

Annual Report
of the
Cancer Data Registry of Idaho

Cancer in Idaho – 2013

December 2015



IDAHO DEPARTMENT OF
HEALTH & WELFARE

CANCER IN IDAHO - 2013

December 2015

A Publication of the
Cancer Data Registry of Idaho



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IDAHO DEPARTMENT OF
HEALTH & WELFARE

PREFACE

"Cancer in Idaho - 2013," the thirty-seventh 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 2013. 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 and/or treated for cancer. Their cooperation in reporting timely, accurate, and complete cancer data is acknowledged and sincerely appreciated.

CDRI would also like to thank the 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 1U58DP003882-04 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.

SUGGESTED CITATION:

Johnson CJ, Carson SL. Cancer in Idaho, 2013. Boise, ID: Cancer Data Registry of Idaho; December 2015.

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BACKGROUND

Introduction to the Cancer Data Registry of Idaho (CDRI)

Purpose of the Registry

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

- ◆ determine the incidence of cancer in the state of Idaho with respect to geographic, demographic, and social characteristics;
- ◆ monitor trends and patterns of cancer incidence over time;
- ◆ identify high risk populations;
- ◆ provide a database and serve as a resource 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 and/or treatment in the above sources),
- ◆ death certificates, and
- ◆ other state cancer registries reporting an Idaho resident with cancer (as negotiated).

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

Reported cases contain the following data:

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

Primary site, behavior, grade, and histology were coded according to the *International Classification of Diseases for Oncology, 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 2.04*.^{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 or malignant neoplasms are reportable to CDRI. The database includes all cases of carcinoma, sarcoma, melanoma, lymphoma, and leukemia, diagnosed by histology/cytology, radiology, laboratory testing, clinical observation, and autopsy.

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

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

Under Idaho Code, and as recommended by 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 (2012 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 1975-2013. Section VIII shows cancer incidence rates by race and ethnicity for the period 2009-2013. New this year, Section IX shows cancer survival statistics for Idahoans diagnosed during the period 2006-2012 with follow-up through 2013.

Descriptive Summary by Gender and Race and Ethnicity

The data presented in this report cover cancer cases diagnosed among Idaho residents between January 1, 2013, and December 31, 2013. In this time frame, there were 7,986 cases of in-situ and invasive cancer diagnosed among Idaho residents (4,045 among males and 3,941 among females). By race and ethnicity, there were 7,373 cases among non-Hispanic whites, 323 among Hispanic whites, 20 cases among blacks, 61 cases among Native Americans, and 65 cases among Asians/Pacific Islanders. One hundred and forty four 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: 2008-2012, Volume Two*.¹¹

Trends

There was a 4.0% decrease in the age-adjusted cancer incidence rates as published in the 2012 and 2013 annual reports. Changes in health policy and screening recommendations may have impacted cancer incidence in 2013. 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 2013, prostate cancer incidence rates decreased about 14.2% per year in Idaho, similar to national trends. The drop in lung cancer cases in 2013 was followed by a rebound in 2014 (preliminary data). 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, larynx, ovary and Hodgkin lymphoma, which fluctuate annually due to relatively small case counts, rebounded from 2012. See [Section VII](#) for more detailed long term trends in cancer incidence.

Population Description

The population of the state of Idaho on July 1, 2013, was estimated to be 1,612,843 (807,401 males and 805,442 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:

<u>Health District</u>	<u>Counties</u>	<u>Male</u>	<u>Female</u>
District 1	Benewah, Bonner, Boundary, Kootenai, Shoshone	108,044	109,615
District 2	Clearwater, Latah, Lewis, Idaho, Nez Perce	54,483	52,306
District 3	Adams, Canyon, Gem, Owyhee, Payette, Washington	150,133	150,923
District 4	Ada, Boise, Elmore, Valley	230,559	228,483
District 5	Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, Twin Falls	94,832	94,027
District 6	Bannock, Bear Lake, Bingham, Butte, Caribou, Franklin, Oneida, Power	84,574	84,363
District 7	Bonneville, Clark, Custer, Fremont, Jefferson, Lemhi, Madison, Teton	104,337	103,687

SUMMARY MEASURES OF CANCER BURDEN IN IDAHO - 2013

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 2012 to 2013
All Sites	7,358	2,709	67.0	73.0	56,570	18,463	11.8	-4.0%
Bladder	381	85	72.0	77.0	2,863	341	9.5	-1.2%
Brain	110	80	58.0	64.0	523	1,034	17.8	-0.3%
Breast	1,085	207	64.0	68.0	12,162	1,848	13.7	-2.8%
Cervix	40	14	47.5	55.5	722	219	19.9	-21.5%
Colorectal	604	233	67.0	71.0	4,668	1,721	12.0	-1.2%
Corpus Uteri	203	20	62.0	71.0	2,420	166	11.9	-11.0%
Esophagus	83	72	67.0	71.0	149	469	10.0	-0.9%
Hodgkin Lymphoma	49	7	45.0	63.0	770	116	19.3	10.0%
Kidney	292	68	66.5	73.5	1,874	415	10.4	14.0%
Larynx	42	14	66.5	67.5	347	115	12.7	10.0%
Leukemia	291	103	68.0	74.0	1,791	833	15.4	17.1%
Liver and Bile Duct	104	94	63.5	64.0	145	876	13.9	-8.3%
Lung and Bronchus	824	627	71.0	73.0	1,831	3,435	9.3	-8.1%
Melanoma of Skin	447	67	63.0	67.0	4,384	677	15.0	-2.8%
Myeloma	95	61	72.0	75.0	439	273	8.3	-7.0%
Non-Hodgkin Lymphoma	293	110	69.0	75.5	2,473	598	10.9	-4.7%
Oral Cavity and Pharynx	234	41	64.0	70.0	1,611	327	12.1	12.5%
Ovary	94	84	64.0	71.0	771	596	11.2	-20.0%
Pancreas	240	212	71.0	73.0	237	1,276	10.1	5.2%
Prostate	909	160	67.0	80.0	12,624	401	7.4	-14.1%
Stomach	75	35	68.0	78.0	268	152	9.5	1.7%
Testis	41	1	33.0	-	1,017	-	-	-4.1%
Thyroid	234	10	51.0	64.5	3,196	105	13.1	-13.8%

Notes:

Incident cases include all invasive and bladder in situ cases newly diagnosed among Idaho residents in 2013.

Cancer prevalence is the number of people alive today 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 2013 but underestimates complete prevalence due to an unknown number of live cases diagnosed prior to 1970.

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 testis primary site 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 2013 (7,986), a total of 7,358 cases (7,141 invasive and 217 bladder

in-situ) were used for calculating age-adjusted incidence rates. Of the 7,358 cases, 3,789 occurred among males and 3,569 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 site 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 Center 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 $p \leq 0.05$ and (*) for $p \leq 0.01$. 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/Mode

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

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

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

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: 2008-2012, 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, and/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 2009-2013. 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 2006-2012 with follow-up/death ascertainment through December 31, 2013. 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 8.2.1) 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, 2013 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

2013 SUMMARY ON ALL SITES COMBINED AND 23 MOST COMMON SITES

ALL SITES

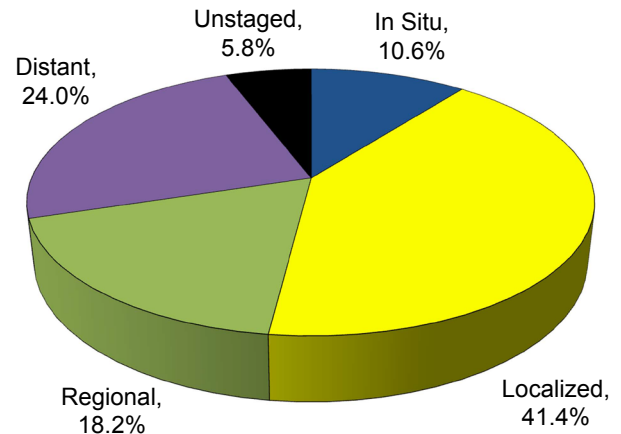
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	419.5	448.0	397.9
# of new invasive cases	7,141	3,615	3,526
# of new in-situ cases	845	430	415
# of deaths	2,709	1,442	1,267

Total Cases by County

Ada	1,979	Cassia	87	Lewis	20
Adams	30	Clark	3	Lincoln	32
Bannock	322	Clearwater	83	Madison	79
Bear Lake	22	Custer	31	Minidoka	111
Benewah	59	Elmore	121	Nez Perce	272
Bingham	193	Franklin	50	Oneida	17
Blaine	126	Fremont	62	Owyhee	41
Boise	31	Gem	119	Payette	131
Bonner	286	Gooding	93	Power	27
Bonneville	470	Idaho	114	Shoshone	91
Boundary	68	Jefferson	96	Teton	26
Butte	19	Jerome	88	Twin Falls	369
Camas	7	Kootenai	927	Valley	57
Canyon	901	Latah	161	Washington	69
Caribou	29	Lemhi	67		

Stage at Diagnosis - All Sites



Risk and Associated Factors

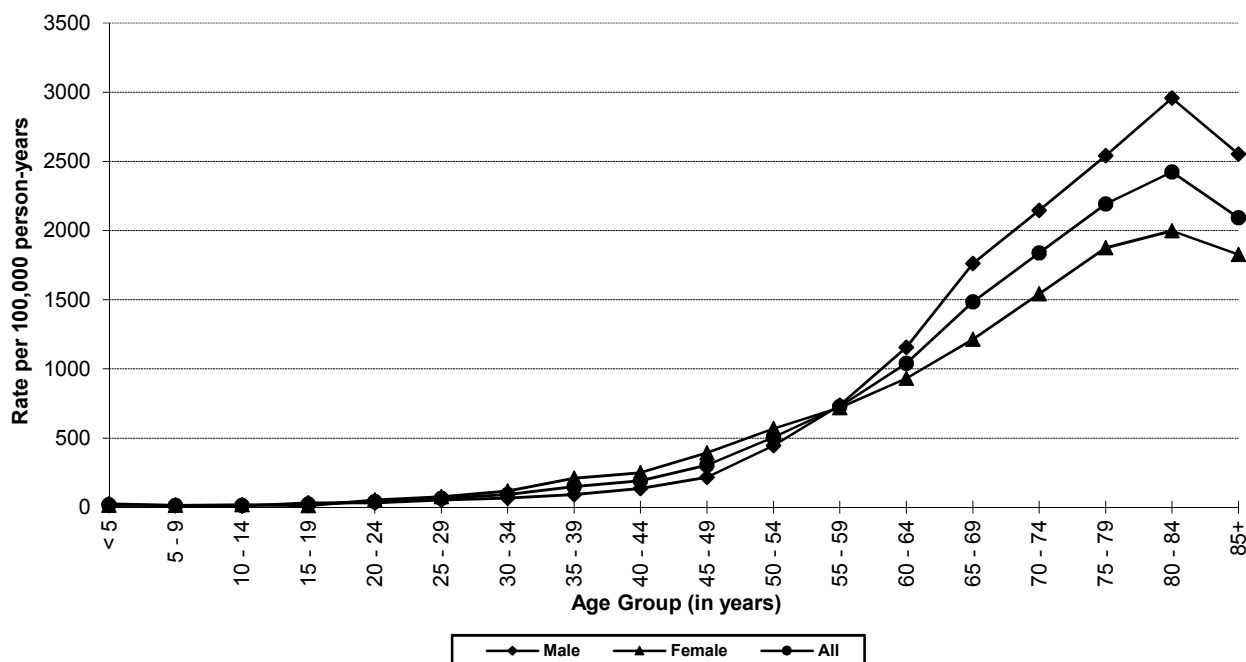
Age	Rates usually increase steadily with age. Most cases occur among adults in mid-life or older.
Gender	Males have higher incidence rates than females for most cancer types.
Race & SES	Rates are higher for blacks than for whites and other races. Rates are generally higher among lower income groups.
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

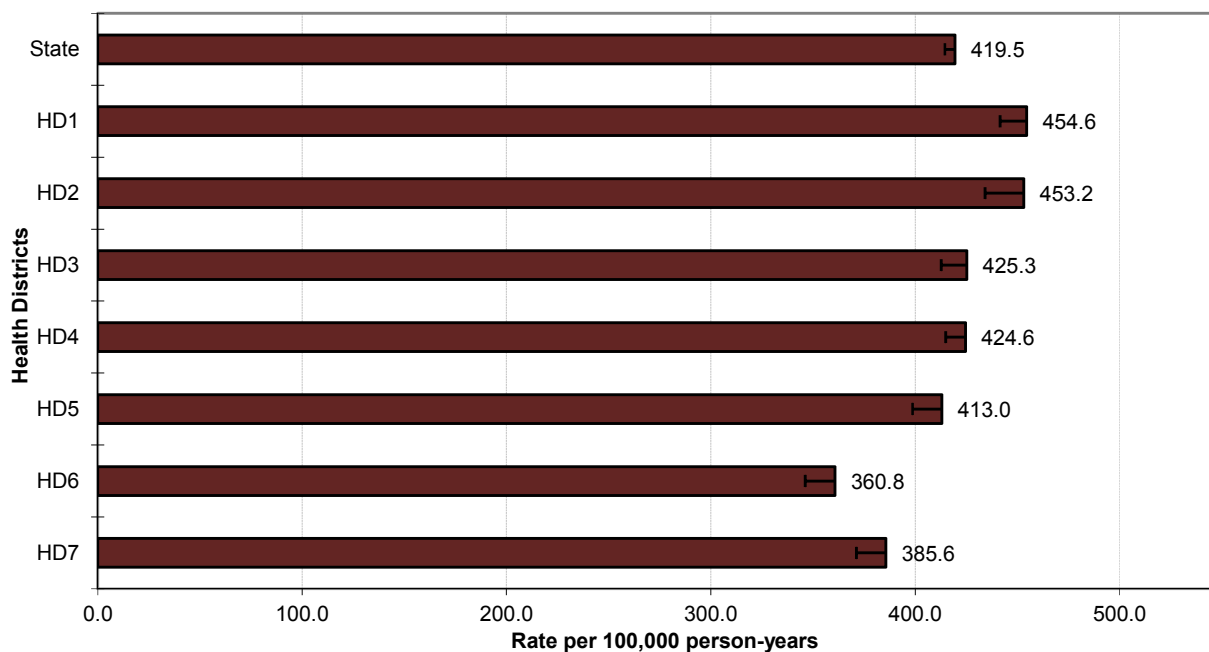
Mean age-adjusted incidence rate across health districts:	416.7
95% confidence interval on the mean age-adjusted incidence rate:	391.4- 442.1
Median age-adjusted incidence rate of health districts:	424.6
Range of age-adjusted incidence rate for health districts:	360.8- 454.6
USCS rate (2012, all races):	440.3

The incidence rates for all cancers combined were similar for males and females in Idaho until approximately age 55-59, after which rates for males rose dramatically. The highest rates for both males and females were observed in age groups after age 70, peaking in the age group 80-84 for both males and females. Health District 1 had statistically significantly more cases of cancer than expected based upon rates for the remainder of Idaho, and Health Districts 6 and 7 had statistically significantly fewer cases than expected.

State All Cancer Sites Combined Age-specific Rates



All Sites Combined Cancer Incidence Age-adjusted Rates by Health District



BLADDER

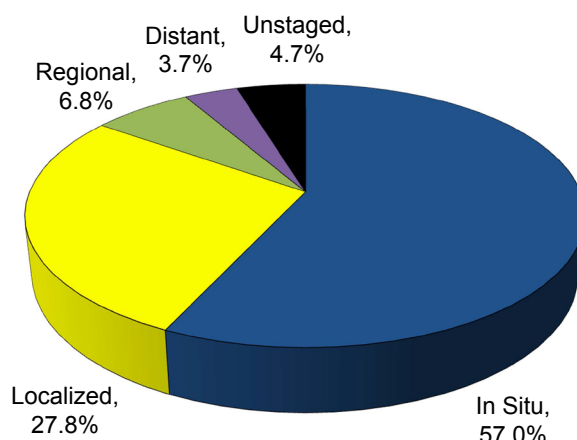
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	21.8	37.7	7.9
# of new invasive cases	164	131	33
# of new in-situ cases	217	174	43
# of deaths	85	63	22

Total Cases by County

Ada	90	Cassia	6	Lewis	-
Adams	2	Clark	-	Lincoln	2
Bannock	13	Clearwater	8	Madison	1
Bear Lake	2	Custer	2	Minidoka	5
Benewah	2	Elmore	5	Nez Perce	13
Bingham	4	Franklin	2	Oneida	2
Blaine	9	Fremont	-	Owyhee	2
Boise	2	Gem	8	Payette	7
Bonner	15	Gooding	1	Power	1
Bonneville	18	Idaho	3	Shoshone	8
Boundary	4	Jefferson	5	Teton	-
Butte	-	Jerome	3	Twin Falls	14
Camas	-	Kootenai	63	Valley	3
Canyon	34	Latah	10	Washington	6
Caribou	1	Lemhi	5		

Stage at Diagnosis - Bladder



Risk and Associated Factors

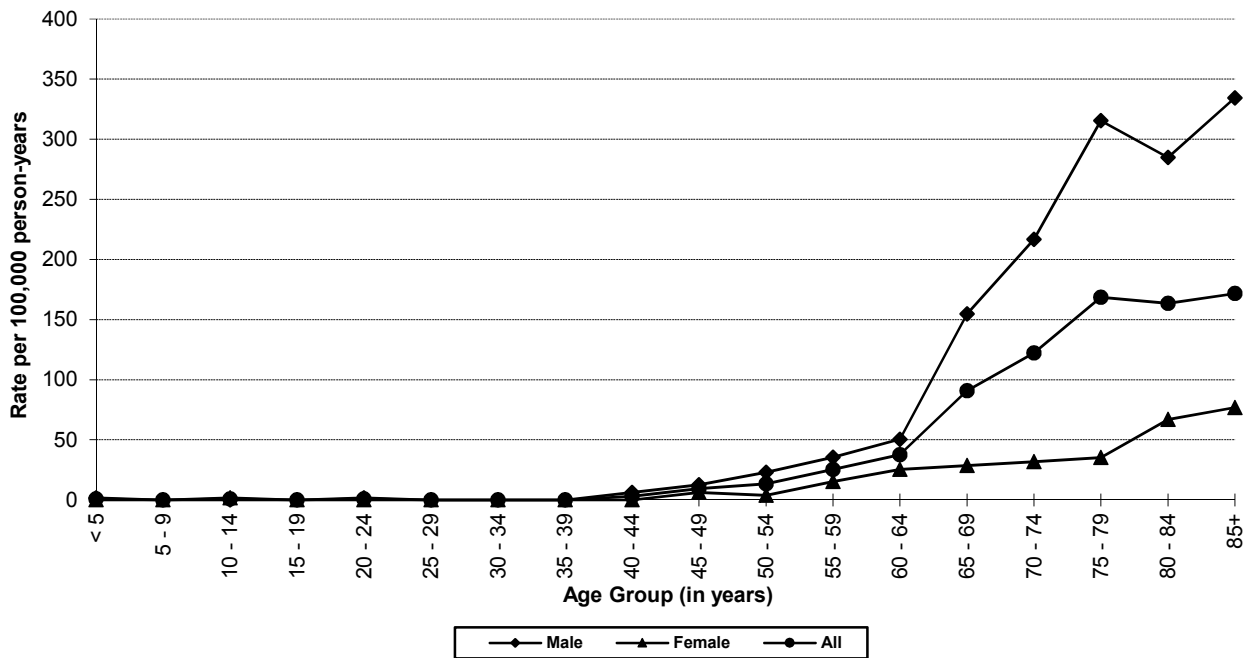
Age	Rates usually increase steadily with age.
Gender	Males have substantially higher rates than females.
Race	Incidence rates are higher in whites.
Occupation	Truck drivers, likely via exposure to motor exhaust, are at increased risk. Occupational exposures, including manufacturers of certain dyes, painters, 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. <i>Schistosoma hematobium</i> 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

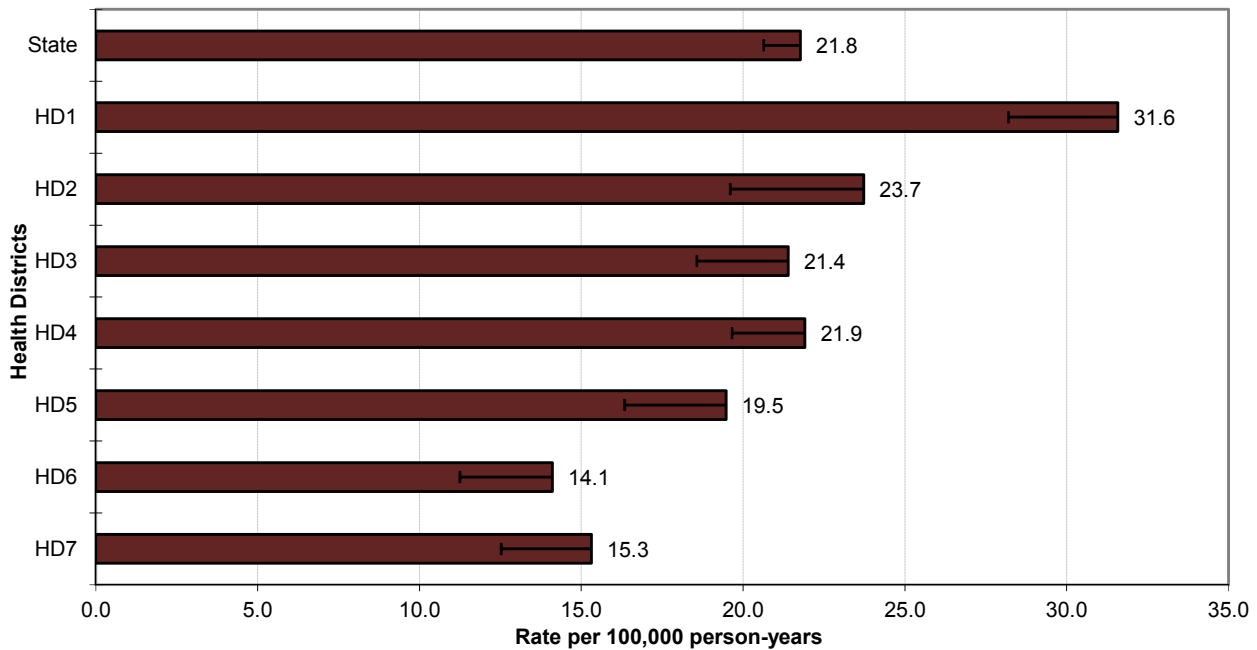
Mean age-adjusted incidence rate across health districts:	21.1
95% confidence interval on the mean age-adjusted incidence rate:	16.8- 25.4
Median age-adjusted incidence rate of health districts:	21.4
Range of age-adjusted incidence rate for health districts:	14.1- 31.6
USCS rate (2012, all races):	20.2

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 1 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



Bladder Cancer Incidence Age-adjusted Rates by Health District



BRAIN

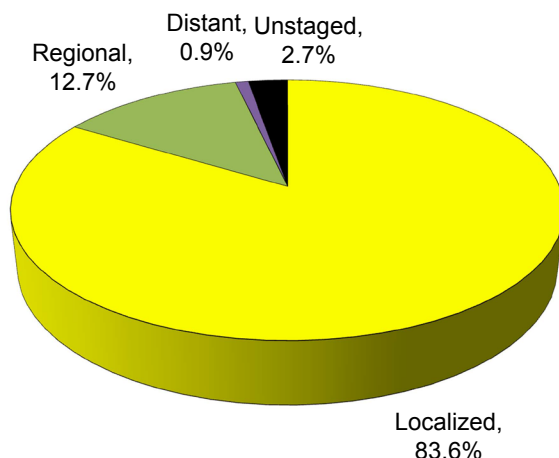
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	6.4	7.7	5.3
# of new invasive cases	110	63	47
# of new in-situ cases	0	0	0
# of deaths	80	49	31

Total Cases by County

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

Stage at Diagnosis - Brain



Risk and Associated Factors

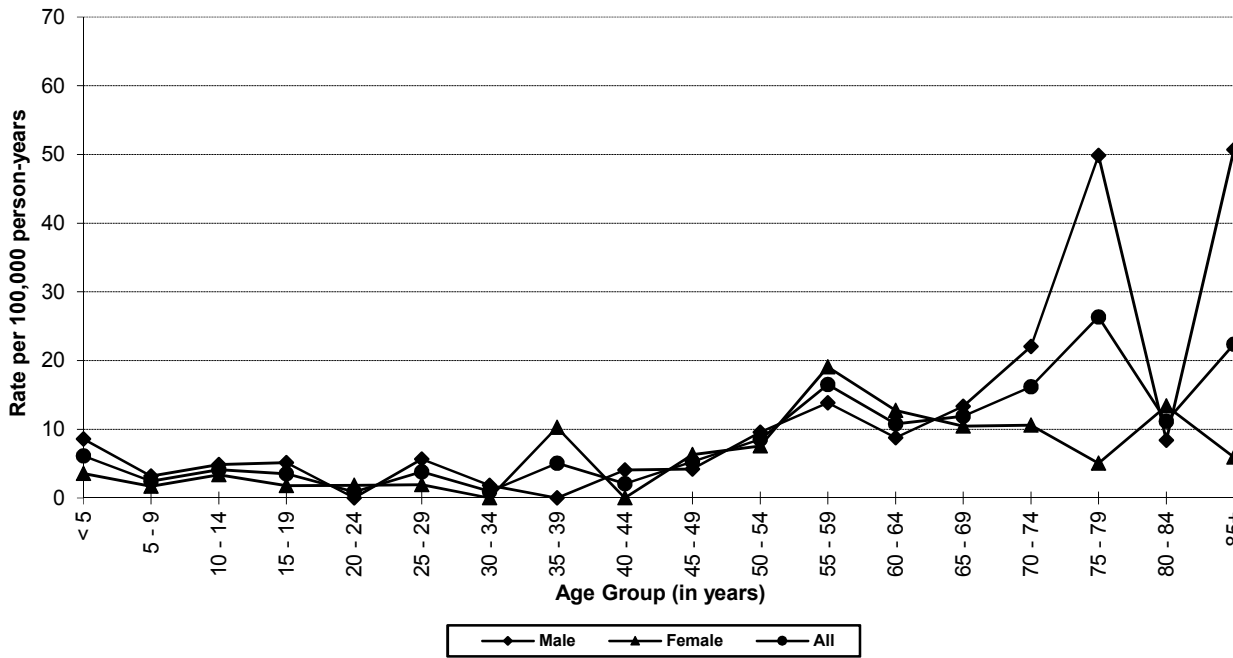
Age	This is the second most common cancer among children, following leukemia. Adult malignant brain tumors are most common after age 60.
Gender	Males typically have higher rates than females.
Race & SES	The incidence rate is higher in whites and higher social classes.
Genetics	Certain genetic factors 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

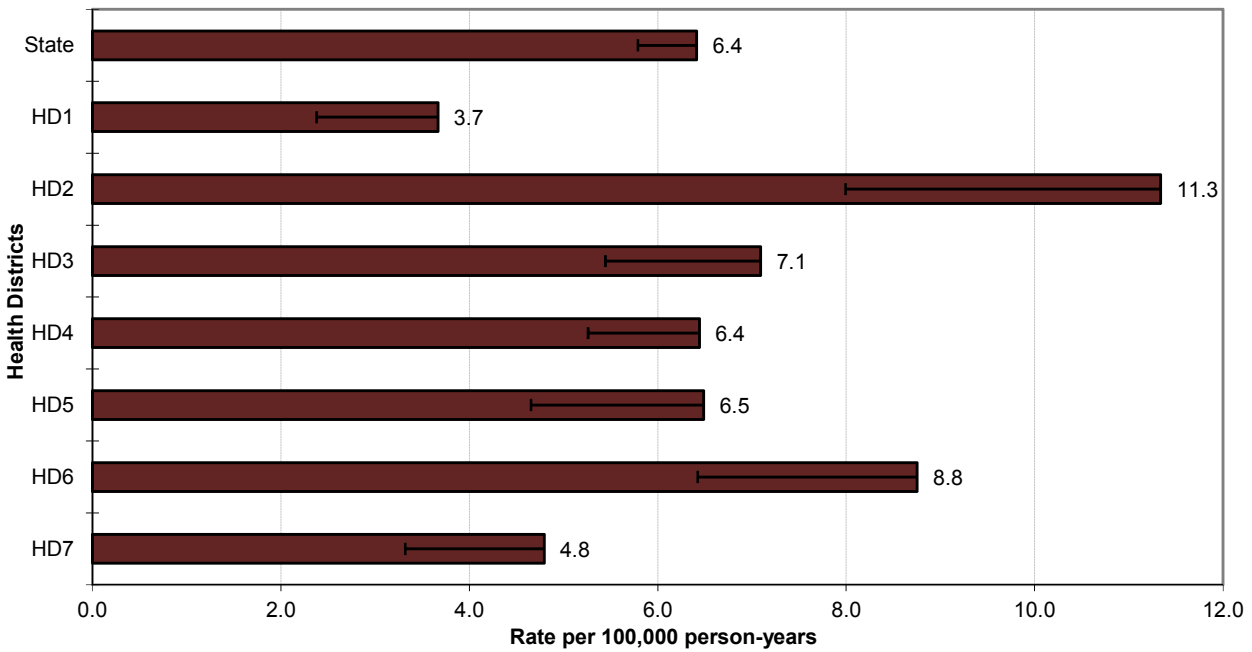
Mean age-adjusted incidence rate across health districts:	6.9
95% confidence interval on the mean age-adjusted incidence rate:	5.1- 8.8
Median age-adjusted incidence rate of health districts:	6.5
Range of age-adjusted incidence rate for health districts:	3.7- 11.3
USCS rate (2012, all races):	6.5

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. Health District 1 had statistically significantly fewer cases of brain cancer than expected based upon rates for the remainder of Idaho.

