2019 Community Health Needs Assessment

CHRISTUS Health Shreveport-Bossier

CHRISTUS SHREVEPORT-BOSSIER Health System

18-0700

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In addition, the following individuals contributed to the data collection, analysis, writing, and editing of this report from the Louisiana Public Health Institute.

Barrie Black, MPH
Program Manager, Healthy Communities
Louisiana Public Health Institute

Michelle Lackovic, MPH
Senior Analyst, Evaluation and Research
Louisiana Public Health Institute

Sandra Veronica Serna, MPH
Associate Director, Healthy Communities
Louisiana Public Health Institute

Lisa Tobe, MPH, MFA
Executive Director
Wildflower Consulting

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About the Louisiana Public Health Institute (LPHI)

LPHI, founded in 1997, is a statewide 501(c)(3) nonprofit and public health institute that translates evidence into strategy to optimize health ecosystems. Our work focuses on uncovering complementary connections across sectors to combine the social, economic, and human capital needed to align action for health. We champion health for people, within systems, and throughout communities because we envision a world where everyone has the opportunity to be healthy. For more information, visit www.lphi.org.

Executive Summary

CHRISTUS Health Shreveport-Bossier is a Catholic, nonprofit system serving communities in Bossier, Caddo, Claiborne, Desoto, Lincoln, Natchitoches, Sabine, Webster, and Winn Parishes. As part of their mission and to meet federal IRS 990H requirements, CHRISTUS Health contracted with the Louisiana Public Health Institute (LPHI) to conduct and document the community health needs assessment (CHNA) and community health improvement plan (CHIP) reports. The requirements imposed by the IRS for tax-exempt hospitals includes conducting a CHNA every three years and to adopt an implementation strategy to meet the community health needs identified through the assessment. This document, which will be made publically available, serves as the CHRISTUS Health Shreveport-Bossier CHNA report for 2019-2022.

LPHI worked with CHRISTUS Health Shreveport-Bossier using a mixed methods approach to conduct the CHNA. Existing data for this nine-parish footprint was compiled from local and national sources including indicators for demographics, socioeconomic factors, access to care, health outcomes, and other health factors. Primary hospital data was also collected from CHRISTUS Health Shreveport-Bossier and analyzed. LPHI conducted a focus group, multiple interviews, and a validation meeting to gather input from the persons who represent the broad interests of the community served by the hospital facility. Multiple priorities were identified based on issues of prevalence and severity according to the secondary data and stakeholder input.

With the guidance of the CHNA Advisory Committee and CHRISTUS Health leadership, three top priorities were identified: access to care, child safety & well-being, and disease prevention & management (cardiovascular health and cancers).

1. Access to care

   Access to appropriate quality care when needed was a concern raised by most participants. Although the Region had a higher rate of primary care physicians (95.9 per 100,000 persons) compared to the state and country, finding providers that would take new patients, especially with Medicaid, no insurance, or other types of subsidized coverage was difficult and usually entailed long waitlists. The rate of dentists (51.2 per 100,000 persons) and mental health providers (122.9 per 100,000 persons) in Northwest Louisiana was similar to the state, but well below national numbers.

   Overuse and misuse of the Emergency Room (ER) was also a concern. Participants acknowledged that many times the ER may be the only option for some to receive care, but also many non-emergency visits could be avoided through improved patient education on navigating the health system. Key barriers described by participants as reasons individuals do not access care appropriately included:

   - Not knowing where to go to get resources and services
   - Limited providers that care and treat you as family and lack of trust
   - Transportation, especially in rural areas
   - Lack of access points
   - Needing care during non-traditional hours
   - Cost of co-pays, insurance, and medications
   - Not seeking care or knowing to seek care early

2. Child Safety and Well-Being

   Teen births and high infant mortality rates among African Americans were noted concerns in the community. The infant mortality rate in the Region at 10.8 deaths per 1,000 births was far above the Healthy People 2020 Target, as well as the state and national averages with rates of 8.9 per 1,000 births and 6.5 per 1,000 births respectively. The percentage of live births with low birthweight (<2500grams) was also higher at 12% for the Region, compared to 11% for the state and 8% for the nation.

3. Disease Prevention and Management (focusing on cardiovascular health and cancers)

   The CDC cites chronic diseases and conditions, such as heart disease, stroke, cancer, diabetes, obesity, and arthritis, as some of the most common, costly, and preventable of all health problems affecting the American public.[1] Diseases of the heart was the leading cause of death in NWLA with an age-adjusted rate of 190 per 100,000 persons. Northwest Louisiana had higher age-adjusted rates of mortality due to cancers (186.1 per 100,000 persons) compared to the state and country. Like many Louisianans, participants were concerned about cancer, especially with mortality rates being high. The five types of cancer with the highest incidence rates (age-adjusted) in the state are colon and rectal, lung and bronchus, kidney and renal pelvis, breast in females, and prostate in males. Although the incidence rates for these types of cancers in the Shreveport-Bossier region were similar to the state averages, the incidence rates are higher than the average for the country. There are many factors associated with cardiovascular disease and cancers. This report also includes additional data and details regarding some these factors in the nine-parish region.

This CHNA report includes data for a number of needs for the Northwestern Louisiana region, including details regarding the three priorities. This report will be used by CHRISTUS Health Shreveport-Bossier as a resource to develop implementation strategies to improve community health over the next three years.

[1] Centers for Disease Control and Prevention. About Chronic Disease. https://www.cdc.gov/chronicdisease/about/index.htm

Introduction

CHRISTUS Health continues its mission "to extend the healing ministry of Jesus" in Northwest Louisiana and in service to communities in Bossier, Caddo, Claiborne, Desoto, Lincoln, Natchitoches, Sabine, Webster, and Winn Parishes.[2] CHRISTUS Health Shreveport-Bossier is a Catholic, nonprofit system owned and operated by CHRISTUS Health, Dallas, Texas. CHRISTUS Highland Medical Center is the main campus located in the City of Shreveport, LA. The bulk of Shreveport is in Caddo Parish, extending along the Red River into neighboring Bossier Parish. The CHRISTUS Health Shreveport-Bossier staff includes more than 600 physicians, 1,800 employees, and 200 volunteers. Areas of specialty include cardiovascular services, oncology, orthopedic services, primary care medicine, surgical services, and women's and children's services.[3]

As part of the mission and to meet federal IRS 990H requirements, CHRISTUS Health contracted with the Louisiana Public Health Institute (LPHI) to conduct the community health needs assessment (CHNA) and community health improvement plan (CHIP) reports.[4] The requirements imposed by the IRS for tax-exempt hospitals includes conducting a CHNA every three years and to adopt an implementation strategy to meet the community health needs identified through the assessment.[5] The CHNA must be documented, adopted by an authorized body at the hospital facility, and made publically available. The CHNA must include:

- A definition of the community served by the hospital facility and description of how the community was determined.
- A description of the process and methods used to conduct the CHNA.
- A description of how the hospital facility solicited and took into account input received from persons who represent the broad interests of the community it serves.
- A prioritized description of the significant health needs identified though the CHNA, including a description of the process and criteria used in identifying certain health needs as significant and prioritizing those needs.
- A description of resources potentially available to address the significant health needs identified.
- An evaluation of the impact of any actions that were taken to address significant health needs identified in the immediately preceding CHNA.[6]

This document serves as the CHRISTUS Health Shreveport-Bossier Community Health Needs Assessment report conducted in FY 2019 for 2019-2022. The hospital serves a majority of patients from a nine-parish area in Northwestern Louisiana. This CHNA report will be made publically available on the CHRISTUS Health website for future reference.

[2] https://www.christushealth.org/about/our-mission-values-and-vision
[3] https://www.christushealth.org/shreveport-bossier/about
[4] All statements and opinions herein were expressed by key informants and focus group participants and do not necessarily represent the view points and opinions of LPHI or its contractors.
[5] Hospital organizations use Form 990, Schedule H, Hospitals, to provide information on the activities and community benefit provided by its hospital facilities and other non-hospital health care facilities, which is separate from this report.
[6] https://www.irs.gov/charities-non-profits/community-health-needs-assessment-for-charitable-hospital-organizations-section-501r3

Methodology

The mixed-methods approach conducted for this report was based off methodology used by LPHI when contracted in 2012 and again in 2016 to complete the CHNA report for numerous CHRISTUS Health facilities. Originally informed by assessment materials developed by national organizations such as the Association for Community Health Improvement (ACHI), the Catholic Health Association of the United States (CHA), and the National Association of County and City Health Officials (NACCHO), this approach was further refined in partnership with LPHI's counterpart conducting the CHNA & CHIP process for CHRISTUS facilities in Texas, Texas Health Institute (THI), and the CHRISTUS Health corporate office. The process incorporates the following activities.

CHNA Advisory Committee

In support of the 2019 CHNA and 2019-2022 CHIP, the CHRISTUS Shreveport-Bossier Health System CHNA Advisory Committee met periodically with the CHRISTUS Shreveport-Bossier Health System Vice President, Mission Integration to work on the CHNA and upcoming CHIP. This Committee reviewed data collection materials developed by LPHI, including a list of recommended quantitative indicators, the key informant interview guide, and the focus group interview guide. The Advisory Committee also made recommendations for who to interview as key informants and who to invite as focus group participants. On February 11, 2019, the CHNA Advisory Committee met to review the data presented at the Validation meeting on January 24, 2019, as well as the ranking results. The Committee made recommendations to the hospital's executive leadership on which priority issues should be addressed as part of the corresponding community health implementation plan (CHIP). Further details regarding the prioritization process are provided in this report.

Define community

The geographic region of focus was determined in collaboration with CHRISTUS Health. Given that CHRISTUS Health Shreveport-Bossier serves patients primarily in the following 9-parish region, it made the most sense to define the community assessed in this report by the same region.

CHRISTUS Shreveport-Bossier Louisiana Parishes				
Bossier	Caddo	Claiborne	De Soto	Lincoln
Natchitoches	Sabine	Webster	Winn	

Gather input representing broad community

Per IRS regulations (Section 3.06 of Notice 2011-52), each facility must get input from people who fall into each of these three categories:

1) *Persons with special knowledge of or expertise in public health;*
2) *Federal, tribal, regional, state, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility;*
3) *Leaders, representatives, or members of medically underserved, low-income, and minority populations, and populations with chronic disease needs, in the community served by the hospital facility.*

In order to satisfy these requirements, a focus group and interviews were conducted with key informants. The Vice President, Mission Integration, with input from the CHNA Advisory Committee and other hospital colleagues, provided LPHI with a list of potential key informants. Many of the informants (often referred to as participants in this report) met one or more of the above requirements and were able to speak to the geographic region served by CHRISTUS Health Shreveport-Bossier. Appendix A includes a matrix detailing key informant affiliation in compliance with requirements.

Key informant interviews

The key informant semi-structured interview guide was designed to illicit responses about both the direct and indirect factors that influence the health of community members. The protocol was similar to the assessment conducted in 2016 with updates and changes based on feedback from CHRISTUS Health, and lessons learned.

The key informant interview guide included the following areas of focus: economic, social and environmental concerns, community health and wellness, behavioral risk factors, health care utilization, and access to care. Additional probes and follow up questions were designed to ensure the participant provided detailed responses, including opportunities to share information on assets in the community that could be tapped for future implementation planning. The guide was reviewed and approved by CHRISTUS Health Shreveport-Bossier representatives in October 2018 and then LPHI conducted interviews between November 2018 and January 2019.

Key informants were contacted by phone or email to initiate the scheduling of the interview. The interviewer provided a brief introduction to the project and explained the purpose of the interview, including how the data would be used and the time commitment to complete the interview. All key informants were assured that their names would not be associated with responses and that all results would be reported in aggregate. If the key informant agreed to participate, phone interviews were scheduled depending on interviewer and participant availability.

At the beginning of the scheduled interview, consent was obtained for interviewers to transcribe the discussion. The interviewer assigned a study number to the participant and no identifiers were shared. Participants were only asked about their names, job titles, and affiliation with CHRISTUS to confirm if they met one of the three IRS requirements.

Most interviews took around 45 minutes. Detailed notes comprised of quotes and the interviewer's general comments regarding each interview were documented, edited, and synthesized into a larger master notes

document. Analyses were then conducted to identify major themes, needs, assets, and quotations. For CHRISTUS Health Shreveport-Bossier, a total of 11 interviews were conducted.

Focus group feedback

Focus groups served as another mechanism to obtain community input. Like the key informant interview guide, the focus group guide was designed to encourage participants to think about the behavioral, environmental, and social factors that influence a person's health status, as well as health care utilization and the physical and mental health concerns within the geographic area of focus. Questions inquiring about existing community assets and ways CHRISTUS could partner with others, to address some of the factors discussed, were included in the guide. The guide was reviewed and approved by CHRISTUS Health Shreveport-Bossier representatives in October 2018.

A focus group for CHRISTUS Health Shreveport-Bossier was conducted November 8, 2018. Participants consisted of patients, staff, and providers from community health centers and school based health centers. LPHI facilitated the 2-hour focus group with dedicated note takers. Detailed notes were synthesized and analyzed similar to the key informant interviews.

Collect and analyze existing quantitative data

LPHI worked with CHRISTUS Health to adapt a list of potential indicators for analysis based off prior CHNA reports, as well as additional measures that became relevant through the process. Existing data for this nine-parish footprint was compiled from local and national sources and analyzed by a senior analyst at LPHI. Different indicators that affect health were compiled across the parishes, region, state, and national level including demographics, socioeconomic factors, access, health outcomes, and additional health factors. Where secondary data was not readily available or outdated, topics were representatively addressed in the qualitative instruments developed by LPHI. Primary hospital data was also collected from CHRISTUS Health and analyzed. A list of indicators was reviewed and approved by CHRISTUS Health Shreveport-Bossier representatives in October 2018. A summary of these quantitative indicators and their data sources are listed at end of report.

Community validation and prioritization

After all of the above data were analyzed, LPHI facilitated a 2-hour meeting at CHRISTUS Health Shreveport-Bossier, Highland Campus presenting a summary of the quantitative and qualitative findings (detailed further in this report) to obtain feedback and validate or update findings if needed. Participants represented employees of CHRISTUS Health Shreveport-Bossier, as well as leaders of different organizations and coalitions serving the community. Participants discussed if the data made sense, if anything surprised participants, and if any key indicators were missing or needed clarification. The participants then ranked what they thought were most important concerns using www.polleverywhere.com. Of the forty-two attendees, twenty-seven participated in the ranking exercise at the validation meeting held January 24, 2019 for CHRISTUS Health Shreveport-Bossier.

Feedback from the validation meeting was incorporated into LPHI's findings and then presented to the Vice President, Mission Integration, the CHNA Advisory Committee, and CHRISTUS Health Shreveport-Bossier leadership to prioritize what the hospital will feasibly tackle as part of the 2019-2022 Community Health Improvement Plan (CHIP).

Findings

The quantitative data and qualitative data were analyzed independently and then overlaid by theme to identify areas of agreement and areas of disconnect. Notes from both the interviews and focus groups were carefully read through to identify major themes, which are summarized below. Certain quotations from participants are also included. For the purposes of this report, "participant" refers to key informant interview participants and focus group participants, unless specified otherwise.

Demographics

The CHRISTUS Health Shreveport-Bossier region (often referred to as the Region, Northwest Louisiana, or NWLA in this report) includes the following nine Louisiana parishes: Bossier, Caddo, Claiborne, De Soto, Lincoln, Natchitoches, Sabine, Webster, and Winn. According to the 2013-2017 five-year American Community Survey (ACS) population estimates, the total population of the Region was 587,256.[7] The largest change in population since 2000 was the increase seen in Bossier Parish with a population of 98,310 in 2000 compared to 125,698 persons estimated for 2013-2017. During the same time period Caddo experienced a slight decline in population.[8] This Region was 51.2% urban, 32.9% rural, and 15.9% suburban with Caddo, Bossier, and Webster parishes being the only designated urban parishes in the Northwest region.[9] Maps of Hospital Administrative regions and rural parishes can be found in Appendix B.

