



NORTHSHORE AREA

2021 COMMUNITY HEALTH NEEDS ASSESSMENT

A joint assessment with the following hospital facilities:

Northshore Extended Care Hospital
Northshore Rehabilitation Hospital
Ochsner Medical Center – Northshore
Slidell Memorial Hospital
St. Tammany Health System

Drafted November 2021

Adopted by hospital facilities December 2021

The Metropolitan Hospital Council of New Orleans (MHCNO), part of the Louisiana Hospital Association (LHA), contracted with the Louisiana Public Health Institute (LPHI) to develop Community Health Needs Assessment (CHNA) and Community Health Implementation Plan (CHIP) reports for their member hospitals. This report summarizes the findings of the CHNA for the Northshore area and describes the community health needs identified as top priorities by each hospital. This report serves as the 2021 CHNA report for the following facilities:

- Northshore Extended Care Hospital
- Northshore Rehabilitation Hospital
- Ochsner Medical Center – Northshore
- Slidell Memorial Hospital
- St. Tammany Health System

MHCNO participants defined the Northshore community as St. Tammany, Tangipahoa, and Washington Parishes in Louisiana, and Pearl River County in Mississippi.

LPHI used a collaborative mixed methods approach to determine significant needs and concerns in the community. Community input was gathered through interviews, focus groups, and an electronic survey, particularly from those with special knowledge of public health and representatives of vulnerable populations in the communities served by the hospitals. Community input drove the determination of significant concerns for this CHNA and therefore the priorities.

The CHNA revealed six key concerns in the Northshore community: Access to and continuity of care, mental and behavioral health, health equity and discrimination in healthcare, education and health literacy, infrastructure, and poverty. Each hospital prioritized three to four of these community health needs to address over the next three years based on criteria such as feasibility and impact. Brief descriptions of each priority are provided below, followed by a list of the specific priorities chosen by each hospital. While these community health concerns are presented separately, they are interconnected and impact one another as they drive health outcomes. If a community health concern is not prioritized by a hospital, it does not mean it is not an important issue and may still be addressed.

ACCESS TO AND CONTINUITY OF CARE

Concerns about access to and continuity of care were evident among community members. Barriers to care in the community include insurance issues (limited options based on payor, uninsured rates), lack of reliable transportation, lack of access to pediatric specialists and providers in more rural areas, and operational issues such as location and hours.

EDUCATION AND HEALTH LITERACY

Low health literacy is a key factor contributing to poor health outcomes in the community. Health literacy affects patients' ability to access care and manage their health. Community members felt that low health literacy affects access to health services because residents do not know what health resources are available to them. Additionally, community members said that low health literacy can lead to unhealthy habits such as lack

MENTAL AND BEHAVIORAL HEALTH

The CHNA revealed mental health conditions, substance abuse, addiction, excessive alcohol use, and trauma as major problems in their communities. Despite the prevalence of these issues, community members said that access to treatment for mental and behavioral health services is severely lacking. Issues include limited substance abuse treatment facilities, long waits for appointments with therapists, and fragmented delivery of care. Stigma was also seen as a major barrier to care, especially in communities of color and rural areas. Isolation and lack of social support are seen as contributing factors to mental health issues in the community, which has been made worse by the disruptions of the COVID-19 pandemic.

HEALTH EQUITY AND DISCRIMINATION IN HEALTHCARE

One of the primary goals of Centers for Disease Control and Prevention's (CDC) National Center for Chronic Disease Prevention and Health Promotion is to achieve health equity where everyone can reach their optimal health. Discrimination in healthcare affects patient engagement, access to care, and quality of care. Participants raised examples of discrimination in healthcare based on race, language, immigration status, age, sexual orientation, and gender identity/expression. Previous experiences of discrimination contributed to a lack of trust in healthcare at the personal and community levels. Lack of diversity in the healthcare workforce was also identified by participants as a factor that leads to discrimination.

COMMUNITY HEALTH PRIORITIES BY NORTHSORE HOSPITAL FACILITY

NORTHSORE EXTENDED CARE HOSPITAL

- Access to and continuity of care
- Education and health literacy
- Mental and behavioral health

NORTHSORE REHABILITATION HOSPITAL

- Access to and continuity of care
- Education and health literacy
- Mental and behavioral health

OCHSNER MEDICAL CENTER – NORTHSORE

- Access to and continuity of care
- Health equity and discrimination in healthcare
- Education and health literacy
- Mental and behavioral health

SLIDELL MEMORIAL HOSPITAL

- Access to and continuity of care
- Mental and behavioral health
- Education and health literacy

ST. TAMMANY HEALTH SYSTEM

- Access to and continuity of care
- Mental and behavioral health
- Education and health literacy

TABLE OF CONTENTS

Executive Summary.	1
Community Health Priorities by Northshore Hospital Facility.	2
Background.	4
Overview of Participating Hospitals Serving the Northshore Area.	6
Defining the Community.	7
Key Findings from the Northshore Area.	8
Social and Economic Factors.	8
Physical Environment.	10
Clinical Care.	13
Health Behaviors and Outcomes.	15
Significant Health Issues and Priorities.	21
Prioritization of Community Health Concerns.	21
2021 CHNA Priorities by Participating Northshore Area Hospitals.	22
Next Steps.	23
Transition to Planning and Implementation.	23
Acknowledgements.	24
About the Louisiana Public Health Institute.	24
Appendix A: Progress Made Since Previous CHIP.	25
Northshore Extended Care & Northshore Rehabilitation Hospitals.	25
Ochsner Medical Center – Northshore.	25
Slidell Memorial Hospital.	26
St. Tammany Health System.	27
Appendix B: Local Resources Mentioned by Qualitative Participants.	29
Appendix C: MHCNO Assessment Approach.	35
Appendix D: Methodology.	36
Data Collection and Analysis.	36
Appendix E: Additional Community Survey Data.	38
Appendix F: Additional Secondary Data.	42
Appendix G: Secondary Data Sources.	47

BACKGROUND

CHNA OVERVIEW

With the enactment of the Patient Protection and Affordable Care Act (PPACA), tax-exempt hospitals are required to conduct a CHNA and develop implementation strategies to better meet the community health needs identified every three years.¹ [Section 501\(r\)\(3\)](#) requirements include having an authorized body at the hospital facility adopt a documented CHNA that is available to the public, available for feedback, and includes the following:

- A definition of the community served by the hospital facility and a description of how the community was determined.
- A description of the process and methods used to conduct the CHNA.
- A description of how the hospital facility solicited and took into account input received from persons who represent the broad interests of the community it serves.
- A prioritized description of the significant health needs identified through the CHNA, including a description of the process and criteria used in identifying certain health needs as significant and prioritizing those needs.
- Resources potentially available to address the significant health needs identified.
- An evaluation of the impact of any actions that were taken to address significant health needs identified in the immediately preceding CHNA.²

This CHNA was conducted amid the COVID-19 pandemic, which has exacerbated existing health inequities, especially those experienced by some racial and ethnic groups. COVID-19 continues to pose high risks for all communities, affecting all aspects of how people live, work, and play.

ASSESSMENT APPROACH

Nineteen hospitals eager to collaborate through the CHNA and CHIP process contracted with LPHI via MHCNO, which is part of LHA. LPHI was contracted to develop the CHNA and accompanying CHIP reports for participating hospital facilities. LPHI brings extensive history leading and supporting health systems, hospitals, Federally Qualified Health Centers (FQHCs), and state/local health departments in the development of health assessments and implementation strategies based on health equity and population health strategies.

According to the CDC, the **social determinants of health** are “conditions in the places where people live, learn, work, and play” that can affect a person’s health risks and outcomes. They consist of factors such as economic and educational opportunity, access to transportation and housing, the quality of the natural environment, and access to and quality of healthcare.³ This assessment focuses on themes that relate to social determinants of health, organized by those that proved most salient from the data.

¹Hospital organizations use Form 990, Schedule H, Hospitals, to provide information on the activities and community benefit provided by its hospital facilities and other non-hospital health care facilities, which is separate from this report.

²<https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3>

³Centers for Disease Control and Prevention. (2021). About Social Determinants of Health. Retrieved from <https://www.cdc.gov/socialdeterminants/about.html>

The assessment approach is centered in **health equity**, defined as all community members having a fair and just opportunity to be as healthy as possible. Racism is a principal barrier to health equity. Research shows that racism has impacted social determinants of health for communities of color, driving health inequities and placing communities of color at increased risk for poor health.⁴ By applying a health equity framework, the assessment seeks to move beyond identifying health disparities to uncovering and understanding the drivers, including racism, which produce inequities in health outcomes.

LPHI uses a mixed methods approach to assessments and draws on evidence-based practices, population health, and health equity frameworks. Collaboration and engagement are central to LPHI's process. The gathering of input representing the broad interests of the community occurred through four modes: an online survey, focus groups, interviews, and data review meetings (As this input was gathered for the purpose of this assessment and participation was limited, these findings may not be generalizable to the larger community). Validated secondary data was also analyzed and incorporated to corroborate these findings. See Appendices C and D for more details on the assessment approach and methodology, respectively.

USING THIS CHNA

This document serves as the 2021 joint CHNA report for five hospital facilities: Northshore Extended Care Hospital, Northshore Rehabilitation Hospital, Ochsner Medical Center – Northshore, Slidell Memorial Hospital, and St. Tammany Health System. For this assessment, hospitals defined their community as the geographic area where most of their patients reside, which includes Tangipahoa Parish, St. Tammany Parish, and Washington Parish in Louisiana, as well as Pearl River County in Mississippi.

Health assessments facilitate strategic data collection and analysis to understand where and why health outcomes differ across a parish, how a variety of health factors combine to influence these outcomes, and how policies and programs are supporting — or restricting — opportunities for health for all. Final CHNA reports are available via hospital websites for future reference, feedback, and use by the public.

This CHNA serves multiple purposes:

- Provides hospitals and health systems with the information to guide development of implementation strategies to address their community's health concerns.
- Meets IRS requirements for non-profit hospitals.
- Informs planning of the city and state health department.
- Provides residents and community organizations with a better understanding of the significant issues in their community and what the hospital plans to prioritize.

⁴Centers for Disease Control and Prevention. (2021). Racism and Health. Retrieved from <https://www.cdc.gov/healthequity/racism-disparities/index.html>

OVERVIEW OF PARTICIPATING HOSPITALS SERVING THE NORTHSHORE AREA

Northshore Extended Care Hospital

In partnership with:



Northshore Extended Care Hospital is a long-term acute care hospital that provides intense, specialized treatment for patients who require service for an extended period of time – often transferring from intensive care units in traditional hospitals. The highly trained healthcare staff at Northshore Extended Care Hospital focuses on care customized for each and every individual. They get to know the patients and families they serve. Their health, happiness, and well-being are the reasons and motivations behind everything the staff does.

Northshore Rehabilitation Hospital

In partnership with:



Northshore Rehabilitation Hospital is an innovative, state-of-the-art inpatient rehabilitation hospital located in Lacombe, La. It offers 30 private patient rooms and an individualized approach to rehabilitation. The hospital places the patient at the center of care with care teams offering daily physical, occupational, speech therapy, and nursing care. The teams provide these services to help patients achieve their best possible outcomes and return them to their community.



Ochsner Medical Center – Northshore is a full-service, 165-bed acute care hospital that includes a 24-hour emergency room and the only Pediatric Intensive Care Unit (PICU) on the Northshore. The hospital specializes in surgical and cardiac care, pediatric intensive care, physical therapy, and rehabilitation. Ochsner Medical Center – Northshore is accredited by the Joint Commission, the nation's oldest and largest hospital accreditation agency.



Slidell Memorial Hospital (SMH) has been providing quality care to their community for 60 years. As a leader in healthcare on the Northshore, they offer advanced technology and innovative treatments to help keep patients well — including a Level III neonatal intensive care unit, the SMH Heart Center, the SMH Regional Cancer Center, and the SMH Physicians Network. Located in the heart of Slidell, La, 30 minutes north of New Orleans, they offer a 229-bed acute care hospital with expert physicians, specially trained staff, and the latest treatments and technology.



Ever since its founding in 1954 as St. Tammany Parish Hospital, St. Tammany Health System has consistently delivered world-class healthcare with compassion and quality to Northshore families. They have evolved into a comprehensive healthcare system, which includes a flagship 281 bed inpatient hospital, a network of clinically integrated physicians, and offsite diagnostic and clinic locations throughout northern and western St. Tammany Parish. Partnering with Ochsner Health, the St. Tammany Cancer Center opened its doors in 2021 and serves as a regional destination for the treatment of cancer. Growth, however, has not changed St. Tammany Health's dedication to the health of St. Tammany Parish and the people of the region. From wellness and prevention to diagnosis, treatment, rehabilitation and recovery, St. Tammany Health prides itself on its use of the very latest technology — delivered by the most accomplished specialists and a highly personalized, caring staff — to ensure patients and their families receive world-class healthcare close to home.

DEFINING THE COMMUNITY

For this joint assessment, Northshore Extended Care Hospital, Northshore Rehabilitation Hospital, Ochsner Medical Center – Northshore, Slidell Memorial Hospital, and St. Tammany Health defined their community as the geographic area where most (over 50%) of their patients reside based on inpatient discharge data. This community includes three Louisiana parishes, St. Tammany, Tangipahoa, and Washington, as well as the Mississippi county of Pearl River, and incorporates medically underserved, low-income, and minority populations. The parishes and county will be referred to as “the Northshore area” throughout this report.

