Nebraska Comprehensive Cancer Control

State Plan



2004 - 2010

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Nebraska Health and Human Services System

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Core Planning Team

The Nebraska Comprehensive Cancer Control Core Planning Team guided the development of the Nebraska Comprehensive Cancer Control Statewide Partnership and the creation of this plan. During the pre-implementation phase of developing Nebraska's Comprehensive Cancer Control Program, the Core Planning Team changed its focus from planning to implementation and now is the Nebraska Comprehensive Cancer Control Advisory Committee. Core Planning Team members recognized for their commitment to comprehensive cancer control are as follows:

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Nebraska Comprehensive Cancer Control Statewide Partnership

The process of developing this plan brought together many people and organizations to examine, very broadly and in a concerted effort, the need for improving cancer prevention and control in Nebraska. The Nebraska Comprehensive Cancer Control Statewide Partnership (NCCCP) served as the driving force in developing Nebraska's cancer plan. The partnership expanded from 72 partners at the beginning of the partnership in July 2002, to 130 partners representing nearly 100 groups and organizations in 2004. The members of the partnership who generously gave of their time and talent are listed below.

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DEDICATION

The Nebraska Comprehensive Cancer Control Plan is dedicated to the people of the state whose lives have been touched by cancer.

Working in partnership, we will conquer cancer in Nebraska!

Nebraska Comprehensive Cancer Control State Plan

2004-2010

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INTRODUCTION

Comprehensive Cancer Control

The National Comprehensive Cancer Control Program is an integrated, coordinated approach to reducing the impact of cancer that includes monitoring, policy, research, education, programs, services, and evaluation. The Centers for Disease Control and Prevention (CDC) funds states, territories, and Native American tribes to develop public-private coalitions or partnerships. These partnerships bring together interested and involved groups and individuals to maximize use of existing resources and identification of new resources. Today, 51 entities (states, territories or tribes) across the country are receiving planning or implementation funding from CDC for comprehensive cancer control.

History of Nebraska's Comprehensive Cancer Control Program

Nebraska's Comprehensive Cancer Control Program follows this national model as an integrated, coordinated approach to cancer control. Nebraska was one of seven states to receive a planning grant from CDC in 2001. A small group of individuals interested in cancer control came together to write the grant application and then remained together to form the Core Planning Team. This group invited others to join the Nebraska Comprehensive Cancer Control Statewide Partnership. From an initial 60 invitations to individuals and/or organizations, this Partnership has grown to nearly 130 persons representing 100 groups and organizations across Nebraska. The Partnership consists of cancer survivors and their families, health care professionals, legislators, educators, administrators, program directors and staff, representatives of local and state health departments, state associations, and others involved with or interested in cancer control. The American Cancer Society and the National Cancer Institute Cancer Information Service are two key partners. The 12 Nebraska Cancer Centers approved by the American College of Surgeons Commission on Cancer are other key partners.

The Partnership met as a single entity and as distinct task groups between August 2002 and October 2003 to review cancer burden information, identify cancer issues for Nebraska, establish goals and set strategies to include in a Comprehensive Cancer Control Plan. The Partnership convened an expert treatment panel to discuss specific cancer treatment issues. The American College of Surgeons Commission on Cancer, the American Cancer Society, Heartland Division and the Partnership also held a meeting of the 12 accredited Cancer Centers that collectively serve nearly 85% of Nebraska's cancer patients.

The Partnership used the CDC guidelines and building blocks as well as information from other states to foster plan development. (See Building Blocks in Appendix D.) This State Plan is the result of input from the Partners and others across Nebraska who brought their talents, time and concern to the planning table.

Purposes of the Nebraska Comprehensive Cancer Control State Plan

The Nebraska Comprehensive Cancer Control State Plan has the following purposes:

To provide an overview of the cancer burden and status of cancer control in Nebraska

To report on the results of the planning process used to identify problems, establish priorities and develop strategies to better control cancer in the future

To provide an improved quality of life for those affected by cancer in Nebraska

To foster the development of relationships which Support cancer control activities

To build upon the resources and the commitment of Statewide Partners implementing cancer control strategies

Nebraska Comprehensive Cancer Control Statewide Partnership's Vision and Mission Statements

The *vision* of the Nebraska State Plan is that the human suffering and economic burden from cancer will be greatly reduced for Nebraska citizens.

The *mission* of the Statewide Partnership is as follows:

The Nebraska Comprehensive Cancer Control Partnership is a network of public and private groups and organizations working together toward the development and implementation of innovative actions plans to reduce the impact of cancer on the people of Nebraska.

EXECUTIVE SUMMARY

- Cancer will claim the lives of 3,300 people who live in Nebraska this year.
- More than 8,000 people who live in Nebraska will be diagnosed with cancer this year.
- Some 50,000 people in Nebraska are living with cancer or are now cancer-free.
- Cancer is currently the *second leading cause* of death among people who live in Nebraska and is the **leading cause of death** among those under the age of 75.
- Four sites account for almost 60% of all cancer diagnoses: lung, breast, prostate and colon/rectum.
- As people age, they become more at risk for cancer.

Cancer affects the lives of most people in Nebraska. It is the leading cause of death in Nebraska among people under the age of 75; overall, it is the second leading cause of death for persons of all ages. Cancer is also the leading cause in Nebraska of years of potential life lost, e.g. one measure of premature death. Cancer can strike regardless of age, gender, nationality, race or ethnicity. It is estimated that 50,000 people in Nebraska who were once diagnosed with cancer are now living with cancer--or are cancer-free. As people age, they become more at risk for cancer. Between 1997 and 2001, 62% of people who live in Nebraska diagnosed with cancer were 65 years and older while less than 1% were under 15 years of age. Four cancer sites account for nearly 60% of all cancer cases. These sites are lung, breast, prostate, and colon/rectum. Many of these cancers are preventable. Others are treatable when discovered early. The good news is that with improved diagnostic and treatment options, pain management, and supportive care, more people with cancer are living productive lives.

Some population groups are at higher cancer risk due to socioeconomic status, age, gender, race, ethnicity or other factors. White women, for example, are at higher risk of breast cancer than other women are and African American men are at higher risk of prostate cancer than other men. Studies have shown that some population groups do not receive the same diagnostic and treatment opportunities afforded to others. These health care disparities must be addressed nationally and in Nebraska. The number one goal in the Nebraska State Plan is the elimination of cancer disparities.

The Centers for Disease Control and Prevention (CDC) recognized that most states did not have adequate infrastructures or programs to support cancer control beyond existing programs directed primarily at breast and cervical cancer early detection and treatment (Nebraska's Every Woman Matters Program.) Also recognizing the value of public-private partnerships and potential funding challenges, CDC established the National Comprehensive Cancer Control Program.

Nebraska received funding from the Centers for Disease Control National Cancer Prevention and Control Program to establish a state Comprehensive Cancer Control Statewide Partnership and develop a State Plan. The Statewide Partnership currently comprised of 130 Partners representing 100 groups and organizations brought their talents, time and concern to the planning table and worked to complete this State Plan over the past eighteen months. The Partners selected six priority goals and 12 strategies (two per goal) from more than 60 identified strategies that are being implemented during 2004-2005. (See Nebraska Goals and Strategies for 2004-2005 in the Appendix .) The Partners also designed a logo which they believe conveys the care and concern they have for persons with cancer and their families as well as the action-orientation that cancer control includes--Cancer Awareness, Research, Education and Service. The logo will be incorporated into many of the priority strategies for 2004-2005 as a visual reminder of Nebraska's cancer burden and the steps that are being taken to substantially reduce that burden for Nebraska residents.

The Plan is intended to foster relationships among many who are currently working to control cancer in Nebraska. It is intended to build upon existing resources and identify new resources to implement and enhance cancer control strategies. The Plan is a living document that will be re-assessed annually. Goals may be added and strategies selected that Partners may support through ongoing activities. The Statewide Partnership continues to add Partners to address these strategies. While the ultimate goal is to reduce cancer incidence and mortality, the Partners recognize that other shorter-term measures can be used effectively to measure progress and commitment. An Evaluation Committee has been established to ensure that evaluation strategies are selected and implemented to measure ongoing progress.

The Comprehensive Cancer Control Program is currently funded by the CDC and the Partners. No state funding is sought at this time; however, other legislative and political strategies may be implemented to improve access (e.g. insurance coverage), increase awareness of cancer burden or promote cancer specific control activities.

