

# South Carolina Cancer Control Plan 2011 - 2015



*Many Voices - One Cause*



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## The Problem

Too many people still suffer and die unnecessarily from cancer in our state. Cancer is second only to heart disease as the leading cause of death in South Carolina, and it touches us all. Approximately 22,000 South Carolinians are diagnosed with cancer and 9,100 die from the disease each year.<sup>1</sup> However, many new cancer cases and cancer deaths could be avoided. Approximately 50-75 percent of cancer deaths are caused by three preventable lifestyle factors: tobacco use, poor diet, and lack of exercise.<sup>2</sup> Cancers that can be prevented or detected earlier by screening include breast, cervical, and colorectal cancers.<sup>3</sup> Other causes of cancer that could be prevented include excessive exposure to the sun and certain infections such as human papillomavirus and Hepatitis B.<sup>3</sup> For individuals with cancer, lack of access to high quality, timely treatment can reduce the potential for effective cancer treatment. For cancer survivors, lack of access to resources and support after a cancer diagnosis can lead to poor physical and emotional health outcomes.

## The Solution

We have many opportunities in our state to reduce the burden of cancer. Many individuals and organizations are already engaged in efforts to increase awareness about cancer prevention, to improve access to care and treatment options, and to help cancer survivors live longer, healthier lives. By bringing together South Carolinians who are passionate about decreasing the burden of cancer, we can wage a unified effort to save lives, reduce suffering and lower healthcare costs from cancer.

More than 100 individuals worked together to create the South Carolina Comprehensive Cancer Control Plan (Cancer Plan), a plan of action that will allow South Carolinians to share ideas and resources to reduce the burden of cancer in each community. The Cancer Plan is a tool that can be used to identify gaps and successes in our efforts, to develop education and training resources, to advocate for new and better programs and policies and to provide a method for coordinating and communicating about cancer efforts statewide. The Cancer Plan is a catalyst for community action: our health advocates across the state work together to enact policies, laws and regulations that will decrease exposure to tobacco products, increase opportunities for healthy diet and exercise, and increase cancer screening, treatment and support.

The Cancer Plan can only be effective, however, through the efforts of diverse partners, including individuals, healthcare providers, community organizations and businesses. Through everyone’s combined actions – implementing programs, providing resources, changing policies, making personal lifestyle changes – we can, together, decrease the burden of cancer in our state over the next five years.

## About the Cancer Plan

The Cancer Plan provides a road map of objectives and strategies for implementing our state's cancer prevention and control activities from 2011 to 2015. These objectives and strategies were chosen based on cancer priorities identified as important in South Carolina; they target action steps likely to produce results. The Cancer Plan will be reviewed annually to prioritize focus areas and to assess progress. This Cancer Plan is designed to be a "living" document, so we anticipate that as we review our progress each year, partner agencies that agree to provide resources and support will also add new strategies.

The Cancer Plan is a companion document to the [South Carolina Cancer Report Card](http://www.sccanceralliance.org/resources/report_card.aspx) (Link: [http://www.sccanceralliance.org/resources/report\\_card.aspx](http://www.sccanceralliance.org/resources/report_card.aspx)).<sup>4</sup> While the Cancer Report Card describes the distribution of cancer cases and deaths in our state, the Cancer Plan addresses the health priority areas identified in the Cancer Report Card. The Cancer Plan includes seven sections on cross-cutting cancer topics: health advocacy and policy, health disparities, capacity building, cancer research, cancer prevention, patient care and survivorship. Additionally, the Cancer Plan includes eight sections on selected cancers — those cancers for which early detection screening strategies are available and those cancers identified in our Cancer Report Card as being most common in our state.

It is the philosophy of the South Carolina Cancer Alliance (SCCA) that no one individual or organization can decrease the state cancer burden alone. Through the leadership of the SCCA and the combined actions of partners who are passionate about cancer prevention and control, we believe that we can reduce the burden of cancer in South Carolina. We will measure our success by the extent to which we carry out the strategies and accomplish the objectives set forth in this Cancer Plan.

## About the South Carolina Cancer Alliance

The South Carolina Cancer Alliance (SCCA) is a non-profit organization dedicated to decreasing the burden of cancer for all South Carolinians. SCCA is funded by the Centers for Disease Control and Prevention (CDC) through a grant from the South Carolina Department of Health and Environmental Control (DHEC). By developing statewide, collaborative partnerships among individuals and organizations, our goals are to maximize the impact of current programs, to expand resources and capacity, and to eliminate cancer disparities. The SCCA leads the development, implementation and evaluation of South Carolina's state Cancer Plan. Together, we influence change and impact lives.

The SCCA is a statewide coalition of more than 1,000 individuals and organizations. Our purpose is to strengthen the combined effectiveness of our cancer prevention and control efforts by:

- *Creating a shared vision for action*
- *Developing collaborative partnerships and projects*
- *Providing coordination, training, and resources*
- *Advocating for programs and policies that influence change and impact lives*

The SCCA relies on active involvement by individuals and organizations statewide to assess priorities and to develop, implement, and evaluate the success of our projects. The SCCA leadership, which includes our Board of Directors, Coordinating Council and staff, provides a statewide infrastructure; however, only through the grassroots efforts of committed partners across the state will we achieve the goals set forth in this Cancer Plan. Please visit our website at [www.sccanceralliance.org](http://www.sccanceralliance.org) to see how you can join our cancer prevention and control efforts in South Carolina.



## Executive Summary: Cancer Plan Goals

The list below provides a snapshot of the goals for cancer prevention and control in South Carolina. Later in this document, each goal is expanded in greater detail, along with the measurable objectives and specific strategies to be used to accomplish it.

### HEALTH ADVOCACY AND POLICY

To implement environmental and policy changes that will reduce the burden of cancer

### HEALTH DISPARITIES

To eliminate cancer disparities by ensuring equitable access to cancer prevention, screening, early detection, and treatment for all people in South Carolina

### CAPACITY-BUILDING

To increase the effectiveness of our cancer prevention and control activities by ensuring adequate resources such as high quality data, funds and an educated workforce, as well as effective allocation of these resources

### CANCER RESEARCH

To promote cancer research in South Carolina that targets finding solutions for the specific cancer issues observed in our state

### PRIMARY CANCER PREVENTION

To reduce the incidence of preventable cancers by increasing physical activity and a healthy diet and by decreasing exposure to tobacco, excessive sun exposure, infection with certain pathogens such as HPV, and environmental toxins that can cause cancer

### PATIENT CARE

To reduce cancer morbidity and mortality by ensuring timely access to and completion of appropriate, state-of-the-art cancer diagnosis and treatment

### SURVIVORSHIP

To improve the long-term health and quality of life of cancer survivors and their supporters by ensuring that resources are available to provide support during and after treatment

### WOMEN'S CANCERS

To reduce breast and cervical cancer morbidity and mortality through screening, early detection and state-of-the-art cancer diagnosis and treatment

### COLORECTAL CANCER

To reduce colorectal cancer morbidity and mortality through screening, early detection, and state-of-the-art cancer diagnosis and treatment

### TOBACCO-RELATED CANCERS (LUNG, ESOPHAGEAL, AND HEAD AND NECK)

To reduce tobacco-related cancer deaths through decreased tobacco use, exposure to secondhand smoke and state-of-the-art cancer diagnosis and treatment

### PROSTATE CANCER

To promote informed decision-making about issues associated with prostate cancer and prostate cancer screenings

### SKIN CANCER

To reduce skin cancers through protection from UV radiation (sun, tanning beds)

### OTHER CANCERS

To link patients and providers who have an interest in other specific cancers so that they can work together to reduce the burden of these cancers



## Cross-cutting topics

As a result of the complex interactions among the individual, their communities and health policies, there are overlaps among the sections of this report. We list all strategies that would relate to multiple cancer topics under this Cross-cutting Topics section of the Cancer Plan. We list all strategies that would help to decrease a particular type of cancer under the cancer site-specific section of this report; those same strategies may also appear in other sections where appropriate. For example, strategies to increase smoke-free workplace ordinances appear under the Health Advocacy and Policy section, the Tobacco section, and the Lung and Esophageal Cancer sections of this report. Similarly, strategies to increase funding for colorectal cancer screening for the uninsured appear under the Health Advocacy and Policy section, the Health Disparities section and the Colorectal Cancer section of this report.

With these complex relationships in mind, we present the following cross-cutting topic areas in this Cancer Plan:

- A. Health Advocacy and Policy
- B. Health Disparities
- C. Capacity Building
- D. Cancer Research
- E. Cancer Prevention
- F. Patient Care
- G. Survivorship

prevention

## Health Advocacy and Policy

The South Carolina Cancer 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 SCCA works to ensure that our laws, ordinances and policies protect our citizens from cancer to the greatest extent possible. One key area where the SCCA is actively working is to decrease cancer caused by smoking and exposure to secondhand smoke. In partnership with the SC Tobacco Collaborative and its organizational members, we are specifically advocating for an additional increase in the cigarette tax and for ordinances across the state that will ensure a healthy smoke-free environment for all workers. We also advocate for access to cancer prevention, screening and treatment for all citizens of our state.



*Note: SCCA activities that support testifying and lobbying for specific bills are not supported by CDC dollars.*

**Goal 1: To create environmental and policy change that reduces the number of new cancer cases and deaths and improves quality of life for cancer patients and survivors**

### OBJECTIVE 1:

By December 31, 2011, to develop a cancer advocacy and policy leadership network of key partner organizations to set and implement annual priorities and strategies. (Data Source: the SCCA; also included in Capacity Building section)

**Strategies:**

1. Form an advocacy and policy leadership network.
2. Convene an SCCA Advocacy Forum in Columbia, SC where at least 75 advocates from areas with low advocacy representation will be trained in cancer advocacy.
3. Mobilize trained advocates from all counties to implement the Cancer Plan.

**OBJECTIVE 2:**

By December 31, 2013, to ensure that the federal Affordable Care Act (ACA) is implemented at the state level for cancer patients and their families (Data Sources: American Cancer Society (ACS), American Association of Retired Persons (AARP))

**Strategies:**

1. Distribute information on cancer prevention screening and treatment services related to the ACA as developed by nationally recognized health organizations (ACS; Kaiser Foundation; Robert Wood Johnson Foundation) to advocates and policy/decision-makers.
2. Determine the percentage of South Carolina citizens eligible for Medicaid who are not actually enrolled in Medicaid (Data Source: SC Department of Health and Human Services).
3. Promote Medicaid enrollment among eligible citizens.
4. SCCA advocates will actively participate in the South Carolina Public Health Institute's (SCPHI) ACA Working Groups on issues of how the ACA helps people with cancer and their families.

**OBJECTIVE 3:**

By December 31, 2013, to secure recurring state funding for the colorectal cancer screening program, called South Carolina Screening Colonoscopies on People Everywhere (SC SCOPE) (Data Source: SC Legislative Record; also included in Colorectal Cancer section)

**Strategies:**

1. Prepare a case study showing the effectiveness of colorectal cancer screening in cancer prevention and early detection in SC.
2. Educate legislators and policymakers on the importance of colorectal cancer screening, including the human and financial impact of late-stage diagnosis versus early-stage diagnosis.
3. Testify before key health sub-committees regarding the human and financial costs of colorectal cancer.

*The estimated average economic impact for each case of colon cancer is \$143,000. Colonoscopies save \$4 for every \$1 spent by preventing colon cancer.<sup>5</sup>*

**OBJECTIVE 4:**

By December 31, 2013, to secure recurring state funding for breast and cervical cancer screening through the Best Chance Network program (Data Source: SC Legislative Record; also included in Breast, Cervical, and Health Disparities sections)

**Strategies:**

1. Educate legislators and policymakers on the importance of breast and cervical cancer screening, including the human and financial impact of late-stage diagnosis versus early-stage diagnosis.
2. Testify before key health sub-committees regarding the human and financial costs of breast and cervical cancer.
3. Advocate for implementation of the ACS's breast cancer screening guidelines to begin routine screenings at age 40.

*The 5-year survival rate for women in the United States who receive a diagnosis of localized breast cancer is 99 percent, compared with 84 percent for regional stage and 23 percent for distant stage.<sup>6</sup>*



*The 5-year survival rate for women in the United States who receive a diagnosis of localized cervical cancer is 91 percent, compared with 57 percent for regional disease and 19 percent for distant disease.<sup>6</sup>*

### OBJECTIVE 5:

By December 31, 2013, to increase the percentage of the population covered by comprehensive smoke-free ordinances from 34 percent to 50 percent (Data Source: SC Tobacco Collaborative, 2010; also included in Tobacco section)

#### Strategies:

1. Recruit and engage community support for smoke-free campaigns.
2. Educate the public about the harmful effects of secondhand smoke exposure and the importance of comprehensive smoke-free workplace laws.
3. Educate policy makers about the harmful human and financial effects of secondhand smoke exposure and the importance of comprehensive smoke-free workplace laws.
4. Promote the adoption of a statewide comprehensive smoke-free workplace law.
5. Promote the adoption of voluntary, model smoke-free policies in workplaces and public spaces.

### OBJECTIVE 6:

By December 31, 2015, increase the sales tax on cigarettes from 57 cents to \$1.00 per pack (Data Source: SC Code of Laws, 2010; also included in Tobacco section)

#### Strategies:

1. Educate supportive community members to advocate with their local legislator to support a tax.
2. Recruit and engage legislative influencers/trusted messengers.
3. Educate legislators and policymakers about the benefits of increasing the cigarette tax on youth smoking prevention.
4. Testify before key health sub-committees regarding the financial and human costs of tobacco use in SC.

