Annual Report of the Cancer Data Registry of Idaho

Cancer in Idaho – 2014

December 2016

CDRI Cancer Data Registry of Idaho

Idaho Hospital Association

IDAHO DEPARTMENT OF HEALTH & WELFARE

CANCER IN IDAHO - 2014

December 2016

A Publication of the
Cancer Data Registry of Idaho

CDRI Cancer Data Registry of Idaho

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PREFACE

"Cancer in Idaho - 2014," the thirty-eighth annual report of the Cancer Data Registry of Idaho (CDRI), contains information on the cancer burden among Idaho residents, with a focus on cancer cases diagnosed during 2014. The data can be used by public health officials, hospital administrators, physicians, the Comprehensive Cancer Alliance for Idaho, 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 Public 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 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 Division of Public Health, Idaho Department of Health and Welfare, and the Comprehensive Cancer Alliance for Idaho for their continued partnership and for using CDRI data as a tool in cancer control and prevention.

We acknowledge the Centers for Disease Control and Prevention for its support of CDRI and the distribution of this annual report under cooperative agreement 1U58DP003882-05 awarded to the Idaho Hospital Association. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease 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 or treated for cancer in the state of Idaho. The goals of 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 for 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.

CDRI works closely with the Comprehensive Cancer Alliance for Idaho (CCAI), the Idaho Comprehensive Cancer Control Program, and other organizations to lessen the burden of cancer in Idaho.

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 a portion (less than one percent) of the cigarette tax to be dedicated to fund the statewide cancer registry. Through the National Program of Cancer Registries (NPCR), 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 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 of treatment; and
- follow-up data for purpose of calculating survival rates.

Primary site, behavior, grade, and histology were coded according to the *International Classification of Diseases for Oncology, 3rd edition.*[1] Stage of disease variables were coded using SEER's *Summary Staging Manual 2000*, the *AJCC Manual for Staging of Cancer, 7th edition*, and the *Collaborative Staging Manual, Version 2.05.*[2,3,4] SEER Summary Stage was derived from Collaborative Staging variables. All other variables were coded following the rules of the North American Association of Central Cancer Registries (NAACCR), the National Cancer Institute's SEER program, and the American College of Surgeons Commission on Cancer.[5-8] Beginning with cases diagnosed in 2010, new rules for coding hematopoietic and lymphoid neoplasms were applied.[9]

Reportable Cases

All in situ and 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, spinal cord, any other part of the central nervous system, 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 NAACCR, 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 GenEDITS Plus 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, and site/age combinations. Records are also routinely checked for duplicate entries. Duplicate case checking is performed both manually and electronically using several methodologies.

CDRI has met NPCR program standards and is recognized as a "gold standard registry" for quality, completeness, and timeliness as designated by NAACCR. These designations enable Idaho data to be included in *United States Cancer Statistics* and all NAACCR volumes of *"Cancer Incidence in North America."*

Executive Summary

Data Presentation

This report is comprised of nine sections. Section I focuses on the 23 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. Comparison rates from the National Cancer Institute's SEER program and United States Cancer Statistics (USCS), which are combined from SEER and the Centers for Disease Control and Prevention's National Program of Cancer Registries (NPCR),[10] are provided. Only registries whose data meet specified data quality criteria are included in USCS statistics. For the latest USCS data (2013 incidence), all areas of the U.S. are included except Nevada. Section II depicts incidence data by site, subsite, and gender for invasive and in situ cases. For completeness, site groups include categories for mesothelioma and Kaposi sarcoma histologies. In the remainder of the report, these cancers are grouped by anatomic site. 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. For more detailed statistics by county, see CDRI's *County Cancer Profiles* at www.idcancer.org. Section VI contains tables of age-specific risks of developing and dying from cancer for males and females. Section VII shows cancer incidence trends in Idaho for the period 1975-2014. Section VIII shows cancer incidence rates by race and ethnicity for the period 2010-2014. Section IX shows cancer survival statistics for Idahoans diagnosed during the period 2007-2013 with follow-up through 2014.

Descriptive Summary by Gender and Race and Ethnicity

The data presented in this report cover cancer cases diagnosed among Idaho residents between January 1, 2014, and December 31, 2014. In this time frame, there were 8,326 cases of in situ and invasive cancer diagnosed among Idaho residents (4,068 among males and 4,258 among females). By race and ethnicity, there were 7,741 cases among non-Hispanic whites, 307 among Hispanic whites, 20 cases among blacks, 85 cases among Native Americans, and 52 cases among Asians/Pacific Islanders. One hundred and twenty one cases were coded as other or unknown race. The number of cancer cases treated in outpatient settings and reported only by pathology laboratories has increased over the last several years. These cases are more likely to have missing race and ethnicity information. CDRI has conducted matches with the Indian Health Service and Northwest Portland Area Indian Health Board to improve the accuracy of race information collected on Native Americans, and uses the NAACCR Hispanic Identification Algorithm to identify Hispanics by birthplace/race/surname. For more detailed statistics by race and ethnicity, see Section VIII of this report and *Cancer in North America: 2009-2013, Volume Two*.[11]

Trends

There was a 0.2% increase in the age-adjusted cancer incidence rates as published in the 2013 and 2014 annual reports. Changes in health policy and screening recommendations may have impacted cancer incidence in 2013 and 2014. In May 2012, the United States Preventive Service Task Force issued a recommendation against Prostate Specific Antigen (PSA)-based

screening for prostate cancer in all age groups. From 2011 to 2014, prostate cancer incidence rates decreased about 13.3% per year in Idaho, similar to national trends. The drop in lung cancer cases in 2013 was followed by a rebound in 2014. Low dose CT (LDCT) screening for lung cancer among persons at higher risk due to smoking history was recommended by the United States Preventive Services Task Force in December 2013. The incidence rates of cancers of the cervix, liver and bile duct, oral cavity and pharynx, stomach, testis, and Hodgkin lymphoma, which fluctuate annually due to relatively small case counts, rebounded from 2013. See Section VII for more detailed long-term trends in cancer incidence.

Population Description

The population of the state of Idaho on July 1, 2014, was estimated to be 1,634,806 (818,714 males and 816,092 females). Population estimates were obtained from the National Center for Health Statistics.[12] Idaho is comprised of 44 counties grouped into seven health districts. The composition of the health districts and their population estimates by gender as used in this report are shown below:

Health District	Counties	Male	Female
District 1	Benewah, Bonner, Boundary, Kootenai, Shoshone	109,841	111,384
District 2	Clearwater, Latah, Lewis, Idaho, Nez Perce	54,692	52,362
District 3	Adams, Canyon, Gem, Owyhee, Payette, Washington	152,299	153,045
District 4	Ada, Boise, Elmore, Valley	236,085	233,654
District 5	Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, Twin Falls	95,829	94,812
District 6	Bannock, Bear Lake, Bingham, Butte, Caribou, Franklin, Oneida, Power	84,506	84,428
District 7	Bonneville, Clark, Custer, Fremont, Jefferson, Lemhi, Madison, Teton	105,094	104,409

SUMMARY MEASURES OF CANCER BURDEN IN IDAHO - 2014

Primary Site	Incident Cases	Deaths	Median Age at Diagnosis	Median Age at Death	Estimated Prevalence Count	Total Number of YPLL Before Age 75	Average Number of YPLL per Death, Persons Aged Less than 75 Years	% Change Incidence Rate 2013 to 2014
All Sites	7,605	2,789	67.0	72.0	63,100	18,623	11.3	0.2%
Bladder	368	68	72.0	80.0	3,200	180	7.5	-7.3%
Brain	112	103	63.0	65.0	600	1,311	16.8	-0.3%
Breast	1,145	194	63.0	71.0	13,200	1,709	14.7	2.5%
Cervix	49	17	51.0	55.0	900	341	22.7	19.1%
Colorectal	623	232	68.0	70.5	5,200	1,758	12.1	-1.7%
Corpus Uteri	221	19	62.0	64.0	2,800	187	11.7	8.5%
Esophagus	95	84	69.0	69.5	200	578	9.6	7.6%
Hodgkin Lymphoma	34	3	33.5	76.0	800	-	-	-29.7%
Kidney	278	80	66.0	70.5	2,100	644	13.1	-10.1%
Larynx	39	14	66.0	67.0	400	124	13.7	-10.4%
Leukemia	252	118	69.0	74.5	2,000	812	13.5	-16.7%
Liver and Bile Duct	150	103	66.0	68.0	200	776	10.8	43.3%
Lung and Bronchus	902	657	71.0	72.0	2,000	3,706	8.8	4.2%
Melanoma of Skin	473	61	63.0	70.0	5,200	519	12.4	1.9%
Myeloma	107	50	72.0	75.5	500	252	10.1	10.0%
Non-Hodgkin Lymphoma	345	118	68.0	77.0	2,700	370	7.4	15.3%
Oral Cavity and Pharynx	179	42	65.0	71.5	1,800	302	12.1	-24.4%
Ovary	108	62	65.0	71.0	900	382	9.8	13.3%
Pancreas	223	206	70.0	70.5	300	1,476	11.0	-10.1%
Prostate	833	191	68.0	80.0	13,600	437	5.9	-10.2%
Stomach	107	46	70.0	69.0	300	448	15.4	44.3%
Testis	54	4	34.0	46.5	1,100	-	-	30.3%
Thyroid	262	12	52.5	74.5	3,500	81	13.5	7.3%

Notes:

Incident cases include all invasive and bladder in situ cases newly diagnosed among Idaho residents in 2014.

Cancer prevalence is the number of people alive who have been diagnosed with cancer. This includes individuals who were newly diagnosed, are in active treatment, have completed active treatment, and those living with progressive symptoms of their disease. Limited-duration prevalence was estimated from long-term incidence and survival rates from 1970 to 2014 but underestimates complete prevalence due to an unknown number of live cases diagnosed prior to 1970. Estimated prevalence counts on July 1, 2014 are rounded to the nearest hundred.

Years of potential life lost (YPLL) is a statistic used to measure the number of years of life lost in a population when persons in that population die prematurely (standard of 75 years of age used for this table).

Mortality-related statistics are suppressed for Hodgkin lymphoma and testis primary sites due to small number of deaths.

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 A). Incidence rates represent the average number of new cases diagnosed annually per 100,000 persons. Age adjustment allows rates from one geographic area or time period to be compared with rates from other geographic areas or time periods 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 incident 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 National Center for Health Statistics (see Appendix B).[12]

In conformity with NPCR and 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 2014 (8,326), a total of 7,605 cases (7,402 invasive and 203 bladder in situ) were used for calculating age-adjusted incidence rates. Of the 7,605 cases, 3,773 occurred among males and 3,832 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.

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 during their lifetime, the number of incident cancer cases is greater than the number of persons who are diagnosed with cancer.

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, the Centers for Disease Control and Prevention's National Program of Cancer Registries (NPCR), and are adopted by NAACCR.[5,6] 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 http://seer.cancer.gov/siterecode/ for groupings of codes.

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. Cases with unknown county of residence were not included in the observed numbers of cases. 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.

Confidence Intervals

A confidence interval gives an estimated range of values which is likely to include the true population value, and is used to indicate the reliability of an estimate.

Mean/Median

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.

Risk and Associated Factors

The "risk and associated factors" subsections in Section I were developed from extracts of *Cancer Epidemiology and Prevention*, the American Cancer Society's *Clinical Oncology*, and *the U.S. Department of Health and Human Services 11th Report on Carcinogens*.[13-15]
Socioeconomic status is abbreviated as SES in Section I text.

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. For detailed statistics by race and ethnicity, see Section VIII and *Cancer in North America: 2009-2013, Volume Two*.[11]

NPCR

The Centers for Disease Control and Prevention's National Program of Cancer Registries (NPCR) supports central cancer registries in 45 states (including Idaho), the District of Columbia, Puerto Rico, and the U.S. Pacific Island Jurisdictions. These data represent 96% of the U.S. population.

SEER

Part of the National Cancer Institute, the Surveillance, Epidemiology, and End Results (SEER) program consists of several population-based cancer registries throughout the U.S. SEER cancer statistics are designed to be representative of the U.S. population, and are included for reference, combined with NPCR data, in Section I of this report. SEER rates included data from 18 registries and were calculated using SEER*Stat.[16]

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 extension of tumor to adjacent organs, tissues, or lymph nodes),
◆ distant (metastasis to tissues or lymph nodes remote from the primary site), or
◆ unstaged.

Limited-Duration Prevalence

Limited-duration prevalence represents the number of people alive on a certain day that had a diagnosis of the disease within some past number of years. SEER*Stat's prevalence calculations use the counting method to estimate prevalence from incidence and follow-up data. The counting method estimates prevalence by counting the number of persons who are known to be alive at a specific calendar time and adjusting for those lost to follow-up.

Risks of Developing and Dying from Cancer

Cancer incidence and mortality risks were estimated using DEVCAN Version 6.7.3 software.[17] DEVCAN was used to calculate the probability of developing or dying of cancer using Idaho-specific cancer incidence and mortality data for the years 2010-2014. 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.

Trend Analyses

Joinpoint Version 4.2.0.2 software was used to model trends in age-adjusted cancer incidence rates.[18] For each joinpoint time segment, the estimated annual percent change (EAPC) was calculated by fitting a least squares regression line to the natural logarithm of the rates using calendar year as a covariate. The software used a grid search to find the maximum likelihood estimates of the joinpoints for multiple models (0 to 5 joinpoints) per primary site category and sex. Trend analyses are limited to cases considered to be malignant in both ICD-O-2 and ICD-O-3, and exclude cases only defined as malignant in 2010 or later.

Survival

Two tables of survival estimates are included in this annual report: one table for actual prognosis, referred to as "crude" survival in the statistical literature; and one table for cancer survival, referred to as "net" survival in the statistical literature. Actual (crude)

measures of survival include cancer and other competing causes of death, while net measures of cancer survival exclude competing causes of death. Both types of survival estimates, crude and net, may be calculated using either information on cause of death or on expected survival. Policy makers, cancer control planners, and others may be interested in net deaths from cancer where the confounding effects of death from other causes are removed, such as when comparing geographic areas or population subgroups that have different background or other-cause mortality rates. Crude estimates of actual patient survival are useful for cancer patients and health care providers who are interested in estimating the patients' chances of dying from cancer, from other competing causes of death, or surviving.[20] For younger and healthier patients, crude and net estimates of survival are similar because competing causes of death are rare. Crude and net estimates of survival may differ substantially for older and sicker patients.

Relative survival is a net measure of excess mortality experienced by cancer patients. It is calculated by dividing the observed survival from all causes of death for the patient cohort by the expected survival in a comparable group not diagnosed with cancer. Because information on cancer-free cohorts is not readily available, general population life tables are used to estimate expected survival. Relative survival based on general life tables, which include people previously diagnosed with cancer, may be overestimated for common cancers, in particular for all sites combined, breast, colorectal, and prostate cancers.[21]

The SEER cause-specific death classification variable, which provides guidance for which deaths should be attributable to a specific cancer diagnosis, was used to estimate the probabilities of dying of cancer, dying of other competing causes, and survival.[22] For patients diagnosed with more than one primary cancer, this variable is not defined for the second or subsequent cancers. Thus, the cancer survival tables are split into columns for "single or first primary cancers only," and "all primaries," for which relative survival can be calculated.

Survival statistics published in this annual report include all invasive and bladder in situ cases aged 15-99 at diagnosis during 2007-2013 with follow-up/death ascertainment through December 31, 2014. Cases reported solely via death certificates or autopsy were excluded. Using SEER 2007 Multiple Primary and Histology Coding Rules,[8] multiple primary cancers could be included for each patient, but only one record per patient was included in each survival estimate.

SEER*Stat (version 8.3.2) was used to perform the survival calculations. The survival duration in months was calculated based on complete dates, with all patients not known to be dead as of December 31, 2014 presumed to be alive on this date. Survival calculations were performed using the actuarial method on monthly intervals. Expected survival was estimated using the Ederer II method from life tables matched to the cancer patients by age, sex, year, race, and county-level socioeconomic status.[23, 24] Cases were censored at an achieved age of 100 years.

Because the excess mortality due to cancer is often age dependent, and the age distributions of cancer patients may differ among comparison groups, net survival estimates were age standardized using the International Cancer Survival Standards (ICSS).[25] Crude survival estimates were not age-standardized and reflect the actual prognosis of the cohort of Idaho cancer cases.

SECTION I

2014 SUMMARY ON ALL SITES COMBINED
AND
23 MOST COMMON SITES

ALL SITES

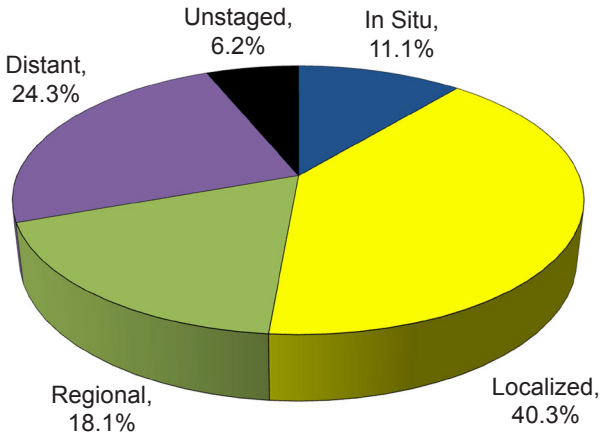
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	420.4	433.4	414.8
# of new invasive cases	7,402	3,619	3,783
# of new in situ cases	924	449	475
# of deaths	2,789	1,518	1,271

Total Cases by County

Ada	2,132	Cassia	104	Lewis	25
Adams	19	Clark	-	Lincoln	20
Bannock	349	Clearwater	65	Madison	69
Bear Lake	26	Custer	22	Minidoka	79
Benewah	61	Elmore	116	Nez Perce	270
Bingham	169	Franklin	36	Oneida	22
Blaine	101	Fremont	76	Owyhee	64
Boise	44	Gem	121	Payette	139
Bonner	285	Gooding	85	Power	39
Bonneville	514	Idaho	107	Shoshone	104
Boundary	91	Jefferson	103	Teton	38
Butte	17	Jerome	96	Twin Falls	395
Camas	5	Kootenai	960	Valley	69
Canyon	966	Latah	165	Washington	70
Caribou	28	Lemhi	60		

Stage at Diagnosis - All Sites



Risk and Associated Factors

Age Rates usually increase steadily with age. Most cases occur among adults in mid-life or older.

Gender Males have higher incidence rates than females for most cancer types.

Race & SES Rates are higher for blacks than for whites and other races. 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.

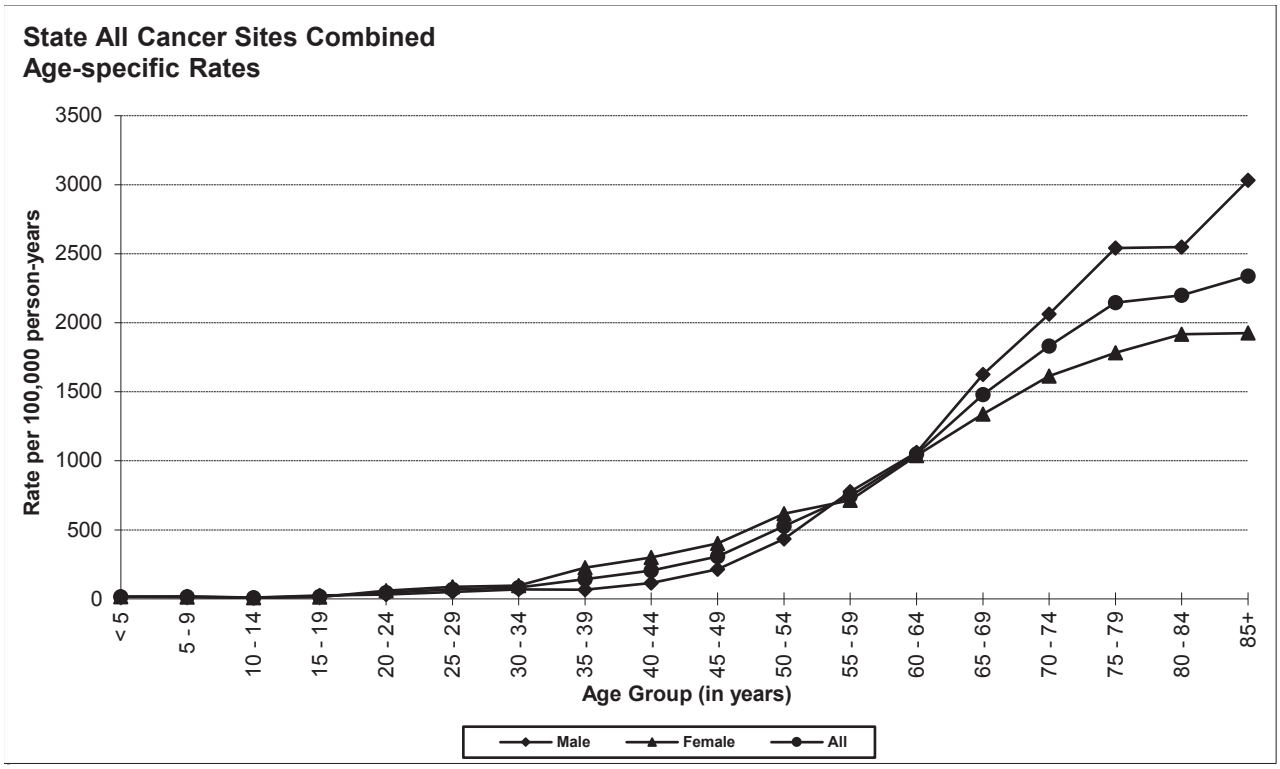
Diet Diets that are low in fresh fruits and vegetables have been associated with increased incidence of several cancers.

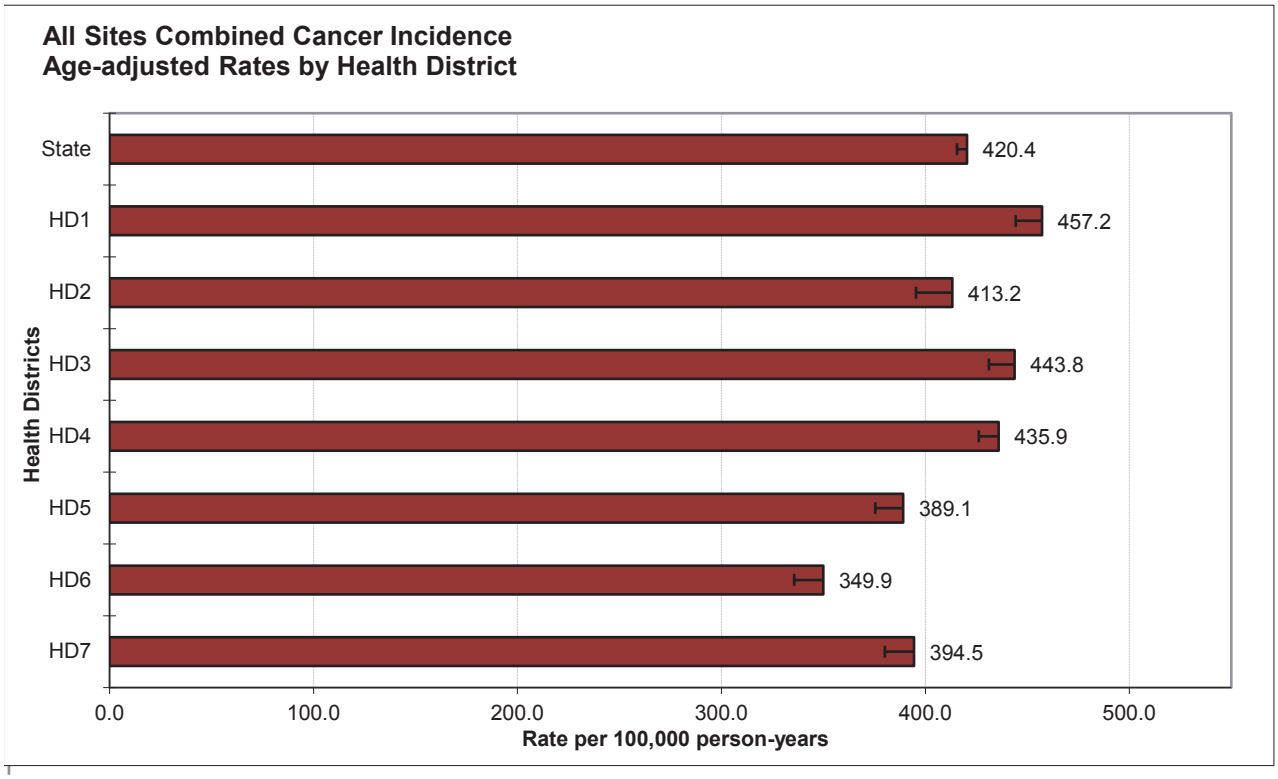
Other Tobacco use is the single most important risk factor for cancer incidence and mortality. Most cancers manifest a tendency to aggregate in families – close relatives of a cancer patient can be considered to have increased risk of that neoplasm, but not all forms of cancer. Excess risk is usually 2-3 times baseline, but in some (rare) families may be hundreds-fold.

Special Notes

Mean age-adjusted incidence rate across health districts:	411.9	
95% confidence interval on the mean age-adjusted incidence rate:	384.4-	439.5
Median age-adjusted incidence rate of health districts:	413.2	
Range of age-adjusted incidence rate for health districts:	349.9-	457.2
USCS rate (2013, all races):	439.0	

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 85+ for both males and females. Health Districts 1 and 3 had statistically significantly more cases of cancer than expected based upon rates for the remainder of Idaho, and Health Districts 5 and 6 had statistically significantly fewer cases than expected.


State All Cancer Sites Combined
Age-specific Rates
Rate per 100,000 person-years
3500
3000
2500
2000
1500
1000
500
0
< 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+
Age Group (in years)
Male
Female
All


All Sites Combined Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
420.4
457.2
413.2
443.8
435.9
389.1
349.9
394.5
0.0
100.0
200.0
300.0
400.0
500.0
Rate per 100,000 person-years

BLADDER

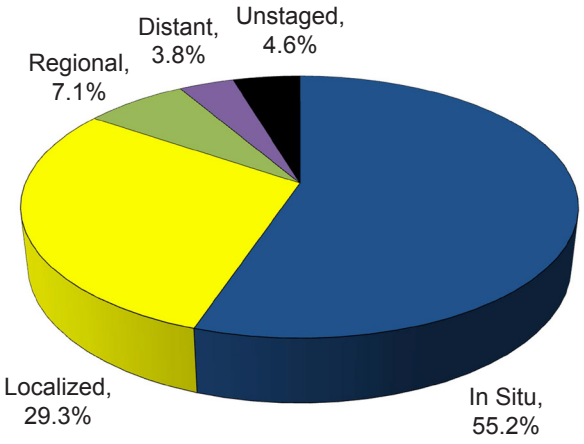
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	20.2	32.8	9.4
# of new invasive cases	165	123	42
# of new in situ cases	203	154	49
# of deaths	68	55	13

Total Cases by County

Ada	95	Cassia	4	Lewis	2
Adams	-	Clark	-	Lincoln	1
Bannock	9	Clearwater	4	Madison	3
Bear Lake	1	Custer	1	Minidoka	2
Benewah	1	Elmore	7	Nez Perce	9
Bingham	8	Franklin	2	Oneida	-
Blaine	3	Fremont	4	Owyhee	5
Boise	2	Gem	8	Payette	4
Bonner	12	Gooding	10	Power	-
Bonneville	16	Idaho	5	Shoshone	6
Boundary	7	Jefferson	3	Teton	1
Butte	2	Jerome	2	Twin Falls	22
Camas	-	Kootenai	41	Valley	8
Canyon	42	Latah	8	Washington	2
Caribou	1	Lemhi	5		

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 higher in whites.

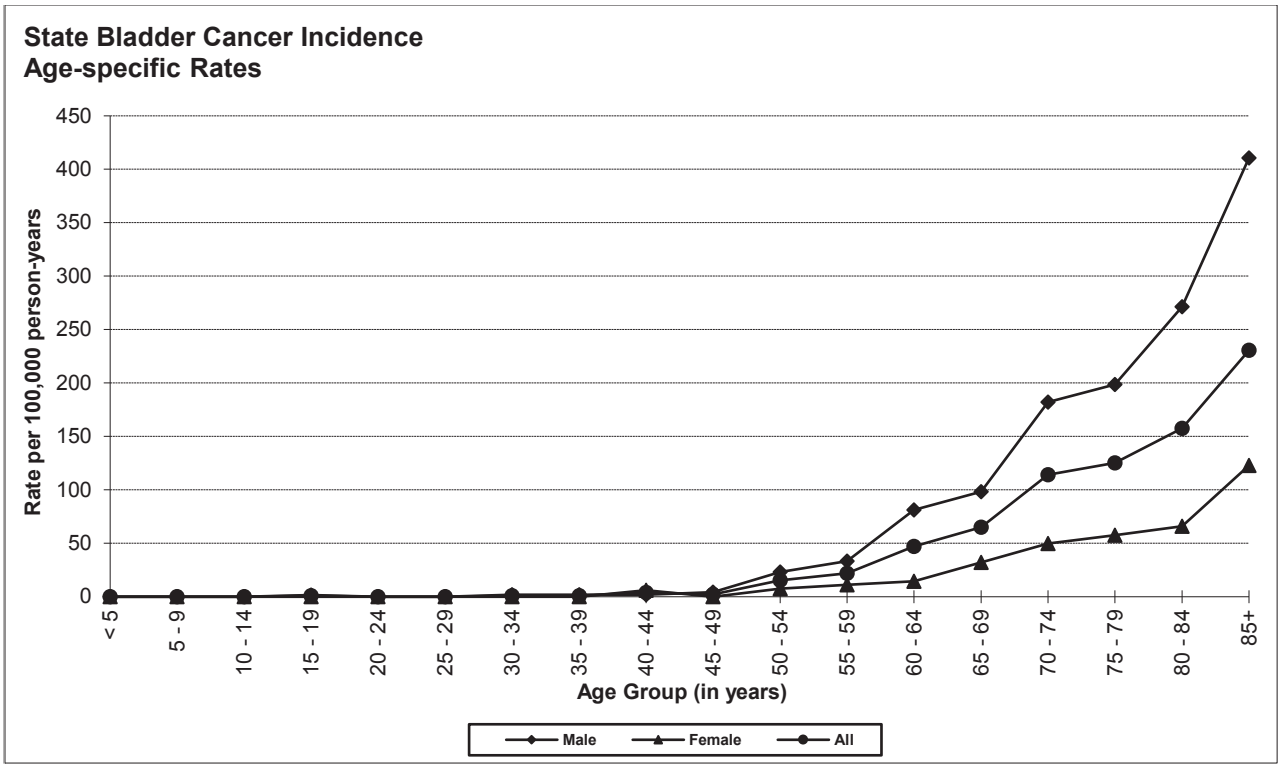
Occupation Truck drivers, likely via exposure to motor exhaust, are at increased risk. Occupational exposures, including manufacturers of certain dyes, painters, and aluminum, rubber, cable, and leather workers, have been shown to increase risk of bladder cancer. Exposure to permanent hair dyes may increase risk.

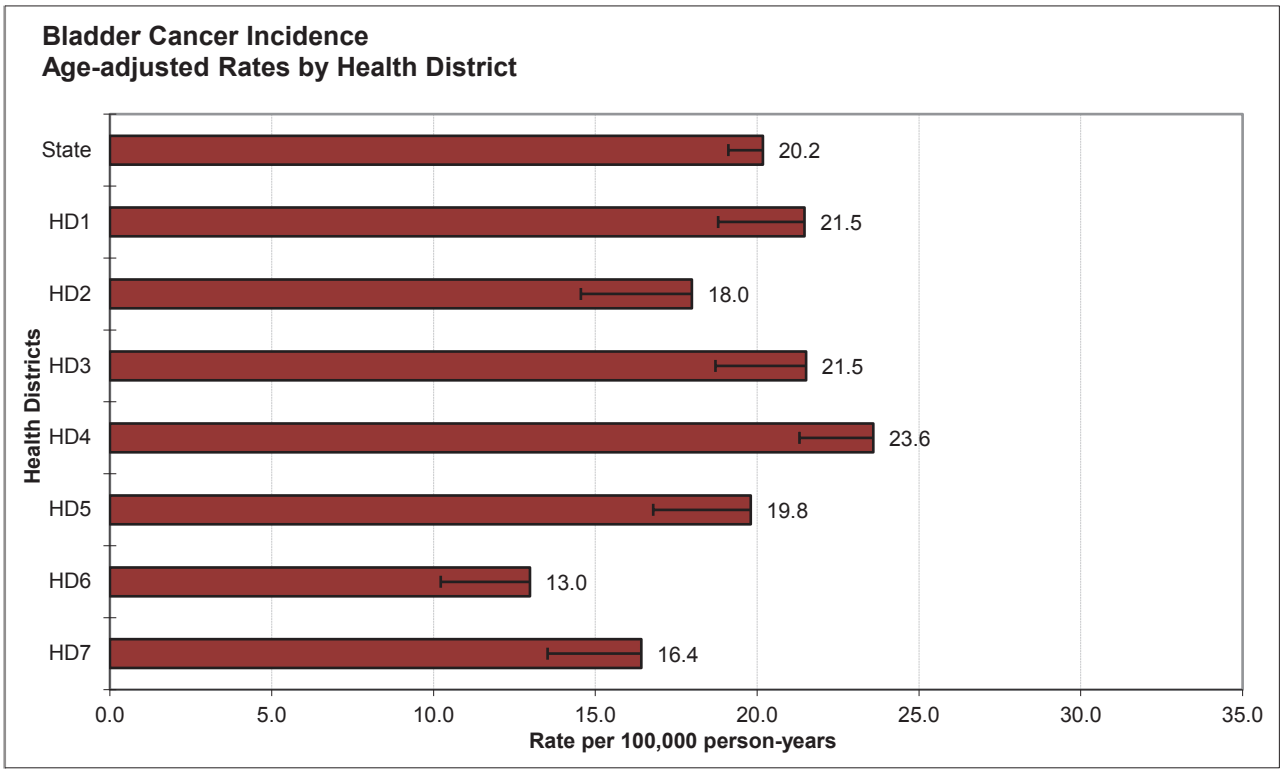
Other Tobacco consumption has been associated with a 2- to 5-fold higher incidence of bladder cancer and is attributable for a greater number of cases than other risk factors. Cyclophosphamide, a chemotherapeutic agent, and 4-amino-diphenyl are known human bladder carcinogens. *Schistosoma hematobium* may cause bladder tumors. Nitrate and arsenic in drinking water, and chlorinated surface water as a source for drinking water, have each been shown to increase the risk of bladder cancer.

Special Notes

Mean age-adjusted incidence rate across health districts:	19.1
95% confidence interval on the mean age-adjusted incidence rate:	16.4- 21.8
Median age-adjusted incidence rate of health districts:	19.8
Range of age-adjusted incidence rate for health districts:	13.0- 23.6
USCS rate (2013, all races):	20.0

There were few cases of bladder cancer among persons aged less than 50 years. Bladder cancer incidence rates increased with age, peaking in the age group 85+ for both males and females. Health District 4 had statistically significantly more cases of bladder cancer than expected based upon rates for the remainder of Idaho, and Health District 6 had statistically significantly fewer cases than expected.


State Bladder Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
450
400
350
300
250
200
150
100
50
0
< 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+
Age Group (in years)
Male
Female
All


Bladder Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
20.2
21.5
18.0
21.5
23.6
19.8
13.0
16.4
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
Rate per 100,000 person-years

BRAIN

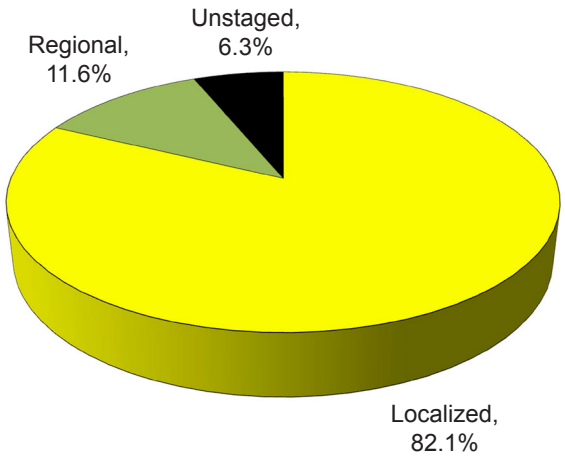
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	6.4	7.9	5.1
# of new invasive cases	112	66	46
# of new in situ cases	0	0	0
# of deaths	103	62	41

Total Cases by County

Ada	28	Cassia	1	Lewis	1
Adams	-	Clark	-	Lincoln	-
Bannock	4	Clearwater	1	Madison	-
Bear Lake	-	Custer	-	Minidoka	1
Benewah	-	Elmore	2	Nez Perce	1
Bingham	1	Franklin	2	Oneida	1
Blaine	2	Fremont	2	Owyhee	-
Boise	-	Gem	3	Payette	2
Bonner	5	Gooding	1	Power	-
Bonneville	10	Idaho	4	Shoshone	3
Boundary	1	Jefferson	1	Teton	2
Butte	-	Jerome	1	Twin Falls	5
Camas	-	Kootenai	11	Valley	2
Canyon	13	Latah	-	Washington	1
Caribou	-	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 typically have higher rates than females.

Race & SES The incidence rate is higher in whites and higher social classes.

Genetics Certain genetic factors may cause an increased risk of some malignant brain tumors, including gliomas, but the proportion of brain tumors attributable to inheritance is likely no more than 4%. Molecular tests are being developed that may be useful in screening for recurrences.

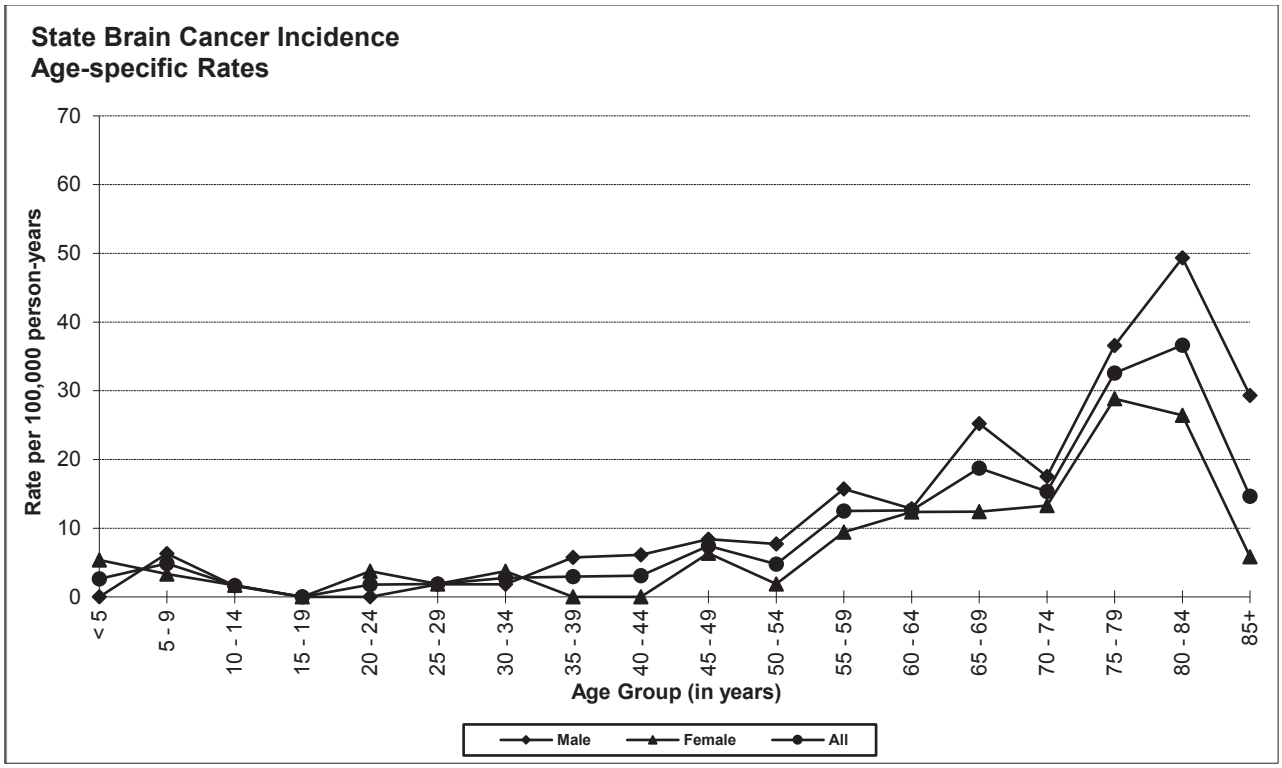
Occupation Vinyl chloride and ionizing radiation exposure are risk factors. Many occupational and environmental exposures have shown suggestive associations with elevated rates of brain cancer. Roofers, sheet metal workers, and rubber and plastic workers may be at elevated risk. Specific exposures underlying these associations have been suggested but not established.

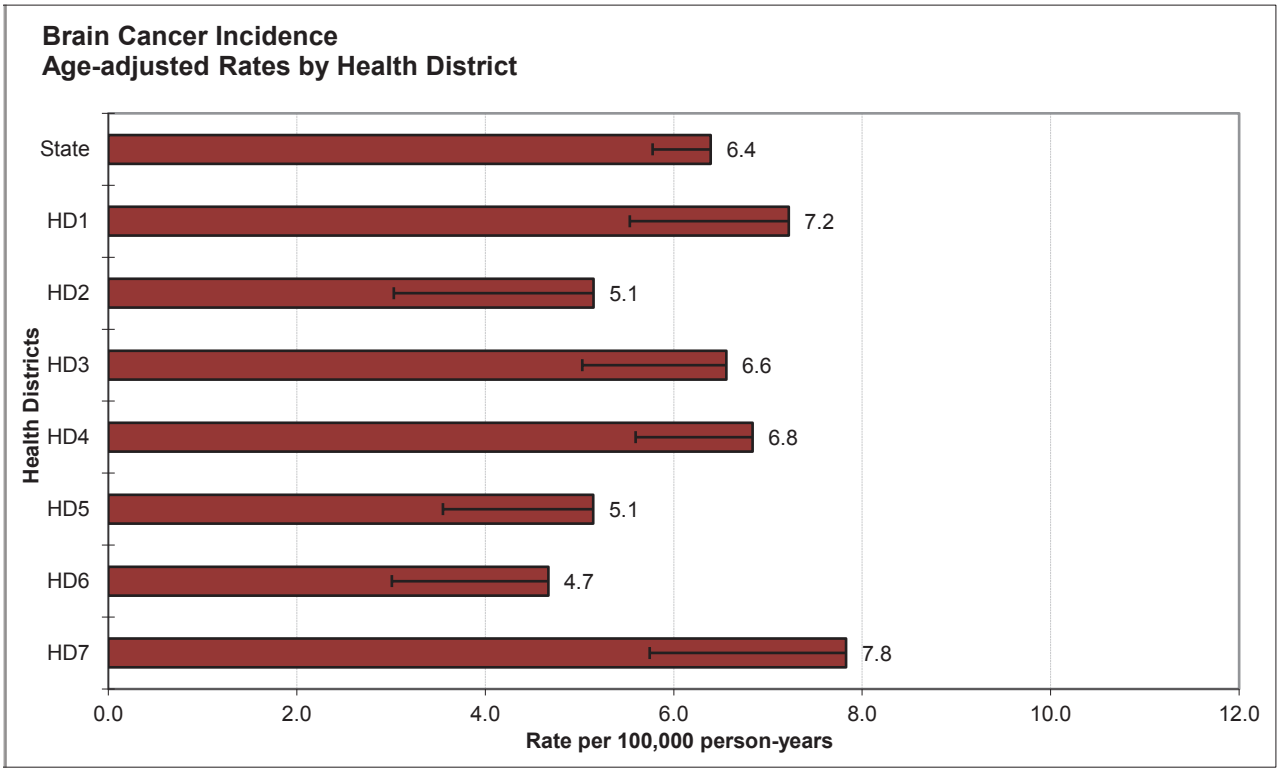
Other Human Immunodeficiency Virus (HIV) infected individuals and organ transplant recipients have an increased risk of developing brain lymphoma.

Special Notes

Mean age-adjusted incidence rate across health districts:	6.2
95% confidence interval on the mean age-adjusted incidence rate:	5.3- 7.1
Median age-adjusted incidence rate of health districts:	6.6
Range of age-adjusted incidence rate for health districts:	4.7- 7.8
USCS rate (2013, all races):	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 district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.


