

Kentucky Cancer Consortium

CANCER ACTION PLAN

a blueprint for cancer prevention
and control in our state by 2022



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Acknowledgments

The Kentucky Cancer Consortium (KCC) is Kentucky's statewide comprehensive cancer control coalition and is designated as the bona fide agent by the Kentucky Department for Public Health to receive the [National Comprehensive Cancer Control Program](#) grant from the Centers for Disease Control and Prevention as one of 65 state, tribal and territorial programs.

KCC is comprised of more than 70 organizations committed to reducing the significant burden of cancer in our state. Cancer is too big and complex a problem for any one group to address effectively. Comprehensive Cancer Control offers the power of collaboration as a key approach to reducing cancer.

The Kentucky Cancer Consortium IS its members. The Consortium provides a forum where the following organizations have united to implement the Cancer Action Plan for Kentucky. Many thanks to the organizations, agencies and programs who are members of the Kentucky Cancer Consortium and have helped develop, revise, maintain, implement and evaluate the Cancer Action Plan:

- American Cancer Society
- American Cancer Society Cancer Action Network
- American College of Obstetricians and Gynecologists
- American College of Surgeons
- American Heart Association
- American Lung Association in Kentucky
- Area Health Education Centers (AHEC)
- Baptist Health
- Center for Health Equity
- Center of Excellence in Rural Health
- Colon Cancer Prevention Project
- Faith Moves Mountains
- Friend for Life Cancer Support Network
- Gilda's Club, Louisville
- Hispanic Disparities Research, UK College of Nursing
- Humana - Kentucky
- Kentucky Academy of Family Physicians
- Kentucky African Americans Against Cancer
- Kentucky Alliance of YMCAs
- Kentucky Association of Hospice and Palliative Care
- Kentucky Association of Radon Professionals
- Kentucky Cancer Foundation
- Kentucky Cancer Link
- Kentucky Cancer Program East
 - University of Kentucky Markey Cancer Center*
- Kentucky Cancer Program West
 - University of Louisville Brown Cancer Center*
- Kentucky Cancer Registry
- Kentucky Center for Smoke-free Policy
- Kentucky Cervical Cancer Coalition
- Kentucky Chamber of Commerce
- Kentucky Council on Post-Secondary Education
- Kentucky Department of Education
- Kentucky Department of Insurance
- Kentucky Department for Medicaid Services
- Kentucky Department for Public Health
 - Chronic Disease Branch*
 - Cancer Control Leadership Team*
 - Kentucky Colon Cancer Screening Program*
 - Worksite Wellness Program*
- Kentucky Department for Public Health (cont.)
 - Health Promotion Branch*
 - Tobacco Prevention and Cessation Program*
 - Obesity Prevention Program*
 - Division of Women's Health*
 - Kentucky Women's Cancer Screening Program*
 - Office of Health Equity*
 - Kentucky Radon Program*
- Kentucky Environmental Foundation
- Kentucky Health Department Association
- Kentucky Homeplace
- Kentucky Hospital Association
- Kentucky LEADS Collaborative
- Kentucky Medical Association
- Kentucky Nurses Association
- KentuckyOne Health
- Kentucky Primary Care Association
- Kentucky Public Health Association
- Kentucky Retirement Systems
- Kentucky Rural Health Association
- Kentucky Voices for Health
- Kentucky Youth Advocates
- Kids Cancer Alliance
- Leukemia and Lymphoma Society
- Lung Cancer Alliance
- Norton Cancer Institute
- Operation UNITE
- Partnership for a Fit Kentucky
- Qsource (Medicare QIO)
- Susan G. Komen - Lexington
- Susan G. Komen - Louisville
- University of Kentucky
 - Center for Clinical and Translational Science*
 - Cooperative Extension Service*
 - Markey Cancer Center Affiliate Network*
 - Markey Cancer Center*
 - Prevention Research Center*
 - Rural Cancer Prevention Research Center*
- University of Louisville
 - Brown Cancer Center*

Kentucky's Goals at a glance

Prevention

- Goal 1:** Reduce the incidence and mortality rates of tobacco-related cancers in all populations.
- Goal 2:** Reduce the incidence of cancers related to nutrition, physical activity and obesity.
- Goal 3:** Reduce the incidence and mortality rates of cancers related to environmental carcinogens, with a focus on radon.
- Goal 4:** Reduce incidence of HPV-related cancers by increasing initiation and completion of the human papillomavirus (HPV) vaccine series.

Screening and Early Detection

- Goal 5:** Reduce the proportion of late-stage diagnosis and mortality from breast cancer through screening and early detection.
- Goal 6:** Reduce the incidence and mortality rates of cervical cancer through increased screening and early detection.
- Goal 7:** Reduce the incidence and mortality rates of colon cancer through prevention and early detection.
- Goal 8:** Reduce lung cancer mortality and increase detection through screening for those Kentuckians who meet the eligibility criteria as recommended by the United States Preventive Services Task Force (USPSTF).

Treatment and Care

- Goal 9:** Promote access to and appropriate utilization of quality cancer diagnostic and treatment services for all Kentuckians.

Quality of Life

- Goal 10:** Promote overall health of Kentucky cancer survivors from diagnosis onward, to increase quality of life.

Executive Summary

Kentucky's Cancer Action Plan (CAP) represents who we are and what we do. The CAP serves as a blueprint for comprehensive cancer prevention and control throughout Kentucky. However, the CAP would just be words on paper without support and implementation by the Kentucky Cancer Consortium and its partner organizations, at both the state and regional level.

The primary target audience for the CAP is KCC member organizations implementing aspects of the plan. Secondary audiences for the CAP include community leaders, businesses, policymakers and others who are interested in learning more about what is being done to reduce cancer in Kentucky. Cancer is a major public health issue in Kentucky. For many cancer sites, Kentucky has consistently ranked among the top states in cancer mortality. As a result, a comprehensive approach is warranted, examining cancer and related issues from multiple viewpoints and determining which resources are available and feasible. By examining the data, developing goals and objectives, and providing a menu of strategies to be implemented based on the latest evidence, the CAP seeks to provide a unified call to action for the Kentucky Cancer Consortium. By working together, we can prevent cancer, help diagnose cancer when it's easier and less costly to treat, improve the treatment and care cancer patients receive, and improve the quality of life for people in Kentucky who are diagnosed with cancer.

The Cancer Action Plan is intended to be a practical, living document; it will be revised on an ongoing basis, based on the latest data and emerging science related to the areas of the cancer continuum. The CAP is developed, updated, revised, implemented and evaluated through member efforts. See the KCC website for more information: www.kycancerc.org.

If you have any questions, please contact the KCC staff:

Elaine Russell, Program Director, Elaine.Russell@uky.edu

Kristian Wagner, Health Policy Director, kristian@kycancerc.org

Jennifer Redmond Knight, Evaluation and Sustainability Specialist, jennifer.knight@uky.edu

Introduction



Mission Statement

The mission of the Kentucky Cancer Consortium shall be to achieve significant reductions in the incidence, morbidity and mortality of cancer among the citizens of Kentucky through a comprehensive, integrated and coordinated approach to cancer control. This approach covers the cancer continuum from prevention, early detection, care and treatment, through quality of life.

Cancer Action Plan

Kentucky's Cancer Action Plan, known as the CAP, address four key areas of the cancer continuum: prevention, screening and early detection, treatment and care, and quality of life. Each section contains major goals, objectives and suggested strategies.

The CAP is revised on an ongoing basis as new evidence or strategies become available or if it has been five years or longer since a section was last updated.

Resource Plan – *Finding resources to do the work in the CAP*

The Resource Plan is a companion piece to the Cancer Action Plan. The purpose of the Resource Plan is to educate healthcare decision makers, elected officials, funders and interested Kentuckians about the potential to decrease the cancer burden in Kentucky through supporting cancer prevention and early detection. More than 20 Kentucky Cancer Consortium organizations representing healthcare, advocacy, government and non-profit entities worked together to define the financial resources needed to prevent cancers and detect them earlier in order to save lives and money.

[Click here to access the Executive Summary of the Resource Plan.](#)

[Click here to access the latest version of the Resource Plan.](#)

How CAP relates to other public health plans

Cancer prevention and control is a challenge that is too complex and comprehensive of a problem for a single organization to address on their own. In addition, the evidence has shown that there are many common modifiable, behavioral risk factors that relate to the prevention of cancer and many chronic diseases. These risk factors include:

- Tobacco Use
- Lack of Physical Activity
- Poor Nutrition
- Exposure to Secondhand Smoke
- Excessive Alcohol Consumption

These risk factors for numerous overlapping chronic diseases provide strong support for addressing cancer prevention and control in a comprehensive, coordinated and integrated manner. The KCC benefits from its member organizations' expertise, resources, and support. KCC partners, in return, are able to maximize their own organization's initiatives and priorities through their work with KCC. By working together, KCC and its members can identify and leverage opportunities to more effectively and efficiently address the burden of cancer in Kentucky.

Listed below are plans that are related to the CAP:

Plan & Website	Partner Organization	Collaborative Initiatives Include:
<p>Unbridled Health: A Plan for Coordinated Chronic Disease Prevention and Health Promotion</p>	<p>Kentucky Coordinated Chronic Disease Prevention and Health Promotion Program Department for Public Health Cabinet for Health and Family Services</p>	<ul style="list-style-type: none"> • Promoting policy, environmental and system changes that support healthy choices and healthy living in Kentucky and its communities • Expanding access to coordinated, quality, evidence-based clinical screenings, clinical management and chronic disease self-management • Cultivating strong connections linking individuals, community organizations, businesses, schools, the health care system and other partners to improve health outcomes, reduce health care costs, and improve quality of life • Translating surveillance, research and evaluation findings into information that is easily accessible to and useful to the community partners, health advocates and decision makers
<p>Healthy Kentuckians 2020</p>	<p>Kentucky Department for Public Health</p>	<ul style="list-style-type: none"> • Reducing the number of new cancer cases, as well as illness, disability and death caused by cancer, specifically for: <ul style="list-style-type: none"> - Lung cancer - Invasive colorectal cancer • Increasing the proportion of cancer survivors who are living 5 years or longer after diagnosis

Introduction

Plan & Website	Partner Organization	Collaborative Initiatives Include:
Healthy People 2020	U.S. Department of Health and Human Services	<ul style="list-style-type: none"> Reducing the overall cancer death rate, specific to lung cancer, breast cancer, and colorectal cancer
80% by 2018	National Colorectal Cancer Roundtable Centers for Disease Control and Prevention	<ul style="list-style-type: none"> Reducing the burden of colorectal cancer by working on the shared goal of screening 80% of adults aged 50 or older by 2018
Numerous Kentucky State Program Plans	Kentucky Department for Public Health, State Program Plans and Policy Initiatives	Includes: <ul style="list-style-type: none"> Kentucky Colon Cancer Screening Program Tobacco Prevention and Cessation Program Kentucky Women's Cancer Screening Program Partnership for a Fit Kentucky HPV Plan Radon Plan
Individual Member Organizations' Strategic and Annual Work Plans	Numerous regional and community level partners	Includes strategic and annual work plans with initiatives and activities focused on specific cancer prevention and control activities. Examples include: <ul style="list-style-type: none"> A hospital system offering smoking cessation programs Local or district health departments focusing on increasing HPV vaccination rates A local cancer organization geared toward cancer survivorship and offering patient navigation services in underserved rural areas

Using data to inform the CAP

Data is the cornerstone of the Kentucky Cancer Consortium's Cancer Action Plan (CAP). By conducting a comprehensive, in-depth examination and analysis of the data, priority cancer sites as well as treatment and survivorship-related issues are determined and accompanying goals, objectives and strategies are formulated. In order to be effective as well as efficient in reducing the impact of cancer's burden in Kentucky, a thorough examination of data sources is required prior to planning, implementing and evaluating cancer prevention and control activities. Some frequently utilized data sources include the [Kentucky Cancer Registry](#), the [Kentucky Behavioral Risk Factor Surveillance \(KyBRFS\) program](#), CDC's [BRFSS Prevalence and Trends Data](#), and [State Cancer Profiles](#). (See Appendix A-Common Data Sources Used in Kentucky's Comprehensive Cancer Control.)

