

2019 Hepatitis B & Hepatitis C Surveillance Report

State of Louisiana
Department of Health
Office of Public Health



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History of Hepatitis Surveillance and Office of Public Health STD/HIV/Hepatitis Program Overview

The History of Hepatitis Surveillance in Louisiana

The Louisiana Office of Public Health (OPH) has collected surveillance data for hepatitis B since 1987 and for hepatitis C since 1990. Surveillance for hepatitis B and hepatitis C has historically been passive with few financial resources available to either. Advancements in hepatitis medical care and treatment have resulted in additional resources directed to hepatitis B and hepatitis C prevention and surveillance activities. Louisiana's Infectious Disease Epidemiology Program (ID EPI) maintained surveillance for both hepatitis B and hepatitis C until 2018 when it was recognized that statewide initiatives would benefit from the infrastructure already in place for HIV and STD surveillance, and a decision was made to transfer surveillance for hepatitis B and hepatitis C to what is now known as the STD/HIV/Hepatitis Program (SHHP). The transition of hepatitis B and hepatitis C surveillance from ID EPI to SHHP began in late 2018 and was completed in early 2020.

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 surveillance, and became the STD/HIV/Hepatitis Program (SHHP).

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 and hepatitis C to ensure the availability of quality medical and social services for those diagnosed with an STD, HIV, or hepatitis B or hepatitis C and to track the impact of the STD, HIV, and hepatitis B and hepatitis C epidemics in Louisiana.

VISION

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

MISSION

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

About this Report

The 2019 Hepatitis B & Hepatitis C Surveillance Report provides a thorough surveillance profile of the hepatitis B and hepatitis C epidemics in Louisiana.

For More Information:

SHHP maintains two websites <http://dhh.louisiana.gov/hiv> and www.louisianahealthhub.org.

Executive Summary

Louisiana experiences high rates of viral hepatitis and its citizens suffer the health related consequences of these acute and chronic infections. Driven by both hepatitis B and hepatitis C, Louisiana had the fourth highest rate (9.7 per 100,000 population) of liver and bile duct cancers in the United States and ranked fourth for its rate (8.3 per 100,000 population) of death from liver and bile duct cancers in 2017.¹ Additionally, Louisiana is experiencing increased injection drug use among people with opioid addiction similar to trends observed across the nation.² Nearly a third of the Louisiana's population is on Medicaid and over 31,000 people are incarcerated under state or federal jurisdiction. A large number of people on Medicaid and in the state correctional system are known to have untreated hepatitis C. Recognizing the significant impact that viral hepatitis, especially hepatitis C, has on the people of Louisiana, an initiative to eliminate hepatitis C as a public health threat was implemented in 2019.

Understanding the populations most affected by hepatitis B and hepatitis C in the state is critical to implementing programs to prevent morbidity and mortality from these diseases and achieving elimination. The following report provides detailed information regarding demographic and risk characteristics of individuals diagnosed with hepatitis B and hepatitis C and trends in the epidemics over time. This report includes cases diagnosed through 2019. Some of the most significant trends are highlighted below:

Chapter 1 - Hepatitis B (HBV) in Louisiana

Acute HBV Diagnoses

- In 2019, there were 73 cases of acute hepatitis B reported for a rate of 1.6 per 100,000 population. Taking into account underreporting, acute hepatitis B infections likely affect close to 500 people in Louisiana each year (estimated rate 10.5 per 100,000 population).
- Case counts for acute hepatitis B have remained fairly stable over the last ten years with an average of 70 cases reported each year from 2010-2019.
- Of reported acute hepatitis B cases in 2019, 55% (n=40) were male and 45% (n=33) were female. The reported rate for males was 1.8 per 100,000 population and 1.4 per 100,000 population for females.
- In 2019, the majority of reported acute HBV cases were White (75%, n=54), and only 18% (n=13) were Black. The rate for reported cases was 2.0 per 100,000 for Whites and 0.9 per 100,000 for Blacks.
- The majority of reported cases of acute hepatitis B in 2019 (65%, n=46) were between the ages of 30-49 years old, in line with historical trends. Compared to previous years, a larger proportion of cases were 40-49 years old. In 2019, 40% of cases were 40-49 years old compared to 27% in 2018.
- People 40-49 years old have the highest rate of reported acute hepatitis B (5.3 per 100,000 population) in 2019, followed by people 30-39 years old (2.7 per 100,000 population), and people 50-59 years old (1.9 per 100,000 population).
- In 2019, the largest proportion of reported acute hepatitis B cases lived in the Hammond/Slidell region (25%, n=18), followed by the New Orleans region (16%, n=12), the Houma region (15%, n=11), and the Baton Rouge region (14%, n=10). These four regions account for the majority of reported cases over the last five years.
- The most common risk factor identified for people diagnosed with acute hepatitis B from 2015-2019 was injection drug use. Of the 204 people with complete risk data for injection drug use, 43% (n=87) reported "yes".

Chronic HBV Diagnoses

- There have been no significant changes in the populations affected by chronic hepatitis B over the past 10 years. From 2010-2019, more men than women have been diagnosed (58% compared to 42%), and Blacks and Asians were disproportionately affected (46% and 16%, respectively). The

majority of reported chronic hepatitis B diagnoses occurred in people age 30-59 years old (64%). People diagnosed with chronic hepatitis B primarily lived in the New Orleans (30%), Baton Rouge (17%), and Lafayette (11%) regions.

Chapter 2 - Hepatitis C (HCV) in Louisiana

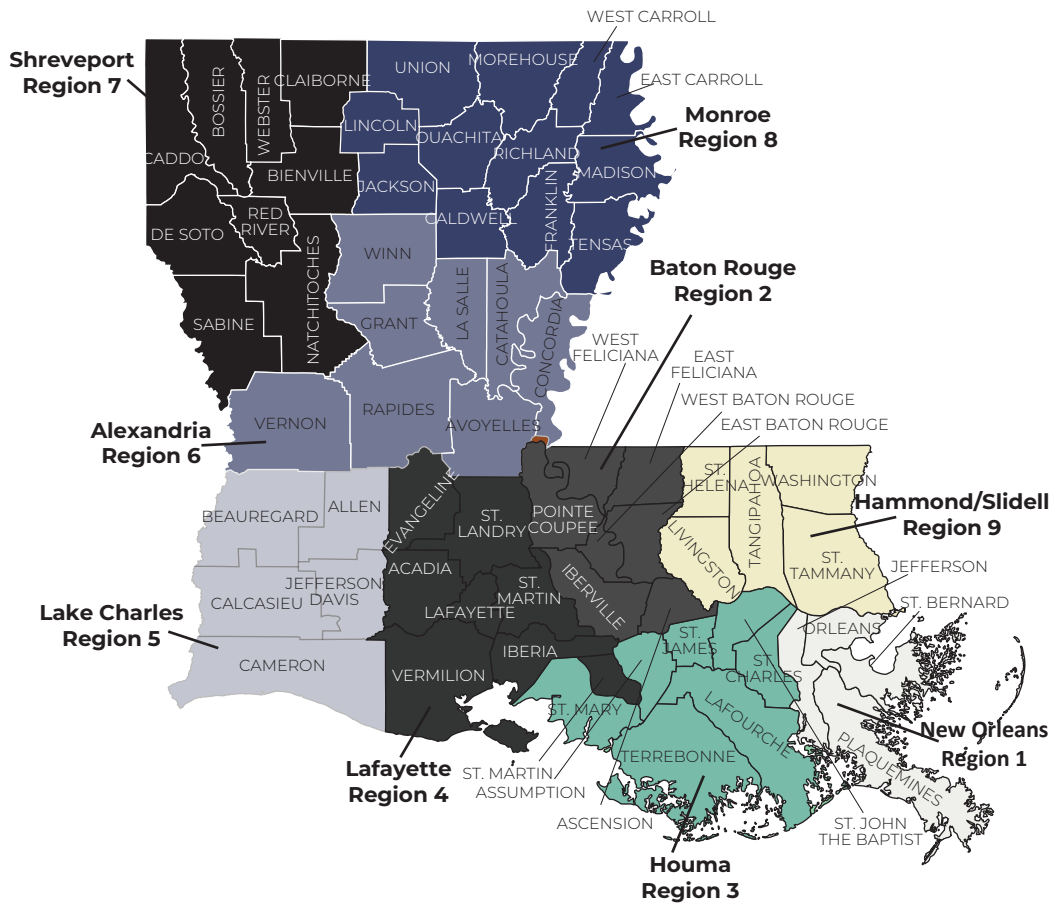
Acute HCV Diagnoses

- In 2019, there were 25 cases of acute hepatitis C reported for a rate of 0.5 per 100,000 population. Taking into account underreporting, acute hepatitis C infections likely affect close to 260 people in Louisiana each year, possibly more given the state's high rates of opioid abuse. The estimated rate of acute hepatitis C, after taking into account underreporting, is likely close to 5.6 per 100,000 population.
- Of people reported with acute HCV in 2019, 64% (n=16) were male and 36% (n=9) were female. Over the last two years, a larger proportion of males were diagnosed with acute HCV compared to females.
- The majority of reported acute HCV cases in 2019 were White (65%, n=15), and only 30% (n=7) were Black. The majority of cases occurring in White people is in line with historical trends with few to no reported cases in people who are not White each year.
- In 2019, the majority of people reported with acute HCV (56%, n=14) were 39 years of age and younger, and 28% (n=7) were 60 years and older. Compared to previous years, a larger proportion of people with acute HCV were 60 years and older. From 2010-2019, 71% (n=130) of acute HCV diagnoses occurred among people 39 years and under.
- In 2019, the largest proportion of people diagnosed and reported with acute hepatitis C lived in the Baton Rouge region (40%, n=10), followed by the New Orleans region (24%, n=6), and the Hammond/Slidell region (16%, n=4). Over the last five years, the majority of acute HCV diagnoses lived in these three regions.
- The most common risk factor identified among people diagnosed and reported with acute HCV was injection drug use. Of the 46 cases with complete risk data for injection drug use, 74% (n=34) reported, "yes."

Chronic HCV Diagnoses

- In recent years, there has been a large increase in the number of people diagnosed with chronic hepatitis C, likely due to increased incidence, enhanced case reporting, and increased awareness and screening. From 2015-2019, there were an average of 9,939 people newly diagnosed with HCV each year; 8,918 chronic hepatitis C diagnoses in 2019.
- The percentage of diagnoses in people 39 years and under has increased over the last 10 years. In 2007, only 21% (608/2,879) of newly reported chronic HCV diagnoses were among people 39 years and under, while Baby Boomers (born 1945-1965) accounted for 66% of diagnoses (1,886/2,879). In 2019, people 39 years and under accounted for 36% (3,199/8,918) of chronic HCV diagnoses, while Baby Boomers accounted for 41% of diagnoses (3,647/8,918).
- From 2010 to 2019, among persons 39 and younger, more men than women, were diagnosed with chronic HCV (54% male compared to 46% female). Among this same age group, the majority of diagnoses were White (76%). An additional 20% of diagnoses occurred in Black people, and only 3% of cases occurred in Hispanic/Latinx people. In addition, the majority lived in the New Orleans (27%), Baton Rouge (17%), and Hammond/Slidell (18%) regions.
- From 2010-2019, Baby Boomers diagnosed with chronic hepatitis C were primarily male (67% male compared to 33% female). Among this same age group, diagnoses were more evenly divided among Black people and White people (49% Black and 47% White). In addition, the majority lived in the New Orleans (27%), Baton Rouge (18%), Hammond/Slidell (12%), and Shreveport (10%) regions.

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



Louisiana's Population

Parishes in Public Health Region Parishes in MSA		
Region 1: New Orleans	Jefferson, Orleans, Plaquemines, St. Bernard	Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Tammany
Region 2: Baton Rouge	Ascension, E. Baton Rouge, E. Feliciana, Iberville, Pointe Coupee, W. Baton Rouge, W. Feliciana	Ascension, E. Baton Rouge, E. Feliciana, Iberville, Livingston, Pointe Coupee, St. Helena, W. Baton Rouge, W. Feliciana
Region 3: Houma	Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, St. Mary, Terrebonne	Lafourche, Terrebonne
Region 4: Lafayette	Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, Vermillion	Acadia, Iberia, Lafayette, St. Martin, Vermillion
Region 5: Lake Charles	Allen, Beauregard, Calcasieu, Cameron, Jefferson Davis	Calcasieu, Cameron
Region 6: Alexandria	Avoyelles, Catahoula, Concordia, Grant, La Salle, Rapides, Vernon, Winn	Grant, Rapides
Region 7: Shreveport	Bienville, Bossier, Caddo, Claiborne, DeSoto, Natchitoches, Red River, Sabine, Webster	Bossier, Caddo, DeSoto, Webster
Region 8: Monroe	Caldwell, E. Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, W. Carroll	Ouachita, Union
Region 9: Hammond/Slidell	Livingston, St. Helena, St. Tammany, Tangipahoa, Washington	Tangipahoa

Louisiana's Population and Healthcare Environment

Louisiana's Population

In the 2019 census, the total population of Louisiana was 4,648,794 people. Louisiana is made up of 64 county-equivalent subdivisions called parishes. In 2019, parish populations ranged from a low of 4,334 people (Tensas Parish) to a high of 440,059 people (East Baton Rouge Parish). While the state is considered rural, 84% of the population resides in urban areas.³ The state has nine public health regions and nine metropolitan statistical areas (MSAs). The largest MSA is the New Orleans Metro Area (1,270,530) followed by the Baton Rouge Metro Area (854,884). The Lafayette MSA has the third largest population in the state; 489,207.

Demographic Composition

According to the 2019 census data, the racial and ethnic composition of the state was estimated to be 58% White, non-Hispanic, 32% Black, non-Hispanic, 2% Asian, and <1% American Indian. People of Hispanic origin make up an additional 5% of the total population.

