

Louisiana Comprehensive  
Cancer Control Plan

**2017-2021**

## Editors

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For more information about the Louisiana Cancer Prevention and Control Programs, please visit our website at [louisianacancer.org](http://louisianacancer.org)

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## EXECUTIVE SUMMARY

This 2017-2021 cancer plan, created by the Louisiana Comprehensive Cancer Control Program and its partner organizations, is meant to be used by its existing partners and other stakeholders (healthcare providers, community organizations, and state organizations) as a roadmap and a reference. Using data to inform our decisions, we emphasized where we think we can make the biggest impact: early detection of specific cancers and reducing cancer risks such as tobacco exposure and obesity.

**Population Summary:** According to the latest United States (US) Census Bureau estimates, as of July 1, 2015, the population in Louisiana is nearly 4.7 million. Roughly 63.2 percent of the state's population is White, followed by 32.4 percent Black, 1.8 percent Asian, and 2.6 percent other. Four percent identify as Hispanic or Latino. Louisiana has the second highest percentage Black population in the United States, and 73 percent of Louisiana residents are urban dwellers.

**Health Disparities and Social Determinants:** Although Blacks in Louisiana represent one third of the population, they experience a disproportionate share of poor outcomes, including health outcomes. For example, Blacks have lower rates of educational attainment than Whites. Thirty-one percent of Blacks are living in poverty versus 12 percent of Whites. Blacks in Louisiana, and nationally, are more likely to be uninsured than Whites (this disparity should be reduced after Medicaid expansion). Educational attainment, income, access to healthcare, and health outcomes are clearly linked. People with better education, more income, and health insurance have better health outcomes. However, both Blacks and Whites in Louisiana have worse outcomes (social and health) than their national counterparts, with few exceptions.

**A Snapshot of Cancer in Louisiana:** As a trend, cancer incidence and mortality rates are declining among men in Louisiana. Among Louisiana women, while cancer mortality is decreasing, cancer incidence rates are increasing, opposite the national trend. Cancer incidence and mortality rates among men and women in Louisiana are worse than the national rates for all cancers combined. Cancer remains the second leading cause of death in Louisiana, and both Blacks and Whites in Louisiana have poorer cancer survival than their national counterparts. In line with the national statistics, the top three causes of cancer death in Louisiana are lung, colorectal, and breast cancers.

**National Health Rankings:** Among state health rankings, Louisiana comes in 49th place; it has the highest percentage of obesity in the US at 36.2 percent, and the American Lung Association report card gives Louisiana an F (Fail)—largely for its inability to protect bar and casino workers and patrons from toxic, secondhand smoke. What are the most important factors within state health rankings? Tobacco exposure and obesity. They are also the most prominent health risks leading to premature death and disability in Louisiana. Tobacco exposure leads to heart disease, the leading cause of death, and it also leads to many types of cancer, the second leading cause of death. Obesity increases risks for many cancers, and it complicates and sometimes delays cancer treatment.

**Access to Healthcare:** In January of 2016, the current governor, John Bel Edwards, accepted Medicaid expansion. As of July 1, 2016, Medicaid expansion has helped over 305,000 people get health insurance in Louisiana. This is an important step towards increased preventive health screenings, including cancer screenings, and providing a payment mechanism for treatment. This

should help reduce some health disparities in Louisiana, especially those improved by early detection (i.e. heart disease, breast, cervical, and colorectal cancers).

**Cancer Survivorship:** As the number of cancer survivors increases, more healthcare professionals will need to learn how to best treat the late- and long-term effects of being a survivor. Linking cancer survivors back to primary care providers will be an important step going forward; primary care providers can recommend cancer screenings, help manage comorbidities, and help prevent and treat other chronic diseases.

**Summary of Common Strategies:** As an overall goal, this cancer plan aims to reduce cancer death in Louisiana. Partners state-wide have identified key strategies they feel can help reduce cancer death. In general, the strategies include:

1. Increasing availability of patient navigation services at the community level
2. Assisting with enrollment in the health insurance marketplace and Medicaid
3. Encouraging men and women with health insurance to use no-cost early detection cancer screenings
4. Collaborating with Federally Qualified Health Centers (FQHCs) to use evidence-based interventions to increase cancer screening rates
5. Using data visualization software to map Louisiana cancer data to assist in focusing resources and identify areas for early detection interventions
6. Working with communities and key partners to create a smoke-free Louisiana
7. Implementing policy, systems, and environmental changes to reduce obesity

## COMMONLY USED ABBREVIATIONS

### ORGANIZATIONS & PROGRAMS

AAFP	American Academy of Family Practice
AAP	American Academy of Pediatricians
ACG	American College of Gastroenterology
ACOG	American Congress of Obstetricians and Gynecologists
ACoS	American College of Surgeons
ACS	American Cancer Society
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control & Prevention
CDC ACIP	CDC Advisory Committee on Immunization Practices
FDA	Food and Drug Administration
IOM	Institute of Medicine
LBCHP	Louisiana Breast & Cervical Health Program
LCCCP	Louisiana Comprehensive Cancer Control Program
LCCRT	Louisiana Colorectal Cancer Roundtable
LCP	Louisiana Cancer Prevention and Control Programs
LDH	Louisiana Department of Health
LHCC	Louisiana Healthy Communities Coalition
LPCA	Louisiana Primary Care Association
LTR	Louisiana Tumor Registry
NBCCEDP	National Breast and Cervical Cancer Early Detection Program
NCCCP	National Comprehensive Cancer Control Programs
NCCN	National Comprehensive Cancer Network
NCHS	National Center for Health Statistics
NCI	National Cancer Institute
SAHM	Society for Adolescent Health and Medicine
SEER	Surveillance, Epidemiology, and End Results Program (National Cancer Institute)
SHA/SHIP	State Health Assessment & State Health Improvement Plan
SNAP	Supplemental Nutrition Assistance Program
TFL	Tobacco Free Living
USPSTF	US Preventive Services Task Force

## **MEDICAL TERMINOLOGY**

BRCA	breast cancer susceptibility gene
FAP	familial adenomatous polyposis
FIT	fecal immunochemical testing
FOBT	fecal occult blood testing
HPV	human papillomavirus
LDCT	low-dose computed tomography, or low-dose CT
PSA	prostate-specific antigen
STD	sexually transmitted disease

## **OTHER TERMS**

FQHC	Federally Qualified Health Center
LGBT	lesbian, gay, bisexual, and transgender
NHIS	National Health Interview Survey
NIS	National Immunization Survey
PPACA	Patient Protection and Affordable Care Act
PSE	policy, systems, and environmental
SES	socioeconomic status
SMD	sexual minority density
YTS	Youth Tobacco Survey

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# INTRODUCTION

## COMPREHENSIVE CANCER CONTROL PROGRAM

The Louisiana Comprehensive Cancer Control Program (LCCCCP) is administered through LSU Health New Orleans within the LSU School of Public Health. It is the planning and partnership component of the Louisiana Cancer Prevention and Control Programs (LCP). As such, LCCCCP supports the LCP mission: to eliminate suffering and death in Louisiana by focusing on cancers that can be prevented or detected early and cured. We have identified and prioritized those cancers that can be detected early and cured: breast, cervical and HPV-related cancers, colorectal, and lung and other tobacco-related cancers. This cancer plan also discusses some emerging issues related to cancer such as liver cancer, genetic testing, sexual orientation and gender identity disparities, patient navigation, and survivorship. LCCCCP's mission is to engage diverse public and private community partners to develop, implement, and promote a statewide comprehensive, coordinated approach to cancer prevention and control.

LCCCCP is part of the National Comprehensive Cancer Control Programs (NCCCCP) which was established in 1998 by the Centers for Disease Control and Prevention (CDC). Every state and territory has a comprehensive cancer control program. The main components of the NCCCCP are as follows: building strategic partnerships, using data to inform decision-making, the cancer plan, and implementing statewide programs.

These combined efforts are meant to achieve the following:

- ◆ Reduce cancer risk
- ◆ Detect cancers earlier
- ◆ Improve cancer outcomes after diagnosis
- ◆ Increase the number of cancer survivors
- ◆ Improve quantity and quality of life among cancer survivors

A strong emphasis of the program is to improve cancer-related health outcomes among those who suffer the most from health disparities such as minorities, people in poverty, and people with low access to healthcare.

The bulk, but not all, of this cancer plan focuses on prevention of preventable cancers and addressing risk factors. Other LCCCCP partners, primarily the medical professionals, are best equipped to implement interventions to achieve the best treatment outcomes in the clinical setting.

Before this plan was finalized, it was sent to key partners for review and feedback, including the statewide Louisiana Healthy Communities Coalitions (LHCC).

## PURPOSE OF THE PLAN

This document is a reference guide for stakeholders and a roadmap and strategy guide for LCCCCP and its immediate partners. The first part of this cancer plan uses a data-driven approach to communicate incidence and mortality rates in Louisiana and the populations that are disproportionately burdened by the disease. LCCCCP and its partner organizations worked together to identify population-level disparities and system level gaps for specific cancers and risk factors. The Louisiana Tumor Registry (LTR) provided the most up-to-date (2009-2013) rates for cancer incidence, mortality, late-stage diagnosis, and five-year survival rates. The second part of this plan, the Strategies section, identifies the cancer types and/or risks, near-term targets, and recommended strategies to help achieve those targets.

In 2016, LCCCP and LHCC members participated in a multitude of statewide planning sessions including the following: the State Health Assessment and State Health Improvement Plan (SHA/SHIP), the Statewide Tobacco Strategic Planning sessions, the Louisiana Colorectal Cancer Roundtable (LCCRT), LHCC regional strategic planning sessions, the Pennington Biomedical Research Center Childhood Obesity and Public Health Conference, and the Louisiana Breast & Cervical Health Program (LBCHP) Medicaid Expansion Impact Group. The resulting strategies are used in the applicable sections of this plan. In instances where a formal work group with partners was not specifically convened in 2016 by or with LCCCP (obesity, HPV vaccination, cancer survivorship, LGBT health, and patient navigation), the following strategy sources were identified.

- ◆ **Obesity:** Adopted recommendations from *Reducing Childhood Obesity in Louisiana: An Evidence-based Approach to Inform Policy Decisions*, and consulted the CDC's website's "Health Impact in Five Years" intervention guide
- ◆ **HPV Vaccination:** Consulted LCP experts and Louisiana Department of Health Office of Immunization
- ◆ **Cancer Survivorship:** Consulted LCP experts and the National Cancer Survivorship Resource Center's publication *Systems Policy and Practice: Clinical Survivorship Care*
- ◆ **LGBT Health:** Consulted LGBT Health Link
- ◆ **Patient Navigation:** Solicited recommendations for navigation from LCCRT, SHA/SHIP, and the LBCHP Medicaid Expansion Impact Group

LCCCP partner organizations have largely identified their priorities and which strategies they fund and implement.

## IMPLEMENTATION OF THE PLAN

The Louisiana State Cancer Plan is expected to be carried out by LCCCP partners in the strategies section. In many cases LCCCP will provide nominal support and coordination for these strategies (e.g. data mapping, tobacco control, electronic health record quality implementation, access to healthcare, etc.). Where possible, it will employ staff in other parts of Louisiana for local implementation and partnership development.

LCCCP has established core partnerships to ensure the sustainability and function of nine community coalitions statewide called the Louisiana Healthy Communities Coalitions (LHCC). These partners include the Campaign for Tobacco Free Living (TFL), LDH, and LBCHP. The nine LHCCs consist of public and private sector stakeholders who strategically identify policy, systems, and environmental changes (PSEs) for local implementation. Regional representatives, typically LHCC chairs and co-chairs, provide logistical and technical support for PSEs. LCCCP may provide a small amount of monetary support and hands-on coordination (regional LHCC initiatives for tobacco, obesity, cancer, cancer survivorship, HPV vaccination, and media and communications around cancer and its risk factors). Some of the groups, such as those focusing on HPV, cancer survivorship, and patient navigation, require the development of partnerships for strategy implementation.

Every year, LCCCP's program evaluator completes a partnership evaluation, and LHCC action plan evaluation, and an LCCCP action plan evaluation. LCCCP presents evaluation results to the program managers, partners (e.g. LCCRT, LDH, TFL), and LHCC Co-Chairs. These results are examined and lessons learned are incorporated into the following years' programs. Every five years, LCCCP does a full evaluation of the five-year cancer plan which is shared with its partners. LCCCP will monitor implementation of the cancer plan strategies on a monthly basis. Updates to the plan may occur as strategies are implemented, goals are achieved, or ideas become outdated.

# LOUISIANA COMPREHENSIVE CANCER CONTROL PROGRAM STRATEGIES

**GOAL 1:** Reduce cancer incidence and mortality rates in Louisiana. Provide ongoing cancer surveillance, partnership development, and support for program development and implementation.

The statewide cancer plan is a product of LCCCP and its partner organizations. To maintain the staff, programs, and partners, a core level of operations is necessary. Goal 1 and its objectives below largely contain the key elements required for continued administration of comprehensive cancer control activities.

**Objective 1: Infrastructure:** Ensure fiscal management, program management, and surveillance data operate continuously and accountably.

**Objective 2: Local Implementation:** Maintain cancer coalitions (currently Louisiana Healthy Communities Coalitions).

**Objective 3: Partnerships:** Maintain existing partnerships and/or establish new partnerships so as to align existing initiatives and/or identify opportunities for collaboration.

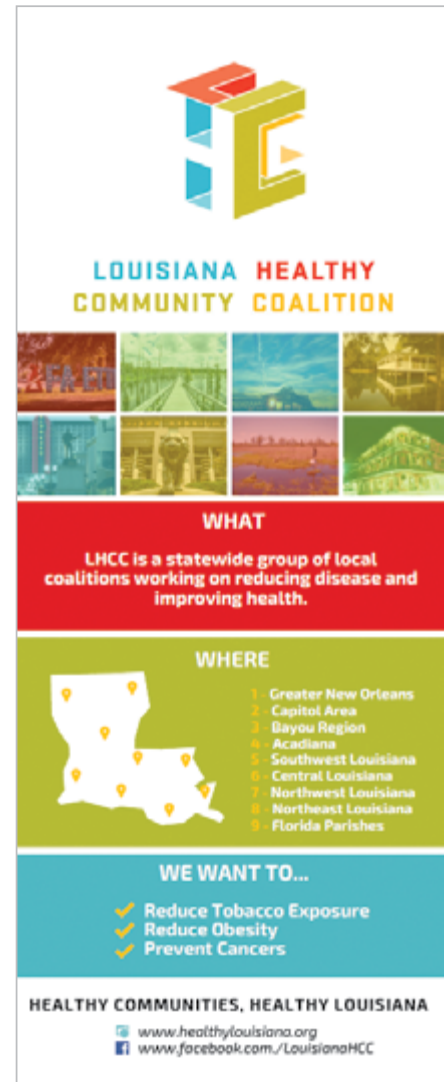
**Objective 4: Communications:** Maintain and implement communication plans annually (website, social media, etc.).

**Objective 5: Funding:** Apply for funding opportunities that address disparities as identified by data.

**Objective 6: Evaluation:** Evaluate cancer plan efforts annually using appropriate data sources (BRFSS, NHIS, YTS, SEER, etc.).

**Objective 7: Policy:** Maintain a policy coordinator to assist with data-informed program and policy development statewide.

**Objective 8: Surveillance:** Work with the Louisiana Tumor Registry to use data mapping technology to identify areas with high cancer mortality rates while maintaining patient confidentiality.



## Strategies

1. Convene regularly with program management
2. Use partnerships to create strategic changes to improve health outcomes
3. Identify funding sources to implement policy, systems, and environmental changes in Louisiana
4. Evaluate LCCCP's programmatic and planning efforts

## A Look at All Cancers

Louisiana faces large and important challenges to reducing its cancer incidence and mortality rates. Each year in Louisiana, about 23,570 new cases of cancer are diagnosed. Louisiana suffers from some of the highest cancer mortality rates in the US (5th highest), with approximately 9,252 deaths per year. Only heart disease—which, like cancer, is strongly correlated with

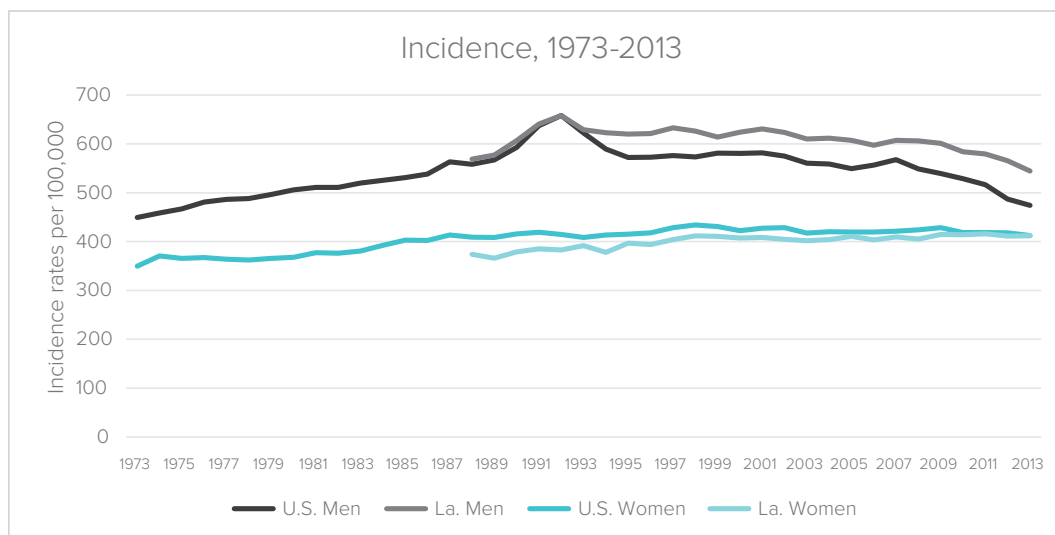
smoking—causes more death in Louisiana. The most commonly diagnosed cancers in Louisiana were prostate, lung, breast, colorectal, and kidney. The most common causes of cancer death were lung, colorectal, breast, pancreas, and prostate cancers, in that order. With few exceptions, Blacks in Louisiana have poorer cancer-related health outcomes such as lower five-year survival rates and higher mortality rates (LTR, 2016). Black women in Louisiana continue to have the highest breast cancer mortality rates in the US.

LCCCP has established priority cancers in the cancer plan: breast, cervical and HPV-related cancers, colorectal, and lung and tobacco-related cancers. The cancer plan’s priority cancers are subsequently discussed in more detail, examining and explaining disparities evidenced by the most recent data. Some of the cancers noted in this section are not cancers on which LCCCP and its partners focus their efforts—this is mainly due to funding priorities or unclear guidelines for prevention and control (e.g. prostate cancer).