State Brain Cancer Incidence Age-specific Rates



Brain Cancer Incidence Age-adjusted Rates by Health District



BRAIN & OTHER CNS NON-MALIGNANT

Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	9.2	7.5	11.1
# of new cases	156	59	97

Total Cases by County

Ada	36	Cassia	2	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	6	Clearwater	2	Madison	-
Bear Lake	1	Custer	-	Minidoka	1
Benewah	2	Elmore	4	Nez Perce	5
Bingham	2	Franklin	2	Oneida	-
Blaine	-	Fremont	5	Owyhee	2
Boise	2	Gem	2	Payette	4
Bonner	5	Gooding	-	Power	1
Bonneville	7	Idaho	2	Shoshone	2
Boundary	2	Jefferson	2	Teton	-
Butte	-	Jerome	3	Twin Falls	6
Camas	-	Kootenai	17	Valley	-
Canyon	25	Latah	4	Washington	1
Caribou	1	Lemhi	-		

Background

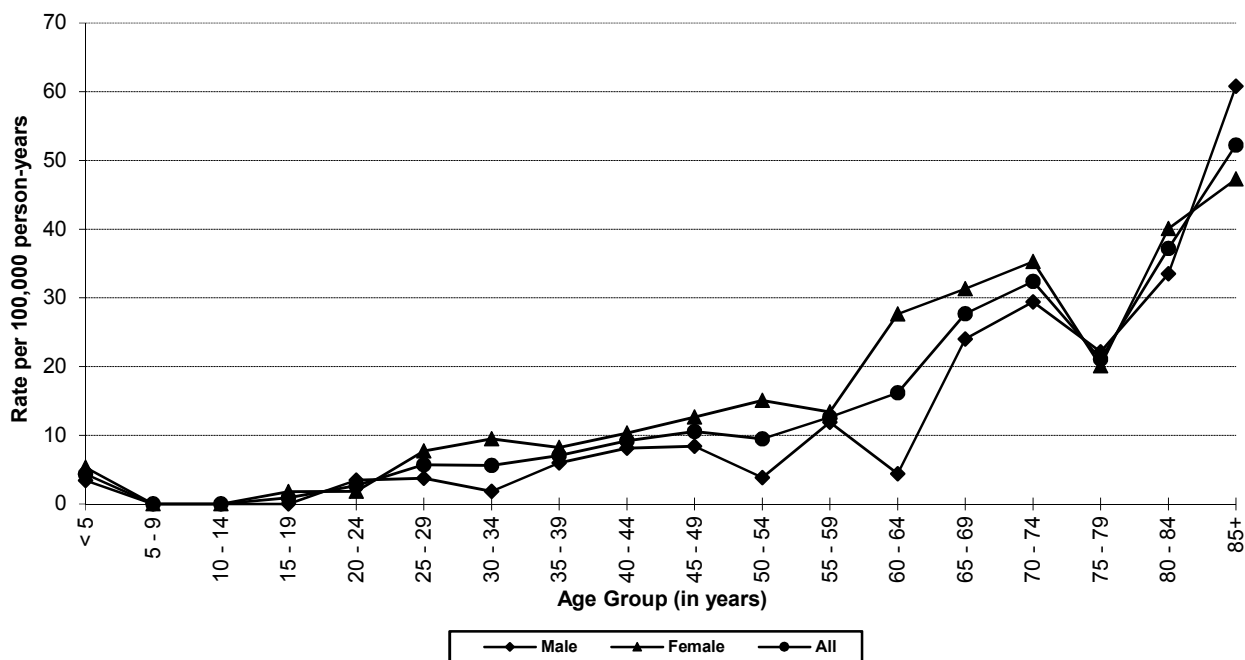
In 2007, as a result of Public Law 107-260, the publication *United States Cancer Statistics 2004 Incidence and Mortality* began to include tables for non-malignant brain tumors. Until this time, the only reference data were from the Central Brain Tumor Registry of the United States (CBTRUS), which has 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

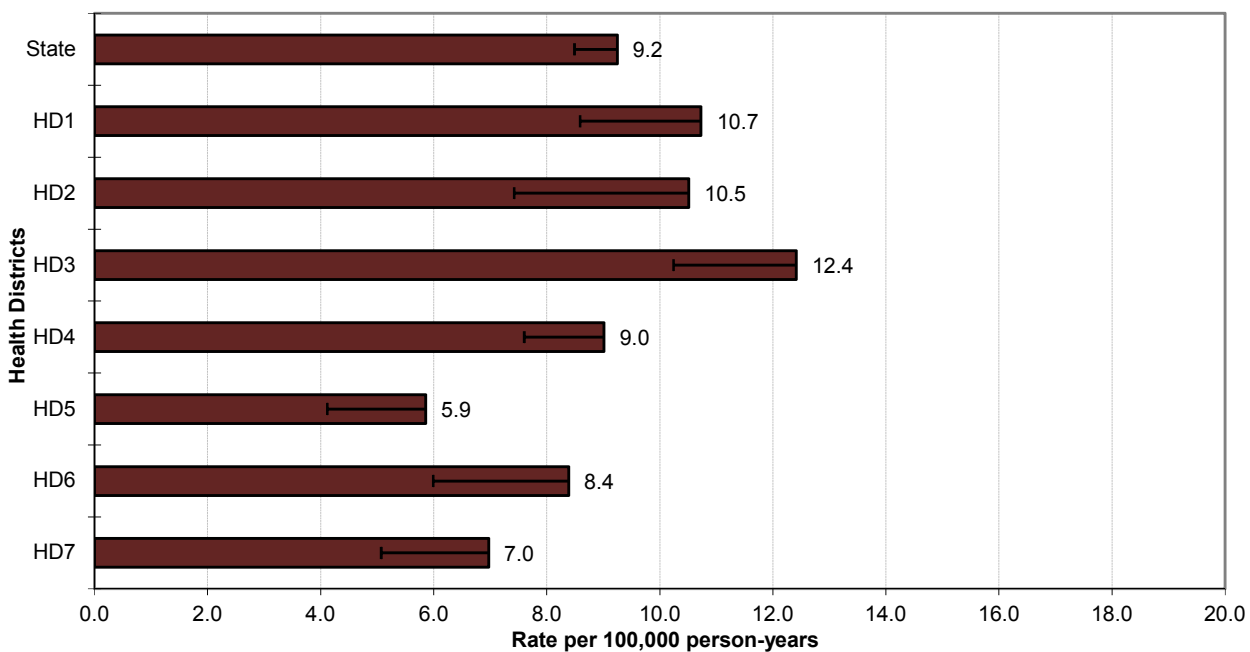
Mean age-adjusted incidence rate across health districts:	9.1
95% confidence interval on the mean age-adjusted incidence rate:	7.4- 10.8
Median age-adjusted incidence rate of health districts:	9.0
Range of age-adjusted incidence rate for health districts:	5.9- 12.4
SEER 18 rate (2012, all races):	11.2

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



Brain & other CNS non-Malignant Incidence Age-adjusted Rates by Health District



BREAST

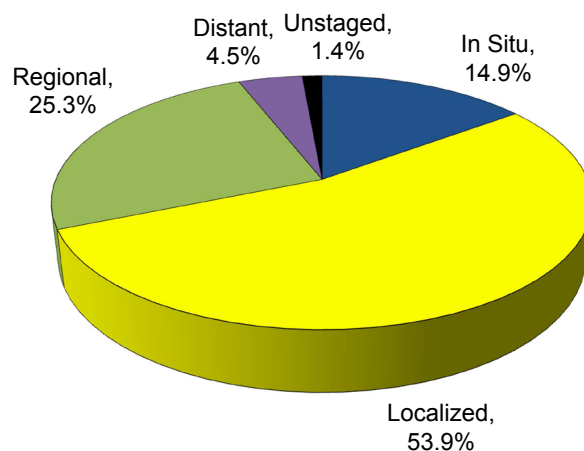
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	62.4	1.6	119.4
# of new invasive cases	1,085	13	1,072
# of new in-situ cases	190	0	190
# of deaths	207	2	205

Total Cases by County

Ada	302	Cassia	18	Lewis	1
Adams	-	Clark	-	Lincoln	3
Bannock	45	Clearwater	8	Madison	13
Bear Lake	2	Custer	5	Minidoka	15
Benewah	8	Elmore	23	Nez Perce	47
Bingham	35	Franklin	14	Oneida	3
Blaine	26	Fremont	8	Owyhee	11
Boise	9	Gem	13	Payette	18
Bonner	58	Gooding	16	Power	2
Bonneville	79	Idaho	18	Shoshone	14
Boundary	6	Jefferson	11	Teton	1
Butte	3	Jerome	14	Twin Falls	68
Camas	-	Kootenai	164	Valley	9
Canyon	129	Latah	32	Washington	8
Caribou	3	Lemhi	13		

Stage at Diagnosis - Breast



Risk and Associated Factors

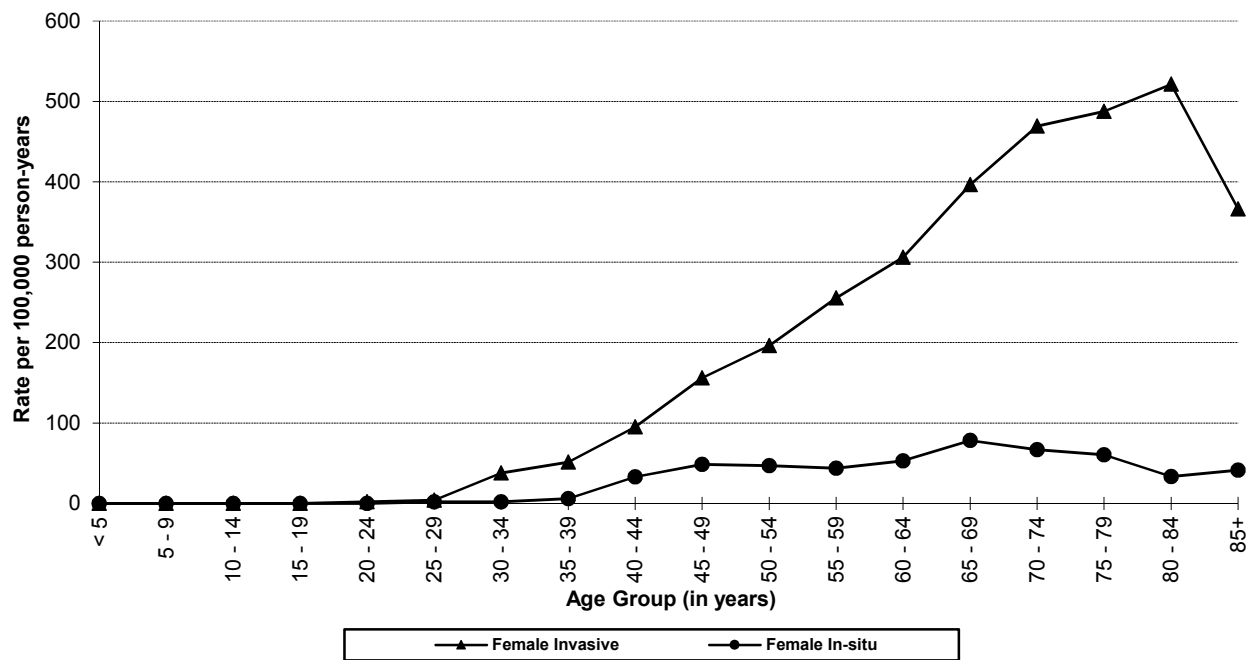
Age	Rates increase steadily with age. Age is the single most important risk factor for breast cancer. A 60-year-old white American woman's risk of developing breast cancer is fourteen times that of a 30-year-old American woman.
Race & SES	Whites have higher incidence rates, as do women in higher income 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

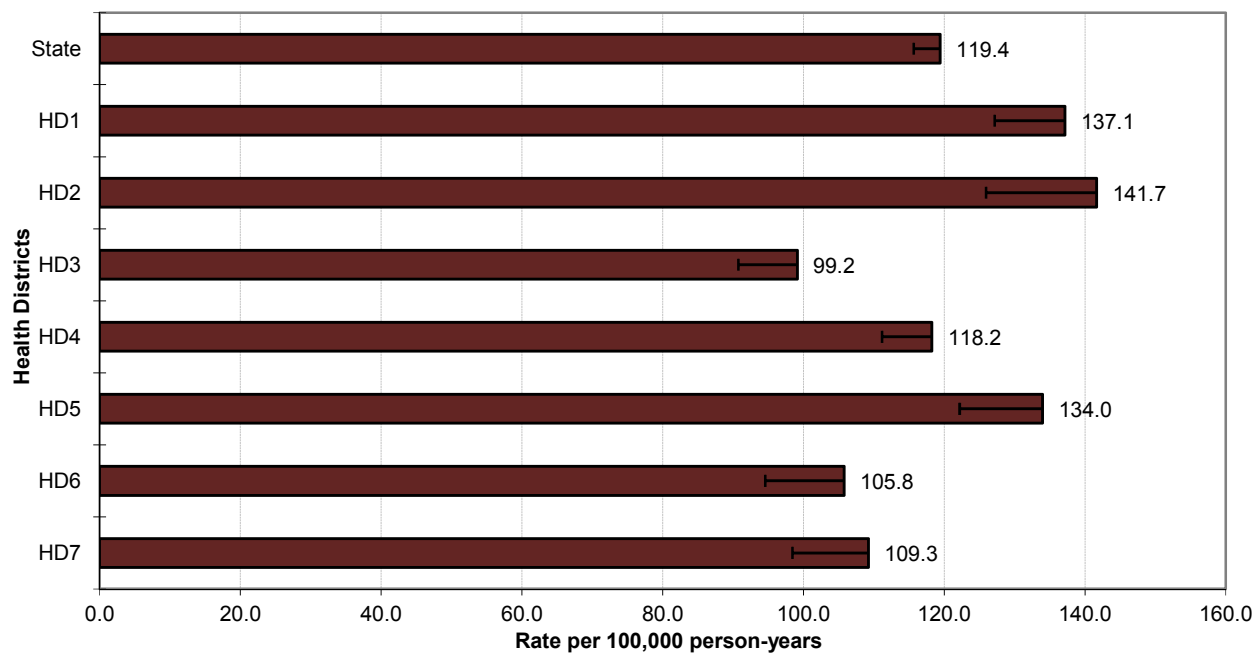
Mean age-adjusted incidence rate across health districts:	120.7
95% confidence interval on the mean age-adjusted incidence rate:	108.2- 133.2
Median age-adjusted incidence rate of health districts:	118.2
Range of age-adjusted incidence rate for health districts:	99.2- 141.7
USCS rate (2012, all races):	122.2

The vast majority of breast cancer cases occur among females. In Idaho during the year 2013, there were 13 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 80-84 for invasive cases. No cases were observed in women less than 20 years of age. Health District 1 had statistically significantly more cases of breast cancer than expected based upon rates for the remainder of Idaho, and Health District 3 had statistically significantly fewer cases than expected.

State Female Breast Cancer Incidence Age-specific Rates



Female Breast Cancer Incidence Age-adjusted Rates by Health District



CERVIX

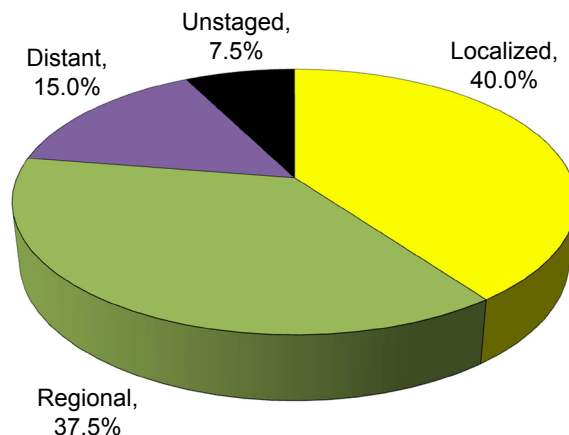
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	-	5.2
# of new invasive cases	-	-	40
# of new in-situ cases	-	-	n/a
# of deaths	-	-	14

Total Cases by County

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

Stage at Diagnosis - Cervix



Risk and Associated Factors

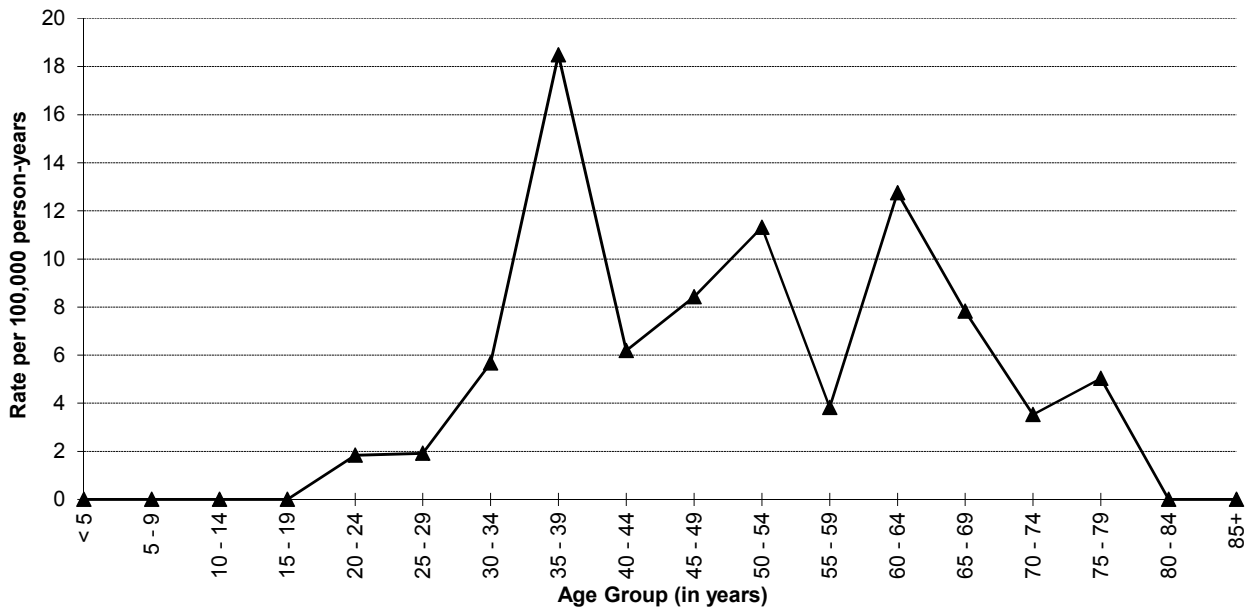
Age	Cervical cancer occurs in adult women of any age. However, the majority of invasive cases are diagnosed in older women.
Race & SES	Blacks, Hispanics, and women in lower income groups have been shown to experience higher rates.
Other	The large majority of cervical cancer cases worldwide can be attributed 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

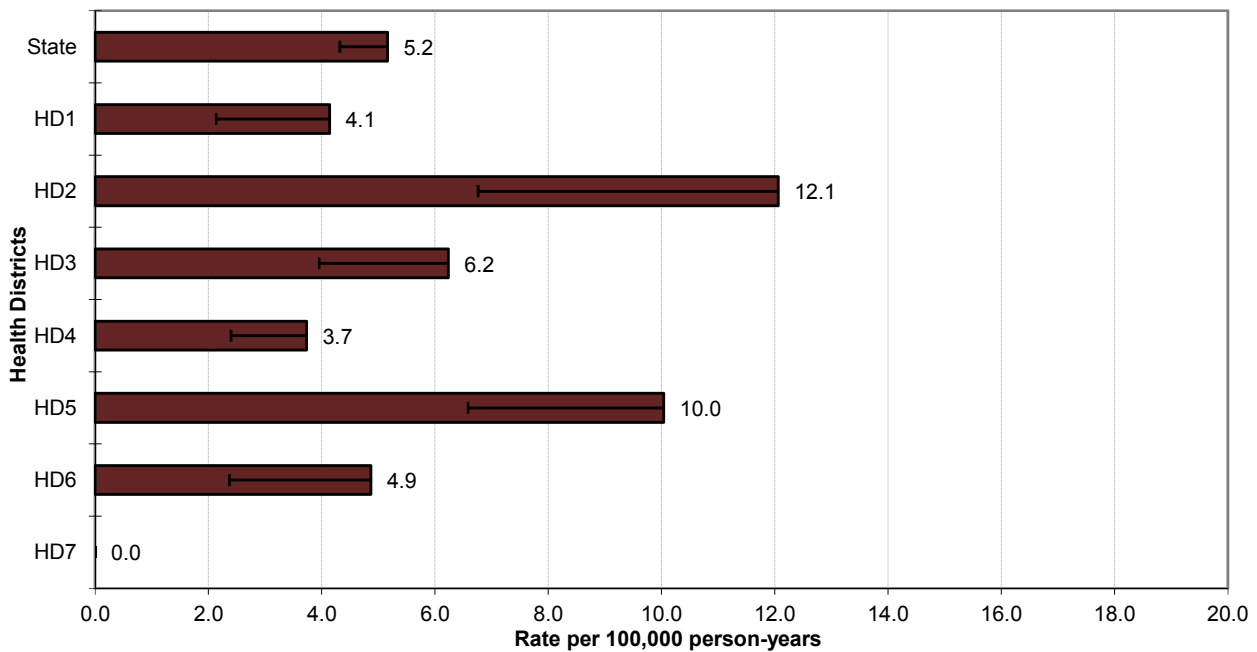
Mean age-adjusted incidence rate across health districts:	5.9
95% confidence interval on the mean age-adjusted incidence rate:	2.9- 8.9
Median age-adjusted incidence rate of health districts:	4.9
Range of age-adjusted incidence rate for health districts:	0.0- 12.1
USCS rate (2012, all races):	7.4

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. Health District 5 had statistically significantly more cases of cervical cancer than expected based upon rates for the remainder of Idaho, and Health District 7 had statistically significantly fewer cases than expected.

State Cervical Cancer Incidence Age-specific Rates



Cervical Cancer Incidence Age-adjusted Rates by Health District



COLORECTAL

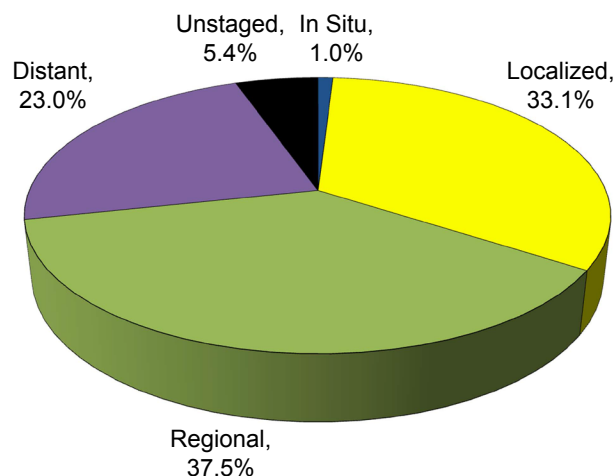
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	35.1	41.3	29.1
# of new invasive cases	604	346	258
# of new in-situ cases	6	2	4
# of deaths	233	131	102

Total Cases by County

Ada	138	Cassia	2	Lewis	1
Adams	2	Clark	1	Lincoln	2
Bannock	20	Clearwater	7	Madison	5
Bear Lake	1	Custer	3	Minidoka	10
Benewah	4	Elmore	10	Nez Perce	15
Bingham	16	Franklin	6	Oneida	1
Blaine	8	Fremont	11	Owyhee	4
Boise	2	Gem	15	Payette	17
Bonner	22	Gooding	8	Power	4
Bonneville	24	Idaho	9	Shoshone	9
Boundary	7	Jefferson	9	Teton	1
Butte	3	Jerome	5	Twin Falls	32
Camas	-	Kootenai	73	Valley	2
Canyon	73	Latah	12	Washington	5
Caribou	2	Lemhi	9		

Stage at Diagnosis - Colorectal



Risk and Associated Factors

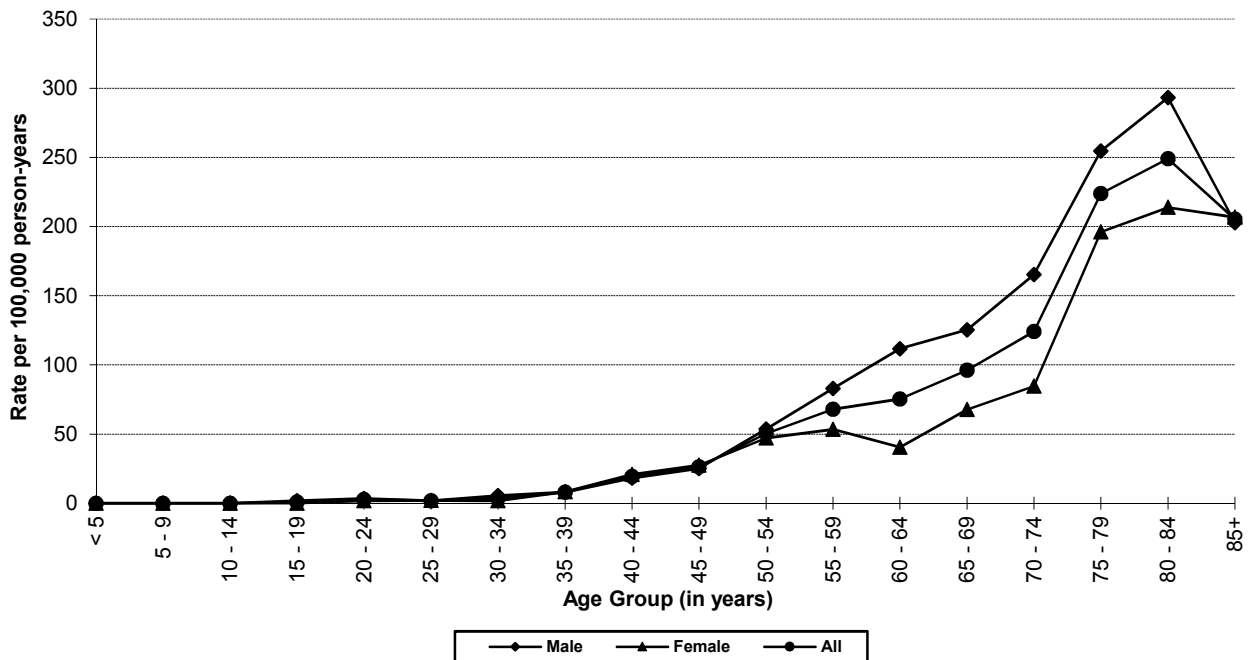
Age	Rates increase with age; the vast majority of cases occur after age 50.
Gender	Incidence rates are slightly higher in males.
Genetics	It is estimated that 65-85% of colorectal cancer cases are sporadic, 10-30% are familial, and the remainder are the result of specific rare genetic disorders such 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

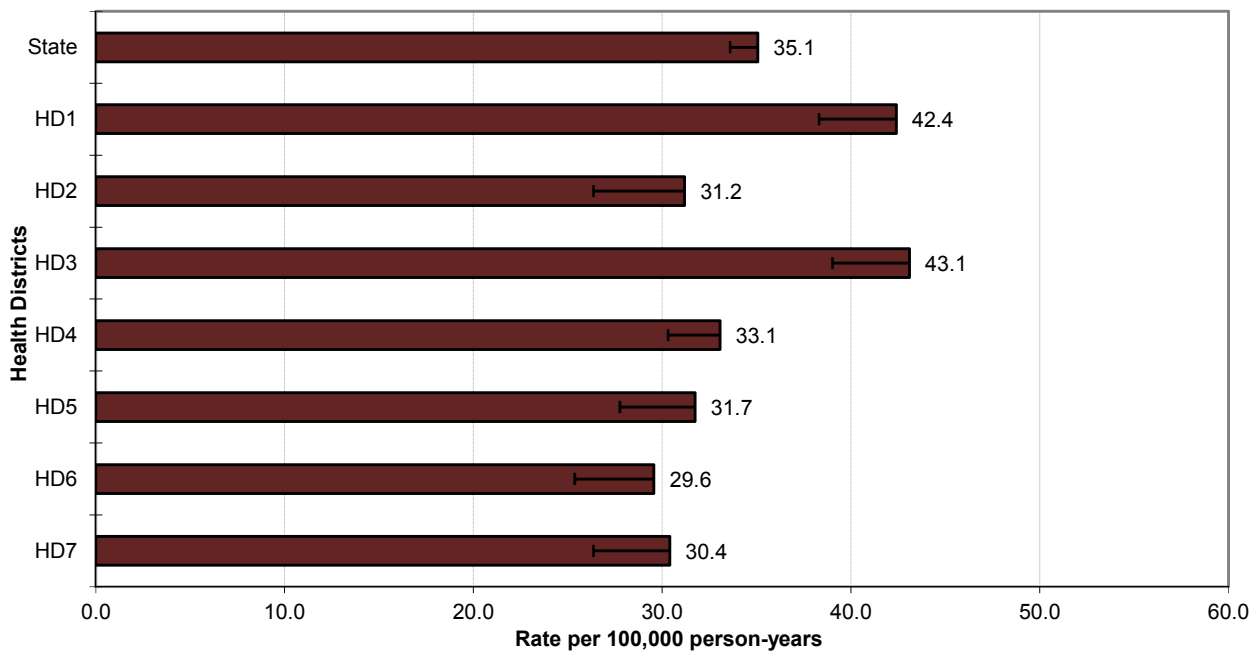
Mean age-adjusted incidence rate across health districts:	34.5
95% confidence interval on the mean age-adjusted incidence rate:	30.2- 38.8
Median age-adjusted incidence rate of health districts:	31.7
Range of age-adjusted incidence rate for health districts:	29.6- 43.1
USCS rate (2012, all races):	38.9

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 65. Health District 3 had statistically significantly more cases of colorectal cancer than expected based upon rates for the remainder of Idaho.

State Colorectal Cancer Incidence Age-specific Rates



Colorectal Cancer Incidence Age-adjusted Rates by Health District



CORPUS UTERI

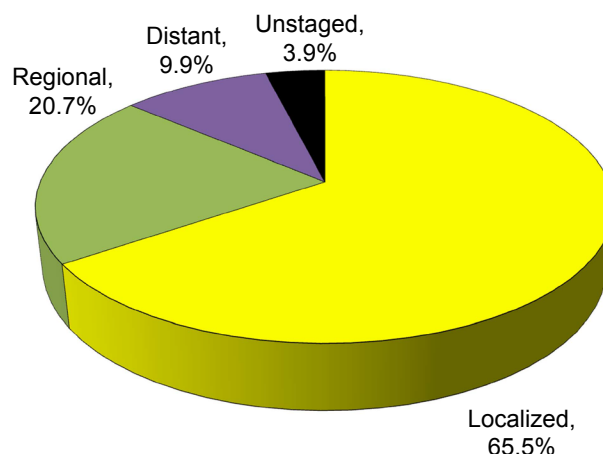
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	-	21.4
# of new invasive cases	-	-	203
# of new in-situ cases	-	-	0
# of deaths	-	-	20

Total Cases by County

Ada	47	Cassia	2	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	10	Clearwater	5	Madison	2
Bear Lake	1	Custer	-	Minidoka	5
Benewah	-	Elmore	4	Nez Perce	2
Bingham	8	Franklin	3	Oneida	-
Blaine	3	Fremont	1	Owyhee	-
Boise	-	Gem	4	Payette	5
Bonner	7	Gooding	2	Power	-
Bonneville	10	Idaho	4	Shoshone	1
Boundary	2	Jefferson	4	Teton	-
Butte	1	Jerome	4	Twin Falls	14
Camas	-	Kootenai	17	Valley	-
Canyon	30	Latah	1	Washington	-
Caribou	2	Lemhi	2		

Stage at Diagnosis - Corpus Uteri



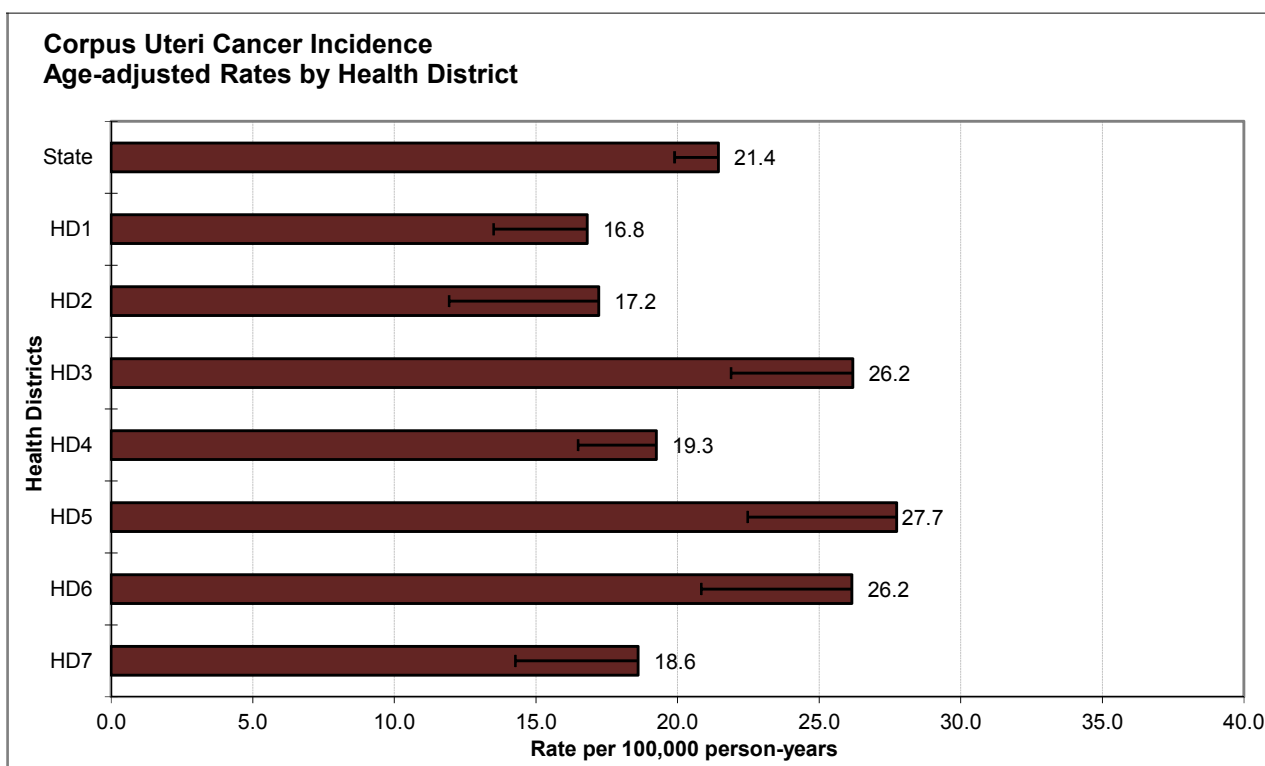
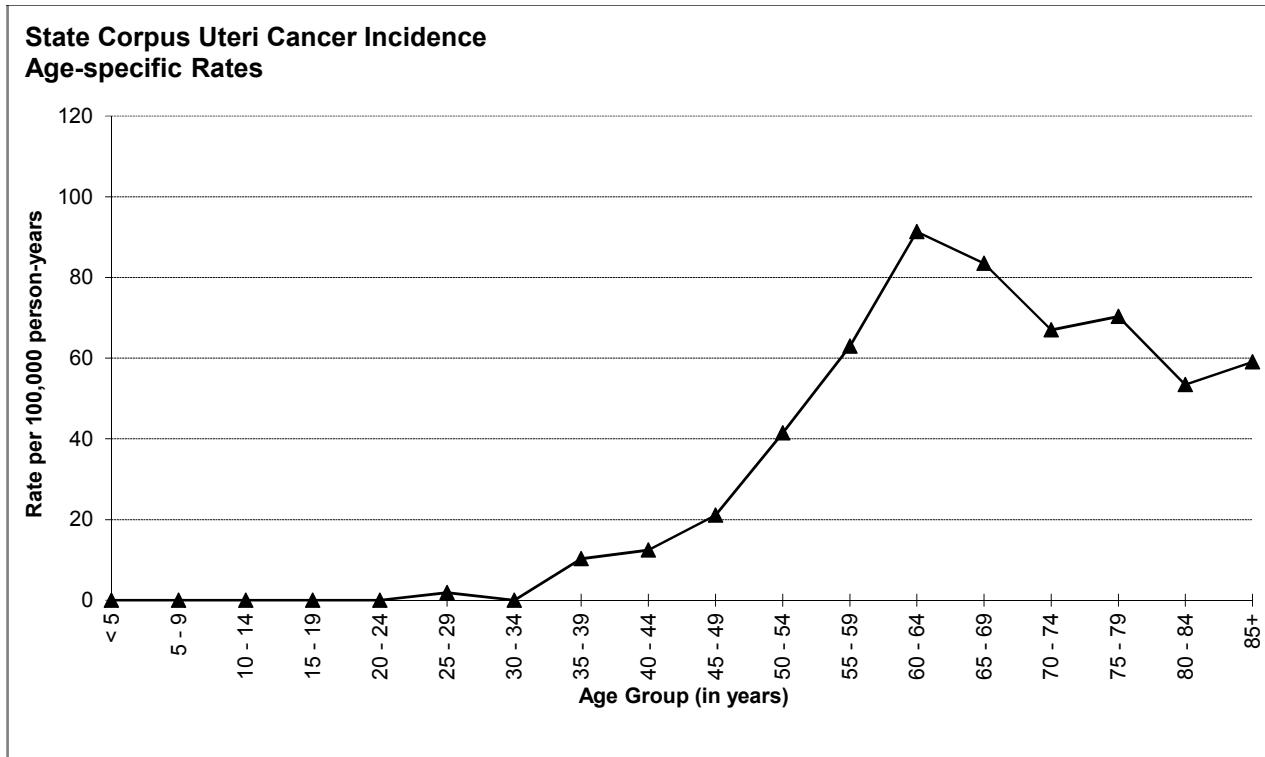
Risk and Associated Factors

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:	21.7
95% confidence interval on the mean age-adjusted incidence rate:	18.2- 25.2
Median age-adjusted incidence rate of health districts:	19.3
Range of age-adjusted incidence rate for health districts:	16.8- 27.7
USCS rate (2012, all races):	24.9

Few cases of endometrial cancer were diagnosed in persons less than 35 years of age. After age 49, there was a sharp increase in age-specific rates, peaking in the age group 60-64. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.



