

Ochsner Medical Center – Northshore

Community Health Needs Assessment

October 2015



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Introduction

Ochsner Medical Center – Northshore, a 165-bed community hospital located in Slidell, LA, in response to its community commitment, contracted with Tripp Umbach to facilitate a comprehensive Community Health Needs Assessment (CHNA). A CHNA was conducted between March 2015 and October 2015 identifying the needs of residents served by Ochsner Medical Center – Northshore. As a partnering hospital of a regional collaborative effort to assess community health needs, Ochsner Medical Center – Northshore collaborated with 15 hospitals and other community-based organizations in the region during the CHNA process. The following is a list of organizations that participated in the CHNA process in some way:

- Louisiana Office of Public Health
- Humana Louisiana
- Director – Medical Student Clerkship
- Louisiana Public Health Institute
- Acadian Ambulance
- St. Tammany EDF
- City of Slidell
- COAST – Slidell Senior Center
- First Baptist Church
- St. Tammany Outreach for the Prevention of Suicide (STOPS)
- Youth Service Bureau – Slidell Client Services & CASA
- St. Tammany Parish Fire District 4
- NAMI
- S.A.L.T
- STPH Community Wellness Center
- The Good Samaritan Ministry
- Covington Police Department
- SMH Foundation Board
- Chief – HIV Division of Infectious Disease
- The McFarland Institute
- Prevention Research Center at Tulane University
- Greater New Orleans Foundation
- Susan G. Komen, New Orleans
- Ochsner Health System
- Cancer Association of Greater New Orleans (CAGNO)
- Methodist Health Foundation
- The Metropolitan Hospital Council of New Orleans (MHCNO)
- Ochsner Medical Center
- Ochsner Baptist Medical Center
- Ochsner Medical Center Kenner
- Ochsner St. Anne General Hospital
- Ochsner Medical Center Westbank
- St. Charles Parish Hospital
- Children’s Hospital of New Orleans
- Touro Infirmary
- University Medical Center
- East Jefferson General Hospital
- West Jefferson Medical Center
- Slidell Memorial Hospital

This report fulfills the requirements of the Internal Revenue Code 501(r)(3); a statute established within the Patient Protection and Affordable Care Act (ACA) requiring that non-profit hospitals conduct CHNAs every three years. The CHNA process undertaken by Ochsner Medical Center – Northshore, with project management and consultation by Tripp Umbach, incorporated extensive input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of public

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health issues, data related to vulnerable populations, and representatives of vulnerable populations served by the hospital. Tripp Umbach worked closely with leadership from Ochsner Medical Center – Northshore and a project oversight committee to accomplish the assessment.

Community Definition

While community can be defined in many ways, for the purposes of this report, the **Ochsner Medical Center – Northshore (OMC- Northshore)** community is defined as 12 zip codes – including 3 parishes/counties that hold a large majority (80%) of the inpatient discharges for the hospital (See Table 1 and Figure 1).

Table 1. Ochsner Medical Center - Northshore Study Area Definition – Zip Codes

City	Zip Code	Parish/County	City	Zip Code	Parish/County
Louisiana			Mississippi		
Covington	70433	St. Tammany Parish	Carriere	39426	Pearl River County
Lacombe	70445	St. Tammany Parish	Picayune	39466	Pearl River County
Mandeville	70448	St. Tammany Parish	Poplarville	39470	Pearl River County
Pearl River	70452	St. Tammany Parish	Bay Saint Louis	39520	Hancock County
Slidell	70458	St. Tammany Parish	Pearlington	39572	Hancock County
Slidell	70460	St. Tammany Parish			
Slidell	70461	St. Tammany Parish			

Figure 1. Map of Ochsner Medical Center - Northshore Study Area



Consultant Qualifications

Ochsner Medical Center - Northshore contracted with Tripp Umbach, a private healthcare consulting firm headquartered in Pittsburgh, Pennsylvania to complete the CHNA. Tripp Umbach is a recognized national leader in completing CHNAs, having conducted more than 300 CHNAs over the past 25 years; more than 75 of which were completed within the last three years. Today, more than one in five Americans lives in a community where Tripp Umbach has completed a CHNA.

Paul Umbach, founder and president of Tripp Umbach, is among the most experienced community health planners in the United States, having directed projects in every state, as well as internationally. Tripp Umbach has written two national guide books¹ on the topic of community health and has presented at more than 50 state and national community health conferences. The additional Tripp Umbach CHNA team brought more than 30 years of combined experience to the project.

¹ A Guide for Assessing and Improving Health Status Apple Book:

http://www.haponline.org/downloads/HAP_A_Guide_for_Assessing_and_Improving_Health_Status_Apple_Book_1993.pdf and

A Guide for Implementing Community Health Improvement Programs:

http://www.haponline.org/downloads/HAP_A_Guide_for_Implementing_Community_Health_Improvement_Programs_Apple_2_Book_1997.pdf

Project Mission & Objectives

The mission of the Ochsner Medical Center - Northshore CHNA is to understand and plan for the current and future health needs of residents in its community. The goal of the process is to identify the health needs of the communities served by the hospital, while developing a deeper understanding of community needs and identifying community health priorities. Important to the success of the community needs assessment process is meaningful engagement and input from a broad cross-section of community-based organizations, who are partners in the CHNA.

The objective of this assessment is to analyze traditional health-related indicators, as well as social, demographic, economic, and environmental factors and measure these factors with previous needs assessments and state and national trends. Although the consulting team brings experience from similar communities, it is clearly understood that each community is unique. This project was developed and implemented to meet the individual project goals as defined by the project sponsors, including:

- ❑ Ensuring that community members, including underrepresented residents and those from a broad-based racial/ethnic/cultural and linguistic background are included in the needs assessment process. In addition, educators, health-related professionals, media representatives, local government, human service organizations, institutes of higher learning, religious institutions, and the private sector will be engaged at some level in the process.
- ❑ Obtaining information on the health status and socio-economic/environmental factors related to the health of residents in the community.
- ❑ Developing accurate comparisons to previous assessments and the state and national baseline of health measures utilizing most current validated data.
- ❑ Utilizing data obtained from the assessment to address the identified health needs of the service area.
- ❑ Providing recommendations for strategic decision-making, both regionally and locally, to address the identified health needs within the region to use as a benchmark for future assessments.
- ❑ Developing a CHNA document as required by the Patient Protection and Affordable Care Act (ACA).

Methodology

Tripp Umbach facilitated and managed a comprehensive CHNA on behalf of Ochsner Medical Center - Northshore — resulting in the identification of community health needs. The assessment process gathered input from persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge and expertise of public health issues. The needs assessment data collection methodology was comprehensive and there were no gaps in the information collected.

Key data sources in the CHNA included:

- ❑ **Community Health Assessment Planning:** A series of meetings was facilitated by the consultants and the CHNA oversight committee consisting of leadership from Ochsner Medical Center - Northshore and other participating hospitals and organizations. This process lasted from March 2015 until August 2015.
- ❑ **Secondary Data:** Tripp Umbach completed comprehensive analysis of health status and socio-economic environmental factors related to the health of residents of the Ochsner Medical Center - Northshore community from existing data sources such as state and county public health agencies, the Centers for Disease Control and Prevention, County Health Rankings, Truven Health Analytics, CNI, Healthy People 2020, and other additional data sources. This process lasted from March 2014 until August 2015.
- ❑ **Trending from 2013 CHNA:** In 2013, Ochsner Medical Center - Northshore contracted with Tripp Umbach to complete a CHNA. The data sources used for the current CHNA were the same data sources from the 2013 CHNA, making it possible to review trends and track changes across the hospital service area. There were several data sources with changes in the definition of specific indicators, restricting the use of trending in several cases. The factors that could not be trended are clearly defined in the secondary data section of this report. Additionally, the findings from primary data (i.e., community leaders, stakeholders, and focus groups) are presented, when relevant, in the executive summary portion. The 2013 CHNA can be found online at: <http://www.ochsner.org/giving/community-outreach/community-health-needs-assessment/>.
- ❑ **Interviews with Key Community Stakeholders:** Tripp Umbach worked closely with the CHNA oversight committee to identify leaders from organizations that included: 1) Public health expertise; 2) Professionals with access to community health related data; and 3) Representatives of underserved populations (i.e., seniors, low-income residents, homeless, youth, residents with disabilities, residents with a behavioral

health diagnosis, women of child bearing age, and residents that are uninsured). Such persons were interviewed as part of the needs assessment planning process. A total of 32 interviews were completed with key stakeholders in the Ochsner Medical Center - Northshore community. A complete list of organizations represented in the stakeholder interviews can be found in the “Key Stakeholder Interviews” section of this report. This process lasted from April 2015 until August 2015.

- **Survey of vulnerable populations:** Tripp Umbach worked closely with the CHNA oversight committee to ensure that community members, including under-represented residents, were included in the needs assessment through a survey process. A total of 115 surveys were collected in the Ochsner Medical Center - Northshore service area; providing a +/- 2.89 confidence interval for a 95% confidence level. Tripp Umbach worked with the oversight committee to design a 32 question health status survey. The survey was offered in English, Spanish, and Vietnamese. The survey was administered by community-based organizations providing services to vulnerable populations in the hospital service area. Community-based organizations were trained to administer the survey using hand-distribution. Surveys were administered onsite and securely mailed to Tripp Umbach for tabulation and analysis. Surveys were analyzed using SPSS software. Geographic regions were developed by the CHNA oversight committee for analysis and comparison purposes:
 - ✓ Northshore Region: St. Tammany Parish, LA and Pearl River, MS.
 - ✓ Southeast Louisiana (SELA) Region: all parishes included in the study (Ascension, East Baton Rouge, Iberville, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany, Terrebonne, and Washington parishes).

Vulnerable populations were identified by the CHNA oversight committee and through stakeholder interviews. Vulnerable populations targeted by the surveys consisted of: seniors, low-income residents (including families), homeless, youth, residents with disabilities, residents with a behavioral health diagnosis, women of child bearing age, and residents that are uninsured. This process lasted from May 2014 until July 2015.

There are several inherent limitations to using a hand-distribution methodology that targeted medically vulnerable and at-risk populations. Often, the demographic characteristics of populations that are considered vulnerable populations are not the same as the demographic characteristics of a general population. For example, vulnerable populations, by nature, may have significantly less income than a general population. For this reason the findings of this survey are not relevant to the general population of the hospital service area. Additionally, hand-distribution is limited by

the locations where surveys are administered. In this case Tripp Umbach asked CBOs to self-select into the study and as a result there are several populations that have greater representation in raw data (i.e., low-income, women, etc.). These limitations were unavoidable when surveying low-income residents about health needs in their local communities.

- ❑ **Identification of top community health needs:** Top community health needs were identified and prioritized by community leaders during a regional community health needs identification forum held on August 3, 2015. Consultants presented to community leaders the CHNA findings from analyzing secondary data, key stakeholder interviews, and surveys. Community leaders discussed the data presented, shared their visions and plans for community health improvement in their communities, and identified and prioritized the top community health needs in the Ochsner Medical Center - Northshore community.

- ❑ **Public comment regarding the 2013 CHNA and implementation plan:** Ochsner Medical Center – Northshore made the CHNA document publicly available on October 3, 2013. Since October 2013, Ochsner Medical Center – Northshore has offered a link on their web page for questions and comments related to the CHNA document. While the main Ochsner Health System CHNA website has been viewed 6,326 times since October 2013; Ochsner Medical Center – Northshore has not yet received any feedback related to the CHNA or 990 documents.

- ❑ **Final CHNA Report:** A final report was developed that summarizes key findings from the assessment process, including the priorities set by community leaders.

Key Community Health Priorities

Louisiana is a state that has not expanded Medicaid, a key component of health reform that extends Medicaid eligibility to a greater population of residents. Many health needs identified in this assessment relate to the lack of Medicaid expansion and the resulting restricted access to health services. Community leaders reviewed and discussed existing data, in-depth interviews with community stakeholders representing a cross-section of agencies, and survey findings presented by Tripp Umbach in a forum setting, resulting in the identification and prioritization of three community health priorities in the Ochsner Medical Center - Northshore community. Community leaders identified the following top community health needs, which are supported by secondary and/or primary data: 1) Access to health services; 2) Behavioral health and substance abuse; and 3) Resource awareness and health literacy. Many of the same underlying factors were identified in the 2013 CHNA, with slightly different priorities. A summary of the top three needs in the Ochsner Medical Center - Northshore community follows:

INCREASING ACCESS TO HEALTHCARE

Underlying factors identified by secondary data and primary input from community leaders, community stakeholders, and resident survey respondents:

1. Residents need solutions that reduce the financial burden of health care.
2. Provider to population ratios that are not adequate enough to meet the need.
3. Need for care coordination.
4. Limited access to healthcare as a result of transportation issues.

Increasing access to healthcare is identified as the number one community health priority by community leaders. Access to health care is an ongoing health need in rural areas across the U.S. Apart from issues related to insurance status and the Medicaid waiver², access to health care in the hospital service area is limited by provider to population ratios that cause lengthy wait times to secure appointments, location of providers, transportation issues, limited awareness of residents related to the location of health services, as well as preventive practices.

Findings supported by study data:

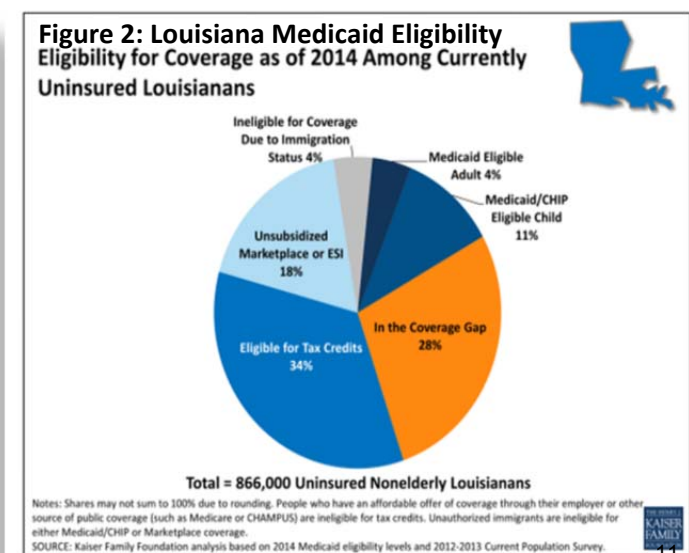
Residents need solutions that reduce the financial burden of health care:

² In 2015, there are multiple Medicaid Waivers operating in Louisiana. Residents are qualify for one of the Medicaid Waivers whereby receiving health services from health providers which accept the Medicaid Waiver, and are then eligible for Medicaid reimbursement.

Socio-economic status creates barriers to accessing health care (e.g., lack of health insurance, inability to afford care, transportation challenges, etc.), which typically have a negative impact on the health of residents. Often, there is a high correlation between poor health outcomes, consumption of healthcare resources, and the geographic areas where socio-economic indicators (i.e., income, insurance, employment, education, etc.) are the poorest. In the needs assessment completed by Ochsner Medical Center - Northshore in 2013, community stakeholders and focus group participants identified access to health care and medical services (i.e., primary, preventive, and mental) as a need in the hospital service area.

- In findings from the 2013 CHNA, stakeholders perceived there was a lack of insurance coupled with increased poverty rates.
- During the 2015 study, the Ochsner Medical Center - Northshore study area has an average annual household income of \$71,672, there is a contrast between the socio-economic level of Pearl River, MS and St. Tammany Parish, LA. For example, a larger percentage of residents in Pearl River, MS make less than \$25,000 a year when compared to the annual household incomes of residents in St. Tammany Parish, LA (33.9% and 19.9%, respectively).
- There are indications in the secondary data that the geographic pockets of poverty align with data showing fewer providers and poor health outcomes in the same areas. For example, residents in zip code areas with higher CNI scores (greater socio-economic barriers to accessing healthcare) tend to experience lower educational attainment, lower household incomes, higher unemployment rates, as well as consistently showing less access to health care due to lack of insurance, lower provider ratios, and consequently poorer health outcomes when compared to other zip code areas with lower CNI scores (fewer socio-economic barriers to accessing healthcare).

- There are also pockets of poverty in St. Tammany Parish, LA that may go unnoticed due to the affluence found in most of the parish. For example, single parent homes are likely to be living in poverty with at least one-quarter of these homes below the federal poverty rate throughout the service area. In Poplarville, LA (39470), as many as two-thirds (73.3%) of single parent homes earn incomes below federal poverty rates.
- The overall CNI score for the Ochsner Medical Center - Northshore service area remained the same from 2011 to 2015 (3.4); a score that is higher than the median for the scale (3.0), indicating more than average socio-economic barriers to accessing health care across the service area. Nine of the 12 zip codes (75%) in the hospital service area are above 3.0. The Ochsner Medical Center - Northshore service area contains some of the highest CNI scores, across the entire Ochsner Health System, with 4.4 (Bay Saint Louis-39520) being the highest. While a 4.4 CNI score indicates significant barriers to accessing health care, it is not the highest CNI score in the area served by the Ochsner Health System. It will be important to take a close look at the higher CNI score areas to better understand the barriers to accessing health care. The highest scores in the Ochsner Medical Center - Northshore service area are located in Bay Saint Louis (39520), Picayune (39466), Poplarville (39470), and Slidell (70458) (4.4, 4.2, 4.0, and 4.0, respectively). These areas have the highest rates of poverty, unemployment, uninsured, and lowest rates of educational attainment.
- The data suggest there is an increase in barriers to accessing healthcare for some of the hospital service area. A closer look at the changes in scores shows that nine zip codes saw increases in barriers since 2011; three remained unchanged or showed improvement. Of the three unchanged or improved zip codes, one was an area with high barriers that remained unchanged. The change in CNI scores may be slightly inflated due to the lack of Medicaid expansion; causing higher uninsured rates than national norms. However, when socio-economic indicators measured by CNI are compared at the zip code level from 2011 to 2015, we see a pattern of increased rates of poor socio-economic measures. Socio-economic indicators (i.e., income, culture, education, insurance, and housing) are disintegrating at a rapid pace in areas that previously showed better socio-economics and there is little change in areas where socio-economic status was already poor.
- Community leaders and stakeholders noted that poverty and homelessness appears to have increased in Slidell, LA, where Ochsner Medical Center - Northshore



is located. This is apparent in the increased CNI score for Slidell, LA (70458) from 2.8 to 4.0 (an increase of 1.2) indicating significant increases in barriers to accessing healthcare. Community leaders discussed a development process taking place on the outskirts of 70458, which may be drawing the younger, professional residents away; leaving an aging population with lower-fixed incomes and residents that cannot afford to relocate.

Louisiana is a state that has chosen not to expand Medicaid, a key component in healthcare reform that extends the population that is eligible for Medicaid insurance coverage. Kaiser Family Foundation estimates that 32% of uninsured, nonelderly Louisiana residents (866,000 people) remain ineligible for any insurance coverage or tax credits due to the lack of Medicaid expansion. The primary pathway for uninsured residents to gain coverage is the federally administered Marketplace where 34% (approximately 298,000) of uninsured Louisianans become eligible for tax credits. Though residents earning between 19% to 100% Federal Poverty Line (FPL) or \$4,476 to \$23, 550/year for a family of four do not qualify for any assistance at all.⁴

- In the findings of the 2013 CHNA, many focus group participants felt that healthcare may have been difficult for some residents to secure due to limited outreach programs, costly procedures, and a lack of health insurance coverage. Focus group participants also felt health insurance was difficult for some residents to afford, at that time, due to costly premiums and higher co-pays for medical care. Participants felt Medicare and supplemental insurance are costly and can be unaffordable for some residents that may be on a fixed income. Additionally, participants felt some residents may not be able to afford health insurance due to limited financial resources and the need to pay for basic necessities.
- Today, the uninsured rate for the hospital service area (11.9%) is less than the state (19%); there is one zip code that has higher rates of uninsured residents than the state and the nation (i.e., Bay Saint Louis (39520)). Bay Saint Louis (39520) also shows the highest rates of unemployed (15.5%), and limited English speaking residents (1.5%) found in the service area. Latino residents are more likely to be uninsured than their counterparts in St Tammany Parish (28.41% to 12.96%, respectively) and Pearl River, MS (27.54% to 20.87%, respectively). Additionally, we see the highest uninsured rates among residents reporting “Some other race” across the study area (St. Tammany Parish, LA and Pearl River, MS).
- During the community planning forum, community leaders discussed residents in areas with high rates of poverty, as well as seniors that are not always able to afford prescription medication (e.g., uninsured, donut insurance coverage, etc.) without some form of assistance. Leaders and stakeholders indicated that there are very few resources available to subsidize prescription medications. Community leaders and

⁴ Source: Kaiser Family Foundation analysis based on 2014 Medicaid eligibility levels and 2012-2013 Current Population Survey

stakeholders addressed the limitations of the Medicaid Waiver, which does not cover hospitalization, prescription medications, or specialty care. As a result, many community-based clinics do not have access to specialty diagnostic services and many treatment options. Among the results of the 2013 CHNA, stakeholders felt there is a lack of access to affordable medication; resulting in some residents not being able to afford prescription medications to control chronic illness.

- Today, the percent of insured population receiving Medicaid benefits (2009-2013) was highest in Pearl River, MS (26.52%); followed by St. Tammany Parish, LA (16.69%) as compared to the Louisiana (25.70%), Mississippi (28.22%) and national (20.21%) rates. If physicians are not accepting new Medicaid patients, it is possible that many patients in the hospital service area are not able to secure primary care even though they are insured.
- During the 2013 CHNA, focus group participants felt the cost of medical care, including medical prescriptions, could be unaffordable for some residents due to costly procedures. Additionally, some focus group participants perceived Medicare/Medicaid as not being comprehensive enough to cover the cost of medical care because residents receive medical bills for the cost of services that are not covered by Medicare/Medicaid. Participants believed patients may, at times, resist care due to costly fees/co-pays and uninsured patients are less likely to seek medical care, which participants believed may result in untreated illness and a poorer health status. Today, uninsured and underinsured residents may also be resisting seeking health services due to the cost of uninsured care, unaffordable copays and/or high deductibles. This trend was apparent in surveys collected with 38.6% of respondents reporting less than \$29,999 annual household income. A higher percentage of respondents indicated that they could not see a doctor in the last 12 months because of cost (20%) when compared to the state average (18.9%). Additionally, 16.5% of respondents reported not taking medications as prescribed in the last 12 months due to cost. Stakeholders also felt that residents in poverty are less likely to secure health services prior to issues becoming emergent due to a lack of resources (i.e., time, money, transportation, etc.) and a focus on meeting basic needs, leading to a lower prioritization of health and wellness.

Provider to population ratios that are not adequate enough to meet the need:

Community leaders discussed that specialty care is not always available (i.e., pediatric neurosurgery, pediatric cardiology, endocrinology, trauma unit, diagnostics, and treatment). There are additional challenges to accessing specialty care for residents that are uninsured, Medicaid recipients, living in the most rural areas, and/or residents that live in communities with the highest rates of poverty.

- In 2013, stakeholders and focus group participants felt there was a shortage of healthcare providers throughout the region causing a lack of timely access to healthcare providers, a lack of access to specialty services/providers, and over use of emergency medical care (i.e., non-emergency issues). Some focus group participants believed that there was an exodus of local physicians from their communities at that time. Stakeholders felt primary care in the Greater New Orleans area was a consistent issue due to huge caseloads, not enough physicians to see them all, and a lack of care coordination. Additionally, focus group participants were under the impression there are not enough healthcare professionals or clinics to meet the demand for under/uninsured medical care. Focus group participants believed many residents are seeking pediatric medical care outside of their community and many were under the impression, due to lack of resources, that follow-up care and/or in-home care is not being provided to some residents upon discharge from an inpatient stay at local hospitals.
- During the 2015 study, community leaders and stakeholders discussed the uncertainty in the medical industry and low reimbursement rates that drive the lack of services for Medicaid populations. Leaders discussed the lack of providers in Northshore communities accepting new patients with Medicaid (e.g., primary care practices, pediatric care, psychiatric care, orthodontists, etc.). Leaders discussed the retirement of one physician that served a large Medicaid population in Northshore communities leaving many families and individuals without a local medical provider that 1) Accepts Medicaid and 2) Is accepting new patients.
- Community leaders felt that there is a general lack of resources to meet the needs of residents with complex health needs and co-occurring health issues, which are often found among populations with higher poverty rates. The physician workforce is aging and many physicians are retiring, leading to a decrease in the number of physicians available. The primary care physician ratio in Pearl River, MS (28.94 per 100,000 pop.) is lower than St. Tammany Parish, LA, the state, and the national rates (86.6, 86.66, and 78.92 per 100,000 pop., respectively). However, the rates of Federally Qualified Health Centers (FQHC) was highest in Pearl River, MS (1.79 per 100,000 pop.) when compared to St. Tammany Parish, LA (0.86 per 100,000 pop.), with Mississippi, Louisiana, and national rates at 6.2, 2.1, and 1.92 per 100,000 pop., respectively. Stakeholders noted that there are FQHC clinics in St. Tammany Parish, LA (e.g., Covington, Slidell, etc.), though under/uninsured residents and Medicaid beneficiaries have limited options for local primary care providers in many Northshore communities due to the location of resources, size of the parish, and distance residents must travel. Community leaders indicated that there are gaps in available services in the hospital service area (i.e., palliative care services for Medicaid beneficiaries, pediatric neurosurgery, pediatric cardiology, endocrinology, trauma unit, diagnostics, care coordination, after-hours

specialty care, HIV services, prescription assistance, primary care (rural areas), and community-based supportive services for seniors).

- When asked if they felt a variety of health services were available to them or their family, at least one in 10 survey respondents indicated they did not feel as though they have access to the following: vision services (18.8%), dental services (15.7%), cancer screening (15.7%), medical specialist (13%), primary care (12.3%), pediatric & adolescent health (10.8%), and healthy foods (10.3%).
- While not as clear an indication of restricted access to healthcare as provider rates, hospitalizations rates that are higher than expected are usually driven by access issues in the community. The end result is hospitalizations for illnesses that could have been resolved prior to becoming emergency situations. In the Ochsner Medical Center - Northshore service area, there are higher rates when compared to the state and national rate across six of the fourteen PQI measures (i.e., COPD, or adult asthma; asthma in younger adults; congestive heart failure; perforated appendix; bacterial pneumonia; and urinary tract infection). The hospitalization rate for perforated appendix is the highest (387.10) when compared to state (322.43) and national (323.43) norms. The State of Louisiana has higher hospitalization rates when compared to the national trends for many of the PQI measures. The greatest difference in hospitalization rates is between the hospital service area, the state, and the nation are for congestive heart failure (CHF) (416.00, 404.11, and 321.38 respectively). When considering pediatric access to health services, the Pediatric Quality Indicators (PDI) are similar to the higher hospitalization rates in adult populations (i.e., diabetes, short-term complications- ages 6-17 years old, perforated appendix in ages 1-17 years old, and urinary tract infection- ages 3 months to 17 years old). Three of the five PDI measures show higher hospitalization rates for children than the national trends. Perforated appendix hospitalizations among children (one to 17 years old) in the hospital service area shows the highest rates when compared to St. Tammany Parish, LA, state (LA and MS), and national rates (400.00, 361.11, 322.09, and 344.22, respectively).

Need for care coordination:

Leaders discussed the need for care coordination for residents. Specifically, leaders discussed the importance of ensuring patients have access to treatment methods prescribed by the physician (i.e., medications, healthy nutrition, etc.) and that providers follow up with patients to improve implementation of treatment recommendations.

- In the 2013 CHNA, stakeholders believed hospital competition creates barriers to coordination of care throughout the region. Focus group participants were also concerned with the level of coordination of medical care offered by local medical providers at that time. Many focus group participants were under the impression, due

to lack of resources, that follow-up care and/or in-home care was not being provided to some residents upon discharge from an inpatient stay at local hospitals.

- During this study, stakeholders discussed the lack of care coordination provided for uninsured, underinsured, Medicaid beneficiaries, and senior residents who are seeking care in inappropriate settings like the emergency room. Several stakeholders mentioned the benefits of home healthcare and palliative care for care coordination, though Medicaid eligible residents, reportedly, are not often approved for home health services.
- Community leaders discussed some of the barriers to efficient care coordination related to the perceptions that health staff have about HIPAA regulations and information sharing. Leaders discussed that many times staff are not familiar with HIPAA regulations and fear penalty for doing the wrong thing regarding the management of a patient's health information which causes a resistance to share any information at all.

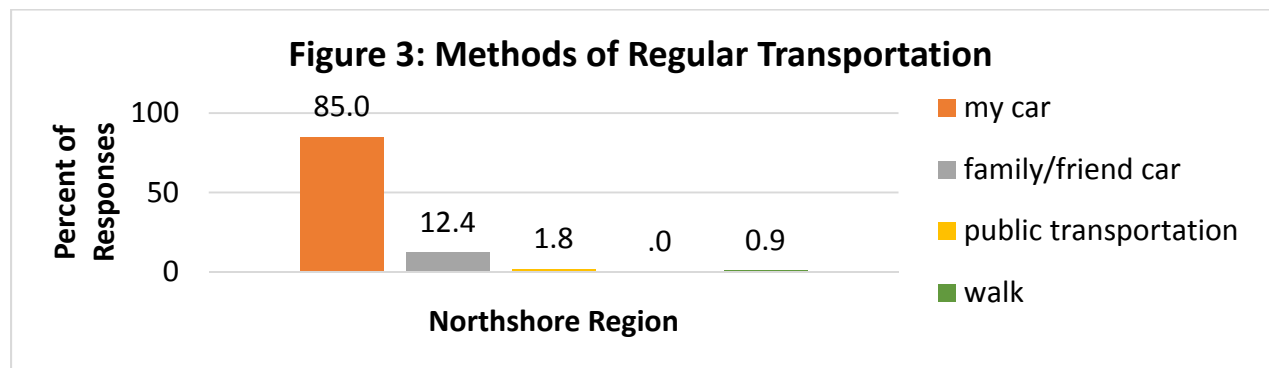
Limited access to healthcare as a result of transportation issues.

Transportation was discussed as a barrier to accessing health services for residents in the most rural Northshore communities with the highest poverty rates.

- In 2013, the absence of readily, accessible, convenient transportation was causing limited access to medical care for some residents because they could not get to and from their medical appointments. Many focus group participants felt the limited public transportation resulted in residents requiring the use of emergency medical transportation (EMT) services more often, which may have increased the cost of medical care and possibly over-utilization of emergency rooms for non-emergency related issues. Additionally, focus group participants believed that public transportation provided in some of their communities had restrictive regulations such as limited weekday hours, no weekend service, limited circulation, and 48-hour advanced scheduling. Participants felt those restrictions limited the convenience and availability of public transportation which ultimately affected their ability to access services at that time.
- Today, stakeholders also acknowledge that the lack of adequate transportation is one of the greatest barriers to accessing healthcare for seniors and residents in the most rural areas (i.e., Bogalusa, LA and Washington Parish). Many of the health service providers and FQHCs exist in the areas where population is the densest (i.e., Covington and Slidell) and residents of the more rural areas must travel further to secure health services. Transportation challenges in Northshore communities impact the health of residents in a variety of ways by limiting the access residents have to healthy options like medical providers and grocery stores with fresh foods. For this reason, stakeholders indicated that rural residents often delay seeking health services until the issue becomes an

emergency and potential outcomes are often poor. The limitations of transportation may restrict the access residents have to employment opportunities, which could be a barrier to insurance and financial stability. While each parish has a van that provides transportation, stakeholders noted that it is by appointment only and costly to maintain.

- While the general population shows average or below average rates of households with no motor vehicles when compared to state (8.48%) and national (9.07%) norms; 15.1% of survey respondents indicated that their primary form of transportation is some method other than their own car. In an area as rural as the Northshore, transportation becomes a stumbling block to accessing health services due to the limited public transportation options and travel required for many residents to see a health professional.



Stakeholders noted that the need for accessible healthcare among medically vulnerable populations (e.g., uninsured, low-income, Medicaid insured, etc.) has an impact on the health status of residents in a variety of ways and often leads to poorer health outcomes. Some of the noted effects are:

- ✓ Higher cost of healthcare that results from hospital readmissions and increased usage of costly emergency medical care.
- ✓ Residents delaying medical treatment and/or non-compliant due to the lack of affordable options and limited awareness of what options do exist.
- ✓ Poor outcomes in adult, maternal, and pediatric care due to limited care coordination and lack of patient compliance.

Increasing access to healthcare is an issue that carries forward from previous assessments, though some progress has been made by increasing access to community-based health services through the growth of FQHCs and urgent care clinics. It will be very important to further understand the access issues of low-income communities in the hospital service area. Primary

data collected during this assessment from community leaders and residents offered several recommendations to increase access to healthcare. Some of which included:

- **Physician recruitment and retention:** Community leaders felt that there is a need to recruit more physicians that will accept Medicaid and specialty providers to Northshore communities. Additionally, leaders felt that hospitals could facilitate additional training in specialty areas for current staff to diversify the services offered in the community.
- **Offer health services in rural areas where the rate of poverty is high:** Leaders discussed increasing access to health services in communities where the poverty rates are high and transportation may be an issue. Leaders discussed mobile health services and satellite sites with limited hours as two models that may increase the availability of health services in underserved areas.
- **Increase collaboration in the community to meet needs:** Leaders discussed the need to increase collaboration among hospitals, community-based organizations, and community-based providers. The discussion focused on the need to develop creative solutions to challenging problems.

ADDRESSING BEHAVIORAL HEALTH ISSUES INCLUDING SUBSTANCE ABUSE

Underlying factors identified by secondary data and primary input from community leaders, community stakeholders, and resident survey respondents:

1. There are not enough providers to meet the demand and the spectrum of services available in most areas is not comprehensive enough to treat individual needs.
2. Care coordination is needed among behavioral health, substance abuse, and primary care/medical providers.

Community leaders at the community forum identified addressing behavioral health needs as a top health priority. Community leaders, stakeholders, and survey respondents agree that behavioral health and substance abuse is a top health priority. Discussions focused primarily on the limited number of providers, the need for care coordination, and the fact that individuals with behavioral health and substance abuse needs often have poor health outcomes.

Findings supported by study data:

There are not enough providers to meet the demand and the spectrum of services available in most areas is not comprehensive enough to treat individual needs:

- During the needs assessment conducted by Ochsner Medical Center - Northshore in 2013, Stakeholder's perceived access was becoming increasingly difficult, especially among the mental health and indigent population. Focus group participants were under

the impression that mental health services were limited and lacking the capacity to meet the demand for services due to recent closures and funding cuts.

- While the 2015 CHNA Needs assessment was being conducted, [St. Tammany] Parish leaders say [there are] two common places for people desperately needing [behavioral health] help to end up.

“We have people who are sent to jail who should be being treated in a facility, we have people going to emergency rooms, in there for 72 hours and then sometimes not a lot of treatment is going on. It's just a process," said Parish President Pat Brister.⁵

- Data suggests there is a need for behavioral health services

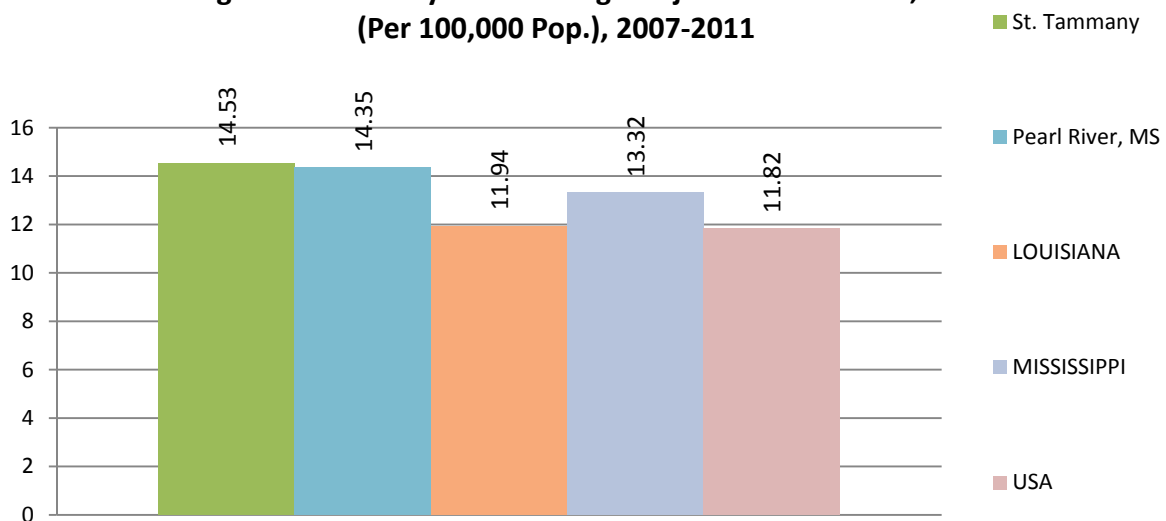
Table 2: County Health Rankings –Mental Health Providers (Count/Ratio) by Parish

Measure of Mental Health Providers*	LA	St. Tammany Parish	Pearl River, MS
Mental health providers (count)	5386	339	22
Mental health providers (ratio Population to provider)	859:1	715:1	2,503:1

*County Health Ranking 2015

- Pearl River, MS shows a significantly larger population to provider ratio (2,503 pop. for every 1 mental health provider) than St. Tammany Parish, LA and the state (715 and 859 pop. per provider respectively). However, there is no measure of the providers that are accepting under/uninsured and Medicaid eligible behavioral health patients. Both primary and secondary data suggests there is a need for additional behavioral health services in both geographical areas.

Figure 4: Mortality - Suicide- Age-Adjusted Death Rate, (Per 100,000 Pop.), 2007-2011



⁵ Source: St. Tammany creating 'one-stop shop' for mental health services (accessed 9/23/15-<http://www.wvltv.com>)

*Source: Community Commons. 06/08/2015

- St. Tammany Parish, LA (14.53 per 100,000 pop.) and Pear River, MS (14.35 per 100,000 pop.) report rates of age-adjusted mortality due to suicide higher than LA, MS, and the nation (11.94, 13.32, and 11.82 per 100,000 pop., respectively) The Healthy People 2020 goal is for mortality due to suicide to be less than or equal to 10.2 per 100,000 population; the study area shows higher rates than this HP2020 Goal.
- More than one in five (21.4%) of survey respondents indicated that they have received mental health treatment or medication at some time in their lives. When asked to report health conditions that they had ever been diagnosed with by a health professional, survey respondents from the Northshore region reported higher diagnosis rates than the SELA region, the state and the nation for depressive disorder (25.5% vs. SELA- 21.5%, LA- 18.7%, and U.S. - 18.7%).
- A majority of stakeholders (80%) identified a health need related to behavioral health and/or substance abuse. Stakeholders discussed the lack of behavioral health and substance abuse resources in general and many noted that behavioral health and substance abuse needs are highest in communities with the highest rates of poverty. Stakeholders felt that there is a connection between environmental factors and the prevalence of behavioral health and substance abuse, a sentiment that was echoed in the previous 2013 CHNA study.

*“Katrina has had a major impact on the mental health of residents- the stress, and displacement of residents has had an impact and the response has not been adequate to meet the need.” ~
First Responder*

- Community leaders and stakeholders alike discussed the gaps in the available services for adults and children related to behavioral health and substance abuse diagnosis and treatment. Services that were noted as being inadequate in Northshore communities were inpatient crisis intervention, outpatient counseling services, and school-based screening. There is reportedly a resistance among behavioral health providers to accept Medicaid insurance and the cost of uninsured behavioral health services is unaffordable for residents who are

Medicaid eligible. While there are inpatient beds and outpatient services available, stakeholders indicated that they are not adequate to meet the demand for behavioral health and substance abuse services in Northshore communities. In recent years, there has been a decrease in the number of inpatient beds and crisis services have declined. Outpatient services have improved but, often have lengthy waiting lists for diagnostic services as well as ongoing treatment.

- More than half (51.9%) of survey respondents selected “Drugs and Alcohol” as one of the top five health concerns in their communities. Stakeholders felt that the culture of New Orleans and its tourist industry encourages substance abuse and identified tobacco, alcohol, and marijuana as the most common substances being abused. Other substances noted were heroin and prescription pain medications. Stakeholders also felt that substance abuse is often a way for residents to self-medicate or cope with behavioral health issues including stress and serious mental illness (e.g., bipolar, schizophrenia, etc.).

Care coordination is needed among behavioral health, substance abuse, and primary care/medical providers:

- Among the findings of the 2013 CHNA, focus group participants believed mental health services throughout the region were disjointed and at times difficult to navigate. Some focus group participants believed there was a disconnect in the communication between mental health providers, and physicians, and/or the school system. Focus group participants gave the impression that some residents in the region may not have been aware of available mental health services and believed , at the time, it resulted in patients suffering from mental illnesses may not have been getting their needs met.
- Today, community leaders discussed a fractured behavioral health system where residents are not seeking and receiving effective, ongoing behavioral health and/or substance abuse treatment. Residents may be seen in the emergency room for crisis behavioral health and then have little follow up afterward. Care coordination is needed among behavioral health, substance abuse, and physical health providers.

Stakeholders noted that behavioral health and substance abuse has an impact on the health status of residents in a variety of ways and often leads to poorer health outcomes. Several of the noted effects of behavioral health and substance abuse are:

- ✓ Incarceration rates among residents with behavioral health and/or substance abuse diagnosis is high.
- ✓ Residents with a history of behavioral health and substance abuse do not always practice healthy behaviors and may be non-compliant with necessary medical treatments (e.g., HIV treatments).

Behavioral health has remained a top health priority and appears to be a theme in each data source included in this assessment. The underlying factors include: care coordination and workforce supply vs. resident demand. Primary data collected during this assessment from community leaders and residents offered several recommendations to address the need for behavioral health and substance abuse services. Some of which included:

- **Integrate behavioral health and primary care:** Leaders felt that primary care providers could begin screening for behavioral health symptoms and discussing these symptoms and resources with patients in order to decrease the stigma of behavioral health diagnoses and increase screening rates.

RESOURCE AWARENESS AND HEALTH LITERACY

Underlying factors identified by secondary data and primary input from community leaders, community stakeholders and resident survey respondents:

1. A lack of awareness about health resources
 - ✓ System navigation
2. Presence of barriers related to literacy and awareness
 - ✓ Need to increase educational outreach to vulnerable populations

Improving resource awareness and health literacy is identified as a top health priority for the Ochsner Medical Center - Northshore service area. While there has been some development in health services since the last CHNA in 2013; there is limited awareness among residents regarding where to secure services and the health provider landscape remains largely disjointed. According to stakeholders and community leaders, efforts to better connect service providers (e.g., the health information exchanges, electronic medical records, etc.) are in the earliest stages of development. There is agreement across data sources in support of improving resource awareness, health literacy of residents, and cultural sensitivity of providers in the hospital service area.

Findings supported by study data:

A lack of awareness about health resources:

- In the 2013 CHNA, stakeholders believed the healthcare system was fractured and there was a lack of consistent information and human resources available to help with navigation of the system. Stakeholders perceived there was not a system that was universally accessible or easy to navigate due to all of the different ways one could obtain healthcare and mental health care at that time.
- During the current assessment, stakeholders discussed a shift in the way health services are provided from the charity care model before Katrina to the community-based FQHC model providing primary care to residents through a network of FQHCs. One of the most discussed barriers to accessing health services in the study area was the awareness residents had regarding what services are available and where they are located. Residents are not securing health services in the proper locations because they are not

aware of new clinics and services that may be available to them. The result has reportedly been an over utilization of the emergency rooms for primary care and behavioral health concerns.

- Community leaders felt that it can be difficult to identify which physicians will accept Medicaid. Leaders discussed the difficulty this poses in referrals as well as residents’ ability to secure community-based primary care services.
- Community leaders and stakeholders felt that residents are not securing health services in the proper locations because they are not aware of where health services are located and what services are available at each location. There were further discussions by both sources about residents that may not always know how to utilize insurances once they are insured, and may continue to seek more costly care in the emergency room due to the need for health services that are more convenient.
- Stakeholders also indicated that residents are not always practicing prevention (e.g., screenings) due to a lack of awareness about healthy preventive practices. Stakeholders also pointed to education in charter schools as an issue related to the access youth have to education about reducing the spread of STIs and HIV.

Table 3: Survey Responses – Preferences for Receiving Information about Healthcare

Preferred Method	Respondents (%)
Newspaper	26.4%
TV	33.0%
Internet	33.1%
Word of Mouth	61.0%
Radio	12.4%
Library	3.7%
Clinics	18.8%
Faith/Religious Organizations	20.3%
Call 2-1-1	3.9%
Other	5.4%

- One of the greatest challenges in increasing health literacy and resources awareness will be the method many respondents prefer to use when receiving information about health services (i.e., 61% prefer word of mouth).

Presence of barriers related to literacy and awareness:

- Community leaders and stakeholders discussed the limited awareness of residents with the lowest educational attainment in their communities; noting that the capacity to

advocate for themselves is greatly reduced as a result. Stakeholders noted that there is a high correlation between lower educational attainment and a lower level of health literacy; indicating that residents are not always being assessed for their level of understanding. There is evidence of areas where educational attainment is low i.e., Pearl River (70452), Pearlinton (39572), Poplarville (39470), and Lacombe (70445) where more than 20% of residents did not earn a high school diploma (22.2%, 20.9%, 20.9%, and 20.1% respectively). Additionally, stakeholders felt that the movement toward electronic medical records, the use of online applications, and internet based systems may leave some residents that do not have access to computers and/or whom may be unfamiliar with computers without access to relevant health information.

Health literacy can impact the level of engagement with health providers at every level; limiting preventive care, emergent care, and ongoing care for chronic health issues; leading to health disparities among vulnerable populations with limited literacy skills and limited computer literacy.

- ✓ There are socio-economic and racial disparities apparent in secondary data related to health outcomes (i.e., HIV/AIDS, low birth weight, infant mortality, heart disease, cancer, colon cancer, prostate cancer, stroke (Pearl River, MS), and homicide).

Primary data collected during this assessment from community leaders and residents offered several recommendations to improving resource awareness and health literacy. Some of which include:

- **Increase awareness through outreach education with providers and residents alike:** Community leaders indicated that there is a need to increase the level of education and outreach being provided in the community to health service providers as well as residents. Leaders felt the providers could benefit from education regarding available services, the use of HIPAA regulations, behavioral health symptoms, elder abuse, and sensitivity. Leaders felt that residents could benefit from additional education and awareness regarding preventive practices, available services, appropriate use of healthcare resources, the risks of HIV, end of life decisions, and behavioral health symptoms.
- **Increase access to information about what services are available:** Leaders discussed the development of a searchable data warehouse of resources that would be updated on a regular basis to ensure accuracy of information.

Community Health Needs Identification Forum

The following qualitative data were gathered during a regional community planning forum held on August 3rd in Slidell, LA. The community planning forum was conducted with community leaders representing the Ochsner Medical Center - Northshore primary service area. Community leaders were identified by the CHNA oversight committee for Ochsner Medical Center - Northshore. The community forum was conducted by Tripp Umbach consultants and lasted approximately two hours.

Tripp Umbach presented the results from secondary data analysis, community leader interviews, and community surveys, and used these findings to engage community leaders in a group discussion. Community leaders were asked to share their vision for the community they represent, discuss an action plan for health improvement in their community, and prioritize their concerns. Breakout groups were formed to pinpoint, identify, and prioritize issues/problems that were most prevalent and widespread in their community. Most importantly, the breakout groups were charged to identify ways to resolve their community's identified problems through innovative solutions in order to bring about a healthier community.

Group Recommendations:

The group provided many recommendations to address community health needs and concerns for residents in the Ochsner Medical Center - Northshore service area. Below is a brief summary of the recommendations:

- ***Increase awareness through outreach education with providers and residents alike:*** Community leaders indicated that there is a need to increase the level of education and outreach being provided in the community to health service providers as well as residents. Leaders felt the providers could benefit from education regarding available services, the use of HIPAA regulations, behavioral health symptoms, elder abuse, and sensitivity. Leaders felt that residents could benefit from additional education and awareness regarding preventive practices, available services, appropriate use of healthcare resources, the risks of HIV, end of life decisions, and behavioral health symptoms.
- ***Physician recruitment and retention:*** Community leaders felt that there is a need to recruit more physicians that will accept Medicaid and specialty providers to Northshore communities. Additionally, leaders felt that hospitals could facilitate additional training in specialty areas for current staff to diversify the services offered in the community.
- ***Integrate behavioral health and primary care:*** Leaders felt that primary care providers could begin screening for behavioral health symptoms and discussing these symptoms

and resources with patients in order to decrease the stigma of behavioral health diagnoses and increase screening rates.

- **Offer health services in rural areas where the rate of poverty is high:** Leaders discussed increasing access to health services in communities where the poverty rates are high and transportation may be an issue. Leaders discussed mobile health services and satellite sites with limited hours as two models that may be able to increase the availability of health services in underserved areas.
- **Increase access to information about what services are available:** Leaders discussed the development of a searchable data warehouse of resources that would be updated on a regular basis to ensure accuracy of information.
- **Increase collaboration in the community to meet needs:** Leaders discussed the need to increase collaboration among hospitals, community-based organizations, and community-based providers. The discussion focused on the need to develop creative solutions to challenging problems. For example, leaders discussed allocating a percentage of hospital beds that are not in use for homeless shelter beds each night.

Problem Identification:

During the community planning forum process, community leaders discussed regional health needs that centered around three themes. These were (in order of priority assigned):

1. **Access to Health Services**
2. **Behavioral Health and Substance Abuse**
3. **Resource Awareness and Health Literacy**

The following summary represents the most important topic areas, within the community, discussed at the planning retreat in order of priority. Community leaders believe the following concerns are the most pressing problems and are identified as the most manageable to address and tackle.

Access to Health Services:

Community leaders identified access to health services as a community health priority. Leaders focused discussions around Medicaid access issues, physician workforce issues, and care coordination.

Contributing Factors:

- There are not enough primary care providers in Northshore communities accepting new patients with Medicaid. Leaders discussed the retirement of one physician that served a

large Medicaid population in Northshore communities leaving many families and individuals without a local medical provider that 1) Accepts Medicaid and 2) Accepting new patients.

- Leaders discussed the uncertainty in the medical industry and low reimbursement rates that drive the lack of services for Medicaid populations.
- Residents that qualify for the Medicaid Waiver are not covered in hospitals and do not have prescription assistance, often leaving these residents without access to diagnostic and treatment options.
- There is a general lack of resources to meet the needs of residents with complex health needs and co-occurring health issues, which are often found among populations with higher poverty rates.
- There are residents who are not able to afford health insurance.
- Youth that become ineligible for Medicaid due to age do not have resources to cover their medical needs as young adults. Many of these youth do not have other options to cover the cost of health services.
- Palliative care services are not always available to residents due to a lack of reimbursement for end-of-life care. Additionally, residents are not always aware of where to secure palliative services.
- Specialty care is not always available (i.e., pediatric neurosurgery, pediatric cardiology, endocrinology, trauma unit, diagnostics and treatment). There are additional challenges to accessing specialty care for residents that live in the most rural Northshore communities and for resident that are uninsured or Medicaid recipients.
- The physician workforce is aging and many physicians are retiring, leading to a decrease in the number of physicians available, further restricting access to health services.
- HIPAA regulations have created barriers for medical staff regarding care coordination and information sharing. Leaders discussed that many times staff are not familiar with HIPAA regulations and fear penalty for doing the wrong thing regarding the management of a patient's health information which causes a resistance to share any information.
- Transportation was discussed as a barrier to accessing health services for the most rural residents in Northshore communities.
- There is limited follow up for Medicaid populations that seek care in the hospital.

Behavioral health and Substance Abuse:

Behavioral health and substance abuse services were discussed at the community forum. Community leaders focused their discussions primarily on the impact on child development, the limited number of providers, and the need for care coordination.

Contributing Factors:

- There is a stigma associated with behavioral health diagnoses, which causes residents to resist seeking diagnosis and treatment.
- There are gaps in the available services for adults and children related to behavioral health and substance abuse diagnosis and treatment. Services noted as being inadequate in Northshore communities were inpatient crisis intervention and outpatient counseling services. Leaders noted that the resources that do exist are good, and explained that the level of services is not adequate to meet the demand. Leaders discussed the impact of inadequate services on the higher than average suicide rates in Northshore communities.
- Leaders discussed a fractured behavioral health system where residents are not seeking and receiving effective ongoing behavioral health and/or substance abuse treatment. Residents may be seen in the emergency room for crisis behavioral health and then have little follow-up afterward. Care coordination is needed among behavioral health, substance abuse, and physical health providers.
- Leaders discussed an almost universal lack of awareness regarding behavioral health and substance abuse symptoms among residents, which leads to a lack of diagnosis and treatment of behavioral health issues.

Resource Awareness and Health Literacy:

Community leaders discussed resource awareness and health literacy as a top health priority. Community leaders focused their discussions primarily on awareness of the health resources that exists among providers and residents, system navigation issues, and the education of vulnerable populations.

Contributing Factors:

- Leaders discussed the limited awareness of residents with the lowest educational attainment in their communities; noting that the capacity to advocate for themselves is greatly reduced as a result.
- Residents that are medically fragile do not always have a person that can advocate for their health and wellness in medical settings.
- Socio-economic status may pose additional challenges to residents navigating available resources. For example, there are specific physicians that accept Medicaid insurance however; many health care professionals do not accept new patients with Medicaid coverage.
- Residents are not always being assessed to determine their level of understanding and health literacy.
- Residents do not always know how to utilize insurances once they are insured, and may be seeking more costly care in the emergency room due to the need for health services that are more convenient.
- Leaders discussed the stigma associated with diagnoses like behavioral health issues and STIs like HIV; leading residents to avoid screening activities when they are offered.

- Leaders noted the limited collaboration among organizations meeting the health needs of medically vulnerable populations due to the silos that exist in funding and program development.

Secondary Data

Tripp Umbach worked collaboratively with the Ochsner Medical Center - Northshore CHNA oversight committee to develop a secondary data process focused on three phases: collection, analysis, and evaluation. Tripp Umbach obtained information on the demographics, health status, and socio-economic and environmental factors related to the health and needs of residents from the multi-community service area of Ochsner Medical Center - Northshore. The process developed accurate comparisons to the state baseline of health measures utilizing the most current validated data. In addition to demographic data, specific attention was focused on two key community health index factors: Community Need Index (CNI) and Prevention Quality Indicators Index (PQI). Tripp Umbach provided additional comparisons and trend analysis for CNI data from 2012 to present.

Demographic Data

Tripp Umbach gathered data from Truven Health Analytics, Inc. to assess the demographics of the study area. The **Ochsner Medical Center - Northshore** Study Area is defined to include the 12 zip codes across the 3 parishes/counties; for comparison purposes the Ochsner Medical Center - Northshore Study Area looks to compare St. Tammany Parish and Pearl River County, MS (parish/counties with the largest number of zip codes that make up the study area). Information pertaining to population change, gender, age, race, ethnicity, education level, housing, income, and poverty data are presented below.

Demographic Profile – Key Findings:

- The Ochsner Medical Center - Northshore zip-code defined study area encompasses 613,839 residents.
- The Ochsner Medical Center - Northshore Study Area encompasses 246,151 residents.
- In 2015, the largest parish/county in the study area was St. Tammany Parish, LA with 246,163 residents in 2015.
- From 2015 to 2020, St. Tammany Parish, LA is projected to experience the largest percentage change in population with a 5.1 % increase (12,499 people); St. Tammany Parish, LA is also projected to experience the largest rise in number of residents for the study area.
- Pearl River County, MS is expected to experience a population decline of -0.6% (a loss of 358 residents); it is the least populated of the study area, at only 56,077 residents in 2015.

- The gender breakdown for the study area is generally consistent across the parishes/counties and similar to state and national norms.
- Pearl River County, MS reports the largest population of residents aged 65 and older (17.1%) followed by Ochsner Medical Center - Northshore Study Area with 15.3%, and St. Tammany Parish, LA with 15.0%.
- Pearl River County, MS reports the highest White, Non-Hispanic population percentage at 81.2%, this is much higher than state (59.1%) and national norms (61.8%).
- Ochsner Medical Center - Northshore Study Area reports the highest Black, Non-Hispanic population across the study area at 14.0%; Pearl River County, MS reports the second highest percentage at 12.7%.
- All of the study area parishes/counties report lower rates of Hispanic residents as compared with the country (17.6%). St. Tammany Parish, LA reports the highest Hispanic population rate at 5.4%.
- Pearl River County, MS reports the highest rate of residents with 'Less than a high school' degree (6.8%); this is above the state (6.1%) and national (5.9%) rates.
- St. Tammany Parish, LA reports the highest rate of residents with a Bachelor's degree or greater at 29.2%; this is higher than state (21.7%) and national (28.9%) norms.
- Pearl River County, MS reports the lowest average annual household income for the study area at \$55,103.
- St. Tammany Parish, LA reports the highest average annual household income compared to the other parishes/counties in the study area at \$82,316. Ochsner Medical Center - Northshore Study Area is second highest at \$71,672; both higher than state (\$64,209) and national norms (\$74,165).
- Pearl River County, MS reports the highest rates of households that earn less than \$15,000 per year (18.2%).

Community Needs Index (CNI)

In 2005 Catholic Healthcare West, in partnership with Thomson Reuters, pioneered the nation's first standardized Community Need Index (CNI).⁶ CNI was applied to quantify the severity of health disparity for every zip code in the study area based on specific barriers to health care access. Because the CNI considers multiple factors that are known to limit health care access, the tool may be more accurate and useful than other existing assessment methods in identifying and addressing the disproportionate unmet health-related needs of neighborhoods or zip code areas.

The CNI score is an average of five different barrier scores that measure various socio-economic indicators of each community using the 2015 source data. The five barriers are listed below

⁶ Truven Health Analytics, Inc. 2015 Community Need Index.

along with the individual 2015 statistics that are analyzed for each barrier. These barriers, and the statistics that comprise them, were carefully chosen and tested individually by both Dignity Health and Truven Health:

1. Income Barrier
 - a. Percentage of households below poverty line with head of household age 65 or more
 - b. Percentage of families with children under 18 below poverty line
 - c. Percentage of single female-headed families with children under 18 below poverty line
2. Cultural Barrier
 - a. Percentage of population that is minority (including Hispanic ethnicity)
 - b. Percentage of population, over age 5, that speaks English poorly or not at all
3. Education Barrier
 - a. Percentage of population, over 25, without a high school diploma
4. Insurance Barrier
 - a. Percentage of population in the labor force, aged 16 or more, without employment
 - b. Percentage of population without health insurance
5. Housing Barrier
 - a. Percentage of households renting their home

Every populated zip code in the United States is assigned a barrier score of 1,2,3,4, or 5 depending upon the zip code's national rank (quintile). A score of 1 represents the lowest rank nationally for the statistics listed, while a score of 5 indicates the highest rank nationally. For example, zip codes that score a 1 for the Education Barrier contain highly educated populations; zip codes with a score of 5 have a very small percentage of high school graduates.

- A total of 9 of the 12 zip code areas (75%) for the Ochsner Medical Center - Northshore Study Area are above the median score for the scale (3.0), one falls at the median, and 2 fall below the median. Being above the median for the scale indicates that these zip code areas have more than average the number of barriers to health care access.

Figure 5. Ochsner Medical Center - Northshore Study Area 2015 CNI Map

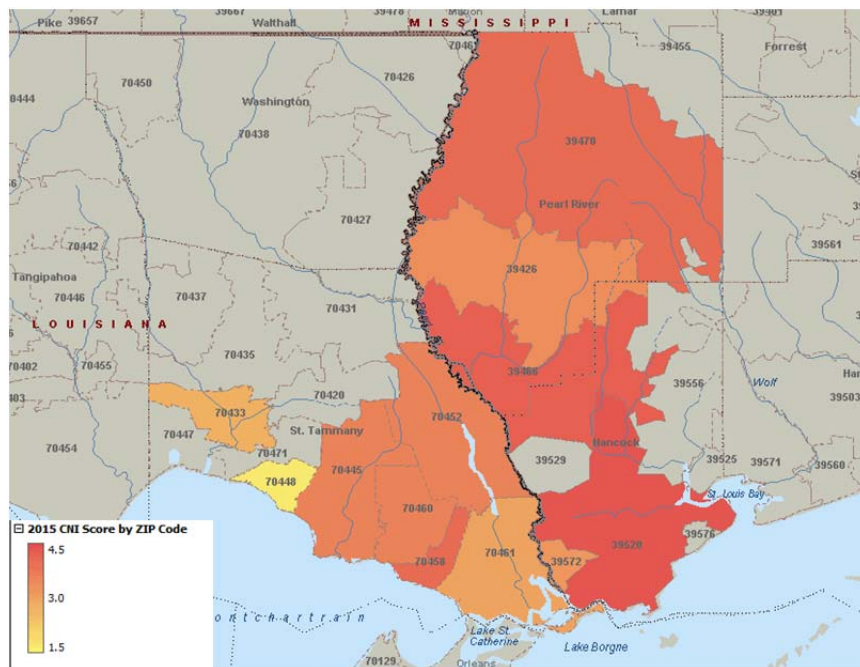


Table 4: Ochsner Medical Center - Northshore - 2015 CNI Detailed Data

Zip	City	2015 CNI Score	Poverty 65+	Poverty Married w/ kids	Poverty Single w/kids	Limited English	Minority	No High School Diploma	Un-employed	Un-insured	Renting
39520	Bay Saint Louis	4.4	9.0%	35.3%	60.6%	1.5%	21.2%	16.8%	15.6%	20.8%	33.9%
39466	Picayune	4.2	15.1%	29.1%	56.0%	0.2%	24.3%	18.1%	11.2%	15.6%	27.1%
39470	Poplarville	4.0	13.7%	36.1%	73.3%	0.2%	18.7%	20.9%	14.6%	16.7%	19.6%
70458	Slidell	4.0	12.9%	22.5%	45.2%	0.7%	25.6%	14.3%	9.2%	10.4%	26.4%
70445	Lacombe	3.6	17.4%	21.7%	46.2%	1.2%	31.2%	20.1%	13.2%	13.8%	14.1%
70452	Pearl River	3.6	14.7%	26.2%	46.1%	0.2%	12.5%	22.2%	8.6%	14.7%	19.9%
70460	Slidell	3.6	11.0%	21.5%	42.1%	1.3%	39.3%	16.0%	9.7%	11.4%	21.4%
39426	Carriere	3.4	15.1%	29.2%	73.2%	0.1%	9.5%	16.0%	9.5%	13.4%	14.5%
39572	Pearlington	3.2	8.8%	4.2%	2.8%	0.4%	28.6%	20.9%	13.0%	16.8%	13.3%
70461	Slidell	3.0	9.4%	13.9%	26.8%	0.8%	32.4%	9.5%	10.7%	9.4%	24.0%
70433	Covington	2.8	8.2%	17.6%	42.6%	0.7%	18.0%	8.5%	7.1%	9.5%	22.4%
70448	Mandeville	1.8	7.2%	4.3%	17.1%	0.6%	13.2%	6.3%	6.8%	5.7%	19.0%

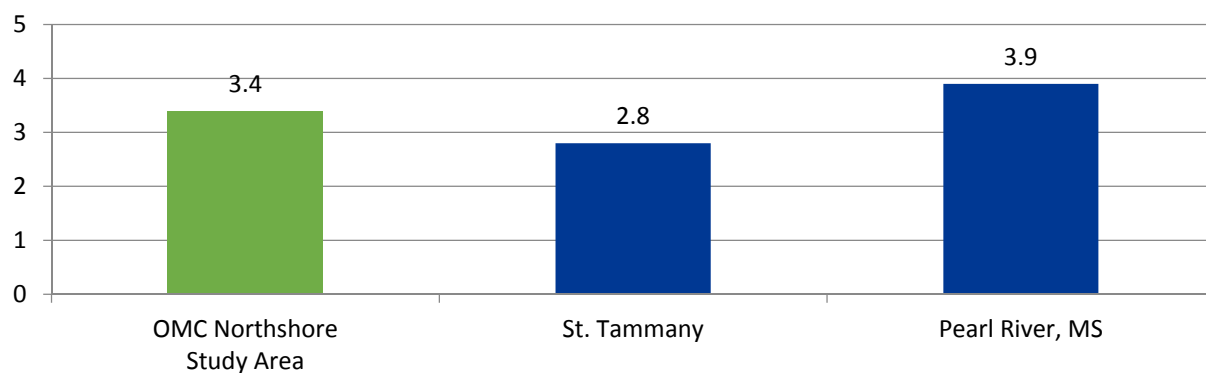
- Zip code 39520 in Bay Saint Louis, MS reports the highest rates compared with the other zips in the Ochsner Medical Center - Northshore Study Area for:
 - ✓ Limited English at 1.5%
 - ✓ Unemployed residents at 15.6%

- ✓ Uninsured residents at 20.8%
- ✓ Residents renting at 33.9%; this is much higher than state (6.6%) and national (5.5%) rates.⁷
- Zip code area 39470 in Poplarville, MS reports the highest rates of married, as well as single, parents living in poverty with their children for the study area (36.1% and 73.3% respectively).
- Zip code area 70445 in Lacombe, LA reports the highest rate of resident's aged 65+ living in poverty at 17.4%.
- Zip code area 70452 in Pearl River, LA reports the highest rate for the study area for residents without a high school diploma (22.2%).
- Zip code area 70461 in Slidell, LA reports the highest rate of residents that identify as a minority for study area at 39.3%.

On the other end of the spectrum, the lowest CNI score for the study area is 1.8 in 70448 – Mandeville, LA.

- Zip code 70448 in Mandeville, LA reports the lowest rates for
 - ✓ Residents age 65+ living in poverty at 7.2%
 - ✓ Residents with no high school diploma at 6.3%
 - ✓ Unemployed residents at 6.8%
 - ✓ Uninsured residents at 5.7%
- Zip code area 39572 in Pearlinton, MS reports the lowest rates of married, as well as single, parents living in poverty with their children for the study area (4.2% and 2.8% respectively), and for residents renting (13.3%).
- Zip code area 39426 in Carriere, MS reports the lowest rates for residents with limited English (0.1%) and residents identifying as minorities (9.5%).

Figure 6. Overall CNI Values - OMC Northshore, Parishes, Counties



⁷ March 2015 state and national statistics. U.S. Bureau of Labor Statistics.

Figure 7. CNI Trending - Ochsner Medical Center - Northshore Study Area 2011 - 2015 CNI Difference Map

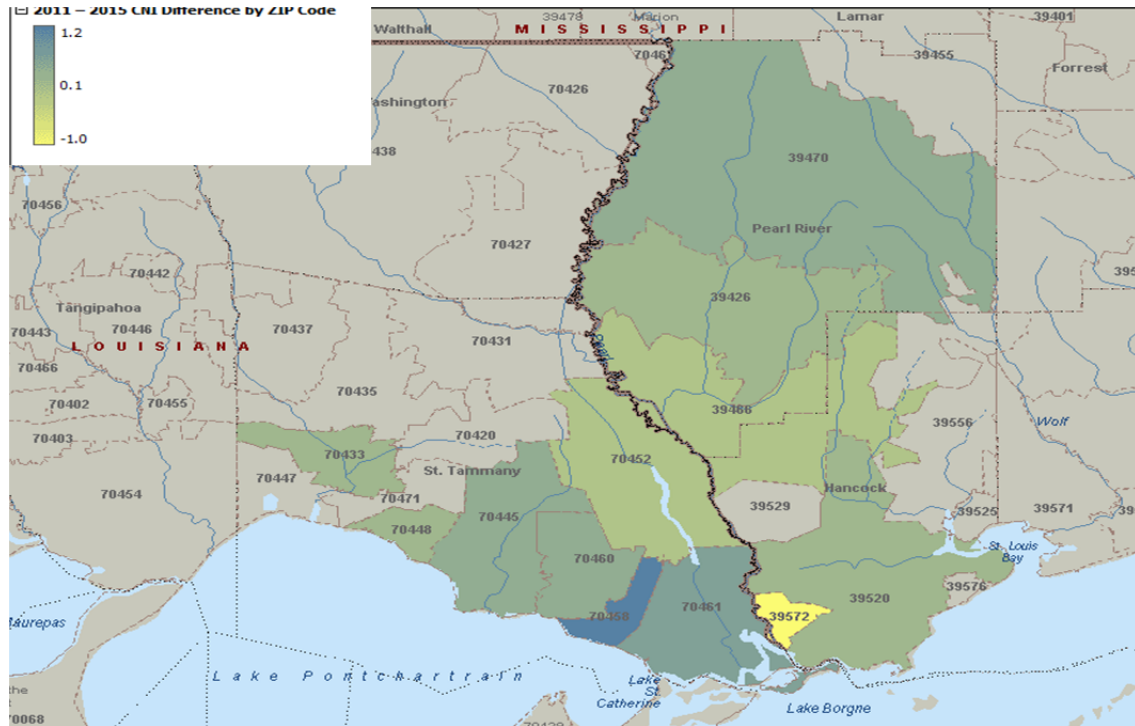


Table 5. CNI Trending - Ochsner Northshore General Hospital – 2011 to 2015 CNI Comparison

Zip	Community Name	County	Income Rank	Culture Rank	Education Rank	Insurance Rank	Housing Rank	2015 CNI Score	2011 CNI Score	Diff. 2011 – 2015
39520	Bay Saint Louis	Hancock County	5	4	4	5	4	4.4	4.2	+ 0.2
39466	Picayune	Pearl River County	4	4	4	5	4	4.2	4.2	0.0
39470	Poplarville	Pearl River County	5	3	5	5	2	4.0	3.6	+ 0.4
70458	Slidell	St. Tammany Parish	4	4	4	4	4	4.0	2.8	+ 1.2
70445	Lacombe	St. Tammany Parish	4	4	4	5	1	3.6	3.2	+ 0.4
70452	Pearl River	St. Tammany Parish	4	3	5	4	2	3.6	3.6	0.0
70460	Slidell	St. Tammany Parish	3	4	4	4	3	3.6	3.2	+ 0.4
39426	Carriere	Pearl River County	5	3	4	4	1	3.4	3.2	+ 0.2
39572	Pearlington	Hancock County	1	4	5	5	1	3.2	4.2	- 1.0
70461	Slidell	St. Tammany Parish	2	4	2	4	3	3.0	2.4	+ 0.6
70433	Covington	St. Tammany Parish	3	3	2	3	3	2.8	2.6	+ 0.2
70448	Mandeville	St. Tammany Parish	1	3	1	2	2	1.8	1.6	+ 0.2

Across the 12 Ochsner Medical Center - Northshore study area zip codes:

- Only 39572 – Bay Saint Louis, MS experienced a decline in their CNI score from 2011 to 2015, indicating a shift to fewer barriers to health care access (green, negative values).
- Two remained the same from 2011 to 2015: 39466 – Picayune, MS and 70452 – Pearl River, LA.
- Nine experienced a rise in their CNI score from 2011 to 2015, indicating a shift to more barriers to health care access (red, positive values).
 - ✓ Zip code area 70461 – Slidell experienced the largest rise in CNI score for the study area (going from 2.4 to 3.0).

Prevention Quality Indicators (PQI) and Pediatric Quality Indicators (PDI)⁸

The Prevention Quality Indicators index (PQI) was developed by the Agency for Healthcare Research and Quality (AHRQ). PQI is similarly referred to as Ambulatory Care Sensitive Hospitalizations. The quality indicator rates are derived from inpatient discharges by zip code using ICD diagnosis and procedure codes. There are 14 quality indicators.

The PQI index identifies potentially avoidable hospitalizations for the benefit of targeting priorities and overall community health. The index measures number of residents living in the hospital service area, which are hospitalized for one of the following reasons (note: this does not indicate that the hospitalization took place at Ochsner Medical Center – Northshore). Lower index scores represent fewer admissions for each of the PQIs.

PQI Subgroups:

1. Chronic Lung Conditions

- PQI 5 Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults (40+) Admission Rate⁹
- PQI 15 Asthma in Younger Adults Admission Rate¹⁰

2. Diabetes

- PQI 1 Diabetes Short-Term Complications Admission Rate
- PQI 3 Diabetes Long-Term Complications Admission Rate
- PQI 14 Uncontrolled Diabetes Admission Rate

⁸ PQI and PDI values were calculated including all relevant zip-code values from Louisiana; Mississippi data could not be obtained and was therefore not included.

⁹ PQI 5 for past study was COPD in 18+ population; PQI 5 for current study is now restricted to COPD and Asthma in 40+ population

¹⁰ PQI 15 for past study was Adult Asthma in 18+ population; PQI 15 for current study is now restricted to Asthma in 18-39 population (“Younger”).

- PQI 16 Lower Extremity Amputation Rate Among Diabetic Patients

3. Heart Conditions

- PQI 7 Hypertension Admission Rate
- PQI 8 Congestive Heart Failure Admission Rate
- PQI 13 Angina Without Procedure Admission Rate

4. Other Conditions

- PQI 2 Perforated Appendix Admission Rate¹¹
- PQI 9 Low Birth Weight Rate¹²
- PQI 10 Dehydration Admission Rate
- PQI 11 Bacterial Pneumonia Admission Rate
- PQI 12 Urinary Tract Infection Admission Rate

Table 6. Prevention Quality Indicators (PQI) Ochsner Medical Center - Northshore / LA / U.S.A. 2015

Prevention Quality Indicators (PQI)	OMC - Northshore Study Area 2015 PQI	LA 2015 PQI	U.S.A. 2015 PQI	OMC - Northshore Study Area – LA Diff.	OMC - Northshore Study Area – U.S.A. Diff.
Chronic Lung Conditions					
COPD or Adult Asthma (PQI5)	555.28	531.03	495.71	+ 24.25	+ 59.57
Asthma in Younger Adults (PQI15)	50.41	42.83	46.02	+ 7.58	+ 4.39
Diabetes					
Diabetes Short-Term Complications (PQI1)	74.05	98.10	63.86	- 25.05	+ 10.19
Diabetes Long-Term Complications (PQI3)	89.32	126.06	105.72	- 36.74	- 16.40
Uncontrolled Diabetes (PQI14)	8.45	15.57	15.72	- 7.12	- 7.27
Lower Extremity Amputation Among Diabetics (PQI16)	6.03	12.74	16.50	- 6.71	- 10.47
Heart Conditions					
Hypertension (PQI7)	38.17	46.06	54.27	- 7.89	- 16.10
Congestive Heart Failure (PQI8)	416.16	404.11	321.38	+ 12.05	+ 94.78
Angina Without Procedure (PQI13)	6.11	13.74	13.34	- 7.63	- 7.23
Other Conditions					
Perforated Appendix (PQI2)	387.10	322.43	323.43	+ 64.67	+ 63.67
Low Birth Weight (PQI9)	82.40	86.51	62.14	- 4.11	+ 20.26
Dehydration (PQI10)	93.52	124.53	135.70	- 31.01	- 42.18
Bacterial Pneumonia (PQI11)	327.96	305.80	248.19	+ 22.16	+ 79.77

¹¹ PQI 2 changed from Perforated Appendix in Males 18+ for the past study to Perforated Appendix in Total 18+ population as a rate per 1,000 ICD-9 code admissions for appendicitis. This shift has changed the values for this measure drastically and therefore, Tripp Umbach did not adjust.

¹² Although not clearly explained by the AHRQ, it would seem that a definition of Newborn population has shifted for PQI 9 because the values are drastically lower in 2014 than in previous years (2011). This has shifted PQI 9 values drastically. Tripp Umbach did not adjust.

Table 6. Prevention Quality Indicators (PQI) Ochsner Medical Center - Northshore / LA / U.S.A. 2015

Prevention Quality Indicators (PQI)	OMC - Northshore Study Area 2015 PQI	LA 2015 PQI	U.S.A. 2015 PQI	OMC - Northshore Study Area – LA Diff.	OMC - Northshore Study Area – U.S.A. Diff.
Urinary Tract Infection (PQI12)	232.92	209.39	167.01	+ 23.53	+ 65.91

Key Findings from 2015 PQI Data:

- When comparing the Ochsner Medical Center - Northshore Study Area PQI data to the State of Louisiana rates, the Ochsner Medical Center - Northshore Study Area reports higher preventable hospital admissions for:
 - ✓ COPD, or Adult Asthma
 - ✓ Asthma in Younger Adults
 - ✓ Congestive Heart Failure
 - ✓ Perforated Appendix
 - ✓ Bacterial Pneumonia
 - ✓ Urinary Tract Infection
- When comparing the Ochsner Medical Center - Northshore Study Area PQI data to the national rates, the Ochsner Medical Center - Northshore Study Area study area reports higher preventable hospital admissions for:
 - ✓ COPD, or Adult Asthma
 - ✓ Asthma in Young Adults
 - ✓ Diabetes, Short-Term Complications
 - ✓ Congestive Heart Failure
 - ✓ Perforated Appendix
 - ✓ Low Birth Weight
 - ✓ Bacterial Pneumonia
 - ✓ Urinary Tract Infection
- There are a number of PQI values in which the Ochsner Medical Center - Northshore Study Area, as well as a majority of the study area parishes/counties, report higher rates than is seen nationally (indicating areas in which there are more preventable hospital admissions than the national norm), these include:
 - ✓ Chronic Lung Conditions
 - ✓ Diabetes, Short-Term Complications
 - ✓ Congestive Heart Failure
 - ✓ Perforated Appendix
 - ✓ Low Birth Weight
 - ✓ Bacterial Pneumonia
 - ✓ Urinary Tract Infection
- There are also a number of PQI measures in which the Ochsner Medical Center - Northshore Study Area and many of the parishes/counties in the study area report lower values than the nation (indicating areas in which there are fewer preventable hospital admissions than the national norm), these include:
 - ✓ Uncontrolled Diabetes

- ✓ Diabetes, Long-Term Complications
- ✓ Lower Extremity Amputation Among Diabetics
- ✓ Hypertension
- ✓ Angina without Procedure
- ✓ Dehydration

Pediatric Quality Indicators Overview

The Pediatric Quality Indicators (PDIs) are a set of measures that can be used with hospital inpatient discharge data to provide a perspective on the quality of pediatric healthcare. Specifically, PDIs screen for problems that pediatric patients experience as a result of exposure to the healthcare system and that may be amenable to prevention by changes at the system or provider level.