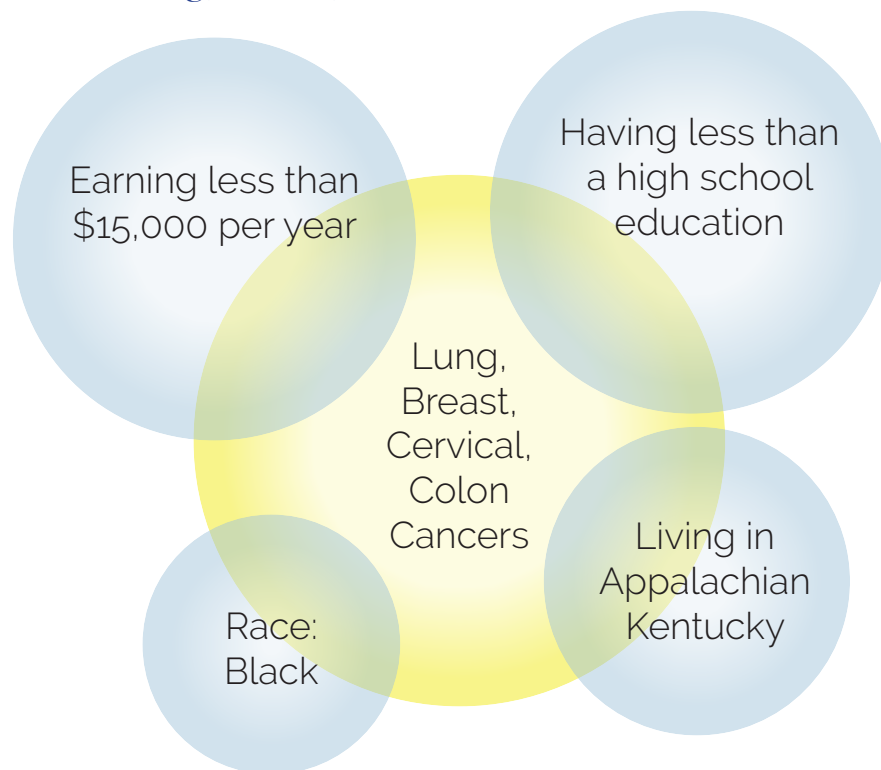
Introduction

A large proportion of the cancer burden and mortality in Kentucky is attributable to four major cancers for which there are effective prevention and early detection strategies: Lung, Colon, Breast, and Cervical. For most of these cancers, Kentucky ranks at or above the national average for incidence and mortality. In addition, Kentucky sees larger proportions of late-stage than early-stage diagnoses for lung, colon and cervical cancers, which significantly impacts an individual's quality of life as well as increasing treatment costs.

When exploring the burden of cancer in Kentucky, it is important to examine concurrent risk factors which either cause or are highly associated with the four noted cancers. These risk factors are often associated with lifestyle behaviors such as smoking, eating a poor diet and being physically inactive. In addition, an individual's risk for cancer also goes up for behaviors they neglect to perform, such as not receiving a colon cancer or breast cancer screening as recommended by the guidelines.

The risk factor information from the four noted cancers shows two predominant economic conditions associated with cancer in Kentucky: Earning less than \$15,000 per year and having less than a high school education. Living in Appalachian Kentucky is also noted to be a factor associated with greater cancer incidence, mortality and risk factors. To a lesser extent but still significant to note, disparities by race/ethnicity are noted by individuals who identify themselves as "Other" and "Black".

Factors associated with Lung, Breast, Cervical and Colon Cancers in Kentucky



Introduction

Information about cancer determinants has been used to help identify populations at risk in Kentucky. In examining data about the state's population, Kentucky has lower per capita income, a higher proportion of people living in poverty, and lower high school graduation rates than the nation as a whole. These factors are all associated with cancer and cancer-related risk factors. By identifying geographic areas or organizations/agencies where populations at risk are located, cancer control strategies can be created and implemented specifically for them, with respect to their cultural, literacy, linguistic, and financial considerations. (See Appendix B-Kentucky's Population Demographics.)

Summary of Process for Utilizing Data in Prioritizing Kentucky's Planning, Implementation and Evaluation in Cancer Control Activities



Process for Implementation

The Kentucky Cancer Consortium (KCC) achieves its goals and objectives through the collaborative work of its member organizations. KCC provides a neutral environment for multi-regional and state partners to collaborate on specific CAP objectives. [The Kentucky Cancer Program](#) coordinates regional comprehensive cancer control efforts. While the Consortium meets as a whole at least three times per year, smaller topic-focused teams and networks collaborate to implement priority areas of CAP.

The following are active teams and networks as of January 2016:

- Affordable Care Act (ACA) and Cancer
- Lung Cancer Network: Focused on Prevention and Early Detection
- Cancer Patient Navigation Network
- Radon Coalition
- Evaluation Team

Please visit the [Kentucky Cancer Consortium website](#) to learn more about KCC's implementation of the CAP and organizations working on CAP-related areas.

Cancer Action Plan

In 1999, the Kentucky Cancer Program, the Kentucky Department for Public Health and the American Cancer Society developed the plan with funding from the Centers for Disease Control and Prevention. The first Kentucky Cancer Action Plan was completed in 2001. It was completely revised, based on updated data, in 2005. Since that time, the CAP has been revised on a “rolling” basis, section by section, at quarterly Consortium meetings. By addressing the Plan as a group on an ongoing topical basis, the CAP remains data relevant, timely and at the forefront of all we do.

The Kentucky Cancer Action Plan (CAP) is the state's comprehensive cancer control plan to reduce our burden of cancer. The Kentucky Cancer Consortium is charged with implementing the CAP. The plan is a blueprint for action that addresses four key areas of the cancer continuum: prevention, early detection, treatment and care, and quality of life. Each section contains major goals, objectives, and suggested strategies.

Cancer Burden of Kentucky's Four Major Cancer Sites U.S. Cancer Statistics, 2008-2012			
Type of Cancer	Kentucky's Incidence Rate	Kentucky's Mortality Rate	Difference in KY and U.S. mortality rate
Lung	1	1	50.2% ↑
Colon	1	5	16.8% ↑
Breast	35	18	3.2% ↑
Cervical	10	7	26.1% ↑

Mortality Rates for Kentucky's Four Major Cancers							
	Age-Adjusted Mortality Rate (2008-2012)		Ranking in the United States (51-highest in the nation, incl. D.C., 2008-2012)	Age-Adjusted Mortality Rate by Race/Ethnicity (2008-2012)			
	KY	U.S.		KY	White	Black	Appalachia
Lung	70.9	47.2	51	70.2	73.8	83.0	65.1
Colon	18.1	15.5	47	17.6	22.8	20.6	16.9
Breast	22.6	21.9	34	21.7	32.4	24.1	21.7
Cervical	2.9	2.3	45	2.9	3.2	3.3	2.8

Goal 1: Prevention

Reduce the incidence and mortality rates of tobacco-related cancers in all populations.

Preventing Youth Initiation

Focus Areas

- 1.1 Preventing Youth Initiation
- 1.2 Promoting Tobacco Cessation
- 1.3 Eliminating Exposure to Second-hand Smoke

Objectives

Measure	Baseline	Target
% of youth who have smoked a cigarette at least once in the past 30 days	17.9% ¹	15% by 2020
% of youth who used some form of tobacco products ²	26.3% ¹	20% by 2020
% of youth who ever used an e-cigarette ²	41.7% ²	
% of youth who have used an e-cigarette at least once in the past 30 days ²	23.4% ²	

¹2013 KY Youth Risk Behavior Survey (YRBS).

“ We want all youth, college students and others to avoid initiation of tobacco products. ”

Policy, Systems and Environmental Changes

- Support comprehensive smoke-free policies in all public places including bars and restaurants.
- Promote passage and enforcement of 100% tobacco-free policies in schools and other organizations that serve youth.³
- Promote passage and enforcement of 100% tobacco-free policies in colleges and universities.
- Support increasing the unit price for tobacco products.
- Achieve tax parity on tobacco products.
- Support legal and regulatory equity between traditional tobacco products and electronic nicotine delivery systems/novel tobacco products, including advertising restrictions, flavor restrictions, unit pricing, and tobacco-free policies and smoke-free laws.
- Encourage community mobilization with additional interventions to restrict minors' access to tobacco products, including electronic nicotine delivery systems or similar products.
- Strengthen state and local tobacco control measures through increased funding.

Health Equity

- Ensure that educational materials for preventing youth initiation are culturally and linguistically appropriate.

Communication/Education

- Conduct media campaigns to counter pro-tobacco influences and increase pro-health messages at state and local levels.³
- Promote person-to-person interventions intended to modify adolescent risk behaviors by improving their caregivers' parenting skills.
- Promote the use of evidence-based curricula to reduce youth tobacco use.³
- Promote youth involvement in state and local coalitions.³



²This is a proxy measure for all tobacco use among youth. We want all youth, college students and others to avoid initiation of tobacco products. The 2015 YRBS surveys students in grades 9-12 in alternative years and defines tobacco products as cigarettes, smokeless tobacco, cigars, little cigars and cigarillos, and e-cigarettes. ³KY Healthy People (HP) 2020

Goal 1: Prevention

Reduce the incidence and mortality rates of tobacco-related cancers in all populations.

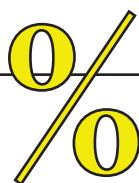
Promoting Tobacco Cessation

Focus Areas

- 1.1 Preventing Youth Initiation
- 1.2 Promoting Tobacco Cessation
- 1.3 Eliminating Exposure to Second-hand Smoke

Objectives		
Measure	Baseline	Target
% of adults (>18) who are smokers	28.3% ¹	17% by 2020
% of adults (>18) with less than a high school education who are smokers	45.1% ¹	26.3% by 2020
% of adults (>18) who use smokeless tobacco	4.6%	2% by 2020
% of women who smoke cigarettes during pregnancy	22.8% ²	17% by 2020

Kentucky ranks second in the nation (26.5%) for adult smoking.³



Policy, Systems and Environmental Changes

- Support comprehensive smoke-free policies in all public places including bars and restaurants.⁴
- Promote passage and enforcement of 100% tobacco-free policies in colleges and universities.
- Promote passage and enforcement of 100% tobacco-free policies in schools and other organizations that serve youth.⁴
- Increase the unit price for tobacco products.
- Support legal and regulatory equity between traditional tobacco products and electronic nicotine delivery systems/novel tobacco products, including advertising restrictions, flavor restrictions, unit pricing, and tobacco-free policies and smoke-free laws.
- Reduce client out-of-pocket costs for cessation therapies, including counseling, medications, etc.
- Implement a tobacco-user identification and prompting system in every health care clinic.

Health Equity

- Provide culturally competent evidence-based smoking prevention and cessation interventions for the African-American and Hispanic/Latino communities, the low socioeconomic scale population, women of child-bearing age, pregnant women, and rural populations.
- Ensure that educational materials for tobacco cessation are culturally and linguistically appropriate.
- Identify health care professionals, organizations and agencies that represent the interest of pregnant women and encourage them to participate in tobacco prevention and cessation efforts.
- Promote utilization of evidence-based programs to help pregnant women stop smoking, including the pregnancy protocol for the Quitline.
- Increase availability and access to cessation resources for adults, including components targeting diverse/special populations.⁴

Communication/Education

- Conduct media campaigns to counter pro-tobacco influences and increase pro-health messages at state and local levels.⁴
- Conduct a series of mass media segments to recruit, inform and motivate tobacco users to quit.
- Increase public awareness of evidence-based smoking cessation services available in the community: Kentucky's Tobacco Quit Line (1-800-QUIT-NOW), the Cooper/Clayton Method to Stop Smoking, Freedom From Smoking (American Lung Association), pharmacotherapy and 5 A's.

