



# TOGETHER

WE CAN REDUCE THE IMPACT OF CANCER IN SOUTH CAROLINA



SOUTH CAROLINA  
CANCER ALLIANCE

South Carolina  
Cancer Plan  
2017-2021



Dear Fellow South Carolinians:

We are pleased to share the 2017-2021 South Carolina State Cancer Plan. Cancer remains the second leading cause of death in our state, accounting for approximately 1 in every 4 deaths. This disease touches us all whether as a cancer survivor, caregiver, family member, or friend. The Cancer Plan, developed by the South Carolina Cancer Alliance in collaboration with state, regional, and local partners, outlines goals, objectives, and strategies to help reduce the impact of cancer in South Carolina.

Fortunately, South Carolina has made notable strides in the fight against cancer, but we must continue to work together to save more lives and reduce disparities in our state. The Cancer Plan is a tool designed to highlight cancer prevention methods, improve the treatment and ease the suffering of those with cancer, and encourage community action to enact policies and regulations that decrease cancer occurrences. The Cancer Plan can only be effective, however, through the combined efforts and dedication of the Alliance's diverse partners, who are committed to the belief that we can, together, decrease the burden of cancer in our state over the next five years.

No one individual or organization can decrease the state cancer burden alone, although, through the grassroots efforts of committed partners across the state, we will achieve the objectives set forth in this Cancer Plan.

We hope you find this Cancer Plan beneficial in your efforts to make a difference in the fight against cancer in South Carolina.

Best Regards,

Dr. Gerald Wilson, Chairman  
Surgeon (retired), Midlands Surgical Associates

Henry Well, Executive Director



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# EXECUTIVE SUMMARY

Every five years, the South Carolina Cancer Alliance members work together to develop the five-year South Carolina Cancer Plan (the Cancer Plan). The Cancer Plan serves as the official road map in the fight against cancer in our state. The South Carolina Cancer Plan 2017-2021 is the state's third cancer plan and serves as a companion to the South Carolina Cancer Report Card, which describes the distribution of cancer cases and deaths in the state.

The Cancer Plan is organized to address each of the Centers for Disease Control and Prevention (CDC) National Comprehensive Cancer Control Program (NCCCP) priority areas: primary prevention of cancer; early detection and treatment; public health needs of cancer survivors; policy, system, and environmental changes; health equity as it relates to cancer control; and outcomes demonstrated through evaluation. Content on each of these topics includes goals, specific objectives that support the goals, strategies to achieve the objectives, sources of data that will be used to assess achievement of the objectives, and plans for monitoring progress towards achievement of objectives. The Cancer Plan also includes a separate evaluation plan, entitled "Evaluation Plan for the South Carolina Cancer Plan 2017-2021," which outlines more specifically how the plan will be evaluated during and after its implementation.

Too many people still suffer and die unnecessarily from cancer in South Carolina, and the disease touches us all in some way. In South Carolina and the United States, cancer is the second leading cause of death after heart disease, accounting for approximately one in every four deaths. In 2017, the American Cancer Society estimates there will be 28,680 new cancer cases and 10,320 cancer deaths in South Carolina alone. Fortunately, many new cancer cases and deaths can be prevented and avoided.

The Cancer Plan is a tool designed to highlight opportunities to prevent new cases of cancer, improve the treatment and ease the suffering of those with cancer, and spur community action to enact policies and regulations that decrease the cancer burden. The Cancer Plan can only be effective through the combined efforts and dedication of the Alliance's diverse partners, who are committed to the belief that together, we can decrease the burden of cancer in our state over the next five years.



# SECTION 1: INTRODUCTION AND BACKGROUND

## About The South Carolina Cancer Alliance (the Alliance)

Founded in 2003, the South Carolina Cancer Alliance (the Alliance) has been dedicated to the prevention and early detection of cancer, improving the treatment of those affected by the disease, and minimizing the burden of cancer in South Carolina. The Alliance consists of more than 800 members who represent the state's medical and public health community, academic institutions, governmental, and nonprofit organizations, and various community groups. The members of the Alliance are divided into workgroups. Currently, the Alliance is comprised of eight (8) workgroups that address breast, cervical, colorectal, prostate, and lung cancers; survivorship; policy and advocacy; and health equity.

### Objectives:

To build a more robust and self-sustaining Alliance, the organization established the following operational objectives:

- 1.1** Increase membership by engaging a broad and diverse range of local, regional, and state partners as well as to include organizations with a focus on the reduction of health disparities. Progress towards this goal will be assessed using the Alliance's database of partners.
- 1.2** Increase participation by, and the number of, active workgroup members who work to develop, implement, and evaluate the Cancer Plan. Progress towards this goal will be assessed using the attendance and partner section of Alliance meeting notes, to better understand average participation.
- 1.3** Evaluate and review each objective in the Cancer Plan annually to determine progress and make modifications, as necessary. Progress towards this goal will be assessed through document updates and recommendations.

# Our Five-Year Cancer Plan

The Alliance’s workgroups are responsible for developing, implementing, and evaluating specific objectives outlined in the cancer plan. The Alliance then provides annual funding opportunities to the workgroups to assist them in implementing their strategies. All goals, objectives, and funding decisions are reviewed and approved by the Alliance’s Board of Directors.

The Alliance observed recommendations from the Centers for Disease Control and Prevention (CDC) and divided the development of the Cancer Plan into the following 4-step process:

- **Step 1: Goals and objectives**—The Alliance focuses on the three types of changes/goals outlined in the table below. Each objective related to a goal must be “SMART”—Specific, Measurable, Attainable, Results-oriented, and Time-phased.
- **Step 2: Strategies**—The Cancer Plan is a “living document” and will be periodically revised. Strategies for achieving the objectives and goals in the Cancer Plan, as well as specific plans for evaluation, will be added to the document soon after its initial release.
- **Step 3: Gathering the data**—The Cancer Plan includes sources of data that will be used to monitor progress towards each objective.
- **Step 4: Evaluation**— Plans for data collection and evaluation will be included in a separate evaluation plan, entitled “Evaluation Plan for the South Carolina Cancer Plan 2017-2021,” once all strategies have been established.

The Alliance organized the South Carolina Cancer Plan to address each of the CDC’s National Comprehensive Cancer Control Program (NCCCP) priority areas: primary prevention of cancer; early detection and treatment; public health needs of cancer survivors; policy, system, and environmental changes (Table 1); health equity as it relates to cancer control, and outcomes demonstrated through evaluation.

**Table 1:** Definition and examples of policy, system, and environmental changes

Types of Changes	Definition	Examples
Policy	Interventions or actions that amend laws, ordinances, mandates, rules, or regulations.	Tax increase for tobacco and other tobacco products, tanning bed laws/rules, random mitigation building codes.
System	Evidence-based interventions or actions that change the rules and activities within an organization; system changes often work hand in hand with policy changes.	Automating reminder/recall for cancer screening across a healthcare organization, providing incentive for workplace wellness programs, implementing system-wide hospice referral process.
Environmental	Interventions or actions that make physical or substantive changes to the physical, economic, or social environment.	Building community walking paths, reducing geographic barriers to screening through the use of mobile mammography, making fresh fruits and vegetables available in food desert areas.

## Evaluation of the Cancer Plan

The Alliance recognizes the importance of evaluation at every stage of the design and implementation of the Cancer Plan. With respect to “front-end evaluation” or needs assessment, members of the Alliance’s various workgroups are continuously interacting with their priority populations to understand what information, products, and services are lacking in the state. In fact, one of the main purposes of the Alliance’s October 2016 general membership meeting was to launch a “gap analysis,” identifying needs among the group’s stakeholders as well as identifying skills and expertise lacking internally, within the Alliance itself.

With respect to formative evaluation, which is critical for assessing progress towards meeting objectives and identifying mid-course programmatic improvements where needed, the Alliance is committed to collecting and periodically analyzing data on the objectives and related strategies throughout this document. In general, this data collection and analysis will be done by the respective workgroups that developed them.

Finally, the Alliance looks forward to a comprehensive summative analysis, at the end of the Cancer Plan’s term, to assess how well the plan’s objectives and overarching goals were realized. This summative evaluation will foster a greater understanding of the Alliance’s impact in South Carolina, provide crucial feedback into the development of the next state plan, and help to identify areas where further work and resources are necessary.



## The Burden of Cancer in South Carolina

In South Carolina and the United States, cancer is the second leading cause of death after heart disease, accounting for approximately 1 in every 4 deaths. On average in South Carolina, 28,680 new cancer cases and 10,320 cancer deaths occur annually. Many of these cancer cases and deaths could be prevented; the purpose of this Cancer Plan is to provide a roadmap to decrease cancer incidence and mortality.

