Colon and Rectum Cancer Facts & Figures 2001

Idaho

American Cancer Society®

ROCKY MOUNTAIN DIVISION

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ACS 2015 Challenges

The American Cancer Society has set ambitious challenge goals for the year 2015:

- **To reduce the rate of cancer deaths by 50 percent.**
- **To reduce the rate of cancer cases by 25 percent.**
- **To improve the quality of life for all cancer survivors.**

Introduction

The American Cancer Society, Rocky Mountain Division, presents *Colon and Rectum Cancer Facts and Figures 2001,* to assist American Cancer Society volunteers and staff, local community groups, and health professionals in providing programs and services to the public, cancer patients, and their families.

Cancer is a major public health problem in Idaho. This publication provides benchmarks to measure progress towards the Society's challenge goals for major reductions in cancer deaths and incidence, and improvement in quality of life for cancer survivors. Colorectal cancer is preventable if detected early, and Idaho has made progress in early detection and prevention of Colorectal cancer.

For more information you can trust about cancer, contact your American Cancer Society at 1-800-ACS-2345, or visit our website at www.cancer.org.

What Is Colon and Rectum Cancer?

Most cancers are named after the part of the body where the cancer originates. The colon is part of the digestive tract, where food is processed to create energy. The colon has four sections: the ascending colon, the transverse colon, the descending colon, and the sigmoid colon. Colon cancer can start in any of these four sections, or where the colon ends in the rectum. Because the colon and rectum tissues are so closely related, colon and rectum cancers will hereafter be referred to as colorectal cancers.

Over 95 percent of colorectal cancers are adenocarcinomas. These are cancers of the cells that line the inside of the colon and rectum. Before a cancer develops, there are often earlier changes in the lining of the colon or rectum. One type of change is a growth of a tissue called a polyp. Removing a polyp, which can be done during a screening procedure, may prevent it from becoming cancerous.

Colorectal cancer is the forth most common cancer in Idaho, yet colorectal cancer has remained a little-discussed disease. Recent reports of notable public figures being treated for colorectal cancer have provoked discussion about this cancer, and may help the public to understand its threat. The more people talk about it, the more likely they are to seek information about early detection and to adopt behaviors that reduce the risk of colorectal cancer.

Colon and Rectum Cancer

Colorectal cancer is the fourth most common cancer among men and women in Idaho, and it is the second most common cause of cancer-related death in Idaho, eclipsed only by lung cancer. Incidence rates for both invasive and in situ (early stage tumors that have not extended through the first layer of cells). Colorectal cancer has declined steadily since 1990, as indicated in the graph below. The apparent increase in colorectal cancer incidence in Idaho in the late 1990's may be due to the increased use of screenings, such as blood stool tests, sigmoidoscopies, and colonoscopies.

Death from colorectal cancer has declined steadily among women since about 1950, and among men since around 1985. The reasons for these decreases are not well understood. Increased polyp removal, advances in treatment protocols (such as increased use of new surgical techniques and adjuvant therapies), and other behaviors, including changes in dietary practices, daily use of aspirin, or estrogen replacement therapy, may be contributing factors

Risk

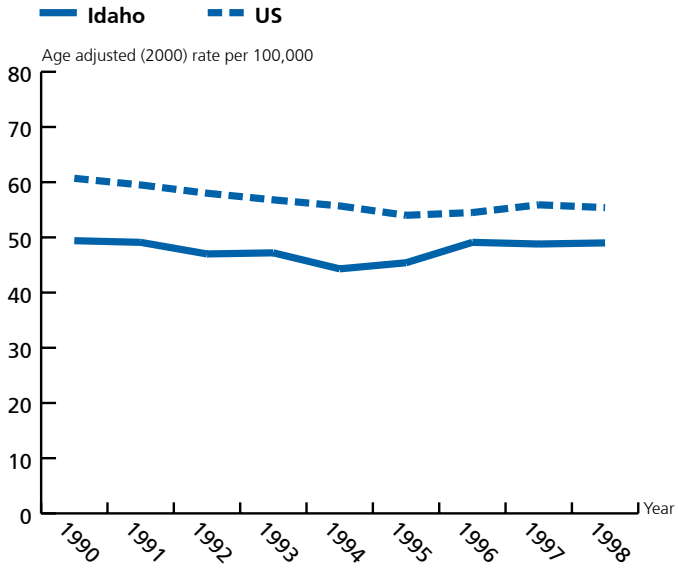
The risk of developing colorectal cancer increases with age. The rate of colorectal cancer is six times higher among persons 65 years of age and older than among persons aged 40-64 years. Almost 75 percent of newly diagnosed colorectal cancers occur in persons aged 65 and older, but this disease can occur at much younger ages as well. Men are more likely to develop colorectal cancer than women.