Age distributions in Northwest LA were similar to the state with approximately 24% under 18 years of age, 61% between 18 and 64 years, and 15% over 65 years. Race was predominantly white at 57% and those identifying as Hispanic ethnicity was estimated to be 3%. Figure 1 illustrates the age and race makeup of the region. Sex distribution was 51% male and 49% female across the Region.[10]

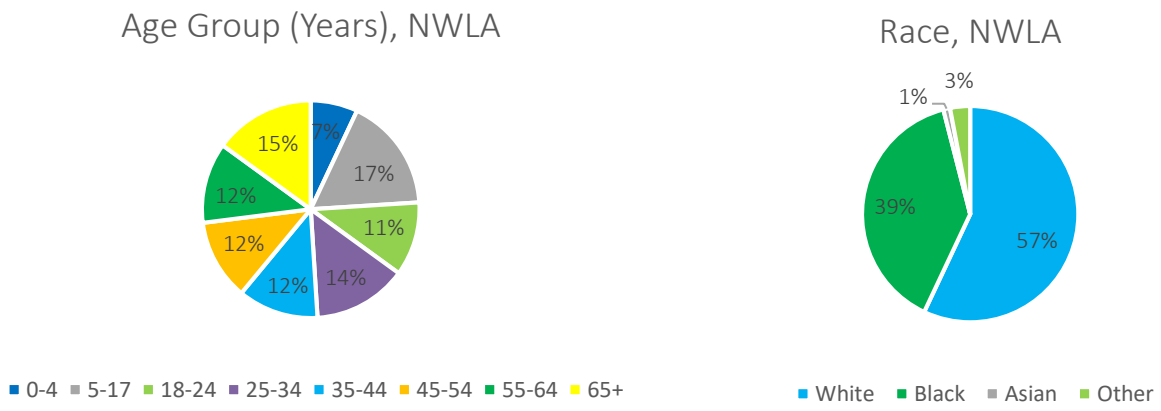


Figure 1: Demographic profile of age and race, NWLA, 2012-16

[7] Demographic indicators were compiled using Community Commons. Data source: U.S. Census Bureau American Community Survey (ACS) 2012-16. 5-year estimates are used to include all parishes with small populations.
[8] Aggregated using www.policymap.com. Source: 2000 U.S. Census, Summary File 3; 2010 U.S. Census Summary File 1; 2008-2012 U.S. Census American Community Survey (ACS); 2013-2017 U.S. Census ACS.
[9] Data source: U.S. Census Bureau American Community Survey ACS) 2012-16, 5-year estimates.
[10] Data source: U.S. Census Bureau ACS 2012-16, 5-year estimates.

Socioeconomic factors that impact health

Economics, choices, education. They all overlap. They are integrated.

There are many factors outside of clinical care that can impact population health. These factors include access to social and economic opportunities, the quality of schooling, and the cleanliness of water, food, and air.[11] As a result, participants were asked about economic, social and environmental concerns in the region. Participants discussed poor education, high poverty, affordable quality housing, access to transportation, cost of childcare, and violence as all factors they see impacting health in their communities. Seniors and those in rural areas were acknowledged as being most vulnerable in regards to housing and access to resources.

Poor education was a major topic raised by participants including low literacy rates, low educational attainment, and students not learning what was needed to obtain good employment.

We have a significant dropout rate…. We have great problems with children entering school ready to start learning. We have problems with children learning to read at a 3rd grade level.

In divergence to what a few participants brought up about high school graduation rates, 84% of ninth grade cohorts graduated in four years across the Region according to U.S. Department of Education ED Facts, 2014-2015. This graduation rate was above average for both the Louisiana (80%) and the U.S. (83%). Although the percent of those graduating high school in four years was higher, that did not mean the quality of education was better. Only 51% of adults ages 25-44 in the Region obtained some post-secondary education, which was below the state (56%) and the U.S. (65%). See figure 2 below.[12]

Participants also discussed high rates of homeless and foster children, number of single parent households, as well as high number of grandparents raising children. Some participants related this to mental health and substance abuse issues many parents were experiencing. The percent of children under 18 in poverty was 33% in Northwest LA, ranging from 23% in Bossier Parish to 39% and 43% in both Caddo and Claiborne parishes respectively. The percent of children that live in a household headed by a single parent varied across the region, with the highest concentrations in Claiborne (59%) followed by Caddo (54%), which was well above the state percentage (44%).[13]

Participants expressed that crime was on the rise, especially in Shreveport, including domestic violence, teen violence, gun violence, and crimes associated with substance use. The violent crime rate across the Region was 480 per 100,000 persons, below the state average 510 per 100,000. The crime rate varied across parishes with De Soto experiencing the highest rate at 936 per 100,000 persons, followed by Caddo at 600 per 100,000, and

[11] https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health
[12] Source: High school graduation rate. U.S. Department of Education, Ed Facts, 2014-2015.
[13] Sources: Child in Poverty, Small Area Income and Poverty Estimates, 2016. Children in single parent households, ACS 5-year estimate, 2012-2016.

then Lincoln Parish reporting the lowest at violent crime rate of 353 per 100,000 persons. See figure 2 for socioeconomic data by parishes, the region, the state, and country. [14]

I don't enjoy looking over my shoulder so I don't go to the park anymore…Crime used to be in parts of the city, now it is everywhere.

	% Graduate high school	% Some college	% Unemployed	% Children in poverty	% Single parent households	Violent crime rate per 100,000 pop.
Bossier	85	67.7	5.4	23	40	343
Caddo	75	57.2	6.6	39	54	600
Claiborne	83	37.8	6.7	43	59	383
De Soto	96	49.5	7.4	29	49	936
Lincoln	90	64.5	6.5	32	43	353
Natchitoches	80	57.9	7.0	37	47	564
Sabine	87	44.9	6.9	27	37	269
Webster	83	45.6	8.6	35	45	381
Winn	78	36.9	7.8	32	43	493
Northwest LA	**84**	**51.0**	**8.0**	**33**	**46**	**480**
Louisiana	80	56.0	6.1	28	44	510
U.S.	83	65.0	4.9	20	34	380

Figure 2: Socio-economic factors including parish, region, state and country comparisons.

As illustrated in figure 2 above, the percent of the population aged 16 or older unemployed and seeking work was 8% in Northwest LA, higher than the state and national averages. Bossier Parish experienced lower unemployment at 5.4% compared to Webster with 8.6% unemployment.[15] According to the Bureau of Labor Statistics, the average employment count from 2017-2018 in the Northwest region was 219,127. Of those employed 20% were workers in health care and social assistance industries followed by 14% working in retail trade (see figure 3 below).[16]

Figure 3. Industry Sector (NAICS), NWLA	% Employed
Total number of workers	**219,127**
Health care and social assistance	20%
Retail trade	14%
Accommodation and food services	12%
Manufacturing	7%
Educational services	6%
Administrative and waste services	6%
Construction	5%

[14] Source: Violent crime rate, Uniform crime-reporting, Federal Bureau of Investigation, 2012-2014.
[15] Source: Unemployment: Bureau of Labor Statistics, 2016. Accessed through County Health Rankings, 2018.
[16] Source: Bureau of Labor Statics, Total number workers and percent of total workers by industry sector based on average employment counts for a 1-year period (Q3-Q4 2017, Q1-Q2 2018). The industry sector is coded to North American Industrial Classification System (NAICS).

Public administration	5%
Wholesale trade	4%
Professional and technical services	3%
Transportation and warehousing	3%
Finance and insurance	3%
Mining	2%
Other services, except public administration	2%
Arts, entertainment, and recreation	2%
Real estate and rental and leasing	2%
Information	1%
Utilities	1%
Management of companies and enterprises	1%
Agriculture, forestry, fishing and hunting	1%

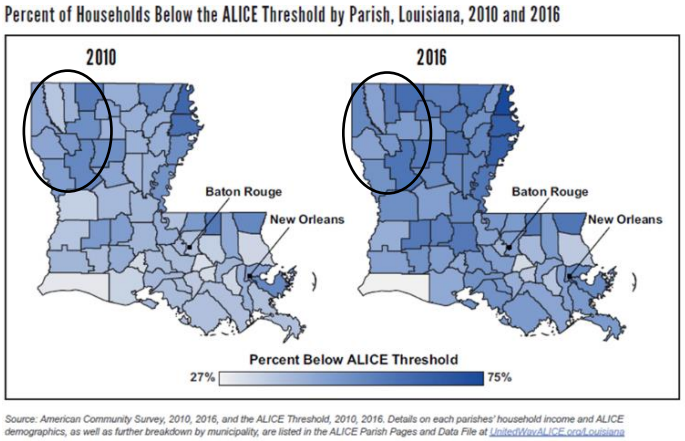
Figure 3: Total number workers and percent of total workers by industry sector based on average employment counts for a 1-year period (Q3-Q4 2017, Q1-Q2 2018).

Since 2016, United Way has produced an Asset Limited, Income Constrained, Employed (ALICE) report for Louisiana. The purpose of the report is to provide community leaders with a more accurate snapshot of the number of families facing financial hardship not captured by traditional federal poverty measures. The ALICE threshold is the average income that a household needs to afford the basic necessities defined by the Household Survival Budget for each parish in Louisiana. The household survival budget (adjusted for different parishes and household types) calculates the actual cost of basic necessities- housing, childcare, food, transportation, health care, technology (phone), and taxes. Households below the threshold include both ALICE and poverty level households.

In the Northwest Region, 54% of households did not meet the ALICE threshold, the average income a household needs to afford the basic necessities. The map in Figure 4 illustrates that the percent of households below the ALICE threshold (including those in poverty) has increased from 2010 to 2016, not just in the Northwest, but across the state. Figure 4 also shows the percentage of households in each parish that did not meet the ALICE threshold in 2016. [17]

When you have poverty existing in someone's life all those things [homelessness, food insecurity, affording child care, unemployment, crime…] can follow suit.

[17] ALICE: A Study of financial hardship in Louisiana, 2018 Report. https://www.launitedway.org/alice-report-update-louisiana-released-january-2019



Parish	Total Households	% ALICE & Poverty
Bossier	47,458	46%
Caddo	96,532	53%
Claiborne	5828	61%
De Soto	10,259	46%
Lincoln	17,144	56%
Natchitoches	14,393	59%
Sabine	8,984	50%
Webster	15,806	56%
Winn	5,440	57%

Figure 4: Percentage of households that do not meet the ALICE threshold (including those in poverty)

Other aspects of the physical environment were raised, such as access to healthy food and cost of quality housing, especially for seniors and in rural areas. Below, figure 5 shows over 30% of the population was struggling with low food access as of 2015 and 29% were facing housing cost burden as of 2016. *Low food access* reports the percentage of the population living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. *Housing Cost Burden (30%)* illustrates the percentage of the households where housing costs exceed 30% of total household income each month. This indicator provides a measure of housing affordability and excessive shelter costs for owners and renters. [18]

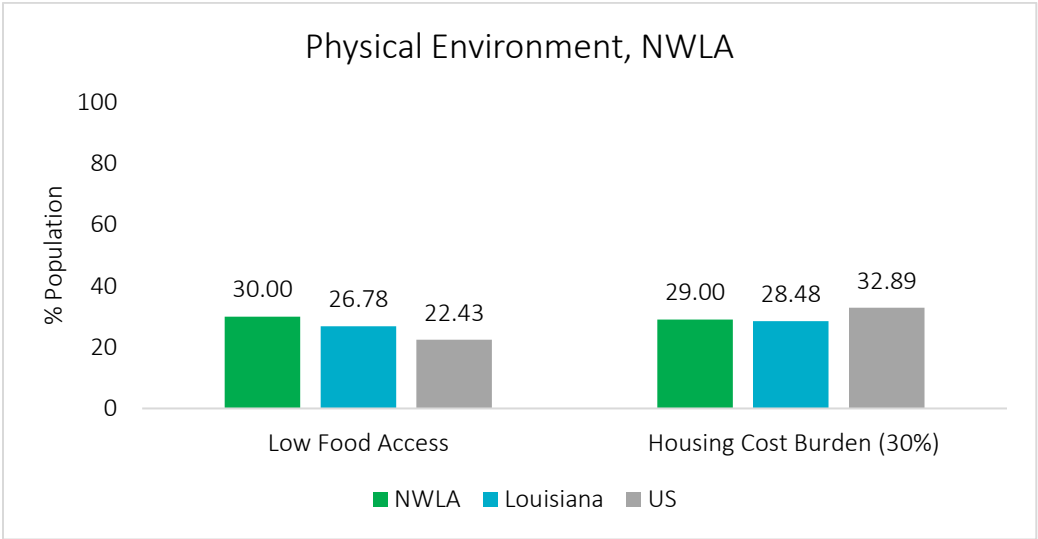


Figure 5: Percentage of population with low food access and housing cost burden, NWLA

[18] Sources: Food Access: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2015. Housing Cost Burden: US Census Bureau, American Community Survey. 2012-16. Health Indicators report prepared by Community Commons, November 5, 2018.

Participants discussed a range of other social issues. Human trafficking was a concern, especially related to interstate corridors and casino/ gaming industry. According to U.S. Department of Homeland Security, human trafficking is a modern form of slavery where people are forced into sex or labor by threats of violence, fraud, coercion, or other forms of exploitation.[19] Access to transportation was a major underlying issue in the Region discussed by participants that affected people not only accessing resources, but also jobs.

There is not enough effort to coordinate the resources and not enough resources to address all the issues.

Access to Healthcare

Access to healthcare is an indisputable determinant of health. The Institute of Medicine defined access in 1993 as the "timely use of personal health services to achieve the best health outcomes."[20] Healthy People 2020 adds to this definition to state that "access to comprehensive quality health care services is important to the achievement of health equity," and asserts that access encompasses not only health insurance coverage, but availability and quality of services, timeliness, and sufficient numbers of health care providers within the workforce.[21]

It's really when things get too bad for them or they are unable to cope with physical or emotional health they end up in Emergency Room.

In spite of the range of available health care options, many participants indicated a need for more services that are both affordable and accessible. Finding providers that would take new patients, especially with Medicaid, no insurance or other types of subsidized coverage was difficult and usually entailed long waitlists. Cost of care, including prescriptions, was a major concern for participants. Over use and misuse of ER was also a concern of participants. Many acknowledged that many times the ER may be the only option for some to receive care (because of clinic hours, lack of payment/ insurance, etc.), but also many non-emergency visits could be avoided through improved patient education on navigating the health system.

Key barriers described by participants as to reasons individuals do not access care appropriately included:

[19] https://nam.edu/human-trafficking-is-a-public-health-issue-our-interview-with-nam-fellow-and-human-trafficking-expert-dr-hanni-stoklosa/

[20] Institute of Medicine, Committee on Monitoring Access to Personal Health Care Services. Access to health care in America. Millman M, editor. Washington, DC: National Academies Press; 1993

[21] Healthy People 2020 [Internet]. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion [2016]. Available from: https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services.

- Not knowing where to go to get resources and services
- Limited providers that care and treat you as family
- Lack of trust
- Transportation, especially in rural areas
- Being homeless
- Lack of access points
- Needing care during non-traditional hours
- Cost of insurance, co-pays, and/ or medications
- Not seeking care or knowing to seek care early

If you have the money to pay for it, you're good. If you don't, you don't get those services…That's still a challenge.

Health Insurance

On January 12, 2016, Louisiana Governor John Bel Edwards signed an executive order to expand Medicaid. Subsequently, Medicaid and LaCHIP became Healthy Louisiana. The expansion made Medicaid available to more than 400,000 people living in Louisiana who did not previously qualify for full Medicaid coverage and could not afford to buy private health insurance.

