17. Cancer

Goal

Reduce the burden of cancer on the Kentucky population by decreasing cancer incidence, morbidity, and mortality rates.

Overview

Cancer is the second leading cause of death in Kentucky. The American Cancer Society (ACS) estimates over 570,000 Americans will die of cancer in 2005. Of these annual cancer deaths, 9,560 are expected in Kentucky. In 2005, 1,372,910 million new cases of cancer will be diagnosed nationally, including 23,020 new cases that are likely to be diagnosed in Kentucky.

Kentucky’s health care community continues to meet challenges in determining the contributing factors for and addressing geographic and racial disparities in cancer mortality. African-American residents die from cancer at a higher rate than white residents. The age-adjusted mortality rate for cancers in Kentucky during 1998 through 2002 is higher for men than for women, slightly higher for rural Kentuckians than urban residents, and higher for Appalachian residents than for non-Appalachian Kentuckians.

In addition to the human toll of cancer, the financial costs of cancer are enormous. The National Cancer Institute (NCI) estimates that the overall costs for cancer in 2004 were $189.8 billion, with $69.4 billion for direct medical expenditures, $16.9 billion for lost productivity due to illness, and $103.5 billion for costs of lost productivity due to premature death.

The number of new cancer cases and deaths, as well as the costs of cancer morbidity and mortality, can be reduced in Kentucky through screening tests for breast, cervical, and colorectal cancers. Other essential public health activities include education of residents about cancer screening, tobacco avoidance and cessation, and other risk reduction practices, such as increasing physical activity, achieving a healthy weight, improving nutrition, and avoiding sun overexposure. Efforts to make cancer screening, information, and referral services available and accessible are essential for reducing the high rates of cancer and cancer deaths. These efforts must include approaches to reduce health care disparities among Appalachian and African-American residents.

Summary of Progress

For all cancers, the mortality rate in 2002 was 226.3 per 100,000, a decrease from the baseline of 229.9 per 100,000 in 1996. As evidenced by Kentucky Cancer Registry (KCR) data through 2002, progress has been made toward achieving the majority of
targets for HK 2010 goals related to cancer mortality. Targets were achieved for maintaining lung cancer deaths at or below 80.7 per 100,000 and reducing deaths from cancer of the uterine cervix to at or below 3.2 per 100,000. Additionally, Kentucky has met the 2010 targets to increase to at least 85 percent those women age 18 and older who received a Pap test within the preceding one to three years and to increase to at least 40 percent both men and women age 50 and older who have ever received a sigmoidoscopy or colonoscopy. Kentucky still faces challenges in improving the percentage of women age 50 and older who have received a mammogram and clinical breast exam in the past two years. The percentage declined from 73 percent in 1997 to 68.6 percent in 2004. Another concern is the decline in the percentage of persons age 50 and older who have received a fecal occult blood test within the past two years from 26 percent in 1997 to 24 percent in 2004. The number of cancer survivors who are living 5 years or longer after diagnosis also declined from 57.8 percent in 2000 to 56.2 percent in 2002.

**Progress toward Achieving Each HK 2010 Objective**

17.1. Reduce cancer deaths to a rate of no more than 220.7 per 100,000 people in Kentucky.

**Data Sources:** Kentucky Cancer Registry data are age-adjusted to the year 2000 standard. (Cancer mortality data is not available beyond 2002 from the Kentucky Cancer Registry.)

**Baseline:** 229.9 per 100,000 people in 1996

**HK 2010 Target:** No more than 220.7 per 100,000

**Mid-Decade Status:** 226.3 in 2002

![Figure 17.1 Age-adjusted Cancer Mortality Rate, Kentucky, 1996-2002, (Source: Kentucky Cancer Registry)](image)

HK 2010 Mid-Decade Review
Strategies to Achieve Objective:

- Implement an aggressive statewide comprehensive cancer control plan involving the combined efforts of national, state, regional, local, and community stakeholders to identify and mobilize resources to reduce cancer morbidity and mortality
- Encourage reduction in tobacco use and diet modification through public and professional education
- Promote use of early detection and screening practices by primary care providers, local health departments, and other health care agencies
- Increase community outreach efforts in prevention and early detection education

17.2. Maintain lung cancer deaths to a rate of no more than 80.7 per 100,000 people in Kentucky.

Rates of lung cancer deaths were 79.8 per 100,000 in 2002. The trend since 2000 indicates a slow decline which will slightly exceed the target of no more than 80.7 deaths per 100,000 in 2002.