Other risk factors include a personal history of intestinal adenomatous polyps or inflammatory bowel disease. Familial risk factors include inherited familial adenomatous polyposis (FAP) and hereditary nonpolyposis colon cancer (HNPCC), which result in an increased risk due to alterations of cancer susceptibility genes. Smoking, physical inactivity and diets high in fat/ low in fiber may also increase risk.

Some behaviors may reduce the risk of developing colorectal cancer, such as a diet high in fruits and vegetables, physical activity, hormone replacement therapy in postmenopausal women, and aspirin use.

Rates of New Cases* of Colon and Rectum Cancer, Idaho and U.S., 1990-1998

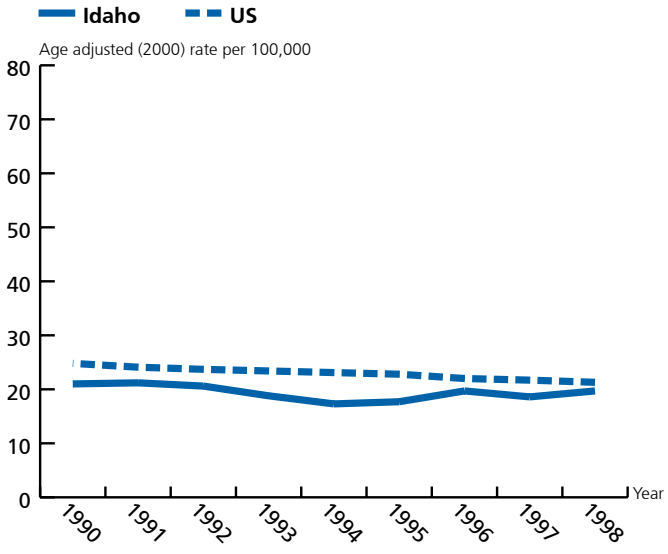
Source: Cancer Data Registry of Idaho, SEER



*Invasive cases only. Rate per 100,000 age-adjusted to the 2000 U.S. standard population.

Colon and Rectum Cancer Death Rates*, Idaho and the U.S., 1990-1998

Source: Cancer Data Registry of Idaho, U.S. Bureau of Vital Statistics



*Rate per 100,000 age-adjusted to the 2000 U.S. standard population.

Stage of Diagnosis and Survival

Staging is the process of describing the extent of the disease or the spread of the cancer from the site of origin. Staging is essential in determining the choice of therapy and assessing prognosis. A cancer's stage is based on information about the primary tumor's size and location in the body and whether or not it has spread to other areas of the body.

If cancer cells are present only in the layer of cells where they originally developed and have not spread to any other parts of that organ or elsewhere in the body, then the cancer is *in situ.* If cancer cells have spread beyond the original layer of tissue, then the cancer is considered to be invasive.

Five-year relative survival rates are commonly used to monitor the progress in early detection and treatment of cancer. Generally, survival has an inverse relationship with the stage of colorectal cancer at the time of detection-the more advanced the stage, the lower the survival rate.

Nationally, when colorectal cancer is diagnosed at an early, localized stage, the five-year survival rate is 90 percent. Unfortunately, only 37 percent of cases are diagnosed at the local stage[1]. Declines in the proportion of colorectal cancers diagnosed in late stages may reflect an increase in screening practices. The American Cancer Society recommends that both men and women begin routine colorectal cancer screening at age 50. For more information about the colorectal screening recommendations and screening utilization rates, see page 6.

The same methods used to screen for colorectal cancers can also be used to remove polyps (adenomas), preventing the growths from becoming cancerous in many cases.

Public Policy

The American Cancer Society is taking the lead to address barriers to colorectal cancer screening for patients at average risk.

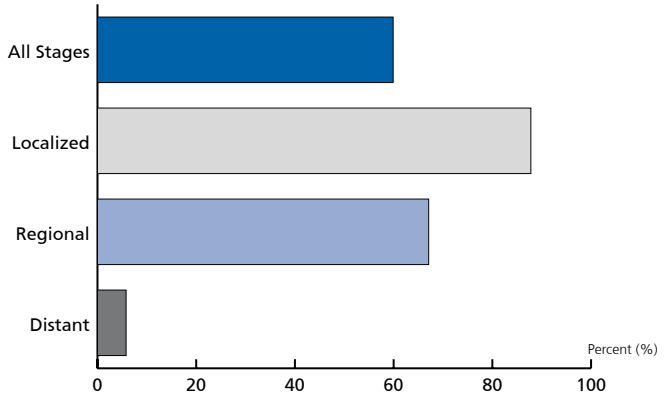
Idaho law does not mandate health plans to cover colorectal cancer screening, nor does Idaho have a law to mandate health plans to cover routine costs associated with participation in clinical trials. The American Cancer Society is working in the public policy arena to address these barriers to access.

