

CANCER IN IDAHO - 2000

**A Publication of the
Cancer Data Registry of Idaho**



C A N C E R D A T A
R E G I S T R Y O F I D A H O

**A Program of the
Idaho Hospital Association**



I D A H O H O S P I T A L
A S S O C I A T I O N

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PREFACE

"Cancer in Idaho - 2000," the twenty-fourth annual report of the Cancer Data Registry of Idaho (CDRI), contains data on cancer cases diagnosed during 2000 among Idaho residents. These data can be used by public health officials, hospital administrators, physicians, and others to effectively plan services, prioritize health resource allocations, develop and measure prevention and intervention strategies, and identify high risk populations within the state of Idaho.

ACKNOWLEDGMENTS

The Idaho Hospital Association (IHA) contracts with, and receives funding from, the Idaho Department of Health and Welfare, Division of Health, to provide a statewide cancer surveillance system.

The statewide cancer registry database is a product of collaboration among many report sources including: hospitals, physicians, surgery centers, pathology laboratories, and other states in which Idaho residents are diagnosed and/or treated for cancer. Their cooperation in reporting timely, accurate, and complete cancer data is acknowledged and sincerely appreciated.

CDRI would also like to thank the Idaho Bureau of Vital Records and Health Statistics, the Bureau of Clinical and Preventive Services, the Bureau of Health Promotion, and the Bureau of Environmental Health and Safety of the Idaho Department of Health and Welfare, Division of Health, for their continued partnership in using CDRI data as a tool in cancer control and prevention.

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BACKGROUND

Introduction to the Cancer Data Registry of Idaho (CDRI)

Purpose of the Registry

Population-based cancer registries are essential for assessing the extent of cancer burden in a specified geographic area. The Cancer Data Registry of Idaho (CDRI) is a population-based cancer registry that collects incidence and survival data on all cancer patients who reside in the state of Idaho or who are diagnosed and/or treated for cancer in the state of Idaho. The goals of the CDRI are to:

- ◆ determine the incidence of cancer in the state of Idaho with respect to geographic, demographic, and social characteristics;
- ◆ monitor trends and patterns of cancer incidence over time;
- ◆ identify high risk populations;
- ◆ provide a database and serve as a resource in conducting epidemiologic studies; and
- ◆ provide data to assist public health officials, hospital administrators, and physicians to effectively plan services, prioritize health resource allocations and develop and measure prevention and intervention strategies.

History and Funding of the Registry

CDRI was established in 1969 and became population-based in 1971. The Idaho State Legislature has provided guidelines for the establishment, requirements, and funding of the statewide cancer registry. The operations of the registry are mandated by Idaho Code 57-1703 through 57-1707. Funding is appropriated in Idaho Code 57-1701 and 63-2520, which delineates one percent of the cigarette tax to be dedicated to fund the statewide cancer

registry. Additional funding has been awarded to CDRI from the Centers for Disease Control and Prevention (CDC) to enhance timely, complete and accurate data collection, computerization, and reporting of reliable data.

Collection of Data

Each Idaho hospital, outpatient surgery center, and pathology laboratory is responsible for the complete ascertainment of all data on cancer diagnoses and treatments provided in its facility within six months of diagnosis. Sources for identifying eligible cases include:

- ◆ hospitals,
- ◆ outpatient surgery centers,
- ◆ private pathology laboratories,
- ◆ free-standing radiation centers,
- ◆ physicians (for patients not receiving cancer diagnoses and/or treatment in the above sources),
- ◆ death certificates, and
- ◆ other state cancer registries reporting an Idaho resident with cancer (as negotiated).

When a cancer case is reported from more than one source, the information is consolidated into one record.

Reported cases contain the following data:

- ◆ patient demographics (including geographic place of residence at time of cancer diagnosis);
- ◆ description of cancer (including date of diagnosis, primary site, metastatic sites, histology, extent of disease, etc.);
- ◆ first course treatment; and
- ◆ follow-up data for purposes of calculating survival rates.

Primary site, behavior, grade, and histology were coded according to the *“International Classification of Diseases for Oncology, 2nd edition.”*¹ Stage of disease variables were coded using *“SEER’s Summary Staging Guide”* and *“AJCC Manual for Staging of Cancer, 5th edition.”*²⁻³ All other variables were coded following the rules of the North American Association of Central Cancer Registries, the SEER program, and the American College of Surgeons.⁴⁻⁶

Reportable Cases

All in-situ or malignant neoplasms are reportable to CDRI. The database includes all cases of carcinoma, sarcoma, melanoma, lymphoma, and leukemia, diagnosed by histology/ cytology, radiology, laboratory testing, clinical observation, and autopsy.

Also reportable are benign tumors of the brain, meninges, pineal gland, and pituitary gland.

Basal and squamous cell carcinomas of the skin are excluded except when occurring on a mucous membrane or if the AJCC stage group is II, III, or IV.

Under Idaho Code and as recommended by the North American Association of

Central Cancer Registries, cervix in-situ cases are not currently reportable.

Confidentiality of Data

Idaho state law ensures the protection of confidential data and restricts the release of identifying data. Only aggregate data are published. The same law protects report sources from any liability for reporting confidential data to CDRI. Persons with access to confidential data are required to sign a pledge of confidentiality and are subject to penalty if they, through negligence or willful misconduct, disclose confidential data.

Quality Assurance

To assure validity and reliability of data presented, CDRI has many mechanisms in place to check data for quality and completeness. CDRI uses EDITS software which has standard edits using algorithms that check the content of data fields against an encoded set of acceptable possible contents and flags the acceptability of coded data. Edits include field edits, inter-field edits, and inter-record edits. Edits check for unlikely sex/site, site/histology, or site/age combinations. In addition to computerized edits, each case is manually reviewed for errors.

Records are also routinely checked for duplicate entries. Duplicate case checking is performed both manually and electronically using various methodologies.

Idaho data have qualified for inclusion in all volumes of NAACCR’s publication of *“Cancer Incidence in North America.”* In order to be included, states must meet standards for quality and completeness.

Executive Summary

Data Presentation

This report is comprised of five sections. Section I focuses on the 24 most common cancer sites and all sites combined and presents age-adjusted incidence rates, numbers of cases, numbers of deaths, counts by county, stage of disease at time of diagnosis, risk factors, special notes, age-adjusted incidence rate comparisons by health district, and age-specific rates by gender. Section II depicts incidence data by site and gender for invasive and in-situ cases. Section III depicts mortality data by site and gender. Section IV contains a table of age-specific cancer rates, per 100,000, by site and gender. Section V contains a table of observed versus expected numbers of cancer cases by health district. Section VI contains tables of age-specific risks of developing and dying from cancer for males and females.

Population Description

The population of the state of Idaho in 2000 was 1,293,953 (648,660 males and 645,293 females). Population figures were obtained from the U.S. Bureau of the Census.⁷ Idaho is comprised of 44 counties grouped into seven health districts. The composition of the health districts, as well as their population estimates by gender as used in this report, are shown below:

<u>Health District</u>	<u>Counties</u>	<u>Male</u>	<u>Female</u>
District 1	Benewah, Bonner, Boundary, Kootenai, Shoshone	88,773	89,560
District 2	Clearwater, Latah, Lewis, Idaho, Nez Perce	51,019	49,514
District 3	Adams, Canyon, Gem, Owyhee, Payette, Washington	95,257	96,040
District 4	Ada, Boise, Elmore, Valley	174,327	170,028
District 5	Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, Twin Falls	81,469	80,928
District 6	Bannock, Bear Lake, Bingham, Butte, Caribou, Franklin, Oneida, Power	78,011	78,895
District 7	Bonneville, Clark, Custer, Fremont, Jefferson, Lemhi, Madison, Teton	79,804	80,328

Descriptive Summary by Gender and Race and Ethnicity

The data presented in this report cover those cases diagnosed among Idaho residents between January 1, 2000, and December 31, 2000. In this time frame, there were 5,756 cases of cancer diagnosed among Idaho residents (2,978 among males and 2,777 among females; 1 other/missing). By race and ethnicity, there were 5,594 cases among non-Hispanic whites, 85 among Hispanic whites, 4 cases among Blacks, 8 cases among Native Americans, 31 cases among Asians/Pacific Islanders, and 6 cases among other races. Race was missing for 23 cases, and 5 cases among whites had unknown ethnicity. The majority of cases with missing race and/or ethnicity were reported by out-of-state sources. The number of cancer cases treated in outpatient settings and reported only by pathology laboratories has increased over the last several years. Many of such cases are reported with race missing, causing tabulations of cases by race to be skewed. CDRI is actively working to improve the data quality of cases reported by pathology laboratories only.

Trends

There was an increase of 359 cases from 1999 to 2000 (as of one year after close of calendar year). This was one of the largest single-year increases in cancer incidence in the history of the Cancer Data Registry of Idaho. Cancer sites with notable increases from 1999 to 2000 were lung, melanoma (in-situ), oral cavity and pharynx, and prostate. While lung and oral cavity and pharynx cancer counts increased over 1999 levels, the incidence rates are similar to recent rates earlier than 1999. The number of in-situ melanoma cases is 65% higher than for any previous year. The prostate cancer incidence rate is the highest it has been since the spike in prostate cancer rates in 1990-1993 due to prostate-specific antigen (PSA) screening. However, the increase in rates was limited to Health Districts 2, 4, 5, and 7.

Technical Notes

Age-adjusted Incidence Rates

Age-adjusted incidence rates published within this report were adjusted using the direct method and standardized to the age distribution of the 2000 U.S. population (see Appendix B for the 2000 U.S. standard population). Incidence rates represent the average number of new cases diagnosed annually per 100,000 persons. Age adjustment allows rates from one geographic area to be compared with rates from other geographic areas that may have differences in age distributions. Any observed differences in age-adjusted incidence rates between populations are not due to differing age structures.

Because the 2000 U.S. standard population was used to age-adjust rates, the age-adjusted rates published in this report are not comparable with age-adjusted rates published in CDRI annual reports for years prior to 1999.

The computation of rates requires reliable estimates of the population at risk by five-year age groups and gender during the time period being studied. Population figures used in this report were obtained from the U.S. Bureau of the Census (see Appendix C).⁷

In conformity with the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program guidelines, the incidence rates excluded the following:

- ◆ in-situ cases, except bladder;
- ◆ basal and squamous cell skin cancers;
- ◆ cases with unknown age; and
- ◆ cases with unknown gender.

Of the total number of invasive and in-situ cases for 2000 (5,756), a total of 5,338 cases (5,223 invasive and 115 bladder in-situ) were used for calculating age-adjusted incidence rates. Of the 5,338 cases, 2,838 occurred among males and 2,499 occurred among females.

Age-specific Incidence Rates

Age-specific rates are calculated by dividing the number of cases for a given age group by the total population of that age group and are expressed as an average annual rate per 100,000 population by age group. Age-specific rates exclude the same types of cases that are excluded from age-adjusted incidence rates.

Observed vs. Expected Numbers of Cases

The expected numbers of cases were calculated using the indirect method of age-adjustment. For each health district, the expected numbers of cases were calculated using rates for the remainder of Idaho. The observed and expected numbers exclude in-situ cases (except bladder), basal and squamous cell skin cancers, and cases with unknown age or sex. Statistically significant differences between observed and expected cases (standardized incidence ratios) were marked (+) for $p < 0.05$ and (*) for $p < 0.01$. Statistical significance does not necessarily imply that concern is warranted, since differences can occur as a result of multiple factors.

Risk and Associated Factors

The "risk and associated factors" subsections in Section I were developed from extracts of the 1993 annual report

of the Washington State Cancer Registry, the “American Cancer Society Textbook of Clinical Oncology,” and the U.S. Department of Health and Human Services 9th Report on Carcinogens.⁸⁻¹⁰ Socio-economic status is abbreviated as SES in Section I text.

Mean/Median/Mode

Measures of central tendency are helpful to describe a group of individual values in a simple and concise manner.

Mean also known as the arithmetic average, is the sum of all observations divided by the number of observations.

Median is the middle value when the observations are ranked in order from the smallest to the largest.

Mode is the value which occurs most frequently in a group of observed values.

Confidence Intervals

An estimated range of values within which the true population value lies with given probability is the confidence interval.

Cancer Case Definition

A “cancer case” is defined as a primary cancer site (where the cancer started), not a metastatic cancer site (where the cancer spread to). Since an individual can have more than one primary cancer site during their lifetime, the number of incident cancer cases is greater than the number of persons who are diagnosed with cancer.

Limitations to Data Interpretation and Comparison

Rates based on population estimates: In

non-census years, state and county population figures are estimates. Errors in the estimates will impact the rates.

Rate comparisons: Age-adjusted incidence rates and age-specific rates based on small numbers of cases (fewer than 10 cases) may be unstable. In comparing rates among geographic areas (counties, health districts, or states), factors such as the absolute numbers of cases and differences in demographics should be considered. Interpretations without consideration of these factors may be misleading or inaccurate.

Racial misclassification: Many source documents used to report cancer do not specify race of the patient, or misclassify race. Studies have shown racial misclassification rates of nearly 50% for Native Americans. This can result in substantial bias, and is the reason why race-specific rates are not published in this report.

Standard Site Analyses Categories

To facilitate interpretation of data and comparisons across registries, CDRI uses standardized groupings of site analysis categories. These groupings are consistent with the National Cancer Institute’s SEER Program and are adopted by NAACCR.^{4,5} Most neoplasms are grouped by the organ where they occur. Neoplasms of the lymphatic, hematopoietic, and reticuloendothelial systems are grouped by their histologies (leukemias, lymphomas, etc.), and not by the anatomic site where they occurred. Melanoma of the skin is a combination of both anatomic site and histologic type. See Appendix A for groupings of codes. SEER rates for Section 1 were calculated using SEER*Stat.¹¹

Stage at Time of Diagnosis

Staging measures the extent of disease at the time of initial diagnosis. Summary staging attempts to group cases with similar prognoses into categories of:

- ◆ in-situ (non-invasive),
- ◆ localized (cancer confined to the primary site),
- ◆ regional (direct extensive of tumor to adjacent organs, and/or lymph nodes),
- ◆ distant (metastasis to tissues or lymph nodes remote from the primary site), or
- ◆ unknown.

Risks of Developing and Dying from Cancer

Cancer incidence and mortality risks were estimated using DEVCAN Version 4.1 software.¹² DEVCAN was used to calculate the probability of developing or dying of cancer using Idaho-specific cancer incidence and mortality data for the years 1996-2000. The estimates generated are similar to estimates derived using incidence data from the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute, mortality data from the National Center for Health Statistics, and population estimates from census data. DEVCAN was developed by Information Management Services, Inc. in consultation with the Applied Research Branch of the National Cancer Institute. DEVCAN uses a standard multiple decrement life table.

SECTION I

2000 SUMMARY ON ALL SITES COMBINED AND 24 MOST COMMON SITES

ALL SITES

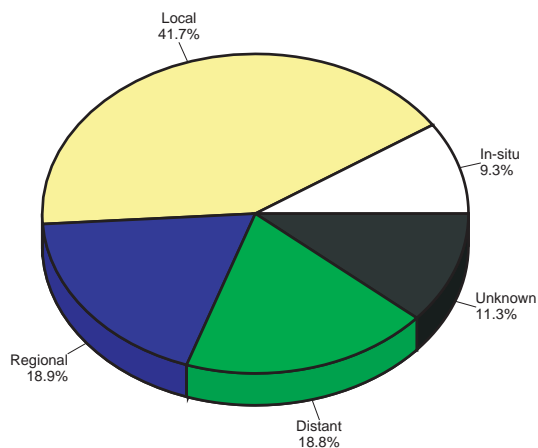
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	449.0	523.9	394.1
# of new invasive cases	5,223	2,749	2,473
# of new in-situ cases	533	229	304
# of deaths	2,131	1,128	1,003

Total Cases By County

Ada	1,273	Cassia	74	Lewis	38
Adams	19	Clark	1	Lincoln	23
Bannock	256	Clearwater	40	Madison	51
Bear Lake	26	Custer	23	Minidoka	76
Benewah	51	Elmore	100	Nez Perce	234
Bingham	130	Franklin	34	Oneida	14
Blaine	65	Fremont	48	Owyhee	34
Boise	22	Gem	86	Payette	89
Bonner	173	Gooding	68	Power	23
Bonneville	326	Idaho	66	Shoshone	90
Boundary	45	Jefferson	66	Teton	18
Butte	13	Jerome	81	Twin Falls	352
Camas	7	Kootenai	658	Valley	55
Canyon	515	Latah	118	Washington	73
Caribou	29	Lemhi	43		

Stage at Diagnosis - All Sites



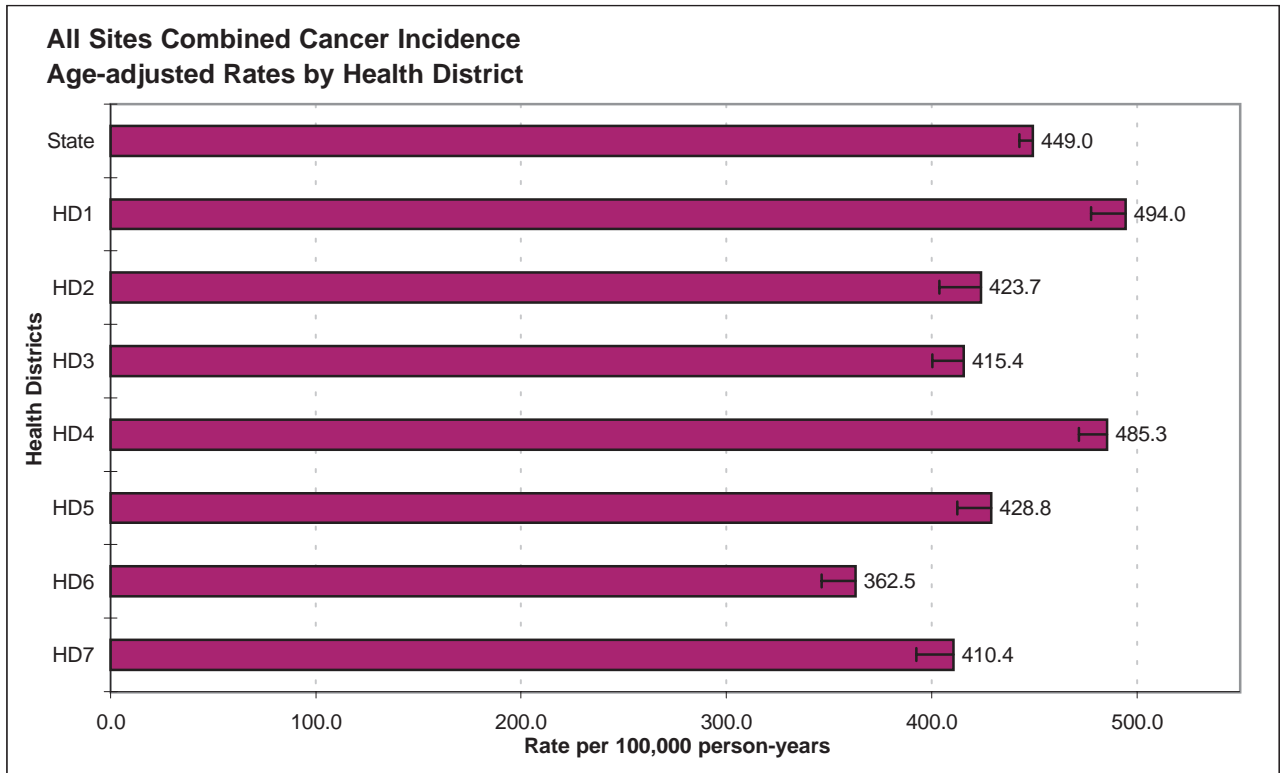
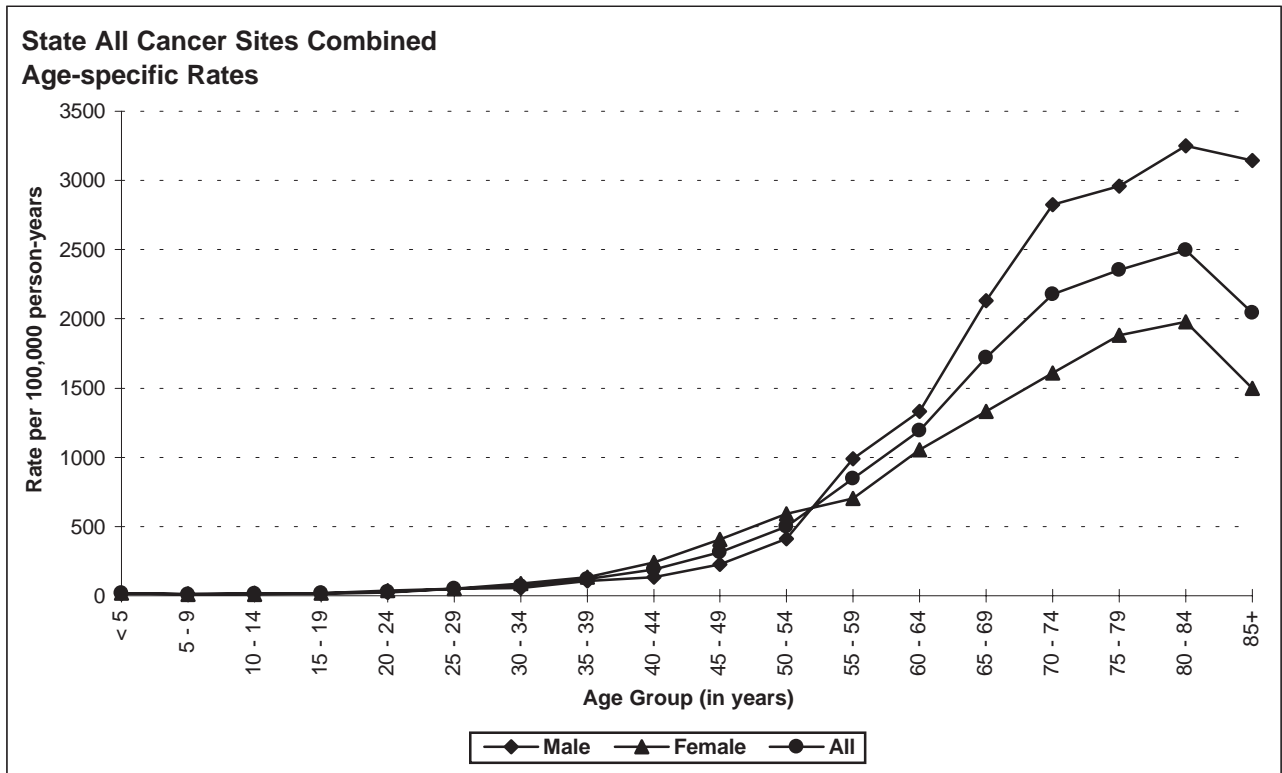
Risk and Associated Factors

Age	Rates usually increase steadily with age. Most cases are adults in mid-life or older.
Gender	Males have a higher incidence than females for most cancer types.
Race & SES	Rates are higher for African Americans than for Caucasians and other ethnic groups. Rates are generally higher among lower income groups.
Occupation	Risk for cancer is greater with some kinds of workplace exposures, such as some chemicals, asbestos, and radiation.
Diet	Diets that are low in fresh fruits and vegetables have been associated with increased incidence of several cancers.
Other	Tobacco use is the single most important risk factor for cancer incidence and mortality.

Special Notes

Mean age-adjusted incidence rate across health districts:	431.4
95% confidence interval on the mean age-adjusted incidence rate:	397.8 - 465.0
Median age-adjusted incidence rate of health districts:	423.7
Range of age-adjusted incidence rate for health districts:	362.5 - 494.0
SEER rate (1998, Whites):	462.5

The incidence rates for all cancers combined were similar for males and females in Idaho until approximately age 60-64, after which rates for males rose dramatically. The highest rates for both males and females were observed in age groups after age 70, peaking in the age group 80-84 for both males and females. Health Districts 1 ($p < 0.01$) and 4 ($p < 0.01$) had statistically significantly more cases of cancer than expected based upon rates for the remainder of Idaho, and Health Districts 3 ($p < 0.05$), 6 ($p < 0.01$) and 7 ($p < 0.05$) had statistically significantly fewer cases than expected.



BLADDER

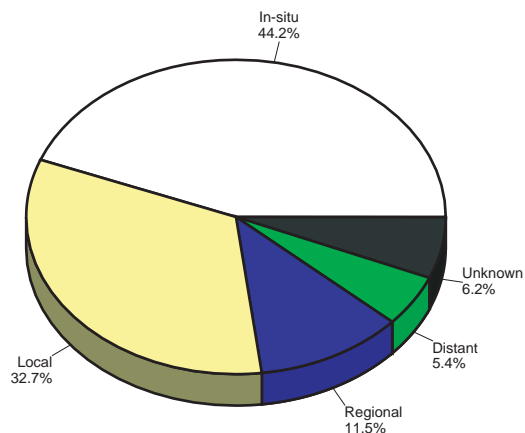
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	22.1	39.4	8.3
# of new invasive cases	145	117	28
# of new in-situ cases	115	89	26
# of deaths	53	37	16

Total Cases By County

Ada	59	Cassia	2	Lewis	4
Adams	2	Clark	1	Lincoln	2
Bannock	9	Clearwater	2	Madison	2
Bear Lake	2	Custer	2	Minidoka	-
Benewah	4	Elmore	3	Nez Perce	18
Bingham	7	Franklin	3	Oneida	1
Blaine	4	Fremont	2	Owyhee	2
Boise	1	Gem	-	Payette	5
Bonner	6	Gooding	4	Power	2
Bonneville	12	Idaho	3	Shoshone	4
Boundary	-	Jefferson	3	Teton	1
Butte	-	Jerome	1	Twin Falls	15
Camas	2	Kootenai	38	Valley	1
Canyon	21	Latah	4	Washington	3
Caribou	-	Lemhi	2		

Stage at Diagnosis - Bladder



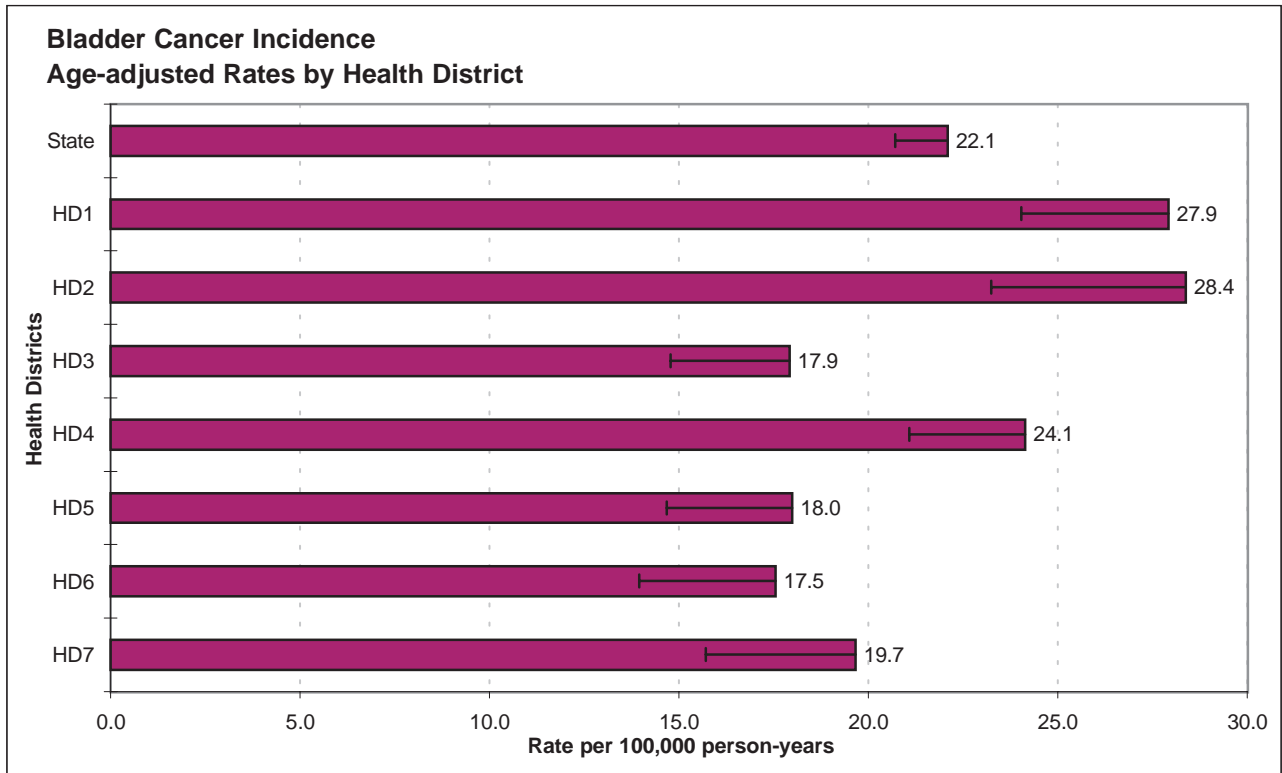
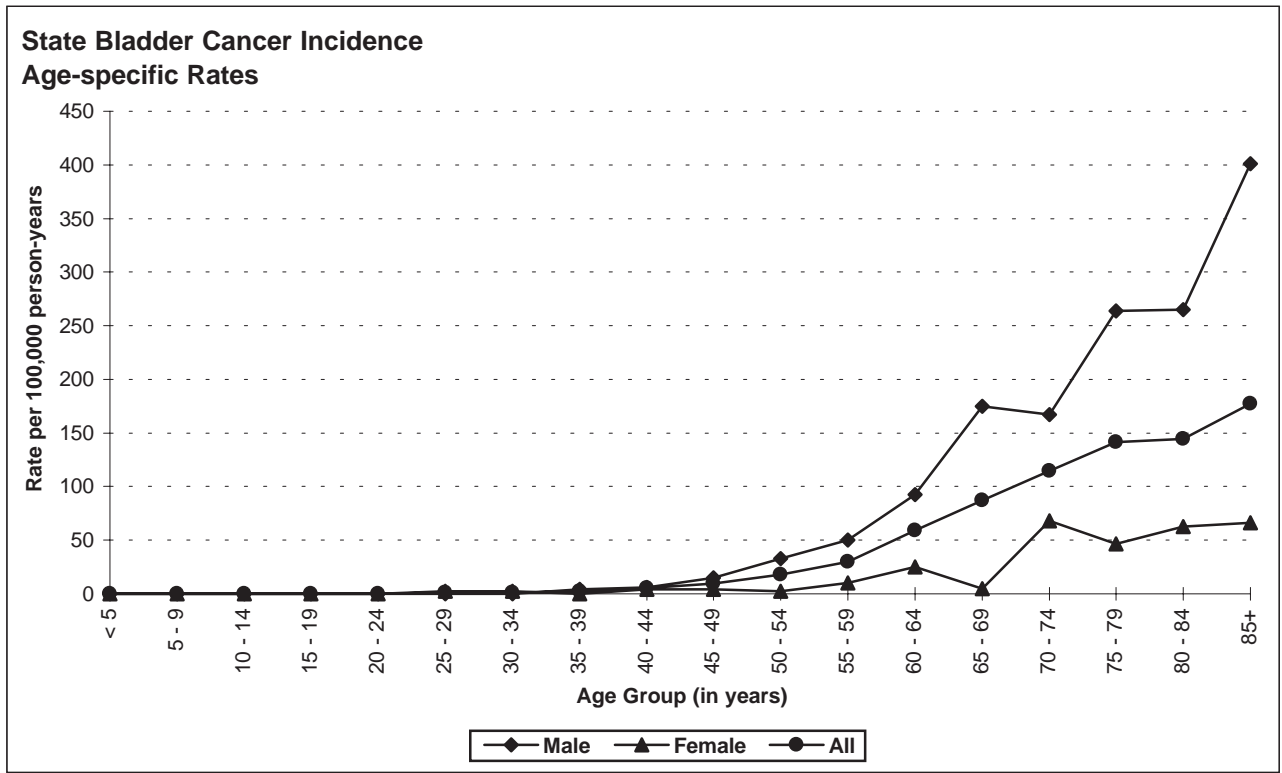
Risk and Associated Factors

Age	Rates usually increase steadily with age.
Gender	Males have substantially higher rates than females.
Race	Incidence rates are slightly higher in African Americans.
Occupation	Occupational exposures, most prominently aniline dye used in textile, rubber, and cable industries, are associated with a large proportion of cases. Exposure to permanent hair dyes increases risk.
Other	Tobacco consumption has been associated with a six-fold higher incidence of bladder tumor. Cyclophosphamide, a chemotherapeutic agent, and 4-amino-diphenyl are known human bladder carcinogens. Beta-naphthylamine and tobacco tar have been implicated in animal studies as possible causative factors. Chronic infections, calculus disease, and <i>Schistosoma hematobium</i> may also cause bladder tumors. Nitrate in drinking water, one of the most common contaminants in rural areas, is associated with an increased risk for bladder cancer.

Special Notes

Mean age-adjusted incidence rate across health districts:	21.9
95% confidence interval on the mean age-adjusted incidence rate:	18.4 - 25.5
Median age-adjusted incidence rate of health districts:	19.7
Range of age-adjusted incidence rate for health districts:	17.5 - 28.4
SEER rate (1998, Whites):	21.6

There were few cases of bladder cancer among persons aged less than 40 years. Bladder cancer incidence rates increased with age, peaking in the age group 85+ for males, and 70-74 for females. Health District 1 had statistically significantly more cases than expected based upon rates for the remainder of Idaho ($p < 0.05$).



BRAIN

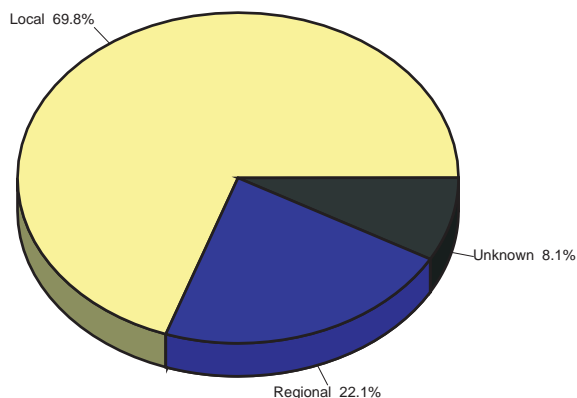
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	7.1	8.8	5.3
# of new invasive cases	86	52	34
# of new in-situ cases	0	0	0
# of deaths	66	39	27

Total Cases By County

Ada	23	Cassia	1	Lewis	1
Adams	-	Clark	-	Lincoln	-
Bannock	5	Clearwater	1	Madison	-
Bear Lake	-	Custer	-	Minidoka	-
Benewah	-	Elmore	-	Nez Perce	2
Bingham	2	Franklin	-	Oneida	-
Blaine	2	Fremont	-	Owyhee	1
Boise	-	Gem	2	Payette	4
Bonner	3	Gooding	-	Power	-
Bonneville	5	Idaho	2	Shoshone	3
Boundary	-	Jefferson	5	Teton	2
Butte	-	Jerome	-	Twin Falls	6
Camas	-	Kootenai	7	Valley	1
Canyon	3	Latah	2	Washington	1
Caribou	1	Lemhi	-		

Stage at Diagnosis - Brain



Risk and Associated Factors

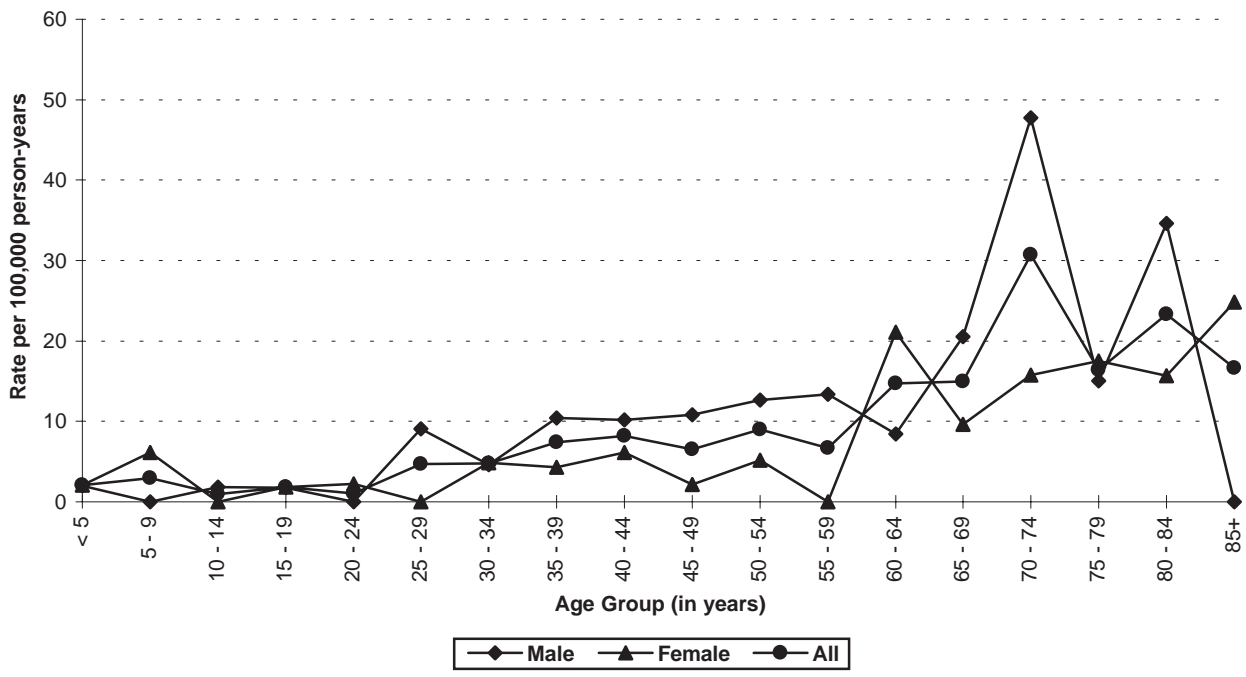
Age	This is the second most common cancer among children, following leukemia. Adult malignant brain tumors are most common after age 60.
Gender	Males have higher rates than females.
Race & SES	The incidence rate is higher in Caucasians and higher social classes.
Genetics	Certain genetic factors may cause an increased risk of some malignant brain tumors, including gliomas. Molecular tests that may be useful in screening for recurrences are being developed.
Occupation	Vinyl chloride is a known human carcinogen, with exposure causing brain cancer and other types of cancer. Many occupational and environmental exposures have shown suggestive associations with elevated rates of brain cancer, including radiation, and agricultural chemicals. Roofers, sheet metal workers, and rubber and plastic workers may be at elevated risk. Studies about these associations are still inconclusive.
Other	Human Immunodeficiency Virus (HIV) infected individuals have an increased risk of developing brain lymphoma.

