causes of Disparities*

among GBM and Transgender Persons: Stigma and a Lack of Support).

Persons may forgo or delay HIV screening or HIV medical treatment due to the following stigma-related reasons:

- Avoiding healthcare providers that offer HIV-related services out of fear of being seen by community members and subsequently being associated with HIV, same-sex sexuality, or other stigmatizing attributes.
- Avoiding disclosure of HIV status, sexual orientation, or gender identity to providers, community members, sexual partners, or family because of internalized shame, fear of being shunned or discriminated against, or previous experiences of being shamed or treated unfairly.
- Avoiding HIV treatment adherence or sustained engagement in HIV medical treatment due to internalized shame or fear of HIV-status disclosure to community members, sexual partners, or family.

Poverty and Isolation in Underserved Neighborhoods. In Louisiana, 45% of Blacks are estimated to live in poverty compared to 17% of Whites.[35] This alarming socioeconomic gap is largely the result of institutional policies and practices that deny Blacks equal opportunities for housing, education, and employment.[36] Blacks have endured a history of discriminatory legislation and housing practices in the US that have limited them to living in underserved neighborhoods isolated from Whites. Throughout the majority of the 20th century, Blacks were banned from home ownership assistance programs (such as the GI bill), barred from White neighborhoods due to legislation (1934 Housing Act), and faced widespread discriminatory real estate and mortgage lending practices (such as redlining). Blacks also have a long history of being effectively barred from renting in White neighborhoods due to discriminatory renting practices.[37-46] Many Black neighborhoods suffer major disinvestment from local governments, the real estate market, and businesses leading to plummeting housing values, a dearth of livable wage employment opportunities, and a lack of high-quality public services such as education, healthcare, access to healthy foods, and public transportation. These structural inequities result in neighborhoods with little opportunity for overall economic growth and perpetually high rates of poverty.[37,47]

Poverty and isolation in underserved neighborhoods have a significant impact on the utilization of HIV screening and HIV medical treatment among Blacks. Some examples of this impact are described below.

- Lack of comprehensive, adequate healthcare coverage due to affordability, a lack of Medicaid expansion, and a lack of opportunities for jobs that include health insurance benefits. Consequently, Blacks may delay or forgo HIV screening and HIV medical treatment due to affordability concerns.
- Lack of transportation to attend healthcare appointments. Many Blacks lack adequate transportation options to attend healthcare appointments due to affordability and a lack of adequate public transportation options and nearby healthcare providers within Black communities.[37,47]
- Lack of job flexibility to attend healthcare appointments. Employees of low-wage jobs typically do not have paid sick leave or affordable child-care options in order to go to clinic appointments during business hours.
- Homelessness can lead to a lack of privacy to store and take HIV medications as well as a dearth of methods of contact for healthcare providers to reach patients.
- Healthcare providers may have policies that unintentionally or intentionally make healthcare access difficult for impoverished patients who have Medicaid, lack certain identification documents, are illiterate, have mental disabilities, or have drug abuse issues.

Inequitable Treatment in the Healthcare System. Blacks have endured a history of abuses and discriminatory treatment in the healthcare system that continues into the present-day. In response, many Blacks consider healthcare providers to be untrustworthy or unreliable. This sentiment can lead to delayed HIV screening and significant gaps in HIV medical treatment engagement. Some sources and examples of this mistrust are listed below.[48]

- The Tuskegee syphilis experiment. A study conducted by the US Public Health Service for 40 years (between 1932 and 1972) where Blacks who were diagnosed with syphilis were purposely not told of their diagnosis and not treated in order to monitor the progression of the disease.[48,49]
- Black are more likely than Whites to report feeling belittled, stereotyped, or disrespected by healthcare provider staff and doctors. Blacks have also been less likely than Whites to report feeling satisfied with the care and treatment they received.[49]
- Nationally, Blacks receive less aggressive or delayed treatment (including delayed prescribing of HIV treatment), on average, compared to Whites for the same medical conditions due to implicit racial biases and stereotyping among healthcare providers.[49]
- A lack of Black physicians in the healthcare system. Blacks make up only 4% of US physicians even though they make up 13% of the US population. Black patients report higher levels of confidence, trust, and satisfaction when seeing Black physicians compared to White physicians. In addition, Black physicians may be more likely to have a better understanding of the social and cultural factors that affect health behaviors and outcomes among Black patients.[49-50]

Incarceration Disparities. Louisiana has the highest incarceration rate and some of the longest incarceration sentences in the US. Blacks in Louisiana are four times more likely than Whites to be incarcerated in jails or prisons.[51] Reasons for this alarming disparity include over-policing in Black communities, racial profiling due to racial stigmas, differences in incarceration outcomes for similar crimes between Whites and Blacks, lack of adequate legal representation in court, bond policies that favor wealthy individuals, and a lack of social support and job opportunities upon reentry into the community.[52-57] Incarceration may have the following effects:

- Persons may experience substantial interruptions in routine HIV screening and HIV medical treatment during and after incarceration due to difficulty accessing HIV medical services in correctional facilities and significant difficulty obtaining employment, housing, and healthcare upon release.[52,57]
- Incarceration may disrupt stable, monogamous relationships and lead to a lower number of available sexual partners in a community. A smaller sexual network increases the risk of exposure to HIV and other STDs.[52,57]
- Incarceration generates additional stigma that may affect HIV screening and medical treatment utilization patterns.[52,57]

*Causes of HIV disparities among Gay, Bisexual and other Men who have Sex with Men and Transgender Women**

While gay, bisexual and other men who have sex with men (GBM) and transgender women have the same concerns regarding their health as other groups, they continually have the highest rates of HIV infection in Louisiana and across the US.[65] Studies show that HIV disparities among GBM and transgender women are fueled by interrelated social factors associated with a history of institutional norms and policies in the US that are rooted in heterosexism, homophobia, and transphobia. Social factors related to the institutional oppression of Blacks (discussed in the previous section) also play a role in the development and persistence of these disparities as Black GBM and transgender women bear the largest burden of HIV of any population in Louisiana. A selection of these social factors are discussed on the following pages.

Stigma and a Lack of Social Support. Studies have shown that stigma tied to same-sex sexuality and non-conforming gender identities has played a critical role in the development of HIV disparities.[18, 22-25, 33] Stigmas

* Rates of HIV infection among transgender men in the US has not been sufficiently researched; however, transgender men in the US suffer from some of the same institutional oppressions as transgender women. SHP intends to include transgender men in all prevention and service efforts.

faced by GBM and transgender women are fueled and reinforced by an extensive history of institutional attitudes and policies that have perpetually devalued, stereotyped, and discriminated against same-sex sexuality and non-conforming gender identities. Laws and policies in the US have long allowed GBM and transgender women to be denied equal treatment, housing, employment, marriage benefits, entry into the armed forces, access to public accommodations (retail stores, banks, libraries, restaurants, etc.) , and other equal protections.[57-61] Likewise, many important religious institutions strongly prohibit and/or vilify same-sex sexuality and non-conforming gender identities. Moreover, GBM and transgender women have often been negatively portrayed by community leaders and the media as being promiscuous, drug users, pedophiles, criminals, and/or sex workers.[63]

Due to widespread stigma, GBM and transgender women often face severe hostility, ostracism, and violence from family, friends, and community members upon revealing their sexuality and/or gender identity. Consequently, GBM and transgender women may feel tremendous internalized shame, fear of discrimination or mistreatment, and psychological distress. GBM and transgender women are also more sensitive to other stigmas such as HIV stigma and racial stigma as the effects of multiple stigmas have been shown to be additive. Altogether, the psychological distress caused by this combination of stigma can result in delayed HIV screening and medical treatment (additional details on the effects of stigma on HIV infection risk are available in the above section, *Causes of HIV Disparities among Blacks: Stigma and a Lack of Support*).[18, 22-25, 33]

Poverty, Ostracism, and Discriminatory Treatment. Transgender persons, particularly transgender persons of color, are dramatically more likely to live in poverty and experience homelessness than the general US population due to the widespread prevalence of discriminatory policies and hostile attitudes against this population. A national study of transgender women in the US found that transgender persons were four times as likely to have a household income under $10,000 compared to the general US population (15% vs. 4%). Black transgender persons face worse financial outcomes then other transgender persons. One in three Black transgender persons (34%) reported an income below $10,000 and 41% of Black transgender persons have reported ever being homeless.[61]

Transgender women often first encounter poverty and homelessness as youths. Studies show that transgender women are significantly more likely to endure harsh bullying, ostracism, harassment, and violence from schoolmates, families, and school administrators. Transgender students who face these experiences are more likely to have higher levels of psychological distress, lower academic achievement, miss class, and not plan on attending college. As a result, transgender persons may be less prepared to compete for livable-wage jobs. In addition, rejection from family members during childhood is a major cause of homelessness among transgender youth.[64, 65] Currently, Louisiana has no laws protecting students from discrimination or bullying on the basis of gender identity.[60]

Transgender women also face significant employment and housing discrimination due to their gender identity. In a review of 11 surveys, 13-47% of transgender respondents reported being unfairly fired or denied a job. In another survey, 78% of transgender persons reported experiencing harassment or mistreatment at work.[61] In addition, 19% of transgender persons have reported discrimination in the housing and renting market and 29% have reported discrimination from shelters and public housing.[62] Currently, Louisiana has no laws banning employment or housing discrimination based on gender identity.[60]

Poverty and homelessness have a significant impact on the transmission of HIV and the utilization of HIV screening and HIV medical treatment among transgender women. Some examples of this impact are described below (additional examples can be found in the above section, *Causes of HIV Disparities among Blacks: Poverty and Isolation in Underserved Neighborhoods*).

- Transgender women face immense employment discrimination due to gender nonconformity and may turn to sex work in order to survive. In a national survey of transgender persons in the US, 40% of black transgender persons and 6.3% of white transgender persons reported ever engaging in sex work (10.8% for all races). Almost 70% of these individuals reported discrimination in the traditional workforce. Engaging

in unregulated sex work for survival is a significant risk factor for HIV transmission as there are financial pressures to engage in unprotected sex and a risk of sexual assault.[62]

- Lack of comprehensive, adequate healthcare coverage due to affordability, a lack of Medicaid expansion, and a lack of opportunities for jobs that include health insurance benefits. In one study, 48% of transgender persons reported delaying or going without medical care because they could not afford it.[65]

Inequitable Treatment in the Healthcare System. GBM and transgender women face widespread discrimination and exclusionary policies within the US healthcare system. As a result, GBM and transgender women are less likely to have a regular place to go for medical care (such as a primary care physician) and they are more likely to delay or forgo preventative care and treatment (such as routine HIV screening and HIV medical treatment).[62, 65]

- Many GBM and transgender individuals report being refused care by healthcare providers and/or facing harassment, ridicule, or disrespectful treatment by health provider staff and physicians. Staff and physicians may also blame a patient's sexual orientation or gender identity as the cause of an illness. [62, 65]
- Many insurance policies have historically used or continue to use blanket exclusions to deny coverage for health concerns of transgender persons such as transition surgery, sex-specific preventative services (i.e., prostate exams for transgender women), and hormone medications. Louisiana lacks any laws prohibiting insurance companies from discriminating against transgender persons. As a result, transgender women may be discouraged from enrolling in healthcare insurance. [62, 65]
- Transgender persons may experience delays or difficulties in accessing coverage because their gender identity or chosen name does not reflect the gender or name on their identification documents (such as a driver's license or social security card). Changing identification documents to reflect one's gender identity can be time-consuming and expensive. [62, 65]
- Most doctors receive little or no instruction on the unique physical and mental health concerns of GBM and transgender women. Consequently, many GBM and transgender women go without receiving adequate, client-centered care.[62, 65]

Incarceration and Survival. Transgender women, particularly low-income and Black transgender women, face high levels of over-policing, profiling, police harassment, and incarceration. Transgender women are often shunned from employment opportunities, family, and their surrounding community. To survive, some transgender women may turn to activities that carry a high risk of incarceration such as sex work or drug trafficking. Transgender women also report being the target of random searches by police and being incarcerated for carrying condoms due to suspicion of sex work engagement.[62, 66] Incarceration may have the following effects for transgender women:

- Transgender women placed in men's prisons face a high risk of being sexually assaulted. One study found that 59% of transgender women in men's prisons reported ever being sexually assaulted while in prison.[62]
- Transgender women may experience substantial interruptions in routine HIV screening and HIV medical treatment during and after incarceration due to difficulty accessing HIV services in correctional facilities and difficulty obtaining access to healthcare upon release. In addition, they may experience disruptions in transgender-specific healthcare such as hormone therapy and mental healthcare.
- Transgender women may be discouraged from carrying condoms due to the risk of profiling and subsequently being incarcerated.
- Transgender persons who have been incarcerated are at higher risk of future incarceration because of the tremendous difficulty they may face obtaining employment, housing, and healthcare upon release.

Eliminating HIV Disparities among Blacks, GBM, and Transgender Women

SHP is committed to adopting policies and developing interventions that tackle the institutional barriers that are driving HIV disparities among Blacks, GBM, and transgender women. This commitment is aligned with the mission and goals of the National HIV/AIDS Strategy (described in the section titled *National HIV/AIDS Strategy*). Examples of SHP's efforts are presented below.

Addressing HIV Transmission Disparities

- **No-cost HIV testing and counseling.** SHP supports HIV testing and counseling through contracts with community-based organizations and through partnerships with parish health units, hospital emergency departments, correctional facilities, substance abuse treatment programs, Federally Qualified Health Centers, and school-based health clinics.
- **Wellness Centers.** SHP has contracted with six community-based organizations to provide integrated prevention services to GBM and transgender women in New Orleans, Baton Rouge, Lafayette, Shreveport, Monroe, and Alexandria.
- **Pre-exposure Prophylaxis (PrEP) Navigation.** SHP supports PrEP navigators at three community health centers in the New Orleans region to increase PrEP awareness, link HIV-negative persons to a PrEP provider, and assist PrEP users with long-term PrEP adherence. PrEP navigators also refer persons to social support services that may address barriers to HIV prevention behaviors and PrEP utilization, such as housing, transportation, financial support, medical, and mental health. PrEP medication (Truvada®) is highly effective at preventing HIV transmission when used as prescribed.
- **PrEP Telemedicine Navigation.** SHP's telemedicine navigation program connects HIV-negative persons to a PrEP provider that utilizes video conferencing to prescribe PrEP remotely.
- **No-cost condom distribution.** Condoms and lubricant are made available in neighborhoods through hundreds of community sites, parish health units, and through various outreach activities. The use of condoms during sexual activity is a highly effective method of preventing HIV transmission.

Addressing HIV Health Disparities among Persons Living with HIV

- **Case Management.** SHP contracts with community-based organizations to provide medical and non-medical case management and other critical supportive services to assist persons living with HIV with access to medical care and address potential medical and socioeconomic barriers to entering or staying connected to HIV care.
- **Louisiana Health Access Program (LA-HAP).** SHP provides access to HIV medications for uninsured persons living with HIV and assistance with health insurance premiums and other cost shares for insured persons living with HIV.
- **Louisiana Links.** A linkage/re-engagement and patient navigation intervention that utilizes HIV surveillance data to find persons living with HIV who may be in need of linkage/reengagement to HIV medical care or treatment adherence services. Enrollees in this program receive assistance overcoming socioeconomic barriers to HIV medical care that typically goes above and beyond what is provided through traditional case management.
- **Health Models.** A pay-for-performance treatment and prevention program that gives financial incentives to patients who attend regularly scheduled HIV medical appointments and reach and maintain viral suppression. Enrollees in this program also receive additional counseling and HIV education.
- **Pre-release Reentry Services.** Incarcerated persons living with HIV are offered pre-release reentry services aimed at helping them link to HIV medical care and other critical support services upon release and prepare for challenges that may arise while transitioning to life in the community. These services include education on social support services in their community that they may qualify for, referral to medical care, assistance making their first HIV medical appointment, assistance with enrollment into Louisiana's AIDS

Drug Assistance Program, and referral to case management at an agency in their community.

Social Equity Training for Health Department Staff and Care Providers

- **Trainings on Institutional Oppression**. SHP has partnered with capacity building organizations to provide trainings on institutional racism, transphobia, and homophobia to its staff, as well as staff at parish health centers, Federally Qualified Health Centers, and other community-based organizations across the state.

Community Engagement

- **Community Advisory Boards.** SHP consults with community advisory boards for guidance when designing and implementing HIV interventions and strategic plans, creating social marketing materials and programs, and interpreting monitoring and evaluation data.

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Chapter 1

Profile Of The HIV Epidemic In Louisiana

Introduction to HIV Surveillance

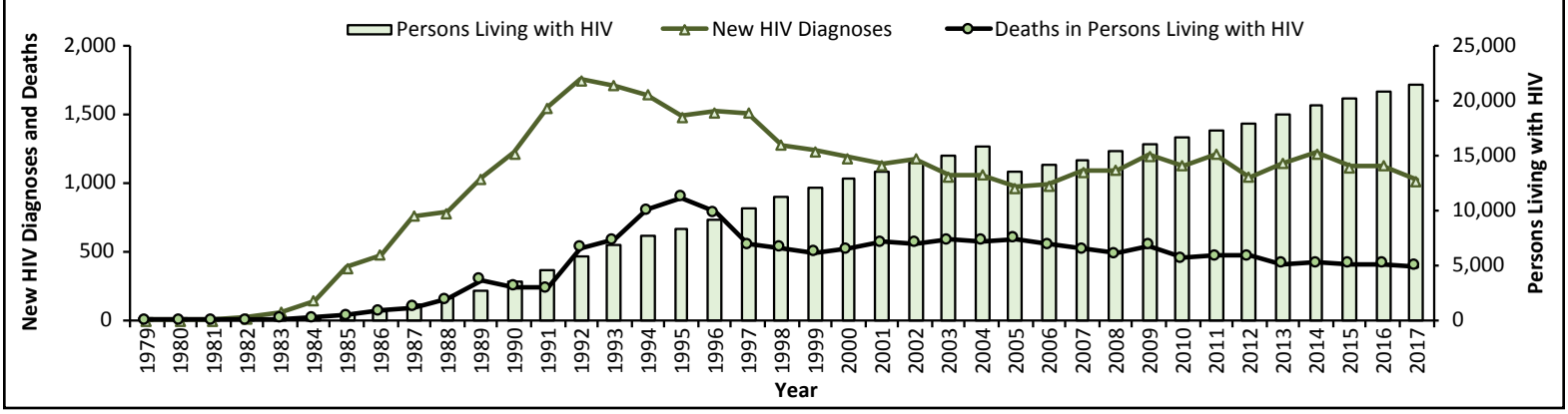
The Louisiana Department of Health, Office of Public Health STD/HIV Program's (SHP) HIV Surveillance Program conducts general case ascertainment through the receipt of reports of potential cases of HIV infection from clinical providers, laboratories, and other public health providers throughout the state 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, acute HIV infections, HIV transmission patterns through genetic sequence data, 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. Maternal and pediatric medical records are reviewed to assess testing and treatment. Follow-up occurs until the infant's HIV status is 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 and develop effective HIV prevention programs; to help identify where services for people living with HIV 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, 2017 and reported to SHP before December 21, 2018. 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, which allows for the direct comparison of rates between two or more groups or areas. This can help identify important differences between groups of people or areas.

Number of HIV Diagnoses, Deaths, and Persons Living with HIV
Louisiana, 1979-2017

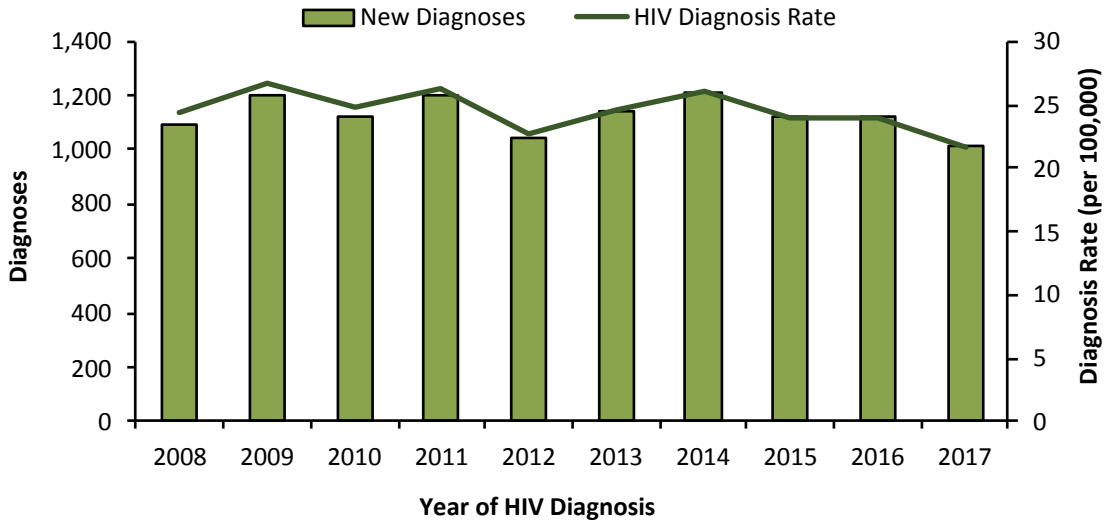


The first reported Louisiana resident with AIDS was diagnosed in 1979. In the 40 years since then, the number of persons living with HIV in the state has continued to increase. New HIV diagnoses peaked in 1992 and deaths among persons with HIV peaked in 1995. Deaths have decreased since 1995 due to the availability of more effective treatments. The decreases seen in 2005 in both persons living with HIV 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 (2008-2017)

The number of new HIV diagnoses in a given year has historically served as a measure of new infections (incidence). However, since individuals may have HIV for varying periods of time before they are diagnosed, counting new HIV diagnoses is not an accurate representation of new infections in a given year.

New HIV Diagnoses and Rates
Louisiana, 2008-2017

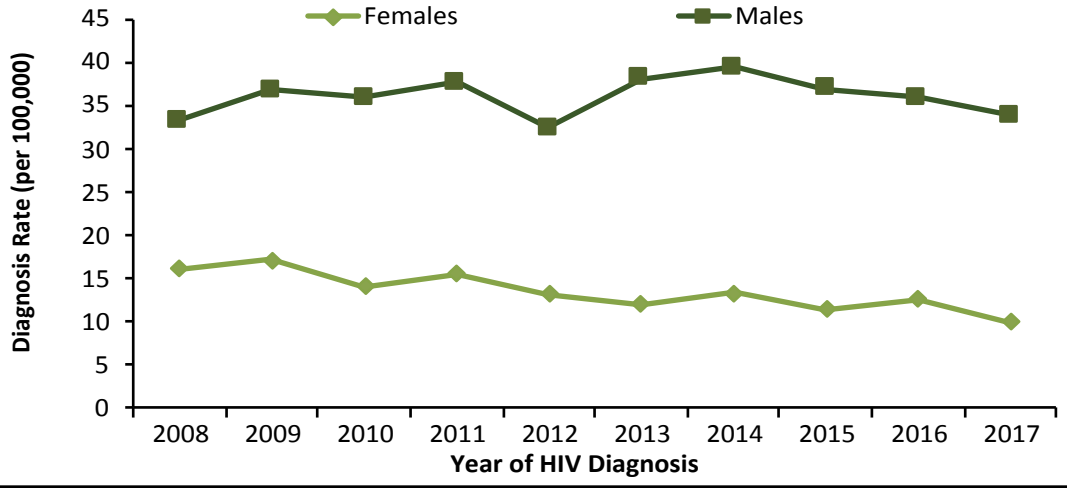


- In 2017, 1,017 individuals were newly diagnosed with HIV in Louisiana. Over the past 10 years, the number of new HIV diagnoses has fluctuated from a low of 1,017 diagnoses in 2017 to a high of 1,215 diagnoses in 2014.
- Over the past 10 years, the HIV diagnosis rate ranged from a low of 21.7 per 100,000 in 2017 to a high of 26.7 per 100,000 in 2009, followed closely by 26.3 per 100,000 in 2011.

HIV Diagnoses by Sex, Race/Ethnicity, and Age

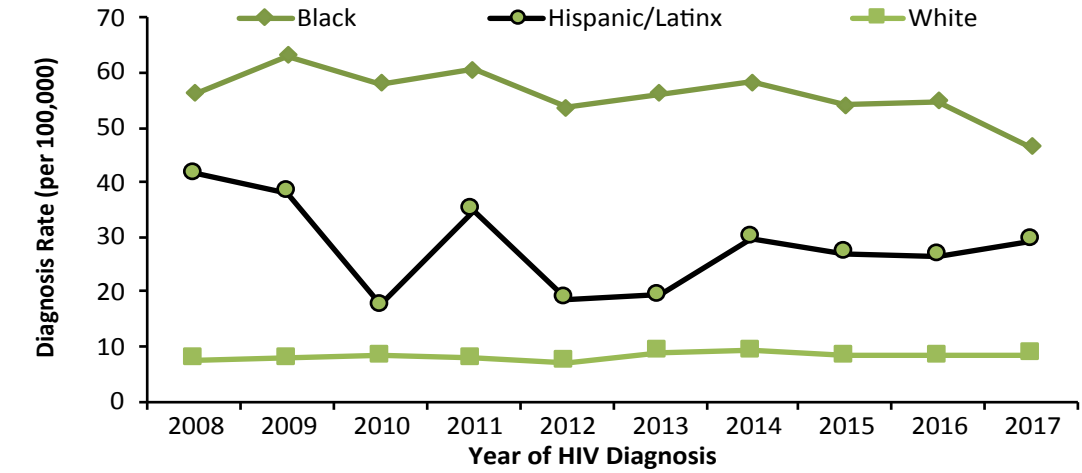
Although the HIV epidemic affects persons of all genders, ages, and race/ethnicities in Louisiana, the impact is not the same across all populations. Identifying the populations more likely to acquire HIV helps in planning HIV prevention activities and services, as well as determine the most effective use of limited resources. To get a better understanding as to how some groups are disproportionately impacted by the HIV epidemic, refer to the introductory chapter of this surveillance report.

Trends in HIV Diagnosis Rates by Sex at Birth
Louisiana, 2008-2017



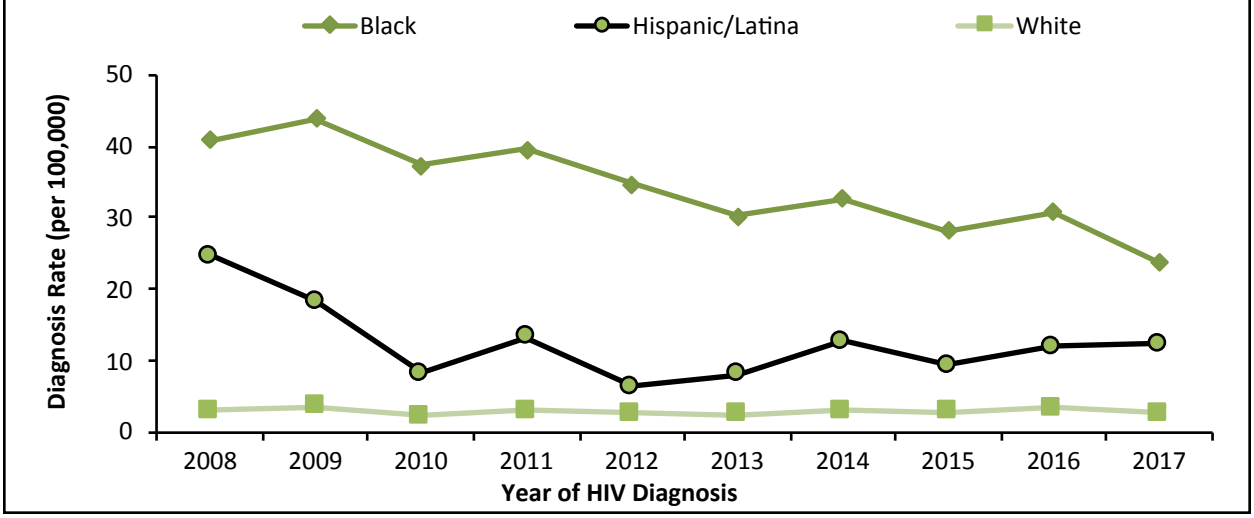
- Overall, the HIV diagnosis rate for females in Louisiana has been slowly declining over the past 10 years. In 2008, the female HIV diagnosis rate was 16.1 per 100,000 females. In 2017, the female HIV diagnosis rate had declined to 10.1 per 100,000.
- The rate for men over the past 10 years has been more variable. From 2012 to 2014, the male HIV diagnosis rate increased sharply from 32.5 per 100,000 to 39.5 per 100,000. In 2017, the male HIV diagnosis rate declined to a 5-year low of 33.9 per 100,000 males. The HIV diagnosis rate for males was over three times greater than females in 2017. Cumulatively, males have accounted for 72% of all new HIV diagnoses in Louisiana over the past 10 years.

Trends in HIV Diagnosis Rates by Race/Ethnicity
Louisiana, 2008-2017



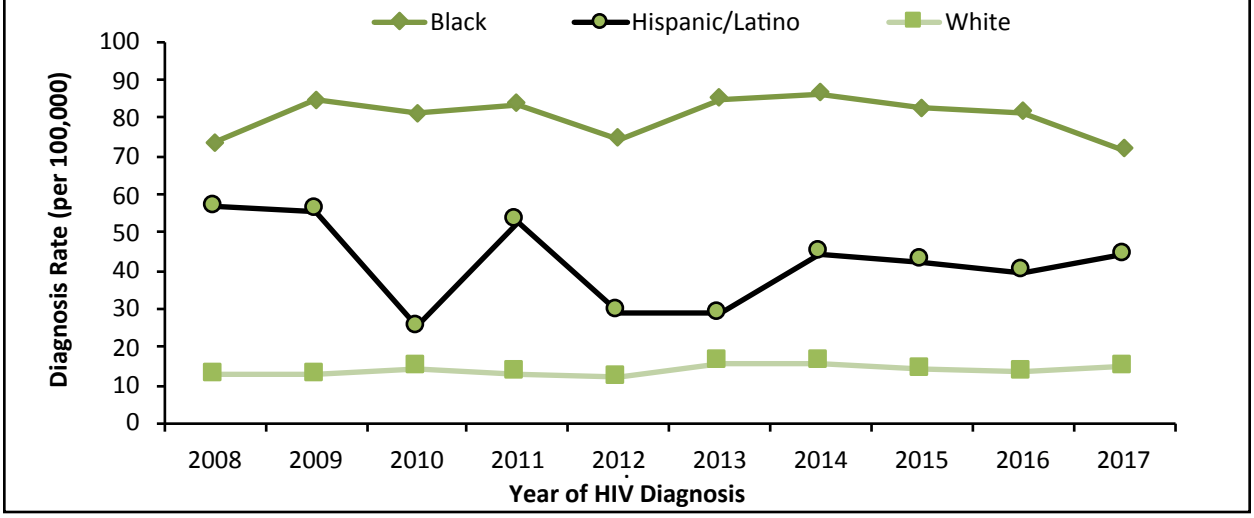
- The HIV diagnosis rate among whites has remained relatively stable over the past 10 years, with a diagnosis rate of 8.5 per 100,000 whites in 2017. The rate for blacks has been more variable with a low of 46.5 per 100,000 blacks in 2017 to a high of 63.1 per 100,000 blacks in 2009.
- In 2017, the HIV diagnosis rate for blacks was over five times greater than the rate for whites and 1.5 times the rate for Hispanics/Latinx (29.4 per 100,000 Hispanics/Latinx). The HIV diagnosis rate for Hispanics/Latinx was over three times the rate for whites; among the 1,017 newly diagnosed persons in 2017, 72 were Hispanic/Latinx. The number of new diagnoses among Hispanic/Latinx persons is smaller which causes more variability in the rate of new diagnoses from year to year.

Trends in HIV Diagnosis Rates Among Females by Race/Ethnicity
Louisiana, 2008-2017



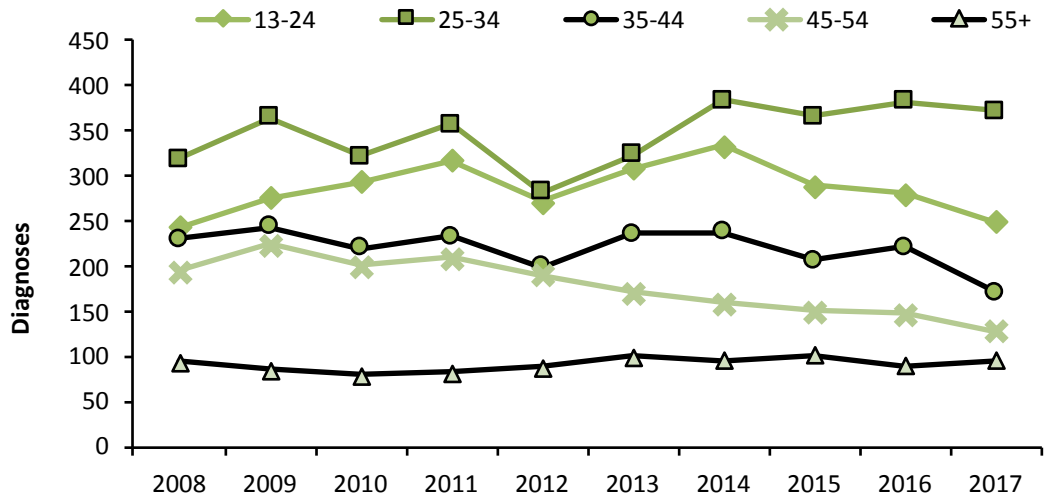
- In 2017, the HIV diagnosis rate in black females (23.7 per 100,000) was nearly nine times greater than the rate for white females (2.7 per 100,000) and was two times greater than the rate for Hispanic/Latina females (12.3 per 100,000).
- The HIV diagnosis rate among black females has declined significantly from a high of 43.8 per 100,000 in 2009 to a low of 23.7 per 100,000 in 2017.
- The HIV diagnosis rate for Hispanic/Latina females is higher than for white females, although the number of diagnoses is higher among whites.

Trends in HIV Diagnosis Rates Among Males by Race/Ethnicity
Louisiana, 2008-2017



- In 2017, the HIV diagnosis rate among black males (71.7 per 100,000) was five times greater than the rate for white males (14.6 per 100,000), and was 1.6 times the rate for Hispanic/Latino males (44.2 per 100,000). The HIV diagnosis rate among black males reached a 10-year low in 2017.
- Black females and males in Louisiana account for the overwhelming majority of new HIV diagnoses each year. When considering blacks make up only 32% of Louisiana's population, these disproportionately high diagnosis rates reflect the stark racial and ethnic health disparities that exist in the state.

Trends in New HIV Diagnoses by Age Group
Louisiana, 2008-2017



- The number of new diagnoses among youth, age 13-24 years, is of special interest in Louisiana and across the nation. In 2008, the number of new diagnoses among 13-24 year olds surpassed the number of new diagnoses among 35-44 year olds to become the second largest age group for new diagnoses. In 2017, new diagnoses in youth accounted for 25% of new diagnoses.

- Over the past 10 years, the 25-34 year-old age group consistently accounted for the highest number and percentage of new diagnoses, comprising 37% of all new HIV diagnoses in 2017. New diagnoses in persons aged 35-44 accounted for an additional 17% of all new diagnoses in 2017.

- From 2016 to 2017, the number of new diagnoses declined among all age groups in Louisiana, except among persons 55 and older.

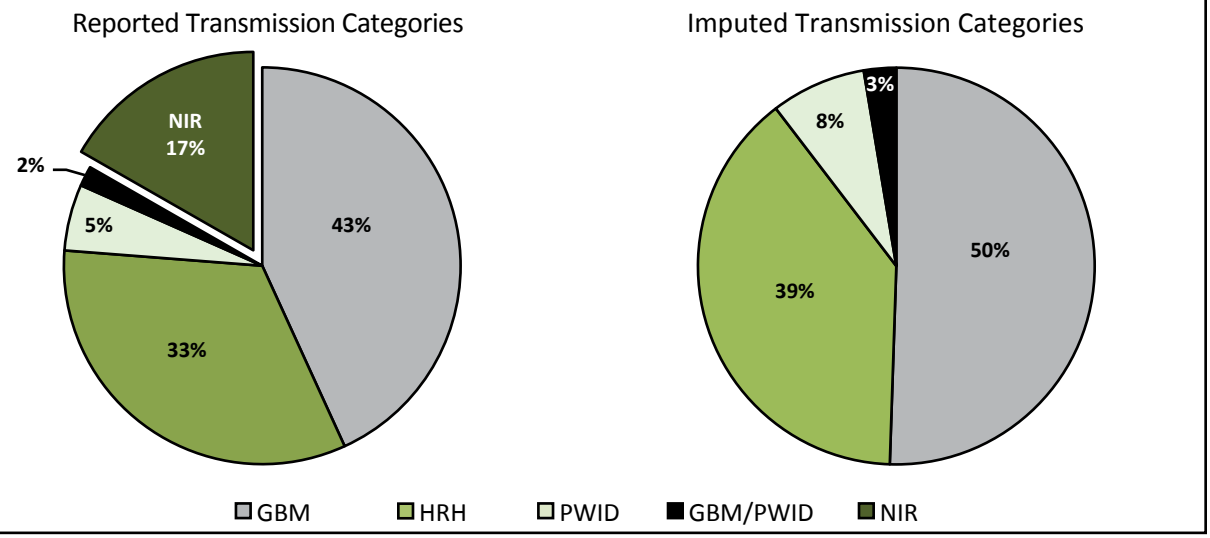
HIV Diagnoses by Transmission Category

In accordance with the transmission categories used by the CDC, SHP classifies diagnoses into six transmission categories: gay, bisexual, and other men who have sex with men (GBM), high risk heterosexual contact (HRH), persons who inject drugs (PWID), men who have sex with men and inject drugs (GBM/PWID), perinatal transmission (Pediatric), and cases who received a transfusion or hemophiliac products (Transfusion/ Hemophilia). The CDC calculates a risk of GBM for transgender women who report male sex partners because birth sex is collected as male. As illustrated in the graph on the following page, many cases do not have risk information reported or do not meet the transmission category criteria and are labeled as no identified risk (NIR). For all persons diagnosed between 2008 and 2017, 17% do not have a reported risk.

Risk information is difficult to ascertain because individuals may not know how they acquired HIV, 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 (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).

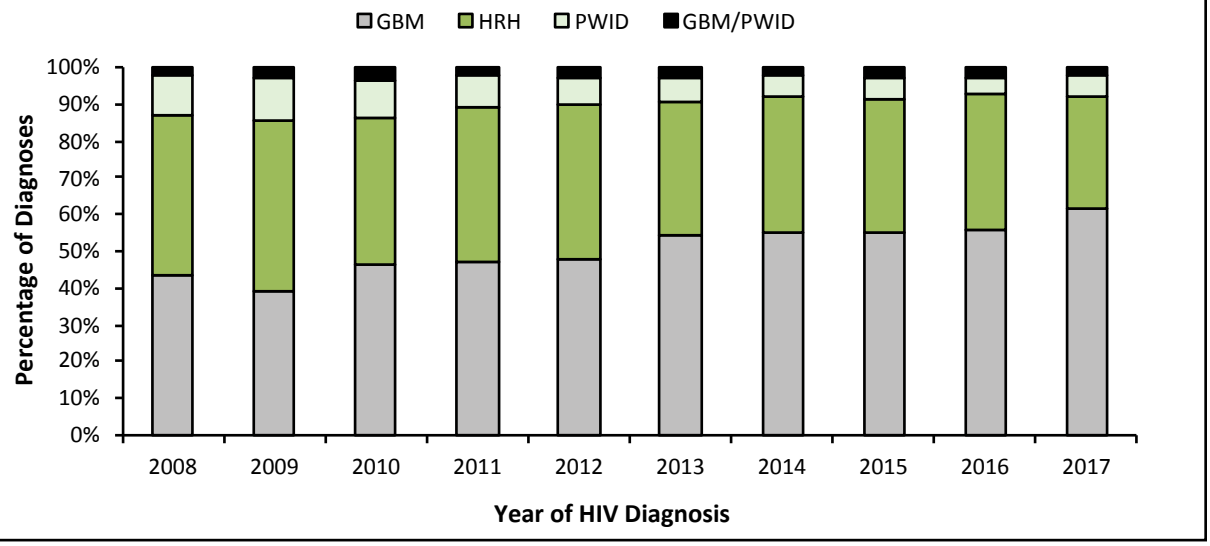
In 2018, SHP began performing routine matches with surveillance and Ryan White services data in order to ascertain information on risk for PLWH classified as NIR. As a result of these matches, a significant number of PLWH had their risk updated from NIR to HRH. Reported HRH now makes up 33% of diagnoses between 2008-2017. In the 2016 Annual Report and earlier versions, the reported HRH transmission category typically comprised 18% of HIV diagnoses.

HIV Transmission Categories
Louisiana, 2008-2017 Combined



- Of the new diagnoses from 2008 to 2017, 17% 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 GBM, 39% were HRH, 8% were PWID, 3% were GBM/PWID. Perinatal diagnoses are not included above as they do not undergo the risk imputation process.
- 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 and tables use imputed transmission categories unless otherwise noted.

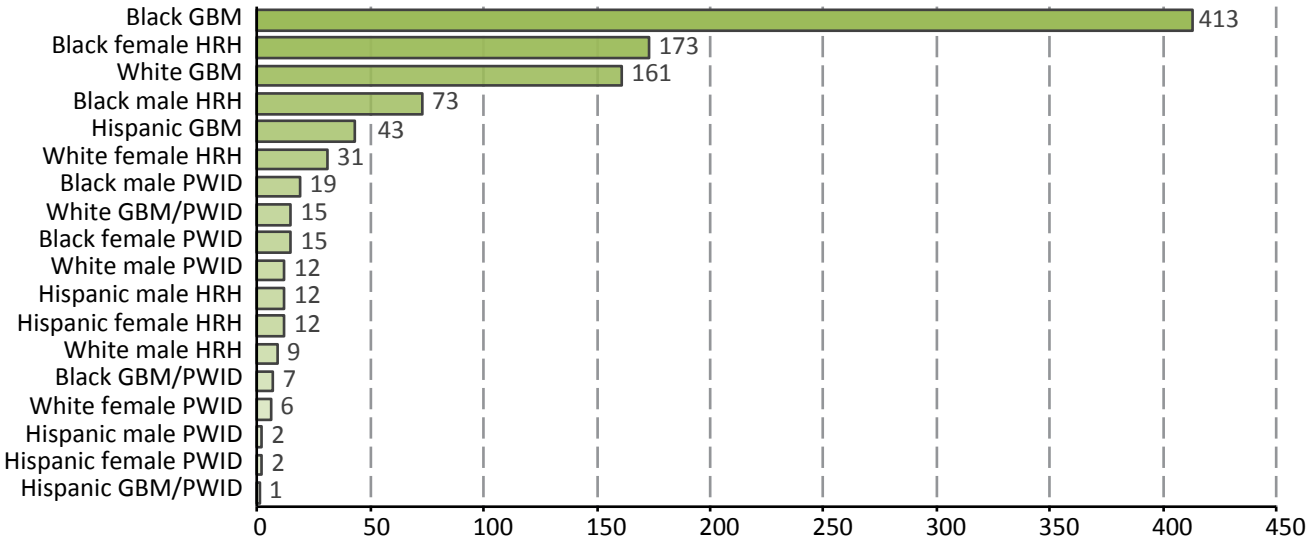
Trends in New HIV Diagnoses by Transmission Category
Louisiana, 2008-2017



- The percentage of adult HIV diagnoses attributed to GBM has increased significantly from a low of 39% in 2009 to a high of 61% in 2017. Since 2013, the proportion of GBM has consistently comprised over half of the new HIV diagnoses each year.
- Proportions among HRH and PWID have steadily decreased over the past 10 years. The percentage of HRH diagnoses has seen the largest decline, from a high of 46% in 2009 to a low of 31% in 2017. The percentage of diagnoses attributed to PWID has decreased significantly as well from a high of 12% in 2009 to a low of 6% in 2017. The percentage of GBM/PWID diagnoses has remained relatively constant over the past 10 years.

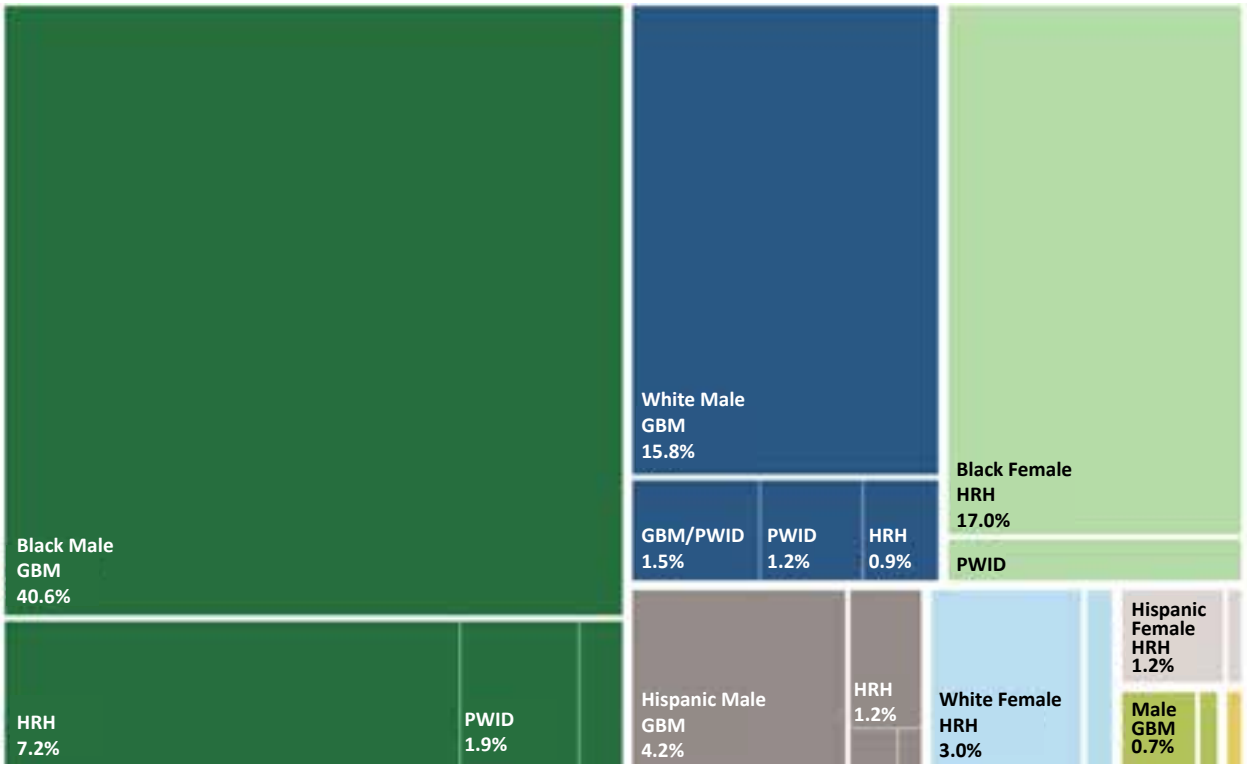
New HIV Diagnoses by Race/Ethnicity, Sex at Birth, and Transmission Category- Louisiana, 2017

New HIV Diagnoses by Race/Ethnicity, Sex at Birth, and Transmission Category
Louisiana, 2017



- The chart above highlights the marked disparities in the number of new HIV diagnoses when persons are grouped by their race/ethnicity, sex at birth, and imputed transmission category.
- Among newly diagnosed persons in 2017 in Louisiana, 73% of new diagnoses occurred among three groups: black gay, bisexual, and other men who have sex with men (GBM), black high-risk heterosexual women (HRH), and white gay, bisexual, and other men who have sex with men (GBM).
- In 2017, black GBM accounted for 413 (41%) of Louisiana's 1,017 new HIV diagnoses. This was more than double the number of new diagnoses among the second highest group, black female HRH, who accounted for 173 new HIV diagnoses. The number of black GBM diagnoses was 2.5 times higher than the 161 new HIV diagnoses among white GBM.