### About the Data

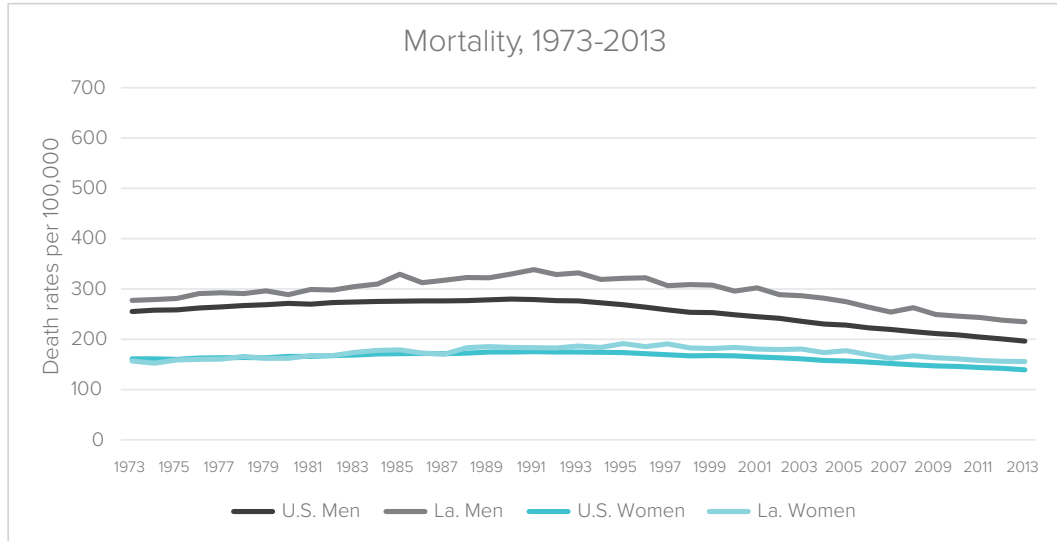
The following discussion, graphs, and figures provided by the Louisiana Tumor Registry (LTR) examine cancer trends among Louisianans overall, and by gender and race as they compare with the national trends.<sup>1</sup> Louisiana cancer incidence and mortality data in this cancer plan include the racial categories of White and Black. Counts and rates for American Indians/Alaska Natives and Asian Pacific Islanders are not presented here because incidence in these populations totals only about one percent of all invasive cases diagnosed from 2009 to 2013. Less than one percent of 2009-2013 cases were of unknown race. Data is not stratified by ethnicity because of very small numbers; two percent of all invasive cases from 2009 to 2013 were Hispanic. Data is typically presented in rates of incidence (new cases) and mortality (deaths ascribed to cancer) to provide a reasonable basis for comparison and frame of reference. This document uses the term Black(s) and White(s) to refer to African Americans and Caucasians because it is the term generally used in the source cancer data collection and presentation.

**Figure 1a. The incidence rates are declining in both the state and the nation for men. Cancer incidence among women in Louisiana is rising, but appears to be leveling off. For all cancers combined, Louisiana exceeds the national incidence rates.**



<sup>1</sup> US incidence rates are based on 9 regions from the SEER Program of the National Cancer Institute. Underlying mortality data provided by NCHS (National Center for Health Statistics). Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130) standard.

**Figure 1b. Mortality from cancer has traditionally been high in Louisiana and significantly exceeds the US rates for all four major sex groups in 2009-2013. For women, mortality is declining in Louisiana and the US, but this trend is not seen in the overall cancer incidence rates.**



### Leading Cancers in Louisiana, 2009-2013

The four cancers listed below rank the same in both Louisiana and the US. For many of these diseases, however, the incidence and/or mortality rates are significantly higher in the state than nationally.

**Figure 1c. Leading Cancers in Louisiana, 2009-2013 (SEER). The numbers (1,2,3,4) as a superscript are used to communicate that rate is significantly higher in Louisiana than in the US.**

	Men		Women	
	Incidence	Mortality	Incidence	Mortality
1.	Prostate <sup>1,2</sup>	Lung <sup>1,2</sup>	Breast <sup>2,3</sup>	Lung <sup>1,2</sup>
2.	Lung <sup>1,2</sup>	Prostate	Lung <sup>1</sup>	Breast <sup>2</sup>
3.	Colorectal <sup>1,2</sup>	Colorectal <sup>1,2</sup>	Colorectal <sup>1,2</sup>	Colorectal <sup>1,2</sup>
4.	Bladder	Pancreas <sup>1</sup>	Uterus <sup>3,4</sup>	Pancreas <sup>1</sup>

Notes: 1. Significantly high for Whites.  
 2. Significantly high for Blacks.  
 3. Significantly low for Whites.  
 4. Significantly low for Blacks.

### Priority Cancers for LCCCP

In order to make the most impact, LCCCP will address improving cancer outcomes in two ways: 1) focusing on specific cancers that are either preventable (tobacco-related cancers) or for which early detection via screenings improves survival rates, and;

2) focusing on systems-level strategies shown to improve cancer outcomes. The specific cancer focus areas for the program and its partners are breast, colorectal, cervical and other HPV-related cancers, lung and other tobacco-related cancers. Skin, prostate, and liver cancer are also discussed in the plan, and strategies are recommended. Skin cancer incidence and mortality rates in Louisiana are among the lowest in the nation. Prostate cancer does not currently have clear guidelines, so LCCCP will inform and educate the public on those guidelines as they become clearer. Some instances of liver cancer can be prevented with Hepatitis B vaccination or treatment for Hepatitis C, but LCCCP will not initiate steps to treat these risk factor diseases in this plan.

The overall goals for 2017-2021 include:

- ◆ **Reducing incidence and mortality rates** of breast, colorectal, cervical and other HPV-related cancers, and lung and tobacco-related cancers
- ◆ **Increasing early detection** of breast, colorectal, cervical, and lung cancer

The chart below provides the most recent incidence rates of these cancers among men and women in Louisiana. More important than the rates themselves, is that Louisiana’s citizens are, with few exceptions, suffering from these cancers to a greater extent than the rest of the nation. The upward arrows below indicate that Louisiana residents have significantly higher rates than their national counterparts. In other words, the difference is greater than one would expect to be by chance. One assumes in this case that certain geographic, demographic, and system level factors influence the extent of the difference in incidence rates.

**Figure 1d. Average Annual Incidence Rates of Select Cancers in Louisiana, 2009-2013 (SEER). All rates are per 100,000 persons and adjusted to the US 2000 standard population. Only includes invasive cancers.**

	Men		Women	
	Whites	Blacks	Whites	Blacks
Colorectal	53.4 ↑	69.9 ↑	38.6 ↑	51.2 ↑
Lung	86.8 ↑	110.6 ↑	57.8 ↑	50.8
Female Breast	--	--	121.7 ↓	130.9 ↑
Cervical	--	--	7.9	11.1 ↑
Tobacco-related (See “Lung and Other Tobacco-Related Cancers” section)	260.4 ↑	298.2 ↑	154.6 ↑	171.7 ↑

Notes: ↑ Significantly higher than the US (SEER) rate.  
 ↓ Significantly lower than the US (SEER) rate  
 -- Not applicable

Advanced-stage (sometimes referred to as late-stage) diagnoses arise when cancer is detected after it has spread from its initial location to other, sometimes distant, parts of the body. Advanced stage diagnosis for an individual may lead to the need for more aggressive treatment and possibly less successful outcomes. Populations with significantly higher advanced stage diagnoses show community and health systems-level barriers to care probably exist. The chart below shows the percentage of Louisiana cases that are diagnosed with advanced (regional or distant) disease.



Figure 1e. Advanced Stage Cancer Diagnoses in Louisiana, 2009-2013 (SEER).

	Men		Women	
	Whites	Blacks	Whites	Blacks
Colorectal	52.8% †	54.2% †	52.3% †	54.2% †
Female Breast	--	--	28.7%	37.0% †
Cervical	--	--	46.7%	56.6% †

Notes: -- Not applicable  
† Significantly higher than the US (SEER) rate for that race-sex group  
Derived SEER Summary Stage 2000

Figure 1f. Louisiana Average Annual Case and Death Counts for All Cancers, 2009-2013 (SEER)

	Case Count (Invasive only)	Death Count
White men	9,057	3,476
White women	7,668	2,943
Black men	3,552	1,489
Black women	3,028	1,263

In order to reduce the percentage of late-stage diagnosis for breast, cervical, and colorectal cancers, more Louisianians need to get screened according to expert panel guidelines such as those from the American Cancer Society (ACS) and the United States Preventive Services Task Force (USPSTF). As seen in the above table, Louisiana men and women experience significantly higher late-stage cancer rates than the US averages for colorectal cancer, and for breast cancer among Black women. These excesses can be reversed if early detection screening is increased. Black women in Louisiana are diagnosed at later stages than White women for breast, cervical, and colorectal cancer. This unfortunate fact must be addressed. More information about these cancers and strategies to improve cancer-related disparities can be found in the following sections.

## Breast Cancer

### GOALS, OBJECTIVES, AND STRATEGIES

*Goal 2: Reduce morbidity and mortality due to breast cancer.*



## Objectives



**Objective 1:** Increase the percentage of women aged 50-74 years and older who have had mammography screening within the past two years

- Where We Are: **79.4%**
- ▨ Healthy People 2020 Target: **81.1%**
- Our Target: **81.1%**



**Objective 2:** Reduce the number of new cases of late-stage breast cancer

- Where We Are: **42.1 per 100,000 women**
- Our Target: **40.0 per 100,000 women**

**No-Cost Mammograms and Pap tests for Louisiana Women Who Qualify.**

Louisiana has the 2nd highest breast cancer death rate in the U.S. and the 6th highest cervical cancer death rate - and that's from a disease we can stop.

Why? Women aren't getting screened like they should. So if you are low-income or uninsured, contact us.

**LBCHP**  
LOUISIANA BREAST & CERVICAL HEALTH PROGRAM

888-699-1073  
www.lbchp.org

**SCREENING RECOMMENDATIONS**

<b>Ages 50+ :</b> Mammogram every 1 to 2 years (40 years old for those with problems)	<b>Ages 21-64:</b> Pap test at least every 3 years
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## Strategies

1. Increase availability of patient navigation services at the community level
2. Assist with enrollment in the health insurance marketplace and Medicaid
3. Encourage women with health insurance to use no-cost mammography as part of their existing health plans
4. Educate the public and providers on LBCHP eligibility, policies, and services
5. Collaborate with Federally Qualified Health Centers (FQHCs) and LBCHP provider organizations to use evidence-based interventions to increase mammography screening rates
6. Use data visualization software to map LA cancer data to assist in focusing resources and identify areas for early detection interventions
7. Use national and state surveys to assess cancer prevalence (BRFSS, NHIS)

## BURDEN AND DISPARITIES IN LOUISIANA

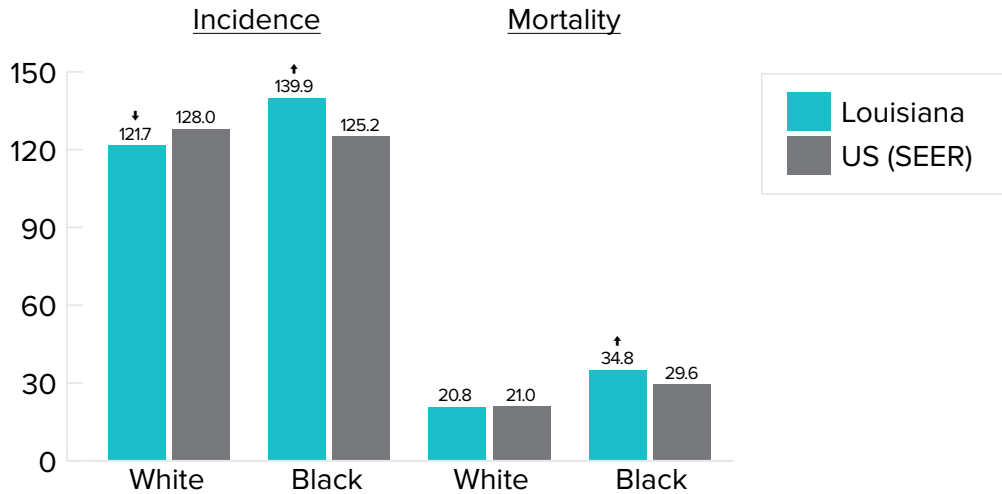
### *Incidence and Mortality Rates*

Black women in Louisiana are being diagnosed with and dying from breast cancer at a greater rate than White women in Louisiana and Black women in the US. The incidence rates for Black and White women in Louisiana are 139.9 per 100,000 women

and 121.7 per 100,000 women, respectively. The mortality rates are 34.8 per 100,000 women for Black women and 20.8 per 100,000 women for White women in the state.

The breast cancer incidence and mortality rates for Black women in Louisiana are significantly higher than the national rates. The incidence rate for White women in Louisiana is significantly *lower* than the national rate, but their mortality rate does not mirror the markedly lower incidence.

**Figure 2a. Female Breast Cancer Incidence and Mortality Rates in Louisiana and the US, 2009-2013 (SEER)**



Louisiana is the state with the highest breast cancer mortality rate in the US. Between 2009 and 2013, an average of 2,172 White women and 935 Black women in Louisiana were diagnosed with invasive breast cancer each year. An average of 410 White women and 244 Black women in the state die from breast cancer annually (see Figure 3e).

### Survival Rates

Five-year relative survival rates for breast cancer are lower in Louisiana than the US for both Black and White women for every stage of diagnosis. Nationwide, Black women have much lower survival rates than their White counterparts. As Figure 2b shows, 90.6 percent of White women are living five years after diagnosis at any stage, compared with 80.2 percent of Black women. The disparity is consistent for women diagnosed with invasive (localized, regional, or distant) stages, too; 88.3 percent of White women diagnosed with invasive breast cancer survive five years, while only 76.7 percent of Black women do.



Figure 2b. Five-Year Relative Survival for Female Breast Cancer by Stage at Diagnosis in Louisiana and the US (SEER). All cases diagnosed between the years of 2000-2012

	White women		Black women	
	Louisiana	US	Louisiana	US
In situ	100.0%	100.0%	99.4%	100.0%
Localized	96.5% ↓	99.1%	91.9% ↓	93.8%
Regional	84.5% ↓	86.8%	73.2% ↓	75.8%
Distant	28.5% ↓	32.2%	18.0%	21.1%
4 stages (includes in situ cases)	90.6% ↓	93.3%	80.2% ↓	83.7%
Invasive stages (excludes in situ cases)	88.3% ↓	91.0%	76.7% ↓	79.6%

### Late-Stage Diagnoses

The poor breast cancer outcomes for Black women in Louisiana are at least partially due to the high prevalence of late-stage diagnoses for these women. Thirty-seven percent of breast cancers diagnosed in Black Louisiana women are at a late stage (regional or distant). This is much higher than among diagnoses in White Louisiana women (28.7 percent). See Figure 2c.

When women are diagnosed with breast cancer before the age of 45, there is a higher chance the cancer is late-stage. See Figure 2d. Almost half (47.1 percent) of Black Louisiana women under the age of 45 that have breast cancer are diagnosed when the cancer is already in a late stage.

Figure 2c. Percentages of Female Breast Cancers Diagnosed at Late Stages, 2009-2013 (SEER)

Louisiana		US (SEER)	
Whites	Blacks	Whites	Blacks
28.7%	37.0%	27.0%	34.3%

Note: Includes in situ cases in the denominator

Figure 2d. Percentages of Breast Cancers Diagnosed at Late Stages among Women Under 45 Years of Age, 2009-2013 (SEER)

Louisiana		US (SEER)	
Whites	Blacks	Whites	Blacks
37.6%	47.1%	36.7%	43.6%

Note: Includes in situ cases in the denominator

**10 TIPS FOR TELLING YOUR KIDS ABOUT YOUR CANCER**

- PLAN THE CONVERSATION**  
Have an age-appropriate conversation with your child and use simple language.
- "IT'S NOT YOUR FAULT"**  
Help your child understand that the cancer is not their fault. Cancer is naturally occurring, and most of the time, no single cause can be pinpointed.
- EXPLAIN THE TREATMENT**  
Be sure your child understands that treatments are designed to kill cancer cells and make you better, but they also may make you tired and you may lose your hair.
- SOME THINGS WON'T CHANGE**  
Let your child know that they are loved and some things won't change. Try to maintain a normal schedule when possible.
- STAY POSITIVE**  
Your attitude can and will affect your child's, so it is important to stay positive.
- BE HONEST**  
Be reassuring, but don't make concrete promises about the future. Make sure your child is prepared for anything that may happen.
- LET YOUR CHILD HELP**  
Give your child an age-appropriate task, such as a daily hug or helping with dinner. It will allow your child to feel important and play an integral role in your recovery.
- LET OTHERS HELP**  
Let family, friends, teachers, school counselors and others know what is going on. They can be a huge help.
- SET BOUNDARIES**  
Let others know what is and is not okay to mention in front of your child. Do not be afraid to enforce those boundaries.
- ASK QUESTIONS, GIVE ANSWERS**  
Take time to ask each other questions. You may be surprised by what you find out.

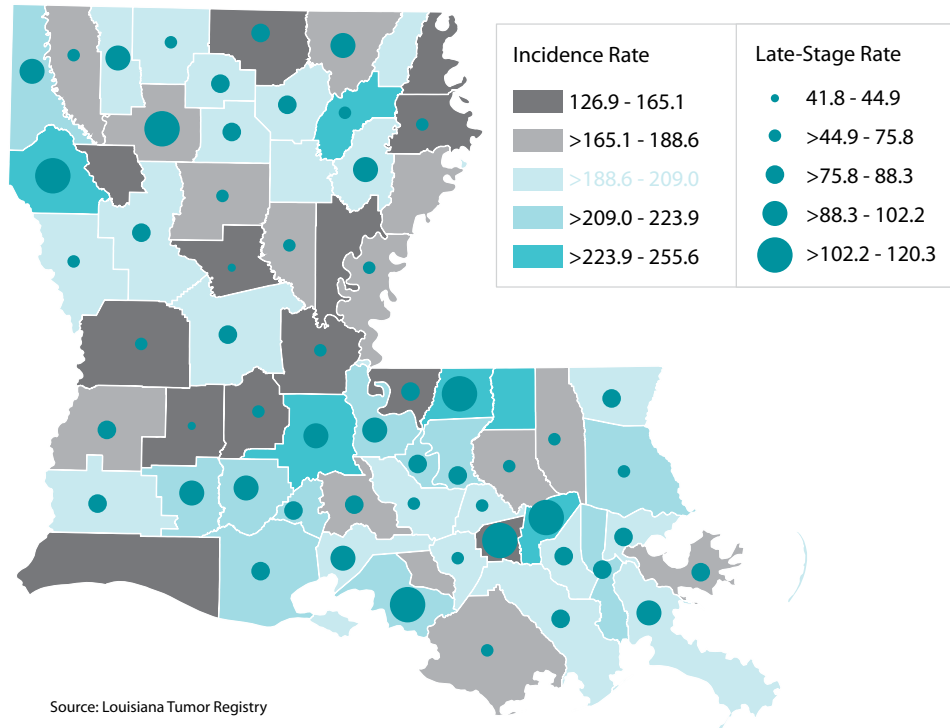
**GULF STATES YOUNG BREAST CANCER SURVIVOR NETWORK**

**SURVIVE DAT AL MISS**

The map below shows incidence and late-stage diagnosis rates for breast cancer for women between 40 and 64 years of age by parish. Parishes with higher late-stage diagnosis (those with a larger circle) are priority areas for initiatives to increase access to mammography screening. More screening will reduce incidence by increasing the number of in situ cases. Parishes with higher incidence rates (those in a darker shades of blue) may benefit from increased access to breast cancer care and treatment.