The population of the Northshore area is described in the figures below.⁵

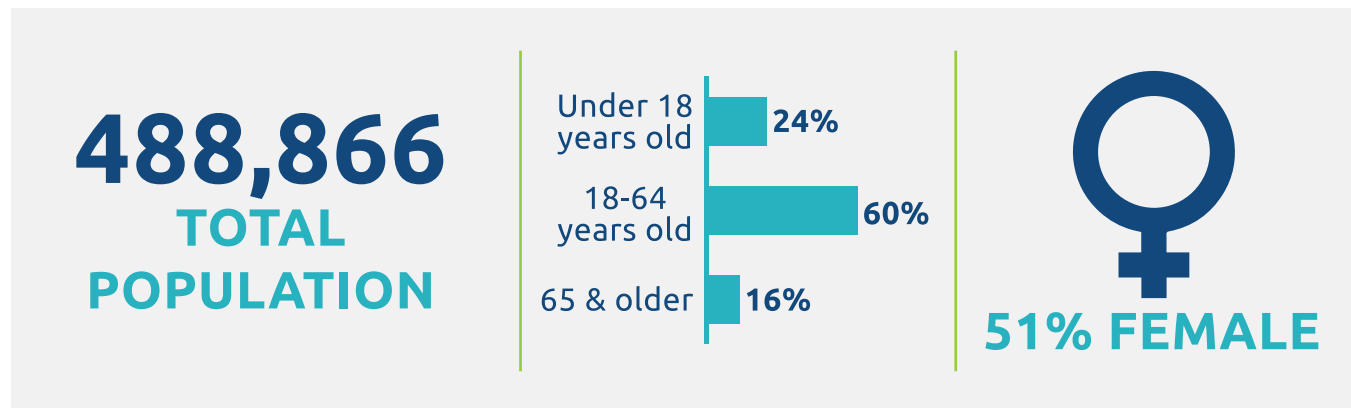


Table 1 shows the demographics by parish compared to Louisiana. The most populous parish in the Northshore area is St. Tammany Parish. All parishes in the area are predominately non-Hispanic White. The percent of non-Hispanic Asian residents is lower than state levels (1.7%) in all parishes. The percent of Hispanic residents in St. Tammany Parish (5.6%) is higher than the state (5.1%). In nearly all parishes in the Northshore area, the percent of the population that lives in a rural area is higher than that of Louisiana (26.8%), except for St. Tammany Parish (23.2%).⁶

TABLE 1:
DEMOGRAPHICS OF NORTHSHORE AREA COMPARED TO LOUISIANA

Community	Population	% non-Hispanic White	% non-Hispanic Black	% non-Hispanic Asian	% Hispanic	% Rural
Pearl River (MS)	55,219	81.8%	12.8%	0.2%	3.1%	69.9%
St. Tammany	255,155	78.6%	12.0%	1.5%	5.6%	23.2%
Tangipahoa	132,057	63.2%	29.4%	0.7%	4.3%	40.9%
Washington	46,435	65.5%	30.1%	0.1%	2.3%	66.7%
Louisiana	4,664,362	58.7%	32.0%	1.7%	5.1%	26.8%

⁵American Community Survey. (2015-2019).

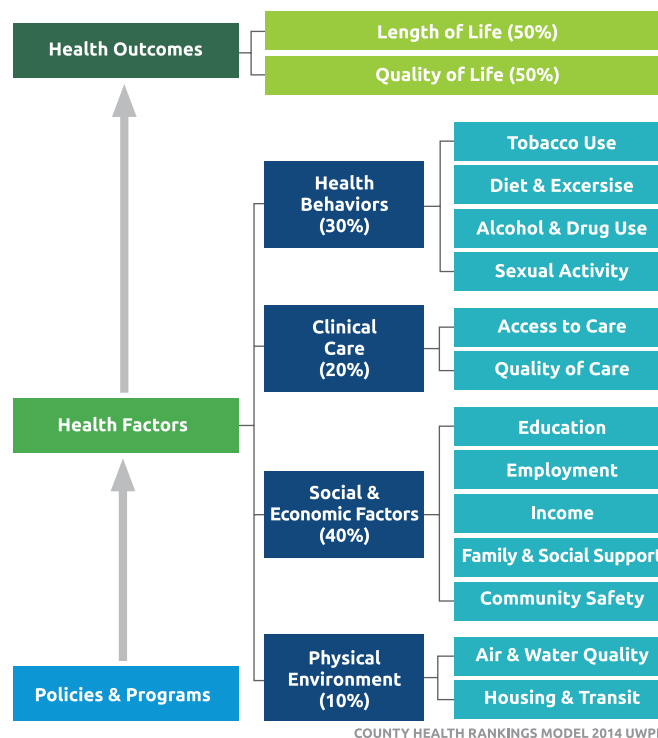
⁶Census Population Estimates. (2010). Retrieved from County Health Rankings, 2021.

KEY FINDINGS FROM THE NORTHSHORE AREA

Below are quantitative (community survey and secondary data) and qualitative (interviews and focus groups) findings from the Northshore area. Parish-level findings are presented with Louisiana data as a baseline. It is important to note that **Louisiana is ranked 50th in health outcomes**, according to the 2020 America's Health Rankings Report.⁷

The findings are organized into four sections: social and economic factors, physical environment, clinical care (which is comprised of access to and quality of care), and health behaviors and outcomes. Many of these findings align with the County Health Rankings Model illustrated in Figure 1.⁸

FIGURE 1.
COUNTY HEALTH RANKINGS MODEL



COUNTY HEALTH RANKINGS MODEL 2014 UWPHI

SOCIAL AND ECONOMIC FACTORS

Many factors outside of clinical care affect the health of residents and communities in the Northshore area. Qualitative participants and survey respondents indicated the importance of social and economic factors, such as poverty and income inequality, as well as educational opportunity.

⁷United Health Foundation. (2021). America's Health Rankings 2020 Annual Report. Retrieved from <https://www.americashealthrankings.org/learn/reports/2020-annual-report>

⁸County Health Rankings. (2021). County Health Rankings Model. Retrieved from <https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>

POVERTY AND INCOME INEQUALITY

63% OF SURVEY RESPONDENTS DISAGREED WITH THE STATEMENT, "ALL WORKERS IN MY COMMUNITY MAKE MINIMUM INCOME NECESSARY TO MEET BASIC NEEDS."

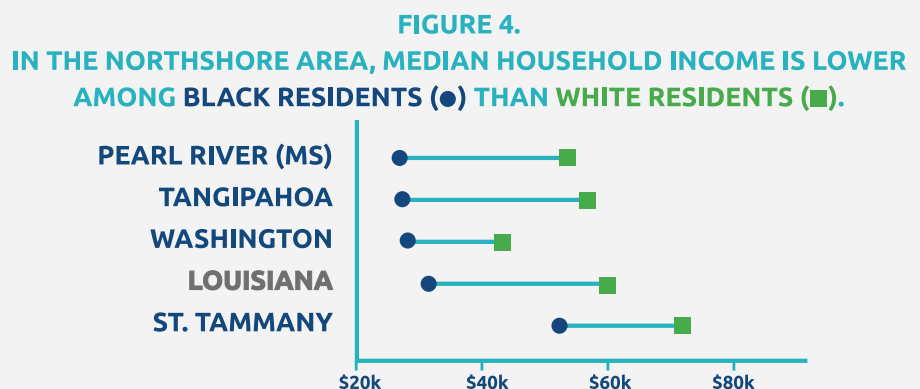
International and national research connects poverty to ill-health.⁹ Qualitative participants and survey respondents indicated that economic divides, as well as a lack of economic opportunity, are key factors driving adverse health outcomes in the Northshore area. Qualitative participants expressed that many individuals are working multiple jobs, both out of economic necessity and to achieve a higher standard of living. They shared that **many people struggle to afford basic needs**, such as daycare, medications, and housing costs, and said that this is particularly an issue for people living on a fixed income, like the elderly. This is supported by the secondary data, which show that 43-63% of households in the Northshore area earn less than the basic cost of living (Figure 2).¹⁰ Qualitative participants added that spending so much time at work can negatively impact people's health since it leaves them with little time to exercise, spend time with family, or go to the doctor.



Furthermore, qualitative participants shared that **there are economic inequities both within St. Tammany Parish and between St. Tammany and other parishes in the Northshore area**. Secondary data show that the median household income is much higher in St. Tammany than other parishes in the Northshore area (Figure 3), but within all parishes, Black residents have a lower median income than White residents (Figure 4).¹¹

Figure 3. Median household income is higher in St. Tammany Parish than other parishes in the Northshore area.

St. Tammany	\$71,526
Louisiana	\$51,108
Tangipahoa	\$47,860
Pearl River (MS)	\$45,874
Washington	\$35,505



⁹Wagstaff, A. (2002). Poverty and health sector inequalities. Retrieved from <https://www.scielo.org/article/bwho/2002.v80n2/97-105/en/>

¹⁰ALICE Threshold, American Community Survey. (2007-2018). Retrieved from ALICE Parish Profiles, 2018

¹¹Small Area Income and Poverty Estimates. (2019). Retrieved from County Health Rankings, 2021.

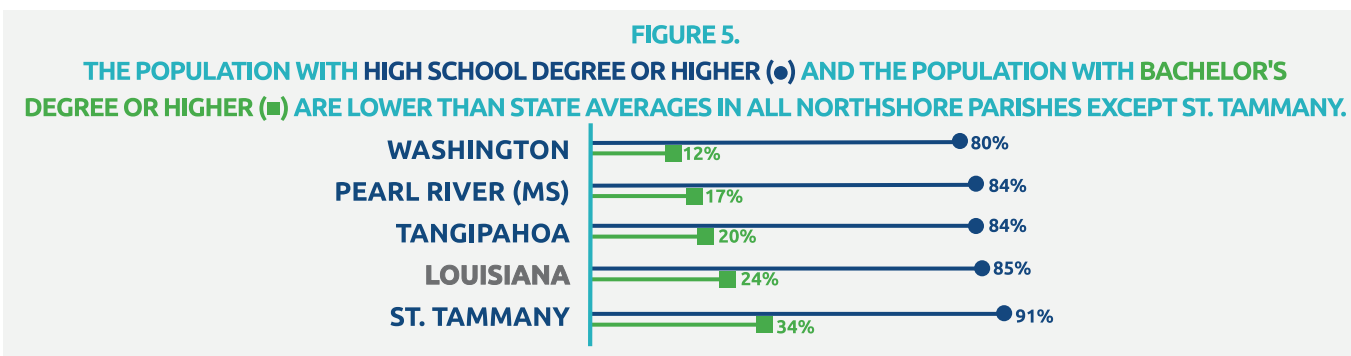
“We’ve got St. Tammany Parish, which is the most affluent Parish in the state... We’ve also got really rural, poor parishes. But even in St. Tammany... you’ve got some pockets of really poor people as well... **In Covington, you can drive five minutes from a \$2 million house and be in the West Thirties area where people hardly have anything and are struggling to make ends meet.**” -Behavioral Health Provider

EDUCATIONAL OPPORTUNITY

NEARLY HALF OF SURVEY RESPONDENTS DISAGREED
WITH THE STATEMENT, “**ALL CHILDREN IN MY COMMUNITY**
RECEIVE HIGH QUALITY EDUCATION.”

Higher educational attainment is linked to greater life expectancy, as well as other positive health outcomes.¹² **Disparities exist within the Northshore area in terms of educational quality and attainment.** While the school system in St. Tammany was lauded by qualitative participants, they expressed that the public schools in other parishes could be improved.

The secondary data show a similar trend in educational attainment, with St. Tammany surpassing the state average, but all other parishes in the Northshore area below the state average (Figure 5).¹³ Qualitative participants shared that low educational attainment and literacy rates in the Northshore area contribute to unhealthy habits, such as consuming unhealthy diets and not getting sufficient exercise.



PHYSICAL ENVIRONMENT

The physical environment consists of both infrastructure factors and the natural environment in which people live. Barriers in the physical environment can affect health and well-being.¹⁴ Qualitative participants and survey respondents emphasized poor infrastructure factors, such as transportation, housing, and food insecurity. They also discussed how natural disasters, water quality, and access to walking and exercise infrastructure affect community health in the Northshore area.

LACK OF TRANSPORTATION OPTIONS

75% OF SURVEY RESPONDENTS DISAGREED
WITH THE STATEMENT, “**ALL PEOPLE HAVE ACCESS TO**
RELIABLE PUBLIC TRANSPORTATION IN MY COMMUNITY.”

¹²Zajacova, A. & Lawrence, E.M. (2018). The relationship between education and health: reducing disparities through a contextual approach. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5880718/>

¹³American Community Survey. (2015-2019).

¹⁴County Health Rankings. (2021). County Health Rankings Model. Retrieved from <https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>

Qualitative participants and survey respondents pointed to transportation as a significant issue facing their communities. The following issues with transportation were emphasized by qualitative participants:

- There is a lack of reliable public transportation, especially in rural areas.
- Transportation affects access to healthcare, grocery/drug stores, and school meetings.
- Members of immigrant communities often share cars, which contributes to unreliable access to transport.
- Some people use ride-share services or cabs for their transportation, but these are not financially accessible to all community members.
- Medicaid transportation is inconvenient and unreliable.

“The biggest problems... are transportation and resources and rurality. Obviously, we don't have any public transportation... Since we serve the poorest people, a lot of times that's a problem with them getting treatment. **Telling somebody to get from St. Helena to Hammond, we might as well be telling them to go to China.**” - Behavioral Health Expert

HOUSING CHALLENGES

63% OF SURVEY RESPONDENTS DISAGREED
WITH THE STATEMENT, “**ALL PEOPLE IN MY COMMUNITY**
LIVE IN SAFE, AFFORDABLE HOUSING.”

Research shows that residents facing housing insecurity are more likely to delay care and report poor health status than residents with stable housing.¹⁵ Qualitative participants expressed **a need for more affordable housing in the Northshore area**, especially for community members who are aging or living on disability. They mentioned that the lack of affordable housing creates difficulties both for renting and purchasing homes. Secondary data show that more than one-fifth of households in the Northshore area are housing cost-burdened, meaning that they spend 30% or more of their income on housing costs (Figure 6).¹⁶

Figure 6. More than one-fifth of households in the Northshore area are housing cost burdened.	
Pearl River (MS)	22.89%
Washington	25.52%
St. Tammany	26.39%
Tangipahoa	27.07%
Louisiana	27.90%

Qualitative participants shared that housing impacts the health of community members in the Northshore area, for example by contributing to stress that can exacerbate mental health and substance use issues. Additionally, community members may have to switch houses frequently, which can negatively impact their continuity of care if they are no longer located near their healthcare providers. Finally, community members may desire to stay on family land, even if it is no longer financially advantageous or healthy to do so.