Louisiana has seen a dramatic reduction in uninsured population since the governor's executive order went into effect. According to LSU's 2017 Louisiana Health Insurance Survey, the estimated percent of uninsured adults in Louisiana dropped from 22.7% in 2015 to 11.4% in 2017. Since the expansion 56,733 newly eligible adults in Northwest Louisiana have enrolled (see table below). Of those adults, 74% had a doctor's office visit during the past year, and 28,057 (49%), received a preventative healthcare service. Figure 6 (pulled from the Louisiana Medicaid Dashboard) illustrates the number of adults enrolled in Medicaid, percent who had a doctor's visit, and the number who went to a doctor and received new preventive healthcare services as well, such as a mammogram or colonoscopy, as of November 2018.[22]

Parish	Total number of Adults enrolled in Medicaid Expansion as of November 2018	Percentage of adults who had a doctor's office visit during the year	Adults who visited a doctor and received new preventive healthcare services
Bossier	8889	74%	4820
Caddo	26185	72%	12730
Claiborne	1565	73%	627
DeSoto	2761	79%	1058
Lincoln	4563	81%	2678
Natchitoches	4107	80%	2090
Sabine	2399	82%	1026
Webster	4762	77%	2140
Winn	1502	79%	888
Total	***56733***	***74%***	***28057***

Figure 6: The LDH Medicaid Expansion Dashboard, November 2018

While participants acknowledged that Medicaid Expansion reduced the number of uninsured, they also mentioned that accessing care remains limited, especially for primary and specialty services.

[22] http://www.ldh.la.gov/healthyladashboard/

Access to Providers

The rate of dental, mental health, and primary care providers is an indicator used for access to care and is illustrated below in figure 7. The number of dentists (51.2 per 100,000 persons) and mental health providers (122.9 per 100,000 persons) in Northwest Louisiana was similar to the state, but well below national numbers. Although the Region had a higher number of primary care physicians (95.9 per 100,000 persons) compared to the state and country, accessing affordable providers was a major concern of participants. [23]

Looking from a healthcare perspective, there are only a few organizations that would accept patients that have Medicaid or uninsured. We can't handle all the needs, especially from primary care. If we treat someone in primary care, it's difficult to find someone that can help with specialty care. We do have LSU health Sciences – formally University Health, now Ochsner, that still [must comply with] a state mandate to see citizens of LA regardless of ability to pay. That's still limited resources.

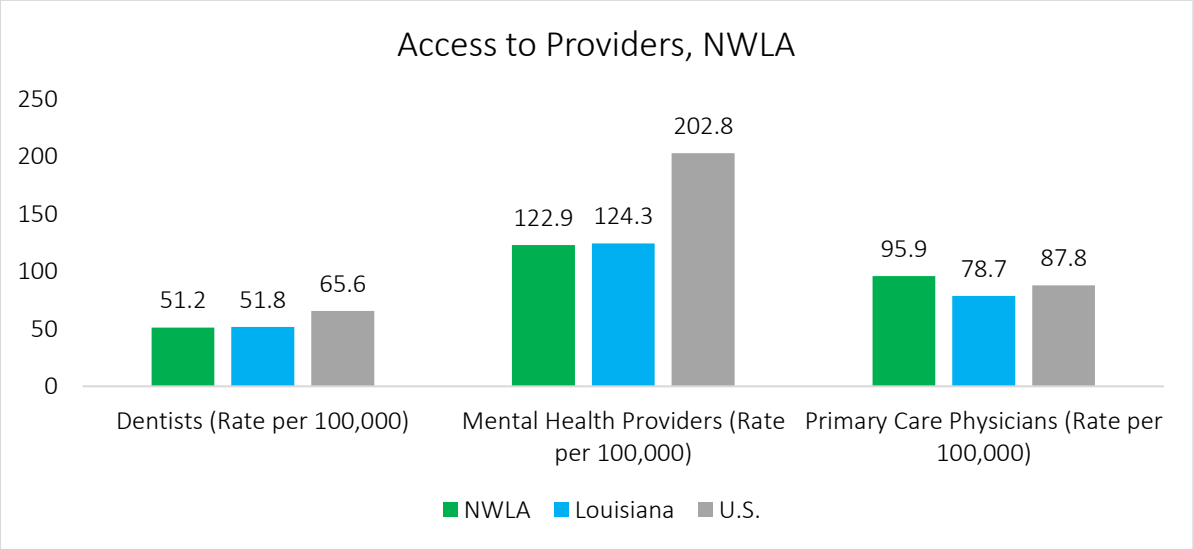


Figure 7: Access to dentists, mental health providers, and primary care physicians, NWLA

Health Professional Shortage Area (HPSA) is a designation that indicates health care provider shortages in primary care, dental health, or mental health. These shortages may be geographic, population, or facility based. Northwest LA health care provider shortages are illustrated through the Health Professional Shortage Area (HPSA) maps, where Caddo, Bossier, Claiborne, and Lincoln are designated low-income population primary care HPSAs. Most of the state, except Caddo, Webster, and Desoto, were experiencing shortages in Mental Health providers. All parishes in the region, except Bossier, are designated dental HPSAs (Caddo Parish designated as such for low-income populations only). The three HPSA maps for Louisiana are in Appendix B.

[23] Sources: Primary Care physicians: HRSA, Area Health Resource File, 2014. Mental Health providers: County Health Rankings, 2018. Dentists: HRSA, Area Health Resource File, 2015.

Health Outcomes

Physical Conditions/ Indicators

Chronic health conditions, particularly high blood pressure, diabetes, high cholesterol, asthma and obesity, were acknowledged by participants as being an issue across the Region. The percentages of adults with diabetes, high blood pressure, and obesity were similar to the population in Louisiana, which were all higher than U.S. averages. Participants attributed the region's culture to the inevitably high rate of chronic disease experienced among residents. Participants also mentioned asthma, particularly for children. The percent of adults diagnosed with asthma in the Region was 11.5%, which was below state and national averages. See figure 8. [24]

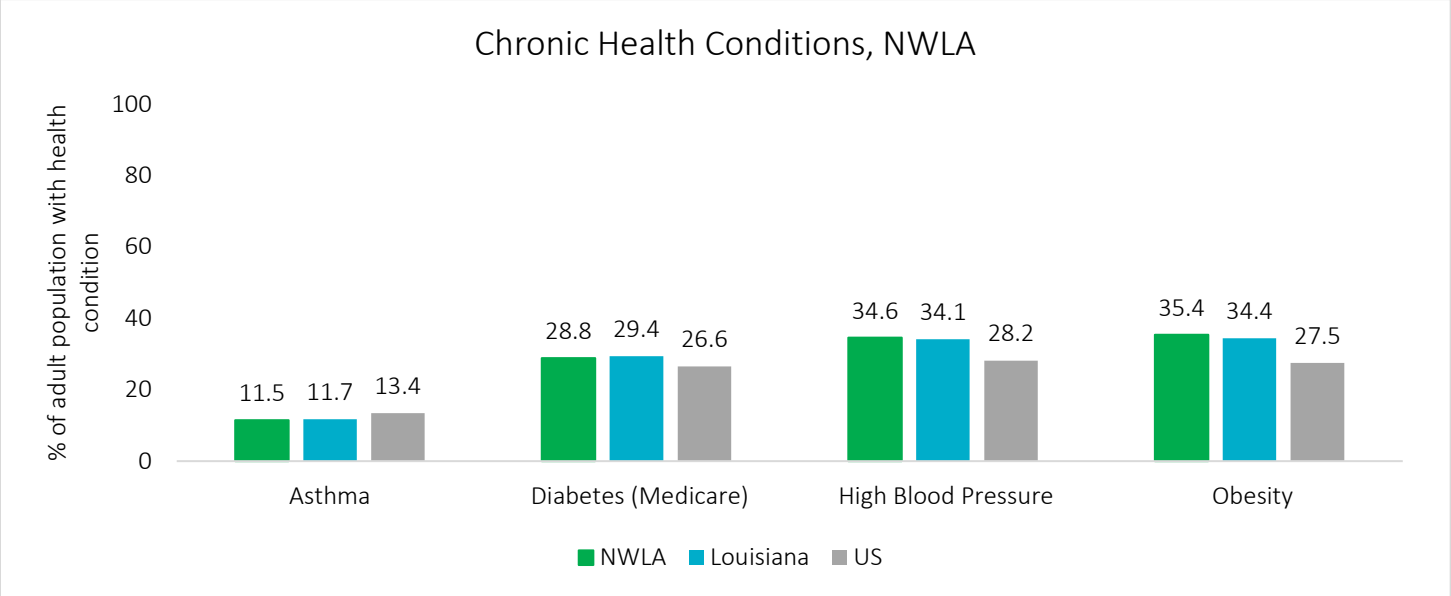


Figure 8: Percentage of population with chronic health condition, NWLA

Working poor have to decide whether to get medicine or put food on the table.

Participants discussed cancer, heart disease, and stroke as major issues. According to the Louisiana State Health Assessment and Improvement Plan 2016-2020, the leading causes of death in Louisiana are heart disease, cancers, respiratory disease, and cerebrovascular disease.[25] Figure 9 below lists the top 15 leading causes of death in the Northwest Region. Diseases of the heart was the leading cause of death in NWLA with the age-adjusted rate of 190 per 100,000, which incorporates multiple ICD 10 codes and diagnoses. Alzheimer's disease surpassed cerebrovascular disease as a leading cause of death for the Northwest Region. [26]

[24] Sources: Asthma BRFSS 2011-2012, Diabetes CDC 2013, High blood pressure BRFSS 2006-2012, Obesity CDC 2013
[25] Louisiana State Health Assessment and Improvement Plan, 2016-2020. http://ldh.la.gov/assets/oph/SHA_SHIP/SHA-SHIP.pdf
[26] Source: US Department of Health & Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018.

Top 15 Leading Causes of Death, NWLA	Average Deaths per Year	Age-Adjusted Rate Per 100,000
#Diseases of heart (I00-I09,I11,I13,I20-I51)	1286	190
#Malignant neoplasms (C00-C97)	1277	185
#Chronic lower respiratory diseases (J40-J47)	384	56
#Alzheimer's disease (G30)	354	52
#Cerebrovascular diseases (I60-I69)	337	50
#Diabetes mellitus (E10-E14)	271	40
#Accidents (unintentional injuries) (V01-X59,Y85-Y86)	262	43
#Septicemia (A40-A41)	141	21
#Essential hypertension and hypertensive renal disease (I10,I12,I15)	133	20
#Influenza and pneumonia (J09-J18)	124	18
#Nephritis, nephrotic syndrome and nephrosis (N00-N07,N17-N19,N25-N27)	115	17
#Chronic liver disease and cirrhosis (K70,K73-K74)	87	13
#Intentional self-harm (suicide) (*U03,X60-X84,Y87.0)	84	14
#Assault (homicide) (*U01-*U02,X85-Y09,Y87.1)	60	11
#Parkinson's disease (G20-G21)	49	7

Figure 9: Top 15 leading causes of death in NWLA, annual average 2013-2017

Northwest Louisiana had higher age-adjusted rates of mortality due to cancer (186.1 per 100,000), lung disease (55.6 per 100,000), and stroke (48.6 per 100,000) compared to the state and country. The rate of coronary heart disease specifically, although lower than the average for the state and country, remained high at 95.1 per 100,000 population. [27]

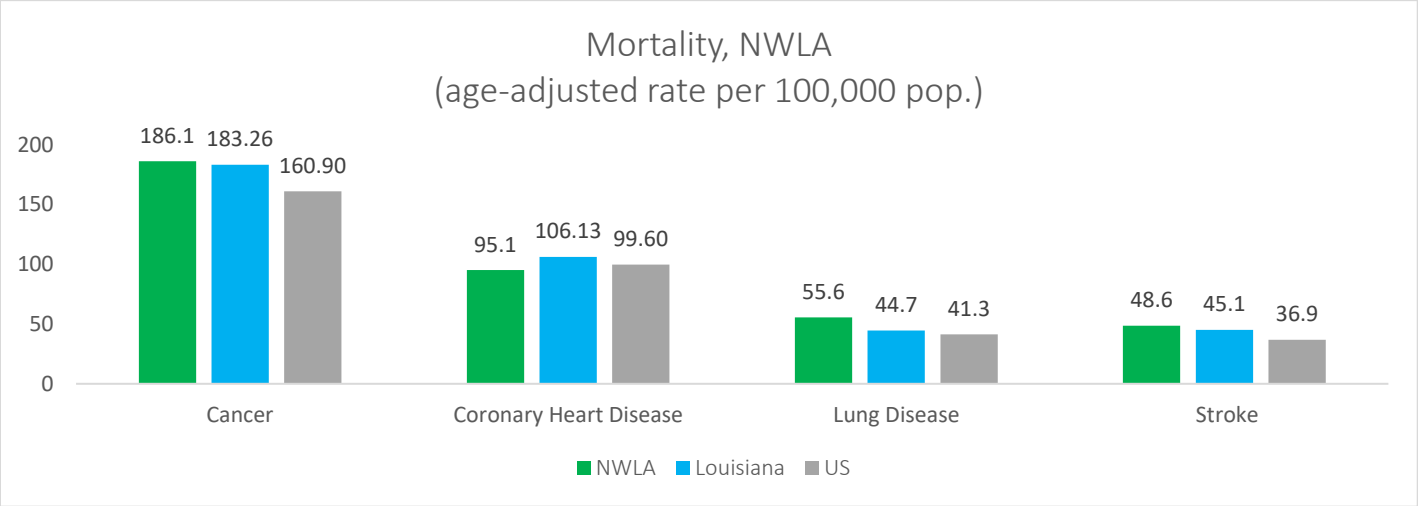


Figure 10: Age adjusted mortality rates, NWLA 2012-2016

Accessed at http://wonder.cdc.gov/ucd-icd10.html on Jan 11, 2019 11:14:45 AM. Note: Each cause of death includes many diagnoses, included ICD codes are listed next to cause.

[27] Source: CDC, National Vital Statistics System. Accessed via CDC WONDER. 2012-2016. Aggregated via Community Commons, 2018.