State Brain Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
70
60
50
40
30
20
10
0
< 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+
Age Group (in years)
Male
Female
All


Brain Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
6.4
7.2
5.1
6.6
6.8
5.1
4.7
7.8
0.0
2.0
4.0
6.0
8.0
10.0
12.0
Rate per 100,000 person-years

BRAIN & OTHER CNS NON-MALIGNANT

Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	10.7	7.2	14.1
# of new cases	185	58	127

Total Cases by County

Ada	54	Cassia	2	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	6	Clearwater	1	Madison	2
Bear Lake	1	Custer	1	Minidoka	3
Benewah	1	Elmore	3	Nez Perce	7
Bingham	4	Franklin	1	Oneida	1
Blaine	4	Fremont	1	Owyhee	-
Boise	-	Gem	7	Payette	2
Bonner	5	Gooding	-	Power	-
Bonneville	10	Idaho	-	Shoshone	4
Boundary	2	Jefferson	1	Teton	1
Butte	-	Jerome	-	Twin Falls	10
Camas	1	Kootenai	13	Valley	-
Canyon	28	Latah	3	Washington	3
Caribou	1	Lemhi	2		

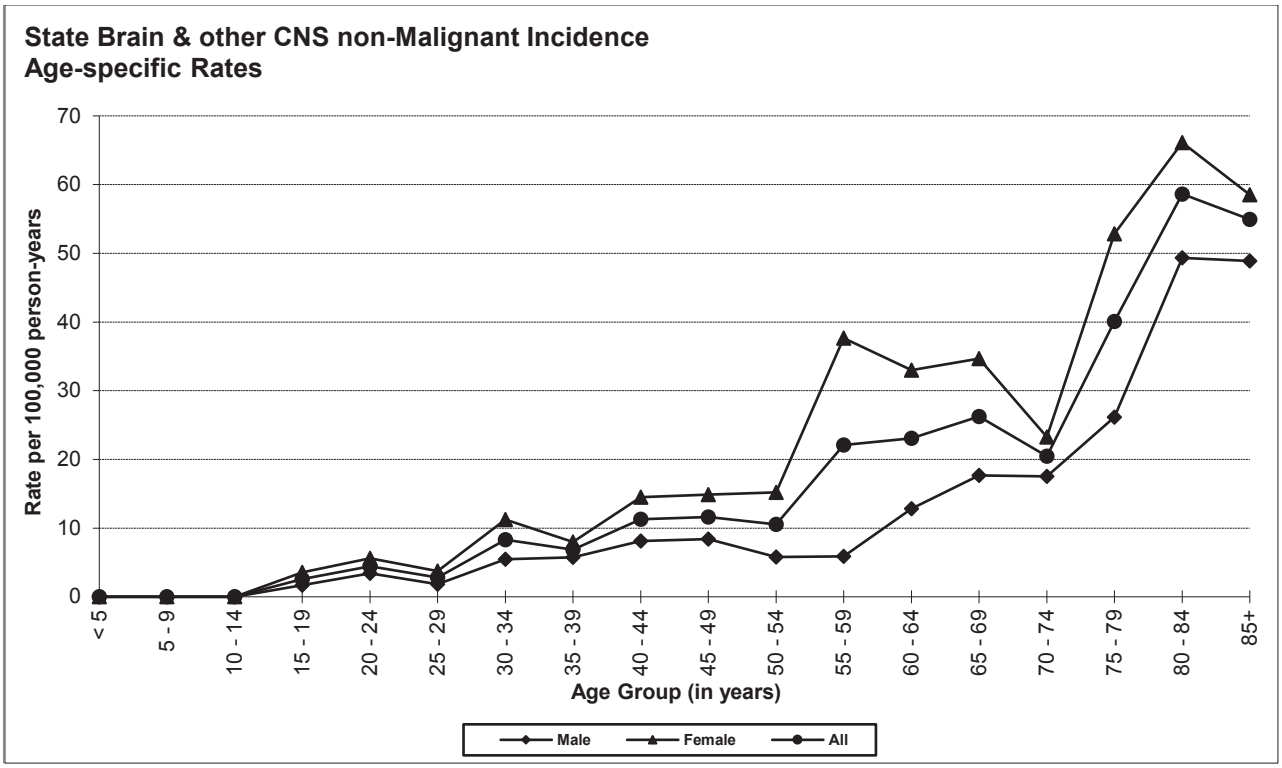
Background

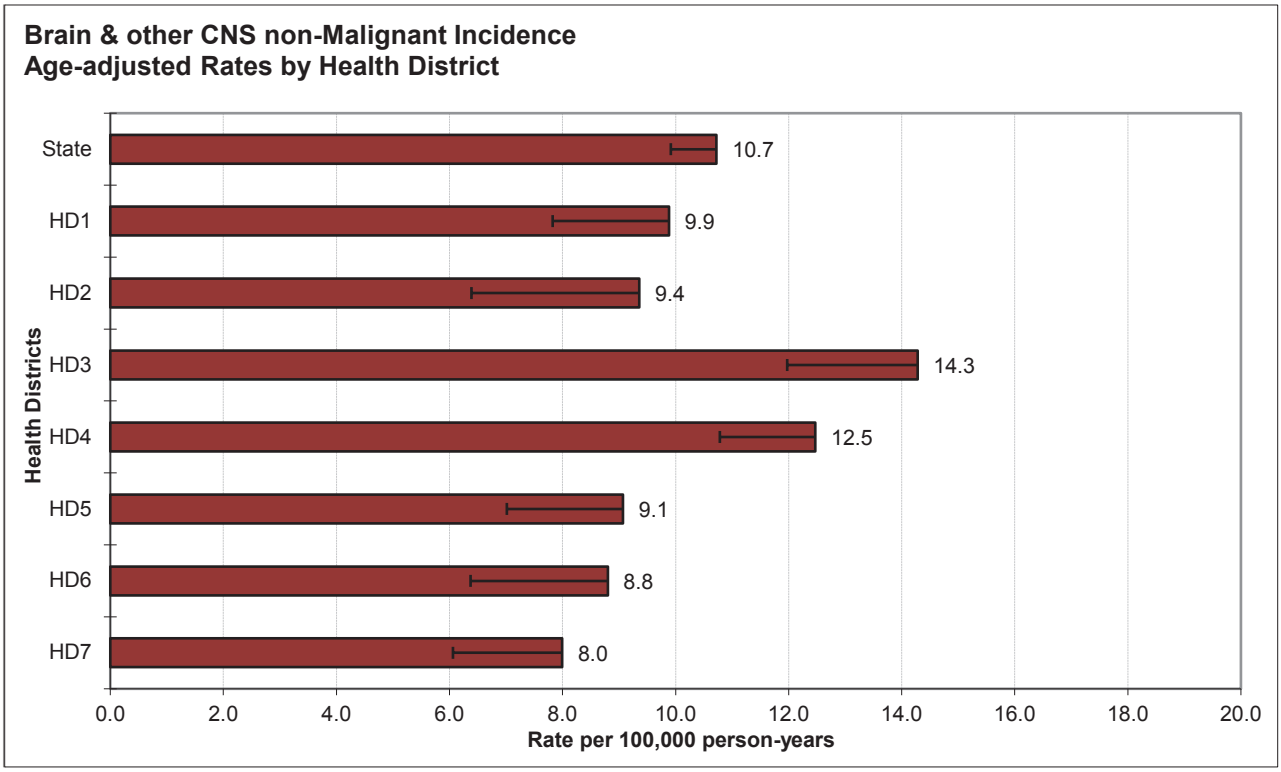
In 2007, as a result of Public Law 107-260, the publication United States Cancer Statistics 2004 Incidence and Mortality began to include tables for non-malignant brain tumors. Until this time, the only reference data were from the Central Brain Tumor Registry of the United States (CBTRUS), which has reported on data submitted from eighteen state central cancer registries, including Idaho. For more detailed information regarding non-malignant brain tumors, see http://www.cbtrus.org.

Special Notes

Mean age-adjusted incidence rate across health districts:	10.3
95% confidence interval on the mean age-adjusted incidence rate:	8.6- 11.9
Median age-adjusted incidence rate of health districts:	9.4
Range of age-adjusted incidence rate for health districts:	8.0- 14.3
SEER 18 rate (2013, all races):	11.6

Health District 3 had statistically significantly more cases of non-malignant brain and other central nervous system tumors than expected based upon rates for the remainder of Idaho.


State Brain & other CNS non-Malignant Incidence
Age-specific Rates
Rate per 100,000 person-years
70
60
50
40
30
20
10
0
< 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+
Age Group (in years)
Male
Female
All


Brain & other CNS non-Malignant Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
10.7
9.9
9.4
14.3
12.5
9.1
8.8
8.0
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
18.0
20.0
Rate per 100,000 person-years

BREAST

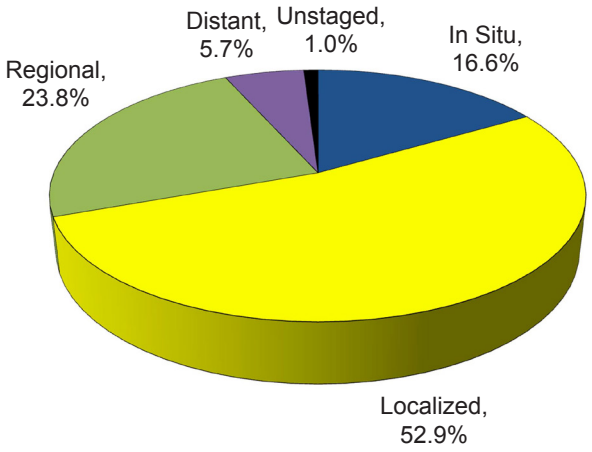
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	63.9	1.2	123.2
# of new invasive cases	1,145	11	1,134
# of new in situ cases	228	0	228
# of deaths	194	3	191

Total Cases by County

Ada	393	Cassia	15	Lewis	-
Adams	2	Clark	-	Lincoln	3
Bannock	63	Clearwater	6	Madison	4
Bear Lake	2	Custer	7	Minidoka	15
Benewah	9	Elmore	17	Nez Perce	52
Bingham	22	Franklin	6	Oneida	5
Blaine	16	Fremont	9	Owyhee	13
Boise	13	Gem	12	Payette	22
Bonner	35	Gooding	4	Power	6
Bonneville	79	Idaho	12	Shoshone	10
Boundary	12	Jefferson	15	Teton	7
Butte	2	Jerome	15	Twin Falls	57
Camas	-	Kootenai	156	Valley	12
Canyon	176	Latah	40	Washington	16
Caribou	6	Lemhi	7		

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 Whites have higher incidence rates, as do women in higher income groups.

Genetics 5% to 10% of all breast cancers have a major hereditary component. For the 2% to 4% of women who have BRCA 1 or 2 mutations, the risk of breast cancer by age 70 is about 45% to 65% in the absence of intervention.

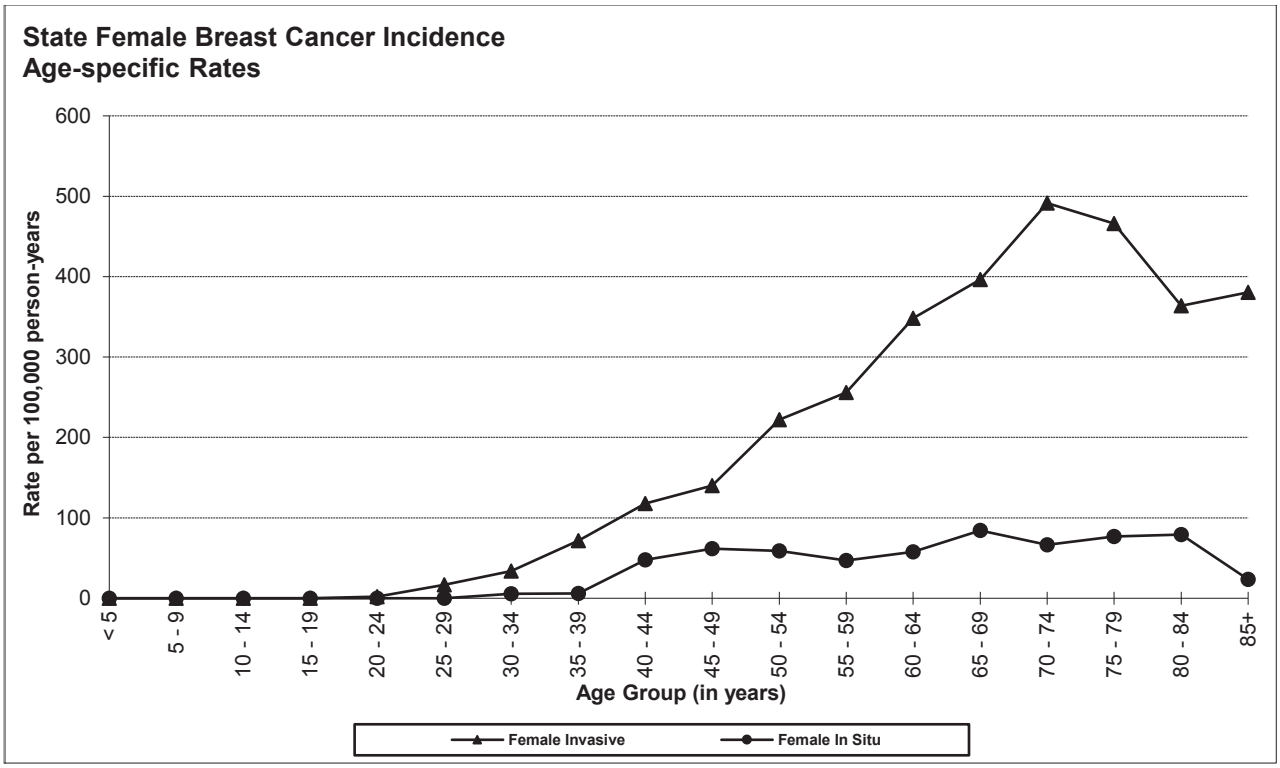
Hormonal There is evidence of hormonal influence in the risk of developing breast cancer. Longer intervals of menarche to the first full-term pregnancy and menarche to menopause, as well as menarche before age 13, have been associated with higher risks of breast cancer. Cumulative estrogen exposure, including use of hormone replacement therapy, increases breast cancer risk.

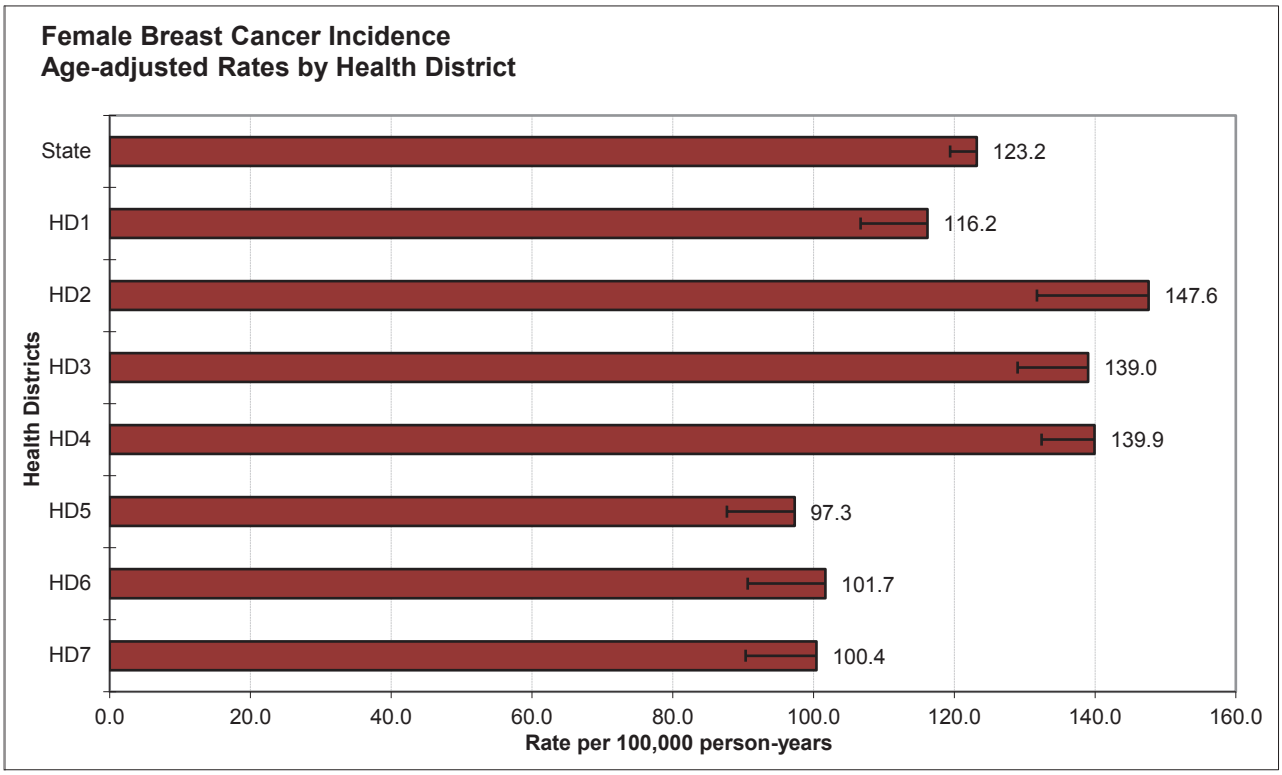
Other Alcohol consumption, high dietary fat intake, obesity (in postmenopausal women), sedentary life-style, in utero exposure to DDT (dichlorodiphenyltrichloroethane) and having a mother or sister with breast cancer have all been implicated as associated risk factors. Weight gain of 55 lbs or more after age 18 is associated with a 45% increased risk.

Special Notes

Mean age-adjusted incidence rate across health districts:	120.3	
95% confidence interval on the mean age-adjusted incidence rate:	104.4-	136.2
Median age-adjusted incidence rate of health districts:	116.2	
Range of age-adjusted incidence rate for health districts:	97.3-	147.6
USCS rate (2013, all races):	123.7	

The vast majority of breast cancer cases occur among females. In Idaho during the year 2014, there were 11 cases of invasive breast cancer among males. The age-specific incidence rates of female breast cancer in Idaho increased with age, peaking in the age group 70-74 for invasive cases. No cases were observed in women less than 20 years of age. Health District 4 had statistically significantly more cases of breast cancer than expected based upon rates for the remainder of Idaho, and Health Districts 5 and 6 had statistically significantly fewer cases than expected.


State Female Breast Cancer Incidence
Age-specific Rates
600
500
400
300
200
100
0
Rate per 100,000 person-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+
Age Group (in years)
Female Invasive
Female In Situ


Female Breast Cancer Incidence
Age-adjusted Rates by Health District
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
Health Districts
123.2
116.2
147.6
139.0
139.9
97.3
101.7
100.4
0.0
20.0
40.0
60.0
80.0
100.0
120.0
140.0
160.0
Rate per 100,000 person-years

CERVIX

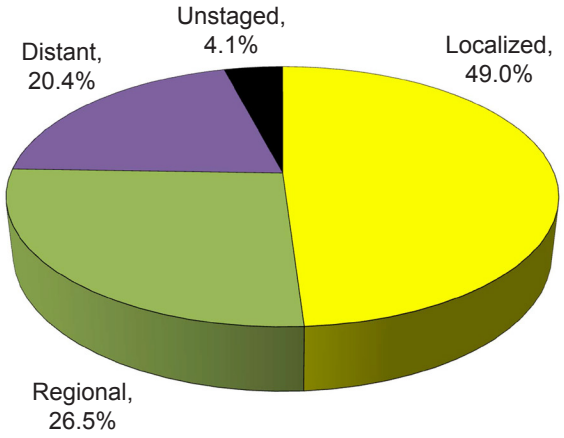
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	-	6.1
# of new invasive cases	-	-	49
# of new in situ cases	-	-	n/a
# of deaths	-	-	17

Total Cases by County

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

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.

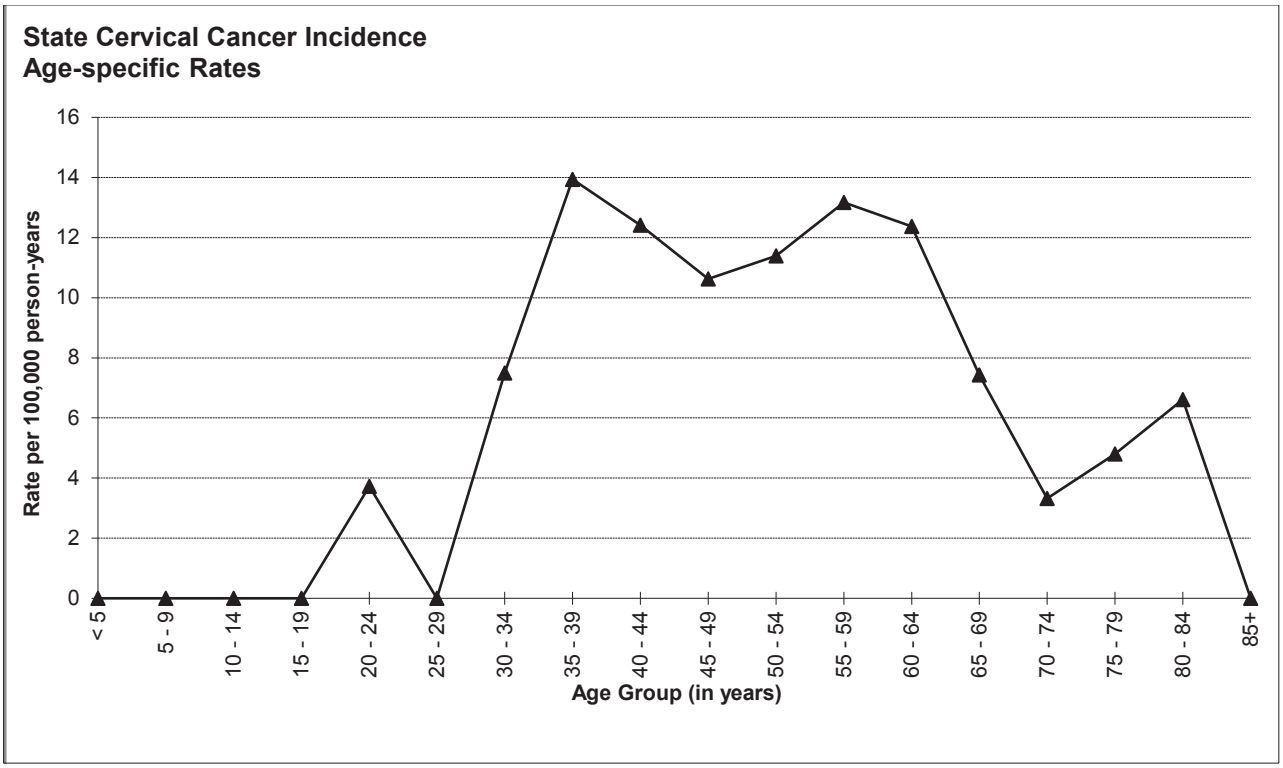
Race & SES Blacks, Hispanics, and women in lower income groups have been shown to experience higher rates.

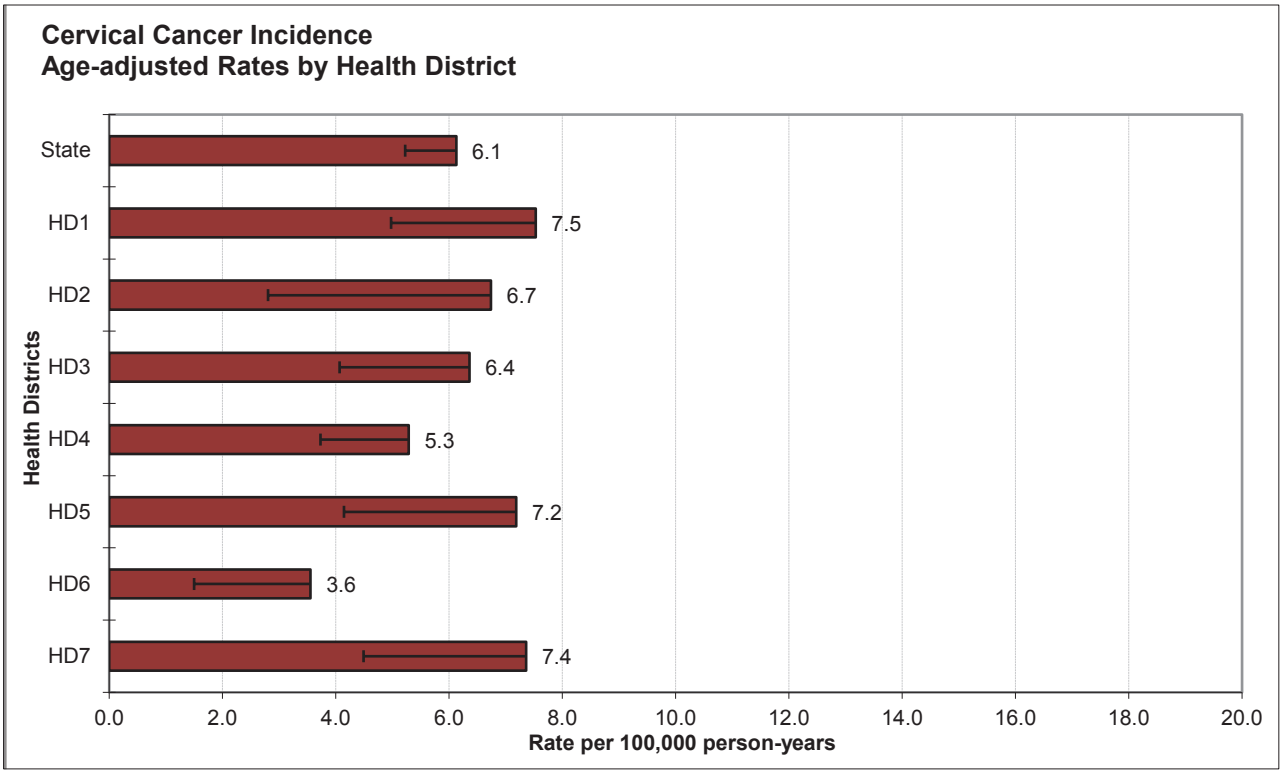
Other The large majority of cervical cancer cases worldwide can be attributed to human papilloma virus (HPV) infection. Of the at least 70 types of HPV known, types 16 and 18 are most closely associated with malignancy. Other risk factors that may be correlates, cofactors, or independent risk factors of HPV infection include: early age at first intercourse (less than 16 years old), a history of multiple sexual partners, a large number of pregnancies, oral contraceptive use, a history of other sexually transmitted diseases, 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:	6.3
95% confidence interval on the mean age-adjusted incidence rate:	5.2- 7.3
Median age-adjusted incidence rate of health districts:	6.7
Range of age-adjusted incidence rate for health districts:	3.6- 7.5
USCS rate (2013, all races):	7.2

Increased screening with routine Pap tests, particularly among older and low-income women, has increased diagnostic rates for pre-invasive disease and helped to reduce the incidence of invasive cervical cancer. 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.


State Cervical Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
16
14
12
10
8
6
4
2
0
< 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+
Age Group (in years)


Cervical Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
6.1
7.5
6.7
6.4
5.3
7.2
3.6
7.4
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
18.0
20.0
Rate per 100,000 person-years

COLORECTAL

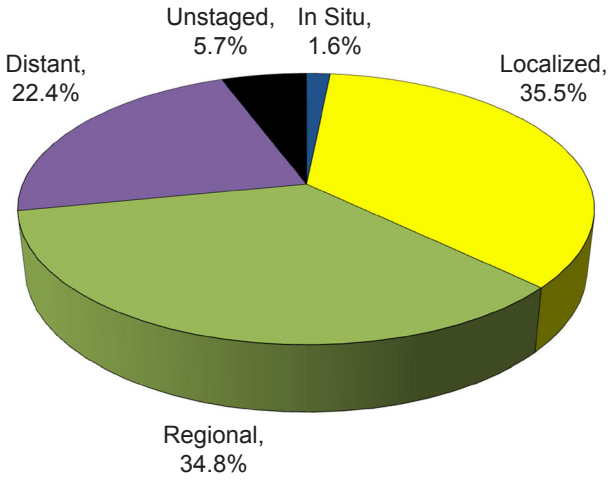
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	34.5	35.4	33.9
# of new invasive cases	623	307	316
# of new in situ cases	10	6	4
# of deaths	232	124	108

Total Cases by County

Ada	145	Cassia	9	Lewis	1
Adams	2	Clark	-	Lincoln	3
Bannock	26	Clearwater	11	Madison	5
Bear Lake	3	Custer	-	Minidoka	7
Benewah	6	Elmore	7	Nez Perce	21
Bingham	18	Franklin	3	Oneida	3
Blaine	4	Fremont	3	Owyhee	6
Boise	5	Gem	12	Payette	10
Bonner	26	Gooding	11	Power	2
Bonneville	42	Idaho	8	Shoshone	16
Boundary	6	Jefferson	10	Teton	-
Butte	-	Jerome	5	Twin Falls	35
Camas	-	Kootenai	63	Valley	3
Canyon	68	Latah	10	Washington	7
Caribou	2	Lemhi	9		

Stage at Diagnosis - Colorectal



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 It is estimated that 65-85% of colorectal cancer cases are sporadic, 10-30% are familial, and the remainder are the result of specific rare genetic disorders such as Lynch Syndrome.

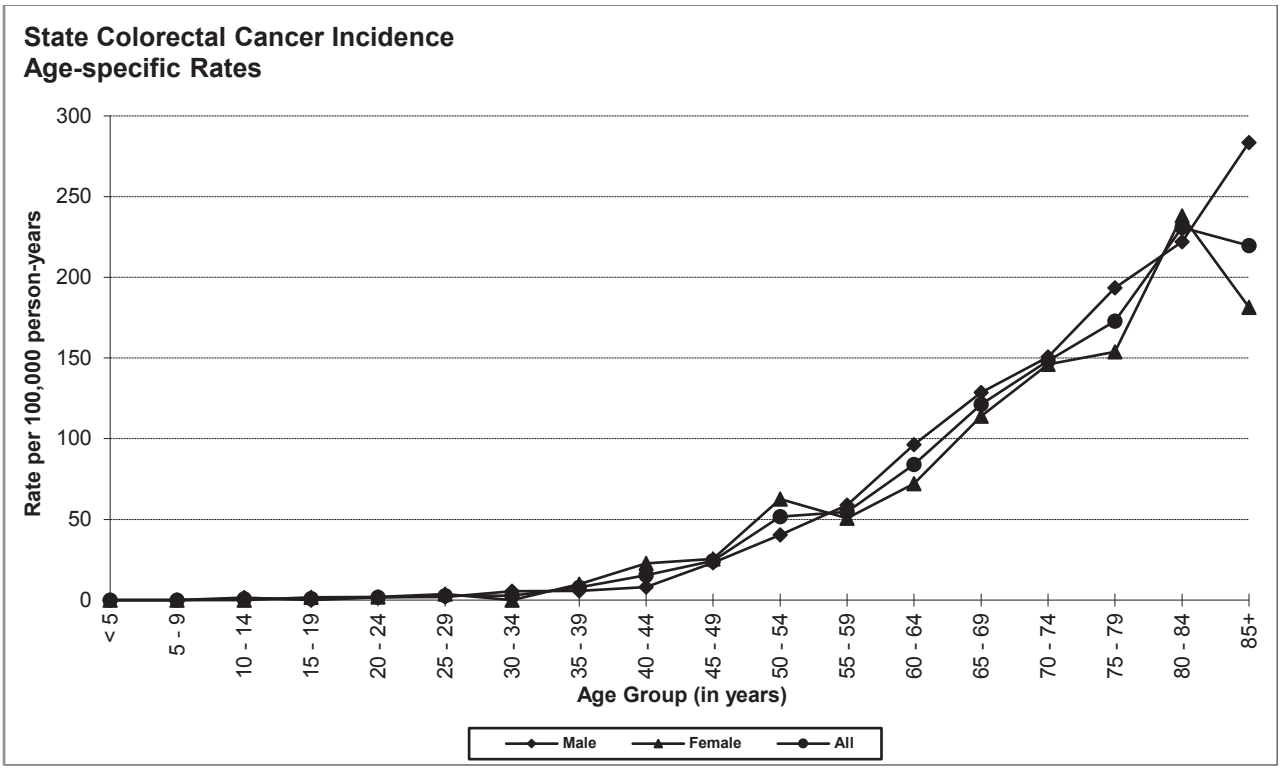
Diet There is strong evidence that high calorie diets and diets high in fat and low in fiber contribute to higher risks of colon cancer.

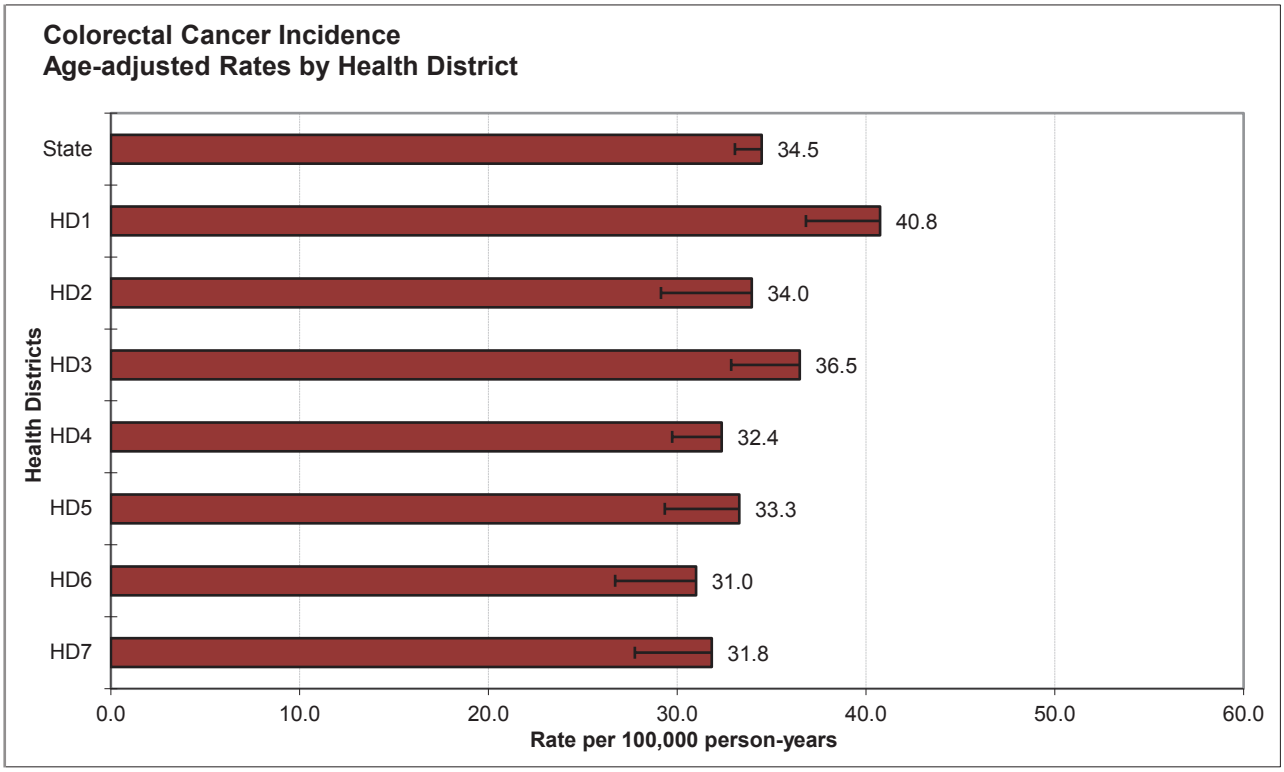
Other Individuals with a close family history of this cancer and those with a personal history of certain other cancers are at increased risk. Physical inactivity, obesity, and tobacco use are known risk factors for colorectal cancer. Cigarette smoking is significantly associated with colorectal cancer incidence and mortality. The use of NSAIDs, including aspirin, may help prevent colon cancer. Inflammatory bowel disease confers a 4- to 20-fold increase in colorectal cancer risk, with younger age at diagnosis. If everyone aged 50 years and older were screened regularly, as many as 60% of deaths from colorectal cancer could be avoided.

Special Notes

Mean age-adjusted incidence rate across health districts:	34.2
95% confidence interval on the mean age-adjusted incidence rate:	31.7- 36.7
Median age-adjusted incidence rate of health districts:	33.3
Range of age-adjusted incidence rate for health districts:	31.0- 40.8
USCS rate (2013, all races):	38.4

Few cases of colorectal cancer were diagnosed in persons less than 40 years of age. There was a steep increase in age-specific incidence rates starting at age 60. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.


State Colorectal Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
300
250
200
150
100
50
0
< 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+
Age Group (in years)
Male
Female
All


Colorectal Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
34.5
40.8
34.0
36.5
32.4
33.3
31.0
31.8
0.0
10.0
20.0
30.0
40.0
50.0
60.0
Rate per 100,000 person-years

CORPUS UTERI

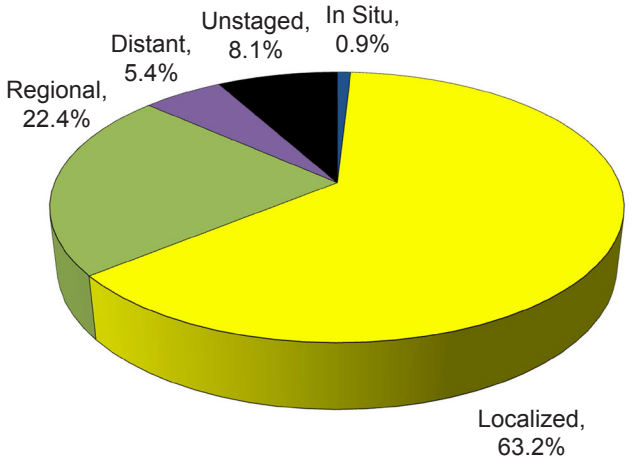
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	-	23.5
# of new invasive cases	-	-	221
# of new in situ cases	-	-	2
# of deaths	-	-	19

Total Cases by County

Ada	46	Cassia	5	Lewis	-
Adams	1	Clark	-	Lincoln	2
Bannock	13	Clearwater	3	Madison	2
Bear Lake	-	Custer	-	Minidoka	1
Benewah	2	Elmore	5	Nez Perce	3
Bingham	5	Franklin	-	Oneida	1
Blaine	4	Fremont	1	Owyhee	2
Boise	-	Gem	6	Payette	8
Bonner	9	Gooding	4	Power	2
Bonneville	16	Idaho	4	Shoshone	4
Boundary	2	Jefferson	2	Teton	1
Butte	-	Jerome	2	Twin Falls	13
Camas	-	Kootenai	25	Valley	-
Canyon	24	Latah	4	Washington	-
Caribou	-	Lemhi	1		

Stage at Diagnosis - Corpus Uteri



Risk and Associated Factors

Age Occurs predominantly after menopause, with incidence rates peaking before age 80.

Race & SES White women have higher rates than black or Asian/Pacific Islander women in the U.S.

Genetics Familial tendency has been observed, but likely accounts for a small fraction of cases.

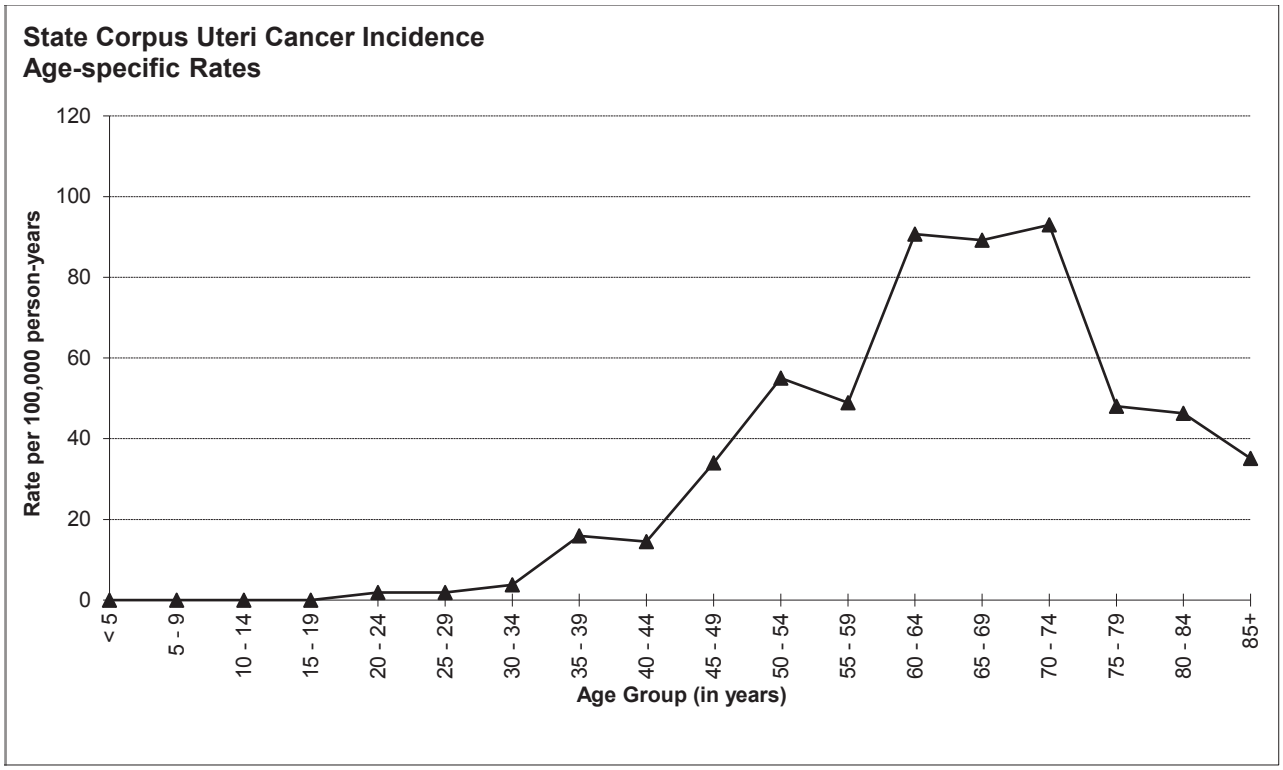
Diet Dietary fat may play a role in increased risk. Obesity and hypertension are common associated conditions of endometrial cancer.

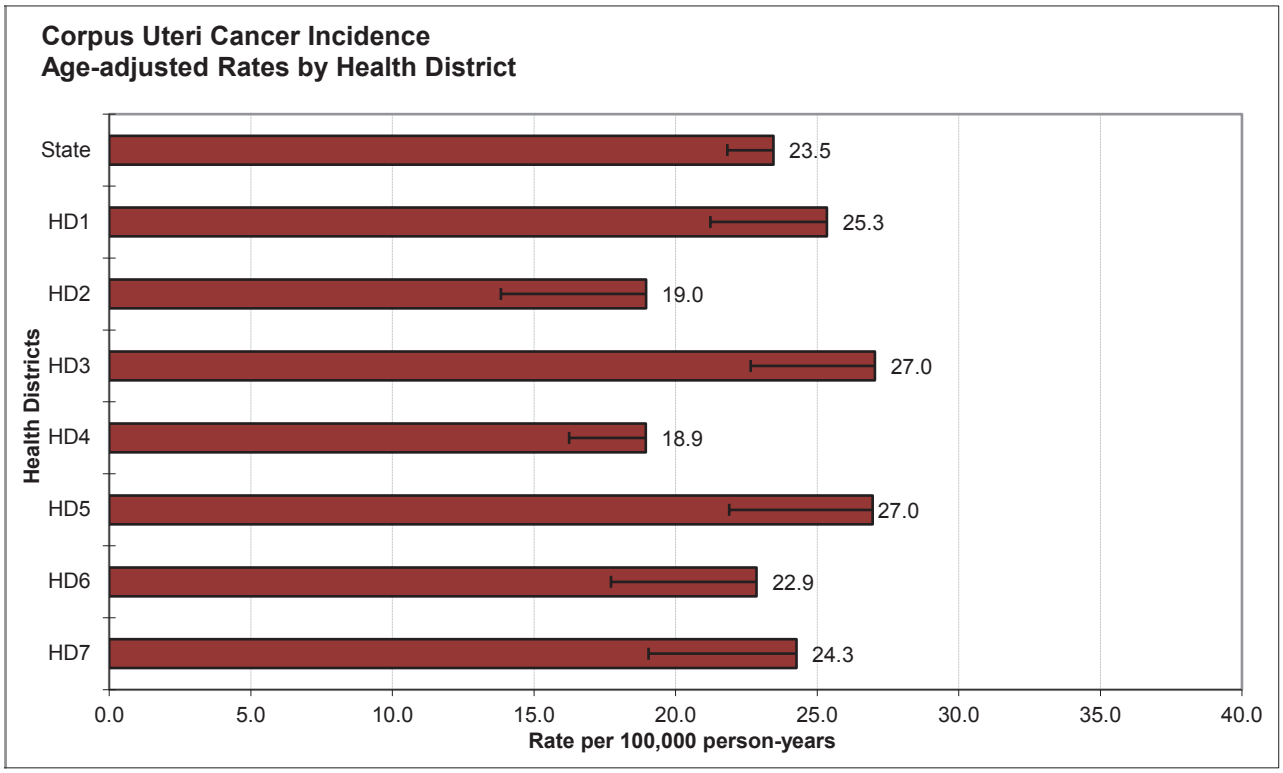
Hormonal Factors that elevate levels of estrogen or decrease progesterone levels enhance the risk. Women who have never carried a pregnancy to term are at a relatively high risk. Risk decreases as the number of pregnancies increases. An increased incidence of endometrial cancer has been found in association with prolonged, unopposed estrogen exposure and with tamoxifen treatment of breast cancer. Use of combination oral contraceptives (estrogen and progestin) decreases risk of endometrial cancer by about 50%.

Special Notes

Mean age-adjusted incidence rate across health districts:	23.5
95% confidence interval on the mean age-adjusted incidence rate:	20.9- 26.0
Median age-adjusted incidence rate of health districts:	24.3
Range of age-adjusted incidence rate for health districts:	18.9- 27.0
USCS rate (2013, all races):	25.0

Few cases of endometrial cancer were diagnosed in persons less than 35 years of age. After age 44, there was a sharp increase in age-specific rates, peaking in the age group 70-74. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.


State Corpus Uteri Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
120
100
80
60
40
20
0
< 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+
Age Group (in years)


Corpus Uteri Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
23.5
25.3
19.0
27.0
18.9
27.0
22.9
24.3
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
Rate per 100,000 person-years

ESOPHAGUS

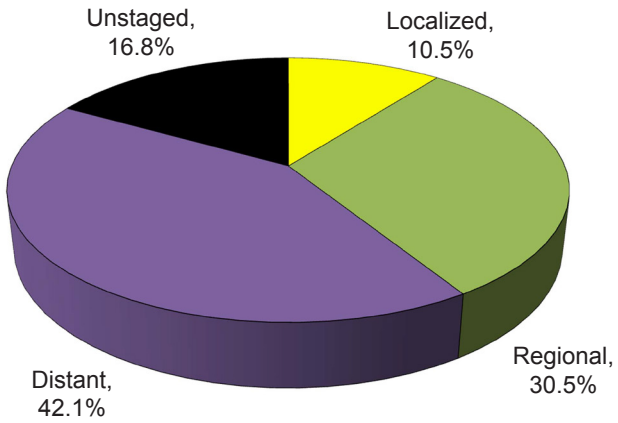
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	5.1	8.8	1.8
# of new invasive cases	95	77	18
# of new in situ cases	0	0	0
# of deaths	84	69	15

Total Cases by County

Ada	23	Cassia	2	Lewis	1
Adams	-	Clark	-	Lincoln	1
Bannock	7	Clearwater	1	Madison	2
Bear Lake	-	Custer	-	Minidoka	1
Benewah	2	Elmore	-	Nez Perce	4
Bingham	1	Franklin	1	Oneida	-
Blaine	1	Fremont	1	Owyhee	1
Boise	1	Gem	-	Payette	2
Bonner	4	Gooding	1	Power	-
Bonneville	6	Idaho	1	Shoshone	3
Boundary	1	Jefferson	-	Teton	-
Butte	-	Jerome	-	Twin Falls	1
Camas	-	Kootenai	13	Valley	-
Canyon	11	Latah	-	Washington	1
Caribou	-	Lemhi	1		

Stage at Diagnosis - Esophagus



Risk and Associated Factors

Age Incidence of esophageal cancer is highest after age 55.