¹⁵Stahre M, VanEenwyk J, Siegel P, Njai R. (2011). Housing Insecurity and the Association With Health Outcomes and Unhealthy Behaviors. Retrieved from https://www.cdc.gov/pcd/issues/2015/14_0511.htm

¹⁶American Community Survey. (2015-2019). Retrieved from CARES HQ, 2021

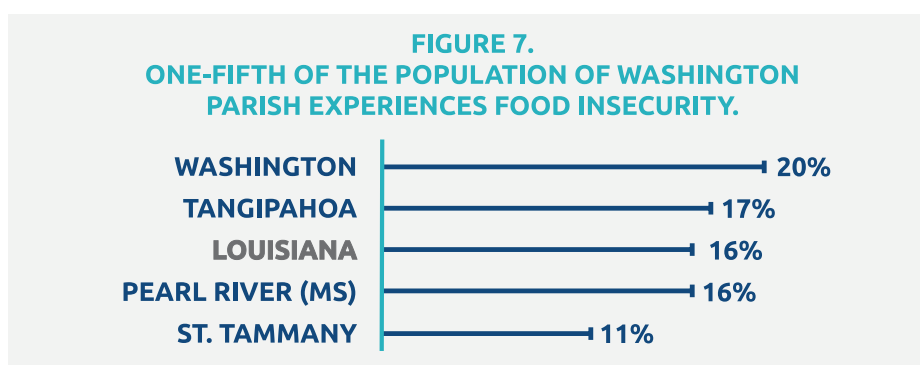
“[We have clients who] insist on living on their family land, 40 acres, 10 miles from the nearest grocery store, even though it has long since stopped being a smart decision for them... **It's like, 'Uh-uh, this is grandpa's land, and I'm dying here,' and they do.**”

- Non-Governmental Organization (NGO) Director

FOOD INSECURITY

OVER HALF OF SURVEY RESPONDENTS DISAGREED WITH THE STATEMENT, “ALL PEOPLE IN MY COMMUNITY HAVE ACCESS TO HEALTHY, NUTRITIOUS FOODS.”

Food insecurity, or limited access to adequate food, is associated with poor physical and mental health outcomes, including increased risk of chronic diseases.¹⁷ Qualitative participants and survey respondents identified access to food as a significant issue in the Northshore area. Qualitative participants shared that **fresh foods are much more available in urban, wealthy areas in comparison to poorer, rural ones**. They also explained that cost is a barrier to accessing nutritious food. Secondary data show one-fifth of people in Washington Parish experience food insecurity (Figure 7).¹⁸



NATURAL AND BUILT ENVIRONMENT

Qualitative participants discussed concerns about natural disasters, particularly flooding and hurricanes. They shared that flooding is an issue, especially on the east side of St. Tammany Parish, and that flooding patterns have changed since Hurricane Katrina and increasingly impact low-income populations. Qualitative participants also raised concerns that **flooding and the threat of hurricanes can negatively impact health, especially behavioral health and substance use issues**.

Additional concerns about the built environment were introduced by qualitative participants, including **disparities in access to walking and exercise infrastructure within the Northshore area**. They noted that, while the urban areas of St. Tammany Parish have a great walking and exercise infrastructure, the rural parts of the Parish and the rest of the Northshore area lack these resources.

¹⁷Michael Precker, American Heart Association News. (2021) Food insecurity's long-term health consequences. Retrieved from <https://www.heart.org/en/news/2021/09/22/food-insecuritys-long-term-health-consequences>

¹⁸Map the Meal Gap. (2018). Retrieved from County Health Rankings, 2021

CLINICAL CARE

Access to affordable, high-quality clinical care can improve the health and well-being of communities through prevention and early detection of diseases.¹⁹ This section will also include discrimination in healthcare, which was emphasized by qualitative participants and can contribute to inequitable health outcomes.

ACCESS TO CARE

OVER HALF OF SURVEY RESPONDENTS DISAGREED WITH THE STATEMENT, “EVERYONE IN MY COMMUNITY CAN ACCESS THE HEALTH CARE THEY NEED.”

Qualitative participants elevated various factors that inhibit access to care, including location and time-related issues. They shared that healthcare facilities are more concentrated in urban areas and that doctor’s offices and hospitals are inaccessible in rural communities. They also expressed concerns that **there are fewer healthcare providers in the Northshore area compared to statewide**, which is supported by the secondary data (Figure 8).²⁰ Access to specialized care is even more challenging for certain groups, like children, because of limited providers and services. One qualitative participant shared the example of a child who needed in-patient psychiatric care, but the closest available service was six hours away. These barriers to access are further complicated by limited hospital and clinic hours, as well as long wait times. Qualitative participants explained that community members, especially working people, tend to go to urgent care centers or the emergency room as these are the only facilities that are available after work hours.

Figure 8. In most parishes in the Northshore area, there are fewer primary care physicians (per 100,000 population) compared to the state rate.	
St. Tammany	81
Louisiana	68
Tangipahoa	40
Pearl River (MS)	27
Washington	19

“We are a commuter community on the Northshore, so people drive either into Baton Rouge or across the bridge to Metairie and New Orleans. Some drive into Mississippi, depending on where they are. When you take into account commuting, and we have services [that are open] 8:00[am] to 4:30[pm], **by the time they get off of work and drive, the access to certain services is not there.**” - Public Health Expert

Qualitative participants elevated issues with insurance as barriers to access to care. They shared that it can be hard for community members to find providers who take their insurance, especially Medicaid, and that **those who are uninsured and underinsured face the most challenges in accessing care**. Secondary data show access to insurance is varied across the Northshore area. The percent of the population that is uninsured is higher than the Louisiana average in most parishes (Figure 9).²¹ Percent uninsured is highest in Pearl River County, MS, which could relate to the lack of Medicaid expansion in that state.²² There are also inequities in who has access to insurance within parishes in the Northshore area. In Tangipahoa and St. Tammany Parishes, a higher percentage of Black residents are uninsured compared to White residents (Figure 10).²³ In all parishes, a higher percentage of Hispanic residents are uninsured compared to non-Hispanic residents of any race (Appendix F).²⁴

¹⁹County Health Rankings. (2021). County Health Rankings Model. Retrieved from <https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>

²⁰Area Health Resource File, American Medical Association. (2018). Retrieved from County Health Rankings, 2021

²¹American Community Survey. (2015-2019). Retrieved from CARES HQ, 2021.

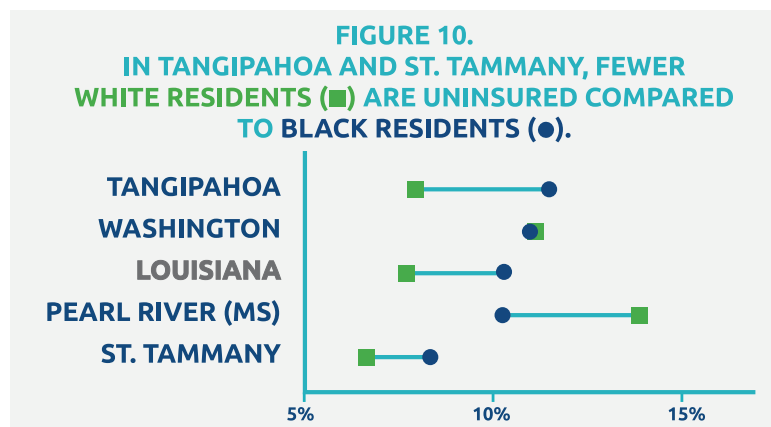
²²Rachel Garfield, Kendal Orgera, and Anthony Damico. (2021). The Coverage Gap: Uninsured Poor Adults in States that Do Not Expand Medicaid. Retrieved from <https://www.kff.org/medicaid/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/>

²³American Community Survey. (2015-2019). Retrieved from CARES HQ, 2021.

²⁴American Community Survey. (2015-2019). Retrieved from CARES HQ, 2021.

Figure 9. Percent of the population that is uninsured is highest in Pearl River (MS).

St. Tammany	7.9%
Louisiana	9.5%
Tangipahoa	9.6%
Washington	11.8%
Pearl River (MS)	14.2%



DISCRIMINATION IN HEALTHCARE

“There are also issues in our area with other social problems, racial inequality, or inequities with regard to treatments available and access to care. Even within health systems, there's lots of data that shows if, just for example, if a Black woman goes in with the same complaint as a White woman, that they don't always get the same treatment. Same could go for other marginalized groups, sexuality and gender identification, and all those other reasons that people get discriminated against.” - Behavioral Health Provider

Discrimination in healthcare affects individuals' access to quality care, as well as their willingness to seek care,²⁵ and was an issue elevated by most qualitative participants. They pointed to a **lack of diversity among providers and lack of trust among patients as two key factors influencing people's access to care.** Participants reported that marginalized groups, including people of color, the LGBTQ population, Native Americans, undocumented or migrant workers, and language-minority communities, often experience discrimination in seeking care. This then leads to a lack of trust and an unwillingness to seek care when needed. For example, qualitative participants shared that the undocumented population is afraid to seek care due to fear of deportations or arrest. Another participant shared that lack of cultural awareness may lead to misdiagnoses, and gave the example of a Native American patient who was diagnosed with depression because they did not make eye contact with the provider, though this is a sign of respect in their community. A few participants suggested a need for greater cultural awareness and language resources, such as interpreters and language support services.

“I think there's still that inequity in the healthcare system, whether it is with people of color or the LGBTQ community... There needs to be competence in how to provide services that are needed, to make people more comfortable to want to get services. While their staff is really great, they're not very diverse... There needs to be that intention to invest in training that's needed, and to be a more diverse workforce as well to reflect the communities that you treat.” - Public Health Expert

²⁵Irena Stepanikova and Gabriela Oates. (2017). Perceived Discrimination and Privilege in Health Care: The Role of Socioeconomic Status and Race. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5172593/>

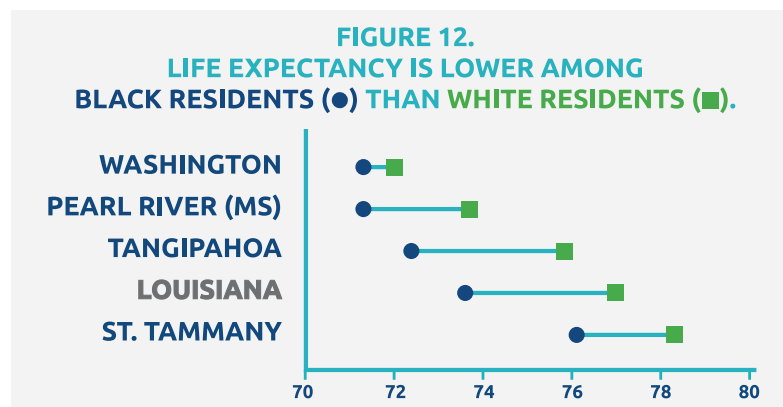
HEALTH BEHAVIORS AND OUTCOMES

Health behaviors, or the actions people take that affect their health, can affect individuals' risk of disease. Health outcomes reflect the physical and mental well-being of communities.²⁶ Health behaviors and outcomes emphasized by qualitative participants, as well as survey respondents, and supported by analysis of secondary data include behavioral health, obesity, physical inactivity, tobacco use, diabetes, heart disease, cancer, and COVID-19.

Communities of color are often at greater risk for poor health outcomes because of inequitable access to social and economic benefits,²⁷ as shown in previous data on social determinants of health in the Northshore area. One important measure of health is average life expectancy. There are considerable differences in average life expectancy between parishes in the Northshore area, with life expectancy the highest in St. Tammany and the lowest in Washington (Figure 11).²⁸ Additionally, there are significant disparities in life expectancy by race within all parishes (Figure 12).²⁹ **In all parishes in the Northshore area, Black residents have lower average life expectancy than White residents, with the largest disparity in Tangipahoa Parish.**

Figure 11. Average life expectancy is highest in St. Tammany and lowest in Washington.

St. Tammany	78.3
Louisiana	76.1
Tangipahoa	75.2
Pearl River (MS)	73.7
Washington	72.1



BEHAVIORAL HEALTH

"[Substance use and mental health issues] are worse, both in terms of their frequency and the severity... **The stresses and the effects of the pandemic made it more difficult for a lot of those people to keep it together.**" – Behavioral Health Provider

Mental and behavioral health, including substance use, was a key concern arising from both qualitative and quantitative data. Qualitative participants shared that the stress and isolation created by the COVID-19 pandemic has exacerbated behavioral health issues, such as anxiety, depression, and substance use. Providers saw isolation as a particular issue for children and the aging population and observed an increase in behavioral health issues in these populations. Qualitative participants explained that substance use disorders may also be driven by the lack of mental health support, which can lead to self-medication. Secondary data show that the drug overdose death rate is higher in all parishes in the Northshore area compared to statewide, and **Washington Parish has the highest drug overdose death rate of all Louisiana parishes** (Figure 13).³⁰ Additionally, qualitative participants expressed concern about high suicide rates in the Northshore area, which is supported by secondary data (Figure 14).³¹ Finally, qualitative participants said that behavioral health issues can exacerbate physical health concerns, as providers may not take a patient's physical needs seriously if they have severe behavioral health needs.