### OBJECTIVE 7:

By December 31, 2013, to ensure insurance coverage through public and private health plans for oral chemotherapy (Data Source: SC Code of Laws and/or voluntary agreements; to include the State Health Plan and Medicaid at a minimum)

#### Strategies:

1. Convene meetings with key health organizations to develop an action plan.
2. Negotiate voluntary agreements among all stakeholders, including insurance industry and healthcare providers.
3. Testify at Sub-Committee meetings in support of legislation related to The Cancer Treatment Fairness Act of 2011.

### OBJECTIVE 8:

By December 31, 2013, to secure recurring state funding for the SCCA to implement the Cancer Plan (Data Source: SC Legislative Record; as measured by the creation of a line item for direct funding to the SCCA)

#### Strategies:

1. Mobilize cancer control advocates to educate and inform legislators and their staffs about the Cancer Plan, particularly on the importance and benefits of prevention and early detection of cancer.
2. Gain an understanding about how the tobacco settlement funds are committed.
3. Direct a portion of tobacco settlement funds for cancer prevention and control.
4. Advocate for the revenue from increases in the cigarette tax to be committed to cancer prevention and control.

*While the state tax on a pack of cigarettes in SC is \$.57, the real price to our state's economy based on costs of treating smoking-related illness, lost productivity due to smoking, and the cost to society of premature death is \$13.27 per pack.<sup>7</sup>*

**OBJECTIVE 9:**

By December 31, 2015, to increase by 20 percent the number of policies that impact various settings to support healthy eating and physical activity. (Data Sources: SCORES; Baseline to be established in 2011; also included in Cancer Prevention section)

**Strategies:**

1. Have SCCA advocates actively participate in local coalition workgroups in the Eat Smart, Move More South Carolina Movement.
2. Gather facts, figures, policy statements and research on the relationship between childhood obesity and cancer to help inform advocacy efforts.
3. Advocate to strengthen nutrition standards in public secondary schools, after-school programs, recreation centers, parks, and child-care programs.
4. Advocate for expansion of the “Food to School” program to a “Food to Institution” program.
5. Advocate for adequate funding for the 2005 Student Health and Fitness Act.
6. Advocate for local and statewide Complete Street Ordinances (i.e. streets that include space for walking and biking).
7. Advocate for inclusion of nutrition and physical activity education as part of the continuing education requirements for child care providers.



## Health Disparities

We will never reduce the burden of cancer in our state without reducing our racial, ethnic, and geographic health disparities. One of the key goals of this SCCA Cancer Plan is to close the gap in cancer disparities in South Carolina. By health disparities, we mean differences in the incidence, mortality, and burden from cancer among specific population groups in South Carolina. Disparities seen here tend to be similar to, but more pronounced than, those observed nationally.

For each of the following cancer health disparity objectives, there is interest in reducing documented disparities by race or ethnicity, gender, geographic location (e.g., rural and urban), poverty and insurance status, and other documented characteristics for which differences in cancer prevention, screening, diagnosis, care, and outcomes exist.



## Promoting Awareness of Health Disparities

As a statewide advocacy organization, the SCCA works to provide awareness about our cancer health disparities and about successful interventions that can be used to address these disparities.

**Goal 1: To reduce cancer health disparities by educating SCCA partners about cancer health disparities and disseminating information about successful approaches to eliminate these disparities.**

### **OBJECTIVE 1:**

Conduct one SCCA meeting per year (2011-2015) to showcase successful interventions for reducing cancer health disparities (Data Source: SCCA conference agendas; success defined as having at least 15 state interventions showcased per year)

### **Strategies:**

1. Identify best practices for health communication and interventions for minority populations.
2. Collaborate with SCCA partners to educate the public and professionals about topics related to health disparities and cancer.
3. Encourage schools of public health and health sciences to better coordinate programs and recruitment activities with Historically Black Colleges and Universities.
4. Provide a forum for SCCA partners to showcase successful cancer prevention, early detection, patient care and survivorship interventions for reducing cancer health disparities.

awareness

## Promoting Healthy Lifestyles to Reduce Health Disparities

In partnership with the SC Tobacco Collaborative and the SC Eat Smart, Move More Coalition, SCCA partners advocate for legislative and environmental changes that will encourage healthy lifestyles (i.e. nutritious diet, physical activity, tobacco prevention and cessation) in underserved communities.

**Goal 1: To reduce health disparities by promoting opportunities for all individuals to consume a nutritious diet, be physically active and avoid tobacco exposure.**

### **OBJECTIVE 1:**

By December 31, 2015, eliminate the gap in the percentage of European American and African American adults who report being physically inactive (Data Source: BRFSS; 2009; currently 17.0 percent of African Americans and 13.0 percent of European Americans report no physical activity)

### **OBJECTIVE 2:**

By December 31, 2015, decrease the gap in the percentage of European American and African American adults who report consumption of only 0 or 1 fruits and vegetables per day from 54.7 percent to 27.4 percent (Data Source: BRFSS; 2009)

### **Strategies:**

1. Identify communities with limited access to safe, enjoyable and accessible opportunities for physical activity.
2. Promote policies and legislation that provide safe, enjoyable, and accessible environments for physical activity in these communities (i.e., green spaces; walking paths).
3. Identify communities with limited access to affordable and nutritious foods.
4. Promote policies and legislation that provide opportunities for good nutrition in underserved communities (i.e. farmers' markets, community gardens).
5. Disseminate successful evidence-based and emerging models for promoting physical activity and nutrition in these communities.

**OBJECTIVE 3:**

By December 31, 2015, decrease the rate of tobacco use among African American adults from 21.4 percent to 18 percent (Data Source: SC BRFSS; 2010)

**Strategies:**

1. Identify communities where tobacco prevention and cessation services are not available.
2. Conduct targeted tobacco prevention education in these underserved areas.
3. Provide targeted tobacco cessation services in these underserved areas.
4. Train community members and organizations in underserved areas to provide tobacco education and cessation services
5. Increase the capacity and diversity of local tobacco coalitions

**Promoting Access to Care to Reduce Health Disparities**

The SCCA works with our statewide partners to develop voluntary agreements and legislation to increase availability of primary healthcare and cancer screening, diagnosis and treatment services.

**Goal 1: To reduce cancer-related health disparities by removing financial barriers to receipt of primary healthcare and participation in cancer prevention and control activities**

**OBJECTIVE 1:**

By December 31, 2015, increase the percentage of South Carolinians who report having a personal healthcare provider from 84.1 percent to 88 percent (Data Source: BRFSS; 2010)

**Strategies:**

1. Advocate to ensure that the federal Affordable Care Act (ACA) is fully implemented at the state level to include all its components for cancer prevention, early detection, screening and treatment.
2. Work with healthcare providers to negotiate voluntary agreements to provide care for additional uninsured patients.
3. Compile a web-based directory of sources of healthcare for the medically underserved in South Carolina (i.e. free clinics, federal health centers, health department providers)
4. Post the health care resource directory on the SCCA website.
5. Disseminate the health care resource directory statewide.

cure

**OBJECTIVE 2:**

By December 31, 2013, to secure recurring state funding for the colorectal cancer screening program, called South Carolina Screening Colonoscopies on People Everywhere (SC SCOPE) (Data Source: SC Legislative Record; also included in Colorectal Cancer section)

**Strategies:**

1. Prepare a case study showing the effectiveness of colorectal cancer screening in cancer prevention and early detection in SC.
2. Educate legislators and policymakers on the importance of colorectal cancer prevention and early detection, including the human and financial impact of late stage diagnosis versus early stage diagnosis.
3. Testify before key health sub-committees regarding the human and financial costs of colorectal cancer.

**OBJECTIVE 3:**

By December 31, 2013, to secure recurring state funding for breast and cervical cancer screening through the Best Chance Network program (Data Source: SC Legislative Record; also included in Breast and Cervical Cancer sections)

**Strategies:**

1. Educate legislators and policymakers on the importance of breast and cervical cancer prevention and early detection, including the human and financial impact of late-stage diagnosis versus early-stage diagnosis.
2. Testify before key health sub-committees regarding the human and financial costs of cervical and breast cancer.
3. Advocate for implementation of the ACS's breast cancer screening guidelines to begin routine screenings at age 40.

live

## Goal 2: To reduce cancer-related health disparities by promoting routine screening and timely follow-up care for cancers with recommended screening and follow up guidelines

**OBJECTIVE 1:**

By December 31, 2015, to reduce the gap in late-stage diagnosis of breast cancer between European Americans and African Americans from 17.2 percent to 13.8 percent (Data Source: SCCCR 2006-2008; also included in Breast Cancer Section)

**OBJECTIVE 2:**

By December 31, 2015, to reduce from 16.2 percent to 13.0 percent the gap between European-American and African-American women for late-stage diagnosis of cervical cancer (Data Source: SCCCR; 2006-08; also included in Cervical Cancer section).



**Strategies:**

1. Promote personalized breast and cervical cancer screening referrals for medically underserved women to bridge information gaps and direct women to services that are available.
2. Increase access to mobile breast and cervical screening for women with low income and/or who reside in rural areas.
3. Implement the Witness Project and other evidence-based educational interventions to promote breast and cervical cancer screening among medically underserved and ethnically diverse women.
4. Implement and evaluate emerging interventions developed in South Carolina, such as Girl Talk and Save our Breasts, to promote breast and cervical cancer screening among medically underserved and ethnically diverse women.
5. Educate the public about free and low-cost breast and cervical cancer screening services that are currently available through healthcare plans, Best Chance Network and volunteer screening opportunities.
6. Educate women receiving breast and cervical cancer screening on the importance of follow-up care and rescreening.
7. Monitor cervical cancer incidence and mortality rates and participation in cervical cancer prevention and control activities (e.g. Mammograms, Pap test, HPV vaccination) among Hispanic women
8. Improve data collection strategies to include Hispanic ethnicity.

together

**OBJECTIVE 3:**

By December 31, 2015, to achieve equal five-year colonoscopy screening rates between African Americans and European Americans ages 50 and older (Data Source: BRFSS 2010; Baseline: 14.2 percent difference between African Americans and European Americans in screening rates; also included in Health Disparities section)

**Strategies:**

1. Increase public awareness about colorectal cancer screening guidelines and screening exams at age 50 through educational programs targeting medically underserved communities
2. Promote colorectal cancer screening referrals for medically underserved men and women to bridge information gaps and to direct people to services that are available.
3. Implement evidence based educational interventions to promote colorectal cancer screening among medically underserved and ethnically diverse men and women.
4. Implement and evaluate emerging interventions developed in South Carolina, to promote colorectal cancer screening among medically underserved and ethnically diverse people.
5. Seek additional private funding to develop screening colonoscopy programs for the medically underserved and ethnically diverse men and women in South Carolina.



# Capacity Building

Reaching the goals outlined in the Cancer Plan will be impossible without the availability of and creative, coordinated use of resources – human, informational and financial – to implement the strategies identified. To make an impact, we need to not only increase the number of individuals providing services, but also to ensure that the programs are being implemented effectively. We need to use best practices, share resources, and work collaboratively to avoid duplication while maximizing resources and expertise. We must ensure that individuals needing services have the information they need to connect with those services, and we must document problems and successful solutions.

An adequate supply of well-trained, culturally-sensitive and diverse personnel is vital to provide comprehensive cancer prevention, early detection, treatment and support services within the many diverse areas of the state. It is predicted that as the population ages and as the cancer treatments become more effective at extending life, there will be an increasing need for professionals and support staff to provide cancer-related care. From 2010 to 2020, South Carolina’s population is estimated to grow 10 percent with the over 65 age group growing as much as 78 percent.<sup>10</sup> The number of individuals living with cancer is likely to grow tremendously. At the same time, the state is faced with an aging workforce. Finally, the complexity of the health care system is increasing dramatically; a whole new cadre of individuals is needed to ensure that patients can understand, access and follow-through with services that they need.



Collecting strong and relevant surveillance and evaluation data is also a priority for capacity-building. Without adequate monitoring of cancer incidence, mortality, and health services data, it would be impossible to understand the scope of the problem or define areas that require further attention. In addition, it is critical to use limited resources wisely. Therefore, we must focus on ensuring thorough evaluation of the impact of our efforts and dissemination of those results “from bench to bedside.”

It is essential that we have the financial resources to maintain our efforts. South Carolina is unique in its coalition of professionals and volunteers who have come together to implement the Cancer Plan. Providing the backbone structure for maintaining that coalition and keeping it energized, focused and maximally effective requires time and money.

Providing seed money to community projects as well as bringing together the resources to do larger, state-wide initiatives has been an essential component of how SC addresses cancer. It is critical that resources beyond those provided by state and federal government be directed toward the fight. That includes obtaining the financial resources for the alliance itself, but also helping to maximize the resources available to the Alliance partners to ensure they can continue to provide services and programs directly to patients.



**Human Resources****Goal 1: To expand the capacity for effectively implementing the Cancer Plan****OBJECTIVE 1:**

By December 31, 2011, to develop a statewide cancer advocacy and policy leadership network of key partner organizations to set and implement annual priorities and strategies (Data Source: the SCCA; also included in Health Advocacy and Policy section)

**Strategies:**

1. Form an advocacy and policy leadership network.
2. Convene an SCCA Advocacy Forum in Columbia, SC where at least 75 advocates from areas with low advocacy representation will be trained in cancer advocacy.
3. Mobilize trained advocates from all counties to implement the Cancer Plan.

