

Alabama Cancer Control Plan 2016-2021



Vision Statement

The Alabama Comprehensive Cancer Control Coalition will strive to eliminate the burden of cancer in Alabama.

The Alabama Comprehensive Cancer Control Coalition will strive to reduce the incidence, morbidity, and mortality of cancer in all Alabamians, and build a sustainable effort for cancer prevention and control in Alabama.

Mission Statement

The mission of the Alabama Comprehensive Cancer Control Coalition (ACCCC) is to develop and sustain an integrated and coordinated approach to reducing cancer incidence, morbidity and mortality, and to improve the quality of life and care for cancer survivors, their families, and their caregivers. ACCCC fulfills its mission by improving access, reducing cancer disparities, endorsing public policy, and implementing the Alabama Comprehensive Cancer Control Plan. This plan addresses primary prevention, secondary prevention, and tertiary prevention which includes survivorship, palliative care, and end-of-life care. The mission fits well with the Centers for Disease Control and Prevention's (CDC) current priority areas, which are to emphasize primary prevention, coordinate early detection and treatment interventions, address the public health needs of cancer survivors, implement policies to sustain cancer control, eliminate disparities to achieve health equity, and measure outcomes and impact through evaluation. ACCCC will coordinate, enhance, and strengthen the efforts of public agencies, academic institutions, and community-based private and public organizations that are concerned with cancer prevention, control, and care in Alabama:

- ACCCC will assist with dissemination and utilization of state registry data as well as the sharing of other information procured by various entities concerned with cancer-related issues through the state.
- ACCCC will continue to work in partnership with the Alabama Department of Public Health (ADPH) and other institutions and organizations to improve cancer prevention, control, and care in Alabama; to evaluate areas of greatest need; and to help coordinate the resources to meet the identified needs.
- ACCCC will educate and advocate for policies about cancer issues in Alabama that will reduce cancer rates and improve outcomes among Alabamians.
- ACCCC will act as a clearinghouse for information on cancer control activities and will partner with other stakeholders to help disseminate information on cancer control activities in Alabama.
- ACCCC will track the progress of implementation of cancer control objectives through annual evaluation.

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From The State Health Officer

I am pleased to introduce the 2016-2021 Alabama Comprehensive Cancer Control Plan as produced by the Alabama Comprehensive Cancer Control Coalition (ACCCC). In keeping with the Coalition's mission, this plan addresses efforts to combat the cancer burden by reducing the incidence and mortality of the disease in Alabama. Each year, thousands of Alabamians are diagnosed with cancer, and thousands more succumb to the disease. Reduction in the rates of cancer in Alabama is achievable through an aggressive plan of action that includes fundamental lifestyle changes such as elimination of tobacco use, increased emphasis on physical activity and proper nutrition, participation in cancer screenings and vaccination, and appropriate and timely treatment.

The ACCCC is a diverse, statewide group of organizations and partners dedicated to implementing this important plan to fight cancer. It is through their hard work that this plan was developed, and it is our hope that this plan becomes the driving force behind cancer control activities in the state. I encourage you to become involved in reducing the cancer burden on Alabama residents. For more information on how you can join the ACCCC to help with this important task, please visit our website at alabamacancercontrol.gov, and find us on Facebook at facebook.com/ALCompCancerCoalition.

Sincerely,



Scott Harris, M.D., M.P.H.
State Health Officer



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INTRODUCTION

Purpose

The 2016–2021 Alabama Comprehensive Cancer Control Plan (Plan) is the result of community stakeholders, leaders, champions, and survivors working together to define the burden of cancer and provide an actionable framework that will guide statewide efforts to address cancer in Alabama. The plan provides goals, objectives, and evidence-based (proven) strategies to assist in a coordinated approach.

The Plan was developed in concert with the ACCCC and included a three-day cancer planning retreat. The retreat provided a forum for data analysis, planning, and drafting the Plan. The retreat included presentations addressing both federal and state perspectives for cancer control strategies and discussions about promising practices currently underway in communities across the state. Participants were assigned work groups based on expertise or interest to develop the Plan's content. Coalition members and work groups included representatives from the Alabama Breast and Cervical Cancer Early Detection Program (ABCCEDP), the FITWAY Alabama Colorectal Cancer Prevention Program (ALCRC), and the Bureau of Prevention, Promotion, and Support. In addition, Alabama communities involved in Communities Putting Prevention to Work were represented. As a result, the plan was developed with ABCCEDP and ALCRC objectives as well as the ADPH Coordinated Chronic Disease State Plan for 2014-2020.

The Plan was developed keeping strategies that address policy (procedures, laws, rules for communities), systems (rules within an organization), and the environment (where we live and work) in mind. In addition, the following principles were followed in the Plan's development:

- Focus on the cancer control continuum which addresses primary prevention, early detection, diagnosis, treatment, survivorship, and end-of-life care.
- Realistic data-driven measures.
- Aligning efforts with CDC's Division of Cancer Prevention and Control.
- Aligning efforts with Healthy People 2020.
- Evidence-based guidelines developed by The Guide to Community Preventive Services.
- Focus on disparities (groups in the population that experience a higher burden of illness, disability, or mortality) and priority populations (groups in the population with special health care needs).

Alabama Cancer Facts & Figures

Alabama Cancer Facts & Figures is an annual publication produced by the Alabama Statewide Cancer Registry (ASCR) in collaboration with the American Cancer Society (ACS). Alabama Cancer Facts & Figures 2016 was developed to assist cancer control organizations, health professionals, legislators, donors, community groups, and others who are working to reduce the cancer burden throughout Alabama. The overall goal of the publication is to facilitate cancer control planning that is based on data and directed toward clear outcomes. It provides accurate and timely cancer incidence and mortality data by county, gender, and race as well as cancer risk factor information, to key Alabama stakeholders at all levels. The document also served as an essential planning and evaluation tool for the ACCCC Plan.

Cancer Rates and Trends in Alabama

Incidence Rates:

In Alabama, there will be an estimated 26,160 Alabamians, or 70 per day, who receive a diagnosis of cancer. Of those 26,160 new cases, the top five cancers are lung cancer (4,220 cases), female breast cancer (3,960 cases), prostate cancer (2,950 cases), and colon and rectal cancer (2,190 cases) – in addition to melanoma (1,320 cases). Males in Alabama had a higher cancer incidence rate from 2009-2013 than females with a rate of 550.1 per 100,000 versus 397.0 per 100,000. Among males, black males had a higher cancer incidence rate than white males with a rate of 589.9 per 100,000 versus 534.3 per 100,000 from 2009-2013. Among females,

white females had a higher cancer incidence rate than black females with a rate of 420.9 per 100,000 versus 379.9 per 100,000 during the same time period.

