



Kansas Comprehensive Cancer Control and Prevention Plan

March 2005



Comprehensive Cancer Control is an integrated and coordinated approach to reducing cancer incidence, morbidity and mortality through prevention, early detection, treatment, rehabilitation and palliation.

– Centers for Disease Control and Prevention

Kansas Comprehensive Cancer Control and Prevention Plan

Published March 2005

Kathleen Sebelius, Governor

Roderick Bremby, Secretary

Kansas Department of Health and Environment



"This publication was supported by Cooperative Agreement Number U55/CCU721977 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention."





K A N S A S

OFFICE OF THE GOVERNOR

KATHLEEN SEBELIUS, GOVERNOR

Dear Fellow Kansans:

Cancer has touched nearly all of our lives. Without much thought you could likely recall a neighbor, friend, church member or associate who has battled the disease. Or perhaps cancer has hit you much closer to home with a relative, spouse or child affected. You may be struggling with cancer yourself right now, perhaps you are a cancer survivor or you treat those who have cancer.

The reality is that cancer places a heavy burden on the state of Kansas. More than 12,000 Kansans are diagnosed with cancer each year and 5,400 individuals will die from the disease. The cost of cancer also is staggering - more than \$1.6 billion each year in direct medical costs and the cost of lost productivity due to illness and premature death.

The good news is that many cancers are preventable. Avoiding tobacco use, eating a nutritious diet, participating in regular physical exercise, and using sunscreen can further reduce cancer incidence and death. Routine screening and early detection can often identify cancer at its earliest stage when it is most treatable and survivable. Quality treatment is available right here at home for those diagnosed with cancer and advancements in pain management and medical therapy are allowing individuals to live with and beyond the disease. Kansans are urged to adopt lifestyles that reduce the chance of developing cancer, improve survival and avoid unnecessary pain and suffering.

Kansas Department of Health and Environment Secretary Roderick Bremby joins me in presenting this Kansas Comprehensive Cancer Plan to the citizens of this state. This plan outlines a comprehensive approach to reducing the burden of cancer and was produced with the diligent efforts of the Kansas Cancer Partnership. This partnership is comprised of individuals from more than 65 agencies in the public and private sector who dedicated their time and effort to identifying the burden cancer causes in the state, and approaches that can be taken to help solve the problem.

I challenge Kansas' citizens and communities to take this plan and put it into action. Through a comprehensive effort we can address the burden of cancer in the state.

Sincerely yours,
A handwritten signature in black ink, appearing to read "Kathleen Sebelius".
Kathleen Sebelius
Governor of the State of Kansas

KS:RRO:tc

Capitol, 300 SW 10th Ave., Ste. 212S, Topeka, KS 66612-1590

Voice 785-296-3232 Fax 785-296-7973 www.ksgovernor.org governor@state.ks.us

TABLE OF CONTENTS

Governor's Letter	i
Introduction	2
Executive Summary.....	3
Background	5
CCC/Healthy People 2010 Objectives	10
Goals	13
Continuum for Action	16
Prevention	20
Screening and Early Detection	28
Diagnosis and Treatment.....	31
Survivorship and End of Life Care.	35
Plan Implementation.	38
Cross Cutting Issues in Cancer Control and Prevention	44
1) Disparity	
2) Data	
3) Public Information/Education/Internet	
4) Professional Education	
5) Resources	
6) Research	
7) Advocacy/Policy	
Burden of Cancer	49
1) Breast Cancer	
2) Cervical Cancer	
3) Colorectal Cancer	
4) Lung Cancer	
5) Prostate Cancer	
6) Skin Cancer	
Appendices	65
Background and Previous Work	
Timeline	
Issues Surrounding Cancer	
Prevention Action Steps	
Guiding Principles	
List of Cancer Partnership members	
Source Data from KCR and BRFSS for charts and graphs	
Websites and Internet links	

INTRODUCTION

Cancer in Kansas causes a heavy toll in both lives lost and the burden of the disease for patients and their families. Cancer in the U.S. recently surpassed heart disease as the leading cause of death for citizens under the age of 85. An enormous impact is seen in social, economic and personal costs for cancer.

Kansas has a long and rich history of taking a proactive approach to public health. From the establishment of one of the first public health agencies in 1885 to current initiatives to control and prevent West Nile Virus, the state has established innovative programs, which keep Kansans safe and healthy. Cancer prevention and control is a logical and important step in achieving the goal of Healthy Kansans by 2010 and beyond.

The Kansas Cancer Control Plan Part I was published in April 2002, the culmination of two years of work by the Kansas Cancer Partnership. The Healthy Kansans goals and objectives were outlined in that document. The 70-member partnership, with representatives from organizations and agencies across the state, identified five key strategies to accomplish its mission. These included fostering collaboration for primary, secondary and tertiary/palliative care, thereby reducing duplication of services and optimizing resources; identifying gaps in services and optimizing resources; reducing disparities in cancer screening and management; enhancing access to quality treatment and support services; and identifying and implementing priorities and strategies to evaluate outcomes.

The workgroups identified six specific cancer areas, which were selected based on the frequency and severity of the disease and the availability of prevention, screening and early diagnosis efforts that could reduce morbidity and mortality. Those six cancers include breast (female), cervical, colorectal, prostate, lung and skin.

The groups were presented with the clinical and epidemiological characteristics of cancer and the research needed to understand the unmet public health problems. In addition, the initial planning process defined the key cross-cutting issues that would need to be addressed for both specific cancers and cancer care.

The Phase II process organizes the workgroups around the Continuum of Care, which includes more comprehensive recommendations for prevention, early detection, treatment and survivorship as it pertains to the six priority cancers.

The approach to the burden of cancer includes preventing some cancers from occurring, screening to detect cancer at its earliest stages, treating cancer with the most comprehensive/highest quality treatments available, and addressing survivorship and end of life issues for cancer patients.

A comprehensive approach to the prevention and control of cancer in Kansas provided the framework for these workgroups to explore available resources, identify interested individuals, groups and businesses and access the network of providers and programs that are currently involved in efforts to reduce the disease burden and mortality rate. The culmination of this effort will provide the platform for an implementation plan based on the combined efforts of various organizations and partners that are currently participating in activities dealing with cancer issues.

EXECUTIVE SUMMARY

The KANSAS CANCER PARTNERSHIP is an integrated network of organizations and individuals that provided statewide leadership in developing this coordinated, comprehensive Kansas Cancer Control and Prevention Plan. What you will read here is the collaborative work of dedicated partners with one goal in mind - to reduce cancer incidence, morbidity and mortality in Kansas through prevention, early detection, treatment, rehabilitation, and palliation.



Through the continuum of action a comprehensive approach to the burden of cancer will be taken in Kansas. The partnership approached the problem by researching and studying cancer prevention to help reduce the future burden, screening methods to help detect cancer at its earliest stages, treatment that includes quality care right here at home and survivorship and end of life issues to help cancer patients and survivors live with and beyond the disease.

The partnership recognized the tremendous burden of cancer in Kansas - it is the second leading cause of death in the state. The diseases affect some groups far worse than others and cut across social and economic lines. The cost of cancer will continue to rise. The diseases are expensive to treat and as cancer becomes survivable, more individuals will live with the tremendous cost of treatment.

Prevention of the diseases are highlighted in this plan. Although it is recognized that some cancers cannot be prevented, the partnership identified the six cancers - female breast, cervical, colorectal, lung, prostate and skin - where prevention and early detection will help reduce incidence and the severity of the diseases. The goals and strategies outlined for this effort will include educating the public and professionals about cancer related factors, healthy lifestyles and risk-taking behaviors. With lung cancer being the leading cause of cancer death, a priority has been placed on promoting tobacco prevention and cessation initiatives and eliminating nonsmoker's exposure to second hand smoke. Being able to evaluate and track prevention efforts is essential in knowing the impact made and benefits derived.

Screening will help detect the diseases when most cancer can be treated at an early stage deriving the most benefit for the patient. This effort also will take an educational and informational effort so individuals understand the benefit of screening for cancer and health professionals recommend and promote early

screening methods. Addressing financial and ethnic disparities and expanding screening services for colorectal cancer also are priorities. While screening rates for cervical cancer are more than 90 percent, much work needs to be done in the other identified cancers.

Cancer treatment is available in Kansas with quality care in a convenient location. Trained oncologists are located statewide to treat cancer patients and centers offering radiation, chemotherapy and other cancer services are located in strategic communities. Efforts needing attention in this area will include promotion of timely, affordable care including clinical trials in this state. The education of Kansas' lawmakers is essential in overcoming the financial burden that cancer patients face, including uninsured and underinsured individuals. Those individuals diagnosed with cancer seek up-to-date, easily accessible information, which has been set as one of the goals of this plan.

Cancer survivors will continue to grow in numbers during the next decade as better treatment and drugs become available. Ensuring that these survivors lead productive and healthy lives with and beyond the disease is a goal of this plan. Survivorship standards will be addressed for individuals, families, health professionals and businesses. When cancer leads to the end of life, those patients must receive compassionate care and pain management.

The efforts of the Partnership will be ongoing and will begin with fostering collaboration of primary, secondary, tertiary and palliative care to reduce the duplication of services and optimization of resources. Gaps in services, information and data must be identified and resources dedicated to those tasks. The reduction in disparities for some populations must receive priority, particularly in the areas of screening and treatment management. Access to quality treatment and support services for all cancer patients must be enhanced.

Identifying and implementing priorities and strategies to evaluate the goals, outcomes and actions of this plan is essential to its success. The partnership is united in its goal of reducing cancer, supporting each other's efforts and applauding their successes.

The probability of cancer becoming part of your own life is high - if you are not affected personally then you will have a family member, neighbor, co-worker or friend who is. Although great progress has been made in the fight against cancer, much remains to be done. This comprehensive plan will begin to target and track that effort.

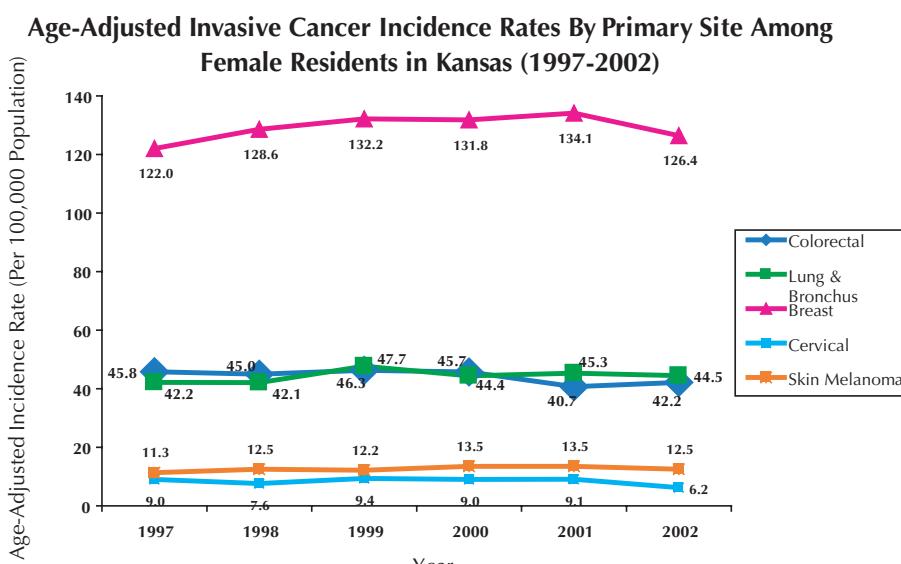


BACKGROUND OF THE CANCER PROBLEM IN KANSAS

In 2002, about 12,000 new invasive cancer cases (all sites) were reported in Kansas. The age-adjusted incidence rate for cancer (all sites) was 416.4 per 100,000 population.¹ The chance of having cancer in a lifetime is 45 percent for men and 41 percent for women.² The burden falls unequally for those who lack insurance, populate low socio-economic sectors or do not have access to health care.¹ Besides its high incidence rate (rate of new case occurrence), cancer is the second leading cause of death in Kansas.³ Despite advances in recent years related to prevention, detection and treatment, more than 5,000 Kansans die each year from cancer, accounting for approximately 22 percent of all deaths in Kansas.^{1,3} In 2002, the age-adjusted death rate for cancer (all sites) was 187.5 per 100,000 population.³ In addition to disease burden, end of life issues are also of particular concern to cancer patients and their families who must come to an emotional and spiritual reconciliation of dying and separation. Issues related to pain management, minimizing complications and caregiver needs also require attention.

In Kansas 9,420 total cases of breast cancer (99.4 percent of all cases were among women) were identified between 1997 and 2001, making it the most frequently diagnosed cancer among women in Kansas.¹ It is the second leading cause of cancer death among women, accounting for approximately 400 deaths in the state each year. During the last five years, the age-adjusted incidence rate of invasive breast cancer is almost stable.¹ Breast cancer is most common (has a peak incidence) among women ages 65 to 74 years and is less common among women younger than 40 years of age. White females are more often diagnosed with invasive breast cancer than African-American women (130.9 cases per 100,000 white women versus 107.2 cases per 100,000 African-American women for the years 1997-2001).¹ Among women of all other races, 212.6 cases per

100,000 women were diagnosed with invasive breast cancer.¹ African-American women have higher age-adjusted breast cancer death rates than White women (37.2 per 100,000 women versus 23.7 per 100,000 women for the years 2001-2002).³ The U.S. Preventative Services Task Force (USPSTF) recommends mammography, with or without a clinical breast exam, every one to two years for



Rates are per 100,000 Female Population and age-adjusted to the 2000 U.S. Standard Population.
Data Source: Kansas Cancer Registry

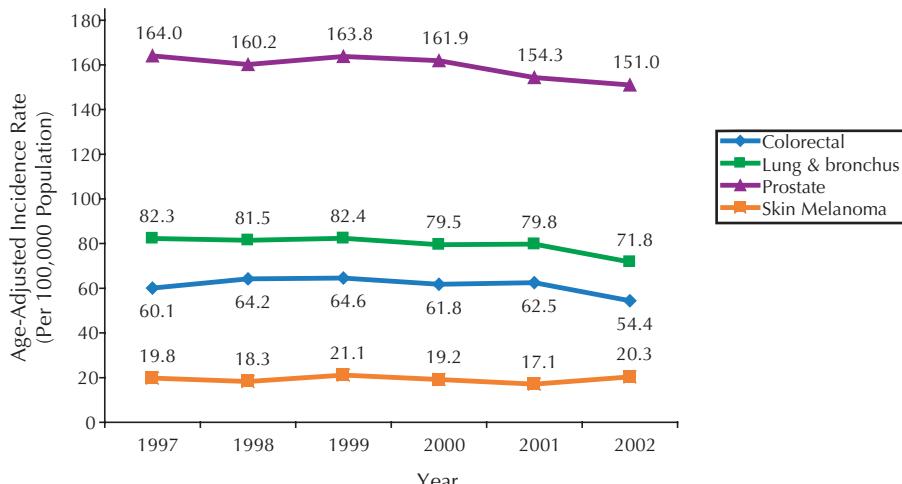
women aged 40 years and older (USPSTF 2002).⁴ In Kansas from 2000-2002, 24 percent of women who were 40 years of age and older had not had a mammogram in the past two years. The percentage of White women age 40 and older who had not had a mammogram in the past two years was higher when compared to African-American women (24 percent of White women versus 14

percent of the African-American women).⁵ Between 2000-2002, women at increased risk of not having a recent mammogram (within the past two years) include those in households making less than \$20,000 per year (34 percent), women of Hispanic ethnicity (30 percent), women in rural areas (30 percent) and women without a high school education (35 percent).⁵

Cervical cancer accounts for approximately two percent of all cancers in Kansas women. From 1997 to 2001, 599 new cases of invasive cervical cancer were seen among Kansas' women. Thirty-five percent of total new invasive cervical cancer cases were seen among women age 55 years and older. In 2002, the age-adjusted incidence rate in Kansas females was 6.2 cases per 100,000 women.¹ The death rates for cervical cancer are low, due mainly to early

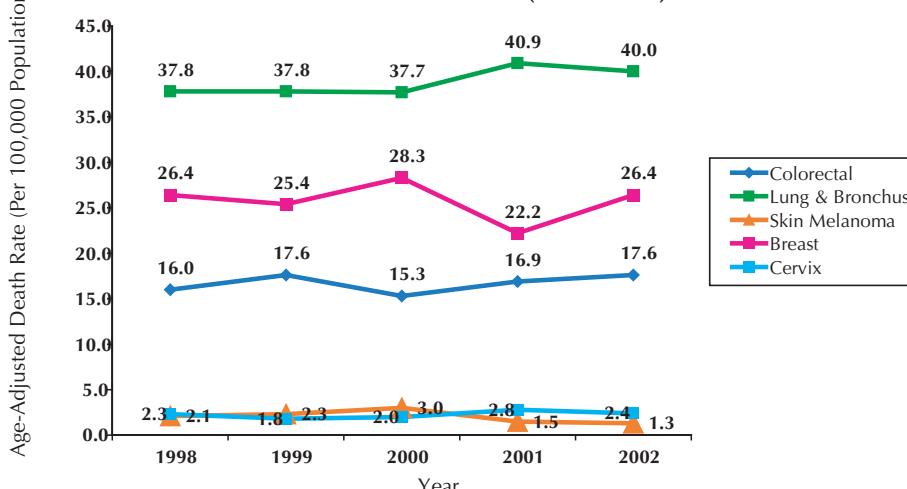
detection and screening. The USPSTF strongly recommends screening for cervical cancer in women who have been sexually active and have a cervix (this statement updates the 1996 recommendation mentioned in the Guide to Preventive Services, second

Age-Adjusted Invasive Cancer Incidence Rates By Primary Site Among Male Residents in Kansas (1997-2002)



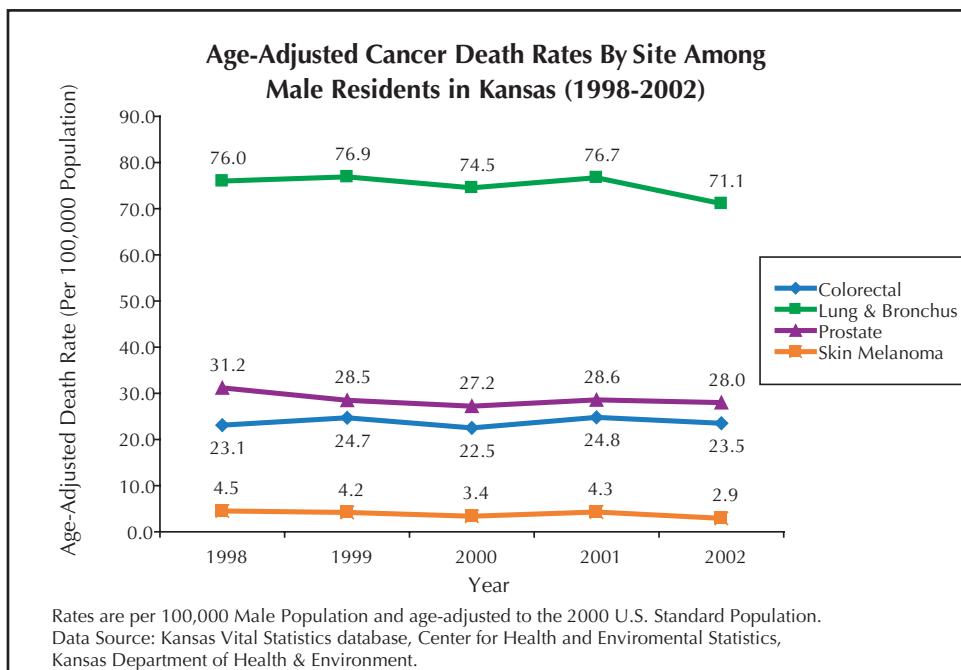
Rates are per 100,000 Male Population and age-adjusted to the 2000 U.S. Standard Population.
Data Source: Kansas Cancer Registry

Age-Adjusted Cancer Death Rates By Site Among Female Residents in Kansas (1998-2002)



Rates are per 100,000 Female Population and age-adjusted to the 2000 U.S. Standard Population.
Data Source: Kansas Vital Statistics database, Center for Health and Environmental Statistics, Kansas Department of Health & Environment.

edition).⁶ In Kansas, from 2000-2002, 84 percent of women age 18 and older with a uterine cervix had received a Pap smear in the past two years. The highest percentage of women receiving a Pap smear in this age group was seen among African-American women (93 percent). The lowest percentage was seen among Hispanic women (81 percent). Women living in rural areas and with an annual household income less than \$20,000 also were seen to be at risk of not receiving a pap test in past two years.⁵



Hispanic) as compared to African-American (including Hispanic and non-Hispanic) i.e. 59.5 cases per 100,000 persons versus 48.2 cases per 100,000 persons. In 2001-2002, the age adjusted colorectal death rate was 20.3 per 100,000 persons. Higher age-adjusted mortality was seen among African-Americans (age-adjusted death rate of 30.5 cases per 100,000 population) as compared to Whites (age-adjusted death rate of 19.8 cases per 100,000 population).³ Survival depends on the stage of cancer progression at the time of diagnosis. If cancer is detected while it is still localized in the bowel, 90 percent of persons can expect to be alive five years later.⁷ The USPSTF strongly recommends that clinicians screen men and women age 50 and older who are at average risk for colorectal cancer. For high-risk persons, it is reasonable to begin screening at a younger age (this statement updates the 1996 recommendation mentioned in the Guide to Clinical Preventive Services, Second Edition).⁸ In 2001-2002, only 66 percent of Kansans age 50 years and older received a screening test for colorectal cancer (fecal occult blood test or a sigmoidoscopy or colonoscopy exam). Only 13 percent of Kansans 50 years and older had both a sigmoidoscopy in the past 5 years and a fecal occult blood test in the past year.⁵

Lung cancer is the leading cause of cancer death among males, as well as females in Kansas.³ It is the second most commonly diagnosed cancer among men and the third most commonly diagnosed cancer among women.¹ From 1997-2001, 8,479 persons were diagnosed with the disease and 7,401 individuals in Kansas during that same period died from the disease. In 2002, the age-adjusted incidence rate for lung cancer in Kansas was 56.4 per 100,000 population.¹ Lung cancer accounts for about 30 percent of all cancer deaths in the state. In the year

Colorectal cancer represents 13 percent of all newly diagnosed cancers in Kansas.¹ It is the third leading cause of cancer death among males, as well as, among females.³ From 1997-2001, 7,466 Kansans were diagnosed with colorectal cancer and 2,790 died. For the same time period, the age-adjusted colorectal cancer incidence rate was 53.6 cases per 100,000 population. Higher incidence of disease was seen among Whites (including Hispanic and non-

2001-2002, the age-adjusted lung cancer death rate was 54.5 per 100,000 population. The death rate was higher among African-Americans (75.1 per 100,000) as compared to Whites (53.9 per 100,000).³ The prognosis for lung cancer is poor; only 14 percent of persons with the disease will be alive five years after diagnosis because the cancer is usually asymptomatic until it has spread outside the local tissues. Even if found when localized, the five-year survival rate is less than 50 percent.⁷ The most important risk factor for lung cancer (as well as for many other cancers) is tobacco use. Studies have shown that screening for lung cancer with a chest X-ray and/or sputum cytology does not reduce mortality from the disease. In addition, studies have shown that screening would lead to false-positive tests and unnecessary invasive diagnostic procedures and treatments.