Data Sources: Kentucky Cancer Registry data are age-adjusted to the year 2000 standard. (Cancer mortality data are not available beyond 2002 from the Kentucky Cancer Registry.)

Baseline: 80.7 per 100,000 in 1997

HK 2010 Target: No more than 80.7 per 100,000

Mid-Decade Status: 79.8 per 100,000 in 2002
Strategies to Achieve Objective:

- Encourage school, family and community based programs to discourage tobacco use among children and teenagers
- Support and encourage local initiatives to strengthen enforcement of youth access laws regarding tobacco
- Target pregnant women and mothers of young children with cessation counseling
- Increase number of workplaces and restaurants that are smoke free or have stronger policies against smoking

17.3. Reduce breast cancer deaths to no more than 22.5 per 100,000 women in Kentucky.

Data Sources: Kentucky Cancer Registry data are age-adjusted to the year 2000 standard. (Cancer mortality data are not available beyond 2002 from the Kentucky Cancer Registry.)

Baseline: 28.1 per 100,000 women in 1997

HK 2010 Target: No more than 22.5 per 100,000 women

Mid-Decade Status: 27.6 in per 100,000 women in 2002. Rates of breast cancer deaths declined from 28.1 per 100,000 women in 1997 to 27.6 deaths per 100,000 women in 2002.
Figure 17.3 Age-adjusted Female Breast Cancer Mortality Rate, Kentucky, 1997-2002
(Source: Kentucky Cancer Registry)

Strategies to Achieve Objective:

- Increase availability and accessibility of breast screening and diagnostic services for uninsured and underinsured women through local health departments
- Support population based education efforts to increase screening in all women 40 and older, including education and peer counseling, to be carried out by community breast cancer coalitions and other entities
- Provide professional education opportunities to improve expertise in provision of clinical breast exams, mammography and treatment
- Promote participation in clinical trials for prevention and treatment

17.4. Reduce deaths from cancer of the uterine cervix to no more than 3.2 per 100,000 women in Kentucky.

Data Sources: Kentucky Cancer Registry data are age-adjusted to the year 2000 standard. (Cancer mortality data are not available beyond 2002 from the Kentucky Cancer Registry.)

Baseline: 4.3 per 100,000 in 1997

HK 2010 Target: No more than 3.2 per 100,000

Mid-Decade Status: 2.4 per 100,000 in 2002, Cervical cancer rates have declined to 2.4 per 100,000 women in 2002 exceeding the target of 3.2 per 100,000 women.
Strategies to Achieve Objective:

- Increase availability and accessibility of cervical screening and diagnostic services for uninsured and underinsured women through local health departments
- Support population based education efforts carried out by community cancer coalitions and other entities to increase screening in all women 18 and older
- Provide professional education opportunities to improve technique, referral, and standards of care
- Provide education on risk factors including intercourse at an early age, multiple sex partners, and sexually transmitted disease

17.5. Increase a) to at least 85 percent the proportion of women ages 40 and older who have ever received a Clinical Breast Exam (CBE) and mammogram. and b) to at least 85 percent in those ages 50 and older who have received a CBE and mammogram within the preceding one to two years.

Data Source: Kentucky Behavioral Risk Factor Surveillance System (BRFSS), 1997-2004. Starting in 2000, questions on women’s health are included in even numbered years.

Baseline: In 1997, 78 percent of women 40 and older had at some time received a mammogram and Clinical Breast Exam (CBE), and 73 percent of women 50 and older had a mammogram and clinical breast exam within the past 2 years.
**HK 2010 Target:** a) At least 85 percent the proportion of women ages 40 and older will have ever received a mammogram and a CBE, and b) at least 85 percent those ages 50 and older will have received a mammogram and a CBE in the preceding one to two years.

**Mid-Decade Status:** a) The percentage of women age 40 and older who have ever had a mammogram and clinical breast examination (CBE) has exceeded the baseline of 78 percent in 1997 with an increase to 82.3 percent in 2004. b) However, the percentage of women age 50 and older who had a mammogram and CBE within the preceding 2 years declined from the baseline of 73 percent in 1997 to 68.6 percent in 2004.