Gender Males have higher incidence rates, with male-to-female ratios of cases about 3:1 or more.

Race & SES United States data show that blacks are affected more than whites. Risk is higher among lower SES strata.

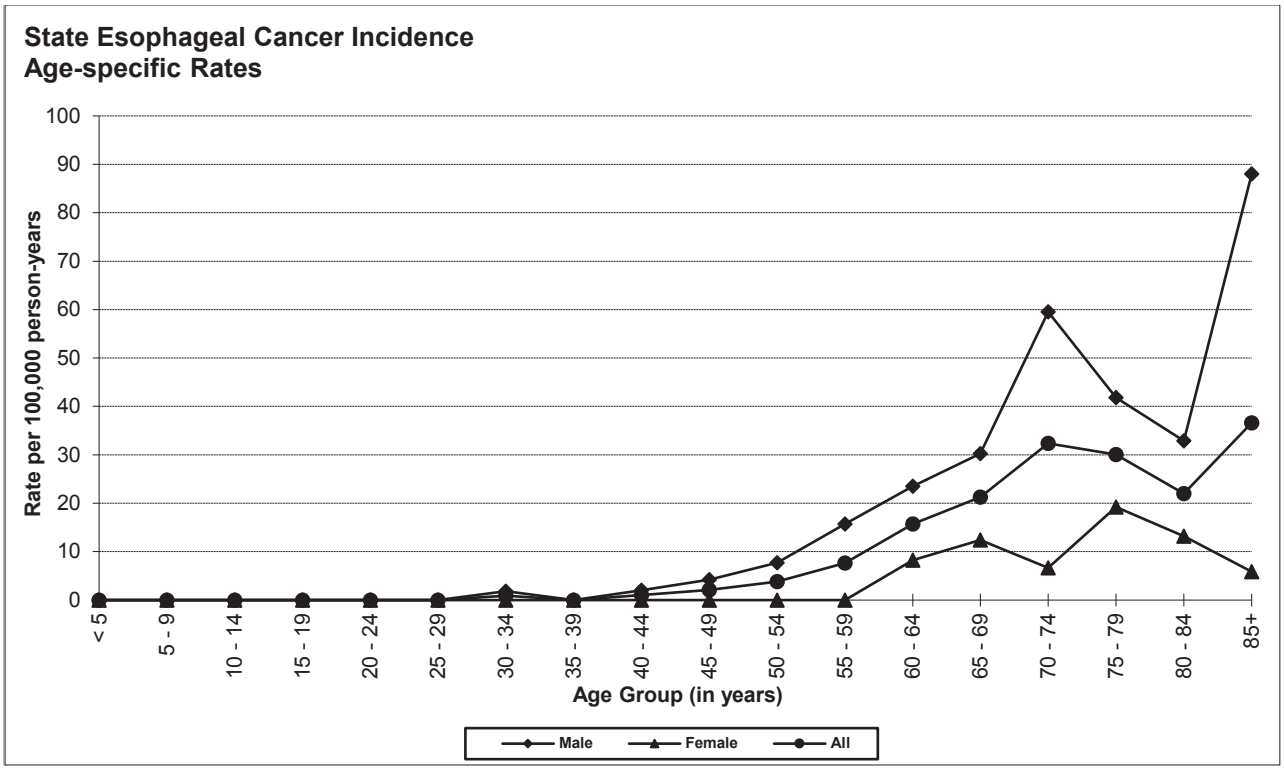
Occupation Chimney sweeps exposed to soot are at higher risk.

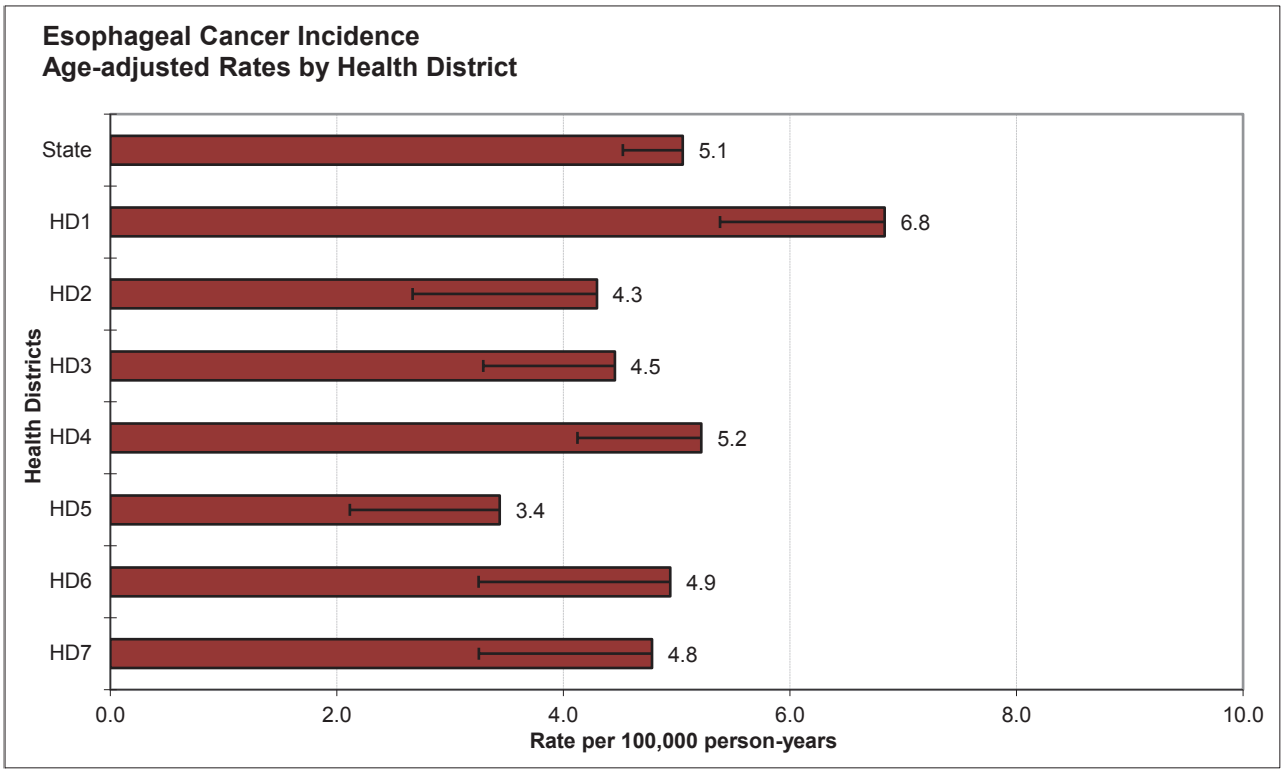
Other Tobacco use (cigarettes or spit tobacco) and heavy alcohol consumption are major risk factors for cancer of the esophagus. The risk is particularly increased when these two factors are both present. In Western Europe and North America, 90% or more of the risk of esophageal cancer can be attributed to alcohol and tobacco. Drinking “burning hot” beverages may increase the risk of esophageal cancer.

Special Notes

Mean age-adjusted incidence rate across health districts:	4.9
95% confidence interval on the mean age-adjusted incidence rate:	4.1- 5.6
Median age-adjusted incidence rate of health districts:	4.8
Range of age-adjusted incidence rate for health districts:	3.4- 6.8
USCS rate (2013, all races):	4.5

Few cases of esophageal cancer were diagnosed in person less than 50 years of age. The age-specific incidence rates peaked in the age group 85+ for males and 75-79 for females. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.


State Esophageal Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
100
90
80
70
60
50
40
30
20
10
0
< 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+
Age Group (in years)
Male
Female
All


Esophageal Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
5.1
6.8
4.3
4.5
5.2
3.4
4.9
4.8
0.0
2.0
4.0
6.0
8.0
10.0
Rate per 100,000 person-years

HODGKIN LYMPHOMA

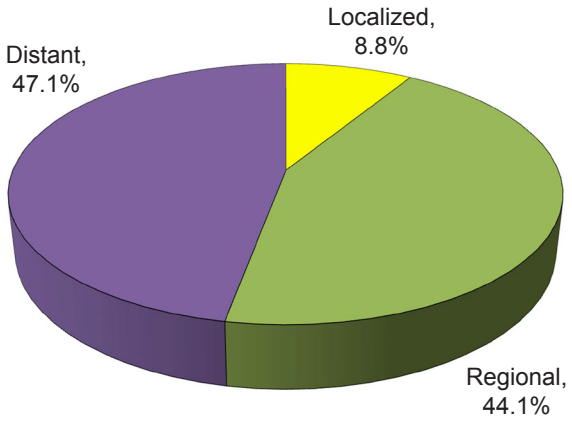
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	2.2	2.1	2.1
# of new invasive cases	34	17	17
# of new in situ cases	0	0	0
# of deaths	3	1	2

Total Cases by County

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

Stage at Diagnosis - Hodgkin Lymphoma



Risk and Associated Factors

Age High rates are seen in young adults and in later age groups especially among males.

Gender Males typically have slightly higher rates than females.

Race & SES Hodgkin lymphoma is more common among whites than among blacks. Hodgkin lymphoma is more common in higher income groups.

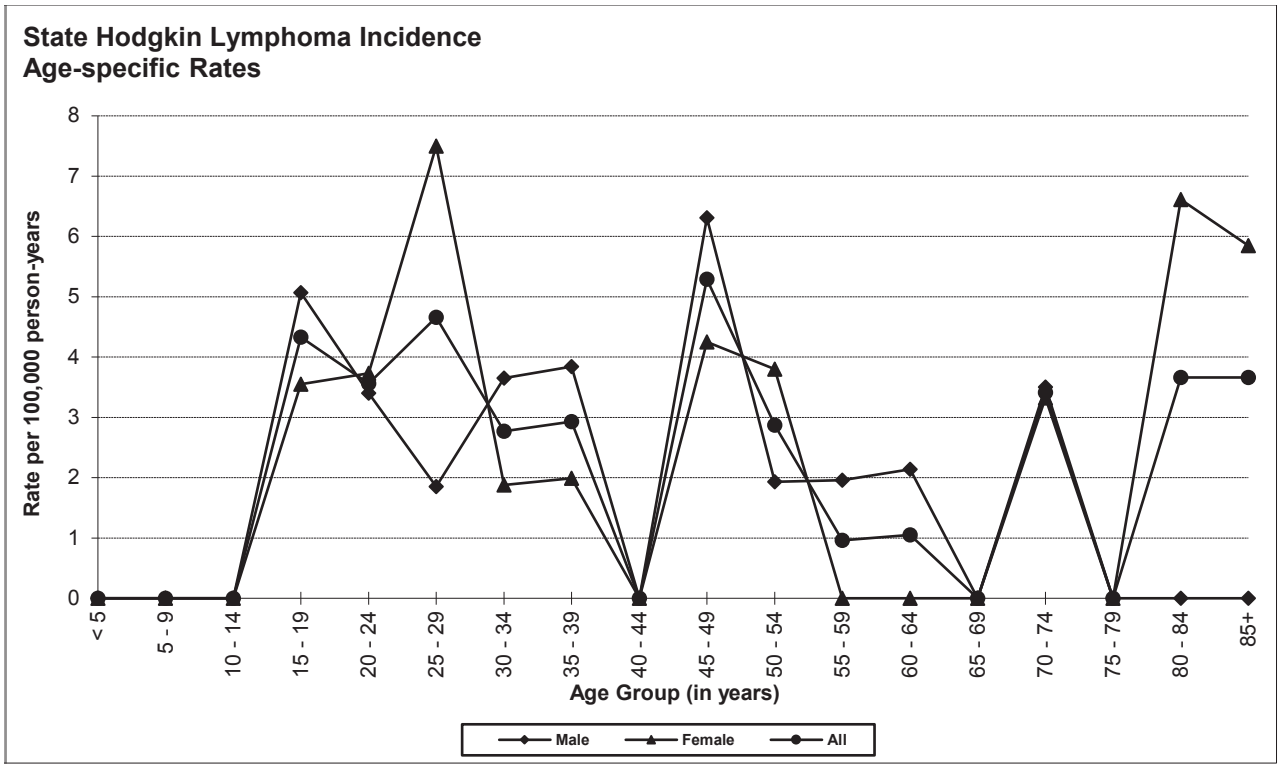
Genetics Genetic factors are thought to play an important role in the etiology of Hodgkin lymphoma, but these are yet to be adequately defined.

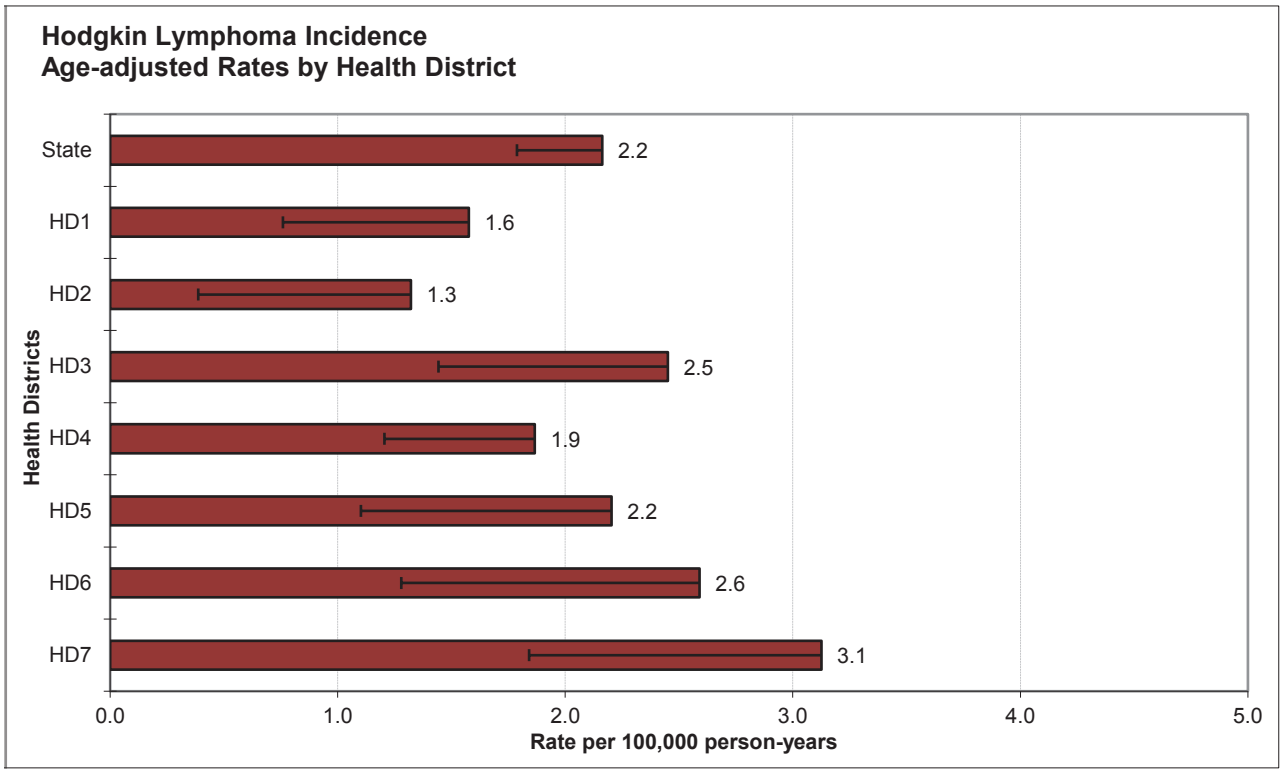
Other Small family size and ensuing delayed exposure to childhood infections is thought to be responsible for a portion of Hodgkin lymphoma cases. Certain viral infections, especially Epstein-Barr virus, and AIDS increase the risk of Hodgkin lymphoma. With current treatment, Hodgkin disease, which was once highly fatal, is among the most curable of all cancers.

Special Notes

Mean age-adjusted incidence rate across health districts:	2.2
95% confidence interval on the mean age-adjusted incidence rate:	1.7- 2.6
Median age-adjusted incidence rate of health districts:	2.2
Range of age-adjusted incidence rate for health districts:	1.3- 3.1
USCS rate (2013, all races):	2.6

The age-related incidence of Hodgkin 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. No health district had statistically significantly fewer or more cases than expected based upon rates for the remainder of Idaho.


State Hodgkin Lymphoma Incidence
Age-specific Rates
Rate per 100,000 person-years
0
1
2
3
4
5
6
7
8
< 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+
Age Group (in years)
Male
Female
All


Hodgkin Lymphoma Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
2.2
1.6
1.3
2.5
1.9
2.2
2.6
3.1
0.0
1.0
2.0
3.0
4.0
5.0
Rate per 100,000 person-years

KIDNEY AND RENAL PELVIS

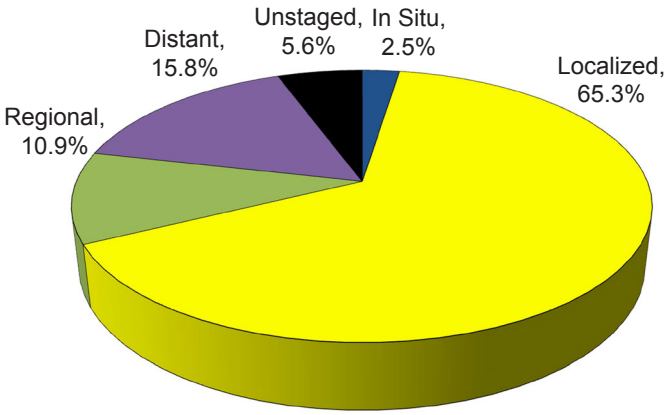
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	14.9	20.2	10.2
# of new invasive cases	278	181	97
# of new in situ cases	7	5	2
# of deaths	80	60	20

Total Cases by County

Ada	71	Cassia	4	Lewis	-
Adams	5	Clark	-	Lincoln	-
Bannock	10	Clearwater	2	Madison	5
Bear Lake	-	Custer	1	Minidoka	4
Benewah	3	Elmore	3	Nez Perce	8
Bingham	7	Franklin	1	Oneida	1
Blaine	3	Fremont	3	Owyhee	2
Boise	-	Gem	2	Payette	5
Bonner	13	Gooding	4	Power	1
Bonneville	10	Idaho	4	Shoshone	4
Boundary	3	Jefferson	2	Teton	-
Butte	-	Jerome	6	Twin Falls	13
Camas	-	Kootenai	36	Valley	1
Canyon	39	Latah	5	Washington	1
Caribou	2	Lemhi	1		

Stage at Diagnosis - Kidney and Renal Pelvis



Risk and Associated Factors

Age Both adults and children are at risk for kidney cancer. Renal cell carcinoma accounts for about 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.

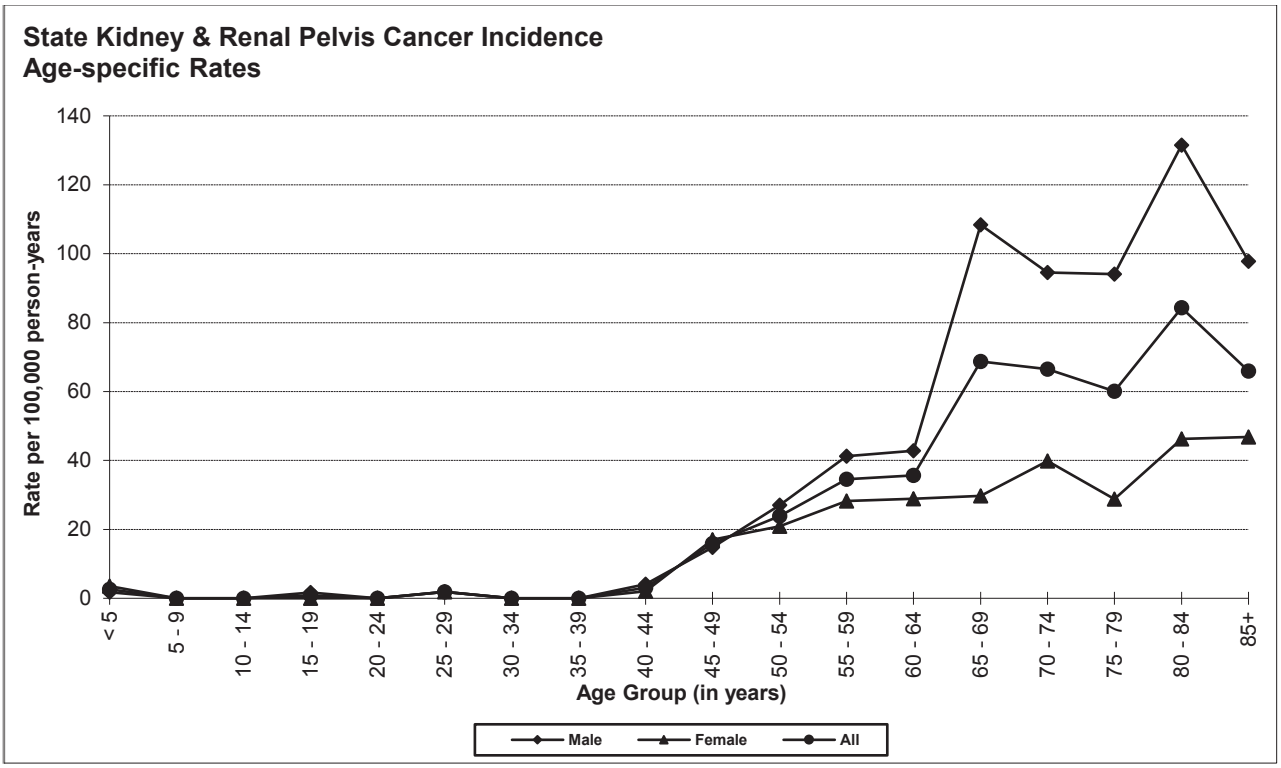
Occupation Certain occupations, such as laundry and leather workers, have been associated with increased risk due to chemical exposure.

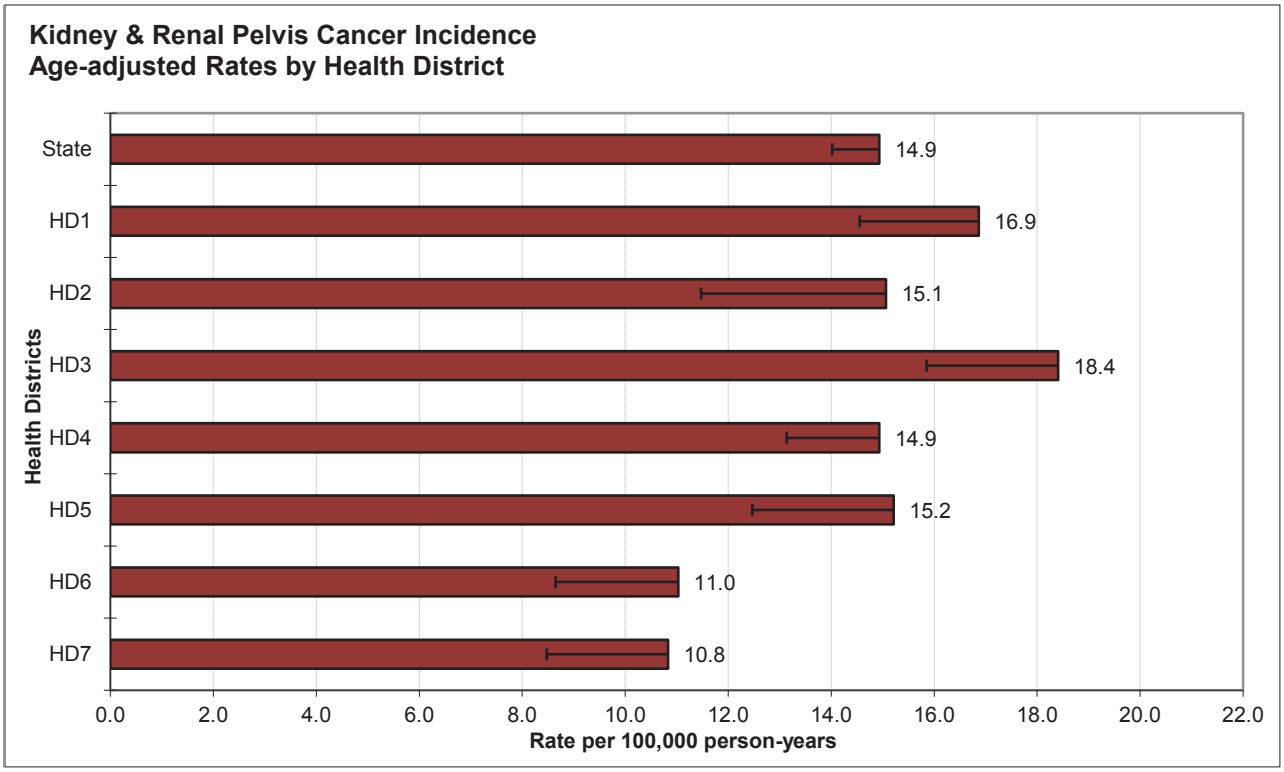
Other Cigarette smoking is strongly associated with renal pelvis and ureter cancers. Smokers are at twice the risk of developing kidney cancer as non-smokers. Analgesic mixtures containing phenacetin increase the risk of kidney cancer. Obesity is a risk factor for kidney cancer. High dietary protein consumption, independent of fat and calorie intake, may elevate kidney cancer risk.

Special Notes

Mean age-adjusted incidence rate across health districts:	14.6
95% confidence interval on the mean age-adjusted incidence rate:	12.5- 16.7
Median age-adjusted incidence rate of health districts:	15.1
Range of age-adjusted incidence rate for health districts:	10.8- 18.4
USCS rate (2013, all races):	16.0

There were few cases of kidney or renal pelvis cancer among persons aged less than 40 years. The age-specific incidence rates peaked in the age group 80-84 for males and 85+ for females. No health district had statistically significantly fewer or more cases than expected based upon rates for the remainder of Idaho.


State Kidney & Renal Pelvis Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
140
120
100
80
60
40
20
0
< 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+
Age Group (in years)
Male
Female
All


Kidney & Renal Pelvis Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
14.9
16.9
15.1
18.4
14.9
15.2
11.0
10.8
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
18.0
20.0
22.0
Rate per 100,000 person-years

LARYNX

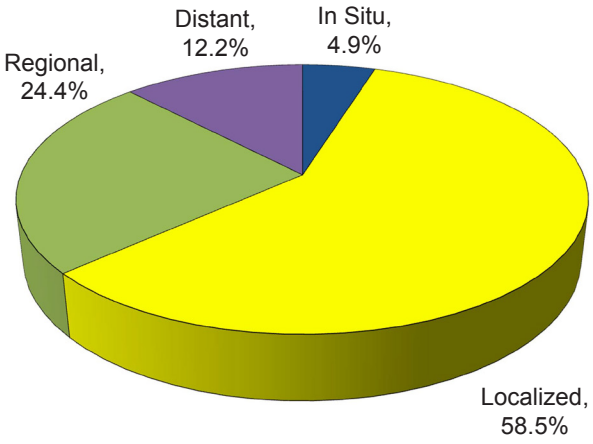
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	2.0	3.7	0.6
# of new invasive cases	39	33	6
# of new in situ cases	2	1	1
# of deaths	14	13	1

Total Cases by County

Ada	6	Cassia	1	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	3	Clearwater	1	Madison	-
Bear Lake	-	Custer	-	Minidoka	-
Benewah	-	Elmore	1	Nez Perce	1
Bingham	1	Franklin	-	Oneida	-
Blaine	1	Fremont	1	Owyhee	-
Boise	-	Gem	1	Payette	1
Bonner	-	Gooding	-	Power	1
Bonneville	1	Idaho	1	Shoshone	1
Boundary	1	Jefferson	1	Teton	-
Butte	1	Jerome	1	Twin Falls	3
Camas	-	Kootenai	9	Valley	-
Canyon	2	Latah	1	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 Laryngeal cancers are much more common in males than females.

Race & SES Generally in the United States, blacks have higher incidence rates than whites. Lower income groups experience higher rates.

Occupation Laryngeal cancer has been associated with exposures to asbestos and wood dust.

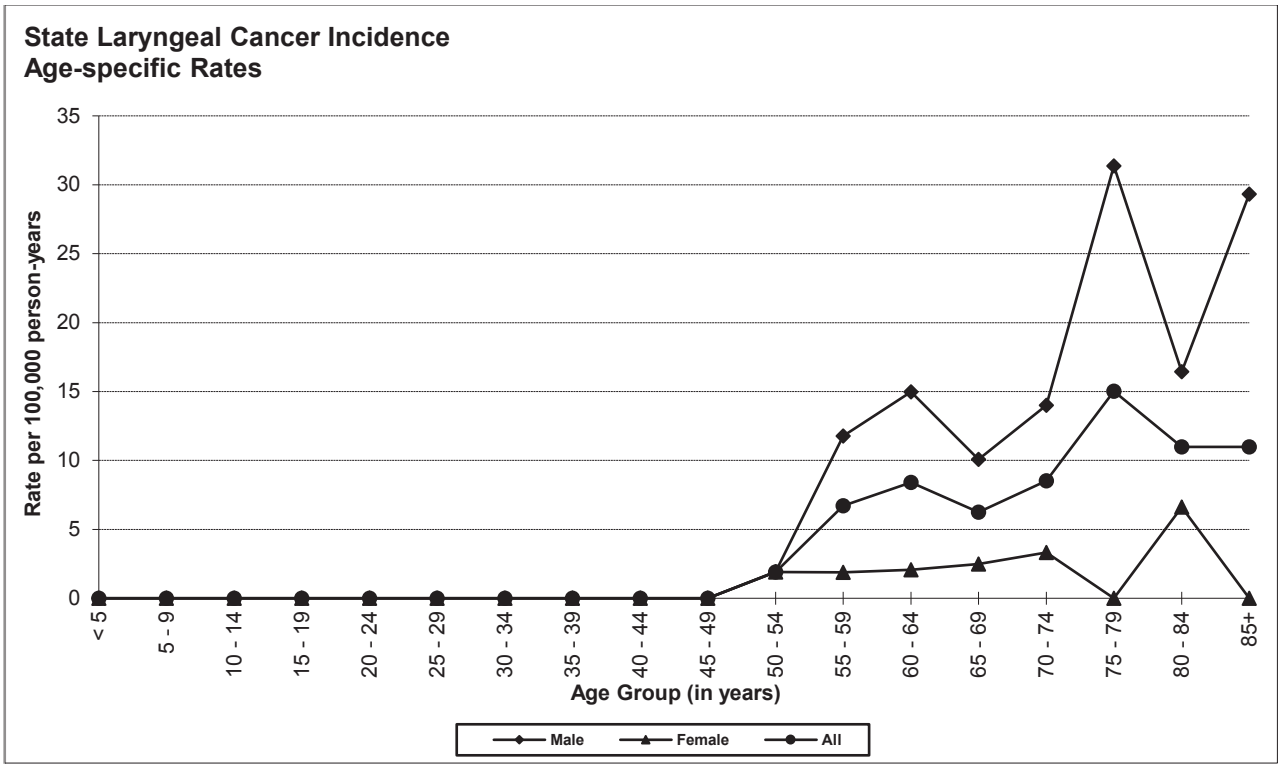
Diet Diets low in fresh fruits and vegetables may increase the risk.

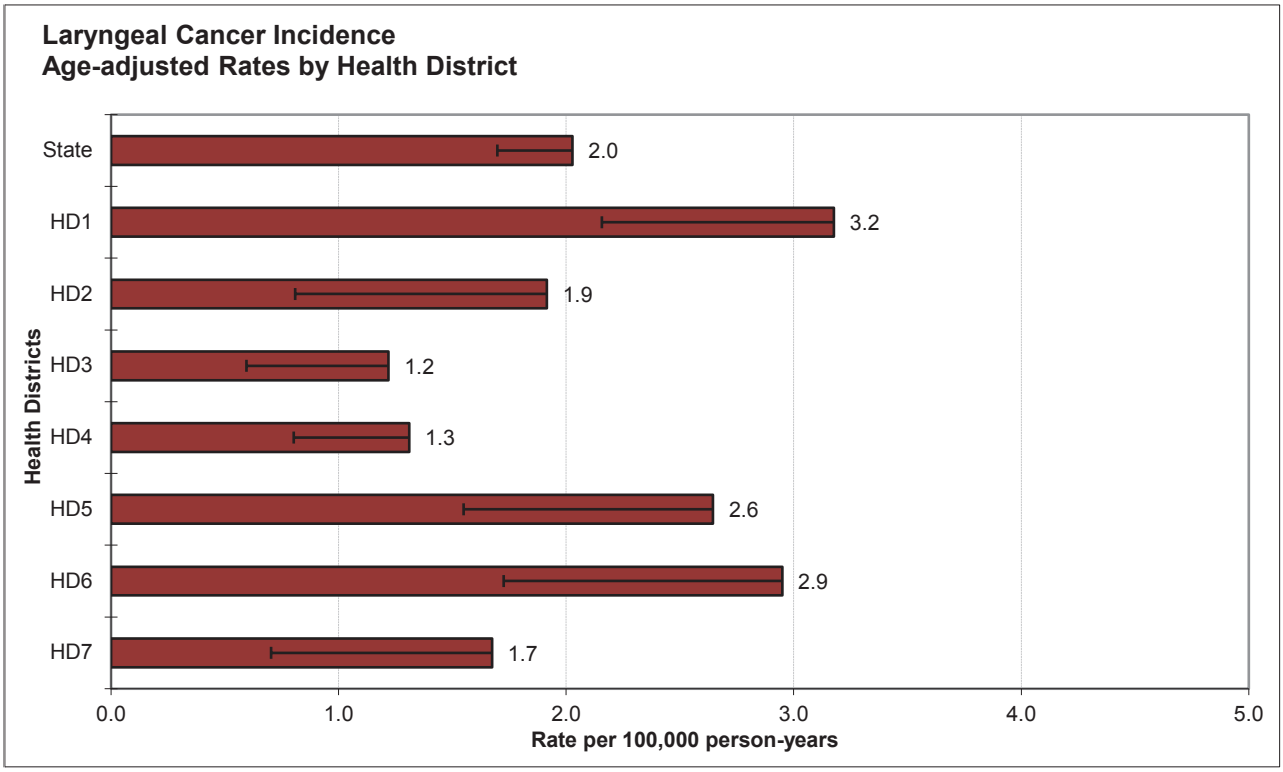
Other Cigarette smoking and alcohol use are both major risk factors. The combination of alcohol consumption and tobacco use (smoking or spit tobacco) acts greatly to increase the risk. A patient with a single laryngeal cancer who continues to smoke and drink alcohol has an enhanced risk of developing a second laryngeal tumor.

Special Notes

Mean age-adjusted incidence rate across health districts:	2.1
95% confidence interval on the mean age-adjusted incidence rate:	1.5- 2.7
Median age-adjusted incidence rate of health districts:	1.9
Range of age-adjusted incidence rate for health districts:	1.2- 3.2
USCS rate (2013, all races):	3.4

There were no cases of laryngeal cancer among persons aged less than 50 years. The age-specific incidence rates for males were more than twice those for females in most age groups. The age-specific incidence rates peaked in the age group 75-79 for males and 80-84 for females. No health district had statistically significantly fewer or more cases than expected based upon rates for the remainder of Idaho.


State Laryngeal Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
35
30
25
20
15
10
5
0
< 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+
Age Group (in years)
Male
Female
All


Laryngeal Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
2.0
3.2
1.9
1.2
1.3
2.6
2.9
1.7
0.0
1.0
2.0
3.0
4.0
5.0
Rate per 100,000 person-years

LEUKEMIA

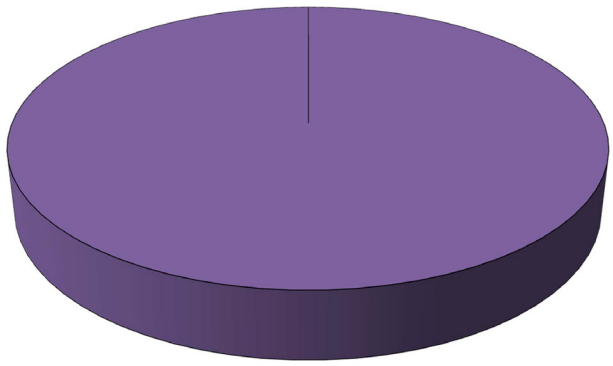
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	14.2	16.3	12.1
# of new invasive cases	252	141	111
# of new in situ cases	0	0	0
# of deaths	118	72	46

Total Cases by County

Ada	57	Cassia	1	Lewis	2
Adams	1	Clark	-	Lincoln	-
Bannock	12	Clearwater	1	Madison	6
Bear Lake	2	Custer	-	Minidoka	1
Benewah	3	Elmore	2	Nez Perce	8
Bingham	7	Franklin	1	Oneida	2
Blaine	3	Fremont	1	Owyhee	4
Boise	1	Gem	1	Payette	6
Bonner	7	Gooding	3	Power	3
Bonneville	11	Idaho	5	Shoshone	2
Boundary	6	Jefferson	-	Teton	4
Butte	-	Jerome	3	Twin Falls	15
Camas	1	Kootenai	29	Valley	3
Canyon	31	Latah	2	Washington	4
Caribou	-	Lemhi	1		

Stage at Diagnosis - Leukemia



Risk and Associated Factors

Age Leukemia 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 higher incidence rates than females for chronic myelogenous leukemia (CML), acute lymphoblastic leukemia (ALL), and chronic lymphocytic leukemia (CLL).

Race ALL is less common among blacks. CLL is rare in Asian/Pacific Islanders.

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.

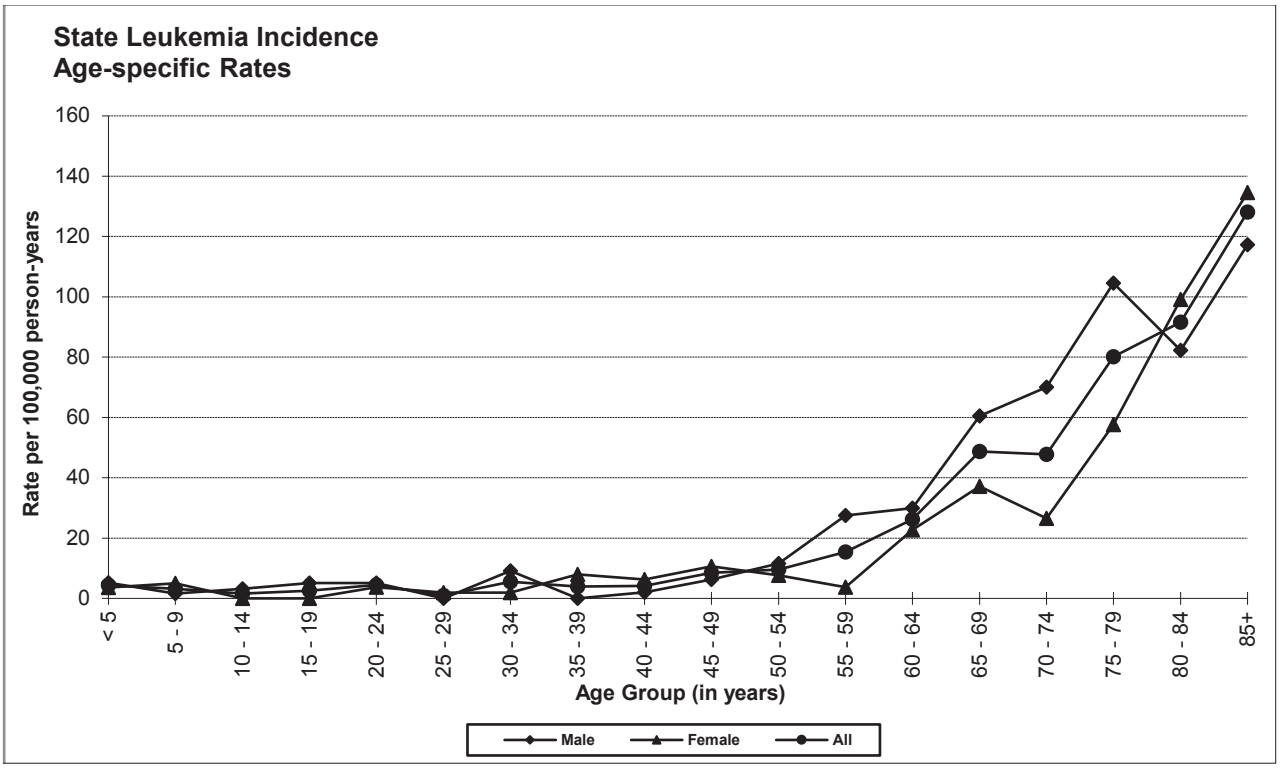
Occupation Benzene is a known cause of leukemia (predominantly acute myelogenous leukemia [AML]). Chimney sweeps exposed to soot are at higher risk.

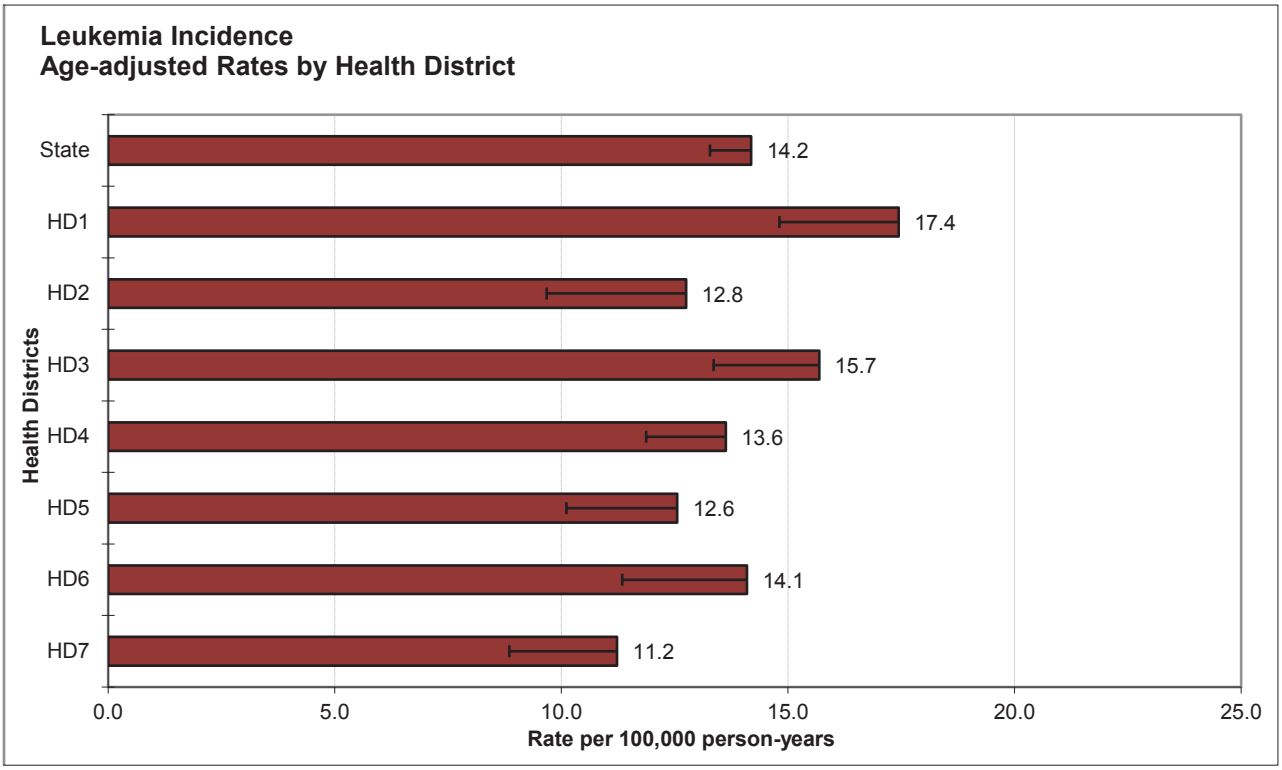
Other Ionizing radiation exposure increases the risk (except for CLL). Environmental exposure to low frequency, non-ionizing radiation and its association with leukemia incidence is being investigated. Treatment with some chemotherapeutic agents for other cancers increases the risk of leukemia. Exposure to herbicides used during the Vietnam War, including Agent Orange, has been associated with increased incidence of CLL. The antibiotic chloramphenicol likely causes leukemia. Autoimmune diseases and several viruses, including HTLV-I and EBV, have been linked to certain types of leukemia.

Special Notes

Mean age-adjusted incidence rate across health districts:	13.9
95% confidence interval on the mean age-adjusted incidence rate:	12.4- 15.5
Median age-adjusted incidence rate of health districts:	13.6
Range of age-adjusted incidence rate for health districts:	11.2- 17.4
USCS rate (2013, all races):	13.2

The age-specific incidence distribution of leukemia for Idaho is quite similar to the typical pattern seen in SEER or NPCR data. 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. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.