Approximately 50-75% of cancer deaths are caused by three preventable lifestyle factors: tobacco use, poor nutrition, and lack of exercise. There is no way to prevent some, but there are actions that individuals can take to help reduce their risk and increase the likelihood that if cancer does occur, it can be found at an early, more treatable stage.

The Alliance relies on the South Carolina Central Cancer Registry (SCCCR) for cancer statistics in our state. The SCCCR is a population-based surveillance system covering the entire state. Staff collects cancer incidence (newly diagnosed cases) from hospitals, pathology labs, free-standing treatment centers, and physicians throughout South Carolina. Data in the registry are used to study trends in cancer occurrence by cancer type, race, sex, stage-at-diagnosis, county, diagnostic and treatment patterns, and patient survival. The Department of Health and Environmental Control (DHEC) Vital Records collects and publishes information on mortality (deaths) occurring in the state. The SCCCR uses the cancer mortality data from Vital Records to supplement the incidence data maintained in its database system. SCCCR data are provided to the public on DHEC’s interactive health data query website called SCAN (the South Carolina Community Assessment Network) as well as through publications produced by the Alliance.

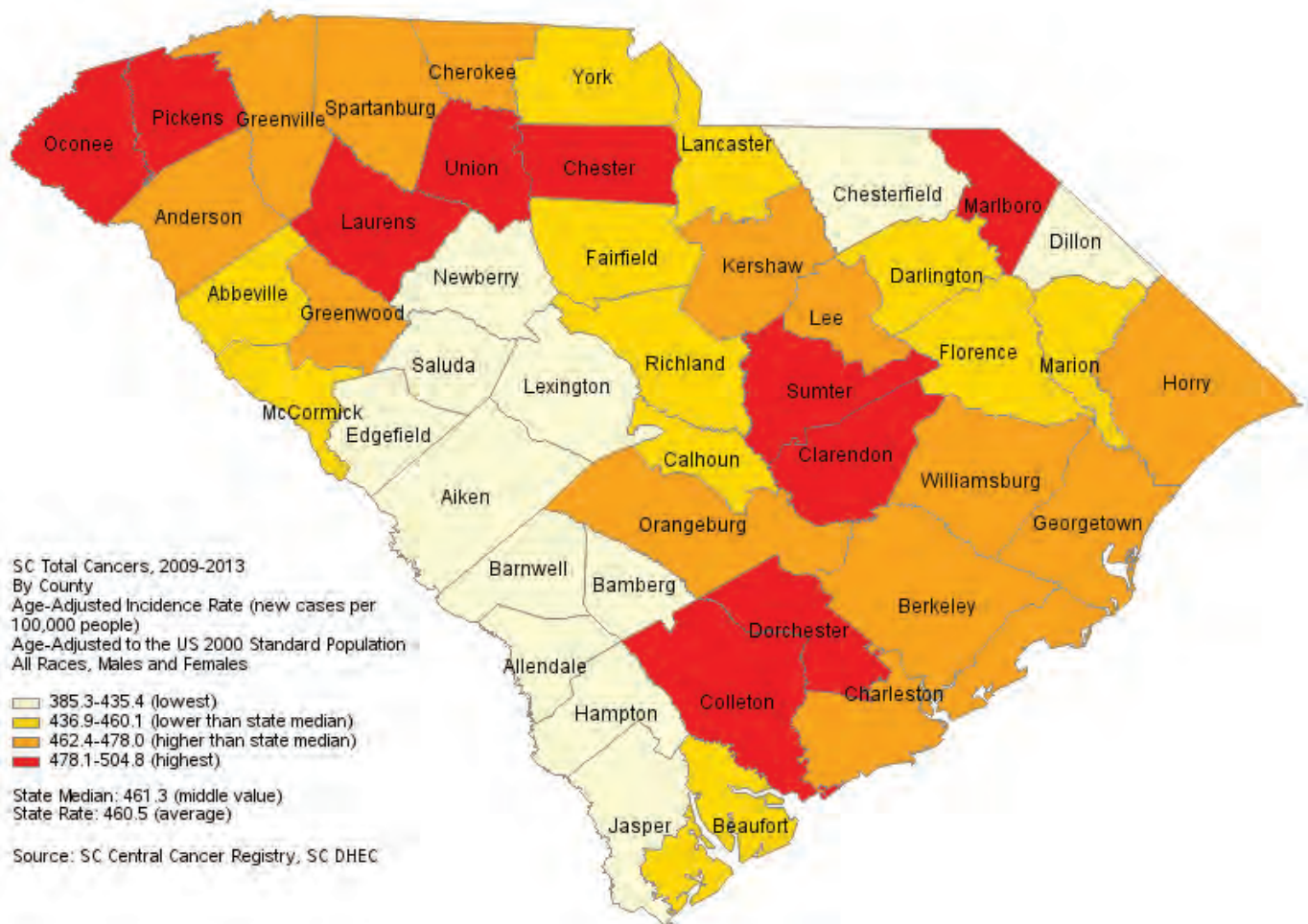
The SCCCR data are graded by two national standards setters for cancer each year to determine the level of excellence in completeness, timeliness, and quality. The SCCCR has consistently achieved Gold

Certification from the North American Association of Central Cancer Registries, and the designation of Registry of Distinction from the CDC National Program of Cancer Registries (NPCR). This level of excellence allows the data to be utilized for The United States Cancer Statistics (USCS), the most extensive federal report available on state-specific and regional data for cancer incidence and cancer deaths. Community cancer concerns are addressed by the SCCCR through statistical analysis at the ZIP code level, assessing any excess of cancer occurrence or cancer deaths. A written report called Community Cancer Assessment is provided to concerned citizens. The following two subsections present specific data from the SCCCR. For more information, please visit [scdhec.gov](http://scdhec.gov) and search for “cancer clusters.”

## South Carolina Cancer Incidence (Newly Diagnosed Cases), 2009-2013

Cancer incidence is a measure of how many new cancer cases occurred in a certain period (e.g., 2009-2013). A cancer incidence rate represents the number of cancer diagnoses per 100,000 people in a given population (e.g., county-level data in South Carolina). On average, 28,680 new cases of cancer are diagnosed in South Carolina annually. Figure 1 shows county-level cancer incidence for the period of 2009-2013 using age-adjusted incidence rates. For more information on cancer incidence rates in South Carolina see **Tables 2-4**.

**Figure 1:** South Carolina Total Cancer Incidence Rates, 2009-2013 (Data Source: SC Central Cancer Registry)





**Table 2.** SC Cancer Incidence Rates, 2009-2013

Types of Cancer	South Carolina Incidence Rate	Count	SC Rank (Incidence Rates highest 1 - lowest 5)
All Cancer Sites	460.5	123,635	
Lung & Bronchus	68.8	18,748	1
Female Breast	125.9	18,030	2
Prostate	129.3	16,929	3
Colon & Rectum	39.4	10,495	4
Melanoma of the Skin	22.5	5,869	5

(Data Source: SC Central Cancer Registry, SC DHEC; data includes invasive only, except bladder).

**Table 3.** SC Cancer Incidence by Sex and Race, 2013 South Carolina and the United States

SEX/RACE	UNITED STATES	SOUTH CAROLINA	SOUTH CAROLINA	US RANK
	Rate	Rate	New cases	Rank
ALL	430.6	430.7	24,477	35
MALE	468.8	485.9	12,661	21
FEMALE	405.4	392.3	11,816	40
WHITE	436.9	428.7	18,279	32
BLACK	437.9	435.7	5,802	25

(Data Source: SC Central Cancer Registry, SC DHEC; data includes invasive only, except bladder).