Healthcare Professionals

- Utilize provider reminder systems either alone or with provider education.
- Educate health care providers on evidence-based strategies for treating tobacco use dependence.
- Encourage tobacco screening and counseling in all health care settings.

¹2012 KY Behavioral Risk Factor Surveillance System (BRFSS); ²2012 Vital Statistics ³2013 CDC-BRFSS; ⁴KY HP 2020

Goal 1: Prevention

Reduce the incidence and mortality rates of tobacco-related cancers in all populations.

Promoting Tobacco Cessation

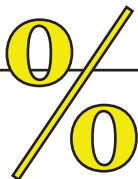
Focus Areas

- 1.1 Preventing Youth Initiation
- 1.2 Promoting Tobacco Cessation
- 1.3 Eliminating Exposure to Second-hand Smoke

*Kentucky's
Tobacco Quit Line
1-800-QUIT-NOW*

The populations with the greatest exposure to cancer risk factors are:

- *Income of \$15,000/year or less (40.9%)¹*
- *Having less than a high school education (40.0%)¹*



Healthcare Professionals (cont.)

- Encourage health care providers to expand the definition of tobacco use to include smokeless, spit and electronic nicotine delivery systems or similar tobacco products in patient health assessments.
- Incorporate tobacco screening and counseling as part of lung cancer screening and other lung cancer risk reduction efforts.
- Encourage health care providers to assess and educate patients/clients on health effects of exposure to secondhand smoke and interventions to establish smoke-free homes.
- Promote utilization of a fully integrated, interactive toll-free statewide tobacco cessation telephone Quitline, web-based and text messaging tobacco cessation component and mobile app to stop smoking or using other tobacco products.
- Promote utilization of evidence-based programs to help pregnant women stop smoking, including the pregnancy protocol for the Quitline.
- Establish partnership between providers and the tobacco Quitline that includes enhancement of services, such as free or low cost Nicotine Replacement Therapy and other pharmacotherapy for tobacco cessation.

Insurers

- Increase private and public insurance coverage for smoking cessation counseling and pharmacotherapy.
- Educate insurers on tobacco cessation coverage under the Affordable Care Act.
- Educate policyholders on which tobacco cessation treatments are covered by their health plan(s).
- Reduce out-of-pocket costs for evidence-based tobacco cessation.

Worksite Wellness

- Encourage businesses to implement comprehensive tobacco-free policies.
- Encourage businesses to prohibit the use of e-cigarettes in their workplaces.
- Educate businesses on the benefits for tobacco use cessation treatment that are available from health plan(s) and the Affordable Care Act.
- Encourage employers to refer employees to evidence-based cessation resources.
- Encourage employers and businesses to reduce out-of-pocket costs for comprehensive tobacco cessation and support programs.
- Extend tobacco use cessation benefits to family members.
- Promote worksite-based incentives and competitions in combination with additional interventions.

Data & Research

- Evaluate reach and effectiveness of smoking cessation services in Kentucky.
- Promote implementation and evaluation of internet-based cessation interventions.
- Conduct community needs assessments to determine infrastructure and support regarding tobacco treatment services.
- Assess the impact of the insurance surcharge for smokers and whether it is a barrier to receiving tobacco dependence treatment in Kentucky.

¹2013 CDC-BRFSS

Goal 1: Prevention

Reduce the incidence and mortality rate of tobacco-related cancers in all populations.

Eliminating Exposure to Second-hand Smoke

Focus Areas

- 1.1 Preventing Youth Initiation
- 1.2 Promoting Tobacco Cessation
- 1.3 Eliminating Exposure to Second-hand Smoke

Objectives		
Measure	Baseline	Target
% of Kentuckians who are protected from the dangers of second-hand smoke in workplaces and public places	31%	100% by 2020

Policy, Systems and Environmental Changes

- Support comprehensive smoke-free policies in all workplaces and public places including bars and restaurants (KY HP 2020).
- Encourage advocacy groups, communities and other organizations to support tobacco-free policies and comprehensive smoke-free laws in all workplaces and public places including bars and restaurants.
- Promote the inclusion of e-cigarettes in tobacco-free policies and smoke-free laws and ordinances.
- Provide technical assistance to cities on model tobacco-free policies.
- Promote passage and enforcement of 100% tobacco-free policies in schools and other organizations that serve youth.
- Promote passage and enforcement of 100% tobacco-free policies in colleges and universities.
- Support implementation of existing policies related to smoke-free environments and smoke-free policies in multi-unit housing (public and private).

Health Equity

- Ensure that educational materials on the dangers of second-hand smoke and the benefits of tobacco-free policies are culturally and linguistically appropriate.

Communication/Education

- Educate decision-makers, communities, workplaces and others on the dangers of second-hand smoke and the benefits of tobacco-free policies and comprehensive smoke-free laws.
- Leverage funding for a media education campaign on the need for comprehensive smoke-free policy targeted and tailored to rural areas.
- Provide technical assistance to rural communities to gain and use earned media effectively to promote comprehensive smoke-free policies.

Healthcare Professionals

- Encourage health care providers to assess and educate patients/clients on health effects of exposure to second-hand smoke and interventions to establish smoke-free homes and cars.

Kentucky ranks 43rd in the nation (near the bottom), in exposure to second-hand smoke, with only 31.1% of the population covered by 100% Smoke-free Workplace, Restaurant, and Bar Laws.¹

The populations with the greatest exposure to second-hand smoke are:

- Race: Black (46.8%)*
- Nonsmokers who live below the poverty line (43.2%)*



¹2015 BRFSS Estimates; CDC, Secondhand Smoke (SHS) Facts; & Tobacco Control State Highlights 2012

Goal 2: Prevention

Reduce the incidence from cancers related to nutrition, physical activity and obesity.

Nutrition

Focus Areas

2.1 Nutrition

2.2 Physical Activity

2.3 Obesity

2.4 Alcohol

Policy, Systems, and Environmental Changes

- Increase access (availability and affordability) of healthy foods in public service venues.
- Support menu labeling at fast food and chain restaurants.
- Improve access to locally grown foods.
- Limit advertisements of less healthy foods and beverages.
- Discourage consumption of sugar-sweetened beverages.
- Utilize multi-component counseling or coaching to effect weight loss, using computer or web applications.³
- Promote standards for nutrition and physical activity in licensed child care centers and K-12.

Health Equity

- Improve geographic availability of supermarkets in underserved areas.
- Provide incentives to food retailers to locate in, and/or offer healthier food and beverage choices in, underserved areas.

Communication/Education

- Increase the number of statewide trained breastfeeding peer counselors.

Healthcare Professionals

- Provide breastfeeding CME/CEU opportunities to health professionals.
- Increase the number of International Board Certified Lactation Consultants in Kentucky.

Worksite Wellness

- Encourage businesses to provide space and flexible scheduling for breastfeeding or expressing milk in the workplace.
- Encourage comprehensive worksite wellness programs.

“One serving of fruit is 1/2 cup chopped or one medium fruit. One serving of vegetables is one cup of leafy, raw veggies or 1/2 cup of other vegetables.”

Objectives

Measure	Baseline	Target
% of Kentucky adults who eat five or more servings of fruits and vegetables daily	21.1% ¹	25% by 2022
% of Kentucky youth (grades 9-12) who eat vegetables	91.5% ²	95% by 2022

Note: Unless otherwise noted, strategies listed in the Nutrition, Physical Activity and Obesity sections of the Kentucky Cancer Action Plan are taken from "Recommended Community Strategies and Measurements to Prevent Obesity in the United States: Implementation and Measurement Guide," by Keener, D., Goodman, K., Lowry, A., Zaro, S., & Kettel Khan, L. (2009). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.



¹2009 BRFSS; ²2013-2015 YRBS; Did not eat vegetables 7 days before the survey; ³The Community Preventive Services Task Force, 2009

Goal 2: Prevention

Reduce the incidence from cancers related to nutrition, physical activity and obesity.

Physical Activity

Focus Areas

- 2.1 Nutrition
- 2.2 Physical Activity**
- 2.3 Obesity
- 2.4 Alcohol

Objectives

Measure	Baseline	Target
% of Kentucky adults who participate in 30+ minutes of moderate physical activity five+ days per week or vigorous physical activity for 20+ minutes three+ days per week.	45.7% ¹	48.7% by 2022
% of Kentucky youth who were not physically active at least 60 minutes per day on 5+ days during the 7 days before the survey.	63% ²	60% by 2022

Policy, Systems and Environmental Changes

- Promote physical education opportunities in schools.
- Encourage physical activity in physical education programs in schools.
- Encourage opportunities for extracurricular physical activity.
- Promote standards for nutrition and physical activity in licensed child care centers
- Increase number of child care settings that require structured moderate to vigorous physical activity for all participants daily.
- Support Step it Up Kentucky.
- Increase local walk/bike plans.

Communication/Education

- Encourage 5-2-1-0 campaign.
- Encourage Step it Up Kentucky.

Healthcare Professionals

- Utilize multi-component counseling or coaching to effect weight loss, using technology such as computer or web applications.³
- Utilize Community Health Worker/Community-Clinical linkages to promote opportunities in local communities.
- Identify how transportation plans can increase Community-Clinical linkages for increased physical activity.



¹2009 BRFSS; ²2015 YRBS; ³The Community Preventive Services Task Force, 2009

Goal 2: Prevention

Reduce the incidence from cancers related to nutrition, physical activity and obesity.

Obesity

Focus Areas

- 2.1 Nutrition
- 2.2 Physical Activity
- 2.3 Obesity**
- 2.4 Alcohol

Kentucky ranks 45th in the nation, near the bottom, in adults who are currently healthy/normal weight, with only 30.6% of the population at a healthy weight.⁴

The populations with the greatest percentage that are currently obese:

- *Race: Black (40.9%)⁴*
- *Age: 55-64 (40.5%)⁴*

Objectives

Measure	Baseline	Target
% of Kentucky adults who are a healthy weight (BMI less than 24.9)	31.7% ¹	34% by 2022
% of Kentucky youth (grades 9-12) who are obese (students who were ≥95 percentile for body mass index (BMI) by age and sex based on reference data)	18.5% ²	16.5% by 2022

Policy, Systems and Environmental Changes

- Improve access to locally grown foods.
- Limit advertisements of less healthy foods and beverages.
- Discourage consumption of sugar-sweetened beverages.
- Increase access (availability and affordability) of healthy foods in public service venues.
- Support Step it Up Kentucky.
- Increase local walk/bike plans.

Healthy Equity

- Encourage walk/bike plans in rural communities

Communication/Education

- Participate in community coalitions or partnerships to address obesity.
- Ensure that pre-services curricula for various public health professionals include nutrition and physical activity.³

Healthcare Professionals

- Develop easily accessed CMEs/CEUs for various health professionals on counseling about nutrition and physical activity.³
- Promote nutrition and physical activity strategies in health care environments.³
- Educate providers.⁵
- Organize opportunities for provider feedback.⁵
- Utilize provider reminder systems.⁵
- Utilize multi-component interventions along with client interventions.⁵
- Utilize multi-component counseling or coaching to effect weight loss, using technology such as computer or web applications.⁵
- Utilize Community Health Worker/Community-Clinical linkages to promote weight loss and physical activity opportunities in local communities.

Worksite Wellness

- Encourage Comprehensive Worksite Wellness Programs to address overweight and obesity.
- Provide worksite wellness tax credits to businesses.
- Encourage worksite cultures that promote and incorporate healthy nutrition and physical activity.
- Encourage worksite cultures that offer benefits and programs that help to prevent cancer.

Data & Research

- Establish a BMI surveillance system for youth.
- Develop measurable guidelines regarding fitness for physicians.³
- Conduct academic detailing review of physician needs concerning nutrition and physical activity.³
- Coordination of electronic medical records to facilitate data collection.