State Leukemia Incidence
Age-specific Rates
Rate per 100,000 person-years
160
140
120
100
80
60
40
20
0
< 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+
Age Group (in years)
Male
Female
All


Leukemia Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
14.2
17.4
12.8
15.7
13.6
12.6
14.1
11.2
0.0
5.0
10.0
15.0
20.0
25.0
Rate per 100,000 person-years

LIVER AND BILE DUCT

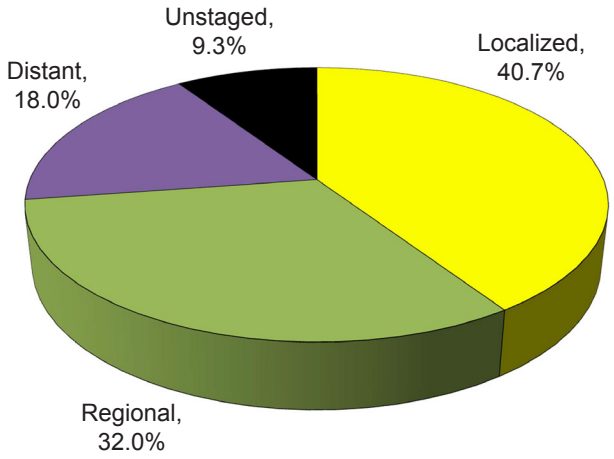
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	7.7	10.8	4.7
# of new invasive cases	150	103	47
# of new in situ cases	0	0	0
# of deaths	103	65	38

Total Cases by County

Ada	38	Cassia	3	Lewis	1
Adams	1	Clark	-	Lincoln	1
Bannock	1	Clearwater	-	Madison	1
Bear Lake	2	Custer	1	Minidoka	4
Benewah	3	Elmore	1	Nez Perce	2
Bingham	4	Franklin	1	Oneida	-
Blaine	-	Fremont	1	Owyhee	4
Boise	1	Gem	4	Payette	5
Bonner	4	Gooding	3	Power	-
Bonneville	3	Idaho	2	Shoshone	3
Boundary	1	Jefferson	1	Teton	1
Butte	-	Jerome	4	Twin Falls	9
Camas	2	Kootenai	19	Valley	1
Canyon	15	Latah	1	Washington	-
Caribou	-	Lemhi	2		

Stage at Diagnosis - Liver and Bile Duct



Risk and Associated Factors

Age The incidence rate of liver cancer increases with age.

Gender Rates are usually higher among males than females.

Race Incidence is higher among Asian/Pacific Islanders and blacks than the remainder 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.

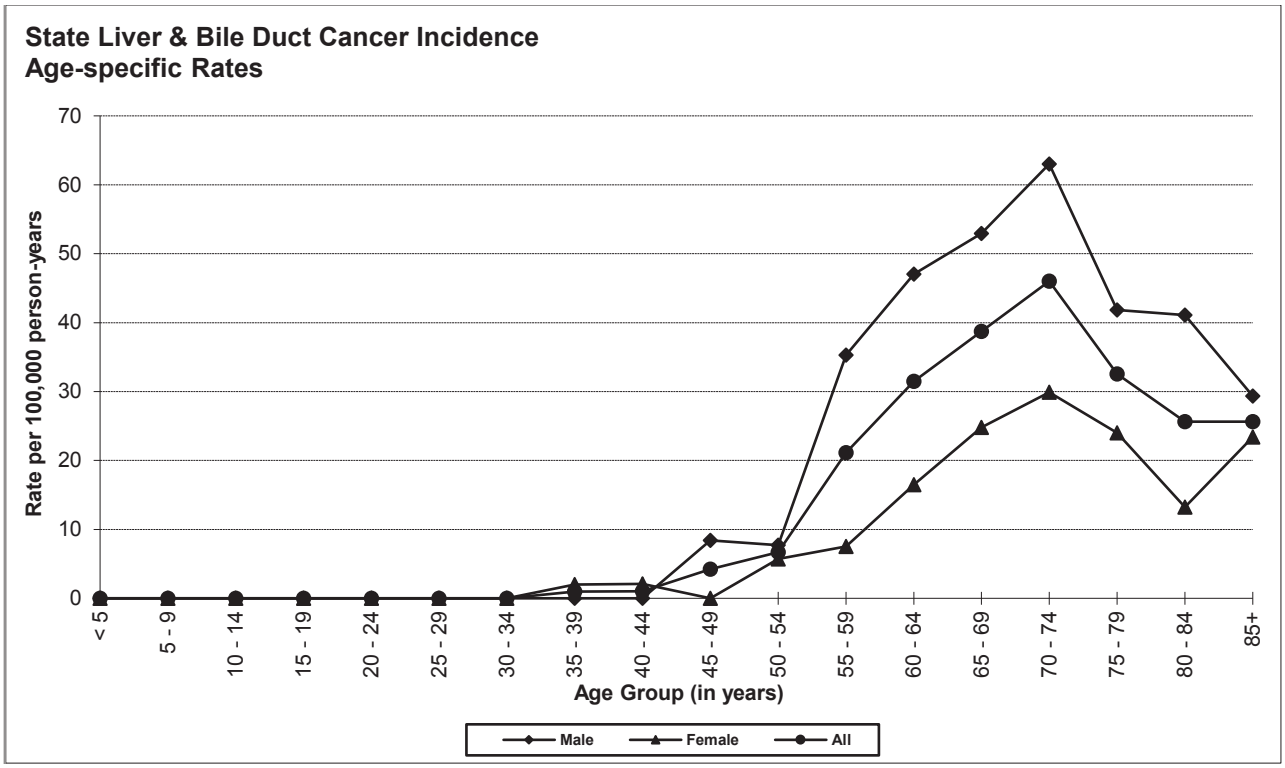
Occupation Thorium dioxide (an x-ray contrast medium) exposure increases liver cancer risk. Exposure to vinyl chloride used in plastic production is associated with an increased risk of angiosarcoma of the liver. Chimney sweeps exposed to soot are at higher risk.

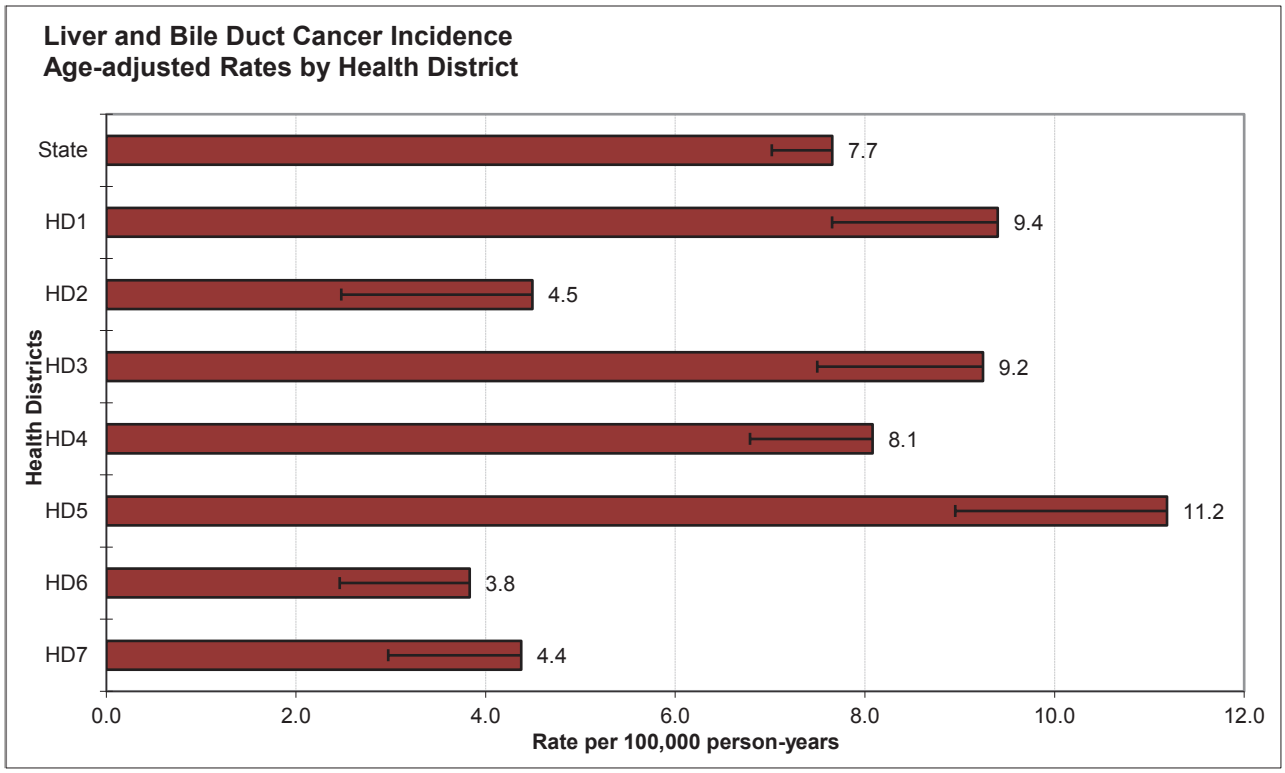
Other Hepatitis B and Hepatitis C infections are significant causes of hepatocellular carcinoma. Cirrhosis of the liver due to viral hepatitis, alcoholism, or toxic chemical exposure accounts for 50-80% of patients diagnosed with liver cancer. Long-term use of oral contraceptives increases risk of hepatocellular carcinoma.

Special Notes

Mean age-adjusted incidence rate across health districts:	7.2
95% confidence interval on the mean age-adjusted incidence rate:	5.0- 9.4
Median age-adjusted incidence rate of health districts:	8.1
Range of age-adjusted incidence rate for health districts:	3.8- 11.2
USCS rate (2013, all races):	7.9

There were few cases of liver cancer among persons less than 55 years of age. Age-specific incidence rates generally increased with age, peaking in the age group 70-74 for both males and females. Health District 5 had statistically significantly more cases of liver cancer than expected based upon rates for the remainder of Idaho


State Liver & Bile Duct Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
70
60
50
40
30
20
10
0
< 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+
Age Group (in years)
Male
Female
All


Liver and Bile Duct Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
7.7
9.4
4.5
9.2
8.1
11.2
3.8
4.4
0.0
2.0
4.0
6.0
8.0
10.0
12.0
Rate per 100,000 person-years

LUNG AND BRONCHUS

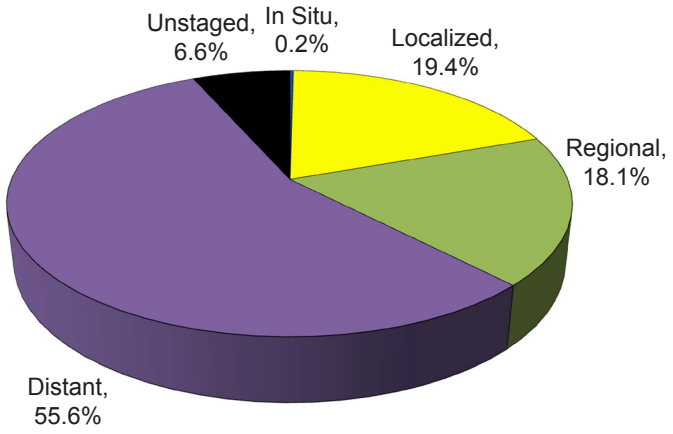
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	48.8	56.0	43.0
# of new invasive cases	902	481	421
# of new in situ cases	2	2	0
# of deaths	657	353	304

Total Cases by County

Ada	216	Cassia	10	Lewis	5
Adams	1	Clark	-	Lincoln	1
Bannock	28	Clearwater	13	Madison	1
Bear Lake	3	Custer	1	Minidoka	8
Benewah	11	Elmore	17	Nez Perce	34
Bingham	12	Franklin	-	Oneida	1
Blaine	10	Fremont	9	Owyhee	6
Boise	4	Gem	14	Payette	17
Bonner	35	Gooding	8	Power	5
Bonneville	42	Idaho	11	Shoshone	17
Boundary	9	Jefferson	7	Teton	4
Butte	2	Jerome	15	Twin Falls	46
Camas	1	Kootenai	128	Valley	4
Canyon	111	Latah	18	Washington	8
Caribou	4	Lemhi	7		

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 among women in recent decades.

Race & SES Incidence is generally higher among blacks 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.

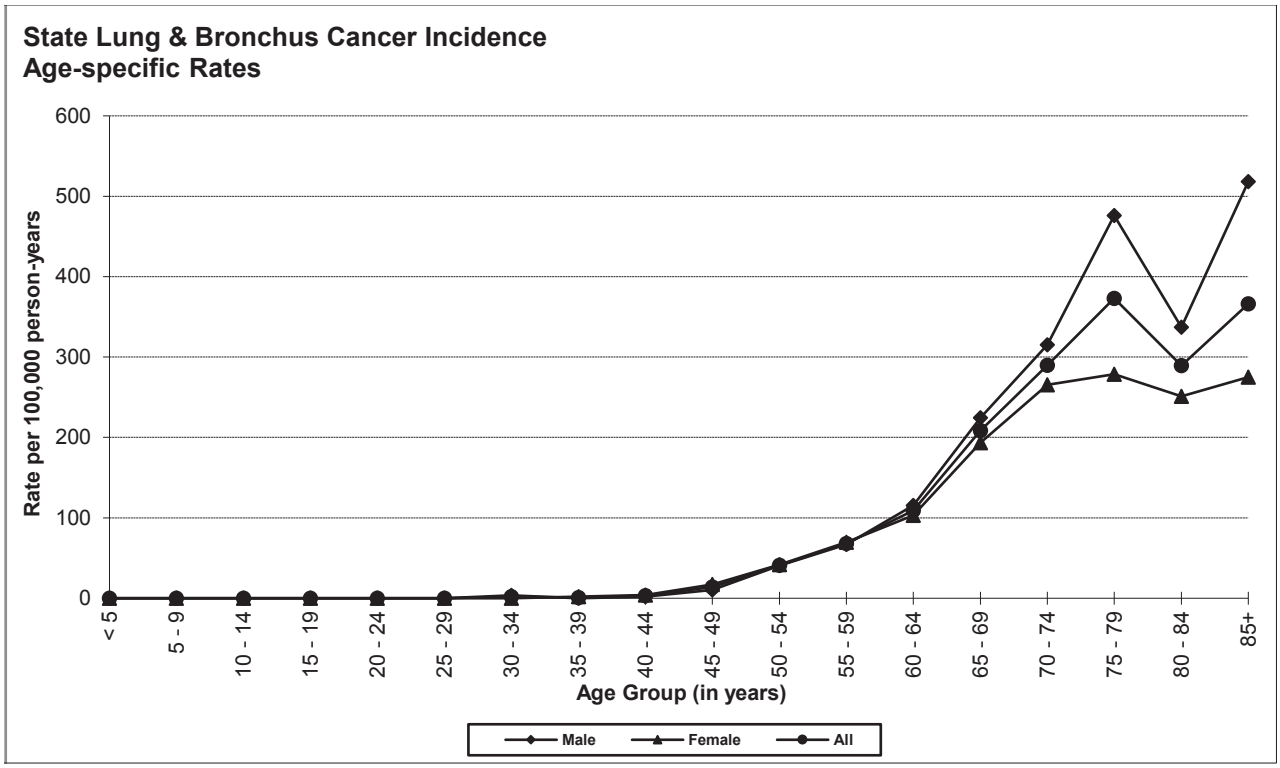
Occupation Occupational or environmental exposures to asbestos, cadmium, chromium, coal tars, crystalline silica dust, polycyclic aromatic hydrocarbons, radon, soot, chlorpyrifos insecticides, ionizing radiation, and other substances increase the risk.

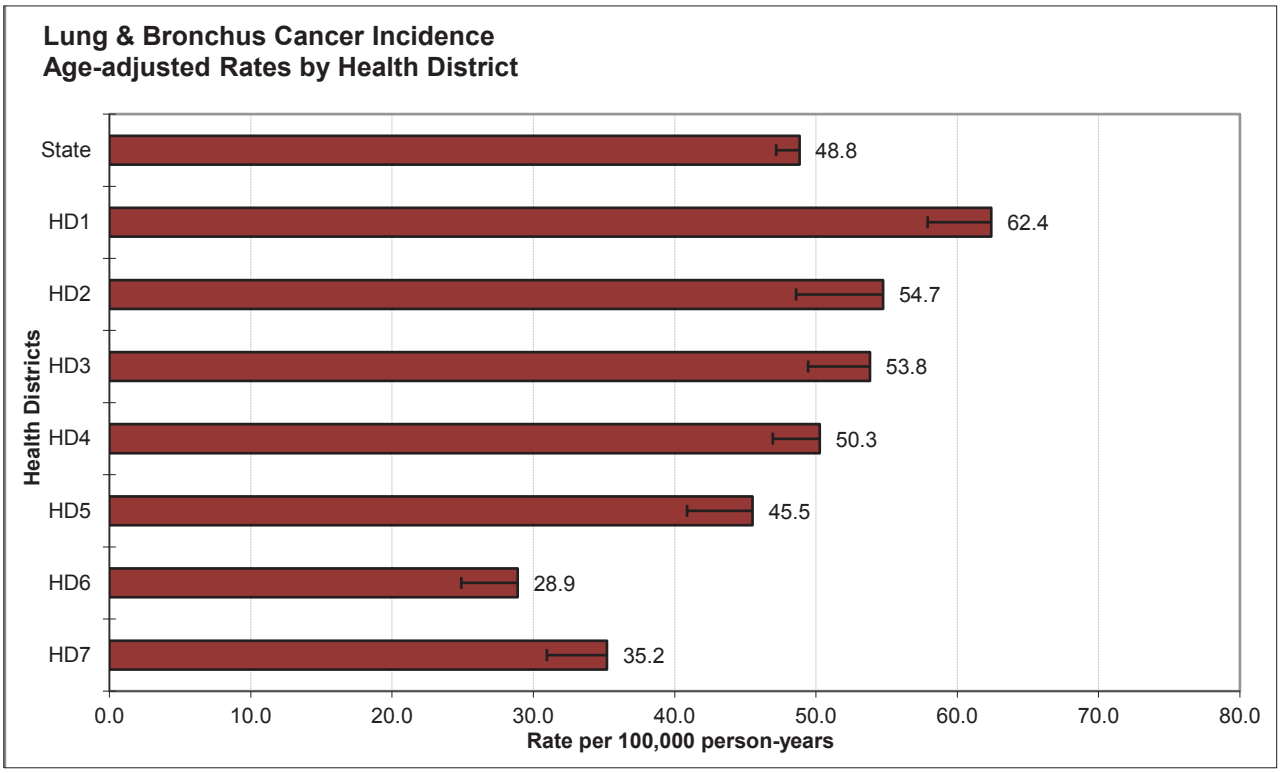
Other Cigarette smoking, including exposure to second-hand smoke, is the most important risk factor, accounting for over 85% of lung cancer deaths. Evidence exists that rates are about 1.3 times higher, adjusted for smoking, in urban areas than rural areas due to air pollution, mostly from motor vehicles.

Special Notes

Mean age-adjusted incidence rate across health districts:	47.3
95% confidence interval on the mean age-adjusted incidence rate:	38.6- 55.9
Median age-adjusted incidence rate of health districts:	50.3
Range of age-adjusted incidence rate for health districts:	28.9- 62.4
USCS rate (2013, all races):	59.4

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 64. The incidence rates increased with age, peaking in the age group 85+ for males and 75-79 for females. Health District 1 had statistically significantly more cases of lung cancer than expected based upon rates for the remainder of Idaho, and Health Districts 6 and 7 had statistically significantly fewer.


State Lung & Bronchus Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
600
500
400
300
200
100
0
< 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+
Age Group (in years)
Male
Female
All


Lung & Bronchus Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
48.8
62.4
54.7
53.8
50.3
45.5
28.9
35.2
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
Rate per 100,000 person-years

MELANOMA OF SKIN

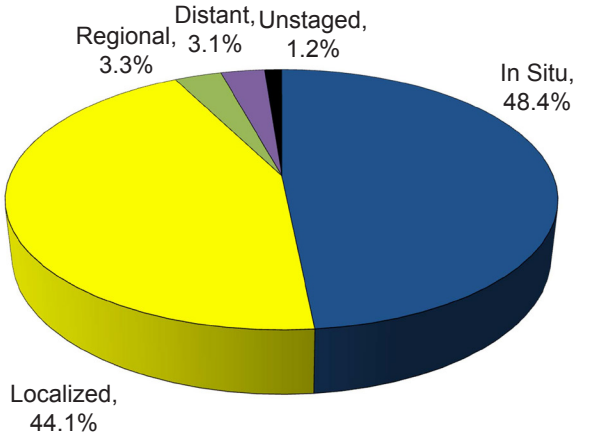
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	26.6	30.5	23.8
# of new invasive cases	473	266	207
# of new in situ cases	444	269	175
# of deaths	61	42	19

Total Cases by County

Ada	289	Cassia	12	Lewis	1
Adams	4	Clark	-	Lincoln	1
Bannock	48	Clearwater	4	Madison	10
Bear Lake	6	Custer	4	Minidoka	8
Benewah	6	Elmore	13	Nez Perce	28
Bingham	14	Franklin	2	Oneida	3
Blaine	11	Fremont	4	Owyhee	4
Boise	2	Gem	5	Payette	7
Bonner	30	Gooding	2	Power	3
Bonneville	81	Idaho	18	Shoshone	4
Boundary	6	Jefferson	14	Teton	4
Butte	2	Jerome	10	Twin Falls	31
Camas	1	Kootenai	99	Valley	7
Canyon	86	Latah	16	Washington	5
Caribou	3	Lemhi	9		

Stage at Diagnosis - Melanoma of Skin



Risk and Associated Factors

Age Melanoma is extremely uncommon before puberty. Rates increase with age.

Gender Incidence rates are higher among females than males in younger age groups, and higher in males than females in older age groups.

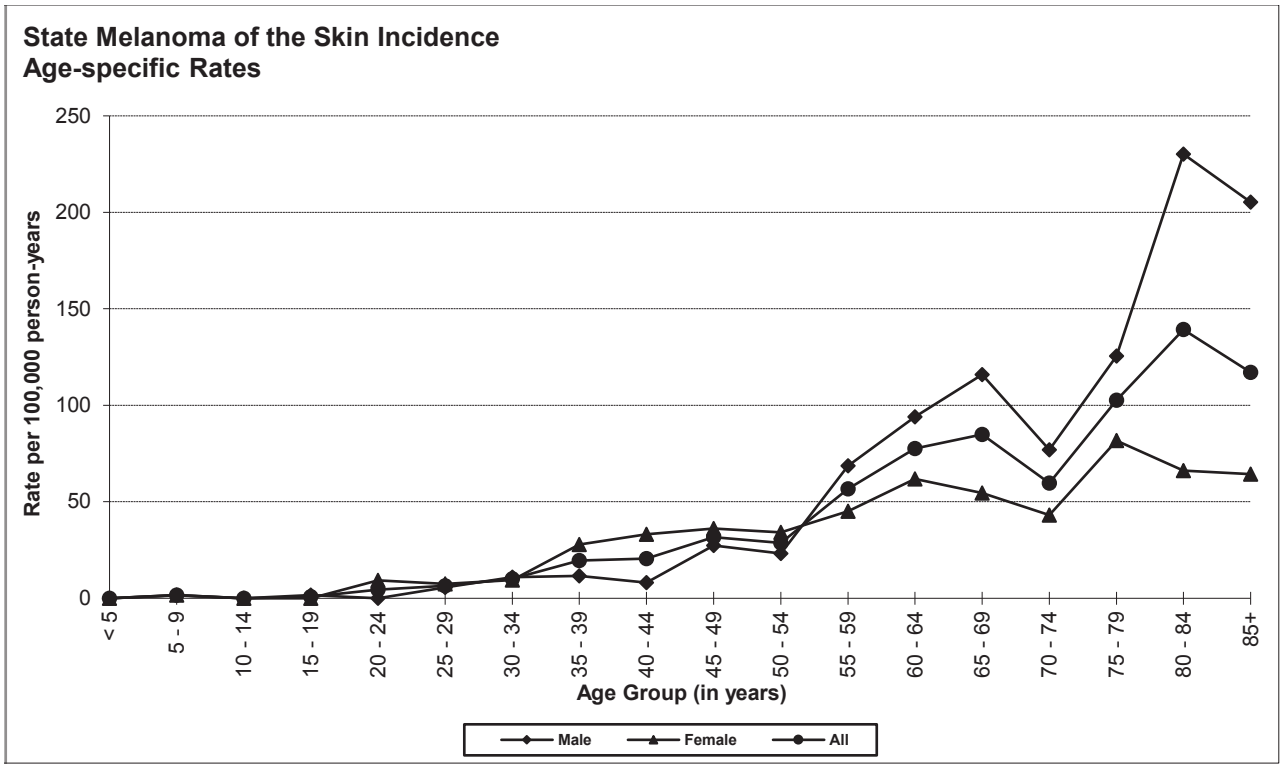
Race & SES The incidence rate is highest in whites and lowest in blacks. Incidence rates of melanoma of the skin are higher in higher income groups (indoor workers).

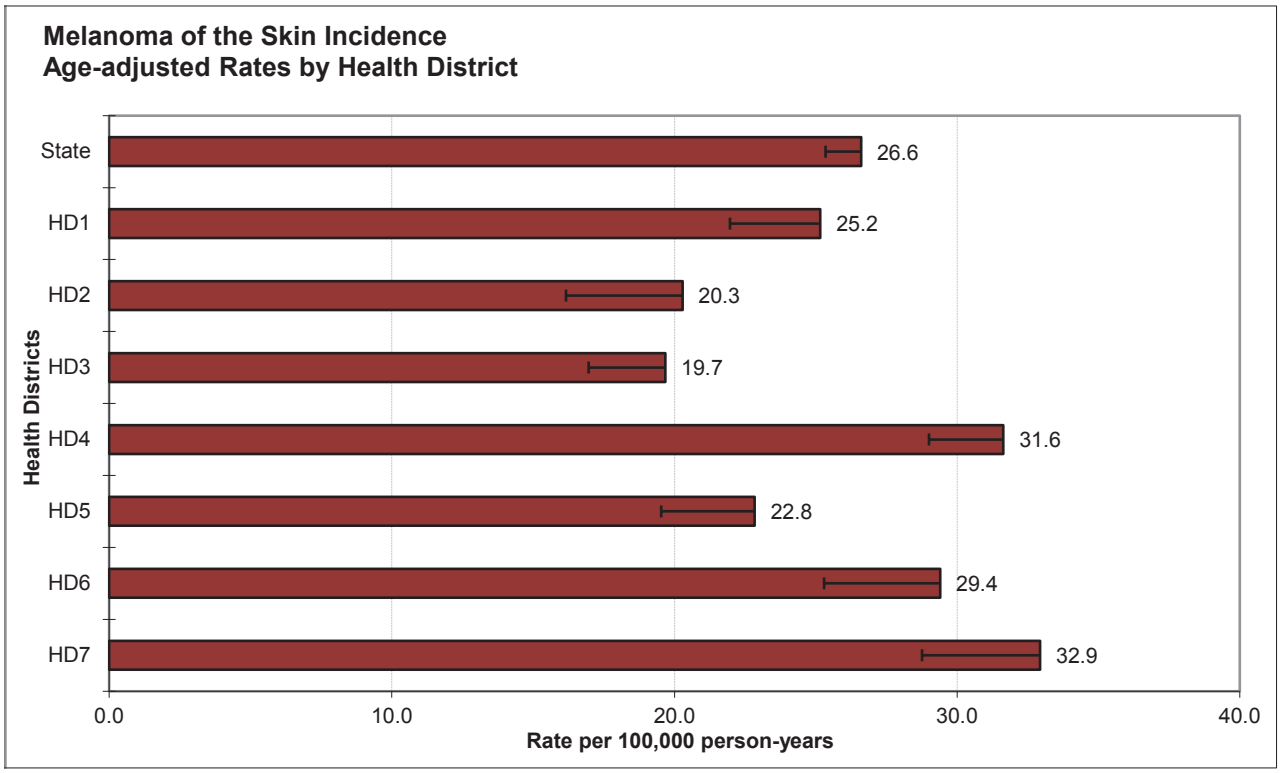
Other Ultra-violet light exposure, especially blistering sunburns during childhood and intermittent exposure of untanned skin to intense sunlight, is a major risk factor. Melanoma incidence rates are increasing around the world. Blue eyes, fair or red hair and pale complexion are well-known risk factors for melanoma. Apart from race and age, the number of melanocytic nevi is the strongest known risk factor for melanoma.

Special Notes

Mean age-adjusted incidence rate across health districts:	26.0
95% confidence interval on the mean age-adjusted incidence rate:	22.0- 30.0
Median age-adjusted incidence rate of health districts:	25.2
Range of age-adjusted incidence rate for health districts:	19.7- 32.9
USCS rate (2013, all races):	20.7

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 54. Health District 4 had statistically significantly more cases of melanoma than expected based upon rates for the remainder of Idaho, and Health District 3 had statistically significantly fewer.


State Melanoma of the Skin Incidence
Age-specific Rates
Rate per 100,000 person-years
250
200
150
100
50
0
< 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+
Age Group (in years)
Male
Female
All


Melanoma of the Skin Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
26.6
25.2
20.3
19.7
31.6
22.8
29.4
32.9
0.0
10.0
20.0
30.0
40.0
Rate per 100,000 person-years

MYELOMA

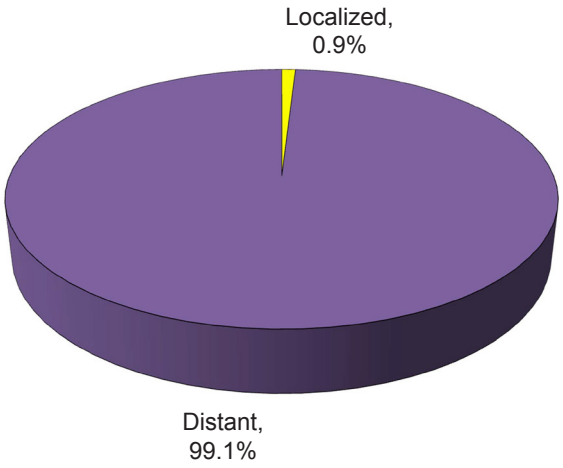
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	6.0	7.2	5.0
# of new invasive cases	107	60	47
# of new in situ cases	0	0	0
# of deaths	50	28	22

Total Cases by County

Ada	27	Cassia	4	Lewis	2
Adams	-	Clark	-	Lincoln	-
Bannock	4	Clearwater	2	Madison	1
Bear Lake	-	Custer	-	Minidoka	1
Benewah	3	Elmore	1	Nez Perce	3
Bingham	1	Franklin	-	Oneida	1
Blaine	1	Fremont	3	Owyhee	-
Boise	1	Gem	2	Payette	1
Bonner	3	Gooding	2	Power	-
Bonneville	4	Idaho	1	Shoshone	-
Boundary	1	Jefferson	-	Teton	-
Butte	-	Jerome	4	Twin Falls	4
Camas	-	Kootenai	10	Valley	-
Canyon	17	Latah	3	Washington	-
Caribou	-	Lemhi	-		

Stage at Diagnosis - Myeloma



Risk and Associated Factors

Age Multiple myeloma is an age-dependent cancer; incidence rates increase with age and it rarely occurs before age 40.

Gender Rates for males are somewhat higher than for females.

Race Blacks have higher incidence rates than whites.

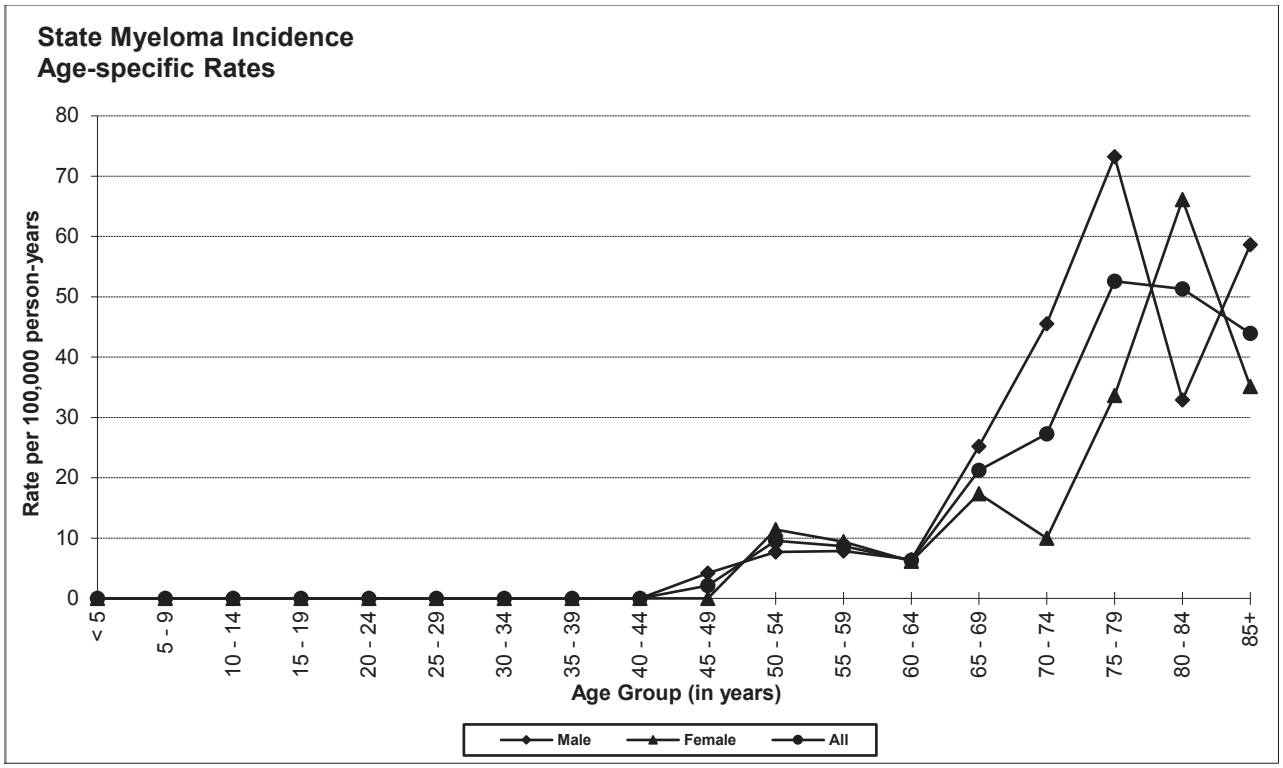
Genetics Genetic factors play an important role in its development, but how so is not completely understood. Familial factors and chronic antigenic stimulation have also been implicated.

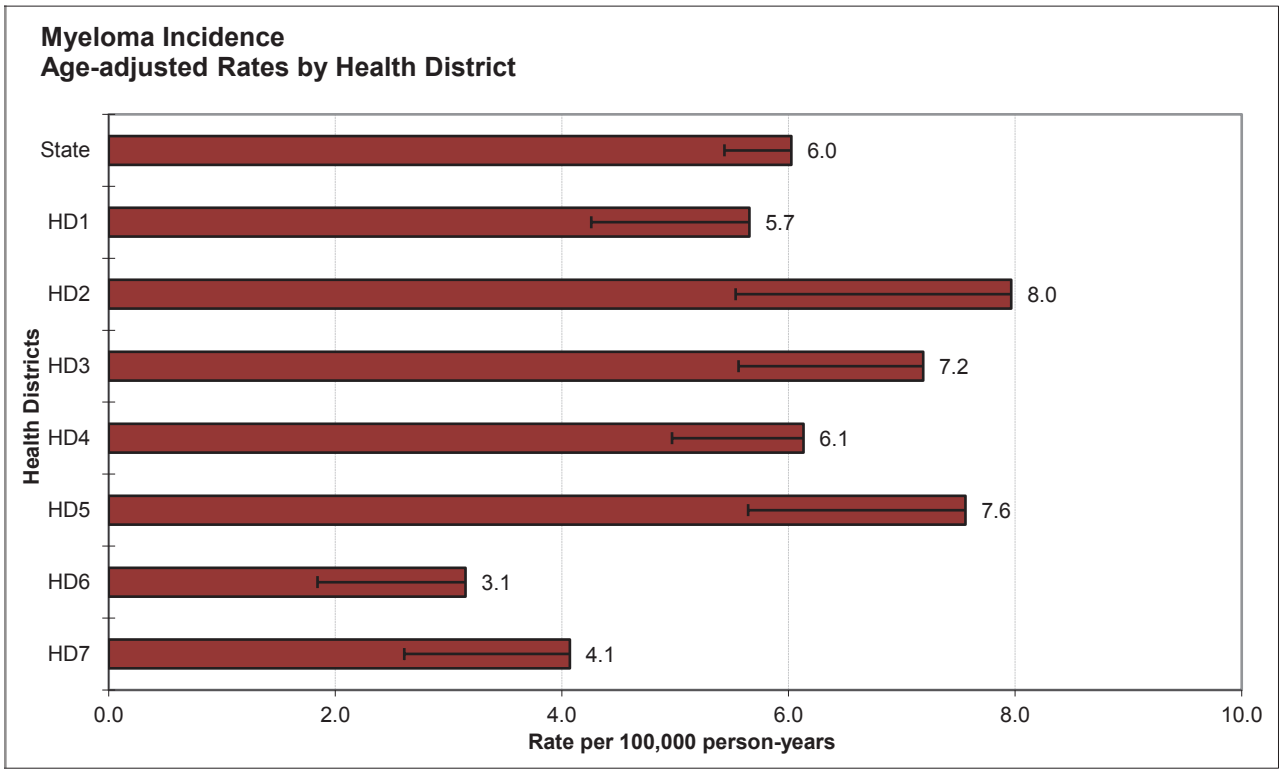
Other Multiple myeloma has been associated with lymphomas such as Burkitt's and non-Hodgkin lymphomas. Studies have suggested several possible viral etiologies, and multiple myeloma has been linked to ionizing radiation exposure. Several specific chemical and physical substances have been linked to myeloma risk in one or more studies. Truck drivers, painters, and agricultural workers are at increased risk for multiple myeloma. Individuals with monoclonal gammopathy of unknown significance are predisposed to develop multiple myeloma.

Special Notes

Mean age-adjusted incidence rate across health districts:	6.0
95% confidence interval on the mean age-adjusted incidence rate:	4.6- 7.3
Median age-adjusted incidence rate of health districts:	6.1
Range of age-adjusted incidence rate for health districts:	3.1- 8.0
USCS rate (2013, all races):	6.3

There were no cases of myeloma among persons less than 45 years of age. The age-specific incidence rates increased rapidly for both males and females after age group 60-64. No health district had statistically significantly fewer or more cases than expected based upon rates for the remainder of Idaho.


State Myeloma Incidence
Age-specific Rates
Rate per 100,000 person-years
80
70
60
50
40
30
20
10
0
< 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+
Age Group (in years)
Male
Female
All


Myeloma Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
6.0
5.7
8.0
7.2
6.1
7.6
3.1
4.1
0.0
2.0
4.0
6.0
8.0
10.0
Rate per 100,000 person-years

NON-HODGKIN LYMPHOMA

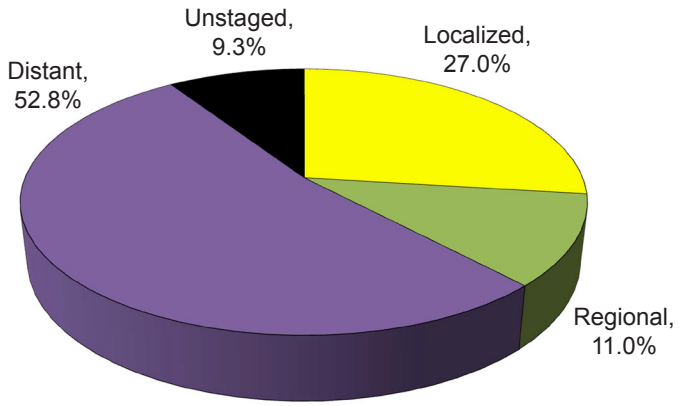
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	19.6	25.2	14.4
# of new invasive cases	345	213	132
# of new in situ cases	0	0	0
# of deaths	118	70	48

Total Cases by County

Ada	85	Cassia	4	Lewis	1
Adams	-	Clark	-	Lincoln	1
Bannock	21	Clearwater	1	Madison	4
Bear Lake	1	Custer	1	Minidoka	3
Benewah	-	Elmore	4	Nez Perce	11
Bingham	6	Franklin	2	Oneida	-
Blaine	4	Fremont	7	Owyhee	1
Boise	2	Gem	1	Payette	4
Bonner	11	Gooding	4	Power	1
Bonneville	22	Idaho	5	Shoshone	7
Boundary	5	Jefferson	4	Teton	2
Butte	1	Jerome	5	Twin Falls	15
Camas	-	Kootenai	42	Valley	2
Canyon	39	Latah	11	Washington	3
Caribou	1	Lemhi	1		

Stage at Diagnosis - Non-Hodgkin Lymphoma



Risk and Associated Factors

Age Rates increase with age, reaching the highest levels in the eighth and ninth decades of life.

Gender Males have higher rates than females.

Race & SES Generally in the United States, incidence rates are generally higher for whites than blacks. Rates are higher in upper income groups.

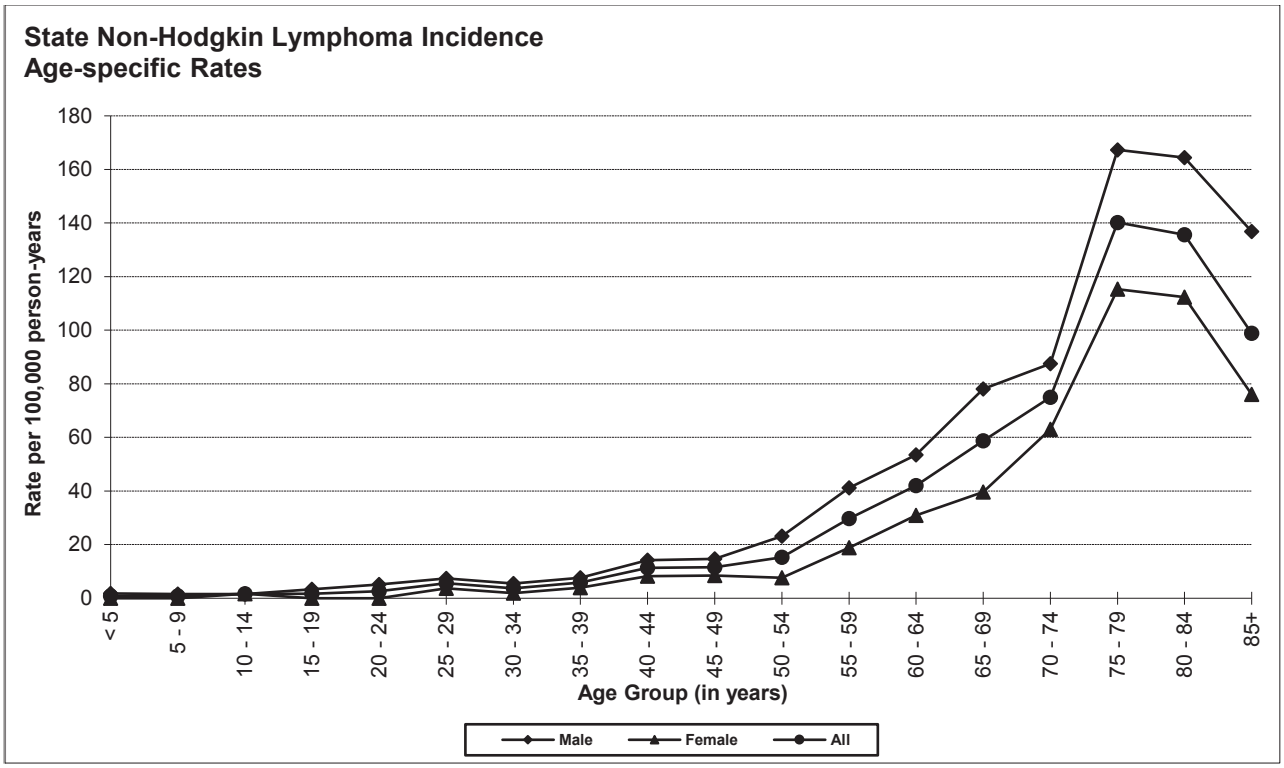
Occupation Exposure to ethylene oxide, such as through commercial production or use as a sterilant in the manufacture of medical and pharmaceutical products or production of food spices, has been identified as a risk factor.

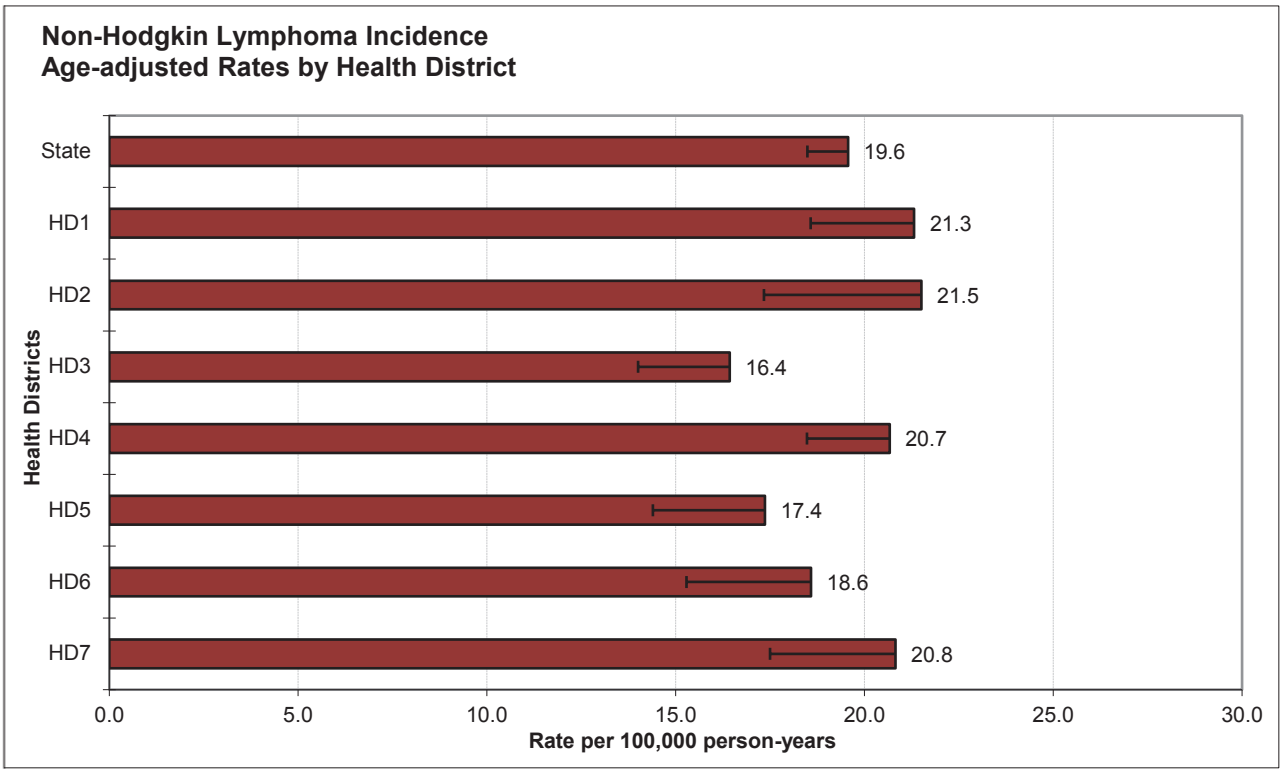
Other Non-Hodgkin lymphoma (NHL) develops with increased frequency in individuals infected with certain viruses, including HTLV-I, HIV, and EBV. Exposures to agricultural chemicals and PCBs have also been implicated. Treatment with some immunosuppressants increases the risk of NHL among organ transplant patients, evidently by reactivating Epstein-Barr virus.