ESOPHAGUS

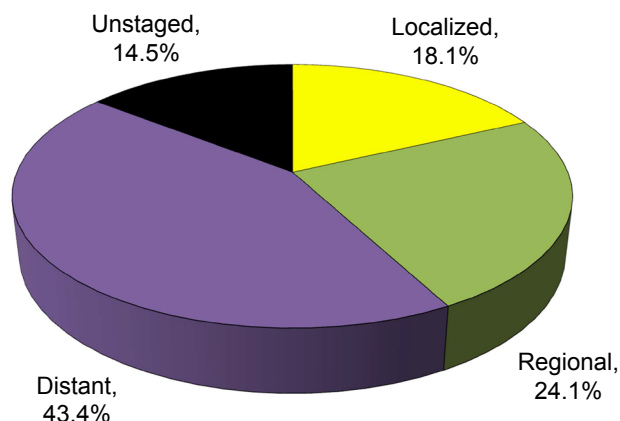
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	4.7	7.6	1.9
# of new invasive cases	83	66	17
# of new in-situ cases	0	0	0
# of deaths	72	57	15

Total Cases by County

Ada	28	Cassia	2	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	6	Clearwater	1	Madison	1
Bear Lake	-	Custer	1	Minidoka	2
Benewah	1	Elmore	-	Nez Perce	1
Bingham	2	Franklin	-	Oneida	-
Blaine	1	Fremont	1	Owyhee	-
Boise	1	Gem	2	Payette	1
Bonner	4	Gooding	-	Power	1
Bonneville	3	Idaho	1	Shoshone	1
Boundary	-	Jefferson	-	Teton	2
Butte	-	Jerome	2	Twin Falls	4
Camas	-	Kootenai	9	Valley	-
Canyon	5	Latah	-	Washington	-
Caribou	-	Lemhi	-		

Stage at Diagnosis - Esophagus



Risk and Associated Factors

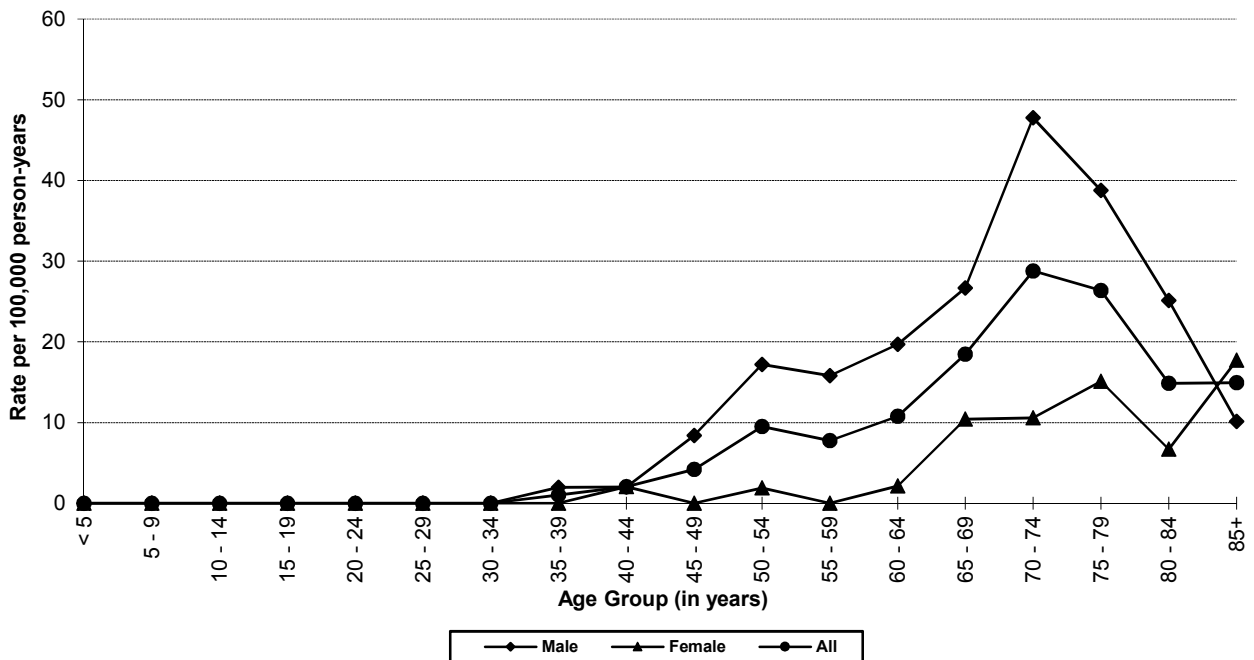
Age	Incidence of esophageal cancer is highest after age 55.
Gender	Males have higher incidence rates, with male-to-female ratios of cases about 3:1 or more.
Race & SES	United States data show that blacks are affected more than whites. Risk is higher among lower SES strata.
Occupation	Chimney sweeps exposed 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

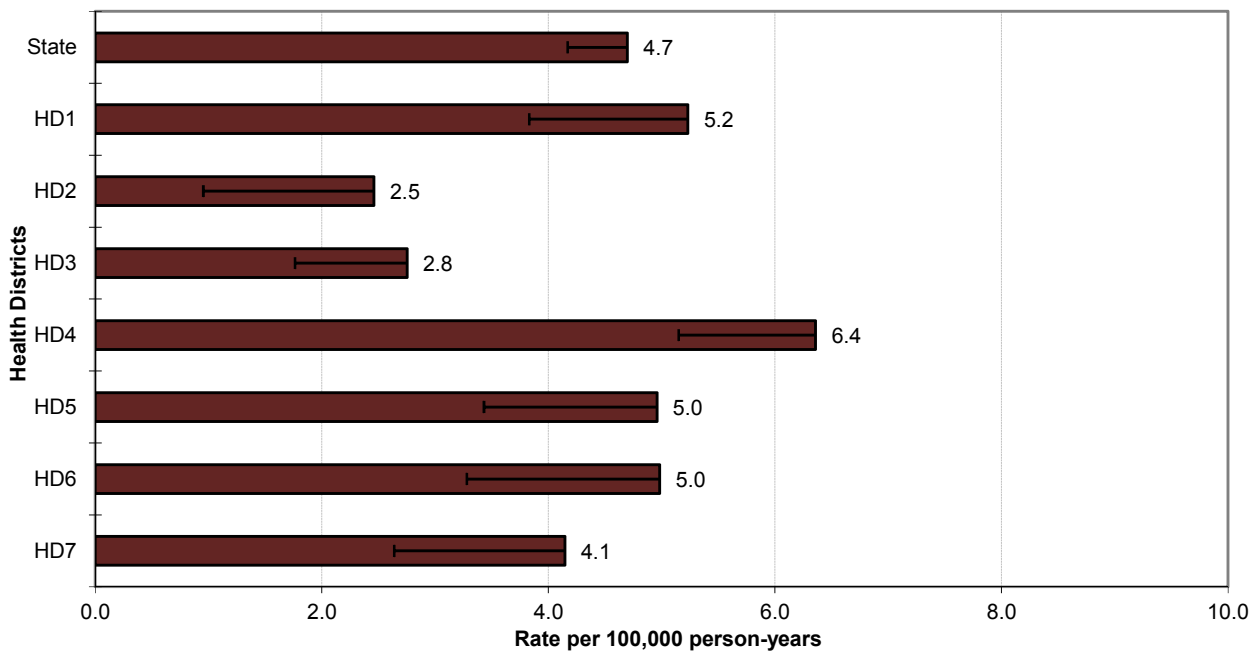
Mean age-adjusted incidence rate across health districts:	4.4
95% confidence interval on the mean age-adjusted incidence rate:	3.4- 5.4
Median age-adjusted incidence rate of health districts:	5.0
Range of age-adjusted incidence rate for health districts:	2.5- 6.4
USCS rate (2012, all races):	4.5

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 70-74 for males and 85+ 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



Esophageal Cancer Incidence Age-adjusted Rates by Health District



HODGKIN LYMPHOMA

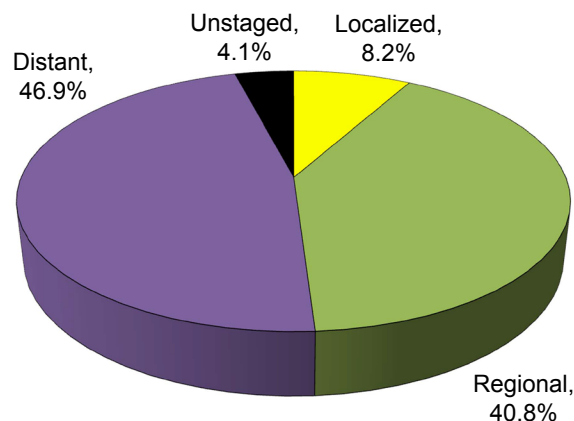
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	3.1	3.3	2.8
# of new invasive cases	49	26	23
# of new in-situ cases	0	0	0
# of deaths	7	2	5

Total Cases by County

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

Stage at Diagnosis - Hodgkin Lymphoma



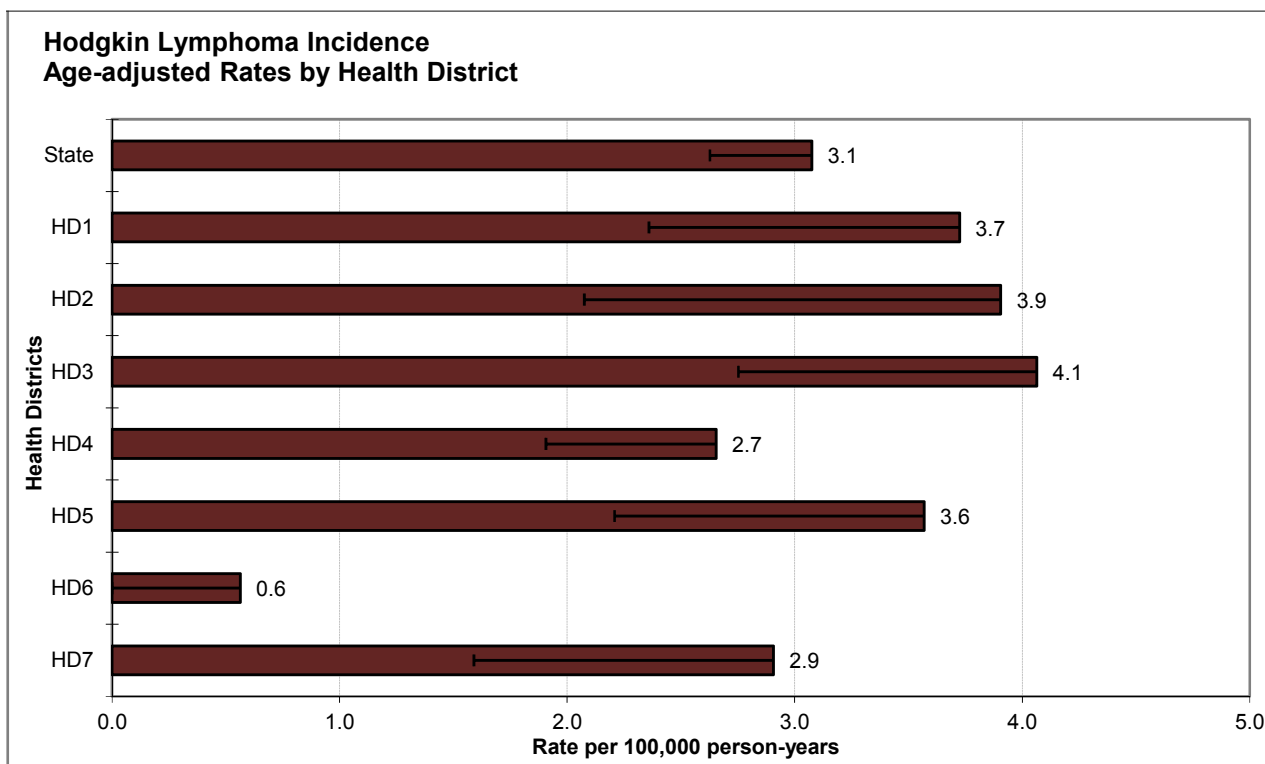
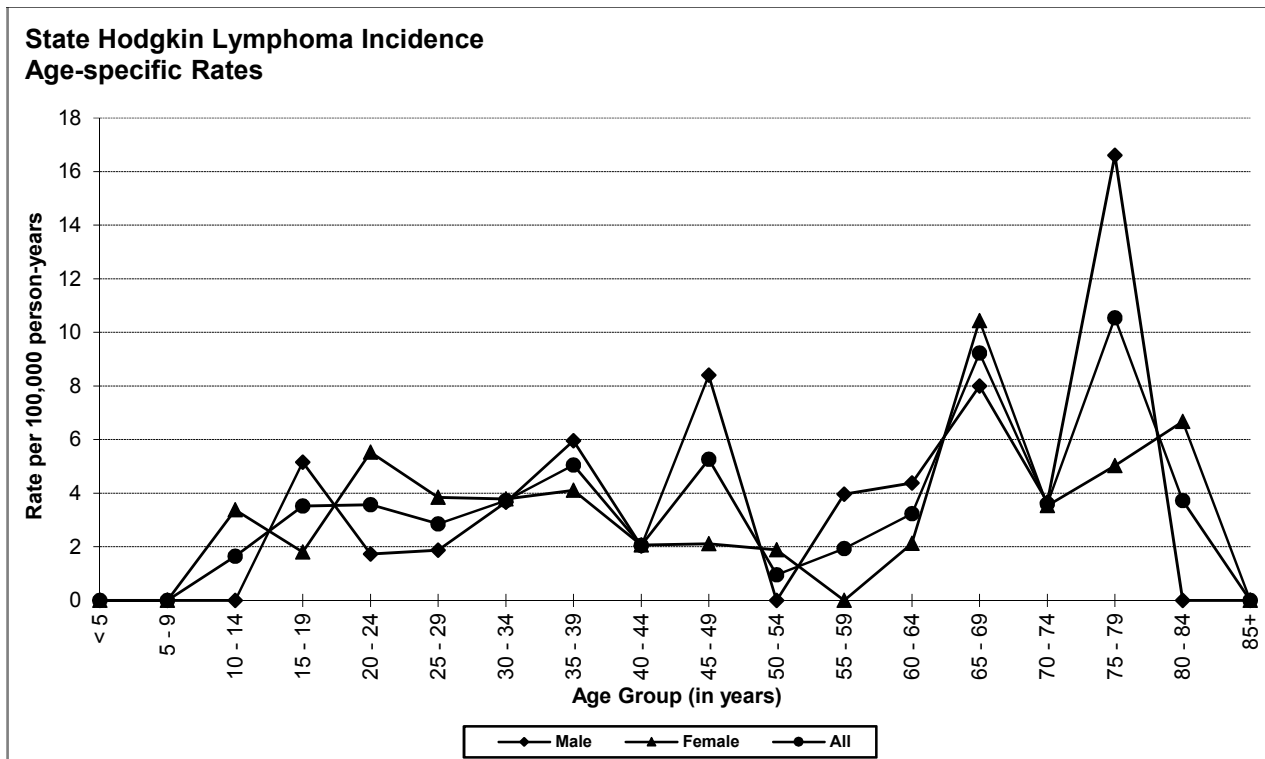
Risk and Associated Factors

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:	3.1
95% confidence interval on the mean age-adjusted incidence rate:	2.2- 4.0
Median age-adjusted incidence rate of health districts:	3.6
Range of age-adjusted incidence rate for health districts:	0.6- 4.1
USCS rate (2012, 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.



KIDNEY AND RENAL PELVIS

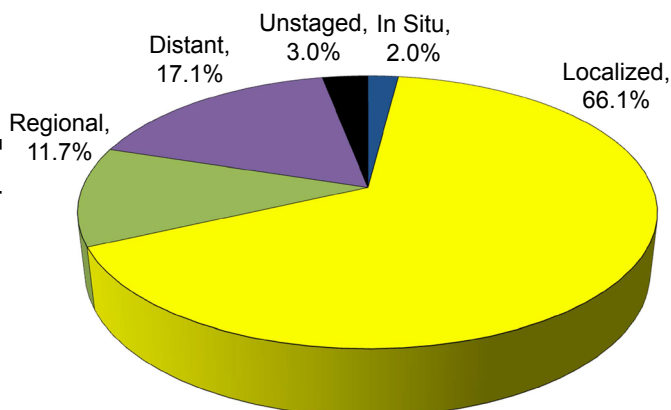
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	16.6	21.3	12.2
# of new invasive cases	292	178	114
# of new in-situ cases	6	5	1
# of deaths	68	41	27

Total Cases by County

Ada	60	Cassia	5	Lewis	1
Adams	-	Clark	-	Lincoln	4
Bannock	13	Clearwater	-	Madison	2
Bear Lake	-	Custer	1	Minidoka	2
Benewah	5	Elmore	9	Nez Perce	9
Bingham	5	Franklin	5	Oneida	1
Blaine	3	Fremont	2	Owyhee	2
Boise	-	Gem	2	Payette	5
Bonner	9	Gooding	10	Power	-
Bonneville	24	Idaho	7	Shoshone	2
Boundary	3	Jefferson	2	Teton	-
Butte	2	Jerome	4	Twin Falls	13
Camas	1	Kootenai	33	Valley	2
Canyon	34	Latah	8	Washington	4
Caribou	1	Lemhi	3		

Stage at Diagnosis - Kidney and Renal Pelvis



Risk and Associated Factors

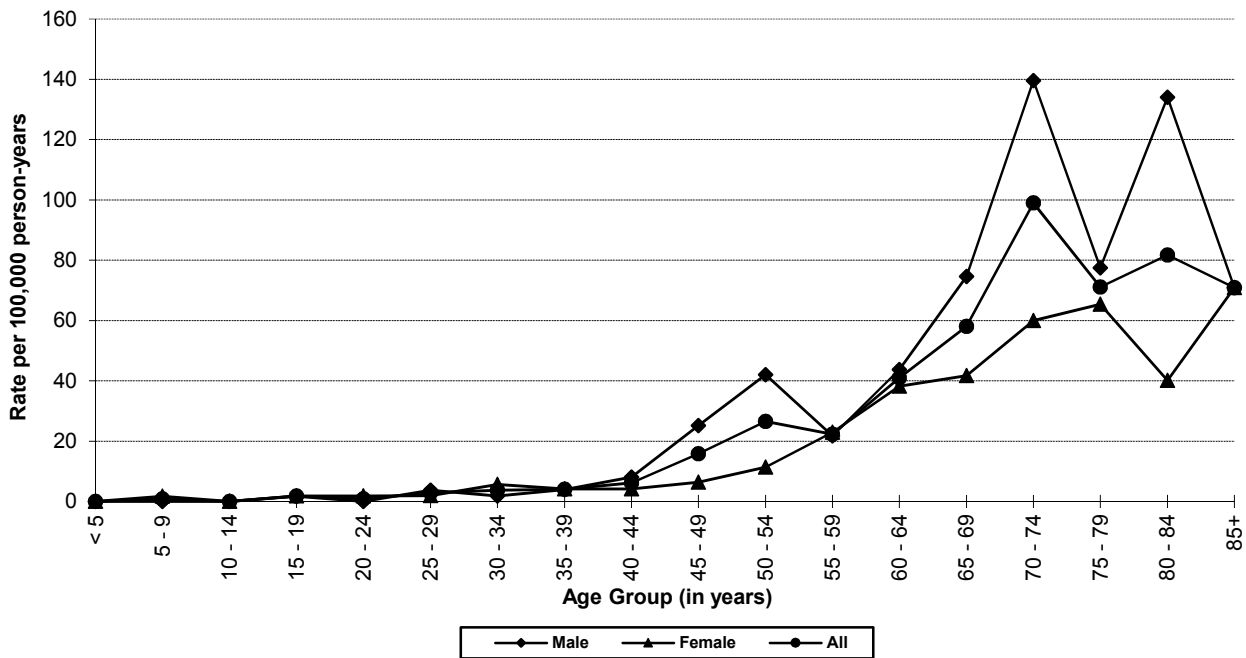
Age	Both adults and children are at risk for kidney cancer. Renal cell carcinoma accounts for about 80% of all adult kidney cancers. Wilm's tumor (nephroblastoma) affects predominantly children under age 5 and accounts for the majority of childhood kidney cancers.
Gender	Renal cell carcinoma affects 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

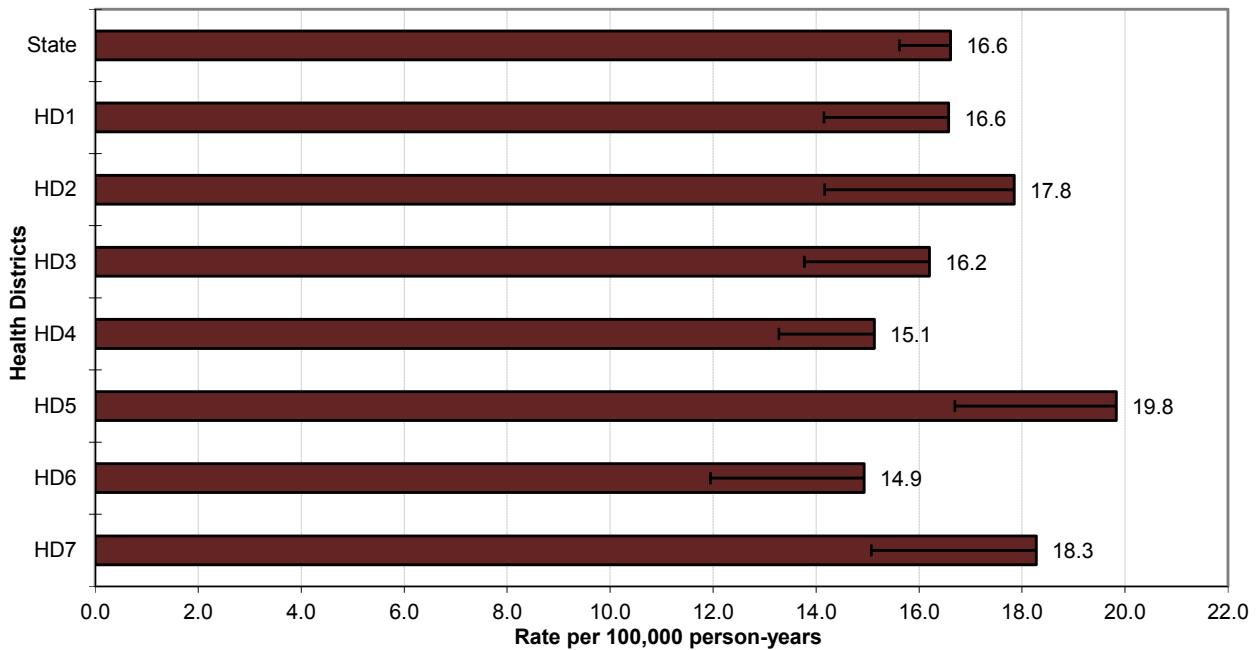
Mean age-adjusted incidence rate across health districts:	17.0
95% confidence interval on the mean age-adjusted incidence rate:	15.7- 18.3
Median age-adjusted incidence rate of health districts:	16.6
Range of age-adjusted incidence rate for health districts:	14.9- 19.8
USCS rate (2012, all races):	15.9

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 70-74 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



Kidney & Renal Pelvis Cancer Incidence Age-adjusted Rates by Health District



LARYNX

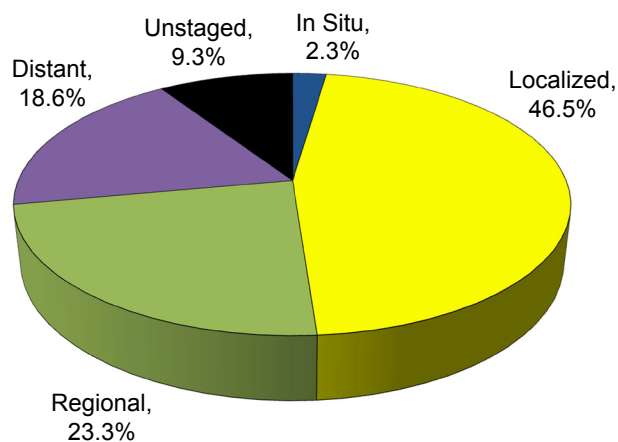
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	2.3	3.9	0.8
# of new invasive cases	42	35	7
# of new in-situ cases	1	1	0
# of deaths	14	12	2

Total Cases by County

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

Stage at Diagnosis - Larynx



Risk and Associated Factors

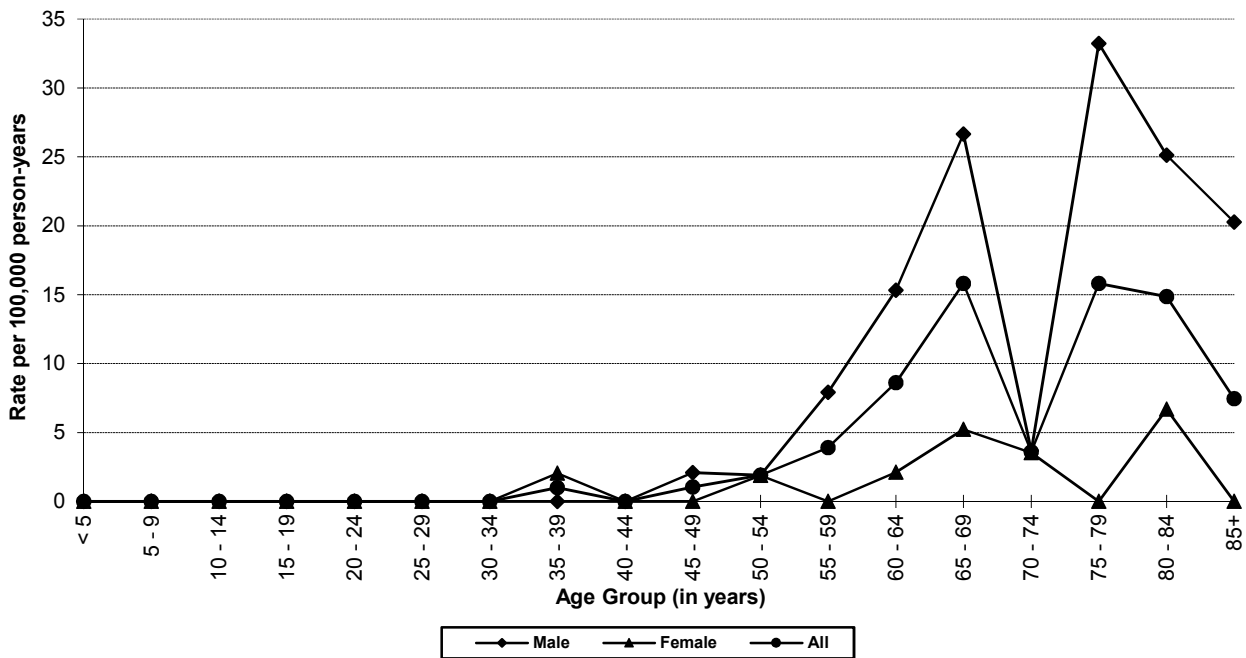
Age	Rates increase with age, with the vast majority of cases occurring after age 55.
Gender	Laryngeal cancers are much more common in males than females.
Race & SES	Generally in the United States, blacks have higher incidence rates than whites. Lower income groups experience higher rates.
Occupation	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