**OBJECTIVE 2:**

By December 31, 2015, to increase the availability of well-trained professionals working in cancer prevention and control in the state (Data Source: SCCA member survey; baseline to be established in 2011)

**Strategies:**

1. Conduct three workshops per year to educate health professionals, patients and the public about critical cancer priorities and needs and to highlight best practices and resources for addressing them.
2. Assess the adequacy of cancer materials in continuing education programs for healthcare professionals.
3. Create an online resource clearinghouse of continuing educational opportunities for healthcare professions.
4. Work with college and university training programs to ensure adequate exposure to cancer-related issues in their curriculum and practicum experiences (public health, biomedical, palliative care and end-of-life care, genetics, emerging technologies).
5. Strengthen health training in areas of language (bilingual), cultural sensitivity and health literacy.
6. Facilitate distance learning and web-based education strategies for cancer-related information.
7. Collaborate with AHEC regions to provide training and information on best-practices in cancer prevention and control.
8. Map shortages in cancer screening, diagnostic and treatment providers by geographic regions.
9. Increase the supply of these providers in professions where shortages are demonstrated.
10. Create training programs and voluntary certification programs for patient navigators.

together

**OBJECTIVE 3:**

By December 31, 2015, to increase from three to nine the number of active SCCA workgroups addressing cancer issues in the state (Data Source: SCCA; Baseline: Existing workgroups are Colorectal, Prostate and Advocacy/Policy)

**Strategies:**

1. Conduct regional cancer plan implementation sessions.
2. Conduct yearly leadership development and training programs.
3. Solicit SCCA grant applications from diverse partners.
4. Develop an SCCA recruitment video.
5. Develop an SCCA brochure.
6. Develop a speakers' bureau.
7. Facilitate corporate participation in the CEO Cancer Gold Standard Program (a comprehensive program developed by the CEO Roundtable on Cancer to fight cancer in workplaces in the United States; it has three main goals: risk reduction through lifestyle change; early detection of cancer; and promotion of quality cancer care).

**OBJECTIVE 4:**

By December 31, 2015, to double the number of active partnerships developed through the SCCA that bring together diverse partners (e.g. healthcare facilities, public health, researchers and community organizations) to address the burden of cancer (Data Source: SCCA Member Survey; baseline to be established in 2011)

**Strategies:**

1. Foster community partnerships at SCCA meetings through presentations and poster displays.
2. Promote opportunities to join existing partnerships on the SCCA website.
3. Create and disseminate promotional materials on the value of comprehensive cancer planning and implementation.
4. Promote statewide cancer research alliance and disparities network.
5. Publicize successful collaborative efforts.

**Information Resources****Goal 1: To ensure data-driven decision making in prioritizing needs and determining allocation and use of available cancer resources****OBJECTIVE 1:**

By December 31, 2013, to increase by 30 percent the number of individuals who use the Cancer Plan as an essential part of their planning of implementation projects (Data Source: SCCA Member Survey; baseline to be established in 2011)

**Strategies:**

1. Post the Cancer Plan prominently on the SCCA website.
2. Review and update the Cancer Plan regularly.



OBJECTIVE 2:

By December 31, 2013, to disseminate high-quality information about cancer priorities, resources and projects to project partners and the cancer community (Data Source: SCCA Member Survey; Baseline to be established in 2011)

Strategies:

- 1. Conduct educational meetings.
- 2. Create a website.
- 3. Disseminate the Cancer Plan.
- 4. Conduct patient education using programs such as the Cancer Education Guide (CEG) and other programs taught by cancer survivors.
- 5. Create a clearinghouse of information about cancer survivor activities and volunteer opportunities throughout the state.

OBJECTIVE 3:

By December 31, 2015, to increase the number of annual approved requests for cancer registry data by 40 percent (Data Source: SCCCR; baseline to be established in 2011)

Strategies:

- 1. Ensure funding for the South Carolina Comprehensive Cancer Registry.
- 2. Publish the Cancer Report Card using data from our state cancer registry.
- 3. Train health care professionals regarding the importance of collecting accurate and comprehensive cancer registry data.
- 4. Expand cancer registry data collection and analysis based on information needs.
- 5. Promote the cancer registry as a data source for cancer data.

awareness

Financial Resources

Goal 1: To increase funding for cancer plan implementation, capacity building and organizational development

OBJECTIVE 1:

By December 31, 2013, to increase from \$20,000 to \$40,000 the financial resources available from non-federal or state funds for cancer plan implementation, capacity building and organizational development (Data Source: SCCA Budget; Baseline: \$20,000)

Strategies:

- 1. Conduct a fundraising campaign that will focus on engaging a larger donor base and include awareness events as well as on-line giving.
- 2. Increase the number of hospitals with American College of Surgeons (ACOS) certification, with NCI Cancer Center designation and garner one comprehensive cancer center (and associated funds).
- 3. Engage corporate partners including businesses, such as pharmaceutical companies.
- 4. Seek grants for capacity building.
- 5. Create and maintain a “library” of cancer information and statistics and training materials to facilitate grant-writing by state partners and organizations.
- 6. Identify and expand charitable donations that stay within the state.



# Cancer Research

University-based and other research scientists are an important SCCA constituency. Researchers in South Carolina focus on cancer-related processes in much the same way as scientists anywhere might. They use the same study designs and measurement devices, record the same outcomes, and employ the same statistical procedures in analyzing our data. But it also is true that for South Carolina to be successful in addressing disparities that have unique expression here, researchers must engage with the population subgroups at highest risk here rather than relying on the results of studies conducted elsewhere. For this reason, this section of the Cancer Plan focuses on how we can support cancer research in our state. We seek to identify innovative ways to address the specific cancer needs faced by the racially, ethnically and geographically diverse populations in our state.



## Goal 1: To optimize the potential benefits of cancer-related research by streamlining the process for conducting cancer research and disseminating research findings to the SC public

### OBJECTIVE 1:

By December 31, 2013, to ensure that the SC Tissue Bank will have an active tissue banking process in place that includes ongoing collection of new specimens and a formal process in place to request specimens and related identifiers needed to conduct research (Data Source: Health Sciences South Carolina; baseline: this system currently not in place)

#### Strategies:

1. Coordinate with Health Sciences South Carolina to ensure that tissue samples and related identifiers are available to researchers.

### OBJECTIVE 2:

Statewide cancer research will be showcased each year at an SCCA Conference as an ongoing commitment to enhancing collaboration in cancer research (Data Source: SCCA Conference Agendas)

#### Strategies:

1. Designate one of the SCCA meetings each year as a research-sharing meeting.
2. Solicit abstracts from SCCA partners to present their research findings.
3. Select presentations for oral and poster presentations.

### OBJECTIVE 3:

By December 31, 2013, the SCCA will regularly use at least two approaches biannually (every 6 months) to disseminate critical new cancer prevention and treatment-related research findings to the SC public (Data Source: SCCA staff documentation of website content)

#### Strategies:

1. Request SCCA partners provide information about new cancer prevention and treatment research that has been conducted.
2. Establish a peer review process to be used to evaluate submitted research findings to determine which ones are most timely, noteworthy and of sufficient quality for promotion on the Alliance website.
3. Showcase two new research findings each quarter (every 3 months) on the SCCA website.
4. Encourage the high-risk community to help conceptualize and design cancer research studies.



# Cancer Prevention

The primary focus of the Cancer Prevention section of the Cancer Plan is to promote lifestyle factors that protect us from many types of cancer and other chronic diseases. We know that most cancers could be prevented by maintaining a healthy lifestyle - which includes a healthy diet, physical activity and avoiding tobacco, heavy alcohol use, and stress. Most of these factors increase our risk of cancer when we are on an unhealthy trajectory and decrease our risk with improvement. We also know that the rate of spread and extent of damage from cancer are influenced by many of these same factors. While we prefer preventing the cancer from developing in the first place, we often must deal with limiting the damage the cancer will do. Primary prevention of cancer through a healthy lifestyle is the primary focus of this section, but many of the things we mention also are good prescriptions for people who already have a cancer diagnosis.

In addition to the lifestyle factors described above, this section of the Cancer Plan highlights our opportunities to prevent specific types of cancers. For example, skin protection from the sun greatly reduces the risk of skin cancer. Vaccination with the HPV vaccine prevents the most common strains of HPV that can lead to cervical cancer.

A second focus of this section of the Cancer Plan is to promote the protection of our water and air from hazardous chemicals that can increase the risk of cancer. We describe the South Carolina Department of Health’s Environmental Public Health Tracking system, which provides a resource for the public to address concerns about environmental hazards, exposures, and health effects such as cancer.

*When it comes to maintaining a healthy weight for a lifetime, calories count! Weight management is all about balance – balancing the number of calories consumed with the number of calories used or “burned off.”<sup>11</sup>*

hope

## Exercise, Nutrition and Obesity

Being active and eating a healthy diet can reduce the risk of cancer and other chronic diseases. In partnership with the state’s Eat Smart, Move More obesity coalition, the SCCA will work to bring about change at a state and local level to support healthy lifestyles. We will work to increase the availability of healthy food options and safe, accessible green space in communities. We will also work with diverse community partners, such as schools, daycares, and healthcare providers to ensure policies and education that support a healthy lifestyle.

### Goal 1: To reduce the burden of obesity and related chronic diseases in South Carolina by creating environments that provide access to healthy foods and safe places to be physically active

#### OBJECTIVE 1:

By December 31, 2015, to increase by 20 percent the number of policies that impact various settings to support healthy eating and physical activity. (Data Source: SCORES; Baseline to be established in 2011)

#### Strategies:

1. Participate in local coalition workgroups in the Eat Smart, Move More Movement.
2. Promote participation in the ABC Grow Healthy Initiative.
3. Promote the use of the Eat Smart, Move More, and ABC Grow Healthy toolkits.
4. Advocate to ensure that nutrition and physical activity education are included as continuing education requirements for child care providers.
5. Advocate for local and statewide Complete Street Ordinances (i.e. streets that include space for walking and biking).
6. Promote the integration of healthy eating habits within the routine health education given by health care providers.
7. Promote the use of the SCCA’s Cancer Education Guide to increase awareness of the benefits of healthy eating and physical activity as related to cancer prevention.
8. Promote healthy food opportunities in local communities through the following types of initiatives: establishing new community farmers’ markets and community gardens, establishing new “farm to institution” programs.
9. Promote physical activity in local communities through the following types of initiatives: active transportation policies, joint-use agreements between schools and communities.

**OBJECTIVE 2:**

By December 31, to increase the percentage of SC middle school students who consume at least five servings a day of fruits and vegetables from 14.7 percent in 2009 to 20 percent (Data Source: YRBSS 2009)

**Strategies:**

1. Advocate to strengthen nutrition standards in public schools, after-school programs, recreation centers, parks, and child care programs.
2. Advocate to ensure that the 2005 Student Health and Fitness Act is adequately funded.
3. Encourage schools to implement the core components of the SC Farm to School program.
4. Promote the establishment or revitalization of school gardens.
5. Promote an increase in schools that support healthy foods on campus by offering fruits or non-fried vegetables in vending machines and school stores, canteens, or snack bars, and during celebrations when foods and beverages are offered (Data Source: School Health Profiles).

**Tobacco**

Every year more than 5,900 adults in South Carolina die from tobacco use. An additional 7,300 South Carolina children become new smokers each year.<sup>12</sup> Cigarette smoking is the predominant cause of lung cancer. It is also a major cause of other types of cancers such as head and neck cancers and esophageal cancer. Exposure to secondhand smoke also causes lung cancer for non-smoking adults. Because there is no screening test of proven efficacy for lung cancer and other tobacco-related cancers, tobacco control is a top priority for our state.



Our tobacco control efforts focus on ensuring adequate funding for tobacco control activities, promoting tobacco-free school policies, increasing use of tobacco cessation services and advocating for smoke-free ordinances and an increase in the tobacco tax.

**Goal 1: To reduce the toll of tobacco use in South Carolina****OBJECTIVE 1:**

By December 31, 2015, to decrease the percentage of high school students in South Carolina who use tobacco from 17.8 percent to 13 percent (Data Source: YTS 2008)

**OBJECTIVE 2:**

By December 31, 2015, to decrease the percentage of adult South Carolinians who use tobacco from 21 percent to 16 percent (Data Source: BRFSS 2010)

*Secondhand smoke causes 790 deaths in non-smoking South Carolinians each year.<sup>13</sup>*

**Strategies for Objectives 1 and 2:**

1. Partner with community groups to educate disparate populations about the availability and efficacy of cessation programs statewide.
2. Enhance training of healthcare providers on use of evidence-based guidelines for smoking cessation.
3. Promote the adoption of model tobacco-free school district policies in public and private schools.
4. Direct a portion of tobacco settlement funds for cancer prevention and control.
5. Advocate for the revenue from increases in the cigarette tax to be committed for cancer prevention and control.

**OBJECTIVE 3:**

By December 31, 2013, to increase the sales tax on cigarettes from 57 cents to \$1.00 per pack (Data Source: SC Code of Laws, 2010; also included in Tobacco section)

**Strategies:**

1. Educate supportive community members to advocate with their local legislator to support an increased tobacco tax.
2. Recruit and engage legislative influencers/trusted messengers.
3. Educate legislators and policymakers about the benefits on youth smoking prevention of increasing the cigarette tax.
4. Testify before key health sub-committees regarding the financial and human costs of tobacco use in SC.