Top 5 Newly Diagnosed Cancer Cases in Alabama Expected in 2017:

- Lung Cancer (4,220 cases)
- Female Breast Cancer (3,960 cases)
- Prostate Cancer (2,950 cases)
- Colon and Rectal Cancer (2,190 cases)
- Melanoma (1,320 cases)

Top 5 Cancer Deaths in Alabama Expected in 2017:

- Lung Cancer (3,200 deaths)
- Colon and Rectal Cancer (940 deaths)
- Pancreas (710 deaths)
- Female Breast Cancer (650 deaths)
- Prostate Cancer (450 deaths)

Mortality Rates

In 2017, an estimated 10,530 Alabamians, or 29 per day, died from cancer. Lung cancer accounts for approximately 30.4 percent of all estimated cancer deaths (ACS, ADPH 2017). Males in Alabama had a higher cancer mortality rate than females from 2005-2014 with a rate of 245.8 per 100,000 versus 152.4 per 100,000. Among males, black males had a higher cancer mortality rate than white males with a rate of 299.4 per 100,000 versus 235.6 per 100,000 from 2005-2014. Among females, black females had a higher cancer mortality rate than white females with a rate of 165.7 per 100,000 versus 149.3 per 100,000 during the same time period.

Genetic Testing

The risk factors for cancer are many and varied, and inherited genetic mutations play a major role in 5 to 10 percent of all cancers. When these mutations are identified early, patients are able to work with their healthcare providers to take crucial steps toward care and treatment. Many of those affected by genetic cancer syndromes do not know that genetic testing is an option. Both patients and healthcare providers need the resources and education to know when genetic testing is necessary, based on family history and other risk factors (CDC). ACCCC supports increased awareness and utilization of genetic testing for health care providers, communities, patients, and caregivers.

Screening Guidelines

Many health organizations, including ACS and the U.S. Preventive Services Task Force (USPSTF), recommend regular cancer screening related to age and frequency for at-risk populations. This document follows USPSTF screening recommendations as the CDC utilizes USPSTF as a standard of care. The USPSTF guidelines can be found on page 16 of this plan.

Disparities in Alabama

Differences in incidence and mortality rates between specific populations are called health disparities. Factors that contribute to disparities are socioeconomic factors such as years spent in school, how much money a person earns, whether a person has a job, lack of access to health care due to limited English proficiency, worry about a screening test, inability to take a day off from work to go to the doctor, or lack of transportation. Environments may influence behaviors that lead to unhealthy eating, lack of physical activity, use of tobacco, and fear of the medical community. An example of a disparity in cancer status would be that black women are more likely to die from breast cancer than white women in Alabama, although white women are diagnosed with breast cancer more frequently than black women.

The incidence and mortality rates of cancer show disparities among minority and rural populations within Alabama. These populations are more likely to experience the following: being diagnosed with and dying from preventable cancers, being diagnosed with late-stage

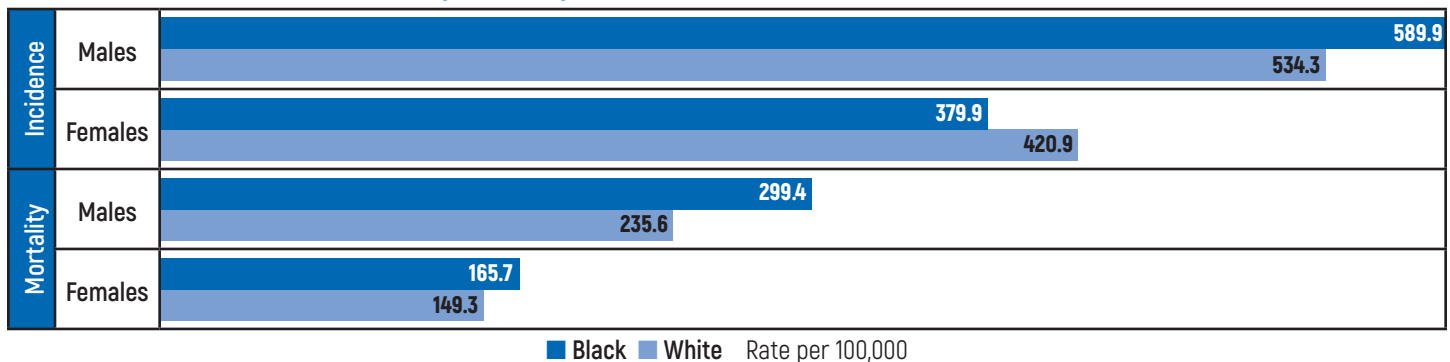
disease for cancers detectable through screening at an early stage, receiving no treatment or treatment that does not meet current accepted standards of care, and suffering from cancer without the benefit of pain control and other palliative care.

In Alabama, minorities and those living in rural areas are more likely to:

- Be diagnosed with and/or die from preventable cancers.
- Be diagnosed when the cancer has metastasized (spread) to other parts of the body or when chances of survival are greatly diminished.
- Receive no treatment for their cancer.
- Receive care not appropriate for their cancer.
- Not receive any pain medication for their cancer or other treatments that would help them feel better.

The goals of the ACCCC include identifying and improving the health equity of disparate populations in Alabama affected with cancer, such as older individuals, minority groups, groups with lower income, education and health literacy, rural populations, and non-English speaking populations. Strategies should enhance data collection and reporting on differences in incidence, prevalence, mortality and burden of cancer, and related adverse conditions across disparate populations. Incidence and mortality rate targets outlined in this document apply to disparate populations as well as the general population. The ACCCC is committed to ensuring health equity by closely monitoring appropriate trends.

All Sites Cancer Incidence and Mortality Rates,* by Sex and Race, Alabama



*Malignant only, with the exception of in situ bladder cancer, per 100,000 and age-adjusted to the 2000 US standard population. Source: Alabama Statewide Cancer Registry, 2017. Cancer Incidence (2009-2013), Cancer Mortality (2005-2014).

Patient Navigation

Patient navigators help patients improve their access to and understanding of their health care. The importance of patient navigation is increasingly emphasized, particularly for the National Breast and Cervical Cancer Early Detection Program and the National Colorectal Cancer Prevention Program, as a strategy to overcome the barriers patients encounter in obtaining timely and quality medical care; which includes access to screening. While patient navigation can be helpful to any individual screened for or diagnosed with cancer, it is a particularly important tool in decreasing health disparities in groups that have difficulty accessing healthcare services or limited knowledge of the healthcare system.