The Partners believe that the successful implementation of this Plan will depend on widespread visibility and awareness of the Plan throughout Nebraska. The plan will be promoted through an initial, public event, media coverage, and addition of new Partners. The Partnership will distribute the Plan to interested parties, potential Partners and policy makers, including members of the Nebraska Legislature. The Partnership seeks to add active, interested committed members. *If you want to become involved with the Partnership, complete the "Join the Partnership" form included in the Plan.* There is a need for the public, decision-makers and Partners to be aware of progress made on an ongoing basis. An annual review of progress will be conducted by the Partnership and reported widely along with any changes in the plan based on the progress review. Nebraska CARES--Cancer Awareness, Research, Education and Service. Together, we can make a difference!

The Burden of Cancer in Nebraska



THE BURDEN OF CANCER IN NEBRASKA

Nebraska Demographics

Nebraska is the fifteenth largest state in the nation, with an area of 77,227 square miles. The state spans nearly 500 miles from east to west and approximately 250 miles from north to south. Its two largest cities are Omaha, a center of the food-processing, insurance and telecommunications industries, and Lincoln, the state capital and site of the University of Nebraska's largest campus. Most of the rest of the state is devoted to agriculture and livestock production and is sparsely populated. Population density as reported by the 2000 U.S. Census was 22.3 persons per square mile compared to the United States population density of 79.6 persons per square mile.

According to the 2000 Census, Nebraska's population count was 1,711,263, an 8.4% - increase over the 1990 Census. Nebraska's demographic profile is becoming increasingly middle-aged and elderly, and this trend should continue well into the future. The Census Bureau projects that Nebraska's 45+ age group will grow to nearly 800,000 by 2020 when two of every five residents will be at least 45 years of age. This combination of an aging population with an age-related risk of cancer assures that, without greater and more effective prevention efforts, cancer will afflict an increasing number of Nebraska residents in the future.

One of Nebraska's most distinguishing features is its prominent rural character. Eleven of the 93 counties have fewer than 1,000 residents; median county population in 2000 was 6,601. Only six counties are considered part of a Metropolitan Statistical Area; the remaining 87 counties contain nearly half (47.4%) of the state's total population.

Although once thought of as homogeneous, Nebraska's population is becoming increasingly racially and ethnically diverse. Nebraska's Hispanic population nearly tripled during the last decade. Six counties (Colfax, Dakota, Dawson, Hall, Morrill and Scottsbluff) report 10% or more of their residents as Hispanics. African Americans, living primarily in Omaha, represent the largest racial minority group; they account for about 14% of Omaha's population and 5.7% of the state's population. Nebraska's Asian American population, concentrated in Omaha and Lincoln, nearly doubled during the last decade. Nebraska's Native American population grew slightly during the last decade. About half of Nebraska's Native Americans live on reservations (Omaha, Macy, Santee Sioux, and Winnebago); others live in Omaha and Lincoln and in the northern and western counties close to the Pine Ridge and Rosebud, South Dakota, reservations. Thurston County's population is 52% Native American and Sheridan and Knox Counties report more than 7% Native Americans. Nebraska, like many other states, is experiencing challenges in serving the increasing numbers of persons who do not speak English or do not speak English well. As noted in Figure 1, whites have the oldest median age.

Median Age of Nebraska Population By Race and Ethnicity, 2000

	Median Age (Years)
Hispanic	23.1
African American	27.0
Asian American	28.2
Native American	23.8
Whites	36.9

Source: U.S. Census Bureau 2000

People who live in Nebraska have a median income of \$19,613 compared to a national median of \$21,587. However, 9.7% of people who live in Nebraska are living at or below poverty level, which is lower than the 12.4% national rate. From 1997-2002, the rate of people who live in Nebraska without health insurance ranged from 8.4% to 11.8%. In 2002, slightly more than one in every ten Nebraska adults (11.8%) had no health care coverage (an estimated 140,000-165,000 Nebraska adults). For those with health care insurance, approximately 1.2 million persons were covered by private insurance; 340,000 by Medicare or Medicaid; and 114,000 by the military. Adequacy of coverage, however, is less clear. Presumably, people who live in Nebraska, like residents of other states, may have health care insurance limited to wage-earners only and coverage may have high deductibles or may be catastrophic coverage only.

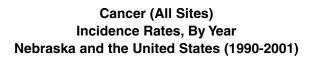
Cancer Trends in Nebraska

The Nebraska Cancer Registry, managed by the Nebraska Health and Human Services System, gathers data with which to describe cancer incidence, mortality, treatment, and survival in Nebraska. These data are especially useful for analysis of trends and to see how Nebraska's cancer experience compares to the rest of the nation. The following sections briefly describe the cancer burden within Nebraska. More detailed data and reports are available from the Nebraska Cancer Registry and their website: http://www.hhs.state.ne.us/ced/cancer/data.htm.

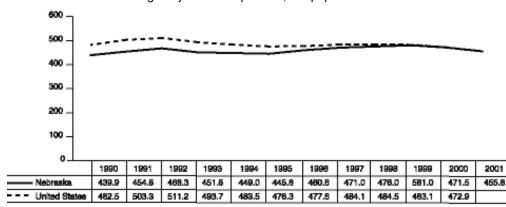
The incidence of cancer in Nebraska is similar to or lower than for Americans as a whole. Between 1997 and 2001, 41,051 cases of invasive cancer were diagnosed in Nebraska. This translates into an average annual incidence rate in Nebraska of 474.6 cases per 100,000 population (age-adjusted to the 2000 Census) compared to the 2000 national rate of 472.9. The Nebraska Cancer Registry recorded 8,708 new cases of cancer among Nebraska residents in 2001. The 2001 cancer incidence rate dropped slightly to 455.8

cases per 100,000. The 2001 data show that 8,142 were invasive cancers and 566 were in situ cancers. (See Figure 2 below.)

Figure 2



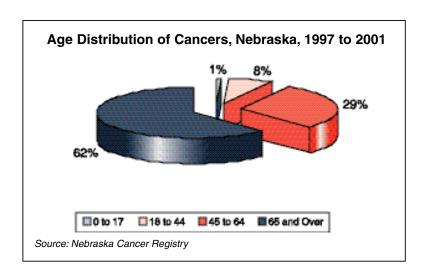
Age-adjusted rate per 100,000 population



Source: Nebraska Cancer Registry

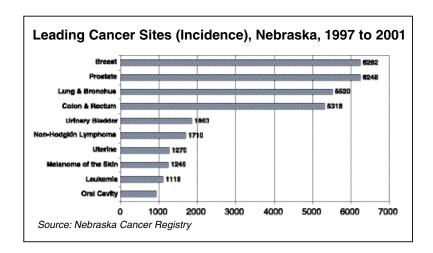
The incidence of cancer increases dramatically with age (as shown in Figure 3). Less than 1% of all cases were diagnosed among children 15 years of age or younger, while 62% were diagnosed among persons 65 years and older. Persons between the ages 45 and 64 constitute 29% of new cancer cases. African Americans are more likely to be diagnosed with cancer than whites, although the substantial number of cases reported to the State Cancer Registry without race and/or ethnic back ground information complicates any evaluation of cancer incidence.

Figure 3



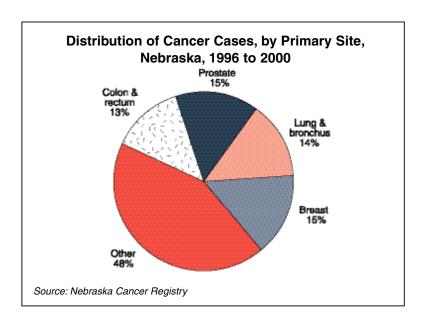
The leading cancer sites from 1997 through 2001 have consistently included breast, prostate, lung & bronchus, and colon & rectum. The top ten cancer sites are shown in Figure 4 below.

Figure 4



As shown by Figure 5, five cancer sites, lung, prostate, breast, colon, and rectum, accounted for 57% of cases diagnosed. For males, prostate cancer was the most frequently-diagnosed cancer (30% of new cases) followed by lung, colorectal, and bladder cancers. For women, breast cancer was the most frequently-diagnosed cancer (30%) followed by colorectal, lung and uterine cancers. The incidence of colorectal cancer in Nebraska is higher than the national rate.

Figure 5



Cancer is the <u>leading</u> cause of death for certain groups of people who live in Nebraska. As shown in Figures 6 and 7 below, cancer is the leading cause of death for men from 0 to age 74 and also the leading cause of death for women 0 to age 74.