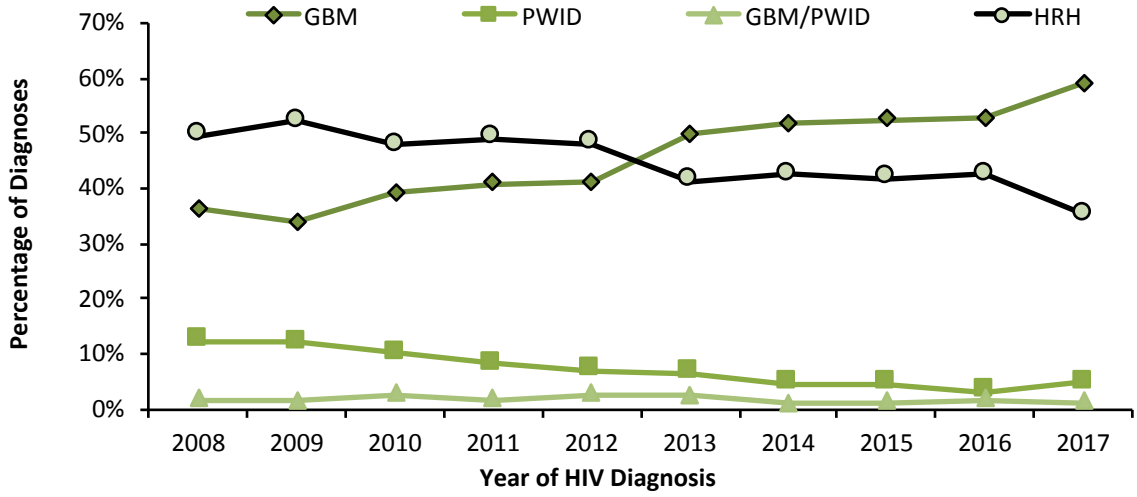
New HIV Diagnoses by Race/Ethnicity, Sex at Birth, and Transmission Category-Louisiana, 2017



*Boxes without a label or percentage indicated < 0.5%

- The TreeMap above is a graphical tool designed here to emphasize disparities in the proportion of new HIV diagnoses by race/ethnicity, sex at birth, and transmission category. In 2017, 61% of all new diagnoses were GBM, 31% HRH, 6% PWID, and 2% GBM/PWID.
- Among males, GBM is the primary mode of transmission accounting for 83% of Louisiana's male HIV diagnoses in 2017. Among females, HRH is the primary mode of transmission comprising 90% of new female HIV diagnoses.
- Black males only comprise 15% of Louisiana's population but account for 50% of all new HIV diagnoses. Black females comprise 17% of Louisiana's population and account for 18% of new HIV diagnoses. In total, blacks made up 69% of new HIV diagnoses in 2017.

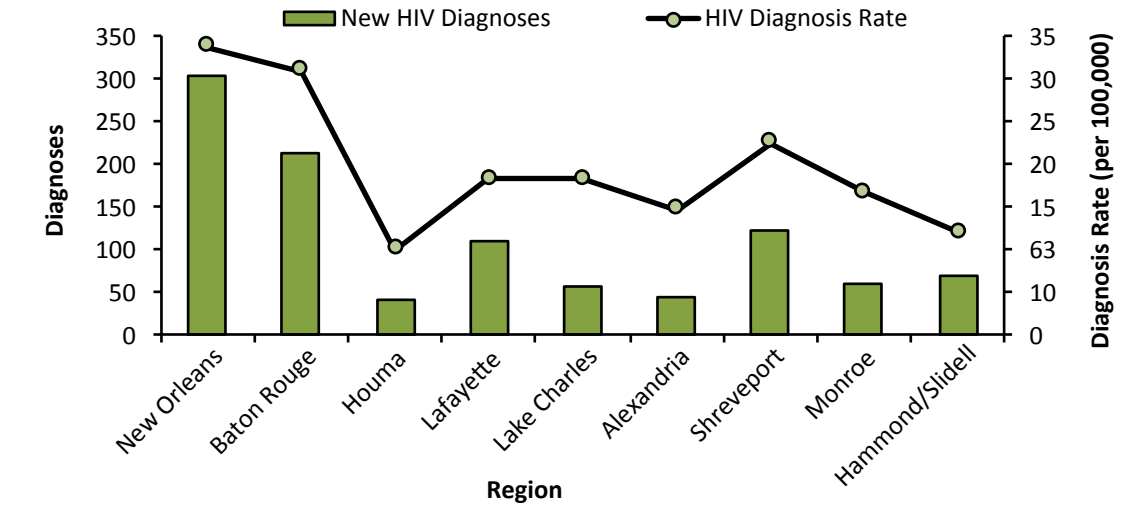
Trends in New HIV Diagnoses by Transmission Category
Black Adolescents and Adults in Louisiana, 2008-2017



- Historically, the primary mode of transmission for blacks was HRH contact followed closely by GBM. In 2013, the percentage of new diagnoses among black GBM surpassed the percentage of diagnoses among HRH and has remained the primary mode of transmission among blacks to present.
- In 2017, 59% of all new HIV diagnoses among blacks were GBM and 35% were HRH; 2013 marked a large increase among black GBM from 41% of diagnoses in 2012 to 50% of diagnoses in 2013.
- From 2008 to 2017, the percentage of HIV diagnoses among black PWID has declined significantly from 12% to 5%, respectively. The percentage of black GBM/PWID has remained relatively constant over the past 10 years.

HIV Diagnoses by Public Health Region

New HIV Diagnoses by Rate and Region
Louisiana, 2017



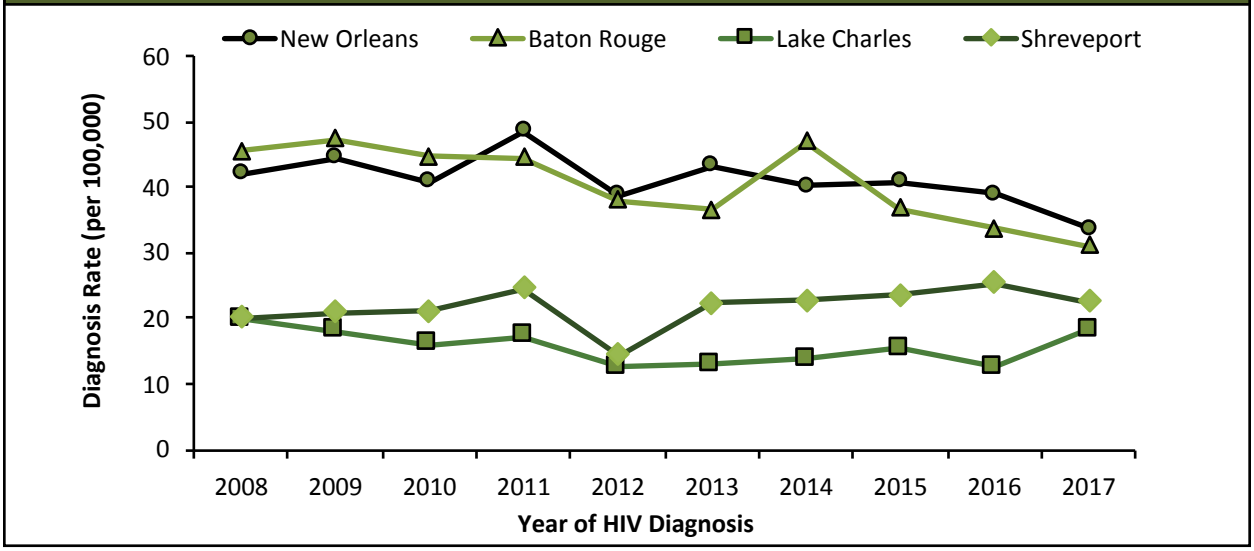
- In 2017, the New Orleans region had the highest number of new HIV diagnoses and the highest HIV diagnosis rate. The Baton Rouge region had the second highest number of new diagnoses and the second highest diagnosis rate.
- The Houma region had the lowest number of new HIV diagnoses and the lowest HIV diagnosis rate.

New HIV Diagnoses by Region and Year
Louisiana, 2013-2017

	2013		2014		2015		2016		2017	
Louisiana	**1,142**	**100%**	**1,215**	**100%**	**1,118**	**100%**	**1,125**	**100%**	**1,017**	**100%**
1-New Orleans	381	33%	356	29%	365	33%	350	31%	303	30%
2-Baton Rouge	246	22%	319	26%	251	22%	231	21%	212	21%
3-Houma	57	5%	52	4%	63	6%	59	5%	40	4%
4-Lafayette	91	8%	111	9%	89	8%	110	10%	111	11%
5-Lake Charles	38	3%	41	3%	46	4%	38	3%	55	5%
6-Alexandria	63	6%	57	5%	52	5%	59	5%	45	4%
7-Shreveport	123	11%	124	10%	128	11%	138	12%	122	12%
8-Monroe	77	7%	89	7%	63	6%	71	6%	59	6%
9-Hammond/Slidell	66	6%	66	5%	61	5%	69	6%	70	7%

- Over half of new HIV diagnoses occur in the New Orleans and Baton Rouge regions each year. In 2017, the Shreveport region had the third highest number of new diagnoses followed by the Lafayette region. From 2013 to 2017, the proportion of new diagnoses in the Baton Rouge region fluctuated from a high of 26% in 2014 to a low of 21% in 2016 and 2017. The proportion of new diagnoses in the New Orleans region fluctuated from a high of 33% in 2013 and 2015 to a low of 29% in 2014.

Trends in New HIV Diagnoses by Selected Region
Louisiana, 2008-2017



- The four public health regions in Louisiana with the highest HIV diagnosis rates in 2017 were New Orleans, Baton Rouge, Lake Charles, and Shreveport (regions 1, 2, 5, and 7, respectively).
- Over the past 10 years, the New Orleans and Baton Rouge regions have had the highest diagnosis rates in the state. In 2017, the HIV diagnosis rate in the New Orleans region (33.8 per 100,000) was 9% higher than the rate in the Baton Rouge region (31.0 per 100,000). The Shreveport region had the third highest rate in 2017 (22.4 per 100,000) followed by the Lake Charles region (18.2 per 100,000). *A table with the number of HIV diagnoses for each region, 2008-2017, is located in the Appendix.*

Characteristics of Persons Newly Diagnosed with HIV

Characteristics of Persons Newly Diagnosed with HIV Louisiana, 2016-2017				
	Persons First Diagnosed with HIV in 2016		Persons First Diagnosed with HIV in 2017	
	Diagnoses	Percent	Diagnoses	Percent
TOTAL	**1,125**	**100%**	**1,017**	**100%**
Gender				
Men	794	71%	753	74%
Women	304	27%	241	24%
Transgender women	27	2%	23	2%
Race/Ethnicity				
Black/African American	824	73%	700	69%
Hispanic/Latinx	63	6%	72	7%
White	230	20%	234	23%
Other/Unknown/Multi-race	8	1%	11	1%
Age at HIV Diagnosis				
0-12	3	<1%	0	0%
13-19	55	5%	52	5%
20-24	226	20%	198	19%
25-34	383	34%	372	37%
35-44	221	20%	171	17%
45-54	147	13%	128	13%
55-64	76	7%	74	7%
65+	14	1%	22	2%
Transmission Category				
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	624	55%	624	61%
Persons Who Inject Drugs (PWID)	48	4%	56	6%
GBM/PWID	35	3%	23	2%
High Risk Heterosexual (HRH)	415	37%	314	31%
Perinatal/Pediatric*	3	<1%	0	0%
Rural/Urban				
Rural	104	9%	106	10%
Urban	1,021	91%	911	90%

* Transmission category not imputed.

- In 2017, 1,017 persons were newly diagnosed with HIV, a 10% decrease from 2016.
- In 2017, 74% of new diagnoses were men, 24% were women, and 2% were transgender women.
- Among all HIV diagnoses in 2017, 69% were black even though blacks make up only 32% of Louisiana's population, representing a large racial disparity among new HIV diagnoses.
- In 2016 and 2017, the greatest number and proportion of diagnoses were among persons age 25-34 years.
- In 2017, 61% of all new diagnoses were among gay, bisexual, and other men who have sex with men (GBM) and an additional 2% were among GBM who also inject drugs (GBM/PWID).
- In Louisiana, the majority of new diagnoses in 2017 (90%) was among persons residing in an urban area. An urban area is defined as a parish that belongs to a metropolitan statistical area (MSA).

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 to 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, 2017

	Persons Diagnosed with HIV, 2017								
	New HIV Diagnoses	AIDS at Time of Diagnosis*		AIDS Within 3 Months of Diagnosis		AIDS Within 6 Months of Diagnosis		AIDS Within 9 Months of Diagnosis	
		Count	Percent**	Count	Percent**	Count	Percent**	Count	Percent**
Total	**1,017**	**167**	**16%**	**188**	**18%**	**218**	**21%**	**231**	**23%**
Gender									
Men	753	132	18%	146	19%	168	22%	178	24%
Women	241	32	13%	39	16%	47	20%	50	21%
Transgender women	23	3	13%	3	13%	3	13%	3	13%
Race/Ethnicity									
Black/African American	700	106	15%	120	17%	142	20%	152	22%
Hispanic/Latinx	72	12	17%	14	19%	16	22%	17	24%
White	234	49	21%	54	23%	59	25%	61	26%
Other/Unknown/Multi-race	11	0	0%	0	0%	1	9%	1	9%
Age at HIV Diagnosis									
0-12	0	0	0%	0	0%	0	0%	0	0%
13-19	52	2	4%	2	4%	3	6%	3	6%
20-24	198	19	10%	21	11%	25	13%	27	14%
25-34	372	55	15%	62	17%	69	19%	72	19%
35-44	171	27	16%	32	19%	38	22%	41	24%
45-54	128	39	30%	43	34%	47	37%	50	39%
55-64	74	18	24%	19	26%	26	35%	28	38%
65+	22	7	32%	9	41%	10	45%	10	45%
Transmission Category									
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	624	99	16%	107	17%	125	20%	132	21%
Persons Who Inject Drugs (PWID)	56	13	23%	14	25%	16	29%	17	30%
GBM/PWID	23	2	9%	2	9%	3	13%	3	13%
High Risk Heterosexual (HRH)	314	53	17%	65	21%	74	24%	79	25%
Region									
1-New Orleans	303	50	17%	54	18%	58	19%	59	19%
2-Baton Rouge	212	35	17%	38	18%	46	22%	52	25%
3-Houma	40	10	25%	11	28%	12	30%	13	33%
4-Lafayette	111	17	15%	19	17%	23	21%	24	22%
5-Lake Charles	55	9	16%	10	18%	12	22%	12	22%
6-Alexandria	45	6	13%	10	22%	10	22%	10	22%
7-Shreveport	122	18	15%	19	16%	23	19%	27	22%
8-Monroe	59	9	15%	12	20%	16	27%	16	27%
9-Hammond/Slidell	70	13	19%	15	21%	18	26%	18	26%

*If AIDS diagnosis was within 1 month of HIV diagnosis.

**Value calculated as the number of persons in the demographic group sub-category over the total number of new diagnoses in the category (e.g. percentage of males with AIDS at HIV diagnosis = 132/753 * 100 = 18%).

- Of the 1,017 persons diagnosed with HIV in 2017, 16% had an AIDS diagnosis at the time of their initial HIV diagnosis, an additional 2% had an AIDS diagnosis within three months. A total of 23% of persons had an AIDS diagnosis within nine months post HIV diagnosis.

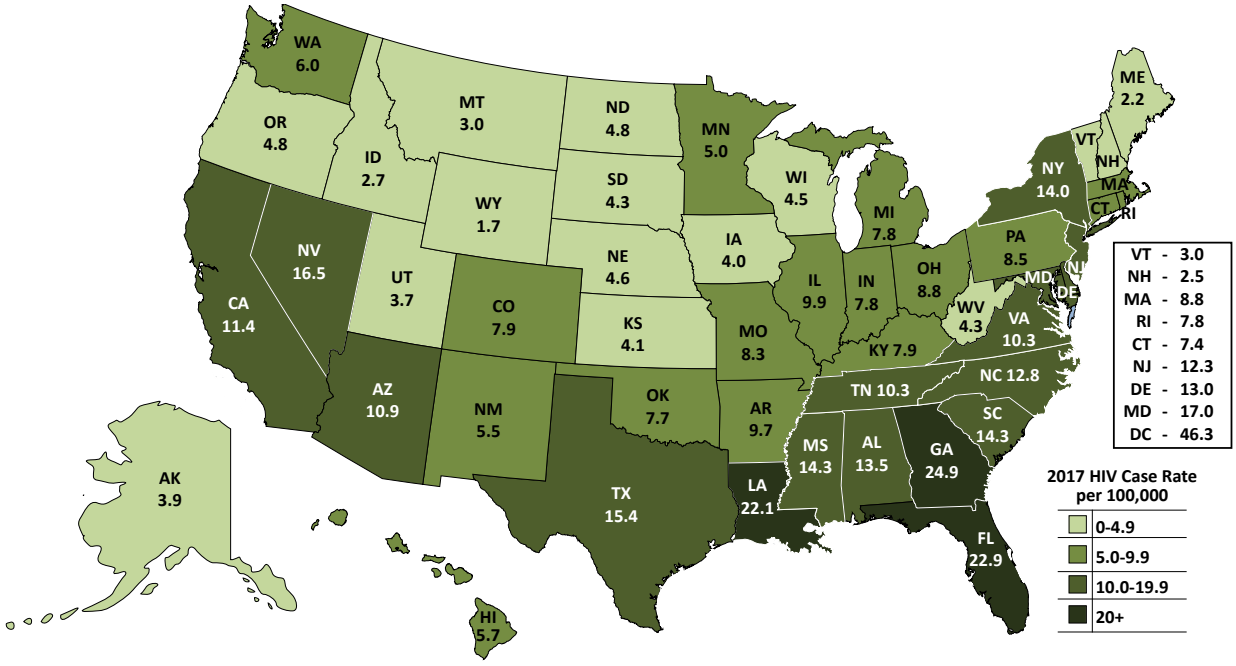
- A greater proportion of men were concurrently diagnosed with HIV and AIDS (18%) than women (13%). Among transgender women, 13% were diagnosed with AIDS at HIV diagnosis. At nine months post HIV diagnosis, 24% of men had an AIDS diagnosis compared to 21% of women and 13% of transgender women.

- Blacks and Hispanics/Latinx had lower proportions of AIDS concurrent with HIV diagnosis and AIDS at three, six, and nine months as compared to whites.

- Persons 25 years and older had much higher proportions of AIDS at the time of HIV diagnosis and within the following nine months as compared to youth, age 13-24 years.

- The proportion of late testers varies by region throughout the state. The Houma region had the highest proportion of late testers at all time points with 33% of new diagnoses having an AIDS diagnosis within nine months of their initial HIV diagnosis.

HIV Rates in the United States (2017)[ix]



- In November 2017, the CDC released their HIV Surveillance Report, 2017; vol. 29, which provides national and statewide HIV and AIDS data.
- In the US, 38,281 new HIV diagnoses were reported in 2017, for a national HIV diagnosis rate of 11.8 diagnoses per 100,000 population.
- In 2017, Louisiana ranked 4th highest in state HIV diagnosis rates (22.1 per 100,000 population) in the US, behind the District of Columbia (46.3 per 100,000), Georgia (24.9 per 100,000), and Florida (22.9 per 100,000).
- In 2017, Louisiana ranked 10th in the nation for the number of new HIV diagnoses.

HIV Among Gay, Bisexual and Other Men Who Have Sex with Men (GBM)

Nationally, GBM account for over half of the one million people living with HIV and two-thirds of all new HIV diagnoses in the US each year. In 2017, GBM accounted for 67% of all new HIV diagnoses across the US and GBM/PWID accounted for an additional 3% of new HIV diagnoses.

SHP has made a concerted effort to assess the epidemic among GBM to adequately focus prevention efforts. The following table shows the demographics of new HIV diagnoses in 2017 among GBM who may or may not be injection drug users. Transgender women are not included in the table below.

- In 2017, there were 1,017 new HIV diagnoses in Louisiana; 61% (624) among all GBM (PWID and non-PWID).
- The majority of the new diagnoses among GBM are black (65%) and under the age of 35 (69%).
- The majority (48%) of GBM were diagnosed in the New Orleans and Baton Rouge regions.
- Two-thirds (67%) of the GBM/PWID cases were white and 57% were 35 years and older. While 48% of GBM/non-PWID were diagnosed in New Orleans and Baton Rouge regions, only 29% of GBM/PWID were diagnosed in New Orleans and Baton Rouge regions.
- The percentage of GBM diagnosed with AIDS at HIV diagnosis was the same as the overall population of new diagnoses in Louisiana, 16%.

For more information on HIV disparities in Louisiana in relation to the GBM population, please refer to the introduction of this surveillance report.

Demographics of New HIV Diagnoses Among GBM
Louisiana, 2017

	GBM/Non-PWID		GBM/PWID		All GBM*	
	Cases	Percent	Cases	Percent	Cases	Percent
TOTAL	**603**	**100%**	**21**	**100%**	**624**	**100%**
Race/Ethnicity						
Black/African American	397	66%	6	29%	403	65%
Hispanic/Latinx	40	7%	1	5%	41	7%
White	159	26%	14	67%	173	28%
Other/Unknown/Multi-race	7	1%	0	0%	7	1%
Age at HIV Diagnosis						
13-19	44	7%	0	0%	44	7%
20-24	148	25%	1	5%	149	24%
25-34	232	38%	8	38%	240	38%
35-44	81	13%	7	33%	88	14%
45-54	54	9%	3	14%	57	9%
55-64	34	6%	2	10%	36	6%
65+	10	2%	0	0%	10	2%
Region						
1-New Orleans	175	29%	4	19%	179	29%
2-Baton Rouge	117	19%	2	10%	119	19%
3-Houma	22	4%	1	5%	23	4%
4-Lafayette	77	13%	3	14%	80	13%
5-Lake Charles	33	5%	3	14%	36	6%
6-Alexandria	18	3%	5	24%	23	4%
7-Shreveport	84	14%	2	10%	86	14%
8-Monroe	36	6%	0	0%	36	6%
9-Hammond/Slidell	41	7%	1	5%	42	7%
Late Testers						
AIDS at Time of HIV Diagnosis	96	16%	2	10%	98	16%
AIDS Within 3 Months of HIV Diagnosis	104	17%	2	10%	106	17%
AIDS Within 6 Months of HIV Diagnosis	122	20%	3	14%	125	20%

*All GBM is a cumulative total of GBM/Non-PWID (603) and GBM/PWID (21). Transgender women are excluded from this table.

HIV Among Youth in Louisiana

In 2017, persons age 13-24 years comprised 21% of all new HIV diagnoses in the United States.

- In 2017, there were 1,017 new HIV diagnoses in Louisiana; 25% (250) were among youth 13-24 years-old.
  - 198 (79%) of the youth diagnoses were among persons age 20-24 years.
- Among all youth, 82% of the new diagnoses were men.
- The majority (77%) of the new diagnoses among youth were black. The proportion was higher among 13-19 year olds (81%) than it was among 20-24 year olds (76%).
- The majority (79%) of new diagnoses among youth were gay, bisexual and other men who have sex with men, followed by high risk heterosexuals (18%).
- Among all youth diagnosed in Louisiana, 45% lived in the New Orleans and Baton Rouge regions at the time of diagnosis.
- The percentage of late testers among youth is much lower than the state's overall population of new diagnoses.

Demographics of New HIV Diagnoses Among Youth
Louisiana, 2017

	13-19 Years		20-24 Years		All Youth: 13-24 Years	
	Cases	Percent	Cases	Percent	Cases	Percent
TOTAL	**52**	**100%**	**198**	**100%**	**250**	**100%**
Gender						
Men	46	88%	159	80%	205	82%
Women	5	10%	33	17%	38	15%
Transgender Women	1	2%	6	3%	7	3%
Race/Ethnicity						
Black/African American	42	81%	151	76%	193	77%
Hispanic/Latinx	5	10%	8	4%	13	5%
White	5	10%	37	19%	42	17%
Other/Unknown/Multi-race	0	0%	2	1%	2	1%
Transmission Category						
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	44	85%	154	78%	198	79%
Persons Who Inject Drugs (PWID)	1	2%	4	2%	5	2%
GBM/PWID	1	2%	1	1%	2	1%
High Risk Heterosexual (HRH)	6	12%	39	20%	45	18%
Region						
1-New Orleans	15	29%	52	26%	67	27%
2-Baton Rouge	11	21%	35	18%	46	18%
3-Houma	1	2%	12	6%	13	5%
4-Lafayette	8	15%	23	12%	31	12%
5-Lake Charles	2	4%	14	7%	16	6%
6-Alexandria	2	4%	4	2%	6	2%
7-Shreveport	6	12%	30	15%	36	14%
8-Monroe	5	10%	11	6%	16	6%
9-Hammond/Slidell	2	4%	17	9%	19	8%
Late Testers						
AIDS at Time of HIV Diagnosis	2	4%	19	10%	21	8%
AIDS Within 3 Months of HIV Diagnosis	2	4%	21	11%	23	9%
AIDS Within 6 Months of HIV Diagnosis	3	6%	25	13%	28	11%

HIV Among African Americans in Louisiana

In 2017, African Americans made up 44% of all new HIV diagnoses across the United States even though they comprise only 12% of the total U.S. population.

- In 2017, there were 1,017 new HIV diagnoses in Louisiana; 69% (700) were among African Americans.
- In 2017, 71% of the new diagnoses among African Americans were men.
- Youth, 13-24 years-old, made up 28% of all diagnoses among African Americans. An additional 38% of diagnoses were 25-34 years old.
- The majority (59%) of new diagnoses among African Americans were gay, bisexual, & other men who have sex with men (GBM).
- More than half (56%) 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 comparable to the overall population of new diagnoses in Louisiana.

For more information about the HIV disparities in Louisiana in relation to the black population, please refer to the introduction of this surveillance report.

Demographics of New HIV Diagnoses Among African Americans
Louisiana, 2017

	Cases	Percent
TOTAL	**700**	**100%**
Gender		
Men	495	71%
Women	188	27%
Transgender Women	17	2%
Age at HIV Diagnosis		
13-19	42	6%
20-24	151	22%
25-34	264	38%
35-44	106	15%
45-54	76	11%
55-64	45	6%
65+	16	2%
Transmission Category		
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	413	59%
Persons Who Inject Drugs (PWID)	34	5%
GBM/PWID	7	1%
HRH	246	35%
Region		
1-New Orleans	211	30%
2-Baton Rouge	180	26%
3-Houma	26	4%
4-Lafayette	56	8%
5-Lake Charles	28	4%
6-Alexandria	21	3%
7-Shreveport	96	14%
8-Monroe	40	6%
9-Hammond/Slidell	42	6%
Late Testers		
AIDS at Time of HIV Diagnosis	106	15%
AIDS Within 3 Months of HIV Diagnosis	120	17%
AIDS Within 6 Months of HIV Diagnosis	142	20%

HIV Among Transgender Persons in Louisiana

Since data for transgender people is not collected uniformly, overall new diagnoses in the United States are 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 2017, there were 1,017 new HIV diagnoses in Louisiana; 23 diagnoses were reported as transgender women. In 2016, there were 1,125 new HIV diagnoses in Louisiana; 27 diagnoses were reported as transgender women.
- As of December 31, 2017, there were 21,432 persons living with HIV, 273 persons were transgender. Of the 273 transgender people living with HIV in Louisiana, 99% (272) were transgender women.
- Between 2016 and 2017, 86% of new HIV diagnoses among transgender women were African American. Among transgender persons living with HIV at the end of 2017, 84% were African American.
- Between 2016 and 2017, 80% of the diagnoses among transgender women were 20-29 years old.
- The majority (89%) of transgender persons living with HIV reported engaging in sex with men; 10% of transgender persons reported engaging in sex with men and injection drug use.
- Between 2016 and 2017, 54% of new HIV diagnoses among transgender women occurred in the New Orleans and Baton Rouge regions. At the end of 2017, 51% of all transgender individuals living with HIV lived in the New Orleans region and an additional 24% in the Baton Rouge region.

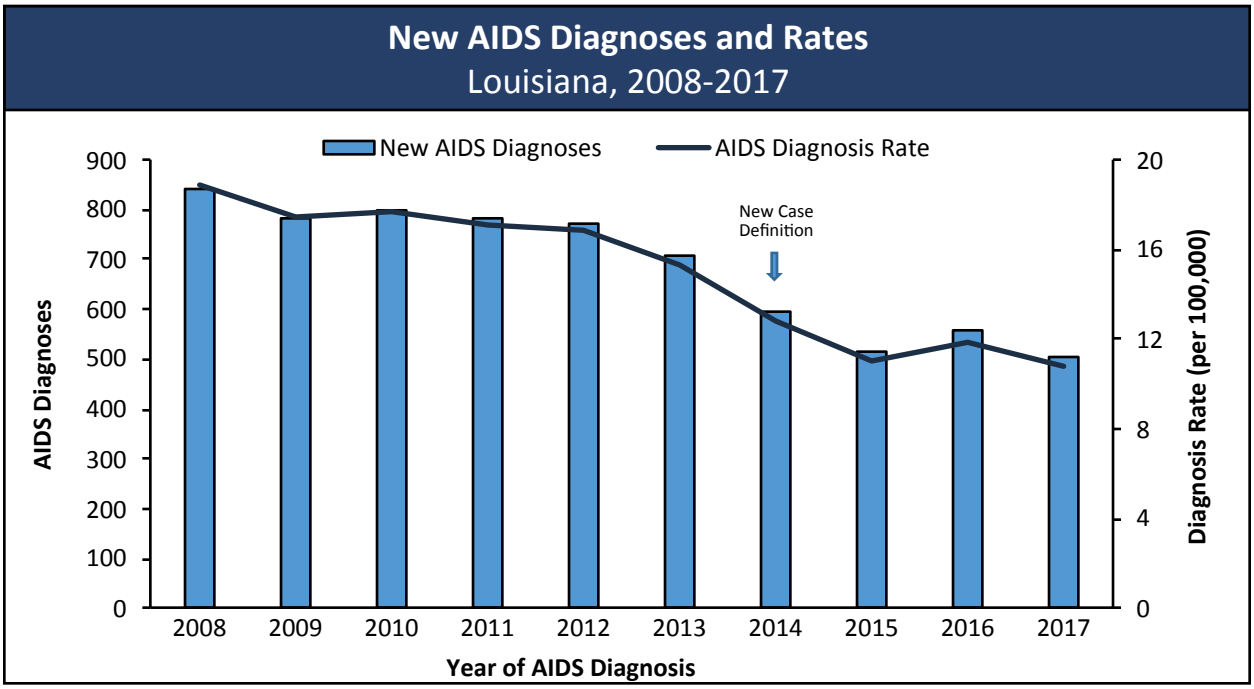
For more information about the HIV disparities in Louisiana in relation to the transgender population, please refer to the introduction of this surveillance report.

Demographics of New HIV Diagnoses and Persons Living with HIV Among Transgender Persons
Louisiana, 2016 and 2017

	New HIV Diagnoses				Persons Living with HIV	
	2016		2017		As of Dec. 31, 2017	
	Cases	Percent	Cases	Percent	Cases	Percent
TOTAL	**27**	**100%**	**23**	**100%**	**273**	**100%**
Transgender Women	27	100%	23	100%	272	99%
Transgender Men	0	0%	0	0%	1	<1%
Race/Ethnicity						
Black/African American	26	96%	17	74%	229	84%
Hispanic/Latinx	0	0%	3	13%	14	5%
White	1	4%	3	13%	26	10%
Other/Unknown/Multi-race	0	0%	0	0%	4	1%
Age at HIV Diagnosis					**Current Age**	
13-19	0	0%	1	4%	0	0%
20-24	11	41%	6	26%	22	8%
25-29	13	48%	10	43%	71	26%
30-34	2	7%	4	17%	60	22%
35-39	1	4%	1	4%	46	17%
40-44	0	0%	1	4%	23	8%
45+	0	0%	0	0%	51	19%
Transmission Category						
Sex with Men	27	100%	21	91%	242	89%
Persons Who Inject Drugs (PWID)	0	0%	0	0%	1	<1%
Sex with Men & PWID	0	0%	2	9%	27	10%
Sex with Women	0	0%	0	0%	3	1%
Region					**Current Region**	
1 - New Orleans	10	37%	7	30%	139	51%
2 - Baton Rouge	3	11%	7	30%	66	24%
3 - Houma	2	7%	2	9%	8	3%
4 - Lafayette	4	15%	1	4%	13	5%
5 - Lake Charles	1	4%	0	0%	7	3%
6 - Alexandria	1	4%	1	4%	7	3%
7 - Shreveport	3	11%	1	4%	12	4%
8 - Monroe	2	7%	1	4%	10	4%
9 - Hammond/Slidell	1	4%	3	13%	11	4%

10-Year Trends in New AIDS Diagnoses (2008-2017)

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 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 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.*



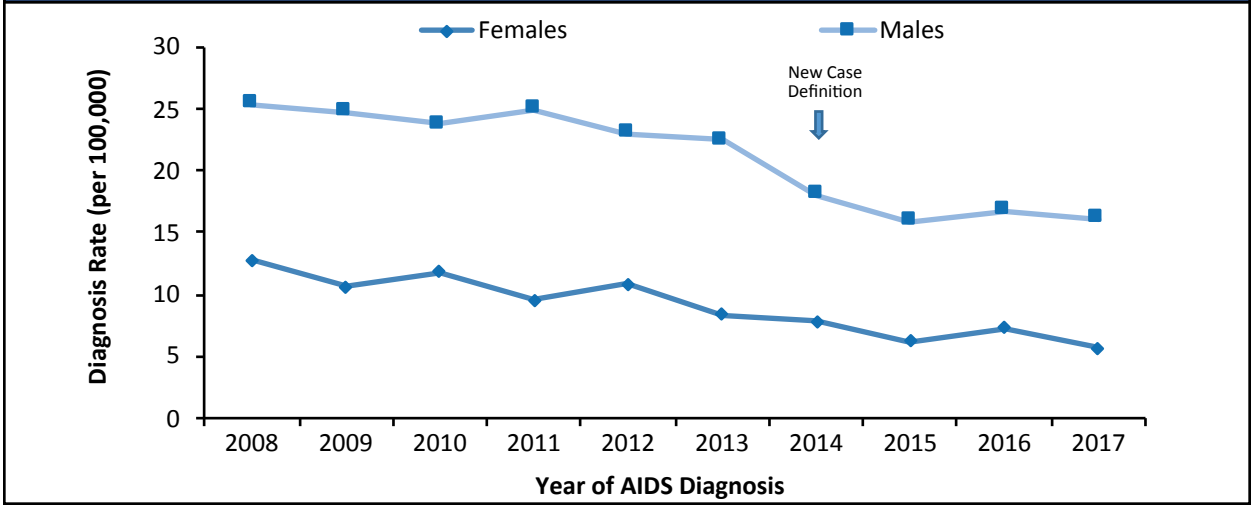
- Since 1997, the number of new AIDS diagnoses each year in Louisiana has remained below 1,000. Over the past 10 years, the number of new AIDS diagnoses has fluctuated from a high of 842 diagnoses in 2008 to a low of 504 AIDS diagnoses in 2017. The steep decrease between 2013 and 2014 was in part due to the new AIDS surveillance case definition. The number of new AIDS diagnoses further declined from 2014 to 2015 under the same case definition.
- In 2017, the AIDS diagnosis rate for Louisiana was 10.8 per 100,000 population which was twice as high as the national AIDS diagnosis rate of 5.4 per 100,000.

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 17,571 new AIDS diagnoses in 2017. The CDC reports that since the beginning of the epidemic through the end of 2017, approximately 1,245,349 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.

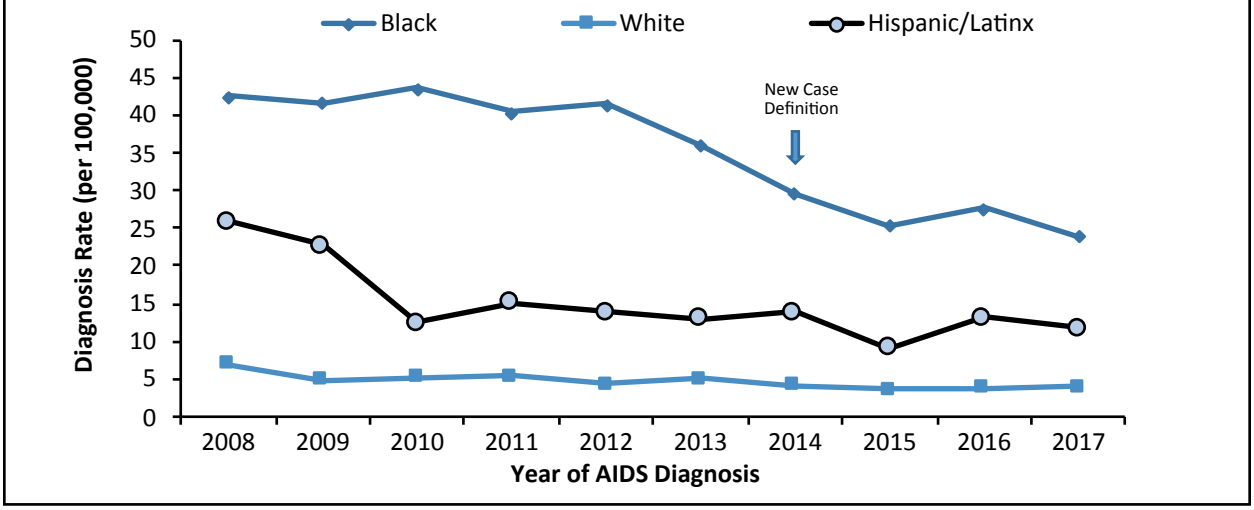
Centers for Disease Control and Prevention. *HIV Surveillance Report*, 2017. Vol. 29

AIDS Diagnosis Rates by Sex at Birth
Louisiana, 2008-2017

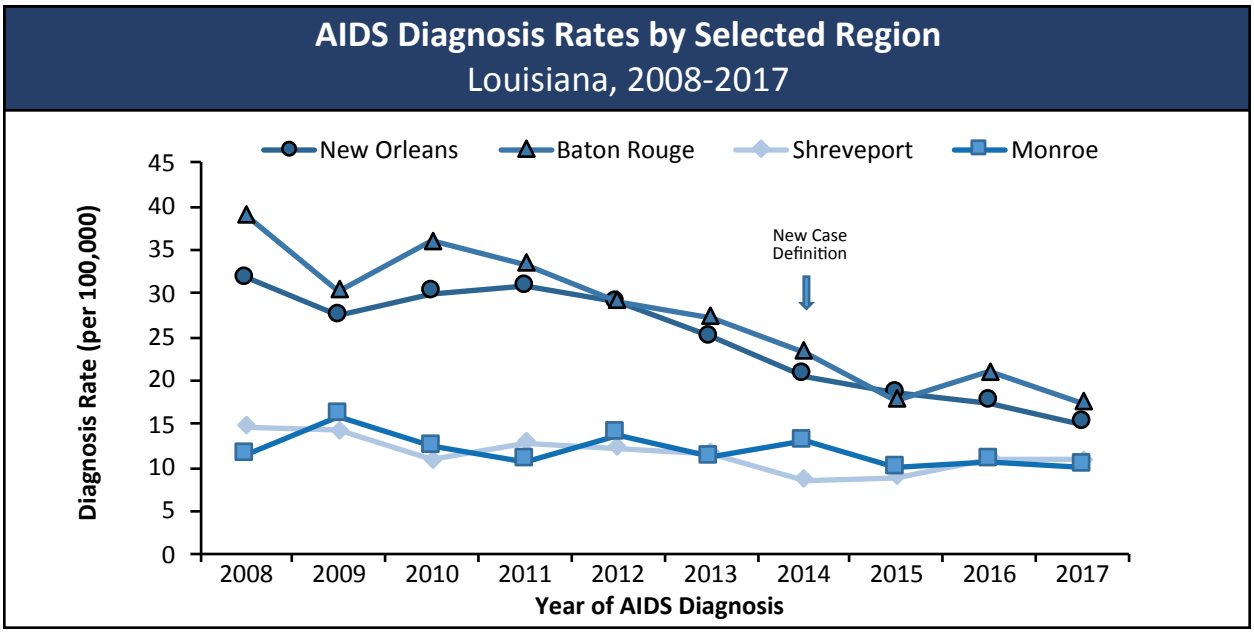


- Under the previous case definition, the AIDS diagnosis rate for males and females decreased slightly from 2008 to 2013.
- From 2013 to 2014, the new case definition led to a 20% decrease in the male AIDS diagnosis rate but the female rate was relatively unchanged.
- From 2016 to 2017, the AIDS diagnosis rate decreased for both males and females. The male AIDS diagnosis rate (16.1 per 100,000) was nearly three times the female AIDS diagnosis rate (5.6 per 100,000) in 2017.

AIDS Diagnosis Rates by Race/Ethnicity
Louisiana, 2008-2017

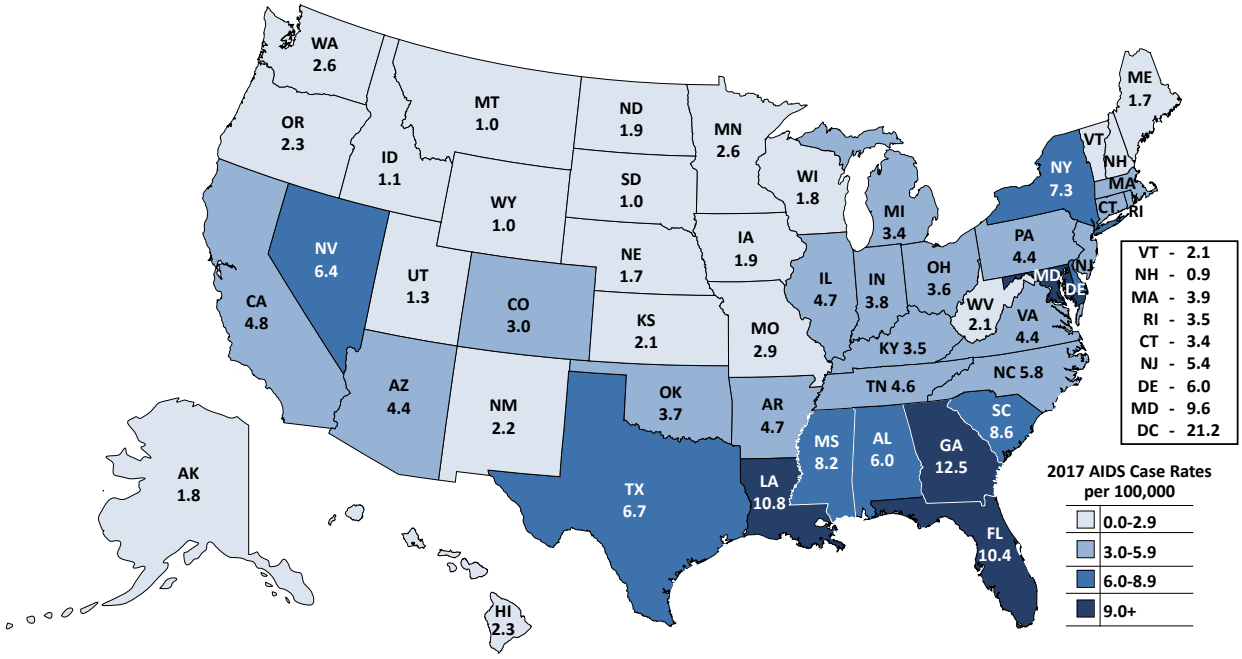


- In 2017, the AIDS diagnosis rate for blacks (23.9 per 100,000 blacks) was two times greater than for Hispanics/Latinx (11.8 per 100,000 Hispanics/Latinx) and six times greater than for whites (4.0 per 100,000 whites).
- From 2016 to 2017, the AIDS diagnosis rate increased among whites by 6%. The AIDS diagnosis rate among blacks and Hispanics/Latinx decreased from 2016 to 2017, 14% and 10%, respectively.



- 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 2017, the Baton Rouge and New Orleans regions had the highest AIDS diagnosis rates (17.4 per 100,000 and 15.0 per 100,000, respectively). The AIDS diagnosis rate has been on a downward trend in Baton Rouge since 2010 and the rate in New Orleans has been decreasing steadily since 2011.
- The AIDS diagnosis rates for the Shreveport and Monroe regions were very similar over the past 10 years. In 2017, the AIDS rates in Shreveport and Monroe were 10.9 per 100,000 and 10.2 per 100,000, respectively.

AIDS Rates in the United States (2017)[x]



- In the US, 17,604 new AIDS cases were reported in 2017, for a national AIDS diagnosis rate of 5.4 per 100,000 population.
- In 2017, Louisiana ranked 3rd highest in state AIDS diagnosis rates (10.8 per 100,000 population) and 10th in the number of AIDS diagnoses in the US, according to the most recent CDC HIV Surveillance Report, 2017; vol. 29. Louisiana's AIDS rate was double the national rate.

Characteristics of Persons Newly Diagnosed with AIDS

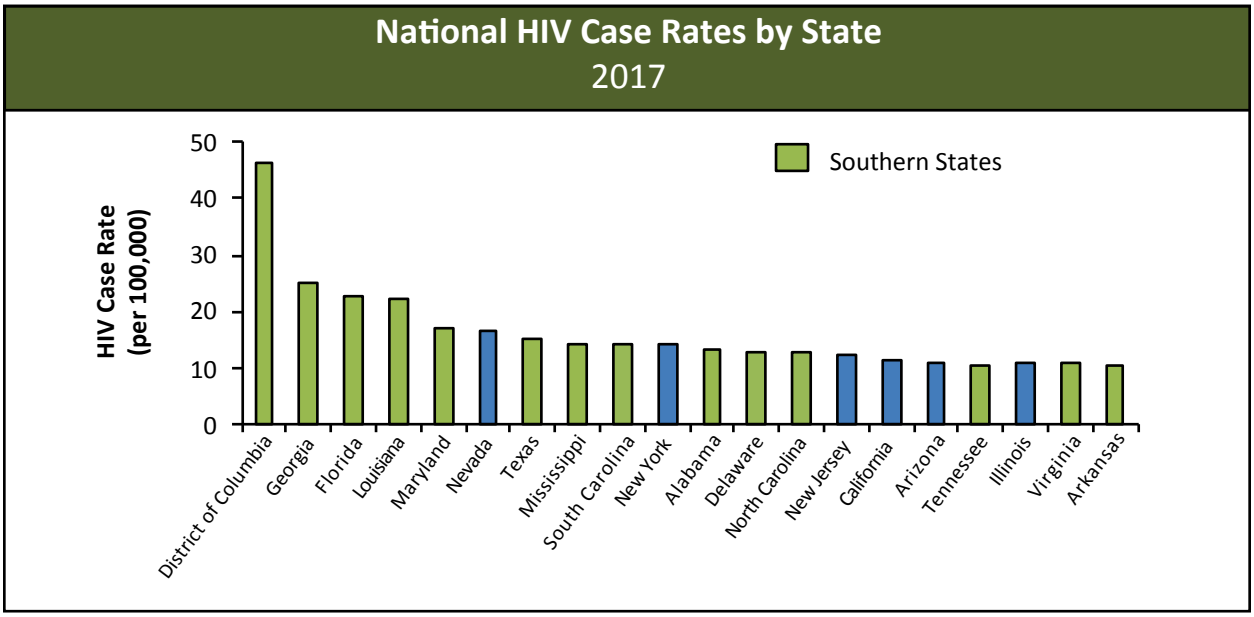
Characteristics of Persons Newly Diagnosed with AIDS Louisiana, 2016-2017				
	Persons First Diagnosed with AIDS in 2016		Persons First Diagnosed with AIDS in 2017	
	Diagnoses	Percent	Diagnoses	Percent
TOTAL	**558**	**100%**	**504**	**100%**
Gender				
Men	375	67%	360	71%
Women	175	31%	135	27%
Transgender Women	8	1%	9	2%
Race/Ethnicity				
Black/African American	416	75%	360	71%
Hispanic/Latinx	31	6%	29	6%
White	104	19%	110	22%
Other/Unknown/Multi-race	7	1%	5	1%
Age at AIDS Diagnosis				
0-12	1	<1%	3	1%
13-19	8	1%	4	1%
20-24	48	9%	47	9%
25-34	174	31%	163	32%
35-44	135	24%	111	22%
45-54	110	20%	96	19%
55-64	72	13%	55	11%
65+	10	2%	25	5%
Transmission Category				
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	233	42%	255	51%
Persons Who Inject Drugs (PWID)	45	8%	41	8%
GBM/PWID	19	3%	10	2%
High Risk Heterosexual (HRH)	257	46%	192	38%
Transfusion/Hemophilia*	0	0%	1	<1%
Perinatal/Pediatric*	4	1%	5	1%
Rural/Urban				
Rural	55	10%	44	9%
Urban	503	90%	460	91%

* Transmission category not imputed.