Development of quality indicators for the pediatric population involves many of the same challenges associated with the development of quality indicators for the adult population. These challenges include the need to carefully define indicators using administrative data, establish validity and reliability, detect bias and design appropriate risk adjustment, and overcome challenges of implementation and use. However, the special population of children invokes additional, special challenges. Four factors—differential epidemiology of child healthcare relative to adult healthcare, dependency, demographics, and development—can pervade all aspects of children’s healthcare; simply applying adult indicators to younger age ranges is insufficient.

This PDIs focus on potentially preventable complications and iatrogenic events for pediatric patients treated in hospitals, and on preventable hospitalizations among pediatric patients.

The PDIs apply to the special characteristics of the pediatric population; screen for problems that pediatric patients experience as a result of exposure to the healthcare system and that may be amenable to prevention by changes at the provider level or area level; and, help to evaluate preventive care for children in an outpatient setting, and most children are rarely hospitalized.

PDI Subgroups:

- PDI 14 Asthma Admission Rate (per 100,000 population ages 2 – 17)
- PDI 15 Diabetes, Short-Term Complications Admission Rate (per 100,000 population ages 6 – 17)
- PDI 16 Gastroenteritis Admission Rate (per 100,000 population ages 3 months – 17 years)
- PDI 17 Perforated Appendix Admission Rate (per 1,000 admissions ages 1 – 17)

- PDI 18 Urinary Tract Infection Admission Rate (per 100,000 population ages 3 months – 17 years)

Key Findings from PDI Data:

- ✓ Ochsner Medical Center - Northshore Study Area reports the highest rate of preventable hospitalizations due to asthma for children aged two to 17 at 101.95 per 100,000 population; this is less than the national rate of 117.37
- ✓ Both the Ochsner Medical Center - Northshore Study Area and St. Tammany Parish, LA report the highest rates of diabetes, short-term complications for those aged six to 17 years old for the study area (31.63 and 30.39 respectively); these rates are above the national rate of 23.89.
- ✓ Both the Ochsner Medical Center - Northshore Study Area and St. Tammany Parish, LA report less than half the state and country rates for Gastroenteritis for those aged three months to 17 years at 19.09 and 19.32, respectively; the national rate is 47.28.
- ✓ Both the Ochsner Medical Center - Northshore Study Area and St. Tammany Parish, LA report higher rates than the state and nation for perforated appendix for ages one to 17 years.
- ✓ Ochsner Medical Center - Northshore Study Area reports the highest rate in the study area for urinary tract infection for those aged three months to 17 years at 30.82 per 100,00 population; this is slightly higher than the national rate of 29.64.

Community Commons Data

Tripp Umbach gathered data from Community Commons related to social and economic factors, physical environment, clinical care, and health behaviors for the parishes/counties of interest for the Ochsner Medical Center - Northshore CHNA.¹³ The data is presented in the categories below.

Medicaid

- Pearl River County, MS reports the highest rate of Insured Residents Receiving Medicaid at 26.52%; this rate is higher than the national (20.21%) rate.
- The population under the age of 18 receives the highest rates of Medicaid assistance across all of the study area parishes/counties.
- St. Tammany Parish, LA reports the lowest rates among the study area parishes/counties for all age groups receiving Medicaid (33.24%).

¹³ Community Commons. <http://www.communitycommons.org/> Accessed 06/08/2015.

- Pearl River County, MS reports the highest rate of uninsured adults for the study area at 26.3%. This rate is higher than state (25.0% for both LA and MS) and national (20.8%) norms.
- Pearl River County, MS has experienced drastic declines in its rates of uninsured adults going from a high of 29.00% in 2010 to its lowest rate in the most recent data year of 2012 reporting 26.30%.
- The county of Pearl River in Mississippi reports the highest rate of uninsured children across the study area parishes/counties at 7.3%.
- The State of Louisiana reports lower rates of uninsured children as compared with the State of Mississippi. Both states report lower rates of uninsured children as compared with the country (7.5%)
- From 2011 to 2012, nearly all of the study area parishes reported declines in the rates of uninsured children.
 - ✓ However, St. Tammany Parish, LA did see slight rises in the rates of uninsured children – going from 6.4% to 5.7%.

Uninsured Population

- Overall, men are more likely to be uninsured than women. Pearl River County is the only exception in the study area.
- Those aged 18 – 64 are more likely to be uninsured as compared with those under 18 or those 65 and older.
- Residents of Hispanic or Latino ethnicity are more likely to be uninsured than their counterparts.
- Residents reporting “Some other race”, for the majority of the study area parishes/counties, have the highest rates of being uninsured.
- More than 60% of the “Some other race” population of Pearl River County, MS report being uninsured.
- The Native American/Alaska Native populations of both Pearl River County, MS and St. Tammany Parish, LA experience some of the highest rates of living in poverty as compared with the other study area parishes/counties (56.28% and 49.04% respectively).

Primary Care Physicians

- Pearl River Country, MS reports the lowest number of physicians across the study area parishes/counties at only 16.
- St. Tammany Parish, LA reports the most physicians in the study area.
- St. Tammany Parish, LA has the highest primary care physician (PCP) rate per 100,000 population at 86.03 in 2012.

- Pearl River County, MS reports the lowest rate of PCPs per 100,000 population at only 28.94 in 2012.

Federally Qualified Health Centers (FQHCs)

- Mississippi has a very high rate of FQHCs per 100,000 population at 6.2 (more than three times the national rate of 1.92).
- Pearl River County, MS reports the highest rate of FQHCs per population for the study area at 1.79 per 100,000.
- St. Tammany Parish, LA reports the lowest at 0.86 FQHCs per 100,000 population.

Regular Doctor

- Across the country, 22.07% of residents report not having a regular doctor (77.93% have a regular doctor); in Louisiana the rate is 24.09% and in Mississippi it is 25.58%.
- St. Tammany Parish, LA reports the highest rate of residents who do not have a regular doctor at 21.71%.

Population Living in an HPSA (Health Professional Shortage Area)

- Pearl River County, MS is a health care professional shortage area (HPSA) designated county; therefore 100% of their populations live in an HPSA designated area.
- St. Tammany Parish, LA reports at only 5.63%; the national rate is 34.07%.

Dentists

- St. Tammany Parish, LA reports the highest number of dentists across the study area parishes at 189.
- Pearl River County, MS reports the fewest dentists with only 11.
- St. Tammany Parish, LA has the highest dentist rate per 100,000 population at 77.99 in 2013.
- Pearl River County, MS reports the lowest rate of dentists per 100,000 population for the study area at only 19.97 in 2013.

Dental Exam

- The State of Mississippi and the study area county in Mississippi (Pearl River) report some of the highest rates of adults who have not had a dental exam (MS = 40.98%; Pearl River = 43.04%); the national rate is 30.15%.

Dental Health

- St. Tammany Parish, LA reports the lowest rate of adults with poor dental health for the study area at 14.55%; this is lower than the national rate of 15.65%.

- Pearl River County, MS reports a high rate of residents with poor dental health at 30.44%; this is almost double the national rate of 15.65%.

Poor Health

- Similar to poor dental health, Pearl River County, MS reports the highest rates of poor general health (25.40%); this is higher than the national rate of 15.74%.

HIV/AIDS

- The national rate of the population having never been tested for HIV/AIDS is 62.79%; in Louisiana only 56.23% have not been tested, and for Mississippi 61.18% have not been tested.
- The Non-Hispanic Black population sees the highest rates of HIV/AIDS.
- Pearl River County, MS, specifically, sees the highest rates of HIV/AIDS, for the study area; 806.01 per 100,000 Non-Hispanic Black population has HIV/AIDS, 109.45 per 100,000 Non-Hispanic White, and 0 for the Hispanic/Latino population.
- From 2008 to 2010, both of the study area parishes/counties experienced slight rises in HIV/AIDS rates.

Chlamydia Infection

- Both of the study area parishes/counties fall below the national chlamydia rate of 454.1 per 100,000 population:
 - ✓ St. Tammany Parish, LA reports a rate of 280.4 per 100,000 population.
 - ✓ Pearl River County, MS reports a rate of 272.8 per 100,000 population.

Gonorrhea Infection

- Similar to chlamydia infection, both of the study area parishes/counties report a substantially lower rate of gonorrhea infection than all of the other states, and country at 73.6 per 100,000 population for Pearl River County, MS and 55.7 per 100,000 population for St. Tammany Parish, LA. The national chlamydia rate is 103.09 per 100,000 population.

Depression

- The State of Louisiana reports a higher rate of residents with depression (15.66%) than Mississippi (14.41%) and the country (15.45%).
- Both of the parishes/counties in the study area report higher rate of depression than the national rate.
- Pearl River County, MS reports the highest rate of residents with depression within the study area at 16.15%.

Mortality – Suicide

- Both St. Tammany Parish, LA and Pearl River County, MS report a high rate of age-adjusted mortality due to suicide at 14.53 and 14.35 per 100,000 population, respectively; this rate is higher than the national rate (11.82) and both study area states.
- The Healthy People 2020 goal is for mortality due to suicide to be less than or equal to 10.2 per 100,000 population; all the study area parishes/counties report rates higher than this HP2020 Goal.
- Men are more likely than women to die as a result of a suicide.
- The Hispanic/Latino population of the U.S. reports the highest rate of suicide at 32.88 per 100,000 population.
- For the study area, the Non-Hispanic White population of St. Tammany Parish, LA reports the highest rate of suicide at 16.72 per 100,000 population.

Heart Disease

- St. Tammany Parish, LA reports the highest rate of residents who have heart disease (5.22%); this rate is higher than the national rate of 4.40%.
- Looking specifically at the Medicare population, St. Tammany Parish, LA also reports the highest rate of residents with heart disease at 37.49%; the national rate being 28.55%.

Mortality – Heart Disease

- Pearl River County, MS reports the highest rate of age-adjusted mortality due to heart disease for the study area at 265.2 per 100,000 population.
- On a national level and for all of the study area parishes/counties, men are more likely to die as a result of heart disease than women.
- The African-American/Black population of Pearl River County, MS reports the highest rate of death due to heart disease across the study area at 361.87 per 100,000 population.

Mortality – Ischemic Heart Disease

- Pearl River County, MS reports the highest rate of age-adjusted mortality due to ischemic heart disease for the study area at 140.07 per 100,000 population.
- The Healthy People 2020 goal is for mortality due to ischemic heart disease to be less than or equal to 103.4 per 100,000 population; St. Tammany Parish, LA reports rates already lower than this HP2020 Goal.
- On a national level and for both study area parishes/counties, men are more likely to die as a result of ischemic heart disease than women.
- Non-Hispanic Black residents of Pearl River County, MS report the highest rate of death due to ischemic heart disease for the study area at 177.49 per 100,000 population.

High Blood Pressure

- Pearl River County, MS reports the highest rate of residents who have high blood pressure (39.10%); this rate is higher than the national rate of 28.16%.
- Looking specifically at the Medicare population, Pearl River County, MS continues to report the highest rate of residents with high blood pressure at 58.64%; the national rate being 55.49%.

Mortality – Stroke

- St. Tammany Parish, LA reports the highest rate of age-adjusted mortality due to stroke for the study area at 43.77 per 100,000 population.
- The Healthy People 2020 goal is for mortality due to stroke to be less than or equal to 33.8 per 100,000 population; all of the study area parishes/counties report rates higher than this goal.
- On a national level, men are more likely to die as a result of stroke than women (40.51 per 100,000 pop. vs. 39.62); for the study area, it is slightly more female.
- The Non-Hispanic Black population of Pearl River County, MS reports the highest rate of death as a result of stroke, for the study area, at 103.83 per 100,000 population.

Asthma

- Pearl River County, MS reports the highest rate of adults with asthma, for the study area, at 17.02%; this is higher than the national rate of 13.36%.

Breast Cancer

- St. Tammany Parish, LA reports the highest incidence rate of breast cancer for the study area at 133.8 per 100,000 population; this is higher than the national rate of 122.7 per 100,000 pop.
- The Healthy People 2020 goal is for breast cancer incidence to be less than or equal to 40.9 per 100,000 population; all of the study area parishes/counties and state report rates more than double this goal.
- The African-American/Black population of St. Tammany Parish, LA reports the highest rate of breast cancer incidence when looking at incidence by race/ethnicity (145.7 per 100,000 pop.).

Cervical Cancer

- St. Tammany Parish, LA reports the only incidence rate of cervical cancer for the study area at 7.4 per 100,000 population; this is lower than the national rate of 7.8 per 100,000 pop.

- The Healthy People 2020 goal is for cervical cancer incidence to be less than or equal to 7.1 per 100,000 population; all of the study area parishes/counties and states report rates higher than this goal.

Colon and Rectum Cancer

- Pearl River County, MS reports the highest incidence rate of colon and rectum cancer for the study area at 50 per 100,000 population; this is higher than the national rate of 43.3 per 100,000 pop.
- The Healthy People 2020 goal is for colon and rectum cancer incidence to be less than or equal to 38.7 per 100,000 population; all of the study area parishes/counties and states report rates higher than this goal.
- The African-American/Black population reports higher rates of colon and rectum cancer incidence as compared with other racial groups for the study area, the states, and nationally.

Lung Cancer

- Pearl River County, MS reports the highest incidence rate of lung cancer for the study area at 96.2 per 100,000.
- The African-American/Black population in Pearl River County, MS reports the highest rate of lung cancer incidence when looking at incidence by race/ethnicity (117.3 per 100,000 pop.).

Prostate Cancer

- St. Tammany Parish, LA reports the highest incidence rate of prostate cancer, for the study area, at 158.6 per 100,000 population; this value is higher than the national rate of 142.3 per 100,000 pop.
- The African-American/Black population reports higher rates of prostate cancer incidence as compared with other racial groups for the study area, the states, and nationally.

Mortality - Cancer

- Pearl River County, MS reports the highest rate of age-adjusted mortality due to cancer, for the study area, at 222.26 per 100,000 population.
- All of the study area parishes/counties report higher rates of mortality due to cancer than the national rate of 174.08 per 100,000 population.
- The Healthy People 2020 goal is for mortality due to cancer to be less than or equal to 160.6 per 100,000 population; all of the study area parishes/counties and state report rates higher than this goal.

- Across the study area, all of the parishes/counties, states, and nationally; men have higher mortality rates due to cancer than women.
- The Non-Hispanic Black population of Pearl River County, MS reports the highest rate of mortality due to cancer, for the study area, with 240.27 per 100,000 population.

Teen Birth Rate

- Pearl River County, MS reported slight rises in the teen birth rates from the 2005-2011 5-year estimate census to the 2006-2012 5-year estimate census.
- Pearl River County, MS reports the highest teen birth rate among Non-Hispanic White girls (55.4 per 1,000 pop.).
- Pearl River County, MS reports the highest teen birth rate among Non-Hispanic Black girls (57.7 per 1,000 pop.).
- St. Tammany Parish, LA reports the highest teen birth rate among Hispanic/Latino girls (41.1 per 1000 pop.).

Low Birth Weight

- Pearl River County, MS reports the highest rate of low-weight births for the study area at 9.50%; followed closely by St. Tammany Parish, LA at 8.40%.
- All of the study area parishes/counties report higher rates of low-weight births than the national rate of 8.2%.
- The Healthy People 2020 goal is for low-weight births to be less than or equal to 7.8%; all of the study area parishes/counties and state report rates higher than this goal.
- The Non-Hispanic African-American/Black population sees higher rates of low-weight births as compared with other racial groups for the study area, the states, and nationally.
- Pearl River County, MS reports the highest rate of low-weight births in 2006-2012 (9.50%), for the study area; this rate has been steadily inclining since 2004-2010.

Infant Mortality Rate

- Pearl River County, MS reports the highest rate of infant mortality, for the study area, at 9.8 per 1,000 births; this rate is higher than the national rate of 6.52 per 1,000 births.
- The Healthy People 2020 goal is for infant mortality to be less than or equal to 6.0 per 1,000 births; all study area parishes/counties report rates higher than this HP2020 Goal.
- The Non-Hispanic White population of Pearl River County, MS reports the highest rate of infant mortality, for the study area parishes/counties, at 8.1 per 1,000 births.

Mortality – Pedestrian Accident

- Pearl River County, MS reports the highest rate of age-adjusted mortality due to pedestrian accident, for the study area, at 1.79 per 100,000 population.

- The Healthy People 2020 goal is for mortality due to pedestrian accident to be less than or equal to 1.3 per 100,000 population; St. Tammany Parish, LA reports rates already lower than this HP2020 Goal.

Mortality – Homicide

- Pearl River County, MS reports the highest rate of age-adjusted mortality due to homicide, for the study area, at 6.83 per 100,000 population; this rate is higher than the national rate (5.63) and all of the other study area parishes/counties.
- The Healthy People 2020 goal is for mortality due to homicide to be less than or equal to 5.5 per 100,000 population; St. Tammany Parish, LA reports rates already lower than this HP2020 Goal.
- Men are more likely to die as a result of homicide than women.
- The Non-Hispanic Black population of St. Tammany Parish, LA reports the highest rate of death as a result of homicide across the study area at 16.89 per 100,000 population.

County Health Rankings

The County Health Rankings were completed as collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.¹⁴

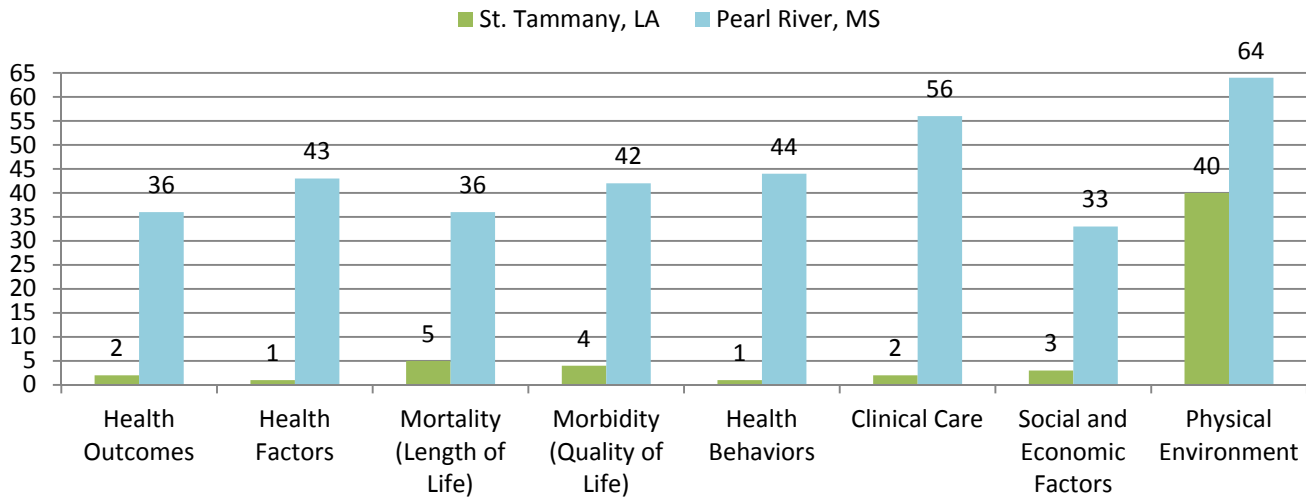
Each parish/county receives a summary rank for its health outcomes, health factors, and also for the four different types of health factors: health behaviors, clinical care, social and economic factors, and the physical environment. Analyses can also drill down to see specific parish/county-level data (as well as state benchmarks) for the measures upon which the rankings are based. Parishes/counties in each of the 50 states are ranked according to summaries of more than 30 health measures. Those having high ranks, e.g. 1 or 2, are considered to be the “healthiest.” Parishes/counties are ranked relative to the health of other parishes/counties in the same state on the following summary measures:

- Health Outcomes – Rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.
- Health Factors – Rankings are based on weighted scores of four types of factors:
 - ✓ Health behaviors
 - ✓ Clinical care
 - ✓ Social and economic

¹⁴ 2015 County Health Rankings. Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute

✓ Physical environment

- Mississippi has 82 counties. A score of 1 indicates the “healthiest” county for the state in a specific measure. A score of 82 for MS indicates the “unhealthiest” county for the state in a specific measure.
- Louisiana has 64 parishes. A score of 1 indicates the “healthiest” parish for the state in a specific measure. A score of 64 for LA indicates the “unhealthiest” parish for the state in a specific measure.



Key Findings from County Health Rankings:

- Pearl River County, MS reports the highest ranks (unhealthiest parish/county of the study area) for the all of the County Health Rankings:
 - A rank of 33 for Social and Economic Factors.
 - A rank of 36 for:
 - Health Outcomes
 - Mortality (Length of Life)
 - A rank of 42 for Morbidity (Quality of Life)
 - A rank of 43 for Health Factors.
 - A rank of 44 for Health Behaviors.
 - A rank of 56 for Clinical Care.
 - A rank of 64 out of the worst possible 82 for Physical Environment.
- St. Tammany Parish, LA ranks 40 out of the worst possible 64 for Physical Environment.

Substance Abuse and Mental Health

The Substance Abuse and Mental Health Services Administration (SAMHSA) gathers region specific data from the entire United States in relation to substance use (alcohol and illicit drugs) and mental health.

Every state is parceled into regions defined by SAMHSA. The regions are defined in the *'Substate Estimates from the 2010-2012 National Surveys on Drug Use and Health'*. Data is provided at the first defined region (i.e., those that are grouped).

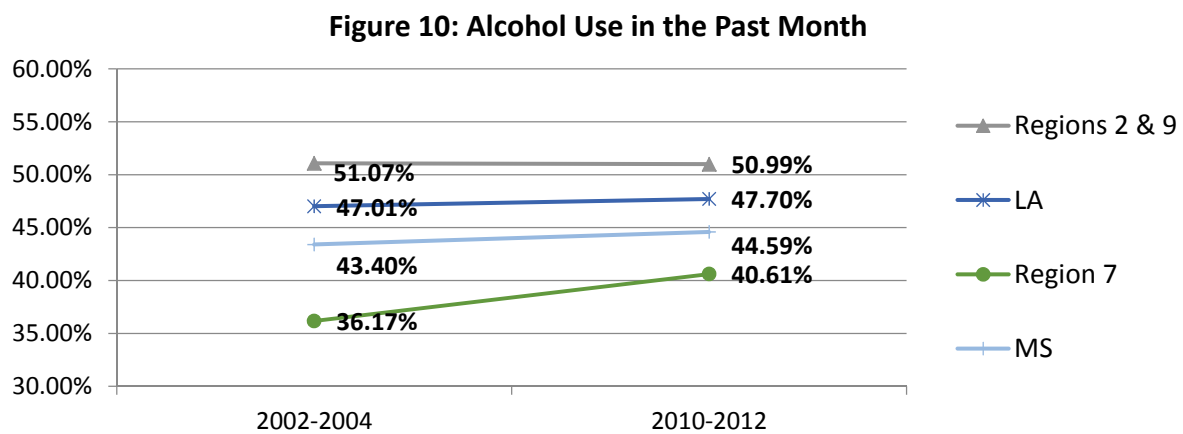
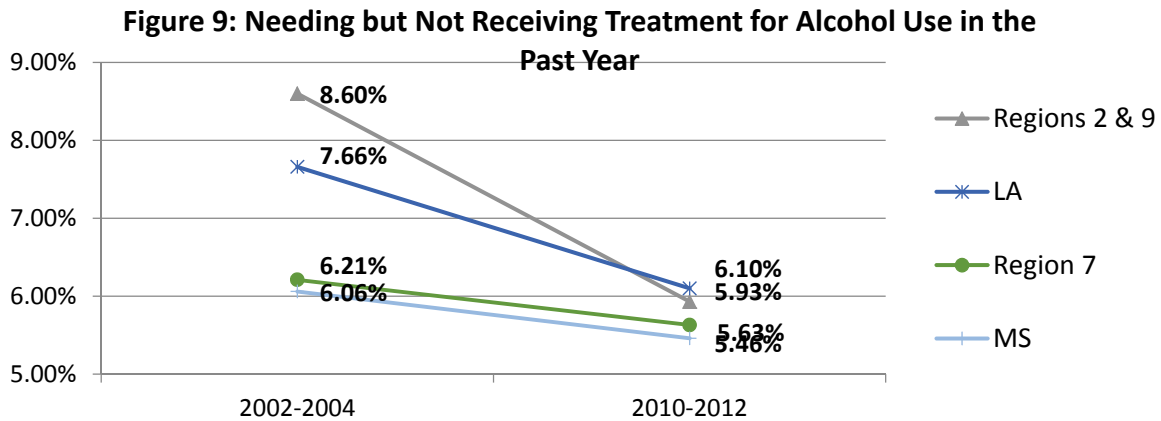
The Substate Regions for Louisiana are defined as such:

- Regions 1 and 10 (Data for Regions 1 and 10 provided separately for this grouping only)
 - ✓ Region 1 – Orleans, Plaquemines, St. Bernard
 - ✓ Region 10 – Jefferson
- Regions 2 and 9
 - ✓ Region 2 – Ascension, East Baton Rouge, East Feliciana, Iberville, Pointe Coupee, West Baton Rouge, West Feliciana
 - ✓ Region 9 – Livingston, St. Helena, St. Tammany, Tangipahoa, Washington
- Region 3
 - ✓ Region 3 – Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, St. Mary, Terrebonne
- Regions 4, 5, and 6
 - ✓ Region 4 – Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, Vermilion
 - ✓ Region 5 – Allen, Beauregard, Calcasieu, Cameron, Jefferson Davis
 - ✓ Region 6 – Avoyelles, Catahoula, Concordia, Grant, La Salle, Rapides, Vernon, Winn
- Regions 7 and 8
 - ✓ Region 7 – Bienville, Bossier, Caddo, Claiborne, De Soto, Natchitoches, Red River, Sabine, Webster
 - ✓ Region 8 – Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, West Carroll

Data concerning alcohol use, illicit drug use, and psychological distress for the various regions of the study area are shown here.

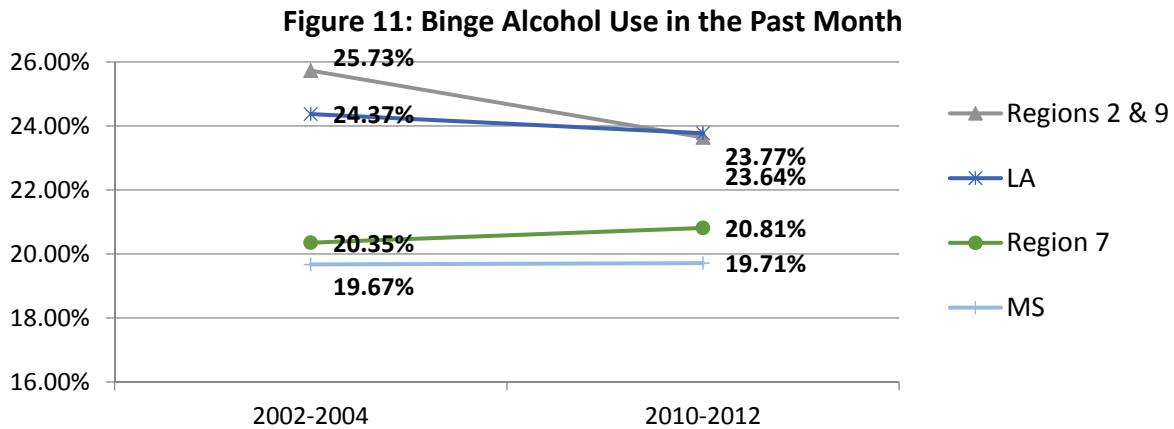
Alcohol Use in the Past Month

- For the Study Area, Regions 2 & 9 (St. Tammany) reports the highest current rate of alcohol use in the past month at 50.99% of the population aged 12 and older. However, Region 7 has seen the largest increase in alcohol use rate from 2002-2004 to 2010-2012.



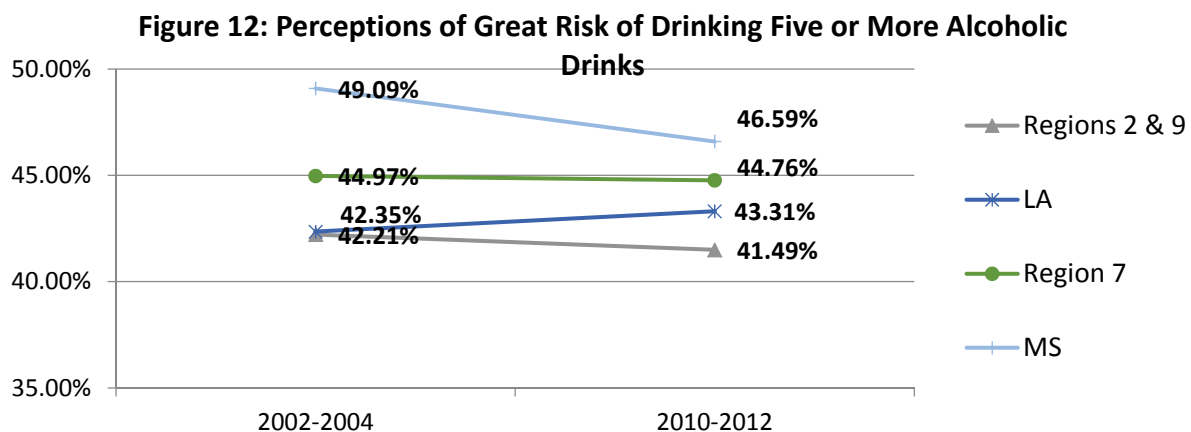
Binge Alcohol Use in the Past Month

- Regions 2 & 9 (St. Tammany Parish, LA) reports the highest rate, for the study area, in binge alcohol use despite seeing a decrease from 2002-2004 to 2010-2012.



Perceptions of Great Risk of Having Five or More Alcoholic Drinks Once or Twice a Week

- Many of the study area regions have shown declines in the perceptions of risk of having five or more drinks once or twice a week from 2002-2004 to 2010-2012.
- The State of Mississippi rates of perceptions of risk of having five or more drinks once or twice a week have declined from 2002-2004 to 2010-2012.

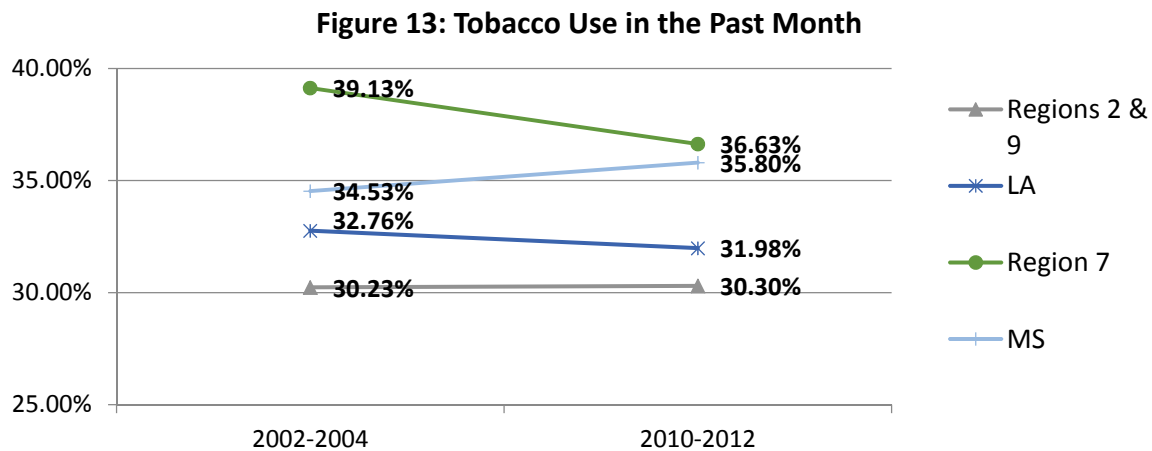


Needing but Not Receiving Treatment for Alcohol Use in the Past Year

- All of the study area regions/states have seen declines in the rates of residents needing but not receiving treatment for alcohol use from 2002-2004 to 2010-2012.
- Region 2 & 9 (St. Tammany Parish, LA) reports the highest rate, for the study area, of residents who needed but did not receive treatment for alcohol use in the past year at 5.93%; this region has, however, seen a decline in the rate from 8.60% in 2002-2004.

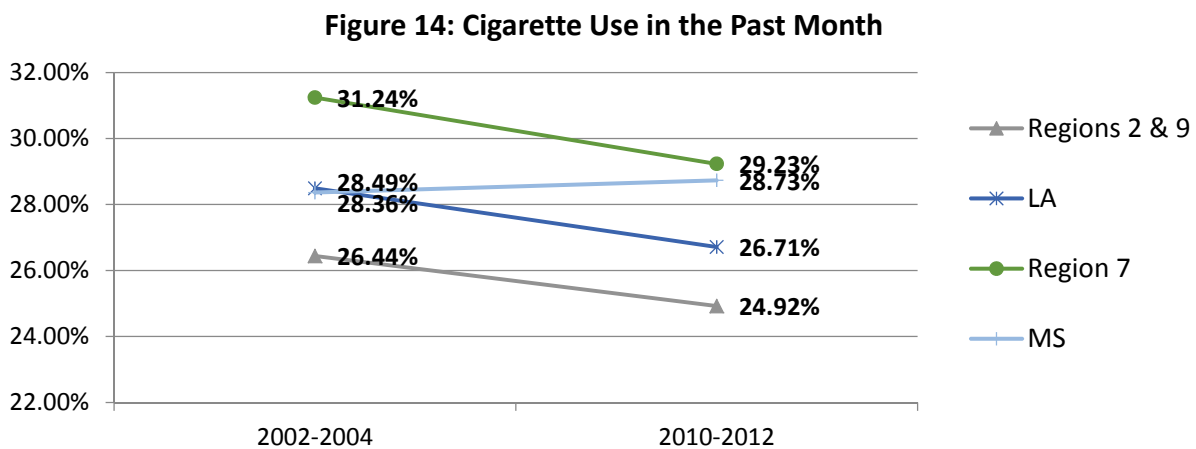
Tobacco Use in the Past Month

- Region 7 (Pearl River County, MS) reports the highest current rate of tobacco use in the past month, for the study area, at 36.63%; this region has, however, seen a decline in the rate from 39.13% in 2002-2004.



Cigarette Use in the Past Month

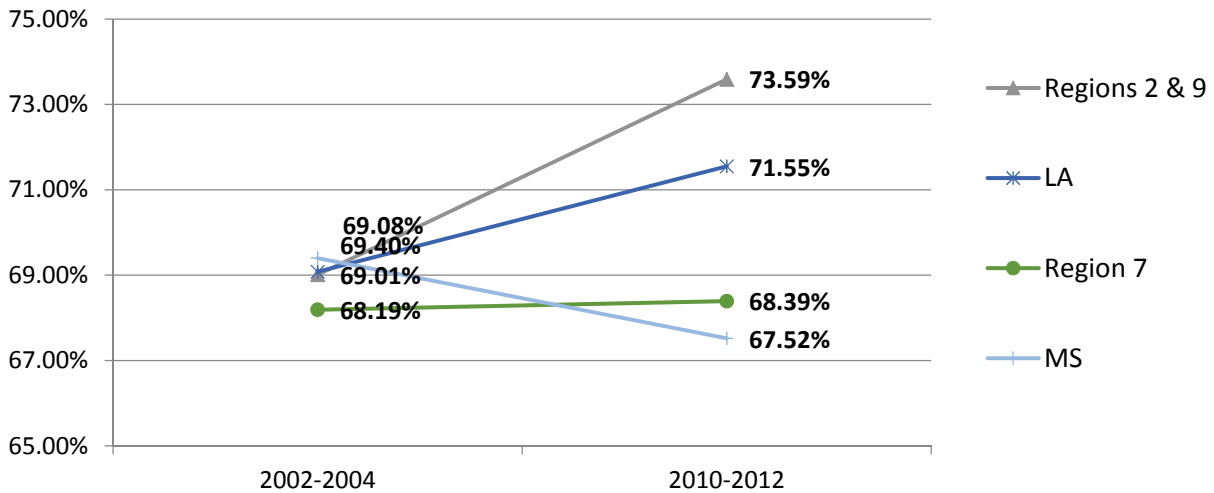
- Cigarette use in the past month is highest in the study area for Region 7 in the 2010-2012 analysis; it has seen a slight decline in rate over the years going from 31.24% to 29.23%.



Perceptions of Great Risk of Smoking One or More Packs of Cigarettes per Day

- All of the study area regions, except for the State of Mississippi, report rises in the rate of perceptions of great risk of smoking one or more packs of cigarettes per day.

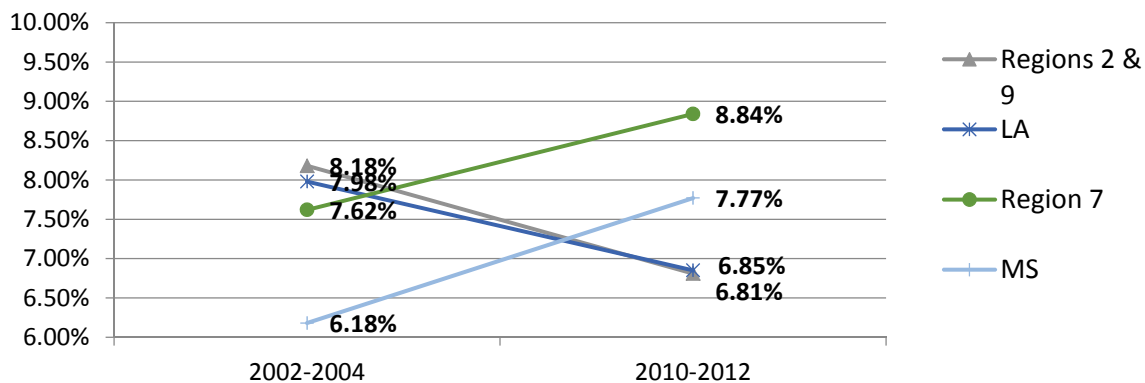
Figure 15: Perceptions of Great Risk of Smoking One or More Packs of Cigarettes per Day



Illicit Drug Use in the Past Month

- Region 7 (Pearl River County, MS) reports the highest rate of illicit drug use in the past month with 8.84% of the population aged 12 and older participating in drug use.
- The Louisiana regions of SAMHSA report declines in rates of illicit drug use; the State of Mississippi reports rises in illicit drug use.

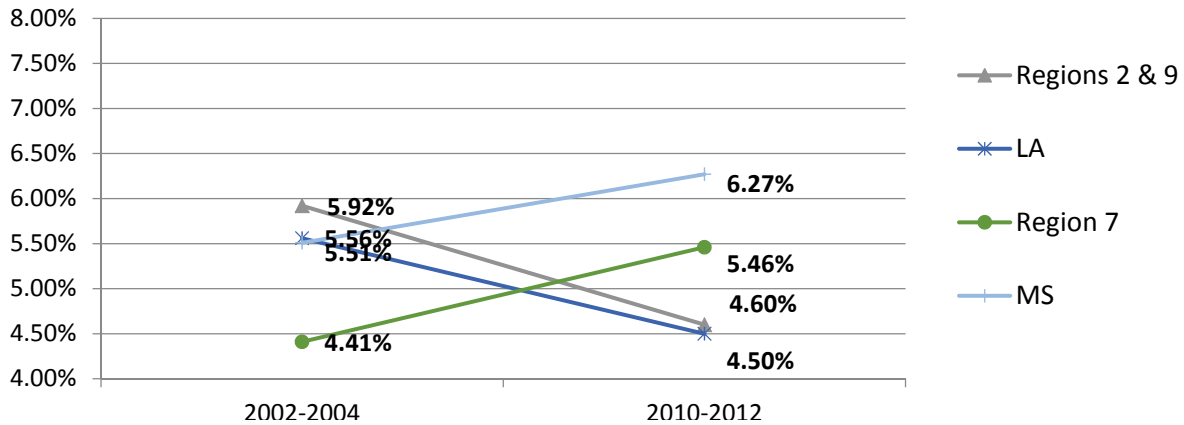
Figure 16: Illicit Drug Use in the Past Month



Marijuana Use in the Past Month

- Region 7 (Pearl River County, MS) reports the highest rate of marijuana use in the past month with 5.46% of the population aged 12 and older reporting use; this rate has been on the incline since 2002-2004 in which it was 4.41%.
- The Louisiana regions of SAMHSA report declines in rates of marijuana use; the State of Mississippi reports rises in marijuana use.

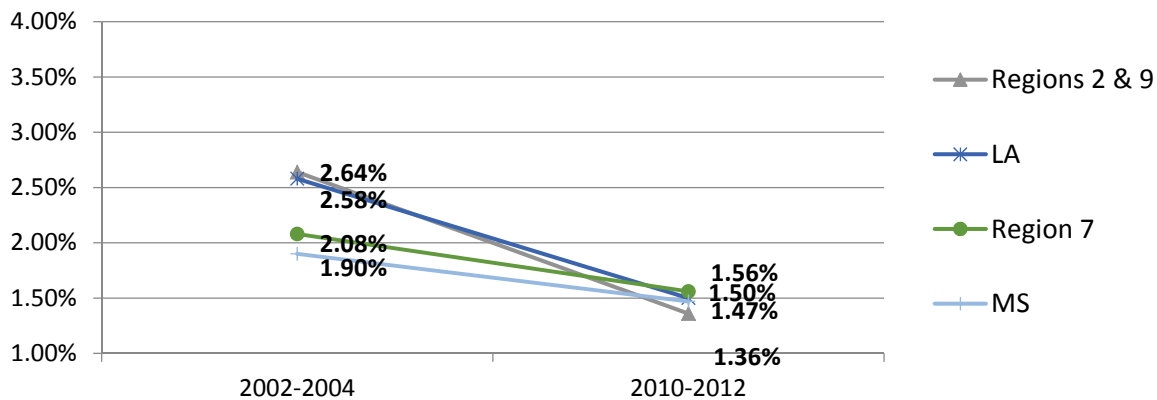
Figure 17: Marijuana Use in the Past Month



Cocaine Use in the Past Year

- Region 2 & 9 (St. Tammany Parish, LA) reports the highest rate of cocaine use in the past month with 1.56 % of the population aged 12 and older reporting use; this rate has been on the decline since 2002-2004 in which it was 2.08%.
- All of the study area regions have seen declines in the rates of cocaine use from 2002-2004 to 2010-2012.

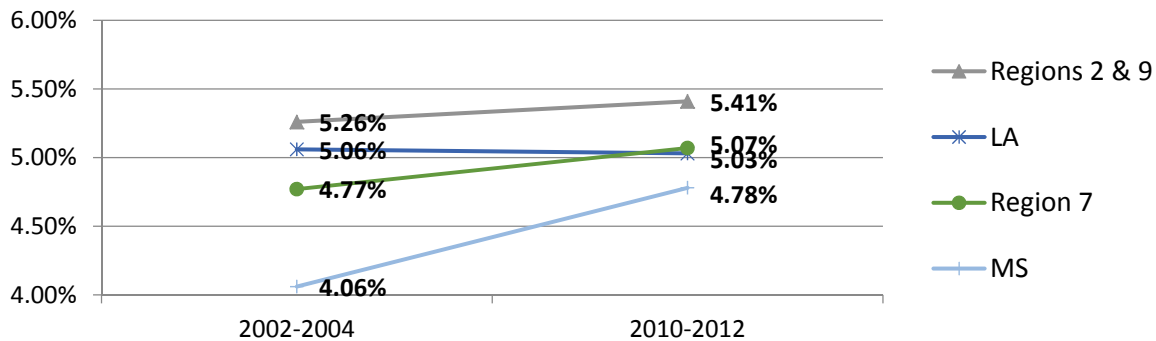
Figure 18: Cocaine Use in the Past Year



Nonmedical Use of Pain Relievers in the Past Year

- Regions 2 & 9 report the highest current rate of nonmedical use of pain relievers in the past year at 5.41% of the population aged 12 and over and have seen this rate rise since 2002-2004 when it was 5.26%.

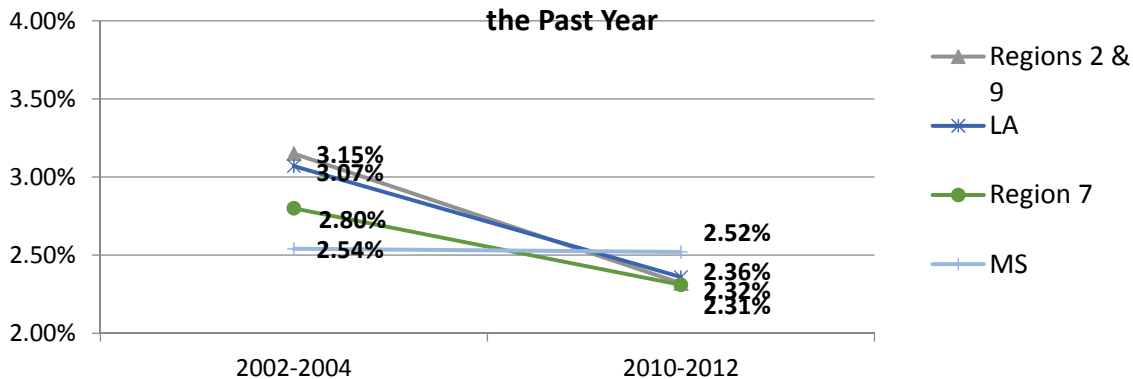
Figure 19: Nonmedical Use of Pain Relievers in the Past Year



Needing but Not Receiving Treatment for Illicit Drug Use in the Past Year

- All of the study area regions report declines in the rates of residents reporting needing but not receiving treatment for illicit drug use in the past year. Region 1 still reports the highest rate, for the study area, at 2.58% needing but not receiving treatment.

Figure 20: Needing but Not Receiving Treatment for Illicit Drug Use in the Past Year



America’s Health Rankings

America’s Health Rankings® is the longest-running annual assessment of the nation’s health on a state-by-state basis. For the past 25 years, America’s Health Rankings® has provided a holistic view of the health of the nation. America’s Health Rankings® is the result of a partnership between United Health Foundation, American Public Health Association, and Partnership for Prevention™.

For this study, the Louisiana State report was reviewed. The following were the key findings/rankings for Louisiana:

- Louisiana Ranks:
 - ✓ 48th overall in terms of health rankings
 - ✓ 44th for smoking
 - ✓ 45th for diabetes
 - ✓ 45th in obesity
- Louisiana Strengths:
 - ✓ Low incidence of pertussis
 - ✓ High immunization coverage among teens
 - ✓ Small disparity in health status by educational attainment
- Louisiana Challenges:
 - ✓ High incidence of infectious disease
 - ✓ High prevalence of low birthweight
 - ✓ High rate of preventable hospitalizations
- Louisiana Highlights:
 - ✓ In the past year, children in poverty decreased by 15 percent from 31.0 percent to 26.5 percent of children.
 - ✓ In the past 2 years, physical inactivity decreased by 10 percent from 33.8 percent to 30.3 percent of adults.
 - ✓ In the past 20 years, low birthweight increased by 15 percent from 9.4 percent to 10.8 percent of births. Louisiana ranks 49th for low birthweight infants.
 - ✓ In the past 2 years, drug deaths decreased by 25 percent from 17.1 to 12.9 deaths per 100,000 population.
 - ✓ Since 1990, infant mortality decreased by 32 percent from 11.8 to 8.2 deaths per 1,000 live births. Louisiana now ranks 47th in infant mortality among states.

Table 7. America's Health Rankings - Louisiana

Measure	Rank	Value	Measure	Rank	Value
Air Pollution	26	9.2	Infectious Disease	48	
All Determinants	48	-0.53	Insufficient Sleep	34	37
All Outcomes	44	-0.273	Lack of Health Insurance	39	16.7
Binge Drinking	21	16.3	Low Birthweight	49	10.8
Cancer Deaths	47	217.4	Median Household Income	50	39,622
Cardiovascular Deaths	46	307.5	Obesity	45	33.1
Children in Poverty	44	26.5	Obesity – Youth		13.5
Chlamydia	47	597.9	Occupational Fatalities	47	8.2
Cholesterol Check	26	76.2	Overall	48	-0.803
Colorectal Cancer Screening	39	61.5	Personal Income, Per Capita	29	41,204
Dental Visit, Annual	48	56.1	Pertussis	1	1.6
Dentists	39	49.6	Physical Activity	46	67.8
Diabetes	45	11.6	Physical Inactivity	46	32.2
Disparity in Health Status	16	26.5	Poor Mental Health Days	43	4.2
Drug Deaths	27	12.9	Poor Physical Health Days	38	4.2
Excessive Drinking	22	17.7	Premature Death	45	9625
Fruits	44	1.18	Preterm Birth	49	15.3
Heart Attack	41	5.3	Preventable Hospitalizations	48	80.3
Heart Disease	40	5	Primary Care Physicians	20	123.7
High Blood Pressure	47	39.8	Public Health Funding	27	69.01
High Cholesterol	41	40.7	Salmonella	47	33.7
High Health Status	47	44.4	Smoking	44	23.5
High School Graduation	46	72	Stroke	45	4
Immunization - Adolescents	11	72.6	Suicide	12	12.5
Immunization – Children	31	69.1	Teen Birth Rate	44	43.1
Immunization Dtap	16	87.9	Teeth Extractions	48	9.6
Immunization HPV female	12	42.1	Underemployment Rate	23	12.7
Immunization MCV4	9	87.7	Unemployment Rate, Annual	15	6.2
Income Disparity	48	0.491	Vegetables	49	1.64
Income Disparity Ratio	1	5.68	Violent Crime	44	496.9
Infant Mortality	47	8.2	Youth Smoking		12.1

Key Stakeholder Interviews

INTRODUCTION:

Tripp Umbach conducted interviews with community leaders on behalf of the Ochsner Medical Center - Northshore. Leaders targeted for interviews encompassed a wide variety of professional backgrounds including 1) Public health expertise; 2) Professionals with access to community health related data; and 3) Representatives of underserved populations. The interviews offered community leaders an opportunity to provide feedback on the needs of the community, secondary data resources, and other information relevant to the study.

This report represents a section of the overall CHNA project completed by Tripp Umbach.

DATA COLLECTION:

The following qualitative data were gathered during individual interviews with 26 stakeholders in communities served by the Ochsner Medical Center - Northshore, a 165-bed community hospital located in Slidell, LA. Each interview was conducted by a Tripp Umbach consultant and lasted approximately 60 minutes. All respondents were asked the same set of questions developed by Tripp Umbach and previously reviewed by the Ochsner Medical Center - Northshore CHNA oversight committee. The purpose of these interviews was for stakeholders to identify health issues and concerns affecting residents in the communities served by Ochsner Medical Center - Northshore, as well as ways to address those concerns.

There was a diverse representation of community-based organizations and agencies among the 26 stakeholders interviewed. Those organizations represented included:

- Louisiana Office of Public Health
- Humana Louisiana
- Director - Medical Student Clerkship
- Louisiana Public Health Institute
- Acadian Ambulance
- St. Tammany EDF
- City of Slidell
- COAST - Slidell Senior Center
- First Baptist Church
- St. Tammany Outreach for the Prevention of Suicide (STOPS)
- Youth Service Bureau - Slidell Client Services & CASA
- St. Tammany Parish Fire District 4
- NAMI
- S.A.L.T
- STPH Community Wellness Center
- The Good Samaritan Ministry
- Covington Police Department
- SMH Foundation Board
- Chief - HIV Division of Infectious Disease
- Prevention Research Center at Tulane University
- The McFarland Institute
- Greater New Orleans Foundation
- Susan G. Komen, New Orleans
- Ochsner Health System
- Cancer Association of Greater New Orleans (CAGNO)
- Methodist Health Foundation

STAKEHOLDER RECOMMENDATIONS:

The stakeholders provided many recommendations to address health issues and concerns for residents living in communities served by Ochsner Medical Center - Northshore. Below is a brief summary of the recommendations:

- Increase afterhours access to clinics and specialty care: Stakeholders recommended that clinics could offer additional hours during evenings and weekends to increase access for residents that may work during normal business hours.
- Increase collaboration between hospitals, FQHCs, and clinics: Stakeholders felt that hospitals could be more connected with FQHCs and clinics in local communities through collaboration and referrals to reduce the use of emergency rooms and urgent care clinics. Stakeholders recommended that hospitals work with local FQHCs and clinics to provide access to specialty diagnostics and treatment for residents that are uninsured or Medicaid eligible. Additionally, stakeholders felt that increased collaboration could mean additional funding for healthcare providers throughout the community.
- Increase information dissemination and education of residents regarding healthy options such as: how to read nutrition labels, food preparation, preventive practices, prevention of STIs, etc. To do this hospitals could partner with local schools, churches, and other community-based organizations.
- Integrate behavioral health services into primary care settings through co-location of behavioral health providers to decrease stigma and increase treatment options for behavioral health. Additional integration could include psychiatric consultation on an as needed basis for primary care providers to treat behavioral health issues that are not severe or persistent.
- Increase care coordination and community support for residents, including seniors, to improve treatment compliance, medication management, appropriate use of healthcare resources, and outcomes.
- Incentivize healthy choices through employers and health insurance companies. Employers could offer monetary incentives and health insurance companies could offer discounted rates for practicing health behaviors. Entities responsible for the cost of unhealthy options should be held accountable (e.g., bars, fast food restaurants, residents making unhealthy choices) through a tax, similar to the tax placed on cigarettes.
- Providers and other community-based organizations should educate residents about the appropriate use of health care resources (e.g., primary care, emergency medical care, urgent care, etc.).
- Increase the number of providers that offer services to Medicaid eligible and uninsured residents (i.e., psychiatrists, pediatricians, and orthodontists).

PROBLEM IDENTIFICATION:

During the interview process, stakeholders discussed five overall health needs and concerns in their community. The top five health needs in order from most discussed to least discussed were:

1. Accessibility of health services
2. Social and environmental determinants of health
3. Behavioral health, including substance abuse
4. Common health concerns
5. Personal behaviors that impact health

ACCESSIBILITY OF HEALTH SERVICES:

All stakeholders representing Northshore communities articulated a need to improve the accessibility of health services (medical, dental, behavioral) in the study area. Several stakeholders acknowledged the significant investments that have been made in healthcare, including establishing FQHC Clinics and behavioral health services as well as the investment in the nearby University Medical Center. Stakeholders noted that there are several major hospitals serving the area, making medical care available for private insured residents. The discussion about accessibility of services was related most often to the cost of care, acceptance of insurance, awareness of services available, and the number and location of providers.

Stakeholders discussed a shift in the way health services are provided from the charity care model where charity care was provided in large charity hospital settings before Katrina to the community-based clinic model providing charity care to residents through a network of community-based clinics. Most stakeholders felt that the community-based clinic model has proven to be more efficient and accessible to residents in Northshore communities. One of the most discussed barriers to accessing health services in Northshore communities was the awareness of residents about what services are available and where they are located. Residents are not securing health services in the proper locations because they are not aware of new clinics and services that may be available to them. The result has reportedly been an over utilization of the emergency rooms for primary care and behavioral health concerns.

Stakeholders discussed the cost of health services in relationship to health insurance, uninsured care, and poor reimbursement rates of health service providers (medical, dental and behavioral). Many providers are not accepting patients with Medicaid insurance due to the low reimbursement rates (e.g., primary care practices, pediatric care, psychiatric care, orthodontists, etc.). This does not include non-profit hospitals. One stakeholder noted that there was a physician that recently retired and has not been replaced who accepted many Medicaid patients. While there are FQHCs in St. Tammany Parish, LA (e.g., Covington, Slidell,

etc.), Medicaid patients have limited options for local primary care providers in Northshore communities. Stakeholders discussed the lack of Medicaid expansion placing a strain on health resources to meet the needs of uninsured and underinsured residents. Additionally, there is a population of residents that earn a moderate income and are underinsured due to unaffordable copays and high deductibles, which restricts access to ongoing preventive care. Residents that are uninsured often seek health services when an issue becomes an emergency and requires more intense and costly care, which typically yields poorer outcomes than primary and preventive care practices.

Stakeholders discussed the fragmentation of health services and the gaps in available services. According to stakeholders, there were several health services that are not readily available in their region, specifically: outpatient Medicaid providers (dental, pediatricians, psychiatrist, etc.), pediatric neurosurgery, pediatric cardiology, inpatient behavioral health and substance abuse services, adequate outpatient behavioral health and substance abuse services, care coordination, after-hours specialty care, HIV services, prescription assistance, primary care (rural areas), trauma unit, endocrinology, and community-based supportive services for seniors. Stakeholders described disparate health resources with lower income neighborhoods containing the fewest resources. The Medicaid Waiver provides some access to care but, does not cover prescription medications or specialty care. As a result, many community-based clinics do not have access to specialty care. Residents may have an undiagnosed illness that they cannot afford to treat due to the cost of medications. Stakeholders discussed the lack of care coordination provided for uninsured and underinsured residents, including seniors, who are seeking care in inappropriate settings (i.e., the emergency room). Seniors have limited options for local rehabilitation if needed upon discharge from the hospital. One stakeholder mentioned the need for medication management among seniors who are prescribed multiple medications by several different doctors that may be contraindicated.

Stakeholders noted that the need for accessible healthcare among medically vulnerable populations (e.g., uninsured, low-income, Medicaid insured, etc.) has an impact on the health status of residents in a variety of ways and often leads to poorer health outcomes. Several of the noted effects are:

- Higher cost of healthcare that results from hospital readmissions and increased usage of costly emergency medical care.
- Residents delaying medical treatment and/or non-compliant due to the lack of affordable options and limited awareness of what options do exist.
- Poor outcomes in adult, maternal and pediatric care due to limited care coordination and lack of patient compliance.

SOCIAL AND ENVIRONMENTAL DETERMINANTS OF HEALTH:

More than 90 percent of stakeholders discussed the social and environmental determinants of health in Northshore communities. The most common social and environmental factors, discussed by stakeholders, were the lack of transportation, impact of culture, high rates of violence, lack of education, and poverty on the health of seniors, adults, children, and unborn children.

The topic of transportation was most often discussed in relationship to residents seeking health care and healthy nutrition in rural areas. Transportation was addressed as a need across all of the Greater New Orleans area, with stakeholders from Northshore communities indicating transportation was one of the greatest barriers to accessing healthcare for seniors and residents in the most rural areas like Bogalusa, LA and Washington Parish. Many of the health service providers exist in the areas where population is the densest (i.e., Covington and Slidell) and residents of the more rural areas must travel to secure health services. Often residents in rural areas are not able to get to and from the health services they need. For this reason, stakeholders indicated that rural residents often delay seeking health services until the issue becomes an emergency and potential outcomes are often poor. While there is a Parish van that provides transportation, stakeholders noted that it is by appointment only and costly for the Parish to maintain. One stakeholder noted that Medicaid used to provide funding for transportation. The lack of adequate transportation impacts health in a variety of ways by limiting the access residents have to healthy options like medical providers and grocery stores with healthy produce. Additionally, the limitations of transportation may restrict the access residents have to employment opportunities, which could be a barrier to insurance and financial stability.

New Orleans and surrounding areas, including Northshore communities, are famous for the culture, food, and drinking. Stakeholders discussed the impact that culture has on the practices, views, and health of residents. Stakeholders noted that the culture of residents is close and supportive, but often centers around food and alcohol consumption. Traditional diets of residents are reflective of culture and, historically, are high in fried and fatty foods. Additionally, the tourism industry is focused on the party atmosphere and encourages excessive consumption of alcohol and foods that can be unhealthy. Stakeholders noted that changing behavior can be difficult particularly when it is steeped in accepted cultural practices and supported by the economy of tourism. Excessive consumption of alcohol and fried foods can cause lifestyle diseases such as cardiovascular disease, obesity, diabetes and cancer.

Hurricane Katrina facilitated worsened conditions in communities due to the displacement of residents, loss, and extensive damage to property. Post-Katrina housing has been overcrowded due to extended family living arrangements, damaged homes, and an overall reduction in healthy, safe living conditions. Stakeholders often reminisced about the informal support networks for child care, transportation, etc. that existed in areas where poverty is the highest. According to stakeholders, many residents practiced almost a communal sharing of resources (child care, transportation, food, money, etc.). Many residents had to move from the communities where they lived after Katrina and lost access to these informal networks.

The economy was discussed regarding the lack of opportunity many residents have, particularly in the Slidell area. According to stakeholders there is no formal industry to support a healthy economy in the Slidell area. Stakeholders addressed the high rates of poverty and the poor outcomes for residents in poverty. Discussions focused on poverty as an explanation for the high prevalence of substance abuse, low educational attainment, poor health, limited access to health services, etc. Often stakeholders pointed out that the lack of opportunity, limited employment, and low educational attainment found in communities of poverty cause residents to feel apathetic. While St. Tammany Parish, LA is one of the more financially stable areas of the state, stakeholders noted that many residents live below the federal poverty line in the Slidell area. Stakeholders felt that the lack of education coupled with low exposure to healthy resources causes residents in poverty to be unaware of healthy options. When residents are aware of healthier choices they may perceive these options to be out of their reach (e.g., healthy produce and nutrition may not be viewed as consistently attainable due to a lack of grocery stores, limited transportation, and cost).

Housing insecurity was discussed by stakeholders in relationship to the homeless population in locations like Slidell. Stakeholders indicated that residents may face one of three types of housing insecurities: 1) persistent relocation to be closer to resources (e.g., employment for parents, family/friends, etc.); 2) families that are homeless; and 3.) youth that are homeless by themselves (without adult accompaniment). Stakeholders felt that housing insecurity influences the ability for youth to consistently secure appropriate health services (e.g., medical, dental, behavioral health), proper nutrition, etc. The health status of youth experiencing housing insecurity is often worse than youth with stable living conditions.

Food security was discussed by stakeholders related to the health of seniors and youth. Grocery stores are not often located in low income neighborhoods creating what is being called a “food desert”. Youth and seniors residing in these food deserts may not have ready access to healthy nutrition due to the lack of transportation options.

Stakeholders discussed the level of health literacy among residents. Health literacy is influenced by literacy levels and access to and understanding of technology (e.g., computers). Stakeholders noted that there is a high correlation between lower educational attainment and lower level of health literacy. Stakeholders felt that the movement toward electronic medical records, the use of online applications, and internet based systems may leave some residents that do not have access to computers and/or may be unfamiliar with computers without access to relevant health information.

Stakeholders discussed the implications of social and environmental determinants of health as some of the following:

- Lifestyle diseases such as obesity, diabetes, cancer, hypertension, and cardiovascular disease.
- Higher rates of poor birth outcomes such as low birth weight.

- Increased behavioral health symptoms of trauma (e.g., risky behaviors, suicide, anxiety, depression, violence, apathy, etc).
- Poor birth outcomes (e.g., low birth weight) and limited access to healthy options.

NEED FOR BEHAVIORAL HEALTH INCLUDING SUBSTANCE ABUSE SERVICES:

Behavioral health services and issues were discussed separate from medical or dental health services, with 80 percent of stakeholders identifying a health need related to behavioral health and/or substance abuse. Stakeholders discussed the lack of behavioral health and substance abuse resources in general and many noted that behavioral health and substance abuse needs are highest in the most rural areas and communities with the highest rates of poverty. Stakeholders felt that there is a connection between environmental factors and the prevalence of behavioral health and substance abuse. Stakeholders felt that the culture of the area and local tourist industry encourages substance abuse and identified tobacco, alcohol and marijuana as the most common substances being abused. Other substances noted were heroin and prescription pain medications. Stakeholders also felt that substance abuse is often a way for residents to self-medicate or cope with behavioral health issues including stress and serious mental illness (e.g., bipolar, schizophrenia, etc.).

“Katrina has had a major impact on the mental health of residents- the stress, and displacement of residents has had an impact and the response has not been adequate to meet the need.” ~ First Responder

Often communities with higher rates of poverty are also the areas with limited resources available to treat diagnoses related to behavioral health and substance abuse. This is, in part, due to the low reimbursement rates for behavioral health services. There is reportedly a resistance among behavioral health providers to accept Medicaid insurance and the cost of uninsured behavioral health services is unaffordable for residents who are Medicaid eligible.

Stakeholders noted that there has been a decrease in funding for behavioral health and substance abuse services which has led to limited resources. While there are inpatient beds and outpatient services available, stakeholders indicated that they are not adequate enough to meet the demand for behavioral health and substance abuse services in Northshore communities. In recent years there has been a decrease in the number of inpatient beds and crisis services have declined. Outpatient services have improved but, often have lengthy waiting lists for diagnostic services as well as ongoing treatment. Suicide rates have reportedly increased in recent years in several Northshore communities.

Stakeholders noted that behavioral health and substance abuse have an impact on the health status of residents in a variety of ways and often leads to poorer health outcomes. Several of the noted effects of behavioral health and substance abuse are:

- Higher suicide rates and incarceration rates for residents with mental illness.

- Residents with a history of behavioral health and substance abuse do not always practice healthy behaviors and may be non-compliant with necessary medical treatments (e.g., HIV treatments, etc.).

COMMON HEALTH CONCERNS:

More than 90 percent of stakeholders discussed specific health concerns of residents. The most common health concerns discussed by stakeholders were obesity, diabetes, and heart disease.

1. Obesity –half of stakeholders discussed the prevalence and cause of obesity among residents in Northshore communities. Stakeholders indicated that obesity is an issue among adults, as well as a growing problem among youth. Stakeholders identified social and environmental determinants (e.g., culture, lack of awareness, limited access to healthy nutrition, etc.), as well as personal choice and behaviors within the control of residents (e.g., choices about nutrition, exercise, etc.) as driving the high rates of obesity.
2. Diabetes – More than one-third of stakeholders discussed the prevalence and cause of diabetes as a common health issue among residents. Stakeholders identified social and environmental determinants (e.g., lack of awareness, limited access to primary care, food deserts, etc.), as well as personal choice and behaviors within the control of residents (e.g., choices about nutrition, exercise, etc.) as driving the high rates of diabetes.
3. Heart disease – More than one quarter of stakeholders discussed heart disease and cardiovascular complications as a common health concern among residents. Stakeholders identified social and environmental determinants (e.g., lack of awareness, culture, etc.), as well as personal choice and behaviors within the control of residents (e.g., smoking, exercising, etc.) as driving the high rates of heart disease.

The impact of common health issues can be poor health outcomes of a population and greater consumption of health care resources.

PERSONAL BEHAVIORS THAT IMPACT HEALTH:

Approximately two-thirds of the stakeholders interviewed discussed lifestyle choices that impact the health status and subsequent health outcomes for residents. Stakeholders noted that there are factors like smoking, lack of physical exercise, and risky behaviors that are related to the personal choices of residents and influence health outcomes. The topic of personal choice was most often discussed in relationship to obesity, the prevalence of STIs, and cancer and respiratory issues related to smoking and alcoholism. Note that these are also health concerns stakeholders felt were heavily influenced by social and environmental determinants of health. It is this coupling of social/environmental and personal choice determinants of health

that present the greatest challenge to improving lifestyle related diseases like diabetes, obesity, cancer, and STIs.

Stakeholders recognized that there are social determinants that drive the rate of obesity such as food deserts, lack of awareness about healthy food preparation, and the inability to exercise outdoors due to a lack of safety; however, stakeholders also recognized that residents often make personal choices based on preferences for unhealthy foods and limited motivation to exercise.

At the same time, stakeholders recognized that there are social and environmental determinants of cancer and respiratory diseases like chemical run off from factories and pollution; they discussed the personal choice to continue smoking as an additional factor that facilitates low birth weight and the rates of cancer and COPD in communities where smoking rates are greatest.

While stakeholders understood the impact of social and environmental determinants, like youth not learning the practices that reduce the spread of HIV and other STIs in school settings; stakeholders also recognized that parents are choosing not to provide education to their children about preventing the spread of STIs and youth are making the decision to practice risky behaviors.

Survey of Vulnerable Populations

Tripp Umbach worked closely with the CHNA oversight committee to ensure that community members, including under-represented residents, were included in the needs assessment through a survey process.

DATA COLLECTION:

Vulnerable populations were identified by the CHNA oversight committee and through stakeholder interviews. Vulnerable populations targeted by the surveys were: seniors, low-income (including families), uninsured, Latino, chronically ill, had a mental health history, homeless, literacy challenged, limited English speaking, women of child bearing age, diabetic, and residents with special needs.

A total of 115 surveys were collected in the Ochsner Medical Center - Northshore service area which provides a +/- 2.89 confidence interval for a 95% confidence level. Tripp Umbach worked with the oversight committee to design a 32 question health status survey. The survey was administered by community-based organizations providing services to vulnerable populations in the hospital service area.

- Community-based organizations were trained to administer the survey using hand-distribution.
- Surveys were administered onsite and securely mailed to Tripp Umbach for tabulation and analysis.
- Surveys were analyzed using SPSS software.

Limitations of Survey Collection:

There are several inherent limitations to using a hand-distribution methodology that targeted medically vulnerable and at-risk populations. Often, the demographic characteristics of populations that are considered vulnerable populations are not the same as the demographic characteristics of a general population. For example, vulnerable populations, by nature, may have significantly less income than a general population. For this reason the findings of this survey are not relevant to the general population of the hospital service area. Additionally, hand-distribution is limited by the locations where surveys are administered. In this case Tripp Umbach asked CBOs to self-select into the study and as a result there are several populations that have greater representation in raw data (i.e., low-income, women, etc.). These limitations were unavoidable when surveying low-income residents about health needs in their local communities.

Demographics:

Survey respondents were asked to provide basic anonymous demographic data.

Table 8: Survey Responses – Self-Reported Age of Respondent

Age	Respondents (%)
18-24	21.7%
25-34	35.7%
35-44	15.7%
45-54	9.6%
55-64	12.2%
65-74	2.6%
75-84	2.6%
85+	21.7%

- Of the surveys gathered: 90.4% were female, 9.6% were male
- The majority of the survey respondents reported their race as White or Caucasian (63.6%), the next largest racial group was Black or African American (23.4%), and third largest was more than one race (4.7%).

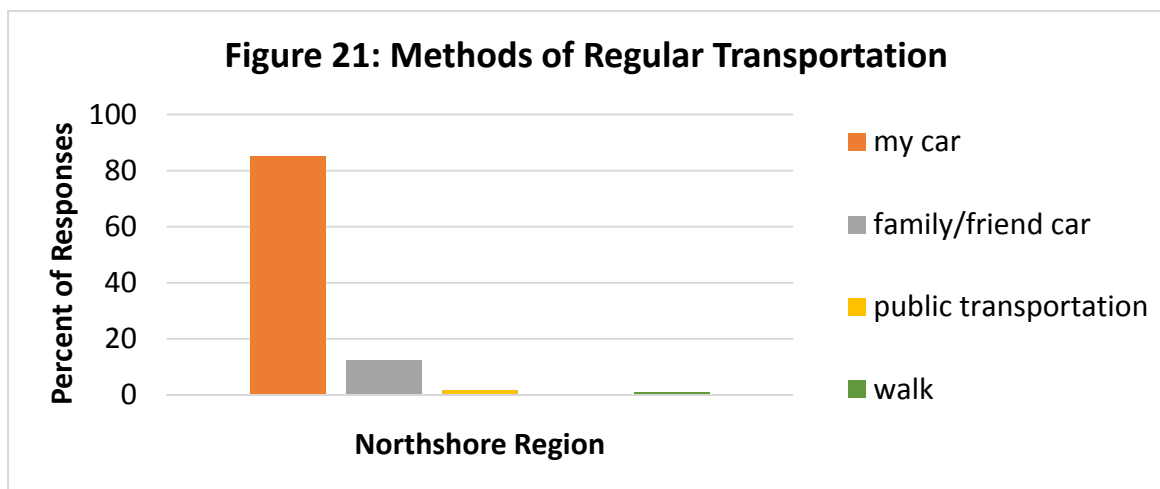
Table 9: Survey Responses – Self-Reported Annual Income of Respondents

Income	Respondents (%)
< \$10k	21.5%
\$10-19,999	13.1%
\$20-29,999	14.0%
\$30-39,999	12.1%
\$40-49,999	3.7%
\$50-59,999	5.6%
\$60-69,999	2.8%
\$70-79,999	.9%
\$80-99,999	2.8%
\$100-149,999	1.9%

- ✓ The household income levels with the most responses were < \$10,000 (21.5%) and \$20,000 - \$29,999 (14.0%)
- ✓ 48.6% of respondents reported less than \$29,999 annual household income.

Healthcare:

- ✓ The most popular place for residents to seek care is a doctor’s office (68.8%), with the urgent care being the second most popular (8.9%), ER third (8.0%), and free/reduced fourth (7.1%).
- ✓ The most common forms of health insurance carried by respondents was Medicaid (38.6%), private/commercial (29.8%), and No Insurance (15.8%).
- ✓ The most common reason why individuals indicated that they do not have health insurance is because they can’t afford it (73.3%).
- ✓ 1/5 of respondents (20%) could not see a doctor in the last 12 because of cost; compared to the state (18.9%).
- ✓ Most respondents had been examined by a physician within the last 12 months at least once (66.1%).
- ✓ 16.5% respondents reported not taking medications as prescribed in the last 12 months due to cost.



- 15.1% of survey respondents indicated that their primary form of transportation is some method other than their own car.

Table 10: Survey Responses Related to HIV/AIDS Testing

Ever Been Tested for HIV	Northshore	LA	U.S.
Yes	55.9%	43.5%	35.2%
No	44.1%	56.5%	64.8%

- The Northshore reports a higher rate of HIV testing (55.9%) than the state (43.5%) or the U.S. (35.2%).

Health Services:

Table 11: Survey Responses – Health Services Received During the Previous 12 Month Period

Test Received	SELA Region	Northshore Region
Blood test	52.3%	42.6%
Check up	45.8%	47%
Cholesterol test	31.5%	17.4%
Flu shot	31.1%	29.6%
Urinalysis	23%	27%

- ✓ Respondents from the Northshore Region report similar testing rates as those across the SELA Region.
- Most respondents did not prefer to receive health services in a language other than English.

Table 12: Survey Responses – Perceptions about Health Service Availability

Northshore	Available to me	Available to others	Not available	NA*
Dental services	80.4%	8.8%	6.9%	3.9%
Vision services	77.2%	10.9%	7.9%	4.0%
Affordable, safe, and healthy housing	68.3%	8.9%	6.9%	15.8%
Healthy foods	26.8%	6.2%	4.1%	62.9%
Cancer screening	80.4%	8.8%	6.9%	3.9%

*NA = Not applicable

- ✓ At least 1 in 10 respondents indicated they did not have access to the following at all or the services is available to others but not them: Primary care (12.3%), Medical specialist (13%), Pediatric & adolescent health (10.8%).
- ✓ Most respondents indicated that they have access to the following services: services for 60+, substance abuse services, women's health, mental health service, HIV services, safe exercise, healthy foods, transportation, surgical, emergency medical, employment assistance, cancer screening, cancer treatment.

Table 13: Survey Responses – Preferences for Receiving Information about Healthcare

Preferred Method	Respondents (%)
Newspaper	26.4%
TV	33.0%
Internet	33.1%
Word of Mouth	61.0%
Radio	12.4%
Library	3.7%

Preferred Method	Respondents (%)
Clinics	18.8%
Faith/Religious Organizations	20.3%
Call 2-1-1	3.9%
Other	5.4%

- ✓ Respondents reported preferring to receive information by word of mouth most often.

Common Health Issues:

Table14: Survey Responses – Health Issues Respondents Reported Ever Diagnosed with

Ever Diagnosed with	SELA Region	Northshore Region	LA*	U.S.*
High blood pressure	44.8%	28.8%	39.9%	31.4%
High blood cholesterol	30%	15.3%	--	--
Heart attack	6.2%	.9%	5.3%	4.3%
Asthma	13.2%	18.3%	5.3%	4.3%
Still have asthma	8.8%	8.4%	--	--
COPD, emphysema or chronic bronchitis	4.2%	4.6%	7.5%	6.5%
Arthritis/rheumatoid, gout, lupus, or fibromyalgia	27.8%	18.9%	26.4%	25.3%
Depressive disorder	21.5%	25.5%	18.7%	18.7%
Pre-diabetes or borderline diabetes	18.6%	12.8%	11.6%	9.7%
Diabetes	16%	8.6%	10.3%	9.7%
Skin cancer	2.8%	1.9%	5%	6%
Other types of cancer (Breast-20.5%)	4.4%	6.7%	6.6%	6.7%
Receiving mental health treatment/medication	21.4%	21.4%	--	--

* Source: CDC

- Survey respondents from the Northshore Region self-reported lower diagnosis rates for many of the measures than the SELA region, the state and the nation with few exceptions (i.e., asthma, mental health, and cancer).

When asked to report health conditions that they had ever been diagnosed with by a health professional, survey respondent from the Northshore Region reported:

- Higher diagnosis rates than the SELA Region, the state and the nation for asthma (18.3% vs. SELA- 13.2%, LA- 5.3%, and U.S.- 4.3%); depressive disorder (25.5% vs. SELA- 21.5%, LA- 18.7%, and U.S.- 18.7%); and other types of cancer-breast cancer was the most diagnosed (6.7% vs. SELA- 4.4%, LA- 6.6%, and U.S.- 6.7%).

- More than one in five (21.4%) survey respondents indicated they have received mental health treatment or medication at some point in their lives.