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**Figure 17.5** Women Age 40 and Older Who Have Ever Received a Clinical Breast Exam and a Mammogram, Kentucky, 1997, 2000, 2002, and 2004 (Source: BRFSS)

**Figure 17.6** Women Age 50 and Older Who Have Received a Clinical Breast Exam and a Mammogram in the Past Two Years, Kentucky, 1997, 2000, 2002, 2004 (Source: BRFSS)
Strategies to Achieve Objective:

- Increase availability and accessibility of breast screening and diagnostic services for uninsured and underinsured women through local health departments
- Support population based education efforts carried out by community breast cancer coalitions and other entities to increase screening in all women 40 and older
- Provide professional education opportunities to improve expertise in the provision of clinical breast exams, mammography and treatment
- Promote participation in clinical trials for prevention and treatment

17.6. Increase a) to at least 95 percent the proportion of women ages 18 and older who have ever received a Pap test, and b) to at least 85 percent of those who received a Pap test within the preceding one to three years.

Data Source: Kentucky BRFSS, 1997-2004. Starting in 2000, questions on women’s health are included in even numbered years.

Baseline: In 1997, 93 percent had a Pap test at some time, and 82 percent had a Pap test within the past 3 years.

HK 2010 Target: a) At least 95 percent in the proportion of women ages 18 and older will have ever received a Pap test. b) At least 85 will have received a Pap test in the last three years.

Mid-Decade Status: In 2004, a) 94.2 percent had a Pap test at some time, and b) 85 percent had a Pap test within the past 3 years. By 2004, the percent of women age 18 and older having ever had a Pap test was 94.2 percent (slightly below the target, but exceeding the baseline), while 85 percent had received a Pap test within the past 3 years, to meet the target.
Figure 17.7 Women age 18 and Older Who Have Ever Received a Pap Test, Kentucky, 1997, 2000, 2002, and 2004 (Source: BRFSS)

Figure 17.8 Females Age 18 and Older Who Have Had a Pap Test in the Past Three Years, Kentucky, 1997, 2000, 2002 and 2004 (Source: BRFSS)

Strategies to Achieve Objective:

- Increase availability and accessibility of cervical screening and diagnostic services for uninsured and underinsured women through local health departments
- Support population based education efforts carried out by community cancer coalitions to increase screening in all women 18 and older
- Provide professional education opportunities to improve technique, referral, and standards of care
- Provide professional education opportunities to increase health care providers' awareness of accepted screening guidelines

17.7. To reduce colorectal cancer deaths to no more than 23.5 per 100,000 people in Kentucky.
Data Sources: Kentucky Cancer Registry data are age-adjusted to the year 2000 standard. (Cancer mortality data are not available beyond 2002 from the Kentucky Cancer Registry.)

Baseline: In 1996, the death rate for colorectal cancer was 25.3 per 100,000 (Male 29.9, Female 21.9).

HK 2010 Target: No more than 23.5 per 100,000

Mid-Decade Status: In 2002, the death rate for colorectal cancer was 24.1 per 100,000 with a disparity in the death rates between males, 30 per 100,000, and females, 20.4 per 100,000.

Strategies to Achieve Objective:

- Increase community education programs to promote compliance among people over age 50 with early detection recommendations for fecal occult blood testing and sigmoidoscopy/colonoscopy
- Promote referrals by health care providers for screening exams
- Promote clinical trial participation for prevention and/or treatment
- Promote education/outreach regarding dietary modifications to reduce risk

17.8. To increase a) to at least 35 percent the proportion of people ages 50 and older who have received fecal occult blood testing within the preceding one to two years, and b) to at least 40 percent of those who have ever received a sigmoidoscopy or colonoscopy.
**Data Source:** Kentucky BRFSS, 1997-2004, Starting in 2000, questions on colorectal cancer screening are included in even numbered years.

**Baseline:** 1997 data show 26 percent of people ages 50 and older have had a fecal occult blood test within the past 2 years and 34 percent have had a either a sigmoidoscopy or colonoscopy at some time.

**HK 2010 Target:** a) At least 35 percent of the proportion of people ages 50 and older will have received a fecal occult blood test, and b) at least 40 percent of age 50 and older will have ever received a sigmoidoscopy or colonoscopy.

**Mid-Decade Status:** Data from 2004 show a) 24 percent of people ages 50 and older have had a fecal occult blood test within the past 2 years and b) 47.2 percent ever had a sigmoidoscopy or colonoscopy. The trends since establishment of the baselines for this goal reflected a) a decline in the percent of those ages 50 and older who received a fecal occult blood test and b) an increase in the percent of those who have ever received a sigmoidoscopy or colonoscopy to exceed the HK 2010 target.
Strategies to Achieve Objective:

- Increase community education programs to promote compliance among people over age 50 with early detection recommendations for fecal occult blood testing and sigmoidoscopy/colonoscopy
- Promote referrals by health care providers for screening exams
- Promote clinical trial participation for prevention and/or treatment
- Provide public education/outreach regarding the importance of screening exams

17.9. (Developmental) Increase the number of men 50 years and older, particularly African American and other high risk individuals, who receive counseling from health care providers about prostate cancer screening. (DELETED.)