Age and Sex

In 2019, the census estimates that people under the age of 18 made up 23% of the population while people 65 and older made up 16% of the population. The median age in Louisiana is 38 years. As in previous years, the estimated proportion of females in the overall population in 2019 was slightly higher than that of males (51% vs. 49%).³

Education, Income, Poverty and Unemployment

An estimated 86% of Louisiana residents aged 25 years and older had attained a high school degree or higher, compared to 89% nationally. Additionally, 25% of Louisiana adults had a bachelor's degree or higher compared to 33% nationally. The estimated median household income in Louisiana was \$51,073 for 2019 compared to \$65,712 nationally. Moreover, an estimated 19% of Louisiana's population was living below the poverty level, compared to 12% of the national population. Louisiana has one of the highest proportions of children living in poverty, with an estimated 27% of all children 18 years or younger living in households with an income below the federally defined poverty level in 2019 compared to the national estimate of 17% of all US children.³ An estimated 2,571 people experience homelessness on any one night.⁴ During 2019, the average unemployment rate in Louisiana was 4.8%.⁵

Incarceration/Crime

In 2019, the property crime rate in Louisiana was 51% higher than the national property crime rate and the violent crime rate was 45% higher than the national violent crime rate. Louisiana's incarceration rate was 1st among all 50 states with 680 incarcerated adults per 100,000, significantly higher than the national rate of 419 incarcerated adults per 100,000.⁶ As of December 31, 2019, the Louisiana prison population was 31,609 persons under federal or state correctional authority, of which 67% were Black and 33% were White.⁷

Health Indicators

In the 2019 United Health Foundation's *America's Health Rankings* report, Louisiana ranked 49th out of 50 in overall health. This national health survey compares multiple health outcomes and health determinants in all states. The low-place ranking is predominately due to the state having a high percentage of adults who smoke, high percentage of children in poverty, high rates of obesity, high percentage of mental distress, high rates of premature death, and high infant mortality rates.⁸

Public Aid

In 2019, Medicaid covered 29% of all people living in Louisiana, and Medicare covered 14%. An additional 9% of the population was considered to be uninsured. Medicaid expenditures in Louisiana totaled nearly \$12 billion in the 2019 fiscal year.⁹ In 2019, 52% of children ages 0-18 were insured through Medicaid.¹⁰

Contextualizing Disparities, Drug Use, and Stigma

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The rise in opioid use in the United States has greatly increased the risk of transmission and outbreaks of viral hepatitis which has been shown to disproportionately affect vulnerable populations. Analyzing data to identify subpopulations most affected by a disease may lead to conclusions that place blame on the people affected rather than the social and economic factors that contribute to the environment in which they live that make people more vulnerable to acquiring these diseases. Discrimination and stigmatized systems have long been associated with worse health outcomes, yet blame is often placed on the people themselves instead of the systems in which they exist.

Racial and ethnic groups, subpopulations based on location, and/or those that engage in certain behaviors can often be used to describe persons at risk, but these groupings are generally more social than biological. Analyzing disease data by one-dimensional categories such as these ignores that the people encompassed within each category span a wide range of historical and cultural backgrounds. The social determinants of health among populations are complex, and, as such, health statistics should always be contextualized when examined.

The populations most at risk for acquiring viral hepatitis tend to be those who inject and/or use drugs, incarcerated populations, people experiencing homelessness and/or poverty – all of which are social and economic factors and not biological.¹¹ Minority populations experience a disproportionate burden of morbidity and mortality from viral hepatitis.¹² Effective efforts to prevent spread of diseases like viral hepatitis are through screening, testing, and appropriate linkage to health services. However, when it comes to successfully implementing interventions to treat people affected and reduce the risk of acquiring disease, it can be difficult to engage with people who inject and/or use drugs, incarcerated populations, and people experiencing homelessness, and/or poverty due to competing priorities and barriers that limit access to healthcare that prevent successful engagement in interventions. Consequently, these populations do not achieve similar health outcomes obtained by others with better access to services and healthcare.

In many settings, persons who inject drugs (PWID) face multi-leveled barriers of accessing health and social services, some of which can be attributed to unique health conditions and environmental challenges. Additionally, self-reported stigma and mistrust in the healthcare system and greater community at large, prevent PWID from accessing services and healthcare.¹³ PWID, as any other member of the population, may experience homelessness, unemployment, untreated mental health conditions, physical, sexual, or emotional abuse, poor familial or social support, criminalization, incarceration, and discrimination.^{14, 15}

Stigma generates psychological trauma, internalized shame, loss of self-worth, and fear of discrimination and judgement by society among those associated with marginalized populations such as PWID.^{16, 17, 18} As such, PWID with or without comorbid conditions may forgo or delay screening or treatment for diseases such as viral hepatitis out of desire to avoid community settings in which they have previously felt excluded, mainly healthcare settings or healthcare providers.¹⁹ When PWID do seek care, they often experience discrimination and receive lesser quality care.²⁰ Efforts may be made by PWID to hide their drug use from healthcare providers to avoid stigma and discrimination.²¹ As a barrier to care, stigma and discrimination may adversely affect both mental health and physical health by impeding entry into the healthcare system, reducing accurate reporting of health issues, and lowering the quality of care received.²²

SHHP is committed to adopting policies and developing interventions that tackle the barriers preventing those most affected by viral hepatitis from achieving good health outcomes.

Introduction to Surveillance

The purpose of surveillance is to describe the current burden of disease, monitor trends in disease, and detect possible outbreaks. The data gathered from surveillance is critical to understanding how a disease affects a community. Prevention of hepatitis B and hepatitis C depends on robust data collected through surveillance to inform, design, and implement effective interventions. Louisiana's Public Health Sanitary Code provides the state the authority to collect labs and health information needed to appropriately identify and characterize persons diagnosed with hepatitis B and hepatitis C.

Louisiana's Public Health Sanitary Code

Louisiana's Public Health Sanitary Code (Title 51, Part II, Chapter 1) establishes requirements for reporting certain diseases and conditions, unusual health events, and outbreaks of disease. The Sanitary Code requires that any physician practicing medicine in Louisiana who attends to or examines a person with hepatitis B (acute, carriage in pregnancy or perinatal infection) or hepatitis C (acute or perinatal) must report the case by the end of the next business day. Chronic hepatitis C infection is reportable within 5 business days. Positive laboratory results for hepatitis B and all laboratory results (both positive and negative) for hepatitis C are reportable. These reporting requirements apply to health care providers, laboratories and other entities.



Chapter 1

Hepatitis B in Louisiana

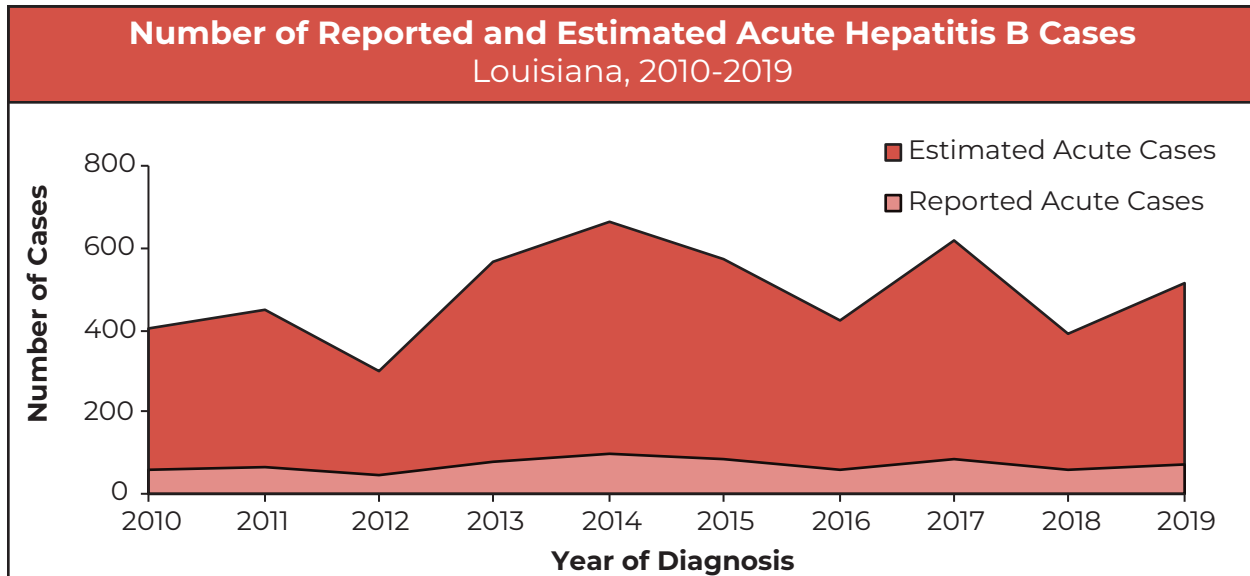
Background

Hepatitis B is a vaccine-preventable liver infection caused by the hepatitis B virus (HBV). It is spread when body fluids with the virus enters the body of someone without the virus. This can happen by needle stick, sharing drug injection equipment, sexual contact, mother to baby exposure at birth, or sharing personal care items that can break skin or mucous membranes such as razors, toothbrushes, or glucose monitoring equipment. The most common ways that hepatitis B is spread is by injection drug use and sexual contact. New infections of HBV cause a short term illness, referred to as an acute infection. Some people are able to clear HBV on their own and will no longer have HBV in their body, and are immune from future exposures to HBV. Others may develop a long-term chronic illness that may result in cirrhosis, liver cancer, and death. Approximately, 25% of those who acquire HBV in childhood and 15% of those who acquire HBV in adulthood will die from cirrhosis or liver cancer. The risk of developing a chronic infection is directly related to age. The younger a person is when they acquire HBV, the more likely they are to develop a chronic infection. Approximately, 90% of infants with acute HBV will develop chronic infection, whereas only 2-6% of adults will develop chronic HBV infection.²³ The most effective way to prevent HBV is through vaccination. Treatment is available for chronic hepatitis B, but it is not curative and is used to prevent worsening of liver disease. Reported cases of hepatitis B declined after routine vaccination for children was recommended in 1991.²⁴ An estimated 862,000 people are living with hepatitis B in the United States, and an estimated 21,600 people are newly infected each year.^{24,25} Approximately, 32% of adults living with hepatitis B are aware of their condition.²⁶

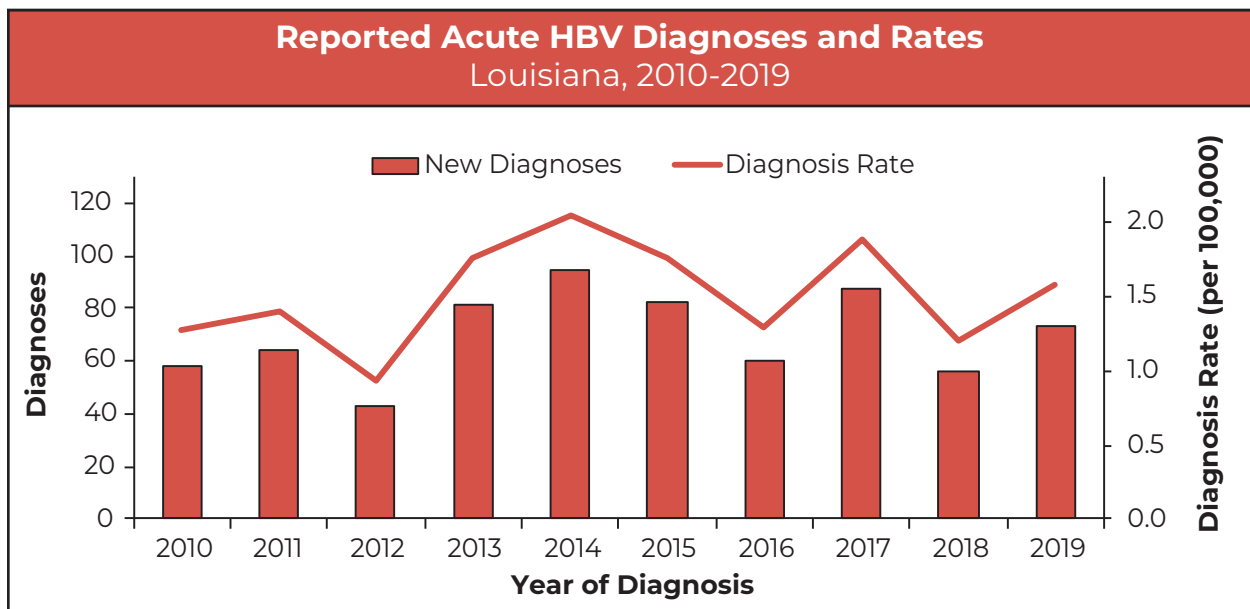
Acute Hepatitis B

Trends in Reported Acute Hepatitis B Cases and Underreporting

People with acute hepatitis B may not experience symptoms or may experience very mild symptoms. Consequently, not everyone with acute hepatitis B may seek medical care. Research estimates that only 1 out of 7 people with acute hepatitis B are identified and reported to public health.²⁷ It is likely that the burden of disease from acute hepatitis B is much greater in Louisiana than reported, and the number of cases that are reported to and confirmed by public health are only a small proportion of the true burden of disease.



In 2019, there were 73 diagnoses of acute hepatitis B reported for a rate of 1.6 per 100,000 population. Taking into account underreporting, acute hepatitis B infections likely affect close to 500 people in Louisiana each year. The estimated rate of acute HBV, after taking into account underreporting, is likely close to 10.5 per 100,000 population.

