

Kentucky Women's Cancer Screening Program
**Report of Breast Cancer Screening
Fiscal Years 2003-2005**

Presented to the Governor
and State Legislature

By

Kentucky Women's Cancer Screening Program
Maternal and Child Health Branch
Division of Adult and Child Health Improvement
Department for Public Health
Cabinet for Health and Family Services



The Breast Cancer Advisory Committee

Doris Rosenbaum, Chairperson
Breast Cancer Survivor

Arlayne Francis
Breast Cancer Survivor

Brenda Broughton
Breast Cancer Survivor

Donald Miller, MD, PhD
Director, James Graham Brown Cancer Center

Alfred Cohen, MD, FACS, FASCRS
Director, Lucille Parker Markey Cancer Center

Thomas C. Tucker, PhD, MPH
Director, Kentucky Cancer Registry

Elizabeth Amin, MD
Radiologist

Joyce Jennings
Director, Division of Women's Physical and Mental Health

Peggy S. Lewis
Assistant Director, Kentucky State Office of Rural Health

Elaine Eustis, MD
Kentucky Commission on Women

**The Kentucky Women's Cancer Screening Program
Report of Breast Cancer Screening
July 2002 Through June 2005**

This report was prepared by

The Kentucky Women's Cancer Screening Program
Women's Health Section
Maternal and Child Health Branch
The Kentucky Department for Public Health

in collaboration with

The Breast Cancer Advisory Committee

**Kentucky Women's Cancer Screening Program
contributing staff**

Catherann Key, BS, RN
Sivaram Maratha, M.Sc, MPA
Carolyn Breckel, BSN, RN
Brenda Combs, BS, CHES

Supporting Partners

American Cancer Society
Kentucky Cancer Program, James Brown Cancer Center
Kentucky Cancer Program, Lucille Parker Markey Cancer Center
Kentucky Cancer Registry
Louisville and Jefferson County Partnership in Cancer Control

Funding for this project was provided through KRS 214.554 and a Cooperative Agreement (U55/CCU421882-03) with the Centers for Disease Control and Prevention, Division of Cancer Control and Prevention.

Please direct requests for additional information to:

Catherann Key, BS, RN
Kentucky Women's Cancer Screening Program Coordinator
Women's Health Section
Maternal and Child Health Branch
275 East Main Street
Frankfort, Kentucky 40621
CatherannE.Key@ky.gov

Table of Contents

| | |
|--|----|
| Message From the Commissioner | 4 |
| Executive Summary | 5 |
| I. Program Overview | 6 |
| A. Eligibility Criteria | 6 |
| B. Provision of Services | 7 |
| C. Public Education and Outreach | 7 |
| D. Breast and Cervical Cancer Treatment Program | 8 |
| II. The Problem of Breast Cancer | 9 |
| A. Breast Cancer Incidence Rates | 10 |
| B. Breast Cancer Mortality Rates | 12 |
| III. Clinical Services | 14 |
| A. Screening Services | 14 |
| 1. Screening Mammograms Performed Through Local Health Departments in Kentucky by Service Numbers | 14 |
| 2. Screening Mammograms Performed Through Local Health Departments in Kentucky by Age Groups | 16 |
| 3. Screening Mammograms Performed Through Local Health Departments in Kentucky by Race | 17 |
| B. Diagnostic Services | 18 |
| 1. Diagnostic Mammograms Performed Through Local Health Departments in Kentucky by Age Groups | 18 |
| 2. Diagnostic Mammograms Performed Through Local Health Departments in Kentucky by Race | 19 |
| 3. Breast Diagnostic Procedures Performed Through Local Health Departments in Kentucky | 19 |
| C. Outcomes: Breast Cancers Detected Through Local Health Departments in Kentucky | 20 |
| IV. Quality Assurance | 22 |
| A. Clinical Standards | 23 |
| 1. Training | 23 |
| 2. Professional Education | 23 |
| B. Data Monitoring | 24 |
| V. Financial | 25 |
| A. Funding Sources | 25 |
| B. Financial Data (1991-2005) | 25 |
| Appendix A: Statutes and Administrative Regulations | 28 |
| Technical Notes | 30 |
| References | 31 |
| Glossary | 32 |
| List of Figures and Tables | 33 |

MESSAGE FROM THE COMMISSIONER

In 1990, legislation established a breast cancer screening program in the Kentucky Department for Public Health. The program, called the Kentucky Women's Cancer Screening Program (KWCSPP), must make "breast cancer screening services of high quality and reasonable cost available to women of all income levels throughout the Commonwealth and to women whose economic circumstances or geographic location limits access to breast cancer screening facilities." (Refer to KRS 214.554, Appendix A).

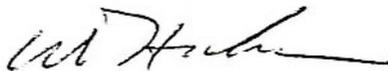
KRS 214.554 also created a Breast Cancer Advisory Committee, which advises the Commissioner of the Kentucky Department for Public Health. This committee must "provide input in the development of guidelines for access to the program and the monitoring of the quality of services provided through the program." This report is presented in consultation with the Breast Cancer Advisory Committee.

Kentucky women are diagnosed with breast cancer at a lower rate than women in the U.S., but are dying of breast cancer at a higher rate than women in the rest of the nation. Kentucky ranks seventh in the nation in terms of annual breast cancer death rates. In 2004, the American Cancer Society estimated Kentucky women would be diagnosed with 3,340 new cases of breast cancer and 620 of these women would die of breast cancer.

In response to the great need for breast cancer treatment funding, National Breast and Cervical Cancer Treatment funds were made available through the Department for Medicaid Services for Kentucky women. Since the inception of the treatment program, more than 800 women have been referred to the Breast and Cervical Cancer Treatment Program for coverage of treatment.

I want to thank communities and health care providers across the Commonwealth for your support in promoting breast cancer screening and prompt referral for treatment of all women. Through screening, early detection and community outreach initiatives, we can make a tremendous difference in the health and lives of Kentucky's women.

Sincerely,



William D. Hacker, M.D., F.A.A.P., C.P.E.
Commissioner
Department for Public Health

Executive Summary

Since 1990, state funds have been available for breast cancer screening services and administered by the Kentucky Department for Public Health through Local Health Departments. In 1995, the program was granted federal funding for breast cancer screening services. Since the inception of the Kentucky Women's Cancer Screening Program (KWCSPP) through 2005, 184,597 screening mammograms have been provided and 1,584 cases of breast cancer have been detected.

Deaths due to invasive breast cancer in rural areas (29 deaths per 100,000 women) of Kentucky are higher compared to those in urban areas (26 deaths per 100,000 women). The KWCSPP must continue to focus resources on activities to decrease this geographic disparity in death rates due to invasive breast cancer. Breast and Cervical Cancer Treatment Funds, a resource with significant potential for reduction of Kentucky's breast cancer death rates, became available for Kentucky women on October 1, 2002. Kentucky's Department of Medicaid Services added coverage with special eligibility processes to enroll women requiring treatment for breast or cervical cancer or precancerous conditions. Without the availability of screening, diagnostic and treatment services through KWCSPP, 800 women might not have been diagnosed nor received treatment for breast or cervical cancer.

The KWCSPP assures the quality of screening, diagnostic and treatment services as evidenced by results of the August 2005 Centers for Disease Control and Prevention (CDC) report of the program's performance for eleven (11) core performance indicators. Four (4) of the program's core performance indicators assess quality of breast cancer services. The program met or exceeded the CDC standards for all four breast cancer quality of services indicators.

In FY 2005, KWCSPP staff worked with the University of Louisville Kentucky Cancer Program consultants and key stakeholders to assess overall program operations and develop recommendations for program improvement. A primary benefit of the assessment project included development of a guide summarizing opportunities which are expected to improve implementation and overall program performance. All recommendations have been presented for consideration by the KWCSPP Quality Assurance Committee and many have been implemented.

During FY 2003 to 2005, KWCSPP public education staff continued to work with state partners, Local Health Department staff and 52 community coalitions to support efforts to recruit members of disparate populations. Through contracts with the Fayette County Health Department and the University of Louisville Brown Cancer Center, the program supported special efforts to recruit African American women and women from other disparate populations for breast cancer screening.

Other special outreach projects include a national pilot project sponsored by the CDC. The state workgroup called TEAM UP developed and piloted a media campaign to promote awareness of the need for screening in nine Eastern Kentucky counties with high mortality rates and low screening rates for breast cancer. As a baseline, age-adjusted mortality rates were calculated for these nine counties for 1996-2000. The mortality rates found in eight of the nine counties ranged from 6 to 14 deaths per 100,000 women in each county, compared to the statewide mortality rate of 4 deaths per 100,000 women. The KWCSPP anticipates statewide expansion of the campaign pending evaluation of pilot activity.

I. Program Overview

Breast cancer screening services are available through several preventive health programs at the Local Health Departments including the Kentucky Women's Cancer Screening Program (KWCSP), the Family Planning Program, and the Adult Preventive Program in each of Kentucky's 120 counties. Women to be screened are seen initially in Local Health Departments by nurses or other practitioners who provide instruction in breast self-examination and clinical breast exams. Annual clinical breast exams are provided beginning at age 21 and annual screening mammograms are provided beginning at age 40 in accordance with nationally recommended screening guidelines. Local Health Departments contract with providers in the community for screening mammograms and for follow-up diagnostic tests as clinically indicated. The cost of a screening mammogram is currently reimbursed by the program at a rate of \$70 each.

Women who receive abnormal screening results are referred to providers who contract with Local Health Departments to provide follow-up diagnostic services, which may include diagnostic mammography. Most diagnostic follow-up procedures are covered for women with abnormal mammogram results. For those services for which no funds are available, or for services not covered by third party payers, Local Health Departments negotiate with local providers to provide these services to patients at low cost or at a reduced charge. If final diagnosis reveals a cancer or precancer of the breast or cervix, eligibility for coverage of treatment services from the Medicaid supported treatment program is assessed, enrollment processes are completed as applicable and necessary referrals are initiated.

Each year the program supports a variety of activities aimed at raising awareness about breast cancer and the benefits of screening. Throughout fiscal years 2003-2005, the program collaborated with the Kentucky Cancer Program and other partners to conduct media campaigns, community and provider educational programs, and to support outreach activities of local cancer coalitions across the state. These outreach and media campaigns focused on recruitment of Appalachian women, women ages 50 and over, and women who have never or rarely been screened for breast cancer. A woman who has rarely been screened for breast cancer is one who has had her first mammogram, but has not had mammograms according to nationally recognized guidelines for frequency of breast cancer screening.

A. Eligibility Criteria

During fiscal years 2003-2005, the following criteria were used to establish a woman's eligibility for KWCSP's cancer screening services: ages 21 to 64 years; household income of less than 250% of the federal poverty guidelines; and no insurance or insurance which does not cover annual breast cancer screening services. Screening visits include clinical breast exams for all women and annual mammograms for women 40-64 years old. Women younger than 40 years of age are eligible to receive screening mammography services if they have been diagnosed with breast cancer, have had chest wall radiation or have a family history of pre-menopausal breast cancer. Women with household incomes below 100% of the poverty level receive services at low cost. Women between 100 and 250% of the poverty level are charged according to a sliding fee schedule based on household income. Women are never denied services due to an inability to pay. Women who do not meet eligibility criteria for services through KWCSP may be eligible for cancer screening services through other Kentucky Department for Public Health programs, including Family Planning and Adult Preventive Health, at Local Health Departments.

B. Provision of Services

Cancer screening services are provided by a physician, nurse practitioner, or a specially trained registered nurse at a Local Health Department or contracted healthcare provider. A cancer screening visit includes a health history; a physical examination including Pap test and clinical breast exam; laboratory tests; referral for annual mammogram for women ages 40 and over; and risk reduction counseling. Nurse case management is also provided for follow-up in the event of abnormal results. Patients are encouraged to receive all services; however, the patient retains the right to refuse any part of the exam.

Local Health Departments contract with local providers for mammograms and diagnostic tests. In counties where there is not a certified mammography facility, or where an agreement cannot be established, a contract is established with a neighboring county or with a mobile mammography unit. There are approximately 162 mammography facilities available to screen Local Health Department clients across the state. Technical assistance from program staff members is available to help Local Health Departments identify providers for potential establishment of contracts or to assist with funding to assure transportation of patients to appointments.