Invasive cancer of the prostate is limited almost exclusively to men over 50 years of age. Nearly 9,500 cases of prostate cancer were diagnosed in Kansas between 1997 and 2001. Most cases are diagnosed in men between the ages of 65 and 80 years and about 300 Kansans die from the disease each year. The age-adjusted prostate cancer incidence rate in the year 2001 was 154.3 per 100,000 male population. African-American males experience a higher age-adjusted incidence rate of prostate cancer (221 cases per 100,000 male population) compared to Whites (153 per 100,000 male population).¹ The age-adjusted prostate cancer death rate in the year 2001-2002 was 28.3 per 100,000 male population.³ Prostate cancer screening is controversial due to the lack of a definitive evidence of benefit. In addition, there is a lack of consensus regarding optimal treatment of localized disease and the clear evidence that active treatment options are associated with significant morbidity. At present, the USPSTF concludes that the evidence is insufficient to recommend for or against routine screening for prostate cancer using prostate antigen (PSA) testing or digital rectal examination (DRE).¹⁰

Skin cancer is a widespread problem in the state with as many as 12,000 new cases diagnosed each year. Cancer registries do not collect most occurrences of squamous and basal cell carcinoma of the skin, so data are limited. From 1997 to 2001, 2,117 cases of invasive melanoma were reported in the Kansas Cancer Registry and of these, 43 percent were diagnosed in persons less than 55 years of age and 12 percent were diagnosed among persons younger than 35 years of age.¹ Nearly 400 persons died from melanoma during these five years compared to 144 deaths due to non-melanoma skin cancers. Ten percent of the melanoma cancers diagnosed in Kansas were either regional or distant at the time of diagnosis.¹ The USPSTF has concluded that the evidence is insufficient to recommend for or against routine counseling by primary care clinicians to prevent skin cancer (this statement updates the 1996 recommendation mentioned in the Guide to Clinical Preventive Services, Second Edition).¹¹

References:

¹ Kansas Cancer Registry Annual Reports, Cancer incidence and mortality in Kansas 1997-2002. University of Kansas Medical Center.

² Eliminate Disparities in Cancer Screening and Management. Centers for Disease Control and Prevention. Office of Minority Health. www.cdc.gov/omh/AMH/factsheets/cancer

³ Vital Statistics Report, 2002, & Kansas Information for Communities (KIC) databases, Center for Health and Environmental Statistics, Kansas Department of Health and Environment. www.kdhe.state.ks.us/hci/annsumm.html, <http://kic.kdhe.state.ks.us/kic/death.html>

⁴ U.S. Preventive Services Task Force. Screening for Breast Cancer. Recommendations and Rationale. ANN Intern Med. 2000 Sept3; 137(Part5 1):344-346

⁵ Kansas Behavioral Risk Factor Surveillance System, 2000,2001 & 2002 database. Office of Health Promotion, Kansas Department of Health and Environment.

⁶ U.S. Preventive Services Task Force, Screening for Cervical Cancer: Recommendations and Rationale. www.ahrq.gov/clinic/3rduspstf/cervcan/cercanrr

⁷ Ries LAG, Kosary CL, Hankey BF, Miller BA, Clegg LX, Edwards BK, eds. 1999 SEER Cancer Statistics Review, 1973 –1996 (NIH Pub. No 99-2789). Bethesda, MD.

⁸ U.S. Preventive Services Task Force. Screening for Colorectal Cancer: Recommendations and Rationale. www.ahrq.gov/clinic/3rduspstf/colorectal.colorr.htm

⁹ African-American WC. Over diagnosis: An under recognized cause of confusion and harm in cancer screening. J Natl Cancer Inst. 2000;92(16):1280-1282.

¹⁰ U.S. Preventive Services Task Force. Prostate Cancer for Screening: Summary of Recommendations/ Supporting Documents (Release Date: December 2002. www.ahrq.gov/clinic/uspstf/uspsprca.htm

¹¹ U.S. Preventive Services Task Force. Counseling to Prevent Skin Cancer: Recommendations and Rationale. www.ahrq.gov/clinic/2rduspstf.skcacoun/skcarr.htm



*Audrey-
Outreach Worker*

Being told by your doctor that you have cancer is frightening and life altering. You will need to make important decisions about your treatment and care and knowing your options is very important.

The American Cancer Society (ACS) recommends understanding the various treatment options available to you, which can include surgery, radiation, chemotherapy and immunotherapy. Your health care provider also can help you understand the best treatment for your specific cancer. You also might be interested in clinical trials, which are people-based studies of new drugs and procedures for cancer treatment.

You may have questions and need information about the logistics of treatment including financial and legal concerns, insurance claims and transportation. There also may be physical and emotional issues during your cancer treatment.

It is important to maintain your health once your treatment is complete, according to the ACS. Good nutrition will help you regain your strength, rebuild tissue and maintain your overall health. You might also consider a support group that can help patients, survivors and loved ones deal with the burden of cancer.

Comprehensive Cancer Control Plan / Healthy People 2010 Objective	U.S Figure	Kansas Figure
Breast Cancer		
1. By 2010, reduce breast cancer death rate among women by 20% to 22.3 deaths per 100,000 women.	25.9 (2001 NCHS data)	24.3 (2001-2002 CHES data)
2. By 2010, reduce the percentage of invasive female breast cancers (excluding in situ) diagnosed with regional or distant metastasis to less than 25%.	33.3% (1996-2000 SEER data)	33.2% (1997-2001 KCR data)
3. By 2010, increase the proportion of women aged 50 & older who have received a mammogram within the past 2 years to greater than 85%.	75% (1999 BRFSS data)	80% (2000-2002 BRFSS data)
4. By 2010, increase the proportion of women aged 40 & older who have received a mammogram within the past 2 years to 70%.	70% (2000 NHIS data)	76% (2000-2002 BRFSS data)
5. By 2010, increase the proportion of women aged 50 & older who have received a mammogram and a CBE in the past 2 years to greater than 80%.	68% (1999 BRFSS data)	71% (2000-2002 BRFSS data)
Cervical Cancer		
6. By 2010, reduce death rate from cancer of uterine cervix to 2 deaths per 100,000 women.	2.6 (2002 NVSS data)	2.4 (2002 CHES data)
7. By 2010, increase the proportion of women aged 18 & older with a uterine cervix who have ever received a Pap smear to 97%.	95% (2000 BRFSS data)	95% (2000-2002 BRFSS data)
8. By 2010, increase the proportion of women aged 18 & older with a uterine cervix who have received a Pap smear in the past three years to 90%.	87.5% (2002 BRFSS data)	89.2% (2000-2002 BRFSS data)
Colorectal Cancer		
9. By 2010, reduce colorectal cancer death rate to 13.9 deaths per 100,000 persons (34% improvement).	19.7 (2002 NVSS data)	20.3 (2001-2002 CHES data)
10. Reduce the incidence of colorectal cancer to 45 cases per 100,000 persons.	54.3 (1999 U.S. SEER data)	53.6 (1997-2001 KCR data)
11. By 2010, increase the proportion of adults aged 50 years & older who had both sigmoidoscopy in the past 5 years & a fecal occult blood stool test (FOBT) in the past year to greater than 15%.	-	13% (2001-2002 BRFSS data)
12. By 2010, increase the proportion of persons aged 50 years and older who had FOBT in the past year to greater than 25%.	-	24% (2001-2002 BRFSS data)
13. By 2010, increase the proportion of adults aged 50 years & older who have had a sigmoidoscopy in the past five years to greater than 35%.	-	37% (2001-2002 BRFSS data)

Healthy People 2010 Objective	U.S Figure	Kansas Figure
14. By 2010, increase the proportion of adults aged 50 years & older who received a screening test (FOBT or a sigmoidoscopy or colonoscopy exam) for colorectal cancer to greater than 80%.	-	66% (2001-2002 BRFSS data)
15. By 2010, increase the proportion of adults who report consuming fruits & vegetables five or more times per day to 30%.	23% (2000 BRFSS data)	18% (2002 BRFSS data)
16. Decrease the proportion of adults who are overweight or obese ($BMI \geq 25$) to less than 50%.	57% (2000 BRFSS data)	60% (2002 BRFSS data)
17. Increase the proportion of adults who engage in any leisure time physical activity to 80%.	75.6 (2000 BRFSS data)	78% (2002 BRFSS data)
Lung Cancer		
18. By 2010, reduce the lung and bronchus cancer death rate to 44.9 deaths per 100,000 persons.	54.9 (2002 NVVS data)	54.5 (2001-2002 CHES data)
19. By 2010, reduce the prevalence of current smoking among adults to less than 15%.	23% (2000 BRFSS data)	22% (2001-2002 BRFSS data)
20. By 2010, reduce the prevalence of current smoking among African-American adults to less than 15%.	23% (2000 BRFSS data)	23% (2001-2002 BRFSS data)
21. By 2010, reduce the prevalence of current smoking among Hispanic adults to less than 15%.	22% (2000 BRFSS data)	21% (2001-2002 BRFSS data)
22. By 2010, reduce the prevalence of smoking among students in grades 6 th , 7 th & 8 th to 10%.	9% (2000 YTS data)	6% (2002 YTS data)
23. By 2010, reduce the prevalence of smoking among 12 th graders to 20%.	-	26% (2001-2002 YTS data)
24. By 2010, increase the proportion of adults who report a no smoking policy at work to greater than 70% (among employed adults who work in a building other than their own home).	-	81% (2002 ATS data)
Prostate Cancer		
25. By 2010, reduce the prostate cancer death rate to 28.8 deaths per 100,000 males.	27.9 (2002 NVSS data)	28.3 (2001- 2002 CHES data)
26. By 2010, increase the percentage of men 50 years or older who have been counseled by their provider regarding the risks and benefits of early detection and treatment of prostate cancer	-	61% (2001 BRFSS data)
Skin Cancer		
27. By the year 2010, reduce the melanoma cancer deaths to 2.5 deaths per 100,000 persons.	2.6 (2002 NVSS data)	2.4 (2001-2002 CHES data)

Healthy People 2010 Objective	U.S Figure	Kansas Figure
28. By the year 2010, reduce the proportion of malignant melanomas of the skin (excluding <i>in situ</i> , excluding unstaged) diagnosed with regional or metastatic spread at diagnosis to 5%.	8.6% (1989-1995 SEER data)	10.3% (1996-1999 KCR data)
29. Increase the proportion of persons who use at least one of the following protective measures that may reduce the risk of skin cancer: avoid the sun between 10 a.m. and 4 p.m., wear sun-protective clothing when exposed to sunlight, use sunscreen with a sun-protective factor (SPF) of 15 or higher, and avoid artificial sources of ultraviolet light:		
a) Increase the proportion of adults aged 18 years and older who follow protective measures that may reduce the risk of skin cancer to 75%.	58% (2000 NHIS data)	-
b) Increase the proportion of adolescents (in grades 9 through 12) who follow protective measures that may reduce the risk of skin cancer.	-	-

Data Sources:

- NCHS - National Center for Health Statistics.
- CHES - Center for Health & Environmental Statistics, KDHE
- CDC - Centers for Disease Control & Prevention
- NVSS - National Vital statistics System (CDC, NCHS)
- NHIS - National Health Interview Survey (CDC, NCHS)
- NCI - National Cancer Institute
- SEER - Surveillance, Epidemiology & End Results (NCI).
- KCR - Kansas Cancer Registry
- BRFSS - Behavioral Risk Factor Surveillance System
- YTS - Youth Tobacco Survey
- ATS - Adult Tobacco Survey

Goals

The goal of the cancer control and prevention project appears simple – to reduce the burden of cancer in the state of Kansas. However, the problem is more far-reaching and complex than it first appears.

Cancer affects an estimated 1 in every 3 individuals, either through their own diagnosis or that of a loved one. The American Cancer Society estimated that in 2004 in Kansas 12,940 individuals were diagnosed with cancer and 5,330 died from the disease. The spectrum of the disease involves personal health issues, environmental factors and access to treatment. Cancer is not discriminatory – affecting both male and female, young and old, rich and poor.

The cost of cancer also is staggering – estimated at \$189.5 billion dollars in the United States. That includes more than \$64.2 billion for direct medical expenses, \$16.3 billion in indirect morbidity costs and \$109 billion for lost worker productivity due to premature death. In Kansas the cost is estimated at \$1.6 billion annually including direct medical costs, cost of lost productivity due to illness and the cost of lost productivity due to premature death.¹

We do know that leading a healthy lifestyle will help prevent some cancers, screening and early detection will help reduce the severity of the disease, and prompt and thorough treatment will help prolong life. However, disparities exist in longevity and life expectancy for cancer patients and the uninsured and underinsured are at a higher risk.

Control and prevention of cancer cuts across economic lines, covers every geographic region in the state, encompasses every ethnic and racial group and will take a concerted effort by health care professionals and advocates alike. It will take time, talent and effort and may be years in the making. Immediate changes can be made and long-term goals must be set. Enormous strides can be taken but small steps are imperative.

A comprehensive plan will pull together those efforts that currently exist to help in fighting cancer and will outline strategies and



Debbie-
Cancer Survivor

I began having a sore throat in November 1991 that persisted for several months. My mom and sister picked up on my voice being hoarse when we were using a new video camera during the Christmas holidays. They pulled out a medical book we had at my parents that said if you had a sore throat for more than two weeks you should get it checked out. I went to see my primary care doctor in December who was treating me with antibiotics. Finally, after several months and no real improvement, his partner referred me to an ear, nose and throat specialist in February 1992.

I went into the procedure not knowing what to expect and it was probably worse than I could have thought. I had cancer under my left vocal cord, about the size of a half dollar that was removed and the vocal cord was scraped off. A portion of my left vocal cord was removed where the cancer had spread. My patient records indicate the cancer as Keratinizing Squamous Cell Carcinoma in Situ with Microinvasion.

The doctor told me that this was a type of cancer that is seen in 70-80 year old men who smoked and drank all their life. Here I was just 28 with cancer very atypical for someone my age, so I just didn't think something like this could happen. And I had a seven-year-old son, so my first thought was that I was going to make it through this for him; surviving was the only option. Being a Mom, there was no doubt I had to live... continued on page 14

...The surgery was followed by 33 radiation treatments, one a week for the next 8 to 9 months. I was back in for surgery in December 1993 when some scar tissue needed to be removed. I have some side effects after all these years; my voice is deeper and I have some sinus drainage. But I was lucky because my doctor told me this sort of cancer normally goes to the brain or into the lungs.

I think the cancer was hardest on my family. Now, I have been on the other side because my husband, at the age of 43, just recently died of cancer. He had been having back pain for about a year and was diagnosed with arthritis and a ruptured disc. He was treated with medication until his system could no longer tolerate the medicine. He went to the emergency room on July 31, of 2004 in severe pain. On August 4 he was diagnosed with stage four metastatic gastric cancer and died on August 26. We had such a short time to adjust to the news before he was gone.

Now I have my two children to worry about. My six-year-old daughter has already asked me if she will get cancer like Mommy and Daddy. My 19-year-old son has twice had to go through the horror of someone he loves having cancer. It's hard, but I am a survivor.

goals that can be reached with careful planning and a concerted effort. Resources can be pooled and benefits from cancer control will affect other health-related talented and skilled health care professionals and advocates. These individuals and groups are stakeholders in this plan and its success. They encompass public and private organizations as well as medical, health and business communities. They include advocates, survivors and local leaders.

The Kansas Cancer Partnership will continue to provide the guidance and direction needed to implement the Plan with the goal of reducing cancer incidence and morbidity in the state of Kansas.

Priority Cancer Areas

Between 1997 and 2002 the incidence of cancer decreased for four of the six cancer areas. Breast cancer showed a slight increase, from 122 cases to 126.4 cases per 100,000 female population. Melanoma rates remained steady at 16 cases per 100,000 population. A decline has been seen in the incidence of prostate cancer, which fell from 164 cases per 100,000 male population in 1997 to 151 cases in 2002. A similar picture was seen when national rates for prostate cancer incidence were examined. A sharp increase started in 1988 after the introduction of screening for prostate-specific antigen (PSA). This is not because more men actually developed prostate cancer, but because the new test found more early cases. Incidence leveled off after a few years and has recently started to decline, a pattern typically observed after introduction of a new early detection test.² Similar phenomenon might explain the recent decline in prostate cancer incidence rates in Kansas.

Deaths rates have remained fairly steady during the past five years with lung cancer taking the biggest toll with 53.1 cancer deaths per 100,000 population.

Despite this good news, the statistics are often staggering. More than 12,100 Kansans were diagnosed with some type of cancer during 2002. This includes 2,186 cases of female breast cancer, 1,817 cases of prostate cancer in men, 1,552 cases of lung and bronchus cancer and 1,432 cases of colorectal cancer.

More than 12,000 new cases of skin cancer were diagnosed in the five-year period from 1997-2001, with 2,117 of those cases being melanoma, the most deadly form. Almost 400 individuals died from melanoma during that same five-year period.

Breast cancer is the second most diagnosed cancer in the state with more than 9,400 women diagnosed from 1997 to 2001 and 400 deaths each year are attributed to the disease. Cervical cancer accounts for two percent of all cancer in women and one percent of all cancer deaths even with early screening.

Prostate cancer ranks third with more than 9,400 men diagnosed with the disease from 1997-2001 and more than 300 deaths each year.

During that same five-year period, lung cancer was diagnosed in 8,479 individuals and 7,400 died. Another 7,466 individuals were diagnosed with colorectal cancer from 1997-2001 and during that same period 2,790 died from the disease.

Although workgroups focused on these six types of cancer because of the frequency and severity of the disease and the availability of prevention and early diagnosis to reduce morbidity and mortality, other types of cancers also were discussed.

¹ National Institutes of Health/American Cancer Society – Trust for America's Health

² American Cancer Society, News Center Article, June 6, 2001,
www.cancer.org

Continuum for Action –

The primary purpose of the Kansas Cancer Partnership was to focus on cancer issues across a continuum of care and develop a statewide, comprehensive cancer control plan to reduce the burden of cancer in Kansas. During a December 2003 Steering Committee retreat, four workgroups were established to develop recommendations for priority strategies and actions. The four groups as established included:

Prevention: This group focused on primary prevention issues such as tobacco use, nutrition, physical activity, ultraviolet light exposure and other prevention and wellness issues that relate to cancer. Risk factor reduction is a critical element in preventing cancer and issues such as tobacco use, weight loss, sun exposure and environmental factors all contribute to this issue. The group approached cancer prevention by addressing system issues that impact a community's ability to identify cancer risks and capacity to promote cancer prevention. It is estimated that as much as 50 percent or more of cancer cases can be prevented through smoking cessation and improved lifestyle and dietary habits, such as reducing fat consumption and increasing fruit and vegetable consumption. Physical activity and weight control also can contribute to cancer prevention. Health education and public health policy were essential discussion areas for this work group.

Screening and Early Detection: This group was tasked with issues surrounding screening including access to services and early detection methods. Disparate health care screening and access were an emphasis of this workgroup. New screening technologies and guidelines also were a topic of discussion.

Diagnosis and Treatment: This group worked with physicians and health care professionals through a questionnaire format to discuss diagnostic and treatment options including rehabilitation. Issues related to



Ghazala-
Health Officer

Diet plays an important role in decreasing the risk of some cancers. Being overweight or obese appears to be one of the most important modifiable risk factors of cancer, next to smoking or using tobacco. Watching your weight and the types of food you eat not only contribute to your overall, general health but can help reduce your risk of developing cancer later in life.

The National Cancer Institute indicates that heavy consumption of red and preserved meats, salt preserved foods and salt probably increase the risk of colorectal and stomach cancers. There also is evidence that an increase in intake of fruits and vegetables may decrease the risk of prostate cancer.

Heavy drinkers also have an increased risk of cancer, particularly among individuals that smoke. Cancers associated with drinking include cancers of the throat, mouth, voice box, liver and esophagus. There also is some evidence linking alcohol and cancer of the breast.

clinical trials, which are research studies that evaluate the effectiveness of new treatment or disease prevention methods on patients, also were studied by this group. A critical element of this group's discussion centered on prompt delivery of the best available therapeutics following cancer detection.

Survivorship/End of Life: This group studied problems related to recovery and reintegration of cancer survivors back into family, society and the workplace after cancer treatment. Discussion of palliative care including quality of medical care delivery such as pain management, therapies, acceptance and mental health issues were included. Reintegration of cancer patients back into a normal life following treatment along with the psychosocial and economic issues related to this process were identified issues. Non-curative, mitigating therapy intended to improve the quality of life and functional capabilities of persons living with cancer also was a topic of concern for this workgroup.

MAJOR ASSETS

The state of Kansas has a number of assets to help address the burden of cancer. The comprehensive plan will help to better coordinate and target ongoing efforts and to identify and focus on new approaches.

- Kansas has access to strong data resources and the ability to expand this system. The Kansas Cancer Registry has recorded and tracked cancer incidence in Kansas since 1995 and will continue to track long-term effects in cancer screening and treatment efforts. The state currently conducts the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Behavioral Risk Factor System (YRBSS). Increased data collection and analysis may help better target efforts to reduce cancer incidence in specific locations and populations.
- Access to cancer information is currently available from a number of sources including the KDHE web site www.preventionworksksansas.com. This site also provides links to national websites such as the Cancer Control Planet and the Centers for Disease Control and Prevention. Kansas supports a tobacco quit line toll-free number and website, 1-866-KAN-STOP and www.kanstop.org, and other services such as the Telemedicine line and the Life Project for cancer survivors.
- Screening and detection services for breast and cervical cancer are available through KDHE's Early Detection Works for women meeting income and age guidelines. The program also includes a component for Medicaid referral for treatment when breast or cervical cancer is diagnosed. Screening services for those women who don't qualify under the Early Detection Works program are available through the Susan G. Komen Breast Cancer foundation.
- Through local health departments, community preventive programs and support groups, school health programs, local coalitions and recreation departments, a number of resources exist to help spread the word and expand on programs to address the burden of cancer.
- Kansas currently supports partnerships with a number of associations such as the Kansas Medical Society, Mid-America Health

Care Coalition, American College of Surgeons and others addressing cancer issues and concerns.

- Kansas has a strong, cooperative presence between volunteer organizations such as the American Cancer Society and the Susan G. Komen Breast Cancer Foundation and many others.
- The state has a network of urban and rural hospitals, clinics, treatment centers, physicians and other health care providers across Kansas to provide health care services. In addition, the University of Kansas Medical Center provides outreach services across the state and the Kansas State University Extension Service reaches each Kansas county.
- Resources exist to conduct asset mapping for the Cancer Plan to better identify future partners, contributing organizations and current community programs and projects.
- Other resources and websites, such as the National Cancer Institute's Cancer Information Service, are listed in the Appendix of this report.

BARRIERS

Just as the state boasts a number of assets, a number of barriers also exist that must be overcome to address the burden of cancer. These cover a spectrum of issues from access, location, and political priorities to insurance concerns and health care provider training.

- While a large amount of data on cancer exists, there also are gaps in the existing system, linkage problems and areas where specific information is not collected or utilized.
- Information about cancer for the public and providers is often deficient, hard to understand and difficult to access.
- Cancer has not been a consistent political priority. While some areas have received needed attention such as tobacco use issues, others are lacking. Issues such as managed care, insurance services and coverage also are barriers to screening tests and quality treatment. Funding for cancer programs needs to become a priority. Other financial issues exist for uninsured and underinsured Kansans.
- Access to cancer screening, diagnosis and treatment is unequal with disparities in minority and low-income individuals. Geographic and transportation issues also exist that limit health care services primarily in rural, remote areas of the state.
- Quality care, once cancer is diagnosed, can impact individual longevity and life-style. Some treatment centers may not be certified to provide all services of cancer care in all areas of the state, which are needed by cancer patients.
- Individual lifestyle, including risk-taking behaviors such as smoking and tobacco use, increasing obesity and the lack of physical activity continue to contribute to the burden of cancer in Kansas.
- Environmental and systematic changes are needed. Issues such as exposure to carcinogens, air pollution and high levels of radon in some areas and chemical exposure are of concern for both rural and urban areas of the state, especially for those Kansans who smoke.

- Training for health care providers, including the insufficient number of trained oncologists in Kansas and inconsistent guidelines, is a concern as the number of cancer patients increase and the population of the state continues to age. This aging population also will bring an increased need for hospice care and end of life issues. Survivorship issues, as individuals live longer with cancer, will have long-term effects in the health care arena.

PREVENTION

Prevention of cancer is an integral part of overall reduction and management of the cancer burden in Kansas. Prevention efforts will provide the basic groundwork and the large encompassing effort of this plan. Many cancers are preventable with sound health initiatives and awareness of the factors that contribute to the disease. The individual cancer risk is a barrier to sound public health efforts. Lifestyle choices are hard to effect and people often choose to take risks with their health now that will have consequences later in life.