**Table 4.** SC Cancer Incidence for Selected Cancers, 2013 South Carolina and the United States

TYPE OF CANCER	UNITED STATES	SOUTH CAROLINA	SOUTH CAROLINA	US Rank (Incidence Rate)
	Rate	Rate	New cases	
BREAST (FEMALE)	123.4	124.5	3,741	28
PROSTATE (MALE)	102.1	105.8	3,013	19
LUNG/BRONCHUS	58.8	64.4	3,750	17
COLON/RECTUM	38.5	36.1	2,029	36
PANCREAS	12.3	12.8	721	18

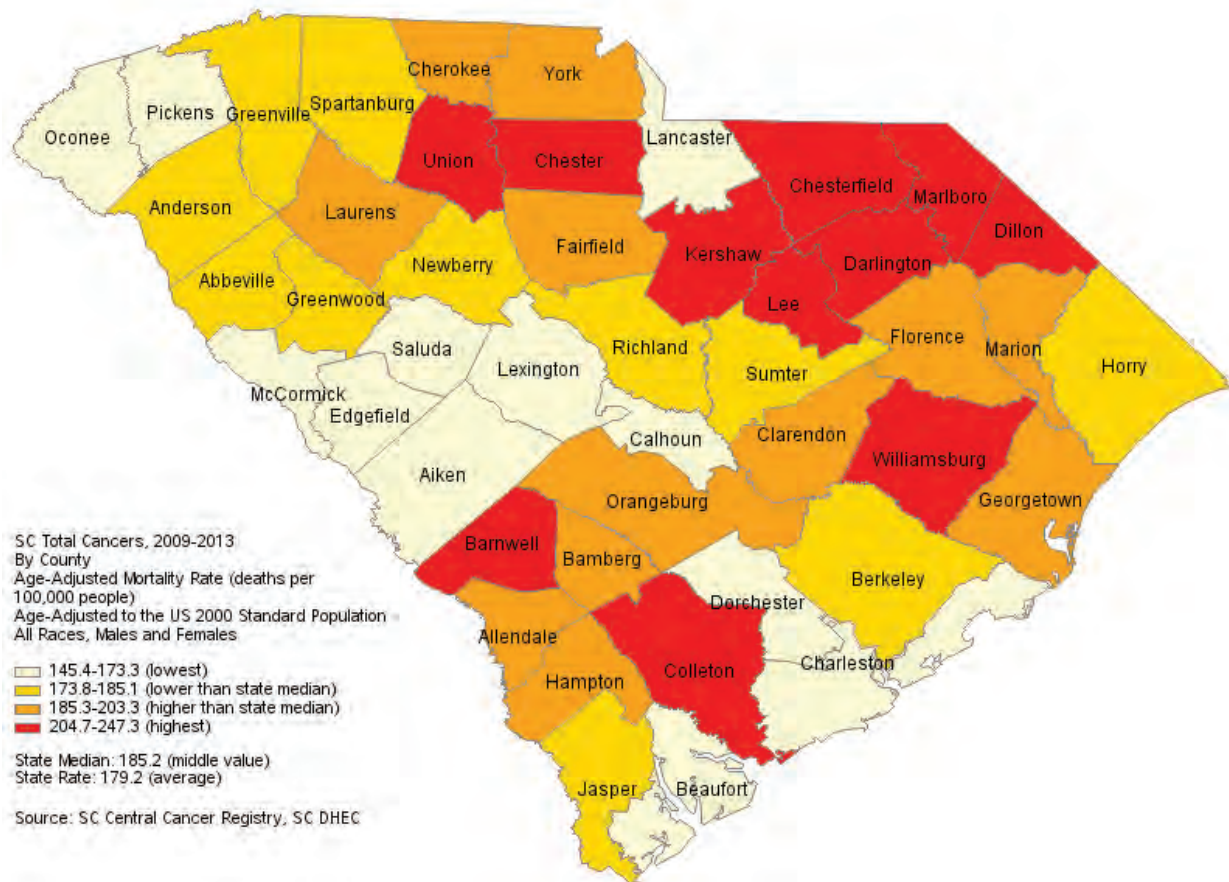
(Data Source: SC Central Cancer Registry, SC DHEC).

# South Carolina Cancer Mortality (Deaths), 2009-2013

Cancer mortality is a measure of how many cancer deaths occurred in a certain period (e.g., 2009-2013). A cancer mortality rate explains the number of deaths from cancer per 100,000 people in a given population (e.g., county-level data in South Carolina).

On average, 10,320 cancer deaths occur in South Carolina annually. Figure 2 shows county-level cancer mortality for the period of 2009-2013 using age-adjusted rates. For more information on cancer mortality rates in South Carolina see Tables 5-7.

**Figure 2:** South Carolina Total Cancer Mortality Rates, 2009-2013 (Data Source: SC Central Cancer Registry)



**Table 5. SC Cancer Incidence Rates, 2009-2013**

<b>South Carolina Mortality</b>	<b>Rate</b>	<b>Count</b>	<b>SC Rank</b> <i>(Mortality rate highest 1 - lowest 5)</i>
All Cancer Sites	179.2	47,281	Rank
Lung & Bronchus	51.8	13,924	1
Colon & Rectum	15.7	4,129	2
Female Breast	22.4	3,265	3
Pancreas	11.3	2,967	4
Prostate	24.2	2,346	5

*(Data Source: SC Central Cancer Registry, SC DHEC).*

**Table 6. Cancer Mortality by Sex and Race, 2013 South Carolina and the United States**

<b>SEX/RACE</b>	<b>UNITED STATES</b>	<b>SOUTH CAROLINA</b>	<b>SOUTH CAROLINA</b>	<b>US RANK</b>
	Rate	Rate	Lives lost	Rank
ALL	163.0	174.0	9,745	14
MALE	196.2	220.2	5,306	9
FEMALE	139.1	141.7	4,385	21
WHITE	163.3	168.4	7,210	17
BLACK	189.5	197.6	2,474	21

*(Data Source-SC Central Cancer Registry, SC DHEC).*

**Table 7. Cancer Mortality for Selected Cancers, 2013 South Carolina and the United States**

<b>TYPE OF CANCER</b>	<b>UNITED STATES</b>	<b>SOUTH CAROLINA</b>	<b>SOUTH CAROLINA</b>	<b>US Rank</b> <i>(Incidence Rate)</i>
	Rate	Rate	Lives lost	Rank
BREAST (FEMALE)	20.7	21.1	638	21
PROSTATE MALE)	19.2	21.4	460	10
LUNG/BRONCHUS	43.4	49.3	2,833	14
COLON/RECTUM	14.5	14.9	823	21
PANCREAS	10.8	10.9	608	29

*(Data Source: SC Central Cancer Registry, SC DHEC).*



## SECTION 2: PREVENTION

**Goal:** Reduce the risk of cancer for all South Carolinians through awareness, education, and behavior change.

Maintaining a healthy lifestyle, which includes eating a healthy diet, being physically active, and avoiding tobacco, heavy alcohol use, and stress, can protect individuals from cancer and many other chronic diseases. Although the Alliance has partners within South Carolina who directly address some of the most pervasive risk factors to cancer in the state, the Alliance nonetheless has its own specific goals and objectives related to cancer prevention.

### Prevention Partners

The Alliance is fortunate to have highly effective state-level partner organizations addressing the critical and far-reaching issues of tobacco use prevention, nutrition, and physical activity. These organizations have created their own goals and objectives, which the Alliance supports as part of the Cancer Plan. Details on these partner organizations are as follows:

**Eat Smart, Move More (Nutrition and Obesity)**—Being active and eating a healthy diet can help reduce the risk of developing cancer and other chronic diseases. South Carolina’s Eat Smart, Move More obesity coalition works to bring about change at a state and local level to support healthy lifestyles. They work to increase the availability of healthy food options and safe, accessible green spaces in our communities. They also work with diverse community partners, such as schools, daycares, and healthcare providers to ensure their programs promote policies and education that support a healthy lifestyle. Please visit [eatsmartmovemoresc.org](http://eatsmartmovemoresc.org) for more information.

**South Carolina Tobacco-Free Collaborative (Tobacco Control)**—Every year more than 7,200 adults in South Carolina die from tobacco use. An additional 2,800 South Carolina children become new smokers each year. Cigarette smoking is the predominant cause of lung cancer. It is also a major cause of other types of cancers, such as head, neck, and esophageal. Exposure to secondhand smoke is also known to cause cancer. SCTFC is responsible for developing, implementing, and evaluating the smoke-free efforts in our state. To view their plan, “Ending the Epidemic: Plan for a Tobacco-Free South Carolina, 2015-2020,” please visit [sctobaccofree.org](http://sctobaccofree.org).

The South Carolina Cancer Alliance and our members continue to support and collaborate with the SCTFC on the four priority areas as outlined in “Ending the Epidemic: Plan for a Tobacco-Free South Carolina, 2015-2020.”

- Prevent Initiation of Tobacco Use among Youth and Young Adults
- Eliminate Exposure to Secondhand Smoke
- Promote Quitting among All Tobacco Users
- Strengthen Statewide Infrastructure and Sustainability

The Alliance continues to work closely with its partners who have goals and objectives that benefit the success of the Cancer Plan.