Special Notes

Mean age-adjusted incidence rate across health districts:	19.5
95% confidence interval on the mean age-adjusted incidence rate:	18.0- 21.0
Median age-adjusted incidence rate of health districts:	20.7
Range of age-adjusted incidence rate for health districts:	16.4- 21.5
USCS rate (2013, all races):	18.5

The age-specific incidence rates of non-Hodgkin lymphoma increased with age, peaking 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.


State Non-Hodgkin Lymphoma Incidence
Age-specific Rates
Rate per 100,000 person-years
180
160
140
120
100
80
60
40
20
0
< 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+
Age Group (in years)
Male
Female
All


Non-Hodgkin Lymphoma Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
19.6
21.3
21.5
16.4
20.7
17.4
18.6
20.8
0.0
5.0
10.0
15.0
20.0
25.0
30.0
Rate per 100,000 person-years

ORAL CAVITY AND PHARYNX

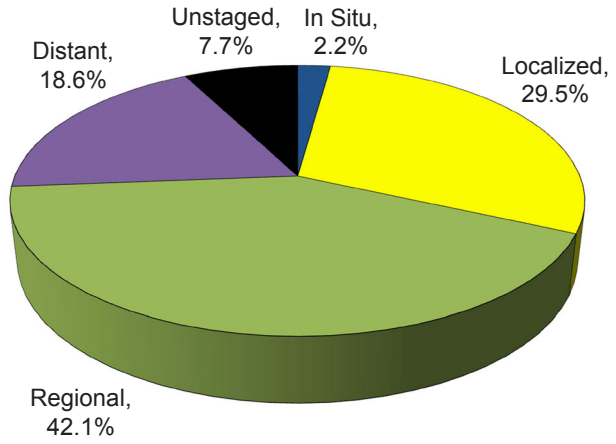
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	9.6	12.7	6.8
# of new invasive cases	179	115	64
# of new in situ cases	4	2	2
# of deaths	42	29	13

Total Cases by County

Ada	50	Cassia	-	Lewis	1
Adams	-	Clark	-	Lincoln	1
Bannock	9	Clearwater	2	Madison	3
Bear Lake	-	Custer	1	Minidoka	-
Benewah	2	Elmore	1	Nez Perce	5
Bingham	2	Franklin	-	Oneida	1
Blaine	5	Fremont	1	Owyhee	1
Boise	1	Gem	7	Payette	2
Bonner	8	Gooding	-	Power	2
Bonneville	6	Idaho	3	Shoshone	2
Boundary	3	Jefferson	1	Teton	1
Butte	1	Jerome	1	Twin Falls	9
Camas	-	Kootenai	21	Valley	-
Canyon	23	Latah	4	Washington	1
Caribou	-	Lemhi	2		

Stage at Diagnosis - Oral Cavity and Pharynx



Risk and Associated Factors

Age Most cases occur in people over age 60.

Gender Males have higher incidence rates than females, 2-6 times higher in most parts of the world.

Race & SES Rates are higher for blacks than for whites. Rates are also higher among lower income groups.

Diet Diets low in fresh fruit and vegetable consumption are associated with increased risk.

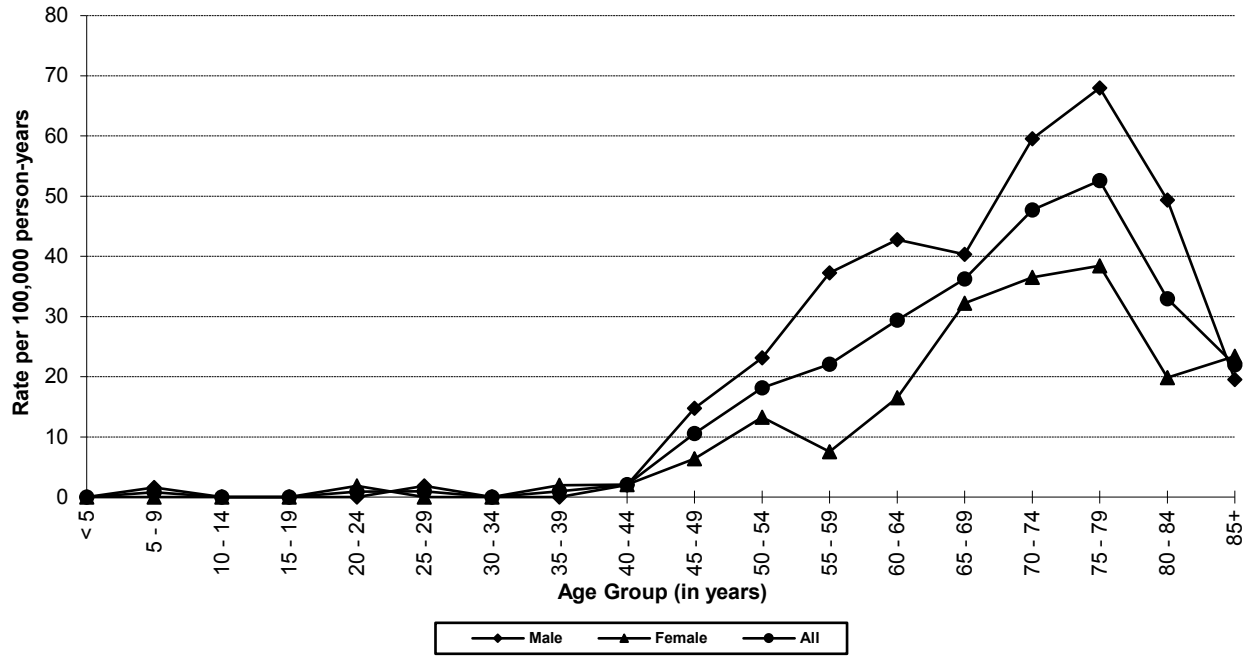
Other Smoking and spit tobacco use are major risk factors for cancers of the oral cavity and pharynx. Alcohol use, especially excessive, is a major risk factor. Combined exposure to tobacco and alcohol multiply the risks of each other. It is estimated that smoking and drinking account for 75% of all oral cancers in the United States. Approximately 15% of oral cavity and pharyngeal cancers in the United States are attributable to infection with oncogenic human papillomavirus (HPV) types. Patients with late stage oropharyngeal cancer have better outcomes if their tumors were linked to HPV versus tobacco and alcohol.

Special Notes

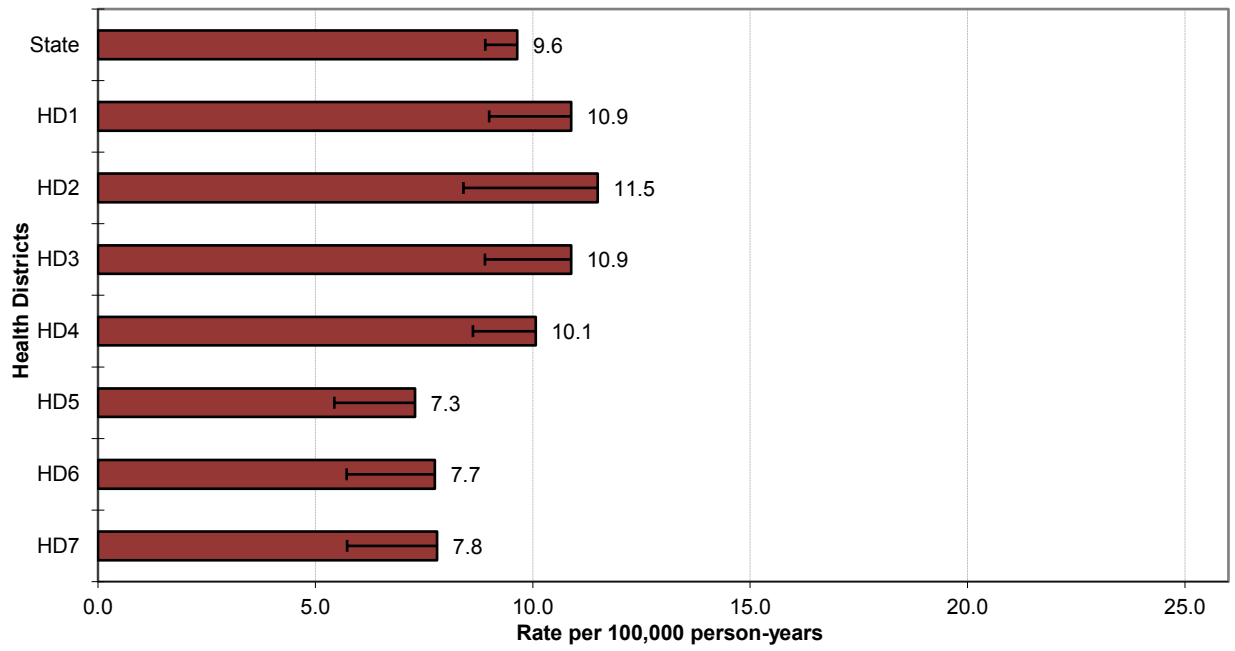
Mean age-adjusted incidence rate across health districts:	9.5
95% confidence interval on the mean age-adjusted incidence rate:	8.1- 10.8
Median age-adjusted incidence rate of health districts:	10.1
Range of age-adjusted incidence rate for health districts:	7.3- 11.5
USCS rate (2013, all races):	11.5

There were few cases of oral cavity and pharyngeal cancers among persons less than 45 years of age. The age-specific incidence rates generally increased with age after age 49, peaking 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.

State Oral Cavity & Pharyngeal Cancer Incidence
Age-specific Rates



Oral Cavity & Pharyngeal Cancer Incidence
Age-adjusted Rates by Health District



OVARY

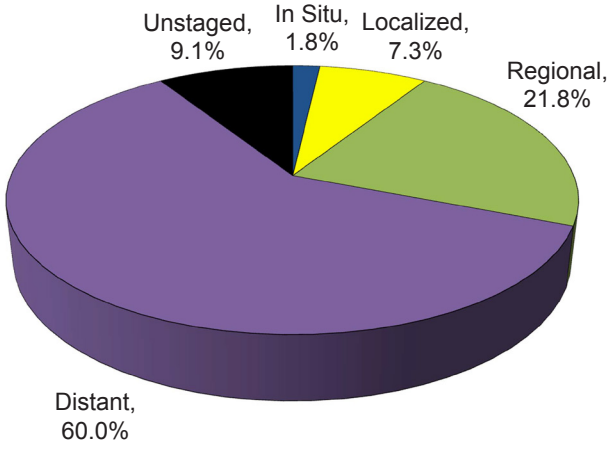
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	-	11.5
# of new invasive cases	-	-	108
# of new in situ cases	-	-	2
# of deaths	-	-	62

Total Cases by County

Ada	27	Cassia	-	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	9	Clearwater	-	Madison	1
Bear Lake	-	Custer	-	Minidoka	-
Benewah	-	Elmore	1	Nez Perce	-
Bingham	6	Franklin	1	Oneida	-
Blaine	2	Fremont	-	Owyhee	2
Boise	-	Gem	3	Payette	-
Bonner	7	Gooding	1	Power	1
Bonneville	11	Idaho	-	Shoshone	1
Boundary	2	Jefferson	-	Teton	-
Butte	-	Jerome	3	Twin Falls	5
Camas	-	Kootenai	12	Valley	2
Canyon	10	Latah	2	Washington	-
Caribou	-	Lemhi	1		

Stage at Diagnosis - Ovary



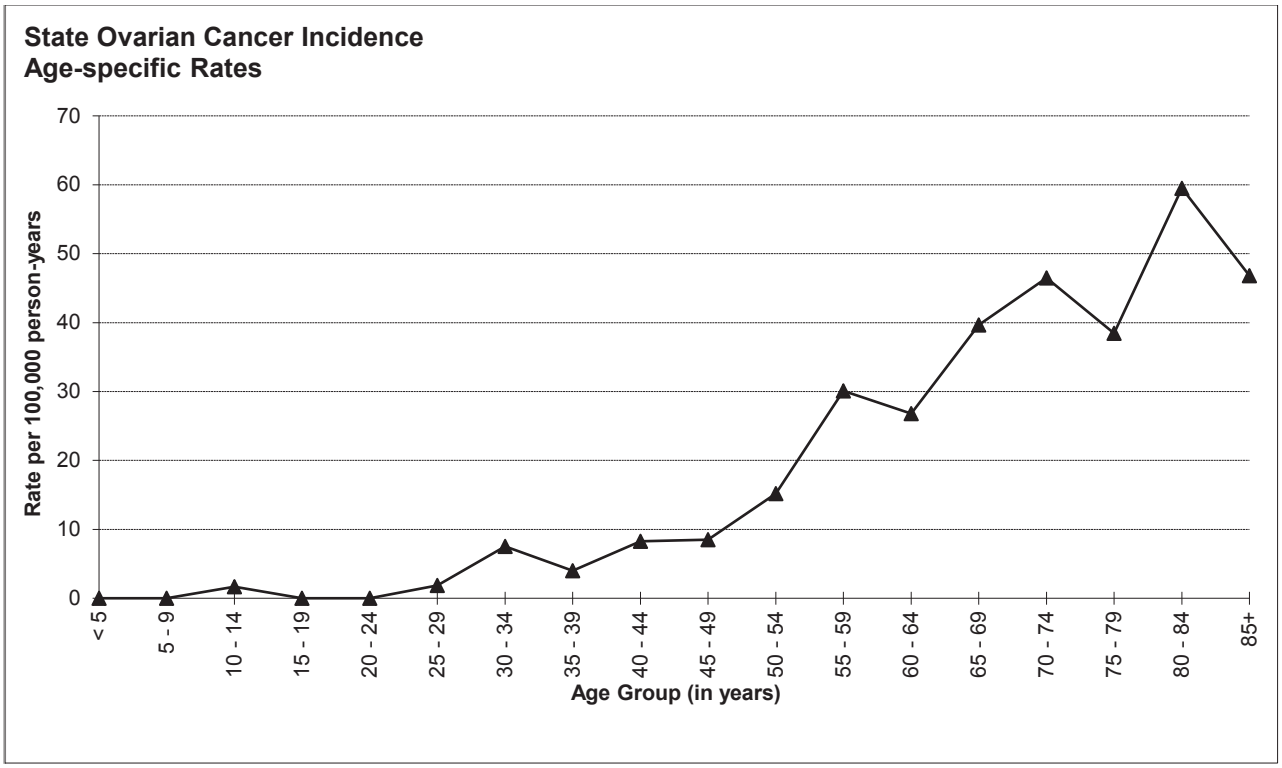
Risk and Associated Factors

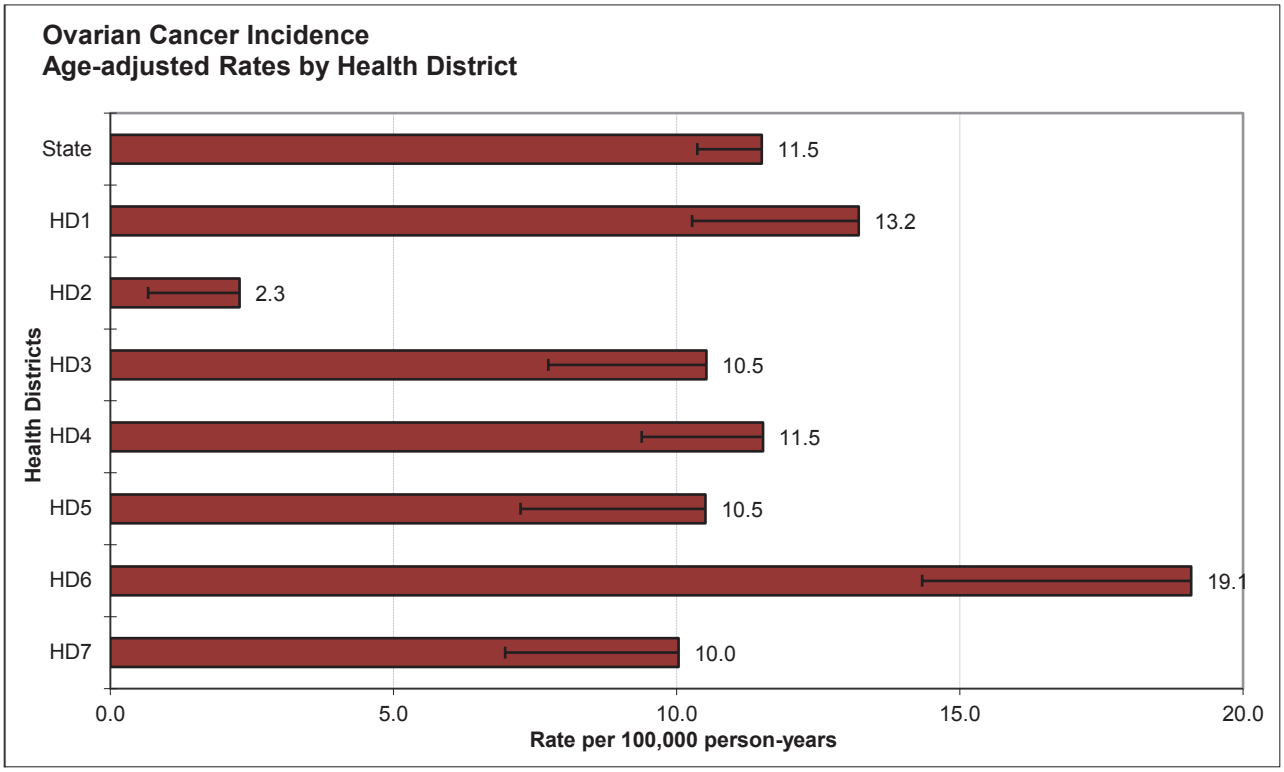
Age	The rate of ovarian cancer increases with age, and it is primarily a disease of older women.
Race & SES	Incidence rates are slightly higher among white females than blacks. Rates are higher among upper income groups.
Genetics	The most important risk factor for ovarian cancer is a family history of 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 via suppression of ovulation through pregnancy or oral contraceptive use. The highest risk is in post-menopausal women. Ovarian cancer is also associated with a personal history of breast, endometrial, and colon cancers.
Diet	Dietary animal fat may increase the risk.
Other	High dose (>100 rads) ionizing radiation roughly doubles the risk of ovarian cancer.

Special Notes

Mean age-adjusted incidence rate across health districts:	11.0
95% confidence interval on the mean age-adjusted incidence rate:	7.3- 14.7
Median age-adjusted incidence rate of health districts:	10.5
Range of age-adjusted incidence rate for health districts:	2.3- 19.1
USCS rate (2013, all races):	11.2

There were few cases of ovarian cancer among females aged less than 35 years. The age-specific incidence rates of ovarian cancer generally increased with age starting in the 45-49 age group. The highest age-specific rate was for women aged 80-84. Health District 2 had statistically significantly fewer cases of ovarian cancer than expected based upon rates for the remainder of Idaho.


State Ovarian Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
70
60
50
40
30
20
10
0
< 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+
Age Group (in years)


Ovarian Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
11.5
13.2
2.3
10.5
11.5
10.5
19.1
10.0
0.0
5.0
10.0
15.0
20.0
Rate per 100,000 person-years

PANCREAS

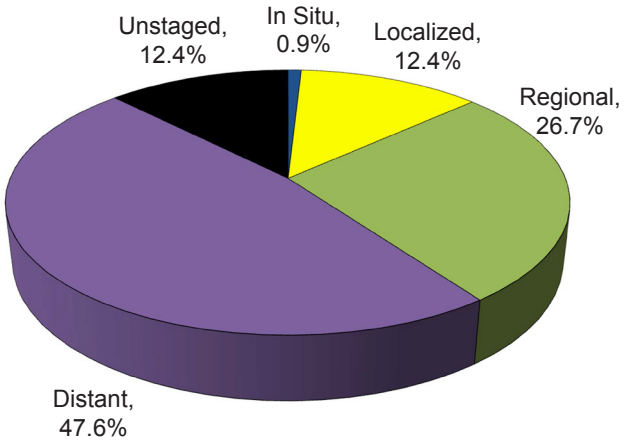
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	12.1	12.6	11.4
# of new invasive cases	223	112	111
# of new in situ cases	2	1	1
# of deaths	206	100	106

Total Cases by County

Ada	57	Cassia	2	Lewis	-
Adams	-	Clark	-	Lincoln	1
Bannock	9	Clearwater	2	Madison	1
Bear Lake	1	Custer	1	Minidoka	2
Benewah	-	Elmore	2	Nez Perce	11
Bingham	6	Franklin	-	Oneida	1
Blaine	2	Fremont	2	Owyhee	2
Boise	-	Gem	6	Payette	5
Bonner	9	Gooding	4	Power	1
Bonneville	11	Idaho	3	Shoshone	1
Boundary	3	Jefferson	2	Teton	-
Butte	-	Jerome	1	Twin Falls	9
Camas	-	Kootenai	24	Valley	2
Canyon	29	Latah	5	Washington	7
Caribou	-	Lemhi	1		

Stage at Diagnosis - Pancreas



Risk and Associated Factors

Age Pancreatic cancer increases with age and is rare in persons younger than 40 years old.

Gender Incidence rates of pancreatic cancer are about 50% higher in males than females.

Race In the United States, the incidence is higher in blacks.

Diet Investigators have generally found increased risks associated with animal protein and fat consumption, and decreased risks associated with vegetables and fruit intake. The normal range of body mass index (>=18 - <25 kg/m^2) has been associated with decreased risk of pancreatic cancer.

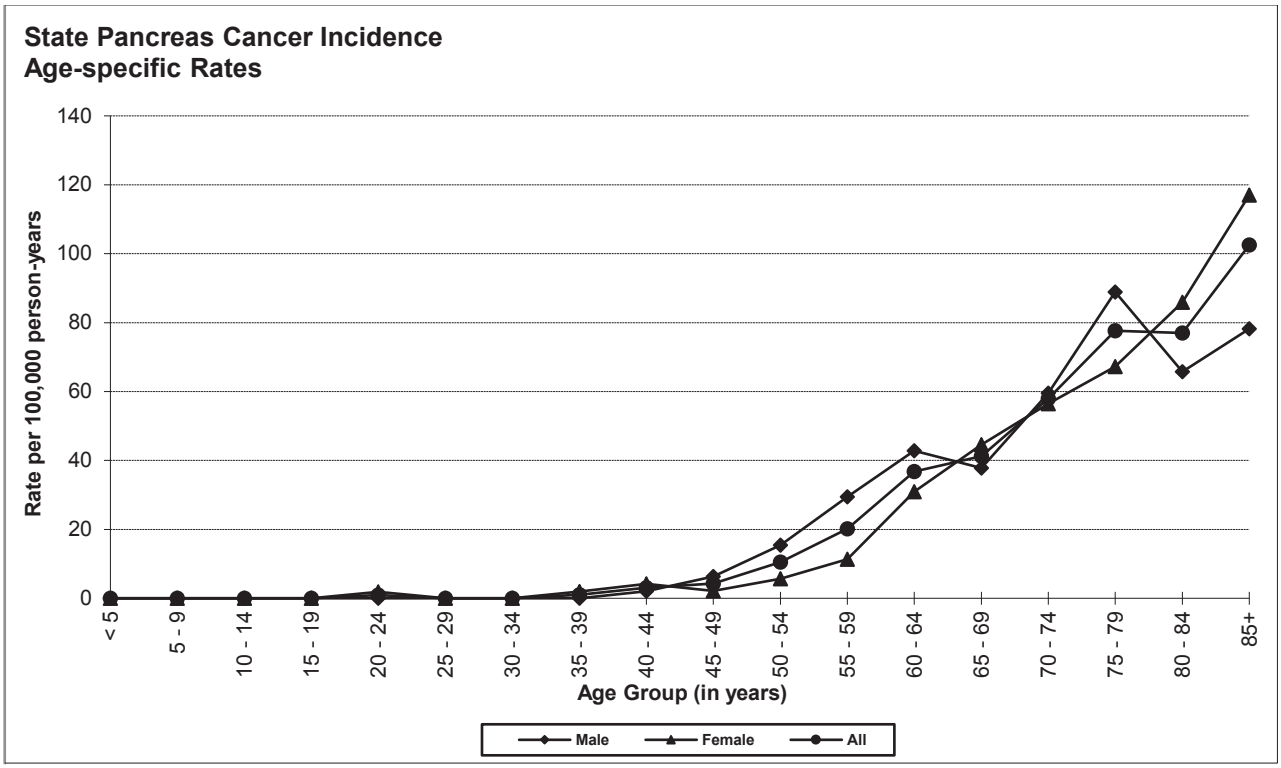
Occupation Persons in certain occupations, such as chemists, metal workers, and persons employed in the manufacture of benzidine and betanaphthylene, are believed to be at higher risk.

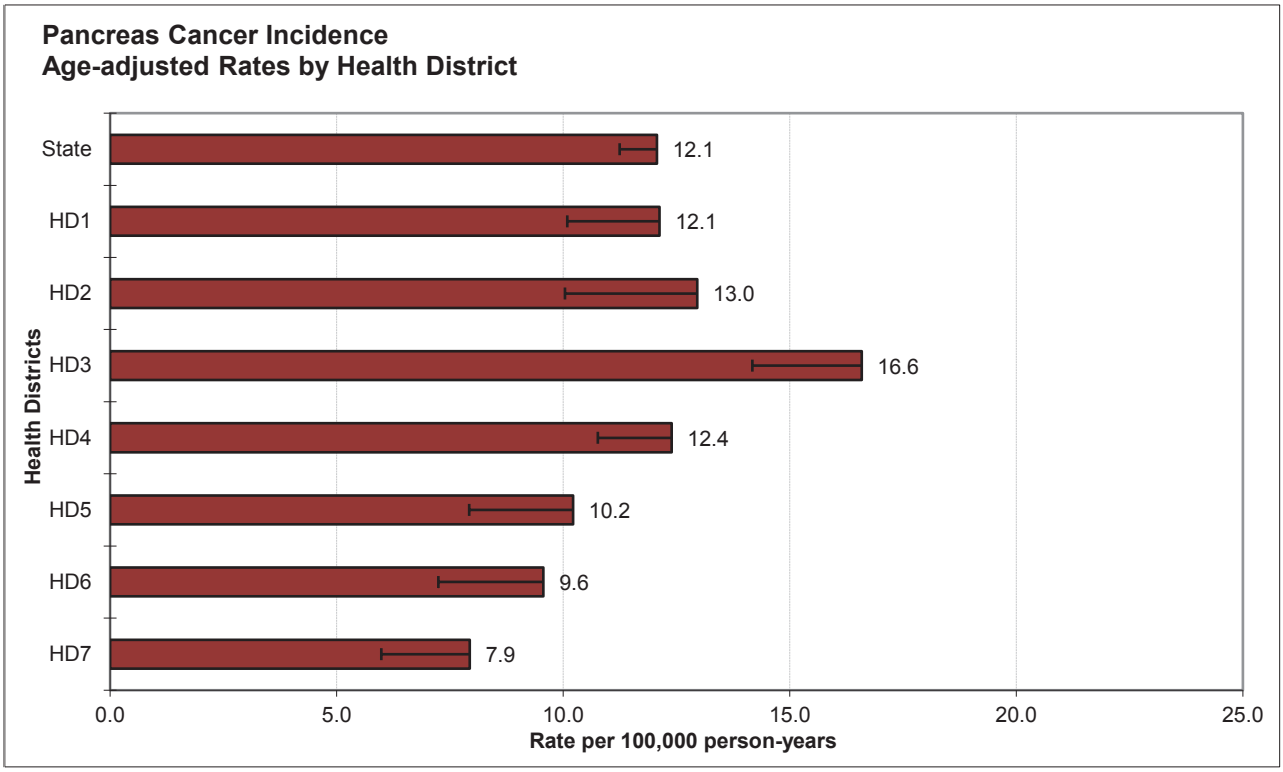
Other Pancreatic cancer is more common among smokers than non-smokers. Familial clustering has been observed in some studies. Pancreatic cancer usually progresses to an advanced stage before symptoms develop. It is rapidly fatal in over 90% of cases.

Special Notes

Mean age-adjusted incidence rate across health districts:	11.7
95% confidence interval on the mean age-adjusted incidence rate:	9.6- 13.8
Median age-adjusted incidence rate of health districts:	12.1
Range of age-adjusted incidence rate for health districts:	7.9- 16.6
USCS rate (2013, all races):	12.4

There were few cases of pancreatic cancer among persons aged less than 45 years. The age-specific incidence rates of pancreatic cancer generally increased after age 54. Health District 3 had statistically significantly more cases of pancreatic cancer than expected based upon rates for the remainder of Idaho.


State Pancreas Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
140
120
100
80
60
40
20
0
< 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+
Age Group (in years)
Male
Female
All


Pancreas Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
12.1
12.1
13.0
16.6
12.4
10.2
9.6
7.9
0.0
5.0
10.0
15.0
20.0
25.0
Rate per 100,000 person-years

PROSTATE

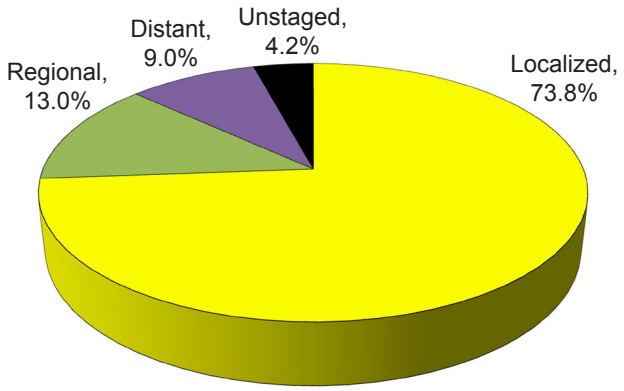
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	91.4	-
# of new invasive cases	-	833	-
# of new in situ cases	-	0	-
# of deaths	-	191	-

Total Cases by County

Ada	196	Cassia	7	Lewis	3
Adams	1	Clark	-	Lincoln	3
Bannock	35	Clearwater	8	Madison	5
Bear Lake	2	Custer	2	Minidoka	6
Benewah	2	Elmore	13	Nez Perce	34
Bingham	17	Franklin	7	Oneida	1
Blaine	14	Fremont	8	Owyhee	3
Boise	6	Gem	13	Payette	15
Bonner	31	Gooding	8	Power	9
Bonneville	53	Idaho	8	Shoshone	8
Boundary	13	Jefferson	17	Teton	6
Butte	1	Jerome	7	Twin Falls	47
Camas	-	Kootenai	94	Valley	6
Canyon	89	Latah	16	Washington	7
Caribou	5	Lemhi	7		

Stage at Diagnosis - Prostate



Risk and Associated Factors

Age Prostate cancer is rarely diagnosed before age 50, and it is primarily a disease of older men.

Race Black males have substantially higher incidence and mortality rates than white males.

Genetics A family history of prostate cancer is associated with increased risk.

Diet Dietary fat has been implicated in several international, regional, and case-control studies.

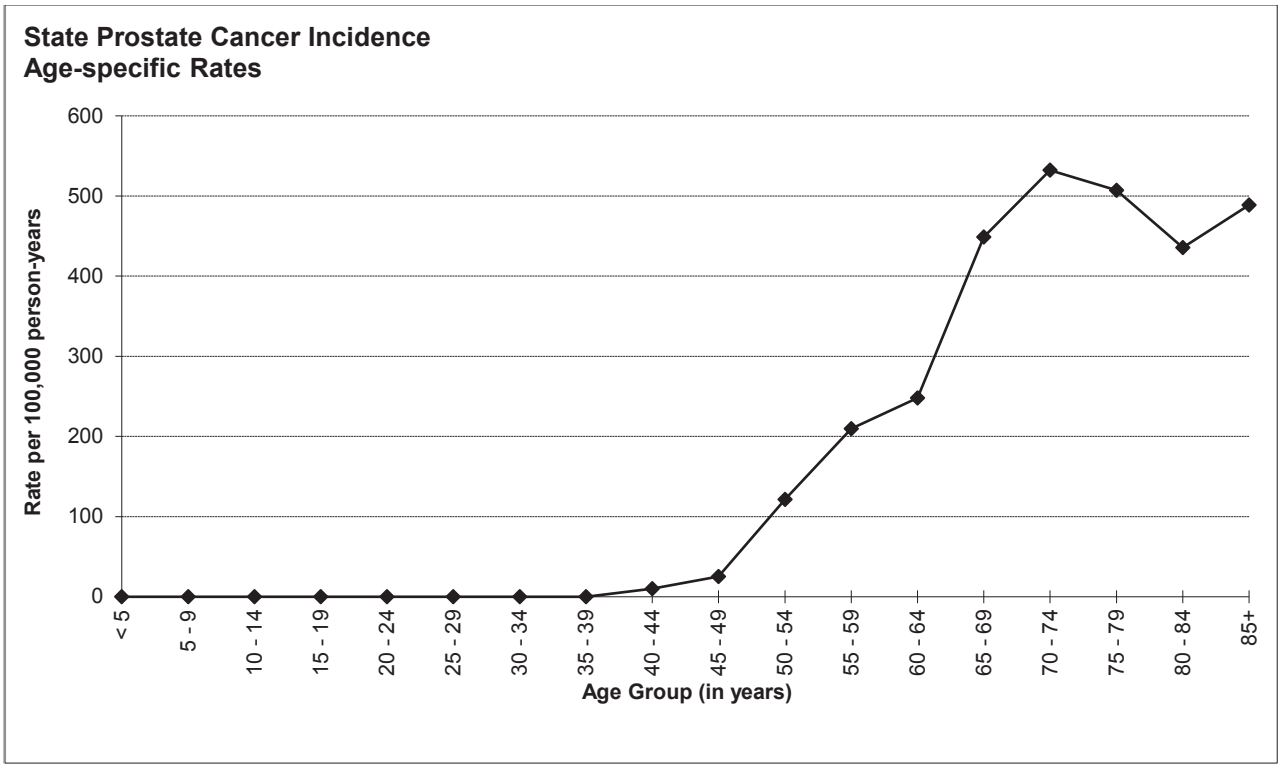
Other Environmental and familial factors may contribute to an increased incidence but no specific factor in these two groups of potential risk factors has been clearly identified. Three risk factors are well established: age, family history, and ethnic group/country of residence.

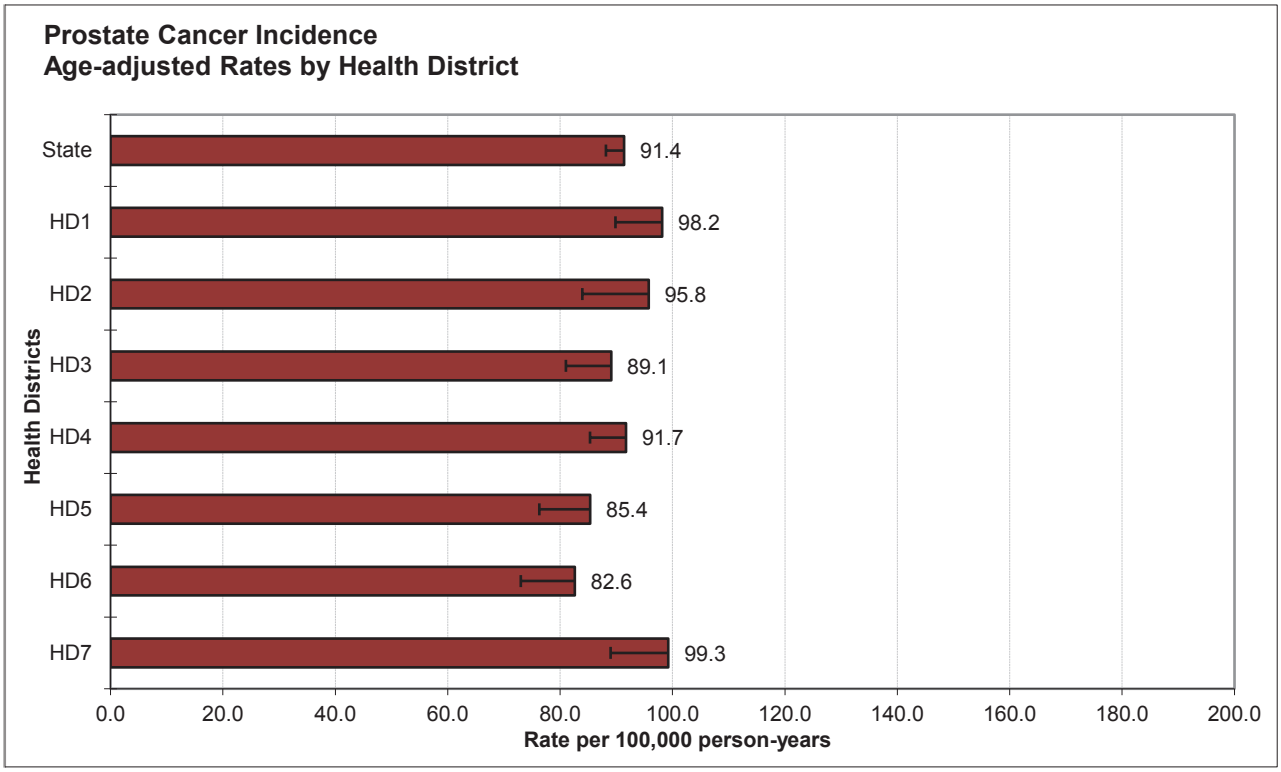
Occupation Farming is the most consistent occupational risk factor for prostate cancer. Methyl bromide pesticide application has been identified as a risk factor by the Agricultural Health Study. It is likely that only a very small proportion of all prostate cancer cases can be attributed to a specific industrial chemical exposure.

Special Notes

Mean age-adjusted incidence rate across health districts:	91.7
95% confidence interval on the mean age-adjusted incidence rate:	87.0- 96.4
Median age-adjusted incidence rate of health districts:	91.7
Range of age-adjusted incidence rate for health districts:	82.6- 99.3
USCS rate (2013, all races):	101.6

There were few cases of prostate cancer among men aged less than 50 years. The age-specific incidence rates of prostate cancer increased with age, peaking in the 70-74 age group. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.


State Prostate Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
600
500
400
300
200
100
0
< 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+
Age Group (in years)


Prostate Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
91.4
98.2
95.8
89.1
91.7
85.4
82.6
99.3
0.0
20.0
40.0
60.0
80.0
100.0
120.0
140.0
160.0
180.0
200.0
Rate per 100,000 person-years

STOMACH

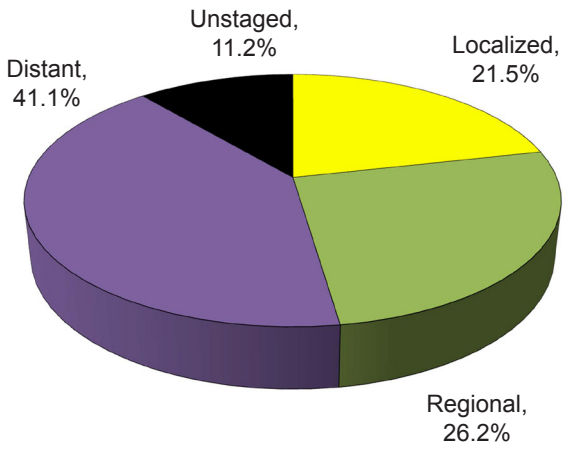
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	6.1	8.2	4.3
# of new invasive cases	107	69	38
# of new in situ cases	0	0	0
# of deaths	46	28	18

Total Cases by County

Ada	28	Cassia	1	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	4	Clearwater	-	Madison	-
Bear Lake	-	Custer	-	Minidoka	2
Benewah	1	Elmore	2	Nez Perce	5
Bingham	4	Franklin	-	Oneida	-
Blaine	1	Fremont	1	Owyhee	1
Boise	-	Gem	-	Payette	1
Bonner	6	Gooding	1	Power	-
Bonneville	6	Idaho	1	Shoshone	1
Boundary	1	Jefferson	2	Teton	1
Butte	-	Jerome	-	Twin Falls	7
Camas	-	Kootenai	7	Valley	2
Canyon	16	Latah	2	Washington	1
Caribou	-	Lemhi	2		

Stage at Diagnosis - Stomach



Risk and Associated Factors

Age Stomach cancer incidence rates increase with age.

Gender Incidence rates for males are usually more than twice as high as for females.

Race & SES Incidence rates are higher among blacks and Asian/Pacific Islanders, and incidence is also higher in lower SES groups.

Diet Increased risk has been attributed to diets high in smoked foods and foods high in nitrates. Salt and salted foods contribute to stomach cancer risk. Diets high in fresh fruits and vegetables seem to be protective.

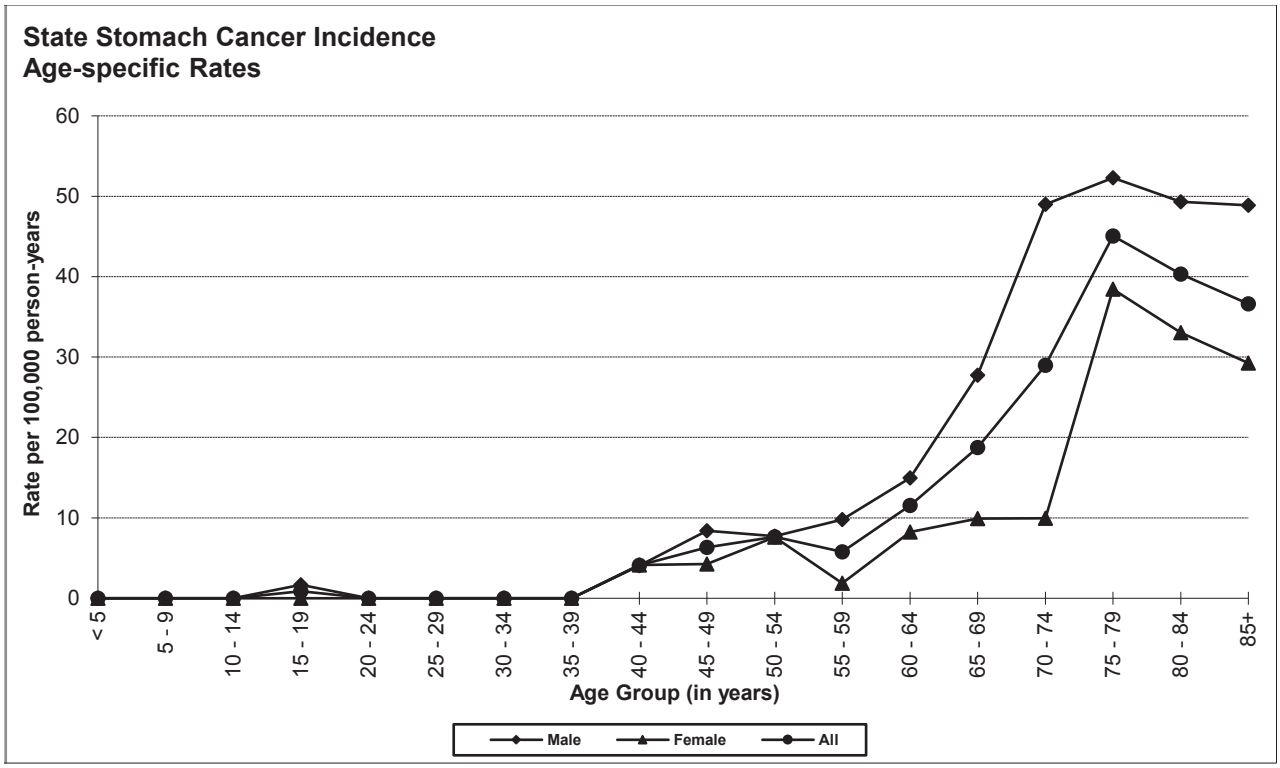
Occupation Elevated rates have been found in certain occupational groups, especially coal miners and asbestos workers, and occupations with mineral dust exposure.

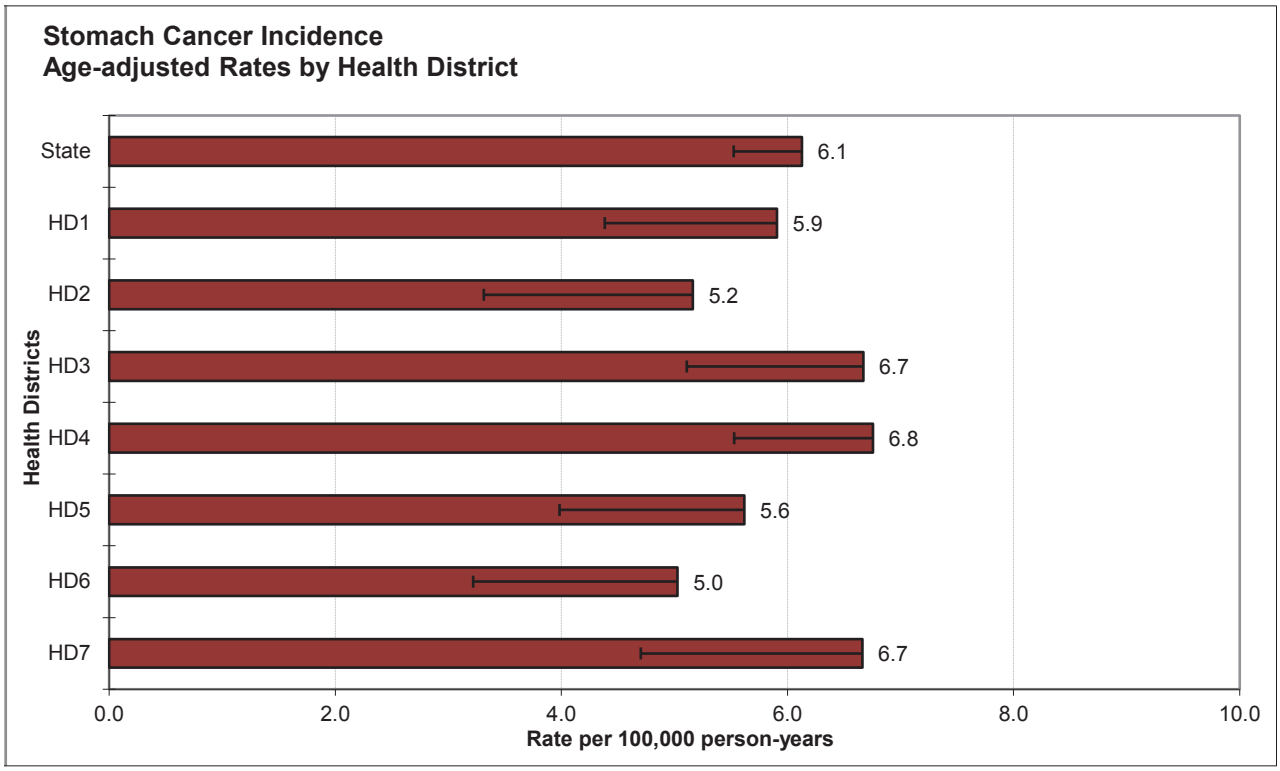
Other Stomach cancer has been linked to peptic ulcer disease and to certain bacteria.