Special Notes

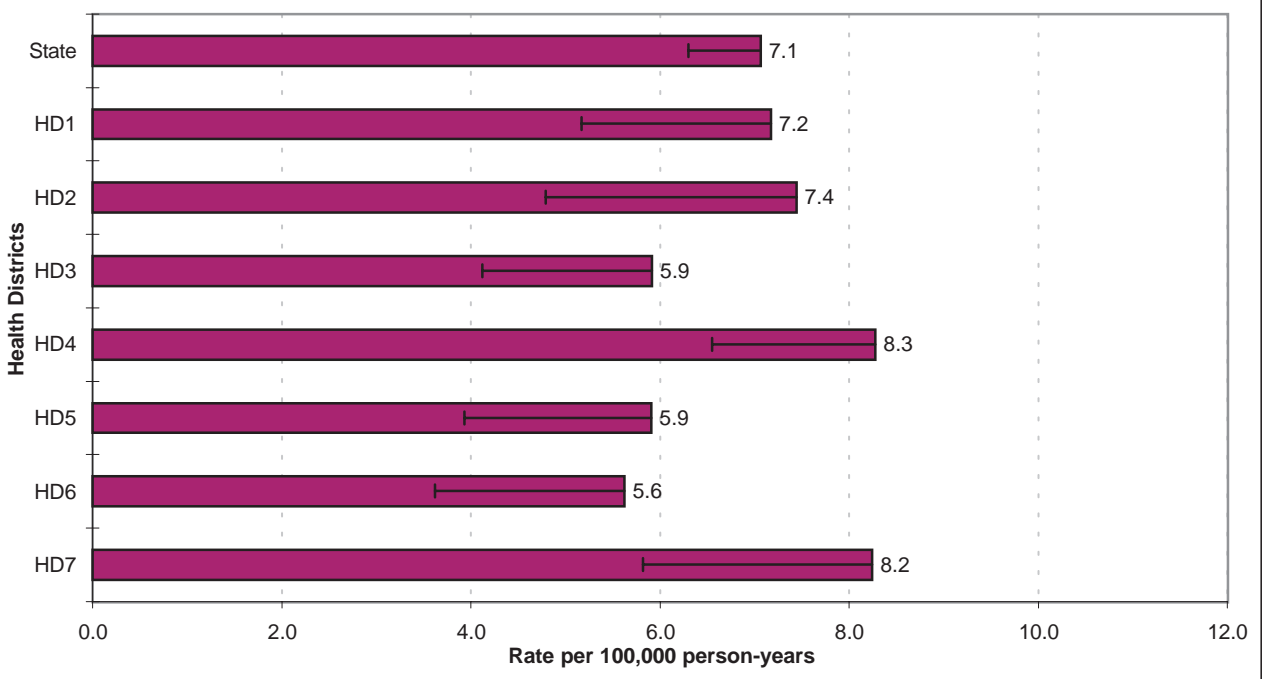
Mean age-adjusted incidence rate across health districts:	6.9
95% confidence interval on the mean age-adjusted incidence rate:	6.1 - 7.8
Median age-adjusted incidence rate of health districts:	7.2
Range of age-adjusted incidence rate for health districts:	5.6 - 8.3
SEER rate (1998, Whites):	6.5

The age-related incidence of brain cancer is typically bimodal, usually with a peak in infancy and childhood, a gradual rise in young adulthood, and a broader, sustained peak during the fifth to eighth decade of life. This trend is difficult to discern in Idaho's population due to the relatively small number of cases observed annually, which increases the variability in age-specific rates. No health districts had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.

**State Brain Cancer Incidence
Age-specific Rates**



**Brain Cancer Incidence
Age-adjusted Rates by Health District**



BREAST

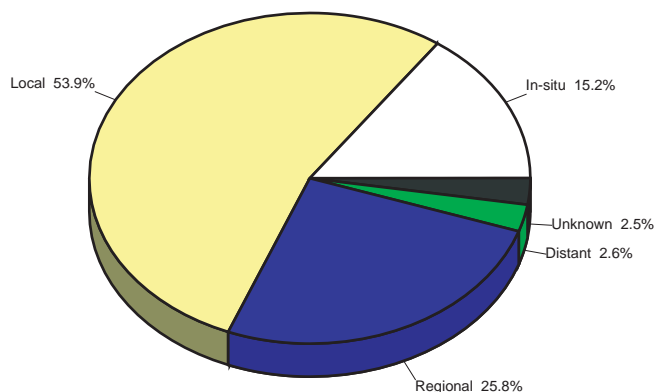
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	69.7	1.4	131.6
# of new invasive cases	834	8	826
# of new in-situ cases	149	1	148
# of deaths	179	1	178

Total Cases By County

Ada	247	Cassia	13	Lewis	6
Adams	2	Clark	-	Lincoln	3
Bannock	49	Clearwater	9	Madison	12
Bear Lake	3	Custer	2	Minidoka	12
Benewah	3	Elmore	12	Nez Perce	38
Bingham	25	Franklin	5	Oneida	1
Blaine	18	Fremont	11	Owyhee	7
Boise	5	Gem	17	Payette	11
Bonner	33	Gooding	8	Power	3
Bonneville	62	Idaho	13	Shoshone	16
Boundary	10	Jefferson	8	Teton	-
Butte	3	Jerome	14	Twin Falls	63
Camas	1	Kootenai	98	Valley	7
Canyon	84	Latah	21	Washington	15
Caribou	3	Lemhi	5		

Stage at Diagnosis - Breast



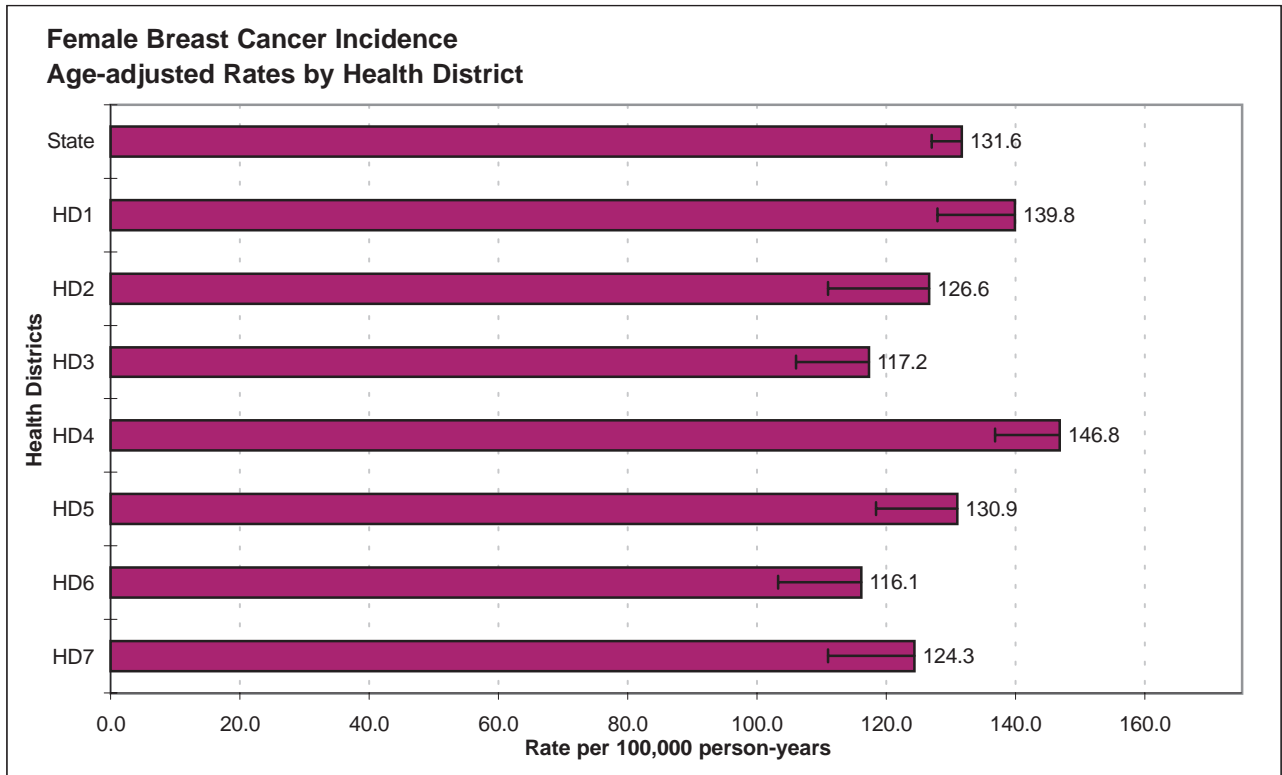
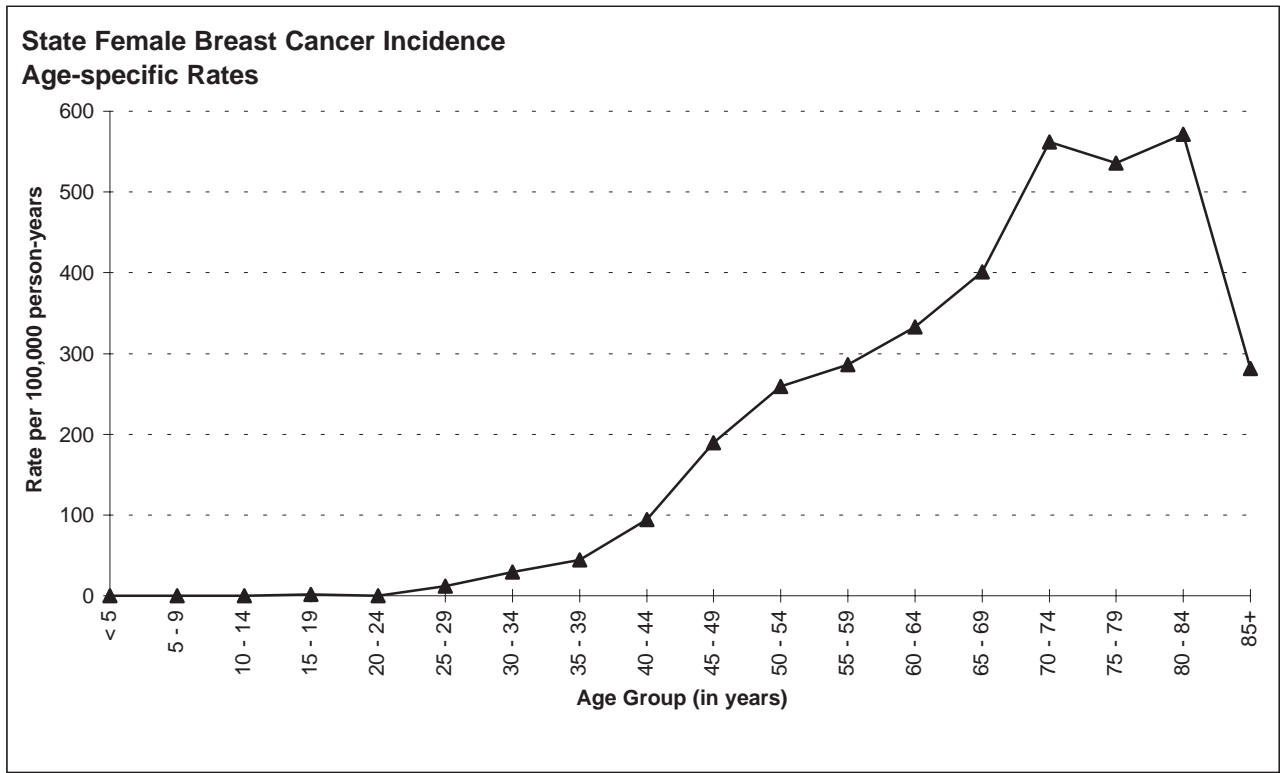
Risk and Associated Factors

Age	Rates increase steadily with age. Age is the single most important risk factor for breast cancer. A 60-year old white American woman's risk of developing breast cancer is fourteen times that of a 30-year old American woman.
Race & SES	Caucasians have higher incidence rates as do women in higher income groups.
Genetics	Specific genes associated with breast cancers have been identified and are being studied.
Hormonal	There is evidence of hormonal influence in the risk of developing breast cancer. Longer intervals of menarche to the first full-term pregnancy and menarche to menopause, as well as menarche before age 13, have been associated with higher risks of breast cancer.
Other	High dietary fat intake, obesity, sedentary life-style, and having a mother or sister with breast cancer have all been implicated as associated risk factors. Epstein-Barr virus may increase the risk of metastasis.

Special Notes

Mean age-adjusted incidence rate across health districts:	128.8
95% confidence interval on the mean age-adjusted incidence rate:	120.4 - 137.2
Median age-adjusted incidence rate of health districts:	126.6
Range of age-adjusted incidence rate for health districts:	116.1 - 146.8
SEER rate (1998, Whites):	140.8

The vast majority of breast cancer cases occur among females. In Idaho during the year 2000, there were eight cases of invasive breast cancer among males. The age-specific incidence rates of female breast cancer in Idaho in 2000 increased with age, peaking in the age group 80-84. No cases were observed in women less than 25 years of age. Health District 4 had statistically significantly more cases of female breast cancer than expected based upon rates for the remainder of Idaho ($p < 0.05$).



CERVIX

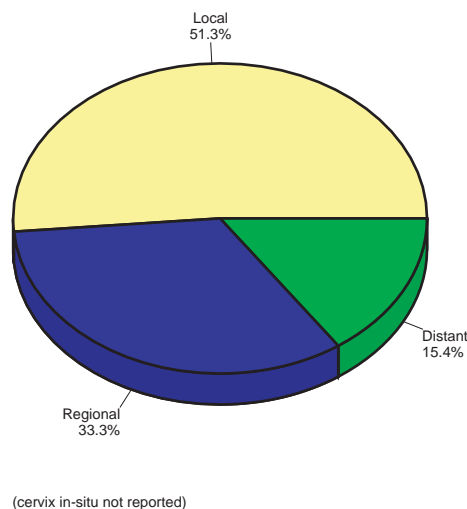
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	-	6.4
# of new invasive cases	-	-	39
# of new in-situ cases	-	-	n/a
# of deaths	-	-	10

Total Cases By County

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

Stage at Diagnosis - Cervix



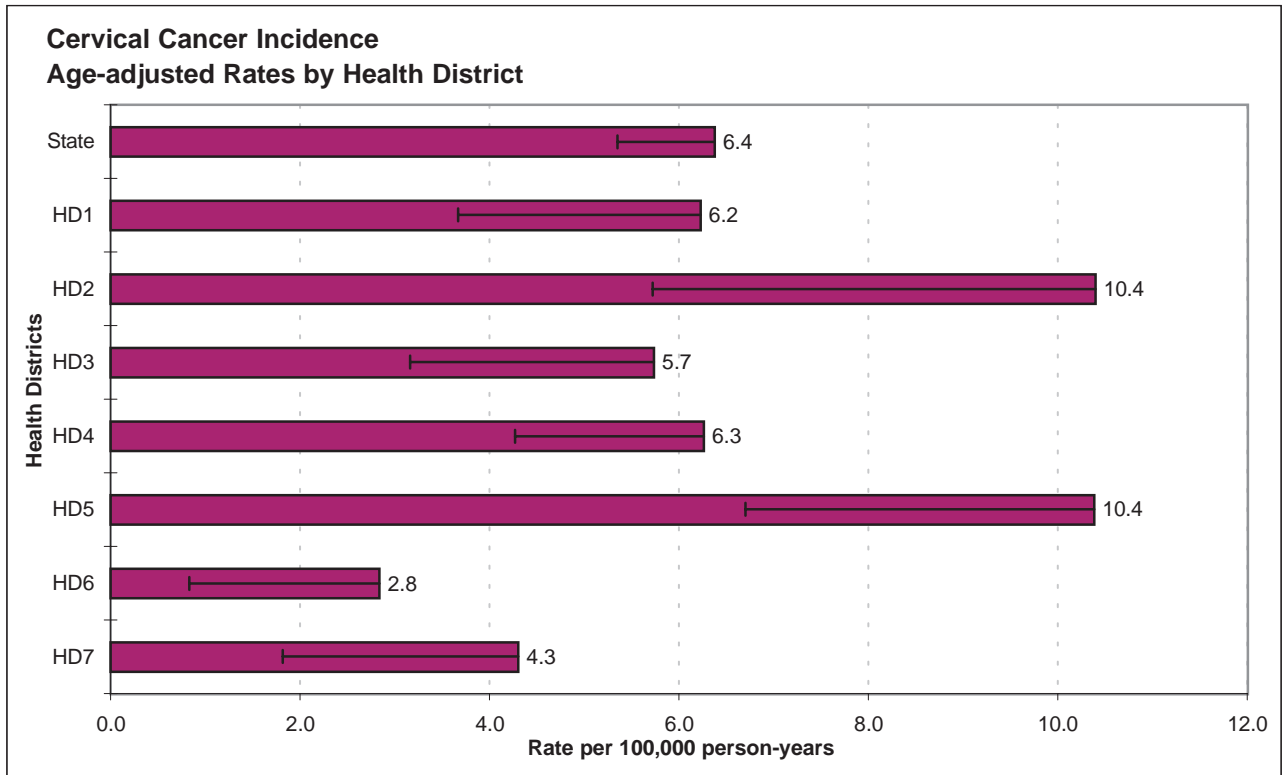
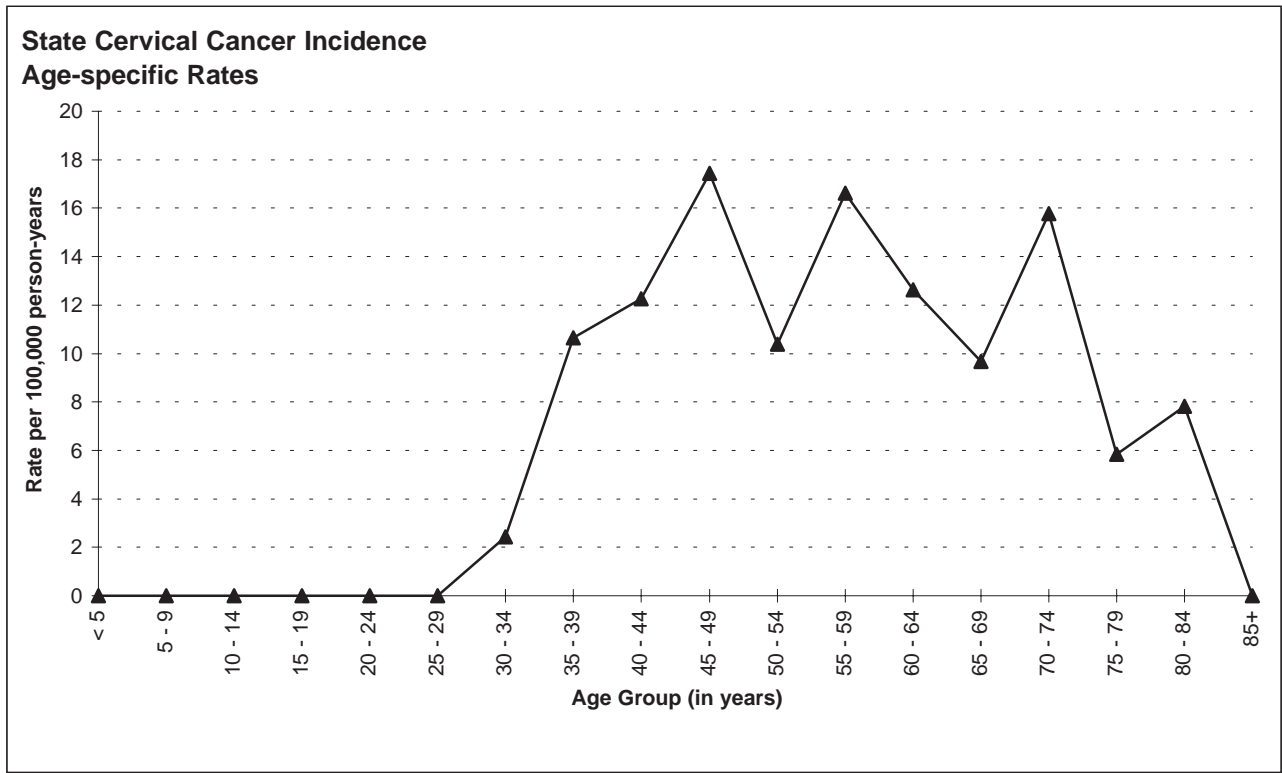
Risk and Associated Factors

- Age** Cervical cancer occurs in adult women of any age. However, the majority of invasive cases are diagnosed in older women.
- Race & SES** African American females, as well as women in lower income groups, have been shown to experience higher rates.
- Other** Strong risk factors for cervical cancer and its precursors include: early age at first intercourse (less than 16 years old), a history of multiple sexual partners, a large number of pregnancies, a history of genital human papilloma virus infection or other sexually transmitted disease, and the presence of other genital tract neoplasia. Exposure to cigarette smoke is also a known risk factor, although by unknown mechanisms. Diethylstilbestrol use during pregnancy increased clear-cell adenocarcinoma in daughters exposed in utero.

Special Notes

Mean age-adjusted incidence rate across health districts:	6.6
95% confidence interval on the mean age-adjusted incidence rate:	4.5 - 8.7
Median age-adjusted incidence rate of health districts:	6.2
Range of age-adjusted incidence rate for health districts:	2.8 - 10.4
SEER rate (1998, Whites):	9.0

No cases of invasive cervical cancer were diagnosed in females less than 30 years of age. Increased screening with routine Pap tests, particularly among older and low-income women, has increased diagnostic rates and helped to reduce the incidence of invasive disease. Today, the vast majority of cases in younger women is diagnosed before the invasive stage, with cure rates approaching 100%. These pre-invasive cases are not included in this report. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.



COLON (excluding rectum)

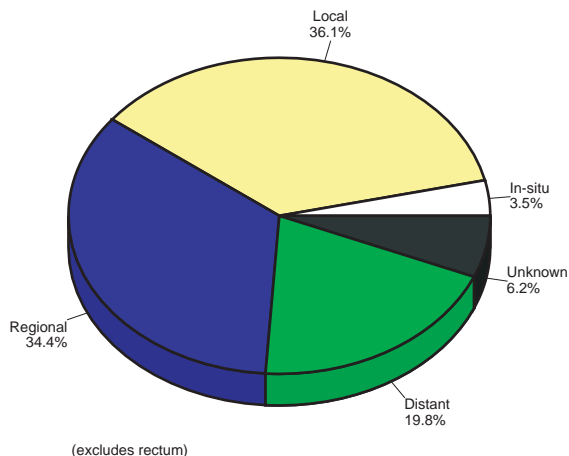
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	33.2	33.9	32.7
# of new invasive cases	390	178	212
# of new in-situ cases	14	5	9
# of deaths	157	73	84

Total Cases By County

Ada	76	Cassia	6	Lewis	6
Adams	4	Clark	-	Lincoln	1
Bannock	18	Clearwater	3	Madison	5
Bear Lake	6	Custer	3	Minidoka	7
Benewah	6	Elmore	6	Nez Perce	23
Bingham	10	Franklin	2	Oneida	1
Blaine	6	Fremont	2	Owyhee	-
Boise	1	Gem	7	Payette	6
Bonner	14	Gooding	8	Power	2
Bonneville	22	Idaho	3	Shoshone	9
Boundary	3	Jefferson	6	Teton	2
Butte	1	Jerome	2	Twin Falls	18
Camas	1	Kootenai	40	Valley	2
Canyon	42	Latah	9	Washington	5
Caribou	4	Lemhi	2		

Stage at Diagnosis - Colon



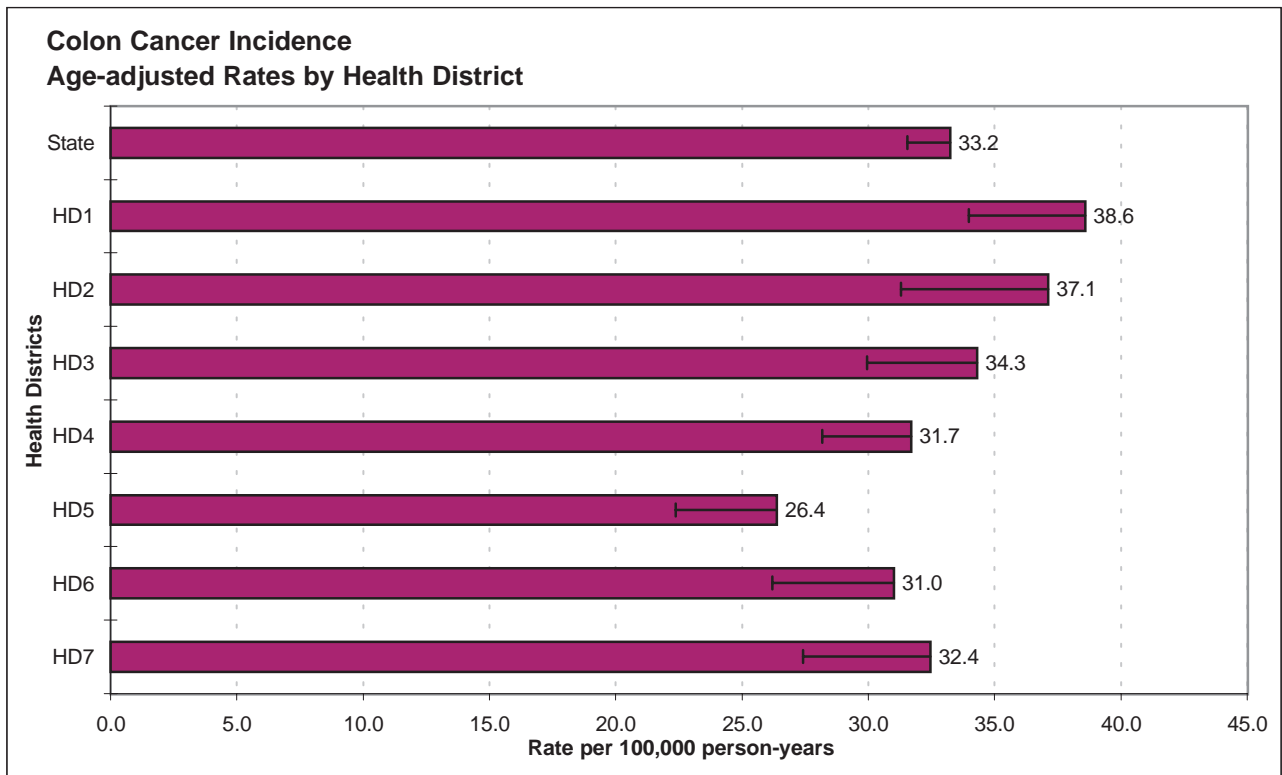
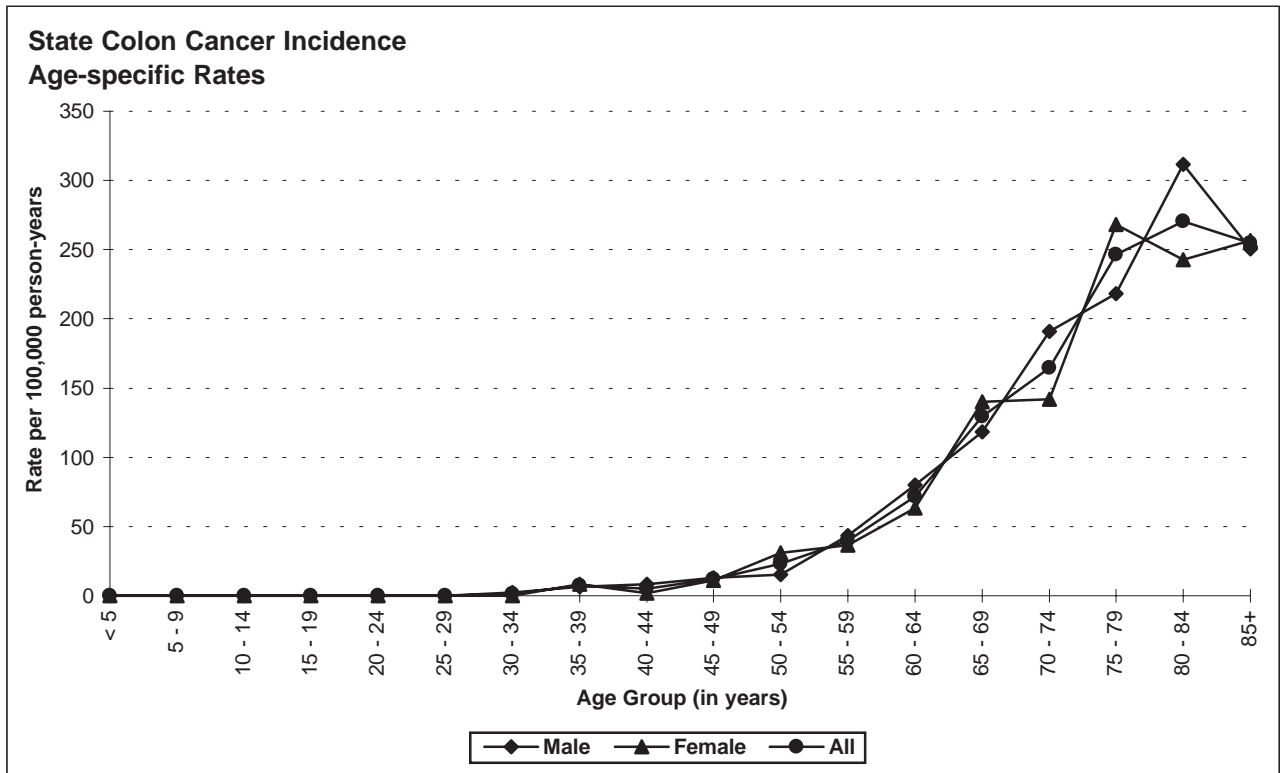
Risk and Associated Factors

- Age** Rates increase with age; the vast majority of cases occur after age 50.
- Gender** Incidence rates are slightly higher in males.
- Genetics** Specific genetic alterations have been recognized in several hereditary conditions with high risk of colon cancer, such as familial polyposis. These conditions account for about six percent of colon cancer cases.
- Diet** Strong evidence that diets high in fat and low in fiber contribute to increased risk of colon cancer has been shown.
- Other** Individuals with a close family history of this cancer and those with a personal history of certain other cancers are at increased risk. Regular, moderate physical activity is associated with lower rates of this cancer.

Special Notes

Mean age-adjusted incidence rate across health districts:	33.1
95% confidence interval on the mean age-adjusted incidence rate:	30.0 - 36.1
Median age-adjusted incidence rate of health districts:	32.4
Range of age-adjusted incidence rate for health districts:	26.4 - 38.6
SEER rate (1998, Whites):	38.5

No cases of colon cancer were diagnosed in persons less than 35 years of age. There was a steep increase in age-specific incidence rates starting at age 55 and peaking in the age group 75-79 for females and 80-84 for males. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.