Tobacco use prevention and cessation is a priority in Kansas with a measure of Best Practices currently in place. Additional work and a community approach will continue as the state strives to provide services to individuals who want to quit smoking, support enactment of local ordinances aimed at reducing exposure to secondhand smoke and empower youth to adopt healthy, tobacco-free lifestyles.

With environmental factors, including radon and chemical exposure contributing to the cancer burden (especially among smokers), prevention efforts must be broad-based and all encompassing.

Kansans deserve cancer prevention services, education and materials. There are disparities in disease incidence related to cancer including prevention research and access to services. Disparities exist among Kansans of diverse races. Disabilities, geographic location, culture, age and socio-economic status are barriers to preventing cancer in Kansas' citizens. Barriers also include gaps in the data systems and public access to prevention education and information. Funding and financial support for prevention programs and initiatives must achieve a higher priority. Professional resources for health care providers are an issue along with the dispersed and disparate state population.

Specific action steps for the prevention section can be found in the Appendix.

GOALS

- A-** Educate the general public of cancer related risks
- B-** Improve the education of health professionals and providers to promote healthy lifestyles and reduce exposure to environmental carcinogens
- C-** Create a prevention-oriented environment that makes risk reduction behaviors easier to choose
- D-** Increase resources dedicated to cancer prevention
- E-** Increase the availability of data to evaluate cancer risk, incidence and program efficacy at the state and local level

STRATEGIES

- Promote tobacco prevention and cessation initiatives and eliminate nonsmokers' exposure to secondhand smoke.
- Improve dietary practices to reduce the incidence of cancer.
- Promote increased physical activity and reduce the percentage of Kansans who engage in little or no activity.
- Reduce exposure to environmental carcinogens and ultraviolet light.

PUBLIC INFORMATION

Educate the general public of cancer related risks

Goal A: Educate the general public of cancer related risks in association with tobacco use, physical activity, diet, and environmental effects.

Strategy A: Coordinate the provision of consistent, accurate, information to the general public on the association of tobacco, diet, physical activity, ultraviolet exposure and environmental effects with cancer prevention.

Action/Outcome A-1: *Implement a comprehensive and collaborative prevention education effort*

Improve public education to reduce the prevalence of cancer risk factors in Kansas. Promote the benefit of consuming 5-9 fruit and vegetable servings a day, which would meet the dietary cancer guidelines regarding obesity. Promote physical activity and the avoidance of tobacco and alcohol. Educate about UV, radon and other environmental exposures. By June 2007, at least 10 communities in Kansas will have implemented a comprehensive and collaborative education effort to reduce the prevalence of cancer risk related to tobacco, diet, physical activity, and other environmental factors.

Rationale:

Tobacco use as a health risk

- Most lung cancers are caused by smoking
- Children are particularly vulnerable to illnesses caused by exposure to secondhand smoke
- About 500 Kansas children begin smoking each month

Physical inactivity as a health risk

- General population is unaware of the health risks of a sedentary lifestyle
- Sedentary lifestyle is a contributor to chronic disease such as diabetes
- Links must be understood before individuals can be motivated to action

Diet as health risk

- Knowledge is a necessary, although not sufficient, condition for

behavior change. Research with multiple populations supports behavior change in the areas of increased fruit and vegetable consumption, increased consumption of whole grains, limited alcohol consumption and obesity prevention and management to reduce the risk of multiple cancers.

Radon as health risk, especially for smokers

- Nearly one in 15 homes in the U.S. has a high level of indoor radon
- The U.S. Surgeon General and Environmental Protection Agency recommend all homes be tested. Sixty-four of the 105 counties in Kansas have high radon risk
- Smoking exacerbates the effects of radon exposure
- Radon is the second leading cause of lung cancer

Action/Outcome A-2: *Coordinate media education awareness campaigns*

Provide coordinated media education awareness campaigns that enhance local and state efforts for promotion of healthy lifestyles (tobacco, diet, physical activity, and environmental effects). By June 2006, year around comprehensive media campaigns conducted by major health partners will have a consistent, coordinated multimedia message on tobacco use and secondhand smoke.

Rationale:

- Stated as Best Practice and evidence-based as supported by the American Journal of Preventive Medicine, "The Guide to Community Preventive Services: Tobacco Use Prevention and Control," and Centers for Disease Control and Prevention (CDC)
- Skin cancer is one of the most common cancers
- At least one research tested intervention included UV posting
- 30.8% of Kansans were sunburned in 1999
- Educational policy/interventions in primary schools and recreational settings are effective

HEALTH PROFESSIONAL EDUCATION

Improve education of health professionals and providers to promote healthy lifestyles and reduce exposure to environmental carcinogens

Goal B: Improve the education of health professionals and providers to increase the guidance of their clients concerning methods to promote healthy lifestyles and reduce exposure to environmental carcinogens.

Strategy B: Ensure a systematic approach to disseminating evidence-based cancer prevention strategies to Kansas doctors, nurses, dentists, and other allied health professionals through health care curricula and continuing education.

Action/Outcome B1: *Systematic dissemination of cancer prevention strategies to Kansas Health Professionals*

By June 2008, policies and procedures will be implemented that assure a systematic approach to disseminating newly identified cancer prevention strategies to Kansas doctors, nurses, dentists and other allied health professionals.



Sean
Cancer Survivor

It was November 1993 and I had just moved to Arizona from Texas and was working freelance as an artist and part time as a waiter. I had a small irritation on my left cheek by the side of my nose that wouldn't heal and would bleed freely. I thought it was acne, but after a month or two, I decided I better get it checked. I went to see a local dermatologist on the advice of a friend and he immediately told me it looked like skin cancer, or in my case, basal cell carcinoma.

I was only 34 years old, but had spent years in the sun without any kind of skin protection. Of course, that wasn't unusual growing up in the 1960's and 70's. I have very fair skin, am of Irish heritage and getting sunburned was pretty much just a way of life. I would spend all afternoon at the pool with my friends in Junior High and I spent the summers during college working on a highway crew, so I had many sunburns and some severe enough to burn and blister.

I was scared hearing that I had cancer and one of my biggest concerns upon hearing the diagnosis was that I didn't have any health insurance yet. So, I worked out a deal with the doctor to pay cash for the service. He was very good and I spent about 4 hours in his office while he conducted the procedure. The doctor removed the layers of skin in an ever enlarging circle, testing along the way for the spider veins and blood supply to the carcinoma. I ended up having a piece the size of a quarter taken out of my face, just to the left of my nose. Since the incision was sewn into the crease of my nose, I don't have much of a scar. There was a follow up check by the doctor about a week later and then again after two months...

continued on page 24

RISK REDUCTION

Create a prevention-oriented environment that makes risk reduction behaviors easier to choose

Goal C: Create a prevention-oriented environment that makes risk reduction behaviors easier for individuals to choose.

Strategy C: Enact and strengthen community, school, and workplace policies and programs that model and provide opportunities for the practice of healthy lifestyles (tobacco, diet, physical activity, and environmental factors).

Action/Outcome C1: *Implement school and community level policies that promote health*

Enact school and community policies that promote healthy lifestyles. Support the school wellness policy as required by CDC by June 2006. By 2007, at least 10 schools and/or communities will have enacted policies that promote healthy lifestyles (tobacco, diet, physical activity, and environmental factors).

Rationale:

- The intention to be active may not be enough; individuals must have opportunities for activity, such as physical education classes, walking trails with adequate lighting and sidewalks in neighborhoods.

Action/Outcome C2: *At recommended CDC funding levels, conduct comprehensive tobacco use prevention programs*

At recommended CDC funding levels, conduct comprehensive tobacco use prevention programs statewide based on proven practices illustrated by the Center for Disease Control and Prevention's Best Practices. By July 2006, three communities will have joined Saline County in implementing comprehensive prevention and cessation programs to reduce tobacco use.

Rationale:

- Stated as Best Practice and evidence-based as supported by the American Journal of Preventive Medicine, "The Guide to Community Preventive Services: Tobacco Use Prevention and Control," and Centers for Disease Control and Prevention.

...I now use maximum sunscreen every day on my face, neck and arms, usually a 45 SPF (sun protection factor) or better and wear a hat whenever I am outside. I have regular checks during my visits to the doctor and I know what to look for if I have a skin irritation that I believe could be suspicious.

I was lucky because I didn't wait to have the cancer checked out. I knew that a non-healing sore was a common sign that something was wrong and needed immediate attention. My message would be – wear sunscreen and be diligent about protecting yourself from the sun.

Action/Outcome C3: Increase community smoke-free policies

By the end of 2005, ten additional communities will be actively developing strategies to implement clean indoor air ordinances, with five communities achieving success by 2006. By 2006, five additional Kansas communities will have adopted public policies making workplaces smoke-free. By 2010 at least 20 community coalitions should be actively working to protect their citizens from secondhand smoke through the adoption of public policies and there will be at least 15 smoke-free Kansas communities.

Rationale:

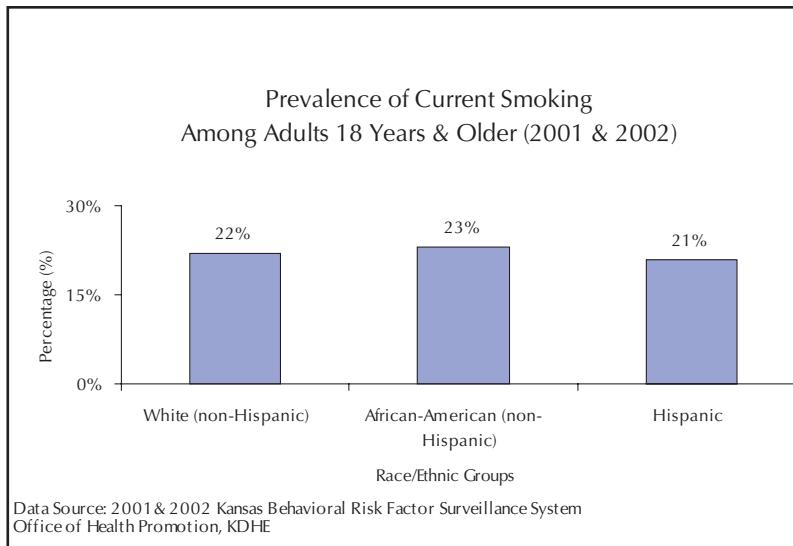
- Stated as Best Practice and evidence-based as supported by the American Journal of Preventive Medicine, "The Guide to Community Preventive Services: Tobacco Use Prevention and Control," and Centers for Disease Control and Prevention.

Action/Outcome C4: Increase excise taxes on cigarette and tobacco products

Increase excise taxes on cigarette and tobacco products on a regular basis in order to reduce tobacco consumption and prevalence rates. By the 2007 legislative session, the state cigarette tax will be raised to \$1.25 per pack and the tobacco products tax increased to 25 percent of the wholesale price, with legislative stipulations that tobacco taxes automatically be reviewed for possible increases every three years.

Rationale:

- Single most effective short-term evidence-based intervention as supported by the American Journal of Preventive Medicine, "The Guide to Community Preventive Services: Tobacco Use Prevention and Control."
- Sustainability of success is high when funding is dedicated for tobacco programs.
- The current Kansas 79 cent excise tax per pack of cigarettes falls exactly at the national average.



Action/Outcome C5: *Increase tobacco cessation programs*

Promote, encourage and support the development and evaluation of tobacco cessation programs and strategies aimed at specific populations, including youth and adults.

By 2010, through development and implementation of proven programs for cessation, the adult use of cigarettes in Kansas will have declined to 15 percent and youth use to 10 percent.

Rationale:

- Stated as Best Practice and evidence-based as supported by the American Journal of Preventive Medicine, "The Guide to Community Preventive Services: Tobacco Use Prevention and Control," and Center's for Disease Control and Prevention.

Action/Outcome C6: *Implement dietary school policies closer to cancer prevention recommendations.*

Bring the foods offered in school settings closer to the recommendation for cancer prevention. By August 2008, at least 10 schools that currently lack policies will have enacted changes on the availability and accessibility of foods in vending machines, through the school food service, and at school-sponsored events.

Rationale:

- Schools provide access to the majority of Kansas children aged 5-18 years old for modeling of healthy behaviors and environments and for education in health risk reduction.
- The school cafeteria environment should model the health messages provided in the classroom and send a clear message to students, faculty, staff and parents that: 1) healthy foods improve academic performance, decrease chronic disease risk, and contribute to overall health; 2) the school community places the health and well-being of their student population above the potential economic gains from vending machines and 3) the school cafeteria is an integral part of the educational system and provides a learning laboratory for students to experience healthy food options.

Action/Outcome C7: *Develop best practice guidelines resource for worksites*

Develop and distribute Best Practice guidelines for worksites to encourage and support physical activity. By December 2007 enter a partnership with a selected worksite to implement a pilot worksite program.

Rationale:

- A large portion of our time is spent at work
- Promote worksite programs to support employees' exercise to address the list of reasons why people can not be active
- Make opportunities to exercise

Action/Outcome C8: *Implement community level UV protection strategies*

Develop policies to support implementation of worksite and recreational strategies to support environmental and personal protection from UV exposure. Examples of desired actions include: umbrellas for lifeguard protection, shade, sunscreen and protective clothing for state/county workers required to have increased UV exposure; and construction of shaded areas at parks/schools/worksites. By 2007, at least 10 schools and/or communities will have enacted policies that promote strategies to support environmental and personal protection from UV exposure.

Rationale:

- Skin cancer is one of the most common cancers.
- 30.8% Kansans were sunburned in 1999
- Educational policy/interventions in primary schools and recreational settings are effective.

Action/Outcome C9: *Increase radon mitigation policies in new construction*

Increase the number of city, county and state building policies that require radon mitigation systems in new construction. By June 2008, at least 5 communities in Kansas will have implemented a regulation requiring a radon mitigation system in all new construction.

Rationale:

- Cost-effective.
- Currently Manhattan is the only community with this type of regulation.
- Effects of radon are increased for smokers

RESOURCES

Increase resources dedicated to cancer prevention

Goal D: Increase the amount of resources (funding, personnel, and program materials) dedicated to cancer prevention.

Strategy D: Increase resources dedicated to the reduction of cancer risk factors, including design, implementation, and evaluation of evidence-based programs (tobacco, diet, physical activity, and environmental factors).

Action/Outcome D1: *Increase resources for cancer risk reduction*

By June 2006, leaders of partner organizations will develop and implement a plan to increase resources dedicated to cancer risk reduction in Kansas. Resources include money, personnel, and program materials in training.

Rationale:

- Science-based, evaluated programs, when disseminated for widespread adoption by multiple agencies in multiple population settings, result in decreased cancer risk.
- Increased resources for the development and testing of model programs should result in effective program options for all of the Comprehensive Cancer Control Partners to adopt and/or adapt for their target audiences.

DATA

Increase the availability of data to evaluate cancer risk, incidence and program efficacy at the state and local level

Goal E: Increase the availability of data to evaluate cancer risks, incidence and program efficacy at the state and local level.

Strategy E: Ensure a surveillance/evaluation system of data collection tools that accurately capture appropriate cancer prevention variables (tobacco, diet, physical activity, and environmental factors).

Action/Outcome E-1: *Implement state cancer prevention surveillance system*

By June 2007, have in place policies and procedures to ensure collection of appropriate and adequate data related to cancer prevention in the Behavioral Risk Factor Surveillance Survey (BRFSS), Youth Risk Behavior Survey (YRBS), Youth Tobacco Survey (YTS), Adult Tobacco Survey (ATS). Data include UV index, radon, environmental carcinogens, and others, through the state cancer prevention surveillance system.

Rationale:

- Accurate and complete data on behaviors, environment, and other factors that increase cancer risk is essential both for program planning and for monitoring and measuring progress toward goals.
- A number of dietary behaviors and diet-related factors have been demonstrated to be positively associated with increased cancer risk. It is critical that Kansas collect appropriate data on these dietary behaviors and related factors.
- Access to environmental carcinogen exposure information is limited.
- Current Kansas radon database is not collected utilizing scientific methods. Further research is needed to determine increased radon risks among non-smokers.
- Estimated 20,000 lung cancer deaths per year in the U.S. associated with radon, especially among those who smoke.

SCREENING/EARLY DETECTION

Screening for cancer across the population will help detect the disease at its earliest stages when it is treatable and curable. Not all cancers are preventable, but in some cancers that are more common in the Kansas population, early detection and treatment may help save lives. Screening barriers include limited financial and human resources for testing and early detection of cancer. Information gaps also constitute a barrier to fighting the disease, as well as confusion about guidelines to screen for cancer. Patients may receive screening then not obtain any follow up treatment. Some insurance companies do not cover or reimburse for certain screening tests and no Kansas law exists mandating such coverage. In some areas of the state screening services are underutilized.

GOAL

- A-** Increase the percentage of Kansans who are screened for cancer

STRATEGIES

- A-** Increase education/information on screening
B- Address financial disparities
C- Improve follow up to screening services
D- Improve research since guidelines change or vary
E- Improve data collection

EDUCATION/INFORMATION

Increased education/information on screening is needed

Strategy A: Increase awareness/education about cancer screening guidelines and early detection services among Kansans, including the general public and health care providers.

Action/Outcome: Develop and update culturally sensitive materials prior to December 2006. Provide continuing education opportunities for providers, beginning in December 2006 and ongoing as trainings, conferences and events occur. Update educational curriculums in medical and nursing schools by December 2010. Conduct a comprehensive media campaign, beginning in the Summer of 2005 and ongoing. Develop a database of providers offering screening services by January 2008.

Rationale:

- Guidelines are not standard
- Differences in practitioner standards
- Many Kansans are not aware of guidelines
- Many services are available of which the public and providers are not aware

FINANCIAL DISPARITY

Overcome financial disparities

Strategy B: Decrease financial barriers that restrict Kansans ability to access early detection and screening services.

Action/Outcomes: Advocate to the Kansas Legislature during the 2007 session to mandate insurance coverage for colorectal screening. Advocate to legislators to increase funding for screening services during 2007 session. Advocate the Center for Disease Control and Prevention to extend cancer screening services beyond breast and cervical cancer, after submission of the Comprehensive Cancer Control Plan.

Rationale :

- Many Kansans are financially unable to afford screening services

SERVICES AND FOLLOWUP

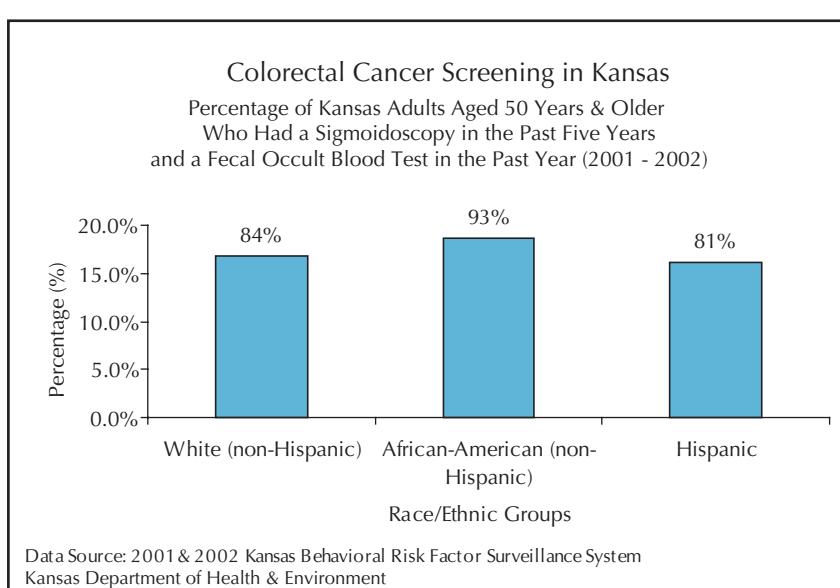
Follow up to screening services is needed

Strategy C: Strengthen the Kansas monitoring system for maintaining the quality of cancer screening and early detection services.

Action/Outcome: Conduct a three-year study to assess the quality of screening services, to be finalized by December 2008. After completion of study, implement specific actions to address gaps in the services identified. Gaps will be improved at the institution where the gap is found.

Rationale:

- Screening services should be assessed for quality
- Screening services are provided without follow-up care.



RESEARCH

More research is needed since guidelines change or vary

Strategy D: Promote and support research in Kansas for screening and early detection services.

Action/Outcome: Coordinate with research institutes and other agencies to increase enrollment of Kansans, including minority populations, in screening research trials, to begin in 2006 and ongoing through 2010. Disseminate information about trials to health care providers to inform their clients/patients, ongoing through 2010.

Rationale:

- Screening and early detection will identify cancer at its earliest stages when treatment will do the most good to prolong life.

DATA COLLECTION

Improve data collection

Strategy E: Develop/enhance the state-wide data collection system about screening and early detection procedures for cancer.

Action/Outcome: Include questions about the six identified cancers in the BRFSS questions for survey in 2005. Develop a data collection tool for provider information about screening services they provide beginning in the Fall of 2005. Collect the data from the providers about screening and early detection services that are provided in those Kansas facilities, beginning in January 2006. Collect information about screening provided through non-traditional means, such as health fairs and other venues, beginning in January 2006.

Rationale:

- Many Kansans and providers are unaware of what is happening in the state.
- KDHE can track activities and identify areas that need improvement.



Henri-
Epidemiologist

Physical activity is an important thing to do to stay healthy, but did you know there is a strong link between the beneficial effect of exercise and cancer? The National Cancer Institute estimates that inactivity and obesity account for 25 to 30 percent of the cases of several major cancers including colon, breast, endometrial, kidney and esophagus. And there is strong evidence that physical inactivity increases the risk for these diseases as we age. The beneficial effect of exercise is greatest among very active people.

Cancer prevention and early screening can be particularly important for the minority population. For example, African-Americans are 34 percent more likely to die of cancer than are people of the White race. And African-American male adults have the highest rates of prostate cancer, lung cancer and colorectal cancer as compared to the general population in Kansas, according to the state vital statistic records. Late diagnosis and poorer outcomes from treatment contribute to higher mortality that characterizes minority health with respect to cancer.

DIAGNOSIS/TREATMENT

Once cancer is diagnosed, prompt and thorough treatment is essential for prolonging the patient's survival and improving the patient's quality of life. Although as varied as the individual, cancer treatment can entail surgery, radiation, chemotherapy, and any combination thereof. The choices of treatment are often dictated by the patient's age, underlying disease, performance status, stage at diagnoses, available treatments and access to care. Treatments and rehabilitation strategies have improved over the years and clinical trials may offer the latest advancements and potentially more effective treatment options. The barriers to treatment are lack of affordable care, adequate reimbursement, timely referral, access to services, and lack of communication between the health care providers, patients and caregivers. Kansas must optimize the known cancer resources for the underserved in the state.

GOALS

- A-** Improve access to timely, affordable cancer treatment including clinical trials
- B-** Improve the quality of care for cancer patients
- C-** Improve communication for patients and providers

STRATEGIES

- A-** Promote the theme "Quality cancer care in Kansas- Close to home."
- B-** Promote education, advocacy, patient navigators and case management to help improve patient care.
- C-** Educate and inform the Legislature on the burden and continuum of cancer treatment.

ACCESS – Improve access to timely, affordable cancer treatment including clinical trials

Strategy A1- Financial – Explore alternative financial options for underserved individuals and work for insurance that covers routine costs associated with the treatment of cancer.

Action/Outcome- Educate and inform state and federal elected officials and policy makers on issues concerning health insurance and care for poor, uninsured cancer patients by January 2007.

Rationale:

- Affordable treatment is often lacking, particularly for uninsured populations.
- Insurance coverage is sometimes inadequate and policies are hard to understand.

Strategy A2 - Geographic: Work for the availability and maintenance of transportation services for cancer patients in remote geographic areas. Ill cancer patients need transportation help and ancillary services close by.

Action/Outcome: Educate and inform federal elected officials and policy makers to permit Medicare guidelines to cover satellite cancer treatment costs under remote supervision of treating oncologists.

Coordinate with existing agencies to provide transportation for cancer patients by January 2007.