C. Public Education and Outreach

During the past years, collaborative efforts resulted in the implementation of integrated marketing plans that included media messages, program materials, partnerships with other cancer control organizations and ongoing support for outreach efforts of Local Health Departments and 52 community cancer coalitions. The KWCSPP supports community coalitions in the following counties: Ballard, Bath, Bourbon, Bullitt, Caldwell, Carlisle, Carroll, Christian, Cumberland, Elliott, Estill, Fayette, Fleming, Floyd, Franklin, Graves, Green, Harlan, Jessamine, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Lewis, Lincoln, McCracken, McCreary, Madison, Magoffin, Marshall, Meade, Menifee, Mercer, Monroe, Montgomery, Morgan, Muhlenberg, Nicholas, Northern Kentucky District, Ohio, Oldham, Owen, Owsley, Powell, Pulaski, Rowan, Shelby, Todd, Warren, Washington, Wayne, Whitley, and Wolfe. These community coalitions implemented activities to increase awareness of the need for breast cancer screening among women ages 50 and over as well as those who have never or rarely been screened for breast cancer. Women who have never or rarely been screened for breast cancer are at risk for late detection of breast cancer and consequently have higher mortality from breast cancer. KWCSPP supports the following community coalition outreach initiatives to recruit women for screening for breast and cervical cancer: educational presentations, distribution of educational materials, health fairs, physician education and awareness through presentations and materials, newspaper and radio articles, press releases, and public announcements. During 2005, community coalition activities resulted in screening of 2,753 women, distributed 15,348 pieces of educational material, and conducted 700 educational presentations, including 38 physician education and awareness presentations.

Since 2003, the KWCSPP has participated in TEAM UP, a national partnership between the United States Department of Agriculture (USDA), the National Cancer Institute, the Centers for Disease Control and Prevention (CDC) and the American Cancer Society. The objective of TEAM UP is to increase breast cancer screening services among never or rarely screened individuals through grass roots awareness and activism. The project is aimed at nine Kentucky counties with high mortality rates and low breast

cancer screening rates (Breathitt, Elliott, Floyd, Johnson, Lawrence, Magoffin, Martin, Powell and Wolfe counties). During 2003, the Kentucky partners attended the initial CDC pilot project training. In 2004, the Kentucky team planned the pilot project beginning with county selection based on mortality data from the Kentucky Cancer Registry, recruitment of local and other state partners, and identification and development of evidence-based recruitment methods. During 2005, TEAM UP breast cancer screening activities included the creation and distribution of a media toolkit and campaign efforts to promote mammograms. In addition, a facilitation guide was created and distributed to all USDA extension agents in the nine counties. Agents in turn have been incorporating community presentations to increase awareness and breast cancer screenings. The team will establish baseline screening rates using 2005 data. Evaluation of pilot project data will begin in the summer of 2006 with completion scheduled by 2007. Statewide expansion is an anticipated outcome of the TEAM UP initiative pending results of the evaluation.

During FY 2003, 2004, and 2005, public education and outreach staff members continued to support efforts to recruit members of disparate populations, including Appalachian women, African American women, and women who partner with other women. More than a total of 2,000 women have been screened annually as a result of these special efforts in Fayette and Jefferson County. Special emphasis is given to the African American women through the Lexington/Fayette County Health Department, the Sister to Sister Project, and the Louisville and Jefferson County Partnership in Cancer Control. Through a contract with the University of Louisville Brown Cancer Center, the program supports a special mobile mammography outreach called the Jefferson County Partnership in Cancer Control. The aim of this outreach initiative is to reduce barriers in breast cancer screening among women who are members of disparate populations, including immigrant women such as those among the rapidly increasing Hispanic population. The program continues to improve partnerships to establish resources for evaluation of screening outcomes for these projects.

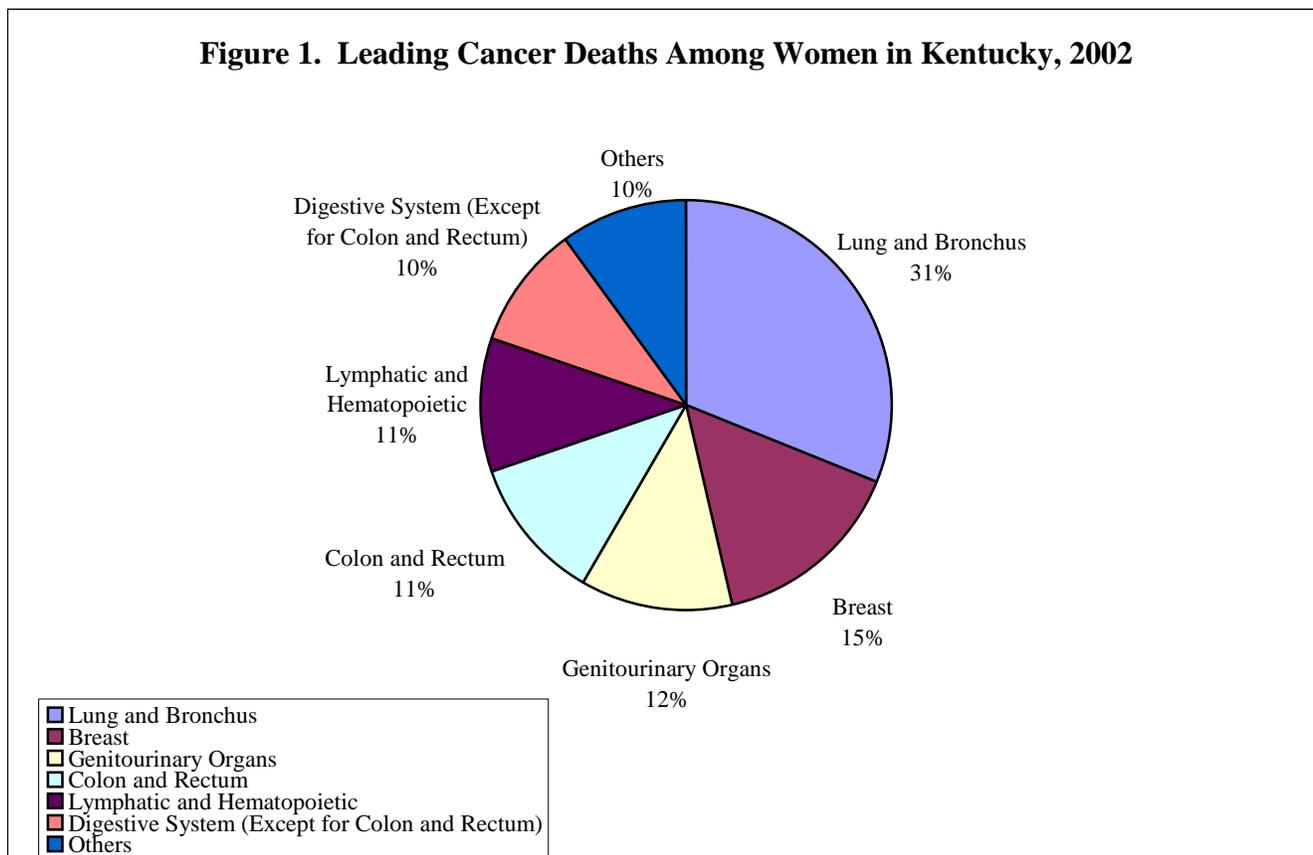
Training programs are provided to Local Health Department staff and coalition members to enhance their outreach efforts. Trainings in FY 2004 and FY 2005 were accomplished collaboratively with the Kentucky Comprehensive Cancer Control Program at the University of Kentucky. The trainings provided participants (coalition leaders and Local Health Department staff) with the knowledge and skills to plan, implement, and evaluate effective outreach strategies for older women and women who have never or rarely been screened for breast and cervical cancer. Outreach trainings will be continued in the coming year and will be offered on a statewide basis.

D. Breast and Cervical Cancer Treatment Program

On October 1, 2002, Breast and Cervical Cancer Treatment Funds became available for women who are screened for breast cancer through the KWCSPP. Kentucky's Department for Medicaid Services (DMS) added coverage through special eligibility processes to enroll women requiring treatment for breast or cervical cancer or precancerous conditions. Since 2003, through the collaborative efforts of KWCSPP and the DMS, more than 800 women have received benefits of coverage for treatment through the Breast and Cervical Cancer Prevention and Treatment Program. Without availability of the screening, diagnostic and treatment referral services program, these 800 women might not have been diagnosed and received treatment for breast or cervical cancer.

II. Problem of Breast Cancer

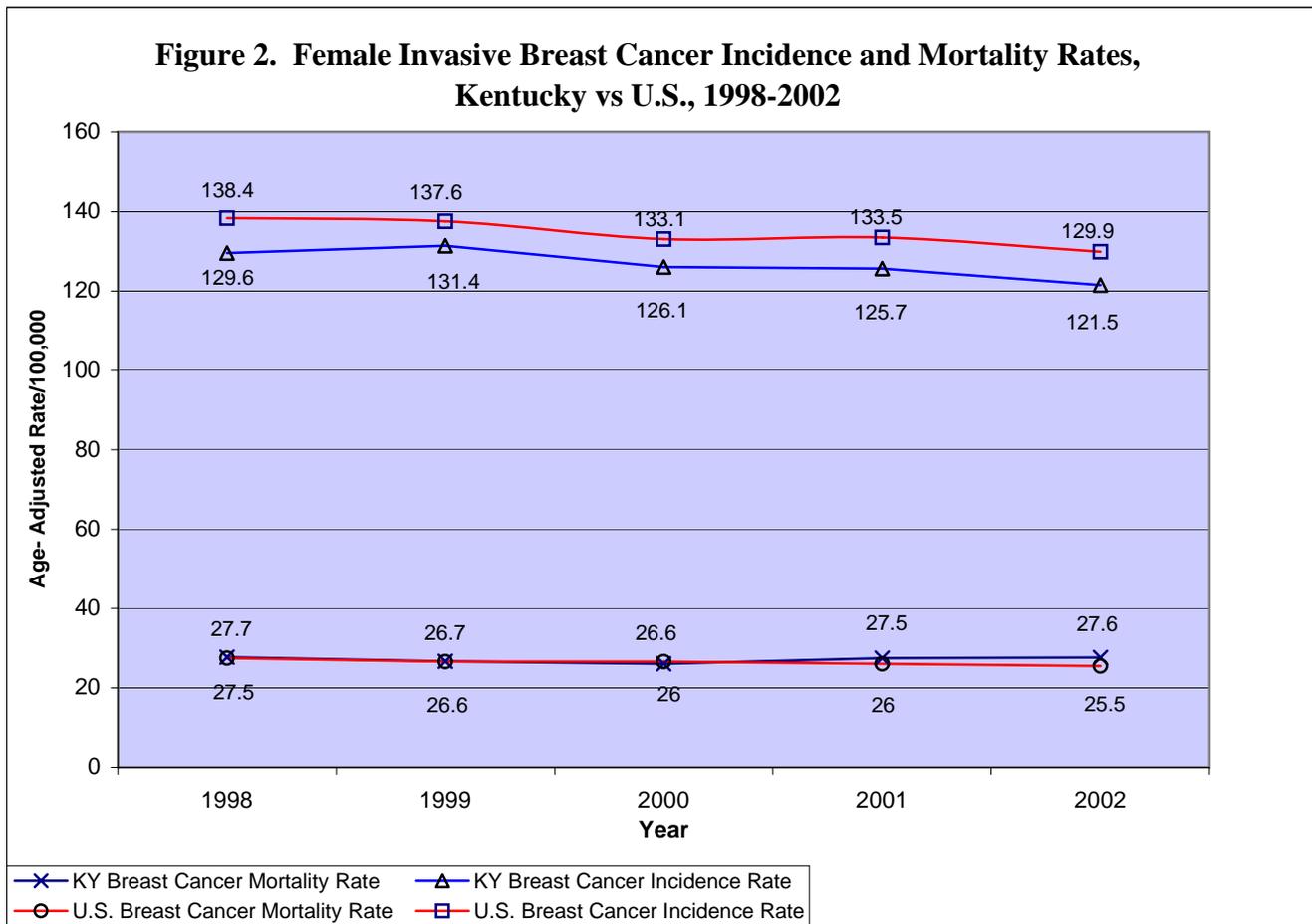
Breast cancer is the most commonly diagnosed cancer among American women. Based on rates from 2000-2002, approximately 13%, or 1 in 8, American women born today will be diagnosed with cancer of the breast at some time during their lifetime. For the nation, Kentucky ranks 7th in annual breast cancer death rate (28 deaths per 100,000 women). The cause of death for approximately one out of every four Kentucky residents is cancer and among Kentucky women, breast cancer is the second leading cause of cancer deaths. (Refer to Figure 1.)



Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health

A. Breast Cancer Incidence Rates

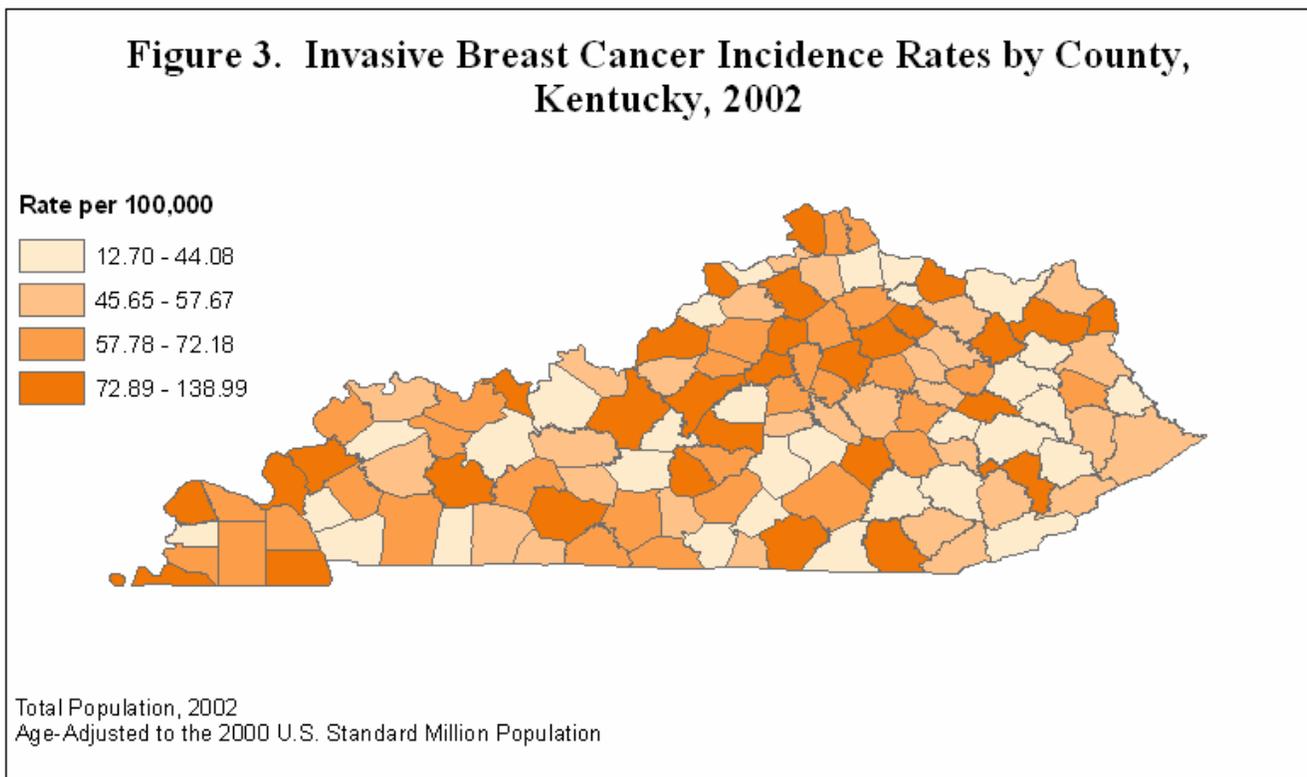
Breast cancer incidence in Kentucky has declined slightly overall during the last few years. According to the Surveillance, Epidemiology, and End Results (SEER) Program data of the National Cancer Institute, during 1998-2002 Kentucky's invasive breast cancer incidence rate was lower than that of the rest of the nation. According to the most recent data available, the average annual age-adjusted female breast cancer (invasive) incidence rate from 1998 to 2002 in Kentucky was 127 cases per 100,000 women, lower than the U.S. rate of 134 cases per 100,000. (Refer Figure 2.) In Kentucky, the average annual age-adjusted invasive breast cancer incidence rate from 1998 to 2002 was 127 cases per 100,000 among white women and 130 per 100,000 among African American women, reflecting a higher incidence of breast cancer among African American women in Kentucky.



Source: Surveillance, Epidemiology, and End Results, National Cancer Institute

In order to determine how many breast cancers are detected through Local Health Departments, mammogram records are electronically matched to the most recent finalized data available from the Kentucky Cancer Registry. There is a significant lag of nine months between the date of diagnosis and the date that a cancer case is reported to the Kentucky Cancer Registry. An additional period of 21 months may be incurred before all cancer diagnosis information for each case is reported to the Registry. The most recent available data (2002) from the Kentucky Cancer Registry revealed 30 counties in

Kentucky with high incidence rates of invasive breast cancer. These counties were: Fulton, Ballard, Calloway, Livingston, Crittenden, Muhlenberg, Warren, Hancock, Hardin, Jefferson, Green, Wayne, Whitley, Perry, Rockcastle, Wolfe, Clark, Montgomery, Bath, Rowan, Carter, Boyd, Mason, Anderson, Nelson, Franklin, Owen, Trimble, Boone and Marion. (Refer to Figure 3.) The higher incidence in these counties may be related to high risk behaviors and other factors associated with invasive breast cancer such as heritable factors, poor diet, obesity, physical inactivity, low income, and environmental and global community factors. On the other hand, higher incidence in these counties could represent effective outreach to recruit women for early detection of breast cancer and increased accessibility to breast cancer screening services. Trends in county screening rates are being monitored to assess these findings.



Source: Kentucky Cancer Registry

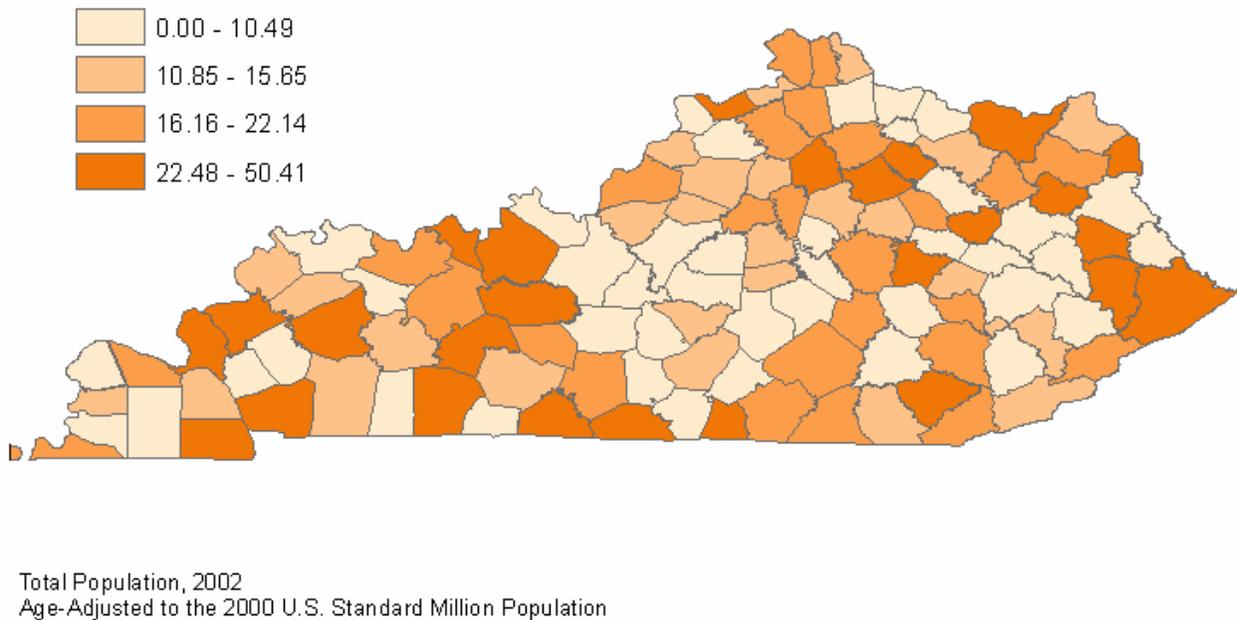
B. Breast Cancer Mortality Rates

Kentucky's invasive breast cancer mortality rates are similar to invasive breast cancer mortality rates in the United States. (Refer to Figure 2.) The average mortality rate due to breast cancer among Kentucky women (27 deaths per 100,000 women) was slightly higher than the average mortality rate due to breast cancer among women in the United States (26 deaths per 100,000 women) from 1998 through 2002. In addition, mortality rates of breast cancer in rural areas (29 deaths per 100,000 women) of Kentucky are higher than in the urban areas (26 deaths per 100,000 women) of Kentucky. To decrease deaths from breast cancer among Kentucky women, the Kentucky Women's Cancer Screening Program (KWCSPP) will continue to promote early detection and prompt referral for treatment of breast cancer among all Kentucky women and support special outreach initiatives to decrease the geographic disparity in these mortality rates.

Female breast cancer mortality rates vary considerably across racial and ethnic groups in Kentucky as elsewhere in the United States. African American women continue to die of breast cancer at a higher rate than any other racial or ethnic group suggesting racial and ethnic disparities exist in Kentucky. The average annual age-adjusted breast cancer mortality rate in Kentucky from 1998 to 2002 was 27 cases per 100,000 in white women, and 31 cases per 100,000 African American women. The observed higher incidence and higher mortality among African American women may be the result of later detection of disease among African American women in Kentucky. These findings indicate a need to continue to extend outreach initiatives to Kentucky's African American women, to reduce disparities in access to services and to promote early detection and prompt treatment after diagnosis.

Given the small number of Hispanic women in the general Kentucky population (1.9% in 2004), available data for invasive breast cancer mortality among Hispanic women is not sufficient to support reliable inferences about mortality. However, the 2000 U.S. Census projects that population growth among Hispanic residents in Kentucky will increase by 104% from 1995 to 2025. The program will continue to assess trends for invasive breast cancer mortality among this population and will work with community, state and national partners to support initiatives to promote early detection, diagnosis and prompt treatment of invasive breast cancer among all minority residents of the state.

Figure 4. Invasive Breast Cancer Mortality Rates by County, Kentucky, 2002



Source: Kentucky Cancer Registry

The most recent, finalized data (2002) from the Kentucky Cancer Registry revealed 26 counties in Kentucky that have high breast cancer mortality rates. These counties are: Crittenden, Carroll, Hancock, Menifee, Clinton, Trigg, Livingston, Estill, Calloway, Floyd, Elliott, Breckinridge, Knox, Johnson, Allen, Grayson, Lewis, Bourbon, Scott, Butler, Clay, Pike, Nicholas, Hopkins, Rockcastle, and Letcher. However, other than for Calloway County, the mortality rates in these counties are either stable or declining. (Refer to Figure 4). Like women in counties with higher rates of invasive breast cancer incidence, women in counties with higher rates of breast cancer mortality may have multiple risk factors for invasive breast cancer, such as poor diet, obesity, heritable factors, and physical inactivity. Women in these counties may have lower household income, less access to healthcare services for screening, diagnosis and treatment, decreased outreach encounters, and later detection of disease.