Like many Louisianans, participants were concerned about cancer rates, especially with cancer mortality rates being high. The five types of cancer with highest incidence rates (age-adjusted) in the state were colon and rectal, lung and bronchus, kidney and renal pelvis, breast in females, and prostate in males. Although the incidence rates for these types of cancers were similar to the state rates, in the Shreveport-Bossier region, incidence rates were higher than national rates (except for breast cancer). Figure 11 compares the region to the state and country for the five highest cancer incidence rates in the state per year.[28]

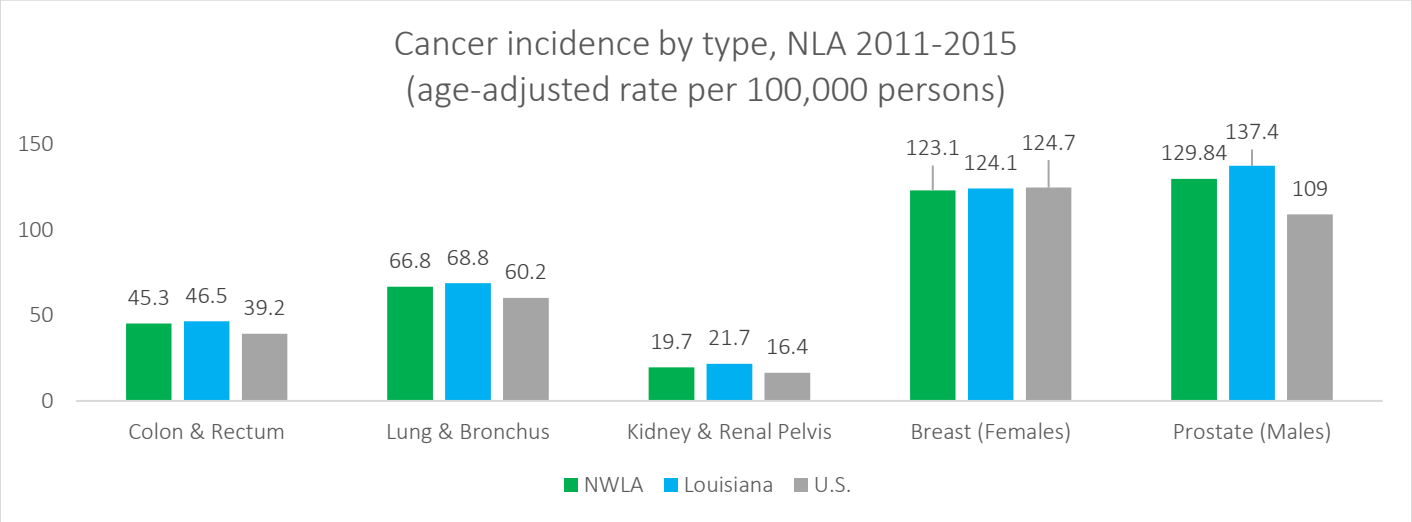


Figure 11: Incidence rates by type of cancer, NWLA 2011-2015

Figure 12 below illustrates the breakdown estimates by type of cancer incidence rates at the parish level with averages from years 2011-2015. The age-adjusted rates of those bolded below are higher than the regional average. Figure 12 includes average annual counts, age-adjusted rates per 100,000 population, and recent trends (rising, falling or stable) for nine parishes, state, and country.[29]

[28] Incidence data are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), Centers for Disease Control and Prevention and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. Incidence rates (cases per 100,000 population per year) are age-adjusted to the 2000 US standard population. Rates are for invasive cancer only. The 1969-2015 US Population Data File [https://seer.cancer.gov/popdata/] is used for SEER and NPCR incidence rates. Parish cancer breakdown was based on highest cancer rate per year https://sph.lsuhsc.edu/wp-content/uploads/2019/01/02_Tables-1-15.pdf. *Data has been suppressed to ensure confidentiality and stability of rate estimates. Counts are suppressed if fewer than 16 records were reported in a specific area-sex-race category. If an average count of 3 is shown, the total number of cases for the time period is 16 or more which exceeds suppression threshold (but is rounded to 3).

[29] Source: National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), Centers for Disease Control and Prevention and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program, 2011-2015. https://statecancerprofiles.cancer.gov

	Colon & Rectum Cancers			Lung & Bronchus Cancers			Kidney & Renal Pelvis Cancers			Breast Cancers, Females			Prostate Cancers, Males		
Parish	Rate	Count	Trend	Rate	Count	Trend	Rate	Count	Trend	Rate	Count	Trend	Rate	Count	Trend
Bossier	41.7	53	⇓	**69.4**	**89**	⇒	18.1	24	⇒	117.6	80	⇒	114.1	70	⇓
Caddo	47.6	136	⇓	**70.4**	**210**	⇓	19.5	57	⇑	121.9	193	⇒	**135.8**	**186**	⇓
Claiborne	42.5	9	⇓	66.3	14	⇒	18	4	⇒	**148.7**	**14**	⇒	176.1	19	⇒
De Soto	49	16	⇓	**74.5**	**26**	⇒	18.7	7	*	**139.7**	**24**	⇒	126.8	22	⇓
Lincoln	37.2	16	⇓	57.9	26	⇒	**24.8**	**10**	⇑	100.2	23	⇓	123.1	26	⇒
Natchitoches	**47.5**	**21**	⇒	59.6	27	⇒	15.7	7	⇒	122.5	27	⇑	112.4	24	⇓
Sabine	40.2	14	⇓	58.8	20	⇓	**20**	**6**	⇒	123.1	19	⇒	120.2	21	⇓
Webster	44.4	25	⇓	**81.3**	**45**	⇓	**22.9**	**12**	*	121.2	34	⇒	124.1	33	⇓
Winn	**58.1**	**10**	⇒	63	12	⇓	19.3	4	⇒	112.7	11	⇒	**136**	**13**	⇓
Louisiana	46.5	2347	⇓	68.8	3515	⇓	21.7	1097	⇒	124.1	3340	⇑	137.4	3387	⇓
U.S.	39.2	n/a	⇓	60.2	n/a	⇓	16.4	n/a	⇑	124.7	n/a	⇒	109	n/a	⇓

Figure 12: Average annual counts and age-adjusted rates of incidence for different cancers at the parish level

Other indicators of interest were fatalities due to human behaviors and actions, rather than long-term diseases. The homicide death rate was lower in the Northwest region (10.7 per 100,000) than the state, but still almost double the national rate of 5.5 per 100,000 persons. The rate of fatalities in the Northwest region due to motor vehicle crashes was slightly lower than the rate for Louisiana. The death rate due to suicide (13.8 per 100,000) was similar to the state (13.7 per 100,000). See figure 13.[30]

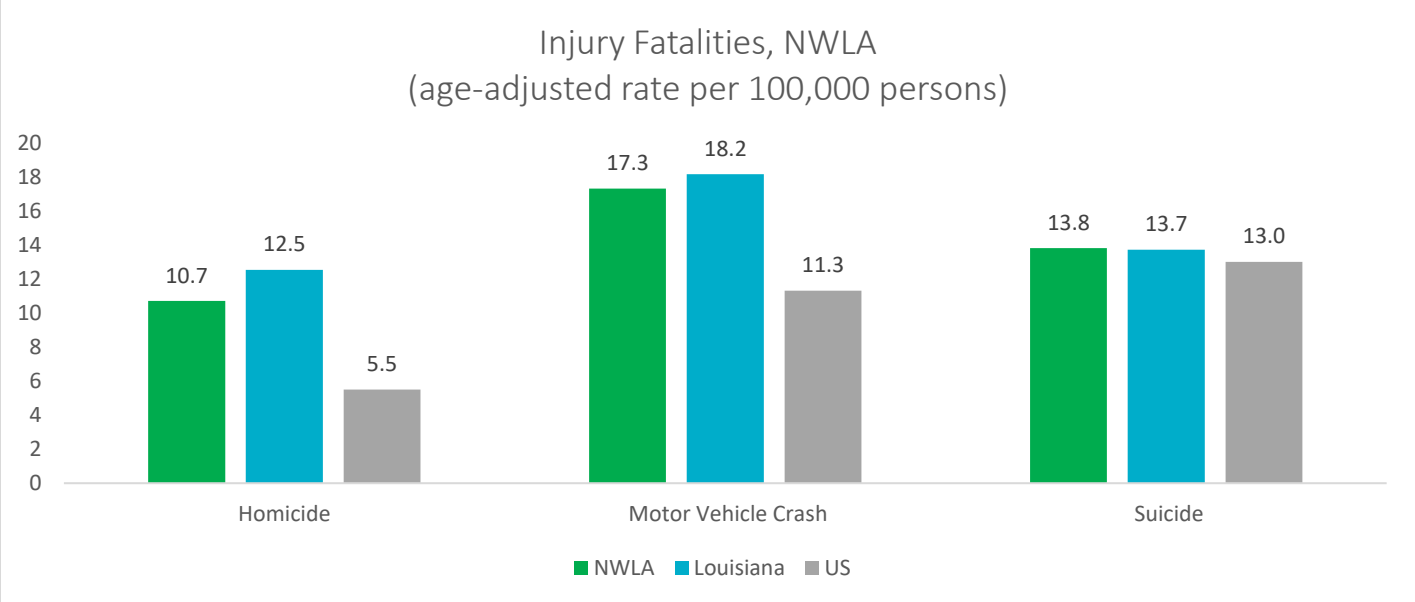


Figure 13: Death rates due to homicide, motor vehicle crash, and suicide, NWLA 2012-2016

[30] Sources: Injury fatality rates, CDC Wonder, 2012-2016. Aggregated through Community Commons, 2018.

Suicide is a Healthy People 2020 Leading Health Indicator for mental health. The age-adjusted target for the national suicide rate in 2020 is 10.2 per 100,000 population, which is lower than the Regional rate of 13.8 per 100,000.[31] Figure 14 illustrates how the suicide rate differs based on sex and race, with higher rates for males and whites.[32]

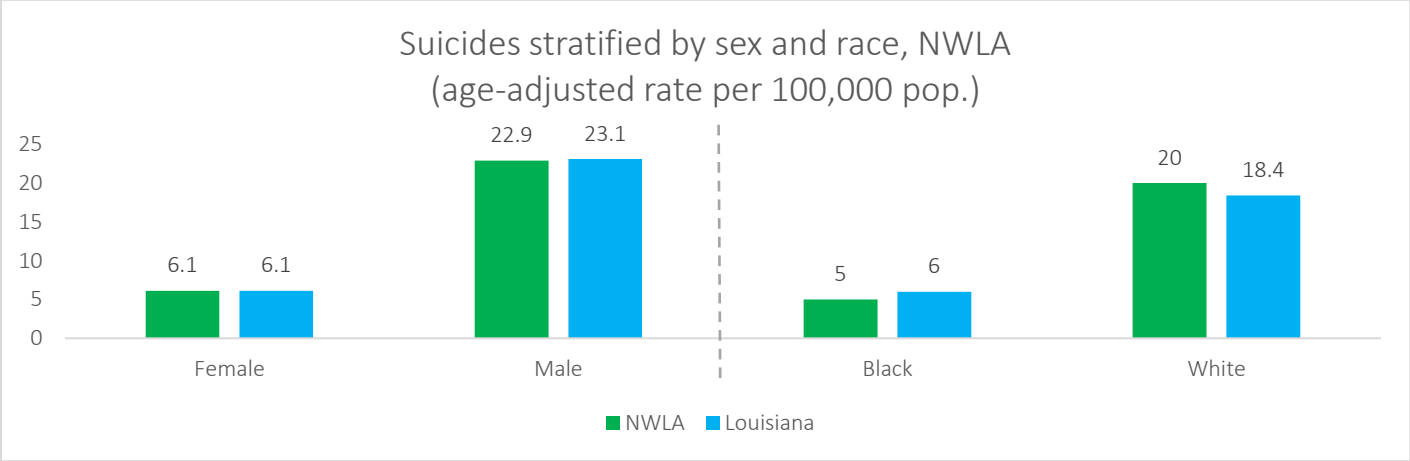


Figure 14: Suicide rate stratified by sex and race, NWLA 2012-2016

According to the Centers for Disease Control and Prevention (CDC), suicide is a leading cause of death. Suicide rates have steadily increased in nearly every state from 1999 through 2016 (see figure 15). Much of the increase was driven by suicides occurring in mid-life, and were mostly committed by men. The highest number of suicides among both men and women occurred among those aged 45 to 54.[33] Suicide was the 3rd leading cause of death in youth ages 10-24.[34] Louisiana saw a 29.3 percent increase in suicides from 1999 to 2016.[35]

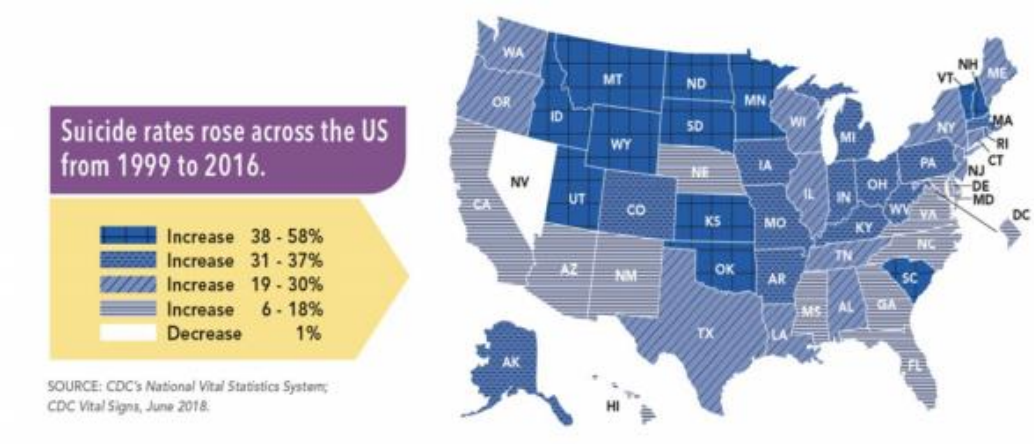


Figure 15: Suicide rates rose across the US from 1999 to 2016

[31] https://www.healthypeople.gov/sites/default/files/LHI-ProgressReport-ExecSum_0.pdf
[32] Source: CDC Wonder 2012-2016, aggregated through County Health Rankings, 2018
[33] https://www.cdc.gov/nchs/data/databriefs/db330_tables-508.pdf
[34] https://www.nami.org/NAMI/media/NAMI-Media/Infographics/Children-MH-Facts-NAMI.pdf
[35] www.cdc.gov/vitalsigns/suicide/infographic.html#graphic1

Mental and Behavioral Health

According to the World Health Organization, "mental health is defined as a state of well-being in which every individual realizes their own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." Mental health affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Good mental health is freedom from depression, anxiety, and other psychological issues. It affects all racial groups and socio-economic backgrounds.[36]

Participants discussed mental health and substance abuse as major issues becoming more prevalent in communities across the Region. Anxiety, depression, and post-traumatic stress disorder (PTSD) were all mentioned as specific concerns. According to the Behavioral Risk Factor Surveillance System (BRFSS), 2016, over eighteen percent (18.9%) of the LA-DHH Region 7 population self-reported depression. See Appendix B for map of LA-DHH regions.

In 2013-2014, just over four percent (4.5%) of all adults in Louisiana reported serious mental illness (SMI) within the past year, an increase from 3.8% of all adults in 2010-2011. Among all adults aged 18 or older with any mental illness, 61.8% had not received mental health treatment or counseling within the year.[37] It is also important to note that the number of public psychiatric beds in Louisiana decreased from 903 beds in 2010 to 616 beds in 2016.[38]

Across America, approximately 60% of adults and nearly 50% of youth aged 8-15 with a mental illness did not receive mental health services in the previous year.[39] According to the Substance Abuse and Mental Health Services Administration's (SAMHSA) 2016 National Survey on Drug Use and Health, reasons adults 18 and older were not receiving mental health services included the inability to afford the cost (46.2%), followed by the thought they could handle the problem without treatment (30.5%), and they did not know where to go to access services (28.1%).[40]

Mental illness and substance abuse are often co-occurring. People with serious mental illness and/or substance use disorders often face higher rates of cardiovascular disease, diabetes, respiratory disease, and infectious disease. They face increased vulnerability due to poverty, social isolation, trauma and violence, and incarceration; the lack of coordination between mental and primary health care providers; prejudice and discrimination; side effects from psychotropic medications; and an overall lack of access to health care, particularly preventive care.[41]

Behavioral health with an emphasis on substance abuse disorders…we see a lot of that as a growing need [and] general mental health issues. A lot of people needing that level of care, that type of care.