Rationale:

- There may be a long distance to full, accredited cancer treatment services.
- The treating oncologist must be present by Medicare guidelines for payment, which causes a burden in remote locations.

Strategy A3 - Cultural: Work for universal availability of translation services.

Work to establish a medical advocate for each cancer patient beginning in July 2005.

Action/Outcome: Coordinate with local organizations to provide translation services. Educate and inform state and federal elected officials and policy makers about the issue of insurance reimbursement for medical advocacy services for patient by January 2007.

Rationale:

- Patients and/or their families need translation services.
- Patients need assistance to negotiate the medical culture and navigate the medical system.

Strategy A4- Clinical Trials: Work with practitioners to increase participation by cancer patients particularly in the underserved patients.



Tibi-
Cancer Survivor

My bone cancer was diagnosed in 1987, a time when I was just starting my Ph.D. I had an ear infection and required surgery. After a few days, the infection returned and the doctor in Manhattan sent me to KU Medical Center, where an ear, nose and throat specialist decided to do a Gallium Scan. A bone tumor showed up on the surface of the left humerus in my arm- a chondrosarcoma.

My surgery was on July 24, 1987. The tumor on my left humerus was removed and a bone graft using part of the bone from my left hip and left fibula were used to replace the portion removed. At this point, I did not know if I would lose my arm or not.

I was hospitalized for an extended period of time and received antibiotics and extensive physical therapy. Many months of rehabilitation followed that. This was a very hard period for my family in Venezuela since we were so far away and they could not be here for me.

Through all this, I have found that surviving cancer was a milestone in my life. I work as an advocate for cancer and keep up on the latest research and prevention campaigns. I take care of myself to prevent any kind of cancer from reoccurring. I provide education for those recently diagnosed with cancer .

My road to recovery has not been easy but my faith, family and friends helped me overcome the fear of cancer and the disability that comes with the disease.

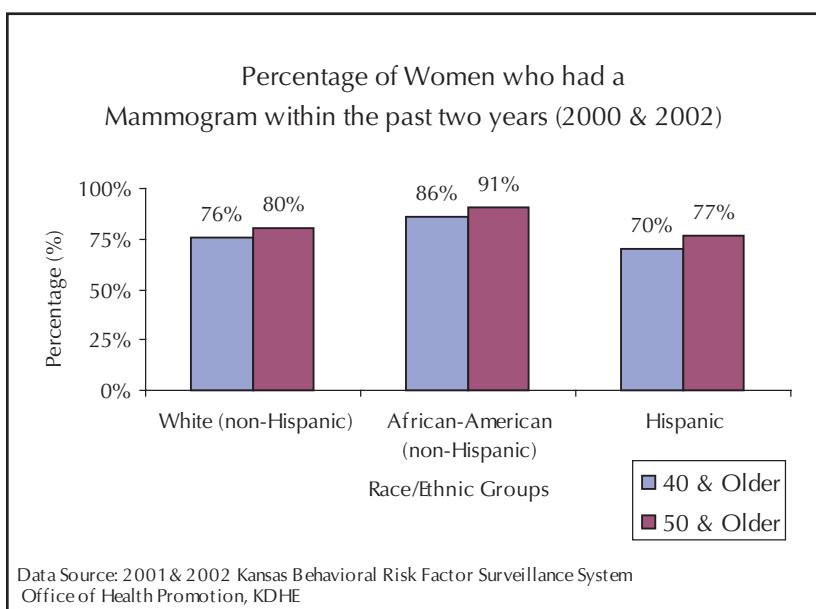
Increase awareness of existence and benefits of clinical trials among patients beginning in January 2006.

Work for insurance coverage for routine costs of clinical trials beginning in January 2006.

Action/Outcome- Develop a web site listing availability and location of clinical trials by October 2005. Educate and inform state and federal elected officials and policy makers about the need for health insurance reimbursement for standard care expenses involved in clinical trials by January 2006.

Rationale:

- Access to clinical trials is not equally available.
- Care may not be paid for by insurance.



QUALITY – Improve the quality of care for cancer patients

Strategy B- Encourage centers providing cancer treatment to be accredited by or associated with a center accredited by the American College of Surgeons (ACOS).

Action/Outcome- Develop a web site listing accredited cancer centers in Kansas by October 2005.

Have existing accredited cancer centers serve as mentors for centers seeking accreditation by the American College of Surgeons.

Rationale:

- Not all treatment centers in the state are accredited by ACOS which ensures the full spectrum of services for cancer patients.
- A time lag exists between the time symptoms appear and diagnosis of cancer, which needs to decrease especially in rural areas.

COMMUNICATION- Improve communication for patients and providers

Strategy C- Develop and promote the “Quality cancer care in Kansas – Close to home” Speaker’s Bureau, web site and medical advocacy program by June 2006.

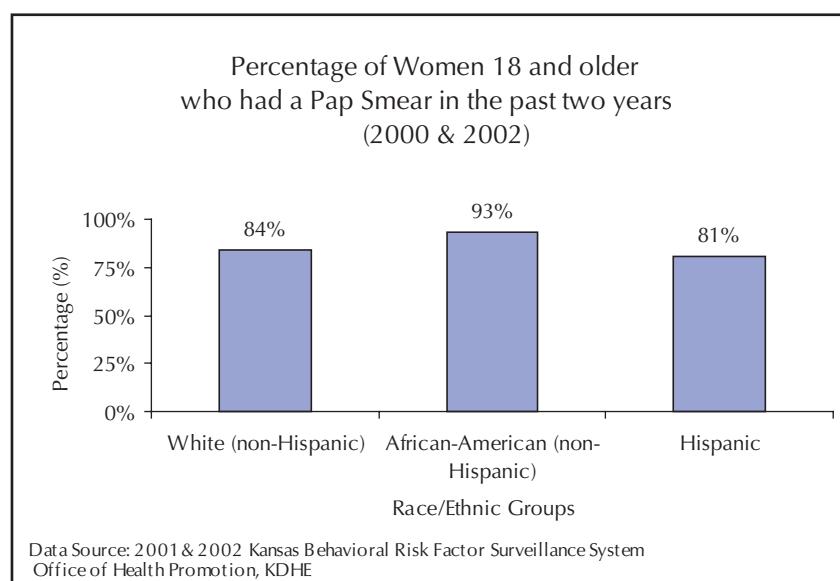
Action/Outcome- Develop a hyperlink from the KDHE Prevention Works web site listing accredited cancer centers, sub-specialists and participating facilities offering clinical trials in Kansas by October 2005.

Develop and lobby for a medical advocacy program by January 2007.

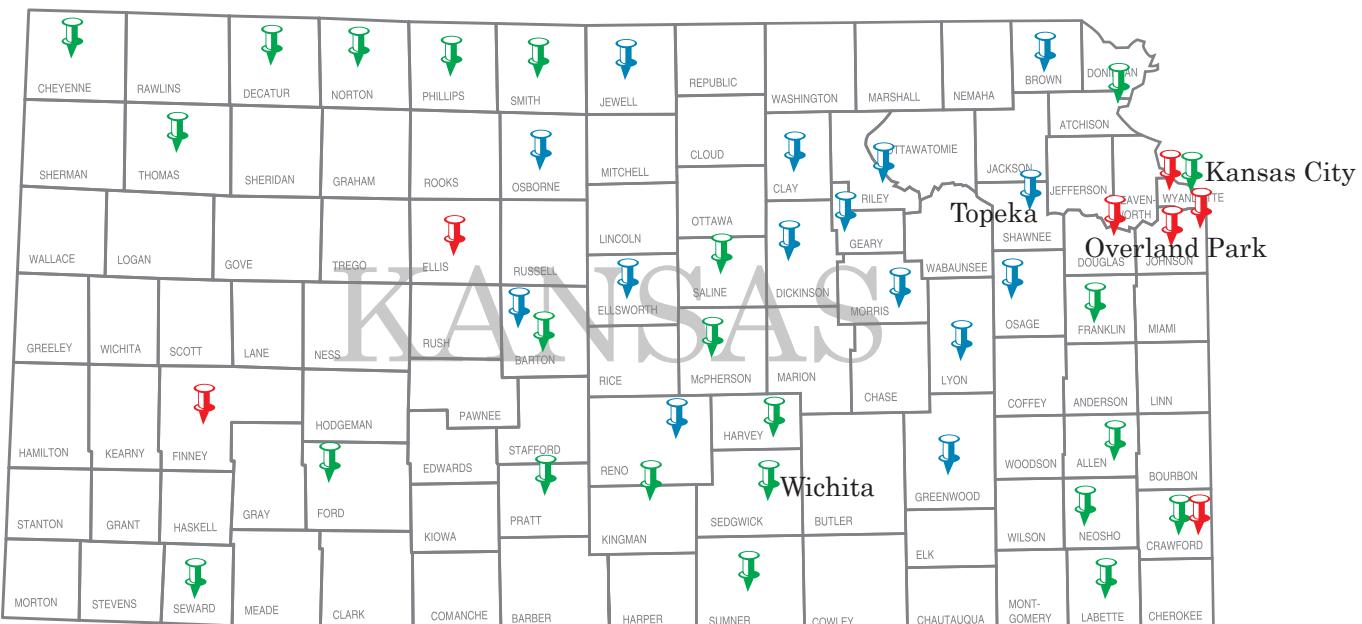
Develop a speaker's bureau through the University of Kansas Medical Center in Kansas City and Wichita to speak to hospitals, county medical societies and specialty meetings on issues of diagnosis and treatment by August 2007.

Rationale:

- Patients need a better understanding of treatment options and how to work within the system to get adequate care.
- There is a need for better communication and coordination between team members (primary care physicians, generalists, internalists, surgeons, clinical oncologists, radiation oncologists, etc.).



Cancer Treatment Locations in the State of Kansas



- Green pins indicate locations offering only oncology and chemotherapy services.
- Blue pins indicate locations where oncologists visit, but no treatment is available.
- Red pins indicate locations offering comprehensive cancer treatment including oncology, chemotherapy and radiation services.

SURVIVORSHIP/END OF LIFE

Cancer survivors are growing in numbers as prevention, screening, early diagnosis and treatment improve. Survivorship and End of Life care is and will continue to play an important role in addressing the burden of cancer in Kansas. Recovery and reintegration into family, society, and workplace are all issues a cancer patient must face. And just as critical, when the disease is terminal, palliative care including quality of the medical delivery, pain management, therapies, acceptance, and culturally sensitive and compassionate support are all important. Cancer patients and survivors often need support to deal with issues such as finances, insurance, employment, transportation and simply the tasks of daily living. The quality of life dimensions cover four issues: physical, psychological, social and spiritual. Patients often need help in navigating the health care system, physical rehabilitation and the control of pain to minimize suffering and ease the side effects of treatment. The barriers for this continuum mirror that of others including physician education, the lack of patient and caregiver information, financial and transportation issues and geographic, social and language concerns.

GOALS

- A**- Better health care professional education is needed for pain and patient care symptom management
- B**- Better rehabilitation and recovery plans for survivors
- C**- Utilization of hospice when appropriate

STRATEGIES

- A**- Professional education
- B**- Information clearinghouse
- C**- Promotion of healthy lifestyle
- D**- Business and industry survivorship standards
- E**- Patient navigators

PROFESSIONAL EDUCATION

Need for better health care professional education in terms of pain and patient care symptom management

Strategy A: Ensure that all health professionals receive standardized end of life, palliative care and survivorship education.

Action/Outcome: Survey nursing and medical schools to determine current end of life, palliative care and survivorship education by January 2006.

Review End of Life Consortium education curriculum and determine best practices by April 2006.

Develop relationship with Kansas Medical Society and State Board of Nursing to assist with development of curriculum and implementation by January 2006.

Develop and/or recommend a standardized professional education curriculum for nurses and physicians by July 2006.

Promote policy to assure appropriate professional educational components are offered by January 2009.

Rationale:

- Lack of physician education in end of life care
- Underutilization of hospice care



Sarah-
Cancer Survivor

STATEWIDE INFORMATION ACCESS POINT

Information for cancer survivors, families and health professionals

Strategy B: Develop a statewide central information access point (one stop for cancer information) for cancer patients, their families and health care professionals.

Action/Outcome: Determine appropriate agency to provide information via toll-free number and website for cancer patients, caretakers and possibly human resource professionals by October 2005.

Promote the toll-free number and website to Kansas through mass media effort by June 2006.

Develop and maintain an annual statewide information exchange session by January 2007 and annually thereafter.

Rationale:

- Accessing credible information often is difficult
- Comprehensive approach needed to provide accurate and timely cancer information

HEALTHY LIFESTYLE FOR SURVIVORS

Promote healthy lifestyle choices for cancer survivors

Strategy C- Promote healthful diet and lifestyle choices to reduce the risk of both recurrence and secondary cancer among survivors.

I was in Jamaica in October 2002 and had gotten sick down there. When I returned to college in Emporia, I was still feeling ill and thought I had a parasite. My stomach was bloated and I had other symptoms. My doctor started treating me for parasites and when I didn't improve he checked me for irritable bowel syndrome. It was during this test that I learned I had colon cancer one week before Thanksgiving in 2002.

I was in major denial about my disease. I wanted to finish school in May and didn't want to have surgery that would have made me miss classes for six weeks. I skipped doctor's appointments and some chemotherapy and radiation treatments. Then about a year and a half later I found out the cancer had spread to my lymph nodes and I thought 'time to get real.' My doctor suggested I enter a clinical trial and I went to the Cleveland Clinic where they did immunotherapy, which uses your own immune system to treat your cancer. It put me into remission for about a month, but when I was checked by my doctor in Kansas City, the cancer had returned. I was then entered into a more aggressive therapy trial and my cancer has now been in remission since November 2003. I continue to have polyps removed from my colon when needed.

My son was only two years old when I was first diagnosed and I kept picturing things like his graduation or wedding day without me there. He was so young; I didn't think he would remember me...

I thank God I had him because he really gave me the willpower to fight the
continued on page 37

...cancer no matter what. I wasn't going to leave him without a mama. He's my world and has been my driving force these last couple of years. He is a very caring child and can sense when I don't feel good or come home from work tired.

My family, friends and church were of tremendous support. I could call my parents in the middle of the night when I was very angry or upset. My church held a fund raiser to help with my medical expenses. My friends were there for whatever I needed.

My maternal grandfather died of colon cancer and I believe there is a genetic tendency in our family. My sister has had a colonoscopy and been tested- not easy for a 15 year old. And my son will be tested too when he is older. I think my fight against cancer has brought my whole family closer together.

Action/Outcome: Increase the consumption of fruit, vegetables and whole grains among Kansans and decrease consumption of high calorie, high fat, low nutrient value foods especially from animal sources and decrease alcoholic consumption.

Increase the percentage of survivors who meet the recommended levels of physical activity and reduce the percentage of survivors who engage in little or no physical activity. Promote safe food handling to reduce the risk of infection and illness.

Rationale:

- Cancer patients and survivors need help with special diets and lifestyle changes
- Safe food sources are a necessity for cancer patients and survivors

BUSINESS STANDARD OF EXCELLENCE

Business and industry survivorship standards

Strategy D: Create a business and industry standard of excellence for cancer survivors.

Action/Outcome: Develop and sponsor a training for human resource professionals by the Fall of 2005 and ongoing.

Explore the possibility of offering a tax credit or incentives to businesses based on the provision of programs of excellence or best practices for employees who are cancer survivors by 2007.

Rationale:

- Financial burden of cancer treatment and recovery often affects employment
- Individuals often lose their jobs and company supplied health insurance
- Geographic and social isolation often occurs with cancer patients

PATIENT ADVOCATE

Patient navigators are needed to assist with cancer care

Strategy E: Every cancer patient will be provided the opportunity to have a patient navigator or advocate assisting in his/her continuum of care.

Action/Outcome: Develop a "society" of cancer patients/survivors to support other survivors and to serve as advocates for survivorship issues by January 2006.

Begin development of a model navigator program for utilization around the state in July 2005.

Rationale:

- Lack of advanced care planning
- Language and transportation barriers/issues

PLAN IMPLEMENTATION

Key First Steps

The Kansas Cancer Partnership agreed that a comprehensive plan and approach outlining strategies and addressing cancer issues should be the first step in statewide cancer control efforts. The plan will serve to mobilize the partnership and agencies, organizations and individuals committed to fighting the disease of cancer. The workgroups were united in their efforts to find solutions to the problems identified, develop strategies that were workable and prioritize their actions to reach a united goal.

A recurring concern centered on the collection and use of data. All of the groups indicated that an increase in data availability and access was important. Improved data will provide critical information that can be disseminated to the general public and health care providers and will help to target efforts particularly in the area of cancer prevention and screening.

Improved data collection first steps will consist of:

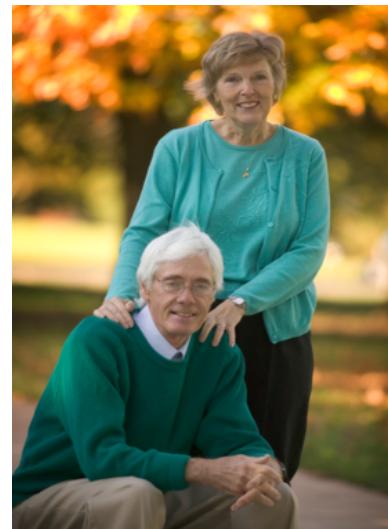
- Questions will be added to collect information on screening advice for breast, cervical and colorectal cancer by health care providers to the KDHE Behavioral Risk Factor Surveillance System survey in 2005 and/or 2006. The BRFSS may also include questions about adult behaviors and professional advice about skin protection and UV exposure. Collection of data on these measures will provide baseline information for ongoing planning and implementation efforts for the Comprehensive Cancer Control program. The data collected will be analyzed according to the program needs by the Cancer Control Program epidemiologist. The analyzed information will be utilized in the Cancer Control program for action recommended in the plan as the implementation phase begins in late 2005 or early 2006. Information also will be used for ongoing monitoring on a yearly basis of the indicators targeted through the questions.
- Data will continue to be collected on cancer incidence from health care providers for the Kansas Cancer Registry (KCR) contracted by KDHE. The KCR also provides mortality information on specific cancers. Both incidence and mortality information on specific cancers helps in identifying specific cancer clusters, which might warrant investigation particularly due to environmental hazards. Data also is used to help with clinical research, market-share analyses, hospital strategic planning and policymaking. The data also will be invaluable in identifying the need for specific cancer-related services in some regions.
- The collection of data from other sources, such as KDHE's Women's Health Survey, is considered a first key step. The comparison of data collected in other health programs coordinated by KDHE or partners such as the American Heart Association, American Diabetes Association and others dealing with heart disease, diabetes and obesity also may provide valuable information to

cancer prevention. This coordinated effort will be done during 2005 and 2006 as plans for cancer, heart attack prevention, stroke, obesity and school and community programs are developed and implemented by KDHE.

The key elements of education, information and communication were recurring themes discussed by the workgroups. Each group identified gaps in those elements that needed to be filled, recognized that a comprehensive effort was needed and targeted both the general public and health care professionals as needing current and accurate information and/or training. Education and information are needed through the continuum of care, from prevention through end of life issues and was desired by patients, care givers, and health care professionals from nurses to doctors.

Education, information, communication first steps will consist of:

- A comprehensive education/information effort will be expanded beginning in 2005 based on the use of the www.preventionworksksansas.org website maintained by KDHE and focused primarily on prevention and screening issues. This effort will consist of a format that provides basic information about the six cancer priority areas to raise awareness and inform individuals about what they can do to prevent cancer and/or receive early screening. The format will include fact sheets that can be downloaded from the website for personal use or replicated for distribution. The effort will be coordinated with the American Cancer Society, the Susan G. Komen Breast Cancer Foundation, Cancer Information Service and other entities that currently publish and distribute materials.
- A media component will build upon the Prevention Works initiative currently underway by KDHE and



*Jan & Tim-
Cancer Survivors*

Early detection of many cancers often depends upon timely screening tests. If you can't prevent cancer, the next best thing you can do to protect your health is to detect it early. According to the American Cancer Society (ACS) recognizing symptoms, getting regular checkups and performing self-exams are just a few ways you can do this.

The ACS has a set of cancer detection guidelines that everyone should become familiar with. For example, did you know that in the fight against breast cancer your best tool is a Clinical Breast Exam for women in the 20's and 30's and yearly mammograms starting at age 40? All women should begin cervical cancer screening by the time they are age 21.

Both the prostate-specific antigen blood test and digital rectal examination should be offered annually, beginning at age 50, to men who have at least a 10-year life expectancy. Men at high risk, such as African-Americans or those with a strong family history should begin testing as early as age 40. The ACS recommends that information be provided to all men about the benefits and limitations of early detection and treatment of prostate cancer so that they can make an informed decision about testing.

Beginning at age 50, both men and women should follow one of the testing guidelines set out by ACS to check for colorectal cancer, which include a fecal occult blood test, sigmoidoscopy and colonoscopy depending upon your age, personal history and other health factors.

These tests and others can often detect cancers at their earliest and most treatable stage. Prompt treatment and care can prolong life making a cancer patient a cancer survivor.

act as a companion piece to the education/information effort. The media component will begin in 2006 and complement initiatives already underway by the Tobacco Free Kansas Coalition dealing with tobacco use prevention and cessation. In addition to efforts for breast and cervical cancer screening and tobacco cessation, the media effort will expand to cover prostate, skin and colorectal cancer awareness and screening. Media outreach will be done using print, radio and/or TV mediums and will focus on particular demographics or regions as needed to reach the target populations particularly affected by cancer rates.

- School outreach to students and teachers with specific cancer-related messages centered on prevention and early detection will be another component of the education/information effort. The Coordinated School Health program, currently administered by KDHE, involves school planning and implementation grants to promote initiatives and healthy lifestyles for students. It involves a component for health promotion for teachers. A partnership will be forged with this on-going effort in the 80+ pilot schools to disseminate information on skin cancer prevention for students when they participate in outdoor physical education or activities such as field day beginning with the 2005/2006 school year. In addition, information will be provided for school newsletters and/or fact sheets or other links will be provided on the e-line system KDHE uses to communicate with these schools.
- A survey to assess the need for additional professional and educational training will be examined as one of the first key steps. This survey could determine the type and extent of professional training received by doctors, nurses and health professionals in the areas of cancer screening, treatment, survivorship and end of life care.

Another concern of both the treatment and survivorship workgroups centered on improving access to treatment and regulations regarding payment and reimbursement for cancer treatment services. Access to treatment is a problem, particularly in remote areas of the state where transportation is limited and patients must travel long distances to receive care. Regulations regarding payment are restrictive and affect treatment for patients and may be of particular concern in rural areas where doctors and treatment are often limited.

Access to treatment first steps will consist of:

- An information gathering study of the accessibility of public transportation services in rural areas, as a means of transporting patients to treatment may begin by 2006. Public transportation programs currently exist in Kansas, with vans and transportation services provided in rural areas. Gaining more accessibility for patients in rural areas needs additional study, and information should be shared with providers and their patients of the availability of these services. In addition, research will be conducted to determine if and how current hospitals and treatment centers transport patients in rural areas for treatment.
- A survey/study of the Kansas payment regulations and guidelines for insurance will be explored by KDHE beginning in 2005. The treatment work group also was concerned about treatment in remote, rural areas

where the number of oncologists is limited and treatment must be administered under the direct supervision of a doctor. In addition, there are reimbursement concerns for physicians who administer chemotherapy treatment in their office (with requirements pertaining to “oversight” presence). In addition, accredited cancer treatment facilities are not reimbursed for the additional quality standards and services provided to cancer patients. KDHE will work with advocacy groups to study and take action on these items.

The survivorship workgroup discussed a number of issues including the need for a “patient navigator” system. The idea for this system stemmed from the lack of a coordinated service to help patients newly diagnosed with cancer through the myriad of treatment courses, insurance issues, support groups, employment concerns and financial issues.

Survivorship first steps will consist of:

- During 2005/2006 a pilot project will be explored to establish a patient navigator system in one community/hospital within Kansas. This system will be planned, developed and implemented with the intent to replicate in other regions or locations within the state. The project will be designed for evaluation by an independent consultant.