²⁶County Health Rankings. (2021). County Health Rankings Model. Retrieved from <https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model>

²⁷Centers for Disease Control and Prevention. (2021). Racism and Health. Retrieved from <https://www.cdc.gov/healthequity/racism-disparities/index.html>

²⁸National Center for Health Statistics- Mortality Files. (2017-2019). Retrieved from County Health Rankings, 2021

²⁹National Center for Health Statistics- Mortality Files. (2017-2019). Retrieved from County Health Rankings, 2021

³⁰National Center for Health Statistics- Mortality Files (2017-2019; 2015-2019) Retrieved from County Health Rankings, 2021

³¹National Center for Health Statistics- Mortality Files (2017-2019; 2015-2019) Retrieved from County Health Rankings, 2021

Figure 13. Washington has the highest drug overdose death rate (per 100,000) in Louisiana.	
Louisiana	25
Pearl River (MS)	29
Tangipahoa	32
St. Tammany	35
Washington	84

Figure 14. Suicide death rates (per 100,000) are higher in most Northshore parishes than the Louisiana rate.	
Washington	13
Louisiana	15
Tangipahoa	16
St. Tammany	17
Pearl River (MS)	21

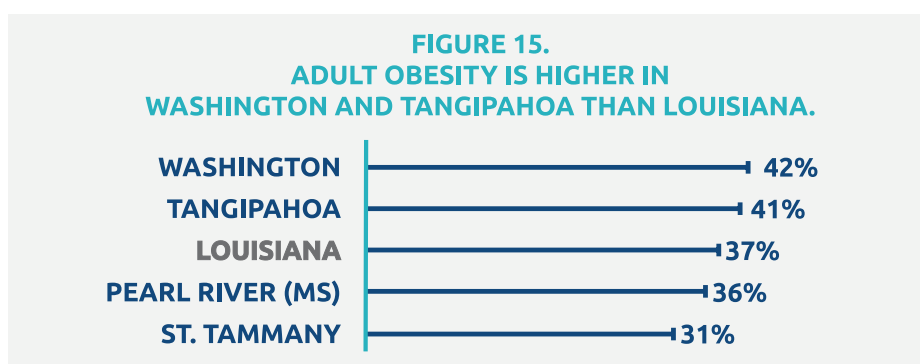
Qualitative participants emphasized **stigma as a significant barrier to accessing behavioral healthcare**. They shared that seeking mental healthcare is “frowned upon” in the Northshore area, and that there is pushback against programs such as naloxone distribution and needle exchanges because they are seen as condoning drug use. However, some participants indicated that the stigma is changing and that some community members are more open to these programs.

“In St. Tammany Parish, it's just kind of hidden underneath the rug, and they don't like to bring that stuff up.” – Mental Health Professional

OBESITY

NEARLY 7 IN 10 SURVEY RESPONDENTS
REPORTED THAT **WEIGHT MANAGEMENT IS A**
MAJOR PROBLEM FOR THEIR COMMUNITY.

Obesity is associated with increased risk for leading causes of death, including diabetes, heart attack, stroke, and different types of cancers. Obesity results from a combination of behaviors and environmental factors, such as access to walking trails and healthy foods.³² **In the Northshore area, adult obesity is highest in Washington and Tangipahoa Parishes** (Figure 15).³³



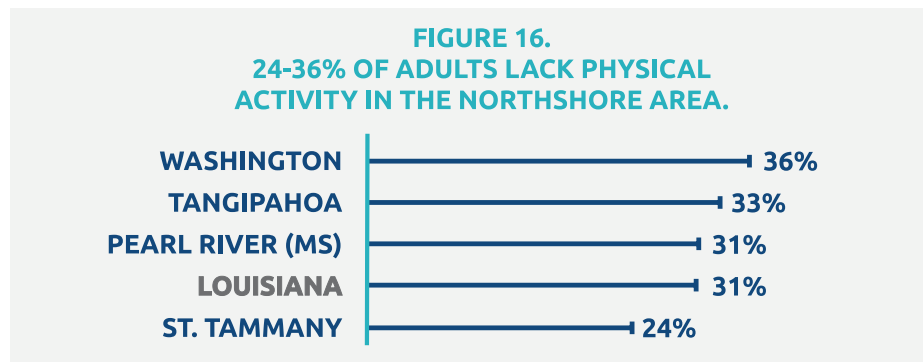
³²Centers for Disease Control and Prevention. (2021). Adult Obesity Causes & Consequences. Retrieved from <https://www.cdc.gov/obesity/adult/causes.html>

³³Behavioral Risk Factor Surveillance System. (2018). Retrieved from CDC PLACES, 2021

PHYSICAL INACTIVITY

NEARLY HALF OF SURVEY RESPONDENTS
REPORTED THAT **PHYSICAL INACTIVITY** IS A
MAJOR PROBLEM FOR THEIR COMMUNITY.

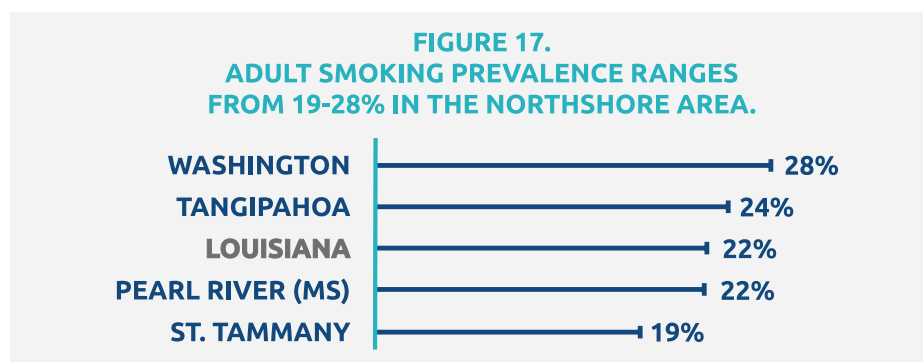
In the Northshore area, 24-36% of adults lack physical activity (Figure 16).³⁴ Decreased physical activity can contribute to heart disease, type 2 diabetes, different kinds of cancer, and obesity. Many communities, schools, and work environments are not designed for physical activity and improving these environments can promote active communities.³⁵



TOBACCO USE

NEARLY HALF OF SURVEY RESPONDENTS
REPORTED THAT **TOBACCO/SMOKING** IS A
MAJOR PROBLEM FOR THEIR COMMUNITY.

Smoking can lead to a variety of chronic health conditions, including cancer, heart disease, stroke, lung diseases, and type 2 diabetes. The effects of tobacco use go beyond the smoker and can impact others via secondhand smoke or adverse birth outcomes for infants of smokers. According to the CDC, "tobacco use is the leading cause of preventable disease, disability, and death in the United States."³⁶ In the Northshore area, 19-28% of adults currently smoke, with adult smoking prevalence highest in Washington and Tangipahoa Parishes (Figure 17).³⁷



³⁴Behavioral Risk Factor Surveillance System. (2018). Retrieved from CDC PLACES, 2021

³⁵Centers for Disease Control and Prevention. (2019). Lack of Physical Activity. Retrieved from <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/physical-activity.htm>

³⁶Centers for Disease Control and Prevention. (2021). Tobacco Use. Retrieved from <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/tobacco.htm>

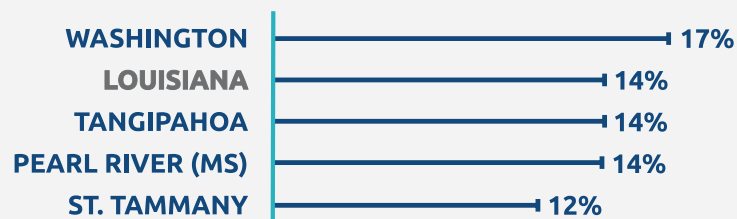
³⁷Behavioral Risk Factor Surveillance System. (2018). Retrieved from CDC PLACES, 2021

DIABETES

73% OF SURVEY RESPONDENTS
REPORTED THAT **DIABETES** IS A **MAJOR PROBLEM**
FOR THEIR COMMUNITY.

In the Northshore area, 12-17% of adults report being told by a health professional that they have diabetes (Figure 18).³⁸ Over time, diabetes can contribute to serious health problems such as heart disease, vision loss, and kidney disease.³⁹

FIGURE 18.
12-17% OF ADULTS IN THE NORTHSHORE
AREA REPORT BEING DIAGNOSED WITH DIABETES.



HEART DISEASE

62% OF SURVEY RESPONDENTS
REPORTED THAT **HEART DISEASE** IS A **MAJOR PROBLEM**
FOR THEIR COMMUNITY.

Heart disease can lead to a heart attack or heart failure. Risk factors for heart disease include smoking, diabetes, obesity, and physical inactivity.⁴⁰ These risk factors are prevalent in many parishes in the Northshore area. Though self-reported rates of heart disease are lower in the Northshore area compared to Louisiana,⁴¹ **heart disease is the leading cause of death in all parishes in the Northshore area**, when adjusted for age.⁴²

³⁸Behavioral Risk Factor Surveillance System. (2018). Retrieved from CDC PLACES, 2021

³⁹Centers for Disease Control and Prevention. (2020). Diabetes Basics- What is diabetes? Retrieved from <https://www.cdc.gov/diabetes/basics/diabetes.html>

⁴⁰Centers for Disease Control and Prevention. (2021). About Heart Disease. Retrieved from <https://www.cdc.gov/heartdisease/about.htm>

⁴¹Behavioral Risk Factor Surveillance System. (2018). Retrieved from CDC PLACES, 2021

⁴²CDC WONDER- Underlying Cause of Death. (2015-2019).

CANCER

65% OF SURVEY RESPONDENTS
REPORTED THAT **CANCER** IS A **MAJOR PROBLEM**
FOR THEIR COMMUNITY.

Cancer is the second leading cause of death in all parishes in the Northshore area, when adjusted for age.⁴³ Cancer incidence rates (the rate of newly diagnosed cases, Figure 19) and cancer death rates (Figure 20) are higher in most parishes in the Northshore area compared to the state rates.⁴⁴ Additional data by cancer type is located in Appendix F.

Figure 19. The age-adjusted incidence rates per 100,000 for all cancer types in the Northshore area.	
Tangipahoa	467
Louisiana	481
Washington	491.7
St. Tammany	497.8
Pearl River (MS)	500.9

Figure 20. St. Tammany Parish has a lower cancer death rate (per 100,000) compared to the Louisiana rate.	
St. Tammany	156.2
Louisiana	176.1
Tangipahoa	182.5
Washington	193.2
Pearl River (MS)	198.8

COVID-19

76% OF SURVEY RESPONDENTS
REPORTED THAT **COVID-19** IS A **MAJOR PROBLEM**
FOR THEIR COMMUNITY.

COVID-19 can lead to severe medical complications and death, with older adults and people with existing medical conditions at greater risk of these effects.⁴⁵ The Louisiana Department of Health (LDH) reported Louisiana's first presumptive case of COVID-19 on March 9, 2020.⁴⁶ Since then, Louisiana and the nation have experienced four waves, or surges, of COVID-19 cases, with the latest wave driven by the Delta variant of the disease in July-October 2021.⁴⁷ Early in the pandemic, the CDC determined that many racial and ethnic minority groups are at increased risk of infection, severe illness, and death from COVID-19 due to inequities in the social determinants of health.⁴⁸

⁴³CDC WONDER- Underlying Cause of Death. (2015-2019).

⁴⁴National Cancer Institute/ Centers for Disease Control and Prevention. (2014-2018).

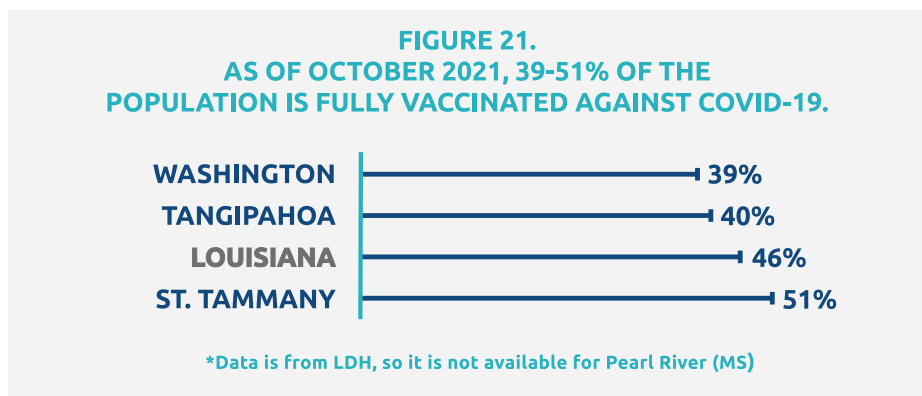
⁴⁵Mayo Clinic Staff. (2021). Coronavirus disease 2019 (COVID-19). Retrieved from <https://www.mayoclinic.org/diseases-conditions/coronavirus/symptoms-causes/syc-20479963>

⁴⁶State of Louisiana Office of the Governor. (2020). Gov. Edwards Confirms Louisiana's First Presumptive Positive Case of COVID-19. Retrieved from <http://gohsep.la.gov/portals/0/News/Covid-Release03092020.pdf>

⁴⁷Weintraub, Karen. (2021). The fourth wave of COVID-19 cases is here. Retrieved from <https://www.usatoday.com/story/news/health/2021/07/16/covid-19-fourth-wave-pandemic-surge-deaths-hospitalizations/7976034002/>

⁴⁸Centers for Disease Control and Prevention. (2020). Introduction to COVID-19 Racial and Ethnic Health Disparities. Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/index.html>

The best way to prevent COVID-19 is via vaccination.⁴⁹ **As of October 11, 2021, 39-51% of the population was fully vaccinated in the Northshore area, with the lowest vaccination rate in Washington Parish (Figure 21).**⁵⁰ There is an ongoing push from local health providers and public health officials to increase vaccination rates in Louisiana.



For real-time data on COVID-19 cases, deaths, and vaccinations in Louisiana parishes, please refer to the [LDH COVID data dashboard](#).

⁴⁹Centers for Disease Control and Prevention. (2021). Key Things to Know About COVID-19 Vaccines. Retrieved from https://www.cdc.gov/coronavirus/2019ncov/vaccines/keythingstoknow.html?_cid=10536:%2Bthe%20%2Bcovid%20%2Bvaccine.sem.b;p:RG:GM:gen:PTN:FY21
⁵⁰Louisiana Department of Health. (Oct. 11, 2021). COVID-19 Data Dashboard.

SIGNIFICANT HEALTH ISSUES AND PRIORITIES

Across the Northshore area, both qualitative and quantitative data were collected and analyzed to understand and elevate concerns and issues seen across diverse community members (community advocates, public health experts, providers) and data sources (community survey, interviews/ focus groups, secondary data). Special attention was paid to understand and elevate drivers of poor health outcomes and health inequities.

