

RURAL HEALTH FACTS

The Burden of Cancer in North Dakota

Summer 2006

What Is Cancer?¹

Cancer is uncontrolled growth of abnormal cells. If the growth is not controlled, death may occur.¹

What Causes Cancer?¹

There are both internal and external causes of cancer:

Internal

- ❖ Gene mutations
- ❖ Hormones
- ❖ Immune conditions

External

- ❖ Tobacco
- ❖ Chemicals
- ❖ Radiation
- ❖ Infectious organisms
- ❖ Sun and tanning booths

Cancer in the United States¹

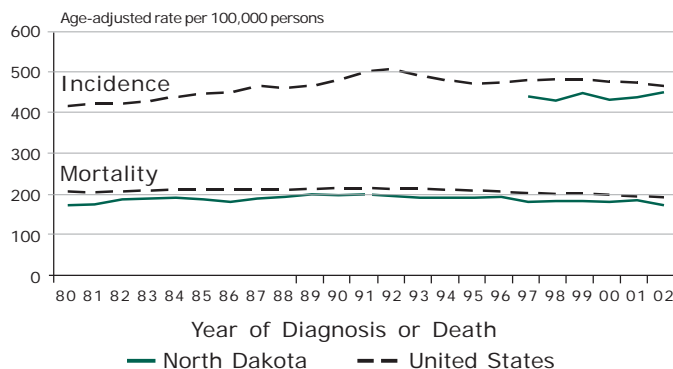
- ❖ Cancer is most prevalent in older individuals, men, and racial minorities.
- ❖ Seventy-six percent of all cancers are diagnosed in persons 55 years and older.
- ❖ Men have a 46 percent chance of developing cancer in their lifetime; women have a 38 percent chance.
- ❖ African Americans are one-third more likely to die from cancer than any other race.
- ❖ Each year in the U.S., approximately 1.4 million people are diagnosed with cancer.
- ❖ Approximately 565,000 people (1,500 per day) die of cancer.
- ❖ Overall costs for cancer in 2005 were estimated at \$209.9 billion.

Cancer in North Dakota^{1,2}

- ❖ Cancer is the second leading cause of death (22 percent) in North Dakota following heart disease.
- ❖ North Dakota cancer incidence rates appear somewhat lower than the national figures (Figure 1).
- ❖ In 2002, there were 3,041 new cases diagnosed.

- ❖ There were 1,720 cancer related deaths in 2002.
- ❖ Approximately 22,000 state residents were cancer survivors in 2000 (about two percent of the state's population).

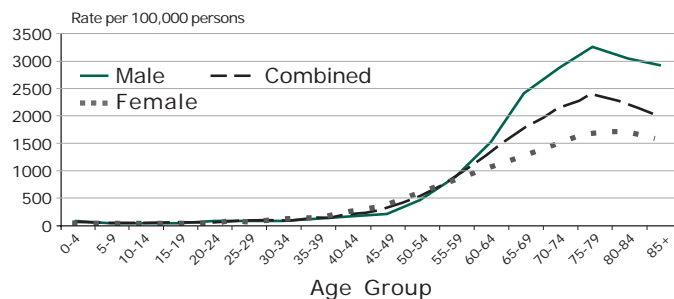
Figure 1. Overall Cancer Rates, 1980-2002



Cancer Disparities in North Dakota³

- ❖ Age – The likelihood of being diagnosed and dying from cancer tends to increase with age (Figure 2).
- ❖ Gender – Males have higher rates of cancer incidence and mortality.
- ❖ Race – Native Americans have cancer incidence rates that are higher than all races combined.

Figure 2. North Dakota Age-Specific Cancer Incidence Rates, by Gender, 1997-2002



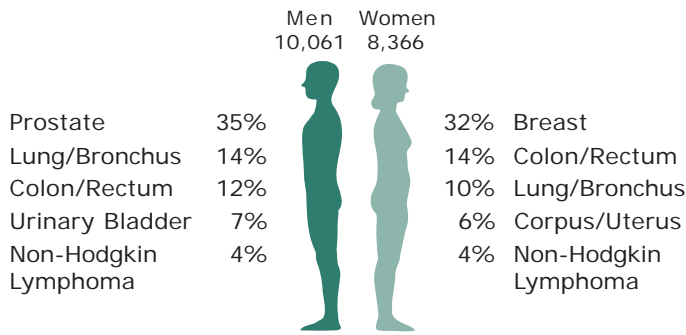
Cancer Cases in North Dakota Men²

Of the 10,061 men who were diagnosed with cancer in 1997-2002 (Figure 3), the four most common cancers were:

- Prostate: 35 percent
- Lung/Bronchus: 14 percent
- Colon/Rectum: 12 percent
- Urinary bladder: 7 percent

These are also the four most commonly diagnosed cancers in U.S. men.

Figure 3. North Dakota Cancer Cases, 1997-2002



Cancer Cases in North Dakota Women²

Between 1997-2002, 8,366 women in North Dakota were diagnosed with cancer (Figure 3). The four most common cancers were:

- Breast: 32 percent
- Colon/Rectum: 14 percent
- Lung/Bronchus: 10 percent
- Corpus/Uterus: 6 percent

These are also the four most commonly diagnosed cancers in women in the U.S.

How Can Cancer Be Treated?¹

- ❖ Surgery
- ❖ Radiation
- ❖ Chemotherapy
- ❖ Hormones
- ❖ Immunotherapy

Prevention⁴

Healthy Life Style

- ❖ Don't smoke.
- ❖ Eat a balanced diet.
- ❖ Exercise at least 30 minutes a day.
- ❖ Maintain a healthy weight.
- ❖ Protect yourself from the sun.

Screening will lower cancer risks for you and your family. The American Cancer Society recommends:⁴

- ❖ **Breast:** clinical breast exams (CBEs) every three years for women in their 20s and 30s. Women in their 40s and older should have annual mammograms and CBEs.
- ❖ **Colorectal:** all persons ages 50 or older receive one or more of the following: annual fecal occult blood testing; flexible sigmoidoscopy every five years; colonoscopy every 10 years; double-contrast barium enema every five years.

- ❖ **Cervical:** a yearly Pap test three years after first vaginal intercourse, but no later than age 21. At or after age 30, women who have had three normal tests in a row may get screened every two to three years.
- ❖ **Prostate:** beginning at age 50, both prostate-specific antigen blood test and digital rectal examination should be done annually.⁴

References

- 1 American Cancer Society. (2006). *Cancer Facts and Figures 2006*. Atlanta: American Cancer Society.
- 2 North Dakota Cancer Registry. (2004). Bismarck, ND: Division of Cancer Prevention and Control, North Dakota Department of Health.
- 3 Northern Plains Tribal Epidemiology Center. (2005). *Fact Sheet: Cancer Prevention and Control Among Northern Plains American Indians*. http://www.aatchb.org/epi/docs/Cancer_Fact_Sheet.pdf
- 4 American Cancer Society. (2006). *Cancer Prevention*. http://www.cancer.org/docroot/PED/ped_1.asp?sitearea=PED

The Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences is assisting the North Dakota Department of Health in studying the burden of cancer upon North Dakotans. Results of this research are being used by the state Cancer Planning Committee to develop a plan for reducing the adverse impact of this disease on the lives and families of North Dakota residents.

This fact sheet is a product of the North Dakota Comprehensive Cancer Control project, with data collected by the North Dakota Cancer Registry participating in the National Program of Cancer Registries, and jointly funded by the U. S. Centers for Disease Control and Prevention. For more information, contact:

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