

2022 HIV Supplemental Report

State of Louisiana
Department of Health
Office of Public Health



Louisiana Department of Health
Office of Public Health
STD/HIV/Hepatitis Program
1450 Poydras Street, Suite 2136
New Orleans, LA 70112
(504) 568-7474
<http://ldh.louisiana.gov/hiv>
www.louisianahealthhub.org

Louisiana Office of Public Health STD/HIV/Hepatitis Program

DeAnn Gruber, PhD, LCSW

Director, Bureau of Infectious Diseases

Sam Burgess, MA, MSHCM

Director, STD/HIV/Hepatitis Program

Anthony James, MS, MA, MSHCM

Deputy Director - Programs

Franda Thomas, MEd

Deputy Director - Operations

Tsegaye Assefa, MBA

Financial Operations Manager

Jacquelyn Naomi Bickham, MPA

Prevention Manager

Samantha Euraque, MA

Field Operations Manager

Jessica Fridge, MSPH

Surveillance Manager

Jimmy Gale

Capacity Building Community Mobilization Manager

Will F. Henderson III, MSIS

Health Systems Manager

Billy Robinson, PhD

Evaluation Manager

Erika Sugimori, MPH

Care and Services Manager

Debbie Wendell, PhD, MPH

Data Management/Analysis Manager

Graphic Design

Jim McGowan with Complete Communications, Inc.

Editor/Production

Christian Beauchamp, MPH

Jessica Fridge, MSPH

Elizabeth Lindsay, MPH

Caroline Moore, MPH

Lauren Ostrenga, MPH

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Louisiana Office of Public Health STD/HIV/Hepatitis Program Overview

The History of the STD/HIV/Hepatitis 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 and became the STD/HIV/Hepatitis Program (SHHP). In January 2019, SHHP fully took on Hepatitis B & C surveillance activities.

About the Current STD/HIV/Hepatitis Program

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

VISION

Louisiana is a place where new HIV, STI and hepatitis diagnoses are rare, all people have high-quality health care and treatment, are free from discrimination, and can achieve their full potential for health and well-being across their lifespan.

MISSION

Our mission is to end the impacts of HIV, STIs, and hepatitis by eliminating related health inequities and stigma for all communities in Louisiana.

About this Report

The *2022 HIV Supplemental Report* provides a surveillance profile of the HIV epidemic in Louisiana. The diagnoses included in this report include syphilis, gonorrhea, chlamydia, Hepatitis C, mpox, HIV and AIDS.

For More Information:

SHHP 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, co-infections among people with HIV, perinatal HIV exposure and transmission, and HIV mortality. This report includes cases diagnosed through 2022. Some of the most significant trends are highlighted below:

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EHE & Other Key HIV Measures

- As of 2021, an estimated 84% of persons living with HIV in Louisiana had knowledge of their HIV status.
- In 2022, 857 individuals were newly diagnosed with HIV in Louisiana.
- In 2022, the proportion of people newly diagnosed with HIV, linked to care within 7 days, was 44%, the lowest linkage to care rate from 2018-2022. This marked the second consecutive year the proportion decreased.
- In 2022, there were 21,747 people living with HIV in Louisiana, of whom, 14,812 (68%) were virally suppressed.
- In 2022, 13% of people newly diagnosed with HIV were identified as acute infections.
- In 2022, 16% of people newly diagnosed with HIV were diagnosed with Stage 3 (AIDS) within 30 days of their HIV diagnosis. These people are considered “late testers.”

HIV Co-Infection

- In 2022, coinfection with HIV was identified in 2% of chlamydia diagnoses (n=826), 6% of gonorrhea diagnoses (n=967), 31% of early syphilis diagnoses (n=654), 2% of hepatitis C diagnoses (n=80), and 54% of mpox diagnoses (n=164).
- The number of persons identified with early syphilis/HIV co-infection has more than tripled between 2018 and 2022, from 190 co-infections in 2018 to 654 co-infections in 2022.
- From 2018 to 2022, the gonorrhea/HIV co-infection rate increased from 17.7 per 100,000 in 2018 to 20.9 per 100,000 in 2022.
- Persons who inject drugs accounted for 16% of HCV/HIV co-infections in 2022. An additional 10% of HCV/HIV co-infections were among, gay, bisexual, and other men who have sex with men who inject drugs.

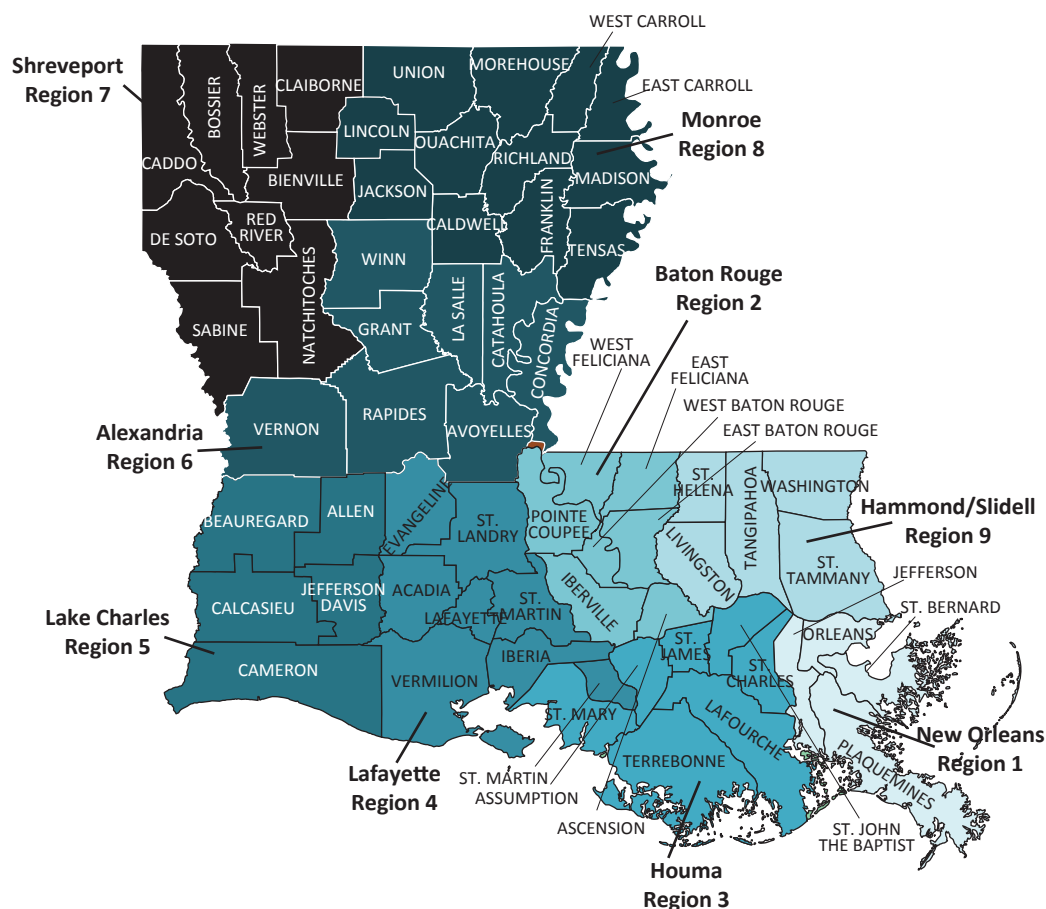
Perinatal HIV Exposure

- Perinatal HIV transmission rates have declined significantly from a high of nearly 16% in 1994 to less than 1% in 2021.
- In 2021, 91% of women living with HIV in Louisiana received ARV therapy during pregnancy; 98% received appropriate care and treatment during labor/delivery; and 96% of newborns received prophylactic zidovudine shortly after birth. Eighty-nine percent of mother-infant pairs received all three recommended components of the antiretroviral prophylaxis protocol. Continued efforts must be made to intervene during pregnancy, labor/delivery, and after the birth of the child to achieve a perinatal HIV transmission rate below 1%.
- 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.

Mortality among People with HIV

- In 2021, there were 498 people with HIV who died.
- The median age at death among people with HIV in 2021 was 53.5 years as compared to 38.0 years in 1996 when HAART was first introduced.
- Among people with HIV who died in 2021, 75% of deaths were due to non-HIV related causes of death and 25% of deaths were HIV-related.
- The leading non-HIV related cause of death in 2021 was unintentional injury. Of the 78 deaths from unintentional injury, 66 (85%) were due to accidental drug overdoses. Heart disease, cancer, and COVID-19 were other leading non-HIV related causes of death in 2021.

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

State Population Overview

According to the 2021 census, the state of Louisiana has 4,624,047 residents. Louisiana is divided into 64 county-equivalent units called parishes. In 2021, parish populations ranged from a low of 4,043 residents in Tensas Parish to a high of 453,301 residents in East Baton Rouge Parish.¹ While the state is considered rural, 84.3% of the population lives in urban areas. The estimated 15.7% of the population that lives in rural areas often experience poorer health outcomes and increased morbidity and mortality as compared to their urban counterparts. The 64 parishes are grouped into nine public health regions. In addition, Louisiana has nine metropolitan statistical areas (MSAs), the largest of which is the New Orleans MSA (1,261,726), followed by the Baton Rouge MSA (851,216).¹

Demographics

According to the 2021 census, the racial and ethnic composition of Louisiana is 57.9% non-Hispanic White, 32.4% non-Hispanic Black, 1.8% non-Hispanic Asian, and 0.67% non-Hispanic Native American. Persons of Hispanic or Latinx origin make up an additional 5.6% of the population.¹

Age and Sex

According to 2021 census data, 51.0% of the population is female and 49.0% of the population is male.¹ Among Louisiana residents, 23.4% are under 18 years old, and 16.5% are 65 years or older. Young people 15 to 24 years old, comprise 12.9% of the state's population.¹

Education and Socioeconomic status

An estimated 86.7% of Louisiana residents over 25 years old have attained a high school degree or higher, and 26.4% of adults have a bachelor's degree or higher.¹ The median household income in Louisiana is \$52,087, which is lower than the national median household income of \$69,717.¹ In Louisiana, 18.8% of people live below the poverty level, compared to 12.8% nationally.^{1,3} In the 2022 United Health Foundation's America's Health Rankings, Louisiana ranked 49th out of 50 for children in poverty with 27.0% of Louisiana children living in poverty as compared to 16.8% nationally.⁴ Women are also economically disadvantaged as the state ranked 48th out of 50 for women in poverty with 23.0% of Louisiana women 18-44 years old living in poverty as compared to 15.2% nationally.⁴

Health Indicators

In the 2022 United Health Foundation's America's Health Rankings, Louisiana ranked 50th out of 50 in overall health in the United States.⁴ This national health survey compares a variety of health outcomes and health determinants in all state. A high premature death rate, high smoking rates, and a high economic hardship index contribute to the state's low health ranking. In addition, Louisiana has high rates of adults with obesity (35.9%) and adults with diabetes (12.6%).³ It is estimated that 14.4% of adults smoke nationally, however, 19.5% of Louisianans smoke.⁴ An estimated 24.0% of adults in Louisiana have ever been told by a health care professional they had depression or a depressive disorder.³ People in Louisiana also struggle to access mental health care. Louisianans were four times more likely to be forced out-of-network for mental health care than for primary care.⁶

In 2020, Louisiana's teen birth rate was 25.7 births per 1,000 females 15-19 years old. There are stark racial disparities in Louisiana's reproductive health outcomes.⁴ Teen pregnancy rates nearly are twice as high for Black females as compared to White females (35.3 births per 1,000 females 15-19 years old and 18.4 births per 1,000 females 15-19 years old, respectively).⁷ During pregnancy, 71.1% of pregnant people accessed prenatal care in the first trimester of pregnancy.⁷ Pregnancy-associated mortality was twice as high among Black women as compared to White women (155.0 deaths per 100,000 live births and 80.5 deaths per 100,000 live births, respectively).⁷ The Louisiana infant mortality rate of 7.8 deaths per 1,000 live births is considerably higher than the national average of 5.6 deaths per 1,000 live births.⁴ Further, Black infants are twice as likely to experience low birth weight compared to White infants, 16.1% and 7.6%, respectively.⁷

Crime and Incarceration

In 2022, Louisiana had the 5th highest violent crime rate in the country with 639 offenses per 100,000 population as compared to 399 offenses per 100,000 population nationally.⁴ Louisiana has an incarceration rate of 1,094 per 100,000 people which is almost double the national incarceration rate of 664 per 100,000 people.⁸ At the end of 2022, 27,212 people were incarcerated with the Louisiana Department of Corrections.⁹ Approximately 64.9% of incarcerated people in Louisiana are Black and 34.6% are White.⁹ Incarcerated people in Louisiana are disproportionately impacted by mental illness. It is estimated that 40% of incarcerated adults have a history of mental illness and 70% of incarcerated youth have a mental health condition.⁶

Insurance Coverage

In 2021, 48.1% of adults in Louisiana had employer-sponsored health insurance, 31.9% were covered through Medicaid, and 10.2% were covered through Medicare.¹⁰ Uninsured adults comprise 9.4% of the state population as compared to an estimated 12.2% nationally.^{10,11} Among children, 39.1% had employer-sponsored health insurance, 53.7% were covered by Medicaid, and 6.1% were covered by Medicare.¹⁰ Only 2.6% of Louisiana children were uninsured as compared to an estimated 5.3% nationally.^{10,11} In the United States, 48.5% of the population is covered by employer-sponsored health insurance, 21.1% by Medicaid, and 14.3% by Medicare.¹¹

EHE and Other Key HIV Care Measures

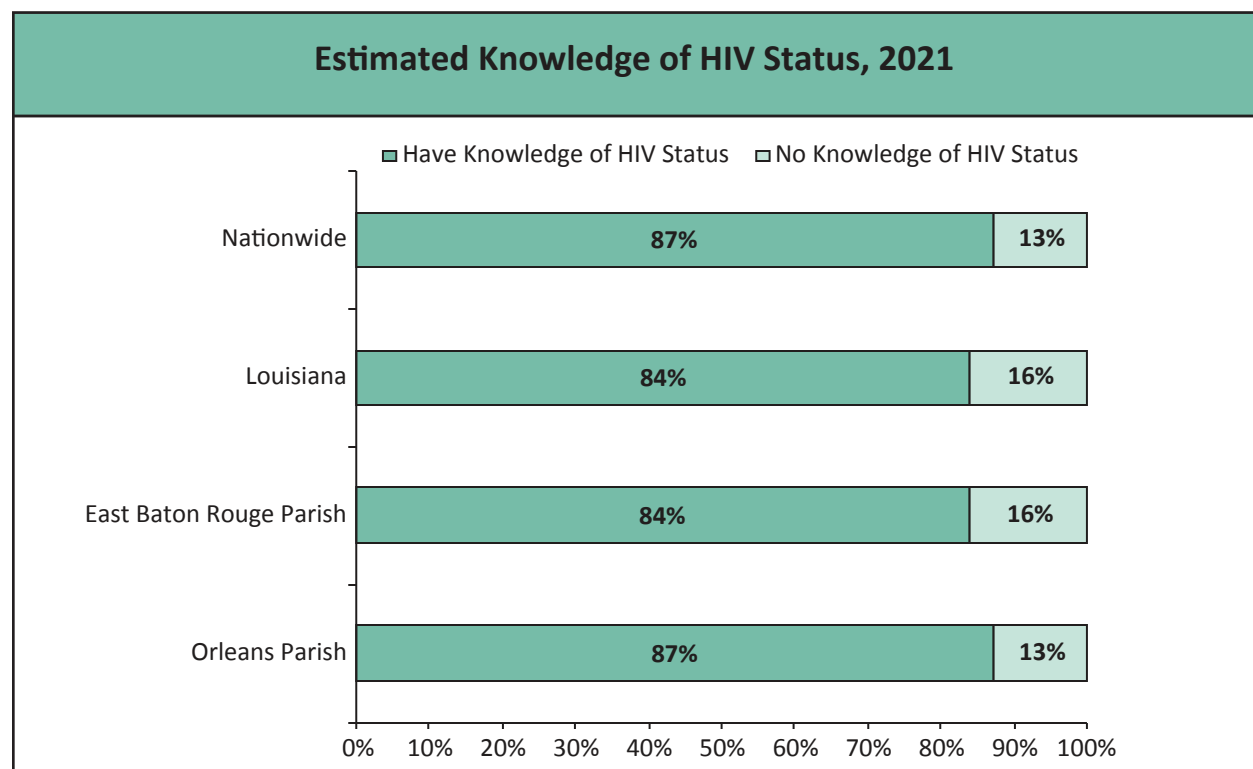
Ending the HIV Epidemic Initiative

Ending the HIV Epidemic (EHE) is a federal initiative launched in 2019 with the ambitious goal of reducing new HIV infections in the United States by 90% by 2030. The EHE initiative focuses on four pillars: Diagnose, Test, Treat, and Respond to monitor progress and focus prevention and treatment efforts. While EHE requires national coordination, the Centers for Disease Control and Prevention (CDC) identified 57 priority jurisdictions with disproportionate HIV burdens and directed additional resources to these communities. In Louisiana, East Baton Rouge Parish and Orleans Parish were identified as priority jurisdictions. The data on the following pages will highlight Louisiana's progress on four of the six core EHE indicators: knowledge of HIV status, HIV diagnoses, linkage to HIV care, and viral suppression.

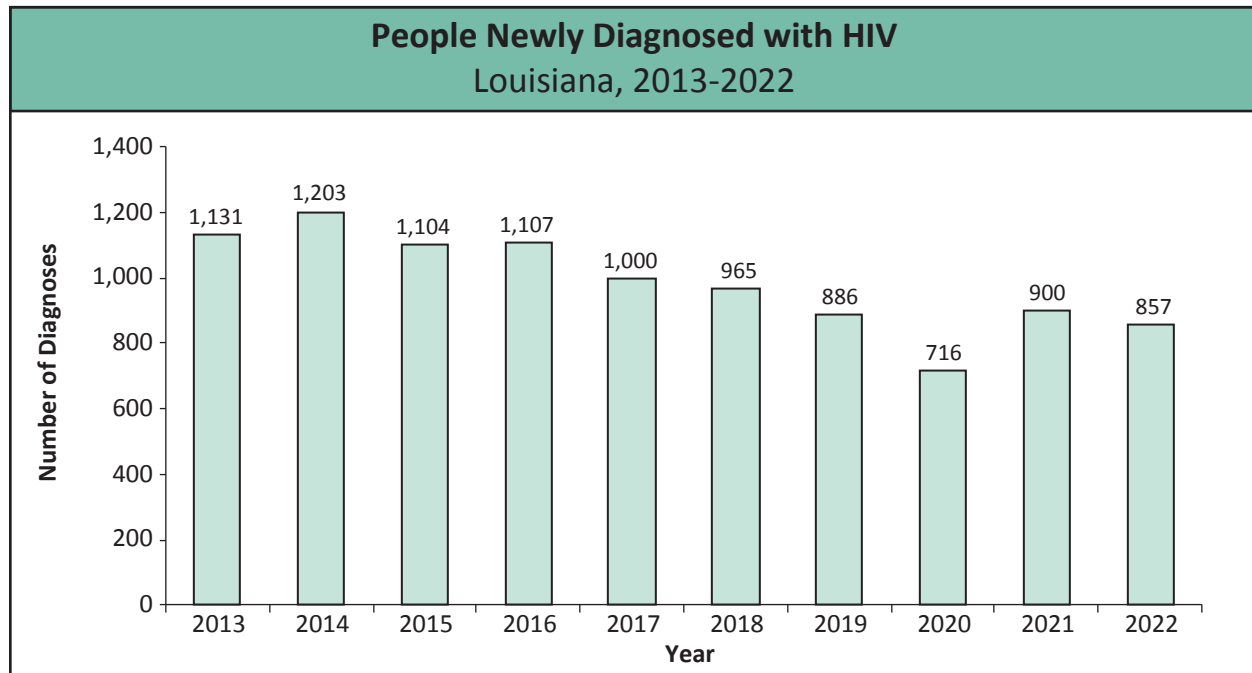
Knowledge of HIV Status in Louisiana

Knowledge of HIV status is one of six core indicators for ending the HIV Epidemic in the United States. The percentage of people with knowledge of status is considered to be the percentage of persons living with HIV who have received an HIV diagnosis. The CDC has set the goal of having 95% of people with HIV receive a diagnosis by 2025 and to have that figure remain at 95% through 2030. Current CDC estimates suggest that only 87% of people living with HIV in the United States have knowledge of their status.¹²

Since it is difficult to know whether each person living with HIV has knowledge of their status, the CDC has developed statistical programs to estimate what percentage of people living with HIV have received an HIV diagnosis. In 2021, it is estimated that 84% of persons living with HIV in Louisiana have knowledge of their HIV status.