Survey findings were analyzed alongside qualitative findings to understand what community members perceived as the top health issues facing their community. Secondary data were then reviewed and analyzed to reinforce, contradict, or add additional context and complexity to results from the primary data. These three layers of data (survey, qualitative, and secondary) were analyzed in concert and produced the following key health concerns in the Northshore community:

- Access to and continuity of care
- Health equity and discrimination in healthcare
- Education and health literacy
- Infrastructure (transportation, housing, food access)
- Mental and behavioral health
- Poverty and income inequality

While these areas of concern are listed separately, they are all interconnected and impact one another as they drive health outcomes.

Focus group and interview participants discussed resources in the community to address health needs, which are listed in Appendix B.

PRIORITIZATION OF COMMUNITY HEALTH CONCERNS

LPHI convened participating Northshore area hospitals on October 8, 2021, via a virtual meeting to review key findings and begin prioritizing key concerns. An initial prioritization activity was conducted with participants using a web-based audience interaction platform. During this activity, participants rated each key concern based on their perceptions of the **impact** addressing the issue would have on their community's health and the **feasibility** of the hospital to address the issue. The initial results of the activity are shown below. Access to and continuity of care, mental and behavioral health, education and health literacy, and health equity and discrimination in healthcare were ranked the highest for both impact and feasibility.

After the activity, participants brought the key concerns back to their hospital teams and leadership to discuss and finalize priorities. The 2021 CHNA priorities for each participating hospital are listed below.



2021 CHNA PRIORITIES BY PARTICIPATING NORTSHORE AREA HOSPITALS

NORTSHORE EXTENDED CARE HOSPITAL

- Access to and continuity of care
- Education and health literacy
- Mental and behavioral health

NORTSHORE REHABILITATION HOSPITAL

- Access to and continuity of care
- Education and health literacy
- Mental and behavioral health

OCHSNER MEDICAL CENTER – NORTSHORE

- Access to and continuity of care
- Health equity and discrimination in healthcare
- Education and health literacy
- Mental and behavioral health

SLIDELL MEMORIAL HOSPITAL

- Access to and continuity of care
- Mental and behavioral health
- Education and health literacy

ST. TAMMANY HEALTH SYSTEM

- Access to and continuity of care
- Mental and behavioral health
- Education and health literacy

NEXT STEPS

This CHNA report will be available to the public via the hospital's website. To request a paper copy of the report or to provide feedback on the assessment, please contact:

Facility	Contact	E-mail Address
Northshore Extended Care Hospital Northshore Rehabilitation Hospital Ochsner Medical Center – Northshore	Jessica Diedling, Associate Manager, Community Benefit	CommunityOutreach@ochsner.org
Slidell Memorial Hospital	Jennifer Berger, Director, Business Development	Jennifer.Berger@slidellmemorial.org
St. Tammany Health System	Kelly Rabalais, AVP Strategic Planning & Implementation	kmrabalais@stph.org

TRANSITION TO PLANNING AND IMPLEMENTATION

Following adoption of the CHNA, each hospital will develop a three-year CHIP describing how the hospital intends to address the key health concerns prioritized. The accompanying CHIP will be a separate written report, also adopted by the hospital facility.

The CHIP will include:

- Actions the hospital intends to take to address priority concerns,
- Resources the hospital plans to commit,
- Planned collaborations, and
- Metrics to track progress.

ACKNOWLEDGEMENTS

This CHNA report was developed under the care and guidance of MHCNO participants. The CHNA workgroup for the 2021 CHNA for the Northshore area included:

Allison Sharai, Ochsner Health
Anne Pablovich, St. Tammany Health System
Jennifer Berger, Slidell Memorial Hospital
Jennifer McMahon, MHCNO, Louisiana Hospital Association
Jessica Diedling, Ochsner Health
Kelly Rabalais, St. Tammany Health System
Melissa Hodgson, St. Tammany Health System
Taylor Nations, Slidell Memorial Hospital

The following LPHI team members managed the planning, data collection, analysis, writing, and editing of this report:

Barrie Black, Program Manager, Monitoring, Evaluation, and Learning
Caitlin Canfield, Associate Director, Monitoring, Evaluation, and Learning
Daniele Farrisi, Senior Program Manager, Family Health
Jesse Chanin and Rachel Powell, Qualitative Research Consultants
Jessica Brewer, Program Coordinator, Monitoring, Evaluation, and Learning
Peggy Sanders, Clinical Integration Manager, Family Health
Trey Lewis, Senior Analyst, Monitoring, Evaluation, and Learning

The authors of this report thank community members and leaders across the Northshore area who participated in the interviews, focus groups, and surveys. This report could not have been completed without your time and dedication. For a list of participating organizations, please see **Appendix D**.

ABOUT THE LOUISIANA PUBLIC HEALTH INSTITUTE

LPHI, founded in 1997, is a statewide community-focused 501(c)(3) nonprofit and public health institute committed to ensuring all Louisianans have just and fair opportunities to be healthy and well. Our work focuses on areas that touch public health, including tobacco prevention and control, building healthier communities, assessing needs of communities, supporting the whole health needs of individuals and families from early childhood to older adults, COVID-19, and more. We create authentic partnerships with both communities and partners to align action for health. For more information, visit www.lphi.org.

APPENDIX A: PROGRESS MADE SINCE PREVIOUS CHIP

This section summarizes the progress made since their previous CHNA cycle and related CHIP.

NORTHSHORE EXTENDED CARE & NORTHSHORE REHABILITATION HOSPITALS

Northshore Extended Care Hospital and Northshore Rehabilitation Hospital facilities do not have a previous CHIP on which to report.

OCHSNER MEDICAL CENTER – NORTHSHORE

Ochsner – Northshore prioritized addressing behavioral health, health education, and chronic disease concerns in their previous CHNA.

BEHAVIORAL HEALTH/MENTAL HEALTH/SUBSTANCE ABUSE

Ochsner partnered with Safe Haven, a collaborative healing environment for citizens struggling with mental illness and substance abuse. Safe Haven provides a single point of entry into the behavioral health continuum for law enforcement, the judiciary, and local hospitals. Ochsner's partnership with Safe Haven includes education, training, advisory-expertise, and collaborative partnership programming.

To meet the behavioral health, mental health, and substance use needs of the community, Ochsner - Northshore focused on increasing access to care for all ages. The Boh Center for Child Development is one of the largest multi-disciplinary child focused centers in the Gulf South utilizing interdisciplinary team evaluations, integrated treatment protocols, and supports parents within the school setting to navigate special education services and provide family-centered treatment plans.

The system-wide Opioid Stewardship Committee continues to develop best-practices in decreasing the use of opioids. Additionally, through Ochsner's TelePsych program, psych consultations were completed throughout the health system, removing distance as a barrier to mental health services. Ochsner - Northshore also maintained a close partnership with the National Alliance on Mental Illness (NAMI), collaborating on and hosting support groups and other events throughout the year.

HEALTH EDUCATION

Ochsner - Northshore provided opportunities for community members and patients to learn about their health and how to improve or maintain it. The Ochsner Eat Fit program makes it easy for community members to make the right decisions for their health through collaborative work with local restaurants, schools, and sports arenas to certify approved "Eat Fit" options. Ochsner provides the "CHOP" After-School cooking program at schools and community centers in the Greater New Orleans area. The Ochsner Corporate Wellness team provided over 3,500 no-cost health screenings to community members, teachers, and local organizations across regions.

The Ochsner Sports Medicine Institute partnered with local schools throughout southeast Louisiana to provide low or no-cost athletic training services for their student athletes, including pre-sports physicals to keep student-athletes healthy.

Ochsner Tobacco Cessation and Education programs educate local students through interactive tobacco prevention programs. Additionally, the Tobacco Control & Prevention program offers 23 cessation clinic sites that provide free tobacco cessation services to patients who are eligible for the tobacco trust program.

CHRONIC DISEASE

Ochsner's digital medicine programs change the way patients manage chronic diseases like hypertension and diabetes through wearable technology that monitors levels and alerts care providers. Seventy one percent of participants in the hypertension digital medicine program achieved control within 90 days of entering the program. The diabetes digital medicine program allows diabetic patients to measure blood sugar levels anywhere and automatically transmit the information to their care teams. Care teams use information to adjust treatment plans, medications, and provide lifestyle guidance resulting in significant improvements in blood sugar control, patient activation, and completing important health maintenance measures.

The Ochsner Innovation Hub opened in 2019 as a way for community members to have access to learn about digital medicine options to manage chronic disease, explore healthy lifestyle education, and have interactive experiences centered around healthcare.

In community centers, churches, schools, and businesses throughout the community, Ochsner provides expert speakers that cover topics centered around managing chronic diseases, prevention strategies, and a host of other health topics for community members.

All Ochsner campuses provide support groups for a variety of topics, including managing chronic health conditions, transplant support, mental health, pre- and post-natal, sibling classes, geriatric, and women's health.

SLIDELL MEMORIAL HOSPITAL

Slidell Memorial Hospital prioritized addressing behavioral health, chronic disease prevention and management, and health education concerns in their previous CHNA cycle.

BEHAVIORAL HEALTH

One of Slidell Memorial's goals was to enhance behavioral health services and resources in the populations they serve. Main strategies were through education and increasing awareness and connections to other resources in the community. An example was Stress Management talks, which illustrate what stress is, how it affects the body, symptoms, and coping/ management techniques. Examples of partners and resources Slidell Memorial worked with in the community included NAMI, programs with Ochsner, Recovering Nurse Program, Families Helping Families, Youth Services Bureau, Volunteers of America, and 211 Talk.

CHRONIC DISEASE PREVENTION AND MANAGEMENT

In partnership with Ochsner, Slidell Memorial offers the following programs to educate and encourage community members to adopt healthy lifestyles: CHOP, Reading Food Labels, Lighten Up, COAST Exercise Program, Healthy Exercise Program, Comprehensive Weight Loss Center, Ideal Protein, 5-2-1-0 obesity prevention program, Eat Fit Northshore, and Mall Walkers.

The Eat Fit program is offered across the region and is currently in over 300 restaurants and other venues. The Eat Fit app went live in 2018, which lists approved restaurants, recipes, nutritional information, and educational materials.

HEALTH EDUCATION AND TOBACCO CESSATION

Free tobacco cessation services were available at clinics throughout the region. Inpatient smoking services were provided to create a continuum of care for patients. Slidell Memorial worked with the Council for Tobacco Treatment Training Programs to maintain Certified Tobacco Treatment Specialists on staff and in the community. Slidell Memorial provides education on tobacco cessation and health effects to schools and other community groups.

Slidell Memorial provided other education services such as Girl Talk and Guy Talk. These are talks for preteens and teens to discuss changes that occur during puberty and healthy choices. Other Health Talks Slidell Memorial has conducted in the community include Hands Only CPR, Diabetes Education, Babysitting 101, Safe Kids 101, Health and Hygiene, Stroke Education, and Wellness and You.

ST. TAMMANY HEALTH SYSTEM

St. Tammany Health also prioritized addressing behavioral health, health education, and chronic disease in their previous cycle.

BEHAVIORAL HEALTH

St. Tammany Health has formed close relationships with behavioral health facilities that provide crisis intervention, inpatient, intensive outpatient, and clinic treatment for mental illness and substance use disorders. They further understand the value of engaging local non-profit agencies such as NAMI St. Tammany, who provide support for those in need of behavioral health services. Inpatient social worker case managers look to place individuals who report to the Emergency Department and, upon inpatient discharge, to the appropriate behavioral health facilities. In their pediatric clinic, St. Tammany Health has imbedded a social worker to assist with identifying resources to address adverse impacts of social determinants of health.

HEALTH EDUCATION

In 2020 St. Tammany Health launched Healthier Northshore, a community-based health initiative which aims to improve the health of St. Tammany and Washington Parish residents through education around the value of nutrition, prevention, and early detection, while providing access to resources across our community. St. Tammany Health also launched several virtual educational programs during the COVID-19 pandemic as residents sought health information in non-traditional formats, like webinars and Facebook live educational events that featured physicians and clinical providers. Topics included COVID-19, cervical cancer, colorectal cancer, breast cancer, skin cancer, sleep health, diabetes education, scoliosis, pediatric health, behavioral health, stroke prevention, heart health, and advance care planning and tobacco cessation. Traditional screening events with educational components resumed, including Health Check 365 screening events, Girl's Health and Empowerment Summit, and more.

CHRONIC DISEASE

As mentioned previously, St. Tammany Health initiated a community-based initiative, Healthier Northshore, to address the prevalence of chronic disease on the Northshore. On an inpatient basis, the volume of diabetes inpatient consults increased by 20% each year. In response, they added additional Registered Nurses in the Diabetes Education Department to provide clinical management and education to patients and staff. St. Tammany Health provides inpatient coverage six days a week, and on-call coverage for pediatric services on Sunday. They also provide clinical review of daily reports to assist with clinical management of hypo and hyperglycemia and assist with discharge needs of consulted patients. On an outpatient basis, St. Tammany Health has implemented digital hypertension (HTN) and digital diabetes management (DM) in all primary care clinics and incorporated diabetes education in a clinical site.

APPENDIX B: LOCAL RESOURCES MENTIONED BY QUALITATIVE PARTICIPANTS

RESOURCES ADDRESSING SOCIAL AND ECONOMIC SUPPORT

Organization	Focus	Parish(es)	Notes
Boys & Girls Club of Metro Louisiana	Health, leadership, and academic success.	Northshore region	The Boys & Girls Clubs of Metro LA teach kids and teen how to live healthier. Their nine Clubs have programs that focus on healthy lifestyles, academic success, and character & leadership. The Southeast LA and Greater Baton Rouge Clubs have merged to become Metro LA.
Catholic Charities on the Northshore	Community services.	Northshore region	Services include on-site counseling and case management, job readiness and employment assistance, and a computer lab for adults and youth. Programs include Isaiah 43 Parenting and Mentoring Program, Case Management through Parish and Community Ministries, Food for Families/Food for Seniors, Cornerstone Builders, Counseling Solutions (Slidell and Covington), Adult Education Services including literary and English as a Second Language classes, and Office of Justice and Peace.
Community Action Agency	Utility, rental, and mortgage assistance.	St. Tammany	The Community Action Agency (CAA), with offices in Covington and Slidell, provides several services to St. Tammany Parish residents including emergency utility, rental, and mortgage assistance. The CAA also works with homeless and near-homeless families transitioning from homelessness to help them become self-sustaining.
Community Christian Concern (CCC)	Basic necessities for those in crisis.	St. Tammany	CCC is in East St. Tammany Parish and provides basic necessities to individuals and families in crisis.
Council on Aging St. Tammany (COAST)	Senior health and wellness.	St. Tammany	COAST is a private, nonprofit corporation, which serves St. Tammany parish residents aged 60 and older. Most services are offered at no cost. COAST strives to provide St. Tammany Parish seniors with services designed to maintain and enhance their quality of life, wellbeing, independence, and involvement in the community. They offer games, events, activities, crafts, wellness classes, nutrition courses, and daily meals in the 7 centers in the parish.
Family Promise of St. Tammany	Unhoused.	St. Tammany	Family Promise of St. Tammany is one of over 200 local Family Promise affiliates across 41 states. It provides unhoused children and their families with safe & comfortable shelter, meals, and compassionate support. Local congregations throughout St. Tammany Parish host up to five families (14 people) at a time on a weekly rotating schedule.
NAMI St. Tammany Housing Services	Transitional group home.	St. Tammany	Transitional supportive group homes for males and females with serious mental illness, 24/7 supervision with support for a transition period of up to 2 years.