Types of navigation can vary depending on the scope of the program. For instance, outreach navigation involves patient recruitment and ends with preventive screenings; diagnostic navigation starts with abnormal findings and continues through diagnostic resolution; and treatment navigation begins with the cancer diagnosis and continues through completion of treatment.

The ACCCC supports increased awareness and utilization of patient navigation by healthcare providers, communities, patients, and caregivers to help achieve the goals and objectives outlined in the Plan.

Primary Prevention

Anyone can get cancer. The best way to fight cancer is to prevent it. Although the risk for cancer increases with age, healthy choices can reduce the risk of getting cancer. Risk factors for cancer include use of tobacco, exposure to radon, poor nutrition, lack of physical activity, being overweight or obese, exposure to sunlight or indoor tanning, and exposure to viruses such as Human

Papillomavirus (HPV) and Hepatitis B (HBV). ACS estimates that cancers that are controllable through prevention and early detection will account for half of all new cancer cases diagnosed.

The ACS recommends that all individuals take control of their health and reduce their cancer risk by doing the following:

- Avoiding tobacco (cigarettes, cigars, cigarillos, pipes, dip, or chewing tobacco).
- Maintaining a healthy weight.
- Engaging in regular physical activity.
- Eating healthy with plenty of fruits and vegetables.
- Limiting alcohol.
- Using sunscreen or wearing protective clothing.
- Knowing risk factors and family medical history.
- Having regular check-ups and recommended cancer screening tests.

Primary prevention of cancer should promote changes in policy, systems, and the environment that encourage Alabamians to make healthy lifestyle choices – to quit using tobacco, eat better, get more physical exercise, and avoid overexposure to ultraviolet light.

Secondary Prevention

Finding cancer in its early stages, before signs or symptoms are present, leads to improved outcomes for almost all types of cancer. Early detection of cancer enables treatment to be started at the earliest stage possible, significantly improving survival. Detection of cancer in an early, asymptomatic stage greatly improves available treatment options for many cancers.

Cancer screening is checking your body for cancer before you have symptoms; this is known as secondary prevention. Finding cancer as soon as possible, even before symptoms are present, makes it easier to fight almost all types of cancer. Early detection of cancer allows treatment to start much sooner so chances of surviving are higher. Also, if cancer is found at its earliest stages, more treatments may be available and the chances of being cured are higher. Following CDC guidelines and getting screening tests early can find breast, cervical, and colon cancers, and possibly prostate or lung cancers when treatment is most effective.

Public education is extremely important in the role of early detection. Alabamians must be aware of and have access to proven cancer screening methods in order to benefit from early detection. Health care professionals play an important role by providing information about cancer screening services, encouraging their patients to participate in routine screening procedures, and systematically integrating the established guidelines in a routine standard of care.

Secondary prevention supports policy, system, and environmental changes that ensure improved access to screening tests with appropriate follow-up after testing. Making cancer screening services readily available and accessible to all Alabamians is essential for reducing late-stage cancer incidence and mortality in the state.

Tertiary Prevention

Tertiary prevention begins after diagnosis and continues during the treatment of cancer. The goal of cancer treatment is to cure cancer, control the disease, or reduce symptoms of the disease. Treatment plans vary from one patient to another; plans are dependent on the type of cancer, as well as the stage of the disease (severity of cancer, and whether it has spread). Physicians may also consider a patient's age and general health. Treatment plans may change over time. A patient's cancer may be responsive to one treatment or a combination of treatments.

Cancer treatment plans commonly include:

- Surgery.
- Radiation therapy (high-energy radiation like X-rays to shrink and kill cancer cells).

- Chemotherapy (medicines or drugs to treat cancer).
- Biological therapy (using living organisms like bacteria to stimulate the body's immune system to fight cancer).
- Hormonal therapy (treatment that slows or stops the growth of cancers such as breast and prostate cancer).

Clinical trials are an important option in cancer treatment. Clinical trials are health-related studies that research new medical strategies to determine if they are safe and effective for people who have cancer.

The patient's treatment plan should be made in conjunction with the patient's cancer physician(s). Risks and benefits of each treatment, in addition to side effects, should be considered to determine the most effective treatment plan.

Tertiary prevention also includes palliative care, which includes the following:

- Survivorship plans (a complete record of a person's cancer history, treatments given, need for future checkups and cancer tests, long term effects of treatment, and ideas for staying healthy).
- Symptom management (prevent or treat, as soon as possible, the symptoms of a disease, side effects caused by treatment of a disease, and address the mental, social and spiritual needs of the patient).
- Pain management (making sure a patient is in as little pain as possible from the cancer or cancer treatments).
- Advanced directives or living will (a legal document in which a person decides what they want done medically if they are unable to make decisions for themselves because of their illness).
- End-of-life care (when treatment is no longer working or wanted, the cancer is incurable, and the patient will die).

Tertiary prevention should promote changes in policy, systems, and the environment by ensuring:

- Patients receive treatment best suited for them in proximity to where they work and live.
- Patients are educated about all of their treatment options.
- Patients have an advanced directive so that their wishes for treatment are known.
- Patients have access to end-of-life care when treatment no longer works or is no longer wanted by the patient.

PRIMARY PREVENTION: NUTRITION, PHYSICAL ACTIVITY AND HEALTHY WEIGHT

GOAL: Reduce cancer risk by maintaining a healthy weight, eating a healthy diet, and being physically active

Objectives:

- Increase awareness of the link between being overweight or obese and an increased risk of cancers.
- Promote moderate to vigorous activity in addition to limiting sedentary behavior.
- Promote a healthy diet which emphasizes vegetables, whole grains, fruits, and nuts, while limiting processed foods, red meat, food with high fat and sugar content.
- Promote limiting alcohol intake.

Important Fact:

Excess body weight contributes to as many as 1 out of 5 of all cancer-related deaths.