Figure 6

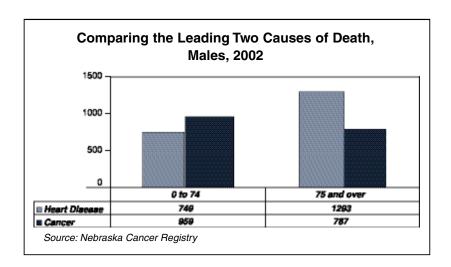
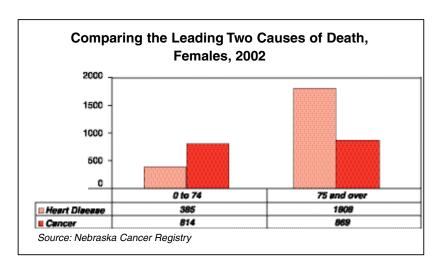


Figure 7



Cancer is the second leading cause of death in Nebraska for men and women of all ages accounting for one in four deaths. Between 1998 and 2002, 16,885 Nebraska residents died from cancer. This translates into an average annual mortality rate of 186.5 deaths per 100,000 population (age-adjusted to the 2000 U.S. population). Although 75% of cancer deaths occurred among people 65 and older, cancer was the state's *leading* cause of death for both men and women under the age of 65. For women under 65, cancer deaths outnumbered heart disease deaths by more than a 2-1 margin. African Americans and Native Americans were more likely to die from cancer than whites. Cancer mortality in Nebraska was about 10% lower than nationally.

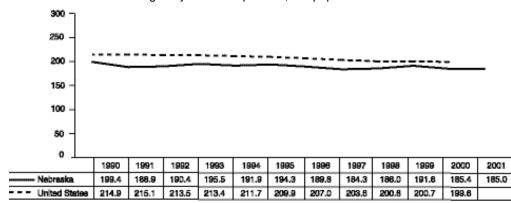
During the last decade, the cancer mortality rate in Nebraska declined slightly, following the national trend. The actual number of cancer deaths in Nebraska, however, are

attributed to improved prospects for survival and Nebraska's aging population. Improved survival, the result of early detection (through increased cancer screening) and more effective cancer treatments work to reduce the number of cancer deaths, or at least delay them until later ages. At the same time, the increasing numbers of people reaching middle and elderly years when they are at their highest risk of being diagnosed with cancer drives up the number of cancer deaths.

Figure 8

Cancer (All Sites) Mortality Rates, By Year Nebraska and the United States (1990-2001)

Age-adjusted rate per 100,000 population



Source: Nebraska Cancer Registry

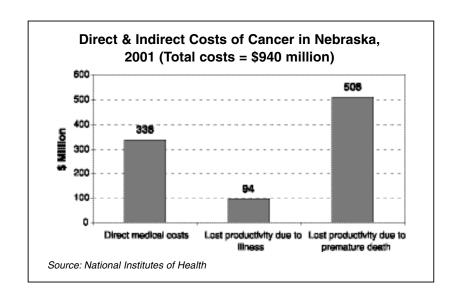
It is impossible to predict how cancer survival rates will change in the future, but it is projected that Nebraska's older population will substantially increase over the next two decades. At the current rates, the number of Nebraska residents who will die from cancer will increase to 4,000 in 2010 and to more than 4,800 in 2020. For 2010, these rates translate to 11 cancer deaths per day or one death nearly every two hours. The number of cancer deaths in Nebraska each year is larger than the population of most of Nebraska towns and villages!

The Economic Cost of Cancer

The economic impact of cancer in Nebraska is enormous. Hospital discharge data show that between 1996 and 2000, there were 32,480 inpatient hospitalizations for which cancer was the primary discharge diagnosis; these hospitalizations resulted in total charges of nearly \$540 million (based on a computed average cost per hospitalization of \$16,547.)

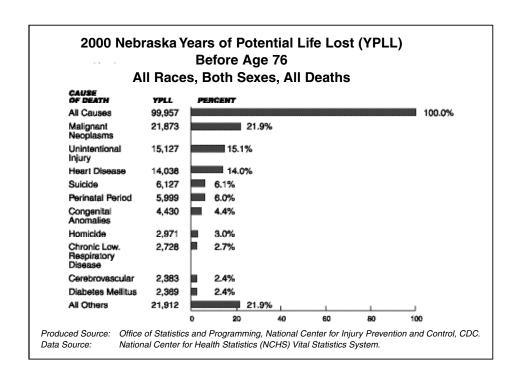
As shown in Figure 9, the total direct and indirect costs of cancer in Nebraska in 2001 was \$940 million.

Figure 9



Years of Potential Life Lost (YPLL) is one measure of premature death and can also help to measure the economic cost of disease. Assuming 75 years of potential life as the basis, a person who dies before their 20th birthday loses 55 years of potential life or a person dying at age 50 has lost 25 years of potential life. Thus, the younger the age of the person at death, the more years of potential life are lost. As shown in Figure 10, cancer is the leading cause of potential life lost in Nebraska, accounting for more than 20% of all premature mortality in Nebraska in the year 2000.

Figure 10



Risk Factors

Tobacco

The American Cancer Society reports that tobacco use is the most preventable cause of death in our society, accounting for at least 30% of all cancer deaths. Use of tobacco is responsible for as many as 87% of all lung cancers. There is ample evidence that secondhand smoke, smokeless tobacco, pipe tobacco, cigars, and cigarettes cause cancer. Exposure to secondhand smoke also causes other health problems such as respiratory illness and asthma attacks. Oral cancer occurs several times more frequently among smokeless tobacco users.

According to the most recent data from the Nebraska Behavioral Risk Factor Surveillance System (BRFSS), the prevalence of cigarette smoking among Nebraska adults has changed only slightly during the past decade, with rates of 23% in 1990 and 20% in 2001. Cigarette smoking among adults is now about as common in Nebraska as it is throughout the United States. Although men are still more likely to smoke than women are, the gender gap has now almost completely disappeared. Cigarette smoking prevalence rates decline with age, from 25% among people 18-44, to only 9% among people 65 and older. Data from the National Health Interview Survey (NHIS) shows that cigarette smoking is much less common among Asian-Americans, about as common among Whites as among African-Americans, and far more prevalent among Native Americans. An estimated 250,000 Nebraska adults currently smoke cigarettes, 42,000 use smokeless tobacco and 63,000 currently smoke cigars.

Approximately 80% of adults who use tobacco products began to do so before they turned 18 years of age. According to the 2001 Nebraska Youth Risk Behavior Survey (YRBS), more than one-third (35%) of all high school students (grades 9-12) or 33,000 reported using some type of tobacco product within the past 30 days. Cigarette smoking was the most prevalent form of tobacco use (31% reported current use; 64% tried cigarette smoking at least once), although 10% were currently using smokeless tobacco and 15% were currently smoking cigars. Since 1997, Nebraska YRBS data on cigarette smoking have shown an encouraging downward trend. Another encouraging trend is that Nebraska retailers are increasingly coming into compliance with the state law that prohibits the sale of tobacco to minors. According to the 1995 Nebraska YRBS, only 37% of the survey participants had been asked for proof of their age when attempting to purchase cigarettes in a store, but by 2001, this figure increased to 61%.

Nutrition and Physical Activity

For the majority of Americans who do not use tobacco products, diet and physical activity are the most important modifiable determinants of cancer risk. Nutritional factors are estimated to account for about one-third of all U.S. cancer deaths. The greatest concern with the Americans diet today is the consumption of too much saturated fat and too few vegetables, fruits, and grains. In Nebraska, barely more than 20% of adults who participated in the 2000 BRFSS reported that they consumed recommended servings of

fruits and vegetables per day. This was virtually unchanged from the 1990 survey. The statistics for youth are similarly disappointing. According to the 2001 Nebraska YRBS, only 18% of the state's high school students reported that they had eaten at least five servings of fruits and vegetables per day during the past seven days.

Obesity is known to increase the risk of developing cancers of the breast (among post-menopausal women), colon, cervix, endometrium, ovary, gall bladder and prostate. Obesity may also be a risk factor for cancers of the pancreas and esophagus. In Nebraska, 59% of adults who participated in the BRFSS in 2001 were categorized according to the Body-Mass Index (BMI) as either obese or overweight (obesity is defined as having a BMI [weight divided by height-squared] of 30 or greater, and overweight is defined as having a BMI between 25 and 29). The proportion of Nebraska adults who are obese has almost doubled since 1990, to 21% in 2001, nearly equal to the most recent national figure.