Special Notes

Mean age-adjusted incidence rate across health districts:	6.0	
95% confidence interval on the mean age-adjusted incidence rate:	5.4-	6.5
Median age-adjusted incidence rate of health districts:	5.9	
Range of age-adjusted incidence rate for health districts:	5.0-	6.8
USCS rate (2013, all races):	6.6	

There were few cases of stomach cancer among persons aged less than 50 years. The age-specific incidence rates of stomach cancer increased with age, peaking in the 75-79 age group 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.


State Stomach Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
60
50
40
30
20
10
0
< 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+
Age Group (in years)
Male
Female
All


Stomach Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
6.1
5.9
5.2
6.7
6.8
5.6
5.0
6.7
0.0
2.0
4.0
6.0
8.0
10.0
Rate per 100,000 person-years

TESTIS

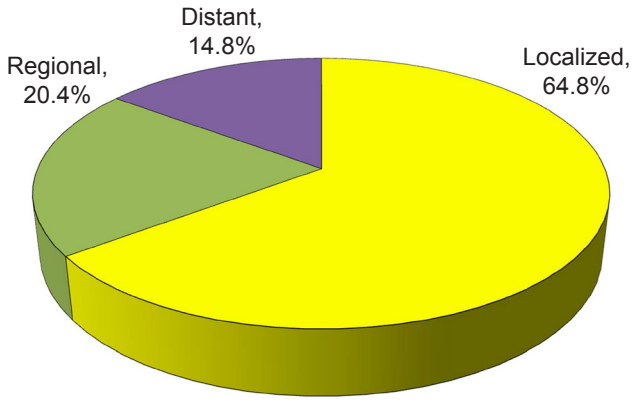
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	7.2	-
# of new invasive cases	-	54	-
# of new in situ cases	-	0	-
# of deaths	-	4	-

Total Cases by County

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

Stage at Diagnosis - Testis



Risk and Associated Factors

Age Testicular cancer is the most common cancer in young males, especially males between the ages of 20 and 34.

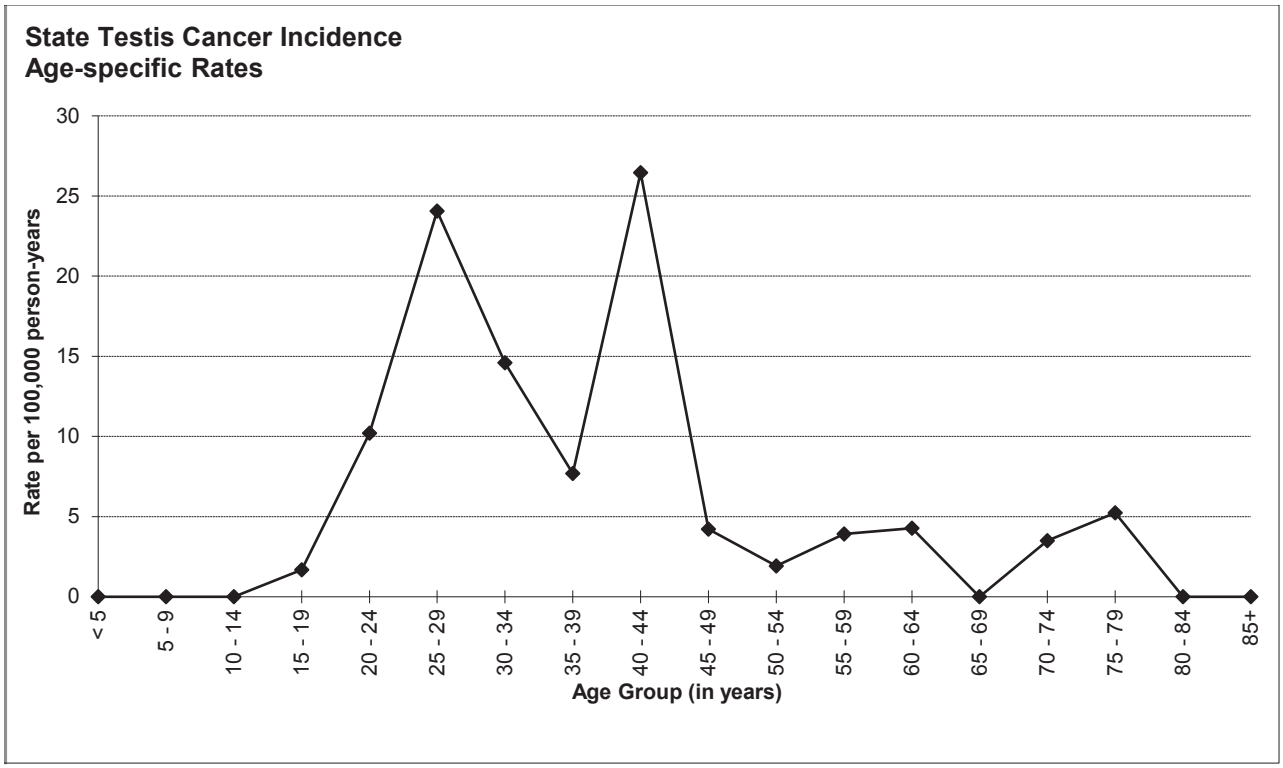
Race & SES Incidence rates are substantially higher in white males than in black males. Incidence of testicular cancer is highest in highest socioeconomic classes.

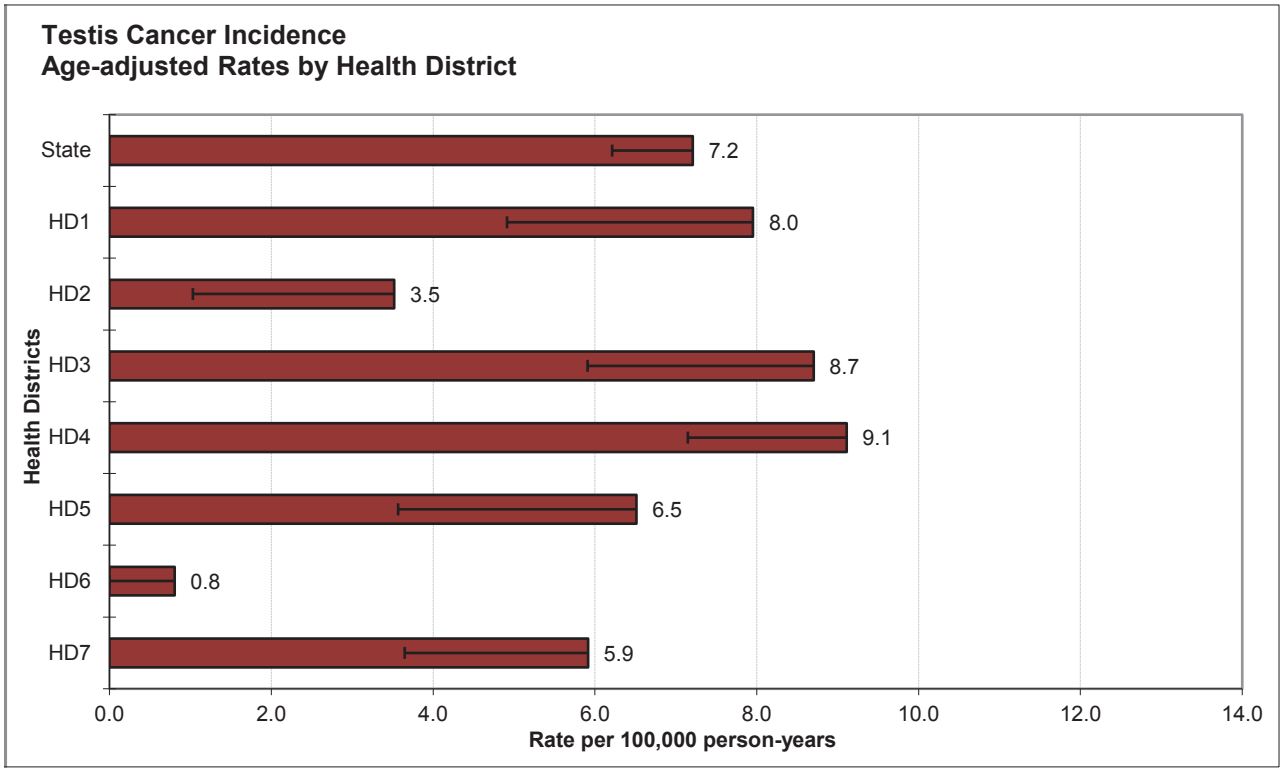
Other Undescended testis, a minor abnormality that can usually be detected and corrected with surgery in childhood, is responsible for a substantially high risk for testicular cancer when uncorrected. The extent to which surgical correction reduces cancer risk is unclear. Some evidence suggests that 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:	6.1
95% confidence interval on the mean age-adjusted incidence rate:	3.8- 8.3
Median age-adjusted incidence rate of health districts:	6.5
Range of age-adjusted incidence rate for health districts:	0.8- 9.1
USCS rate (2013, all races):	5.5

The highest age-specific incidence rate was in the 40-44 age group. Health District 6 had statistically significantly fewer cases than expected based upon rates for the remainder of Idaho.


State Testis Cancer Incidence
Age-specific Rates
Rate per 100,000 person-years
30
25
20
15
10
5
0
< 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+
Age Group (in years)


Testis Cancer Incidence
Age-adjusted Rates by Health District
Health Districts
State
HD1
HD2
HD3
HD4
HD5
HD6
HD7
7.2
8.0
3.5
8.7
9.1
6.5
0.8
5.9
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
Rate per 100,000 person-years

THYROID

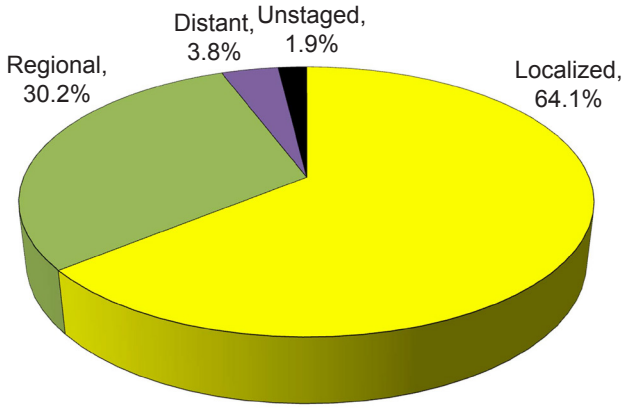
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	15.7	7.2	24.3
# of new invasive cases	262	61	201
# of new in situ cases	0	0	0
# of deaths	12	7	5

Total Cases by County

Ada	67	Cassia	4	Lewis	1
Adams	-	Clark	-	Lincoln	-
Bannock	10	Clearwater	-	Madison	5
Bear Lake	-	Custer	1	Minidoka	2
Benewah	-	Elmore	-	Nez Perce	3
Bingham	9	Franklin	3	Oneida	-
Blaine	2	Fremont	5	Owyhee	1
Boise	1	Gem	6	Payette	5
Bonner	3	Gooding	1	Power	-
Bonneville	39	Idaho	2	Shoshone	3
Boundary	-	Jefferson	10	Teton	1
Butte	1	Jerome	2	Twin Falls	14
Camas	-	Kootenai	30	Valley	2
Canyon	24	Latah	3	Washington	1
Caribou	-	Lemhi	1		

Stage at Diagnosis - Thyroid



Risk and Associated Factors

Age Thyroid cancer is 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 among whites 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.

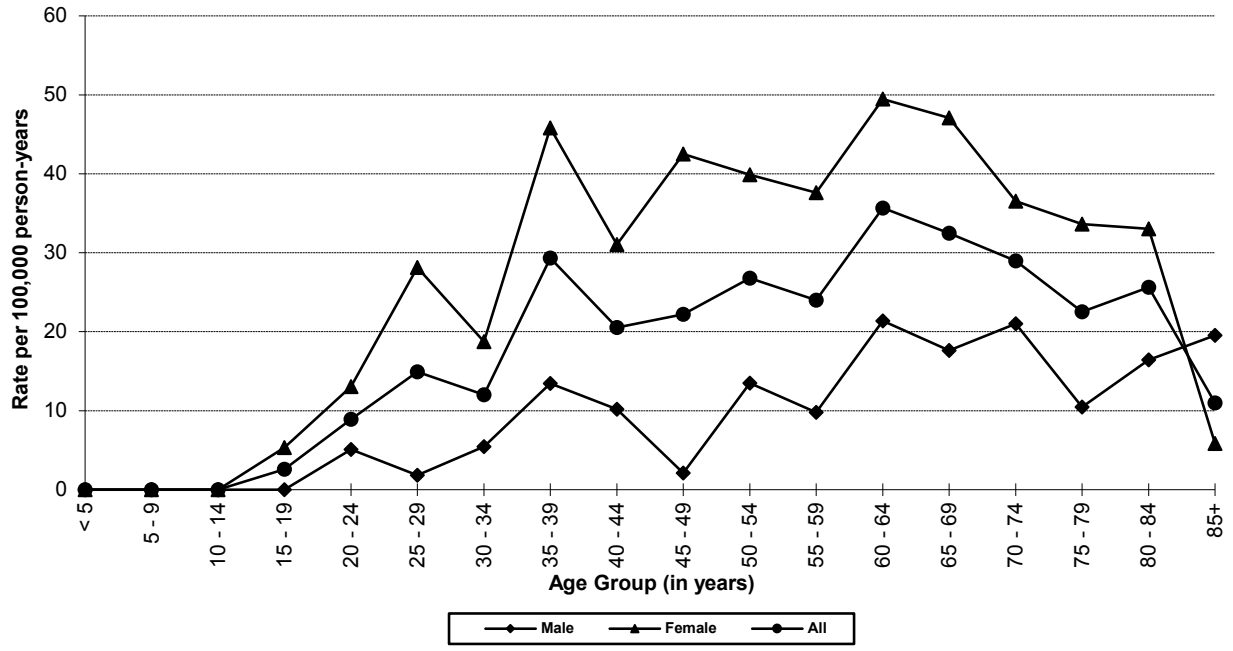
Other Occupational and environmental exposures to ionizing radiation have been associated with higher rates of thyroid cancer. Radiation exposure to the head and neck in childhood is a well-known risk factor. Family history of thyroid cancer substantially increases the risk. Prognosis worsens with each decade of age over 50, partially because anaplastic thyroid cancer, which has a higher fatality rate, occurs more often among older patients. In the U.S., thyroid cancer incidence rates have tripled in the past 30 years. Some clinicians believe that use of imaging technologies such as ultrasound, CT, and MRI scanning is fueling an epidemic in diagnosis of thyroid cancers that are unlikely to progress to cause symptoms or death, while others argue that the trend is in part real, and involves both small and large tumors.

Special Notes

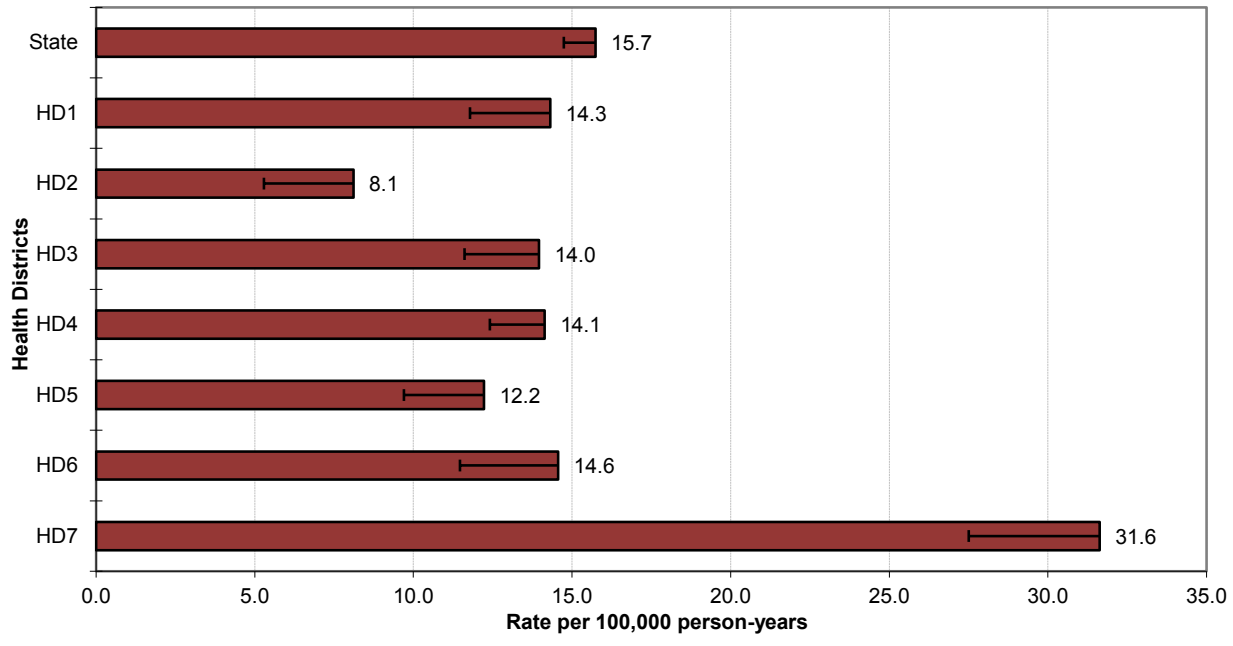
Mean age-adjusted incidence rate across health districts:	15.6
95% confidence interval on the mean age-adjusted incidence rate:	10.1- 21.1
Median age-adjusted incidence rate of health districts:	14.1
Range of age-adjusted incidence rate for health districts:	8.1- 31.6
USCS rate (2013, all races):	14.6

The age-specific incidence rates of thyroid cancer were typically higher for females than males. Health District 7 had statistically significantly more cases than expected based upon rates for the remainder of Idaho and Health District 2 had statistically significantly fewer cases than expected.

State Thyroid Cancer Incidence
Age-specific Rates



Thyroid Cancer Incidence
Age-adjusted Rates by Health District



SECTION II

STATE OF IDAHO – 2014
INCIDENCE DATA BY SITE AND GENDER

Idaho Resident Cancer Cases - 2014

Primary Site of Cancer	Invasive			In situ		
	Total	Male	Female	Total	Male	Female
All Sites	7,402	3,619	3,783	924	449	475
Oral Cavity and Pharynx	179	115	64	4	2	2
Lip	9	5	4	-	-	-
Tongue	63	42	21	1	-	1
Salivary Gland	18	6	12	-	-	-
Floor of Mouth	10	7	3	2	2	-
Gum and Other Mouth	23	13	10	1	-	1
Nasopharynx	4	4	-	-	-	-
Tonsil	32	25	7	-	-	-
Oropharynx	5	2	3	-	-	-
Hypopharynx	7	6	1	-	-	-
Other Oral Cavity and Pharynx	8	5	3	-	-	-
Digestive System	1,365	731	634	13	8	5
Esophagus	95	77	18	-	-	-
Stomach	107	69	38	-	-	-
Small Intestine	44	23	21	-	-	-
Colon and Rectum	623	307	316	10	6	4
Colon excluding Rectum	431	205	226	7	4	3
Cecum	99	40	59	1	-	1
Appendix	27	11	16	-	-	-
Ascending Colon	72	28	44	2	1	1
Hepatic Flexure	26	13	13	-	-	-
Transverse Colon	34	21	13	-	-	-
Splenic Flexure	12	5	7	-	-	-
Descending Colon	17	9	8	1	-	1
Sigmoid Colon	113	59	54	3	3	-
Large Intestine, NOS	31	19	12	-	-	-
Rectum and Rectosigmoid Junction	192	102	90	3	2	1
Rectosigmoid Junction	43	23	20	2	1	1
Rectum	149	79	70	1	1	-
Anus, Anal Canal and Anorectum	39	9	30	-	-	-
Liver and Intrahepatic Bile Duct	150	103	47	-	-	-
Liver	127	93	34	-	-	-
Intrahepatic Bile Duct	23	10	13	-	-	-
Gallbladder	17	5	12	-	-	-
Other Biliary	29	14	15	1	1	-
Pancreas	223	112	111	2	1	1
Retroperitoneum	4	2	2	-	-	-
Peritoneum, Omentum and Mesentery	14	1	13	-	-	-
Other Digestive Organs	20	9	11	-	-	-
Respiratory System	959	524	435	5	4	1
Nose, Nasal Cavity and Middle Ear	15	7	8	1	1	-
Larynx	39	33	6	2	1	1
Lung and Bronchus	902	481	421	2	2	-
Pleura	1	1	-	-	-	-
Trachea, Mediastinum and Other Respiratory Organs	2	2	-	-	-	-
Skin excluding Basal and Squamous	500	281	219	444	269	175
Melanoma of the Skin	473	266	207	444	269	175
Other Non-Epithelial Skin	27	15	12	-	-	-
Breast	1,145	11	1,134	228	-	228

Primary Site of Cancer	Invasive			In situ		
	Total	Male	Female	Total	Male	Female
Female Genital System	427	-	427	12	-	12
Cervix Uteri	49	-	49	-	-	-
Corpus and Uterus, NOS	234	-	234	2	-	2
Corpus Uteri	221	-	221	2	-	2
Uterus, NOS	13	-	13	-	-	-
Ovary	108	-	108	2	-	2
Vagina	5	-	5	-	-	-
Vulva	20	-	20	8	-	8
Other Female Genital Organs	11	-	11	-	-	-
Male Genital System	894	894	-	3	3	-
Prostate	833	833	-	-	-	-
Testis	54	54	-	-	-	-
Penis	4	4	-	3	3	-
Other Male Genital Organs	3	3	-	-	-	-
Urinary System	457	313	144	214	162	52
Urinary Bladder	165	123	42	203	154	49
Kidney and Renal Pelvis	278	181	97	7	5	2
Ureter	9	5	4	3	2	1
Other Urinary Organs	5	4	1	1	1	-
Brain and Other Nervous System	121	72	49	-	-	-
Brain	112	66	46	-	-	-
Cranial Nerves Other Nervous System	9	6	3	-	-	-
Endocrine System	274	69	205	-	-	-
Thyroid	262	61	201	-	-	-
Other Endocrine including Thymus	12	8	4	-	-	-
Lymphoma	379	230	149	-	-	-
Hodgkin Lymphoma	34	17	17	-	-	-
Non-Hodgkin Lymphoma	345	213	132	-	-	-
Myeloma	107	60	47	-	-	-
Leukemia	252	141	111	-	-	-
Lymphocytic Leukemia	130	75	55	-	-	-
Acute Lymphocytic Leukemia	26	12	14	-	-	-
Chronic Lymphocytic Leukemia	96	58	38	-	-	-
Other Lymphocytic Leukemia	8	5	3	-	-	-
Myeloid and Monocytic Leukemia	104	61	43	-	-	-
Acute Myeloid Leukemia	67	38	29	-	-	-
Acute Monocytic Leukemia	2	1	1	-	-	-
Chronic Myeloid Leukemia	34	21	13	-	-	-
Other Myeloid/Monocytic Leukemia	1	1	-	-	-	-
Other Leukemia	18	5	13	-	-	-
Other Acute Leukemia	9	5	4	-	-	-
Aleukemic, Subleukemic and NOS	9	-	9	-	-	-
Other or Unknown Sites	343	178	165	1	1	-
Bones and Joints	15	8	7	-	-	-
Soft Tissue including Heart	41	22	19	-	-	-
Eye and Orbit	18	15	3	1	1	-
Mesothelioma	22	16	6	-	-	-
Kaposi Sarcoma	1	1	-	-	-	-
Miscellaneous	246	116	130	-	-	-

SECTION III

STATE OF IDAHO – 2014
MORTALITY RATES BY SITE AND GENDER

Idaho Resident Cancer Mortality Rates - 2014

Cause of Death	Total			Male			Female		
	Rate	Deaths	Pop	Rate	Deaths	Pop	Rate	Deaths	Pop
All Causes of Death	724.9	12,609	1,634,806	826.3	6,492	818,714	634.6	6,117	816,092
All Malignant Cancers	155.1	2,789	1,634,806	182.8	1,518	818,714	133.6	1,271	816,092
Bladder	3.9	68	1,634,806	7.3	55	818,714	1.2	13	816,092
Brain and Other Nervous System	5.7	105	1,634,806	7.3	63	818,714	4.3	42	816,092
Breast	11.1	194	1,634,806	0.4	3	818,714	20.5	191	816,092
Cervix	1.0	17	1,634,806	-	-	818,714	2.0	17	816,092
Colorectal	12.8	232	1,634,806	14.6	124	818,714	11.3	108	816,092
Corpus Uteri	1.0	19	1,634,806	-	-	818,714	2.0	19	816,092
Esophagus	4.5	84	1,634,806	7.8	69	818,714	1.6	15	816,092
Hodgkin Lymphoma	0.2	3	1,634,806	0.1	1	818,714	0.2	2	816,092
Kidney	4.4	80	1,634,806	7.1	60	818,714	2.1	20	816,092
Larynx	0.7	14	1,634,806	1.5	13	818,714	0.1	1	816,092
Leukemia	6.7	118	1,634,806	8.8	72	818,714	4.9	46	816,092
Liver and Bile Duct	5.3	103	1,634,806	7.0	65	818,714	3.8	38	816,092
Lung and Bronchus	36.1	657	1,634,806	41.9	353	818,714	31.5	304	816,092
Melanoma of the Skin	3.3	61	1,634,806	4.7	42	818,714	2.1	19	816,092
Myeloma	2.8	50	1,634,806	3.5	28	818,714	2.3	22	816,092
Non-Hodgkin Lymphoma	6.7	118	1,634,806	8.9	70	818,714	4.9	48	816,092
Oral Cavity and Pharynx	2.3	42	1,634,806	3.3	29	818,714	1.4	13	816,092
Ovary	3.3	62	1,634,806	-	-	818,714	6.2	62	816,092
Pancreas	11.4	206	1,634,806	11.2	100	818,714	11.4	106	816,092
Prostate	10.8	191	1,634,806	24.9	191	818,714	-	-	816,092
Stomach	2.6	46	1,634,806	3.4	28	818,714	2.1	18	816,092
Testis	0.2	4	1,634,806	0.5	4	818,714	-	-	816,092
Thyroid	0.7	12	1,634,806	0.9	7	818,714	0.6	5	816,092

Data source: Bureau of Vital Records and Health Statistics (BVRHS), Idaho Department of Health and Welfare, 2015.[19]

Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130) standard.

Cause of death categories are based on SEER cause of death recodes (http://seer.cancer.gov/codrecode/), which differ from official BVRHS cancer mortality categories. Death counts may differ from official BVRHS statistics due to late filings. Two 2014 deaths had unknown age at death and are not included in the table.

SECTION IV

2014 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** **2014**

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	15.9	16.2	9.0	18.2	44.5	68.9	83.2	143.7	206.2	307.6	526.1	745.3	1049.5	1480.8	1832.1	2145.8	2198.5	2339.1
Male	15.6	18.9	9.6	23.7	30.6	50.0	69.3	65.3	114.0	214.6	433.8	776.9	1060.7	1625.9	2062.1	2541.3	2548.5	3030.9
Female	16.1	13.3	8.4	12.4	59.7	88.1	97.6	225.0	300.0	401.6	616.9	715.0	1038.8	1338.2	1613.9	1782.5	1917.1	1925.1
Bladder																		
All	0.0	0.0	0.0	0.9	0.0	0.0	0.9	1.0	4.1	2.1	15.3	22.1	47.2	65.0	114.2	125.2	157.6	230.6
Male	0.0	0.0	0.0	1.7	0.0	0.0	1.8	1.9	2.0	4.2	23.1	33.4	81.3	98.3	182.1	198.7	271.3	410.6
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	0.0	7.6	11.3	14.4	32.2	49.8	57.7	66.1	122.9
Brain																		
All	2.6	4.9	1.6	0.0	1.8	1.9	2.8	2.9	3.1	7.4	4.8	12.5	12.6	18.7	15.3	32.6	36.6	14.6
Male	0.0	6.3	1.6	0.0	0.0	1.9	1.8	5.8	6.1	8.4	7.7	15.7	12.8	25.2	17.5	36.6	49.3	29.3
Female	5.4	3.3	1.7	0.0	3.7	1.9	3.8	0.0	0.0	6.4	1.9	9.4	12.4	12.4	13.3	28.8	26.4	5.9
Brain & Other Central Nervous System (Non-Malignant)																		
All	0.0	0.0	0.0	2.6	4.5	2.8	8.3	6.8	11.3	11.6	10.5	22.1	23.1	26.2	20.5	40.1	58.6	54.9
Male	0.0	0.0	0.0	1.7	3.4	1.9	5.5	5.8	8.1	8.4	5.8	5.9	12.8	17.7	17.5	26.2	49.3	48.9
Female	0.0	0.0	0.0	3.6	5.6	3.8	11.3	8.0	14.5	14.9	15.2	37.6	33.0	34.7	23.3	52.9	66.1	58.5
Breast																		
Female Invasive	0.0	0.0	0.0	0.0	1.9	16.9	33.8	71.7	117.9	140.2	222.1	255.9	348.3	396.5	491.5	466.0	363.6	380.3
Female In Situ	0.0	0.0	0.0	0.0	0.0	0.0	5.6	6.0	47.6	61.6	58.8	47.0	57.7	84.3	66.4	76.9	79.3	23.4
Cervix																		
Female	0.0	0.0	0.0	0.0	3.7	0.0	7.5	13.9	12.4	10.6	11.4	13.2	12.4	7.4	3.3	4.8	6.6	0.0
Colorectal																		
All	0.0	0.0	0.8	0.9	1.8	2.8	2.8	7.8	15.4	24.3	51.7	54.7	84.0	121.2	148.3	172.8	230.9	219.6
Male	0.0	0.0	1.6	0.0	1.7	1.9	5.5	5.8	8.1	23.1	40.5	58.9	96.2	128.6	150.5	193.5	222.0	283.5
Female	0.0	0.0	0.0	1.8	1.9	3.8	0.0	10.0	22.8	25.5	62.6	50.8	72.1	114.0	146.1	153.7	238.0	181.4
Corpus Uteri																		
Female	0.0	0.0	0.0	0.0	1.9	1.9	3.8	15.9	14.5	34.0	55.1	48.9	90.7	89.2	93.0	48.0	46.3	35.1
Esophagus																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	1.0	2.1	3.8	7.7	15.7	21.2	32.4	30.1	22.0	36.6
Male	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	2.0	4.2	7.7	15.7	23.5	30.3	59.5	41.8	32.9	88.0
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	8.2	12.4	6.6	19.2	13.2	5.9

IDAHO **AGE-SPECIFIC CANCER RATES, PER 100,000 POPULATION, BY SITE AND GENDER** **2014**

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+
Hodgkin Lymphoma																		
All	0.0	0.0	0.0	4.3	3.6	4.7	2.8	2.9	0.0	5.3	2.9	1.0	1.1	0.0	3.4	0.0	3.7	3.7
Male	0.0	0.0	0.0	5.1	3.4	1.9	3.7	3.8	0.0	6.3	1.9	2.0	2.1	0.0	3.5	0.0	0.0	0.0
Female	0.0	0.0	0.0	3.6	3.7	7.5	1.9	2.0	0.0	4.3	3.8	0.0	0.0	0.0	3.3	0.0	6.6	5.9
Kidney & Renal Pelvis																		
All	2.6	0.0	0.0	0.9	0.0	1.9	0.0	0.0	3.1	15.9	23.9	34.6	35.7	68.7	66.5	60.1	84.3	65.9
Male	1.7	0.0	0.0	1.7	0.0	1.9	0.0	0.0	4.1	14.7	27.0	41.2	42.8	108.4	94.5	94.1	131.5	97.8
Female	3.6	0.0	0.0	0.0	0.0	1.9	0.0	0.0	2.1	17.0	20.9	28.2	28.9	29.7	39.9	28.8	46.3	46.8
Larynx																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	6.7	8.4	6.3	8.5	15.0	11.0	11.0
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	11.8	15.0	10.1	14.0	31.4	16.4	29.3
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.9	2.1	2.5	3.3	0.0	6.6	0.0
Leukemia																		
All	4.4	3.2	1.6	2.6	4.5	0.9	5.6	3.9	4.1	8.5	9.6	15.4	26.2	48.7	47.7	80.1	91.6	128.1
Male	5.2	1.6	3.2	5.1	5.1	0.0	9.1	0.0	2.0	6.3	11.6	27.5	29.9	60.5	70.0	104.6	82.2	117.3
Female	3.6	5.0	0.0	0.0	3.7	1.9	1.9	8.0	6.2	10.6	7.6	3.8	22.7	37.2	26.6	57.7	99.2	134.6
Liver & Bile Duct																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	4.2	6.7	21.1	31.5	38.7	46.0	32.6	25.7	25.6
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	7.7	35.3	47.1	52.9	63.0	41.8	41.1	29.3
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.1	0.0	5.7	7.5	16.5	24.8	29.9	24.0	13.2	23.4
Lung & Bronchus																		
All	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.0	3.1	13.7	41.1	68.2	109.2	208.7	289.7	373.1	289.5	366.1
Male	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	2.0	10.5	40.5	66.7	115.5	224.4	315.1	475.8	337.1	518.2
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	4.1	17.0	41.8	69.6	103.1	193.3	265.7	278.7	251.2	275.0
Melanoma of the Skin																		
All	0.0	1.6	0.0	0.9	4.5	6.5	10.2	19.6	20.5	31.7	28.7	56.7	77.7	85.0	59.7	102.7	139.2	117.1
Male	0.0	1.6	0.0	1.7	0.0	5.6	10.9	11.5	8.1	27.4	23.1	68.7	94.1	116.0	77.0	125.5	230.2	205.3
Female	0.0	1.7	0.0	0.0	9.3	7.5	9.4	27.9	33.1	36.1	34.2	45.2	61.8	54.5	43.2	81.7	66.1	64.4
Myeloma																		
All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	9.6	8.6	6.3	21.2	27.3	52.6	51.3	43.9
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	7.7	7.9	6.4	25.2	45.5	73.2	32.9	58.7
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.4	9.4	6.2	17.4	10.0	33.6	66.1	35.1

IDAHO **AGE-SPECIFIC CANCER RATES, PER 100,000 POPULATION, BY SITE AND GENDER** **2014**

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+
Non-Hodgkin Lymphoma																		
All	0.9	0.8	1.6	1.7	2.7	5.6	3.7	5.9	11.3	11.6	15.3	29.8	42.0	58.7	75.0	140.2	135.6	98.8
Male	1.7	1.6	1.6	3.4	5.1	7.4	5.5	7.7	14.3	14.7	23.1	41.2	53.5	78.1	87.5	167.3	164.4	136.9
Female	0.0	0.0	1.7	0.0	0.0	3.8	1.9	4.0	8.3	8.5	7.6	18.8	30.9	39.7	63.1	115.3	112.4	76.1
Oral Cavity & Pharynx																		
All	0.0	0.8	0.0	0.0	0.9	0.9	0.0	1.0	2.1	10.6	18.2	22.1	29.4	36.2	47.7	52.6	33.0	22.0
Male	0.0	1.6	0.0	0.0	0.0	1.9	0.0	0.0	2.0	14.7	23.1	37.3	42.8	40.3	59.5	68.0	49.3	19.6
Female	0.0	0.0	0.0	0.0	1.9	0.0	0.0	2.0	2.1	6.4	13.3	7.5	16.5	32.2	36.5	38.4	19.8	23.4
Ovary																		
Female	0.0	0.0	1.7	0.0	0.0	1.9	7.5	4.0	8.3	8.5	15.2	30.1	26.8	39.7	46.5	38.4	59.5	46.8
Pancreas																		
All	0.0	0.0	0.0	0.0	0.9	0.0	0.0	1.0	3.1	4.2	10.5	20.2	36.7	41.2	57.9	77.6	77.0	102.5
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.3	15.4	29.4	42.8	37.8	59.5	88.9	65.8	78.2
Female	0.0	0.0	0.0	0.0	1.9	0.0	0.0	2.0	4.1	2.1	5.7	11.3	30.9	44.6	56.5	67.3	85.9	117.0
Prostate																		
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2	25.2	121.5	209.9	248.1	448.7	532.2	507.2	435.7	488.9
Stomach																		
All	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	4.1	6.3	7.7	5.8	11.5	18.7	29.0	45.1	40.3	36.6
Male	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	4.1	8.4	7.7	9.8	15.0	27.7	49.0	52.3	49.3	48.9
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	4.3	7.6	1.9	8.2	9.9	10.0	38.4	33.1	29.3
Testis																		
Male	0.0	0.0	0.0	1.7	10.2	24.1	14.6	7.7	26.5	4.2	1.9	3.9	4.3	0.0	3.5	5.2	0.0	0.0
Thyroid																		
All	0.0	0.0	0.0	2.6	8.9	14.9	12.0	29.3	20.5	22.2	26.8	24.0	35.7	32.5	29.0	22.5	25.7	11.0
Male	0.0	0.0	0.0	0.0	5.1	1.9	5.5	13.5	10.2	2.1	13.5	9.8	21.4	17.7	21.0	10.5	16.4	19.6
Female	0.0	0.0	0.0	5.3	13.1	28.1	18.8	45.8	31.0	42.5	39.9	37.6	49.5	47.1	36.5	33.6	33.1	5.9

SECTION V

2014 OBSERVED VS. EXPECTED NUMBERS BY HEALTH DISTRICT

2014 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	1,364	1,234.6 *	580	583.5	1,275	1,199.3 +	2,125	2,057.9	838	900.0 +	634	767.5 *	789	837.2
Bladder	67	61.3	28	29.9	61	58.0	112	91.9 +	44	43.9	23	38.2 +	33	40.4
Brain	20	17.2	7	8.2	19	17.8	32	30.9	11	13.5	8	11.7	15	12.4
Brain & CNS non-Malignant	25	30.0	11	14.1	40	27.3 +	57	50.0	20	21.8	14	19.0	18	21.3
Breast	170	190.7	101	83.7	203	178.5	364	302.1 *	108	136.5 +	90	115.4 +	109	127.4
Breast (in situ)	52	33.8 *	9	16.9	38	36.2	71	63.3	17	27.5 +	22	22.3	19	25.8
Cervix	10	6.7	3	3.3	8	7.8	12	15.8	6	5.5	3	5.1	7	5.5
Colorectal	116	101.5	51	48.0	105	97.9	160	172.3	73	73.4	55	62.5	63	68.3
Corpus Uteri	42	34.9	14	16.3	40	34.2	51	66.5	30	24.8	21	21.8	23	24.3
Esophagus	23	14.7	7	7.5	15	15.2	24	26.0	7	11.7	9	9.4	10	10.2
Hodgkin lymphoma	4	4.6	2	2.4	6	5.3	8	10.8	4	3.9	4	3.4	6	4.2
Kidney & renal pelvis	56	44.3	19	21.5	54	42.4	73	77.6	32	32.6	22	28.0	22	31.2
Larynx	10	5.9	3	3.1	4	6.6	7	11.7	6	4.4	6	3.7	3	4.4
Leukemia	47	39.8	18	19.7	47	39.0	63	69.9	27	30.3	27	25.1	23	28.8
Liver & bile duct	30	24.9	6	12.0	29	22.9	41	40.8	26	16.3 +	8	15.5	10	16.9
Lung & bronchus	200	144.7 *	81	71.2	157	141.6	240	238.9	99	108.1	54	93.3 *	71	99.8 *
Melanoma of skin	70	77.5	27	36.0	55	78.7 *	152	124.6 +	50	55.8	54	46.3	65	50.9
Myeloma	17	18.4	11	8.4	20	16.6	29	27.8	16	12.3	6	11.2	8	12.0
N-H Lymphoma	65	55.2	29	26.4	48	56.5	93	94.0	36	41.4	33	34.6	41	37.5
Oral cavity & pharynx	35	28.8	15	13.5	31	28.0	52	47.9	16	21.5	15	17.9	15	20.0
Ovary	22	16.5	2	8.6 +	15	17.6	30	29.9	11	12.8	17	10.0	11	12.0
Pancreas	37	37.8	20	17.5	49	32.8 *	61	59.1	21	27.1	18	22.6	17	24.9
Prostate	148	141.2	69	64.6	128	133.8	221	225.1	92	98.3	77	82.8	98	88.5
Stomach	16	18.3	8	8.4	19	16.8	32	27.9	12	12.8	8	10.8	12	11.5
Testis	7	6.9	2	3.7	10	8.3	22	14.0	5	6.2	1	5.9 +	7	6.8
Thyroid	36	39.6	9	18.9 +	37	42.6	70	78.9	25	30.6	23	26.3	62	26.2 *
Pediatric (age 0-19)	3	8.7	1	4.0	15	11.9	26	16.2 +	7	8.8	6	8.1	12	10.0

+ Statistically significant difference at p<.05.
* Statistically significant difference at p<.01.

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

2014 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	700	621.5 *	303	299.1	620	596.5	1,013	999.9	416	449.2	315	382.8 *	406	415.1
Bladder	52	46.5	25	22.7	49	43.2	77	70.0	29	33.7	18	28.9 +	27	30.4
Brain	8	11.0	4	4.9	12	10.3	20	17.8	8	7.8	5	6.8	9	7.3
Brain & CNS non-Malignant	5	9.8	5	4.5	10	9.0	20	14.3	7	6.8	6	5.8	5	6.9
Breast	1	2.1	3	0.7	1	1.9	1	3.7	0	1.5	0	1.2	5	0.7 *
Breast (in situ)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Colorectal	65	49.1 +	26	24.2	49	48.6	71	85.9	39	35.9	25	31.2	32	33.8
Esophagus	18	12.0	7	6.1	12	12.3	21	20.2	6	9.5	6	7.8	7	8.5
Hodgkin lymphoma	2	2.3	2	1.1	6	2.1 +	3	5.9	0	2.2	1	1.8	3	2.1
Kidney & renal pelvis	39	28.8	11	14.5	35	27.6	48	48.9	19	21.5	15	18.2	14	20.5
Larynx	9	4.9	3	2.6	3	5.6	4	10.2 +	6	3.6	5	3.1	3	3.7
Leukemia	26	22.5	9	11.3	29	21.3	31	39.9	17	16.6	16	14.0	13	16.2
Liver & bile duct	19	17.5	5	8.3	22	15.2	30	26.9	16	11.5	4	10.9 +	7	11.7
Lung & bronchus	104	79.0 *	44	39.0	88	74.9	122	125.0	49	58.4	36	49.2	38	53.7 +
Melanoma of skin	44	43.7	14	21.3	30	44.2 +	83	68.1	32	31.1	24	27.0	39	28.3
Myeloma	9	10.6	6	4.8	11	9.4	19	14.1	8	7.0	2	6.4	5	6.7
N-H Lymphoma	37	34.7	21	16.3	33	34.2	55	58.5	23	25.4	20	21.4	24	23.6
Oral cavity & pharynx	23	18.4	12	8.6	16	18.7	35	29.7	9	14.0	9	11.6	11	12.8
Pancreas	21	18.6	11	8.7	22	17.0	31	29.0	8	13.9	13	11.0	6	13.0
Prostate	148	142.2	69	66.1	128	133.3	221	220.7	92	98.6	77	83.3	98	89.4
Stomach	12	11.7	6	5.4	11	11.2	21	17.4	6	8.5	6	6.9	7	7.6
Testis	7	6.8	2	3.8	10	8.1	22	14.2	5	6.2	1	5.9 +	7	6.8
Thyroid	9	9.3	1	4.7	7	10.0	13	19.1	8	6.9	5	6.2	18	5.5 *
Pediatric (age 0-19)	0	5.4 *	1	2.4	11	6.5	14	10.1	4	5.2	5	4.6	6	5.9

+ Statistically significant difference at p<.05.
* Statistically significant difference at p<.01.

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

2014 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	664	616.1	277	285.5	655	604.9 +	1,112	1,050.4	422	450.3	319	385.4 *	383	422.2
Bladder	15	15.2	3	7.6	12	14.9	35	20.5 *	15	10.3	5	9.4	6	10.2
Brain	12	6.2 +	3	3.3	7	7.5	12	13.0	3	5.8	3	4.9	6	5.2
Brain & CNS non-Malignant	20	20.3	6	9.5	30	18.3 +	37	35.6	13	15.0	8	13.2	13	14.4
Breast	169	188.6	98	81.4	202	177.9	363	301.2 *	108	134.4 +	90	113.9 +	104	125.4
Breast (in situ)	52	33.8 *	9	16.6	38	36.4	71	63.6	17	27.3 +	22	22.3	19	25.5
Cervix	10	6.7	3	3.2	8	7.9	12	15.8	6	5.5	3	5.1	7	5.5
Colorectal	51	52.3	25	23.9	56	49.4	89	86.0	34	37.5	30	31.4	31	34.5
Corpus Uteri	42	35.0	14	16.0	40	34.5	51	67.0	30	24.6	21	21.7	23	24.0
Esophagus	5	2.7	0	1.5	3	2.9	3	5.5	1	2.3	3	1.7	3	1.8
Hodgkin lymphoma	2	2.3	0	1.3	0	3.3	5	4.9	4	1.7	3	1.6	3	2.1
Kidney & renal pelvis	17	15.7	8	7.2	19	14.8	25	28.2	13	11.1	7	9.9	8	10.8
Larynx	1	1.0	0	0.5	1	0.9	3	1.2	0	0.8	1	0.6	0	0.7
Leukemia	21	17.3	9	8.5	18	17.6	32	29.8	10	13.6	11	11.2	10	12.6
Liver & bile duct	11	7.4	1	3.8	7	7.7	11	13.7	10	4.9	4	4.7	3	5.3
Lung & bronchus	96	66.1 *	37	32.5	69	66.9	118	112.7	50	49.7	18	44.1 *	33	46.2
Melanoma of skin	26	34.0	13	14.9	25	34.7	69	55.7	18	24.6	30	19.5 +	26	22.7
Myeloma	8	7.8	5	3.6	9	7.2	10	13.6	8	5.3	4	4.8	3	5.3
N-H Lymphoma	28	20.5	8	10.3	15	22.2	38	35.2	13	16.1	13	13.2	17	14.0
Oral cavity & pharynx	12	10.4	3	5.0	15	9.4	17	17.9	7	7.5	6	6.3	4	7.2
Ovary	22	16.6	2	8.5 +	15	17.7	30	30.3	11	12.8	17	10.0	11	11.9
Pancreas	16	19.1	9	8.8	27	15.9 +	30	30.0	13	13.2	5	11.7	11	11.9
Stomach	4	6.7	2	3.0	8	5.7	11	10.3	6	4.3	2	4.0	5	4.0
Thyroid	27	30.6	8	14.0	30	32.9	57	59.6	17	23.5	18	20.2	44	20.5 *
Pediatric (age 0-19)	3	3.4	0	1.6	4	5.4	12	6.2 +	3	3.7	1	3.5	6	4.1

+ Statistically significant difference at p<.05.
* Statistically significant difference at p<.01.