To learn more about ACS legislative priorities, please call 1-800-ACS-2345 or visit us online at www.cancer.org.

[1]Smith, R., von Eschback, A., Wender, R., Levin, B., Byers, T., Rothenberger, D., Brooks, D., Creasman, W., Cohen, C., Runowicz, C., et al. *American Cancer Society Guidelines for the Early Detection of Cancer: Update of Early Detection Guidelines for Colorectal Cancer.* CA 2000; 51 (1):44-54.

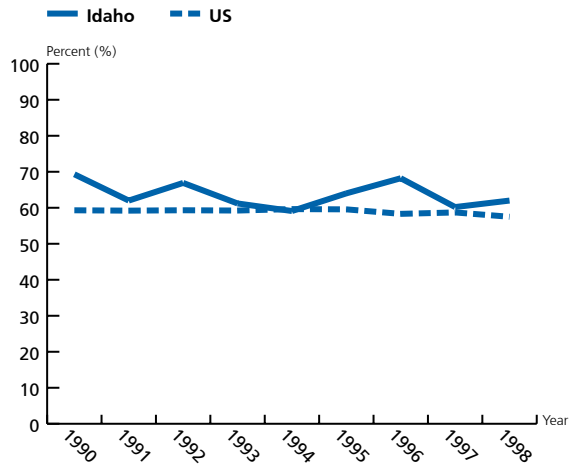
Five Year Relative Survival for Colon and Rectum Cancer, by Stage at Diagnosis, Idaho, 1990-1998

Source: Cancer Data Registry of Idaho



Percent of Colon and Rectum Cancers Diagnosed at Late Stage*, Idaho, 1990-1998

Source: Cancer Data Registry of Idaho, SEER



*Late Stage defined as regional and distant, as a percent of all invasive colorectal cancer diagnoses, excluding unknowns (SEER summary stage definitions, see page 11).

New Local Cases, Deaths, and Late Stage Diagnoses

The following table demonstrates incidence rates (new cases), mortality rates (deaths), and percent of cases diagnosed as late stage* for Idaho Health Districts. See page 9 for more information about Health Districts.

Incidence rates describe the number of new cases of colon and rectum cancer that occur within a defined population and are commonly expressed per standard unit of population. In this instance the rates are expressed per 100,000 persons per year. Rates are used for comparisons between states, counties, or other aggregates. Mortality rates describe the number of colon and rectum cancer deaths that occur within a defined population at risk of dying during a specified time period. The percent of cases diagnosed at late stage is important, as these individuals are beginning treatment when the cancer is more developed and more difficult to treat. The percent of cases diagnosed at a late stage corresponds directly to the level of behavior about screening in the general public.

Colon and Rectum Incidence, Death Rates, and Percent Late Stage* Diagnosis by Idaho Health District***, 1995-1999

Source: Cancer Data Registry of Idaho

Health District	New Cases	Deaths	% Late Stage Diagnoses*
	Rate, 1995-1999	Rate, 1995-1999	Percent, 1995-1999
Health District 1	52.1	17.5	68.0%
Health District 2	53.1	17.7	56.6%
Health District 3	47.7	18.8	60.5%
Health District 4	48.4	21.0	56.3%
Health District 5	42.1	19.7	68.1%
Health District 6	45.3	17.4	67.0%
Health District 7	40.9	16.5	72.4%

* Late stage defined as regional and distant, as a percent of all invasive colon & rectum cancer diagnoses, excluding unknowns (SEER summary stage definitions, see p. 11).
** Rates per 100,000 age adjusted to the 2000 U.S. population standard.
***Idaho is comprised of 44 counties grouped into seven health districts.

Screening Guidelines for Prevention and Early Detection of Colon and Rectum Cancer

Health Promotion Guidelines

1. Stay within healthy weight range.

2. Be physically active–at least moderately active for 30 minutes or more on most days of the week.

3. Eat five or more servings of fruits and vegetables a day, and eat foods from other plant sources, such as breads, cereals, grain products, rice, pasta, or beans several times a day.