Organization	Focus	Parish(es)	Notes
Northlake Homeless Coalition	Unhoused.	Southeast LA	The Northlake Homeless Coalition is a network of private and public service providers working together to end the ravages of homelessness in the southeast Louisiana Parishes of Livingston, St. Helena, St. Tammany, Tangipahoa, and Washington.
Northshore Community Foundation (NCF)	Investment in the community.	Northshore region	The NCF is a nonprofit foundation that works to unite human and financial resources with needs and opportunities in the Northshore community. They offer an investment platform with a diversified investment portfolio with more than 1,000 charitable funds. The NCF serves the entire Northshore of Lake Pontchartrain, including St. Helena, Tangipahoa, Washington, and St. Tammany parishes, and is headquartered in downtown Covington.
Northshore Families Helping Families	Disabilities.	Northshore region	Families Helping families serves individuals with disabilities throughout the lifespan, from initial diagnosis through adulthood. Their mission is to provide individuals with disabilities the services, information, resources, and support needed to enhance their independence, productivity, and inclusion within our community.
VIA Link - Louisiana 211 Statewide Network	Community resources.	Statewide	211 is an easy to remember telephone number that connects callers to information about critical health and human services available in their community. It is a single access point for everyday needs and in times of crisis. Callers can be given access to resources including food, clothing, shelter, financial assistance, physical and mental health, employment support, support for older adults and persons with disabilities, and support for children, youth, and families. It also provides crisis counseling for the community.
Volunteers of America	Community services.	St. Tammany	COAST is a private, nonprofit corporation, which serves St. Tammany Parish residents aged 60 and older. Most services are offered at no cost. COAST strives to provide St. Tammany Parish seniors with services designed to maintain and enhance their quality of life, wellbeing, independence, and involvement in the community. They offer games, events, activities, crafts, wellness classes, nutrition courses, and daily meals in the 7 centers in the parish.

RESOURCES ADDRESSING THE PHYSICAL ENVIRONMENT

Organization	Focus	Parish(es)	Notes
LSU Ag Center	Community garden, nutrition.	St. Tammany, Statewide	The LSU Ag Center focuses on research, extension, and teaching to make advancements that will benefit generations. Educational efforts span nutrition and health, food safety, backyard gardening, disaster preparedness, storm recovery, youth development, managing insects and natural threats, economic development, resource conservation, and more. They teach those in the poorest neighborhoods in Covington how to grow fresh foods rather than having to purchase.
Northshore Food Bank	Food bank.	St. Tammany, Washington	Located in Covington, LA, the Northshore Food Bank provides food assistance to more than 400 individuals and families each week who live at or below the 130% federal poverty guidelines and have found themselves in need. After qualifying for assistance, an individual can receive a minimum of 35 lbs. of food once each month and families can receive a minimum of 70 lbs. of food each month. Depending on donations, recipients may also receive a "lagniappe" box, which may be filled with breads, pastries, dairy products, fresh produce, or frozen foods. They offer boxes for diabetics. The Resale Shop raises funds to support food bank programs.
Samaritan Center	Food and emergency assistance.	South LA	The Samaritan Center is a Christian organization offering emergency assistance with food for those in the community who are in need. Limited assistance for utilities, rent/mortgage, transportation, & medicines may be provided in some circumstances. The Samaritan Center is in partnership with Second Harvest Food Bank which serves South Louisiana. They offer SNAP (food stamp) application assistance and operate a thrift shop.

ADDITIONAL CLINICAL CARE RESOURCES

Organization	Focus	Parish(es)	Notes
Access Health, Tangipahoa Community Health Center	Healthcare: Community Health Center.	St. Tammany, Tangipahoa, Washington	Access Health operates health centers in "high need" areas with 32 clinics and school-based health centers throughout Southeast LA. Northshore services include Primary Care, Pediatrics, and Behavioral Health.
Office of Public Health (OPH)	Parish health unit.	Northshore region	The Regional Medical Director and Administrator for OPH oversees all services in parish health units, as well as emergency preparedness, disaster response efforts, infection control. The clinics evaluate and treat STDs, conduct evaluations and referrals for HIV, evaluate and treat TB, offer family planning, immunizations, and WIC services. The Hammond Health Unit provides medical services for children and youth with special healthcare needs. The Northshore region includes St. Tammany, Washington, Tangipahoa, St. Helena, and Livingston parishes.

Organization	Focus	Parish(es)	Notes
Southeast Community Health Center	Healthcare: Community Health Center.	Tangipahoa, St. Helena	As a private, not-for-profit 501 (c) (3) organization, Southeast Community Health Systems offers medical, dental, and behavioral health services, which include mental health counseling, substance abuse treatment, obstetrics and gynecology, and podiatry services. They are federally and state funded to provide primary and preventive care in seven rural-based communities in Southeast Louisiana.
Start Corp	Healthcare: Community Health Center.	St. Tammany	Start Community Health Centers works in tandem with their programs to provide holistic care to its patients by addressing their needs from a primary health and a community-based standpoint. Their clinics consist of physicians, nurse practitioners, and licensed social workers. Start Corp also provides other programs and services such as ACT, Safe Haven, and Sunshine Village.

RESOURCES ADDRESSING HEALTH BEHAVIORS AND OUTCOMES

Organization	Focus	Parish(es)	Notes
Assisted Outpatient Therapy (AOT)	Behavioral health.	Statewide	Assisted Outpatient Treatment (AOT) is the practice of providing community-based mental health treatment under civil court commitment, as a means of: (1) motivating an adult with mental illness who struggles with voluntary treatment adherence to engage fully with their treatment plan; and (2) focusing the attention of treatment providers on the need to work diligently to keep the person engaged in effective treatment.
Coroner's Office	Emergency mental health interdictions.	All parishes	The Coroner is an elected official with many responsibilities, including the investigation and certification of a variety of deaths of legal or public health interest. The Coroner also has the legal responsibility for emergency mental health interdictions, via the Order for Protective Custody and the Coroner's Emergency Certificate, as well as the examination of alleged victims of a sexually-oriented criminal offense.
Crisis Receiving Center on the Safe Haven Campus	Behavioral health crisis.	St. Tammany	This 24-bed crisis receiving facility accepts Physician's Emergency Certificates for triage and determination of level of care needed.
Florida Parishes Human Services Authority (FPHSA)	Behavioral health, addiction treatment, and developmental disabilities.	Northshore region	FPHSA is a community agency committed to providing recovery-based and person-centered Behavioral Health and Developmental Disabilities Services. Behavioral health locations include Hammond, Mandeville, Slidell, Bogalusa, and Denham Springs. FPHSA is the single point of entry for developmental disabilities services in the following parishes: Livingston, St. Helena, St. Tammany, Tangipahoa, and Washington Parish.
Healthier Northshore	Community wellness.	Northshore region	Envisioned as a joint effort between the health system and a collection of community partners, a community health initiative called "Healthier Northshore" was formed to move the community toward a healthier future by teaming with local civic and business leaders, government agencies and not-for-profit organizations to bring educational initiatives and health screening events to people in their own communities. St. Tammy Health System launched its HealthCheck 365 community outreach program in 2020.

Organization	Focus	Parish(es)	Notes
Hope House of Covington	Child abuse recovery resources.	St. Tammany	Hope House of Covington is an independent, non-profit organization dedicated to ending the cycle of child abuse in the community. They provide a path to recovery and a bridge to justice for victims of abuse.
Mayor's Council on Healthy Lifestyles - Covington	Community wellness.	St. Tammany	The Mayor's Council on Healthy Lifestyles - Covington provides the community with programs, events, and connections that affect positive changes in health. Events include NAMI Walks, Cooking Healthy Options and Portions class, health screenings, blood drive, Zumba with the Mayor, and fundraising campaigns.
National Alliance on Mental Illness (NAMI) St. Tammany	Behavioral health.	St. Tammany, Northshore	NAMI St. Tammany is a non-profit organization that fills the need for education, advocacy, support, and resources for both those in the community living with mental illness and their loved ones. Services include a day program, education programs, support groups and a resource directory.
NAMI Connections Recovery Support Group	Online support group.	St. Tammany, Northshore region, Greater New Orleans region	NAMI Connection Recovery Support Groups are open to adults living with mental illness. Led by trained facilitators whom themselves are living in recovery with mental illness. Groups promote respect, understanding, encouragement, and hope. This free online group is currently meeting every Thursday at 6:30 p.m. via Zoom.
NFL PLAY 60	Physical fitness.	National	NFL PLAY 60 is the league's national youth health and wellness campaign that encourages kids to get physically active for at least 60 minutes a day.
Northlake Behavioral Health System	Behavioral health.	St. Tammany	Located in Mandeville, La, Northlake Behavioral Health System offers inpatient and outpatient services for adults and adolescents with behavioral health concerns. The Ness Center at Northlake's Mobile Crisis Team provides immediate screening and intervention for adults and adolescents who are suffering from behavioral health crisis.
President's Council on Sports, Fitness, and Nutrition	Physical fitness.	National	The President's Council on Sports, Fitness, and Nutrition (PCSFN) is a federal advisory committee that aims to promote healthy eating and physical activity for all Americans, regardless of background or ability.
Specialty Courts - 22nd Judicial District Court	Legal.	St. Tammany, Washington	Specialty Courts are problem-solving court strategies designed to address the root causes of criminal activity by coordinating efforts of the judiciary, prosecution, defense bar, probation, law enforcement, treatment, mental health services, and social service agencies. The 22nd Judicial District Court, which serves St. Tammany and Washington parish, have a number of specialty courts including drug court, behavioral health court, and veterans' court.
Well-Ahead Louisiana	Health and wellness.	Statewide	Well-Ahead Louisiana is the chronic disease prevention and healthcare access arm of LDH. This program works to reduce the burden of chronic disease and assure access to quality healthcare for all La residents by connecting communities to tools and resources that can improve the health of Louisiana residents.
West St. Tammany YMCA	Fitness and exercise.	St. Tammany	The West St. Tammany YMCA works to improve and sustain the health and well-being of the community and fosters lasting friendships. They offer exercise and swimming classes, youth soccer, and childcare.

OTHER RESOURCES

Organization	Focus	Parish(es)	Notes
St. Tammany Sheriff's Department	Law enforcement and crime prevention programs.	St. Tammany	This agency exists to serve the public by preserving, protecting, and promoting the quality of life of residents. The St. Tammany Sheriff's Department created the first crisis intervention team in the state of Louisiana. Programs include crime prevention and public awareness.
Additional resources mentioned during focus groups and interviews included hospitals, social service agencies, mental health providers, residential treatment for substance abuse, food banks, churches, faith-based organizations, and schools.			

APPENDIX C: MHCNO ASSESSMENT APPROACH

Collaboration, engagement, and evidence-based practices were central to the assessment process from the onset. MHCNO assessments included 19 hospitals eager to collaborate through the assessment and planning processes. LPHI was contracted by MHCNO to lead the assessment with the participating hospitals:

- Children’s Hospital of New Orleans
- East Jefferson General Hospital
- New Orleans East Hospital
- Ochsner Medical Center - New Orleans (includes Ochsner Baptist & Ochsner-West Bank)
- Ochsner Medical Center - Baton Rouge
- Ochsner Medical Center - Kenner
- Ochsner Medical Center- Northshore
- Ochsner Rehabilitation Hospital
- Northshore Extended Care Hospital
- Northshore Rehabilitation Hospital
- Ochsner St Anne Hospital
- Ochsner St Mary
- River Place Behavioral Health Hospital
- Slidell Memorial Hospital
- St. Tammany Health System
- Touro Infirmary
- Tulane Medical Center (includes Tulane Lakeside Hospital & Lakeview Regional Medical Center)
- University Medical Center New Orleans
- West Jefferson Medical Center

LPHI followed a modified version of the Community Improvement Cycle⁵¹ to guide the community health assessment process with hospitals between April - October 2021.

Primary data collection for MHCNO CHNAs consisted of 75 interviews, 10 focus groups, and over 5,000 community survey responses.

DEFINING COMMUNITY WITH MHCNO

The assessment area focused on where most patients live across participating hospitals rather than each service area separately. Joint assessments were conducted for hospitals serving the same community. Hospitals defined their community geographically based on the parishes where at least 50% of inpatient discharges reside.

Most patients of MHCNO hospitals lived in 18 parishes across southeast Louisiana, which were divided into the following regions for CHNA process based on defined communities:

1. Greater New Orleans area: Orleans, Jefferson, St. Bernard, St. John the Baptist, Plaquemines, St. Tammany, St. James, and St. Charles Parishes
2. Baton Rouge area: East Baton Rouge, Livingston, and Iberville Parishes
3. Northshore area: St. Tammany, Washington, Tangipahoa Parishes, and Pearl River County, MS
4. Bayou area: St. Mary, Lafourche, St. Charles, and Terrebonne Parishes.