[36] World Health Organization: www.who.int/features/factfiles/mental_health/en/
[37] https://www.samhsa.gov/data/sites/default/files/2015_Louisiana_BHBarometer.pdf
[38] https://www.treatmentadvocacycenter.org/browse-by-state/louisiana
[39] https://www.nami.org/NAMI/media/NAMI-Media/Infographics/GeneralMHFacts.pdf
[40] https://www.samhsa.gov/data/sites/default/files/NSDUH-DR-FFR2-2016/NSDUH-DR-FFR2-2016.htm
[41] Substance Abuse and Mental Health Services Administration: www.samhsa.gov/wellness-initiative

From 2013-2014, about 112,000 individuals in Louisiana aged 12 or older (2.9% of individuals in this age group) were dependent on or abused illicit drugs within the year. This was a slight increase from 2010 and similar to the nation.[42] CDC's Drug Overdose Death Data show Louisiana had a statistically significant 14.7% increase in its drug overdose death rate from 2015–2016.[43]

Participants expressed concern about opioid addiction in the region, as well as lack of resources and services to provide adequate treatment. According to the National Institute on Drug Abuse, there were 346 opioid-related overdose deaths reported across Louisiana in 2016, a death rate of 7.7 per 100,000 persons (compared to the national rate of 13.3 deaths per 100,000).[44]

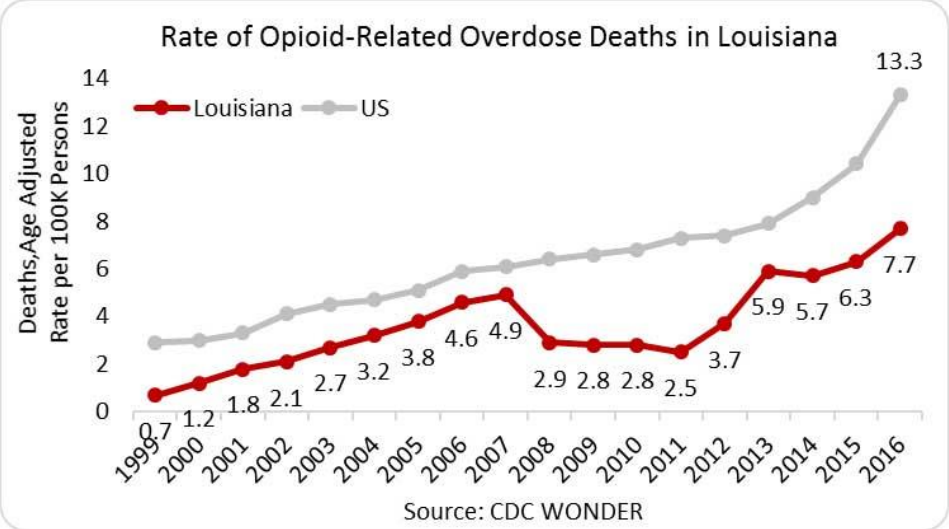


Figure 16: Rate of opioid deaths in Louisiana compared to the U.S. from 1999-2016

[42] https://www.samhsa.gov/data/sites/default/files/2015_Louisiana_BHBarometer.pdf
[43] https://www.cdc.gov/nssp/documents/success-stories/NSSP-Success-Story-louisiana-drug-abuse-508.pdf
[44] https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/louisiana-opioid-summary

Maternal and Child Health

According to the U.S. Centers for Disease Control and Prevention, teen pregnancy and births are "significant contributors to high school dropout rates among girls," with only about 50% of teen mothers receiving a high school diploma by the age of 22.[45] Unplanned pregnancies and high infant mortality rate among African American women were major concerns for participants. The Region had a higher rate of teen births at 44 births per 1,000 female population ages 15-19 compared to the state and nation. See figure 17 for estimated teen birth rate comparing the nine parishes, region, state, and country.[46]

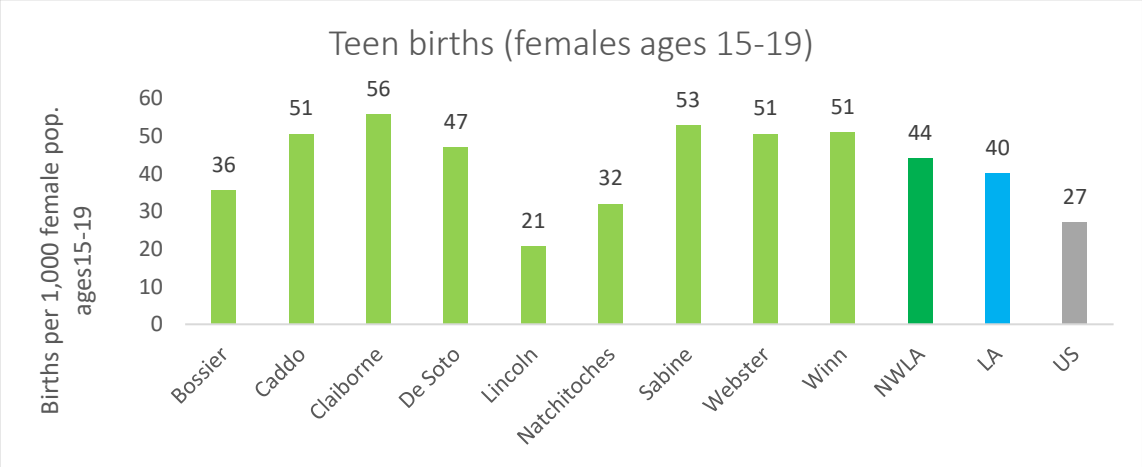


Figure 17: Number of births per 1,000 female population ages 15-19, 2010-2016

Infant mortality is another Healthy People 2020 Leading Health Indicator with a target rate of 6.0 infant deaths (per 1,000 live births, <1 year).[47] The Northwest Region at 10.8 deaths per 1,000 births was far above the Healthy People 2020 Target and had a higher rate of infant deaths compared to the state and national averages with rates of 8.9 per 1,000 births and 6.5 per 1,000 births respectively. See figure 18.[48] The percentage of live births with low birthweight (<2500grams) was 12% for the Region, compared to 11% for the state and 8% for the nation.[49] See figure 19.

[45]Source: Reproductive Health, Teen Pregnancy [Internet]. Atlanta, GA: U.S. Department of Health and Human Services, Centers of Disease Control and Prevention [2016]. Available from: http://www.cdc.gov/teenpregnancy/about/.
[46] Source: National Center for Health Statistics-Natality Files, 2010-2016.
[47] https://www.healthypeople.gov/sites/default/files/LHI-ProgressReport-ExecSum_0.pdf
[48] Source: HRSA, Health area resource file. 2006-2010. Aggregated via Community Commons.
[49] Source: National Center for Health Statistics Natality files, 2010-2016.

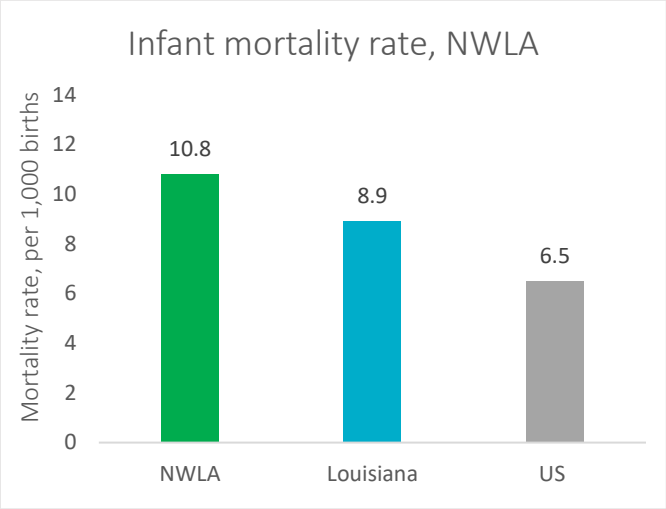


Figure 18: Infant mortality rate per 1,000 births, NWLA 2006-2010

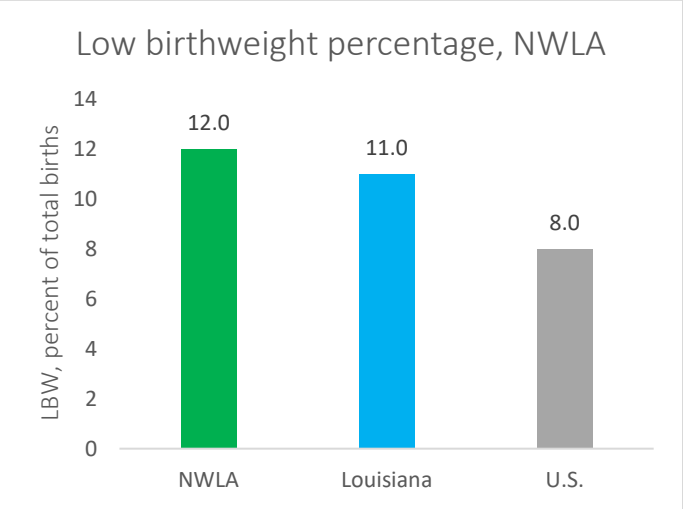


Figure 19: Percentage low-birth weight, NWLA 2010-2016

Although the percentages of births with low birth weight (LBW) were similar overall across the parishes in NWLA, there was a difference in the percentage of LBWs based on race. A higher percentage of LBW births were African American compared to Caucasian in every parish. Figure 20 illustrates the percentage of births at LBW for the nine parishes as well as the percentage of LBW African American births in each parish and LBW Caucasian births in each parish.[50]

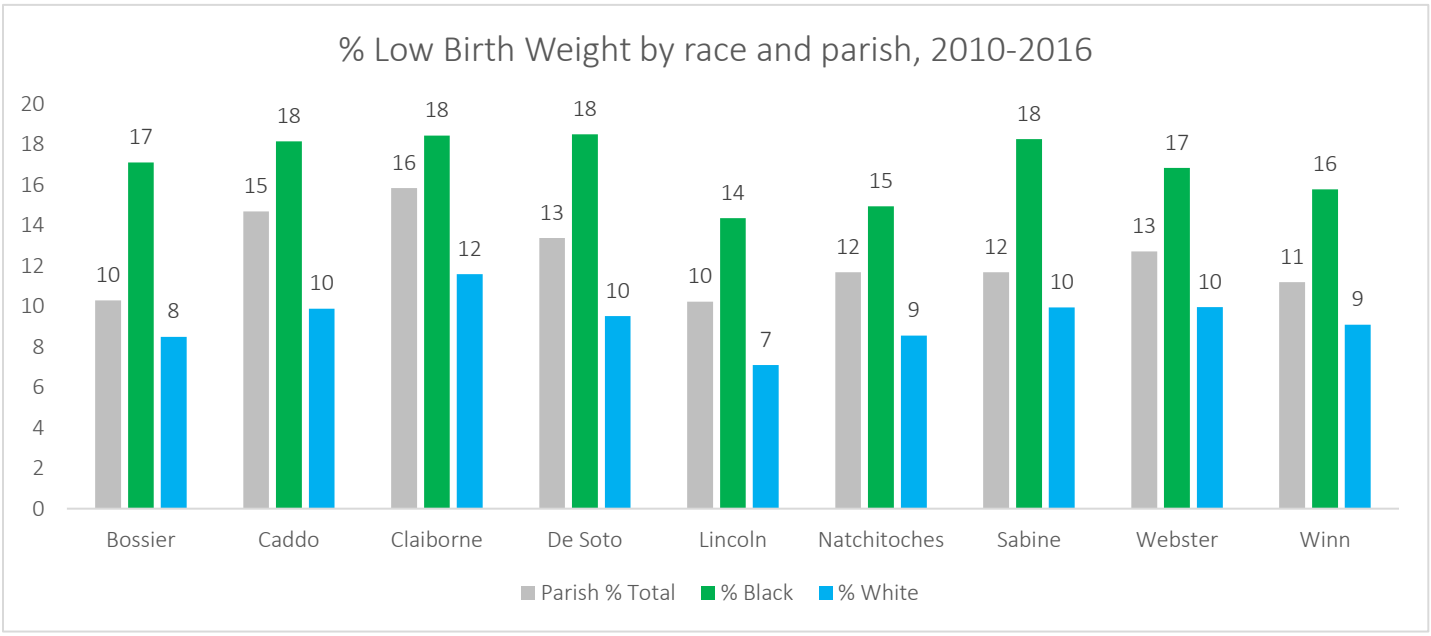


Figure 20: Percentage of low birth weight births by parish totals and % by race, 2010-2016

[50] National Center for Health Statistics Natality files, 2010-2016.

Other Health Factors

Many participants discussed cultural factors as contributors to poor health outcomes in the Northwest region and throughout the state. The percentage of adults that reported a BMI of 30 or more in the Region was 36%, which was higher than the national average of 28% and the Healthy People 2020 target of 30.5%. The percentage of adults age 20 and over reporting no leisure time physical activity for the Region and state was also similar at 30%, but higher than the national average of 23%. According to the 2016 Behavioral Risk Factor Surveillance System (BRFSS), the percentage of adults who reported they were current smokers was 22%, which was similar to the state, but higher than the national percentage and Healthy People 2020 target of 12.0%. The percentage of adults reporting binge or heavy drinking was 17% in the Region, which was lower than both the state and national percentages. Figure 21 illustrate the percentage of NWLA population with obesity, currently smoking, physically inactive, and excessively drink alcohol. [51]

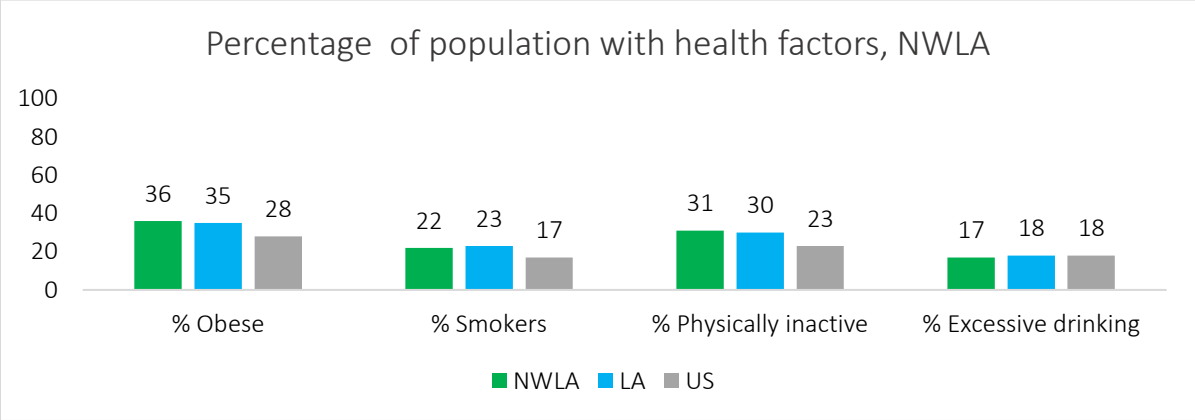


Figure 21: Health related risk factors in the adult population, NWLA

Figure 22 illustrates the differences by parish for the percentage of residents smoking, physically inactive, excessively drinking, with obesity, and alcohol impaired driving deaths in each parish.

	% Smoking	% Physically inactive	% Excessive drinking alcohol	% Alcohol impaired driving deaths	% Obese
Bossier	19	28	20	16	33
Caddo	21	30	15	34	37
Claiborne	24	31	15	33	35
De Soto	21	31	16	50	39
Lincoln	23	28	17	13	36
Natchitoches	24	30	16	24	34
Sabine	20	35	17	27	37
Webster	22	34	16	25	35
Winn	23	31	17	20	36
Avg. NWLA	22	31	17	27	36
Louisiana	23	30	18	34	35
U.S.	17	18	18	29	28

Figure 22: Percentage of adults in the mim-parishes with health related risk factors

[51] Sources: Obesity- CDC Diabetes Interactive Atlas, 2014. Smoking- BRFSS, 2016. Physical inactivity- CDC Diabetes Interactive Atlas, 2014. Excessive drinking- BRFSS, 2016. Alcohol impaired driving deaths- Fatality Analysis Reporting System, 2012-2016.

Hospital Data

The findings in this section refer to data provided by CHRISTUS Highland Medical Center. The count of records for inpatient hospitalizations in the region was 19,014 and the count of records for Emergency Department visits was 50,265. All data shared was de-identified and aggregated. The period of time reported is for FY 2017-FY 2018, which covers July 2016-June 2018.

Most visits for both inpatient hospitalizations (10.01%) and emergency department (ED) visits (13.69%) for the Region during FY 2017-2018 were from patients living in the 71106 zip code in the city of Shreveport. See figures 23 and 24 below for the top 20 zip codes for number and percentage of patient visits for inpatient hospitalizations and visits to the ED.