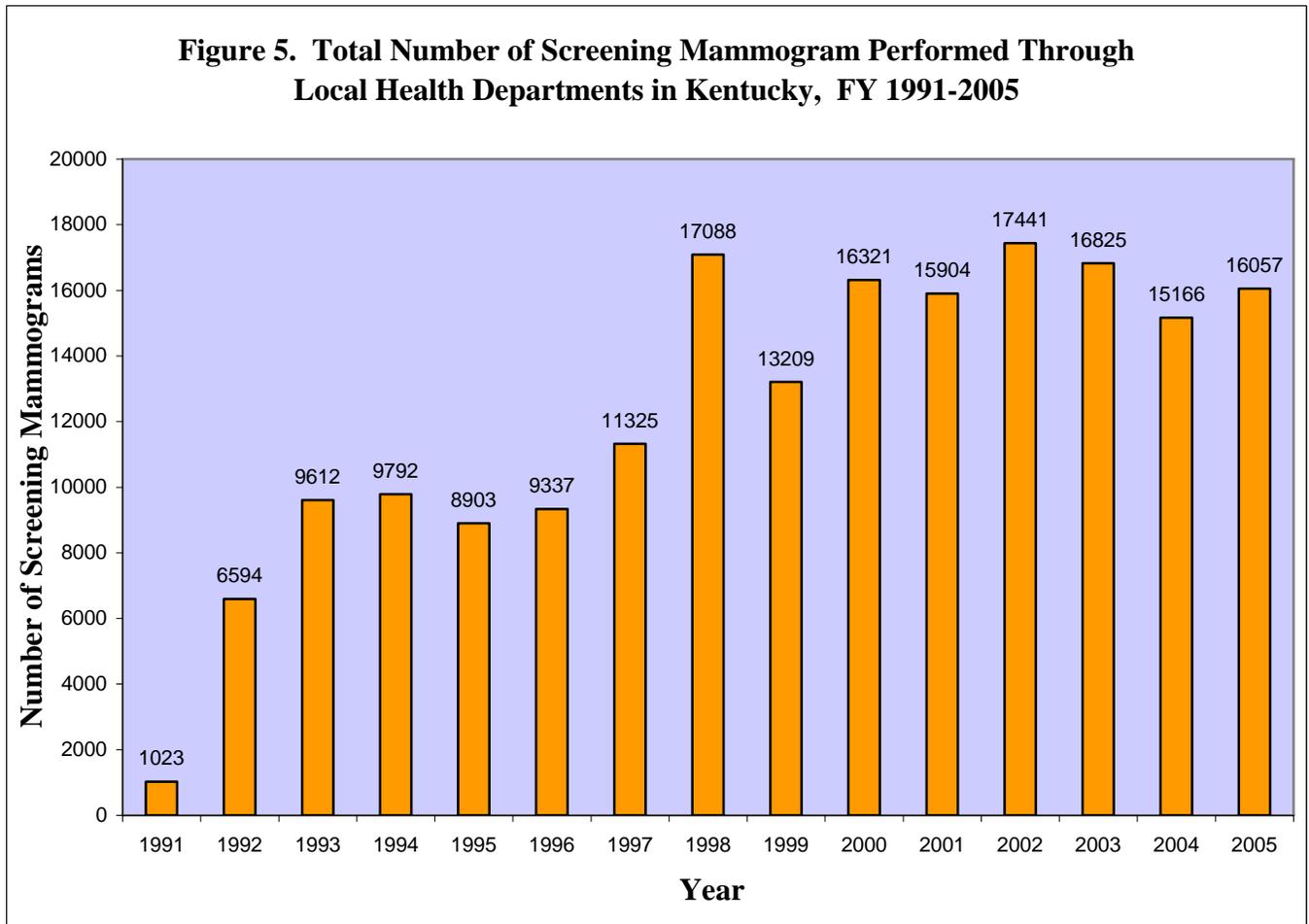
III. Clinical Services

A. Screening Services

1. Screening Mammograms Performed Through Local Health Departments in Kentucky by Service Numbers

Since 1991, a total of 184,597 screening mammograms have been performed through Local Health Departments in Kentucky. During FY 2003, 2004 and 2005, an average of 16,016 screening mammograms was provided each year. (Refer to Figure 5.) However, according to 2004 Behavioral Risk Factor Surveillance System data, 19,886 women ages 40-64 years old report not receiving breast cancer screening services at the frequency established in nationally recommended guidelines. This finding of the survey suggests that the KWCSPP must continue outreach efforts to promote recommended screening for early detection of breast cancer among Kentucky women.

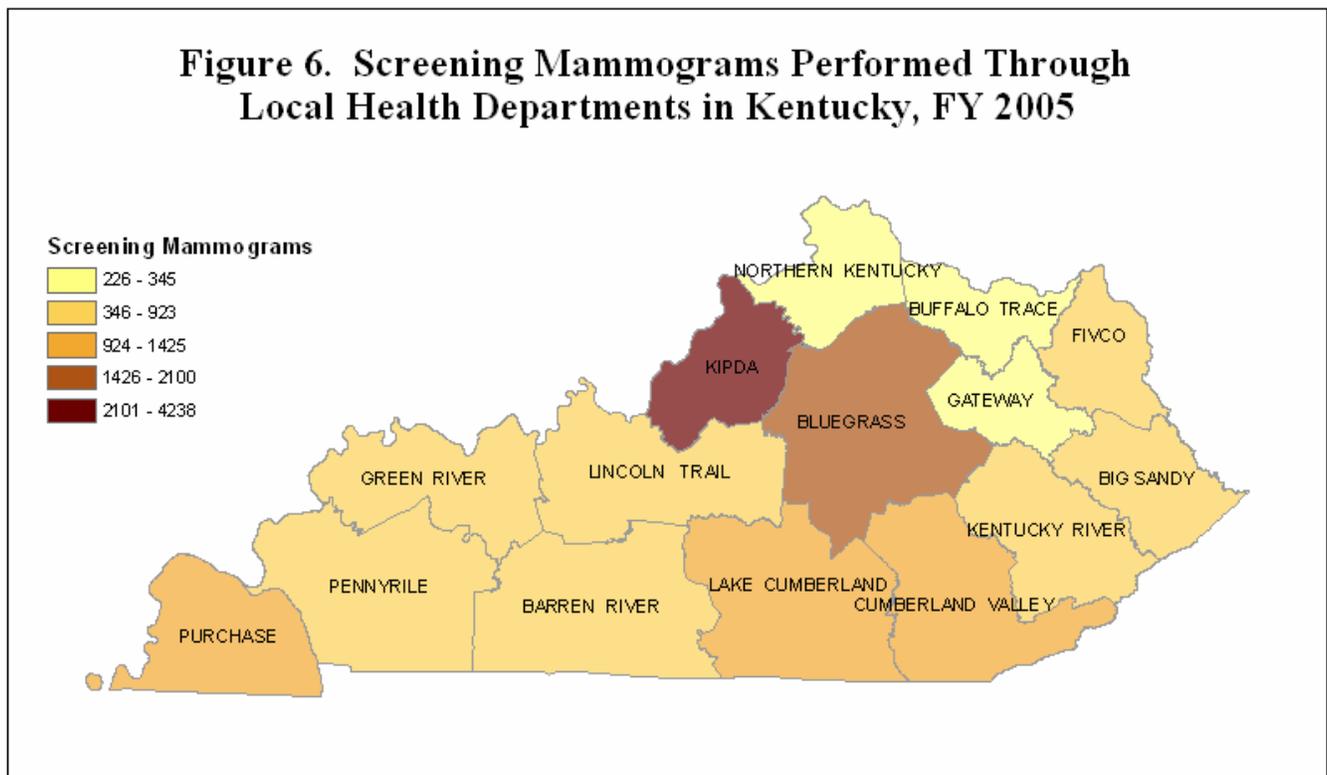
Figure 5 shows the number of screening mammograms provided by the Local Health Departments in Kentucky for FY 1991-2005. County data is available upon request.



Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health

Figure 5 shows one exceptional year of screening mammography in 1998, during which additional, special promotions increased the number of screening mammograms by offering free screenings for all women over age 40, regardless of income and insurance status. The trend since 2000 indicates that the number of mammograms has stabilized, with slight fluctuations in actual numbers from year to year.

Figure 6 demonstrates the large number of screening mammograms performed in the Bluegrass and KIPDA Area Development Districts in Eastern Kentucky, where large urban populations and health care services are clustered.

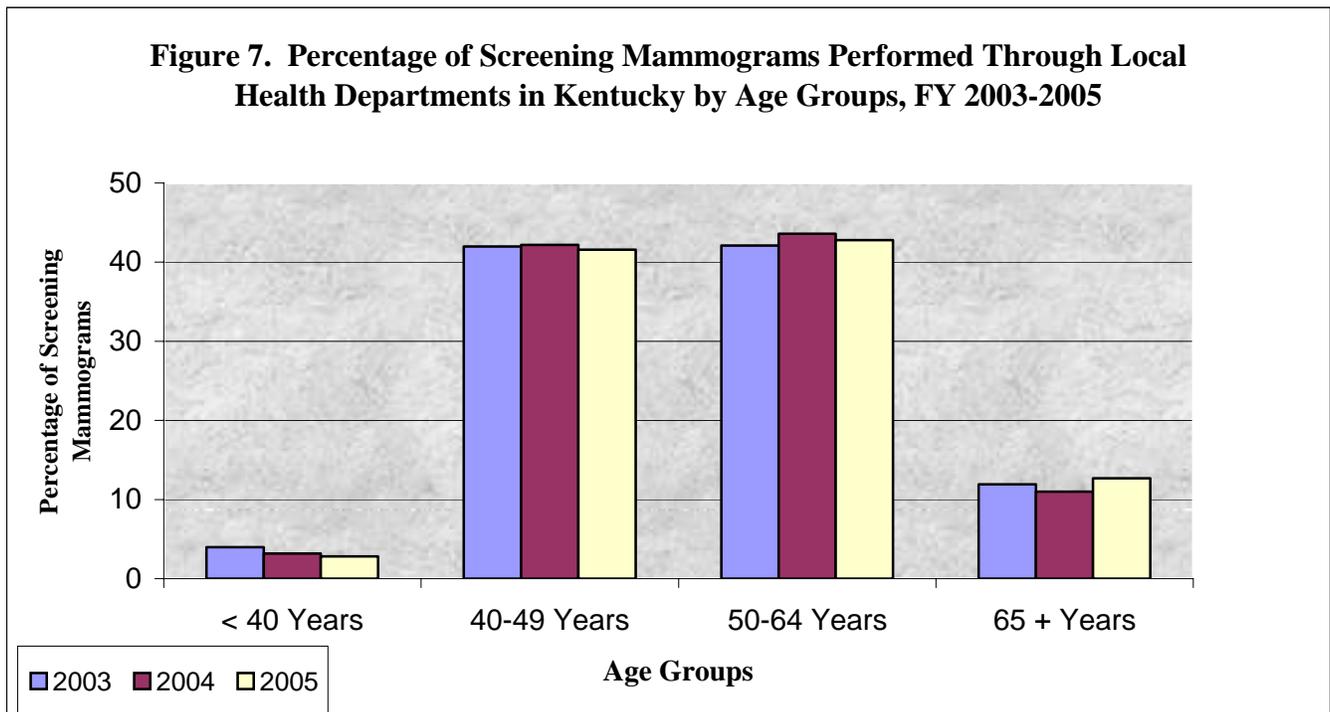


Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health

2. Screening Mammograms Performed Through Local Health Departments in Kentucky by Age Groups

The American Cancer Society and the National Cancer Institute recommend yearly screening mammograms for women 40 years old and over. The Kentucky Department for Public Health follows these recommendations for screening mammograms. In FY 2005, 98% of screening mammograms performed through Local Health Departments were for women 40 years old and over. Forty-three (43%) percent of these women are 50 years and over. Women ages 40-49 comprise the next largest group of women receiving screening services (42%). Thirteen percent (13%) of these women are 65 years old and above. Throughout FY 2003-2005, percentages of screening mammography among all age groups have remained stable. (Refer to Figure 7.)