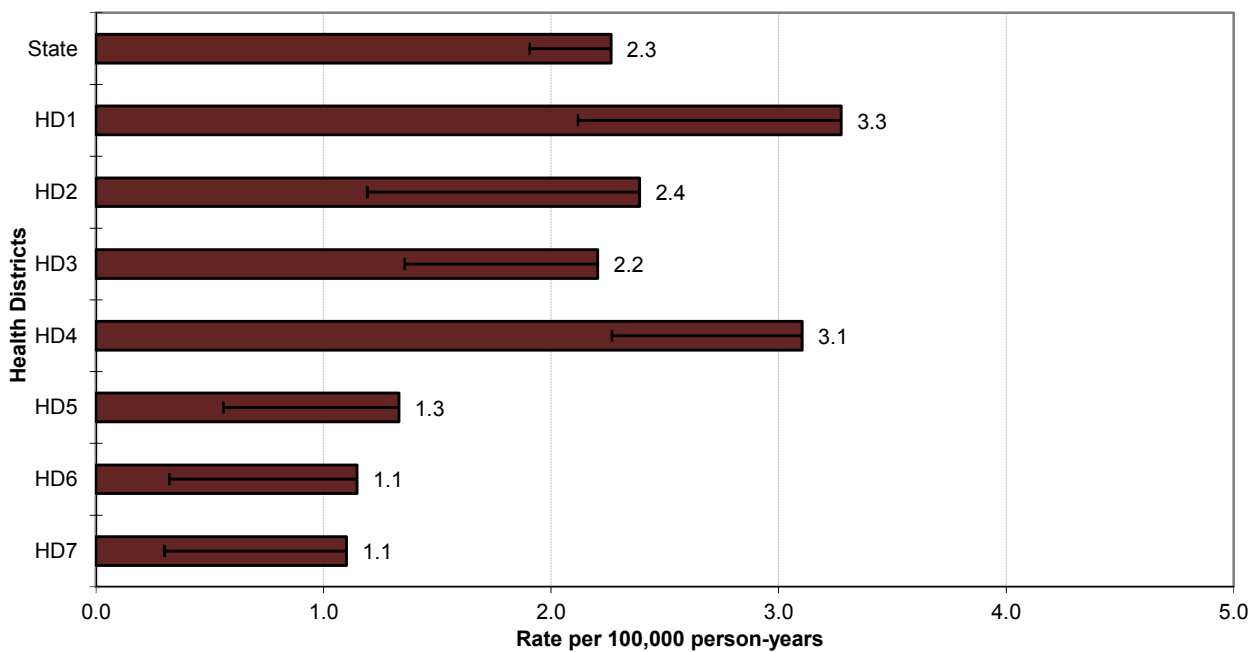
Mean age-adjusted incidence rate across health districts:	2.1
95% confidence interval on the mean age-adjusted incidence rate:	1.4- 2.8
Median age-adjusted incidence rate of health districts:	2.2
Range of age-adjusted incidence rate for health districts:	1.1- 3.3
USCS rate (2012, all races):	3.4

There were few 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



Laryngeal Cancer Incidence Age-adjusted Rates by Health District



LEUKEMIA

Incidence and Mortality Summary

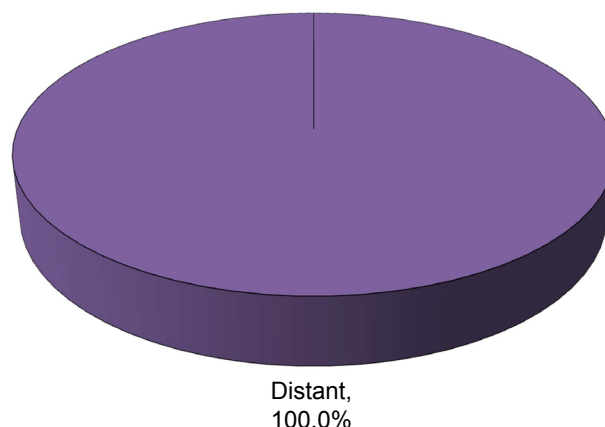
	Total	Male	Female
Age-adjusted incidence rate per 100,000	17.0	20.6	13.9

# of new invasive cases	291	166	125
# of new in-situ cases	0	0	0
# of deaths	103	60	43

Total Cases by County

Ada	69	Cassia	5	Lewis	-
Adams	1	Clark	-	Lincoln	3
Bannock	18	Clearwater	1	Madison	5
Bear Lake	2	Custer	2	Minidoka	1
Benewah	3	Elmore	2	Nez Perce	4
Bingham	3	Franklin	-	Oneida	-
Blaine	4	Fremont	3	Owyhee	-
Boise	2	Gem	3	Payette	3
Bonner	10	Gooding	7	Power	1
Bonneville	22	Idaho	3	Shoshone	4
Boundary	2	Jefferson	3	Teton	-
Butte	2	Jerome	3	Twin Falls	11
Camas	-	Kootenai	34	Valley	1
Canyon	45	Latah	6	Washington	1
Caribou	-	Lemhi	2		

Stage at Diagnosis - Leukemia



Risk and Associated Factors

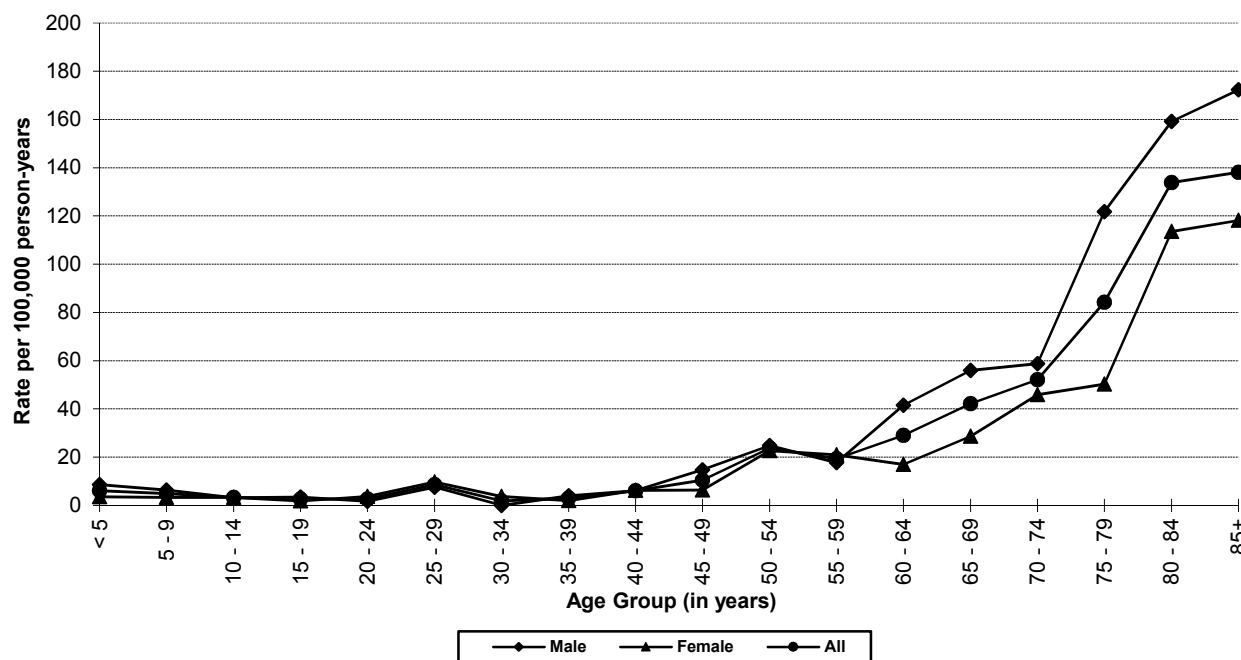
Age	Leukemia is the most common form of cancer in children. Incidence usually increases with age in adults. The highest rates occur in individuals over age 60.
Gender	Males have higher incidence rates than females for chronic myelogenous leukemia (CML), acute lymphoblastic leukemia (ALL), and chronic 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-telangiectasia, 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

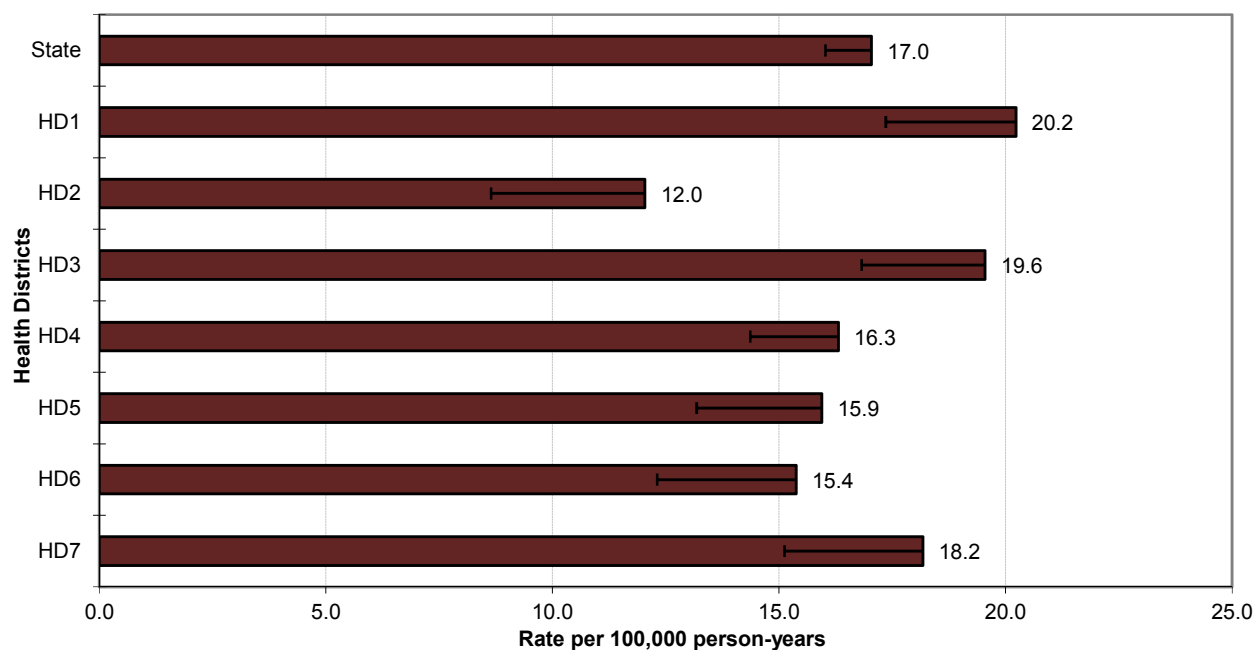
Mean age-adjusted incidence rate across health districts:	16.8
95% confidence interval on the mean age-adjusted incidence rate:	14.7- 18.9
Median age-adjusted incidence rate of health districts:	16.3
Range of age-adjusted incidence rate for health districts:	12.0- 20.2
USCS rate (2012, all races):	13.2

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. Health District 2 had statistically significantly fewer cases of leukemia than expected based upon rates for the remainder of Idaho.

State Leukemia Incidence Age-specific Rates



Leukemia Incidence Age-adjusted Rates by Health District



LIVER AND BILE DUCT

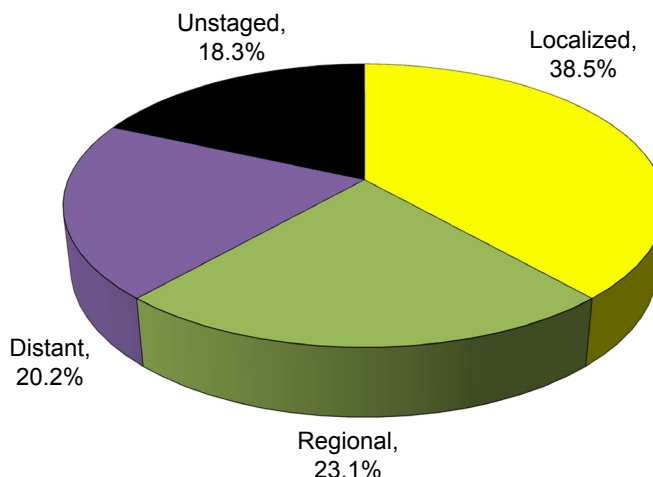
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	5.3	7.7	3.1
# of new invasive cases	104	73	31
# of new in-situ cases	0	0	0
# of deaths	94	57	37

Total Cases by County

Ada	28	Cassia	3	Lewis	-
Adams	-	Clark	-	Lincoln	-
Bannock	4	Clearwater	1	Madison	1
Bear Lake	-	Custer	1	Minidoka	1
Benewah	2	Elmore	1	Nez Perce	6
Bingham	4	Franklin	-	Oneida	-
Blaine	2	Fremont	1	Owyhee	-
Boise	-	Gem	-	Payette	-
Bonner	5	Gooding	-	Power	1
Bonneville	5	Idaho	2	Shoshone	-
Boundary	-	Jefferson	1	Teton	-
Butte	-	Jerome	1	Twin Falls	4
Camas	-	Kootenai	10	Valley	2
Canyon	15	Latah	2	Washington	1
Caribou	-	Lemhi	-		

Stage at Diagnosis - Liver and Bile Duct



Risk and Associated Factors

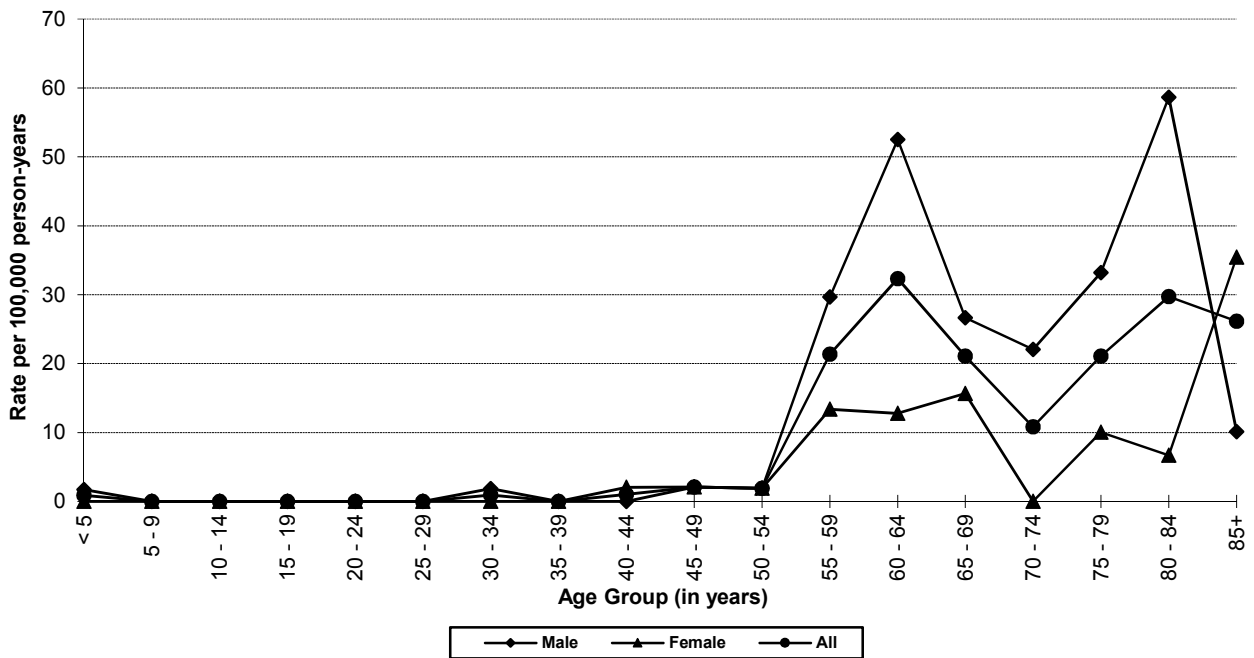
Age	The incidence rate of liver cancer increases with age.
Gender	Rates are usually higher among males than females.
Race	Incidence is higher among Asian/Pacific Islanders and blacks than the remainder of the population.
Diet	Aflatoxins, which are present in certain foods such as peanut butter, are classified 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

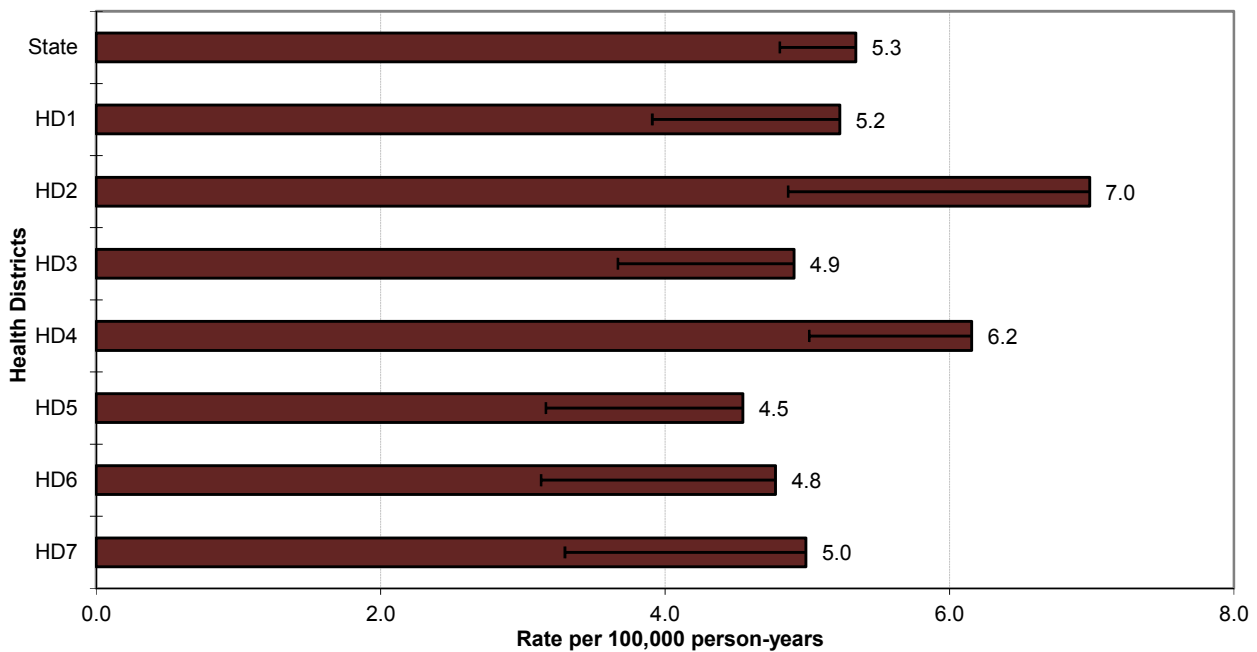
Mean age-adjusted incidence rate across health districts:	5.4
95% confidence interval on the mean age-adjusted incidence rate:	4.7- 6.0
Median age-adjusted incidence rate of health districts:	5.0
Range of age-adjusted incidence rate for health districts:	4.5- 7.0
USCS rate (2012, all races):	6.7

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 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 Liver & Bile Duct Cancer Incidence Age-specific Rates



Liver and Bile Duct Cancer Incidence Age-adjusted Rates by Health District



LUNG AND BRONCHUS

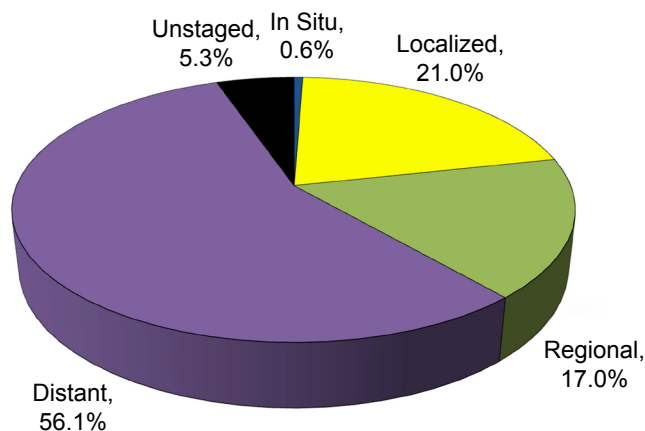
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	46.9	49.9	44.6
# of new invasive cases	824	417	407
# of new in-situ cases	5	0	5
# of deaths	627	345	282

Total Cases by County

Ada	191	Cassia	10	Lewis	5
Adams	4	Clark	-	Lincoln	-
Bannock	36	Clearwater	10	Madison	2
Bear Lake	3	Custer	3	Minidoka	15
Benewah	8	Elmore	15	Nez Perce	28
Bingham	20	Franklin	1	Oneida	2
Blaine	5	Fremont	5	Owyhee	3
Boise	3	Gem	12	Payette	17
Bonner	35	Gooding	14	Power	4
Bonneville	36	Idaho	14	Shoshone	20
Boundary	9	Jefferson	11	Teton	2
Butte	1	Jerome	9	Twin Falls	34
Camas	2	Kootenai	104	Valley	11
Canyon	89	Latah	18	Washington	11
Caribou	4	Lemhi	3		

Stage at Diagnosis - Lung and Bronchus



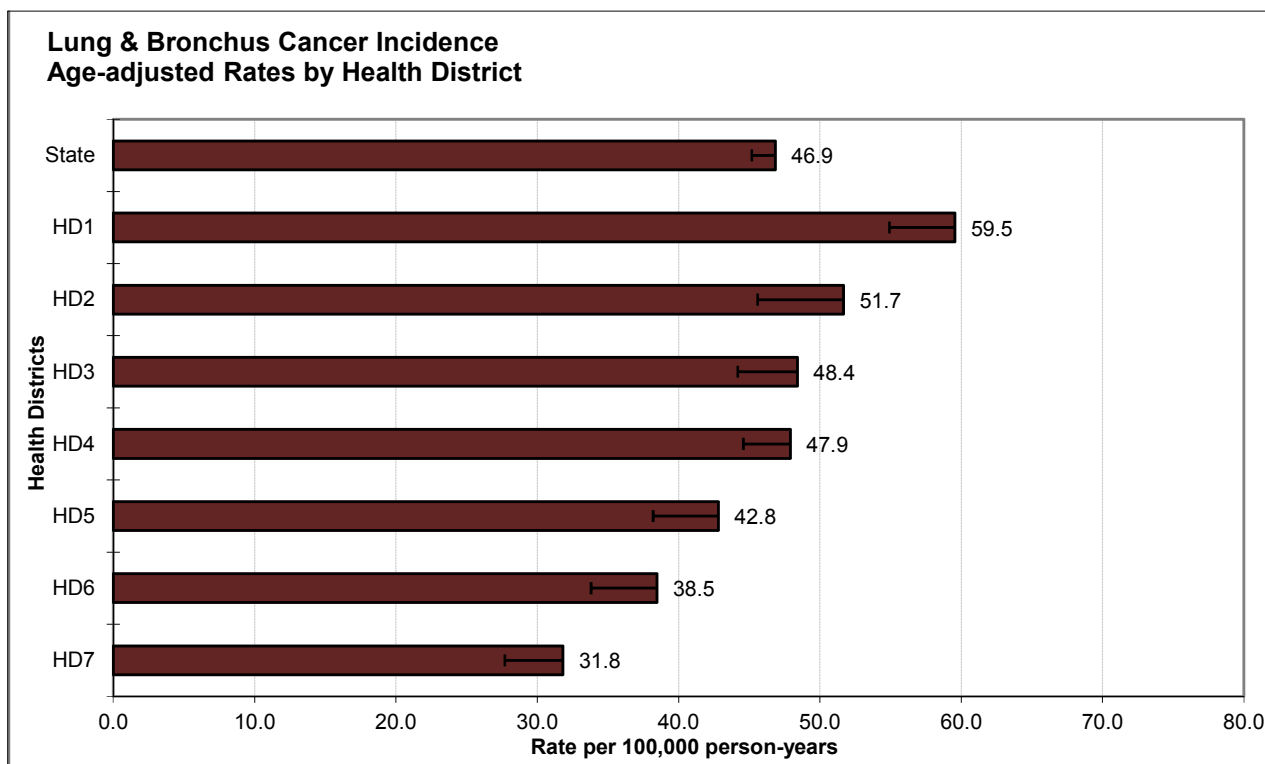
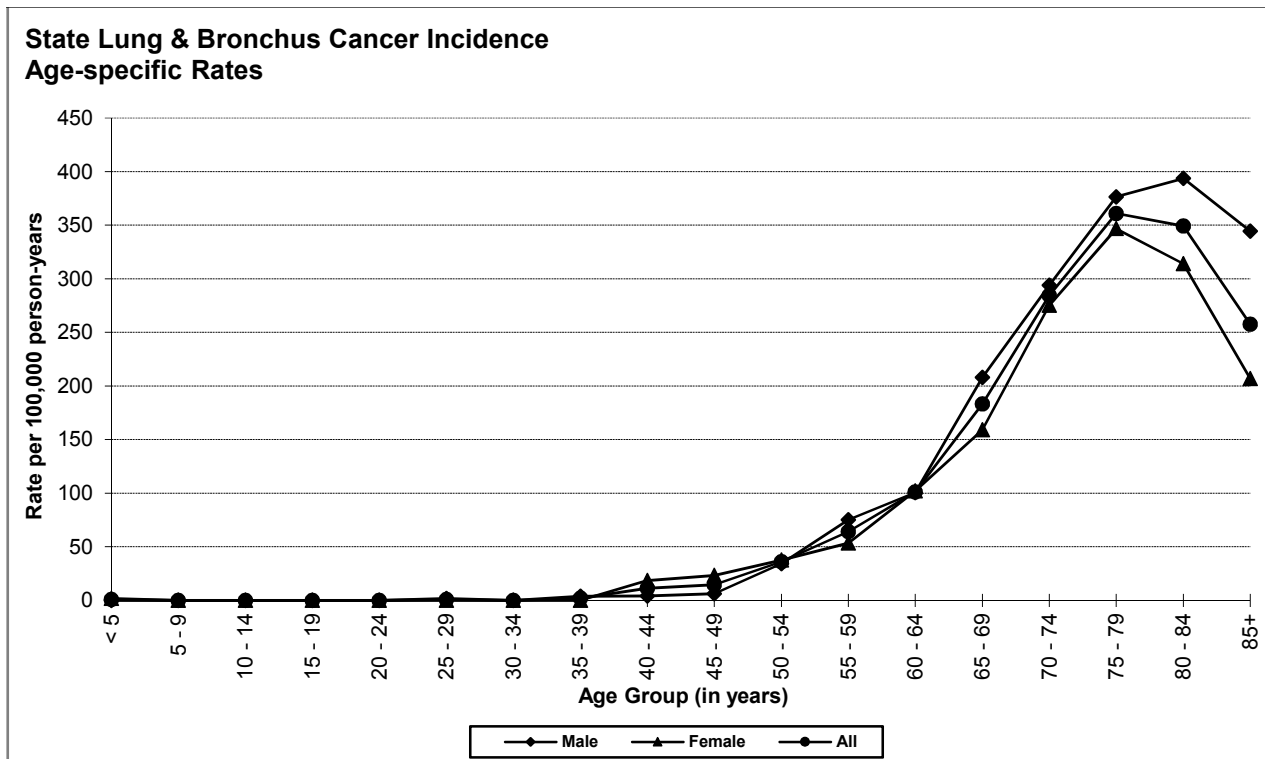
Risk and Associated Factors

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:	45.8
95% confidence interval on the mean age-adjusted incidence rate:	39.1- 52.5
Median age-adjusted incidence rate of health districts:	47.9
Range of age-adjusted incidence rate for health districts:	31.8- 59.5
USCS rate (2012, all races):	60.4

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 80-84 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 District 7 had statistically significantly fewer.



MELANOMA OF SKIN

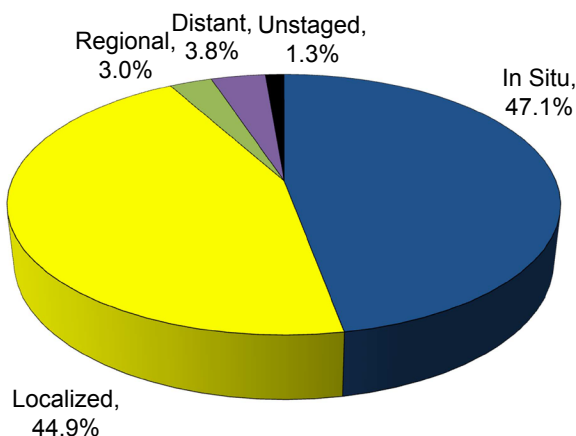
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	26.1	29.9	23.2
# of new invasive cases	447	250	197
# of new in-situ cases	398	239	159
# of deaths	67	41	26

Total Cases by County

Ada	256	Cassia	9	Lewis	1
Adams	3	Clark	2	Lincoln	3
Bannock	35	Clearwater	10	Madison	8
Bear Lake	3	Custer	4	Minidoka	7
Benewah	7	Elmore	9	Nez Perce	15
Bingham	19	Franklin	-	Oneida	1
Blaine	17	Fremont	4	Owyhee	4
Boise	1	Gem	10	Payette	12
Bonner	30	Gooding	12	Power	2
Bonneville	66	Idaho	14	Shoshone	4
Boundary	5	Jefferson	12	Teton	6
Butte	-	Jerome	-	Twin Falls	21
Camas	1	Kootenai	106	Valley	5
Canyon	90	Latah	12	Washington	9
Caribou	2	Lemhi	8		

Stage at Diagnosis - Melanoma of Skin



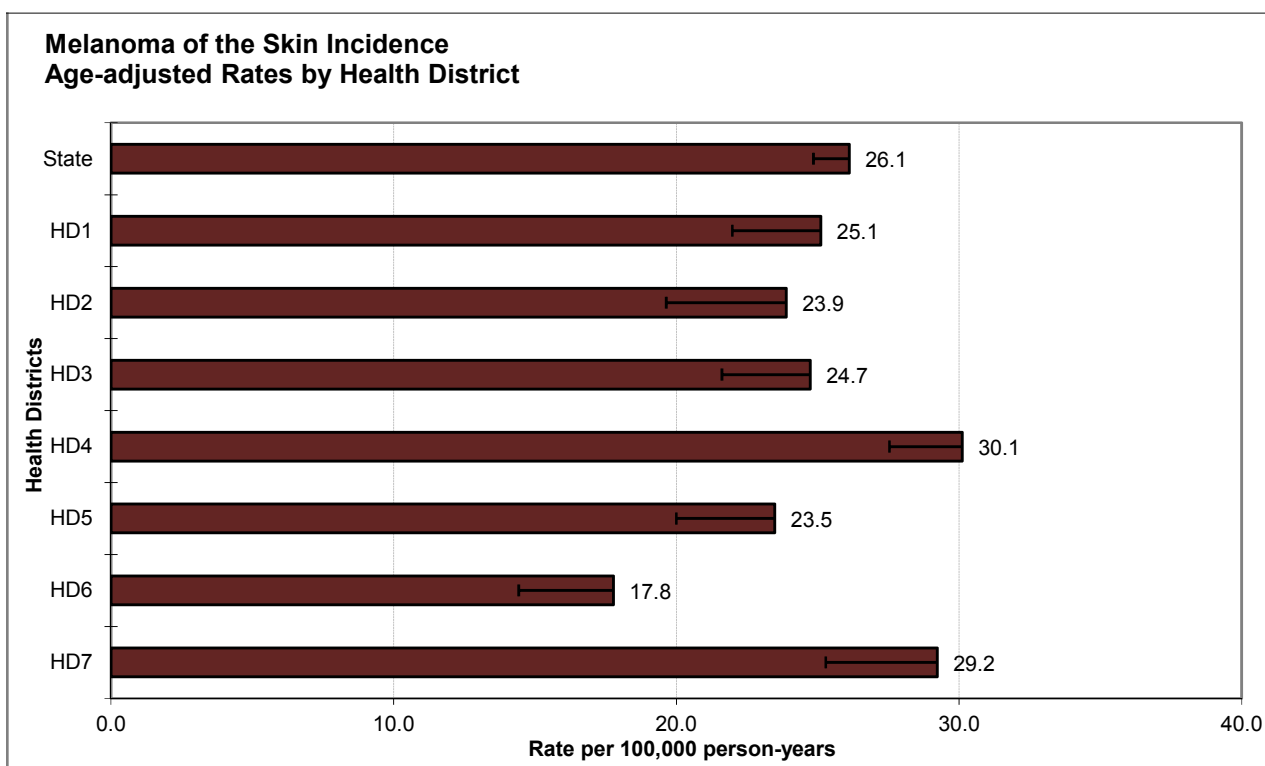
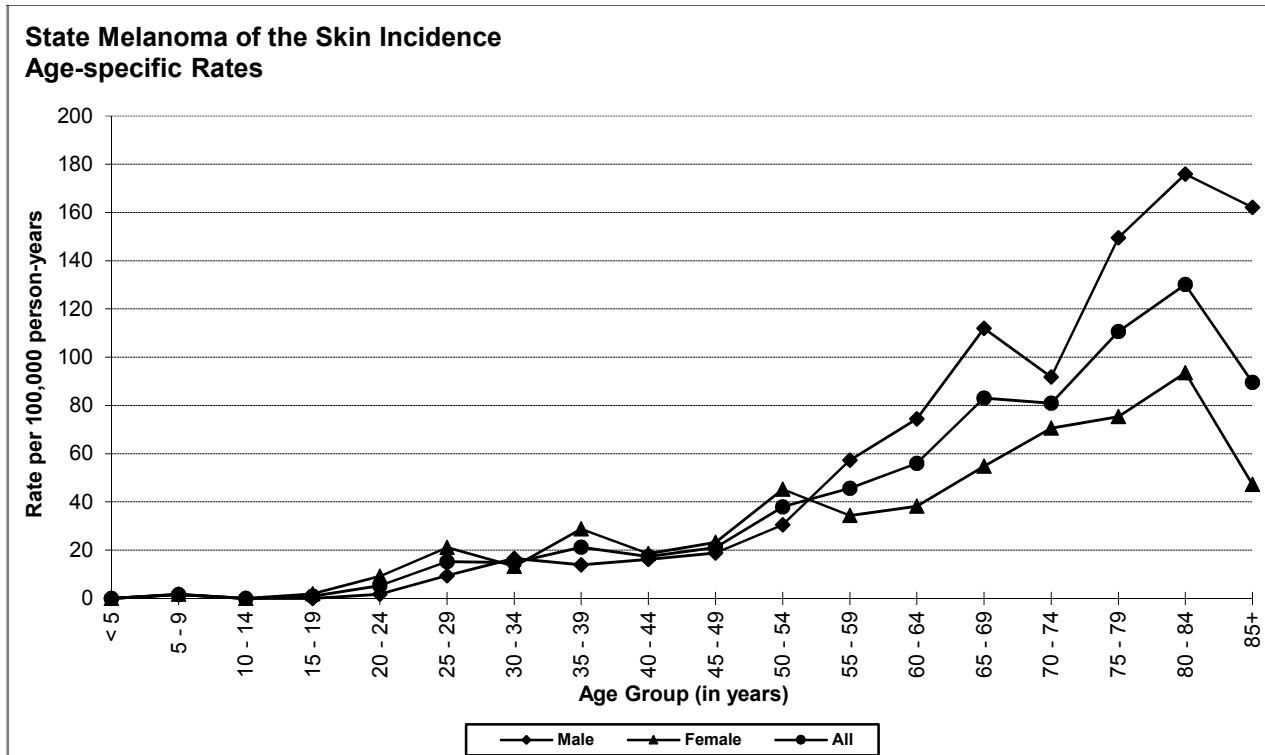
Risk and Associated Factors

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:	24.9
95% confidence interval on the mean age-adjusted incidence rate:	21.9- 27.9
Median age-adjusted incidence rate of health districts:	24.7
Range of age-adjusted incidence rate for health districts:	17.8- 30.1
USCS rate (2012, all races):	19.9

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 6 had statistically significantly fewer.