¹2015 BRFSS; ²2015 YRBS. ³Kentucky Nutrition and Physical Activity State Action Plan, 2005; ⁴2013 CDC-BRFSS; ⁵Guide to Community Preventive Services
Other documents consulted:
 - KY Tobacco Prevention and Cessation Program Strategic Plan, 2005-2013
 - Shaping KY's Future: Policies to Reduce Obesity, 2009
 - Vaccination Coverage Among Adolescents Age 13-17

Goal 2: Prevention

Reduce the incidence from cancers related to nutrition, physical activity and obesity.

Alcohol

Focus Areas

- 2.1 Nutrition
- 2.2 Physical Activity
- 2.3 Obesity
- 2.4 Alcohol

Policy, Systems and Environmental Changes

- Encourage dram shop¹ liability, which holds the owner or server of a retail alcohol establishment legally responsible for the harm inflicted by a customer who recently consumed alcoholic beverages there.
- Increase alcohol taxes.
- Maintain limits on days of sale.
- Maintain limits on hours of sale.
- Promote government regulation over the retail sale of alcoholic beverages.
- Reduce the number of alcohol outlets in a given area.
- Enhance enforcement of laws prohibiting sales to minors.

Communication/Education

- Support electronic screening and brief intervention (E/SBI): screening individuals for excessive drinking and delivering personalized feedback through a brief intervention about risks and consequences.

Objectives

Measure	Baseline	Target
% of Kentucky adults who are binge drinkers (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	15.3% ²	14.3% by 2022
% of Kentucky youth (grades 9-12) who currently use alcohol (had at least one drink of alcohol at least one day during the 30 days before the survey)	28.5% ³	27% by 2022

“Kentucky's mortality rate for lung, colon, breast, and cervical cancers is **higher** than the U.S. average.”

¹Bar, Tavern or the like where alcoholic beverages are sold.; ² 2008 BRFSS; ³2007 YRBSS

Goal 3: Prevention

Reduce the incidence and mortality rate of cancers related to environmental carcinogens, with a focus on radon.

“Working toward radon resistant materials in new construction, especially in schools.”

Objectives

By 2018, develop a baseline measure of the percentage of buildings and homes that are tested for radon in Kentucky.

By 2018, develop a baseline measure of the percentage of buildings and homes with radon levels exceeding the U.S. EPA action guideline of 4 pCi/L.

By 2018, develop a baseline measure of newly built buildings and homes with radon-resistant new construction (RRNC) features.

Development Baseline: Kentucky Radon Program

Policy, Systems, and Environmental Changes

- Encourage agencies and organizations to report radon testing and mitigation every five years to the state radon program.
- Encourage agencies and organizations to report the number of Radon Resistant New Constructions (RRNC).
- Promote efforts to incentivize radon mitigation retrofitting of existing buildings.
- Encourage building code changes/enforcement to require radon reduction venting in new construction.
- Collaborate with real estate firms to test for radon early in the selling process.
- Identify gaps and barriers related to radon policies and advocate for addressing those gaps and barriers.
- Disseminate education around evidence-based policies, systems and environmental changes for workers and communities exposed to radon.
- Share data regarding certified radon mitigators, measurement specialists and certified labs.

Health Equity

- Promote efforts to reduce the burden of costs associated with radon mitigation for the low-income population.
- Partner with nonprofit agencies constructing residential, multi-family, schools and large buildings to encourage use of radon resistant construction materials.
- Ensure that educational radon materials are culturally and linguistically appropriate.

Communication/Education

- Support the Kentucky Radon Program in their efforts to increase public awareness of the potential dangers of high radon levels in homes and workplaces.
- Promote development of educational materials directed towards home builders, home inspectors and realtors.
- Encourage Kentuckians to test their home for radon through short-term kits available through the Kentucky Radon Program.
- Promote notification and disclosure of radon information as part of the property transfer process.
- Educate the public on the risks of high radon levels and the benefits of mitigation and the EPA recommended action levels.
- Educate the public on low cost mitigation assistance/opportunities.
- Ensure that educational radon materials are culturally and linguistically appropriate.
- Identify advocacy channels to promote radon education, awareness and prevention.
- Encourage development and dissemination of information regarding radon policies and education to radon professionals.
- Encourage home builders and realtors to educate clients regarding radon mitigation and RRNC.



Goal 3: Prevention (cont.)

Reduce the incidence and mortality rate of cancers related to environmental carcinogens, with a focus on radon.



Healthcare Professionals

- Educate healthcare providers about radon-induced cancer risk and the link between radon and tobacco smoke in increasing the risk of lung cancer.
- Encourage discussions between healthcare providers and patients on the risks of radon and the importance of testing and mitigation.
- Promote radon continuing education opportunities.
- Encourage the use of the "Prescription for Radon" toolkit.*

Worksite Wellness

- Encourage the state Board of Education to use radon resistant new construction in new schools.
- Promote efforts to require schools, daycare centers and workplaces to test for radon every five years.
- Encourage schools, daycare centers and workplaces with high levels of radon to mitigate.
- Encourage Human Resources to offer radon testing as part of their worksite wellness programs.

Insurers

- Promote the inclusion of radon testing and mitigation coverage through property and casualty insurance companies.
- Encourage healthcare insurers to promote radon testing and mitigation through healthcare networks.
- Promote radon testing and mitigation as a component of health benefits and health savings accounts.

Data & Research

- Collect and analyze radon testing and mitigation data every five years.
- Collect and analyze data on the number of RRRNC.
- Collect and analyze data on the number of homes and buildings mitigated with levels above 4pCi/L.
- Encourage lung cancer patients and their families to test their homes for radon.
- Promote research focused on reducing barriers associated with radon mitigation costs (ie. tax credits, low costs loans, etc.).
- Promote continued research between the synergistic effect of radon, tobacco use and secondhand smoke.

Other Environmental Carcinogens

- Promote research on etiology of environmental-related cancers.
- Encourage Kentucky researchers to apply for federal and nonprofit funding for research projects on environmental carcinogens.
- Monitor environmental exposures and cancer incidence rates.
- Promote public education and awareness regarding environmental risks and cancer.

“We will promote radon testing and mitigation as a component of health benefits and health savings accounts.”

*University of Kentucky

Goal 4: Prevention

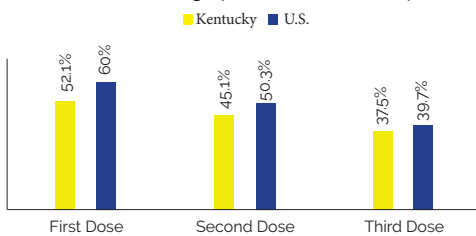
Reduce incidence of HPV-related cancers by increasing initiation and completion of the human papillomavirus (HPV) vaccine series.

Objectives

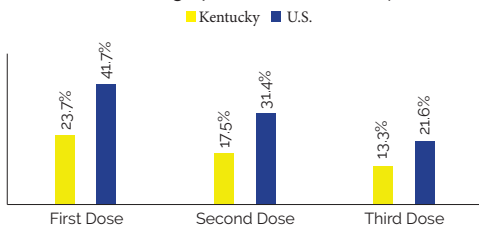
Measure	Baseline	Target
% of Kentucky males age 13-17 ² who have completed the recommended HPV Vaccine series	13.3% ¹	25% by 2020
% of Kentucky females age 13-17 ² who have completed the recommended HPV Vaccine series	37.5% ¹	50% by 2020

¹ 2014, National Immunization Survey- Teen; ²2006 BRFSS; While the CDC recommends vaccination beginning at age 11, we utilized 13, as our ability to measure vaccination completions limited to ages 13-17 (as of 2009).

HPV Vaccine by Dose
Females 13-17, KY and U.S. : 2014



HPV Vaccine by Dose
Males 13-17, KY and U.S. : 2014



Goal

Reduce incidence of HPV-related cancers by increasing initiation and completion of the human papillomavirus (HPV) vaccine series among adolescents and young adults who meet the Advisory Committee on Immunization Practices (ACIP) eligibility recommendations:

- Females: 2vHPV (Cervarix), 4vHPV (Gardasil), and 9vHPV (Gardasil 9) may be administered ages 9-26. Initiation recommended between ages 11 and 12.
- Males: 4vHPV and 9vHPV recommended ages 9-21. Initiation recommended between ages 11 and 12. Males who identify as men-who-have-sex-with-men (MSM) or who are immunocompromised who have not previously been vaccinated recommended through age 26.

Policy and System Changes

- Assist with implementation of reminder and recall tools in healthcare providers' office systems.
- Encourage community-clinical linkages that increase initiation and completion of the HPV vaccine series.

Health Equity

- Focus HPV vaccine promotion in Appalachian Kentucky, where cervical cancer rates are higher than the rest of the state, with tailored messaging for that population.

Communication/Education

- Promote statewide public awareness campaigns that encourage the HPV vaccine series.
- Encourage collaboration with external partners to engage creative, multi-level interventions that increase initiation and completion of the HPV vaccine series.

Healthcare Professionals

- Promote evidence-based tools to providers on how to recommend the vaccine to parents of adolescent patients.
- Assist with implementation of reminder and recall tools in healthcare providers' office systems.

Insurers

- Facilitate enrollment and participation in the state's Vaccines for Children (VFC) Program for providers who serve an eligible adolescent population and would like to participate.

Data & Research

- Collect data on attitudes of healthcare providers and parents about the HPV vaccine and examine how those perceptions influence vaccination rates in our state.
- Look beyond the Kentucky Immunization Registry at alternative data sources for vaccination rates (e.g., CDC Clinical Assessment Software Application, Department for Medicaid Services).
- Determine if existing community guide recommendations for immunization are applicable to HPV vaccination.

Goal 5: Screening & Early Detection

Reduce the proportion of late-stage diagnosis and mortality from breast cancer through screening and early detection.

Objectives

Measure	Baseline	Target
% of Kentucky women age 50-74 who have had a mammogram within the past two years	79.6% ²	84.6% by 2021
% of Kentucky women age 50-74, without a high school education, who have had a mammogram within the past two years	71.1% ²	65% by 2021
% of Kentucky women diagnosed with breast cancer at a late stage	28.4% ³	25.4% by 2021

Kentucky ranks 19th in the nation for women age 50-74 who HAVE HAD a mammogram in the past 2 years, at 79.6%.²



DISPARITY IN FOCUS:

While Kentucky's African American women have a slightly higher screening rate and a similar late-stage diagnosis rate than Kentucky's Caucasian women, they have significantly higher breast cancer incidence and mortality.

¹ Not all evidence-based guidelines agree on breast cancer screening for women age 40-49. However, ALL guidelines agree that we should be screening women age 50-74 – a measure that is also able to be tracked through the CDC's BRFSS. For these reasons, KCC is utilizing the 50-74 year old age bracket. We do, however include a strategy encouraging shared decision making for all women who are 40 and older; ² CDC BRFSS 2014; ³ KCR 2013.

Policy, Systems, and Environmental Changes

- Reduce out-of-pocket costs for screening.
- Mobilize grassroots advocates for legislative change.
- Promote the use of available financial resources for routine screening for uninsured and underinsured women.
- Encourage in-state self-insured companies and in-state branches of companies located outside Kentucky to provide screening mammography coverage in accordance with evidence-based screening guidelines.
- Reduce structural barriers such as screening location, limited hours of operation, lack of childcare, and language and cultural factors.
- Ensure that age-eligible women in counties without mammography facilities have adequate access to breast cancer screening through facilities in adjoining counties and/or mobile mammography units.

Health Equity

- Reduce structural barriers such as screening location, limited hours of operation, lack of childcare, and language and cultural factors.
- Train Community Health Workers (CHW) to identify uninsured women, refer them to the Kentucky Women's Cancer Screening Program, and track their referral.
- Utilize CHWs to evaluate and provide feedback on client reminders and/or small media to assure that they are culturally sensitive.
- Ensure that educational materials for lung cancer screening are culturally and linguistically appropriate.