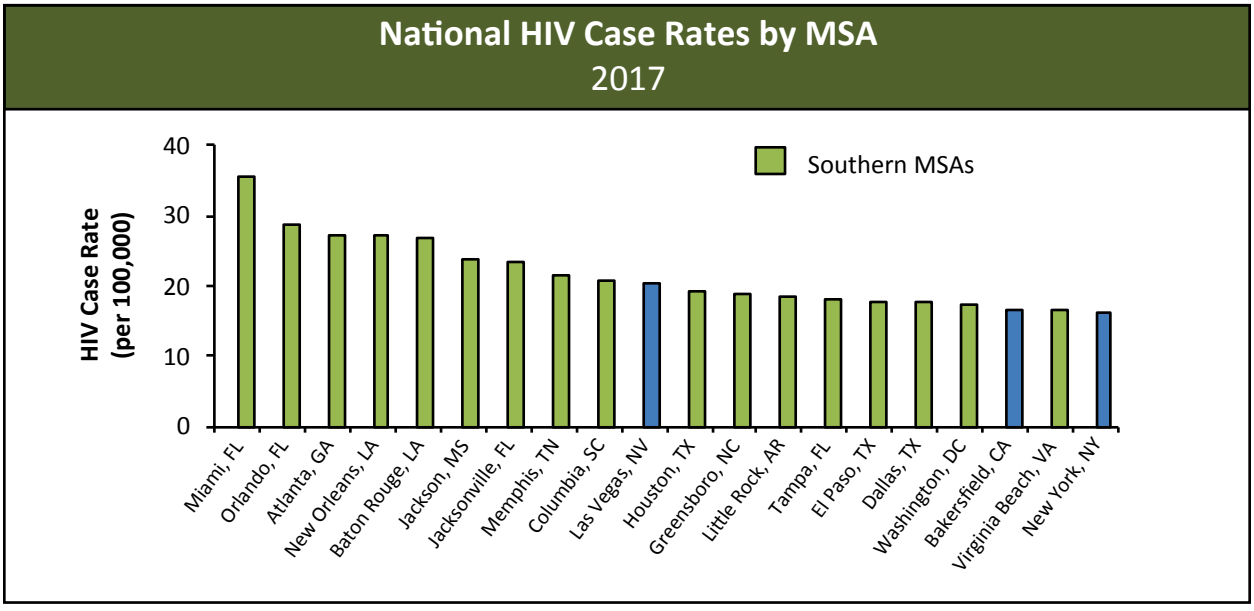
- In 2017, there were 504 new AIDS diagnoses in Louisiana; a 10% decrease from 2016.
- In 2017, men accounted for 71% of all new AIDS diagnoses.
- In 2017, 71% of all AIDS diagnoses were among blacks.
- In 2016 and 2017, the greatest number of new AIDS diagnoses were among persons age 25-34 followed by 35-44 year olds.
- In 2016, the greatest number and percentage of new AIDS diagnoses were among high risk heterosexuals (HRH). In 2017, the greatest number and percentage of new AIDS diagnoses were among gay, bisexual, and other men who have sex with men (GBM).
- The majority of AIDS diagnoses occurred in urban areas in 2016 (90%) and 2017 (91%).

HIV and AIDS in the South

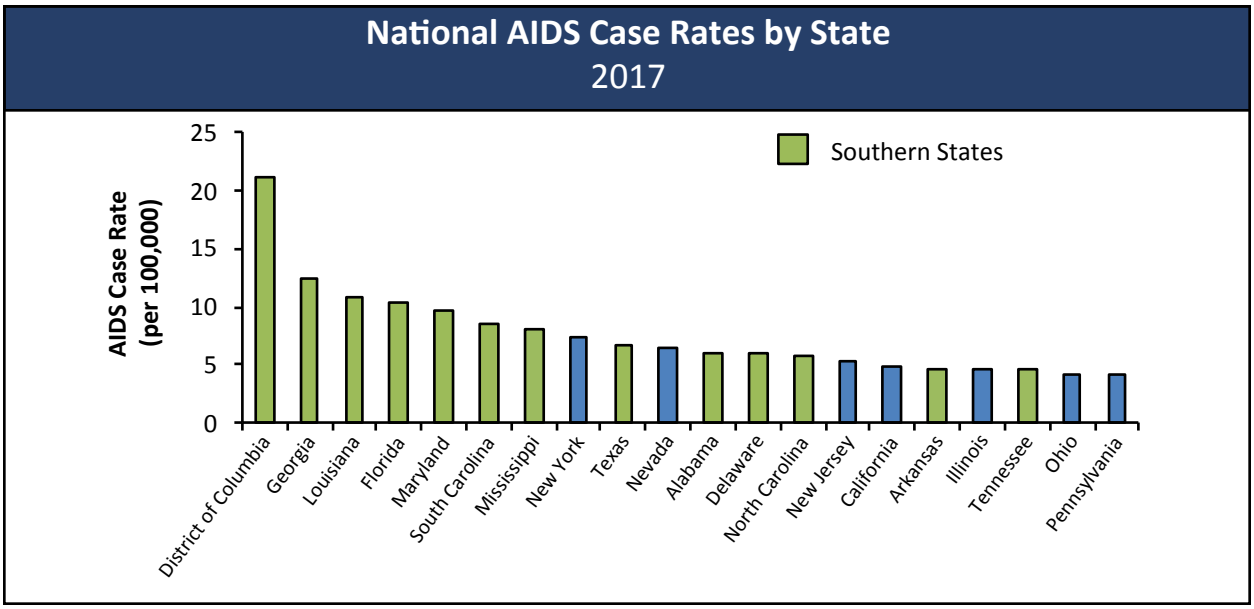
Southern states are disproportionately impacted by HIV and AIDS. Seventeen states are included in the southern region of the United States: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.[xi]



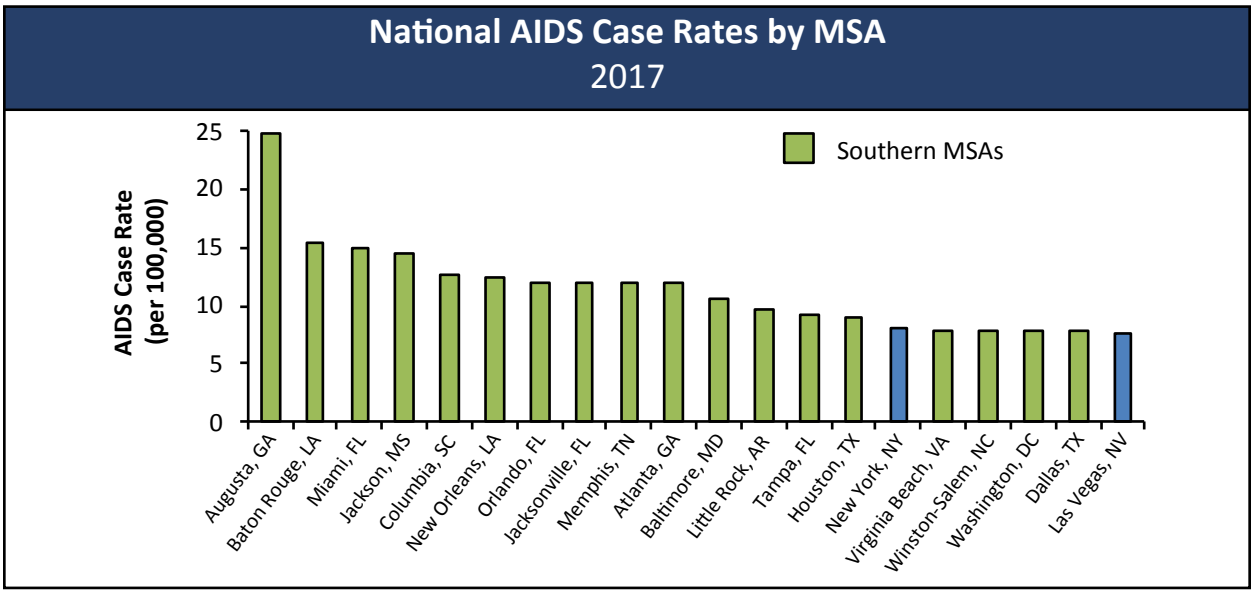
- In 2017, southern states represented 38% of the US population but 52% of new HIV diagnoses. The District of Columbia, when included as a state, is restricted to its borders.
- Of the 20 states that had the highest HIV diagnosis rates in 2017, 14 (70%) were in the South.



- Of the 20 metropolitan areas that had the highest HIV diagnosis rates in 2017, 17 (85%) were in the South. According to the CDC, the New Orleans metro area ranked 4th and the Baton Rouge metro area ranked 5th in HIV diagnosis rates in 2017 among metropolitan areas in the US with more than 500,000 people. Washington, DC, when included as a MSA, includes parts of neighboring states resulting in a greater baseline population and a ranking of 17th.



- In 2017, southern states represented 38% of the US population but 53% of new AIDS diagnoses.
- Of the 20 states that had the highest AIDS diagnosis rates in 2017, 13 (65%) were in the South.



- Of the 20 metropolitan statistical areas that had the highest AIDS diagnosis rates in 2017, 18 (90%) were in the South. According to the CDC, the Baton Rouge metro area ranked 2nd and the New Orleans metro area ranked 6th in AIDS diagnosis rates in 2017 among metropolitan areas in the US with more than 500,000 people.

2017 AIDS and HIV National Rankings**

	LOUISIANA		NEW ORLEANS MSA		BATON ROUGE MSA	
	Value	Rank	Value	Rank	Value	Rank
AIDS Case Rate*	10.8	3rd	12.5	6th	15.3	2nd
AIDS Case Count	506	10th	160	21st	128	28th
HIV Case Rate*	22.1	4th	27.0	4th	26.9	5th
HIV Case Count	1,033	10th	344	23rd	224	35th

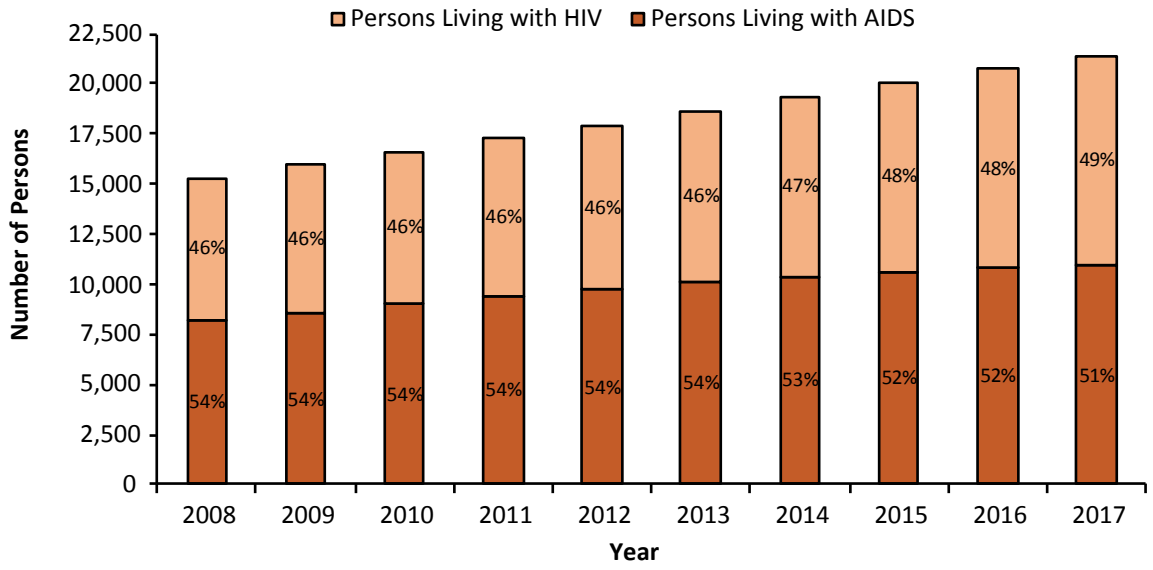
* Rates are per 100,000

** This table is based on case counts and rates reported by the CDC.

Persons Living in Louisiana with HIV (Prevalence)

Prevalence is a measure describing the number of persons living with HIV 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 approximately one in seven people living with HIV in the United States is not aware of his or her HIV status.[x]

Persons Living with HIV
Louisiana, 2008-2017



- Since the beginning of the epidemic, the number of persons living with HIV in Louisiana has increased every year. There was a decrease from 2004 to 2005 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 has far surpassed pre-Katrina numbers.
- At the end of 2017, 21,432 persons were known to be living with HIV in Louisiana, 10,979 (51%) of whom had received an AIDS diagnosis.

Persons living with HIV in the United States

In 2016, an estimated 1,140,400 persons were living with HIV in the United States, including 162,500 (14%) persons who were living with undiagnosed HIV. Of these 1.1 million people, gay and bisexual men of all races, blacks, and Hispanic/Latinx were most heavily affected.[xi] There has been a steady increase in the US in the number of persons living with HIV, which is expected, due to the widespread use of antiretroviral treatment and the continued development of new antiretroviral regimens. In the US, more people acquire HIV than die from the disease each year.

Historically, it was estimated that 25% of HIV-positive persons were undiagnosed or were unaware of their status. Since 2010 when the CDC released a new undiagnosed estimate of 17.2%, the estimate has continued to decrease to a low of 14.2% in 2016 as reported by the CDC.[xii]

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

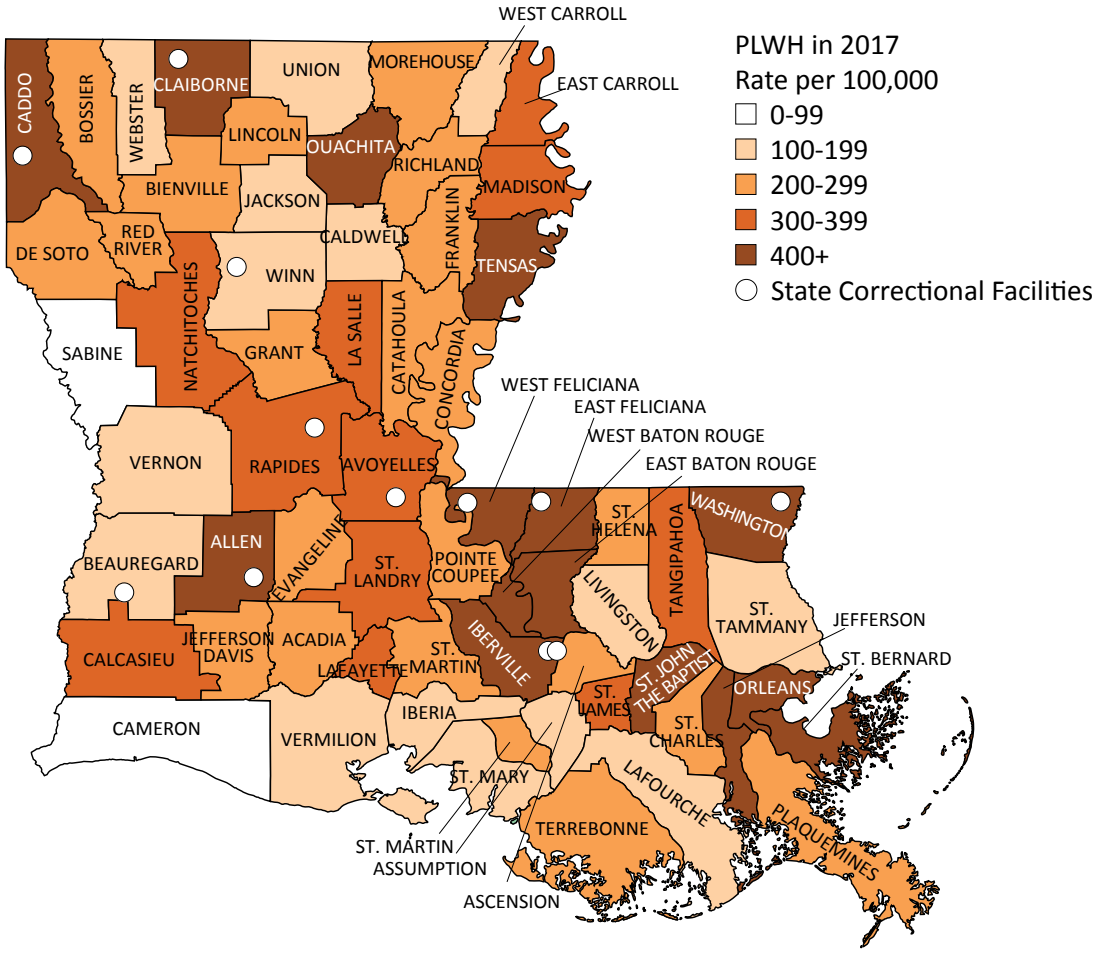
Characteristics of Persons Living with HIV and Cumulative Cases Louisiana, 2017				
	Persons Living with HIV as of 12/31/2017		Cumulative Persons with HIV as of 12/31/2017*	
	Number	Percent	Number	Percent
TOTAL	**21,432**	**100%**	**38,421**	**100%**
Gender				
Men	14,970	70%	28,099	73%
Women	6,189	29%	10,003	26%
Transgender Women	272	1%	318	1%
Transgender Men	1	<1%	1	<1%
Race/Ethnicity				
Black/African American	14,717	69%	25,436	66%
Hispanic/Latinx	988	5%	1,277	3%
White	5,449	25%	11,276	29%
Asian	77	<1%	103	<1%
Mixed Race	149	1%	260	1%
Other/Unknown	52	<1%	69	<1%
Age Group	**Age in 2017**		**Age at Diagnosis**	
0-12	45	<1%	358	1%
13-19	142	1%	1,941	5%
20-24	899	4%	5,495	14%
25-34	4,300	20%	13,247	34%
35-44	4,977	23%	10,094	26%
45-54	5,533	26%	5,059	13%
55-64	4,274	20%	1,728	4%
65+	1,262	6%	499	1%
Transmission Category				
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	10,016	47%	17,203	45%
Persons Who Inject Drugs (PWID)	2,072	10%	5,904	15%
GBM/PWID	1,047	5%	2,646	7%
High Risk Heterosexual (HRH)	8,031	37%	11,828	31%
Transfusion/Hemophilia**	63	<1%	480	1%
Perinatal/Pediatric**	203	1%	360	1%
Rural/Urban				
Rural	2,120	10%	3,524	9%
Urban	19,312	90%	34,897	91%

*Cumulative persons reflects the total number of people with HIV diagnosed in Louisiana, including those who have died, regardless of cause of death, and moved out of Louisiana after diagnosis.
**Transmission category not imputed.

- At the end of 2017, there were 21,432 people with HIV living in Louisiana. These persons may have originally been diagnosed in other states or countries but in 2017 they had a current residence in Louisiana.
- In 2017, men made up 70% of all people living with HIV in Louisiana.
- Although blacks only made up 32% of Louisiana's population in 2017, they accounted for 69% of all people living with HIV.

- A quarter of all persons living with HIV are under the age of 35, 23% are between 35-44 years of age, and 52% are 45 and older.
- Nearly half (47%) of all people living with HIV are GBM, 37% are HRH, 10% are PWID, and 5% are GBM/PWID. Less than 1% of people living with HIV in Louisiana acquired HIV via transfusion or from the use of hemophiliac products and 1% acquired HIV through perinatal transmission.

Persons Living with HIV (PLWH), by Parish
Rate per 100,000, Louisiana, 2017



- The above map illustrates the geographic distribution of persons living with HIV in the state. There are persons living with HIV in every parish in Louisiana. All persons living with HIV in Louisiana are included in the analyses, regardless of their type of residence (correctional facility, nursing home, homeless shelter, etc.).
- At the end of 2017, 15 parishes had a prevalence rate greater than or equal to 400 per 100,000 and an additional 11 parishes had a rate between 300 and 399 per 100,000.
- Many of the parishes with disproportionate prevalence rates have state correctional facilities that are home to persons living with HIV.
- Although the majority of persons living with HIV reside in urban areas, 10% live in rural parishes.

National HIV Behavioral Surveillance Survey 2015-2017

Initiated in 2003, the National HIV Behavioral Surveillance (NHBS) system collects behavioral data among people at high risk for HIV acquisition in the United States. The rationale for this surveillance system is to "provide ongoing, systematic collection of data on behaviors related to HIV acquisition".[xiii] New Orleans was among 20 US metropolitan areas conducting NHBS in 2017. This study collects data from three target populations: gay, bisexual, and other men who have sex with men (GBM), persons who inject drugs (PWID), and heterosexuals living in areas at high risk for HIV/AIDS (HET), 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 the 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. NHBS-GBM uses a targeted venue-based time/space sampling procedure while NHBS-HET and NHBS-PWID use a modified chain referral approach known as respondent-driven sampling.

Persons who inject drugs (2015 Study Cycle)

Recruitment of persons who inject drugs (PWID) for the PWID cycle is conducted using a modified chain referral strategy known as respondent-driven sampling (RDS) wherein a small number of persons or "seeds" who are known to be currently using intravenous drugs are recruited and interviewed by staff and asked to recruit other participants 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. In 2015, a total of 621 people who inject drugs in the New Orleans MSA participated in the NHBS survey:

- The majority of the PWID sample (90%) had been tested for HIV in their lifetime. Of those, 25% received the last HIV test in a correctional facility, followed by a public health clinic (17%), emergency room (16%), or drug treatment program (12%).
- Only 24% of the PWID sample had been tested for gonorrhea, chlamydia, or syphilis in the past 12 months. Of those who had been tested for gonorrhea, 8% self-reported a positive result. Of those who had been tested for chlamydia, 11% self-reported a positive result. Of those who had been tested for syphilis, 3% self-reported a positive result.
- When asked what drug they primarily inject, 68% of participants reported heroin by itself, 17% reported combination of heroin and cocaine (speedball), 6% reported crystal meth, 5% reported powder cocaine, and 2% crack cocaine.
- Forty-two percent of PWID in 2015 experienced an overdose in their lifetime and 81% had been around someone else while they were overdosing, an increase from 2012 responses of 29% and 64%, respectively.
- While only 37% of the 2015 PWID participants had accessed services from a syringe service program (SSP) in the past 12 months, this has increased to 68% in 2018.
- Additional hepatitis C (HCV) testing was provided to the PWID sample participants in 2015; 69% screened positive for hepatitis C antibodies. Among those who screened positive, 44% were unaware of their HCV status before NHBS screening.

Heterosexuals living in high risk areas (2016 Study Cycle)

Participants are recruited during the HET cycle using a similar RDS procedure; however, the initial recruits or "seeds" are individuals residing in areas at increased HIV risk and poverty. Key qualitative and quantitative

findings from the New Orleans NHBS surveillance during 2016 are presented below:

- The majority of participants during the HET cycle (94%) had been tested for HIV in their lifetime. This was an increase from the 2013 cycle where only 84% of respondents had ever been tested. Of those, 25% reportedly received their last HIV test at public health clinic, followed by the hospital (15%), or a correctional facility (12%).

- Only 29% of the HET sample had been tested for gonorrhea, chlamydia, or syphilis in the past 12 months. Of those who had been tested for gonorrhea, 10% self-reported a positive result. Of those who had been tested for chlamydia, 18% self-reported a positive result. Of those who had been tested for syphilis, 8% self-reported a positive result.

Gay, bisexual and other men who have sex with men (2017 Study Cycle)

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

- HIV testing is high within the GBM community with 97% having been tested for HIV in their lifetime. Of those, 51% reportedly received their last HIV test at a public health clinic (27%) or a private health clinic (24%), followed by HIV counseling and testing site (19%), during an outreach event, or through a mobile testing unit (13%).
- Only 57% of the GBM interviewed had been tested for other STDs in the past 12 months. Of those who had been tested for gonorrhea, 11% self-reported a positive result. Of those who had been tested for chlamydia, 7% self-reported a positive result. Of those who had been tested for syphilis, 6% self-reported a positive result.
- PrEP awareness is high in the GBM community with 90% of men surveyed reporting having heard of PrEP. However, of those, only 29% report having taken PrEP in the past 12 months.

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" (37% of GBM, 66% PWID, 62% HET). 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. Less than a quarter of participants (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 GBM participants reported receiving poorer services than other people in restaurants, stores, other businesses or agencies and 35% had been called names or insulted.
- Compared to the general population of Louisiana, GBM are much more likely to be current smokers. Among GBM participants, 44% were current tobacco smokers. In addition, 85% reportedly had friends who are GBM that smoke.
- Recent and lifetime nonfatal overdoses have increased for people who inject drugs. Forty-two percent of the PWID sample in 2015 experienced an overdose in their lifetime and 81% had been around someone else while they were overdosing, an increase from the 2012 responses of 29% and 64%, respectively.
- Among the personal or witnessed overdose experiences, only half the time did someone seek medical assistance or call 911. The main reason cited for not seeking assistance was fear of arrest.

National HIV Behavioral Surveillance (NHBS) Louisiana, 2015-2017						
	Persons Who Inject Drugs (2015)		Heterosexuals at Increased Risk for HIV (2016)		Gay, Bisexual & Other Men Who Have Sex With Men (2017)	
Category	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Race/Ethnicity						
Black/African American	260	42%	576	85%	100	14%
Hispanic/Latinx	22	4%	29	4%	38	9%
White	312	50%	43	6%	248	58%
Multi-race	23	4%	22	3%	26	6%
Other/Unknown	4	1%	6	2%	13	3%
Gender						
Male	474	76%	375	55%	425	100%
Female	145	23%	303	45%	0	0%
Transgender	3	<1%	0	0%	0	0%
Age						
18-24	39	6%	67	10%	35	8%
25-29	75	12%	52	8%	92	22%
30-34	93	15%	47	7%	75	17%
35-39	113	18%	64	9%	49	12%
40-44	90	14%	78	12%	40	9%
45-50	83	13%	115	17%	45	11%
51+	129	12%	255	38%	90	21%
Sexual Identity						
Heterosexual or “Straight”	529	85%	591	87%	8	2%
Homosexual, Gay, or Lesbian	23	4%	3	<1%	350	82%
Bisexual	70	11%	82	12%	63	15%
Substance Use						
Ever Injected Drugs	622	100%	143	21%	32	8%
Injected Any Drug (past 12 months)	622	100%	56	39%	11	3%
Shared Needle (past 12 months)	313	50%	26	46%	2	18%
Shared Works/Equipment (past 12 months)	465	75%	39	69%	3	27%
Used Non-Injection Drugs (past 12 months)	488	79%	425	63%	253	60%
HIV Positivity						
Self-Reported Previous Known Positive	19	3%	26	4%	71	17%
Newly Detected Positive	10	2%	15	2%	8	2%
Never Tested Previously	39	10%	76	6%	13	3%
Hepatitis C Positivity						
HCV Negative	184	30%	454	83%	359	96%
HCV Reactive	412	68%	92	17%	13	3%
Previously Unknown HCV Reactive	173	42%	48	52%	3	23%

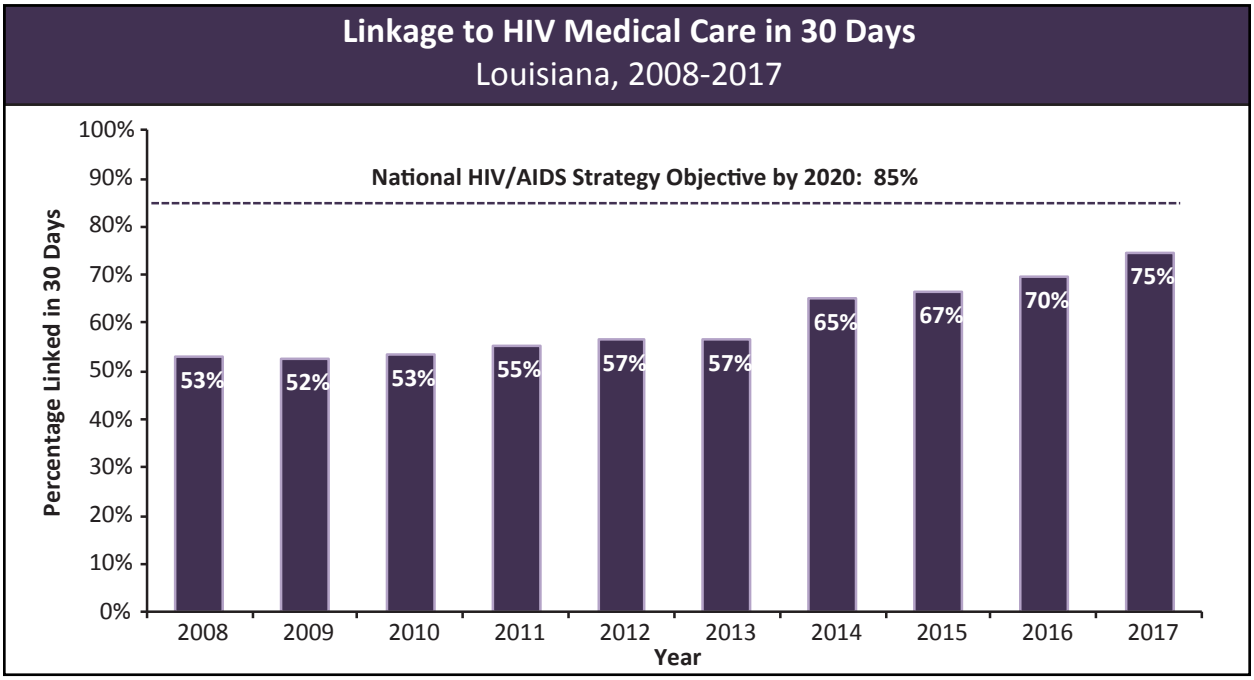
Chapter 2

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 in addition to providing opportunities for intervention to prevent HIV transmission. Early initiation of HIV treatment and long-term adherence leads to better health outcomes and reduces HIV transmission. Initiation of HIV treatment is dependent on linkage and retention in medical care.

Louisiana's surveillance system is able to monitor the proportion of newly diagnosed persons linked to care using HIV laboratory and surveillance data. Linkage to care within 30 days is defined as having a CD4 count or viral load (VL) test conducted within 30 days of HIV diagnosis. If the diagnosis and the CD4 count or VL test are conducted on the same day, those persons are considered to be linked to care.

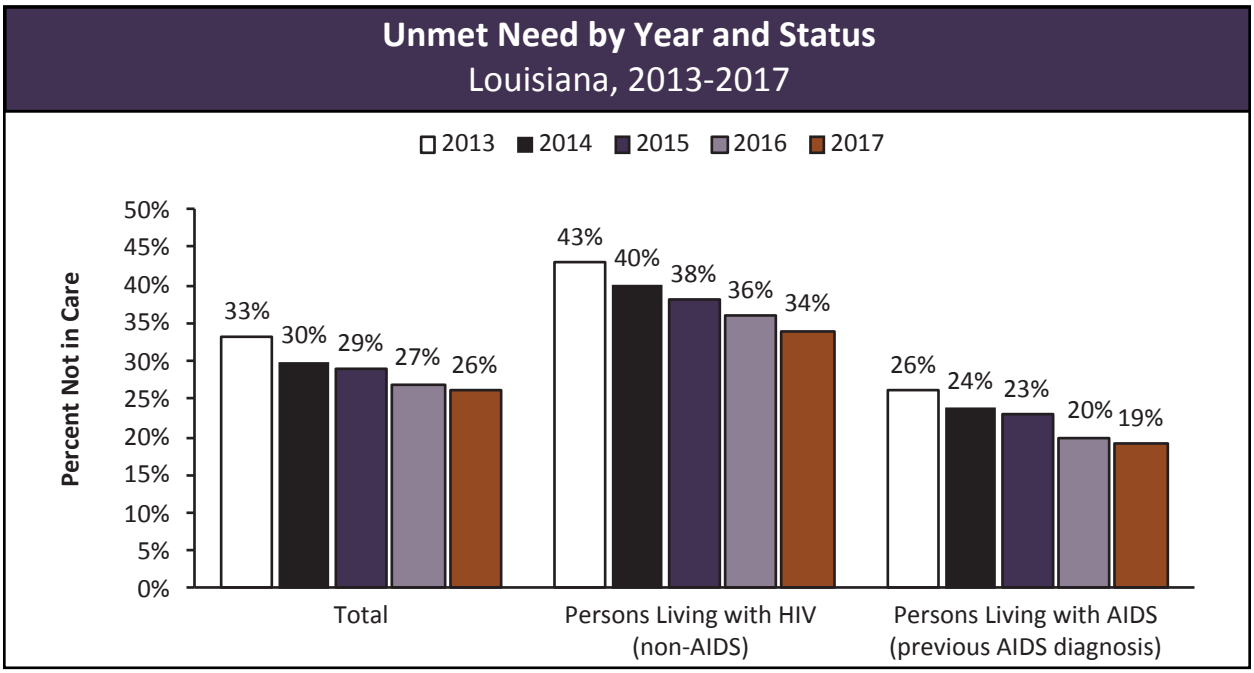


- In Louisiana, the proportion of newly diagnosed persons linked to care within 30 days has increased substantially over the past ten years. In 2008, only 53% of newly diagnosed persons were linked to care within 30 days. By 2017, the proportion had increased to 75% of newly diagnosed persons linked to care within 30 days. While the steady increase in linkage to care is promising, Louisiana still has work to do in order to reach the National HIV/AIDS Strategy (NHAS) Objective of 85% by 2020.
- Linkage to care rates in Louisiana have improved significantly between 2013-2017 in part due to interventions from the Disease Intervention Specialists (DIS) and the Linkage to Care Coordinators (LCCs). Late in 2013, LCCs were hired in Regions 1, 2, and 7 and tasked with engaging individuals without a CD4 count or viral load in the past 1-3 years, linking newly diagnosed persons without labs in the 6-12 months post-diagnosis, and reaching out to persons consistently exhibiting viral loads >1,000 copies/mL. By targeting regions with the highest HIV morbidity in the state, significant improvements have been made in linking HIV positive persons into medical care. By Spring 2016, each of the state's nine public health regions had designated LCCs working to link and re-engage persons with diagnosed HIV into medical care.

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 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.

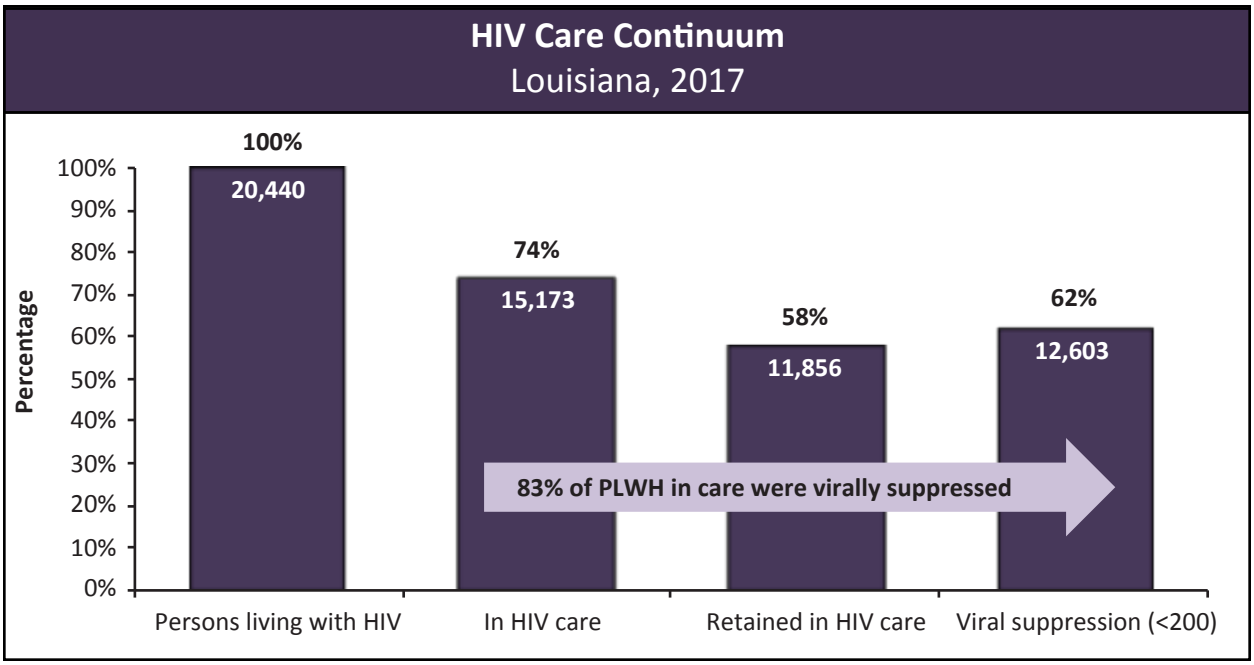
In Louisiana, SHP's Surveillance Unit manages and calculates the data needed to estimate unmet need. Persons who had at least one CD4 or VL test within a 12-month period are considered to have been "in care" during that year. Persons who did not are considered "out of care" and are deemed as having an "unmet need" for care and treatment. Louisiana's Public Health Sanitary Code requires that laboratories report all test results indicative of HIV infection for persons residing in Louisiana. As a result, laboratory data received by SHP's Surveillance Unit can be used to assess whether a person is in care or not in care during a specified time period.



- The overall percentage of persons with unmet need has steadily decreased over the last five years. In 2017, slightly more than one-quarter (26%) of all persons living with HIV in Louisiana did not have a single CD4 count or viral load lab conducted in that year and were considered to be out of HIV medical care.
- Persons living with a prior AIDS diagnosis continue to have lower percentages of unmet need than persons living with HIV who have not had a prior AIDS diagnosis. People living with a prior AIDS diagnosis may require more intensive antiretroviral treatment (ART) regimens and may have more symptoms, leading them to more frequent medical visits.

Unmet Need for Primary HIV Medical Care Louisiana, 2017		
	Percent in Care	**Percent Not in Care (Unmet Need)**
Overall	**74%**	**26%**
Persons living with HIV (non-AIDS)	66%	34%
Persons living with AIDS	81%	19%
Gender		
Men	73%	27%
Women	77%	23%
Transgender persons	83%	17%
Race/Ethnicity		
Black/African American	75%	25%
Hispanic/Latinx	53%	47%
White	77%	23%
Other	71%	29%
Age Group		
0-12	89%	11%
13-24	72%	28%
25-44	74%	26%
45-64	75%	25%
65+	71%	29%
Region		
1-New Orleans	75%	25%
2-Baton Rouge	80%	20%
3-Houma	77%	23%
4-Lafayette	75%	25%
5-Lake Charles	61%	39%
6-Alexandria	71%	29%
7-Shreveport	65%	35%
8-Monroe	71%	29%
9-Hammond/Slidell	77%	23%

- Of persons living with HIV in 2017, 74% had at least one medical care visit during the year. Persons living with AIDS were more likely to have a medical visit (81%) compared to persons living with HIV (non-AIDS) (66%).
- Women, transgender persons, 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.



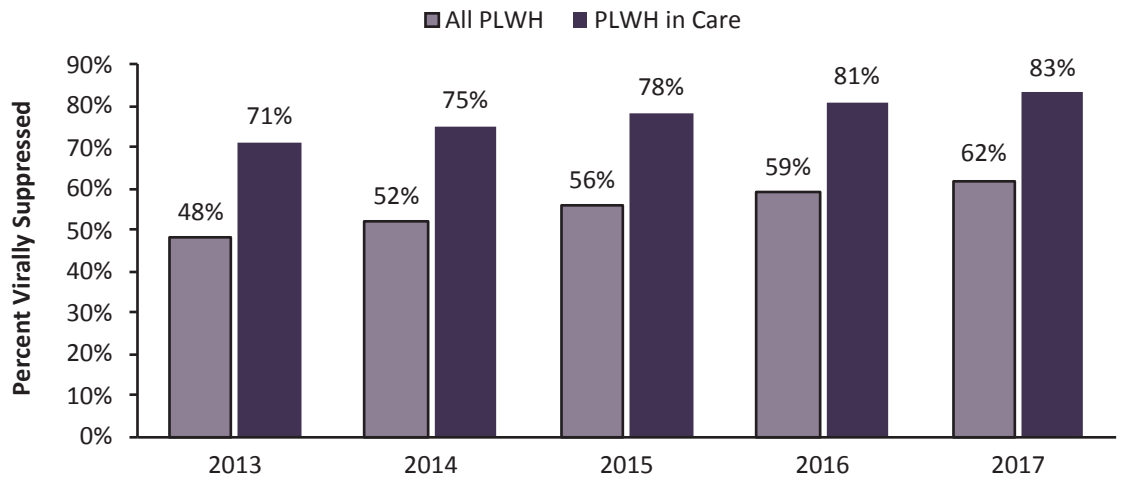
Louisiana's HIV Care Continuum

The HIV Care Continuum is a way to graphically represent the number 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 care continuum from diagnosis through viral suppression. The following graph shows the Louisiana-specific continuum using data from surveillance and laboratory reporting.

- Column 1: The number of persons living with HIV (PLWH) at the end of 2017 included in the continuum is limited to people living with HIV as of 12/31/2017, but who were diagnosed before 01/01/2017 and whose current address is in Louisiana. This number is smaller than the overall number of persons living with HIV presented in Chapter 1 because it removes anyone newly diagnosed in 2017. In 2017, there were 20,440 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 viral load (VL) test conducted in 2017. In 2017, 74% of Louisiana's PLWH had at least one HIV 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 2017 at least 90 days apart. In 2017, 58% 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 2017 was less than 200 copies/mL. In 2017, 62% 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. Among people who had at least one HIV medical care visit in 2017, 83% were virally suppressed.

Viral Suppression Trends

Viral Suppression Trends
Louisiana, 2013-2017



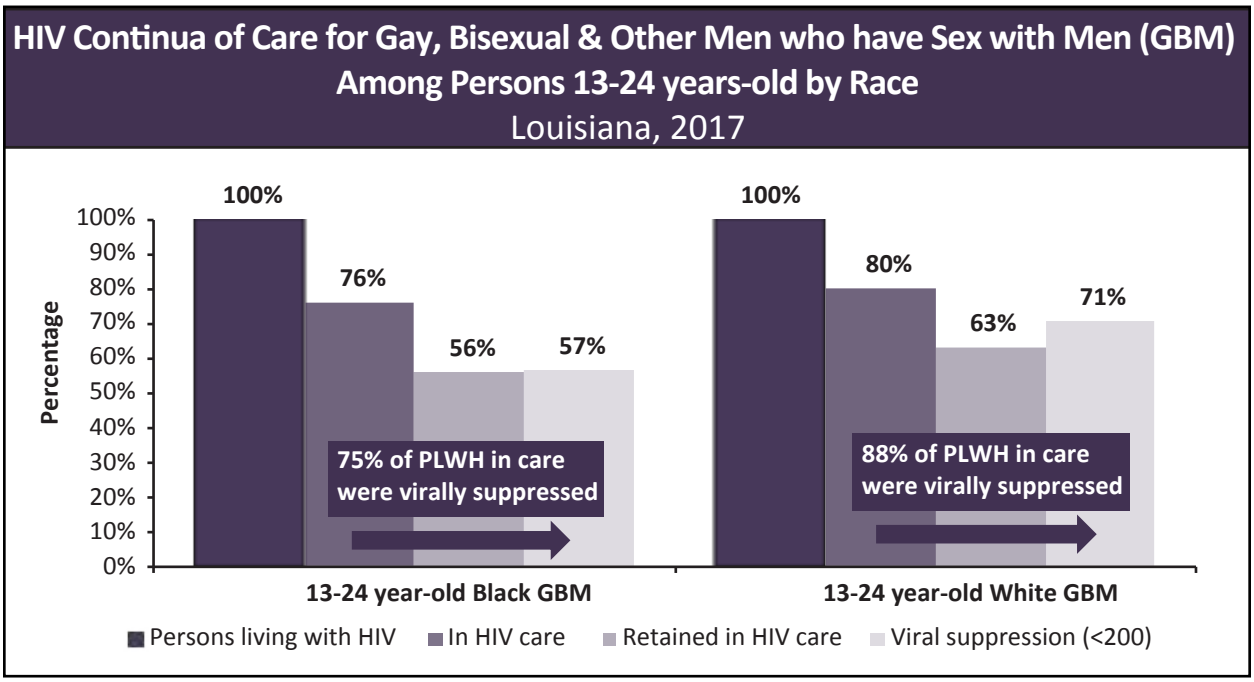
- From 2013-2017, viral suppression among persons living with HIV increased from 48% in 2013 to 62% in 2017.
- Individuals who have had at least one CD4 or viral load lab conducted in the year of interest are considered to be in care. Among PLWH in care, the percentage of individuals virally suppressed increased from 71% to 83% between 2013-2017.

Viral Suppression Among PLWH in Care by Region
Louisiana, 2013-2017

	2013	2014	2015	2016	2017	Percent Change from 2013-2017
Louisiana	**71%**	**75%**	**78%**	**81%**	**83%**	**12%**
1-New Orleans	68%	76%	82%	84%	85%	17%
2-Baton Rouge	71%	74%	75%	78%	83%	12%
3-Houma	78%	80%	85%	85%	86%	8%
4-Lafayette	74%	78%	77%	81%	85%	11%
5-Lake Charles	71%	70%	72%	78%	78%	7%
6-Alexandria	70%	73%	74%	75%	80%	10%
7-Shreveport	68%	70%	76%	78%	78%	10%
8-Monroe	72%	75%	75%	81%	82%	10%
9-Hammond/Slidell	75%	76%	84%	82%	85%	10%

- Improvements in viral suppression among PLWH in care vary by region. The New Orleans region had the greatest improvement in viral suppression among PLWH in care, increasing from 68% in 2013 to 85% in 2017. The Lake Charles region had the smallest change in viral suppression among PLWH in care, increasing from 71% in 2013 to 78% in 2017.

Visualizing Disparities with the HIV Continuum of Care



- Young gay, bisexual, and other men who have sex with men (GBM) comprise a significant proportion of new HIV diagnoses. Engaging young GBM living with HIV in medical care and achieving viral suppression plays an important role in reducing HIV transmission.
- Young, white GBM have significantly higher proportions of engagement in HIV medical care, retention, and viral suppression than young, black GBM. Among those in HIV medical care, 88% of 13-24 year-old white GBM were virally suppressed compared to only 75% of 13-24 year-old black GBM. Young, white GBM have better outcomes on every measure of the HIV continuum as compared to all persons living with HIV in Louisiana, as well.
- The Louisiana Department of Health is currently implementing two Centers for Disease Control and Prevention (CDC) demonstration projects in the New Orleans Metropolitan Statistical Area with primary project aims to address the high HIV burden among GBM, in particular, the racial and gender disparities in this population. Below are descriptions of the demonstration projects:

    1. Project PrIDE (FOA PS15-1506) – The PrEP Implementation Data2Care Evaluation (PrIDE) demonstration project that began in 2015. PrIDE employs two strategies to reduce HIV transmission: 1) Engaging GBM and transgender persons in Pre-exposure Prophylaxis (PrEP) to prevent HIV acquisition and 2) "Data to Care" which utilizes HIV surveillance data to link and re-engage people living with HIV into HIV medical care.
    2. THRIVE (FOA PS15-1509) – The Targeted Highly-Effective Interventions to Reverse the HIV Epidemic (THRIVE) demonstration project began in 2015. THRIVE utilizes a community collaborative model to reduce HIV acquisition and transmission among GBM of color by increasing PrEP uptake, performing routine HIV/STD screening, and improving health outcomes for persons of color living with HIV through ART adherence and achievement of viral suppression.

Chapter 3

Perinatal HIV Exposure and Congenital Syphilis

Active surveillance of perinatal HIV exposure and congenital syphilis is an important aspect in preventing disease transmission of HIV or syphilis to a newborn. Through proper care and treatment, both perinatal transmission of HIV and congenital syphilis can be prevented. The rate of HIV transmission from mother to child can be reduced from 25% to less than 1% with adherence to antiretroviral prophylaxis. Adequate treatment for syphilis during pregnancy is 98% effective in reducing congenital syphilis.[xiv] Early and repeat testing for HIV and syphilis during pregnancy is important in the timely treatment and reduction of transmission. In a move to reinforce these recommendations, Louisiana passed legislation in 2014 requiring physicians to repeat HIV and syphilis testing for pregnant women during their third trimester, in addition to testing already mandated during their first prenatal care visit.

