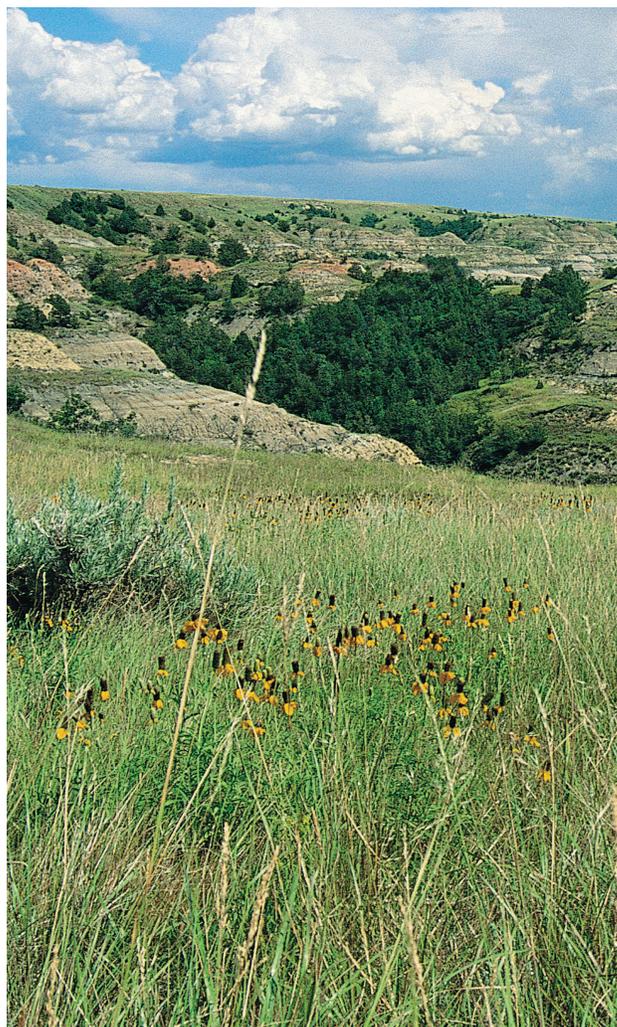


North Dakota Cancer Control Plan 2011-2016

**North Dakota
Cancer Coalition**

Planning for a cancer-free future.



"Planning For a Cancer-Free Future"

What Cancer Cannot Do

Author: Unknown

Cancer is so limited...

It cannot cripple love. It cannot shatter hope.

It cannot corrode faith. It cannot eat away peace.

It cannot destroy confidence. It cannot kill friendship.

It cannot shut out memories. It cannot silence courage.

It cannot reduce eternal life. It cannot quench the Spirit.

A Special Thank You To:

All those who gave of their time, expertise and energy to revise and be photographed for the North Dakota Cancer Control Plan.

All of the health-care professionals and researchers who work with cancer in North Dakota for their dedication.

All of the friends, family and co-workers of those afflicted with cancer for their care and support.

Dedication:

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

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Revised Edition Published 2011

www.ndcancercoalition.org

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Letter From The Chair

The North Dakota Cancer Coalition is pleased to present the 2011-2016 North Dakota Cancer Control Plan. The North Dakota Cancer Coalition is made up of experts from community-based organizations; health-care organizations; local, state, federal agencies; cancer survivors and individuals with an interest in cancer prevention and control.

To create the North Dakota Cancer Control Plan, coalition members examined the burden of cancer in North Dakota and developed goals, objectives and strategies for cancer prevention, early detection, treatment, survivorship, health equity, workforce and evaluation. The plan provides the state with an integrated plan of action for the next six years.

As a “living plan,” when priorities for cancer prevention and control change, the plan will reflect these changes. It is a starting point for use by organizations, communities and individuals to implement activities that will reduce the incidence and impact of cancer.

The National Center for Chronic Disease Prevention and Health Promotion, Division of Cancer Prevention and Control, identified six priorities to be included in state cancer plans:

1. Emphasize primary prevention of cancer.
2. Coordinate early detection and treatment activities.
3. Address public health needs of cancer survivors.
4. Use policy, systems and environmental changes to guide sustainable cancer control.
5. Promote health equity as it relates to cancer control.
6. Demonstrate outcomes through evaluation.

We have a unique opportunity with national health-care reform providing additional resources for prevention, screening, as well as expanded health-care coverage to achieve these priorities. If the coalition focuses efforts on shared priorities, we can more efficiently and effectively collaborate to reduce the cancer burden.

As chairman of the North Dakota Cancer Coalition, I am excited about the opportunity to build on our past accomplishments. We have a wonderful group of enthusiastic community leaders as members and partners of the North Dakota Cancer Coalition. We can accomplish our goals through the synergy that comes from teamwork and collaboration.

I encourage you to become involved and contribute to a healthier North Dakota. Together we can make the vision of a cancer-free North Dakota a reality.



John M. Leitch, M.D.



Embracing Health

“As a community we need to understand and embrace the opportunity we have to prevent cancer. I want to be healthy and to be here for a long time for my children and grandchildren, and I want the same for you.”

— John Eagle Shield, Fort Yates, N.D.

Director, Standing Rock Community Health Representative Program



Worksite Wellness Makes a Difference

“Our worksite wellness program at Hedahls encourages our folks to lead a healthy lifestyle. Individual lifestyle is a personal choice. Worksite wellness gives everyone the information and tools to make the best choices.”

— Dick Hedahl, Bismarck, N.D.

President, Hedahls Auto Parts

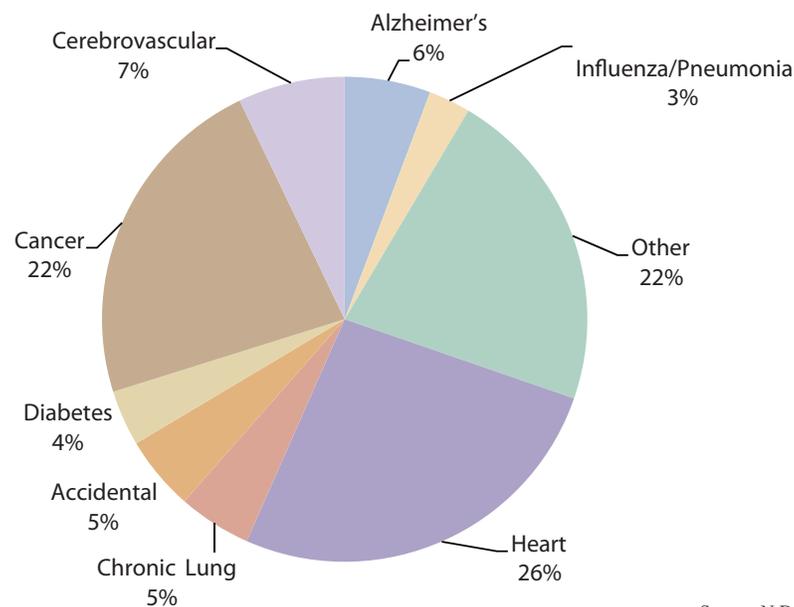
Introduction

Purpose

Cancer in North Dakota

Cancer is the second leading cause of death in North Dakota. It is estimated that one out of two men and one out of three women will develop cancer during the course of their lives. These statistics show that we all have been or likely will be personally affected by someone who has faced head-on the physical, emotional and financial challenges of this disease.

Causes of Death in North Dakota 2003-2007



Source: N D Department of Health,
Division of Vital Records

Means

Partners at Work

With support from the U.S. Centers for Disease Control and Prevention (CDC), the North Dakota Cancer Coalition (NDCC) joined with partners from many sectors of the North Dakota community to develop the state's first comprehensive cancer control plan, launched in June 2006. Gaining an understanding from others' perspectives through a series of coalition and workgroup meetings allowed organizations and individuals to work together toward a common goal and strengthened collaborations among agencies. Since then, over 200 individuals and organizations have joined the cancer prevention movement and have become coalition members.

From 2006 to 2010, the coalition has enjoyed a number of successes, including but not limited to:

- Funding of a Community Grant Program – a grassroots effort to provide seed money for NDCC members and partners to implement priority cancer prevention and control activities at the local level. Grantees have impacted cancer prevention and screening efforts in urban, rural and tribal settings across the state.
- Conducting cancer awareness campaigns for breast, cervical, colorectal, lung, prostate and skin cancer that are print ready and are widely used across the state in many venues.
- Appropriation of funds by the state legislature enhancing the services provided by the Women’s Way program from 2007 to present.
- Appropriation of funds by the state legislature for a colorectal cancer screening pilot project to provide colorectal cancer screening for a portion of our underserved population.
- Implementation of smoke-free ordinances in seven cities in North Dakota that are stronger than the state law.
- Passing of a comprehensive tobacco-free building and grounds policy at 36 percent of school districts.
- Providing educational opportunities — providing coalition members and statewide partners with increased knowledge and ability to implement cancer prevention and control activities such as cultural competency training, worksite wellness strategies to reduce the effects of cancer in the workplace, health-care reform and cancer, implementation of evidence-based strategies at the grass-roots level and grant writing 101.

The coalition has four implementation workgroups: Prevention, Early Detection/Screening, Treatment and Survivorship. These workgroups spearhead implementation efforts by identifying activities to accomplish cancer plan strategies with the desired goal of accomplishing the objectives in the cancer plan. Five committees (Communications; Education/Training; Policy/Advocacy; Data/Evaluation; and Resource/Membership) ensure continued function and infrastructure of the coalition.

The Plan

Opportunity for Impact

The number of people newly diagnosed with cancer continues to rise. It is estimated that each year nearly 3,400 North Dakotans are diagnosed with a new cancer. In 2010, there were approximately 25,271 state residents living with cancer. This means that more people are living with cancer and coping with the effects of cancer treatment while resuming their day-to-day routines. Yet despite the increase in cancer survivorship, there are still people every year who fall through the gaps in cancer prevention, detection and treatment.

The impact of cancer in North Dakota can be reduced by implementing effective interventions to decrease incidence of preventable cancers, detect cancers early and ensure access to quality cancer care services from diagnosis through survivorship or end of life.

North Dakota’s Cancer Control Plan is designed to serve as a living document that can guide collaborative action.

Introduction

Vision

A cancer-free future for North Dakota.

Mission

Working together to reduce the incidence and impact of cancer for all North Dakotans.

The goals of the plan are the result of a detailed assessment of the state's surveillance data and statistics, review of the results of cancer research and recommendations from local cancer experts and health-care professionals.

Goals at-a-Glance

- **Reduce cancer risks by improving healthy behaviors of North Dakota citizens.**
- **Increase cancer screening and early detection of cancer.**
- **Increase access to effective cancer treatment and care.**
- **Optimize the quality of life for North Dakotans affected by cancer.**
- **Continually and respectfully work to identify and reduce cancer inequities in North Dakota.**
- **Improve health-care professional and general public knowledge and understanding of cancer and cancer care through education and training.**
- **Improve decision-making through timely access to current and accurate surveillance and evaluation data.**

The reauthorized North Dakota Cancer Control Plan provides a blueprint for collaborative statewide efforts using successes achieved and lessons learned from the 2006-2010 cancer plan to reduce the burden of cancer. This plan highlights important cancer issues for future prioritization of coalition efforts.

The goals, objectives and strategies in each section of the plan will serve to be a guide and call to action to implement cancer prevention efforts. Success will ultimately be judged by the extent to which these are met. The evidence-based strategies listed throughout the plan are supported by research and are highly recommended for implementation of cancer prevention efforts across the state.

Together we can reduce cancer incidence and mortality among North Dakotans.



Cancer Journey

“My breast cancer diagnosis did not define me. It was only a bump in the road.”

—Ethel Baker Reeves, Watford City, N.D.
Breast Cancer Survivor



Making Cancer Less Scary

“The scariest part of my cancer diagnosis for my two-year-old was losing my hair. Who would have thought markers would lessen that fear. Coloring on my bald head made my disease much less scary and ‘fun’ for her.”

—Tammy Lapp-Harris, Mandan, N.D.
Hodgkins Lymphoma Survivor

In June 1989, the North Dakota Cancer Coalition (NDCC) was formed to assist the North Dakota Department of Health in preparing a state cancer plan. As part of this early effort, committees were established to focus on American Indians as a special population, tobacco use, cancer screening and quality of cancer care. The committees remained active through 1993, with the American Indian subcommittee active until 1995.

During this time, the U.S. Centers for Disease Control and Prevention (CDC) provided an opportunity to apply for National Breast and Cervical Cancer Program funding, resulting in development of the *Women's Way* program. Since its inception in 1997, *Women's Way* has served nearly 1,200 women and diagnosed more than 200 breast cancers and more than 270 cervical cancers and abnormalities requiring follow-up by a health-care professional.

While implementation of the *Women's Way* program continued to be a success for breast and cervical cancer screening, partnerships to address comprehensive cancer control continued. At the national level, development of comprehensive cancer control plans to guide coordination and integration of cancer control programs were encouraged.

CDC and its national partners sponsored a series of leadership institutes for key stakeholders in cancer control from every state. Participants were invited to participate in “how to” conferences designed to help foster the creation of a comprehensive cancer control program in each state. This led to the revitalization of the NDCC and began discussions with the governor’s office.

Governor John Hoeven called on the North Dakota Department of Health and the University of North Dakota to partner in development of a program with an overarching comprehensive approach to good health and wellness for citizens known as Healthy North Dakota (HND). Cancer prevention was a component of the HND program.

In 2003, North Dakota received funding from CDC to implement a comprehensive cancer prevention and control program (CCCP). The CCCP provided the coalition with the administrative support needed to begin development of North Dakota’s Cancer Control Plan, which was launched in the summer of 2006.