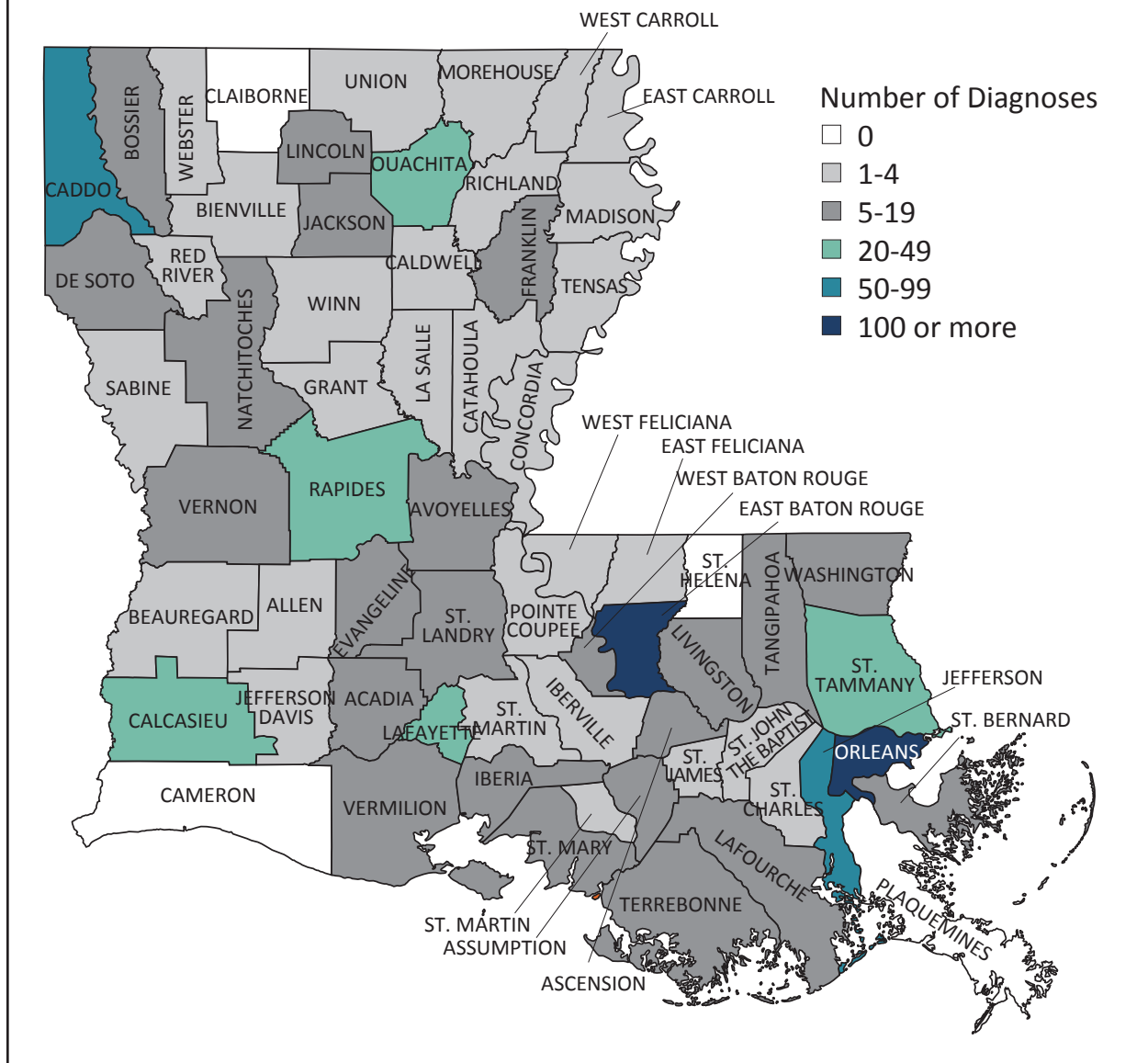


New HIV Diagnoses in Louisiana



- Over the past 10 years, there has been a downward trend in the number of people newly diagnosed with HIV each year in Louisiana.
- In 2020, the COVID-19 pandemic greatly impacted access to HIV testing and services which resulted in a large decline in the number of people newly diagnosed with HIV. In 2021, there was a significant increase in the number of people newly diagnosed with HIV, likely a result of individuals delaying HIV testing during the height of the COVID-19 pandemic and re-engaging in routine testing and medical care during 2021.

New HIV Diagnoses by Parish, Louisiana, 2022

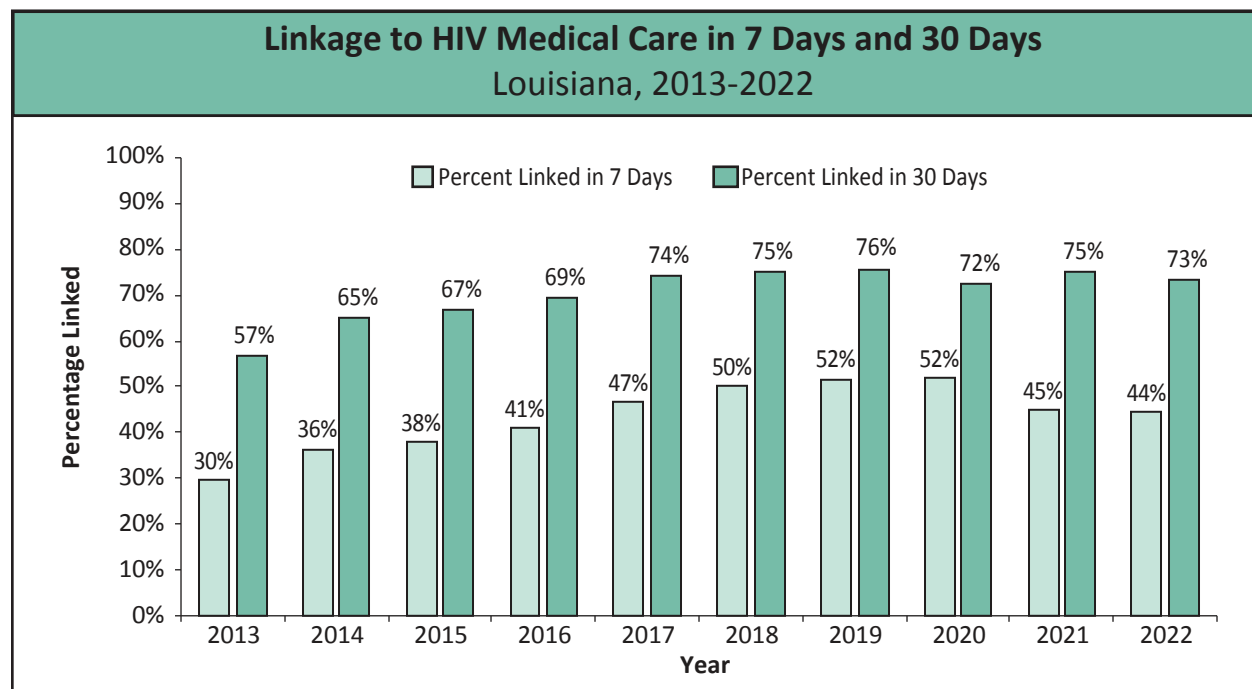


- The majority of diagnoses are concentrated in the most populous areas of the state. East Baton Rouge Parish and Orleans Parish have the highest number of people newly diagnosed with HIV with 132 and 125, respectively.
- Caddo Parish and Jefferson Parish had the third and fourth highest number of new diagnoses with 80 and 76, respectively.
- There were four parishes with zero new HIV diagnoses—Cameron Parish, Claiborne Parish, Plaquemines Parish, and St. Helena Parish.

Linkage to HIV Care in Louisiana

Once a person is diagnosed with HIV, rapid linkage to HIV care is an important next step. Being linked to HIV care is vital for maintaining and monitoring a person's health after HIV diagnosis. Additionally, rapidly linking people to HIV care greatly reduces the chances of further HIV transmission. Rapid linkage to HIV care is associated with better long-term health outcomes among persons living with HIV. Using laboratory and surveillance data, Louisiana's surveillance system is able to monitor what percentage of persons newly diagnosed with HIV are linked to HIV care in a timely manner.

The National HIV/AIDS Strategic Plan has set the goal for 95% of people newly diagnosed with HIV to be linked to care within 30 days, by 2030. Linkage to care within 30 days is defined as having a CD4 count or viral load test within 30 days of a person's HIV diagnosis. Rapid ART programs, focusing on linking people to HIV care within 7 days of diagnosis, have been found to be successful across the country. As such, this measure was also included to monitor Louisiana's ability to rapidly link people to HIV care.



- In 2022, the proportion of people newly diagnosed with HIV, who were linked to care in 7 days, was the lowest of the preceding 5-year period, at 44%. This marked the second consecutive year the proportion decreased.
- The proportion of people newly diagnosed with HIV who were linked to care within 30 days has been more stable over the past 5 years. In 2022, 73% of new HIV diagnoses were linked to care within 30 days.

Linkage to HIV Care Within 7 and 30 Days Louisiana, 2022					
	New HIV Diagnoses	Linked Within 7 Days		Linked Within 30 Days	
		Count	Percent	Count	Percent
Total	857	380	44%	629	73%
Gender					
Female	201	71	35%	145	72%
Male	633	297	47%	465	74%
Transgender Female	19	9	47%	15	79%
Transgender Male	3	2	67%	3	100%
Additional Gender Identity	1	1	100%	1	100%
Race/Ethnicity					
Black/African American	545	221	41%	385	71%
Hispanic/Latinx	79	51	65%	66	93%
White	216	101	47%	166	77%
Multi-race/Other	17	7	41%	12	71%
Age at Diagnosis					
13-24	179	87	49%	142	79%
25-44	493	228	46%	367	74%
45-64	169	57	34%	108	64%
65+	16	8	50%	12	75%
Region					
1-New Orleans	206	95	46%	162	79%
2-Baton Rouge	167	84	50%	134	80%
3-Houma	46	14	30%	29	63%
4-Lafayette	90	41	46%	66	73%
5-Lake Charles	42	18	43%	31	74%
6-Alexandria	55	20	36%	37	67%
7-Shreveport	121	53	44%	73	60%
8-Monroe	67	27	40%	50	75%
9-Hammond/Slidell	63	28	44%	47	75%
Transmission Category					
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	529	246	47%	395	75%
Persons Who Inject Drugs (PWID)	83	31	37%	24	65%
GBM/PWID	32	19	59%	54	75%
High Risk Heterosexual (HRH)	212	84	40%	156	74%

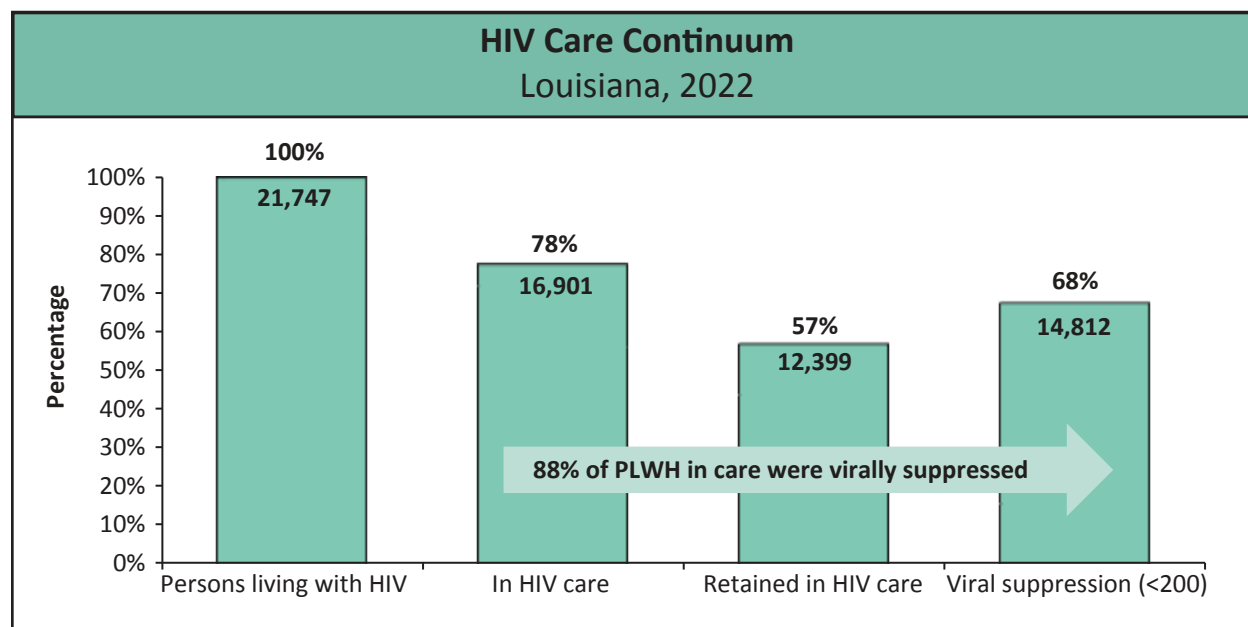
- Males were more likely to be linked to HIV care within 7 days than females, with 47% and 36%, respectively. However, this gap was not present at the 30-day mark.
- Among all racial/ethnic groups, Hispanic/Latinx people newly diagnosed with HIV were most likely to be linked to care within 7 or 30 days, at 65% and 93%, respectively. Conversely, Black people newly diagnosed with HIV were the least likely to be linked to care in 7 or 30 days, at 41% and 71%, respectively.
- In 2022, Region 2-Baton Rouge had the greatest percentage of people newly diagnosed with HIV linked to care within 7 days (50%). Region 3-Houma had the lowest percentage of people newly diagnosed with HIV linked to care within 7 days (30%).
- Among all risk groups, PWID were least likely to be linked to HIV care within 7 days of their diagnosis at just 37%. GBM were more likely to be linked to HIV care within 7 days than HRH, 47% and 40%, respectively.

Louisiana's HIV Care Continuum

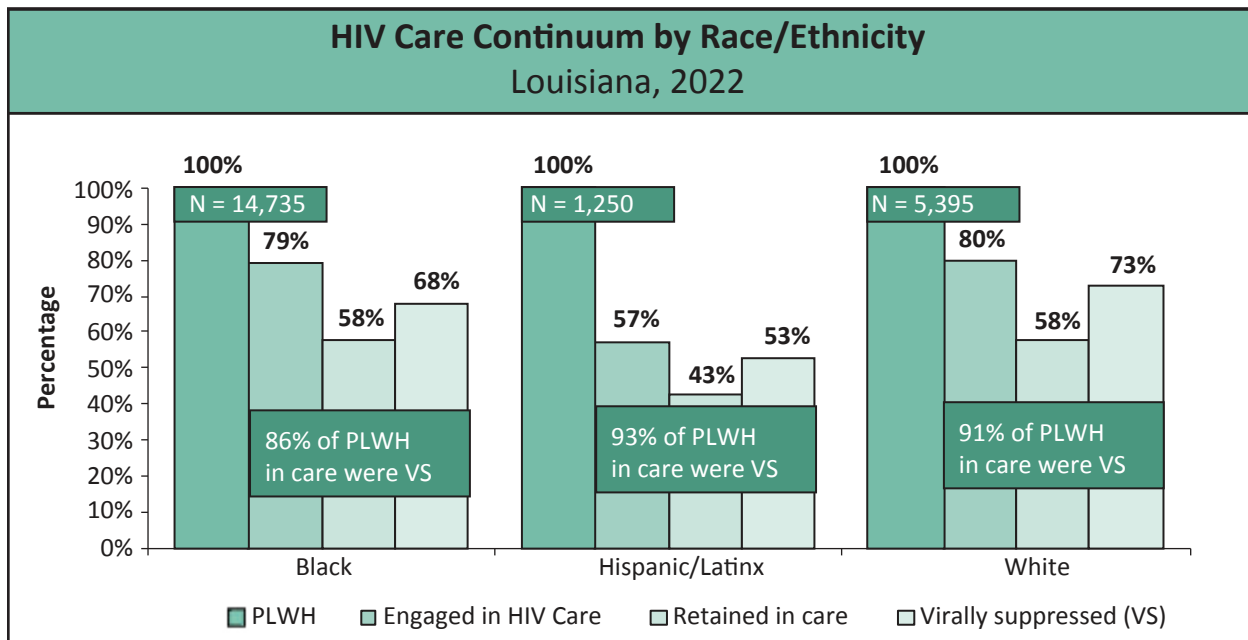
The HIV Care Continuum is a graphical representation of the percentages of persons living with HIV who are engaged in care and achieving viral suppression. This is a useful tool for identifying gaps and disparities at each step of the HIV Care Continuum and can help with targeting necessary interventions. The graph below shows the Louisiana-specific continuum using data from surveillance and laboratory reporting.

HIV Care Continuum Definitions:

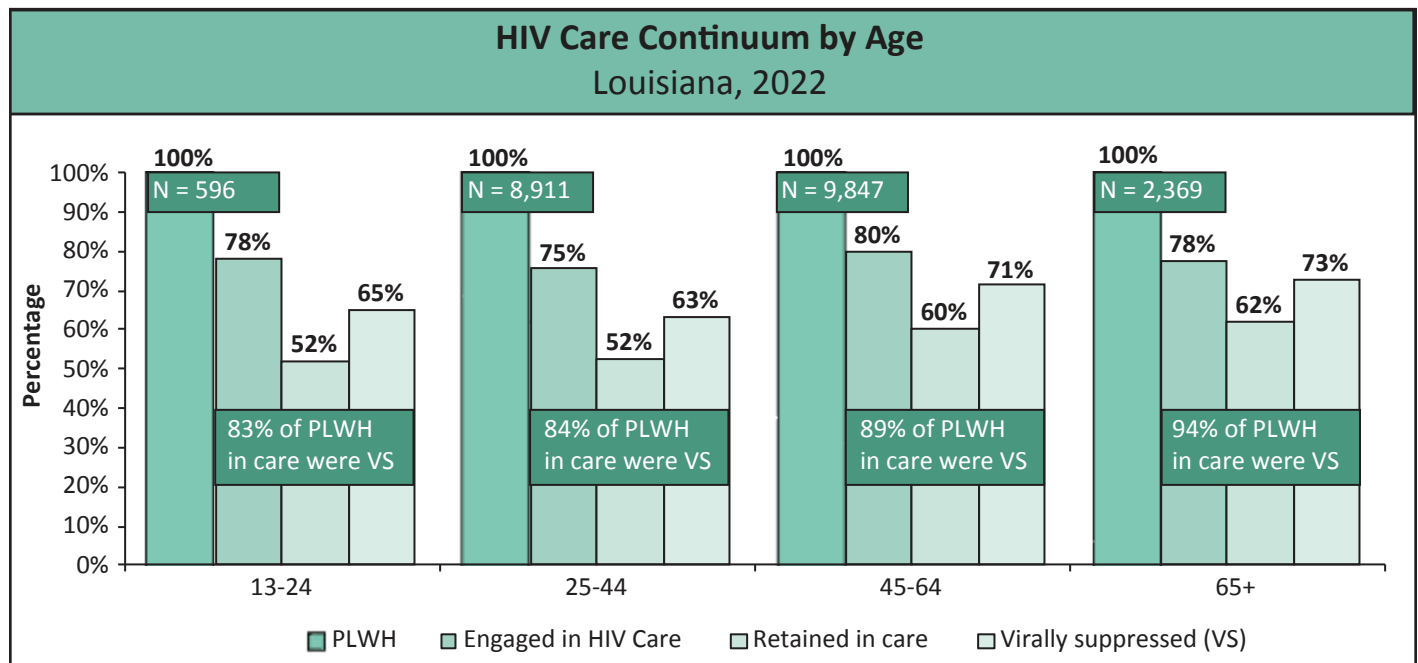
- Persons living with HIV (PLWH)
 - Number of PLWH as of December 31, 2022 who were diagnosed by December 31, 2021 and whose current address is in Louisiana. This number does not include anyone newly diagnosed in 2022.
- Engaged in HIV care
 - Number of PLWH who had at least one CD4 or VL test conducted in 2022.
- Retained in HIV care
 - Number of PLWH who had two or more CD4 or VL tests conducted in 2022 at least 90 days apart.
- Virally suppressed
 - Number of PLWH whose most recent VL test in 2022 was <200 copies/ml.



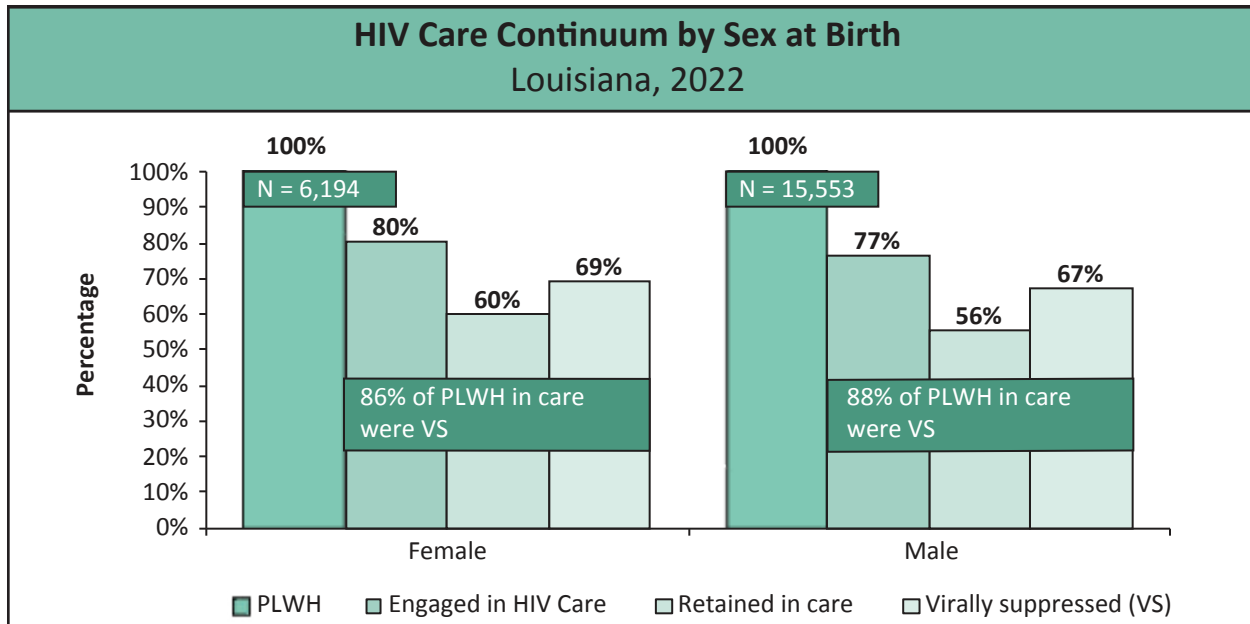
- At the end of 2022, there were 21,747 people living with HIV in Louisiana who had been diagnosed prior to January 1, 2022. Of these 21,747 PLWH, 78% had at least one CD4 count or viral load (VL) test conducted in 2022. These people are considered to be in HIV care.
- Of the 21,747 PLWH, 57% had two or more CD4 counts or VL tests in 2022 that were at least 90 days apart. These people are considered to be retained in HIV care.
- Of the 21,747 PLWH in Louisiana, 68% had a viral load less than 200 copies/ml at their most recent VL test in 2022. These people are considered to be virally suppressed.
- Finally, of the 16,901 people who were in HIV care, 88% were virally suppressed in 2022.