Perinatal exposure to HIV and congenital syphilis are not equal in Louisiana. Black mothers under the age of 30 are affected more than any other race/ethnicity and age group in Louisiana. Barriers to care can include lack of transportation to and from healthcare appointments, low income, stigma, and gaps in other supportive services for pregnant women with these particular health concerns. While Louisiana's rates for perinatal HIV exposure/transmission and congenital syphilis have been historically higher than the national rate, Louisiana is committed to improving health and birth outcomes for women that have been affected by HIV and syphilis.

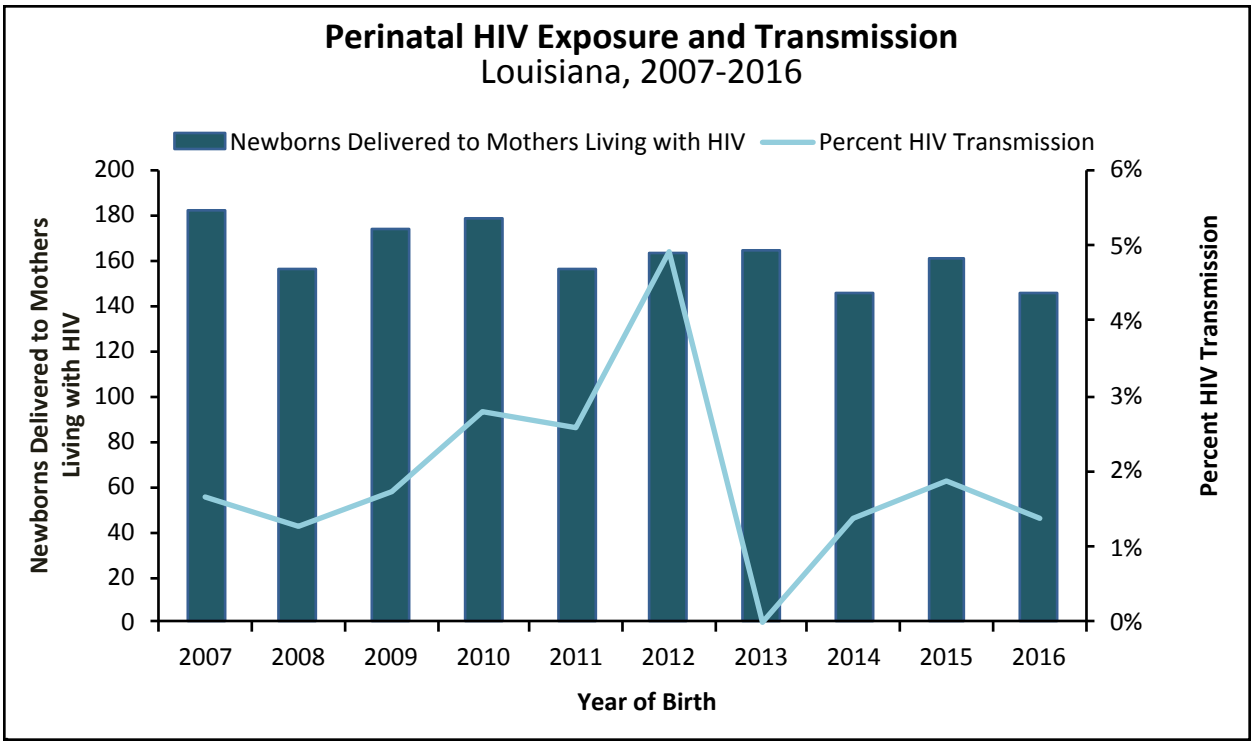
Perinatal HIV Exposure

Background and Overview

In 1994, the Pediatric AIDS Clinical Trials Group demonstrated that zidovudine (ZDV) administered to pregnant women living with HIV could reduce the risk of perinatal acquisition of HIV. As a result, the United States Public Health Service (USPHS) issued recommendations for the use of ZDV during pregnancy to reduce the risk of vertical 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/).[xv]

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.[xvi] 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 for women living with HIV, as well as all HIV tests performed on children aged 0-6 years regardless of test result (positive or negative).

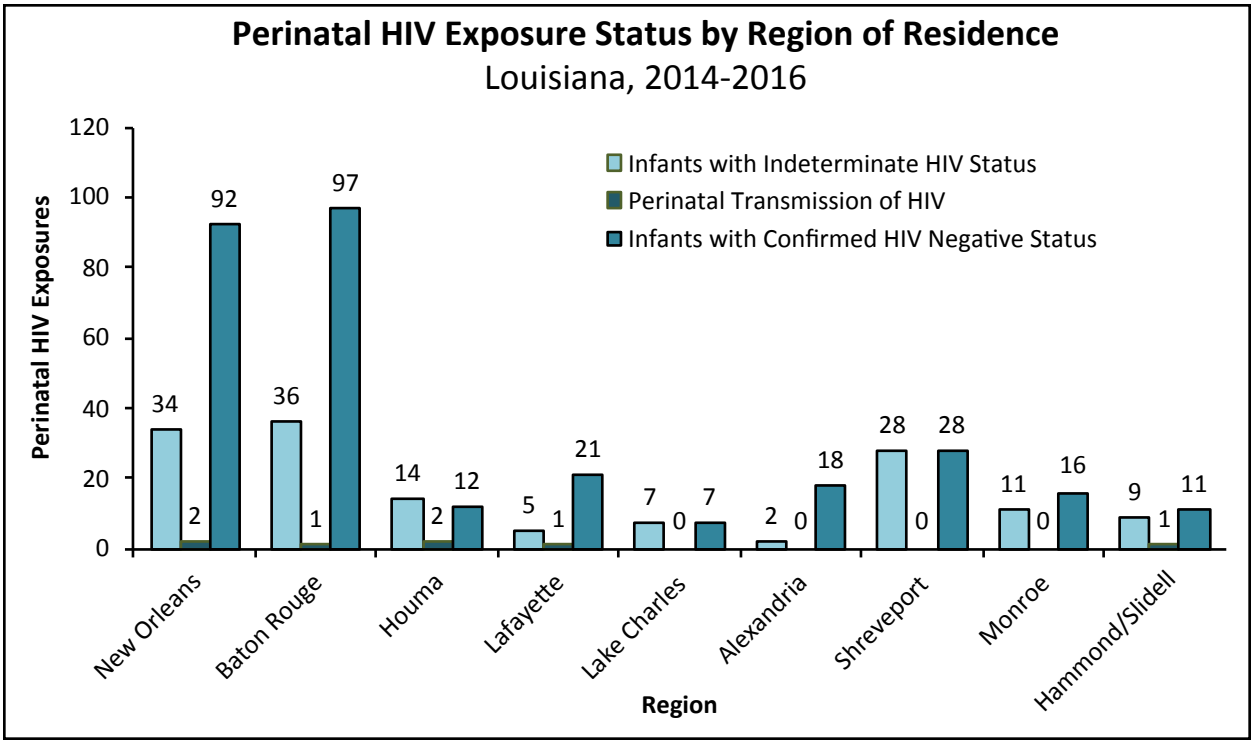
Perinatal HIV exposure surveillance requires several rounds of testing to determine an infant's serostatus. Reporting of this information ensures effective monitoring of all perinatal HIV exposures. Infants born to mothers living with HIV need a recorded negative result on HIV tests conducted at one 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.



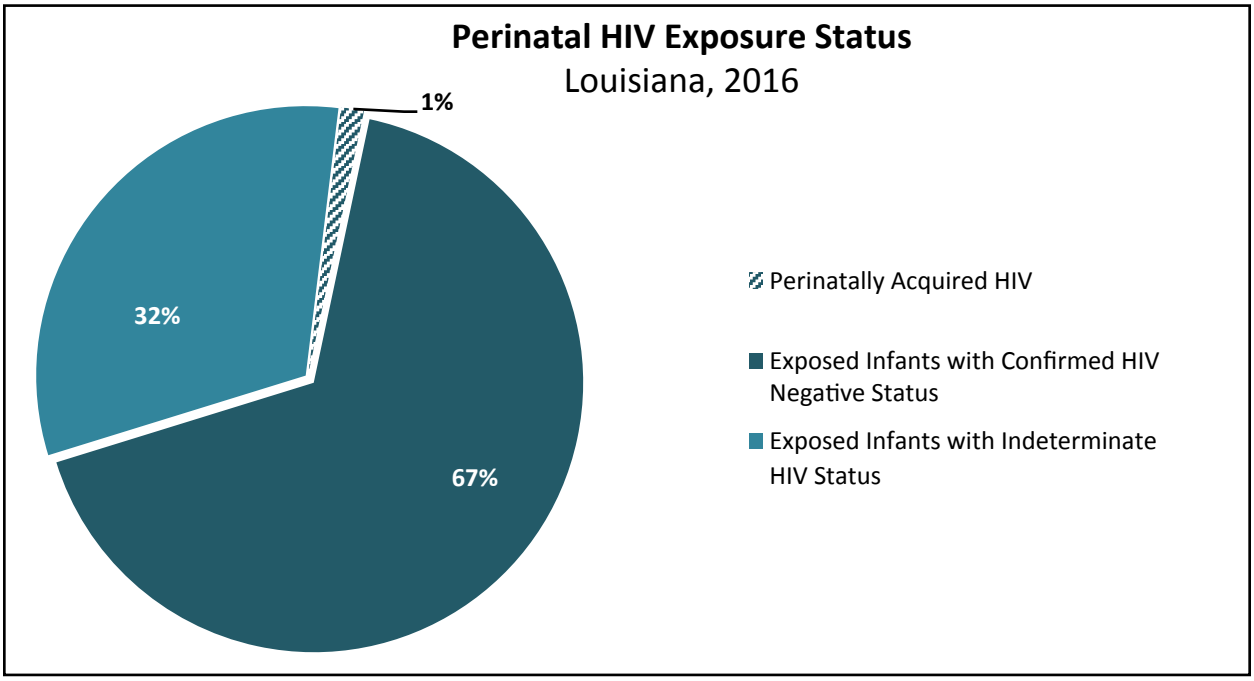
- In 2016, 145 infants were perinatally exposed to HIV in Louisiana.
- There was one case of perinatal transmission in 2016.
- Over the past ten years, the highest percentage of perinatal transmission was in 2012 (5%), while 2013 was the lowest (0%).
- Preliminary data indicate no cases of perinatal transmission in 2017 and one case in 2018.

Perinatal HIV in the United States

In 2016, an estimated 122 children under the age of 13 were diagnosed with HIV, 99 were a result of perinatal transmission.[xvii] While the United States has a low rate of perinatal transmission of HIV, the CDC has proposed a framework to end perinatal transmission in the United States, which is defined as a transmission rate of less than 1% of infants born to mothers living with HIV. The framework includes universal testing (i.e. opt-out testing), data reporting and long-term monitoring, as well as reproductive health and family planning services for women. These efforts, individually managed by each state, sets a foundation for the elimination of vertical transmission through diagnosing women before they are pregnant, providing care for them while they are pregnant, and monitoring of women out of care or in need of other services related to their diagnosis.[xviii]



- Between 2014 and 2016, mothers living with HIV delivered newborns in all nine public health regions in Louisiana. The Baton Rouge region had the highest number of perinatal exposures (134). The New Orleans region had the second highest number of perinatal exposures (128) and two perinatal transmissions.
- Approximately 32% of HIV exposed infants born between 2014 and 2016 have an indeterminate HIV status. To decrease the number of perinatal exposure cases with an indeterminate status, more work must be done to improve reporting of negative test results, create better access to testing, and conduct more complete follow-up on infants.



- Approximately 32% of infants exposed to HIV born in 2016 have an indeterminate HIV status due to an insufficient number of labs to confirm serostatus.

The following table shows demographic information for mothers living with HIV who delivered a newborn in 2016. There were three sets of twins. A total of 142 mothers are included below who gave birth to 145 infants.

Demographics of Mothers Living with HIV
Louisiana, 2016

	Number	Percent
Total	**142**	**100%**
Race/Ethnicity		
Asian	1	<1%
Black/African American	125	88%
Hispanic/Latina	5	4%
White	11	8%
Age at Delivery		
15-19	6	4%
20-24	44	31%
25-29	35	25%
30-34	42	30%
35+	15	11%
Imputed Transmission Category		
Injection Drug User (IDU)	11	8%
High Risk Heterosexual (HRH)	128	85%
Perinatal/Pediatric*	2	1%
Delivery Type		
Vaginal	64	45%
Elective Cesarean	57	40%
Non-elective Cesarean	20	14%
Cesarean, unknown type	1	<1%
Region		
1-New Orleans	32	23%
2-Baton Rouge	45	32%
3-Houma	6	4%
4-Lafayette	8	6%
5-Lake Charles	5	4%
6-Alexandria	7	5%
7-Shreveport	21	15%
8-Monroe	9	6%
9-Hammond/Slidell	9	6%

*Perinatal transmission is not imputed.

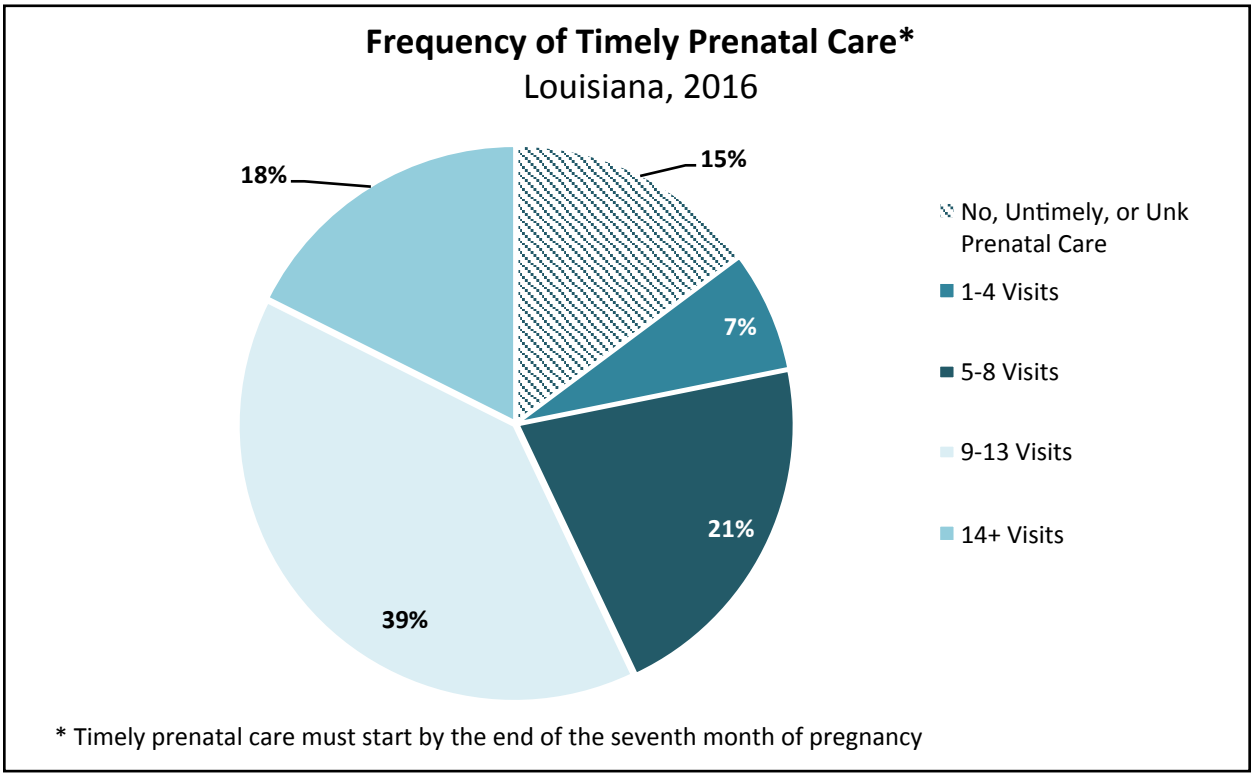
- Mothers living with HIV who gave birth in 2016 were predominately black (88%) and between 20-34 years old (85%).
- Nearly eight percent of mothers injected drugs and two mothers themselves acquired HIV perinatally (1%); the majority acquired HIV through high risk heterosexual sex (85%).
- In 2016, 32% of mothers living with HIV who delivered a newborn, lived in the Baton Rouge region, and 23% lived in the New Orleans region.

Birth Outcomes of Infants Exposed to HIV Louisiana, 2016		
	HIV Exposed Newborns	**Percent**
Total	**145**	**100%**
Birth Weight		
Low (<2500g)	34	23%
Normal (≥2500g)	111	77%
Gestational Age		
Preterm (<37 weeks)	34	23%
Full Term (≥37 weeks)	111	77%

- Among newborns exposed to HIV in Louisiana in 2016, 23% were born at a low birth weight (<2500g), and 23% were born preterm (before 37 weeks gestational age). This is compared to all newborns born in Louisiana in 2016, where 11% were low birthweight and 13% were born preterm.[xix]

Prenatal Care and Perinatal Transmission Risk Reduction

The American Congress of Obstetricians and Gynecologists (ACOG) recommends a total of 14 prenatal care visits during pregnancy.[xx] 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.



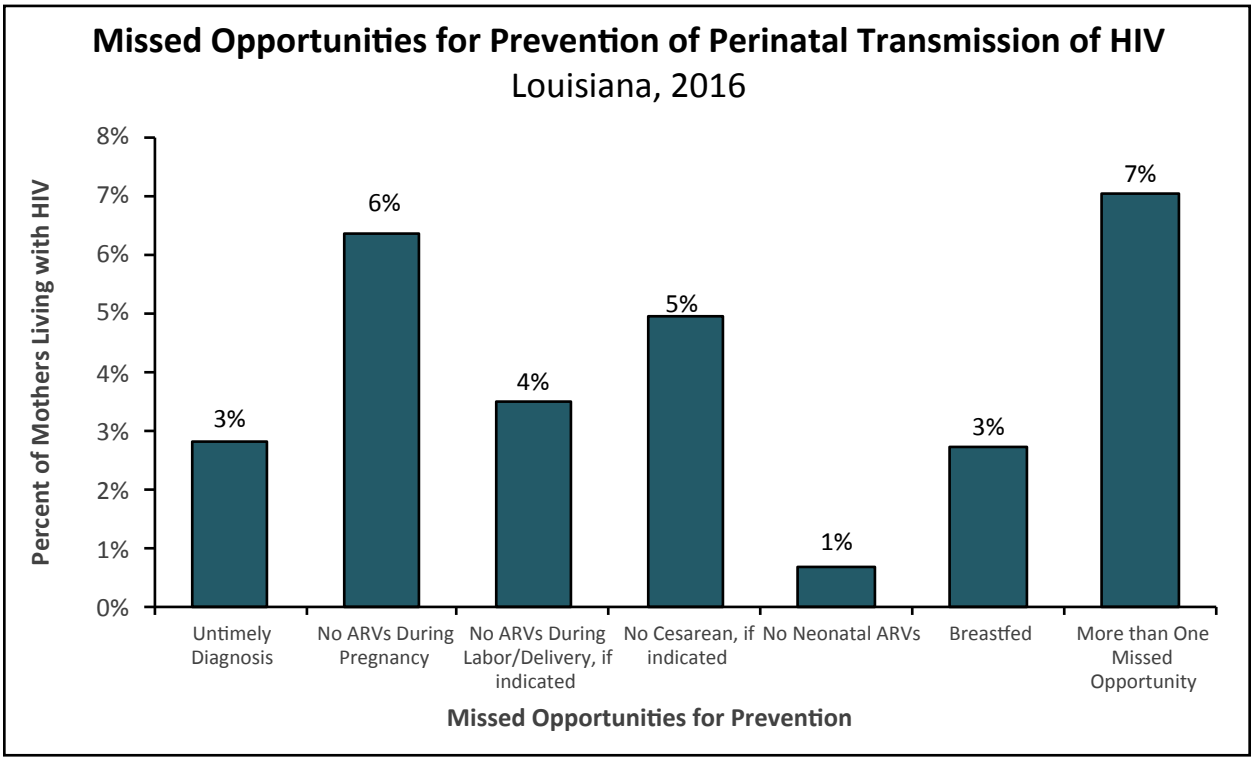
- In 2016, approximately 15% of mothers living with HIV had no, untimely, or unknown status of prenatal care, 7% of mothers had 1-4 visits, 21% had 5-8 visits, and 39% of mothers had 9-13 prenatal visits.
- Eighteen percent of mothers had the recommended number of 14 or more prenatal care visits.

Perinatal HIV Exposure Risk and Missed Opportunities

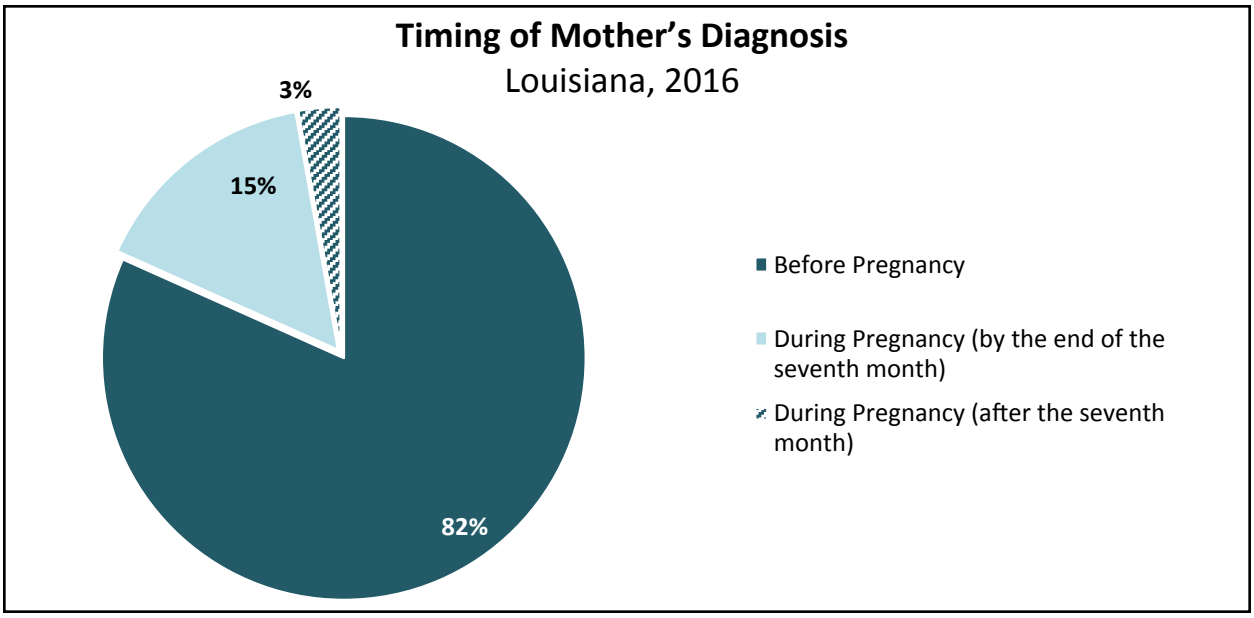
Risk of perinatal transmission of HIV depends on fetal/infant exposure to maternal virus. This exposure can be reduced by adhering to the following recommendations:

- The mother is diagnosed early (by the end of the seventh month of pregnancy) so that maternal viral load can be reduced
- The mother receives ARVs during pregnancy
- The mother receives ARVs during labor/delivery (recommended if the maternal viral load is over 1,000 copies/mL at time of labor/delivery)
- The newborn is delivered by cesarean section (recommended if the maternal viral load is over 1,000 copies/mL at time of labor/delivery)
- The newborn receives ARVs after delivery
- The newborn/infant is not breastfed

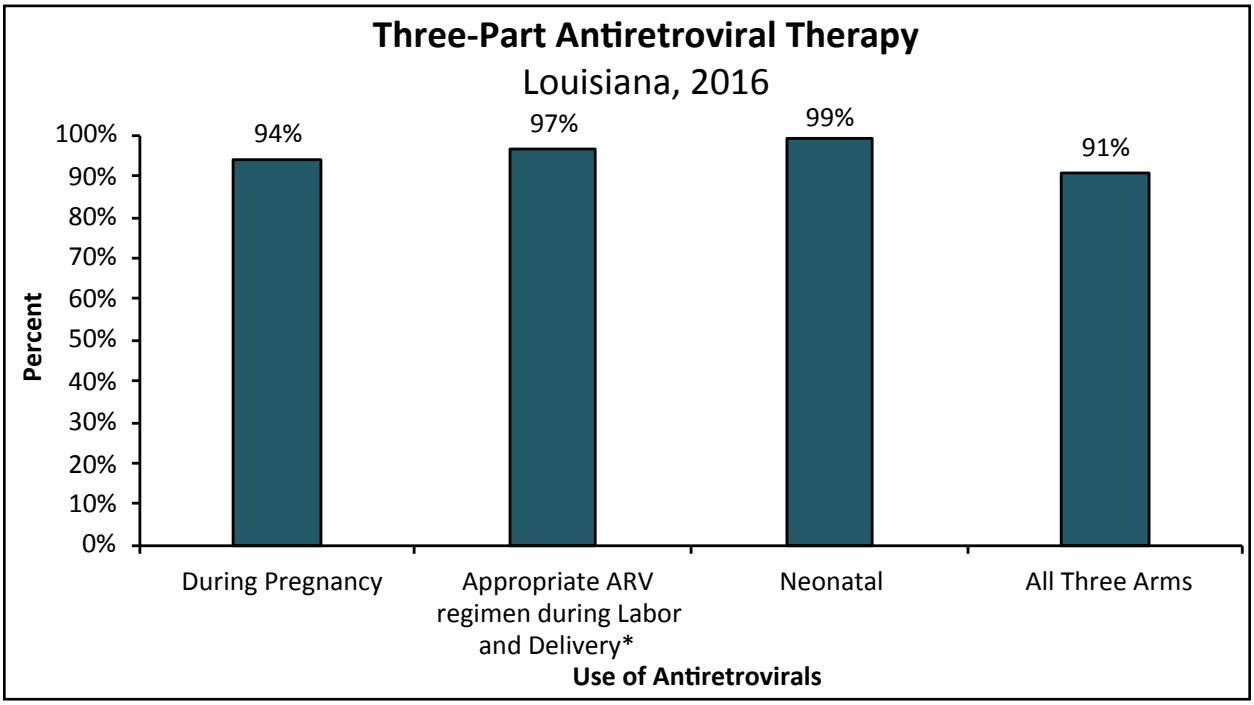
Following all of these recommendations can reduce the rate of perinatal transmission to less than 1%. Although prenatal care is not listed among these missed opportunities because it does not directly increase fetal exposure to maternal virus, it is a crucial component of the prevention of perinatal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



- In 2016, the most prevalent missed opportunity was no ARVs during pregnancy (6%). Three percent of mothers had an untimely HIV diagnosis and five percent did not receive a cesarean section, where indicated (viral load >1,000 copies/mL). The use of ARV medication during pregnancy depends on several factors including timing of diagnosis, prenatal care, and mother's access to ARVs. Overall, 7% of mother-infant pairs had more than one missed opportunity for prevention of perinatal transmission.

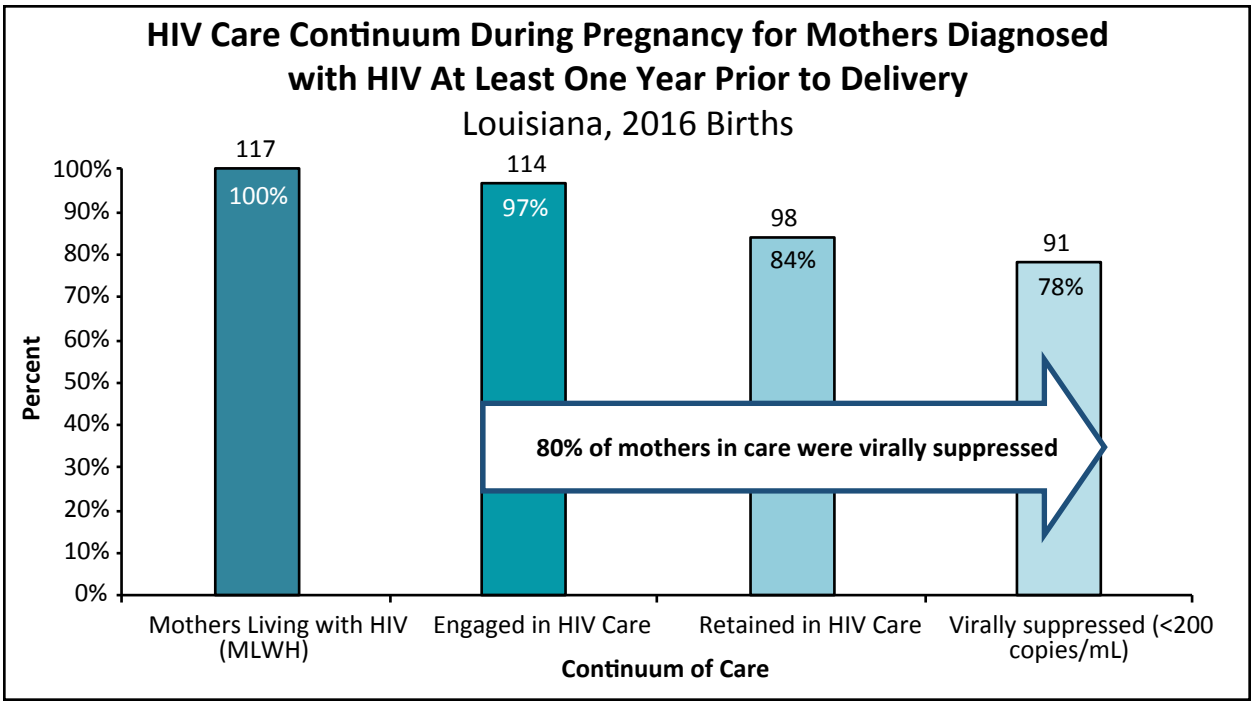


- All mothers living with HIV who gave birth in 2016 were diagnosed with HIV before labor and delivery.
- Eighty-two percent of mothers were diagnosed with HIV before pregnancy, approximately 15% were diagnosed while pregnant but before the end of their seventh month of pregnancy, three percent diagnosed after the seventh month.



*Includes women given ARVs during labor and delivery when indicated (viral load >1,000 copies/mL) and women who were virally supressed at time of delivery.

- Antiretroviral therapy administered to women living with HIV during pregnancy, labor/delivery and to newborns can greatly reduce perinatal transmission to less than 1%.
- In 2016, nearly 94% of women living with HIV in Louisiana received ARV therapy during pregnancy; 97% received appropriate care and treatment during labor/delivery; and 99% of newborns received prophylactic zidovudine shortly after birth. Overall, 91% of mother-infant pairs received all three recommended components of the antiretroviral prophylaxis protocol.

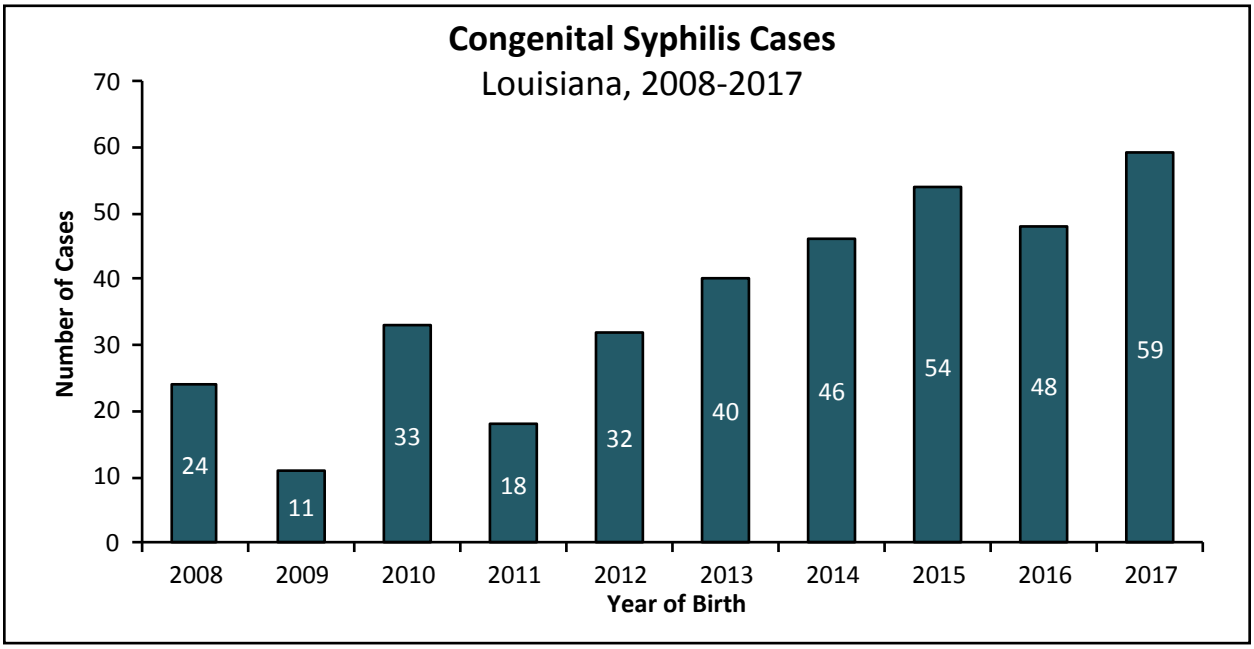


- Of the 142 mothers living with HIV that delivered in 2016, 117 (82%) were diagnosed at least one year (365 days) prior to their delivery date. Of the 117 mothers living with HIV, 97% had at least one CD4 count or viral load test conducted in the year prior to their child's birth date. These mothers are considered to be engaged in HIV care.
- Of the 117 mothers living with HIV, 84% had two or more CD4 counts or viral load tests in the year prior to their child's birth date that were at least 90 days apart. These mothers are considered to be retained in HIV care.
- Of the 117 mothers living with HIV in Louisiana, 78% had a viral load less than 200 copies/mL at their most recent viral load test conducted in the year prior to their child's birth date. These mothers are considered virally suppressed.
- Finally, of the 114 (97%) mothers who were engaged in HIV care, 80% were virally suppressed at their last viral load prior to their child's birth date.

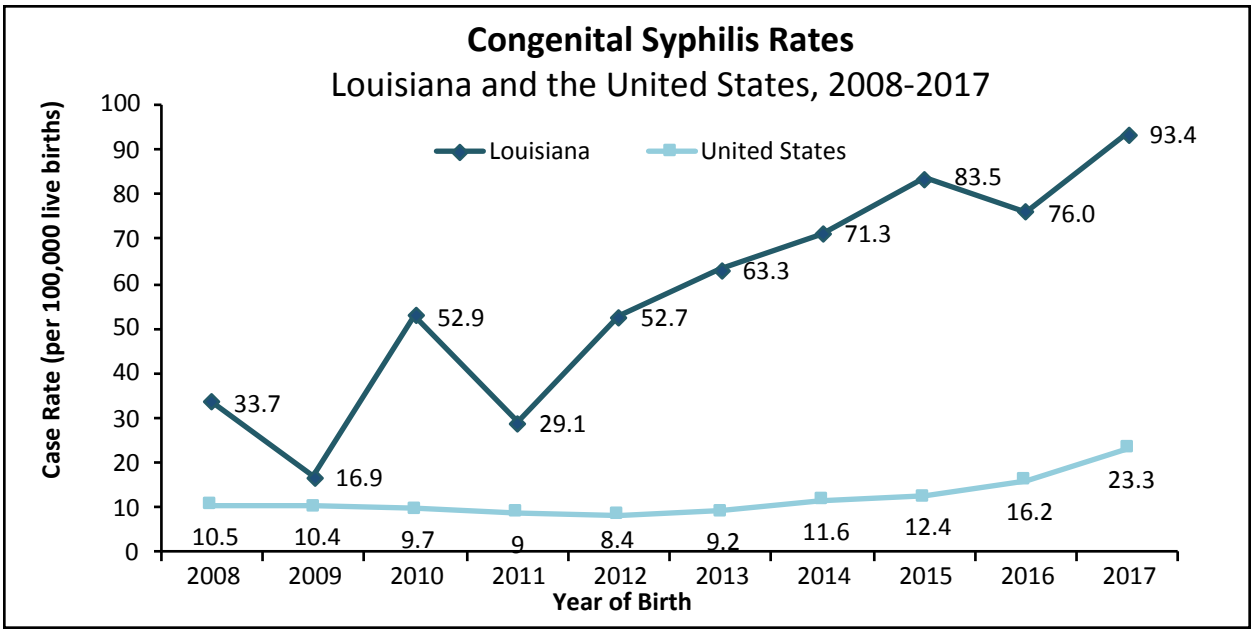
Congenital Syphilis

Syphilis is both curable and easily treated. Subject to the stage of infection, recommended treatment of syphilis during pregnancy ranges from one to three shots of benzathine penicillin, initiated at least 30 days prior to delivery. A case of congenital syphilis occurs when a pregnant woman with a current syphilis infection passes the infection on to her infant in utero or during delivery, most often due to inadequate and/or incomplete treatment, reinfection during pregnancy, or no treatment during pregnancy. Congenital syphilis may result in stillbirth, infant death and/or other significant adverse clinical outcomes.[xxi]

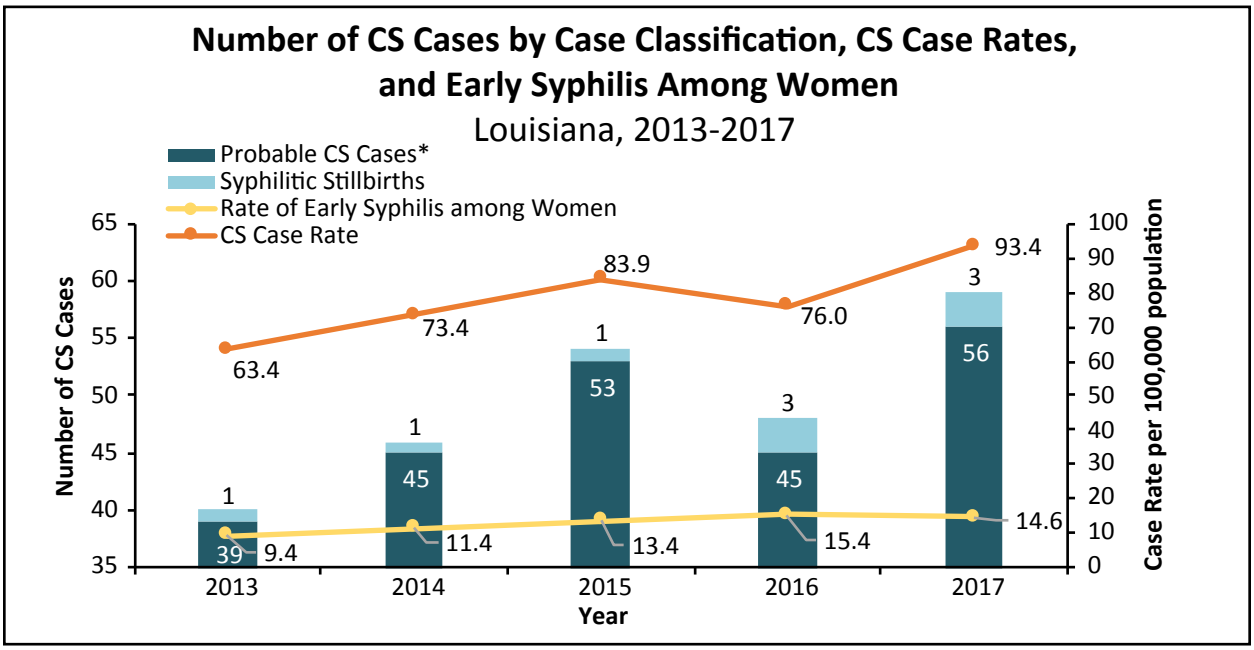
The STD/HIV Program (SHP) evaluates the medical records of all infants exposed to syphilis and uses the CDC case report algorithm for case determination. This algorithm considers maternal testing and treatment of syphilis during pregnancy as well as infant testing and signs of congenital syphilis at birth, though clinical manifestations and/or morbidity of congenital syphilis need not be present in the infant to be considered a reportable case.



- Congenital syphilis cases have fluctuated over the past ten years, with a low of 11 cases in 2009 and a high of 59 cases in 2017.
- The number of congenital syphilis cases in Louisiana increased from 48 cases in 2016 to 59 cases in 2017, a 23% increase.



- Thirty-seven states in the nation reported one or more cases of congenital syphilis in 2017. The congenital syphilis rate in the U.S. continues to rise and the national rate of congenital syphilis increased from 16.2 cases per 100,000 live births in 2016 to 23.3 cases per 100,000 live births in 2017.
- In 2017, Louisiana's congenital syphilis rate was four times the national rate and ranked 1st in the US for congenital syphilis with a case rate of 93.4 per 100,000 live births.



*A probable case of congenital syphilis is defined as an infant whose mother had untreated or inadequately treated syphilis at delivery or an infant who had a reactive test for syphilis and possible signs of syphilis at birth.

- Trends in congenital syphilis tend to follow trends for early syphilis in women with a one to two year lag. Since 2013, the early syphilis rate among women increased by 55% in Louisiana. Similarly, congenital syphilis continues to rise in Louisiana, with a 48% increase in CS since 2013.
- A syphilitic stillbirth is defined by untreated syphilis in a mother at time of delivery to an infant that lacks fetal movement that is greater than 20 weeks gestation or weighs at least 500 grams. Both 2016 and 2017 saw increases in syphilitic stillbirths from previous years.

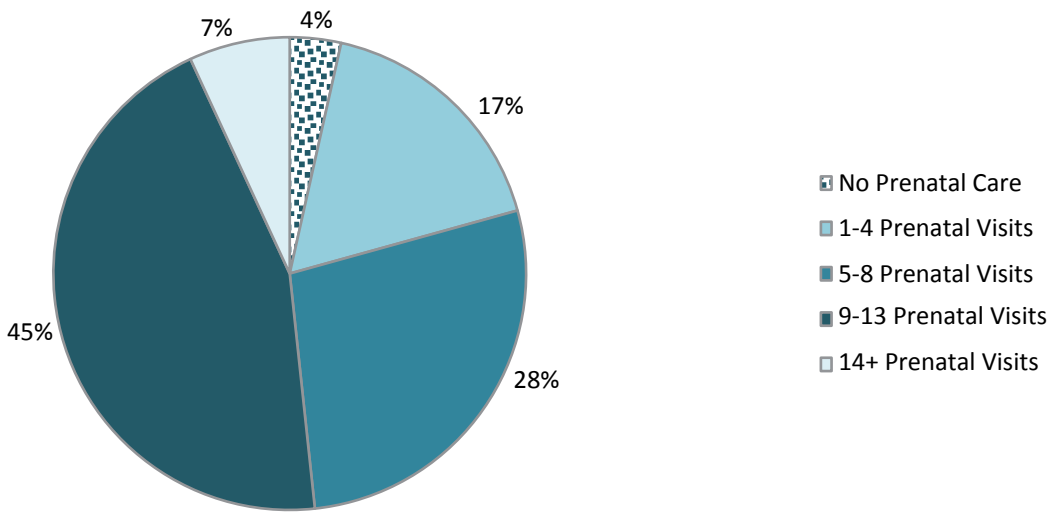
The following table shows demographic information for mothers of congenital syphilis cases in 2017. There was one set of twins. A total of 58 mothers are included below who gave birth to 59 infants.

Demographics for Mothers of Congenital Syphilis Cases
Louisiana, 2017

	Number	Percent
Total	**58**	**100%**
Maternal Race/Ethnicity		
Black/African American	49	85%
Hispanic/Latina	3	5%
White	6	10%
Maternal Age Group		
15-19	12	21%
20-24	20	35%
25-29	13	22%
30-34	9	16%
35+	4	7%
Region of Residence		
1-New Orleans	7	12%
2-Baton Rouge	7	12%
3-Houma	7	12%
4-Lafayette	11	19%
5-Lake Charles	1	2%
6-Alexandria	1	2%
7-Shreveport	12	21%
8-Monroe	11	19%
9-Hammond/Slidell	1	2%
Insurance During Pregnancy		
Private	2	5%
Government/Publicly Funded	46	78%
None	1	2%
Unknown/Not Reported	9	15%
Frequency of Prenatal Care		
No Prenatal Care	2	4%
1-4 Prenatal Visits	10	17%
5-8 Prenatal Visits	16	28%
9-13 Prenatal Visits	26	45%
14+ Prenatal Visits	4	7%

- All nine of Louisiana's public health regions had at least one case of congenital syphilis. The Shreveport region had the highest proportion of cases (21%), followed by Monroe and Lafayette (19%).
- In 2016, 85% of mothers were black, 10% were white, and five percent were Hispanic/Latina.
- Approximately 78% of mothers were under 30 years of age when they delivered.
- While insurance is not a direct measure of income, it can help identify where the greatest need in prevention is. Nearly 78% of women utilized government/publicly funded insurance during their pregnancy.

Frequency of Prenatal Care for Mothers of Congenital Syphilis Cases
Louisiana, 2017



- Of the 58 mothers of congenital syphilis cases, approximately 4% did not have prenatal care.
- Seventeen percent of mothers had 1-4 visits during pregnancy, while the majority of mothers had either 5-8 visits (28%) or 9-13 prenatal visits (45%) during pregnancy.
- Only seven percent of mothers had the recommended number of 14 or more prenatal care visits.

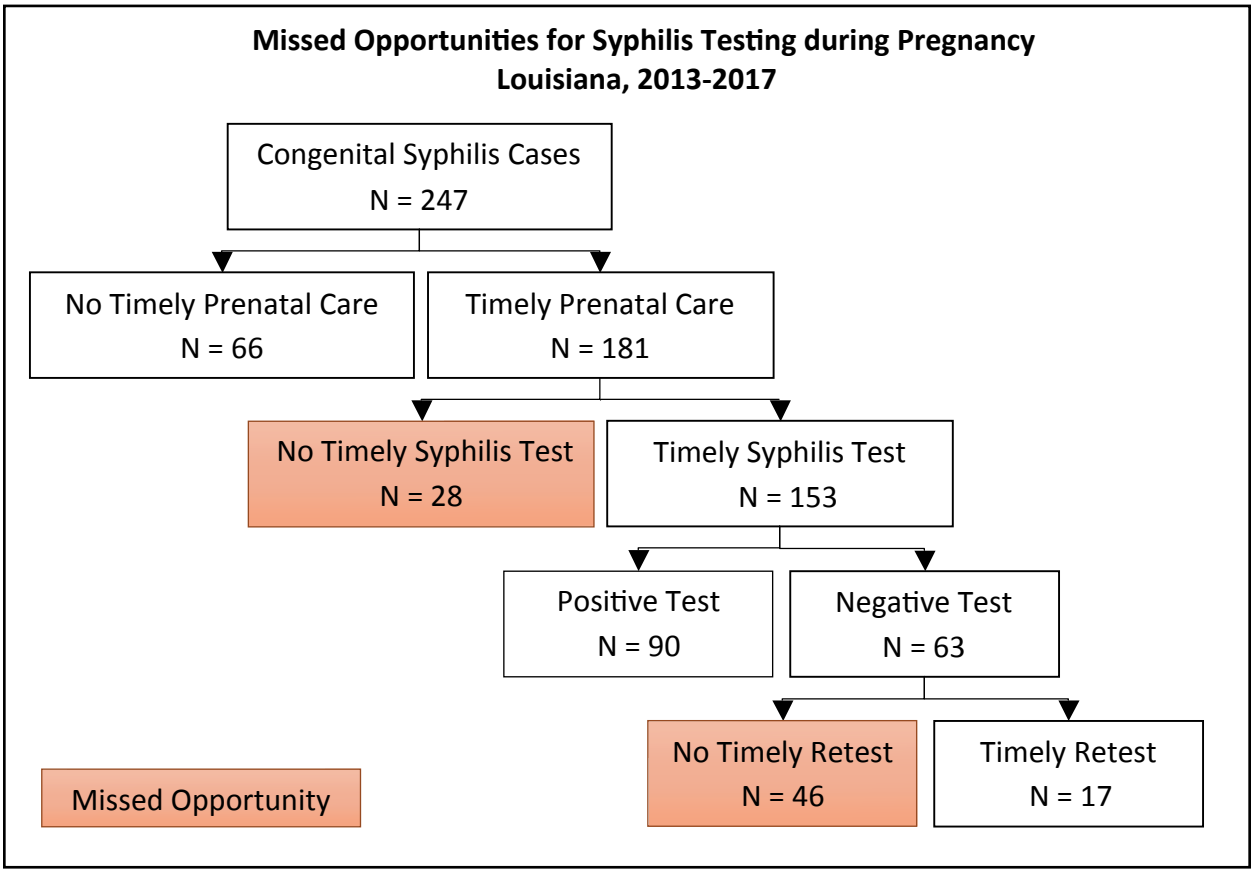
Birth Outcomes of Congenital Syphilis Cases
Louisiana, 2017

	Number	Percent
Total Cases	**59**	**100%**
Birth Weight		
Low Birth Weight (<2500g)	18	30%
Normal Birthweight (≥2500g)	41	70%
Gestational Age		
Preterm (<37 weeks)	16	27%
Term (≥37 weeks)	43	73%

- Infants born prematurely or underweight have greater health risks during their first year of life, as well as later in life. Almost 31% percent of congenital syphilis cases in 2017 had a low birth weight (under 2500 grams) and 27% were preterm (prior to 37 weeks gestation). This is compared to all newborns born in Louisiana in 2017, where 11% were low birthweight and 13% were born preterm.[xxii]

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 also 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.