4. Limit your intake of high-fat foods, particularly from animal sources.

5. Limit consumption of alcoholic beverages, if you drink at all.

6. **Don't smoke!**

American Cancer Society Guidelines for the Cancer-Related Checkup

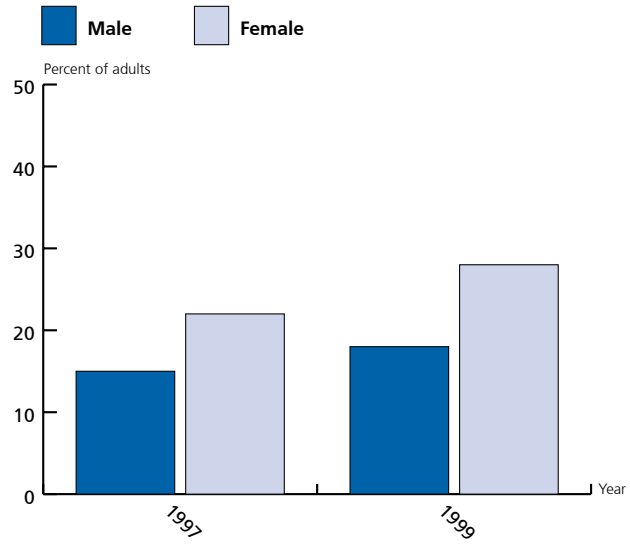
A cancer-related checkup is recommended every three years for people ages 20 to 40 years old and every year for people ages 40 and older. This exam should include health counseling and, depending on a person's age, might include examinations for cancers of the thyroid, oral cavity, skin, lymph nodes, testes, and ovaries as well as for some non-malignant diseases. Special tests for colorectal cancer are recommended as outlined below. Persons with family or personal histories of cancer should discuss appropriate screening guidelines with their physicians.

American Cancer Society Screening Guidelines For Adults 50 or Older at Average Risk

Test or Procedure	Frequency
Fecal Occult Blood Test (FOBT)	Every year
and	
Flexible Sigmoidoscopy	Every 5 years
-OR-	
Double Contrast Barium Enema	Every 5 years
-OR-	
Colonoscopy	Every 10 years

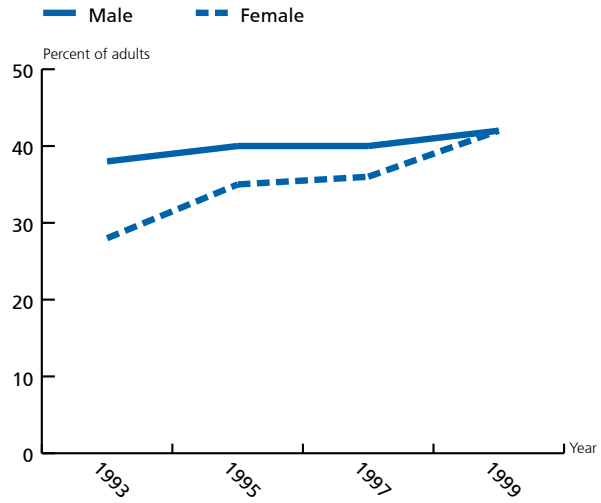
Percent of Adults 50+ Who Had a Screening Blood Stool Test Within the Past 2 Years by Gender, Idaho, 1997-1999

Source: Idaho BRFSS



Percent of Adults 50+ Who Ever Had a Screening Sigmoidoscopy or Colonoscopy by Gender, Idaho, 1993-1999*

Source: Idaho BRFSS



*Note in 1993 and in 1995, data reflects have you ever had a proctoscopic exam.

Lifestyles

Being overweight or obese can increase the risk of cancer of the colon (less so for rectal cancer). Risk increases progressively with increasing body fat. Those who are obese are at about twice the risk for colorectal cancer than those who have normal weight. The reasons for this association between body weight and colorectal cancer are not fully understood, but they may be related to the same adverse metabolic effects of obesity that also increase the risk of diabetes and heart disease.

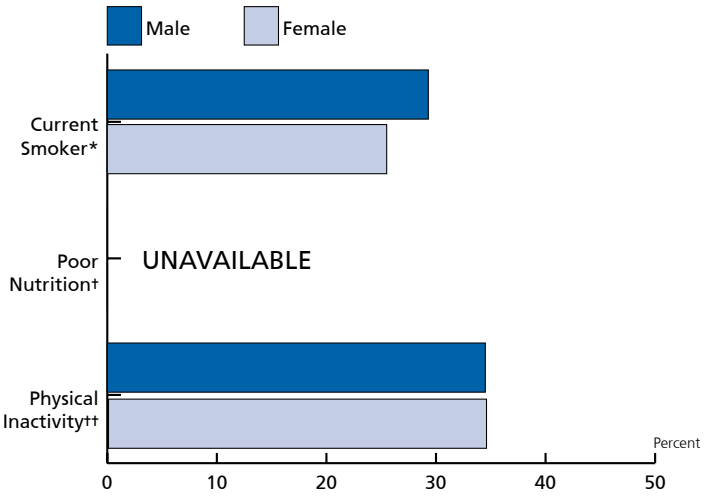
Physical activity may reduce colon cancer risk (less so for rectal cancer). The benefits of physical activity are not limited only to weight control and improved overall health. The relationship between increased physical activity although not fully understood, may be related to improved bowel function and to the beneficial effects of physical activity on metabolism.

Food choices can affect colorectal cancer risk. Studies have shown that those who eat more fruits, vegetables, and whole grains in their diet are at reduced risk, while those who eat more red meat and high fat foods are at increased risk.