Table 15: Survey Responses – Top Health Concerns Reported

Health Concern	SELA Region	Northshore Region
Diabetes	50.8%	37.7%
High Blood Pressure	49.9%	34.9%
Drugs and Alcohol	47.7%	51.9%
Cancer	42.1%	38.7%
Heart disease	38.5%	23.6%

- ✓ When asked to identify five of the top health concerns in their communities; there was a great deal of agreement between the two regions. Several of the additional choices that were not as popular were: adolescent health, asthma, family planning/birth control, flood related health concerns (like mold), hepatitis infections, HIV, maternal and child health, pollution (e.g., air quality, garbage), sexually transmitted diseases, stroke, teen pregnancy, tobacco use, violence or injury, other, and don't know.

Lifestyle:

Table 16: Survey Responses – Average Body Mass Index of Survey Respondents

Weight & BMI	SELA Region	Northshore Region	Avg. Female (5'4")*	Avg. Male (5'9")*
BMI**	29.38	29.21	26.5	26.6

* Source: CDC

** Survey Respondents were asked to report their weight and height, from which the BMI calculation was possible.

- ✓ Respondents in both regions show higher weight and BMI than national and state averages regardless of gender.
- ✓ Most respondents reported having access to fresh fruits and vegetables (89.4%).

Table 17: Survey Responses – Self-Reported Smoking Rates

Smoking	SELA Region	Northshore Region	LA*	U.S.*
Everyday	15.5%	8.8%	19.3%	15.4%
Some days	8.1%	6.1%	6.4%	5.7%
Not at all	74.7%	82.5%	--	--

*Behavioral Risk Factor Surveillance System

- ✓ Self-reported smoking rates are lower in the Northshore Region than is average for the state or the nation.

Table 18: Survey Responses – Self-Reported Physical Activity Rates

Physical Activities	SELA Region	Northshore Region	U.S.*
Yes	57.3%	72.6%	74.7%
No	42.7%	27.4%	25.3%

**Behavioral Risk Factor Surveillance System*

- ✓ Respondents in both the SELA and Northshore regions report lower rates of physical activity than those reported for the nation.

Conclusions and Recommended Next Steps

The community needs identified through the Ochsner Medical Center - Northshore CHNA process are not all related to the provision of traditional medical services provided by medical centers. However, the top needs identified in this assessment do “translate” into a wide variety of health-related issues that may ultimately require hospital services. Each health need identified has an impact on population health outcomes and ultimately the cost of healthcare in the region. For example: unmet behavioral health and substance abuse needs lead to increased use of emergency health services, increased death rates due to suicide, and higher consumption of other human service resources (e.g., the penal system).

Ochsner Medical Center - Northshore, working closely with community partners, understands that the CHNA document is only a first step in an ongoing process. It is vital that ongoing communication and a strategic process follow the assessment – with a clear focus on addressing health priorities for the most vulnerable residents in the hospital service area.

The hospital service area contains affluent populations and populations with higher socio-economic needs (e.g., low-income, residents with a behavioral health history, unemployed, uninsured, homeless, seniors, etc.); which presents a unique challenge for hospital leadership when planning to meet the needs of all residents in the study area. While St. Tammany Parish is one of the most affluent parishes in the state of Louisiana; there is evidence of health needs, particularly related to behavioral health and low income populations. With one of the lowest FQHC ratios and an increase in uninsured residents, it will be important to continue to strive to address the primary care needs of the under/uninsured residents in St. Tammany Parish in a way that take into consideration the size of the parish, the rural nature of the region, and the lack of transportation. Pearl River, MS shows the poorest outcomes across many of the indicators included in this study. Providing access to health services for residents that are under/uninsured will have the greatest impact on the health of residents in Pearl River, MS. It is important to expand existing partnerships and build additional partnerships with multiple community organizations when developing strategies to address the top identified needs. Implementation strategies will need to consider the higher need areas in the study area and address the multiple barriers to healthcare. It will be necessary to review evidence based practices prior to planning to address any of the needs identified in this assessment due to the complex interaction of the underlying factors at work driving the need in local communities.

Tripp Umbach recommends the following actions be taken by the hospital sponsors in close partnership with community organizations over the next five months.

Recommended Action Steps:

- ❑ Widely communicate the results of the CHNA document to Ochsner Medical Center - Northshore staff, providers, leadership and boards.
- ❑ Review the CHNA findings with a decision making body (e.g., a Board of Directors) for approval.
- ❑ Make the CHNA widely available to community residents, as well as through multiple outlets such as: the hospital website, neighborhood associations, community-based organizations, and employers.
- ❑ Review relevant evidence-based practices that the community has the capacity to implement.
- ❑ Develop “Working Groups” to focus on specific strategies to address the top needs identified in the CHNA. The working groups should meet for a period of four to six weeks to review evidence-based practices and develop action plans for each health priority which should include the following:
 - ✓ Objectives
 - ✓ Anticipated impact
 - ✓ Target population
 - ✓ Planned action steps
 - ✓ Planned resource commitment
 - ✓ Collaborating organizations
 - ✓ Evaluation methods and metrics
 - ✓ Annual progress

APPENDIX A



Community Resource Inventory

OCHSNER MEDICAL CENTER - NORTHSORE

September, 2015

Organization/Provider	Counties Served	Contact Information	Zip Code	Column1	Internet Information	Population Served	Services Provided	ACCESS TO HEALTHCARE AND MEDICAL SERVICES	Limited availability of affordable preventive care	Limited availability of medical professionals	Priority care that may be unaffordable for some patients	Cost of health insurance	Transportation availability	Coordination of healthcare	Pediatric Health Care	BEHAVIORAL HEALTH AND SUBSTANCE ABUSE	Mental health	Substance abuse	Pediatric Behavioral health (psychiatry, counseling, etc.)	RESOURCE AWARENESS AND HEALTH LITERACY	Limited information dissemination	Services for Latino/Vietnamese residents (including translation services)	Collaboration of business, hospitals and communities	Limited outreach service provision	ACCESS TO HEALTHY OPTIONS	Healthy nutrition	Recreational activities availability	Public transportation availability	Supervision of young people	BEHAVIORS THAT IMPACT HEALTH
MERCY FAMILY CENTER	No restrictions	1445 W. Causeway Approach Mandeville, LA 70471	70471	St. Tammany	More information	No restrictions	Provides outpatient counseling, psychiatry, educational services and school based mental health services to children, youth, and adults. Greater New Orleans Area Application Center for Medicaid.	*	X	X	X				X	*	X		X	*	X									*
MMO BEHAVIORAL HEALTH SYSTEM	No restrictions	201 Greenbrier Boulevard Covington, LA 70433 Ph: 985.893.2970	70433	St. Tammany	http://www.mmoinc.com/services	Adults	Provides behavioral and mental health care.									*	X			*	X	X	X	X	*	X				*
MMO BEHAVIORAL HEALTH SYSTEM	No restrictions	201 Greenbrier Boulevard Covington, LA 70433 Ph: 985.249.7780	70433	St. Tammany	http://www.mmoinc.com/services	Adults	Provides behavioral and mental health care.									*	X			*	X	X	X	X	*	X				*
NORTHLAKE BEHAVIORAL HEALTH SYSTEM	No restrictions	23515 Highway 190 Mandeville, LA 70448 Phone: (985) 626-6300	70448	St. Tammany	http://www.northlakebehavioralhealth.com/services.htm	Adults and adolescents	Provides mental and behavioral health care and substance abuse services. North Shore Area Application Center for Medicaid.									*	X	X	X	*	X	X	X	X	*	X				*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Health Center - Covington 1000 Ochsner Blvd. Covington, LA 70433 Phone: 985-875-2828	70433	St. Tammany	More information	No restrictions	Provides specialty health care.	*	X	X	X	X	X	X	X	*	X	X	X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Health Center - Pearl River 64629 LA 41 Pearl River, LA 70452 Phone: 985-639-3777	70452	St. Tammany	More information	No restrictions	Provides primary and preventive health care.	*	X	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Health Center - Slidell 2750 E. Gause Blvd. Slidell, LA 70461 Phone: 985-639-3777	70461	St. Tammany	More information	No restrictions	Provides primary, preventive, pediatric, pediatric specialty, and urgent health care.	*	X	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Health Center For Children - Covington 101 E. Judge Tanner Blvd., Suite 302 Covington, LA 70433 Phone: 985-809-5800	70433	St. Tammany	More information	Children	Provides pediatric health care.	*	X	X	X	X	X	X	X	*	X	X	X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Health Center For Children - Slidell 2370 E. Gause Blvd. Slidell, LA 70461 Phone: 985-639-3755	70461	St. Tammany	More information	Children	Provides pediatric health care.	*	X	X	X	X	X	X	X	*	X	X	X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Medical Center - North Shore 100 Medical Center Drive Slidell, LA 70461 Phone: 985-649-7070	70461	St. Tammany	More information	No restrictions	Provides primary, preventive, pediatric, pediatric specialty, specialty, and emergency health care services.	*	X	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Orthopedic Health Center - Slidell 104 Medical Center Drive Slidell, LA 70461 Phone: 985-646-5550	70461	St. Tammany	More information	No restrictions	Provides adult and pediatric orthopedic health care.	*	X	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Specialty Health Center One - Slidell 1850 Gause Blvd. East Slidell, LA 70461 Phone: 985-639-3777	70461	St. Tammany	More information	No restrictions	Provides specialty health care and psychiatric and mental health services.	*	X	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Specialty Health Center Two - Slidell 105 Medical Center Drive, Northshore Two Bldg., Suite 202 & 205 Slidell, LA 70461 Phone: 985-639-3777	70461	St. Tammany	More information	No restrictions	Provides specialty health care.	*	X	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Women's Health Center - Slidell 105 Medical Center Drive, Northshore Two Bldg., Suite 303 Slidell, LA 70461 Phone: 985-639-3777	70461	St. Tammany	More information	Women	Provides women's health care.	*	X	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Ochsner Women's Health Center - Covington 101 E. Judge Tanner Blvd., Suite 301 Covington, LA 70433 Phone: 985-809-5850	70433	St. Tammany	More information	Women	Provides women's health care.	*	X	X	X	X	X	X	X	*	X	X	X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Optical Shop - Ochsner Health Center - Covington 1000 Ochsner Blvd. Covington, LA 70433 Phone: 985-875-2740	70433	St. Tammany	More information	No restrictions	Provides ophthalmic and optometric care to adults and children.	*	X	X	X	X	X	X	X	*	X	X	X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Pediatric Subspecialty Clinic 7121 Highway 21 Covington, LA 70433 Phone: 985-898-7400	70433	St. Tammany	More information	Children	Provides specialty pediatric care.	*	X	X	X	X	X	X	X	*	X	X	X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	Pharmacy & Wellness - Covington 1000 Ochsner Blvd. Covington, LA 70433	70433	St. Tammany	More information	No restrictions	Provides prescription medication services and health education.	*	X	X	X	X	X	X	X	*	X	X	X	*	X	X	X	X	*	X	X	X	X	*
OCHSNER HEALTH SYSTEM	No restrictions	St. Tammany Parish Hospital 1202 S. Tyler Street Covington, LA 70433 Phone: 985-898-4000	70433	St. Tammany	More information	No restrictions	Provides primary, preventive, specialty, and emergency health care.	*	X	X	X	X	X	X	X	*	X	X	X	*	X	X	X	X	*	X	X	X	X	*
REGINA COELI CHILD DEVELOPMENT CENTER	St. Tammany	Covington Head Start 73060 East Stadium Dr Covington, LA 70433 Phone: 985-892-8638	70433	St. Tammany	http://www.rccdc.org/cehs.html	Children and families	Access point for health and social services; medical transportation; mental health counseling and referrals; healthy food and nutrition counseling; education programs for children.	*	X	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X		X	*
REGINA COELI CHILD DEVELOPMENT CENTER	St. Tammany	Early Head Start 73134 East Stadium Dr Covington, LA 70433 Phone: 985-893-0053	70433	St. Tammany	http://www.rccdc.org/cehs.html	Children and families	Access point for health and social services; medical transportation; mental health counseling and referrals; healthy food and nutrition counseling; education programs for children.	*	X	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X		X	*

Organization/Provider	Counties Served	Contact Information	Zip Code	Column1	Internet Information	Population Served	Services Provided	ACCESS TO HEALTHCARE AND MEDICAL SERVICES	Limited availability of affordable preventive care	Limited availability of medical professionals (e.g., interpreters that may be unavailable for some residents)	Cost of health insurance	Transportation availability	Coordination of healthcare	Pediatric Health Care	BEHAVIORAL HEALTH AND SUBSTANCE ABUSE	Mental health	Substance abuse	Pediatric Behavioral health (psychiatry, counseling, etc.)	RESOURCE AWARENESS AND HEALTH LITERACY	Limited information dissemination	Services for Latino/Latinese residents (including translation services)	Collaboration of business, hospitals and communities	Limited outreach service provision	ACCESS TO HEALTHY OPTIONS	Healthy nutrition	Recreational activities availability	Public transportation availability	Supervision of young people	BEHAVIORS THAT IMPACT HEALTH	
REGINA COELI CHILD DEVELOPMENT CENTER	St. Tammany	Lacombe/Mandeville Head Start 60366 S. 24th Street Lacombe, LA 70445 Phone: 985-882-5610	70445	St. Tammany	http://www.rccdc.org/lacombe.html	Children and Families	Access point for health and social services; medical transportation; mental health counseling and referrals; healthy food and nutrition counseling; education programs for children.	*	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X		X	*	
REGINA COELI CHILD DEVELOPMENT CENTER	St. Tammany	Slidell Head Start 61260 Airport Rd Slidell, LA 70460 Phone: 985-641-1451	70460	St. Tammany	http://www.rccdc.org/slidell.html	Children and families	Access point for health and social services; medical transportation; mental health counseling and referrals; healthy food and nutrition counseling; education programs for children.	*	X	X	X	X	X	X	*	X		X	*	X	X	X	X	*	X	X		X	*	
RIVER PARISHES TRANSIT AUTHORITY	St. Charles, St. John the Baptist	149 Woodland Dr. LaPlace, LA 70068 Phone: (504) 304-2000	70068		http://rparolls.org/	Residents of St. Charles and St. John the Baptist Parishes	Provides public transportation services.	*				X												*			X			
SEASIDE HEALTH CARE	No restrictions	350 North Causeway Blvd. Mandeville, LA 70448 (985) 674-7694	70448	St. Tammany	http://www.seasidehc.com/seaside-behavioral-center-locations/	Adults	Partial hospitalization and intensive outpatient programs for patients 18 and older.								*	X	X											X		
ST. TAMMANY AREA TRANSPORTATION	St. Tammany	P.O. Box 628 Covington LA 70434-0628 Phone: 985-809-2989	70434	St. Tammany	http://www.stpgov.org/residents/transportation	Residents of St. Tammany Parish	Provides public transportation services.	*				X												*				X		
ST. TAMMANY COUNCIL ON AGING	St. Tammany Parish	72060 Ramos Avenue, P.O. Box 171 Covington LA 70434 Phone: (985)892-0377	70434	St. Tammany	http://www.coastseniors.org/	Seniors	Provides programs for seniors including access to social services, wellness, transportation, nutrition, recreation, physical activity and social opportunities.	*	X	X	X	X	X	X	*	X	X		*	X	X	X	X	*	X	X	X	X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	1123 Main St. Madisonville, LA 70447 Telephone: (985) 845-4819	70447	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	28027 Hwy 130 Lacombe, LA 70445 Telephone: (985) 882-7858	70445	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	310 W. 21st Ave. Covington, LA 70433 Telephone: (985) 893-6280	70433	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	3457 Highway 190 Mandeville, LA 70471 Telephone: (985) 626-9779	70471	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	555 Robert Blvd. Slidell, LA 70458 Telephone: (985) 646-6470	70458	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	64580 Hwy 41 Pearl River, LA 70452 Telephone: (985) 863-5518	70452	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	71683 Leveson Street Abita Springs, LA 70420 Telephone: (985) 893-6285	70420	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	79213 Hwy 40 Covington, LA 70435 Telephone: (985) 893-6284	70435	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	81597 Hwy. 41 Bush, LA 70431 Telephone: (985) 895-3588	70431	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	82393 Railroad Avenue Folsom, LA 70437 Telephone: (985) 796-9728	70437	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
ST. TAMMANY PARISH LIBRARY	St. Tammany	844 Girod St. Mandeville, LA 70448 Telephone: (985) 626-4293	70448	St. Tammany	http://www.sttammany.lib.la.us/home_flash.htm	Residents of St. Tammany Parish	Provides educational programming for all ages, community activities, meeting rooms, internet access, and health awareness.												*	X	X	X	X	*				X	*	
STARC	St. Tammany, Washington	Administration and Resource Departments 700 Gause Blvd Ste 104 & 209 Slidell, LA 70461 985-641-0197	70461	St. Tammany	http://www.starca.org/programs-training/	Individuals with developmental disabilities and their families	Provides programs and access to health, social and community services.	*	X	X	X				X	*	X		*	X	X	X	X	*	X	X		X	*	
STARC	St. Tammany, Washington	Better Way Services East and Jacob's Ladder East 1541 St. Ann Slidell, LA 70460 985-641-0197	70460	St. Tammany	http://www.starca.org/programs-training/	Individuals with developmental disabilities and their families	Provides programs, transportation, and access to health, social and community services.	*	X	X	X	X			X	*	X		*	X	X	X	X	*	X	X		X	*	
STARC	St. Tammany, Washington	Better Way Services West, Supported Employment and Jacob's Ladder West 1705 Viola Street Mandeville, LA 70448 985-641-0197	70448	St. Tammany	http://www.starca.org/programs-training/	Individuals with developmental disabilities and their families	Provides programs and access to health, social and community services.	*	X	X	X	X			X	*	X		*	X	X	X	X	*	X	X		X	*	
STARC	St. Tammany, Washington	Noah's ARC Child Development Center 1689 Viola Street Mandeville, LA 70448 985-674-1998	70448	St. Tammany	http://www.starca.org/programs-training/	Individuals with developmental disabilities and their families	Provides programs and access to health, social and community services.	*	X	X	X	X			X	*	X		*	X	X	X	X	*	X	X		X	*	
STARC	St. Tammany, Washington	Waiver Services, Residential Services, Elderly Services, STARC Commercial Linen and the Technology Department 40016 Hwy 190 Slidell, LA 70461 985-641-0197	70461	St. Tammany	http://www.starca.org/programs-training/	Individuals with developmental disabilities and their families	Provides programs and access to health, social and community services.	*	X	X	X	X			X	*	X		*	X	X	X	X	*	X	X		X	*	
THE SAMARITAN CENTER, INC.	No restrictions	402 Girod St. Mandeville, Louisiana 70448 tel:9856264457	70448	St. Tammany	http://samcen.org/index.html	No restrictions	Provides food pantry, clothing, emergency financial assistance, transportation assistance, and information on social services.												*	X		X	X	*	X					
TOWNSEND	No restrictions	19411 Helenberg Road Suite 101 Covington, LA 70433 Phone: (985)893-2522	70433	St. Tammany	http://townsendia.com/	No restrictions	Provides substance abuse services.								*		X													
WADES TRANSPORTATION SERVICES	St. Tammany, Tangipahoa, Washington	PO Box 449/2336 Foucher Street Mandeville, LA 70470 Phone: (985) 624-9854	70470	St. Tammany		No restrictions	Provides non-emergency medical transportation.	*				X																		

Organization/Provider	Counties Served	Contact Information	Zip Code	Column1	Internet Information	Population Served	Services Provided	ACCESS TO HEALTHCARE AND MEDICAL SERVICES	Limited availability of affordable preventive care	Limited availability of medical professionals Practices that may be unaffordable for some patients	Cost of health insurance	Transportation availability	Coordination of healthcare	Pediatric Health Care	BEHAVIORAL HEALTH AND SUBSTANCE ABUSE	Mental health	Substance abuse	Pediatric Behavioral health (psychiatry, counseling, etc.)	RESOURCE AWARENESS AND HEALTH LITERACY	Limited information dissemination	Services for Latino/Vietnamese residents (including translation services)	Collaboration of business, hospitals and communities	Limited outreach service provision	ACCESS TO HEALTHY OPTIONS	Healthy nutrition	Recreational activities availability	Public transportation availability	Supervision of young people	BEHAVIORS THAT IMPACT HEALTH	
YMCA	No restrictions	71256 Francis Road Covington, LA 70433 985-893-9622	70433	St. Tammany	More Information	Youth	The YMCA provides programs for all ages to promote wellness and physical fitness.												*	X		X	X	*	X	X		X	*	
YOUTH SERVICE BUREAU	No restrictions	150 Cleveland Avenue Slidell, LA 70438 Client Services: 985-643-5746	70438		http://www.ybworks.com/contact.php	Youth	Provides substance abuse services.								*	X	X	X												
YOUTH SERVICE BUREAU	No restrictions	314 & 316 Austin Street Bogalusa, LA 70427 Client Services: 985-735-1687	70427		http://www.ybworks.com/contact.php	Youth	Provides substance abuse services.								*	X	X	X												
YOUTH SERVICE BUREAU	No restrictions	430 North New Hampshire Covington, LA 70433 Phone: (985)893-2570	70433	St. Tammany	http://www.ybworks.com/contact.php	Youth	Provides substance abuse services.								*	X	X	X												
YOUTH SERVICE BUREAU	No restrictions	911 Washington Street Franklinton, LA 70438 Office: 985-839-4090	70438		http://www.ybworks.com/contact.php	Youth	Provides substance abuse services.								*	X	X	X												

APPENDIX B



Secondary Data Profile

OCHSNER MEDICAL CENTER - NORTHSORE
August, 2015

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- Demographic Data
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 - Social and Economic Factors.....
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- Substance Abuse and Mental Health.....
- America’s Health Rankings.....

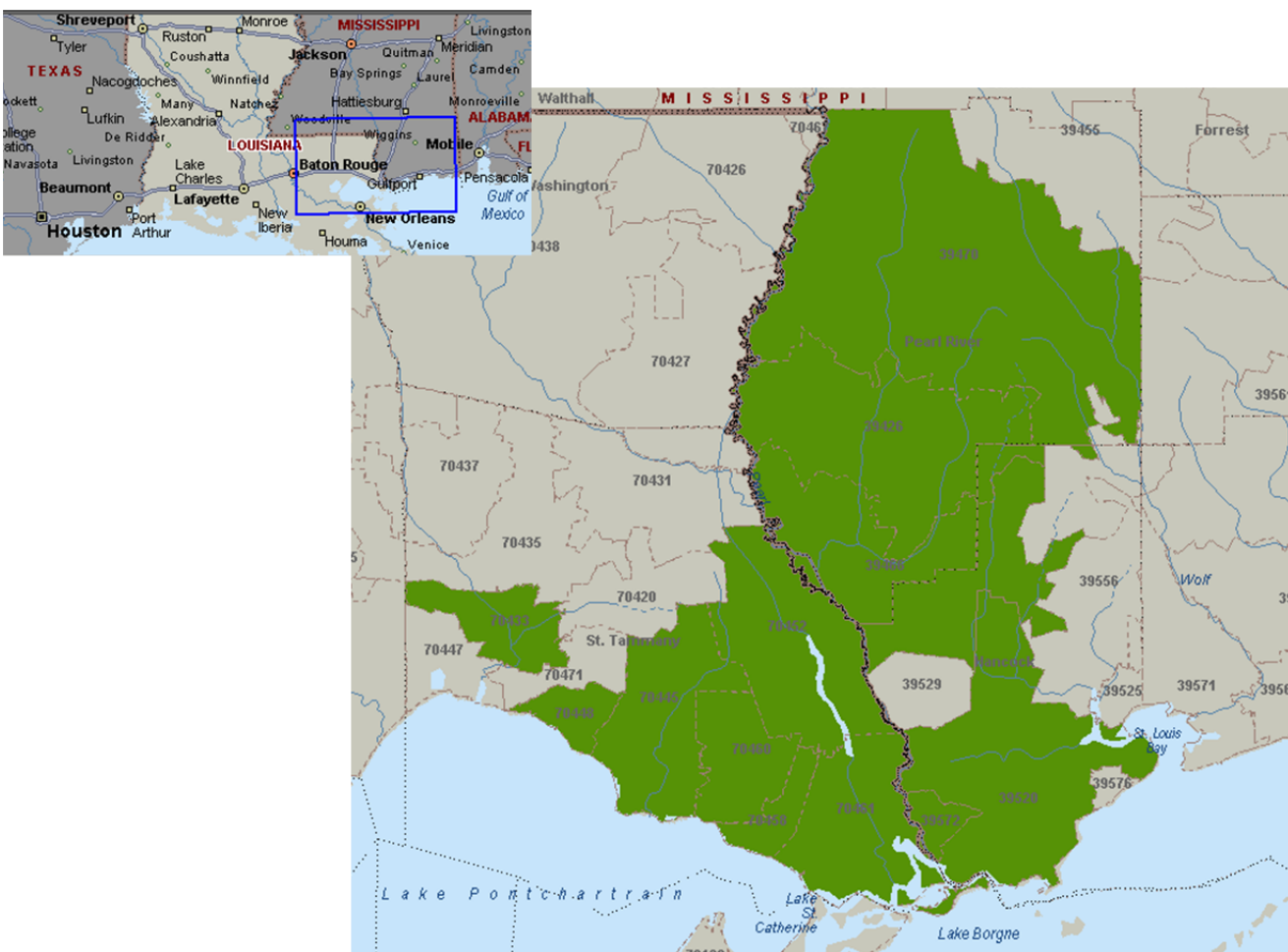
Ochsner Medical Center Northshore Study Area

Definition

While community can be defined in many ways, for the purposes of this report, the **Ochsner Medical Center Northshore (Ochsner Medical Center - Northshore)** community is defined as 12 zip codes – including 3 parishes/counties that hold a large majority (80%) of the inpatient discharges for the hospital (See Table 1 and Figure 1).

Table 1. Ochsner Medical Center - Northshore Study Area Definition – Zip Codes					
City	Zip Code	Parish/County	City	Zip Code	Parish/County
Louisiana			Mississippi		
Covington	70433	St. Tammany Parish	Carriere	39426	Pearl River County
Lacombe	70445	St. Tammany Parish	Picayune	39466	Pearl River County
Mandeville	70448	St. Tammany Parish	Poplarville	39470	Pearl River County
Pearl River	70452	St. Tammany Parish	Bay Saint Louis	39520	Hancock County
Slidell	70458	St. Tammany Parish	Pearlington	39572	Hancock County
Slidell	70460	St. Tammany Parish	Carriere	39426	Pearl River County
Slidell	70461	St. Tammany Parish			

Figure 1. Map of Ochsner Medical Center Northshore Study Area



Demographic Data

Tripp Umbach gathered data from Truven Health Analytics, Inc. to assess the demographics of the study area. The **Ochsner Medical Center - Northshore** Study Area is defined to include the 12 zip codes across the 3 parishes/counties; for comparison purposes the Ochsner Medical Center - Northshore Study Area looks to compare St. Tammany Parish, LA and Pearl River County, MS (parish/counties with the largest number of zip codes that make up the study area). Information pertaining to population change, gender, age, race, ethnicity, education level, housing, income, and poverty data are presented below.

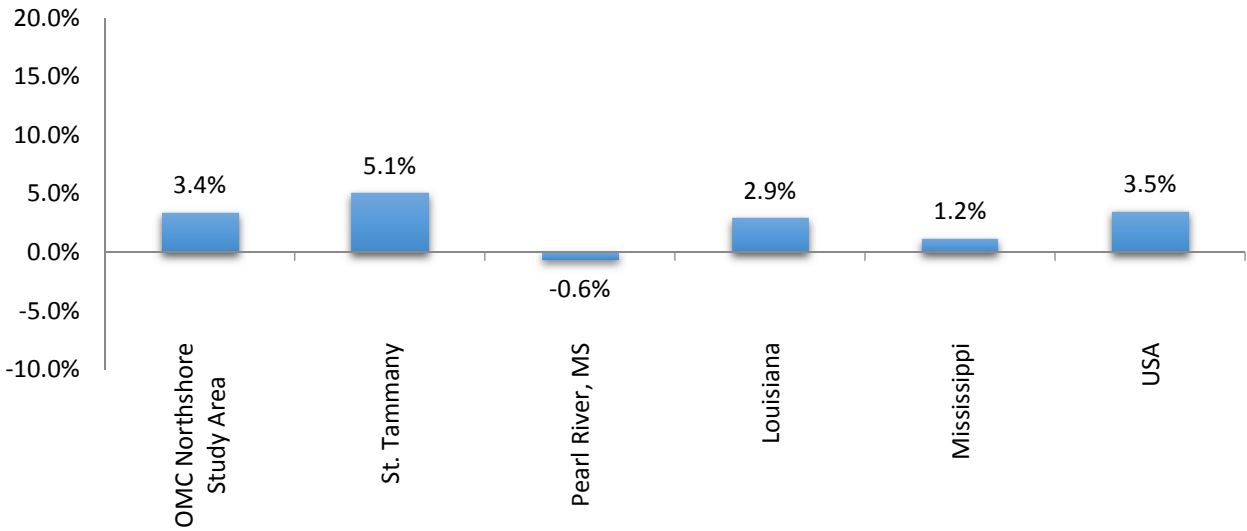
Population Change

- The Ochsner Medical Center - Northshore Study Area encompasses 246,151 residents.
- In 2015, the largest parish/county in the study area was St. Tammany Parish, LA with 246,163 residents in 2015.
- From 2015 to 2020, St. Tammany Parish, LA is projected to experience the largest percentage change in population with a 5.1 % increase (12,499 people); St. Tammany Parish, LA is also projected to experience the largest rise in number of residents, for the study area.
- Pearl River County, MS is expected to experience a population decline of -0.6% (a loss of 358 residents); it is the least populated area in the study at only 56,077 residents in 2015.

Table 2. Population Size and Change Projections 2015, 2020

	Ochsner Medical Center - Northshore Study Area	St. Tammany Parish	Pearl River County, MS	Louisiana	Mississippi	USA
2015 Total Population	246,151	246,163	56,077	4,662,874	2,999,948	319,459,991
2020 Projected	254,474	258,662	55,719	4,800,027	3,035,635	330,689,265
# Change	8,323	12,499	- 358	137,153	35,687	11,229,374
% Change	3.4%	5.1%	- 0.6%	2.9%	1.2%	3.5%

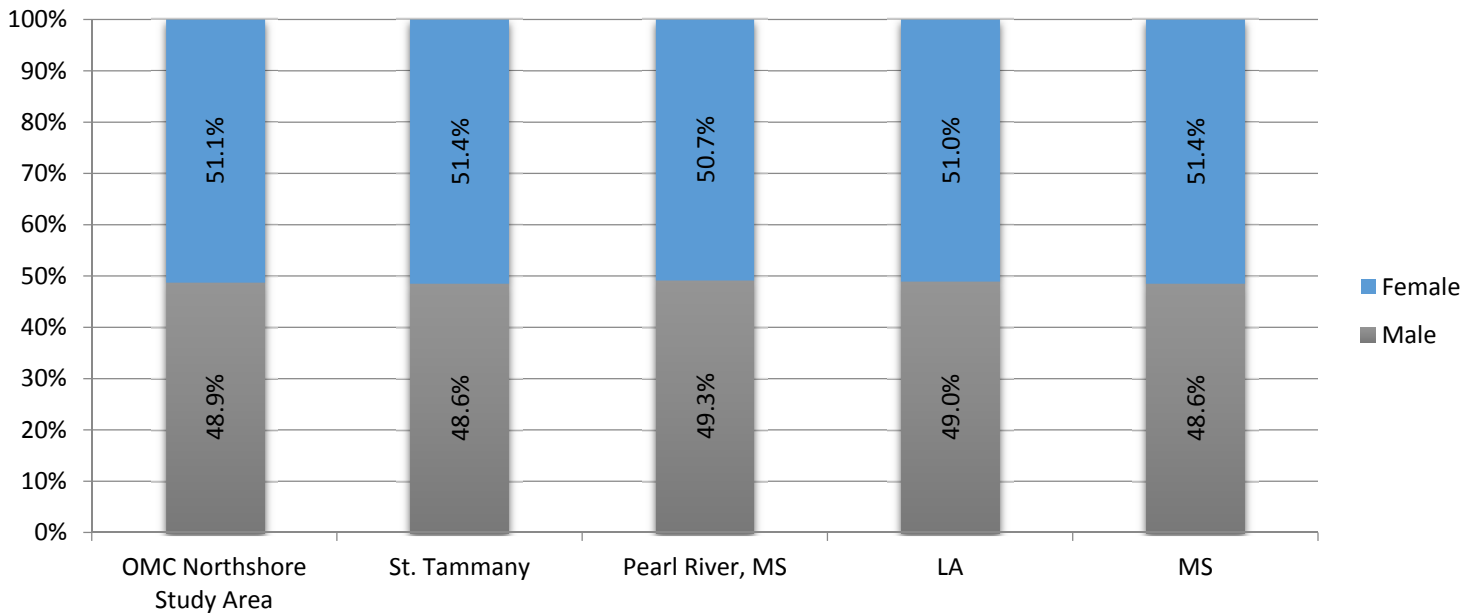
Chart 1. Population Change 2015 - 2020



Gender

- The gender breakdown, for the study area, is generally consistent across the parishes/counties and similar to state and national norms.

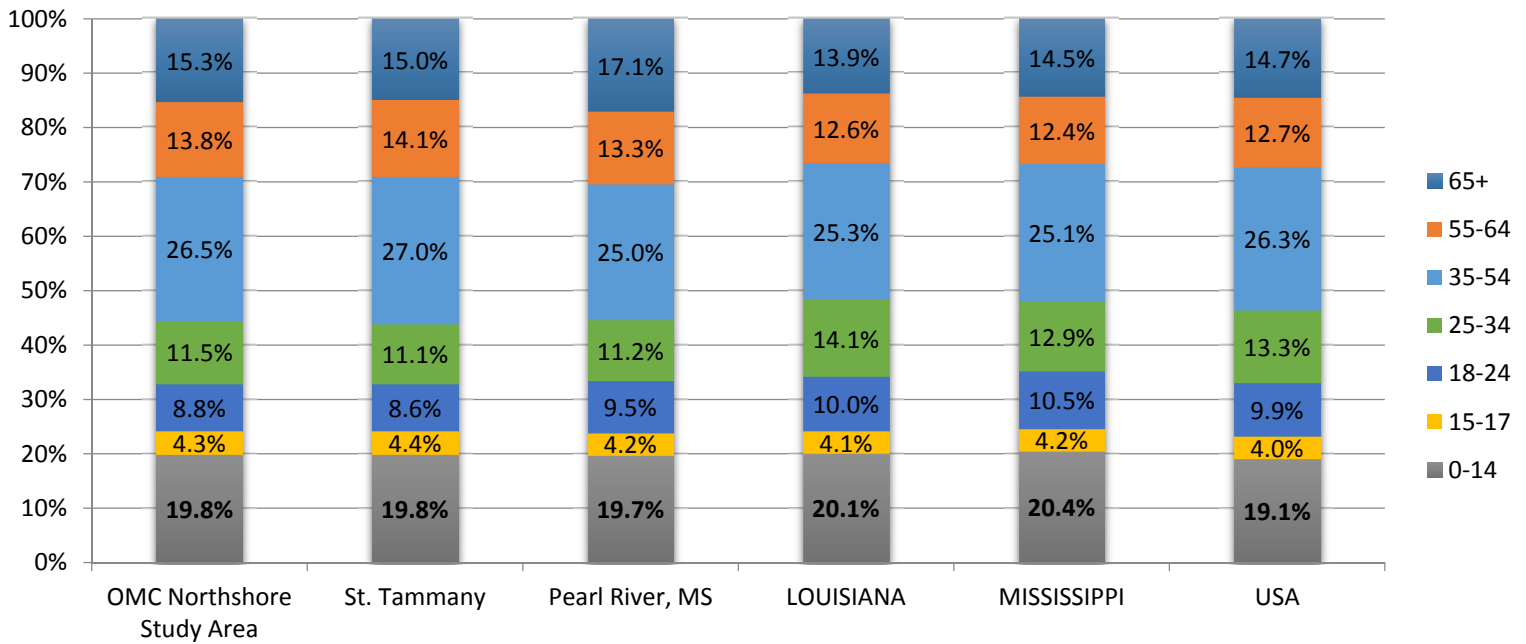
Chart 2. Gender (2015)



Age

- Pearl River County, MS reports the largest population of residents aged 65 and older (17.1%) followed by Ochsner Medical Center - Northshore Study Area with 15.3%, and St. Tammany Parish, LA, LA with 15.0%.

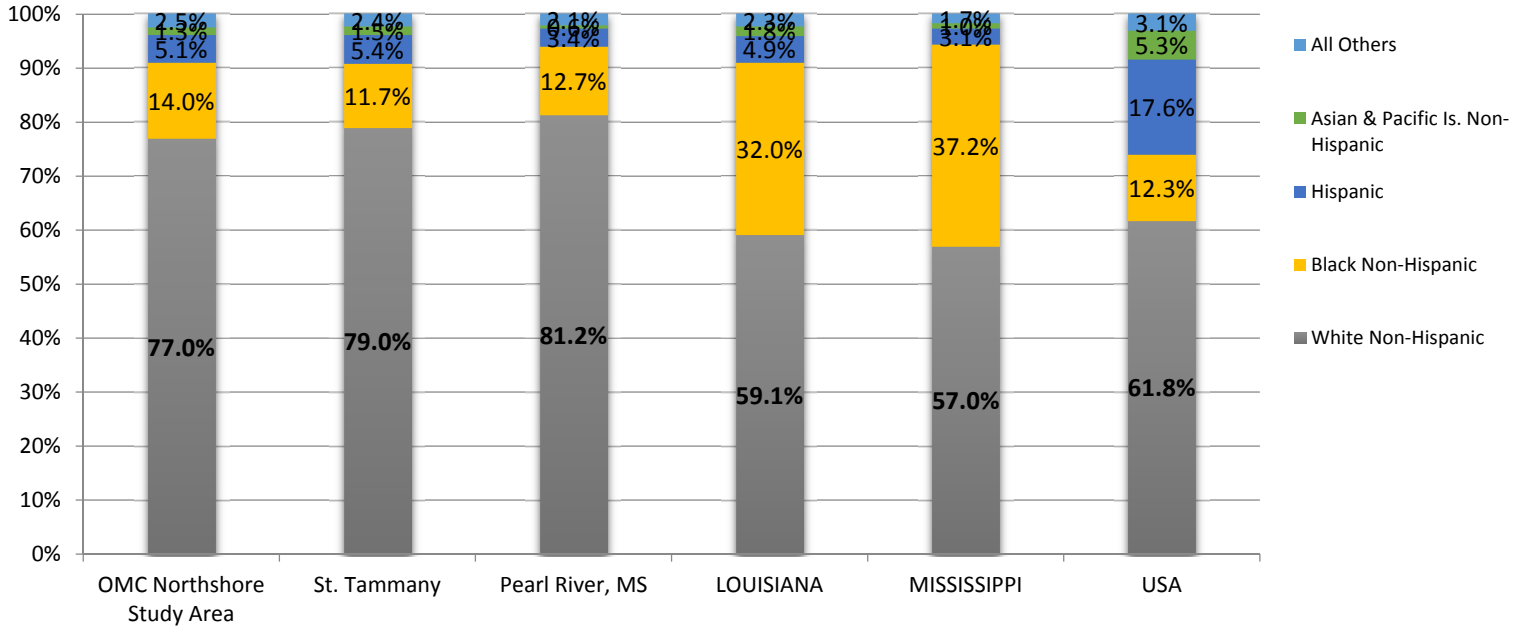
Chart 3. Age (2015)



Race

- Pearl River County, MS reports the highest White, Non-Hispanic population percentage at 81.2%, this is much higher than state (59.1%) and national norms (61.8%).
- Ochsner Medical Center - Northshore Study Area reports the highest Black, Non-Hispanic population across the study area at 14.0%; Pearl River County, MS reports the second highest percentage at 12.7%.
- All of the study area parishes/counties report lower rates of Hispanic residents as compared with the country (17.6%). St. Tammany Parish, LA reports the highest Hispanic population rate at 5.4%.

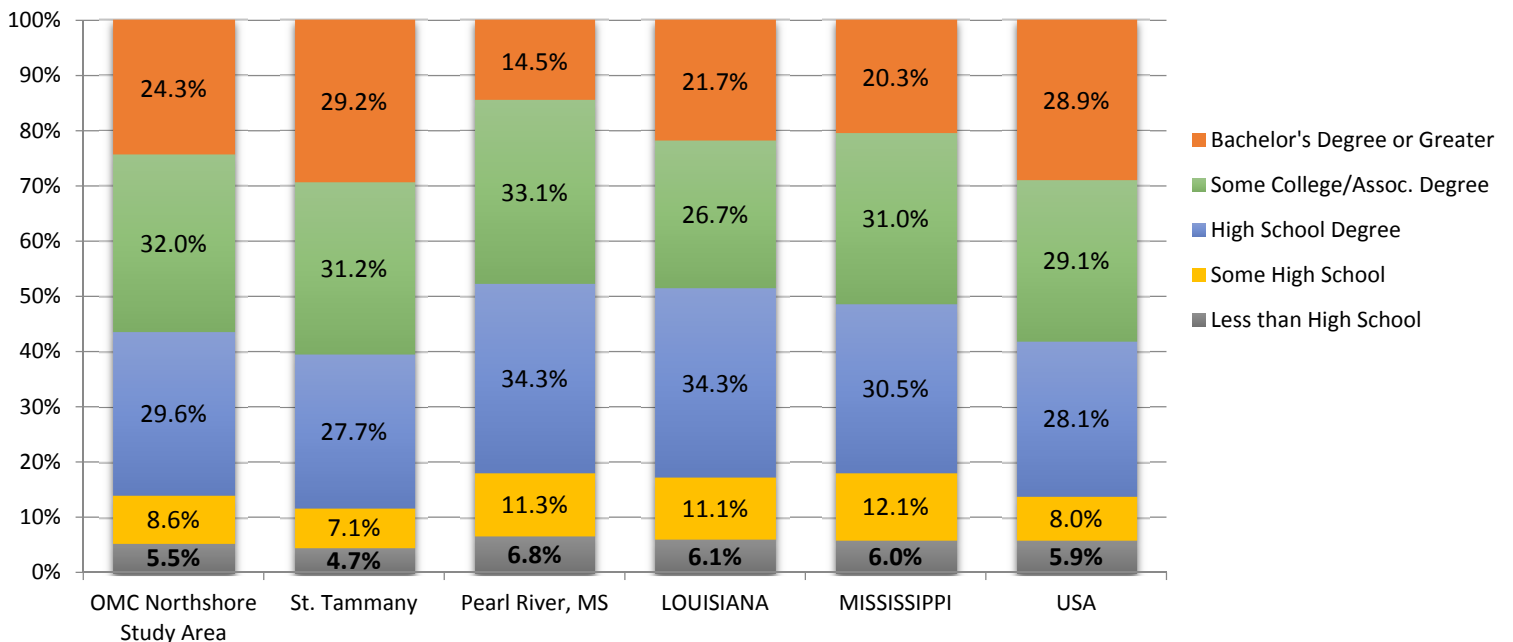
Chart 4. Race (2015)



Education Level

- Pearl River County, MS reports the highest rate of residents with ‘Less than a high school’ degree (6.8%); this is above the state (6.1%) and national (5.9%) rates.
- St. Tammany Parish, LA reports the highest rate of residents with a Bachelor’s degree or greater with 29.2%; this is higher than state (21.7%) and national (28.9%) norms.

Chart 5. Education Level (2015)



Income

- Pearl River County, MS reports the lowest average annual household income, for the study area, at \$55,103.
- St. Tammany Parish, LA reports the highest average annual household income compared to the other parishes/counties in the study area at \$82,316. Ochsner Medical Center - Northshore Study Area is second highest at \$71,672; both higher than state (\$64,209) and national norms (\$74,165).
- Pearl River County, MS reports the highest rates of households that earn less than \$15,000 per year (18.2%); in other words, more than a 1 in every 4 residents of this county have household incomes less than \$15,000 per year.

Chart 6. Average Annual Household Income (2015)

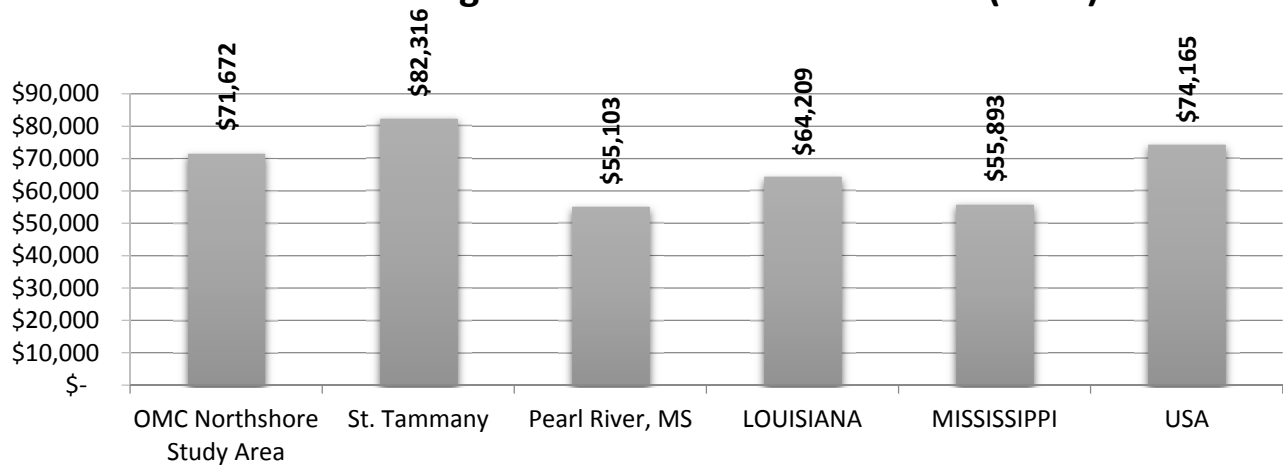
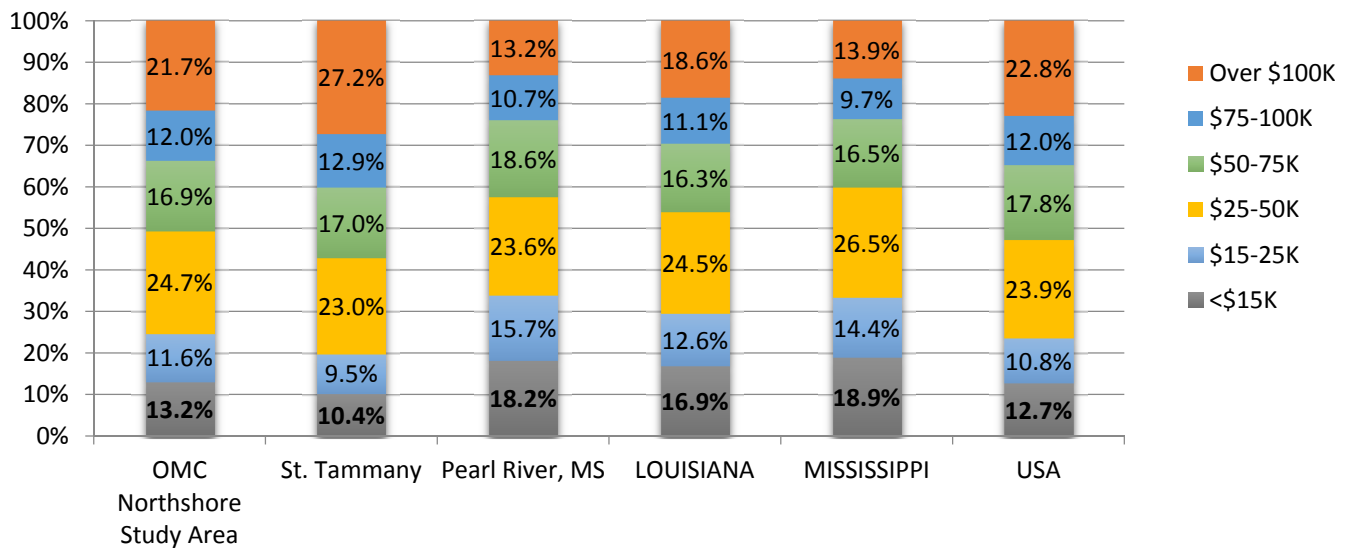


Chart 7. Annual Household Income Detail (2015)



Community Needs Index (CNI)

In 2005 Catholic Healthcare West, in partnership with Thomson Reuters, pioneered the nation’s first standardized Community Need Index (CNI).¹⁵ CNI was applied to quantify the severity of health disparity for every zip code in the study area based on specific barriers to health care access. Because the CNI considers multiple factors that are known to limit health care access, the tool may be more accurate and useful than other existing assessment methods in identifying and addressing the disproportionate unmet health-related needs of neighborhoods or zip code areas.

The CNI score is an average of five different barrier scores that measure various socio-economic indicators of each community using the 2015 source data. The five barriers are listed below along with the individual 2015 statistics that are analyzed for each barrier. These barriers, and the statistics that comprise them, were carefully chosen and tested individually by both Dignity Health and Truven Health:

6. Income Barrier
 - a. Percentage of households below poverty line, with head of household age 65 or more
 - b. Percentage of families with children under 18 below poverty line
 - c. Percentage of single female-headed families with children under 18 below poverty line
7. Cultural Barrier
 - a. Percentage of population that is minority (including Hispanic ethnicity)
 - b. Percentage of population over age 5 that speaks English poorly or not at all
8. Education Barrier
 - a. Percentage of population over 25 without a high school diploma
9. Insurance Barrier
 - a. Percentage of population in the labor force, aged 16 or more, without employment
 - b. Percentage of population without health insurance
10. Housing Barrier
 - a. Percentage of households renting their home

Every populated zip code in the United States is assigned a barrier score of 1,2,3,4, or 5 depending upon the zip code’s national rank (quintile). A score of 1 represents the lowest rank nationally for the statistics listed, while a score of 5 indicates the highest rank nationally. For example, zip codes that score a 1 for the Education Barrier contain highly educated populations; zip codes with a score of 5 have a very small percentage of high school graduates.

Table 3. Complete Zip Code CNI List – 2011 to 2015 Comparison

Zip	Community Name	County	Income Rank	Culture Rank	Education Rank	Insurance Rank	Housing Rank	2015 CNI Score	2011 CNI Score	Diff. 2011 – 2015
39520	Bay Saint Louis	Hancock County	5	4	4	5	4	4.4	4.2	+ 0.2

¹⁵ Truven Health Analytics, Inc. 2015 Community Need Index.

The available data behind the rankings illustrates the supporting data for each CNI ranking.

Table 4. Ochsner Medical Center - Northshore - 2015 CNI Detailed Data

Zip	City	2015 CNI Score	Poverty 65+	Poverty Married w/ kids	Poverty Single w/kids	Limited English	Minority	No High School Diploma	Un-employed	Un-insured	Renting
39520	Bay Saint Louis	4.4	9.0%	35.3%	60.6%	1.5%	21.2%	16.8%	15.6%	20.8%	33.9%
39466	Picayune	4.2	15.1%	29.1%	56.0%	0.2%	24.3%	18.1%	11.2%	15.6%	27.1%
39470	Poplarville	4.0	13.7%	36.1%	73.3%	0.2%	18.7%	20.9%	14.6%	16.7%	19.6%
70458	Slidell	4.0	12.9%	22.5%	45.2%	0.7%	25.6%	14.3%	9.2%	10.4%	26.4%
70445	Lacombe	3.6	17.4%	21.7%	46.2%	1.2%	31.2%	20.1%	13.2%	13.8%	14.1%
70452	Pearl River	3.6	14.7%	26.2%	46.1%	0.2%	12.5%	22.2%	8.6%	14.7%	19.9%
70460	Slidell	3.6	11.0%	21.5%	42.1%	1.3%	39.3%	16.0%	9.7%	11.4%	21.4%
39426	Carriere	3.4	15.1%	29.2%	73.2%	0.1%	9.5%	16.0%	9.5%	13.4%	14.5%
39572	Pearlington	3.2	8.8%	4.2%	2.8%	0.4%	28.6%	20.9%	13.0%	16.8%	13.3%
70461	Slidell	3.0	9.4%	13.9%	26.8%	0.8%	32.4%	9.5%	10.7%	9.4%	24.0%
70433	Covington	2.8	8.2%	17.6%	42.6%	0.7%	18.0%	8.5%	7.1%	9.5%	22.4%
70448	Mandeville	1.8	7.2%	4.3%	17.1%	0.6%	13.2%	6.3%	6.8%	5.7%	19.0%

A total of 9 of the 12 zip code areas (75%) for the Ochsner Medical Center - Northshore Study Area fall above the median score for the scale (3.0), one falls at the median, and 2 fall below the median. Being above the median for the scale indicates that these zip code areas have more than average the number of barriers to health care access.

- Zip code area 39520 in Bay Saint Louis reports the highest rates compared with the other zips in the Ochsner Medical Center - Northshore Study Area for:
 - Limited English at 1.5%
 - Unemployed residents at 15.6%
 - Uninsured residents at 20.8%

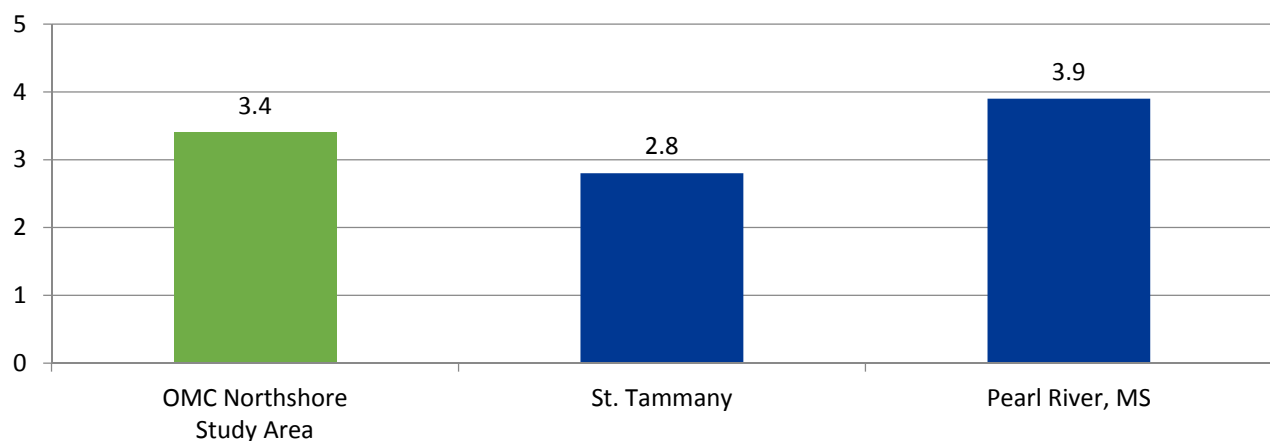
- Residents renting at 33.9%; this is much higher than state (6.6%) and national (5.5%) rates.¹⁶
- Zip code area 39470 in Poplarville, reports the highest rates of married as well as single parents living in poverty with their children, for the study area, (36.1% and 73.3% respectively).
- Zip code area 70445 in Lacombe reports the highest rate of resident's age 65+ living in poverty at 17.4%.
- Zip code area 70452 in Pearl River, LA reports the highest rate, for the study area, for residents without a high school diploma (22.2%).
- Zip code area 70461 in Slidell reports the highest rate of residents that identify as a minority for study area at 39.3%.

On the other end of the spectrum, the lowest CNI score, for the study area, is 1.8 in 70448 – Mandeville.

- Zip code 70448 in Mandeville reports the lowest rates for
 - Residents age 65+ living in poverty at 7.2%
 - Residents with no high school diploma at 6.3%
 - Unemployed residents at 6.8%
 - Uninsured residents at 5.7%
- Zip code area 39572 in Pearlinton, MS reports the lowest rates of married as well as single parents living in poverty with their children, for the study area, (4.2% and 2.8% respectively), and for residents renting (13.3%).
- Zip code area 39426 in Carriere reports the lowest rates for residents with limited English (0.1%) and residents identifying as minorities (9.5%).

Pearl River County, MS reports the highest overall CNI score, for the study area, at 3.9.

Chart 8. Overall CNI Values - OMC Northshore, Parishes, Counties



¹⁶ March 2015 state and national statistics. U.S. Bureau of Labor Statistics.

Prevention Quality Indicators (PQI) and Pediatric Quality Indicators (PDI)¹⁷

PREVENTION QUALITY INDICATORS (PQI)

The Prevention Quality Indicators index (PQI) was developed by the Agency for Healthcare Research and Quality (AHRQ). PQI is similarly referred to as Ambulatory Care Sensitive Hospitalizations. The quality indicator rates are derived from inpatient discharges by zip code using ICD diagnosis and procedure codes. There are 14 quality indicators.

The PQI index identifies potentially avoidable hospitalizations for the benefit of targeting priorities and overall community health. Lower index scores represent fewer admissions for each of the PQIs.

PQI Subgroups:

5. Chronic Lung Conditions
 - PQI 5 Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults (40+) Admission Rate¹⁸
 - PQI 15 Asthma in Younger Adults Admission Rate¹⁹
6. Diabetes
 - PQI 1 Diabetes Short-Term Complications Admission Rate
 - PQI 3 Diabetes Long-Term Complications Admission Rate
 - PQI 14 Uncontrolled Diabetes Admission Rate
 - PQI 16 Lower Extremity Amputation Rate Among Diabetic Patients
7. Heart Conditions
 - PQI 7 Hypertension Admission Rate
 - PQI 8 Congestive Heart Failure Admission Rate
 - PQI 13 Angina Without Procedure Admission Rate
8. Other Conditions
 - PQI 2 Perforated Appendix Admission Rate²⁰
 - PQI 9 Low Birth Weight Rate²¹
 - PQI 10 Dehydration Admission Rate
 - PQI 11 Bacterial Pneumonia Admission Rate
 - PQI 12 Urinary Tract Infection Admission Rate

¹⁷ PQI and PDI values were calculated including all relevant zip-code values from Louisiana; Mississippi data could not be obtained and was therefore not included.

¹⁸ PQI 5 for past study was COPD in 18+ population; PQI 5 for current study is now restricted to COPD and Asthma in 40+ population

¹⁹ PQI 15 for past study was Adult Asthma in 18+ population; PQI 15 for current study is now restricted to Asthma in 18-39 population (“Younger”).

²⁰ PQI 2 changed from Perforated Appendix in Males 18+ for the past study to Perforated Appendix in Total 18+ population as a rate per 1,000 ICD-9 code admissions for appendicitis. This shift has changed the values for this measure drastically and therefore, Tripp Umbach did not adjust.

²¹ Although not clearly explained by the AHRQ, it would seem that a definition of Newborn population has shifted for PQI 9 because the values are drastically lower in 2014 than in previous years (2011). This has shifted PQI 9 values drastically. Tripp Umbach did not adjust.

Table 5. Prevention Quality Indicators (PQI) Ochsner Medical Center - Northshore / LA / U.S.A. 2015

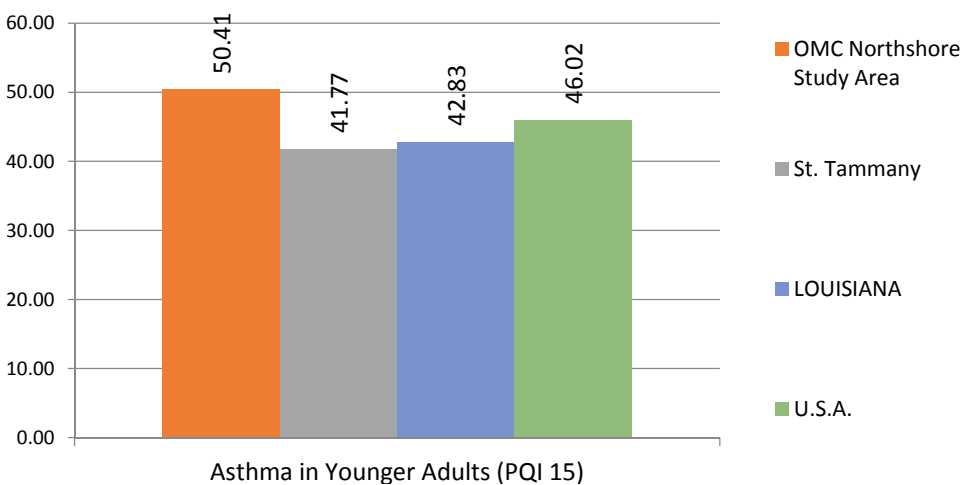
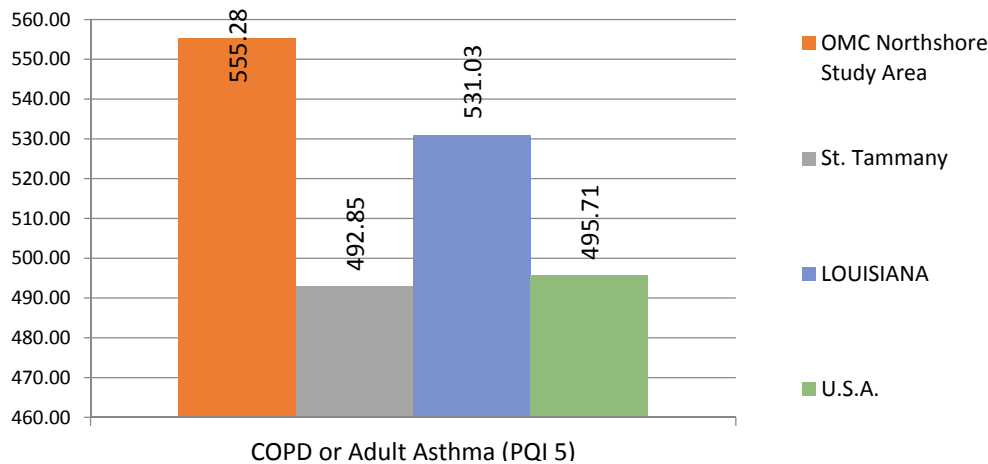
Prevention Quality Indicators (PQI)	Ochsner Medical Center - Northshore Study Area 2015 PQI	LA 2015 PQI	U.S.A. 2015 PQI	Ochsner Medical Center - Northshore Study Area - LA Diff.	Ochsner Medical Center - Northshore Study Area - U.S.A. Diff.
Chronic Lung Conditions					
COPD or Adult Asthma (PQI5)	555.28	531.03	495.71	+ 24.25	+ 59.57
Asthma in Younger Adults (PQI15)	50.41	42.83	46.02	+ 7.58	+ 4.39
Diabetes					
Diabetes Short-Term Complications (PQI1)	74.05	98.10	63.86	- 25.05	+ 10.19
Diabetes Long-Term Complications (PQI3)	89.32	126.06	105.72	- 36.74	- 16.40
Uncontrolled Diabetes (PQI14)	8.45	15.57	15.72	- 7.12	- 7.27
Lower Extremity Amputation Among Diabetics (PQI16)	6.03	12.74	16.50	- 6.71	- 10.47
Heart Conditions					
Hypertension (PQI7)	38.17	46.06	54.27	- 7.89	- 16.10
Congestive Heart Failure (PQI8)	416.16	404.11	321.38	+ 12.05	+ 94.78
Angina Without Procedure (PQI13)	6.11	13.74	13.34	- 7.63	- 7.23
Other Conditions					
Perforated Appendix (PQI2)	387.10	322.43	323.43	+ 64.67	+ 63.67
Low Birth Weight (PQI9)	82.40	86.51	62.14	- 4.11	+ 20.26
Dehydration (PQI10)	93.52	124.53	135.70	- 31.01	- 42.18
Bacterial Pneumonia (PQI11)	327.96	305.80	248.19	+ 22.16	+ 79.77
Urinary Tract Infection (PQI12)	232.92	209.39	167.01	+ 23.53	+ 65.91

Key Findings from 2015 PQI Data:

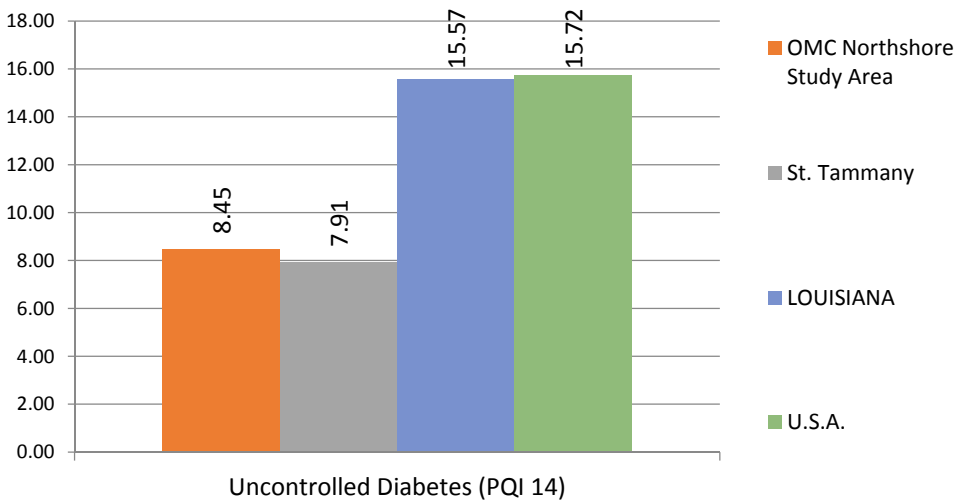
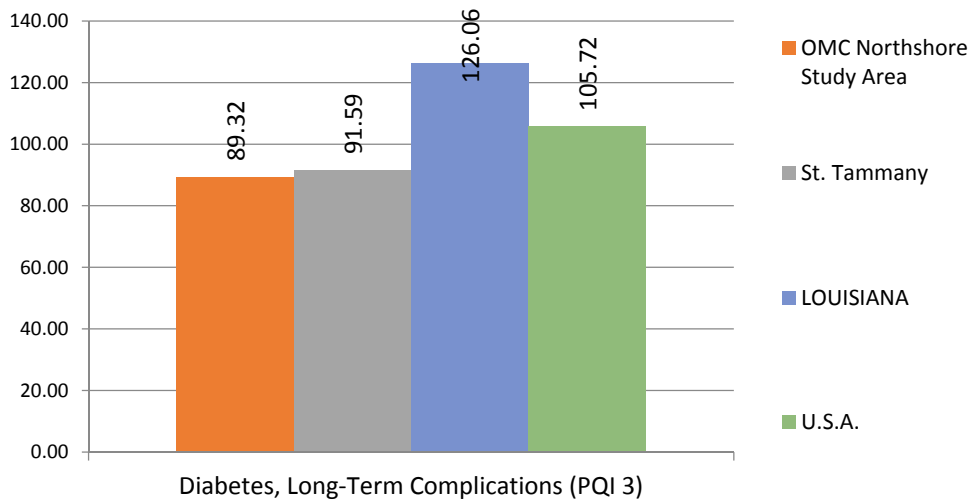
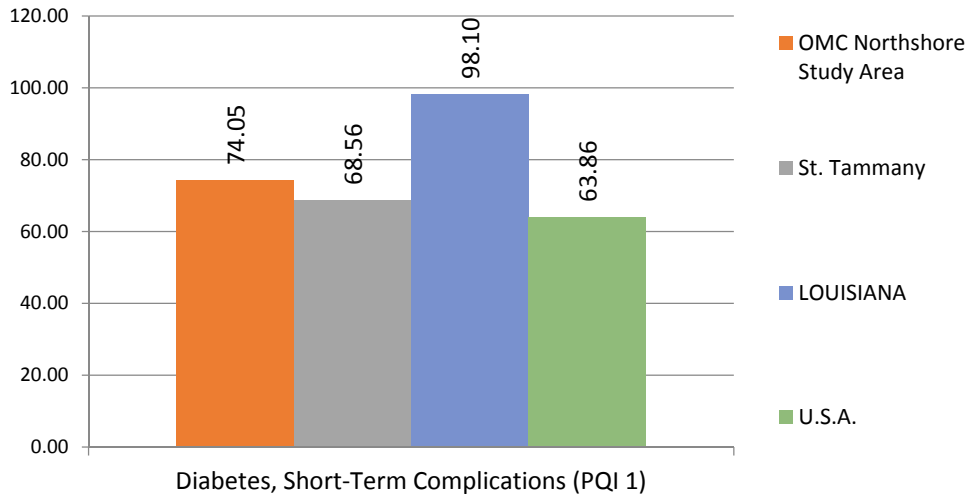
- When comparing the Ochsner Medical Center - Northshore Study Area PQI data to the State of Louisiana rates, the Ochsner Medical Center - Northshore Study Area reports higher preventable hospital admissions for:
 - COPD, or Adult Asthma
 - Asthma in Younger Adults
 - Congestive Heart Failure
 - Perforated Appendix
 - Bacterial Pneumonia
 - Urinary Tract Infection
- When comparing the Ochsner Medical Center - Northshore Study Area PQI data to the national rates, the Ochsner Medical Center - Northshore Study Area study area reports higher preventable hospital admissions for:
 - COPD, or Adult Asthma
 - Asthma in Young Adults
 - Diabetes, Short-Term Complications
 - Congestive Heart Failure
 - Perforated Appendix
 - Low Birth Weight
 - Bacterial Pneumonia

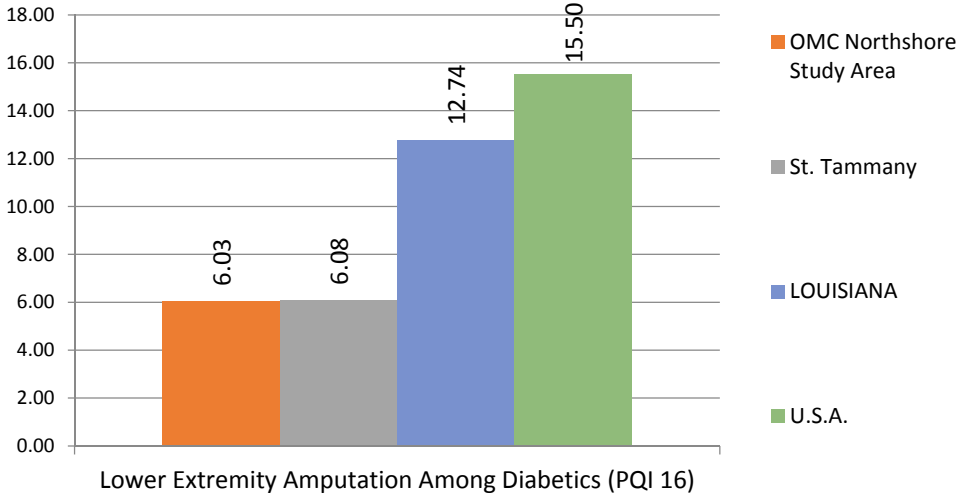
- Urinary Tract Infection
- There are a handful of PQI values in which the Ochsner Medical Center - Northshore Study Area as well as a majority of the study area parishes/counties report higher rates than is seen nationally (indicating areas in which there are more preventable hospital admissions than the national norm), these include:
 - Diabetes, Short-Term Complications
 - Congestive Heart Failure
 - Perforated Appendix
 - Bacterial Pneumonia
 - Urinary Tract Infection
- There are also a number of PQI measures in which the Ochsner Medical Center - Northshore Study Area and many of the parishes/counties in the study area report lower values than the nation (indicating areas in which there are fewer preventable hospital admissions than the national norm), these include:
 - Uncontrolled Diabetes
 - Diabetes, Long-Term Complications
 - Lower Extremity Amputation Among Diabetics
 - Hypertension
 - Angina Without Procedure
 - Dehydration

Chronic Lung Conditions:

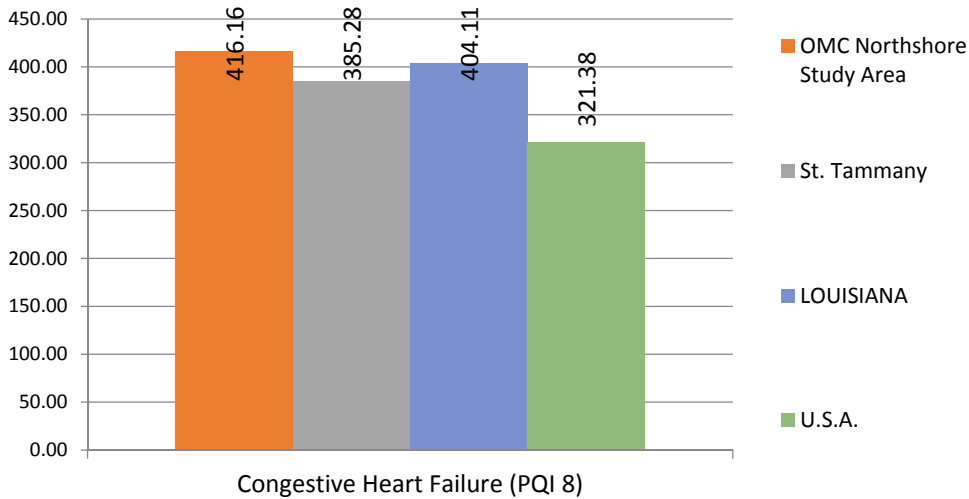
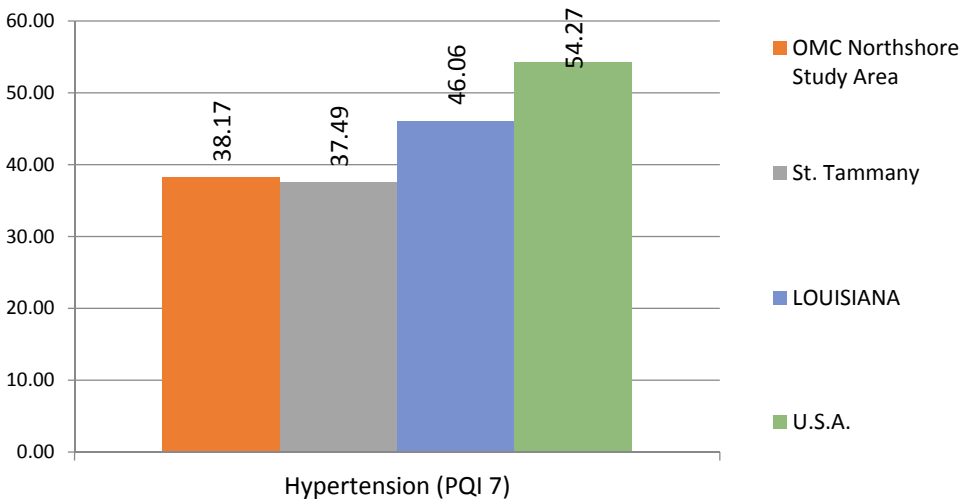


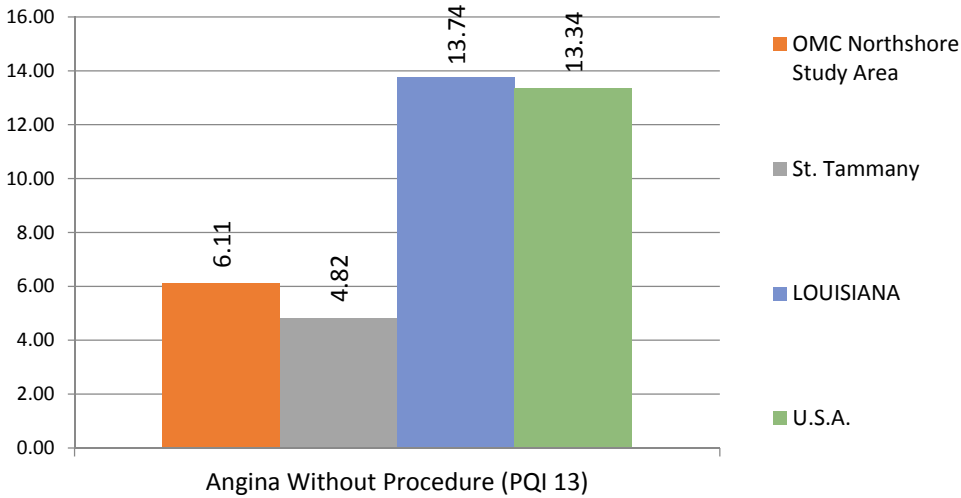
Diabetes:



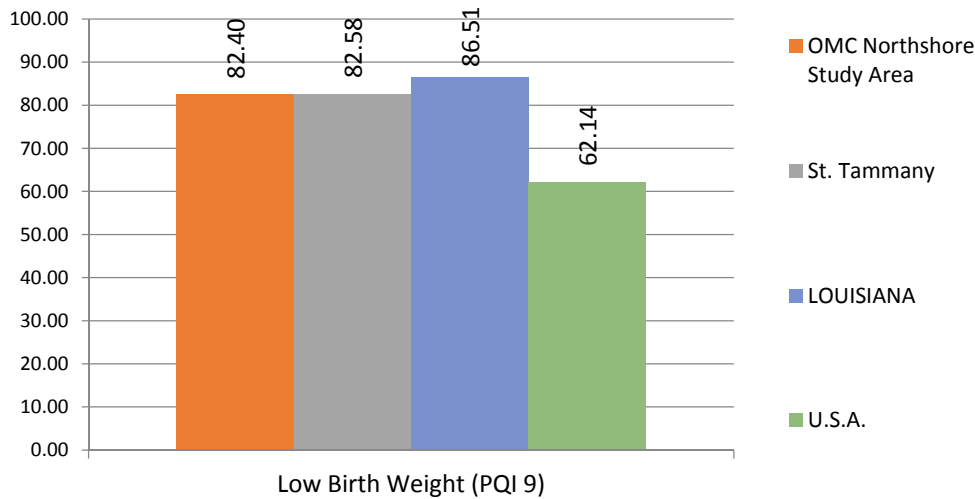
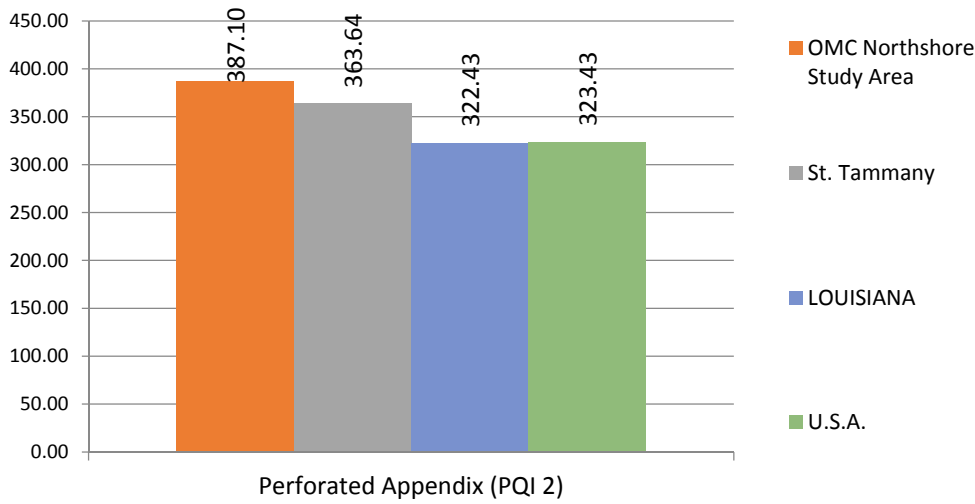


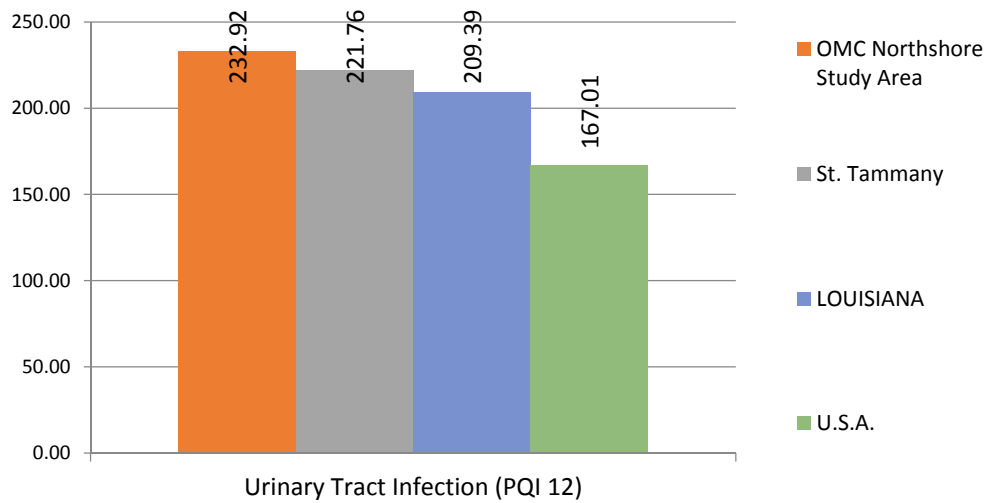
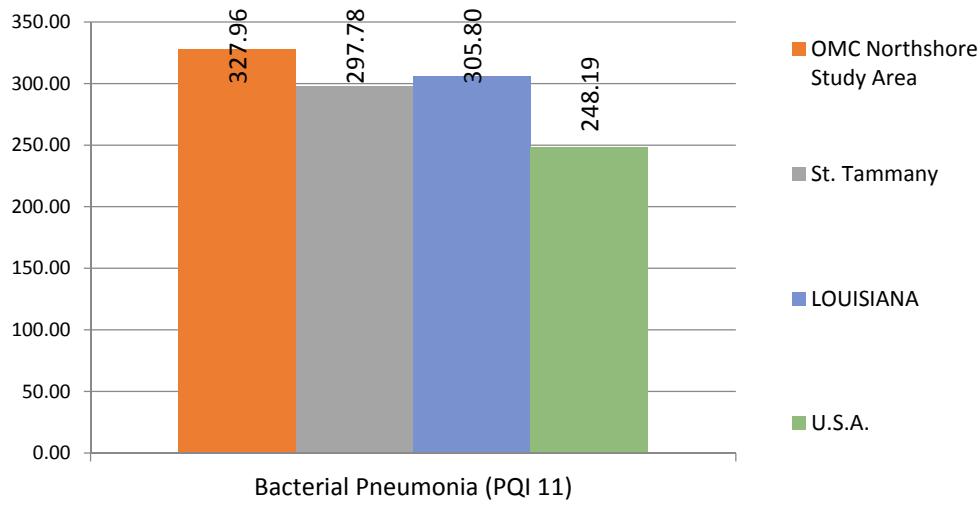
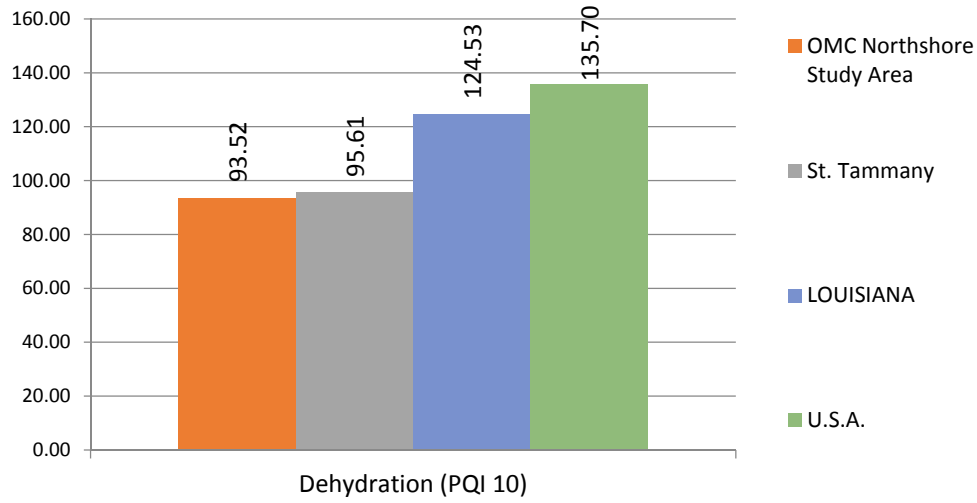
Heart Conditions:





Other Conditions:





PEDIATRIC QUALITY INDICATORS OVERVIEW

The Pediatric Quality Indicators (PDIs) are a set of measures that can be used with hospital inpatient discharge data to provide a perspective on the quality of pediatric healthcare. Specifically, PDIs screen for problems that pediatric patients experience as a result of exposure to the healthcare system and that may be amenable to prevention by changes at the system or provider level.