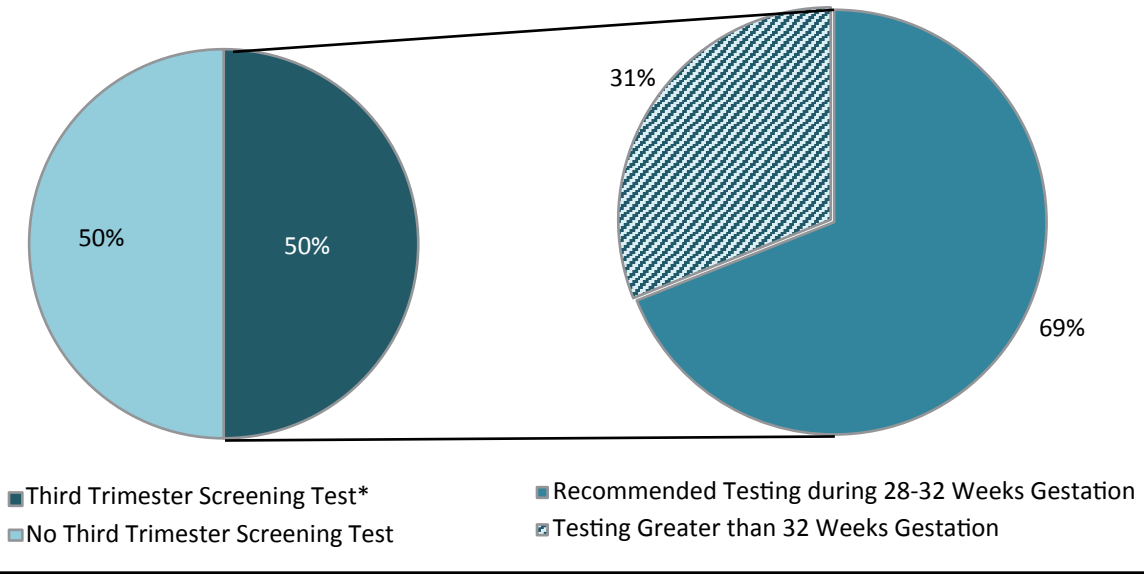


Approximately 16% of the women who delivered a newborn with congenital syphilis and who had timely prenatal care were never tested for syphilis during pregnancy. Physicians are required to offer a syphilis test at the first prenatal care visit, which could have prevented these cases of congenital syphilis.

A large proportion (85%) of the women who delivered a newborn with congenital syphilis and who had timely prenatal care did have a timely test, 60% of which were positive. These women may not have been adequately treated for syphilis during pregnancy or were adequately treated but re-infected. Finally, 41% of women received a timely, negative syphilis tests but 73% of those with a timely negative test were not retested later in pregnancy. Timely third trimester syphilis testing is essential for preventing cases in which syphilis infection or seroconversion occurs late in pregnancy.

Timing of Third Trimester Syphilis Screening* Among Mothers of CS Cases

Louisiana, 2017



*Syphilis screening in third trimester does not include labor/delivery labs, regardless of gestation age at time of delivery.

- Fifty percent of mothers of congenital syphilis cases in 2017 did not have a third trimester test during their pregnancy.
- Of the mothers that had a syphilis test in their third trimester, 69% were screened within the recommended testing window of 28-32 weeks. Thirty-one percent were screened after 32 weeks gestation.

Chapter 4

Profile of STDs in Louisiana

Introduction to STD Surveillance

The Louisiana Department of Health 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 (CDC). Surveillance information for congenital syphilis can be found in Chapter Three.

Reports of positive syphilis tests are sent to 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 except for select persons found to be co-infected with gonorrhea and HIV.

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.

Louisiana consistently experiences some of the highest rates of STDs in the United States. Syphilis, chlamydia, and gonorrhea are the three most commonly reported STDs. In 2017, Louisiana had the 2nd highest chlamydia diagnosis rate, the 3rd highest gonorrhea diagnosis rate, and the 3rd highest primary and secondary (P&S) syphilis rate, according to the CDC's *2017 STD Surveillance Report*.[xxiii]

The data presented below represent all new diagnoses of chlamydia, gonorrhea, P&S syphilis, and early non-primary non-secondary (early non-P&S) syphilis diagnosed from 2008 to 2017 and reported to SHP before April 27, 2018. This report presents both counts of STD diagnoses and STD diagnosis rates. Rates take into account differing population sizes among demographic groups or areas. Comparing rates between two or more groups or areas can identify important differences.

Trends in Louisiana STD Cases
Louisiana, 2008-2017

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Chlamydia	23,485	28,020	29,151	31,642	27,353	28,739	28,896	32,305	31,727	34,749
Gonorrhea	9,718	9,098	8,899	9,172	8,873	8,669	8,978	10,274	10,783	12,014
P&S Syphilis	720	727	546	446	339	423	575	696	750	679
Early non-P&S Syphilis	886	772	739	488	342	276	372	439	568	623

In 2017, 34,749 chlamydia diagnoses, 12,014 gonorrhea diagnoses, 679 P&S syphilis diagnoses, and 623 early non-P&S syphilis diagnoses were reported in Louisiana.

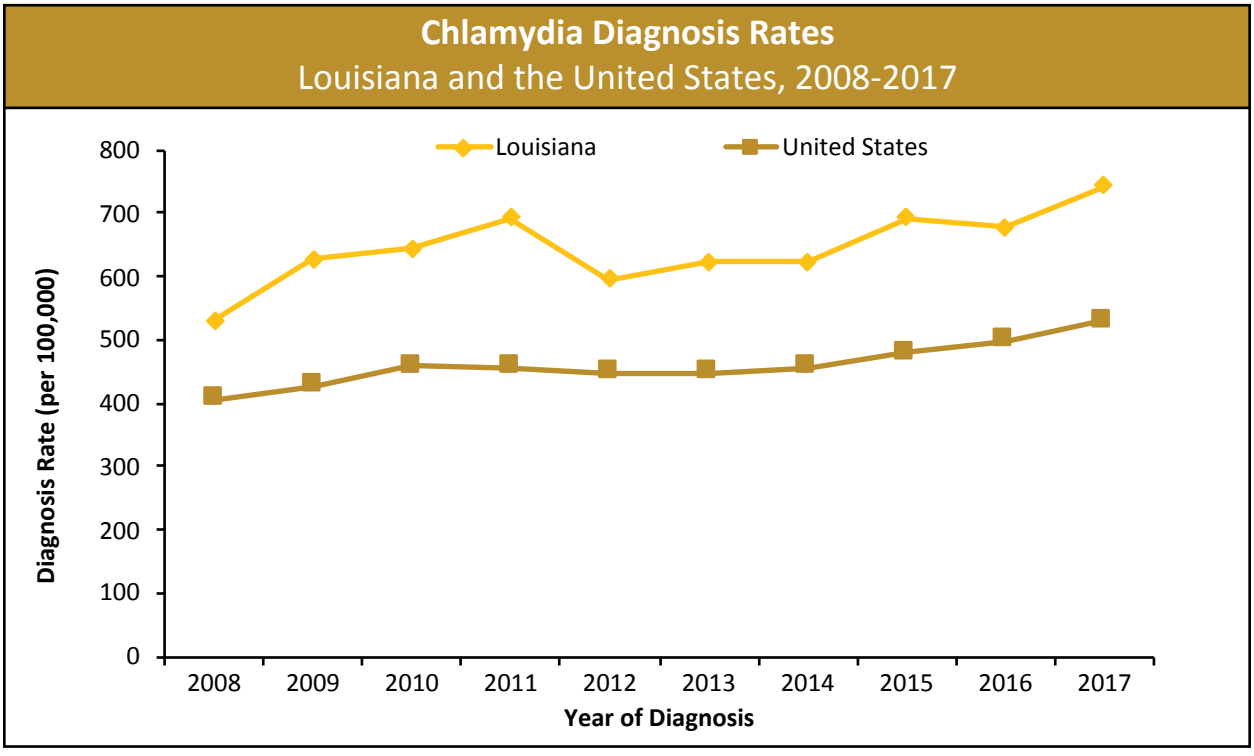
Chlamydia

Caused by the bacterium *Chlamydia trachomatis*, chlamydia is the most commonly diagnosed STD in the United States. Though chlamydial infections are often asymptomatic, symptoms can range from urethritis or vaginitis to severe pelvic inflammatory disease (PID) in women. PID can cause infertility, ectopic pregnancy, and chronic pelvic pain. Pregnant women with chlamydia can pass the infection to their infants during delivery, potentially causing health issues such as ophthalmia neonatorum or pneumonia. The CDC recommends annual screening of all sexually active women under 25 years.[xxiii]

10 Year Trends in Chlamydia Diagnoses

There were 34,749 diagnoses of chlamydia reported in Louisiana in 2017. This represents a 10% increase in the number of diagnoses from 2016, when 31,727 diagnoses were reported. Over the past 10 years, the number of new chlamydia diagnoses has fluctuated from a low of 23,536 in 2008 to a high of 34,749 in 2017.

Some of the rise in diagnoses may be due to an increase in the number of men, including gay, bisexual, and other men who have sex with men (GBM) being tested due to increased availability of urine testing and extragenital screening or due to increased disease transmission.[xxiii] In addition, screening for chlamydia is performed for all sexually active female patients age 30 and younger in Louisiana's family planning clinics. Extragenital testing has also been introduced as a standard of care at parish health units for all persons reporting extragenital sexual contact.



- In 2017, the chlamydia diagnosis rate in Louisiana was 741.8 per 100,000 population, an increase of 10% from the 2016 rate of 677.7 diagnoses per 100,000. The 2017 Louisiana rate was 1.4 times higher than the 2017 national rate of 528.8 per 100,000 population. It should be noted than in 2012, intensive deduplication efforts were begun in Louisiana, which may be account for the reduction in diagnosis counts and rates at that time.

Chlamydia Diagnoses by Sex at Birth, Race/Ethnicity, and Age at Diagnosis

Although STDs affect persons of all sexes, ages, and race/ethnicities in Louisiana, the impact is not the same across all populations. Identifying the populations most at risk of contracting an STD helps in planning STD prevention activities and services, and in determining effective use of limited resources.

Characteristics of Persons Diagnosed with Chlamydia
Louisiana, 2017

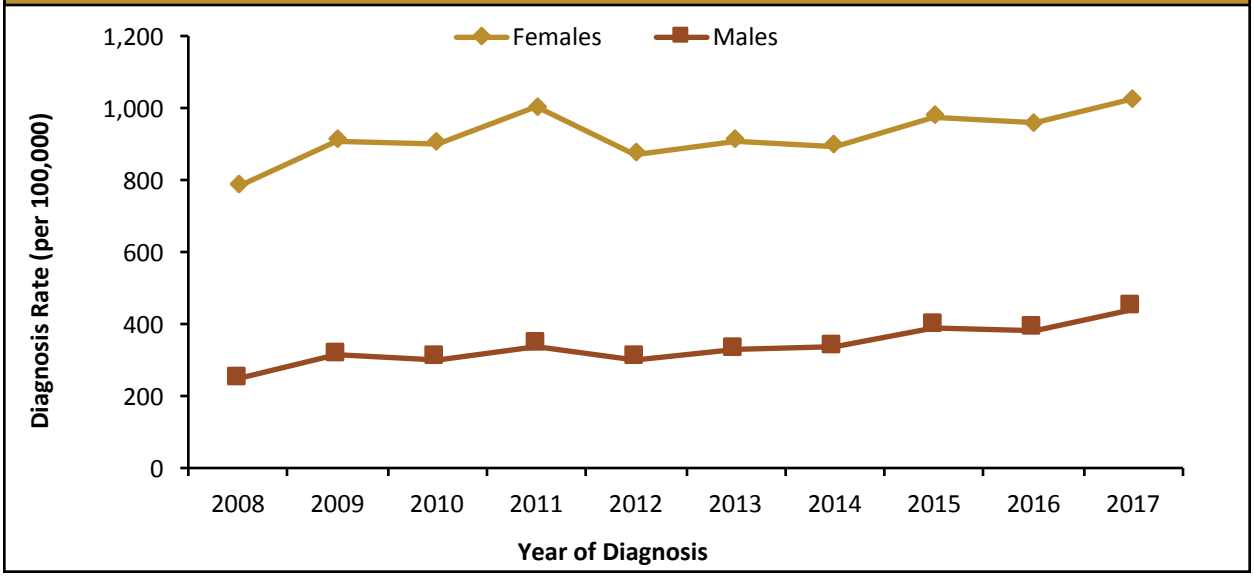
	Cases	Percent	Rate*
Total	**34,749**	**100%**	**741.8**
Sex at Birth			
Female	24,542	70.6%	1,024.8
Male	10,207	29.4%	445.8
Race/Ethnicity**			
Black/African American	24,175	69.7%	1,605.5
Hispanic/Latinx	1,353	3.9%	551.9
White	8,814	25.4%	320.8
Other/Multi-race	344	1.0%	-
Unknown	*63*	*0.2%*	-
Age Group			
0-9	11	0.0%	1.8
10-14	333	1.0%	108.8
15-19	11,220	32.3%	3,744.1
20-24	12,753	36.7%	3,989.3
25-29	5,675	16.3%	1,618.5
30-34	2,501	7.2%	760.1
35-39	1,196	3.4%	385.8
40-44	492	1.4%	183.3
45+	568	1.6%	30.2

* Rate per 100,000

** Demographic information not available through all reporting mediums

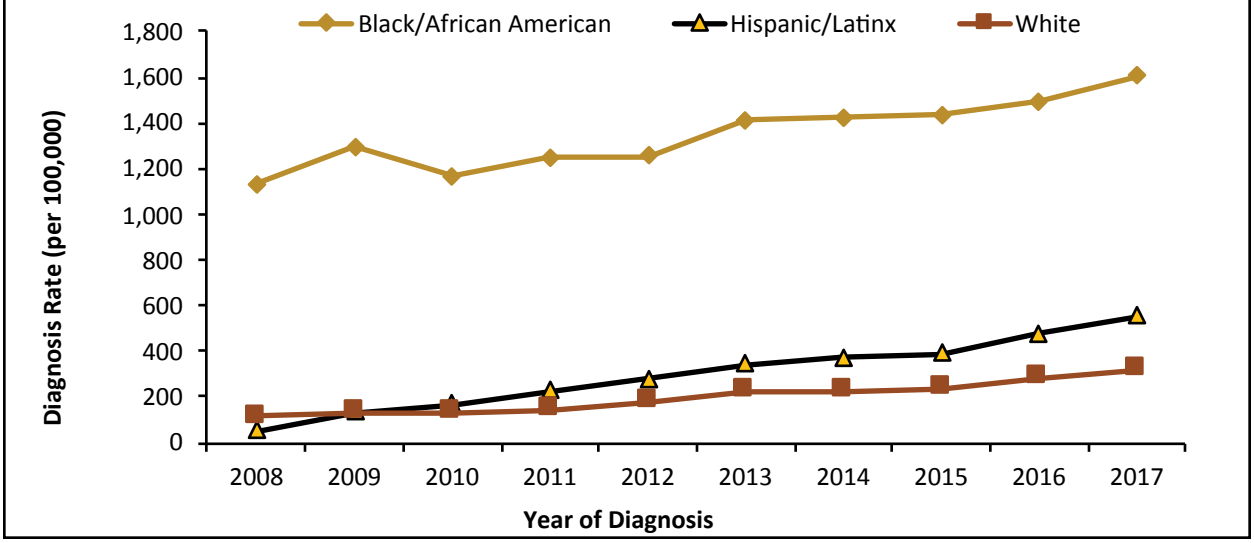
- In 2017, there were 24,542 chlamydia diagnoses in females, increasing 7% from the 22,942 diagnoses in 2016. The number of male chlamydia diagnoses in Louisiana increased 16%, from 8,784 in 2016 to 10,207 in 2017. Overall, 71% of reported chlamydia diagnoses were among women.
- There is a significant racial disparity for chlamydia diagnoses in Louisiana. The rate of chlamydia in blacks in Louisiana was five times higher than the rate in whites, and almost three times higher than among Hispanic/Latinx persons.
- In 2017, 70% of all chlamydia diagnoses with reported race were black and 25% were white. Only 32% of Louisiana's population is black.
- In 2017, 70% of new chlamydia diagnoses were among youth under 25 years of age. From 2016 to 2017, the number of new chlamydia diagnoses increased in all age groups except in children under 10 years of age.

Trends in Chlamydia Diagnosis Rates by Sex at Birth
Louisiana, 2008-2017



- In 2017, the female chlamydia rate of 1024.8 per 100,000 females was 2.3 times higher than the male rate of 445.8 per 100,000 males.
- From 2008 to 2017, the chlamydia diagnosis rate for males in Louisiana almost doubled, from 248.2 per 100,000 males to 445.8 per 100,000 males.

Trends in Chlamydia Diagnosis Rates by Race/Ethnicity
Louisiana, 2008-2017



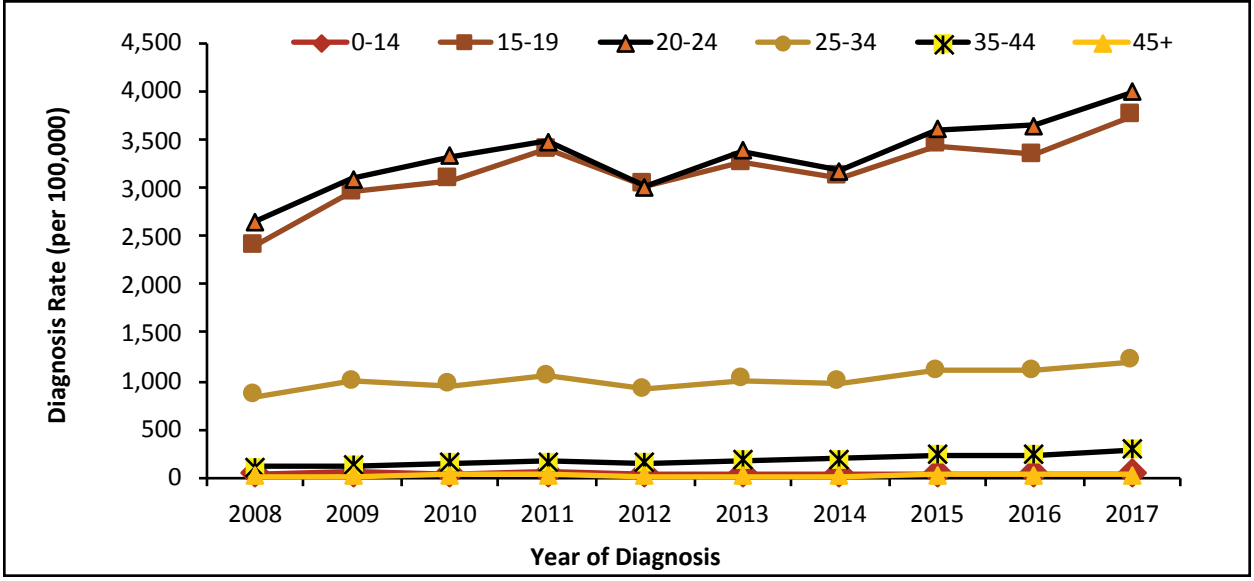
- The chlamydia diagnosis rate for whites and Hispanic/Latinx persons in Louisiana has steadily risen over the past 10 years. The rate for whites increased from a low of 117.4 per 100,000 in 2008 to a high of 320.8 per 100,000 in 2017. The rate for Hispanic/Latinx persons increased from a low of 53.2 per 100,000 in 2008 to a high of 551.9 per 100,000 in 2017. Louisiana has also improved efforts to increase the proportion of cases with recorded race/ethnicity.
- The diagnosis rate for blacks has consistently been higher than the rate for other race/ethnicities. Since 2008, the rate of chlamydia among blacks has been over 1,100 per 100,000 black persons.

Race/Ethnicity of Persons Diagnosed with Chlamydia by Sex at Birth Louisiana, 2017			
	Cases	**Percent**	**Rate***
Total	**34,749**	**100%**	**741.8**
Female	**24,542**	**70.6%**	**1,024.8**
American Indian/Alaskan Native	70	0.3%	458.1
Asian/Pacific Islander	181	0.7%	413.1
Black/African American	16,805	68.6%	2,122.5
Hispanic/Latina	987	4.0%	866.1
White	6,448	26.3%	462.2
Other/ Multirace	3	0.0%	-
Unknown	*48*	*0.2%*	-
Male	**10,207**	**29.4%**	**445.8**
American Indian/Alaskan Native	17	0.2%	114.3
Asian/Pacific Islander	71	0.7%	165.8
Black/African American	7,370	72.3%	1,032.2
Hispanic/Latino	366	3.6%	279.0
White	2,366	23.2%	174.9
Other/ Multirace	2	0.0%	-
Unknown	*15*	*0.1%*	-

* Rate per 100,000

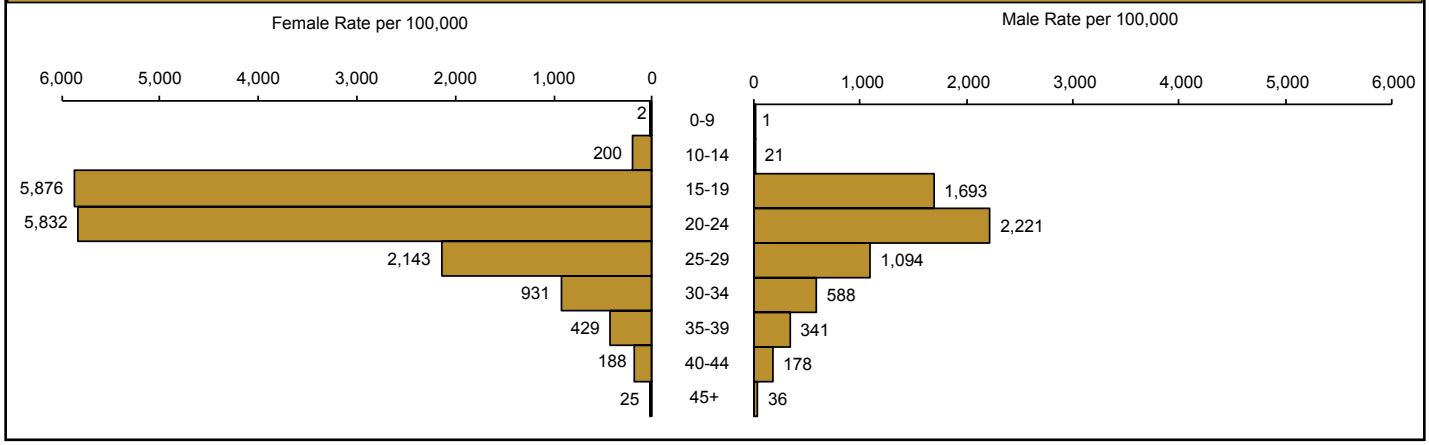
- Among females diagnosed with chlamydia with a reported race, 69% were black, 26% were white, and 4% were Hispanic/Latina. Of the diagnoses in males with a reported race, 72% were black, 23% were white, and 4% were Hispanic/Latino.
- The rate of chlamydia in black females was two times greater than the rate in black males, and the chlamydia rate in white females was over two and half times higher than that seen in white males. The rate in Hispanic/Latina females was over three times that of Hispanic/Latino males.

Trends in Chlamydia Diagnosis Rates by Age Group
Louisiana, 2008-2017



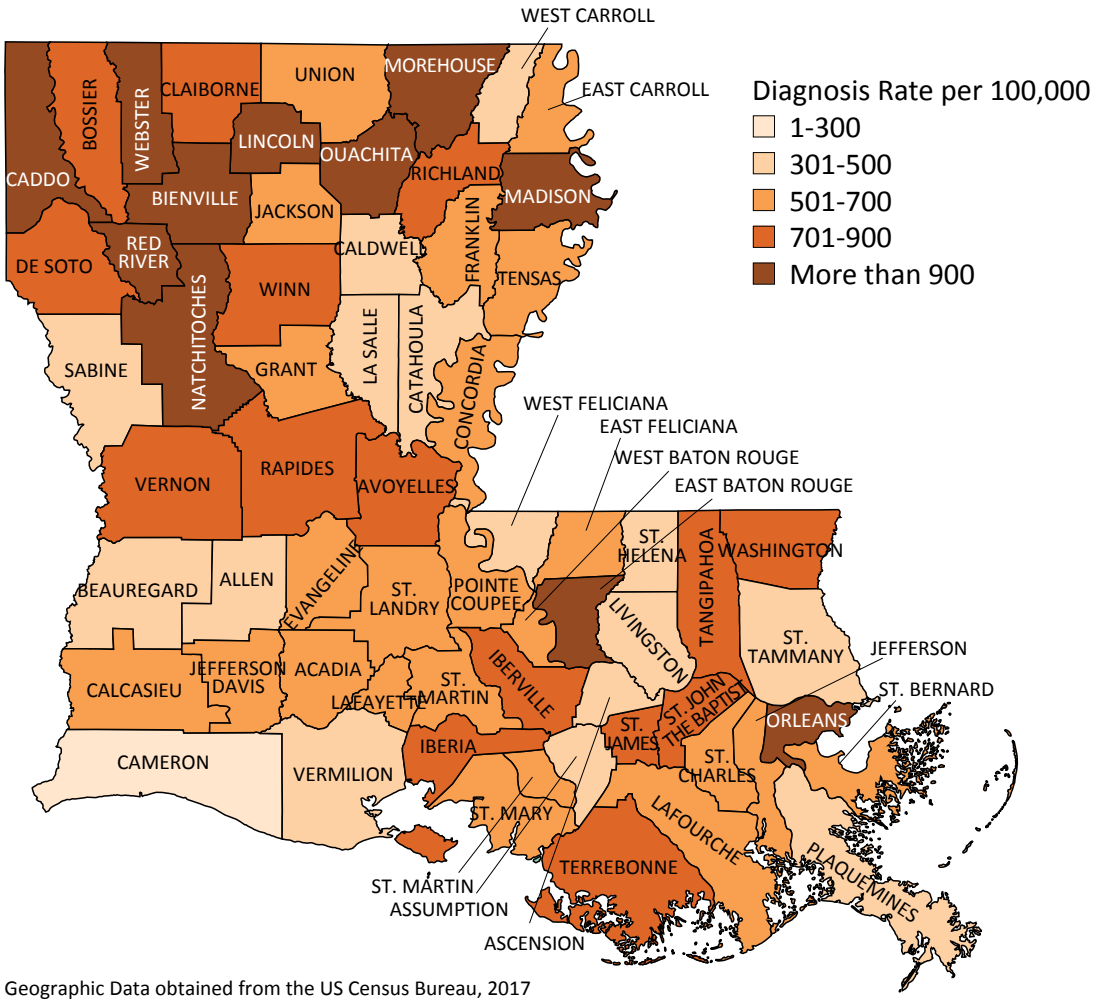
- The highest number of chlamydia diagnoses occur in persons aged 20-24 and 15-19, accounting for an average of 71% of Louisiana diagnoses since 2008. Persons aged 25-34 have made up an additional 22% of diagnoses over the last 10 years.

Chlamydia Diagnosis Rates by Age and Sex at Birth
Louisiana, 2017



- In 2017, the highest age-specific rate was among 15-19 year old females, followed very closely by females age 20-24.
- Among males in 2017, the highest age-specific rate was among 20-24 year olds, followed by males age 15-19. It is only in the 45+ age group that the male diagnosis rate is higher than the female rate.

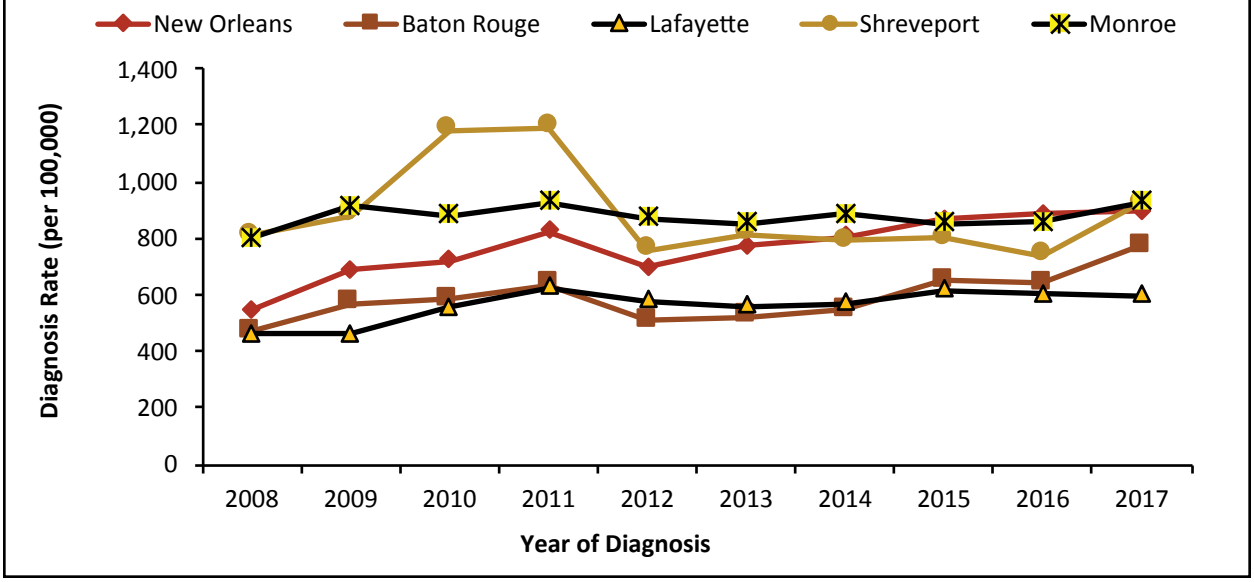
Chlamydia Diagnosis Rates by Parish, Louisiana, 2017



Geographic Data obtained from the US Census Bureau, 2017

- Chlamydia diagnosis rates vary by parish in Louisiana. There were persons diagnosed with chlamydia in all 64 parishes in 2017.
- A total of eleven parishes had a chlamydia diagnoses rate greater than 900 per 100,000 (Bienville, Caddo, East Baton Rouge, Lincoln, Madison, Morehouse, Natchitoches, Orleans, Ouachita, Red River and Webster), an increase from five parishes with a chlamydia diagnoses rate greater than 900 per 100,000 in 2016.
- Additional breakdowns by race/ethnicity and parish can be found in the Appendix.

Trends in Chlamydia Diagnosis Rates by Selected Region
Louisiana, 2008-2017



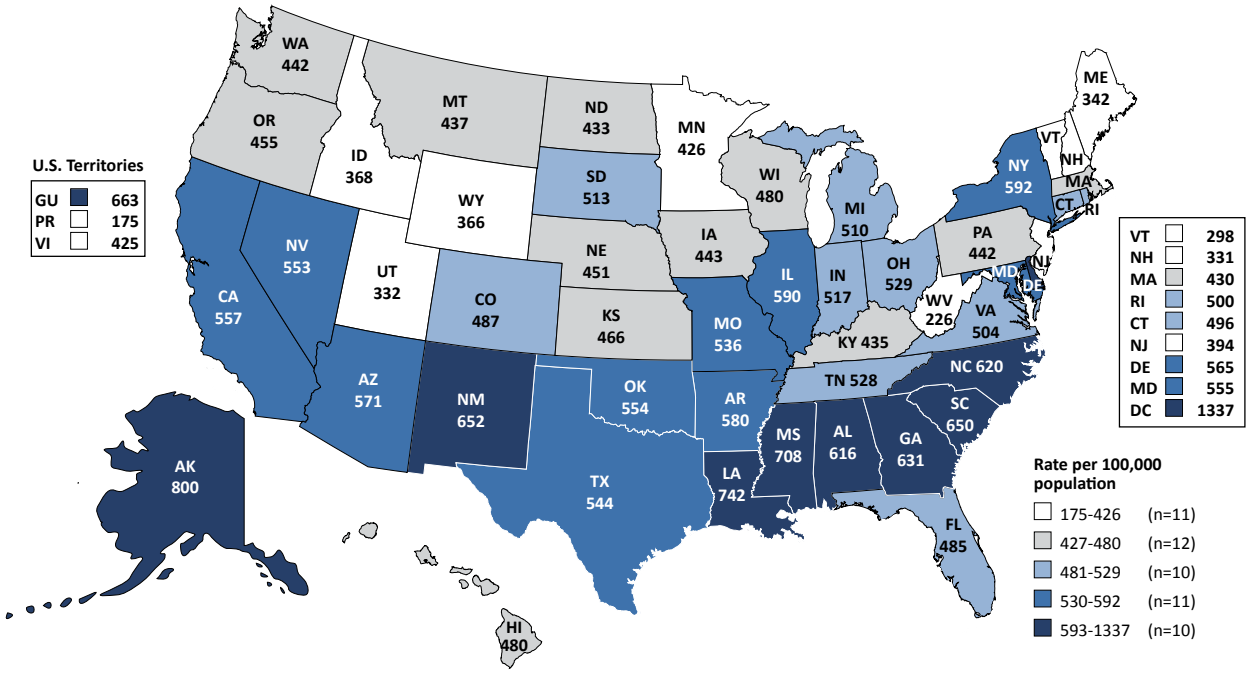
- From 2016 to 2017, the East Baton Rouge region and the Shreveport region had the highest increase in chlamydia diagnosis rates, rising 21% in the East Baton Rouge region and 24% in the Shreveport region.
- From 2012 to 2014, the Monroe region had the highest chlamydia diagnosis rate in the state. In 2015 and 2016, the diagnosis rate in the New Orleans region surpassed the rate in the Monroe region. In 2017, the Monroe region once again had the highest chlamydia diagnosis rate in the state. In 2017, the second highest diagnosis rate was in the Shreveport region and the third highest chlamydia diagnosis rate was in the New Orleans region.

New Chlamydia Diagnoses by Region and Year
Louisiana, 2013-2017

	2013		2014		2015		2016		2017	
Louisiana	**28,739**	**%**	**28,896**	**%**	**32,305**	**%**	**31,727**	**%**	**34,749**	**%**
1-New Orleans	6,784	24%	7,138	25%	7,754	24%	7,942	25%	8,060	23%
2-Baton Rouge	3,522	12%	3,711	13%	4,430	14%	4,370	14%	5,296	15%
3-Houma	2,304	8%	2,441	8%	2,482	8%	2,425	8%	2,604	8%
4-Lafayette	3,342	12%	3,420	12%	3,746	12%	3,674	12%	3,628	10%
5-Lake Charles	1,364	5%	1,111	4%	1,618	5%	1,376	4%	1,622	5%
6-Alexandria	1,678	6%	1,499	5%	1,913	6%	2,066	7%	2,148	6%
7-Shreveport	4,480	16%	4,328	15%	4,358	14%	4,023	13%	5,005	14%
8-Monroe	3,032	11%	3,158	11%	3,026	9%	3,033	10%	3,268	9%
9-Hammond/Slidell	2,081	7%	2,024	7%	2,529	8%	2,772	9%	3,077	9%
Unknown	*152*	*1%*	*66*	*<1%*	*449*	*1%*	*46*	*<1%*	*41*	*<1%*

- The New Orleans region had the highest number of new chlamydia diagnoses in 2017, followed by the Baton Rouge region and the Shreveport region. Over the past five years, the New Orleans region has had between 23% and 25% of all new chlamydia diagnoses in Louisiana.

Chlamydia Diagnosis Rates in the United States (2017)[xxiii]



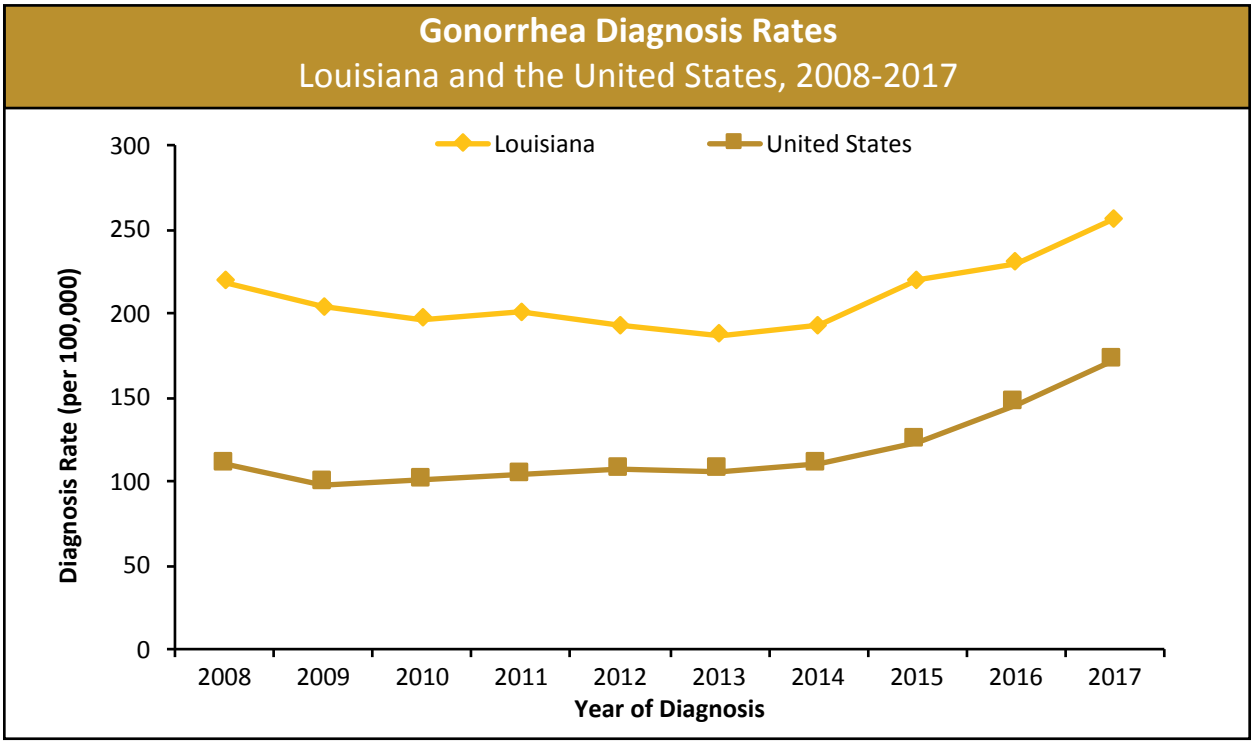
- In September 2018, the CDC released the *STD Surveillance Report, 2017*, which provides national and state-specific STD data. The CDC report uses estimated 2016 Census data while the Louisiana report uses estimated 2017 Census data, resulting in slightly different rate estimates between the reports.
- In the United States, there were 1,708,569 new chlamydia diagnoses reported in 2017, for a national chlamydia rate of 528.8 diagnoses per 100,000 population. In 2016, the national chlamydia diagnosis rate was 494.7 per 100,000 population.[xxiii]
- The national chlamydia diagnosis rate increased 7% from 2016 to 2017.[xxiii]
- Nationally, the rate of females diagnosed with chlamydia rose nearly 5% from 2016, while the rate in males increased 10.5%. Potential reasons for the increase in males include increased disease transmission, improved screening coverage, the use of more sensitive tests, an increased use of electronic laboratory reports, and changes in reporting practices.[xxiii]
- In 2017, Louisiana ranked 2nd in the nation for chlamydia diagnosis rates (742.4 per 100,000). Alaska (799.8 per 100,000) and Mississippi (707.6 per 100,000) ranked 1st and 3rd respectively.[xxiii] The District of Columbia has the highest rate in the nation but is not included in national state rankings.
- Louisiana's 2017 chlamydia diagnosis rate was 1.4 times greater than the national rate.[xxiii]

Gonorrhea

Gonorrhea is caused by the bacterium *Neisseria gonorrhoeae*. It is the second most commonly reported STD in the United States. If left untreated, gonorrhea can affect fertility in males and females, increase the risk of HIV infection and transmission, and cause other serious health problems. Gonorrhea is a common cause of epididymitis in men and PID in women, and both of these conditions can lead to infertility. Pregnant women with a gonorrhea infection may infect their infants during delivery, which can potentially cause blindness, joint infection, or a blood infection.[xxiii] Resistance to antimicrobials is important in considering the treatment of gonorrhea infections. Increasing resistance to flouroquinolones and a decline in susceptibility to cefixime has been noted. Therefore, only dual therapy with ceftriaxome and either azithromycin or doxycycline is now recommended by the CDC.[xxiv]

10 Year Trends in Gonorrhea Diagnoses

There were 12,014 gonorrhea diagnoses in Louisiana in 2017. This represents an 11% increase in the number of diagnoses from 2016, when 10,783 diagnoses were reported. Over the past 10 years, the number of new gonorrhea diagnoses has fluctuated from a low of 8,669 in 2013 to a high of 12,014 in 2017.



- In 2017, the gonorrhea diagnosis rate in Louisiana was 256.5 per 100,000 population, an 11% increase from 230.3 diagnoses per 100,000 in 2016. The 2017 Louisiana rate was 1.5 times greater than the national rate of 171.9 per 100,000 population. It should be noted than in 2012, intensive deduplication efforts were begun in Louisiana which may account for the reduction in diagnosis counts and rates at that time.
- From 2013 to 2017, the gonorrhea diagnosis rate in Louisiana rose 37%.

Gonorrhea Diagnoses by Sex at Birth, Race/Ethnicity, and Age at Diagnosis

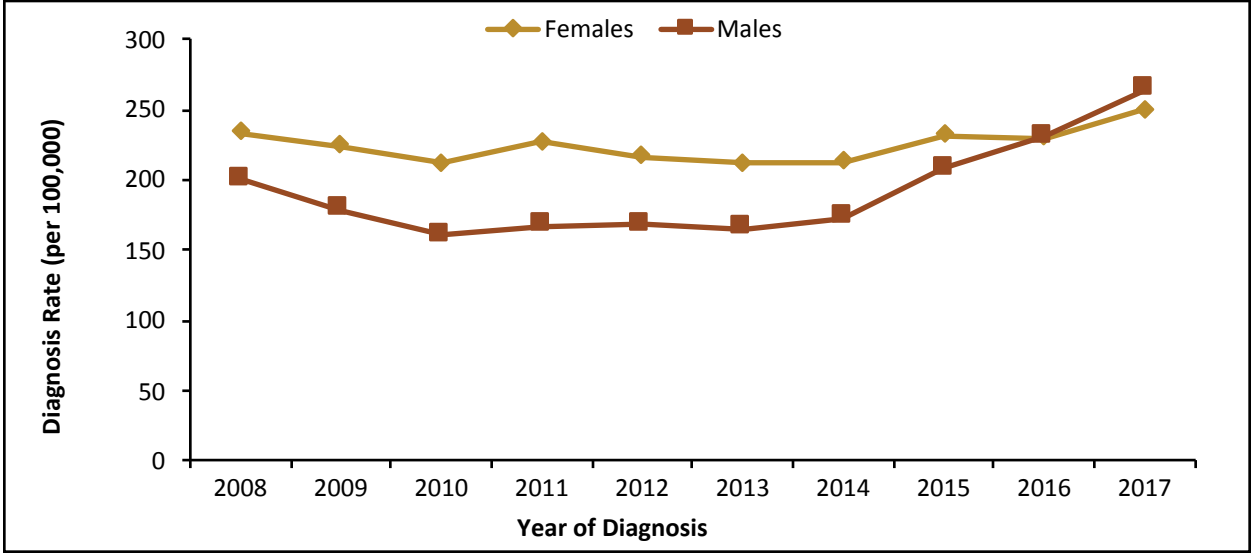
Characteristics of Persons Diagnosed with Gonorrhea Louisiana, 2017			
	Cases	Percent	Rate*
Total	**12,014**	**100%**	**256.5**
Sex at Birth			
Female	5,975	49.7%	249.5
Male	6,039	50.3%	263.8
Race/Ethnicity**			
Black/African American	9,121	76.0%	605.7
Hispanic/Latinx	234	1.9%	95.5
White	2,562	21.3%	93.2
Other/Multi-race	87	0.7%	-
Unknown	*10*	*0.1%*	-
Age Group			
0-9	9	0.1%	1.5
10-14	83	0.7%	27.1
15-19	2,812	23.4%	938.4
20-24	4,090	34.0%	1,279.4
25-29	2,313	19.3%	659.7
30-34	1,206	10.0%	366.5
35-39	683	5.7%	220.3
40-44	296	2.5%	110.3
45+	522	4.3%	27.7

* Rate per 100,000

** Demographic information not available through all reporting mediums

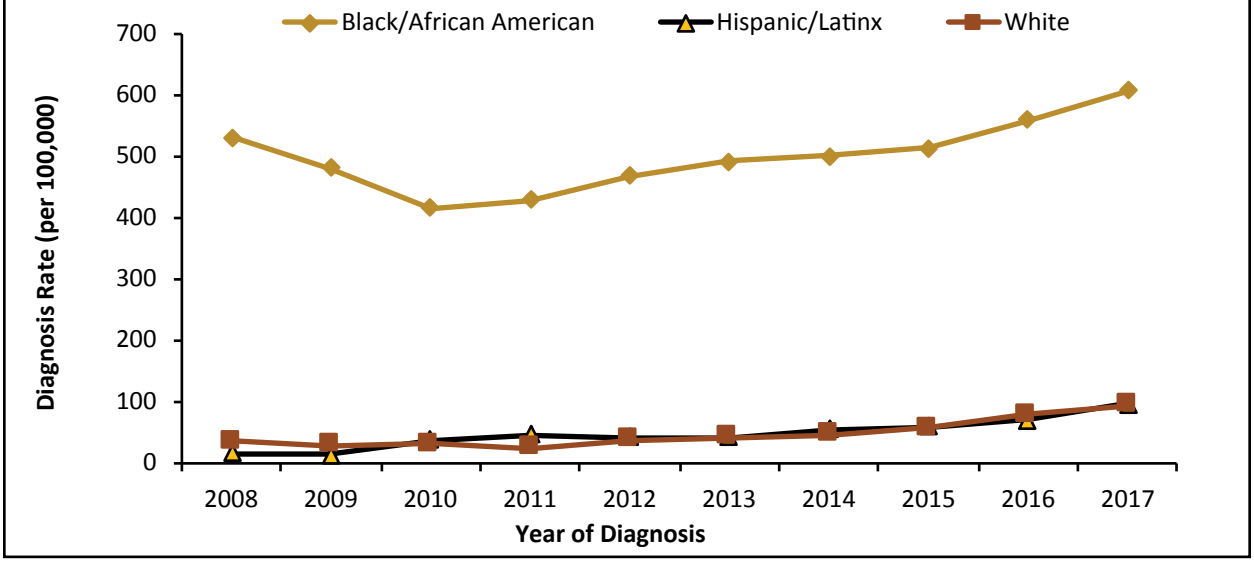
- In 2017, 5,975 gonorrhea diagnoses were reported in females, a 9% increase from the 5,494 diagnoses in 2016. The number of gonorrhea diagnoses in males increased by 14%, from 5,289 diagnoses in 2016 to 6,039 diagnoses in 2017.
- There is a significant racial disparity in gonorrhea diagnoses in Louisiana. In 2017, the rate of new gonorrhea diagnoses among blacks was 605.7 per 100,000, six and a half times higher than among whites and over six times higher than Hispanic/Latinx persons.
- In 2017, 76% of all gonorrhea diagnoses with reported race were black, 21% were white, and 2% were Hispanic/Latinx. Only 32% of Louisiana's population is black.
- In 2017, over 58% of new gonorrhea diagnoses were among youth under 25 years of age. From 2016 to 2017, the number of new diagnoses in persons age 14 and younger decreased 10%, but rose among persons age 15 and older. Increases in the number of diagnoses ranged from 4% in persons age 45 and older to 22% in persons age 30-34 and age 35-39.