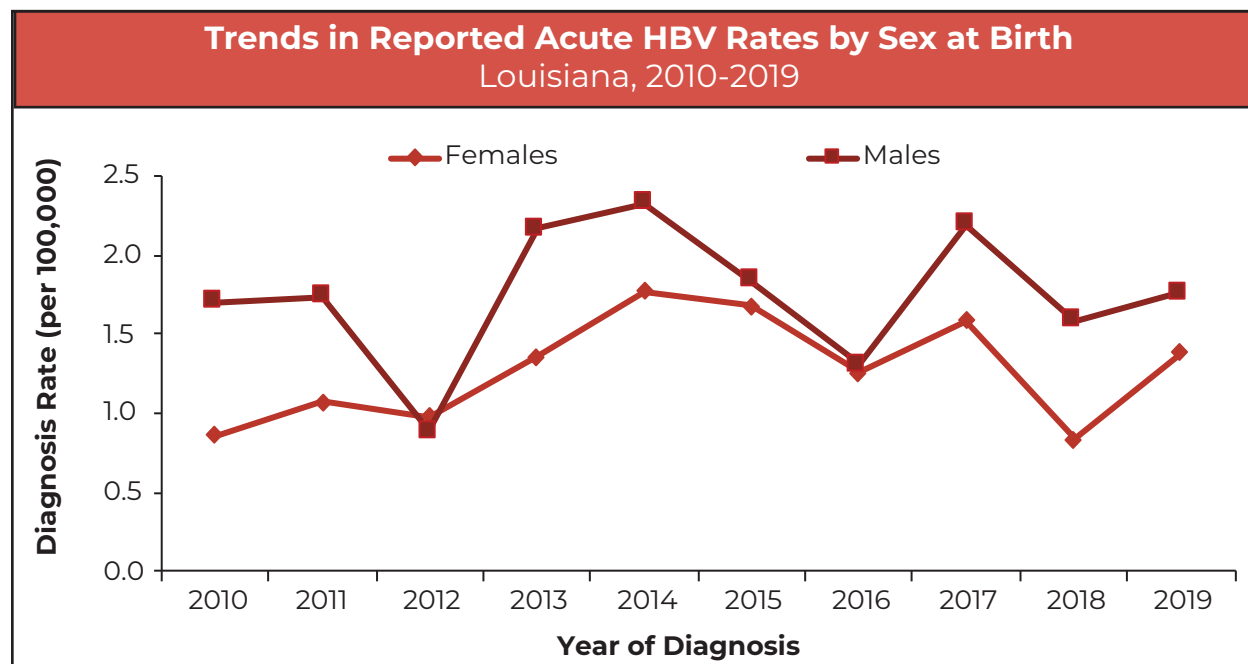


While the number of people diagnosed with acute HBV has fluctuated yearly, there has been an average of 70 new diagnoses reported from 2010-2019. The lowest number of new diagnoses, reported in Louisiana, occurred in 2012 (43 diagnoses), and the highest number of diagnoses occurred in 2014 (95 diagnoses).

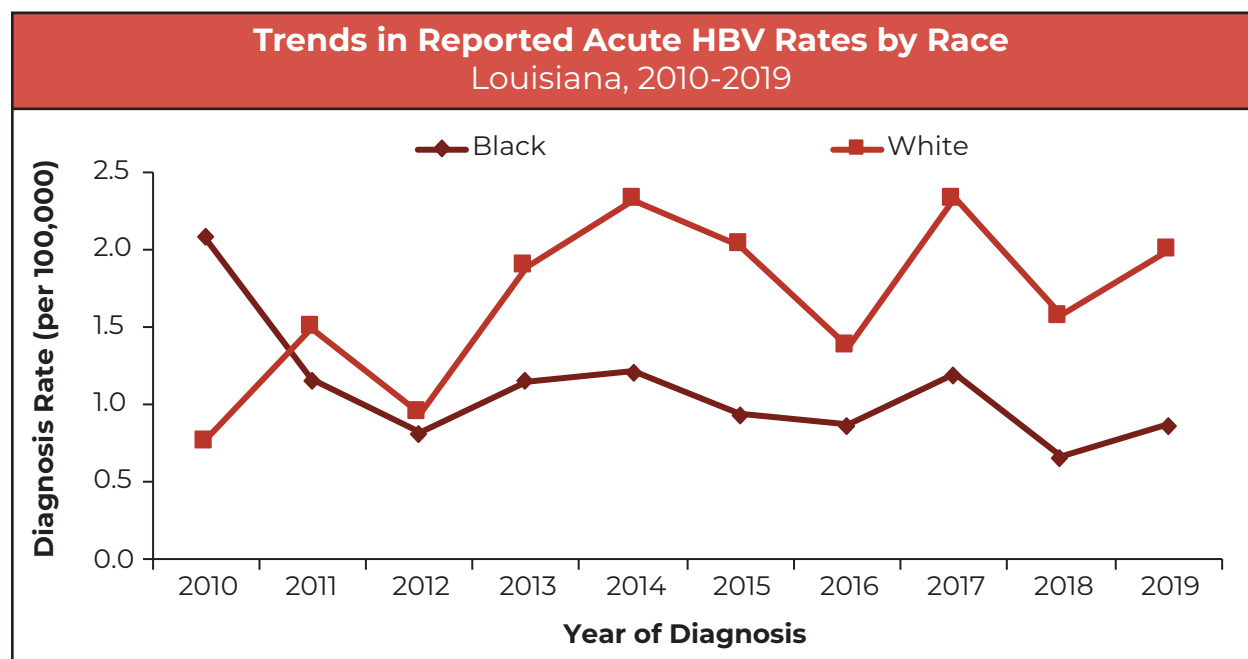
Acute Hepatitis B Diagnoses by Sex, Race/Ethnicity, Age, and Public Health Region

Although acute hepatitis B affects people of all genders, ages, and race/ethnicities throughout Louisiana, the impact is not the same across all populations. Identifying the populations most likely to acquire acute HBV, helps in planning prevention activities and services.

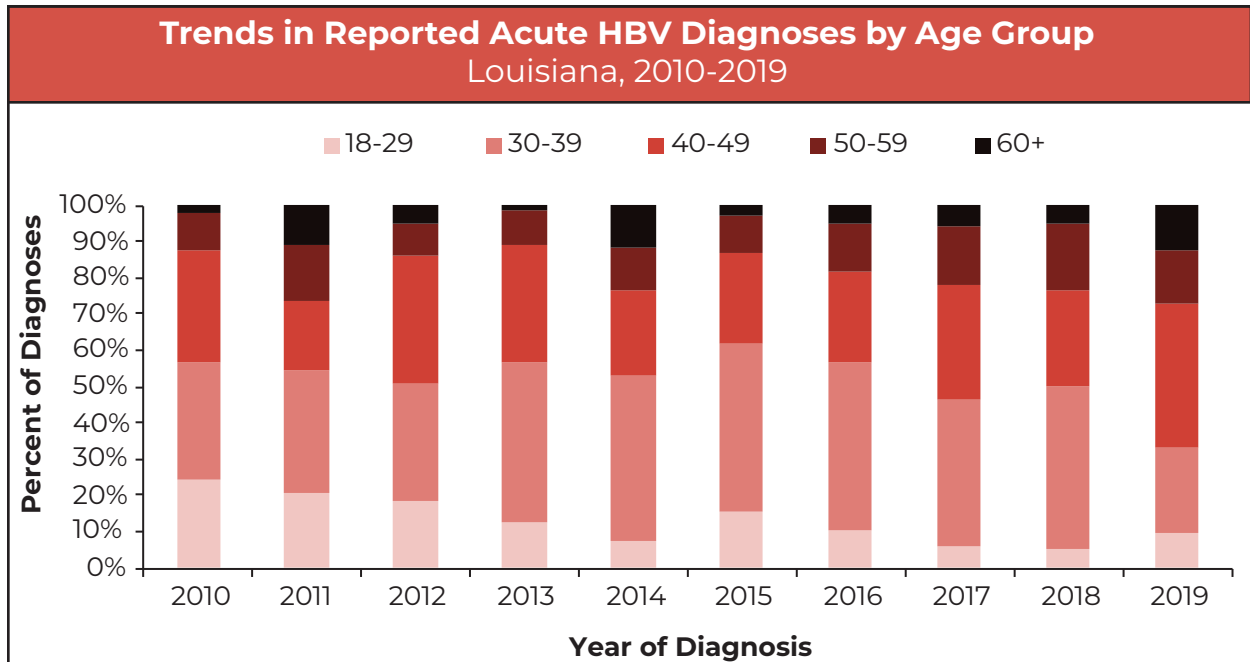
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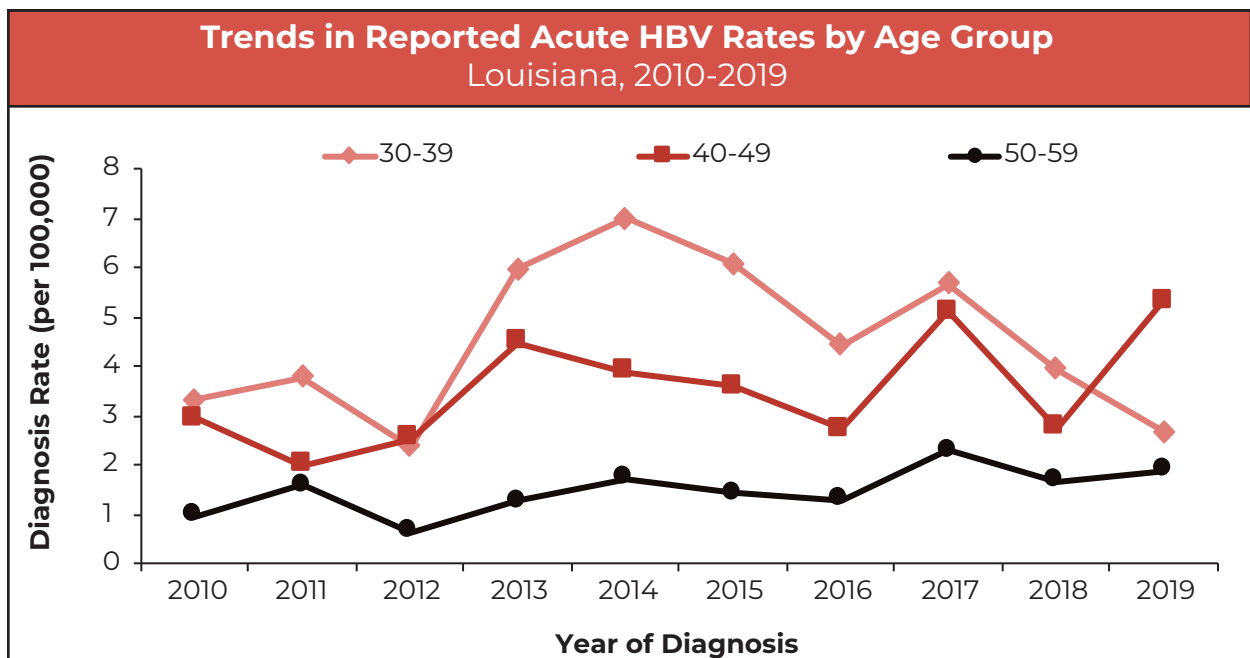
Of reported diagnoses in 2019, 55% (n=40) were male and 45% (n=33) were female. The larger proportion of reported diagnoses among males is typical of recent years. The diagnosis rate for males was 1.8 per 100,000 population and 1.4 per 100,000 population for females.



The majority of diagnoses in 2019 were White (75%, n=54), and only 18% (n=13) were Black, which is in line with historical trends. The acute HBV diagnosis rate by race, was 2.0 per 100,000 White people and 0.9 per 100,000 Black people.



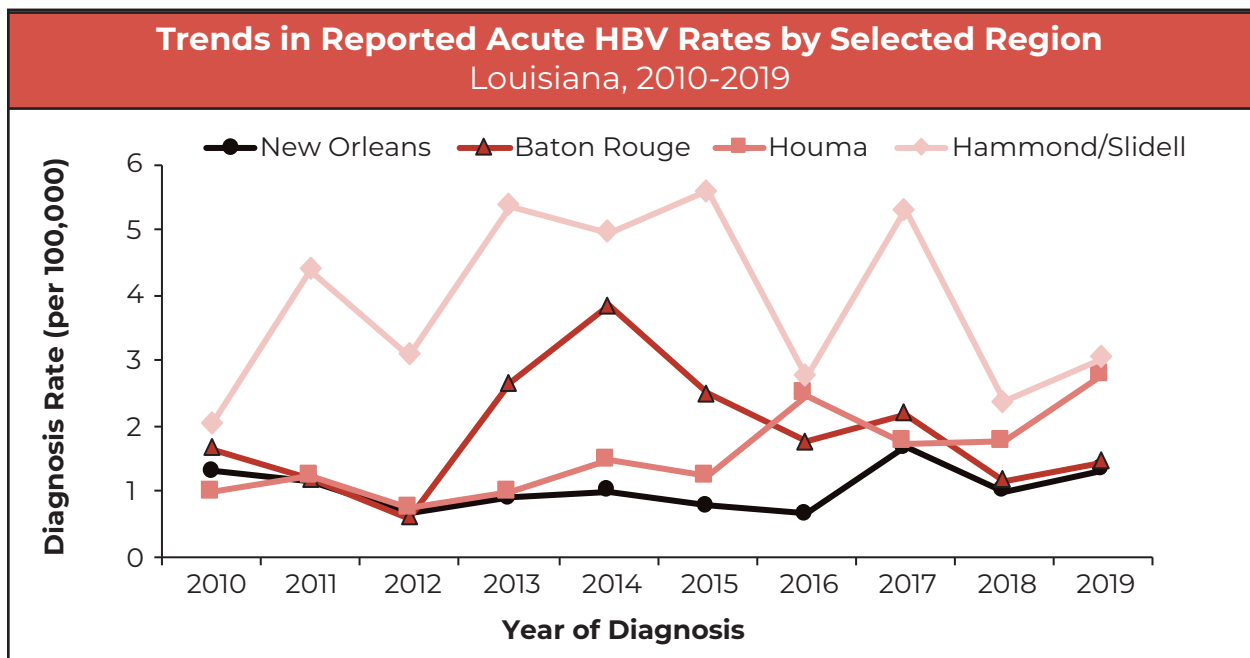
In 2019, the majority of reported acute HBV diagnoses (65%, n=46) were between the ages of 30-49 years, in line with historical trends. Compared to previous years, a larger proportion of diagnoses were 40-49 years old. In 2019, 40% of diagnoses were 40-49 years old compared to 27% in 2018.



In 2019, people 40-49 years old had the highest rate of reported acute HBV (5.3 per 100,000 population), followed by people 30-39 years old (2.7 per 100,000 population), and people 50-59 years old (1.9 per 100,000 population).