ENDOMETRIUM

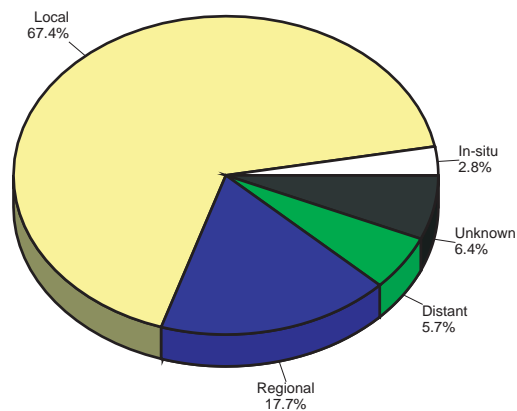
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	-	21.7
# of new invasive cases	-	-	137
# of new in-situ cases	-	-	4
# of deaths	-	-	13

Total Cases By County

Ada	30	Cassia	2	Lewis	-
Adams	1	Clark	-	Lincoln	-
Bannock	3	Clearwater	2	Madison	1
Bear Lake	2	Custer	-	Minidoka	1
Benewah	1	Elmore	1	Nez Perce	5
Bingham	2	Franklin	2	Oneida	-
Blaine	2	Fremont	4	Owyhee	2
Boise	1	Gem	4	Payette	1
Bonner	2	Gooding	2	Power	-
Bonneville	7	Idaho	1	Shoshone	2
Boundary	1	Jefferson	-	Teton	-
Butte	1	Jerome	1	Twin Falls	9
Camas	-	Kootenai	21	Valley	4
Canyon	15	Latah	3	Washington	1
Caribou	1	Lemhi	1		

Stage at Diagnosis - Endometrium



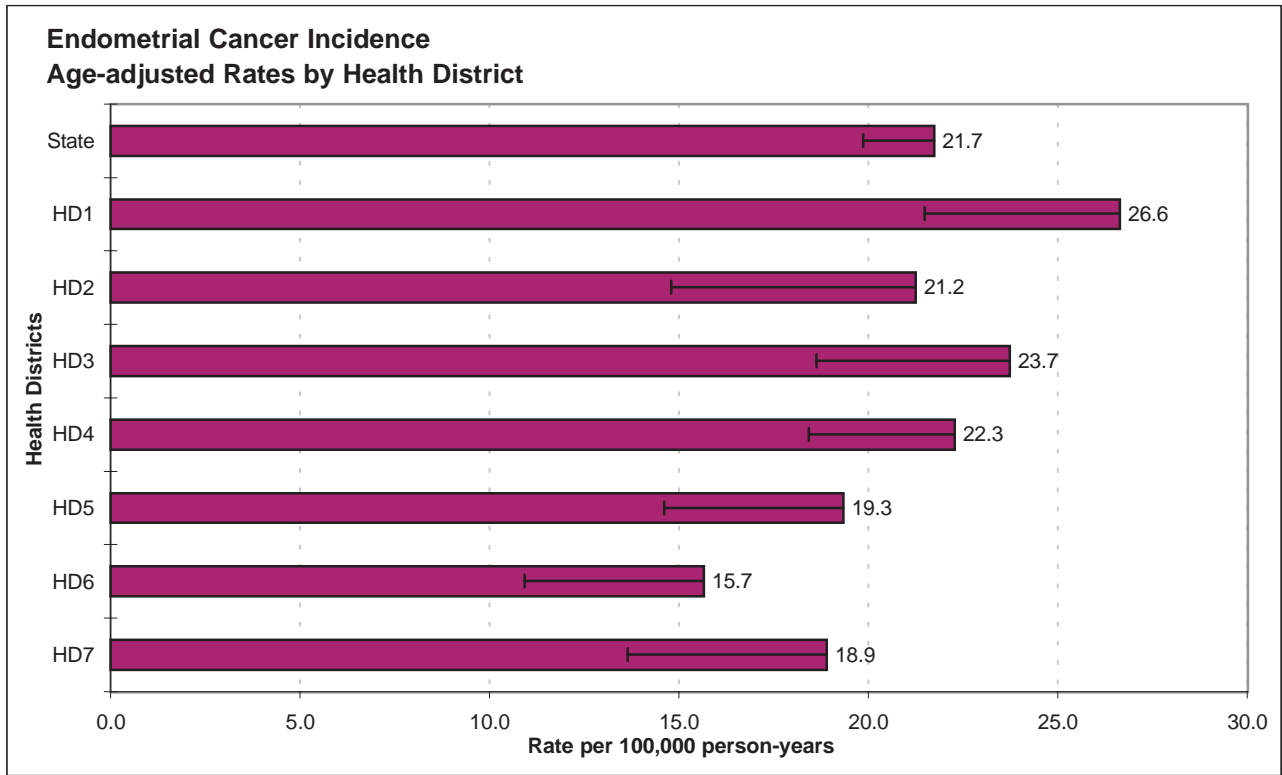
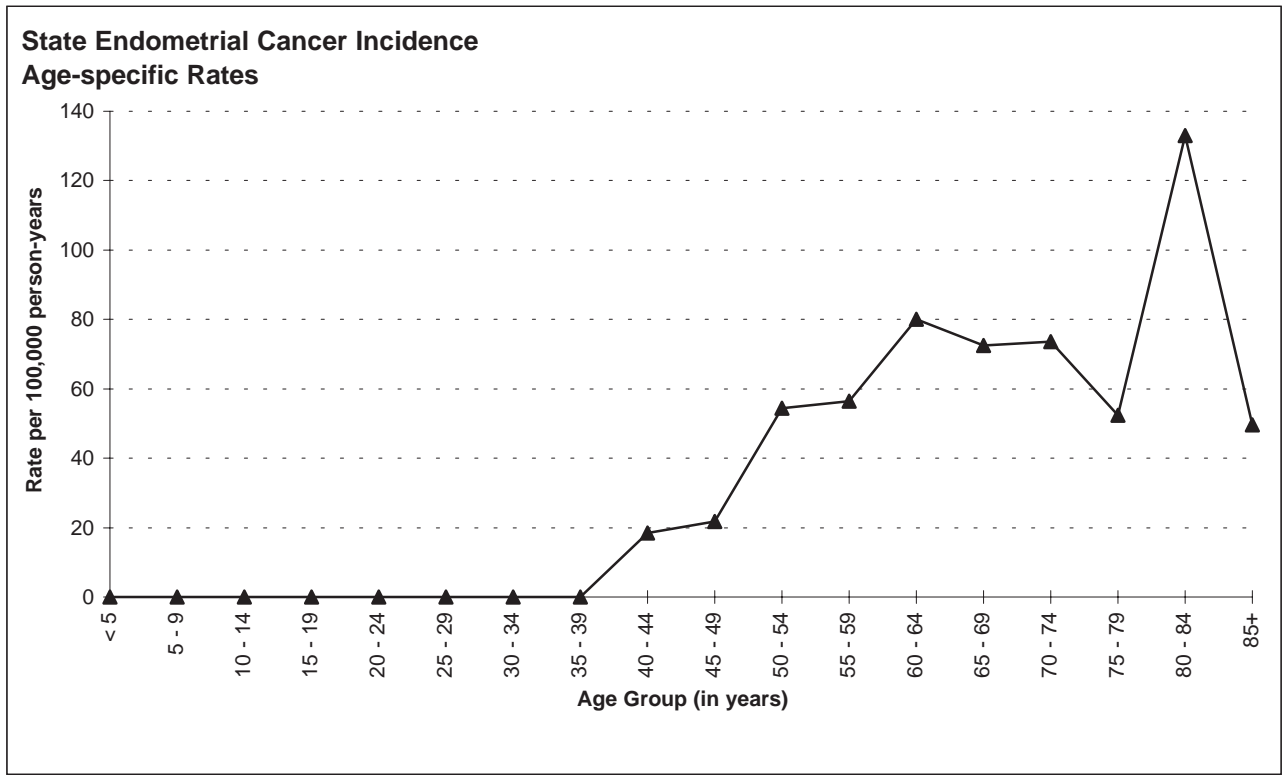
Risk and Associated Factors

Age	Occurs predominantly after menopause, with median age 58 and peaking at the 50 to 60 age group.
Race & SES	Caucasian women have higher rates than African American women.
Genetics	Familial tendency has been observed.
Diet	Dietary fat may play a role in increased risk. Obesity and hypertension are common associated conditions of endometrial cancer.
Hormonal	Factors that elevate levels of estrogen or decrease progesterone levels enhance the risk. Women who have never carried a pregnancy to term are at a relatively high risk. Risk decreases as the number of pregnancies increases. An increased incidence of endometrial cancer has been found in association with prolonged, unopposed estrogen exposure as well as with tamoxifen treatment of breast cancer.

Special Notes

Mean age-adjusted incidence rate across health districts:	21.1
95% confidence interval on the mean age-adjusted incidence rate:	18.5 - 23.7
Median age-adjusted incidence rate of health districts:	21.2
Range of age-adjusted incidence rate for health districts:	15.7 - 26.6
SEER rate (1998, Whites):	25.4

No cases of endometrial cancer were diagnosed in persons less than 40 years of age. There was a sharp increase in age-specific rates, peaking in the age group 80-84. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.



ESOPHAGUS

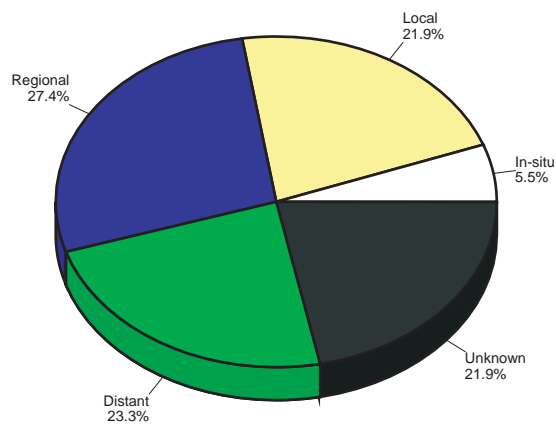
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	5.8	9.2	2.8
# of new invasive cases	69	51	18
# of new in-situ cases	4	3	1
# of deaths	47	34	13

Total Cases By County

Ada	10	Cassia	2	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	4	Clearwater	1	Madison	-
Bear Lake	-	Custer	-	Minidoka	1
Benewah	2	Elmore	1	Nez Perce	2
Bingham	1	Franklin	-	Oneida	-
Blaine	1	Fremont	3	Owyhee	1
Boise	1	Gem	3	Payette	1
Bonner	2	Gooding	-	Power	1
Bonneville	2	Idaho	1	Shoshone	1
Boundary	-	Jefferson	-	Teton	-
Butte	1	Jerome	1	Twin Falls	3
Camas	-	Kootenai	8	Valley	4
Canyon	9	Latah	2	Washington	1
Caribou	-	Lemhi	1		

Stage at Diagnosis - Esophagus



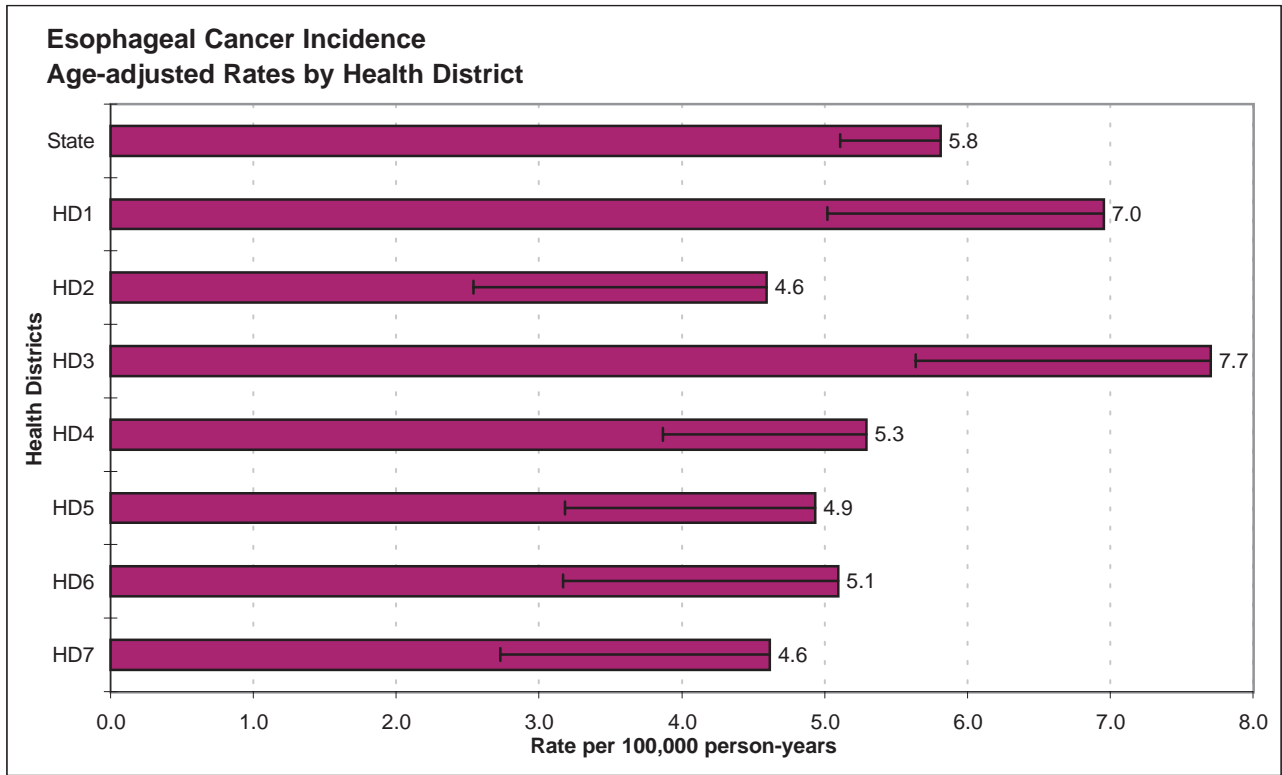
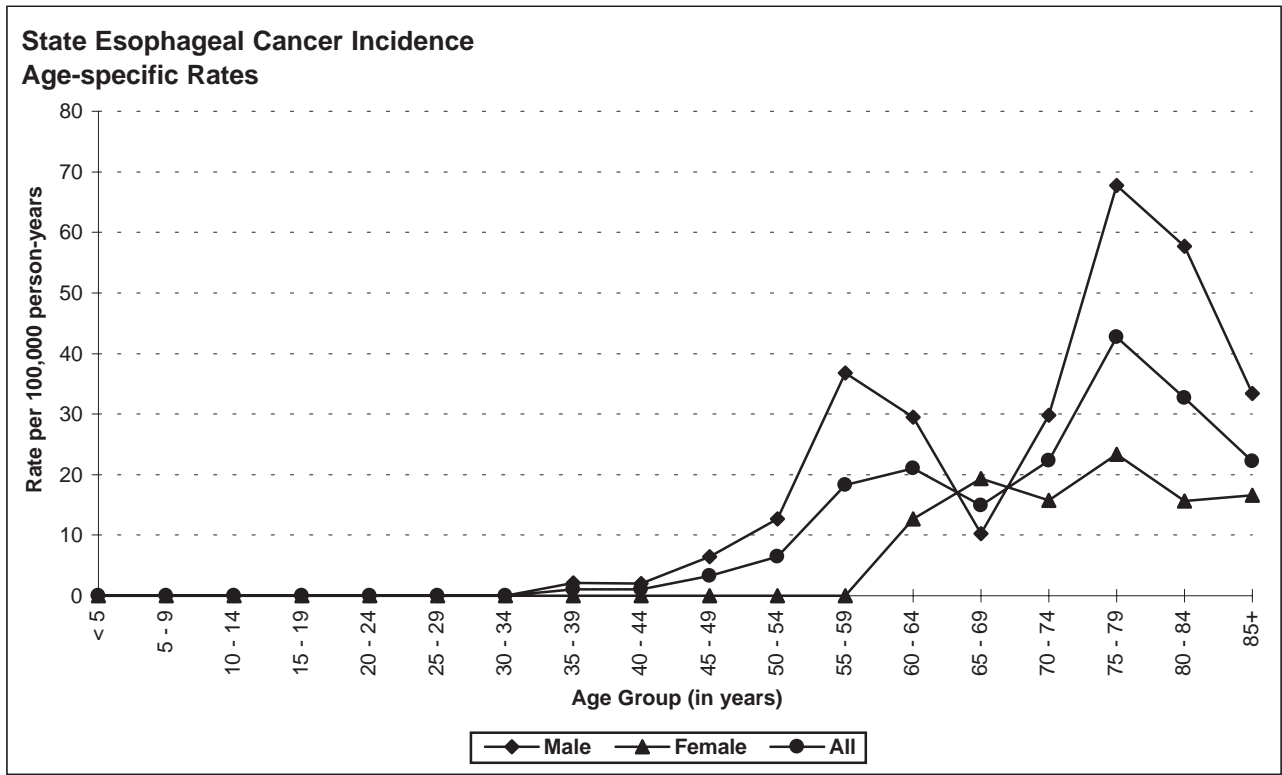
Risk and Associated Factors

Age	Incidence of esophageal cancer is highest after age 55.
Gender	It is predominantly a disease of the male, with male-to-female ratios of about 3:1 or more.
Race & SES	United States data show that African Americans are affected more than Caucasians.
Occupation	Chimney sweeps exposed to soot are at higher risk.
Other	Tobacco use (cigarettes or spit tobacco) and heavy alcohol consumption are major risk factors for cancer of the esophagus. The risk is particularly increased when these two factors are both present.

Special Notes

Mean age-adjusted incidence rate across health districts:	5.6
95% confidence interval on the mean age-adjusted incidence rate:	4.7 - 6.5
Median age-adjusted incidence rate of health districts:	5.1
Range of age-adjusted incidence rate for health districts:	4.6 - 7.7
SEER rate (1998, Whites):	4.3

No cases of esophageal cancer were diagnosed in person less than 35 years of age. The age-specific incidence rates peaked in the age group 75-79 for both males and females. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.

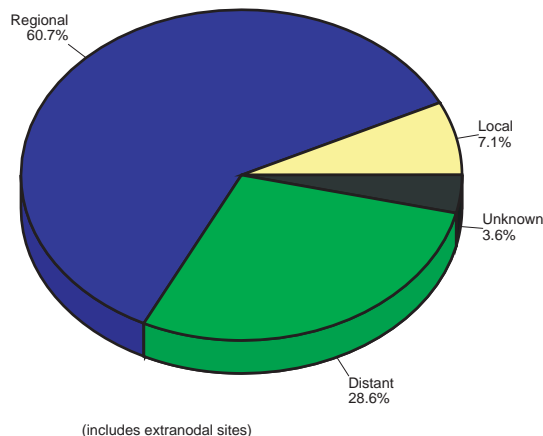


HODGKIN'S LYMPHOMA

Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	2.2	3.2	1.3
# of new invasive cases	28	20	8
# of new in-situ cases	0	0	0
# of deaths	6	2	4

Stage at Diagnosis - Hodgkins Lymphoma



Total Cases By County

Ada	8	Cassia	-	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	-	Clearwater	-	Madison	-
Bear Lake	-	Custer	-	Minidoka	-
Benewah	-	Elmore	1	Nez Perce	1
Bingham	-	Franklin	-	Oneida	-
Blaine	-	Fremont	-	Owyhee	-
Boise	-	Gem	1	Payette	-
Bonner	2	Gooding	1	Power	-
Bonneville	3	Idaho	-	Shoshone	-
Boundary	-	Jefferson	1	Teton	-
Butte	-	Jerome	1	Twin Falls	2
Camas	-	Kootenai	5	Valley	1
Canyon	1	Latah	-	Washington	-
Caribou	-	Lemhi	-		

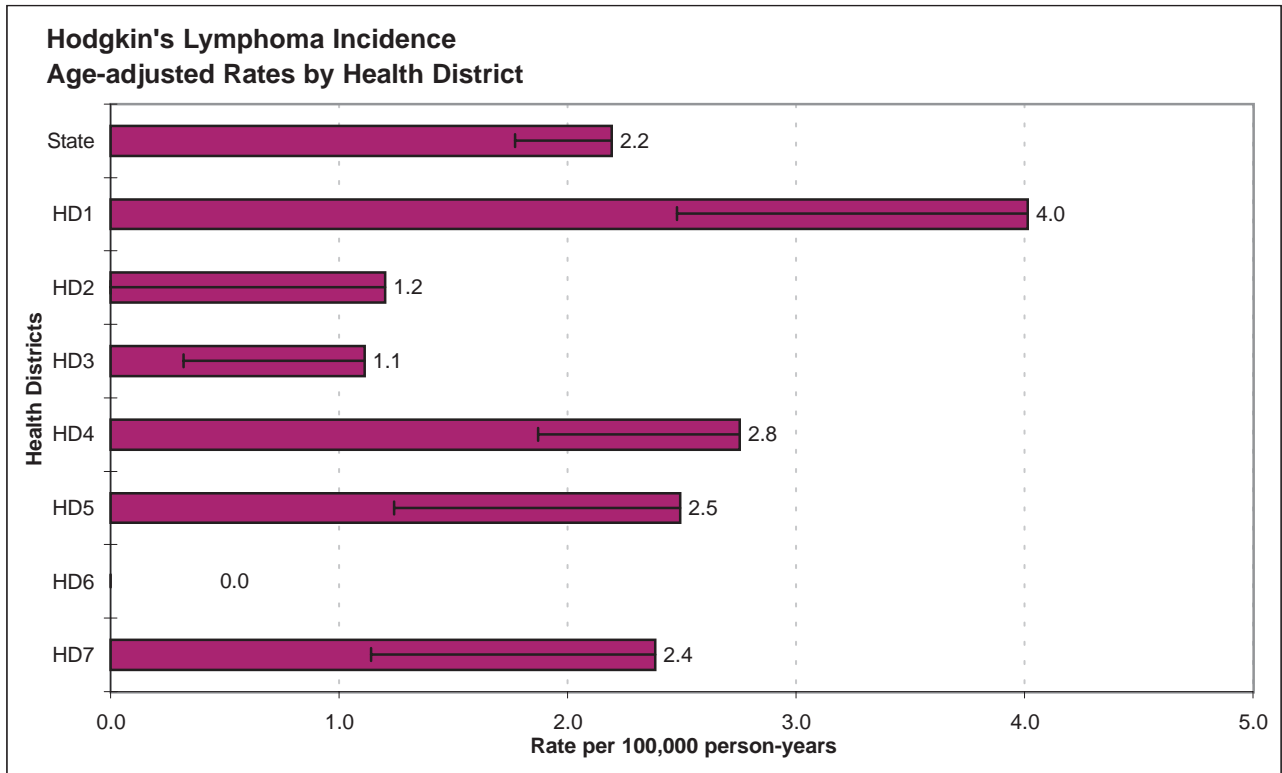
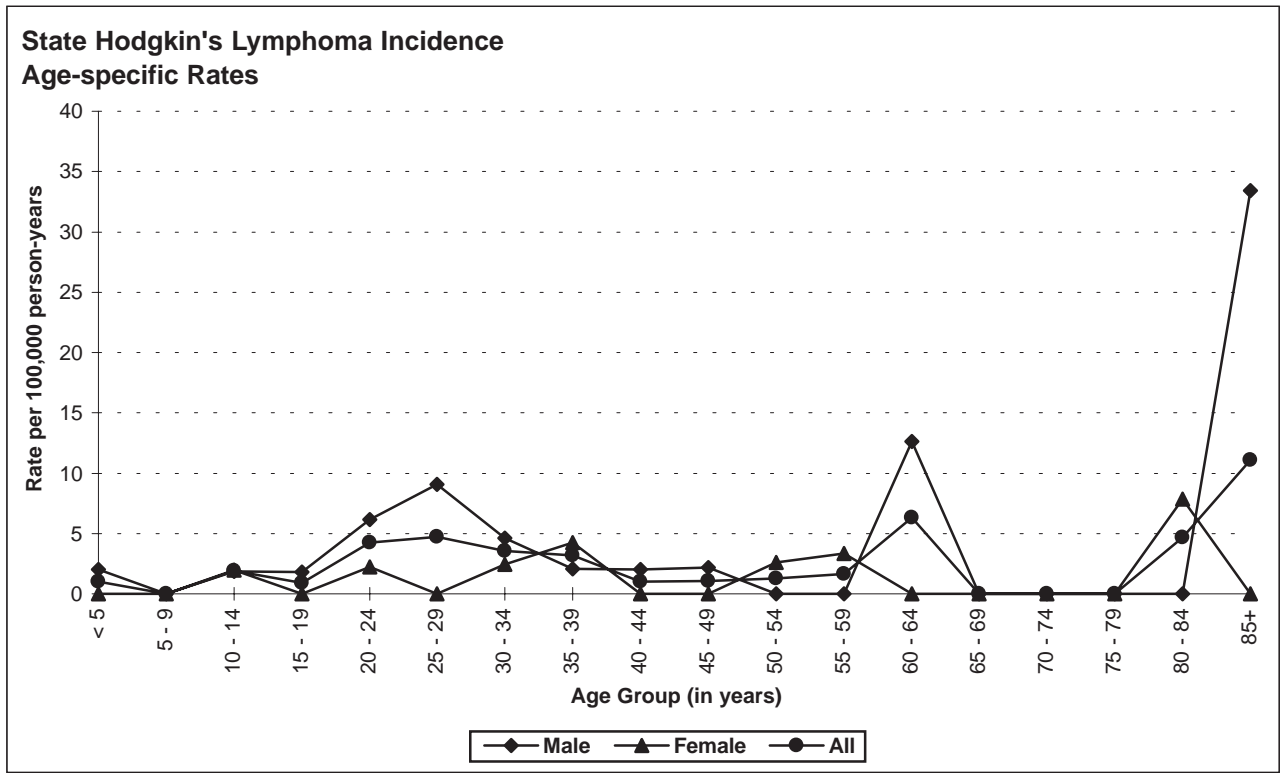
Risk and Associated Factors

Age	High rates are seen in young adults and in later age groups especially among males.
Gender	Males have higher rates than females.
Race & SES	There is a lower incidence among African Americans. Hodgkin's lymphoma is more common in higher income groups.
Genetics	Genetic factors are thought to play an important role in the etiology of Hodgkin's lymphoma, but these are yet to be adequately defined.
Other	Certain viral infections are thought to also increase risk but no clear association has been established. With current treatment, Hodgkin's disease, which was once highly fatal, is among the most curable of all cancers.

Special Notes

Mean age-adjusted incidence rate across health districts:	2.0
95% confidence interval on the mean age-adjusted incidence rate:	1.0 - 3.0
Median age-adjusted incidence rate of health districts:	2.4
Range of age-adjusted incidence rate for health districts:	0.0 - 4.0
SEER rate (1998, Whites):	3.0

The age-related incidence of Hodgkin's lymphoma is typically bimodal, usually with a peak in the late 20s to early 30s, and another peak in the ninth decade of life. This trend is difficult to discern in Idaho's population due to the relatively small number of cases observed annually, which increases the variability in age-specific rates. Health District 1 had statistically significantly more cases than expected based upon rates for the remainder of Idaho ($p < 0.05$).



KIDNEY

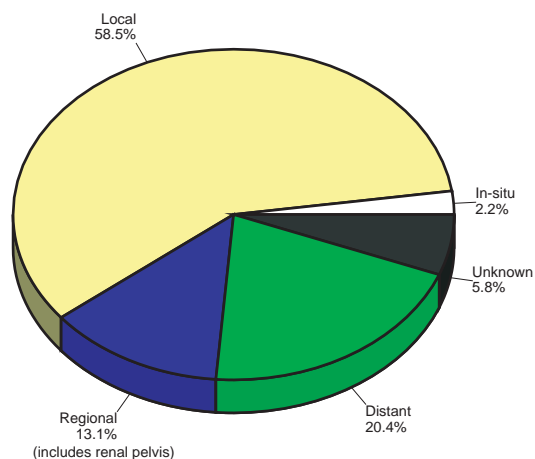
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	11.2	14.0	8.9
# of new invasive cases	134	78	56
# of new in-situ cases	3	2	1
# of deaths	46	24	22

Total Cases By County

Ada	31	Cassia	2	Lewis	1
Adams	1	Clark	-	Lincoln	1
Bannock	5	Clearwater	3	Madison	2
Bear Lake	-	Custer	1	Minidoka	4
Benewah	1	Elmore	4	Nez Perce	7
Bingham	5	Franklin	-	Oneida	1
Blaine	1	Fremont	-	Owyhee	-
Boise	1	Gem	4	Payette	2
Bonner	4	Gooding	1	Power	-
Bonneville	11	Idaho	1	Shoshone	-
Boundary	1	Jefferson	1	Teton	-
Butte	1	Jerome	3	Twin Falls	5
Camas	-	Kootenai	14	Valley	-
Canyon	14	Latah	1	Washington	-
Caribou	1	Lemhi	-		

Stage at Diagnosis - Kidney



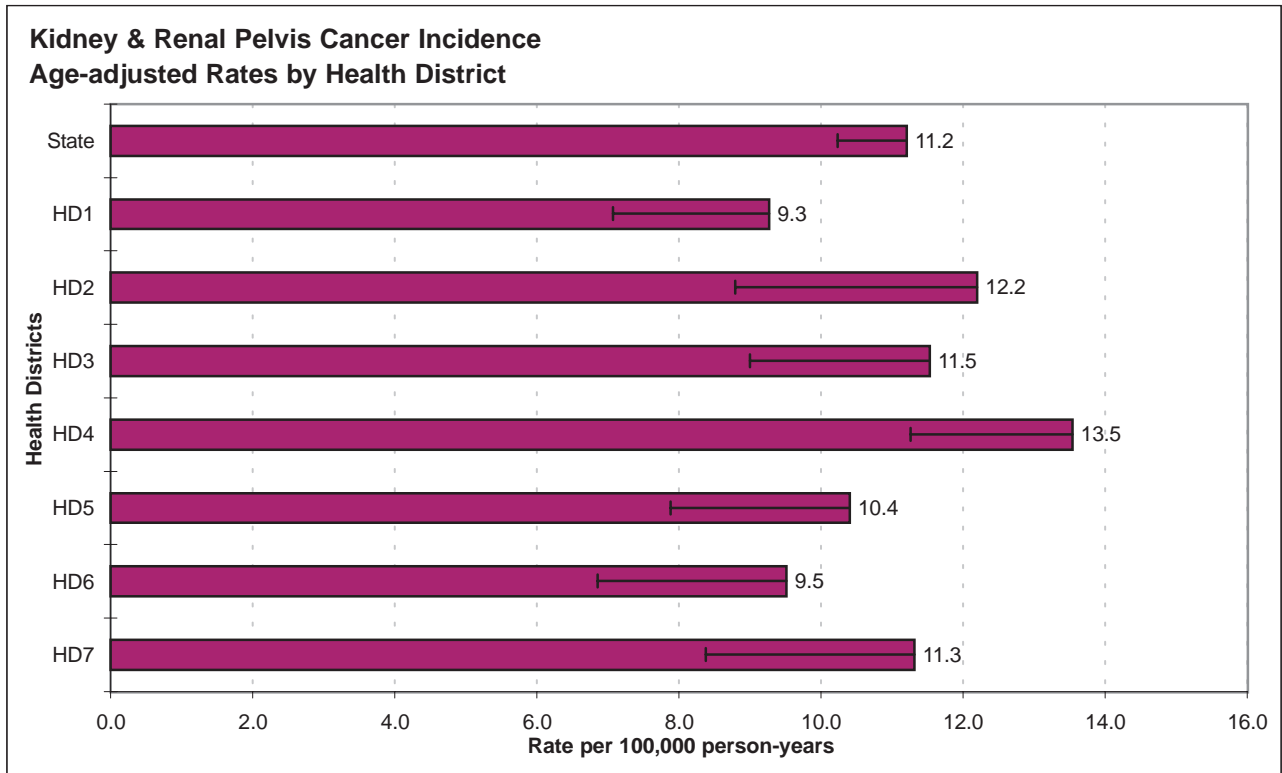
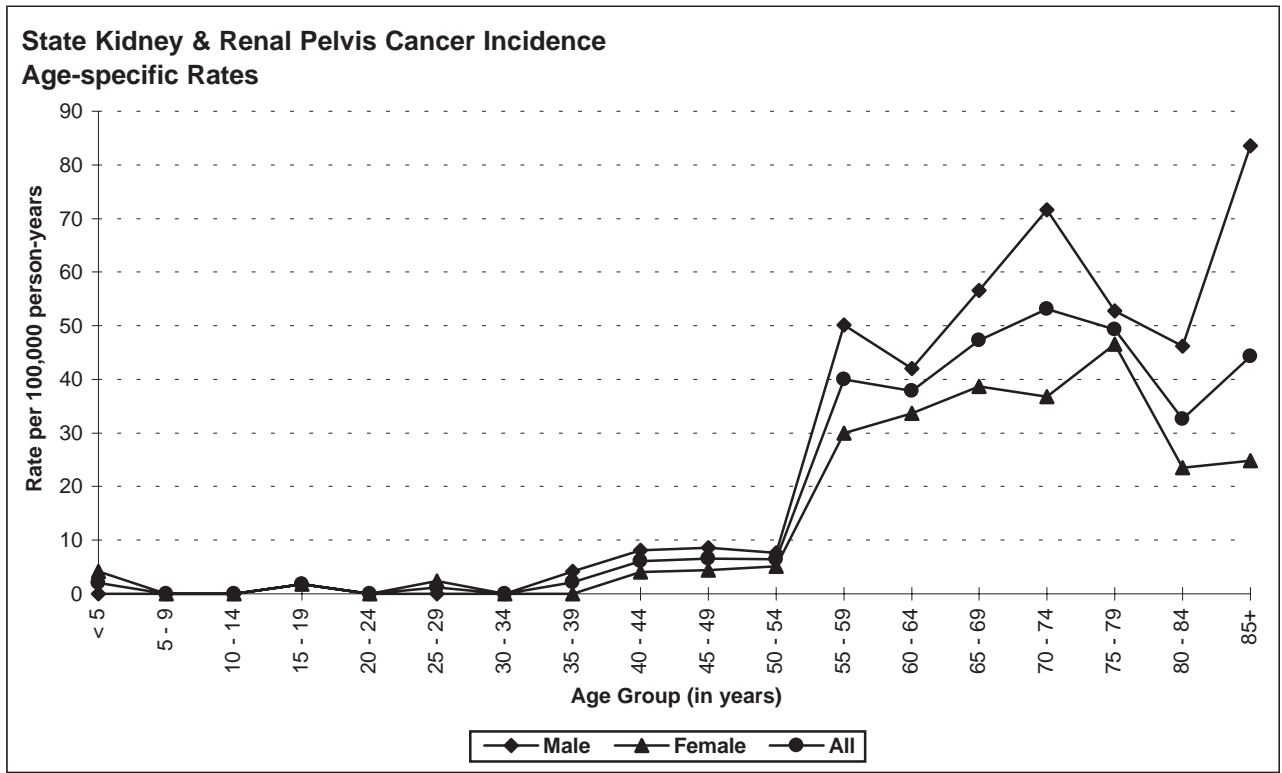
Risk and Associated Factors

Age	Both adults and children are at risk for kidney cancer. Renal cell carcinoma accounts for 80% of all adult kidney cancers. Wilm's tumor (nephroblastoma) affects predominantly children under age 5 and accounts for the majority of childhood kidney cancers.
Gender	Renal cell carcinoma affects males twice as often as females.
Genetics	Wilm's tumor often occurs with congenital defects.
Occupation	Certain occupations, such as laundry and leather workers, have an increased risk due to chemical exposure.
Other	Cigarette smoking is strongly associated with adult kidney cancer. Smokers are at twice the risk of developing kidney cancer as non-smokers. Analgesic mixtures containing phenacetin increase the risk of kidney cancer.

Special Notes

Mean age-adjusted incidence rate across health districts:	11.1
95% confidence interval on the mean age-adjusted incidence rate:	10.0 - 12.2
Median age-adjusted incidence rate of health districts:	11.3
Range of age-adjusted incidence rate for health districts:	9.3 - 13.5
SEER rate (1998, Whites):	11.3

There were no cases of kidney or renal pelvis cancer among persons aged 5-14 years. The highest incidence among males was in the age group 85+. The highest incidence among females was in the age group 75-79. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.