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

SECTION VI

RISKS OF BEING DIAGNOSED AND DYING FROM CANCER

Risks of Being Diagnosed with and Dying from Cancer

All Sites, Invasive in Females

If your current age is:	Then your risk of being diagnosed with cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 65	1 in 21	1 in 9	1 in 5	1 in 3	1 in 2
40		1 in 30	1 in 11	1 in 5	1 in 3	1 in 2
50			1 in 16	1 in 6	1 in 3	1 in 2
60				1 in 8	1 in 4	1 in 2
70					1 in 6	1 in 3
80						1 in 4

If your current age is:	Then your risk of dying from cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 663	1 in 154	1 in 49	1 in 19	1 in 9	1 in 5
40		1 in 199	1 in 52	1 in 19	1 in 9	1 in 5
50			1 in 70	1 in 21	1 in 10	1 in 6
60				1 in 29	1 in 11	1 in 6
70					1 in 16	1 in 7
80						1 in 9

All Sites, Invasive in Males

If your current age is:	Then your risk of being diagnosed with cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 128	1 in 38	1 in 12	1 in 5	1 in 3	1 in 2
40		1 in 53	1 in 13	1 in 5	1 in 3	1 in 2
50			1 in 16	1 in 5	1 in 3	1 in 2
60				1 in 7	1 in 3	1 in 2
70					1 in 4	1 in 2
80						1 in 3

If your current age is:	Then your risk of dying from cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 718	1 in 171	1 in 45	1 in 17	1 in 8	1 in 5
40		1 in 222	1 in 47	1 in 17	1 in 8	1 in 4
50			1 in 59	1 in 18	1 in 8	1 in 4
60				1 in 23	1 in 8	1 in 4
70					1 in 11	1 in 5
80						1 in 6

Risks of Being Diagnosed with and Dying from Cancer

Female Breast Cancer

If your current age is:	Then your risk of being diagnosed with breast cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 236	1 in 61	1 in 27	1 in 14	1 in 9	1 in 8
40		1 in 81	1 in 30	1 in 15	1 in 10	1 in 8
50			1 in 46	1 in 18	1 in 11	1 in 8
60				1 in 28	1 in 13	1 in 10
70					1 in 23	1 in 13
80						1 in 23

If your current age is:	Then your risk of dying from breast cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 2463	1 in 592	1 in 211	1 in 102	1 in 59	1 in 38
40		1 in 772	1 in 229	1 in 106	1 in 60	1 in 38
50			1 in 319	1 in 120	1 in 64	1 in 39
60				1 in 184	1 in 77	1 in 43
70					1 in 120	1 in 51
80						1 in 69

Prostate Cancer

If your current age is:	Then your risk of being diagnosed with prostate cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 15940	1 in 386	1 in 50	1 in 16	1 in 9	1 in 7
40		1 in 389	1 in 50	1 in 15	1 in 9	1 in 7
50			1 in 55	1 in 15	1 in 9	1 in 7
60				1 in 20	1 in 10	1 in 8
70					1 in 16	1 in 10
80						1 in 18

If your current age is:	Then your risk of dying from prostate cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in *	1 in 22321	1 in 1532	1 in 296	1 in 86	1 in 32
40		1 in 21982	1 in 1509	1 in 291	1 in 84	1 in 32
50			1 in 1572	1 in 286	1 in 82	1 in 31
60				1 in 327	1 in 81	1 in 29
70					1 in 94	1 in 28
80						1 in 28

Note: * Risk is not precise - estimate not shown.

Risks of Being Diagnosed with and Dying from Cancer

Colon/Rectal Cancer in Females

If your current age is:	Then your risk of being diagnosed with colorectal cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 1529	1 in 327	1 in 136	1 in 70	1 in 40	1 in 25
40		1 in 412	1 in 148	1 in 73	1 in 40	1 in 25
50			1 in 226	1 in 86	1 in 44	1 in 26
60				1 in 134	1 in 52	1 in 29
70					1 in 76	1 in 33
80						1 in 44

If your current age is:	Then your risk of dying from colorectal cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 5669	1 in 1395	1 in 535	1 in 235	1 in 118	1 in 63
40		1 in 1833	1 in 585	1 in 243	1 in 119	1 in 64
50			1 in 843	1 in 275	1 in 125	1 in 65
60				1 in 391	1 in 141	1 in 67
70					1 in 201	1 in 74
80						1 in 90

Colon/Rectal Cancer in Males

If your current age is:	Then your risk of being diagnosed with colorectal cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 1774	1 in 381	1 in 124	1 in 56	1 in 32	1 in 24
40		1 in 477	1 in 131	1 in 57	1 in 32	1 in 23
50			1 in 174	1 in 63	1 in 34	1 in 24
60				1 in 91	1 in 39	1 in 26
70					1 in 59	1 in 31
80						1 in 46

If your current age is:	Then your risk of dying from colorectal cancer by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 5547	1 in 1470	1 in 429	1 in 167	1 in 84	1 in 53
40		1 in 1970	1 in 458	1 in 170	1 in 84	1 in 53
50			1 in 579	1 in 180	1 in 85	1 in 53
60				1 in 245	1 in 94	1 in 55
70					1 in 132	1 in 61
80						1 in 80

Risks of Being Diagnosed with and Dying from Cancer

Melanoma in Females

If your current age is:	Then your risk of being diagnosed with melanoma by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 530	1 in 214	1 in 122	1 in 80	1 in 60	1 in 49
40		1 in 355	1 in 156	1 in 93	1 in 67	1 in 53
50			1 in 272	1 in 123	1 in 80	1 in 61
60				1 in 213	1 in 109	1 in 75
70					1 in 203	1 in 105
80						1 in 166

If your current age is:	Then your risk of dying from melanoma by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 12342	1 in 3826	1 in 1670	1 in 976	1 in 562	1 in 331
40		1 in 5495	1 in 1914	1 in 1050	1 in 584	1 in 337
50			1 in 2878	1 in 1273	1 in 640	1 in 352
60				1 in 2189	1 in 790	1 in 385
70					1 in 1126	1 in 425
80						1 in 527

Melanoma in Males

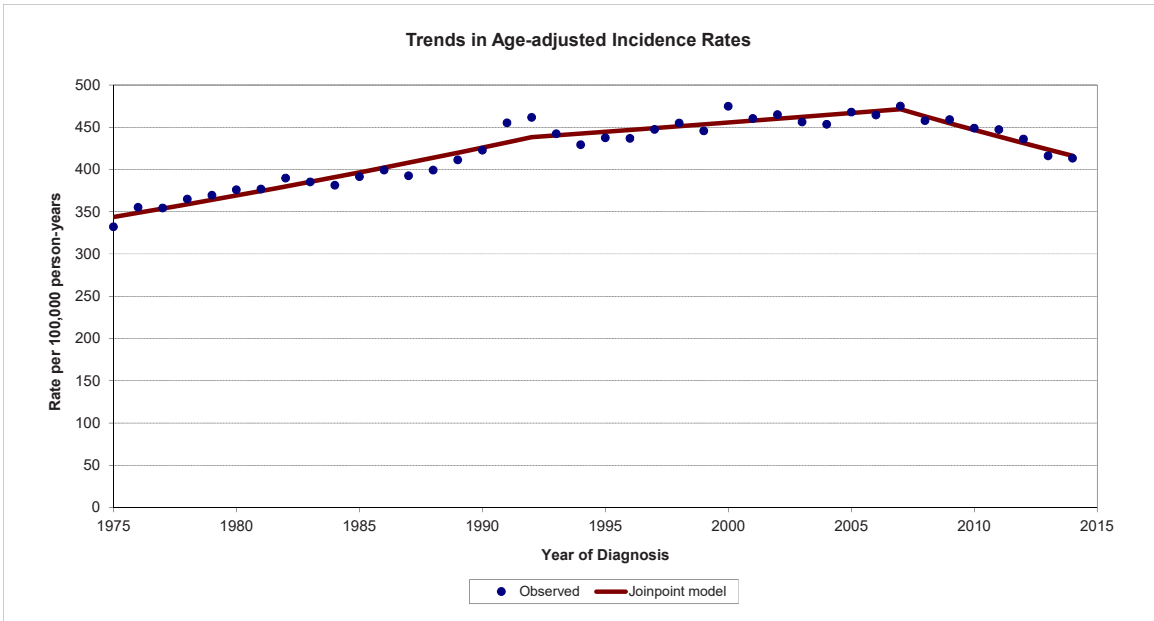
If your current age is:	Then your risk of being diagnosed with melanoma by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 707	1 in 304	1 in 138	1 in 66	1 in 42	1 in 31
40		1 in 524	1 in 168	1 in 71	1 in 43	1 in 32
50			1 in 239	1 in 80	1 in 46	1 in 33
60				1 in 112	1 in 53	1 in 35
70					1 in 86	1 in 45
80						1 in 64

If your current age is:	Then your risk of dying from melanoma by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 8308	1 in 2626	1 in 1120	1 in 485	1 in 281	1 in 184
40		1 in 3782	1 in 1275	1 in 508	1 in 286	1 in 185
50			1 in 1867	1 in 569	1 in 300	1 in 189
60				1 in 766	1 in 335	1 in 196
70					1 in 518	1 in 229
80						1 in 290

SECTION VII

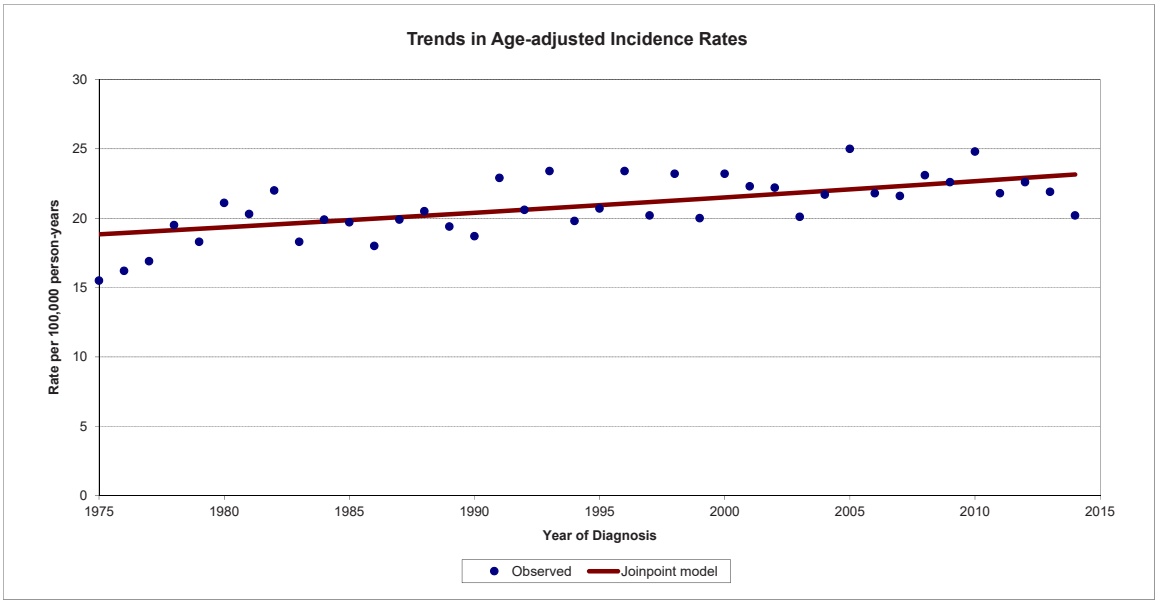
CANCER TRENDS IN IDAHO
1975-2014

All Sites



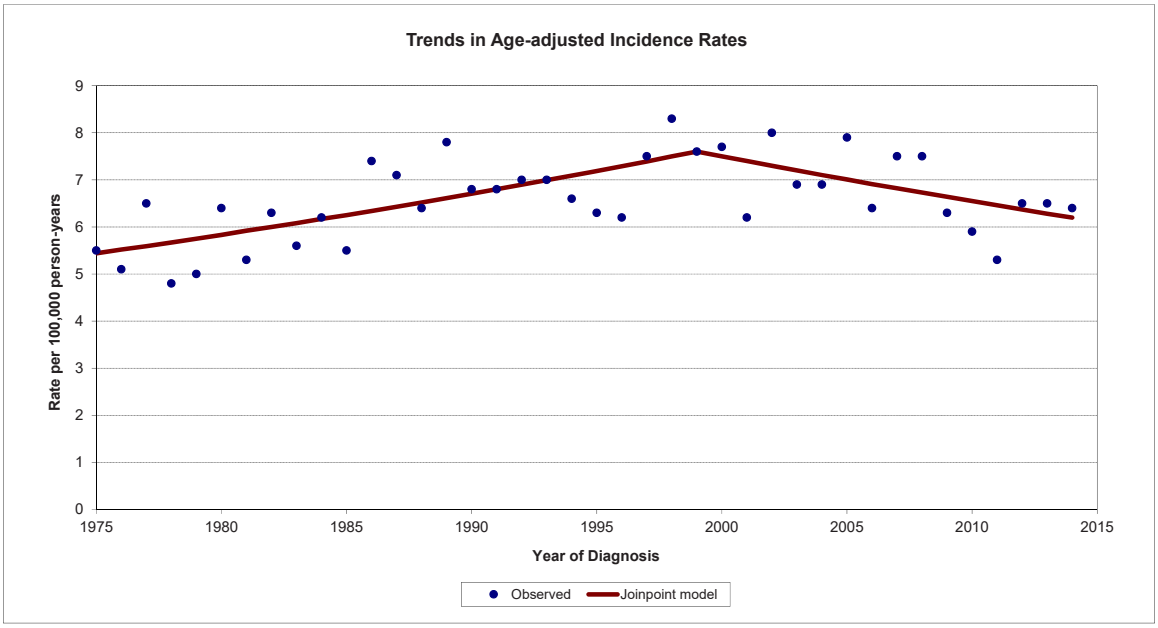
Cancer incidence increased at a rate of about 1.4% per year in Idaho from 1975 to 1992, and at a rate of about 0.5% per year from 1992 to 2007. Since 2007, overall cancer incidence has declined about 1.8% per year. Cancer incidence trends over time were different for males and females. For males, much of the overall trend is due to the trend in prostate cancer incidence. For females, much of the overall trend is due to the trend in breast cancer incidence.

Bladder



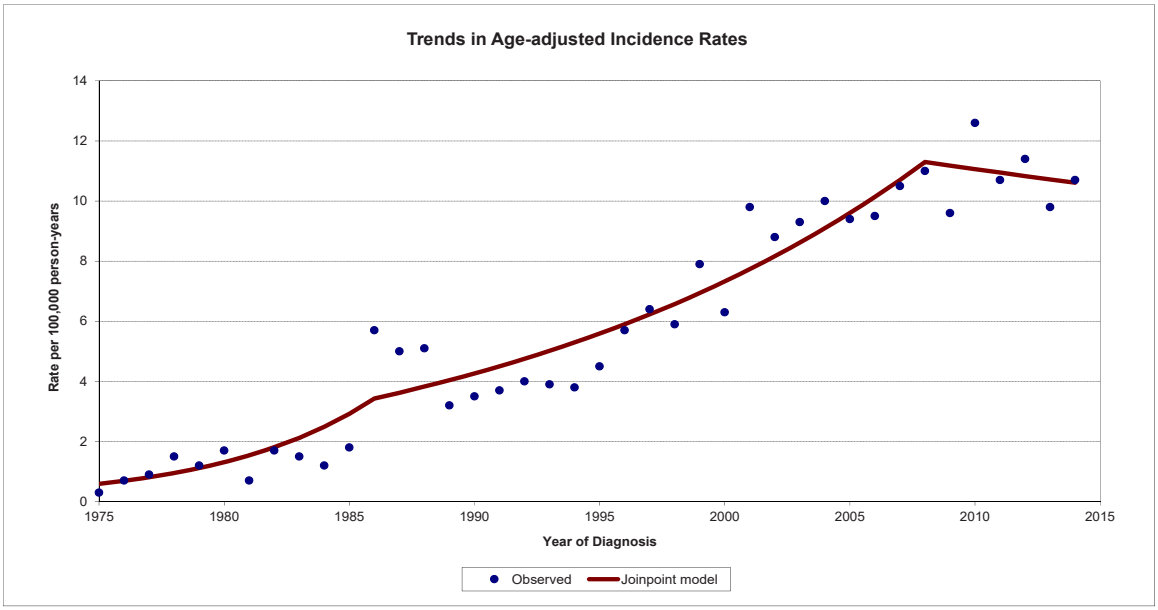
Bladder cancer incidence includes in situ and invasive cases. Bladder cancer incidence increased at a rate of about 0.5% per year in Idaho from 1975 to 2014. Most of the increase in bladder cancer incidence is attributable to males, who have rates of bladder cancer incidence about 4-5 times those of females.

Brain



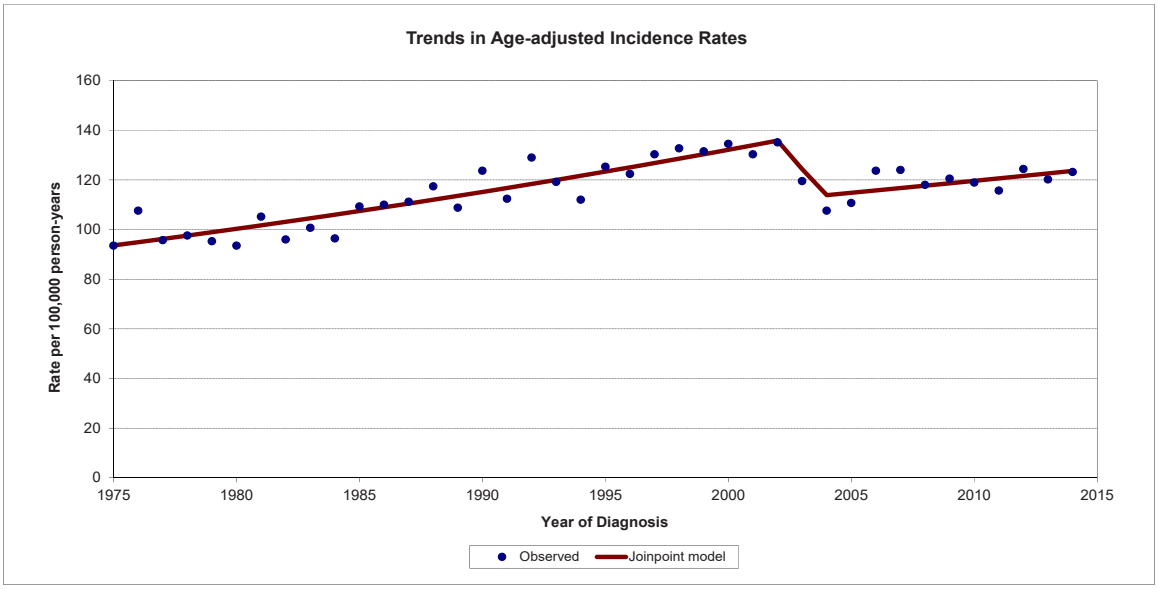
Malignant brain cancer incidence increased at a rate of about 1.4% per year in Idaho from 1975 to 1999, after which the rate has declined about 1.4% per year. Among males, malignant brain cancer incidence rates followed the same pattern. Among females, the rate has been stable 1975 to present.

Brain and Other CNS, Non-Malignant



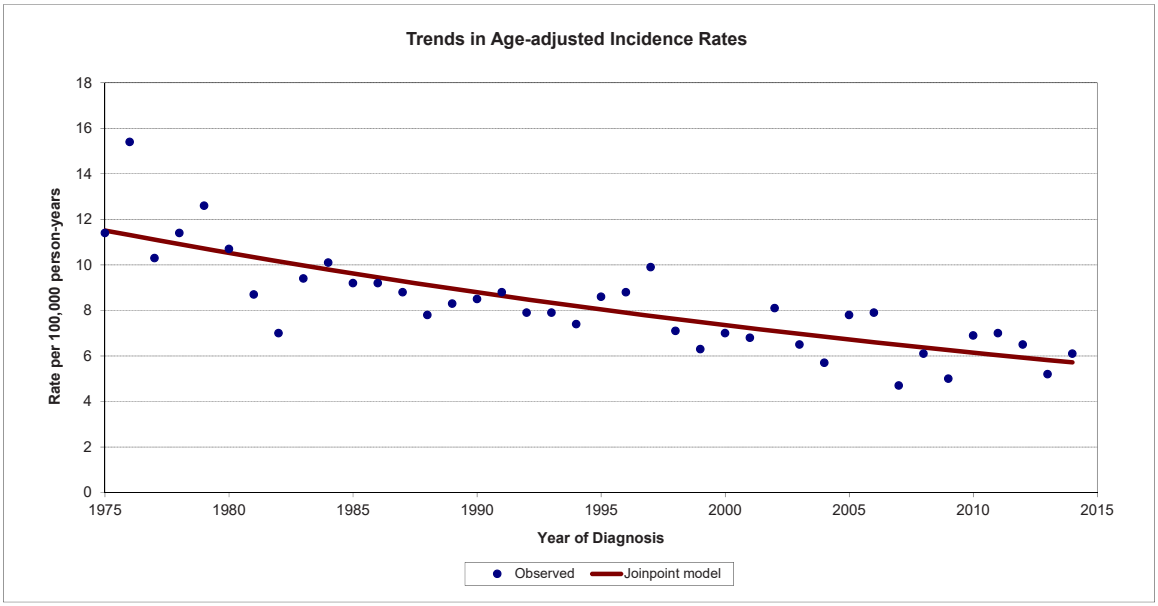
Non-malignant brain and other central nervous system tumors include those with benign and borderline behavior. Non-malignant brain and other CNS tumor incidence increased at a rate of about 17.4% per year in Idaho from 1975 to 1986, then increased by about 5.6% until 2008, after which the rate has been generally stable.

Breast Female



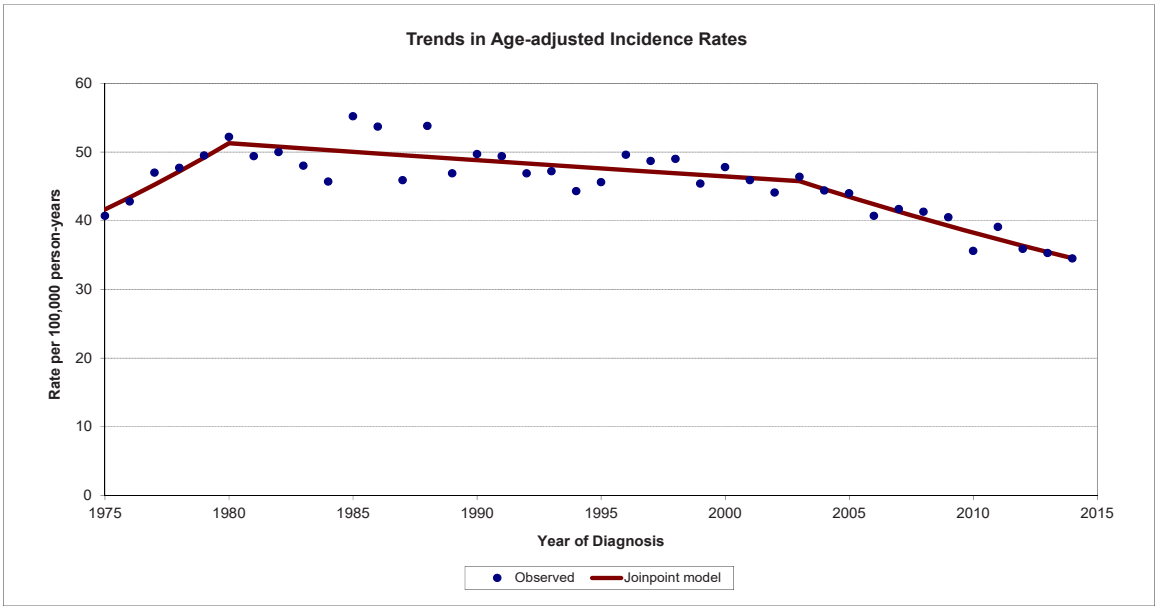
Invasive breast cancer incidence increased at a rate of about 1.4% per year among female Idahoans from 1975 to 2002. From 2002 to 2004, the rate decreased sharply by almost 9% per year. This decrease may be due in part to a decrease in the use of hormone replacement therapy. Since 2004, the invasive breast cancer incidence rate has increased about 0.8% per year. In situ breast cancer rates increased at a rate of about 13.1% per year from 1975 to 1992, after which the rate of increase slowed to about 1.0% per year (data not shown).

Cervix



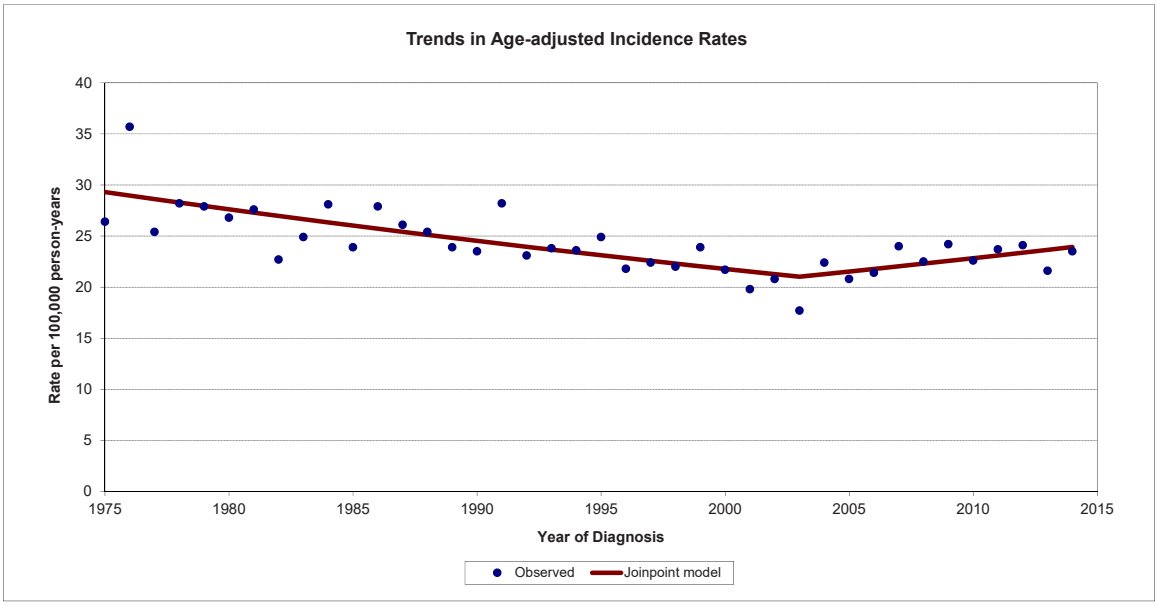
Invasive cervical cancer incidence has decreased about 1.8% per year in Idaho from 1975 to 2014.

Colorectal



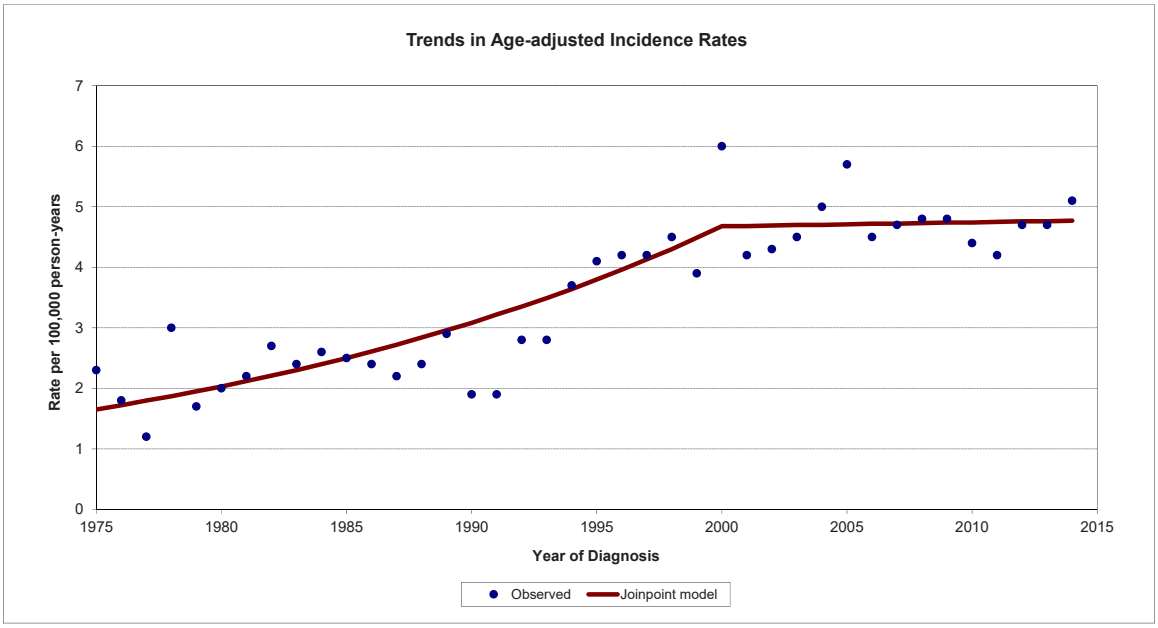
Colorectal cancer incidence increased at a rate of about 4.3% per year in Idaho from 1975 to 1980. From 1980 to 2003, the rate decreased about 0.5% per year, and then the rate decreased about 2.5% per year from 2003 to 2014. Colorectal cancer incidence trends over time were different for males and females. For males, rates increased from 1975 to 1988, then decreased. For females, rates were stable from 1975-2000, then decreased.

Corpus Uteri



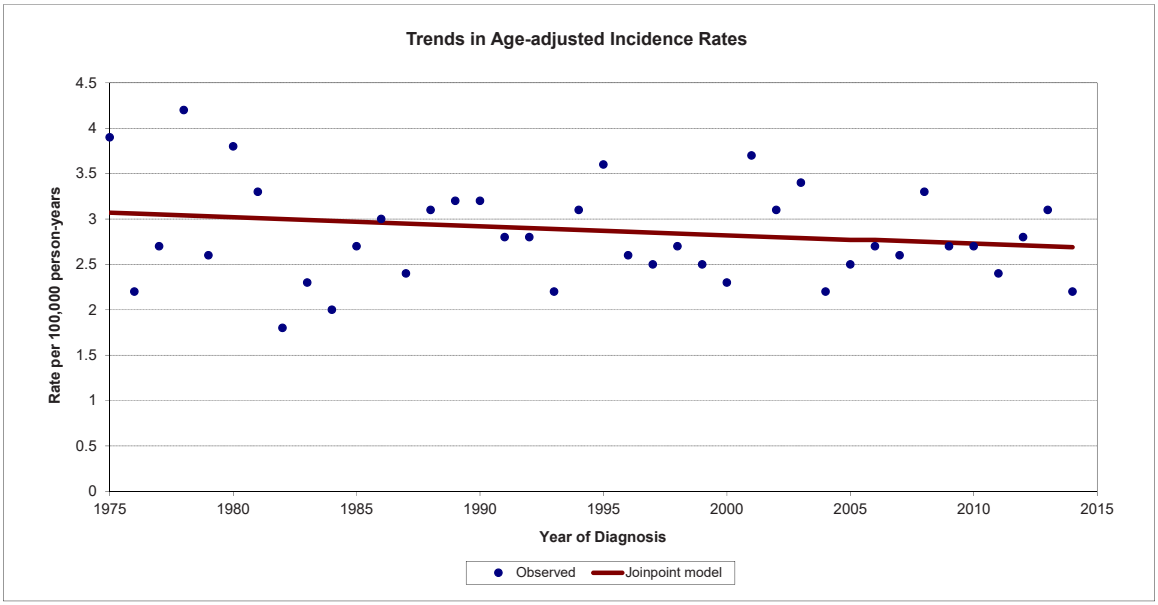
Corpus uteri cancer incidence rates decreased about 1.2% per year in Idaho from 1975 to 2003, and have increased by 1.2% per year since 2003.

Esophagus



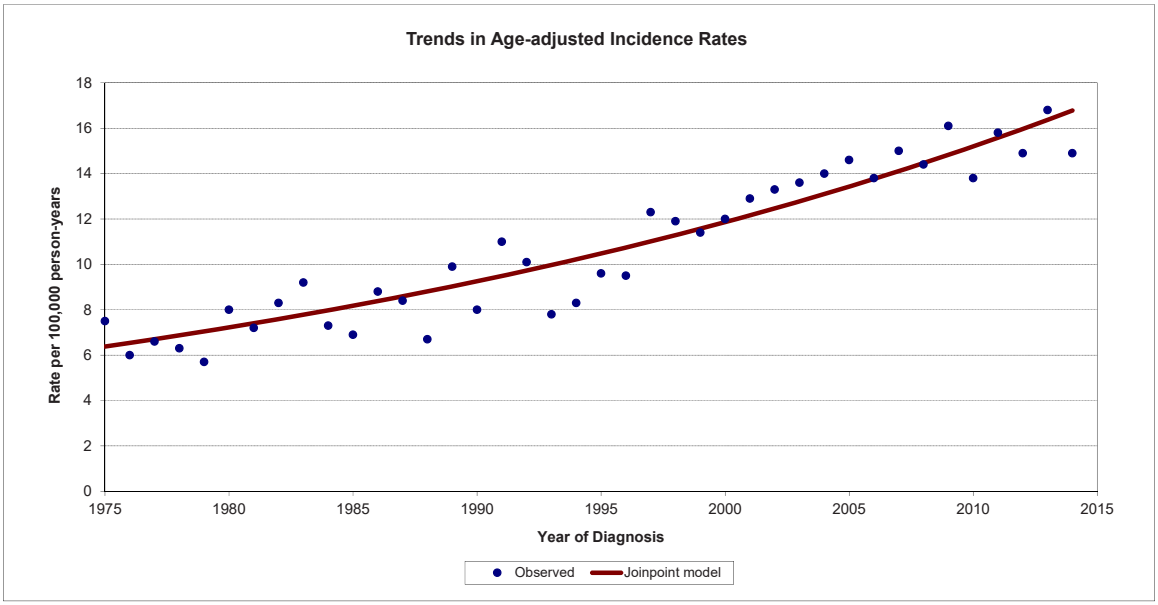
Esophageal cancer incidence increased at a rate of about 4.3% per year in Idaho from 1975 to 2000, after which the incidence rate has been stable. Rates of esophageal cancers among males were about 3-4 times higher than those among females.

Hodgkin Lymphoma



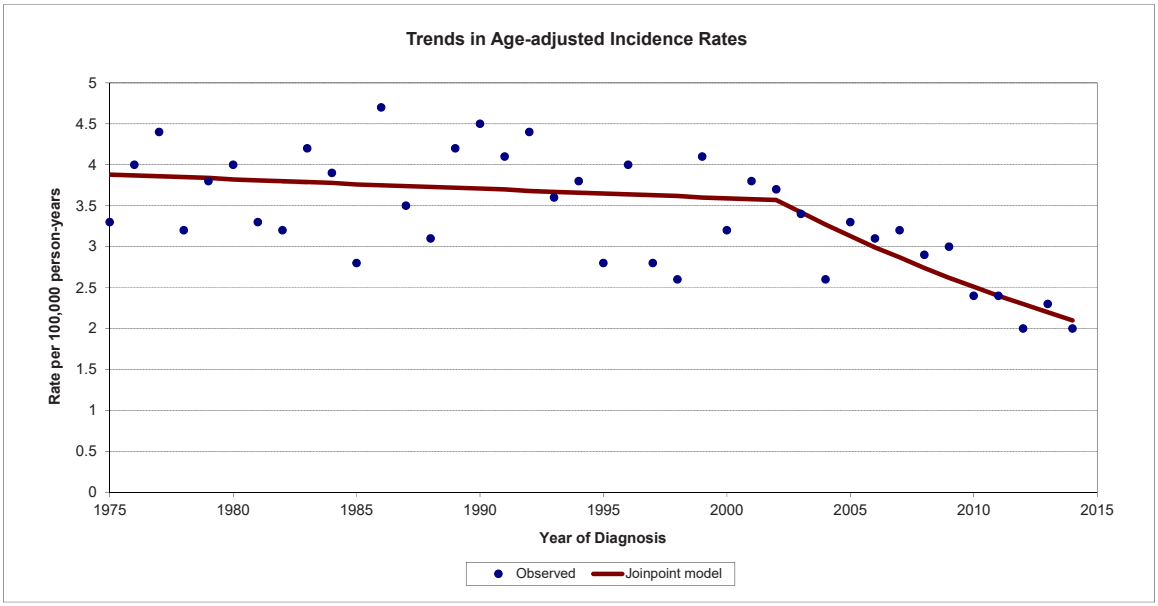
There was no statistically significant trend in Hodgkin lymphoma incidence in Idaho from 1975 to 2014; rates were stable but showed year-to-year variability due to the relatively small numbers of cases diagnosed annually.

Kidney and Renal Pelvis



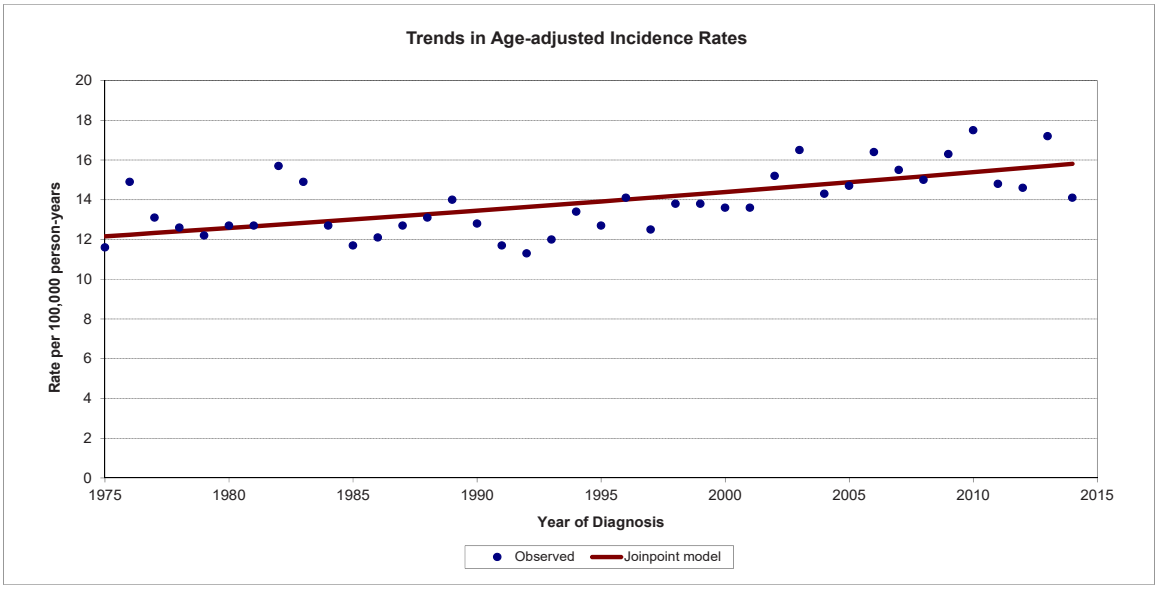
Kidney and renal pelvis cancer incidence increased at a rate of about 2.5% per year in Idaho from 1975 to 2014. The rate of increase was similar for males and females, although rates of kidney and renal pelvis cancers among males were about twice as high as among females.

Larynx



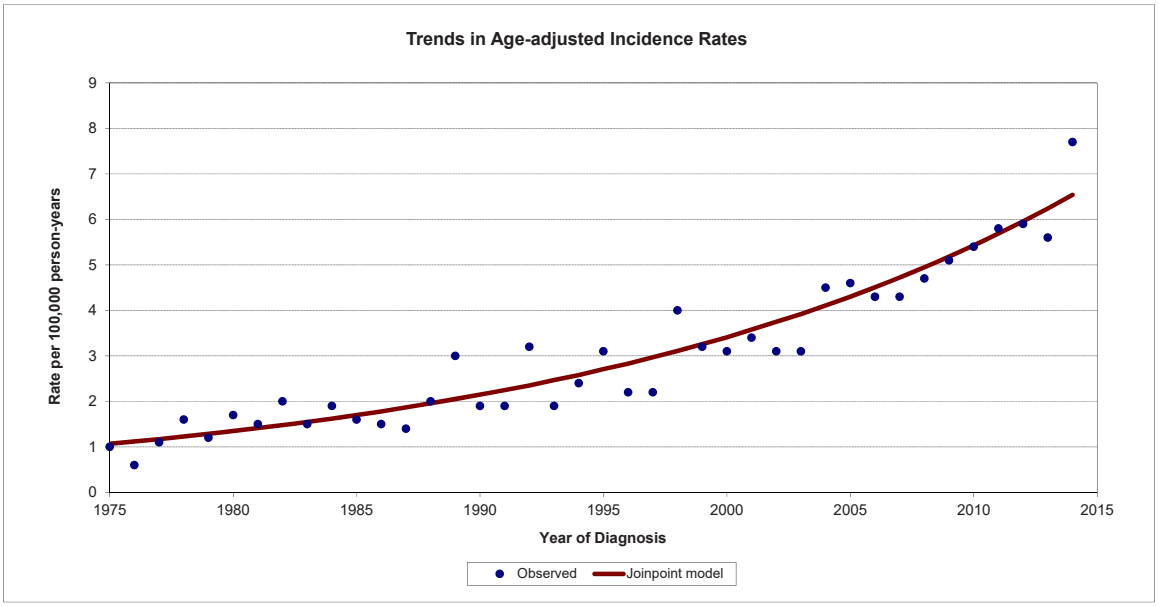
Laryngeal cancer incidence decreased about 0.3% per year in Idaho from 1975 to 2002, and decreased about 4.3% per year since 2002. Rates showed year-to-year variability due to the relatively small numbers of cases diagnosed annually. The temporal pattern was similar for males. Among females, incidence rates of laryngeal cancer decreased about 1.5% per year from 1975 to 2014. Incidence rates of laryngeal cancers among males were about 4 times as high as among females.

Leukemia



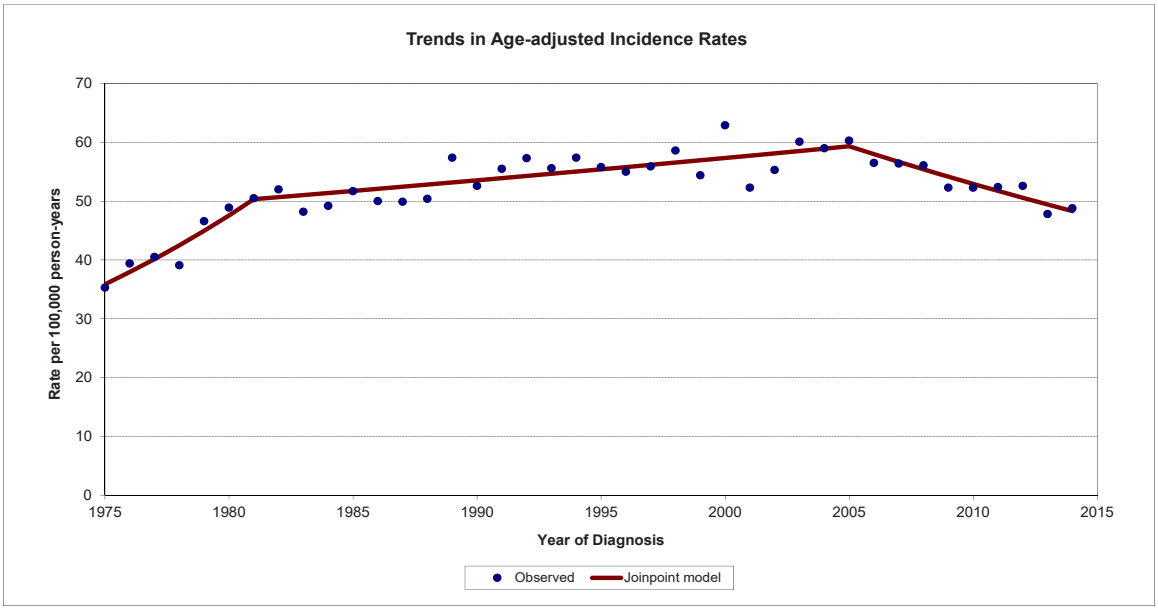
Leukemia incidence has increased about 0.7% per year from 1975 to 2014. Rates showed year-to-year variability due to the relatively small numbers of cases diagnosed annually.