MYELOMA

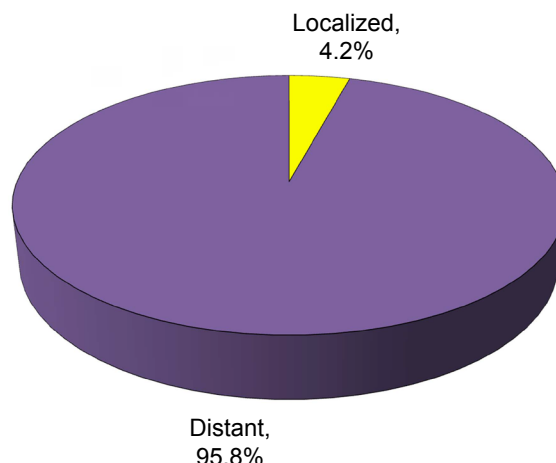
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	5.5	6.1	4.9
# of new invasive cases	95	52	43
# of new in-situ cases	0	0	0
# of deaths	61	35	26

Total Cases by County

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

Stage at Diagnosis - Myeloma



Risk and Associated Factors

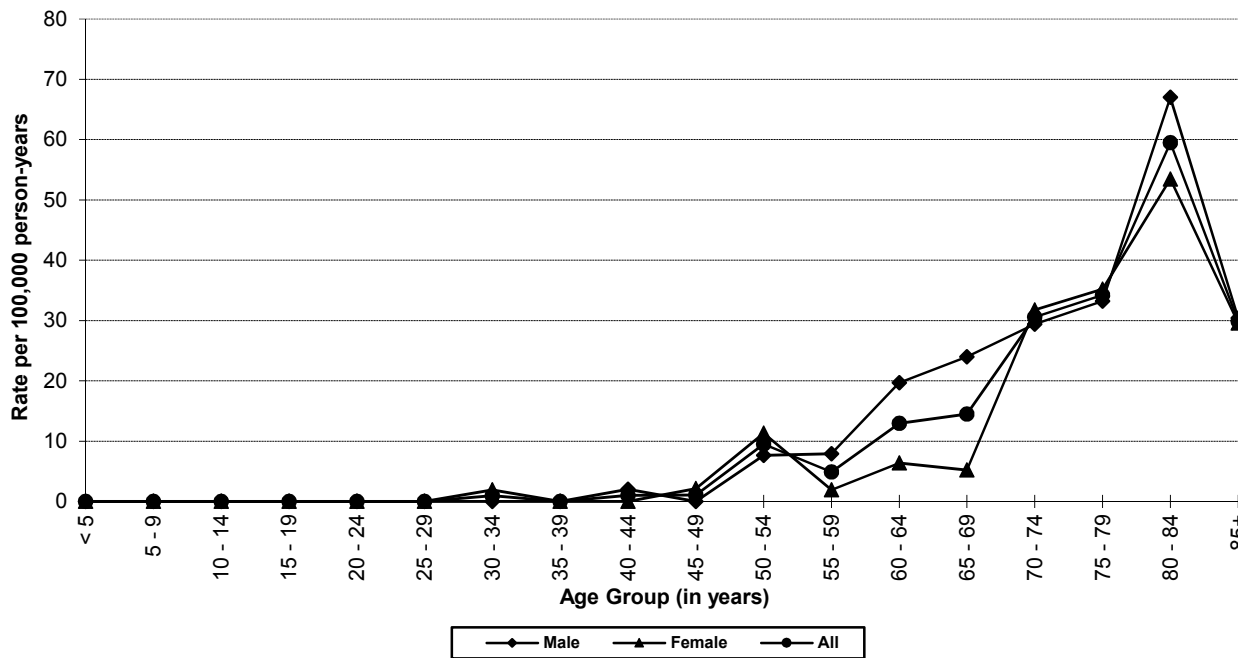
Age	Multiple myeloma is an age-dependent cancer; incidence rates increase with age and it rarely occurs before age 40.
Gender	Rates for males are somewhat higher than for females.
Race	Blacks have higher incidence rates than whites.
Genetics	Genetic factors play an important role in its development, 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

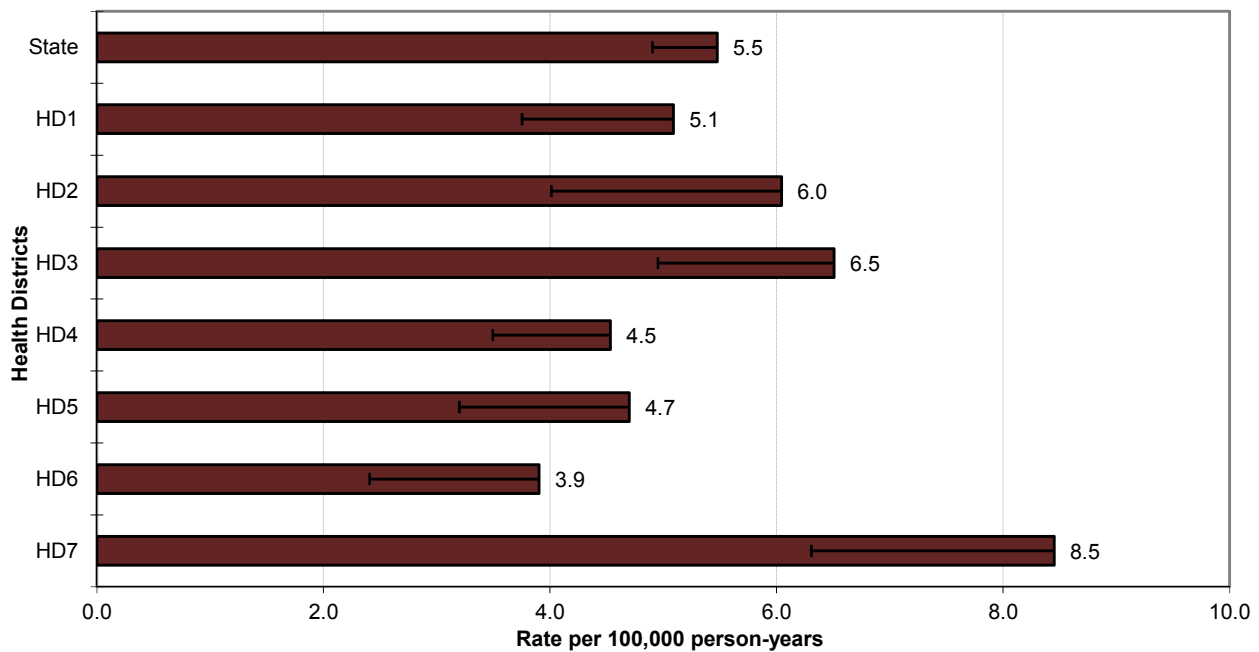
Mean age-adjusted incidence rate across health districts:	5.6
95% confidence interval on the mean age-adjusted incidence rate:	4.5- 6.7
Median age-adjusted incidence rate of health districts:	5.1
Range of age-adjusted incidence rate for health districts:	3.9- 8.5
USCS rate (2011, all races):	6.3

There were few 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 55-59. 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



Myeloma Incidence Age-adjusted Rates by Health District



NON-HODGKIN LYMPHOMA

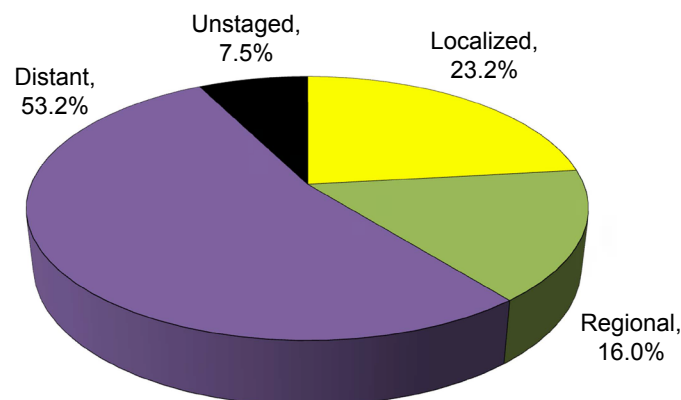
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	17.0	18.8	15.5
# of new invasive cases	293	153	140
# of new in-situ cases	0	0	0
# of deaths	110	61	49

Total Cases by County

Ada	67	Cassia	3	Lewis	2
Adams	2	Clark	-	Lincoln	-
Bannock	13	Clearwater	-	Madison	2
Bear Lake	-	Custer	-	Minidoka	3
Benewah	1	Elmore	3	Nez Perce	16
Bingham	9	Franklin	-	Oneida	-
Blaine	5	Fremont	1	Owyhee	1
Boise	1	Gem	6	Payette	6
Bonner	8	Gooding	-	Power	1
Bonneville	23	Idaho	5	Shoshone	2
Boundary	3	Jefferson	4	Teton	1
Butte	2	Jerome	4	Twin Falls	14
Camas	-	Kootenai	41	Valley	3
Canyon	32	Latah	5	Washington	-
Caribou	3	Lemhi	1		

Stage at Diagnosis - Non-Hodgkin Lymphoma



Risk and Associated Factors

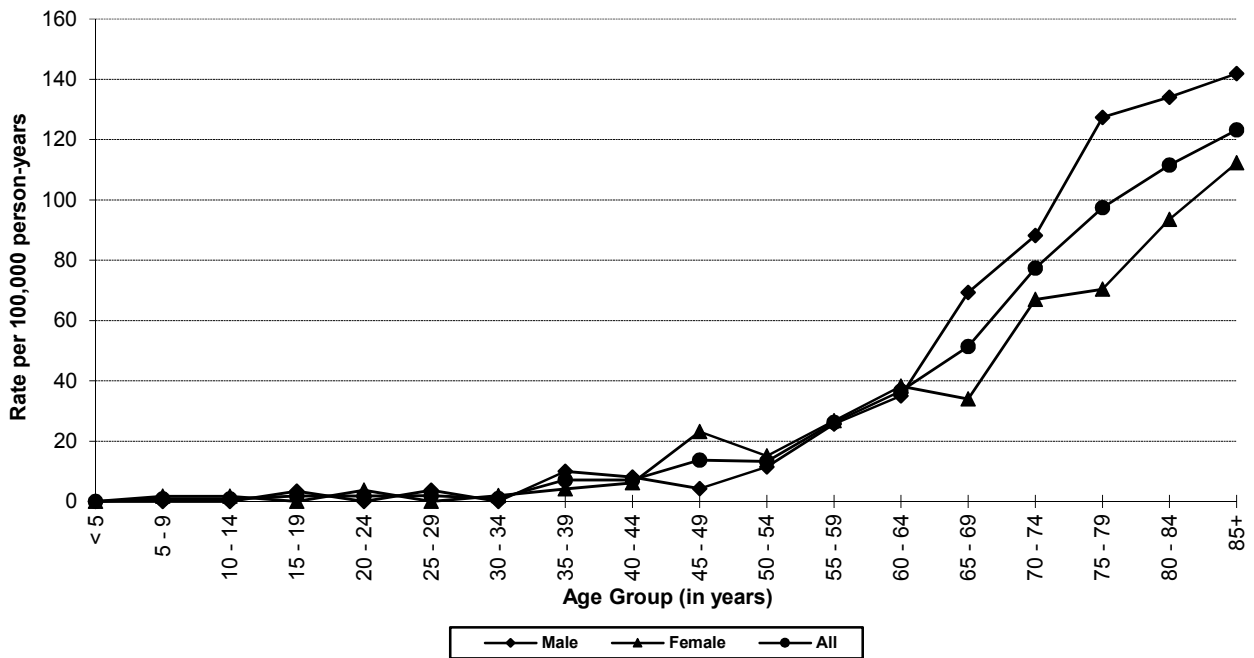
Age	Rates increase with age, reaching the highest levels in the eighth and ninth decades of life.
Gender	Males have higher rates than females.
Race & SES	Generally in the United States, incidence rates are generally higher for whites than blacks. Rates are higher in upper income groups.
Occupation	Exposure 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

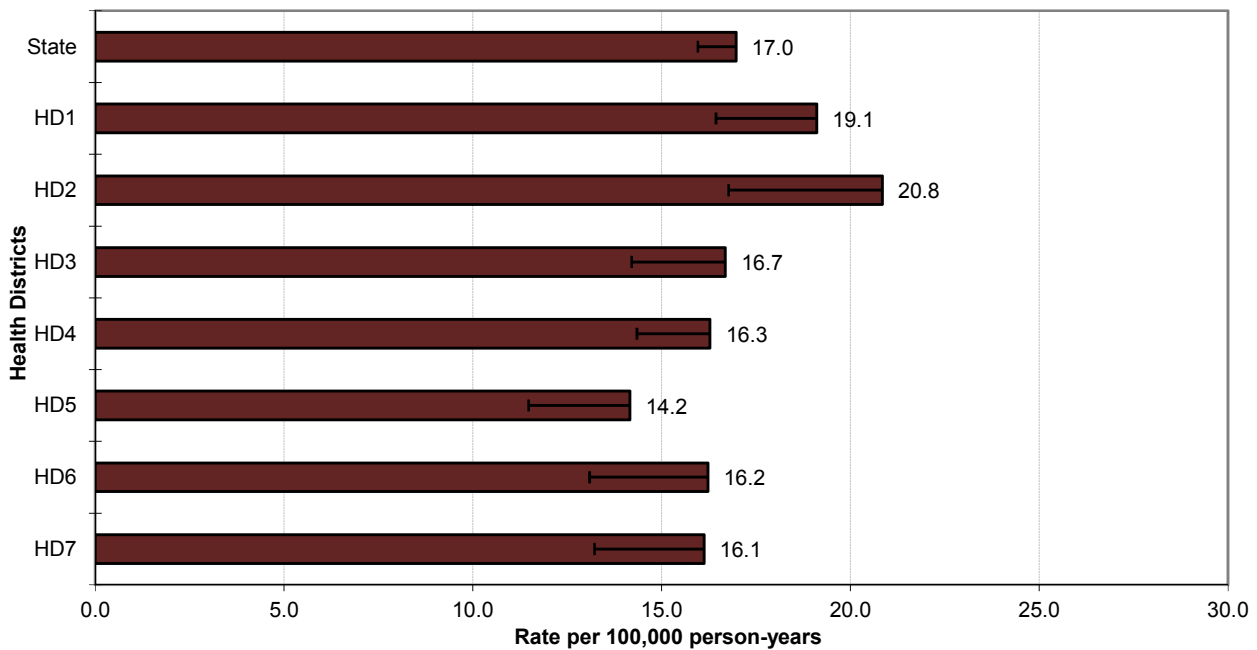
Mean age-adjusted incidence rate across health districts:	17.1
95% confidence interval on the mean age-adjusted incidence rate:	15.4- 18.7
Median age-adjusted incidence rate of health districts:	16.3
Range of age-adjusted incidence rate for health districts:	14.2- 20.8
USCS rate (2012, all races):	18.5

The age-specific incidence rates of non-Hodgkin lymphoma increased with age, peaking in the age group 85+ 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



Non-Hodgkin Lymphoma Incidence Age-adjusted Rates by Health District



ORAL CAVITY AND PHARYNX

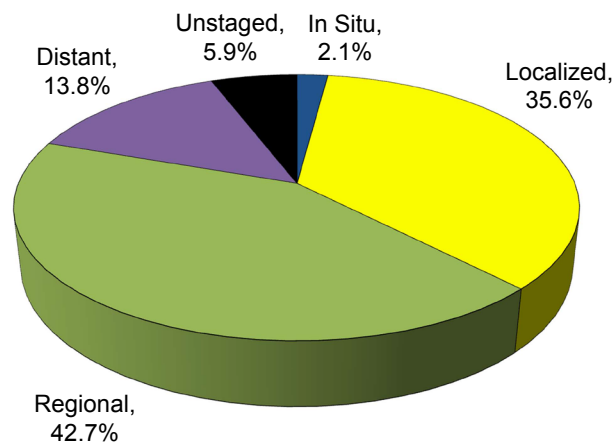
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	12.7	17.8	8.0
# of new invasive cases	234	159	75
# of new in-situ cases	5	3	2
# of deaths	41	28	13

Total Cases by County

Ada	64	Cassia	1	Lewis	-
Adams	1	Clark	-	Lincoln	-
Bannock	4	Clearwater	1	Madison	1
Bear Lake	-	Custer	-	Minidoka	6
Benewah	2	Elmore	6	Nez Perce	8
Bingham	3	Franklin	-	Oneida	1
Blaine	5	Fremont	1	Owyhee	-
Boise	1	Gem	5	Payette	5
Bonner	15	Gooding	1	Power	1
Bonneville	10	Idaho	3	Shoshone	2
Boundary	-	Jefferson	3	Teton	2
Butte	-	Jerome	3	Twin Falls	12
Camas	-	Kootenai	27	Valley	1
Canyon	34	Latah	6	Washington	1
Caribou	-	Lemhi	3		

Stage at Diagnosis - Oral Cavity and Pharynx



Risk and Associated Factors

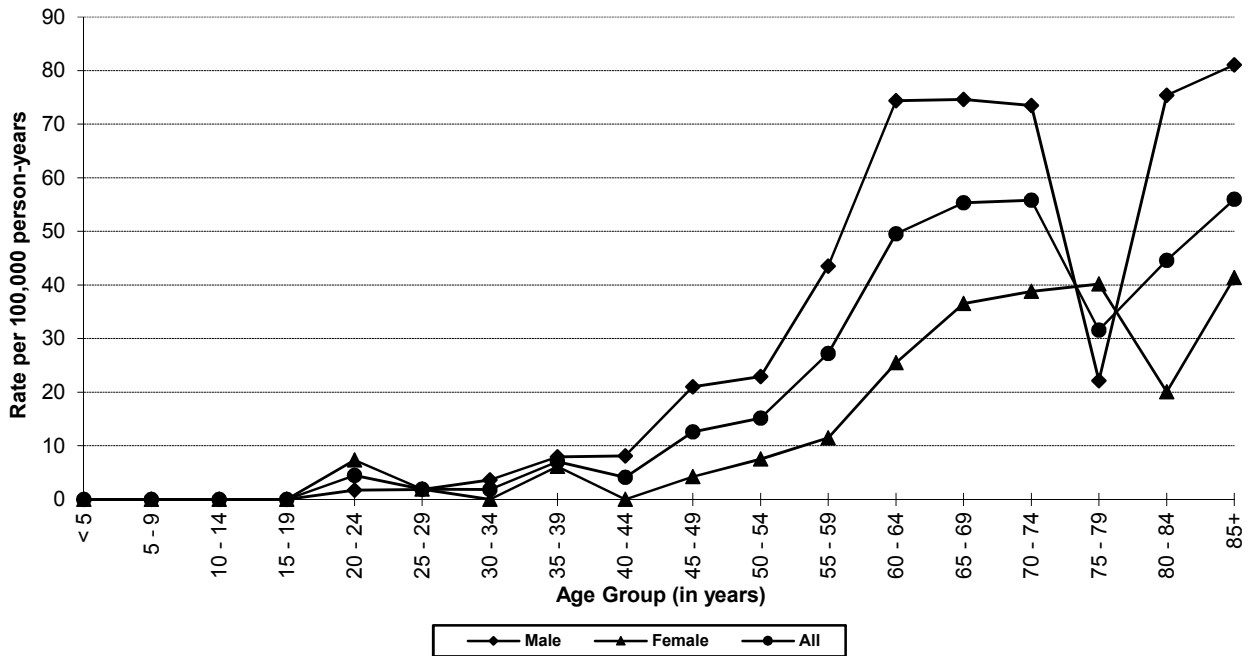
Age	Most cases occur in people over age 60.
Gender	Males have higher incidence rates than females, 2-6 times higher in most parts of the world.
Race & SES	Rates are higher for blacks than for whites. Rates are also higher among lower income groups.
Diet	Diets low in fresh fruit and vegetable consumption 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

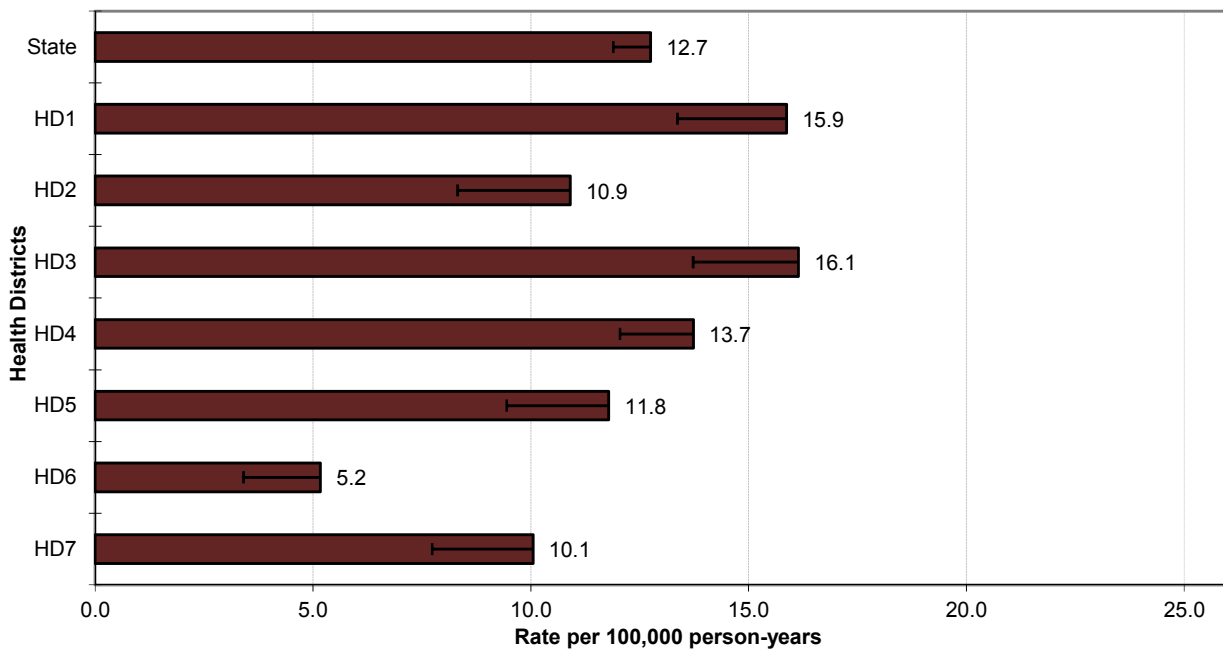
Mean age-adjusted incidence rate across health districts:	12.0
95% confidence interval on the mean age-adjusted incidence rate:	9.1- 14.8
Median age-adjusted incidence rate of health districts:	11.8
Range of age-adjusted incidence rate for health districts:	5.2- 16.1
USCS rate (2012, all races):	11.2

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 85+ for both males and females. Health District 6 had statistically significantly fewer cases of oral cavity and pharyngeal cancers 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

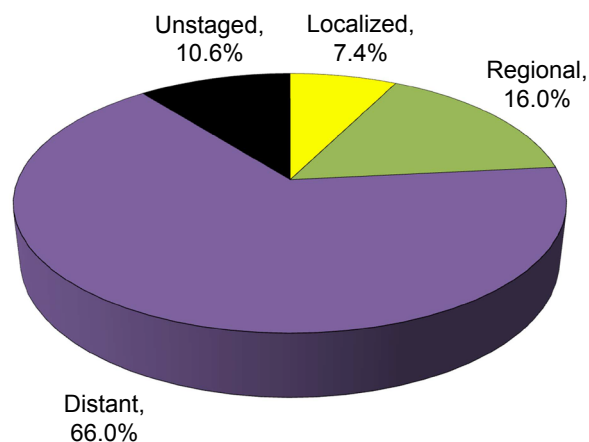
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	-	10.1
# of new invasive cases	-	-	94
# of new in-situ cases	-	-	0
# of deaths	-	-	84

Total Cases by County

Ada	22	Cassia	-	Lewis	-
Adams	1	Clark	-	Lincoln	-
Bannock	6	Clearwater	1	Madison	-
Bear Lake	-	Custer	1	Minidoka	1
Benewah	1	Elmore	-	Nez Perce	3
Bingham	3	Franklin	2	Oneida	-
Blaine	-	Fremont	1	Owyhee	1
Boise	-	Gem	3	Payette	-
Bonner	3	Gooding	2	Power	1
Bonneville	9	Idaho	1	Shoshone	-
Boundary	2	Jefferson	4	Teton	-
Butte	-	Jerome	-	Twin Falls	3
Camas	-	Kootenai	6	Valley	2
Canyon	13	Latah	1	Washington	-
Caribou	1	Lemhi	-		

Stage at Diagnosis - Ovary



Risk and Associated Factors

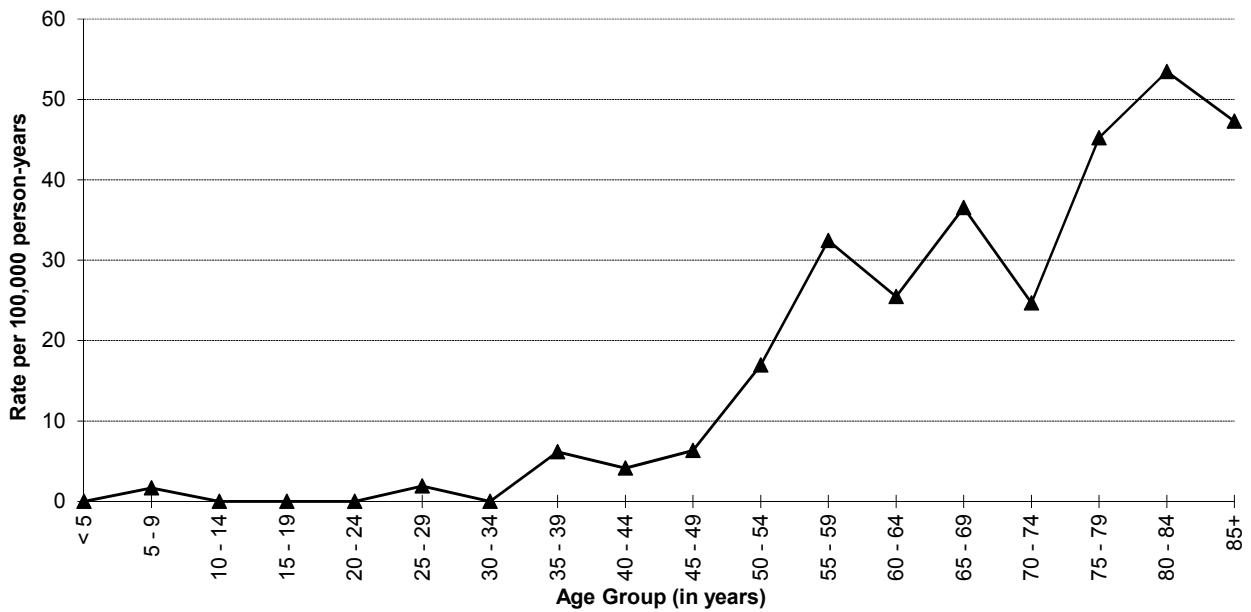
Age	The rate of ovarian cancer increases with age, and it is primarily a disease of older women.
Race & SES	Incidence rates are slightly higher among white females than blacks. Rates are higher among upper income groups.
Genetics	The most important risk factor for ovarian cancer is a family history of 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

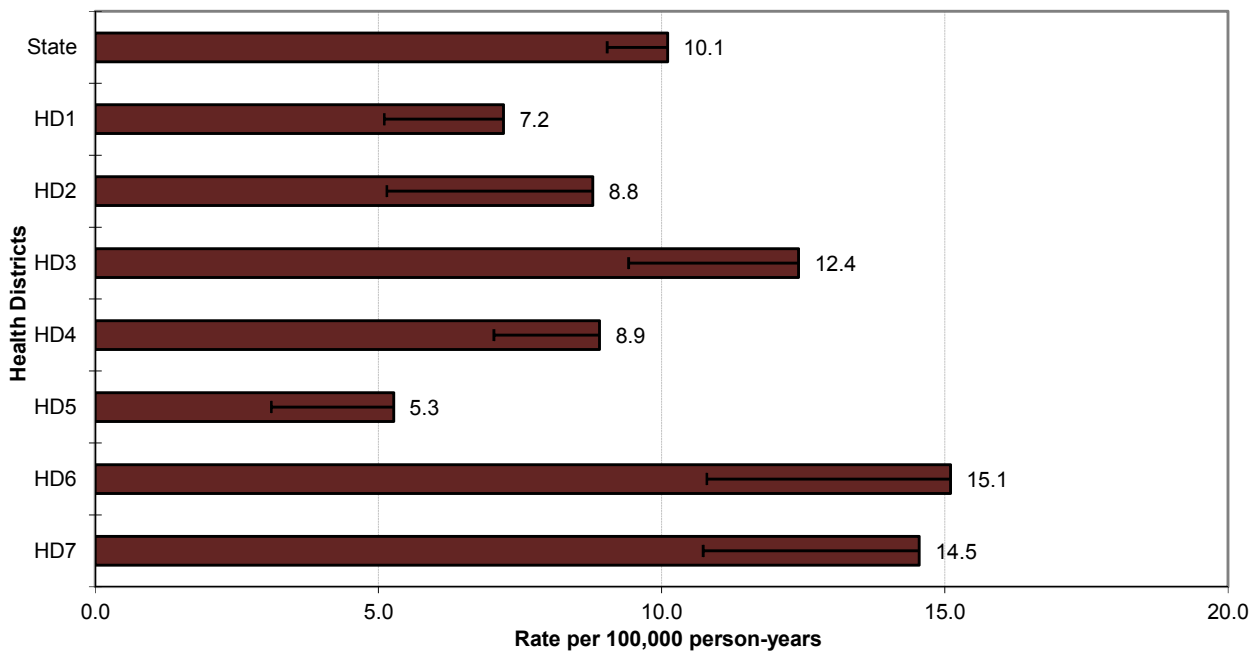
Mean age-adjusted incidence rate across health districts:	10.3
95% confidence interval on the mean age-adjusted incidence rate:	7.5- 13.1
Median age-adjusted incidence rate of health districts:	8.9
Range of age-adjusted incidence rate for health districts:	5.3- 15.1
USCS rate (2012, all races):	11.3

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. No health district had statistically significantly more, or fewer, cases than expected based upon rates for the remainder of Idaho.