*South Carolina will take in \$235 million in revenues from tobacco in 2011, but will spend only \$5 million for tobacco prevention.<sup>14</sup>*

cure

**OBJECTIVE 4:**

By December 31, 2015, to increase from 34 percent to 50 percent the percentage of local municipalities with comprehensive 100 percent smoke-free laws in all indoor workplaces (Data Source: SC Tobacco Collaborative)

**Strategies:**

1. Educate the public, business owners, and policy makers about the harmful effects of secondhand smoke exposure and the importance of comprehensive smoke-free workplace laws.
2. Recruit and engage community support for smoke-free policies.
3. Promote the adoption of local comprehensive smoke-free workplace laws.
4. Promote the adoption of voluntary model smoke-free policies in workplaces and public.



Sun Protection

Skin cancer is the most common form of cancer in South Carolina. There are three types of skin cancer—melanoma, basal cell and squamous cell cancers. The most common skin cancers are the basal cell and squamous cell carcinomas, which are also the most curable. Melanoma is the third most common skin cancer and is more dangerous, especially among young people. Approximately 1,000 people are diagnosed with melanoma skin cancers and 125 die from the disease in South Carolina each year.<sup>1</sup>

Exposure to ultraviolet (UV) light through unprotected sun exposure and tanning bed use is a major cause of melanomas. Experts believe that four out of five cases of skin cancer could be prevented, as UV damage is mostly avoidable. Therefore, the focus of this section of the Cancer Plan is to provide education about sun safety and to work with daycares, schools and recreational centers to promote policies and environmental approaches that protect children and youth from excessive sun exposure.

Goal 1: To reduce new cases and deaths from skin cancer in South Carolina through prevention of excessive UV light exposure

OBJECTIVE 1:

By December 31, 2015, to increase the percentage of South Carolina adults by 10 percent who report almost always or always using some form of sun protection that may reduce the risk of skin cancer: wearing sunscreen, staying in the shade, wearing a wide-brimmed hat, or wearing a long-sleeved shirt (Data Source: BRFSS; question to be added on 2012 and 2015 surveys; also included in the Cancer Prevention section)

Contrary to popular belief, 80 percent of a person’s lifetime sun exposure is not acquired before age 18; only about 23 percent of lifetime exposure occurs by age 18.<sup>15</sup>

OBJECTIVE 2:

By December 31, 2015, to increase the percentage of South Carolina middle school students from 6.2 percent to 8.7 percent who report most of the time or always wearing sunscreen with an SPF of 15 or higher when they are outside for more than one hour on a sunny day (Data Source: YRBSS 2009; also included in the Cancer Prevention section)

Strategies for Objectives 1 and 2:

- 1. Educate the public about the dangers of severe burns and the long-term effects of ultraviolet light exposure from the sun or tanning beds.
- 2. Promote public awareness of the latest ACS sun safety recommendations.
- 3. Educate new parents about ACS sun safety recommendations for infants and toddlers.
- 4. Target daycares, elementary schools and city and county recreational facilities to promote policy and environmental change to limit sun exposure of staff and students.

The World Health Organization in 2009 moved tanning beds to its highest cancer risk category: “carcinogenic to humans,” a list that also includes plutonium and cigarettes.<sup>16</sup>



awareness

## HPV Vaccinations

Human Papillomavirus is a common virus that is spread through sexual contact. Usually it has no symptoms, so people do not know that they have it. Some types of HPV can cause cervical cancer in women and can cause other kinds of cancer in both men and women. Other types can cause genital warts in both males and females. The HPV vaccine works by preventing the most common types of HPV that cause cervical cancer and genital warts.

The HPV vaccine represents a significant public health opportunity: to actually prevent cervical cancer from ever occurring. The focus of this section of the Cancer Plan is to promote state-wide HPV vaccine awareness, as well as targeted HPV vaccine education for those who could benefit from vaccinations.

### Goal: To reduce new cervical cancer cases and deaths in South Carolina through HPV vaccinations

#### OBJECTIVE:

By December 31, 2015, to increase from 16.6 percent to 26.7 percent the proportion of 13-17 year olds who complete the HPV vaccine series (Data Source: NIS-TEEN dataset, National Immunization Survey of 13-17 year old teens; also included in Cancer Prevention section)

#### Strategies:

1. Develop and implement statewide community awareness and educational efforts to promote the initiation and timely completion of HPV vaccination for females and males aged 11-12, with catch-up period for females and males aged 13-26.
2. Advocate for inclusion of HPV in school health education curricula related to sexual health (including STD education) and cancer prevention and control.
3. Provide health care provider education to increase recommendation of HPV vaccines to all age-eligible females and males.

*The main cause of cervical cancer is human papillomavirus (HPV), a common virus that can be passed from one person to another during sex. HPV vaccines protect against the types of HPV that most commonly cause cervical cancer.<sup>17</sup>*

## Recommendations for Cancer Prevention

These ten recommendations for cancer prevention are drawn from the 2007 World Cancer Research Fund (WCRF) / American Institute for Cancer Research (AICR) Second Expert Report ([www.dietandcancerreport.org](http://www.dietandcancerreport.org)).<sup>18</sup>

1. Be as lean as possible without becoming underweight.
2. Be physically active for at least 30 minutes every day.
3. Limit consumption of energy-dense foods.  
Avoid sugary drinks.
4. Eat more of a variety of vegetables, fruits, whole grains, and legumes such as beans.
5. Limit intake of red meat (such as beef, pork, and lamb) and avoid processed meats.
6. Limit alcoholic drinks.
7. Limit consumption of salty foods and foods processed with salt (sodium).
8. Don't use supplements to protect against cancer.
9. Mothers to breastfeed; children to be breastfed.
10. Cancer survivors to follow the recommendations for cancer prevention.

**And always remember – do not smoke or chew tobacco.**

## Environmental Factors

The environment is ranked as one of three primary factors affecting health in the Healthy People 2010 report.<sup>19</sup> The South Carolina Department of Health and Environmental Control was funded by the CDC in 2008 to establish its Environmental Public Health Tracking (EPHT) system as part of the CDC national EPHT network. Its purpose is to provide information necessary to make healthy decisions about one's environment. The Internet-based statewide web portal containing the cancer and environmental data can be used by the public to address concerns about environmental hazards, exposures, and health effects such as cancer. It can be accessed at <http://www.scdhec.gov/administration/epht/>.

The South Carolina Central Cancer Registry (SCCCR) provides a service to address citizens' concerns about too much cancer in their communities (perceived cancer clusters) that may be related to environmental factors. Statistical analyses of the cancer data are performed to create reports called Community Cancer Assessments. The data most often cannot establish an environmental association between a hazard in a community and cancer cases/deaths occurring there, but they can point out unusual cancer patterns in a locality and over time that warrant further epidemiologic investigation.

## **Goal 1: To reduce cancer incidence by knowledge of and avoidance of environmental cancer risks**

### **OBJECTIVE 1:**

By December 31, 2013, increase the use of the Department of Health and Environmental Control's Environmental Public Health Tracking web pages from 45 visits per month to 56 visits per month (Data Source: DHEC EPTS website).

### **OBJECTIVE 2:**

By December 31, 2013, increase the use of the Department of Health and Environmental Control's South Carolina Central Cancer Registry Cancer clusters web pages from 350 visits per month to 387 visits per month (Data Source: DHEC SCCCR website).

### **OBJECTIVE 3:**

By December 31, 2013, produce Community Cancer Assessments for all ZIP codes statewide assessing any excess in cancer occurrences/deaths and post to the South Carolina Central Cancer Registry website for public use (Data Source: DHEC EPHT/SCCCR)

### **Strategies for Objectives 1, 2, and 3:**

1. Have DHEC staff present two topics at the SCCA conference and at other healthcare venues:
  - an overview and demonstration of the Environmental Public Health Tracking program and website (including generation of graphs, tables and maps).
  - South Carolina Central Cancer Registry resources to evaluate community cancer concerns.
2. Make the Environmental Public Health Tracking website more accessible through creation of a link from the SCCA website to the DHEC website.
3. Monitor web access to the Cancer Pages of the DHEC Environmental Public Health Tracking site, as well as web links from which the pages were accessed.
4. Monitor web access to the Cancer Cluster pages of the DHEC South Carolina Central Cancer Registry site, as well as weblinks from which the pages were accessed.



# Patient Care

Ensuring access to timely and high-quality cancer care is critical for improving outcomes for patients in our state. One way that we can facilitate high-quality cancer care is to ensure that all patients have access to care at cancer centers certified through the Commission on Cancer Accreditation Program. This accreditation process helps ensure that patients have access to optimal treatment and careful coordination of care. Another way that we can promote high quality cancer care is to ensure that patients have an opportunity to learn about and to participate in cancer clinical trials. Other patient care initiatives that we will promote through the SCCA include access to oral chemotherapy, genetics 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. Additionally, we present specific measures we will track to monitor patient treatment outcomes across the state in the Breast Cancer, Colorectal Cancer and Lung and Esophageal Cancer sections of this report.

## Goal 1: To ensure access to state-of-the-art cancer care for South Carolina cancer patients

### OBJECTIVE 1:

By December 31, 2015, to increase the proportion of cancer patients who participate in cancer clinical trials by 10 percent (Data Source: Health Sciences SC clinical trial participation database; baseline to be established in 2011)

#### Strategies:

1. Summarize best practices for clinical trial recruitment.
2. Identify global barriers to clinical trial participation in the state.
3. Disseminate best practices for clinical trial recruitment to hospitals throughout the state.
4. Disseminate the National Cancer Institute’s toolkit for tracking clinical trial recruitment to hospitals throughout the state.
5. Disseminate information about clinical trial opportunities to the public and cancer patients.

### OBJECTIVE 2:

By December 31, 2015, to increase the percentage of cancer patients who are referred to American College of Surgeons (ACOS) certified cancer centers by 20 percent (Data Sources: Pre-post survey of ACOS certified cancer centers, baseline to be established in 2011)

#### Strategies:

1. Educate patients about the importance of being referred to an ACOS-certified cancer center for cancer treatment.
2. Educate primary care providers about the importance of referring their patients to an ACOS-certified center for cancer treatment.
3. Encourage all cancer centers in the state to obtain ACOS certification.

### OBJECTIVE 3:

By December 31, 2013, to ensure insurance coverage through public and private health plans for oral chemotherapy (Data Source: SC Code of Laws or voluntary agreements; State Health Plan and Medicaid at a minimum)

#### Strategies:

1. Convene meetings with key health organizations to develop an action plan.
2. Negotiate voluntary agreement among all stakeholders, including insurance industry and healthcare providers.
3. Testify at subcommittees in support of legislation regarding The Cancer Treatment Fairness Act of 2011.



**OBJECTIVE 4:**

By December 31, 2015, to increase the percentage of patients who have access to information and resources to manage the side effects of cancer and its treatment by 30 percent (Data Source: Pre-post survey of ACOS-certified cancer centers; baseline to be established in 2011).

**Strategies:**

1. Summarize National Comprehensive Cancer Network guidelines for managing the side effects of cancer and its treatment.
2. Disseminate National Comprehensive Cancer Network guidelines for managing the side effects of cancer and its treatment.

**OBJECTIVE 5:**

By December 31, 2015, to increase the percentage of patients who have access to palliative care services by 30 percent (Data Source: Pre-post survey of ACOS-certified cancer centers; baseline to be established in 2011)

**Strategies:**

1. Summarize best practices for establishing palliative care units.
2. Identify global barriers to palliative care services across the state.
3. Disseminate best practices for establishing palliative care units throughout the state.

**OBJECTIVE 6:**

By December 31, 2015, to increase by 30 percent the percentage of cancer treatment centers that formally offer patient navigation services, defined as the logistic and emotional support needed to achieve completion of diagnostic and treatment care. (Data Source: Pre-post survey of ACOS cancer centers; baseline to be established in 2011)

**Strategies:**

1. Summarize successful patient navigation program models.
2. Disseminate information about successful patient navigation program models throughout the state.

together

**Goal 2: To ensure that all South Carolinians have access to appropriate cancer risk assessment and genetic counseling and testing services**

**OBJECTIVE 1:**

By December 31, 2015, to increase by 30 percent the percentage of healthcare facilities that diagnose or treat cancer that provide onsite or by referral appropriate cancer risk assessment, genetic counseling, and testing services (Data Source: Pre-post test of ACOS-certified cancer centers; baseline to be established in 2011)

**Strategies:**

1. By December 31, 2011, to obtain baseline data for the number of healthcare facilities that currently do not provide onsite or by referral appropriate cancer risk assessment, genetic counseling, and testing services.
2. To conduct a conference on best practices related to genetic counseling for high risk populations and cancer patients.
3. To develop a partnership with physician, nursing and public health associations to provide education for their members and patients regarding the importance of providing cancer risk assessment, genetic counseling, and testing services.



# Survivorship

Because of improvements in the early detection and treatment of cancer, there are now more than 12 million people living with cancer in the United States. 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 as a result of their cancer diagnosis and treatment.<sup>20</sup>

The focus of this Survivorship section 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. 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 SC Cancer Plan focuses on such strategies as developing statewide cancer resource information, promoting survivorship educational programs such as conferences and survivorship schools, and creating a statewide survivorship network.



## Goal 1: To ensure that the psychosocial needs of cancer survivors are addressed

### OBJECTIVE 1:

By December 31, 2015, to increase the percentage of ACOS cancer center healthcare providers who provide their patients with a comprehensive cancer survivorship plan by 20 percent (Data Source: Pre-post survey of ACOS cancer centers; baseline to be established in 2011)

#### Strategies:

1. Create a library of survivorship care plans from national organizations and statewide partners.
2. Compile guidelines and resources and make available on website.
3. Provide education to healthcare providers and patients about the components and value of a survivorship care plan for cancer survivors.