**Figure 2e. Late-Stage Breast Cancer Incidence by Louisiana Parish**

**Parish Breast Cancer Incidence and Late Stage Diagnosis Rates, 2007-2013**  
All Races, Females, age 40-64



**Figure 2f. Average Annual Case and Death Counts for Breast Cancer in Louisiana, 2009-2013**

**Female Breast Cancer, 2009-2013, Louisiana Average Annual Case and Death Counts**

	Case Count (Invasive only)	Death Count
White women	2,172	410
Black women	935	244

More White women are diagnosed with and die of breast cancer every year. Whites represent two thirds of the population in Louisiana. Of greater significance, Black women are disproportionately affected by poor breast cancer outcomes, namely late-stage diagnosis and cancer death.



## BREAST CANCER SCREENING RECOMMENDATIONS

Figure 2g. Breast Cancer Mammography Screening Recommendations for Women (Average Risk)

### Breast Cancer Mammography Screening Recommendations for Women (Average Risk)

USPSTF	ACS	NCCN
<ul style="list-style-type: none"> <li>Ages 40-50*</li> <li>Ages 50-74 every 2 years</li> </ul>	<ul style="list-style-type: none"> <li>Ages 40-44*</li> <li>Ages 45-55 every year</li> <li>Ages 55+ every 2 years (if in good health)</li> </ul>	<ul style="list-style-type: none"> <li>Ages 40+ every year (NCCN recommends clinical breast exams every one to three years for women 25-39 years of age, and every year starting at age 40)</li> </ul>
<p>*A decision to begin screening at this age should be made with a clinician, and should take into account the woman's values regarding specific benefits and harms, as well as family history and other risk factors</p>		

**The above recommendations are for average risk women only.** These recommendations apply to asymptomatic women aged 40 years or older who do not have preexisting breast cancer or a previously diagnosed high-risk breast lesion and who are not at high risk for breast cancer because of a known underlying genetic mutation (such as a *BRCA 1* or *BRCA 2* gene mutation or other familial breast cancer syndrome) or a history of chest radiation at a young age.



Both the USPSTF and ACS consider women with an underlying genetic mutation known to increase risk of breast cancer (i.e. *BRCA 1* or *BRCA 2* or a syndrome like Li-Fraumeni) (see Genetic section) or that had radiation therapy to the chest to be of (very) high risk. These women should follow different guidelines. A woman is of intermediate risk if she has a personal history (assessed using a tool such as the Claus model) or family history of breast cancer (among a first-degree relative). These women should discuss increased and/or earlier screening with a clinician. MRI screening should only be used for women who are very high risk, and the MRI should be in addition to, not a substitute for, the screening mammogram.

# Cervical and HPV-Related Cancers

## GOALS, OBJECTIVES, AND STRATEGIES

*Goal 3: Reduce the death rate from cancer of the uterine cervix and other HPV-related cancers.*

### Objectives



**Objective 1:** Increase cervical cancer screening within the past 3 years among women aged 21-65 based on the most recent guidelines

- Where We Are: **84.0%**
- Healthy People 2020 Target: **93%**
- Our Goal: **93%**



**Objective 2:** Increase the vaccination coverage level for adolescent females aged 13-15 years that have completed the 2-dose HPV vaccination series

- Where We Are: **39.3%**
- Healthy People 2020 Target: **80%**
- Our Goal: **80%**



**Objective 3:** Increase the vaccination coverage level for adolescent males aged 13-15 years that have completed the 2-dose HPV vaccination series

- Where We Are: **30.5%**
- Healthy People 2020 Target: **80%**
- Our Goal: **80%**

### Strategies

1. Increase availability of patient navigation services at the community level
2. Assist with enrollment in the health insurance marketplace and Medicaid
3. Encourage women with health insurance to use no-cost cervical cancer screening benefit as part of their existing health plans
4. Educate healthcare providers on LBCHP eligibility, policies, and services
5. Develop and implement coordinated media campaigns promoting HPV vaccine and cervical cancer screening
6. Use data visualization software to map LA cancer data to assist in focusing resources and identify areas for early detection interventions

7. Collaborate with FQHCs to use evidence-based interventions to increase HPV vaccination and cervical cancer screenings
8. Use results from positive deviant research to improve provider rates for HPV vaccination
9. Continue working with the Louisiana Vaccination Coalition to identify opportunities

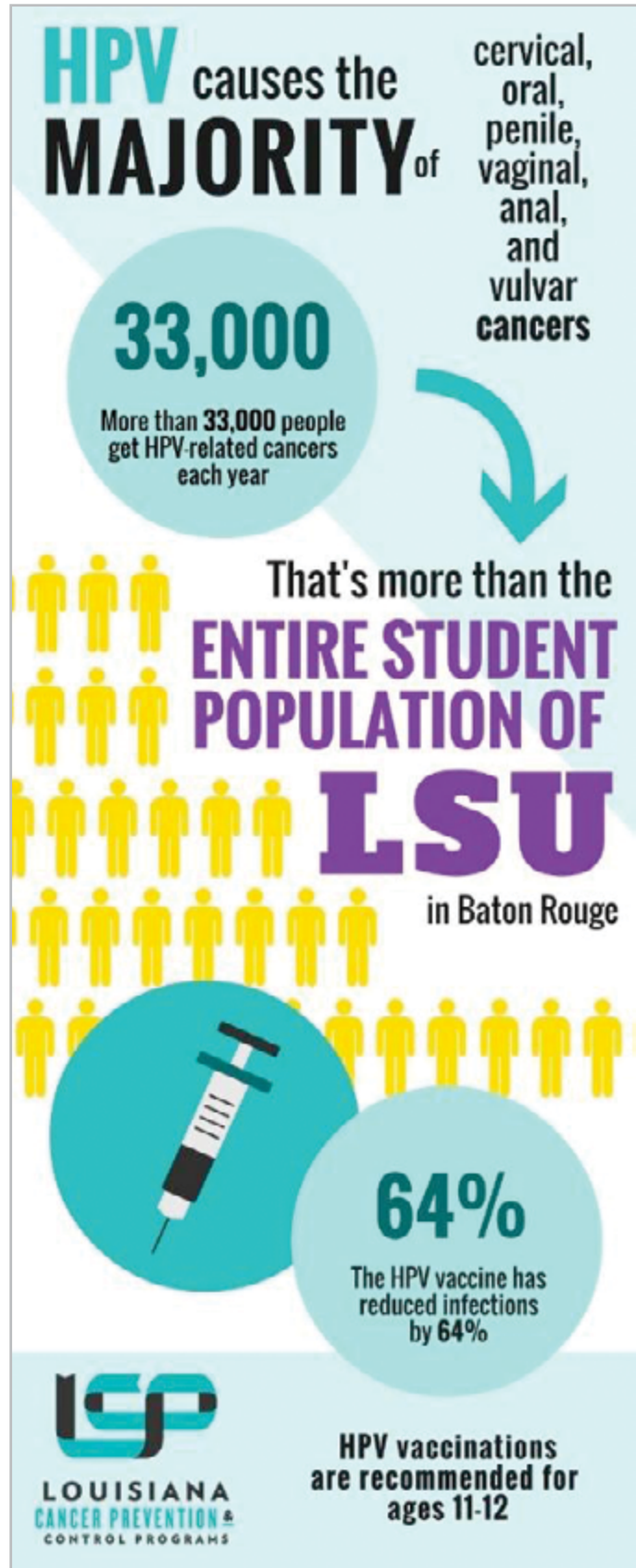
## BURDEN AND DISPARITIES IN LOUISIANA

### *Incidence and Mortality Rates*

Louisiana has the third highest mortality rate in the US from cervical cancer; this is lamentable as cervical cancer is preventable. In Louisiana, both the cervical cancer incidence and mortality rates are higher for Black women than White women. The incidence rate for Black women is 11.1 per 100,000 women, while it's only 7.9 for White women. The mortality rates are 4.3 per 100,000 Black women and 2.5 per 100,000 White women.

Black women in Louisiana are diagnosed with and die from cervical cancer at a significantly higher rate than the US rates for Black women. The rates for White Louisiana women, although slightly higher, are not significantly different than the national rates for White women. See Figure 3a.

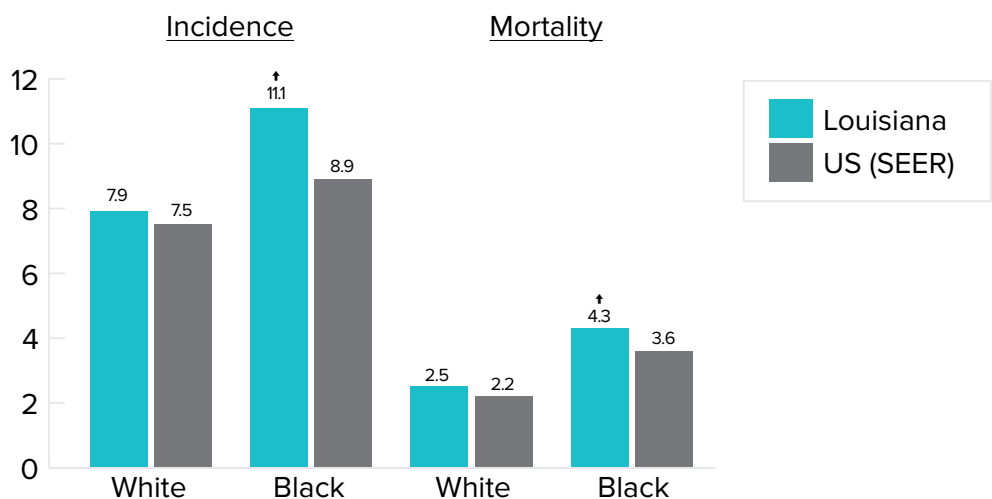
Evidence indicates that the HPV vaccine is effective in reducing infection, which in turn can prevent HPV-associated cancers and genital warts; nationwide, however, vaccination rates remain below the Healthy People 2020 recommendation of 80 percent (Markowitz et al. & www.healthypeople.gov, 2016), suggesting that many in the US remain unprotected (Reagan-Steiner et al., 2015). The 2014 National Immunization Survey (NIS) results for completed HPV series for females was 38.4 percent with males at 21.5 percent in Louisiana (CDC, 2016). Completion rates of the three-part vaccine also differ across race and ethnicity, with Hispanic and non-Hispanic White females completing all three doses of the vaccine more frequently than non-Hispanic Black





females. Initiation rates, however, are much higher in non-Hispanic Black and Hispanic males than non-Hispanic Whites (CDC, 2016). Both non-Hispanic Black and Hispanic male and female adolescents living below the Federal Poverty Level have higher initiation rates than non-Hispanic Whites (CDC, 2016). In addition to disparities in vaccination initiation and completion, the burden of HPV-associated cancers also differs among certain populations: minority women exhibit a higher incidence of cervical cancer than Whites, and oropharyngeal cancer related to HPV is becoming more prevalent in males (Dunne et al., 2014).

**Figure 3a. Cervical Cancer Incidence and Mortality Rates in Louisiana and the US (SEER), 2009-2013**



An average of 120 White women and 78 Black women are diagnosed with cervical cancer, and 41 White women and 31 Black women die from the disease each year in Louisiana. This is a tragedy given that cervical cancer can be completely prevented.

### Survival Rates

The five-year relative survival for cervical cancer in Louisiana is about the same as (not significantly different from) the nationwide rate. However, when the cancer is diagnosed in a localized or regional stage, the survival for White Louisiana women is significantly lower than their US counterparts.

**Figure 3b. Five-Year Relative Survival for Cervical Cancer by Stage at Diagnosis in Louisiana and the US (SEER), Cases Diagnosed in 2000-2012**

	White women		Black women	
	Louisiana	US	Louisiana	US
Localized	87.3% ↓	91.9%	81.8%	84.8%
Regional	50.2% ↓	57.1%	49.3%	48.8%
Distant	20.8%	18.0%	11.9%	11.0%
All stages	68.0%	70.5%	58.2%	58.8%
<i>In situ cervical cancer is not abstracted</i>				

# CERVICAL CANCER SCREENING RECOMMENDATIONS

Figure 3c. Cervical Cancer Screening Recommendations for Women

USPSTF	ACS	American College of Obstetricians and Gynecologists
<ul style="list-style-type: none"> <li>Ages under 21, should not be tested</li> <li>Ages 21-29, every 3 years with a Pap test</li> <li>Ages 30-65, every 5 years Pap test and an HPV co-test <i>or</i></li> <li>Ages 30-65, Pap test every 3 years</li> </ul>	<ul style="list-style-type: none"> <li>Ages 21-29, every 3 years with a Pap test</li> <li>Ages 30-65, every 5 years Pap test and an co-HPV test <i>or</i></li> <li>Ages 30-65, Pap test every 3 years</li> </ul>	<ul style="list-style-type: none"> <li>Ages under 21, should not be tested</li> <li>Ages 21-29, every 3 years with a Pap test</li> <li>Ages 30-65, every 5 years Pap test and an HPV co-test</li> </ul>
<p>* Screening recommendations are for average risk women only. Women are considered at high risk for cervical cancer if they were exposed in utero to diethylstilbestrol (DES) or are immunocompromised (e.g. due to HIV, an organ transplant, long-term steroid use). High risk women should follow the recommendations of their clinicians.</p>		

The USPSTF and ACS recommend screening with a Pap test every three years for women 21-29 years of age. Beginning at age 30, and continuing until 65, women should be screened with a combination of a Pap test **and** a human papillomavirus (HPV) test (called co-testing) every five years. Women could continue screening with only a Pap test once they turn 30, but they would need more frequent testing, every three years rather than five. The USPSTF and ACOG recommend that women under 21 should not be tested.



## HPV-RELATED CANCERS

### Background

Human papillomavirus (HPV) is a common virus. There are more than 150 different types of HPV, some of which can cause genital warts or HPV-associated cancers (vulva, vagina, penis, anus, tongue, and throat), the most common being cervical cancer. Approximately 79 million people are currently infected and about 14 million become infected each year (CDC, 2016). HPV infection is estimated to cause close to 27,000 cancers each year (Ng et al., 2015) and causes approximately 90 percent of cervical cancer cases (CDC, 2016). It is also estimated there will be 12,990 newly diagnosed cases of cervical cancer in the US in 2016 and 4,120 women will die from the disease (CDC, 2016). According to State Cancer Profiles, Louisiana ranks eighth in cervical cancer incidence and is tied for sixth in cervical cancer mortality nationally (SEER, 2015).

HPV is spread through sexual contact with someone who has the virus. Anyone who is sexually active can get HPV, even if the contact was with just one person. HPV is so common that

almost all who are sexually active will get HPV at some point in their lives. Symptoms can develop years after infection. In most cases HPV will clear on its own and not cause any health problems, however, when HPV does not clear it can cause issues such as genital warts or cancer. Cancer typically takes years to develop after HPV infection.

### Prevention: HPV Vaccine

The HPV vaccine is effective in preventing most cervical cancers and other HPV-associated cancers. Research has demonstrated the safety and efficacy of the vaccine, and it has been endorsed by the CDC Advisory Committee on Immunization Practices (ACIP), American Academy of Pediatrics (AAP), the American Congress of Obstetricians and Gynecologists (ACOG), the American Academy of Family Practice (AAFP), and the Society for Adolescent Health and Medicine (SAHM) (SAHM, 2016). Completion rates (coverage  $\geq 3$  doses) of the vaccine series in Louisiana for females and males are 39.3 percent and 30.5 percent, respectively (CDC, 2015); these rates are below Healthy People 2020's recommended 80 percent. (HealthyPeople.gov)

### Updated Vaccination Dose (11/22/16)

The CDC now recommends that 11-12 year olds receive 2 doses of the HPV vaccine to protect against HPV-associated cancers. The second dose is to be given 6-12 months after the first dose. Adolescents and young adults that start the vaccine series at the age of 15 or older will continue to need three doses as protection.

### Safety

All vaccines go through safety testing before being licensed by the FDA. Results from clinical trials have shown the HPV vaccine to be safe. However, as with all medications, there is a risk of side effects. The most common side effects from HPV vaccination are mild and include: pain, redness, or swelling in the arm where the shot was given; fever; headache or feeling tired; nausea; muscle or joint pain (CDC, 2016) (American Cancer Society, 2016). Some also faint (syncope) (CDC, 2016).

### Recommendations

The Advisory Committee on Immunization Practices (ACIP) recommends routine HPV vaccination of girls and boys ages 11-12. ACIP also recommends vaccinating females ages 13-26 and males ages 13-21 who have not been previously vaccinated.

**7 WAYS TO IMPROVE HPV VACCINATION RATES**

HPV vaccination rates are low compared to other age-appropriate vaccinations. To increase these rates, we recommend the following:

- 1 PROVIDER RECOMMENDATION**  
Advocate for your patients to receive the HPV vaccine. Your recommendation is a large motivating factor.
- 2 COMBINE WITH OTHER VACCINATION SCHEDULES**  
Group HPV vaccination in with the meningitis, 11 year old vaccines, or 12 year old vaccines.
- 3 SCHEDULE NEXT APPOINTMENT DURING CURRENT VISIT**  
Automatically set up the next vaccination visit during the current visit to ensure patients complete all 3 appointments.
- 4 PROVIDE REMINDERS**  
Provide patients with a reminder card when the appointment is made. Follow up with a post card, text message, or a phone call.
- 5 STANDING ORDERS**  
Make HPV vaccination a standing order in your clinic for those ages that are eligible to get the vaccine.
- 6 RECOMMEND AT EVERY CHECK UP**  
Recommend the HPV vaccination at every well visit or check up. This provides more than one opportunity to vaccinate and reminds patients that it is important.
- 7 INSURANCE COVERS IT**  
Patients are more likely to get the HPV vaccination if they are reminded that it is covered by insurance.