State Ovarian Cancer Incidence Age-specific Rates



Ovarian Cancer Incidence Age-adjusted Rates by Health District



PANCREAS

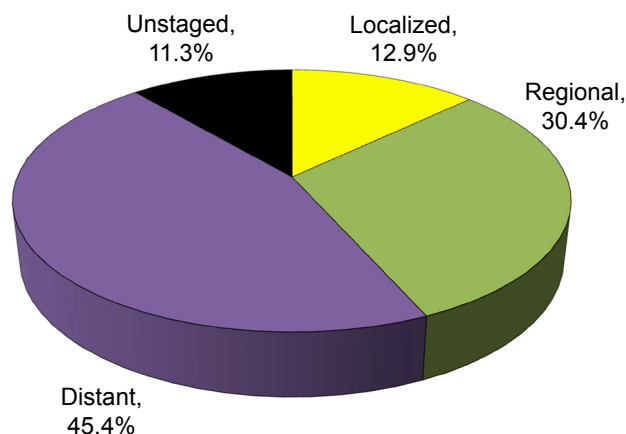
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	13.4	15.4	11.8
# of new invasive cases	240	127	113
# of new in-situ cases	0	0	0
# of deaths	212	113	99

Total Cases by County

Ada	63	Cassia	3	Lewis	-
Adams	1	Clark	-	Lincoln	-
Bannock	9	Clearwater	6	Madison	3
Bear Lake	1	Custer	1	Minidoka	3
Benewah	1	Elmore	5	Nez Perce	15
Bingham	5	Franklin	4	Oneida	-
Blaine	3	Fremont	-	Owyhee	-
Boise	-	Gem	2	Payette	3
Bonner	7	Gooding	1	Power	-
Bonneville	9	Idaho	2	Shoshone	-
Boundary	2	Jefferson	4	Teton	-
Butte	-	Jerome	8	Twin Falls	12
Camas	-	Kootenai	24	Valley	1
Canyon	28	Latah	7	Washington	3
Caribou	1	Lemhi	3		

Stage at Diagnosis - Pancreas



Risk and Associated Factors

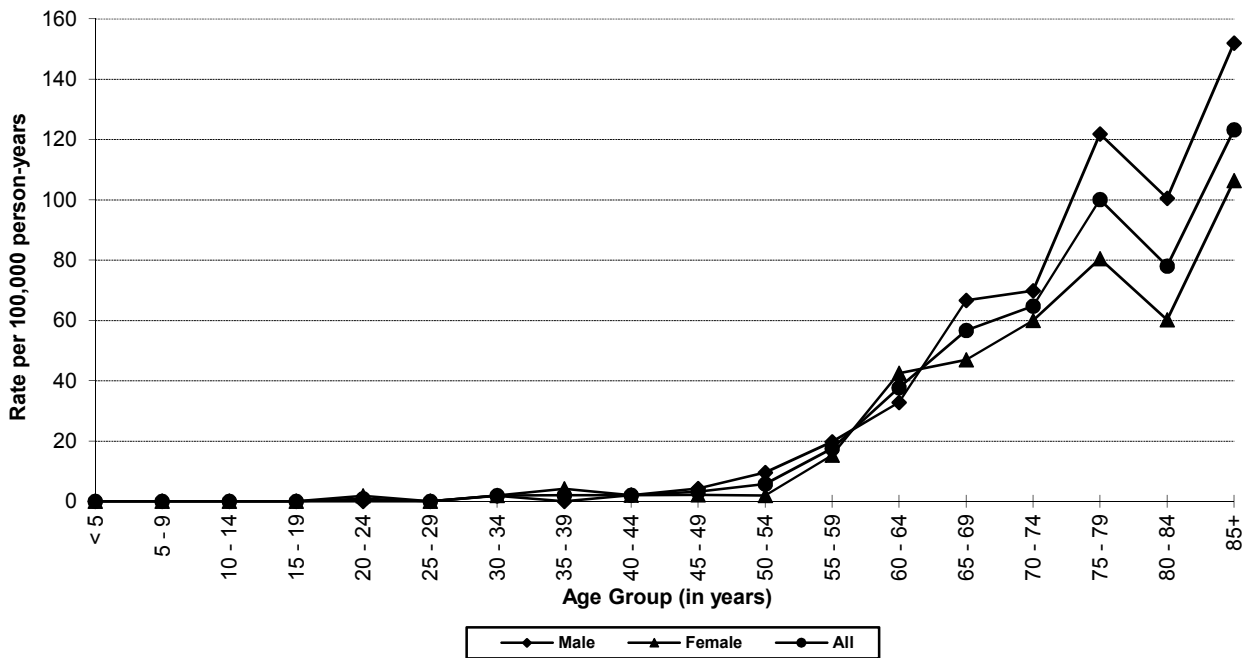
Age	Pancreatic cancer increases with age and is rare in persons younger than 40 years old.
Gender	Incidence rates of pancreatic cancer are about 50% higher in males than females.
Race	In the United States, the incidence is higher in blacks.
Diet	Investigators have generally found increased risks associated 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

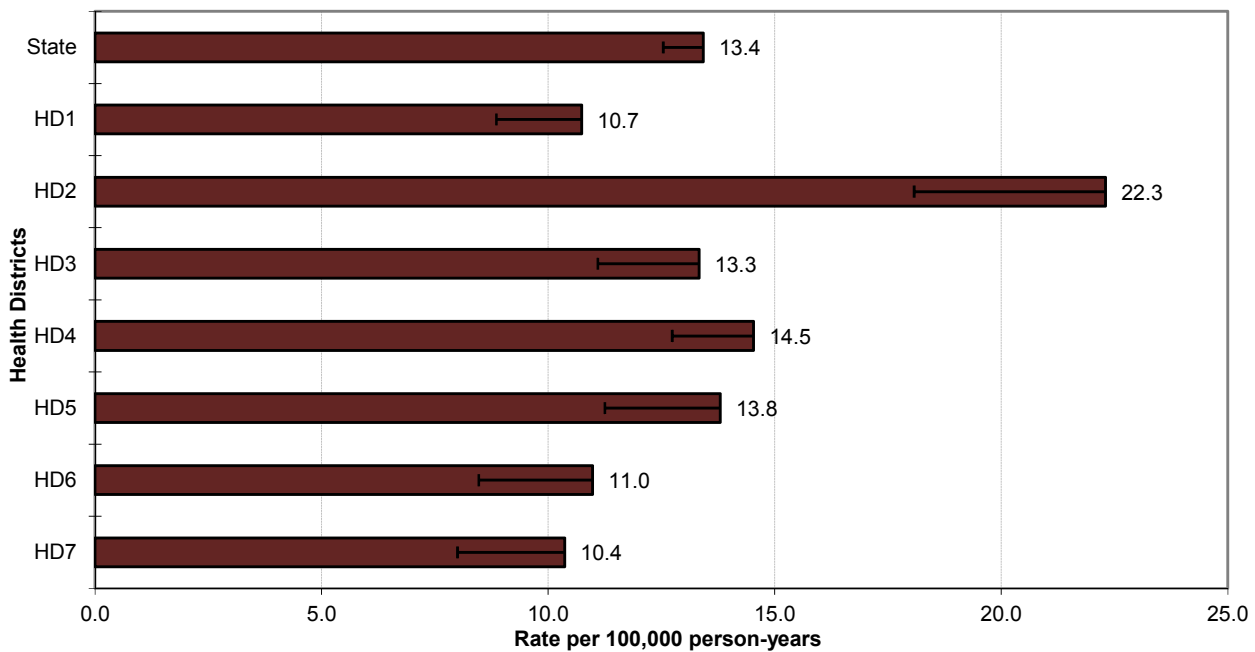
Mean age-adjusted incidence rate across health districts:	13.7
95% confidence interval on the mean age-adjusted incidence rate:	10.7- 16.8
Median age-adjusted incidence rate of health districts:	13.3
Range of age-adjusted incidence rate for health districts:	10.4- 22.3
USCS rate (2012, all races):	12.3

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 2 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



Pancreas Cancer Incidence Age-adjusted Rates by Health District



PROSTATE

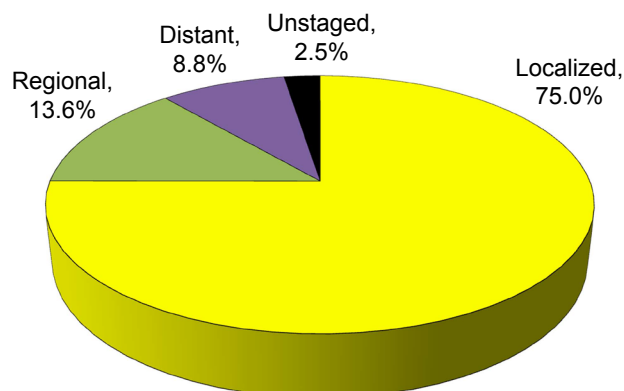
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	101.4	-
# of new invasive cases	-	909	-
# of new in-situ cases	-	0	-
# of deaths	-	160	-

Total Cases by County

Ada	237	Cassia	10	Lewis	4
Adams	4	Clark	-	Lincoln	6
Bannock	37	Clearwater	14	Madison	7
Bear Lake	4	Custer	5	Minidoka	14
Benewah	3	Elmore	6	Nez Perce	39
Bingham	28	Franklin	5	Oneida	4
Blaine	23	Fremont	13	Owyhee	7
Boise	5	Gem	11	Payette	11
Bonner	30	Gooding	6	Power	2
Bonneville	49	Idaho	5	Shoshone	6
Boundary	14	Jefferson	10	Teton	3
Butte	-	Jerome	8	Twin Falls	35
Camas	1	Kootenai	92	Valley	10
Canyon	104	Latah	13	Washington	9
Caribou	5	Lemhi	10		

Stage at Diagnosis - Prostate



Risk and Associated Factors

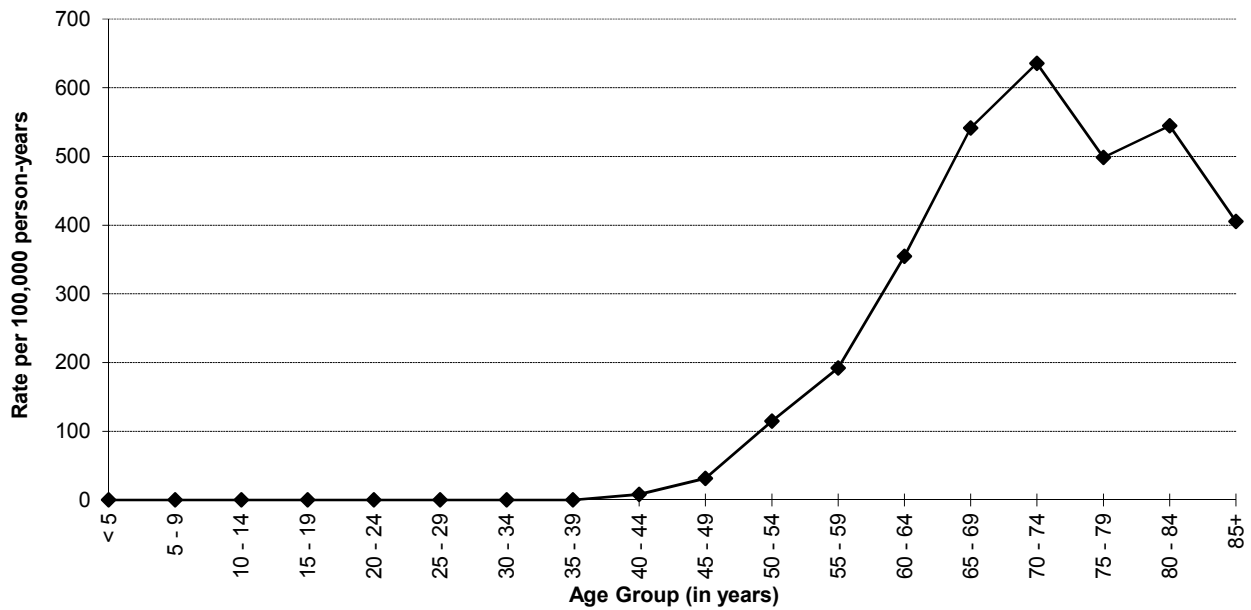
Age	Prostate cancer is rarely diagnosed before age 50, and it is primarily a disease of older men.
Race	Black males have substantially higher incidence and mortality rates than white males.
Genetics	A family history of prostate cancer is associated with increased risk.
Diet	Dietary fat has been implicated 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

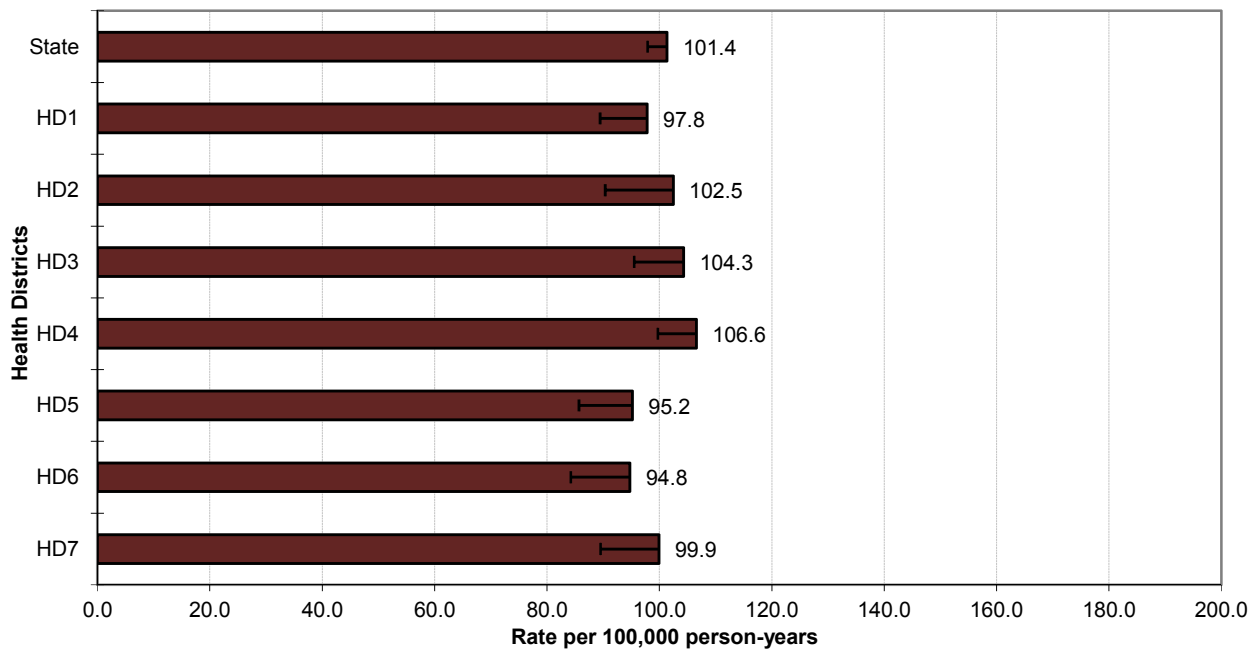
Mean age-adjusted incidence rate across health districts:	100.2
95% confidence interval on the mean age-adjusted incidence rate:	96.8- 103.5
Median age-adjusted incidence rate of health districts:	99.9
Range of age-adjusted incidence rate for health districts:	94.8- 106.6
USCS rate (2012, all races):	105.3

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



Prostate Cancer Incidence Age-adjusted Rates by Health District



STOMACH

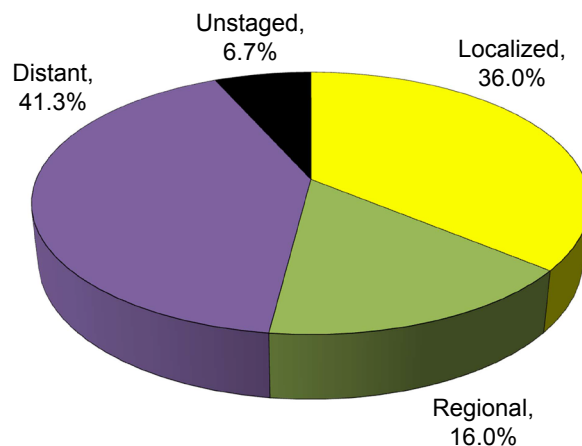
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	4.2	5.9	2.7
# of new invasive cases	75	50	25
# of new in-situ cases	0	0	0
# of deaths	35	27	8

Total Cases by County

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

Stage at Diagnosis - Stomach



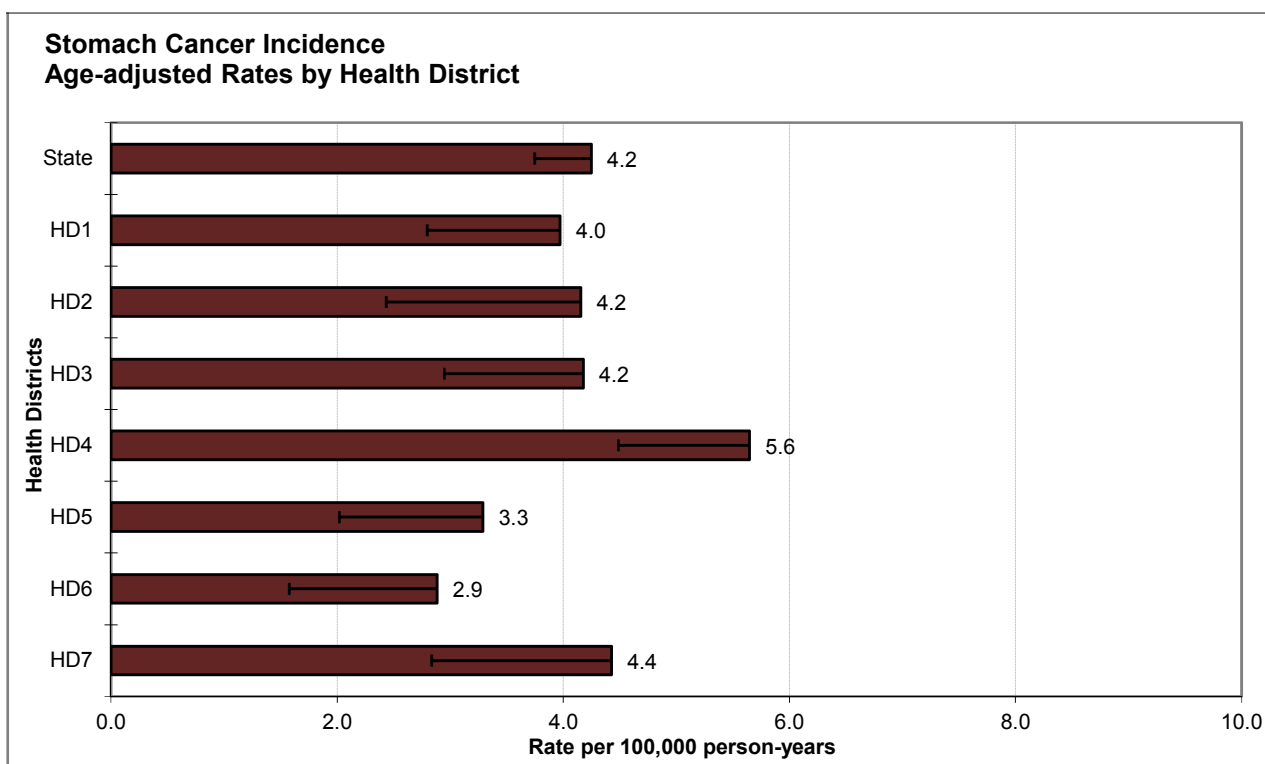
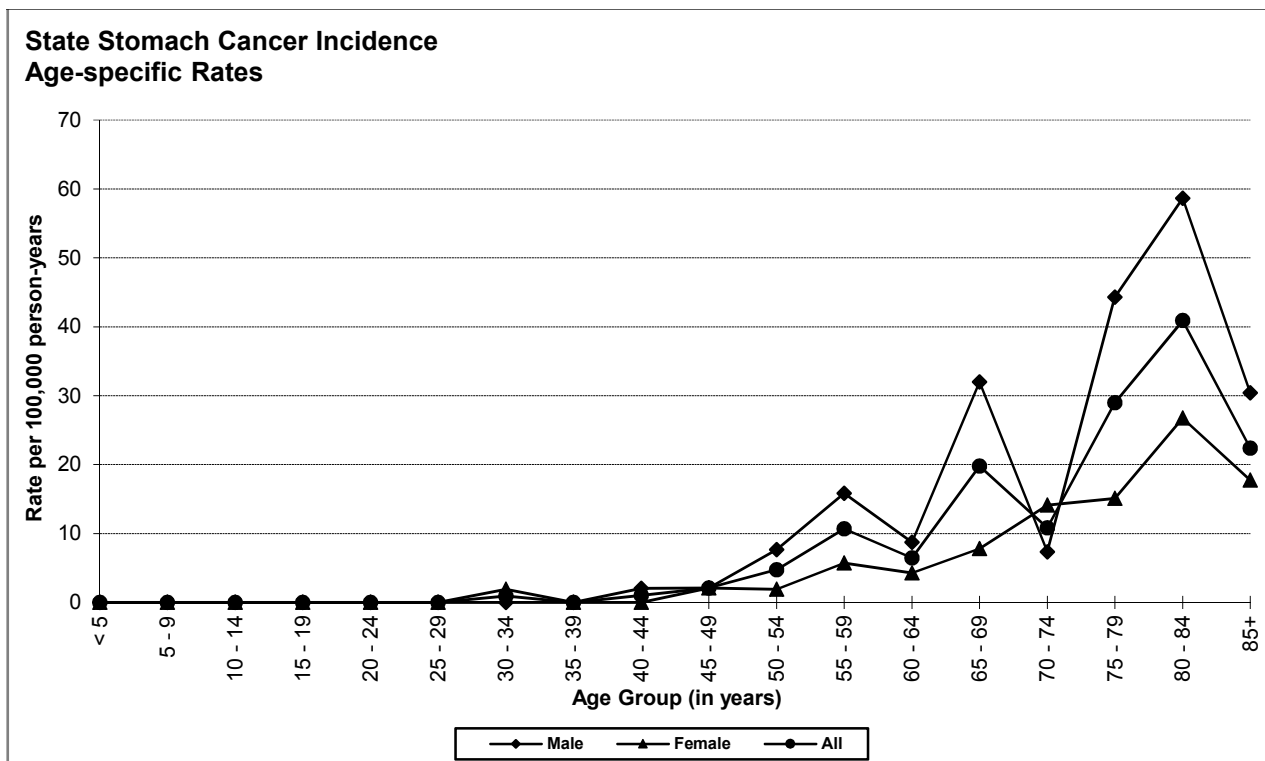
Risk and Associated Factors

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:	4.1
95% confidence interval on the mean age-adjusted incidence rate:	3.4- 4.7
Median age-adjusted incidence rate of health districts:	4.2
Range of age-adjusted incidence rate for health districts:	2.9- 5.6
USCS rate (2012, 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 80-84 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.



TESTIS

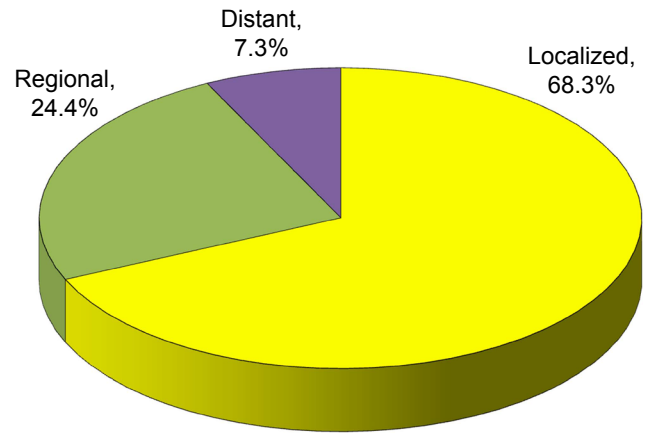
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	-	5.5	-
# of new invasive cases	-	41	-
# of new in-situ cases	-	0	-
# of deaths	-	1	-

Total Cases by County

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

Stage at Diagnosis - Testis



Risk and Associated Factors

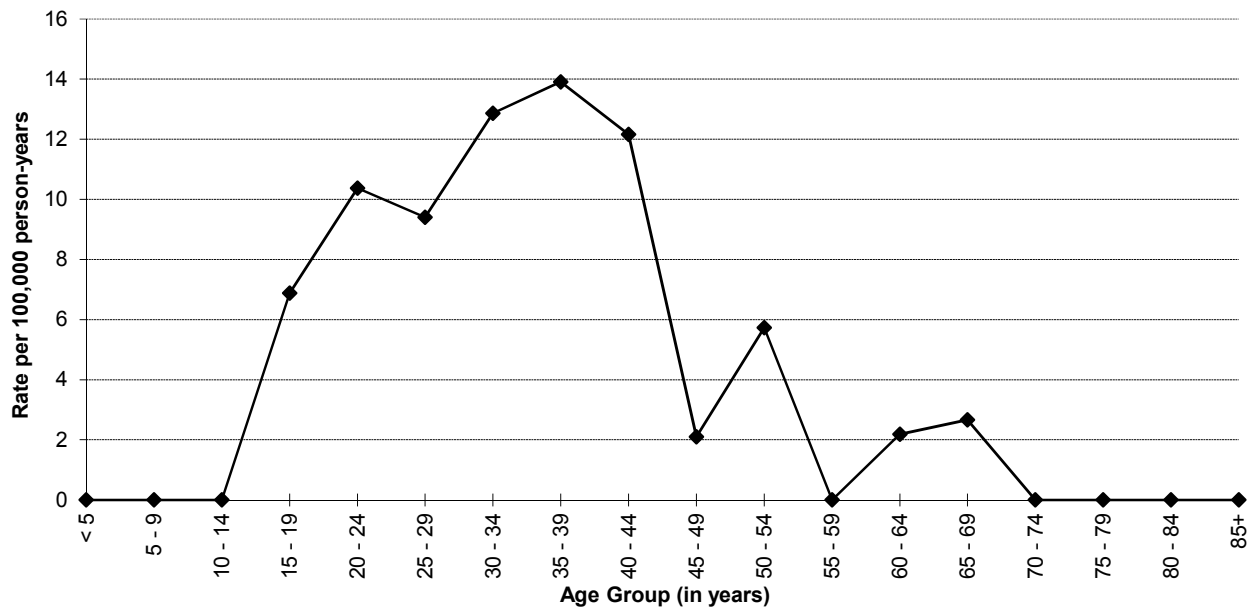
Age	Testicular cancer is the most common cancer in young males, especially males between the ages of 20 and 34.
Race & SES	Incidence rates are substantially higher in white males than in black males. Incidence of testicular cancer is highest in highest socioeconomic classes.
Other	Undescended testis, 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

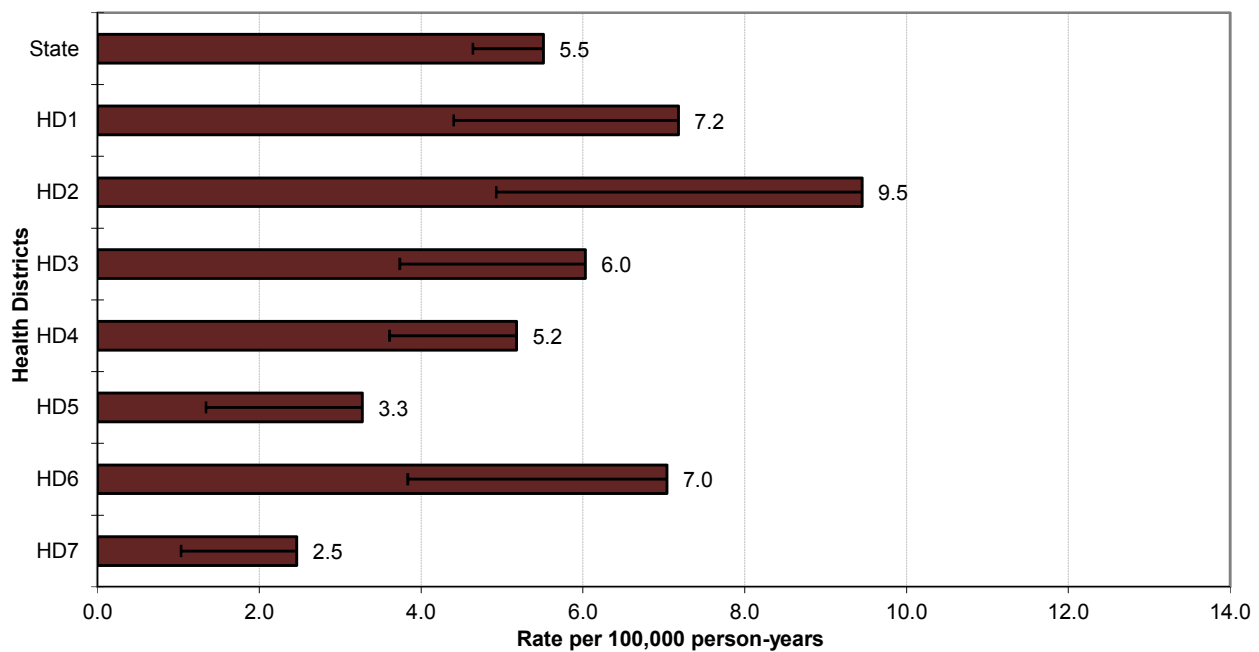
Mean age-adjusted incidence rate across health districts:	5.8
95% confidence interval on the mean age-adjusted incidence rate:	4.0- 7.6
Median age-adjusted incidence rate of health districts:	6.0
Range of age-adjusted incidence rate for health districts:	2.5- 9.5
USCS rate (2012, all races):	5.5

The highest age-specific incidence rate was in the 35-39 age group. No health district had statistically significantly fewer or more cases than expected based upon rates for the remainder of Idaho.