## HPV Vaccination

Human papillomavirus (HPV) is a common virus that is spread through skin to skin contact. Usually it has no symptoms, so people do not know they have it. Most viral infections clear on their own. However, cancer-causing types of HPV can cause cancers in both men and women. The virus is also known to cause genital warts in both males and females. HPV vaccines work by preventing the most common types of HPV that cause cancer and genital warts. The most common vaccine can prevent up to 90% of HPV-related cancers if given prior to any HPV infection. Annually in South Carolina approximately 170 women are diagnosed with cervical cancer and 65 will die from this disease. The United States Preventive Services Task Force (USPSTF) recommends the following guidelines.

**Table 8:** The USPSTF recommendations for HPV Vaccination

<b>HPV Vaccination</b>	Pre-teen boys and girls ages 11 or 12 years, as early as 9 and up to age 26	The HPV vaccine is recommended for preteen boys and girls at age 11 or 12 so they are protected before ever being exposed to the virus.  See <a href="http://www.cdc.gov/std">http://www.cdc.gov/std</a> for further details.
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HPV vaccination represents a significant public health opportunity because it can prevent cervical cancer and other types of cancer from ever occurring. The focus of this subsection of the Cancer Plan is to promote statewide HPV vaccine awareness, HPV vaccine education for those who could benefit from the vaccination, and HPV vaccination uptake and completion of the series.

### Objective:

**2.1** By December 31, 2021, increase from 34 percent for females and from 21 percent for males to 50 percent the percentage of 13-17-year-olds in South Carolina who complete the HPV vaccine series. (Data Source: The NIS-TEEN dataset, a National Immunization Survey of 13-17-year-old teens)



## SECTION 3: EARLY DETECTION

**Goal:** Increase the number of South Carolinians who are diagnosed with cancer at its earliest (local), most curable stage.

The South Carolina Cancer Alliance uses the recommendations of the United States Preventive Services Task Force (USPSTF; see [uspreventiveservicestaskforce.org](https://www.uspreventiveservicestaskforce.org), see **Table 9**) as a guideline for discussions and decisions about cancer screenings. Our plans for improving the early detection of specific types of cancer are discussed in the subsections that follow, and the questions within the Behavioral Risk Factor Surveillance System (BRFSS) for South Carolina will provide a basis for monitoring progress towards many of the Alliance's objectives related to early detection of cancer.

**Table 9:** United States Preventive Services Task Force Cancer Screening Recommendations

<b>Cancer</b>	<b>Population</b>	<b>Recommendation</b>
<b>Breast</b>	Women aged 50 to 74 years	The USPSTF recommends biennial screening mammography for women aged 50 to 74 years. Search for “breast” at <a href="http://www.uspreventiveservicestaskforce.org">www.uspreventiveservicestaskforce.org</a> for details about screening strategies.
<b>Cervical</b>	Women aged 21 to 65 years (Pap test)  or  Women aged 30-65 years (Pap test with HPV testing)	The USPSTF recommends screening for cervical cancer in women age 21 to 65 years with cytology (Pap test) every 3 years or, for women age 30 to 65 years who want to lengthen the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years.  Search for “cervical” at <a href="http://www.uspreventiveservicestaskforce.org">www.uspreventiveservicestaskforce.org</a> for discussion of cytology method, HPV testing, and screening interval.
<b>Colorectal</b>	Adults aged 50 to 75 years	The USPSTF recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years for average risk individuals.  The risks and benefits of different screening methods vary.  Search for “colorectal” at <a href="http://www.uspreventiveservicestaskforce.org">www.uspreventiveservicestaskforce.org</a> for details about screening strategies.
<b>Lung</b>	Adults aged 55 to 80 years, with a history of smoking	The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.  Search for “lung” at <a href="http://www.uspreventiveservicestaskforce.org">www.uspreventiveservicestaskforce.org</a> for details about screening strategies.
<b>Prostate</b>	Men, screening with prostate-specific antigen (PSA)	While the USPSTF recommends against PSA-based screening for prostate cancer, the South Carolina Cancer Alliance recommends that men should speak with their doctor and make an informed decision about the prostate cancer screening process.

*Cancer screening recommendations are based on the most recent USPSTF guidelines.*

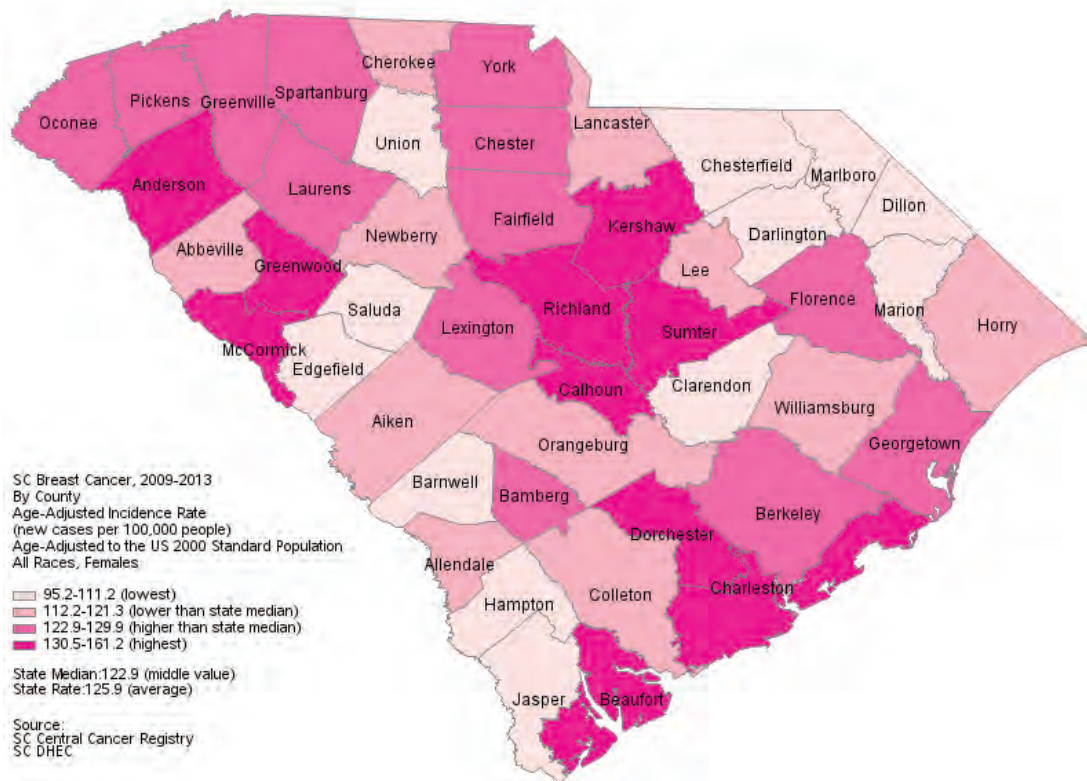
# Breast Cancer

In South Carolina, approximately 3,740 women are diagnosed with breast cancer and 670 die from the disease each year. Breast cancer starts when the cells in the breast begin to grow abnormally. These cells usually form a tumor that can often be seen on a mammogram or felt as a lump. Breast cancer occurs most commonly in women, but men can get it, too.

The USPSTF recommends that women in their 40s should have the choice to start annual breast cancer screening with mammograms, and women ages 50-74 should get mammograms every other year. Since 1989, death rates from breast cancer have been declining, which is largely believed to be the result of early detection through screening, increased awareness, and improved treatment. Currently, there are 2.8 million breast cancer survivors in the U.S., including women still being treated and those who have completed treatment. Survivors face a lifetime of follow-up care and residual worries about life after breast cancer, including possible recurrence.

Search for “breast” at [www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org) for details about screening strategies.

**Figure 3.** SC Breast Cancer Incidence Rates, 2009-2013 (Data Source: SC Central Cancer Registry)



## Objectives

- 3.1** To secure annual recurring state funding for breast cancer screening through the Best Chance Network (BCN) program. (Data Source: SC Legislative Record)
- 3.2** By December 31, 2021, achieve equal breast cancer screening rates between Black and White and Hispanic and non-Hispanic women. (Data Source: SCCCR)
- 3.3** By December 31, 2021, reduce the gap in late-stage diagnosis of breast cancer between White and Black women from 11.43 percent to 7.5 percent. (Data Source: SCCCR)
- 3.4** By December 31, 2021, reduce the gap in late-stage diagnosis of breast cancer between White women and Hispanic women from 10.25 percent to 8.7 percent. (Data Source: SCCCR)
- 3.5** By December 31, 2021, determine the proportion of women with abnormal mammogram results who receive appropriate follow-up care (i.e., diagnostic mammogram) within 3 months of the index mammogram. (Data Sources: BCN (for the eligible SC population), State Health Plan claims, Medicaid and Medicare claims.)