**LSP**  
LOUISIANA  
CANCER PREVENTION &  
CONTROL PROGRAMS

# Colorectal Cancer

## GOALS, OBJECTIVES, AND STRATEGIES

*Goal 4: Decrease incidence, reduce mortality, and reduce late-stage diagnosis of colorectal cancer in Louisiana.*

### Objective

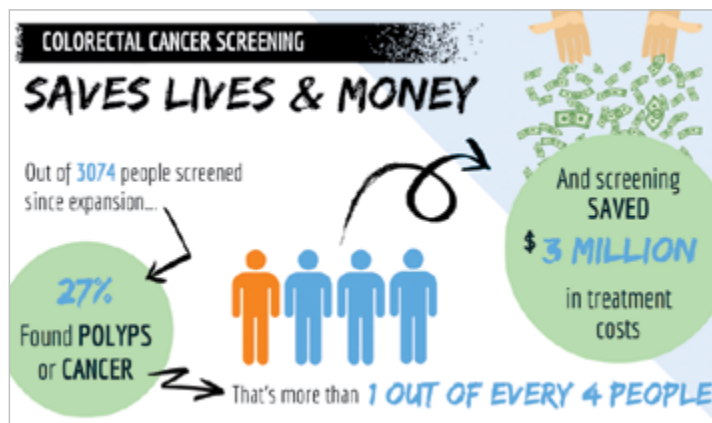


**Objective:** Increase the percent of adults aged 50 to 75 years who received a colorectal cancer screening based on the most recent guidelines

- Where We Are: **64.2%**
- ▨ Healthy People 2020 Target: **70.5%**
- Our Goal: **80% by 2018**

### Strategies

1. Assist with enrollment in the health insurance marketplace and Medicaid
2. Promote 'FIT-First' and Flu-FIT campaigns to providers within the FQHC system to provide an annual, low-cost FIT test to patients
3. Develop and implement coordinated media campaigns promoting colorectal cancer screening
4. Collaborate with FQHCs to use evidence-based interventions to increase colorectal cancer screenings
5. Develop open access endoscopy systems centered around the patient's medical home at the FQHC as part of a committed medical neighborhood
6. Use data visualization software to map LA cancer data to identify areas for early detection and interventions
7. Increase availability of patient navigation services at the community level
8. Develop and promote a competition among primary care providers and gastroenterologists to increase their screening rates
9. Educate clinicians about the ACS 80 percent by 2018 campaign and recommend screening tests
10. Utilize the Louisiana Colorectal Cancer Roundtable to address policy issues

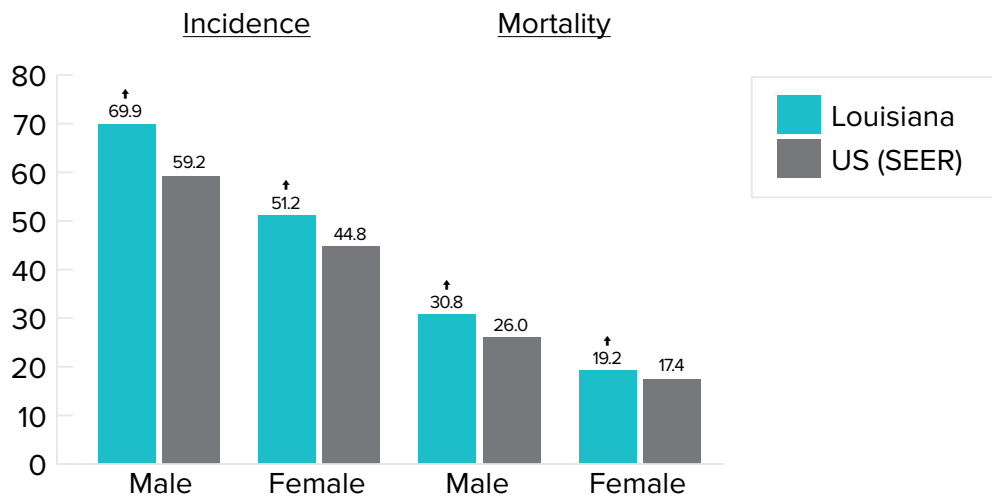


# BURDEN AND DISPARITIES IN LOUISIANA

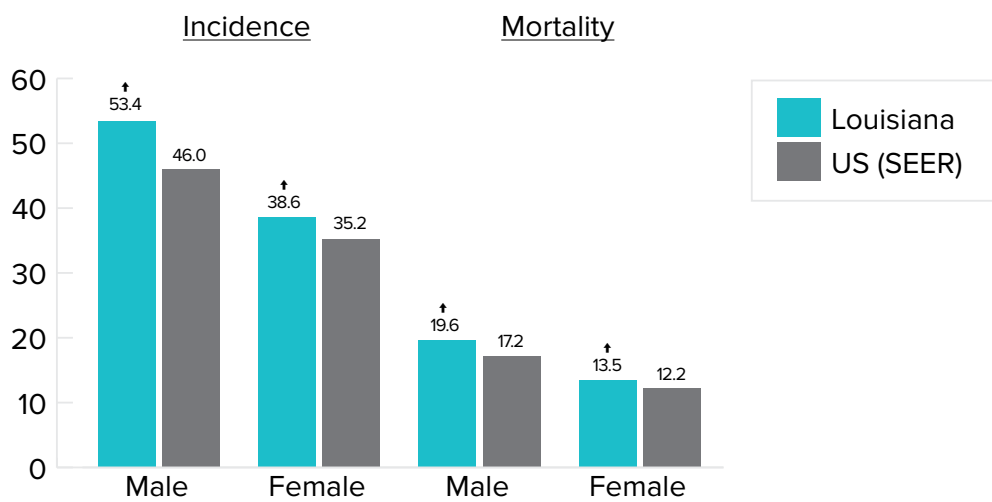
## Incidence and Mortality Rates

Louisiana has the third worst mortality rate for colorectal cancer in the US; West Virginia and Mississippi rank first and second respectively. Colorectal cancer incidence and mortality rates are significantly higher than those for the US for all race and sex groups. In Louisiana and the US, both White and Black men have higher incidence and mortality rates than their female counterparts; and both Black men and women have higher rates than their White counterparts. Compared with all gender and race groups, Black men have the highest incidence and mortality rates of colorectal cancer.

**Figure 4a. Colorectal Cancer Incidence and Mortality Rates in Louisiana and the US (SEER) for Blacks, 2009-2013**



**Figure 4b. Colorectal Cancer Incidence and Mortality Rates in Louisiana and the US (SEER) for Whites, 2009-2013**



On average, between 2009 and 2013, 857 White men, 727 White women, 383 Black men, and 368 Black women were diagnosed with colorectal cancer. 301 White men, 366 White women, 156 Black men, and 134 Black women died from the disease.

### Survival Rates

The five-year relative survival for invasive colorectal cancer for each gender and race group is significantly lower in Louisiana than the US. When looking at survival by stages at diagnosis, only Whites have survival rates that are significantly lower than US rates (the localized rate for White men and the in situ and localized rate for White women are lower in Louisiana than the US).

In Louisiana, like in the US, the survival rate for all stages combined and all invasive stages of colorectal cancer are lower for Blacks than their White gender counterparts. The survival rate for all stages of colorectal cancer is 55.7 per 100,000 (53.8 for invasive stages) for Black men versus 65.2 per 100,000 (63.6 for invasive stages) for White men, and 59.3 per 100,000 (58.0 for invasive stages) for Black women versus 65.7 per 100,000 (64.2 for invasive stages) for White women. When comparing the four gender and race groups, Black men have the worst survival rates. See Figures 4c-4d.

**Figure 4c. Five-Year Relative Survival for Colorectal Cancer by Stage at Diagnosis in Louisiana and the US (SEER) for Blacks, Cases Diagnosed in 2000-2012**

	Black Men		Black women	
	Louisiana	US	Louisiana	US
In situ	87.8%	90.9%	83.6%	91.1%
Localized	82.2%	84.6%	84.8%	86.2%
Regional	59.5%	62.7%	63.9%	64.3%
Distant	9.1%	8.5%	9.6%	9.8%
4 stages (includes in situ cases)	56.4%	58.9%	60.7%	61.3%
Invasive stages (excludes in situ cases)	54.5%	56.9%	59.3%	59.4%

**Figure 4d. Five-Year Relative Survival for Colorectal Cancer by Stage at Diagnosis in Louisiana and the US (SEER) for Whites, Cases Diagnosed in 2000-2012**

**Note:** Arrows indicate the direction of significant differences.

	White men		White women	
	Louisiana	US	Louisiana	US
In situ	92.8%	94.7%	94.0%	95.0%
Localized	86.0% ↓	89.5%	86.4% ↓	89.6%
Regional	67.3% ↓	70.4%	69.0%	70.4%
Distant	12.3%	12.6%	12.7%	13.5%
4 stages (includes in situ cases)	65.9% ↓	68.1%	66.6% ↓	68.2%

## Late-Stage Diagnoses

About half of all colorectal cancer diagnoses are made when the cancer is in an advanced stage (regional or distant); this is true for every gender and race group, and in Louisiana and the US. See Figure 4e.

**Figure 4e. Percentages of Colorectal Cancers Diagnosed at Late Stages in Louisiana and in the US (SEER), 2009-2013**

	Louisiana		US (SEER)	
	White	Black	White	Black
Males	52.8%	54.2%	52.9%	53.3%
Females	52.3%	54.2%	52.8%	52.2%

*Note: includes in situ cases in the denominator*

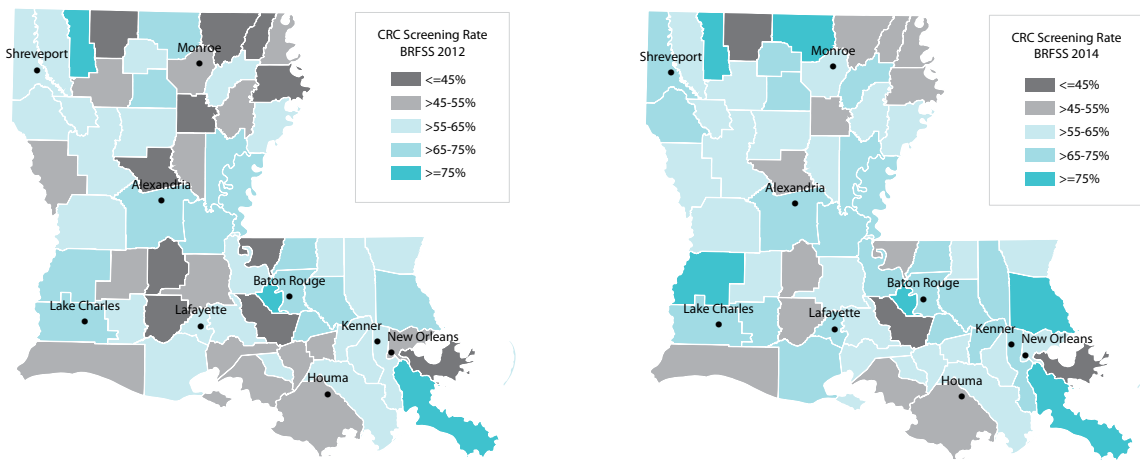
**Figure 4f. Average Annual Case and Death Counts for Colorectal Cancer in Louisiana, 2009-2013**

	Case Count (Invasive only)	Death Count
White men	857	301
White women	727	366
Black men	383	156
Black women	368	134

Black and White men and women are disproportionately affected by colorectal cancer compared with their national counterparts. Although late-stage diagnoses are only slightly higher among Blacks than Whites in Louisiana, five-year survival rates are much lower among Black men and women than among Whites.

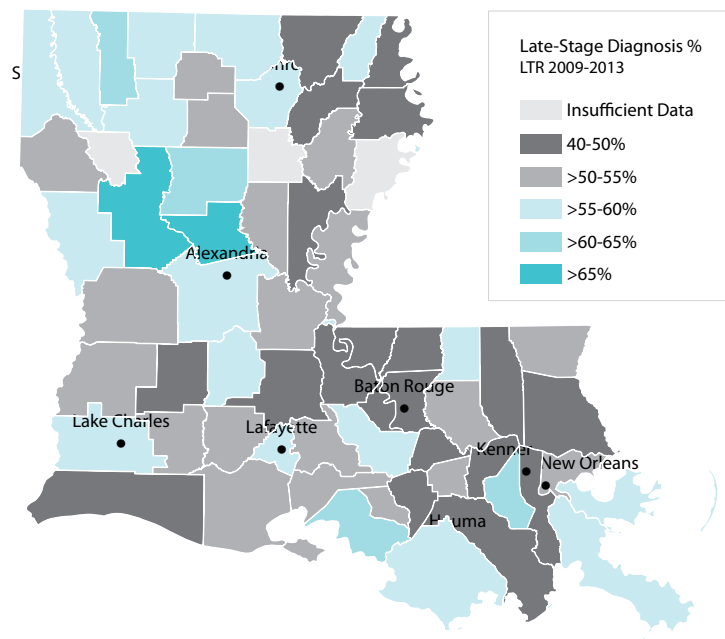
## Geographic Disparities:

**Figure 4g. Percentages of Respondents Screened for Colorectal Cancer by Parish, 2012 (left) & 2014 (right) (BRFSS)**



## Late-Stage Diagnoses

Figure 4h. Percentages of Colorectal Cancers Diagnosed at Late Stages by Parish, 2009-2013 (SEER)



## COLORECTAL CANCER SCREENING RECOMMENDATIONS

About two-thirds of colorectal cancers develop from polyps. The growth of polyps to colorectal cancer takes about five to 10 years. Regular colorectal cancer screening can identify and remove polyps before they become colorectal cancer.

The USPSTF, the ACS, and the American College of Gastroenterology (ACG) recommend that both men and women of average risk begin colorectal cancer screening at age 50. After age 75, the USPSTF does not recommend routine screening. The ACG recommends that Blacks begin screening at age 45 for both genders.

All organizations identify a colonoscopy every 10 years as an effective screening method. The USPSTF, in their 2008 recommendation, considers this method to be approximately equal in effectiveness to annual high-sensitivity fecal occult blood testing (FOBT)/FIT, or to sigmoid-

### COLORECTAL CANCER Screening

At HOME SCREENING	In the CLINIC SCREENING
<p>Requires the patient to collect a specimen and send it in the mail</p> <p>Examples of at-home screenings include:</p> <ul style="list-style-type: none"> <li><b>gFOBT</b> (Guaiac-based Fecal Occult Blood Test) Done yearly</li> <li><b>FIT</b> (Fecal Immunochemical Test) Done yearly</li> </ul>	<p>Procedure in the clinical setting done by a physician</p> <p>Examples of in-clinic screenings include:</p> <ul style="list-style-type: none"> <li><b>Colonoscopy</b> Done every 10 years</li> <li><b>Flexible Sigmoidoscopy</b> Every 5 years w/ gFOBT or FIT every 3 years</li> </ul>
<p><small>*The above are a selection of tests often covered by insurance. Be aware that other tests exist for identifying polyps and colorectal cancer.</small></p> <p><b>TALK TO YOUR DOCTOR ABOUT SCREENINGS COVERED BY YOUR INSURANCE</b></p>	
<p><b>LEP EIGHTYBY2018</b> To join this effort visit <a href="http://www.sccr.org">www.sccr.org</a></p>	

### COLORECTAL CANCER Risk Factors

Things you CAN CHANGE	Things you CANNOT CHANGE
<ul style="list-style-type: none"> <li>Limit red and processed meats </li> <li>Maintain a healthy weight </li> <li>Participate in regular physical activity </li> <li>Limit alcohol use </li> <li>Quit smoking </li> </ul>	<ul style="list-style-type: none"> <li>Age </li> <li>Race or ethnic background </li> <li>Personal or family history of polyps or colorectal cancer </li> <li>Pre-existing conditions such as Type 2 Diabetes and IBD </li> </ul>
<p><b>LEP EIGHTYBY2018</b> To join this effort visit <a href="http://www.sccr.org">www.sccr.org</a></p>	



oscopy every five years in combination with a high-sensitivity FOBT every three years. Below, in Figure 4i, are the screening methods recommended by each organization. In 2016, the USPSTF updated their recommendation. Their current recommendation is the following:

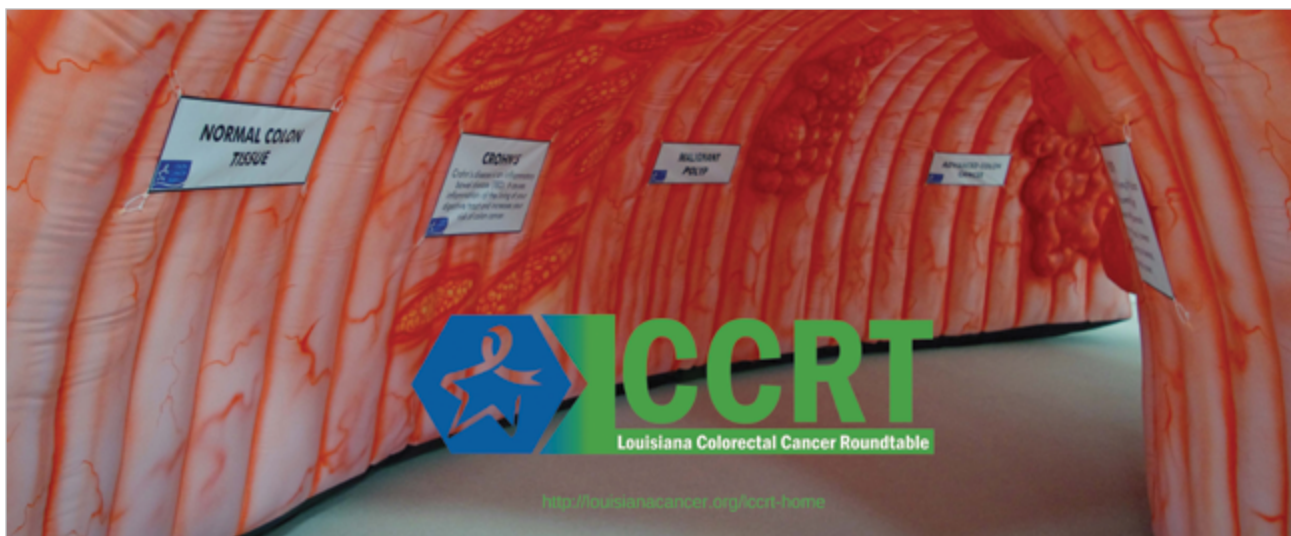
*“...[I]nstead of emphasizing specific screening approaches, the USPSTF has instead chosen to highlight that there is convincing evidence that colorectal cancer screening substantially reduces deaths from the disease among adults aged 50 to 75 years and that not enough adults in the United States are using this effective preventive intervention. The reasons for this gap between evidence and practice are multifaceted and will require sustained effort among clinicians, policy makers, advocates, and patients to overcome.”*

**Figure 4i. Colorectal Cancer Screening Methods Recommended by the Leading Organizations**

US Preventive Services Task Force, 2008 Recommendation (select one)	American Cancer Society (select one)	American College of Gastroenterology (select one)
<ul style="list-style-type: none"> <li>• Colonoscopy every 10 years</li> <li>• FIT every year</li> <li>• High-sensitivity FOBT every year</li> <li>• Sigmoidoscopy every 5 years + high-sensitivity FOBT every 3 years</li> </ul>	<ul style="list-style-type: none"> <li>• Colonoscopy every 10 years</li> <li>• Flexible sigmoidoscopy every 5 years</li> <li>• Double-contrast barium enema every 5 years</li> <li>• CT colonography (virtual colonoscopy) every 5 years</li> <li>• Guaiac-based fecal occult blood test (gFOBT) every year (highly sensitive version with multiple samples)</li> <li>• Fecal immunochemical test (FIT) every year (highly sensitive version with multiple samples)</li> <li>• Stool DNA test every 3 years</li> </ul>	<ul style="list-style-type: none"> <li>• Colonoscopy every 10 years</li> <li>• Flexible sigmoidoscopy every 5–10 years</li> <li>• Computed tomography, CT, colonography every 5 years</li> <li>• Preferred detection test (FIT)</li> </ul>

A benefit of the colonoscopy is that it can be both a screening and a diagnostic test. In addition to detecting cancer, it can find and remove precancerous polyps (a growth on the surface of the colon). If a positive test result is found using any of the other methods, a colonoscopy will need to be performed. Disadvantages of the colonoscopy are that it is invasive, requires an extensive prep, is not available in every clinical setting, and can be otherwise not feasible for patients.