State Testis Cancer Incidence Age-specific Rates



Testis Cancer Incidence Age-adjusted Rates by Health District



THYROID

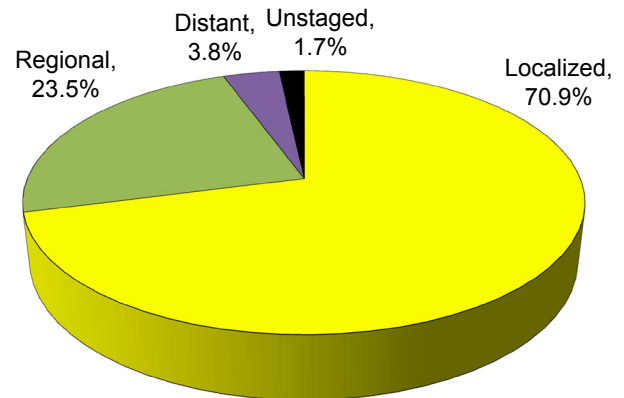
Incidence and Mortality Summary

	Total	Male	Female
Age-adjusted incidence rate per 100,000	14.7	7.6	21.8
# of new invasive cases	234	63	171
# of new in-situ cases	0	0	0
# of deaths	10	4	6

Total Cases by County

Ada	61	Cassia	2	Lewis	1
Adams	1	Clark	-	Lincoln	-
Bannock	12	Clearwater	4	Madison	12
Bear Lake	1	Custer	-	Minidoka	5
Benewah	-	Elmore	3	Nez Perce	6
Bingham	4	Franklin	1	Oneida	-
Blaine	1	Fremont	1	Owyhee	2
Boise	-	Gem	6	Payette	3
Bonner	1	Gooding	5	Power	1
Bonneville	25	Idaho	4	Shoshone	3
Boundary	-	Jefferson	7	Teton	2
Butte	2	Jerome	1	Twin Falls	8
Camas	1	Kootenai	23	Valley	-
Canyon	19	Latah	3	Washington	2
Caribou	-	Lemhi	1		

Stage at Diagnosis - Thyroid



Risk and Associated Factors

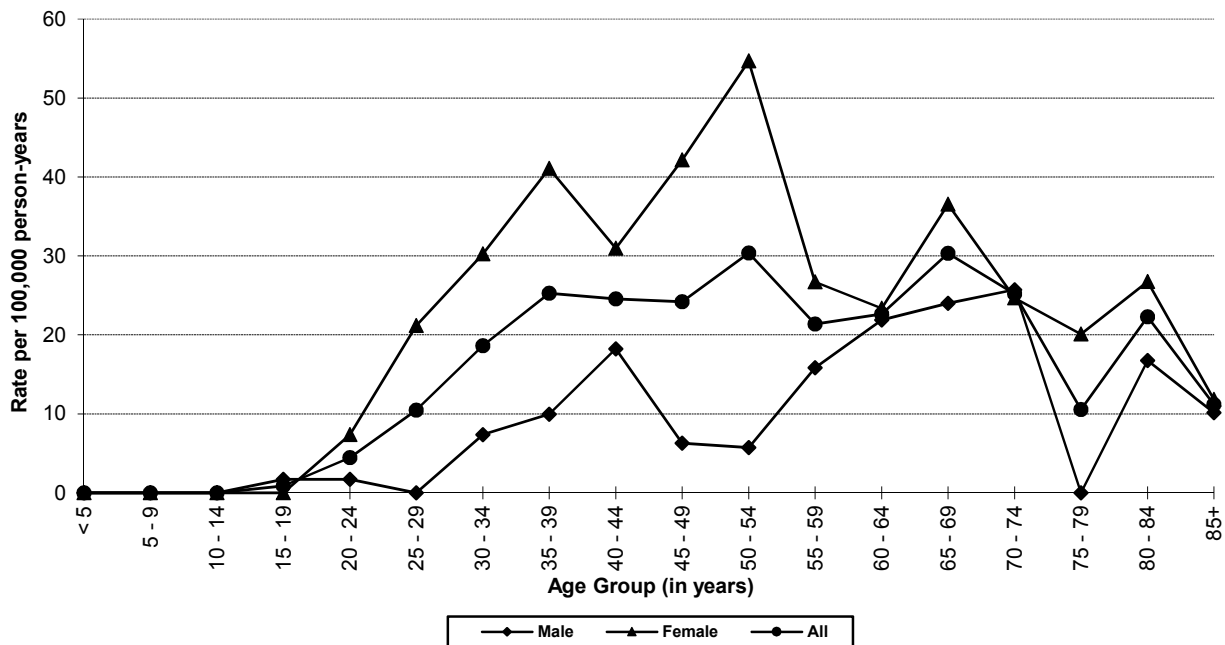
Age	Thyroid cancer is one of the most common malignancies affecting adolescents and adults up to 50 years of age.
Gender	Two-thirds of the cases are among females.
Race & SES	The incidence is higher among whites and in upper income groups.
Hormonal	Hormonal factors are believed to contribute to the increased 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

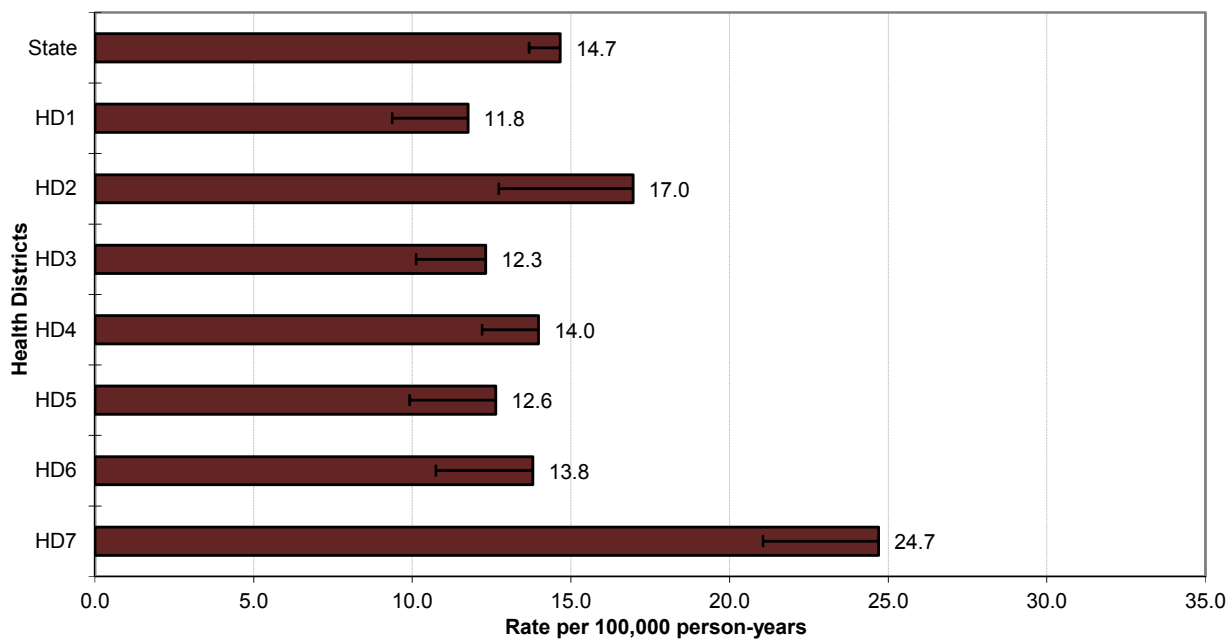
Mean age-adjusted incidence rate across health districts:	15.2
95% confidence interval on the mean age-adjusted incidence rate:	11.8- 18.5
Median age-adjusted incidence rate of health districts:	13.8
Range of age-adjusted incidence rate for health districts:	11.8- 24.7
USCS rate (2012, all races):	14.3

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.

State Thyroid Cancer Incidence Age-specific Rates



Thyroid Cancer Incidence Age-adjusted Rates by Health District



SECTION II

STATE OF IDAHO – 2013 INCIDENCE DATA BY SITE AND GENDER

Idaho Resident Cancer Cases - 2013

Primary Site of Cancer	Invasive			In situ		
	Total	Male	Female	Total	Male	Female
All Sites	7,141	3,615	3,526	845	430	415
Oral Cavity and Pharynx	233	158	75	5	3	2
Lip	26	16	10	1	-	1
Tongue	60	48	12	1	1	-
Salivary Gland	27	17	10	-	-	-
Floor of Mouth	9	5	4	-	-	-
Gum and Other Mouth	33	16	17	3	2	1
Nasopharynx	4	2	2	-	-	-
Tonsil	45	36	9	-	-	-
Oropharynx	5	3	2	-	-	-
Hypopharynx	11	6	5	-	-	-
Other Oral Cavity and Pharynx	13	9	4	-	-	-
Digestive System	1,222	707	515	9	4	5
Esophagus	83	66	17	-	-	-
Stomach	75	50	25	-	-	-
Small Intestine	32	16	16	-	-	-
Colon and Rectum	604	346	258	6	2	4
Colon excluding Rectum	415	231	184	6	2	4
Cecum	105	50	55	3	-	3
Appendix	14	6	8	-	-	-
Ascending Colon	74	39	35	-	-	-
Hepatic Flexure	17	11	6	-	-	-
Transverse Colon	32	12	20	-	-	-
Splenic Flexure	12	5	7	-	-	-
Descending Colon	18	13	5	1	1	-
Sigmoid Colon	123	83	40	2	1	1
Large Intestine, NOS	20	12	8	-	-	-
Rectum and Rectosigmoid Junction	189	115	74	-	-	-
Rectosigmoid Junction	46	28	18	-	-	-
Rectum	143	87	56	-	-	-
Anus, Anal Canal and Anorectum	29	5	24	2	1	1
Liver and Intrahepatic Bile Duct	104	73	31	-	-	-
Liver	88	66	22	-	-	-
Intrahepatic Bile Duct	16	7	9	-	-	-
Gallbladder	15	7	8	-	-	-
Other Biliary	22	11	11	1	1	-
Pancreas	240	127	113	-	-	-
Retroperitoneum	4	2	2	-	-	-
Peritoneum, Omentum and Mesentery	7	2	5	-	-	-
Other Digestive Organs	7	2	5	-	-	-
Respiratory System	882	463	419	6	1	5
Nose, Nasal Cavity and Middle Ear	12	9	3	-	-	-
Larynx	42	35	7	1	1	-
Lung and Bronchus	824	417	407	5	-	5
Pleura	1	-	1	-	-	-
Trachea, Mediastinum and Other Respiratory Organs	3	2	1	-	-	-
Skin excluding Basal and Squamous	467	262	205	398	239	159
Melanoma of the Skin	447	250	197	398	239	159
Other Non-Epithelial Skin	20	12	8	-	-	-
Breast	1,085	13	1,072	190	-	190

Idaho Resident Cancer Cases - 2013 (continued)

Primary Site of Cancer	Invasive			In situ		
	Total	Male	Female	Total	Male	Female
Female Genital System	381	-	381	6	-	6
Cervix Uteri	40	-	40	-	-	-
Corpus and Uterus, NOS	214	-	214	-	-	-
Corpus Uteri	203	-	203	-	-	-
Uterus, NOS	11	-	11	-	-	-
Ovary	94	-	94	-	-	-
Vagina	10	-	10	-	-	-
Vulva	18	-	18	6	-	6
Other Female Genital Organs	5	-	5	-	-	-
Male Genital System	960	960	-	1	1	-
Prostate	909	909	-	-	-	-
Testis	41	41	-	-	-	-
Penis	9	9	-	-	-	-
Other Male Genital Organs	1	1	-	1	1	-
Urinary System	467	317	150	228	181	47
Urinary Bladder	164	131	33	217	174	43
Kidney and Renal Pelvis	292	178	114	6	5	1
Ureter	6	4	2	3	1	2
Other Urinary Organs	5	4	1	2	1	1
Brain and Other Nervous System	116	66	50	-	-	-
Brain	110	63	47	-	-	-
Cranial Nerves Other Nervous System	6	3	3	-	-	-
Endocrine System	243	69	174	-	-	-
Thyroid	234	63	171	-	-	-
Other Endocrine including Thymus	9	6	3	-	-	-
Lymphoma	342	179	163	-	-	-
Hodgkin Lymphoma	49	26	23	-	-	-
Non-Hodgkin Lymphoma	293	153	140	-	-	-
Myeloma	95	52	43	-	-	-
Leukemia	291	166	125	-	-	-
Lymphocytic Leukemia	146	87	59	-	-	-
Acute Lymphocytic Leukemia	26	19	7	-	-	-
Chronic Lymphocytic Leukemia	110	63	47	-	-	-
Other Lymphocytic Leukemia	10	5	5	-	-	-
Myeloid and Monocytic Leukemia	128	70	58	-	-	-
Acute Myeloid Leukemia	75	37	38	-	-	-
Acute Monocytic Leukemia	2	1	1	-	-	-
Chronic Myeloid Leukemia	50	31	19	-	-	-
Other Myeloid/Monocytic Leukemia	1	1	-	-	-	-
Other Leukemia	17	9	8	-	-	-
Other Acute Leukemia	5	2	3	-	-	-
Aleukemic, Subleukemic and NOS	12	7	5	-	-	-
Other or Unknown Sites	357	203	154	2	1	1
Bones and Joints	14	10	4	-	-	-
Soft Tissue including Heart	57	37	20	-	-	-
Eye and Orbit	11	5	6	2	1	1
Mesothelioma	16	14	2	-	-	-
Kaposi Sarcoma	1	1	-	-	-	-
Miscellaneous	258	136	122	-	-	-

SECTION III

STATE OF IDAHO – 2013 MORTALITY RATES BY SITE AND GENDER

Idaho Resident Cancer Mortality Rates - 2013

Cause of Death	Total			Male			Female		
	Rate	Deaths	Pop	Rate	Deaths	Pop	Rate	Deaths	Pop
All Causes of Death	731.6	12,427	1,612,843	837.1	6,403	807,401	636.5	6,024	805,442
All Malignant Cancers	156.5	2,709	1,612,843	181.6	1,442	807,401	136.5	1,267	805,442
Bladder	5.0	85	1,612,843	8.4	63	807,401	2.3	22	805,442
Brain and Other Nervous System	4.5	81	1,612,843	5.8	49	807,401	3.4	32	805,442
Breast	11.9	207	1,612,843	0.2	2	807,401	22.2	205	805,442
Cervix	0.8	14	1,612,843	-	-	807,401	1.6	14	805,442
Colorectal	13.2	233	1,612,843	15.9	131	807,401	11.0	102	805,442
Corpus Uteri	1.2	20	1,612,843	-	-	807,401	2.2	20	805,442
Esophagus	4.1	72	1,612,843	6.9	57	807,401	1.6	15	805,442
Hodgkin Lymphoma	0.5	7	1,612,843	0.3	2	807,401	0.6	5	805,442
Kidney	3.8	68	1,612,843	5.0	41	807,401	2.8	27	805,442
Larynx	0.8	14	1,612,843	1.4	12	807,401	0.2	2	805,442
Leukemia	6.2	103	1,612,843	7.8	60	807,401	4.8	43	805,442
Liver and Bile Duct	5.0	94	1,612,843	6.3	57	807,401	3.7	37	805,442
Lung and Bronchus	36.1	627	1,612,843	43.1	345	807,401	30.3	282	805,442
Melanoma of the Skin	3.8	67	1,612,843	4.9	41	807,401	2.8	26	805,442
Myeloma	3.6	61	1,612,843	4.4	35	807,401	2.9	26	805,442
Non-Hodgkin Lymphoma	6.5	110	1,612,843	7.7	61	807,401	5.4	49	805,442
Oral Cavity and Pharynx	2.4	41	1,612,843	3.5	28	807,401	1.5	13	805,442
Ovary	4.8	84	1,612,843	-	-	807,401	9.0	84	805,442
Pancreas	12.1	212	1,612,843	14.2	113	807,401	10.5	99	805,442
Prostate	9.5	160	1,612,843	22.0	160	807,401	-	-	805,442
Stomach	2.1	35	1,612,843	3.6	27	807,401	0.8	8	805,442
Testis	0.1	1	1,612,843	0.2	1	807,401	-	-	805,442
Thyroid	0.5	10	1,612,843	0.4	4	807,401	0.6	6	805,442

Data source: Bureau of Vital Records and Health Statistics (BVRHS), Idaho Department of Health and Welfare, 2014.¹⁹

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/codrecodes/>), which differ from official BVRHS cancer mortality categories. Death counts may differ from official BVRHS statistics due to late filings.

SECTION IV

2013 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 2013

Age (years)		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	18.3	13.8	14.0	22.0	41.0	63.7	91.3	149.5	192.3	304.0	506.8	728.5	1041.3	1484.5	1837.3	2191.8	2423.4	2093.9
	Male	24.0	14.2	9.7	32.7	31.1	52.6	66.1	91.4	135.8	216.3	445.1	737.9	1155.3	1762.2	2145.6	2541.4	2956.9	2554.0
	Female	12.4	13.4	18.6	10.8	51.6	75.0	117.1	209.6	249.8	392.0	567.6	719.4	930.5	1212.8	1541.3	1874.5	1997.9	1825.7
Bladder	All	0.9	0.0	0.8	0.0	0.9	0.0	0.0	0.0	3.1	9.5	13.3	25.3	37.7	91.0	122.4	168.6	163.5	171.7
	Male	1.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0	6.1	12.6	22.9	35.6	50.3	154.6	216.8	315.6	284.8	334.5
	Female	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	6.3	3.8	15.3	25.5	28.7	31.7	35.2	66.8	76.8
Brain	All	6.1	2.4	4.1	3.5	0.9	3.8	0.9	5.1	2.1	5.3	8.5	16.5	10.8	11.9	16.2	26.3	11.2	22.4
	Male	8.6	3.2	4.9	5.2	0.0	5.6	1.8	0.0	4.1	4.2	9.6	13.9	8.8	13.3	22.0	49.8	8.4	50.7
	Female	3.6	1.7	3.4	1.8	1.8	1.9	0.0	10.3	0.0	6.3	7.5	19.1	12.8	10.4	10.6	5.0	13.4	5.9
Brain & Other Central Nervous System (Non-Malignant)	All	4.4	0.0	0.0	0.9	2.7	5.7	5.6	7.1	9.2	10.5	9.5	12.6	16.2	27.7	32.4	21.1	37.2	52.3
	Male	3.4	0.0	0.0	0.0	3.5	3.8	1.8	6.0	8.1	8.4	3.8	11.9	4.4	24.0	29.4	22.2	33.5	60.8
	Female	5.3	0.0	0.0	1.8	1.8	7.7	9.5	8.2	10.3	12.7	15.1	13.4	27.6	31.3	35.3	20.1	40.1	47.3
Breast	Female Invasive	0.0	0.0	0.0	0.0	1.8	3.9	37.8	51.4	95.0	156.0	196.1	255.7	305.9	396.5	469.1	487.5	521.2	366.3
	Female In-situ	0.0	0.0	0.0	0.0	0.0	1.9	1.9	6.2	33.0	48.5	47.1	43.9	53.1	78.3	67.0	60.3	33.4	41.4
Cervix	Female	0.0	0.0	0.0	0.0	1.8	1.9	5.7	18.5	6.2	8.4	11.3	3.8	12.8	7.8	3.5	5.0	0.0	0.0
Colorectal	All	0.0	0.0	0.0	0.9	2.7	1.9	3.7	8.1	19.4	26.3	50.3	68.0	75.5	96.2	124.2	223.9	249.0	205.3
	Male	0.0	0.0	0.0	1.7	3.5	1.9	5.5	8.0	18.2	25.2	53.5	83.1	111.6	125.3	165.3	254.7	293.2	202.7
	Female	0.0	0.0	0.0	0.0	1.8	1.9	1.9	8.2	20.7	27.4	47.1	53.4	40.4	67.8	84.7	196.0	213.8	206.8
Corpus Uteri	Female	0.0	0.0	0.0	0.0	0.0	1.9	0.0	10.3	12.4	21.1	41.5	63.0	91.4	83.5	67.0	70.4	53.5	59.1
Esophagus	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.1	4.2	9.5	7.8	10.8	18.5	28.8	26.3	14.9	14.9
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	8.4	17.2	15.8	19.7	26.7	47.8	38.8	25.1	10.1
	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	1.9	0.0	2.1	10.4	10.6	15.1	6.7	17.7

IDAHO AGE SPECIFIC CANCER RATES, PER 100,000 POPULATION, BY SITE AND GENDER 2013

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	1.7	3.5	3.6	2.9	3.7	5.1	2.1	5.3	1.0	1.9	3.2	9.2	3.6	10.5	3.7	0.0								
	Male	0.0	0.0	0.0	5.2	1.7	1.9	3.7	6.0	2.0	8.4	0.0	4.0	4.4	8.0	3.7	16.6	0.0	0.0								
	Female	0.0	0.0	3.4	1.8	5.5	3.9	3.8	4.1	2.1	2.1	1.9	0.0	2.1	10.4	3.5	5.0	6.7	0.0								
Kidney & Renal Pelvis																											
	All	0.0	0.8	0.0	1.8	0.9	2.9	3.7	4.0	6.1	15.8	26.6	22.3	41.0	58.0	99.0	71.1	81.8	70.9								
	Male	0.0	0.0	0.0	1.7	0.0	3.8	1.8	4.0	8.1	25.2	42.0	21.8	43.8	74.7	139.6	77.5	134.0	70.9								
	Female	0.0	1.7	0.0	1.8	1.8	1.9	5.7	4.1	4.1	6.3	11.3	22.9	38.2	41.7	60.0	65.3	40.1	70.9								
Larynx																											
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.1	1.9	3.9	8.6	15.8	3.6	15.8	14.9	7.5								
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	1.9	7.9	15.3	26.7	3.7	33.2	25.1	20.3								
	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	1.9	0.0	2.1	5.2	3.5	0.0	6.7	0.0								
Leukemia																											
	All	6.1	4.9	3.3	2.6	2.7	8.6	1.9	3.0	6.1	10.5	23.7	19.4	29.1	42.2	52.2	84.3	133.8	138.1								
	Male	8.6	6.3	3.2	3.4	1.7	7.5	0.0	4.0	6.1	14.7	24.8	17.8	41.6	56.0	58.8	121.8	159.2	172.3								
	Female	3.6	3.3	3.4	1.8	3.7	9.6	3.8	2.1	6.2	6.3	22.6	21.0	17.0	28.7	45.9	50.3	113.6	118.2								
Liver & Bile Duct																											
	All	0.9	0.0	0.0	0.0	0.0	0.0	0.9	0.0	1.0	2.1	1.9	21.4	32.3	21.1	10.8	21.1	29.7	26.1								
	Male	1.7	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	2.1	1.9	29.7	52.5	26.7	22.0	33.2	58.6	10.1								
	Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	1.9	13.4	12.8	15.7	0.0	10.1	6.7	35.5								
Lung & Bronchus																											
	All	0.9	0.0	0.0	0.0	0.0	1.0	0.0	2.0	11.3	14.7	36.1	64.1	101.3	183.3	284.3	360.9	349.4	257.5								
	Male	0.0	0.0	0.0	0.0	0.0	1.9	0.0	4.0	4.1	6.3	34.4	75.2	100.7	208.0	293.9	376.5	393.7	344.6								
	Female	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.6	23.2	37.7	53.4	102.0	159.1	275.1	346.8	314.1	206.8								
Melanoma of the Skin																											
	All	0.0	1.6	0.0	0.9	5.4	15.2	14.9	21.2	17.4	21.0	38.0	45.7	56.1	83.1	81.0	110.6	130.1	89.6								
	Male	0.0	1.6	0.0	0.0	1.7	9.4	16.5	13.9	16.2	18.9	30.6	57.4	74.4	112.0	91.9	149.5	175.9	162.2								
	Female	0.0	1.7	0.0	1.8	9.2	21.2	13.2	28.8	18.6	23.2	45.3	34.4	38.2	54.8	70.5	75.4	93.6	47.3								
Myeloma																											
	All	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	1.0	1.1	9.5	4.9	12.9	14.5	30.6	34.3	59.5	29.9								
	Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	7.6	7.9	19.7	24.0	29.4	33.2	67.0	30.4								
	Female	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	2.1	11.3	1.9	6.4	5.2	31.7	35.2	53.5	29.5								

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

IDAHO

Age (years)	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	0.0	0.8	0.8	1.8	1.8	1.9	0.9	7.1	7.2	13.7	13.3	36.7	51.4	77.4	97.5	111.5	123.2
Male	0.0	0.0	0.0	0.0	3.8	0.0	0.0	9.9	8.1	4.2	11.5	35.0	69.3	88.2	127.4	134.0	141.9
Female	0.0	1.7	1.7	0.0	3.7	0.0	1.9	4.1	6.2	23.2	15.1	38.2	33.9	67.0	70.4	93.6	112.3
Oral Cavity & Pharynx																	
All	0.0	0.0	0.0	0.0	4.5	1.9	1.9	7.1	4.1	12.6	15.2	49.6	55.4	55.8	31.6	44.6	56.0
Male	0.0	0.0	0.0	0.0	1.7	1.9	3.7	8.0	8.1	21.0	22.9	74.4	74.7	73.5	22.2	75.4	81.1
Female	0.0	0.0	0.0	0.0	7.4	1.9	0.0	6.2	0.0	4.2	7.5	25.5	36.5	38.8	40.2	20.1	41.4
Ovary																	
Female	0.0	1.7	0.0	0.0	0.0	1.9	0.0	6.2	4.1	6.3	17.0	25.5	36.5	24.7	45.2	53.5	47.3
Pancreas																	
All	0.0	0.0	0.0	0.0	0.9	0.0	1.9	2.0	2.1	3.2	5.7	37.7	56.7	64.8	100.1	78.1	123.2
Male	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	2.0	4.2	9.6	32.8	66.7	69.8	121.8	100.5	152.0
Female	0.0	0.0	0.0	0.0	1.8	0.0	1.9	4.1	2.1	2.1	1.9	42.5	47.0	60.0	80.4	60.1	106.4
Prostate																	
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	31.5	114.6	354.5	541.2	635.6	498.3	544.5	405.4
Stomach																	
All	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	1.0	2.1	4.7	6.5	19.8	10.8	29.0	40.9	22.4
Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.1	7.6	8.8	32.0	7.4	44.3	58.6	30.4
Female	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	2.1	1.9	4.3	7.8	14.1	15.1	26.7	17.7
Testis																	
Male	0.0	0.0	0.0	6.9	10.4	9.4	12.9	13.9	12.2	2.1	5.7	2.2	2.7	0.0	0.0	0.0	0.0
Thyroid																	
All	0.0	0.0	0.0	0.9	4.5	10.5	18.6	25.3	24.6	24.2	30.4	22.6	30.3	25.2	10.5	22.3	11.2
Male	0.0	0.0	0.0	1.7	1.7	0.0	7.4	9.9	18.2	6.3	5.7	21.9	24.0	25.7	0.0	16.8	10.1
Female	0.0	0.0	0.0	0.0	7.4	21.2	30.2	41.1	31.0	42.2	54.7	23.4	36.5	24.7	20.1	26.7	11.8

SECTION V

2013 OBSERVED VS. EXPECTED NUMBERS BY HEALTH DISTRICT

2013 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	1,300	1,191.0 *	616	570.0	1,188	1,166.0	2,006	1,971.0	863	876.0	633	755.0 *	752	817.0 +
Bladder	92	58.8 *	34	30.9	59	61.2	100	98.8	40	46.8	25	40.0 +	31	42.4
Brain	9	18.1 +	12	7.7	19	17.4	31	30.3	13	13.1	15	11.0	11	13.3
Brain & CNS non-Malignant	28	23.6	13	11.6	34	23.1 +	42	43.9	12	19.2	13	16.1	14	18.3
Breast	207	171.0 *	93	81.9	146	177.0 +	296	299.0	139	126.0	97	110.0	107	121.0
Breast (in-situ)	43	28.2 +	13	14.0	33	29.7	47	56.2	21	22.3	10	19.7 +	23	20.6
Cervix	5	6.0	6	2.4	8	6.1	8	13.4	9	4.0 +	4	4.0	0	5.3 *
Colorectal	115	96.6	44	47.9	116	91.8 +	152	166.0	66	73.0	52	62.1	59	67.0
Corpus Uteri	27	34.7	12	15.7	39	30.6	51	57.6	30	23.0	25	19.8	19	22.6
Esophagus	15	13.6	3	6.8	8	14.2	29	20.1	11	9.7	9	8.2	8	9.1
Hodgkin lymphoma	8	6.9	5	3.3	10	7.5	13	14.3	7	5.5	1	5.5	5	6.2
Kidney & renal pelvis	50	47.8	25	22.5	46	46.7	70	82.2	41	33.7	26	29.7	34	31.8
Larynx	9	6.8	4	3.3	7	6.6	15	10.0	3	5.2	2	4.5	2	4.8
Leukemia	53	45.1	14	23.5 +	53	45.1	74	80.1	34	35.1	26	30.2	37	32.3
Liver & bile duct	17	17.6	11	7.8	16	16.3	31	27.3	11	12.4	9	10.8	9	11.7
Lung & bronchus	175	132.0 *	74	66.1	136	131.0	219	214.0	88	101.0	70	84.7	62	92.3 *
Melanoma of skin	71	70.9	34	33.7	65	72.0	143	115.0 +	48	53.3	29	47.0 *	57	49.3
Myeloma	15	16.2	9	7.5	18	14.5	20	26.5	10	11.7	7	9.9	16	9.7
N-H Lymphoma	55	46.7	28	22.8	47	46.6	74	79.5	29	35.8	28	29.8	32	32.2
Oral cavity & pharynx	45	37.2	18	18.0	46	35.3	70	61.5	26	27.6	9	25.0 *	20	26.6
Ovary	12	16.0	6	7.4	18	14.2	24	26.2	6	11.8	13	9.1	15	9.8
Pancreas	34	41.7	30	18.6 +	37	38.4	69	60.8	30	28.6	20	24.7	20	26.7
Prostate	145	157.0	75	71.7	146	144.0	258	234.0	103	108.0	85	91.8	97	98.1
Stomach	12	12.6	6	6.0	12	11.8	25	18.5	7	9.3	5	7.9	8	8.2
Testis	7	4.9	5	2.6	7	6.5	11	12.8	3	4.8	5	4.1	3	5.7
Thyroid	27	36.1	18	15.9	33	38.1	64	70.4	23	27.4	21	23.6	48	24.4 *
Pediatric (age 0-19)	11	9.1	7	4.3	15	14.0	19	22.2	8	10.1	8	9.2	12	11.8

+ Statistically significant difference at p=0.05 or less.

* Statistically significant difference at p=0.01 or less.

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

2013 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	669	629.0	326	303.0	619	596.0	1,030	982.0	453	452.0	316	392.0 *	376	423.0 +
Bladder	72	48.3 *	27	25.4	46	49.2	82	75.7	34	37.4	21	31.9	23	34.4
Brain	5	10.4	8	4.5	13	9.7	17	17.2	6	7.8	10	6.2	4	8.0
Brain & CNS non-Malignant	13	8.4	6	4.5	14	8.5	12	18.0	4	7.4	6	6.0	4	7.1
Breast	2	2.2	2	1.0	0	2.4	4	3.1	2	1.5	3	1.1	0	1.6
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	64	56.6	24	28.1	63	53.0	77	96.9 +	43	41.0	37	34.9	38	38.3
Esophagus	11	11.0	3	5.3	6	11.3	21	16.4	9	7.7	8	6.5	8	7.2
Hodgkin lymphoma	6	3.5	2	1.8	5	4.0	6	7.9	4	2.9	0	2.9	3	3.1
Kidney & renal pelvis	28	30.0	18	13.7	24	29.1	50	46.8	26	20.5	14	18.3	18	19.8
Larynx	4	6.4	4	2.8	7	5.2	14	7.6 +	2	4.4	2	3.7	2	4.0
Leukemia	28	26.7	6	13.8 +	30	25.8	40	45.7	21	19.9	17	17.1	24	18.1
Liver & bile duct	13	12.3	10	5.4	12	11.2	21	19.0	9	8.6	3	8.1	5	8.5
Lung & bronchus	88	68.7 +	42	33.9	75	64.7	104	108.0	42	51.4	33	43.3	33	46.8 +
Melanoma of skin	37	41.5	19	19.6	35	40.2	85	59.8 *	31	29.5	10	27.1 *	33	27.2
Myeloma	10	8.7	6	4.1	8	8.2	12	13.9	6	6.3	3	5.6	7	5.5
N-H Lymphoma	29	25.0	14	12.3	27	23.9	32	42.6	18	18.4	19	15.1	14	17.2
Oral cavity & pharynx	30	25.3	15	12.0	30	23.8	47	41.9	16	19.0	6	17.1 *	15	18.0
Pancreas	16	22.8	15	10.2	17	20.8	40	30.2	18	14.9	10	13.2	11	14.2
Prostate	145	159.0	75	73.4	146	143.0	258	229.0	103	109.0	85	92.3	97	99.1
Stomach	10	8.1	3	4.2	8	7.9	16	12.3	3	6.4	4	5.2	6	5.4
Testis	7	4.8	5	2.6	7	6.3	11	12.9	3	4.8	5	4.1	3	5.7
Thyroid	13	9.3	4	4.6	8	10.4	18	17.9	6	7.5	3	6.7	11	6.6
Pediatric (age 0-19)	8	5.3	5	2.7	6	9.0	13	12.7	4	6.2	4	5.6	8	6.7

+ Statistically significant difference at p=0.05 or less.

* Statistically significant difference at p=0.01 or less.