Strategic Actions

Implement policy, systems, environmental changes, as well as health promotion activities to address healthy behaviors through evidence-based strategies which include:

- Promoting weight loss or maintenance coaching or counseling in community settings.
- Promoting worksite programs to assist employees who are overweight or obese.
- Promoting limiting alcohol intake to no more than 2 drinks per day for men and 1 drink per day for women.
- Promoting social support interventions in community settings.
- Promoting community-scale and street-scale urban design and land use policies.
- Supporting enhanced school-based physical education.
- Promoting point-of-decision prompts to encourage use of stairs.
- Implementing evidence-based school campus and community programs that increase youth adoption of healthy nutrition and regular physical activity.
- Implementing evidence-based employment site and community programs that increase adult adoption of healthy nutrition and regular physical activity.
- Improving health professional knowledge, practice behaviors, and systems support to provide prescriptions for nutrition and physical activity, referrals to community programs, or referrals to a dietitian.
- Addressing disparities by increasing access to healthy foods, safe places to exercise, and awareness of the link between weight/nutrition/physical activity and cancer risk.
- Conducting awareness campaigns regarding cancer, healthy diets, and the importance of reading food labels.

| Measures | Baseline | 2021 Target |
|---|-----------------------|-------------|
| % of adults age 18 and older who report being overweight based on BMI | 33.0% (BRFSS 2015) | 30.0% |
| % of adults age 18 and older who report being obese based on BMI | 35.6% (BRFSS 2015) | 30.0% |
| % of youth in grades 9-12 who report being overweight based on BMI | 17.5% (YRBS 2015) | 12.0% |
| % of youth in grades 9-12 who report being obese based on BMI | 16.1% (YRBS 2015) | 11% |
| % of adults age 18 and older who consume vegetables less than 1 time daily | 27.8% (BRFSS 2015) | 22% |
| % of adults age 18 and older who consume fruit less than 1 time daily | 48.3% (BRFSS 2015) | 40.0% |
| % of youth in grades 9-12 who report not eating vegetables during the past 7 days | 10.4% (YRBS 2015) | 8.0% |
| % of youth in grades 9-12 who report not eating fruit during the past 7 days | 10.2% (YRBS 2015) | 8.0% |
| % of 9-12th graders in Alabama who report being physically active at least 60 minutes per day on five or more days per week | 58.7% (YRBS 2015) | 63% |
| % of Alabama adults age 18 and older who engage in physical activity | 68.1% (BRFSS 2015) | 70% |

*BMI is a measure of adiposity derived from height and weight and is roughly correlated with body fat. Healthy adult BMI ranges from 18.5 to 24.9. Overweight BMI is 25 to 29.9, while obese adults have a BMI of 30 or above. For youth, Overweight is defined as BMI-for-age. A child's weight status is determined using an age- and sex-specific percentile for BMI rather than the BMI categories used for adults. Obesity for youth is defined as >=95 percentile for body mass index based on 2000 CDC growth charts.

PRIMARY PREVENTION: VACCINATION AGAINST CANCER

GOAL: Increase vaccination rate for vaccines shown to reduce the risk of cancer

Objectives:

- Increase percentage of adolescents who have initiated and completed the Human Papillomavirus (HPV) vaccine series for prevention of cervical cancer and possibly oral cancer and anal cancer.
- Promote Hepatitis B (HBV) vaccine for all children as well as at-risk adults to reduce the risk of hepatitis and liver cancer.

Important Fact:

HPV vaccine is available for females and males and protects against HPV types that most often cause cervical, vaginal, vulvar, oropharyngeal, and anal cancer. Recommendations are for females and males age 9-14 (two doses) and females and males age 15-26 (three doses).

Important Fact:

The HBV vaccine protects against Hepatitis B, a liver disease caused by the Hepatitis B virus. The HBV vaccine is available for all age groups to prevent HBV infection.

Strategic Actions

Implement policy, systems, environmental changes, as well as health promotion activities to promote vaccinations through evidence-based strategies. Selected strategies for Alabama include:

- Improving reporting of HPV vaccination in the ADPH ImmPRINT system (Immunization Patient Registry With Internet Technology).
- Improving health professional knowledge,

practice behaviors, and systems support related to provision of or referral for immunizations for HPV and HBV.

- Addressing disparities in care related to counseling and provision of vaccinations.
- Increasing access to HPV and HBV immunizations and public awareness of relationships to cervical cancer and other types of cancer.

| Measures | Baseline | 2021 Target |
|---|-------------------|-------------|
| % of adolescents (age 13-17) who have initiated HPV vaccine series as of October 2017 | 40% (ImmPRINT) | 80% |
| % of adolescents (age 13-17)s who are up-to-date with HPV vaccine series as of October 2017 | 24% (ImmPRINT) | 80% |

PRIMARY PREVENTION: LUNG CANCER

GOAL: Reduce the incidence and mortality related to lung cancer

Objectives:

- Decrease the percentage of adults who smoked cigarettes in the last year.
- Decrease the percentage of youth who smoked cigarettes or spit tobacco in the last year.
- Reduce exposure to secondhand smoke.
- Increase the knowledge of radon in high-risk counties as a risk factor for lung cancer.

Important Fact:

Lung cancer is the leading cause of cancer death in Alabama. More people will die from lung cancer than breast, colon, and prostate cancers combined. Cigarette smoking is the primary risk factor for lung cancer, with an estimated 80 percent of deaths in the U.S. attributable to smoking. Other major risk factors include exposure to secondhand smoke, radon, and asbestos. The only recommended screening test for lung cancer is a low-dose CT scan.

Important Fact:

E-cigarette aerosol or vaping is not harmless. It can contain harmful and potentially harmful constituents including nicotine. Nicotine exposure during adolescence can cause addiction and can harm the developing adolescent brain.

Strategic Actions

Implement policy, systems, environmental changes, as well as health promotion activities to address lung cancer through evidence-based strategies. Selected strategies for Alabama include:

- Advocating for smoke-free policies at the local and state level to protect the public from the harmful effects of secondhand exposure and to create communities that support tobacco-free living.
- Restricting minors access to tobacco products which includes community mobilization with additional interventions.
- Advocating for an increase in the unit price of tobacco products.
- Implementing provider reminder systems and provider education.
- Providing reduced-cost cessation therapies.
- Promoting 1-800-QUIT-NOW toll-free hotline to offer evidence-based tobacco treatment to tobacco users.
- Promoting referral to 1-800-QUIT-NOW toll-free hotline by primary care physicians.
- Promoting 100% smoke free/tobacco free policies to reduce secondhand smoke focusing on public institutions, public housing, and campus communities.
- Promoting the use of radon testing in high-risk counties.
- Improving health professional knowledge, practice behaviors, and systems support for referral to or provision of tobacco cessation services.
- In addition to primary prevention, increasing health care provider and patient knowledge of lung cancer screening tests for individuals with a history of heavy smoking, who smoke now or have quit within the past 15 years and are between 55 and 80 years old.
- Conducting mass media education campaigns in conjunction with other interventions.
- Conducting awareness campaigns in high-risk counties regarding risk of cancer from radon.
- Identifying and decreasing disparities in care related to lung cancer.