Both the USPSTF and ACS categorize individuals with specific inherited syndromes (Lynch syndrome or familial adenomatous polyposis [FAP]) and those with inflammatory bowel disease as high risk; they therefore should be screened earlier and more frequently. All organizations agree that individuals should be screened earlier if a first-degree relative developed colorectal cancer or (advanced) adenomatous polyps before age 60, or multiple first-degree relatives developed colorectal cancer or (advanced) adenomatous polyps at any age. Individuals with a personal history of colorectal neoplasia would follow a surveillance regimen, and the routine screening recommendations would not apply. The ACG also supports earlier screening for individuals with an extreme smoking history or obesity, if advised by a clinician.



## THE PROBLEM

### LOUISIANA HAS 4TH HIGHEST COLORECTAL CANCER DEATH RATE

State also has the third highest incidence rate

Colorectal cancer is one of only two cancers that can be prevented through screening. And when it's caught early, it's 90% survivable.

So why are so many people in Louisiana dying of colorectal cancer?

The main reason is they are not getting screened like they should. Only about 64% of people with average risk age 50 and over are getting screened, in spite of the fact that preventive cancer screenings are now covered by insurance.

What's more there are a variety of ways to get screened, including colonoscopies (every 10 years) and at-home tests ( a stool DNA test every three years, or annual FIT or gFOBT methods), so people can choose how they'd like to be screened. As the experts say, "The best test is the one you're going to get!"

## THE SOLUTION

### LOUISIANA COLORECTAL CANCER ROUNDTABLE (LCCRT) HAS ANSWERS

Reaching goal would save lives and millions

The Louisiana Colorectal Cancer Roundtable (LCCRT) estimates that the state would save approximately 3,500 deaths and \$368,994,122 over a four-year period if 80% of people age 50 and over get screened by 2018.

That goal, set by the National Colorectal Cancer Roundtable, is no pie-in-the-sky figure. Read more on how LCCRT is doing it.

Contact LCP Manager Colleen Ryan Huard at [cryan1@lsuhsc.edu](mailto:cryan1@lsuhsc.edu) or ACS Health Systems Manager Kaitlyn Sylvester at [kaitlyn.sylvester@cancer.org](mailto:kaitlyn.sylvester@cancer.org)

## WHAT THE LCCRT IS DOING

### 3 WAYS TO REACH 80% BY 2018

**PROVIDER EDUCATION** LCCRT is educating clinicians, healthcare systems, insurance companies, legislators and other influential parties about the 80% By 2018 campaign and recommended screening tests; conducting a "FLU-FIT" campaign (FIT being an at-home fecal immunochemical test) to Federally Qualified Health Center (FQHC) providers as an annual, low-cost alternative to patients; and devising a competition among primary care providers to increase their screening rates.

**ACCESS TO CARE** LCCRT is creating large, effective and committed medical neighborhoods around its partner FQHCs via improved communication within systems and across providers, clarifying roles; and helping FQHCs determine patient need for diagnostic services.

**DATA** LCCRT is using visualization software to map cancer data; developing a data repository and reporting this data; and researching an electronic health record software "overlay" that will assist clinical decisions in real time.

## WHO IS AFFECTED

Adults Age 50 & Over	People age 50 & over = 90% of new cases
Men & Women	Women just as likely to get colorectal cancer as men
Cajuns	Suffer significantly higher rates of the disease than the US and rest of Louisiana
People with Diets High in Red & Processed Meats; Obesity; Physical Inactivity	Controllable factors that increase risk of the disease; uncontrollable factors include previous or family history.

# Lung and Other Tobacco-Related Cancers

## GOALS, OBJECTIVES, AND STRATEGIES

*Goal 5: Reduce the lung cancer death rate.*

### Objectives



**Objective 1:** Have a state population that is covered by a 100% smoke-free ordinance

- Where We Are: **Not met**
- ▨ Healthy People 2020 Target: **100%**
- Our Goal: **100%**



**Objective 2:** Reduce the percent of adolescents in grades 9 through 12 who smoked cigarettes in the last 30 days

- Where We Are: **16.2%**
- ▨ Healthy People 2020 Target: **16.0%**
- Our Goal: **16.0%**

### Strategies

1. Collaborate and use evidence-based strategies to reduce tobacco initiation among youth
2. Collaborate and use evidence-based strategies to reduce adult smoking prevalence
3. Educate and inform youth about e-cigarette use to reduce use
4. Increase the number of municipalities with public policies for smoke-free workplaces and other indoor and outdoor public places that include bars and gaming facilities
5. Educate and inform on the public health benefits of raising the tobacco tax
6. Increase the number of smoke-free and tobacco-free spaces in Louisiana
7. Promote Well Spots from Well-Ahead
8. Strengthen the statewide Clean Indoor Air Act to include all workplaces
9. Increasing the use of cessation services
10. Reduce tobacco use among low socioeconomic status individuals, minorities, and LGBT communities
11. Inform and educate providers and the public on lung cancer screening in accordance with the lung screening guidelines

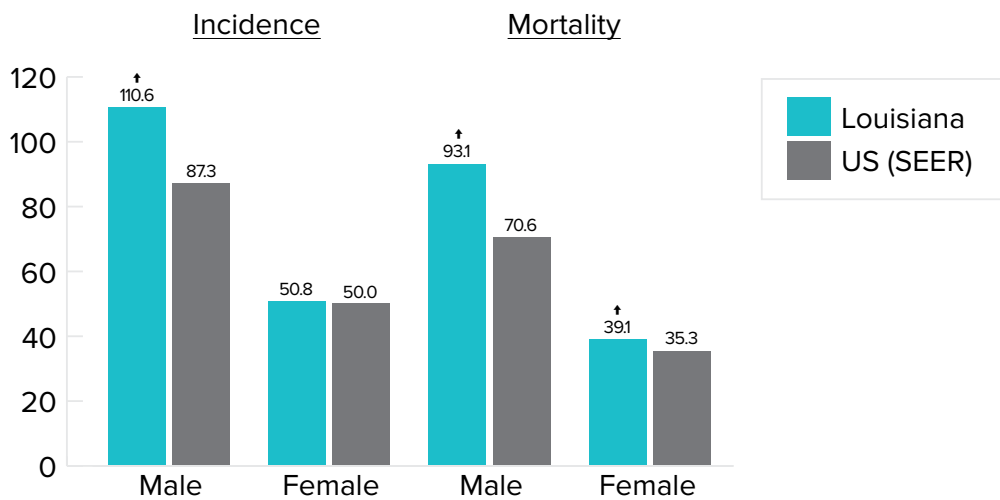
# BURDEN AND DISPARITIES IN LOUISIANA

## *Incidence and Mortality Rates*

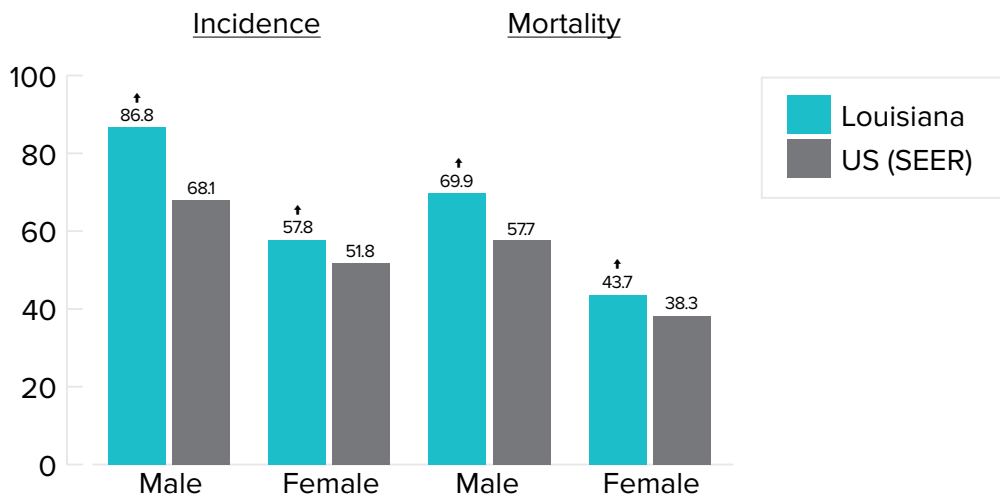
For three of four gender and race groups (except Black women), the incidence rates for lung cancer in Louisiana are significantly higher than in the US. Mortality rates are significantly higher among all groups.

Overall, men have higher incidence and mortality rates than women. In both Louisiana and the US, Black men have higher incidence and mortality rates than White men, but the reverse is true for women—White women have higher incidence and mortality rates than Black women.

**Figure 5a. Lung Cancer Incidence and Mortality Rates in Louisiana and the US (SEER) for Blacks, 2009-2013**



**Figure 5b. Lung Cancer Incidence and Mortality Rates in Louisiana and the US (SEER) for Whites, 2009-2013**



These rates mean thousands of Louisianans are getting diagnosed with and dying from lung cancer each year. Most diagnoses and deaths are among White men.

### Survival Rates

The five-year survival rates, both for all stages combined and for invasive stages only, among all four gender and race groups are significantly lower in Louisiana than the US.

Both Black men and women have lower survival rates than their White counterparts; this is true for each stage (except for distant stage among men nationally) and for all stages combined, and in both the state and the US. See Figures 5c-5d.

**Figure 5c. Five-Year Relative Survival for Lung Cancer by Stage at Diagnosis in Louisiana and the US (SEER) for Blacks, Cases Diagnosed in 2000-2012.**

	Black men		Black women	
	Louisiana	US	Louisiana	US
In situ	^	19.9%	^	37.9%
Localized	34.8%	39.3%	44.2%	49.3%
Regional	16.7%	19.1%	19.5% ↓	24.5%
Distant	2.3%	2.9%	3.4%	3.9%
4 stages (includes in situ cases)	10.4% ↓	11.8%	14.3% ↓	16.6%
Invasive stages (excludes in situ cases)	10.4% ↓	11.8%	14.3% ↓	16.6%

^Percentages not calculated if cases < 16

**Figure 5d. Five-Year Relative Survival for Lung Cancer by Stage at Diagnosis in Louisiana and the US (SEER) for Whites, Cases Diagnosed in 2000-2012.**

	White men		White women	
	Louisiana	US	Louisiana	US
In situ	19.7%	43.6%	^	50.8%
Localized	37.8% ↓	46.5%	45.8% ↓	56.7%
Regional	18.2% ↓	21.6%	21.8% ↓	26.1%
Distant	2.3%	2.9%	4.0%	4.0%
4 stages (includes in situ cases)	12.7% ↓	14.8%	17.2% ↓	20.3%
Invasive stages (excludes in situ cases)	12.7% ↓	14.8%	17.2% ↓	20.3%

^Percentages not calculated if cases < 16



### Late-Stage Diagnoses

The complex structure of lungs make tumors both hard to detect and more likely to spread, causing most cancer diagnoses to occur after the tumor has metastasized (distant stage) (Bradley, 2016). See Figure 5e for the breakdown among gender and race groups.

Figure 5e. Percentages of Lung Cancers Diagnosed at Late Stages, 2009-2013 (SEER)

	Louisiana		US (SEER)	
	White	Black	White	Black
Males	77.6%	81.6%	76.3%	80.2%
Females	75.0%	80.5%	72.1%	77.8%

Note: includes in situ cases in the denominator

Figure 5f. Average Annual Case and Death Counts for Lung Cancer in Louisiana, 2009-2013

	Case Count (Invasive only)	Death Count
White men	1,391	1,098
White women	1,112	846
Black men	589	476
Black women	365	274

### Other Tobacco-Related Cancers

Tobacco use (cigarettes, smokeless tobacco products, and cigars) increases risk for the following cancers: nasopharynx, pharynx, pancreas, bladder, nasal cavity and paranasal sinuses, larynx, uterine cervix, stomach, lip, lung, ovary (mucinous), colorectal, oral cavity, esophagus, kidney, liver, and acute myeloid leukemia.

Tobacco smoke can affect others beyond those who choose to use tobacco products. Secondhand smoke can harm an adult or child who is inhaling tobacco smoke from a nearby smoker exhaling and from the cigarette itself. Tobacco use can severely increase a person’s risk for cancer. LCCCP and its partners will work to reduce this behavior in the next five years.

Incidence and mortality rates for tobacco-related cancers are significantly higher in Louisiana than in the US for the four major race-sex groups (Figures 5g and 5h). Despite this, Louisiana’s tobacco excise tax is thirty-fourth in the nation at \$1.08 per pack. Before 2016, the tobacco excise tax was \$0.86 per pack. According to the LTR, tobacco-related cancers account for 44.6 percent of all cancers diagnosed in Louisiana.

Figure 5g. Blacks: Tobacco-Related Cancer Incidence and Mortality Rates in Louisiana and the US (SEER), 2009-2013

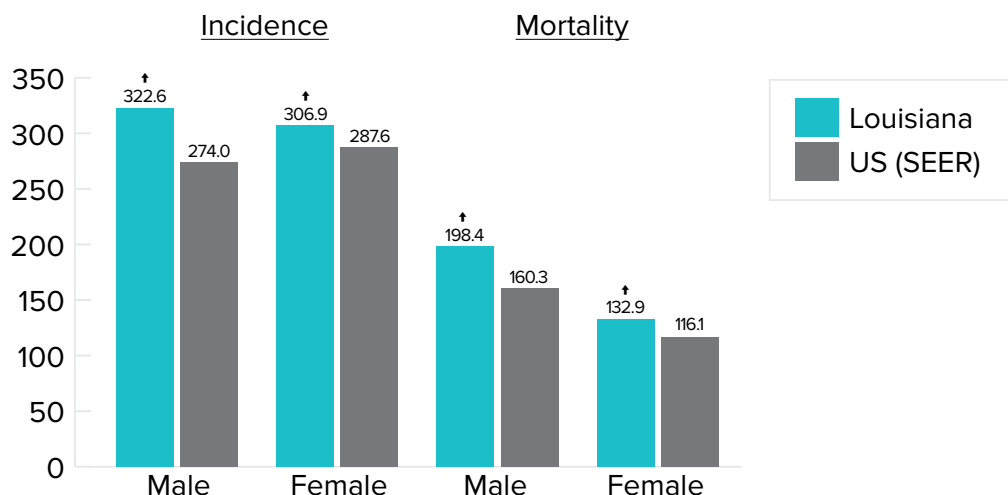
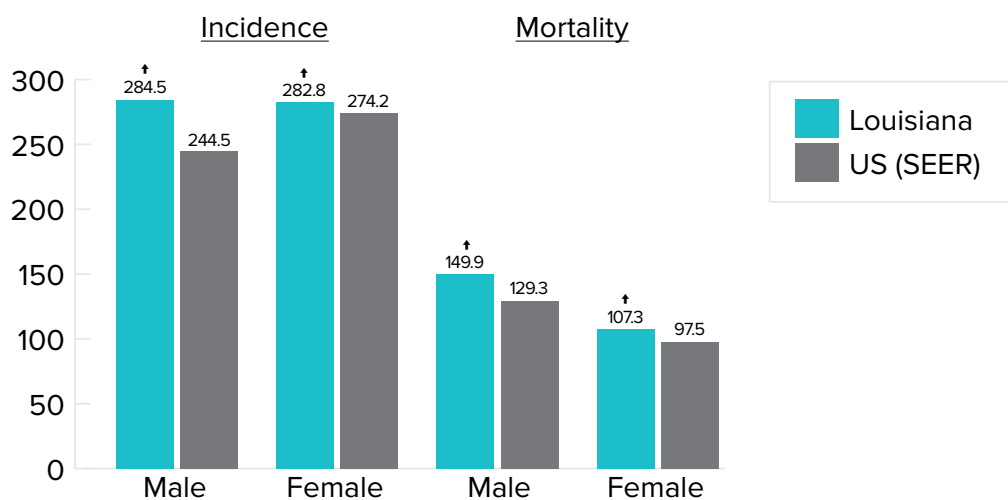


Figure 5h. Whites: Tobacco-Related Cancer Incidence and Mortality Rates in Louisiana and the US (SEER) for, 2009-2013



## Disparity in Tobacco-Related Cancers

Multiple groups are disproportionately affected by tobacco use.

### Lesbian, Gay, Bisexual, and Transgender (LGBT)

The LGBT population is estimated at 111,491 people (3.2 percent of the state population) (Movement Advancement Project, 2016). LGB people have higher rates of smoking than their counterparts (Centers for Disease Control and Prevention, 2016). Data from the 2014 NHIS shows a rate of 23.9 percent for LGB individuals compared with a heterosexual rate of 16.6 percent. No definitive data exists on transgender individuals, but they experience even higher rates and risk factors than LGB individuals. These risk factors for LGBT people include, “the daily stress of prejudice and stigma,” as well as higher rates of HIV infection,

substance abuse and depression. Although LGBT individuals have the same exposure to quitline ads as the general population, they are less likely to use them. Lastly, tobacco companies have repeatedly targeted LGBT individuals with marketing and by donating to local and national LGBT rights groups and agencies, as well as Pride events (CDC, 2016).

### *Black Americans*

Blacks are more likely to die of tobacco-related cancers in the US than their White counterparts (CDC, 2015). Since in Louisiana, Black individuals make up 32.5 percent of the population, or about 1.5 million people, that is a large problem. According to the 2013 National Survey on Drug Use and Health, 29.8 percent of Blacks currently use tobacco products. Even though this rate is the same as Whites, Blacks smoke less than their White counterparts, and start later in life. The four top causes of death among Blacks are tobacco-related as well. Black children are the most likely of any group to be exposed to secondhand smoke, compared with all other US ethnic or racial groups. Overall, the tobacco industry has targeted Blacks aggressively as a group. This includes marketing techniques like placing more ads in Black publications, contributing funds to scholarships, cultural events, and politicians, and customizing point of sale techniques so that stores frequented by Blacks have more shelf space dedicated to tobacco products, specifically menthol products, and to tobacco advertising than other stores (CDC, 2015).

### *Hispanics/Latinos*

Certain groups of Hispanics and/or Latinos have higher rates than the average population for tobacco use (CDC, 2015). While 20.9 percent of Hispanic/Latino adults nationally use tobacco, according to a survey in 2013, foreign born Hispanics/Latinos have lower use rates than those born in the US. By identified heritage, Mexican tobacco use prevalence is 23.8 percent, Puerto Ricans 31.5 percent, Central or South Americans 20.2 percent, and Cubans 25.2 percent. There are also subtle nuances in use of tobacco: Cubans, while having a lower prevalence than half of the groups studied, are using much more tobacco. According to statistics published by the CDC, “50 percent of Cuban men and more than 35 percent of Cuban women report smoking 20 or more cigarettes a day,” among smokers.

In Louisiana, as of the last Census, the population is 5.0 percent Latino, or 232,500 people, with 3.9 percent of the population from 2010-2014 being foreign born (CDC, 2015). An important influence on this group, considering the large amount of undocumented Hispanics/Latinos in Louisiana, is the access to care and to tobacco cessation services. Compared to Whites, Hispanics/Latinos have less access to healthcare and insurance, meaning they benefit from fewer cessation services and healthcare professionals discussing quitting with them (CDC, 2015).

