



*Kentucky Cancer Consortium*

# CANCER ACTION PLAN

a blueprint for cancer prevention  
and control in our state

**NOTE: This Plan excerpt includes HPV Vaccine  
& Cervical Cancer Objectives only**



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# 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.](#)

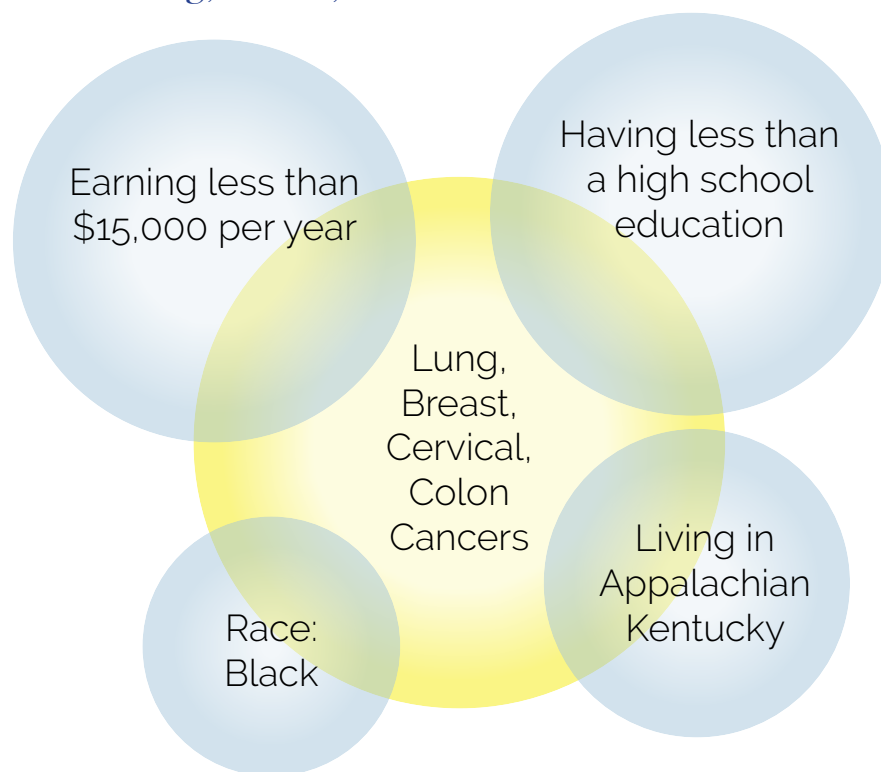
# Introduction

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.		White	Black	Appalachia	Non-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 4: Prevention

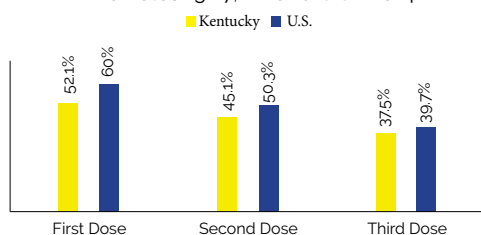
Reduce incidence of HPV-related cancers by increasing initiation and completion of the human papillomavirus (HPV) vaccine series.

## Objectives

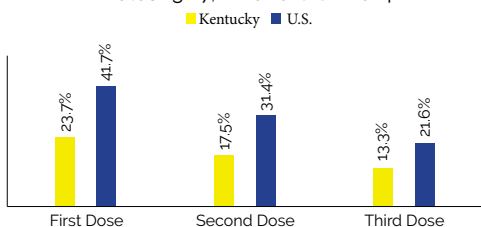
Measure	Baseline	Target
% of Kentucky males age 13-17 <sup>2</sup> who have completed the recommended HPV Vaccine series	13.3% <sup>1</sup>	25% by 2020
% of Kentucky females age 13-17 <sup>2</sup> who have completed the recommended HPV Vaccine series	37.5% <sup>1</sup>	50% by 2020

<sup>1</sup> 2014, National Immunization Survey- Teen; <sup>2</sup>2006 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 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% <sup>1</sup>	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% <sup>1</sup>	75.8% by 2021
% of Kentucky women diagnosed with cervical cancer at a late stage	51.7% <sup>2</sup>	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%

<sup>1</sup>Early 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.

<sup>1</sup>CDC BRFSS 2014; <sup>2</sup>KCR 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%).<sup>1</sup>



## 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

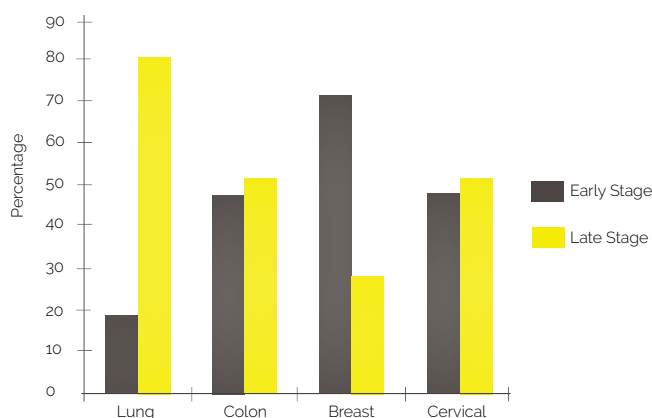
- Encourage worksite cultures that offer benefits and programs that facilitate detecting cancer at its earliest stages.
- Offer employee health benefit plans that eliminate cost as a barrier to accessing cervical cancer screenings.
- Ensure that employee health benefit plans include cervical cancer screening 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.



<sup>1</sup>CDC BRFSS, 2014

### 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:

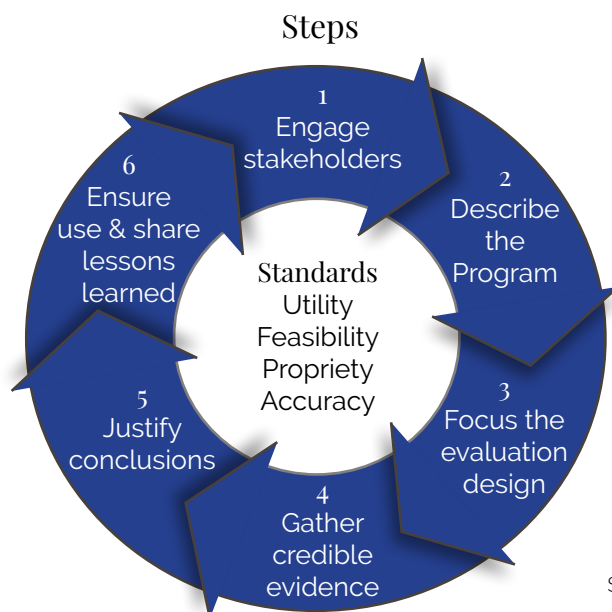
The Kentucky Cancer Consortium (KCC) believes it is essential to evaluate our efforts. The three main components of annual KCC evaluation plans come directly from the [Comprehensive Cancer Control Branch Program Evaluation Toolkit](#) (June 2010) and include:

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