Reported Acute HBV Diagnoses by Region and Year Louisiana, 2015-2019										
	2015		2016		2017		2018		2019	
Louisiana	82	100%	60	100%	88	100%	56	100%	73	100%
1-New Orleans	7	9%	6	10%	15	17%	9	16%	12	16%
2-Baton Rouge	17	21%	12	20%	15	17%	8	14%	10	14%
3-Houma	5	6%	10	17%	7	8%	7	13%	11	15%
4-Lafayette	6	7%	2	3%	2	2%	1	2%	4	5%
5-Lake Charles	2	2%	3	5%	4	5%	1	2%	7	10%
6-Alexandria	5	6%	3	5%	6	7%	6	11%	7	10%
7-Shreveport	3	4%	4	7%	2	2%	2	4%	1	1%
8-Monroe	5	6%	4	7%	6	7%	8	14%	3	4%
9-Hammond/Slidell	32	39%	16	27%	31	35%	14	25%	18	25%

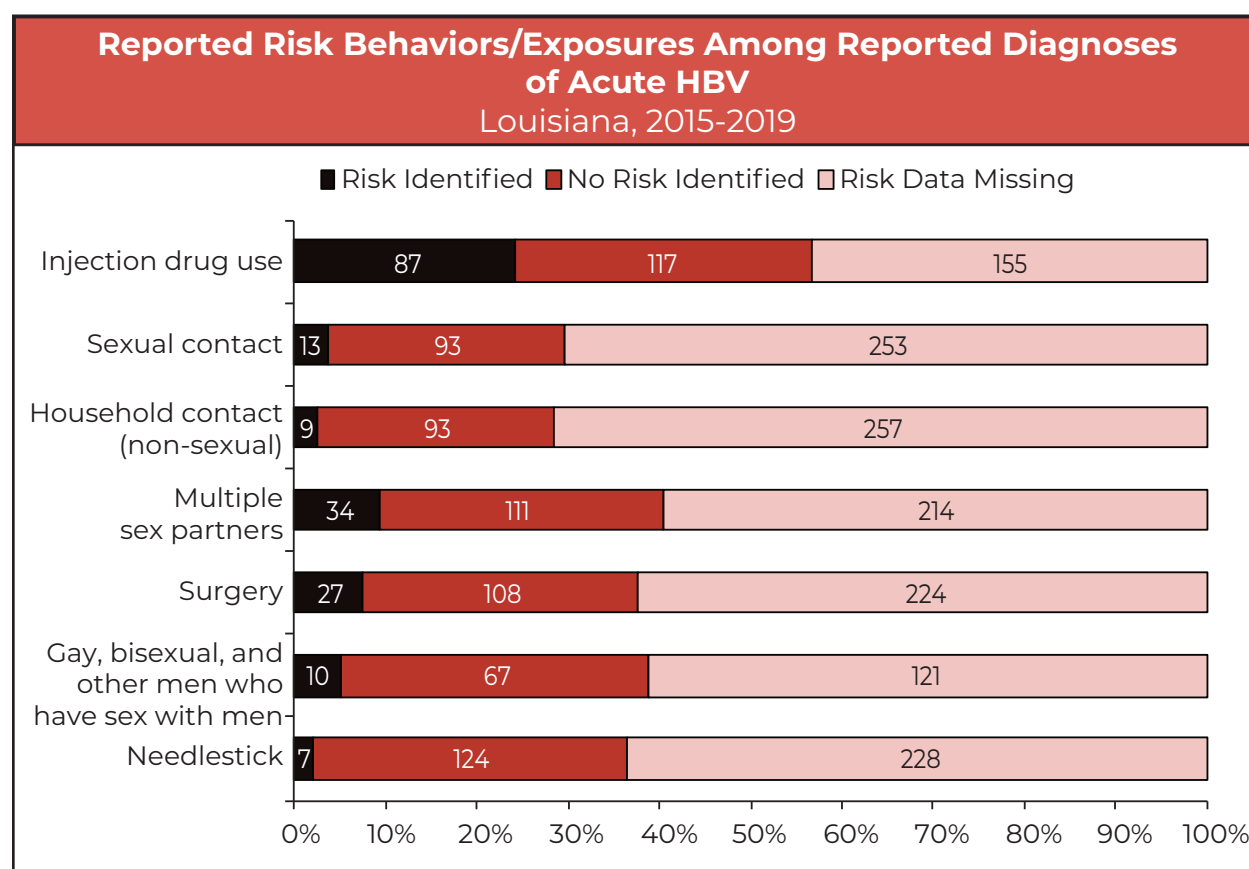
In 2019, the largest proportion of reported acute hepatitis B diagnoses lived in the Hammond/Slidell region (25%, n=18), the New Orleans region (16%, n=12), the Houma region (15%, n=11), and the Baton Rouge region (14%, n=10). From 2015 to 2019, these four regions accounted for the majority of reported acute HBV diagnoses.



In 2019, the four public health regions in Louisiana with the highest rates of reported acute hepatitis B diagnosis were Hammond/Slidell (3.0 per 100,000 population), Houma (2.8 per 100,000 population), Baton Rouge (1.3 per 100,000 population), and New Orleans (1.3 per 100,000 population).

Acute Hepatitis B Risk Behaviors and Exposures

Risk information is difficult to ascertain because individuals may not know how they acquired hepatitis B, their healthcare provider may not feel comfortable collecting the information, or the person may not be willing to share that information possibly due to stigma or fear of discrimination. The most common ways that hepatitis B is transmitted is through injection drug use and sexual contact. An attempt is made to contact and interview each person newly diagnosed with acute hepatitis B. As part of the interview, there is an attempt to capture risk information. This information is used to monitor for outbreaks and direct prevention programs.



From 2015-2019, there were 359 people diagnosed with acute hepatitis B and reported to the state. Of these 359 diagnoses, a potential risk factor was identified for 43% (153/359). Of the diagnoses with a risk identified, the majority reported injection drug use (87/153), followed by having multiple sex partners (34/153).

Of the 359 acute HBV cases, 204 provided a complete response when asked about prior injection drug use and 43% (n=87) responded, "yes".

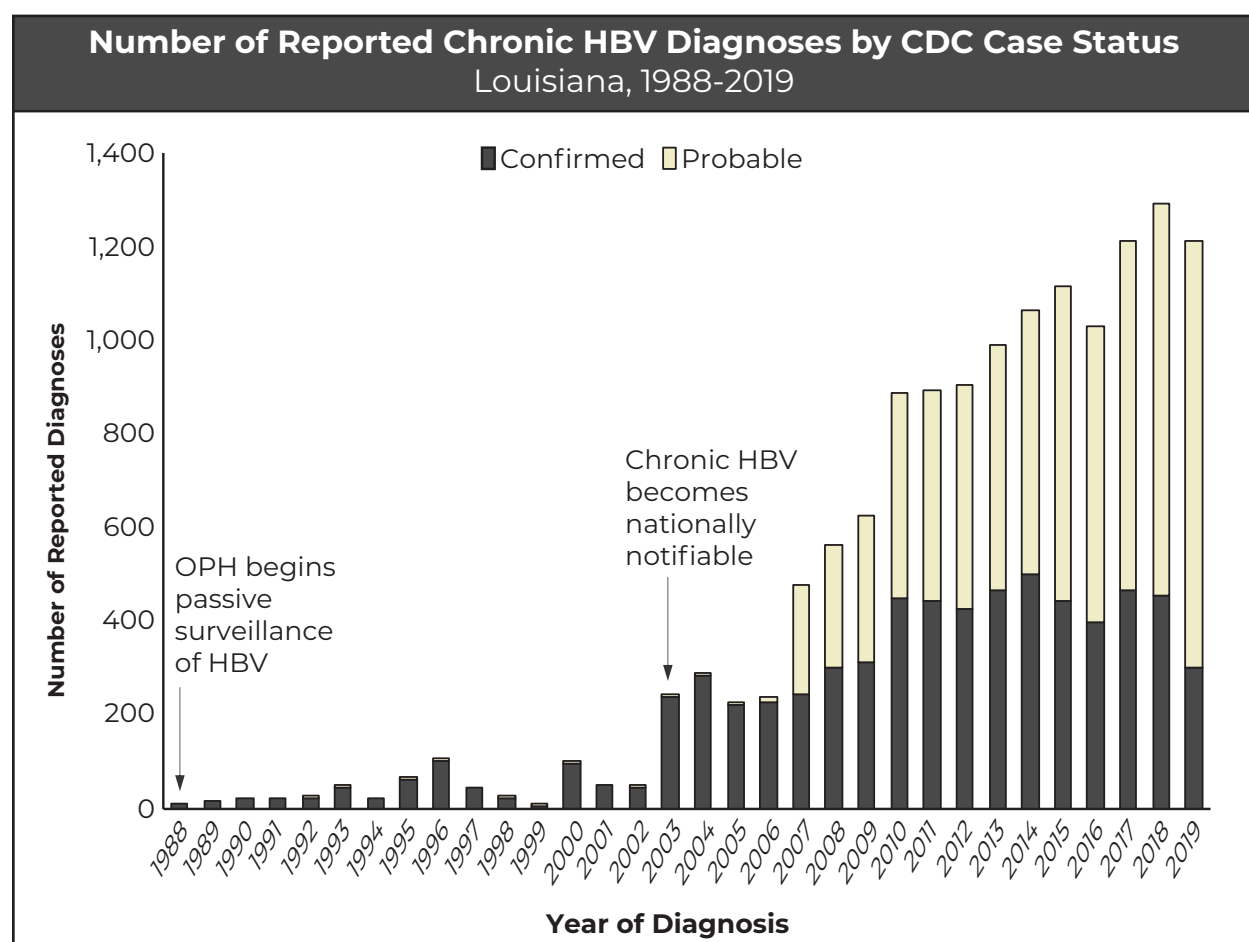
Characteristics of Persons Reported with Acute HBV Louisiana, 2017-2019									
	2017			2018			2019		
	Diagnoses	Percent	Rate*	Diagnoses	Percent	Rate*	Diagnoses	Percent	Rate*
TOTAL	88	100%	1.9	56	100%	1.2	73	100%	1.6
Sex at Birth									
Men	50	57%	2.2	36	64%	1.6	40	55%	1.8
Women	38	43%	1.6	20	36%	0.8	33	45%	1.4
Race/Ethnicity									
Black/African American	18	21%	1.2	10	18%	0.7	13	19%	0.9
White	64	76%	2.3	43	78%	1.6	54	77%	2.0
Other	2	2%	-	2	4%	-	3	4%	-
Unknown	4	-	-	1	-	-	3	-	-
Age at Diagnosis									
0-17	0	0%	0.0	0	0%	0.0	0	0%	0.0
18-29	5	6%	0.6	3	5%	n/a	7	10%	0.9
30-39	36	41%	5.7	25	45%	3.9	17	23%	2.7
40-49	18	20%	5.1	15	27%	2.8	29	40%	5.3
50-59	14	16%	2.3	10	18%	1.7	11	15%	1.9
60+	5	6%	0.5	3	5%	n/a	9	12%	0.9
Region									
1-New Orleans	12	14%	1.7	9	16%	1.0	12	16%	1.3
2-Baton Rouge	10	11%	2.2	8	14%	1.2	10	14%	1.5
3-Houma	11	13%	1.7	7	13%	1.8	11	15%	2.8
4-Lafayette	4	5%	n/a	1	2%	n/a	4	5%	n/a
5-Lake Charles	7	8%	1.3	1	2%	n/a	7	10%	2.3
6-Alexandria	7	8%	2.0	6	11%	2.0	7	10%	2.4
7-Shreveport	1	1%	n/a	2	4%	n/a	1	1%	n/a
8-Monroe	3	3%	n/a	8	14%	2.3	3	4%	n/a
9-Hammond/Slidell	18	20%	5.3	14	25%	2.4	18	25%	3.0

*Rate per 100,000. Rates for numerators less than 20 are unreliable and are unavailable for numerators less than 5.

Chronic Hepatitis B

Trends in Reported Chronic Hepatitis B Cases

People with chronic hepatitis B may not experience symptoms of their chronic infection until the onset of cirrhosis or end-stage liver disease, which may take 30-40 years to develop.²³ Since many people do not experience symptoms, they are unlikely to seek medical care, and once a person tests positive it can be difficult to determine how long a person has been living with hepatitis B, or identify how a person acquired HBV. New reports of chronic hepatitis B are likely to fluctuate yearly based on awareness among healthcare providers and the general population, and trends in testing and people accessing healthcare.



Louisiana began passive surveillance of HBV in 1988. In 2003, chronic HBV became nationally notifiable. Reported cases of chronic HBV have continually increased since becoming reportable. It is likely that the increased number of reports is due to increased testing and awareness. From 2015-2019 in Louisiana, an average of 1,174 cases were reported each year; 1,217 cases reported in 2019.