Summary

The North Dakota Cancer Control Plan has engaged discussion among key stakeholders that has resulted in implementation of objectives and strategies surrounding key issues such as high-quality care options for all North Dakotans, improved patient knowledge about cancer prevention and control, improved health care and patient communications, among many others.

The membership of the North Dakota Cancer Coalition continues to grow. The *Women's Way* program is still a vital partner in cancer prevention and control efforts in the state. Healthy North Dakota has since expanded its efforts to partner with the coalition in addressing not only cancer prevention but the entire cancer continuum.



Spirit and Strength

“Working in oncology, you see patients and their families during the toughest time of their lives. However, the spirit and strength that they show us every day truly inspires me.”

— Shari Hahn, RN, MSN - Fargo, N.D.

Cancer Center Operations Manager, Essentia Health



Voice Against Cancer

“I fight this disease we call cancer by being a voice for those who are unable or no longer can, until I no longer can. Together we can make a difference.”

— Bev Berger, Richardton, N.D.

Wife, mother and daughter of family members affected by cancer

To make the biggest impact on cancer in North Dakota, we first need to understand what cancer is and the extent of the disease. Cancer is a group of more than 100 different diseases characterized by abnormal and uncontrolled cell division, and intrusion on and destruction of nearby tissues that can spread to other locations of the body. In North Dakota each day, about nine people are diagnosed with cancer and about four die from the disease.

There are different ways to describe the burden of cancer. In this chapter, we look at three elements.

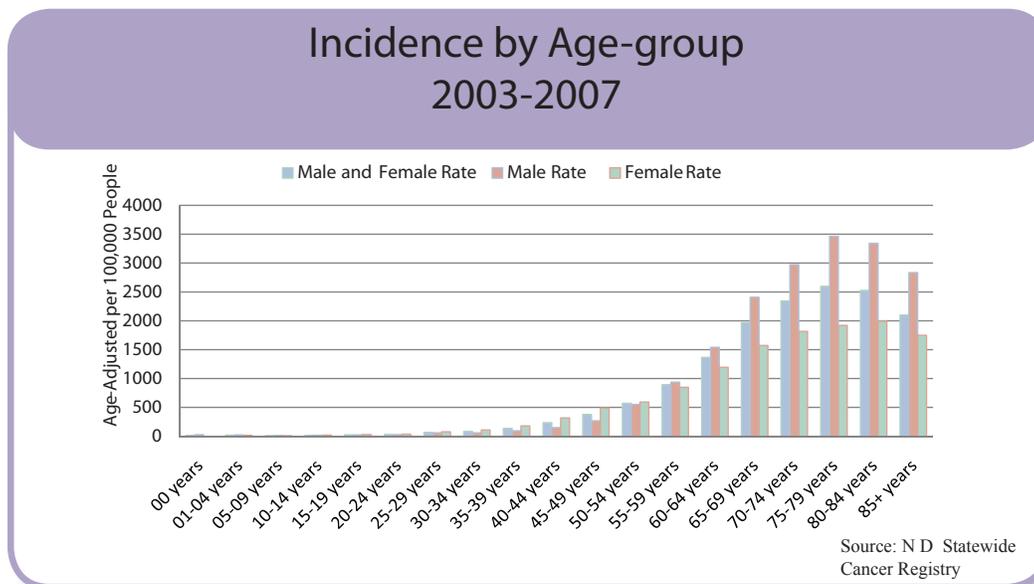
1. The disease burden: who gets cancer, how many people get sick (incidence), how many people die (mortality).
2. The economic burden: direct medical costs, indirect morbidity costs, indirect mortality costs, cancer treatment costs.
3. The burden of access to care.

DISEASE BURDEN

Incidence – Every year nearly 3,400 North Dakotans are diagnosed with cancer.

The disease burden in North Dakota largely is affected by the cancer inequities that exist in the state. A number of factors affect cancer incidence, mortality and survivorship including but not limited to gender, age, late vs. early stage diagnosis and race/ethnicity.

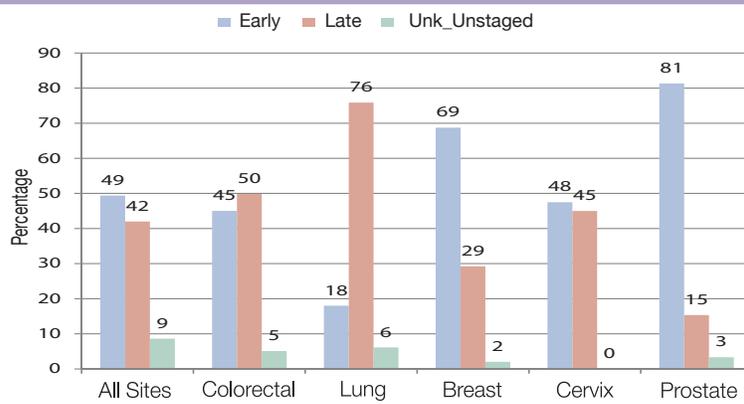
People of all ages are diagnosed with cancer; however, it is primarily an older person's disease. Over three-quarters (80.74%) of all cancers are diagnosed in men and women ages 55 and older (2003-2007 registry data). Furthermore, as men age they are even more likely than women to be diagnosed with cancer.



Between 2005 and 2015, the number of North Dakotans ages 65 and older will increase by 23 percent; the number of North Dakotans ages 85 and older will increase by 33 percent. As the population of North Dakota ages, the burden of cancer increases.

Late-stage diagnosis of cancer occurs most often in lung, colorectal and pancreatic cancer. Screening allows for detection of cancer in early stages when cancer is most treatable. Inability to screen for lung cancer accounts for the high rate of late-stage diagnosis. In the past 10 years, there has been a shift in trends for stage of diagnosis in both colorectal and cervical cancer. Although late stage colorectal cancer rates are still high, there has been a decrease in late-stage diagnosis with an increase of early-stage diagnosis. Although cervical cancer rates are low, the trends for cervical cancer are concerning. Late-stage diagnosis rates for cervical cancer are increasing, while early-stage diagnosis is decreasing.

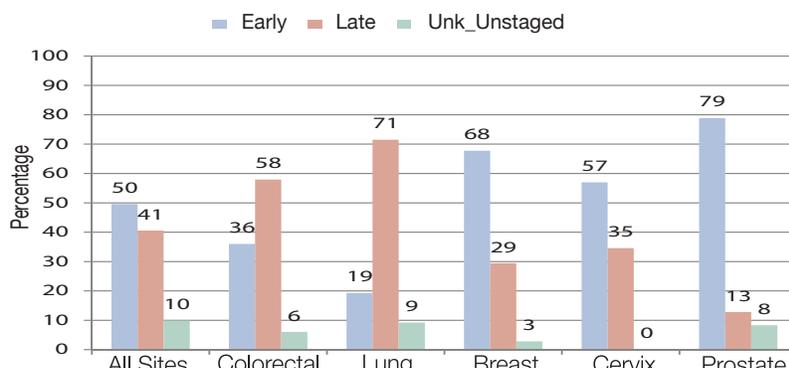
Stage of Diagnosis by Site 2003-2007



* Numbers too small to report for cervix cancer unknown/unstaged

Source: N D Statewide Cancer Registry

Stage of Diagnosis by Site 1998-2002



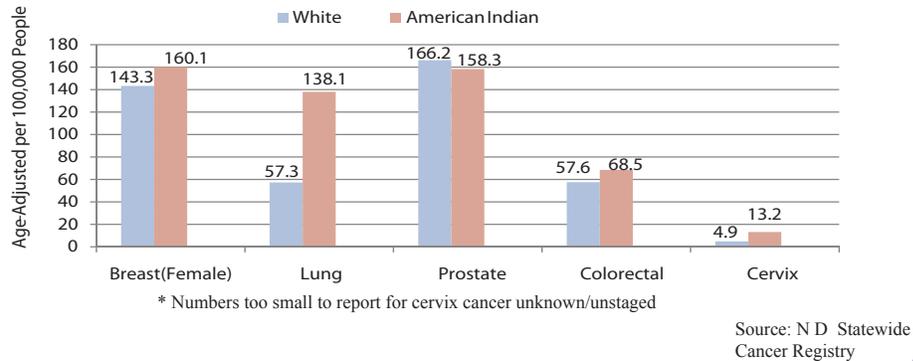
* Numbers too small to report for cervix cancer unknown/unstaged

Source: N D Statewide Cancer Registry

Burden of Cancer

American Indians are by far the largest racial minority group in North Dakota, comprising of just over five percent of the population. American Indians are at higher risk than other races in North Dakota to be diagnosed with breast, lung, colorectal and cervical cancer. 11

North Dakota Cancer Incidence Rates by Race 2003-2007

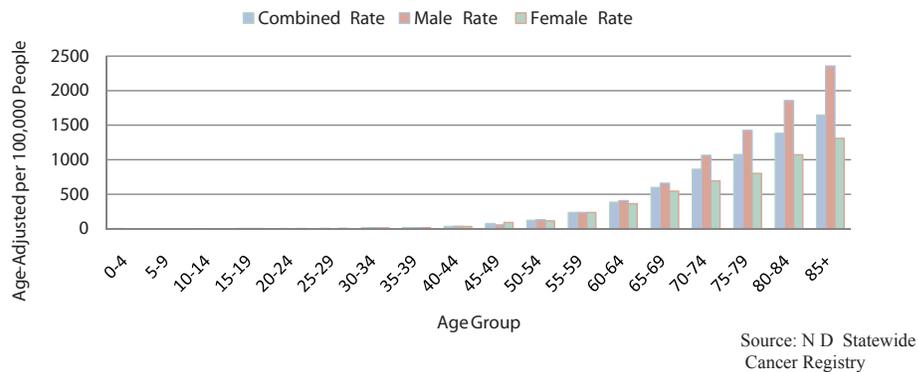


Inequities in cancer incidence rates are driven by a complex set of social, economic, cultural and health system factors. The North Dakota Cancer Coalition collaborates with the Great Plains Tribal Chairmen’s Health Board and Northern Plains Cancer Coalition with the vision of implementing cancer prevention efforts in the American Indian communities.

Mortality – Every year nearly 1,300 North Dakotans die from cancer.

The leading causes of death for North Dakota residents are heart disease and cancer. Lung, breast, colorectal and prostate cancer account for slightly more than 49 percent of the cancer deaths in the state. Overall, cancer mortality increases with age.

Age-Specific Mortality Rates by Gender 2003-2007



Burden of Cancer

Survivorship – There are an estimated 25,271 North Dakotans living with cancer.

Cancer survival rates in the U.S. steadily have increased over the past several decades. This may be due to several factors including higher rates of cancer screening, fewer late-stage diagnoses and improvements in health-care technology and treatment. When diagnosed in the local or regional stage, the five-year cancer survival rate is higher than if diagnosed in distant stages. This is especially true for screenable cancers. Overall, survival rates are highest for prostate, breast, cervix and colorectal. Survival rates are lowest for lung cancer.

Five-Year Cancer Survival Rates 1999-2006

| | Prostate % | Female Breast % | Cervix % | Colorectal % | Lung % |
|----------|------------|-----------------|----------|--------------|--------|
| Local | 100 | 98.0 | 91.2 | 90.4 | 52.9 |
| Regional | 100 | 83.6 | 57.8 | 69.5 | 24.0 |
| Distant | 30.2 | 23.4 | 17.0 | 11.6 | 3.5 |

* A localized cancer is one that is confined to the primary site; a regional cancer is one that has spread directly beyond the primary site or to the regional lymph nodes; a distant cancer is one that has spread to other organs

Source:
American Cancer Society

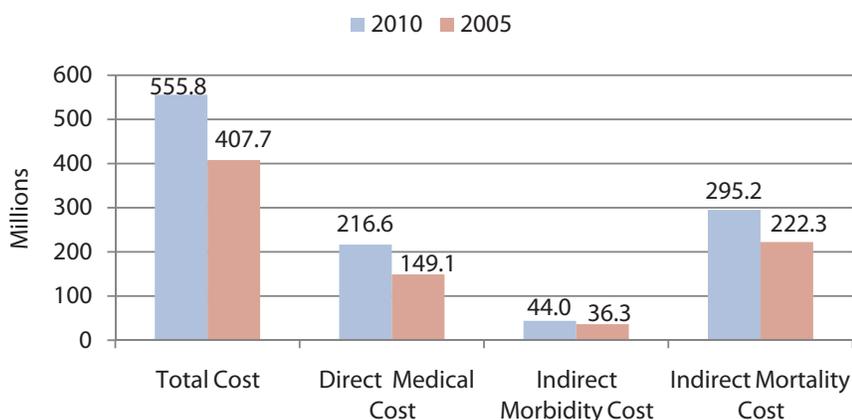
Economic Burden

Estimated Cost of Cancer in North Dakota

Cancer is the leading cause of death for men and women ages 35 to 64, the prime working years for North Dakotans. Not only does cancer impact the person diagnosed physically and emotionally, the financial costs also are a burden to the person, his or her family and society as a whole. According to the American Cancer Society's Cancer Facts and Figures 2010, the estimated cost of cancer in North Dakota in 2010 was \$555,810,445, which includes direct medical costs (total of all health expenditures); indirect morbidity costs (cost of lost productivity due to illness); and indirect mortality costs (cost of lost productivity due to premature death).

Burden of Cancer

Estimated Costs of Cancer in N.D.