Physical activity is strongly associated with reduced risk of developing colon and breast cancers and may also decrease the risk for cancers of the pancreas, prostate, lung, endometrium, ovary, and testes. Physical activity levels among both adolescents and adults are strikingly low. In fact, 30% of Nebraska adults surveyed in the 2001 BFRSS reported that they had engaged in no leisure-time physical activity during the past month; this percentage has been increasing in recent years. Likewise, few people who live in Nebraska had participated in more vigorous physical activity. The 2001 Nebraska YRBS show that one-fourth of youth surveyed had not participated in moderate or vigorous physical activity during the past seven days, fewer than half attended any physical education classes and more than half watched two or more hours of television on an average school day.

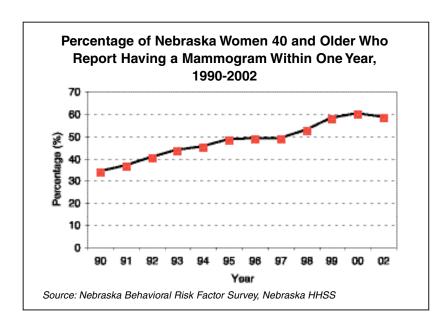
The Nebraska Comprehensive Cancer Control Program is working closely with the Nebraska Health and Human Service System Cardiovascular Disease Program to develop a Physical Activity and Nutrition State Plan that will incorporate unified goals and objectives to address cancer, cardiovascular and other chronic diseases.

Cancer Screening

Breast Cancer

During the decade of the 1990s, breast cancer mortality declined substantially in Nebraska and the nation; this is due in part to the increased use of screening mammography. In Nebraska, nearly 60% of women age 40 and older who participated in the 2002 BRFSS reported having a mammogram within the past year, and nearly 75% reported having a mammogram within the past two years. As shown in Figure 11, the proportion of Nebraska women 40+ who have had a mammogram within the past year has nearly doubled in little more than a decade; in 1990, the comparable figure was just 34%.

Figure 11



Mammogram rates for African American women are significantly higher than rates for whites (70% vs. 55%), and are nearly double for women with health insurance compared to women who have no insurance (56% vs. 28%).

Cervical Cancer

Throughout the United States, cervical cancer incidence and mortality have fallen drastically during the past several decades, as a result of the introduction and widespread adoption of the Pap test as a means to screen for the disease. The Pap test is a simple procedure that can detect cervical cancer and pre-cancerous lesions, and can be performed by a health care professional as part of a pelvic exam. The results from the 2000 Nebraska BRFSS show that 94% of adult women (excluding those who have had a hysterectomy) have at some point in their lives had a Pap test, and that 86% have had one within the past three years. Women with higher incomes, more education, and health care insurance are more likely to have had a Pap test within the past three years.

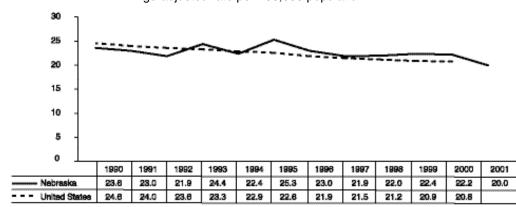
Colorectal Cancer

In 2001, colorectal cancer was the fourth most frequently diagnosed cancer among Nebraska residents, accounting for over 1,000 new cases. It was also the second leading cause of cancer death in the state, accounting for almost 400 deaths. Nationally, colorectal cancer incidence and mortality rates both declined by about 10% during the decade of the 1990's. This same trend did not take place in Nebraska. Instead, the state's annual colorectal cancer incidence rate has remained unchanged since the late 1980's. The rate of colorectal cancer deaths in Nebraska has declined only slightly since 1990. Nebraska's colorectal cancer incidence rate for men and women and the mortality rate for men exceeded the national rate for the entire decade of the '90s.

Figure 12

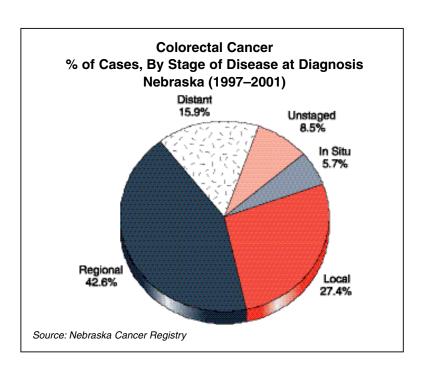
Colorectal Cancer Mortality Rates, By Year Nebraska and the United States (1990-2001)

Age-adjusted rate per 100,000 population



Source: Nebraska Cancer Registry

Figure 13



The risk of developing colorectal cancer increases with age. Other risk factors include a personal or family history of colorectal cancer or polyps, a personal history of chronic inflammatory bowel disease, and certain hereditary colorectal cancer syndromes. Modifiable risk factors include physical inactivity, obesity, use of tobacco products, red meat consumption, and having more than one alcoholic drink per day.

Three colorectal cancer-screening tests are commonly used: fecal occult blood test (FOBT), flexible-sigmoidoscopy, double-contrast barium enema and colonoscopy. In Nebraska, few people 50 and older have ever been screened for colorectal cancer according the 2001 Nebraska BRFSS; national data is similar to this poor screening rate. The National Cancer Institute reported Nebraska last among all the states in the rate of sigmoidoscopy or colonoscopy screening for all races, both sexes age 50 and older. The Healthy People 2010 Objective for this screening factor includes a goal of 50% of men and women 50 years and older; in Nebraska, only 38.4% of adults age 50 and over have ever had a sigmoidoscopy or colonoscopy

Prostate Cancer

Prostate cancer screening remains controversial. The U.S. Preventive Services Task Force recently concluded that there is insufficient evidence to promote routine screening for all men and inconclusive evidence that screening improves health outcomes. Two screening tests are commonly used: prostate-specific antigen (PSA) test and digital rectal exam (DRE). The 2001 Nebraska BRFSS included several questions on prostate cancer screening, which were asked only of men who were at least 40 years of age. Slightly more than half of those surveyed reported having at least one PSA test in their lifetime, with 37% having it within the past year. Men who were at least 65 years of age were far more likely than younger men to have ever had a PSA test or DRE.

Goals and Strategies for Cancer Control in Nebraska



GOALS AND STRATEGIES FOR CANCER CONTROL IN NEBRASKA

The following goals were established by the Nebraska Comprehensive Cancer Control Statewide Partnership:

- 1. Eliminate cancer disparities for all people who live in Nebraska.
- 2. Reduce cancer risks of people who live in Nebraska by reducing behaviors that contribute to cancer and by promoting healthy lifestyles and environment.
- 3. Increase early detection and appropriate screening for cancer.
- 4. Increase access to appropriate and effective cancer treatment and ongoing healthcare.
- 5. Increase understanding of what it means to be a cancer survivor and improve quality of life for those living with cancer.
- 6. Improve professional and consumer knowledge and understanding of cancer through education and training.

Goal 1:

Eliminate cancer disparities for all people who live in Nebraska.

Strategies:

- **1.1:** By 2005, develop and distribute report on cancer disparities among residents of Nebraska, based on current data.
- **1.2:** By 2006, evaluate transportation, insurance and other barriers to cancer screening/early detection, diagnosis, treatment, palliative care and end of life care and develop a plan for aggressively addressing these barriers. (*Selected as Priority for 2004-2005*)
- **1.3:** By 2006, distribute information to the public about potential sources of payment for cancer screening, diagnosis, treatment and palliative care.
- **1.4:** By 2010, document an increase in the number of people who live in Nebraska who have insurance that pays for cancer diagnosis and treatment services.
- **1.5:** By 2004, distribute information about the American College of Surgeons Commission on Cancer (ACoS CoC) designated Cancer Centers located throughout Nebraska.
- **1.6:** By 2004, develop and distribute a Cancer Resource Directory that includes cancer care options and local/national resources and organizations. (Selected as Priority for 2004-2005)
- **1.7:** By 2006, evaluate geographic distribution of cancer services across the continuum to identify gaps in services. Develop a plan to address these gaps.
- **1.8:** By 2005, document an increase in availability of cancer materials for non-English speaking residents of Nebraska, beginning with those who speak or read only Spanish.
- **1.9:** By 2005, increase activities to inform those affected by cancer of their right to participate fully in their care and encourage them to participate as fully as they are comfortable.

Rationale:

Health disparities are differences in the incidence, prevalence, mortality and burden of disease and other adverse health conditions that exist among specific population groups. Cancer and other health disparities exist in Nebraska as in other parts of the country. Eliminating health disparities is a Healthy People 2010 Goal.