LARYNX

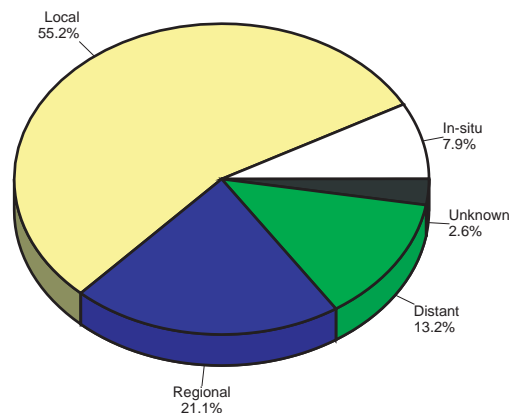
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	3.0	6.0	0.5
# of new invasive cases	35	32	3
# of new in-situ cases	3	2	1
# of deaths	16	15	1

Total Cases By County

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

Stage at Diagnosis - Larynx



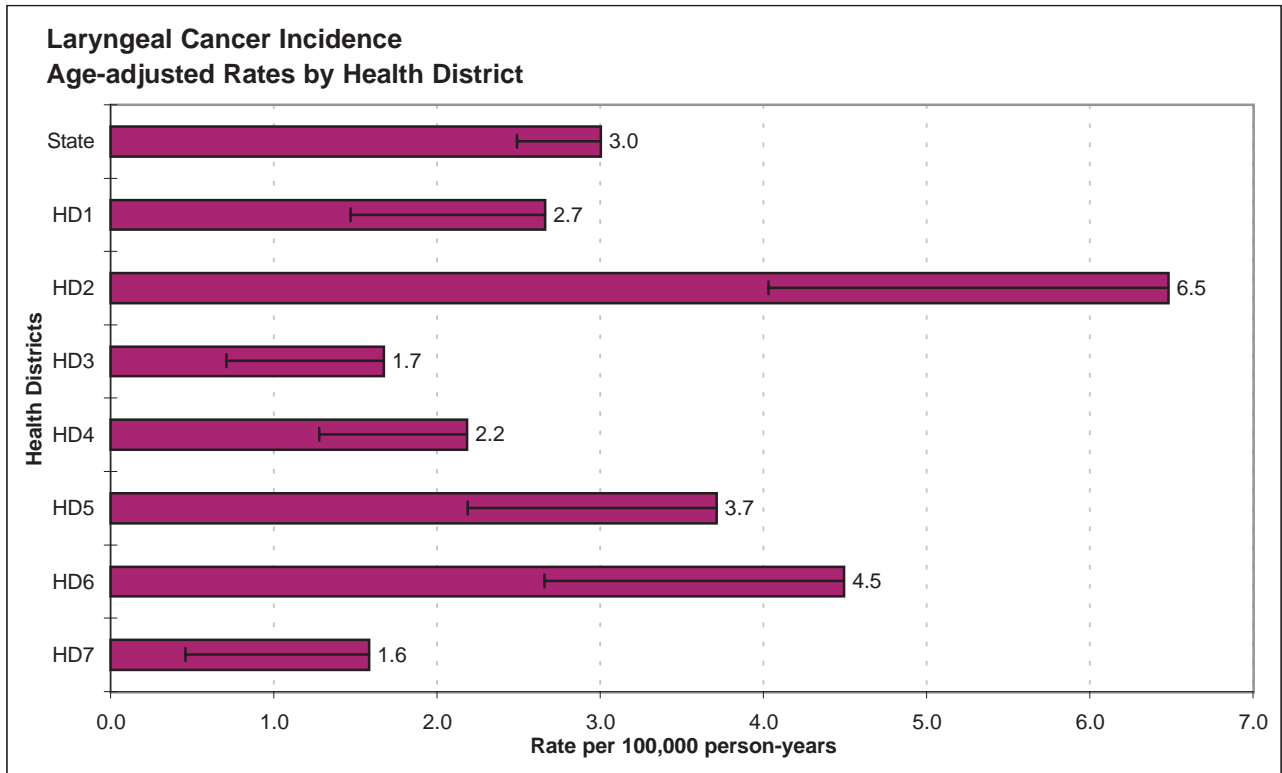
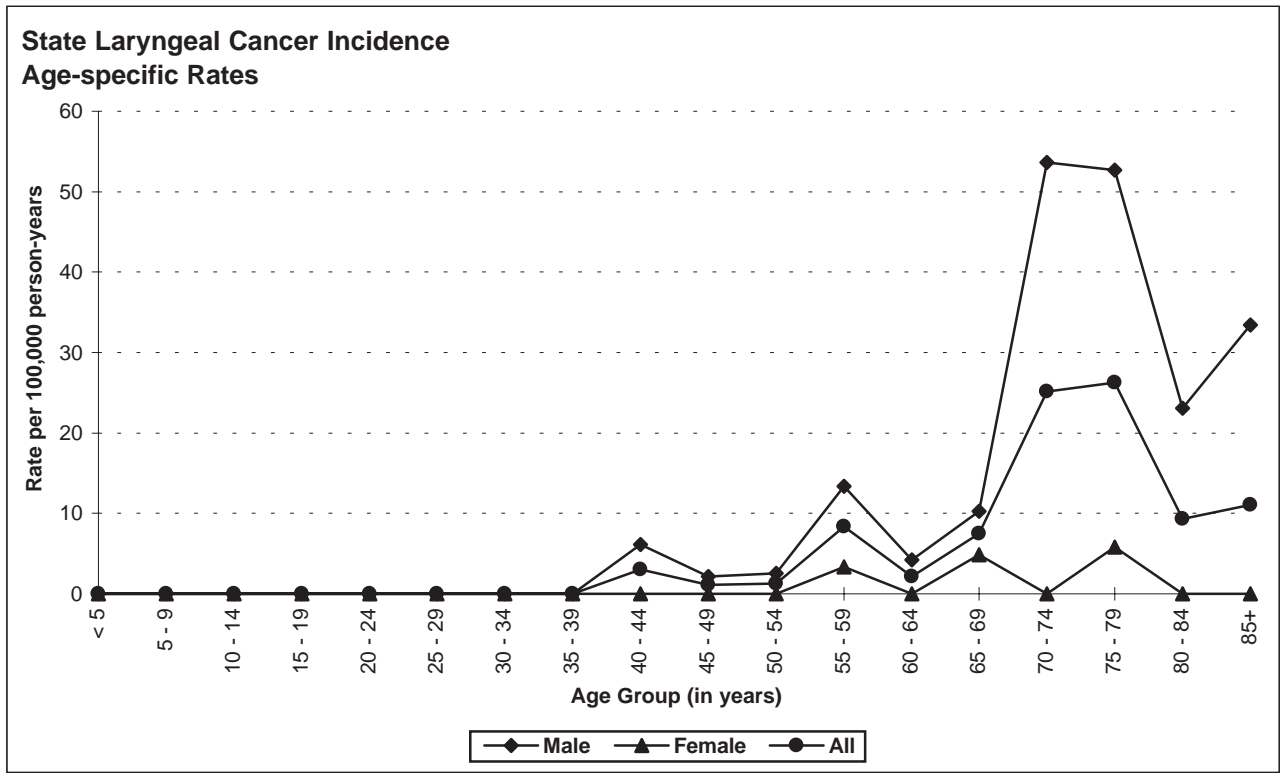
Risk and Associated Factors

Age	Rates increase with age, with the vast majority of cases occurring after age 55.
Gender	Much more common in males than females.
Race & SES	Generally in the United States, African Americans have higher incidence rates than Caucasians. Lower income groups experience higher rates.
Occupation	Laryngeal cancer has been associated with exposures such as asbestos and wood dust.
Diet	Diets low in fresh fruits and vegetables may increase the risk.
Other	Cigarette smoking and alcohol use are both major risk factors. The combination of alcohol consumption and tobacco use (smoking or spit tobacco) acts greatly to increase the risk. A patient with a single laryngeal cancer who continues to smoke and drink alcohol has an enhanced risk of developing a second laryngeal tumor.

Special Notes

Mean age-adjusted incidence rate across health districts:	3.3
95% confidence interval on the mean age-adjusted incidence rate:	1.9 - 4.6
Median age-adjusted incidence rate of health districts:	2.7
Range of age-adjusted incidence rate for health districts:	1.6 - 6.5
SEER rate (1998, Whites):	3.6

There were no cases of laryngeal cancer among persons aged less than 40 years. The age-specific incidence rates for males were more than twice those for females in most age groups. The highest incidence rate among males was in the age group 70-74. The highest incidence rate among females was in the age group 75-79. Health District 2 had statistically significantly more cases than expected based upon rates for the remainder of Idaho ($p < 0.05$).

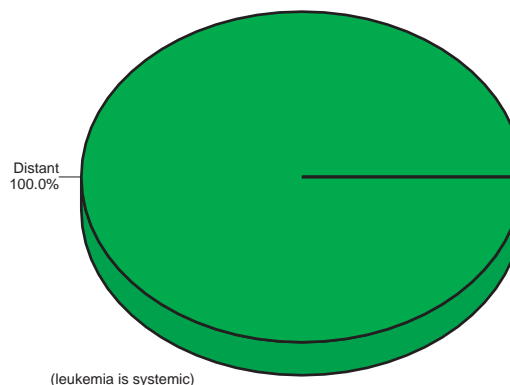


LEUKEMIA

Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	11.3	14.9	8.5
# of new invasive cases	136	81	55
# of new in-situ cases	0	0	0
# of deaths	90	54	36

Stage at Diagnosis - Leukemia



Total Cases By County

Ada	26	Cassia	-	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	2	Clearwater	-	Madison	5
Bear Lake	1	Custer	1	Minidoka	3
Benewah	-	Elmore	4	Nez Perce	3
Bingham	2	Franklin	2	Oneida	1
Blaine	-	Fremont	-	Owyhee	1
Boise	-	Gem	3	Payette	1
Bonner	4	Gooding	4	Power	1
Bonneville	4	Idaho	2	Shoshone	1
Boundary	-	Jefferson	3	Teton	-
Butte	-	Jerome	5	Twin Falls	7
Camas	-	Kootenai	21	Valley	1
Canyon	15	Latah	8	Washington	3
Caribou	1	Lemhi	1		

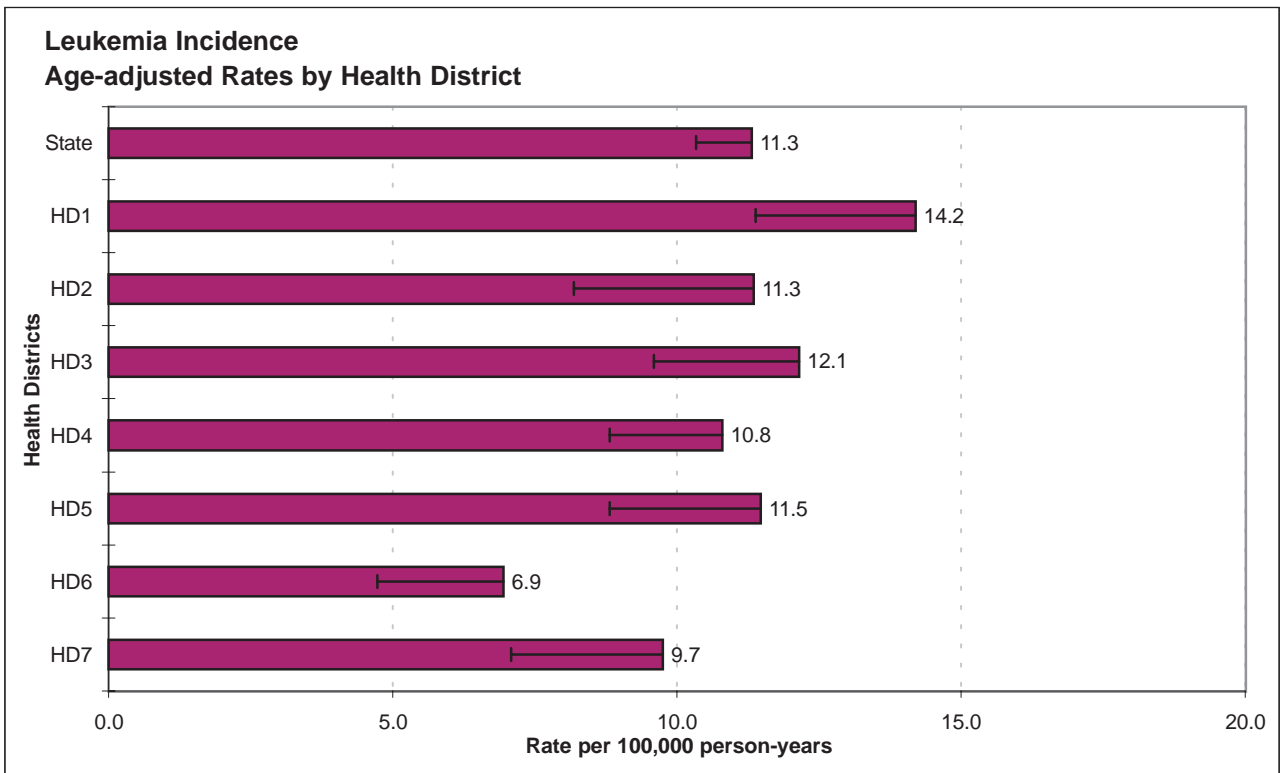
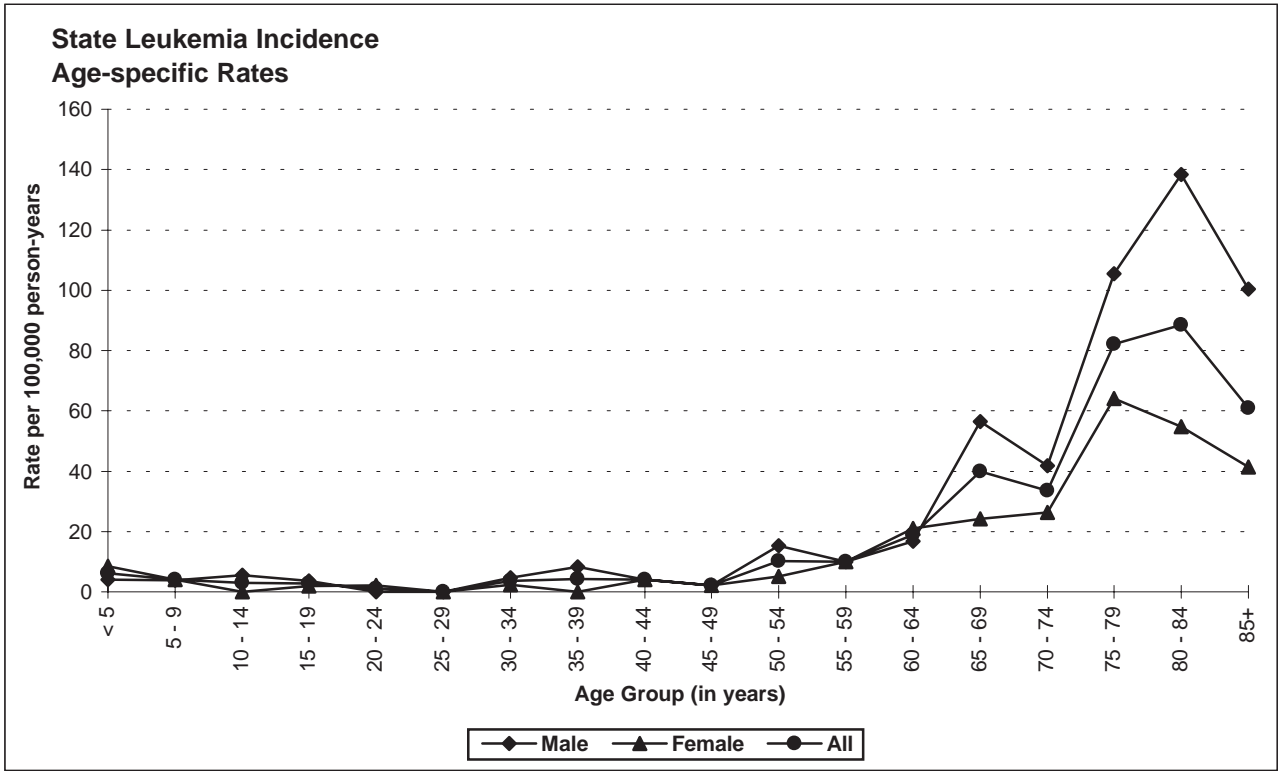
Risk and Associated Factors

Age	This is the most common form of cancer in children. Incidence usually increases with age in adults. The highest rates occur in individuals over age 60.
Gender	Males have a higher incidence than females for chronic myelogenous leukemia (CML), acute lymphoblastic leukemia (ALL), and chronic lymphocytic leukemia (CLL).
Race	ALL is less common among African Americans. CLL is rare in Asians.
Genetics	Certain congenital defects such as trisomy 21, Fanconi's anemia, Bloom syndrome, and ataxia-telangectasia, increase risk in children for various types of leukemia.
Occupation	Benzene is a known cause of leukemia (predominantly acute myelogenous leukemia [AML]). Chimney sweeps exposed to soot are at higher risk.
Other	Ionizing radiation exposure increases the risk. Environmental exposure to low frequency, non-ionizing radiation and its association with leukemia incidence is being investigated. Treatment with some chemotherapeutic agents for other cancers increases the risk of leukemia.

Special Notes

Mean age-adjusted incidence rate across health districts:	10.9
95% confidence interval on the mean age-adjusted incidence rate:	9.3 - 12.6
Median age-adjusted incidence rate of health districts:	11.3
Range of age-adjusted incidence rate for health districts:	6.9 - 14.2
SEER rate (1998, Whites):	11.7

The age-specific incidence distribution of leukemia for Idaho is quite similar to the typical pattern described by the SEER program of the National Cancer Institute. The rates are higher for males than females for all types of leukemia with the exception of acute myelogenous leukemia (AML), which has no predilection for age or sex. Generally, the incidence of leukemia is higher in older age groups. No health district had statistically significantly fewer or more cases than expected based upon rates for the remainder of Idaho.



LIVER

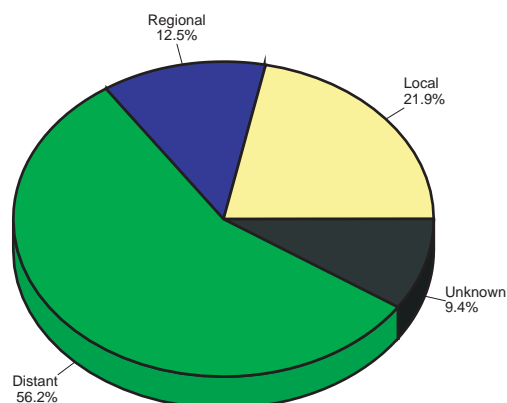
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	2.7	4.0	1.7
# of new invasive cases	32	22	10
# of new in-situ cases	0	0	0
# of deaths	44	34	10

Total Cases By County

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

Stage at Diagnosis - Liver



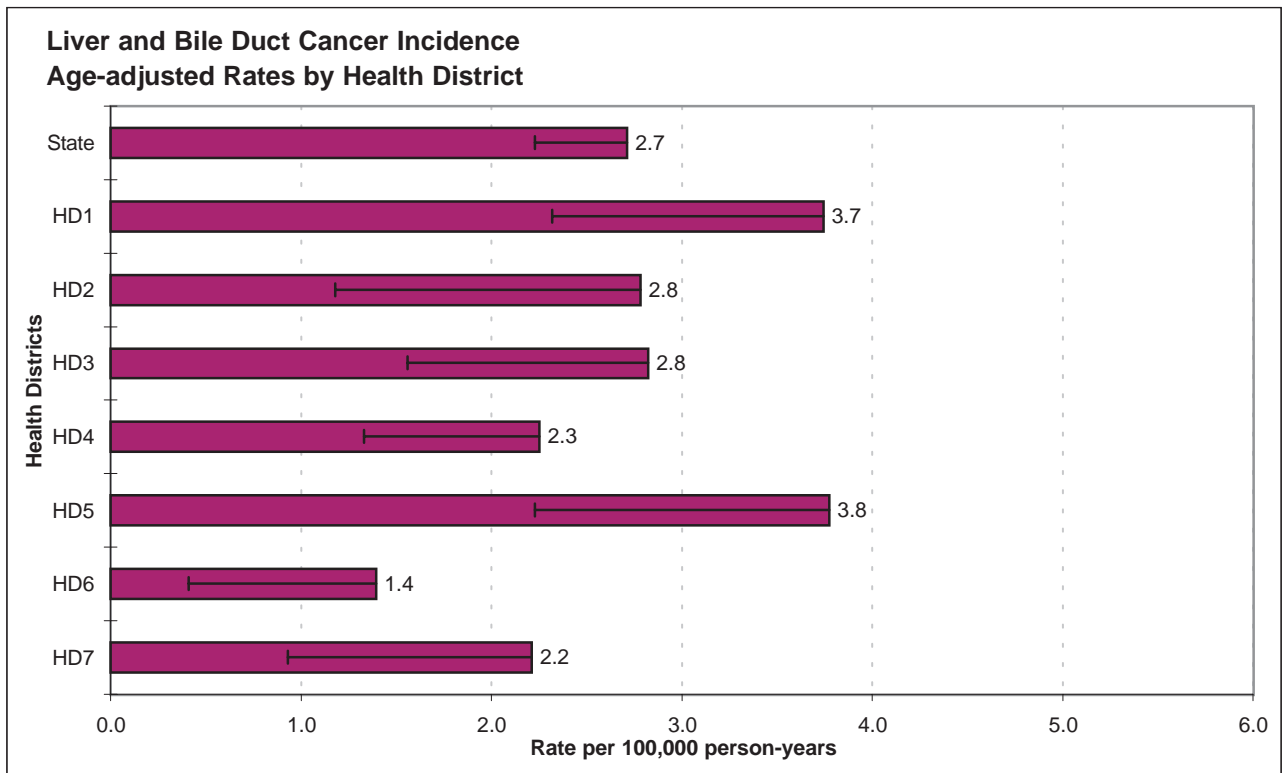
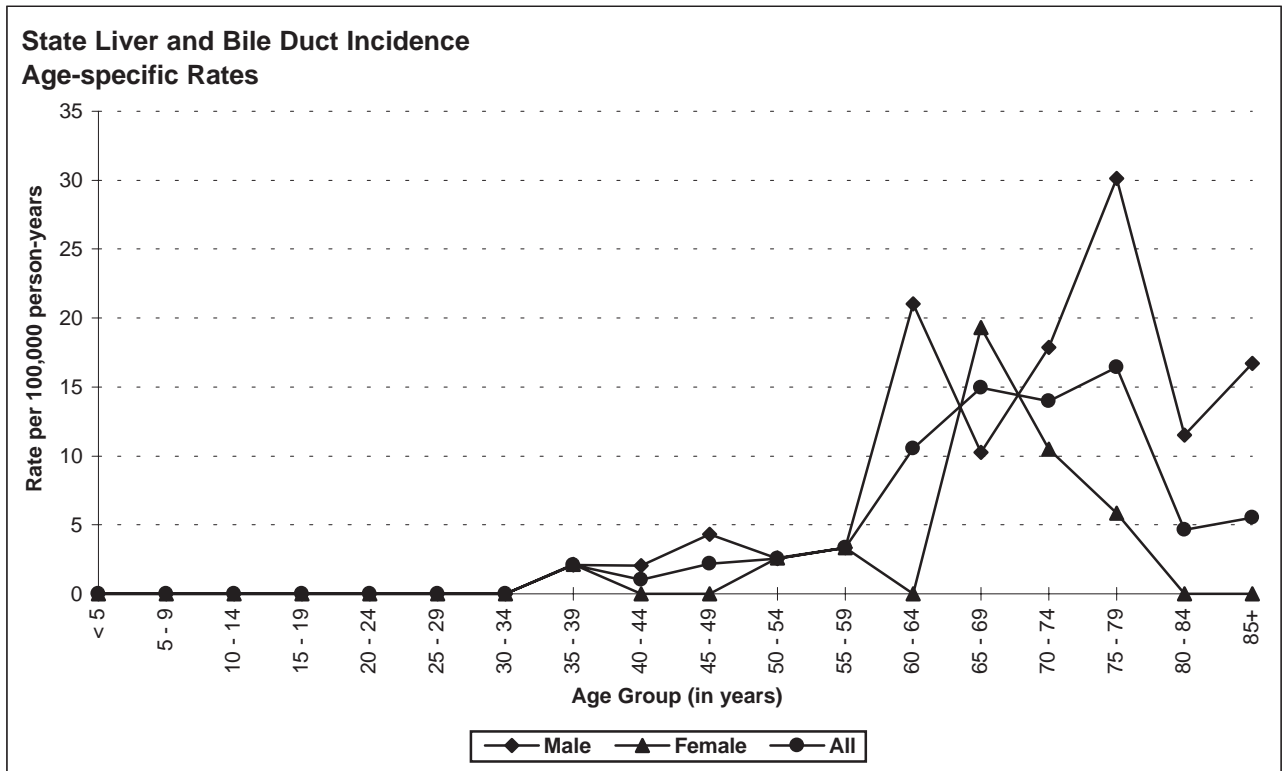
Risk and Associated Factors

Age	The incidence rate of liver cancer increases with age.
Gender	Rates are usually higher in males than in females.
Race	Incidence is higher in Asians and African Americans than for the rest of the population.
Diet	Aflatoxins, which are present in certain foods such as peanut butter, are classified as a known human carcinogen, causing liver cancer.
Occupation	Thorium dioxide exposure increases liver cancer risk. Exposure to vinyl chloride used in plastic production is associated with an increased risk of angiosarcoma of the liver. Chimney sweeps exposed to soot are at higher risk.
Other	Cigarette smoking increases the risk. Hepatitis B and Hepatitis C infections are significant causes of hepatocellular carcinoma. Cirrhosis of the liver due to viral hepatitis, alcoholism, or toxic chemical exposure accounts for 50-80% of patients diagnosed with liver cancer.

Special Notes

Mean age-adjusted incidence rate across health districts:	2.7
95% confidence interval on the mean age-adjusted incidence rate:	2.1 - 3.3
Median age-adjusted incidence rate of health districts:	2.8
Range of age-adjusted incidence rate for health districts:	1.4 - 3.8
SEER rate (1998, Whites):	4.5

There were few cases of liver cancer among persons less than 50 years of age. Age-specific incidence rates increased with age, peaking in the age group 75-79 for males and 65-69 for females. No health district had statistically significantly fewer or more cases than expected based upon rates for the remainder of Idaho.



LUNG

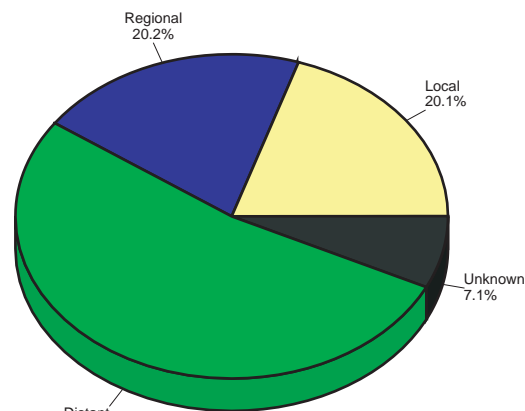
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	58.9	78.5	43.3
# of new invasive cases	692	418	274
# of new in-situ cases	0	0	0
# of deaths	538	316	222

Total Cases By County

Ada	150	Cassia	5	Lewis	5
Adams	-	Clark	-	Lincoln	5
Bannock	18	Clearwater	2	Madison	7
Bear Lake	-	Custer	3	Minidoka	8
Benewah	9	Elmore	19	Nez Perce	42
Bingham	13	Franklin	3	Oneida	-
Blaine	2	Fremont	5	Owyhee	6
Boise	3	Gem	12	Payette	21
Bonner	21	Gooding	5	Power	2
Bonneville	25	Idaho	9	Shoshone	18
Boundary	6	Jefferson	8	Teton	3
Butte	2	Jerome	11	Twin Falls	49
Camas	1	Kootenai	86	Valley	8
Canyon	55	Latah	12	Washington	18
Caribou	3	Lemhi	9		

Stage at Diagnosis - Lung and Bronchus



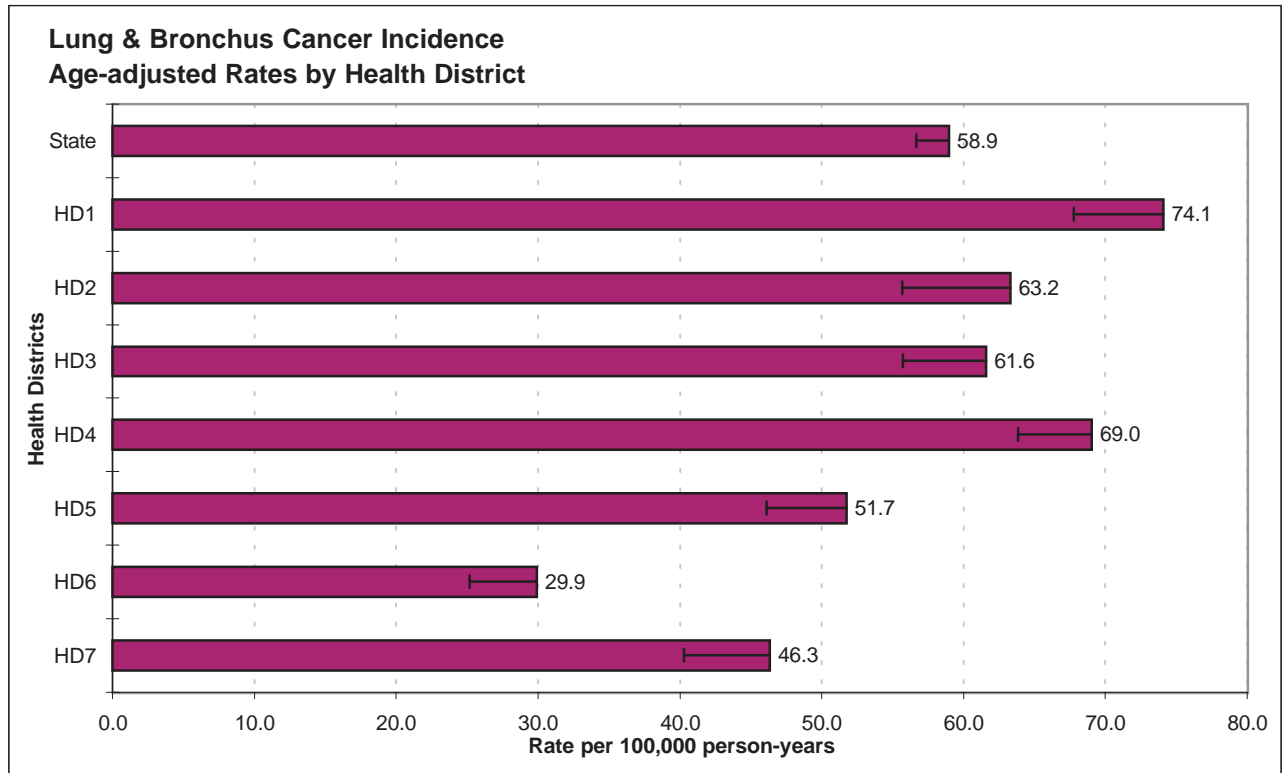
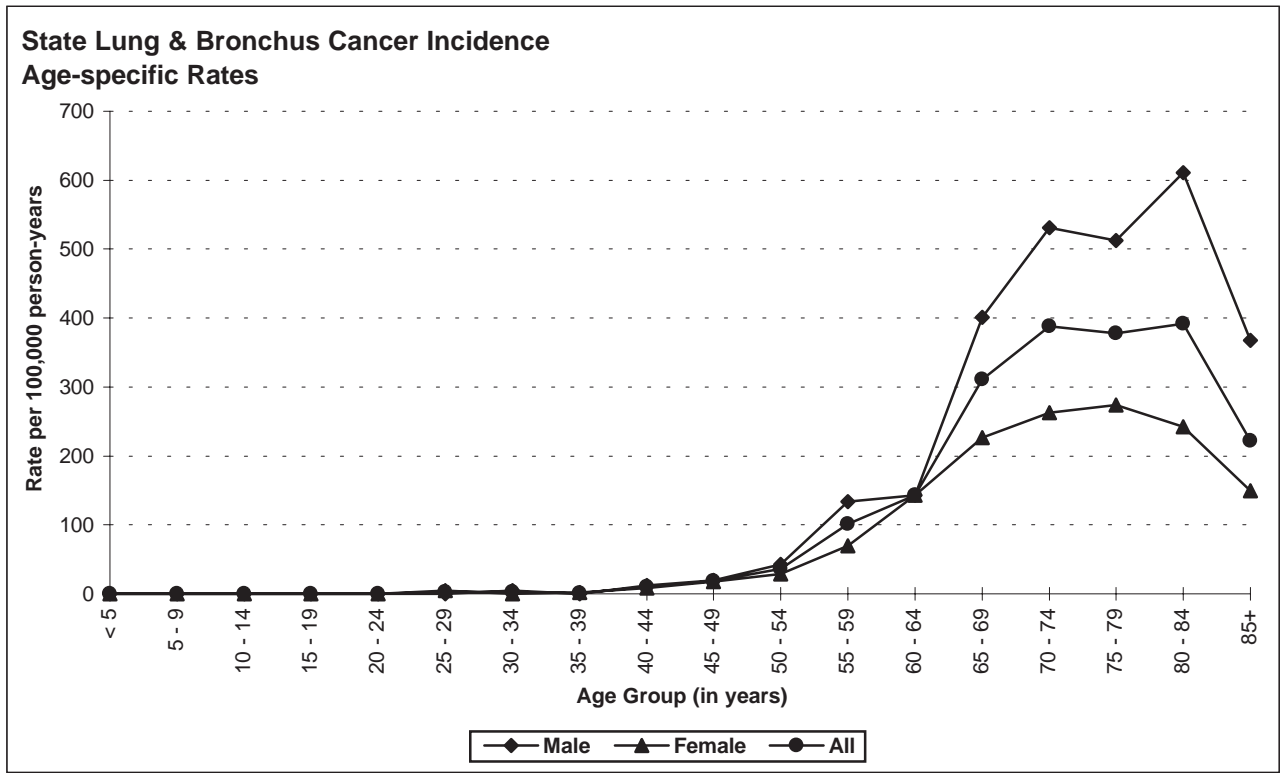
Risk and Associated Factors

Age	Lung cancer incidence rates increase with age.
Gender	The incidence is currently higher in males than in females, but the gap is narrowing due to increased smoking rates in women.
Race & SES	Generally, incidence is higher among African Americans than other racial groups and is also higher in lower income groups.
Diet	Diets low in consumption of fresh fruits and vegetables contribute to increased risk.
Occupation	Occupational or environmental exposures to asbestos, cadmium, chromium, coal tars, crystalline silica dust, polycyclic aromatic hydrocarbons, radon, soot, and other substances increase the risk.
Other	Cigarette smoking, including exposure to second-hand smoke, is the most important risk factor, accounting for over 85% of lung cancer deaths.

Special Notes

Mean age-adjusted incidence rate across health districts:	56.5
95% confidence interval on the mean age-adjusted incidence rate:	45.3 - 67.7
Median age-adjusted incidence rate of health districts:	61.6
Range of age-adjusted incidence rate for health districts:	29.9 - 74.1
SEER rate (1998, Whites):	61.7

There were few cases of lung cancer among persons less than 50 years of age. The age-specific incidence rates for males were uniformly higher than the rates for females after age 65. The incidence rates increased with age, peaking in the age group 80-84 for males, and 75-79 for females. Health Districts 1 and 4 ($p < 0.01$) had statistically significantly more cases than expected based upon rates for the remainder of Idaho. Health Districts 6 ($p < 0.01$) and 7 ($p < 0.05$) had statistically significantly fewer cases than expected based upon rates for the remainder of Idaho.