Source: American Cancer Society
Cancer Facts and Figures (2010)

Since 2005, cancer costs have increased significantly due to new, more advanced and expensive treatments. It makes good business sense to invest in prevention of the disease and is essential for even non-traditional partners, such as businesses and academia, to join the fight against cancer. Investments in cancer screening and prevention result in savings coming directly and indirectly from the cost of cancer care.

The Burden of Access to Care

North Dakota, like other states, tribes and territories, experiences access to care barriers that ultimately affect stage of diagnosis and cancer mortality rates. Access to care issues include, but are not limited to:

- No or limited medical insurance coverage.
- Lack of adequate and sustained funding for state Medicaid programs, including prescription drugs.
- Limited reimbursement for cutting-edge cancer care.
- Long distances to a cancer care facility.
- No primary provider.
- Transportation limitations.
- Language, literacy and cultural barriers.
- Lack of advocacy.
- Limited access to information about available services.
- Lack of knowledge and access to clinical trials.

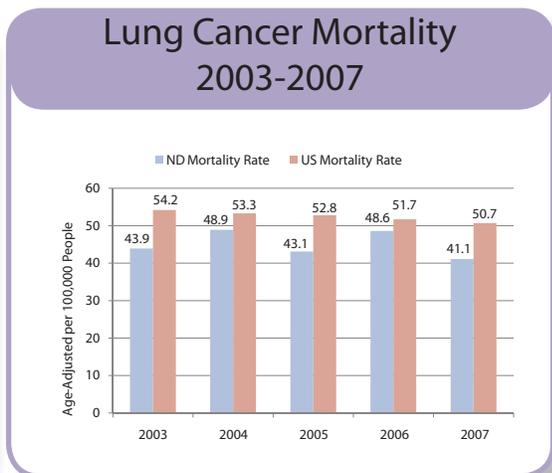
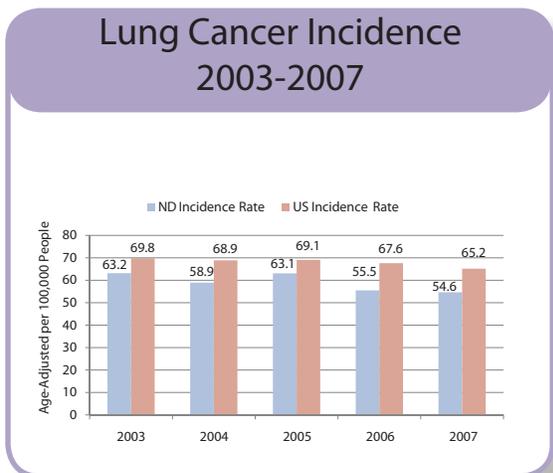
The North Dakota Cancer Coalition, along with many other state partners, are working diligently to improve access to care throughout the cancer continuum.

Lung, breast, colorectal and prostate cancer account for more than 49 percent of cancer cases in North Dakota. On the following pages, we will take a look at this specific data.

Burden of Cancer

Lung Cancer

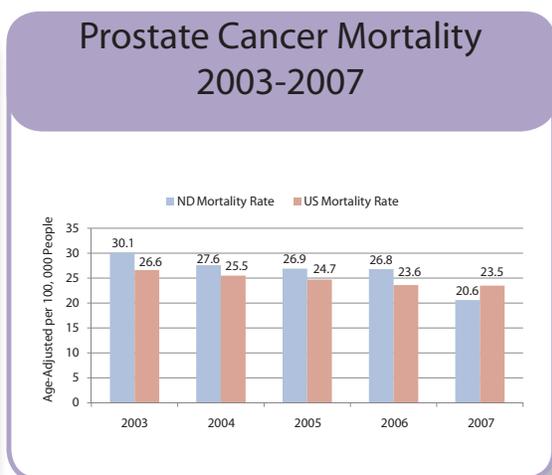
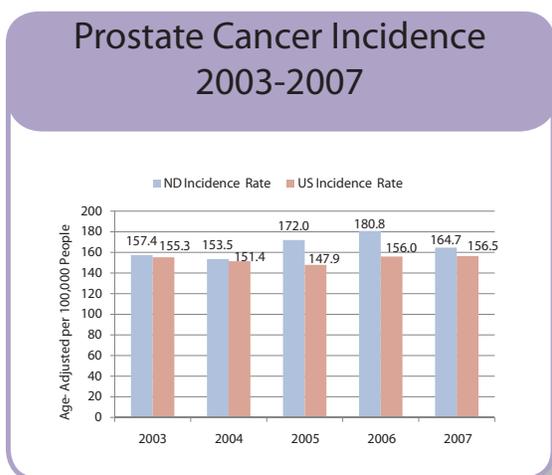
North Dakota has more than 400 new cases of lung cancer each year. Although North Dakota lung cancer rates are lower than the national average, it is still the third most commonly diagnosed cancer and the leading cause of cancer deaths in both men and women. Smoking is the single most preventable cause of death in the United States and accounts for 80 to 90 percent of lung cancer deaths. An astounding 76 percent of lung cancers are diagnosed in late stages; however, there is a poor survival rate for lung cancer, even when diagnosed early. When looking at lung cancer incidence and mortality rates by gender, men have significantly higher rates than that of women in the state.



Source: N D Statewide Cancer Registry; U S Rate-Surveillance Epidemiology and End Results

Prostate Cancer

More than 540 new prostate cancers are diagnosed per year. Prostate cancer incidence has decreased in the past few years; however, prostate cancer incidence in North Dakota is slightly higher than the national average. Prostate cancer is the most commonly diagnosed cancer among men in North Dakota and the second leading cause of cancer deaths among men in the state. There is an excellent survival rate for prostate cancer when diagnosed early. More than 90 percent of prostate cancers are diagnosed in these early stages. In 2007, there were nearly 4,940 prostate cancer survivors in North Dakota.

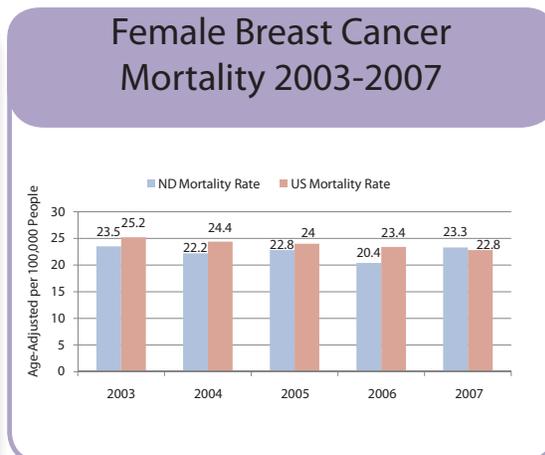
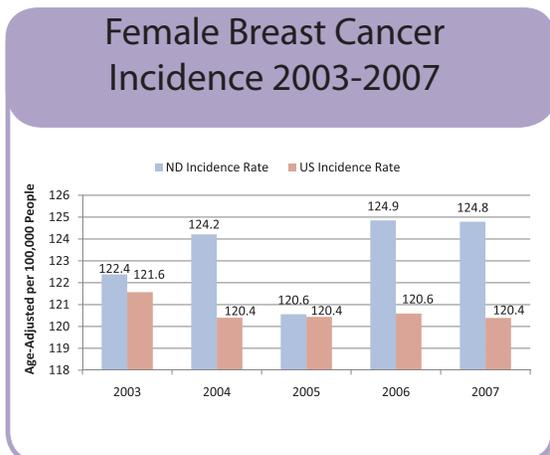


Source: N D Statewide Cancer Registry; U S Rate-Surveillance Epidemiology and End Results

Burden of Cancer

Breast Cancer

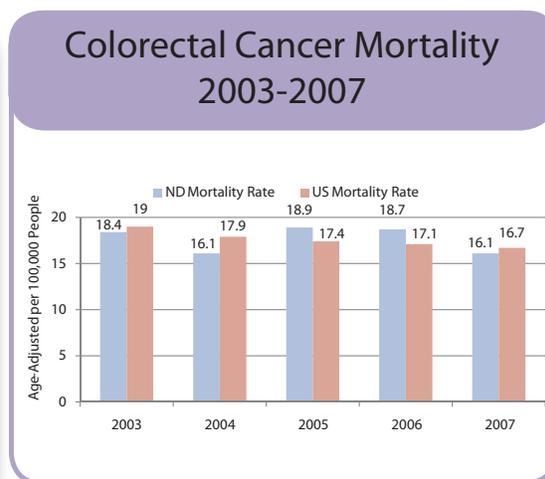
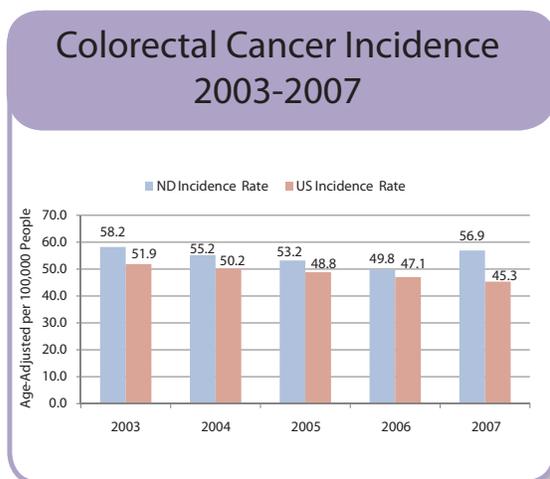
Breast cancer is the most commonly diagnosed cancer for women with more than 530 new cases per year, and the second leading cause of cancer deaths in North Dakota. Nearly 4,700 North Dakota women were breast cancer survivors in 2007.



Source: N D Statewide Cancer Registry; U S Rate-Surveillance Epidemiology and End Results

Colorectal Cancer

About 2,700 North Dakotans were colorectal cancer survivors in 2007. Each year, about 400 new cases are diagnosed. North Dakota men generally have higher rates of being diagnosed and dying from colorectal cancer than women. Screening prevents colorectal cancer by finding and removing polyps before they become cancerous.

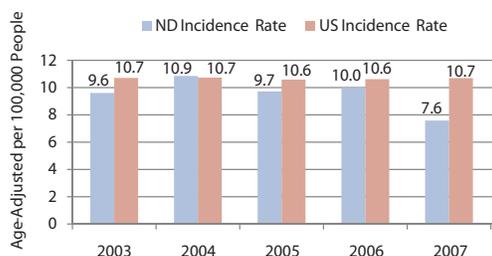


Source: N D Statewide Cancer Registry; U S Rate-Surveillance Epidemiology and End Results

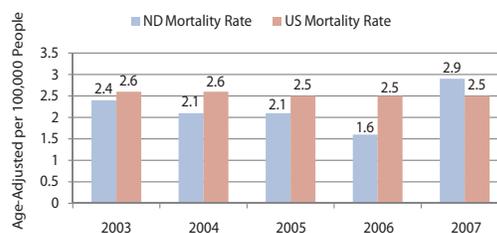
Oral and Pharynx Cancer

Survival rates for oral cancer in the United States have not improved substantially over the past 25 years. More than 40 percent of people diagnosed with oral cancer die within five years of diagnosis; although survival rates vary widely depending on the diagnosis. The five-year survival rate for people with oral cancer diagnosed at early stages is 81 percent. In contrast, the five-year survival rate is only 51 percent when the disease is diagnosed in late stages. North Dakota rates nearly parallel U.S. rates.

Oral and Pharynx Cancer Incidence 2003-2007



Oral and Pharynx Cancer Mortality 2003-2007

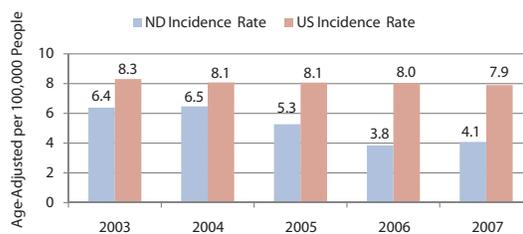


Source: N D Statewide Cancer Registry; U S Rate-Surveillance Epidemiology and End Results

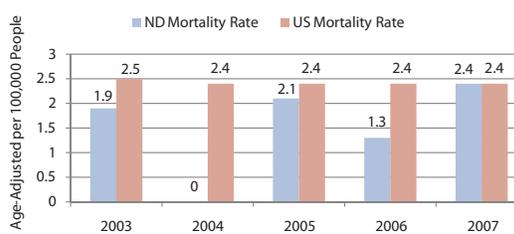
Cervical Cancer

Cervical cancer incidence and mortality rates are slightly lower than the national rates. It is anticipated that as more people receive the human papillomavirus (HPV) vaccine, cervical cancer incidence and mortality will decrease. HPV accounts for more than 99 percent of cervical cancer cases.