### OBJECTIVE 2:

By December 31, 2015, to increase the percentage of ACOS cancer center providers who provide or refer patients to complementary cancer care services by 20 percent (Data Source: Pre-post survey of ACOS cancer centers; baseline to be established in 2011)

#### Strategies:

1. Educate health care professionals about the needs of cancer survivors.
2. Provide resource information about best-practices in patient centered cancer care.
3. Create a “library” or clearinghouse of information on complementary and alternative medicine for patients.
4. Develop a network of survivorship coaches to assist patients in navigating the system and accessing the resources they need.
5. Research credentialing standards and guidelines for non-traditional health care providers and create an information brochure related to referrals and effectiveness.

*The transition from active treatment to post-treatment care is critical to the long-term health of cancer survivors. For this reason, 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.<sup>20</sup>*

## Goal 2: To eliminate the practical barriers associated with living through and beyond cancer

### OBJECTIVE 1:

By December 31, 2015, to increase the percentage of ACOS cancer center providers who provide appropriate cancer resource information to patients by 20 percent (Data Source: Cancer Survivor Survey; baseline to be established in 2011)

#### Strategies:

1. Conduct a survey of patient barriers and needs.
2. Work with health care partners to ensure that resource information on sites is comprehensive, current, and easily accessible.
3. Create a web-based, statewide survivorship network for sharing resource information and gathering information about survivor needs and use of services.
4. Conduct a yearly survey of the survivorship network.

## Goal 3: Provide support, education and resources for patients and caregivers

### OBJECTIVE 1:

To host one Cancer Survivorship Conference each year (2011-2015) that is attended by at least 150 individuals (Data Source: SCCA)

#### Strategies:

1. Plan survivorship conferences each year.
2. Disseminate information about the conferences to patients and healthcare providers throughout the state.
3. Include key patient and survivor topics as part of conference agenda (to include pain management, survivor care plans, hospice and respite care).

# support

### OBJECTIVE 2:

By December 2013, to promote a Survivorship School model through the SCCA (Data Source: SCCA)

#### Strategies:

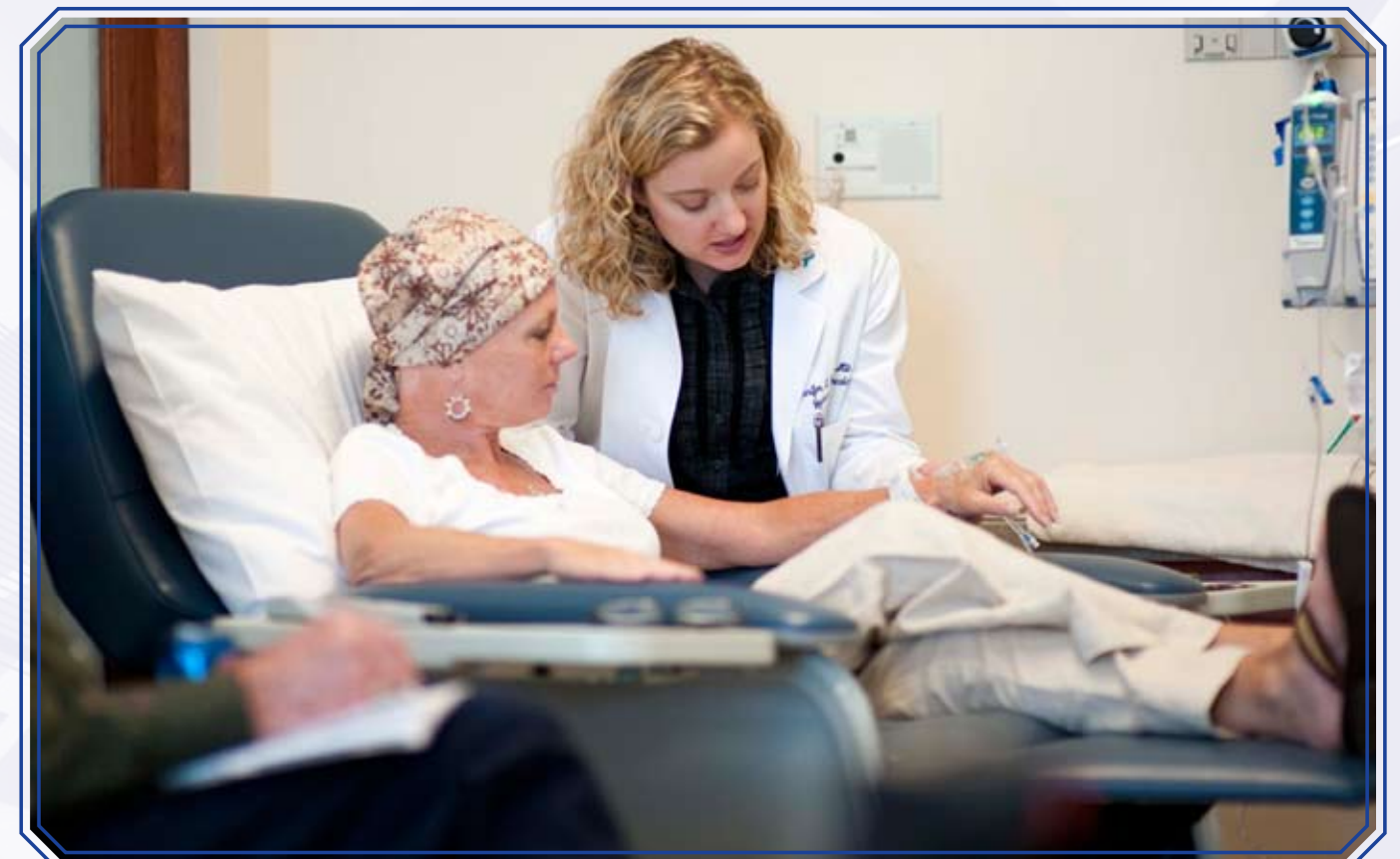
1. Identify possible existing survivorship school models.
2. Develop or adopt a survivorship school model.
3. Showcase this model at SCCA events and on the SCCA website.

### OBJECTIVE 3:

By December 2013, to promote a Survivorship Navigator program through the SCCA (Data Source: SCCA)

#### Strategies:

1. Identify possible existing survivorship navigation school models.
2. Develop or adopt a survivorship navigation model.
3. Showcase this model at SCCA events and on the SCCA website.



# Breast Cancer

In South Carolina, approximately 3,200 women are diagnosed with breast cancer and 640 die from the disease each year.<sup>1</sup> The health disparity seen with breast cancer is unusual. While European-American women over age 40 are more likely to get the disease, African-American women are more likely to die from it. For women within the age range to participate in routine screening mammography (i.e. age 40 and older), ensuring access to screening mammography and diagnostic follow up can help to improve this health disparity. Unfortunately, African-American women under age 40 are more likely to get a more aggressive form of breast cancer. Because routine mammography is not recommended for women under age 40, more research is needed to understand the causes for this health disparity so that interventions can be put in place to reduce this health disparity for younger African-American women.

## Goal 1: To reduce breast cancer deaths in South Carolina through increased awareness, early detection and diagnosis

### OBJECTIVE 1:

By December 31, 2013, to secure recurring state funding for breast cancer screening through the Best Chance Network program (Data Source: SC Legislative Record; also included in Health Advocacy and Policy and Health Disparities sections)

### Strategies:

1. Educate legislators and policymakers (especially key health sub-committee members) on the importance of breast cancer screening, including the human and financial impact of late-stage diagnosis versus early-stage diagnosis.
2. Testify before key health sub-committees regarding the human and financial costs of breast cancer.
3. Advocate for implementation of the American Cancer Society’s breast cancer screening guidelines to begin annual mammography screenings and clinical breast exams at age 40.



### OBJECTIVE 2:

By December 31, 2015 to increase from 83.6 percent to 86 percent the proportion of women age 40 and older who have received a clinical breast exam within the preceding two years (Data Source: BRFSS 2010)

### OBJECTIVE 3:

By December 31, 2015, to increase from 74.5 percent to 80 percent the proportion of women age 40 and older who have received a mammogram within the preceding two years (Data Source: BRFSS 2010)

### OBJECTIVE 4:

By December 31, 2015, to reduce the gap in late-stage diagnosis of breast cancer between European Americans and African Americans from 17.2 percent to 13.8 percent (Data Source: SCCCR; 2006-08; also listed in Health Disparities Section)

**Strategies for Objectives 2 through 4:**

1. Increase public awareness about the American Cancer Society guidelines to begin annual mammography screenings and clinical breast exams at age 40.
2. Educate healthcare providers about the current ACS breast cancer screening guidelines and their important role in referring patients for mammography services.
3. Promote personalized breast cancer screening referrals for medically underserved women to bridge information gaps and direct women to services that are available.
4. Increase access to mobile mammography screening for women with low income and/or those who reside in rural areas.
5. Implement the Witness Project and other evidence-based educational interventions to promote breast cancer screening among medically underserved and ethnically diverse women.
6. Implement and evaluate emerging interventions developed in South Carolina, such as Girl Talk and Save our Breasts, to promote breast cancer screening among medically underserved and ethnically diverse women.
7. Educate the public about free and low-cost breast cancer screening services that are currently available through healthcare plans, Best Chance Network and volunteer screening opportunities.
8. Educate women receiving screening mammograms on the importance of follow-up care and rescreening.
9. Conduct research to help clarify why younger African-American women are at risk for a more aggressive form of breast cancer.

**Goal 2: To reduce the burden of breast cancer in South Carolina through high quality cancer treatment**

**OBJECTIVE 1:**

By December 31, 2015, to increase by 20 percent the percentage of women with non-metastatic breast cancer who receive surgical resection (Data Source: SCCCR; baseline to be established in 2011)

*Mammography can detect breast cancer at an early stage when treatment is more effective and a cure is more likely. Numerous studies have shown that early detection saves lives and improves treatment options.<sup>21</sup>*

**OBJECTIVE 2:**

By December 31, 2015, to increase by 20 percent the percentage of women under age 70 who receive breast-conserving surgery and radiation therapy within 365 days of their diagnosis (Data Source: SCCCR; baseline to be established in 2011)

**OBJECTIVE 3:**

By December 31, 2015 to increase by 20 percent the percentage of women under 70 with American Joint Committee on Cancer (AJCC) T1cN0M0, or Stage II or III hormone receptor negative breast cancer for whom combination chemotherapy is considered or administered within 120 days of their diagnosis (Data Source: SCCCR; baseline to be established in 2011)

**OBJECTIVE 4:**

By December 31, 2015, to increase by 20 percent the percentage of women with AJCC T1cN0M0, or Stage II or III hormone receptor positive breast cancer for whom Tamoxifen or third generation aromatase inhibitor is considered or administered within 365 days of their diagnosis (Data Source: SCCCR; baseline to be established in 2011)

**Strategies for Objectives 1 through 4:**

1. Educate the public about the standard of care that patients with non-metastatic breast cancer should receive appropriate surgery and adjuvant treatment.
2. Educate primary care providers about the standard of care that patients with non-metastatic breast cancer should receive appropriate surgery and adjuvant treatment.

**OBJECTIVE 5:**

By December 31, 2015, to increase by 20 percent the percentage of patients receiving lumpectomy instead of mastectomy when appropriate (Data Source: SCCCR; baseline to be established in 2011)

**Strategies:**

1. Educate patients about the guidelines for the use of lumpectomy versus mastectomy.
2. Educate healthcare providers about the guidelines for the use of lumpectomy versus mastectomy.

# Cervical Cancer

In South Carolina, approximately 190 women are diagnosed with cervical cancer and 70 die from the disease each year.<sup>1</sup> Despite recent improvements in incidence and mortality and the existence of effective methods for prevention and early detection, cervical cancer remains an important problem for women in South Carolina. Our state lags significantly behind most other states in incidence, mortality, and vaccination rates against human papillomavirus (HPV), a common and usually harmless sexually-transmitted infection linked to developed cervical and other types of cancer. While regular participation in cervical cancer screening (i.e. Pap tests) has drastically reduced the rate of new cervical cancer cases and deaths, these rates remain significantly higher in African-American and Hispanic women compared to European-American/White women. Reaching rarely and never screened women is a persistent challenge as is promoting adherence to recommended follow-up care of abnormal screening results.



Infection with cancer-causing types of HPV is considered a necessary underlying cause of cervical cancer (and other types of cancer). The development of HPV testing and HPV vaccines are major breakthroughs in cancer prevention and control. Universal application of HPV vaccines in females and males could reduce the rate of new cases of cervical cancer (and other types of HPV-mediated cancers) in the future and could eliminate disparities in disease rates by race, income level, or geographic location. Thus, the three major strategies to help eliminate cervical cancer are to make routine screening available for all, promote adherence to follow-up care, and promote use of HPV vaccines among those eligible.

prevention

## Goal 1: To reduce new cervical cancer cases and deaths in South Carolina through increased awareness, prevention, early detection, diagnosis, and treatment

### OBJECTIVE 1:

By December 31, 2015, to secure and expand state-wide funding for cervical cancer prevention and control (Data Source: SC Legislative Record; also listed in Health Advocacy and Policy and Health Disparities sections; achievement obtained if at least two state-wide cervical cancer prevention and/or early detection insurance policy coverages are expanded).

### Strategies:

1. Advocate for the reinstatement of state supplemental funding for females aged 40-46 who fall outside the range of current Best Chance Network age eligibility (47-64 years) for cervical cancer screening and follow-up care and advocate for overall expansion of access to routine screening and follow-up care.
2. Advocate for financial coverage in the state health insurance plan and other major insurers for preventive routine assessments for age-eligible females, including associated costs for screening (Pap test), HPV testing when recommended or indicated, and follow-up services when necessary.
3. Advocate for inclusion of coverage for HPV co-testing offered with primary cervical cancer screening to eligible females age 30 and over.