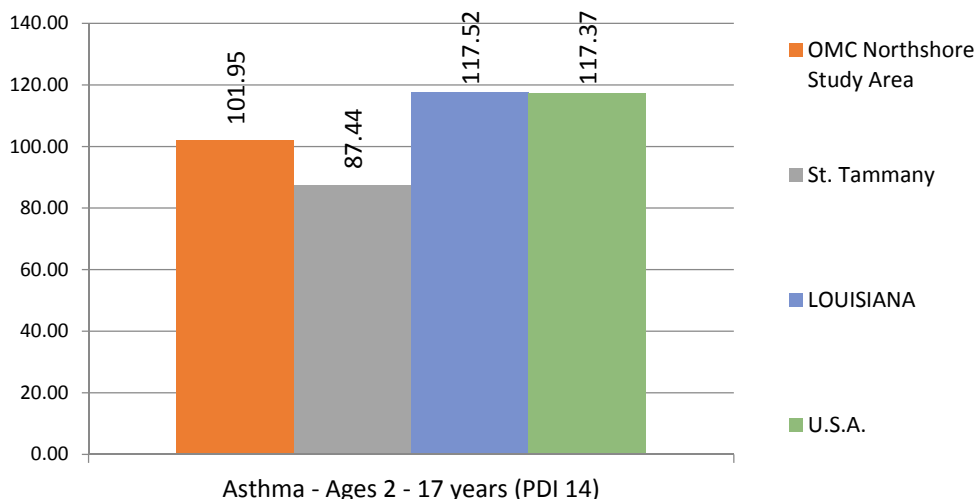
Development of quality indicators for the pediatric population involves many of the same challenges associated with the development of quality indicators for the adult population. These challenges include the need to carefully define indicators using administrative data, establish validity and reliability, detect bias and design appropriate risk adjustment, and overcome challenges of implementation and use. However, the special population of children invokes additional, special challenges. Four factors—differential epidemiology of child healthcare relative to adult healthcare, dependency, demographics, and development—can pervade all aspects of children’s healthcare; simply applying adult indicators to younger age ranges is insufficient.

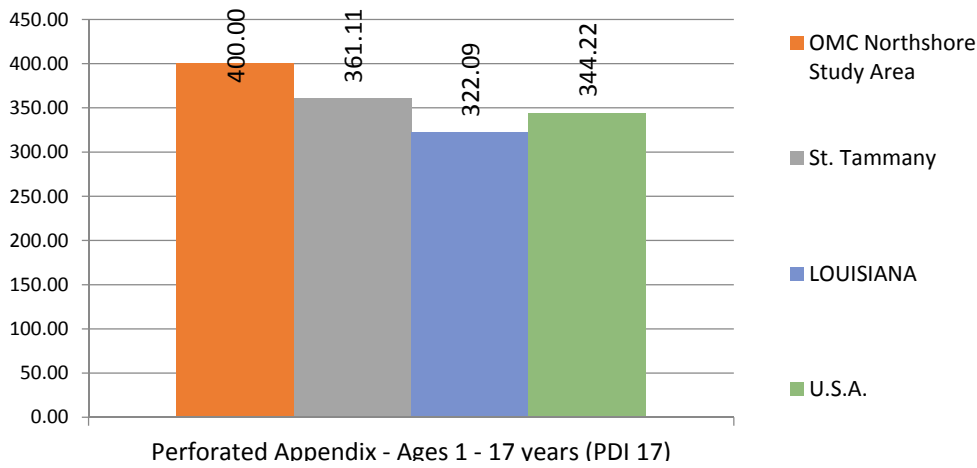
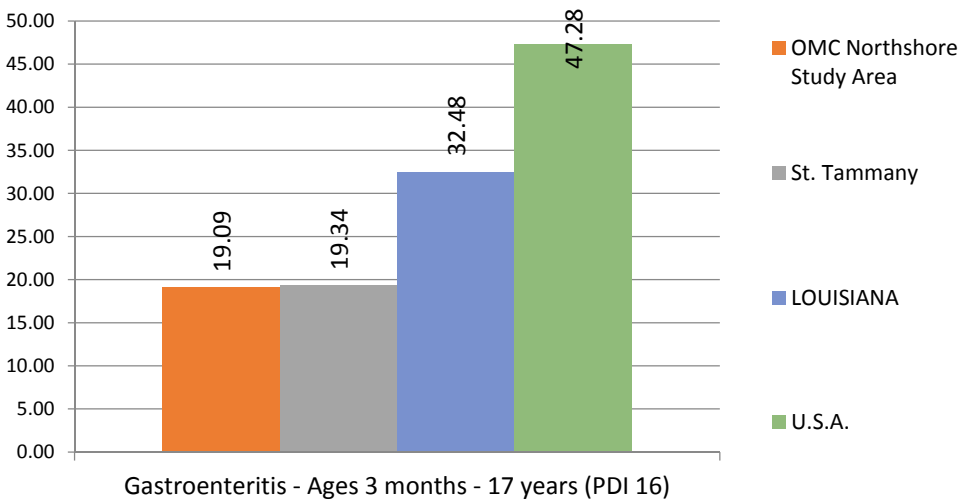
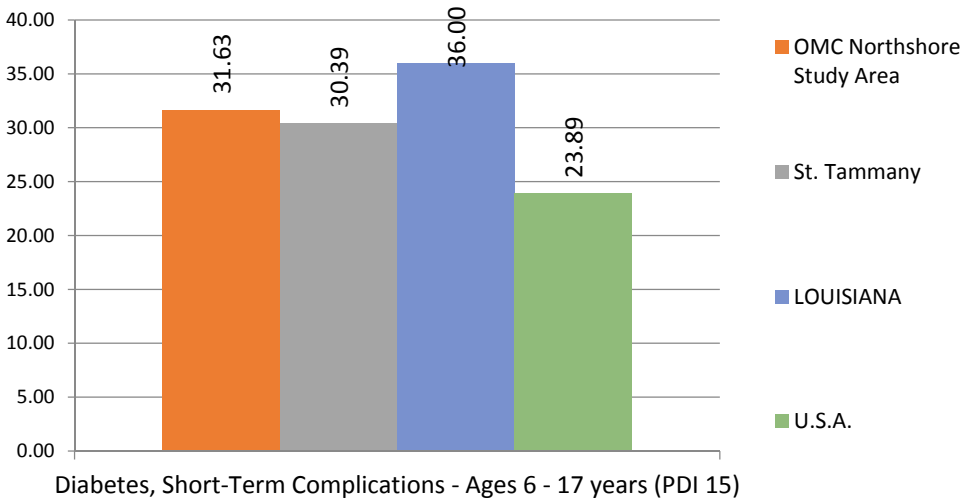
This PDIs focus on potentially preventable complications and iatrogenic events for pediatric patients treated in hospitals, and on preventable hospitalizations among pediatric patients.

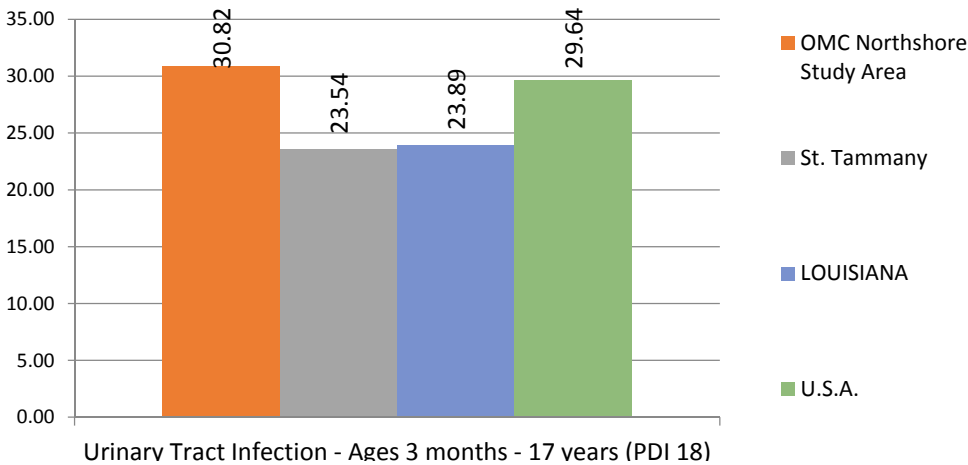
The PDIs apply to the special characteristics of the pediatric population; screen for problems that pediatric patients experience as a result of exposure to the healthcare system and that may be amenable to prevention by changes at the provider level or area level; and, help to evaluate preventive care for children in an outpatient setting, and most children are rarely hospitalized.

PDI Subgroups:

- PDI 14 Asthma Admission Rate (per 100,000 population ages 2 – 17)
- PDI 15 Diabetes, Short-Term Complications Admission Rate (per 100,000 population ages 6 – 17)
- PDI 16 Gastroenteritis Admission Rate (per 100,000 population ages 3 months – 17 years)
- PDI 17 Perforated Appendix Admission Rate (per 1,000 admissions ages 1 – 17)
- PDI 18 Urinary Tract Infection Admission Rate (per 100,000 population ages 3 months – 17 years)







Key Findings from PDI Data:

- Ochsner Medical Center - Northshore Study Area reports the highest rate of preventable hospitalizations due to asthma for children aged 2 to 17 at 101.95 per 100,000 population; this is less than the national rate of 117.37
- Both the Ochsner Medical Center - Northshore Study Area and St. Tammany Parish, LA report the highest rates of diabetes, short-term complications for those aged 6 to 17 years old, for the study area, (31.63 and 30.39 respectively); these rates are above the national rate of 23.89.
- Both the Ochsner Medical Center - Northshore Study Area and St. Tammany Parish, LA report less than half the state and country rates for Gastroenteritis for those aged 3 months to 17 years at 19.09 and 19.32 respectively; the national rate is 47.28.
- Both the Ochsner Medical Center - Northshore Study Area and St. Tammany Parish, LA report higher rates than the state and nation for perforated appendix for ages 1-17 years.
- Ochsner Medical Center - Northshore Study Area reports the highest rate in the study area for urinary tract infection for those aged 3 months to 17 years at 30.82 per 100,00 population; this is slightly higher than the national rate of 29.64.

Community Commons Data

Tripp Umbach gathered data from Community Commons related to social and economic factors, physical environment, clinical care, and health behaviors for the parishes/counties of interest for the Ochsner Medical Center - Northshore Study Area.²² The data is presented in the aforementioned categories below.

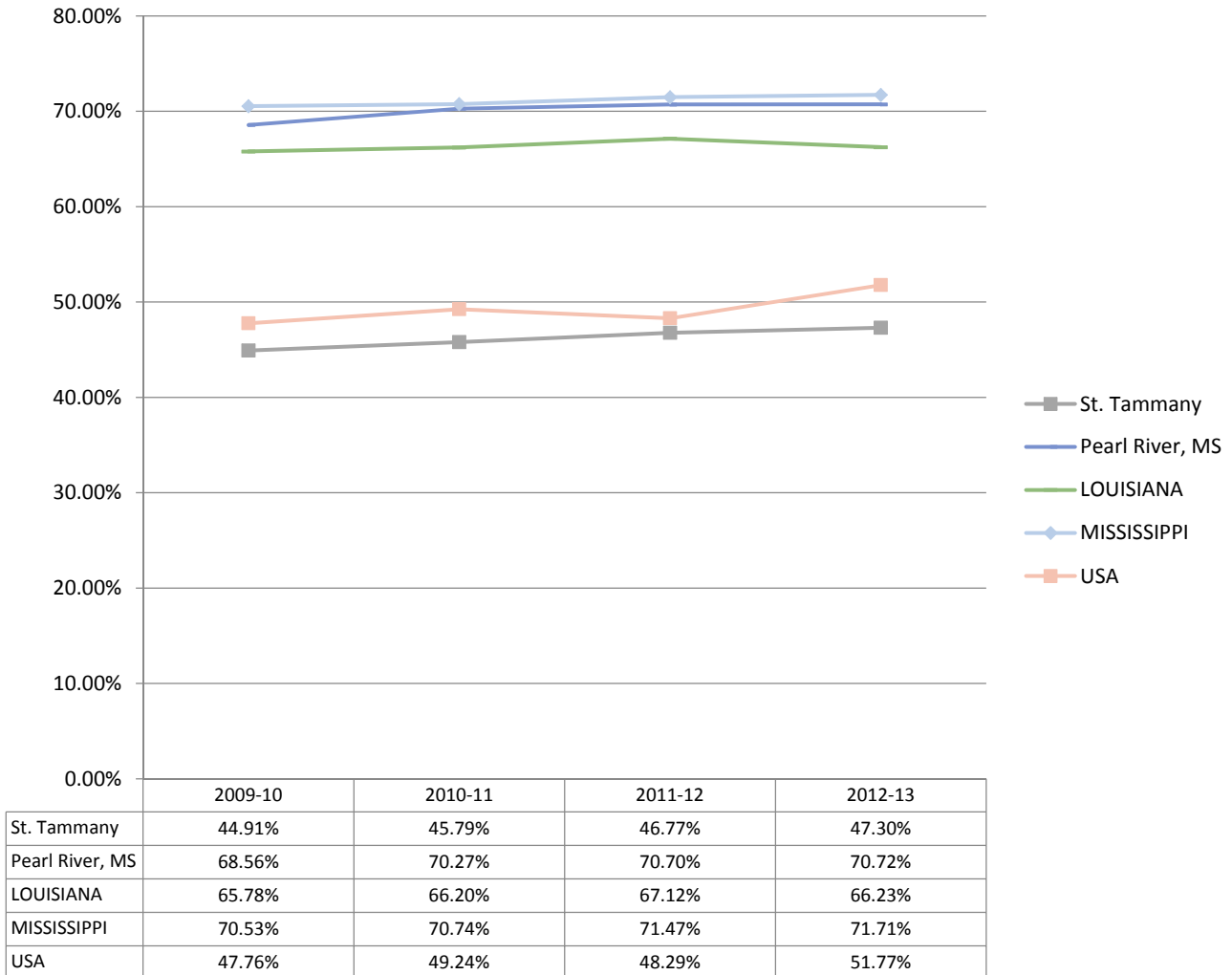
SOCIAL AND ECONOMIC FACTORS

Free/Reduced Price Lunch Eligible

²² Community Commons. <http://www.communitycommons.org/> Accessed 06/08/2015.

- Pearl River County, MS reports the highest rate of public school students who are eligible for free or reduced lunch eligible and has seen a steady rise in the rate (70.72%).

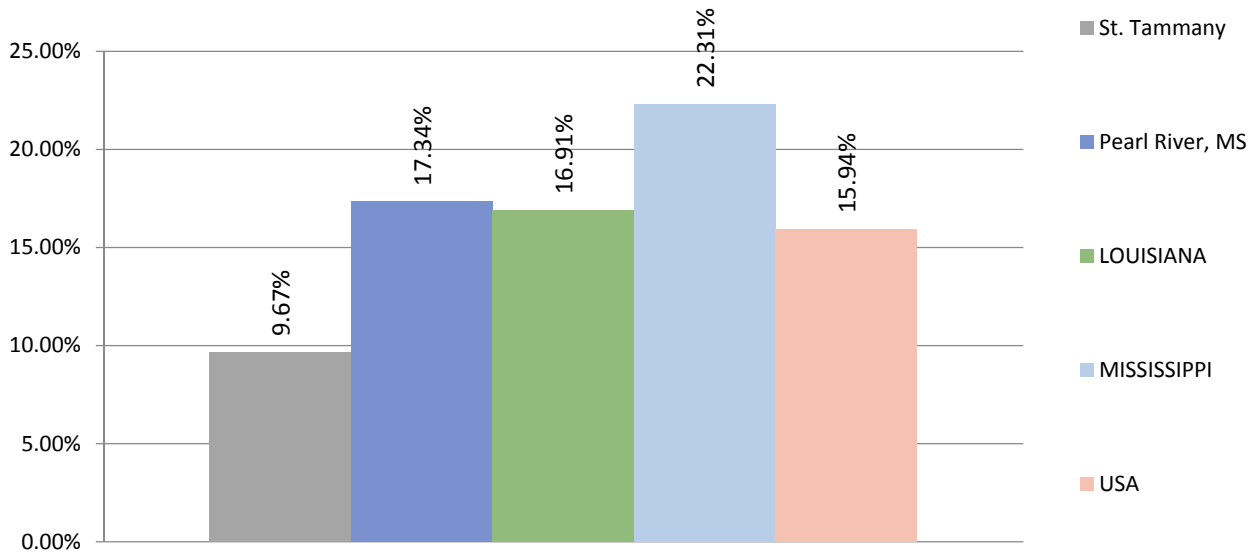
Percent Population Free/Reduced Price Lunch Eligible, 2012-2013



Food Insecure Population

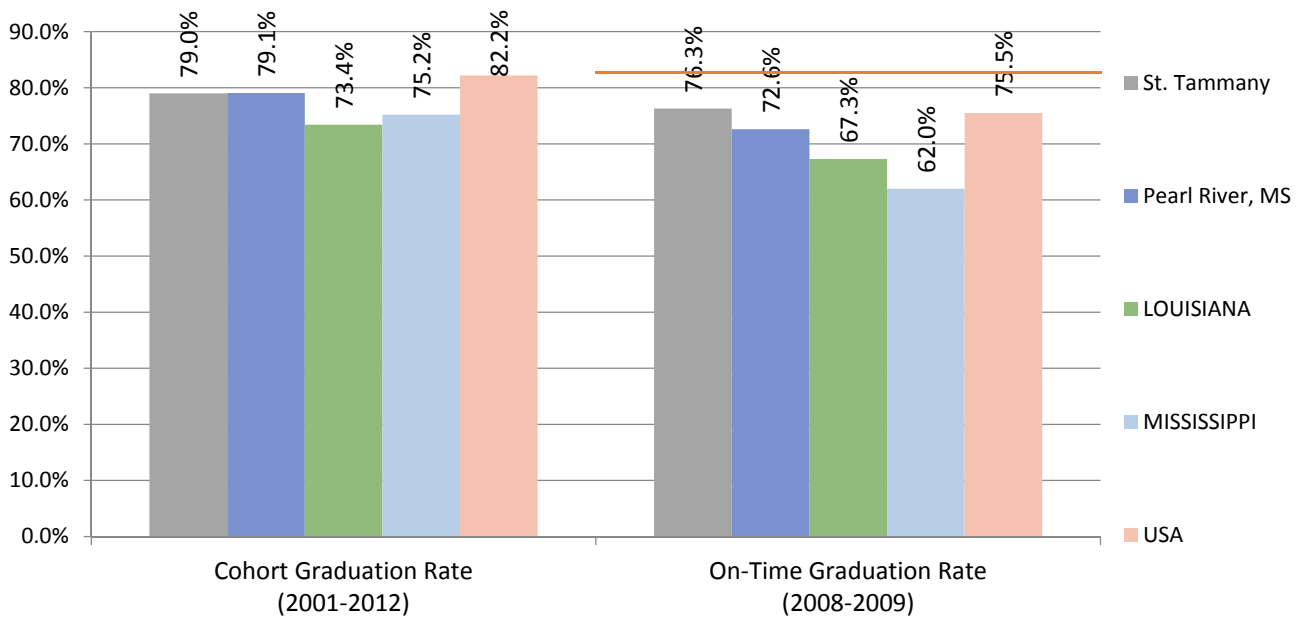
- This indicator reports the estimated percentage of the population that experienced food insecurity at some point during the report year. Food insecurity is the household-level economic and social condition of limited or uncertain access to adequate food.
- Pearl River County, MS reports a slightly higher food insecurity rate (17.34%) than the State of Louisiana and the nation, but stays below the State of Mississippi (22.31%).
- St. Tammany Parish, LA reporting the lowest rate at only 9.6% of the population.

Food Insecure Population, Percent, 2012



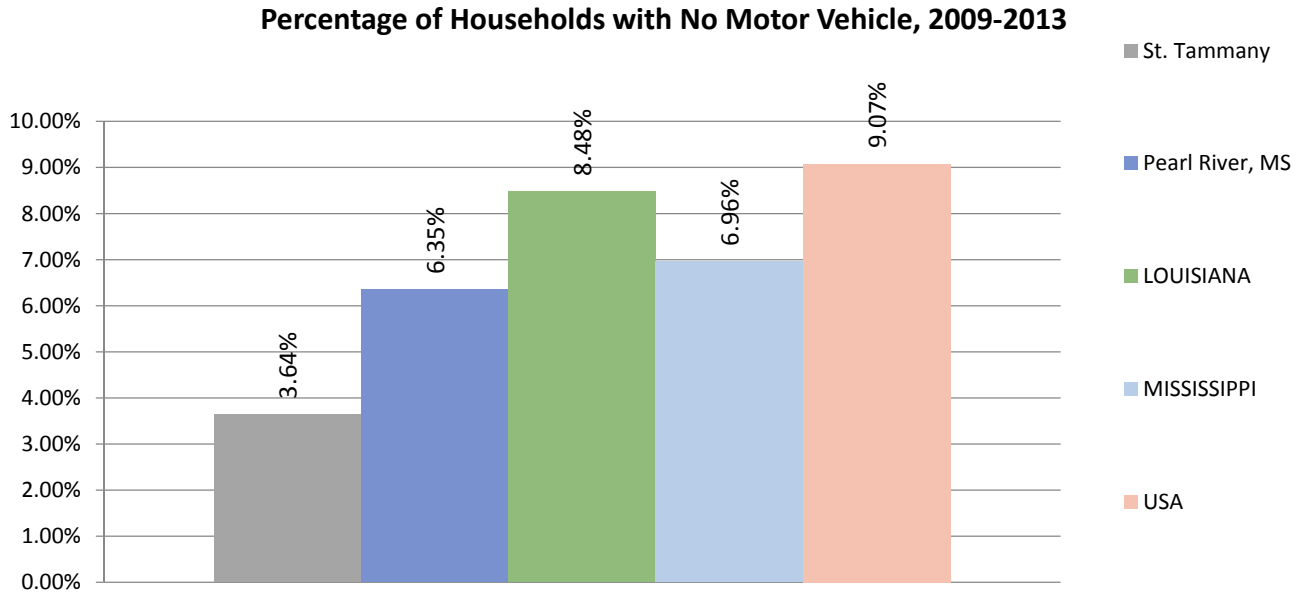
Graduation Rate

- This indicator is relevant because research suggests education is one of the strongest predictors of health (Freudenberg & Ruglis, 2007).
- Pearl River County, MS reports the lowest on-time graduation rate throughout the study area parishes/counties (72.6% on-time graduation).
- The Healthy People 2020 Target for on-time graduation is 82.4% – all of the study area parishes/counties and the states fall below this goal. St. Tammany Parish, LA reports higher on-time graduation rates than the national average.



Households with No Motor Vehicle

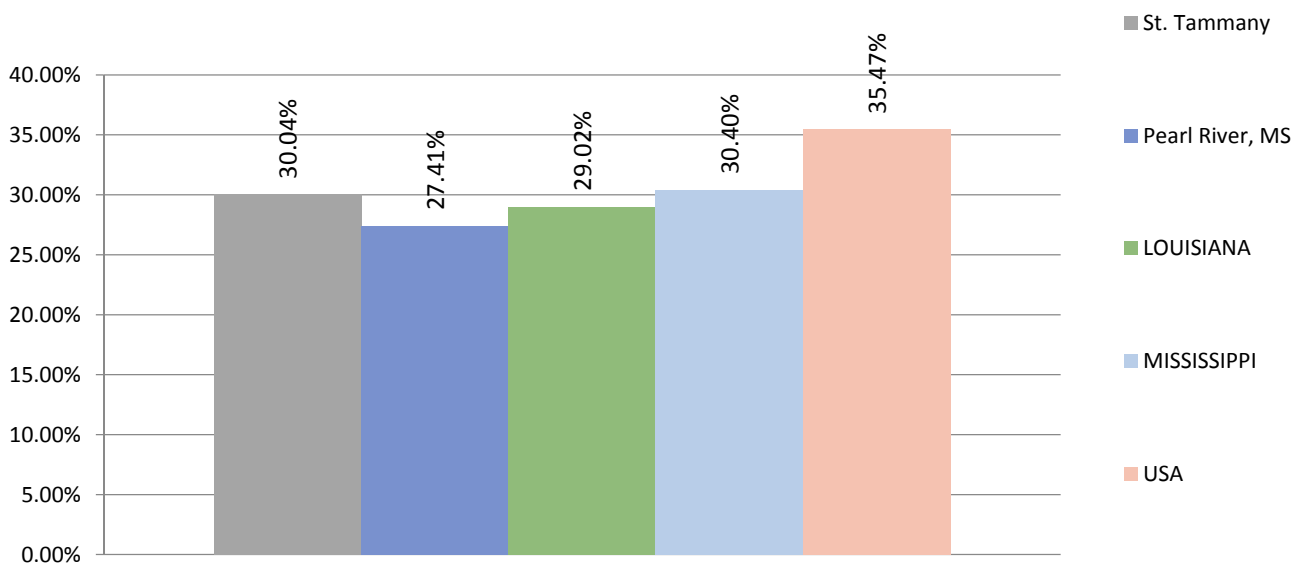
- Pearl River County, MS reports the highest rate of households with no motor vehicle (6.35%), for the study area.



Cost Burdened Households

- This indicator reports the percentage of the households where housing costs exceed 30% of total household income. This indicator provides information on the cost of monthly housing expenses for owners and renters. The information offers a measure of housing affordability and excessive shelter costs. The data also serve to aid in the development of housing programs to meet the needs of people at different economic levels.
- St. Tammany Parish, LA reports a higher percentage of cost-burdened households as compared with the study area at 30.04%. All of the parishes/counties in the study area report lower rates of cost-burdened households than the national average (35.47%).

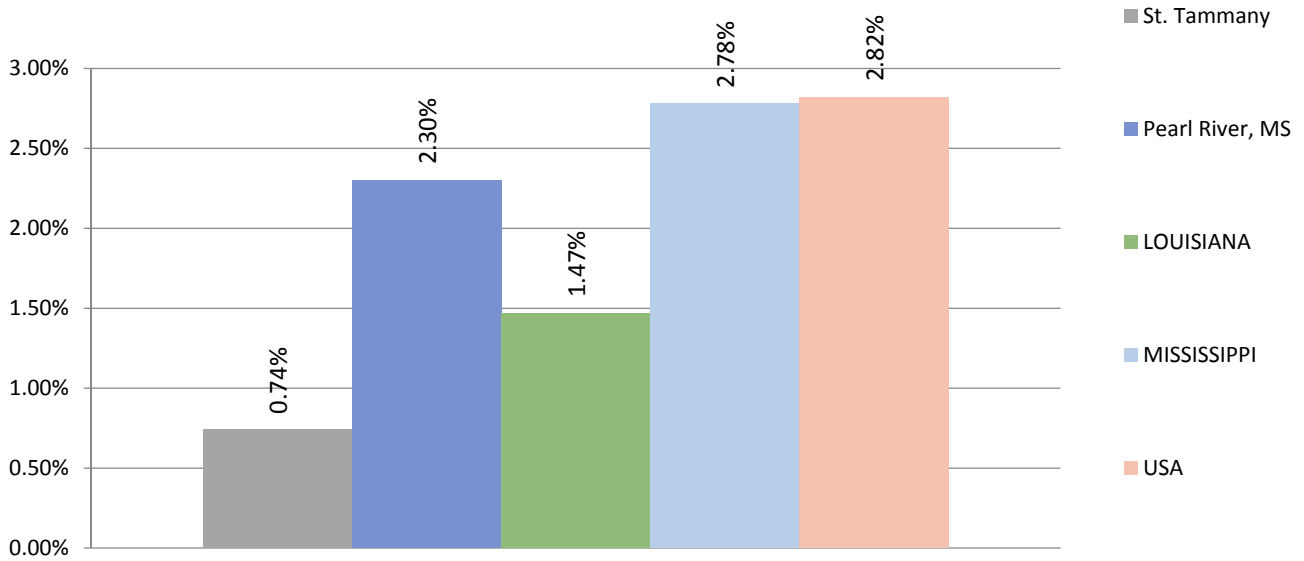
Percentage of Cost Burdened Households (Over 30% of Income), 2009-2013



Public Assistance

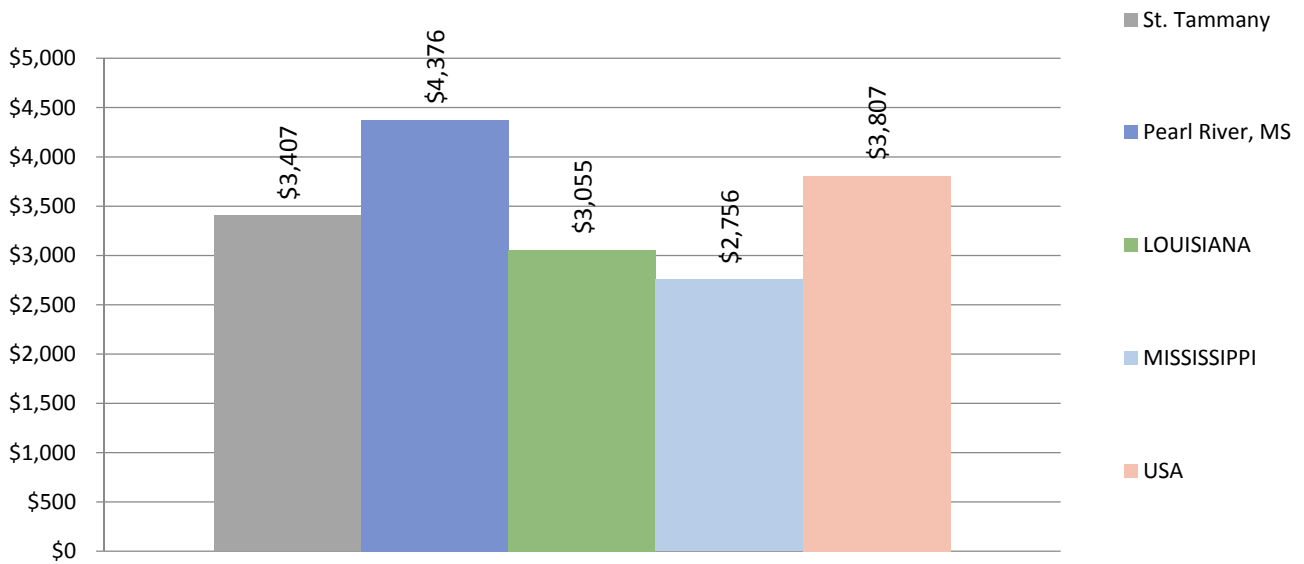
- This indicator reports the percentage households receiving public assistance income. Public assistance income includes general assistance and Temporary Assistance to Needy Families (TANF). Separate payments received for hospital or other medical care (vendor payments) are excluded. This does not include Supplemental Security Income (SSI) or noncash benefits such as Food Stamps.
- All of the study area parishes/counties report lower rates of households receiving public assistance income than the rates seen for the country and for the State of Mississippi.
- Pearl River County, MS reports the highest rate of households receiving public assistance at 2.30%. St. Tammany Parish, LA reports the lowest rate of households receiving public assistance at only 0.74%.

Percent Households with Public Assistance Income, 2009-2013



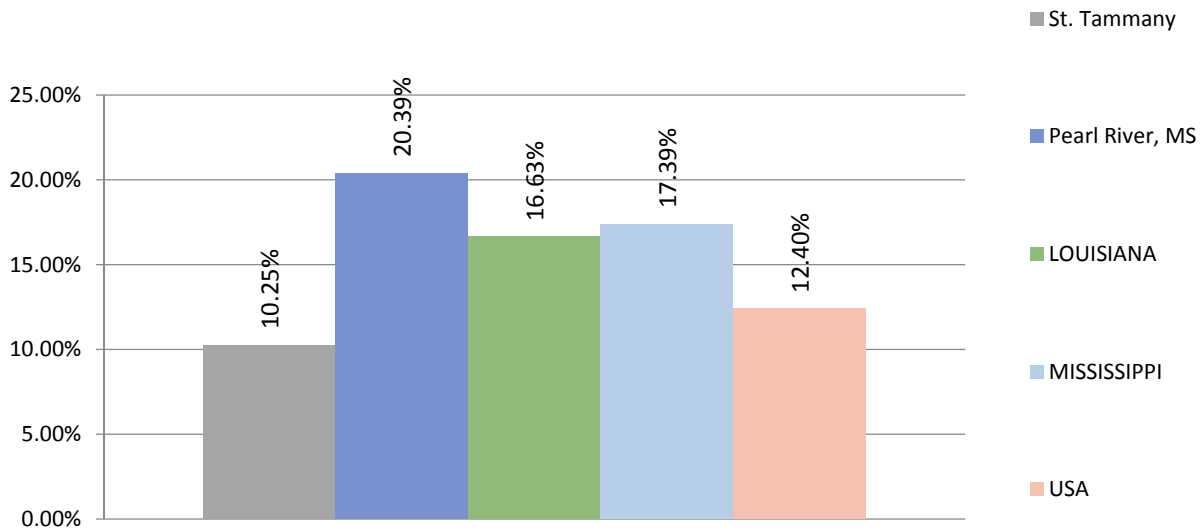
- St. Tammany Parish, LA reports the highest average amount of public assistance received by households at \$3,407.

Average Public Assistance Received (in USD), 2009-2013



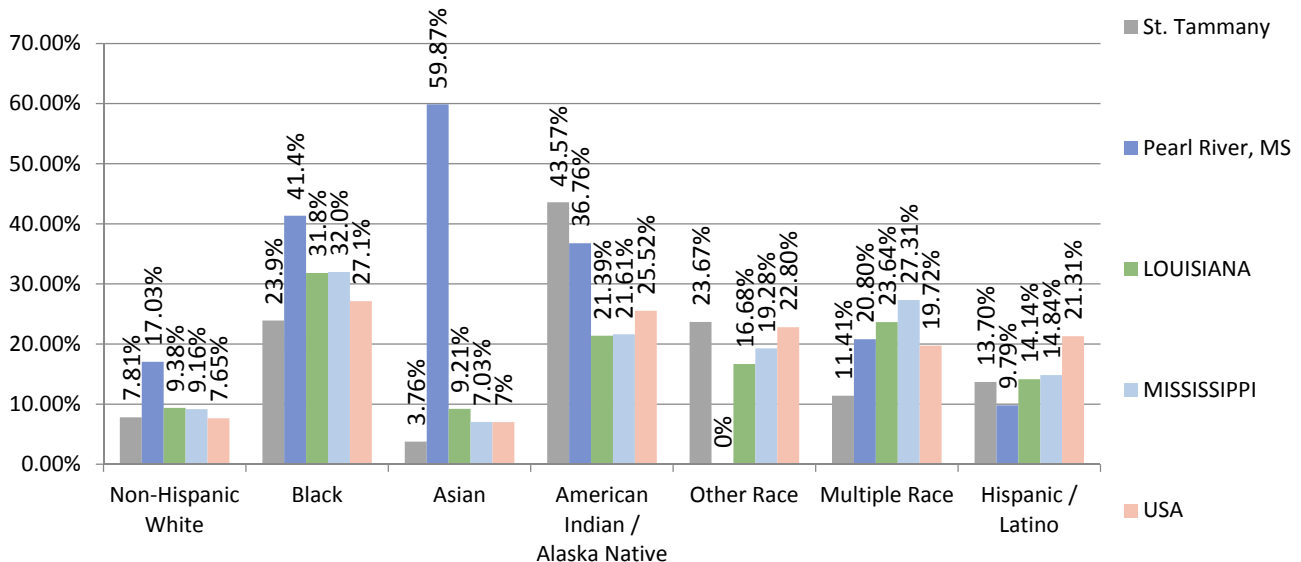
SNAP Benefits

Percent Households Receiving SNAP Benefits, 2009-2013



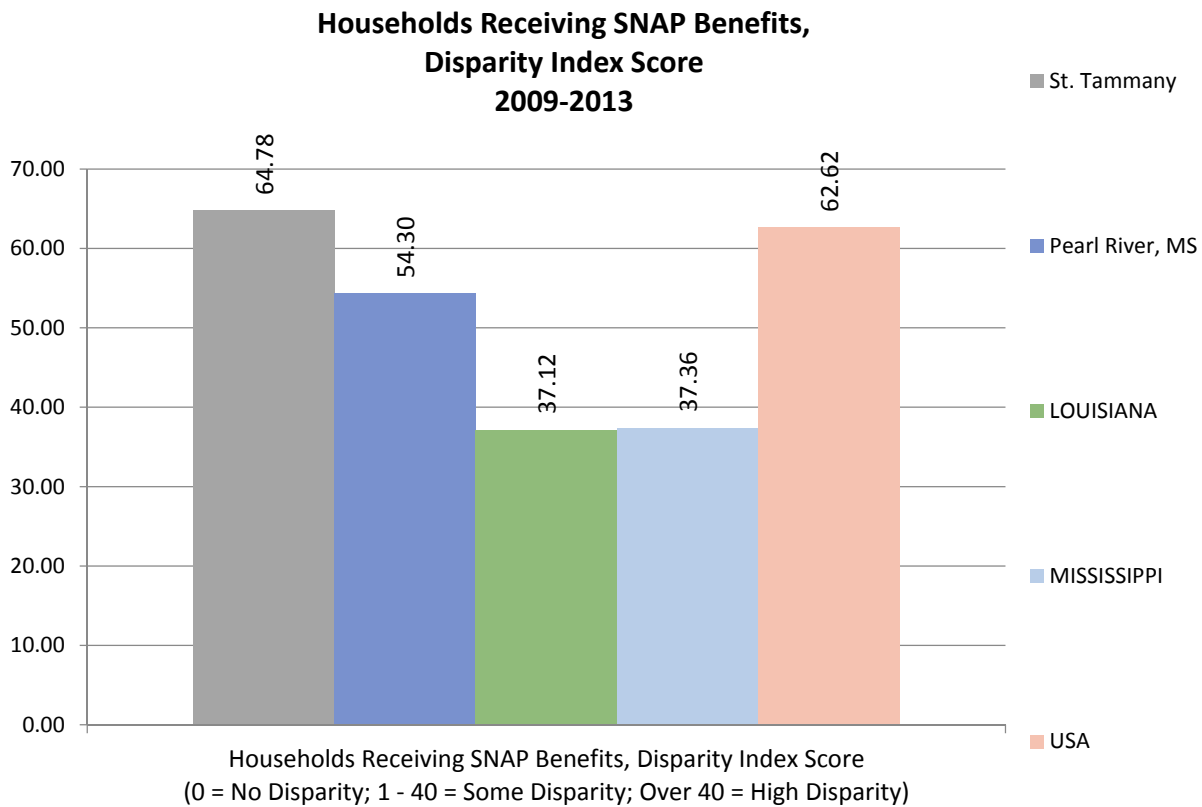
- Pearl River County, MS reports the highest rate of households receiving SNAP benefits across the study area at 20.39%.
- The Asian population of Pearl River County, MS reports a high rate of receiving SNAP benefits at 59.87%.
- The American Indian/Alaska Native, African-American/Black, and Multiple race populations of the study area see some of the highest rates of receiving SNAP benefits.
- The Non-Hispanic White, Asian (minus the Pearl River County, MS population), and Hispanic/Latino populations report some of the lowest rates of receiving SNAP benefits, for the study area.

Percent Households Receiving SNAP Benefits, by Race, 2009-2013



Households Receiving SNAP Benefits, Disparity Index

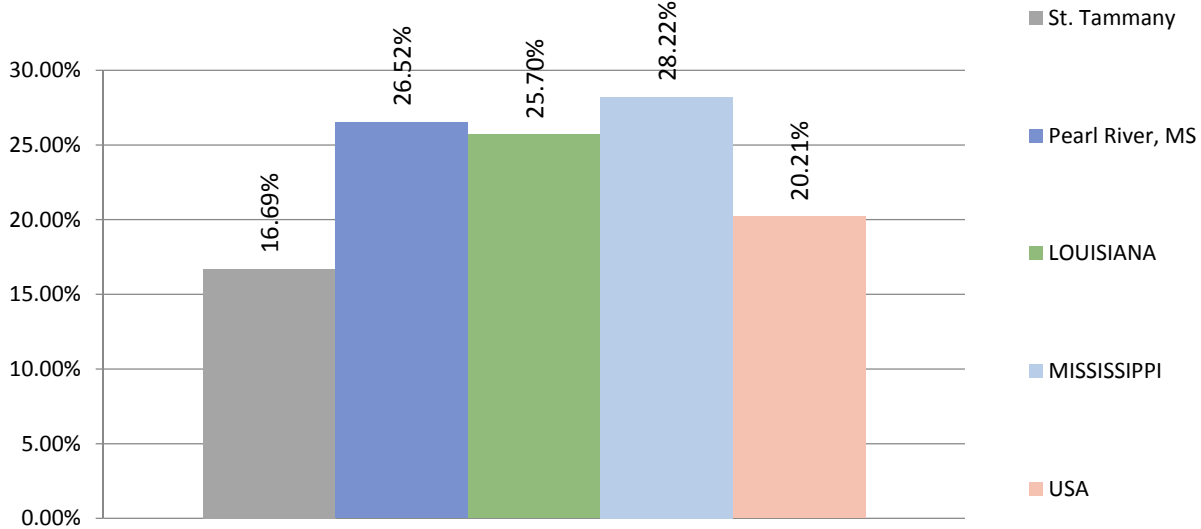
- The Index of Disparity (ID) measures the magnitude of variation in indicator percentages across population groups. Specifically, the index of disparity is defined as "the average of the absolute differences between rates for specific groups within a population and the overall population rate, divided by the rate for the overall population and expressed as a percentage".
- The study area parishes/counties both report "High Disparity" in households receiving SNAP benefits.
- St. Tammany Parish, LA reports the highest disparity score, for the study area, at 64.78; this is higher than the national average of 62.62.



Medicaid

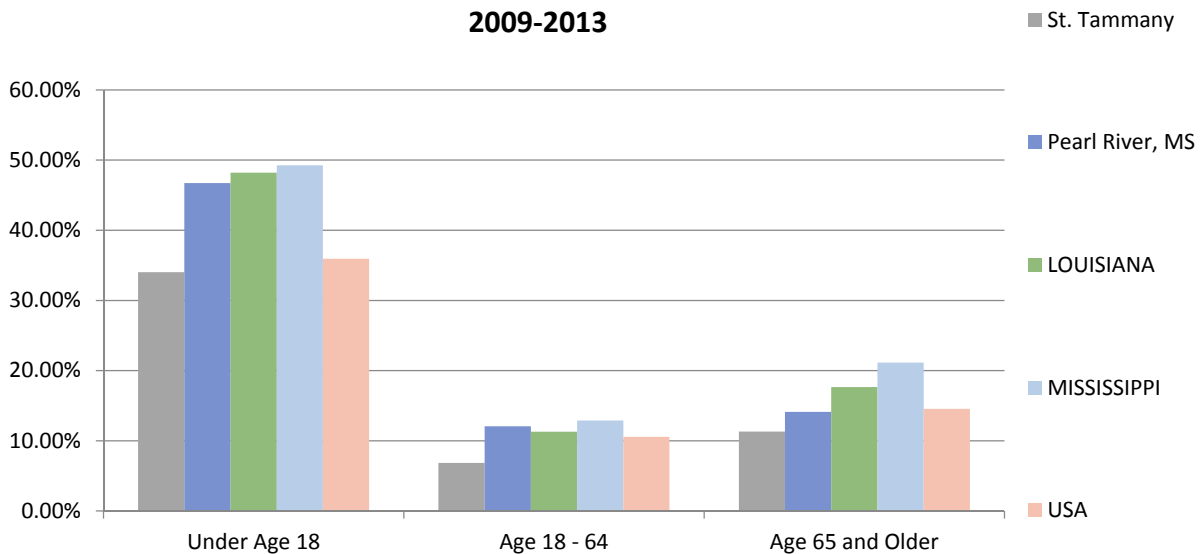
- Pearl River County, MS reports the highest rate of Insured Residents Receiving Medicaid at 26.52%; this rate is higher than the national (20.21%) rate.

Percent of Insured Population Receiving Medicaid, 2009-2013



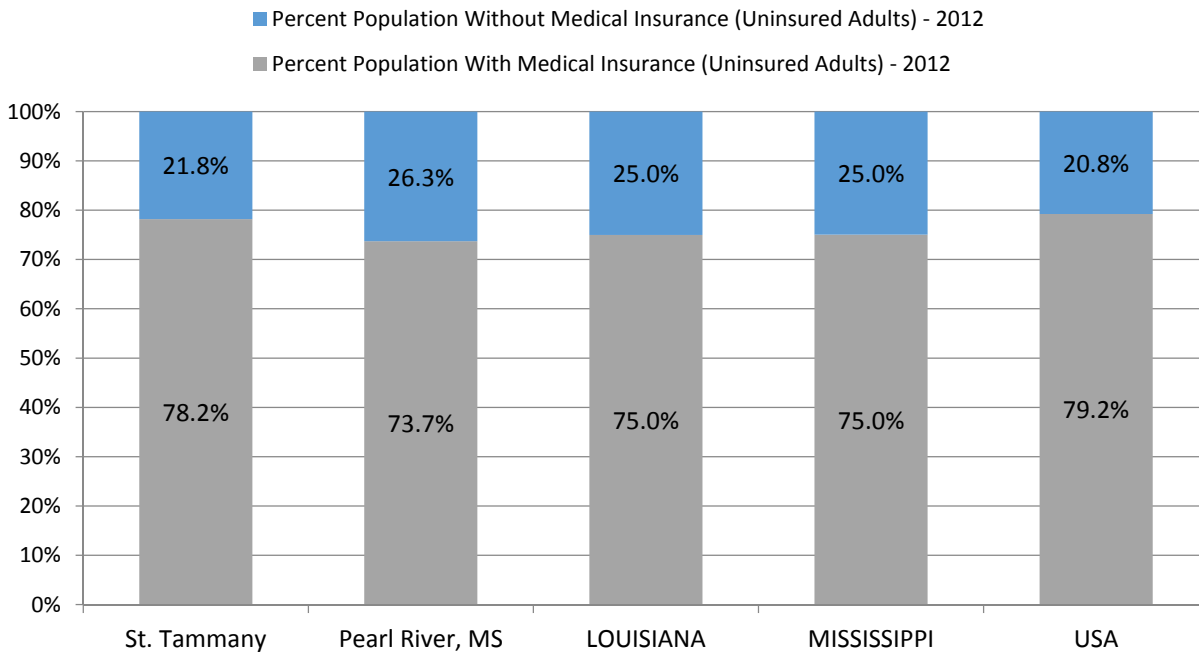
- The population under the age of 18 receives the highest rates of Medicaid assistance across all of the study area parishes/counties.
- St. Tammany Parish, LA reports the lowest rates among the study area parishes/counties for all age groups receiving Medicaid (33.24%).

Percent of Insured Population Receiving Medicaid, by Age Group, 2009-2013



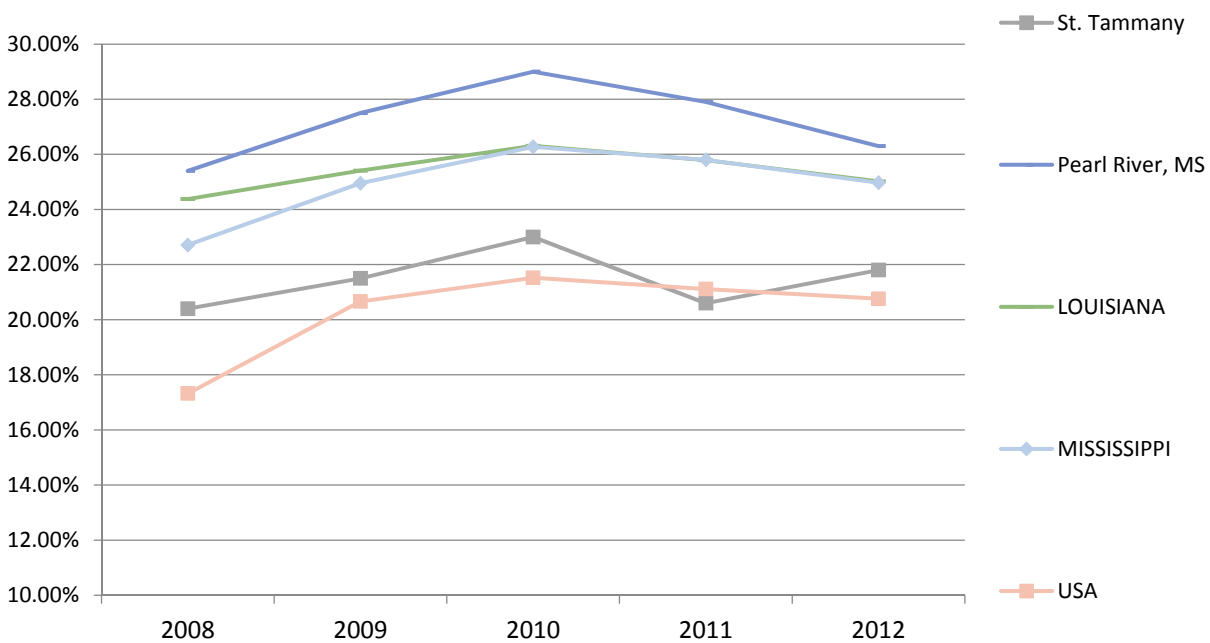
Insurance

- Pearl River County, MS reports the highest rate of uninsured adults, for the study area, at 26.3%. This rate is higher than state (25.0% for both LA and MS) and national (20.8%) norms.

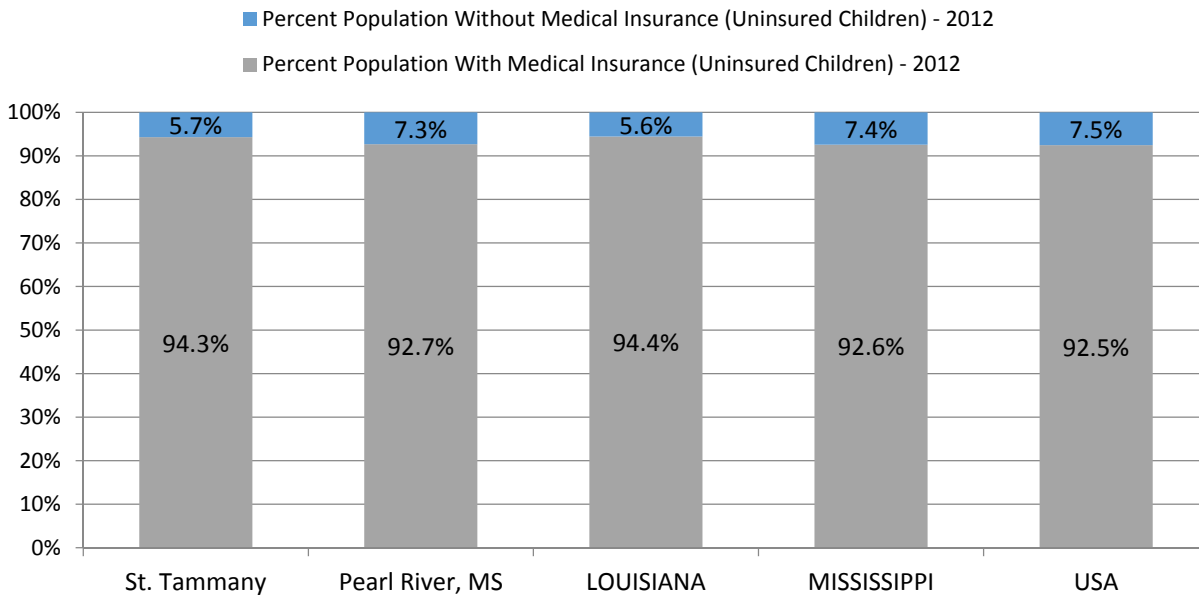


- Pearl River County, MS has experienced drastic declines in its rates of uninsured adults going from a high of 29.00% in 2010 to its lowest rate in the most recent data year of 2012 reporting 26.30%.

Percent Population without Medical Insurance (Uninsured Adults)

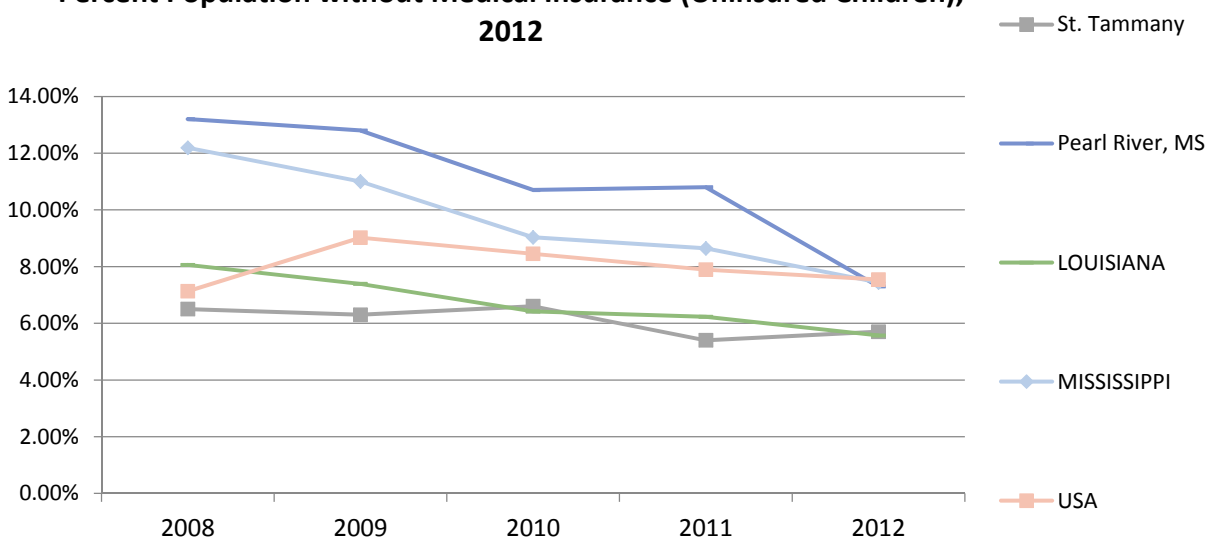


- The county of Pearl River in Mississippi reports the highest rate of uninsured children across the study area parishes/counties at 7.3%.
- The State of Louisiana reports lower rates of uninsured children as compared with the State of Mississippi. Both states report lower rate of uninsured children as compared with the country (7.5%)



- From 2011 to 2012, nearly all of the study area parishes/counties reported declines in the rates of uninsured children (14 of the 16).
 - ✓ However, St. Tammany Parish, LA did see slight rises in the rates of uninsured children – going from 6.4% to 5.7%.

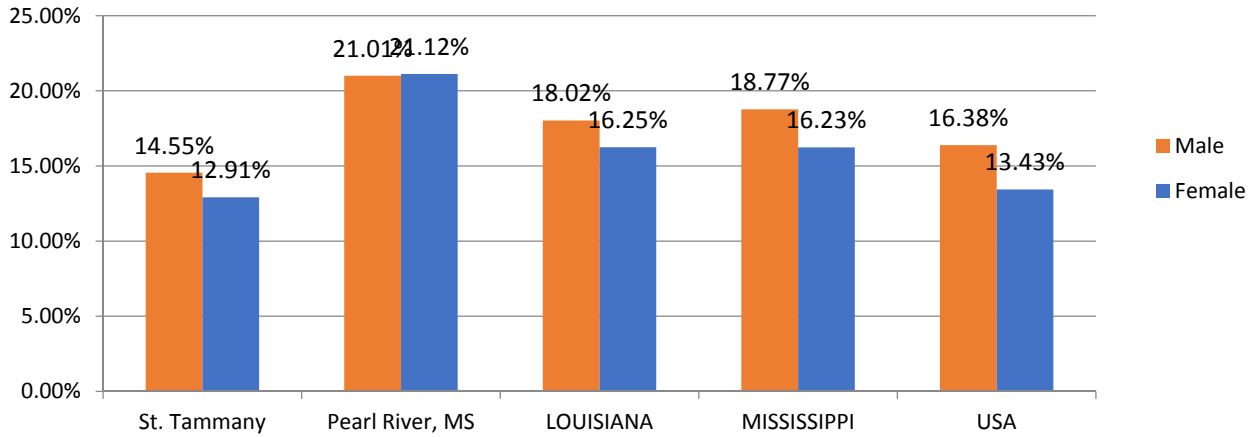
Percent Population without Medical Insurance (Uninsured Children), 2012



Uninsured Population

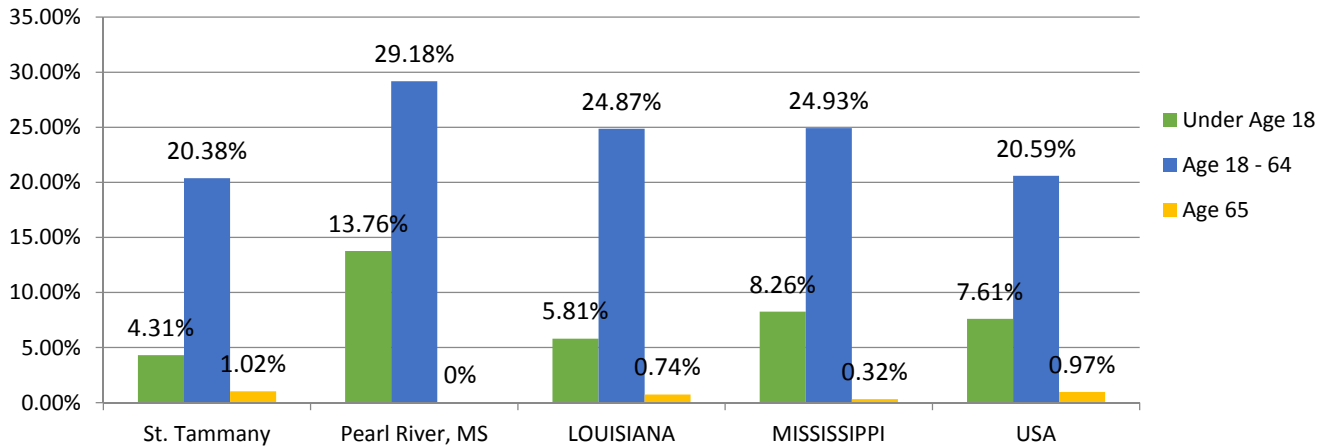
- Overall, men are more likely to be uninsured than women. Pearl River County is the only exception in the study area.

Uninsured - Gender, 2009-2013



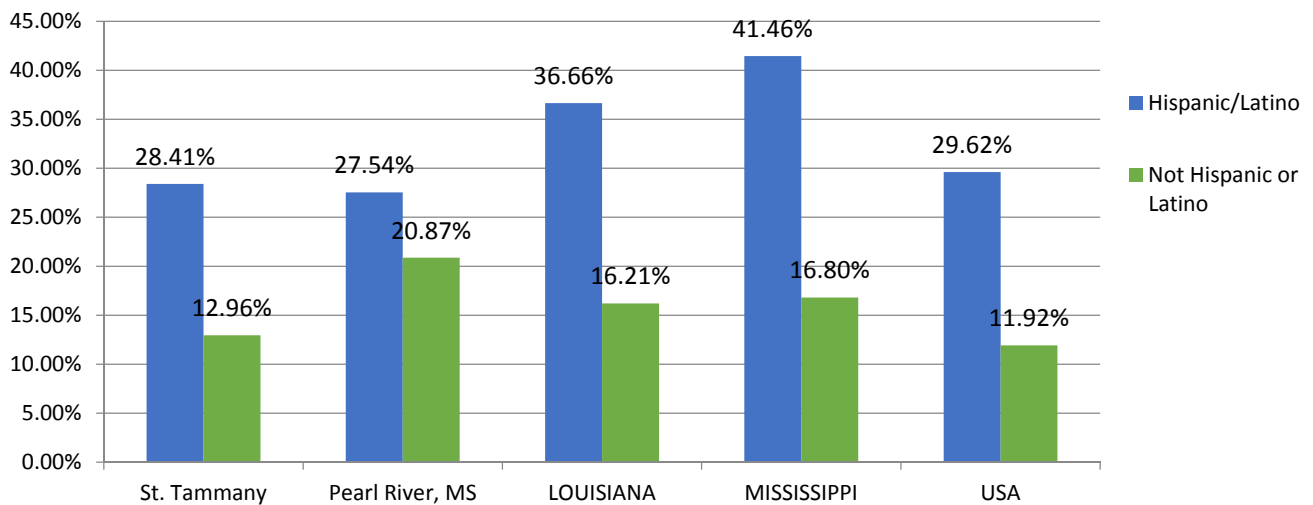
- Those aged 18 – 64 are more likely to be uninsured as compared with those under 18 or those 65 and older.

Uninsured - Age, 2009-2013



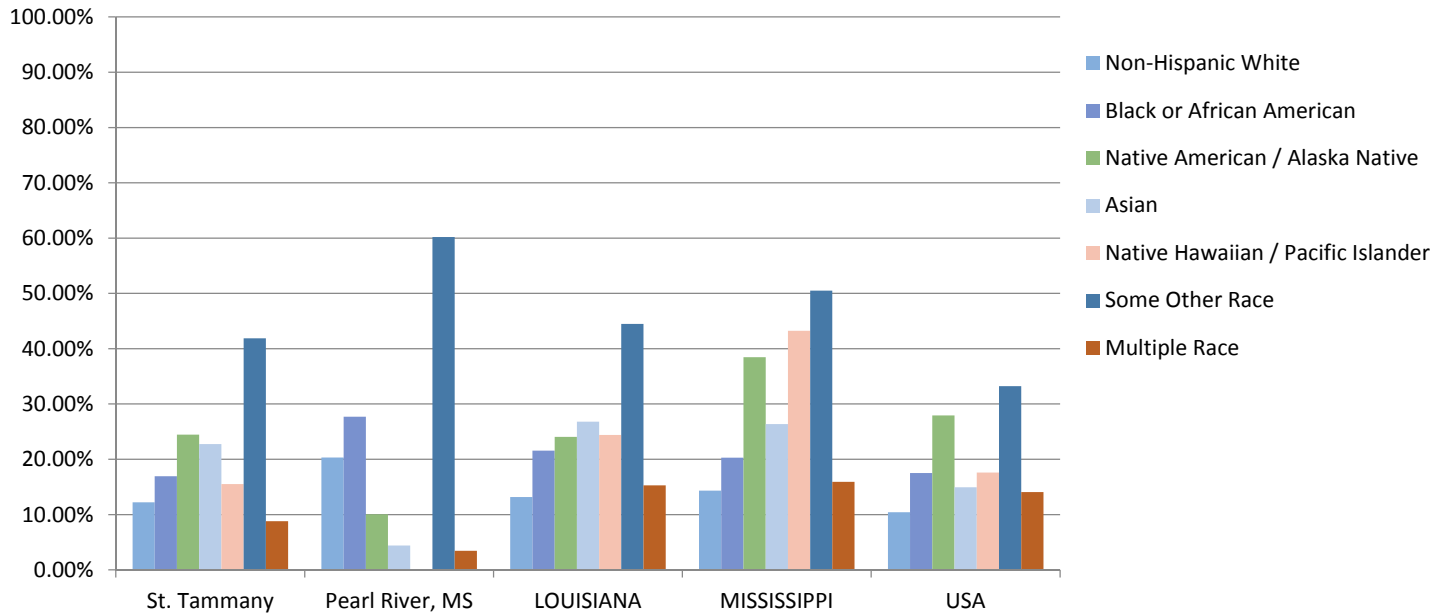
- Residents of Hispanic or Latino ethnicity are more likely to be uninsured than their counterparts.

Uninsured - Ethnicity, 2009-2013



- Residents reporting "Some other race", for the majority of the study area parishes/counties, have the highest rates of being uninsured.
- More than 60% of the "Some other race" population of Pearl River County, MS report being uninsured.

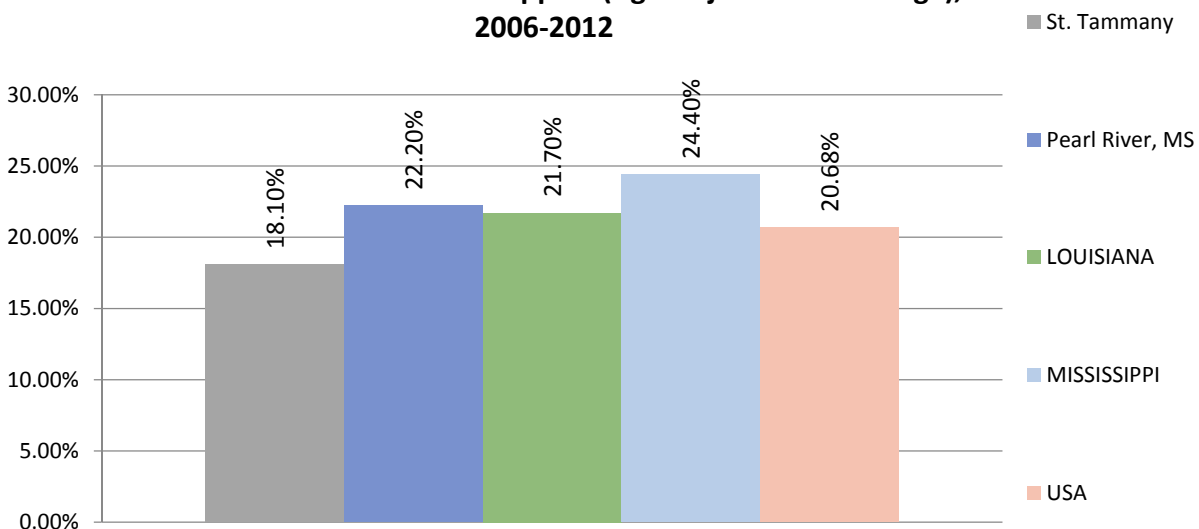
Uninsured - Race, 2009-2013



Social Support

- Pearl River County, MS exhibits the highest rate of residents with a lack of social or emotional support at 22.20% of the population; this is higher than state (21.7%) and national (20.68%) norms.

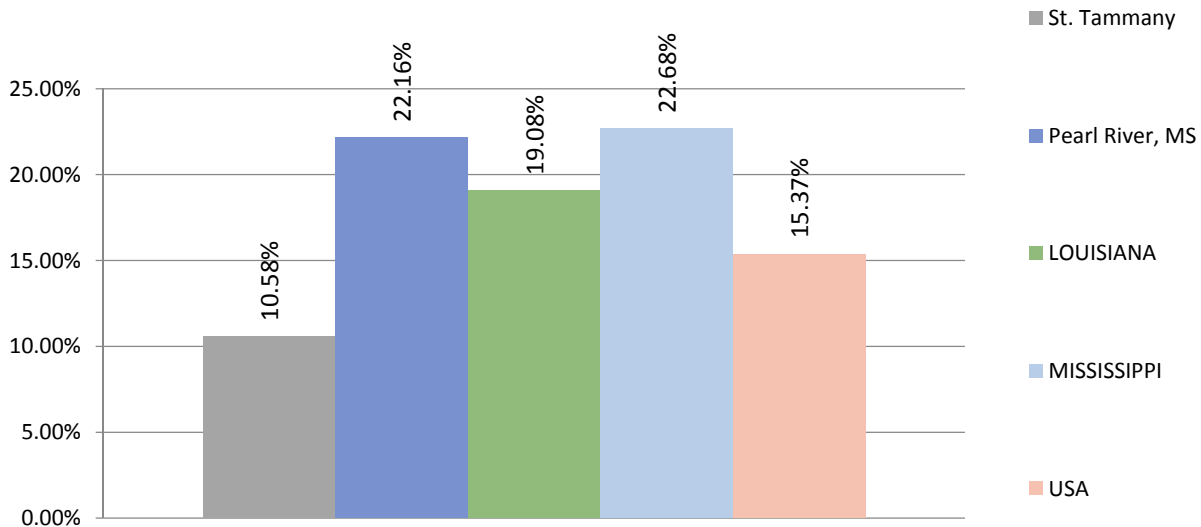
Lack of Social or Emotional Support (Age-Adjusted Percentage), 2006-2012



Poverty

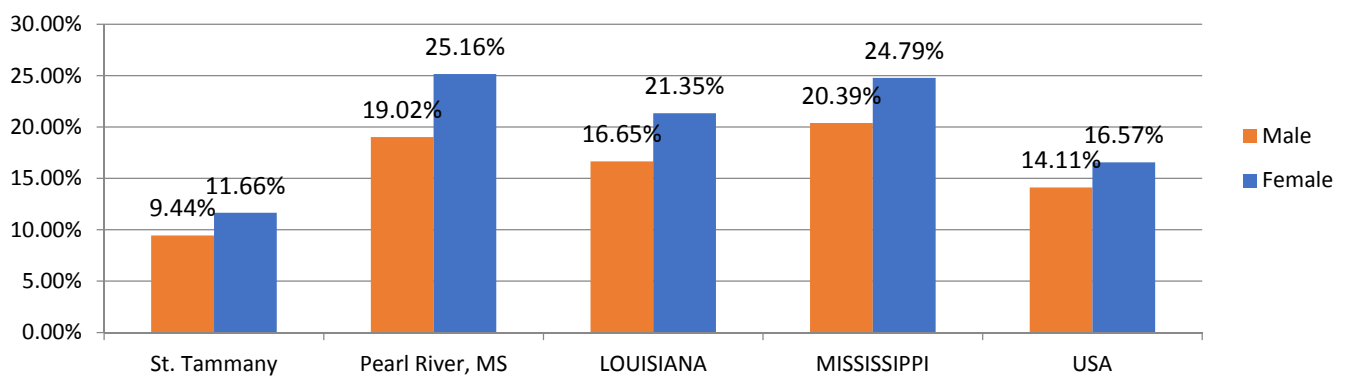
- Pearl River County, MS shows the highest rate of population that is living below the federal poverty level (100% FPL) at 22.16% of the population; this is higher than the national (15.37%) norm.
- Only 10.58% of St. Tammany Parish, LA is living in poverty below 100% FPL.

Percent Population in Poverty (Below 100% FPL), 2009-2013



- Across all of the study area regions, women are more likely than men to be living in poverty.
- 25.16% of female residents of Pearl River County, MS are living in poverty (the highest rate across the study area, including states, and country).

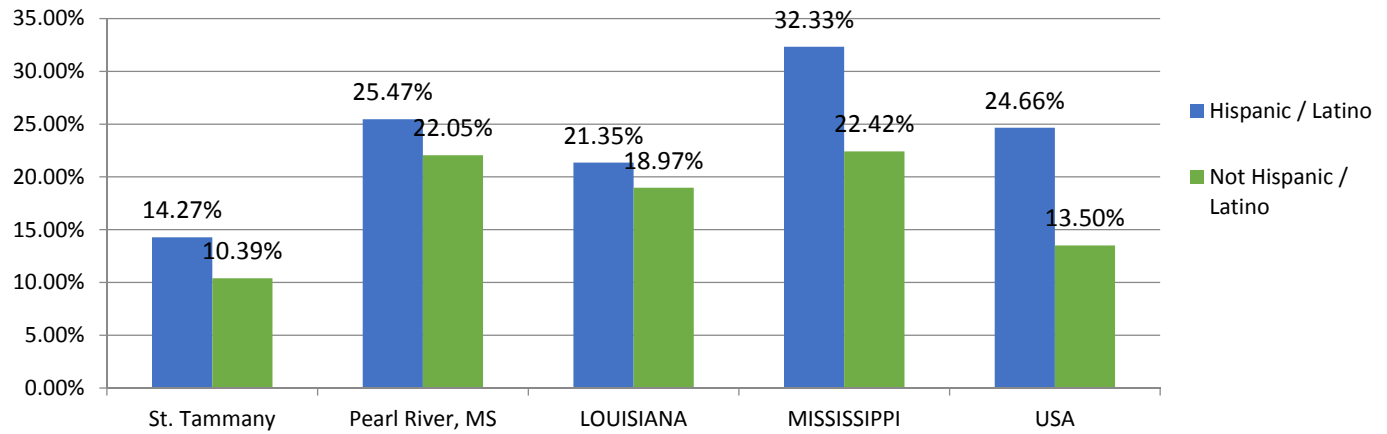
Poverty - Gender, 2009-2013



- In general, the Hispanic/Latino population of the study area is living in poverty at higher rates than their counterparts.