Cigarette smoking could increase the risk of colorectal cancer, whereas the use of estrogen replacement therapy after menopause, or the use of non-steroid anti-inflammatory drugs could reduce risk. Avoiding smoking is a sound idea for many reasons, of course, but the decision to take estrogen or aspirin-like medications is complex because these types of medications present risks as well as possible benefits.

In summary, one's risk of getting colorectal cancer can be reduced by weight control, regular physical activity, and by choosing a diet high in fruits and vegetables but low in red meats and fats. Even though all these lifestyle factors can reduce an individuals risk of getting colorectal cancer, it is still important for everyone to be screened for colorectal cancer following ACS guidelines. *The identification and removal of colorectal polyps is the single most effective strategy to prevent colorectal cancer.*

High School Students Behavior by Gender, Idaho, 1993
Source: Idaho YRBS

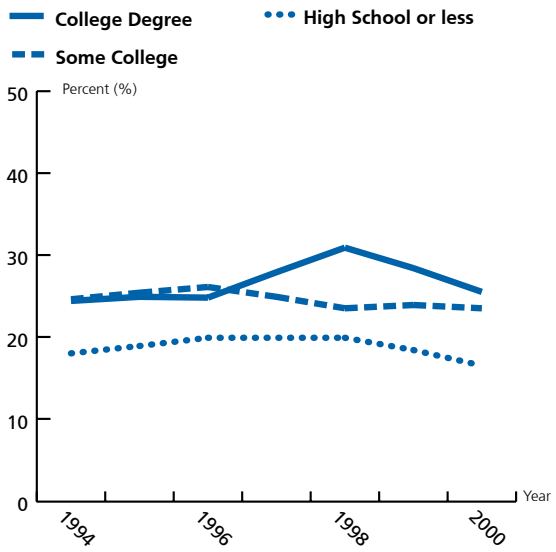


*Current smokers are defined as youth who smoked cigarettes at least once in the last 30 days.
† Poor nutrition defined as youth who did not eat 5 or more fruits and vegetables a day.
†† Physical inactivity defined as youth who did not exercise vigorously (activity for at least 20 min. that made you sweat and breathe hard) 3 or more times during the last 7 days.

Lifestyles

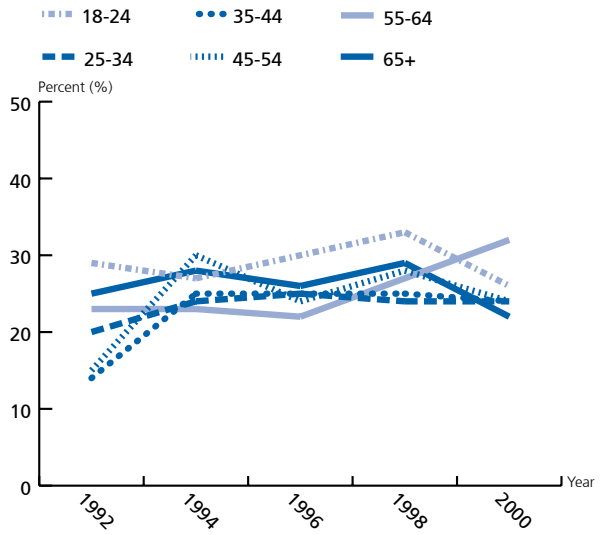
Percent of Adults (18+) Who Eat 5 or More Servings of Fruits and Vegetables per Day by Education, Idaho, 1994-2000

Source: Idaho BRFSS



Percent of Adults (18+) Who Engage in Physical Activity* by Age, Idaho, 1992-2000

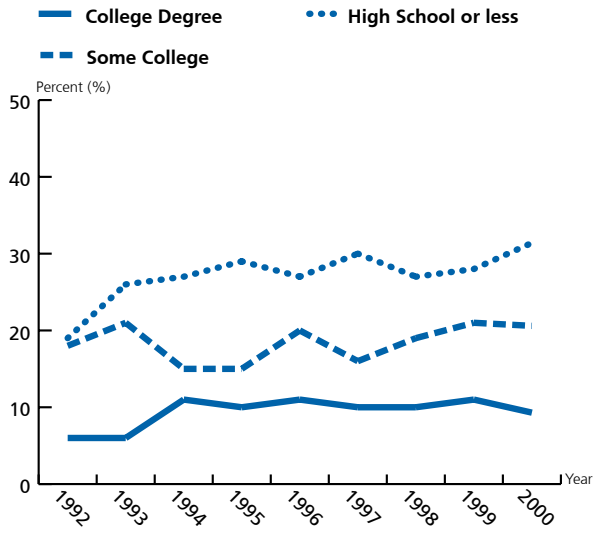
Source: Idaho BRFSS



*Physical activity is defined as regular and sustained physical activity (30 min/day, 5+ days/week), regardless of intensity.