Health disparities may be found in racial/ethnic minority populations (African Americans, Asians, Hispanics and Latinos, and Native Americans), in rural populations, and in populations that have low socioeconomic status. Often, these populations are not mutually exclusive. The burden of cancer, as described earlier, is often greater for the poor, ethnic minorities, and the medically uninsured than for the general population.

Ethnic populations develop cancer more frequently than the majority of the U.S. white population. African-American males, for example, develop cancer some 15% more often then white males. Many ethnic minorities experience poorer cancer survival rates than whites. American Indians experience the lowest cancer survival rates of any U.S. ethnic group. Disparity in cancer outcome is a reflection of the type, timeliness and continuity of cancer care rather than the disease itself. Cancer disparities may involve biological, environmental, and behavioral factors, income and education differences.

The Institute of Medicine reported in 2002 that racial and ethnic minorities tend to receive lower-quality health care than whites do, even when insurance status, income, age, and severity of conditions are comparable. The President's Cancer Panel reported in 2001 that the Nation's "broken health care system is failing people with cancer." That the system is broken is evidenced by the gap between cancer research and cancer care delivery. Health disparities result from unfair treatment when one group receives better care than another group. Studies consistently show that when patients from different ethnic and racial groups do receive the same quality care, their outcomes are similar.

An apparent overriding factor is socioeconomic status (SES), which is closely tied to health and longevity. At all income levels, people with higher SES have better health outcomes than people at SES levels below them. Socioeconomic status also appears to be a strong force behind differences in health among racial and ethnic groups. According to the CDC, African Americans, Hispanics, Native Americans, and Asian populations (Vietnamese and Laotians) are more likely than other groups to be poor. Poverty affects health outcomes in part by limiting access to needed resources. Other SES factors (education, geographic location, and occupation) also affect health status.

Throughout the country, and certainly throughout Nebraska, the moral tenet is stated: No person in Nebraska with cancer should go untreated, experience insurance-related diagnosis or treatment delays that jeopardize survival, or be bankrupt by a cancer diagnosis. Development of this State Plan is based on the fact that cancer disparities do exist in Nebraska. There is no intent to blame or suggest that the disparities are intentional. Rather, the intent is to affirm that **eliminating cancer disparities is the most important goal** included in this State Plan. It is an overarching and crosscutting goal that is incorporated into all goals and objectives that follow in other parts of the Plan. It is a goal that implies fair treatment, quality care and full access to support services for all persons living with cancer in our state.

Goal 2:

Reduce cancer risks of people who live in Nebraska by reducing behaviors that contribute to cancer and by promoting healthy lifestyles and environment.

- **2.1:** By 2010, and ongoing, document reduction in the number of people who live in Nebraska who use tobacco products by challenging community norms that support tobacco use, preventing first use, and by helping tobacco users guit.
- **2.2** By 2004, partner with existing groups including Tobacco Free Nebraska and Smokeless Nebraska Coalitions, County/District Health Departments, American Cancer Society and Cancer Information Service to support/protect tobacco elimination policies and activities. (*Selected as Priority for 2004-2005.*)
- **2.3** By 2010, document improved overall diet of people who live in Nebraska by promoting dietary factors that are known to improve health and decrease cancer risks, e.g., increased intake of fruits and vegetables and decreased intake of fat.
- **2.4:** By 2005, collaborate with other Partners, public/private health agencies and providers to implement an ethnically and culturally appropriate statewide information and educational campaign to increase awareness about the links between diet, physical activity and cancer, including the importance of maintaining a diet rich in fruits and vegetables and low in fat, and maintaining a healthy body weight. (*Selected as Priority for 2004-2005.*)
- **2.5:** By 2010, document an increase in the number of people who live in Nebraska that accumulate a minimum of 30 minutes of moderately intense physical activity on most, if not all days of the week.
- **2.6:** By 2010, document modification of school and workplace policy to create environments that encourage physical activity.
- **2.7:** By 2006, and ongoing, provide information and resources on physical activity to cancer healthcare professionals.
- **2.8:** By 2010, document an increase in the number of people who live in Nebraska that exhibit sun safe behaviors.
- **2.9:** By 2008, collaborate with other health organizations to educate the public, employers, children in elementary schools and their parents about skin cancer and sun safe behaviors.

- **2.10**: By 2010, document an increase in the number of healthcare providers who counsel their patients on the dangers of ultraviolet radiation.
- **2.11** By 2008, gather and distribute information on other environmental and occupational factors that may increase cancer risks for people who live in Nebraska.

Rationale:

<u>Tobacco</u>

Cigarette smoking is responsible for about **one-third of all cancer deaths** in Nebraska and is a major risk factor for heart disease and stroke. Cigarette, pipe and cigar smoking cause the majority of cases and deaths from cancers of the lung, oral cavity, larynx, and esophagus. Cigarette smoking is responsible for 87% of all lung cancer deaths, 81% of laryngeal cancer deaths, 79% of all oral cancer deaths, and 75% of all esophageal cancer deaths. Current estimates indicate that smoking is also responsible for 40% of all bladder cancer deaths, 33% of all kidney cancer deaths, 31% of all cervical cancer deaths, and 29% of all pancreatic cancer deaths. Estimates indicate that more than **1,000 people who live in Nebraska die from tobacco-related cancers annually.** Tobacco use is the single most preventable cause of disease and death in Nebraska today. Cigarette smoking alone is responsible for more deaths than AIDS, alcohol, cocaine, heroin, homicide, suicide and motor vehicle crashes combined.

Smoking during pregnancy is associated with increased rates of infant mortality, low birth weight, and other infant health problems. Environmental tobacco smoke (also known as second-hand smoke) is associated with a number of adverse effects in non-smokers including lung cancer, heart attack, and respiratory illnesses in children.

In Nebraska, cigarette smoking cost approximately \$277 million for the medical care of people with a smoking-related illness and another \$274 million in lost wages and productivity during the year 1998.

Prevalence of cigarette smoking among Nebraska adults has changed little in the last decade with rates of 24% in 1987 and 23% in 1999. Based on these figures, an estimated 280,000 adults in the state currently smoke cigarettes. Use of smokeless tobacco (chewing tobacco, dip and snuff) among Nebraska adult males has held steady at about nine percent for most of the 1990's; this translates into an estimated 53,000 Nebraska men who currently use smokeless tobacco products.

The 1999 Youth Risk Behavior Survey (YRBS) shows that tobacco use overall and cigarette smoking in particular are both <u>more common</u> among Nebraska high school students than they are nationally. This survey reported that 43% of Nebraska youth reported current use of any tobacco product, 37% reported current use of cigarettes and 10% reported use of smokeless tobacco products. Based on this rate, an estimated 40,000 Nebraska high school students are current cigarette smokers. Approximately 80%

of adults who use tobacco products begin to use them before they turn 18 years of age. Data Source: 2000 BRFSS, 2000 YTS, Nebraska HP 2010

Nutrition

Healthy eating practices, including increased consumption of fruits and vegetables may offer protection from certain types of cancer. Research suggests that one-third of all cancer deaths are associated with nutritional factors and obesity. Harvard Center for Cancer Prevention. (1996). Harvard Report on Cancer Prevention Volume 1: Causes of Human Cancer. The National Cancer Institute recommends a diet including five or more servings of fruits and vegetables a day due to indications that this may reduce the risk for developing cancer. In Nebraska the proportion of adults who consumed five or more servings of fruits and vegetables per day was 18% in 1998 and 21% in 2000. Data Source: 2000 BRFSS, YBRFS, HP2010,

Physical Activity

Regular, moderate physical activity has been demonstrated to benefit health and decrease overall mortality. Research suggests that regular physical activity, as part of a healthy lifestyle, may reduce the risk for developing certain cancers, especially colorectal cancer (and possibly breast cancer). For most Americans who do not use tobacco, dietary choices and physical activity become the most important modifiable determinants of cancer risk.

Ultraviolet Radiation Exposure

Exposure to sun's ultraviolet (UV) radiation is a known cancer risk factor. Since more than half of a person's lifetime skin damage from sun exposure occurs by the age of 18, educating parents, caregivers, and children is critical. Sun safe behaviors can reduce the risk of skin cancer. (Sun safe behaviors include avoiding the sun between 10 a.m. and 4 p.m., wearing sun-protective clothing when exposed to sunlight, using sunscreen in ultraviolet light.)

Goal 3:

Increase early detection and appropriate screening for cancer.