Trends in Gonorrhea Diagnosis Rates by Sex at Birth
Louisiana, 2008-2017



- In 2017, the male gonorrhea diagnosis rate of 263.8 per 100,000 males surpassed the female diagnosis rate of 249.5 per 100,000 females. 2017 marks the second year in a row that the male diagnosis rate exceeded the female diagnosis rate in Louisiana.
- The difference between the female and male diagnosis rates was greatest in 2011. Since 2013, the male diagnosis rate has increased 60% to its current height in 2017.

Trends in Gonorrhea Diagnosis Rates by Race/Ethnicity
Louisiana, 2008-2017



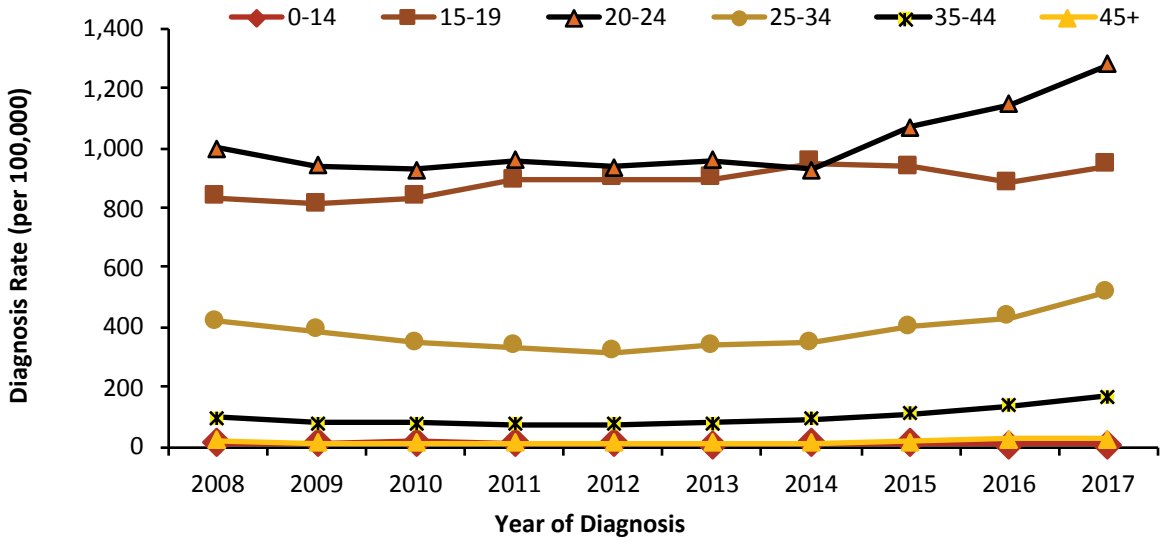
- The gonorrhea rate for blacks has increased steadily over the past seven years, from a low of 414.4 per 100,000 in 2010 to a high of 605.7 per 100,000 in 2017. The rate also rose in Hispanic/Latinx persons, from a low of 13.5 per 100,000 in 2009 to a high of 95.5 per 100,000 in 2017.
- The diagnosis rate for blacks has consistently been higher than the rate for other race/ethnicities. The rate of gonorrhea has consistently exceeded 400 per 100,000 blacks, while the rate for whites and Hispanic/Latinx persons has remained under 100 per 100,000 over the past ten years.

Race/Ethnicity of Persons Diagnosed with Gonorrhea by Sex at Birth Louisiana, 2017			
	Cases	**Percent**	**Rate***
Total	**12,014**	**100%**	**256.5**
Female	**5,975**	**49.7%**	**249.5**
American Indian/Alaskan Native	17	0.3%	111.3
Asian/Pacific Islander	15	0.3%	34.2
Black/African American	4,502	75.4%	568.6
Hispanic/Latina	91	1.5%	79.8
White	1,345	22.5%	96.4
Other/ Multi-race	1	0.0%	-
Unknown	*4*	*0.1%*	-
Male	**6,039**	**50.3%**	**263.8**
American Indian/Alaskan Native	11	0.2%	73.9
Asian/Pacific Islander	41	0.7%	95.7
Black/African American	4,619	76.6%	646.9
Hispanic/Latino	143	2.4%	109.0
White	1,217	20.2%	90.0
Other/ Multi-race	2	0.0%	-
Unknown	*6*	*0.1%*	-

* Rate per 100,000

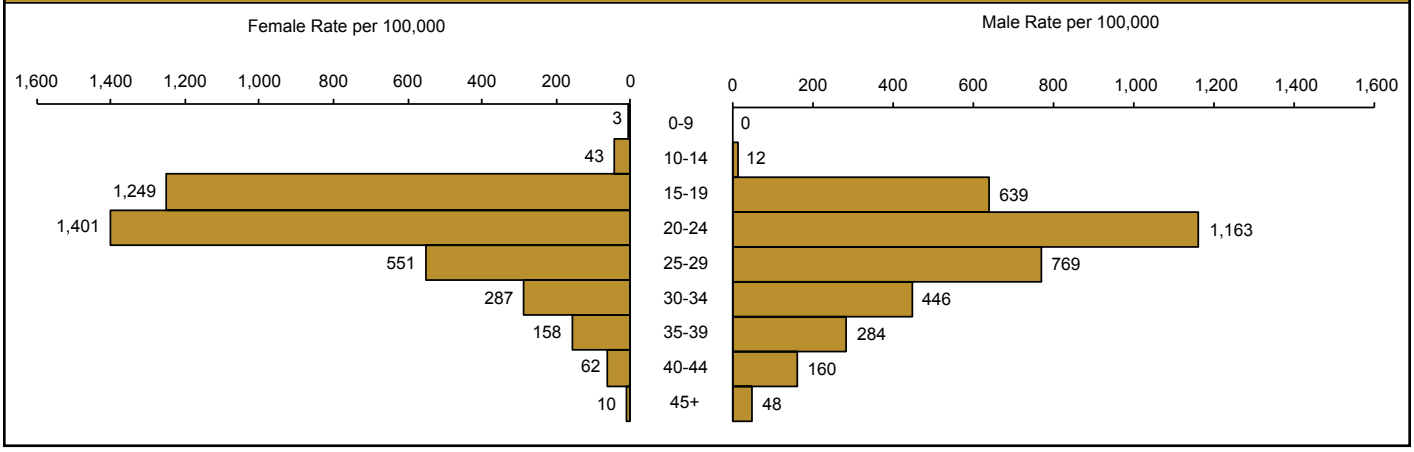
- In 2017, 75% of females and 77% of males with reported race were black and 23% of females and 20% of males were white.
- The gonorrhea diagnosis rate was 12% higher in black males than in black females and the diagnosis rate was 27% higher in Hispanic/Latino males than in Hispanic/Latina females. Among whites, the gonorrhea diagnosis rate was 7% higher in females than males.

Trends in Gonorrhea Diagnoses by Age Group
Louisiana, 2008-2017



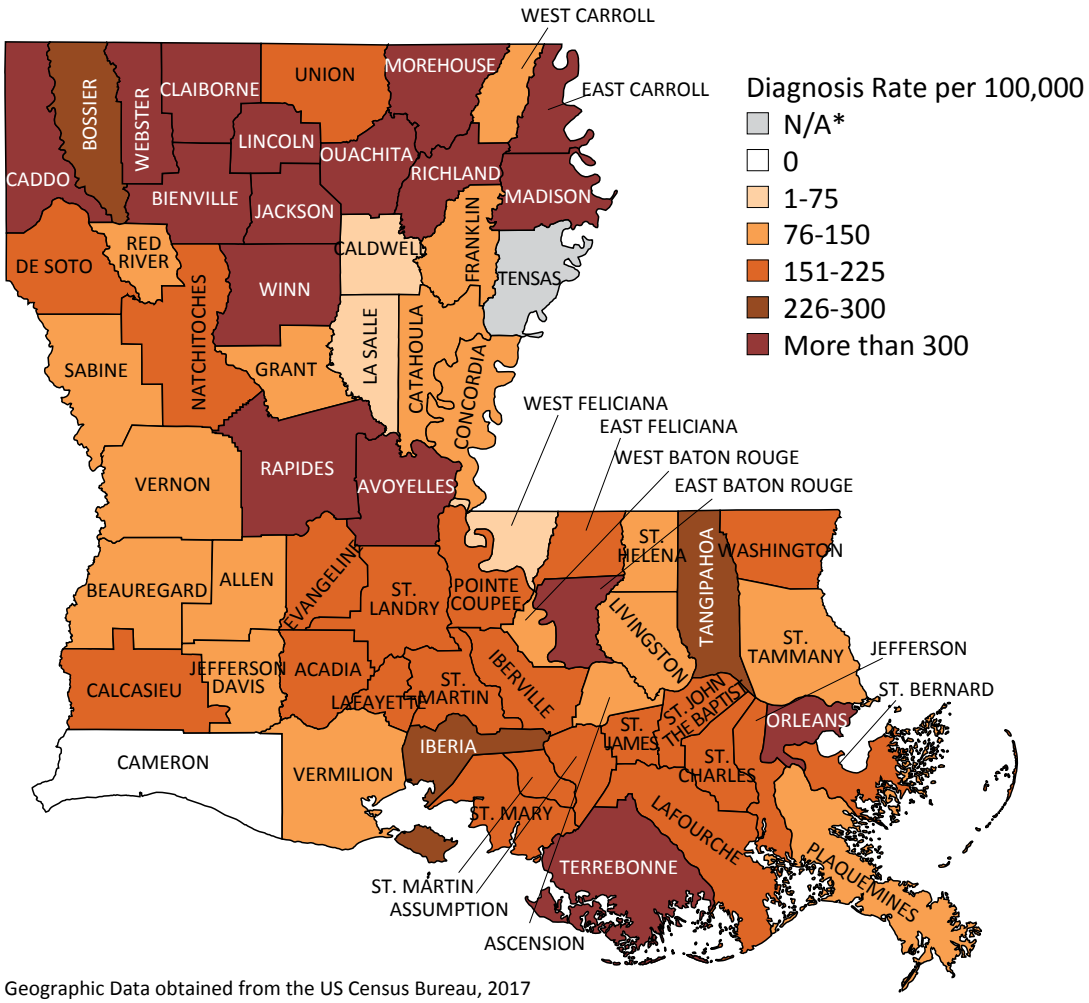
- The highest number of gonorrhea diagnoses occur in persons aged 20-24, accounting for an average of 36% of Louisiana's gonorrhea diagnoses since 2008. Persons aged 15-19 made up an additional 29% of diagnoses over the past 10 years.
- From 2014 to 2017, the gonorrhea diagnosis rate has increased nearly 38% among persons age 20-24 from 927.4 per 100,000 to 1,279.4 per 100,000.

Gonorrhea Diagnosis Rates by Age and Sex at Birth
Louisiana, 2017



- In 2017, the highest age specific gonorrhea rate was among 20-24 year old females, followed by 15-19 year old females.
- Among males in 2017, the highest age-specific rate was among 20-24 year olds, followed by males age 25-29. Among persons 25 and older, the diagnosis rate in males was higher than in females.

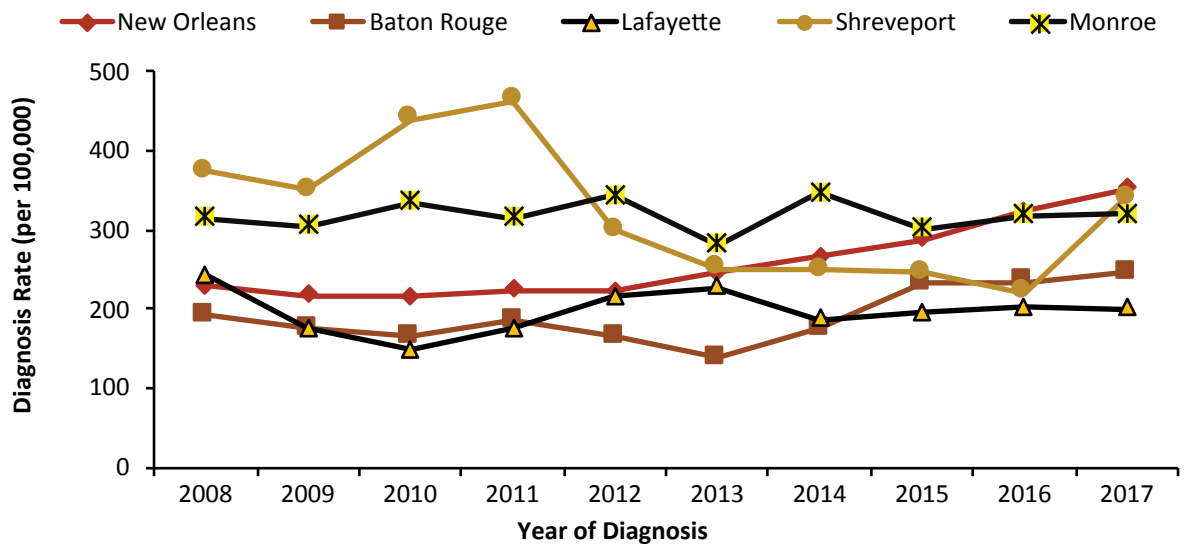
Gonorrhea Diagnosis Rates by Parish, Louisiana, 2017



Geographic Data obtained from the US Census Bureau, 2017
*Rates derived from numerators less than 5 are not available.

- Gonorrhea diagnosis rates vary by parish in Louisiana. In 2017, there were persons diagnosed with gonorrhea in 63 of the 64 parishes. There were no gonorrhea diagnoses reported in Cameron parish.
- A total of seventeen parishes had a gonorrhea diagnoses rate greater than 300 per 100,000 (Avoyelles, Bienville, Caddo, Claiborne, East Baton Rouge, East Carroll, Jackson, Lincoln, Madison, Morehouse, Orleans, Ouachita, Rapides, Richland, Terrebonne, Winn, and Webster), increasing from seven parishes in 2016.
- Additional breakdowns by race/ethnicity and parish can be found in the Appendix.

Trends in Gonorrhea Diagnosis Rates by Selected Region
Louisiana, 2008-2017



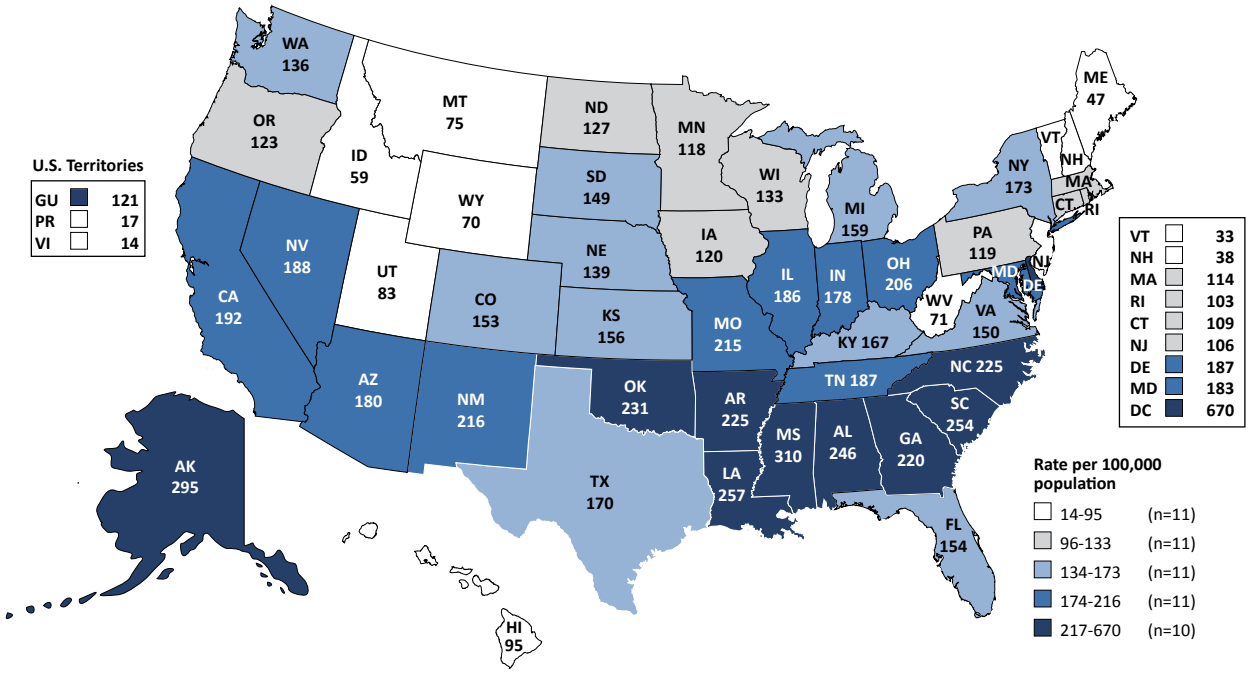
- In 2014 and 2015, the New Orleans region ranked 2nd for gonorrhea diagnosis rates. Since 2016, the New Orleans region has had the highest gonorrhea diagnosis rate.
- Until 2012, the gonorrhea diagnosis rate was highest in the Shreveport region. In 2017, Shreveport had the 2nd highest rate. From 2012 to 2015, the Monroe region had the highest gonorrhea rate, decreasing to 2nd in 2016 and to 3rd in 2017.

New Gonorrhea Diagnoses by Region and Year
Louisiana, 2013-2017

	2013		2014		2015		2016		2017	
Louisiana	**8,669**	**%**	**8,978**	**%**	**10,274**	**%**	**10,783**	**%**	**12,014**	**%**
1-New Orleans	2,156	25%	2,363	26%	2,568	25%	2,900	27%	3,170	26%
2-Baton Rouge	933	11%	1,187	13%	1,583	16%	1,600	15%	1,683	14%
3-Houma	623	7%	553	6%	723	7%	786	7%	853	7%
4-Lafayette	1,347	16%	1,123	13%	1,189	12%	1,227	11%	1,217	10%
5-Lake Charles	324	4%	310	3%	489	5%	428	4%	513	4%
6-Alexandria	483	6%	428	5%	525	5%	660	6%	739	6%
7-Shreveport	1,373	16%	1,358	15%	1,339	13%	1,194	11%	1,840	15%
8-Monroe	1,002	12%	1,233	14%	1,066	10%	1,129	10%	1,125	9%
9-Hammond/Slidell	388	4%	408	5%	671	7%	849	8%	869	7%
Unknown	*40*	*<1%*	*15*	*<1%*	*121*	*1%*	*10*	*<1%*	*5*	*<1%*

- In 2017, the New Orleans region had the highest number of gonorrhea diagnoses, followed by the Shreveport region. From 2013 to 2017, the New Orleans region had between 25% and 27% of all gonorrhea diagnoses in Louisiana.

Gonorrhea Diagnosis Rates in the United States (2017)[xxiii]



- According to the most recent CDC report, there were 555,608 new gonorrhea diagnoses reported in the United States in 2017, for a national gonorrhea diagnosis rate of 171.9 diagnoses per 100,000 population. In 2016, the national gonorrhea diagnosis rate was 145.0 per 100,000 population.[xxiii]
- The national gonorrhea diagnosis rate increased 19% from 2016 to 2017.[xxiii]
- Nationally, the gonorrhea diagnosis rate in males remained higher than the rate in females in 2017, rising 19% from 2016. The national rate in females increased 18%. Potential reasons for the increase in males include increased disease transmission and detection. This increase may also be due to changes in testing technology, more sensitive tests, and changes in reporting practices.[xxiii]
- In 2017, Louisiana ranked 3rd in the nation for gonorrhea diagnosis rates (256.7 per 100,000). Mississippi (309.8 per 100,000) and Alaska (295.1 per 100,000) ranked 1st and 2nd respectively in 2017.[xxiii] The District of Columbia has the highest rate in the nation but is not included in national state rankings.
- Louisiana's 2017 gonorrhea diagnosis rate was 1.5 times greater than the national rate.[xxiii]

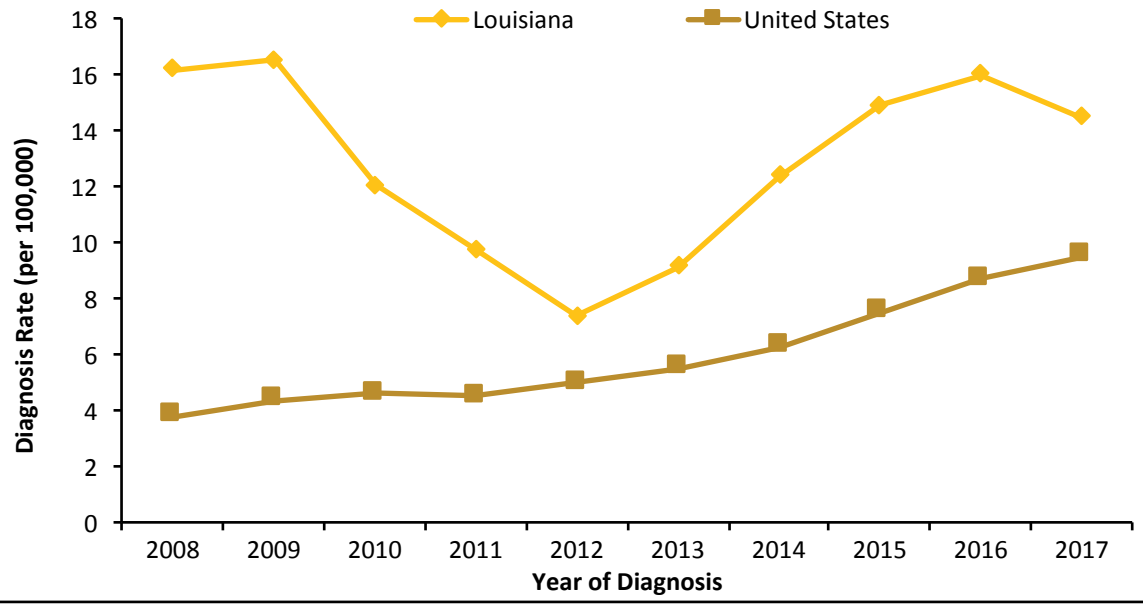
Primary & Secondary Syphilis

Syphilis is one of the three most commonly diagnosed STDs. It is caused by the bacterium *Treponema pallidum* and is typically transmitted through contact with an infected genital ulcer, though ulcers can be found in other sites on the body. These ulcers also facilitate the sexual transmission and contraction of HIV. The primary and secondary stages of syphilis are the most infectious stages.[xxiii] If left untreated, syphilis can cause serious health problems that may include neurologic involvement. Pregnant women with untreated syphilis may experience stillbirth or give birth to a child with congenital defects. Penicillin G is the preferred drug for treating all stages of syphilis. The preparation, dosage, and length of treatment depend on the stage and clinical manifestation of the disease.[xxiv]

10 Year Trends in P&S Syphilis Diagnoses

In 2017 there were 679 new P&S syphilis diagnoses, a 10% decrease compared to 750 diagnoses in 2016. From 2009 to 2017, the P&S syphilis diagnosis rate has ranged from a low of 7.4 per 100,000 in 2012 to a high of 16.5 per 100,000 in 2009. In 2016, Louisiana had the highest number of new P&S syphilis diagnoses in past decade. From 2006 to 2011 and from 2015 to 2016, Louisiana had the highest P&S syphilis rate in the nation.[xxiii]

P&S Syphilis Diagnosis Rates
Louisiana and the United States, 2008-2017



- In 2017, the P&S syphilis diagnosis rate in Louisiana was 14.5 per 100,000 population, which was 1.5 times the national rate of 9.5 per 100,000 population.
- Across the nation, the rate of P&S syphilis has increased two and a half times in the past ten years. From 2012 to 2016, Louisiana experienced its own significant rate increase, but in 2017 had a 10% decrease.

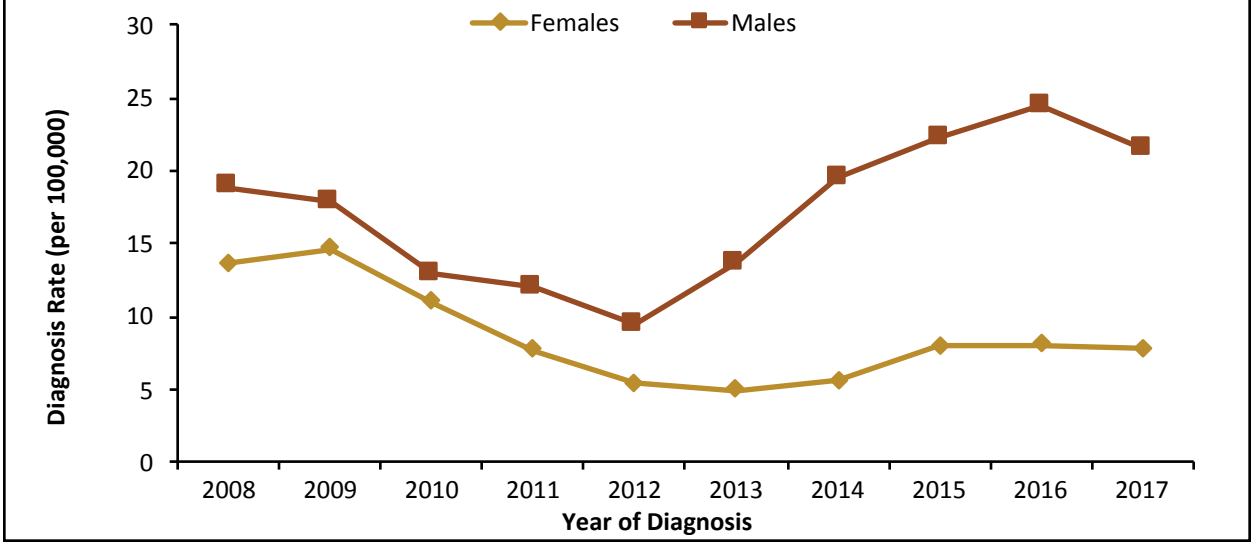
P&S Syphilis Diagnoses by Sex at Birth, Race/Ethnicity, and Age at Diagnosis

Characteristics of Persons Diagnosed with P&S Syphilis Louisiana, 2017			
	Cases	Percent	Rate*
Total	**679**	**100%**	**14.5**
Sex at Birth			
Female	186	27.4%	7.8
Male	493	72.6%	21.5
Race/Ethnicity			
Black/African American	462	68.0%	30.7
Hispanic/Latinx	12	1.8%	4.9
White	194	28.6%	7.1
Other/Multi-race	11	1.6%	-
Age Group			
0-9	0	0.0%	0.0
10-14	3	0.4%	n/a
15-19	56	8.2%	18.7
20-24	171	25.2%	53.5
25-29	164	24.2%	46.8
30-34	109	16.1%	33.1
35-39	68	10.0%	21.9
40-44	40	5.9%	14.9
45+	68	10.0%	3.6

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

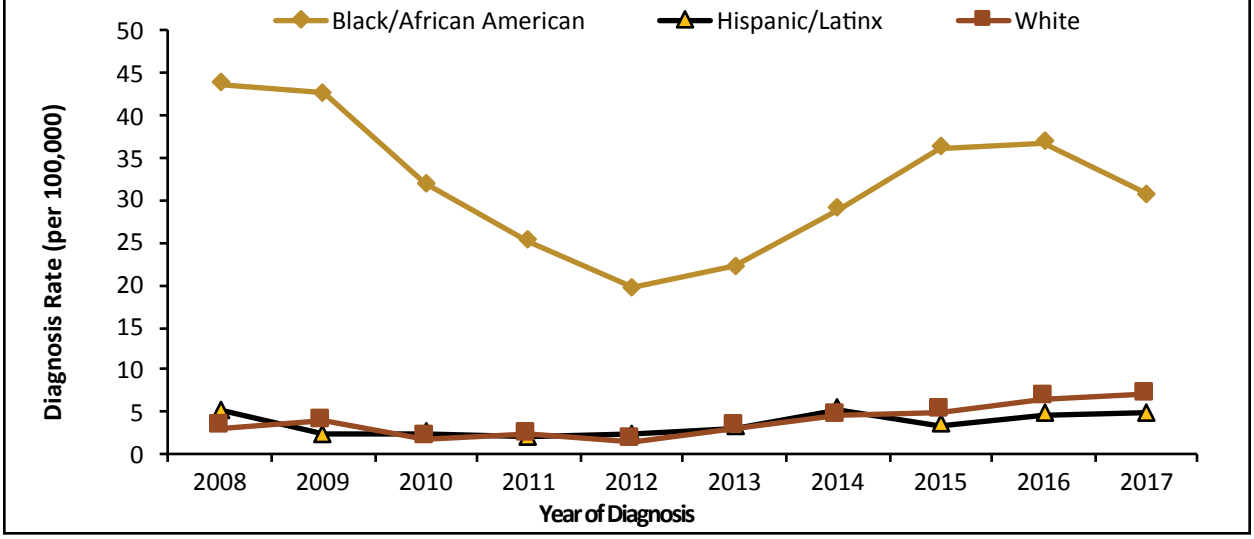
- In 2017, 186 females were diagnosed with P&S syphilis, a 3% decrease from the 192 diagnoses in 2016. The number of males diagnosed with P&S syphilis in Louisiana decreased 12%, from 558 diagnoses in 2016 to 493 diagnoses in 2017.
- There is a significant racial disparity in syphilis diagnoses in Louisiana. In 2017, the rate of new P&S syphilis diagnoses among blacks was 30.7 per 100,000 blacks, almost four and a half times higher than among whites and over six times higher than among Hispanic/Latinx persons.
- In 2017, 68% of all P&S syphilis diagnoses were black, 29% were white, and less than 2% were Hispanic/Latinx. Only 32% of Louisiana's population is black.
- A large decrease in the number of new diagnoses was observed in persons age 15-24. From 2016 to 2017, the number of diagnoses decreased 46% among persons 15-19 years old, and 15% among persons 20-24 years old. Despite these declines, 34% of new P&S syphilis diagnoses were among persons under 25 years of age in 2017.

Trends in P&S Syphilis Diagnosis Rates by Sex at Birth
Louisiana, 2008-2017



- The 2017 male P&S syphilis diagnosis rate of 21.5 per 100,000 males was almost three times greater than the female rate of 7.8 per 100,000 females.
- From 2016 to 2017, the P&S syphilis diagnosis rate decreased 12% in males and remained level in females. The greatest gap in rates between males and females was observed in 2016.

Trends in P&S Syphilis Diagnosis Rates by Race/Ethnicity
Louisiana, 2008-2017



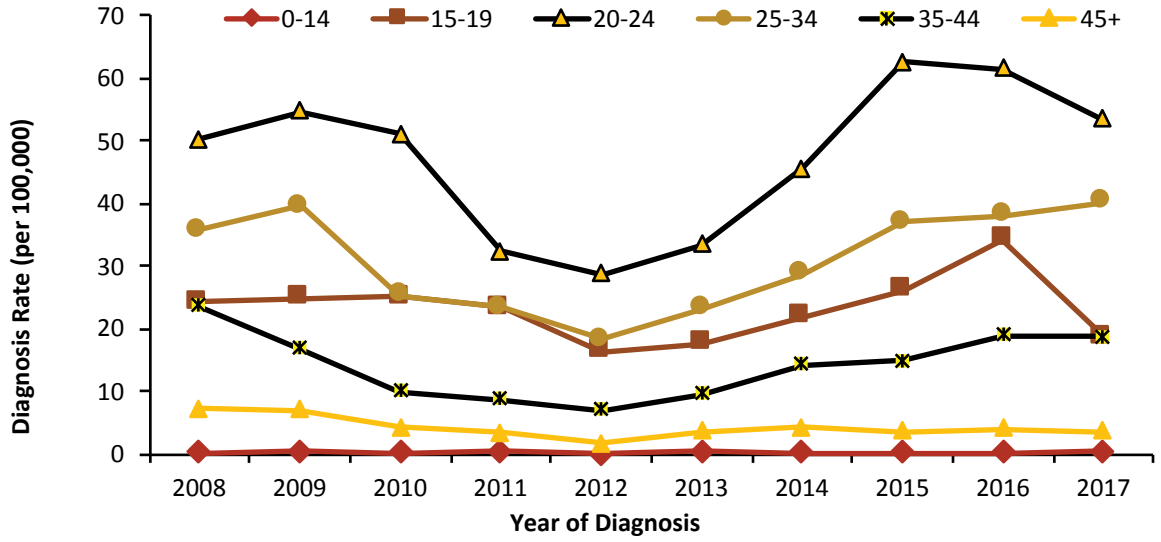
- The P&S syphilis rate among blacks has varied greatly over the past 10 years, from a high of 43.7 per 100,000 in 2008 to a low of 19.6 per 100,000 in 2012. The rate has also fluctuated in whites, increasing over four times from a low of 1.6 per 100,000 in 2012 to a high of 7.1 per 100,000 in 2017.
- The P&S syphilis diagnosis rate for blacks nearly doubled from 2012 to 2016, rising from 19.6 per 100,000 to 36.7 per 100,000. From 2016 to 2017, the diagnosis rate among blacks decreased 16% to 30.7 per 100,000.

Race/Ethnicity of Persons Diagnosed with P&S Syphilis by Sex at Birth Louisiana, 2017			
	Cases	Percent	Rate*
Total	**679**	**100%**	**14.5**
Female	**186**	**27.4%**	**7.8**
American Indian/Alaskan Native	2	1.1%	n/a
Asian/Pacific Islander	0	0.0%	0.0
Black/African American	159	85.5%	20.1
Hispanic/Latina	0	0.0%	0.0
White	25	13.4%	1.8
Other/Multi-race	0	0.0%	-
Male	**493**	**72.6%**	**21.5**
American Indian/Alaskan Native	3	0.6%	n/a
Asian/Pacific Islander	6	1.2%	14.0
Black/African American	303	61.5%	42.4
Hispanic/Latino	12	2.4%	9.1
White	169	34.3%	12.5
Other/Multi-race	0	0.0%	-

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

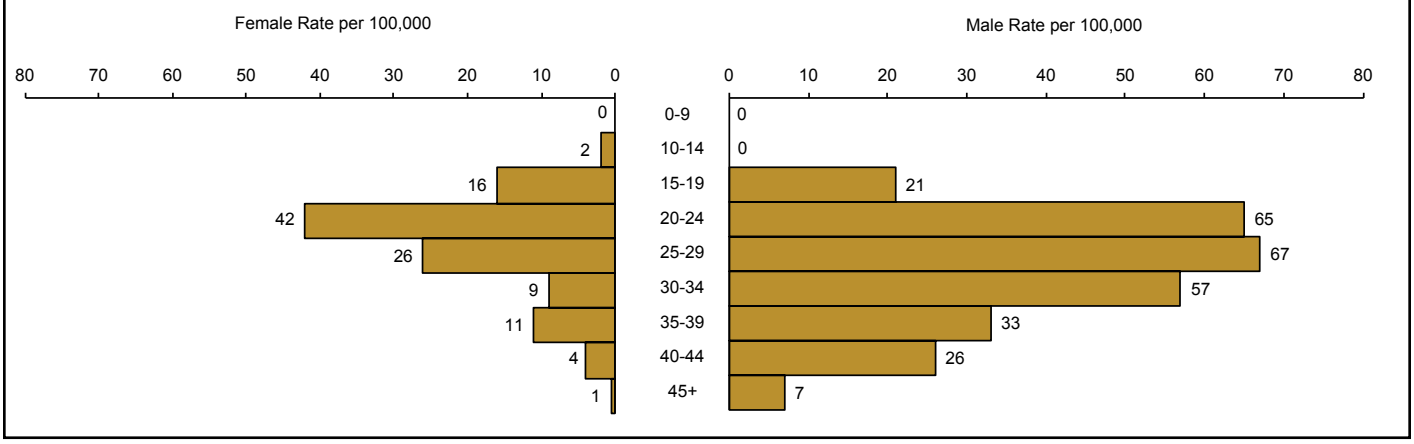
- In 2017, among P&S syphilis diagnoses in females, 86% were black and 13% were white. Of P&S syphilis diagnoses in males, 62% were black, 34% were white, and 2% were Hispanic/Latino.
- The diagnosis rate of P&S syphilis in black males was over two times higher than the rate in black females, and the P&S syphilis rate in white males was almost seven times higher than the rate in white females.

Trends in P&S Syphilis Diagnoses by Age Group
Louisiana, 2008-2017



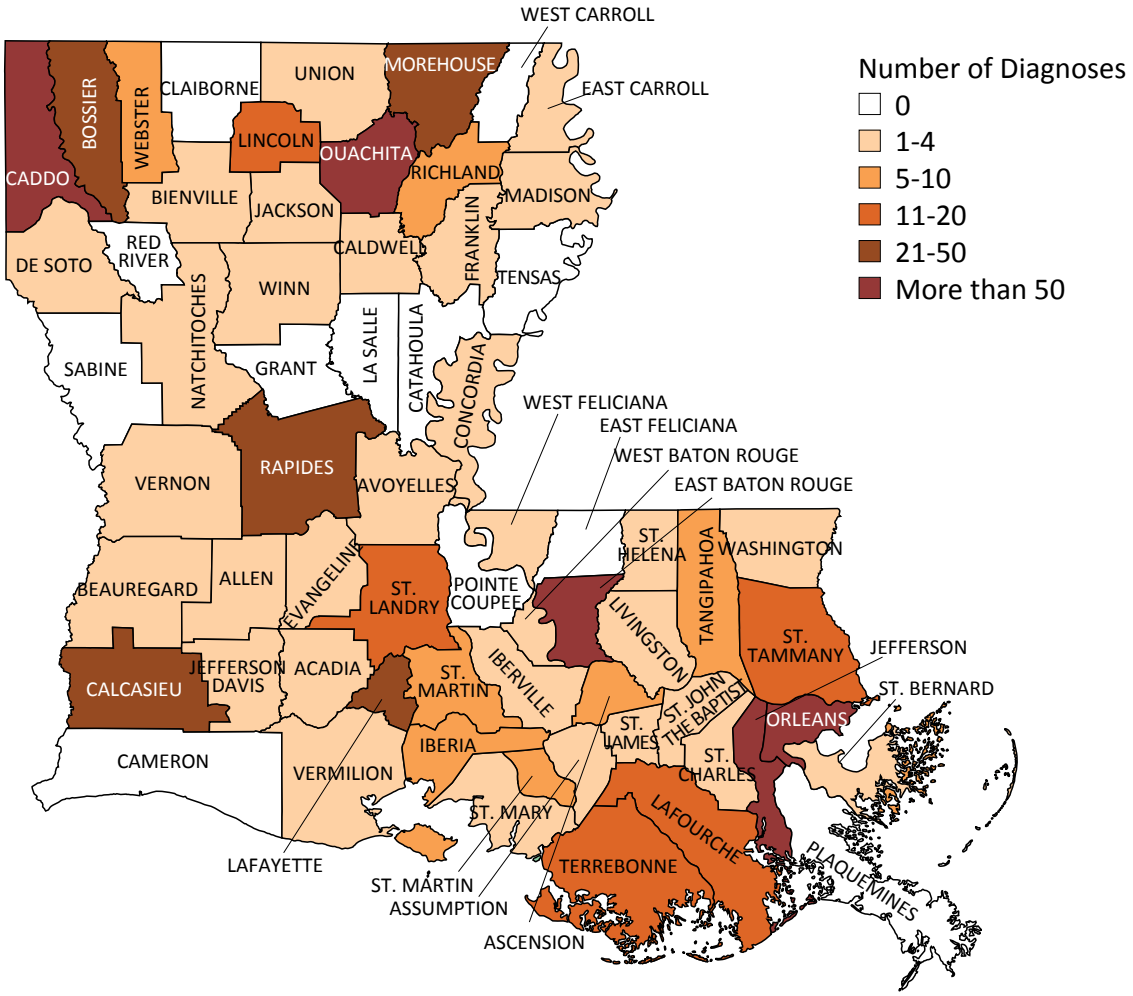
- The highest number of P&S syphilis diagnoses typically occurs in persons age 20-24, accounting for an average of 33% of Louisiana diagnoses since 2008. Persons aged 25-34 made up an additional 27% of diagnoses over the last 10 years.
- While the majority of age groups experienced a rate decrease from 2016 to 2017, persons age 25-34 experienced a 5% increase in the number of new diagnoses in 2017.

P&S Syphilis Diagnosis Rates by Age and Sex at Birth
Louisiana, 2017



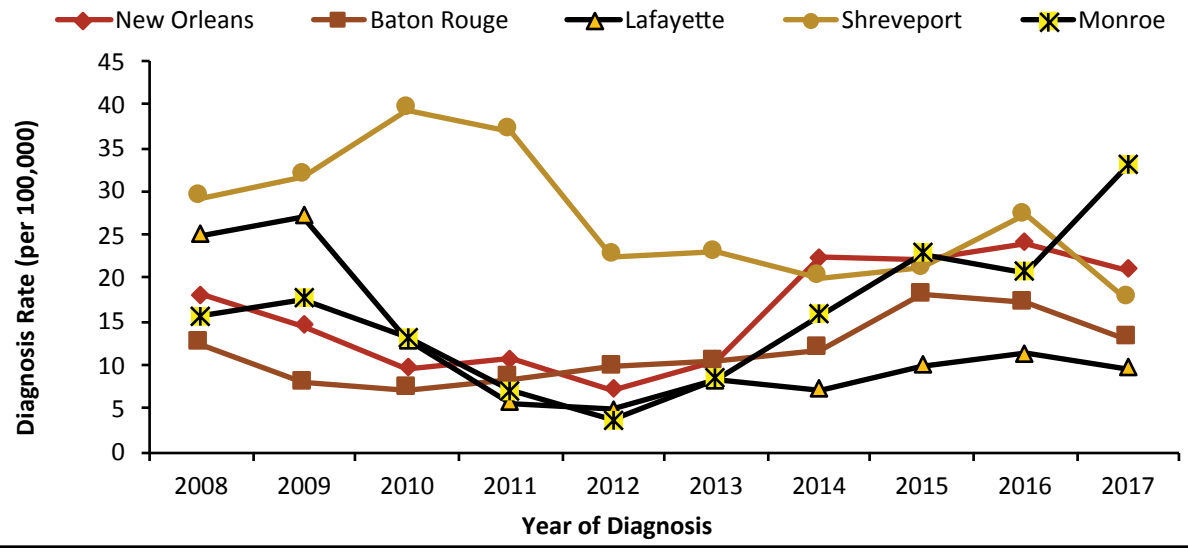
- In 2017, the highest age specific rate was among 25-29 year old males, followed by 20-24 year old males.
- Among females in 2017, the highest age-specific rate was among 20-24 year olds, followed by females age 25-29.

Number of P&S Syphilis Diagnoses by Parish, Louisiana, 2017



- The number of P&S syphilis diagnoses varied by parish in Louisiana. In 2017, there were persons diagnosed with P&S syphilis in 52 of Louisiana's 64 parishes.
- A total of five parishes had P&S syphilis diagnosis counts greater than 50 (Caddo, East Baton Rouge, Jefferson, Orleans and Ouachita). These five parishes accounted for 54% of all P&S syphilis diagnoses in 2017.
- Additional breakdowns by race/ethnicity and parish can be found in the Appendix.

Trends in P&S Syphilis Diagnosis Rates by Selected Region
Louisiana, 2008-2017



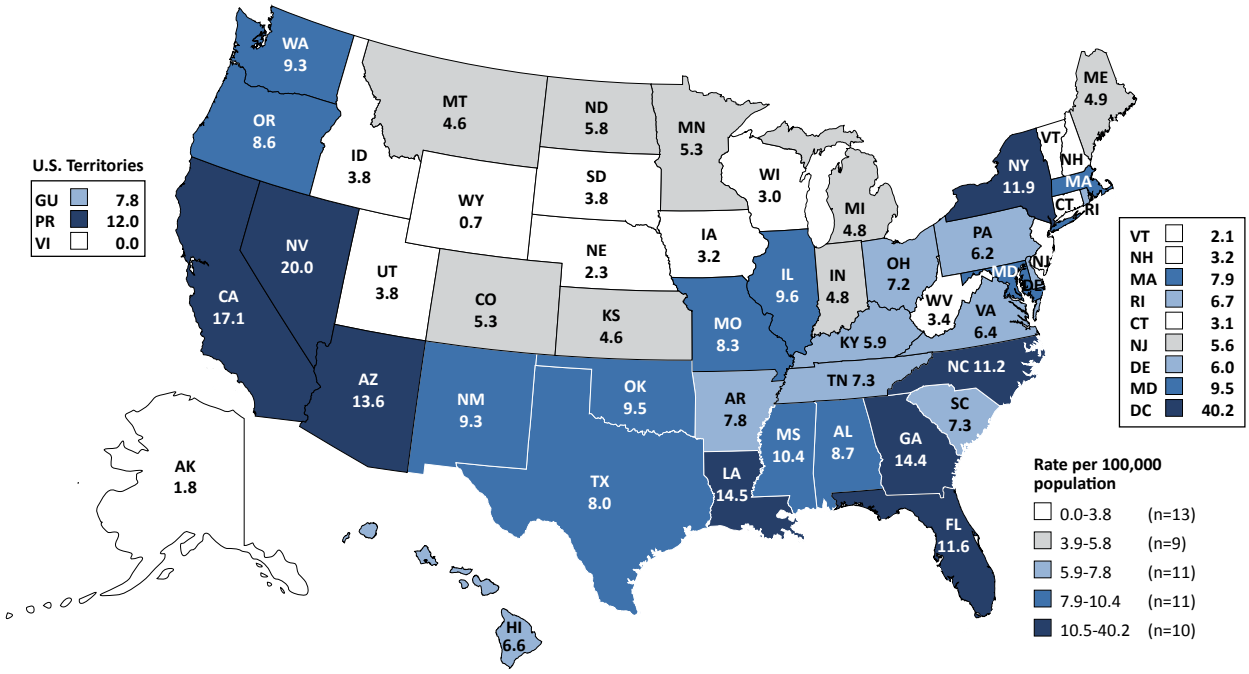
- In 2017, the P&S syphilis diagnosis rate increased 60% in the Monroe region, increasing from 3rd in the state in 2016 to the 1st in 2017.
- The Shreveport region consistently ranks in the top three for P&S syphilis rates. After ranking 1st in 2016, Shreveport dropped to 3rd in 2017.
- From 2014 to 2015, the New Orleans region had the highest P&S syphilis rate in the state but dropped to 2nd in 2016 and 2017.

New P&S Syphilis Diagnoses by Region and Year
Louisiana, 2013-2017

	2013		2014		2015		2016		2017	
Louisiana	**423**	**%**	**575**	**%**	**696**	**%**	**750**	**%**	**679**	**%**
1-New Orleans	93	22%	199	35%	199	29%	216	29%	189	28%
2-Baton Rouge	70	17%	80	14%	123	18%	117	16%	90	13%
3-Houma	21	5%	54	9%	43	6%	56	7%	41	6%
4-Lafayette	49	12%	43	7%	60	9%	69	9%	59	9%
5-Lake Charles	7	2%	6	1%	14	2%	21	3%	26	4%
6-Alexandria	13	3%	10	2%	34	5%	30	4%	33	5%
7-Shreveport	126	30%	110	19%	115	17%	148	20%	95	14%
8-Monroe	30	7%	56	10%	81	12%	73	10%	116	17%
9-Hammond/Slidell	14	3%	17	3%	27	4%	20	3%	30	4%

- In 2017, the number of new diagnoses was highest in the New Orleans region. From 2013 to 2014, the number of P&S syphilis diagnoses more than doubled in this region.
- From 2016 to 2017, the number of P&S syphilis diagnoses in the Shreveport region decreased by 36%, the largest decrease in the state.