Parish	Primary city	Zip code	# of visits (hospital)	% of visits
Caddo	Shreveport	71106	1904	10.01
Bossier	Bossier City	71112	1237	6.51
Caddo	Shreveport	71105	1112	5.85
Caddo	Shreveport	71118	1075	5.65
Bossier	Bossier City	71111	941	4.95
Caddo	Shreveport	71107	937	4.93
Caddo	Shreveport	71115	896	4.71
Caddo	Shreveport	71108	641	3.37
Caddo	Shreveport	71109	588	3.09
Caddo	Shreveport	71104	532	2.80
Bossier	Haughton	71037	527	2.77
Caddo	Keithville	71047	451	2.37
Caddo	Shreveport	71129	440	2.31
De Soto	Mansfield	71052	382	2.01
Caddo	Shreveport	71119	378	1.99
Natchitoches	Natchitoches	71457	346	1.82
De Soto	Stonewall	71078	322	1.69
Caddo	Shreveport	71101	316	1.66
Bossier	Benton	71006	289	1.52
Caddo	Shreveport	71103	280	1.47
Total Top 20 Zip Codes in NWLA target parishes			13594	71.49%
Total Zip Codes in NWLA target parishes			**16880**	**88.78**
All Other Zip Codes			2134	11.22
ALL Zip Codes			19014	100.00

Figure 23: List of inpatient Hospitalizations by top 20 zip codes, total zip codes in target parishes, and all other zip codes, FY 2017-2018.

Parish	Primary city	Zip code	# of visits (ED)	% of ED visits
Caddo	Shreveport	71106	6880	13.69
Bossier	Bossier City	71112	3633	7.23
Caddo	Shreveport	71118	3194	6.35
Caddo	Shreveport	71105	2987	5.94
Caddo	Shreveport	71108	2930	5.83
Bossier	Bossier City	71111	2833	5.64
Caddo	Shreveport	71107	2831	5.63
Caddo	Shreveport	71115	2463	4.90
Caddo	Shreveport	71109	2326	4.63
Caddo	Shreveport	71104	2131	4.24
Caddo	Shreveport	71129	1548	3.08
Bossier	Haughton	71037	1390	2.77
Caddo	Keithville	71047	1360	2.71
Caddo	Shreveport	71101	1354	2.69
Caddo	Shreveport	71119	1199	2.39
Caddo	Shreveport	71103	944	1.88
De Soto	Stonewall	71078	918	1.83
Bossier	Benton	71006	652	1.30
De Sot	Mansfield	71052	627	1.25
De Soto	Frierson	71027	394	0.78
Total Top 20 Zip Codes in NWLA Target Parishes			42594	84.74%
Total Zip Codes in NWLA Target Parishes			**47456**	**94.41**
All Other Zip Codes			2809	5.59
ALL Zip Codes			50265	100.00

Figure 24: List of emergency department visits by top 20 zip codes, total zip codes in target parishes, and all other zip codes, FY 2017-2018.

The top reason for hospital admissions for CHRISTUS Health Shreveport-Bossier was births, followed by Septicemia and Hypertension. The top three most common diagnoses for emergency department visits included other upper respiratory infections and non-specific chest pain followed by strains and sprains. See figure 25.

Top 10 most common diagnoses for inpatient hospitalizations, NWLA 2017

Rank	Diagnosis	# of hospitalizations	% of all hospitalizations
1	Live born	1909	10%
2	Septicemia (except in labor)	1017	5%
3	Hypertension with complications and secondary hypertension	797	4%
4	Osteoarthritis	747	4%
5	Acute and unspecified renal failure	618	3%
6	Cardiac dysrhythmias	476	3%
7	Other nutritional; endocrine; and metabolic disorders	468	2%
8	Complications of surgical procedures or medical care	457	2%
9	Other complications of birth; puerperium affecting management of mother	447	2%
10	Respiratory failure; insufficiency; arrest (adult)	432	2%
	Total	7368	39%

Top 10 most common diagnoses for ED visits, NWLA 2017

Rank	Diagnosis	# of ED visits	% of all ED visits
1	Other upper respiratory infections	2303	5%
2	Nonspecific chest pain	2215	4%
3	Sprains and strains	2134	4%
4	Spondylosis; intervertebral disc disorders; other back problems	1989	4%
5	Urinary tract infections	1687	3%
6	Abdominal pain	1672	3%
7	Superficial injury; contusion	1541	3%
8	Other injuries and conditions due to external causes	1251	2%
9	Headache; including migraine	1151	2%
10	Fluid and electrolyte disorders	1129	2%
	Total	17072	34%

Figure 25: Top 10 most common diagnoses for inpatient hospital data & ED visits. CHRISTUS Shreveport-Bossier, FY 2017-2018.

Participants discussed the use of emergency rooms for individuals who do not seek preventative care or see a primary care physician, as well as those who cannot seek care during the hours most health centers and doctors' offices are open. Overuse and repeated visits, especially among low-income and those with Medicaid was a concern for participants. Below, figure 26 shows the percentage of inpatient and emergency department visits by repeat patients for CHRISTUS Health Shreveport-Bossier.

Patients by number of repeat hospitalizations during 1-year period, NWLA

Number of visits	% of patients
1	80%
2 to 5	19%
> 5	1%

Patients by number of repeat ED visits during 1-year period, NWLA

Number of visits	% all ED visits
1	68%
2 to 5	29%
> 5	3%

Figure 26: Number of repeat hospitalizations and number of repeat ED visits during a 1-year period. CHRISTUS Shreveport-Bossier, FY 2017-2018.

Figure 27 below illustrates the payer mix of hospitalizations and ED visits during FY 2017-2018. Half of hospital visits were by patients with Medicare, 28% with Managed Care, and 16% with Medicaid. For emergency department visits, 34% of patients were with Medicare, followed by 32% with Medicaid, and 24% with Managed Care.

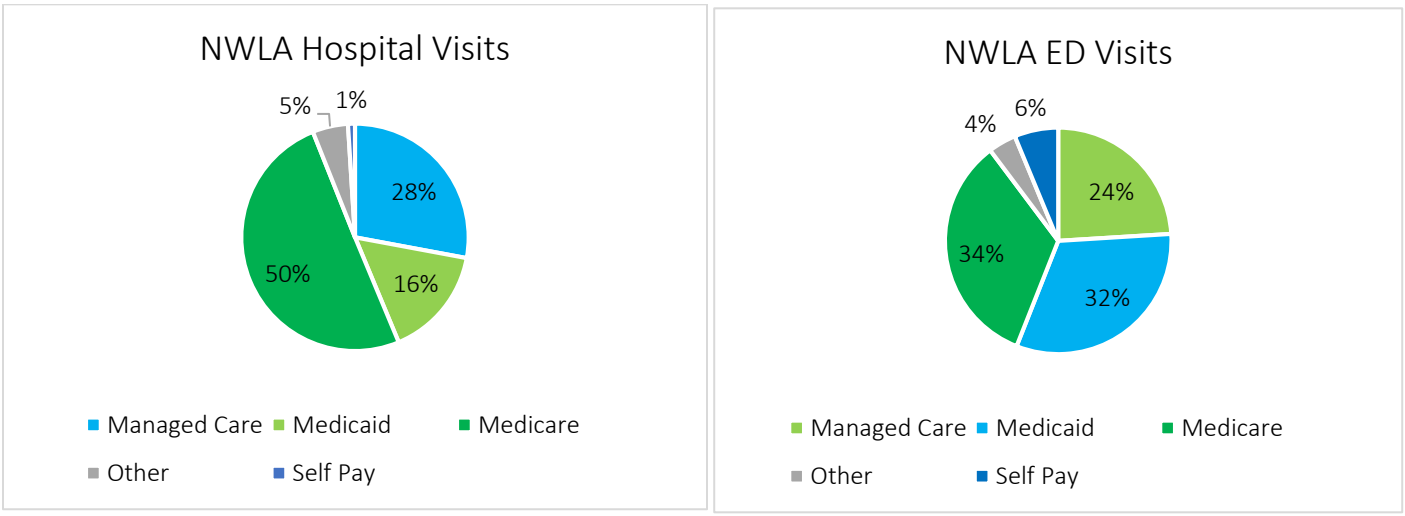


Figure 27: Payer mix for hospitalizations and Emergency Department visits. CHRISTUS Shreveport-Bossier, FY 2017-2018.

Prioritization

Validation Process

LPHI provided an overview of the quantitative and qualitative findings of major concerns for CHRISTUS Health Shreveport-Bossier 41 participants who attended a data validation meeting on January 24, 2019. Cited concerns were included in the overview if they met the following criteria:

1. the issue or concern was brought up at least 3 times during interviews and/ or the focus group
2. and/or the issue was substantiated through the quantitative analysis.

The major issues discussed were organized into 8 categories:

<table>
<tr>
<td>Social Determinants of Health
- Crime, violence, abuse
- Cost of housing, substandard housing
- Transportation, walkability
- Homelessness
- Cost of living, poverty, low-income, unemployment
- Education and education readiness
- Food culture, food access</td>
<td>Cancer

Mental and Behavioral Health
- Untreated mental health issues
- PTSD, depression, anxiety
- Stigma and taboo
- Addiction and substance abuse
- Lack of mental health services, treatment, and addiction services

Chronic diseases & conditions
- Heart Disease
- Diabetes
- Hypertension
- Obesity
- Asthma</td>
<td>Access to Care
- Resource availability (esp. for uninsured and Medicaid)
- High cost of care
- Access points and extended hours
- Privacy and social media
- Improper use of health system (insurance, ED)
- Cost of prescriptions
- Transportation

Sexually transmitted infections

Human Trafficking</td>
</tr>
<tr>
<td>Infant deaths, low-birth weight</td>
<td></td>
<td></td>
</tr>
</table>

Participants discussed the findings via a series of facilitated prompts/ questions:

1. Do these results make sense and what surprises you the most?
2. Are there specific pieces of data shared that concern you or require additional clarification?

Following the facilitated discussion, 27 of the 41 participants ranked what they thought were most important concerns that CHRISTUS Health Shreveport-Bossier and partners should address using www.polleverywhere.com. The results of this ranking exercise are as follows (in order of most to least important):

1. Access to care
2. Mental and behavioral health
3. Chronic disease and conditions
4. Social determinants of health

5. Infant death and low birth weight
6. Human trafficking
7. Cancer
8. Sexually transmitted infections

Hospital priorities for next 3 years

CHRISTUS Health Shreveport-Bossier's Vice President, Mission Integration, and the CHNA Advisory Committee used the information presented at the validation meeting, along with the ranking conducted by participants, to help determine the focal priorities the ministry will address over the next three years through the upcoming 2019-2022 Community Health Improvement Plan (CHIP). CHRISTUS Health Shreveport-Bossier decided the hospital will focus their community benefits efforts on access to care, child safety & well-being, and disease prevention & management. In addition, during the course of the next three years, community benefit initiatives may be added as health-related issues arise that are identified as community needs.

Issues not selected for prioritization

In an effort to maximize resources available for the priority areas listed above, the CHNA Advisory Committee determined that the following issues would not be explicitly included in their community health improvement plan (CHIP):

- Mental and behavioral health (MBH)
- Social determinants of health (SDoH)
- Human trafficking
- Sexually Transmitted Infections (STIs)

While all four areas are of community concern and importance, CHRISTUS Health Shreveport-Bossier committed to focusing on key issues where they could serve as a leader and driver of change in the community.

CHRISTUS Health Shreveport-Bossier's leadership determined there are others in the region already addressing or possess more specialized resources to better address the needs around MBH, SDoH, human trafficking, and STIs. Resources and organizations mentioned by participants are listed in Appendix D.

Impact Thus Far

Since 2016, CHRISTUS Health Shreveport-Bossier has been working to address the following seven needs, which were identified in their previous community health needs assessment:

1. Cardiovascular Health (included heart disease, high blood pressure, high cholesterol, diabetes, and stroke)
2. Nutrition and healthy eating (included both obesity and malnutrition)
3. Tobacco use
4. Sexually transmitted infections and teen pregnancy
5. Lack of knowledge of health care resources in community
6. Improve Access to care for uninsured and underinsured
7. Child safety and well-being

CHRISTUS Health Shreveport-Bossier developed activities, programs and clinical interventions to address these varied health needs described in Appendix E.

Sources and Descriptions of Measures

Demographics				
Focus Area	Measure Description	Source	Year	Accessed via…
Population	Population estimate trend by parish	U.S. Census Bureau, American Community Survey (ACS) 5 year estimates	2000, 2013-2017	Policy map, 2018 www.policymap.org
Rural/ Urban/ Suburban	% of total population of 5-county area that is rural, urban, or suburban	Decennial Census	2010	Community Commons www.community commons.org
Age	% of population ages 0-4,5-17,18-24,25-34,45-54,55-64,65+	ACS, 5 year estimates	2012-2016	Community Commons, 2018
Race & Ethnicity	% of population identified as white, black, or other. % of pop. identified as Hispanic	ACS, 5 year estimates	2012-2016	Community Commons, 2018
Gender	% of population identified as male, female	ACS, 5 year estimates	2012-2016	Community Commons, 2018
Socioeconomic Factors				
Focus Area	Measure Description	Source	Year	Accessed via…
Graduated High School	% of ninth grade cohort that graduates in 4 years	ED Facts	2014-2015	County Health Rankings, 2018
Some College	% of adults ages 24-44 with some secondary education	ACS, 5 year estimates	2012-2016	County Health Rankings, 2018
Unemployment	% of population ages 16 and older unemployed but seeking work	Bureau of labor statistics	2016	County Health Rankings, 2018
Children in poverty	% of children under age 18 in poverty	ACS, 5 year estimates	2012-2016	County Health Rankings, 2018
Children in one parent house	% of children that live in a household headed by single parent	ACS, 5 year estimates	2012-2016	County Health Rankings, 2018
Violent crime	Number of reported violent crime offenses per 100,000 population	FBI, Uniform Crime Reporting	2012-2014	County Health Rankings, 2018
Employment	Total number workers and % of total workers by industry sector, SWLA. Based on average employment counts.	The industry sector is coded to North American Industrial Classification System (NAICS)	1-year period (Q3-Q4 2017, Q1-Q2 2018)	U.S. Bureau of Labor Statistics
ALICE & Poverty	% of households below the ALICE threshold (& poverty)	ALICE: A Study of financial hardship in Louisiana, 2018 Report.	2010, 2016	https://www.launitedway.org/alice-report-update-louisiana-released-january-2019
Low food access	% of the population living more than ½ mile from the nearest supermarket, supercenter, or large grocery store	US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas	2015	Community Commons, 2018
Housing cost burden	% of the households where housing costs exceed 30% of total household income each month	US Census Bureau, American Community Survey 5 year estimates	2012-2016	Community Commons, 2018
Access to Health Care				
Focus Area	Measure Description	Source	Year	Accessed via…
Medicaid	Number of adults enrolled in Medicaid, % who had a doctor's	Louisiana Department of Health, including modified	November 2018	http://www.ldh.la.gov/HealthyLaDashboard/

	visit, and the # that went to a doctor's office also received a preventive healthcare service	version of the AAP HEDIS® measure		
Dentists	Number of dentists per 100,000 persons	HRSA, Area Health Resource File	2015	Community Commons, 2018
Mental health providers	Number of mental health providers per 100,000 persons	County Health Rankings	2018	Community Commons, 2018
Primary care providers	Number of primary care providers per 100,000 persons	HRSA, Area Health Resource File	2014	Community Commons, 2018
Health Outcomes				
Focus Area	Measure Description	Source	Year	Accessed via…
Asthma	% of adult population with asthma	Behavioral Risk Factor Surveillance (BRFSS), and CARES	2011-2012	Community Commons, 2018
Diabetes	% of Medicare population with diabetes	CMS	2015	Community Commons, 2018
High Blood Pressure	% of adult population with high blood pressure	BRFSS, Health Indicators Warehouse	2006-2012	Community Commons, 2018
Obesity	% of adult population that are obese	CDC	2013	Community Commons, 2018
Leading causes of death	Top 10 leading causes of death (based on categories of multiple ICD codes listed) show in average number of deaths per year and age adjusted rates per 100,000 for SWLA	DHH, Health Indicators Warehouse. National Vital Statistics System. Underlying Cause of Death 1999-2017 on CDC WONDER Database, released December, 2018	2013-2017	Accessed at http://wonder.cdc.gov/ucd-icd10.html on Jan 11, 2019
Mortality rates	Age-adjusted mortality rate (per 100,000 population) for cancer, lung disease, coronary heat, SWLA	CDC, National Vital Statistics System. Accessed via CDC WONDER	2012-2016	Community Commons, 2018
Cancers	Cancer Incidence rates (age adjusted per 100,000) population for the following cancers: Colon & Rectum, Lung & Bronchus, Kidney & renal Pelvis, Breast in females, and prostate in males. SWLA and parish level data. Additional info https://sph.lsuhsc.edu/louisiana-tumor-registry/data-usestatistics/monographs-publications/cancer-incidence-louisiana-census-tract/	National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), CDC and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program	2011-2015	https://statecancerprofiles.cancer.gov/
Injury fatalities	Death rates (Age adjusted per 100,000) due to homicide, motor vehicle crash, and suicide	CDC Wonder	2012-2016	Community Commons, 2018
Suicide	Age adjusted per 100,000 rate of suicides stratified by gender (male and female) and race (African American and Caucasian)	CDC Wonder	2012-2016	County Health Rankings, 2018
Teen births	Number of births per 1,000 female population ages 15-19 by parish	National Center for Health Statistics-Natality Files	2010-2016	County Health Rankings, 2018
Infant mortality	Number of deaths per 1,000 births	HRSA Area Health Resource File	2006-2010	Community Commons, 2018