### *Asian Americans*

There are multiple subgroups of the Asian American, Pacific Islander, and Native Hawaiian demographic that have varying prevalence of tobacco use. While Asian Americans overall have a low rate at 10.9 percent currently using tobacco, Vietnamese and Korean Americans have rates of 21.5 percent and 26.6 percent, respectively (CDC, 2015). This is important due to the large Vietnamese population in Louisiana, with the broader group of Asian Americans counting for 1.8 percent of the population, or 83,700 people. However, Asian Americans and Pacific Islanders of all types tend to be non-daily, lighter smokers than other demographics, with 46 percent of them smoking two cigarettes or less a day, and almost half of them smoking less than two days a month. As with other groups, the tobacco industry has targeted Asian American and Pacific Islander-dominated communities through funding for community events, higher concentration of tobacco distributors in their neighborhoods, and culture-specific advertising (CDC, 2015).

### *American Indians/Alaskan Natives*

Almost half, or 43.8 percent, of American Indians/Alaskan Natives report tobacco use, the highest of any demographic group in the US (CDC, 2015). They also report the highest incidence level of tobacco use in the last three months of pregnancy, at



26 percent, compared with the closest group, Whites, at 14.3 percent. American Indians/Alaskan Natives also have the least desire to quit and are the least successful in actually quitting. Tobacco is also used by some American Indian/Alaskan Natives for ceremonial purposes—a fact tobacco companies have taken advantage of in targeted marketing and advertising, e.g. the American Spirit brand which shows an American Indian smoking a pipe on its back (CDC, 2015). All of these reasons help make lung cancer the deadliest type of cancer American Indians/Alaskan Natives face.

### *Low Socioeconomic Status*

Low socioeconomic status (SES) is a category of individuals that are unemployed, who live at or below the Federal Poverty Level, and/or have a low educational level, and are generally worse off than higher SES individuals when it comes to tobacco-related cancers (CDC, 2016). The US Census Bureau puts almost 20 percent of Louisianans as living in poverty. Those with only a GED have a smoking prevalence of 40 percent (CDC, 2016). Low income restricts people from accessing healthcare, leading to later stage of diagnosis and higher risk of death from tobacco-related cancers. Research shows that people with low incomes have a higher rate of lung cancer than those with higher incomes and/or education; and people living in rural areas have an 18 to 20 percent higher rate of lung cancer than urbanites. People of lower SES also tend to smoke more heavily, longer, and from a younger age. Although people of low SES want to quit at rates equal to their higher SES counterparts, they experience less success, in part due to healthcare and insurance access. Sheer proximity to low-income areas can be a risk factor for tobacco use, as it has been shown repeatedly that there is a higher density of tobacco retailers and point of sale advertising in lower SES neighborhoods (CDC, 2016).



### *Mental Health and Substance Use Disorders*

According to the CDC, “approximately 25 percent of adults in the US have some form of mental illness or substance use disorder, and these adults consume almost 40 percent of all cigarettes smoked by adults” (CDC, 2016). To put that in terms of Louisiana population, that is 1,162,500 people who live with mental illness daily (US Census Bureau, 2016). Surveys show that 25.3 percent of adults without mental illness report tobacco use, while 36.5 percent of adults reporting mental illness use tobacco. Nicotine masks some of the effects of mental illness, increasing the risk for those with mental illness to get addicted to tobacco products. The industry encourages people living with mental illness or substance abuse disorders to increase their use of tobacco by contributing financially to groups that work with the mentally ill, including providing “free or cheap psychiatric facilities”; targeting marketing campaigns at them; and perpetuating cigarettes-as-self-medication myths. And because this population is more likely to be low-income, have stressful living conditions and have poor access to healthcare and insurance—and thus less help quitting—they are even more vulnerable to such tactics (CDC, 2016).

## **SCREENING RECOMMENDATIONS**

The USPSTF and the CDC recommend annual lung cancer screening for adults aged 50 to 80 years who have a history of heavy smoking *and* are current smokers or quit within the past 15 years. Heavy smoking means the individual has a history of 30 pack-years or more. A pack-year is smoking an average of one pack of cigarettes per day for one year (i. e. one pack a day for 30 years or two packs a day for 15 years). The ACS agrees that this population should be screened, but only by certain clinicians (those with access to high-volume, high-quality lung cancer screening and treatment), and only if the patient is part of the decision to initiate screening. The NCCN uses slightly different criteria for who should be screened and it as is follows:

- ◆ 55 years old or older
- ◆ Smoked at least 30 pack-years
- ◆ Quit smoking less than 15 years ago

OR

- ◆ 50 years old or older
- ◆ Smoked at least 20 pack-years
- ◆ Have one more risk factor other than secondhand smoke

NCCN varies in the screening frequency, as well. They recommend the frequency of screening be determined based on the results of the first screening test.

According to all organizations, the only recommended screening test is a low-dose computed tomography, also called a low-dose CT scan, or LDCT.

## Melanoma of the Skin, Prostate and Liver Cancers

Skin, prostate, and liver cancers are included in the following section of this cancer plan, although LCCCP does not list them as priority cancers for focused primary or secondary prevention efforts. Skin cancer (especially melanoma of the skin) is included, although Louisiana rates are among the lowest in the nation. Detection with routine screenings will reduce the number of advance-stage cases, and applying sunscreen and avoiding tanning beds help prevent all types of skin cancer.

Prostate cancer rates in Louisiana are disproportionately higher than the rest of the US, and Black men are more likely both to be diagnosed with and to die from prostate cancer. This is of particular interest because Louisiana has the second highest percentage of Blacks of any state in the US and therefore has a large number of potential cases.

Liver cancer rates have more than tripled since 1980 in the US, and liver cancer death rates increased 2.7 percent from 2003 to 2012 (American Cancer Society, 2016). Risk factors for liver cancer include Hepatitis B, Hepatitis C, heavy alcohol use, obesity, and diabetes. Most people are now aware that the US is in the middle of an opioid epidemic. Although opioids used strictly for relieving pain have not been linked to liver injury, opioid abuse—especially when combined with acetaminophen—can lead to liver toxicity when overused or combined with alcohol (National Library of Medicine, 2016). Opioid use trends show that misuse eventually can lead to heroin use and injection drug use. Injection drug use is a risk factor for Hepatitis B and Hepatitis C; both of which are a risk for liver cancer. Vaccination for Hepatitis B and timely treatment of Hepatitis C can ultimately reduce the risk of liver cancer.

### SKIN CANCER

#### Goals, Objectives, and Strategies

*Goal 6: Reduce incidence and mortality of skin cancer.*

#### *Objectives*

Objective: Increase the percentage of adults that follow protective measures that may reduce the risk of skin cancer

Healthy People 2020 Target: 73.7 percent

## Strategies

1. As part of the coordinated communications plan, inform and educate the public on skin cancer risks using social media
2. Promote evidence-based approaches to preventing skin cancer
3. Promote skin cancer screenings

## Burden and Disparities in Louisiana

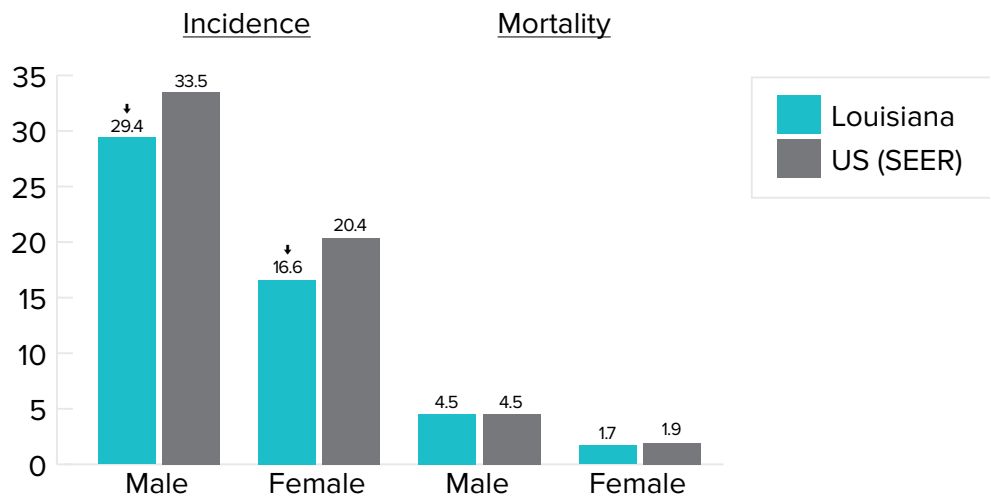
### Incidence and Mortality Rates

Skin cancer does not rank high among causes of death in Louisiana relative to other cancers. The most common types of skin cancer are basal-cell and squamous-cell, but because they are found so early and so often, they are not required to be reported to the cancer registry. Melanomas are the most serious form of skin cancer because they grow and metastasize much faster than other forms. Melanomas account for only about one percent of all skin cancers, but cause nearly all skin cancer deaths (Bradley, 2016).

The incidence of melanoma among White men and women is lower in Louisiana than in the US (29.4 per 100,000 in Louisiana versus 33.5 per 100,000 in the US for men and 16.6 per 100,000 in Louisiana versus 20.4 per 100,000 in the US for women). The mortality rate is about the same in Louisiana as in the US (see Figure 6a).

Both in Louisiana and the US, the incidence and mortality rates for men are higher than for women.

**Figure 6a. Incidence and Mortality Rates of Melanoma of the Skin in Louisiana and the US (SEER), 2009-2013**



Over 700 White Louisianans and 15 Black Louisianans are diagnosed with melanoma cancer each year, on average, and about 100 White Louisianans die from the disease each year, on average. See Figure 6b.

## Survival Rates

The survival rates among Whites for all stages and all invasive stages combined are significantly lower in Louisiana than the US (see Figure 6b).

**Figure 6b. Five-Year Relative Survival for Melanoma of the Skin by Stage at Diagnosis in Louisiana and the US (SEER), Cases Diagnosed in 2000-2012**

	White men		White women	
	Louisiana	US	Louisiana	US
In situ	100%	100%	100%	100%
Localized	92.1% ↓	97.7%	96.1% ↓	99.1%
Regional	53.9% ↓	61.4%	63.5%	68.9%
Distant	18.0%	17.0%	15.0%	20.4%
4 stages (includes in situ cases)	90.7% ↓	95.2%	94.2% ↓	97.8%
Invasive stages (excludes in situ cases)	83.0% ↓	89.4%	89.8% ↓	94.1%

## Late-Stage Diagnoses

Melanoma is not commonly diagnosed at a late stage. For all gender and race groups, the percent of late-stage diagnosis is less than 10 percent.

**Figure 6c. Percentages of Melanoma of the Skin Diagnosed at Late Stages in Louisiana and the US, 2009-2013**

Louisiana		US (SEER)	
White males	White females	White males	White females
9.1%	7.2%	8.4%	6.1%
<i>Note: Includes in situ cases in the denominator</i>			

**Figure 6d. Average Annual Case and Death Counts Melanoma of the Skin in Louisiana, 2009-2013**

	Case Count (Invasive only)	Death Count
White men	460	68
White women	278	33
Black men	7	-
Black women	8	-

# PROSTATE CANCER

## Goals, Objectives, and Strategies

Goal 7: Reduce the prostate cancer death rate.

### Objective

Increase the promotion of informed decision making for cancers where national guidelines are inconsistent

### Strategies

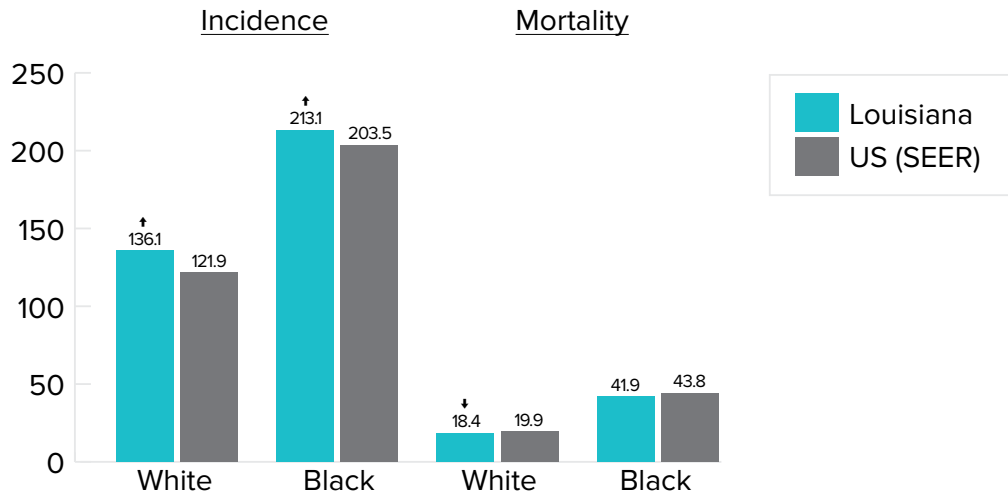
1. Promote informed decision making for cancers where national guidelines are inconsistent

## Burden and Disparities in Louisiana

### Incidence and Mortality Rates

Prostate cancer incidence rates for Black and White men are significantly higher in Louisiana than in the US overall. In Louisiana, Black and White men have lower mortality rates than the national rates. However, both incidence and mortality rates among Black men in Louisiana and nationwide are higher than for White men.

Figure 7a. Prostate Cancer Incidence and Mortality Rates in Louisiana and the US (SEER), 2009-2013



## Screening Recommendations

The USPSTF and the CDC recommend against routine prostate cancer screening for most men. The harms of prostate-specific antigen (PSA)-based screening outweigh the benefits, and until better test and treatment options are available, screening should not be done.

The ACS recommends that men get screened only if they make the decision to do so after being informed about the uncertainties, risks, and potential benefits of screening. The discussion about screening should take place at:

- ◆ Age 50 for men at average risk and expected to live at least 10 more years.
- ◆ Age 45 for men at high risk. This includes African Americans and all men who have a first-degree relative (father, brother, or son) diagnosed with prostate cancer at an early age (younger than age 65).
- ◆ Age 40 for men at even higher risk (those with more than one first-degree relative who had prostate cancer at an early age).

## LIVER CANCER

### Burden and Disparities in Louisiana

#### *Incidence and Mortality Rates*

For men and women of both major races, mortality rates are higher in Louisiana than in the US. Liver cancer incidence and mortality rates among Blacks exceed those among Whites.

**Figure 8a. Liver Cancer among Whites, Incidence and Mortality Rates in Louisiana and the US (SEER), 2009-2013**

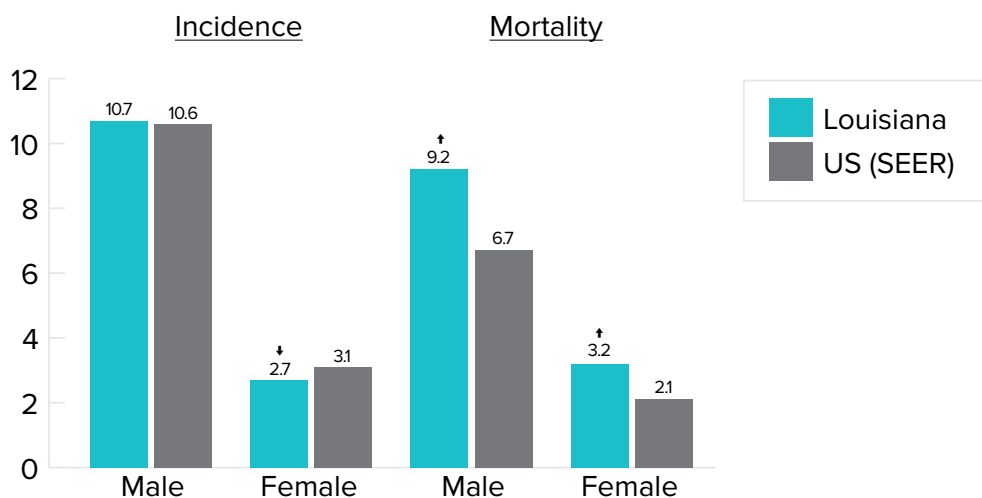


Figure 8b. Liver Cancer among Blacks, Incidence and Mortality Rates in Louisiana and the US (SEER), 2009-2013

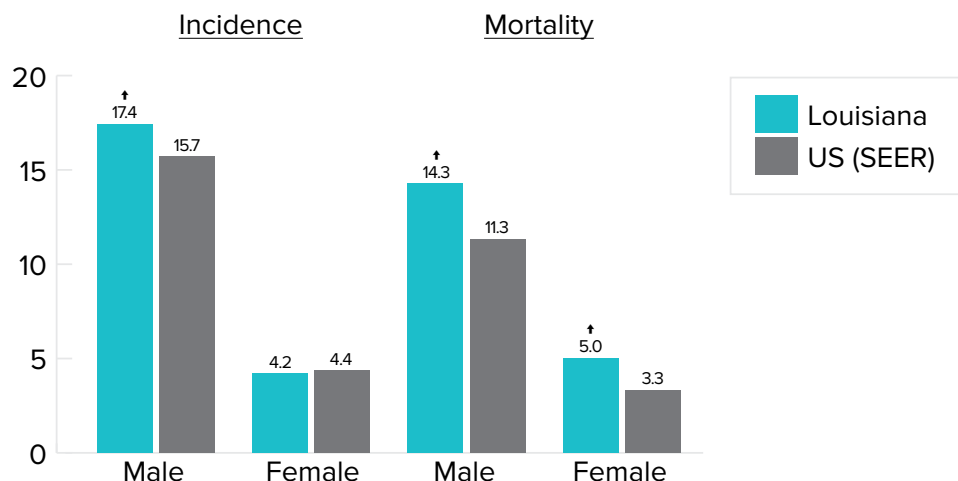


Figure 8c. Liver Cancer, 2009-2013, Louisiana Average Annual Case and Death Counts

	Case Count (Invasive only)	Death Count
White men	183	150
White women	51	63
Black men	117	91
Black women	32	35

Liver incidence and mortality rates from 2009-2013 are not as high as breast, colorectal, or lung and tobacco-related cancer rates. However, cancer data has a three-year lag, and the national liver cancer trend is increasing. Risk factors for liver cancer include Hepatitis B, Hepatitis C, and an unhealthy lifestyle including alcohol abuse. Given recent national trends in increased opioid addiction, and the injection of opioids, there may be increases in Hepatitis B and C and therefore in liver cancer. LTR and LCCCP will monitor liver cancer and its risks on an ongoing basis. Risks for liver cancer can be reduced with Hepatitis B vaccinations, Hepatitis C treatment, and moderated alcohol consumption.