⁵¹ACHI. (2017). Community Health Assessment Toolkit. Retrieved at www.healthycommunities.org/assesstoolkit

APPENDIX D: METHODOLOGY

DATA COLLECTION AND ANALYSIS

LPHI utilized a mixed methods approach to understand and document community feedback and perspectives by triangulating primary qualitative data from interviews and focus groups, secondary quantitative data from existing data sources, and additional quantitative and qualitative data collected through an online community survey. Due to safety protocols during the COVID-19 pandemic, all data collection and engagement efforts occurred virtually.

Health equity was central to both the data collection and analysis processes. Secondary data were analyzed by race whenever possible. Primary data collection focused on gathering voices of vulnerable populations such as aging and non-English speaking communities.

SECONDARY DATA

Secondary data from national and statewide databases were compiled and analyzed to identify key concerns in the Northshore area and supplement findings from primary data sources. The indicator list for secondary data was developed to align with the County Health Rankings Indicator Model. Data were extracted at the parish level and disaggregated by race/ethnicity where possible. Louisiana averages were used as a baseline for comparison. A full list of secondary data indicators and sources can be found in **Appendix G**.

COMMUNITY SURVEY

Between July 13 and August 23, 2021, MHCNO partner hospitals, LPHI, and LDH distributed an online survey through their networks to community members residing in southeast Louisiana. The survey was available in English, Spanish, and Vietnamese and distributed in all three languages via email, social media, and radio. Hospitals focused on distributing the survey to their patients through social media, as well as through clinics and COVID testing/vaccination sites. LPHI and LDH distributed the tool through virtual networks serving the Northshore area. The survey was conducted in collaboration with LDH's Statewide Health Assessment survey, which took place simultaneously, to boost response rates and reduce survey fatigue.

The survey tool was grounded in health equity and informed by evidence-based materials (such as Prevention Institute's *Measuring What Works to Achieve Health Equity: Metrics for the Determinants of Health*).⁵² It included questions designed to measure respondents' perceptions of determinants of health, health behaviors and exposures, and health outcomes, as well as open-ended questions on local assets and recommendations to improve community health. All survey responses from St. Tammany, Tangipahoa, and Washington Parishes, and Pearl River (MS) were compiled for analysis in STATA. In the Northshore area, 491 community members participated in the survey. As survey responses were collected via convenience sampling, these findings may not be generalizable to the entire community and should be interpreted in concert with qualitative and secondary data findings. Demographic information on respondents as well as a summary of responses to survey questions can be found in **Appendix E**.

⁵²Prevention institute (2015). *Measuring What Works to Achieve Health Equity: Metrics for the Determinants of Health*. Retrieved at <https://www.preventioninstitute.org/publications/measuring-what-works-achieve-health-equity-metrics-determinants-health>

FOCUS GROUPS

In August 2021, LPHI facilitated a focus group with mental health and service providers from the Northshore area. The focus group lasted approximately 60 minutes and was conducted via Zoom. The focus group discussion addressed health concerns, resources, and assets of the community; how people choose /access providers; and recommendations on how to improve the health of residents. Incentives were provided to those that were eligible as a token of appreciation for their time. Transcripts were loaded into Dedoose and coded based on key themes. All coders completed training and inter-rater reliability was achieved by the team. A thematic analysis was then conducted to synthesize findings.

KEY STAKEHOLDER INTERVIEWS

Twelve interviews were conducted with key stakeholders across the Northshore area via Zoom between June 24 and August 6, 2021. Interviews averaged 45 minutes and focused on health concerns within the community, community resources and assets, and recommendations on how to improve the health of residents. Incentives were provided to those that were eligible as a token of appreciation for their time. Transcripts were loaded into Dedoose and coded based on key themes. All coders completed training and inter-rater reliability was achieved by the team. A thematic analysis was then conducted to synthesize findings.

QUALITATIVE PARTICIPANTS FROM THE NORTHSHORE COMMUNITY

LPHI, with the hospitals, conducted outreach through virtual platforms to solicit input from persons representing broad interests of the Northshore community. Through key stakeholder interviews, the team incorporated input from at least:

- 2 public health experts and representatives of a state or local health department,
- 10 members, representatives, or leaders of medically underserved, low-income, or minority populations.

Northshore organizations who participated in interviews and focus groups include, but are not limited to:

- COAST (Council on Aging St. Tammany)
- Louisiana Department of Health
- NAMI St. Tammany
- Northshore Community Foundation
- Northshore Food Bank
- Safe Haven
- Access Health St. Tammany Community Health Center
- St. Tammany Parish President's Office
- St. Tammany Public School System
- Start Corporation Community Health Center
- West St. Tammany YMCA

APPENDIX E: ADDITIONAL COMMUNITY SURVEY DATA

DEMOGRAPHIC DATA FROM COMMUNITY SURVEY

N	491
Parish	
St. Tammany	69.7%
Tangipahoa	25.3%
Washington	5.1%
Age	
24 or younger	3.3%
25-35	16.9%
36-45	23.0%
46-55	22.4%
56-65	19.4%
65+	15.1%
Gender	
Female	83.4%
Male	14.5%
Transgender Male	0.2%
Prefer not to answer	1.8%
Race/Ethnicity	
Non-Hispanic White	71.9%
Non-Hispanic Black	20.2%
Latino/Hispanic	4.7%
Multiracial	1.9%
Non-Hispanic Asian	0.9%
Non-Hispanic Native Hawaiian or other Pacific Islander	0.2%
Other	0.2%

Educational Attainment	
Prefer not to answer	1%
Less than high school	1%
High school or GED	12%
Some college	24%
Associates degree	14%
Bachelor's degree	27%
Graduate degree or higher	21%

Zip Code (top 10)	
70458	16.7%
70433	11.7%
70461	7.7%
70471	6.9%
70454	6.7%
70460	6.3%
70403	6.0%
70448	4.2%
70447	3.3%
70401	3.1%

DETERMINANTS OF HEALTH

Question: Please think about how much you agree or disagree with the following based on the overall health and wellbeing of your community when responding to the prompts below.

Survey Statement	Strongly Disagree/ Disagree	Strongly Agree/ Agree	Total responses (N)
All people have access to reliable public transportation in my community.	75%	25%	487
All people in my community live in safe, affordable housing.	63%	37%	486
All workers in my community make minimum income necessary to meet basic needs.	63%	37%	488
Everyone in my community can access the health care they need.	51%	49%	489
All people in my community have access to healthy, nutritious foods.	51%	49%	488
Individuals and families can get the support they need during times of stress and hardship.	47%	53%	489
Everyone in my community regardless of race, gender, or age has equal access to opportunities and resources.	46%	54%	490
All children in my community receive high quality education.	45%	55%	489
All people in my community have opportunities to engage with the arts and culture.	40%	60%	488
People in my community actively work to make the community a better place to live.	24%	76%	488
My community has clean air, water, and soil.	19%	81%	483
People in my community take pride in the community and its accomplishments.	19%	81%	490
My community is a safe place to live.	16%	84%	485
There are parks and green spaces in my community.	15%	85%	488

HEALTH BEHAVIORS & EXPOSURES

Question: For each one, please tell me how big a problem you think it is for people in your community—a major problem, a minor problem, or not a problem at all.

	A major problem	A minor problem	Not a problem at all	Total responses (N)
Substance abuse and addiction	66%	27%	8%	487
Excessive alcohol use	49%	41%	10%	485
Tobacco/smoking	48%	43%	9%	479
Physical inactivity	45%	43%	12%	487
Physical and emotional trauma	44%	46%	9%	488
Poor nutrition	36%	49%	15%	486
Car/motorcycle accidents	35%	51%	14%	487
Violence	28%	59%	13%	487
Air pollution, water pollution, and chemical exposures	18%	54%	28%	486

HEALTH OUTCOMES

Question: For each one, please tell me how big a problem you think it is for people in your community—a major problem, a minor problem, or not a problem at all.

	A major problem	A minor problem	Not a problem at all	Total responses (N)
COVID-19	76%	20%	4%	484
Diabetes	73%	24%	3%	484
Weight management	69%	27%	4%	483
Mental health conditions	67%	26%	7%	483
Cancer	65%	29%	5%	480
Heart disease	62%	33%	5%	483
Stroke	46%	47%	7%	480
Suicide	44%	44%	12%	481
Sexually transmitted infections/ diseases	28%	57%	14%	482
Asthma	28%	62%	10%	482
Homicide	23%	56%	21%	481
Unintentional injury	13%	71%	16%	483
Infant mortality	10%	62%	28%	479

APPENDIX F: ADDITIONAL SECONDARY DATA

This appendix includes additional secondary data to supplement key findings.

SOCIAL AND ECONOMIC FACTORS

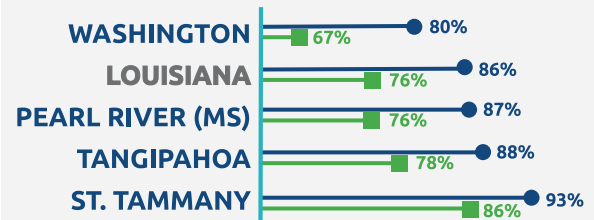
Community	Annual violent crime rate (per 100,000)
Pearl River (MS)	164.2
St. Tammany	170.6
Louisiana	562.3
Washington	754.7
Tangipahoa	862.3

Community	Number of deaths due to homicide (per 100,000)
St. Tammany	5
Pearl River (MS)	6
Washington	7
Tangipahoa	10
Louisiana	13

PHYSICAL ENVIRONMENT

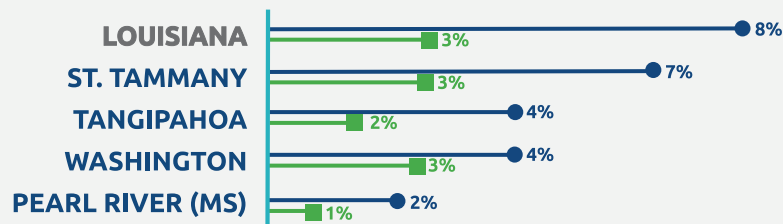
Community	Air pollution-particulate matter (in micrograms per cubic meter)
Tangipahoa	7.0
Washington	8.5
Pearl River (MS)	8.6
Louisiana	8.7
St. Tammany	8.7

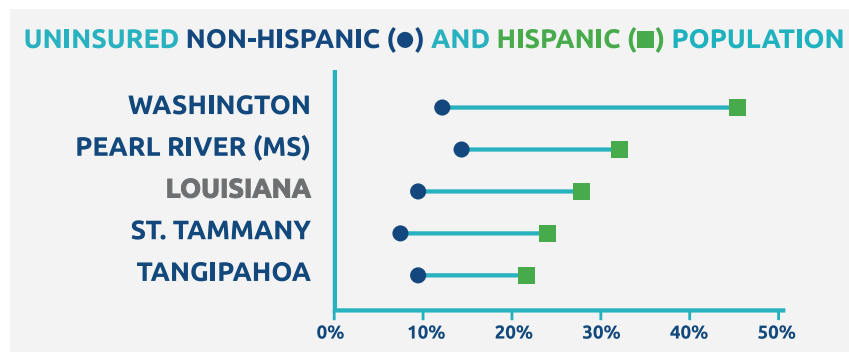
HOUSEHOLDS WITH BROADBAND INTERNET (■) AND HOUSEHOLDS WITH A SMART DEVICE (●)



CLINICAL CARE

POPULATION WHO SPEAKS A LANGUAGE OTHER THAN ENGLISH (●) AND POPULATION WITH LIMITED ENGLISH PROFICIENCY (■)





Note: Total population size and percent of population that is Hispanic differs between each parish (see Table 1). Parishes with smaller Hispanic communities may have a wider margin of error for the indicator percent of Hispanic population that is uninsured.

Community	Dentists (per 100,000 population)
St. Tammany	79
Louisiana	56
Tangipahoa	45
Washington	26
Pearl River (MS)	22

Community	Mental health providers (per 100,000 population)
Louisiana	304
St. Tammany	248
Tangipahoa	222
Washington	154
Pearl River (MS)	54

HEALTH BEHAVIORS AND OUTCOMES

CHRONIC HEALTH CONDITIONS

Community	High blood pressure	High cholesterol	Heart disease	14+ days of poor mental health	14+ days of poor physical health
Pearl River (MS)	42%	42%	9%	16%	16%
St. Tammany	39%	38%	8%	14%	12%
Tangipahoa	39%	37%	8%	17%	15%
Washington	46%	41%	11%	18%	19%
Louisiana	39%	38%	12%	16%	14%

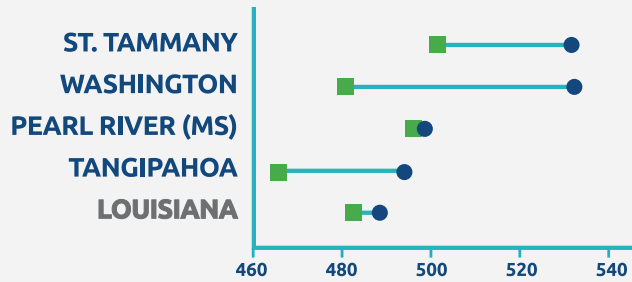
TOP 5 CAUSES OF DEATH (2015-2019)

Community	Top 5 causes of death	Age- adjusted death rate per 100,000
Louisiana	Diseases of heart	211.8
	Malignant neoplasms	172.8
	Accidents	58.5
	Cerebrovascular diseases	46.1
	Chronic lower respiratory diseases	42.8
Pearl River (MS)	Diseases of heart	220.9
	Malignant neoplasms	198.2
	Accident	83.8
	Chronic lower respiratory diseases	82.7
	Alzheimer Disease	50.9
St. Tammany	Diseases of heart	170.4
	Malignant neoplasms	154.0
	Accidents	62.7
	Chronic lower respiratory diseases	43.4
	Cerebrovascular diseases	35.1
Tangipahoa	Diseases of heart	231.6
	Malignant neoplasms	182.5
	Accidents	73.0
	Chronic lower respiratory diseases	50.8
	Alzheimer Disease	49.0
Washington	Diseases of heart	253.2
	Malignant neoplasms	199.4
	Accidents	121.9
	Chronic lower respiratory diseases	71.5
	Cerebrovascular diseases	44.4

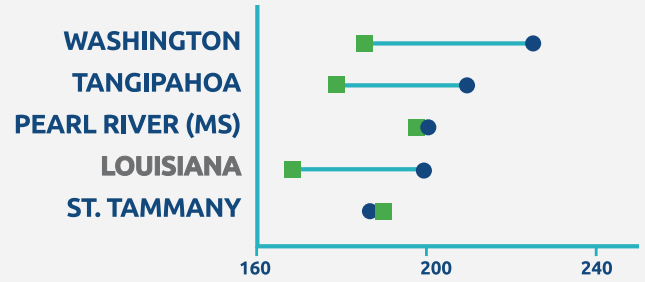
*Preliminary data shows that COVID-19 was a leading cause of death in Louisiana in 2020. Validated data from 2020 is not yet available at the parish level.