Cervical Cancer Incidence 2003-2007



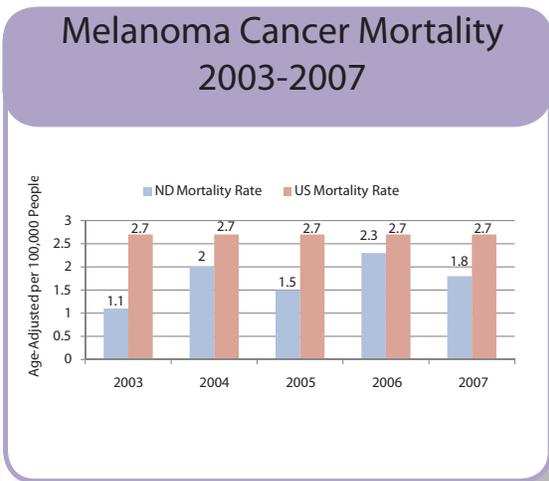
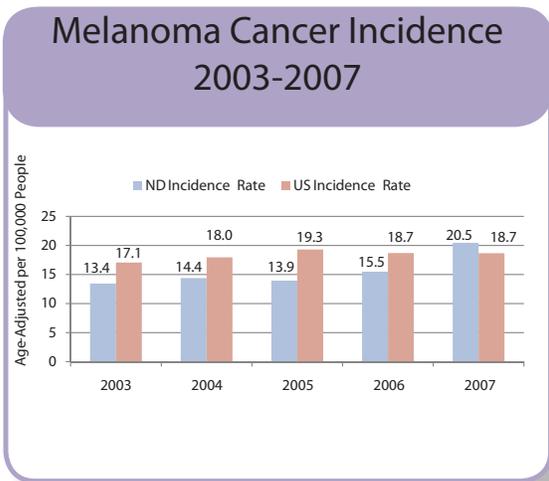
Cervical Cancer Mortality 2003-2007



Source: N D Statewide Cancer Registry; U S Rate-Surveillance Epidemiology and End Results

Melanoma

Each year, about 140 new cases of melanoma are diagnosed. Melanoma (skin cancer) incidence rates for North Dakotans are lower than the national rates. In North Dakota, 87 percent of melanomas are diagnosed in early stages.



Source: N D Statewide Cancer Registry; U S Rate-Surveillance Epidemiology and End Results



Your Future Matters

“It is important for everyone, especially young people, to understand that what you do today can affect you in the long run.”

— Ashley Johnson, Grand Forks, N.D.
Melanoma Skin Cancer Survivor

American Cancer Society. (2010). Cancer facts and figures. Atlanta, GA: ACS.

CDC Wonder Data Query System. (2010). Underlying causes of death. <http://wonder.cdc.gov/>.

Centers for Disease Control and Prevention. Youth Risk Behavioral Surveillance System (YRBSS).
North Dakota Department of Public Instruction. (2009). North Dakota YRBSS Data, 1995-2009.
<http://www.cdc.gov/HealthyYouth/yrbs/>.

Centers for Disease Control and Prevention, National Cancer Institute. State cancer profiles. Accessed at <http://statecancerprofiles.cancer.gov> on February 18, 2010.

Kaiser Family Foundation. (2010). <http://www.statehealthfacts.org/>.

National Cancer Institute. (2010). Glossary of statistical terms. Atlanta, GA: CDC.
<http://www.cancer.gov/statistics/glossary>.

North Dakota Cancer Registry. (2010). Preliminary cancer incidence statistics: 1998-2007. Bismarck, N.D.: North Dakota Cancer Registry.

North Dakota Division of Vital Records. (2009). Mortality among North Dakota residents. Bismarck, N.D.: North Dakota Department of Health.

SEER Survival Statistics. (2010). <http://seer.cancer.gov/canques/survival/htmls>.

U.S. Department of Health and Human Services. (2009). Behavioral Risk Factor Surveillance System data. <http://www.cdc.gov/brfss/>.

Evidence suggests that more than one-third of cancer deaths are preventable by not using tobacco, getting sufficient physical activity and eating healthy foods in moderation. Other health behaviors can increase cancer risk. For too long, medicine has emphasized treating the disease once it has appeared and has not given enough attention to the full spectrum of the disease to warrant the likelihood of reducing incidence through prevention. There is much to be done to prevent cancer for North Dakotans.

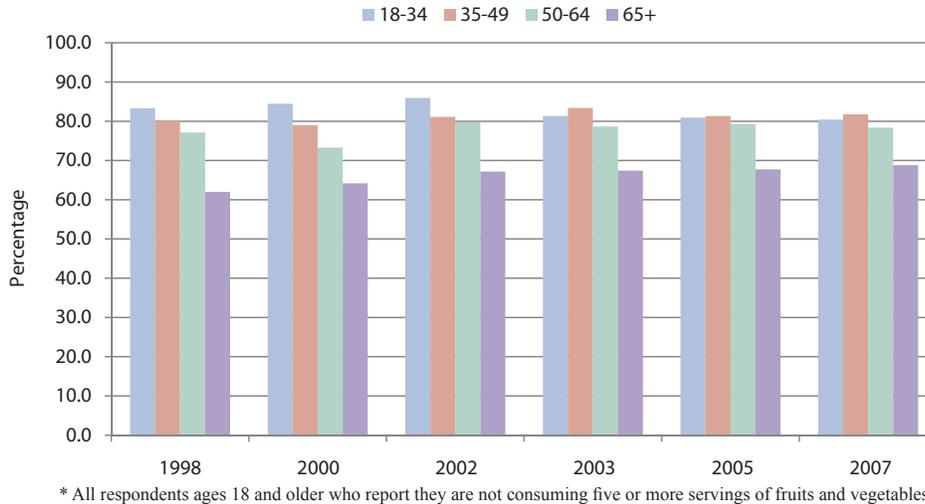
Overarching goal: Reduce cancer risks by improving healthy behaviors of North Dakota citizens.

NUTRITION

Objective 1:

By 2016, increase the proportion of North Dakota adults and youth who report eating fruits and vegetables five or more times a day by 3 percent over 2009 reports.

Not Enough Fruits and Vegetables by Age
1998-2007



Source: Behavioral Risk Factor Surveillance System

Adult baseline: 22.5%

Youth baseline: 13.7%

Adult target: 25.5%

Youth target: 16.7%

Measurement: Behavioral Risk Factor Surveillance System and Youth Risk Behavior Surveillance System

Strategies:

1. Conduct an assessment of policies that increase access to fruits and vegetables.
- ◆ 2. Advocate for local and state policies to improve access and intake of healthy foods.
- 3. Promote access to healthy foods in the worksite.
- ◆ 4. Promote access to healthy foods in the school settings.
5. Advocate for a state comprehensive healthy eating and physical activity program.
- ◆ 6. Promote implementation of culturally-appropriate nutrition programs, practices and policies.
7. Partner with existing coalitions, such as the Healthy Eating and Physical Activity Partnership, in their efforts to increase access to and consumption of more fruits and vegetables, particularly among the underserved populations.

Objective 2:

By 2016, increase the number of worksites that have policies to support mothers who breastfeed.

Baseline: 0

Target: 10

Strategies:

- 1. Support partner efforts to advocate for breastfeeding policies in the workplace.
- 2. Support education and training that promotes breastfeeding policies in the workplace.



Healing at all Levels

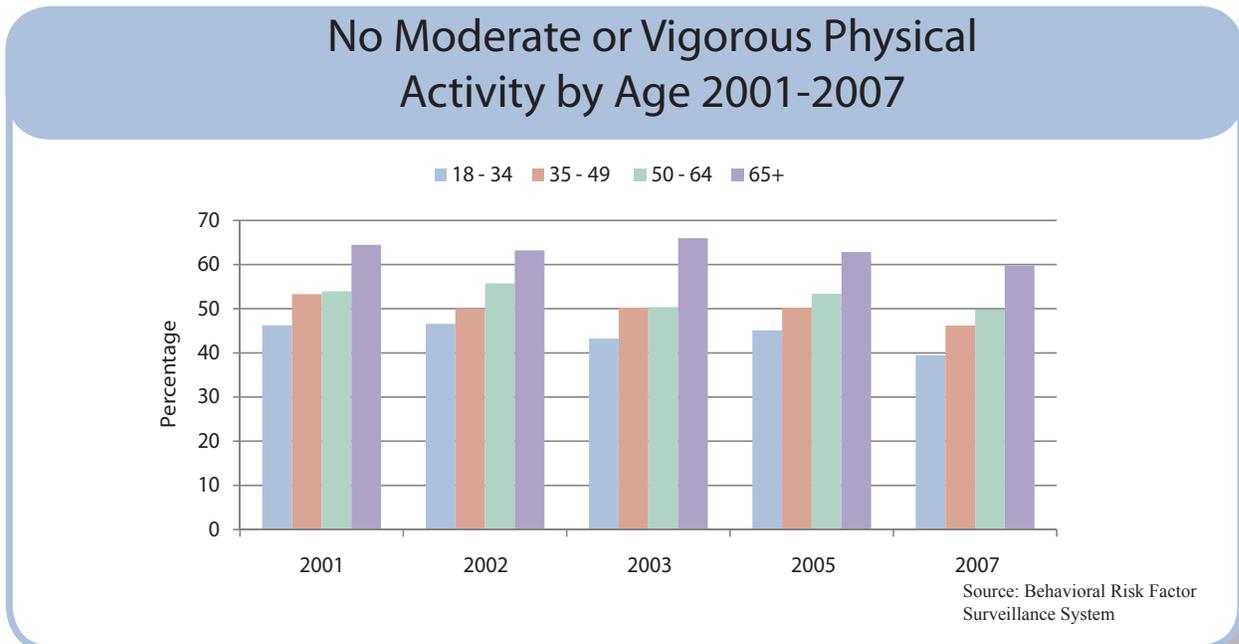
“I encourage everyone to get regular screenings. As a cancer patient, I learned all I could about my type of cancer and became an active participant in my treatment plan. Family support is important. My husband Terry was my strength and he educated himself about my condition and care. Healing from cancer occurs at all levels. The spiritual outcome from shared prayers was a healing of my spirit that completed my physical healing.”

— Antonette Halsey, Fort Totten, N.D.
Spirit Lake Dakota - Arikara
Ovarian Cancer Survivor

Prevention

Objective 3:

By 2016, increase the proportion of North Dakota adults and youth who meet recommended physical activity levels by 3 percent compared to 2009 reports.



Adult Baseline: 52.3% of adults with 30 or more minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20 or more minutes three or more days per week.

Youth Baseline: 43.7% of youth report being physically active at least 60 minutes per day on at least five days per week.

Adult Target: 55.3% Youth Target: 46.7%

Measurement: Behavioral Risk Factor Surveillance System and Youth Risk Behavior Surveillance System.

Strategies:

1. Advocate for local and state policies to increase physical activity in schools.
- 2. Advocate for statewide physical activity policies in child-care settings.
- 3. Support quality physical education programs in schools.
- 4. Advocate for local policies and practices designed to provide opportunities to support and help people be more physically active in their communities.
- 5. Support physical activity programs sponsored by Healthy North Dakota and other worksite wellness initiatives.
- 6. Support onsite physical activity programs in the workplace, or increase access to physical activity sites for workers.
- 7. Conduct community-wide campaigns to increase access to physical activity opportunities.
8. Partner with existing coalitions, such as the Healthy Eating and Physical Activity Partnership, in its efforts to change the environment to increase physical activity and active living, particularly among those underserved populations.
- ◆ 9. Promote implementation of culturally-appropriate physical activity programs, practices and policies.
10. Advocate for a state comprehensive healthy eating and physical activity program.
- ◆ 11. Promote point of decision prompts to encourage use of stairs in public buildings and worksites.

Prevention

Objective 4:

By 2016, strengthen public protection from cancer-causing environmental factors.

Strategies:

1. Conduct educational campaigns about the carcinogenic risks of radon in the home, how to test for radon, sources for obtaining test kits and removal of radon from the home.
2. Educate North Dakotans about the importance of testing private drinking water supplies (water supplies not obtained from municipal or rural water supplies) for potential carcinogenic substances and considerations for environmental carcinogens near the water supply, and identify certified water testing laboratories that are available to conduct the testing.
3. Educate the public, employers, health professionals and policy makers about cancer-related environmental exposures including but not limited to radon, asbestos, lead, mold, erionite, pesticides and home-use products.
4. Support worker health and safety policies and programs that include exposure to environmental carcinogens.

SUN PROTECTION

Objective 5:

By 2016, reduce the number of sunburns resulting from over-exposure to ultraviolet radiation.

Baseline: 2010 Behavioral Risk Factor Surveillance System measurement

Target: 5% decrease from the 2010 Behavioral Risk Factor Surveillance System measurement

Strategies:

- 1. Encourage and support primary school programs to educate students, parents and teachers about skin cancer risks and advocate for sun protection measures.
- ◆ 2. Encourage and support secondary school and college programs to educate students, parents and teachers about skin cancer risks and advocate for sun protection measures.
- ◆ 3. Support and/or implement sun protection policies and guidelines in child-care settings.
- ◆ 4. Support and implement sun protection awareness campaigns.
5. Conduct or support education about the risks of using tanning beds and booths.
- 6. Support education and sun protection policies in recreational settings.
- 7. Advocate for local and state policies that support sun and ultra-violet protective measures. (i.e., schools, Parks and Recreation programs, worksites, use of tanning beds, etc.)
- ◆ 8. Promote counseling by health-care professionals to parents of infants and children about the need for sun protection measures.
9. Advocate for inclusion of a sunburn question on the Youth Risk Behavior Surveillance System (YRBSS) survey.