## A Spotlight on Genetic Cancers

### GOALS, OBJECTIVES, AND STRATEGIES

*Goal 8: Increase knowledge of and appropriate care for those at risk of genetic cancers*

#### Objectives

- Increase the percentage of females with a family history of breast and/or ovarian cancer who receive genetic counseling
- Establish a baseline measurement for screening for genetic cancers

## Strategies

1. Increase the proportion of women with a family history of breast and/or ovarian cancer who receive genetic counseling and testing
2. Increase the proportion of persons with newly diagnosed colorectal cancer who receive genetic counseling and testing to identify Lynch syndrome (or familial colorectal cancer syndromes)
3. Include hereditary and genetic cancers information in the LCP communications plan
4. Expand public and provider knowledge about the impact of genetics on cancer risk and management (especially breast, ovarian, and colorectal cancers)
5. Improve genetic healthcare financing and access to testing and support services



### BURDEN AND DISPARITIES IN LOUISIANA

Breast cancer, ovarian cancer, and colorectal cancer all have serious genetic components that can influence patients and their families' decisions about prevention, screening, and treatment. While five to 10 percent of cancer patients have a heritable mutation that has been identified, early knowledge via genetic testing for these patients and their families can be integral for their well-being (American Cancer Society, 2013). Prevention tactics such as medication, surgical intervention, more screenings, or a combination of these services are available in advance for those that have higher risk of cancer from known mutations.

Researchers refer to breast cancers that lack estrogen receptors, progesterone receptors, and large amounts of HER2/neu protein using the term “triple negative breast cancer” (TNBC), and these cases represent 15 to 20 percent of invasive breast cancer in the US. TNBCs tend to spread quickly and are harder to treat. They are more common in younger women, nearly two times as common in Black women as White women, and more common in women with mutations along the *BRCA 1* tumor-suppressor gene (Bradley, 2016). *BRCA 1* and *BRCA 2* are two of the best-known genetic mutations that increase the risk of cancer. Mutations of these two tumor suppressor genes increase risk significantly, even 30-fold, for ovarian cancer among women 70 years old (CDC, 2014). About 10 to 15 percent of ovarian cancers and 15 to 20 percent of breast cancers are based on genetics. Groups of particular interest for *BRCA 1* and *BRCA 2* mutation testing are those with immediate family members who have had triple negative breast cancer, were diagnosed under age 50, have also been diagnosed with ovarian cancer, or are specific ethnicities, which include, but are not limited to, Ashkenazi Jews (ACS, 2013). For more information, please visit: [www.cdc.gov/cancer/breast/young\\_women/knowbrca.htm](http://www.cdc.gov/cancer/breast/young_women/knowbrca.htm)

*BRCA 1* and *BRCA 2*: For women, physicians look for warning flags for *BRCA 1* and *BRCA 2* mutation risk from taking a detailed family and medical history. According to the NCCN, which houses the most complete guidelines for genetic cancers, these histories would include, but are not limited to, a known mutation in the family, early-age-onset breast cancer, triple negative breast cancer at less than 60 years old, and at least one close blood relative with breast cancer under 50 at diagnosis, or invasive ovarian cancer at any age (National Comprehensive Cancer Network, 2015).

A second, and lesser-known, genetic cancer is colorectal cancer. People at particular risk for genetic mutations for colorectal cancer syndromes are those with a history of colorectal cancer before age 50, those with immediate relatives with a history of



colorectal cancer before age 50, and potentially certain ethnicities such as Cajuns in South Louisiana. For those with colon cancer diagnosis, the most common cancer associated with Lynch syndrome, specific warning signals that alert a clinician to send the patient for genetic testing. A major part of the risk assessment is the collection of a detailed family, surgical, and medical history. Specific signs from the types and amounts of polyps found during colonoscopy may also signal to a healthcare professional that the patient should be sent for genetic testing (National Comprehensive Cancer Network, 2015). A detailed list and schema for colorectal genetic testing protocols can also be found from the NCCN here: [www.nccn.org/professionals/physician\\_gls/pdf/genetics\\_colon.pdf](http://www.nccn.org/professionals/physician_gls/pdf/genetics_colon.pdf)

Since July 1st, 2016 Medicaid in Louisiana has been covering *BRCA 1* and *2* genetic testing for women, allowing detection of a higher risk of cancer (Louisiana Department of Health [LDH], 2016b). This is coupled with expansion of Medicaid in the state, in accordance with the Affordable Care Act (ACA) during the same period. The USPSTF, which sets guidelines for most preventive services covered by insurance, Medicaid and Medicare under the ACA, has recommended coverage of *BRCA* testing for women with high risk since 2013 (Centers for Medicare and Medicaid Services, n.d.; United States Preventive Services Task Force, 2013). Louisiana women receiving Medicaid are now eligible for no-cost genetic screenings in accordance with the USPSTF's guidelines, meaning that if they currently have a *BRCA*-related cancer, or have family history of *BRCA*-related cancers, they should be screened accordingly by their doctor. Once a woman tests positive for high risk using the *BRCA* screening tool, she should receive genetic counseling and then *BRCA* testing, if agreed upon by the patient and counselor. These newly covered and diagnosed women can then make informed decisions with their doctors knowing their future risk of *BRCA* cancers is higher than average (LDH, 2016).

### *Disparities to Look At*

The absence of a genetic counseling program is felt in Louisiana—only three genetic counselors are employed in the state, all of whom are in New Orleans (this may vary slightly between the present and the duration of this document). State law provides for healthcare providers to perform genetic counseling, but after it is done, there is a loss in navigation, support, knowledge and decision making for the patient, especially patients with financial limitations and low education levels (State of Louisiana, 2015).

### **Of particular interest is new research coming from the Acadiana region.**

A recent study used a proxy identifier of French-speaking households in the Acadiana region for Cajun peoples, originally from Canada (Karlitz, et al., 2014). In the mid-1700s, less than 2,000 Acadians (now referred to as Cajuns) made the journey down to Louisiana after they had refused to pledge allegiance to the British monarchy. They have maintained a strong culture, including continuing to speak Cajun French, and have intermarried within the small group many times over, creating potential for a genetic founder effect. (A genetic founder effect is a loss of genetic variation that occurs as a result of intermarrying, such as colon cancer genes being retained.) The unusually high prevalence of Tay-Sachs, a different genetic syndrome, among Acadians further supports the genetic founder effect theory. While no specific genetic mutation has been found, colorectal cancer is astonishingly high for Cajun White males, with rates statistically significantly higher than Louisiana and the US. In the nine most concentrated French-speaking parishes, Whites had 13% higher rates than Louisiana's state rate, and 23% higher rates than the US. White males in these parishes had 19% higher rates than the state and 37% higher than the US. These higher rates for this community are something that our state must watch in the coming years. More research is being done to determine the source of the high rates and if a genetic founder effect is influencing this increased incidence.

Considering the subtleties of genetic counseling and its importance for positive outcomes, increasing the number of genetics counselors in the state is integral to moving forward in the fight to prevent genetic cancers.

### *Conclusion*

The point that must be made with prevention of genetic cancers is that with proper screenings and diagnostics, patients who fit the criteria for genetic testing and their family members can live a long and potentially cancer-free life. By catching one family member with a genetic mutation and offering the informed choice of genetic counseling to their family members, a care plan can be created that is sensitive to their risk. By encouraging informed genetic testing, the state and LCP can reduce the number of cancer patients in the future and identify those who do get genetic cancers at an earlier stage, leading to fewer cancer deaths.

## A Spotlight on Lesbian, Gay, Bisexual, and Transgender (LGBT) Health and Cancer

According to US Census 2010 data, Louisiana had approximately 8,100 same-sex couples, or 4.7 same-sex couples per 1,000 households (Gates & Cooke, 2010). Many same-sex couples are concentrated around larger cities: New Orleans, Baton Rouge, Lafayette, and Shreveport. While these specific statistics are available, limited publications and statistics are available on gay and bisexual health in the nation or in Louisiana. Of the publications that are available, many are related to HIV/AIDS issues and few are published on the array of other issues that surround LGBT health. Cancer statistics for Louisiana's sexual minority population statistics are scarce and prevention strategies are deficient as of 2016. Terminology regarding sexual orientation and gender identity in this section is referred to in the same terminology in which it appears in the source document referenced in that instance.

The LGBT community often does not receive health treatment that is comparable to their heterosexual counterparts. This is largely due to a lack of data in the LGBT population, generic treatment plans that often best suit heterosexual persons, and a stigmatization of the LGBT population (Blank, 2014). These same issues can be seen in public health; the majority of CDC data and resources focus on sexually transmitted disease (STD) and HIV testing (CDC, 2014). This absence of information contributes to health disparities in the US.

LGBT persons seeking treatment for cancer are faced with issues of inadequate data, routine treatment plans, and stigmas that can ultimately result in increased mortality. In one of the few studies published on LGBT communities, the CDC's National Center for Health Statistics developed questions that were subsequently added to the National Health Interview Survey (NHIS) (CDC, 2013). This survey is administered randomly to residents throughout the US and is often used for health statistics. The 2013 NHIS recorded that among US adults ages 18 and over (N=34,557), 1.6 percent identified as gay or lesbian and 0.7 percent identified as bisexual (Ward, Dahlhamer, Galinsky, & Joesti, 2013). Of adults between the ages of 18 and 64 who identified as gay, lesbian, or bisexual (LGB), 29.5 percent reported being current smokers, which is higher than those who identified as straight reported currently smoking (19.6 percent). Those identifying as LGB also reported having five or more drinks in one day at least once in the past year (41.5 percent), more than their straight counterparts (26.0 percent). From the NHIS data, an increase in risk-taking behavior (e.g. smoking and binge drinking) is observed; risk-taking behavior in LGB men and women is also cited throughout published literature (Blosnich, Jarrett, & Horn, 2010) (Rosario, Scrimshaw, & Hunter, 2006). These behaviors can lead to an increase in cancer of multiple sites, some of which are more common in LGB persons than others (Lemp et al., 1994). The National Cancer Institute's SEER (Surveillance, Epidemiology, and End Results) Program, has yet to collect information on sexual orientation of individuals diagnosed with cancer.

## *Increased Risks*

Literature for site-specific cancer among LGBT persons is inadequate to date. However, the few existing publications provide insight into sexual minority cancer status. Breast, lung, and colorectal cancer incidence has been shown to be different in areas that have a higher sexual minority density (SMD) than in those with a higher density of heterosexual persons (Boehmer, Miao, Maxwell, and Ozonoff, 2014). As noted previously, the tobacco industry targets LGBT populations with marketing, and smoking rates among LGBT persons are higher than among the general population; this ultimately increases risk for lung and other tobacco-related cancers. HIV/AIDS can also increase a patient's risk of developing Kaposi sarcoma or non-Hodgkin lymphoma, two cancer types that are associated with the lymphatic system (International Agency for Research on Cancer, 1996; Oksenhendler, 2002).

According to the Louisiana HIV/STD Program, 65 percent of new HIV diagnoses in 2014 were among men who have sex with men (MSM), and the majority of those diagnoses were among Black men. HIV and STDs disproportionately affect Black men, especially Black MSM in Louisiana (Louisiana Department of Health and Hospitals, 2014). Being HIV positive increases a person's risk for other infections, including other sexually transmitted infections and viruses. HPV infection is a viral infection that causes various cancers. HPV can cause of cervical and other cancers in females, and it has recently been implicated in the increased incidence of anal cancers in males; in fact, the incidence of anal cancer among gay or bisexual men is higher than the incidence of cervical cancer among women (Chin-Hong et al., 2005). Persistent HPV infection is frequent among HIV-positive MSM (Krueter, A., Wieland, U., 2009). For men and women (lesbian and bisexual), the number of lifetime oral sex partners increases the risk HPV-related oropharyngeal cancers (Brouwer, A. F., Eisenberg, M. C., & Meza, R., 2016). Women identifying as lesbian or bisexual are also at risk of HPV infection and the possible consequence of cervical cancer, despite common belief that they are at lower risk because they do not have sexual contact with men (Bailey, Kavanagh, Owen, McLean, & Skinner, 2000) (Marrazo, Koutsky, Kiviat, Kuypers, & Stine, 2001). Ultimately, increased HPV-vaccination will reduce new HPV infections and HPV-related cancers among men and women regardless of sexual identity or gender orientation. At present, according to the CDC Sexually Transmitted Diseases Treatment Guidelines, the data are insufficient to recommend routine anal cancer screening for persons with HIV infection or MSM without HIV infection (CDC, 2016).

## *Future Work*

Cancer registries need to start collecting data on sexual orientation and identity, since major cancer registries such as SEER do not do so to date (Bowen & Boehmer, 2007). Without data, adequate research cannot be conducted on cancer trends among sexual minority groups. While some national surveys, such as the BRFSS, have begun to ask questions to identify sexuality, it is imperative that all national self-reported surveys begin to include these questions as well. (Baker & Hughes, 2016)

The National Breast and Cervical Cancer Early Detection Program (NBCCEDP) has recently updated policies to include transgender women who have taken or are taking hormones and meet all program eligibility criteria for breast cancer screening (Maril, 2013). Although the CDC has not made any specific screening recommendations for this population, these women are eligible under federal law to receive appropriate cancer screening. With more research, proper recommendations can be made and early detection programs can include more sexual minority groups.

Visits with primary care physicians are important, as the majority of patients will be screened or be recommended for screening during these visits. If an LGBT patient feels that she or he will be treated unfairly or poorly because of their identity, they may not visit a primary care physician, and therefore may not receive the recommended screenings. To engage this issue, provider education on LGBT cultural competence is increasingly important. Providers may not be aware that certain cancers present at a higher frequency and with more complications in LGBT patients and may not recommend the correct screenings because of this. Provider education on communicating with LGBT patients is also important. Primary prevention—such as regular visits to a physician, healthy diet, exercise, reduced obesity, and smoking cessation—is key in reducing cancer incidence and mortality in the LGBT community, just as it is in any other community.

More culturally appropriate prevention strategies for the LGBT community are needed. Because current prevention strategies may not fit the needs of gay, lesbian, bisexual, or transgender Louisiana residents, research and prevention strategies must be developed to fulfill these needs. With more data collection and research on how cancer affects sexual minorities, specifically in Louisiana, better recommendations for cancer prevention will be made.

## Obesity and Cancer: A Closer Look

### GOALS, OBJECTIVES, AND STRATEGIES

#### Goal 9

Reduce cancer risk by reducing obesity

#### Objectives



**Objective 1:** Decrease the percentage of adults, ages 18+, who report no leisure time physical activity

- Where We Are: **29.5%**
- ▨ National Average: **23.7%**
- Our Goal: **23.7%**



**Objective 2:** Increase the percentage of adults, ages 18+, who consumed 1 or more vegetables per day

- Where We Are: **67.3%**
- ▨ National Average: **77.6%**
- Our Goal: **77.6%**

#### Strategies

1. Increase physical activity access and outreach within communities
2. Encourage the adoption of new local complete streets policies through guidance, trainings, and promotional materials
3. Coordinate with local farmers markets to expand the use of SNAP benefits at markets
4. Expand participation in Well-Ahead
5. Promote health through the consumption of healthful diets
6. Make health foods more appealing with junk food relative pricing
7. Increase the amount of infrastructure to support walking and bicycling
8. Increase consumption of fruits and vegetables

## BURDEN AND DISPARITIES IN LOUISIANA

In 2015, Louisiana was ranked the unhealthiest state in the US, and its overall obesity rate of 36.2 percent was also the highest in the US. Suburban and rural areas have higher rates of obesity than urban areas (United Health Foundation, 2016). Another third of Louisiana residents are overweight, making roughly two thirds of the population either overweight or obese. **With approximately 4.7 million total residents in Louisiana, approximately 3.1 million are overweight or obese.** Not only is obesity a risk factor for heart disease, the leading cause of death in Louisiana, it is also a risk factor for cancer, the second leading cause of death. Just as reducing exposure to tobacco can prevent heart disease, diabetes, and cancer, maintaining a healthy weight can do the same.

*Figure 9a. Obesity Increases Risk for Some Types of Cancer (NCI, 2012)*

Type of Cancer	Estimated Percentage Cancer Cases Caused by Obesity
Endometrial (lining of the uterus)	39%
Esophageal	37%
Kidney	25%
Colorectal	11%
Postmenopausal Breast	9%

Overweight and obesity contribute to the chronic disease burden at a similar magnitude as smoking. (UHF, 2016), and the CDC considers it one of the greatest threats in the US. In addition to increasing one's risk for cancer incidence, obesity decreases cancer survival rates. Cancer patients with one or more comorbid conditions caused by obesity such as type 2 diabetes, stroke, hypertension, liver disease, kidney disease, Alzheimer's disease, dementia, respiratory conditions, and osteoarthritis can experience treatment disruptions or discontinuation in order to stabilize another condition.

The CDC's recommended interventions to reduce obesity can be broken down into the following major domains via environmental and policy approaches:

- ◆ Improve access and availability to healthy foods (fresh fruits and vegetables)
- ◆ Limit availability of less healthy foods and beverages
- ◆ Increase opportunities for safe, physical activity
- ◆ Increase support for breastfeeding (UHF, 2016)

Various factors correlate strongly with obesity, namely low socioeconomic status, low educational attainment, race, and rural residence. In 2015, among obese individuals in Louisiana, 31.9 percent were White and 42.5 percent were Black (Robert Wood Johnson Foundation, 2016). Blacks continue to have the lowest rates of educational attainment (degree level) among all race groups in Louisiana, and that rate is also lower than the national rate (Lumina Foundation, 2016). Meanwhile, 31 percent of Blacks in Louisiana, compared to 12 percent of Whites, live in poverty (Kaiser Family Foundation, 2015). Racial disparities in cancer are outlined throughout this cancer plan, but they exist similarly with obesity. Thirty-eight percent of Louisiana residents live in areas classified as rural and small cities, which have geographic barriers to healthcare (Plyer et al., 2013). Rural residents also suffer greater rates of obesity than their urban counterparts.

The strategies section of this document addresses various policy, systems, and environmental changes that are either already underway, proposed, or recommended for implementation. For more information on the obesity epidemic in Louisiana, more specifically childhood obesity, and recommended interventions, please refer to the Pennington Biomedical Research Center's most recent report titled: *Reducing Childhood Obesity in Louisiana: An Evidence-based Approach to Inform Policy Decisions*.

# Health Systems Change: Patient Navigation, Cancer Survivorship, and Access to Care

## GOALS, OBJECTIVES, AND STRATEGIES

*Goal 9: Increase standard, quality use of patient navigation services across the cancer care continuum.*

### Objective

See breast, cervical, colorectal, and survivorship section objectives that refer to patient navigation

### Strategies

1. Promote competency-based patient navigation training opportunities in Louisiana
2. Navigate rarely- and never-screened women to breast, cervical, and colorectal cancer screening and rarely- and never-screened men to colorectal cancer screening
3. Collaborate with partners to increase screening navigation for colorectal cancer screenings
4. Implement patient navigation to facilitate timely access to cancer screenings and diagnostics
5. Promote patient navigation as an intervention for improving outcomes among cancer survivors

## PATIENT NAVIGATION

Patient navigation is recognized as a component of the patient-centered healthcare delivery model, and it serves to integrate a fragmented healthcare system for an individual patient. It was developed to guide cancer patients with a suspicious finding (i.e. an abnormal cancer screening test result) through the complex cancer care system and help to ensure timely diagnosis and treatment. Barriers to care are the most common reason patients do not access care or complete required follow up. Common barriers to quality care fall into a number of categories:

- ◆ Transportation
- ◆ Financial
- ◆ Communication and information
- ◆ Healthcare system
- ◆ Emotional

Patient navigation services, especially among the poor and minorities, result in a more timely diagnosis and reduce no-show rates (Ko, N. Y., et al, 2016; Lockett R., et al 2015). Ultimately, timely access to diagnosis, to treatment, and to community-based resources improves patient outcomes. What separates a patient navigator from a social worker or a medical care coordinator is that the navigator focuses on getting the patient screened, diagnosed, and treated within a specific timeline, typically based on NCCN recommendations. For example, reduced barriers and improved access to care can help patients get screened and diagnosed for cancers earlier, thereby increasing early-stage diagnoses and reducing late-stage diagnoses. Breast, cervical, and colorectal cancers all have over a 90 percent five-year survival rate if detected early and treated in a timely manner. Improved patient outcomes will become more valuable to health systems as reimbursement shifts from a fee-for-service payment system to a value-based payment system.