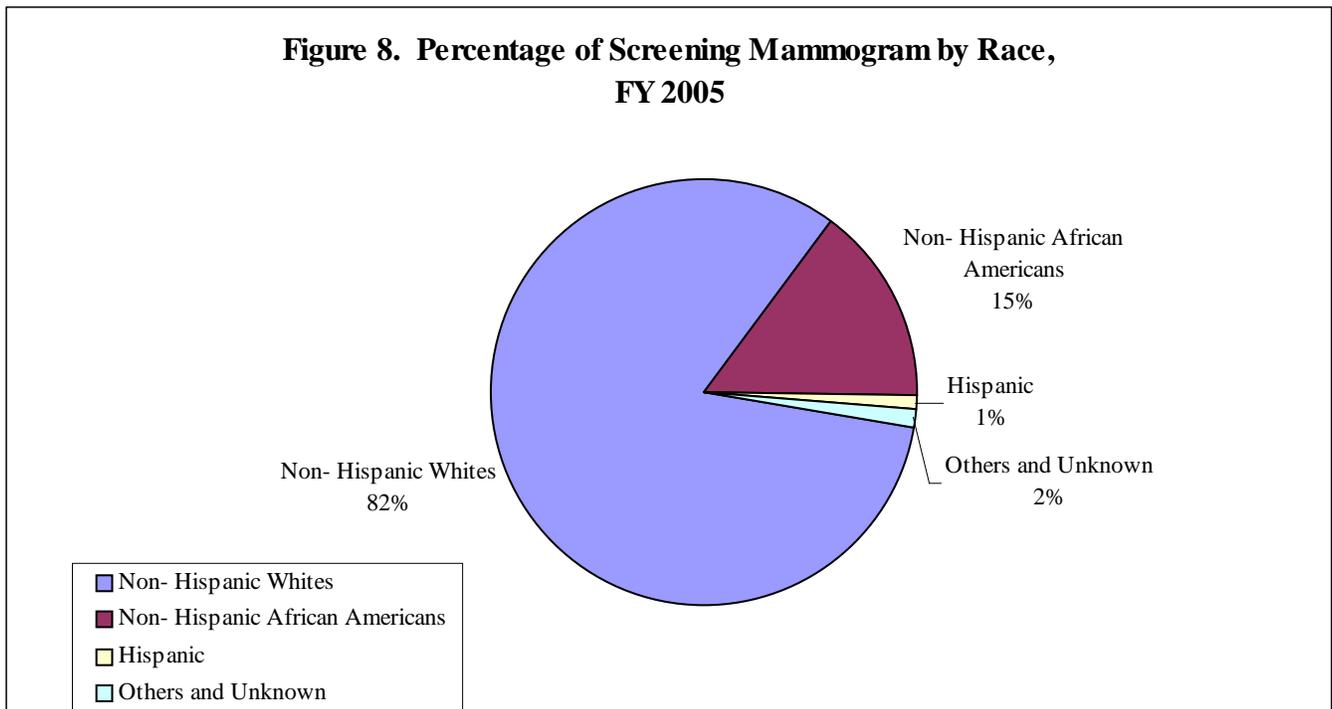
Results of several large studies indicate that screening mammograms reduce the number of deaths from breast cancer for women over age 40 years old, especially for those women over age 50 years old. Studies conducted to date have not shown a benefit for regular screening mammograms, or for a baseline mammogram, for women under 40 years old. Since guidelines do not recommend regular screening for women younger than 40 years old and over, it may be expected to obtain a lower percentage of screening mammograms for women 40 years old and below. However, women under 40 years old are provided with mammograms at Local Health Departments if they have symptoms of breast cancer or a family history of pre-menopausal breast cancer. Women 65 years and over who are eligible for Medicare may be more likely to choose to obtain screening mammography services from providers who may not have contracts with Local Health Departments. Therefore, a lower percentage of women 65 years old and over received screening mammograms through Local Health Departments compared to other age groups.



Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health

3. Screening Mammograms Performed Through Local Health Departments in Kentucky by Race

For FY 2005, the majority of screening mammograms (82%) were provided to White, non-Hispanic women. The remaining screening mammograms were divided among African Americans (15%), Hispanic (1%), and Others or Unknown (2%), which includes Asians and American Indian women. (Refer to Figure 8.) Screening mammograms are provided to a higher proportion of African American women (15%) than are represented in the Kentucky population (7%). The higher proportion of African American women served by the program may be related to a higher number of women who are eligible for KWCSF screening as a result of household income and/or lack of insurance or other third party payer source. Additionally, the data suggests that KWCSF's outreach efforts may have a positive effect in promoting breast cancer screening among African American women.



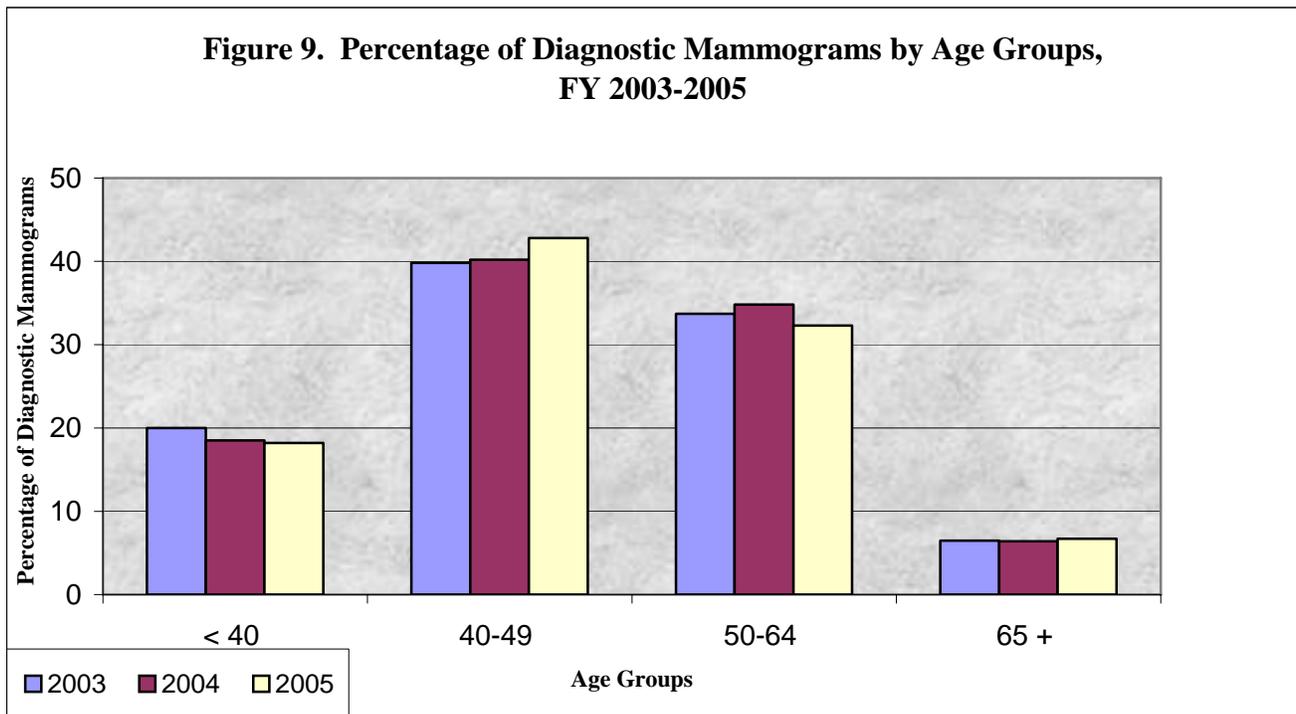
Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health

B. Diagnostic Services

1. Diagnostic Mammograms Performed through Local Health Departments in Kentucky by Age Groups

As described in the Program Overview (p.5), women who obtain abnormal clinical breast examination and/or mammography screening results are referred to contracted providers for diagnostic follow-up, which includes referral for surgical consultation and may include diagnostic mammography. Most of the diagnostic mammograms conducted through Local Health Departments were received by women younger than 49 years of age. Women 50 years old and over received fewer diagnostic mammograms than women 49 years of age and below. This difference in the percentage of diagnostic mammograms is expected because older women have less dense breast tissue, which is more likely to be adequately imaged via screening mammography. Among women 50 years and over, breast cancer is more likely to be diagnosed on screening mammography and is less likely to require diagnostic mammography.

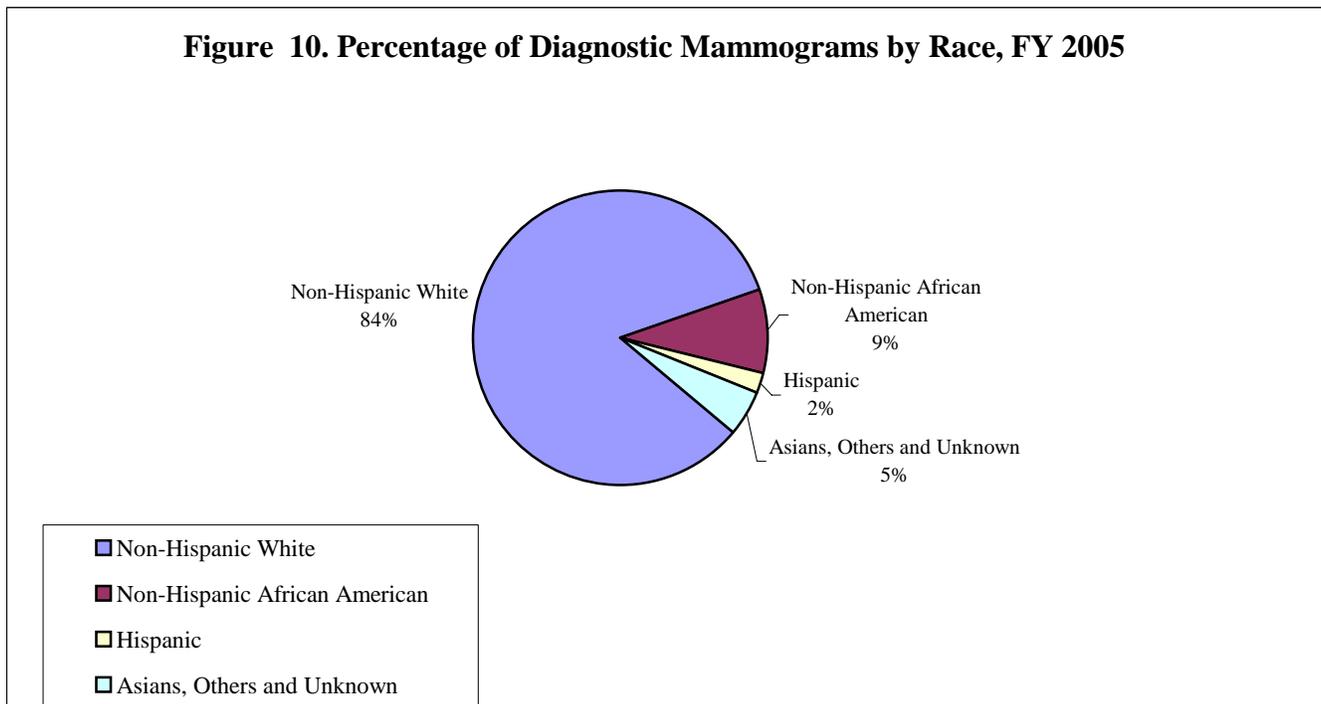
The increased density of breast tissue among younger women can make detection through clinical breast exam challenging, possibly resulting in a higher number of abnormal findings which may require imaging through diagnostic mammography. To meet this challenge, throughout Fiscal Years 2003-2005, the KWCSPP maintained contracts with the University of Louisville and the Cumberland Valley Health Department to conduct clinical breast examination training for Local Health Department nurses and contracted providers.



Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health

2. Diagnostic Mammograms Performed Through Local Health Departments in Kentucky by Race

The majority of diagnostic mammograms (84%) are provided to White, Non-Hispanic women. The remaining diagnostic mammograms were divided among African Americans (9%), Hispanic (2%), and Others or Unknown (5%), which includes Asians and American Indian women. Non-Hispanic African American women received a lower percentage of diagnostic mammograms relative to screening mammograms than Non-Hispanic White women. (Refer to Figure 10.) The percentage of African American women who receive screening mammograms is higher at twice the percentage of African American women represented in the Kentucky population. (Refer to Figure 8.) At this higher screening rate, the percentage of African American women who receive screening and diagnostic mammograms is representative of Kentucky's African American population.