Characteristics of Persons Reported with Chronic Hepatitis B

Characteristics of Persons with Reported Chronic HBV Diagnoses Louisiana, 2010-2019																							
	2010		2011		2012		2013		2014			2015		2016		2017		2018		2019		TOTAL (2010-19)	
	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent		Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent
TOTAL	889	100%	893	100%	906	100%	991	100%	1,064	100%		1,116	100%	1,030	100%	1,215	100%	1,295	100%	1,215	100%	10,614	100%
Sex at Birth																							
Men	532	60%	514	58%	525	58%	576	58%	638	60%		659	59%	590	57%	690	57%	745	58%	717	59%	6,186	58%
Women	352	40%	379	42%	381	42%	415	42%	425	40%		451	41%	438	43%	525	43%	550	42%	498	41%	4,414	42%
Unknown	5	-	0	-	0	-	0	-	1	-		6	-	2	-	0	-	0	-	0	-	14	-
Race/Ethnicity																							
Asian	87	14%	89	15%	81	16%	92	16%	117	18%		101	16%	78	13%	173	17%	190	17%	146	13%	1,154	16%
Black/African American	328	54%	277	48%	262	50%	268	46%	282	44%		289	46%	275	45%	475	45%	498	44%	469	43%	3,423	46%
Hispanic/Latinx	13	2%	15	3%	6	1%	11	2%	9	1%		21	3%	15	2%	13	1%	21	2%	23	2%	147	2%
White	181	30%	182	32%	150	29%	198	34%	210	33%		205	33%	238	39%	378	36%	404	36%	436	40%	2,582	35%
Other	4	1%	12	2%	20	4%	8	1%	19	3%		8	1%	10	2%	8	1%	20	2%	12	1%	121	2%
Unknown	276	-	318	-	387	-	414	-	427	-		492	-	414	-	168	-	162	-	129	-	3,187	-
Age at Diagnosis																							
0-17	15	2%	13	1%	16	2%	7	1%	16	2%		16	1%	5	0%	10	1%	9	1%	10	1%	117	1%
18-29	150	17%	136	15%	141	16%	121	12%	118	11%		142	13%	122	12%	129	11%	166	13%	184	15%	1,409	13%
30-39	185	21%	212	24%	177	20%	217	22%	209	20%		217	19%	216	21%	248	20%	263	20%	242	20%	2,186	21%
40-49	199	22%	198	22%	215	24%	218	22%	253	24%		219	20%	225	22%	263	22%	244	19%	240	20%	2,274	21%
50-59	200	22%	190	21%	171	19%	222	22%	245	23%		257	23%	227	22%	274	23%	280	22%	250	21%	2,316	22%
60-69	84	9%	99	11%	129	14%	132	13%	152	14%		177	16%	155	15%	214	18%	221	17%	181	15%	1,544	15%
70+	56	6%	45	5%	57	6%	74	7%	71	7%		88	8%	80	8%	77	6%	112	9%	108	9%	768	7%
Region																							
1-New Orleans	239	27%	228	26%	247	27%	327	33%	391	37%		323	31%	279	28%	341	28%	394	30%	338	28%	3,107	30%
2-Baton Rouge	117	13%	144	16%	146	16%	143	14%	177	17%		197	19%	170	17%	233	19%	207	16%	232	19%	1,766	17%
3-Houma	52	6%	61	7%	56	6%	65	7%	64	6%		56	5%	100	10%	115	9%	120	9%	100	8%	789	8%
4-Lafayette	126	14%	110	12%	124	14%	125	13%	110	10%		114	11%	116	12%	124	10%	105	8%	110	9%	1,164	11%
5-Lake Charles	42	5%	62	7%	41	5%	44	4%	42	4%		52	5%	50	5%	47	4%	60	5%	71	6%	511	5%
6-Alexandria	32	4%	43	5%	44	5%	41	4%	27	3%		53	5%	46	5%	70	6%	79	6%	80	7%	515	5%
7-Shreveport	149	17%	105	12%	104	11%	89	9%	92	9%		79	8%	85	9%	93	8%	109	8%	90	7%	995	9%
8-Monroe	70	8%	65	7%	64	7%	67	7%	48	5%		77	7%	43	4%	69	6%	86	7%	64	5%	653	6%
9-Hammond/Slidell	62	7%	75	8%	80	9%	90	9%	106	10%		87	8%	95	10%	120	10%	135	10%	129	11%	979	9%
Unknown	0	-	0	-	0	-	0	-	7	-		78	-	46	-	3	-	0	-	1	-	135	-

There have been no significant changes in the populations affected by chronic hepatitis B over the past 10 years. From 2010-2019, more men than women have been diagnosed (58% compared to 42%), and Black people and Asian people were disproportionately affected (46% and 16% respectively). The majority of

reported chronic hepatitis B diagnoses occurred in people age 30-59 years old (64%). The majority of people diagnosed with HBV lived in the New Orleans (30%), Baton Rouge (17%), and Lafayette (11%) regions.

Chapter 2

Hepatitis C in Louisiana

18

Background

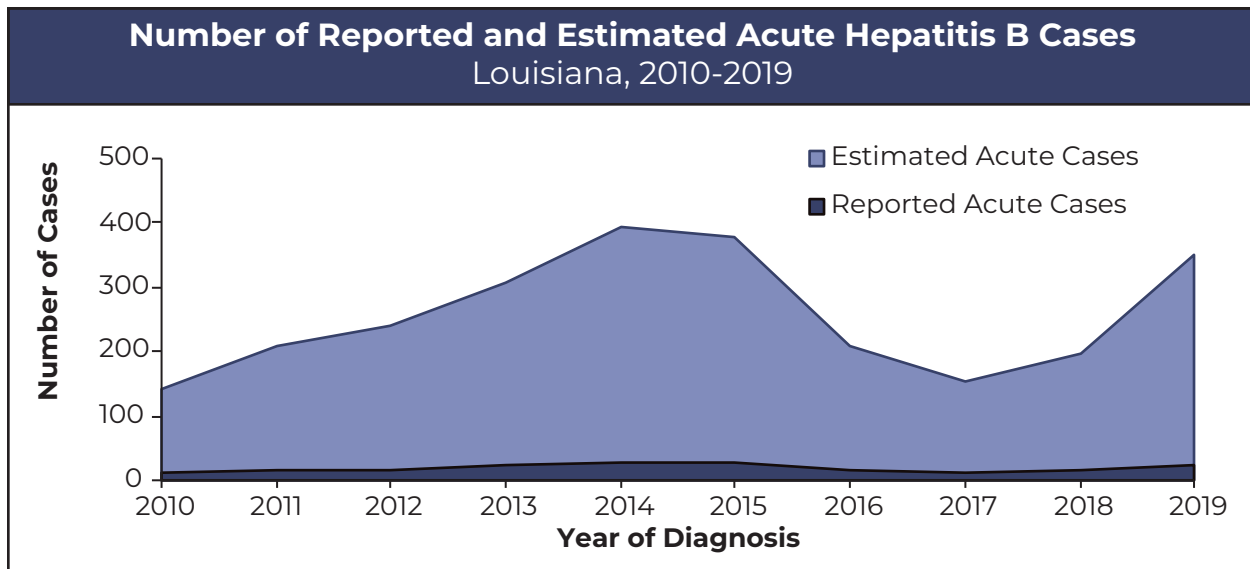
Hepatitis C is a liver disease caused by the hepatitis C virus (HCV). It is a blood-borne virus, and is spread when blood with the virus enters the body of someone without the virus. Today, most people acquire hepatitis C by sharing drug injection equipment, and less commonly through sexual contact, or mother to baby 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 hepatitis C in their body. Others may develop a long-term chronic illness that may result in cirrhosis, liver cancer, and death. Approximately, 80% of persons 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.²⁸ There is no vaccine to prevent hepatitis C. A safe and effective cure is available. An estimated 2.4 million people are living with hepatitis C in the United States and 50,300 are newly infected each year.^{25, 29} Approximately, 56% of adults living with hepatitis C are aware of their diagnosis.²⁶

Acute Hepatitis C

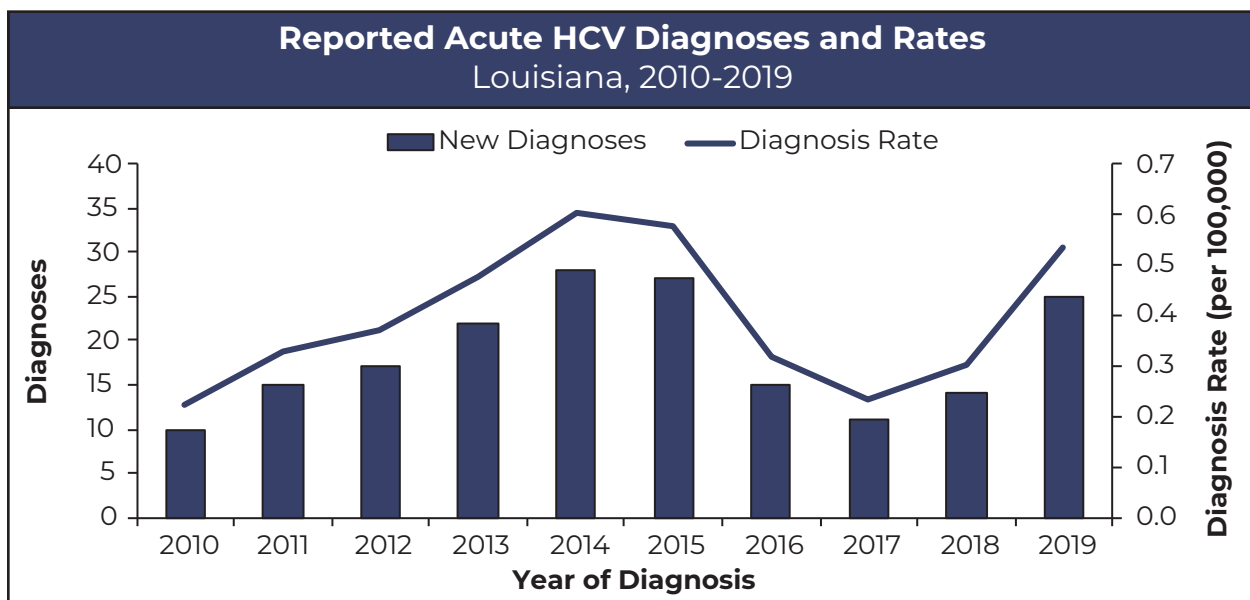
Trends in Reported Acute Hepatitis C Cases and Underreporting

Persons with acute hepatitis C may have very mild symptoms or no symptoms at all. Consequently, many with acute hepatitis C do not seek medical care. Research estimates that only 1 out of 14 people with acute hepatitis C are identified and reported to public health.²⁷ It's likely that the burden of disease from acute hepatitis C is much greater in Louisiana than reported, and the number of diagnoses that are reported to and confirmed by public health are only a small proportion of the true burden of disease.

The identification of acute hepatitis C cases improved in late 2019 and will continue to improve throughout 2020. 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 increased identification of people who test negative and later test positive for hepatitis C within a 12-month period, and represent a confirmed acute case.



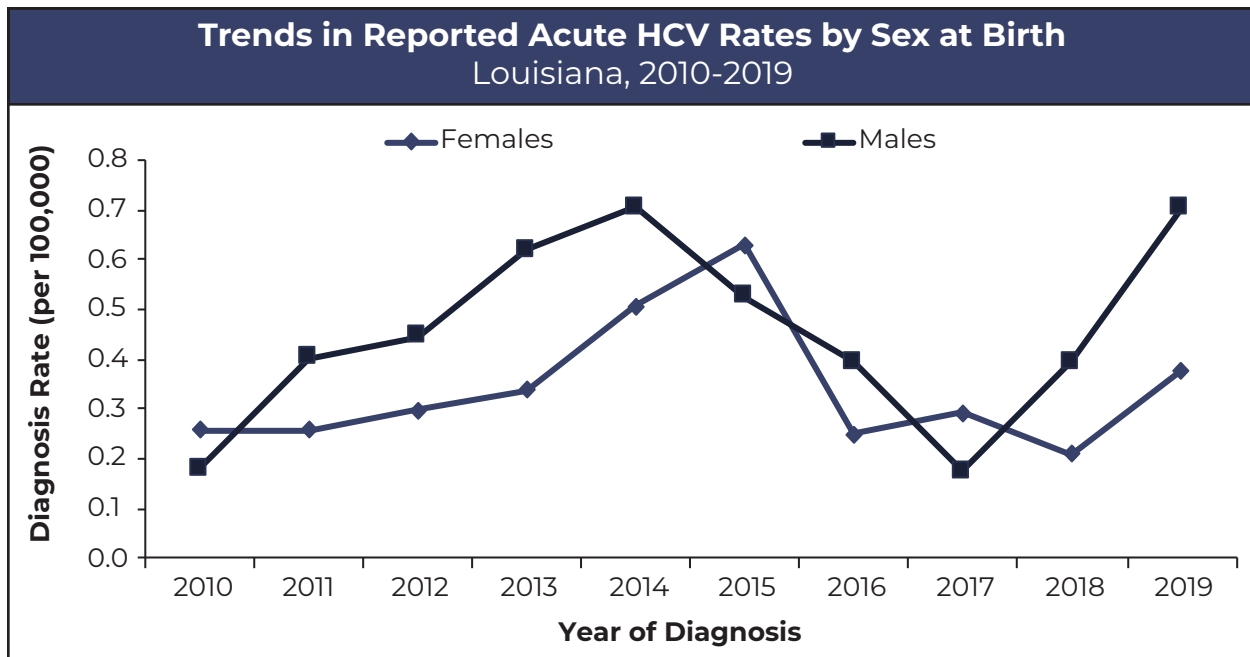
In 2019, there were 25 cases of acute hepatitis C reported for a rate of 0.5 per 100,000 population. Taking into account underreporting, acute hepatitis C infections likely affect close to 260 people in Louisiana each year, possibly more given the state's high rates of opioid abuse. The estimated rate of acute HCV, after taking into account underreporting, is likely close to 5.6 per 100,000 population.



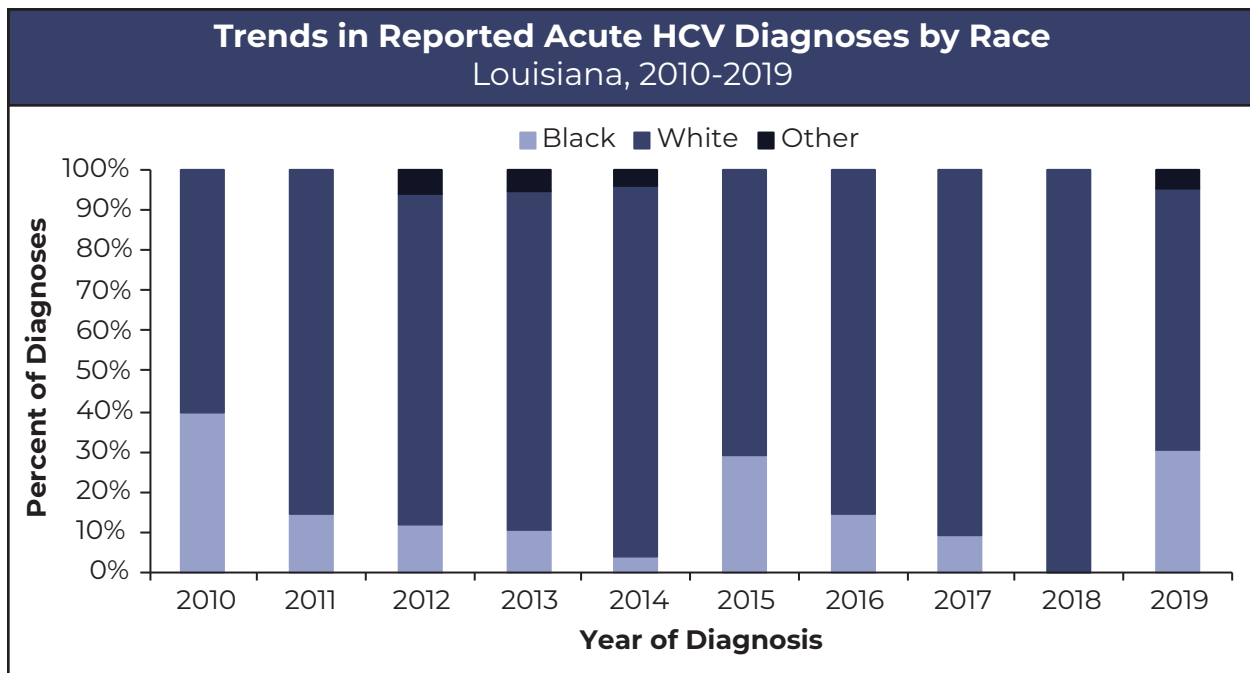
The number of acute HCV diagnoses has fluctuated over the last 10 years with a low of 10 reported diagnoses in 2010 and a high of 28 reported diagnoses in 2014. An average of 18 diagnoses have been reported each year from 2010-2019.