Lung Cancer Incidence and Mortality Rates*, by Sex and Race, Alabama

| Category | Sex | Rate per 100,000 | |
|-----------|---------|------------------|-------|
| | | Black | White |
| Incidence | Males | 100.7 | 94.8 |
| | Females | 38.6 | 58.0 |
| Mortality | Males | 87.4 | 81.6 |
| | Females | 30.8 | 42.8 |

■ Black ■ White Rate per 100,000
Malignant only, per 100,000 and age-adjusted to the 2000 US standard population. Source: Alabama Statewide Cancer Registry, 2017. Cancer Incidence [2009-2013], Cancer Mortality [2005-2014].

| Measures | Baseline | 2021 Target |
|--|---------------------------------|-------------------------|
| % of youth grade 9-12 who report smoking cigarettes last year | 14% (YRBSS 2015) | 10% |
| % of adults age 18 and older who report smoking cigarettes last year | 21.4% (BRFSS 2015) | 18% |
| Age-adjusted mortality rate, lung cancer | 54.0 per 100,000 (ASCR 2014) | 48.6 per 100,000 (>10%) |

PRIMARY PREVENTION: SKIN CANCER

GOAL: Reduce the risk of skin cancer by decreasing exposure to ultraviolet light

Objectives:

- Increase awareness of cancer risk related to UV exposure by sunlight or indoor tanning.
- Increase the utilization of sun safety behaviors related to UV exposure.
- Reduce exposure to indoor tanning by adolescents.

Important Fact:

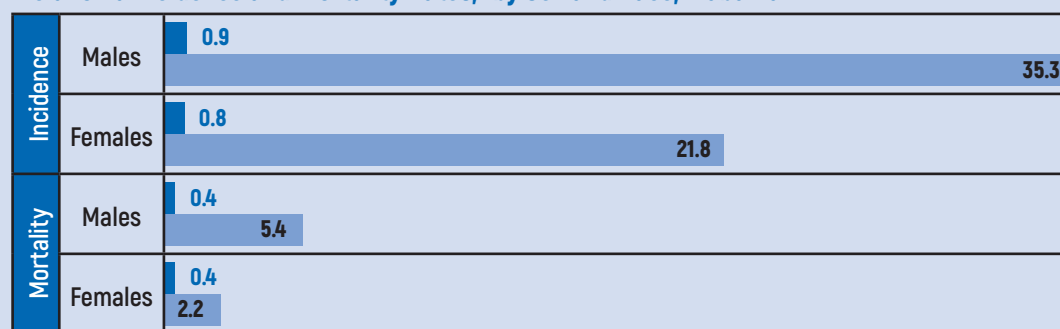
Chronic sun exposure, whether from natural light or indoor tanning, is the leading cause of skin cancer. Exposure to UVA and UVB radiation from the sun, tanning beds, or sun lamps is the major cause of all three types of skin cancer—melanoma, squamous cell carcinoma, and basal cell carcinoma.

Strategic Actions

Implement policy, systems, environmental changes, as well as health promotion activities to address skin cancer through evidence-based strategies. Selected strategies for Alabama include:

- Providing shade structures in Alabama schools.
- Conducting educational campaigns in primary school settings and outdoor recreation settings.
- Promoting dangers of indoor tanning which include tanning bed, booth, or sunlamp.
- Promoting sun safety behaviors such as use of sunscreen, clothing that covers your arms and legs, a hat, sunglasses, and staying in the shade, especially during midday hours; as well as the dangers of sunburn, especially early in life.
- Advocating for stronger policy restrictions to indoor tanning for minors under the age of 18.

Melanoma Incidence and Mortality Rates,* by Sex and Race, Alabama



■ Black ■ White Rate per 100,000

Malignant only, per 100,000 and age-adjusted to the 2000 US standard population. Source: Alabama Statewide Cancer Registry, 2017. Cancer Incidence (2009-2013), Cancer Mortality (2005-2014).

| Measures | Baseline | 2021 Target |
|---------------------------------------|------------------------------|-------------------------|
| Age-adjusted incidence rate, melanoma | 22.2 per 100,000 (ASCR 2014) | 20.0 per 100,000 (>10%) |

SECONDARY PREVENTION: BREAST CANCER

GOAL: Reduce incidence of late stage breast cancer and breast cancer mortality

Objective:

Increase appropriate screening and early detection of breast cancer.

Important Fact:

Genetic counseling and testing enable women to learn if a family history of breast cancer is due to an inherited gene mutation. Women with a BRCA 1 or BRCA 2 have a significantly increased risk of breast cancer. One percent of breast cancer is among men.

Strategic Actions

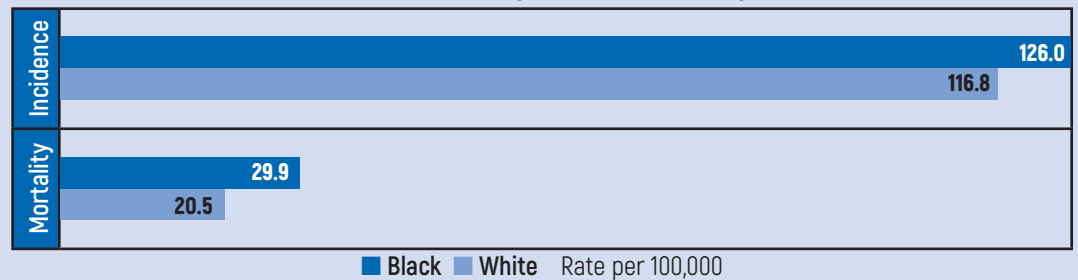
Implement policy, systems, environmental changes, as well as health promotion activities to address breast cancer through evidence-based strategies. Selected strategies for Alabama include:

- Improving health professional knowledge of screening guidelines, practice behaviors, and systems support for breast cancer screening services.
- Increasing utilization of patient navigation programs.
- Promoting strategies that support patients

to establish a medical home.

- Providing group and one-on-one education regarding risk factors, screening guidelines, and the importance of early detection of cancer.
- Focusing efforts to identify and provide mammograms to never or rarely screened "hard to reach" women.
- Identifying and decreasing disparities in care related to breast cancer.
- Promoting and supporting partner organizations that focus efforts on minority populations.