MELANOMA

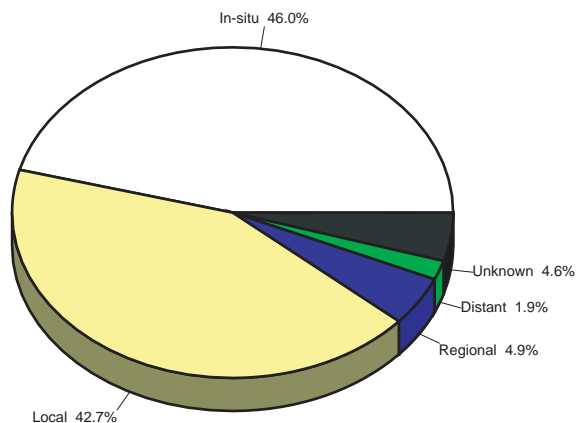
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	19.4	24.5	15.0
# of new invasive cases	234	139	94
# of new in-situ cases	199	113	86
# of deaths	37	22	15

Total Cases By County

Ada	90	Cassia	2	Lewis	-
Adams	2	Clark	-	Lincoln	1
Bannock	17	Clearwater	2	Madison	1
Bear Lake	1	Custer	-	Minidoka	4
Benewah	7	Elmore	9	Nez Perce	14
Bingham	5	Franklin	2	Oneida	1
Blaine	1	Fremont	3	Owyhee	3
Boise	2	Gem	8	Payette	4
Bonner	16	Gooding	4	Power	2
Bonneville	20	Idaho	4	Shoshone	8
Boundary	1	Jefferson	2	Teton	2
Butte	-	Jerome	10	Twin Falls	21
Camas	-	Kootenai	79	Valley	2
Canyon	40	Latah	6	Washington	-
Caribou	-	Lemhi	-		

Stage at Diagnosis - Melanoma of Skin



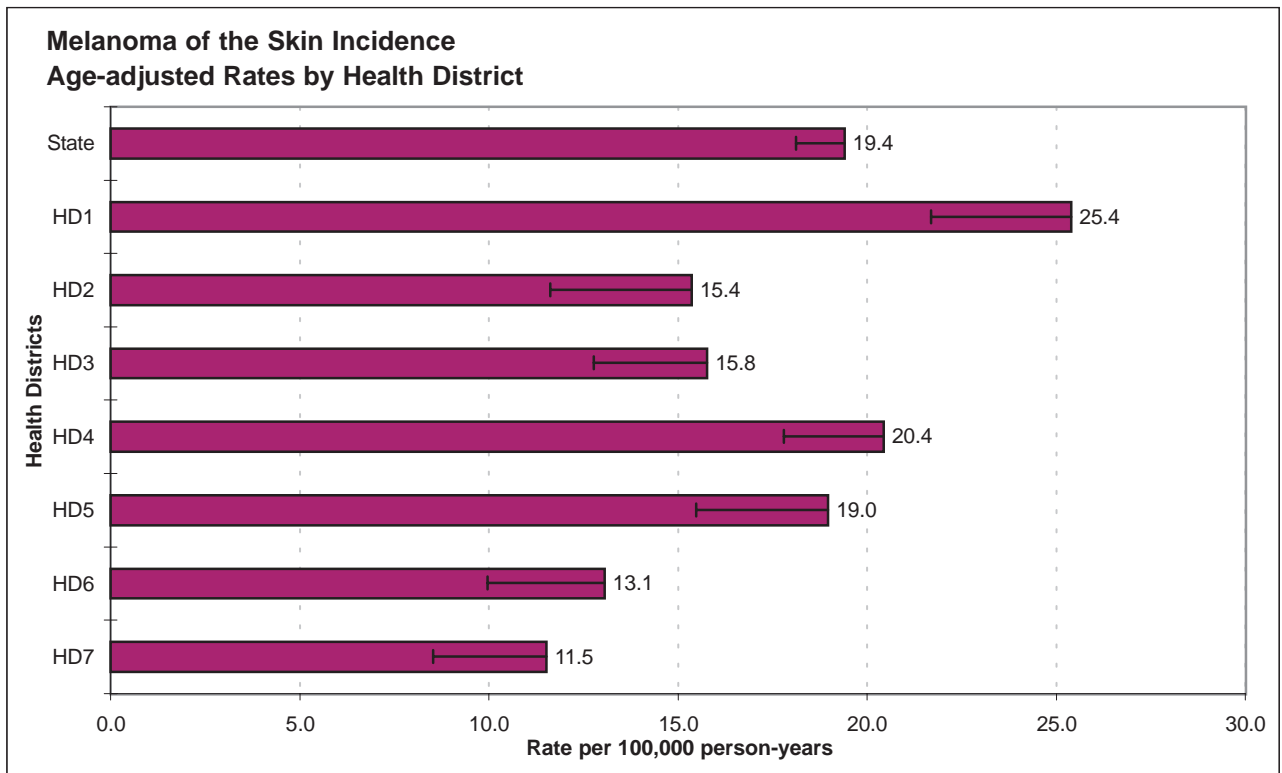
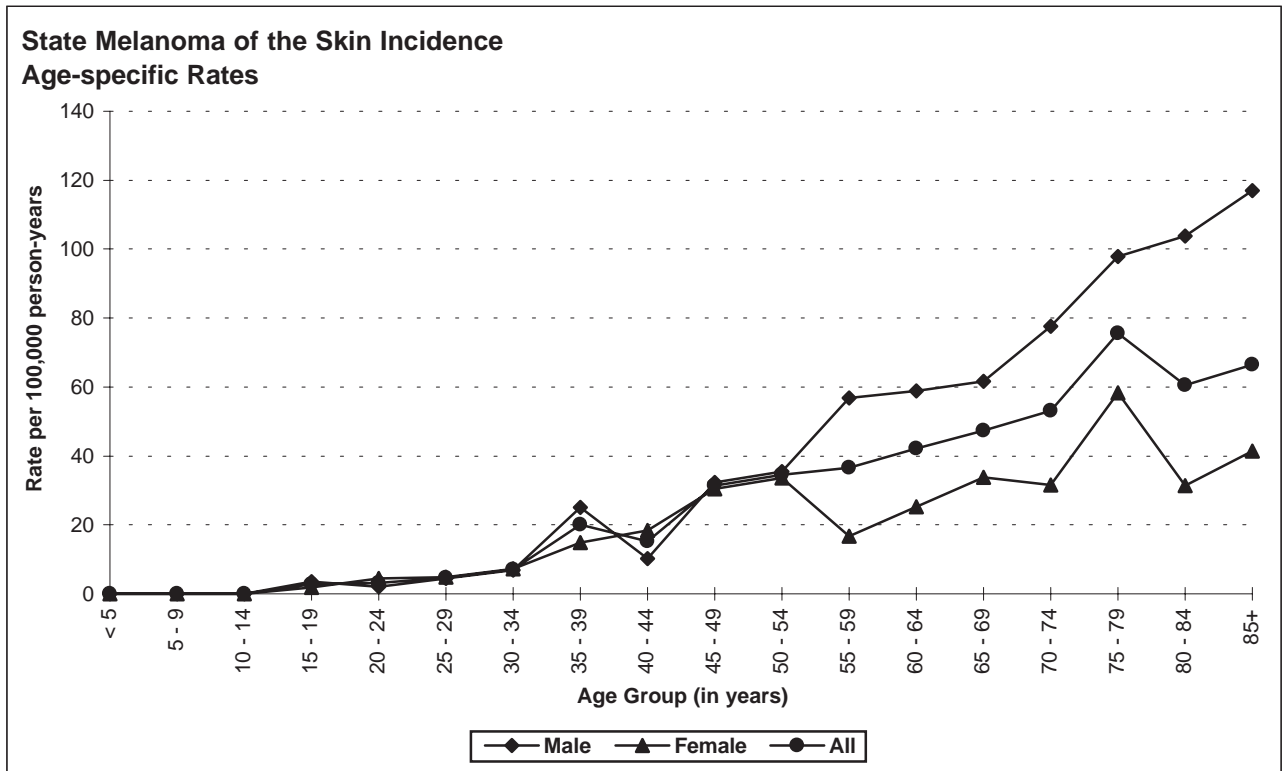
Risk and Associated Factors

Age	Melanoma is extremely uncommon before puberty. Rates increase with age.
Gender	It occurs more frequently in males than females.
Race & SES	The incidence rate is highest in Caucasians and is uncommon in African Americans. It has an increased incidence in higher income groups.
Occupation	Persons working in occupations associated with increased sun exposure have a higher incidence.
Other	Ultra-violet light exposure, especially blistering sunburns during childhood, is a major risk factor. Melanoma has been on the increase nationally for several decades. People with light skin and individuals with numerous or atypical moles are at increased risk.

Special Notes

Mean age-adjusted incidence rate across health districts:	17.2
95% confidence interval on the mean age-adjusted incidence rate:	13.7 - 20.7
Median age-adjusted incidence rate of health districts:	15.8
Range of age-adjusted incidence rate for health districts:	11.5 - 25.4
SEER rate (1998, Whites):	18.0

There were few cases of melanoma of the skin among persons less than 25 years of age. The age-specific incidence rates were higher among males after age 50. Health District 1 ($p < 0.05$) had statistically significantly more cases than expected, and Health District 7 ($p < 0.05$) had statistically significantly fewer cases than expected based upon rates for the remainder of Idaho.

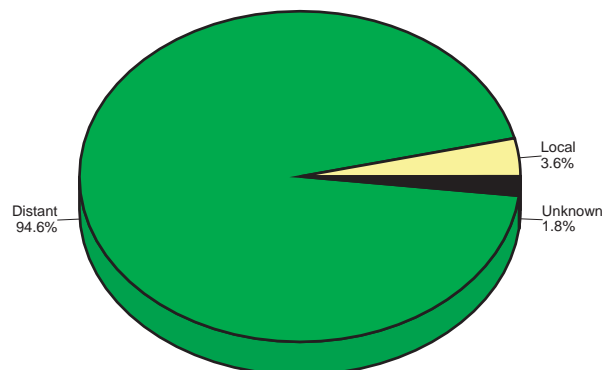


MYELOMA

Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	4.7	6.4	3.6
# of new invasive cases	56	33	23
# of new in-situ cases	0	0	0
# of deaths	41	27	14

Stage at Diagnosis - Myeloma



Total Cases By County

Ada	15	Cassia	1	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	1	Clearwater	-	Madison	-
Bear Lake	-	Custer	-	Minidoka	-
Benewah	-	Elmore	3	Nez Perce	3
Bingham	2	Franklin	-	Oneida	1
Blaine	-	Fremont	1	Owyhee	-
Boise	-	Gem	1	Payette	-
Bonner	-	Gooding	1	Power	-
Bonneville	3	Idaho	-	Shoshone	2
Boundary	2	Jefferson	-	Teton	-
Butte	-	Jerome	-	Twin Falls	5
Camas	-	Kootenai	7	Valley	-
Canyon	5	Latah	1	Washington	1
Caribou	-	Lemhi	-		

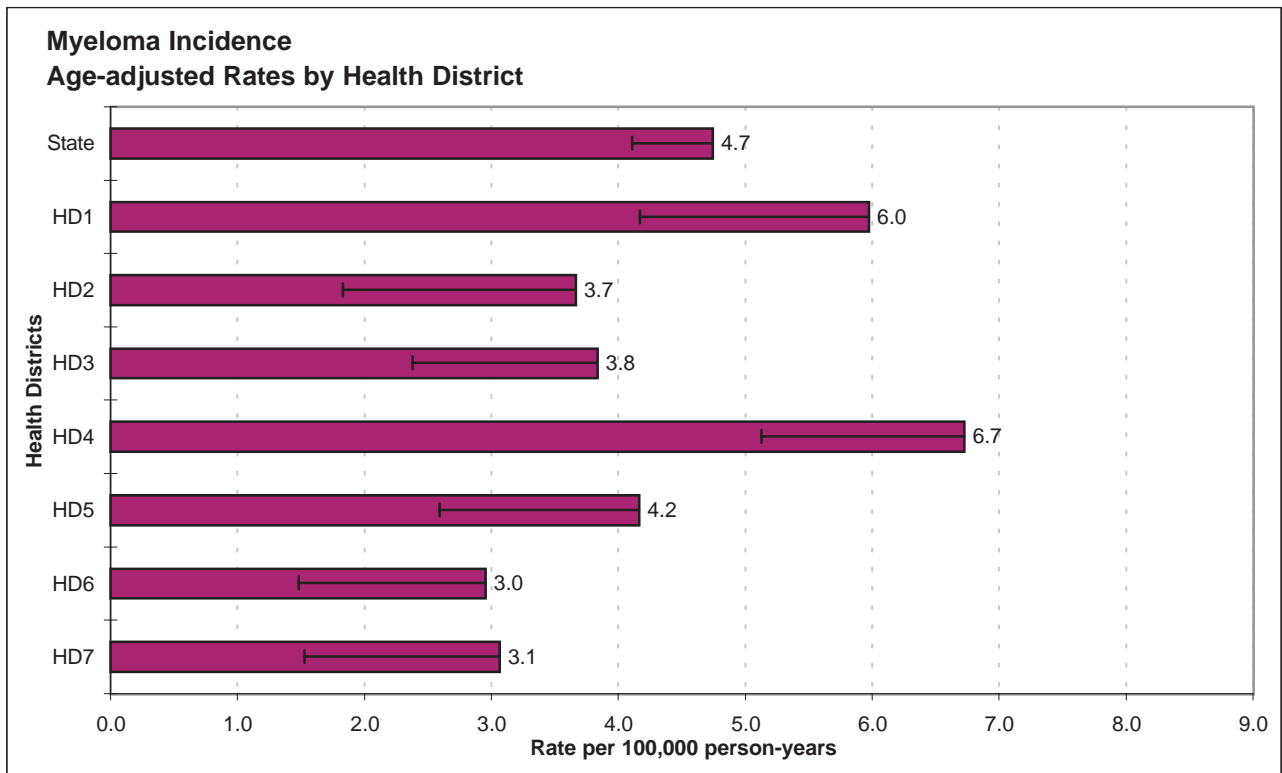
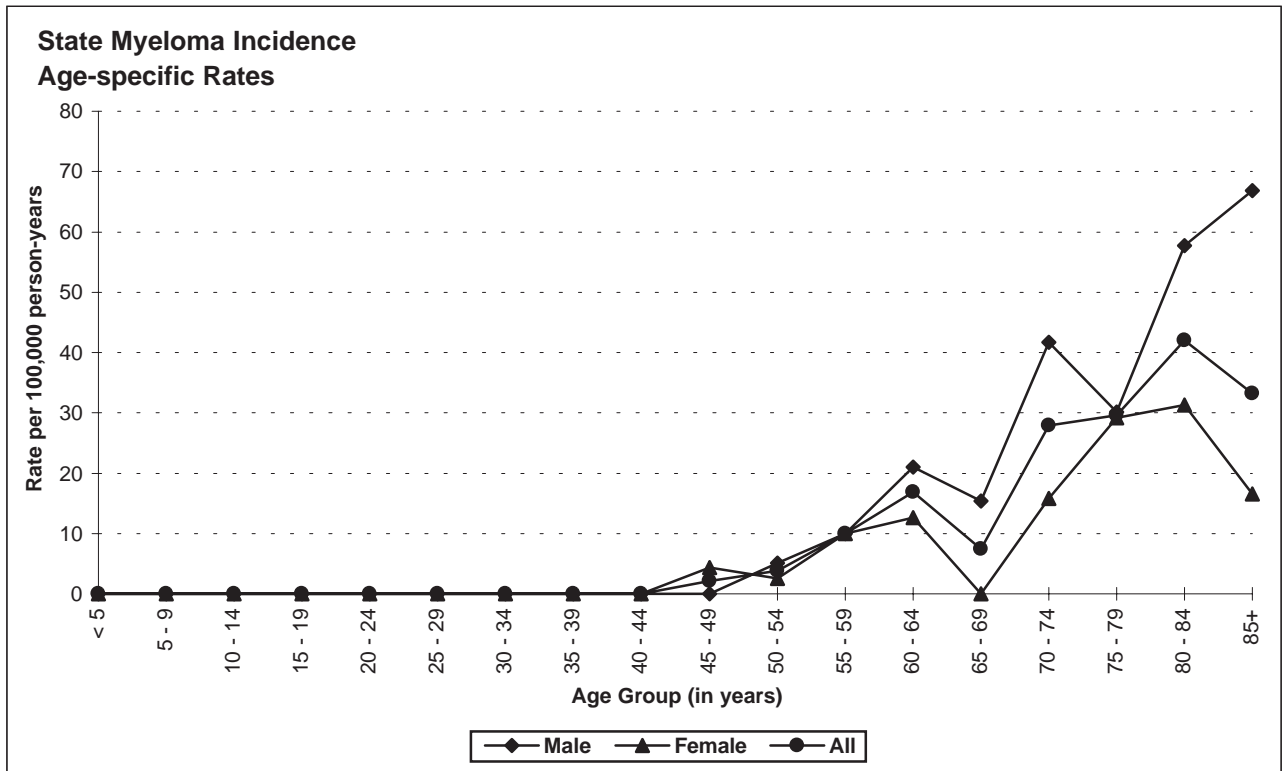
Risk and Associated Factors

- Age** Multiple myeloma is an age-dependent cancer. It increases with age and rarely occurs before age 40.
- Gender** Rates for males and females are usually similar.
- Race** African Americans have a higher incidence rate, sometimes twice the rate for Caucasians.
- Genetics** Genetic factors play an important role in its development but how so is not completely understood. Familial factors and chronic antigenic stimulation have also been implicated.
- Other** Multiple myeloma has been associated with lymphomas such as Burkitt's, and non-Hodgkin's lymphomas. Studies have suggested several possible viral etiologies, and multiple myeloma has been linked to radiation exposures of nuclear workers. Specific environmental exposures such as herbicides and radiation may also play an important role in the incidence of multiple myeloma.

Special Notes

Mean age-adjusted incidence rate across health districts:	4.3
95% confidence interval on the mean age-adjusted incidence rate:	3.3 - 5.4
Median age-adjusted incidence rate of health districts:	3.8
Range of age-adjusted incidence rate for health districts:	3.0 - 6.7
SEER rate (1998, Whites):	4.8

There were no cases of plasma cell tumors among persons less than 45 years of age. The age-specific incidence rates increased rapidly for both males and females after age group 65-69. Health District 4 ($p < 0.05$) had statistically significantly more cases than expected based upon rates for the remainder of Idaho.

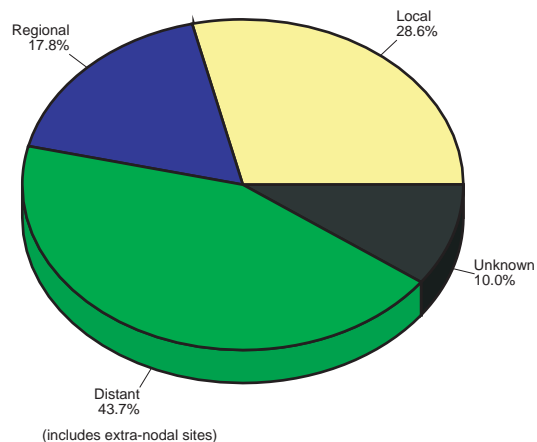


NON-HODGKIN'S LYMPHOMA

Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	19.4	21.5	17.7
# of new invasive cases	231	118	113
# of new in-situ cases	0	0	0
# of deaths	108	53	55

State at Diagnosis - Non-Hodgkins Lymphoma



Total Cases By County

Ada	48	Cassia	3	Lewis	3
Adams	-	Clark	-	Lincoln	2
Bannock	18	Clearwater	1	Madison	-
Bear Lake	1	Custer	-	Minidoka	3
Benewah	1	Elmore	3	Nez Perce	4
Bingham	6	Franklin	1	Oneida	-
Blaine	2	Fremont	1	Owyhee	1
Boise	-	Gem	4	Payette	3
Bonner	8	Gooding	4	Power	3
Bonneville	19	Idaho	4	Shoshone	3
Boundary	2	Jefferson	2	Teton	-
Butte	1	Jerome	3	Twin Falls	8
Camas	1	Kootenai	28	Valley	-
Canyon	28	Latah	3	Washington	2
Caribou	1	Lemhi	3		

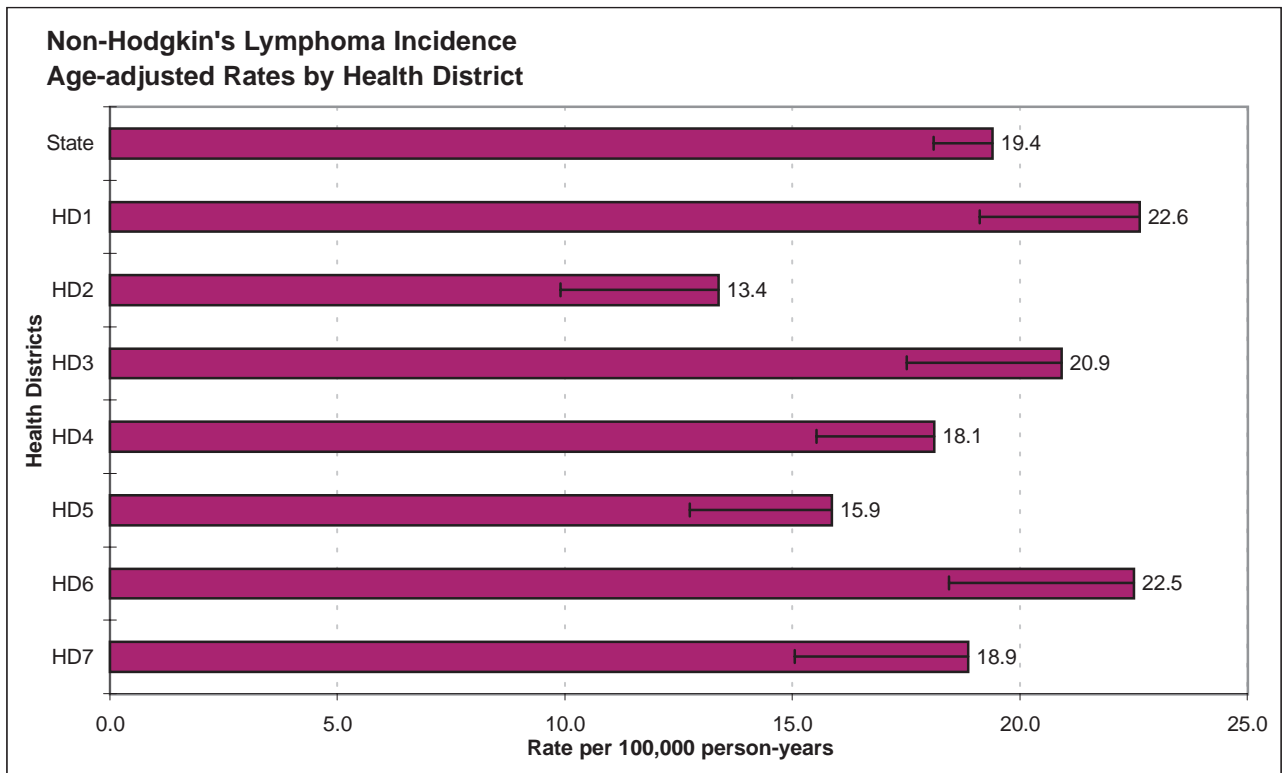
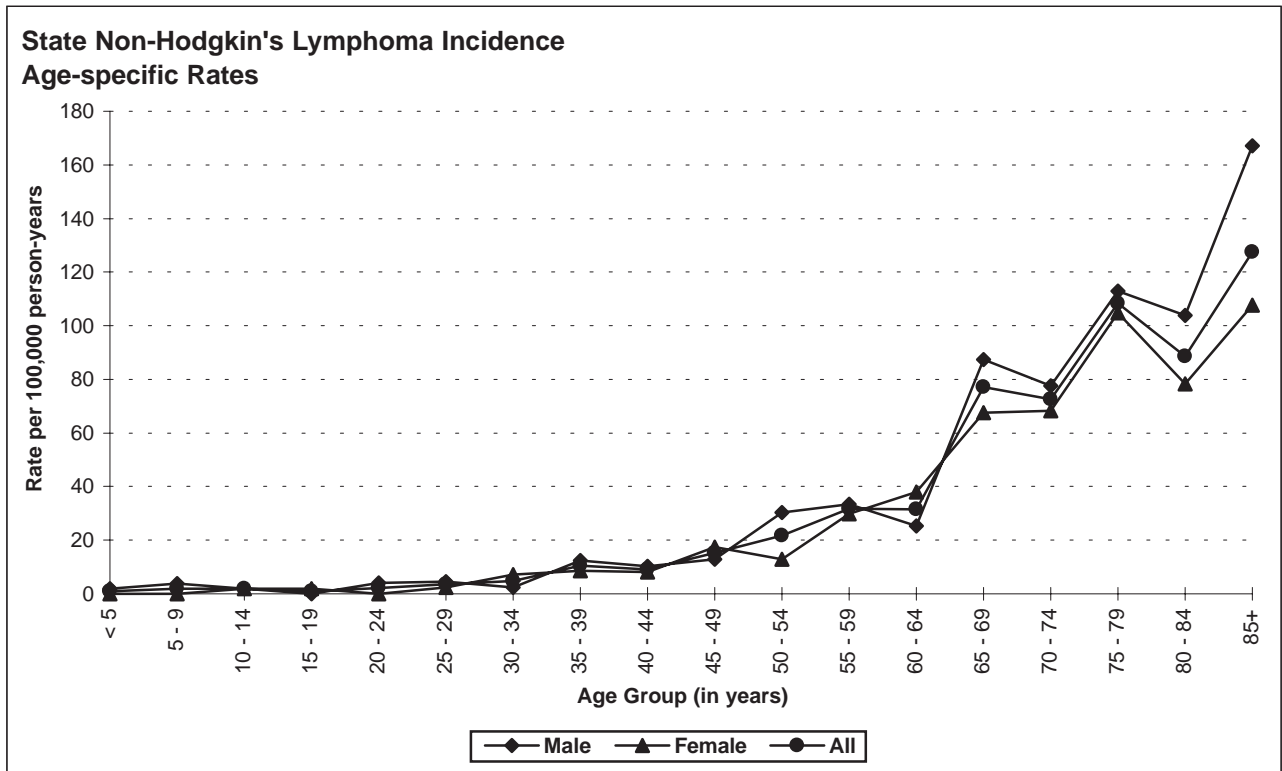
Risk and Associated Factors

Age	Rates increase with age reaching the highest levels in the eight and ninth decades of life.
Gender	Males have higher rates than females.
Race & SES	Generally in the United States incidence rates are slightly lower in African Americans. Rates are higher in upper income groups.
Occupation	Ethylene oxide exposure at plants producing sterilized medical supplies and spices is a risk factor.
Other	Non-Hodgkin's lymphoma (NHL) develops with increased frequency in individuals infected with certain viruses, particularly the human immunodeficiency virus (HIV), which causes acquired immunodeficiency syndrome (AIDS). Exposures to agricultural chemicals and high-dose radiation exposures have also been implicated. Treatment with some immunosuppressants increases the risk of NHL among organ transplant patients. Epstein-Barr virus may increase the risk of metastasis.

Special Notes

Mean age-adjusted incidence rate across health districts:	18.9
95% confidence interval on the mean age-adjusted incidence rate:	16.3 - 21.4
Median age-adjusted incidence rate of health districts:	18.9
Range of age-adjusted incidence rate for health districts:	13.4 - 22.6
SEER rate (1998, Whites):	19.0

The age-specific incidence rates of non-Hodgkin's lymphoma increased with age, peaking in the age group 85+ for males and females. No health districts had statistically significantly more or fewer cases than expected based upon rates for the remainder of Idaho.



ORAL CAVITY AND PHARYNX

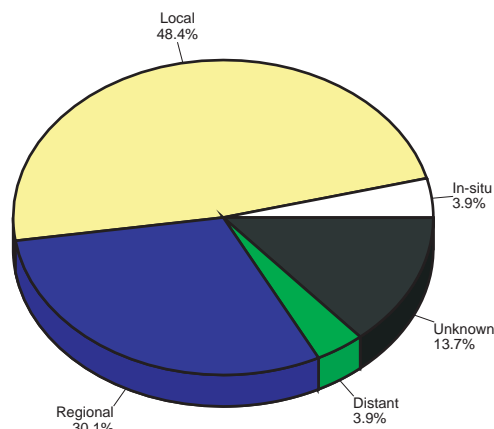
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	12.4	18.2	7.5
# of new invasive cases	147	99	48
# of new in-situ cases	6	5	1
# of deaths	38	22	16

Total Cases By County

Ada	24	Cassia	2	Lewis	-
Adams	2	Clark	-	Lincoln	2
Bannock	4	Clearwater	-	Madison	-
Bear Lake	1	Custer	1	Minidoka	3
Benewah	4	Elmore	4	Nez Perce	2
Bingham	8	Franklin	1	Oneida	-
Blaine	3	Fremont	4	Owyhee	-
Boise	-	Gem	2	Payette	3
Bonner	6	Gooding	2	Power	-
Bonneville	3	Idaho	1	Shoshone	1
Boundary	3	Jefferson	1	Teton	1
Butte	2	Jerome	3	Twin Falls	16
Camas	-	Kootenai	15	Valley	1
Canyon	8	Latah	-	Washington	2
Caribou	4	Lemhi	-		

Stage at Diagnosis - Oral Cavity



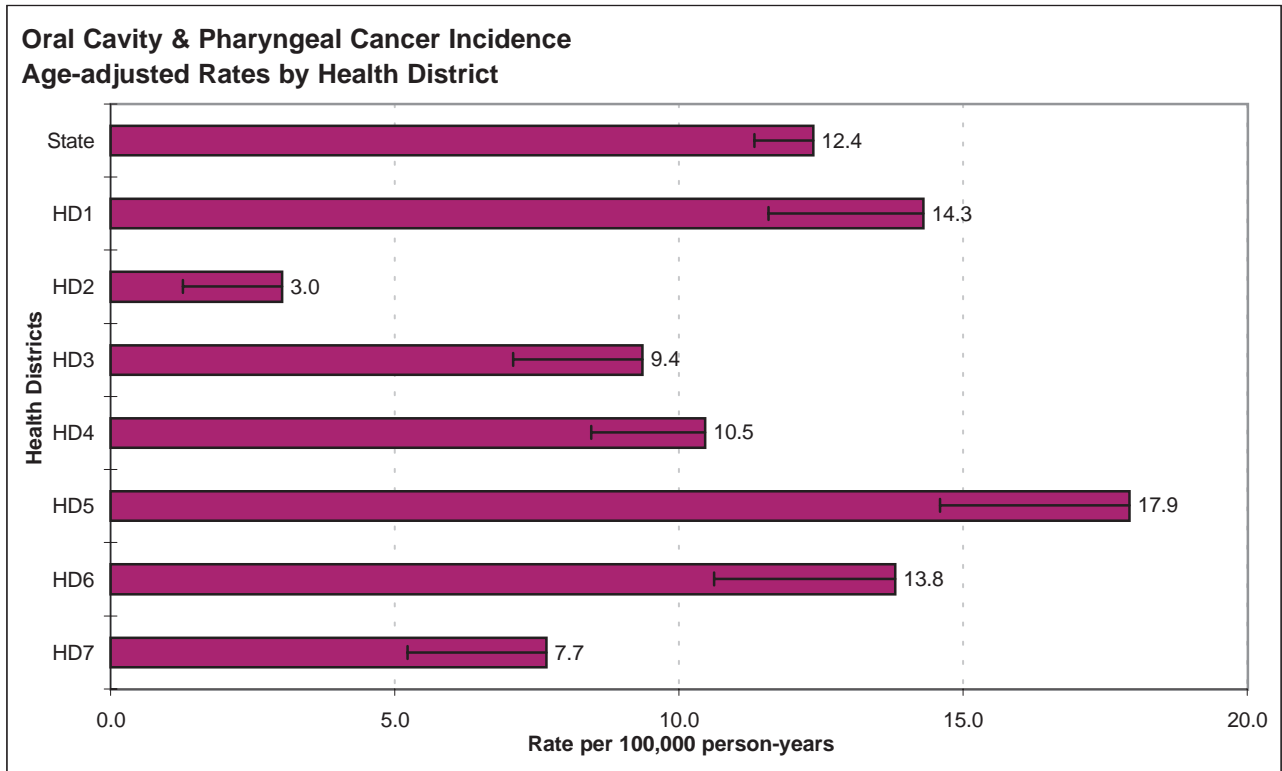
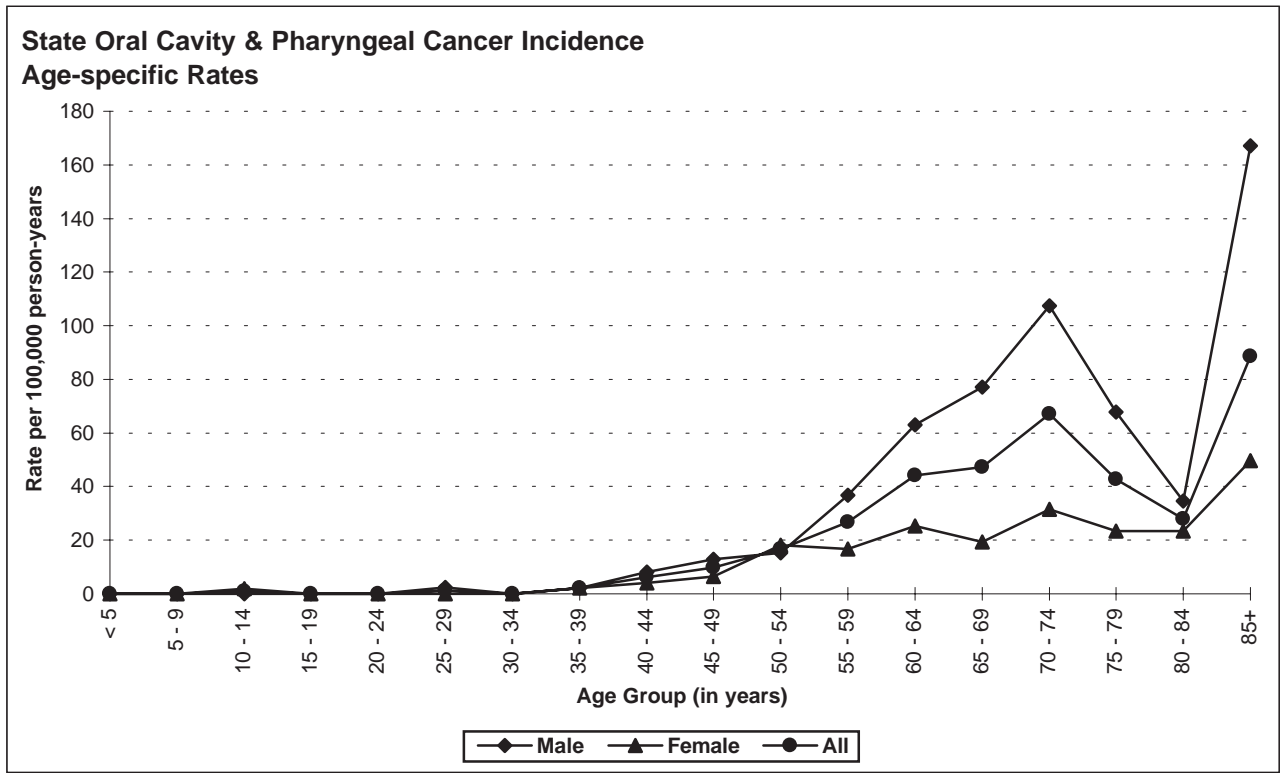
Risk and Associated Factors

Age	Most cases occur in people over age 60.
Gender	Males have a higher incidence than females.
Race & SES	Rates are higher for African Americans than for Caucasians. Rates are also higher among lower income groups.
Diet	Increased risk is associated with diets low in fresh fruit and vegetable consumption.
Occupation	Increased risk with textile and leather manufacturing industries.
Other	Smoking and spit tobacco are major risk factors for cancers of the oral cavity and pharynx. Over 90% of cases are associated with tobacco use. Alcohol use, especially excessive, is a major risk factor. Combined exposure to tobacco and alcohol results in substantially higher risk.

Special Notes

Mean age-adjusted incidence rate across health districts:	10.9
95% confidence interval on the mean age-adjusted incidence rate:	7.3 - 14.6
Median age-adjusted incidence rate of health districts:	10.5
Range of age-adjusted incidence rate for health districts:	3.0 - 17.9
SEER rate (1998, Whites):	10.5

There were few cases among persons less than 40 years of age. The age-specific incidence rates generally increased with age after age 50, peaking in the age group 85+ for males and females. Health District 5 had statistically significantly more cases than expected ($p < 0.05$), and Health District 2 had statistically significantly fewer cases than expected based upon rates for the remainder of Idaho ($p < 0.01$).