Acute Hepatitis C Diagnoses by Sex, Race/Ethnicity, Age, and Public Health Region

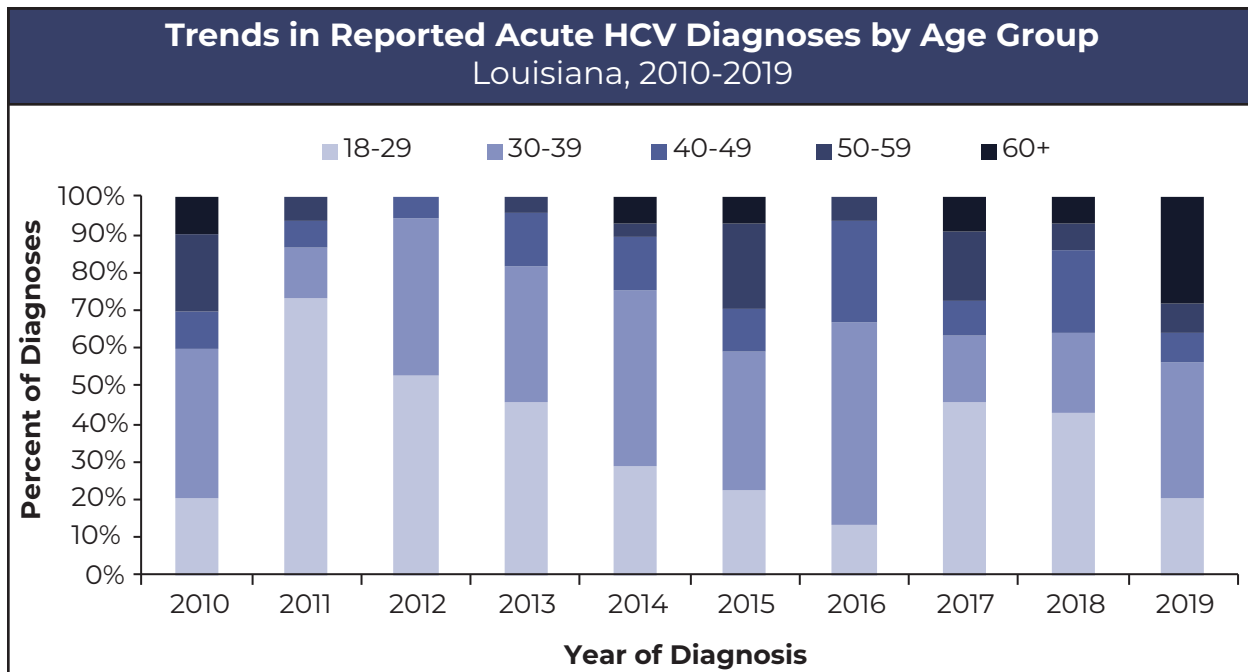
Although acute hepatitis C affects persons of all genders, ages, and race/ethnicities throughout Louisiana, the impact is not the same across all populations. Identifying the populations most likely to acquire hepatitis C, assists in planning prevention activities and services, and equitable distribution of limited resources.



Among people diagnosed with acute HCV in 2019, 64% (n=16) were male and 36% (n=9) were female. In 2018 and 2019, a larger proportion of males were diagnosed compared to females. The reported rate for males was 0.7 per 100,000 population and for females was 0.4 per 100,000 population.



In 2019, the majority of people diagnosed with acute HCV were White (65%, n=15), and only 30% (n=7) were Black. Historically, the majority of diagnoses have been among White people with few to no reported cases in people who are not White each year.



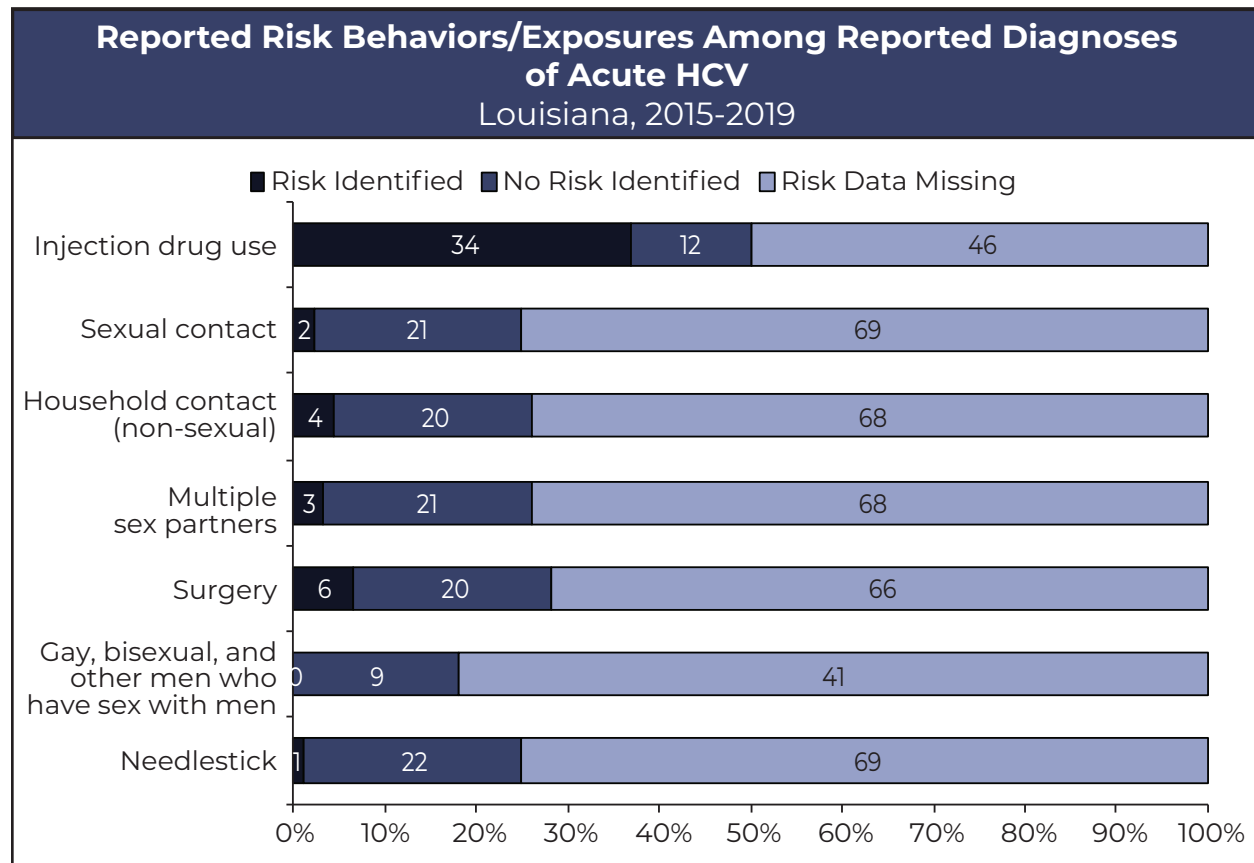
In 2019, the majority of reported diagnoses (56%, n=14) were 39 years of age and younger, and 28% (n=7) were 60 years and older. Compared to previous years, a larger proportion of reported diagnoses were 60 years and older. Over the last 10 years, an average of 71% of diagnoses were 39 years and under.

Reported Acute HCV Diagnoses by Region and Year Louisiana, 2015-2019										
	2015		2016		2017		2018		2019	
Louisiana	27	100%	15	100%	11	100%	14	100%	25	100%
1-New Orleans	5	19%	1	7%	0	0%	6	43%	6	24%
2-Baton Rouge	5	19%	5	33%	5	45%	0	0%	10	40%
3-Houma	1	4%	0	0%	0	0%	1	7%	0	0%
4-Lafayette	1	4%	2	13%	0	0%	1	7%	3	12%
5-Lake Charles	0	0%	0	0%	0	0%	0	0%	0	0%
6-Alexandria	2	7%	2	13%	1	9%	1	7%	1	4%
7-Shreveport	4	15%	1	7%	0	0%	0	0%	1	4%
8-Monroe	0	0%	0	0%	3	27%	0	0%	0	0%
9-Hammond/Slidell	9	33%	4	27%	2	18%	5	36%	4	16%

In 2019, the largest proportion of reported acute hepatitis C diagnoses lived in the Baton Rouge region (40%, n=10), the New Orleans region (24%, n=6), and the Hammond/Slidell region (16%, n=4). Over the last five years, the majority of reported diagnoses lived in these three regions.

Acute Hepatitis C Risk Behaviors and Exposures

Risk information is difficult to ascertain because individuals may not know how they acquired hepatitis C, their healthcare provider may not feel comfortable collecting the information, or the person may not be willing to share that information possibly due to stigma or fear of discrimination. Hepatitis C requires a person to come into contact with blood containing the virus. The most common way that hepatitis C is transmitted is through injection drug use, followed by sexual contact. An attempt is made to contact and interview each person newly diagnosed with acute hepatitis C. As part of the interview, there is an attempt to capture risk information. This information is used to monitor for outbreaks and direct prevention programs.



From 2015 to 2019, 92 people were diagnosed with acute hepatitis C. A potential risk factor was identified for 43% of the acute HCV diagnoses (40/92).

Of the 92 acute HCV cases, 46 people provided a complete response when asked about prior injection drug use and 74% (n=34) reported, "yes".

Characteristics of Persons Reported with Acute Hepatitis C

Characteristics of Persons Reported with Acute HCV Louisiana, 2017-2019									
	2017			2018			2019		
	Diagnoses	Percent	Rate*	Diagnoses	Percent	Rate*	Diagnoses	Percent	Rate*
TOTAL	11	100%	0.2	14	100%	0.3	25	100%	0.5
Sex at Birth									
Men	4	36%	n/a	9	64%	0.4	16	64%	0.7
Women	7	64%	0.3	5	36%	0.2	9	36%	0.4
Race/Ethnicity									
Black/African American	1	9%	n/a	0	0%	n/a	7	30%	0.5
White	10	91%	0.4	13	100%	0.5	15	65%	0.6
Other	0	0%	-	0	0%	-	1	4%	-
Unknown	0	-	-	1	-	-	2	-	-
Age at Diagnosis									
0-17	0	0%	0.0	0	0%	0.0	0	0%	0.0
18-29	5	45%	0.6	6	43%	0.8	5	20%	0.7
30-39	2	18%	n/a	3	21%	n/a	9	36%	1.4
40-49	1	9%	n/a	3	21%	n/a	2	8%	n/a
50-59	2	18%	n/a	1	7%	n/a	2	8%	n/a
60+	1	9%	n/a	1	7%	n/a	7	28%	0.7
Region									
1-New Orleans	0	0%	0.0	6	43%	0.7	6	24%	0.7
2-Baton Rouge	5	45%	0.7	0	0%	0.0	10	40%	1.5
3-Houma	0	0%	0.0	1	7%	n/a	0	0%	0.0
4-Lafayette	0	0%	0.0	1	7%	n/a	3	12%	n/a
5-Lake Charles	0	0%	0.0	0	0%	0.0	0	0%	0.0
6-Alexandria	1	9%	n/a	1	7%	n/a	1	4%	n/a
7-Shreveport	0	0%	0.0	0	0%	0.0	1	4%	n/a
8-Monroe	3	27%	n/a	0	0%	0.0	0	0%	0.0
9-Hammond/Slidell	2	18%	n/a	5	36%	0.9	4	16%	n/a

*Rate per 100,000. Rates for numerators less than 20 are unreliable and are unavailable for numerators less than 5.