Low birth weight (LBW)	% of live births with low birthweight (<2500 grams)	National Center for Health Statistics-Natality Files	2010-2016	County Health Rankings, 2018
Obesity	% of adults that report a BMI of 30 or more	CDC Diabetes Interactive Atlas	2014	County Health Rankings, 2018
Smoking	% of adults who are current smokers	BRFSS	2016	County Health Rankings, 2018
Physically inactive	% of adults age 20 and over reporting no leisure-time physical activity	CDC Diabetes Interactive Atlas	2014	County Health Rankings, 2018
Excessive drinking	% of adults reporting binge or heavy drinking	BRFSS	2016	County Health Rankings, 2018
Alcohol impaired driving deaths	% of driving deaths with alcohol involvement	Fatality Analysis Reporting System	2012-2016	County Health Rankings, 2018
Hospital data				
	Measure Description	Source	Year	Accessed via…
	List of inpatient hospitalizations and ED visits by top 20 zip codes, total zip codes in target parishes, and all other zip codes	CHRISTUS Shreveport-Bossier	July 2016-June 2018	
	Top 10 most common diagnoses for inpatient hospitalizations and ED visits			
	Number of repeat hospitalizations and number of repeat ED visits during a 1-year period			
	Payer mix for hospitalizations and Emergency Department visits			

Appendix A. Matrix of Key Informants Meeting IRS Requirement Guidelines

Per IRS regulations (Section 3.06 of Notice 2011-52), each facility must get input from people who fall into each category. It should be noted that several participants fall into more than one category and other participants identified as business owner, hospital affiliate, or community member. The number of participants who identified meeting requirements are reflected below.

Input representing broad interests of community served	Number of Participants Meeting Requirement
1) Persons with special knowledge of or expertise in public health	1
2) Federal, tribal, regional, state, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by the hospital facility	5
3) Members of medically underserved, low-income, and minority populations in the community served by the hospital facility, or individuals or organizations serving or representing the interests of these populations	9

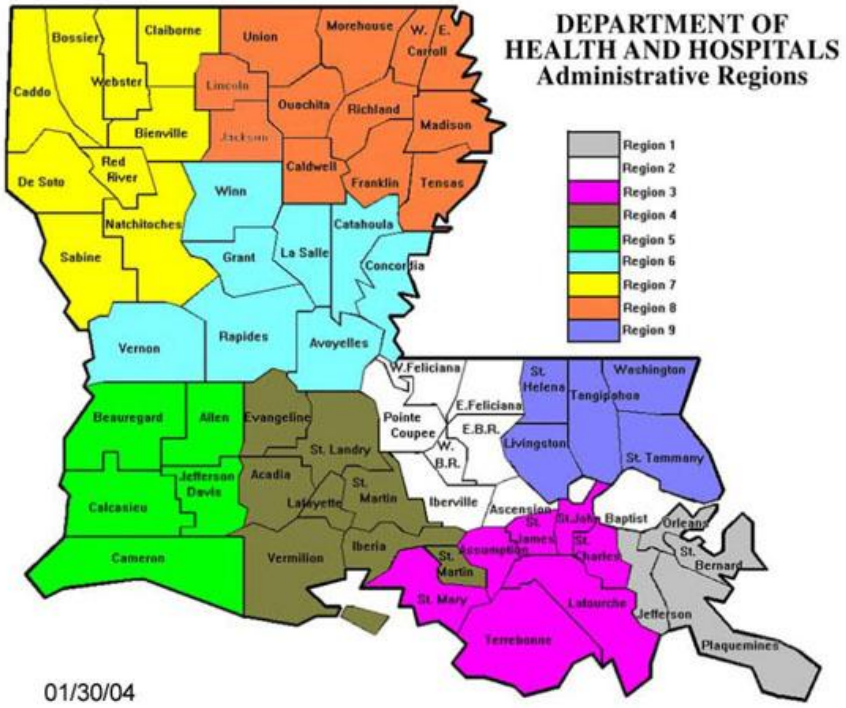
Examples of organizations and populations represented by participants included:

- Providers and patients from Martin Luther King Health Center & Pharmacy
- Parish Health Unit
- United Way
- Council on Aging
- David Raines Community Health Centers
- Sheriff's Office
- Volunteers of America
- Children's Hospital

  And many others…

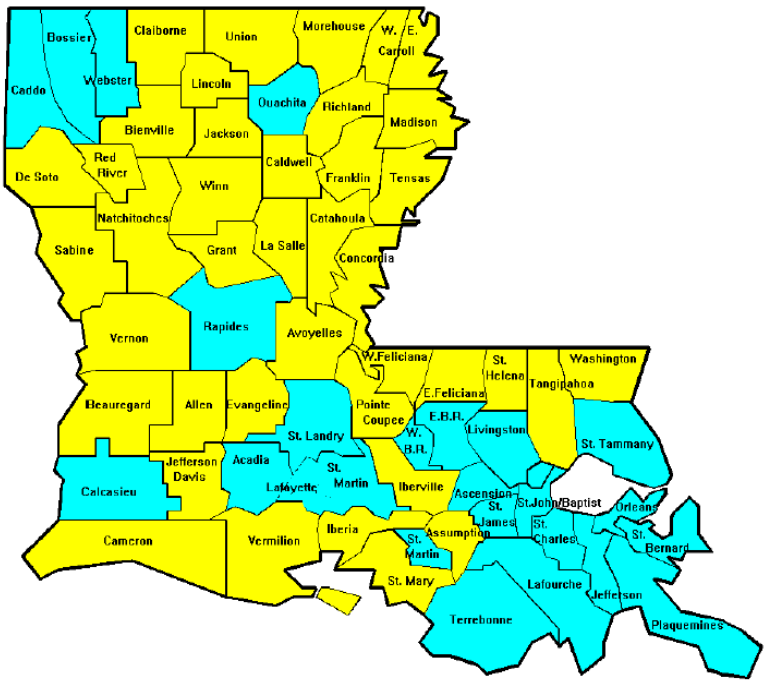
Appendix B. Maps

Louisiana Administrative Regions

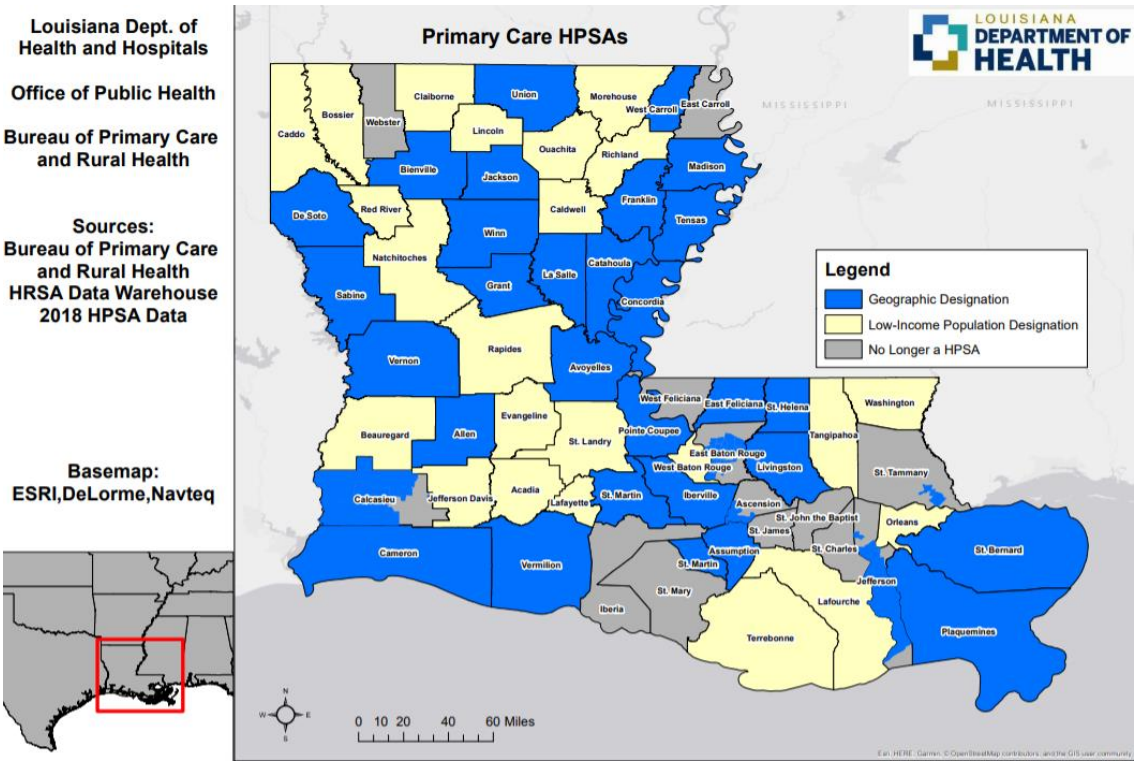


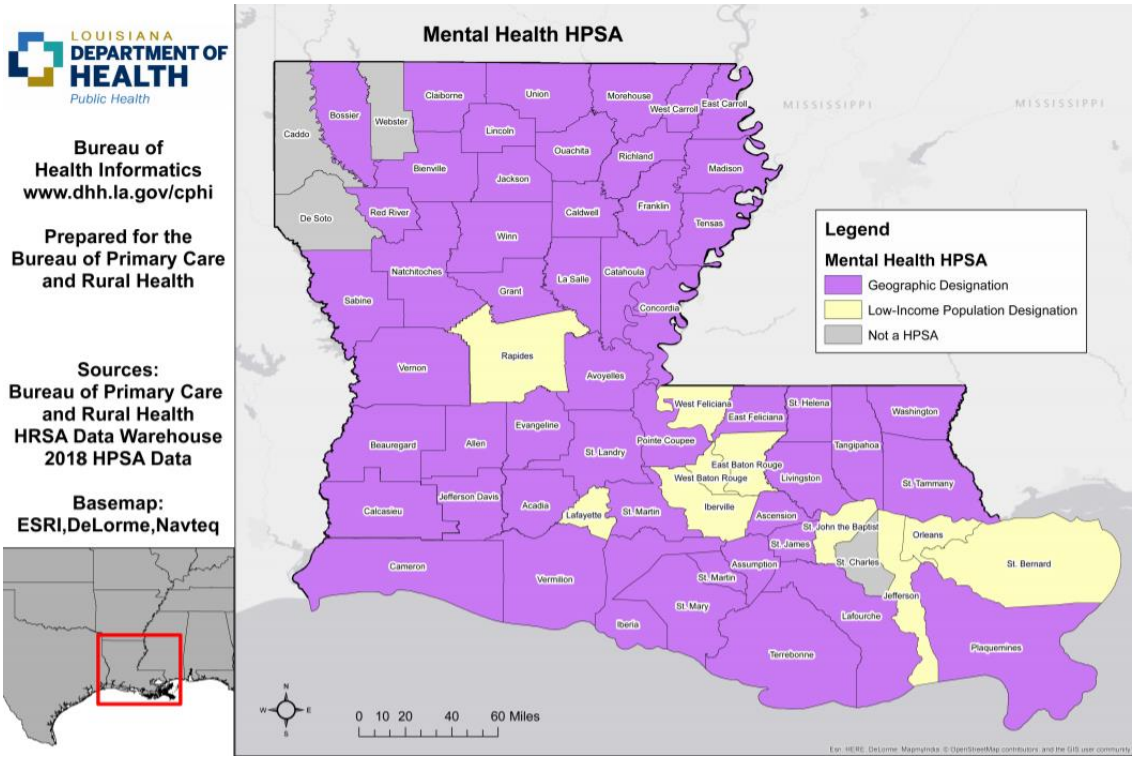
Rural and Urban Parishes

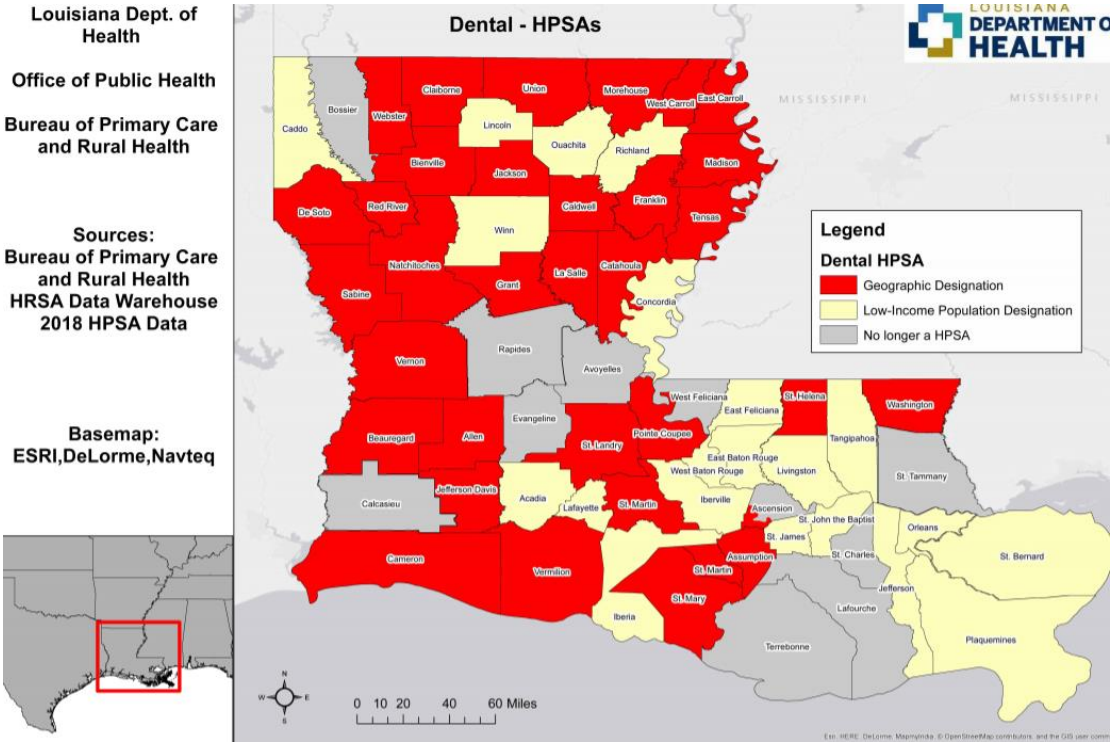
Rural Parishes (Yellow) and Urban (Turquoise Blue) are designated by the Federal Office of Management and Budget.