HIV Care Continuum—Subgroup Trends

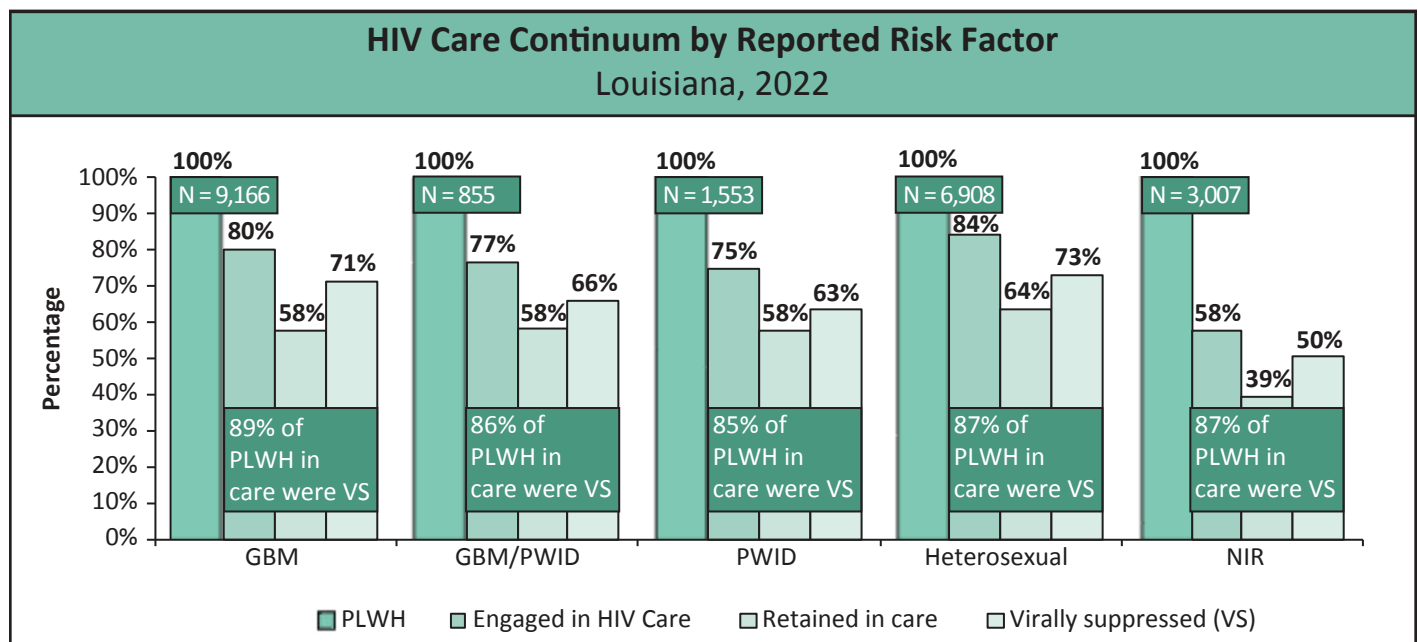
- Although Black people make up the majority of all PLWH, they have the lowest percentage of viral suppression among those who are in HIV care, 86%. Although Hispanic/Latinx people had the lowest percentage of PLWH engaged in HIV care, they have the highest percentage of viral suppression among those in care, 93%.



- People 13-24 and 25-44 had the lowest percentages of viral suppression among those in HIV care, 83% and 84%, respectively. Persons 65 and older had the highest percentage of viral suppression among those in care, 94%.

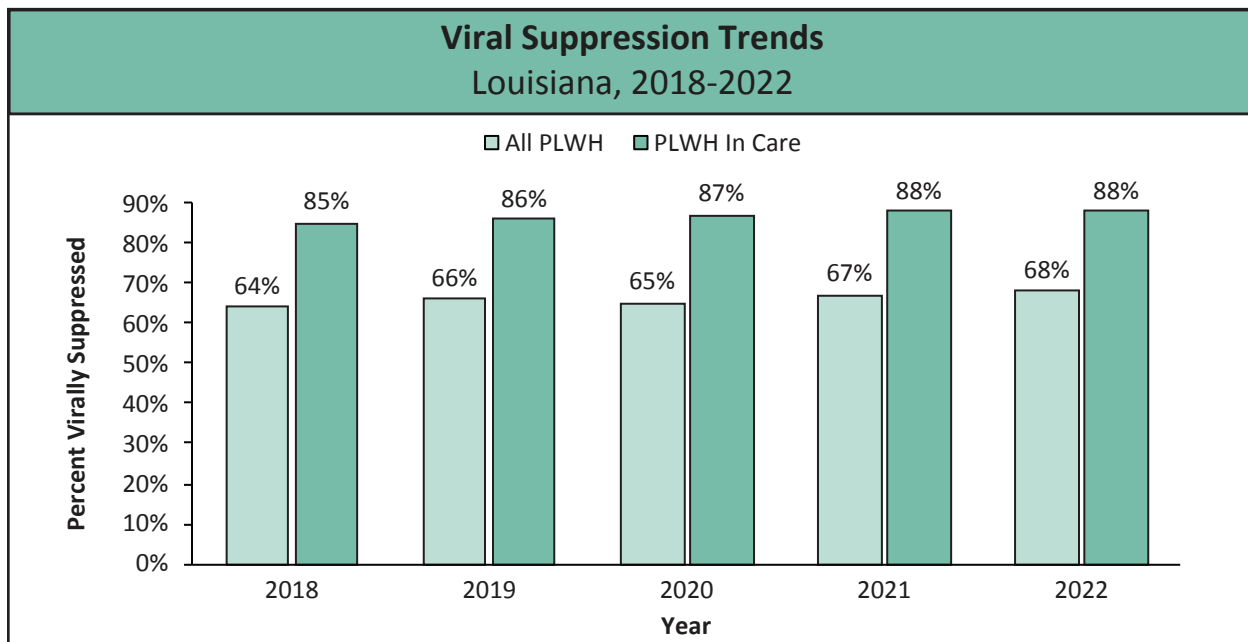


- Although females had a higher percentage of PLWH in HIV care than males, they had a lower percentage of viral suppression among those in care, 86% vs. 88%.



- The risk group with the highest viral suppression rates among those in care was GBM at 89%. PWID had the lowest percentages of viral suppression among those in care, 85%. Persons with No Identified Risk (NIR) had the lowest engagement in care, retention, and viral suppression as compared to all other risk groups.

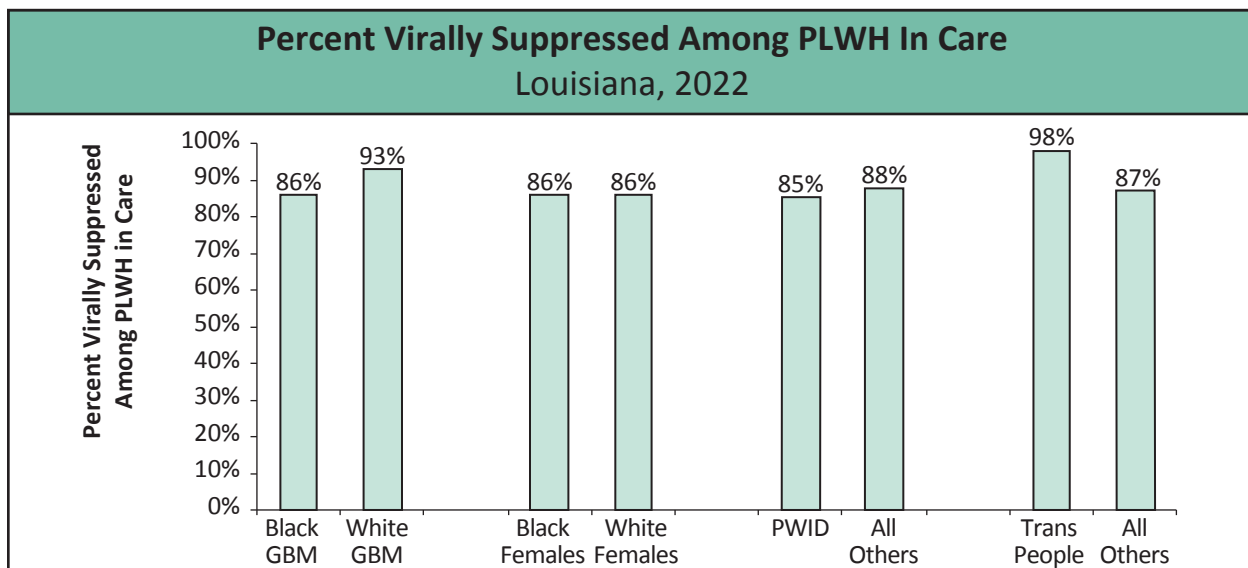
HIV Care Continuum—Viral Suppression Trends



- From 2018-2022, the trend in viral suppression among persons living with HIV has been positive. There has been a slow, but steady increase in viral suppression among all PLWH and those in care.
- Viral suppression among all PLWH increased from 64% in 2018 to 68% in 2022.

HIV Care Continuum—Disparities in Viral Suppression

Health disparities refer to preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations.¹³ Health disparities can be related to a multitude of factors including race or ethnicity, gender, income, disability, or sexual orientation. One area health disparities may be observed is in the ability to achieve viral suppression among persons living with HIV.

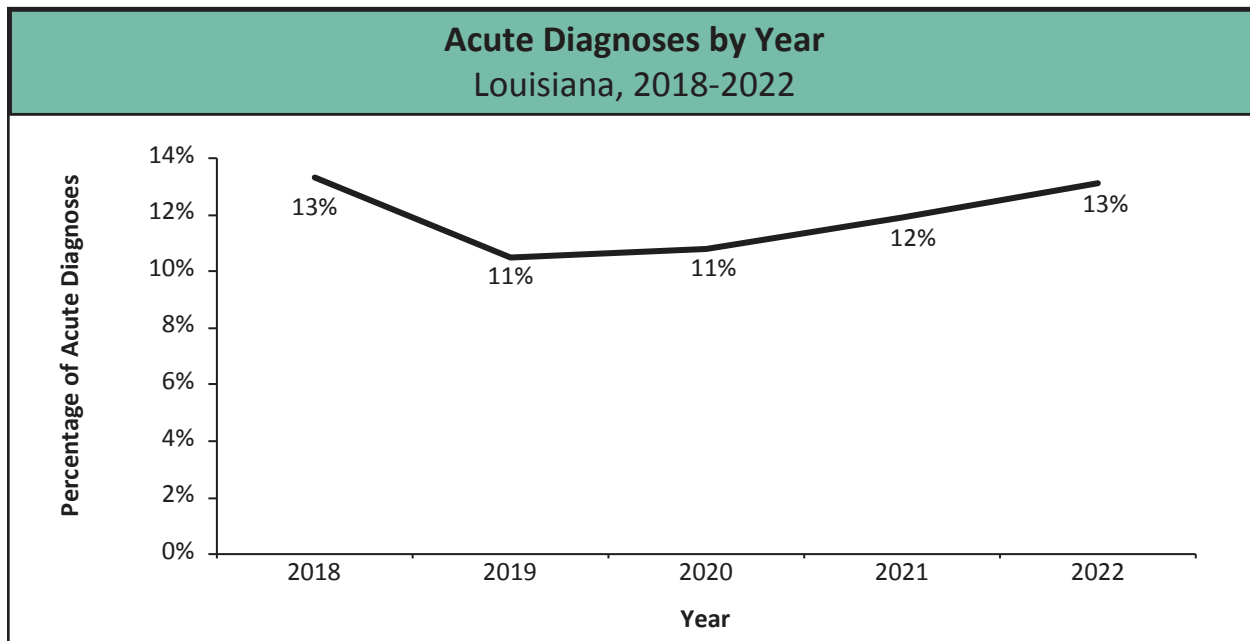


- Among those considered to be in HIV care, Black GBM were less likely than White GBM to achieve viral suppression, 86% and 93%, respectively.
- PWID are less likely to achieve viral suppression than all other risk groups.
- People of trans experience in HIV care were more likely than all other gender groups to be virally suppressed, 98% and 88%, respectively.

Acute HIV Diagnoses

Timely HIV testing allows for the recognition of very early stage diagnoses, known as stage 0 HIV infection or acute infections. This stage of HIV refers to the early period of infection during which the body has not fully developed an antibody response to the virus. This period of HIV infection is characterized by extremely high viral loads and greater likelihood of HIV transmission. As such, detection of acute HIV diagnoses can be helpful in preventing further HIV transmission.

The recognition of acute HIV diagnoses is made possible by new HIV testing algorithms. In short, an acute diagnosis occurs when a person has a positive confirmatory test within 6 months of a negative screening test. Identifying acute diagnoses is crucial for helping slow HIV transmission.



- In 2018, the greatest number and percentage of acute HIV diagnoses were identified, with 128 (13%) of the 965 people newly diagnosed with HIV being identified as acute.
- In 2020, only 77 (11%) of the 716 people newly diagnosed with HIV were identified as acute.
- In 2022, 13% of the 857 people newly diagnosed with HIV were identified as acute. 2022 marked the second consecutive year with an increase in the number and proportion of acute diagnoses.

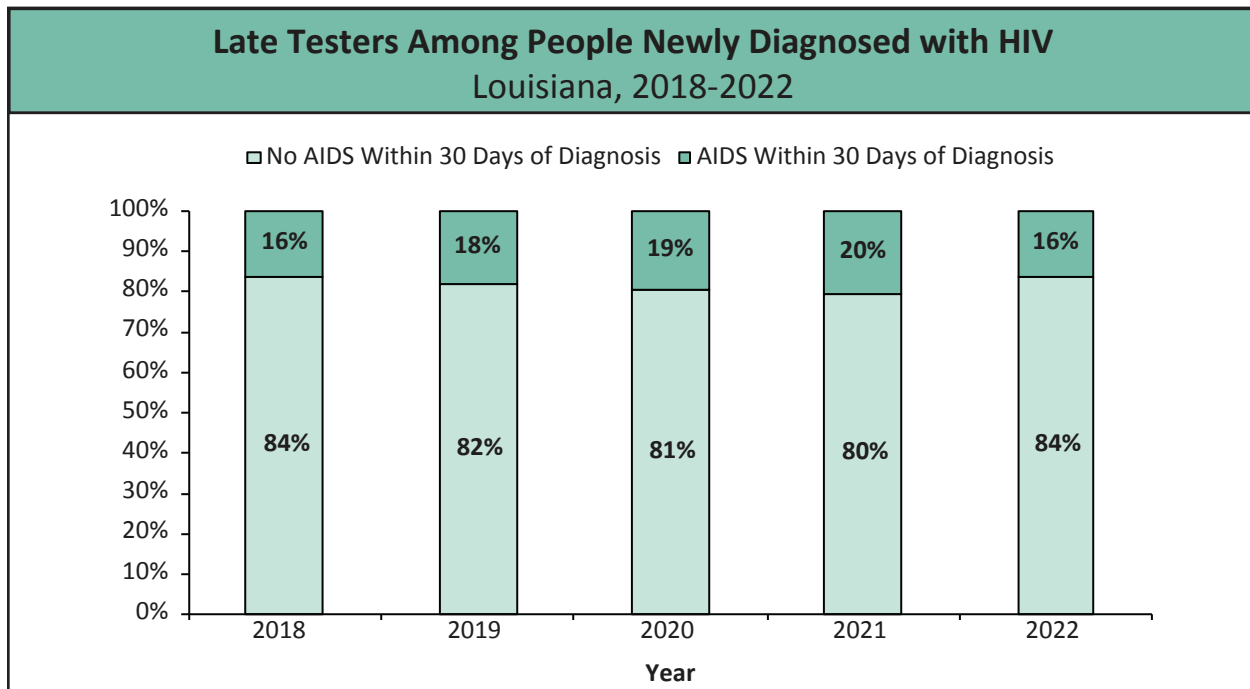
Acute HIV Diagnoses Louisiana, 2022			
	New HIV Diagnoses	Acute HIV Diagnoses	
		Count	Percent
Total	857	112	13%
Gender			
Female	201	25	12%
Male	633	83	13%
Transgender Female	19	3	16%
Transgender Male	3	0	0%
Additional Gender Identity	1	1	100%
Race/Ethnicity			
Black/African American	545	69	13%
Hispanic/Latinx	79	9	11%
White	216	30	14%
Multi-race/Other	17	4	24%
Age at HIV Diagnosis			
13-24	179	29	16%
25-44	493	64	13%
45-64	169	18	11%
65+	16	1	6%
Region			
1-New Orleans	206	31	15%
2-Baton Rouge	167	32	19%
3-Houma	46	6	13%
4-Lafayette	90	5	6%
5-Lake Charles	42	2	5%
6-Alexandria	55	4	7%
7-Shreveport	121	14	12%
8-Monroe	67	10	15%
9-Hammond/Slidell	63	8	13%
Transmission Category			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	529	73	13%
Persons Who Inject Drugs (PWID)	83	6	7%
GBM/PWID	32	4	13%
High Risk Heterosexual (HRH)	212	29	14%

- The proportion of acute HIV diagnoses identified was comparable across racial and ethnic groups and between males and females.
- There was variation in the number of acute diagnoses across the state. Region 2-Baton Rouge had the greatest percentage of new HIV diagnoses being acute HIV diagnoses, 19%. Region 1-New Orleans had the largest number of acute diagnoses, 206.
- Among risk groups, GBM had the greatest number of acute HIV diagnoses at 73, which accounted for 13% of new HIV diagnoses among GBM. Persons who inject drugs were the risk group with the smallest proportion of acute HIV diagnoses, 7%.

Late HIV Testing in Louisiana

Timely HIV testing is an essential part of the public health response to HIV. Frequent HIV testing allows for early HIV detection, which is associated with better long-term health outcomes among persons living with HIV as well as reduced HIV transmission. Unfortunately, many people are not tested until the later stages of infection, resulting in late HIV diagnoses. A later start to treatment can result in a greater chance of health complications. Louisiana defines late testers as those who are diagnosed with Stage 3 HIV (AIDS) within 30 days of their HIV diagnosis.

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- From 2018 to 2021, there was a slight increase in the percentage of people diagnosed with Stage 3 HIV (AIDS) within 30 days of HIV diagnosis.
- In 2022, 16% of the 857 people newly diagnosed with HIV were considered to be late testers.
- Diagnoses from 2020 to 2022 may have been impacted by the COVID-19 pandemic.

Late HIV Testing Louisiana, 2022			
	New HIV Diagnoses	AIDS Diagnosis Within 30 Days of HIV Diagnosis	
		Count	Percent
Total	857	139	16%
Gender			
Female	201	30	15%
Male	633	107	17%
Transgender Female	19	2	11%
Transgender Male	3	0	0%
Additional Gender Identity	1	0	0%
Race/Ethnicity			
Black/African American	545	71	13%
Hispanic/Latinx	79	19	24%
White	216	45	21%
Multi-race/Other	17	4	24%
Age			
13-24	179	8	5%
25-44	493	94	19%
45-64	169	34	20%
65+	16	3	19%
Region			
1-New Orleans	206	35	17%
2-Baton Rouge	167	18	11%
3-Houma	46	7	15%
4-Lafayette	90	21	23%
5-Lake Charles	42	7	17%
6-Alexandria	55	6	11%
7-Shreveport	121	21	17%
8-Monroe	67	10	15%
9-Hammond/Slidell	63	14	22%
Transmission Category			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	529	87	16%
Persons Who Inject Drugs (PWID)	83	17	21%
GBM/PWID	32	2	3%
High Risk Heterosexual (HRH)	212	33	16%

- Not only were more males than females newly diagnosed with HIV, but males were also more likely to be diagnosed with AIDS within 30 days of diagnosis, 17% compared to 15% of females.
- Black people newly diagnosed with HIV had the lowest percentage of late testers compared to other racial/ethnic groups, 13%.
- The percentage of late testers varied across the state. The regions with the highest percentage of late testers were Region 4-Lafayette (23%) and Region 9-Hammond/Slidell (22%). Region 2-Baton Rouge and Region 6-Alexandria had the lowest percentage of late testers, both 11%.
- In 2022, 21% of PWID were late testers, the highest among all risk groups.