CANCER

CANCER INCIDENCE RATES (PER 100,000) ARE LOWER AMONG WHITE RESIDENTS (■) THAN BLACK RESIDENTS (●) IN ALL PARISHES.



CANCER DEATH RATES (PER 100,000) ARE LOWER AMONG WHITE RESIDENTS (■) THAN BLACK RESIDENTS (●) IN ALMOST ALL PARISHES.



Community	Breast cancer, age-adjusted incidence rates per 100,000	Breast cancer, age-adjusted death rates per 100,000
Washington	111.7	26.7
Tangipahoa	112.4	20.0
Louisiana	125.9	22.8
Pearl River (MS)	135.3	22.8
St. Tammany	144.7	19.5

Community	Colon and rectum cancer, age-adjusted incidence rates per 100,000	Colon and rectum cancer, age-adjusted death rates per 100,000
Tangipahoa	41.5	13.0
St. Tammany	42.5	12.2
Louisiana	45.1	16.4
Washington	46.3	18.2
Pearl River (MS)	47.1	21.6

Community	Lung and bronchus cancer, age-adjusted incidence rates per 100,000	Lung and bronchus cancer, age-adjusted death rates per 100,000
St. Tammany	61.7	42.7
Louisiana	66.2	47.5
Tangipahoa	69.1	53.7
Washington	71.0	53.3
Pearl River (MS)	82.0	52.5

Community	Prostate cancer, age-adjusted incidence rates per 100,000	Prostate cancer, age-adjusted death rates per 100,000
Pearl River (MS)	104.6	17.7
St. Tammany	115.8	18.5
Tangipahoa	120.3	23.6
Washington	125.4	22.0
Louisiana	131.2	20.5

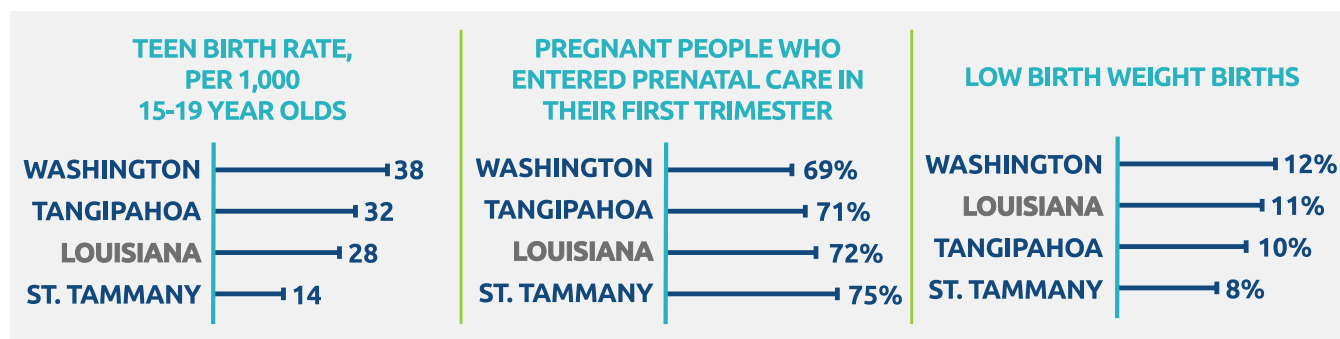
STIs

Community	Chlamydia incidence rate (per 100,000)	Gonorrhea incidence rate (per 100,000)	HIV/AIDS prevalence rate (per 100,000)
St. Tammany	394.4	98.3	218.4
Pearl River (MS)	492.1	150.2	245.2
Washington	769.8	203.7	529.0
Louisiana	774.8	257.1	541.0
Tangipahoa	860.4	301.1	395.2

MATERNAL AND CHILD HEALTH

*Data is from the Louisiana Bureau of Family Health, so it is not available for Pearl River County, MS

Community	Infant mortality rate (per 1,000 live births)	Community	Child death rate (per 100,000)
St. Tammany	5	St. Tammany	46
Louisiana	8	Louisiana	70
Tangipahoa	9	Pearl River (MS)	75
Washington	9	Washington	81
		Tangipahoa	82



APPENDIX G: SECONDARY DATA SOURCES

Section	Focus Area	Measure Description	Source	Year	Accessed via
Demographics	Population	Population estimate trend by parish	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Demographics	Age	% population under 18	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Demographics	Age	% population 65 and over	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Demographics	Race/ethnicity	% non-Hispanic Black	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Demographics	Race/ethnicity	% non-Hispanic White	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Demographics	Race/ethnicity	% non-Hispanic Asian	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Demographics	Race/ethnicity	% Hispanic	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Demographics	Gender	% population identified as female	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Demographics	Rural/urban	% population living in a rural area	Census Population Estimates	2010	County Health Rankings, 2021
Social and Economic Factors	Educational attainment	% population 25 and older with high school graduate or higher	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Social and Economic Factors	Educational attainment	% population 25 and older with Bachelor's degree or higher	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Social and Economic Factors	Violent crime rate	Annual violent crime rate (per 100,000)	FBI Uniform Crime Reports	2015-2019	CARES HQ, 2021
Social and Economic Factors	Homicide death rate	Number of deaths due to homicide per 100,000 population	National Center for Health Statistics- Mortality Files	2013-2019	County Health Rankings, 2021
Social and Economic Factors	Homicide death rate	Number of deaths due to homicide per 100,000 population	National Center for Health Statistics- Mortality Files	2013-2019	County Health Rankings, 2021

Section	Focus Area	Measure Description	Source	Year	Accessed via
Social and Economic Factors	Income	Median household income	Small Area Income and Poverty Estimates	2019	County Health Rankings, 2021
Social and Economic Factors	Households that earn less than the basic cost of living	% households that are below the ALICE threshold (households that earn less than the basic cost of living)	ALICE Threshold, American Community Survey	2007-2018	ALICE Parish Profiles, 2018
Physical Environment	Smart device access	% households with a smart device	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Physical Environment	Internet access	% households with a broadband Internet subscription	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Physical Environment	Housing cost burden	% households that spend 30% or more on housing costs	American Community Survey	2015-2019	CARES HQ, 2021
Physical Environment	Air pollution	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	Environmental Public Health Tracking Network	2016	County Health Rankings, 2021
Physical Environment	Food insecurity	% population who lack access to food	Map the Meal Gap	2018	County Health Rankings, 2021
Clinical Care	Speaks language other than English	% population 5 and older, speaks language other than English	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Clinical Care	Limited English proficiency	% population 5 and older, speaks language other than English, speaks English "less than very well"	US Census Bureau, American Community Survey	2015-2019	American Community Survey, 2021
Clinical Care	Uninsured	% population uninsured	American Community Survey	2015-2019	CARES HQ, 2021
Clinical Care	Primary care physicians	Primary care physicians per 100,000 population	Area Health Resource File, American Medical Association	2018	County Health Rankings, 2021
Clinical Care	Dentists	Dentists per 100,000 population	Area Health Resource File, National Provider Identification File	2019	County Health Rankings, 2021
Clinical Care	Mental health providers	Mental health providers per 100,000 population	CMS, National Provider Identification	2020	County Health Rankings, 2021

Section	Focus Area	Measure Description	Source	Year	Accessed via
Clinical Care	Mental health providers	Mental health providers per 100,000 population	CMS, National Provider Identification	2020	County Health Rankings, 2021
Health Behaviors and Outcomes	STI	Chlamydia incidence (rate per 100,000)	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB	2018	CARES HQ, 2021
Health Behaviors and Outcomes	STI	Gonorrhea incidence (rate per 100,000)	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB	2018	CARES HQ, 2021
Health Behaviors and Outcomes	STI	HIV/AIDS prevalence (rate per 100,000)	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB	2018	CARES HQ, 2021
Health Behaviors and Outcomes	Smoking	% adults current smoking	Behavioral Risk Factor Surveillance System	2018	CDC PLACES, 2021
Health Behaviors and Outcomes	Physical inactivity	% adults with no leisure-time physical activity	Behavioral Risk Factor Surveillance System	2018	CDC PLACES, 2021
Health Behaviors and Outcomes	Obesity	% adults with BMI ≥ 30	Behavioral Risk Factor Surveillance System	2018	CDC PLACES, 2021
Health Behaviors and Outcomes	High blood pressure	% adults who report ever being diagnosed with high blood pressure	Behavioral Risk Factor Surveillance System	2017	CDC PLACES, 2021
Health Behaviors and Outcomes	High cholesterol	% adults who report being diagnosed with high cholesterol	Behavioral Risk Factor Surveillance System	2017	CDC PLACES, 2021
Health Behaviors and Outcomes	Coronary heart disease	% adults who report ever being told by a health professional that they have angina/coronary heart disease	Behavioral Risk Factor Surveillance System	2018	CDC PLACES, 2021
Health Behaviors and Outcomes	Diabetes	% adults who report ever being told by a health professional that they have diabetes	Behavioral Risk Factor Surveillance System	2018	CDC PLACES, 2021
Health Behaviors and Outcomes	Poor mental health	% adults who report 14+ days in past 30 days during which mental health was not good	Behavioral Risk Factor Surveillance System	2018	CDC PLACES, 2021
Health Behaviors and Outcomes	Poor physical health	% adults who report 14+ days in past 30 days during which physical health was not good	Behavioral Risk Factor Surveillance System	2018	CDC PLACES, 2021

Section	Focus Area	Measure Description	Source	Year	Accessed via
Health Behaviors and Outcomes	Life expectancy	Average number of years a person is expected to live at birth	National Center for Health Statistics- Mortality Files	2017-2019	County Health Rankings, 2021
Health Behaviors and Outcomes	Child death rate	Number of deaths among children under age 18 per 100,000 population	National Center for Health Statistics- Mortality Files	2016-2019	County Health Rankings, 2021
Health Behaviors and Outcomes	Drug overdose death rate	Number of drug poisoning deaths per 100,000 population	National Center for Health Statistics- Mortality Files	2017-2019	County Health Rankings, 2021
Health Behaviors and Outcomes	Suicide death rate	Number of deaths due to suicide per 100,000 population	National Center for Health Statistics- Mortality Files	2015-2019	County Health Rankings, 2021
Health Behaviors and Outcomes	Top 5 causes of death	Age-adjusted death rate per 100,000 for top 5 causes of death	CDC WONDER- Underlying Cause of Death	2015-2019	CDC Wonder
Health Behaviors and Outcomes	All cancer- death rate	All cancer, age-adjusted death rates per 100,000	National Cancer Institute/ CDC	2014-2018	National Cancer Institute
Health Behaviors and Outcomes	All cancer - incidence rate	All cancer, age-adjusted incidence rates per 100,000	National Cancer Institute/ CDC	2013-2017	National Cancer Institute
Health Behaviors and Outcomes	Breast cancer- death rate	Breast cancer, age-adjusted death rates per 100,000	National Cancer Institute/ CDC	2014-2018	National Cancer Institute
Health Behaviors and Outcomes	Breast cancer- incidence rate	Breast cancer, age-adjusted incidence rates per 100,000	National Cancer Institute/ CDC	2013-2017	National Cancer Institute
Health Behaviors and Outcomes	Colon and rectum cancer- death rate	Colon and rectum cancer, age-adjusted death rates per 100,000	National Cancer Institute/ CDC	2014-2018	National Cancer Institute
Health Behaviors and Outcomes	Colon and rectum cancer- incidence rate	Colon and rectum cancer, age-adjusted incidence rates per 100,000	National Cancer Institute/ CDC	2013-2017	National Cancer Institute
Health Behaviors and Outcomes	Lung and bronchus cancer- death rate	Lung and bronchus cancer, age-adjusted death rates per 100,000	National Cancer Institute/ CDC	2014-2018	National Cancer Institute
Health Behaviors and Outcomes	Lung and bronchus cancer- incidence rate	Lung and bronchus cancer, age-adjusted incidence rates per 100,000	National Cancer Institute/ CDC	2013-2017	National Cancer Institute

Section	Focus Area	Measure Description	Source	Year	Accessed via
Health Behaviors and Outcomes	Prostate cancer-death rate	Prostate cancer, age-adjusted death rates per 100,000	National Cancer Institute/CDC	2014-2018	National Cancer Institute
Health Behaviors and Outcomes	Prostate cancer-incidence rate	Prostate cancer, age-adjusted incidence rates per 100,000	National Cancer Institute/CDC	2013-2017	National Cancer Institute
Health Behaviors and Outcomes	Teen birth rate	Teen birth rate, per 1,000 15-19 year olds	Bureau of Family Health-Maternal and Child Health Data Indicators	2017-2019	Louisiana Office of Public Health
Health Behaviors and Outcomes	Prenatal care	% entered prenatal care in 1st trimester	Bureau of Family Health-Maternal and Child Health Data Indicators	2017-2019	Louisiana Office of Public Health
Health Behaviors and Outcomes	Low birth weight	% of all births born at a low birth weight	Bureau of Family Health-Maternal and Child Health Data Indicators	2017-2019	Louisiana Office of Public Health
Health Behaviors and Outcomes	Infant mortality rate	Infant mortality rate, per 1,000 live births	Bureau of Family Health-Maternal and Child Health Data Indicators	2017-2019	Louisiana Office of Public Health
Health Behaviors and Outcomes	Infant mortality rate	Infant mortality rate, per 1,000 live births	Bureau of Family Health-Maternal and Child Health Data Indicators	2017-2019	Louisiana Department of Health, COVID-19 Data Dashboard