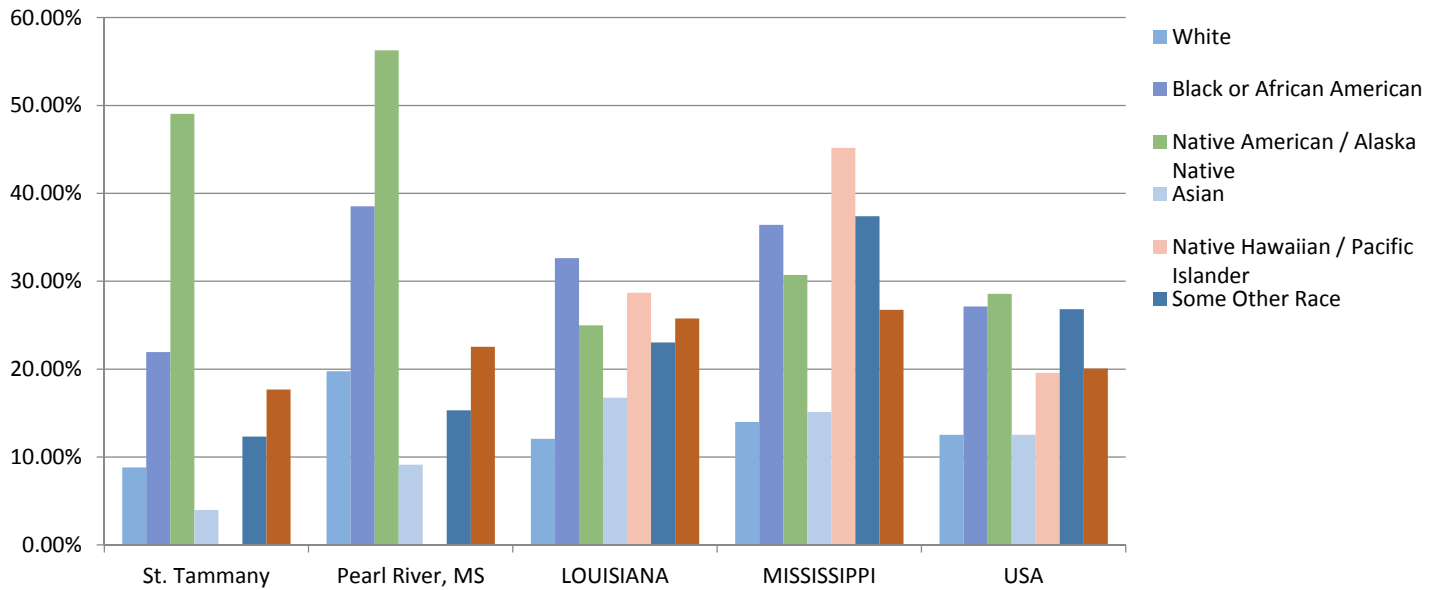
- In Pearl River County, MS 25.47% of the Hispanic/Latino population is living below the federal poverty level (the highest for the study area).

Poverty - Ethnicity, 2009-2013



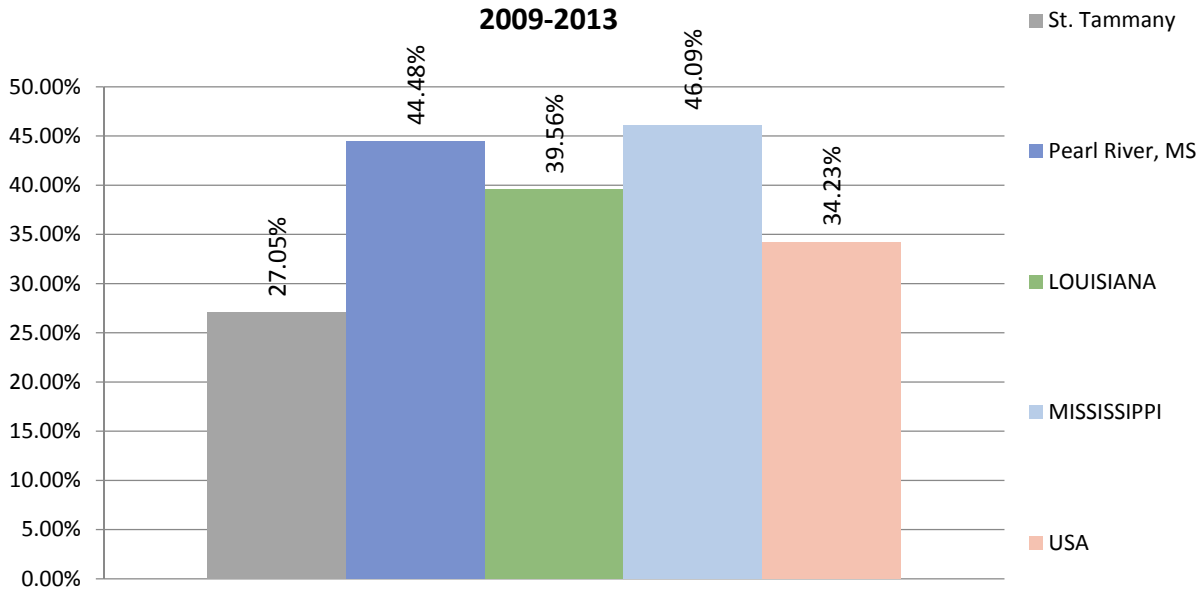
- The Native American/Alaska Native populations of both Pearl River County, MS and St. Tammany Parish, LA experience some of the highest rates of living in poverty as compared with the other study area parishes/counties (56.28% and 49.04% respectively).

Poverty - Race, 2009-2013



- For populations living below 200% of the federal poverty level Pearl River County, MS still reports the highest rate, for the study area, at 44.48%, with St. Tammany still reporting the lowest rate at 27.05%.

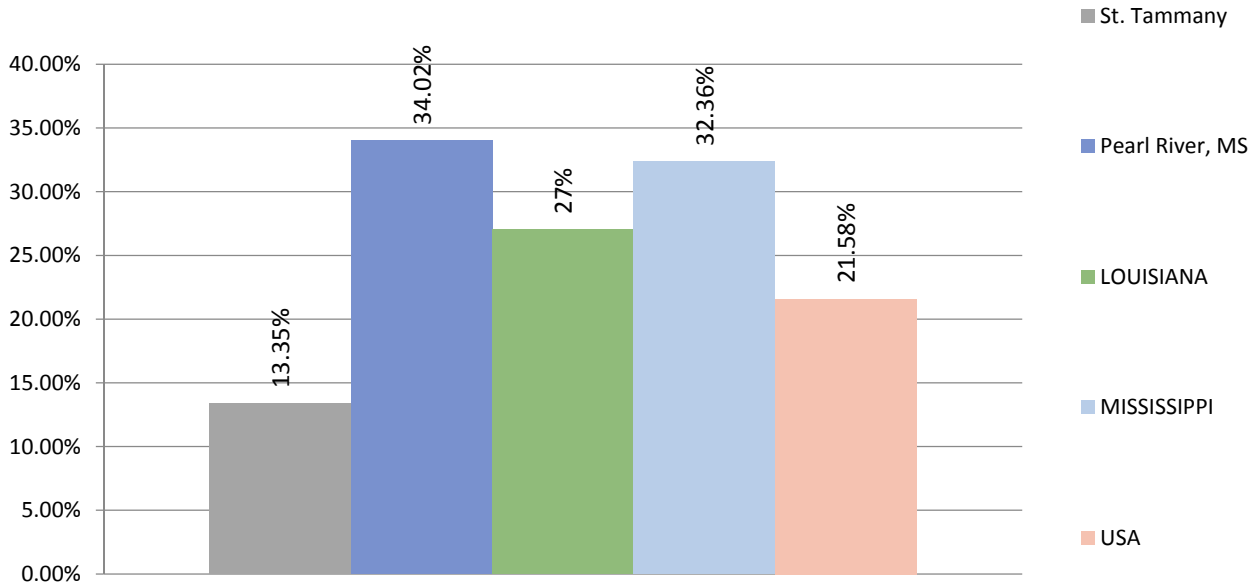
Percent Population with Income at or Below 200% FPL, 2009-2013



Children in Poverty

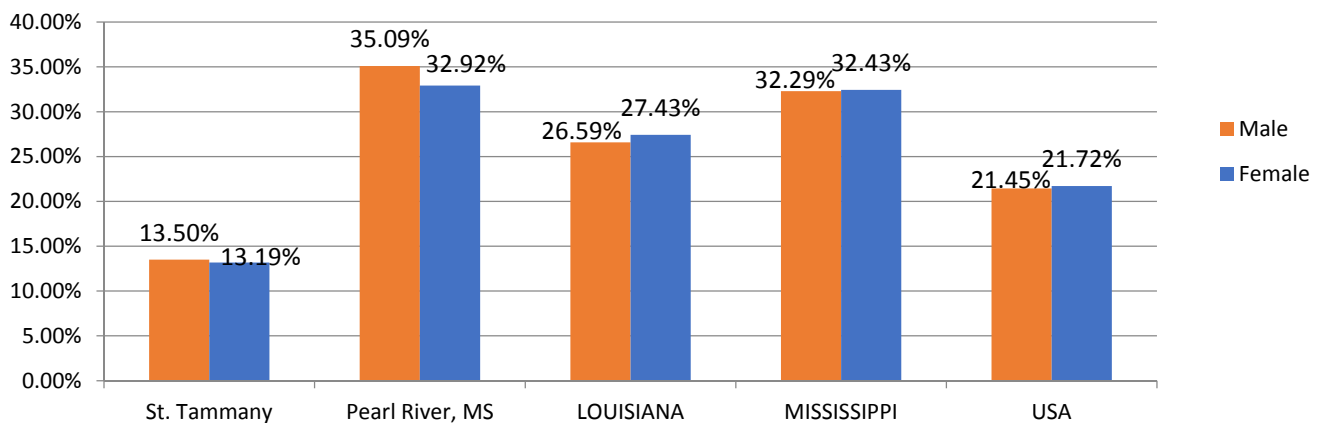
- More than 34% of the children and adolescents (under 18) in Pearl River County, MS are living in poverty (below 100% FPL).

Children in Poverty - Below 100% FPL, 2009-2013



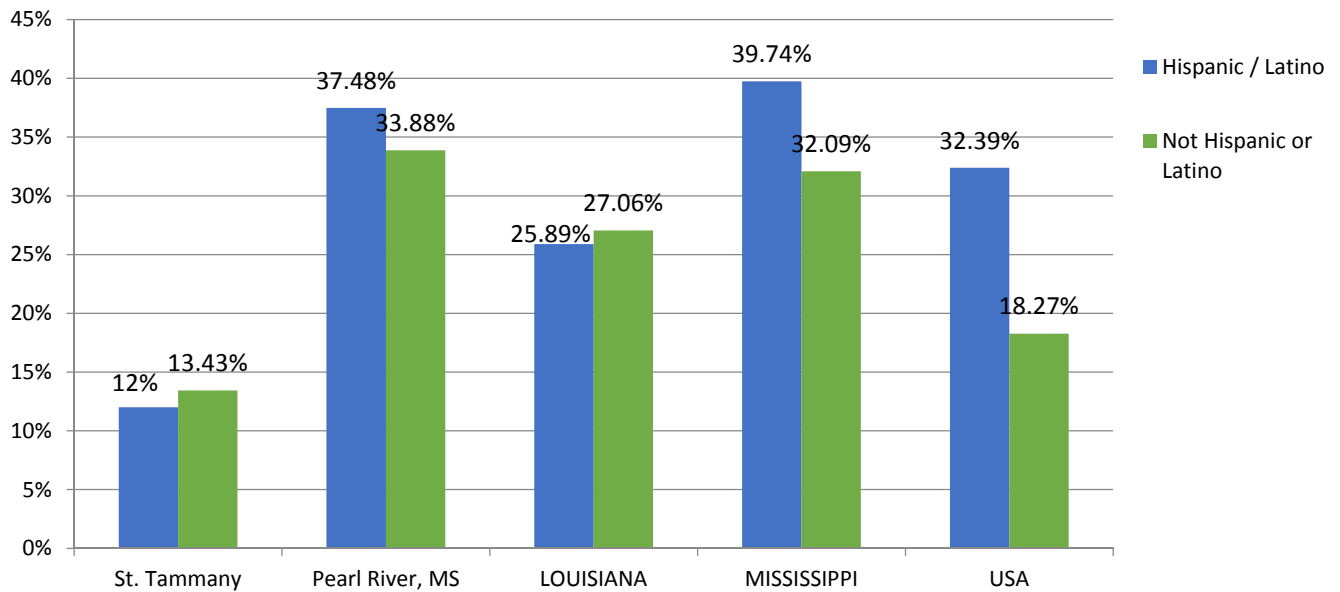
- Male and female children tend to live in poverty at similar rates in the study area; however, Pearl River County, MS reports slightly more male children living in poverty than female children (35.09% for males compared to 32.92% for females).

Children in Poverty - Gender, 2009-2013



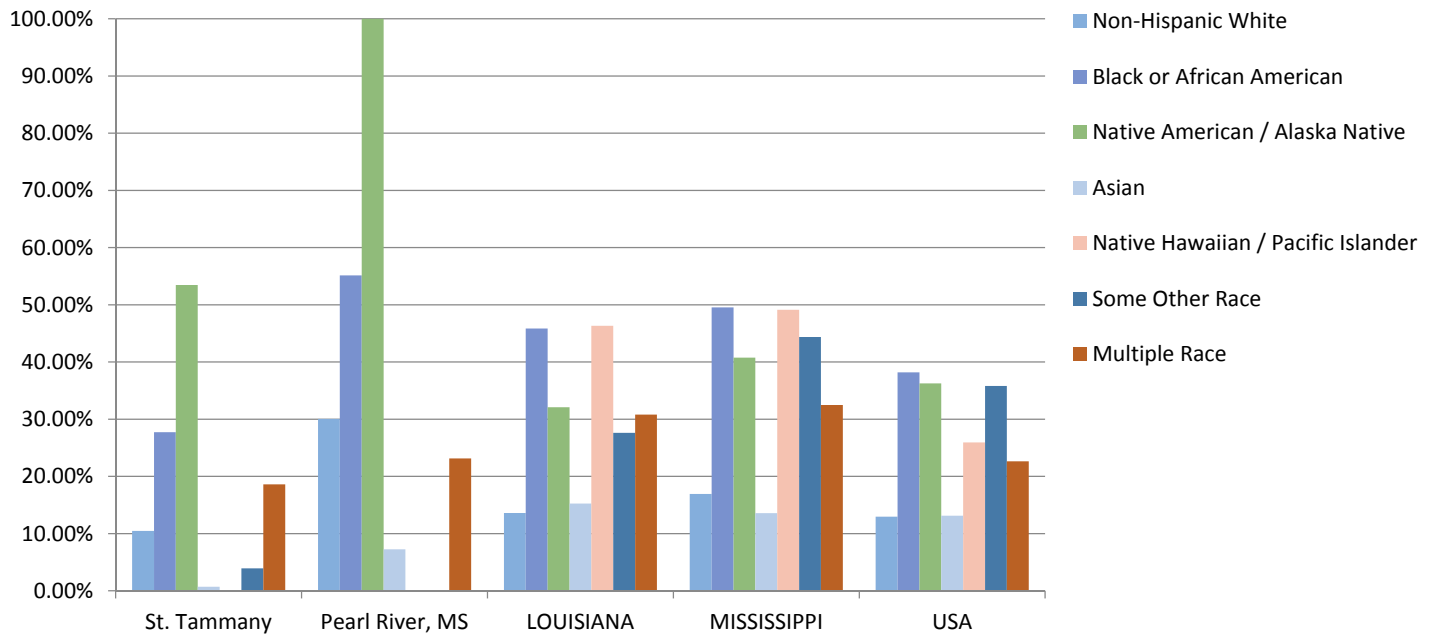
- Similar to gender, the ethnicity of a child varies in whether or not it is related to living in poverty or not. For adults, the Hispanic/Latino population is more likely to live in poverty than their counterparts; however, for children, St. Tammany Parish, LA reports higher rates of poverty in the Non-Hispanic population.
- Pearl River County, MS reports the highest rate of Hispanic/Latino children living in poverty at 37.48%.

Children in Poverty - Ethnicity, 2009-2013



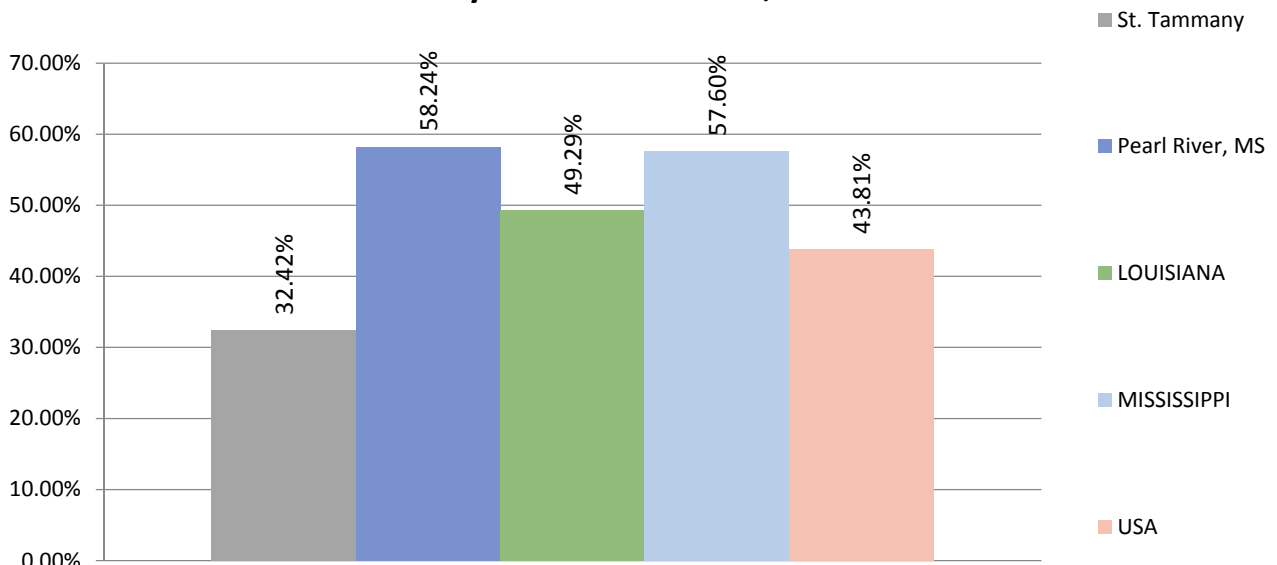
- Within the study area, Pearl River County, MS reports that 100% of its Native American or Alaska Natives population and more than 50% of its African/American Black population are living in poverty.
 - ✓ St. Tammany Parish, LA reports more than 50% of Native American or Alaska Natives living in poverty
- The African/American Black population sees some of the highest rates of poverty across the study area.
 - ✓ 50% of the African-American/Black population of Mississippi is living in poverty.

Children in Poverty - Race, 2009-2013



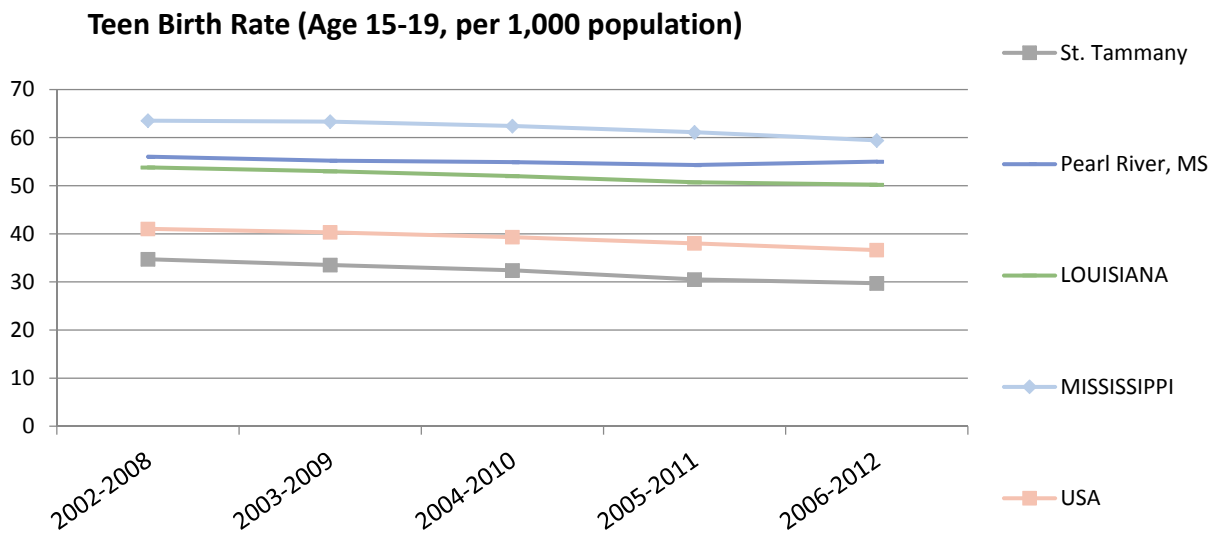
- Similar to children living in poverty below the 100% FPL, Pearl River County, MS reports the highest rate of children living below 200% of the federal poverty level as well (58.24%).

Children in Poverty - Below 200% FPL, 2009-2013

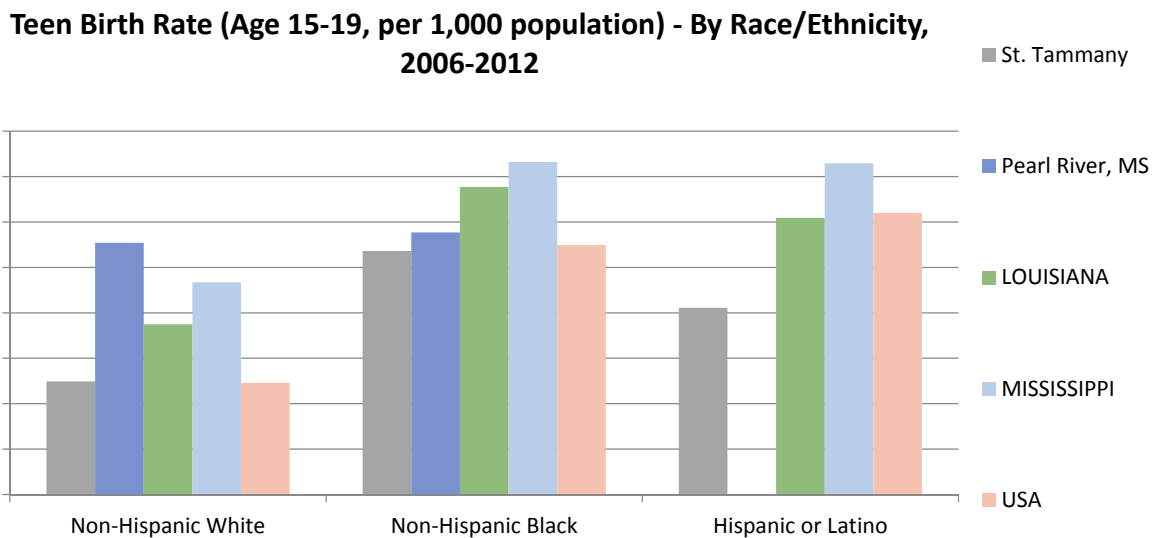


Teen Birth Rate

Pearl River County, MS reported slight rises in the teen birth rates from the 2005-2011 5-year estimate census to the 2006-2012 5-year estimate census.



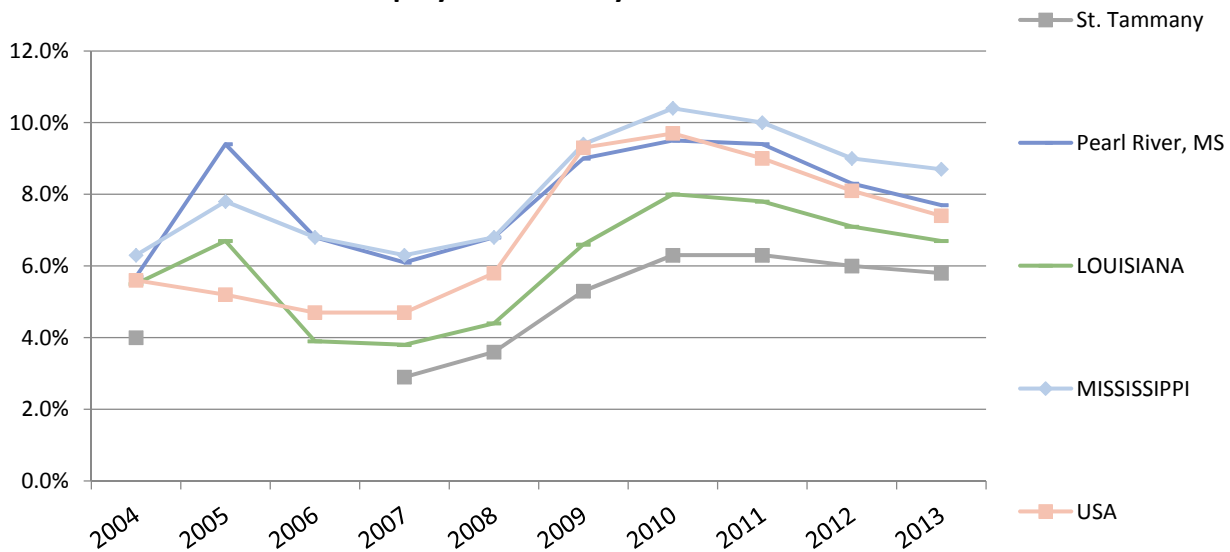
- Pearl River County, MS reports the highest teen birth rate among Non-Hispanic White girls (55.4 per 1,000 pop.).
- Pearl River County, MS reports the highest teen birth rate among Non-Hispanic Black girls (57.7 per 1,000 pop.).
- St. Tammany Parish, LA reports the highest teen birth rate among Hispanic/Latino girls (41.1 per 1000 pop.).



Unemployment Rate

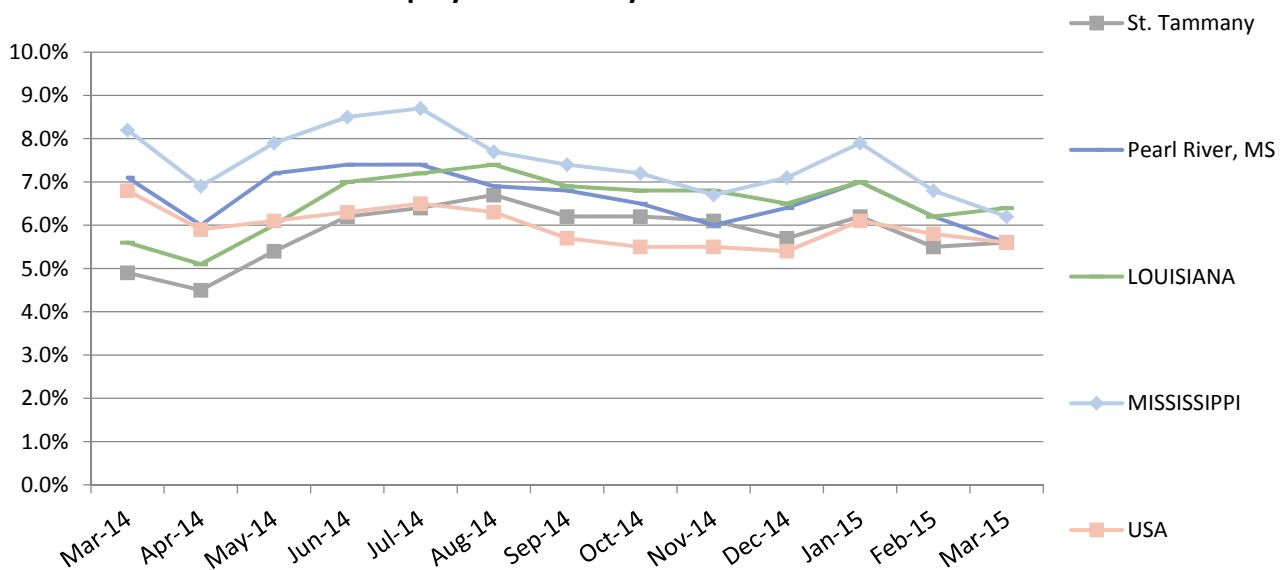
- In 2013; Pearl River County, MS reported the highest unemployment rate, for the study area, at 7.7% (LA = 6.7%, MS = 8.7%, USA = 7.4%).

Unemployment Rate by Year



- For the most current reported data, both parishes/counties in the study area share the same unemployment rate as the nation at 5.6%; this is lower than both state rates (LA = 6.4%, MS = 6.2%,).

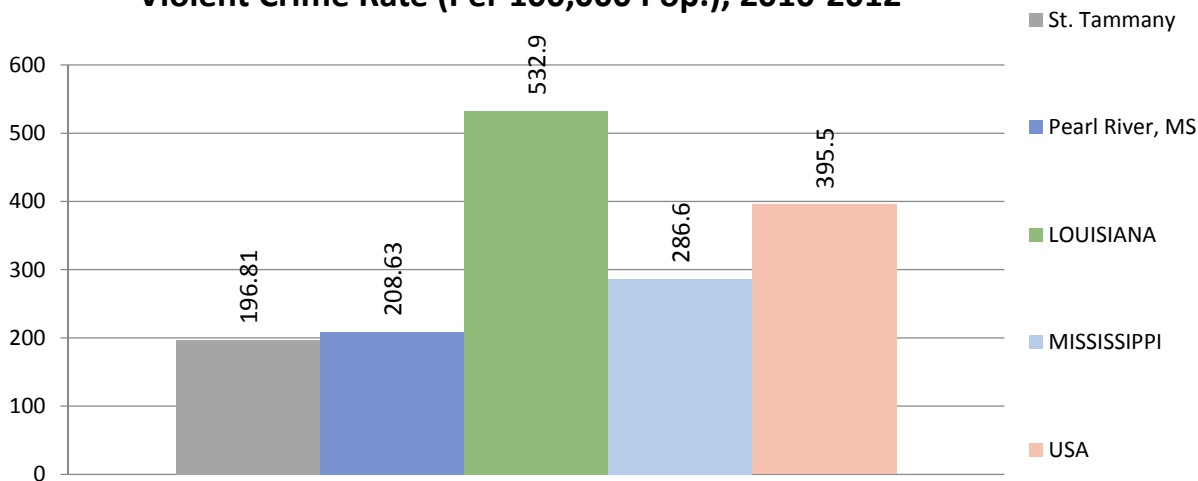
Unemployment Rate by Month



Violent Crime

- Pearl River County, MS and St. Tammany Parish, LA both report a lower violent crime rate than the national rate of 395.5 per 100,000 population (208.63 and 196.81 respectively).
- The State of Louisiana reports a higher rate of violent crime than Mississippi (286.6) and the nation (395.5) at 532.9 per 100,000 population.

Violent Crime Rate (Per 100,000 Pop.), 2010-2012

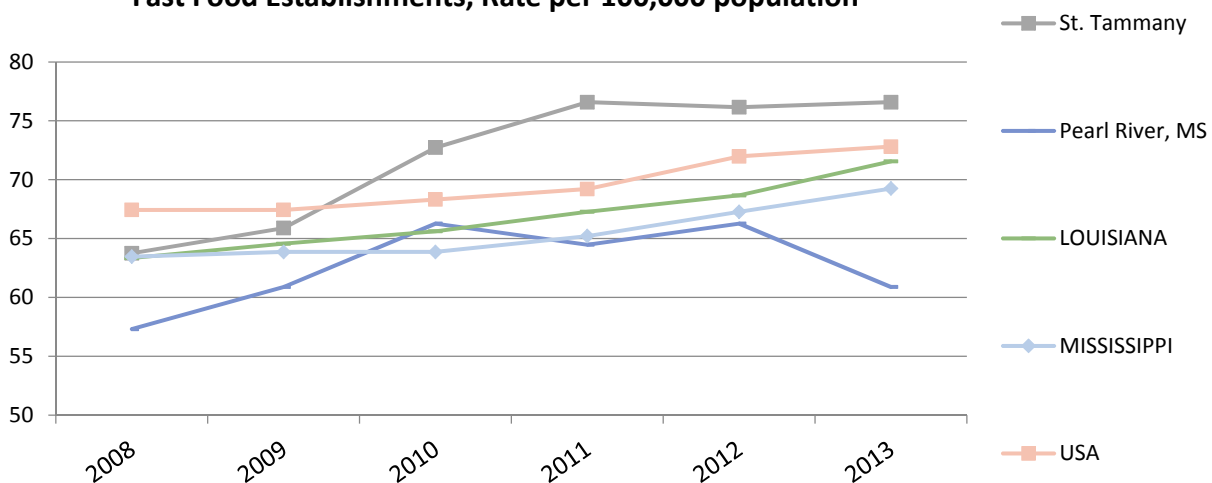


PHYSICAL ENVIRONMENT

Fast Food

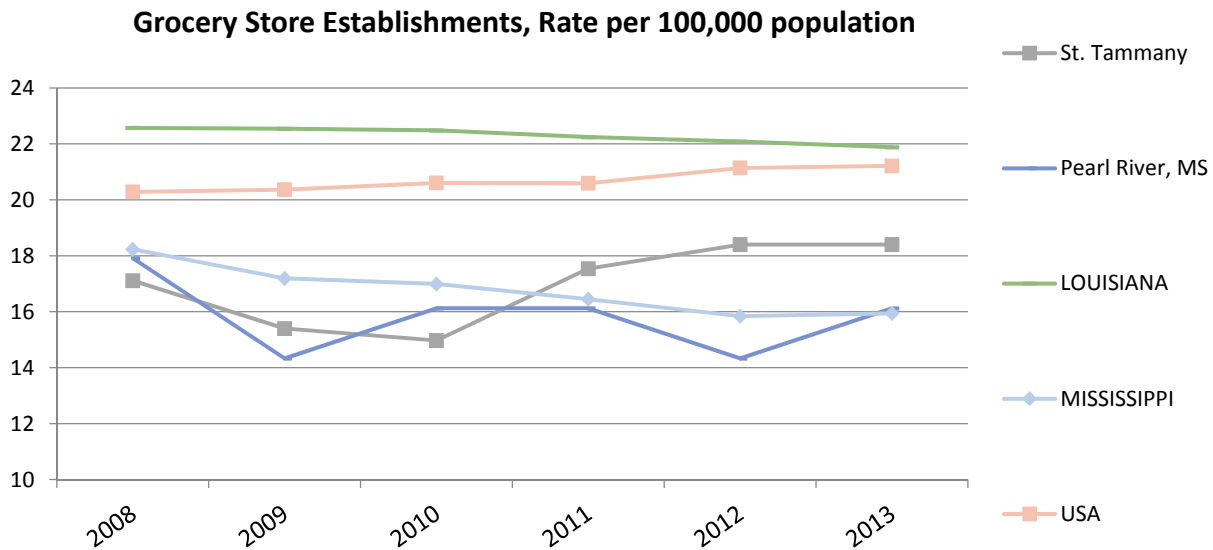
- In 2013, St. Tammany Parish, LA reported the highest rate of fast food restaurants per population at 76.58 per 100,000 pop.; this rate is higher than state (71.56) and national (72.74) norms. Pearl River County, MS reports the lowest rate, for the study area, and has seen a decline since 2012 (going from 67.27 to 60.89).

Fast Food Establishments, Rate per 100,000 population



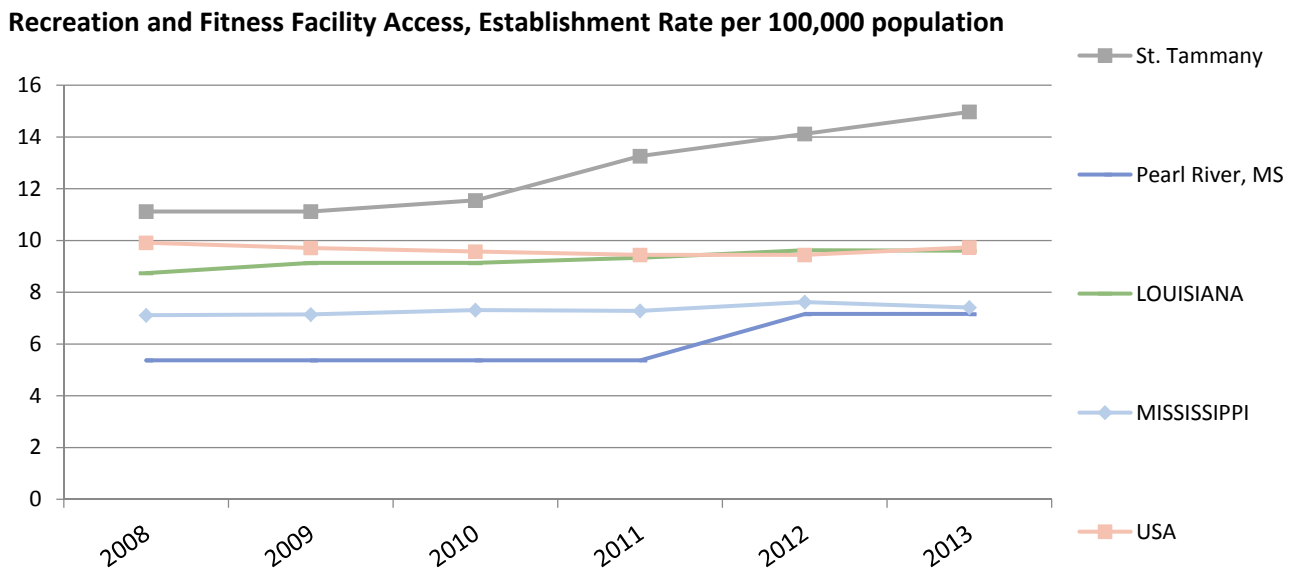
Grocery Stores

- In 2013, Pearl River County, MS reported the lowest rate of grocery stores per population at 16.12 per 100,000 pop.; this is lower than national (21.2) norms.



Recreation and Fitness Facilities

- In 2013, Pearl River County, MS reported the lowest rate of recreation and fitness facilities per population at 7.16 per 100,000 pop.; this is lower than state (9.6-LA, 7.41-MS) and national (9.72) norms.

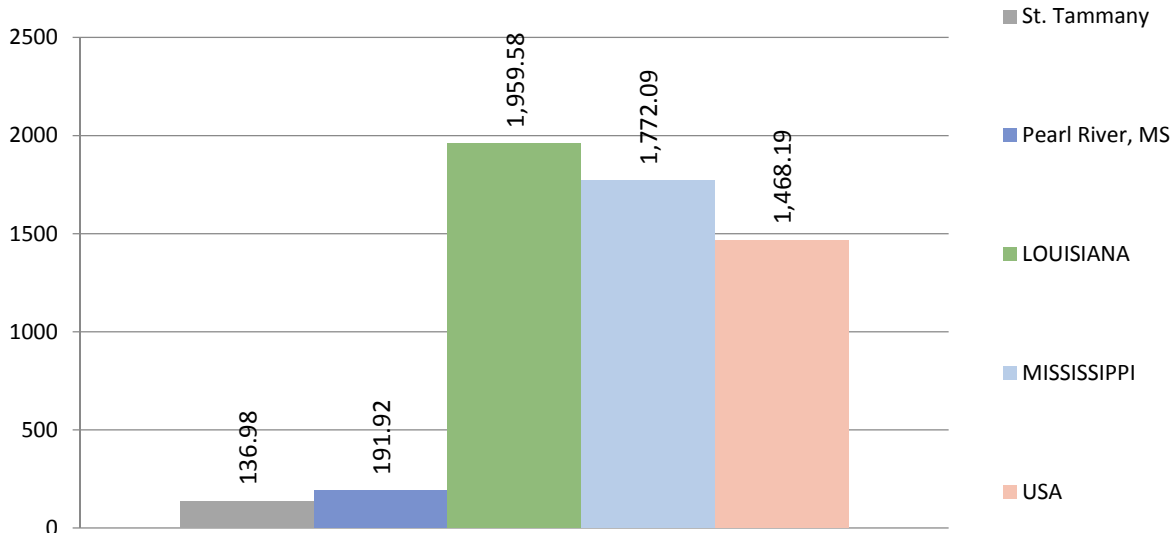


Housing

- All of the study area parishes/counties have lower rates of HUD-Assisted housing units per 10,000 units.

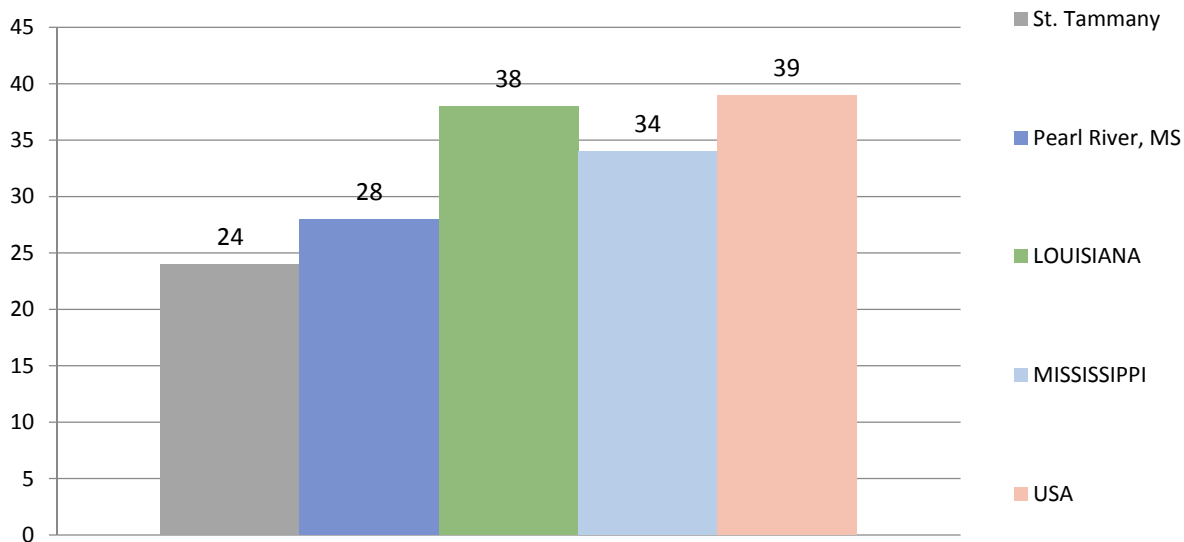
- Pearl River County, MS reports the highest rate, for the study area, at 191.92 per 10,000 units.
- St. Tammany Parish, LA reports the lowest rate of HUD-Assisted housing units at 136.98 per 10,000 units.

HUD-Assisted Units, Rate per 10,000 Housing Units, 2013



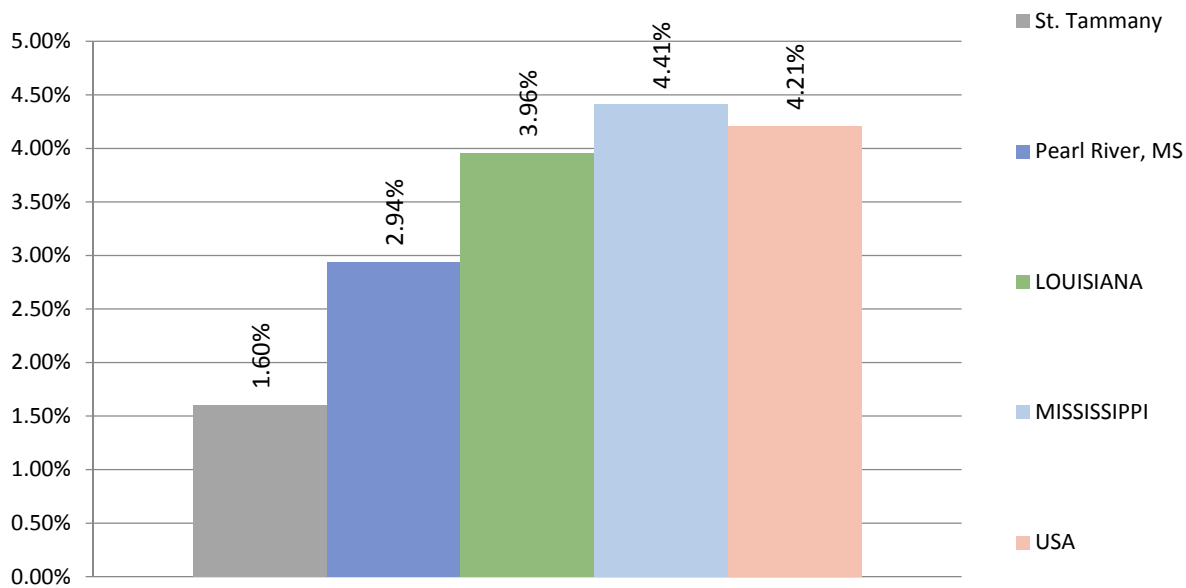
- Housing Unit Age (below) - This indicator reports, for a given geographic area, the median year in which all housing units (vacant and occupied) were first constructed.
- Pearl River County, MS has the highest median housing age, for the study area, at 28 years old.

Housing Unit Age - Years Old, 2013



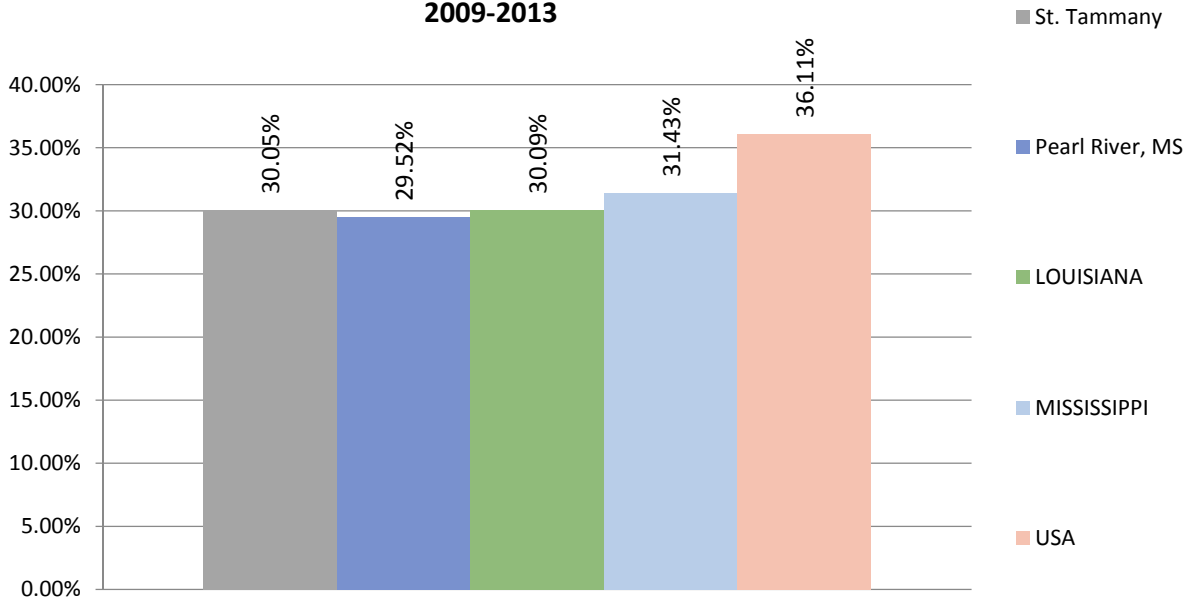
- Pearl River County, MS reports the highest rate of overcrowded housing at 2.94%; this is lower than state (3.96%) and national (4.21%) norms.

Percentage of Housing Units Overcrowded, 2008-2012



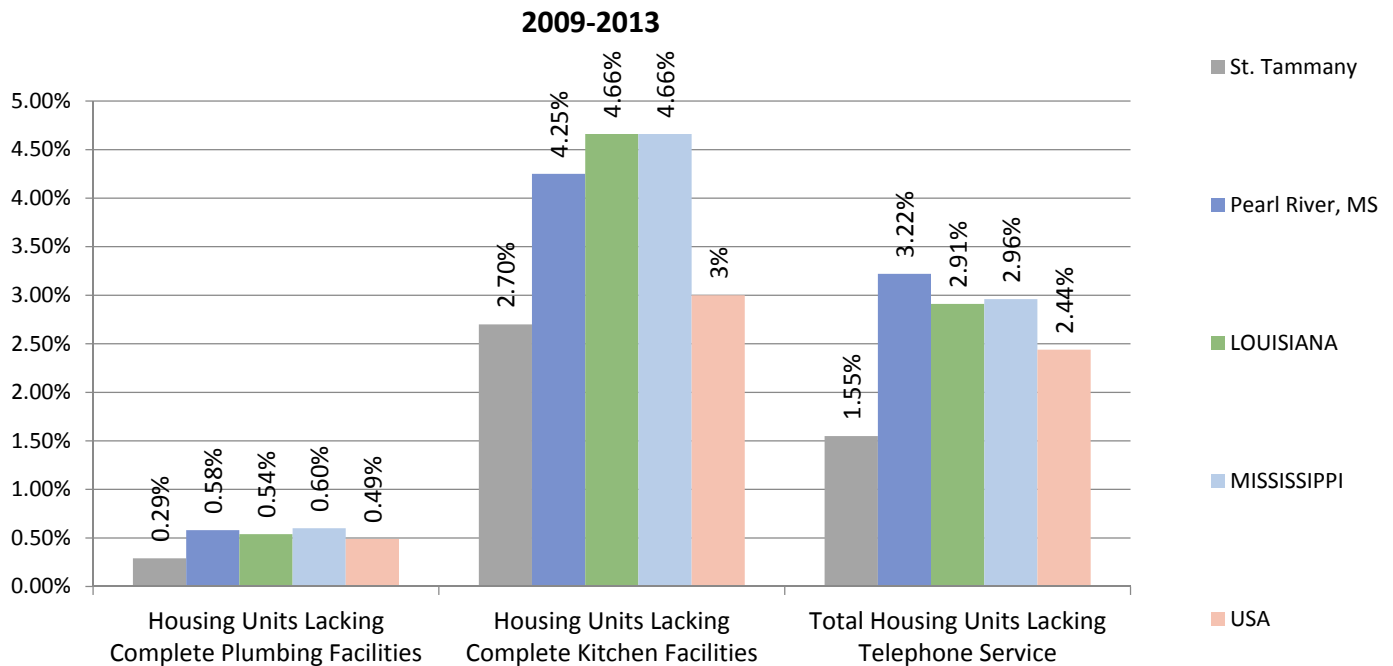
- The study area parishes/counties and both states rate lower than the nation for housing units with substandard conditions; the national rate is 36.11%.

Percent Occupied Housing Units with One or More Substandard Conditions 2009-2013



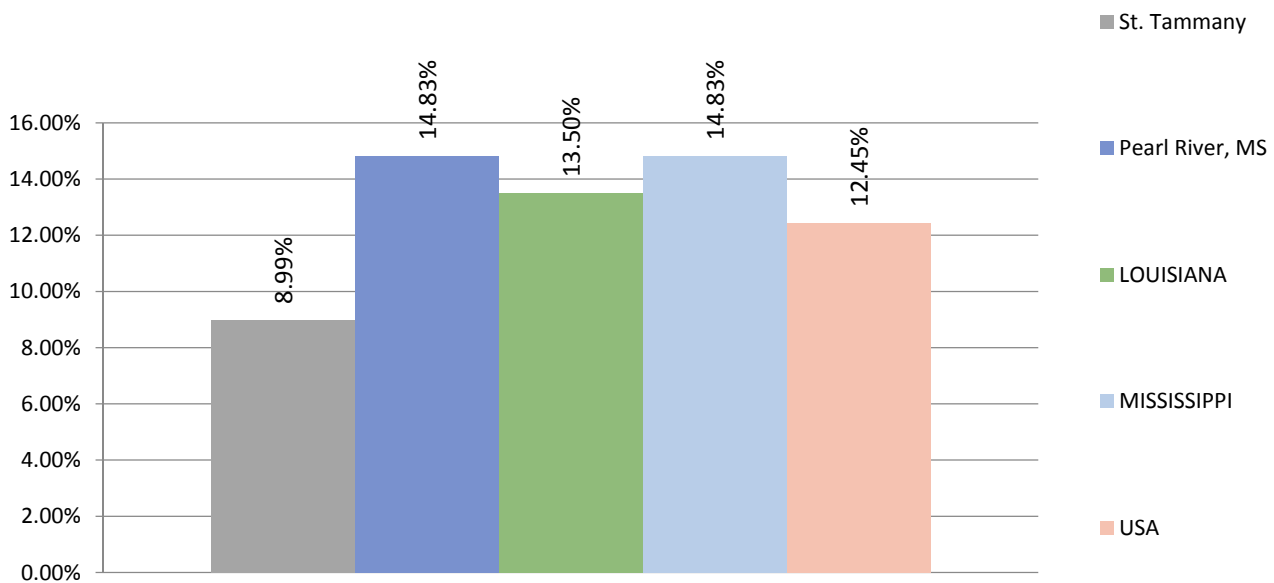
- Pearl River County, MS reports the highest rate of housing units lacking complete plumbing facilities at .58% (LA = 0.54%, MS = 0.60%, USA = 0.49%).
- Pearl River County, MS reports the highest rate of housing units lacking complete kitchen facilities at 4.25% (LA = 4.66%, MS = 4.66%, USA = 3%).

- Pearl River County, MS reports the highest rate of housing units lacking telephone facilities at 3.22% (LA = 2.91%, MS = 2.96%, USA = 2.44%).



- Pearl River County, MS reports the highest rate of vacant housing, for the study area, at 14.83%; St. Tammany Parish, LA reports the lowest rate at 8.99%.

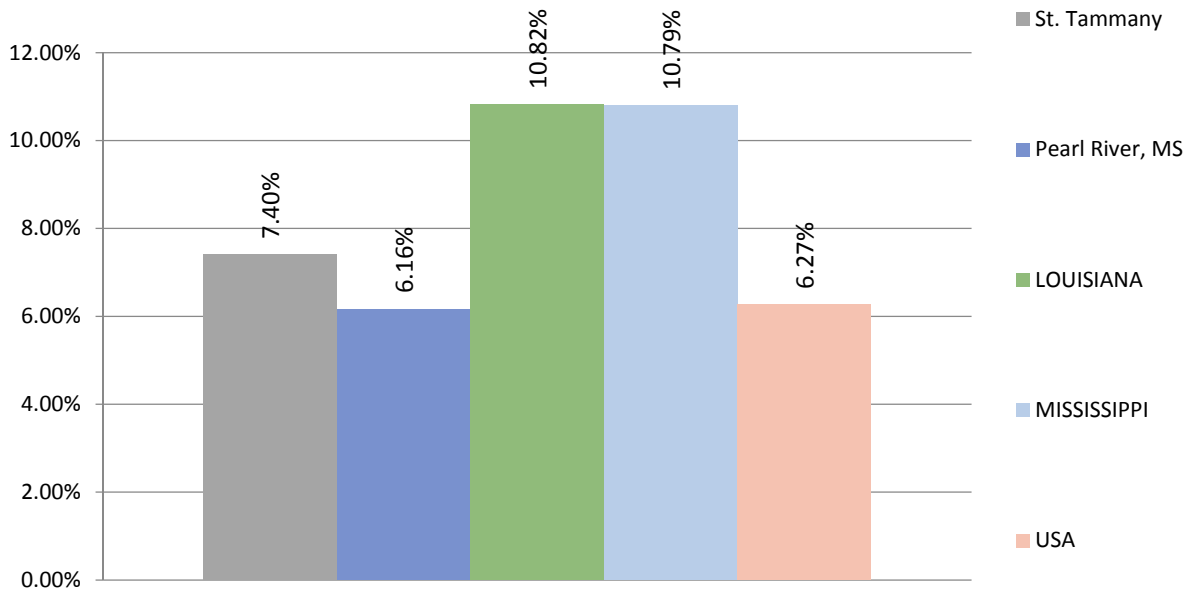
Vacant Housing Units, Percent, 2009-2013



Low Food Access

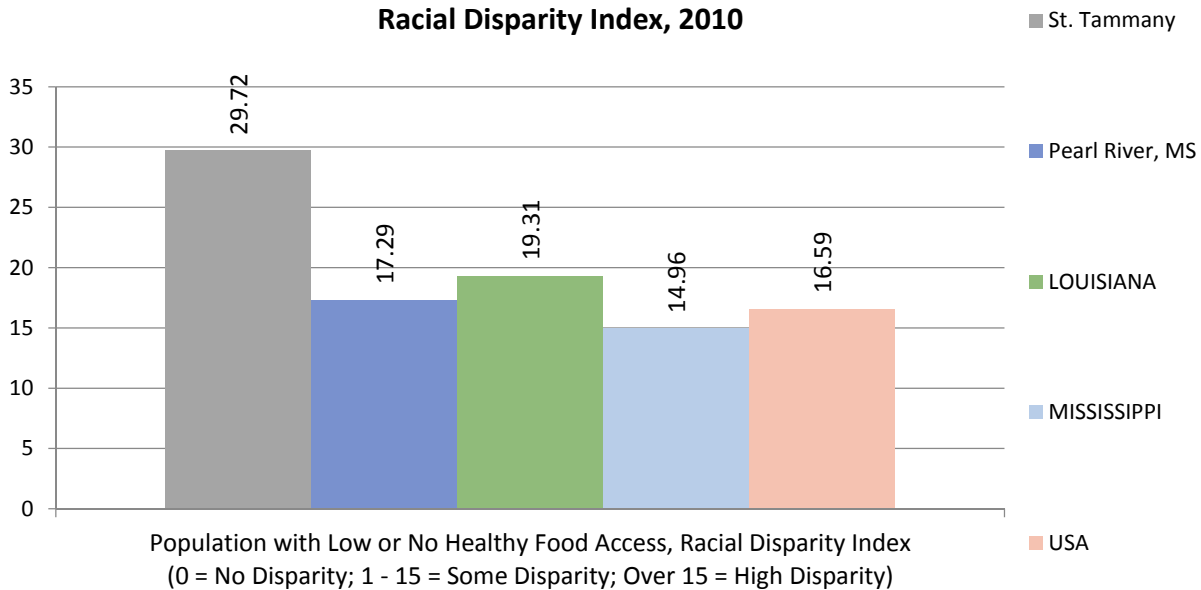
- St. Tammany Parish, LA reports the highest rate of low income population with low food access, for the study area, at 7.40%; this is higher than the national rate of 6.27%.

Percent Low Income Population with Low Food Access, 2010



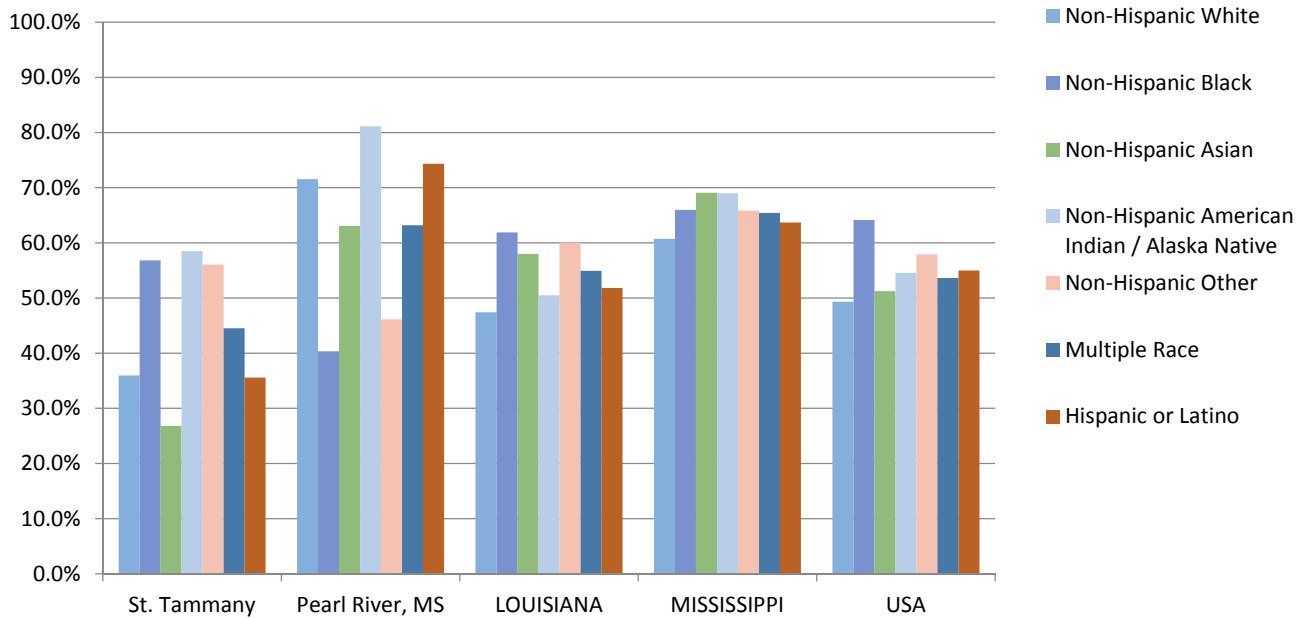
- St. Tammany Parish, LA experiences the highest rate of population with low or no healthy food access; this parish has a disparity index of 29.72 compared to 19.31 for the State of Louisiana, 14.96 for the State of Mississippi, and a national rate of 16.59.

Population with Low or No Healthy Food Access, Racial Disparity Index, 2010



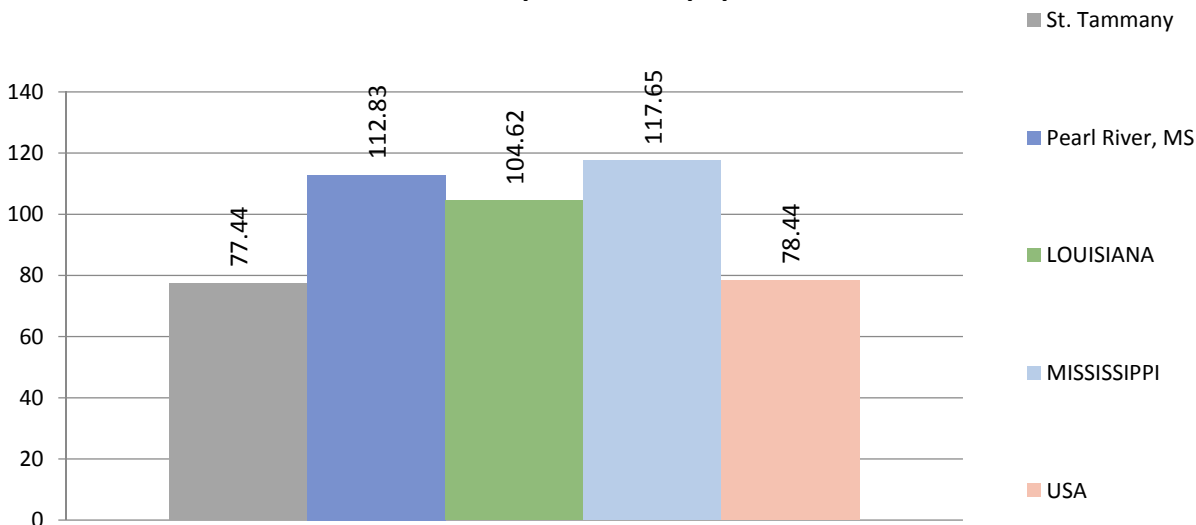
- Within Pearl River County, MS the Non-Hispanic American Indian/Alaska Native population experiences the highest rates of low food access (81.1%) followed by the Hispanic or Latino and Non-Hispanic White populations at 74.3% and 71.5% respectively.

Low Food Access - Race, 2010



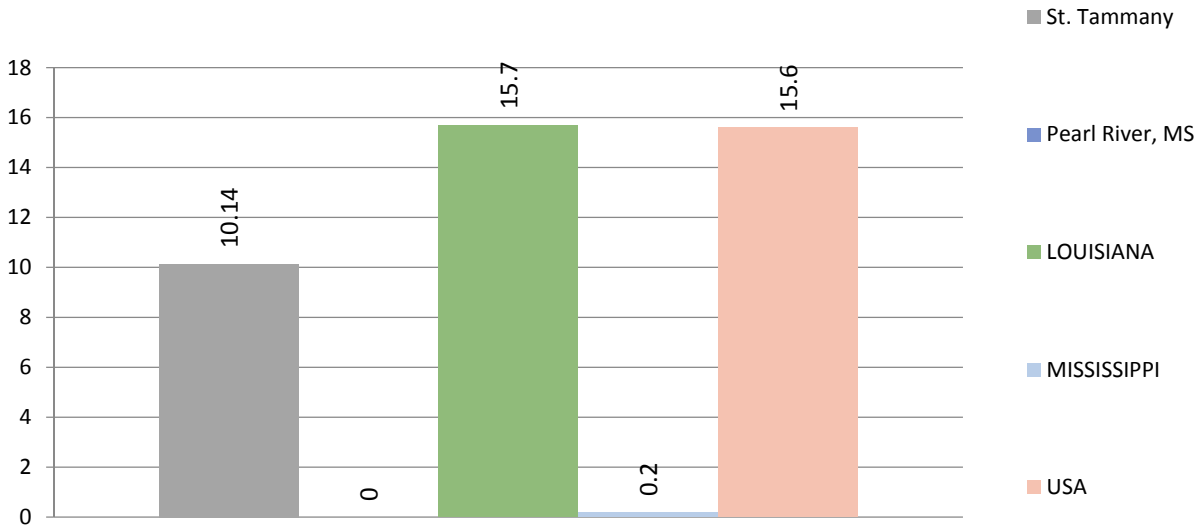
- Pearl River County, MS has the highest rate of SNAP-Authorized retailers, for the study area, at 112.83 per 100,000 population.
- St. Tammany Parish, LA reports the fewest SNAP-Authorized retailers, for the study area, at only 77.44 per 100,000 population.

SNAP-Authorized Retailers, Rate per 100,000 population, 2014



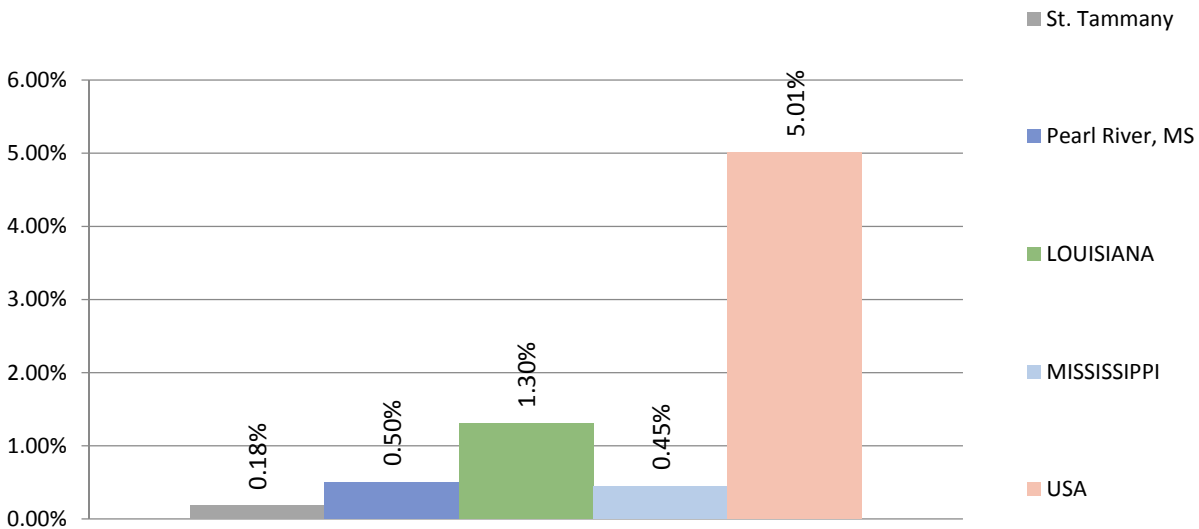
- St. Tammany Parish, LA has rate of WIC-Authorized retailers at 10.14 per 100,000 population.
- Pearl River County, MS reports the fewest WIC-Authorized retailers, for the study area, with 0 per 100,000 population. The State of Mississippi has an overall rate of WIC-Authorized retailers of only 0.2 per 100,000 population; the national rate being 15.6 per 100,000 pop.

WIC-Authorized Food Store Rate (Per 100,000 Population), 2011



- St. Tammany Parish, LA and Pearl River County, MS both report the lower rates of residents using public transportation to commute to work (0.18% and 0.50%); lower than state (1.30% - LA and 0.45% - MS) and national (5.01%) norms.

Percent Population Using Public Transit for Commute to Work, 2009-2013

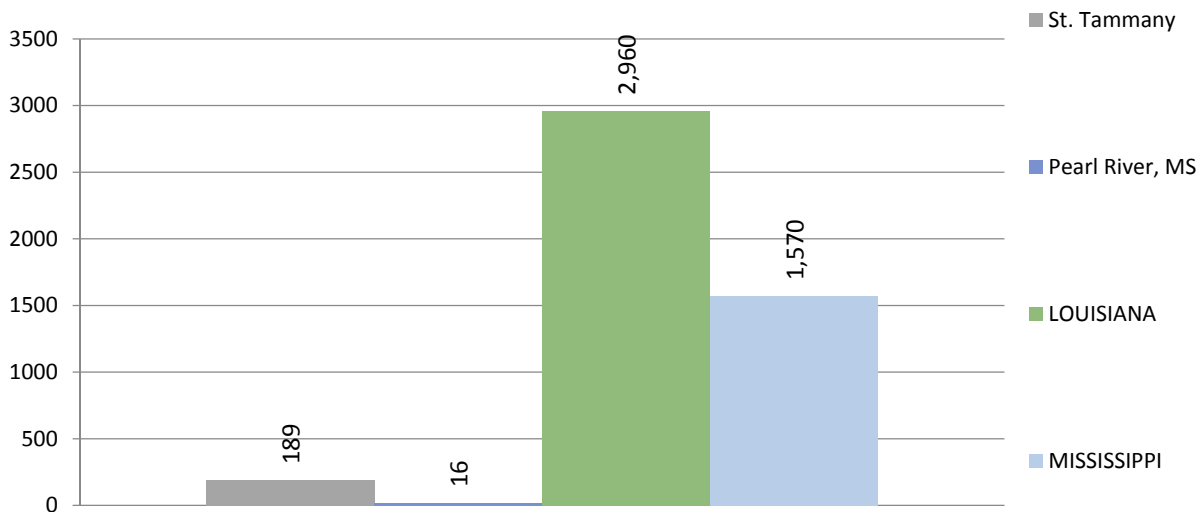


CLINICAL CARE

Primary Care Physicians

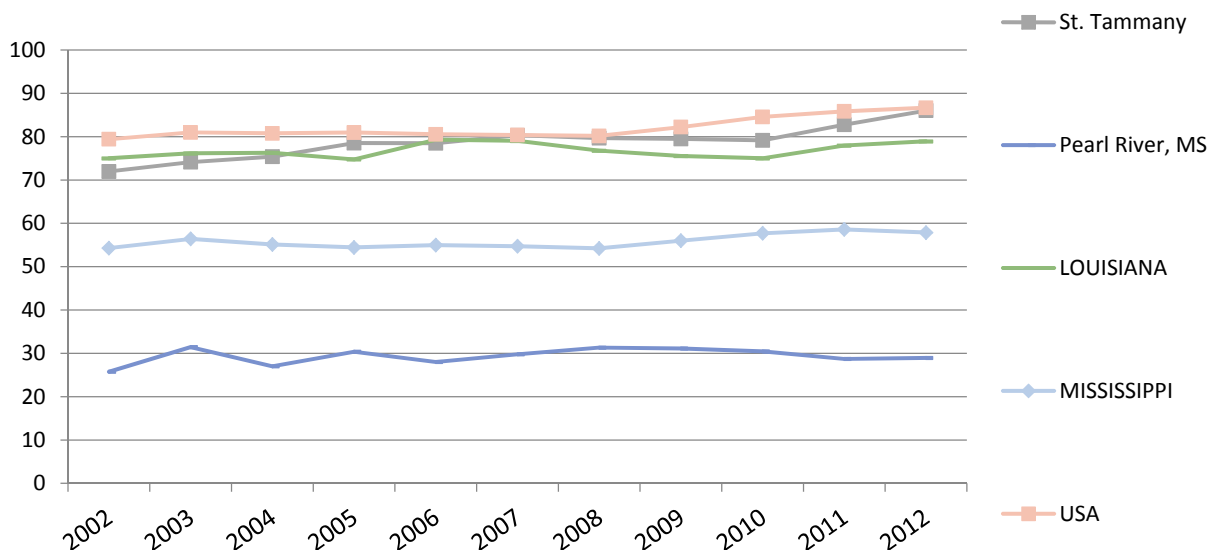
- Pearl River County, MS reports the lowest number of physicians across the study area parishes/counties at only 16.
- St. Tammany Parish, LA reports the most physicians in the study area with only 189.

Primary Care Physicians, 2012



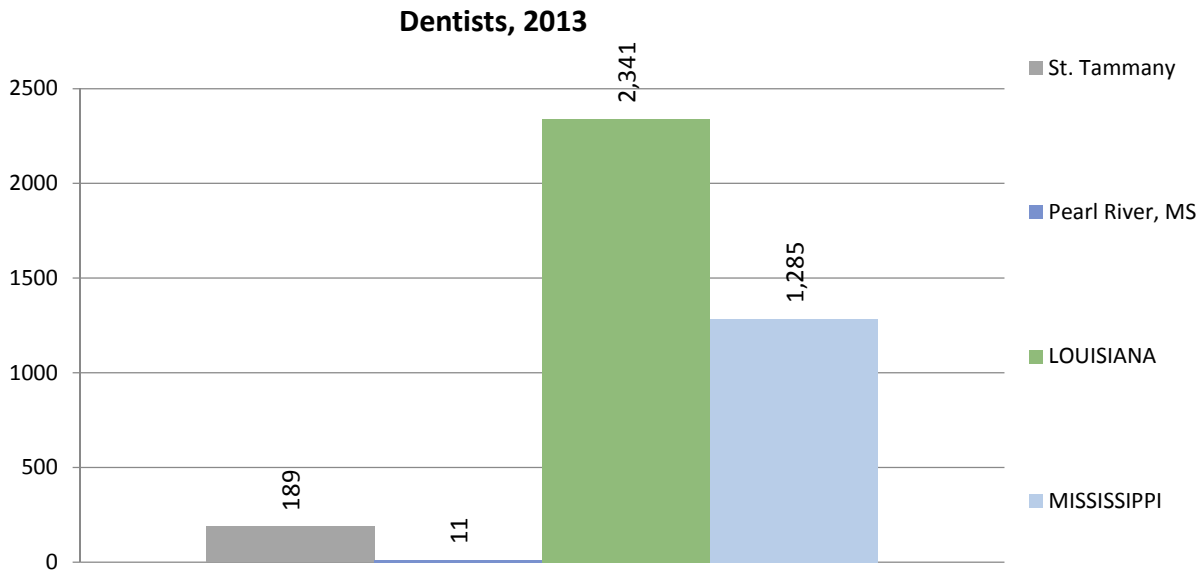
- St. Tammany Parish, LA has the highest primary care physician (PCP) rate per 100,000 population at 86.03 in 2012.
- Pearl River County, MS reports the lowest rate of PCPs per 100,000 population at only 28.94 in 2012.

Primary Care Physicians, Rate per 100,000 population

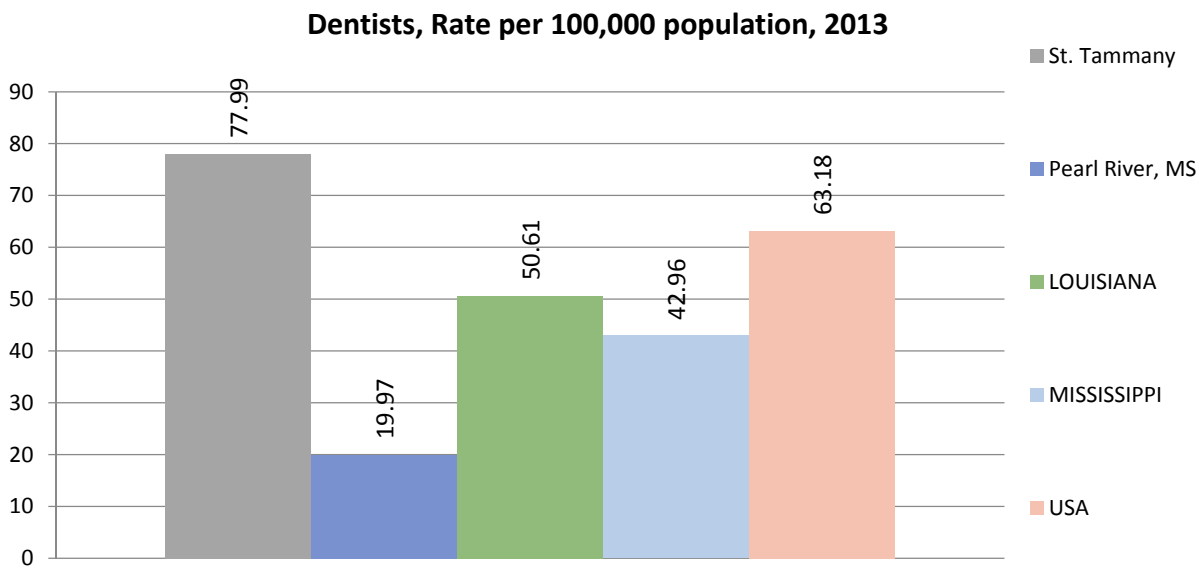


Dentists

- St. Tammany Parish, LA reports the highest number of dentists across the study area parishes/counties at 189.
- Pearl River County, MS reports the fewest dentists with only 11.