OVARY

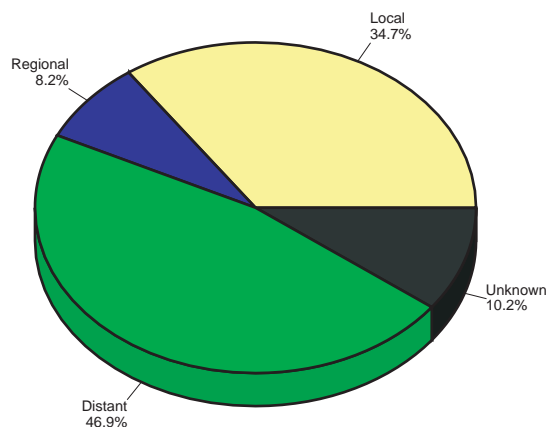
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	-	15.6
# of new invasive cases	-	-	98
# of new in-situ cases	-	-	0
# of deaths	-	-	65

Total Cases By County

Ada	24	Cassia	2	Lewis	1
Adams	-	Clark	-	Lincoln	-
Bannock	11	Clearwater	-	Madison	2
Bear Lake	-	Custer	-	Minidoka	-
Benewah	-	Elmore	1	Nez Perce	2
Bingham	5	Franklin	2	Oneida	1
Blaine	-	Fremont	1	Owyhee	1
Boise	-	Gem	3	Payette	1
Bonner	4	Gooding	1	Power	-
Bonneville	5	Idaho	2	Shoshone	1
Boundary	-	Jefferson	2	Teton	-
Butte	-	Jerome	2	Twin Falls	4
Camas	-	Kootenai	4	Valley	-
Canyon	11	Latah	1	Washington	3
Caribou	1	Lemhi	-		

Stage at Diagnosis - Ovary



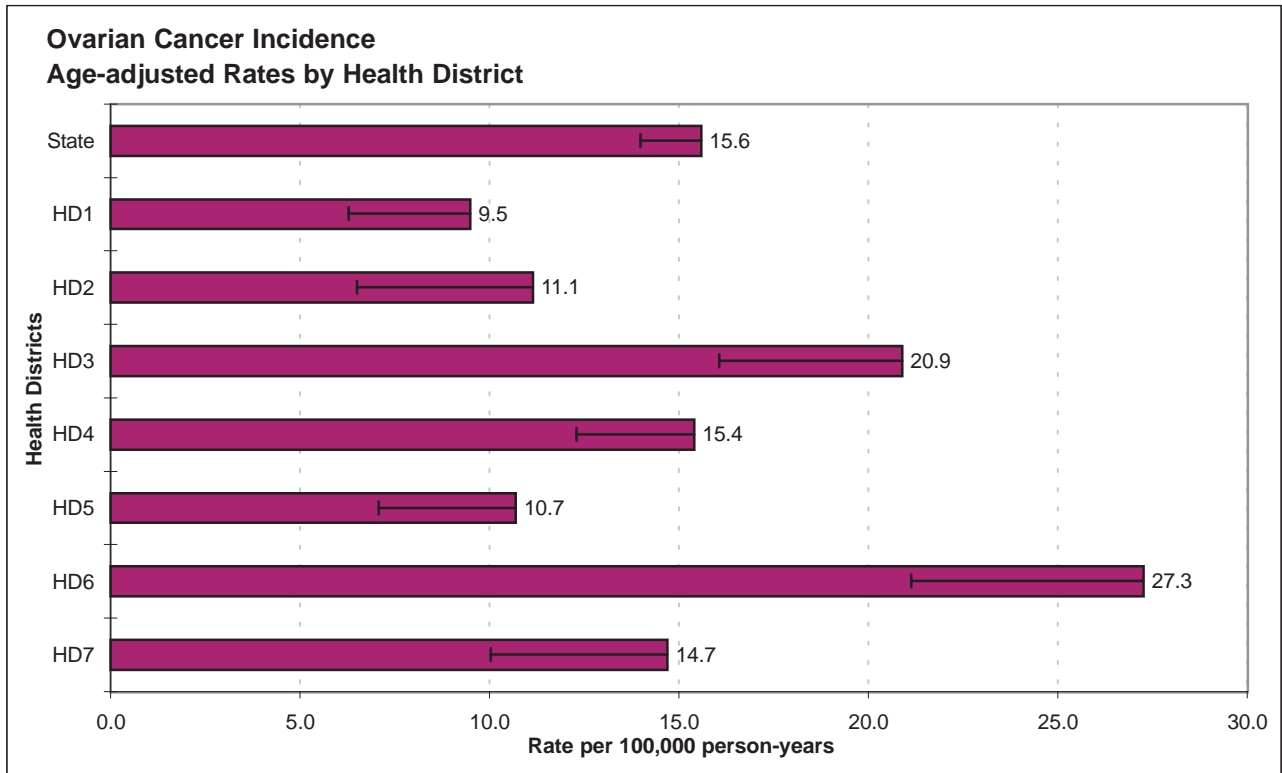
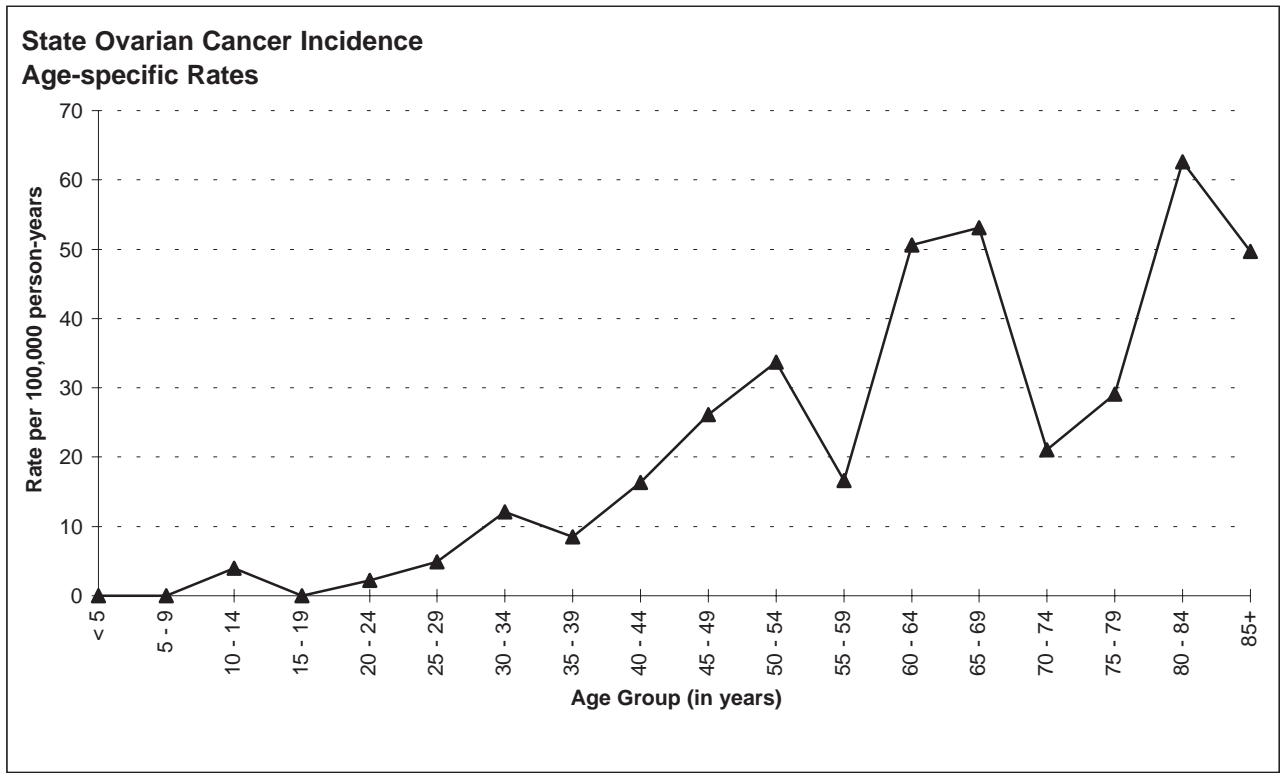
Risk and Associated Factors

Age	The rate of ovarian cancer increases with age and it is primarily a disease of older women.
Race & SES	Rates are slightly higher in Caucasian females than in African American females. The rate is higher among upper income groups.
Genetics	The most important risk factor for ovarian cancer is a family history of a first-degree relative (mother, daughter, or sister) with the disease. The risk is higher still in women with two or more first-degree relatives with ovarian cancer.
Hormonal	Risk of ovarian cancer is significantly reduced among women having at least one live-born child, a history of breast-feeding, or sustained oral contraceptive use. Highest risk is in post-menopausal women. It is also associated with a personal history of breast, endometrial, and colon cancers.
Diet	Dietary fat may increase the risk.

Special Notes

Mean age-adjusted incidence rate across health districts:	15.6
95% confidence interval on the mean age-adjusted incidence rate:	10.9 - 20.4
Median age-adjusted incidence rate of health districts:	14.7
Range of age-adjusted incidence rate for health districts:	9.5 - 27.3
SEER rate (1998, Whites):	17.2

There were few cases of ovarian cancer among persons aged less than 20 years. The age-specific incidence rates of ovarian cancer increased with age starting in the 15-19 age group. The highest age-specific rate was for women aged 80-84. Health District 6 had statistically significantly more cases of ovarian cancer than expected based upon rates for the remainder of Idaho ($p < 0.01$).



PANCREAS

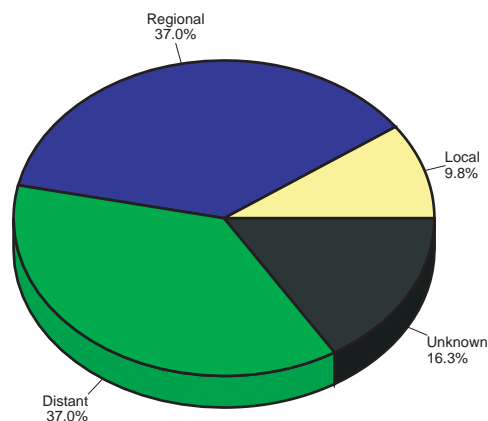
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	7.8	8.1	7.4
# of new invasive cases	92	43	49
# of new in-situ cases	0	0	0
# of deaths	110	46	64

Total Cases By County

Ada	24	Cassia	2	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	6	Clearwater	-	Madison	1
Bear Lake	1	Custer	-	Minidoka	2
Benewah	1	Elmore	-	Nez Perce	1
Bingham	1	Franklin	-	Oneida	1
Blaine	-	Fremont	-	Owyhee	-
Boise	-	Gem	-	Payette	-
Bonner	6	Gooding	1	Power	-
Bonneville	7	Idaho	1	Shoshone	1
Boundary	-	Jefferson	1	Teton	-
Butte	-	Jerome	1	Twin Falls	9
Camas	-	Kootenai	12	Valley	-
Canyon	8	Latah	-	Washington	3
Caribou	-	Lemhi	1		

Stage at Diagnosis - Pancreas



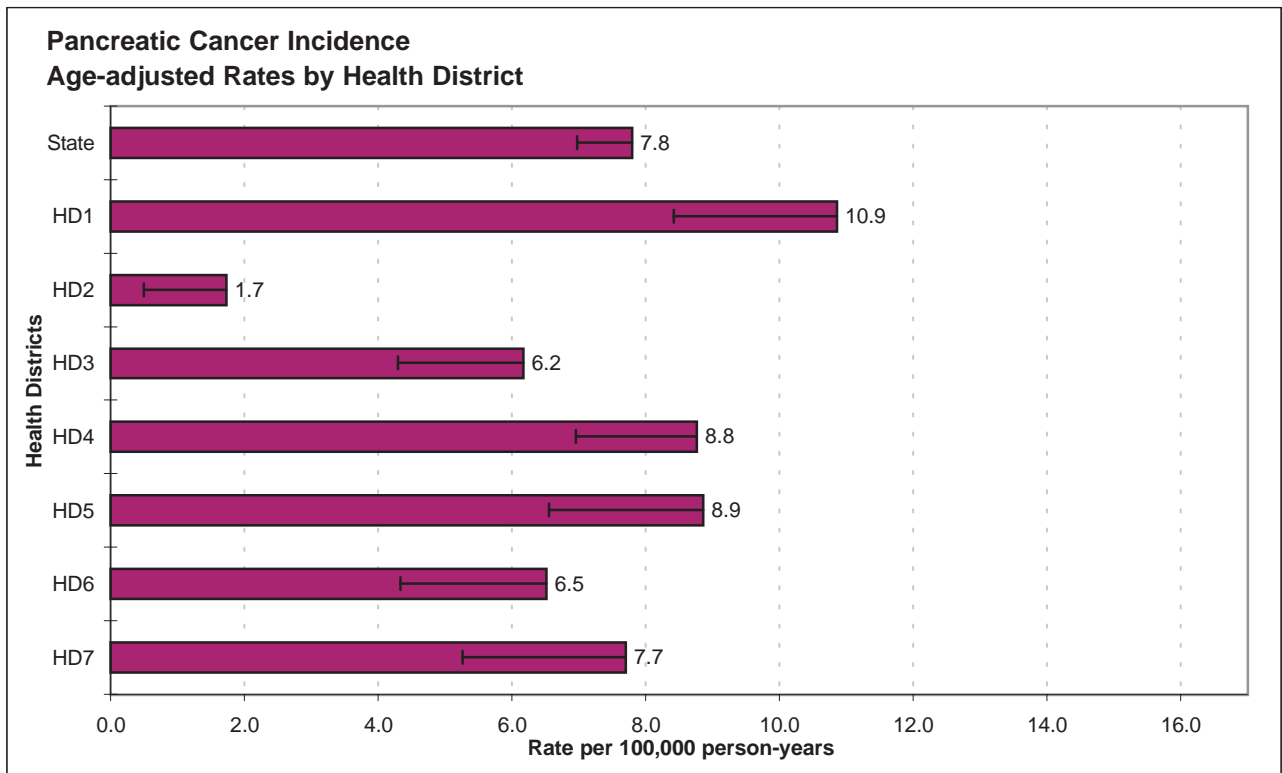
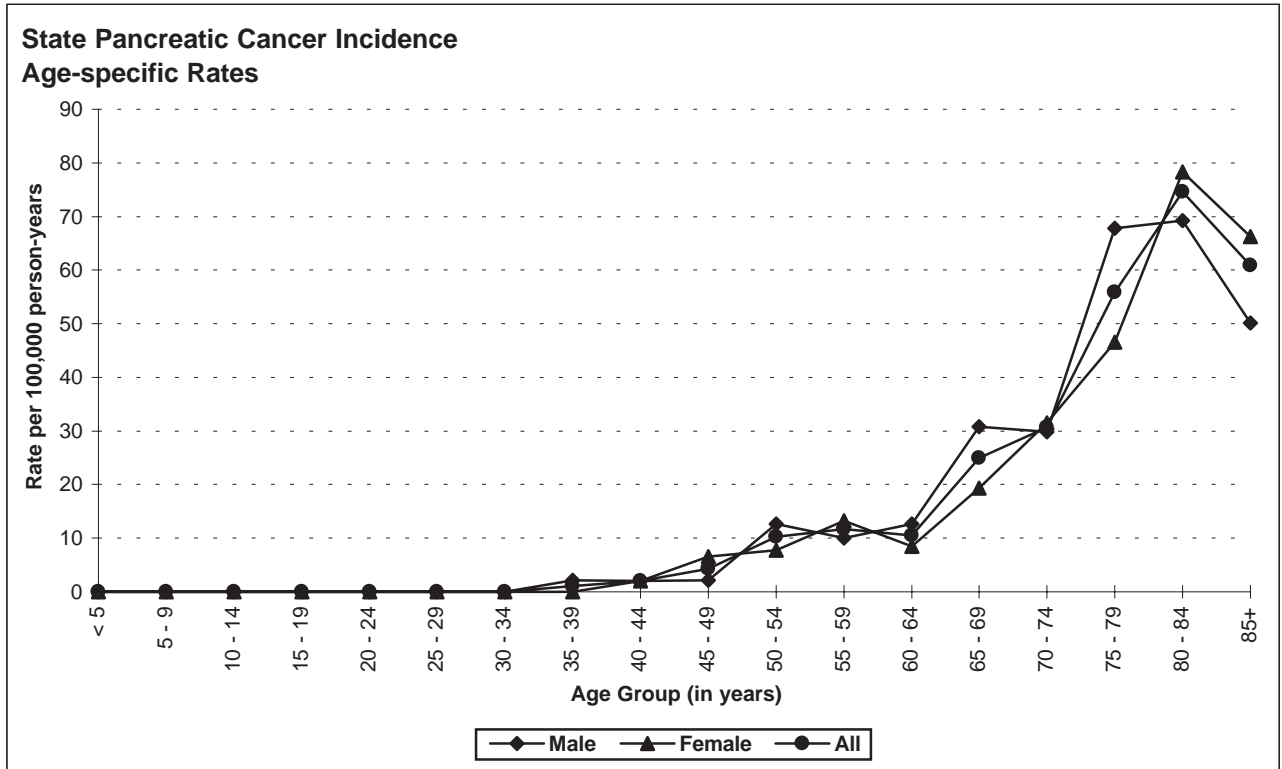
Risk and Associated Factors

Age	Rates increase with age. It is rare in people younger than 40 years old.
Gender	Incidence is slightly higher in males.
Race	In the United States, the incidence is higher in African Americans, Native Americans, and Hispanics, than in the population at large.
Diet	High dietary fat intake has been implicated as a potential risk factor.
Occupation	Persons in certain occupations are believed to be at higher risk, such as chemists, metal workers, and persons employed in the manufacture of benzidine and betanaphthylene.
Other	Pancreatic cancer is more common among smokers than non-smokers. Familial clustering has been observed in some studies. Pancreatic cancer usually progresses to an advanced stage before symptoms develop. It is rapidly fatal in over 90% of cases.

Special Notes

Mean age-adjusted incidence rate across health districts:	7.2
95% confidence interval on the mean age-adjusted incidence rate:	5.1 - 9.4
Median age-adjusted incidence rate of health districts:	7.7
Range of age-adjusted incidence rate for health districts:	1.7 - 10.9
SEER rate (1998, Whites):	10.3

There were few cases of pancreatic cancer among persons aged less than 45 years. The age-specific incidence rates of pancreatic cancer increased sharply from age groups 55-59 to 75-79. Health District 2 had statistically significantly fewer cases than expected based upon rates for the remainder of Idaho ($p < 0.05$).



PROSTATE

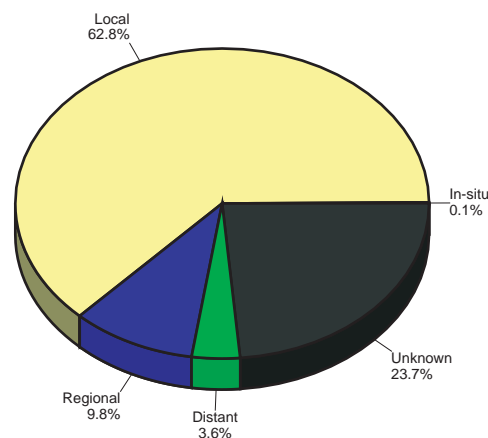
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	171.6	-
# of new invasive cases	-	927	-
# of new in-situ cases	-	1	-
# of deaths	-	160	-

Total Cases By County

Ada	203	Cassia	13	Lewis	9
Adams	2	Clark	-	Lincoln	4
Bannock	36	Clearwater	9	Madison	8
Bear Lake	6	Custer	7	Minidoka	13
Benewah	8	Elmore	13	Nez Perce	40
Bingham	17	Franklin	9	Oneida	4
Blaine	16	Fremont	5	Owyhee	3
Boise	6	Gem	7	Payette	9
Bonner	26	Gooding	9	Power	2
Bonneville	51	Idaho	12	Shoshone	5
Boundary	7	Jefferson	8	Teton	2
Butte	1	Jerome	14	Twin Falls	61
Camas	-	Kootenai	92	Valley	16
Canyon	80	Latah	28	Washington	5
Caribou	6	Lemhi	8		

Stage at Diagnosis - Prostate



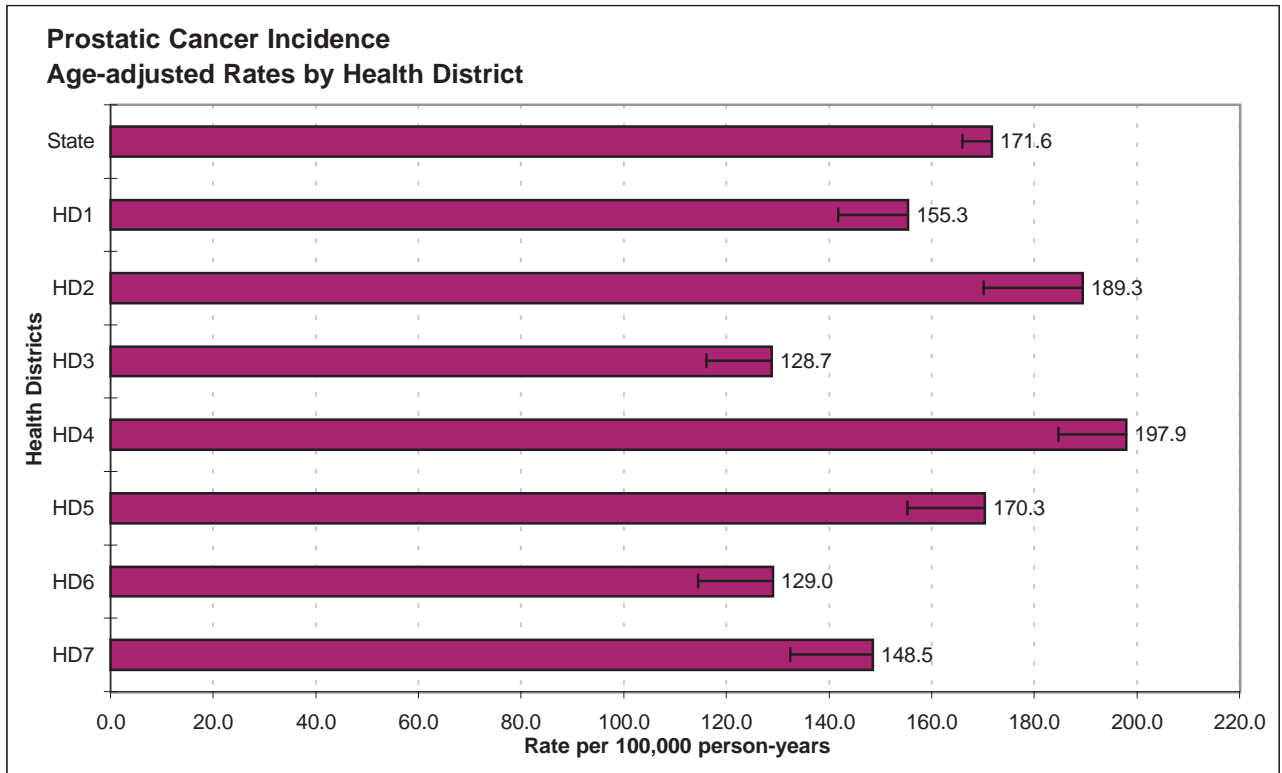
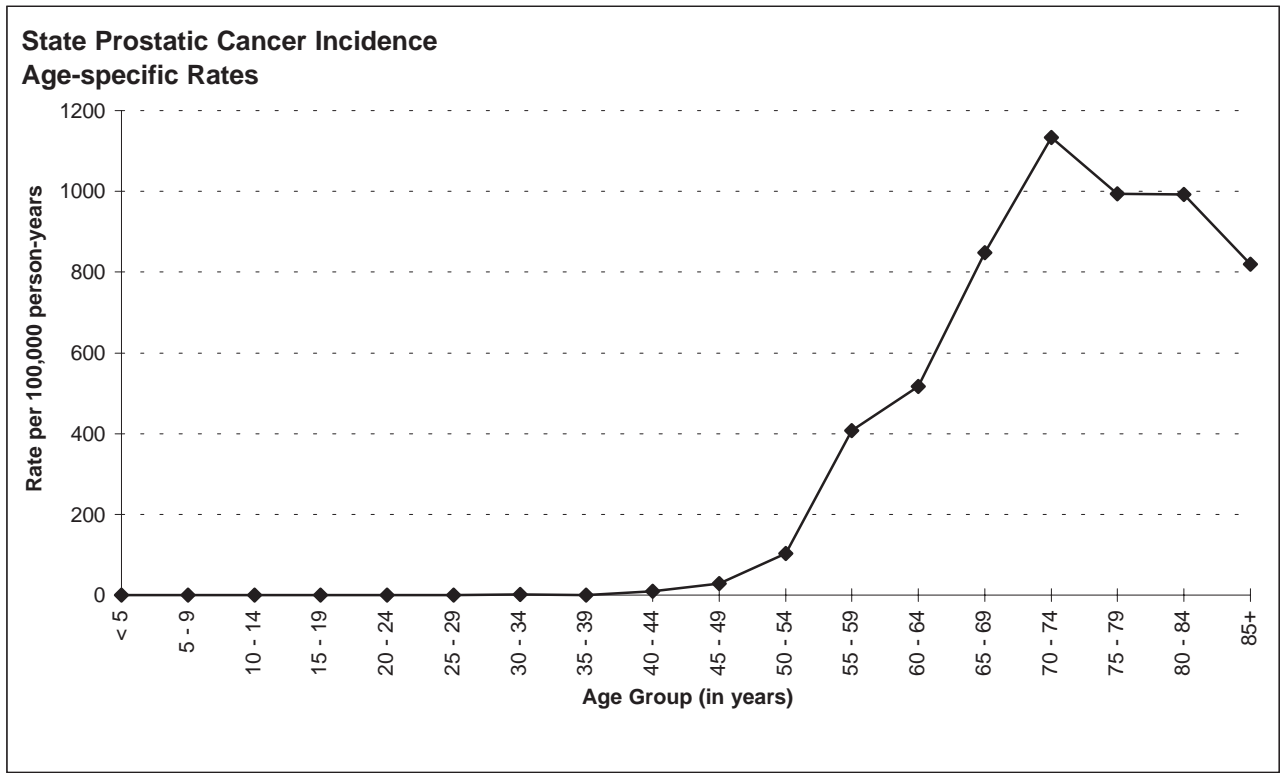
Risk and Associated Factors

Age	It is rarely diagnosed before age 50, and it is primarily a disease of older men.
Race	African American males have a substantially higher rate than Caucasian males.
Genetics	A family history of prostate cancer is associated with increased risk.
Diet	Dietary fat has been implicated in some studies.
Other	Environmental and familial factors may contribute to an increased incidence but no specific factor in these two groups of potential risk factors has been clearly identified. Three risk factors are well established: age, family history, and ethnic group/country of residence.

Special Notes

Mean age-adjusted incidence rate across health districts:	159.8
95% confidence interval on the mean age-adjusted incidence rate:	139.5 - 180.1
Median age-adjusted incidence rate of health districts:	155.3
Range of age-adjusted incidence rate for health districts:	128.7 - 197.9
SEER rate (1998, Whites):	149.2

The age-specific incidence rate distribution of prostate cancer in Idaho in 2000 is similar to that reported by the National Cancer Institute's SEER program. There were no cases of prostate cancer among persons aged less than 40 years. The age-specific incidence rates of prostate cancer increased with age, peaking in the 70-74 age group. Health District 4 had statistically significantly more cases than expected ($p < 0.01$), and Health Districts 3 and 6 had statistically significantly fewer cases based upon rates for the remainder of Idaho ($p < 0.01$).

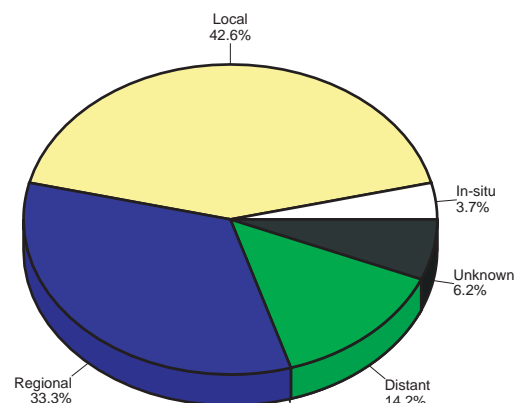


RECTUM

Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	13.1	15.8	11.1
# of new invasive cases	156	85	71
# of new in-situ cases	6	3	3
# of deaths	33	21	12

Stage at Diagnosis - Rectum and Rectosigmoid



Total Cases By County

Ada	31	Cassia	8	Lewis	-
Adams	2	Clark	-	Lincoln	-
Bannock	7	Clearwater	1	Madison	1
Bear Lake	-	Custer	1	Minidoka	2
Benewah	1	Elmore	2	Nez Perce	6
Bingham	5	Franklin	-	Oneida	-
Blaine	2	Fremont	2	Owyhee	-
Boise	1	Gem	-	Payette	2
Bonner	7	Gooding	2	Power	-
Bonneville	13	Idaho	2	Shoshone	2
Boundary	3	Jefferson	2	Teton	1
Butte	-	Jerome	1	Twin Falls	13
Camas	-	Kootenai	13	Valley	-
Canyon	20	Latah	2	Washington	3
Caribou	-	Lemhi	2		

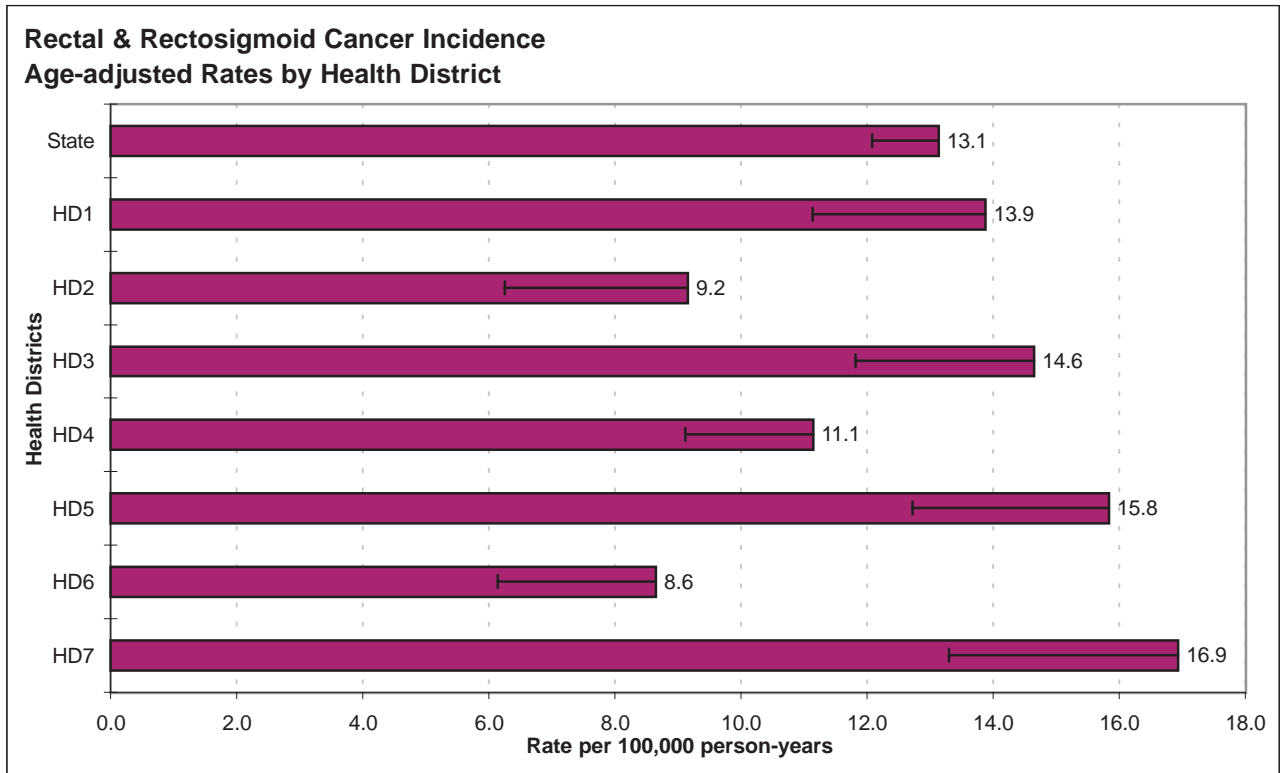
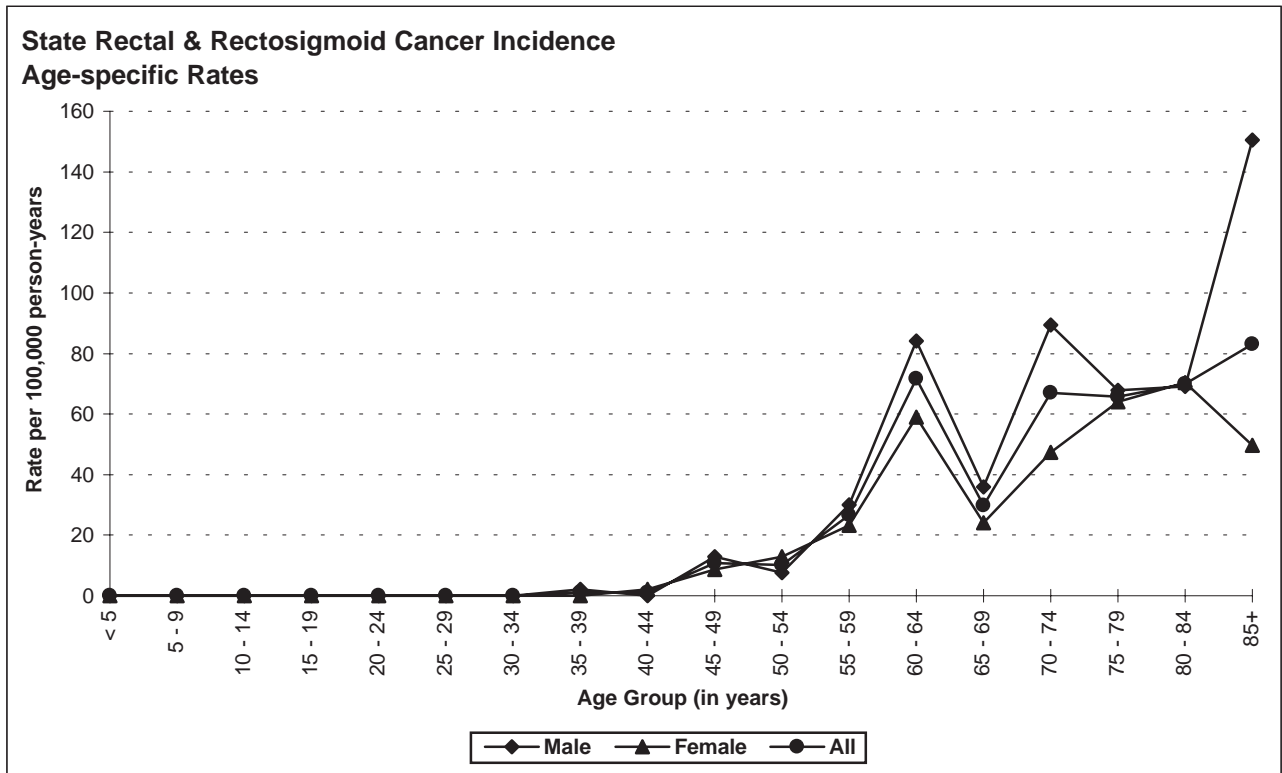
Risk and Associated Factors

- Age** Rates increase with age and the vast majority of cases occur after age 50.
- Gender** Incidence rates are higher in males.
- Genetics** Specific genetic alterations have been recognized in several hereditary conditions with high risk of rectal cancer. These conditions account for about six percent of rectal cancer cases.
- Diet** Strong evidence exists that diets high in fat and low in fiber contribute to increased risk of rectal cancer.
- Other** Individuals with a close family history of this cancer and those with a personal history of certain other cancers are at increased risk. Regular, moderate physical activity is associated with lower rates of this cancer.

Special Notes

Mean age-adjusted incidence rate across health districts:	12.9
95% confidence interval on the mean age-adjusted incidence rate:	10.5 - 15.3
Median age-adjusted incidence rate of health districts:	13.9
Range of age-adjusted incidence rate for health districts:	8.6 - 16.9
SEER rate (1998, Whites):	15.1

There were few cases of rectal cancer among persons aged less than 45 years. The age-specific incidence rates of rectal cancer generally increased with age, peaking in the 85+ age group for males and 80-84 for females. No health districts had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.