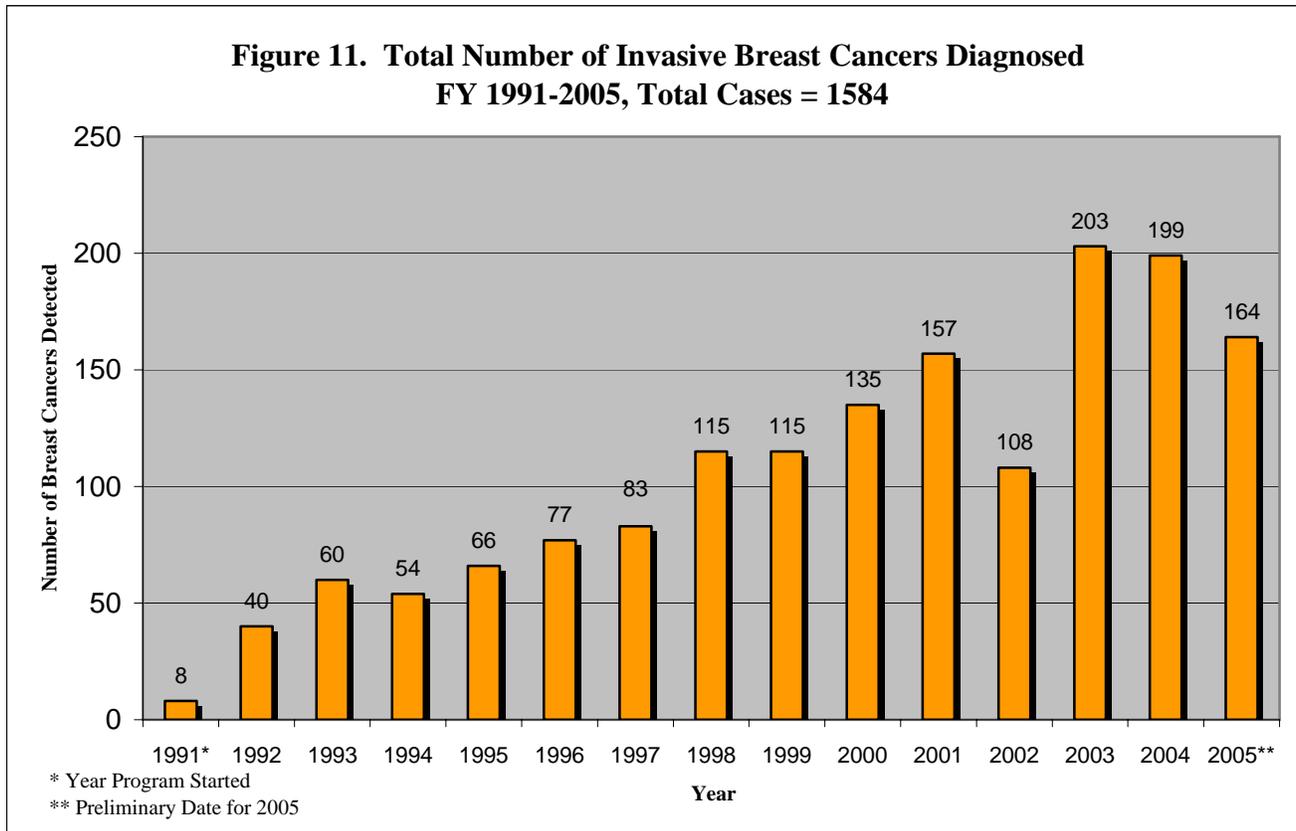
Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health

3. Breast Diagnostic Procedures Performed Through Local Health Departments in Kentucky

Through Fiscal Years 2003 to 2005, 25,853 diagnostic procedures were provided for women who had abnormal screening mammogram results. In FY 2005, 3,516 diagnostic mammograms were provided through Local Health Departments. The most common procedure (approximately 1 of every 6 mammography procedures) was diagnostic mammography (unilateral and bilateral), followed by echography/breast ultrasound, then surgical pathology (gross and microscopic examination.) From FY 2003 to 2005, of all total diagnostic procedures, diagnostic mammogram procedures have decreased from 43% to 35%; ultrasound procedures increased from 22% to 27%; surgical pathology (gross and microscopic examination procedures) have increased from 20% to 22%; and, excision of breast tissue procedures have decreased from 4% to 3%.

C. Outcomes: Breast Cancers Detected through Local Health Departments in Kentucky

Between FY 1991 and FY 2005, 1,584 cases of breast cancer have been detected in women receiving screening and diagnostic mammograms from Kentucky Local Health Departments. The increase in the number of breast cancers detected from FY 2003 to FY 2005 is related to improved data processing and verification with the Kentucky Cancer Registry database. Figure 11 shows the number of breast cancer cases detected each year. Data for breast cancer detected in 2005 is preliminary. (Refer to Technical Notes.) County data is available upon request.



Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health

Table 1 demonstrates the high number of invasive breast cancers diagnosed in Local Health Departments in the Kentuckiana Regional Planning and Development Agency (KIPDA), Bluegrass and Cumberland Valley Area Development District in FY 2005. The higher number of breast cancers diagnosed in these three districts may be related to the large number of mammography screening services provided to women served by Local Health Departments in these areas.

| Table 1. Invasive Breast Cancers Diagnosed Through Local Health Departments in Kentucky, FY 2003-2005 | | | |
|--|----------------|----------------|----------------|
| | FY 2003 | FY 2004 | FY 2005 |
| Purchase | 9 | 14 | 12 |
| Pennyrile | 9 | 6 | 9 |
| Green River | 7 | 5 | 8 |
| Barren River | 8 | 12 | 8 |
| Lincoln Trail | 9 | 8 | 5 |
| KIPDA | 33 | 27 | 25 |
| Northern Kentucky | 6 | 11 | 8 |
| Buffalo Trace | 3 | 3 | 5 |
| Gateway | 6 | 5 | 8 |
| FIVCO | 6 | 11 | 11 |
| Big Sandy | 10 | 19 | 11 |
| Kentucky River | 18 | 7 | 10 |
| Cumberland Valley | 19 | 17 | 11 |
| Lake Cumberland | 11 | 12 | 11 |
| Bluegrass | 50 | 42 | 21 |
| Unknown | 0 | 0 | 1 |
| Total | 204 | 199 | 164 |

Source: Kentucky Women's Cancer Screening Program, Kentucky Department for Public Health

IV. Quality Assurance

In FY 2003 and 2004, the quality assurance activities included routine quality assurance site visits, which were conducted twice each year at all Local Health Departments. After 2004, clinical benchmarks were developed and implemented to standardize the quality assurance review process. These benchmarks correlate with standards established by the CDC's National Breast and Cervical Cancer Early Detection Program. This quality assurance activity was enhanced in FY 2005 to include targeted activities to identify opportunities for program improvement, identify Local Health Departments in need of further assessment or technical assistance, and to focus staff activity and resources to assure and, as needed, improve program performance.

During FY 2005, the KWCSPP contracted with the University of Louisville Kentucky Cancer Program to conduct an assessment of overall program operations. The assessment promoted collaboration of multiple stakeholders in the program, including Local Health Department administrative, clinical and support staff, various Kentucky Department for Public Health agencies, the state's data services vendor, the CDC, and other consultants. This collaboration resulted in the development and enhancement of the KWCSPP Quality Assurance Steering Committee in FY 2005 and the establishment of a process to assure continuous quality improvement in program operations.

Quality assurance activities promote the quality of service delivery at the Local Health Department, contracted providers, mammography facilities, and laboratories. The Kentucky Women's Cancer Screening Program (KWCSPP) assures quality of services as evidenced by results of the August 2005 Centers for Disease Control and Prevention (CDC) report of the program's performance for eleven (11) core performance indicators. Four (4) of the program's core performance indicators assess quality of breast cancer services. The program met or exceeded the CDC standards for all of these indicators for quality of breast cancer services. One additional core performance indicator is expected to improve with a change in program policy to align with the CDC requirement to use 75% of federal grant funds to pay for mammograms for women who are 50 years old and above. (Refer to Table 2).

| Table 2. Breast Cancer Core Performance Indicators for the Kentucky Women's Cancer Screening Program, Released in August 2005 | | | | | |
|--|---------------------|-------------------------|----------------------|--------------------------|----------------------|
| Program Performance Indicator | CDC Standard | Kentucky Results | | National Results | |
| | | Percentage | Standard Met? | Percentage | Standard Met? |
| Abnormal Screening Results with Complete Follow-up | ≥ 90% | 92.8% (794/856) | YES | 88.9% (84,661/95,231) | NO |
| Abnormal Screening Results; Time from Screening to Diagnosis > 60 Days | ≤ 25% | 17.3% (136/786) | YES | 18.7% (15,849/84,733) | YES |
| Treatment Started for Breast Cancer | ≥ 90% | 91.9% (34/37) | YES | 89.5% (3,789/4,234) | YES |
| Breast Cancer; Time from Diagnosis to Treatment > 60 days | ≤ 20 % | 14.7 % (5/34) | YES | 7.1% (266/3,750) | YES |

A. Clinical Standards

Clinical guidelines, as well as timetables for screening, diagnostic follow-up, and case management, are established for the Local Health Departments through the Public Health Practice Reference. The Public Health Practice Reference guidelines are updated as often as twice yearly and reflect current research and best practices. This reference contains the standards by which services are evaluated through routine and focused quality assurance activities. The Public Health Practice Reference guidelines for breast cancer screening recommend that all women 40 years of age and older with a normal clinical breast examination receive an annual screening mammogram. Annual clinical breast exams are provided beginning at age 21 and annual screening mammograms are provided beginning at age 40 in accordance with nationally recommended screening guidelines. All women with an abnormal clinical breast examination, regardless of age, are referred for surgical consultation for further evaluation. The appropriate follow-up for abnormal results of mammograms is specified in the Public Health Practice Reference.

1. Training

Throughout FY 2003-2005, the KWCSPP contracted with the University of Louisville to provide continuing education for Local Health Department nurses and practitioners to assure up to date Women's Health education and cancer screening clinical skills and practices. More than 40 local health department nurses received this essential training annually to ensure that all women who receive breast cancer screenings through the KWCSPP receive quality services. As a result of five Women's Health Update Conferences conducted annually, KWCSPP shared current practice and expertise of breast and cervical cancer physicians and other health care professionals to 250 local health department staff members each year. Through contract with the Cumberland Valley District Health Department, the program provided instruction in specialized clinical breast examination to 175 local health department nurses and 45 medical students from the Pikeville Osteopathic School of Medicine during Fiscal Years 2004-2005.

2. Professional Education

Through partnership with the University of Louisville Kentucky Cancer Program, the Kentucky Department for Public Health continued to support the continuing education self-study kit (called "Providers Practice Prevention") for primary care physicians, advanced registered nurse practitioners, and physician assistants to increase and improve routine breast cancer screenings for Kentucky women. From FY 2003 through FY 2005, the University of Louisville Kentucky Cancer Program provided Clinical Breast Examination instruction using live models to 220 medical residents in Kentucky.

The University of Louisville Kentucky Cancer Program developed and distributed the "Quick Reference Guide for Health Care Providers: Breast and Cervical Cancer Screening and Treatment in Kentucky", which promoted the KWCSPP and the Breast and Cervical Cancer Treatment Program, which is administered by the Department for Medicaid Services (DMS). More than 8,500 copies of the Quick Reference guide were distributed to 130 providers statewide and to other stakeholders through various outreach events.

B. Data Monitoring

The National Breast and Cervical Cancer Early Detection Program grant requires the program to collect an expanded data set (including seventy data elements) called the Minimum Data Elements and to report this data twice yearly to the Centers for Disease Control and Prevention (CDC). The CDC shares feedback regarding the results of the reports with the program staff twice yearly. The CDC reviews the program's data report to determine whether standards are met for National Breast and Cervical Cancer Early Detection Program performance indicators. Quality assurance improvements have contributed to improvements in data management and in collection and reporting of data for services provided by the Kentucky Women's Cancer Screening Program (KWCSPP).

Throughout Fiscal Years 2003-2004, the program continued efforts to streamline the data collection and reporting system. By May 2005, based on findings of the KWCSPP Quality Assurance Steering Committee and the University of Louisville Kentucky Cancer Program KWCSPP Assessment Project, the program developed a process to ensure continued quality improvement in overall program performance. As a result of these activities, Quality Assurance Steering Committee recommendations to improve data collection and reporting processes were in progress before the end of Fiscal Year 2005.