Percent of Adults (18+) Who Are Current Smokers,* by Education, Idaho, 1992-2000

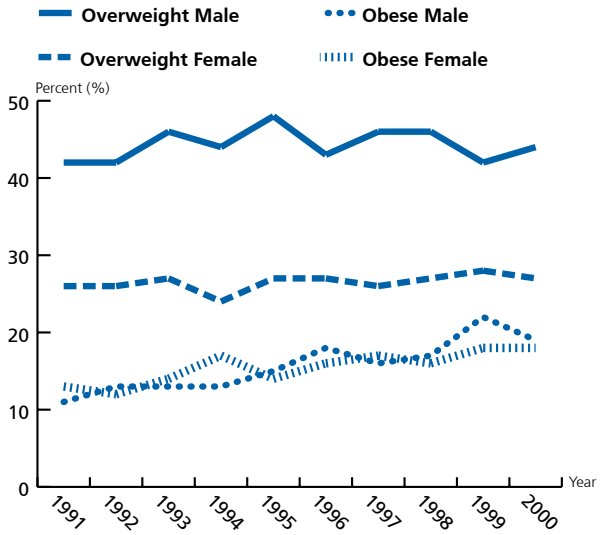
Source: Idaho BRFSS



*Current smokers are defined as people who ever smoked 100 cigarettes and who now report smoking every day or some days.

Percent of Adults (18+) Who Are Overweight* or Obese,** by Gender, Idaho, 1991-2000

Source: Idaho BRFSS



*Based on body mass index 25-29.9 Kg/m^2
**Based on body mass index ≥ 30

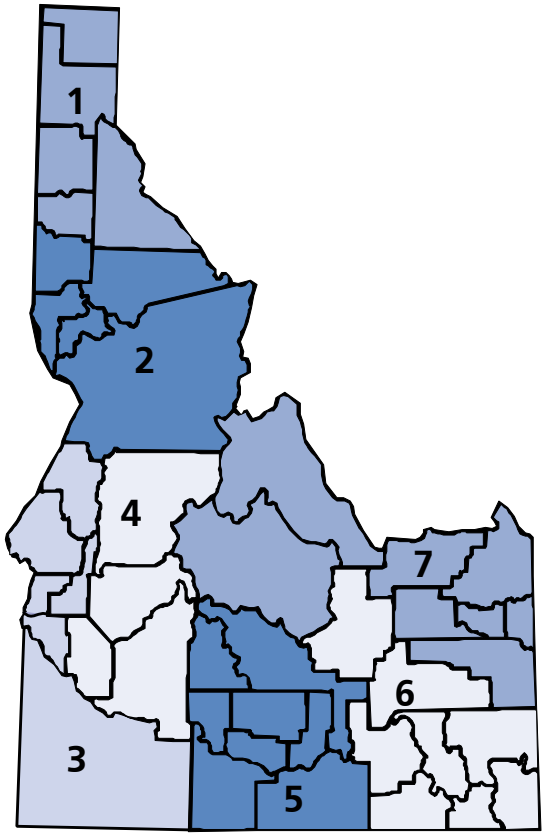
Demographics

Idaho Counties

Results are presented at the health district level instead of county level when county level data are too sparse to calculate accurate data.

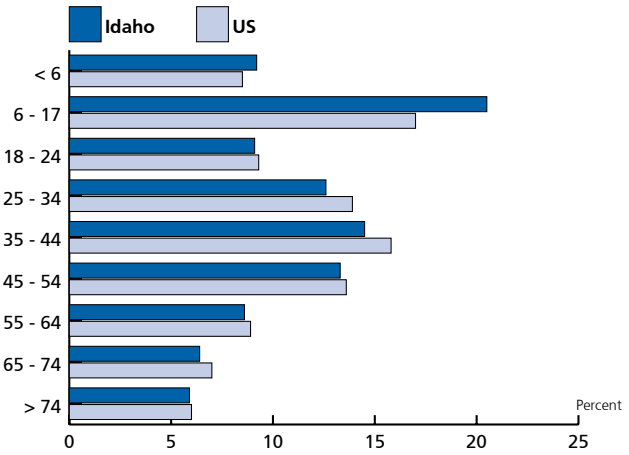
Idaho is comprised of 44 counties grouped into seven Health Districts.