STIs and Hepatitis C Co-Infection with HIV

HIV co-infection is defined as having confirmed HIV and another confirmed diagnosis present in the same individual. This chapter outlines HIV co-infection with common STIs, hepatitis C virus (HCV), and mpox, including the demographics of those co-infected. STIs and HIV are associated with one another: having an STI increases the risk of acquiring HIV or another STI.¹⁴

It is important for everyone to be aware of their HIV, STI, and HCV status, and some people should receive routine screenings. HIV, STI, and HCV testing options are easy and affordable. The Centers for Disease Control and Prevention (CDC) recommends that everyone between ages 13 and 64 years-old get tested for HIV at least once. Some people are at higher risk and it is recommended they get tested more often. People at ongoing risk of contracting HIV should be tested once a year. Ongoing risk includes having sex with someone who has HIV, having sex with a new partner since the most recent HIV test, sharing injection equipment, or having another STI. Information on HIV, STI, and HCV testing can be found at <https://www.louisianahealthhub.org/testing/>.

Although HIV cannot be cured, people who are living with HIV can take daily medication and maintain an undetectable viral load to prevent HIV transmission to sexual partners. The science is there: U=U (Undetectable=Untransmittable). Information on treatment options and services available to people living with HIV in Louisiana can be found at <https://www.louisianahealthhub.org/undetectable/>.

People who do not have HIV may be eligible for PrEP (pre-exposure prophylaxis). PrEP is a once-a-day prescription medication that is highly effective in preventing HIV. PrEP does not protect against other STIs or HCV. Information on PrEP in Louisiana can be found at <https://www.louisianahealthhub.org/prep/>.

In 2022, there were 857 people newly diagnosed with HIV, and 22,601 people living with HIV in Louisiana. Co-infections are matches between persons newly diagnosed with an STI, HCV, or mpox in 2022, against the entirety of the HIV surveillance system, inclusive of those living with HIV in 2022 but diagnosed in prior years and those newly diagnosed with HIV in 2022.

HIV Co-Infection Louisiana, 2022			
Co-Infections	Total Diagnoses	Co-Infected with HIV	
	#	#	%
Early Syphilis*/HIV	2,109	654	31%
Chlamydia/HIV	36,200	826	2%
Gonorrhea/HIV	15,015	967	6%
Hepatitis C/HIV	4,297	80	2%
Mpox/HIV	306	164	54%

* Primary, secondary, and early non-primary non-secondary syphilis only

HIV Co-Infection with Early Syphilis

Syphilis is one of the three most commonly diagnosed STIs. It is caused by the bacterium *Treponema pallidum* and is typically transmitted through direct contact with a chancre, or syphilitic sore.¹⁵ Chancres typically occur in, on, or around genital areas (penis, vagina, anus, and rectum), as well as lips or mouth.¹⁵ Syphilis can be transmitted through vaginal, anal, or oral sex, as well as childbirth. Pregnant people with untreated syphilis are at higher risk of having a stillbirth or result in infant death.¹⁵ 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. Benzathine penicillin G is the recommended treatment for early syphilis. The preparation, dosage, and length of treatment depend on the stage and clinical manifestation of the disease.

Of the 2,109 early syphilis diagnoses in Louisiana in 2022, 654 (31%) were co-infected with HIV. Co-infections include all early syphilis diagnoses who were living with previously diagnosed HIV, diagnosed with syphilis and HIV concurrently, or diagnosed with HIV within one year after their early syphilis diagnosis.

Early syphilis has been on the rise in the past four years in Louisiana. Early syphilis rates in Louisiana have risen 71% from 2018 to 2022 (26.7 cases per 100,000 population and 45.6 cases per 100,000 population, respectively).

The table on the following page reports the demographic composition of these individuals:

- Males comprised 67% of early syphilis diagnoses and 90% of early syphilis/HIV co-infections.
- There is a stark difference between the rates of early syphilis/HIV co-infection by gender. Females have a rate of 0.8 cases per 100,000 population, whereas males have a rate of 25.9 cases per 100,000 population.
- Black people accounted for 71% of early syphilis/HIV co-infections.
- People 20 to 39 years old accounted for 62% of early syphilis/HIV co-infections.
- GBM accounted for 85% of all co-infections.
- Region 1-New Orleans comprised 28% of early syphilis diagnoses, but 39% of early syphilis/HIV co-infections.

Characteristics of Persons with Early Syphilis/HIV Co-infection Louisiana, 2022			
	Number of Co-Infections	Percent	Co-Infection Rate (per 100,000)*
TOTAL	654	100%	14.1
Gender			
Female	19	3%	0.8
Male	587	90%	25.9
Transgender Female	46	7%	n/a
Transgender Male	1	<1%	n/a
Additional Gender Identity	1	<1%	n/a
Race/Ethnicity			
Black/African American	463	71%	30.9
Hispanic/Latinx	36	6%	13.9
White	144	22%	5.4
Other/Multi-Race	11	2%	n/a
Age Group	Age at Early Syphilis Diagnosis		
10-19	18	3%	3.0
20-29	160	24%	26.5
30-39	246	38%	38.6
40-49	117	18%	21.1
50+	113	17%	6.9
Region	Region at Early Syphilis Diagnosis		
1-New Orleans	255	39%	29.0
2-Baton Rouge	137	21%	19.7
3-Houma	27	4%	6.9
4-Lafayette	70	11%	11.8
5-Lake Charles	7	1%	2.3
6-Alexandria	31	5%	10.6
7-Shreveport	58	9%	11.2
8-Monroe	34	5%	9.8
9-Hammond/Slidell	35	5%	5.8
HIV Transmission Risk			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	556	85%	-
Persons Who Inject Drugs (PWID)	10	2%	-
GBM/PWID	30	5%	-
High Risk Heterosexual (HRH)	55	8%	-
Other	3	0%	-
Timing of Early Syphilis Infection			
Concurrent Early Syphilis/HIV Diagnoses**	46	7%	-
1 Month - 2 Years After HIV Diagnosis	108	17%	-
3-10 Years After HIV Diagnosis	278	43%	-
11+ Years After HIV Diagnosis	207	32%	-
Less than 1 year before HIV Diagnosis	15	2%	-

* Rates not available for other/unknown race groups, transgender groups, risk exposure groups, and counts less than 5.

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

HIV Co-Infection with Chlamydia

Chlamydia is the most commonly diagnosed STI in Louisiana. It is caused by the bacterium *Chlamydia trachomatis* and is typically transmitted through vaginal, anal, or oral sex without a barrier method of protection, such as a condom or dental dam.¹⁶ Chlamydia is often asymptomatic, and untreated chlamydia can result in pelvic inflammatory disease (PID), ectopic pregnancy, and chronic pelvic pain in women.¹⁶ Pregnant people can transmit chlamydia during childbirth and can cause *ophthalmia neonatorum* (conjunctivitis) or pneumonia in infants.¹⁶ CDC recommends annual screening of all women under 25 years old.

Of the 36,200 chlamydia diagnoses in Louisiana in 2022, 826 (2%) were co-infected with HIV. Co-infected chlamydia diagnoses include those who were living with previously diagnosed HIV, diagnosed with chlamydia and HIV concurrently, or diagnosed with HIV within one year after their chlamydia diagnosis. The rate of chlamydia/HIV co-infection has increased 10% from 2018 to 2022 (16.3 cases per 100,000 population and 17.9 cases per 100,000 population, respectively).

The table on the following page reports the demographic composition of these individuals:

- While females comprised 67% of chlamydia diagnoses, males accounted for 82% of chlamydia/HIV co-infections.
- Black people accounted for 67% of chlamydia/HIV co-infections.
- People 20 to 39 years old accounted for 72% of chlamydia/HIV co-infections.
- GBM accounted for 74% of all co-infections.
- Region 1-New Orleans comprised 21% of all chlamydia diagnoses, but 40% of chlamydia/HIV co-infections.

Characteristics of Persons with Chlamydia/HIV Co-infection Louisiana, 2022			
	Number of Co-Infections	Percent	Co-Infection Rate (per 100,000)*
TOTAL	826	100%	17.9
Gender			
Female	111	13%	4.7
Male	674	82%	29.8
Transgender Female	36	4%	n/a
Transgender Male	3	<1%	n/a
Additional Gender Identity	2	<1%	n/a
Race/Ethnicity			
Black/African American	554	67%	37.0
Hispanic/Latinx	61	7%	23.6
White	187	23%	7.0
Other/Multi-Race	24	3%	n/a
Age Group	Age at Chlamydia Diagnosis		
10-19	18	2%	3.0
20-29	285	35%	47.1
30-39	306	37%	48.0
40-49	126	15%	22.8
50+	91	11%	5.6
Region	Region at Chlamydia Diagnosis		
1-New Orleans	331	40%	37.7
2-Baton Rouge	138	17%	19.9
3-Houma	39	5%	10.0
4-Lafayette	113	14%	19.0
5-Lake Charles	38	5%	12.6
6-Alexandria	37	4%	12.6
7-Shreveport	30	4%	5.8
8-Monroe	53	6%	15.2
9-Hammond/Slidell	47	6%	7.7
HIV Transmission Risk			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	610	74%	-
Persons Who Inject Drugs (PWID)	23	3%	-
GBM/PWID	35	4%	-
High Risk Heterosexual (HRH)	146	18%	-
Other	12	1%	-
Timing of Chlamydia Infection			
Concurrent Chlamydia/HIV Diagnoses**	53	6%	-
1 Month - 2 Years After HIV Diagnosis	195	24%	-
3-10 Years After HIV Diagnosis	342	41%	-
11+ Years After HIV Diagnosis	207	25%	-
Less than 1 year before HIV Diagnosis	29	4%	-

* Rates not available for other/unknown race groups, transgender groups, risk exposure groups, and counts less than 5.

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

HIV Co-Infection with Gonorrhea

Gonorrhea is the second most commonly reported STI in Louisiana. It is caused by the bacterium *Neisseria gonorrhoeae* and is transmitted through sexual contact with the penis, vagina, anus, or mouth of an infected person.¹⁷ Gonorrhea is often asymptomatic and is a common cause of epididymitis in men and PID in women if left untreated.¹⁷ Pregnant people can transmit gonorrhea during childbirth which can lead to blindness, joint infection, or life-threatening blood infection in the newborn.¹⁷ CDC recommends annual screening of all sexually active women under 25, as well as women older than 25 with risk factors such as new or multiple sexual partners, or a sex partner who has an STI.¹⁷

Of the 15,015 gonorrhea diagnoses in Louisiana in 2022, 967 (6%) were co-infected with HIV. Co-infected gonorrhea diagnoses include those living with previously diagnosed HIV, diagnosed with gonorrhea and HIV concurrently, or diagnosed with HIV within one year after their gonorrhea diagnosis.

Gonorrhea has been on the rise in Louisiana. Gonorrhea rates have increased in Louisiana by 26% from 2018 to 2022 (258.4 cases per 100,000 population and 324.7 cases per 100,000 population, respectively). Gonorrhea/HIV co-infection rates have increased by 18% from 2018 to 2022 (17.7 cases per 100,000 population and 20.9 cases per 100,000 population, respectively). Males have experienced the greatest increase. In 2016, the gonorrhea rate among males surpassed that of females for the first time in Louisiana history and the disparity has only widened since.

The table on the following page reports the demographic composition of these individuals:

- Males comprised 56% of all gonorrhea diagnoses, but 87% of gonorrhea/HIV co-infections.
- Black people accounted for 66% of gonorrhea/HIV co-infections.
- People 20 to 39 years old accounted for 72% of gonorrhea/HIV co-infections.
- GBM accounted for 80% of all co-infections.
- Region 1-New Orleans comprised 23% of all gonorrhea diagnoses, but 45% of gonorrhea/HIV co-infections.

Characteristics of Persons with HIV/Gonorrhea Co-infection Louisiana, 2022			
	Number of Co-Infections	Percent	Co-Infection Rate (per 100,000)*
TOTAL	967	100%	20.9
Gender			
Female	72	7%	3.1
Male	846	87%	37.3
Transgender Female	44	5%	n/a
Transgender Male	1	<1%	n/a
Additional Gender Identity	4	<1%	n/a
Race/Ethnicity			
Black/African American	636	66%	42.4
Hispanic/Latinx	67	7%	25.9
White	239	25%	8.9
Other/Multi-Race	25	3%	n/a
Age Group	Age at Gonorrhea Diagnosis		
10-19	27	3%	4.4
20-29	323	33%	53.4
30-39	373	39%	58.5
40-49	146	15%	26.4
50+	98	10%	6.0
Region	Region at Gonorrhea Diagnosis		
1-New Orleans	434	45%	49.4
2-Baton Rouge	151	16%	21.7
3-Houma	37	4%	9.5
4-Lafayette	141	15%	23.8
5-Lake Charles	31	3%	10.3
6-Alexandria	41	4%	14.0
7-Shreveport	44	5%	8.5
8-Monroe	45	5%	12.9
9-Hammond/Slidell	43	4%	7.1
HIV Transmission Risk			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	772	80%	-
Persons Who Inject Drugs (PWID)	18	2%	-
GBM/PWID	50	5%	-
High Risk Heterosexual (HRH)	110	11%	-
Other	17	2%	-
Timing of Gonorrhea Infection			
Concurrent Gonorrhea/HIV Diagnoses**	55	6%	-
1 Month - 2 Years After HIV Diagnosis	200	21%	-
3-10 Years After HIV Diagnosis	438	45%	-
11+ Years After HIV Diagnosis	239	25%	-
Less than 1 year before HIV Diagnosis	35	4%	-

* Rates not available for other/unknown race groups, transgender groups, risk exposure groups, and counts less than 5.

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

HIV Co-Infection with Hepatitis C Virus

Hepatitis C is a liver disease caused by the hepatitis C virus (HCV). HCV is a blood-borne virus, and is transmitted when blood with the virus enters the body of someone without the virus. Today, most people acquire hepatitis C by sharing drug injection equipment, and less commonly through sexual contact, or mother to infant exposure at birth. New infections of hepatitis C cause a short term illness, referred to as an acute infection. Some people are able to clear HCV on their own and will no longer have the hepatitis C virus in their body. Others may develop a long-term chronic illness that may result in cirrhosis, liver cancer, and death if not treated. Approximately 80% of people with acute infection will develop a chronic infection. Of those with chronic infection, 5-20% will develop cirrhosis, and 1-5% will die from cirrhosis or liver cancer.¹⁸

There is no vaccine to prevent hepatitis C. However, a safe and effective cure for HCV is available. An estimated 2.2 million people are living with hepatitis C in the United States and approximately 68% of adults living with hepatitis C are aware of their diagnosis.¹⁹

Louisiana has greatly expanded its capacity to identify acute hepatitis C cases. The Louisiana Sanitary Code was updated in May 2019 to include the reporting of negative screening and confirmatory tests for hepatitis C. Additionally, a statewide initiative to eliminate hepatitis C has increased awareness and testing, especially for populations most likely to be affected. The change in the Sanitary Code, combined with increased testing, allows for the identification of people who seroconvert (i.e. test negative and then positive for hepatitis C within a 12-month period) and can be classified as confirmed acute HCV cases. Many with acute hepatitis C may have very mild symptoms or no symptoms at all. Consequently, many do not seek medical care. Expanded testing of priority populations and collecting negative HCV tests allows Louisiana to identify many cases that would have previously gone undetected.

The surveillance case definition for acute hepatitis C was most recently published in 2020 and can be found here, <https://ndc.services.cdc.gov/case-definitions/hepatitis-c-acute-2020/>.

People with chronic hepatitis C may not experience symptoms of their chronic infection until the onset of cirrhosis or end-stage liver disease, which can take decades to appear.¹⁸ Since many people do not experience symptoms, they are unlikely to seek medical care, and once tested it can be difficult to know how long a person has been living with HCV. New reports of chronic hepatitis C are likely to fluctuate each year based on awareness among healthcare providers and the general population, and trends in testing and healthcare access. Despite these uncertainties, incidence of chronic hepatitis C has been driven by the opioid epidemic. There are two age groups greatly affected by hepatitis C, Baby Boomers (born 1945-1965), and people 18-39 years old.

Diagnoses of chronic hepatitis C have historically been high among Baby Boomers. Baby Boomers make up roughly one-quarter of the US population, but account for around three-quarters of chronic hepatitis C cases.²⁰ As young adults, Baby Boomers experienced more blood-borne exposures due to unscreened blood products, medical or dental exposures completed without modern infection control measures, and drug use when compared to other generations.²¹

Recent data show that a second age group in the population is affected by hepatitis C, resulting in a bimodal distribution of hepatitis C diagnoses. Recent years have seen a large increase in reported cases of chronic hepatitis C in people 18-39 years old due to the opioid epidemic. An estimated 80% of new cases of hepatitis C are acquired through injection drug use.^{22, 23} The increase in this population as seen in Louisiana is similar to trends nationally.

Chronic hepatitis C can be categorized as either a probable infection or a confirmed infection. The case definition for chronic hepatitis C was most recently published in 2020 and can be found at <https://ndc.services.cdc.gov/case-definitions/hepatitis-c-chronic-2020/>.

In 2022, there were 4,297 cases of acute and chronic hepatitis C in Louisiana. Of those hepatitis C cases, 80 (2%) were co-infected with HIV. This means that people who were diagnosed with hepatitis C in 2022 also were diagnosed with HIV before their hepatitis C diagnosis, at the same time as their hepatitis C diagnosis, or up to one year after their hepatitis C diagnosis.

The table on the following page reports the demographic composition of these individuals:

- Males comprised 65% of all hepatitis C diagnoses and 84% of HCV/HIV co-infections.
- Black people accounted for 56% of HCV/HIV co-infections.
- People 30 to 39 years old comprise 33% of HCV/HIV co-infections.
- GBM accounted for 56% of all co-infections.
- Region 1-New Orleans accounted for 22% of all hepatitis C diagnoses, but 38% of HCV/HIV co-infections.

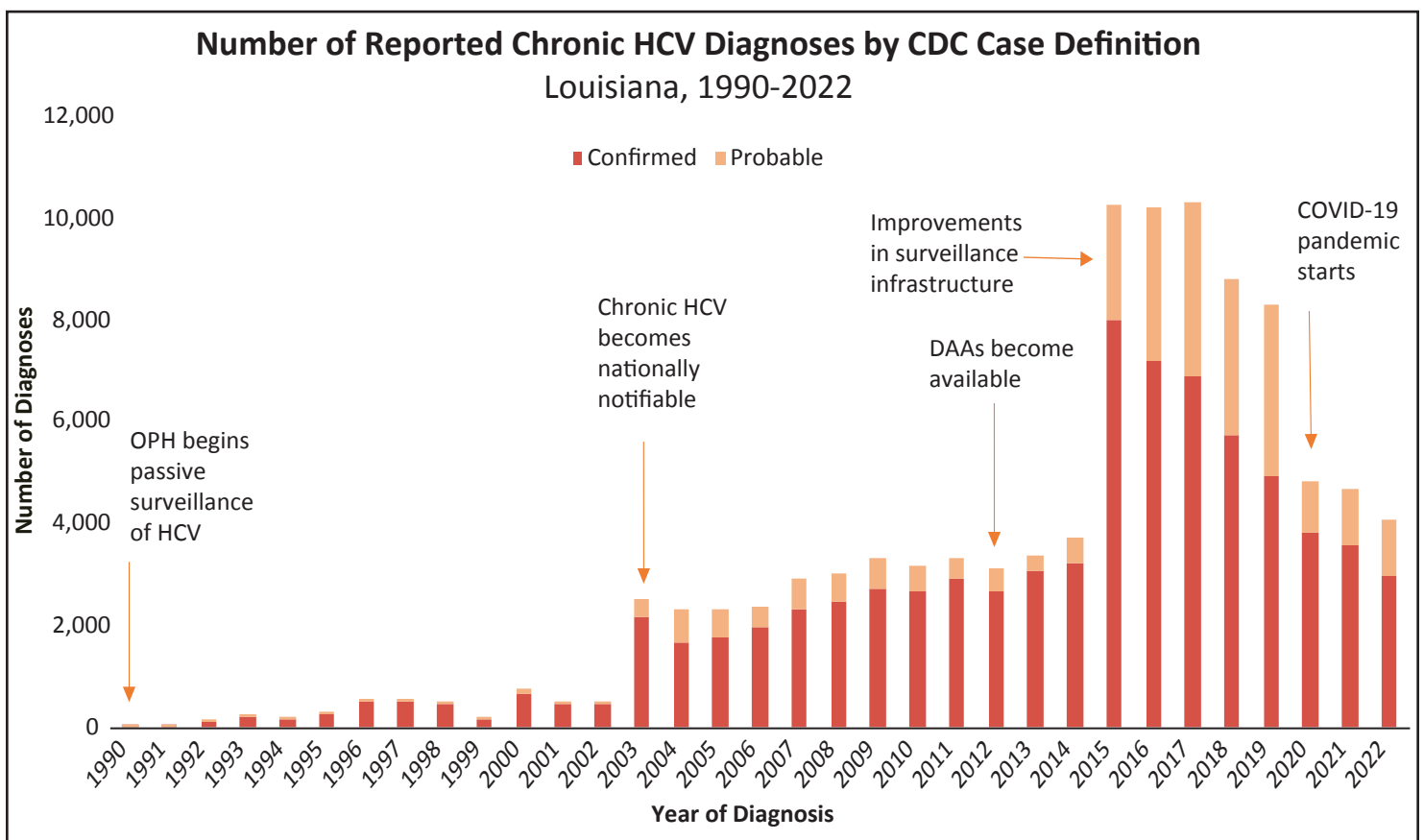
Characteristics of Persons with Hepatitis C/HIV Co-infection Louisiana, 2022			
	Number of Co-Infections	Percent	Co-Infection Rate (per 100,000)*
TOTAL	80	100%	1.7
Gender			
Female	12	15%	0.5
Male	67	84%	3.0
Transgender Female	1	1%	n/a
Transgender Male	0	0%	n/a
Additional Gender Identity	0	0%	n/a
Race/Ethnicity			
Black/African American	45	56%	3.0
Hispanic/Latinx	5	6%	1.9
White	29	36%	1.1
Other/Multi-Race	1	1%	n/a
Age Group	Age at Hepatitis C Diagnosis		
10-19	0	0%	0.0
20-29	14	18%	2.3
30-39	26	33%	4.1
40-49	17	21%	3.1
50+	23	29%	1.4
Region	Region at Hepatitis C Diagnosis		
1-New Orleans	30	38%	3.4
2-Baton Rouge	8	10%	1.2
3-Houma	3	4%	n/a
4-Lafayette	7	9%	1.2
5-Lake Charles	5	6%	1.7
6-Alexandria	4	5%	n/a
7-Shreveport	7	9%	1.3
8-Monroe	7	9%	2.0
9-Hammond/Slidell	9	11%	1.5
HIV Transmission Risk			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	45	56%	-
Persons Who Inject Drugs (PWID)	13	16%	-
GBM/PWID	8	10%	-
High Risk Heterosexual (HRH)	13	16%	-
Other	1	1%	-
Timing of Hepatitis C Infection			
Concurrent Hepatitis C/HIV Diagnoses**	12	15%	-
1 Month - 2 Years After HIV Diagnosis	12	15%	-
3-10 Years After HIV Diagnosis	29	36%	-
11+ Years After HIV Diagnosis	24	30%	-
Less than 1 year before HIV Diagnosis	3	4%	-

* Rates not available for other/unknown race groups, transgender groups, risk exposure groups, and counts less than 5.