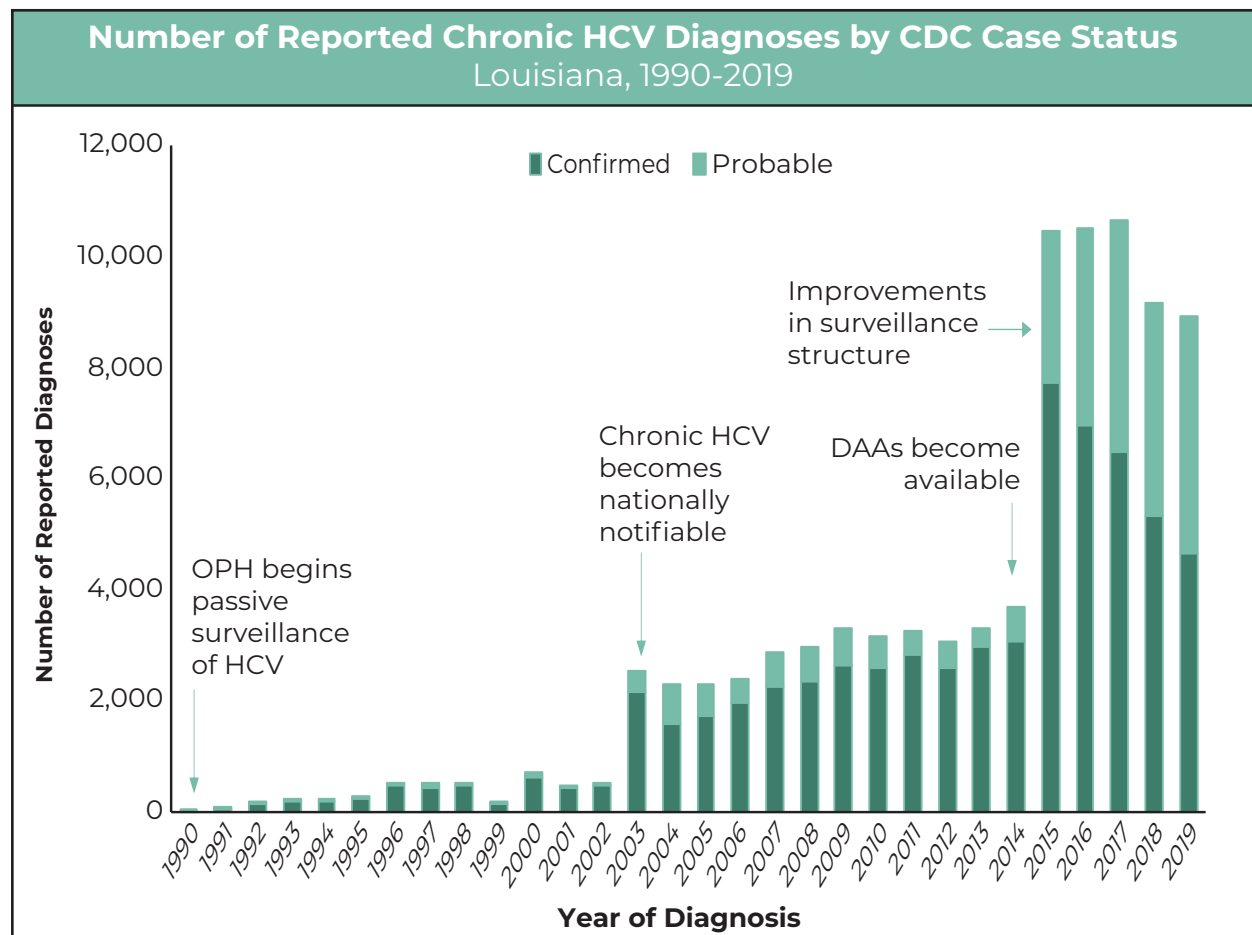
Chronic Hepatitis C

Trends in Reported Chronic Hepatitis C Cases

People living 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 20-30 years to develop.²⁸ 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 had hepatitis C for. New reports of chronic hepatitis C fluctuate yearly based on awareness among healthcare providers and the general population, and trends in testing and people accessing healthcare. Despite these uncertainties, incidence of chronic hepatitis C has increased due to the opioid epidemic. There are two age groups greatly affected by hepatitis C, Baby Boomers (born 1945-1965), and persons 39 years and under.

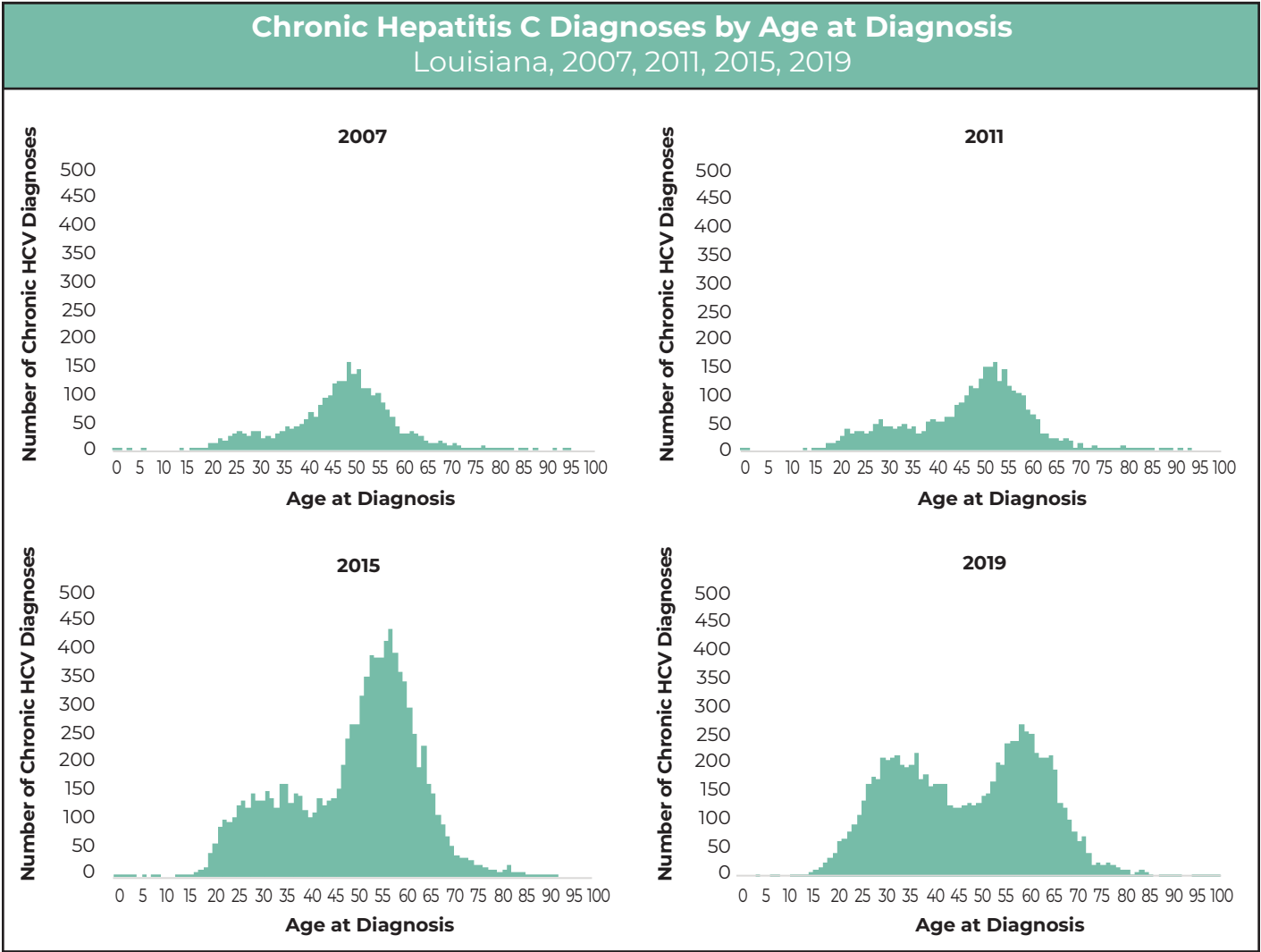
Diagnoses of chronic hepatitis C have historically been high among Baby Boomers. Baby Boomers make up roughly one-quarter of the US population, but account for around three-quarters of chronic hepatitis C cases.³⁰ As young adults, Baby Boomers experienced more bloodborne exposures due to unscreened blood products, medical or dental exposures completed without modern infection control measures, and injection drug use when compared to other generations.³¹

Recent data indicate that a second age group 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 persons 39 years of age and under, which is thought to be due to the opioid epidemic. An estimated 80% of new cases of hepatitis C are acquired through injection drug use.³²⁻³⁵ The increase in this population, seen in Louisiana, is similar to trends seen nationally.



Louisiana began passive surveillance of hepatitis C in 1990. In 2003, chronic HCV became nationally notifiable. Direct-acting antivirals (DAAs) became available in 2014 and revolutionized treatment for chronic hepatitis C. Available HCV treatment, 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 diagnoses in recent years, is due to increased incidence, enhanced case reporting, increased awareness and screening. From 2015-2019, there were an average of 9,939 chronic hepatitis c diagnoses each year; 8,918 diagnoses in 2019.



Historically, the majority of new chronic HCV diagnoses were in Baby Boomers (people born between 1945 and 1965). However, recent years have seen an increase in new diagnoses in people 39 years of age and under mainly due to injection drug use. In 2007, only 21% (608/2,879) of newly reported chronic HCV diagnoses were in people 39 years and under, while Baby Boomers accounted for 66% (1,886/2,879). The percentage of diagnoses in people 39 years and under has increased each year. In 2019, people 39 years and under accounted for 36% (3,199/8,918) of chronic HCV diagnoses, while Baby Boomers accounted for 41% (3,647/8,918).

Characteristics of Persons Reported with Chronic Hepatitis C

Characteristics of Persons with Reported Chronic HCV Diagnoses Louisiana, 2010-2019																							
	2010		2011		2012		2013		2014			2015		2016		2017		2018		2019		TOTAL (2010-19)	
	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent		Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent
TOTAL	3,145	100%	3,272	100%	3,070	100%	3,320	100%	3,684	100%		10,456	100%	10,519	100%	10,643	100%	9,158	100%	8,918	100%	66,185	100%
Sex at Birth																							
Men	2,041	65%	2,149	66%	1,973	64%	2,073	62%	2,280	62%		6,424	61%	6,546	62%	6,546	62%	5,651	62%	5,417	61%	41,100	62%
Women	1,102	35%	1,121	34%	1,097	36%	1,247	38%	1,397	38%		4,027	39%	3,968	38%	4,094	38%	3,502	38%	3,501	39%	25,056	38%
Unknown	2	-	2	-	0	-	0	-	7	-		5	-	5	-	3	-	5	-	0	-	29	-
Race/Ethnicity																							
Asian	10	0%	14	0%	19	1%	21	1%	31	1%		92	1%	88	1%	73	1%	58	1%	52	1%	458	1%
Black/African American	1,117	41%	1,120	40%	1,024	38%	1,131	39%	1,277	39%		3,594	41%	3,472	39%	3,397	37%	2,793	36%	2,502	35%	21,427	38%
Hispanic/Latinx	49	2%	56	2%	49	2%	44	2%	68	2%		186	2%	182	2%	223	2%	185	2%	185	3%	1,227	2%
White	1,573	57%	1,634	58%	1,598	59%	1,723	59%	1,871	57%		4,733	55%	5,010	56%	5,523	59%	4,659	60%	4,351	60%	32,675	58%
Other	9	0%	11	0%	16	1%	13	0%	19	1%		73	1%	117	1%	76	1%	85	1%	104	1%	523	1%
Unknown	387	-	437	-	364	-	388	-	418	-		1,778	-	1,650	-	1,351	-	1,378	-	1,724	-	9,875	-
Age at Diagnosis																							
0-17	17	1%	15	0%	29	1%	18	1%	12	0%		39	0%	40	0%	42	0%	28	0%	41	0%	281	0%
18-29	293	9%	371	11%	354	12%	417	13%	419	11%		1,073	10%	1,297	12%	1,317	12%	1,217	13%	1,152	13%	7,910	12%
30-39	384	12%	409	13%	393	13%	438	13%	488	13%		1,459	14%	1,701	16%	1,952	18%	1,809	20%	2,006	22%	11,039	17%
40-49	874	28%	768	24%	593	19%	624	19%	561	15%		1,497	14%	1,424	14%	1,432	13%	1,355	15%	1,402	16%	10,530	16%
50-59	1,215	39%	1,267	39%	1,180	39%	1,221	37%	1,398	38%		3,681	35%	3,371	32%	3,185	30%	2,395	26%	1,977	22%	20,890	32%
60-69	274	9%	345	11%	399	13%	492	15%	671	18%		2,230	21%	2,153	21%	2,223	21%	1,906	21%	1,905	21%	12,598	19%
70+	83	3%	90	3%	116	4%	96	3%	131	4%		464	4%	470	4%	492	5%	448	5%	435	5%	2,825	4%
Unknown	5	-	7	-	6	-	14	-	4	-		13	-	63	-	0	-	0	-	0	-	112	-
Birth Cohort																							
Prior to 1945	156	5%	154	5%	170	6%	121	4%	145	4%		427	4%	356	3%	299	3%	233	3%	178	2%	2,239	3%
1945-1965	2,030	65%	2,002	61%	1,829	60%	1,907	58%	2,189	59%		6,091	58%	5,547	53%	5,289	50%	4,128	45%	3,647	41%	34,659	52%
1966-1986	863	27%	943	29%	863	28%	994	30%	1,041	28%		3,038	29%	3,293	31%	3,592	34%	3,302	36%	3,389	38%	21,318	32%
1987+	91	3%	166	5%	202	7%	284	9%	305	8%		887	8%	1,260	12%	1,463	14%	1,495	16%	1,704	19%	7,857	12%
Unknown	5	-	7	-	6	-	14	-	4	-		13	-	63	-	0	-	0	-	0	-	112	-
Region																							
1-New Orleans	596	19%	695	21%	545	18%	672	20%	856	23%		3,411	33%	3,402	32%	2,977	28%	2,425	26%	2,201	25%	17,780	27%
2-Baton Rouge	433	14%	584	18%	640	21%	690	21%	679	18%		1,948	19%	1,670	16%	1,827	17%	1,637	18%	1,577	18%	11,685	18%
3-Houma	252	8%	230	7%	209	7%	213	6%	318	9%		864	8%	900	9%	889	8%	757	8%	685	8%	5,317	8%
4-Lafayette	382	12%	383	12%	312	10%	363	11%	298	8%		762	7%	787	7%	857	8%	650	7%	678	8%	5,472	8%
5-Lake Charles	194	6%	246	8%	206	7%	233	7%	248	7%		532	5%	600	6%	578	5%	520	6%	422	5%	3,779	6%
6-Alexandria	155	5%	160	5%	154	5%	195	6%	232	6%		466	4%	546	5%	648	6%	619	7%	749	8%	3,924	6%
7-Shreveport	528	17%	365	11%	360	12%	357	11%	364	10%		658	6%	767	7%	789	7%	714	8%	754	8%	5,656	9%
8-Monroe	187	6%	155	5%	147	5%	173	5%	161	4%		419	4%	436	4%	544	5%	542	6%	487	5%	3,251	5%
9-Hammond/Slidell	417	13%	453	14%	496	16%	424	13%	523	14%		1,391	13%	1,403	13%	1,526	14%	1,293	14%	1,365	15%	9,291	14%
Unknown	1	-	1	-	1	-	0	-	5	-		5	-	8	-	8	-	1	-	0	-	30	-