Cancer patient navigation is mandated by the American College of Surgeons (ACoS) for patients who are undergoing treatment in facilities certified by their organization. Some health systems in Louisiana offer patient navigation services to cancer patients with trained patient navigators. However, screening navigators at the community level remain scarce. This is unfortunate because the impact and success of patient navigation were demonstrated using screening navigation for breast cancer. Dr. Harold P. Freeman’s foundational research on patient navigation showed that inner-city Black women in Harlem, NY, had five-year breast cancer survival rates of 39 percent without patient navigation, but 70 percent with navigators (Oluwole, S. F., et al 2003). Over a decade more of research continues to support the impact patient navigation makes on patient’s lives. Further research has expanded the role of the patient navigator to other cancers, cancer survivorship, chronic diseases, and infectious diseases. Patient navigators are working in areas such as financial, legal, and community resources navigation as well.

As patient navigation relates to this cancer plan and the strategies section, LCCCP recommends providing more navigators for cancer screenings and cancer survivors. At all of the LCCCP partner meetings (LCCRT, SHA/SHIP, LBCHP Medicaid Expansion Group), key stakeholders expressed the need to increase patient navigation for screenings of chronic diseases, especially diabetes and cancer. This is reflected in the strategies section of each cancer area of the next section.

## Cancer Survivorship

### GOALS, OBJECTIVES, AND STRATEGIES

#### *Goal 10: Improve the quality and length of life for cancer survivors*

##### *Strategies*

1. Increase the implementation of evidence-based cancer survivorship interventions
2. Increase the percentage of patients who report receiving a treatment summary and/or a survivor care plan
3. Decrease the prevalence of smoking among cancer survivors
4. Decrease pain caused by cancer or cancer treatment among cancer survivors
5. Create a statewide cancer survivorship workgroup
6. Continue the BRFSS cancer survivor module
7. Create a statewide palliative care workgroup for cancer patients
8. Educate primary care providers on working with cancer survivors

##### *Objectives*



**Objective 1:** Increase the percentage of persons with cancer who are living five years or longer after diagnosis

- Where We Are: **61.3%**
- ▨ Healthy People 2020 Target: **71.7%**
- Our Goal: **71.7%**

**Objective 2:** Increase the percentage of patients who report receiving a treatment summary and/or a survivor care plan (BRFSS question)

■ Baseline not yet established

## SURVIVORSHIP

The ACS estimates that there are currently 15.5 million cancer survivors in the US, and that that number will grow to almost 19 million by 2024. The ACS estimates that in January of 2016, 213,580 cancer survivors live in Louisiana. Nationally, breast, prostate, melanoma of the skin, and colorectal cancers have the highest number of survivors (ACS, 2016). For the purpose of clarity, this document will use the Institute of Medicine's (IOM) definition of survivor: "An individual is considered a cancer survivor from the time of cancer diagnosis through the balance of his or her life (IOM, 2005)."

Increased efforts for cancer screening and prevention of breast, colorectal, melanoma of the skin, prostate, lung, and cervical cancer can in some cases prevent cancer. In other cases, cancer screenings improve survival by finding cancers at earlier stages, thus making treatment less invasive and more effective. Additionally, treatments themselves have become more successful, further increasing the number of cancer survivors.

Cancer survivors face many long-term and late effects from cancer and its treatment including some of the following (ACS, 2016):

- ◆ Psychological and/or emotional distress including fear of recurrence
- ◆ Physical disability and/or modified ability
- ◆ Acute and/or chronic pain
- ◆ Impaired cognitive function
- ◆ Infertility
- ◆ Heart and pulmonary damage
- ◆ Sexual dysfunction

Much of the suffering caused from these late and long-term effects can be reduced with known interventions and care coordination. Cancer survivorship care planning should include further prevention efforts such as other early detection screenings (breast, colorectal, etc.) and ongoing surveillance. Psychological and emotional distress and pain management can be improved with therapy and treatment in many cases. Physical occupational therapists help patients manage impaired cognition and mobility. Finally, standard survivorship care planning links the patient back to their primary care provider (IOM, 2005).

According to the ACS, the uninsured and racial and ethnic minorities are more likely to be diagnosed at a late stage (GW Cancer Center, 2016). The cancer trends noted in this document also demonstrate that Louisiana as a whole, and its minority populations within, suffer from cancer incidence and mortality at significantly greater rates than the rest of the US (with some specific noted exceptions by cancer type). Survivorship care planning must be patient-centered, and survivorship navigators can help patients understand their care plans and connect them to primary care. This is challenging in resource-poor states like Louisiana because survivorship care planning and patient navigation remain unfunded. Additionally, the ACoS's patient navigation, psychosocial distress measure, and survivorship care planning mandates do not come with funding. This makes their implementation and payment particularly difficult in care centers that serve a high number of uninsured patients.



## Recommendations

The ACoS mandates that cancer survivors receive patient navigation, a psychosocial distress screening, and a treatment summary with follow-up care plans, also called survivorship care plans.

Survivorship care planning for patients (including its payment, facilitation, and implementation) can give patients the tools they need to manage life as a survivor. The survivorship care plan is a document that the oncologist or care team provides to the patient. It has two parts: a treatment summary and a care plan. Existing research and IOM recommendations point to the need to assist cancer survivors with understanding the treatment summary and the care plan, and linking the patients back into a primary care setting. The ACoS recommends that health systems providing care plans should initially focus on the most common cancers such as breast, colorectal, prostate, early stage lung, and lymphoma. In the future, all patients would receive a treatment summary and a survivorship care plan.

Patients should understand the post-treatment and long-term effects of cancer, and it is important for healthcare workers to be part of this. All of the following are recommended for cancer survivors and are typically included in the survivorship care plan:

- ◆ Return for routine surveillance per the instructions provided to them by the oncologist
- ◆ Be screened for distress and psychosocial health needs
- ◆ Have a primary care physician
- ◆ Practice healthy behaviors such as not smoking, getting recommended vaccines, having an active lifestyle, eating healthy foods, and limiting alcohol consumption
- ◆ Care coordination to behavioral and rehabilitation specialists to help survivors who are struggling with emotional and/or physical changes resulting from cancer and its treatment



## EVALUATION PLAN

The purpose of the 2016-2021 cancer plan is to create a coordinated action plan to reduce the cancer burden in Louisiana. The plan presents Louisiana-specific cancer information, describes the state's goals and objectives around cancer, identifies and describes initiatives and strategies to achieve the goals and objectives, and coordinates the efforts and resources of the leading cancer organizations. The success of the cancer plan will be evaluated by analyzing the progress towards and achievement of each goal and objective.

During the implementation period of the preceding 2011-2015 cancer plan, many of the stakeholders moved and/or were unable to be contacted. Once the plan was created, we stopped fostering input and participation from the LCCCP members. To improve the implementation and evaluation efforts for this plan, we will continue to engage and regularly communicate with LCCCP members throughout the implementation period.

To lessen the burden of reporting by primary stakeholders, we will evaluate the state cancer plan's effectiveness by using publicly available and easily assessable evaluation metrics. For each section of the cancer plan, we've identified metrics that will determine if our strategies were effective and if our goals were accomplished. All metrics are detailed below in the Evaluation Indicators and Metrics table. The evaluation specialist at LCP will be responsible for monitoring and reporting on the metrics after the culmination of the plan, in year 2022. The evaluation specialist will obtain feedback from the primary stakeholders to ascertain factors that made success (i.e. meeting objectives) possible and to identify challenges and barriers to achieving success.

In 2022, the evaluation specialist will compile all information related to the metrics and feedback from stakeholders to produce an evaluation report that summarizes the findings. The report will be shared with all cancer plan stakeholders, and will be used to inform the process of creating the following years' cancer plan. The results will be used as evidence to justify conclusions and support initiatives and ideas. The report will be disseminated within a couple months after the culmination of the plan, and will be discussed, along with the lessons learned, at a follow-up meeting among stakeholders.

Figure 10a. Evaluation Indicators and Metrics

Objective	Where We Are	Healthy People 2020 Target	Our Target	Data Source	Where We Are in 2022: Did we meet our target?
<b>Louisiana Cancer Prevention and Control Programs (LCP) Goal: Maintain and sustain the LCP administrative framework</b>					
<b>Infrastructure:</b> Ensure fiscal management, program management, and surveillance data operate continuously and accountably.					
<b>Local Implementation:</b> Maintain cancer coalitions (currently Louisiana Healthy Communities Coalitions) in prioritized regions statewide.					
<b>Partnerships:</b> Maintain existing partnerships and/or establish new partnerships so as to align existing initiatives and/or identify opportunities for collaboration.					
<b>Communications:</b> Maintain and implement communications plans annually (website, social media, etc.).					
<b>Funding:</b> Apply for funding opportunities that address disparities as identified by data.					
<b>Evaluation:</b> Evaluate cancer plan efforts annually using appropriate data sources (BRFSS, NHIS, YTS, SEER, etc.)					
<b>Policy:</b> Maintain a Policy Coordinator to assist with data-informed program and policy development statewide.					
<b>Surveillance:</b> Work with the Louisiana Tumor Registry to use ARC-GIS mapping technology to identify areas with high cancer mortality rates while maintaining patient confidentiality.					
<b>Breast Cancer Goal: Reduce morbidity and mortality due to breast cancer</b>					
Increase the percent of women aged 50-74 years and older who have had mammography screening within the past two years.	79.40%	8110%	8110%	Behavioral Risk Factor Surveillance System	
Reduce the number of new cases of late-stage breast cancer.	42.1/100,000	-	40.0/100,000	Surveillance, Epidemiology, and End Results	

Objective	Where We Are	Healthy People 2020 Target	Our Target	Data Source	Where We Are in 2022: Did we meet our target?
<b>Cervical Cancer Goal:</b> Reduce the mortality rate from cancer of the uterine cervix					
Increase cervical cancer screening within the past 3 years among women aged 21-65 based on the most recent guidelines.	84.00%	93%	93%	Behavioral Risk Factor Surveillance System	
Increase the vaccination coverage level for adolescent females aged 13-15 years that have completed the 3-dose HPV vaccination.	33.60%	80%	80%	National Immunization Survey	
Increase the vaccination coverage level for adolescent females aged 13-15 years that have completed the 3-dose HPV vaccination series.	20%	80%	80%	National Immunization Survey	
<b>Colorectal Cancer Goal:</b> Reduce incidence, reduce mortality, and reduce late-stage diagnosis of colorectal cancer in Louisiana					
Increase the percent of adults aged 50 to 75 years who received a colorectal cancer screening based on the most recent guidelines.	64.20%	71%	80% (by 2018)	Behavioral Risk Factor Surveillance System	
<b>Lung and Tobacco-Related Cancers Goal:</b> Reduce the lung cancer mortality rate					
Have a state population that is covered by a 100% smoke-free ordinance.	71%	100%	100%	State Tobacco Activities Tracking and Evaluation System	
Reduce the percentage of adolescents in grades 9 through 12 who smoked cigarettes in the last 30 days.	16.20%	16.00%	16.00%	Youth Risk Behavior Surveillance System	
<b>Skin Cancer Goal:</b> Reduce incidence and mortality rates of skin cancer					
Increase the percentage of adults that follow protective measures that may reduce the risk of skin cancer.	67% (National)	73.70%	73.70%	National Health Interview Survey	

Objective	Where We Are	Healthy People 2020 Target	Our Target	Data Source	Where We Are in 2022: Did we meet our target?
<b>Hereditary and Genetic Cancers Goal:</b> Increase knowledge of hereditary cancers					
Increase the percentage of females with a family history of breast and/or ovarian cancer who received genetic counseling.	34.6% (National)	38.10%	38.10%	National Health Interview Survey	
<b>Prostate Cancer Goal:</b> Reduce the prostate cancer mortality rate					
Increase the proportion of men who have discussed the advantages and disadvantages of PSA test with their healthcare provider.	14.4% (National)	15.90%	15.90%	National Health Interview Survey	
<b>Obesity and Cancer Goal:</b> Reduce cancer risk by reducing the obesity rate					
Decrease the percentage of adults, ages 18+, who report no leisure time physical activity.	29.50%	23.70%	23.70%	National Health Interview Survey	
Increase the percentage of adults, ages 18+, who consumed 1 or more vegetables per day.	67.30%	77.60%	77.60%	Behavioral Risk Factor Surveillance System	
<b>Patient Navigation Goal:</b> Increase standard, quality use of patient navigation services across the cancer care continuum					
See breast, cervical, colorectal, and survivorship section objectives.					
<b>Cancer Survivorship Goal:</b> Improve the quality and length of life of cancer survivors					
Increase the percentage of persons with cancer who are living 5 years or longer after diagnosis.	61.30%	71.70%	71.70%	Surveillance, Epidemiology, and End Results	
Establish the baseline for the percentage of patients who report receiving a treatment summary and/or a survivor care plan.	-	-	-	Behavioral Risk Factor Surveillance System	

## LOUISIANA COLORECTAL CANCER ROUNDTABLE

NAME	ORGANIZATION
Terry Birkhoff	American Cancer Society
Kaitlin Sylvester	American Cancer Society
Amy Williams	American Cancer Society
Lydia Kuykendal	American Cancer Society Cancer Action Network
Dr. Donnie Batie	Baton Rouge General Hospital
Dr. Robert Muscalus	Blue Cross Blue Shield of Louisiana
Dr. James Hobley	Gastrointestinal Specialists
Carolyne LeBlanc	Louisiana Department of Health and Hospitals, Medicaid
Angela Marshall	Louisiana Department of Health and Hospitals, Medicaid
Lee Ann Albert	Louisiana Academy of Family Physicians (LAFP)
Colleen Huard	Louisiana Cancer Prevention and Control Programs
Aubree Thelen	Louisiana Cancer Prevention and Control Programs
Mikal Giancola	Louisiana Cancer Prevention and Control Programs
Michael Rivers	Louisiana Cancer Prevention and Control Programs
Nannozi Ssenkoloto	Louisiana Cancer Prevention and Control Programs, Louisiana Breast & Cervical Health Program
Dr. Donna Williams	Louisiana Cancer Prevention and Control Programs, LSU Health New Orleans School of Public Health
Dr. Randi Kaufman	Louisiana Cancer Prevention and Control Programs, LSU Health New Orleans School of Public Health
Gerrelda Davis	Louisiana Primary Care Association (LPCA)
Stacy Fontenot	Louisiana Rural Health Association
Lauren Maniscalco	Louisiana Tumor Registry
Dr. Xiao-Cheng Wu	Louisiana Tumor Registry
Dr. Wayne Wilbright	LSU Health Care Services Division
Amanda LaCombe	LSU Health Care Services Division
Keith Verret	LSU Health Care Services Division
Dr. Elizabeth Fontham	LSU Health New Orleans School of Public Health
Leigh Anne Kamerman-Burns	LSU Health Sciences Center
Dr. Quyen Chu	LSU Health Sciences Center, Shreveport
Dr. Terry Davis	LSU Health Sciences Center, Shreveport

Dr. Jerry McLarty	LSU Health Sciences Center, Shreveport
Dr. Glenn Mills	LSU Health Sciences Center, Shreveport
Greg Abel	Myriad Genetic Laboratories
Dr. Keith Winfrey	NOELA Community Health Center
Dr. Kelly Finan	Our Lady of the Lake Physician Group, Colon Rectal Associates
Jennifer Fabre	Teche Action Clinic
Dr. Gary Wiltz	Teche Action Clinic
Dr. Jordan Karlitz	Tulane University School of Medicine

## LOUISIANA HEALTHY COMMUNITIES COALITION

Mikal Giancola	Statewide Co-Chair
Earl Nupsius Benjamin-Robinson	Statewide Co-Chair
Aubree Thelen	Co-Chair, Region 1
Matthew Broussard	Co-Chair, Region 1
Hope McPhatter Hickerson	Chair, Region 2
Nakisha Singleton	Chair, Region 3
René Stansbury	Co-Chair, Region 4
Dr. Denise Linton	Co-Chair, Region 4
Janice Ackley (Partnership for Healthier Southwest Louisiana)	Member, Region 5
Joselyn Fontenot	Member, Region 5
Jennifer Gilchrist	Chair, Region 6
Feamula Bradley	Co-Chair, Region 7
Urina Holt	Co-Chair, Region 7
Jennifer Haneline	Chair, Region 8
Jaime Bruins	Co-Chair, Region 9
Taffy Morrison	Co-Chair, Region 9



## STATEWIDE TOBACCO CONTROL WORKGROUP

Kaitlin Sylvester	American Cancer Society
Ashley Lyerly	American Lung Association in Louisiana
Claudia Rodas	Tobacco-Free Kids
Onjewel Smith	Americans for Nonsmokers' Rights
Trayce Snow	The Rapides Foundation
Sarah Moody-Thomas, PhD	Tobacco Control Initiative
Mike Rogers	Smoking Cessation Trust
Marisa Marino	Louisiana Department of Health
Colleen Arceneaux	Louisiana Department of Health
Melissa Martin	Louisiana Department of Health
Lydia Kuykendal	American Cancer Society
Cynthia Hallett	Americans for Nonsmokers' Rights
Tonia Moore	Louisiana Public Health Institute
Donna Williams, DrPH	LSU School of Public Health
Michael Celestin	Tobacco Control Initiative
Dennis Keller	Smoking Cessation Trust
Quinetta Womack	LA Office of Child and Youth Services
Chris Williams	State of Louisiana
Renee Underwood	Louisiana Department of Health
Lisanne Brown	Louisiana Public Health Institute
Mikal Giancola	Louisiana Cancer Prevention and Control Programs
Dodie Arnold PhD	Louisiana Public Health Institute
Aubree Thelen	Louisiana Cancer Prevention and Control Programs
Lauren Conrad	Louisiana Public Health Institute
Earl Nupsius Benjamin-Robinson	Louisiana Public Health Institute
Candice Marti	Louisiana Public Health Institute
Kristen Hernandez	Louisiana Department of Health
Sundee Winder	Louisiana Department of Health
Marie Darr	Louisiana Department of Health
Dr. Eric Baumgartner	Louisiana Public Health Institute
Linda Brown	Southern University Ag Center
Kelley McDonough	Louisiana Public Health Institute
D. Brown	March of Dimes

Ashley Bridges

S. Harris

Nancy Breton

Amy Nolan

Joynetta Bell

Stacey Guidry

American Heart Association

March of Dimes

Pennington Biomedical Research Center

American Cancer Society

Louisiana Department of Health

Louisiana Department of Health

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