Policy and Legislative Education and Information

Legislative action in Kansas is critical to the success of the comprehensive cancer plan and in ensuring that the burden of cancer be reduced in the state. Kansas leaders have supported progressive legislation in the areas of insurance, tobacco and health care issues. Most insurance companies are required to provide coverage for screening and diagnostic cancer tests. Changes in Kansas Medicaid laws in 2002 made it possible for women screened for breast and cervical cancer in the state’s Early Detection Works program to receive treatment if diagnosed with those cancers. An increased cigarette tax passed by the Legislature several years ago has helped to reduce the prevalence of smoking in the state. However, much work and change remains. Educating and informing state and federal elected officials and policy makers is needed on a number of issues including health insurance for the poor and uninsured, coverage for medical advocacy services, and coverage for expenses involving clinical trials.

Pilot Communities

Cancer prevention is an overarching goal that must be guided with a statewide effort but achieved on a community level. It will take changes in lifestyle by individuals and the community support of initiatives and programs. The partnership workgroups were interested in implementing comprehensive and collaborative efforts at the community level. This effort would address the problem at the local level where change and action are most productive and effective. The partnership will identify at least 10 pilot communities to target with education and information efforts for the general public and health care professionals, surveillance and data gathering, and identification of resources and risk reduction factors.

Expanding/Establishing Workgroups

The Kansas Cancer Partnership currently consists of a number of organizations and individuals dedicated to the reduction of cancer incidence and mortality in the state. This Partnership will play a key role as the implementation phase of the plan is initiated. The workgroups may be expanded, reorganized and/or refocused to help initiate, implement, monitor, assess and prioritize activities.

Evaluation

Evaluation of the Kansas Comprehensive Cancer Control and Prevention Plan will help measure the implementation process and progress toward reaching the outlined goals. It is anticipated that several tools will be utilized including evidence-based, process and outcome evaluation. The plan will be monitored against plan objectives to ensure continuous improvement. Evaluation and monitoring will be incorporated into the data review process each year. Several of the strategies and actions pointed to the need to assess the current infrastructure especially in the areas of data collection and gaps, professional training and education and public information and education. Evaluating the current activity will allow for plan implementation feedback and identification of emerging challenges in relieving the burden of cancer in Kansas.

Partnerships

The Kansas Cancer Partnership is comprised of a number of organizations, agencies, and individuals interested and dedicated to reducing the incidence of cancer in Kansas. Individuals from nearly 45 agencies serve on the Kansas Comprehensive Cancer Prevention and Control Partnership.



David-
Student

Some cancers can be prevented – including lung and skin cancer. And the ways are simple – don't smoke and avoid exposure to the sun. For kids and teens those simple things start early in life.

Lung cancer can be prevented by not smoking and avoiding people who do. For youth, this is especially critical since the pressure to smoke often begins during the teenage years. Lung cancer can take years to develop, but it is the leading cause of death in the U.S. with smoking responsible for more than 8 of every 10 cases. Smoking also contributes to heart disease in middle-aged men and women.

Use of other smokeless tobacco products, such as chewing tobacco can contribute to cancer of the throat and larynx. Every year, smoking kills more than 276,000 men and 142,000 women in the U.S. according to the Centers for Disease Control and Prevention.

Skin cancer is the most common form of cancer and the American Cancer Society estimates that more than one million new cases are diagnosed each year. The three types of skin cancer are the highly curable basal cell and squamous cell carcinomas and the more serious malignant melanoma.

Although anyone can get skin cancer, people at high risk include those that have a fair or light complexion, a history of skin cancer in their family, a history of sunburns early in life and a large number of freckles and moles.

Exposure to the sun and the UV rays in tanning beds plays a role in the development of skin cancer. Avoiding this exposure by using sunscreen, wearing a hat or clothing, and seeking out shade when you are out of doors will help reduce your risk of developing skin cancer later in life.

A listing of the Cancer Partnership is included on the back cover of the Plan.

Kansas Department of Health and Environment- Office of Health Promotion
and Office of Local and Rural Health
Centers for Disease Control and Prevention
National Cancer Institute's, Cancer Information Service
National Institutes of Health
Kansas Foundation for Medical Care, Inc.
Kansas Hospice and Palliative Care
Susan G. Komen Breast Cancer Foundation
American Cancer Society
American Heart Association
American Association of Retired Persons
American College of Surgeons
American Lung Association of Kansas
Blue Cross/Blue Shield
C-Change (formerly National Dialogue on Cancer)
Center for Health and Wellness
Coffeyville Regional Medical Center
Community Clinical Oncology Program- Wichita
Cotton O'Neil Clinic-Topeka
Governor's Office of Health Planning and Finance
Hill's Pet Nutrition, Inc.
Midland Hospice Care
Hynes Memorial Hospice
Kansas Palliative Care Association
Kansas Association for the Medically Underserved
Kansas Academy of Family Physicians
Kansas African-American Affairs Commission
Kansas Cancer Registry
Kansas Dietetic Association
Kansas Foundation for Medical Care
Kansas Insurance Department
Kansas State University Research and Extension
University of Kansas Medical Center- Kansas City and Wichita
Kansas Legislature
Life Project
Mount Carmel Regional Cancer Center
Salina Cancer Center-Salina Cares
St. Francis Hospital Cancer Center - Topeka
Via Christi Medical Center, Outreach and Prevention
Mount Carmel Regional Cancer Center - Pittsburg
Tobacco Free Kansas Coalition, Inc.
United Methodist Mexican American Ministries
Via Christi Cancer Center
Wyandotte County Health Department

Cross-Cutting Issues in Cancer Control and Prevention

A number of cross-cutting issues exist which must be addressed in order for the prevention and control of cancer to receive the attention it needs in Kansas. The issues are often complex with interlocking concerns and unclear surrounding aspects. These include:

Disparity – A number of disparate issues and differences in the burden of cancer exist because of differences in age, sex, socio-economic, race, ethnicity, geography, and other factors. These barriers often mean individuals who develop cancer are not screened early enough and often lack access to and the ability to pay for medical care. Patients also must overcome treatment and recovery issues that may be life altering.

Age/Sex – The median age of the Kansas population is 35.5 years, however, in the 65 or older age group, where cancer is most prevalent, there were 356,229 Kansans according to the 2000 census.¹ This represents 13.3 percent of Kansas' total population, a small decrease compared to recent years. In the over age 85 age group, there were more than 52,000 individuals representing 1.9 percent of the population, with Kansas having a slightly higher percentage of such older citizens than the U.S. average of 1.5 percent. By gender, the state has nearly the same amount of males (1.343 million) as females (1.372 million).

Call to Action – With an aging population the incidence of cancer will continue to rise. Of the 11,465 cases of cancer diagnosed in 2002, more than 9,770 were individuals over the age of 50. Of those 9,770 cases, 6,753 occurred in those 65 and older.² With early screening and diagnosis, it is expected that the number of cancer cases will continue to rise and that those living with cancer will continue to increase. Cancer prevention becomes the key to managing this increasing health burden.

Socio-economic/Financial – The financial burden of cancer is staggering and issues of uninsured and underinsured individuals must be addressed. Uninsured Kansans live sicker and die younger than those who have insurance.³ However, with the economic downturn beginning in 2001 and increases in the cost of insurance as high as 28 percent, many individuals have lost their employer-provided health insurance or were unable to afford coverage.⁴ Low-income and ethnic populations felt the biggest impact. Changes in health insurance also have made co-pay amounts and high deductibles areas that need further study and consideration. Changes in the health care laws and regulations must be addressed. Insurance policies should cover screening and early detection tests to further reduce the burden of cancer in the state.

The per capita personal income in Kansas was \$28,565 in 2002, slightly below the national average of \$30,472.⁵ Socio-economic factors contribute to the disparities in health care and can include measures of income, wealth, education, poverty level, occupation and composite measures that include variables such as employment status and access to a car.⁶ The Kansas Health Insurance Study documented that more than 10 percent of all Kansans under 65 years of age are without insurance. Of those uninsured Kansans nearly 21 percent are Hispanic/Latino and 8.5 percent are African-American.

Call to Action – Individuals and organizations are currently committed to cancer control and prevention and awareness of that effort needs to be recognized and expanded. The identification of current resources to fight cancer will help determine if they are allocated correctly. Those resources need to be estimate and identified and the best sources of revenue found. Funding sources beyond government dollars need to be identified.

Race/ Ethnicity – Minority and ethnic individuals represent a small portion of the Kansas population, but have a disproportionate amount of the cancer diagnosis. Kansas' population data indicate that about 90 percent of Kansans are White, 6.4 percent are African-American, 2.2 percent are Asian or Pacific Islanders and 1.1 percent are American Indian. Ethnicity breaks out as 92.4 percent Non-Hispanic and 7.6 percent Hispanic.⁷ Estimates also indicate an upward trend in other races and ethnicities in the population, especially in the proportion of the Hispanic population. Health issues and concerns for some individuals may be exacerbated by a number of factors including limited access to health care, no insurance coverage or high deductibles and co-insurance payments.

Minority health disparities exist in Kansas with different races and ethnicities experiencing a variety of issues related to cultural competency and sensitivity. For example, some Asian cultures have medical traditions that do not emphasize preventive medical services. Asian/Pacific Islander women are 16 percent less likely to receive a Pap smear test for cervical cancer than the general population. Language and cultural competency barriers also may contribute to this pattern.⁸ American Indians also have increased health risk factors with a greater percentage of their population who are obese and smoke, factors which contribute to a high rate of lung cancer.⁹ Studies indicate that Hispanic cultures view chronic diseases as inevitable and unavoidable, which hampers efforts to introduce early prevention for diseases.¹⁰ The overall cancer death rate is 28 percent higher among African-Americans than the total population in Kansas.



Virginia-
Cancer Survivor

I had returned from bowling on a league and just didn't feel right. Later that evening I blacked out in the bathroom and fell into the bathtub. When I finally came to, I called 911 and emergency medical personnel arrived and transported me to the hospital. The ER staff found I had bleeding ulcers and advised me to stay overnight so they could administer more tests the next day. During an endoscope, a biopsy was taken and sent off to Mayo Clinic for further testing. I was released a day or so later, but asked to come back for second biopsy that was requested by Mayo.

About a week later, my primary care physician requested I come in and recommended a referral to an oncologist. The oncologist informed me my biopsy was malignant – a low-grade lymphoma. This was in August 1999 and I was filled with shock, fear and many other emotions. I had known of no family member who had cancer and I rejected the thought of having it. I went through a denial stage for about three weeks, but then started treatment at the end of the month.

I spent the next four months taking chemotherapy treatments. I finished my first round in December 1999. Then in January 2000 I was hospitalized to receive a new medication for treatment. I went through my chemo treatment first and then decided I would deal with whatever problems came later.

I hesitated notifying my mother who was 94 years old then. She worried a lot and I did not want her to worry any more than she had to. I let my daughter and sister know several days after I was diagnosed. My oncologist said my chances of survival were 80/20 and I had prepared a will about 10 years...

continued on page 46

...ago that would apply in case I didn't survive.

I have gone back frequently for check ups. During the first year it was every three months, the second year every six months and since then I am checked every year during my annual visit to the doctor. My primary care doctor encourages me to keep up with the tests.

I would encourage anyone to take advantage of any early screening tests for cancer. In my case, it was another health problem that led to the detection of my cancer, but I was lucky to receive such good care and treatment.

I am thankful for the medical and scientific professionals who spend the time on research and development of a cure for cancer.

African-American male adults have the highest rates of prostate, lung and colorectal cancer compared to the general population.¹¹

In general, late diagnosis and poorer outcomes from treatment contribute to higher mortality that characterizes minority health with respect to cancer.

Call to Action – In 2002, more than 5,300 deaths were attributed to cancer. Of those, data indicates that more than 350 were in individuals where race was indicated as African-American or other.¹² In order to address the disparity issue, an understanding of how cultures look at the disease of cancer is needed.

Geographic – Kansas has a particular challenge when dealing with the urban versus rural issue. Fifty-five percent of the 2.7 million people in Kansas live in the 10 percent of

landmass that comprises the metropolitan areas. The other 45 percent of the population lives in the remaining 90 percent of the geographic areas in the state, mainly the rural counties, particularly in western Kansas.¹³ While the urban areas house state-of-the-art medical facilities and a good doctor-patient ratio, individuals in rural areas must often drive long distances to access medical care. Health care providers in the rural areas are also lacking and the medically underserved in those areas often receive less timely medical care with longer waits for treatment.

Capacity – The capacity of the medical system in Kansas is currently challenged in the area of the underserved individuals. And as more people are screened and diagnosed with cancer, health/medical professionals may be taxed to provide timely and thorough treatment and care. Data also indicates that the population of Kansas is aging, but at a slower pace than the rest of the United States.¹⁴ That is good news when it comes to incidence since cancer occurs more often in those over the age of 50. However, the system will continue to face challenges to provide quality cancer screening, detection and care for Kansans.

Data – The ability to measure the disease of cancer and morbidity and mortality factors is critical to making an impact. This includes being able to measure the effectiveness of intervention methods and the access to care. The Kansas Cancer Registry (KCR) provides an important tool to collect and analyze cancer cases in the state and will serve as a vehicle for successful comprehensive cancer prevention and control. The KCR has identified objectives toward this pursuit including: continued data management and surveillance, hospital, physician, laboratory and radiation reporting and emphasis toward case completeness, data quality and information dissemination. The Behavioral Risk Factor Surveillance Survey (BRFSS) also is an important tool in gathering information from the public. KDHE currently uses data collected by the Environmental Protection Agency during a national study in 1998-99 of radon levels, however, additional study and data collection is needed.

Call to Action – The addition and modification of questions related to comprehensive cancer control will start with the 2005 BRFSS survey in order to begin gathering and

analyzing the data needed. This data collection will help determine the scope, nature and extent of the cancer problem in Kansas. The Partnership also will look at other data collection opportunities particularly in accordance with stated strategies and supports the need for the Kansas Cancer Registry to follow up with patients to collect additional information. The Partnership intends to work toward an annual release of data identifying the status of cancer in Kansas.

Public Information/Education – Increasing the knowledge of the general public and coordinating current efforts through education and information is critical to the prevention and screening efforts to detect cancer at its earliest stages and provide prompt treatment. Those individuals affected by cancer demand direct, accurate, and current information readily accessible through the Internet, local libraries or media sources. A wealth of information on cancer currently is available on cancer in written and electronic form. However, coordination of this information in a comprehensive format is critical to avoid duplication of efforts and ensure that those seeking information will be able to obtain it quickly and reliably. A comprehensive media campaign, using coordinated messages and a logo/slogan concept, also would benefit the state effort by raising awareness of the general public through marketing and media efforts.

Call to Action – The development and promotion of a common theme to raise awareness about cancer and the options available to cancer patients is needed. “Quality cancer care in Kansas – Close to home” will provide the basis for a public information/education and medical advocacy program. A statewide information access point is needed which draws from entities providing cancer information including, but not limited to, the American Cancer Society, Susan G. Komen Breast Cancer Foundation, US TOO, National Cancer Institute, hospital cancer centers and others. This effort should be comprehensive to provide easy utilization and support.

Professional Education – Health care professionals need additional education and training to adequately manage cancer and its risks. A systematic approach to disseminating newly identified cancer strategies to Kansas’s doctors, nurses, dentists and other allied health care professionals is needed. Providers are often unaware of the prevention methods and screening guidelines for the disease and clinical treatment trials available for their clients and patients. Other improvements in communication methods for professionals also are needed in the state.

Call to Action – Programs at medical and nursing schools should cover the full spectrum of the cancer continuum including end of life needs. Training for health professionals in cultural competencies, including disparities in education and literacy levels of patients is needed. Primary care physicians should be engaged in the spectrum of cancer prevention and the continuity of care.

Resources – The risk, occurrence, suffering and death from cancer must be minimized by making sound societal decisions and utilizing resources to deal with this important public health issue. Existing resources must be used wisely and additional sources of revenue, opportunity and collaboration must be explored.

Call to Action – The partnership will support each other and their respective organizations in the implementation of the cancer plan, consistent with the goals and objectives outlined. A clear commitment is needed along with the identification of resources including grants, additional funding and in-kind services.

Research – New knowledge and new tools must be pursued for cancer risk reduction and cancer care. Although there is a downward trend in the mortality rates from cancer, with early detection and treatment, the number of individuals living with this disease will continue to rise. Being a rural state, Kansas has the risk of carcinogens linked to agriculture, and also has a risk from radon in homes and businesses.

Call to Action – Additional research is needed for screening and early detection services. And research is needed into new cancer drugs and treatment, which offer the best hope to those afflicted with the disease. Coordination with health care providers is recommended for screening and treatment trials. Continued scientific study is needed in the area of environmental carcinogens to reduce exposure and to educate the public about possible risk.

Advocacy/Policy – Many groups, individuals, survivors, organizations and companies support the cause of cancer prevention, control and treatment. A number of organizations participated in and contributed to the input for this plan. Health professionals, cancer advocates, medical centers, associations, legislators, foundations, and state departments contributed their time and talent to researching and studying the problem of cancer along the continuum of care. Each realizes that a comprehensive approach to the problem of cancer prevention and control is needed.

Call to Action – A clear call to action is needed by advocates who support a comprehensive and collective approach to reducing the burden of cancer in the state. This includes a visible effort with an established agenda for organizations, health care professionals, the public sector and private businesses. The partnership supports the increase in tobacco taxes for prevention efforts, health care coverage for the medically underserved and programs to reduce cancer risks. Cancer needs to be raised as a priority issue in the health care arena.

References:

- ¹ U.S. Census Bureau and the National Center for Health Statistics
- ² Kansas Cancer Registry, 2002
- ³ Kansas Insurance Department, State Planning Survey, May 2004
- ⁴ Center for Studying Health System Change
- ⁵ State Policy Report, September 2002, U.S. Department of Labor
- ⁶ Institute of Medicine, Guidance for the National Healthcare Disparities Report, 2002
- ⁷ U.S. Census, 2000
- ⁸ Minority Health Disparities in Kansas, Kansas Institute of Health, January 2003
- ⁹ Behavioral Risk Factor Surveillance Survey, 1993-2000
- ¹⁰ Minority Health Disparities in Kansas, Kansas Institute of Health, January 2003
- ¹¹ Minority Health Disparities in Kansas, Kansas Institute of Health, January 2003
- ¹² Kansas Cancer Registry, 2002
- ¹³ Kansas Department of Health and Environment, Office of Local and Rural Health
- ¹⁴ U.S. Census

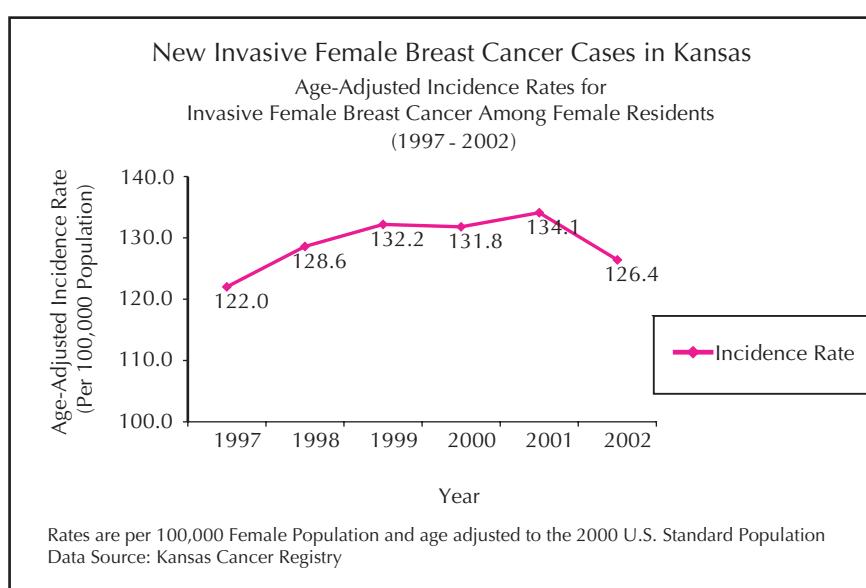
Burden of Cancer

Cancer research directed toward problem assessment, identification of risk factors, and examination of screening, diagnosis and treatment strategies has increased our understanding regarding issues related to the disease. The burden of cancer is tremendous. This toll is taken in lives lost, financial constraints and quality of life issues.

In 2002, about 12,000 new invasive cancer cases (all sites) were reported in Kansas. The age-adjusted incidence rate for cancer (all sites) was 416.4 per 100,000.¹ The chance of having cancer in a lifetime is 45 percent for men and 41 percent for women.² The burden falls unequally for those who lack insurance, populate low socio-economic sectors or do not have access to health care.¹ Besides its high incidence rate, cancer is the second leading cause of death in Kansas.³ Despite advances in recent years related to prevention, detection and treatment, more than 5,000 Kansans die each year from cancer, accounting for approximately 22 percent of all deaths in Kansas.^{1,3} In 2002, the age-adjusted death rate for cancer (all sites) was 187.5 per 100,000 population.³

End of life issues are of particular concern to cancer patients and their families who must come to an emotional and spiritual reconciliation of dying and separation. Issues related to pain management, minimizing complications and caregiver needs also require attention.

A review of the Kansas Cancer Registry (KCR) and Kansas Vital Statistics data provided the true story of those affected by cancer - their sex, age, race, and the demographics including geographic and transportation issues. The data provide the measurement needed to identify where limited resources can be directed to make the most impact on the problem of cancer in the state. The Behavioral Risk Factor Surveillance System (BRFSS) data provide information on utilization patterns of screening and early detection strategies directed toward certain specific cancers and indicators related to end of life issues among adult Kansans.⁴ It also provides information on behavioral risk factors such as smoking, obesity and others. All Kansas statistics in the following section, unless otherwise footnoted, were compiled from KCR, Kansas Vital Statistics and BRFSS data.



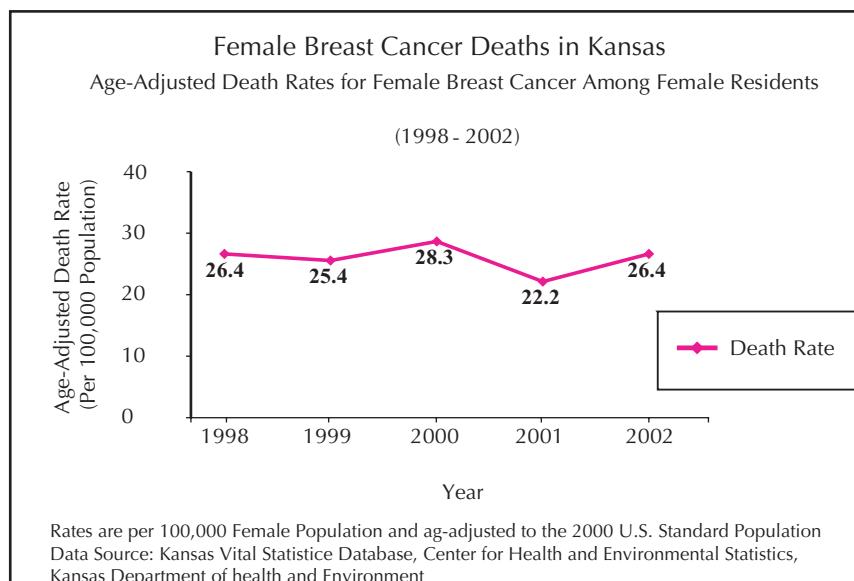
Breast Cancer

In Kansas 9,420 total cases of breast cancer (99.4 percent of all cases were among women) were identified between 1997 and 2001, making it the most frequently diagnosed cancer among women in Kansas.¹ It is the second leading cause of cancer death among women,

accounting for approximately 400 deaths in the state each year. The age-adjusted death rate due to breast cancer was 24.3 deaths per 100,000 women for the years 2001-2002.³ Many of these deaths are preventable with early screening and reactive and prompt treatment. The breast cancer burden (incidence and death and access to care are disproportionate for some population subgroups based on age, race, disability and geographic location, a great concern for Kansas health professionals as they look at ways to decrease the death toll from this disease.