Female Breast Cancer Incidence and Mortality Rates*, Females, by Race, Alabama



Malignant only, per 100,000 and age-adjusted to the 2000 US standard population. Source: Alabama Statewide Cancer Registry, 2017. Cancer Incidence (2009-2013), Cancer Mortality (2005-2014).

| Measures | Baseline | 2021 Target |
|--|------------------------------------|-------------------------------|
| % of women 40 and older who report having had a mammogram in the past two years | 72.7% (BRFSS 2015) | 75% |
| Age-adjusted incidence rate breast cancer cases that are diagnosed at late stage | 39.0 per 100,000 (ASCR 2014) | 37.1 per 100,000 [>5%] |
| Age-adjusted mortality rate for female breast cancer | 22.7 per 100,000 (ASCR 2014) | 20.4 per 100,000 [>10%] |

SECONDARY PREVENTION: CERVICAL CANCER

GOAL: Reduce incidence of late stage cervical cancer and cervical cancer mortality

Objective:

Increase appropriate screening and early detection of cervical cancer.

Important Fact:

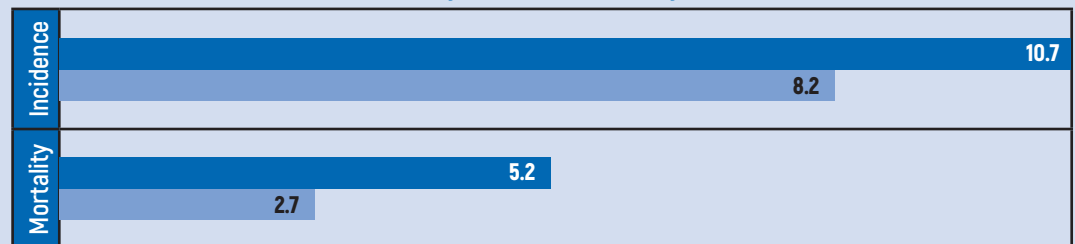
Cervical cancer is highly preventable due to screening tests and the vaccine to prevent Human Papillomavirus (HPV) infections. When cervical cancer is found early, it is highly treatable and associated with long survival and good quality of life.

Strategic Actions

Implement policy, systems, environmental changes, as well as health promotion activities to address cervical cancer through evidence-based strategies. Selected strategies for Alabama include:

- Improving health professional knowledge of screening guidelines, practice behaviors, and systems support for cervical cancer screening services.
- Increasing utilization of patient navigation programs.
- Promoting strategies that support patients to establish a medical home.
- Reducing out-of-pocket costs.
- Conducting a small media awareness campaign about the importance of early detection of cancer.
- Providing group and one-on-one education regarding risk factors, screening guidelines, and the importance of early detection of cancer.
- Focusing efforts to identify and provide cervical cancer screening to never or rarely screened "hard to reach" women.
- Identifying and decreasing disparities in care related to cervical cancer.
- Promoting and supporting partner organizations that focus efforts on minority populations.

Cervical Cancer Incidence and Mortality Rates*, Females, by Race, Alabama



■ Black ■ White Rate per 100,000

Malignant only, per 100,000 and age-adjusted to the 2000 US standard population. Source: Alabama Statewide Cancer Registry, 2017. Cancer Incidence (2009-2013), Cancer Mortality (2005-2014).

| Measures | Baseline | 2021 Target |
|--|-----------------------------|------------------------|
| % of women 18 and older who report having had a Pap test in the past three years | 78.3% (BRFSS 2015) | 80% |
| Age-adjusted incidence rate of cervical cancer that are diagnosed at late stage | 4.0 per 100,000 (ASCR 2014) | 3.8 per 100,000 (>5%) |
| Age-adjusted mortality rate for cervical cancer | 3.0 per 100,000 (ASCR 2014) | 2.7 per 100,000 (>10%) |

SECONDARY PREVENTION: COLON AND RECTAL CANCER

GOAL: Reduce incidence of late stage colon and rectal cancer and colon and rectal cancer mortality

Objective:

Increase appropriate screening and early detection of colon and rectal cancer.

Important Fact:

Colon and rectal cancer almost always develops precancerous polyps which are abnormal growths in the colon and rectum. Screening can find the precancerous polyps which can be removed before turning into cancer.

Strategic Actions

Implement policy, systems, environmental changes, as well as health promotion activities to address colon and rectal cancer through evidence-based strategies. Selected strategies for Alabama include:

- Promoting provider practices and system change to include client reminders, reduction of structural barriers to access, provider assessment and feedback, and provider reminder or recall systems.
- Improving health professional knowledge of screening guidelines, practice behaviors, and systems support for colon and rectal cancer screening services to include appropriate follow-up for individuals who receive abnormal colon and rectum cancer screening results.
- Encouraging worksite cultures that offer benefits and programs that facilitate detecting colon and rectal cancer at its earliest stages.
- Increasing utilization of patient navigation programs.
- Promoting strategies that support patients to establish a medical home.
- Reducing out-of-pocket costs.
- Conducting a small media awareness campaign about the importance of early detection of colon and rectal cancer.
- Providing group and one-on-one education regarding risk factors, screening guidelines, and the importance of early detection of cancer.
- Providing colon cancer education and outreach activities that dispel myths, emphasize early detection, and share alternative screening methods.
- Identifying and decreasing disparities in care related to colon and rectal cancer.
- Promoting and supporting partner organizations that focus efforts on minority populations.

Colorectal Cancer Incidence and Mortality Rates,* by Sex and Race, Alabama

| Incidence | Sex | Rate per 100,000 | |
|-----------|---------|------------------|-------|
| | | Black | White |
| Incidence | Males | 65.1 | 50.1 |
| | Females | 44.8 | 35.3 |
| Mortality | Males | 30.6 | 19.7 |
| | Females | 19.4 | 12.8 |

■ Black ■ White Rate per 100,000

Malignant only, per 100,000 and age-adjusted to the 2000 US standard population. Source: Alabama Statewide Cancer Registry, 2017. Cancer Incidence (2009-2013), Cancer Mortality (2005-2014).

| Measures | Baseline | 2021 Target |
|--|------------------------------|-------------------------|
| % of Alabama men and women, age 50-75 who report having had appropriate colon and rectal cancer screening* | 64.6% (BRFSS 2014) | 70% |
| Age adjusted incidence rate, colorectal cancer diagnosed at late stage | 23.0 per 100,000 (ASCR 2014) | 21.9 per 100,000 (>5%) |
| Age adjusted incidence rate, colorectal cancer | 44.0 per 100,000 (ASCR 2014) | 41.8 per 100,000 (>5%) |
| Age adjusted mortality rate, colon and rectum cancer | 16.4 per 100,000 (ASCR 2014) | 14.8 per 100,000 (>10%) |

*Among adults aged 50-75 the proportion who received one or more of the recommended CRC tests within the recommended time interval. Respondents must have met one of the following: Had blood stool test within the past year; Had a sigmoidoscopy within the past 5 years and a blood stool test within the past 3 years; Received a colonoscopy within the past 10 years; Received home FOBT within the past 3 years and had a sigmoidoscopy within the past 5 years.