STOMACH

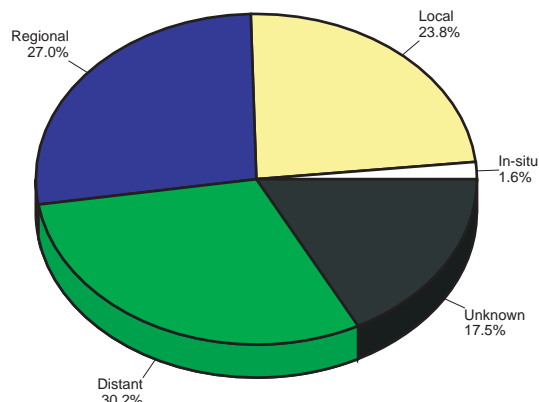
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	5.3	5.9	4.8
# of new invasive cases	62	32	30
# of new in-situ cases	1	0	1
# of deaths	40	26	14

Total Cases By County

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

Stage at Diagnosis - Stomach



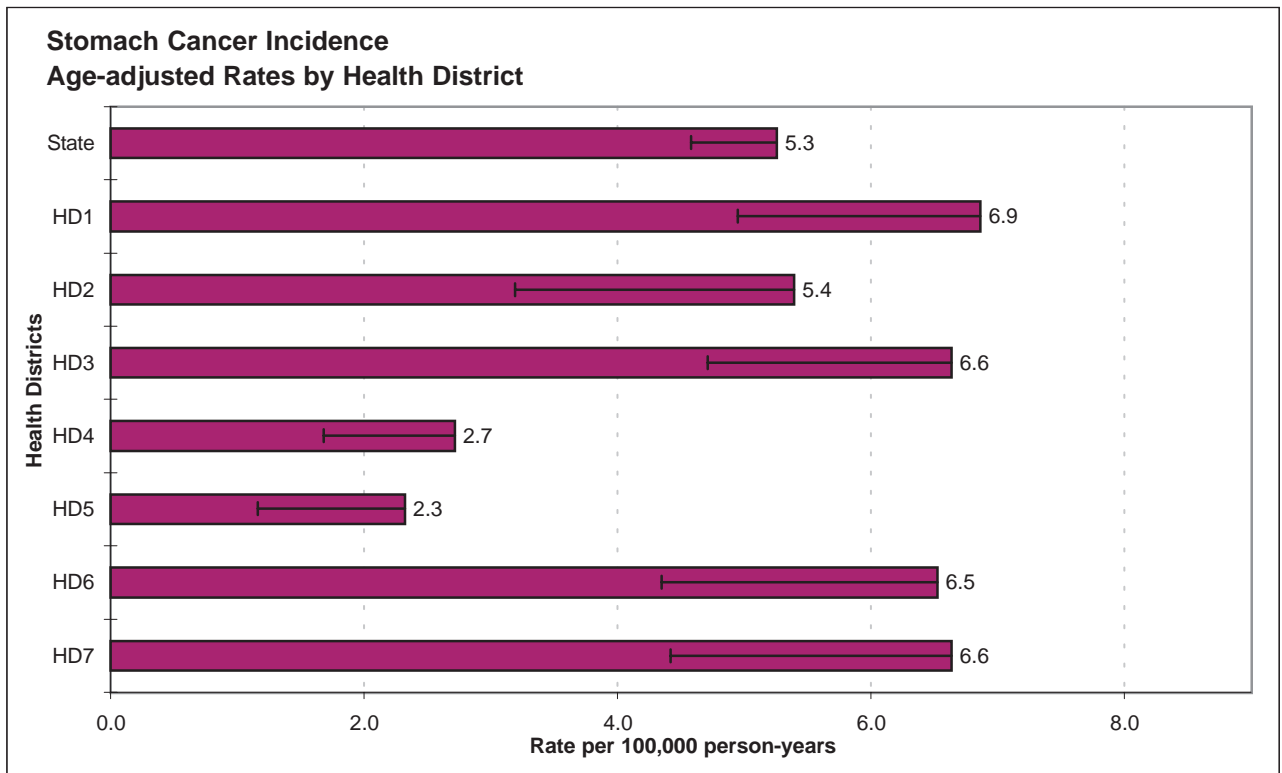
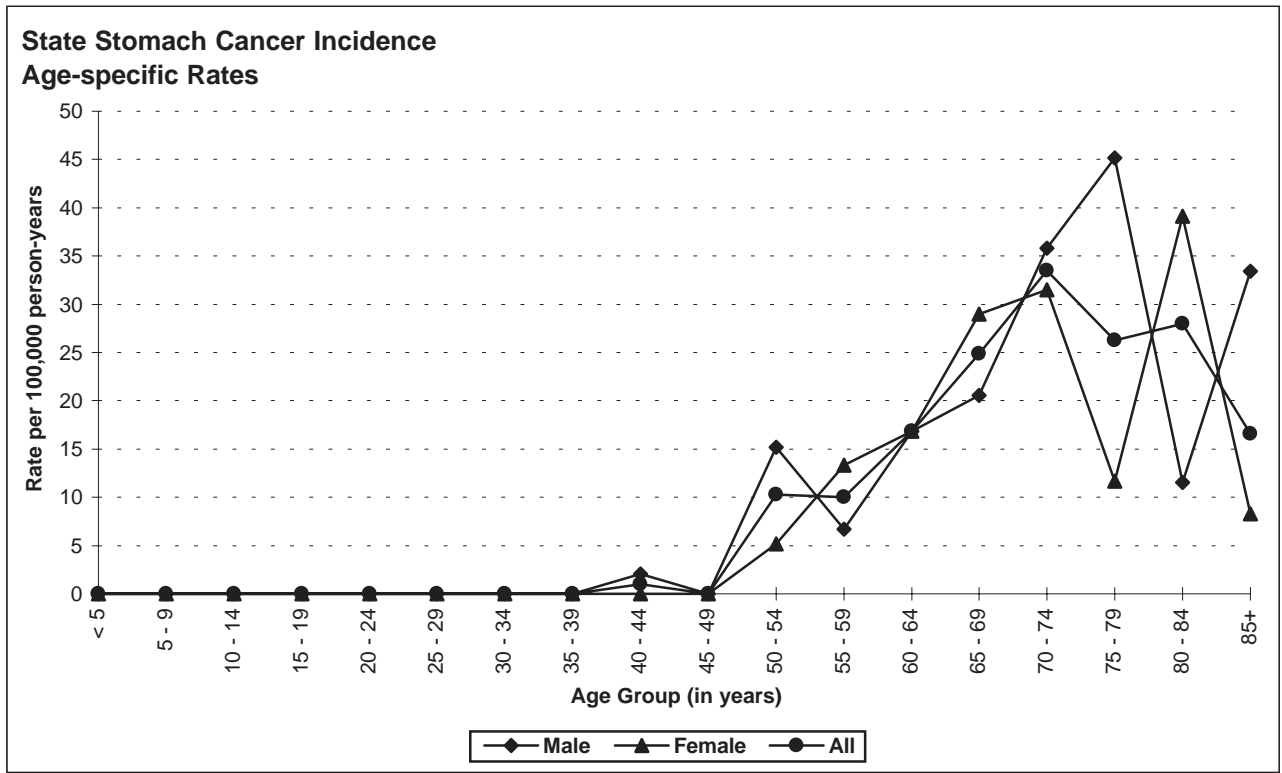
Risk and Associated Factors

Age	Rates increase with age.
Gender	Incidence rates for males are usually more than twice as high as for females.
Race & SES	There is a higher incidence in African Americans, as well as Asians, and incidence is also higher in lower income groups.
Diet	Increased risk has been attributed to diets high in smoked foods and foods high in nitrates. Diets high in fresh fruits and vegetables seem to be protective.
Occupation	Elevated rates have been found in certain occupational groups, especially coal miners and asbestos workers.
Other	Stomach cancer has recently been linked to peptic ulcer disease and to certain bacteria associated with increased risk for both diseases.

Special Notes

Mean age-adjusted incidence rate across health districts:	5.3
95% confidence interval on the mean age-adjusted incidence rate:	3.8 - 6.7
Median age-adjusted incidence rate of health districts:	6.5
Range of age-adjusted incidence rate for health districts:	2.3 - 6.9
SEER rate (1998, Whites):	7.4

There were no cases of stomach cancer among persons aged less than 40 years. The age-specific incidence rates of stomach cancer increased with age, peaking in the 75-79 age group for males and 80-84 for females. Health District 4 had statistically significantly fewer cases than expected based upon rates for the remainder of Idaho ($p < 0.05$).



TESTIS

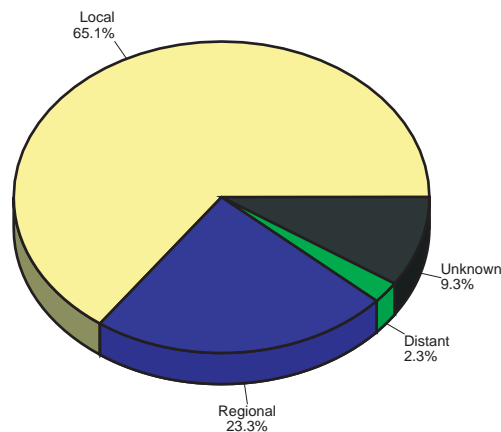
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	6.9	-
# of new invasive cases	-	43	-
# of new in-situ cases	-	0	-
# of deaths	-	2	-

Total Cases By County

Ada	15	Cassia	-	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	5	Clearwater	-	Madison	-
Bear Lake	-	Custer	-	Minidoka	3
Benewah	-	Elmore	3	Nez Perce	1
Bingham	-	Franklin	-	Oneida	-
Blaine	-	Fremont	-	Owyhee	-
Boise	-	Gem	1	Payette	1
Bonner	-	Gooding	1	Power	-
Bonneville	2	Idaho	-	Shoshone	-
Boundary	-	Jefferson	1	Teton	-
Butte	-	Jerome	1	Twin Falls	1
Camas	-	Kootenai	5	Valley	-
Canyon	1	Latah	1	Washington	-
Caribou	-	Lemhi	1		

Stage at Diagnosis - Testis



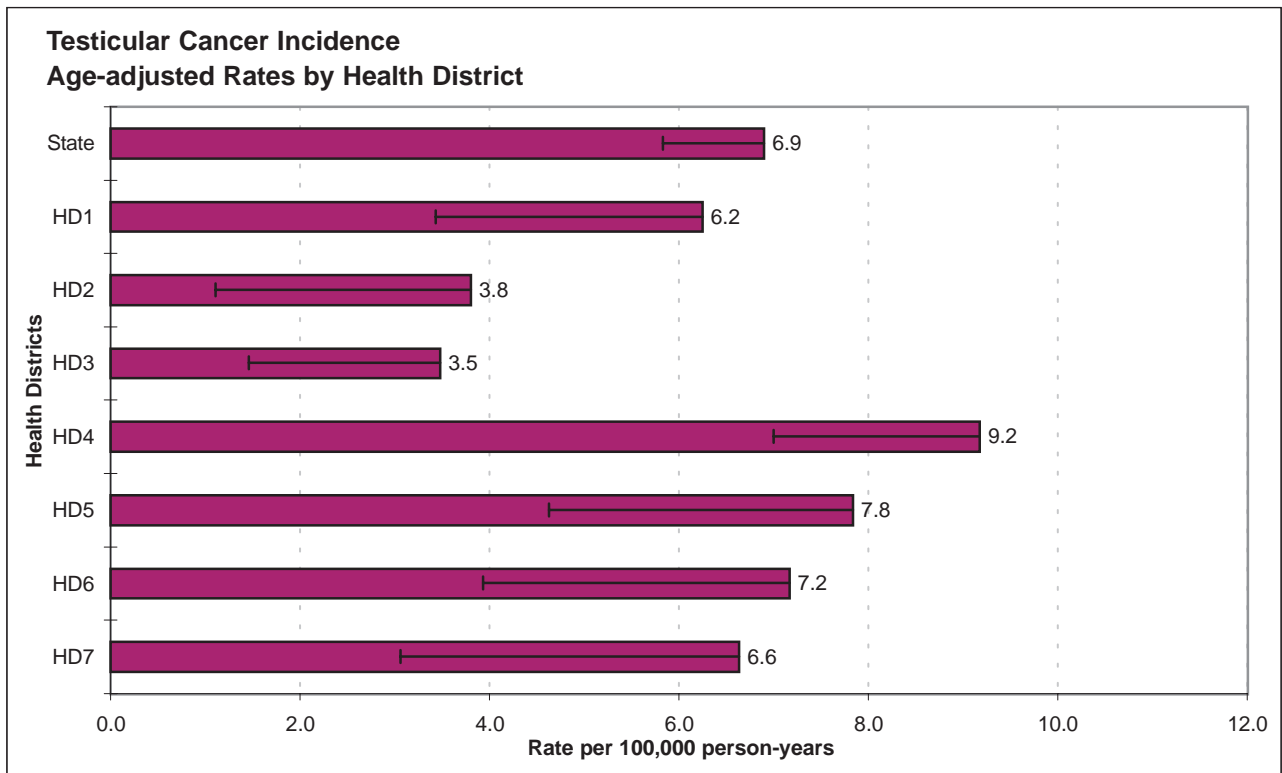
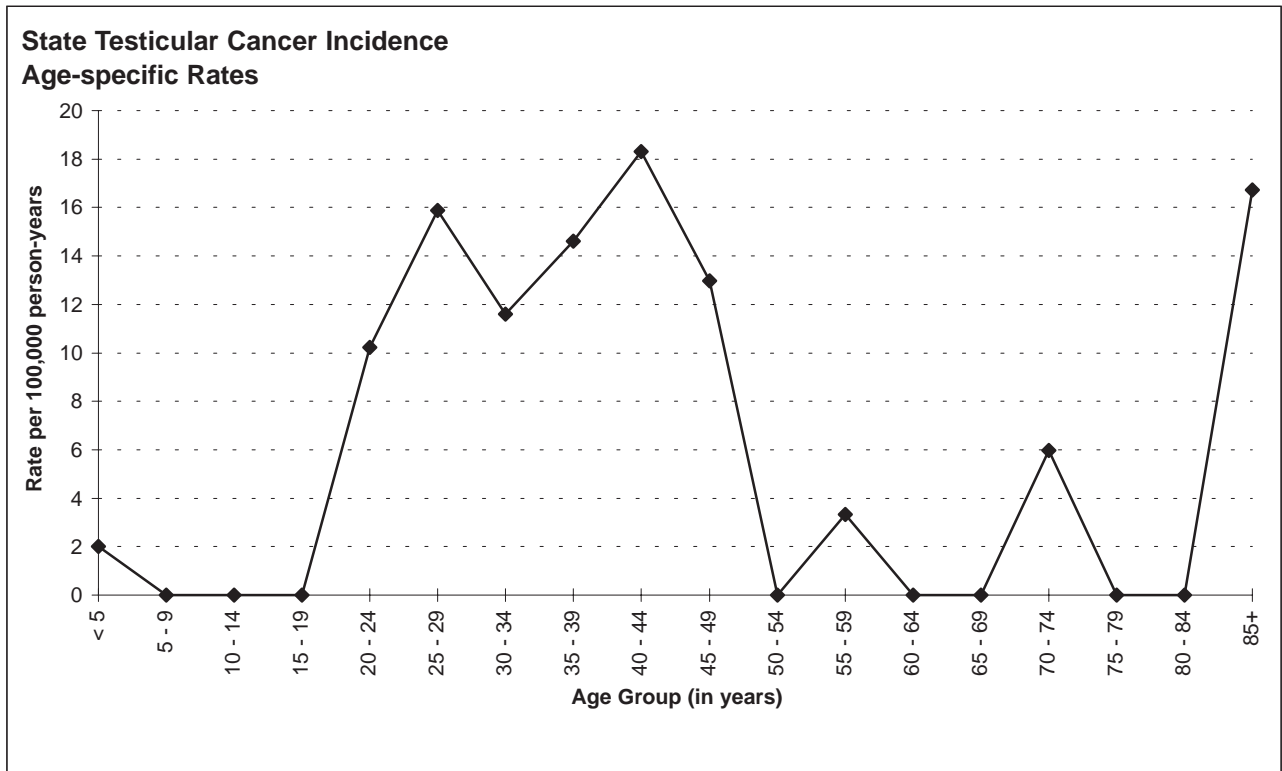
Risk and Associated Factors

- Age** This is the most common cancer in young males, especially males between the ages of 20 and 34.
- Race** Incidence rates are substantially higher in Caucasian males than in African American males.
- Other** Undescended testis, a minor abnormality that can usually be detected and corrected with surgery in childhood, is responsible for a substantially high risk for testicular cancer when uncorrected. The extent to which surgical correction reduces cancer risk is unclear. Some evidence suggests that males exposed in utero to diethylstilbestrol (DES) are at increased risk. With current treatment the cure rates for testicular cancer are greater than 80%.

Special Notes

Mean age-adjusted incidence rate across health districts:	6.3
95% confidence interval on the mean age-adjusted incidence rate:	4.8 - 7.9
Median age-adjusted incidence rate of health districts:	6.6
Range of age-adjusted incidence rate for health districts:	3.5 - 9.2
SEER rate (1998, Whites):	6.3

There were few cases of testicular cancer among persons aged 50-84 years. The highest age-specific incidence rate was in the 40-44 age group. Health District 4 had statistically significantly more cases than expected based upon rates for the remainder of Idaho ($p < 0.05$).



THYROID

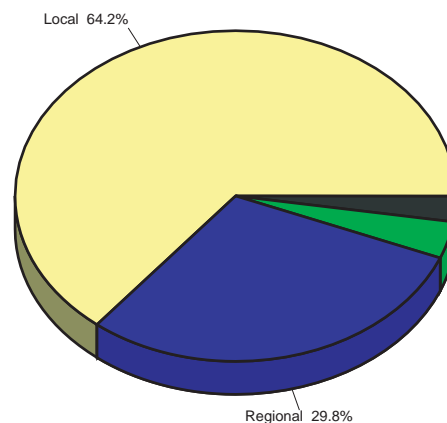
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	6.8	2.5	11.0
# of new invasive cases	84	15	69
# of new in-situ cases	0	0	0
# of deaths	1	1	0

Total Cases By County

Ada	31	Cassia	-	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	4	Clearwater	1	Madison	1
Bear Lake	-	Custer	-	Minidoka	-
Benewah	-	Elmore	-	Nez Perce	2
Bingham	3	Franklin	-	Oneida	-
Blaine	1	Fremont	-	Owyhee	-
Boise	-	Gem	-	Payette	-
Bonner	-	Gooding	2	Power	-
Bonneville	7	Idaho	-	Shoshone	-
Boundary	2	Jefferson	3	Teton	-
Butte	-	Jerome	-	Twin Falls	9
Camas	-	Kootenai	9	Valley	-
Canyon	6	Latah	3	Washington	-
Caribou	-	Lemhi	-		

Stage at Diagnosis - Thyroid



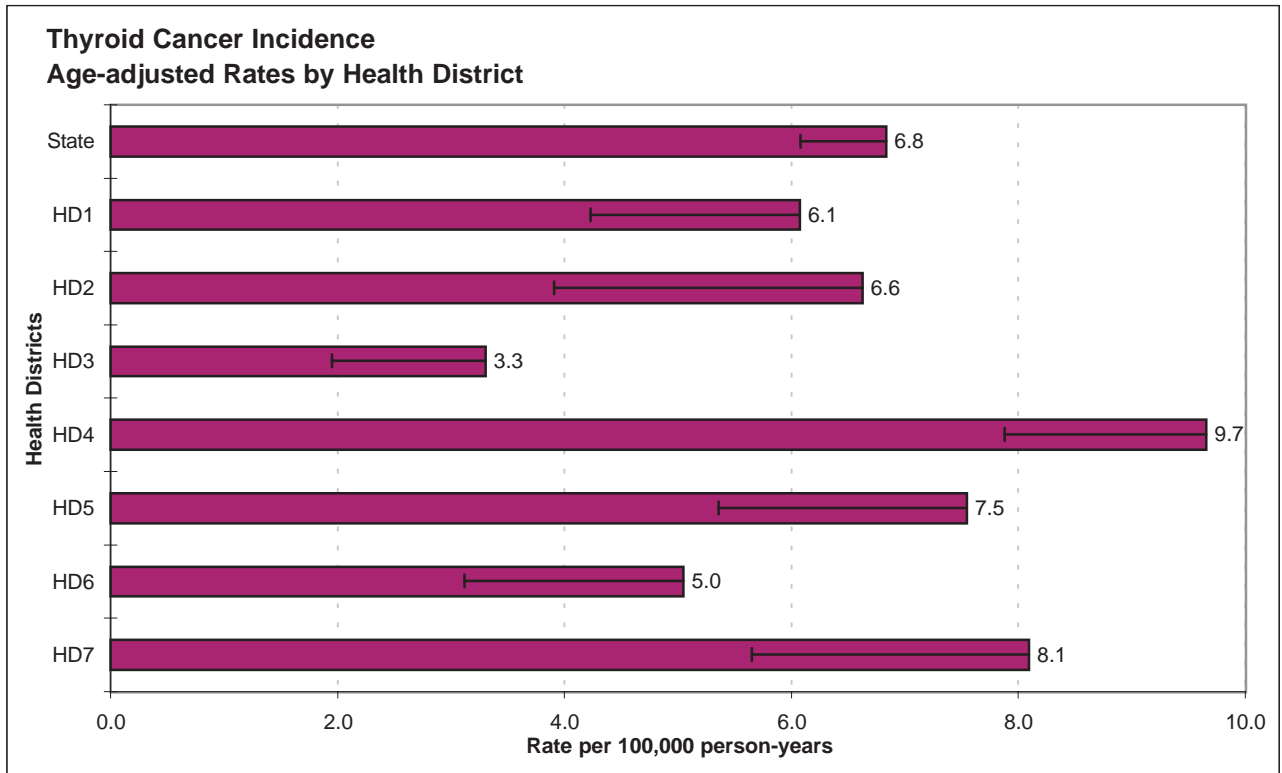
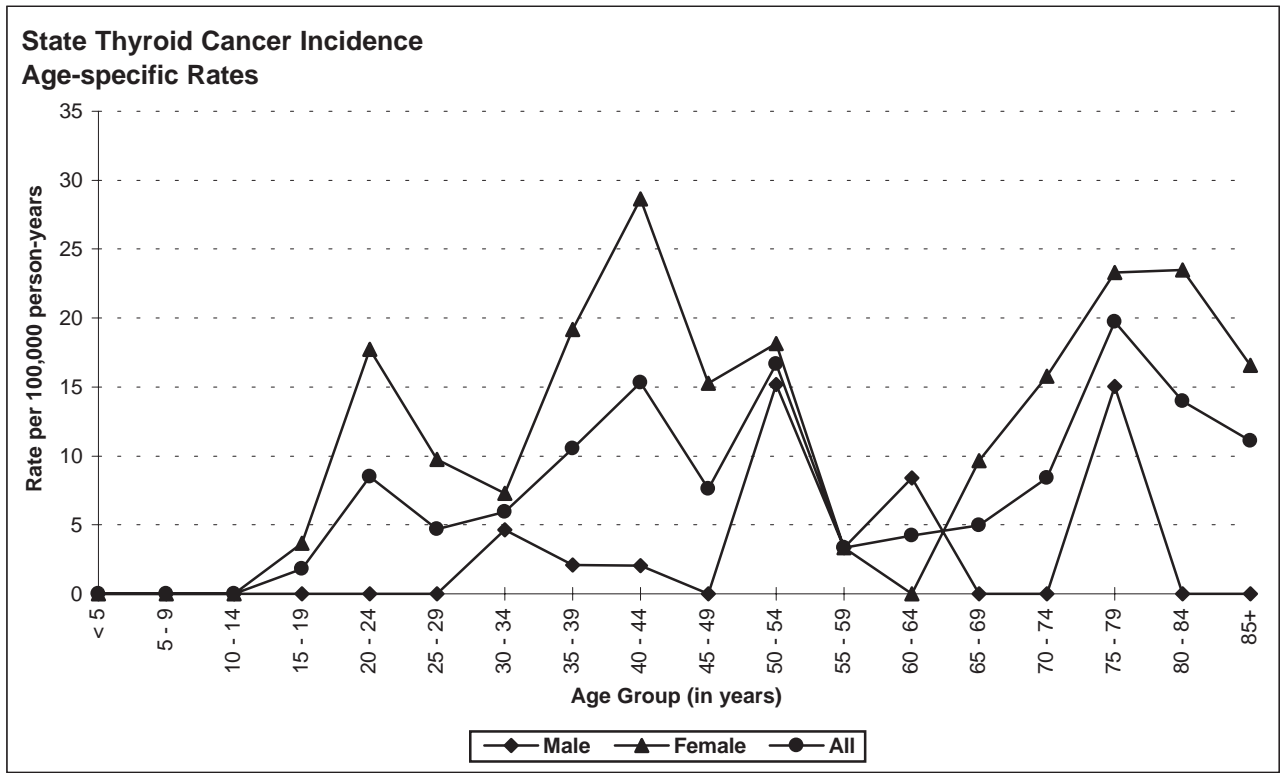
Risk and Associated Factors

Age	Though relatively unusual, it is still one of the most common malignancies affecting adolescents and adults up to 50 years of age.
Gender	Two-thirds of the cases are among females.
Race & SES	The incidence is higher in Caucasians and in upper income groups.
Hormonal	Hormonal factors are believed to contribute to the increased risk in females. This is demonstrated by the sharp increase in incidence among women after menarche.
Other	Occupational and environmental exposures to ionizing radiation have been associated with higher rates of thyroid cancer. Radiation exposure to the head and neck in childhood is a well-known risk factor. Family history of thyroid cancer substantially increases the risk. Death due to thyroid cancer under age 40 is rare. Prognosis worsens with each decade of age over 50.

Special Notes

Mean age-adjusted incidence rate across health districts:	6.6
95% confidence interval on the mean age-adjusted incidence rate:	5.1 - 8.2
Median age-adjusted incidence rate of health districts:	6.6
Range of age-adjusted incidence rate for health districts:	3.3 - 9.7
SEER rate (1998, Whites):	6.6

There were no cases of thyroid cancer among persons aged less than 15 years. The age-specific incidence rates of thyroid cancer were typically higher for females than males. Health District 4 had statistically significantly more cases than expected based upon rates for the remainder of Idaho ($p < 0.05$).



SECTION II

STATE OF IDAHO - 2000 INCIDENCE DATA BY SITE AND GENDER

Idaho Resident Cancer Cases (in-situ) - 2000

PRIMARY SITE OF CANCER	TOTAL	SEX	
		Male	Female
TOTAL NEW CANCER CASES (in-situ)	533	229	304
BUCCAL CAVITY AND PHARYNX	6	5	1
Lip	3	3	0
Tongue	2	2	0
Major salivary glands	0	0	0
Gum and other mouth	1	0	1
Nasopharynx	0	0	0
Oropharynx	0	0	0
Hypopharynx	0	0	0
Tonsil and other buccal cavity	0	0	0
DIGESTIVE SYSTEM	27	12	15
Esophagus	4	3	1
Stomach	1	0	1
Small intestine	1	0	1
Colon excluding rectum	14	5	9
Rectum, rectosigmoid and anus	7	4	3
Liver & bile duct	0	0	0
Gallbladder and other biliary	0	0	0
Pancreas	0	0	0
Peritoneum and retroperitoneum	0	0	0
Other digestive	0	0	0
RESPIRATORY SYSTEM	3	2	1
Larynx	3	2	1
Lung and bronchus	0	0	0
Trachea, pleura, and other	0	0	0
SKIN	199	113	86
Melanoma of skin	199	113	86
Other skin cancers	0	0	0
BREAST	149	1	148
FEMALE GENITAL SYSTEM	25	0	25
Cervix uteri	n/a	n/a	n/a
Corpus uteri (endometrium)	4	0	4
Ovary	0	0	0
Vagina	3	0	3
Vulva	17	0	17
Uterus, NOS and other female genital organs	1	0	1
MALE GENITAL SYSTEM	2	2	0
Prostate gland	1	1	0
Testis	0	0	0
Penis and other male genital organs	1	1	0
URINARY SYSTEM	122	94	28
Urinary bladder	115	89	26
Kidney and renal pelvis	3	2	1
Ureter and other urinary organs	4	3	1
LYMPHATIC AND HEMATOPOIETIC TISSUE	0	0	0
Hodgkin's lymphoma	0	0	0
Non-Hodgkins lymphoma	0	0	0
Multiple myeloma	0	0	0
Acute lymphocytic	0	0	0
Chronic lymphocytic	0	0	0
Acute Myeloid	0	0	0
Chronic Myeloid	0	0	0
Other	0	0	0
OTHER OR UNKNOWN SITES	0	0	0
Eye	0	0	0
Brain	0	0	0
Other nervous system	0	0	0
Thyroid gland	0	0	0
Other endocrine	0	0	0
Bones and joints	0	0	0
Soft tissue (including heart)	0	0	0
Other sites, Ill-defined sites or unknown sites	0	0	0

Idaho Resident Cancer Cases (invasive) - 2000

PRIMARY SITE OF CANCER	TOTAL	SEX	
		Male	Female
TOTAL NEW CANCER CASES (invasive)	5,223	2,749	2,473
BUCCAL CAVITY AND PHARYNX	147	99	48
Lip	41	34	7
Tongue	22	14	8
Major salivary glands	21	12	9
Gum and other mouth	16	7	9
Nasopharynx	6	4	2
Oropharynx	4	2	2
Hypopharynx	5	4	1
Tonsil and other buccal cavity	32	22	10
DIGESTIVE SYSTEM	889	449	440
Esophagus	69	51	18
Stomach	62	32	30
Small intestine	27	14	13
Colon excluding rectum	390	178	212
Rectum, rectosigmoid and anus	171	91	80
Liver & bile duct	32	22	10
Gallbladder and other biliary	28	12	16
Pancreas	92	43	49
Peritoneum and retroperitoneum	13	4	9
Other digestive	5	2	3
RESPIRATORY SYSTEM	739	457	282
Larynx	35	32	3
Lung and bronchus	692	418	274
Trachea, pleura, and other	12	7	5
SKIN	241	143	97
Melanoma of skin	234	139	94
Other skin cancers	7	4	3
BREAST	834	8	826
FEMALE GENITAL SYSTEM	294	0	294
Cervix uteri	39	0	39
Corpus uteri (endometrium)	137	0	137
Ovary	98	0	98
Vagina	3	0	3
Vulva	8	0	8
Uterus, NOS and other female genital organs	9	0	9
MALE GENITAL SYSTEM	977	977	0
Prostate gland	927	927	0
Testis	43	43	0
Penis and other male genital organs	7	7	0
URINARY SYSTEM	284	198	86
Urinary bladder	145	117	28
Kidney and renal pelvis	134	78	56
Ureter and other urinary organs	5	3	2
LYMPHATIC AND HEMATOPOIETIC TISSUE	451	252	199
Hodgkin's lymphoma	28	20	8
Non-Hodgkins lymphoma	231	118	113
Multiple myeloma	56	33	23
Acute lymphocytic leukemia	19	8	11
Chronic lymphocytic leukemia	35	21	14
Acute myeloid leukemia	38	23	15
Chronic myeloid leukemia	25	15	10
Other leukemia	19	14	5
OTHER OR UNKNOWN SITES	367	166	201
Eye	5	2	3
Brain	86	52	34
Other nervous system	4	2	2
Thyroid gland	84	15	69
Other endocrine	3	3	0
Bones and joints	14	5	9
Soft tissue (including heart)	43	20	23
Other sites, Ill-defined sites or unknown sites	128	67	61

SECTION III

STATE OF IDAHO - 2000 MORTALITY DATA BY SITE AND GENDER

Idaho Resident Cancer Deaths - 2000

ICD-10 CODE	SITE OF MALIGNANT NEOPLASM	TOTAL	SEX	
			Male	Female
C00-C97	TOTAL MALIGNANT NEOPLASM DEATHS	2,131	1,128	1,003
C00-C14	LIP, ORAL CAVITY AND PHARYNX	38	22	16
C00	Lip	-	-	-
C01-C02	Tongue	8	4	4
C10-C13, C14.0	Pharynx	15	14	1
C03-C09, C14.2-C14.8	Other and unspecified sites within the lip, oral cavity, and pharynx	15	4	11
C15-C26	DIGESTIVE ORGANS	457	249	208
C15	Esophagus	47	34	13
C16	Stomach	40	26	14
C17	Small intestine	6	5	1
C18	Colon	152	70	82
C19-C20	Rectosigmoid junction and rectum	33	21	12
C21	Anus and anal canal	3	-	3
C22.0, C22.2-C22.9	Liver	31	26	5
C22.1	Intrahepatic bile duct	13	8	5
C23-C24	Gallbladder and extrahepatic bile ducts	13	7	6
C25	Pancreas	110	46	64
C26	Other and ill-defined digestive organs	9	6	3
C30-C39	RESPIRATORY AND INTRATHORACIC ORGANS	557	332	225
C30-C31	Nasal cavity, middle ear, and accessory sinuses	2	-	2
C32	Larynx	16	15	1
C33-C34	Trachea, bronchus, and lung	538	316	222
C37-C38	Thymus, heart, mediastinum, and pleura	1	1	-
C39	Other and ill-defined sites in the respiratory system and intrathoracic organs	-	-	-
C40-C41	BONE AND ARTICULAR CARTILAGE	5	1	4
C43-C44	MELANOMA AND OTHER MALIGNANT NEOPLASMS OF SKIN	51	33	18
C43	Melanoma of skin	37	22	15
C44	Other malignant neoplasms of skin	14	11	3
C45-C49	MESOTHELIAL AND SOFT TISSUE	34	21	13
C45	Mesothelioma	13	8	5
C46	Kaposi's sarcoma	-	-	-
C47-C49	Other mesothelial and soft tissue	21	13	8
C50	BREAST	179	1	178
C51-C58	FEMALE GENITAL ORGANS	103	-	103
C51-C52	Vulva and vagina	5	-	5
C53	Cervix uteri	10	-	10
C54-C55	Corpus uteri and uterus, part unspecified	22	-	22
C56	Ovary	65	-	65
C57	Other and unspecified female genital organs	1	-	1
C58	Placenta	-	-	-

Idaho Resident Cancer Deaths - 2000

ICD-10 CODE	SITE OF MALIGNANT NEOPLASM	TOTAL	SEX	
			Male	Female
C60-C63	MALE GENITAL ORGANS	164	164	-
C61	Prostate	160	160	-
C62	Testis	2	2	-
C60, C63	Penis and other and unspecified male genital organs	2	2	-
C64-C68	URINARY TRACT	100	62	38
C64-C65	Kidney and renal pelvis	46	24	22
C67	Bladder	53	37	16
C66, C68	Other and unspecified sites within the urinary tract	1	1	-
C69	EYE AND ADNEXA	-	-	-
C70-C72	MENINGES, BRAIN, AND OTHER PARTS OF CENTRAL NERVOUS SYSTEM	67	39	28
C71	Brain	66	39	27
C70, C72	Other parts of central nervous system	1	-	1
C73-C75	THYROID AND OTHER ENDOCRINE GLANDS	3	3	-
C76-C80, C97	OTHER MALIGNANT NEOPLASMS OF OTHER AND UNSPECIFIED SITES	126	63	63
C81-C96	LYMPHOID, HEMATOPOIETIC, AND RELATED TISSUE	247	138	109
C81	Hodgkin's disease	6	2	4
C82-C85	Non-Hodgkin's lymphoma	108	53	55
C88	Malignant immunoproliferative diseases	2	2	-
C90	Multiple myeloma and malignant plasma cell neoplasms	41	27	14
C91	Lymphoid leukemia	31	19	12
C92	Myeloid leukemia	41	26	15
C93	Monocytic leukemia	-	-	-
C94-C95	Other and unspecified leukemia	18	9	9
C96	Other and unspecified malignant neoplasms of lymphoid, hematopoietic, and related tissue	-	-	-

* Source: Idaho Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare.¹³

The manner of coding the underlying cause of death changed in 1999 from the ninth revision (ICD-9) to the tenth revision of the International Classification of Diseases (ICD-10). The introduction of ICD-10 resulted in a major reclassification of all causes of death from a numeric classification to an alphanumeric classification. The tenth revision also resulted in new titles for causes, the inclusion of terms and titles from one category to another, regroupings of diseases, and modifications of the coding rules. The introduction of ICD-10 created discontinuities in trend data for some causes of death; therefore, the numbers of deaths in 1999 and later years by site of malignant neoplasm may not be comparable to previously published data for numbers of deaths by site for years prior to 1999. The extent of the discontinuity is measured using a comparability ratio. The National Center for Health Statistics has constructed comparability ratios for the leading causes of death to measure the discontinuity between the data tabulated by the tenth revision and data tabulated by the ninth revision. The comparability ratio for malignant neoplasms based on ICD-10 (codes C00-C97) to ICD-9 (codes 140-208) is 1.01. For more information on ICD, comparability ratios, or Idaho cancer mortality trends, contact the Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare, at (208) 334-6658.