In 2001, the age-adjusted incidence rate for invasive breast cancer was 134 cases per 100,000 women. During the last five years, the age-adjusted incidence rate of invasive breast cancer is almost stable.¹ Breast cancer is most common (has a peak incidence) among women ages 65 to 74 years and is less common among women younger than 40 years of age. White females are more often diagnosed with invasive breast cancer than African-American women (130.9 cases per 100,000 white women versus 107.2 cases per 100,000 African American women for the years 1997-2001).¹ Among women of all other races, 212.6 cases per 100,000 women were diagnosed with invasive breast cancer.¹ African-American women have higher age-adjusted breast cancer death rates than White women (37.2 per 100,000 versus 23.7 per 100,000 for the years 2001-2002).³

The causes of breast cancer are not known, however, research has shown that women with certain risk factors such as age, personal or family history of breast cancer, alcohol intake and obesity are more likely to develop breast cancer. Breast cancer is typically slow growing with tumors that metastasize late. Early detection with treatment to remove or destroy the tumor is the best practice for preventing death from breast cancer.



Although screening recommendations vary between advisory groups, the U.S. Preventative Services Task Force (USPSTF) recommends mammography, with or without a clinical breast exam, every one to two years for women aged 40 years and older (USPSTF 2002). The USPSTF has indicated that fair evidence exists showing significant reduction of deaths due to breast cancer by mammography screening every 12-33 months. It has been indicated that the risk of dying from breast cancer may be reduced by 17 percent among women 40-49 years old and by 30 percent among women 50-74 years of age.⁵

USPSTF has indicated that evidence is strongest for women age 50-69 years, whereas, for women aged 40-49, the evidence that screening mammography reduces mortality from breast cancer is weaker, and the absolute benefit of mammography is smaller, than it is for older women. USPSTF has noted that most, but not all studies, indicate a mortality benefit for women undergoing

mammography at ages 40-49, but delay in observed benefit in women younger than 50 makes it difficult to determine the incremental benefit of beginning screening at age 40 rather than at age 50. As the incidence of breast cancer is lower among women in their 40's than it is among older women, the absolute benefit of screening is smaller.⁵

In addition, the USPSTF has also mentioned that the evidence is generalizable to women age 70 and older (who face a higher absolute risk of breast cancer) if their life expectancy is not affected by other diseases. The USPSTF has pointed out that the absolute probability of benefits of regular mammography increases with increasing age, and the risk of harm from screening (false positive results and unnecessary anxiety, biopsies, and cost) decreases from ages 40-70.

Thus, the balance of benefits and potential harm becomes more favorable with increasing age. USPSTF noted that the exact age at which the potential benefits of mammography justify the possible harm is a subjective choice. The USPSTF did not find sufficient evidence to specify the optimal screening interval for women aged 40-49. It is recommended that the clinicians should inform women about the potential benefits, potential harm, and limitations of the test that apply to women according to their age and should also indicate that the balance of benefits and potential harm of mammography improves with increasing age for women between the ages 40 and 70.⁵

In Kansas from 2000-2002, 24 percent of women who were 40 years of age and older had not had a mammogram in the past two years. The percentage of White women age 40 and older who had not had a mammogram in the past two years was higher when compared to African-American women (24 percent of White women versus 14 percent of the African-American women).⁴

Between 2000-2002, women at increased risk of not having a recent mammogram (within the past two years) include those in households making less than \$20,000 per year (34 percent), women of Hispanic ethnicity (30 percent), women in rural areas (30 percent) and women without a high school education (35 percent).⁴

Patient care following initial suspicion of breast cancer generally includes: confirmation of the diagnosis, evaluation of the stage of disease, and selection of therapy.⁶ Breast cancer is treated by various combinations of surgery, radiation therapy, chemotherapy and hormone therapy. The prognosis (i.e., chance of recovery from disease) and treatment options are affected by factors such as age and menopausal status of the patient, stage of the disease, histologic and nuclear grade of the primary tumor, estrogen-receptor and progesterone-receptor status, measures of proliferative capacity, and HER2/neu gene amplification. Although certain rare inherited mutations such as BRCA1 and BRCA2 predispose women to develop breast cancer, prognostic data on mutation carriers who have developed breast cancer are not consistent.⁷

Cervical Cancer

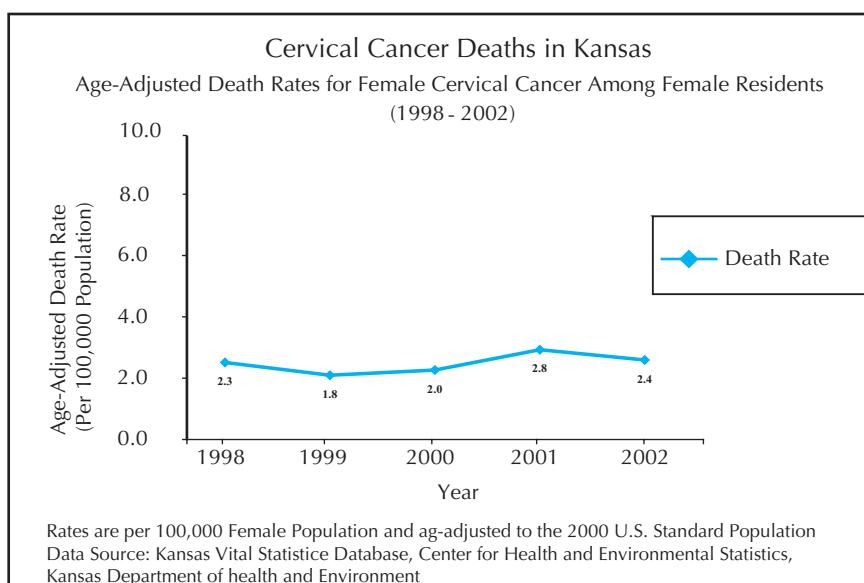
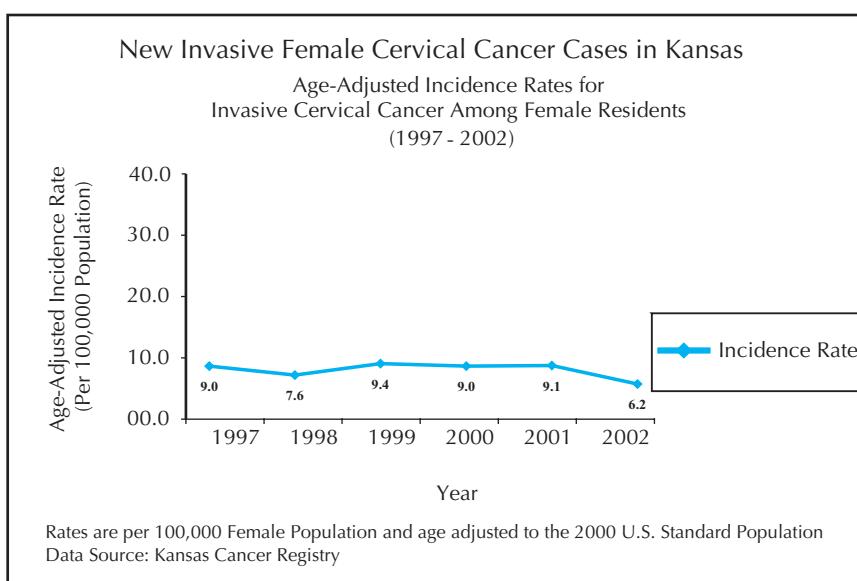
Cervical cancer accounts for approximately two percent of all cancers in Kansas women. From 1997 to 2001, 599 new cases of invasive cervical cancer were seen among Kansas' women. Thirty-five percent of total new invasive cervical cancer cases were seen among women age 55 years and older. In 2002,

the age-adjusted incidence rate among Kansas' females was 6.2 cases per 100,000 women.¹ In 2002, the age-adjusted death rate due to cervical cancer was 2.4 per 100,000 women.³ Death rates for cervical cancer are low, mainly due to early detection and screening.

Death rates from cervical cancer have decreased by 70 percent in the U.S. between 1947 and 1984, mainly due to periodic screening using a Pap test. The human papillomavirus, which is sexually transmitted, appears to play an important role in the genesis of this cancer, and while pre-malignant cellular changes on the cervix can begin at an early age, they progress slowly and cancer may not develop until decades later.⁸ Early detection can identify pre-cancerous changes in the cervix.

The USPSTF strongly recommends screening for cervical cancer in women who have been sexually active and have a cervix (this statement updates the 1996 recommendation mentioned in the Guide to Preventive Services, second edition).

Good evidence is present from several studies showing screening with Pap tests (cervical cytology) reduces the occurrence of new cases of cervical cancer, as well as, deaths from cervical cancer. Despite limited direct evidence to determine the optimal starting and stopping age and interval for screening, indirect evidence suggests

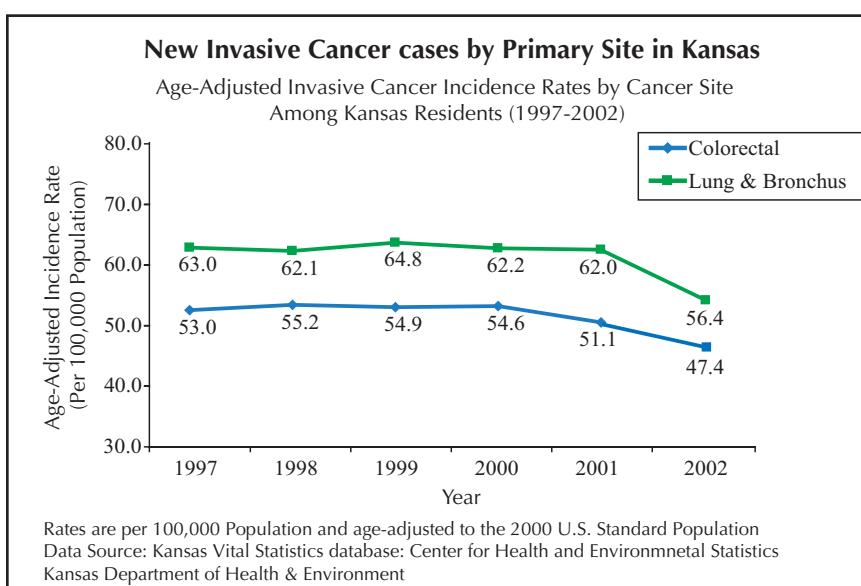


that the most beneficial strategy is to start screening within three years of onset of sexual activity or age 21 (whichever comes first) with continued screening at least every three years. The USPSTF has concluded that the benefits of screening substantially exceed potential harm. As the risk of cervical cancer decreases steadily through middle age, the USPSTF recommends against routine Pap test for cervical cancer in women older than age 65 if they have had adequate recent screening with normal Pap tests and are not otherwise at high risk for

cervical cancer.⁹

In Kansas, from 2000-2002, 84 percent of women age 18 and older with a uterine cervix had received a Pap test in the past two years. The highest percentage of women receiving a Pap test in this age group was seen among African-American women (93 percent). The lowest percentage was seen among Hispanic women (81 percent). Women living in rural areas and with an annual household income less than \$20,000 were also seen to be at risk of not receiving a Pap test in past two years.⁴

Cervical cancer cases are most often treated by surgery or radiation therapy. Treatment options depend on the stage of the cancer, size of the cancer, patient's age and desire to have children.¹⁰



Colorectal Cancer

Colorectal cancer represents 13 percent of all newly diagnosed cancers in Kansas.¹ It is the third leading cause of cancer death among men, as well as, among women in Kansas.³ From 1997-2001, 7,466 Kansans were diagnosed with colorectal cancer and 2,790 died. For the same time period, the age-adjusted colorectal cancer incidence rate was 53.6 cases per 100,000 population.

Higher

incidence of disease was seen among Whites (including Hispanic and non-Hispanic) as compared to African-American (including Hispanic and non-Hispanic) i.e. 59.5 cases per 100,000 persons versus 48.2 cases per 100,000 persons.¹ In 2001-2002, the age adjusted colorectal death rate was 20.3 per 100,000 persons. Higher death rate was seen among African-Americans (age-adjusted death rate of 30.5 cases per 100,000 population) as compared to Whites (age-adjusted death rate of 19.8 cases per 100,000 population).¹

Survival depends on the stage of cancer progression at the time of diagnosis. If cancer is detected while it is still localized in the bowel, 90 percent of persons can expect to be alive five years later.¹¹ Risk factors include family history, advancing age, high fat-low fiber diet and reduced physical activity. In addition, obesity may be a risk factor, although that has not been confirmed.¹² Studies have shown that more than 80 percent of colorectal cancers arise from adenomatous polyps. Although less than 1 percent of adenomatous polyps that are smaller than 1 cm will eventually develop into cancer, 10 percent of adenomatous polyps that are larger than 1 cm become cancerous within 10 years and about 25 percent become cancerous after 20 years.¹³ The prevalence of adenomatous polyps increases with age (from 20 percent to 25 percent at the age of 50 years and to 50 percent by age 75-80 years).¹⁴

Early detection is critical to identifying pre-cancerous lesions with death

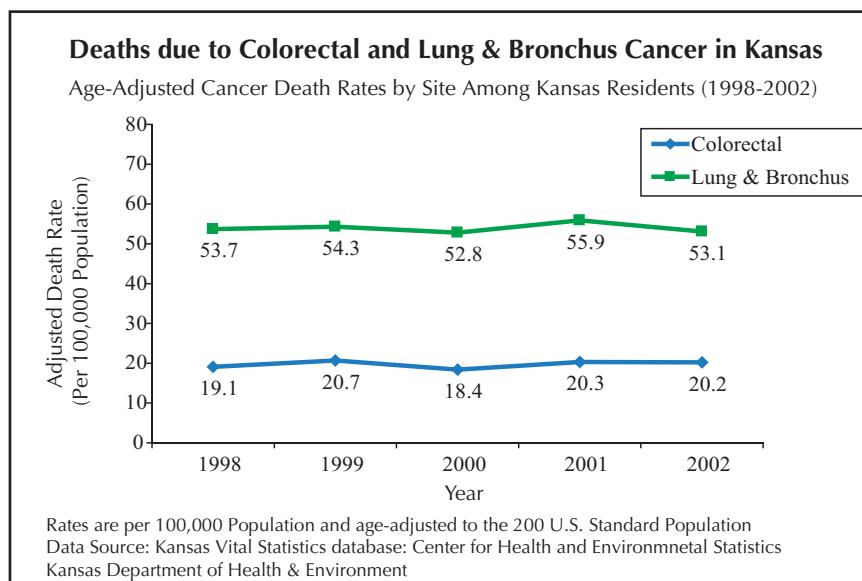
reduction rates from 33 to 80 percent being possible. However, the timing and best tests remain to be determined.¹⁵ The USPSTF strongly recommends that clinicians should conduct colorectal cancer screening among men and women age 50 and older who are at average risk for colorectal cancer. For high-risk persons, it is reasonable to begin screening at a younger age (this statement updates the 1996 recommendation mentioned in the Guide to Clinical Preventive Services, Second Edition). Although, most colorectal cancers occur in persons at average risk, 20 percent occur among patients with specific risk factors such as family history of colorectal cancer in a first-degree relative, uncommon genetic syndromes, history of ulcerative colitis, history of previously diagnosed large adenomatous polyps or colorectal cancer, and family history of adenomatous polyps diagnosed before age 60.¹⁶ The American Cancer Society (ACS) recommends screening people at average risk for colorectal cancer beginning at 50 years of age by one of the following methods:

- Fecal Occult Blood Test (FOBT) annually,
- Flexible sigmoidoscopy every 5 years,
- Annual FOBT plus flexible sigmoidoscopy every 5 years,
- Double-contrast barium enema every 5 years,
- Colonoscopy every 10 years.

ACS also recommends that high-risk persons (with risk factors as mentioned above) should begin colorectal cancer screening earlier and/or undergo screening more often.¹⁷

In 2001-2002, only 66 percent of Kansans age 50 years and older received a screening test for colorectal cancer (fecal occult blood test or a sigmoidoscopy or colonoscopy exam). Only 13 percent of Kansans 50 years and older had both a sigmoidoscopy in the past 5 years and a fecal occult blood test in the past year.⁴

Three types of standard treatment are available for patients with colon cancer which include surgery (local excision, partial colectomy i.e., removing the cancer and a small amount of healthy tissue, resection with colostomy, radiofrequency ablation i.e., use of a special probe with tiny electrodes to kill cancer cells, and cryosurgery i.e., to freeze and destroy abnormal tissue as carcinoma in situ), chemotherapy and radiation therapy. Certain factors affect prognosis of the colorectal cancer (chance of recovery) and treatment options. The prognosis of this cancer depends on the stage of the cancer, whether the cancer has caused blockage or perforation of the colon, the blood levels of carcinoembryonic antigen (a substance in the blood that may be increased when cancer is present) before



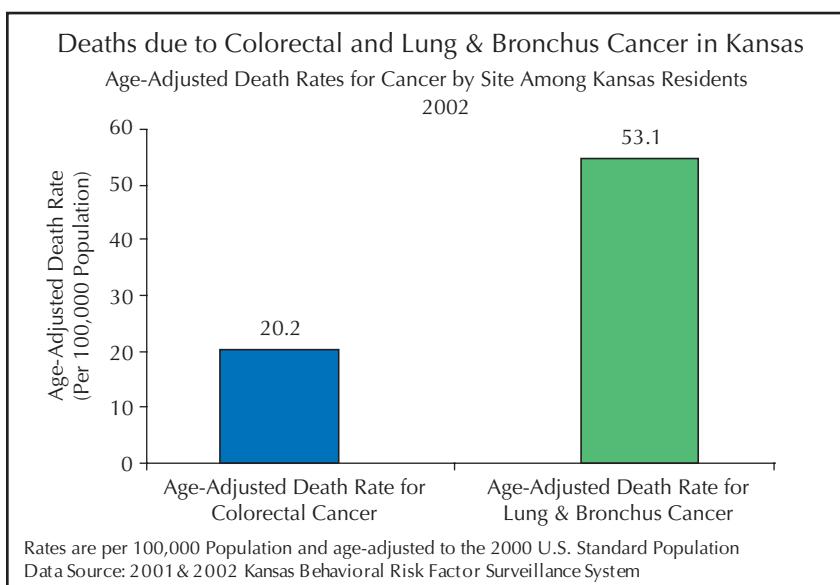
treatment begins, whether the cancer has recurred and the patient's general health. Treatment options depend on the stage of the cancer (whether cancer is in the inner lining of the colon only, involves the whole colon, or has spread to other places in the body), whether the cancer has recurred and the general health of the patient.¹⁸

Lung Cancer

Lung cancer is the leading cause of cancer deaths among men, as well as among women in Kansas.³ It is the second most commonly diagnosed cancer among males and the third most commonly diagnosed cancer among women.¹ From 1997-2001, 8,479 persons were diagnosed with the disease and 7,401 individuals in Kansas during that same period died from the disease. In 2002, the age-adjusted incidence rate for lung cancer in Kansas was 56.4 per 100,000 population.¹ Lung cancer accounts for about 30 percent of all cancer deaths in the state. In the year 2001-2002, the age-adjusted lung cancer death rate was

54.5 per 100,000 population.

The death rate was higher among African-Americans (75.1 per 100,000) as compared to Whites (53.9 per 100,000).³ The prognosis for lung cancer is poor; only 14 percent of persons with the disease survive five years after diagnosis because the cancer is usually asymptomatic until it has spread outside the local tissues. Even if found when localized, the five-year survival rate is less than 50 percent.¹¹ The most important risk factor for lung cancer (as well as for many



other cancers) is tobacco use. Epidemiologic and preclinical animal experimental data have definitively indicated cigarette smoking as the primary cause of lung cancer.^{19, 20, 21} Tobacco smoking is estimated to account for 87 percent of all lung cancers and an additional two percent are attributed to exposure to secondhand smoke.¹² The percentages of lung cancers estimated to be caused by tobacco smoking in males and females are 90 percent and 78 percent respectively.²² Other environmental factors include exposure to residential radon gas and occupational chemicals, especially among smokers. Exposure to residential radon for non-tobacco related cancer cases is currently under research. According to the National Cancer Institute, scientists estimate that lung cancer deaths could be reduced by two to four percent by lowering radon levels in homes exceeding EPA's action level. However, these estimates may change pending current research. Presently, smokers appear to be most affected by radon exceedences. Consequently, nearly all cases of lung cancer are preventable.¹² Primary prevention through risk reduction, particularly to help children avoid smoking, offers the best hope for achieving reduction in deaths due to lung cancer.

Studies have shown that screening for lung cancer with a chest X-ray and/or

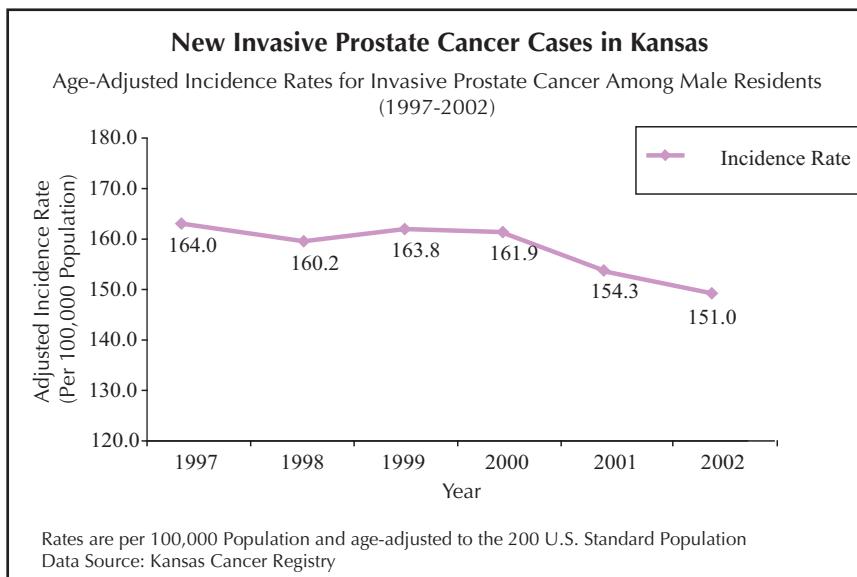
sputum cytology does not reduce deaths due to lung cancer. In addition, studies have shown that screening would lead to false-positive tests and unnecessary invasive diagnostic procedures and treatments.²² In recent years, efforts have been made to improve lung cancer screening with newer techniques such as low-dose helical computed tomography and molecular techniques.^{23, 24} However, further research is needed to evaluate the effectiveness of these techniques as screening tools for lung cancer.