*It is recommended that girls ages 11-12 should receive the HPV vaccine. Also, females ages 13-26 who has not yet been vaccinated should receive the vaccine. The vaccine is now also available for boys.<sup>22-23</sup>*

hope

**OBJECTIVE 2:**

By December 31, 2015, to increase from 85.4 percent to 90 percent the percentage of women aged 21 and older who have received a cervical cancer screening exam within the previous three years (Data Source: BRFSS 2010).

**OBJECTIVE 3:**

By December 31, 2015, to reduce from 16.2 percent to 13.0 percent the gap between European-American and African-American women in late-stage diagnosis of cervical cancer (Data Source: SCCCR; 2006-2008; also listed in Health Disparities section).

**Strategies for Objectives 2 and 3:**

1. Promote cervical cancer screening.
2. Promote public awareness of the preventability of cervical cancer through routine screening (Pap tests), timely follow-up care and appropriate intervention, and HPV vaccination by continuing and expanding public awareness and education campaigns of the SCCA cervical cancer subcommittee and other organizations.
3. Provide health care provider education to ensure recommended screening and treatment approaches, recommended onset of screening and screening intervals, appropriate use of advances in cervical cancer screening technology, and HPV vaccine recommendation for all age-eligible females and males.
4. Advocate for the inclusion of insurance coverage for colposcopy and recommended follow-up treatment of abnormal results among all insurance programs serving women in SC. Colposcopy and cervical conization costs must also be covered for all uninsured/underinsured women in addition to the costs of cervical cancer (per the State Breast and Cervical Cancer Treatment Act).
5. Monitor cervical cancer incidence and mortality and participation in cervical cancer prevention and control activities (e.g. Pap test, HPV vaccination) among Hispanic women.
6. Improve data collection strategies to include Hispanic ethnicity.

*Most cases of cervical cancer are easily preventable with regular screening tests and follow-up. It also is highly curable when found and treated early. Now vaccines are available to protect against the most common cause of cervical cancer.<sup>24</sup>*

**OBJECTIVE 4:**

By December 31, 2015, to increase from 16.6 percent to 26.7 percent the percentage of 13-17 year olds who complete the HPV vaccine series (Data Source: NIS-TEEN dataset, National Immunization Survey of 13-17 year old teens, also included in Cancer Prevention section).

**Strategies:**

1. Develop and implement statewide community awareness and educational efforts to promote the initiation and timely completion of HPV vaccination for females and males aged 11-12, with catch-up period for females and males aged 13-26.
2. Advocate for inclusion of HPV in school health education curricula related to sexual health (including STD education) and cancer prevention and control.
3. Provide health care provider education to increase recommendation of HPV vaccines to all age-eligible females and males.



# Colorectal Cancer

In South Carolina, approximately 2,100 people are diagnosed with colorectal cancer and 800 die from the disease each year.<sup>1</sup> Colorectal cancer is one of the most commonly diagnosed cancers in both women and men. Even though it is one of the more deadly of the leading cancers, it is also the most preventable. Colonoscopy is a preferred screening method because it can find existing colorectal cancer earlier if it is there or prevent it by removing colon polyps before they become cancerous.



None of the other colorectal cancer screening procedures work in this way; indeed their value is based upon identifying at-risk groups who should then undergo colonoscopies. Therefore, colonoscopy is a main focus in this section of the State Cancer Plan. As with many cancers, colorectal cancer is both more common and more deadly in African-Americans. As we strive to decrease overall deaths due to colorectal cancer, particular attention will need to be given to racial and other disparities so that the benefits we achieve are inclusive of all South Carolinians.

## Goal 1: To reduce colorectal cancer deaths through effective screening

### OBJECTIVE 1:

By December 31, 2011 to secure state funding for the SC SCOPE program (Data Source: SC Legislative Record; also included in Health Advocacy and Policy and Health Disparities sections)

### Strategies:

1. Prepare a case study showing the effectiveness of colorectal cancer screening in cancer prevention and early detection in SC.
2. Educate legislators and policymakers on the importance of colorectal cancer prevention and early detection, including the human and financial impact of late-stage diagnosis versus early-stage diagnosis.
3. Testify before key health sub-committees regarding the human and financial costs of colorectal cancer.

### OBJECTIVE 2:

By December 31, 2015 to increase the percentage of adults age 50 and older who have had a colonoscopy procedure within the past 5 years from 49.9 percent to 59.9 percent (Data Source: BRFSS; 2010).

#### Sub-Objective 2a:

By December 31, 2015 to increase the percentage of State Health Plan beneficiaries ages 50 and older who have had a colonoscopy procedure within the past 5 years from 45.1 percent to 54.1 percent (Data Source: SC Office of Research and Statistics; 2006-2010)

#### Sub-Objective 2b:

By December 31, 2015 to increase the percentage of Medicaid beneficiaries ages 50 and older who have had a colonoscopy procedure within the past 5 years from 26.7 percent to 32.0 percent (Data Source: SC Office of Research and Statistics; 2006-2010)

#### Sub-Objective 2c:

By December 31, 2015 to achieve equal five-year colonoscopy screening rates between African Americans and European-Americans ages 50 and older (Data Source: BRFSS 2010; Baseline: 14.2 percent difference in screening rates; also included in Health Disparities section)

*The estimated average economic impact for each case of colon cancer is \$143,000.<sup>5</sup>*

awareness

**Strategies for Objectives 2 through 2c:**

1. Increase public awareness about colorectal cancer screening guidelines and screening exams at age 50 through educational programs at worksites, places of worship and other community settings.
2. Educate healthcare providers about colorectal cancer screening guidelines and their important role in referring patients for colorectal cancer screening services.
3. Educate healthcare providers about changes in reimbursement policies regarding screening colonoscopies.
4. Encourage healthcare providers to use Clinical Decision Support capabilities in their electronic health records to flag patients who are eligible for colorectal cancer screening
5. Promote colorectal cancer screening referrals for medically underserved men and women to bridge information gaps and to direct people to services that are available.
6. Implement evidence based educational interventions to promote colorectal cancer screening among medically underserved and ethnically and racially diverse men and women.
7. Implement and evaluate emerging interventions developed in South Carolina, to promote colorectal cancer screening among medically underserved and ethnically and racially diverse men and women.
8. Work with partner organizations, such as AARP, to increase awareness of colorectal cancer screening guidelines and Medicare coverage of screening colonoscopies among members.
9. Seek additional private funding to develop screening colonoscopy programs for the medically underserved and ethnically and racially diverse men and women in South Carolina.



**Goal 2: To reduce colorectal cancer deaths through high-quality cancer treatment**

**OBJECTIVE 1:**

By December 31, 2015, to increase by 20 percent the percentage of patients with non-metastatic colorectal cancer who receive surgical resection (Data Source: SCCCR; baseline to be established in 2011)

**OBJECTIVE 2:**

By December 31, 2015, to increase by 20 percent the percentage of patients under the age of 80 with American Joint Committee on Cancer Stage III (lymph node-positive) colon cancer for whom adjuvant chemotherapy is considered or administered within 120 days of diagnosis (Data Source: SCCCR; baseline to be established in 2011)

**OBJECTIVE 3:**

By December 31, 2015, increase by 20 percent the percentage of surgically resected colon cancer patients for whom at least 12 regional lymph nodes are removed and pathologically examined (Data Source: SCCCR)

**OBJECTIVE 4:**

By December 31, 2015, to increase by 20 percent the percentage of patients under the age of 80 with American Joint Committee on Cancer T4N0M0 or Stage III cancer receiving surgical resection for rectal cancer for whom radiation therapy is considered or administered within 6 months (180 days) (Data Source: SCCCR; baseline to be established in 2011)

**Strategies for Objectives 1 through 4:**

1. Educate the public and primary care providers about the standard that patients with non-metastatic colorectal cancer should receive surgery and appropriate adjuvant treatment.
2. Educate the public and primary care providers about the importance of being referred to an ACOS certified cancer center for cancer treatment.
3. Conduct interventions to increase the number of patients who are referred to ACOS certified cancer centers in South Carolina.
4. Promote ACOS certification for all cancer centers in South Carolina.

## Head and Neck Cancers

In South Carolina, approximately 560 people are diagnosed with head and neck cancers and 140 die from the disease each year.<sup>1</sup> Survival is highly dependent upon stage at diagnosis. When detected early, these cancers have a greater than 80 percent survival rate after five years.<sup>6</sup> However, in South Carolina, the majority of oral/pharyngeal cancers (64 percent) are diagnosed at a late stage when treatment is often less effective.<sup>1</sup> Unfortunately, African-American men in South Carolina have the highest incidence of any race/sex group. Ensuring that all patients have access to standard of care treatment for head and neck cancer is crucial for addressing this health disparity.



Approximately 85 percent of head and neck cancers are linked to tobacco use. Using alcohol and tobacco together increases this risk. The prevention of these cancers will rely on our prevention efforts to decrease tobacco use and heavy alcohol use.

Some head and neck cancers are associated with the Human Papillomavirus (HPV) infection. Most of the head and neck cancers associated with HPV infection occur in the oro-pharynx. Due to the link between head and neck cancers and HPV infection, vaccines that prevent infection with cancer-causing types of HPV may hold promise for reducing the burden of head and neck cancer.

**Goal: To reduce new head and neck cancer cases and deaths from head and neck cancer by prevention, early detection, and standard of care treatment.**

### OBJECTIVE 1:

By December 31, 2015, to reduce the incidence of new head and neck cancer cases from 10.9 cases per 100,000 in 2008 to 9.7 cases per 100,000 (Data Source: SCCR 2008)

### Strategies:

1. Train dentists and physicians to provide evidence-based smoking cessation interventions for their patients who smoke.
2. Partner with community groups to educate disparate populations about the availability and efficacy of cessation programs statewide.
3. Support advocacy efforts to reduce the initiation of tobacco use, such as advocating to increase the tobacco tax and to increase the number of smoke-free workplaces and communities.
4. Promote community awareness about the importance of avoiding heavy alcohol use.
5. Promote the use of the HPV vaccine among both girls and boys.
6. Collaborate with dental and medical associations and other health organizations to promote oral examination for patients.

### OBJECTIVE 2:

By December 31, 2015, to reduce mortality from head and neck cancer from 2.7 per 100,000 in 2008 to 2.4 per 100,000 (Data Source: SCCR 2008)

### Strategies:

1. Promote the importance of providing standard of care treatment for all head and neck cancer patients.
2. Monitor statewide cancer registry data to identify patient populations who may not be getting standard of care treatment (specifically by race, ethnicity, and rural residence).
3. Conduct education in regions where patients are not receiving standard of care treatment for head and neck cancer.
4. Begin collecting cancer registry data on the percentage of patients whose cancers are HPV-related and identify patient populations who are not receiving testing for HPV.
5. Disseminate information to healthcare providers, particularly in areas where HPV testing is not being done, that head and neck cancer cases should be tested for HPV.

*Head and neck, lung, and esophageal cancers are strongly associated with tobacco use. As an effective primary preventive approach, we strongly support the tobacco control measures in the Cancer Prevention section of this Cancer Plan.*

## Lung and Esophageal Cancers

In South Carolina, approximately 3,400 people are diagnosed with lung cancer each year. With 2,700 lung cancer deaths in South Carolina each year, lung cancer is the leading cause of cancer deaths in our state.<sup>1</sup> Cigarette smoking is the main cause of lung cancer and second-hand smoke exposure increases the risk of this disease. Men in South Carolina have high two times higher rates of new lung cancer cases and deaths from lung cancer compared to women. Lung cancer is a disease in which European Americans have higher rates of both new lung cancer cases and deaths than African Americans.

Approximately 250 people are diagnosed with esophageal cancer and 220 die from the disease in South Carolina each year.<sup>1</sup> Cancers of the esophagus are among the most deadly of all cancers. Those that occur in the upper esophagus are almost always squamous cell cancers. These are thought to be most strongly related to tobacco use. They are much more common in African Americans than European Americans (despite that African Americans use less tobacco than European Americans), and their incidence and mortality rates have been stable for many decades in the US. By contrast, adenocarcinomas, which occur in the lower esophagus, near the stomach, are thought to be less strongly related to tobacco, and rates of esophageal adenocarcinoma have been increasing rapidly in recent decades – especially in European-



American men. Adenocarcinomas are associated with both Barrett's Esophagus and gastro-esophageal reflux disease or GERD.

Because there are no screening tests of proven efficacy for lung and esophageal cancers, the primary strategies for controlling these cancers focus on tobacco control. National research has demonstrated that two of the most effective ways to decrease tobacco exposure are to increase the tax on tobacco products and to enact smoke-free laws. After many years of debate in South Carolina, the cigarette tax increased from 7 cents to 57 cents in 2010. The SCCA was on the forefront of this fight. Additionally, we have made tremendous strides in smoke-free local laws with about 34 percent of South Carolina residents now protected by smoke-free local ordinances. While our progress in tobacco control has been considerable over the past few years, much more work will be required to decrease the burden of disease associated with lung and esophageal cancer in our state.