P&S Syphilis Diagnosis Rates in the United States (2017)[xxiii]



- According to the most recent CDC report, there were 30,644 new P&S syphilis diagnoses reported in the United States in 2017, for a national P&S syphilis diagnosis rate of 9.5 diagnoses per 100,000 population. In 2016, the national P&S syphilis diagnosis rate was 8.6 per 100,000 population.[xxiii]
- The national P&S syphilis diagnosis rate increased by 10.5% from 2016 to 2017 and has increased nearly 73% from 2013 to 2017, when the national P&S syphilis diagnosis rate was 5.5 per 100,000 population.[xxiii]
- Nationally, the female diagnosis rate increased more than the male rate, rising 21% from 2016 to 2017 in females, and 9% in males. However, the rate of P&S syphilis in males still far exceeds that seen in females, accounting for nearly 88% of all P&S syphilis diagnoses.[xxiii]
- In 2017, Louisiana ranked 3rd in the nation for P&S syphilis diagnosis rates (14.5 per 100,000). Nevada (20.0 per 100,000) and California (17.1 per 100,000) ranked 1st and 2nd respectively in 2017.[xxiii] The District of Columbia had the highest rate in the nation but is not included in national state rankings.
- Louisiana's 2017 P&S syphilis rate was nearly 1.5 times greater than the national rate.[xxiii]

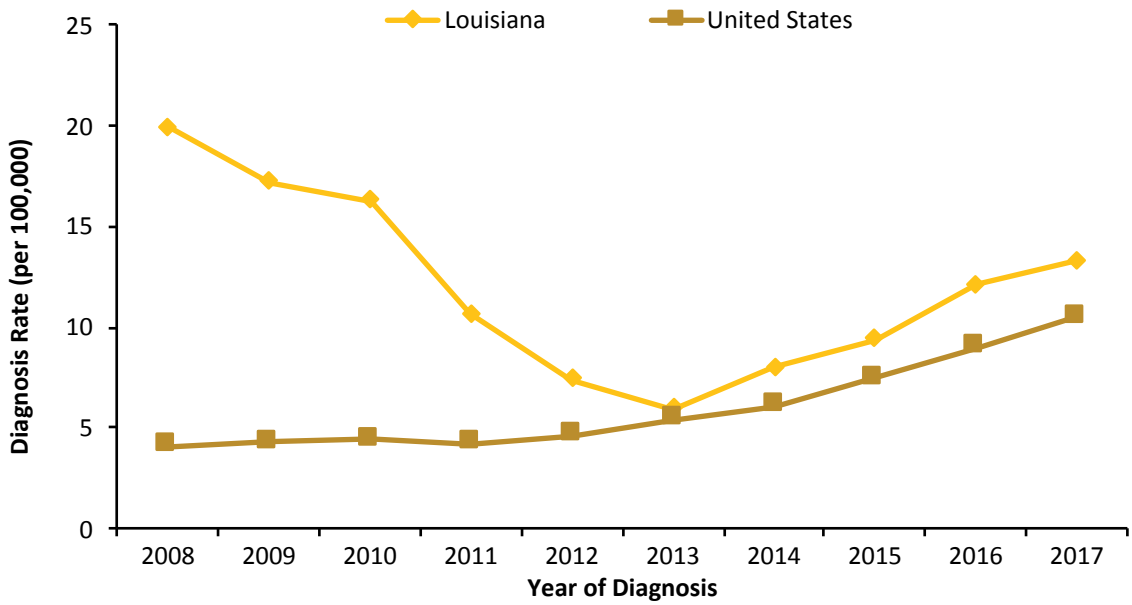
Early non-Primary non-Secondary Syphilis

Early non-P&S syphilis is defined as an infection which has occurred within 12 months of diagnosis without any signs or symptoms of P&S syphilis. If not detected and treated early, syphilis may lead to long-term health problems including blindness, dementia, paralysis, and damage to internal organs. Also, in pregnant women, monitoring of all stages of syphilis is important because undetected infections can lead to stillbirth or congenital defects.[xxiii] In Louisiana, early non-P&S syphilis cases receive the same partner services and follow-up by trained disease intervention specialists as P&S syphilis. This is because early non-P&S syphilis can occur between the primary and secondary stages, or in some cases, if a chancre is not visible upon cursory examination, a case may be misclassified.

Ten Year Trends in Early non-P&S Syphilis Diagnoses

In 2017, there were 623 early non-P&S syphilis diagnoses in Louisiana, a 10% increase compared to 568 diagnoses in 2016. Between 2008 and 2013, Louisiana's early non-P&S syphilis rate decreased 70%, from 19.9 per 100,000 to 6.0 per 100,000. This is likely due to a change in the case definition of early non-P&S syphilis Louisiana fully implemented in 2011. However, since the low of 6.0 per 100,000 in 2013, Louisiana's early non-P&S syphilis rate more than doubled.

Early non-P&S Syphilis Diagnosis Rates
Louisiana and the United States, 2008-2017



- In 2017, the early non-P&S syphilis diagnosis rate in Louisiana was 13.3 per 100,000 population, which was 27% greater than the national rate of 10.5 per 100,000 population.

Early non-P&S Diagnoses by Sex at Birth, Race/Ethnicity, and Age at Diagnosis

Characteristics of Persons Diagnosed with Early non-P&S Syphilis Louisiana, 2017			
	Cases	Percent	Rate*
Total	**623**	**100%**	**13.3**
Sex at Birth			
Female	164	26.3%	6.8
Male	459	73.7%	20.0
Race/Ethnicity			
Black/African American	427	68.5%	28.4
Hispanic/Latinx	24	3.9%	9.8
White	167	26.8%	6.1
Other/Multi-race	5	0.8%	-
Age Group			
0-9	0	0.0%	0.0
10-14	3	0.5%	n/a
15-19	39	6.3%	13.0
20-24	141	22.6%	44.1
25-29	168	27.0%	47.9
30-34	114	18.3%	34.6
35-39	53	8.5%	17.1
40-44	36	5.8%	13.4
45+	69	11.1%	3.7

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

- In 2017, 459 males were diagnosed with early non-P&S syphilis, a 17% increase from 391 males diagnosed in 2016. There were 164 diagnoses of early non-P&S syphilis in females in 2017, a 7% decrease from 177 females diagnosed in 2016.
- The rate of early non-P&S syphilis in males was nearly three times the rate in females in 2017.
- In 2017, 69% of all early non-P&S syphilis diagnoses were black, 27% were white, and 4% were Hispanic/Latinx. Only 32% of Louisiana's population is black.
- There is a significant racial disparity in early non-P&S syphilis diagnoses in Louisiana. In 2017, the early non-P&S syphilis diagnoses rate among blacks was 28.4 per 100,000, over four and a half times higher than among whites and nearly three times higher than among Hispanic/Latinx persons.
- In 2017, nearly half of all early non-P&S syphilis diagnoses were in persons age 20-29. An additional 18% of diagnoses were among persons age 30-34.

Race/Ethnicity of Persons Diagnosed with Early non-P&S Syphilis by Sex at Birth Louisiana, 2017			
	Cases	Percent	Rate*
Total	**623**	**100%**	**13.3**
Female	**164**	**26.3%**	**6.8**
American Indian/Alaskan Native	1	0.6%	n/a
Asian/Pacific Islander	0	0.0%	0.0
Black/African American	127	77.4%	16.0
Hispanic/Latina	3	1.8%	n/a
White	33	20.1%	2.4
Other/Multi-race	0	0.0%	-
Male	**459**	**73.7%**	**20.0**
American Indian/Alaskan Native	1	0.2%	n/a
Asian/Pacific Islander	3	0.7%	n/a
Black/African American	300	65.4%	42.0
Hispanic/Latino	21	4.6%	16.0
White	134	29.2%	9.9
Other/Multi-race	0	0.0%	-

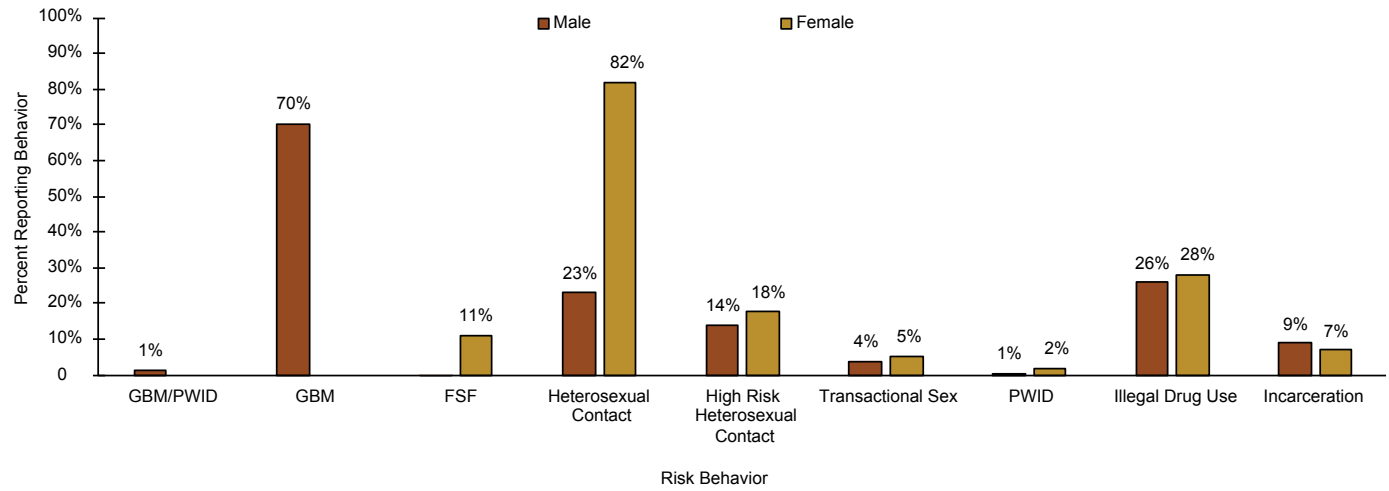
* Rate per 100,000. Rates derived from numerators less than 20 may be unreliable and are not available (n/a) for numerators less than 5.

- In 2017, among early non-P&S syphilis diagnosis in females, 77% were black, 20% were white, and less than 2% were Hispanic/Latina. The diagnosis rate in black females was nearly seven times that in white females.
- Among males, 65% of early non-P&S syphilis diagnoses were black, 29% were white, and nearly 5% were Hispanic/Latino. The diagnosis rate in black males was over four times that in white males and more than two and half times that in Hispanic/Latino males.

Early Syphilis Risk Behaviors

A diagnosis of P&S syphilis or early non-P&S syphilis is also known as early syphilis. In Louisiana, persons with a recent early syphilis diagnosis are interviewed to ensure linkage into treatment and to elicit potentially exposed partners in need of screening. Through the interview process, a person's recent history is recorded to determine sex of sex partners, illicit and/or injection drug use, engagement in transactional sex, and recent history of incarceration. These factors are known to be linked to an increased risk in acquiring syphilis. Risk behavior information was unavailable for 3% of males and 3% of females, and those persons were not included in the analysis below. An individual can have multiple risk factors, thus proportions in the graph below do not sum to 100%.

Risk Behaviors Among Persons Diagnosed with Early Syphilis by Sex at Birth
Louisiana, 2017



GBM = Gay, bisexual, and other men who have sex with men
PWID= Persons who inject drugs
GBM and GBM/PWID are mutually exclusive categories.
High Risk Heterosexual Contact and Heterosexual Contact are mutually exclusive categories.

- A total of 70% of males reported having sex with other men and 37% reported having heterosexual or high-risk heterosexual sex.
- 100% of females with known risk behaviors reported heterosexual or high-risk heterosexual contact and 11% of females reported having sex with other females.
- A greater proportion of females reported high-risk heterosexual contact (18%) such as anonymous partners than males (14%).
- A similar proportion of males (5%) and females (4%) reported transactional sex, which may include providing or receiving drugs, money, shelter, or other goods in exchange for sex.
- Over a quarter of males and females each reported illegal drug use. Among females, 27% of illegal drug users reported the use of stimulants such as crack, cocaine, and/or methamphetamines. Among males, 19% of illegal drug users reported stimulant use. Four-percent of female drug users and 3% of male drug users reported the use of heroin.

Chapter 5

HIV Co-Infection

HIV Co-Infection with STDs and Hepatitis C

HIV shares a number of risk factors with other sexually transmitted diseases (STDs) and the hepatitis C virus (HCV). As a result, persons diagnosed with an STD or HCV are more likely than others to be co-infected with HIV. Co-infection with HIV may introduce additional complications for treatment, increased risk of disease transmission, and accelerated disease progression. The STD/HIV Program routinely conducts matches between Louisiana's HIV, STD, and viral hepatitis registries to monitor the epidemiology of these co-infections in order to evaluate disease transmission risk and determine the need for integrated medical and public health services.

Number and Percent of STD/HCV Diagnoses with HIV Co-infection
Louisiana, 2013-2017

Co-infections	Number of Co-Infections (% of STD or HCV Diagnoses)				
	2013	2014	2015	2016	2017
Chlamydia/HIV	285 (1%)	387 (1%)	439 (1%)	556 (2%)	837 (2%)
Gonorrhea/HIV	276 (3%)	373 (4%)	425 (4%)	683 (6%)	729 (7%)
P&S Syphilis/HIV	113 (27%)	216 (38%)	209 (30%)	221 (30%)	203 (30%)
HCV/HIV*	-	-	-	165 (4%)	205 (3%)

HCV = Hepatitis C Virus; P&S Syphilis = Primary and secondary syphilis
*HCV/HIV co-infection data before 2016 is not provided due to a change in the reporting definition for HCV that went into effect in 2016.

In 2017, HIV co-infection was identified in 2% of new chlamydia diagnoses (n=837), 7% of new gonorrhea diagnoses (n=729), 30% of primary and secondary (P&S) syphilis diagnoses (n=203), and 3% of hepatitis C virus diagnoses (n=205).

HIV and STD Co-infection

Common risk factors for transmission of HIV and STDs include unprotected anal/vaginal sex with anonymous- or multiple partners and sexual activity under the influence of alcohol and/or other drugs. HIV transmission is also more likely to occur during unprotected anal/vaginal sex if one or more sexual partners has sores or lesions present due to an active STD infection.[xxv] Gay, bisexual men, and other men who have sex with men (GBM) are at an elevated risk for both HIV and STD transmission due to a variety of factors: the practice of anal sex among some GBM, which carries a higher risk for STD and HIV transmission compared to other types of sexual activity; a noted decrease in safe sex practices over time; the practice of seeking out sexual partners of the same HIV status thereby creating smaller sexual networks (serosorting); and a complex combination of social barriers to routine HIV/STD screening and medical treatment (e.g., multiple stigmas, socioeconomic status, and mistreatment in the healthcare system).

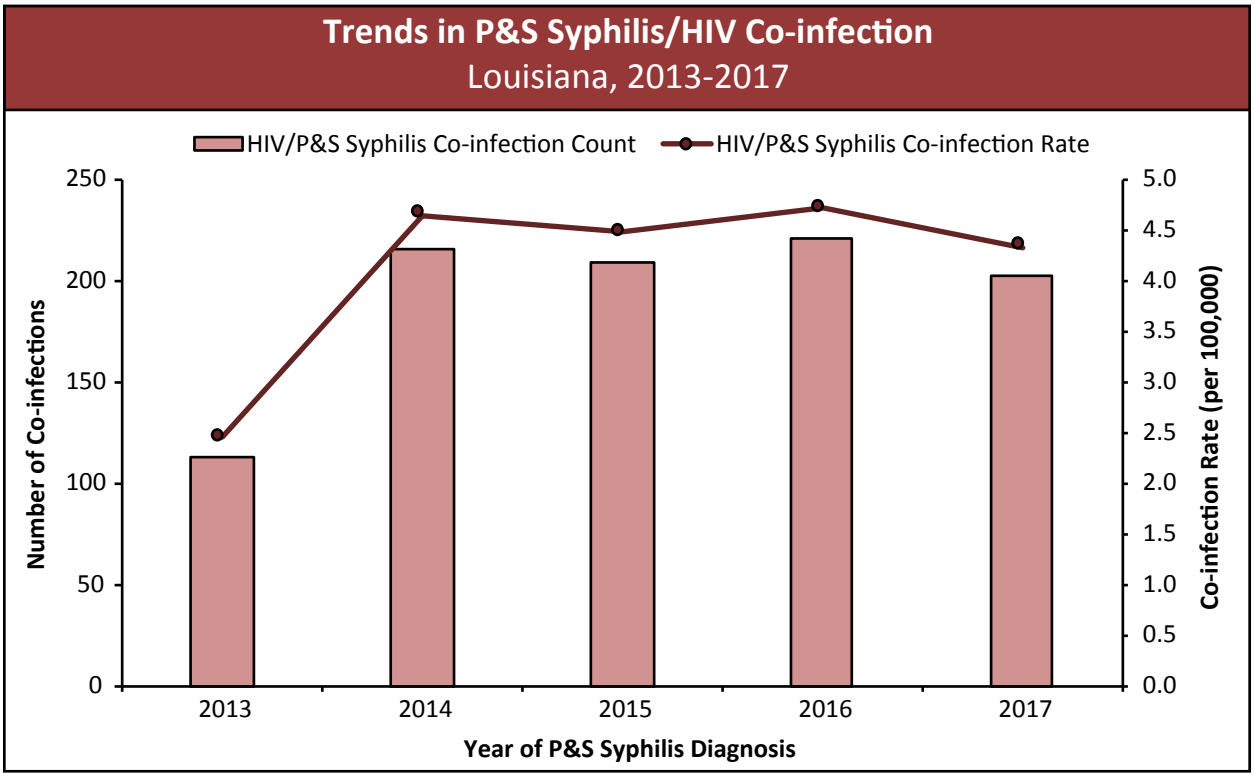
Blacks are also at an elevated risk for acquiring HIV and STDs compared to other racial groups in Louisiana due to a similar combination of social barriers to routine HIV/STD screening and medical treatment that also includes disparate incarceration rates, and being limited to smaller, racially-segregated sexual networks more than other racial groups (see introduction section *Understanding HIV disparities*). For black GBM, the risk of HIV and STD transmission is compounded due to overlapping risk factors experienced by the GBM population and black population; consequently, black GBM currently have some of the highest rates of HIV, STDs, and HIV/STD co-infection.[xxvi]

Syphilis

In Louisiana, the primary and secondary syphilis (P&S syphilis) rate more than doubled between 2012 and 2017, from 7.4 per 100,000 in 2012 to 14.5 per 100,000 in 2017 (see *Chapter 4: Profile of STDs in Louisiana*). Most of this increase occurred in males (sex assigned at birth); in 2013, males had a diagnosis rate that was almost double the rate in females, and by 2017 men had a diagnosis rate that was three times the rate in women. In 2017, gay, bisexual, and other men who have sex with men (GBM) accounted for 50% of diagnoses. According to national data, P&S syphilis rates have rapidly increased around the US, primarily due to increased transmission between GBM. This recent resurgence in P&S syphilis may be linked to an increase in high-risk activity among GBM, such as decreases in condom usage, the use of the internet and cellular phone apps to find sex partners, serosorting and an increase in alcohol and recreational drug use.[xxvii,xxviii]

Persons diagnosed with P&S syphilis are at the highest risk for being co-infected with HIV, compared to other STDs. In 2013, 27% of persons diagnosed with P&S syphilis in Louisiana were also co-infected with HIV, and in 2017, 30% of persons diagnosed with P&S syphilis were also co-infected with HIV. In Louisiana, GBM accounted for 88% of P&S syphilis/HIV co-infections in 2017. In addition, the P&S syphilis/HIV co-infection rate for the state has nearly doubled since 2013 to 4.3 per 100,000 in 2017.

Persons with syphilis/HIV co-infection are at an increased risk for developing syphilis-related complications (*e.g.*, neurosyphilis) and may be at an increased risk for transmitting HIV. As GBM living with HIV are at high risk for syphilis acquisition, CDC recommends that all GBM living with HIV be tested for syphilis upon entering HIV/related medical care and then continually assessed for sexual risk behaviors and tested for syphilis accordingly.[xxix]



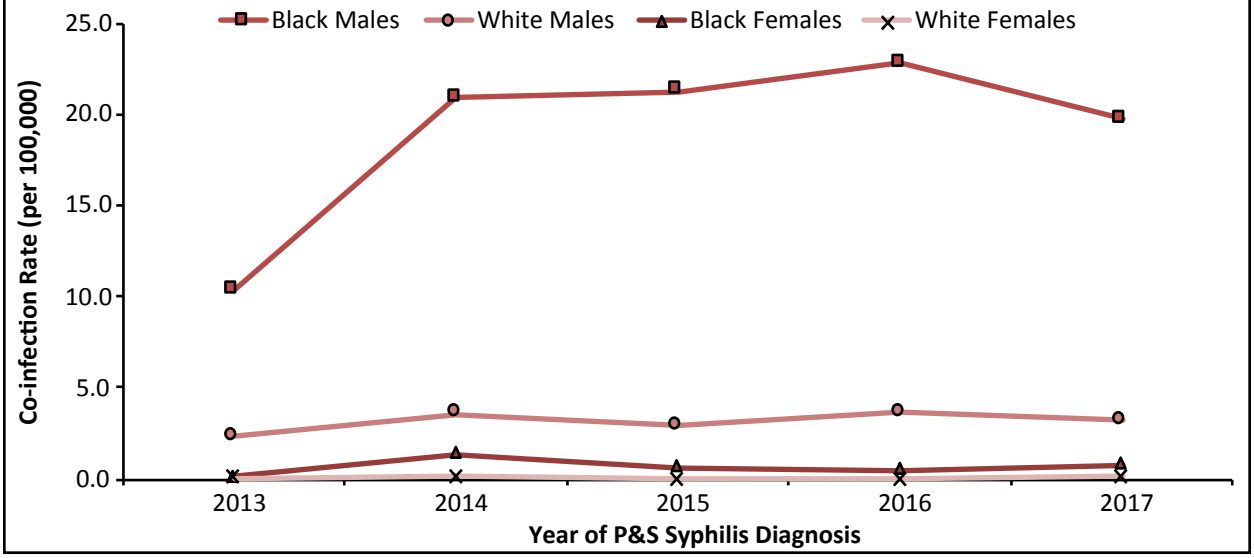
- The number of persons identified with P&S syphilis/HIV co-infection has increased by 80% between 2013 and 2017, from 113 cases in 2013 to 203 cases in 2017.
- From 2013 to 2014, the P&S syphilis/HIV co-infection rate nearly doubled from to 2.4 per 100,000 in 2013 to 4.6 per 100,000 in 2014 and remained stable from 2014 to 2017.

Numbers and Rates of P&S Syphilis/HIV Co-infection by Region Louisiana, 2013-2017					
	Number of Co-infections (Co-infection Rate per 100,000)				
	2013	2014	2015	2016	2017
Louisiana	113 (2.4)	216 (4.6)	209 (4.5)	221 (4.7)	203 (4.3)
Region					
1-New Orleans	43 (4.9)	107 (12.1)	98 (11.0)	102 (11.4)	85 (9.4)
2-Baton Rouge	20 (3.0)	41 (6.0)	47 (6.9)	40 (5.8)	37 (5.4)
3-Houma	6 (1.5)	12 (3.0)	3 (n/a)	12 (3.0)	9 (2.2)
4-Lafayette	10 (1.7)	11 (1.8)	12 (2.0)	14 (2.3)	11 (1.8)
5-Lake Charles	3 (n/a)	4 (n/a)	4 (n/a)	8 (2.7)	7 (2.3)
6-Alexandria	3 (n/a)	2 (n/a)	6 (2.0)	8 (2.6)	5 (1.6)
7-Shreveport	18 (3.3)	24 (4.4)	23 (4.2)	24 (4.4)	27 (5.0)
8-Monroe	7 (2.0)	7 (2.0)	12 (3.4)	11 (3.1)	17 (4.8)
9-Hammond/Slidell	3 (n/a)	8 (1.4)	4 (n/a)	2 (n/a)	5 (0.9)

*Rates derived from numerators less than 5 may be unreliable and are not available (n/a).

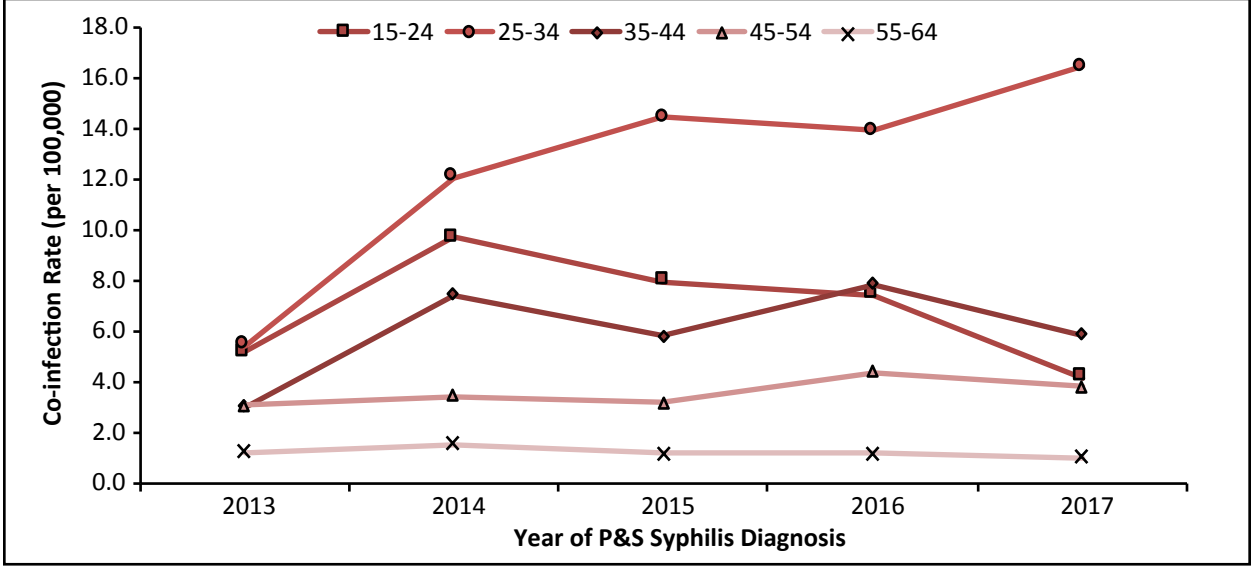
- In 2017, the four regions with the highest P&S syphilis/HIV coinfection rates included New Orleans (9.4 per 100,000), Baton Rouge (5.4 per 100,000), Shreveport (11.8 per 100,000), and Monroe (4.8 per 100,000).
- The Monroe and Shreveport regions were the only regions that experienced a continual increase in P&S syphilis/HIV co-infection rate from 2013-2017. The Monroe region saw the greatest increase in P&S syphilis/HIV co-infection rate from 2013-2017 (146% increase).
- The P&S syphilis/HIV co-infection rate decreased by 22% in both the New Orleans region from 2014-2017 and Baton Rouge region from 2015-2017. From 2016-2017, rate decreases also occurred for the Houma, Lafayette, Alexandria, and Lake Charles regions.

P&S Syphilis/HIV Co-infection Rate by Sex at Birth and Race*
Louisiana, 2013-2017



*Latino males and Latina females are not depicted in the graph as both groups accounted for less than 5 cases each year.

P&S Syphilis/HIV Co-infection Rate by Age
Louisiana, 2013-2017



- In 2013, the P&S syphilis/HIV co-infection rate for black males was 4.5 times greater than for white males. From 2014-2017, the P&S syphilis/HIV co-infection rate for black males was 6-7 times greater than for white males.
- Between 2013 and 2017, the P&S syphilis/HIV co-infection rate increased overall by 91% for black males and by 39% for white males.
- Between 2013 and 2017, persons age 25-34 years old experienced the highest increase in P&S syphilis/HIV co-infection rate (203% increase). This rate increase was more than two times greater than the second highest rate increase which occurred in persons age 35-44 years old (94% increase). During the same period, persons age 15-24 years old and persons age 55-64 years old saw an 18-19% decrease in P&S syphilis/HIV co-infection rate.

Characteristics of Persons with P&S Syphilis/HIV Co-infection Louisiana, 2017			
	Number of Co-infections	**Percent**	**Co-infection Rate (per 100,000)***
Total	**203**	**100%**	**4.3**
Sex at Birth			
Female	8	4%	0.3
Male	195	96%	8.5
Race/Ethnicity			
Black/African American	147	72%	9.8
Hispanic/Latinx	6	3%	2.4
White	45	22%	1.6
Other/Multi-race	5	2%	-
Age Group	**Age at P&S Syphilis Diagnosis**		
Under 15	0	0%	0.0
15-24	26	13%	4.2
25-34	112	55%	16.5
35-44	34	17%	5.9
45-54	22	11%	3.8
55-64	6	3%	1.0
65+	3	1%	n/a
HIV Transmission Risk			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	179	88%	-
Persons Who Inject Drugs (PWID)	16	8%	-
GBM/PWID	5	2%	-
High Risk Heterosexual (HRH)	1	0%	-
Other	2	1.0%	
Timing of P&S Syphilis Diagnosis			
Concurrent P&S Syphilis/HIV Diagnosis**	27	13%	-
1 Month - 2 Years After HIV Diagnosis	50	25%	-
3-10 Years After HIV Diagnosis	76	37%	-
11+ Years After HIV Diagnosis	44	22%	-
Less than 1 year before HIV Diagnosis	6	3%	-

*Rates derived from numerators less than 5 may be unreliable and are not available (n/a).

** Concurrent P&S syphilis/HIV diagnosis is defined as having a confirmed HIV diagnosis within 30 days before or after having a confirmed P&S syphilis diagnosis.

- In 2017, males accounted for 96% of P&S syphilis/HIV co-infections.
- Blacks accounted for 72% of P&S syphilis/HIV co-infections in 2017 even though blacks make up only 32% of Louisiana's population, representing a large racial disparity.
- In 2017, gay, bisexual, and other men who have sex with me (GBM) accounted for half of all P&S syphilis diagnoses in 2017 and 88% of P&S syphilis/HIV co-infections.
- In 2017, 62% of P&S syphilis/HIV co-infections occurred among persons that had been HIV positive for three years or longer.

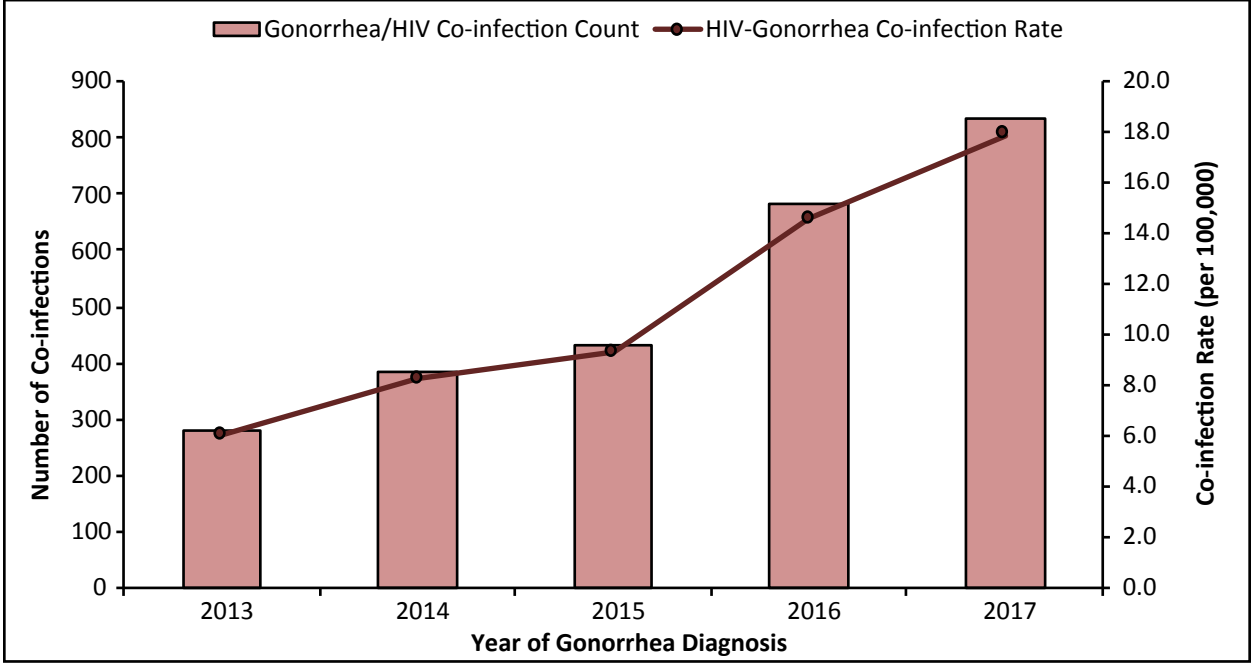
Gonorrhea

Gonorrhea rates in Louisiana have increased by 59% between 2013 and 2017 (see *Chapter 4: Profile of STDs in Louisiana*). While both males and females have experienced increases in gonorrhea rates during this period, men have seen the greatest increase. In 2016, the gonorrhea rate among males surpassed that of females for the first time in Louisiana's history. This disparity widened in 2017.

During the same period, the gonorrhea/HIV co-infection rate tripled from 6.0 per 100,000 in 2013 to 17.9 per 100,000 in 2017. The percentage of gonorrhea diagnoses who were co-infected with HIV grew from 3.2% in 2013 to 7.0% in 2016. GBM accounted for 69% of gonorrhea/HIV co-infections in 2013, and by 2016, GBM accounted for 80% of gonorrhea/HIV co-infections.

Taken together, these trends suggests that GBM are experiencing a growing gonorrhea disparity. This disparity may explain the recent increases in gonorrhea rate for men. Increased gonorrhea transmission among GBM has been associated with the risk factors described in the above sections, as well as lack of routine genital and extragential testing, increases in condomless sex, having multiple anonymous partners, and substance abuse. Recent increases in the utilization of gonorrhea testing of extragential infection sites (e.g., throat and rectum) among GBM in Louisiana may have also contributed to the observed increase in gonorrhea diagnosis rates among GBM.[xxxi]

Trends in Gonorrhea/HIV Co-infection
Louisiana, 2013-2017



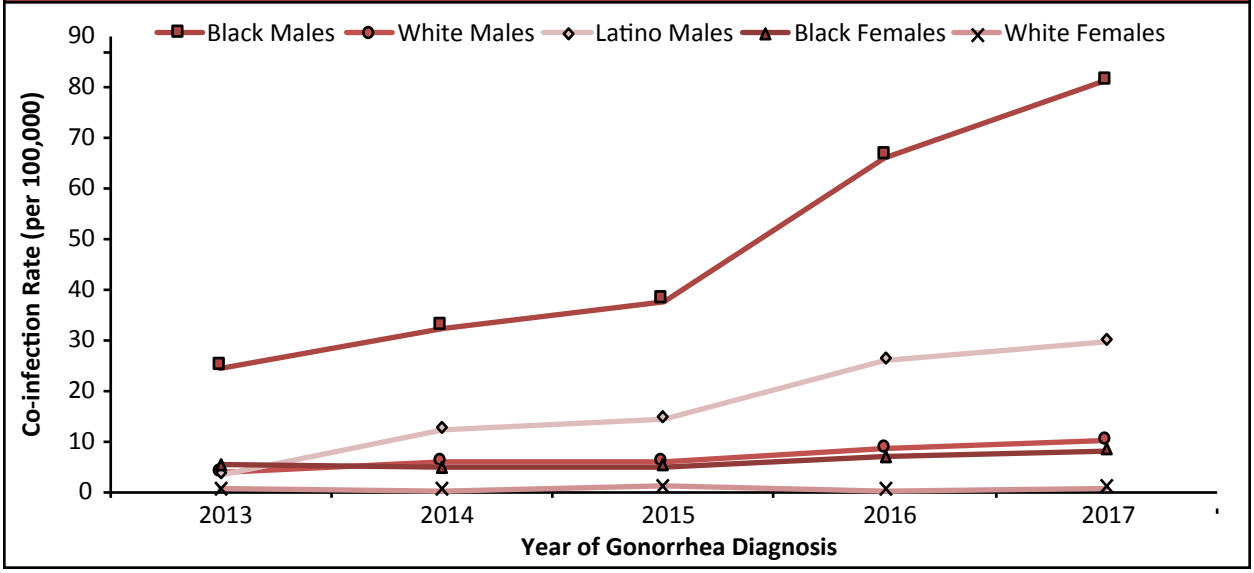
- The number of gonorrhea diagnoses, co-infected with HIV, has more than tripled between 2013 and 2017, from 278 persons in 2013 to 837 persons in 2016.
- From 2013 to 2017, the gonorrhea/HIV co-infection rate almost tripled from a low of 6.0 per 100,000 in 2013 to a high of 17.9 per 100,000 in 2016.

Numbers and Rates of Gonorrhea/HIV Co-infection by Region Louisiana, 2013-2017					
	Number of Co-infections (Co-infection Rate per 100,000)				
	2013	2014	2015	2016	2017
Louisiana	276 (6.0)	373 (8.0)	425 (9.1)	683 (14.6)	729 (15.6)
Region					
1-New Orleans	126 (14.3)	185 (20.8)	206 (23.0)	375 (41.8)	479 (53.1)
2-Baton Rouge	53 (7.8)	87 (12.8)	84 (12.3)	109 (15.9)	118 (17.2)
3-Houma	9 (2.2)	11 (2.7)	17 (4.2)	28 (6.9)	33 (8.2)
4-Lafayette	19 (3.2)	19 (3.2)	35 (5.8)	47 (7.7)	57 (9.4)
5-Lake Charles	10 (3.4)	6 (2.0)	18 (6.0)	12 (4.0)	9 (3.0)
6-Alexandria	5 (1.6)	5 (1.6)	9 (2.9)	13 (4.3)	10 (3.3)
7-Shreveport	28 (5.1)	34 (6.2)	22 (4.0)	56 (10.3)	64 (11.8)
8-Monroe	17 (4.8)	14 (3.9)	15 (4.2)	23 (6.5)	40 (11.4)
9-Hammond/Slidell	9 (1.6)	12 (2.1)	19 (3.3)	20 (3.4)	27 (4.6)

*Rates derived from numerators less than 5 may be unreliable and are not available (n/a).

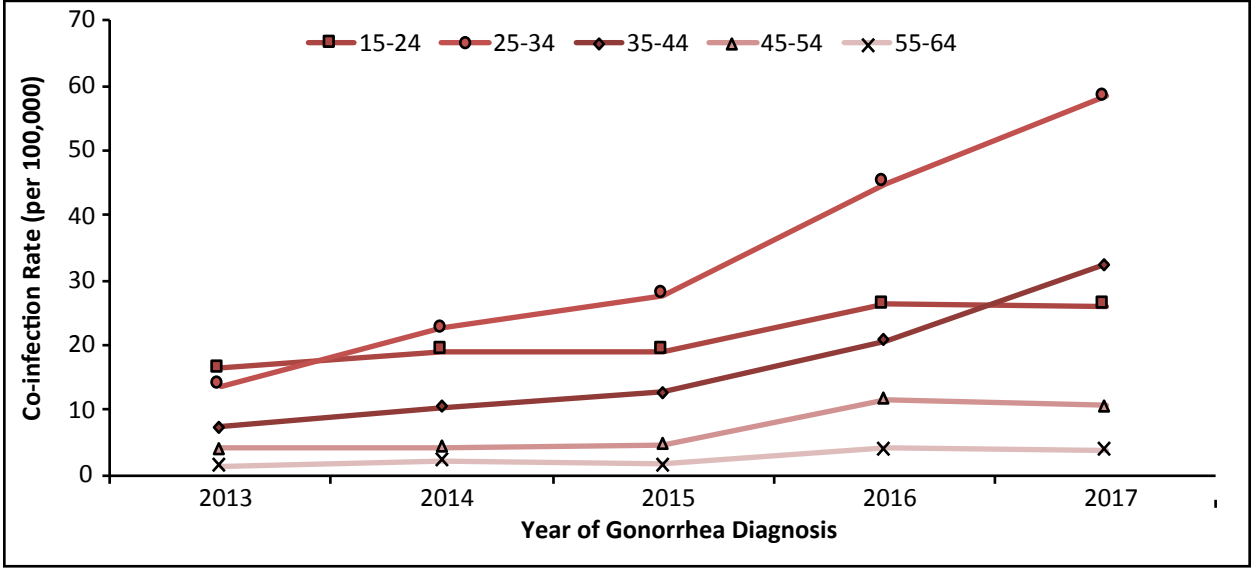
- In 2017, the New Orleans region had the highest gonorrhea/HIV coinfection rate at 53.1 per 100,000. This rate is more than three times greater than the state average and the second highest rate of 17.2 per 100,000 for the Baton Rouge region and almost five times more than the third highest rate of 11.8 per 100,000 for the Shreveport region.
- From 2013 to 2017, the gonorrhea/HIV co-infection rate increased in all regions of the state. During this period, the rate tripled in the New Orleans, Houma, Lafayette and Hammond/Slidell regions, and more than doubled in the Baton Rouge, Alexandria, Monroe, and Shreveport regions.
- Between 2016 and 2017, the Monroe region saw the largest increase in gonorrhea/HIV co-infection rate (75% increase). The gonorrhea/HIV co-infection rate increased by 8-27% in every other region except the Lake Charles (25% decrease) and the Alexandria (23% decrease) regions.

Gonorrhea/HIV Co-infection Rate by Sex at Birth and Race/Ethnicity*
Louisiana, 2013-2017



*Latina females are not depicted in the graph as this group accounted for less than 5 cases each year.

Gonorrhea/HIV Co-infection Rate by Age
Louisiana, 2013-2017



- In 2013, the gonorrhea/HIV co-infection rate for black males was seven times greater than the rate for white males and Latino males. By 2017, the rate for black males was eight times greater than the rate for white males and three times greater than the rate for Latino males.
- In 2017, the gonorrhea/HIV co-infection rate for Latino males was three times greater than the rate for white males.
- In 2017, black females had a gonorrhea/HIV co-infection rate that was 13 times the rate for white females.
- Between 2013 and 2017, all age groups saw overall increases in gonorrhea/HIV co-infection rate, however, persons age 35-44 years old and age 25-34 years old saw the sharpest rate increase during this period (335% increase and 320% increase, respectively). This rate increase was almost twice as large as the rate increase experienced by persons age 55-64 years old and persons age 45-54 years old (186% increase and 184% increase, respectively), and almost six times the rate increase experienced by 15-24 years old (59% increase).

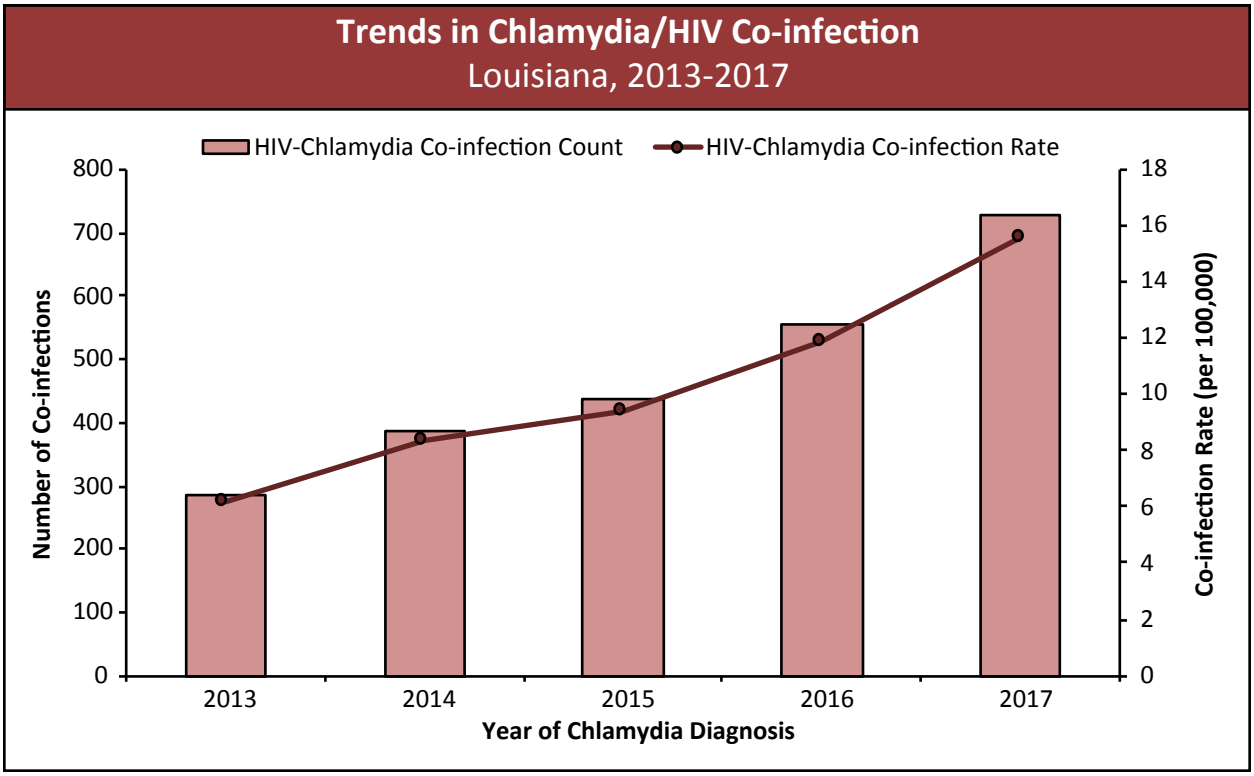
Characteristics of Persons with HIV/Gonorrhea Co-infection Louisiana, 2017			
	Number of Co-infections	**Percent**	**Co-infection Rate (per 100,000)**
Total	**837**	**100%**	**17.9**
Sex at Birth			
Female	76	9%	3.2
Male	761	91%	33.2
Race/Ethnicity			
Black/African American	644	77%	42.8
Hispanic/Latinx	144	17%	58.7
White	40	5%	1.5
Other/Multi-race	9	1%	-
Age Group	**Age at Gonorrhea Diagnosis**		
Under 15	0	0%	0.0
15-24	162	19%	26.2
25-34	396	47%	58.3
35-44	188	22%	32.5
45-54	62	7%	10.7
55-64	24	3%	4.0
65+	5	1%	0.7
HIV Transmission Risk			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	670	80%	-
Persons Who Inject Drugs (PWID)	125	15%	-
GBM/PWID	25	3%	-
High Risk Heterosexual (HRH)	16	2%	-
Other	1	0%	
Timing of Gonorrhea Infection			
Concurrent HIV/Gonorrhea Diagnosis*	65	8%	-
1 Month - 2 Years After HIV Diagnosis	277	33%	-
3-10 Years After HIV Diagnosis	318	38%	-
11+ Years After HIV Diagnosis	160	19%	-
Less than 1 year before HIV Diagnosis	17	2%	-

* Concurrent gonorrhea/HIV diagnosis is defined as having a confirmed HIV diagnosis within 30 days before or after having a confirmed gonorrhea diagnosis.

- In 2017, males accounted for 91% of gonorrhea/HIV co-infections.
- Blacks accounted for 77% of gonorrhea/HIV co-infections in 2017 even though blacks make up only 32% of Louisiana's population, representing a large racial disparity.
- In 2017, persons 35 year old and older accounted for only 13% of all gonorrhea diagnoses, but accounted for 34% of gonorrhea/HIV co-infections.
- Gay, bisexual, and other men who have sex with men (GBM) accounted for 83% of gonorrhea/HIV co-infections in 2017.
- In 2017, 59% of gonorrhea/HIV co-infections occurred among persons that had been HIV positive for 3 years or longer.

Chlamydia

Chlamydia is the most commonly diagnosed STD in the US and Louisiana but has less risk factors in common with HIV compared to syphilis and gonorrhea. Unlike HIV, chlamydia diagnoses rates in Louisiana have been consistently higher among women compared to men and persons under the age of 25 consistently account for the majority of diagnoses (see *Chapter 4: Profile of STDs in Louisiana*). Between 2013 and 2017, the chlamydia rate in Louisiana increased from 621.3 per 100,000 to 741.8 per 100,000 (19% increase). During the same period, the chlamydia/HIV co-infection rate in Louisiana nearly doubled from 6.2 per 100,000 to 11.9 per 100,000. In 2017, more than 2% of persons with a new chlamydia diagnosis were co-infected with HIV.