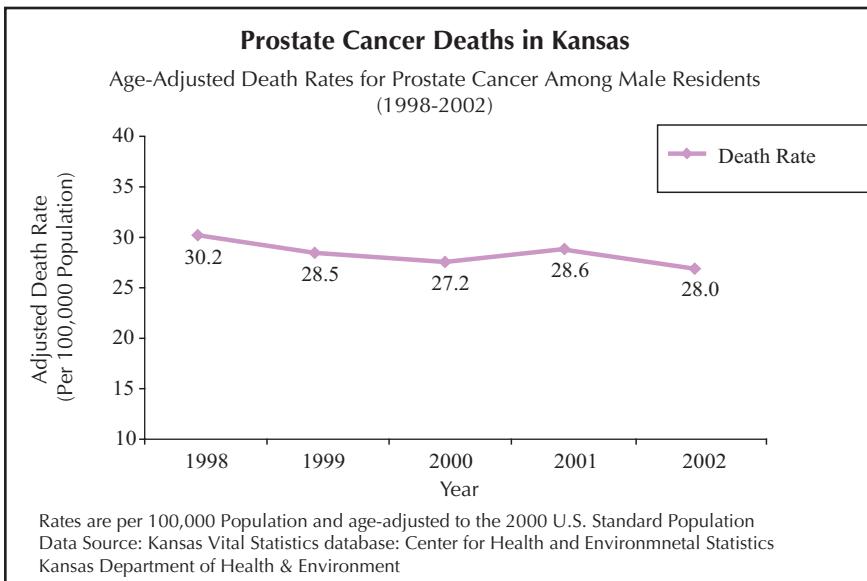
Three types of standard treatment are available for both types of lung cancer (small cell and non-small cell lung cancer), which include surgery, chemotherapy, and radiation therapy. A fourth type of standard treatment, laser therapy is also available for non-small cell lung cancer. Prognosis and treatment options depend on factors such as stage of the cancer, tumor size, type of the lung cancer, presence of symptoms and the patient's general health.²⁵⁻²⁶

Prostate Cancer

Invasive cancer of the prostate is limited almost exclusively to men over 50 years of age. Nearly 9,500 cases of prostate cancer were diagnosed in Kansas between 1997 and 2001. Most cases are diagnosed in men between the ages of 65 and 80 years and about 300 Kansans die from this cancer each year.^{1,3} The age-adjusted prostate cancer incidence rate in the year 2001 was 154.3 per 100,000 male population. African-American males experience a higher age-adjusted incidence rate of prostate cancer (221 cases per 100,000 male populations) compared to Whites (153 per 100,000 male population).¹ The age-adjusted prostate cancer death rate in the year 2001-2002 was 28.3 per 100,000 male population.³

The cause of prostate cancer is not known and at present no known strategies are available to prevent its occurrence. Increased use of screening which followed introduction of the prostate specific antigen (PSA) blood test in the 1980's, has resulted in a sharp rise in the number of men being diagnosed and treated for cancer in the past years.²⁷ Despite this development, the value of early detection and treatment remains uncertain. Prostate cancer screening is controversial due to the lack of a definitive evidence of benefit. In addition, there is a lack of consensus regarding optimal treatment of localized disease and the clear evidence that active treatment options are associated with significant morbidity. Treatment options for early-stage disease include radical surgery, radiation therapy, and watchful waiting (no active treatment unless indications of





progression are present on active surveillance). The valid comparisons of efficacy between treatment options are usually not possible due to differences in reporting and selection factors in the various studies.²⁸ Thus, further research is needed in this regard.

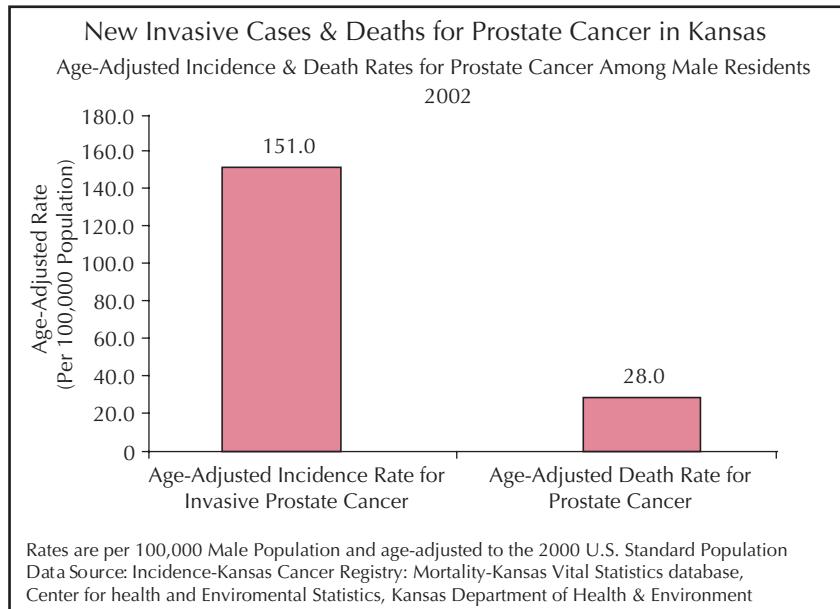
At present, the USPSTF concludes that the evidence is insufficient to recommend for or against routine screening for prostate cancer using prostate antigen (PSA) testing or digital rectal examination (DRE).³⁰

In Kansas, in the year 2001-2002, 67 percent of men age 50 years or older reported having a digital rectal examination to check the prostate within the past two years and 69 percent of men age 50 years and older have reported receiving a prostate specific antigen test within the past two years.⁴

Autopsy studies of men dying from causes other than cancer have found evidence of prostate cancer among 30 percent of men between the ages of 30-49 years and up to 100 percent of men age 80 years and older (USPSTF, 1996).³¹

Thus, prostate cancer can remain latent for decades, so many men with the disease will die of other causes unrelated to cancer. Even those diagnosed with prostate cancer, if found when it is localized, can be treated by surgical removal or treated with radiation therapy. This treatment has a substantial rate of complications including bladder incontinence, impotence and bowel dysfunction. Even this treatment, when the cancer is localized, has not shown evidence of either prolonged survival or improved quality of life.²⁸

Certain studies have

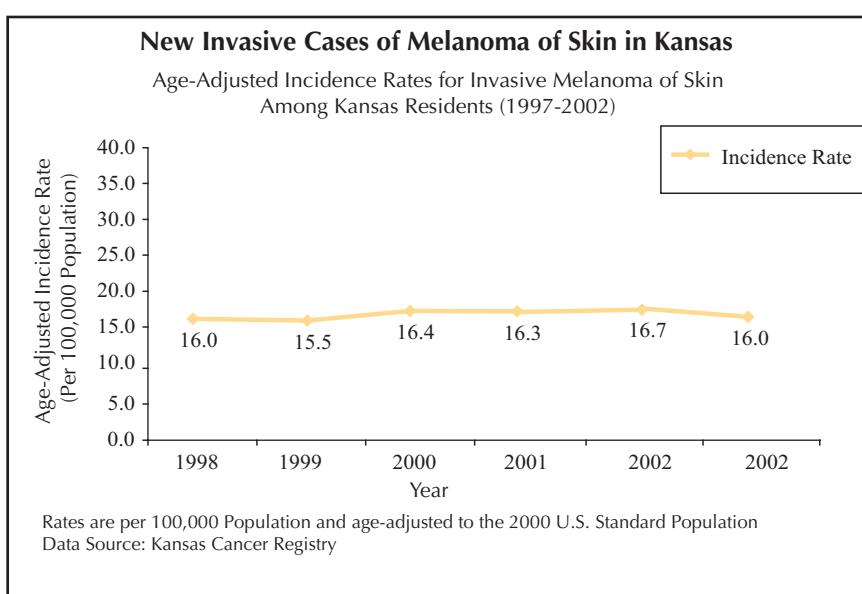
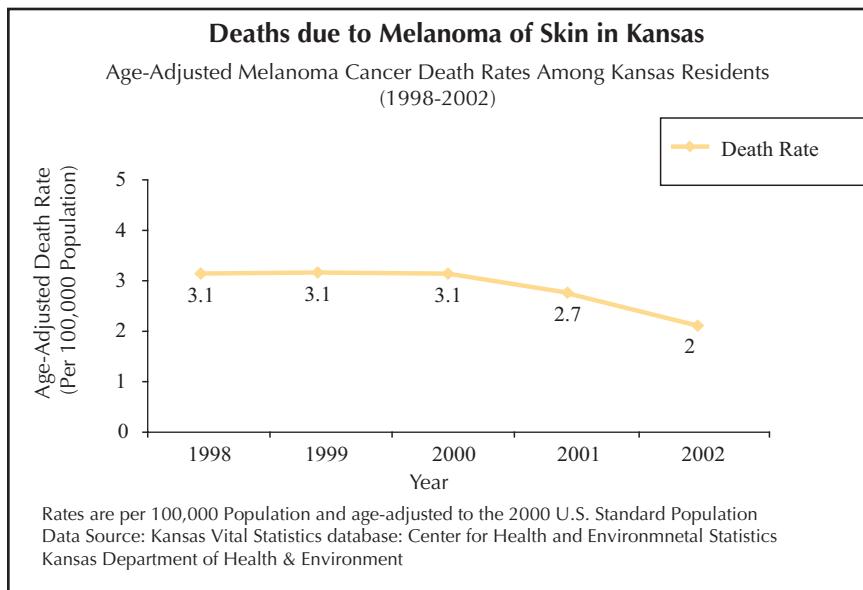


shown the benefits of chemoprevention through use of agents such as isoflavonoids, selenium, vitamins D and E, and lycopene and other agents; however, further studies are needed to confirm the benefit of chemoprevention with these substances. Some studies have shown that a diet high in fat, especially animal fat, may be associated with an increased risk of prostate cancer. In addition, certain studies have indicated increased intake of fruits and vegetables is associated with a reduced risk of prostate cancer.³²

In addition to the above-mentioned types of treatment modalities (watchful waiting, surgery and radiation therapy), hormone therapy also is used for management of prostate cancer patients. Clinical trials are in progress to test other types of treatment including chemotherapy, cryosurgery, and biologic therapy.³²

Skin Cancer

Skin cancer is a widespread problem in the state with as many as 12,000 new cases diagnosed each year. Cancer registries do not collect most occurrences of squamous and basal cell carcinoma of the skin, so data are limited. This estimate is based on extrapolation from national data reported in Murad, et al.³³ Only 5 percent of skin cancers will be melanoma (this type is of greatest concern), about 75 percent will be basal cell carcinoma and 20-25 percent will be of the squamous cell variety.³³



Although anyone can develop skin cancer, the risk is greatest for people who have fair skin that freckles easily, those with red or blond hair and blue or light colored eyes. Skin cancer has been associated with the damaging effects of solar

ultraviolet radiation.³⁴ Artificial sources of ultraviolet radiation such as sun lamps and tanning booths can also cause skin cancer. Lifetime exposure to UV radiation appears to be the most important environmental risk factor for basal and squamous cell cancer. Melanoma, a very aggressive cancer that metastasizes in local tissues, is attributed to severe sunburns, especially in childhood.³⁵ Although both basal cell carcinoma and squamous cell carcinoma are much less aggressive and do not metastasize readily, if left untreated, both can deeply invade the local tissue.³⁴

From 1997 to 2001, 2,117 cases of invasive melanoma were reported in the Kansas Cancer Registry and of these, 43 percent were diagnosed in persons less than 55 years of age and 12 percent were diagnosed among persons younger than 35 years of age. Nearly 400 persons died from melanoma during these five years compared to 144 deaths due to non-melanoma skin cancers. Once it has spread beyond the skin, the five-year survival rate for melanoma is poor with fewer than 10 percent of persons alive after five years.¹¹ Early diagnosis and removal of cancer before it can penetrate into deep tissue is the best hope for preventing death.³⁴

Some experts recommend routine screening for skin cancer. Melanoma lesions are easily recognizable on light-skinned persons and either a physician or patient can do skin exams. Individuals can be taught to recognize suspicious lesions. The American Cancer Society recommends monthly self-exams for all adults with patients receiving education regarding the risk of sun exposure. In addition, ACS recommends a cancer-related checkup by a physician, including skin examination, every three years between the ages of 20 and 40, and annually for those 40 and older. Avoiding the sun between 10 a.m. and 4 p.m., covering the skin with clothing and the use of sunscreen are all ways to prevent sun exposure and the possible resulting burn.³⁴

Various observational studies have been conducted to examine the effectiveness of melanoma screening showing beneficial results.³⁵ However, no randomized controlled trials have been performed to assess screening efficacy.³⁶ In addition, differentiating between benign and cancerous melanocytic tumors during histologic examination of biopsy specimens has been seen to be unreliable even when performed by experienced professionals. This fact decreases the strength of results from studies examining screening effectiveness and also may weaken effectiveness of any screening intervention.³⁷ The USPSTF has concluded that the evidence is insufficient to recommend for or against routine counseling by primary care clinicians to prevent skin cancer (this statement updates the 1996 recommendation mentioned in the Guide to Clinical Preventive Services, Second Edition). The USPSTF has based its statement on the rationale that the evidence to determine whether clinician counseling is effective in changing a patient's behavior to reduce skin cancer risk was insufficient. USPSTF has indicated that the counseling of parents may increase the use of sunscreen for children, but there is little evidence to determine the counseling effects on other preventive behaviors such as wearing protective clothing, reducing excessive sun exposure, avoiding sun lamps/tanning beds, or practicing self-examination. In addition, USPSTF has mentioned that available evidence on potential harms of clinician counseling is insufficient.³⁸

Studies have shown that the progression of a melanoma tumor is usually associated with a prolonged horizontal growth phase during which time it does not spread into underlying dermis, providing a lead-time for early detection.

Melanoma can be treated more easily if treated before the onset of its vertical growth phase, which has metastatic potential.³⁹ The chances of the recurrence of a tumor more than 10 years after curative surgery depends on tumor thickness, as studies have shown that the probability of recurrence in 10 years is less than 10 percent with tumors less than 1.4 mm in thickness. For tumors less than 0.76 mm in thickness, the likelihood of recurrence is less than one percent in 10 years.⁴⁰

There are four types of standard treatment for melanoma, which include surgery, radiation therapy, chemotherapy and biologic therapy (immunotherapy). Factors that can affect prognosis of cancer and its treatment options include stage of melanoma, presence of bleeding or ulceration at the primary site, location and size of the tumor and patient's general health.⁴¹

There are four types of standard treatment for nonmelanoma skin cancer (basal cell carcinoma, squamous cell carcinoma), which include surgery, radiation therapy, chemotherapy and photodynamic therapy. Factors that can affect the prognosis of nonmelanoma skin cancer include stage of cancer and the type of treatment used to remove the cancer. The factors that affect the treatment options include stage of cancer, type of cancer, location and size of the tumor and the patient's general health.⁴²

References:

¹ Kansas Cancer Registry Annual Reports, Cancer incidence and mortality in Kansas 1997-2002. University of Kansas Medical Center.

² Eliminate Disparities in Cancer Screening and Management. Centers for Disease Control and Prevention. Office of Minority Health. www.cdc.gov/omh/AMH/factsheets/cancer

³ Vital Statistics Report, 2002, & Kansas Information for Communities (KIC) databases, Center for Health and Environmental Statistics, Kansas Department of Health and Environment. www.kdhe.ks.us/hci/annsumm.html, <http://kic.kdhe.state.ks.us/kic/death.html>

⁴ Kansas Behavioral Risk Factor Surveillance System, 2000,2001 & 2002 database. Office of Health Promotion, Kansas Department of Health and Environment.

⁵ U.S. Preventive Services Task Force. Screening for Breast Cancer. Recommendations and Rationale. ANN Intern Med. 2000 Sept3; 137(Part5 1):344-346

⁶ National Cancer Institute: Breast Cancer: Treatment. Last Modified 5/19/04. www.cancer.gov/cancertopics/pdq/treatment/breast/healthprofessional

⁷ Simpson JF, Gray R, Dressler LG, et al. Prognostic value of histologic grade and proliferative activity in axillary node-positive breast cancer; results from Eastern Cooperative Oncology Group Companion Study. J. Clin Oncol. 2000;18(10):2059-2069.

⁸ Cannistra SA, Niloff JM. Cancer of the Uterine Cervix. *New Engl J Med.* 1996;334(16):1030-1038.

⁹ U.S. Preventive Services Task Force, Screening for Cervical Cancer: Recommendations and Rationale.

www.ahrq.gov/clinic/3rduspstf/cervcan/cercanrr

¹⁰ National Cancer Institute: Cervical Cancer: Treatment. Last Modified 6/3/03. www.cancer.gov/cancertopics/pdq/treatment/cervical/healthprofessional

¹¹ Ries LAG, Kosary CL, Hankey BF, Miller BA, Clegg LX, Edwards BK, eds. 1999 SEER Cancer Statistics Review, 1973 –1996 (NIH Pub. No 99-2789). Bethesda, MD.

¹² Brownson RC, Reif JS, Alavanja MCR, Bal DG. Cancer. In: Brownson RC, Remington PL, Davis JR, eds. *Chronic Disease Epidemiology and Control* (2nd Ed.) Washington D.C.: American Public Health Association. 1998 pp. 333-373.

¹³ Stryker SJ, Wolff BG, Culp CE, et al. Natural History of Untreated Colonic Polyps. *Gasterenterology.* 1987;93:1009-1013.

¹⁴ Winawer SJ, Shike M. Prevention and Control of Colorectal Cancer. In: Greenwald P, Kramer BS, Weed DL, eds. *Cancer Prevention and Control.* New York: Marcel-Dekker, 1995. pp. 537-560.

¹⁵ Rimer BK, Schidkrout J. Cancer Screening. In: DeVita Jr., Hellman S, Rosenberg SA, eds. *Cancer: Principles & Practice of Oncology.* 2nd Edition. Philadelphia: Lippincott-Raven, 1997. pp. 619-631.

¹⁶ U.S. Preventive Services Task Force. Screening for Colorectal Cancer: Recommendations and Rationale. www.ahrq.gov/clinic/3rduspstf/colorectal.colorr.htm

¹⁷ American Cancer Society. Detailed Guide: Colon and Rectum Cancer. Can Colorectal Polyps and Cancer be Found Early? American Cancer Society Colorectal Cancer Screening Guidelines. www.cancer.org (accessed 10/11/04).

¹⁸ National Cancer Institute: Colon Cancer: Treatment. Last Modified 4/16/04. www.cancer.gov/cancertopics/pdq/treatment/colon/Patient

¹⁹ Schottenfeld D, Fraumeni JF Jr., eds. *Cancer Epidemiology and Prevention.* 2nd Edition. New York, NY: Oxford University Press, 1996.

²⁰ Smoking and Health. Report of the Advisory Committee to the Surgeon General of the Public Health Service. Washington DC: US Department of Health, Education and Welfare, 1965. PHS Publ No. 1103.

²¹ Gazdar AF, Minna JD. Cigarettes, sex and lung adenocarcinoma. *J Natl Cancer Inst.* 1997;89(21):1563-2565.

¹² Brownson RC, Reif JS, Alavanja MCR, Bal DG. Cancer. In: Brownson RC, Remington PL, Davis JR. eds. Chronic Disease Epidemiology and Control (2nd Ed.). Washington DC: American Public Health Association. 1998. pp. 333-373.

²² Roth, JA, Ruckdeschel JC, Weisenburger TH. Thoracic Oncology.2nd Edition, Philadelphia, PA. WB Saunders Co., 1995.

²² African-American WC. Over diagnosis: An under recognized cause of confusion and harm in cancer screening. *J Natl Cancer Inst.* 2000;92(16):1280-1282.

²³ Ahrendt SA, Chow JT, Xu LH, et al. Molecular detection of tumor cells in bronchoalveolar lavage fluid from patients with early stage lung cancer. *J Natl Cancer Inst.* 1999;91(4):332-339.

²⁴ Henschke CI, McCauley DI, Yankelevitz DF, et al. Early Cancer Action Project. Overall design and findings from baseline screening. *Lancet.* 1999;354(9173):99-105.

²⁵ National Cancer Institute: Small Cell Lung Cancer: Treatment. Last Modified 8/19/03. www.cancer.gov/cancertopics/pdq/treatment/small-cell-lung/Patient

²⁶ National Cancer Institute: Non-Small Cell Lung Cancer: Treatment. Last Modified 11/19/03. www.cancer.gov/cancertopics/pdq/treatment/non-small-cell-lung/Patient

²⁷ Ellison LM, Heaney JA, Birkmeyer JD. Trends in the use of radical prostatectomy for treatment of prostate cancer. *Eff Clin Pract.* 1999;2(5):228-233.

²⁸ National Cancer Institute: Prostate Cancer: Screening. Last modified 7/13/04. www.cancer.gov/cancertopics/pdq/screening/prostate/HealthProfessional

³⁰ U.S. Preventive Services Task Force. Prostate Cancer for Screening: Summary of Recommendations/ Supporting Documents (Release Date: December 2002. www.ahrq.gov/clinic/uspstf/uspsprca.htm

³¹ U.S. Preventive Services Task Force. Guide to Clinical Preventive Services. 2nd Edition. Williams & Wilkins. Baltimore, MD. 1996.

³² National Cancer Institute: Prostate Cancer: Treatment. Last Modified 4/16/04.
www.cancer.gov/cancertopics/pdq/treatment/prostate/Patient

³³ Murad, A, Ratner, D. Curaneous Squamous-Cell Carcinoma. N Engl J Med. 2001;344(13):975-983.

³⁴ American Cancer Society, Skin Cancer (Skincancer.pdf) www.cancer.org Accessed on 10/14/04.

³⁵ MacKie RM, Hole D. Audit of Public Education Campaign to Encourage Earlier Detection of Malignant Melanoma. BMJ. 1992;304(6833):1012-1015.

³⁶ National Cancer Institute: Skin Cancer: Screening. Last Modified 5/26/04.
www.cancer.gov/cancertopics/pdq/screening/skin/HealthProfessional

³⁷ Farmer ER, Gonin R, Hanna MP. Discordance in the histopathologic diagnosis of melanoma and melanocytic nevi between expert pathologists. Hum Pathol. 1996;27(6):528-531.

³⁸ U.S. Preventive Services Task Force. Counseling to Prevent Skin Cancer: Recommendations and Rationale. www.ahrq.gov/clinic/2rduspstf.skcacoun/skcarr.htm

³⁹ Friedman RJ, Rigel DS, Kopf AW. Early Detection of malignant melanoma. The Role of Physician Examination and Self-Examination of the Skin. CA Cancer J Clin. 1985;35(3):130-151.

⁴⁰ Blois MS, Sagebiel RW, Abarbanel RM, et al. Malignant Melanoma of the Skin. The Association of Tumor Depth and Type, and Patient Sex, Age and Site with Survival. Cancer. 1983;52(7):1330-1341.

⁴¹ National Cancer Institute: Skin Cancer: Treatment. Last Modified 5/19/04.
www.cancer.gov/cancertopics/pdq/treatment/skin/Patient

⁴² National Cancer Institute: Skin Cancer: Treatment. Last Modified 5/17/04.
www.cancer.gov/cancertopics/pdq/treatment/melanoma/Patient

Appendices

to the

Comprehensive

Cancer Control and

Prevention Plan

The Phase I Plan-

The Kansas Cancer Control Plan Part I was published in April 2002, the culmination of two years of work by the Kansas Cancer Partnership. The partnership was convened at the request of the Kansas Department of Health and Environment (KDHE) and was charged with the task of developing a comprehensive cancer control plan for the state. The 70-member partnership with representatives from organizations and agencies across the state, identified five key strategies to accomplish its mission:

- Foster collaboration for primary, secondary and tertiary/palliative care, thereby reducing duplication of services and optimizing resources
- Identify gaps in services and optimizing resources
- Reduce disparities in cancer screening and management
- Enhance access to quality treatment and support services
- Identify and implement priorities and strategies to evaluate outcomes

The planning process began in the summer of 1999, with the partnership defining its tasks and procedures including priority cancer areas and cross-cutting issues to focus on. Workgroups were formed around the six specific cancer areas selected based on frequency and severity of the disease and availability of prevention and early diagnosis that could reduce morbidity and mortality:

- Lung
- Skin
- Colorectal
- Breast
- Cervical
- Prostate

The groups were presented with the clinical and epidemiological characteristics of cancer and the research needed to understand the unmet public health problems. In addition, the initial planning process defined the key cross cutting issues that would need to be addressed for both specific cancers and cancer care:

- Disparity – difference in the burden of disease or access to services whether based on age, sex, race, ethnicity, geography, income and other measurable factors;
- Data - ability to measure disease morbidity and mortality, access to care, and effectiveness of intervention;
- Education – knowledge and training needed by both patients and health care professionals to adequately manage cancer and cancer risk;
- Prevention – the reduction of cancer incidence through risk factor reduction;
- Diagnosis and Treatment - timely disease detection followed by prompt delivery of the best available therapeutics;
- Recovery – the psychosocial and economic reintegration of persons with cancer back into normal life following treatment;
- Palliation – non-curative (mitigating) therapy intended to improve the quality of life and functional capabilities of persons living with cancer;
- Policy and resources – societal decision making and allocation of money to ensure that cancer risk, occurrence, suffering and death are minimized for all Kansans; and
- Research – creation of new knowledge and new tools for cancer risk reduction and cancer care.

Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
2004											
Kickoff Conference March 3-4	Progress Reports Provided April 16	Workgroup Meetings March-June	Partnership Reporting & Conference June 29-30	Draft Plan reviewed by CCC Steering Committee September	Partnership Review Draft Plan November 16						
2005											
Kickoff for CCC Plan March 2005	Statewide listening tours conducted to garner community buy-in and state implementation	Plan implementation begins	CCC Conference to review implementation process	Develop web site for cancer patients/survivors including location of clinical trials	Ten communities will be working on clean indoor air ordinances						
Submit CCC Implementation Application to CDC March 2005	Begin work on patient navigator/ medical advocate program for cancer patients	Sept. 2005	Sept. 2005	December 2005	December 2005						
	April 2005	July 2005	October 2005	Develop provider data collection tool for screening services	December 2005						
	Application to CDC March 2005	Fall 2005	Institute cancer questions in BRFSS	Fall 2005	Fall 2005						
			Ongoing 2005								
2006											
Collect data from facilities/sources about screening & treatment	Survey nursing and med. schools to determine end of life and survivorship cancer care & coordinate curriculum with KMS and Brd of Nursing	Begin Comprehensive Media Campaign for CCC-including theme of "Quality cancer care in Kansas-Close to Home"	Support school wellness policy as required by CDC	Three communities implement tobacco cessation programs	Coordinate with health care providers to increase enrollment in screening trials						
	January 2006	June 2006	July 2006	July 2006	December 2006						
Increase awareness of clinical trials and work for insurance coverage	January 2006	June 2006	Partner organizations develop plan to increase resources dedicated to cancer risk	Initiate continuing education for providers	Update materials for cancer screening						
			June 2006	December 2006	December 2006						

Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
2007											
Advocate to Legislature to mandate colorectal screening & increase funding for services January 2007	Develop a statewide information exchange session for survivorship January 2007	Raise cigarette tax to \$1.25 per pack May 2007	Begin implementation of education effort in 10 Kansas communities June 2007	Develop speaker's bureau August 2007	Develop speaker's bureau August 2007	Ten schools/ communities enact policies to support UV protection Nov./Dec. 2007	Ten schools/ communities enact policies to support UV protection Nov./Dec. 2007				
Educate & inform Legislature & Congress on issues of insurance, uninsured, Medicare, clinical trials, medical advocacy and other issues January 2007	Begin collection of data from BRFSS and other sources June 2007	Explore tax credit to businesses based on programs for cancer survivors 2007	Enter partnership with worksite to implement cancer program December 2007	Explore tax credit to businesses based on programs for cancer survivors 2007	Explore tax credit to businesses based on programs for cancer survivors 2007	Finalize study to assess quality of screening services December 2008	Finalize study to assess quality of screening services December 2008				
2008											
Educate & inform Legislature & Congress on issues of insurance, uninsured, Medicare, clinical trials, medical advocacy and other issues January 2007	Begin dissemination of cancer prevention strategies to health professionals June 2008	Five communities implement regs requiring radon mitigation in new construction June 2008	Ten schools enact changes in availability of vending machine foods August 2008	Ten schools enact changes in availability of vending machine foods August 2008	Ten schools enact changes in availability of vending machine foods August 2008	Finalize study to assess quality of screening services December 2008	Finalize study to assess quality of screening services December 2008				
2009											
Educate & inform Legislature & Congress on issues of insurance, uninsured, Medicare, clinical trials, medical advocacy and other issues January 2007	Begin dissemination of cancer prevention strategies to health professionals June 2008	Five communities implement regs requiring radon mitigation in new construction June 2008	Ten schools enact changes in availability of vending machine foods August 2008	Ten schools enact changes in availability of vending machine foods August 2008	Ten schools enact changes in availability of vending machine foods August 2008	Finalize study to assess quality of screening services December 2008	Finalize study to assess quality of screening services December 2008				
2010											
Educate & inform Legislature & Congress on issues of insurance, uninsured, Medicare, clinical trials, medical advocacy and other issues January 2007	Decline in tobacco use to 15% for adults and 10% for youth by 2010	Update cancer screening curriculum in medical and nursing schools December 2010	Twenty communities working on ordinances prohibiting secondhand smoke in the workplace December 2010	Twenty communities working on ordinances prohibiting secondhand smoke in the workplace December 2010	Twenty communities working on ordinances prohibiting secondhand smoke in the workplace December 2010						

ISSUES SURROUNDING CANCER

The Kansas Cancer Partnership was united in its quest to approach the issue of cancer control in a comprehensive and directed manner. The need for action and opportunity exists. Workgroups discussed the continuum of care of the six identified cancers (listed in alphabetical order) by identifying the issue perceptions. These six cancers constitute 60 percent of the cancers in Kansas.

Issues of disparity, data, education, policy, resources and research exist for breast, cervical, colorectal, lung, prostate and skin cancer as well as other cancers.

End of life issues are a concern for cancer patients. Hospice services are not fully utilized, especially by low-income populations. Little data exists to measure the quality of life and care among patients dying of cancer. Many of these persons have not prepared end of life directives and too few cancer patients receive a hospice referral from their clinical care provider. Cancer pain is not being well controlled for many persons who are dying of the disease. Insufficient resources are directed into research for improving the end of life for persons dying of cancer.

Breast Cancer -

- Prevention - Many deaths due to breast cancer are preventable and disparity issues such as access to care and the latest research are disproportionately worse in some populations than others (e.g. age, race, disability, geographic location, socio-economic status). Barriers arising from differences in culture, language and literacy affect screening and early detection in many populations. Awareness and education continues to be needed to educate women about breast cancer. Risk reduction should be done by health care providers.
- Screening - Individuals who are underinsured, self-employed, have high insurance deductibles or are Medicare patients without Part B coverage for provider services often do not receive preventative breast cancer screening tests. More screening in remote and underserved areas of the state is needed.
- Treatment - Monitoring and quality improvement of diagnostic and therapeutic services is required to ensure cancer is detected with the least risk and breast cancer morbidity and mortality is reduced.
- Survivorship - Recovery following breast cancer therapy that reintegrates persons into family, society and the workplace is deficient.

Cervical Cancer -

- Prevention – Cervical cancer is a highly preventable disease and public awareness of the possible risk factors, such as sexual behavior, HPV and smoking is lacking. Risk factors are greater in some racial/ethnic groups and for those with low incomes.
- Screening – Screening for cervical cancer is not fully utilized as a tool for preventing premature death and services to persons with low incomes remains a problem.
- Treatment – Cervical cancer is a treatable and curable disease, however barriers arising from differences in culture, behavior, socioeconomic status and literacy affect access to services.
- Survivorship – Recovery and survivorship issues for women with cervical cancer still exist and must be addressed.

Colorectal Cancer-

- Prevention - Factors for preventing colorectal cancers like many others, include consumption of fruit and vegetables and physical activity to maintain a healthy weight. Educating the public in that regard is a critical need. In addition, data to evaluate the effectiveness of health interventions is needed.
- Screening - Colorectal cancer is highly treatable with early screening methods but those services often are not accessed by patients or promoted by health professionals. Incidence rates for colorectal cancer tend to be worse in certain gender and age groups. Mandatory colorectal screening should be a requirement of insurance coverage.
- Treatment - Primary care providers may not refer colorectal cancer patients for dietary counseling and weight reduction as often as they should. Reimbursement to health care providers for education and/or counseling is needed. Patients are not consistently provided information about the availability of clinical treatment trials.
- Survivorship - Rehabilitation following colorectal cancer treatment needs to be part of patient management. Therapeutic options for treating advanced colorectal cancer are very limited and new research is needed to improve survival.

Lung Cancer-

- Prevention - Lung cancer is a preventable disease currently caused mainly by tobacco use and exposure. The prevalence of smoking is disproportionately higher among some populations and minority groups are targeted by the tobacco industry. The understanding of the effects of secondhand smoke and tobacco use is limited by inadequate health survey data. Local policies for smoke-free workplaces, schools and clean indoor air are inadequate and compliance to and enforcement of underage tobacco purchase laws is lacking. Resources have not been identified to conduct a comprehensive tobacco use prevention statewide program and local cessation courses need to be identified. A lack of funding exists for identifying radon gas exposure among populations at risk. There is inadequate compliance for occupational and household exposure hazards (asbestos). A comprehensive statewide data system for radon levels is needed. Surveillance systems are inadequate for providing local level data and data on minority populations. Public awareness programs about the dangers of radon exposure are limited. Inadequate radon testing and remediation exists in geographic areas prone to high levels of radon gas. Requirements for testing and remediation of radon exposure in new construction are too lenient.
- Screening - Screening for lung cancer is lacking and currently no early detection screening method is preferable. New screening tests are needed for early detection. Radon testing is available, however, education required to inform the public, especially among smokers, on who should have tests done and when it is needed.
- Treatment - Treatment for lung cancer is often radical and involved since cancer is often detected at a late stage. Access to quality care and treatment in the state is available, but often not used efficiently and effectively.
- Survivorship - Recovery following lung cancer therapy that reintegrates persons into family, society and the workplace is deficient.

Prostate-

- Prevention - Prevention of prostate cancer is not possible at this time because the cause has not been identified.
- Screening - The general public is not sufficiently educated about prostate cancer and the risks and benefits of screening. The U. S. Preventative Services Task Force concludes that the evidence is insufficient to recommend for or against routine screening for prostate cancer using the prostate specific antigen testing (PSA) or digital rectal examination. The opportunity to receive prostate cancer screening is not offered to all men in the appropriate age or racial/ethnic group likely to benefit from early detection.
- Treatment - Patients lack knowledge of the options available for treatment and recovery. Equal access to treatment services is not ensured. Economic and disparity barriers prevent some patients from receiving treatment. Many patients lack awareness of available research protocols for secondary prevention or treatment of prostate cancer.
- Survivorship - Recovery and survivorship issues for men with prostate cancer exist and must be addressed.

Skin Cancer-

- Prevention - Skin cancer is preventable by limiting sun exposure and educating the public on the dangers of UV exposure. However, high rates of skin cancer among whites make it a population with disparate needs especially in rural and medically underserved communities. Basal cell and squamous cell carcinomas are not reportable to the Kansas Cancer Registry unless occurring on the lip of the face or in the genital area. Melanoma is believed to be substantially under reported, making it difficult to determine the full extent of the problem and how to prevent the disease. Little data exists regarding the behavioral risk of Kansans for sun exposure and the use of UV protective devices. Much of the public is either unaware or unconcerned about the risk of UV light exposure and needs education on skin cancer screening guidelines. Large gaps exist in the knowledge related to preventing skin cancer including research in the field and inadequate data collection systems. Large numbers of Kansans may not be screened for skin cancer by their health care provider.
- Screening - A shortage of dermatologists in some areas of the state may contribute to the lack of early detection and screening for skin cancer. Patients may not receive routine skin examinations. Data is insufficient as to most types of skin cancer, since only melanoma is reported in the Kansas Cancer Registry.
- Treatment - Many providers do not incorporate skin examination as part of the routine preventive care procedures. Many persons lack awareness or opportunity for access to research protocols and clinical trials that may be of benefit. Access to health care may pose special problems for non-white races and Hispanic white populations when skin cancer occurs.
- Survivorship - Little information is available on survivorship issues for skin cancer patients.

Prevention Action Steps—

This section of the report further expands on actions steps that are tied to the Action/Outcomes outlined in the Prevention Section.

Action/Outcome A-1: *Implement a comprehensive and collaborative prevention education effort*

Action Steps:

- 1) By June 2007, have available information on the Prevention Works Kansas website, www.preventionworksksansas.org to document the link of physical inactivity and chronic disease and provide strategies to increase physical activity. Identify the burden of obesity, document the link between obesity and chronic disease, inventory current best and promising practices to address obesity, develop a media campaign and link the campaign to Prevention Works Kansas website.
- 2) Identify target communities and appropriate partners using available and appropriate data and community interest. Convene community partners to develop a plan. Identify funding sources to support action. Develop and adopt an educational plan, including point-of-decision education. Evaluate impact of effort.
- 3) Increase public awareness, including real estate agents, landlords, title companies, construction companies, and building inspectors, of the dangers of radon exposure in the home and provide education on methods to measure and control radon levels and asbestos exposure. By June 2007, at least 10 communities in Kansas will have implemented comprehensive and collaborative education efforts on methods to measure and control radon levels. Identify target communities using appropriate available data and community interest. Convene potential groups in those communities to develop a plan. Identify funding sources to support action. Develop and adopt an educational plan, utilizing evidence-based strategies when available, that includes information on the confounding effects of radon and tobacco exposure. Evaluate impact of effort.

Action/Outcome A-2: *Coordinate media education awareness campaigns*

Action Steps:

- 1) Review tobacco-related media objectives by June 2005, including available campaigns and funding at state and local levels, with the Tobacco Free Kansas Coalition Communications Committee and provide a summation of efforts. Develop a proposed schedule, media messages, and funding collaboration by June 2006 to ensure consistent tobacco-related messages, to avoid overlap, and to provide leveraging opportunities between state and local efforts.
- 2) Improve dissemination of UV index throughout the state by 2006 (television, radio, point-of-activity sites such as state fairs, pools, and parks). By 2007, at least 10 schools and/or communities will have enacted policies that will promote strategies to support environmental and personal protection from UV exposure and 10 sites will have enacted policies/procedures that implement daily UV index. Catalog current daily UV index efforts in the State of Kansas. Identify target

communities and/or facilities using available and appropriate data and community interest. Provide technical assistance to develop and implement a system that implements dissemination of daily UV index, develop a system to document enactment of UV index dissemination policy and will develop an evaluation plan.

Action/Outcome B1: *Systematic dissemination of CA prevention strategies to KS Health Professionals*

Action Step:

- 1) Identify current dissemination structures of health care information to Kansas health professionals and identify gaps in current health care curricula by 2006. Develop or improve current structure to assure dissemination of cancer prevention strategies by 2007. Develop criteria for determination of scientifically accurate cancer prevention information sources. Determine current credible sources for scientifically accurate cancer prevention information. Evaluate structure by 2008 to assure that information is disseminated to health professionals throughout the state of Kansas.

Action/Outcome C1: *Implement school and community level policies that promote health*

Action Step:

- 1) Provide technical assistance to foster development and maintenance of local coalitions with health and wellness orientation during 2006. Provide data to support coalition activities, develop a system to document enactment of policies by 2007.

Action/Outcome C2: *At recommended funding levels, conduct comprehensive tobacco use prevention*

Action Step:

- 1) Identify at least three communities, that have made significant progress in planning for and implementing tobacco control programs, for additional prevention and cessation efforts by the end of 2006. Identify state and local partners for continuing comprehensive tobacco control policies and programs. Disseminate health and economic impact of tobacco control programming. Advocate with state policymakers for additional funding of comprehensive tobacco control programming across Kansas by 2010.

Action/Outcome C3: *Increase community smoke-free policies*

Action Step:

- 1) Provide public policy technical assistance to communities involved in KDHE Enhancement and CDRR programs to reduce tobacco use to provide a baseline for clean indoor air efforts. Identify communities with a mobilization and educational capacity for advancing clean indoor air policy change. Provide or look for additional resources to assist with developing and passing ordinances to reduce exposure to secondhand smoke.

Action/Outcome C4: *Increase excise taxes on cigarette and tobacco products*

Action Step:

- 1) Identify potential partners by 2006 and monitor tobacco tax increases, particularly in surrounding states. Provide estimates for lives saved and increased revenues due to tobacco tax increases. Develop communications linkages on reducing tobacco consumption through increased prices. Cultivate legislative champions to promote tobacco tax increases. Educate grassroots organizations on the importance of reducing tobacco use by steadily increasing tobacco prices. Link the funding of tobacco control programs, particularly cessation and prevention, to revenues from tobacco taxes.

Action/Outcome C5: *Increase tobacco cessation programs*

Action Step:

- 1) Develop a system of providing information and resources for community coalitions and health agencies and health professionals in Kansas. Develop additional funding by 2006 to support media campaigns for the Kansas Quit Line. Provide information on effective and proven program materials to university health programs for use in training new health professionals on tobacco cessation strategies. Identify specific proven programs addressing cessation needs for minority populations, blue collar workers, pregnant women, and rural populations. By 2007 KDHE will provide for a system of monitoring and evaluating cessation programs currently being implemented.

Action/Outcome C6: *Implement dietary school policies closer to cancer prevention recommendations*

Action Step:

- 1) Review the School Health Index results during year one to identify schools with documented need and interest. Inventory best and promising practices for schools, visit with schools that have successfully implemented programs in and out of state; develop a school toolkit that includes clear messages regarding diet and health and diet and cancer; identify a pilot school; develop an implementation plan and implement.

Action/Outcome C7: *Develop best practice guidelines resource for worksites*

Action Step:

- 1) Inventory best and promising practices for worksites during 2006, visit with worksites that have successfully implemented programs in and out of state, develop a worksite toolkit, identify a pilot worksite, develop an implementation plan and implement during 2007.

Action/Outcome C8: *Implement community level UV protection strategies*

Action Step:

- 1) By 2006 inventory best and promising evidence-based practices for worksites and outdoor venues, visit with sites that have successfully implemented programs in and out of state. Develop a worksite/recreation toolkit, identify a pilot worksite, develop an implementation plan by 2007 and implement. Evaluate and track worksites, schools, and recreational facilities that implement policies in 2008.

Action/Outcome C9: *Increase radon mitigation policies in new construction*

Action Step:

- 1) Identify target communities using available and appropriate data and community interest by 2006. Convene potential community groups to develop a plan to educate policy makers of the need for radon mitigation in all new construction. Inventory current community regulations regarding radon in Kansas and nationally. Advocate for state implementation of a requirement for certification of all radon testers and mitigation technicians and implementation of a community regulation requiring mitigation system in all new construction.

Action/Outcome D1: *Increase resources for cancer risk reduction*

Action Step:

- 1) Convene a working group by October 2005 of potential partners; assess current investment in cancer prevention by examining direct funding, personnel dedicated to prevention, and program expenses. Identify overlap, repetition and deficits. Develop and adopt a collaborative plan that utilizes the resources in tandem by 2006.

Action E-1: *Implement state cancer prevention surveillance system*

Action Steps:

- 1) By June 2007, have in place policies and procedures to ensure collection of radon utilizing scientific method and random sampling for 10 counties in Kansas. Review current data collection policies and procedures for known environmental carcinogens. Review Kansas Cancer Registry to identify any existing projects related to environmental carcinogens. Develop policies to ensure regular collection of the appropriate data. Identify and assist with the application of funding as necessary to assist in the implementation and maintenance of the environmental carcinogen database. Evaluate and implement appropriate programming as necessary related to elevated environmental carcinogen exposure.
- 2) Review BRFSS modules and develop policies to ensure regular collection of the appropriate information that will provide the necessary data. Coordinate with KS State Department of Education to discuss current procedures and policies for collection of YRBS data on diet, physical activity, and weight. Partners develop a proposed approach to increasing the number of Kansas youth who complete the YRBS and promote its adoption. Meet with the Kansas School Nurses Association to determine how they might assist in increasing the number of students for whom we have accurate height and weight measurements.

Resources and web sites-

For more information about cancer the following is a partial list of web sites for the Kansas Comprehensive Cancer Control and Prevention Plan:

For information from the Kansas Cancer Registry:
www.kdhe.state.ks.us/bhp/public_health_assessment.html

For information by cancer control topic:
www.cancercontrolplanet.gov

For information from the American Cancer Society:
www.cancer.org

For information from the Center's for Disease Control:
www.cdc.gov

For information from the National Cancer Institute:
www.cancer.gov
Or call 1-800-4-Cancer

For information if you are a cancer patient:
www.cancercare.org

For information about chronic disease prevention and control at the state and national level:
www.chronicdisease.org

For information about cancer prevention in Kansas:
www.preventionworksksansas.org

For information about KU Medical Center:
www.kumc.edu

For cancer information in Kansas City:
www.kccancer.info

For help in understanding cancer:
www.mydna.com

For cancer survivorship- the Lance Armstrong Foundation educational program:
www.livestrong.org

Support services to educate and empower men to be effective caregivers when breast cancer strikes a female loved one:
www.menagainstbreastcancer.org

Living initiatives for end-of-life care:
www.lifeproject.org

Kansas Comprehensive Cancer Partnership

American Association of Retired Persons, **Ernie Kutzley**, Advocacy Director

American Cancer Society, **Stephanie Weiter**, Regional Vice President

Deb Parsons, Regional Director

Connie Rundel

American Lung Association of Kansas, **Judy Keller**, CFRE, Executive Director

Blue Cross/Blue Shield, **Carol Badsky**, ARNP

C-Change, National Dialogue on Cancer, **Cherri McGrew**

Coffeyville Regional Medical Center, **Sylvia Drews**, Director of Outpatient Services

Community Clinical Oncology Program-Wichita, **Marge Good**, RN, BSN, MPH, OCN

Cotton-O'Neil Clinic, Topeka, **Anita Leonard**, RN

Governor's Office, **Adam Obley**, Special Advisor

Hill's Pet Nutrition, Inc., **Lyn Huffaker**, DVM, PhD

Midland Hospice Care, **Karren Weichert**, President/CEO, KHPCO

Kay Fiedler

National Cancer Institute's, Cancer Information Service, **Amy Gaier**

Sharon Turner

Hope Krebill, RN, BSN, MSW

Hynes Memorial Hospice, **Tom Welk**

Kansas Association of the Medically Underserved, **Karla Finnell**, JD, MPH, Executive Director

Denice Curtis, DDS, MPH, Director of Clinical Services

Kansas Academy of Family Physicians, **Carolyn Gaughan**, CAE, Executive Dir.

Kansas African-American Affairs Commission, **Daniel Dempsey-Swopes**, J.D.

Kansas Cancer Registry, **Sue-Min Lai**, PhD, Director

Kansas Dietetic Association, **Peter Beyer**, MS, RD

Janice Harris, PhD, RD, LD

Melinda Pine, RD, LD, CNSD

Kansas Foundation for Medical Care Inc., **Diane Bender** and **Jeanne Bridgewater**

Kansas Insurance Department, **Barbara Torkelson**, Accident & Health Policy Examiner

Kansas Department of Health and Environment (KDHE), Office of Health Promotion

Dorothy Frager, MSW, Health Educator

Cindy Hasvold, RN, BSN, Public Health Nurse

Misty Jimerson, MS, Program Manager

D. Charles Hunt, MPH Sr. Epidemiologist

Jan Lyle, RN,BS, Nurse Consultant

Paula Marmet, MS, RD/LD, Office Director

Janet Neff, BS, Program Director

Patrice O'Hara, BA, Program Manager

Julia Francisco, Program Director

Deborah Williams, MPA, MPH, Program Director

Cindy Winters, BA, Program Manager

Ghazala Perveen, PhD, MPH, Health Officer

Melissa Schoenberger, Outreach Coordinator

KDHE, Office of Local and Rural Health, **Chris Tilden**, PhD, Interim Director

K-State Research and Extension, **Mary Meck Higgins**, PhD, RD, LD, CDE

KU Medical Center, **Gary Doolittle**, MD, MPH

John Neuberger, DrPH, MPH, MBA

Allen Greiner, MD, MPH

Aimee James, PhD, MPH

KU School of Medicine, Wichita, **Judy Johnston**, MS, RD,LD

LIFE Project Foundation, **Donna Bales**, President/CEO

Mt. Carmel Regional Medical Center, **Debra Davidson**, MSA, MS, Cancer Center Director

Salina Regional Health Center, Tammy Walker Cancer Center,

Kathleen Craig, RN,MSN,ARNP, Cancer Outreach Coordinator

St. Francis Health Center, Topeka, **Elizabeth Bessette**, RN, MS

Susan G. Komen Breast Cancer Foundation, **Terry Burnett** and

Peggy Johnson, Wichita Medical Research & Education Foundation, Executive Director

Tobacco Free Kansas Coalition, Inc., **Mary Jayne Hellebust**, Executive Director

United Methodist Mexican American Ministries, **Shelly Nelson**, RN

Via Christi Cancer Center, **Annette Lindal**, RN, MM, OCN(R)

Via Christi Regional Medical Center, **Patti Moser**, RN, MPH, BSN, OCN (R)

Wyandotte County Health Department, **Heidi Weicken**, RN