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

Louisiana began passive surveillance of hepatitis C in 1990. In 2003, chronic HCV became nationally notifiable. Direct-acting antivirals (DAAs) became available in 2013 and revolutionized treatment for chronic hepatitis C. HCV treatment available prior to the introduction of DAAs, had poor cure rates and intolerable side effects. Recent improvements in the state's surveillance infrastructure have allowed for improved laboratory and case data reporting and efficient data processing. The improvements to screening, treatment, and surveillance have allowed for enhanced case ascertainment, and a better understanding of the true burden of disease in the state.

It is likely that the increased number of reports in the beginning of 2015 are due to increased incidence, enhanced case reporting, and increased awareness and screening. There was a large decrease in the number of people diagnosed in 2020 due to the COVID-19 pandemic. From 2015-2019, there were an average of 9,578 chronic hepatitis C diagnoses each year, and in 2020 there were 4,854 diagnoses. While other STIs have regained pre-pandemic numbers in Louisiana, chronic hepatitis C remains at or under 2020 numbers. The United States is experiencing a decline in rates of new hepatitis C infection, particularly among those aged 18-40 years old.²² While the reasons why diagnoses have stayed at or below 2020 levels in Louisiana are uncertain, one possibility could be that more people are being screened and obtaining treatment earlier for acute hepatitis C, with fewer individuals progressing to chronic hepatitis C. Another potential reason could be the need for more innovative screening efforts to engage hard to reach populations in Louisiana.



HIV Co-Infection with Mpox

Mpox is a rare disease caused by the mpox virus. The mpox virus is part of the same family of viruses as smallpox.²⁵ The first confirmed case of mpox in Louisiana was reported on July 7, 2022. The most common mpox symptom is a rash that may be located on hands, feet, chest, face, mouth, or near the genitals. Though it is not classified as an STI, mpox is transmitted through close contact, usually skin-to-skin.²⁵ Transmission can occur from direct contact with an mpox rash, saliva, upper respiratory secretions, and genital areas, as well as intimate contact. The mpox vaccine is an effective way to increase protection against mpox. The vaccine is administered across two doses to offer maximum protection. While there is no direct treatment for mpox, treatments for smallpox can be used for those with a weakened immune system or a genital or rectal rash, but most people fully recover within two to four weeks.²⁵

Of the 306 mpox diagnoses in Louisiana in 2022, 164 (54%) were co-infected with HIV. Over half of Louisiana's mpox diagnoses were living with previously diagnosed HIV, diagnosed with mpox and HIV concurrently, or diagnosed with HIV within one year after their mpox diagnosis.

Mpox predominately affects males. In Louisiana, 94% of mpox cases in 2022 were male, and 96% of mpox/HIV co-infections were male. Gay, bisexual, and other men who have sex with men, accounted for 95% of all mpox/HIV co-infections.

The table on the following page reports the demographic composition of these individuals:

- Males comprised 96% of mpox/HIV co-infections.
- Black people accounted for 70% of mpox/HIV co-infections.
- People 30 to 39 years old accounted for 48% of mpox/HIV co-infections.
- GBM comprised 95% of all co-infections.
- Region 1-New Orleans accounted for 71% of mpox/HIV co-infections.

Characteristics of Persons with Mpox Co-infection Louisiana, 2022			
	Number of Co-Infections	Percent	Co-Infection Rate (per 100,000)*
TOTAL	164	100%	3.5
Gender			
Female	0	0%	0.0
Male	158	96%	7.0
Transgender Female	6	4%	n/a
Transgender Male	0	0%	n/a
Additional Gender Identity	0	0%	n/a
Race/Ethnicity			
Black/African American	114	70%	7.6
Hispanic/Latinx	16	10%	6.2
White	29	18%	1.1
Other/Multi-Race	5	3%	n/a
Age Group	Age at Mpox Diagnosis		
10-19	2	1%	n/a
20-29	43	26%	7.1
30-39	79	48%	12.4
40-49	25	15%	4.5
50+	15	9%	0.9
Region	Region at Mpox Diagnosis		
1-New Orleans	117	71%	13.3
2-Baton Rouge	20	12%	2.9
3-Houma	5	3%	1.3
4-Lafayette	4	2%	n/a
5-Lake Charles	0	0%	0.0
6-Alexandria	1	1%	n/a
7-Shreveport	6	4%	1.2
8-Monroe	6	4%	1.7
9-Hammond/Slidell	5	3%	0.8
HIV Transmission Risk			
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	155	95%	-
Persons Who Inject Drugs (PWID)	1	1%	-
GBM/PWID	5	3%	-
High Risk Heterosexual (HRH)	3	2%	-
Other	0	0%	-
Timing of Mpox Infection			
Concurrent Mpox/HIV Diagnoses**	8	5%	-
1 Month - 2 Years After HIV Diagnosis	21	13%	-
3-10 Years After HIV Diagnosis	75	46%	-
11+ Years After HIV Diagnosis	57	35%	-
Less than 1 year before HIV Diagnosis	3	2%	-

* Rates not available for other/unknown race groups, transgender groups, risk exposure groups, and counts less than 5.

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



Perinatal HIV Exposure

Active surveillance of perinatal HIV exposure is an important aspect in preventing disease transmission of HIV to a newborn. Through proper care and treatment, perinatal transmission of HIV 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 protocols. Early and repeat testing for HIV 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.

The risk of perinatal exposure to HIV is 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 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.

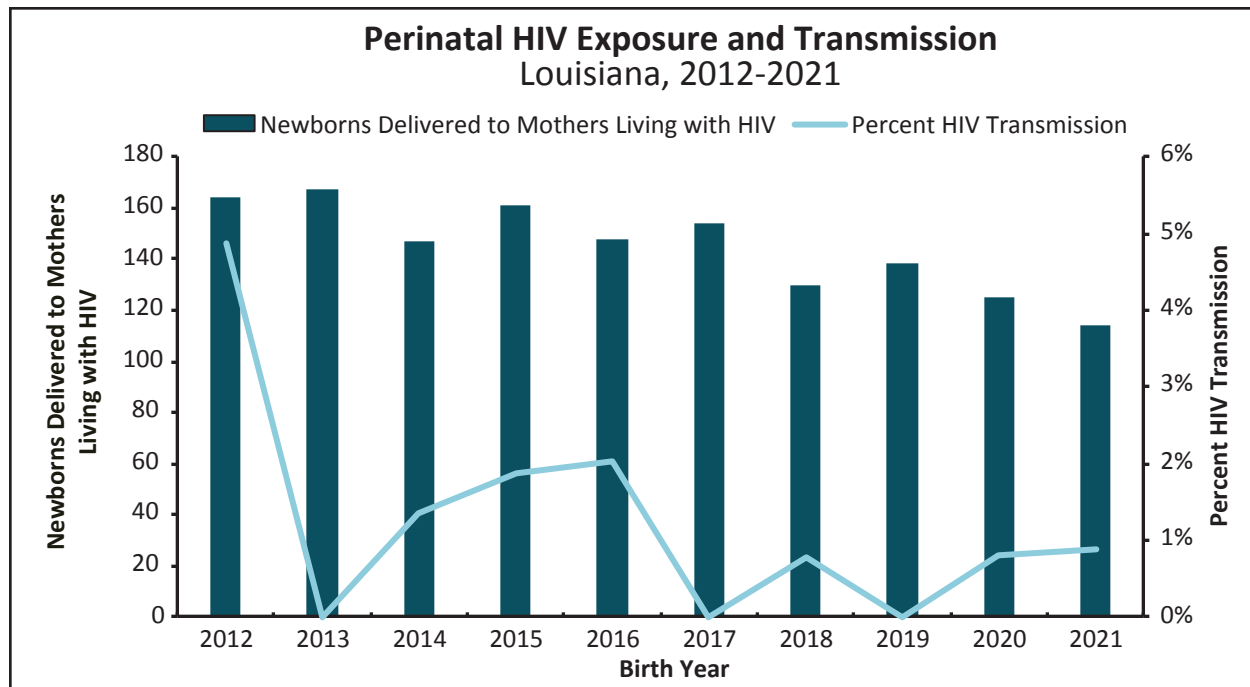
Perinatal HIV Exposure

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 National Institutes of Health's AIDS Info website (<http://aidsinfo.nih.gov/>).²⁶

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.²⁷ 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).

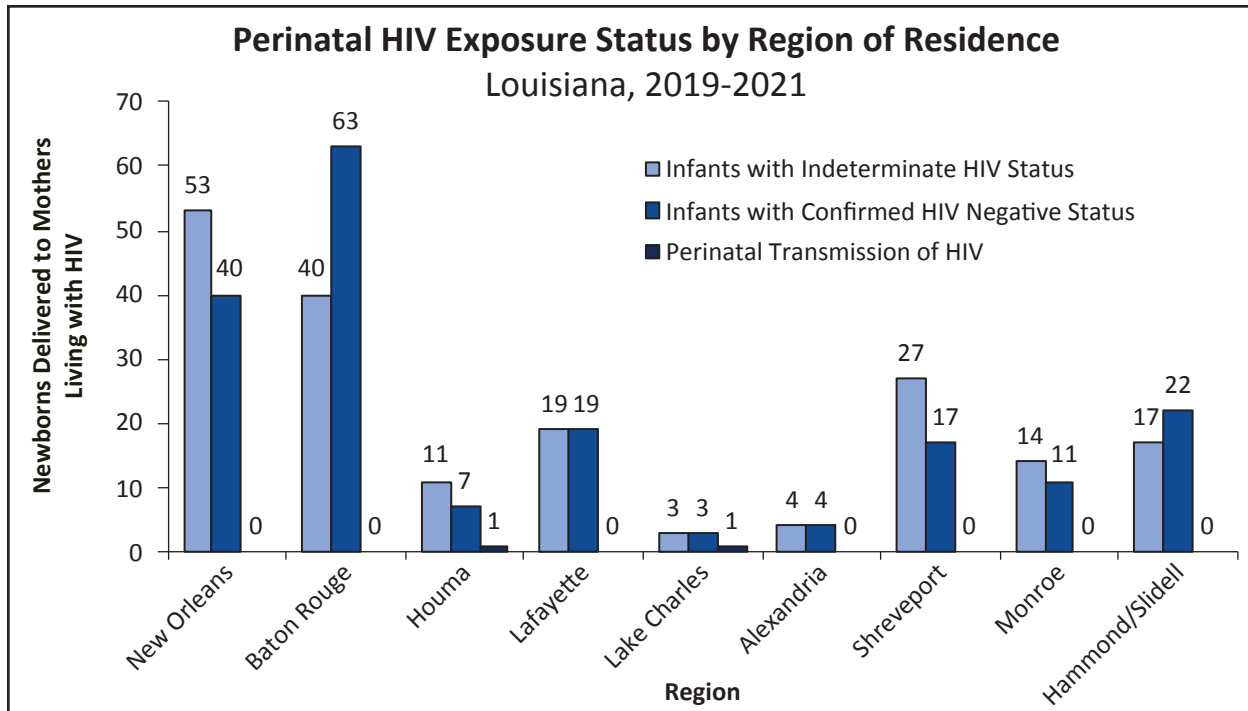
Perinatal HIV exposure surveillance requires several rounds of testing to determine an infant's serostatus. Reporting of this information ensures effective monitoring of all perinatal HIV exposures. Infants born to mothers living with HIV need a recorded negative result on HIV tests conducted at one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



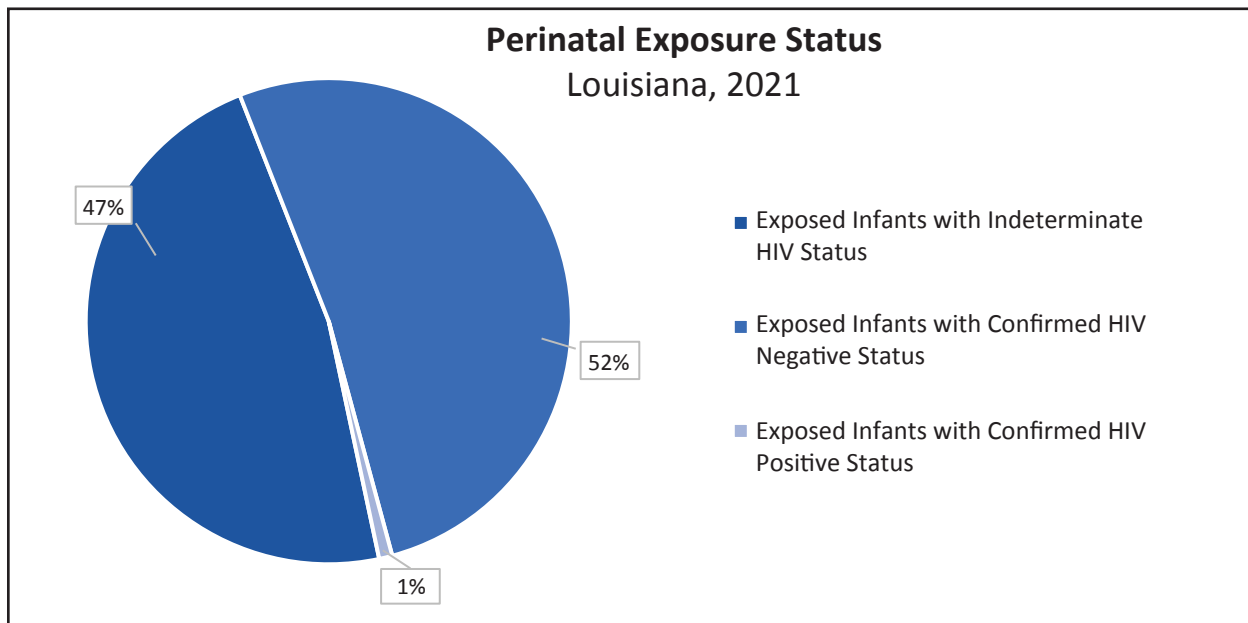
- In 2021, 114 infants were perinatally exposed to HIV in Louisiana.
- There was one case of perinatal transmission in 2021.
- Over the past ten years, the highest percentage of perinatal transmission was in 2012 (5%), while 2013, 2017, and 2019 were the lowest (0%).
- Preliminary data indicate no cases of perinatal transmission in 2022 or in the first six months of 2023.

Perinatal HIV in the United States

In 2019, 57 children under the age of 13 were diagnosed with HIV, 32 were a result of perinatal transmission.²⁸ 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, managed by each state, set a foundation for the elimination of vertical transmission by diagnosing women before they are pregnant, providing care for them while they are pregnant, and monitoring women who are not in HIV medical care or are in need of other services related to their diagnosis.²⁹



- Between 2019 and 2021, 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 (103) and no perinatal transmissions. The New Orleans region had the second highest number of perinatal exposures (93) and no perinatal transmissions.
- Approximately 50% of HIV exposed infants born between 2019 and 2021 have an indeterminate HIV status. To decrease the number of perinatal exposure cases with an indeterminate status, more work must be done to improve access to testing, conduct long-term follow-up on infants, and ensure all negative test results are being reported.



- Approximately 47% of infants born in 2021, exposed to HIV, have an indeterminate HIV status due to an insufficient number of labs to confirm serostatus.

The following table includes demographic information for mothers living with HIV who delivered a newborn in 2021. A total of 114 mothers are included below who gave birth to 114 infants.

Demographics of Mothers Living with HIV Louisiana, 2021		
	Number	Percent
Total	114	100%
Maternal Race/Ethnicity		
Asian	1	1%
Black/African American	92	81%
Hispanic/Latina	7	6%
Multi-race	5	4%
White	9	8%
Maternal Age at Delivery		
20-24	14	12%
25-29	34	30%
30-34	46	40%
35+	20	18%
Imputed Maternal Transmission Category		
High Risk Heterosexual Sex	103	90%
Perinatal/Pediatric*	11	10%
Delivery Type		
Vaginal	59	52%
Elective Cesarean	23	20%
Non-elective Cesarean	22	19%
Cesarean, unknown type	10	9%
Maternal Region of Residence		
1-New Orleans	25	22%
2-Baton Rouge	29	25%
3-Houma	3	3%
4-Lafayette	13	11%
5-Lake Charles	4	4%
6-Alexandria	3	3%
7-Shreveport	17	15%
8-Monroe	6	5%
9-Hammond/Slidell	14	12%

*Perinatal/pediatric transmission is not imputed.

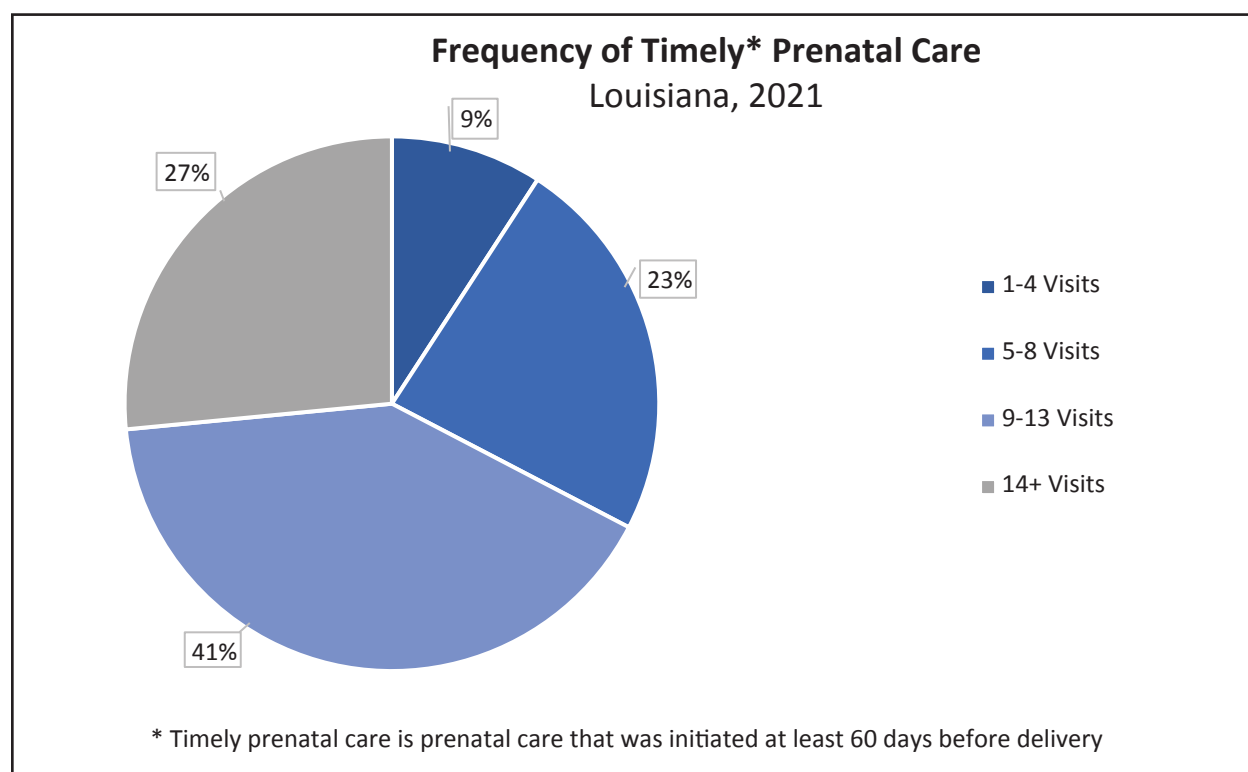
- Mothers living with HIV, who gave birth in 2021, were predominately Black (81%) and between 25-34 years old (70%).
- The majority of mothers acquired HIV through high risk heterosexual sex (90%). Eleven mothers themselves acquired HIV perinatally (10%).
- In 2021, 25% of mothers living with HIV, who delivered a newborn, lived in Region 2-Baton Rouge and 22% lived in Region 1-New Orleans.