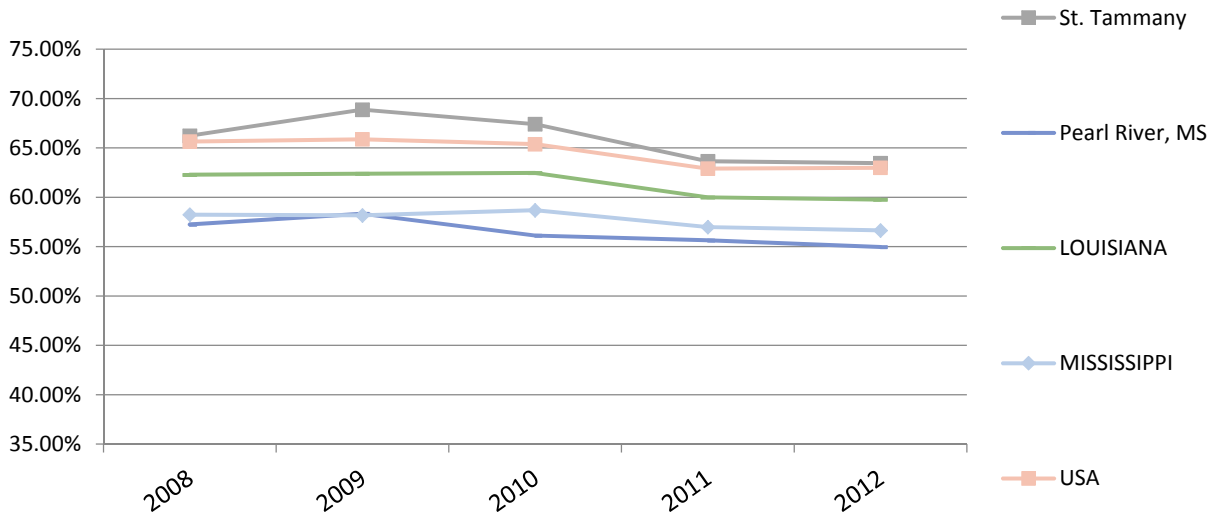
- St. Tammany Parish, LA has the highest dentist rate per 100,000 population at 77.99 in 2013.
- Pearl River County, MS reports the lowest rate of dentists per 100,000 population, for the study area, at only 19.97 in 2013.



Mammogram – Medicare Enrollees

- Across the study area parishes/counties there has been a decline in the rates of women with Medicare receiving a mammogram.
- Pearl River County, MS reports the lowest rate in the study area at 54.96% in 2012; this is below state (59.76% - LA, 56.64% - MS) and national (62.98%) rates.

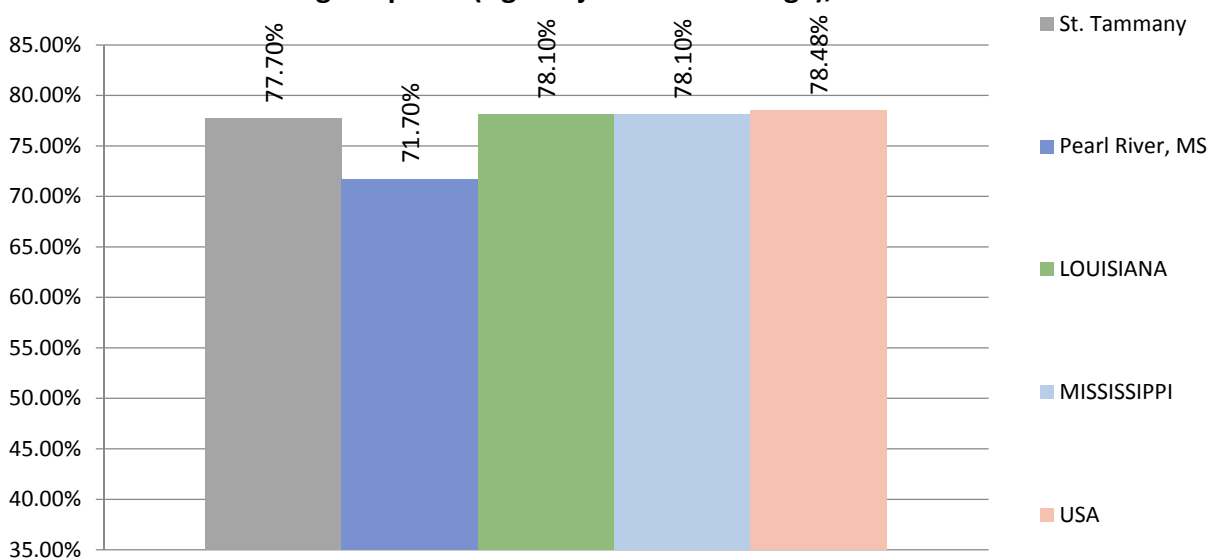
Female Medicare Enrollees with Mammogram in Past 2 years



Cancer Screening – Pap Test

- Both states, Louisiana and Mississippi, report 78.1% of their populations as having received a Pap Test; this rate is slightly lower than the national rate of 78.48%.
- Pearl River County, MS reports the lowest rate of female residents aged 18 and older receiving a Pap Test at only 71.70%.

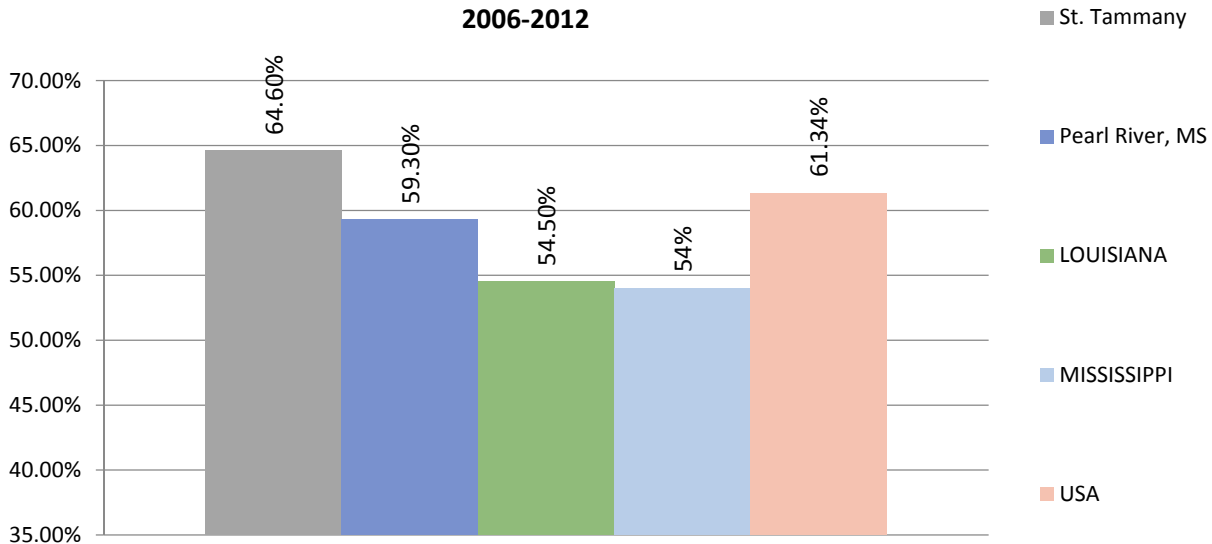
Cancer Screening - Pap Test (Age-Adjusted Percentage), 2006-2012



Cancer Screening – Sigmoidoscopy or Colonoscopy

- 61.34% of the national age-appropriate population (aged 50 and older) receives a sigmoidoscopy or colonoscopy; across the State of Louisiana only 54.5% and Mississippi only 54% receive this screening.
- Pearl River County, MS reports the lowest rate of residents receiving a sigmoidoscopy or colonoscopy at only 59.30%.

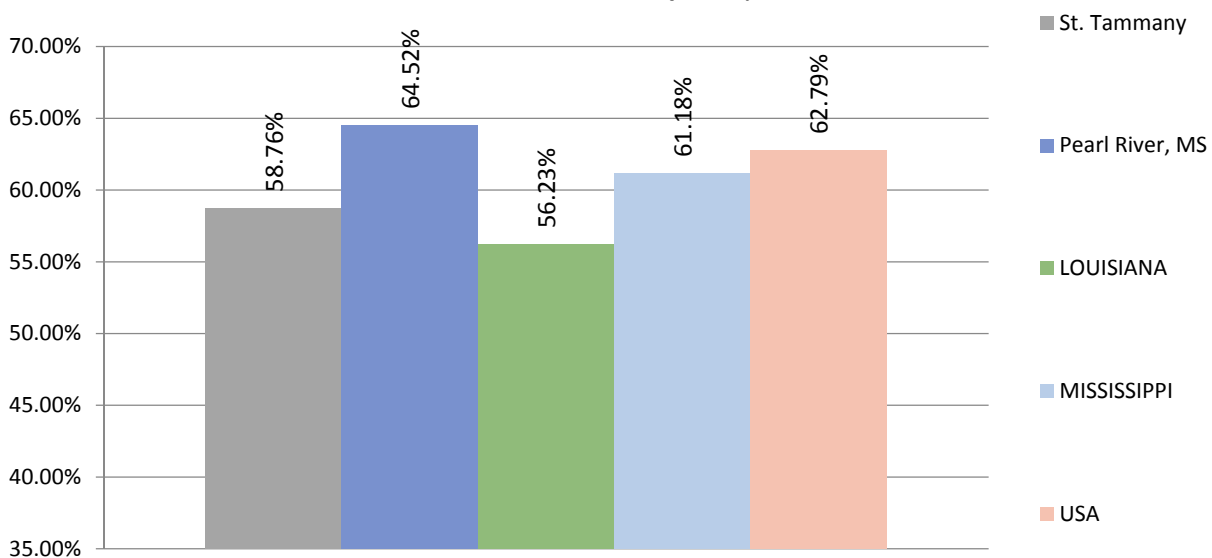
**Cancer Screening - Sigmoidoscopy or Colonoscopy (Age-Adjusted Percentage)
2006-2012**



HIV/AIDS

- The national rate of the population having never been tested for HIV/AIDS is 62.79%; in Louisiana only 56.23% have not been tested, and for Mississippi 61.18% have not been tested.
- St. Tammany Parish, LA reports the lowest rate of residents having never been tested for HIV/AIDS across the study area at only 58.76%.

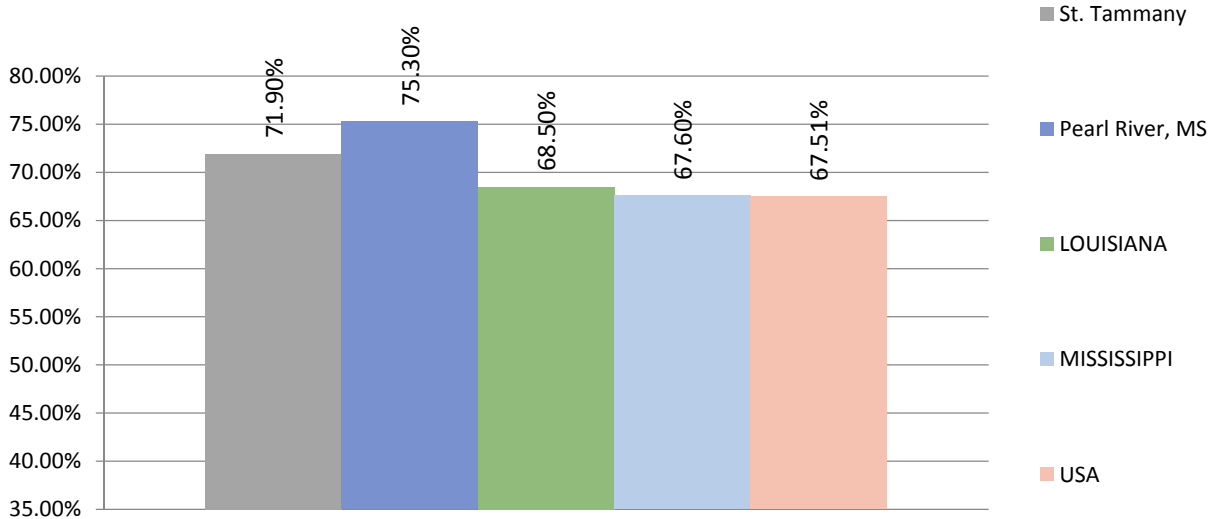
Percent Adults Never Screened for HIV/AIDS, 2011-2012



Pneumonia Vaccine

- The entire study area reports higher rates than the national rate (67.51%) for residents receiving the pneumonia vaccination.
- St. Tammany Parish, LA reports the lowest rate of residents receiving the pneumonia vaccination at 71.90%.

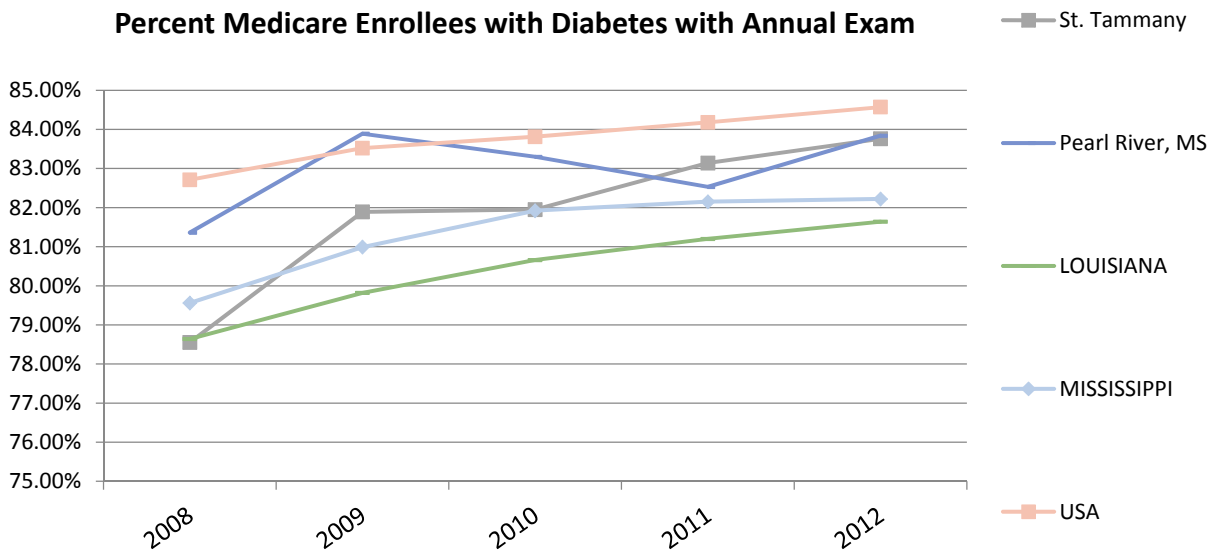
Pneumonia Vaccination (Age-Adjusted Percentage), 2006-2012



Diabetes Screening

- The national rate of diabetes screening in 2012 was 84.57% of the diabetic Medicare population. Both study area parishes/counties report 83%.

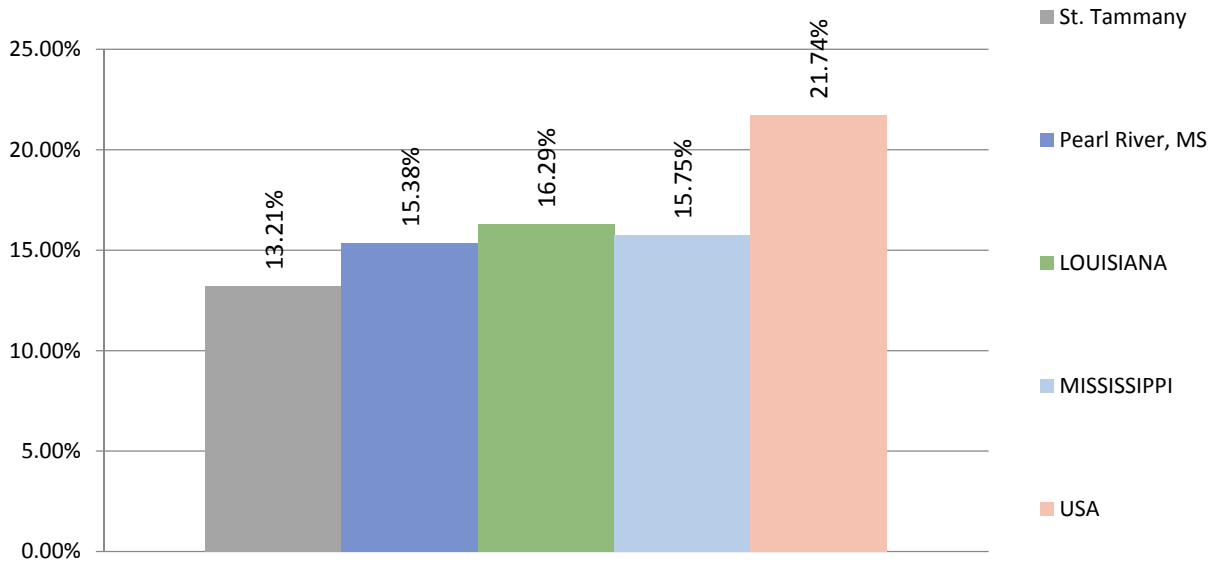
Diabetes Management - Hemoglobin A1c Test, Percent Medicare Enrollees with Diabetes with Annual Exam



High Blood Pressure

- All of the parishes/counties in the study area report lower rates of adult residents with high blood pressure who are not taking their medication than the national average; the national rate being 21.74%.
- Pearl River County, MS reports the highest rate of adult residents with high blood pressure not taking their medication, for the study area, at 15.38%.

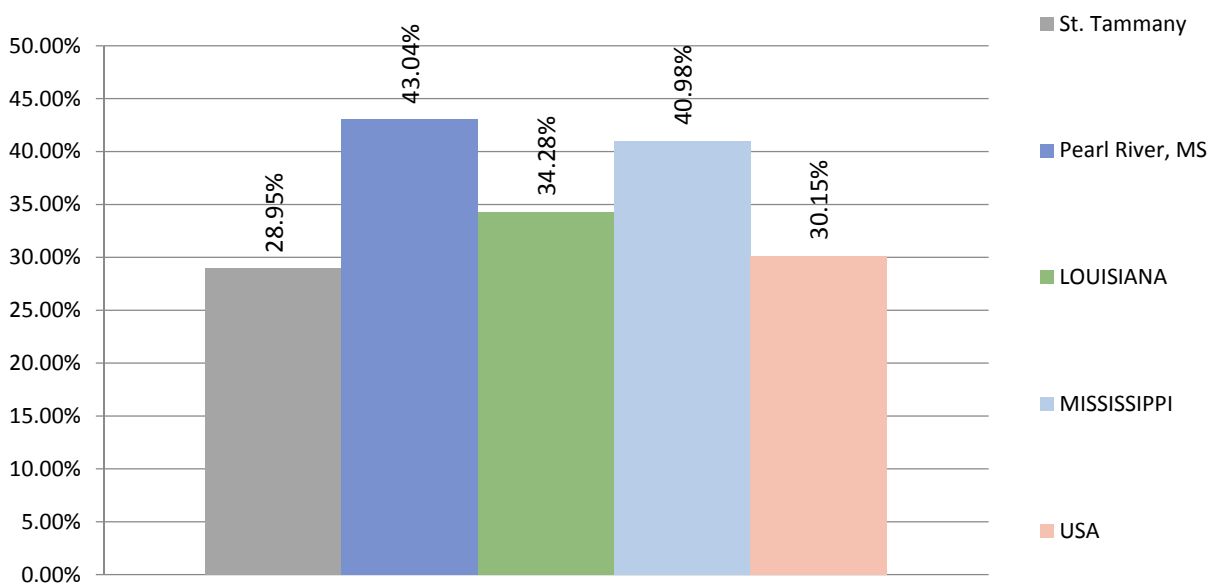
High Blood Pressure, Percent Adults Not Taking Medication, 2006-2010



Dental Exam

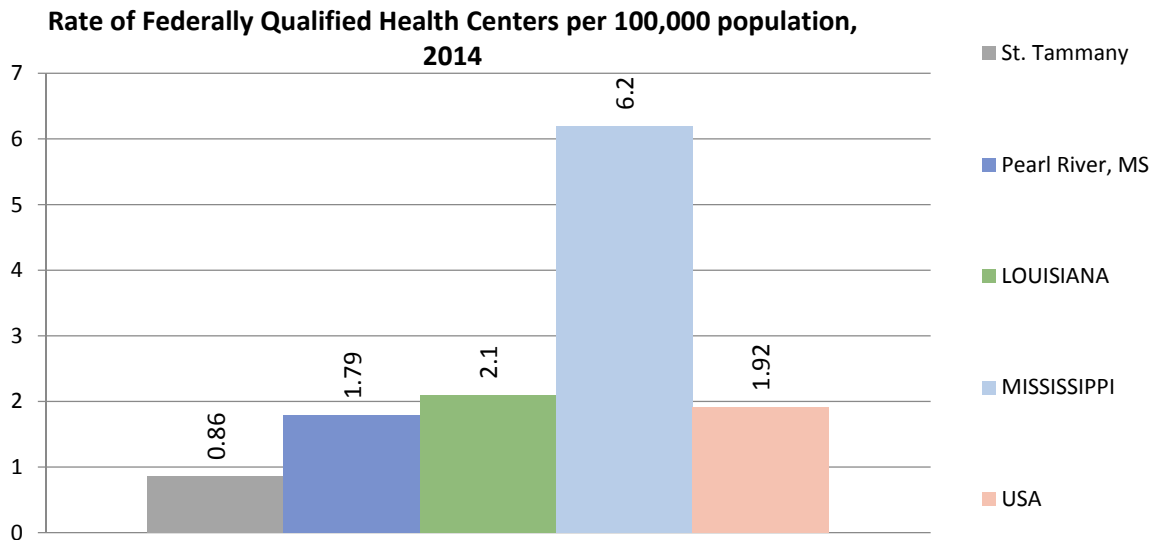
- The State of Mississippi and the study area county in Mississippi (Pearl River) report some of the highest rates of adults who have not had a dental exam, for the study area, (MS = 40.98%; Pearl River = 43.04%); the national rate is 30.15%.

Percent Adults with No Dental Exam, 2006-2010



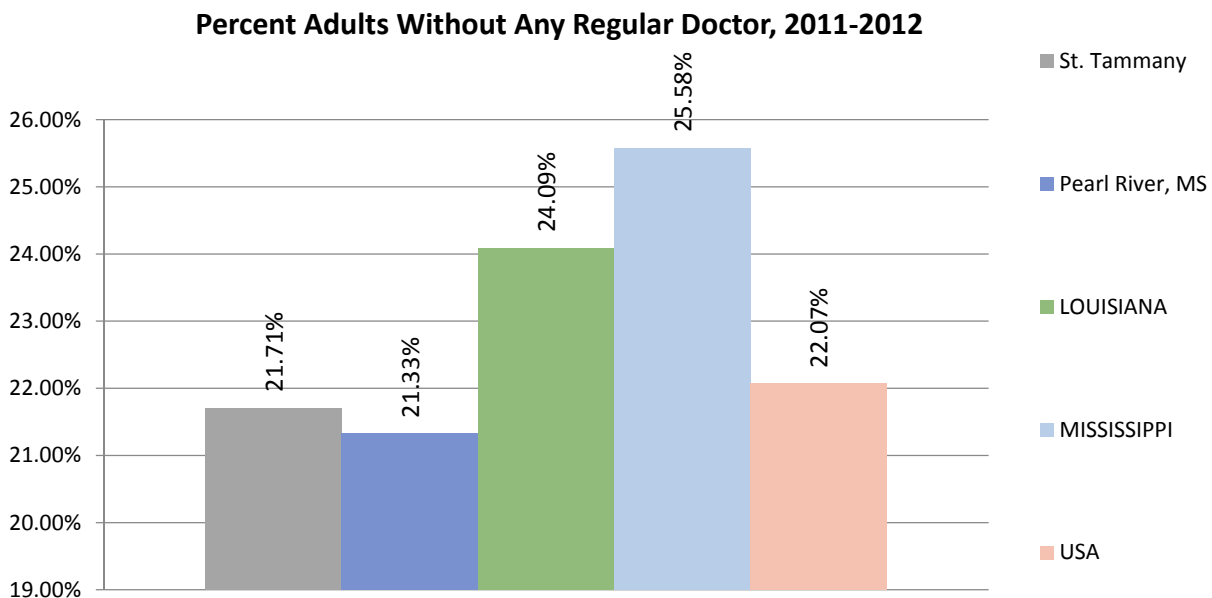
Federally Qualified Health Centers (FQHCs)

- Mississippi has a very high rate of federally qualified health centers per 100,000 population at 6.2 (more than three times the national rate of 1.92).
- Pearl River County reports the highest rate of FQHCs per population, for the study area, at 1.79 per 100,000.
- St. Tammany Parish, LA reports the lowest at 0.86 FQHCs per 100,000 population.



Regular Doctor

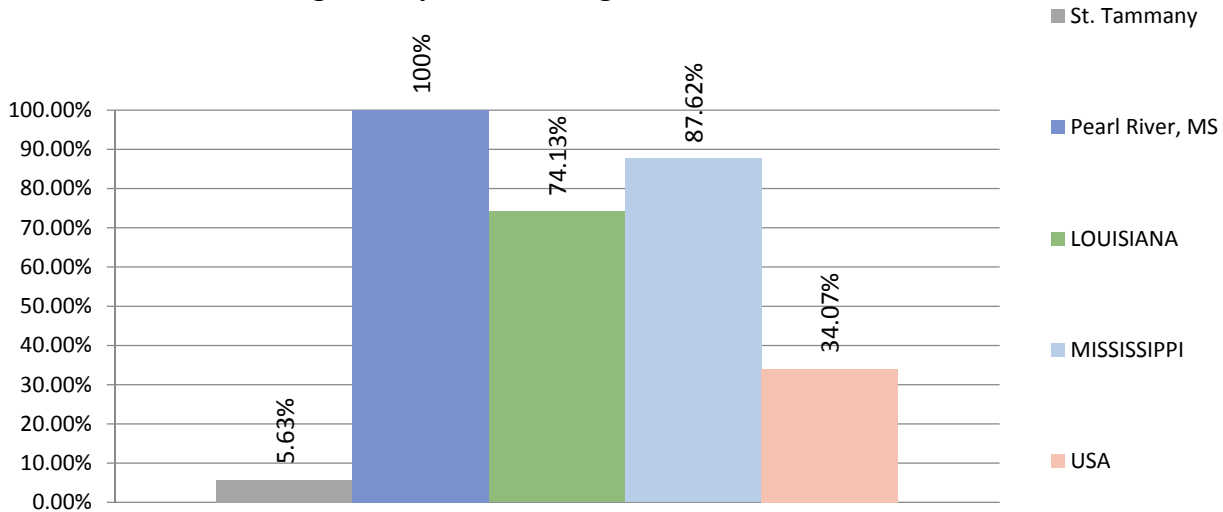
- Across the country, 22.07% of residents report not having a regular doctor (77.93% have a regular doctor); in Louisiana the rate is 24.09% and in Mississippi it is 25.58%.
- St. Tammany Parish, LA reports the highest rate of residents who do not have a regular doctor at 21.71%.



Population Living in an HPSA (Health Professional Shortage Area)

- Pearl River County, MS is a health care professional shortage areas (HPSA) designated county; therefore 100% of their populations live in an HPSA designated area.
- St. Tammany Parish, LA reports at only 5.63%; the national rate is 34.07%.

Percentage of Population Living in a HPSA, March 2015

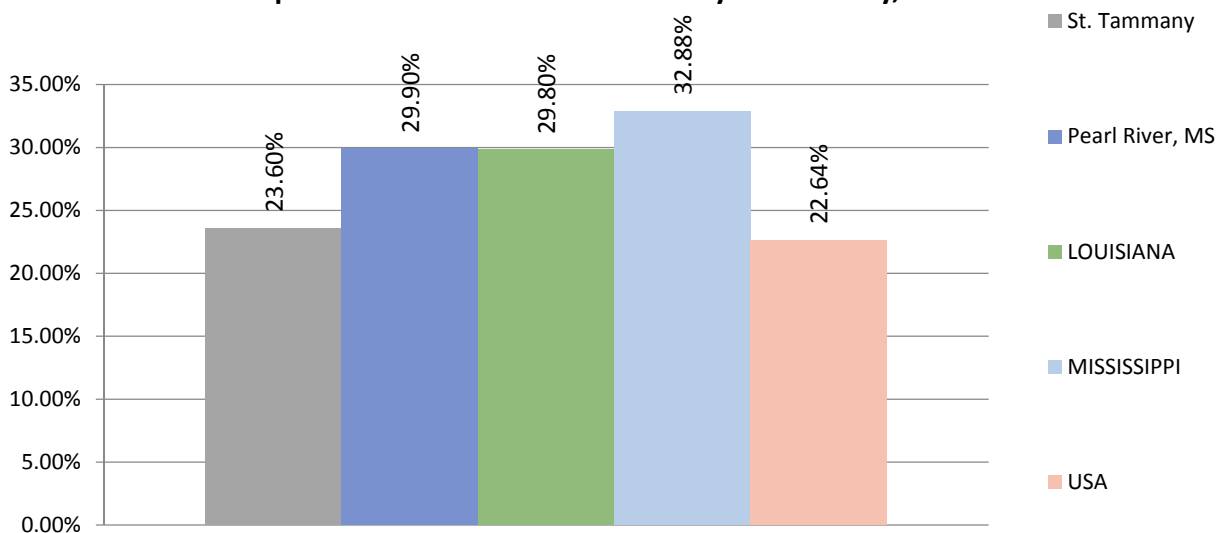


HEALTH BEHAVIORS

Leisure Time Physical Activity

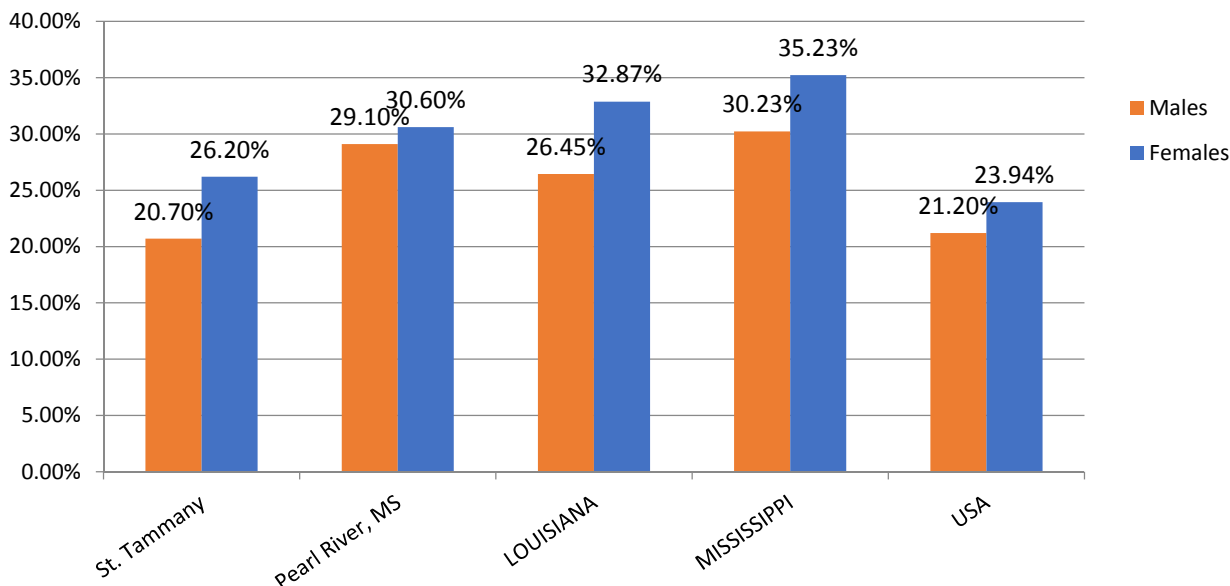
- Pearl River County, MS reports the highest rate of population with no leisure time activity (29.90%), for the study area; higher than the national (22.64%) norms.
- All of the parishes/counties of the study area report higher rates than the national norms for population who do not partake in leisure time physical activity.

Percent Population with No Leisure Time Physical Activity, 2012



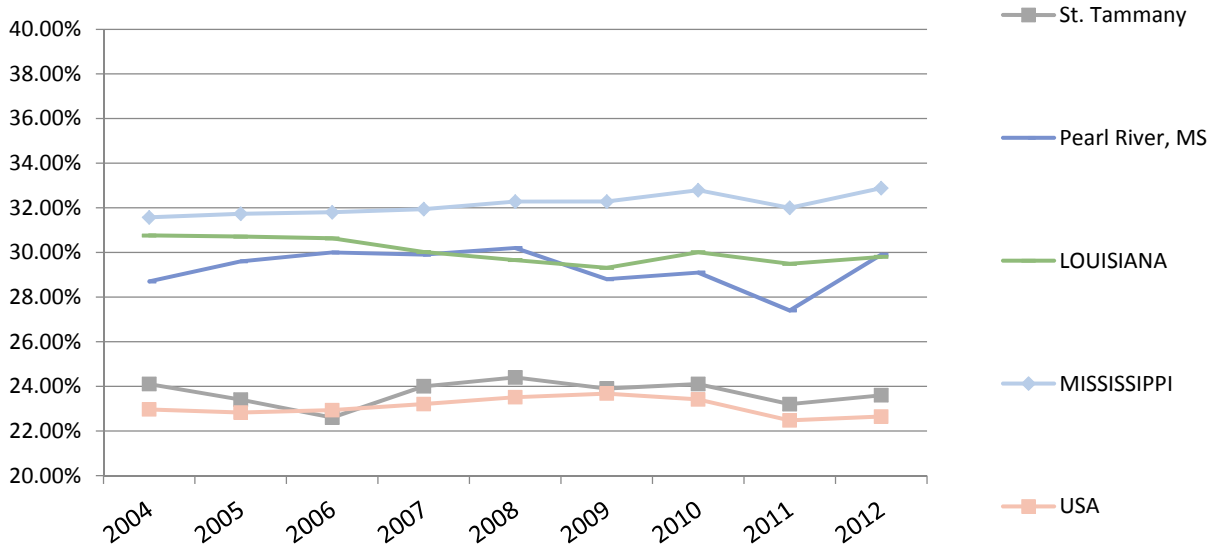
- Men consistently report lower rates of not partaking in leisure time physical activity than women; this may be a reporting difference or that women do not actually partake in leisure time physical activity as men.

Percent Population with No Leisure Time Physical Activity - Gender, 2012



- Pearl River County, MS, currently with the highest rate of population in the study area not partaking in leisure time physical activity, has seen a somewhat recent rise in this rate since 2011.

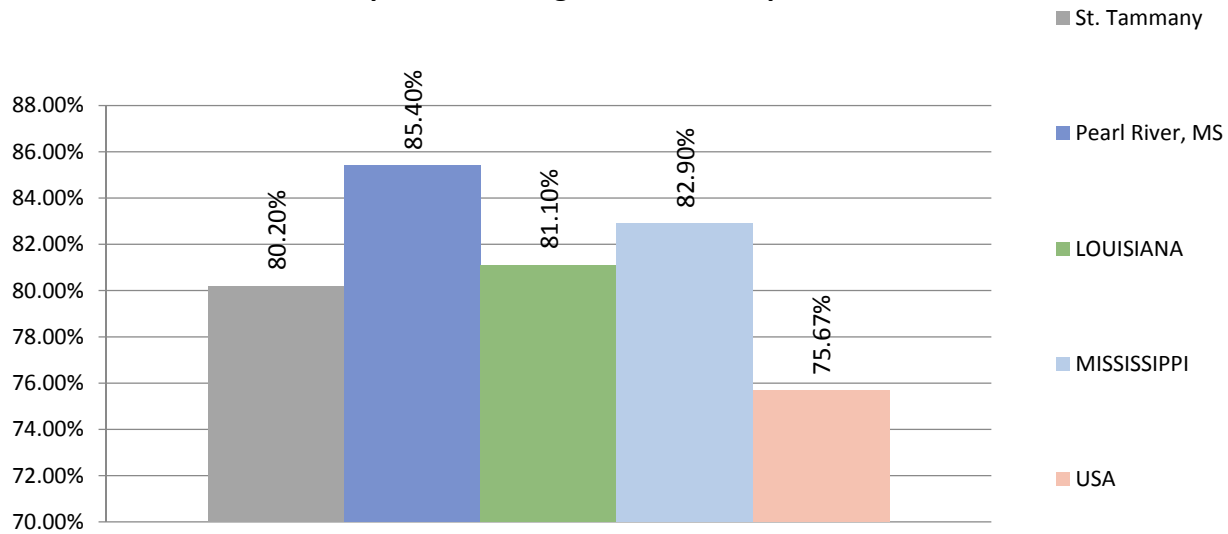
Percent Population with No Leisure Time Physical Activity - Time



Fruit/Vegetable Consumption

- Both of the parishes/counties in the study area report higher rates than the national rate (75.6%) for adults not eating enough fruits and vegetables.

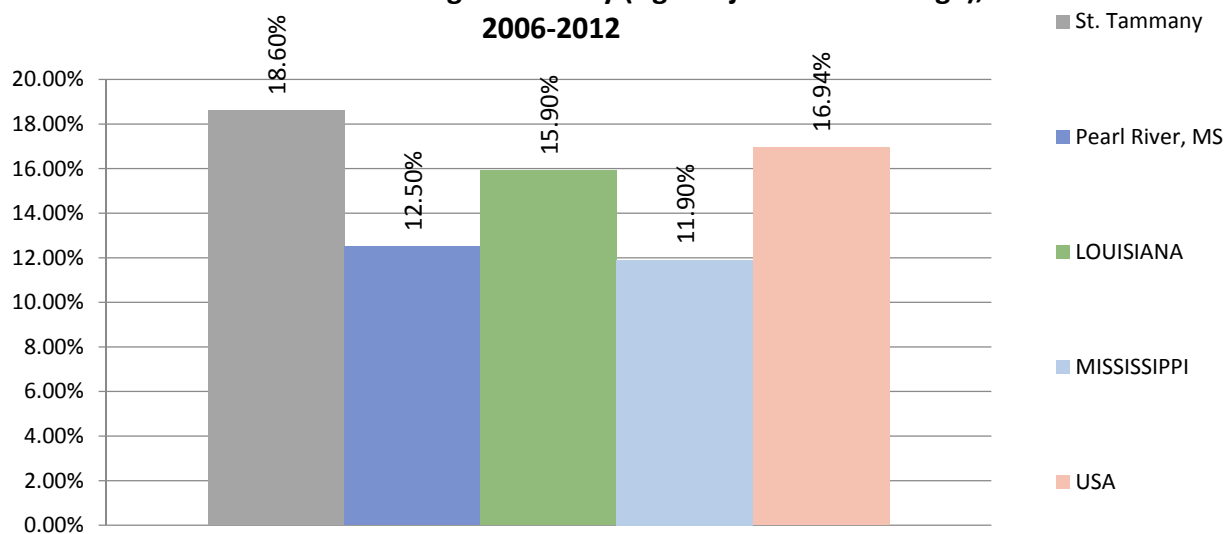
Percent Adults with Inadequate Fruit/Vegetable Consumption, 2005-2009



Excessive Drinking

- The national rate of adults drinking excessively is 16.94%; St. Tammany Parish, LA reports higher rates of adults drinking excessively at 18.60%.
- Pearl River County, MS reports the lowest rate, for the study area, of adults drinking excessively at 12.50%.

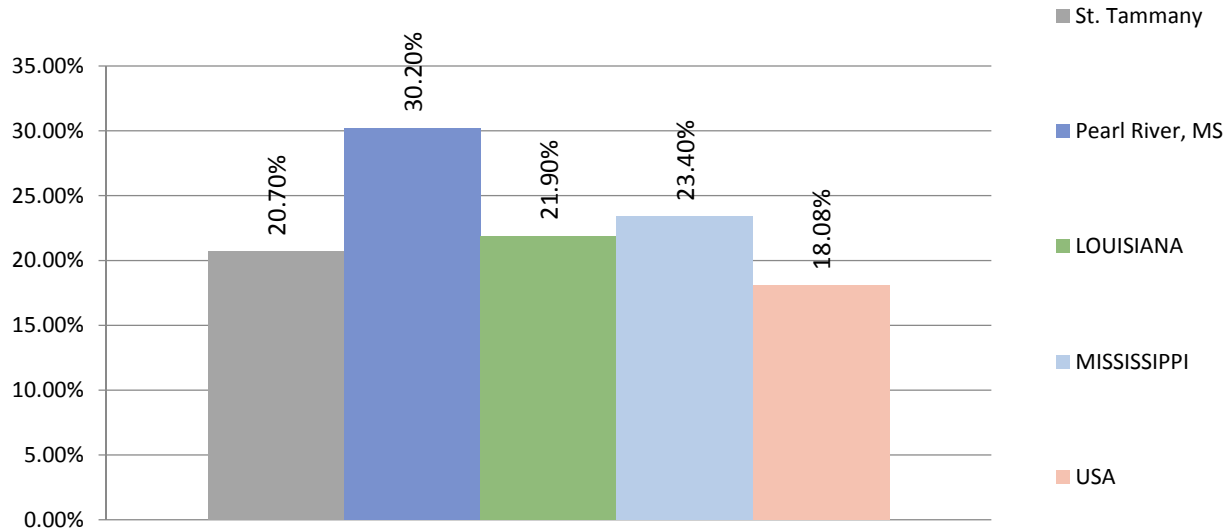
Estimated Adults Drinking Excessively (Age-Adjusted Percentage), 2006-2012



Smoking

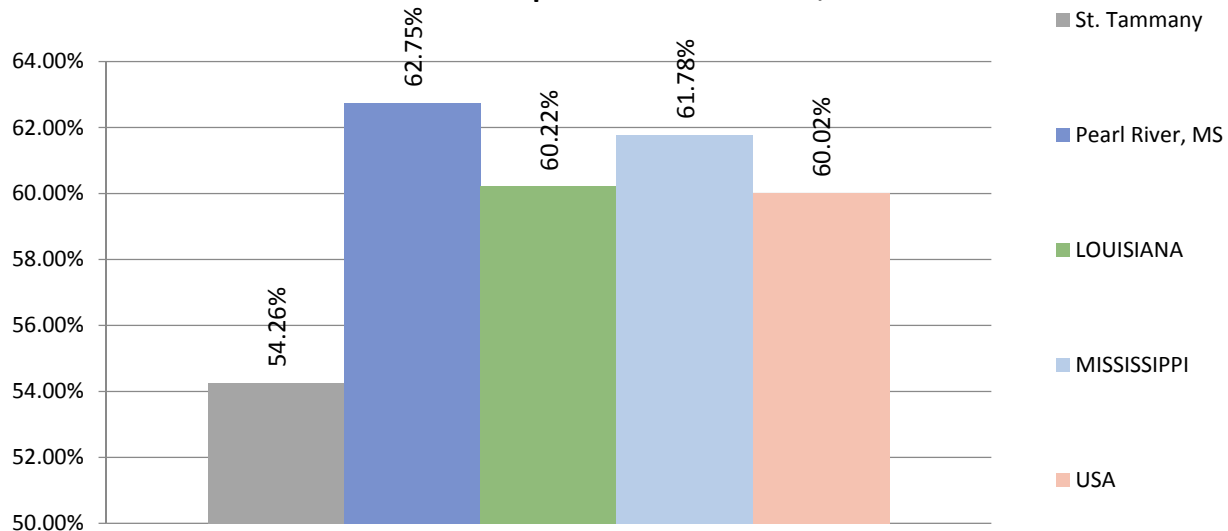
- Pearl River County, MS reports the highest rate of adults smoking cigarettes across the study area with 30.2% of the population smoking. The State of Mississippi reports a higher rate of smoking (23.4%) than Louisiana (21.9%).

Percent Population Smoking Cigarettes (Age-Adjusted), 2006-2012



- Pearl River County, MS reports the highest rate of adults trying to quit smoking in the past 12 months at 62.75%; this would be a prime population to target smoking cessation programs as they have already expressed interest in trying to stop smoking.

Percent Smokers with Quit Attempts in Past 12 Months, 2011-2012

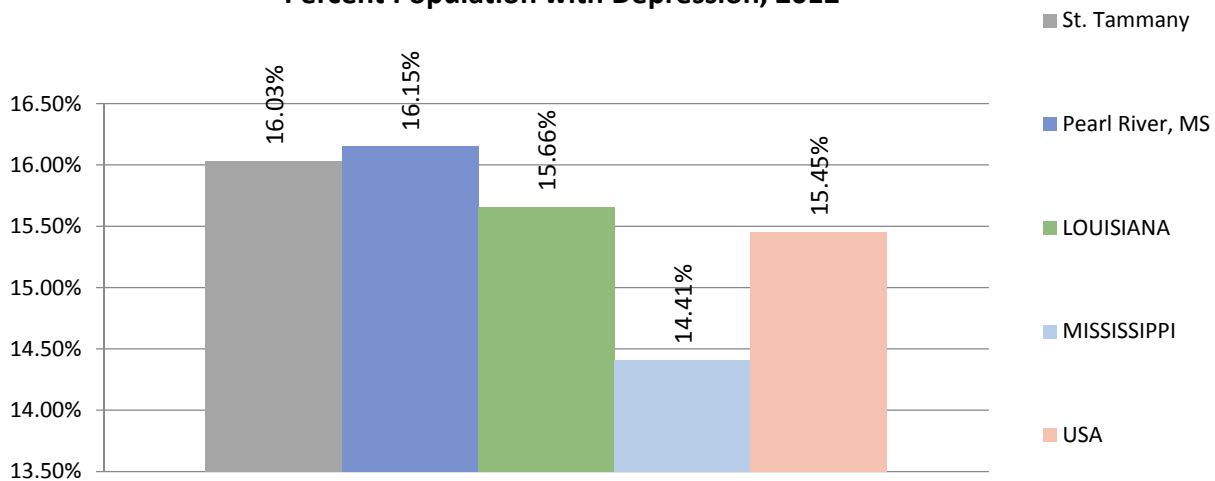


HEALTH OUTCOMES

Depression

- The State of Louisiana reports a higher rate of residents with depression (15.66%) than Mississippi (14.41%) and the country (15.45%).
- Both of the parishes/counties in the study area report higher rate of depression than the national rate.
- Pearl River County, MS reports the highest rate of residents with depression within the study area at 16.15%.

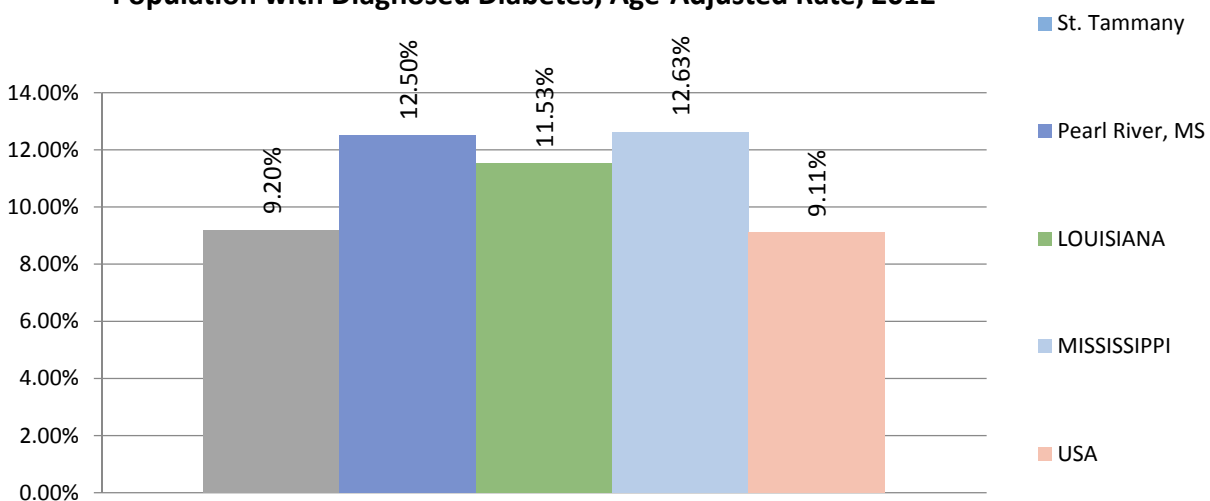
Percent Population with Depression, 2012



Diagnosed Diabetes

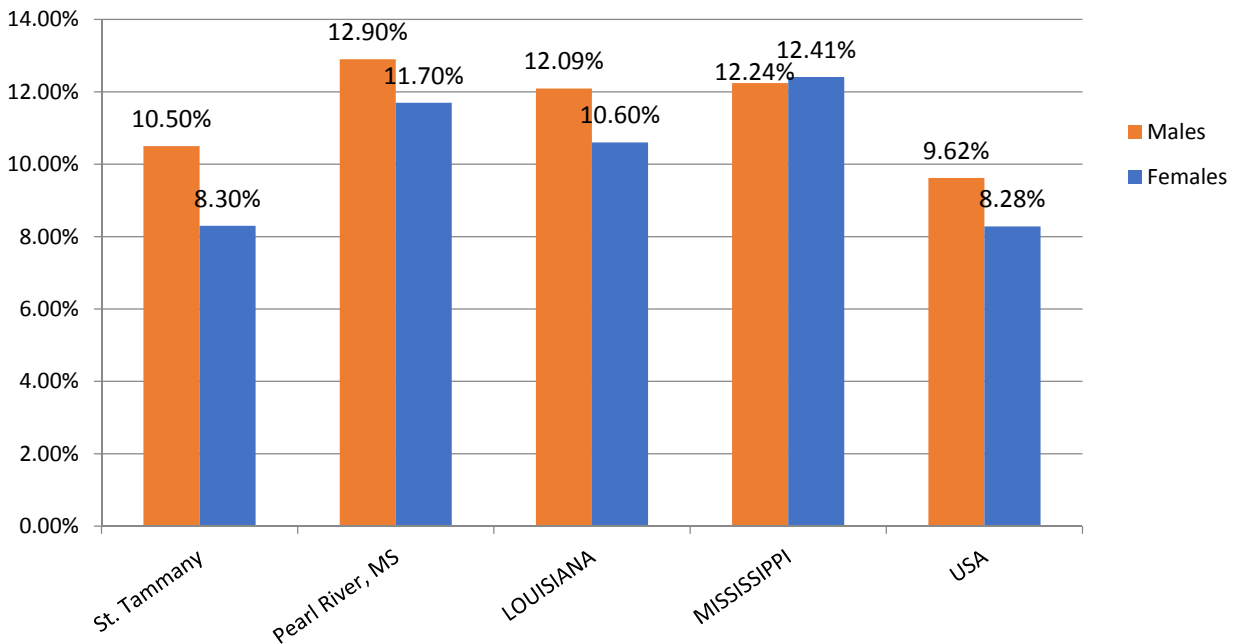
- Pearl River County, MS reports the highest rate of residents with diagnosed diabetes (12.50%)
- Both of the study area parishes/counties as well as the overall state rates for Louisiana and Mississippi are higher than national rates for population being diagnosed with diabetes.

Population with Diagnosed Diabetes, Age-Adjusted Rate, 2012



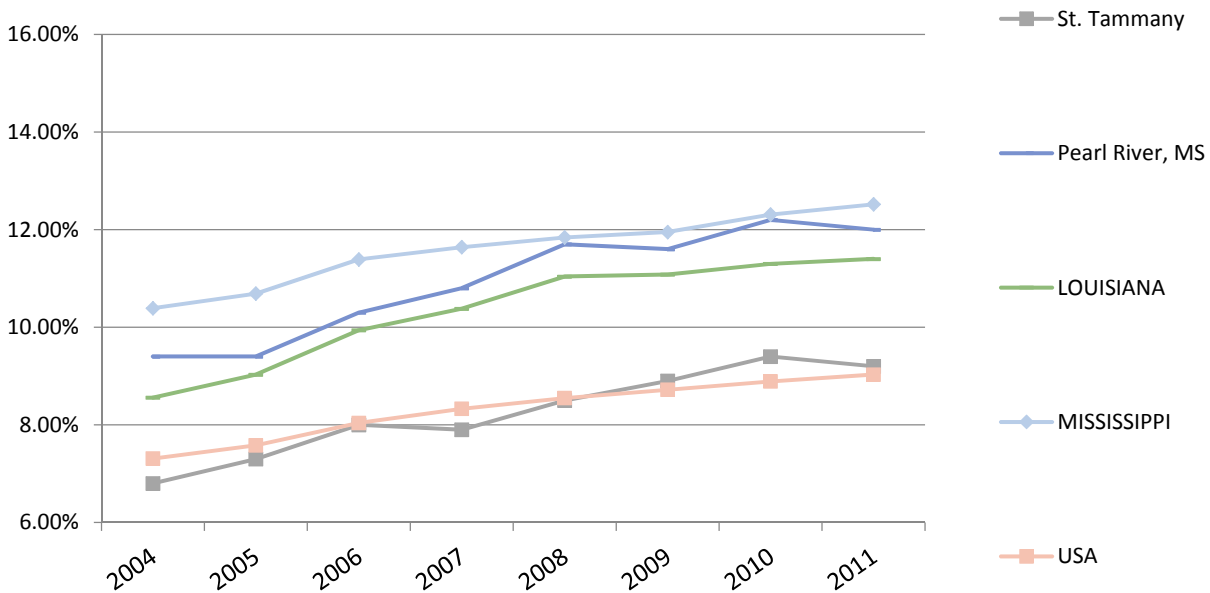
- Men have higher rates of being diagnosed with diabetes than women, for the study area.
- 12.90% of the Pearl River County, MS male population reports being diagnosed with diabetes.

Population with Diagnosed Diabetes, Age-Adjusted Rate - Gender, 2012



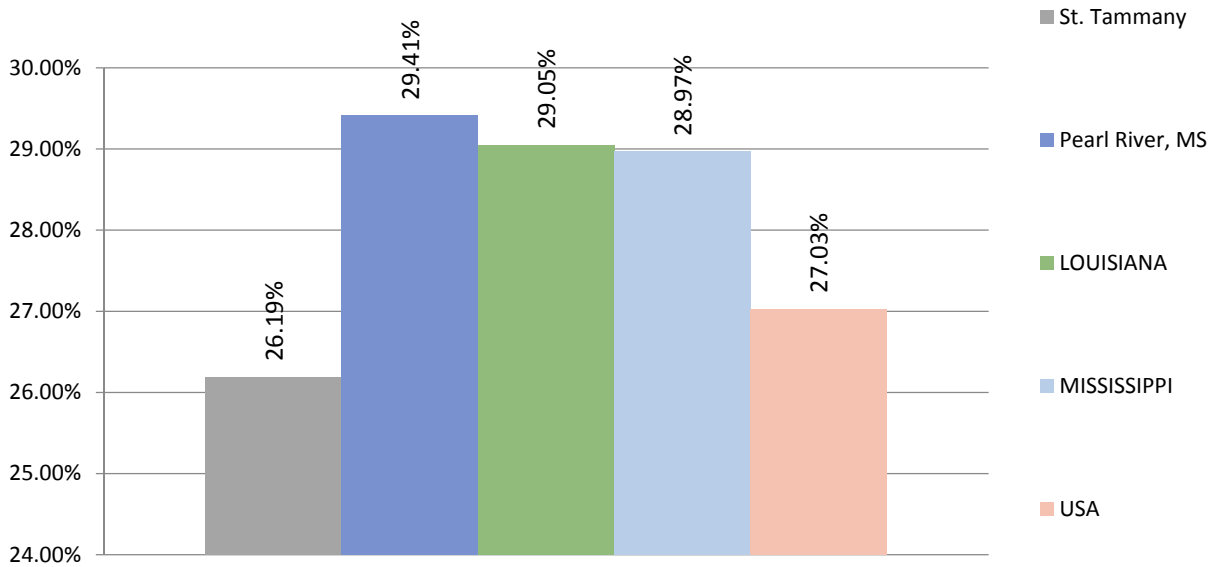
- The rate of diagnosed diabetes cases has seen steady and marked rises from 2004 to 2011 for the study area parishes/counties.

Population with Diagnosed Diabetes, Age-Adjusted Rate - Time



- Looking specifically at the Medicare population, Pearl River County, MS also reports the highest rate of diagnosed diabetes at 29.41%; the national rate being 27.03%.

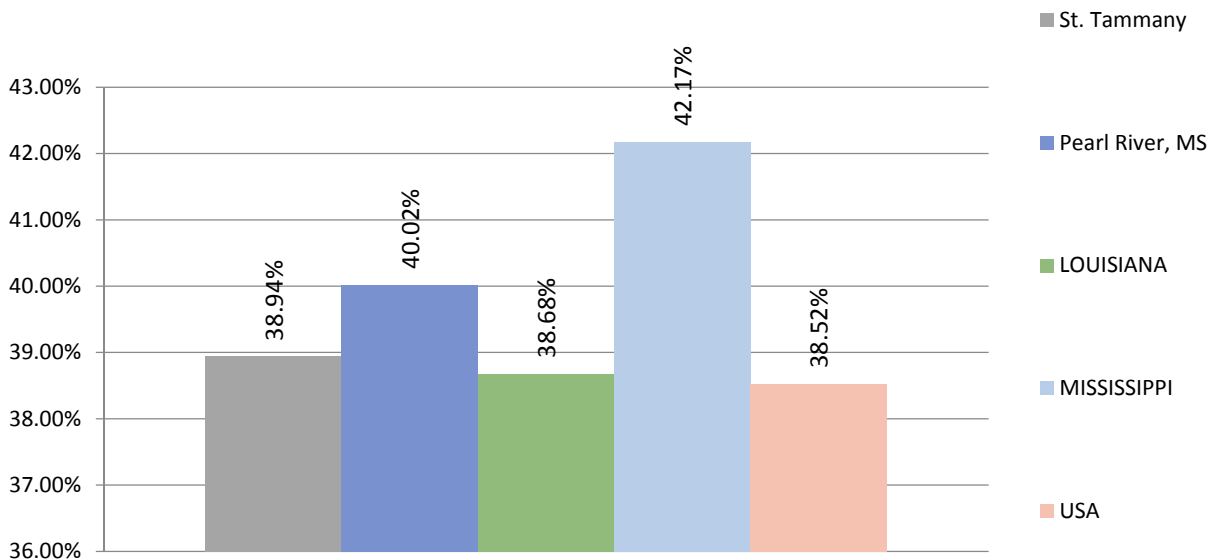
Percent Adults with Diabetes (Medicare Population), 2012



High Cholesterol

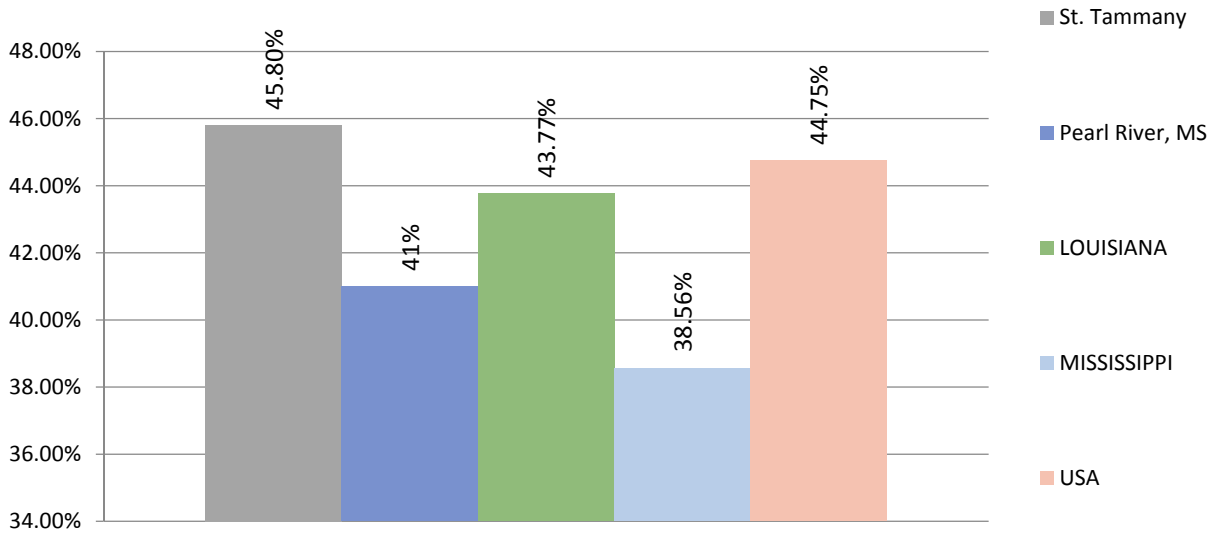
- Both study area parishes/counties report higher rates of residents with high cholesterol than the national average of 38.52%.
- Pearl River County, MS reports the highest rate of residents with high cholesterol at 40.02%.

Percent Adults with High Cholesterol, 2011-2012



- Looking specifically at the Medicare population, St. Tammany Parish, LA reports the highest rate of residents with high cholesterol at 45.08% (compared to Pearl River County, MS for percent adults); the national rate being 44.75%.

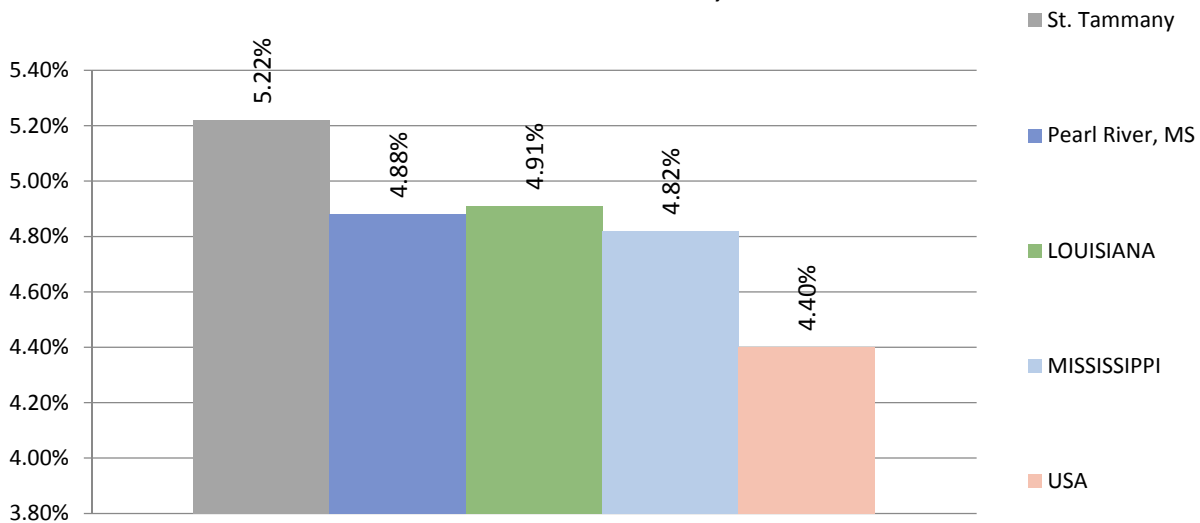
Percent Adults with High Cholesterol (Medicare Pop.), 2012



Heart Disease

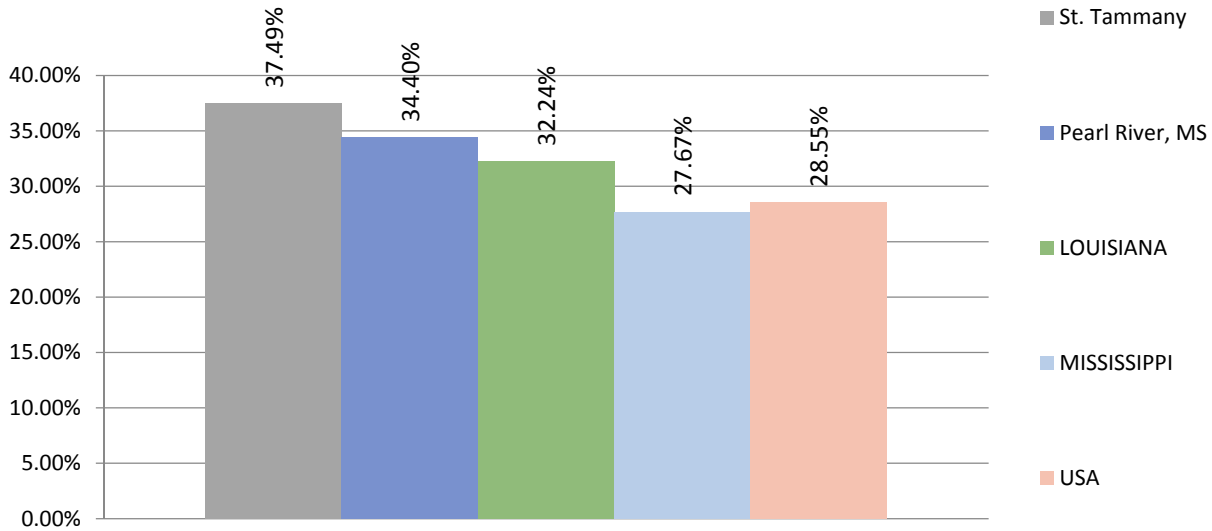
- St. Tammany Parish, LA reports the highest rate of residents who have heart disease (5.22%); this rate is higher than the national rate of 4.40%.

Percent Adults with Heart Disease, 2011-2012



- Looking specifically at the Medicare population, St. Tammany Parish, LA also reports the highest rate of residents with heart disease at 37.49%; the national rate being 28.55%.

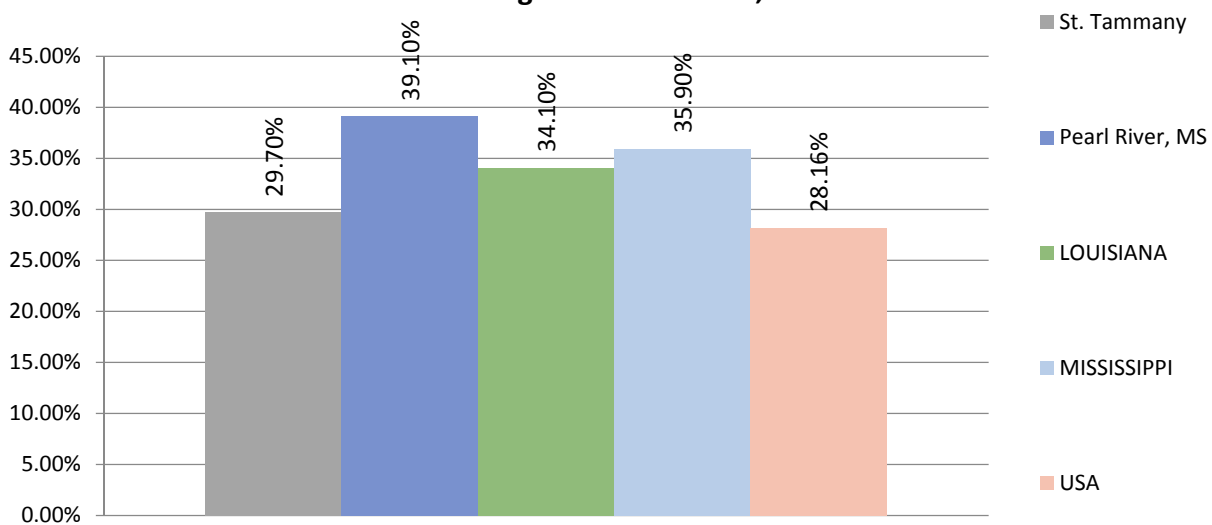
Percent Adults with Heart Disease (Medicare Pop.), 2012



High Blood Pressure

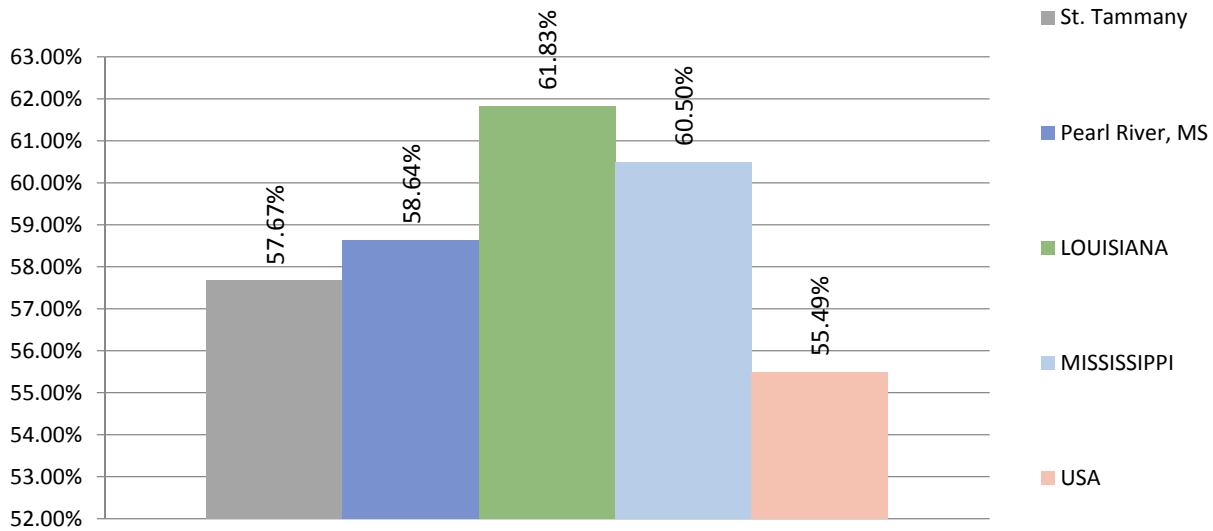
- Pearl River County, MS reports the highest rate of residents who have high blood pressure (39.10%); this rate is higher than the national rate of 28.16%.

Percent Adults with High Blood Pressure, 2006-2012



- Looking specifically at the Medicare population, Pearl River County, MS continues to report the highest rate of residents with high blood pressure at 58.64%; the national rate being 55.49%.

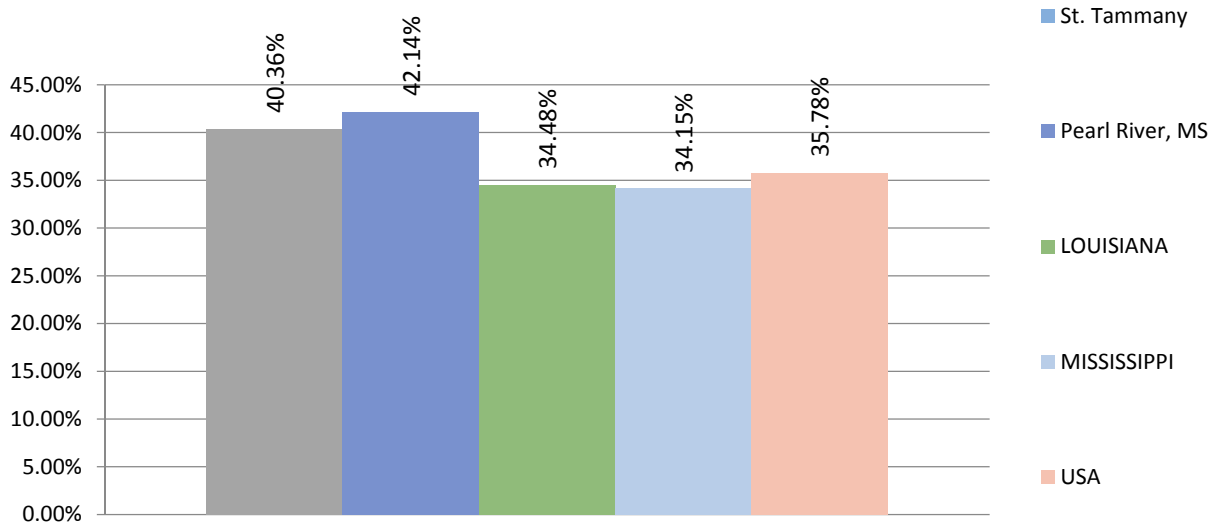
Percent Adults with High Blood Pressure (Medicare Pop.), 2012



Overweight and Obese

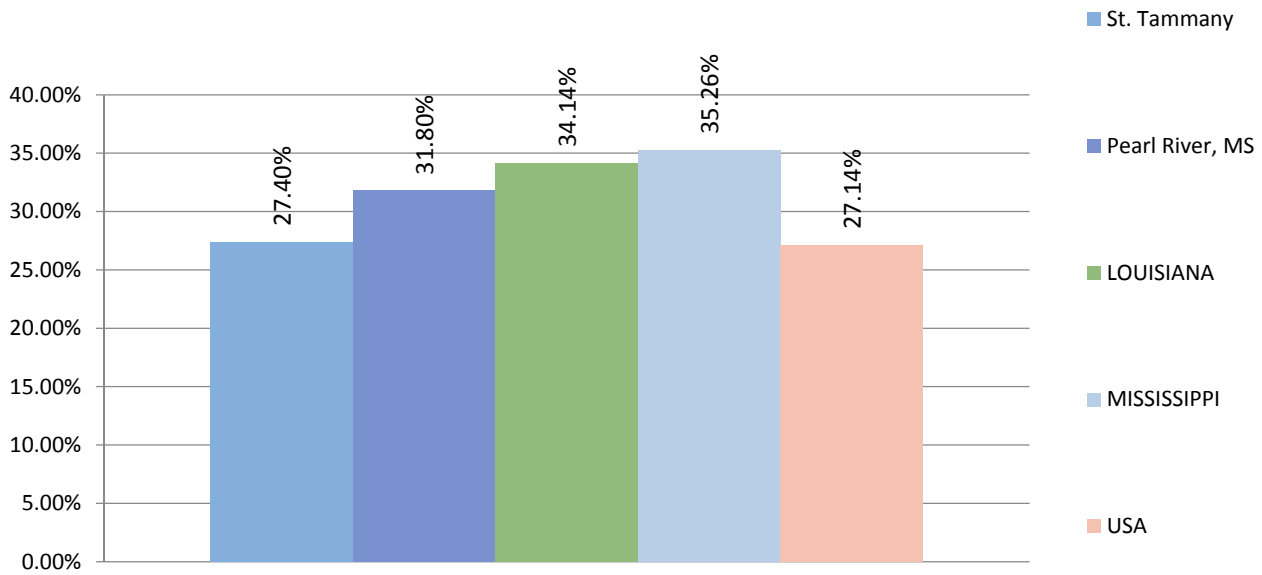
- Pearl River County, MS reports the highest rate of residents who are overweight (42.14%); close to half of the population of this parish is overweight; this rate is higher than the national rate of 35.78%.

Percent Adults Overweight, 2011-2012



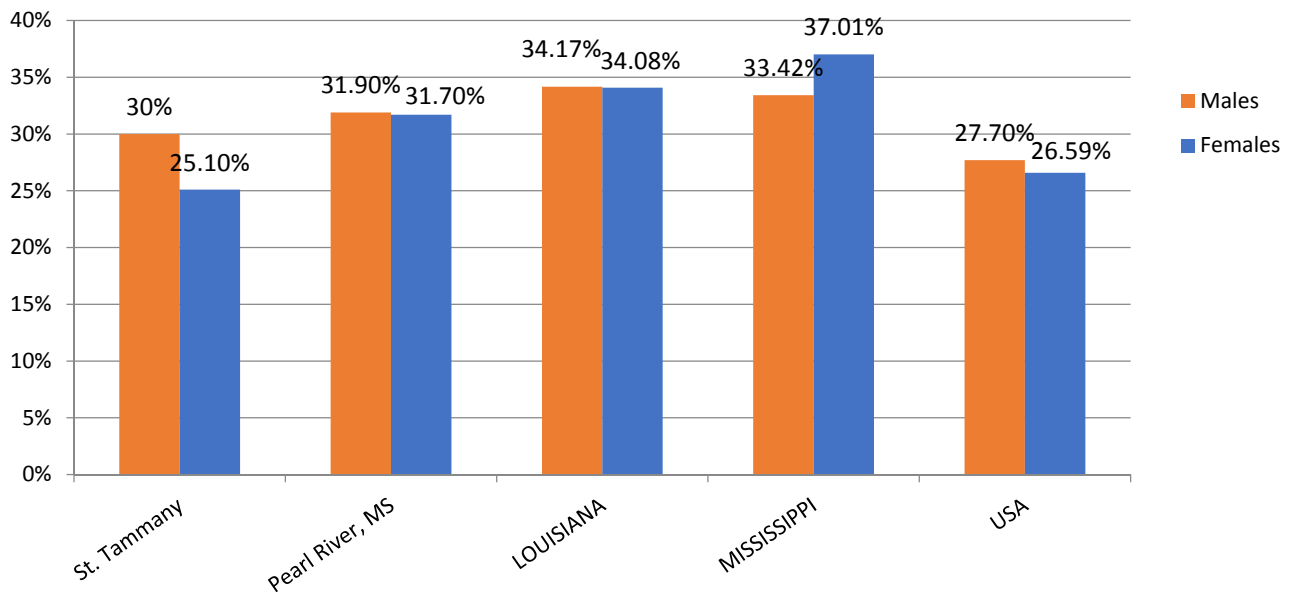
- Pearl River County, MS reports the highest rate of residents who are obese (31.80%); the national rate is 27.14%.