### Goal 1: To reduce new lung and esophageal cancer deaths in South Carolina through prevention of smoking and exposure to secondhand smoke

#### OBJECTIVE 1:

By December 31, 2013, to increase the percentage of the population covered by comprehensive smoke-free ordinances from 34 percent to 50 percent (Data Source: SC Tobacco Collaborative 2010; also included in Healthy Advocacy and Policy section)

#### Strategies:

1. Recruit and engage community support for smoke-free campaigns.
2. Educate the public about the harmful effects of secondhand smoke exposure and the importance of comprehensive smoke-free workplace laws.
3. Educate policy makers about the harmful human and financial effects of secondhand smoke exposure and the importance of comprehensive smoke-free workplace laws.
4. Promote the adoption of a statewide comprehensive smoke-free workplace law.
5. Promote the adoption of voluntary model smoke-free policies in workplaces and public.

*There is no risk-free level of contact with secondhand smoke; even brief exposure can be harmful to health.<sup>25</sup>*

## OBJECTIVE 2:

By December 31, 2013, to increase the sales tax on cigarettes from 57 cents to \$1.00 per pack (Data Source: SC Code of Laws, 2010; also included in Health Advocacy and Policy and Tobacco sections)

### Strategies:

1. Educate supportive community members to advocate with their local legislator to support the tax.
2. Recruit and engage legislative influencers/trusted messengers.
3. Educate legislators and policymakers about the benefits of increasing the cigarette tax on youth smoking prevention.
4. Testify before key health sub-committees regarding the financial and human costs of tobacco use in SC.

*A 10 percent increase in price reduces youth smoking prevalence by 6-7 percent.<sup>26</sup>*

## OBJECTIVE 3:

By December 31, 2015, to decrease the percentage of South Carolinians (age 18+) who use tobacco from 21.0 percent to 16 percent (Data Source: BRFSS 2010)

### Strategies:

1. Train health care providers to provide and/or refer patients for tobacco cessation programs.
2. Implement tobacco cessation programs.
3. Promote the South Carolina Quitline as a resource for tobacco cessation.

## OBJECTIVE 4:

By December 31, 2015, to decrease the percentage of high school students in South Carolina who use tobacco from 17.8 percent to 13 percent (Data Source: YTS 2008)

### Strategies:

1. Coordinate with school districts to integrate tobacco prevention/cessation education integrated into school curriculum.
2. Promote youth participation in the Rage Against the Haze program.
3. Promote use of tobacco cessation programs among high school students.

*Lung cancer is the leading cause of cancer death in the United States among every ethnic group, accounting for one in every three cancer deaths.<sup>27</sup>*

## OBJECTIVE 5:

By December 31, 2015, to increase the percentage of patients with non-metastatic non small-cell lung cancer who receive surgical resection by 20 percent (Data Source: SCCCR; baseline to be established)

### Strategies:

1. Educate the public and primary care providers about the standard that patients with non-metastatic lung cancer should receive surgery and appropriate adjuvant treatment.
2. Educate the public and primary care providers about the importance of being referred to an ACOS certified cancer center for cancer treatment.
3. Conduct interventions to increase the number of patients who are referred to ACOS certified cancer centers in South Carolina.
4. Promote ACOS certification for all cancer centers in South Carolina.

*Each year smoking results in an estimated 443,000 premature deaths nationwide, of which about 49,400 are in nonsmokers as a result of exposure to secondhand smoke.<sup>28</sup>*

together

# Prostate Cancer

Approximately 3,600 men are diagnosed with prostate cancer and 460 die from the disease in South Carolina each year.<sup>1</sup> Prostate cancer is the most commonly diagnosed cancer among men. Both incidence and mortality from prostate cancer are higher for African Americans than European Americans, and African-American men in South Carolina experience the highest mortality from prostate cancer in the U.S. Recent published trials show varying results of the impact of prostate cancer screening on mortality and suggest that the prostate specific antigen (PSA) test may lead to over-detection and over-treatment of patients, with no improvement (or even worsening) in survival and degradation in quality of life.

Given current confusion surrounding prostate cancer screening and treatment, it is recommended that men make an informed decision with their healthcare provider and family as appropriate. A systematic approach to prostate cancer education in the state of South Carolina is needed to help men make such informed decisions about screening and treatment.

*Some medical experts believe all men should be offered regular screening tests for prostate cancer. Other medical experts do not. The decision is up to men and their doctors. We recommend that men know the risk factors for prostate cancer and the pros and cons of getting screened.<sup>29</sup>*



## Goal 1: To increase our understanding of the issues and process of decision making for prostate cancer screening and treatment.

### OBJECTIVE 1:

By December 31, 2015, to complete at least two statewide research projects to increase our understanding of prostate cancer in African-American men in South Carolina (Data Source: SCCA Prostate Cancer Workgroup)

#### Strategies:

1. Conduct a scientifically valid survey of South Carolina African-American men, to determine how and why they learn about prostate cancer screening, treatment and survival, or why they do not learn about these topics and how they go about making a personal informed decision on whether to be screened.
2. Conduct a research study to investigate PSA screening among African-American men in South Carolina, its accuracy, and ways in which prostate cancer detection may improve decisions on treatment.
3. Establishment a Survival Registry of men diagnosed with prostate cancer in South Carolina.

## Goal 2: To promote quality education and outreach on prostate cancer screening and treatment.

### OBJECTIVE 1:

By December 31, 2015, to increase the percentage of men making an informed decision about screening for prostate cancer by at least 10 percent (Data Source: baseline to be established in BRFSS 2012 survey)

#### Strategies:

1. Develop a survey question to determine the percentage of South Carolina men aged 50-75 years who are making an informed decision on screening for prostate cancer, and have the question included in the SC Behavioral Risk Factor Surveillance Survey.
2. Identify, review and disseminate quality education materials to promote informed decision making on prostate cancer screening and treatment.
3. Convene a state-wide conference on prostate cancer to help determine community and medical directions on prostate cancer education, screening and treatment
4. Conduct regional conferences to develop networks to educate local communities.

# Skin Cancer

Skin cancer is the most common form of cancer in South Carolina. There are three types of skin cancer—melanoma, basal cell and squamous cell cancers. The most common skin cancers are the basal cell and squamous cell carcinomas, which are also the most curable. Melanoma is the third most common skin cancer and is more dangerous, especially among young people. Approximately 1,000 people are diagnosed with melanoma skin cancers and 125 die from the disease in South Carolina each year.<sup>1</sup>



Exposure to ultraviolet (UV) light through unprotected sun exposure and tanning bed use is a major cause of melanomas. Experts believe that four out of five cases of skin cancer could be prevented, as UV damage is mostly avoidable. Therefore, the focus of this section of the Cancer Plan is to provide education about sun safety and to work with daycares, schools and recreational centers to promote policies and environmental approaches that protect children and youth from excessive sun exposure.

## Goal 1: To reduce new cases and deaths from skin cancer in South Carolina through prevention of excessive UV light exposure

### OBJECTIVE 1:

By December 31, 2015, to increase the percentage of South Carolina adults by 10 percent who report almost always or always using some form of sun protection that may reduce the risk of skin cancer: wearing sunscreen, staying in the shade, wearing a wide-brimmed hat, or wearing a long-sleeved shirt (Data Source: BRFSS; question to be added on 2012 and 2015 surveys; also included in the Cancer Prevention section)

*The hours between 10 a.m. and 4 p.m. daylight savings time are the most hazardous for UV exposure.<sup>30</sup>*

### OBJECTIVE 2:

By December 31, 2015, to increase the percentage of South Carolina middle school students from 6.2 percent to 8.7 percent who report most of the time or always wearing sunscreen with an SPF of 15 or higher when they are outside for more than one hour on a sunny day (Data Source: YRBSS 2009; also included in the Cancer Prevention section)

### Strategies for Objectives 1 and 2:

1. Educate the public about the dangers of severe burns and the long-term effects of ultraviolet light exposure from the sun or tanning beds.
2. Promote public awareness of the latest ACS sun safety recommendations.
3. Educate new parents about ACS sun safety recommendations for infants and toddlers.
4. Target daycares, elementary schools and city and county recreational facilities to promote policy and environmental change to limit sun exposure of staff and students.

*CDC recommends easy options for sun protection:<sup>30</sup>*

- *Seek shade, especially during midday hours.*
- *Wear clothing to protect exposed skin.*
- *Wear a hat with a wide brim to shade the face, head, ears, and neck.*
- *Wear sunglasses that wrap around.*
- *Use sunscreen with sun protective factor (SPF) 15 or higher with both UVA and UVB protection.*

hope

## Other Cancers

The cancers listed previously were selected to have their own section in the Cancer Plan based on their frequency (incidence), lethality (mortality), availability of appropriate screening methods, or some combination of these factors. Each of these cancer sites also has been the focus of SCCA membership activities (i.e., in the form of workgroups and conferences). In turn, this reflects the manner in which the SCCA works as an activist organization.

The cancers listed below are included in this Other Cancers section because they rank among the top ten causes of incidence and/or mortality for cancer overall, for men or for women in our state. While none of these cancers below have reached the level necessary to warrant its own section in this Plan, there are groups of clinicians, researchers, and survivors within the SCCA that have expressed an interest in these cancers. While none is currently well-suited for screening, all are appropriate targets for discovery – ranging from primary prevention/etiology to secondary prevention/treatment of existing disease to tertiary prevention/survivorship and palliative care.

The SCCA does not have any ongoing active projects related to the cancers listed below. If you want to become involved with the SCCA to help us develop projects that address these or other cancers, or if you want to have your organization listed here, please contact the SCCA at (866) 745-5680.

### BLADDER CANCER

Bladder cancer ranks as the sixth leading cause of new cancer cases in South Carolina. For men, it ranks as the fourth leading cause of new cancer cases and the ninth leading cause of cancer deaths in our state.

### BLOOD CANCERS (LEUKEMIA AND LYMPHOMA)

Leukemia ranks as the tenth leading cause of new cancer cases and the sixth leading cause of cancer deaths in South Carolina. Lymphoma ranks as seventh for both new cancer cases and cancer deaths in our state.

Links to organizations working in this area:

South Carolina Leukemia and Lymphoma Society: <http://www.lls.org/#/aboutlls/chapters/sc/>

### BRAIN CANCER

Brain cancer ranks as the tenth leading cause of cancer deaths for women in South Carolina.

Links to organizations working in this area

South Carolina Brain Tumor Support Network: <http://www.sc.braintumorawareness.org/>

### KIDNEY CANCER

Kidney cancer ranks as the eighth leading cause of new cancer cases in South Carolina. For men, it ranks as the tenth leading cause of cancer deaths in our state.

### LIVER CANCER

Liver cancer ranks as the ninth leading cause of cancer deaths in South Carolina.



## OVARIAN CANCER

Ovarian cancer ranks as the seventh leading cause of new cancer cases and the fifth leading cause of cancer deaths for women in South Carolina.

Links to organizations working in this area:

South Carolina Ovarian Cancer Foundation: <http://www.scovariancancer.org/>

## PANCREATIC CANCER

Pancreatic cancer ranks tenth for men and ninth for women for new cancer cases in South Carolina. In terms of cancer deaths, pancreatic cancer ranks as the fifth leading cause of cancer deaths in our state.



## PEDIATRIC CANCERS

Cancers such as Acute Lymphoblastic Leukemia, Acute Myeloid Leukemia and brain tumors occur more commonly in children than other types of cancers. Many of these cancers are treatable and curable, but concerns remain about potential long-term effects of the treatments.

Links to organizations working in this area:

MUSC Children's Hospital: <http://www.musckids.com/>

Greenville Hospital Systems: <http://www.ghschilrens.org/>

McLeod Children's Hospital: <http://www.mcleodhealth.org/mrmc/childrenshospital.cfm>

Palmetto Health Children's Hospital: <http://ch.palmettohealth.org/>

Camp Happy Days: <http://www.camphappydays.org>

Children's Chance: <http://www.childrenschance.org>

## STOMACH CANCER

Stomach cancer ranks as the eighth leading cause of cancer deaths for men in South Carolina.

## UTERINE CANCER

Uterine cancer ranks as the fourth leading cause of new cancer cases and the eighth leading cause of cancer deaths for women in South Carolina.



# How to Get Involved

To address the significant problem that cancer poses to South Carolinians, we must take action to prevent cancer and to detect it in its early stages, when it is more curable. For this reason, the Cancer Plan provides a blueprint for moving forward to reduce the burden of cancer in South Carolina.

We hope that you will get involved with fighting cancer in South Carolina. Below are ways that individuals and organizations can help. Please join the movement to fight cancer in our state!

## IF YOU ARE AN INDIVIDUAL

- Eat healthy, be physically active and maintain a healthy body weight.
- Do not use tobacco in any form.
- Support efforts to make your community smoke-free.
- Get screened for breast, cervical and colorectal cancer at recommended intervals.
- If diagnosed with cancer, consider enrolling in a clinical trial.
- Join the SCCA!

## IF YOU ARE A LEGISLATOR OR POLICY MAKER

- Support access to health care.
- Support legislation to increase access to appropriate breast, cervical and colorectal cancer screening.
- Support a significant cigarette tax increase.
- Support smoke-free workplace legislation.
- Support appropriate funding for comprehensive cancer prevention and control.

## IF YOU ARE A HOSPITAL

- Acquire or maintain American College of Surgeons (ACOS) membership.
- Assure that your cancer cases are reported to the cancer registry.
- Encourage patients to get recommended cancer screenings at recommended intervals.
- Encourage participation in clinical trials and trials of innovative screening protocols.
- Provide meeting space for cancer support groups.
- Collaborate to sponsor community screening programs.

## IF YOU ARE A LOCAL HEALTH DEPARTMENT

- Provide cancer prevention and early detection awareness information to citizens.
- Collaborate with partners on community prevention programs.
- Work with physicians to promote screening programs and case reporting.
- Provide meeting space for cancer support groups.