Birth Outcomes of Infants Exposed to HIV Louisiana, 2021		
	HIV Exposed Newborns	Percent
Total	114	100%
Birth Weight		
Extremely Low (<1000g)	1	1%
Very Low (1000g to 1499g)	2	2%
Low (1500g to 2499g)	16	14%
Normal (≥2500g)	95	83%
Gestational Age		
Extremely Preterm (<28 weeks)	1	1%
Preterm (29 to 36 weeks)	17	15%
Full Term (≥37 weeks)	96	84%

- Among newborns exposed to HIV in Louisiana in 2021, 14% were born at a low birth weight (1500g to 2499g), and 15% were born preterm (28 to 36 weeks). This is compared to all newborns born in Louisiana in 2021, where 11.3% were low birthweight and 13.5% were born preterm.³⁰

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.³¹ Lack of prenatal care is one of the factors that most significantly impacts perinatal transmission since women who are not in prenatal care are less likely to get tested for HIV and receive ARVs during their pregnancy.



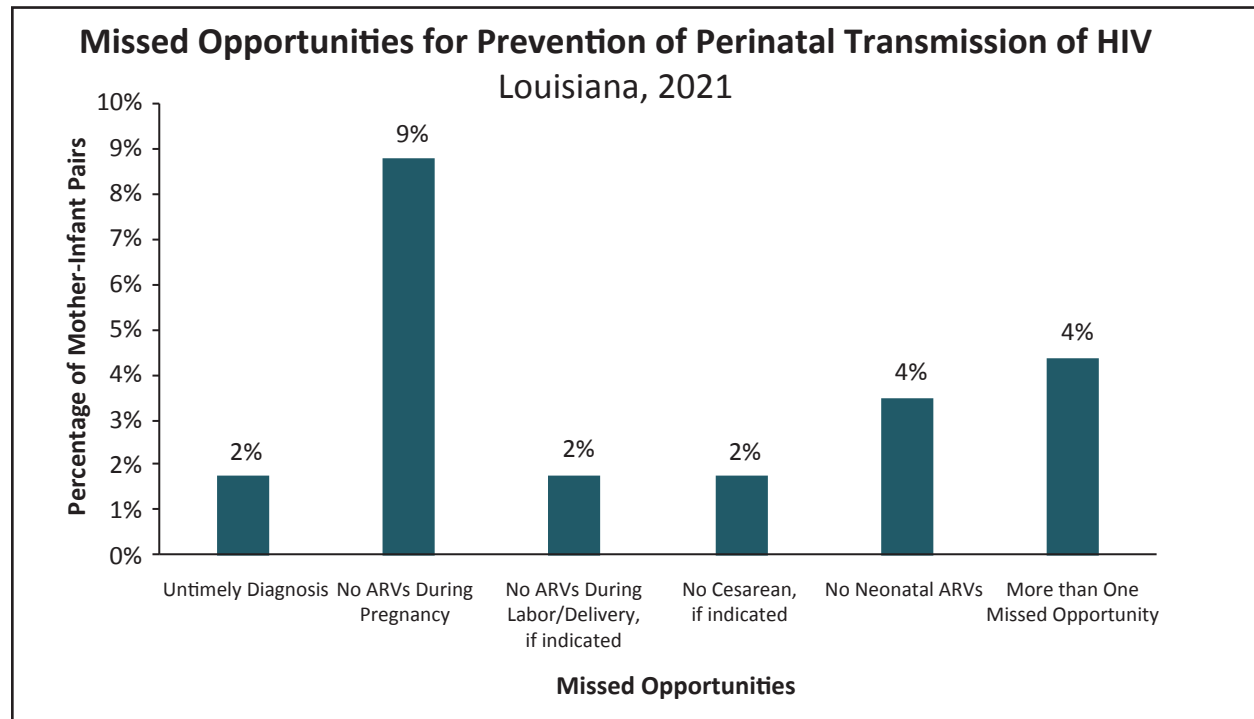
- Of the 114 women living with HIV in Louisiana in 2021, 98 (86%) had timely prenatal care. Of these mothers, 9% had 1-4 visits, 23% had 5-8 visits, and 41% of mothers had 9-13 prenatal visits.
- Twenty-seven percent of mothers had the recommended number of 14 or more prenatal care visits.

Perinatal HIV Exposure Risk and Missed Opportunities

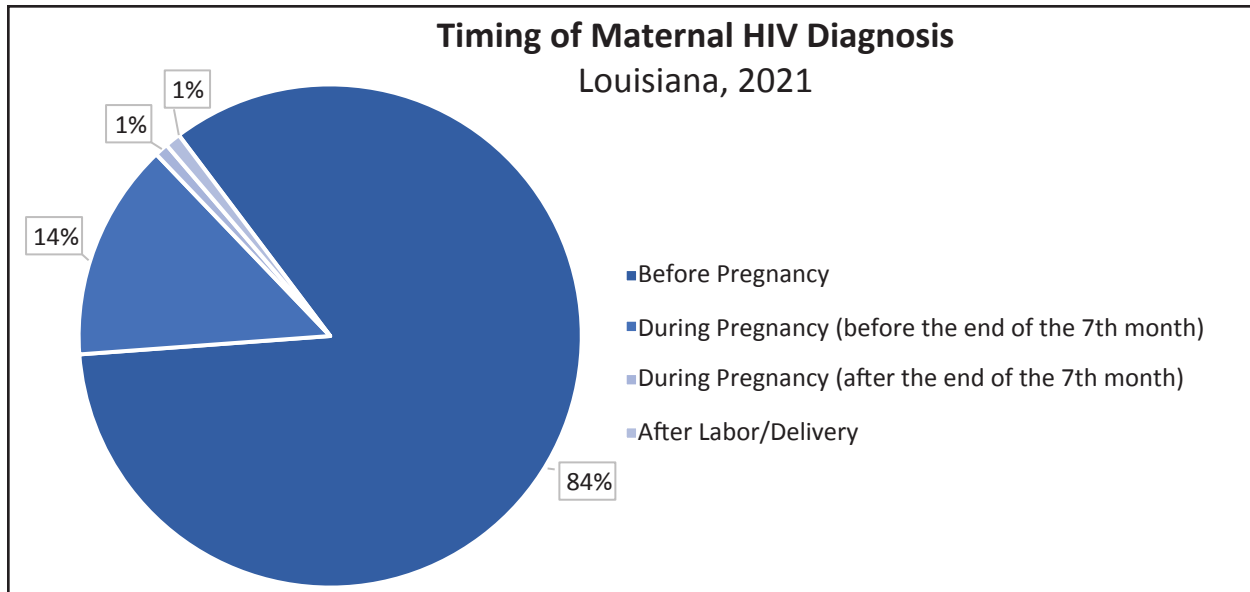
Risk of perinatal transmission of HIV depends on fetal/infant exposure to maternal virus. This exposure can be reduced by adhering to the following recommendations:

- 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

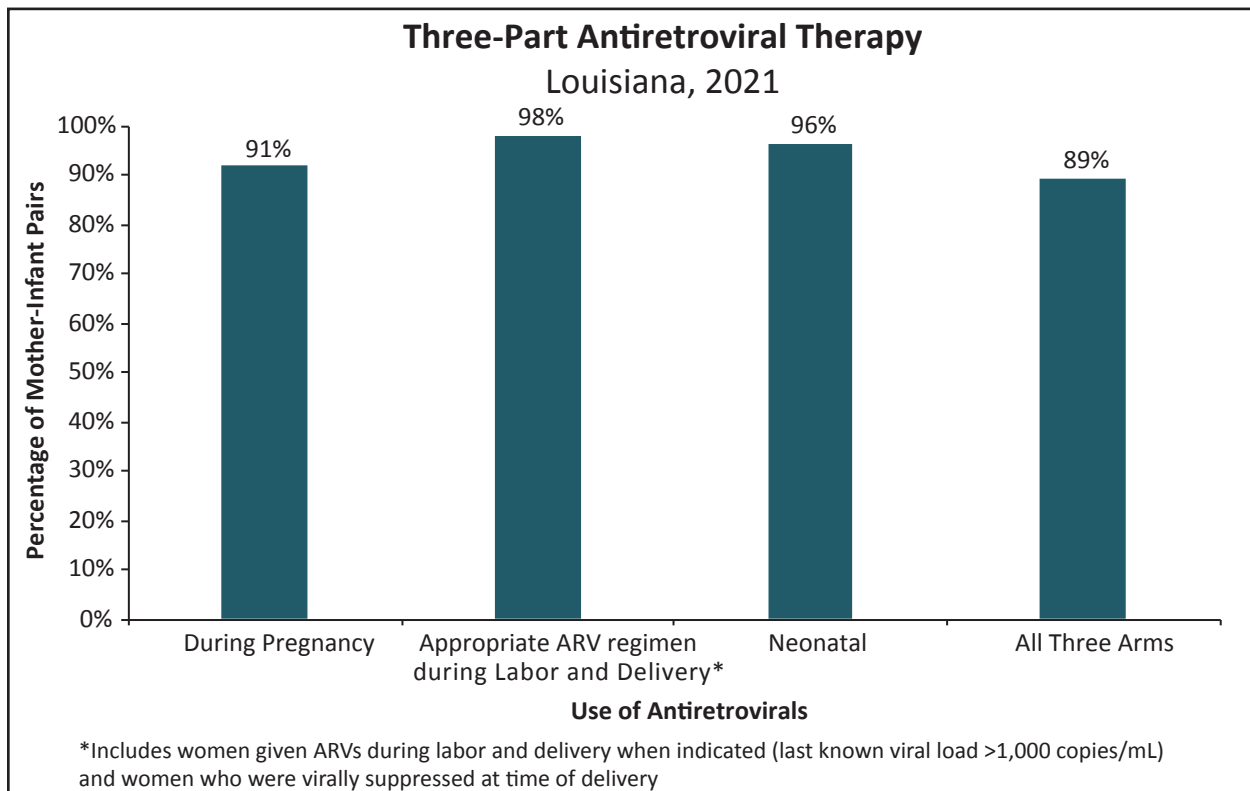
Following all of these recommendations can reduce the rate of perinatal transmission to less than 1%. Although prenatal care is not listed among these missed opportunities because it does not directly increase fetal exposure to maternal virus, it is a crucial component of the prevention of perinatal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



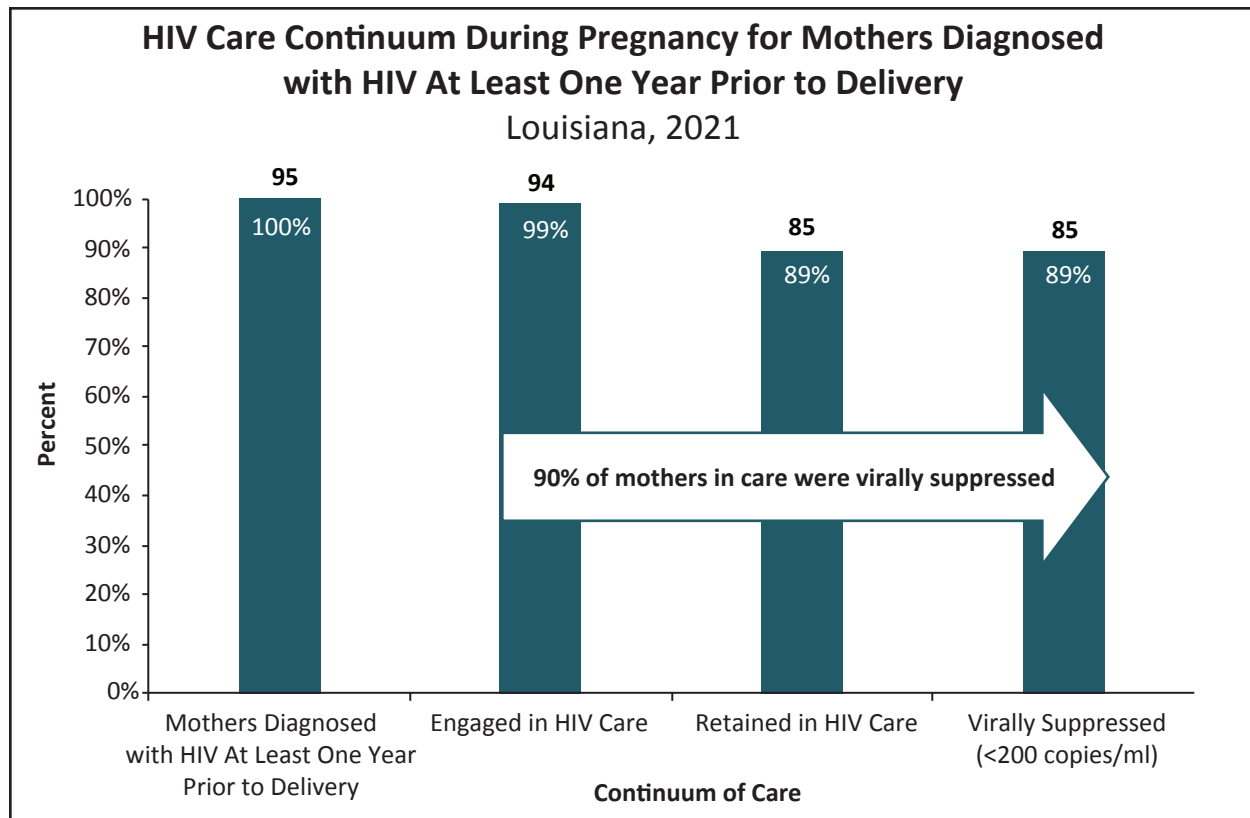
- In 2021, the most prevalent missed opportunity was no ARVs during pregnancy (9%). Two percent of mothers had an untimely HIV diagnosis that occurred after seventh month of pregnancy, and two percent did not receive a cesarean section, where indicated (last known viral load >1,000 copies/mL). The use of ARV medication during pregnancy depends on several factors including timing of diagnosis, prenatal care, and mother's access to ARVs. Four percent of infants did not receive ARVs at delivery. Overall, five (4%) mother-infant pairs had more than one missed opportunity for prevention of perinatal transmission.



- All but one mother was diagnosed before labor and delivery.
- Eighty-four percent of mothers were diagnosed with HIV before pregnancy, approximately 14% were diagnosed while pregnant but before the end of their seventh month of pregnancy, and one percent were diagnosed after the seventh month.



- 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 2021, 91% of women living with HIV in Louisiana received ARV therapy during pregnancy; 98% received appropriate care and treatment during labor/delivery; and 96% of newborns received prophylactic zidovudine shortly after birth. Overall, 89% of mother-infant pairs received all three recommended components of the antiretroviral prophylaxis protocol.



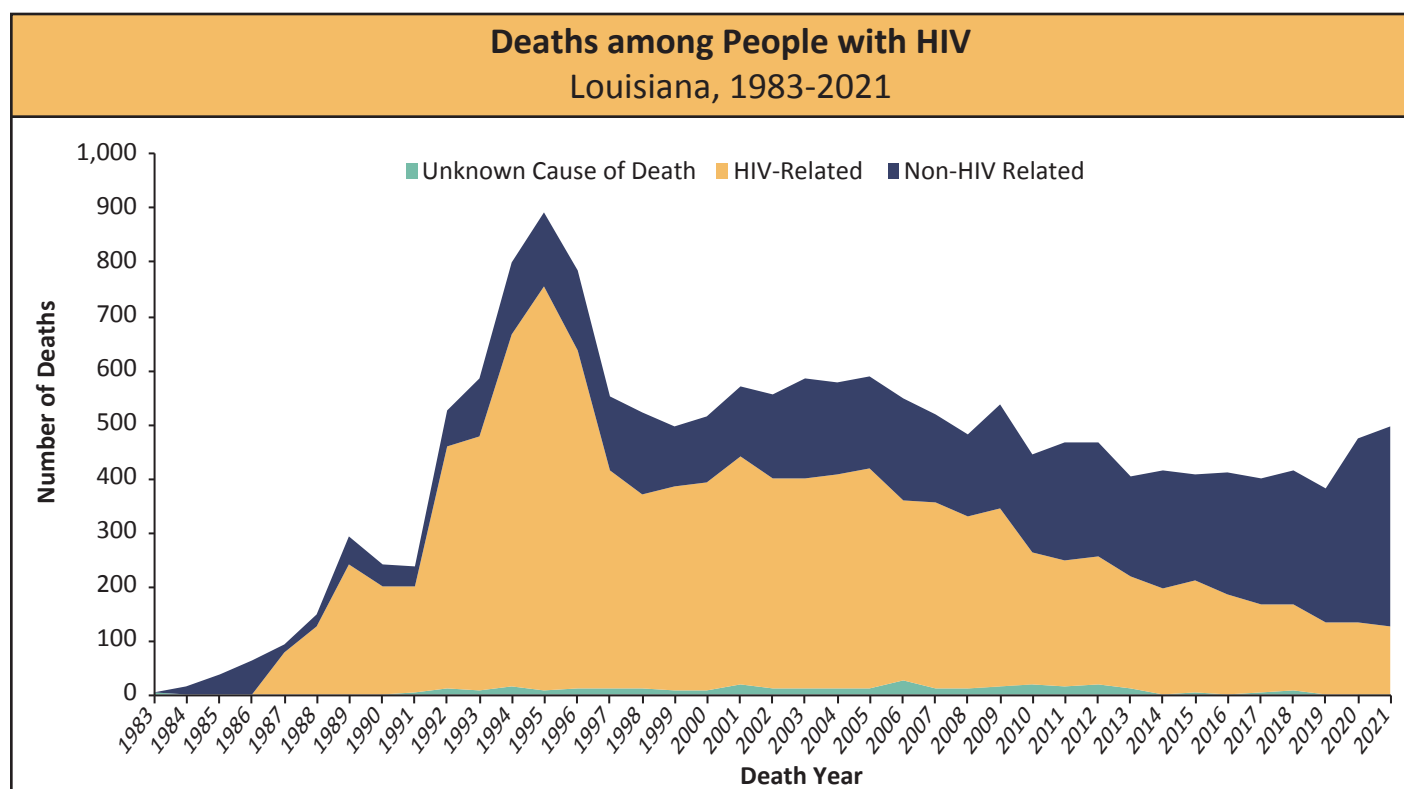
- Out of the total mothers who delivered in 2021, 95 were diagnosed at least one year (365 days) prior to their delivery date. Of the 95 mothers living with HIV, 94 (99%) had at least one CD4 count or viral load test conducted in the year prior to their child's birth date. These mothers are considered to be engaged in HIV care.
- Of the 95 mothers living with HIV, 85 (89%) 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 95 mothers living with HIV in Louisiana that delivered an infant in 2021, 85 (89%) 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 94 mothers who were engaged in HIV care, 85 (90%) were virally suppressed at their last viral load prior to their child's birth date.