In FY 2005, the KWCSPP developed and evaluated effectiveness of data management tools for review of vendor data files. These tools are used to assess, on a monthly basis, the completeness, accuracy, and timeliness of the data reported in the data management vendor's file. Local Health Departments can obtain feedback reports from encounter data in the Patient Services Reporting System to monitor the quality of clinical services. Local and state health department staff members review these reports for compliance with established clinical screening guidelines and protocols for follow-up of abnormal breast cancer screening and diagnostic services. Technical assistance is provided by program staff to promote effective utilization of the reports for quality assurance and to assure completion, accuracy and timeliness of required data submissions.

Although changes to the data collection and reporting process have resulted in dramatic improvements in data timeliness and completeness for submission as required to the CDC, the program continues to address challenges in data management systems as identified via the program Quality Assurance monitoring and the Quality Assurance Steering Committee. Quality Assurance monitoring of Local Health Department performance is being accomplished through analysis of data files and focused site visits to determine Local Health Department needs for technical assistance and program performance improvements. Ongoing assessment must be accomplished to assure completeness and accuracy of eligibility and clinical screening and diagnostic service data, as well as quality of services and fiscal accountability. Utilization of a single data collection process to improve completeness and accuracy is being considered by the Quality Assurance Steering Committee. In order to assure a quality outcome in program implementation, quality assurance efforts must maintain the active interest and participation of Local Health Department stakeholders.

V. Financial

A. Funding Sources

Federal and state funds support state staff, training programs for Local Health Department nurses and practitioners, breast and cervical cancer screening services, including limited diagnostic follow-up tests when abnormal screening test results are obtained, and other program activities. Contracts with universities and Local Health Departments support community based staff, the training programs, clinical services provided in Local Health Departments (Pap smears, breast self-examination instruction, and clinical breast exams), follow-up diagnostic tests, case management, and local outreach projects.

During Fiscal Years 2003-2005, efficiency of program operations was a focus of program efforts. The program aligned reimbursement policies with the Centers for Disease Control and Prevention's National Breast and Cervical Cancer Early Detection Program Policy and Procedure. Additionally, data management tools were provided to partners (including Local Health Departments and the Kentucky Women's Cancer Screening Program (KWCS) data management vendor) to promote improvement in data management and program outcomes, including fiscal stewardship. A redesign of roles and responsibilities for key personnel positions included assignment of specific reimbursement responsibilities to the Division of Administrative and Financial Management.

Local Health Departments require increased technical assistance to obtain commensurate funds for screening services and to improve program management and efficiency. Communities continue to supplement funding of Local Health Department's breast cancer screening services for all women through increased allocations of local tax appropriations. Secondary to level funding, Local Health Department federal and state funding allocations for services have not increased since FY 2003.

B. Financial Data (1991 – 2005)

Table 3 (page 25) shows how funds were spent for the last fourteen state fiscal years. Note that the costs of mammograms shown in the table include mammograms paid for with state *and* federal funds beginning in FY 98. FY 98 is the first time that federal funds were used to pay for screening and follow-up. As of October 1999, all 120 counties were eligible for federal funds for screening and follow up.

For Fiscal Year 2005, the average cost of screening services per woman, including those who received diagnostic mammograms, was \$130. This is a reasonable cost considering that many insurers pay more than that amount for screening mammograms alone. In FY 04 and FY 05, an increase in rates for ten services contributed to a rise in the average cost of screening per woman with state and federal funds, including diagnostic tests, to \$171 per woman, up \$46 from FY 03.

The information in each column of the table summarizes the expenses paid by the program in each fiscal year for the following items: breast cancer screening office visits; breast cancer screening mammograms; breast cancer follow-up visits, diagnostic tests and procedures, and case management; and training and outreach activities. The last column reflects the total of expenditures in each fiscal year.

Table 3. Funds Spent for Fiscal Years 1991 through 2005

| Fiscal Year | Breast Cancer Screening | | Breast Cancer Follow-Up | Training ² | Outreach ² | Total per Fiscal Year |
|------------------------|-------------------------|-------------|-------------------------|-----------------------|-----------------------|-----------------------|
| | Visits ¹ | Mammograms | | | | |
| 1990-91 | \$172,200 | \$92,200 | | \$10,300 | | \$274,700 |
| 1991-92 | \$260,900 | \$328,700 | \$14,500 | \$12,500 | | \$616,600 |
| 1992-93 | \$341,700 | \$476,100 | \$102,600 | \$12,250 | \$104,000 | \$1,036,650 |
| 1993-94 | \$360,400 | \$558,400 | \$140,600 | \$20,200 | \$254,000 | \$1,333,600 |
| 1994-95 | \$336,800 | \$499,700 | \$128,100 | \$13,900 | \$110,950 | \$1,089,450 |
| 1995-96 | \$556,600 | \$516,000 | \$130,300 | \$11,550 | \$6,000 | \$1,220,450 |
| 1996-97 | \$549,700 | \$608,900 | \$191,574 | \$3,000 | \$117,602 | \$1,470,776 |
| 1997-98 | \$588,000 | \$870,200 | \$238,300 | \$42,600 | \$198,108 | \$1,937,208 |
| 1998-99 | \$642,200 | \$640,200 | \$317,500 | \$56,700 | \$236,853 | \$1,893,453 |
| 1999-00 | \$838,962 | \$619,920 | \$411,308 | \$31,360 | \$543,294 | \$2,444,844 |
| 2000-01 | \$718,395 | \$610,624 | \$423,669 | \$31,000 | \$359,702 | \$2,143,390 |
| 2001-02 | \$866,703 | \$633,640 | \$566,645 | \$43,500 | \$496,517 | \$2,607,005 |
| 2002-03 | \$436,438 | \$614,246 | \$565,754 | \$43,500 | \$496,517 | \$2,156,455 |
| 2003-04 ³ | \$424,116 | \$596,903 | \$549,780 | \$54,500 | \$456,517 | \$2,081,816 |
| 2004-05 ⁴ | \$420,580 | \$591,927 | \$545,196 | \$54,500 | \$456,517 | \$2,068,720 |
| 1991-2005 Total | \$7,513,694 | \$8,257,660 | \$4,325,826 | \$441,360 | \$3,836,577 | \$24,375,117 |

Source: Kentucky Department for Public Health, Division of Adult and Child Health Improvement, Maternal and Child Health Branch

¹ The actual visits are a combination of breast cancer screening (education on breast self-examination and clinical breast exam) and other preventive measures. Actual proportion of the costs may vary since each visit is individualized to meet the patient's screening and other preventive services need. Of the total visit cost, 40% is allocated to breast cancer screening (second column from left).

² For the purpose of this report, the numbers in the table allocate 50% of the total training and outreach expenditures of state funds to breast cancer. The other half goes to cervical cancer training and outreach. In FY 95, 96, and 97, additional federal funds were spent on training and outreach that are not shown in this table. Expenditures shown for these years are state funds only.

³ Rates for reimbursements for 10 services were increased during FY04 to provide an incentive to community providers to contract with Local Health Departments and provide services required to implement breast cancer screening services.

⁴ Invoices for payment of federal funds may be billed and paid for twelve (12) months following the end of each fiscal year; therefore, expenditures for FY 2005 are preliminary estimates.

⁵ Includes funds for case management.

Table 4 indicates state, federal and local tax funds spent for breast cancer screening, diagnostic follow-up and case management for Fiscal Years 2003-2005. During these fiscal years, local tax appropriations have funded 37% of all breast cancer screening, diagnostic follow-up and case management services through Local Health Departments in Kentucky. Review of the Kentucky Department for Public Health Department Statement of Revenue and Expenses for Fiscal Years 2003-2005 reveal local tax appropriations have been as high as 57% of the contributions from combined funding sources in 2000 and as low as 22% of the combined funding sources in 2002.

| Table 4. Expenditures of State, Federal and Local Tax Funds for Breast Cancer Screening, Follow-up and Case Management for Fiscal Years 2003-2005* | | | | |
|--|---------------|----------------|------------------|--------------|
| Year | State | Federal | Local Tax | Total |
| 2003 | \$1,045,319 | \$571,119 | \$513,912 | \$2,130,350 |
| 2004 | \$1,017,981 | \$552,818 | \$716,790 | \$2,287,589 |
| 2005 | \$984,000 | \$573,703 | \$927,714 | \$2,485,417 |
| Totals | \$3,047,300** | \$1,697,640 | \$2,158,416 | \$6,903,356 |
| *Expenditures for Breast Cancer Screening, Follow-up and Case Management are based on a calculation of the distribution of breast cancer screening, follow-up and case management services (approximately 40% of all KWCSF clinical services encounters) in the FY 2005 Cancer Resource Management files. Source of the denominator for the calculation of breast cancer screening, diagnostic follow-up and case management expenditures is the total program clinical services expenditures for each fiscal year included in the Statement of Revenue and Expenses for Fiscal Years 2003-2005. | | | | |
| **State funds cover Breast Cancer Screening and Follow-up services for women ages 21-64 years of age that are not approved for payment with federal grant funds. | | | | |

Appendix A: Statutes and Administrative Regulations

214.550 Definitions for KRS 214.552 to 214.556. As used in KRS 214.552 to 214.556: (1) "Department" means the Department for Public Health of the Cabinet for Health and Family Services. (2) "Fund" means the breast cancer screening fund. (3) "Screening" means the conduct of screening mammography for the purpose of ascertaining the existence of any physiological abnormality, which might be indicative of the presence of disease. **Effective:** June 20, 2005 **History:** Amended 2005 Ky. Acts ch. 99, sec. 461, effective June 20, 2005. – Amended 1998 Ky. Acts ch. 426, sec. 408, effective July 15, 1998. -- Amended 1994 Ky. Acts ch. 184, sec. 1, effective July 15, 1994. -- Created 1990 Ky. Acts ch. 318, sec. 2, effective July 1, 1990.

214.552 Breast cancer screening fund. There is hereby established within the department a breast cancer screening fund. Any funds appropriated by the General Assembly for the purpose of the Breast Cancer Screening Program and any gifts or federal grants shall be deposited in the State Treasury to the credit of a trust or agency fund to be used for the purposes of KRS 214.554 and shall not lapse. **Effective:** July 15, 1994 **History:** Amended 1994 Ky. Acts ch. 184, sec. 4, effective July 15, 1994. – Created 1990 Ky. Acts ch. 318, sec. 3, effective July 1, 1990.

214.554 Breast Cancer Screening Program – Breast Cancer Advisory Committee --Annual report.

(1) There is established within the department a Breast Cancer Screening Program for the purposes of: (a) Reducing morbidity and mortality from breast cancer in women through early detection and treatment; and (b) Making breast cancer screening services of high quality and reasonable cost available to women of all income levels throughout the Commonwealth and to women whose economic circumstances or geographic location limits access to breast cancer screening facilities. (2) Services provided under the Breast Cancer Screening Program may be undertaken by private contract for services or operated by the department and may include the purchase, maintenance, and staffing of a truck, a van, or any other vehicle suitably equipped to perform breast cancer screening. The program may also provide referral services for the benefit of women for whom further examination or treatment is indicated by the breast cancer screening. (3) The department may adopt a schedule of income-based fees to be charged for the breast cancer screening. The schedule shall be determined to make screening available to the largest possible number of women throughout the Commonwealth. The department shall, where practical, collect any available insurance proceeds or other reimbursement payable on behalf of any recipient of a breast cancer screening under KRS 214.552 to 214.556 and may adjust the schedule of fees to reflect insurance contributions. All fees collected shall be credited to the fund. (4) The department may accept any grant or award of funds from the federal government or private sources for carrying out the provisions of KRS 214.552 to 214.556. (5) For the purpose of developing and monitoring the implementation of guidelines for access to and the quality of the services of the Breast Cancer Screening Program, there is hereby created a Breast Cancer Advisory Committee to the commissioner of the Department for Public Health which shall include the directors of the James Graham Brown Cancer Center and the Lucille Parker Markey Cancer Center, the director of the Kentucky Cancer Registry, the director of the Division of Women's Physical and Mental Health, one (1) radiologist with preference given to one who has been fellowship-trained in breast diagnostics and who shall be appointed by the Governor, one (1) representative of the Kentucky Office of Rural Health appointed by the Governor, one (1) representative of the Kentucky Commission on Women appointed by the Governor, and at least three (3) women who have had breast cancer and who shall be appointed by the Governor. (6) The commissioner of the Department for Public Health, in consultation with the Breast Cancer Advisory Committee, shall annually, but no later than November 1 of each year, make a report to the Governor, the Legislative Research Commission, and the Interim Joint Committees on Appropriations and Revenue and on Health and Welfare on the: (a) Implementation and outcome from the Breast Cancer Screening Program including, by geographic region, numbers of persons screened, numbers of cancers detected, referrals for treatment, and reductions in breast cancer morbidity and mortality; (b) Development of quality assurance guidelines, including timetables, for breast cancer screening under this section, and monitoring of the manner and effect of implementation of those guidelines; and (c) Funds appropriated, received, and spent for breast cancer control by fiscal year. **Effective:** June 20, 2005 **History:** Amended 2005 Ky. Acts ch. 99, sec. 462, effective June 20, 2005. – Amended 2003 Ky. Acts ch. 48,

sec. 1, effective June 24, 2003. -- Amended 1998 Ky. Acts ch. 95, sec. 1, effective July 15, 1998; and ch. 426, sec. 409, effective July 15, 1998. -- Amended 1994 Ky. Acts ch. 184, sec. 2, effective July 15, 1994. -- Created 1990 Ky. Acts ch. 318, sec. 4, effective July 1, 1990.