- **3.1:** By 2006, and ongoing, document professional training opportunities that enhance the ability of healthcare providers to screen and provide cancer detection services to detect cancer early and at a more treatable stage.
- **3.2:** By 2005, collaborate with partners, State programs such as Office of Women's Health, Every Woman Matters, and County/District Health Departments to promote early detection and cancer screening initiatives through a comprehensive statewide multimedia campaign utilizing social marketing strategies. (*Selected as Priority for 2004-2005.*)
- **3.3:** By 2005, and ongoing, provide periodic continuing professional education programs about colorectal cancer screening guidelines and procedures.
- **3.4:** By 2004, and ongoing, support activities and programs of Every Woman Matters and WISE Woman in breast and cervical cancer screening.
- **3.5:** By 2005, disseminate simplified cancer screening guides and recommendations for providers to recommend to patients, e.g., reminder software, pocket cards, use of routine standards/protocols. (Selected as Priority for 2004-2005.)
- **3.6:** By 2005, find ways to continue and expand the statewide coordinated screening effort for colorectal cancer and skin cancer as currently offered by the Every Woman Matters (breast and cervical cancer) and the WISE Woman Programs.
- **3.7:** By 2006, document promotion and expansion of existing consumer cancer education programs and support the development of consumer education where indicated to detect cancer early and at a more treatable stage.
- **3.8:** By 2004, identify current resources and develop a Nebraska Cancer Resource Directory that includes prevention through treatment (including screening guidelines, website links, support groups, teaching institutions and national cancer organizations.)
- **3.9:** By 2005, evaluate distribution of cancer screening and diagnostic services to identify gaps in service.
- **3.10:** By 2005, and ongoing, document linkage with traditional and non-traditional groups such as health clubs, PTA's, community health centers, YMCA's, YWCA's beauty and barbershops, senior centers, libraries, churches, retail pharmacies to develop outreach initiatives to encourage appropriate cancer screening.

3.11: By 2004, demonstrate increased advocacy for screening and early detection insurance initiatives, e.g., colorectal cancer screening.

Rationale:

Early detection refers to cancer screening tests to detect cancer early and at a more treatable stage. Some early detection tests can actually prevent cancer by detecting precancerous conditions such as those found in the cervix or colon. Other screening tests allow cancer to be diagnosed at an earlier stage, thereby increasing chances for survival if treated appropriately. The American Cancer Society has established criteria for *cervical*, *breast*, *and colorectal cancer screening*. These are included in Appendix E. Locally, for more than ten years, Nebraska has had a very successful Every Women Matters (EWM) program for breast and cervical cancer screening.

Goal 4:

Increase access to appropriate and effective cancer treatment and ongoing healthcare.

- **4.1:** By 2008, increase access to and use of optimal cancer care for residents, especially those outside metropolitan areas, including increasing the state's capacity to provide optimal cancer care.
- **4.2:** By 2006, increase the number of providers, (other than oncologists,) who are knowledgeable about optimal cancer screening and care; this includes APRNs, oncology social workers and other health professionals.
- **4.3:** By 2005, convene an expert treatment panel to review current treatment guidelines, develop guidelines as needed, and further define state-of the art treatment for site-and state-specific cancers. Disseminate information to health care professionals.
- **4.4:** By 2006, identify barriers to receiving state-of-the art treatment and develop strategies to overcome the barriers.
- **4.5:** By 2005, and ongoing, analyze the status of treatment through a review of existing databases and processes.
- **4.6:** By 2006, encourage hospitals/cancer treatment facilities reporting more than 200 cancer cases per year to become accredited by the American College of Surgeons to increase by geographic distribution the availability of approved cancer centers across the state.
- **4.7:** By 2008, collaborate with health care providers throughout the state to develop and support regional tumor boards and meetings of multidisciplinary teams to discuss treatment options for challenging cases.
- **4.8:** By 2005, and ongoing, support the development of networks of cancer specialists who can provide diagnostic and treatment consultation to primary care physicians and other health care providers in medically underserved areas. (Selected as Priority for 2004-2005.)
- **4.9:** By 2007, promote and evaluate policies that support cancer patient's access to a second opinion from a cancer specialist.

- **4.10:** By 2008, and ongoing, ensure that health insurance, managed care plans, and public payers facilitate prompt access to appropriate cancer treatment and supportive services.
- **4.11:** By 2006, and ongoing, increase the number of Nebraska cancer patients who participate in appropriate clinical trials. (*Selected as Priority for 2004-2005.*)
- **4.12:** By 2005, and ongoing, improve the quality of life of cancer patients by reversing or eliminating treatment-related side effects during and following cancer treatments through appropriate pain and other symptom management and rehabilitative interventions.
- **4.13:** By 2008, and ongoing, leverage community assets to implement a program of improved cancer treatment.
- **4.14:** By 2006, facilitate the ability of cancer patients, survivors, and their families to express treatment preferences and make informed decisions regarding treatment and quality of life issues.
- **4.15** By 2009, increase housing options for adult patients and their families to permit them to participate in full treatment regimens.

Rationale:

Cancer treatment is improving—saving lives and extending survival for people with cancers at many sites, including the breast and colon, and for people with leukemias, lymphomas, and pediatric cancers. Clinical trials are the major avenue for discovering, developing, and evaluating new therapies. However, only about 3 percent of all adult cancer patients participate in clinical trials. It is important to increase physician and patient awareness of, and participation in, clinical trials if we are to test new treatments more rapidly, find more effective treatments, and broaden the options available to patients.

Goal 5:

Increase understanding of what it means to be a cancer survivor and improve quality of life for those living with cancer in Nebraska.

Strategies:

- **5.1:** By 2010, and ongoing, demonstrate reduced anxieties in those worried about cancer.
- **5.2:** By 2007, demonstrate increased availability, accessibility, awareness, and use of palliative cancer care and resources that address patient, family, and workplace quality of life issues on each dimension: physical, emotional, spiritual, and social. (*Selected as Priority for 2004-2005.*)
- **5.3:** By 2006, gather quality of cancer care and quality of patient life evaluation data and use it to document the initiation of improvements in cancer programs.
- **5.4:** By 2006, increase the awareness, availability and use of cancer patient and family support services during active treatment. (*Selected as Priority for 2004-2005.*)

Rationale:

The National Cancer Institute states, "An individual is considered a cancer survivor from the time of diagnosis, through the balance of his or her life." Family, friends, and caregivers are also impacted by the survivorship experience and are therefore included in this definition.

Currently there are approximately 9.2 million cancer survivors nationally. By the year 2015, it is estimated that there will be approximately 11.3 million cancer survivors nationally.

The key to addressing needs of survivors is gaining an understanding of the unique needs and concerns throughout diagnosis, treatment, and recovery phases of the cancer experience. These needs span the physical, social, psychological, emotional and spiritual domains. Examples of survivor issues include concern regarding long-term effects of cancer treatment, re-employability and insurability, and fear of recurrence.

For some persons living with cancer, preparing for end of life and death with dignity is the focus for the patient, family and friends.

Goal 6:

Improve professional and consumer knowledge and understanding of cancer through education and training.

Strategies:

- **6.1:** By 2005, promote and provide targeted, relevant and effective professional continuing education programs on cancer-related topics with special emphasis on practitioners in rural and underserved areas, to enhance knowledge, skills, and practices. (Selected as Priority for 2004-2005.)
- **6.2:** By 2005, increase public knowledge about cancer prevention, early detection, patient care and survivorship through the distribution of cancer information, including benefits of screening and cancer diagnostic, treatment and support resources, to patients, providers, and the public, with an emphasis on distributing the information to racial and ethnic groups more adversely affected by cancer, low literacy populations and rural residents. (Selected as Priority for 2004-2005.)
- **6.3:** By 2006, increase public knowledge of the significance of a family history of cancer and the usefulness of appropriate screening and genetic testing.
- **6.4:** By 2005, and ongoing, obtain or develop and distribute linguistically and culturally appropriate patient cancer education materials.
- 6.5: By 2005, identify and promote best practices and current cancer research to providers.

Rationale:

Education is key to understanding Nebraska's cancer burden, how to prevent cancer, how to seek and understand screening and early detection, treatment and how to improve quality of life for cancer patients and their families. Health care consumers report that they are more likely to be screened or follow other preventive procedures when their physician recommends the procedure. New technologies, new treatments and new trends need to be conveyed to professionals and consumers alike. Nebraska has many opportunities to provide cancer education through new and existing Partner resources.