District 1: Benewah, Bonner, Boundary, Kootenai, Shoshone
District 2: Clearwater, Latah, Lewis, Idaho, Nez Perce
District 3: Adams, Canyon, Gem, Owyhee, Payette, Washington
District 4: Ada, Boise, Elmore, Valley
District 5: Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, Twin Falls
District 6: Bannock, Bear Lake, Bingham, Butte, Caribou, Franklin, Oneida, Power
District 7: Bonneville, Clark, Custer, Fremont, Jefferson, Lemhi, Madison, Teton



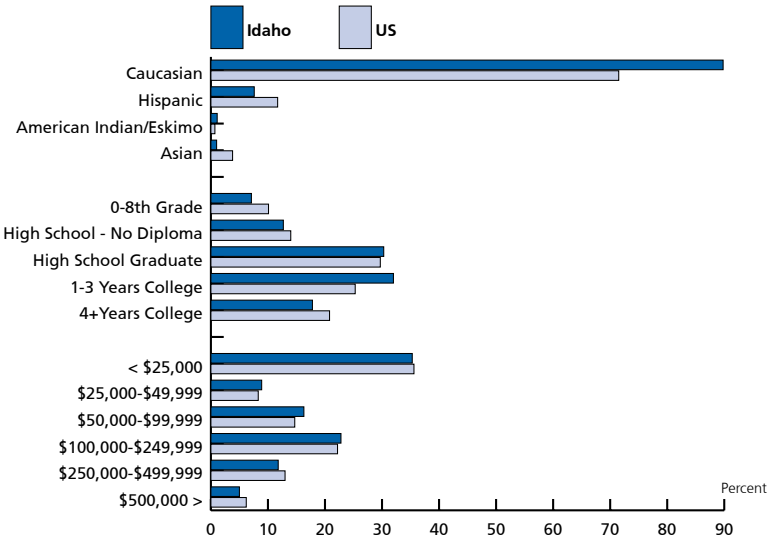
Total Population by Age, Idaho and United States, 2000

Source: United States Census



Total Population by Race/Ethnicity, Education Level, and Household Income, Idaho and U.S., 2000

Source: United States Census



Underserved Populations

Despite recent progress in the fight against cancer, many Americans continue to suffer an unequal burden of cancer. Underserved populations, as a result of being uninsured or underinsured or unaware of available screening and treatment resources, have inadequate access to high quality cancer prevention, screening, treatment, and rehabilitation. These Americans include many racial and cultural groups who share certain characteristics, such as low levels of income and education, or who live in geographically isolated areas. Other individuals experience barriers to health care because of illiteracy, or differing cultural beliefs, practices, and languages.

Poverty[1]

Poverty is a reality for 32 million Americans and is a major factor associated with an increased risk of developing and dying from cancer. Poverty is also associated with higher rates of unemployment, lower education levels, inadequate living conditions, poor nutrition, and decreased access to quality health care.

Thirteen percent of Idaho residents are below 100 percent of poverty level, which is the same as the national average of 13 percent.

Median household income in Idaho in 1997-1998 averaged $33,612, which is below the national average of $37,005.

Race and Ethnicity[1]

In Idaho, 10.3 percent of the population are minorities, in contrast to the United States as a whole, in which minorities comprise 28.7 percent of the total population.

Health Care Access[1]

Sixteen percent of Idaho citizens do not have access to primary care providers. Fifty-five percent of counties in Idaho have been designated as medically underserved areas. Additionally, 100 percent of Idaho counties have been identified as having a health professional shortage.

Health Insurance[1]

There are also a number of residents that do not have health insurance. In 1999, 17.7 percent of Idaho residents did not have health insurance, which is above the national average of 16.3 percent.

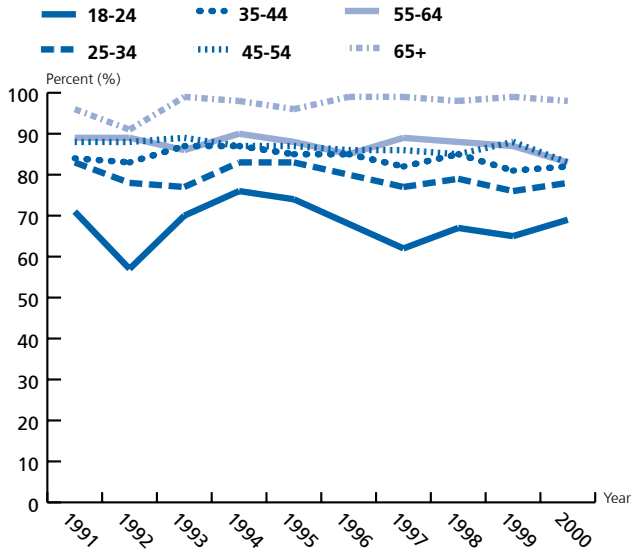
Addressing Cancer in the Underserved

The American Cancer Society has engaged in a full-scale initiative to eliminate health disparities among racial and ethnic minorities and other underserved groups to improve health status and reduce numbers of new cancer cases and deaths.