HPSA maps


Louisiana Dept. of Health and Hospitals
Office of Public Health
Bureau of Primary Care and Rural Health
Sources:
Bureau of Primary Care and Rural Health
HRSA Data Warehouse
2018 HPSA Data
Basemap:
ESRI,DeLorme,Navteq
Primary Care HPSAs
LOUISIANA DEPARTMENT OF HEALTH
Legend
Geographic Designation
Low-Income Population Designation
No Longer a HPSA
0 10 20 40 60 Miles


LOUISIANA DEPARTMENT OF HEALTH
Public Health
Bureau of Health Informatics
www.dhh.la.gov/cphi
Prepared for the Bureau of Primary Care and Rural Health
Sources:
Bureau of Primary Care and Rural Health
HRSA Data Warehouse
2018 HPSA Data
Basemap:
ESRI,DeLorme,Navteq
Mental Health HPSA
Legend
Mental Health HPSA
Geographic Designation
Low-Income Population Designation
Not a HPSA
0 10 20 40 60 Miles


Louisiana Dept. of Health
Office of Public Health
Bureau of Primary Care and Rural Health
Sources:
Bureau of Primary Care and Rural Health
HRSA Data Warehouse
2018 HPSA Data
Basemap:
ESRI,DeLorme,Navteq
Dental - HPSAs
LOUISIANA DEPARTMENT OF HEALTH
Legend
Dental HPSA
Geographic Designation
Low-Income Population Designation
No longer a HPSA
Claiborne
Union
Morehouse
West Carroll
East Carroll
Bossier
Caddo
Webster
Lincoln
Ouachita
Richland
Madison
Bienville
Jackson
Franklin
De Soto
Red River
Caldwell
Tensas
Winn
Natchitoches
La Salle
Catahoula
Grant
Sabine
Concordia
Vernon
Rapides
Avoyelles
West Feliciana
East Feliciana
St Helena
Washington
Evangeline
Beauregard
Allen
St Landry
Pointe Coupee
Tangipahoa
East Baton Rouge
West Baton Rouge
Livingston
St Tammany
Jefferson Davis
Acadia
Calcasieu
Lafayette
St Martin
Iberville
Ascension
St John the Baptist
St James
Orleans
Cameron
Vermilion
Assumption
St Charles
St Bernard
St Martin
St Mary
Jefferson
Iberia
Lafourche
Terrebonne
Plaquemines
0 10 20 40 60 Miles

Appendix C. Local Organizations & Community Assets Mentioned by Participants

- *Martin Luther King Health Center & Pharmacy*
- *Parish Health Unit*
- *United Way*
- *Caddo Council on Aging*
- *David Raines Community Health Centers*
- *Sheriff's Office*
- *Volunteers of America*
- *Children's Hospital*
- *School based health centers*
- *The HUB Ministry*
- *Rescue Mission*
- *Salvation Army- work with high poverty populations*
- *Hope Connections- grant that provides housing for high risk homeless*
- *Re-nesting Project- project that provides basic furnishings for people who are moving into an apartment*
- *Housing Authority*
- *Community Foundation of North Louisiana*
- *Step Forward- seeks to provide collaborative efforts to address [housing] issues*
- *City of Shreveport- for housing, usually long wait list*
- *Financial Empowerment Center*
- *CHOICE Neighborhood grant- to help with substandard housing*
- *Providence House- helps homeless, but has a long waiting list*
- *Office of Public Health*
- *Interfaith- trying to address payday lending*
- *Catholic Charities*
- *YWCA- eliminating racism and empowering women*
- *Mobile Units: St. Luke's, Miles to Smiles can provide full service dental work*
- *LSU Medical School in Shreveport- provides sig amount of MDs, nurses, specialty practitioners*
- *Natchitoches has an economic development forum annually*
- *Bienville Coalition- helped with high school addiction issues*
- *Cara Center- part of CHRISTUS and LSU*
- *Complete Clinic- provides drug screenings and medical screenings for children*
- *CADA (Council on Alcoholism and Drug Abuse)- for substance abuse and addictions*
- *Brentwood Hospital- for mental health services (services and beds have been trimmed down)*
- *New Day Recovery [formerly Pines Treatment Center]- drug and alcohol treatment*
- *Shreveport Green- a mobile market*
- *Recreational department*
- *211 through United Way- an updated community resource hub*
- *Walgreens, Walmart, etc providing vaccinations*
- *Other facilities: University Health, Willis Knighton, CHRISTUS Velocity Urgent Care, other Urgent Cares*
- *Federally Qualified Health Centers (FQHCs) and Rural Health Centers*

Appendix D. Recommendations provided by Interview and Focus Group Participants

- *Coordinate trade associations (hospital association, chamber, environmental groups, healthcare, etc. CHRISTUS cannot make all of these changes alone because of competition. Need a third party, such as trade association where you have representation and involvement. That may a way to bring some disparate groups to the table.*
- *I think it starts as education in the school, in pre-school, elementary school, has to start there with making sure that the children get that side of the equation b/c children can have real impact on what happens in many homes. 'Hey mom guess what we learned in school today? Can we have some fruit and vegetable sometime?' Sometimes that can be generational. You have to plant those seeds that will over time have a positive effect. Education is that.*
- *Maybe talk to food industry about making healthier food options more affordable*
- *Having more outpatient facilities, having extending care to other communities, smaller communities with physical office supported by telehealth, tele medicine, tele-psychiatry would help extend care into some of the communities.*
- *There needs to be an understanding that in some areas, they [the outpatient facilities] would need financial support, because not enough people to make it a sustainable operation.*
- *There needs to be some balance in that utilizing technology and advocated for reimbursement for technology. We are moving in that direction, and we just need to be stronger advocates to make sure the reimbursement mechanisms keep pace with that.*
- *Advocating at the policy level for adequate reimbursements for underserved*
- *Transportation is a big issue in the city. I don't know how they (CHRISTUS) could help besides partnering with someone who provides transportation, so the patient could get free or reduced rides to physicians.*
- *Encourage their patients to be more social, referring them to more agencies or companies that provide activities or even with their insurance if they have silver sneakers encourage patients to be more active and have referral for that. CHRISTUS could provide funding for agencies helping with socialization.*
- *Reaching out to public or advertising what services and facilities CHRISTUS offers*
- *An increase in availability; I'm not sure if that's through hiring more people, quicker turn around -mainly in mental health.*
- *One thing could do as Shreveport and Alexandria -- serve as catalyst to start conversation around integrating healthcare, to bring together and rally the providers that do healthcare. Get them in the same room and start talking together about how they can solve some of these problems.*
- *Getting policy makers together on some specific project like integration of healthcare, CHRISTUS has the cache to create that kind of dialogue. Especially since you have hospital in Alexandria and Shreveport*

- *Continue funding community programs that are working*
- *Someone has to bring legislators together to look at finite number of dollars that we have to raise health and economic wellbeing of entire state. CHRISTUS could do this.*
- *CHRISTUS could work with some of the people here in town; go along with them when they conduct listening tours in different communities. Like in Shreveport, the Committee of 100 has a subgroup that goes out in some of the neighborhood that are economically challenged and hold meetings in recreation halls or schools where they just listen to what are the problems are here. That would be good for CHRISTUS to do, just to listen go to where people are and where they gather and don't try to do anything other than just listen. They are very smart people at CHRISTUS. They can figure things out.*
- *CHRISTUS has excellent reputation in community, but they need to expand, create satellite services or regrow urban services. They don't have enough services to compete.*
- *Commit more assets to urban areas. I want them to put nice facility in Benton area.*
- *CHRISTUS has an excellent reputation, but they have gotten beat up and others don't think they have specialty services that another provider has. They need to compete, and people will go there.*
- *As far as meeting needs in rural communities. Thera aren't a lot of things they do in rural areas. Still has Coushatta hospital, which is great. It's a feeder hospital for Highland and need to do more than that. They should reinvest in inpatient services in area.*
- *Maybe have locations in parts of town or in rural areas where transportation is lacking. Get services to the people.*

Appendix E. Impact since last CHNA (recorded as of July 2016-February 2019)

Since 2016, CHRISTUS Health Shreveport-Bossier has been working to address the following needs, which were identified in their previous community health needs assessment:

- Cardiovascular Health (includes heart disease, high blood pressure, high cholesterol, diabetes, and stroke)
- Nutrition and health eating (includes both obesity and malnutrition)
- Tobacco use
- Sexually transmitted infections and teen pregnancy
- Lack of knowledge of health care resources in community
- Improve Access to care for uninsured and underinsured
- Child safety and well-being

CHRISTUS Health Shreveport-Bossier developed activities, programs and clinical interventions to address these seven health needs, which are described below.

1. Cardiovascular Health

From January 2018 – January 2019, CHRISTUS Health Shreveport-Bossier educated 338 people during 13 sessions at various locations in the Shreveport-Bossier area on hypertension, salt intake, finding a primary care provider, and when to use the emergency room or an urgent care facility. One hundred eight-one (181) participants (54%) were African American women between the ages of 45-75.

CHRISTUS Health Shreveport-Bossier partnered with American Heart Association for multiple events and programs to promote awareness in the community of heart disease prevention and knowing your numbers. Examples include:

- Co-sponsored the 2017, 2018, and 2019 Go Red Luncheons
- Implemented community health fairs where CHRISTUS Shreveport-Bossier provided biometric screenings, educational materials and "Ask the Doc" sessions for over 900 attendees. In 2019, 90 attendees were able to speak directly with a doctor at the health fair to discuss their health fair test results.

During April 2018-February 2019, two hundred fifty-two (252) emergency room patients were enrolled in the Equity of Care Program, which targeted patients who had a primary care diagnosis of hypertension. Through the Equity of Care Program, a Community Health Worker spoke to each patient within 24 hours of their Emergency Room visit and then followed up with each patient at the two-week, two-month, and six-month mark. The Community Health Worker closely followed any participant that had a readmission within 30 days of their initial Emergency Room visit. Ninety-eight percent (98%) of Equity of Care participants did not have a readmission within 30 days.

2. Nutrition and Healthy Eating Strategy

From June 2016-Febrauary 2019, staff conducted 186 nutrition education seminars in the Shreveport-Bossier community. Over nine thousand (9,300) participants were educated on healthy dietary choices as well as

overall better selections of nutrient dense foods. Staff also provided food demonstrations. Some of the education seminars were conducted at Common Ground, a day-center for homeless persons.

3. Tobacco Use Strategy

From June 2016-January 2019, CHRISTUS Health Shreveport-Bossier distributed 3,850 tobacco cessation brochures to in-house patients who were currently smoking.

4. Sexually Transmitted Disease Infections and Teen Mom Strategy

Beginning in 1993, the CHRISTUS Teen Mom program meets monthly to discuss a high school graduation plan, pregnancy prevention for the future, budgeting, and positive parenting with young girls aged 12 to 18 who find themselves pregnant or who may have recently delivered. The program attendance is constantly changing as participants roll in and out based on age and other social factors. Referrals for the program come from school counselors, physicians and pastors. In 2018, an Office of Public Health staff member attended three Teen Mom program sessions to educate participants on STI prevention and risky sexual behavior. The attendance averaged six per month. Two participants graduated high school in 2017 and went on to pursue a college degree. Three participants graduated high school in 2018, two of whom went on to pursue a college education and one enrolled in a vocational education program.

CHRISTUS sent a delegate to STI training with the Office of Public Health. The group met once a month to discuss STI issues facing our community. A CHRISTUS delegate also attended six Syphilis Taskforce meetings in 2018.

5. Improving Community Knowledge of Health Care Resources

In 2018, CHRISTUS educated Hospitalists on resources available for those with limited resources through two trainings. Topics included resources available to patients with Medicaid or patients without insurance, as well as how the Community Health staff members could assist patients who have limited resources.

The Community Health Worker attended monthly Case Management and Social Worker hospital meetings to assist patients with accessing primary care. The Community Health Worker helped 486 in-house patients from December 2017 to February 2019. Duties of the Community Health Worker entailed:

- Find a primary care physician if needed,
- Arrange transportation assistance to appointments and
- Provide assistance to patients who cannot afford their medications.

6. Improving Access to Care

The CHRISTUS Shreveport-Bossier Health System Community Health Worker position, which helps patients obtain access to care, was originally a grant-awarded position that started in October 2017. The position is now a permanent position funded by the hospital to serve patients who lack resources including the uninsured or underinsured. CHRISTUS Shreveport-Bossier defines an underinsured patient as one who has Medicaid Primary Insurance, a patient who has Medicare but is under the age of 65, or who has another type of insurance that

does not meet their health care needs. Below are outcomes of the program from December 2017-February 2019:

- Created a hypertension referral process, known as the Equity of Care Program, for ED patients who do not have primary care physicians, and primarily for uninsured or underinsured patients. Made 268 primary care physician appointments for ED patients.
- Assisted 486 in-house patients with primary care placement, specialist placement, or other community resources. On average, thirty-five (35) patients received assistance each month. Eighty-eight percent (88%) of the patients had Medicaid or were uninsured.
- Referred 44 uninsured patients to Martin Luther King Health Center, a non-profit Shreveport facility for patients with chronic diseases, without insurance and low income. Thirty-three patients received help through MLK pharmacy to receive free medications.

Twenty-eight (28) frequent ED utilizers who have Medicaid were referred to their Managed Care Organization Case Management department for further education.

From June 2016 - February 2019, almost three thousand (2,859) patients were approved for Medicaid through a referral program. Seventy-eight (78) disability insurance applications were also completed during this time.

CHRISTUS Shreveport-Bossier Health System provides an online and call center-based physician match resource that includes CHRISTUS aligned primary care and specialist physicians. The physician match service can be found at www.christushealthsb.org.

In response to the Shreveport-Bossier community's lack of primary care providers, CHRISTUS Shreveport-Bossier Health system recruited three new physicians to the community in 2018. They are now CHRISTUS Physician Group providers.

CHRISTUS also provided financial support to community partners who help the underserved.

- In 2017, provided $43,230 in financial support to the Martin Luther King Health Center in Shreveport, Louisiana for their work with patients who have no insurance of any kind. The MLK Health Center has a very successful cohort chronic disease management program and free pharmacy.
- Provided continued financial support for School Based Health Centers (SBHCs) after transitioning management to David Raines Community Health. The SBHCs provide education, health screenings, immunizations and other primary care and preventative services to underserved youth. In addition to in-kind support, CHRISTUS Shreveport-Bossier Health System has provided more than $63,000 of financial support from July 1, 2016 – January 31, 2019.
- Providing $30,000 in funding and furnishings toward a fifth School Based Health Center to be run by David Raines Community Health, opening in fall 2019.

7. Child Safety and Well-Being

The hospital's Cara Center provides suspected child abuse victims with a medical examination and follow-up counseling. An average of forty-one (41) children are seen each month. The Cara Center works in conjunction with the Louisiana State University Health Science Center's Gingerbread House, which helps children through

the investigative and judicial process, and provides counseling. The two are co-located to make the process more seamless and less stressful for the children.

Provided three Darkness to Light, Stewards of Children training programs, which is a sexual abuse prevention training program that educates adults to prevent, recognize, and react responsibly to child sexual abuse. Fifty-one people attended the three training sessions. Cara Center staff are certified to present these training sessions.

Provided training sessions to twelve Emergency Department (ED) staff, a Community Health Worker, and two social workers on how to spot suspected child abuse and how to refer children for further assessment and assistance.

The Emergency Department held two information meetings for staff in 2018 on sex trafficking. Attendees learned how to identify sex trafficking and how to report it. Eighteen Emergency Department staff members attended.

Pre-childbirth classes are also offered free of charge. Between, July 1, 2016 – January 31, 2019, over a thousand (1,036) people participated in 60 class offerings.