## IF YOU ARE A COMMUNITY ORGANIZATION

- Provide cancer awareness information to constituents.
- Promote cancer screening among clients.
- Provide community prevention programs that promote nutrition, physical activity and tobacco-free communities.

## IF YOU ARE AN EMPLOYER

- Provide healthy foods in vending machines and cafeterias.
- Encourage employees to increase physical activity.
- Provide tobacco cessation services.
- Provide smoke-free work places.
- Collaborate with hospitals to host cancer screening events.



# Acronyms

A number of acronyms and shortened names are used to present the information in this plan. The following definitions are provided to assist the reader.

AARP: American Association of Retired Persons

ACA: Affordable Care Act

ACOS: American College of Surgeons

ACS: American Cancer Society

AJCC: American Joint Committee on Cancer

BCN: Best Chance Network

BMI: Body Mass Index

BRFSS: Behavioral Risk Factor Surveillance Survey

Cancer Plan: South Carolina Comprehensive Cancer Plan

CCCR: South Carolina Center for Colon Cancer Research

CDC: Centers for Disease Control and Prevention

CEG: Community Education Guide

DHEC: South Carolina Department of Health and Environmental Control

EPHT: Environmental Public Health Tracking

FOBT: Fecal Occult Blood Test

GERD: Gastro-Esophageal Reflux Disease

HPV: Human Papillomavirus

HSSC: Health Sciences South Carolina

NCCN: National Comprehensive Cancer Network

NCI: National Cancer Institute

PSA: Prostate Screening Antigen

SCCA: South Carolina Cancer Alliance

SCCCR: South Carolina Central Cancer Registry

SCORES: South Carolina Online Reporting and Evaluation System

SC SCOPE: South Carolina Screening Colonoscopies of People Everywhere

STD: Sexually Transmitted Disease

YTS: Youth Tobacco Survey

YRBS: Youth Risk Behavior Survey

UV Light: Ultraviolet Light

# Glossary of Terms

A number of technical terms are used to presenting the information in this plan. The following definitions are provided to assist the reader.

**ABC GROW HEALTHY INITIATIVE:** A joint effort between the SC Department of Health and Environmental Control (DHEC) and the SC Department of Social Services ABC Child Care Program to establish and implement new nutrition and physical activity standards in South Carolina Level B child care centers.

**AGE-ADJUSTED RATE:** A statistical process applied to rates of disease, death, injuries or other health outcomes that allows communities with different age structures 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.

**BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM:** A phone survey conducted each year across the US to assess health conditions and risk 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:** 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 Cancer Prevention Program.

**BODY MASS INDEX:** A useful measure of overweight and obesity that is calculated from a person's height and weight. Body mass index is an estimate of body fat and a good gauge of risk for diseases that can occur with more body fat.

**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 other.

**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 period of time.

**CANCER EDUCATION GUIDE:** Program of the SCCA that targets ALL people in South Carolina and is designed to educate South Carolinians about cancer prevention, early detection and treatment.

**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 tests such as Pap smears for detecting early cervical cancer, routine mammography for early breast cancer and colonoscopy for detecting colorectal cancer.

**TERTIARY PREVENTION:** Stopping a disease and the suffering caused by the disease after the disease is already present. Tertiary prevention for cancer would include developing better treatments, preventing complications, and minimizing pain for cancer patients.

**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:** 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 (ie. nutrition, physical activity, avoiding tobacco); early detection (i.e. decreasing the cancer burden through appropriate cancer screenings); and promoting quality care (ensuring access to the best available cancer treatment).

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

**COMPLEMENTARY AND ALTERNATIVE MEDICINES:** A group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine. “Complementary medicine” refers to use of CAM together with conventional medicine, such as using acupuncture in addition to usual care to help lessen pain.

**COMPLETE STREETS:** Street design that allows people to get around safely on foot, bicycle or public transportation instead of just by private vehicle.

**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.

**ENVIRONMENTAL HAZARDS:** Any situation or series of events that threatens the surrounding natural environment and adversely affects people’s health. In cancer, we are particularly concerned about environmental hazards that can result in cancer, such as disinfectants, asbestos and carcinogenic chemicals contained in cigarettes.

**ENVIRONMENTAL PUBLIC HEALTH TRACKING:** DHEC-conducted surveillance of environmental hazards in South Carolina through a grant from the CDC. Through the grant, DHEC collects and reports data about environmental hazards (including cancer-causing agents such as asbestos, arsenic and disinfectants) and illness data in different regions of the state.

**FECAL OCCULT BLOOD TEST:** A screening test that detects blood in the stool, which can be used to screen for colorectal cancer.

**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.

**HEALTH LITERACY:** Health literacy is an individual’s ability to read, understand and use healthcare information to make decisions and follow instructions for treatment.

**HUMAN PAPILLOMAVIRUS:** A common virus that can lead to cervical cancers, head and neck cancers and several other types of cancers.

**HEALTH SCIENCES SOUTH CAROLINA:** South Carolina’s state-wide biomedical research collaborative that is committed to transforming South Carolina’s public health and economic wellbeing through research.

**INCIDENCE RATE:** An incidence rate is the number of new cases of a disease that occur in a specific time period 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.

**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 persons aged 65 and over and for certain disabled persons under 65.

**MORBIDITY:** Illness or disease.

**MORTALITY RATES:** A mortality rate is the number of deaths that occur in a specific time period 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 COMPREHENSIVE CANCER NETWORK:** 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.

**OBESE:** Body mass index of 30 or greater.

**OVERWEIGHT:** Body mass index of 25-29.9.

**PALLIATIVE CARE:** Healthcare that focuses on relieving and preventing suffering of patients. Palliative care is used for patients in all disease stages, including those in treatment for curable illnesses, those living with chronic disease, and patients near the end of life.

**PAP TEST:** Sometimes called a 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.

**RAGE AGAINST THE HAZE:** South Carolina's youth-powered tobacco-free movement for ages 13-17, sponsored by SC DHEC.

**SOUTH CAROLINA CENTER FOR COLON CANCER RESEARCH:** A University of South Carolina center that conducts colorectal cancer research and promotes colorectal cancer screening in the state.

**SOUTH CAROLINA CANCER ALLIANCE:** The statewide organization that is responsible for implementation of the South Carolina Comprehensive Cancer Plan.

**SOUTH CAROLINA CENTRAL CANCER REGISTRY:** 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 COMPREHENSIVE CANCER CONTROL PLAN:** This publication is the Cancer Plan for the state of South Carolina. Each state in the United States is funded through the Centers for Disease Control and Prevention to prepare a plan for how they will conduct cancer prevention and control work in their state.

**SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL:** The South Carolina agency that is responsible for ensuring public and environmental health in the state.

**SOUTH CAROLINA SCREENING COLONOSCOPIES OF PEOPLE EVERYWHERE:** A South Carolina colorectal cancer pilot screening program that was funded through the SC Legislative to the Department of Health and Environmental Control to pay for colorectal cancer screening for the uninsured and underinsured.

**SUPPORTER:** Any person who is providing care or assistance for a cancer patient.

**ULTRAVIOLET LIGHT:** UV radiation is part of the light spectrum that reaches the earth from the sun. It has wavelengths shorter than visible light, making it invisible to the naked eye. UV light penetrates the atmosphere and plays a role in development of skin cancer.

**WITNESS PROJECT:** A culturally informed, community-based breast and cervical cancer education program. It is designed to effectively increase awareness, knowledge, and motivation, thereby increasing screening and early-detection behaviors among African-American women and ultimately reducing mortality and morbidity from breast and cervical cancer.

**YOUTH TOBACCO SURVEY:** A national survey conducted through funding from the Centers for Disease Control and Prevention to collect data on tobacco exposure among middle and high school students.

**YOUTH RISK BEHAVIOR SURVEY:** A national survey conducted through funding from the Centers for Disease Control and Prevention to collect data on youth risk exposures among middle and high school students. The survey monitors a number of risks related to cancer such as diet, physical activity, tobacco use, and sun exposure.

## References

1. South Carolina Community Assessment Network. South Carolina Department of Health and Environmental Control; URL: <http://scangis.dhec.sc.gov/scan>; accessed July 29, 2011.
2. National Cancer Institute. Cancer Trends Progress Report: 2009/2010 Update; Bethesda, MD, April 2010.
3. American Cancer Society. Cancer Facts & Figures 2010; Atlanta, GA, 2010.
4. South Carolina Cancer Report Card 2010. South Carolina Cancer Alliance; 2010. URL: [http://www.sccanceralliance.org/resources/report\\_card.aspx](http://www.sccanceralliance.org/resources/report_card.aspx).
5. American Cancer Society. South Carolina Cancer Advocacy Community Promotes Continued Funding for Colonoscopy Program; November 12, 2009; URL: <http://www.sccanceralliance.org/UserFiles/SCOPE%20press%20release%20FINAL.doc>; accessed July 29, 2011.
6. Howlader N, Noone AM, Krapcho M, et al. SEER Cancer Statistics Review, 1975-2008; National Cancer Institute. Bethesda, MD, 2011.
7. Rumberger JS, Hollenbeak CS, Kline D. Potential Costs and Benefits of Smoking Cessation: An Overview of the Approach to State Specific Analysis; Penn State, Harrisburg, PA; April 30, 2010.
8. CDC website. Colorectal Cancer: Basic Information about Colorectal Cancer. URL: [http://www.cdc.gov/cancer/colorectal/basic\\_info](http://www.cdc.gov/cancer/colorectal/basic_info); accessed July 6, 2011.
9. NCI website. NCI Fact Sheet: Cancer Health Disparities; URL: <http://www.cancer.gov/cancertopics/factsheet/disparities/cancer-health-disparities>; accessed July 22, 2011.
10. South Carolina Budget and Control Board Office of Research and Statistics. South Carolina Statistical Abstract; URL: <http://abstract.sc.gov/>.
11. CDC website. Healthy Weight: Introduction; URL: <http://www.cdc.gov/healthyweight/calories>; accessed July 22, 2011.
12. South Carolina Tobacco Collaborative. Addressing the Toll of Tobacco: a 5 Year Plan for the State of South Carolina. 2008-2013.
13. South Carolina Department of Health and Environmental Control. Rage Against the Haze: what's your tobacco IQ?; <http://www.rageagainstthehaze.com>; accessed 07/06/11.
14. Campaign for Tobacco Free Kids. Tobacco Prevention Spending vs. State Tobacco Revenues; Washington, DC. URL: <http://www.tobaccofreekids.org/research/factsheets/pdf/0219.pdf>; accessed 06/29/11.
15. Godar DE, Urbach F, Gasparro FP, Van der Leun JC. UV Doses of Young Adults. Photochemistry and Photobiology; 77(4):453-457, 2003.
16. El Ghissassi, F, Baan R, Straif K et al. A Review of Human Carcinogens: Part D: Radiation; Lancet Oncology; 10(8):751-752, 2009.

17. CDC website. CDC Features: The Preventable Gynecological Cancer; URL: <http://www.cdc.gov/Features/CervicalCancer/>; accessed July 22, 2011.
18. World Cancer Research Fund / American Institute for Cancer Research. Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective. Washington DC: AICR, 2007.
19. Department of Health and Human Services. Healthy People 2010, 2nd. edition. With Understanding and Improving Health and Objectives for Improving Health. 2 volumes. Washington, DC, 2000.
20. Hewitt M and Ganz PA. From Cancer Patient to Cancer Survivor: Lost in Transition; Institute of Medicine, National Research Council. 2005.
21. CDC website. Breast Cancer Screening: Kinds of Screening Tests; URL: <http://www.cdc.gov/Features/CervicalCancer/>; accessed July 22, 2011.
22. CDC. FDA Licensure of Bivalent Human Papillomavirus Vaccine (HPV2, Cervarix) for Use in Females and Updated HPV Vaccination Recommendations from the Advisory Committee on Immunization Practices (ACIP); MMWR: 59(20): 626-629. May 28, 2010.
23. CDC. FDA Licensure of Quadrivalent Human Papillomavirus Vaccine (HPV4, Gardasil) for Use in Males and Guidance from the Advisory Committee on Immunization Practices; MMWR: 59(20): 630-632, May 28, 2010.
24. CDC website. Gynecologic Cancers: Cervical Cancer; URL: <http://www.cdc.gov/cancer/cervical/>; accessed July 22, 2011.
25. US Department of Health and Environmental Control. The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General; Atlanta, GA, 2006.
26. Chaloupka, FJ. Macro-Social Influences: The Effects of Prices and Tobacco Control Policies on the Demand for Tobacco Products. Nicotine and Tobacco Research 1(Suppl 1):S105-109, 1999.
27. Lung Cancer Alliance website. Lung Cancer Facts; URL: <http://www.lungcanceralliance.org/facing/facts.html>; accessed July 6, 2011.
28. American Cancer Society. Cancer Prevention & Early Detection Facts & Figures 2011; Atlanta, GA, 2011.
29. CDC. Prostate Cancer Screening: A Decision Guide for African Americans; CDC publication 99-7692; October 2003.
30. CDC website. Skin Cancer: Prevention; URL: [http://www.cdc.gov/cancer/skin/basic\\_info/prevention.htm](http://www.cdc.gov/cancer/skin/basic_info/prevention.htm); accessed July 6, 2011.

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An electronic copy of the 2011-2015 South Carolina Cancer Control Plan can be downloaded from our website. To join the South Carolina Cancer Alliance or to request a hard copy or copy of the report on a CD, available in limited supply, contact the SCCA.

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