Communication/Education

- Utilize small media (videos, letters, brochures, newsletters) to inform and motivate women to have a mammogram.
- Utilize mass media (TV, radio, newspaper, magazines, billboards) to educate and motivate women to have a mammogram.
- Educate groups on the indications for, benefits of, and ways to overcome barriers to receiving mammograms, with the goal of informing, encouraging, and motivating participants to seek a mammogram.
- Educate one-on-one, either in person or via telephone, on the indications for, benefits of, and ways to overcome barriers to receiving a mammogram, with the goal of informing, encouraging, and motivating participants to seek a mammogram.
- Promote and expand community-level programs, such as breast cancer coalitions, to increase education about the risk of breast cancer and the need for screening at appropriate intervals.
- Utilize client incentives (e.g., small rewards such as cash or coupons) that encourage women to have a mammogram.



Goal 5: Screening & Early Detection (cont.)

Reduce the proportion of late-stage diagnosis and mortality rate from breast cancer through screening and early detection.

Female Breast Cancer Late Stage Diagnosis, Kentucky, 2009–2013

Year	Total Cases	Late Stage	Proportion Late Stage
2009	3,969	1,051	28.44%
2010	3,700	1,050	28.38%
2011	3,814	1,092	28.63%
2012	3,963	1,088	27.45%
2013	4,007	1,138	28.40%
Total	19,180	5,419	28.25%

*Early stage includes insitu and local stages; late stage includes regional and distant stages. Data source: Kentucky Cancer Registry, 2013.

Neither the breast cancer incidence nor late stage disease rates have changed significantly in the past 13 years. However, the mortality rate has declined significantly, suggesting improvements in treatment.¹

DISPARITY IN FOCUS:

Breast cancer incidence rate in the Appalachian area is low and the mortality rate is high, suggesting that this population may be under-screened relative to the non-Appalachian area of the state.

% of KY women age 50–74 having had a mammogram in the past two years

Education Level	2012	2014
Less than H.S.	67.5%	71.1%
H.S. or G.E.D.	73.5%	81.5%
Some post-H.S.	78.5%	80.3%
College graduate	84%	91.9%

Healthcare Professionals

- Educate healthcare providers and staff on breast cancer screening utilizing a patient/healthcare provider shared decision-making model and evidence-based screening guidelines.
- Promote discussions between patients and healthcare providers on risks and benefits of being screened for breast cancer.
- Utilize client reminders (e.g., letters, postcards or phone calls) to alert clients that it is time for their mammogram.
- Utilize client incentives (e.g., small rewards such as cash or coupons) that encourage women to have a mammogram.
- Train Community Health Workers (CHWs) to deliver evidence-based cancer prevention interventions with consistent screening messaging in health disparate communities, businesses, churches and social groups.
- Support CHWs in conducting community group seminars about available mammography screening resources.
- Support CHWs in conducting follow-up calls with women who do not show up for a scheduled mammography, and identify barriers.
- Train CHWs to identify uninsured women, refer them to the Kentucky Women's Cancer Screening Program (KWCSPP), and track their referral.
- Promote healthcare provider utilization of current screening guidelines through professional journals and association newsletters.
- Organize opportunities for provider assessment and feedback (ex. how often providers offer and deliver screening services to clients and then give providers information about their performance).
- Utilize provider incentives, such as monetary rewards or CMEs, that motivate providers to perform screening or refer clients for screening.
- Utilize provider reminder and recall systems (e.g., chart stickers; electronic medical records).

Insurers

- Work with healthcare plans to promote and increase the utilization of colon cancer screening, particularly focused on implementation of ACA.

Worksite Wellness

- Encourage worksite cultures that offer benefits and programs that facilitate detecting cancer at its earliest stages.
- Offer employee health benefit plans that eliminate cost as a barrier to accessing breast cancer screenings.
- Ensure that employee health benefit plans include breast cancer screening provisions that adhere to the American Cancer Society (ACS) Guidelines or the US Preventive Services Task Force (USPSTF) Guidelines.
- Incorporate breast cancer prevention and early detection information into worksite wellness programs.
- Conduct assessment related to feasibility of implementing health promotion programs within Kentucky worksites, with special emphasis on cancer prevention and control.

Data & Research

- Conduct community needs assessments to determine health systems infrastructure regarding colon cancer screening services.

¹Kentucky Cancer Registry "State of the State" Cancer Data presentation, Drs. Tucker & Nee, July 2016

Goal 6: Screening & Early Detection

Reduce the incidence and mortality rate of cervical cancer through increased screening and early detection.

Objectives

Measure	Baseline	Target
% of Kentucky women age 21-65 who have had a pap test within the past three years	81.3% ¹	84.3% by 2021
% of Kentucky women age 21-65 without a high school education who have had a pap test within the past three years	72.8% ¹	75.8% by 2021
% of Kentucky women diagnosed with cervical cancer at a late stage	51.7% ²	48.7% by 2021

Female Breast Cancer Late Stage Diagnosis, Kentucky, 2009–2013

Year	Total Cases	Late Stage	Proportion Late Stage
2009	209	101	48.33%
2010	203	107	52.71%
2011	185	80	43.24%
2012	212	116	54.72%
2013	178	92	51.69%
Total	987	496	50.25%

¹Early stage includes local stages; late stage includes regional and distant stages.

Policy, Systems, and Environmental Changes

- Reduce structural barriers such as screening location, limited hours of operation, lack of childcare, and language and cultural factors.
- Reduce out-of-pocket costs to obtain screening.
- Mobilize grassroots advocates for legislative change.
- Promote the use of available financial resources for routine screening for uninsured and underinsured women.

Health Equity

- Reduce structural barriers such as screening location, limited hours of operation, lack of childcare, and language and cultural factors.
- Train CHWs to identify uninsured women, refer them to the Kentucky Women's Cancer Screening Program, and track their referral.
- Utilize CHWs to evaluate and provide feedback on client reminders and/or small media to assure that they are culturally sensitive.
- Ensure that educational materials for lung cancer screening are culturally and linguistically appropriate.

Communication/Education

- Utilize small media (videos, letters, brochures, newsletters) to inform and motivate women to have a Pap test.
- Utilize mass media (TV, radio, newspaper, magazines, billboards) to educate and motivate women to have a Pap test.
- Educate groups on the indications for, benefits of, and ways to overcome barriers to having a Pap test, with the goal of informing, encouraging, and motivating participants to seek a Pap test.
- Educate one-on-one, either in person or via telephone, on the indications for, benefits of, and ways to overcome barriers to receiving a Pap test, with the goal of informing, encouraging, and motivating participants to seek a Pap test.
- Utilize client incentives (e.g., small rewards such as cash or coupons) that encourage women to have a Pap test.

Healthcare Professionals

- Educate healthcare providers and staff on cervical cancer screening utilizing a patient/healthcare provider shared decision-making model and evidence-based screening guidelines.
- Promote discussions between patients and healthcare providers on risks and benefits of being screened for cervical cancer.
- Utilize client reminders (e.g., letters, postcards, phone calls) to alert clients that it is time for their Pap test.
- Utilize client incentives (e.g., small rewards such as cash or coupons) that encourage women to have a Pap test.
- Train Community Health Workers (CHWs) to deliver evidence-based cancer prevention interventions with consistent screening messaging in health disparate communities, businesses, churches and social groups.
- Support CHWs in conducting community group seminars about available cervical cancer screening resources.
- Support CHWs in conducting follow-up calls with women who do not show up for a scheduled Pap test, and identify barriers.

¹CDC BRFSS 2014; ²KCR 2013

Goal 6: Screening & Early Detection (cont.)

Reduce the incidence and mortality rate from cervical cancer through increased screening and early detection.

% of KY women age 21-65, without a high school education, who have had a pap test in the past three years

Education Level	2012	2014
Less than H.S.	77.3%	72.8%
H.S. or G.E.D.	74%	79.1%
Some post-H.S.	83.2%	79.2%
College graduate	90.1%	90.3%

Kentucky ranks 34th in the nation for women ages 21-65 who HAVE HAD a pap test in the past 3 years (81.3%).¹



Healthcare Professionals (cont.)

- Train CHWs to identify uninsured women, refer them to the Kentucky Women's Cancer Screening Program, and track their referral.
- Promote healthcare provider utilization of current screening guidelines through professional journals and association newsletters.
- Organize opportunities for provider assessment and feedback (e.g., how often providers offer and deliver screening services to clients) and then give providers information about their performance.
- Utilize provider incentives, such as monetary rewards or CMEs, that motivate providers to perform screening or refer clients for screening.
- Utilize provider reminder and recall systems (e.g., chart stickers, electronic medical records).
- Utilize CHWs to evaluate and provide feedback on client reminders and/or small media to assure that they are culturally sensitive.

Insurers

- Work with healthcare plans to promote and increase the utilization of colon cancer screening, particularly focused on implementation of Affordable Care Act.

Worksite Wellness

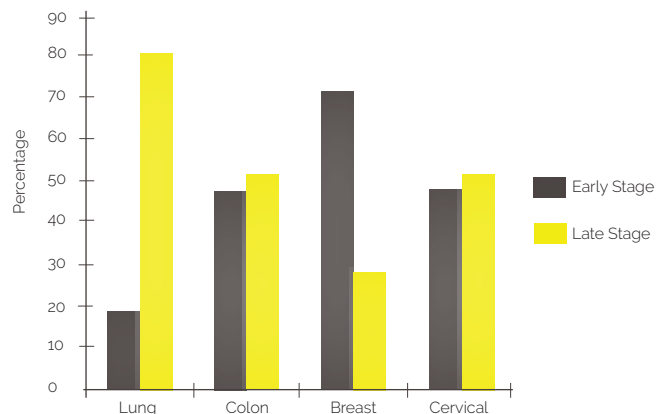
- Encourage worksite cultures that offer benefits and programs that facilitate detecting cancer at its earliest stages.
- Offer employee health benefit plans that eliminate cost as a barrier to accessing cervical cancer screenings.
- Ensure that employee health benefit plans include cervical cancer screening provisions that adhere to the American Cancer Society Guidelines or the US Preventive Services Task Force Guidelines.
- Incorporate cervical cancer prevention and early detection information into worksite wellness programs.
- Conduct assessments related to feasibility of implementing health promotion programs within Kentucky worksites, with special emphasis on cancer prevention and control.

Data & Research

- Conduct community needs assessments to determine health systems infrastructure regarding cervical cancer screening services.

Average % of Kentuckians Diagnosed Early vs. Late Stage

Nearly **50%** of Cervical Cancer diagnoses in Kentucky are Late Stage.



¹CDC BRFSS, 2014

Goal 7: Screening & Early Detection

Reduce the incidence and mortality rate from colon cancer through prevention and early detection.

Objectives

Measure	Baseline	Target
% of adults age 50 and older being screened for colon cancer	72.3% ¹	80% by 2018
% of adults with less than a high school education age 50 years and older who have been screened for colon cancer	62.2% ¹	70% by 2018
Incidences of colon cancer in Kentucky	53.8 ² per 100,000	50 per 100,000 by 2018

Policy, Systems, and Environmental Changes

- Promote enrollment and utilization of colon cancer screening benefits as part of the Affordable Care Act.
- Identify needs for performance improvement and advocate for system changes based on Healthcare Effectiveness Data and Information Set.
- Encourage policies that reduce out-of-pocket costs to the patient.
- Advocate for new funding and resources to support the Kentucky Colon Cancer Screening Program. Currently the KCCSP supports the uninsured. Future plans may include supporting the underinsured as needed.
- Educate state and local policy makers concerning the health and economic benefits of prevention and early detection of colon cancer.
- Disseminate information on new colon cancer screening policies and legislation through established partnerships and networks.
- Identify gaps in colon cancer screening policies and advocate for reducing those gaps.
- Provide free colon cancer screening with referrals and follow-up.
- Reduce structural barriers such as screening location, limited hours of operation, lack of childcare, and language and cultural factors.