Conclusion and Call to Action



CONCLUSION AND CALL TO ACTION

Through the dedicated work of the Nebraska Comprehensive Cancer Control Partnership, which represents a wide range of cancer-related groups, six overarching goals have been identified. This plan also identifies specific strategies in support of a statewide public health approach for cancer prevention and control. While this is a "living document" and subject to revisions and modifications at timely intervals, this document provides direction into the 21st century.

Already drawing support from voluntary and public agencies, professional groups, universities, and many others, commitment from the partners is now needed to act on this plan. There are important roles for all individuals and groups to play in preventing and controlling cancer. The Nebraska Comprehensive Cancer Control Partnership challenges everyone to be a part of this effort and to transform the vision outlined in this plan into a reality.

Nebraska CARES--Working together, we can make a difference!

For more information, or to become involved, contact:

Nebraska Comprehensive Cancer Control Program Nebraska Health and Human Services System 301 Centennial Mall South Lincoln, NE 68509-5044 402-471-0369

june.ryan@hhss.state.ne.us

Join the Partnership



The Partnership seeks to add active, interested committed members. *If you want to become involved with the Partnership, complete the form below.*

Yes, I want to join the Partnership!

Name:
Organization:
Address:
City/State/Zip:
Phone:
ax:
Email:

Send to: Nebraska Comprehensive Cancer Control Program

Nebraska Health and Human Services System

301 Centennial Mall South Lincoln, NE 68509-5044

Or contact: june.ryan@hhss.state.ne.us 402-471-0369

DEFINITIONS

A number of technical terms are used in presenting the information in this State Plan. The following definitions are provided here to assist the reader.

Age-Adjusted Rate

Age-adjustment is a simple mathematical procedure that makes it possible to compare rates between populations that have different age distributions, and to compare rates within a single population over time. In comparing cancer data, it is important for the user to determine whether the rates are age-adjusted and whether the age-adjustment is related to the 1970 or 2000 United States population standard.

Cancer Incidence Rate

A cancer incidence rate is the number of new cases of cancer that occur within a specific population, divided by the size of that population. For example, if 10 persons in a county with 20,000 population are diagnosed with colorectal cancer during a single year, then the incidence rate for that county for that year is .0005. Cancer incidence rates are usually expressed per 100,000 population. In our example, the .0005 figure would be multiplied by 100,000 to yield a colorectal cancer rate of 50 per 100,000 per year. Expressing the rate as a per 100,000 rate allows for comparison of county and statewide data to national data.

Cancer Mortality Rate

A cancer mortality rate is the number of deaths that occur within a specific population, divided by the size of the population. Only those persons whose death certificate lists cancer as the primary cause of death are included in a cancer mortality rate. Like incidence rates, mortality rates are usually expressed as the number of cancer deaths per 100,000.

Comprehensive Cancer Control

An integrated and coordinated approach to reducing cancer incidence, morbidity, and mortality through *prevention* (*primary prevention*), *early detection* (*secondary prevention*), *treatment*, *rehabilitation*, and *palliation*.

Stages of Disease at Diagnosis

When cancer is diagnosed, the cancer is given a "stage" identifier, which defines the extent that the cancer has developed.

In situ--cancer cases diagnosed as in situ include malignant tumors that are confined to the cell group of origin and have not penetrated the supporting structure of the organ on which they arose.

Invasive--cancer cases diagnosed as invasive include malignant tumors that, unlike in site tumors, have at least penetrated the supporting structure of the organ where they originated, and may have spread further.

Localized--an invasive malignant tumor that has not spread beyond the boundaries of the organ where it originated

Regional--an invasive malignant tumor that has spread beyond the limits of the organ of origin by direct extension to immediately adjacent organs or tissues and/or by spread to regional lymph nodes.

Distant--an invasive malignant tumor that has spread beyond its original (primary) site to distant parts of the body.

APPENDIX A.

Nebraska Healthy People 2010 Short-term Outcome Goals

Healthy People Objective	Current Rate	NE HP 2010 Goal
Reduce the proportion of adults age 18+ who currently smoke cigarettes.	23%	12%
Reduce the percentage of males age 18+ that currently use smokeless tobacco.	9%	4%
Reduce the proportion of youth 17 and younger who report using tobacco products (cigarettes, spit tobacco, or cigars) in the last month.	44%	21%
Decrease the percentage of adults age 18 and older who report height and weight that place them in the obese category according to Body Mass Index.	20%	15%
Decrease the number of children and adolescents age 12-19 who are overweight or obese.	6%	3%
Increase the number of adults age 18 and older who report regular & sustained physical activity for at least five times per week.	20%	*
Increase the number of adults age 18 and older who report regular and vigorous physical activity at least five times per week.	10%	*
Increase the number of adolescents in grades 9-12 who engaged in moderate physical activity for at least 30 minutes on five or more of the previous seven days.	28%	35%
Increase the number of adolescents in grades 9-12 who engaged in vigorous physical activity on three or more days per week, for 20 or more minutes per occasion.	69%	85%
Reduce melanoma death rate for Nebraska.	2.7**	2.4**
Increase the proportion of people age 50 and older who have received fecal occult blood tests (FOBT), within the preceding two years.	28%	50%
Increase the proportion of adults aged 50 and older who have ever had a sigmoidoscopy or proctoscopic exam.	35%	50%

^{*}Goals to be developed in collaboration with the Physical Activity and Nutrition Task Force

^{**}Deaths per 100,0000 persons

APPENDIX B.

Nebraska Healthy People 2010 Cancer Goals & Strategies

3-1	Reduce Overall cancer death rate		from 186.0 to 147.0
3-2	Re	duce Lung cancer death rate	from 50.1 to 39.0
3-3	Re	duce Breast cancer death rate	from 25.9 to 20.7
3-4	Re	duce Cervical cancer death rate	from 3.1 to 2.0
3-5	Re	duce Colorectal cancer death rate	from 21.6 to 14.3
3-6	Re	duce Oropharyngeal cancer death rate	from 2.6 to 1.4
3-7	Reduce Prostate cancer death rate f		from 28.2 to 25.9
3-8	Reduce Melanoma death rate		from 2.7 to 2.4
3-9	Reduce Lymphoma death rate		from 8.9 to 6.2
3-10	Reduce Leukemia death rate		from 7.5 to 5.2
3-11	a.	Increase % of women who ever received a Pap test	from 94 to 98
	b.	Increase % of women who received a Pap test within last 3 years	from 76 to 90
3-12	a.	Increase % of adults age 50+ who had fecal occult blood test in past 2 years	from 28 to 50
	b.	Increase % of adults age 50+ who ever had a sigmoidoscopy	from 35 to 50
3-13	Increase % of women 40+ who had mammograms within past two years from 70 to 75		from 70 to 75

APPENDIX C.

Nebraska Goals and Strategies For Cancer Control in Nebraska Priorities for 2004 – 2005

Goal 1:	Eliminate cancer disparities for all people who live in Nebraska.
Goal 2:	Reduce cancer risks of people who live in Nebraska by reducing behaviors that contribute to cancer and by promoting healthy lifestyles and environment.
Goal 3:	Increase early detection and appropriate screening for cancer.
Goal 4:	Increase access to appropriate and effective cancer treatment and ongoing healthcare.
	Increase understanding of what it means to be a cancer survivor and improve quality of life for those living with cancer.
Goal 6:	Improve professional and consumer knowledge and understanding of cancer through education and training.

Goal 1: CANCER DISPARITIES

Eliminate cancer disparities for all people who live in Nebraska.

Strategies:

- **1.2:** By 2006, evaluate transportation, insurance and other barriers to cancer screening/early detection, diagnosis, treatment, palliative care and end of life care and develop a plan for aggressively addressing these barriers.
- **1.6:** By 2004, develop and distribute a Cancer Resource Directory that includes cancer care options and local/national resources and organizations.
- **3.5:** By 2005, disseminate simplified cancer screening guides and recommendations for providers to recommend to patients, e.g., reminder software, pocket cards, use of routine standards/protocols.

Goal 2: PRIMARY PREVENTION

Reduce cancer risks of people who live in Nebraska by reducing behaviors that contribute to cancer and by promoting healthy lifestyles and environment.

- **2.2:** By 2004, partner with existing groups including Tobacco Free Nebraska and Smokeless Nebraska Coalitions, County/District Health Departments, American Cancer Society and Cancer Information Service to support/protect tobacco elimination policies and activities.
- **2.4:** By 2005, collaborate with other Partners, public/private health agencies and providers to implement an ethnically and culturally appropriate statewide information and educational campaign to increase awareness about the links between diet, physical activity and cancer, including the importance of maintaining a diet rich in fruits and vegetables and low in fat, and maintaining a healthy body weight.