SECTION IV

2000 AGE SPECIFIC INCIDENCE RATES PER 100,000 POPULATION BY SITE AND GENDER

IDAHO

AGE SPECIFIC CANCER RATES, PER 100,000 POPULATION, BY SITE AND GENDER

2000

Age (years)	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85+
All Cancers																		
All	16.4	10.9	14.3	16.2	28.7	50.5	71.2	120.1	189.7	315.7	500.8	846.3	1193.6	1720.2	2178.7	2351.9	2494.6	2043.5
Male	14.0	11.6	18.6	12.5	22.5	49.9	55.7	106.4	136.3	224.7	412.7	991.7	1333.3	2132.4	2826.8	2959.3	3252.6	3143.3
Female	18.9	10.2	9.8	20.1	35.5	51.2	87.4	134.1	241.3	407.6	591.0	701.6	1053.5	1332.9	1607.7	1882.0	1980.3	1498.8
Bladder																		
All	0.0	0.0	0.0	0.0	0.0	1.2	1.2	2.1	5.1	9.8	17.9	30.0	58.9	87.1	114.5	141.3	144.6	177.2
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	6.1	15.1	32.9	50.1	92.5	174.7	167.0	263.6	265.3	401.3
Female	0.0	0.0	0.0	0.0	0.0	2.4	2.4	0.0	4.1	4.4	2.6	10.0	25.3	4.8	68.3	46.6	62.6	66.3
Brain																		
All	2.1	3.0	1.0	1.8	1.1	4.7	4.7	7.4	8.2	6.5	9.0	6.7	14.7	14.9	30.7	16.4	23.3	16.6
Male	2.0	0.0	1.9	1.8	0.0	9.1	4.6	10.4	10.2	10.8	12.7	13.4	8.4	20.6	47.7	15.1	34.6	0.0
Female	2.1	6.1	0.0	1.8	2.2	0.0	4.9	4.3	6.1	2.2	5.2	0.0	21.1	9.7	15.8	17.5	15.7	24.8
Breast																		
Female	0.0	0.0	0.0	1.8	0.0	12.2	29.1	44.7	94.1	189.6	259.2	286.0	332.9	400.8	562.2	536.0	571.4	281.6
Cervix Uteri																		
Female	0.0	0.0	0.0	0.0	0.0	0.0	2.4	10.6	12.3	17.4	10.4	16.6	12.6	9.7	15.8	5.8	7.8	0.0
Colon																		
All	0.0	0.0	0.0	0.0	0.0	0.0	1.2	7.4	5.1	11.9	23.1	40.0	71.6	129.5	164.8	246.4	270.5	254.8
Male	0.0	0.0	0.0	0.0	0.0	0.0	2.3	6.3	8.1	13.0	15.2	43.4	79.9	118.2	190.8	218.4	311.4	250.8
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	2.0	10.9	31.1	36.6	63.2	140.1	141.9	268.0	242.6	256.7
Endometrium																		
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4	21.8	54.4	56.5	80.1	72.4	73.6	52.4	133.1	49.7
Esophagus																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.0	3.3	6.4	18.3	21.1	14.9	22.4	42.7	32.6	22.2
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.0	6.5	12.7	36.7	29.4	10.3	29.8	67.8	57.7	33.4
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	19.3	15.8	23.3	15.7	16.6
Hodgkin's Lymphoma																		
All	1.0	0.0	1.9	0.9	4.3	4.7	3.6	3.2	1.0	1.1	1.3	1.7	6.3	0.0	0.0	0.0	4.7	11.1
Male	2.0	0.0	1.9	1.8	6.1	9.1	4.6	2.1	2.0	2.2	0.0	0.0	12.6	0.0	0.0	0.0	0.0	33.4
Female	0.0	0.0	2.0	0.0	2.2	0.0	2.4	4.3	0.0	0.0	2.6	3.3	0.0	0.0	0.0	0.0	7.8	0.0

IDAHO

AGE SPECIFIC CANCER RATES, PER 100,000 POPULATION, BY SITE AND GENDER

2000

Age (years)	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85+
Kidney & Renal Pelvis																		
All	2.1	0.0	0.0	1.8	0.0	1.2	0.0	2.1	6.1	6.5	6.4	40.0	37.9	47.3	53.1	49.3	32.6	44.3
Male	0.0	0.0	0.0	1.8	0.0	0.0	0.0	4.2	8.1	8.6	7.6	50.1	42.1	56.5	71.6	52.7	46.1	83.6
Female	4.2	0.0	0.0	1.8	0.0	2.4	0.0	0.0	4.1	4.4	5.2	29.9	33.7	38.6	36.8	46.6	23.5	24.8
Larynx																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	1.1	1.3	8.3	2.1	7.5	25.1	26.3	9.3	11.1
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.1	2.2	2.5	13.4	4.2	10.3	53.7	52.7	23.1	33.4
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	4.8	0.0	5.8	0.0	0.0
Leukemia																		
All	6.1	4.0	2.9	2.7	1.1	0.0	3.6	4.2	4.1	2.2	10.3	10.0	19.0	39.8	33.5	82.1	88.6	60.9
Male	4.0	3.9	5.6	3.6	0.0	0.0	4.6	8.3	4.1	2.2	15.2	10.0	16.8	56.5	41.8	105.4	138.4	100.3
Female	8.4	4.1	0.0	1.8	2.2	0.0	2.4	0.0	4.1	2.2	5.2	10.0	21.1	24.2	26.3	64.1	54.8	41.4
Liver & Bile Duct																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.0	2.2	2.6	3.3	10.5	14.9	14.0	16.4	4.7	5.5
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.0	4.3	2.5	3.3	21.0	10.3	17.9	30.1	11.5	16.7
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.6	3.3	0.0	19.3	10.5	5.8	0.0	0.0
Lung & Bronchus																		
All	0.0	0.0	0.0	0.0	0.0	2.4	2.4	1.1	10.2	18.4	35.9	101.6	143.1	311.2	388.3	377.8	391.7	221.5
Male	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	12.2	19.4	43.0	133.6	143.0	400.8	530.8	512.1	611.3	367.8
Female	0.0	0.0	0.0	0.0	0.0	4.9	0.0	2.1	8.2	17.4	28.5	69.8	143.3	227.0	262.7	273.8	242.6	149.1
Melanoma of the Skin																		
All	0.0	0.0	0.0	2.7	3.2	4.7	7.1	20.0	15.3	31.5	34.6	36.7	42.1	47.3	53.1	75.6	60.6	66.5
Male	0.0	0.0	0.0	3.6	2.0	4.5	7.0	25.0	10.2	32.4	35.4	56.8	58.9	61.7	77.5	97.9	103.8	117.0
Female	0.0	0.0	0.0	1.8	4.4	4.9	7.3	14.9	18.4	30.5	33.7	16.6	25.3	33.8	31.5	58.3	31.3	41.4
Myeloma																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	3.8	10.0	16.8	7.5	27.9	29.6	42.0	33.2
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	10.0	21.0	15.4	41.8	30.1	57.7	66.9
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	2.6	10.0	12.6	0.0	15.8	29.1	31.3	16.6
Non-Hodgkin's Lymphoma																		
All	1.0	2.0	1.9	0.9	2.1	3.5	4.7	10.5	9.2	15.2	21.8	31.7	31.6	77.2	72.6	108.4	88.6	127.4
Male	2.0	3.9	1.9	0.0	4.1	4.5	2.3	12.5	10.2	13.0	30.4	33.4	25.2	87.4	77.5	113.0	103.8	167.2
Female	0.0	0.0	2.0	1.8	0.0	2.4	7.3	8.5	8.2	17.4	13.0	29.9	37.9	67.6	68.3	104.9	78.3	107.7

IDAHO

AGE SPECIFIC CANCER RATES, PER 100,000 POPULATION, BY SITE AND GENDER

2000

Age (years)	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85+
Oral Cavity & Pharynx																		
All	0.0	0.0	1.0	0.0	0.0	1.2	0.0	2.1	6.1	9.8	16.7	26.7	44.2	47.3	67.0	42.7	28.0	88.6
Male	0.0	0.0	0.0	0.0	0.0	2.3	0.0	2.1	8.1	13.0	15.2	36.7	63.1	77.1	107.4	67.8	34.6	167.2
Female	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.1	4.1	6.5	18.2	16.6	25.3	19.3	31.5	23.3	23.5	49.7
Ovary																		
Female	0.0	0.0	3.9	0.0	2.2	4.9	12.1	8.5	16.4	26.2	33.7	16.6	50.6	53.1	21.0	29.1	62.6	49.7
Pancreas																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.0	4.3	10.3	11.7	10.5	24.9	30.7	55.8	74.6	60.9
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.0	2.2	12.7	10.0	12.6	30.8	29.8	67.8	69.2	50.2
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.5	7.8	13.3	8.4	19.3	31.5	46.6	78.3	66.3
Prostate																		
Male	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	10.2	28.1	103.8	407.4	517.4	847.8	1133.1	994.0	991.9	819.3
Rectum & Rectosigmoid																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.0	10.9	10.3	26.7	71.6	29.9	67.0	65.7	69.9	83.1
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	13.0	7.6	30.1	84.1	36.0	89.5	67.8	69.2	150.5
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	8.7	13.0	23.3	59.0	24.2	47.3	64.1	70.4	49.7
Stomach																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	10.3	10.0	16.8	24.9	33.5	26.3	28.0	16.6
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	15.2	6.7	16.8	20.6	35.8	45.2	11.5	33.4
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	13.3	16.9	29.0	31.5	11.7	39.1	8.3
Testis																		
Male	2.0	0.0	0.0	0.0	10.2	15.9	11.6	14.6	18.3	13.0	0.0	3.3	0.0	0.0	6.0	0.0	0.0	16.7
Thyroid																		
All	0.0	0.0	0.0	1.8	8.5	4.7	5.9	10.5	15.3	7.6	16.7	3.3	4.2	5.0	8.4	19.7	14.0	11.1
Male	0.0	0.0	0.0	0.0	0.0	0.0	4.6	2.1	2.0	0.0	15.2	3.3	8.4	0.0	0.0	15.1	0.0	0.0
Female	0.0	0.0	0.0	3.7	17.8	9.8	7.3	19.2	28.6	15.3	18.2	3.3	0.0	9.7	15.8	23.3	23.5	16.6

SECTION V

2000 OBSERVED VS. EXPECTED NUMBERS BY HEALTH DISTRICT

**2000 OBSERVED VERSUS EXPECTED NUMBERS
BY
HEALTH DISTRICT**

ALL SEXES

	HD 1		HD 2		HD 3		HD 4		HD 5		HD 6		HD 7	
	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP
All Sites	931	829.2*	460	490.9	754	824.1+	1344	1207.9*	700	740.3	499	635.8*	542	597.7+
Bladder	52	39.4+	31	23.9	33	41.8	64	56.9	30	37.6	24	31.1	25	28.8
Brain	13	13.0	8	7.1	10	13.4	24	21.6	9	11.7	8	10.3	12	9.5
Breast	141	130.8	68	75.2	113	126.4	226	191.7+	112	112.8	84	97.7	87	93.4
Cervix	6	6.1	5	3.1	5	5.7	10	10.5	8	4.6	2	4.7	3	4.6
Colon	71	59.9	41	36.6	63	60.6	83	88.7	44	57.1	42	45.9	42	42.4
Endometrium	27	21.0	11	12.6	22	20.3	34	31.9	17	18.9	11	16.5	13	15.5
Esophagus	13	10.7	5	6.5	14	10.0	14	16.6	8	9.8	7	8.1	6	7.9
Hodgkin's lymphoma	7	3.2+	1	2.4	2	4.6	10	6.6	4	3.4	0	3.8	4	3.2
Kidney and renal pelvis	18	22.1	13	12.1	21	20.2	36	30.1	17	18.5	13	16.0	15	15.1
Larynx	5	5.7	7	2.9+	3	5.8	6	8.5	6	4.7	6	3.8	2	4.1
Leukemia	26	19.6	13	12.0	23	20.8	31	31.6	19	18.8	10	16.9	14	15.4
Liver & bile duct	7	4.8	3	2.9	5	4.8	6	8.0	6	4.1	2	3.9	3	3.6
Lung and bronchus	140	105.4*	70	64.5	112	106.2	180	147.2*	86	99.1	41	86.0*	60	78.3+
Melanoma of skin	48	33.9+	17	20.4	27	35.5	62	56.5	30	30.9	18	27.9	15	27.6+
Myeloma	11	8.6	4	5.4	7	9.1	18	10.9+	7	8.0	4	6.8	4	6.4
Non-Hodgkin's lymphoma	42	35.0	15	21.5	38	34.8	51	55.8	26	32.6	31	26.3	25	25.7
Oral cavity and pharynx	28	22.6	3	14.4*	17	23.0	28	36.1	29	18.6+	19	16.7	10	16.9
Ovary	9	16.5	6	8.7	19	13.8	25	24.4	9	13.6	20	10.2*	10	11.0
Pancreas	20	13.5	2	9.4+	11	14.9	24	19.8	15	12.6	9	10.9	10	10.0
Prostate	138	152.7	98	85.6	106	149.6*	238	196.3*	128	130.1	81	111.5*	89	104.4
Rectum & rectosigmoid	26	25.0	10	15.0	27	23.3	31	36.4	26	21.1	12	18.9	22	16.6
Stomach	13	9.5	6	5.7	12	9.0	7	16.1+	4	9.3	9	7.0	9	6.6
Testis	5	5.9	2	3.5	3	6.7	18	10.1+	6	5.0	5	5.0	4	5.1
Thyroid	11	12.3	6	7.2	6	13.1	31	20.0+	12	10.3	7	10.1	11	9.7

+ Statistically significant difference at p=0.05 or less.

* Statistically significant difference at p=0.01 or less.

Note: Observed and expected numbers exclude in-situ cases, basal/squamous skin cases, and cases with unknown age and/or gender.

**2000 OBSERVED VERSUS EXPECTED NUMBERS
BY
HEALTH DISTRICT**

MALES

	HD 1		HD 2		HD 3		HD 4		HD 5		HD 6		HD 7	
	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP
All Sites	478	455.6	259	268.4	394	438.0+	681	620.8+	391	396.4	269	339.3*	280	320.7+
Bladder	40	32.3	28	19.0+	26	32.9	49	43.9	25	30.0	16	25.1	21	22.9
Brain	11	7.4	6	4.2	6	7.9	11	14.7	7	6.8	5	6.2	4	6.1
Breast	2	1.1	1	0.7	1	1.2	3	1.4	0	1.3	1	0.9	0	1.0
Cervix	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colon	34	27.8	21	16.8	23	28.3	36	39.4	19	26.4	25	20.2	16	20.1
Endometrium	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Esophagus	7	8.5	2	5.0	11	7.1	11	12.2	6	7.2	7	5.7	5	5.8
Hodgkin's lymphoma	5	2.2	1	1.8	1	3.3	8	4.4	2	2.6	0	2.7	3	2.3
Kidney and renal pelvis	9	13.4	7	7.3	11	11.8	22	17.0	9	11.0	8	9.2	11	8.5
Larynx	4	5.4	7	2.6*	3	5.3	5	7.6	6	4.3	5	3.6	2	3.8
Leukemia	14	12.2	10	7.1	13	12.5	17	18.8	12	11.2	8	9.7	7	9.4
Liver & bile duct	4	3.5	1	2.2	4	3.2	5	5.1	4	2.9	1	2.8	3	2.4
Lung and bronchus	73	67.4	37	40.7	79	61.4+	98	88.3	61	58.8	27	51.9*	40	47.3
Melanoma of skin	28	20.6	11	12.4	10	22.1*	36	33.0	22	17.9	13	16.3	10	16.3
Myeloma	7	5.1	3	3.3	5	5.1	7	7.1	4	4.9	3	4.0	3	3.7
Non-Hodgkin's lymphoma	25	17.4	7	11.1	23	17.0	25	28.6	12	16.8	13	13.8	11	13.5
Oral cavity and pharynx	20	15.3	0	10.1*	11	15.4	19	23.3	20	12.5+	14	11.1	7	11.4
Ovary	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pancreas	9	6.5	2	4.3	8	6.3	11	8.9	5	6.2	4	5.1	3	5.0
Prostate	138	156.5	98	88.0	106	147.8*	238	189.3*	128	130.7	81	112.1*	89	105.2
Rectum & rectosigmoid	16	13.6	3	8.6	11	13.2	17	19.1	15	11.4	10	9.9	11	9.2
Stomach	4	5.5	4	2.9	9	4.0+	3	8.4	1	5.0	5	3.6	5	3.4
Testis	5	5.8	2	3.5	3	6.6	18	10.3+	6	5.0	5	4.9	4	5.1
Thyroid	3	2.2	1	1.3	1	2.3	1	5.3	2	1.9	2	1.6	5	1.3*

+ Statistically significant difference at p=0.05 or less.

* Statistically significant difference at p=0.01 or less.

Note: Observed and expected numbers exclude in-situ cases, basal/squamous skin cases, and cases with unknown age and/or gender.

**2000 OBSERVED VERSUS EXPECTED NUMBERS
BY
HEALTH DISTRICT**

FEMALES

	HD 1		HD 2		HD 3		HD 4		HD 5		HD 6		HD 7	
	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP	OBS	EXP
All Sites	453	378.3*	201	224.5	360	385.3	663	577.1*	309	345.8+	230	297.4*	262	277.8
Bladder	12	7.7	3	5.2	7	8.8	15	11.6	5	8.0	8	6.0	4	6.1
Brain	2	5.6	2	2.9	4	5.4	13	7.0+	2	4.9	3	4.2	8	3.3*
Breast	139	128.5	67	73.0	112	126.5	223	192.4+	112	111.4	83	96.6	87	92.0
Cervix	6	6.2	5	3.0	5	5.7	10	10.4	8	4.6	2	4.7	3	4.6
Colon	37	32.2	20	19.8	40	32.2	47	49.1	25	30.7	17	25.7	26	22.3
Endometrium	27	20.7	11	12.3	22	20.5	34	32.4	17	18.9	11	16.4	13	15.5
Esophagus	6	2.2+	3	1.6	3	2.8	3	4.3	2	2.6	0	2.4	1	2.1
Hodgkin's lymphoma	2	1.0	0	0.7	1	1.2	2	2.2	2	0.8	0	1.1	1	0.9
Kidney and renal pelvis	9	8.8	6	4.9	10	8.4	14	12.9	8	7.6	5	6.8	4	6.6
Larynx	1	0.4	0	0.3	0	0.5	1	0.6	0	0.5	1	0.3	0	0.4
Leukemia	12	7.5	3	5.0	10	8.3	14	12.6	7	7.6	2	7.1	7	6.1
Liver & bile duct	3	1.3	2	0.8	1	1.6	1	2.8	2	1.3	1	1.2	0	1.3
Lung and bronchus	67	38.7*	33	24.3	33	44.6	82	56.9*	25	40.6+	14	34.2*	20	31.2+
Melanoma of skin	20	13.5	6	8.1	17	13.3	26	23.1	8	13.0	5	11.6	5	11.3
Myeloma	4	3.6	1	2.2	2	3.9	11	3.6*	3	3.2	1	2.9	1	2.7
Non-Hodgkin's lymphoma	17	17.6	8	10.3	15	17.8	26	27.1	14	15.8	18	12.5	14	12.3
Oral cavity and pharynx	8	7.5	3	4.5	6	7.5	9	12.4	9	6.2	5	5.6	3	5.6
Ovary	9	16.4	6	8.6	19	13.9	25	24.5	9	13.6	20	10.2*	10	11.0
Pancreas	11	7.0	0	5.1+	3	8.6	13	10.9	10	6.3	5	5.8	7	5.0
Prostate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rectum & rectosigmoid	10	11.5	7	6.4	16	10.1	14	17.1	11	9.7	2	9.0+	11	7.4
Stomach	9	4.0+	2	2.8	3	5.0	4	7.7	3	4.4	4	3.4	4	3.2
Testis	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thyroid	8	10.3	5	5.8	5	10.8	30	14.6*	10	8.4	5	8.6	6	8.4

+ Statistically significant difference at p=0.05 or less.

* Statistically significant difference at p=0.01 or less.

Note: Observed and expected numbers exclude in-situ cases, basal/squamous skin cases, and cases with unknown age and/or gender.

SECTION VI

RISKS OF DEVELOPING AND DYING FROM CANCER

Risks of Developing and Dying from Cancer

For Females

If your current age is:	Then your risk of <u>developing cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 82	1 in 23	1 in 9.6	1 in 4.8	1 in 3	1 in 2.3
40		1 in 31	1 in 11	1 in 5	1 in 3.1	1 in 2.3
50			1 in 15	1 in 5.7	1 in 3.3	1 in 2.4
60				1 in 8.3	1 in 3.8	1 in 2.6
70					1 in 5.7	1 in 3
80						1 in 4.3*

If your current age is:	Then your risk of <u>dying from cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 490	1 in 124	1 in 38	1 in 15	1 in 8	1 in 5
40		1 in 164	1 in 41	1 in 15	1 in 8	1 in 5
50			1 in 54	1 in 17	1 in 8.3	1 in 5.1
60				1 in 23	1 in 9.5	1 in 5.4
70					1 in 14	1 in 6.3
80						1 in 8.6*

For Males

If your current age is:	Then your risk of <u>developing cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 136	1 in 40	1 in 12	1 in 4.5	1 in 2.5	1 in 2
40		1 in 56	1 in 13	1 in 4.5	1 in 2.5	1 in 1.9
50			1 in 16	1 in 4.7	1 in 2.5	1 in 1.9
60				1 in 5.9	1 in 2.7	1 in 2
70					1 in 3.5	1 in 2.2
80						1 in 2.8*

If your current age is:	Then your risk of <u>dying from cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 812	1 in 151	1 in 41	1 in 14	1 in 6.4	1 in 4.2
40		1 in 183	1 in 42	1 in 14	1 in 6.4	1 in 4.1
50			1 in 54	1 in 14	1 in 6.4	1 in 4.1
60				1 in 18	1 in 6.9	1 in 4.2
70					1 in 9.2	1 in 4.5
80						1 in 5.7*

Note: * Risks are not precise - best estimates are shown.

Risks of Developing and Dying from Cancer

Female Breast Cancer

If your current age is:	Then your risk of <u>developing breast cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 260	1 in 57	1 in 23	1 in 13	1 in 8.8	1 in 7.2
40		1 in 72	1 in 25	1 in 13	1 in 9	1 in 7.3
50			1 in 38	1 in 16	1 in 10	1 in 7.9
60				1 in 26	1 in 13	1 in 9.3
70					1 in 21	1 in 12
80						1 in 22*

If your current age is:	Then your risk of <u>dying from breast cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 1803	1 in 401	1 in 138	1 in 72	1 in 45	1 in 31
40		1 in 512	1 in 148	1 in 75	1 in 46	1 in 31
50			1 in 206	1 in 86	1 in 50	1 in 32
60				1 in 142	1 in 63	1 in 37
70					1 in 102	1 in 44
80						1 in 59*

Prostate Cancer

If your current age is:	Then your risk of <u>developing prostate cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 14665	1 in 533	1 in 52	1 in 14	1 in 7.4	1 in 6
40		1 in 544	1 in 51	1 in 13	1 in 7.3	1 in 5.9
50			1 in 54	1 in 13	1 in 7.1	1 in 5.8
60				1 in 16	1 in 7.6	1 in 6
70					1 in 11	1 in 7.5
80						1 in 13*

If your current age is:	Then your risk of <u>dying from prostate cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in *	1 in 22562	1 in 1600	1 in 230	1 in 65	1 in 26
40		1 in 22191	1 in 1574	1 in 227	1 in 64	1 in 26
50			1 in 1646	1 in 223	1 in 63	1 in 25
60				1 in 242	1 in 61	1 in 24
70					1 in 69	1 in 22
80						1 in 21*

Note: * Risks are not precise - best estimates are shown.

Risks of Developing and Dying from Cancer

Colon/Rectal Cancer in Females

If your current age is:	Then your risk of <u>developing colon/rectal cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 2747	1 in 603	1 in 159	1 in 58	1 in 29	1 in 18
40		1 in 765	1 in 168	1 in 58	1 in 29	1 in 18
50			1 in 211	1 in 62	1 in 29	1 in 18
60				1 in 84	1 in 33	1 in 19
70					1 in 47	1 in 21
80						1 in 29*

If your current age is:	Then your risk of <u>dying from colon/rectal cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 10505	1 in 2338	1 in 525	1 in 208	1 in 96	1 in 45
40		1 in 2981	1 in 548	1 in 210	1 in 96	1 in 45
50			1 in 661	1 in 222	1 in 97	1 in 45
60				1 in 322	1 in 110	1 in 46
70					1 in 148	1 in 48
80						1 in 53*

Colon/Rectal Cancer in Males

If your current age is:	Then your risk of <u>developing colon/rectal cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 2608	1 in 465	1 in 134	1 in 47	1 in 25	1 in 18
40		1 in 557	1 in 139	1 in 47	1 in 24	1 in 18
50			1 in 180	1 in 50	1 in 25	1 in 18
60				1 in 64	1 in 27	1 in 18
70					1 in 39	1 in 21
80						1 in 30*

If your current age is:	Then your risk of <u>dying from colon/rectal cancer</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 14665	1 in 1786	1 in 426	1 in 142	1 in 67	1 in 40
40		1 in 2001	1 in 431	1 in 141	1 in 66	1 in 40
50			1 in 534	1 in 148	1 in 67	1 in 40
60				1 in 192	1 in 72	1 in 40
70					1 in 96	1 in 43
80						1 in 49*

Note: * Risks are not precise - best estimates are shown.

Risks of Developing and Dying from Cancer

Melanoma in Females

If your current age is:	Then your risk of <u>developing melanoma</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 836	1 in 306	1 in 178	1 in 113	1 in 84	1 in 68
40		1 in 477	1 in 223	1 in 129	1 in 92	1 in 73
50			1 in 412	1 in 174	1 in 113	1 in 85
60				1 in 287	1 in 148	1 in 103
70					1 in 273	1 in 142
80						1 in 221*

If your current age is:	Then your risk of <u>dying from melanoma</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 23022	1 in 5762	1 in 1875	1 in 1243	1 in 658	1 in 427
40		1 in 7619	1 in 2024	1 in 1303	1 in 672	1 in 431
50			1 in 2712	1 in 1546	1 in 725	1 in 450
60				1 in 3449	1 in 949	1 in 517
70					1 in 1169	1 in 543
80						1 in 761*

Melanoma in Males

If your current age is:	Then your risk of <u>developing melanoma</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 707	1 in 287	1 in 138	1 in 82	1 in 59	1 in 48
40		1 in 475	1 in 169	1 in 91	1 in 63	1 in 51
50			1 in 254	1 in 110	1 in 70	1 in 55
60				1 in 180	1 in 91	1 in 66
70					1 in 153	1 in 88
80						1 in 131*

If your current age is:	Then your risk of <u>dying from melanoma</u> by a particular age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 7852	1 in 2066	1 in 1058	1 in 563	1 in 345	1 in 251
40		1 in 2758	1 in 1202	1 in 596	1 in 355	1 in 255
50			1 in 2070	1 in 739	1 in 395	1 in 273
60				1 in 1079	1 in 459	1 in 295
70					1 in 670	1 in 342
80						1 in 445*

Note: * Risks are not precise - best estimates are shown.

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APPENDICES

APPENDIX A

STANDARD SITE ANALYSIS CATEGORIES

SITE CATEGORY <small>Categories in SMALL CAPITALS are aggregated from groups indented under them</small>	PRIMARY SITE CODE (ICD-O-2) <small>EXCLUDES histologic types 9590-9989</small>
BUCCAL CAVITY & PHARYNX	
Lip	000 - 009
Tongue	019 - 029
Salivary Glands	079 - 089
Floor of Mouth	040 - 049
Gum and Other Mouth	030 - 039 050 - 059 060 - 069
Nasopharynx	110 - 119
Tonsil	090 - 099
Oropharynx	100 - 109
Hypopharynx	129 130 - 139 141
Other Buccal Cavity and Pharynx	140 142-148
DIGESTIVE SYSTEM	
Esophagus	150 - 159
Stomach	160 - 169
Small Intestine	170 - 179
COLON (excluding rectum)	
Cecum	180
Appendix	181
Ascending Colon	182
Hepatic Flexure	183
Transverse Colon	184
Splenic Flexure	185
Descending Colon	186
Sigmoid Colon	187
Large Intestine, NOS	188 - 189 260

SITE CATEGORY Categories in SMALL CAPITALS are aggregated from groups indented under them	PRIMARY SITE CODE (ICD-O-2) EXCLUDES histologic types 9590-9989
RECTUM AND RECTOSIGMOID	
Rectosigmoid Junction	199
Rectum	209
Anus, Anal Canal, & Anorectum	210 - 212 218
Liver	220
Intrahepatic Bile Duct	221
Gallbladder	239
Other Biliary	240 - 249
Pancreas	250 - 259
Retroperitoneum	480
Peritoneum, Omentum, & Mesentery	481 - 482
Other Digestive Organs	268 - 269 488
RESPIRATORY SYSTEM	
Nasal Cavity, Middle Ear, & Accessory Sinuses	300 - 301 310 - 319
Larynx	320 - 329
Lung and Bronchus	340 - 349
Pleura	384
Trachea, Mediastinum, & Other Respiratory Organs	339 381 - 383 388 390 398 399
BONES AND JOINTS	400 - 419

SITE CATEGORY Categories in SMALL CAPITALS are aggregated from groups indented under them	PRIMARY SITE CODE (ICD-O-2) EXCLUDES histologic types 9590-9989
SKIN (Excluding Basal and Squamous)	
Melanomas - Skin	440 - 449 Histology Types 8720 - 8790 ONLY
Other Non - Epithelial	440 - 449 Also Excluding Histology Types 8000 - 8004 8010 - 8012 8070 - 8076 8090 - 8096 8720 - 8790 9590 - 9989
BREAST	500 - 509
FEMALE GENITAL SYSTEM	
Cervix Uteri	530 - 539
Corpus Uteri	540 - 549
Uterus, NOS	559
Ovary	569
Vagina	529
Vulva	510 - 519
Other Female Genital Organs	570 - 589
MALE GENITAL SYSTEM	
Prostate	619
Testis	620 - 629
Penis	600 - 609
Other Male Genital Organs	630 - 639
URINARY SYSTEM	
Bladder	670 - 679
Kidney and Renal Pelvis	649 659
Ureter	669
Other Urinary Organs	680 - 689
EYE AND ORBIT	690 - 699

SITE CATEGORY Categories in SMALL CAPITALS are aggregated from groups indented under them	PRIMARY SITE CODE EXCLUDES histologic types 9590-9989
BRAIN AND OTHER NERVOUS SYSTEM	
Brain	710 - 719 Also excludes: 953
Other Nervous System	A) 710 - 719 (meningioma) Histologic Type: 9530-9539 ONLY B) 700 - 709 C) 720 - 729
ENDOCRINE SYSTEM	
Thyroid	739
Other Endocrine (including Thymus)	379 740 - 749 750 - 759

SITE CATEGORY Categories in SMALL CAPITALS are aggregated from groups indented under them	PRIMARY SITE CODE	HISTOLOGY
LYMPHOMAS		
Hodgkin's Disease		
Nodal	024, 098, 099, 111, 142, 379 422 770 - 779	Types: 9650 - 9667 ONLY
Extranodal	For All Other Sites Exclude Sites: 024, 098, 099, 111, 142, 379, 422 770 - 779	Types: 9650 - 9667 ONLY
Non - Hodgkin's Disease		
Nodal	024, 098, 099, 111, 142, 379, 422 770 - 779	Types: 9590 - 9595 9670 - 9719 ONLY
Extranodal	For All Other Sites Excluding Sites: 024, 098, 099, 111, 142, 379, 422 770 - 779	Types: 9590 - 9595 9670 - 9719 ONLY
MULTIPLE MYELOMA	For All Sites	Types: 9731 - 9732 ONLY

SITE CATEGORY Categories in SMALL CAPITALS are aggregated from groups indented under them	HISTOLOGY
LEUKEMIAS	
Lymphocytic	
Acute Lymphocytic	Type: 9821, 9828, ONLY
Chronic Lymphocytic	Type: 9823 ONLY
Other Lymphocytic	Type: 9820, 9822, 9824, 9825, 9826, ONLY
Granulocytic (Myeloid)	
Acute Granulocytic	Type: 9861, 9867, 9871, 9872, 9873, 9874, ONLY
Chronic Granulocytic	Type: 9863, 9868, ONLY
Other Granulocytic	Type: 9860, 9862, 9864, 9866, ONLY
Monocytic	
Acute Monocytic	Type: 9891 ONLY
Chronic Monocytic	Type: 9893 ONLY
Other Monocytic	Type:
	9890, 9892, 9894, ONLY
Other	
Other Acute	Type: 9801, 9841, ONLY
Other Chronic	Type: 9803, 9842, 9931, ONLY
Aleukemic, Subleukemic, and NOS	Type: 9800, 9802, 9804, 9827, 9830, 9840, 9850, 9870, 9880, 9900, 9910, 9930 - 9941 ONLY

<p style="text-align: center;">SITE CATEGORY</p> <p>Categories in SMALL CAPITALS are aggregated from groups indented under them</p>	<p style="text-align: center;">PRIMARY SITE CODE</p> <p style="text-align: center;">EXCLUDES histologic types 9590-9989</p>
<p>ILL- DEFINED AND UNSPECIFIED SITES</p>	<p>A) Type: 9720 - 9723 9740 9741 9760 - 9764 9950 - 9989 ONLY For All Sites</p> <p>B) 760 - 768 809 Type 8000 - 9589 ONLY</p> <p>C) 420 - 424 Type 8000 - 9589 ONLY</p> <p>D) 770 - 779 Type 8000 - 9589 ONLY</p>
<p>INVALID SITE</p>	<p>Site or histology code not within valid range or site code not found in this table.</p>

Source: "Standards for Completeness, Quality, Analysis, and Management of Data, Vol III". American Association of Central Cancer Registries. ¹⁴

APPENDIX B

2000 U.S. STANDARD POPULATION

AGE GROUP	United States 2000 Standard Million Population
0-4	69,135
5-9	72,533
10-14	73,032
15-19	72,169
20-24	66,478
25-29	64,529
30-34	71,044
35-39	80,762
40-44	81,851
45-49	72,118
50-54	62,716
55-59	48,454
60-64	38,793
65-69	34,264
70-74	31,773
75-79	26,999
80-84	17,842
85 +	15,508
Total	1,000,000

Source: SEER Program, National Cancer Institute, 2001. ¹¹

APPENDIX C

2000 POPULATION BY HEALTH DISTRICT, GENDER, AND AGE GROUP

	HD 1	HD 2	HD 3	HD 4	HD 5	HD 6	HD 7	STATE
Males								
< 5	5,971	2,867	8,289	13,361	6,317	6,720	6,522	50,047
5 to 9	6,700	3,206	8,501	13,439	6,572	6,574	6,868	51,860
10 to 14	7,330	3,391	8,060	13,354	6,962	7,177	7,423	53,697
15 to 19	7,016	4,695	8,016	12,944	7,317	7,542	8,601	56,131
20 to 24	4,757	5,107	6,512	13,533	5,381	6,248	7,396	48,934
25 to 29	4,925	3,474	6,634	14,469	4,959	5,177	4,479	44,117
30 to 34	5,303	3,024	6,479	14,376	4,979	4,508	4,442	43,111
35 to 39	6,383	3,358	6,860	15,176	5,798	4,972	5,393	47,940
40 to 44	6,998	3,684	6,564	14,452	6,172	5,552	5,727	49,149
45 to 49	7,208	3,715	6,112	12,757	5,748	5,382	5,368	46,290
50 to 54	6,537	3,281	5,320	10,751	4,838	4,429	4,343	39,499
55 to 59	4,964	2,586	4,319	7,348	3,924	3,349	3,459	29,949
60 to 64	4,154	2,245	3,507	5,179	3,168	2,782	2,740	23,775
65 to 69	3,416	1,849	2,894	4,116	2,665	2,333	2,189	19,462
70 to 74	2,885	1,659	2,557	3,408	2,370	2,018	1,871	16,768
75 to 79	2,031	1,340	2,167	2,753	1,944	1,524	1,521	13,280
80 to 84	1,286	906	1,412	1,750	1,389	1,022	905	8,670
85+	909	632	1,054	1,161	966	702	557	5,981
Total	88,773	51,019	95,257	174,327	81,469	78,011	79,804	648,660
Females								
< 5	5,639	2,710	7,970	12,895	5,903	6,302	6,177	47,596
5 to 9	6,220	2,973	8,025	12,599	6,312	6,340	6,427	48,896
10 to 14	6,839	3,311	7,722	12,510	6,663	6,828	7,038	50,911
15 to 19	6,437	4,251	7,375	12,441	6,641	7,389	10,193	54,727
20 to 24	4,599	4,340	6,366	12,343	4,746	6,386	6,280	45,060
25 to 29	4,874	2,840	6,499	12,721	4,659	5,049	4,369	41,011
30 to 34	5,473	2,787	6,116	12,965	4,824	4,550	4,479	41,194
35 to 39	6,652	3,353	6,711	14,062	5,694	5,183	5,318	46,973
40 to 44	7,468	3,724	6,555	13,901	6,002	5,636	5,620	48,906
45 to 49	7,396	3,596	6,144	12,686	5,654	5,201	5,205	45,882
50 to 54	6,359	3,122	5,344	10,165	4,918	4,341	4,328	38,577
55 to 59	4,970	2,627	4,488	7,291	3,875	3,342	3,482	30,075
60 to 64	3,955	2,049	3,634	5,391	3,243	2,784	2,674	23,730
65 to 69	3,408	1,930	3,151	4,540	2,942	2,493	2,243	20,707
70 to 74	3,018	1,742	3,065	4,111	2,759	2,152	2,186	19,033
75 to 79	2,645	1,605	2,738	3,904	2,408	2,007	1,856	17,163
80 to 84	1,827	1,254	2,123	2,840	1,921	1,515	1,296	12,776
85+	1,781	1,300	2,014	2,663	1,764	1,397	1,157	12,076
Total	89,560	49,514	96,040	170,028	80,928	78,895	80,328	645,293
Total	178,333	100,533	191,297	344,355	162,397	156,906	160,132	1,293,953

Source: U.S. Bureau of the Census, 2001.