Mortality among People with HIV

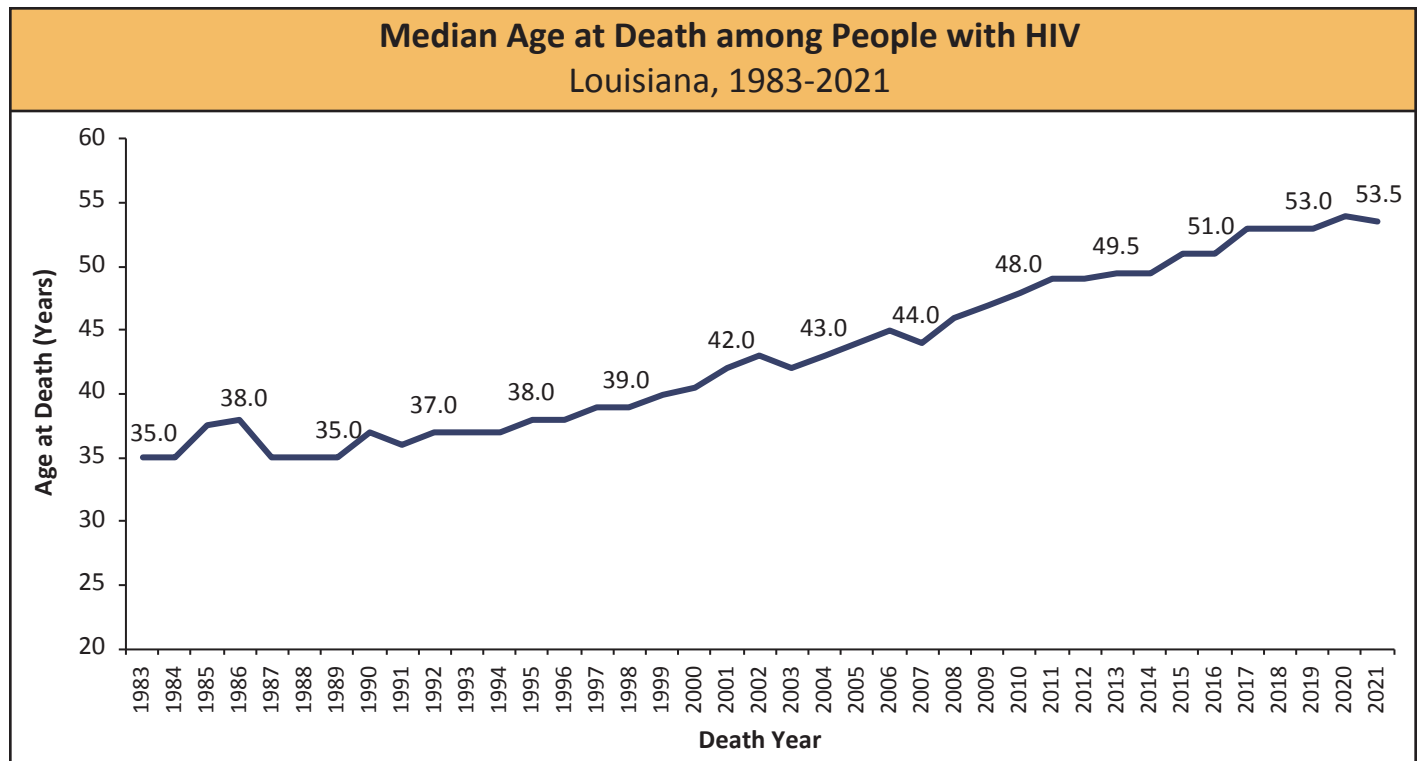
Mortality among People with HIV in Louisiana

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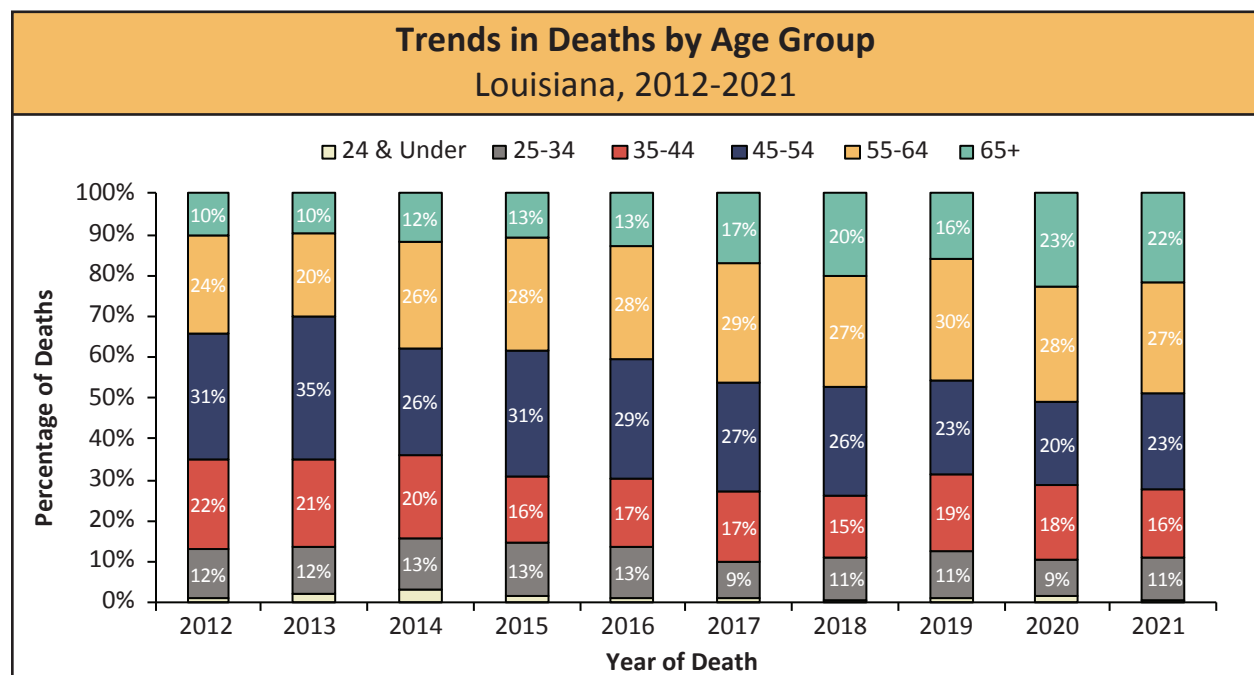
Each year, SHHP conducts linkages between Louisiana’s HIV surveillance database and three death databases (Louisiana’s Vital Records, the Social Security Death Master File, and the National Death Index) to verify the vital status of all persons with diagnosed HIV in Louisiana. Additional information, including the underlying and other contributing causes of death, is extracted from the respective death file and imported in SHHP’s HIV surveillance system. While individuals may die from HIV-related illnesses, others may die from non-HIV related causes such as heart disease, cancer, COVID-19, drug overdoses, or a car accident. The Louisiana death data detailed throughout this report includes all causes of death among people with HIV, unless noted otherwise.



The introduction of Highly Active Antiretroviral Therapy (HAART) after 1995 has led to lower mortality rates and improved quality of life among persons living with HIV in the United States. Clinical studies have shown that appropriate HAART initiation and continual adherence to treatment leads to repressed HIV viral replication, undetectable HIV viral levels in the blood, delayed onset of AIDS, and prolonged survival time. When HAART was introduced in 1995, the number of deaths per year among persons with HIV in Louisiana, and across the US, had peaked. In the years after HAART introduction, from 1996 to 1999, the number of deaths per year among Louisiana’s HIV population plummeted by approximately 50%. From 1999-2019, the number of deaths remained relatively stable, with slight declines in recent years. During the same time period, the total number of persons living in Louisiana with HIV increased yearly. Taken together, these trends suggest that the population of persons living with HIV in Louisiana has been living longer than before and mortality rates have fallen due to widespread use of HAART. From 2020-2021, Louisiana experienced increases in the number of deaths among people with HIV due to the COVID-19 pandemic and an increase in accidental drug overdoses. Increases in mortality from COVID-19 and drug overdoses in Louisiana are similar to trends nationally.



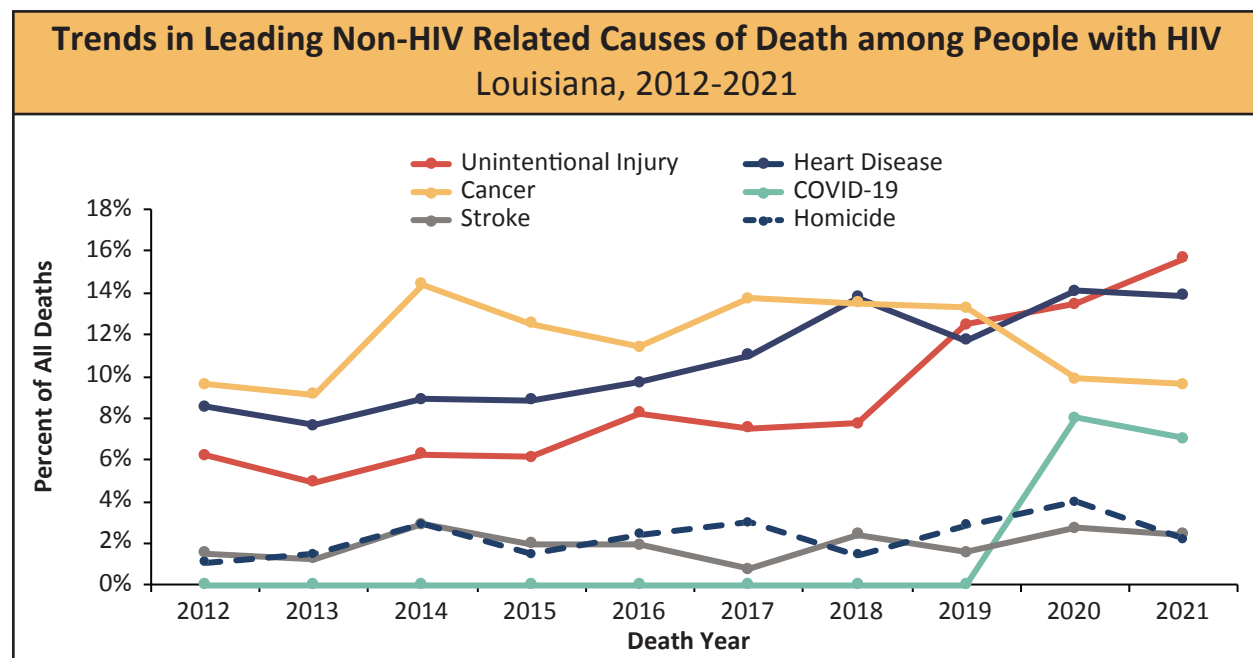
- The median age at death has steadily increased among people with HIV in Louisiana since the introduction of HAART in 1996.
- In 1996, the median age at death was 38.0 years and increased to 53.5 years by 2021.



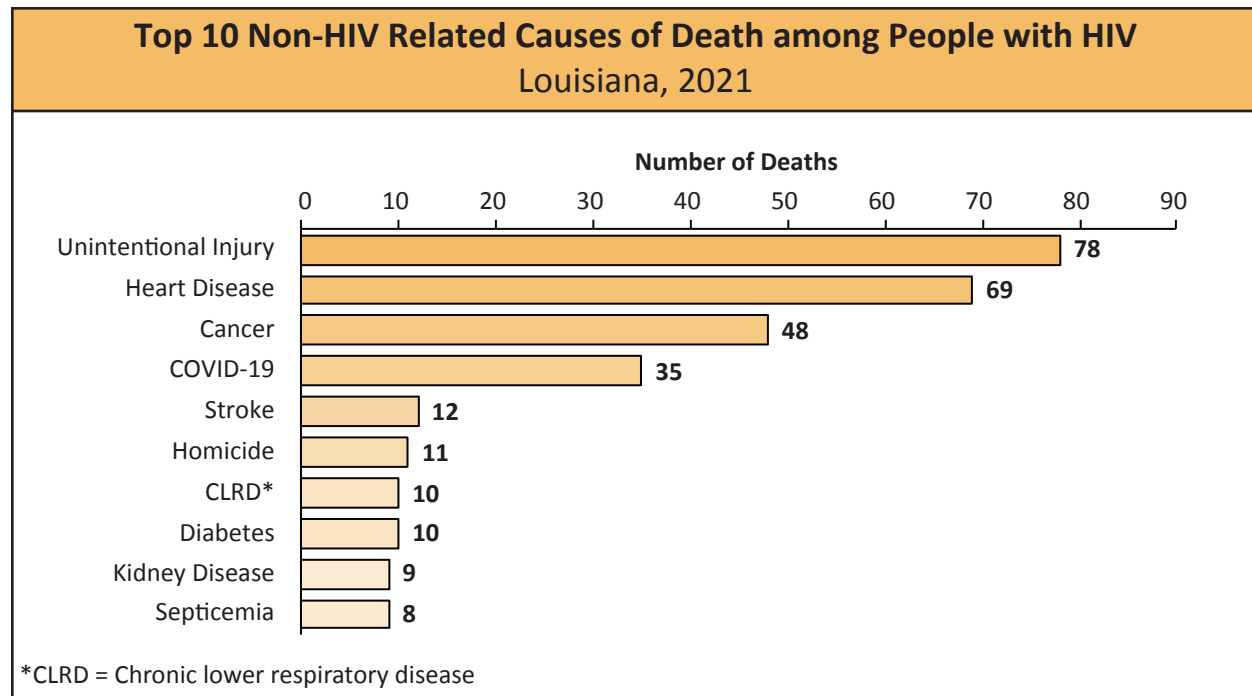
- In 2021, nearly half (49%) of deaths were among people ages 55 and older.
- The proportion of deaths among people with HIV ages 65 and older increased from 10% in 2012 to 22% in 2021.
- From 2012-2021, the proportion of deaths among people with HIV ages 45-54 years old decreased significantly from 31% to 23%. Among people 35-44 years old, the proportion of deaths decreased from 22% in 2012 to 16% in 2021.

Cause of Death among People with HIV

Before the introduction of HAART, the vast majority of deaths among persons with HIV in Louisiana were attributed to HIV-related causes, opportunistic infections and AIDS-related malignancies (such as Kaposi's sarcoma and non-Hodgkin's lymphoma). As HAART led to increased survival time and delayed onset of AIDS, an increasingly larger proportion of deaths among persons with HIV were attributed to non-HIV related causes, most often heart and cardiovascular diseases, cancer, and stroke. As a result, a smaller proportion of deaths among people with HIV were caused by HIV-related conditions. In recent years, the proportion of deaths attributed to unintentional injury (traffic accidents, falls, overdoses, etc.) has increased dramatically with the primary driver of those increases being accidental drug overdoses. In addition, COVID-19 became one of the top five non-HIV related causes of death among people with HIV in 2020 and 2021. In 2021, 25% of deaths were HIV-related and 75% of deaths were non-HIV related.



- In 2021, the leading non-HIV related cause of death among people with HIV was unintentional injury, comprising 16% of deaths. Deaths from unintentional injury comprised only 6% of deaths in 2012. The primary driver of this increase being accidental drug overdose deaths.
- From 2012-2021, the percentage of deaths attributed to heart disease increased from 9% to 14%.
- COVID-19 comprised 8% of deaths among people with HIV in 2020 and 7% of deaths in 2021.
- Cancer has been a leading non-HIV related cause of death among people with HIV over the past 10 years, comprising a high of 14% of deaths in 2014. In 2021, cancer was attributed to 10% of deaths among people with HIV in Louisiana.



- In 2021, unintentional injury was the number one non-HIV related cause of death among people with HIV. Of the 78 deaths from unintentional injury, 66 (85%) were due to drug overdoses.
- COVID-19 was the fourth highest non-HIV related cause of death among people with HIV in 2021.

In 2021, there were 498 people with HIV in Louisiana who died from an HIV or non-HIV related cause of death. The table on the following page shows the demographic composition of these individuals.

- Among people who died in 2021, 72% had been previously diagnosed with Stage 3 (AIDS).
- The majority of deaths were men (71%) and Black (72%).
- The age group comprising the greatest number of deaths was 55-64 year olds (27%).
- High risk heterosexuals accounted for 40% of deaths followed by gay, bisexual, and other men who have sex with men (35%).
- There were deaths among people with HIV in every public health region. Region 1-New Orleans and Region 2-Baton Rouge comprised over half of deaths, 30% and 22%, respectively.
- The majority (87%) of deaths were among people residing in urban parishes.

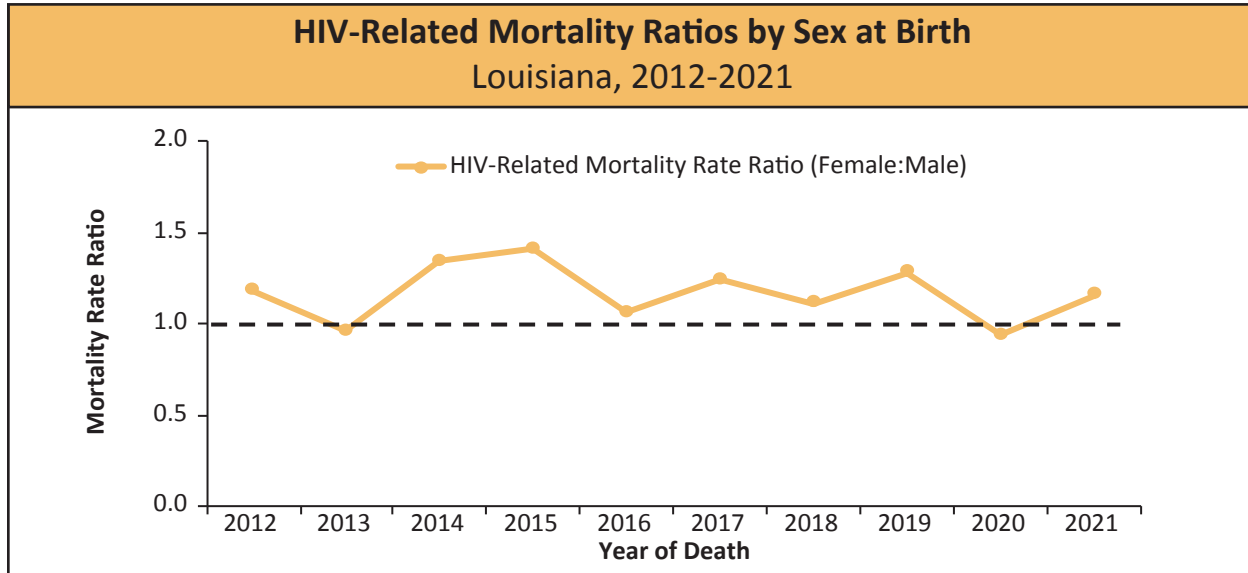
Characteristics of Deaths among People with HIV

Deaths Among People with HIV Louisiana, 2021		
	2021 Deaths	Percent
Total Deaths	498	100%
Diagnosis at Death		
Stage 3 (AIDS)	361	72%
HIV	137	28%
Gender		
Men	353	71%
Women	141	28%
Transgender women	4	1%
Race/Ethnicity		
Black/African American	361	72%
Hispanic/Latinx	7	1%
White	120	24%
Multi-Race/Other	10	2%
Age at Death		
20-24	3	1%
25-34	53	11%
35-44	81	16%
45-54	117	23%
55-64	136	27%
65+	108	22%
Imputed Transmission Category		
Gay, Bisexual, & Other Men who have Sex with Men (GBM)	172	35%
Persons Who Inject Drugs (PWID)	85	17%
GBM/PWID	42	8%
High Risk Heterosexual (HRH)	198	40%
Transfusion/Hemophilia*	0	0%
Pediatric*	1	< 1%
Region at Death		
1-New Orleans	147	30%
2-Baton Rouge	108	22%
3-Houma	27	5%
4-Lafayette	43	9%
5-Lake Charles	23	5%
6-Alexandria	25	5%
7-Shreveport	51	10%
8-Monroe	36	7%
9-Hammond/Slidell	38	8%
Rural/Urban		
Rural	63	13%
Urban	435	87%

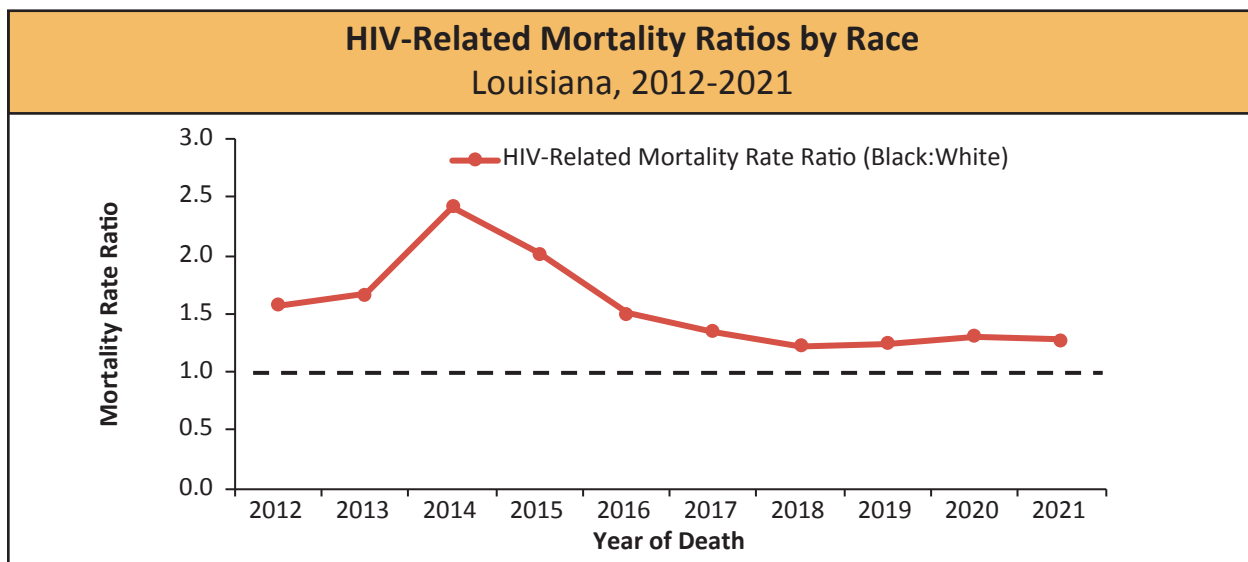
*Transmission category not imputed.

Trends in HIV-Related Mortality

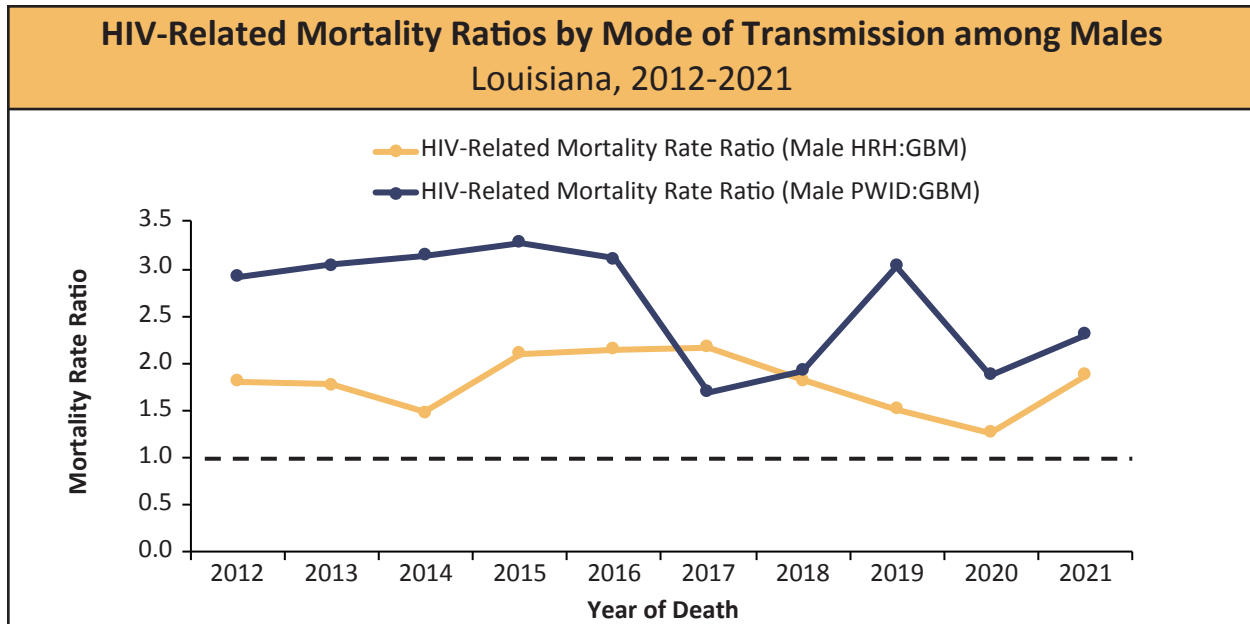
Despite statewide increases in access to HIV testing and treatment, disparities exist in HIV-related mortality rates between races, transmission risk groups, Stage 3 (AIDS) status, and geographic location. Black people, people who inject drugs, people previously diagnosed with Stage 3 (AIDS), and people who reside in certain regions of Louisiana are at increased risk of HIV-related mortality. These disparities in HIV-related mortality may be reflective of disparities in timely HIV diagnosis, linkage to HIV-related care, and adherence to HIV-related treatment.