214.556 Kentucky Cancer Registry -- Cancer patient data management system. (1) There is hereby established within the Kentucky cancer program the Kentucky Cancer Registry and the cancer patient data management system for the purpose of providing accurate and up-to-date information about cancer in Kentucky and facilitating the evaluation and improvement of cancer prevention, screening, diagnosis, therapy, rehabilitation, and community care activities for citizens of the Commonwealth. The cancer patient data management system shall be administered by the Lucille Parker Markey Cancer Center. (2) Each licensed health facility, which provides diagnostic services, or diagnostic services and treatment, or treatment to cancer patients, shall report to the Kentucky Cancer Registry, through the cancer patient data management system and in a format prescribed by the Kentucky Cancer Registry, each case of cancer seen at that health facility. Failure to comply may be cause for assessment of an administrative fine for the health facility, the same as for violation of KRS 216B.250. (3) Each health facility shall grant to the cancer registry access to all records which could identify cases of cancer or would establish characteristics of the cancer, treatment of the cancer, or status of any identified cancer patient. Hospitals actively participating and enrolled in the cancer patient data management system of the Kentucky Cancer Program as of July 13, 1990, shall be considered to be in compliance with this section. The Lucille Parker Markey Cancer Center shall provide staff assistance in compiling and reporting required information to hospitals which treat a low volume of patients. (4) No liability of any kind or character for damages or other relief shall arise or be enforced against any licensed health facility by reason of having provided the information or material to the Kentucky Cancer Registry pursuant to the requirements of this section. (5) The identity of any person whose condition or treatment has been reported to the Kentucky Cancer Registry shall be confidential, except that: (a) The Kentucky Cancer Registry may exchange patient-specific data with any other cancer control agency or clinical facility for the purpose of obtaining information necessary to complete a case record, but the agency or clinical facility shall not further disclose such personal data; and (b) The Kentucky Cancer Registry may contact individual patients if necessary to obtain follow-up information which is not available from the health facility. (6) All information, interviews, reports, statements, memoranda, or other data furnished by reason of this section and any findings or conclusions resulting from those studies shall be privileged. (7) The Kentucky Cancer Registry shall make periodic reports of its data and any related findings and recommendations to the Legislative Research Commission, the Interim Joint Committees on Appropriations and Revenue and on Health and Welfare, the Governor, the Cabinet for Health and Family Services, the reporting health facility, and other appropriate governmental and nongovernmental cancer control agencies whose intent it is to reduce the incidence, morbidity, and mortality of cancer. The Kentucky Cancer Registry may conduct analyses and studies as are indicated to advance cancer control in the Commonwealth. **Effective:** June 20, 2005 **History:** Amended 2005 Ky. Acts ch. 99, sec. 463, effective June 20, 2005. -- Amended 1998 Ky. Acts ch. 426, sec. 410, effective July 15, 1998. -- Amended 1994 Ky. Acts ch. 184, sec. 3, effective July 15, 1994. -- Created 1990 Ky. Acts ch. 318, sec. 5, effective July 1, 1990.

Technical Notes

Data used to develop this report was obtained from multiple sources. The National Center for Chronic Disease Prevention and Health Promotion Behavioral Risk Factor Surveillance System, the world's largest telephone survey, tracks health risks in the United States. Information from the 2004 Kentucky survey was used in this report to estimate the number of women ages 40 and over who are in need of mammography screening according to nationally recommended guidelines.

In order to determine how many breast cancers are detected through Local Health Departments, mammogram records were electronically matched to Kentucky Cancer Registry (KCR) records. There is a significant lag of nine months between the date of diagnosis and the date that a cancer case is reported to the KCR. An additional period of 21 months may be incurred before all cancer diagnosis information for each case is reported to the Registry. Therefore, data for breast cancers detected in FY 2005 are preliminary. Some breast cancer cases may not have been reported to the KCR related to accessibility of diagnostic and treatment services in large urban centers in contiguous states.

Kentucky Department for Public Health data sources include Cancer Resource Management Reports 2003-2005 and Minimum Data Elements Reports 2003-2005. The Cancer Resource Management Reports reflect encounter billing data for services received at Local Health Departments in all 120 Kentucky counties. Encounter billing information has been provided to the Kentucky Women's Cancer Screening Program (KWCSP) electronically by all Local Health Departments in Kentucky except the Louisville Metro Health Department. Minimum Data Elements Reports include seventy data variables required for reporting to the Centers for Disease Control and Prevention (CDC). The Minimum Data Elements are collected electronically through Local Health Departments to report information on patients who are eligible for payment of breast and cervical cancer screening, diagnosis and case management with federal grant funding provided by the CDC through the National Breast and Cervical Cancer Early Detection Program. The CDC provides the KWCSP with a report of performance on four (4) Breast Cancer Quality of Services core performance indicators.

The Kentucky State Data Center and its 78-member affiliate network provides training and assistance to government, the business community, university researchers, and other interested data users regarding use of Census data for research, administration, planning, and decision making. The State Data Center Program is a cooperative effort of the University of Louisville, the Commonwealth of Kentucky, and the U.S. Census Bureau. The Data Center's state profile information was used to complete this report.

Considered the standard for quality among cancer registries around the world, the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI) is a nationally recognized source for cancer data. SEER collects cancer incidence and survival data from population-based cancer registries. In 1973, SEER began collecting data on cancer cases. In 2001, the SEER Program expanded coverage to include Kentucky. Data used for this report includes the period from 1998 through 2002.

A decennial census is conducted by the U.S. Census Bureau to collect demographic, economic, community and other data about the American population. State specific data and population projections for 2025 are available from the public website and are included in this report.

References

ACS. (2006). American Cancer Society. Detailed Guide: Breast Cancer. Can Breast Cancer be found Early? Available at

http://www.cancer.org/docroot/CRI/content/CRI_2_4_3X_Can_breast_cancer_be_found_early_5.asp

Breast and Cervical Cancer Treatment Act, 2000; accessed on November 2005 at

<http://www.cdc.gov/cancer/nbccedp/law106-354.htm>

CDC. (2006).Centers for Disease Control and Prevention. 2004 Cancer Burden Data Fact Sheets. Breast Cancer. Available at <http://www.cdc.gov/cancer/cancerburden/ky.htm#breast>

KCR. (2005). Kentucky Cancer Registry. Available at <http://www.kcr.uky.edu/>

Kentucky Department for Public Health, Cancer Resource Management Reports 2003-2005

Kentucky Department for Public Health Practice Reference, Cancer Screening Follow-up Sections, revisions July 1, 2002-2004 and January 1, 2003-2005

Kentucky State Data Center; accessed on April 18, 2006 at

<http://ksdc.louisville.edu/profiles/58page/kentucky58.pdf>

Kentucky Women's Cancer Screening Program, Minimum Data Elements Reports, 2003-2005

National Cancer Institute. (2005). State Cancer Profiles. Available at

<http://statecancerprofiles.cancer.gov/cgi-bin/quickprofiles/profile.pl?00&055>

Surveillance, Epidemiology, and End Results (SEER) Program. (2005). Ries LAG, Eisner MP, Kosary CL, Hankey BF, Miller BA, Clegg L, Mariotto A, Feuer EJ, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2002, National Cancer Institute. Bethesda, MD,

http://seer.cancer.gov/csr/1975_2002/, based on November 2004 SEER data submission, posted to the SEER web site 2005.

Surveillance, Epidemiology, and End Results (SEER) Program; accessed on March 12, 2006 at

<http://seer.cancer.gov/about/>

U.S. Census Bureau; accessed on March 12, 2006 at

http://factfinder.census.gov/home/saff/main.html?_lang=en

U.S. Food and Drug Administration, Center for Devices and Radiologic Health, Mammography;

accessed on November 2005 at <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfMQSA/mqsa.cfm>

Glossary

Age-Adjusted: A weighted average of the age-specific or crude rates, where weights are the proportions of persons in the corresponding age groups of a standard million population.

Benign: A condition that is not cancerous.

Biopsy: Taking a small amount of tissue for microscopic analysis to establish a precise diagnosis.

Breast Carcinoma, In Situ: An early form of breast cancer characterized by absence of invasion of surrounding breast tissues, with no spreading of cancer cells beyond the milk ducts or milk-producing glands.

Breast Carcinoma, Invasive: A form of breast cancer characterized by invasion of surrounding breast tissue, with spreading of cancer cells beyond the milk ducts or milk glands.

Incidence: Rate of new cancers of a specific site/type occurring in a specified population during a year, expressed as the number of cancers per 100,000 people.

Malignant: The medical term for cancer, referring to the abnormal division of cells which can spread through the body.

Mammogram: A form of breast x-ray used to detect breast cancer.

Mammogram, Screening: Two x-ray views of each breast, typically used when a physical exam shows no signs or symptoms are present.

Mammogram, Diagnostic: Three x-ray views of one or both breasts, typically used when a physical exam shows signs or symptoms are present.

Payer: Agency responsible for paying for services performed through Local Health Departments; includes The Kentucky Women's Cancer Screening Project, Medicaid, Medicare, commercial insurance, and the client herself (self-paid).

Prevalence: Total number of people with a specific site/type of cancer at a particular moment in time in the entire population.

Ultrasound, Breast: An imaging procedure using high-frequency sound waves to create an image of a change in breast tissue.

List of Figures and Tables

| | | |
|------------|--|----|
| Figure 1. | Leading Cancer Deaths Among Women in Kentucky, 2002 | 9 |
| Figure 2. | Female Invasive Breast Cancer Incidence and Mortality Rates, Kentucky vs. U.S., 1998-2002 | 10 |
| Figure 3. | Invasive Breast Cancer Incidence Rates by County, Kentucky, 2002 | 11 |
| Figure 4. | Invasive Breast Cancer Mortality Rates by County, Kentucky, 2002 | 13 |
| Figure 5. | Total Number of Screening Mammogram Performed Through Local Health Departments in Kentucky, FY 1991-2005 | 14 |
| Figure 6. | Screening Mammograms Performed Through Local Health Departments in Kentucky, FY 2005 | 15 |
| Figure 7. | Percentage of Screening Mammograms Performed Through Local Health Departments in Kentucky by Age Groups, FY 2003- 2005 | 16 |
| Figure 8. | Percentage of Screening Mammogram by Race, FY 2005 | 17 |
| Figure 9. | Percentage of Diagnostic Mammograms by Age Groups, FY 2003-2005 | 18 |
| Figure 10. | Percentage of Diagnostic Mammograms by Race, FY 2005 | 19 |
| Figure 11. | Total Number of Invasive Breast Cancers Diagnosed, FY 1991-2005 | 20 |
| Table 1. | Invasive Breast Cancers Diagnosed Through Local Health Departments in Kentucky, FY 2005 | 21 |
| Table 2. | Breast Cancer Core Performance Indicators for the Kentucky Women’s Cancer Screening Program, Released in August 2005 | 22 |
| Table 3. | Funds Spent for Fiscal Years 1991 through 2005 | 26 |
| Table 4. | Expenditures of State, Federal and Local Tax Funds for Breast Cancer Screening, Follow-up and Case Management for Fiscal Years 2000-2005 | 27 |