Health Equity

- Identify gaps in colon cancer screening by educational status and advocate for reducing those gaps.
- Identify materials for populations whose primary language is not English through connecting with national materials/pictures.
- Ensure that educational materials for colon cancer screening are culturally and linguistically appropriate.
- Find local resources and support to identify and address transportation barriers.
- Reduce structural barriers such as screening location, limited hours of operation, lack of childcare, and language and cultural factors.

Communication/Education

- Target people 50 years old as well as the population over 50, alerting them to the trend of increased diagnosis under 50, empowering them to learn about their family history and colon cancer symptoms, and urging them to talk with their doctor starting at age 40 about when it's the best time for them to be screened.
- Educate about the variety of screening options available including stool testing.
- Develop and implement a mass media strategy.
- Develop and implement a social media strategy.
- Implement a statewide public awareness campaign on colon cancer screening that uses simple, consistent messages that can be tailored and delivered to organizations and individuals. This includes tailoring small media (videos and printed materials such as letters, brochures, and newsletters) to inform and motivate people to be screened for colon cancer.
- Provide colon cancer education and outreach activities in all areas of the state to encourage patients at age 40 to be proactive in asking health care providers about colon cancer screening tests.



The best colon cancer screening test is the one that gets done.

¹2012 KYBRFS, includes FIT, FOBT, colonoscopy, and sigmoidoscopy; ²2010 KCR

Goal 7: Screening & Early Detection (cont.)

Reduce the incidence and mortality rate from colon cancer through prevention and early detection.

0%
Kentucky ranks 21st in the nation for adults age 50-75 who have fully met the USPSTF colon cancer screening recommendation, at 67.2%.¹

0%
The population with the highest percentage who have NOT fully met the USPSTF colon cancer screening recommendation are those who have less than a high school education (50.4%).

Communication/Education (cont.)

- Provide colon cancer education and outreach activities that dispel fatalistic beliefs/myths and emphasize that colon cancer can be prevented.
- Provide colon cancer education and outreach activities that use positive messages and experiences provided by trusted leaders and survivors in the community.
- Involve faith-based communities in delivery of colon cancer screening messages.
- Organize opportunities for group education.
- Organize opportunities for one-on-one education.

Healthcare Professionals

- Educate healthcare professionals on the rise in the under 50 population being diagnosed with colon cancer (often late stage).
- Educate healthcare professionals on stool based tests and FIT-first.
- Target professionals at Community Health Centers/Free Clinics where patients often have health disparities. Work with them on increasing screening rates.
- Educate healthcare professionals on a "quality colonoscopy".
- Utilize client reminders (e.g., letters, postcards, or phone calls) to alert clients that it is time for their colon cancer screening.
- Communicate colonoscopy prep instructions to patients using simple language and pictures, with key information highlighted.
- Provide free colon cancer screening with referrals and follow-up.
- Provide information about colon cancer screening to all patients discharged from the hospital or Emergency Department.
- Educate health care professionals about how to implement the Affordable Care Act.
- Promote the utilization of patient reminder and tracking systems (letters, postcards, or phone calls) in primary care practices to alert clients that it is time for their colon cancer screening test.
- Encourage primary care practice interventions that include provider assessment and feedback.
- Promote utilization of patient navigators to increase follow-through of referrals for colon cancer screening.
- Work with healthcare professionals to identify and address local access and capacity barriers for colon cancer screening.
- Promote the utilization of United States Preventive Services Task Force colon cancer screening guidelines through professional journals and association newsletters.
- Support adoption of the direct referral system in primary care practices.
- Increase the number of providers using best practices in fostering trust, cultural competency, and shared decision making in choosing the best screening method based on the individual.
- Encourage involvement of dentists, pharmacists, and other health care provider groups not usually targeted for colon cancer screening recommendations.
- Promote follow-up with patients after referring them to screening.

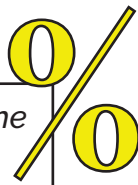


¹2014 CDC BRFSS

Goal 7: Screening & Early Detection (cont.)

Reduce the incidence and mortality rate from colon cancer through prevention and early detection.

Kentucky ranks 22nd in the nation for adults age 50+ (65.9%) who HAVE EVER HAD a sigmoidoscopy or colonoscopy.¹



KY has made tremendous progress in increasing CRC screening rates through sigmoidoscopy/colonoscopy.

Year Screening Rate (CDC, BRFSS)

2002	43.9%
2008	63.7%
2014	69.7%



**BRFSS Methodology Change in 2011*

“Begin talking about colon cancer screening at age 40.”



Insurers

- Work with healthcare plans to promote and increase the utilization of colon cancer screening, particularly focused on implementation of the Affordable Care Act.
- Identify gaps in co-pays and insurance coverage for colon cancer screening and advocate for reducing those gaps.

Worksite Wellness

- Encourage worksites to provide colon cancer screening opportunities, such as FIT tests, on-site for their employees.
- Encourage worksites to select health benefit plans that eliminate cost as a barrier to accessing colon cancer screenings.
- Encourage worksites to offer employee health benefit plans that include colon cancer screening provisions adhering to the American Cancer Society Guidelines or the US Preventive Services Task Force Guidelines.
- Conduct an assessment related to the feasibility of implementing health promotion programs within Kentucky worksites, with special emphasis on cancer prevention and control.
- Incorporate colon cancer screening information into worksite wellness programs to promote a screening-friendly worksite culture.

Data & Research

- Monitor colon cancer screening through Healthcare Effectiveness Data and Information Set (HEDIS) measures.
- Identify data and information on those who did not graduate from high school and have had colon cancer.
- Collect and monitor data elements required under the Affordable Care Act.
- Conduct community needs assessments to determine health systems infrastructure regarding colon cancer screening services.
- Identify the most important barriers to colon cancer screening for those without a high school education.
- Identify the gaps in screening by educational status.
- Monitor data related to colon cancer diagnosis by age, especially those under 50.



¹2012 CDC BRFSS

Goal 8: Screening & Early Detection

Reduce lung cancer mortality and increase early detection through screening for Kentuckians who meet the eligibility criteria as recommended by the United States Preventive Services Task Force (USPSTF).

Objectives

Measure	Baseline	Target
% of Kentuckians diagnosed at an early stage (Stage 1 or 2) of lung cancer	26.6%	30% by 2020

By 2017, develop a baseline measure of Kentuckians who meet the USPSTF criteria for lung cancer screening who have discussed the risks and benefits of screening with their health care provider.¹

By 2017, develop a baseline measure of Kentuckians who meet the USPSTF criteria who have been screened for lung cancer using a low-dose CT scan.¹



Policy, Systems, and Environmental Changes

- Encourage clinics and hospitals in Kentucky to deliver high quality lung cancer screening and patient centered care by following the United States Preventive Services Task Force (USPSTF) evidence-based recommendation, that would also include the following:
 - Radon prevention²
 - Smoke-free environments²
 - Smoking cessation for patients and their families: discussing smoking status and encouraging cessation attempts for smokers with referrals to evidence-based programs/resources at every visit²
- Reduce out-of-pocket costs for lung cancer screening and follow-up according to the USPSTF recommendations.
- Disseminate information on lung cancer screening policies and legislation through established partnerships and networks.
- Identify gaps and barriers related to lung cancer screening policies and advocate for addressing them.
- Promote cultural systems change to address the stigma often associated with lung cancer.
- Identify advocacy channels to promote evidence-based lung cancer screening.

Health Equity

- Ensure that educational materials for lung cancer screening are culturally and linguistically appropriate.
- Promote cultural system changes to address the stigma often associated with lung cancer.

Communication/Education

- Educate the public about the burden of lung cancer in Kentucky.
- Educate the public on the risks and benefits of lung cancer screening, the USPSTF recommendations and that screening is not a substitute for smoking cessation.
- Educate the public on the importance of getting lung cancer screening at a Screening Center of Excellence according to the Lung Cancer Alliance.
- Educate the public on the rationale of the USPSTF guidelines in order to address concerns among the ineligible.
- Implement a public awareness campaign on lung cancer screening emphasizing:
 - A patient/health care provider shared decision-making model
 - Lung cancer screening is a process
 - USPSTF recommendations
- Ensure that educational materials for lung cancer screening are culturally and linguistically appropriate.

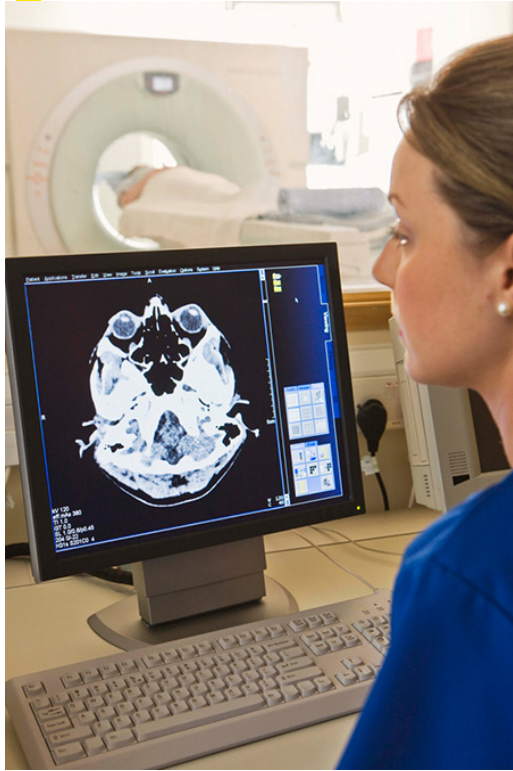
Healthcare Professionals

- Educate healthcare providers and staff on lung cancer screening utilizing a patient/healthcare provider shared decision-making model and the USPSTF recommendations.
- Promote discussions between patients and healthcare providers on risks and benefits of being screened among the Kentuckians who meet the USPSTF lung cancer screening recommendation criteria and those who don't meet the criteria.

¹KY LEADS Screening Registry; ²Guide to Community Preventive Services. <http://www.thecommunityguide.org>

Goal 8: Screening & Early Detection (cont.)

Reduce lung cancer mortality and increase early detection through screening for Kentuckians who meet the eligibility criteria as recommended by the United States Preventive Services Task Force (USPSTF).



Healthcare Professionals (cont.)

- Educate health care providers and staff on the importance of referring patients to have lung cancer screening at a Screening Center of Excellence according to the Lung Cancer Alliance.
- Identify advocacy channels to promote evidence-based lung cancer screening.
- Create a provider focused educational campaign on comprehensive messaging for decreasing lung cancer risk through:
 - Evidence-based eligibility recommendations for lung cancer screening based on an individual's health status
 - Radon prevention¹
 - Smoke-free environments¹
 - Smoking cessation for patients and their families: discussing smoking status and encouraging cessation attempts for smokers with referrals to evidence-based programs/resources at every visit¹

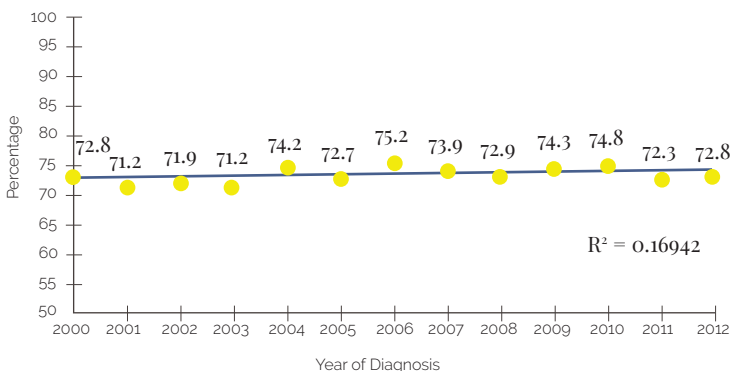
Insurers

- Advocate for coverage of lung cancer screening according to the USPSTF recommendations.
- Work with healthcare plans to educate their policyholders on lung cancer screening using a shared decision-making model, according to USPSTF recommendations.
- Work with healthcare plans to educate their policyholders on covered tobacco cessation treatment options.
- Ensure that educational materials utilized for policyholders related to lung cancer screening are culturally and linguistically appropriate.