# Cervical Cancer

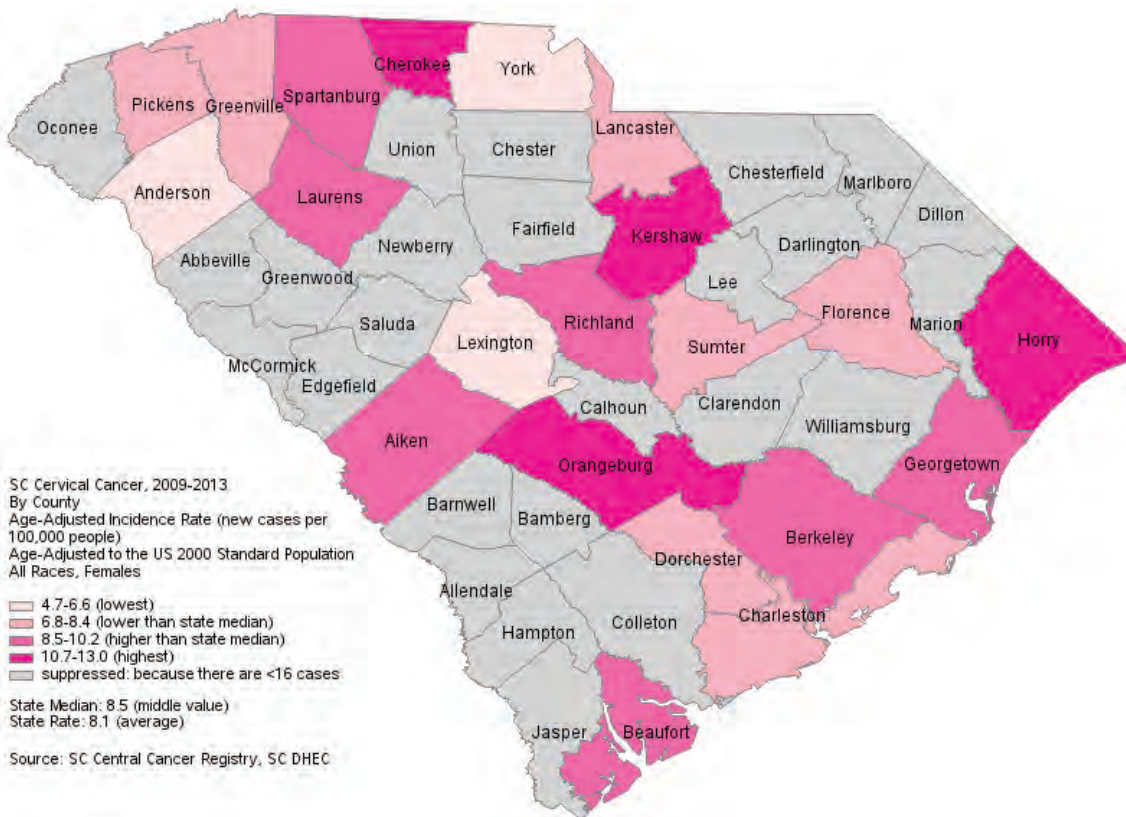
Despite recent increases in incidence and mortality, cervical cancer remains an important problem for women in South Carolina, where approximately 170 women are diagnosed with cervical cancer and 65 die from the disease each year.

Three major strategies to help eliminate cervical cancer are to make routine screenings readily accessible to women of all ages, promote adherence to follow-up exams, and promote the use of HPV vaccines among those eligible. While regular participation in cervical cancer screening tests has drastically reduced the rate of new cervical cancer cases and deaths, these rates remain significantly higher in Black and Hispanic women compared to White women.

Cervical cancer is curable if discovered early and can be detected by a Pap test. It is recommended that women between the ages of 21-65 receive a Pap test every three years, while women between the ages of 30-65 who want to prolong the screening interval should receive both a Pap test and HPV test every 5 years.

Search for “cervical” at [www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org) for discussion of cytology method, HPV testing, and screening interval.

**Figure 4.** South Carolina Cervical Incidence Rates, 2009-2013 (Data Source: SC Central Cancer Registry)



## Objectives

**3.6** To secure annual recurring state funding for cervical cancer screening through the Best Chance Network program. (Data Source: SC Legislative Record)

**3.7** By December 31, 2021, increase from 82.4 percent to 90 percent the percentage of women aged 21 to 65 who have received a Pap test in the previous three years. (Data Source: BRFSS)

**3.8** By December 31, 2021, because of the disparity in late-stage diagnosis, increase from 37% to 40% the percentage of Black women diagnosed with cervical cancer in its earliest stage. (Data Source: SCCR; 2006-2008)

# Colorectal Cancer

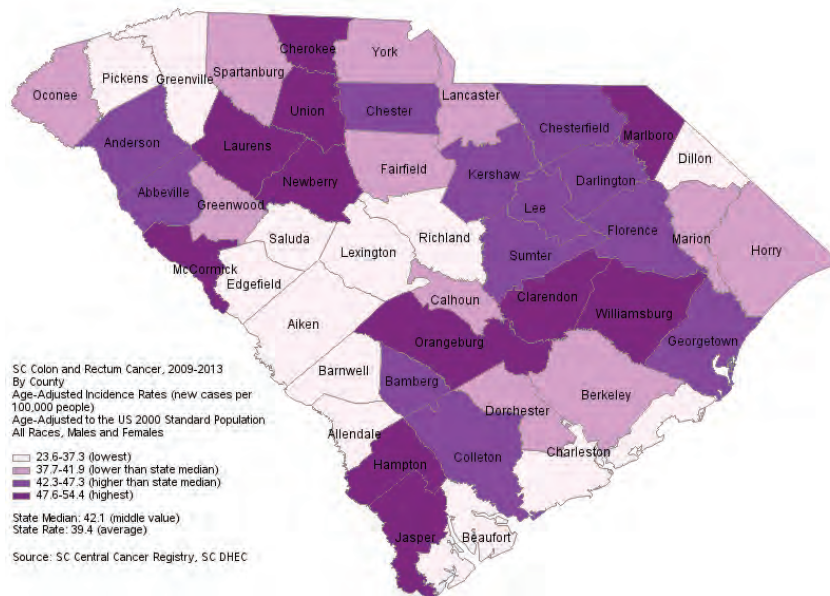
In South Carolina, approximately 2,000 people will be diagnosed with colorectal cancer and approximately 800 people will die from this disease each year. Colorectal cancer is one of the most commonly diagnosed cancers in both men and women, and even though it is one of the leading causes of cancer deaths, it is also one of the most preventable.

Colorectal cancer starts in the colon or rectum, both of which are parts of the large intestine. Most colorectal cancers are adenocarcinomas, or cancers that begin in cells that make and release mucus and other fluids. Colorectal cancer often begins as a growth called a polyp, which may form on the inner wall of the colon or rectum. Some polyps develop into cancer, so detecting and removing the polyps is imperative to preventing colorectal cancer altogether.

It is recommended that colorectal cancer screening begin at age 50 and continue until age 75. The decision to screen for colorectal cancer in adults aged 76 to 85 years should be an individual one made with the provider, considering the patient's overall health and prior screening history.

Search for "colorectal" at [www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org) for details about screening strategies.