Percent Adults with BMI > 30.0 (Obese), 2012



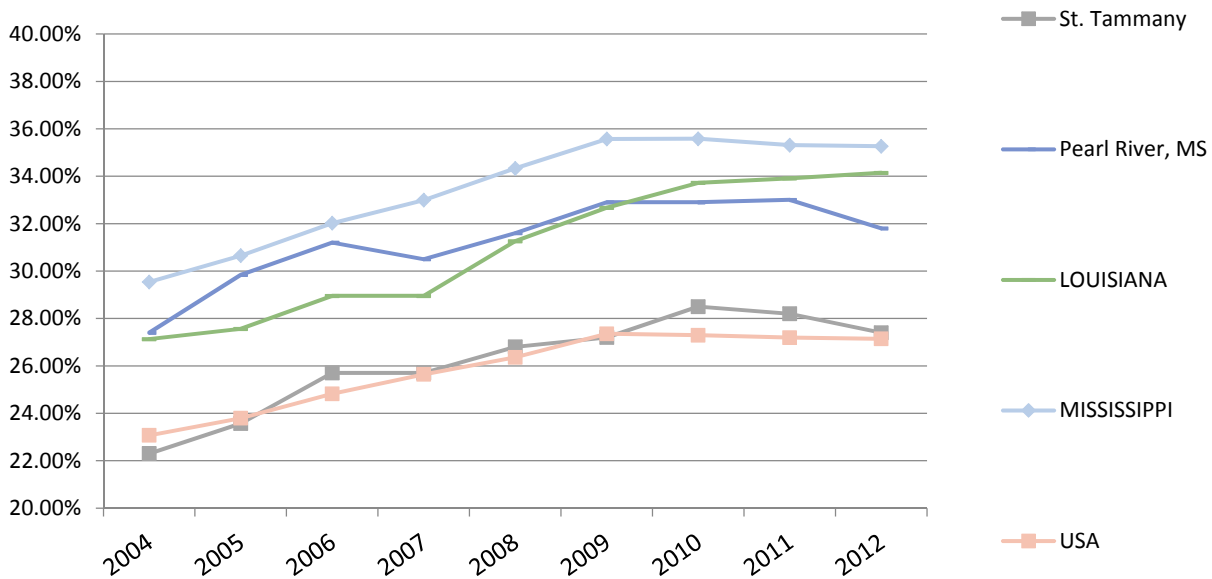
- There are not significant differences in males and females in terms of obesity for Pearl River County, MS.
- St. Tammany Parish, LA reports a rate of 30% obesity for males versus 25.10% for females
- On a national level, men are more likely to be obese than women (27.7% vs. 26.59%).

Percent Adults with BMI > 30.0 (Obese) - Gender, 2012



- The rates of obesity in the study area and nationally have seen steady rises over the years. St. Tammany Parish, LA is the lowest in the study area and closest to the U.S. rates for obesity and has seen slight declines in the rates of obese residents from 2010 to 2012.

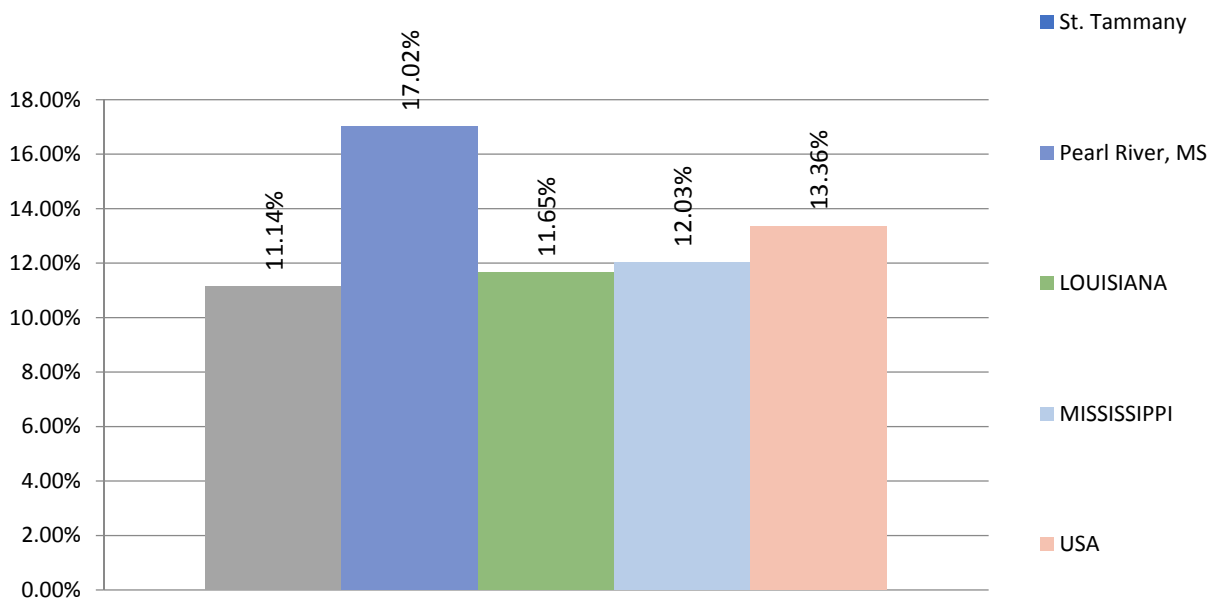
Percent Adults with BMI > 30.0 (Obese) - Time



Asthma

- Pearl River County, MS reports the highest rate of adults with asthma, for the study area, at 17.02%; this is higher than the national rate of 13.36%.

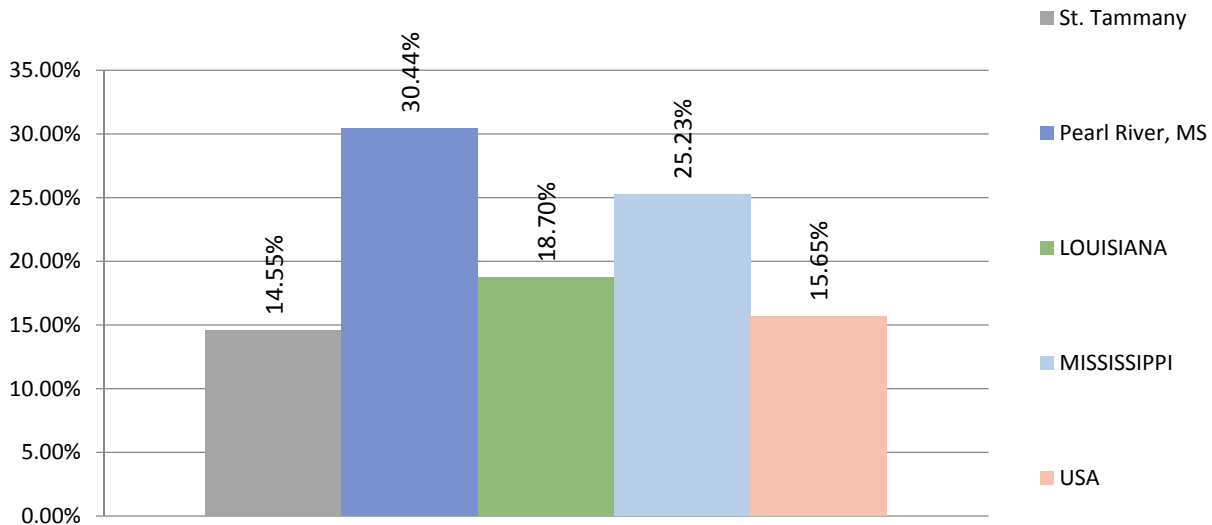
Percent Adults with Asthma, 2011-2012



Dental Health

- St. Tammany Parish, LA reports the lowest rate of adults with poor dental health, for the study area, at 14.55%; this is lower than the national rate of 15.65%.
- Pearl River County, MS also reports a high rate of residents with poor dental health at 30.44%; this is almost double the national rate of 15.65%.

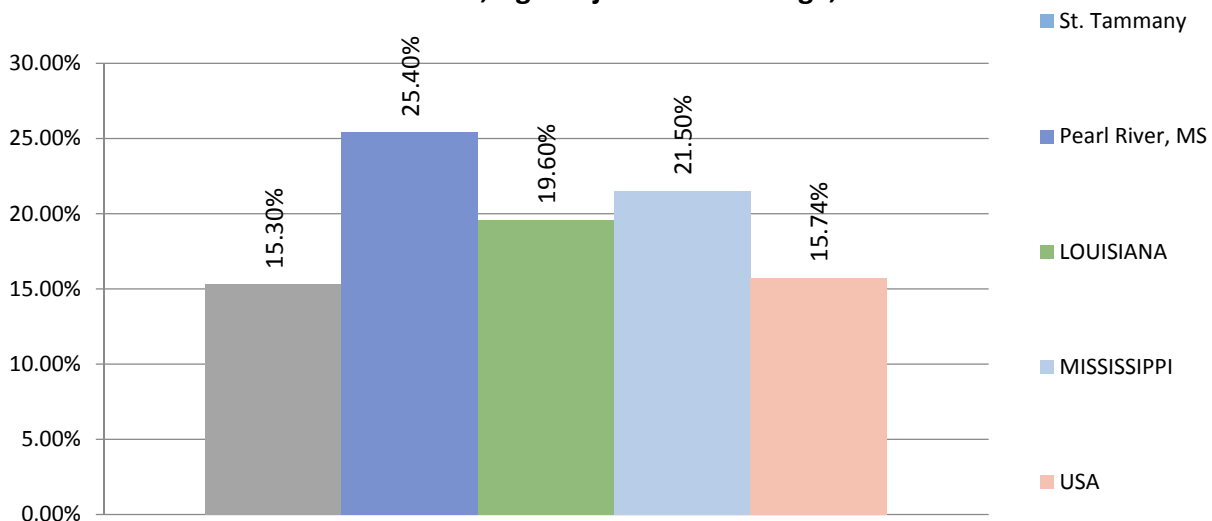
Percentage Adults with Poor Dental Health, 2006-2010



Poor Health

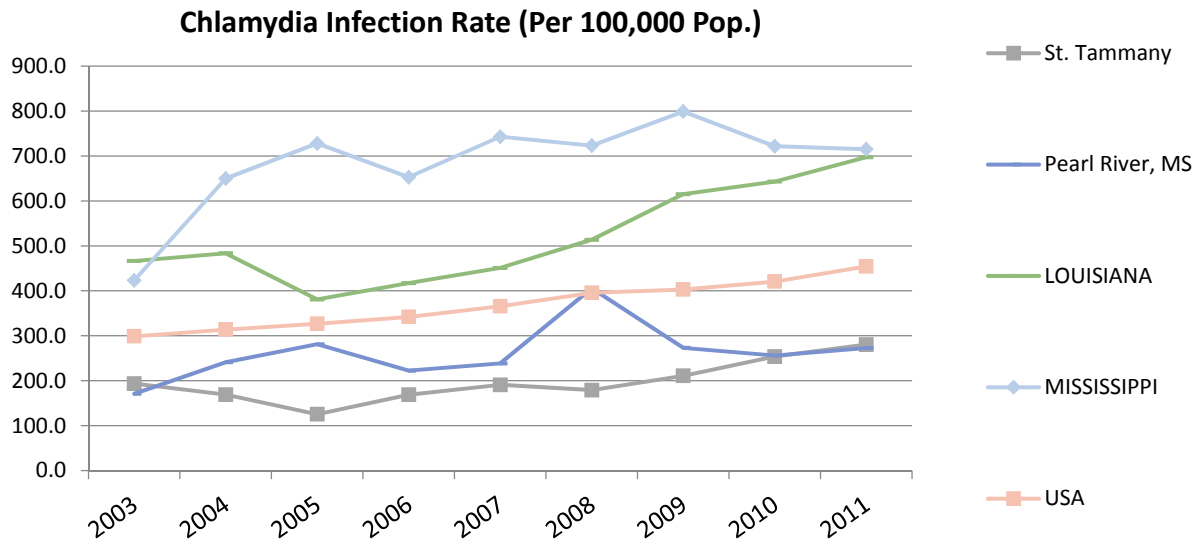
- Similar to poor dental health, Pearl River County, MS reports the highest rates of poor general health (25.40%); this is higher than the national rate of 15.74%.

Poor General Health, Age-Adjusted Percentage, 2006-2012



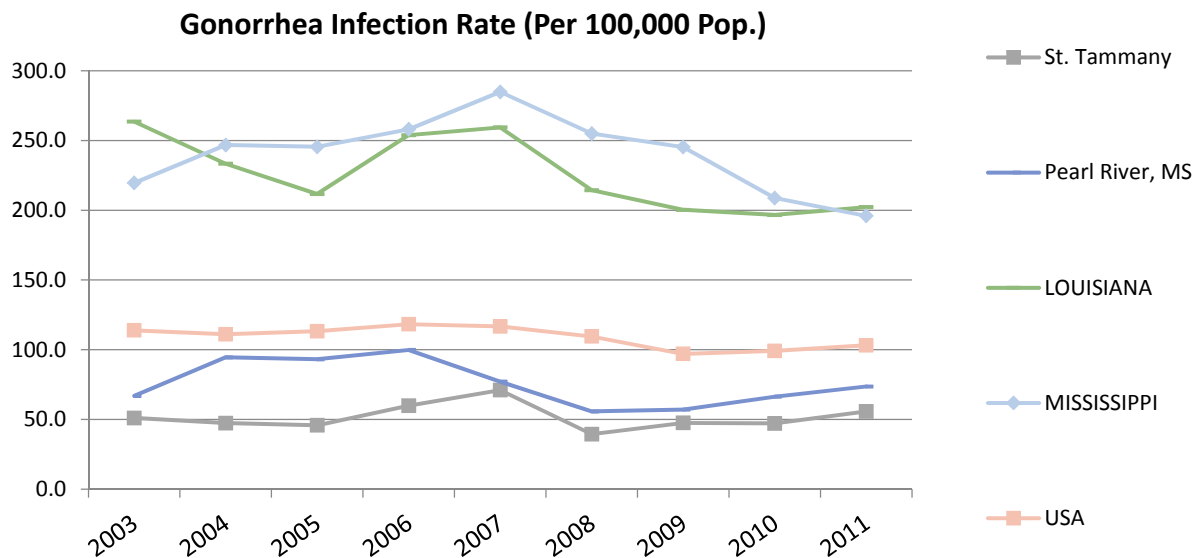
Chlamydia Infection

- Both of the study area parishes/counties fall below the national chlamydia rate of 454.1 per 100,000 population:
 - ✓ St. Tammany reports a rate of 280.4 per 100,00 population.
 - ✓ Pearl River County, MS reports a rate of 272.8 per 100,00 population.



Gonorrhea Infection

- Similar to chlamydia infection, both of the study area parishes/counties reports a substantially lower rate of gonorrhea infection than all of the other states, and country at 73.6 per 100,000 population for Pearl River County, MS and 55.7 per 100,00 population for St. Tammany Parish, LA. The national chlamydia rate is 103.09 per 100,000 population.

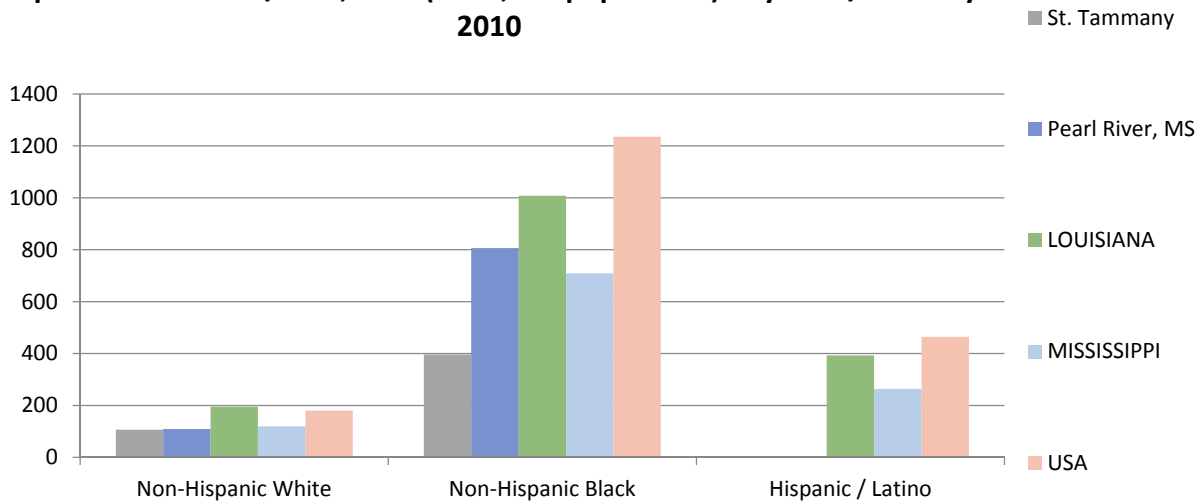


HIV/AIDS

- The Non-Hispanic Black population is the population that sees the highest rates of HIV/AIDS.

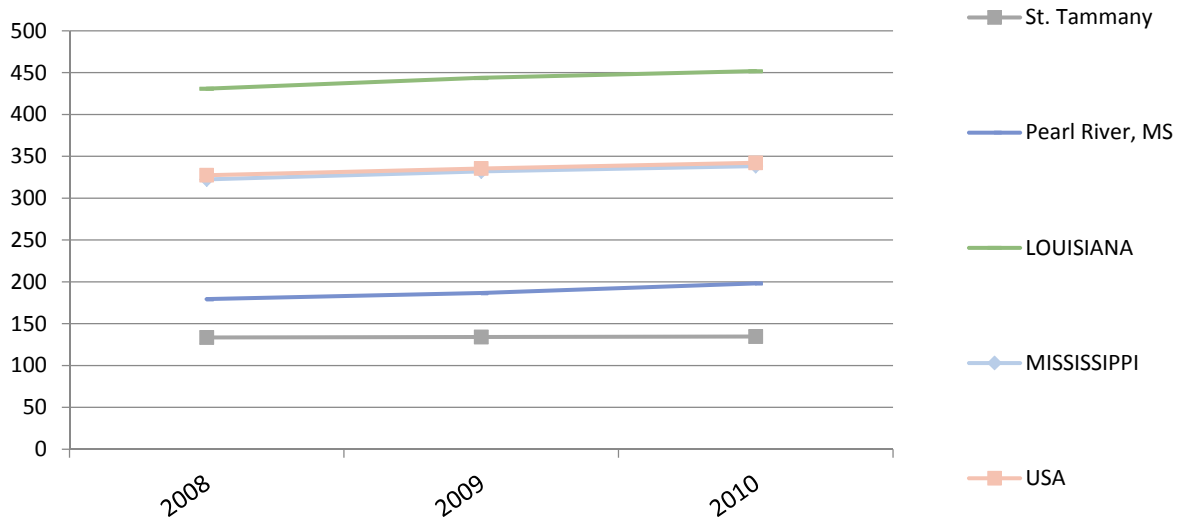
- Pearl River County, MS specifically sees the highest rates of HIV/AIDS, for the study area; 806.01 per 100,000 Non-Hispanic Black population has HIV/AIDS, 109.45 per 100,000 Non-Hispanic White, and 0 for the Hispanic/Latino population.

Population with HIV/AIDS, Rate (Per 1,000 population) - By Race/Ethnicity 2010



- From 2008 to 2010, both of the study area parishes/counties experienced slight rises in HIV/AIDS rates for their parish/county. Therefore 2010 rates of HIV/AIDS in the study area are higher than 2008 rates.

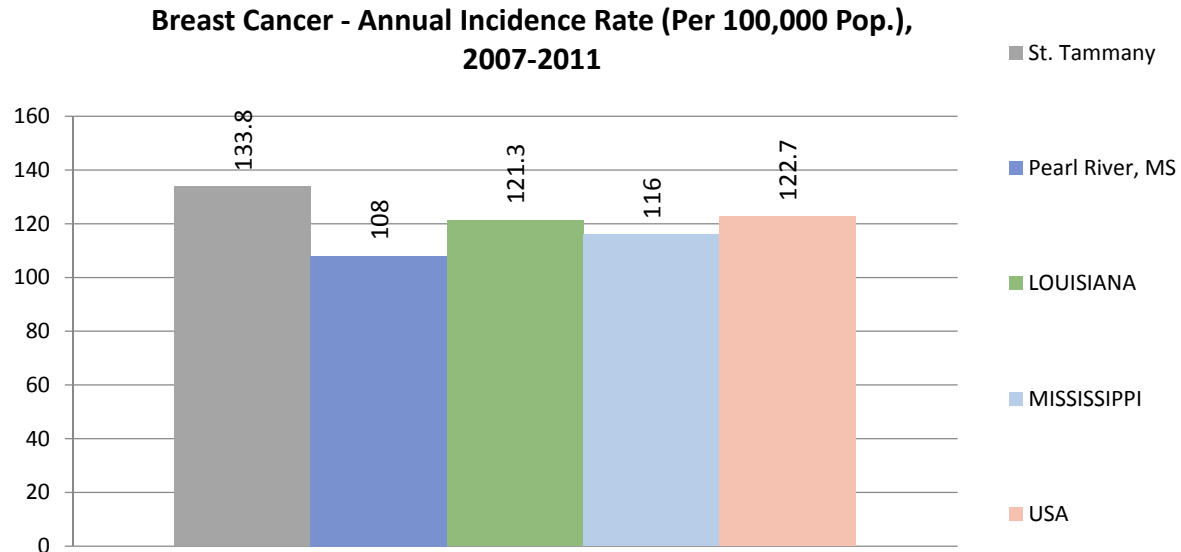
Population with HIV/AIDS, Rate (Per 100,000 Pop.)



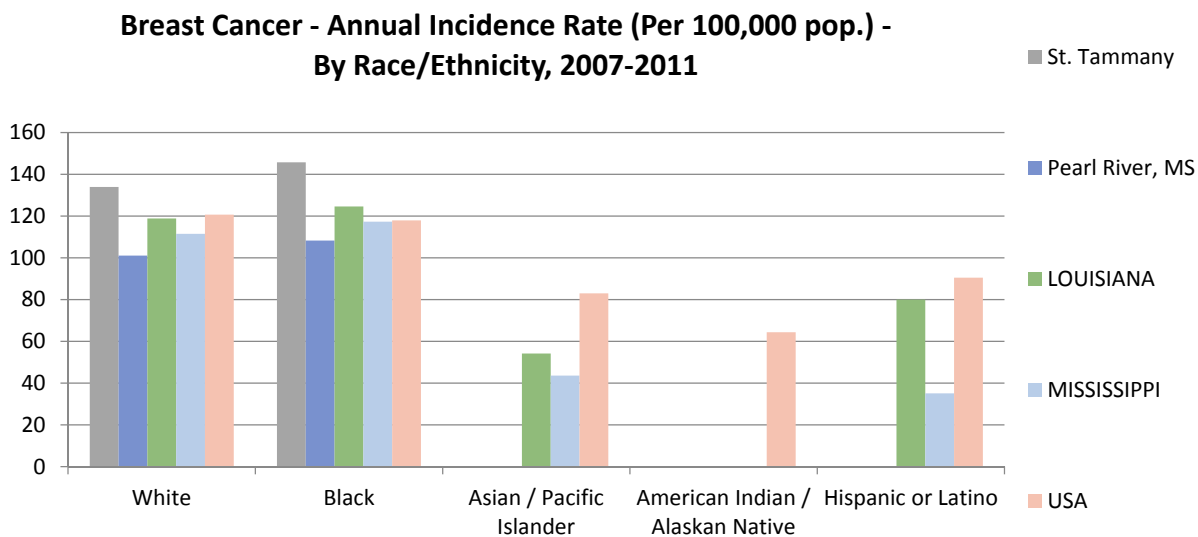
Breast Cancer

- St. Tammany Parish, LA reports the highest incidence rate of breast cancer, for the study area, at 133.8 per 100,000 population; this is higher than the national rate of 122.7 per 100,000 pop.

- The Healthy People 2020 goal is for breast cancer incidence to be less than or equal to 40.9 per 100,000 population; all of the study area parishes/counties and state report rates more than double this goal.



- The African-American/Black population of St. Tammany Parish, LA reports the highest rate of breast cancer incidence when looking at incidence by race/ethnicity (145.7 per 100,000 pop.).



Cervical Cancer

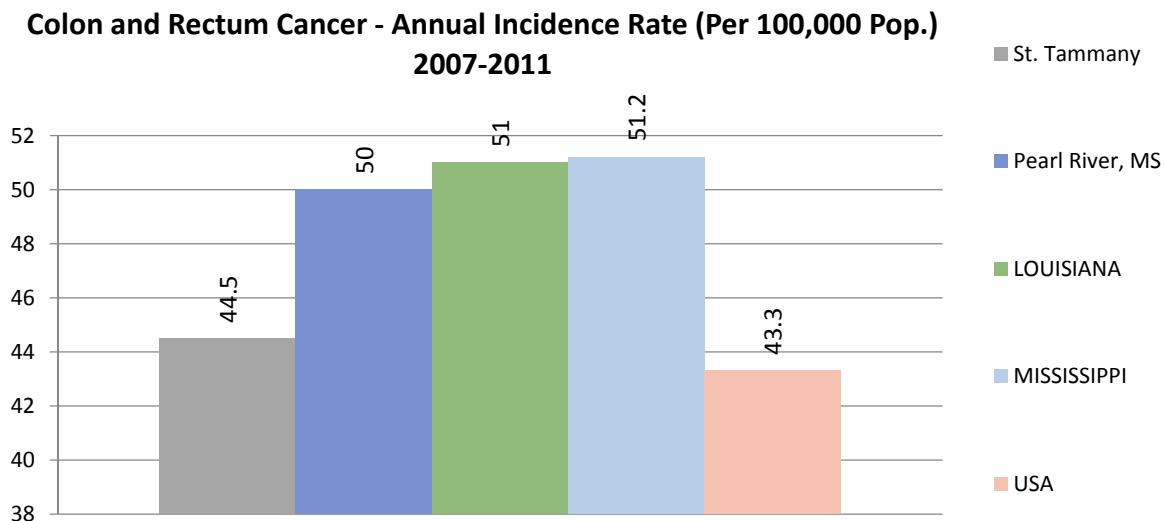
- St. Tammany Parish, LA reports the only incidence rate of cervical cancer, for the study area, at 7.4 per 100,000 population; this is lower than the national rate of 7.8 per 100,000 pop.

- The Healthy People 2020 goal is for cervical cancer incidence to be less than or equal to 7.1 per 100,000 population; all of the study area parishes/counties and state report rates higher than this goal.



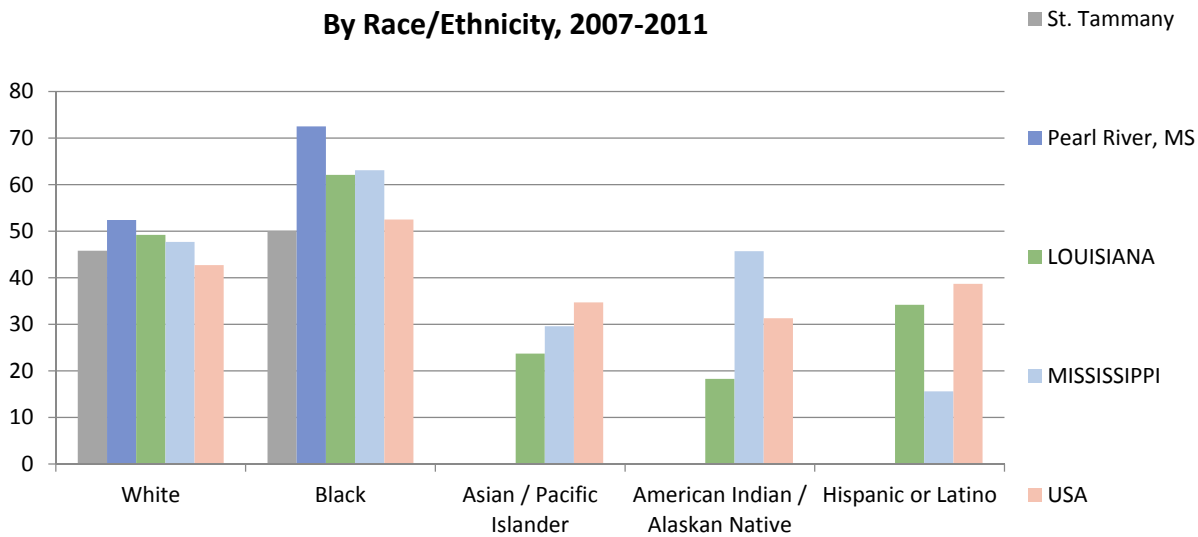
Colon and Rectum Cancer

- Pearl River County, MS reports the highest incidence rate of colon and rectum cancer, for the study area, at 50 per 100,000 population; this is higher than the national rate of 43.3 per 100,000 pop.
- The Healthy People 2020 goal is for colon and rectum cancer incidence to be less than or equal to 38.7 per 100,000 population; all of the study area parishes/counties and state report rates higher than this goal.



- The African-American/Black population reports higher rates of colon and rectum cancer incidence as compared with other racial groups, for the study area, the states, and nationally.

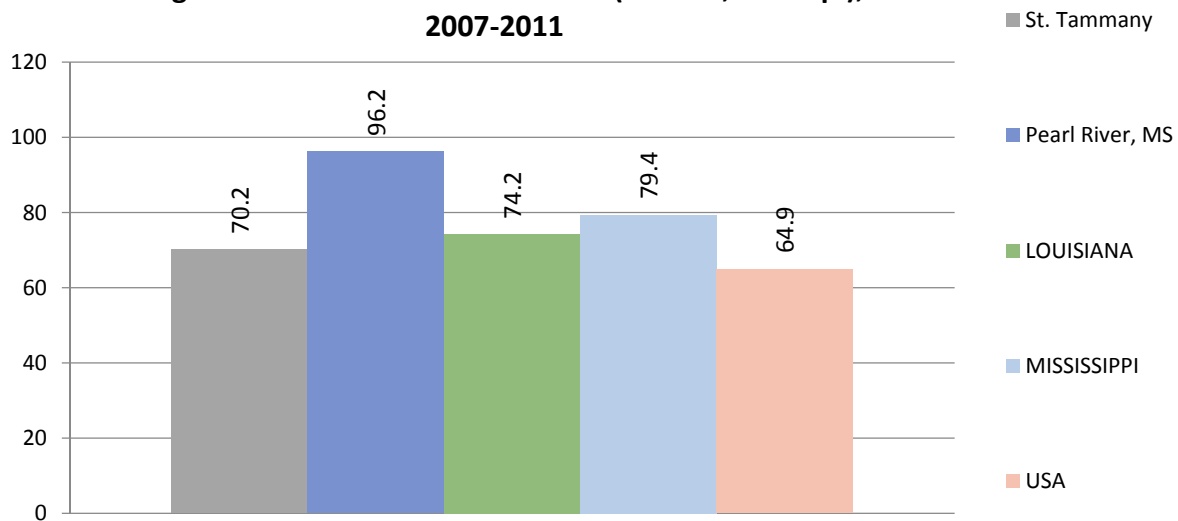
**Colon and Rectum Cancer - Annual Incidence Rate (Per 100,000 pop.) -
 By Race/Ethnicity, 2007-2011**



Lung Cancer

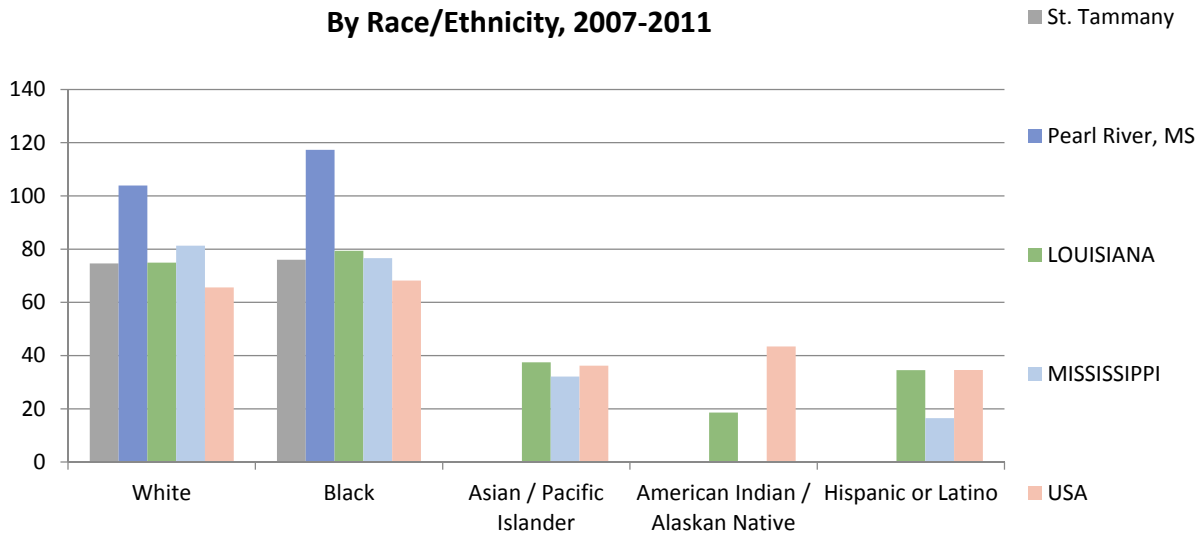
- Pearl River County, MS reports the highest incidence rate of lung cancer, for the study area, at 96.2 per 100,000.

**Lung Cancer - Annual Incidence Rate (Per 100,000 Pop.),
 2007-2011**



- The African-American/Black population in Pearl River County, MS reports the highest rate of lung cancer incidence when looking at incidence by race/ethnicity (117.3 per 100,000 pop.).

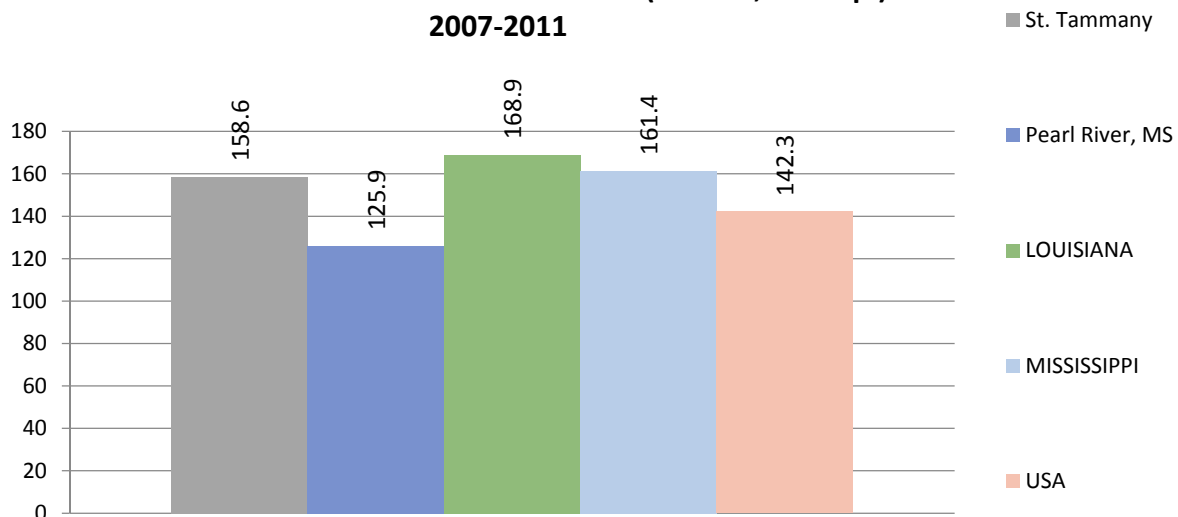
**Lung Cancer - Annual Incidence Rate (Per 100,000 pop.) -
 By Race/Ethnicity, 2007-2011**



Prostate Cancer

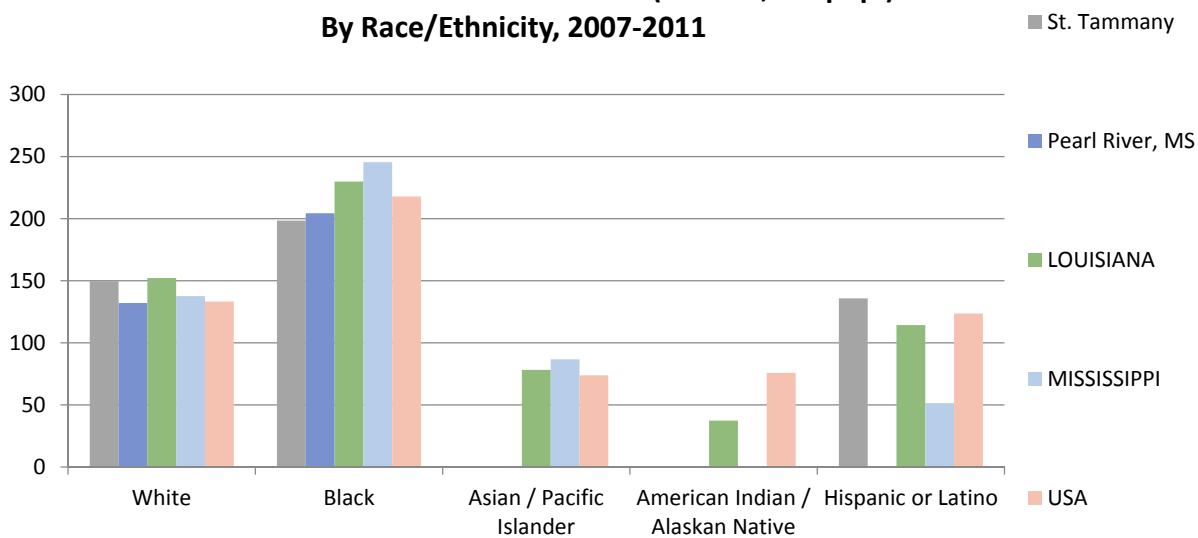
- St. Tammany Parish, LA reports the highest incidence rate of prostate cancer, for the study area, at 158.6 per 100,000 population; this value is higher than the national rate of 142.3 per 100,000 pop.

**Prostate Cancer - Annual Incidence Rate (Per 100,000 Pop.)
 2007-2011**



- The African-American/Black population reports higher rates of prostate cancer incidence as compared with other racial groups for the study area, the states, and nationally.

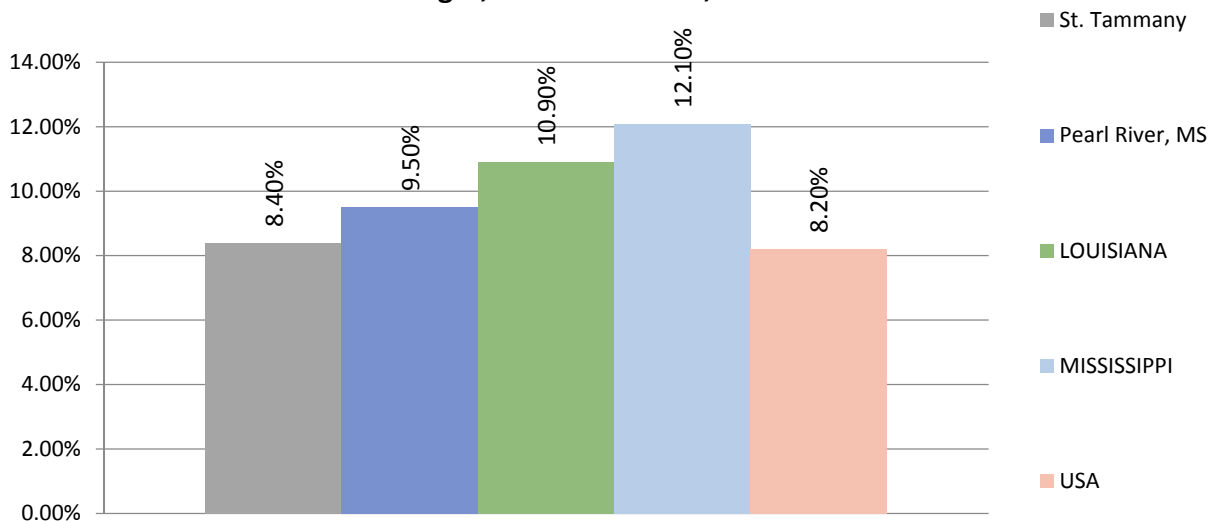
**Prostate Cancer - Annual Incidence Rate (Per 100,000 pop.) -
By Race/Ethnicity, 2007-2011**



Low Birth Weight

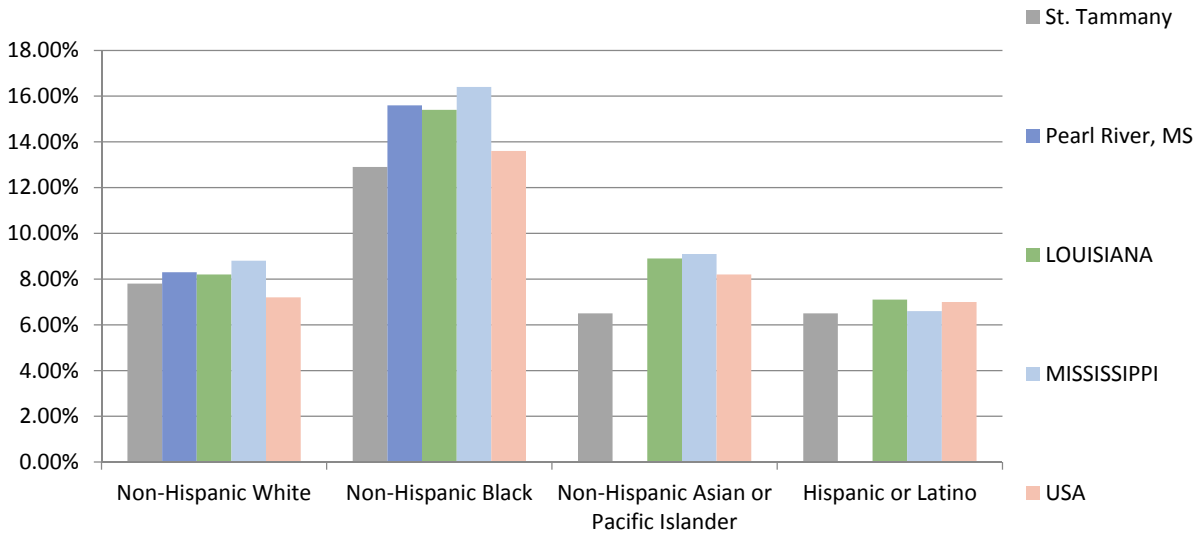
- Pearl River County, MS reports the highest rate of low-weight births, for the study area, at 9.50% followed closely by St. Tammany Parish, LA at 8.40%.
- All of the study area parishes/counties report higher rates of low-weight births than the national rate of 8.2%.
- The Healthy People 2020 goal is for low –weight births to be less than or equal to 7.8%; all of the study area parishes/counties and state report rates higher than this goal.

Low Birth Weight, Percent of Total, 2006-2012



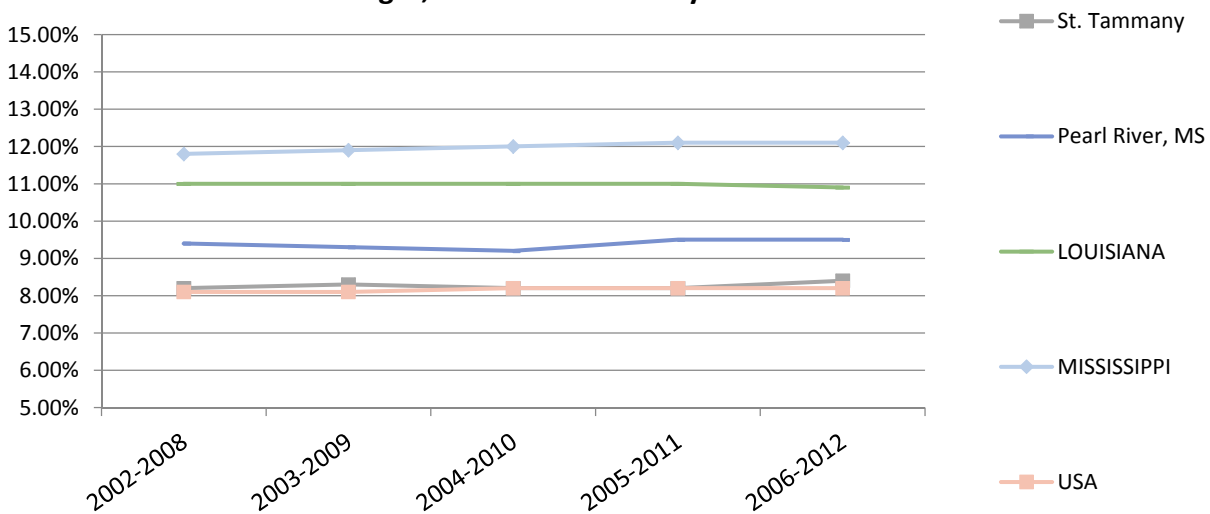
- The Non-Hispanic African-American/Black population sees higher rates of low-weight births as compared with other racial groups for the study area, the states, and nationally.

Low Birth Weight, Percent of Total - By Race/Ethnicity, 2006-2012



- Pearl River County, MS reports the highest rate of low-weight births in 2006-2012 (9.50%), for the study area; this rate has been steadily inclining since 2004-2010.

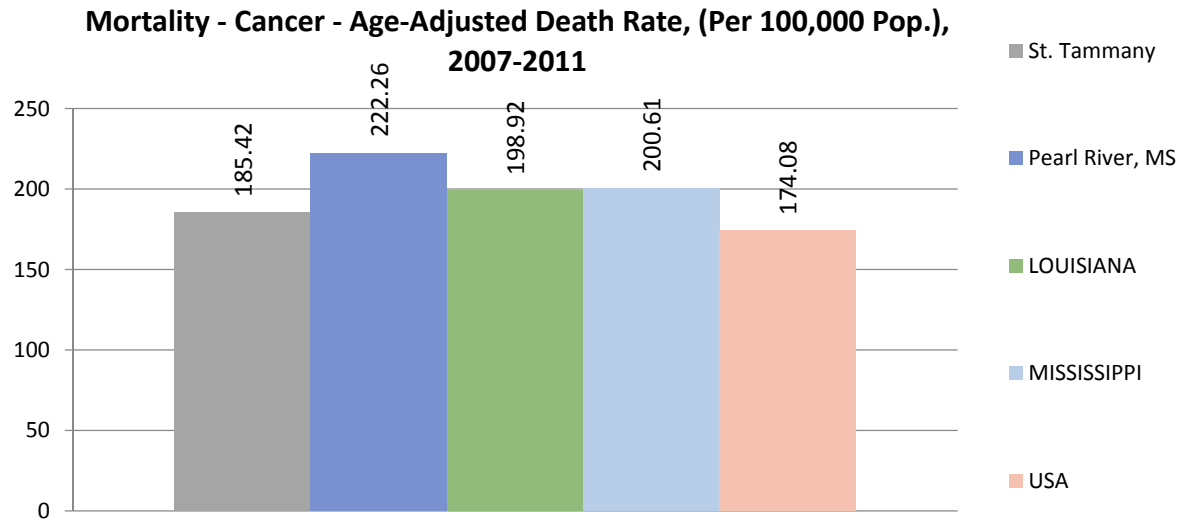
Low Birth Weight, Percent of Total - By Year



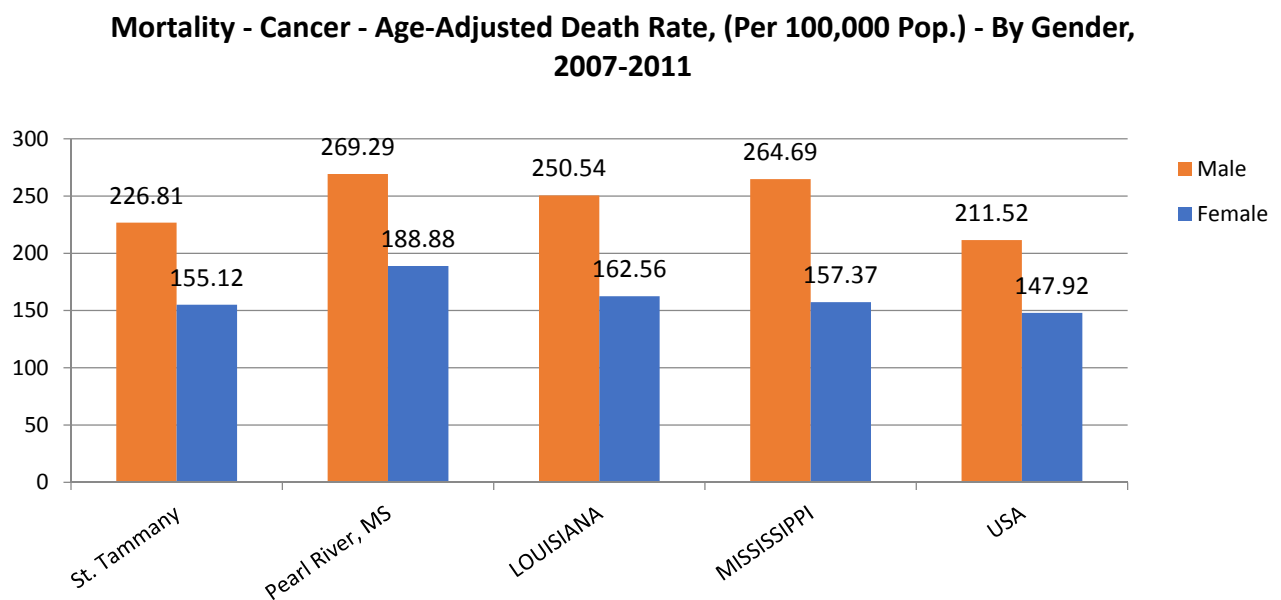
Mortality - Cancer

- Pearl River County, MS reports the highest rate of age-adjusted mortality due to cancer, for the study area, at 222.26 per 100,000 population.

- All of the study area parishes/counties report higher rates of mortality due to cancer than the national rate of 174.08 per 100,000 population.
- The Healthy People 2020 goal is for mortality due to cancer to be less than or equal to 160.6 per 100,000 population; all of the study area parishes/counties and state report rates higher than this goal.

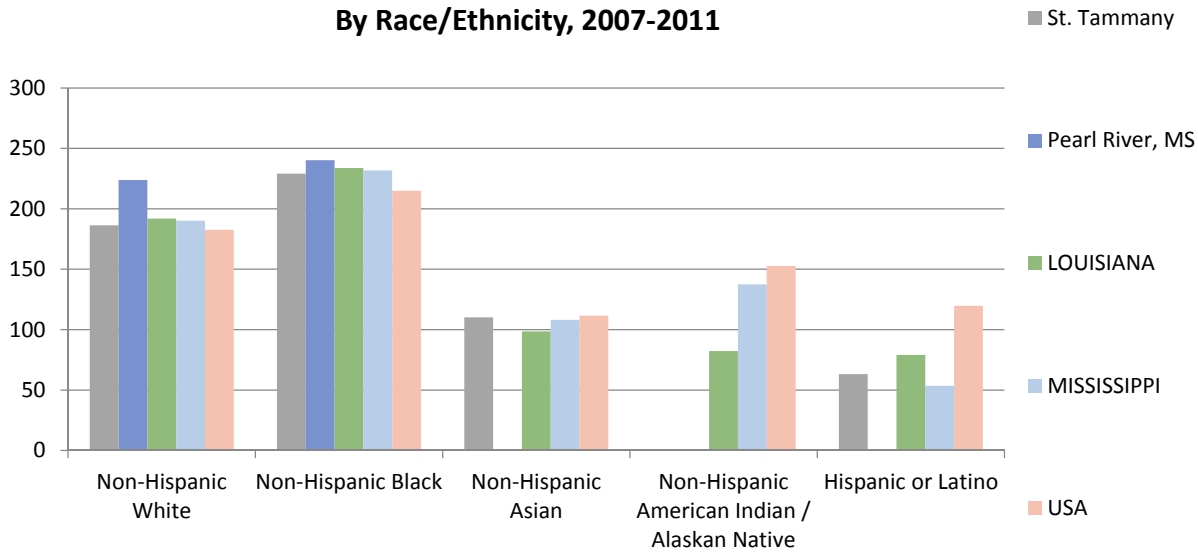


- Across the study area, all of the parishes/counties, states, and nationally; men have higher mortality rates due to cancer than women.



- The Non-Hispanic Black population of Pearl River County, MS reports the highest rate of mortality due to cancer, for the study area, with 240.27 per 100,000 population.

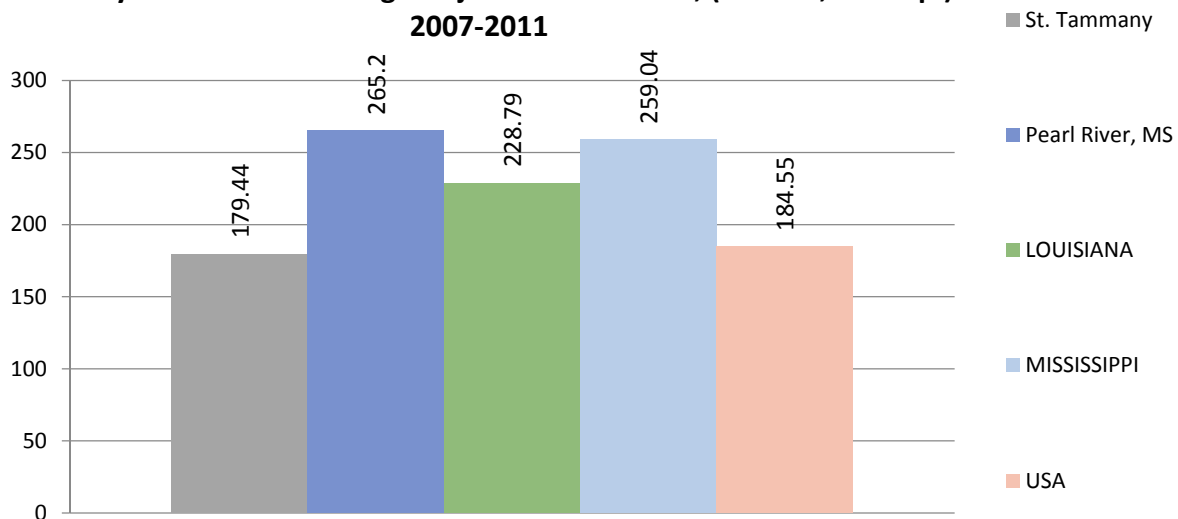
**Mortality - Cancer - Age-Adjusted Death Rate, (Per 100,000 Pop.) -
 By Race/Ethnicity, 2007-2011**



Mortality – Heart Disease

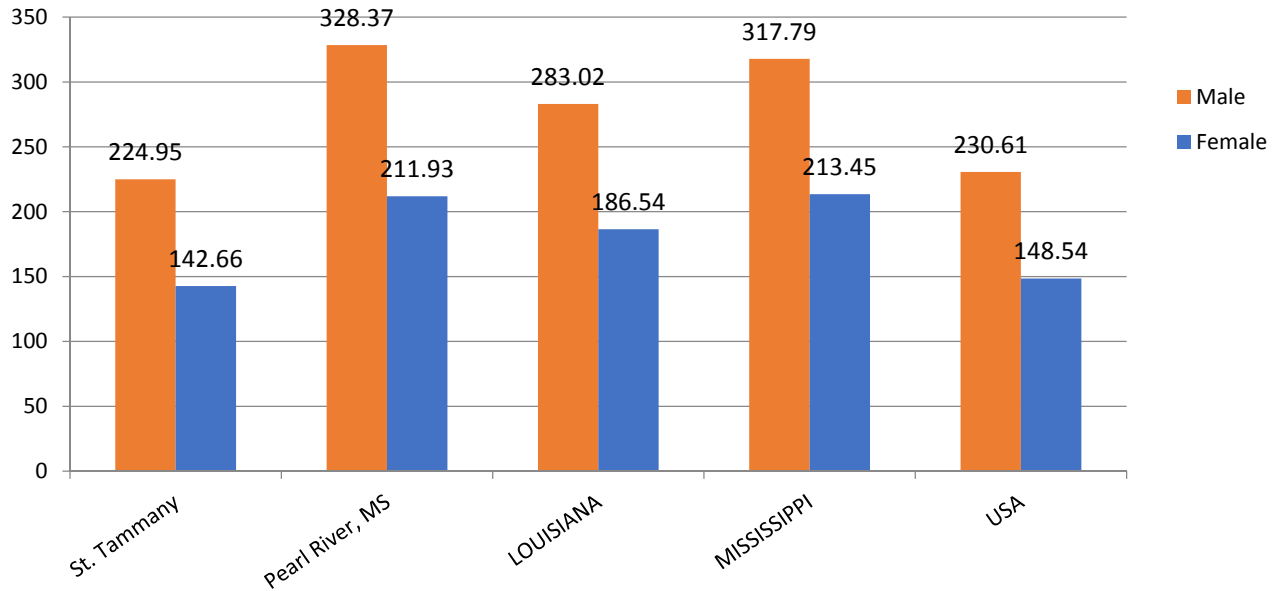
- Pearl River County, MS reports the highest rate of age-adjusted mortality due to heart disease, for the study area, at 265.2 per 100,000 population.

**Mortality - Heart Disease - Age-Adjusted Death Rate, (Per 100,000 Pop.)
 2007-2011**



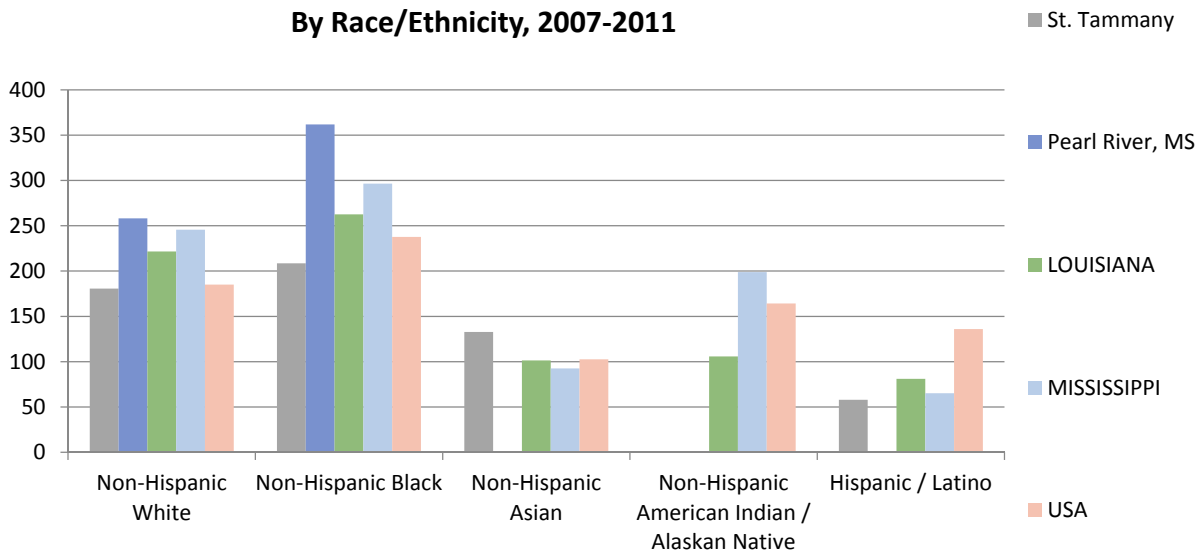
- On a national level and for all of the study area parishes/counties, men are more likely to die as a result of heart disease than women.

**Mortality - Heart Disease - Age-Adjusted Death Rate, (Per 100,000 Pop.) -
By Gender, 2007-2011**



- The African-American/Black population of Pearl River County, MS reports the highest rate of death due to heart disease across the study area at 361.87 per 100,000 population.

**Mortality - Heart Disease - Age-Adjusted Death Rate, (Per 100,000 Pop.) -
By Race/Ethnicity, 2007-2011**

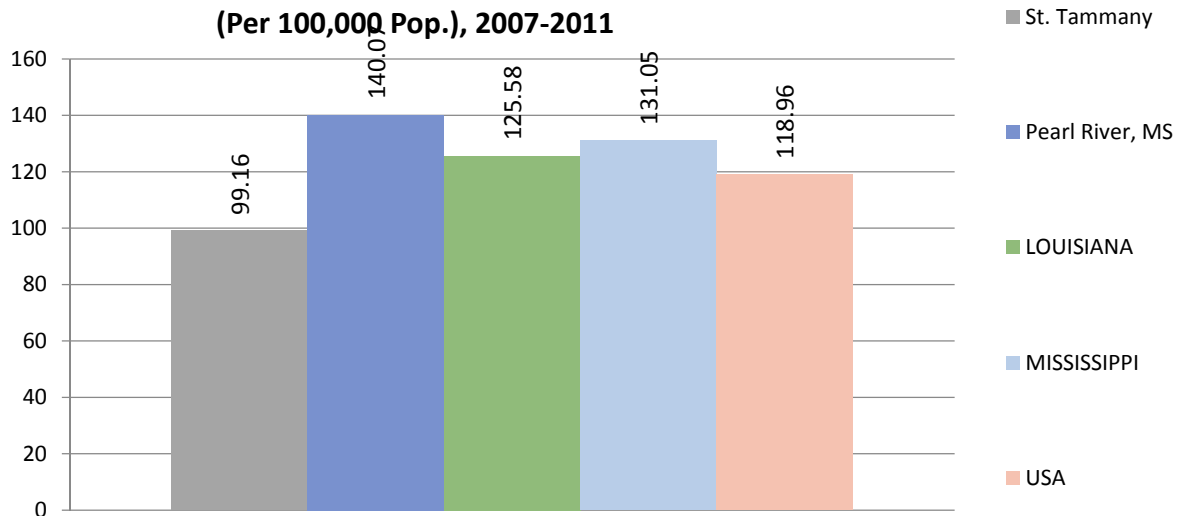


Mortality – Ischemic Heart Disease

- Pearl River County, MS reports the highest rate of age-adjusted mortality due to ischemic heart disease, for the study area, at 140.07 per 100,000 population.

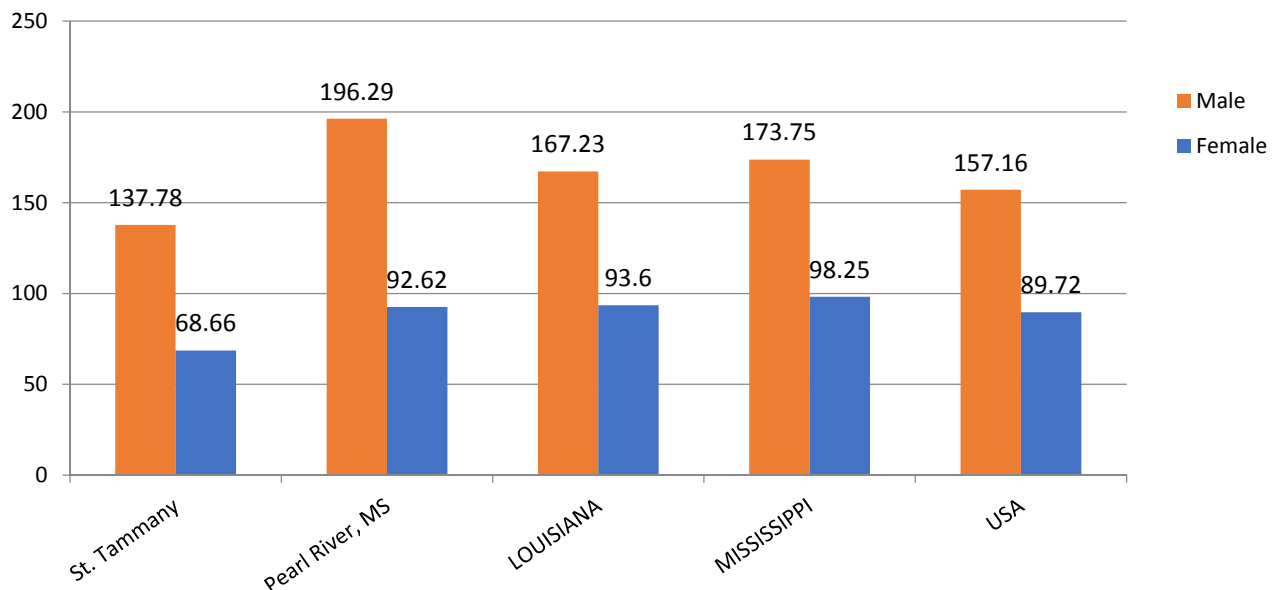
- The Healthy People 2020 goal is for mortality due to ischemic heart disease to be less than or equal to 103.4 per 100,000 population; St. Tammany Parish, LA reports rates already lower than this HP2020 Goal.

Mortality - Ischemic Heart Disease - Age-Adjusted Death Rate, (Per 100,000 Pop.), 2007-2011



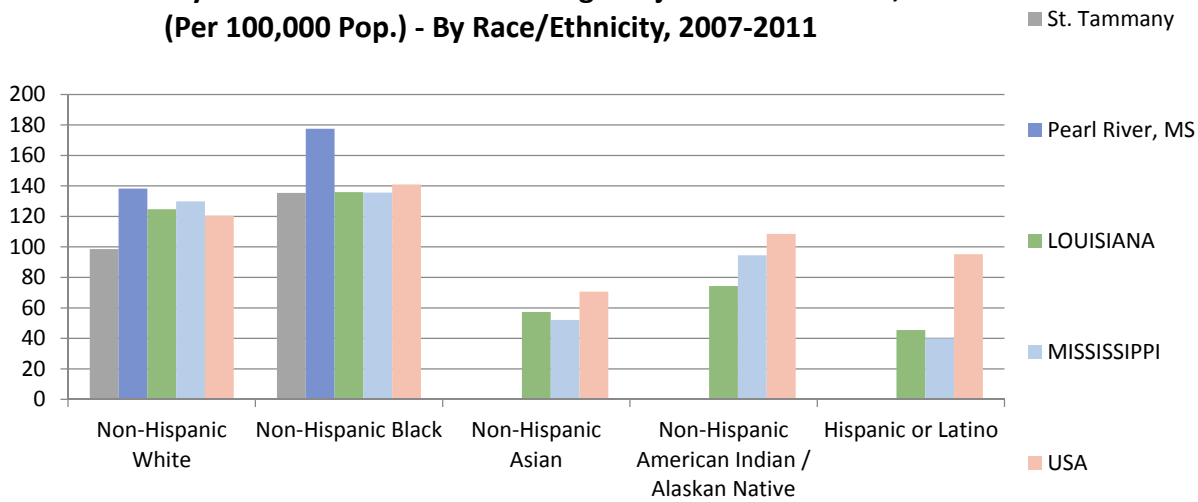
- On a national level and for all of the study area parishes/counties, men are more likely to die as a result of ischemic heart disease than women.

Mortality - Ischemic Heart Disease - Age-Adjusted Death Rate, (Per 100,000 Pop.) - By Gender, 2007-2011



- Non-Hispanic Black residents of Pearl River County, MS report the highest rate of death due to ischemic heart disease, for the study area, at 177.49 per 100,000 population.

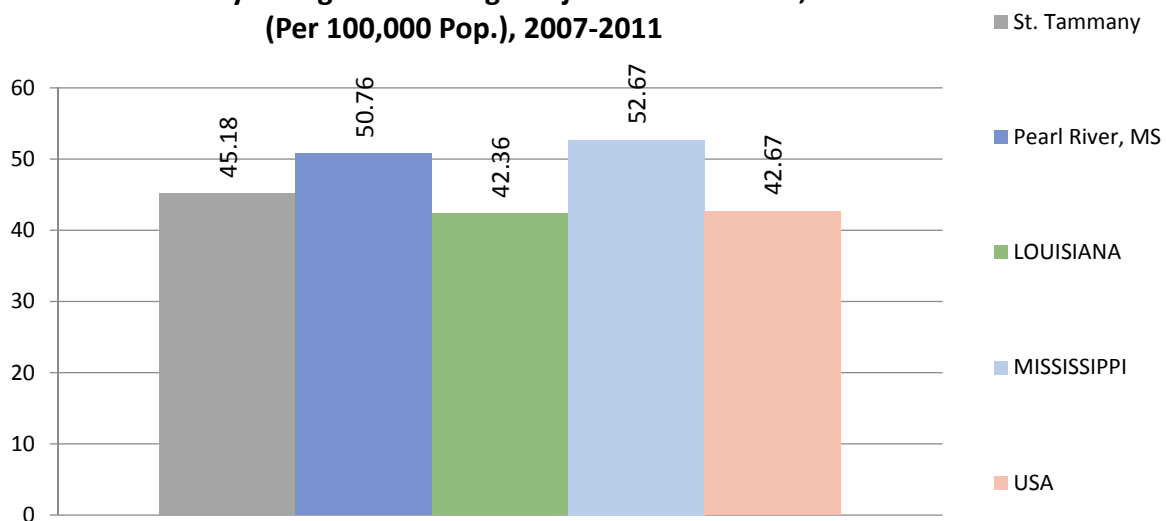
**Mortality - Ischemic Heart Disease - Age-Adjusted Death Rate,
 (Per 100,000 Pop.) - By Race/Ethnicity, 2007-2011**



Mortality – Lung Disease

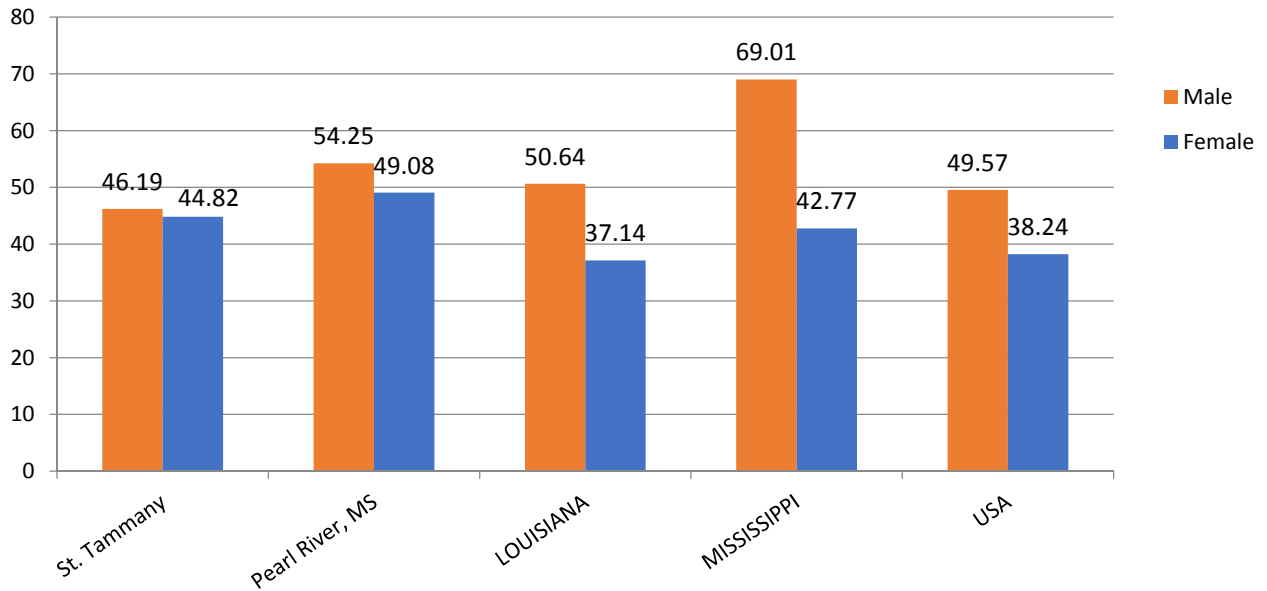
- Pearl River County, MS reports the highest rate of mortality due to lung disease, for the study area, at 50.76 per 100,000 population. St. Tammany Parish, LA is not far behind at 45.18 per 100,000 population; these are higher than the national rate of 42.67.

**Mortality - Lung Disease - Age-Adjusted Death Rate,
 (Per 100,000 Pop.), 2007-2011**



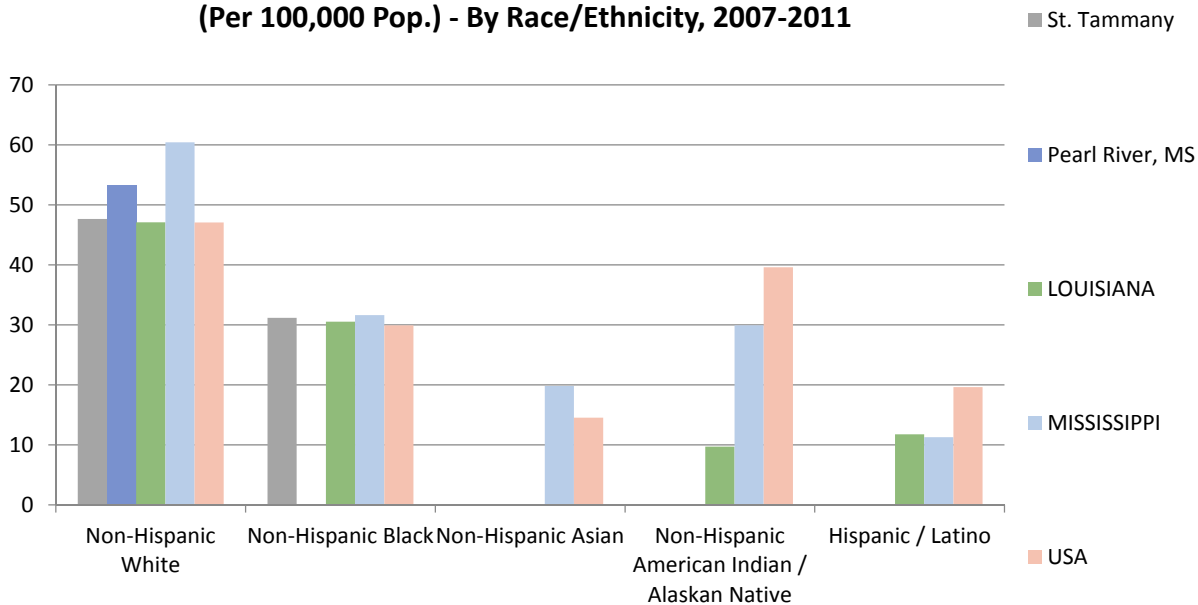
- On a national level and for all of the study area parishes/counties, men are more likely to die as a result of lung disease than women.

**Mortality - Lung Disease - Age-Adjusted Death Rate,
 (Per 100,000 Pop.) - By Gender, 2007-2011**



- The Non-Hispanic white population reports the highest rates of death as a result of lung disease for all the study area parishes/counties, states, and nation.

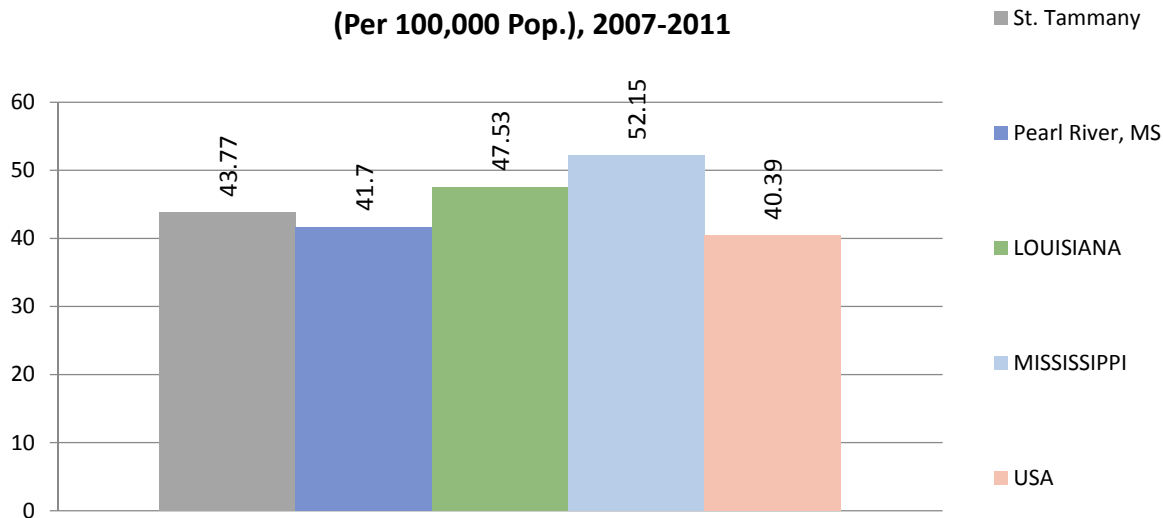
**Mortality - Lung Disease - Age-Adjusted Death Rate,
 (Per 100,000 Pop.) - By Race/Ethnicity, 2007-2011**



Mortality – Stroke

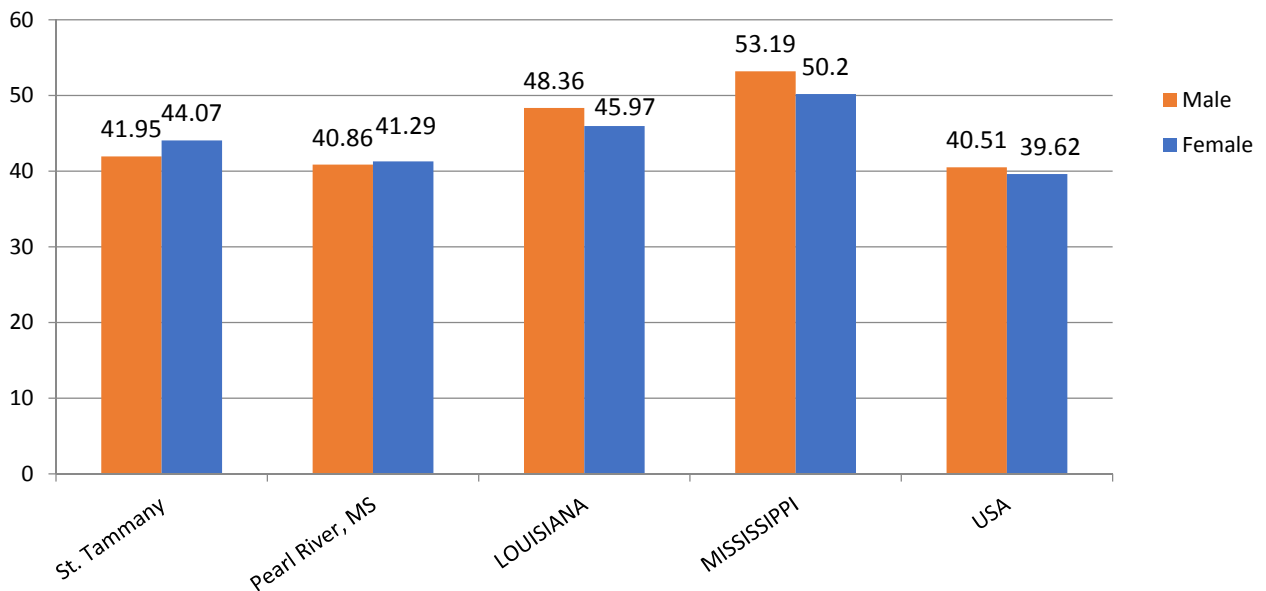
- St. Tammany Parish, LA reports the highest rate of age-adjusted mortality due to stroke, for the study area, at 43.77 per 100,000 population.
- The Healthy People 2020 goal is for mortality due to stroke to be less than or equal to 33.8 per 100,000 population; all of the study area parishes/counties report rates higher than this goal.