Reason for Deletion: There are no data to track this objective, and no data are expected in the near future.

17.10. (Developmental) Increase the percentage of persons ages 50 and older who have received oral, skin and digital rectal exams in the preceding year. (See Revision)

17.10R. (REVISION) Increase the percentage of persons age 50 and older who have received a digital rectal exam in the preceding year to at least 51 percent and have visited an oral health professional in the preceding year to at least 69 percent.
**Reason for Revision:** No data source has been established to track the percentage of persons ages 50 and older who have received skin exams in the preceding year; therefore, the part of the objective relating to increasing the percentage of persons ages 50 and older who have received skin exams has been deleted.

**Data Source:** Kentucky BRFSS, 2001-2004. Baselines were not included with the original HK 2010 objective. Therefore, baselines will be set with the first year of data available.

**Baseline:** Data from 2002 show that 63 percent of persons ages 50 and older received an oral exam in the preceding year. Data from 2001 show that 46 percent of persons ages 50 and older received a digital rectal exam in the preceding year.

**HK 2010 Target:** a) At least 69 percent of persons ages 50 and older will have received an oral exam in the preceding year, and b) at least 51 percent of persons ages 50 and older will have received a digital rectal exam in the preceding year.

**Mid-Decade Status:** a) In 2004, at least 62.4 percent of persons ages 50 and older received an oral exam in the preceding year, and b) at least 51 percent of persons ages 46.3 and older received a digital rectal exam in the preceding year.

![Figure 17.12](image-url)
Strategies to Achieve Objective:

- Support the efforts of the Kentucky Dental Association and the American Dental Association to promote early screenings of Kentucky adults for oral cancer.
- Increase utilization of adult Medicaid benefits for detection of oral cancer in earlier stages in the high risk adult Medicaid group through education by the Department of Medicaid Services.
- Promote use of early detection and screening practices for prostate cancer by primary care providers, local health departments and other health care agencies.

17.11. (Developmental) Increase the percentage of Kentucky physicians who have current knowledge about genetics and disease and who appropriately counsel or refer their high risk patients. (DELETED)

Reason for Deletion: There are no data to track this objective, and no data are expected in the near future.

17.12. Increase the number of cancer survivors who are living 5 years or longer after diagnosis to at least 58.8 percent.

Data Source: Kentucky Cancer Registry (Cancer mortality data are not available beyond 2002. Incidence data for all cancers for the period of 1994-1998 was not available.)

Baseline: Data for 1996-2000 show that 57.8 percent of persons who had been diagnosed with cancer were surviving the cancer at 5 years past diagnosis.
HK 2010 Target: At least 58.8 percent survival rate at 5 years past diagnosis

Mid-Decade Status: 56.2 percent in 2002. No data source was available at the time of development of this objective. However, data are now available from the Kentucky Cancer Registry for cancer incidence and mortality for all cancers over 5 year periods. The baseline was established from the percent of survivors calculated in year 2000.

In addressing the needs of cancer survivors, there are particular areas of concern. These include increasing the number of cancer patients who are referred for cancer support services; training healthcare providers to disseminate information regarding long-term health maintenance, including the late effects of cancer treatment; and the availability of educational resources for cancer patients and their families, including information on palliative care and their rights as a cancer survivor.

![Figure 17.14 Percentage of Cancer Survivors Living Five Years or Longer after Diagnosis, Kentucky, 2000-2002 (Source: KCR)](image)

Strategies to Achieve Objective:

- Promote use of early detection and screening practices by primary care providers, local health departments and other health care agencies
- Provide professional education opportunities to improve technique, standards of care, and referral for treatment and survivor support services
- Promote clinical trial participation for prevention and/or treatment
- Maintain strong partnerships between the Kentucky Department for Public Health, the American Cancer Society, and Kentucky's university cancer centers to improve surveillance, access to state of the art care, and provision of professional education opportunities to ensure high standards of care
References

- Behavioral Risk Factor Surveillance System, 1997-2004
- Kentucky Cancer Registry. (2005) Cancer Mortality/Mortality Rates in Kentucky. Retrieved 08/02/05 and 08/03/05 from http://www.kcr.uky.edu/