**Figure 5.** SC Colon and Rectum Cancer Incidence Rates, 2009-2013 (Data Source: SC Central Cancer Registry)



## Objectives

- 3.9** To secure annual recurring state funding for colorectal cancer screening through the Center for Colon Cancer Research-University of South Carolina. (Data Source: SC Legislative Record)
- 3.10** By December 31, 2018, increase the percentage of adults aged 50-75 who are up-to-date\*\* with colorectal cancer (CRC) screening from 71% to 80% (\*\*Up-to-date defined as high sensitivity FOBT within one year, or sigmoidoscopy within 5 years and FOBT within 3 years, or colonoscopy within 10 years). (Recommendation Source: USPSTF) (Data Source: BRFSS)
- 3.11** By December 31, 2021, increase the percentage of State Health Plan beneficiaries ages 50-75 who are up-to-date\*\* with CRC screening from 53% to 60% (\*\*Up-to-date defined as high sensitivity FOBT within one year, or sigmoidoscopy within 5 years and FOBT within 3 years, or colonoscopy within 10 years). (Recommendation Source: USPSTF) (Data Source: PEBA Health analytics data)
- 3.12** By December 31, 2021, achieve equal colorectal cancer screening rates between Black and White and Hispanic and non-Hispanic persons ages 50 to 75. (Data Source: BRFSS)
- 3.13** By December 31, 2018, work with two major employers/systems to increase percentage of employees ages 50 to 75 who are currently up to date on their CRC screening test by 10 percent from baseline rates. (Data Source: Employers' claim data)

# Lung Cancer

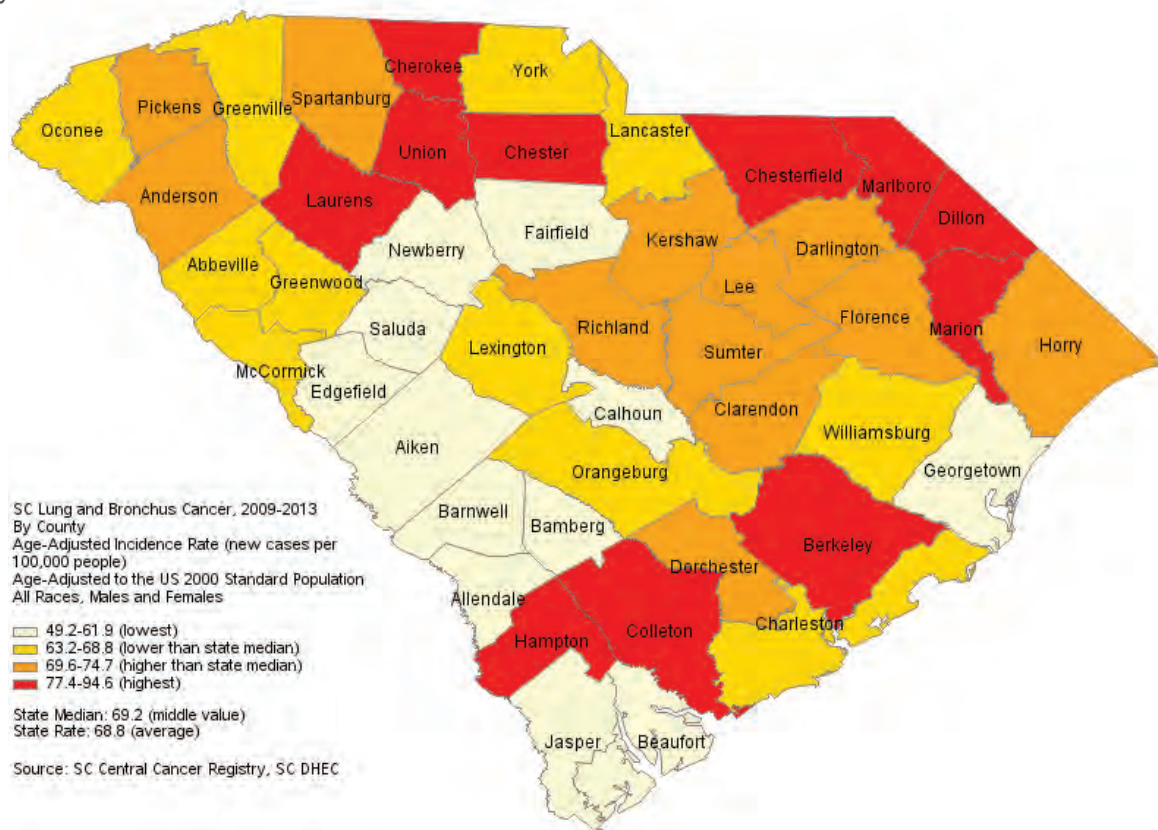
In South Carolina, approximately 3,780 people are diagnosed with lung cancer and 2,850 people die from the disease each year. Cigarette smoking is the leading cause of lung cancer, and exposure to secondhand smoke, asbestos, and radon contributes to lung cancer for non-smoking adults. Per the Environmental Protection Agency (EPA), exposure to elevated radon levels is the number one cause of lung cancer among nonsmokers.

The most effective way to prevent lung cancer for all individuals is to never start smoking cigarettes or to stop smoking if currently a smoker.

Lung cancer screenings are recommended for adults aged 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops extensive health issues.

Search for “lung” at [www.uspreventiveservicestaskforce.org](http://www.uspreventiveservicestaskforce.org) for details about screening strategies.

**Figure 6.** SC Lung and Bronchus Cancer Incidence Rates, 2009-2013 (Data Source: SC Central Cancer Registry)



## Objectives

**3.14** By December 31, 2018, initiate a small traditional (brochures, flyers, etc.) and social media campaign to increase the public’s knowledge about low-dose CT for lung cancer screening and smoking cessation programs. (Data Source: SCCA)

**3.15** Provide annual educational opportunities for healthcare providers to learn about best practices in lung cancer screenings that they can incorporate into their programs and practices. (Data Source: SCCA)

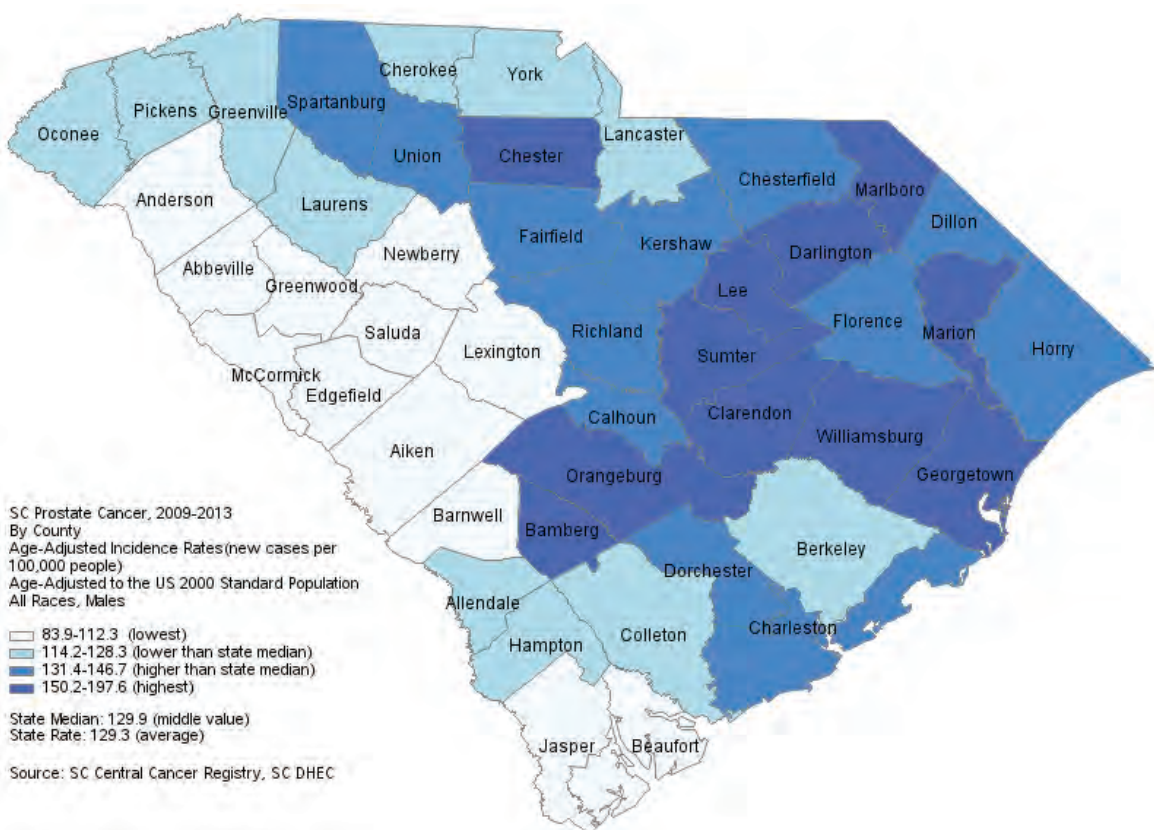
(Additional objectives are being developed and will be released in June 2017 via [sccancer.org](http://sccancer.org))

# Prostate Cancer

In the United States, prostate cancer is the second most commonly diagnosed cancer in men, following skin cancer. Prostate cancer is the second leading cause of cancer death in men, and it is more prevalent in Black men. In South Carolina, approximately 3,000 men are diagnosed with prostate cancer and 480 die from the disease each year.

Although prostate cancer is very common, it often grows so slowly that it seldom causes health problems during a man's lifetime. Most men with prostate cancer are older than 50 and do not die from the disease. Talk to your doctor about your risk of prostate cancer and whether you need screening.