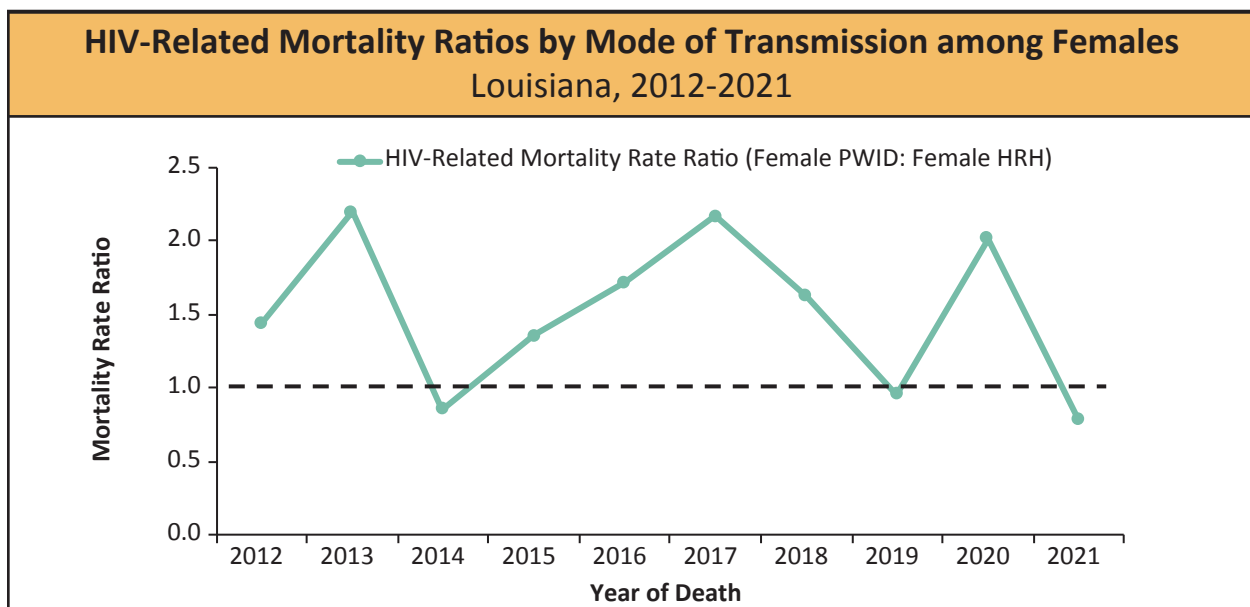
- From 2012-2021, the average HIV-related mortality rate among females with HIV was approximately 1.2 times that of males. This means, on average, women were 1.2 more likely than men to die from an HIV-related cause of death.
- The HIV-related mortality rate between females and males has been similar over the past 10 years.



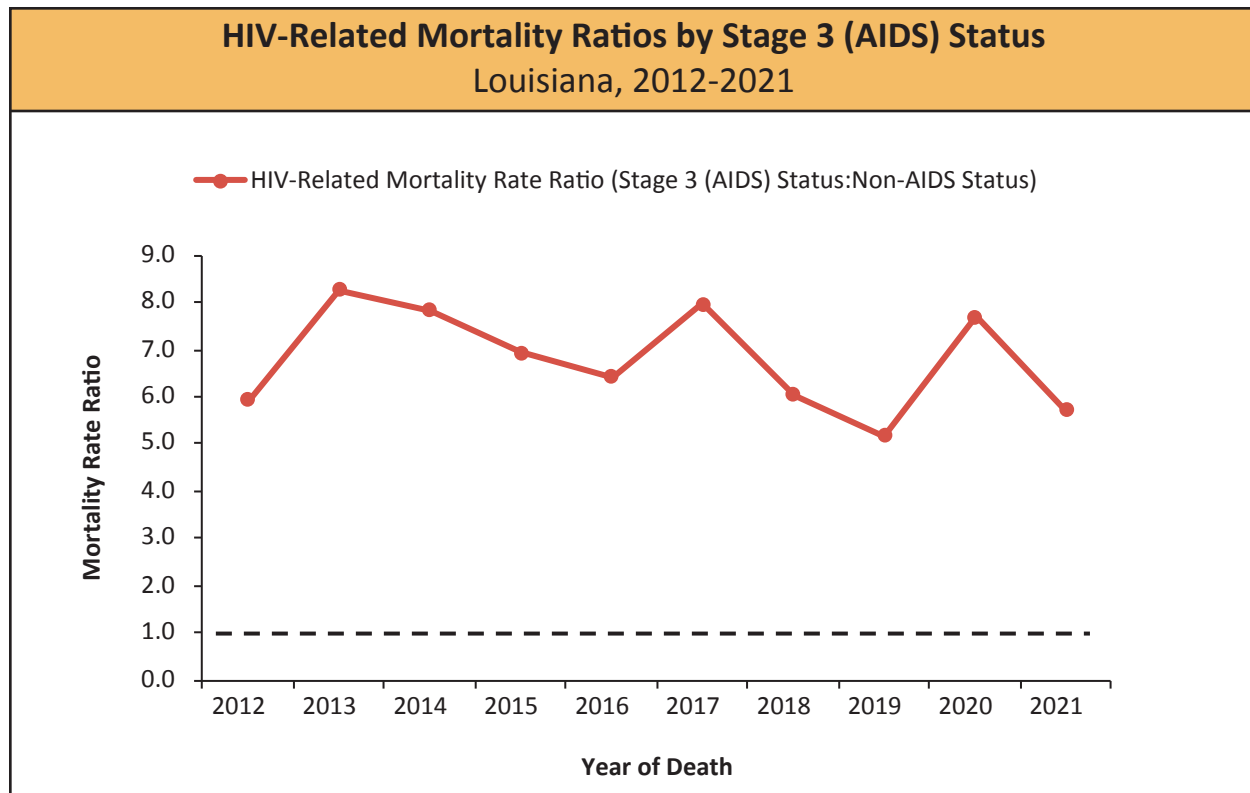
- From 2012-2021, the average HIV-related mortality rate among Black people with HIV was approximately 1.6 times that of White people. This means Black people were, on average, 1.6 times more likely to die from an HIV-related cause of death than White people.
- Over the past 10 years, there has been disparities in the Black and White HIV-related mortality rate. The highest HIV-related mortality rate ratio was seen in 2014 with Black people experiencing an HIV-related mortality rate 2.4 times that of White people with HIV.



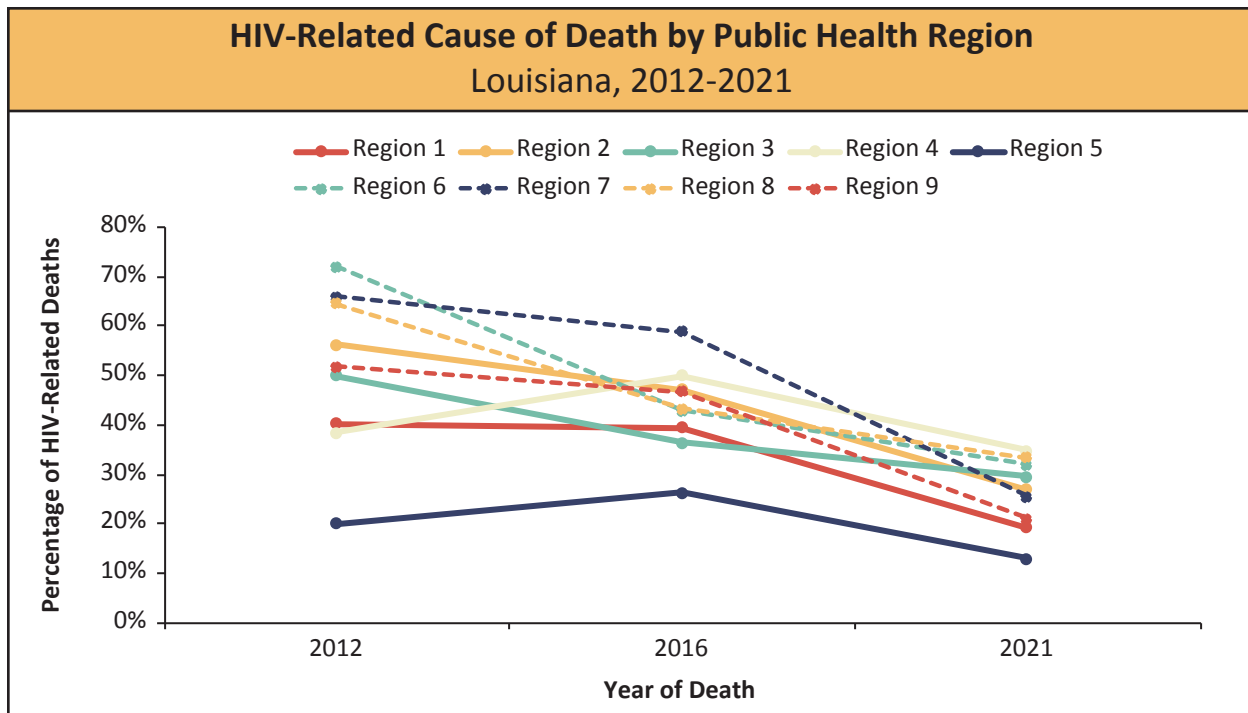
- From 2012-2021, the average HIV-related mortality rate among male high risk heterosexuals (HRH) was approximately 1.8 times that of gay, bisexual, and other men who have sex with men (GBM). This means male HRH, on average, were 1.8 times more likely than GBM to die of an HIV-related cause of death.
- The average HIV-related mortality rate among male persons who inject drugs (PWID) was approximately 2.6 times that of GBM. This means male PWID, on average, were 2.6 times more likely to die from an HIV-related cause of death than GBM.



- From 2012-2021, the average HIV-related mortality rate among females who inject drugs (PWID) was approximately 1.5 times that of female high risk heterosexuals (HRH). This means female PWID were, on average, 1.5 times more likely to die from an HIV-related cause of death than female HRH.



- From 2012-2021, the average HIV-related mortality rate among people previously diagnosed with Stage 3 (AIDS) was approximately 6.8 times that of people who had never progressed to Stage 3 (AIDS). This means people previously diagnosed with Stage 3 (AIDS) were, on average, 6.8 times more likely to die from an HIV-related cause of death than people who had never progressed to Stage 3 (AIDS).
- There has been a slight decline in HIV-related mortality rate disparities over the past 10 years. These trends highlight the importance of early diagnosis and adherence to HIV treatment in maintaining a healthy immune system.



- From 2012-2021, the percentage of HIV-related deaths decreased in each of Louisiana's nine public health regions.
- Regions in northern Louisiana experienced some of the largest declines in HIV-related deaths among persons diagnosed with HIV. In Region 6 – Alexandria, 72% of deaths in 2012 were HIV-related as compared to 32% in 2021. In Region 7 – Shreveport, 66% of deaths in 2012 were HIV-related as compared to 25% in 2021. In Region 8 – Monroe, 65% of deaths in 2012 were HIV-related as compared to 33% in 2021.
- In 2021, Region 4 – Lafayette had the highest proportion of HIV-related deaths, 35%. Region 5 – Lake Charles had the lowest proportion of HIV-related deaths, 13%.

Appendix

Program Report Technical Notes

Report Format

The *2022 HIV Supplemental Report* includes only HIV, STD, and Hepatitis surveillance data and does not include HIV/STD/Hepatitis prevention and services data. This STD/HIV/Hepatitis Program Report is divided into the following sections: Introduction, Chapter 1: EHE and Other Key HIV Care Measures, Chapter 2: HIV Co-infection, Chapter 3: Perinatal HIV Exposure, and Chapter 4: Mortality among People with HIV.

Tabulation of Data

This report includes all STD information entered at the STD/HIV/Hepatitis Program office as of July 20, 2023, and all HIV information entered as of July 13, 2023. Chlamydia, gonorrhea, syphilis, HCV, mpox, HIV and AIDS cases diagnosed through 2022 are included in this report. The 2022 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 2021 to ensure complete data.

Census Data and Rate Calculation

For rates, the 2021 five-year estimates for populations were obtained from the U.S. Census Bureau. All rates are calculated per 100,000 persons. An example of how rates are calculated is as follows. For the early syphilis/HIV co-infection rate in 2022 for the New Orleans Public Health Region 1, the 2021 Census populations for the four parishes within Region 1 are added together equaling a regional population of 878,220 persons. Then the number of early syphilis/HIV co-infections in Region 1 in 2022, 255 new diagnoses, is divided by the totaled population, 878,220 persons to get 0.000290. This number is multiplied by 100,000 to result in an early syphilis/HIV co-infection case rate of 29.0 per 100,000 population for Region 1 in 2022.

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 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.

HIV and AIDS Case Definition Changes

Most recently, the HIV surveillance case definitions were revised in 2008 for adults and adolescents (age ≥ 13

years).³² 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.³³

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

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

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 from transmission from an HIV-infected mother to her child.

Unspecified/NIR: Cases who, at the time of this publication, have no reported history of exposure to HIV through any of the routes listed in the hierarchy of exposure categories. These cases are traditionally marked as No Identified Risk factor (NIR). NIR cases include: persons for whom risk behavior information has not yet been reported and are still under investigation; persons whose exposure history is incomplete because they have died, declined risk disclosure, or were lost to follow-up; persons who deny any risk behavior; and persons who do not know the HIV infection status or risk behaviors of their sexual partners. For this report, all cases with an unspecified transmission category were assigned an imputed transmission category. Imputation procedures are described below.

HIV Imputed Transmission Category

Newly reported cases, especially HIV (non-AIDS) cases, are often reported without a specified risk exposure, thereby causing a distortion of trends in exposure categories. Thus, statistical procedures to provide or impute predicted values of transmission category were used. All data in the graphs and tables throughout the surveillance section of the report represent imputed transmission categories. Values for transmission category for cases with no known risk were estimated using a statistical procedure known as hotdeck imputation, similar to methods used by the U.S. Census on the American Community Survey (www.census.gov/acs/www/Downloads/tp67.pdf). The Louisiana hotdeck imputation method was locally developed and validated against the CDC methodology. Logistic regression models were developed to identify those variables that are highly correlated with either a) missingness or b) one of the three chief risk factors for 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.

Works Cited

Introduction

1. U.S. Census Bureau, 2021 Population Estimates.
2. Adolescents and STDs. Centers for Disease Control and Prevention. <https://www.cdc.gov/std/life-stages-populations/stdfact-teens.htm>. Published April 12, 2022. Accessed August 2023.
3. Louisiana Department of Health. Louisiana State Health Assessment. MySidewalk. <https://dashboards.mysidewalk.com/louisiana-state-health-assessment/demographics>. Published 2021. Accessed August 2023.
4. America's Health Rankings Analysis of U.S. Census Bureau. American Community Survey. United Health Foundation. AmericasHealthRankings.org. Accessed August 2023.
5. Current cigarette smoking among adults in the United States. Centers for Disease Control and Prevention. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/index.htm. Published March 17, 2022. Accessed August 2023.
6. Mental Health in Louisiana. National Alliance on Mental Illness. <https://www.nami.org/NAMI/media/NAMI-Media/StateFactSheets/LouisianaStateFactSheet.pdf> May 2023. Accessed August 2023.
7. Louisiana 2018-2020 Maternal and Child Health Profile. Louisiana Department of Health. Bureau of Family Health. <https://partnersforfamilyhealth.org/wp-content/uploads/2022/08/2018-2020-Region-Profiles.pdf>. Published May 2022. Accessed August 2023.
8. Prison Policy Initiative (2021). Louisiana Profile. Prison Policy Initiative | Prison Policy Initiative. <https://www.prisonpolicy.org/profiles/LA.html>. Accessed August 2023.
9. Demographic dashboard. Louisiana Department of Public Safety & Corrections. <https://doc.louisiana.gov/demographic-dashboard/>. Published May 2022. Accessed August 2023.
10. Louisiana Health Insurance Survey. Louisiana Department of Public Health & LSU E.J. Ourso College of Business <https://ldh.la.gov/assets/medicaid/LHIS/2022LHIS/LouisianaHealthInsuranceSurvey2021-4.18.2022.pdf>.

Updated June 30, 2023. Accessed August 2023.

11. Health insurance coverage of the total population. Kaiser Family Foundation. <https://www.kff.org/state-category/health-coverage-uninsured>. Published November 2021. Accessed August 2023.

Chapter 1

12. Centers for Disease Control and Prevention. HIV Statistics Center—Knowledge of Status. May 26, 2023. Accessed September 13, 2023 <https://www.cdc.gov/hiv/statistics/overview/in-us/status-knowledge.html>

13. Centers for Disease Control and Prevention. Health Disparities. May 26, 2023. Accessed September 13, 2023 <https://www.cdc.gov/healthyyouth/disparities/index.htm>

Chapter 2

14. Centers for Disease Control and Prevention. STDs and HIV – CDC Basic Fact Sheet. April 12, 2022. Accessed September 15, 2023. <https://www.cdc.gov/std/hiv/stdfact-std-hiv.htm>.

15. Centers for Disease Control and Prevention. Syphilis – CDC Detailed Fact Sheet. April 11, 2023. Accessed September 13, 2023. <https://www.cdc.gov/std/syphilis/stdfact-syphilis-detailed.htm>.

16. Centers for Disease Control and Prevention. Chlamydia – CDC Detailed Fact Sheet. April 11, 2023. Accessed September 13, 2023. <https://www.cdc.gov/std/chlamydia/stdfact-chlamydia-detailed.htm>.

17. Centers for Disease Control and Prevention. Gonorrhea – CDC Detailed Fact Sheet. April 11, 2023. Accessed September 13, 2023. <https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea-detailed.htm>.

18. Centers for Disease Control and Prevention. Hepatitis C questions and answers for health professionals. August 7, 2020. Accessed September 13, 2023. <https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm>.

19. Karon C Lewis, Laurie K Barker, Ruth B Jiles, Neil Gupta, Estimated Prevalence and Awareness of Hepatitis C Virus Infection Among US Adults: National Health and Nutrition Examination Survey, January 2017–March

2020, Clinical Infectious Diseases, 2023;; ciad411, <https://doi.org/10.1093/cid/ciad411>

20. Smith BD, Morgan RL, Beckett GA, et al. Recommendations for the identification of chronic hepatitis C virus infection among persons born during 1945-1965. MMWR Recomm Rep. 2012; 61(No. RR-4).

21. Perz JF, et al. Case-control study of hepatitis B and hepatitis C in older adults: Do healthcare exposures contribute to burden of new infections?. J Hepatol. 2013; 57(3):917-24.

22. Kleven RM, Hu DJ, Jiles R, Holmber SD. Evolving epidemiology of hepatitis C virus in the United States. Clin Infect Dis. 2012; 55(Suppl 1):S3-9.

23. Nelson PK, Mathers BM, Cowie B, et al. Global epidemiology of hepatitis B and hepatitis C in people who inject drugs: results of systematic reviews. Lancet. 2011; 378:571-83.

24. Centers for Disease Control and Prevention. Reduce reported rate of new hepatitis C virus infections among persons who inject drugs by 25% or more. August 8, 2023. Accessed September 15, 2023. <https://www.cdc.gov/hepatitis/policy/npr/2023/NationalProgressReport-HepC-ReduceInfectionsPWID.htm>.

25. Centers for Disease Control and Prevention. About Mpox. August 30, 2023. Accessed September 14, 2023. <https://www.cdc.gov/poxvirus/mpox/about/index.html>.

Chapter 3

26. Panel on Treatment of HIV-Infected Women and Prevention of Perinatal Transmission. Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States. Department of Health and Human Services. Available at <http://aidsinfo.nih.gov/contentfiles/lvguidelines/perinatalgl.pdf>. Accessed [August 3rd, 2023]

27. CDC. Revised recommendations for HIV testing of adults, adolescents, and pregnant women in health care settings. MMWR 2006;55(RR-14):1-17.

28. Centers for Disease Control and Prevention. HIV Surveillance Report, 2019; vol. 33. <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2020-updated-vol-33.pdf>. Accessed

[August 4th, 2023].

29. CDC. Pregnant Women, Infants and Children: Elimination of Mother-to-Child Transmission. <http://www.cdc.gov/hiv/group/gender/pregnantwomen/emct.html#ref6>. Accessed [August 7th, 2023]

30. Louisiana Department of Health, Bureau of Family Health, 2020.

31. American College of Obstetricians and Gynecologists (ACOG) Guidelines for Perinatal Care. Sixth Edition. October 2007.

Appendix

32. MMWR 2008; 57 [RR-10]: 1-12

33. MMWR 2014; 63 [RR-03]: 1-10