SECONDARY PREVENTION: PROSTATE CANCER

GOAL: Reduce prostate cancer mortality

Objective:

Promote education about prostate cancer screening options.

Important Fact:

Prostate cancers usually grow slowly. Most men with prostate cancer are older than 65 years and do not die from the disease. Prostate cancer screening benefits and risks should be discussed with your primary care physician.

Strategic Actions

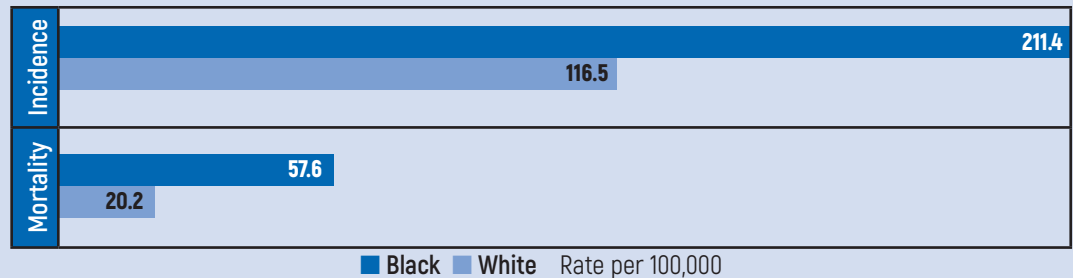
Implement policy, systems, environmental changes, as well as health promotion activities to address prostate cancer through evidence-based strategies. Selected strategies for Alabama include:

- Improving health professional knowledge of screening guidelines, practice behaviors, and systems support for prostate cancer screening services.
- Improving health care provider and public knowledge about the higher risk for African

Americans regarding prostate cancer and new and emerging treatment alternatives.

- Promoting discussion between primary care providers and their patients about the benefits and risks associated with prostate cancer screening.
- Identifying and decreasing disparities in care related to prostate cancer.
- Promoting and supporting partner organizations that focus efforts on minority populations.

Cervical Cancer Incidence and Mortality Rates*, Females, by Race, Alabama



Malignant only, per 100,000 and age-adjusted to the 2000 US standard population. Source: Alabama Statewide Cancer Registry, 2017. Cancer Incidence (2009-2013), Cancer Mortality (2005-2014).

| Measures | Baseline | 2021 Target |
|---|------------------------------|------------------------|
| Age adjusted mortality rate for prostate cancer | 22.0 per 100,000 (ASCR 2012) | 20.9 per 100,000 (>5%) |

TERTIARY PREVENTION: CLINICAL TRIALS

GOAL: Increase participation in cancer clinical trials

Objectives:

- Promote awareness of clinical trials in the state.
- Promote access to clinical trials in the state.
- Increase enrollment of minority populations in clinical trials.

Important Fact:

The biggest barrier to advancing treatments for cancer through clinical trials, is the shortage and diversity of individuals who take part. According to the American Cancer Society, fewer than 5 percent of adults with cancer will participate in drug trials. Approvals for new forms of treatment are delayed due to the low number of participants.

Strategic Actions

Selected strategies for Alabama include:

- Address barriers to participation such as low literacy, cost, lack of awareness and invitation, language differences, and mistrust.
- Promote provision of resources to help individuals make informed decisions about clinical trials.
- Increase awareness about the importance of diversity in clinical research to ensure that the discoveries, treatments, interventions, and prevention strategies are relevant to those populations.

TERTIARY PREVENTION: SURVIVORSHIP

GOAL: Improve quality of life for cancer survivors and their families

Objectives:

- Promote individualized survivorship care plans for every cancer patient.
- Support integration of palliative care as a routine part of cancer care.
- Improve use of advance directives as part of a cancer treatment plan.
- Promote timely and appropriate referral to hospice care.
- Promote resources available to current cancer survivors.

Important Fact:

An advance directive does not affect the type or quality of care while a cancer patient is able to voice decisions. It only becomes a factor when the patient cannot voice decisions.

Hospice care begins after treatment of the disease is stopped and when it is clear that the person is not going to survive the illness.

Strategic Actions

Selected strategies for Alabama include:

- Identify, disseminate, and, if needed, developed evidence-based videos regarding survivorship topics for healthcare professionals and cancer survivors. Topics include survivorship care plans, nutrition, depression, cancer and the workplace, chemo brain, communication with healthcare team, and social relationships after cancer.
- Empower primary care providers to address cancer related needs by promoting coordination of care among primary care providers and oncologists.
- Increase knowledge and initiation of survivorship care planning including cancer history, treatments given, the need for future checkups and cancer tests, possible long-term effects of treatment, and recommendations for staying healthy.
- Identify, develop and promote resources available for current cancer survivors that address improving physical health, mental health, and addressing work and financial concerns.
- Promote awareness in healthcare professionals and cancer patients about the role of palliative therapy from diagnosis through the balance of a patient's life which includes pain control, psychosocial, and spiritual support.
- Promote the importance of cancer patients completing advance directives such as living wills and power of attorney in the event they are incapacitated to ensure their own healthcare decisions are carried out, such as accepting or refusing medical treatment.
- Promote and support systems changes that strengthen referral to hospice for end-of-life care through partnerships with providers and community members.
- Promote cancer survivorship training for health care professionals, health profession students, and community health workers that address care plans, palliative care, advance directives, hospice care, and patient navigation.