**Figure 7.** SC Prostate Cancer Incidence Rates, 2009-2013 (Data Source: SC Central Cancer Registry)



## Objectives

- 3.16** By December 31, 2021, improve the understanding and decision making process for prostate cancer screening and treatment among men aged 40 and older in South Carolina. (Data Source: BRFSS)
- 3.17** By December 31, 2021, have knowledge about the main messages that primary care providers and nurse practitioners across the state are delivering to men  $\geq 40$  years about prostate cancer prevention, screening, treatment, and survivorship. (Data Source: SCCA)
- 3.18** By December 31, 2021, increase opportunities for dialogue between community members and healthcare providers regarding how to make decisions about prostate cancer screening and treatment. (Data Source: SCCA)
- 3.19** By December 31, 2021, make material progress toward establishing a cohort of Black men to validate a method for using serial PSA measures to detect aggressive prostate cancers that currently represent about 17% of all PrCAs diagnosed and one quarter of PrCAs diagnosed in Black men. (Data Source: SCCA)



## SECTION 4: TREATMENT AND SURVIVORSHIP

### Treatment and Survivorship

**Goal:** Increase the number of South Carolinians who have access to effective cancer treatment and care and benefit from improved quality of life services.

Ensuring access to timely and high-quality cancer care is critical for improving outcomes for patients in our state. One way to facilitate high-quality cancer care is to make certain that all patients have access to optimal treatment and careful coordination of care at cancer centers certified through the Commission on Cancer Accreditation Program. Many independent community oncology practices are also moving toward accreditation via the Commission on Cancer as Oncology Medical Homes. Additionally, opportunities for patients to learn about and participate in cancer clinical trials should be promoted. Other patient care initiatives to promote through the Alliance include access to oral chemotherapy, genetic counseling for populations at high risk for cancer, wide-scale dissemination of information about controlling the side effects of cancer and its treatment, and patient navigation—a process of assisting patients through complicated decision-making about treatment and clinical trials.

The transition from active treatment to post-treatment care is critical to the long-term health of cancer survivors. The American Cancer Society—in collaboration with The National Cancer Institute—estimates there are more than 15.5 million cancer survivors in the United States today, and that number will grow to more than 20 million by 2026 (Data Source: Cancer Treatment and Survivorship Facts and Figures, 2016-2017). Approximately two-thirds of people diagnosed with cancer are expected to live

at least five years after diagnosis. While improvement in overall cancer survival is very encouraging, many cancer survivors face physical, emotional, social, spiritual, and financial challenges because of their cancer diagnosis and treatment. An overarching goal of the Alliance is to optimize the quality of life for every person affected by cancer, across the continuum of care. The focus of this subsection of the Cancer Plan is to help ensure that people with cancer have the resources they need for a successful transition to life after the cancer diagnosis.

It is important that cancer survivors have access to a coordinated plan for their treatment and follow up from the time they are diagnosed through all the years of their survivorship. Patients completing primary cancer care should be given a cancer survivorship care plan so that routine follow-up visits become opportunities to promote a healthy lifestyle, check for cancer recurrence, and manage lasting effects of the cancer experience.

It is also important that cancer survivors have access to support services and opportunities helpful in implementing their plan and to other survivors and professionals who can assist them in their survivorship journey. Thus, the South Carolina Cancer Plan focuses on strategies such as developing statewide cancer resource information, promoting survivorship educational programs such as conferences and survivorship schools, and creating a statewide survivorship network.

## Objectives:

- 4.1** Increase knowledge and awareness of national cancer care standards and guidelines among multidisciplinary South Carolina healthcare providers. (Data Sources: SCCA, ACoS/CoC, and NCCN)
- 4.2** Increase knowledge and awareness of cancer care programs and services among South Carolinians affected by cancer. (Data Sources: SCCA, ACoS/CoC, and NCCN)
- 4.3** Increase knowledge and awareness among South Carolinians affected by cancer and multidisciplinary healthcare providers of the primary physical, emotional, social and spiritual needs at each phase of the cancer care continuum. (Data Sources: SCCA, ACoS/CoC, and NCCN)
- 4.4** Increase knowledge and awareness among South Carolinians affected by cancer and multidisciplinary healthcare providers of cancer supportive care best practices, programs, and services. (Data Source: SCCA)
- 4.5** Increase the number of South Carolina cancer centers providing supportive care services and programs based on best practices for cancer survivors. (Data Source: SCCA)
- 4.6** Increase knowledge and awareness of the survivorship support service needs by cancer survivors and caregivers in South Carolina among survivors, the general public, providers, and policy makers. (Data Source: SCCA)

# SECTION 5: HEALTH POLICY AND ADVOCACY



**Goal:** To create environmental and policy changes that reduce the number of new cancer cases and deaths and improve quality of life for cancer patients and survivors.

The Alliance serves as the central voice for cancer prevention and control advocacy in South Carolina. In coordination with our partners and key decision-makers in the state, the Alliance works to ensure that our laws, ordinances, and policies protect our citizens from cancer to the greatest extent possible, and it advocates for access to cancer prevention, screening, and treatment for all citizens of our state.

## Objectives:

- 5.1** By December 31, 2018, develop a cancer advocacy and policy leadership network of key partner organizations to set and implement annual priorities and strategies. (Data Source: SCCA)
- 5.2** By December 31, 2021, ensure equitable insurance coverage through public and private health plans for oral chemotherapy. (Data Source: SC Code of Laws, public/private health plans)
- 5.3** To secure annual state funding for breast, cervical, and colorectal cancer screening programs for uninsured South Carolinians. (Data Source: SC Legislative Record)
- 5.4** Annually educate South Carolina State Legislative on the current priorities of the South Carolina Cancer Alliance and the burden of cancer in our state. (Data Source: SCCA and SCCCR)
- 5.5** Annually promote and collaborate with the South Carolina Tobacco-Free Collaborative in strengthening their advocacy efforts including the increase of the cigarette tax and smoke-free communities. (Date Source: SC Legislative Record)



## SECTION 6: HEALTH EQUITY

**Goal:** To reduce and eliminate cancer disparities in South Carolina by identifying and addressing the needs of priority populations to achieve health equity.

Equity and equality in cancer care are important issues. The National Cancer Institute (NCI) defines cancer health disparities as “differences in the incidence, prevalence, mortality, and burden of cancer and related adverse health conditions that exist among specific population groups in the United States.” Individuals of all ethnic backgrounds who are poor, lack health insurance, or have inadequate access to quality cancer screening and treatment experience more cancer diagnoses and death, as well as unfavorable survival rates.

These disparities in healthcare continue in the United States, even in an equal access system like the U.S. Department of Veterans Affairs (VA), where many barriers in healthcare have been addressed. Differences are shown to exist in disease incidence, prevalence, morbidity, and mortality. In South Carolina, if you are Black, you are twice as likely to have diabetes compared to White individuals, and you are almost one and one-half times more likely to die from diabetes than a White individual of similar age. This provides a dramatic example of health disparities related to race, though there are many other contributors to health inequity that we seek to understand and eliminate. For example, socioeconomic status, education, language, race, ethnicity, and disability can be barriers to accessing quality health care.

### Objectives:

- 6.1** Annually the South Carolina Cancer Alliance Health Equity Workgroup will review the proposed new South Carolina Cancer Plan 2017-2021 for the inclusion of health equity language to address health disparities in the state. (Data Source: SCCA)
- 6.2** Annually the South Carolina Cancer Alliance Health Equity Workgroup will ensure all the South Carolina active workgroups include at least one health equity objective to address health disparities in the state. (Data Source: SCCA)
- 6.3** Annually the South Carolina Cancer Alliance Health Equity Workgroup will review the inclusion of CLAS (Culturally and Linguistically Appropriate Services) Standards opportunities. (Data Source: SC DHEC Office of Health Equity)



# SECTION 7: GLOSSARY

**Age-Adjusted Rate:** A statistical process applied to rates of disease, death, injuries, or other health outcomes that allows communities with different age structure to be compared.

**American Cancer Society:** National grassroots cancer organization that works at the local and national level to support cancer prevention, treatment, and research. The American Cancer Society is a resource for cancer patients and their supporters.

**American College of Surgeons-Certified Cancer Center:** Cancer Centers that are accredited by the American College of Surgeons' Commission on Cancer.

**Average:** A single value that summarizes or represents the general significance of a set of unequal values.

**Behavioral Risk Factor Surveillance System (BRFSS):** A phone survey conducted each year across the US to assess health conditions and risks behaviors among US adults. This survey provides national and state representative data that can be used to track progress in public health.