Prevention

Objective 6:

By 2016, increase the number of age-appropriate North Dakotans who receive the first dose and complete the human papillomavirus (HPV) vaccination series; 2009 female rates and 2010 male rates.

| | | | |
|-----------|----------------------|------------------------------|------------------------------|
| Baseline: | Females age 13 to 17 | First dose: 45.1% | Third dose: 31.7% |
| Target: | Females age 13 to 17 | First dose: 60% | Third dose: 50% |
| Baseline: | Males age 13 to 17 | First dose: To be determined | Third dose: To be determined |
| Target: | Males age 13 to 17 | First dose: To be determined | Third dose: To be determined |

Measurement: National Immunization Survey

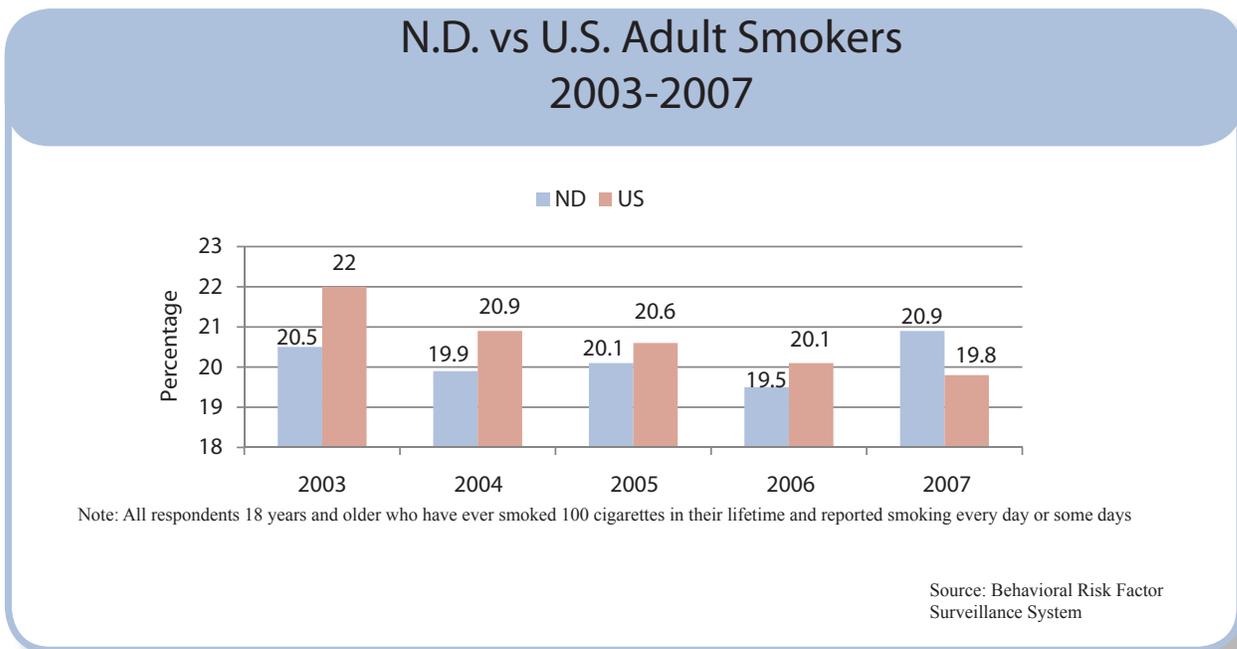
Strategies:

- 1. Support the Federal Advisory Committee on Immunization Practices recommendations regarding HPV vaccination by promoting vaccination of all age-appropriate females and males.
- ◆ 2. Work with partners to conduct community campaigns about HPV, the link between HPV and cancer (cervical, oral and rectal), the importance of HPV vaccination and the need to complete the vaccination series.
- 3. Support efforts to improve access to receive and complete the HPV vaccine series.
- 4. Support culturally-appropriate HPV vaccination education and programs.
- ◆ 5. Support incentive programs to complete the vaccination series.
- 6. Advocate for client reminders by health-care professionals to complete the vaccination series.

TOBACCO

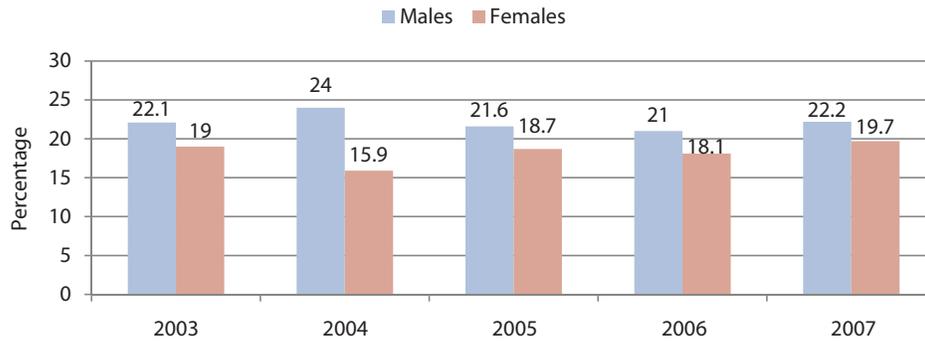
Objective 7:

By 2016, decrease from 18.6 percent in 2009 to 16 percent the percentage of adults who are current smokers.



Prevention

North Dakota Adult Smokers by Gender 2003-2007



Note: All respondents 18 years and older who have ever smoked 100 cigarettes in their lifetime and reported smoking every day or some days

Source: Behavioral Risk Factor Surveillance System

Strategies:

- 1. Promote the North Dakota Tobacco Quitline and Quitnet and local cessation services.
- 2. Promote insurance coverage for cessation services.
- 3. Promote health-care provider training on Public Health Service Guidelines, Treating Tobacco Use and Dependence.
- 4. Promote health-care systems change by institutionalizing Public Health Service Guidelines.
- 5. Advocate for a significant increase in the tax on tobacco products.
- 6. Advocate for policies that address tobacco-related disparities.
- 7. Collaborate with the Great Plains Tribal Chairmen's Health Board Epidemiology Center Tobacco Prevention and Control Program.

Prevention

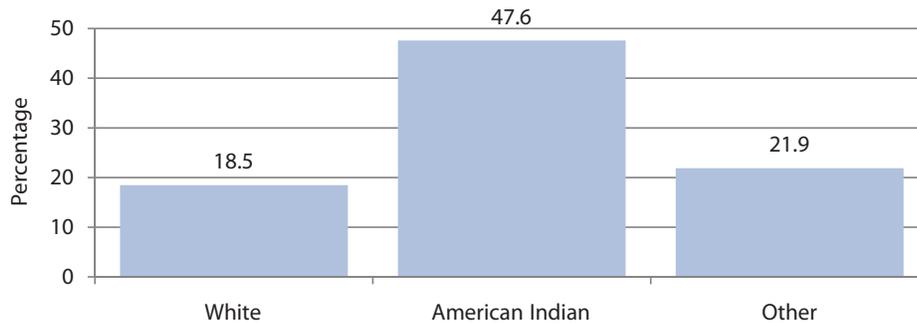
■ = Evidence based

◆ = Insufficient evidence

Objective 8:

By 2016, decrease from 48.5 percent in 2008-2009 to 45 percent the percentage of American Indian adults who smoke.

Current Adult Smokers by Race 2004-2008



Note: All respondents 18 years and older who have ever smoked 100 cigarettes in their lifetime and reported smoking every day or some days

Source: Behavioral Risk Factor Surveillance System

Strategies:

1. Collaborate with the Office for the Elimination of Health Disparities and the Healthy North Dakota Disparities Committee.
- 2. Promote the North Dakota Tobacco Quitline and Quitnet and tribal cessation programs.
- 3. Promote health-care provider training on the Public Health Service guidelines, Treating Tobacco Use and Dependence.
- 4. Promote health-care change to institutionalize the Public Health Service Guidelines.
- 5. Promote tobacco-free policies in reservation workplaces.
6. Support education about the difference between the ceremonial use of traditional tobacco and commercial tobacco.
7. Facilitate relationship building between cancer-focused state/local tobacco programs with tribal health programs to advance collaborative tobacco prevention and control efforts.
- 8. Advocate for policies that address tobacco-related disparities.
9. Collaborate with the Great Plains Tribal Chairmen's Health Board Epidemiology Center Tobacco Prevention and Control Program.

Prevention

■ = Evidence based

◆ = Insufficient evidence

Objective 9:

By 2016, increase from 25 percent in 2010 to 50 percent of North Dakotans that are protected from secondhand smoke by strengthening the North Dakota Smoke Free Law for Public Places and Places of Employment to 100 percent.

Strategies:

- 1. Educate state and local policymakers and the public on the need for and the benefits of smoke-free environments.
- 2. Collaborate with partners to provide education in tribal communities on the need for and benefits of smoke-free environments.
- 3. Support efforts to increase the number of colleges and universities that are tobacco free.
- 4. Support communities enacting or strengthening smoke-free ordinances.
- 5. Support K-12 schools in the adoption of comprehensive tobacco-free school policies.

Objective 10:

By 2016, decrease from 5.2 percent in 2007 to 3 percent of North Dakota adults who currently use chewing tobacco or snuff every day or some days.

Strategies:

- 1. Promote the North Dakota Tobacco Quitline, Quitnet and local cessation services.
- 2. Promote insurance coverage for cessation services.
- 3. Promote health-care provider training on Preventive Health Service Guidelines to prevent tobacco use and addiction.
- 4. Promote health-care systems change by institutionalizing Preventive Health Service Guidelines.
- 5. Advocate for a significant increase in the tax on tobacco products.



Family First

“Cancer is a scary situation. One thing is for sure, if I knew how the several years of smoking would affect me and my family, I never would have picked up my first cigar.”

—Verle Marsaa, Tappen, N.D.”

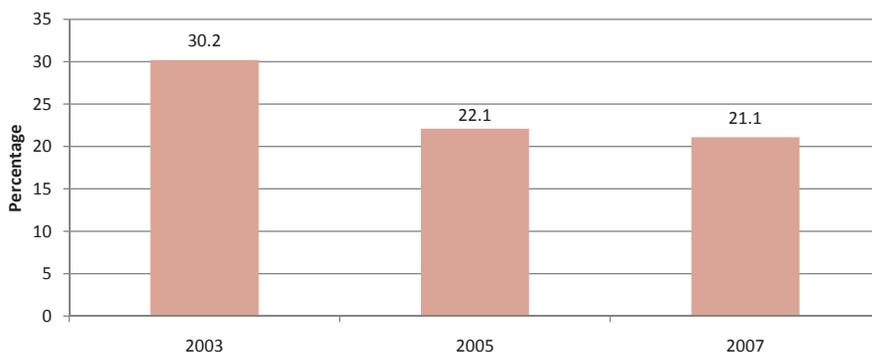
Lip and Skin Cancer Survivor

Prevention

Objective 11:

By 2016, decrease from 30.6 percent in 2009 to 26 percent the percentage of students in grades nine through 12 who are current tobacco users. Tobacco use includes smoking cigarettes or cigars, or using chewing tobacco, snuff or dip, etc.

Youth Tobacco Users 2003-2007



Source: Behavioral Risk Factor Surveillance System

Strategies:

- 1. Promote adoption of comprehensive tobacco-free school policy.
- 2. Provide cessation resources to youth.
- 3. Advocate for a significant increase in the tax on tobacco products.
- 4. Collaborate with youth tobacco committees to implement prevention policy strategies.
- 5. Collaborate with the Great Plains Tribal Chairmen's Health Board Epidemiology Tobacco Prevention and Control Program.



Prevention At All Levels

“Environmental factors that can contribute to cancer are controllable and preventable. In some way, we can all make a difference in preventing cancer among our fellow North Dakotans.”

—Kevin Pavlish, Dickinson, N.D.
Environmental Health Practitioner,
Southwestern District Health Unit

Prevention

■ = Evidence based

◆ = Insufficient evidence



Rolling With The Punches

“It is important for employers to be active in the health of their employees. At age 45, I was diagnosed and treated for prostate cancer due to an employee screening. Life is the best ‘bonus’ I could have ever received.”

—Pat Helfrich, Dickinson, N.D.
Prostate Cancer Survivor



Compassion Through Experience

“Cancer is an experience that changed my life. As a colorectal cancer survivor, I have compassion for others going through the cancer journey. My profession allows me the opportunity to help people understand the importance of early detection and preventive measures.”

—Ken Dykes, Bismarck, N.D.
Colorectal Cancer Survivor
Executive Director, Bismarck Cancer Center

Screening/Early Detection Chapter 3

Screening refers to tests and exams used to find a disease, such as cancer, in people who do not have symptoms. Early detection of cancer increases chance of survivorship and will reduce the incidence and impact of cancer in North Dakota.

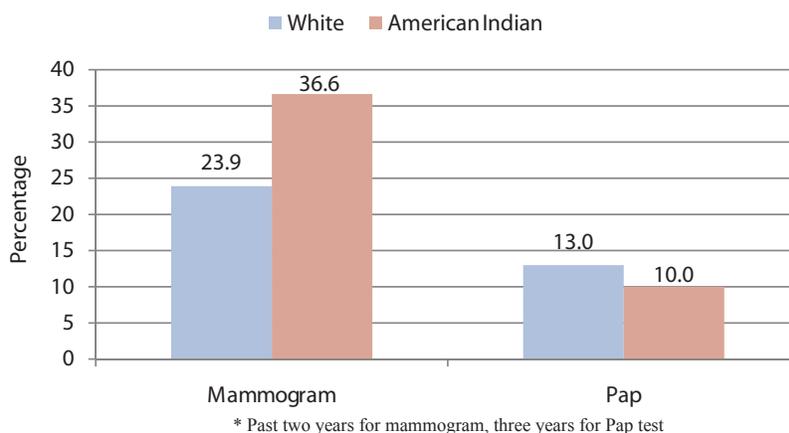
Overarching goal: Increase cancer screening and early detection of cancer.

BREAST CANCER

Objective 12:

By 2016, increase by 3 percent from 2008, the percentage of age-appropriate women who have had a mammogram in the past two years.