Liver and Bile Duct



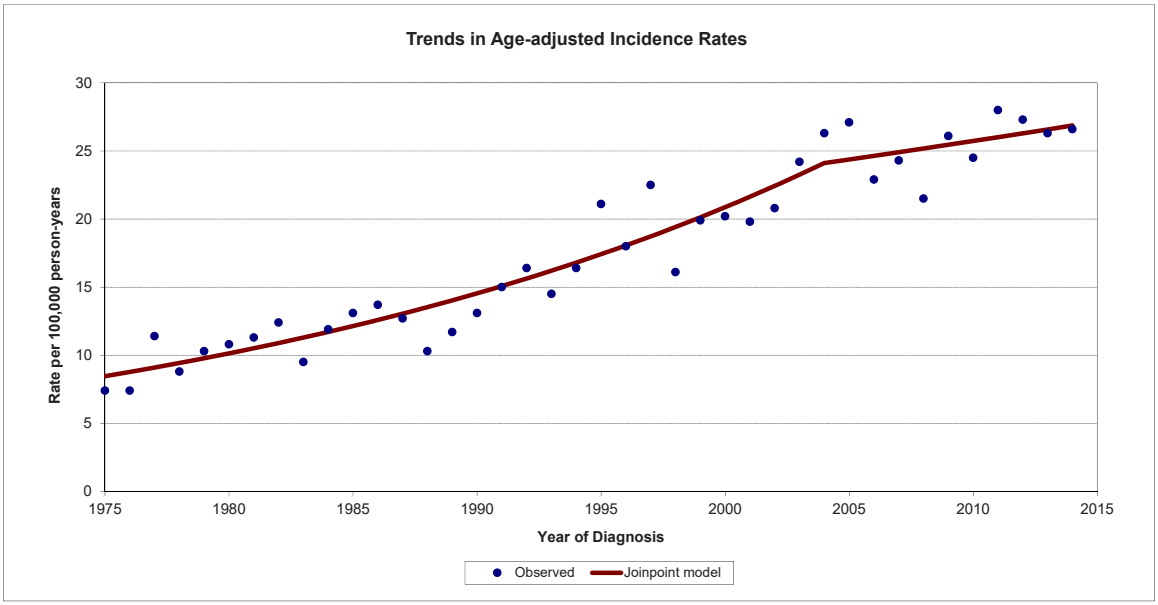
Liver cancer incidence increased at a rate of about 4.8% per year in Idaho from 1975 to 2014. The rate of increase was higher for males (5.3% per year) than for females (3.4% per year), and rates of liver cancers among males were about twice as high as among females.

Lung and Bronchus



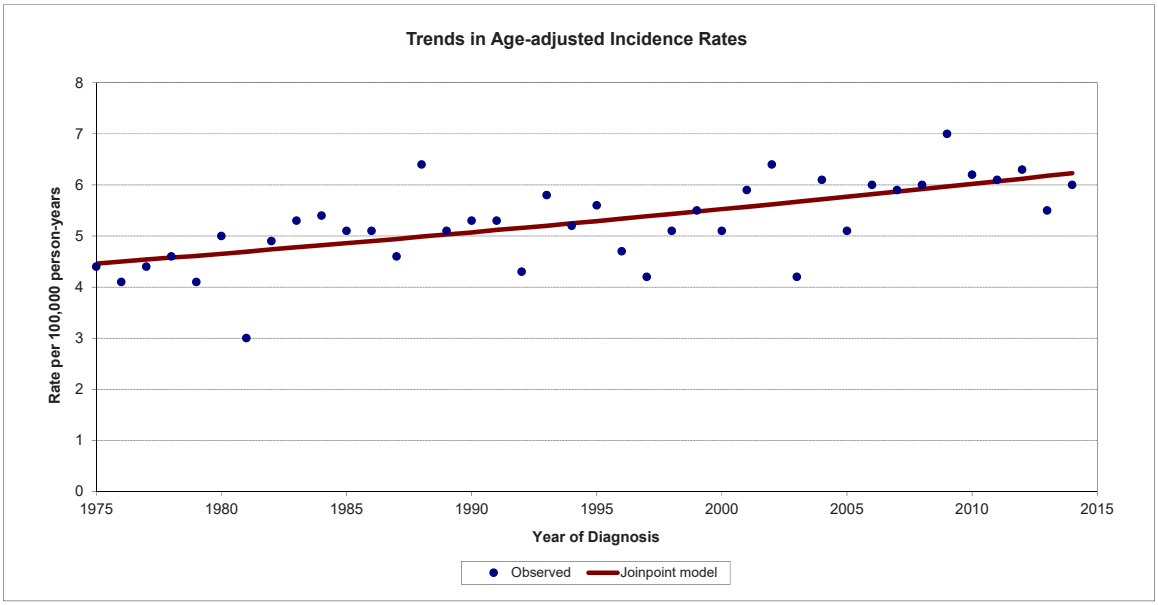
Lung cancer incidence increased at a rate of about 5.8% per year in Idaho from 1975 to 1981, after which the rate of increase lessened to about 0.7% per year until 2005. From 2005 to 2014, the rate has decreased about 2.3% per year. Lung cancer incidence trends over time were different for males and females. For males, lung cancer incidence increased at a rate of about 5.9% per year from 1975 to 1980, and then decreased by about 0.4% per year until 2004, after which it has decreased by about 3.0% per year. For females, lung cancer incidence increased at a rate of about 5.9% per year from 1975 to 1989, after which the rate of increase lessened to about 1.7% per year until 2006. From 2006 to 2014, there has been no statistically significant trend in lung cancer incidence among females. Historically, lung cancer incidence rates have been two or more times higher among males as among females, but the gap is continuing to narrow, reflecting long-term trends in smoking prevalence.

Melanoma



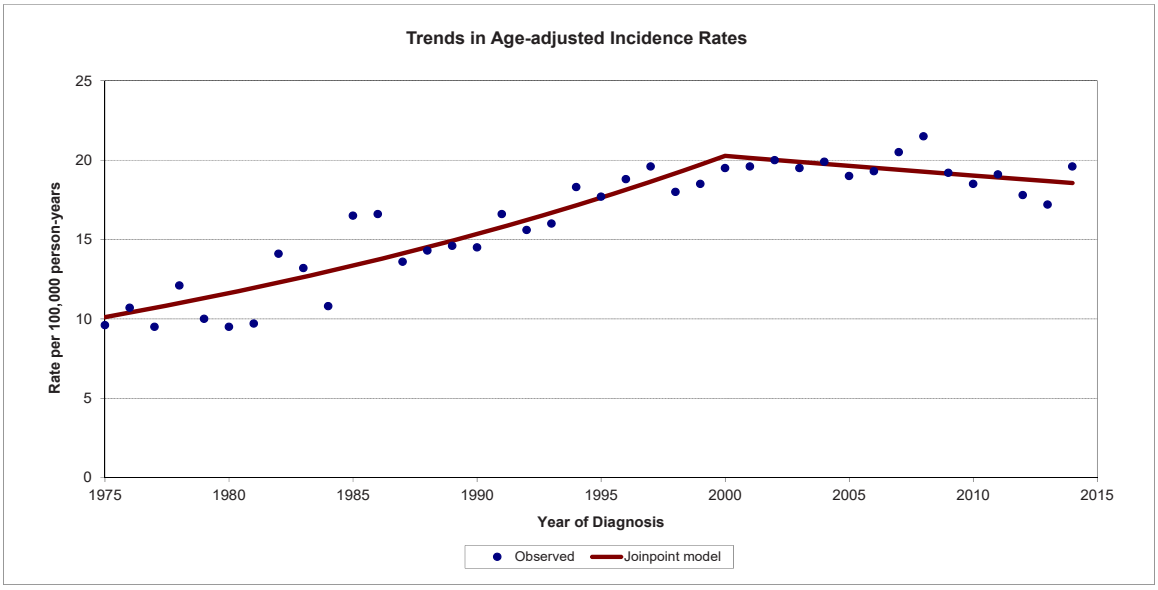
The incidence of melanoma of the skin increased at a rate of about 3.7% per year in Idaho from 1975 to 2004. Since 2004 there has been no statistically significant trend in melanoma incidence. The temporal pattern was similar for males. Among females, incidence rates of melanoma of the skin increased about 2.6% per year from 1975 to 2014. The incidence of in situ melanoma of the skin increased at a higher rate (7.0% per year from 1980 to 2014) than for the invasive cases depicted in the graph.

Myeloma



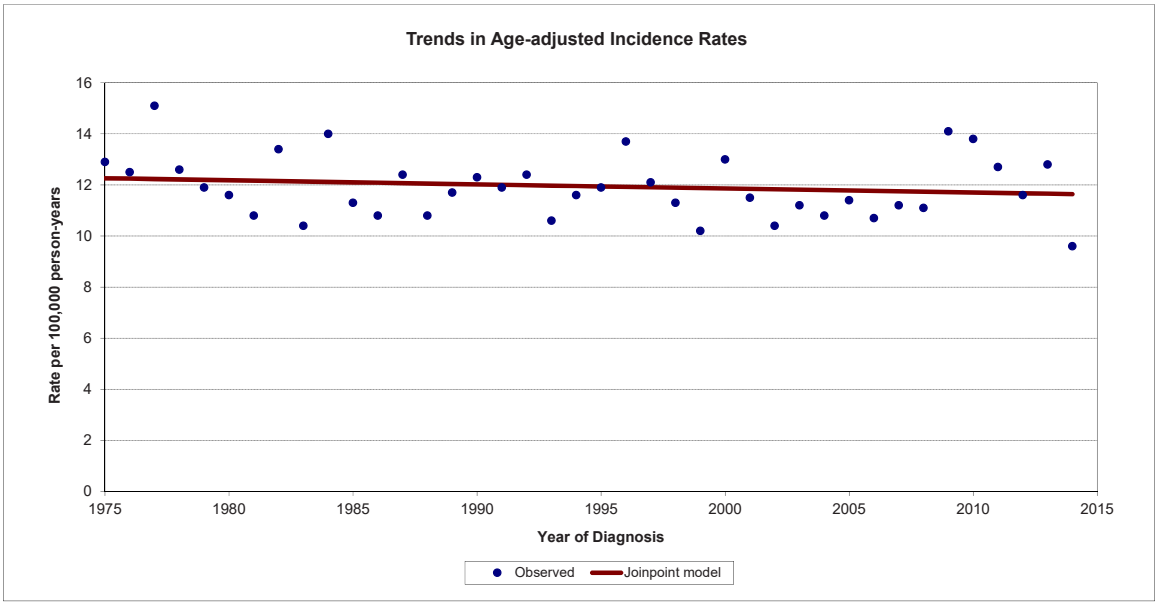
The incidence of myeloma increased at a rate of about 0.9% per year in Idaho from 1975 to 2014. The rate of increase was higher for males (1.3% per year) than for females (no significant trend), and rates of myeloma incidence among males were higher than among females.

Non-Hodgkin Lymphoma



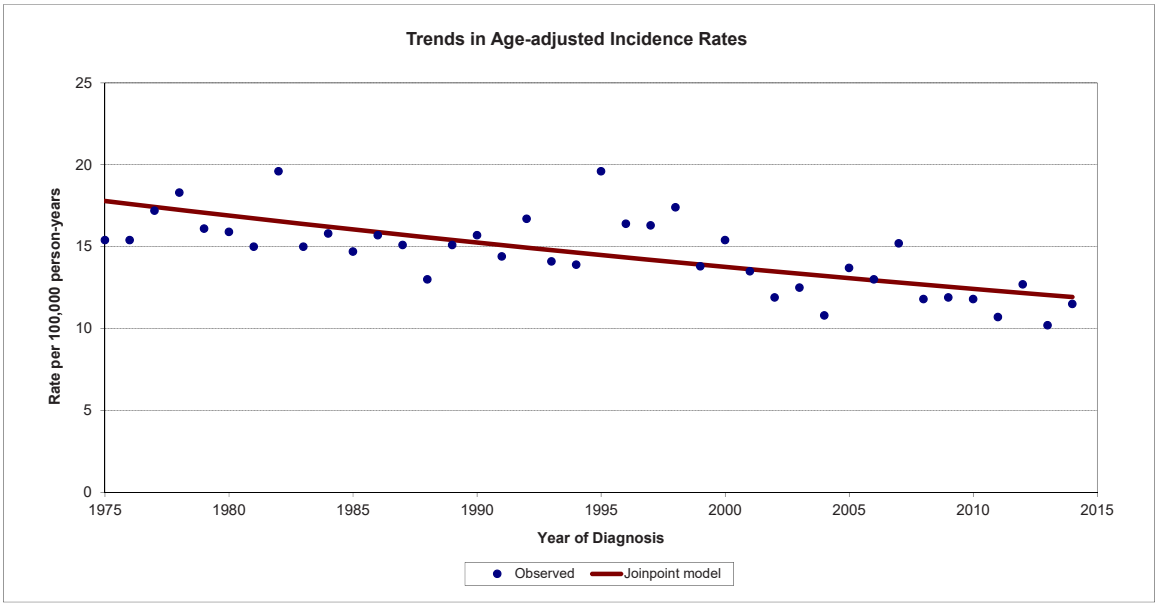
The incidence of non-Hodgkin lymphoma increased at a rate of about 2.8% per year in Idaho from 1975 to 2000, after which there has been no significant trend. Non-Hodgkin lymphoma incidence trends over time were similar for males and females, but rates of non-Hodgkin lymphoma incidence among males were higher than among females.

Oral Cavity and Pharynx



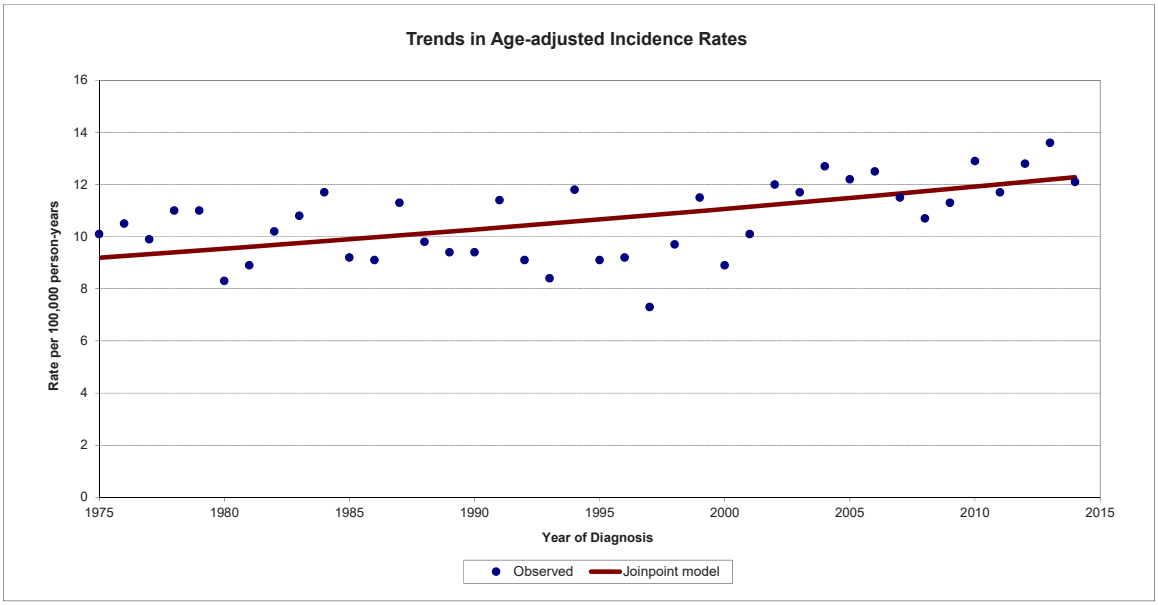
The incidence of cancers of the oral cavity and pharynx decreased at a rate of about 0.1% per year in Idaho from 1975 to 2014. Among males, the rate of decrease was about 0.6% per year for the entire time period. Among females, incidence of cancers of the oral cavity and pharynx increased at a rate of about 0.7% per year 1975 to 2014. Rates of cancers of the oral cavity and pharynx were about 3 times higher among males than among females. This latter result likely reflects differences in long-term prevalence trends for tobacco use and alcohol consumption between males and females.

Ovary



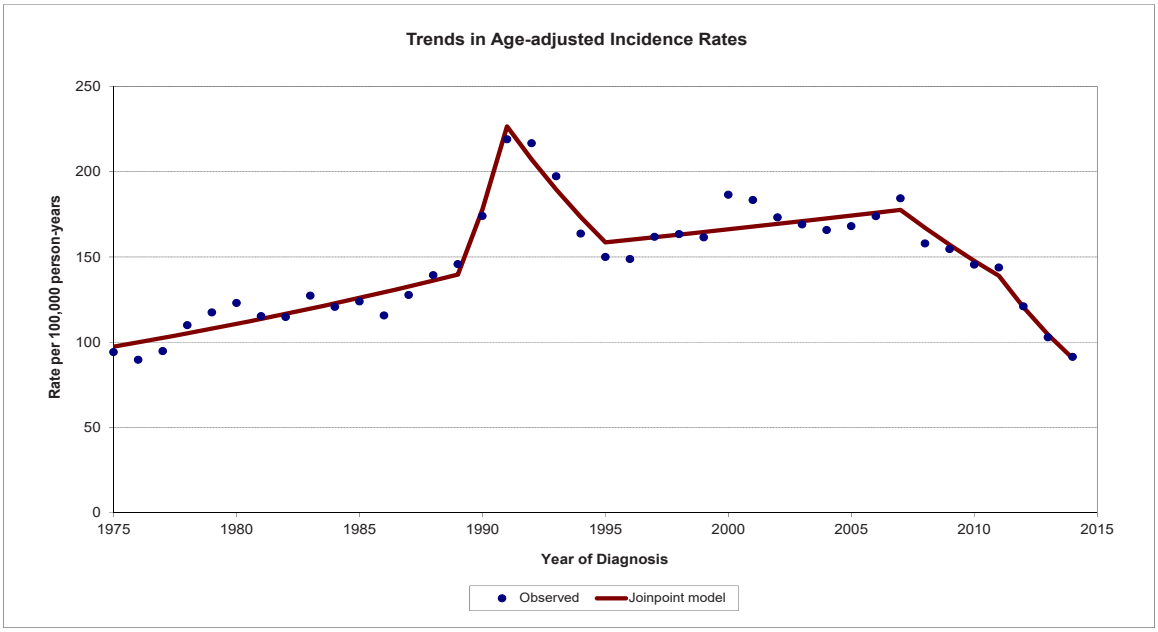
The incidence of ovarian cancer among females in Idaho decreased about 1.0% per year from 1975 to 2014. Part of the decrease in ovarian cancer incidence rates may have been due to a decrease in the use of hormone replacement therapy.

Pancreas



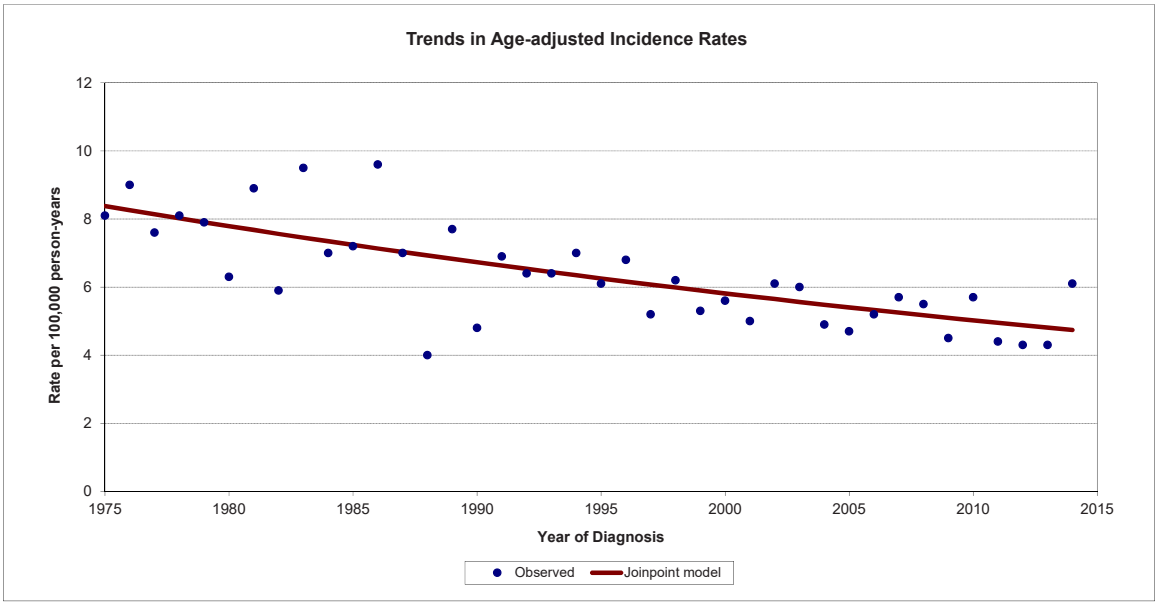
Pancreas cancer incidence increase at a rate of about 0.7 per year in Idaho from 1975 to 2014; rates showed year-to-year variability due to the relatively small numbers of cases diagnosed annually. Pancreas cancer incidence trends over time were different for males and females. Among males, pancreas cancer incidence decreased about 1.1% per year from 1975-1997, and has increased about 1.7% per year since 1997. Among females, pancreas cancer increased about 1.2% per year from 1975-2014. Rates of pancreas cancer incidence among males were higher than among females.

Prostate



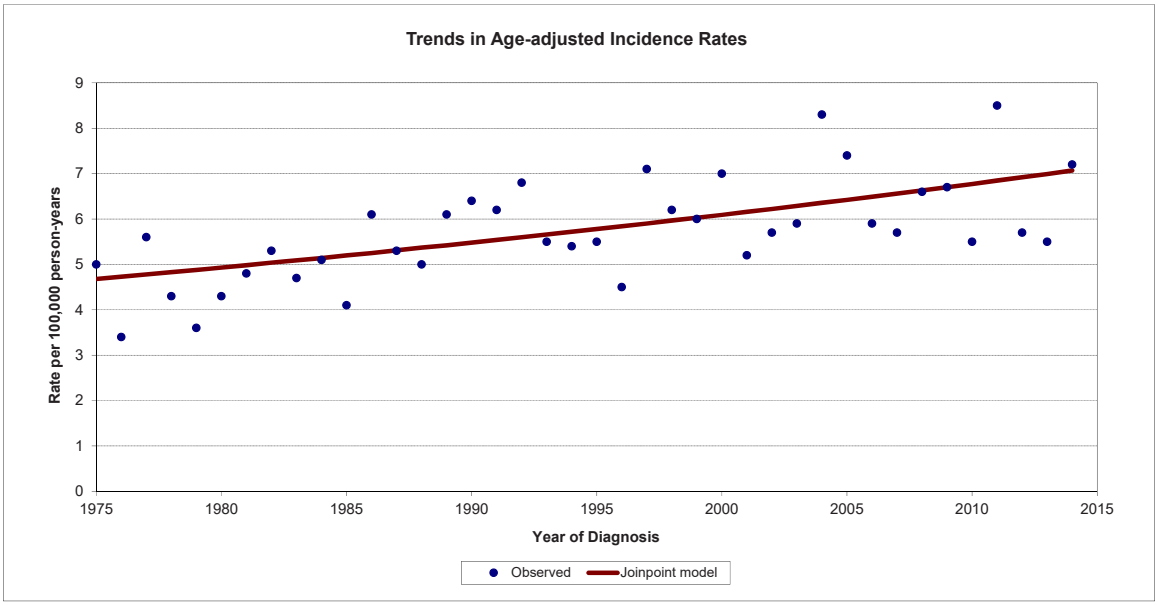
Trends in prostate cancer incidence are complicated, owing to the adoption of the Prostate-Specific Antigen (PSA) screening test in the late 1980s and early 1990s. From 1975 to 1989, prostate cancer incidence increased in Idaho at a rate of about 2.6% per year. From 1989 to 1991, prostate cancer incidence increased at a rate of about 27.4% per year. For the period 1991 to 1995, prostate cancer incidence rates decreased by about 8.5% per year. From 1995 to 2007, the rates increased about 1.0% per year, and from 2007 to 2011, the rate decreased about 6.0% per year. In May 2012, the United States Preventive Service Task Force issued a recommendation against PSA-based screening for prostate cancer in all age groups. From 2011 to 2014, prostate cancer incidence rates have decreased about 13.3% per year. Overall, there was an increasing trend in prostate cancer incidence from 1975 to 2007 punctuated by a large increase and concomitant decrease associated with widespread adoption of the PSA test, which likely detected many indolent cases. The prostate cancer incidence rate in 2014 was similar to the rates at the beginning of the time series, before the adoption of the PSA test.

Stomach



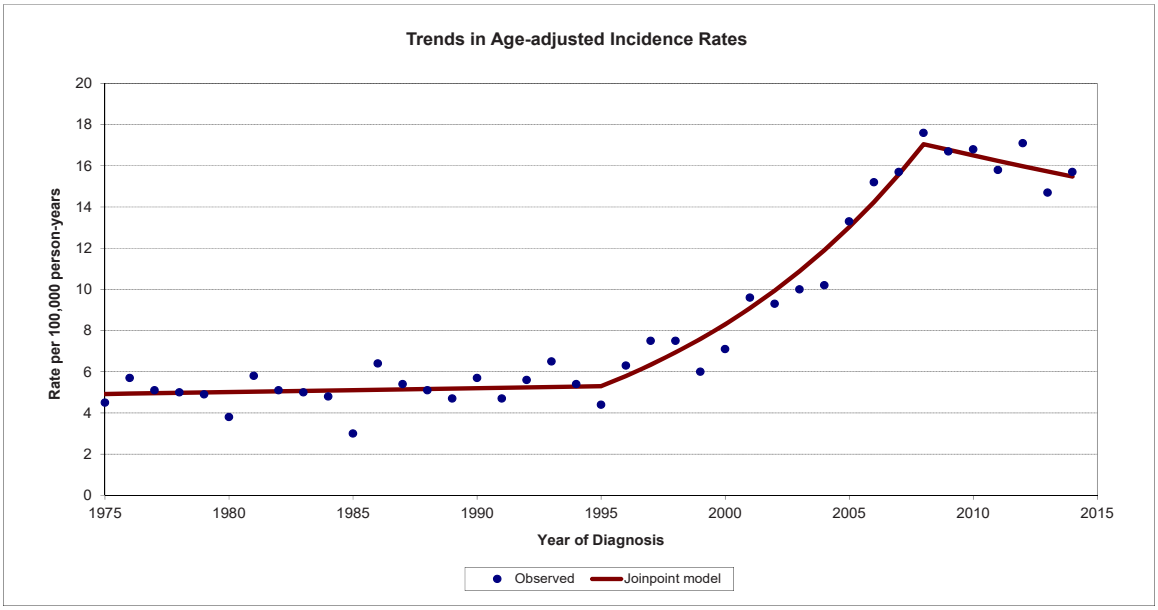
Stomach cancer incidence decreased at a rate of about 1.5% per year in Idaho from 1975 to 2014. Stomach cancer incidence trends over time were similar for males and females, although stomach cancer incidence rates among males were about twice as high as among females.

Testis



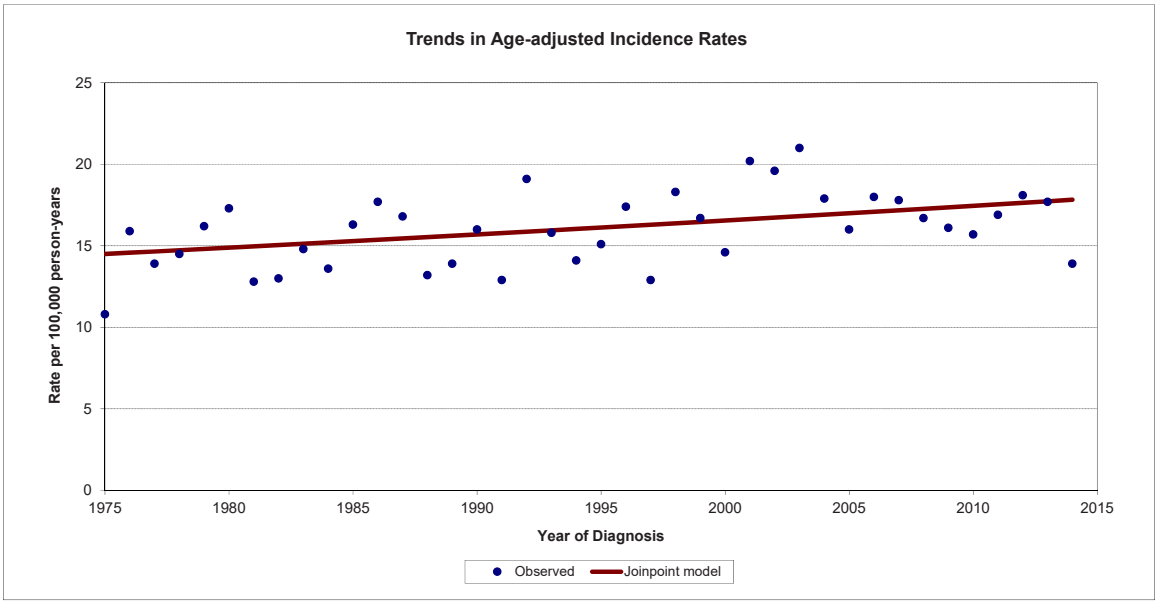
Testis cancer incidence increased at a rate of about 1.1% per year in Idaho from 1975 to 2014.

Thyroid



Thyroid cancer incidence was essentially stable in Idaho from 1975 to 1995. From 1995-2008, thyroid cancer incidence increased at a rate of about 9.4% per year, and thyroid cancer incidence has been stable since 2008. Thyroid cancer incidence trends over time were different for males and females. For males, thyroid cancer incidence increased at a rate of about 4.1% per year from 1975 to 2014. Among females, the trend was similar to both sexes combined. Historically, thyroid cancer incidence rates have been about 3 times higher among females as among males.

Pediatric (age 0 to 19) Cancer



Pediatric cancer incidence increased at a rate of about 0.5% per year in Idaho from 1975 to 2014. Pediatric cancer incidence trends over time were similar for males and females although pediatric cancer incidence rates among males were slightly higher than among females. For more detailed information on pediatric cancer in Idaho, see: http://www.idcancer.org/pediatriccancer.

SECTION VIII

CANCER INCIDENCE BY RACE AND ETHNICITY
2009-2014

Idaho Cancer Incidence Rates by Race and Ethnicity, 2010 - 2014

Primary Site	All Races (includes Hispanic)		White Non-Hispanic		Hispanic (any race)		Black		American Indian/ Alaska Native		Asian or Pacific Islander	
	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases
All Sites	439.7	37,621	440.9	34,853	341.6	1,435	350.0	112	346.4	361	278.9	276
Bladder	22.2	1,874	22.4	1,782	10.4	31	^	^	^	^	13.0	10
Brain - malignant	6.1	515	6.3	472	5.7	31	^	^	^	^	^	^
Brain and other CNS - non-malignant	11.0	904	11.2	835	9.5	46	^	^	^	^	^	^
Breast	120.5	5,295	121.9	4,936	89.1	200	96.0	12	103.5	57	76.0	50
Breast - in situ	24.2	1,044	24.4	962	22.3	53	^	^	^	^	18.8	13
Cervix	6.4	245	5.9	201	9.8	31	0.0	-	^	^	^	^
Colorectal	36.0	3,049	35.7	2,805	31.9	124	^	^	42.8	39	26.7	26
Corpus Uteri	23.1	1,060	22.8	965	21.8	55	^	^	15.4	11	19.0	13
Esophagus	4.6	400	4.7	381	^	^	0.0	-	^	^	^	^
Hodgkin Lymphoma	2.6	207	2.7	179	3.2	21	^	^	^	^	^	^
Kidney and Renal Pelvis	15.3	1,316	15.1	1,199	17.8	79	^	^	14.1	15	^	^
Larynx	2.2	197	2.3	189	^	^	0.0	-	^	^	^	^
Leukemia	15.9	1,331	16.0	1,232	9.8	60	^	^	12.5	15	12.3	12
Liver and Bile Duct	6.1	561	5.4	460	13.5	55	^	^	20.7	22	9.3	11
Lung and Bronchus	50.7	4,338	51.3	4,134	33.1	108	44.1	10	49.5	42	40.0	32
Melanoma of the Skin	26.5	2,229	28.6	2,181	9.0	35	^	^	^	^	^	^
Myeloma	6.0	508	6.0	472	6.7	21	^	^	^	^	^	^
Non-Hodgkin Lymphoma	18.5	1,562	18.5	1,453	15.3	64	^	^	10.4	11	10.2	10
Oral Cavity and Pharynx	12.1	1,057	12.2	987	8.3	30	0.0	-	^	^	^	^
Ovary	11.4	510	11.5	476	9.2	22	^	^	^	^	^	^
Pancreas	12.6	1,089	12.7	1,024	12.9	42	^	^	^	^	14.8	13
Prostate	119.7	5,187	115.9	4,690	81.7	143	118.8	26	66.0	37	46.2	19
Stomach	5.0	421	4.8	377	5.4	21	^	^	^	^	11.3	10
Testis	6.5	242	6.8	209	4.2	24	0.0	-	^	^	^	^
Thyroid	16.0	1,269	16.3	1,133	13.6	86	^	^	14.2	18	9.2	10
Pediatric Age 0 to 19	16.8	397	17.7	326	13.6	57	^	^	^	^	^	^

Notes:
Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130) standard.
Rates and case counts include all invasive and bladder in situ cases. Statistics for non-malignant brain and other CNS, and breast in situ categories are not included in the all sites totals.
Rates and case counts for cancers of the breast, cervix, corpus uteri, and ovary are for females only, and rates and case counts for cancers of the prostate and testis are for males only.
Statistics for Black, American Indian/Alaska Native, and Asian or Pacific Islander include non-Hispanic and Hispanic ethnicity.
^ Statistic not displayed due to fewer than 10 cases.

SECTION IX

CANCER SURVIVAL
2007-2013

Actual (Crude) Measures of Cancer Prognosis at 5 Years After Diagnosis
Idaho Cases Diagnosed 2007-2013 Followed Through December 31, 2014

	Single or First Primary Cancers Only							All Primaries			
		Using Cause of Death			Using Expected Survival				Using Expected Survival		
Primary Site	N	Cancer Death	Other Death	Survival	Cancer Death	Other Death	Survival	N	Cancer Death	Other Death	Survival
All Sites	40,705	30.5	8.6	60.9	29.0	8.8	62.2	47,177	30.8	9.3	59.9
Brain & Other Nervous System	586	71.3	2.6	26.1	70.5	1.6	27.9	662	72.3	1.7	26.0
Breast	5,724	11.5	6.2	82.3	8.1	8.4	83.5	6,832	8.6	9.3	82.1
Cervix Uteri	291	35.0	3.8	61.2	32.3	2.5	65.2	308	32.3	2.6	65.1
Colon & Rectum	3,391	34.8	10.0	55.2	31.9	11.0	57.1	4,087	33.8	11.6	54.6
Corpus & Uterus, NOS	1,281	19.0	5.5	75.5	16.4	6.2	77.4	1,456	17.8	6.6	75.6
Esophagus	418	75.9	11.2	12.9	81.9	4.1	14.0	509	82.3	4.2	13.5
Hodgkin Lymphoma	261	11.2	1.3	87.5	10.3	1.8	87.9	283	13.4	2.5	84.1
Kidney & Renal Pelvis	1,330	24.8	8.8	66.4	24.5	8.0	67.5	1,653	27.4	8.9	63.7
Larynx	239	33.1	11.4	55.5	35.6	8.2	56.2	292	37.4	8.7	53.9
Leukemia	1,238	32.8	11.2	56.0	33.8	8.8	57.4	1,574	37.1	9.2	53.7
Liver & Intrahepatic Bile Duct	490	80.2	9.8	10.0	86.5	2.2	11.3	581	85.1	2.6	12.3
Lung & Bronchus	4,272	76.8	9.4	13.8	80.3	4.7	15.0	5,557	79.8	5.2	15.0
Melanoma of the Skin	2,228	12.1	6.3	81.6	7.8	9.1	83.1	2,726	9.5	10.5	80.0
Mesothelioma	79	90.0	6.3	3.7	90.6	4.2	5.2	114	87.9	5.8	6.3
Myeloma	524	46.6	13.5	39.9	49.0	8.6	42.4	658	51.8	9.2	39.0
Non-Hodgkin Lymphoma	1,628	28.6	9.8	61.6	27.9	9.3	62.8	2,063	29.9	10.6	59.5
Oral Cavity & Pharynx	1,102	27.6	10.1	62.3	26.8	8.8	64.4	1,378	29.3	10.0	60.7
Ovary	585	59.8	4.4	35.8	55.8	4.5	39.7	686	55.7	4.9	39.4
Pancreas	1,025	91.9	2.5	5.6	91.5	2.3	6.2	1,284	92.0	2.5	5.5
Prostate	7,150	7.0	9.2	83.8	1.7	13.7	84.6	7,888	2.8	14.1	83.1
Stomach	425	67.8	8.5	23.7	69.4	5.6	25.0	528	70.4	5.8	23.8
Testis	308	3.2	1.8	95.0	4.5	0.8	94.7	318	4.6	1.3	94.1
Thyroid	1,534	2.9	2.3	94.8	1.9	3.4	94.7	1,729	2.7	4.1	93.2
Urinary Bladder	1,795	18.5	16.4	65.1	17.8	15.8	66.4	2,437	21.1	17.0	61.9

Notes:

Actual (crude) measures of cancer survival include competing causes of death. Analysis includes all invasive and bladder in situ cases diagnosed among persons aged 15-99. See Technical Notes for more details.

N: Number of cases included in analysis.

^ Statistic not able to be calculated.

Net Measures of Cancer Survival at 5 Years After Diagnosis
Idaho Cases Diagnosed 2007-2013 Followed Through December 31, 2014

Primary Site	Single or First Primary Cancers Only					All Primaries		
	N	Cause Specific Survival (95% CI)		Relative Survival Ratio (95% CI)		N	Relative Survival Ratio (95% CI)	
All Sites	40,705	66.5	(66.0, 67.1)	68.6	(67.9, 69.3)	47,177	67.3	(66.8, 67.9)
Brain & Other Nervous System	586	28.6	(25.1, 32.2)	29.7	(26.0, 33.4)	662	29.6	(26.0, 33.1)
Breast	5,724	87.1	(85.9, 88.2)	91.2	(89.3, 92.8)	6,832	90.7	(89.0, 92.2)
Cervix Uteri	291	***64.6***	***(58.1, 70.3)***	56.8	(51.1, 62.1)	308	57.9	(52.4, 63.1)
Colon & Rectum	3,391	63.5	(61.5, 65.3)	66.7	(64.3, 68.8)	4,087	65.0	(62.9, 67.0)
Corpus & Uterus, NOS	1,281	75.8	(72.6, 78.6)	78.6	(74.2, 82.4)	1,456	77.5	(74.0, 80.5)
Esophagus	418	***18.7***	***(14.6, 23.2)***	***16.0***	***(11.8, 20.7)***	509	***15.5***	***(11.8, 19.6)***
Hodgkin Lymphoma	261	86.5	(81.5, 90.2)	87.2	(81.6, 91.1)	283	85.2	(79.9, 89.2)
Kidney & Renal Pelvis	1,330	70.7	(67.6, 73.6)	71.6	(67.5, 75.2)	1,653	69.7	(66.2, 72.8)
Larynx	239	65.2	(57.6, 71.7)	60.7	(52.0, 68.3)	292	59.9	(51.6, 67.2)
Leukemia	1,238	65.0	(61.9, 67.9)	64.1	(60.4, 67.6)	1,574	61.8	(58.6, 64.9)
Liver & Intrahepatic Bile Duct	490	***13.0***	***(9.3, 17.2)***	10.1	(6.8, 14.2)	581	11.9	(8.6, 15.8)
Lung & Bronchus	4,272	18.8	(17.2, 20.5)	18.2	(16.5, 19.9)	5,557	18.7	(17.2, 20.3)
Melanoma of the Skin	2,228	87.7	(86.0, 89.3)	91.3	(89.3, 92.9)	2,726	89.9	(88.2, 91.4)
Mesothelioma	79	***5.2***	***(0.6, 17.7)***	***5.8***	***(0.7, 19.7)***	114	***7.8***	***(2.0, 18.8)***
Myeloma	524	50.4	(45.2, 55.4)	49.7	(44.1, 55.1)	658	48.5	(43.5, 53.3)
Non-Hodgkin Lymphoma	1,628	69.2	(66.7, 71.6)	69.5	(66.4, 72.5)	2,063	69.1	(66.4, 71.7)
Oral Cavity & Pharynx	1,102	68.7	(65.2, 72.0)	70.3	(65.5, 74.5)	1,378	67.9	(63.9, 71.5)
Ovary	585	33.8	(29.6, 38.0)	37.6	(32.7, 42.6)	686	38.8	(34.2, 43.3)
Pancreas	1,025	7.5	(5.5, 9.9)	8.1	(6.0, 10.6)	1,284	7.7	(5.8, 10.1)
Prostate	7,150	91.6	(90.8, 92.4)	96.9	(95.4, 97.8)	7,888	95.8	(94.4, 96.9)
Stomach	425	30.3	(25.6, 35.2)	28.5	(23.5, 33.7)	528	28.2	(23.6, 32.9)
Testis	308	***96.7***	***(93.8, 98.3)***	***95.4***	***(91.9, 97.5)***	318	***95.4***	***(91.4, 97.6)***
Thyroid	1,534	94.5	(92.5, 96.0)	95.5	(92.6, 97.3)	1,729	95.1	(92.8, 96.7)
Urinary Bladder	1,795	81.4	(79.1, 83.4)	81.7	(78.4, 84.5)	2,437	79.3	(76.6, 81.7)

Notes:
Net measures of cancer survival exclude competing causes of death. Analysis includes all invasive and bladder in situ cases diagnosed among persons aged 15-99. Age standardized to the International Cancer Survival Standards. Statistics in bold italics could not be age standardized; unstandardized measure shown instead. See Technical Notes for more details.

N: Number of cases included in analysis; CI: Confidence Interval.
^ Statistic not able to be calculated.

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APPENDICES

APPENDIX A

2000 U.S. STANDARD POPULATION

Age Group	2000 US Standard Population (Census P25-1130)
0	3,794,901
1-4	15,191,619
5-9	19,919,840
10-14	20,056,779
15-19	19,819,518
20-24	18,257,225
25-29	17,722,067
30-34	19,511,370
35-39	22,179,956
40-44	22,479,229
45-49	19,805,793
50-54	17,224,359
55-59	13,307,234
60-64	10,654,272
65-69	9,409,940
70-74	8,725,574
75-79	7,414,559
80-84	4,900,234
85+	4,259,173
Total	274,633,642

Source: SEER Program, National Cancer Institute, 2016.[16]

APPENDIX B

2014 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	6,465	3,083	11,094	14,992	7,363	6,498	9,092	57,535
5 to 9	7,163	3,024	12,014	17,283	8,286	7,327	9,134	63,648
10 to 14	7,490	3,037	11,631	17,564	7,638	7,103	8,624	62,624
15 to 19	7,207	4,131	12,032	16,114	6,819	6,532	8,009	59,190
20 to 24	6,437	6,143	12,696	16,093	6,171	5,767	9,581	58,825
25 to 29	6,013	3,640	9,832	17,252	5,911	5,651	7,587	54,001
30 to 34	6,420	3,218	9,761	17,714	6,369	5,631	7,147	54,823
35 to 39	6,286	2,829	9,232	16,572	6,198	5,372	6,491	52,049
40 to 44	6,535	2,801	8,983	16,237	5,384	4,518	5,559	49,134
45 to 49	6,629	2,918	8,589	15,291	5,368	4,295	5,254	47,536
50 to 54	7,604	3,415	8,974	15,728	6,085	4,963	6,016	51,862
55 to 59	8,050	3,689	8,899	14,552	5,958	5,257	5,827	50,975
60 to 64	7,916	3,601	8,293	12,959	5,266	4,815	5,164	46,762
65 to 69	7,200	3,098	7,163	10,848	4,425	3,745	4,098	39,671
70 to 74	5,234	2,342	5,351	6,993	3,395	2,764	2,992	28,563
75 to 79	3,496	1,676	3,583	4,421	2,346	1,898	2,053	19,124
80 to 84	2,134	1,082	2,239	2,838	1,533	1,323	1,338	12,164
85+	1,562	965	1,933	2,634	1,314	1,047	1,128	10,228
Total	109,841	54,692	152,299	236,085	95,829	84,506	105,094	818,714
	HD 1	**HD 2**	**HD 3**	**HD 4**	**HD 5**	**HD 6**	**HD 7**	**STATE**
Females								
< 5	6,204	2,922	10,763	14,320	7,149	6,628	8,894	55,973
5 to 9	6,596	2,728	11,327	16,492	7,835	6,870	8,768	60,186
10 to 14	7,207	2,771	11,111	16,814	7,391	6,556	8,361	59,861
15 to 19	6,659	3,714	11,322	15,162	6,279	5,950	8,784	56,361
20 to 24	5,880	5,107	11,709	14,242	5,745	5,528	8,739	53,594
25 to 29	6,349	3,267	10,046	16,560	5,851	5,711	7,251	53,344
30 to 34	6,450	2,959	9,851	16,524	6,181	5,622	6,879	53,301
35 to 39	6,275	2,570	9,181	15,752	5,702	5,256	6,201	50,228
40 to 44	6,445	2,638	8,982	15,570	5,298	4,559	5,579	48,332
45 to 49	6,855	2,900	8,485	14,916	5,150	4,461	5,110	47,066
50 to 54	8,045	3,552	9,454	15,769	5,951	5,040	5,860	52,682
55 to 59	8,638	3,777	9,273	15,501	6,111	5,297	5,840	53,147
60 to 64	8,582	3,526	8,639	13,568	5,413	4,811	5,150	48,520
65 to 69	7,282	3,006	7,433	11,015	4,542	3,775	4,086	40,352
70 to 74	5,211	2,380	5,710	7,801	3,532	2,875	3,202	30,114
75 to 79	3,505	1,687	3,755	5,183	2,662	2,204	2,212	20,814
80 to 84	2,443	1,309	2,787	3,806	1,920	1,642	1,680	15,127
85+	2,758	1,549	3,217	4,659	2,100	1,643	1,813	17,090
Total	111,384	52,362	153,045	233,654	94,812	84,428	104,409	816,092
Total	221,225	107,054	305,344	469,739	190,641	168,934	209,503	1,634,806

Source: National Center for Health Statistics, 2016.