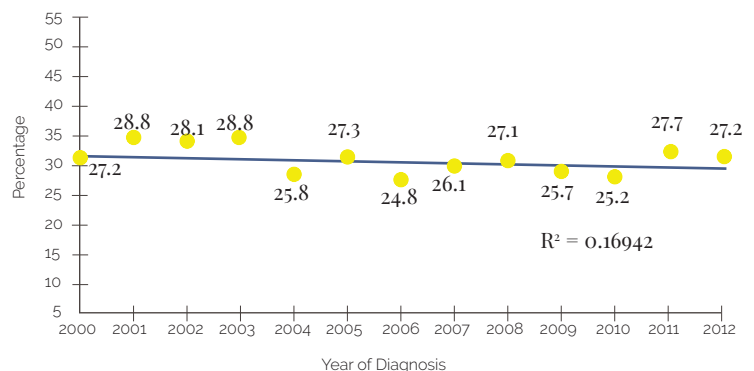
Data & Research

- Support development of a lung cancer screening registry for Kentucky with consideration of how it can connect to the American College of Radiology or other CMS approved national lung cancer screening registry.
- Explore and address access barriers within the state for implementation of high quality lung cancer screening programs.

Late Stage Diagnosis (%)
Lung Cancer
Kentucky, 2000-2012²



Early Stage Diagnosis (%)
Lung Cancer
Kentucky, 2000-2012²



¹Guide to Community Preventive Services. Accessed December 2009. <http://www.thecommunityguide.org>; ² Kentucky Cancer Registry, 2015

Goal 9: Treatment & Care

Promote access to and appropriate utilization of quality cancer diagnostic and treatment services for all Kentuckians.

Objectives

Select a breast cancer treatment objective based on the American College of Surgeons Commission on Cancer's "Cancer Program Practice Profile Reports (CP3R)" standards that addresses breast cancer treatment disparities in Kentucky by 2017.

Select a colon cancer treatment objective based on the American College of Surgeons Commission on Cancer's "Cancer Program Practice Profile Reports (CP3R)" standards that addresses colon cancer treatment disparities in Kentucky by 2017.

*Definition: CP3R are web-based reports from the ACOS Commission on Cancer, offering local providers comparative information to assess adherence to and consideration of standard of care therapies for major cancers. CP3R provides a platform from which to promote continuous practice improvement to improve quality of patient care at the local level and also permits hospitals to compare their care for these patients relative to that of other providers. The aim is to empower the healthcare community to work cooperatively and collaboratively to identify problems in practice and delivery and to implement best practices that will diminish disparities in care across CoC-accredited cancer programs.

The *Commission on Cancer (CoC)*, a quality program of the American College of Surgeons, offers accreditation to cancer programs who meet standards in their provision of high-quality, multidisciplinary, patient-centered cancer care. **Currently, there are 27 CoC accredited cancer programs in Kentucky.**¹

¹ The KCC is working closely with the Kentucky Cancer Registry to identify population-based treatment data based on the Commission on Cancer CP3R standards. There are 3 types of standards. 1) Accountability; 2) Quality Improvement and 3) Surveillance. KCC is currently focused on accountability measures, as they should be standard of care. To date, breast and colon cancer have multiple options for accountability standards. There are no accountability standards yet for lung cancer. If an accountability measure for lung cancer becomes available in 2017, it will be considered for inclusion in the CAP. For the full list of measures, please visit: <https://www.facs.org/quality%20programs/cancer/ncdb/qualitymeasures>;

² American College of Surgeons Commission on Cancer Hospital Locator; Accessed December 2016.

Policy, Systems, and Environmental Changes

- Increase free or low-cost transportation and housing options for persons in remote areas who have to travel for treatment services.

Health Equity

- Increase availability, awareness and utilization of culturally and linguistically-diverse and low-literacy cancer treatment information resources.
- Promote use of Spanish language cancer information services.
- Cultivate distribution channels in special population communities.
- Integrate patient-provider cultural and communication training into healthcare and allied health education and training programs.
- Encourage Kentucky healthcare professional academic institutions to add cultural competency courses to their curriculum.
- Work with opinion leaders within special populations to disseminate appropriate treatment messages.

Communication/Education

- Increase awareness and utilization of reputable cancer information resources by cancer patients and their families.
- Educate the community regarding how and where to access care if uninsured and ineligible.
- Increase patient education on the purpose and benefits of clinical trials.
- Increase development and utilization of resources that increase health literacy.
- Increase KCC involvement in initiatives addressing social determinants of health, especially related to education.
- Promote enrollment of people who are currently eligible for health care services through Medicaid.
- Promote collaborations to reduce duplication of services and maximize reach and effectiveness.

Healthcare Professionals

- Expand continuing medical education opportunities regarding treatment guidelines through increased programming, distance learning, and teleconference capabilities in rural areas throughout the state.
- Promote opportunities to retain/increase the number of healthcare professionals in underserved areas.
- Increase health professionals' awareness and use of the National Cancer Institute's Prescreening Developmental Questionnaire and continuing medical education.
- Integrate professionally accepted practice guidelines into health professional school curricula.
- Increase physician-to-patient education about appropriate professional treatment guidelines for their situation.
- Educate healthcare professionals and lay health workers on how to best provide reputable cancer information.
- Present latest American College of Surgeons Commission on Cancer CP3R standards to tumor boards throughout the state.
- Expand the network of patient navigators, including volunteers and trained social workers.
- Increase access to clinical trial protocol information.

Goal 9: Treatment & Care

Promote access to and appropriate utilization of quality cancer diagnostic and treatment services for all Kentuckians.



Healthcare Professionals (cont.)

- Encourage health and healthcare professionals to inform and educate cancer patients about the availability and benefits of clinical trials, and to offer participation in clinical trials as a choice.
- Promote programs addressing patient safety throughout the cancer continuum.

Insurers

- Promote awareness of insurance coverage for treatment under clinical trials.
- Raise awareness of policies ensuring that in-state self-insured companies and in-state branches of companies based out of state must provide cancer treatment coverage in accordance with current evidence based treatment guidelines.

Worksite Wellness

- Encourage worksite cultures that provide access to high-quality treatment, including cancer clinical trials.
- Conduct assessments related to feasibility of implementing health promotion programs within Kentucky worksites, with special emphasis on cancer prevention and control.

Data & Research

- Increase access to information regarding clinical trial protocols available in Kentucky.
- Monitor American College of Surgeons Commission on Cancer CP3R standards.
- Work with Kentucky Cancer Registry to support coordination of comparative effectiveness studies assessing treatment patterns in selected cancer types/stages which have clearly established guidelines (CP3R).

Goal 10: Quality of Life

Promote overall health of Kentucky cancer survivors from diagnosis onward to increase quality of life.

Public Health of Adult Survivors

Focus Areas

- Public Health Needs of Adult Cancer Survivors
- Childhood Cancer Survivors
- Hospice and Palliative Care

Objectives

Measure	Baseline	Target
% of cancer survivors who smoke	23.3% ¹	20% by 2020
% of cancer survivors who are a normal weight	29.3% ¹	32% by 2020
% of cancer survivors who are limited in any way in activities because of physical, mental or emotional problems	40.3% ¹	37% by 2020
By 2017, establish a baseline number of cancer patients who have received a written summary of their cancer treatments and instructions about where and who they should see regarding routine cancer checkups. ²		
By 2017, establish a baseline percentage of cancer patients within Commission on Cancer (CoC) accredited facilities who have received a survivorship care plan. ³		

XX% of Kentucky Cancer Survivors who have EVER RECEIVED a written summary of all the cancer treatments that they have received.

****Anticipated Summer 2016, KyBRFS 2015**



Policy, Systems, and Environmental Changes

- Educate key decision makers about quality of life issues, services, and research.
- Offer tobacco treatment at all points of care, but especially during teachable moments such as immediately after diagnosis.
- Use medical record systems to trigger providers to assess and treat smoking.
- Provide a culture of care which supports smoking cessation, including smoke-free medical campuses.
- Endorse policies and initiatives that support health-promoting behaviors, including access to nutritious foods and increasing opportunities for physical activity, especially among populations most at risk or affected by overweight and obesity.
- Build existing treatment summary templates into systems of care.

Health Equity

- Offer training to increase patient navigators' knowledge regarding issues of health equity and cultural competency to address cancer health disparities.

Communication/Education

- Enhance and leverage existing, regional resource directories such as the Kentucky Cancer Program's "Pathfinders" to increase cancer survivors' awareness of the availability of community supportive services, including transportation, housing, nutrition, outpatient treatment, psychosocial support services, disability income, legal supportive services and wellness programs.
- Promote appropriate follow-up care (e.g., guideline concordant cancer screening) and other appropriate post-treatment support (e.g., tobacco cessation counseling, physical activity recommendations) to cancer survivors.
- Increase the number of people living with cancer who are offered and use survivorship care plans.
- Support efforts of the Kentucky Cancer Patient Navigation Network to meet biennially and provide continuing education in best-practices, networking opportunities and encouragement for professionals.
- Coordinate with quality-of-life stakeholders, including survivors, to develop and promote quality-of-life messages that are consistent and linked to data and research.

Healthcare Professionals

- Train all front-line cancer care providers about smoking cessation.
- Provide smoking cessation support for health care providers.
- Promote the use of survivor care plans by health care providers and cancer patients.

Data & Research

- Conduct research and education about cancer survivors' needs, including adequacy of follow-up and support services, and barriers encountered during the diagnostic, treatment and post-treatment phases of care.

¹2012 BRFS; ²2015 KyBRFS; ³ Survey Application Record from the American College of Surgeons Commission on Cancer;

Goal 10: Quality of Life

Promote overall health of Kentucky cancer survivors from diagnosis onward, to increase quality of life.

Childhood Cancer Survivors

Focus Areas

- Public Health Needs of Adult Cancer Survivors
- **Childhood Cancer Survivors**
- Hospice and Palliative Care

Objectives

Measure	Baseline	Target
% of KY pediatric oncology patients seen at Children's Oncology Group facilities	81% ¹	90% by 2021
Number of KY pediatric oncology patients evaluated at Long-Term Follow Up Clinics.	XX ²	XX by 2021
Five year survival rate of KY childhood cancer patients.	84% ³	87% by 2021
Number of KY-specific resource guides available to pediatric cancer patients and their families/ careivers.	0 ⁴	1 by 2021
Number of instructional hours offered under KY's home/hospital instruction programs.	Minimum of two (2) one (1) hour visits per week. ⁵	Minimum of five (5) hours per week by 2021.
Number of statewide networking & professional development meetings of childhood cancer advocates & professionals.	0 ⁶	One meeting annually (five total) by 2021.

Policy, Systems, and Environmental Changes

- Work with childhood cancer advocacy organizations to support efforts aimed at improving Kentucky pediatric cancer patients' quality of life from diagnosis onward.
- Educate patients, parents and educators on academic challenges faced by childhood cancer patients, and educate legislators as to the importance of comprehensive home/hospital instruction administrative regulations in Kentucky.
- Expand workforce training in pediatric palliative care.
- Promote increased access to integrated palliative care services for children facing any stage of cancer.
- Work with public health economists to calculate the financial impact of childhood cancer in Kentucky (loss of income by parents; out of pocket costs for care; data on financial hardships/medical bankruptcy; long-term financial impact on pediatric cancer survivors such as employability and insurability).

Health Equity

- Increase research to better understand and address differences in childhood cancer occurrence and survival between Appalachian and Non-Appalachian regions.