The American Cancer Society is working diligently to understand the needs of underserved populations by conducting community assessments, sponsoring research, and funding demonstration projects. The ACS is taking action by conducting health education and outreach, and advocating for changes in coverage for screening and treatment, as well as changes in public policy at all levels of government responsible for addressing the inequalities in health care delivery and financing. The American Cancer Society is committed to providing local leadership in cancer prevention and control to break down barriers to access and optimum health care.

Percent of Adults (18+) with Health Care Coverage, by Age, Idaho, 1991-2000

Source: Idaho BRFSS



[1]Data source: U.S. Department of Health and Human Services Administration, *HRSA State Health and Workplace Profiles, Fiscal Year 1999.*

Data Sources

Cancer incidence and mortality data are based on cases reported to each state's central cancer registry (CCR) and the underlying cause of death reported by each state's Office of Vital Statistics. U.S. mortality rates are from the Bureau of Vital Statistics. CCRs are legally mandated, statewide, population-based cancer information centers. Analyses were performed by the registries. All rates are age-adjusted to the 2000 U.S. standard population. More detailed information on the status of cancer in each state is available from the state's CCR.

Survival trends for adults, children, and U.S. incidence rates are from the Surveillance, Epidemiology, and End Results (SEER) program. More detailed information can be found in (SEER Cancer Statistics Review, 1973-1997,) available from SEER and on its website at www-seer.ims.nci.nih.gov. Survival rates are from cancer incidence data collected on about 10 percent of the U.S. population

Risk factor data have been drawn from each state's Behavioral Risk Factor Surveillance System (BRFSS) and Youth Risk Behavior Survey (YRBS), both of which are conducted as collaborations between the Centers for Disease Control and Prevention and state departments of health or education.

Definitions and Abbreviations

SEER summary stage definitions- Stage of disease information is obtained from extent of disease information. The historical stage presented has four levels. An invasive neoplasm confined entirely to the organ of origin is said to be **localized**. An invasive neoplasm that has extended beyond the limits of the organ of origin is said to be **regional.** An invasive neoplasm that has spread to parts of the body remote from the primary tumor either by direct extension or by discontinuous metastasis is said to be **distant.** In addition, when information is not sufficient to assign a stage, an invasive neoplasm is said to be **unstaged.**
Unavailable data- For states that did not have overall response rates of 40 percent or more on youth risk behavior surveys, the data are not eligible for publication in the MMWR (Morbidity and Mortality Weekly Report), and, as such, are unavailable.
Relative Survival Rate: The relative survival rate is the survival rate observed for a group of cancer patients compared to the survival rate of persons in the general population who are similar to the patient group with respect to age, gender, race, and calendar year of observation. Relative survival adjusts for normal life expectancy (factors such as dying from accidents or other diseases). Five-year relative survival rates include persons who are still living five years after diagnosis, whether in treatment, remission, or disease-free.

ACS	American Cancer Society
BMI	Body Mass Index, Weight in Kg/Height in m^2
BRFSS	Behavioral Risk Factor Surveillance System
CCR	Central Cancer Registry
CDC	Centers for Disease Control and Prevention
C&R	Colon and Rectum
MMWR	*Morbidity and Mortality Weekly Report*
NCI	National Cancer Institute
RMD	Rocky Mountain Division
SEER	NCI Surveillance, Epidemiology, and End Results Program
YRBS	Youth Risk Behavior Survey

Agencies Contributing Data

Cancer Data Registry of Idaho
615 N. Seventh Street
P.O. Box 1278
Boise, ID 83701-1278
http://www.idcancer.org/
208-338-5100 x213

BRFSS
Bureau of Vital Records and Health Statistics
Division of Health
Idaho Department of Health and Welfare
450 W. State St., 1st Floor
Boise, ID 83720
http://www2.state.id.us/dhw/hwgd_www/health/vs/brfssindx.htm
208-334-5992

YRBS
HIV, AIDS, & Health Education
Idaho Department of Education
650 W. State St.
P.O. Box 83720
Boise, ID 83720-0027
208-332-6950

Acknowledgements

The data for portions of this report have been provided through the cooperation of local agencies, all of which are listed on this page. These agencies are the primary contributors of cancer-related data specific to Idaho, and this publication would not have been possible without their assistance. This publication is designed to provide an overview in Idaho and in no way replaces the relevance or need for reports of the individual organizations.

Report compiled and produced for the American Cancer Society's Rocky Mountain Division, by the following staff: Alacey Berumen, MNM Regional Planner, Robert Grosboll, MPH Cancer Specialist, Joe McManis, Communications Coordinator, Lisa Emery MSPH.

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American Cancer Society Mission:

The American Cancer Society is the nationwide, community-based, voluntary health organization dedicated to eliminating cancer as a major health problem by preventing cancer, saving lives from cancer, and diminishing suffering from cancer through research, education, advocacy, and service.

American Cancer Society®

Cancer Information: 800-ACS-2345 http://www.cancer.org