No Recent Mammogram or Pap Test By Race
1999-2008



Source: Behavioral Risk Factor Surveillance System

Baseline: 76.5% Target: 79.5%

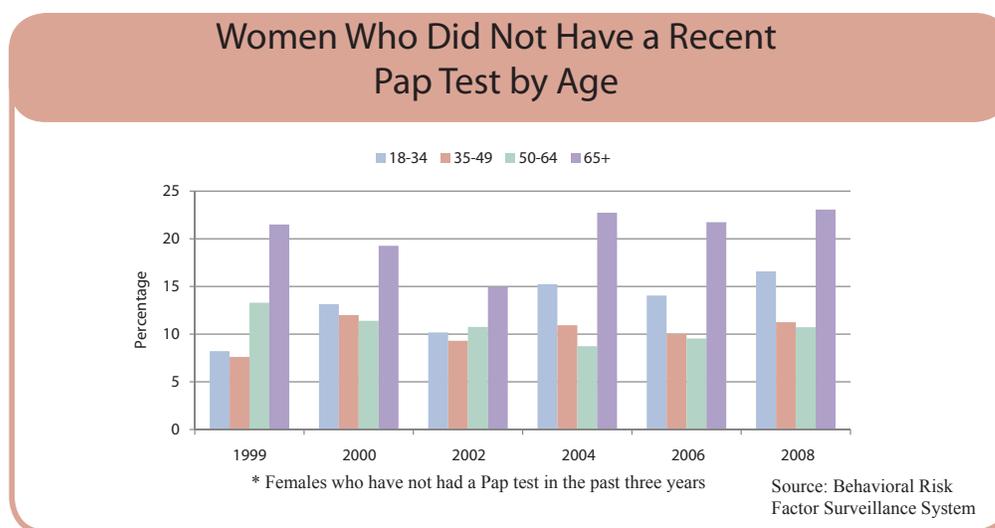
Strategies:

- 1. Promote breast cancer screening education using a multi-component approach, including small media and one-to-one education.
- ◆ 2. Promote informed and/or shared decision making based on personal and family history, by age-appropriate women and health-care providers.
- 3. Support ongoing efforts to identify and address gaps among women who could be served by the North Dakota Breast and Cervical Cancer Screening Program (*Women's Way*) or other no- or low-cost screening programs, such as Family Planning, Community Health Centers, Indian Health Services or Tribal clinics, with particular attention to identify people who experience health inequities.
- 4. Reduce barriers to breast cancer screening including but not limited to language, financial, geographic, access and low literacy.
- ◆ 5. Advocate for health-care settings and staff that are culturally sensitive.
- ◆ 6. Encourage the “one-stop shop concept” to make breast cancer screening more convenient.
- 7. Advocate for the development of outreach systems for the underserved and minority populations, such as patient navigation.
- 8. Support efforts to secure, maintain or increase cancer screening funds for *Women's Way*, Susan G. Komen Foundation and other breast cancer screening funding sources.
- 9. Promote health-care providers' utilization of client reminders for breast cancer screening.
10. Promote the business case to business leaders about the benefits of breast cancer screening and early detection, along with effective employer strategies to facilitate cancer screening.
11. Support health-care provider education about the importance of obtaining detailed personal and family history identifying risk factors (inherited predisposition for cancer) that can initiate appropriate cancer screening.

CERVICAL CANCER

Objective 13:

By 2016, increase by 2 percent from the 2008 rates the percentage of age-appropriate women who have had a Pap test in the past three years.



Baseline: 82.5% Target: 84.5%

Screening/Early Detection

Strategies:

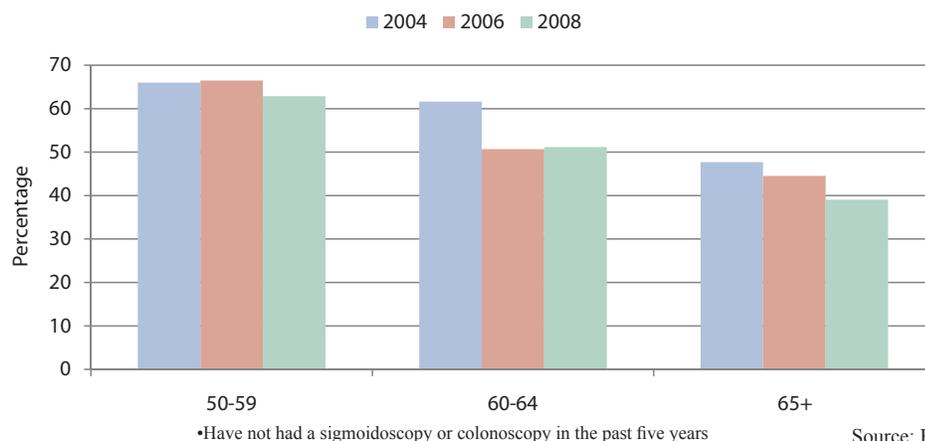
- 1. Educate North Dakotans about current cervical cancer screening guidelines and the connection between HPV and cervical cancer using a multi-component approach, including small media and one-to-one education.
- ◆ 2. Promote informed and shared decision making for women and health-care professionals regarding cervical cancer screening based on personal medical history.
- 3. Reduce barriers to cervical cancer screening including but not limited to language, financial, geographic, access issues and low literacy.
- ◆ 4. Advocate for health-care settings and staff that are culturally sensitive.
- 5. Support ongoing efforts to identify and address gaps among women who could be served by the North Dakota Breast and Cervical Cancer Early Detection Program (*Women's Way*) and other no- or low-cost screening programs, such as Family Planning, Community Health Centers, Indian Health Services or Tribal clinics, with particular attention on people who experience health inequities.
- ◆ 6. Encourage the “one-stop shop” concept to make cervical cancer screening convenient.
- 7. Advocate for the development of outreach systems, such as patient navigation for underserved women.
- 8. Support efforts to secure, maintain or increase cancer screening funds for *Women's Way* and other cervical cancer screening funding sources.
- 9. Promote the business case to business leaders about the benefits of cervical cancer screening and early detection along with effective employer strategies to facilitate cancer screening.
- 10. Promote health-care providers' utilization of client reminders for cervical cancer screening.

COLORECTAL CANCER

Objective 14:

By 2016, increase by 5 percent from the 2008 rates the percentage of North Dakotans ages 50 and older who have been screened for colorectal cancer.

No Recent Sigmoidoscopy or Colonoscopy Exam by Age 2004-2008



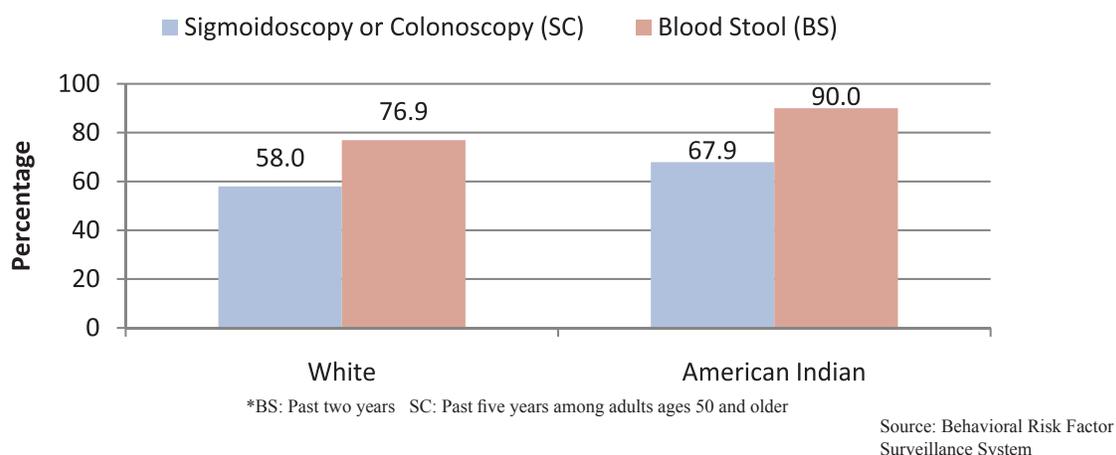
Source: Behavioral Risk Factor Surveillance System

Screening/Early Detection

■ = Evidence based

◆ = Insufficient evidence

Adults With No Recent Colorectal Cancer Screening by Race 1999-2008



Baseline: Fecal Occult Blood Test = 20% Colonoscopy = 57%

Target: Fecal Occult Blood Test = 25% Colonoscopy = 62%

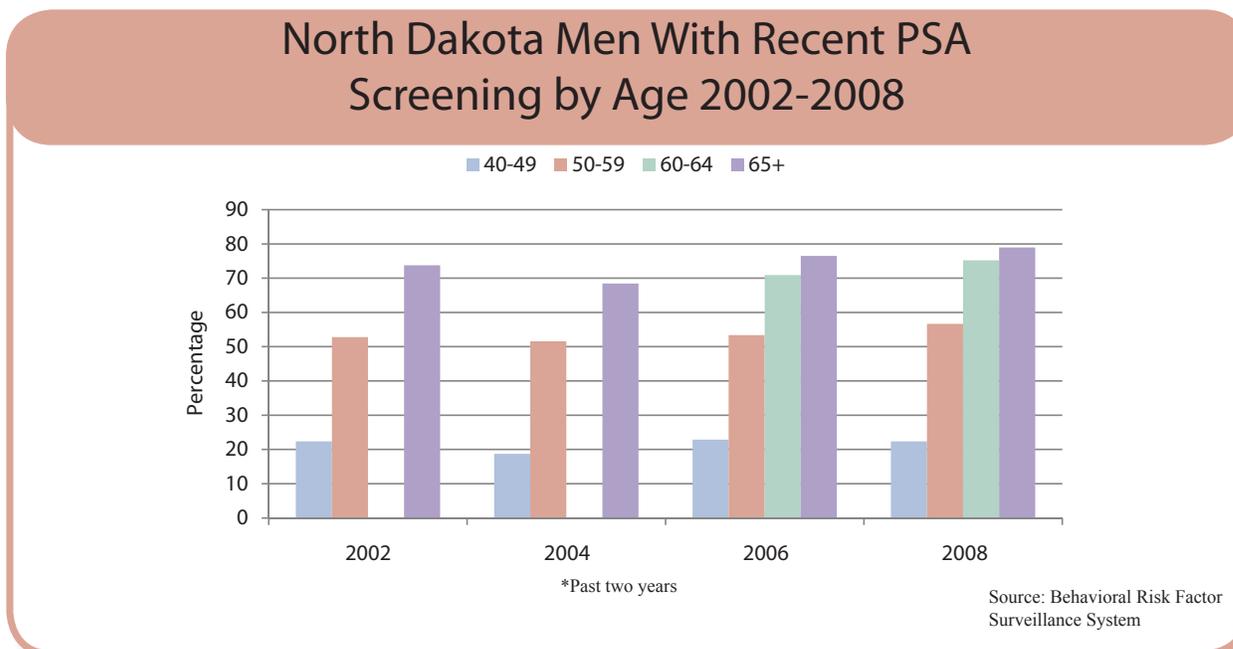
Strategies:

1. Assess current colorectal cancer screening practices and capacity to conduct endoscopic colorectal cancer screening in North Dakota.
2. Assess for gaps in North Dakota regarding access to endoscopic colorectal cancer screening.
- ◆ 3. Advocate for health insurance companies and policy makers to include or increase insurance coverage of colorectal cancer screening in all insurance plans and other medical coverage programs.
- 4. Support efforts to maintain and expand state funding to provide colorectal cancer screening to the uninsured and underinsured.
- ◆ 5. Conduct a statewide media education campaign about colorectal cancer screening including but not limited to types of tests, current screening guidelines and how to access screening.
6. Support activities to increase awareness and compliance among primary-care providers of the American College of Gastroenterology colorectal cancer screening recommendations.
- 7. Promote strategic partnerships to reach age-appropriate men and women who are not being screened for colorectal cancer and facilitate the screening process.
- 8. Reduce barriers to colorectal cancer screening including but not limited to language, financial, geographic, access issues and low literacy.
- ◆ 9. Advocate for health-care settings and staff that are culturally sensitive.
- 10. Support the development of outreach systems such as patient navigation for underserved men and women.
- ◆ 11. Promote informed and/or shared decision making based on personal and family history by age-appropriate North Dakotans and health-care providers.
12. Promote the business case and benefits of colorectal cancer early detection and screening of employees with business leaders and policy makers.
- 13. Promote health-care providers' utilization of client reminders for colorectal cancer screening.

Screening/Early Detection

Objective 15:

By 2016, promote informed and shared decision making for age-appropriate North Dakota men regarding prostate cancer screening.



Baseline: 2010-2011 North Dakota Cancer Coalition member survey reports of educational efforts
 Target: 5% increase in member reported efforts

Strategies:

1. Provide education for health-care professionals and the public about the risks and benefits of prostate cancer screening for men ages 50 and older, as well as men ages 40 to 49 who are at high risk for prostate cancer.
- ◆ 2. Promote informed and/or shared decision making based on personal and family history by age-appropriate North Dakotans and health-care providers.
3. Disseminate discussion tools, such as question lists, to facilitate active discussion with health-care providers regarding the risks and benefits of prostate cancer screening.
4. Monitor the prostate cancer incidence and death rates annually, as well as prostate cancer screening rates, via the Behavioral Risk Factor Surveillance System (BRFSS) and biannually disseminate the findings for evaluation and planning.
5. Advocate for a state-added question in the BRFSS survey biannually regarding informed and shared decision making by men ages 50 to 75 years.
- 6. Reduce barriers to prostate cancer screening (when screening is indicated) including but not limited to language, financial, geographic, access issues and low literacy.
- ◆ 7. Advocate for health-care settings and staff that are culturally sensitive.
8. Promote the business case and benefits of prostate cancer early detection and screening of employees, when indicated, with business leaders and policy makers.

Screening/Early Detection

MELANOMA

Objective 16:

By 2016, the percentage of melanoma cancer detected at the earliest stage will increase to 90 percent compared to 88.8 percent in 2008.