Characteristics of Persons 39 Years and Under Reported with Chronic Hepatitis C

Characteristics of Persons 39 Years & Under with Reported Chronic HCV Diagnoses Louisiana, 2010-2019																							
	2010		2011		2012		2013		2014			2015		2016		2017		2018		2019		TOTAL (2010-19)	
	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent		Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent
TOTAL	889	100%	893	100%	906	100%	991	100%	1,064	100%		1,116	100%	1,030	100%	1,215	100%	1,295	100%	1,215	100%	10,614	100%
Sex at Birth																							
Men	381	55%	457	57%	437	56%	436	50%	495	54%		1,305	51%	1,684	55%	1,795	54%	1,652	54%	1,778	56%	10,420	54%
Women	312	45%	338	43%	339	44%	437	50%	424	46%		1,266	49%	1,352	45%	1,515	46%	1,402	46%	1,421	44%	8,806	46%
Unknown	1	-	0	-	0	-	0	-	0	-		0	-	2	-	1	-	0	-	0	-	4	-
Race/Ethnicity																							
Black/African American	138	22%	149	21%	95	14%	118	15%	132	16%		405	19%	544	21%	596	20%	520	19%	592	23%	3,289	20%
Hispanic/Latinx	19	3%	21	3%	25	4%	19	2%	32	4%		71	3%	73	3%	102	3%	80	3%	100	4%	542	3%
White	479	75%	536	75%	555	81%	662	82%	661	80%		1,686	77%	1,954	75%	2,214	75%	2,050	76%	1,875	72%	12,672	76%
Other	5	1%	5	1%	8	1%	11	1%	6	1%		27	1%	43	2%	45	2%	46	2%	53	2%	249	1%
Unknown	53	-	84	-	93	-	63	-	88	-		382	-	424	-	354	-	358	-	579	-	2,478	-
Region																							
1-New Orleans	147	21%	170	21%	121	16%	117	13%	189	21%		806	31%	949	31%	945	29%	893	29%	767	24%	5,104	27%
2-Baton Rouge	83	12%	152	19%	157	20%	183	21%	159	17%		445	17%	486	16%	529	16%	539	18%	579	18%	3,312	17%
3-Houma	57	8%	57	7%	48	6%	62	7%	76	8%		205	8%	222	7%	252	8%	249	8%	263	8%	1,491	8%
4-Lafayette	77	11%	88	11%	91	12%	109	12%	106	12%		210	8%	247	8%	283	9%	190	6%	256	8%	1,657	9%
5-Lake Charles	35	5%	40	5%	50	6%	43	5%	39	4%		106	4%	180	6%	147	4%	151	5%	126	4%	917	5%
6-Alexandria	39	6%	34	4%	50	6%	66	8%	46	5%		117	5%	188	6%	219	7%	212	7%	296	9%	1,267	7%
7-Shreveport	80	12%	75	9%	64	8%	80	9%	61	7%		88	3%	128	4%	150	5%	124	4%	181	6%	1,031	5%
8-Monroe	51	7%	40	5%	37	5%	46	5%	43	5%		88	3%	103	3%	172	5%	188	6%	167	5%	935	5%
9-Hammond/Slidell	125	18%	138	17%	158	20%	167	19%	199	22%		504	20%	531	18%	609	18%	507	17%	564	18%	3,502	18%
Unknown	0	-	1	-	0	-	0	-	1	-		2	-	4	-	5	-	1	-	0	-	14	-

From 2010-2019, diagnoses of chronic hepatitis C in people 39 years and younger were reported in more men than women (54% male compared to 46% female). The majority of reported chronic HCV diagnoses occurred in White people (76%). An additional 20% of diagnoses occurred in Black people, and only 3% of diagnoses occurred in Hispanic/Latinx people. People diagnosed with chronic HCV lived in the New Orleans (27%), Baton Rouge (17%), and Hammond/Slidell (18%) regions.

Characteristics of Baby Boomers Reported with Chronic Hepatitis C

Characteristics of Baby Boomers with Reported Chronic HCV Diagnoses Louisiana, 2010-2019																							
	2010		2011		2012		2013		2014			2015		2016		2017		2018		2019		TOTAL (2010-19)	
	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent		Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent	Diagnoses	Percent
TOTAL	2,030	100%	2,002	100%	1,829	100%	1,907	100%	2,189	100%		6,091	100%	5,547	100%	5,289	100%	4,128	100%	3,647	100%	34,659	100%
Sex at Birth																							
Men	1,405	69%	1,374	69%	1,242	68%	1,318	69%	1,443	66%		4,079	67%	3,701	67%	3,516	66%	2,810	68%	2,361	65%	23,249	67%
Women	624	31%	626	31%	587	32%	589	31%	742	34%		2,010	33%	1,846	33%	1,772	34%	1,314	32%	1,286	35%	11,396	33%
Unknown	1	-	2	-	0	-	0	-	4	-		2	-	0	-	1	-	4	-	0	-	14	-
Race/Ethnicity																							
Black/African American	841	48%	820	48%	775	48%	849	51%	947	49%		2,609	52%	2,366	50%	2,219	48%	1,681	49%	1,377	47%	14,484	49%
Hispanic/Latinx	26	1%	26	2%	17	1%	13	1%	25	1%		72	1%	68	1%	71	2%	64	2%	38	1%	420	1%
White	879	50%	853	50%	800	50%	784	47%	931	48%		2,257	45%	2,129	45%	2,210	48%	1,621	47%	1,461	50%	13,925	47%
Other	13	1%	18	1%	22	1%	18	1%	33	2%		101	2%	127	3%	76	2%	61	2%	60	2%	529	2%
Unknown	271	-	285	-	215	-	243	-	253	-		1,052	-	857	-	713	-	701	-	711	-	5,301	-
Region																							
1-New Orleans	383	19%	431	22%	348	19%	431	23%	542	25%		2,008	33%	1,859	34%	1,447	27%	979	24%	878	24%	9,306	27%
2-Baton Rouge	273	13%	345	17%	397	22%	415	22%	404	18%		1,180	19%	926	17%	940	18%	771	19%	653	18%	6,304	18%
3-Houma	168	8%	142	7%	134	7%	103	5%	196	9%		523	9%	534	10%	473	9%	373	9%	283	8%	2,929	8%
4-Lafayette	259	13%	243	12%	171	9%	191	10%	156	7%		440	7%	381	7%	408	8%	335	8%	270	7%	2,854	8%
5-Lake Charles	128	6%	178	9%	116	6%	158	8%	169	8%		327	5%	294	5%	315	6%	250	6%	187	5%	2,122	6%
6-Alexandria	87	4%	102	5%	81	4%	100	5%	136	6%		246	4%	238	4%	291	6%	250	6%	250	7%	1,781	5%
7-Shreveport	376	19%	227	11%	242	13%	222	12%	246	11%		442	7%	479	9%	502	9%	442	11%	421	12%	3,599	10%
8-Monroe	113	6%	92	5%	79	4%	97	5%	87	4%		251	4%	224	4%	264	5%	217	5%	184	5%	1,608	5%
9-Hammond/Slidell	242	12%	242	12%	261	14%	190	10%	250	11%		672	11%	608	11%	648	12%	511	12%	521	14%	4,145	12%
Unknown	1	-	0	-	0	-	0	-	3	-		2	-	4	-	1	-	0	-	0	-	11	-

From 2010-2019, Baby Boomers diagnosed with chronic hepatitis C were primarily male (67% male compared to 33% female). Of the Baby Boomers diagnosed with chronic hepatitis C, 49% were Black and 47% were White. Baby Boomers diagnosed with chronic hepatitis C resided in the New Orleans (27%), Baton Rouge (18%), Hammond/Slidell (12%), and Shreveport (10%) regions.

Ongoing Initiatives and Next Steps

Louisiana Hepatitis C Modified Subscription Model and Elimination Program

Recognizing the morbidity and mortality caused by hepatitis C, the Louisiana Office of Public Health (OPH), prioritized the public health problem and established an HCV Elimination Program accompanied by a statewide elimination plan that outlines how to expand access to curative treatment to affected persons. The plan focuses on first eliminating hepatitis C in the state's Medicaid and Department of Corrections populations, and then expanding elimination to additional populations throughout the state. The plan is made possible through an innovative payment model strategy that provides unrestricted access to the generic form of the DAA Epclusa for persons on Medicaid and in Corrections over a 5-year contract period from 2019-2024 with an annual expenditure cap. The payment model went into effect July 15, 2019, shortly after the removal of restrictions that limited treatment to those with severe liver damage or comorbidities such as HIV. To ensure targets are met, the following complementary strategies are being implemented with the payment model to ensure the unrestricted supply of DAAs reach intended populations:

Expand Provider Capacity to Treat Hepatitis C

Train primary care providers to diagnose and treat hepatitis C and refer for advanced liver disease, cancer, and substance use disorders;

Educate Public on Availability of Cure and Mobilize Priority Populations for Screenings

Mobilize high-risk populations for screening and treatment through media campaigns;

Expand HCV Screening and Expedited Linkage to HCV Cure

Partner with health care providers across the State to screen high-risk populations and ensure individuals with hepatitis C are linked to treating providers;

Strengthen HCV Surveillance to Link Persons Previously Diagnosed to Treatment

Upgrade OPH's hepatitis C surveillance system to support timely identification of individuals with hepatitis C;

Implement Harm Reduction and Complementary Treatment Strategies

Prevent new or reinfections through syringe service programs and treatment for opioid use disorder;

Extend Elimination Efforts to All Populations within the State

Work with partners—commercial insurers, health systems, and entities serving the uninsured—to reach all Louisianans and achieve statewide elimination.

Regional Provider Trainings

To improve statewide patient access to HCV treatment, the Louisiana Department of Health (LDH) removed restrictions surrounding who can prescribe HCV medications and developed a continuing medical education (CME) accredited training series, with the goal that more primary care providers provide curative treatment to people living with hepatitis C. These no-cost trainings are intended for all prescribers (MDs, DOs, NPs, PAs), and other staff who would like to be a part of elimination efforts in Louisiana. The LDH HCV Provider Curriculum comprises three parts:

HCV Provider Training

The first step in training consists of a single one hour HCV Provider Training aimed at preparing prescribers to identify and treat people living with HCV. These trainings are designed to provide

a background on the hepatitis C epidemic facing our community, an introduction to the HCV elimination plan, and a review of the streamlined HCV screening and treatment algorithm, so all prescribers can confidently provide HCV curative treatment to their clients. This training is eligible for 1 hr of CME and is available to any prescriber. These trainings are ideal for one-on-one or small groups so that individual questions or concerns from prescribers can be directly addressed.

HCV Project ECHO Series

In addition to the onsite trainings offered by the LDH provider network coordinators, there is the HCV Project Echo series. These sessions are short 15 minute didactic lessons followed by clinical case discussions offered on a weekly basis.

HCV Champions Training

These trainings are designed for those that want to become more experienced providers through an intensive class called HCV Champions Training. This provides an in-depth analysis of more complicated HCV care and consists of a half day didactic, followed by weekly online case review sessions to improve provider comfort in treating more advanced cases. The trainings are being held in every region of the state and the sessions are eligible for 3.75 CME hours. In order to become a HCV Champion, a provider must attend the regional HCV Champions half-day trainings, attend 8 Project Echo sessions (presenting at least 5 cases) and complete a culminating exam.

Linkage to Care

Numerous studies have demonstrated the benefits of integrated, coordinated care and case management to address both infectious diseases and substance use disorders (SUD) in persons who inject drugs.^{36,37} SHHP, in partnership with the Office of Behavioral Health (OBH) and OPH Bureau of Community Preparedness, secured funds to build a community facing program to improve access to SUD treatment for persons who use drugs by integrating the SAMHSA: Screening, Brief Intervention, and Referral to Treatment (SBIRT) practice into HCV linkage to treatment and counseling activities provided by SHHP. Funds are assigned to hire additional linkage staff. These staff, who function as patient navigators, reach out to Medicaid-enrolled clients who may have an untreated HCV infection via phone, email, and/or home visits to explain the navigation, case management and linkage to treatment services available to them. After consenting to participate in the program, clients are screened for SUD through an SBIRT assessment as well as assessed for the need of social supportive services and HCV testing and/or treatment. Clients will be provided assistance with accessing the various services they need including harm reduction and syringe service programs (SSPs). Clients who score on the SBIRT will be offered direct linkage to SUD recovery and treatment services through the resources available via their Medicaid insurance plan, including the OBH and local human service districts treatment providers. Clients will also be offered linkage to a HCV treatment provider covered by their Medicaid plan. If a client chooses not to enroll in the Linkage to Treatment Initiative, they will still be provided information on SUD treatment, harm reduction (include naloxone access) and HCV testing and treatment services in their community.

Harm Reduction Programs

The *Louisiana Hepatitis C Elimination Plan: 2019-2024* and the *2019 Louisiana Opioid Response Plan* both outline comprehensive and overlapping strategies to reduce the impacts of drug use including hepatitis C, HIV, addiction, overdose and death. Both plans incorporate harm reduction interventions to meet people “where they’re at”. The fundamental tenets of social justice – good health for all and value all equally – offer both a framework and a rationale for this work. Both behavioral healthcare and public health seek to reduce disparities and promote equity in health status and care. The OPH and OBH conducted an environmental scan to maximize touchpoints in order to best serve the specific individual and community needs of people who use drugs in Louisiana.

Community-level prevention and harm reduction measures depend on public trust in available

services and information to empower people to reduce harm and improve their health and wellness. OPH and OBH are working systematically to build a stronger referral network statewide to assure people who inject drugs access integrated and comprehensive care to improve opioid use disorder and infectious disease outcomes. These Offices are supporting culturally competent engagement with people who inject drugs through the utilization of evidence-based medical and behavioral therapies, HCV screening and treatment, syringe service programs, and grassroots engagement. By increasing HCV testing among people who inject drugs, treating those who are positive, preventing new infections, and providing additional support services, Louisiana will make significant strides toward eliminating HCV in this particularly high-risk population.



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