USPSTF: CANCER SCREENING RECOMMENDATIONS FOR ADULTS

| USPSTF Grade Meanings and Suggestions for Practice | | |
|--|--|---|
| Grade | Definition | Suggestions for Practice |
| A | The USPSTF recommends the service. There is high certainty that the net benefit is substantial. | Offer/provide this service. |
| B | The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial. | Offer/provide this service. |
| C | The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small. | Offer/provide this service for selected patients depending on individual circumstances. |
| I | The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits. | Discourage the usage of this service. |
| D | The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined. | Read the Clinical Considerations section of the USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms. |

Lung Cancer

The USPSTF recommends annual screening for lung cancer with low-dose computed tomography in adults aged 55 to 80 years who have a 30-pack year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery. **Grade: B Recommendation.**

Breast Cancer

USPSTF recommendations are:

- Biennial mammography screening for women aged 50 to 74 years. **Grade: B Recommendation.**
- The decision to start regular, biennial mammography screening before the age of 50 years should be an individual one and take patient context into account, including the patient's values regarding specific benefits and harms. **Grade: C Recommendation.**
- Current evidence is insufficient to assess the additional benefits and harms of screening mammography in women 75 years or older. **Grade: I Statement.**
- Current evidence is insufficient to assess the benefits and harms of digital breast tomosynthesis (DBT) as a primary screening method for breast cancer in all women. **Grade: I Statement.**
- Current evidence is insufficient to assess the balance of benefits and harms of adjunctive screening for breast cancer using breast ultrasonography, magnetic resonance imaging, DBT, or other methods in women identified to have dense breasts on an otherwise negative screening mammogram. **Grade: I Statement.**

Colorectal Cancer and Polyps

USPSTF recommendations are:

- Screening for colorectal cancer (CRC) using fecal occult blood testing, sigmoidoscopy, or colonoscopy, in adults, beginning at age 50 years and continuing until age 75 years. The risks and benefits of these screening methods vary. **Grade: A Recommendation.**
- No routine screening for colorectal cancer in adults age 76 to 85 years. Overall health and prior screening history may support colorectal cancer screening in an individual patient. **Grade: C Recommendation.**
- Adults in the 76 to 85 years of age group who have never been screened for CRC are more likely to benefit. **Grade: C Recommendation.**
- The USPSTF recommends screening would be most appropriate among adults who 1) are healthy enough to undergo treatment if colorectal cancer is detected and 2) do not have comorbid conditions that would significantly limit life expectancy. **Grade: C Recommendation.**

Cervical Cancer

USPSTF recommendations are:

- Screening for cervical cancer in women age 21 to 65 years with cytology (Pap smear) every 3 years or, for women age 30 to 65 years who want to lengthen the screening interval, screening with a combination of cytology and HPV testing every 5 years. See the Clinical Considerations for discussion of cytology method, HPV testing, and screening interval. **Grade: A Recommendation.**
- No screening for cervical cancer with HPV testing, alone or in combination with cytology, in women younger than age 30 years. **Grade: D Recommendation.**
- No screening for cervical cancer in women younger than age 21 years. **Grade: D Recommendation.**
- No screening for cervical cancer in women older than age 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer. See the Clinical Considerations for discussion of adequacy of prior screening and risk factors. **Grade: D Recommendation.**
- No screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and who do not have a history of a high-grade precancerous lesion (cervical intraepithelial neoplasia grade 2 or 3) or cervical cancer. **Grade: D Recommendation.**

Prostate Cancer

USPSTF recommendations are:

- Clinicians inform men ages 55 to 69 about the balance of potential benefits and harms of prostate cancer screening. **Grade: C Recommendation.**
- No screening for prostate cancer in men age 70 years or older. **Grade: D Recommendation.**

ACKNOWLEDGEMENTS

The development of the 2016–2021 Alabama Comprehensive Cancer Control Plan is the result of ongoing collaboration among statewide organizations and individuals committed to improving the state's cancer incidence and mortality rates.

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ADPH - Alabama Comprehensive Cancer Control Program

ADPH - Colorectal Cancer Program

ADPH - Bureau of Prevention, Promotion, and Support

ADPH - Immunization Division

ADPH - Nutrition and Physical Activity

ADPH - Office of Radiation Control

ADPH - Tobacco Prevention and Control Branch

Alabama Medicaid Association

Alabama Department of Senior Services

Alabama Hospital Agency

American Cancer Society

Baptist Medical Center's Montgomery Cancer Center

Blue Cross Blue Shield of Alabama

Cooper Green Mercy Health Services

East Alabama Medical Center

Jefferson County Department of Health

Joy to Life Foundation

Laura Crandall Brown Foundation

Merck Pharmaceutical Company

Rumpshaker, Inc. / Rumpshaker 5K

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Tuskegee University Cooperative Extension Program

UAB School of Public Health

UAB Comprehensive Cancer Center/ Deep South Network

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DATA SOURCES

The Alabama Comprehensive Cancer Control Plan 2016-2021 utilized data from existing data sources to identify and focus efforts on cancers in Alabama that are the highest burden. These data sources will continue to be used to monitor the incidence, prevalence, and mortality of cancer in Alabama. All datasets will be examined on a regular basis to detect the burden of cancer, monitor behavioral risk factors, and identify health disparities. The data will be used routinely to inform the general public, key stakeholders, and policy makers of cancer and its associated risk factors in Alabama. Further, the data will support the development of effective health interventions and will be used to perform evaluations of existing programs. The following data sources, among numerous others, will be utilized:

- Alabama Statewide Cancer Registry (ASCR) is a population-based cancer registry that will provide data on cancer burden. It is an information system designed for the collection, management, and analysis of cancer data. The purpose of the registry is to disseminate cancer data to public health and medical professionals, community groups, volunteer agencies, and others interested in cancer prevention and control.
- Behavioral Risk Factor Surveillance System (BRFSS) is used to monitor risk factor data. It will provide risk factor data by age, race, gender, income, and educational status. In addition, BRFSS data will provide a robust analysis of health disparities at the state level and by public health districts.
- Youth Risk Behavior Surveillance System (YRBSS) provides risk factor data at the state level for youth in grades 9 through 12 by grade, race, and gender. The data monitor four types of health-risk behaviors among youth relevant to chronic disease: tobacco, unhealthy dietary behaviors, physical inactivity, and obesity.
- CDC WONDER is used for mortality data on heart disease, stroke, diabetes, and cancer. This data will be at the state and county levels and allow for national and regional comparisons. Data from CDC WONDER are used to determine counties of the state with the highest mortality rates, and interventions identified in the Alabama Coordinated Chronic Disease State Plan will focus on communities within these counties.
- The Alabama Center for Health Statistics, Statistical Analysis Division, provides analysis of mortality data for public health policy and surveillance.