Baseline: 88.8% Target: 90%

Strategies:

- ◆ 1. Support public campaigns using a number of media approaches including small media and one-to-one, to increase awareness about the risk factors, signs of skin cancer, recommendations for screening and how to conduct visual inspections of the skin to detect skin cancer early.
- ◆ 2. Advocate for practices that include skin cancer screening by health-care professionals during routine exams and facilitate provider skin assessment education as needed.
- 3. Support efforts to conduct community-based skin cancer screening events.

ORAL PHARYNGEAL

Objective 17:

By 2016, the percentage of oral and pharyngeal cancer detected at the earliest stage will increase to 59 percent compared to 55 percent in 2007.

Strategies:

- ◆ 1. Advocate for regular oral cancer screening by dental professionals and other health-care professionals, as appropriate.
- 2. Collaborate with partners to provide education and to disseminate tools for health-care professionals on how to conduct an oral examination for cancer.
- 3. Encourage dental and health-care professionals to educate patients about the need for the oral cancer examination and make patients aware that examination has been provided during the exam.
- 4. Partner with dental, tobacco and other programs to conduct general public education campaigns about oral cancer risk factors, signs and symptoms of oral cancer, including how to talk to dental and other health-care professionals about oral cancer screening and emphasize the importance of regular oral health checkups.
- 5. Provide education for the general public on oral self-examination.



Strength From My Journey

“When I was first diagnosed with breast cancer, I was a stay-at-home mom who did not have insurance. *Women’s Way* helped me get the care I needed. Through my journey, my family and I found strength we never knew we had.”

—Renae Byre, Minot, N.D.
Breast Cancer Survivor

Screening/Early Detection

Several factors can affect cancer treatment and care in North Dakota. Potential issues include but are not limited to limitations on the quality and availability of cancer care, lack of patient and provider knowledge, insurance coverage, geographic location, socioeconomic status and insufficient patient-provider communication. One strategy to ensuring high-quality and up-to-date cancer treatment is through education and availability of clinical trials.

Overarching goal: Increase access to effective cancer treatment and care.

Objective 18:

By 2016, increase the educational opportunities for primary care health-care professionals regarding cancer diagnosis, treatment and other related services.

Strategies:

- 1. Promote awareness and implementation of the National Comprehensive Cancer Network Treatment Guidelines and the Physician Data Query Standards by providers and consumers.
- ◆ 2. Support health-care professional education that promotes shared decision making regarding treatment options.
- 3. Conduct education for health-care professionals about cancer treatment options, clinical trials and genetic testing.

Objective 19:

By 2016, optimize access to resources including but not limited to transportation, lodging and financial assistance that support cancer care from diagnosis through treatment and follow-up.

Strategies:

- 1. Support and engage communities, minority health community organizations and those with health inequities in identifying and solving access to care issues.
- 2. Support a collaborative community network that provides transportation and housing as needed for cancer treatment.
- ◆ 3. Support partnerships to facilitate access to specialty services for rural patients and providers through methods such as telemedicine.
- 4. Support access to cancer treatment drugs for those who are medically underserved.
- ◆ 5. Support access to clinical trials.
- ◆ 6. Support efforts to provide cancer care funding resources for the uninsured, underinsured and medically underserved populations.
- 7. Support efforts to fund patient navigators in cancer treatment centers and in underserved or minority areas of the state.
- ◆ 8. Support activities that provide culturally-competent cancer treatment, such as appropriate environments for cancer treatment, educational material and trained staff.

Objective 20:

By 2016, increase knowledge of North Dakotans regarding cancer treatment services, cancer treatment options, side effects of treatment, clinical trials and pre-post cancer diagnosis for genetic testing.

Strategies:

1. Conduct educational campaigns with primary care health-care professionals, cancer patients and their families, and the general public.
2. Promote the utilization of cancer resource centers in the state.
3. Provide information that will direct cancer patients, patient caregivers and the general public to a reliable website focused on cancer treatment and cancer care.
- ◆ 4. Develop and promote educational campaigns about cancer care and services that are culturally appropriate and targeted at underserved groups.
5. Provide information to North Dakotans about the National Comprehensive Cancer Network Treatment Guidelines and Physician Data Query Standards.

Objective 21:

By 2016, support advocacy efforts and increase knowledge of elected officials, policymakers and decisionmakers related to issues of cancer care including but not limited to health insurance coverage, access to care, cultural competency and issues for the underinsured and uninsured.

Strategies:

1. Educate policy and decision makers about the benefit of prevention and screening versus treatment.
2. Support advocacy efforts to include clinical trials in all health insurance packages offered in North Dakota.
- 3. Support efforts to fund patient navigators in cancer treatment centers and in underserved or minority areas of the state.
4. Advocate for cancer care funding resources for the uninsured and underinsured.
5. Educate employers regarding the cost of cancer treatment versus prevention and screening.



Future Cancer Care

“As we learn more about cancer and technology and treatment improves, we will be able to minimize side effects and have better results.”

—Diane Prudhomme, BSRT(R)T

Grand Forks, N.D.

Radiation Therapist, Altru Cancer Center

Treatment

Improvements in the early detection and treatment of cancer have resulted in more people living longer after being diagnosed with the disease. A cancer diagnosis remains a life-changing event for individuals and their family members, friends and caregivers. People who have been diagnosed with cancer are faced with a host of short- and long-term issues affecting their quality of life, including but not limited to the physical effects of cancer treatment, spiritual and emotional needs, pain control, and for some, decisions about end-of-life care. There is a general lack of knowledge among the public and health-care professionals about survivorship resources and services available to North Dakotans.

Overarching goal: Optimize the quality of life for North Dakotans affected by cancer.

Objective 22:

By 2016, improve awareness and knowledge about cancer survivorship.

Strategies:

1. Educate the general public, policymakers and business leaders about the ongoing needs of cancer survivors.
2. Provide education to health-care professionals about the short- and long-term issues that affect the quality of life of cancer survivors and their families in North Dakota following initial treatment.
3. Identify, develop and maintain accessible cancer survivorship resources.
4. Expand and build relationships with organizations that celebrate cancer survivorship.

Objective 23:

By 2016, improve continuity of care for North Dakota cancer survivors and their families.

Strategies:

1. Identify and address deficiencies and gaps in service coordination, especially for underserved areas.
2. Advocate for and facilitate patient navigation services for cancer patients and families affected by cancer in North Dakota.
3. Educate North Dakotans about the value of support services and how to access them.
- 4. Support education for cancer patients, their families and the general public about cancer survivorship care plans, the importance of the plan and how to access templates on reliable websites, as well as discussing the development of a survivorship plan with their health-care professionals.
- 5. Develop and promote methods to facilitate the exchange of information among all health-care professionals involved in the development of cancer survivorship care plans.
- 6. Advocate for payment of services for a survivorship visit to develop a survivorship care plan.
- 7. Advocate for improvement of pain management in North Dakota by implementation of the cancer-related pain guide for practice.
8. Provide education to patients, their families, caregivers and others about the short- and long-term issues that affect quality of life of those affected by cancer.



Cancer Changes Lives

“Your cancer journey does not end when you hear the words ‘cancer free.’ It is an experience that is carried with you for a lifetime.”

— Jake Ferguson, Hillsboro, N.D.
Leukemia Cancer Survivor

Objective 24:

By 2016, increase access and utilization of hospice in North Dakota.

Strategies:

1. Partner with the North Dakota Hospice Organization to increase utilization of cancer referral guidelines.
2. Advocate for statewide hospice care services.
3. Distribute information and educational materials about issues that affect short- and long-term plans for follow-up, palliative care and advance-care planning to patients and their families in North Dakota.
4. Conduct a public awareness campaign about hospice care (what it is and how to access services).
5. Develop a mechanism to measure the use of hospice services in the state.

Survivorship/Quality of Life

It has been well documented that health equity exists for groups within given populations. Cancer incidence, mortality and survivorship are affected by many factors such as race and ethnicity, gender, age, geography, socioeconomic status, sexual orientation and insurance status. Data indicates that those affected by health inequity tend to be less likely than others to receive needed cancer care.

Overarching goal: Continually and respectfully work to identify and reduce cancer care inequities in North Dakota.

Objective 25:

By 2016, monitor and evaluate cancer health equity data in North Dakota.

Strategies:

1. Support efforts to improve the availability, accuracy and completeness of data collection in terms of race/ethnicity classification, third-party payers and other pertinent data components.
2. Determine potential data sources and disseminate cancer health inequity data statewide to support cancer control efforts.
3. Support efforts to maintain a centralized repository of inequity data and resources by working with health-care organizations and other vested resources to develop mechanisms for gathering and reporting cancer-related behaviors (i.e., risk factors).

Objective 26:

By 2016, increase the number of health-care providers and systems providing culturally-competent health care in North Dakota.

Strategies:

- 1. Support the use of properly trained and culturally-competent community health workers or patient navigators in communities experiencing cancer care inequities.
- 2. Promote and support ongoing cultural-competency education opportunities and curricula training on cancer inequities, including strategies that health-care professionals can implement into practice to address and reduce inequities in cancer care including but not limited to gender, race or ethnicity, education, income or employment, refugee or immigrant status, age, geographic location, physical or mental status and sexual orientation or gender identity.
- ◆ 3. Support the local development of culturally-appropriate cancer education material utilizing community feedback.
- ◆ 4. Support culturally-competent informed/shared decision-making tools regarding clinical trials, screening, treatment and survivorship.
- ◆ 5. Support efforts to increase the number of racial and ethnic minority individuals in the cancer health-care field.
- 6. Support community-based participatory research for populations that experience challenges with health equity by involving the communities impacted by cancer inequities in the planning, implementation, analysis and dissemination of cancer research.

Objective 27:

By 2016, increase access to cancer-related services and resources for underserved populations in North Dakota.

Strategies:

1. Support a collaborative community network in a variety of settings to address barriers to access of care and provide transportation and housing as needed for cancer-related services.
2. Support efforts to direct medically underserved populations to available medical services, resources and medical coverage programs.
3. Support access to available cancer treatment drugs for medically-underserved populations who cannot afford copayments and deductibles.
- ◆ 4. Support properly trained and culturally-competent community health workers or navigators in communities and health-care settings.



Advocacy for Policy and Practice

“There is power in advocacy that you don't realize you can have until you use it. With this power, we hope to end cancer as we know it.”

— Deb Knuth, Mandan, N.D.
Director of Government Relations
American Cancer Society

Objective 28:

By 2016, develop a culturally-appropriate system of coordination among or within organizations to improve the continuity of cancer care.

Strategies:

1. Support legislative capacity to include cancer care services and prevention measures through public policy for medically-underserved or populations who experience inequity in cancer care.
- ◆ 2. Support culturally-appropriate environments from prevention through survivorship, palliative and end-of-life care.
3. Support collaborative efforts of tribal communities with other state and local partners.
- ◆ 4. Advocate for facility practices that support the needs of ethnic or minority populations.

Health Equity

North Dakota's aging population indicates an increasing need for people to work with individuals and families diagnosed with and surviving cancer. Gaps in workforce will comprise of both health-related and administrative professions including but not limited to nurses, oncologists, pharmacists, researchers/scientists, social workers, communications/human resources and management professionals. Workforce needs are important to identify for all of the objectives included in the cancer plan.

Overarching goal: Improve health-care professional and general public knowledge and understanding of cancer and cancer care through education and training.

Objective 29:

By 2016, support and facilitate educational opportunities for health-care professionals to prevent, diagnose and treat cancer, including survivorship and palliative or end-of-life care.

Strategies:

1. Support continuing health-care professional education regarding cancer care.
2. Encourage advanced training and certifications for professionals in the cancer care field by providing links to websites such as Oncology Nurses Society (ONS), American Cancer Society (ACS) and National Cancer Institute (NCI) along with webinars and other educational opportunities as they become available.
3. Identify North Dakota Cancer Coalition members and partners who can provide educational opportunities for the cancer continuum and facilitate these educational opportunities.
4. Facilitate education for health-care professionals and partners on implementation of evidence- based interventions.
5. Facilitate education for health-care professionals and partners on the development of primary prevention messages that are consistent with chronic disease partner messaging.
6. Provide information for health-care professionals on issue framing, policy analysis and formulation of policy agenda.
7. Provide action plan training on goal, objective and strategy development.
8. Conduct training sessions about program evaluation, which includes outcome and impact evaluation.

Objective 30:

By 2016, provide support for career recruitment of cancer-related professions in North Dakota.

Strategies:

1. Support education in schools of medicine, nursing allied health professions or non-health related fields that expose students to cancer-care professions, as well as how cancer care can be part of professions not traditionally thought of as cancer care, such as business management or communications, etc.
2. Support Area Health Education Center (AHEC) recruitment program to increase employment of health-related professions and health-care professional cancer care education in rural settings.
3. Collaborate with community partners to support education of local community members to provide end-of-life services in rural and urban areas where health-care professionals are not available for 24-hour care.
4. Partner with organizations such as C-Change and others that have developed programs to recruit people into the cancer-care profession.
5. Identify resource personnel in the cancer-care field who can be contacted for questions by in-state and out-of-state health-care professionals interested in pursuing a cancer-related career in North Dakota.

Objective 31:

By 2016, provide ongoing support to educate health-care professionals to provide culturally-competent cancer care in North Dakota.

Strategies:

- ◆ 1. Support ongoing cultural-competency education opportunities for health-care professionals that work within the cancer continuum.
- ◆ 2. Support education for racial and ethnic minority individuals to increase their awareness of cancer-related career opportunities.