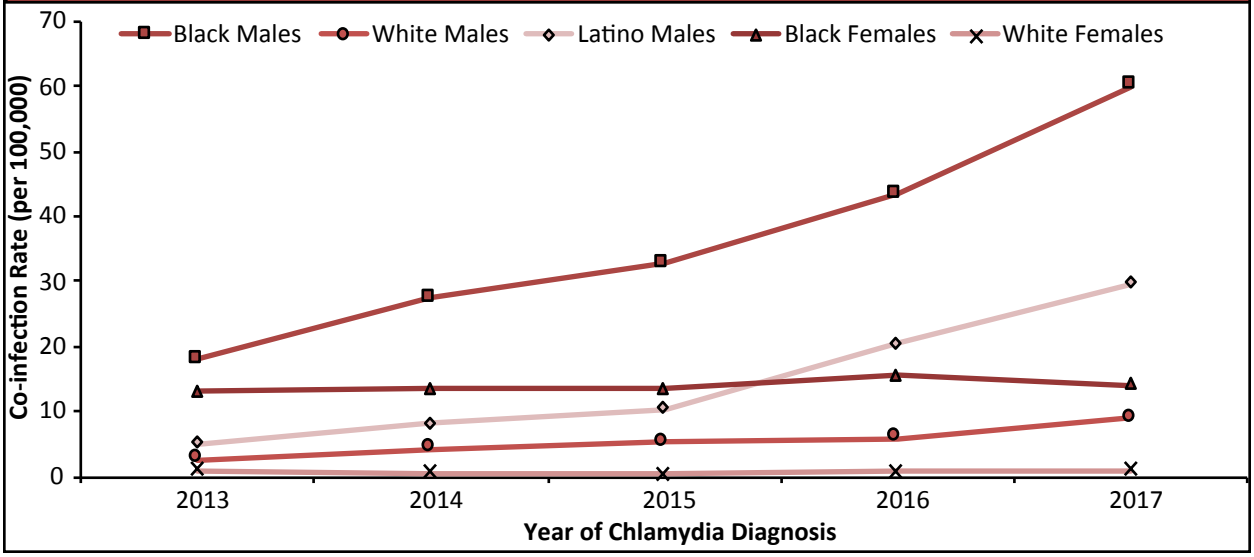
- The number of persons identified with chlamydia/HIV co-infection has increased by 31% between 2016 and 2017, and by 153% between 2013 and 2017.
- From 2013 to 2017, the chlamydia/HIV co-infection rate has more than doubled from a low of 6.2 per 100,000 in 2013 to a high of 15.6 per 100,000 in 2017.

Numbers and Rates of Chlamydia/HIV Co-infection by Region Louisiana, 2013-2017					
	Number of Co-infections (Co-infection Rate per 100,000)				
	2013	2014	2015	2016	2017
Louisiana	285 (6.2)	387 (8.3)	439 (9.4)	556 (11.9)	729 (15.6)
Region					
1-New Orleans	125 (2.7)	160 (3.4)	199 (4.3)	249 (5.3)	357 (7.6)
2-Baton Rouge	69 (7.8)	105 (11.8)	108 (12.1)	111 (12.4)	105 (11.6)
3-Houma	9 (1.3)	16 (2.4)	21 (3.1)	22 (3.2)	29 (4.2)
4-Lafayette	21 (5.2)	23 (5.7)	31 (7.6)	48 (11.9)	69 (17.2)
5-Lake Charles	9 (1.5)	6 (1.0)	15 (2.5)	6 (1.0)	16 (2.6)
6-Alexandria	3 (n/a)	5 (1.7)	8 (2.7)	10 (3.3)	21 (6.9)
7-Shreveport	28 (9.1)	38 (12.3)	25 (8.2)	49 (16.0)	65 (21.3)
8-Monroe	11 (2.0)	17 (3.1)	18 (3.3)	32 (5.9)	49 (9.0)
9-Hammond/Slidell	10 (2.8)	17 (4.8)	14 (3.9)	29 (8.2)	18 (5.1)

*Rates derived from numerators less than 5 may be unreliable and are not available (n/a).

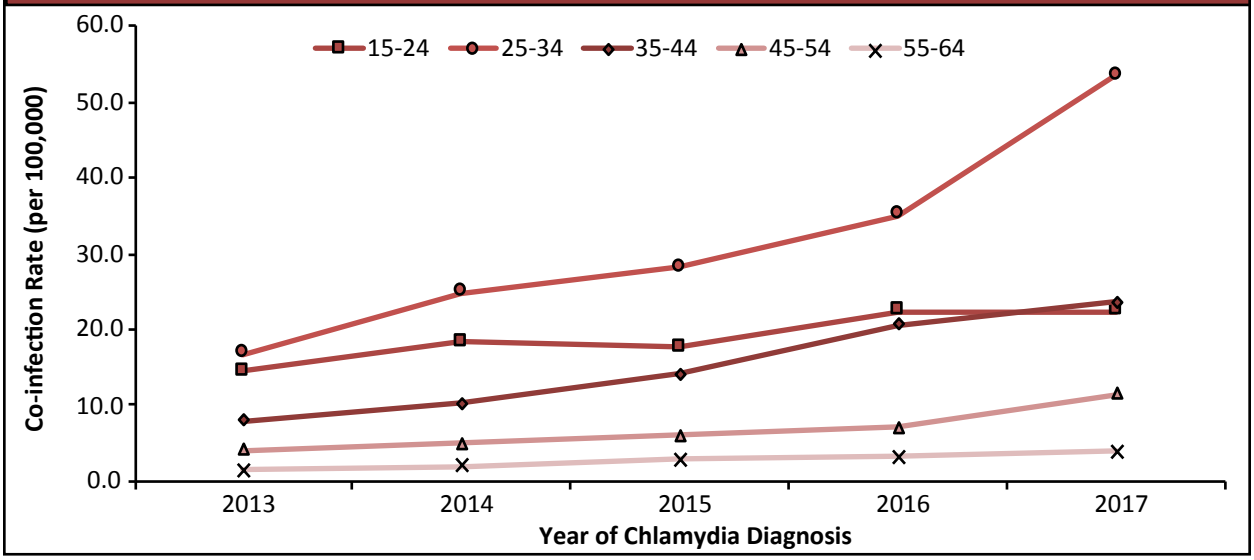
- The three regions with the highest chlamydia/HIV co-infection rates in 2017 included Shreveport (21.3 cases per 100,000), Lafayette (17.2 per 100,000), and Baton Rouge (11.6 per 100,000).
- From 2013 to 2017, the chlamydia/HIV co-infection rate increased in all regions of the states. The rate more than quadrupled in the Alexandria and Monroe regions, more than tripled in the Houma and Lafayette regions, and more than doubled in the New Orleans and Shreveport regions.
- Between 2016 and 2017, the chlamydia/HIV co-infection rate more than doubled in the Lake Charles and Alexandria regions, increased by 54% in the Monroe region, and increased by 43-45% in the New Orleans and Lafayette regions.

Chlamydia/HIV Co-infection Rate by Sex at Birth and Race/Ethnicity*
Louisiana, 2013-2017



*Latina females are not included in the above graph as this group accounted for less than 3 co-infections each year.

Chlamydia/HIV Co-infection Rate by Age
Louisiana, 2013-2017



- In 2017, the chlamydia/HIV co-infection rate for black males was almost seven times greater than for white males and two times greater than for Latino males. The rate for Latino males was more than three times greater than for white males.
- In 2017, the chlamydia/HIV co-infection rate for black women was 14 times the rate for white women.
- Between 2016 and 2017, white males experienced the greatest increase in chlamydia/HIV co-infection rate (53% increase), followed by Latino males (45% increase), white females (41% increase), and black males (38% increase).
- In 2017, persons age 25-34 years old had the highest chlamydia/HIV coinfection rate at 53.4 per 100,000. This rate is more than two times greater than the second highest rate of 23.5 per 100,000 for persons age 35-44 years old.
- Between 2013 and 2017, all age groups saw overall increases in chlamydia/HIV co-infection rate. Persons age 25-34 years old saw the greatest rate increase during this period (219% increase), followed by persons age 35-44 years old (194% increase), 55-64 years old (186% increase), 45-54 years old (184% increase).

Characteristics of Persons with Chlamydia/HIV Co-infection Louisiana, 2017			
	Number of Co-infections	**Percent**	**Co-infection Rate (per 100,000)***
Total	**729**	**100%**	**15.6**
Sex at Birth			
Female	130	18%	5.4
Male	599	82%	26.2
Race/Ethnicity			
Black/African American	541	74%	35.9
Hispanic/Latinx	39	5%	15.9
White	136	19%	4.9
Other/Multi-race	13	2%	-
Age Group	**Age at Chlamydia Diagnosis**		
Under 15	0	0%	0.0
15-24	138	19%	22.3
25-34	363	50%	53.4
35-44	136	19%	23.5
45-54	66	9%	11.4
55-64	24	3%	4.0
65+	2	0.3%	n/a
HIV Transmission Risk			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	519	71%	-
Persons Who Inject Drugs (PWID)	161	22%	-
GBM/PWID	19	3%	-
High Risk Heterosexual (HRH)	24	3%	-
Other	6	1%	
Timing of Chlamydia Infection			
Concurrent HIV/Chlamydia Diagnosis**	74	10%	-
1 Month - 2 Years After HIV Diagnosis	209	29%	-
3-10 Years After HIV Diagnosis	296	41%	-
11+ Years After HIV Diagnosis	134	18%	-
Less than 1 year before HIV Diagnosis	16	2%	-

*Rates derived from numerators less than 5 may be unreliable and are not available (n/a).

** Concurrent chlamydia/HIV diagnosis is defined as having a confirmed HIV diagnosis within 30 days before or after having a confirmed chlamydia diagnosis.

- In 2017, males accounted for 82% of chlamydia/HIV co-infections but only accounted for 29% of all chlamydia diagnoses.
- Blacks accounted for 74% of chlamydia/HIV co-infections in 2017 even though blacks make up only 32% of Louisiana's population, representing a large racial disparity.
- In 2017, persons 35 and older accounted for 31% of chlamydia/HIV co-infections but only accounted for 6% of all chlamydia diagnoses.
- Gay, bisexual, and other men who have sex with men (GBM) accounted for 71% of chlamydia/HIV co-infections in 2017.
- In 2017, 61% of chlamydia/HIV co-infections occurred among persons that had been HIV positive for three years or longer.

HIV and Hepatitis C Virus Co-Infection

Hepatitis C virus (HCV) is a blood-borne virus that is typically transmitted through syringe sharing and the use of unsterile equipment associated with injection drug use. Rarely, HCV transmission can occur through sexual contact, tattoo application in unregulated settings, and among infants born to mothers living with HCV. Before 1990, persons may have also acquired HCV from a blood transfusion, medical blood products, or kidney dialysis equipment. The risk of HCV transmission (and HIV transmission) associated with medical treatments has decreased greatly since 1990 due to the introduction of routine screening of blood products and widespread use of sterile syringes in healthcare settings. Most persons living with HCV do not experience any recognizable symptoms during the acute phase of an HCV infection. Symptoms of acute HCV, when they do occur, are typically mild and may include flu-like symptoms, abnormal bloodwork, or jaundice. It's estimated that 60-85% of persons with acute HCV will go on to develop a chronic HCV infection. Persons with chronic HCV do not usually experience any further symptoms until advanced disease progression has already occurred. Left untreated, an estimated 10-20% of persons living with chronic HCV will develop HCV-related cirrhosis 20-30 years after the initial HCV infection. Due to the asymptomatic nature of the disease, many persons living with HCV may be unaware of their status. Routine HCV testing of high-risk persons is important for early diagnosis and treatment.[xxx,xxxi]

From 2010 to 2016, the number of reported HCV diagnoses in the US more than tripled and reached a 16-year high in 2016. HCV rates are most rapidly increasing among persons 20-29 years old primarily due to injection drug-use associated with growing opioid-use; however, HCV continues to be most prevalent among persons born between 1945 and 1965. Based on 2003-2010 data from national health surveys, an estimated 3.5 million persons are living with HCV in the US. Although HCV is a reportable disease, HCV infections in the US are critically underreported due to a low volume of routine HCV screening among high-risk groups and a lack of resources devoted to viral hepatitis state surveillance programs.[xxx,xxxii]

Co-infection with HIV and HCV is commonly associated with sharing syringes or using previously-used syringes for injection drug use. While both represent a serious health concern, especially among persons who inject drugs, HCV/HIV co-infection introduces additional complication in the treatment and disease progression of both conditions.[xxxi, xxxiii]

Region of Residence of Persons with HIV/HCV Co-infection
Louisiana, 2016-2017

	2016			2017		
	# Co-infections	Percent	Co-infection Rate (per 100,000)*	# Co-infections	Percent	Co-infection Rate (per 100,000)*
Louisiana	**165**	**100%**	**3.5**	**205**	**100%**	**4.4**
Region						
1-New Orleans	38	23%	4.2	60	29%	6.7
2-Baton Rouge	57	35%	8.3	66	32%	9.6
3-Houma	1	1%	0.2	10	5%	2.5
4-Lafayette	12	7%	2.0	17	8%	2.8
5-Lake Charles	18	11%	6.0	19	9%	6.3
6-Alexandria	4	2%	1.3	10	5%	3.3
7-Shreveport	15	9%	2.8	7	3%	1.3
8-Monroe	8	5%	2.3	6	3%	1.7
9-Hammond/Slidell	12	7%	2.1	10	5%	1.7

* Rates derived from numerators less than 5 may be unreliable and are not available (n/a).

- The number of HCV/HIV co-infections increased from 165 in 2016 to 205 in 2017 and the HCV/HIV co-infection rate increased by 26% from 3.5 per 100,000 in 2016 to 4.4 per 100,000 in 2017. Recent increases in HCV screening efforts and improvements in HCV reporting across the state may have contributed to the above increases.
- From 2016-2017, the Baton Rouge region had the highest number of HCV/HIV co-infections and the highest HCV/HIV co-infection rate. In 2017, the New Orleans region had the second highest HCV/HIV co-infection rate, followed by the Lake Charles region and the Alexandria region.

Characteristics of Persons with HIV/HCV Co-infection
Louisiana, 2016-2017

	2016			2017		
	# Co-infections	Percent	Co-infection Rate (per 100,000)*	# Co-infections	Percent	Co-infection Rate (per 100,000)*
TOTAL	**165**	**100%**	**3.5**	**205**	**100%**	**4.4**
Sex at Birth						
Female	39	24%	1.6	57	28%	2.4
Male	126	76%	5.5	148	72%	6.5
Race/Ethnicity						
Black/African American	114	69%	7.6	143	70%	9.5
Hispanic/Latino	5	3%	2.1	4	2%	n/a
White	42	25%	1.5	56	27%	2.0
Other/Multi-race	4	2%	n/a	2	1%	-
Age at HCV Diagnosis						
15-24	4	2%	n/a	8	4%	n/a
25-34	24	15%	3.5	25	12%	4.0
35-44	22	13%	4.0	41	20%	6.0
45-54	56	34%	9.5	54	26%	9.3
55-64	52	32%	8.6	66	32%	11.4
65+	7	4%	1.0	11	5%	1.8
HIV Transmission Risk						
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	62	38%	-	65	32%	-
Persons Who Inject Drugs (PWID)	52	32%	-	62	30%	-
GBM/PWID	19	12%	-	25	12%	-
High Risk Heterosexual (HRH)	31	19%	-	53	26%	-
Other	1	1%	-	0	0%	-

*Rates derived from numerators less than 5 may be unreliable and are not available (n/a).

- In 2017, males accounted for 72% of HCV/HIV co-infections.
- Persons over the age of 45 years old account for 63% of HCV/HIV co-infections in 2017.
- Gay, bisexual, and other men who have sex with men (GBM), accounted for the greatest proportion of HCV/HIV co-infections in 2017 (32% of HCV/HIV co-infections), closely followed by persons who inject drugs (30% of HCV/HIV co-infections).

Appendices

The appendix contains additional tables relevant to the HIV Surveillance chapter of this report, Chapter 1 and the STD Surveillance Chapter, Chapter 4. Immediately following the tables are the Technical Notes and Works Cited.

HIV SURVEILLANCE TABLES

Trends in HIV Infection, Louisiana, 1979-2017

- This table includes the number of HIV Diagnoses, AIDS Diagnoses, Persons Living with HIV, and Deaths in Persons with HIV from 1979 to 2017. The number of deaths in 2017 are not finalized and are therefore not available.

New HIV Diagnoses by Region and Year, Louisiana, 2008-2017

- This table includes the number of New HIV Diagnoses from 2008 to 2017, for each of the nine public health regions in Louisiana.

New AIDS Diagnoses by Region and Year, Louisiana, 2008-2017

- This table includes the number of New AIDS Diagnoses from 2008 to 2017, for each of the nine public health regions in Louisiana.

Geographic Distribution of HIV in Louisiana, 2017

- This two-page table includes new AIDS Diagnoses in 2017, HIV Diagnoses in 2017, HIV Diagnosis Rate in 2017, Persons Living with HIV Infection in 2017 and Deaths in Persons Living with HIV Infection in 2016 for each of the nine public health regions and the 64 parishes of Louisiana.

Deaths among Persons with HIV Infection, Louisiana, 2016

- This table contains the demographic breakdown of Persons with HIV Infection who died in 2016 in Louisiana, regardless of cause of death.

STD SURVEILLANCE TABLES

Geographic Distribution of Chlamydia by Race/Ethnicity, Louisiana, 2017

- This two-page table includes Chlamydia diagnoses in 2017, for each of the nine public health regions and the 64 parishes of Louisiana.

Geographic Distribution of Gonorrhea by Race/Ethnicity, Louisiana, 2017

- This two-page table includes Gonorrhea diagnoses in 2017, for each of the nine public health regions and the 64 parishes of Louisiana.

Geographic Distribution of Primary & Secondary Syphilis by Race/Ethnicity, Louisiana, 2017

- This two-page table includes P&S syphilis diagnoses in 2017, for each of the nine public health regions and the 64 parishes of Louisiana.

Geographic Distribution of Gonorrhea by Race/Ethnicity, Louisiana, 2017

- This two-page table includes Gonorrhea diagnoses in 2017, for each of the nine public health regions and the 64 parishes of Louisiana.

Geographic Distribution of Gonorrhea in Females by Race/Ethnicity, Louisiana, 2017

- This two-page table includes female Gonorrhea diagnoses in 2017, for the 64 parishes of Louisiana.

Geographic Distribution of Gonorrhea in Males by Race/Ethnicity, Louisiana, 2017
- This two-page table includes Gonorrhea male diagnoses in 2017, for the 64 parishes of Louisiana.

Geographic Distribution of Primary & Secondary Syphilis by Race/Ethnicity, Louisiana, 2017
- This two-page table includes P&S syphilis diagnoses in 2017, for each of the nine public health regions and the 64 parishes of Louisiana.

Geographic Distribution of Primary & Secondary Syphilis in Females by Race/Ethnicity, Louisiana, 2017
- This two-page table includes P&S syphilis female diagnoses in 2017, for the 64 parishes of Louisiana.

Geographic Distribution of Primary & Secondary Syphilis in Males by Race/Ethnicity, Louisiana, 2017
- This two-page table includes P&S syphilis male diagnoses in 2017, for the 64 parishes of Louisiana

Trends in HIV Infection Louisiana, 1979-2017				
Year	**New HIV Diagnoses**	**New AIDS Diagnoses**	**Persons Living with HIV Infection**	**Deaths**
1979	1	1	1	0
1980	1	1	1	0
1981	5	0	7	0
1982	17	10	22	0
1983	59	27	70	7
1984	146	84	188	15
1985	383	151	499	38
1986	479	241	853	65
1987	757	417	1,394	93
1988	781	450	1,956	149
1989	1,032	613	2,640	292
1990	1,216	709	3,470	241
1991	1,545	935	4,572	237
1992	1,745	1,064	5,700	527
1993	1,708	1,131	6,728	586
1994	1,642	1,103	7,654	799
1995	1,482	1,038	8,331	891
1996	1,515	1,118	9,144	784
1997	1,504	939	10,213	552
1998	1,272	840	11,097	522
1999	1,235	789	12,005	496
2000	1,182	819	12,805	517
2001	1,130	881	13,502	571
2002	1,176	969	14,260	556
2003	1,049	888	14,848	587
2004	1,055	863	15,680	578
2005	966	801	13,454	589
2006	984	762	14,005	548
2007	1,079	810	14,617	519
2008	1,089	842	15,268	482
2009	1,200	784	15,935	540
2010	1,121	801	16,629	448
2011	1,205	782	17,314	467
2012	1,043	774	17,905	470
2013	1,142	706	18,618	406
2014	1,215	596	19,398	415
2015	1,118	513	20,114	407
2016	1,125	558	20,812	408
2017	1,017	504	21,432	n/a*

*Data are not complete

New HIV Diagnoses by Region and Year Louisiana, 2008-2017										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Louisiana	**1,089**	**1,200**	**1,121**	**1,205**	**1,043**	**1,142**	**1,215**	**1,118**	**1,125**	**1,017**
1-New Orleans	353	383	341	406	336	381	356	365	350	303
2-Baton Rouge	295	309	296	292	255	246	319	251	231	212
3-Houma	42	40	56	56	54	57	52	63	59	40
4-Lafayette	74	85	88	89	82	91	111	89	110	111
5-Lake Charles	56	51	47	50	37	38	41	46	38	55
6-Alexandria	47	59	62	63	54	63	57	52	59	45
7-Shreveport	107	112	101	117	79	123	124	128	138	122
8-Monroe	54	72	58	66	77	77	89	63	71	59
9-Hammond/Slidell	61	89	72	66	69	66	66	61	69	70

New AIDS Diagnoses by Region and Year Louisiana, 2008-2017										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Louisiana	**842**	**784**	**801**	**782**	**774**	**706**	**596**	**513**	**558**	**504**
1-New Orleans	266	236	250	258	251	219	182	166	156	135
2-Baton Rouge	252	198	239	220	195	184	158	121	143	119
3-Houma	32	34	49	30	37	40	29	24	19	22
4-Lafayette	63	50	60	55	59	65	46	37	54	46
5-Lake Charles	37	42	29	38	33	26	19	22	25	22
6-Alexandria	34	41	36	40	35	26	24	21	29	31
7-Shreveport	78	76	52	61	67	64	47	48	60	59
8-Monroe	40	55	44	38	49	40	46	35	38	36
9-Hammond/Slidell	40	52	42	42	48	42	45	39	34	34

Geographic Distribution of HIV Louisiana, 2017						
Region	**Parish**	**AIDS Diagnoses 2017***	**HIV Diagnoses 2017**	**HIV Diagnosis Rate 2017****	**Persons Living with HIV 2017**	**Deaths 2016**
Statewide		**504**	**1,017**	**22**	**21,432**	**408†**
Region 1		**135**	**303**	**34**	**7,442**	**127**
	Jefferson	41	103	23	2,049	37
	Orleans	91	190	48	5,154	85
	Plaquemines	1	4	17	49	2
	St. Bernard	2	6	13	190	3
Region 2		**119**	**212**	**31**	**5,036**	**106**
	Ascension	9	10	8	246	6
	East Baton Rouge	84	169	38	4,013	87
	East Feliciana	5	5	26	196	3
	Iberville	12	16	48	284	6
	Pointe Coupee	1	1	4	54	2
	West Baton Rouge	6	7	27	111	0
	West Feliciana	2	4	26	132	2
Region 3		**22**	**40**	**10**	**896**	**11**
	Assumption	0	1	4	36	2
	Lafourche	4	6	6	156	3
	St. Charles	4	4	8	120	1
	St. James	2	5	23	78	2
	St. John the Baptist	5	8	18	175	0
	St. Mary	2	7	14	99	2
	Terrebonne	5	9	8	232	1
Region 4		**46**	**111**	**18**	**1,659**	**33**
	Acadia	5	8	13	127	4
	Evangeline	4	8	24	89	2
	Iberia	6	12	17	126	3
	Lafayette	21	53	22	809	11
	St. Landry	7	19	23	294	8
	St. Martin	3	5	9	109	2
	Vermilion	0	6	10	105	3
Region 5		**22**	**55**	**18**	**1,038**	**19**
	Allen	1	1	4	211	0
	Beauregard	0	1	3	52	1
	Calcasieu	18	48	24	701	16
	Cameron	0	0	n/a	3	0
	Jefferson Davis	3	5	16	71	2

Geographic Distribution of HIV
Louisiana, 2017

Region	Parish	AIDS Diagnoses 2017*	HIV Diagnoses 2017	HIV Diagnosis Rate 2017**	Persons Living with HIV 2017	Deaths 2016
Statewide		**504**	**1,017**	**22**	**21,432**	**408†**
Region 6		**31**	**45**	**15**	**938**	**21**
	Avoyelles	1	6	15	159	4
	Catahoula	1	2	20	29	1
	Concordia	1	1	5	49	1
	Grant	4	3	13	49	1
	La Salle	3	6	40	47	0
	Rapides	19	22	17	514	14
	Vernon	2	3	6	69	0
	Winn	0	2	14	22	0
Region 7		**59**	**122**	**23**	**1,908**	**33**
	Bienville	1	2	15	35	1
	Bossier	8	17	13	258	4
	Caddo	40	80	32	1,229	16
	Claiborne	1	2	13	85	1
	De Soto	2	6	22	57	1
	Natchitoches	2	7	18	130	3
	Red River	0	0	n/a	18	0
	Sabine	1	0	n/a	17	2
	Webster	4	8	20	79	5
Region 8		**36**	**59**	**17**	**1,126**	**28**
	Caldwell	1	1	10	16	0
	East Carroll	0	1	14	22	1
	Franklin	3	3	15	45	3
	Jackson	0	2	13	20	1
	Lincoln	1	8	17	101	0
	Madison	0	2	18	39	1
	Morehouse	1	6	23	66	0
	Ouachita	25	30	19	685	19
	Richland	2	3	15	42	0
	Tensas	1	0	n/a	33	2
	Union	1	3	13	40	1
	West Carroll	1	0	n/a	17	0
Region 9		**34**	**70**	**12**	**1,389**	**30**
	Livingston	6	8	6	217	4
	St. Helena	2	2	19	22	3
	St. Tammany	7	14	5	510	8
	Tangipahoa	15	39	29	438	11
	Washington	4	7	15	202	4

*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 100,000 persons in parish. Rates derived from numerators less than 20 may be unreliable and are not available (n/a) for numerators less than 5.
† Statewide total may include Louisiana deaths that lack a parish of death.

Geographic Distribution of Chlamydia by Race/Ethnicity
Louisiana, 2017

	White		Black/African American		Hispanic/Latinx		Total†	
	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Louisiana**	**8,814**	**321**	**24,175**	**1,605**	**1,353**	**552**	**34,749**	**742**
Region 1: New Orleans	**1,449**	**366**	**5,843**	**1,607**	**636**	**675**	**8,060**	**894**
Jefferson	639	277	1,858	1,597	470	717	3,033	691
Orleans	667	552	3,774	1,626	143	641	4,641	1,180
Plaquemines	57	384	44	917	3	n/a	108	463
St. Bernard	86	297	167	1,599	20	433	278	602
Region 2: Baton Rouge	**1,038**	**282**	**4,004**	**1,415**	**195**	**683**	**5,296**	**772**
Ascension	221	262	301	1,071	37	541	563	458
East Baton Rouge	645	324	3,205	1,558	154	821	4,058	909
East Feliciana	26	249	86	1,037	0	0	112	577
Iberville	49	312	186	1,169	1	n/a	237	718
Pointe Coupee	30	224	111	1,406	1	n/a	142	638
West Baton Rouge	59	402	89	872	2	n/a	150	571
West Feliciana	8	99	26	380	0	0	34	221
Region 3: Houma	**863**	**341**	**1,593**	**1,379**	**88**	**420**	**2,604**	**648**
Assumption	26	177	66	989	1	n/a	94	417
Lafourche	230	305	260	1,968	8	181	502	510
St. Charles	106	309	176	1,286	10	308	293	555
St. James	19	184	150	1,441	4	n/a	173	810
St. John the Baptist	38	251	269	781	11	396	321	739
St. Mary	113	395	218	1,364	17	464	352	691
Terrebonne	331	443	454	2,147	37	640	869	775
Region 4: Lafayette	**1,096**	**274**	**2,409**	**1,450**	**78**	**334**	**3,628**	**596**
Acadia	168	347	196	1,762	3	n/a	368	588
Evangeline	50	223	131	1,418	3	n/a	185	549
Iberia	154	362	402	1,743	13	420	583	808
Lafayette	406	256	951	1,502	49	422	1,429	589
St. Landry	113	248	375	1,089	5	274	494	592
St. Martin	94	270	243	1,492	2	n/a	340	628
Vermilion	111	236	111	1,288	3	n/a	229	381
Region 5: Lake Charles	**670**	**311**	**891**	**1,334**	**47**	**459**	**1,622**	**535**
Allen	59	323	41	718	2	n/a	102	398
Beauregard	81	273	54	1,210	4	n/a	142	385
Calcasieu	424	310	724	1,413	40	547	1,195	590
Cameron	9	144	1	n/a	0	0	11	159
Jefferson Davis	97	393	71	1,382	1	n/a	172	546

Geographic Distribution of Chlamydia by Race/Ethnicity
Louisiana, 2017

	White		Black/African American		Hispanic/Latinx		Total†	
	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Louisiana**	**8,814**	**321**	**24,175**	**1,605**	**1,353**	**552**	**34,749**	**742**
Region 6: Alexandria	**738**	**371**	**1,318**	**1,620**	**66**	**542**	**2,148**	**705**
Avoyelles	99	372	205	1,698	3	n/a	310	756
Catahoula	14	215	23	759	0	0	38	385
Concordia	25	221	85	1,079	1	n/a	111	559
Grant	70	409	43	1,269	9	775	122	546
La Salle	31	251	14	786	3	n/a	49	328
Rapides	282	351	736	1,761	16	383	1,044	793
Vernon	182	513	144	2,046	33	695	369	727
Winn	35	377	68	1,560	1	n/a	105	734
Region 7: Shreveport	**973**	**333**	**3,914**	**1,868**	**75**	**378**	**5,005**	**923**
Bienville	24	323	105	1,854	1	n/a	132	968
Bossier	311	366	535	1,901	36	417	903	707
Caddo	333	301	2,359	1,950	20	280	2,721	1,103
Claiborne	18	250	104	1,266	2	n/a	124	777
De Soto	52	324	146	1,483	6	777	207	757
Natchitoches	62	300	287	1,791	6	670	357	915
Red River	17	351	68	2,025	2	n/a	87	1,019
Sabine	63	387	48	1,214	2	n/a	119	495
Webster	93	382	262	1,961	0	0	355	902
Region 8: Monroe	**609**	**297**	**2,604**	**1,989**	**42**	**478**	**3,268**	**928**
Caldwell	27	344	21	1,320	1	n/a	49	492
East Carroll	3	n/a	37	766	0	0	40	561
Franklin	25	189	100	1,566	1	n/a	126	622
Jackson	26	243	64	1,414	0	0	92	581
Lincoln	82	322	413	2,141	14	942	511	1,070
Madison	6	156	122	1,725	2	n/a	130	1,149
Morehouse	38	300	233	1,918	3	n/a	274	1,069
Ouachita	288	318	1,336	2,307	14	389	1,645	1,055
Richland	44	356	136	1,863	1	n/a	182	892
Tensas	8	407	19	764	0	0	28	607
Union	36	232	98	1,727	4	n/a	138	611
West Carroll	26	300	25	1,456	2	n/a	53	483
Region 9: Hammond/Slidell	**1,369**	**310**	**1,583**	**1,600**	**110**	**408**	**3,077**	**527**
Livingston	407	336	136	1,547	22	432	568	411
St. Helena	7	153	37	684	0	0	44	425
St. Tammany	525	261	406	1,323	56	379	996	389
Tangipahoa	301	360	782	1,962	29	495	1,114	841
Washington	129	422	222	1,567	3	n/a	355	761

*Rates per 100,000 persons in parish. Rates derived from numerators less than 20 may be unreliable and are not available (n/a) for numerators less than 5.
** Louisiana total includes cases with unknown parish.
† The totals include cases with other and unknown race.

Geographic Distribution of Gonorrhea by Race/Ethnicity
Louisiana, 2017

	White		Black/African American		Hispanic/Latinx		Total†	
	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Louisiana**	**2,562**	**93**	**9,121**	**606**	**234**	**95**	**12,014**	**256**
Region 1: New Orleans	**557**	**141**	**2,464**	**678**	**115**	**122**	**3,170**	**351**
Jefferson	179	78	675	580	68	104	940	214
Orleans	335	277	1,718	740	44	197	2,112	537
Plaquemines	9	n/a	11	229	1	n/a	21	90
St. Bernard	34	118	60	574	2	n/a	97	210
Region 2: Baton Rouge	**190**	**55**	**1,458**	**515**	**23**	**81**	**1,683**	**245**
Ascension	42	50	65	231	4	n/a	113	92
East Baton Rouge	125	63	1,237	601	17	91	1,389	311
East Feliciana	2	n/a	31	374	0	0	33	170
Iberville	7	45	56	352	0	0	63	191
Pointe Coupee	7	52	27	342	1	n/a	35	157
West Baton Rouge	6	41	32	313	1	n/a	39	148
West Feliciana	1	n/a	10	146	0	0	11	72
Region 3: Houma	**295**	**116**	**530**	**459**	**7**	**33**	**853**	**212**
Assumption	7	48	27	404	0	0	34	151
Lafourche	76	101	79	598	2	n/a	159	162
St. Charles	16	47	71	519	0	0	87	165
St. James	6	58	34	327	0	0	40	187
St. John the Baptist	9	59	77	224	1	n/a	87	200
St. Mary	32	112	64	401	1	n/a	97	190
Terrebonne	149	199	178	842	3	n/a	349	311
Region 4: Lafayette	**352**	**88**	**841**	**506**	**15**	**64**	**1,217**	**200**
Acadia	43	89	50	449	2	n/a	96	153
Evangeline	11	49	39	422	1	n/a	51	151
Iberia	51	120	127	551	3	n/a	182	252
Lafayette	160	101	365	576	6	52	535	221
St. Landry	30	66	138	401	1	n/a	169	202
St. Martin	34	98	79	485	1	n/a	116	214
Vermilion	23	49	43	499	1	n/a	68	113
Region 5: Lake Charles	**169**	**78**	**333**	**499**	**11**	**107**	**513**	**169**
Allen	14	77	15	263	0	0	29	113
Beauregard	23	78	15	336	3	n/a	41	111
Calcasieu	113	83	276	539	8	109	397	196
Cameron	0	0	0	0	0	0	0	0
Jefferson Davis	19	77	27	526	0	0	46	146

Geographic Distribution of Gonorrhea by Race/Ethnicity
Louisiana, 2017

	White		Black/African American		Hispanic/Latinx		Total†	
	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Louisiana**	**2,562**	**93**	**9,121**	**606**	**234**	**95**	**12,014**	**256**
Region 6: Alexandria	**220**	**111**	**500**	**615**	**13**	**107**	**739**	**243**
Avoyelles	33	124	100	828	1	n/a	135	329
Catahoula	4	n/a	8	264	0	0	12	122
Concordia	2	n/a	17	216	1	n/a	20	101
Grant	10	58	16	472	0	0	26	116
La Salle	6	49	3	n/a	1	n/a	10	67
Rapides	108	134	286	684	7	168	404	307
Vernon	31	87	37	526	3	n/a	73	144
Winn	26	280	33	757	0	0	59	412
Region 7: Shreveport	**303**	**104**	**1,507**	**719**	**22**	**111**	**1,840**	**339**
Bienville	11	148	29	512	1	n/a	41	301
Bossier	83	98	218	775	8	93	313	245
Caddo	129	117	1,002	828	10	140	1,145	464
Claiborne	8	111	44	536	0	0	52	326
De Soto	15	94	45	457	0	0	60	219
Natchitoches	15	73	57	356	1	n/a	73	187
Red River	2	n/a	6	179	1	n/a	9	105
Sabine	13	80	10	253	0	0	23	96
Webster	27	111	96	718	1	n/a	124	315
Region 8: Monroe	**189**	**92**	**923**	**705**	**8**	**91**	**1,125**	**319**
Caldwell	3	n/a	4	n/a	0	0	7	70
East Carroll	0	0	27	559	0	0	27	379
Franklin	2	n/a	26	407	0	0	28	138
Jackson	22	205	33	729	0	0	56	353
Lincoln	31	122	115	596	2	n/a	149	312
Madison	6	n/a	37	523	0	0	43	380
Morehouse	12	95	69	568	0	0	81	316
Ouachita	90	99	514	887	5	139	610	391
Richland	10	81	52	712	0	0	64	314
Tensas	0	0	1	n/a	0	0	1	n/a
Union	8	52	37	652	1	n/a	46	204
West Carroll	5	58	8	466	0	0	13	118
Region 9: Hammond/Slidell	**285**	**65**	**563**	**569**	**19**	**71**	**869**	**149**
Livingston	81	67	43	489	4	n/a	128	93
St. Helena	0	0	11	203	0	0	11	106
St. Tammany	93	46	145	472	11	75	251	98
Tangipahoa	85	102	300	753	4	n/a	389	294
Washington	26	85	64	452	0	0	90	193

*Rates per 100,000 persons in parish. Rates derived from numerators less than 20 may be unreliable and are not available (n/a) for numerators less than 5.
**The Louisiana Strata include cases with unknown parish.
† The totals include cases with other and unknown race.

Geographic Distribution of Primary & Secondary Syphilis by Race/Ethnicity
Louisiana, 2017

	White		Black/African American		Hispanic/Latinx		Total†	
	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Louisiana**	**194**	**7**	**462**	**31**	**12**	**5**	**679**	**15**
Region 1: New Orleans	**60**	**15**	**121**	**33**	**5**	**5**	**189**	**21**
Jefferson	18	8	34	29	1	n/a	54	12
Orleans	41	34	85	37	3	n/a	131	33
Plaquemines	0	0	0	0	0	0	0	0
St. Bernard	1	n/a	2	n/a	1	n/a	4	n/a
Region 2: Baton Rouge	**16**	**5**	**72**	**25**	**1**	**n/a**	**90**	**13**
Ascension	2	n/a	6	21	1	n/a	9	7
East Baton Rouge	14	7	57	28	0	0	72	16
East Feliciana	0	0	0	0	0	0	0	0
Iberville	0	0	4	n/a	0	0	4	n/a
Pointe Coupee	0	0	0	0	0	0	0	0
West Baton Rouge	0	0	3	n/a	0	0	3	n/a
West Feliciana	0	0	2	n/a	0	0	2	n/a
Region 3: Houma	**20**	**8**	**19**	**16**	**0**	**0**	**41**	**10**
Assumption	0	0	1	n/a	0	0	1	n/a
Lafourche	13	17	6	45	0	0	19	19
St. Charles	0	0	1	n/a	0	0	1	n/a
St. James	0	0	1	n/a	0	0	1	n/a
St. John the Baptist	2	n/a	2	n/a	0	0	4	n/a
St. Mary	0	0	4	n/a	0	0	4	n/a
Terrebonne	5	7	4	n/a	0	0	11	10
Region 4: Lafayette	**23**	**6**	**35**	**21**	**1**	**n/a**	**59**	**10**
Acadia	0	0	2	n/a	0	0	2	n/a
Evangeline	1	n/a	0	n/a	0	0	1	n/a
Iberia	0	0	6	26	0	0	6	8
Lafayette	13	8	14	22	1	n/a	28	12
St. Landry	3	n/a	9	26	0	0	12	14
St. Martin	5	14	4	n/a	0	0	9	17
Vermilion	1	n/a	0	0	0	0	1	n/a
Region 5: Lake Charles	**10**	**5**	**16**	**24**	**0**	**0**	**26**	**9**
Allen	1	n/a	0	0	0	0	1	n/a
Beauregard	1	n/a	1	n/a	0	0	2	n/a
Calcasieu	6	4	15	29	0	0	21	10
Cameron	0	0	0	0	0	0	0	0
Jefferson Davis	2	n/a	0	0	0	0	2	n/a

Geographic Distribution of Primary & Secondary Syphilis by Race/Ethnicity
Louisiana, 2017

	White		Black/African American		Hispanic/Latinx		Total†	
	Cases	Rate*	Cases	Rate*	Cases	Rate*	Cases	Rate*
Louisiana**	**194**	**7**	**462**	**31**	**12**	**5**	**679**	**15**
Region 6: Alexandria	**16**	**8**	**17**	**21**	**0**	**0**	**33**	**11**
Avoyelles	1	n/a	2	n/a	0	0	3	n/a
Catahoula	0	0	0	0	0	0	0	0
Concordia	1	n/a	0	0	0	0	1	n/a
Grant	0	0	0	0	0	0	0	0
La Salle	0	0	0	0	0	0	0	0
Rapides	13	16	14	34	0	0	27	21
Vernon	1	n/a	0	0	0	0	1	n/a
Winn	0	0	1	n/a	0	0	1	n/a
Region 7: Shreveport	**16**	**6**	**75**	**36**	**2**	**n/a**	**95**	**18**
Bienville	0	0	1	n/a	0	0	1	n/a
Bossier	8	9	18	64	0	0	27	21
Caddo	6	5	48	40	2	n/a	56	23
Claiborne	0	0	0	0	0	0	0	0
De Soto	0	0	2	n/a	0	0	2	n/a
Natchitoches	1	n/a	2	n/a	0	0	3	n/a
Red River	0	0	0	0	0	0	0	0
Sabine	0	0	0	0	0	0	0	0
Webster	1	n/a	4	n/a	0	0	6	15
Region 8: Monroe	**17**	**8**	**97**	**74**	**1**	**n/a**	**116**	**33**
Caldwell	0	0	1	n/a	0	0	1	n/a
East Carroll	0	0	1	n/a	0	0	1	n/a
Franklin	2	n/a	1	n/a	0	0	3	n/a
Jackson	0	0	2	n/a	0	0	2	n/a
Lincoln	5	20	15	78	0	0	20	42
Madison	0	0	1	n/a	0	0	1	n/a
Morehouse	1	n/a	25	206	0	0	26	101
Ouachita	7	8	44	76	1	n/a	52	33
Richland	2	n/a	4	n/a	0	0	7	34
Tensas	0	0	0	0	0	0	0	0
Union	0	0	3	n/a	0	0	3	n/a
West Carroll	0	0	0	0	0	0	0	0
Region 9: Hammond/Slidell	**16**	**4**	**10**	**10**	**2**	**n/a**	**30**	**5**
Livingston	2	n/a	1	n/a	0	0	3	n/a
St. Helena	0	0	1	n/a	0	0	1	n/a
St. Tammany	9	5	2	n/a	2	n/a	15	6
Tangipahoa	4	n/a	5	13	0	0	9	7
Washington	1	n/a	1	n/a	0	0	2	n/a

*Rates per 100,000 persons in parish. Rates derived from numerators less than 20 may be unreliable and are not available (n/a) for numerators less than 5.
**The Louisiana Strata include cases with unknown parish.
† The totals include cases with other race/ethnicities.

Deaths Among Persons with HIV Infection Louisiana, 2016		
	2016 Deaths	**Percent**
Total Deaths	**408**	**100%**
Diagnosis at Death		
AIDS	327	80%
HIV	81	20%
Gender		
Men	294	72%
Women	114	28%
Transgender Women	0	0%
Race/Ethnicity		
Black/African American	300	74%
Hispanic/Latinx	5	1%
White	100	25%
Multi-Race/Other	3	1%
Age at Death		
20-24	5	1%
25-34	52	13%
35-44	68	17%
45-54	116	28%
55-64	115	28%
65+	52	13%
Imputed Transmission Category		
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	135	33%
Persons Who Inject Drugs (PWID)	77	19%
GBM/PWID	40	10%
High Risk Heterosexual (HRH)	153	38%
Transfusion/Hemophilia	1	<1%
Pediatric*	2	<1%
Region		
1-New Orleans	127	31%
2-Baton Rouge	106	26%
3-Houma	11	3%
4-Lafayette	33	8%
5-Lake Charles	19	5%
6-Alexandria	21	5%
7-Shreveport	33	8%
8-Monroe	28	7%
9-Hammond/Slidell	30	7%
Rural/Urban		
Rural	42	10%
Urban	366	90%

*Transmission category not imputed.

Program Report Technical Notes

Report Format

The *2017 HIV/STD Surveillance Report* includes only HIV and STD surveillance data and does not include HIV/STD prevention and services data. This STD/HIV Program Report is divided into the follow sections: Introduction, Chapter 1: Profile of the HIV Epidemic in Louisiana, Chapter 2: Linkage and Retention in HIV Care, Chapter 3: Perinatal HIV Exposure and Congenital Syphilis, Chapter 4: Profile of STDs in Louisiana, Chapter 5: HIV Co-Infection with STDs and Hepatitis C, and an Appendix which includes additional HIV and STD tables.

Tabulation of Data

This report includes all STD information entered at the STD/HIV Program office as of April 27, 2018 and all HIV information entered as of December 21, 2018. Chlamydia, gonorrhea, syphilis, congenital syphilis, HIV and AIDS cases diagnosed through 2017 are included in this report. The 2017 data are very complete and are not adjusted for a potential reporting delay. Due to reporting and collection delays for deaths among person with an HIV diagnosis and pediatric HIV exposures, those data are reported only through 2016 to ensure complete data.

Census Data and Rate Calculation

For all rates calculated for years 2008-2017, 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 2017 for the New Orleans Public Health Region 1, the 2017 Census populations for the four parishes within Region 1 are added together equaling a regional population of 901,878 persons. Then the number of new HIV diagnoses in Region 1 in 2017, 303 new diagnoses, is divided by the totaled population, 901,878 persons to get 0.0003360. This number is multiplied by 100,000 to result in an HIV case rate of 33.60 per 100,000 population for Region 1 in 2017.

Interpretation of HIV Data

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.

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.

Interpretation of STD and Hepatitis Data

Similar to the limitations of the HIV data, STD data in this report represent only persons who have been tested for an STD. For many people, symptoms of an STD may not be obvious or may be ignored and a person does not seek STD testing.

The Hepatitis C virus (HCV) data described in *Chapter 5 – HIV Co-Infection* was provided by the Louisiana Department of Health – Office of Public Health – Infectious Disease Epidemiology Program. The Infectious Disease Epidemiology Program has been tracking HCV diagnoses made in Louisiana since 1990, when HCV

first became a reportable disease under the Louisiana Sanitary Code. In 2016, the case definition of chronic HCV was expanded to include persons that only had a positive HCV antibody test result. Also in that year, chronic HCV became a laboratory-only reportable disease as oppose to a physician-reportable disease. These changes alone caused a large increase in the number of confirmed HCV cases reported from 2015 to 2016. As a result, the HIV/HCV co-infection analyses presented in this report are limited to HCV diagnoses made and reported in 2016.

HIV and AIDS Case Definition Changes

≥13 years).[xxxiv] A single case definition was created that incorporates AIDS and an HIV classification system. HIV infection is now categorized into four stages based on severity. Stage 1 is HIV infection with no AIDS-defining conditions and either the CD4+ T-lymphocyte count is >500 cells/µl or the lymphocyte percentage is ≥29%. Stage 2 is HIV infection with no AIDS-defining conditions and either the CD4+ T-lymphocyte count is between 200-499 cells/µl or the lymphocyte percentage is between 14-28%. Stage 3 is AIDS where one of the following three conditions is met: CD4+ T-lymphocyte count is <200 cells/µl, or the lymphocyte percentage <14%, or there is documentation of an AIDS-defining condition. An AIDS-defining condition supersedes the CD4 count or percentage. Stage 4 is an unknown stage where no information has been collected on AIDS-defining conditions, CD4 count, or percentage. Once a person is classified as Stage 2 or 3, they cannot be reclassified at a lower stage.[xxxv]

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.

The definition of Stage 3 (AIDS) was further modified for all HIV-positive persons with laboratory results in 2014 and going forward. The new case definition relies only on the diagnosis of an OI or a CD4 count below 200. If the CD4 lymphocyte count is above 200 and the lymphocyte percentage is below 14%, this no longer meets the surveillance definition for Stage 3 (AIDS). If no CD4 lymphocyte count is available then a CD4 lymphocyte percent below 14% does meet the surveillance definition for AIDS.

Definitions of the HIV Transmission Categories

FFor 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:

Gay, Bisexual, and Other Men who have Sex with Men (GBM): 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 GBM for transgender women who report male sex partners, because the birth sex is collected as male.

Persons Who Inject Drugs (PWID): 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 acquiring HIV, 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 in HIV 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 acquiring HIV (GBM, PWID, 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.

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