**Mortality - Stroke - Age-Adjusted Death Rate,
 (Per 100,000 Pop.), 2007-2011**

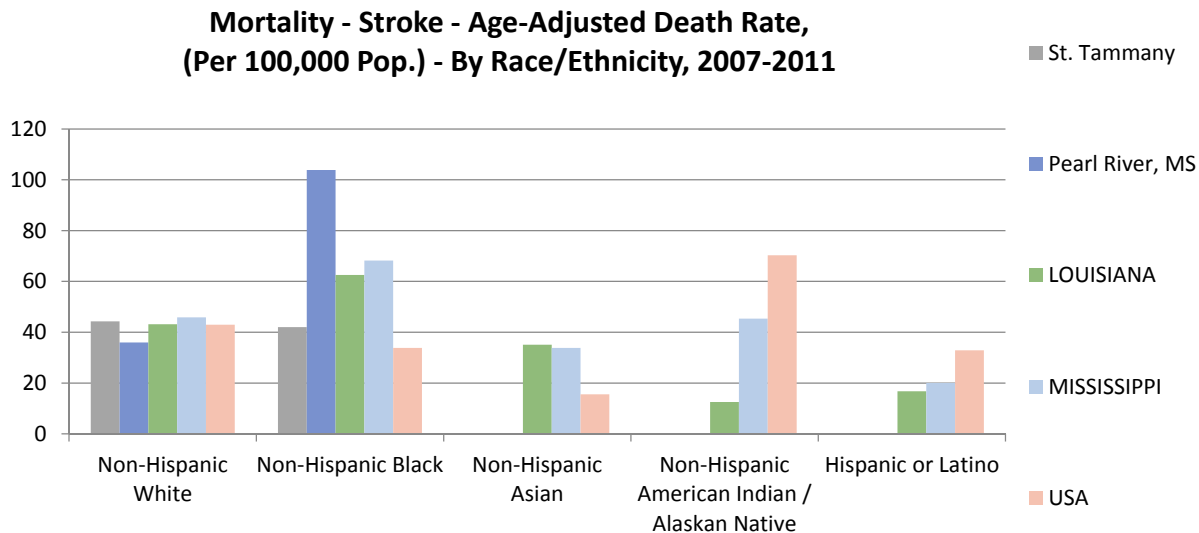


- On a national level, men are more likely to die as a result of stroke than women (40.51 per 100,000 pop. vs. 39.62); for the study area, it is slightly more female.

**Mortality - Stroke - Age-Adjusted Death Rate,
 (Per 100,000 Pop.) - By Gender, 2007-2011**

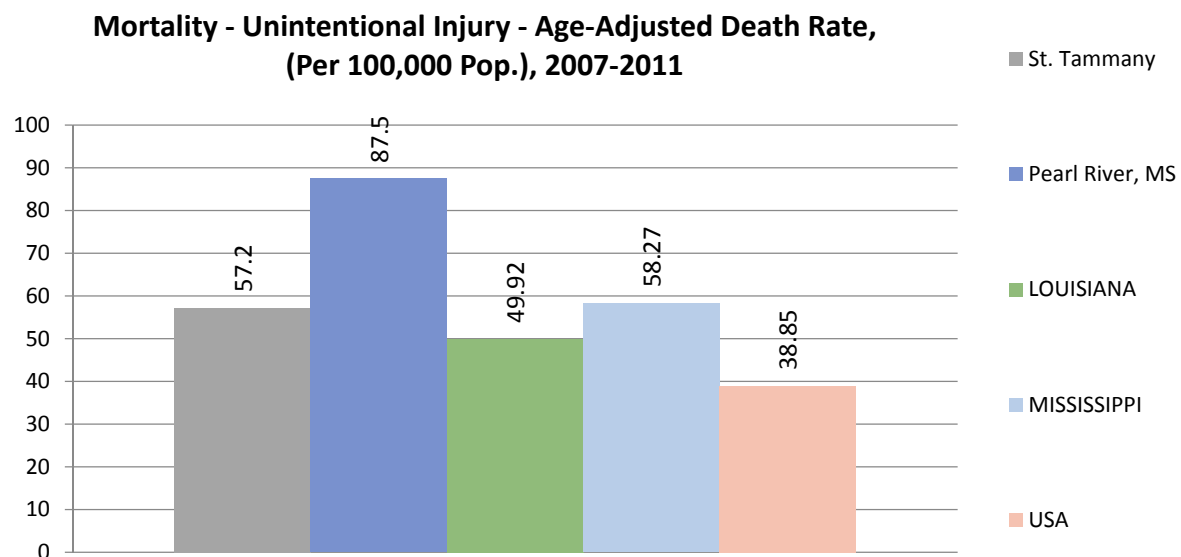


- The Non-Hispanic Black population of Pearl River County, MS reports the highest rate of death as a result of stroke, for the study area, at 103.83 per 100,000 population.



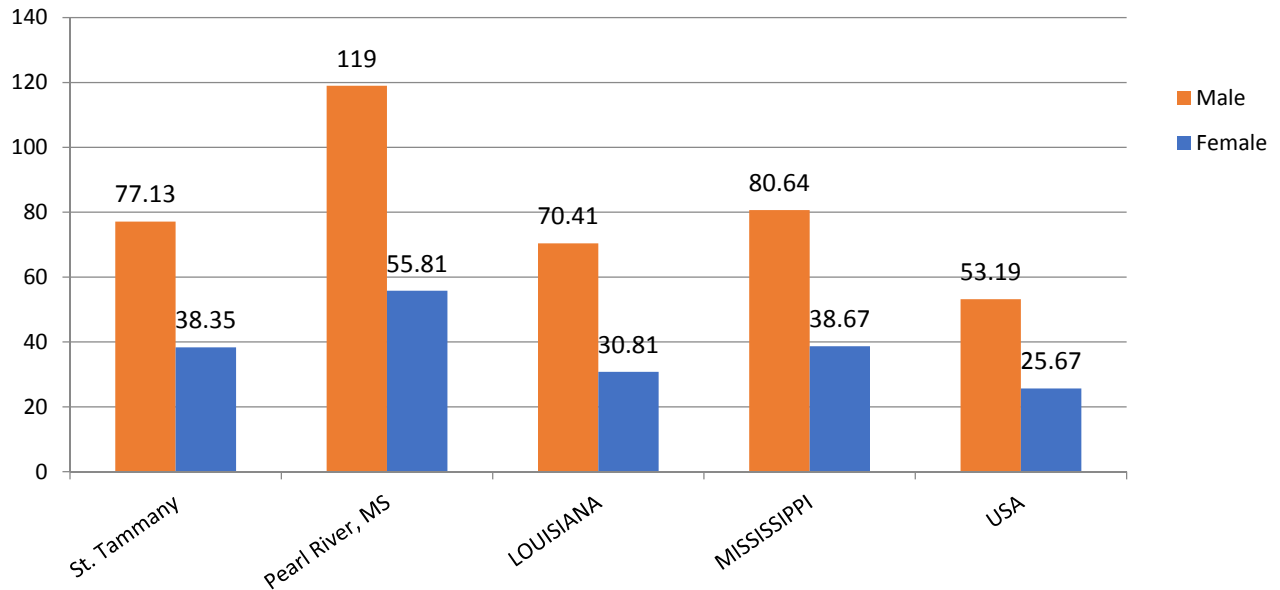
Mortality – Unintentional Injury

- Pearl River County, MS reports the highest rate of age-adjusted mortality due to unintentional injury, for the study area, at 87.5 per 100,000 population.
- The Healthy People 2020 goal is for mortality due to unintentional injury to be less than or equal to 36.0 per 100,000 population; all of the study area parishes/counties report rates higher than this goal.



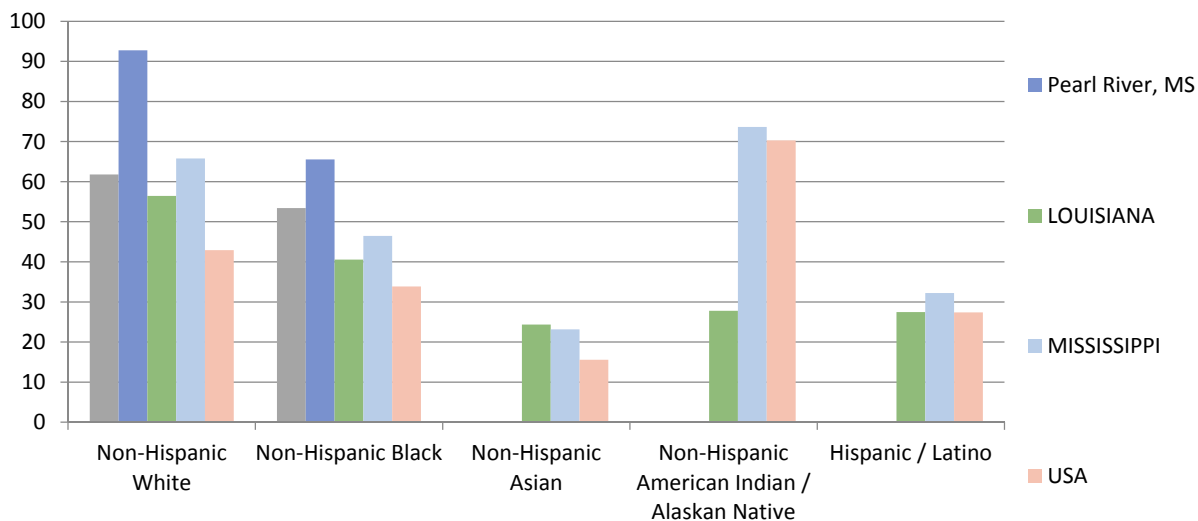
- On a national level and across all of the study area parishes/counties, men are far more likely to die as a result of unintentional injury than women.

**Mortality - Unintentional Injury - Age-Adjusted Death Rate,
 (Per 100,000 Pop.) - By Gender, 2007-2011**



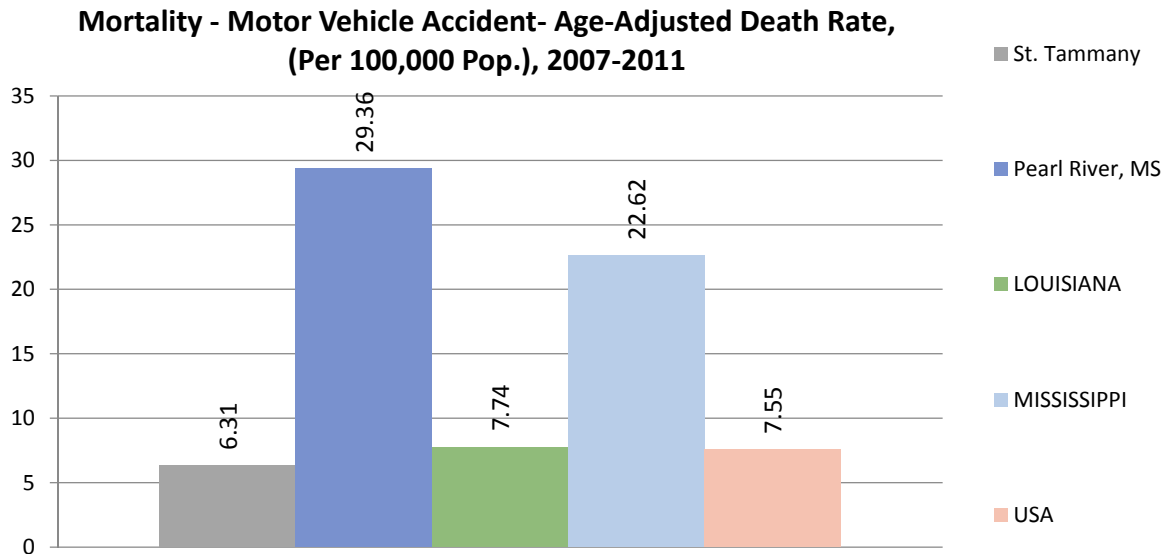
- The Non-Hispanic White population of Pearl River County, MS reports the highest rate of mortality due to unintentional injury, for the study area, at 92.76 per 100,000 population.

**Mortality - Unintentional Injury - Age-Adjusted Death Rate,
 (Per 100,000 Pop.) - By Race/Ethnicity, 2007-2011**

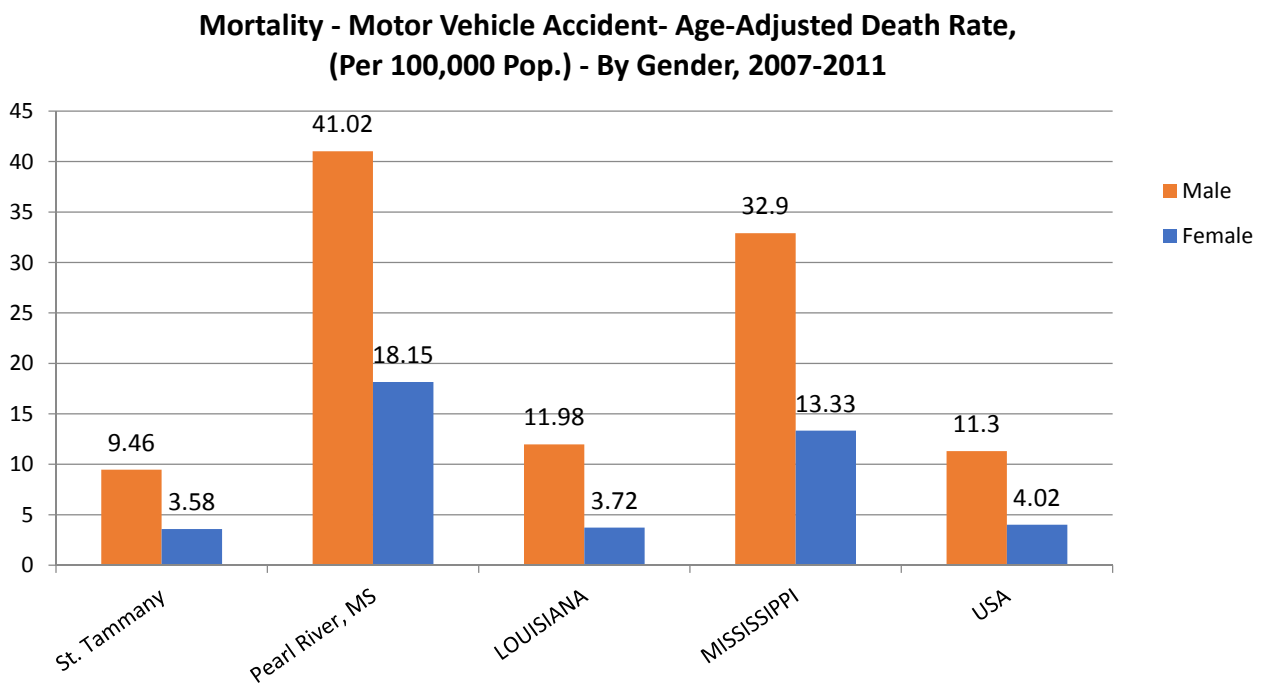


Mortality – Motor Vehicle Accident

- Pearl River County, MS reports the highest rate of deaths due to motor vehicle accidents, for the study area, at 29.36 per 100,000 population; this is higher than the national rate of 7.55 per 100,000 population. This rate is also much higher than the other study area parishes/counties which are closer to the national rate of 7.5.

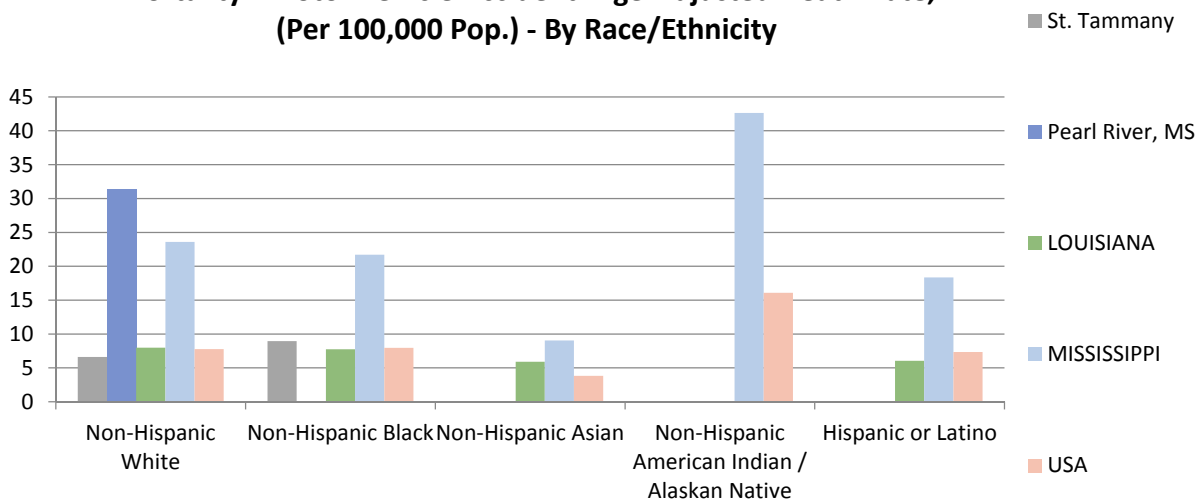


- Men are more likely to die as a result of a motor vehicle accident than women.



- The Non-Hispanic American-Indian/Alaskan Native population of the State of Mississippi reports the highest rate of death due to motor vehicle accident at 42.64 per 100,000 population. Pearl River County, MS follows with the Non-Hispanic White population at 31.35 per 100,000 population.

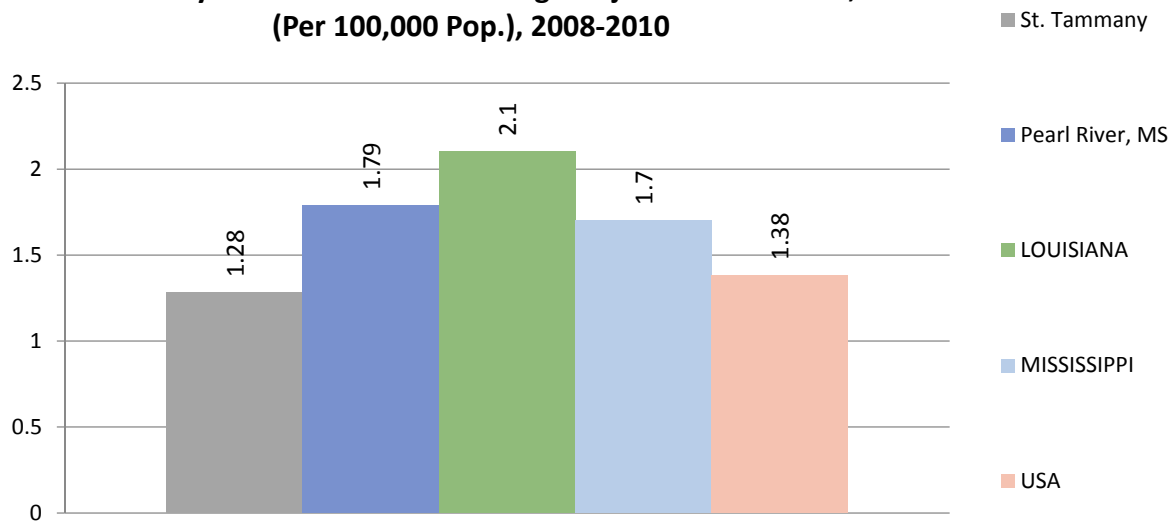
Mortality - Motor Vehicle Accident- Age-Adjusted Death Rate, (Per 100,000 Pop.) - By Race/Ethnicity



Mortality – Pedestrian Accident

- Pearl River County, MS reports the highest rate of age-adjusted mortality due to pedestrian accident, for the study area, at 1.79 per 100,000 population.
- The Healthy People 2020 goal is for mortality due to pedestrian accident to be less than or equal to 1.3 per 100,000 population; St. Tammany Parish, LA reports rates already lower than this HP2020 Goal.

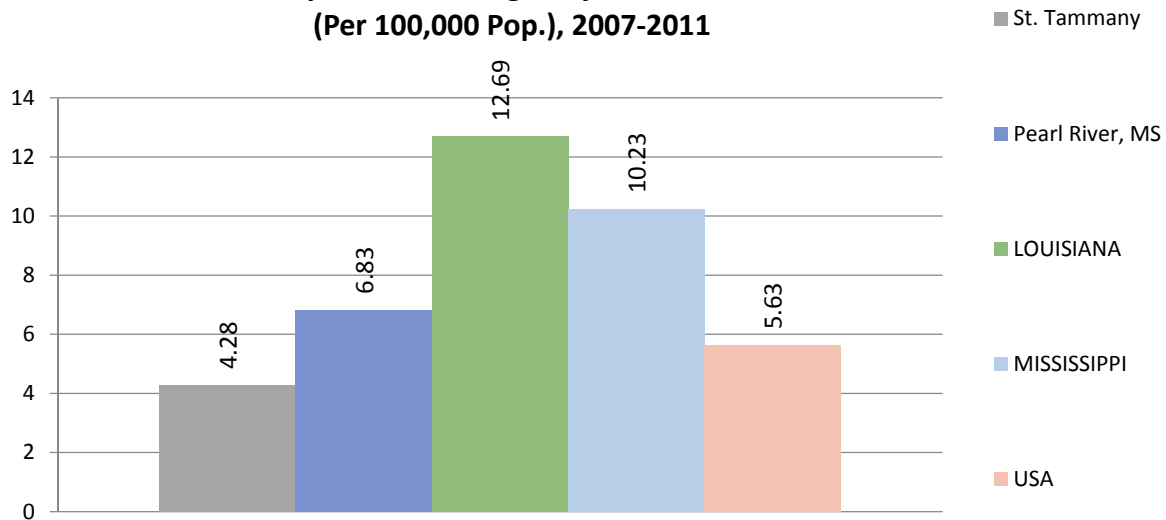
Mortality - Pedestrian Accident- Age-Adjusted Death Rate, (Per 100,000 Pop.), 2008-2010



Mortality – Homicide

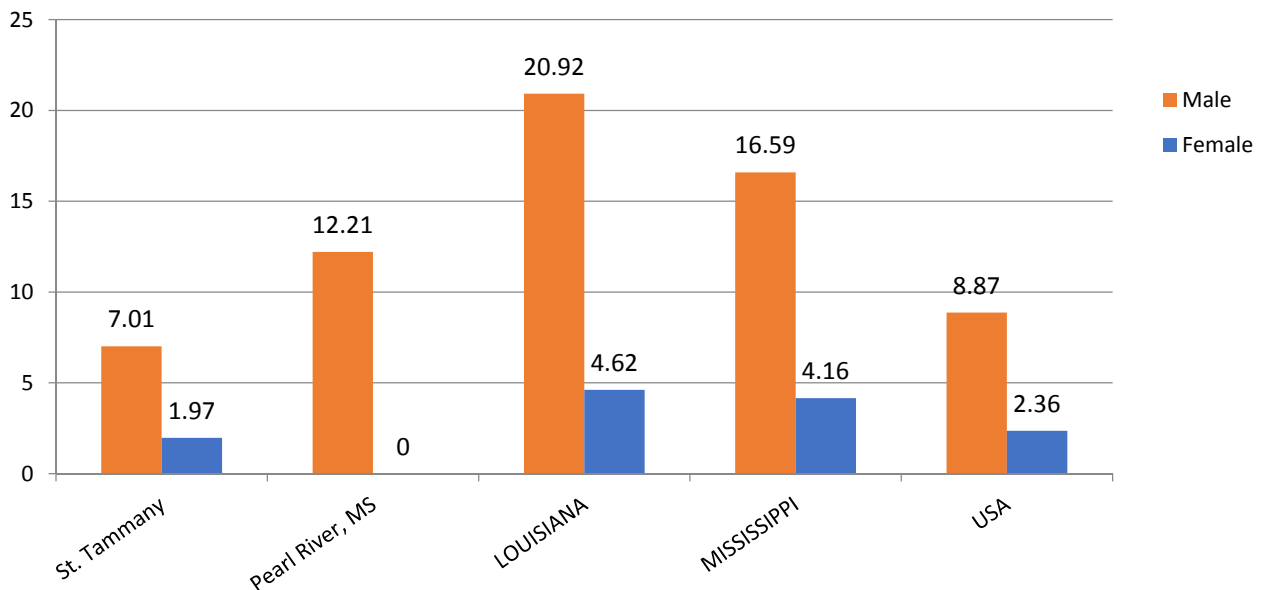
- Pearl River County, MS reports the highest rate of age-adjusted mortality due to homicide, for the study area, at 6.83 per 100,000 population; this rate is higher than the national rate (5.63) and all of the other study area parishes/counties.
- The Healthy People 2020 goal is for mortality due to homicide to be less than or equal to 5.5 per 100,000 population; St. Tammany Parish, LA reports rates already lower than this HP2020 Goal.

**Mortality - Homicide- Age-Adjusted Death Rate,
 (Per 100,000 Pop.), 2007-2011**



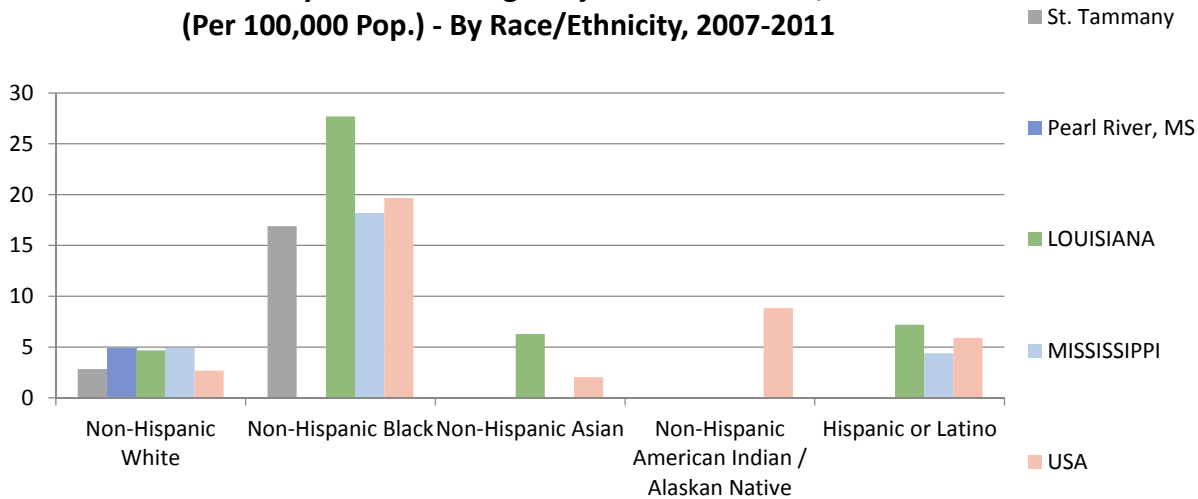
- Men are more likely to die as a result of homicide than women.

**Mortality - Homicide- Age-Adjusted Death Rate,
 (Per 100,000 Pop.) - By Gender, 2007-2011**



- The Non-Hispanic Black population of St. Tammany Parish, LA reports the highest rate of death as a result of homicide across the study area at 16.89 per 100,000 population.

Mortality - Homicide- Age-Adjusted Death Rate, (Per 100,000 Pop.) - By Race/Ethnicity, 2007-2011



Mortality – Suicide

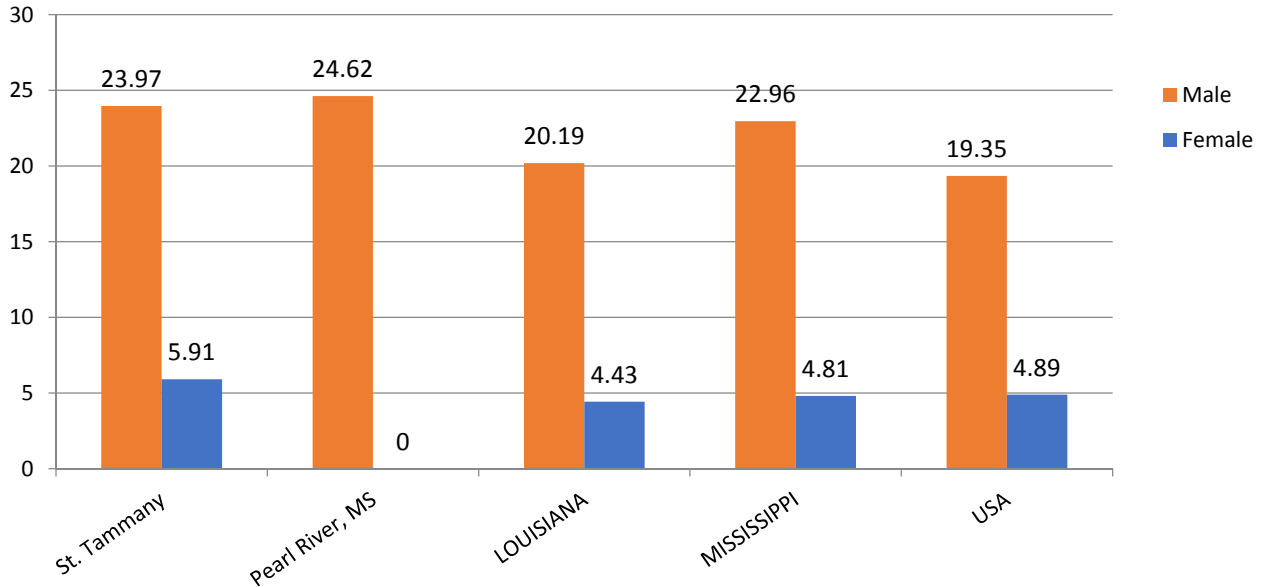
- Both St. Tammany Parish, LA and Pearl River County, MS reports a high rate of age-adjusted mortality due to suicide at 14.53 and 14.35 per 100,000 population; this rate is higher than the national rate (11.82) and both study area states.
- The Healthy People 2020 goal is for mortality due to suicide to be less than or equal to 10.2 per 100,000 population; all the study area parishes/counties report rates higher than this HP2020 Goal.

Mortality - Suicide- Age-Adjusted Death Rate, (Per 100,000 Pop.), 2007-2011



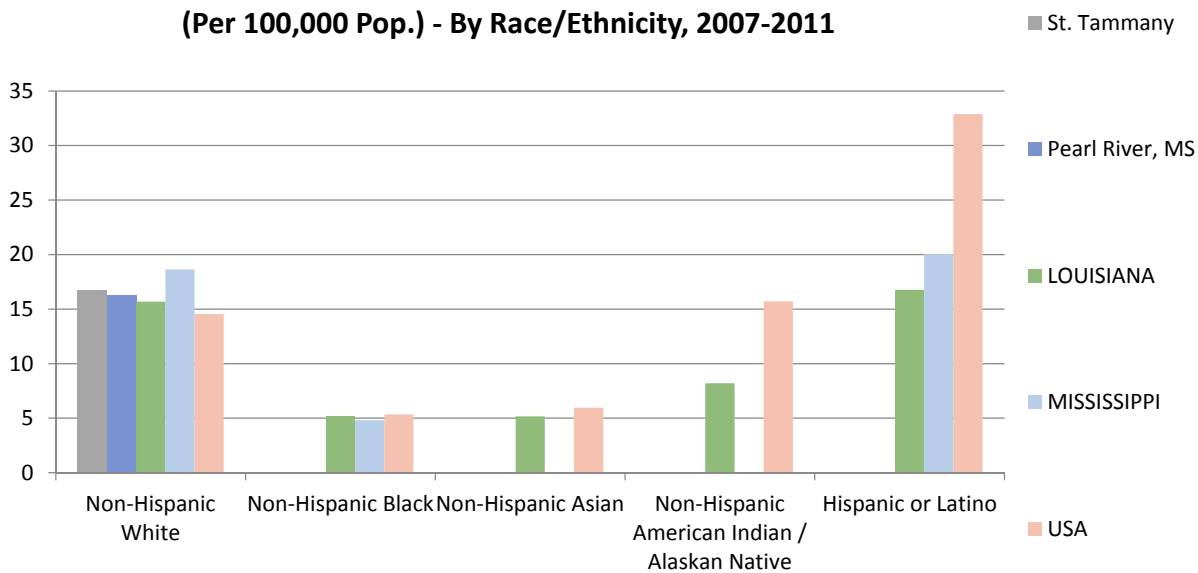
- Men are more likely than women to die as a result of a suicide.

**Mortality - Suicide- Age-Adjusted Death Rate,
 (Per 100,000 Pop.) - By Gender, 2007-2011**



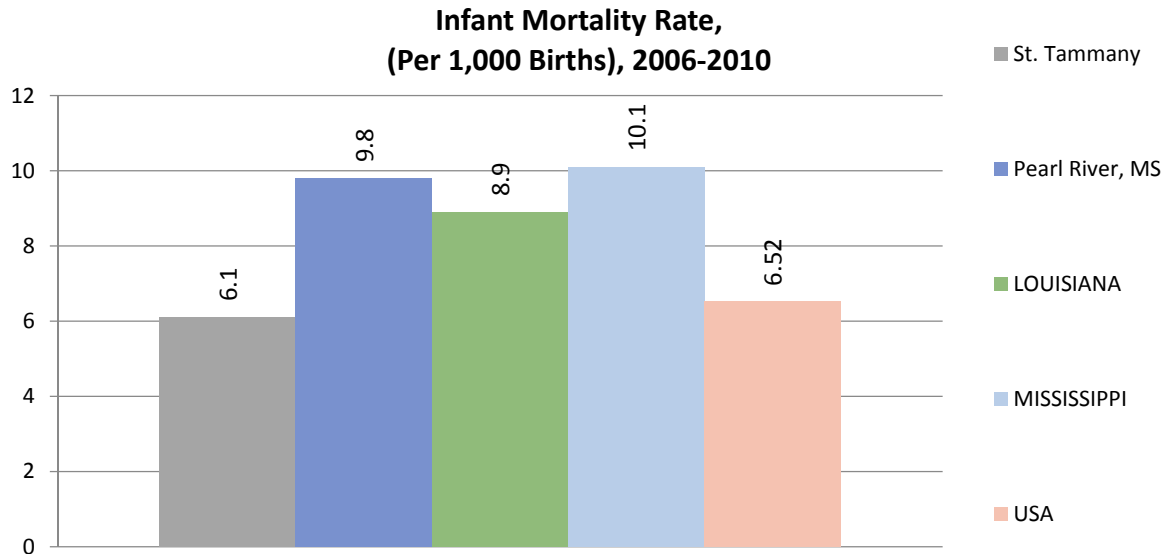
- The Hispanic/Latino population of the U.S. reports the highest rate of suicide at 32.88 per 100,000 population.
- For the study area, the Non-Hispanic White population of St. Tammany Parish, LA reports the highest rate of suicide at 16.72 per 100,000 population.

**Mortality - Suicide- Age-Adjusted Death Rate,
 (Per 100,000 Pop.) - By Race/Ethnicity, 2007-2011**

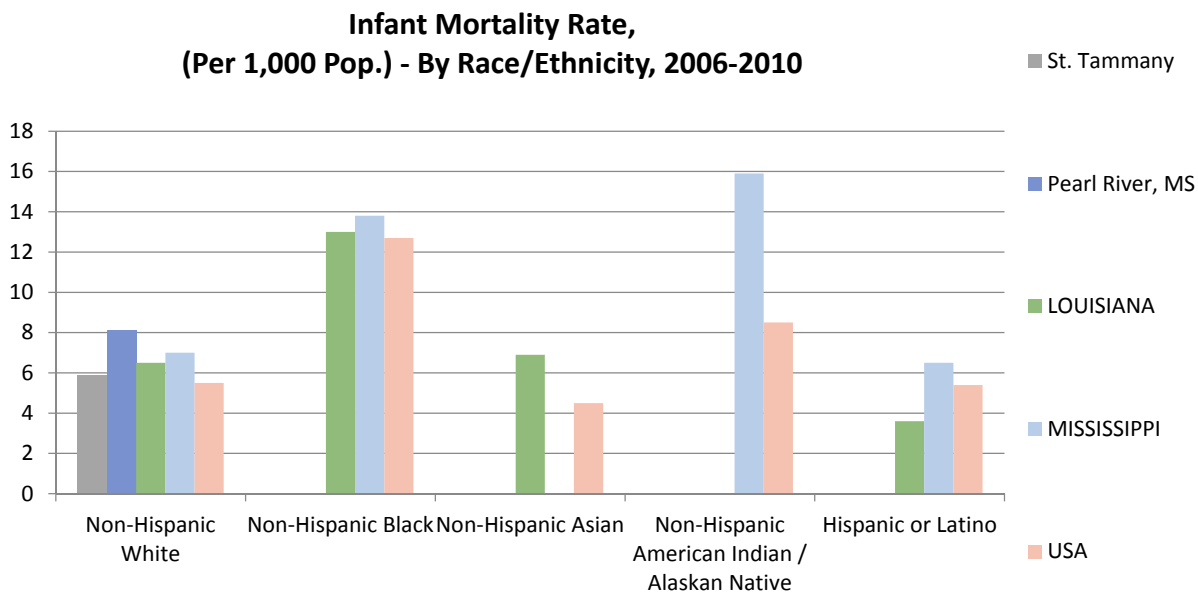


Infant Mortality Rate

- Pearl River County, MS reports the highest rate of infant mortality due, for the study area, at 9.8 per 1,000 births; this rate is higher than the national rate of 6.52 per 1,000 births.
- The Healthy People 2020 goal is for infant mortality to be less than or equal to 6.0 per 1,000 births; all study area parishes/counties report rates higher than this HP2020 Goal.



- The Non-Hispanic White population of Pearl River County, MS reports the highest rate of infant mortality, for the study area, parishes/counties at 8.1 per 1,000 births.

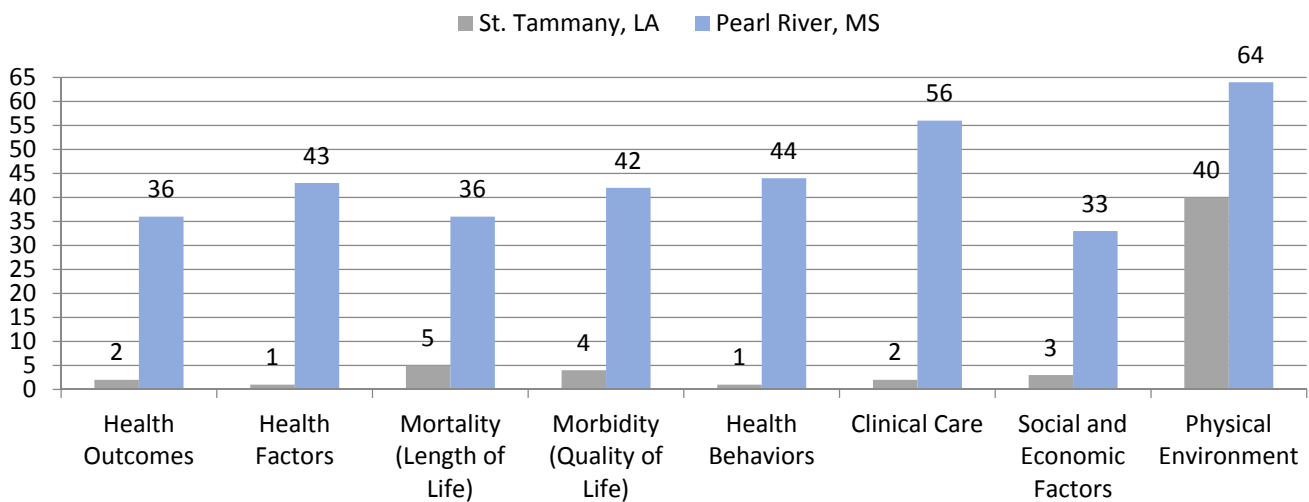


County Health Rankings

The County Health Rankings were completed as a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.²³

Each parish/county receives a summary rank for its health outcomes, health factors, and also for the four different types of health factors: health behaviors, clinical care, social and economic factors, and the physical environment. Analyses can also drill down to see specific parish/county-level data (as well as state benchmarks) for the measures upon which the rankings are based. Parishes/Counties in each of the 50 states are ranked according to summaries of more than 30 health measures. Those having high ranks, e.g. 1 or 2, are considered to be the “healthiest.” Parishes/Counties are ranked relative to the health of other parishes/counties in the same state on the following summary measures:

- Health Outcomes – Rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.
- Health Factors – Rankings are based on weighted scores of four types of factors:
 - Health behaviors
 - Clinical care
 - Social and economic
 - Physical environment
- Louisiana has 64 parishes and Mississippi has 82 counties. A score of 1 indicates the “healthiest” parish/county for the state in a specific measure. A score of 64 (for LA) or 82 (for MS) indicates the “unhealthiest” parish/county for the state in a specific measure.



²³ 2015 County Health Rankings. Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute

Key Findings from County Health Rankings:

- Pearl River County, MS reports the highest ranks (unhealthiest parish of the study area) for the all of the County Health Rankings:
 - A rank of 33 for Social and Economic Factors.
 - A rank of 36 for:
 - Health Outcomes
 - Mortality (Length of Life)
 - A rank of 42 for Morbidity (Quality of Life)
 - A rank of 43 for Health Factors.
 - A rank of 44 for Health Behaviors.
 - A rank of 56 for Clinical Care.
 - A rank of 64 out of the worst possible 82 for Physical Environment.
- St. Tammany Parish, LA, LA ranks 40 out of the worst possible 64 for Physical Environment.

Substance Abuse and Mental Health

The Substance Abuse and Mental Health Services Administration (SAMHSA) gathers region specific data from the entire United States in relation to substance use (alcohol and illicit drugs) and mental health.

Every state is parceled into regions defined by SAMHSA. The regions are defined in the '*Substate Estimates from the 2010-2012 National Surveys on Drug Use and Health*'. Data is provided at the first defined region (i.e., those that are grouped).

The Substate Regions for Louisiana are defined as such:

- Regions 1 and 10 (Data for Regions 1 and 10 provided separately for this grouping only)
 - ✓ Region 1 – Orleans, Plaquemines, St. Bernard
 - ✓ Region 10 – Jefferson
- Regions 2 and 9
 - ✓ Region 2 – Ascension, East Baton Rouge, East Feliciana, Iberville, Pointe Coupee, West Baton Rouge, West Feliciana
 - ✓ Region 9 – Livingston, St. Helena, St. Tammany, Tangipahoa, Washington
- Region 3
 - ✓ Region 3 – Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, St. Mary, Terrebonne
- Regions 4, 5, and 6
 - ✓ Region 4 – Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, Vermilion
 - ✓ Region 5 – Allen, Beauregard, Calcasieu, Cameron, Jefferson Davis
 - ✓ Region 6 – Avoyelles, Catahoula, Concordia, Grant, La Salle, Rapides, Vernon, Winn
- Regions 7 and 8
 - ✓ Region 7 – Bienville, Bossier, Caddo, Claiborne, De Soto, Natchitoches, Red River, Sabine, Webster
 - ✓ Region 8 – Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, West Carroll

The Substate Region for Mississippi relevant to the MHCNO study area is defined as such:

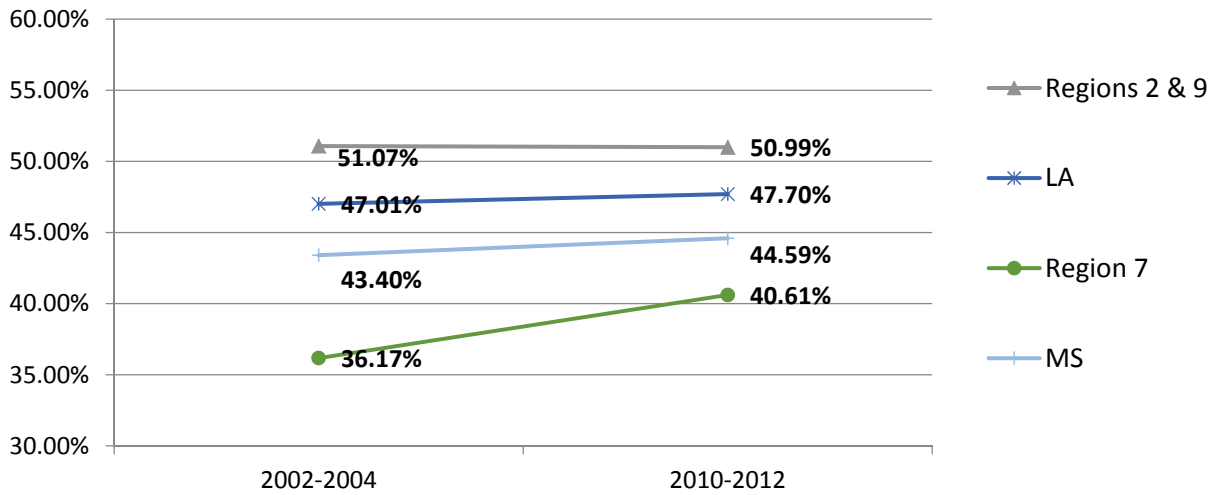
- Region 7
 - ✓ Region 7 – George, Hancock, Harrison, Jackson, Pearl River, and Stone

Data concerning alcohol use, illicit drug use, and psychological distress for the various regions of the study area are shown here.

Alcohol Use in the Past Month

- For the Study Area, Regions 2 & 9 (St. Tammany) reports the highest current rate of alcohol use in the past month at 50.99% of the population aged 12 and older. However, Region 7 has seen the largest increase in alcohol use rate from 2002-2004 to 2010-2012.

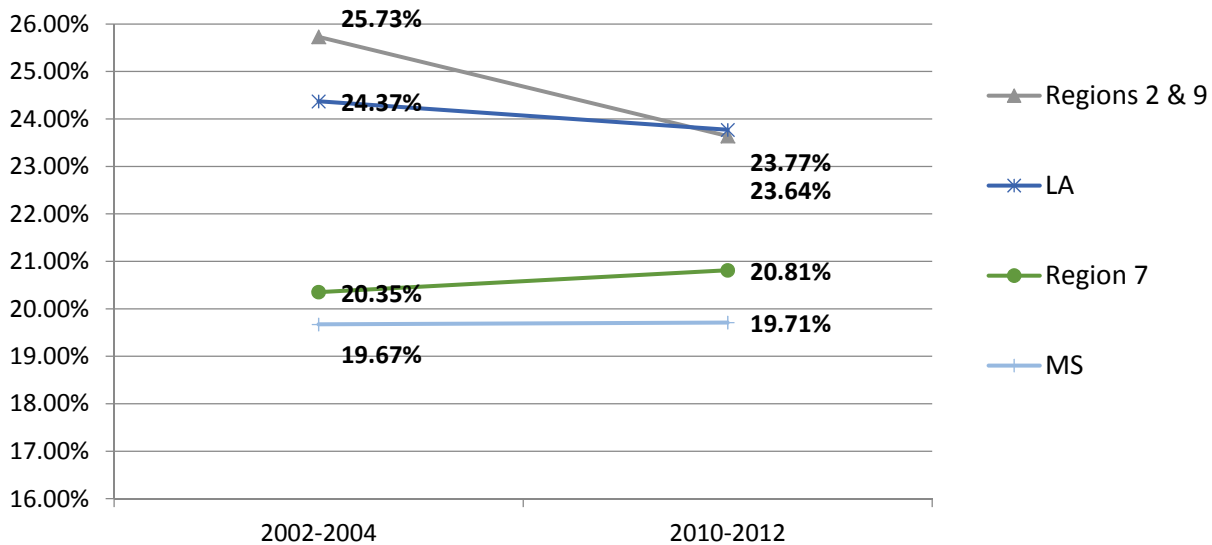
Alcohol Use in the Past Month



Binge Alcohol Use in the Past Month

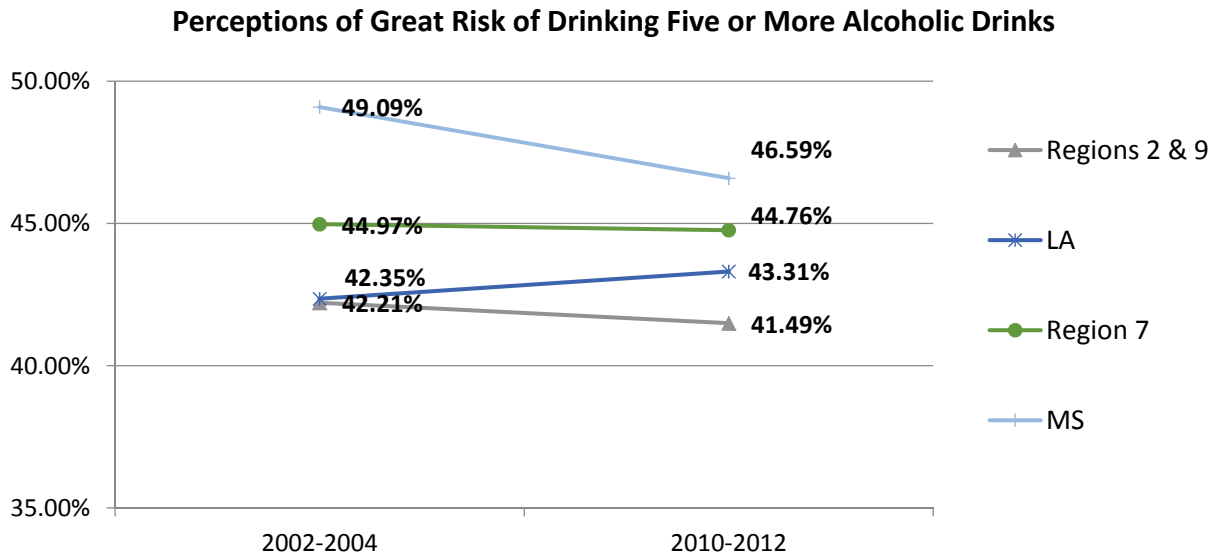
- Regions 2 & 9 (St. Tammany Parish, LA) reports the highest rate, for the study area, in binge alcohol use despite seeing a decrease from 2002-2004 to 2010-2012.

Binge Alcohol Use in the Past Month



Perceptions of Great Risk of Having Five or More Alcoholic Drinks Once or Twice a Week

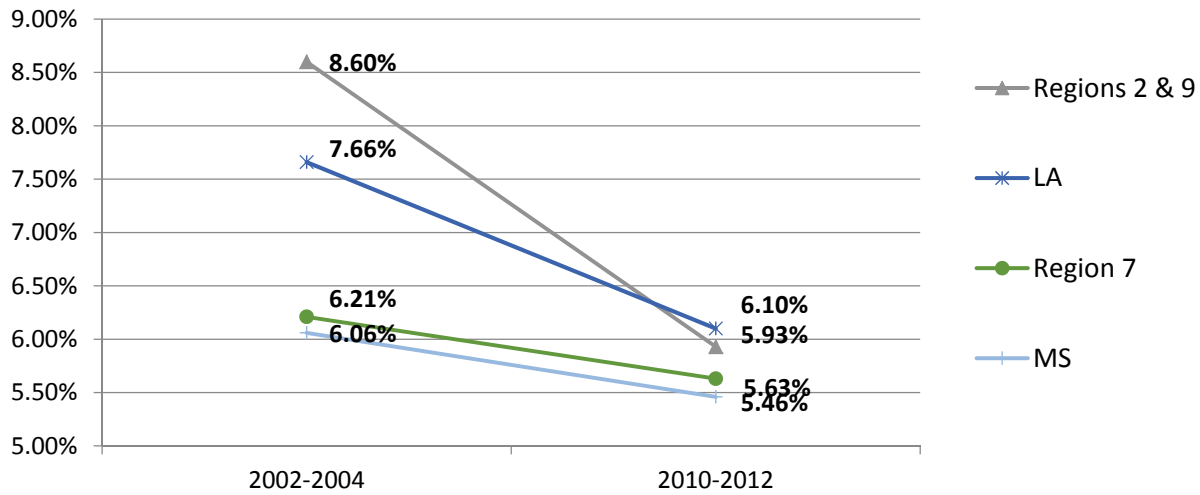
- Many of the study area regions have shown declines in the perceptions of risk of having five or more drinks once or twice a week from 2002-2004 to 2010-2012.
- The State of Mississippi rates of perceptions of risk of having five or more drinks once or twice a week have declined from 2002-2004 to 2010-2012.



Needing but Not Receiving Treatment for Alcohol Use in the Past Year

- All of the study area regions/states have seen declines in the rates of residents needing but not receiving treatment for alcohol use from 2002-2004 to 2010-2012.
- Region 2 & 9 (St. Tammany Parish, LA) reports the highest rate, for the study area, of residents who needed but did not receive treatment for alcohol use in the past year at 5.93%; this region has, however, seen a decline in the rate from 8.60% in 2002-2004.

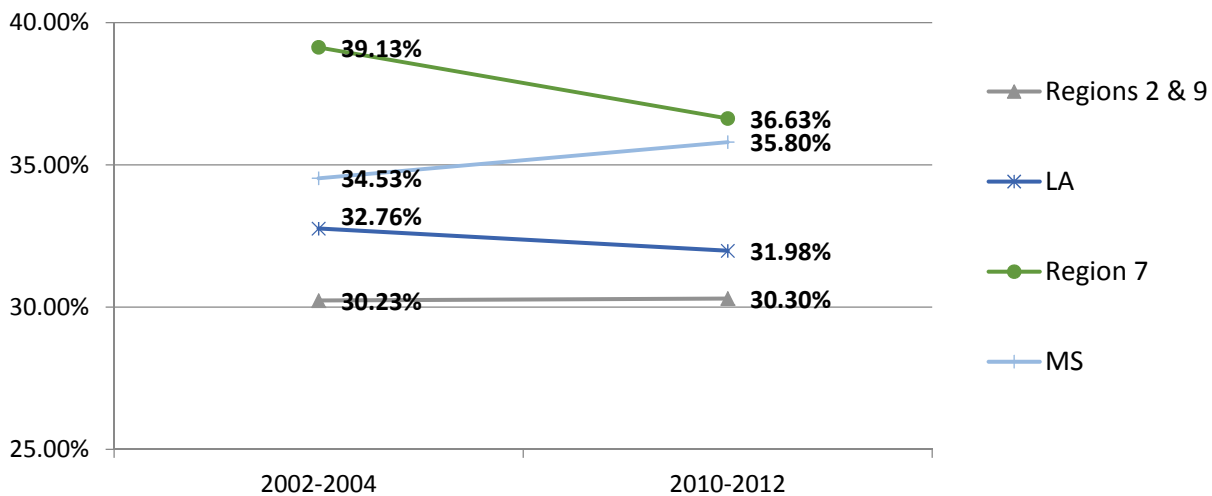
Needing but Not Receiving Treatment for Alcohol Use in the Past Year



Tobacco Use in the Past Month

- Region 7 (Pearl River County, MS) reports the highest current rate of tobacco use in the past month, for the study area, at 36.63%; this region has, however, seen a decline in the rate from 39.13% in 2002-2004.

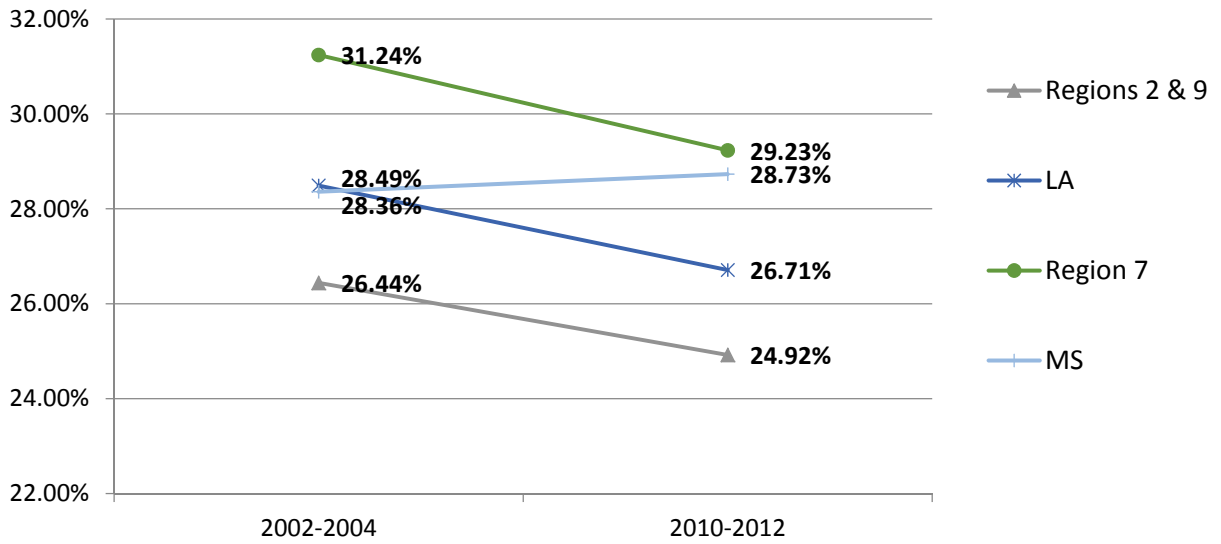
Tobacco Use in the Past Month



Cigarette Use in the Past Month

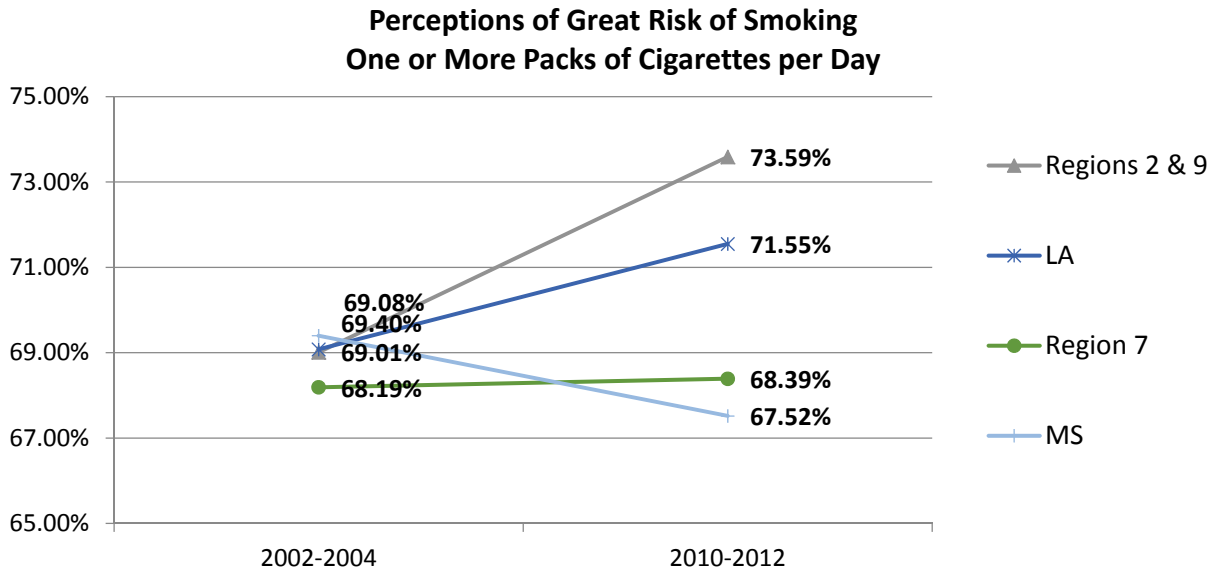
- Cigarette use in the past month is highest in the study area for Region 7 in the 2010-2012 analysis; it has seen a slight decline in rate over the years going from 31.24% to 29.23%.

Cigarette Use in the Past Month



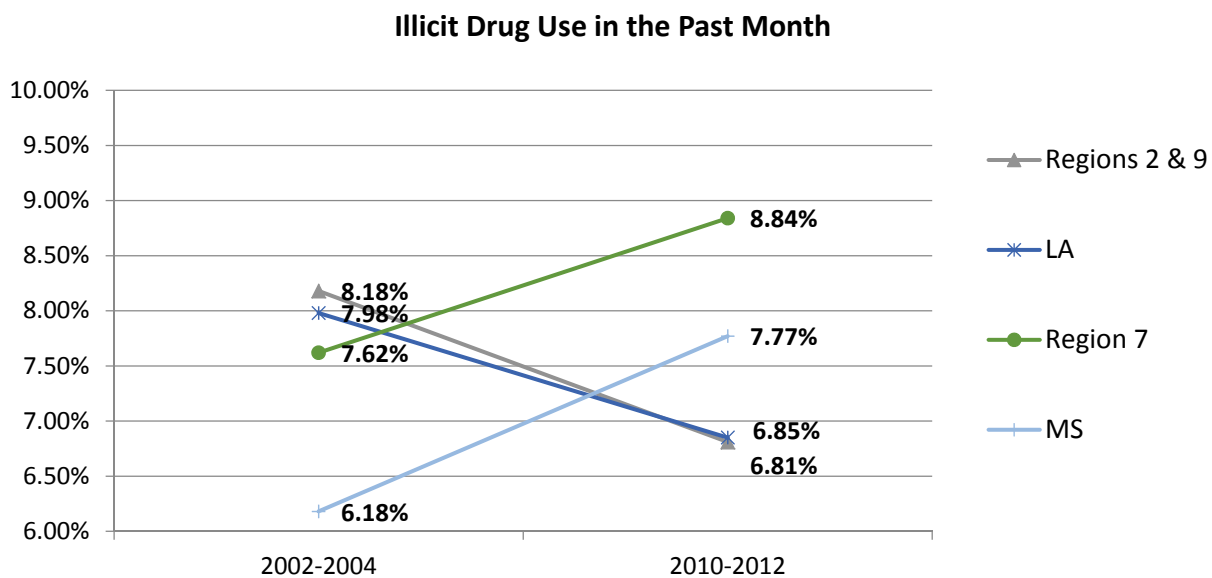
Perceptions of Great Risk of Smoking One or More Packs of Cigarettes per Day

- All of the study area regions, except for the State of Mississippi, report rises in the rate of perceptions of great risk of smoking one or more packs of cigarettes per day.



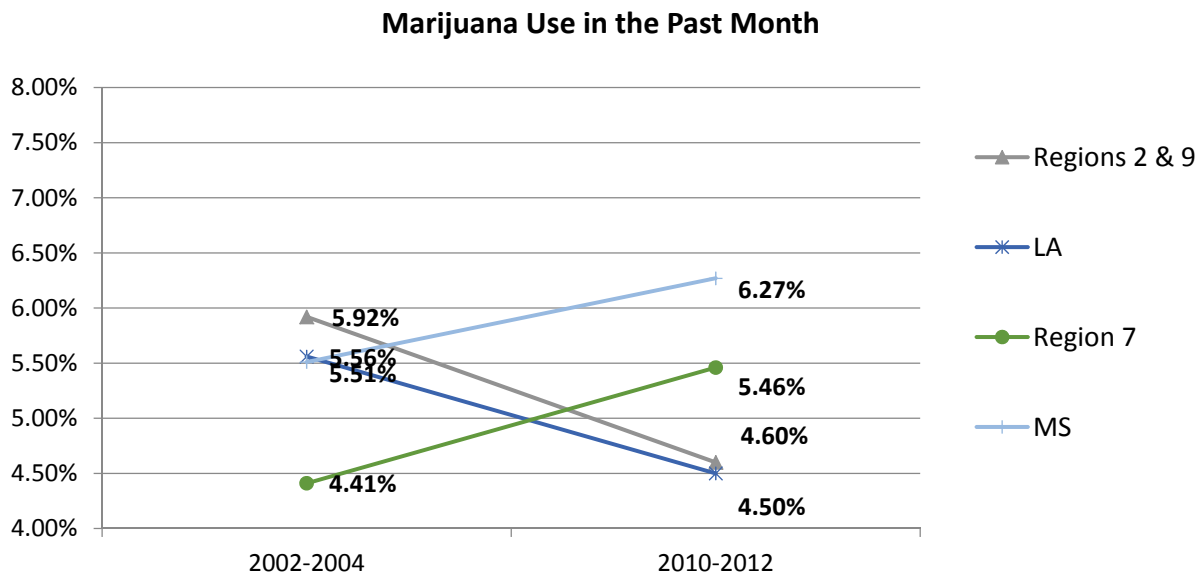
Illicit Drug Use in the Past Month

- Region 7 (Pearl River County, MS) reports the highest rate of illicit drug use in the past month with 8.84% of the population aged 12 and older participating in drug use.
- The Louisiana regions of SAMHSA report declines in rates of illicit drug use; the State of Mississippi reports rises in illicit drug use.



Marijuana Use in the Past Month

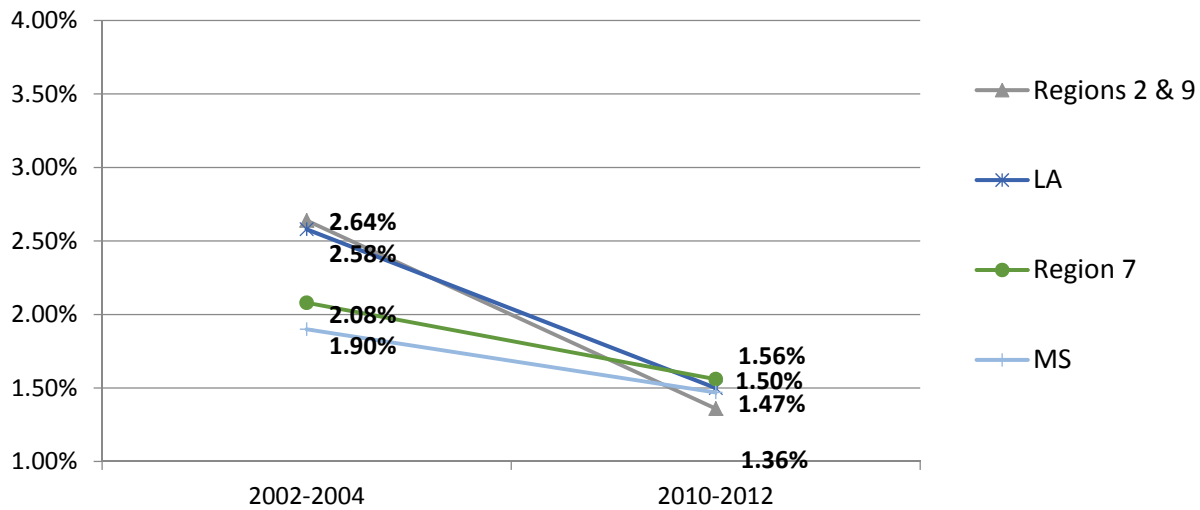
- Region 7 (Pearl River County, MS) reports the highest rate of marijuana use in the past month with 5.46% of the population aged 12 and older reporting use; this rate has been on the incline since 2002-2004 in which it was 4.41%.
- The Louisiana regions of SAMHSA report declines in rates of marijuana use; the State of Mississippi reports rises in marijuana use.



Cocaine Use in the Past Year

- Region 2 & 9 (St. Tammany Parish, LA) reports the highest rate of cocaine use in the past month with 1.56 % of the population aged 12 and older reporting use; this rate has been on the decline since 2002-2004 in which it was 2.08%.
- All of the study area regions have seen declines in the rates of cocaine use from 2002-2004 to 2010-2012.

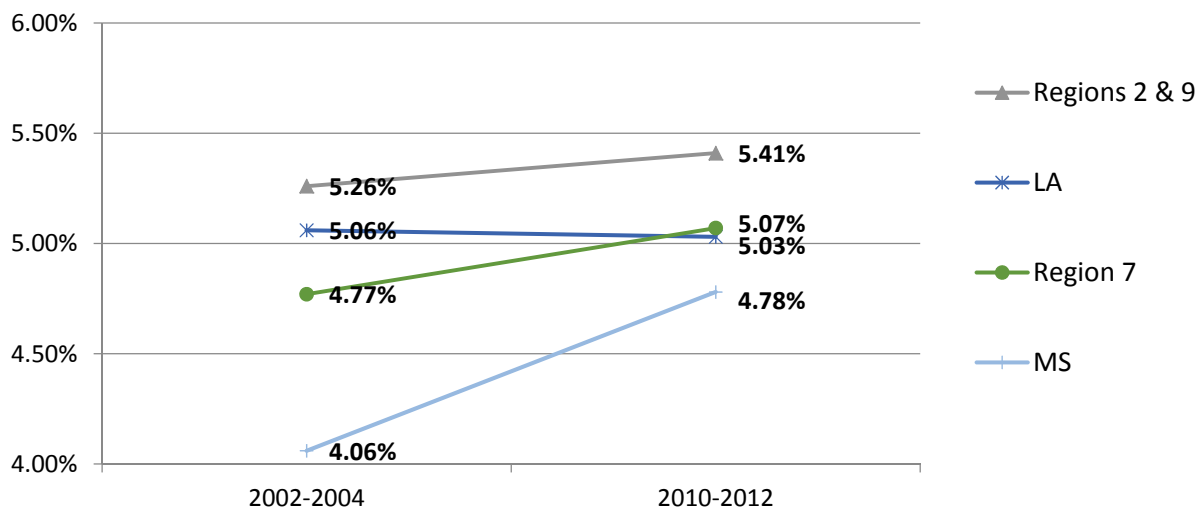
Cocaine Use in the Past Year



Nonmedical Use of Pain Relievers in the Past Year

- Regions 2 & 9 report the highest current rate of nonmedical use of pain relievers in the past year at 5.41% of the population aged 12 and over and have seen this rate rise since 2002-2004 when it was 5.26% (all of the other study area regions have report declines in this rate).

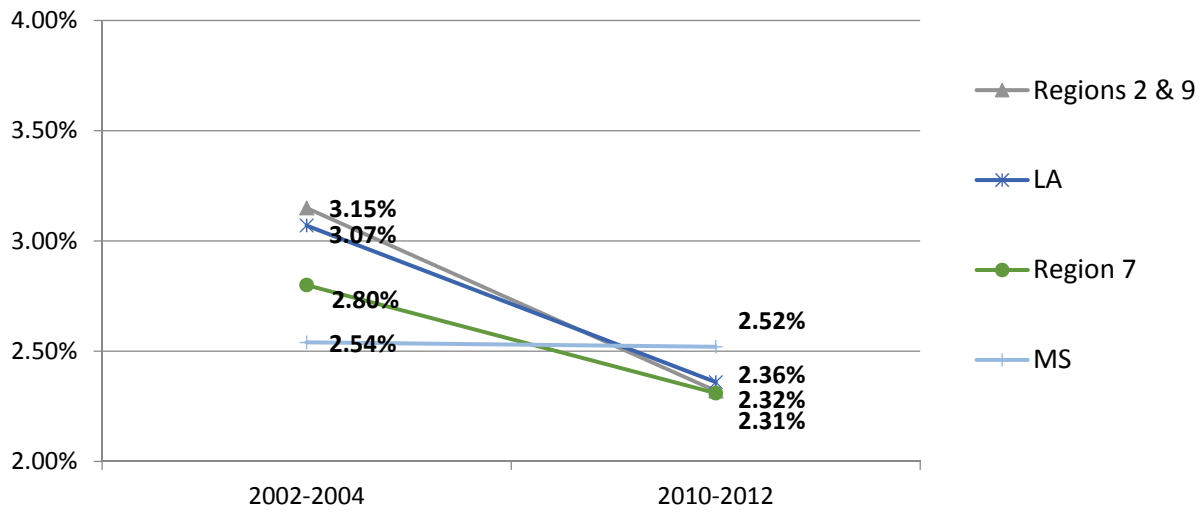
Nonmedical Use of Pain Relievers in the Past Year



Needing but Not Receiving Treatment for Illicit Drug Use in the Past Year

- All of the study area regions report declines in the rates of residents reporting needing but not receiving treatment for illicit drug use in the past year. Region 1 still reports the highest rate, for the study area, at 2.58% needing but not receiving treatment.

Needing but Not Receiving Treatment for Illicit Drug Use in the Past Year



America's Health Rankings

America's Health Rankings® is the longest-running annual assessment of the nation's health on a state-by-state basis. For the past 25 years, America's Health Rankings® has provided a holistic view of the health of the nation. America's Health Rankings® is the result of a partnership between United Health Foundation, American Public Health Association, and Partnership for Prevention™.

For this study, the Louisiana State report was reviewed. The following were the key findings/rankings for Louisiana:

- Louisiana Ranks:
 - ✓ 48th overall in terms of health rankings
 - ✓ 44th for smoking
 - ✓ 45th for diabetes
 - ✓ 45th in obesity
- Louisiana Strengths:
 - ✓ Low incidence of pertussis
 - ✓ High immunization coverage among teens
 - ✓ Small disparity in health status by educational attainment
- Louisiana Challenges:
 - ✓ High incidence of infectious disease
 - ✓ High prevalence of low birthweight
 - ✓ High rate of preventable hospitalizations
- Louisiana Highlights:
 - ✓ In the past year, children in poverty decreased by 15 percent from 31.0 percent to 26.5 percent of children.
 - ✓ In the past 2 years, physical inactivity decreased by 10 percent from 33.8 percent to 30.3 percent of adults.
 - ✓ In the past 20 years, low birthweight increased by 15 percent from 9.4 percent to 10.8 percent of births. Louisiana ranks 49th for low birthweight infants.
 - ✓ In the past 2 years, drug deaths decreased by 25 percent from 17.1 to 12.9 deaths per 100,000 population.
 - ✓ Since 1990, infant mortality decreased by 32 percent from 11.8 to 8.2 deaths per 1,000 live births. Louisiana now ranks 47th in infant mortality among states.

Table 7. America's Health Rankings - Louisiana

Measure	Rank	Value	Measure	Rank	Value
Air Pollution	26	9.2	Infectious Disease	48	
All Determinants	48	-0.53	Insufficient Sleep	34	37
All Outcomes	44	-0.273	Lack of Health Insurance	39	16.7
Binge Drinking	21	16.3	Low Birthweight	49	10.8
Cancer Deaths	47	217.4	Median Household Income	50	39,622
Cardiovascular Deaths	46	307.5	Obesity	45	33.1
Children in Poverty	44	26.5	Obesity – Youth		13.5
Chlamydia	47	597.9	Occupational Fatalities	47	8.2
Cholesterol Check	26	76.2	Overall	48	-0.803
Colorectal Cancer Screening	39	61.5	Personal Income, Per Capita	29	41,204
Dental Visit, Annual	48	56.1	Pertussis	1	1.6
Dentists	39	49.6	Physical Activity	46	67.8
Diabetes	45	11.6	Physical Inactivity	46	32.2
Disparity in Health Status	16	26.5	Poor Mental Health Days	43	4.2
Drug Deaths	27	12.9	Poor Physical Health Days	38	4.2
Excessive Drinking	22	17.7	Premature Death	45	9625
Fruits	44	1.18	Preterm Birth	49	15.3
Heart Attack	41	5.3	Preventable Hospitalizations	48	80.3
Heart Disease	40	5	Primary Care Physicians	20	123.7
High Blood Pressure	47	39.8	Public Health Funding	27	69.01
High Cholesterol	41	40.7	Salmonella	47	33.7
High Health Status	47	44.4	Smoking	44	23.5
High School Graduation	46	72	Stroke	45	4
Immunization - Adolescents	11	72.6	Suicide	12	12.5
Immunization – Children	31	69.1	Teen Birth Rate	44	43.1
Immunization Dtap	16	87.9	Teeth Extractions	48	9.6
Immunization HPV female	12	42.1	Underemployment Rate	23	12.7
Immunization MCV4	9	87.7	Unemployment Rate, Annual	15	6.2
Income Disparity	48	0.491	Vegetables	49	1.64
Income Disparity Ratio	1	5.68	Violent Crime	44	496.9
Infant Mortality	47	8.2	Youth Smoking		12.1

Figure 4. Louisiana Health Rankings Bubble Chart