Making a Difference

“Working towards a common goal we have the opportunity to make a significant difference in the fight against cancer.”

—John Leitch, MD, CMPE, Fargo, N.D.

Medical Oncology and Hematology,
Sanford Health Roger Maris Cancer Center
North Dakota Cancer Coalition Chair

Workforce

Surveillance and Evaluation Chapter 8

Achievement of coalition cancer plan goals will be determined through surveillance and evaluation. Surveillance is needed to monitor changes in cancer incidence, mortality and survival. Evaluation will measure achievements of the North Dakota Cancer Plan's goals and objectives. It provides ongoing information regarding needs, completion of activities and strategies and North Dakota Cancer Control Plan outcomes. Surveillance and evaluation will be used to identify data gaps and identify and celebrate success in cancer prevention and control.

Overarching goal: Improve decision making through timely access to current and accurate surveillance and evaluation data.

Objective 32:

By 2016, ensure the North Dakota Cancer Coalition has access to the most current data (incidence, mortality and behavioral risk factors) to implement and evaluate cancer plan objectives.

Strategies:

1. Create a surveillance plan by December 2011 that includes the sources of data, what will be collected and the frequency.
2. Collect information on an ongoing basis.
3. Identify data gaps on an ongoing basis.
4. Disseminate data as scheduled and as available, or as requested.

Objective 33:

By 2016, monitor the number of evidence-based interventions implemented by NDCC members.

Strategies:

1. Identify evidence-based strategies that members currently are implementing in priority areas or other cancer plan interventions.
2. Facilitate education for NDCC members and partners regarding implementation of evidence-based strategies.
3. Support NDCC workgroups and partners by developing action plans that incorporate evidence-based strategies into the planning process.

Objective 34:

By 2016, develop and enhance capacity to evaluate process, outcome and impact of NDCC efforts.

Strategies:

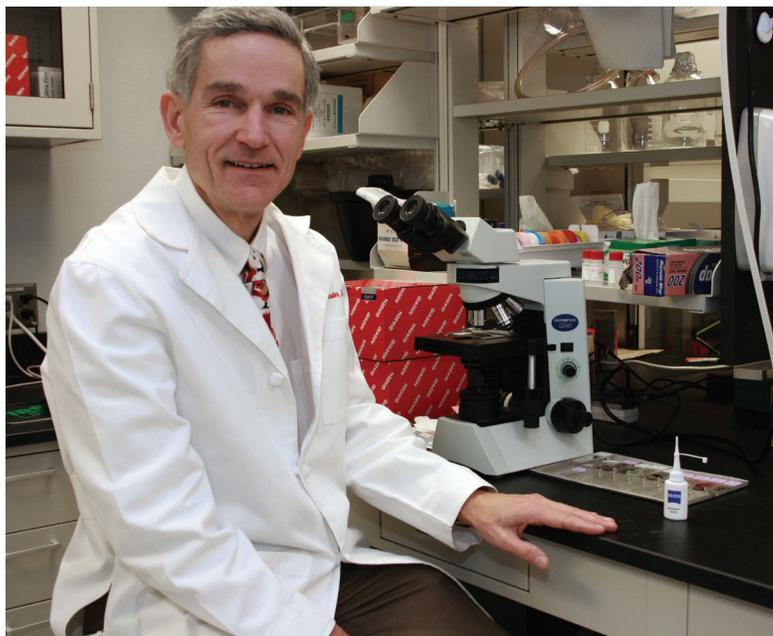
1. Develop and implement a plan for increasing capacity.
2. Publish evaluation and surveillance resources in one location on the NDCC website that are available to data/evaluation committee members, other NDCC members and statewide partners.
3. Ensure that the data and evaluation committee reflects skills and knowledge needed to conduct an evaluation of the NDCC and statewide partner implementation efforts.

Objective 35:

By 2016, annually evaluate outcomes and impact of the cancer plan implementation.

Strategies:

1. The data and evaluation committee will report findings to the NDCC steering committee that will be used in the decision-making process for future cancer plan implementation.
2. Data and evaluation committee members will be assigned to all workgroups to gather implementation data and project results from the workgroups that will be included in the overall evaluation process.



Hope for a Cure

“Through our investigations in breast cancer prevention and early detection, it is our goal to improve the quantity and quality of the lives of women and men in America.”

—Edward Sauter, MD, PhD, M.H.A.,
Grand Forks, N.D.

Associate Dean for Research, Professor of Surgery,
UND School of Medicine and Health Sciences

Objective 36:

By 2016, annually disseminate surveillance and evaluation information regarding the cancer plan priorities.

Strategies:

1. Develop a plan for dissemination of surveillance and evaluation regarding the cancer plan priorities.
2. Complete annual reports, including surveillance and evaluation information.
3. Disseminate information based on dissemination plan.
4. Evaluate success of dissemination activities.
5. Utilize findings to guide future decision making.

Surveillance and Evaluation

Thank you to everyone who participated in the following workgroups to help revise the 2011-2016 North Dakota Cancer Plan:

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Glossary

Advanced care planning: The process of planning for future medical care. It involves helping people anticipate and plan for those events. Advanced care planning includes discussions with patients and/or their representatives about the goals and desired direction of the patient's care, particularly end-of-life care, in the event that the patient is or becomes incompetent to make decisions.

Age-adjusted rates: Cases or deaths divided by the population, adjusted for the age distribution of the population, usually presented per 100,000 people. A standardizing procedure in which the effects of difference in composition for variable(s) among populations being compared have been removed by mathematical procedures. Most often, adjustment is performed on rates. Age is the variable for which adjustment is most often carried out.

Baseline: An initial or known value to which later measurements can be compared.

Behavioral Risk Factor Surveillance System (BRFSS): Annual statewide telephone surveillance system designed by the U.S. Centers for Disease Control and Prevention (CDC) to collect data on modifiable risk behaviors, preventative health practices and health-related conditions contributing to the leading causes of morbidity and mortality in the population.

Carcinogens: A substance or agent causing cancer.

Cancer: The umbrella term used to describe many different diseases in which cells grow and reproduce out of control.

Cancer burden: The overall impact of cancer in a given community.

Cessation: The process of discontinuing the practice of using tobacco products.

Chemotherapy: The treatment of disease by means of chemicals that have a specific toxic effect upon the disease-producing microorganisms (antibiotics), or that selectively destroy cancerous tissue (anticancer therapy).

Chronic disease: A disease or condition that persists or progresses over a long period of time.

Clinical trials: Research studies that involve patients. Each study is designed to find better ways to prevent, detect, diagnose or treat cancer and to answer scientific questions.

Community-based participatory research (CBPR): A collaborative process of research involving researchers and community representatives. It engages community members; employs local knowledge in the understanding of health problems and the design of interventions; and invests community members in the processes and products of research.

Continuum of care: Delivery of health care over a period of time for patients with a disease. This covers all phases of illness from diagnosis to end of life.

Cultural competency: A set of harmonious behaviors, attitudes and policies that enable effective work in cross-cultural settings.

Diagnosis: The process of identifying a disease by the signs and symptoms.

Distant cancer: Cancer that has spread from the primary organ to distant organs or distant lymph nodes.

End of life: The final stage of survival as a patient approaches death.

Evidence-based: The systematic review of available studies that provides strong or sufficient evidence that the intervention is effective.

Federal Advisory Committee on Immunization Practices: This committee provides advice and guidance on effective control of vaccine-preventable diseases in the United States.

Five-year survival: Percentage of patients who live at least five years after their cancer is diagnosed. The term is commonly used as the statistical basis for successful treatment. A patient with cancer is generally considered cured after five or more years without recurrence of disease.

Follow-up: Monitoring a person's health over time after treatment. This includes keeping track of the health of people who participate in a clinical study or clinical trial for a period of time, both during the study and after the study ends.

Health-care provider: Practitioners in disease prevention, detection, treatment and rehabilitation. They include physicians, nurses, dentists, dietitians, health educators, social workers and therapists, among others.

Health-care directives: Also known as living wills, advance directives, or advance decisions. They are instructions given by individuals specifying what actions should be taken for their health in the event that they are no longer able to make decisions due to illness or incapacity.

Health disparities: Defined as inequalities in health status, utilization, or access to structural, financial, personal or cultural barriers. Population categories affected include but are not limited to those identified by gender, race or ethnicity, education or income, disability, geographic location, or sexual orientation.

High risk: When the chance for developing cancer is greater for an individual or a group of people than it is for the general population, that individual or group is considered to be at high risk. People may be considered to be at high risk due to many factors or combination of factors, including family history of disease, personal habits or exposure to carcinogens in the environment or in the workplace.

Hospice care: Quality and compassionate care that incorporates a team-oriented approach to medical care, pain management and emotional and spiritual support tailored to the needs and wishes of a patient facing life-limiting (end-of-life) illness or injury.

Human Papillomavirus (HPV): More than 100 types of viruses that cause various human warts (as the common warts of the extremities, plantar warts and genital warts), including some associated with the production of cancer. More than 30 of these papilloma viruses are sexually transmitted. High-risk HPV include types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68 and 69. HPVs now are recognized as the major cause of cervical cancer.

Informed decision-making: Choices and preferences stated after the individual understands the nature and risks of the cancer diagnosis and treatment options.

In situ cancer: Early stage of cancer that has not penetrated the membrane surrounding the tissue of origin. Cancer is localized and confined to one area.

Insufficient evidence: The available studies do not provide sufficient evidence to determine if the intervention is, or is not, effective. This does NOT mean that the intervention does not work. It means that additional research is needed to determine whether or not the intervention is effective.

Incidence: The number of newly diagnosed cancer cases that occur in a population per unit of time, usually one year. Incidence rate is the number of new cases of cancer diagnosed in one year per 100,000 people in a population.

Localized cancer: Cancer that is confined to the organ of origin.

Mammography: An x-ray of the breast.

Melanoma: Cancer of the cells that produce pigment in the skin. Melanoma usually begins in a mole.

Metastasis: The spread of cancer cells from the original site to other parts of the body.

Morbidity: Illness or disability resulting from a disease or its treatment.

Mortality rate: A rate expressing the proportion of a population that die from a disease, or of all causes. The numerator is the number of people who have died; the denominator is the total population in which the deaths occurred. The unit of time is usually a calendar year. To produce a rate that is a manageable whole number, the fraction is usually multiplied by 1,000 to produce a rate per 1,000. This rate also is called the crude death rate.

National Comprehensive Cancer Network (NCCN): A not-for-profit alliance of 20 of the world's leading cancer centers dedicated to improving the quality and effectiveness of care provided to patients with cancer.

Nutrition Action Plan: A vision for a plan to improve the nutrition of North Dakota's population.

North Dakota Tobacco Quitline: A free, confidential, telephone-based cessation counseling available to any North Dakota resident interested in quitting tobacco.

North Dakota Tobacco Quitnet: A free web-based service available to help North Dakota smokers and spit-tobacco users quit using tobacco.

Obesity: A condition in which a person has abnormally high amounts of unhealthy body fat.

Oncology: The study of diseases that cause cancer.

Overweight: Being too heavy for one's height. Excess body weight can come from fat, muscle, bone and/or water retention. Being overweight does not always mean being obese.

Palliative care: Patients with life-threatening or life-limiting conditions with an emphasis on the control of pain and symptoms. It incorporates an effort to fulfill physical, emotional, psychological, spiritual, social and cultural needs. Palliative care does not alter the course of the disease, but improves the quality of life. Palliative care can be offered simultaneously with any level of treatment and at any point of the disease process.

Patient navigator: A person who helps a patient work with others who have an effect on the patient's health (patient advocate).

Physical activity: Any bodily movement produced by skeletal muscles that result in energy expenditure.

Precancerous: A term to describe a condition that may, or is likely to, become cancer.

Quality of life: In cancer treatment and survival, quality of life is the concept of ensuring that cancer patients are able to lead the most comfortable and productive lives possible during and after treatment. New treatment techniques and social and emotional support groups are adding to the quality of life for cancer patients, as well as to their survival.

Quality physical education: Giving children the opportunity to learn the knowledge, skills, behaviors and gain the confidence needed to be physically active for life.

Regional cancer: Cancer that has extended beyond the primary organ to nearby organs or tissues, or has spread via the lymphatics to regional lymph nodes or both.

Risk factor: Something that may increase a person's chances of developing a disease. Some examples are age, obesity, tobacco use and genetic predisposition.

Screening: Routine medical tests that are given if an individual is over a certain age, or has a family history or other risk factors for any medical condition. Early detection can mean that a serious health problem or problems may be avoided.

Shared decision making: Decisions that are shared by doctors and patients informed by the best evidence available and weighted according to the specific characteristics and values of the patient.

Socioeconomic: Relating to, or involving a combination of social and economic factors.

Stage: A distinct phase in the course of a disease. Stages of cancer are typically defined by containment or spread of the tumor: in situ, localized, regional or distant spread.

Survivorship: The experience of the individual, family members, friends and caregivers living with, through or beyond cancer. A continual, ongoing process that begins at the moment of diagnosis and continues for the remainder of life. It is composed of stages or phases of survival.

Target: Goal to be achieved.

Ultra-violet radiation (UV): Part of the electromagnetic spectrum from the sun. The wavelengths, shorter than visible light, are classified as UVA, UVB or UVC. UVA and UVB penetrate the atmosphere, and overexposure can lead to premature skin aging, eye damage and skin cancer.

Youth Risk Behavioral Survey: Survey developed by the U.S. Centers for Disease Control and Prevention to monitor priority health-risk behaviors that contribute markedly to the leading causes of death, disability and social problems among youth and adults in the United States.