Communication/Education

- Increase education about long-term consequences of cancer treatment for pediatric, adolescent/young adult, and adult cancer patients.
- Educate patients and their families about the need for long term follow-up care to monitor for late effects of childhood cancer treatment and promote healthy survivorship.
- Encourage families of children with cancer to utilize treatment summaries and survivorship care plans.
- Conduct website research to identify available childhood cancer educational resources.
- Work with Kentucky Children's Alliance, Kentucky COG facilities staff, and other interested partners and advocates to create a list of childhood cancer resources utilized by pediatric cancer patients and their families.
- Support and promote awareness for programs that provide psychosocial, physical, logistical, and emotional support for patients and their families.
- Identify and address need for consumer friendly explanations of pediatric clinical trials, informed consent, and referral patterns.
- Identify and address family educational needs (diagnosis, treatment, late-effects, psychosocial support programs, sibling support, respite care).
- Work with school intervention specialists to raise awareness among Kentucky patients, families, educators and administrators as to support that should be available through the school system (IEP, educational consultants, etc.).

¹Kentucky Cancer Registry, 2009-2013, accessed September 2016; ² Data pending from Sherry Bayliff: University of Kentucky's Long-Term Follow-Up Clinic, based on those seen from 2011-2016; ³National Cancer Institute, SEER Stat database, 2009-2013; ⁴Meeting of Kentucky Cancer Consortium childhood Cancer member organizations, August 2016; ⁵704 KAR 7:120; ⁶Kentucky Cancer Consortium program records, 2001-2016.

Goal 10: Quality of Life

Promote overall health of Kentucky cancer survivors from diagnosis onward to increase quality of life.

Childhood Cancer Survivors

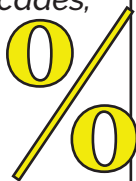
Focus Areas

- Public Health Needs of Adult Cancer Survivors
- Childhood Cancer Survivors
- Hospice and Palliative Care

In the U.S. in 2016, an estimated 10,380 new cases of cancer will be diagnosed among children from birth to 14 years, and about 1,250 children are expected to die from the disease.¹

In Kentucky, approximately 238 children were diagnosed with invasive childhood cancer in 2015.²

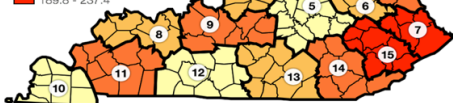
Although pediatric cancer death rates have declined by nearly 70% over the past four decades, cancer remains the leading cause of death from disease among children.¹



Age-Adjusted Childhood Cancer Incidence Rates in Kentucky
All Sites, 1999 - 2013
By Area Development District
Age-Adjusted to the 2000 U.S. Standard Million Population

Kentucky Rate: 176.0 / per 1,000,000

- 155.7 - 172.5
- 174.4 - 175.5
- 176.1 - 189.0
- 189.8 - 237.4



All rates per 1,000,000.
Data accessed August 29, 2016. Based on data released Jan 2016.
© 2016 Kentucky Cancer Registry.

- | | |
|---------------------|----------------------|
| 1 Northern Kentucky | 9 Lincoln Trail |
| 2 Buffalo Trace | 10 Purchase |
| 3 Fivco | 11 Pennyrite |
| 4 Kipda | 12 Barren River |
| 5 Bluegrass | 13 Lake Cumberland |
| 6 Gateway | 14 Cumberland Valley |
| 7 Big Sandy | 15 Kentucky River |
| 8 Green River | |

Communication/Education (cont.)

- Increase general awareness of incidence and impact of pediatric cancer on America's children.
- Increase awareness of clinical trials in the pediatric/adolescent population.
- Increase awareness of need for novel pediatric cancer therapies.
- Increase awareness of the impact of pediatric cancer on survivors and their families.

Healthcare Professionals

- Promote utilization of recommendations/standards for follow-up care [e.g., COG Passport for Care; Psychosocial Standards of Care Project for Childhood Cancer (PSCPCC)], including baselines for neuro-cognitive status and follow-up screening.
- Increase continuing education opportunities for pediatricians and primary care providers regarding diagnosis of childhood cancer and importance of referrals to COG facilities.
- Adopt a standardized neuro-cognitive baseline and follow up assessments as established by COG.
- Increase collaborations among Kentucky partner organizations to develop childhood cancer awareness continuing education modules for tele-health and online use.

Insurers

- Work to increase access and coverage of treatment at COG facilities for all childhood cancer patients.
- Educate decision makers on the need for adequate reimbursement for pediatric home, hospice and palliative care.
- Advocate for coverage of appropriate psychosocial services for parents and siblings of children with cancer.

Worksite Wellness

- Educate human resource professionals as to the full extent of resources available to pediatric cancer caregivers through the Family Medical Leave Act.

Data & Research

- Support research leading to new therapies targeted specifically for children with cancer that are effective and less toxic.
- Promote basic/molecular research leading to understanding the causes of pediatric cancers.
- Increase access to all phases of pediatric oncology clinical trials.
- Promote research to improve the quality of life for survivors that address the physical, cognitive and psychosocial consequences of treatment from diagnosis through late effects.
- Work with state and national partners to support funding for pediatric cancer research.
- Support development of funding mechanisms to support non-profits providing quality educational materials to children with cancer and their families.

¹National Cancer Institute; ²Kentucky Cancer Registry

Goal 10: Quality of Life

Promote overall health of Kentucky cancer survivors from diagnosis onward, to increase quality of life.

Hospice and Palliative Care

Focus Areas

- Public Health Needs of Adult Cancer Survivors
- Childhood Cancer Survivors
- Hospice and Palliative Care

Objectives

Measure	Baseline	Target
The number of providers certified in Hospice and Palliative Medicine in Kentucky	332 ¹	350 by 2020
Kentucky's grade regarding the quality of its policies affecting pain treatment	B+ ²	A by 2020
By 2020, for cancer patients with a terminal diagnosis, increase median length of stay in hospice care. ⁴ <i>*This will serve as a proxy measure for Kentucky as there is no statewide data source available.</i>		

Policy, Systems, and Environmental Changes

- Encourage oncology and inpatient programs to incorporate components of palliative care.
- Educate key decision makers regarding policy changes that will support reimbursement for advanced care planning conversations and concurrent use of hospice care during active treatment.
- Educate clinic staff to facilitate culturally competent conversations about advance care planning.
- Monitor changes in State and Federal legislation and funding regarding palliative care, and serve as a source of this information for health care providers, institutions, voluntary organizations and others.
- Promote completion of advanced care planning documents for all cancer patients near the time of diagnosis or early in treatment.
- Support implementation of palliative care programs for children.

Communication/Education

- Encourage health care providers, institutions, voluntary organizations, government agencies and others to provide education and information on palliative care and hospice care, including scope of services, locations, access to care and reimbursement.
- Work with member organizations to do targeted outreach and education about the benefits of hospice.
- Document and promote the availability of palliative care in inpatient and outpatient settings in NCI-designated cancer centers, tertiary hospitals, children's hospitals and community cancer centers in Kentucky.

Healthcare Professionals

- Work with associations representing health care professionals to promote hospice and palliative care certification and credentialing.
- Promote training for health professionals in both adult and pediatric hospice and palliative care.

Insurers

- Educate public and private insurers regarding policy changes that will support reimbursement for advanced care planning conversations and concurrent use of hospice care during active treatment.

¹Baseline: 94 MDs, American Board of Medical Specialties, 2014; 9 APRNs & 229 RNs, Nat'l Board for Certification of Hospice and Palliative Nurses, 2014; ² State Pain Policy Advocacy Network, 2013; ³ 20 days, Hospice of the Bluegrass, 2014

Appendices

appendix a

Common Data Sources Used in Kentucky's Comprehensive Cancer Control

Although not exhaustive, the following list provides common data sources that the Kentucky Cancer Consortium and its partners use in planning, implementing, and evaluating their cancer control activities.

Data Source	Web Address
Kentucky Cancer Consortium	http://www.kcr.uky.edu/
Kentucky Behavioral Risk Factor Surveillance (KyBRFS) Program	http://chfs.ky.gov/dph/info/dpqi/cd/brfss.htm
State Cancer Profiles	http://statecancerprofiles.cancer.gov/
American Cancer Society Facts and Figures	http://www.cancer.org/research/cancerfactsstatistics/
U.S. Census	http://quickfacts.census.gov/qfd/states/21000.html
Vital Statistics	http://chfs.ky.gov/dph/vital/

Kentucky's Population Demographics

	Kentucky (%)	U.S. (%)
Population, 2014 estimate	4,413,457	318,857,056
Gender		
Males	49.2	49.2
Females	50.8	50.8
Race/Ethnicity		
White alone, not hispanic or latino, 2013	85.6	62.6
Black or African American alone, 2013	8.2	13.2
Hispanic or Latino, 2013	3.3	17.1
Income		
Per capita income in past 12 months (2013 \$), 2009-2013	\$23,462	\$28,155
Median Household Income, 2009-2013 (\$)	\$43,036	\$53,046
Persons below poverty level, 2009-2013	18.8	15.4
Income		
High school graduate or higher, percent of persons age 25+, 2009-2013	83.0	86.0
Bachelors degree or higher, percent of persons age 25+, 2009-2013	21.5	28.8

Source: United States Census Bureau, Kentucky QuickFacts

Appendices

appendix c

Evaluation:

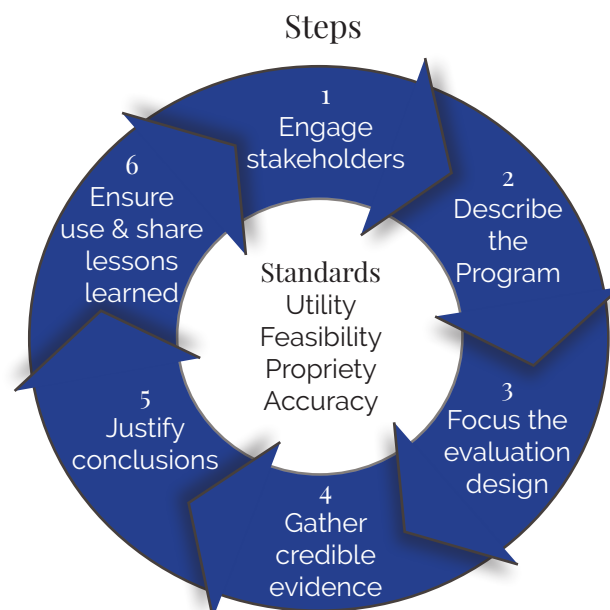
The Kentucky Cancer Consortium (KCC) believes it is essential to evaluate our efforts. The three main components of annual KCC evaluation plans come directly from the [Comprehensive Cancer Control Branch Program Evaluation Toolkit](#) (June 2010) and include:

1. Partnership: the quality, contributions, and impacts of the KCC including:
 - Membership satisfaction
 - Communication satisfaction
2. Plan: the quality and implementation of the Kentucky Cancer Action Plan (CAP) including:
 - Understanding which organizations are working on various aspects of the plan in order to improve coordination and collaboration
 - Working together to revise the plan
3. Program: assessing the results of interventions outlined in the CAP which are being implemented by KCC staff and their partners

The KCC follows the [Centers for Disease Control and Prevention's Framework for Program Evaluation in Public Health](#) as well as the standards for evaluation, with a particular focus on utility. These areas are often found directly in the CAP and the [KCC logic model](#), in the form of short-term, intermediate, and long-term indicators.

Each year the KCC staff, with Consortium member input, develops a plan for evaluation activities for the year and creates an annual report with associated products related to its results. Diverse partners are engaged in the planning and conduction of evaluation projects as well as dissemination of their findings. Sometimes this involves working with a KCC team or network and other times it involves developing a specific evaluation committee for a particular project.

The information learned from evaluation activities is widely disseminated so partners can use it to be more effective in their practice. More information about past evaluation projects and their reports can be found on the [KCC evaluation webpage](#).



Source: Comprehensive Cancer Control Branch Program Evaluation Toolkit, June 2010, p.13



Kentucky
Cancer Consortium

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Kentucky Cancer Consortium

CANCER ACTION PLAN

a blueprint for cancer prevention
and control in our state by 2022