**Best Chance Network (BCN):** A program that provides funding for uninsured or underinsured women in South Carolina so that they can obtain breast and cervical cancer screening, diagnosis, and treatment. The Best Chance Network is the South Carolina program of the National Breast and Cervical Prevention Program.

**Burden of Cancer:** The impact of cancer on individuals, their support systems, and on society. The burden of cancer includes financial cost, sickness, death, and others.

**Cancer Clinical Trial:** Research studies that involve people and test new ways to prevent, detect, diagnose, or treat cancer.

**Cancer Cluster:** Cancer cluster is a term used to define an occurrence of a greater-than-expected number of cancer cases within a group of people in a geographic area over a certain period.

**Cancer Education Guide:** Program of the Alliance that targets ALL people in South Carolina and is designed to educate South Carolinians about cancer prevention, early detection, and treatment.

**Cancer Incidence:** Is a measure of how many new cancer cases per 100,000 people occurred in a certain period.

**Cancer Mortality:** Is a measure of how many deaths per 100,000 people occurred in a certain period.

**Cancer Prevention:** Taking pro-active measures against cancer.

**Primary Prevention:** The prevention of disease before disease is present. Strategies for the primary prevention of cancer include improving one's diet, exercising, avoiding tobacco smoke, and avoiding excessive sun exposure and infection with viruses such as HPV.

**Secondary Prevention:** Stopping a disease that is present in the body before it causes any symptoms. Secondary prevention for cancer would include screening test such as Pap smears for detecting early cervical cancer, routine mammography for early breast cancer, and colonoscopy for detecting colorectal cancer.

**Cancer Survivor:** A cancer survivor is an individual with cancer of any type, current or past, who is still living.

**Centers for Disease Control and Prevention (CDC):** The premier national organization for protecting the public's health.

**CEO Cancer Gold Standard Program:** Recommendations to fight cancer developed by the CEO Roundtable on Cancer for use in workplaces in the United States. The Gold Standard is a comprehensive program with three main goals: risk reduction through lifestyle change (i.e., nutrition, physical activity, avoiding tobacco); early detection (i.e., decreasing the cancer burden through appropriate cancer screenings); and promoting quality care (i.e., ensuring access to the best available cancer treatment).

**The National CLAS Standards:** The National Culturally and Linguistically Appropriate Services (CLAS) Standards in Health and Health Care are intended to advance health equity, improve quality, and help eliminate health care disparities by establishing a blueprint for health and healthcare organizations.

**Commission on Cancer Accreditation Program (CoC):** A program of the American College of Surgeons (ACoS) recognizes cancer care programs for their commitment to providing comprehensive, high-quality, and multidisciplinary patient-centered care.

**Community Education Guide:** An educational program developed by the Alliance to provide community education about how to prevent cancer. The program teaches participants about how to prevent cancer through a healthy lifestyle (i.e., not smoking healthy diet, physical activity, sun protection) and secondary prevention (i.e., evidence-based cancer screenings).

**Comprehensive Cancer Control:** A collaborative process through which a community pools resources to reduce the burden of cancer that results in risk reduction, early detection, better treatment and enhanced survivorship.

**Eat Smart, Move More South Carolina:** The SC Eat Smart Move More Coalition coordinates obesity prevention efforts across the state and leads the implementation of South Carolina's Obesity Prevention Plan. The intent of this coalition is ongoing collaboration among many diverse organizations to capitalize and leverage differing areas of expertise, skill and resources to impact obesity in South Carolina.

**Evidence Academies:** The Academies are designed to bring the most up-to-date screenings, treatment options, and survivorship issues to South Carolina's healthcare providers.

**Health Equity / Health Disparities:** Refers to the study of differences in the quality of health and healthcare across different populations. In the United States, disparities are well documented in minority populations such as African Americans, Native Americans, Asian Americans, and Latinos.

**HPV Vaccine:** The Human Papillomavirus Vaccine works by preventing the most common types of HPV that cause cervical cancer and genital warts.

**Human Papillomavirus (HPV):** A common virus that can lead to cervical cancer, head and neck cancers, and several other types of cancer.

**Incidence Rate:** An incidence rate is the number of new cases of a disease that occur in a specific time within a specific population, divided by the size of the population at risk. Cancer rates are usually expressed as the number of new cases per 100,000 people.

**Median:** Is the value separating the higher half of a data sample from the lower half.

**Medicaid:** A U.S. government program, financed by federal, state, and local funds, of hospitalization and medical insurance for persons of all ages within certain income limits.

**Medicare:** A U.S. government program of hospitalization insurance and voluntary medical insurance for people aged 65 and over and for certain disabled persons under 65.

**Morbidity:** Illness or disease.

**Mortality:** Deaths.

**Mortality Rates:** A mortality rate is the number of deaths that occur in a specific time within a specific population, divided by the size of the population at risk for the disease. Like incidence rates, mortality rates are usually expressed as the number of deaths per 100,000 people.

**National Cancer Institute (NCI):** The National Cancer Institute is the federal government's principal agency for cancer research and training.

**National Comprehensive Cancer Network (NCCN):** Not-for-profit alliance of 21 of the world's leading cancer centers is dedicated to improving the quality and effectiveness of care provided to patients with cancer.

**National Program of Cancer Registries (NPCR):** Data collected by local cancer registries enable public health professionals to understand and address the cancer burden more effectively. CDC provides support for states and territories to maintain registries that provide high-quality data.

**North American Association of Central Cancer Registries (NAACCR):** The North American Association of Central Cancer Registries, Inc. (NAACCR, Inc.) is a professional organization that develops and promotes uniform data standards for cancer registration; provides education and training; certifies population-based registries; aggregates and publishes data from central cancer registries; and promotes the use of cancer surveillance data and systems for cancer control and epidemiologic research, public health programs, and patient care to reduce the burden of cancer in North America.

**Pap Test:** Sometimes called Pap smear or cervical cytology, it is a way to examine cells collected from the cervix (the lower, narrow end of the uterus). The main purpose of the Pap test is to detect cancer or abnormal cells that may lead to cancer. It can also find noncancerous conditions, such as infection and inflammation.

**Patient Workshops:** These Alliance workshops are designed for newly diagnosed and current cancer patients and their caregivers. Through these workshops, we aim to provide information on clinical trials, understanding treatment/survivorship care plans, tips on how to live a healthy lifestyle, and various ways to cope with cancer.

**Public Employees Benefit Authority (PEBA):** Provides retirement and insurance benefit programs for South Carolina public employers, employees, and retirees.

**Center for Colon Cancer Research and the University of South Carolina:** A University of South Carolina center that conducts colorectal cancer research and promotes colorectal cancer screening in the state.

**South Carolina Cancer Alliance (the Alliance):** The statewide organization that is responsible for implementation of the South Carolina Cancer Plan.

**South Carolina Central Cancer Registry (SCCCR):** The office within the South Carolina Department of Health and Environmental Control responsible for collecting and reporting all cancer incidence information for South Carolina.

**South Carolina Cancer Plan:** This publication is the Cancer Plan for the state of South Carolina. Each state in the U.S. is funded through the Center for Disease Control and Prevention to prepare a plan for how they will conduct cancer prevention and control work in their state.

**South Carolina Cancer Report Card:** Describes the distribution of cancer cases and deaths in the state.

**South Carolina Community Assessment Network (SCAN):** South Carolina Community Assessment Network (SCAN) is an interactive data retrieval system for community assessment, planning, and health practices. Users can create tables, charts, and maps per their interests and specifications at the DHEC Region, County, or Zip-Code level.

**South Carolina Department of Health and Environmental Control (SC DHEC):** The South Carolina agency that is responsible for ensuring public and environmental health in the state.

**South Carolina Tobacco-Free Collaborative (Tobacco Control):** The South Carolina Tobacco-Free Collaborative is responsible for developing, implementing, and evaluating the smoke-free efforts in our state.

**State Health Plan:** The South Carolina Health Plan outlines the need for medical facilities and services in the State.

**The United States Cancer Statistics (USCS):** The most extensive federal report available on state-specific and regional data for cancer incidence and cancer deaths.

**United States Preventive Services Task Force (USPSTF):** The U.S. Preventive Services Task Force is an independent panel of experts in primary care and prevention who systematically reviews the evidence of effectiveness and develops recommendations for clinical preventive services. These reviews are published as U.S. Preventive Services Task Force recommendations on the Task Force Web site and/or in a peer-reviewed journal.

**Workgroup:** The members of the Alliance are divided into workgroups. These workgroups are responsible for developing, implementing, and evaluating specific projects comprised in the South Carolina Cancer Plan.



**SOUTH CAROLINA**  
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South Carolina Cancer Plan  
2017-2021