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### 17. Cancer – Summary Tables

<table>
<thead>
<tr>
<th>Summary of Objectives for Cancer</th>
<th>Baseline</th>
<th>HK 2010 Target</th>
<th>Mid-Decade Status</th>
<th>Progress</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>17.1. Reduce cancer deaths to a rate of no more than 220.7 per 100,000 people in Kentucky.</strong></td>
<td>229.9/100,000 (1996)</td>
<td>≤220.7/100,000</td>
<td>226.3/100,000 (2002)</td>
<td>Yes</td>
<td>KCR</td>
</tr>
<tr>
<td><strong>17.2. Maintain lung cancer deaths to a rate of no more than 80.7 per 100,000 people in Kentucky.</strong></td>
<td>80.7/100,000 (1997)</td>
<td>≤80.7/100,000</td>
<td>79.8/100,000 (2002)</td>
<td>Target Achieved</td>
<td>KCR</td>
</tr>
<tr>
<td><strong>17.3. Reduce breast cancer deaths to no more than 22.5 per 100,000 women in Kentucky.</strong></td>
<td>28.1/100,000 (1997)</td>
<td>≤22.5/100,000</td>
<td>27.6/100,000 (2002)</td>
<td>Yes</td>
<td>KCR</td>
</tr>
<tr>
<td><strong>17.4. Reduce deaths from cancer of the uterine cervix to no more than 3.2 per 100,000 women in Kentucky.</strong></td>
<td>4.3/100,000 (1997)</td>
<td>≤3.2/100,000</td>
<td>2.4/100,000 (2002)</td>
<td>Target Achieved</td>
<td>KCR</td>
</tr>
<tr>
<td><strong>17.5. Increase a) to at least 85 percent the proportion of women ages 40 and older who have ever received a Clinical Breast Exam (CBE) and mammogram, and b) to at least 85 percent those ages 50 and older who have received a CBE and mammogram within the preceding one to two years.</strong></td>
<td>a)78% (1997)</td>
<td>a)≥85%</td>
<td>82.3% (2004)</td>
<td>Yes</td>
<td>BRFSS</td>
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<td><strong>17.6. Increase a) to at least 95 percent the proportion of women ages 18 and older who have ever received a Pap test, and b) to at least 85 percent those who received a Pap test within the preceding one to three years.</strong></td>
<td>a)93% (1997)</td>
<td>≥95%</td>
<td>94.2% (2004)</td>
<td>Yes</td>
<td>BRFSS</td>
</tr>
<tr>
<td><strong>17.7. Reduce colorectal cancer deaths to no more than 23.5 per 100,000 people in Kentucky.</strong></td>
<td>25.3/100,000 (1996)</td>
<td>≤23.5/100,000</td>
<td>24.1/100,000 (2002)</td>
<td>Yes</td>
<td>KCR</td>
</tr>
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<td><strong>17.8. Increase a) to at least 35 percent the proportion of people ages 50 and older who have received fecal occult blood testing within the preceding one to two years, and b) to at least 40 percent in those who have ever received a sigmoidoscopy or colonoscopy.</strong></td>
<td>a)26% (1997)</td>
<td>≥35%</td>
<td>24% (2004)</td>
<td>No</td>
<td>BRFSS</td>
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<td><strong>17.9. (DELETED)</strong></td>
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<td><strong>17.10R. (Developmental) Increase the percentage of persons aged 50 and older who have received a) a digital rectal</strong></td>
<td>a)46% (2002)</td>
<td>≥51%</td>
<td>46.3% (2004)</td>
<td>Yes</td>
<td>BRFSS</td>
</tr>
<tr>
<td>Summary of Objectives for Cancer</td>
<td>Baseline</td>
<td>HK 2010 Target</td>
<td>Mid-Decade Status</td>
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<td>exam in the preceding year to at least 51 percent and b) have visited an oral health professional in the preceding year to at least 69 percent.</td>
<td>b)63% (2002)</td>
<td>≥69%</td>
<td>62.4% (2004)</td>
<td>No</td>
<td>KCR</td>
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<td>17.11. (DELETED)</td>
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<td>17.12. (Developmental) Increase the number of cancer survivors who are living 5 years or longer after diagnosis to at least 58.8%.</td>
<td>57.8% (1996-2000)</td>
<td>≥58.8%</td>
<td>56.2% (2002)</td>
<td>No</td>
<td>KCR</td>
</tr>
</tbody>
</table>

R= Revised objective