Goal 3: EARLY DETECTION & SCREENING

Increase early detection and appropriate screening for cancer.

Strategies:

- **3.2:** By 2005, collaborate with partners, State programs such as Office of Women's Health, Every Woman Matters, and County/District Health Departments to promote early detection and cancer screening initiatives through a comprehensive statewide multimedia campaign utilizing social marketing strategies.
- **3.4:** By 2005, collaborate with other Partners, public/private health agencies and providers to implement an ethnically and culturally appropriate statewide information and educational campaign to increase awareness about the links between diet, physical activity and cancer, including the importance of maintaining a diet rich in fruits and vegetables and low in fat, and maintaining a healthy body weight.

Goal 4: TREATMENT

Increase access to appropriate and effective cancer treatment and ongoing healthcare.

- **4.8:** By 2005, and ongoing, support the development of networks of cancer specialists who can provide diagnostic and treatment consultation to primary care physicians and other health care providers in medically underserved areas.
- **4.11:** By 2006, and ongoing, increase the number of Nebraska cancer patients who participate in appropriate clinical trials.

Goal 5: QUALITY OF LIFE/SURVIVORSHIP

Increase understanding of persons who live in Nebraska of what it means to be a cancer survivor and improve quality of life for those living with cancer.

Strategies:

- **5.2:** By 2007, demonstrate increased availability, accessibility, awareness, and use of palliative cancer care and resources that address patient, family, and workplace quality of life issues on each dimension: physical, emotional, spiritual, and social.
- **5.4:** By 2006, increase the awareness, availability and use of cancer patient and family support services during active treatment.

Goal 6: CROSSCUTTING ISSUES

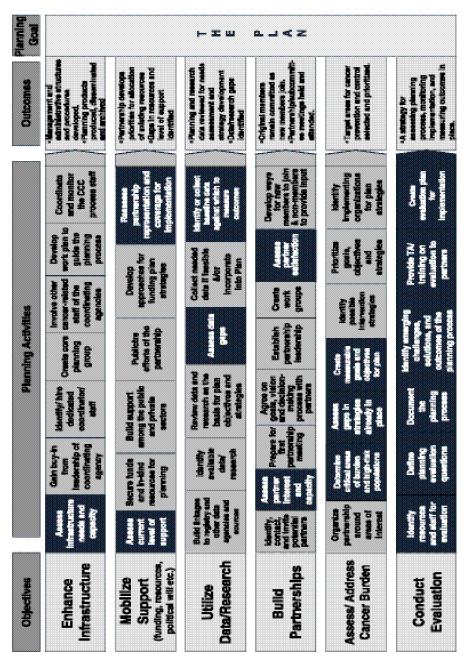
Improve professional and consumer knowledge and understanding of cancer through education and training.

- **6.1:** By 2005, promote and provide targeted, relevant and effective professional continuing education programs on cancer-related topics with special emphasis on practitioners in rural and underserved areas, to enhance knowledge, skills, and practices.
- **6.2:** By 2005, increase public knowledge about cancer prevention, early detection, patient care and survivorship through the distribution of cancer information, including benefits of screening and cancer diagnostic, treatment and support resources; provide information to patients, providers, and the public, with an emphasis on distributing the information to racial and ethnic groups more adversely affected by cancer, low literacy populations and rural residents.

APPENDIX D.

CDC Cancer Building Blocks

The comprehensive cancer control process consists of six building blocks. Each building block is composed of a series of activities derived from an assessment of the way in which six model-planning states actually developed a comprehensive cancer control process.



APPENDIX E.

ACS Cancer Detection Guidelines

Cancer-Related Checkup

For people having periodic health examinations, a cancer-related checkup should include health counseling and depending on a person's age might include examinations for cancers of the thyroid, oral cavity, skin, lymph nodes, testes, and ovaries as well as for some non-malignant diseases. Special tests for certain cancer sites are recommended as outlined below.

Breast Cancer

- Yearly mammograms starting at age 40 and continuing for as long as a woman is in good health.
- Clinical breast exams (CBE) should be part of a periodic health exam, about every three years for women in their 20s and 30s and every year for women 40 and over.
- Women should report any breast change promptly to their health care providers. Breast self-exam (BSE) is an option for women starting in their 20s.
- Women at increased risk (e.g., family history, genetic tendency, past breast cancer) should talk with their doctors about the benefits and limitations of starting mammography screening earlier, having additional tests (e.g., breast ultrasound or MRI), or having more frequent exams.

Colon and Rectal Cancer

Beginning at age 50, both men and women should follow one of these five testing schedules:

- yearly fecal occult blood test (FOBT)*
- flexible sigmoidoscopy every 5 years
- yearly fecal occult blood test* plus flexible sigmoidoscopy every 5 years**
- double-contrast barium enema every 5 years
- colonoscopy every 10 years

^{*}For FOBT, the take-home multiple sample method should be used.

^{**}The combination of FOBT and flexible sigmoidoscopy is preferred over either of these two tests alone.

All positive tests should be followed up with colonoscopy.

People should begin colorectal cancer screening earlier and/or undergo screening more often if they have any of the following colorectal cancer risk factors.

- a personal history of colorectal cancer or adenomatous polyps
- a strong family history of colorectal cancer or polyps (cancer or polyps in a first-degree relative younger than 60 or in two first-degree relatives of any age) Note: a first-degree relative is defined as a parent, sibling, or child.
- a personal history of chronic inflammatory bowel disease
- a family history of an hereditary colorectal cancer syndrome (familial adenomatous polyposis or hereditary non-polyposis colon cancer)

Cervical Cancer

The American Cancer Society recommends:

- All women should begin cervical cancer screening about 3 years after they begin
 having vaginal intercourse, but no later than when they are 21 years old.
 Screening should be done every year with the regular Pap test or every 2 years
 using the newer liquid-based Pap test.
- Beginning at age 30, women who have had 3 normal Pap test results in a row may get screened every 2 to 3 years with either the conventional (regular) or liquid-based Pap test. Women who have certain risk factors such as diethylstilbestrol (DES) exposure before birth, HIV infection, or a weakened immune system due to organ transplant, chemotherapy, or chronic steroid use should continue to be screened annually.
- Another reasonable option for women over 30 is to get screened every 3 years (but not more frequently) with either the conventional or liquid-based Pap test, plus the HPV DNA test.
- Women 70 years of age or older who have had 3 or more normal Pap tests in a
 row and no abnormal Pap test results in the last 10 years may choose to stop
 having cervical cancer screening. Women with a history of cervical cancer, DES
 exposure before birth, HIV infection or a weakened immune system should
 continue to have screening as long as they are in good health.
- Women who have had a total hysterectomy (removal of the uterus and cervix)
 may also choose to stop having cervical cancer screening, unless the surgery
 was done as a treatment for cervical cancer or precancer. Women who have had

a hysterectomy without removal of the cervix should continue to follow the guidelines above.

Endometrial (Uterine) Cancer

The American Cancer Society recommends that all women should be informed about the risks and symptoms of endometrial cancer, and strongly encouraged to report any unexpected bleeding or spotting to their doctors. For women with or at high risk for hereditary nonpolyposis colon cancer (HNPCC), annual screening should be offered for endometrial cancer with endometrial biopsy beginning at age 35.

Prostate Cancer

Both the prostate-specific antigen (PSA) blood test and digital rectal examination (DRE) should be offered annually, beginning at age 50, to men who have at least a 10-year life expectancy. Men at high risk (African-American men and men with a strong family of one or more first-degree relatives (father, brothers) diagnosed at an early age) should begin testing at age 45. Men at even higher risk, due to multiple first-degree relatives affected at an early age, could begin testing at age 40. Depending on the results of this initial test, no further testing might be needed until age 45.

Information should be provided to all men about what is known and what is uncertain about the benefits and limitations of early detection and treatment of prostate cancer so that they can make an informed decision about testing.

Men who ask their doctor to make the decision on their behalf should be tested. Discouraging testing is not appropriate. Also, not offering testing is not appropriate.

References (Revised 1-6-04)

American Cancer Society. Cancer Facts and Figures 2004. Atlanta, GA: American Cancer Society; 2004.

Smith RA, Saslow D, Sawyer KA, et al. American Cancer Society Guidelines for Breast Cancer Screening: Update 2003. *CA Cancer J Clin.* 2003;53:141-169.