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

2013 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	631	566.0 *	290	269.0	569	570.0	976	982.0	410	423.0	317	364.0 +	376	394.0
Bladder	20	11.2 +	7	6.0	13	11.9	18	21.4	6	9.5	4	8.0	8	8.2
Brain	4	7.8	4	3.2	6	7.8	14	13.0	7	5.3	5	4.8	7	5.3
Brain & CNS non-Malignant	15	15.2	7	7.1	20	14.7	30	25.8	8	11.8	7	10.1	10	11.1
Breast	205	168.0 *	91	79.4	146	176.0 +	292	298.0	137	124.0	94	109.0	107	118.0
Breast (in-situ)	43	28.2 +	13	13.8	33	30.0	47	56.4	21	22.1	10	19.7 +	23	20.4
Cervix	5	6.1	6	2.3	8	6.2	8	13.3	9	4.0 +	4	4.0	0	5.3 +
Colorectal	51	40.1	20	20.1	53	38.7 +	75	68.7	23	32.0	15	27.3 +	21	28.9
Corpus Uteri	27	34.8	12	15.4	39	30.9	51	58.1	30	22.9	25	19.7	19	22.4
Esophagus	4	2.6	0	1.5	2	2.9	8	3.4 +	2	2.0	1	1.8	0	2.0
Hodgkin lymphoma	2	3.4	3	1.5	5	3.5	7	6.4	3	2.6	1	2.5	2	3.0
Kidney & renal pelvis	22	18.0	7	8.9	22	17.5	20	35.3 *	15	13.2	12	11.4	16	12.0
Larynx	5	0.4 *	0	0.6	0	1.4	1	2.3	1	0.8	0	0.8	0	0.9
Leukemia	25	18.6	8	9.8	23	19.3	34	34.2	13	15.3	9	13.2	13	14.2
Liver & bile duct	4	5.4	1	2.5	4	5.0	10	8.0	2	3.9	6	2.8	4	3.2
Lung & bronchus	87	64.0 *	32	32.2	61	66.0	115	106.0	46	49.2	37	41.5	29	45.6 +
Melanoma of skin	34	29.6	15	14.2	30	31.9	58	54.1	17	23.9	19	20.0	24	22.2
Myeloma	5	7.5	3	3.5	10	6.2	8	12.6	4	5.4	4	4.4	9	4.2
N-H Lymphoma	26	22.0	14	10.6	20	22.7	42	36.6	11	17.4	9	14.6	18	14.9
Oral cavity & pharynx	15	11.8	3	6.1	16	11.2	23	19.4	10	8.7	3	8.0	5	8.8
Ovary	12	16.0	6	7.2	18	14.2	24	26.4	6	11.8	13	9.1	15	9.7
Pancreas	18	19.0	15	8.5	20	17.6	29	30.5	12	13.7	10	11.5	9	12.6
Stomach	2	4.5	3	1.9	4	4.0	9	6.1	4	2.9	1	2.7	2	2.8
Thyroid	14	27.1 *	14	11.3	25	28.1	46	52.1	17	19.9	18	17.0	37	17.7 *
Pediatric (age 0-19)	3	3.8	2	1.6	9	5.0	6	9.6	4	4.0	4	3.6	4	4.9

+ Statistically significant difference at p=0.05 or less.

* Statistically significant difference at p=0.01 or less.

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

SECTION VI

RISKS OF 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 <u>being diagnosed with cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 66	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 <u>dying from cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 664	1 in 156	1 in 49	1 in 19	1 in 9	1 in 5
40		1 in 203	1 in 52	1 in 19	1 in 9	1 in 5
50			1 in 69	1 in 21	1 in 10	1 in 5
60				1 in 29	1 in 11	1 in 6
70					1 in 16	1 in 6
80						1 in 9

All Sites, Invasive in Males

If your current age is:	Then your risk of <u>being diagnosed with cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 127	1 in 37	1 in 11	1 in 5	1 in 3	1 in 2
40		1 in 51	1 in 12	1 in 5	1 in 3	1 in 2
50			1 in 15	1 in 5	1 in 3	1 in 2
60				1 in 6	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 <u>dying from cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 740	1 in 161	1 in 45	1 in 16	1 in 8	1 in 5
40		1 in 202	1 in 47	1 in 17	1 in 8	1 in 4
50			1 in 59	1 in 17	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 <u>being diagnosed with breast cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 264	1 in 62	1 in 27	1 in 14	1 in 10	1 in 8
40		1 in 80	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 <u>dying from breast cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 2626	1 in 596	1 in 208	1 in 99	1 in 58	1 in 37
40		1 in 764	1 in 224	1 in 102	1 in 58	1 in 38
50			1 in 311	1 in 115	1 in 62	1 in 39
60				1 in 176	1 in 74	1 in 42
70					1 in 117	1 in 51
80						1 in 69

Prostate Cancer

If your current age is:	Then your risk of <u>being diagnosed with prostate cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 15225	1 in 356	1 in 47	1 in 14	1 in 8	1 in 7
40		1 in 359	1 in 47	1 in 14	1 in 8	1 in 7
50			1 in 52	1 in 14	1 in 8	1 in 6
60				1 in 18	1 in 9	1 in 7
70					1 in 14	1 in 9
80						1 in 16

If your current age is:	Then your risk of <u>dying from prostate cancer</u> 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 25061	1 in 1637	1 in 323	1 in 86	1 in 32
40		1 in 24685	1 in 1612	1 in 318	1 in 85	1 in 32
50			1 in 1672	1 in 312	1 in 82	1 in 31
60				1 in 360	1 in 81	1 in 29
70					1 in 91	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 <u>being diagnosed with colorectal cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 1563	1 in 346	1 in 142	1 in 73	1 in 40	1 in 25
40		1 in 441	1 in 155	1 in 76	1 in 41	1 in 25
50			1 in 235	1 in 90	1 in 44	1 in 26
60				1 in 138	1 in 52	1 in 28
70					1 in 75	1 in 31
80						1 in 41

If your current age is:	Then your risk of <u>dying from colorectal cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 6250	1 in 1327	1 in 540	1 in 247	1 in 122	1 in 62
40		1 in 1670	1 in 586	1 in 255	1 in 123	1 in 62
50			1 in 884	1 in 295	1 in 130	1 in 64
60				1 in 426	1 in 146	1 in 66
70					1 in 203	1 in 71
80						1 in 84

Colon/Rectal Cancer in Males

If your current age is:	Then your risk of <u>being diagnosed with colorectal cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 1787	1 in 371	1 in 119	1 in 53	1 in 30	1 in 22
40		1 in 462	1 in 125	1 in 54	1 in 30	1 in 22
50			1 in 167	1 in 60	1 in 31	1 in 23
60				1 in 86	1 in 36	1 in 24
70					1 in 54	1 in 29
80						1 in 45

If your current age is:	Then your risk of <u>dying from colorectal cancer</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 7815	1 in 1623	1 in 457	1 in 171	1 in 84	1 in 52
40		1 in 2018	1 in 478	1 in 172	1 in 84	1 in 51
50			1 in 607	1 in 182	1 in 85	1 in 51
60				1 in 244	1 in 92	1 in 52
70					1 in 129	1 in 57
80						1 in 73

Risks of Being Diagnosed with and Dying from Cancer

Melanoma in Females

If your current age is:	Then your risk of <u>being diagnosed with melanoma</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 541	1 in 221	1 in 124	1 in 81	1 in 61	1 in 49
40		1 in 369	1 in 159	1 in 94	1 in 68	1 in 54
50			1 in 273	1 in 124	1 in 81	1 in 62
60				1 in 218	1 in 110	1 in 76
70					1 in 201	1 in 106
80						1 in 172

If your current age is:	Then your risk of <u>dying from melanoma</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 8294	1 in 3496	1 in 1544	1 in 876	1 in 584	1 in 341
40		1 in 5988	1 in 1880	1 in 970	1 in 623	1 in 352
50			1 in 2687	1 in 1135	1 in 681	1 in 367
60				1 in 1887	1 in 877	1 in 408
70					1 in 1489	1 in 474
80						1 in 537

Melanoma in Males

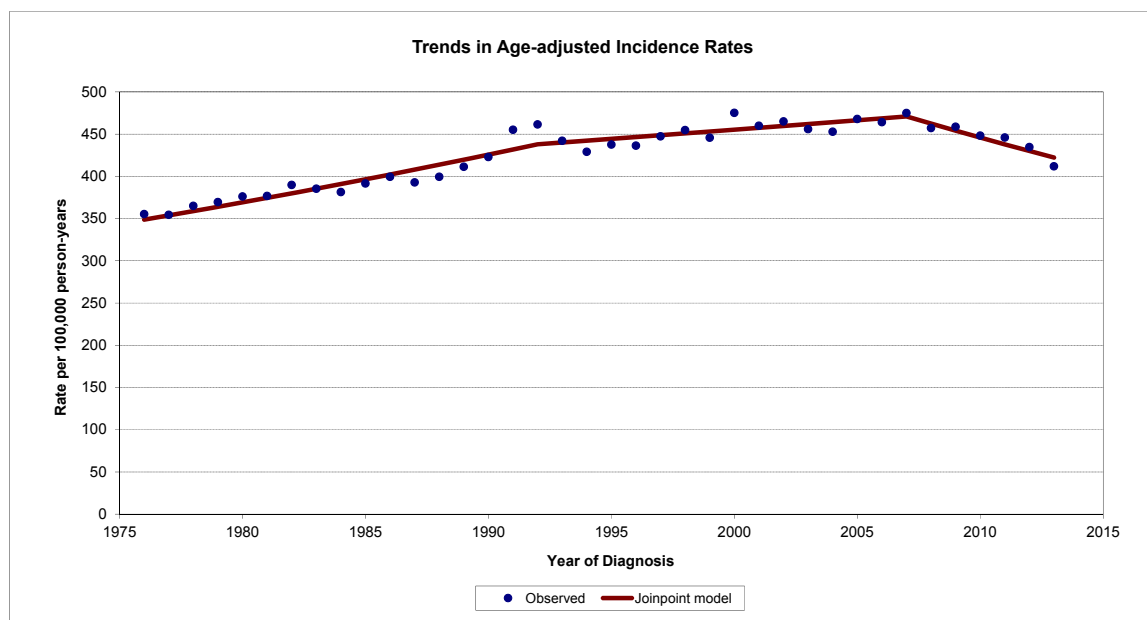
If your current age is:	Then your risk of <u>being diagnosed with melanoma</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 736	1 in 302	1 in 136	1 in 66	1 in 41	1 in 31
40		1 in 503	1 in 165	1 in 71	1 in 43	1 in 32
50			1 in 237	1 in 80	1 in 45	1 in 33
60				1 in 112	1 in 52	1 in 36
70					1 in 84	1 in 46
80						1 in 69

If your current age is:	Then your risk of <u>dying from melanoma</u> by a given age is:					
	By age 40	By age 50	By age 60	By age 70	By age 80	Ever
30	1 in 8389	1 in 2391	1 in 1050	1 in 471	1 in 276	1 in 183
40		1 in 3293	1 in 1182	1 in 491	1 in 281	1 in 184
50			1 in 1787	1 in 560	1 in 298	1 in 189
60				1 in 764	1 in 335	1 in 198
70					1 in 517	1 in 232
80						1 in 295

SECTION VII

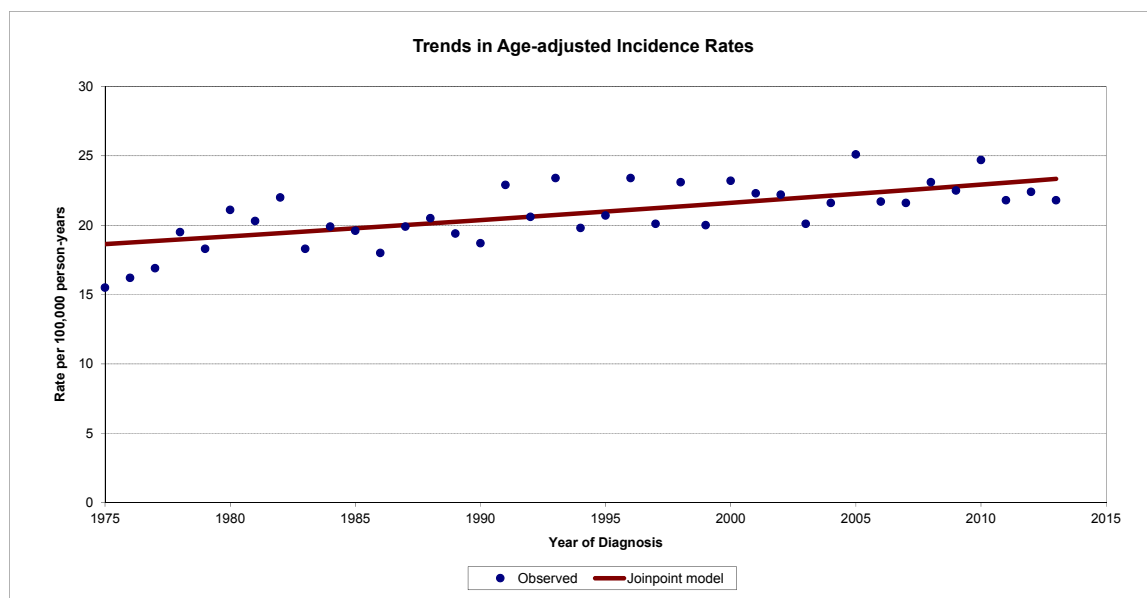
CANCER TRENDS IN IDAHO 1975-2013

All Sites



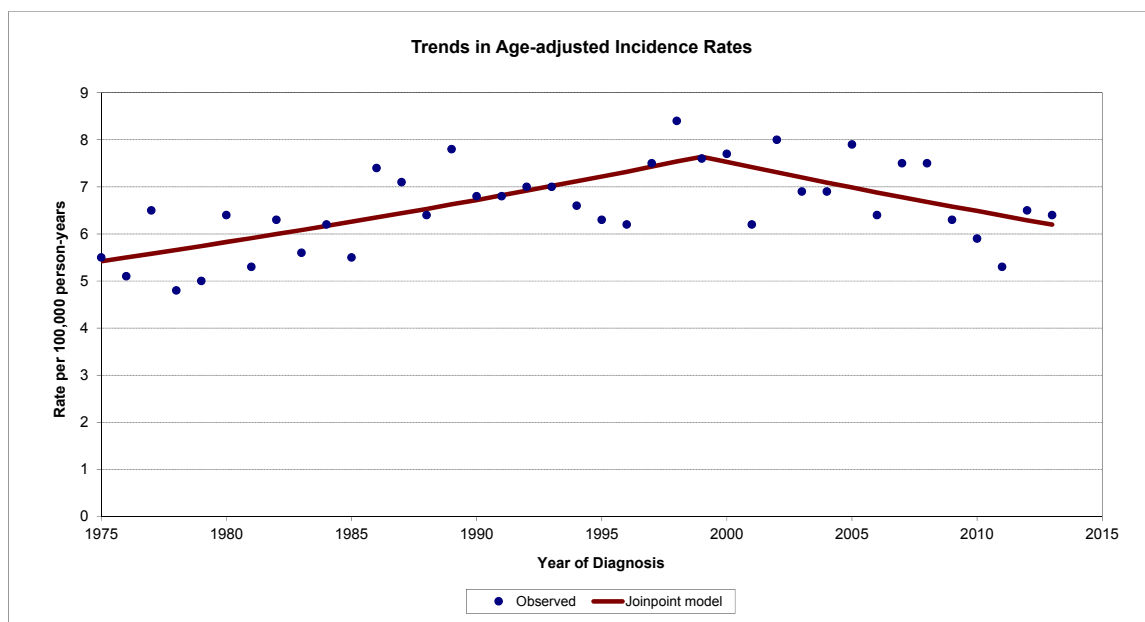
Cancer incidence increased at a rate of about 1.4% per year in Idaho from 1975 to 1992, and at a rate of about 0.5% per year from 1992 to 2007. Since 2007, overall cancer incidence has declined about 1.8% per year. Cancer incidence trends over time were different for males and females. For males, much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



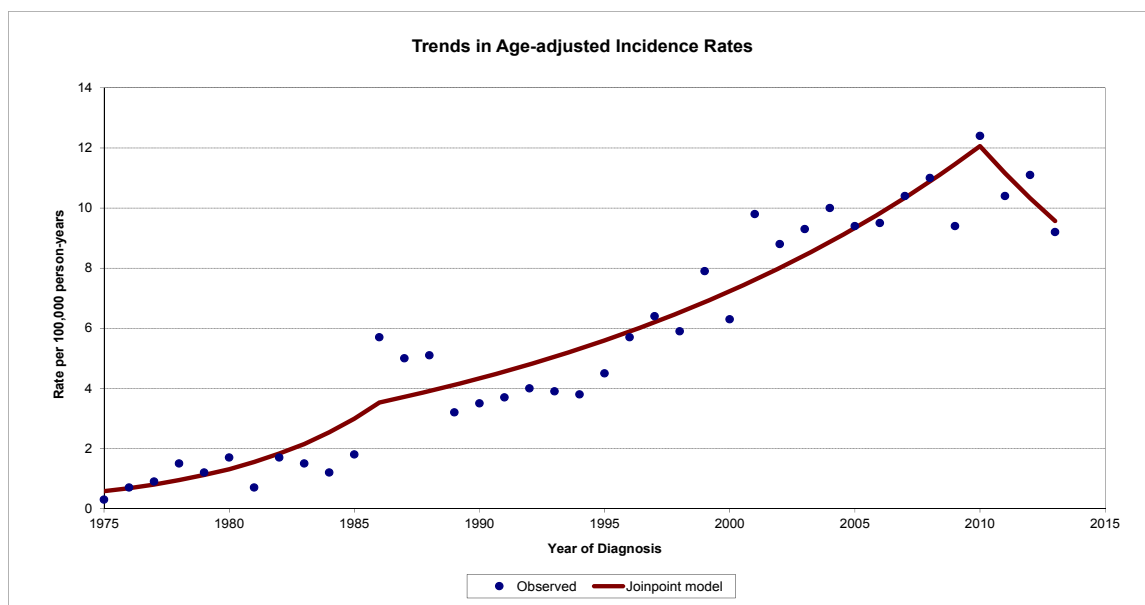
Bladder cancer incidence includes in-situ and invasive cases. Bladder cancer incidence increased at a rate of about 0.6% per year in Idaho from 1975 to 2013. Most of the increase in bladder cancer incidence is attributable to males, who have rates of bladder cancer incidence about 4-5 times those of females.

Brain



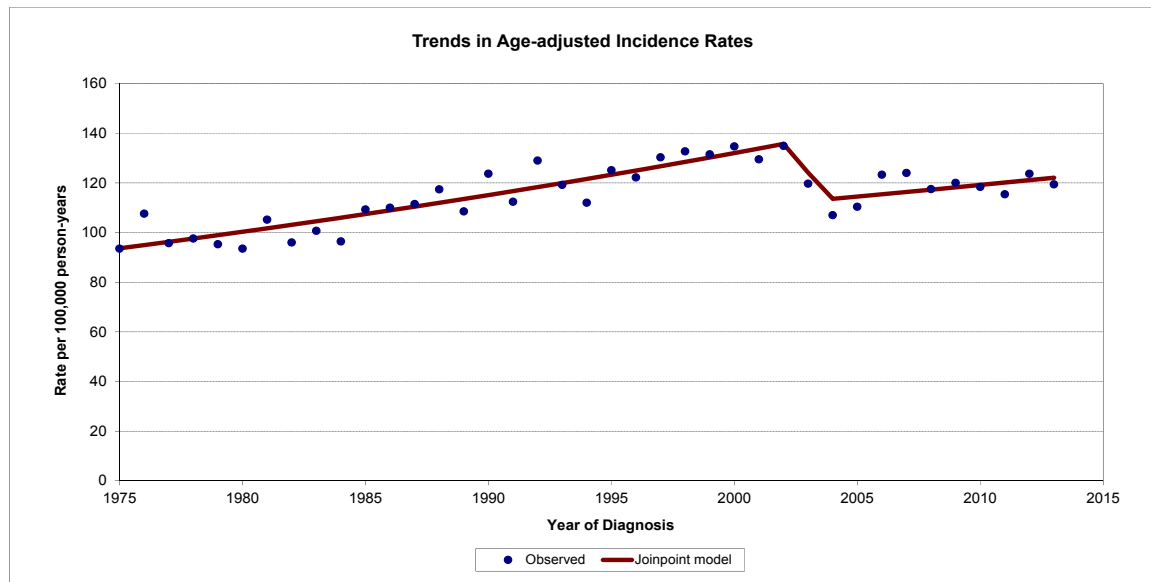
Malignant brain cancer incidence increased at a rate of about 1.4% per year in Idaho from 1975 to 1999, after which the rate has declined about 1.5% per year. Among males, malignant brain cancer incidence rates followed the same pattern. Among females, the rate has been stable 1975 to present.

Brain and Other CNS, Non-Malignant



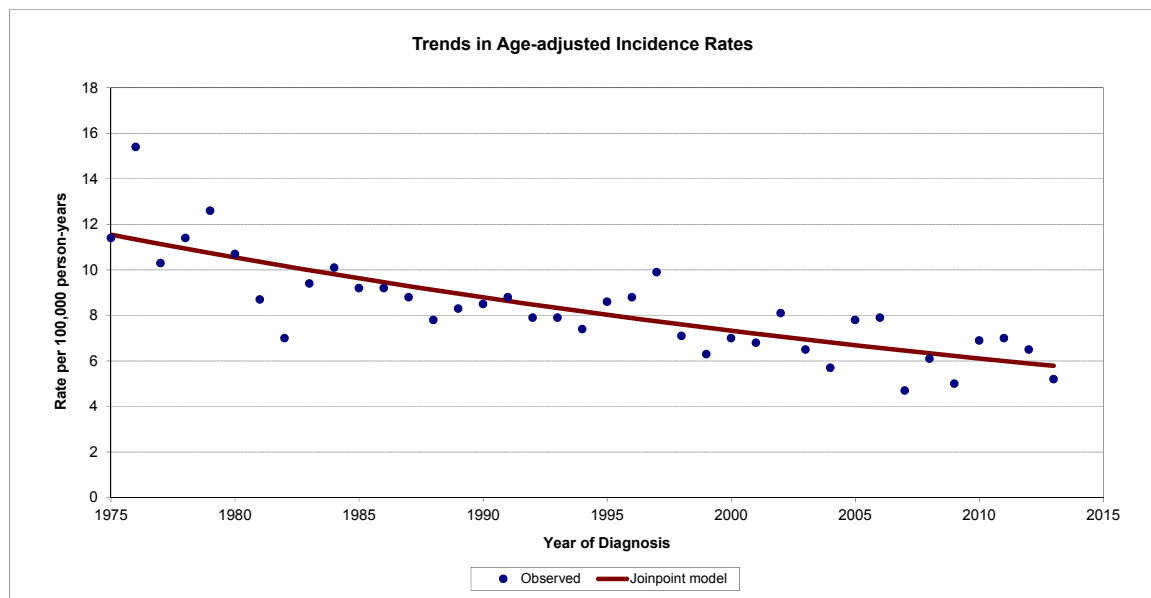
Non-malignant brain and other central nervous system tumors include those with benign and borderline behavior. Non-malignant brain and other CNS tumor incidence increased at a rate of about 17.9% per year in Idaho from 1975 to 1986, then increased by about 5.3% until 2010, after which the rate has been generally stable.

Breast Female



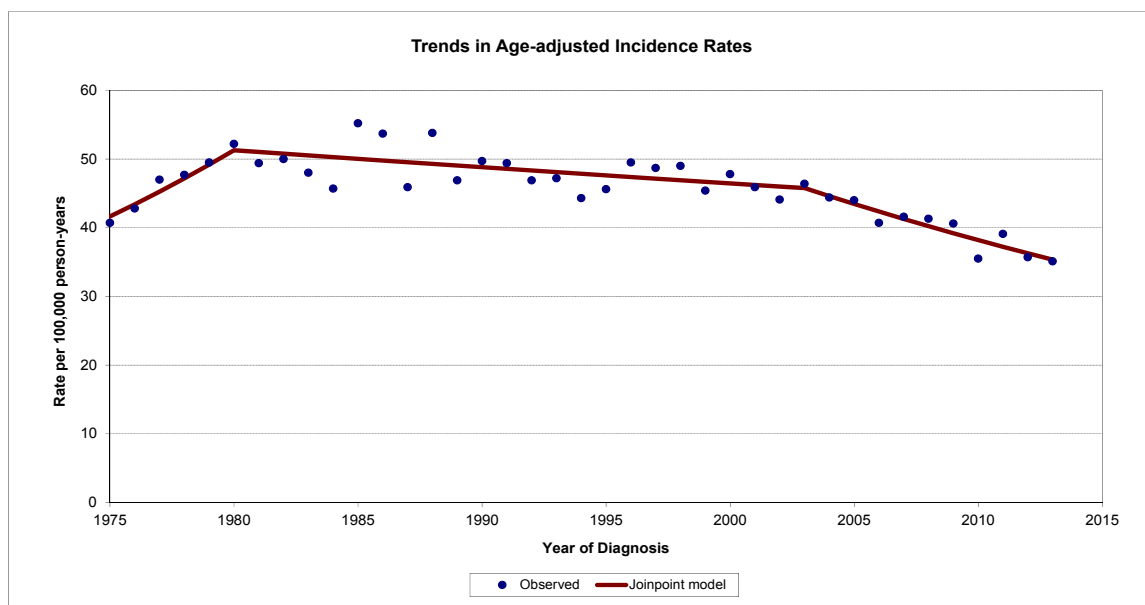
Invasive breast cancer incidence increased at a rate of about 1.4% per year among female Idahoans from 1975 to 2002. From 2002 to 2005, the rate decreased sharply by almost 9% per year. This decrease may be due in part to a decrease in the use of hormone replacement therapy. Since 2004, the invasive 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



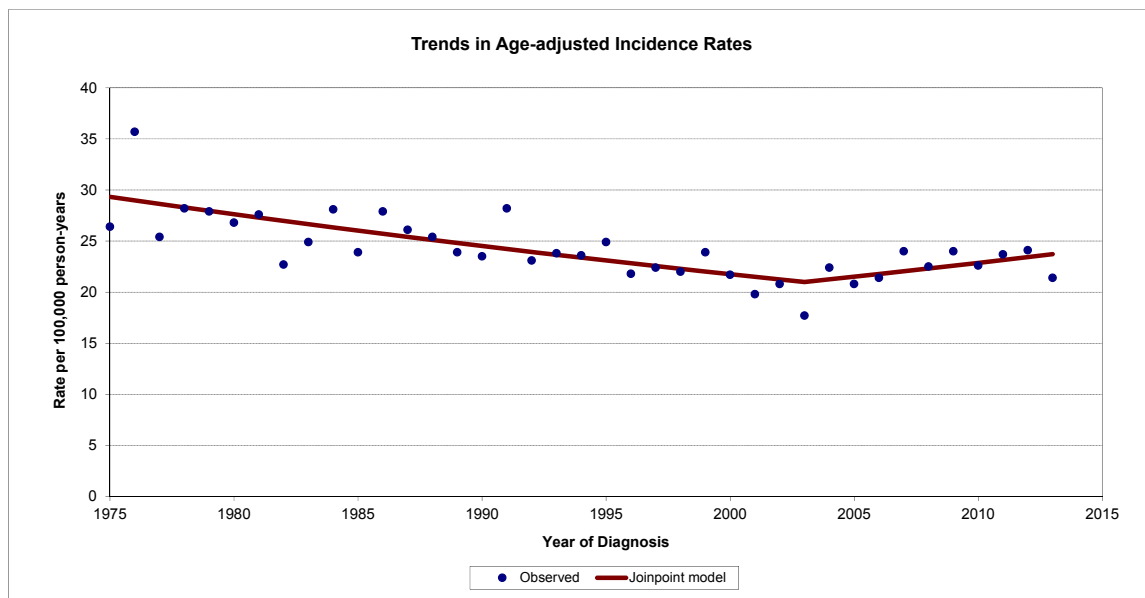
Invasive cervical cancer incidence has decreased about 1.8% per year in Idaho from 1975 to 2013.

Colorectal



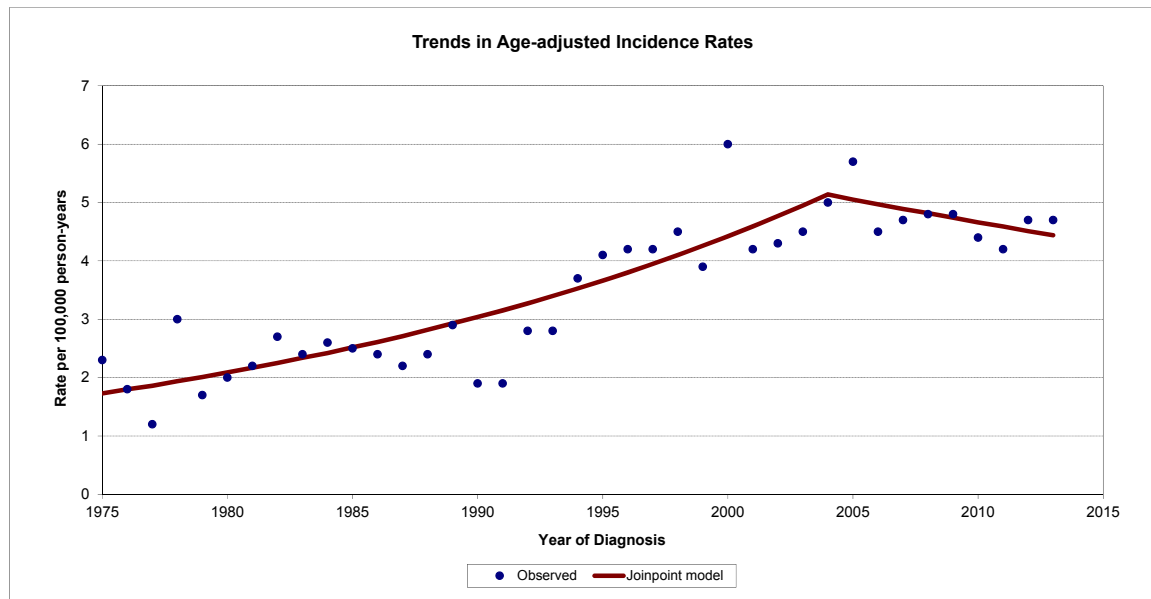
Colorectal cancer incidence increased at a rate of about 4.3% per year in Idaho from 1975 to 1980. From 1980 to 2003, the rate decreased about 0.5% per year, and then the rate decreased about 2.6% per year from 2003 to 2013. Colorectal cancer incidence trends over time were different for males and females. For males, rates increased from 1975 to 1988, then decreased. For females, rates were stable from 1975-2000, then decreased.

Corpus Uteri



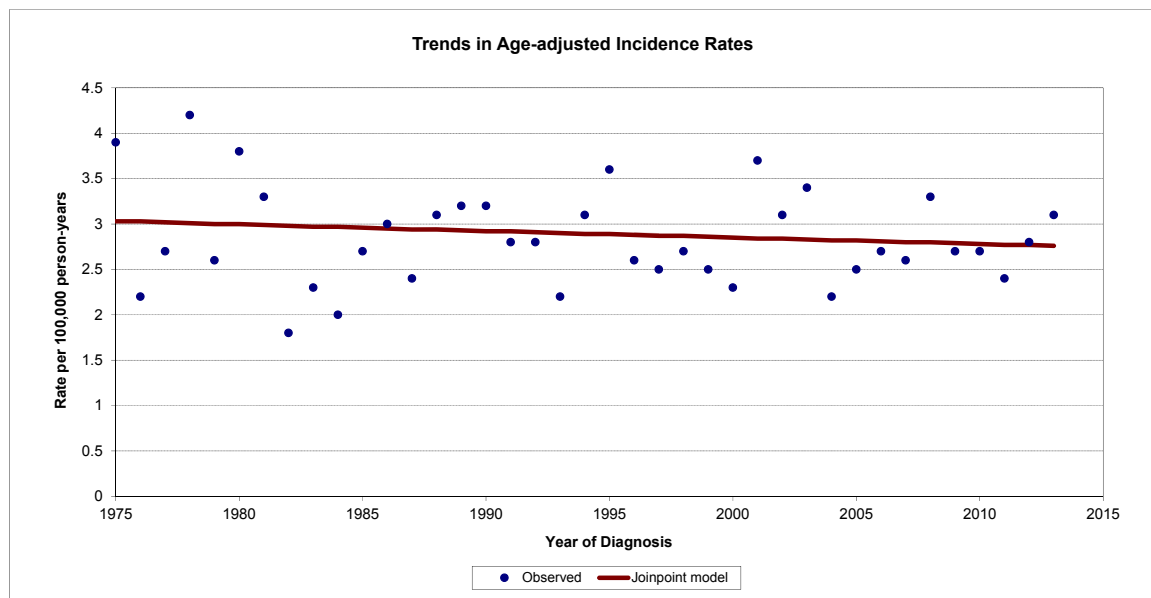
Corpus uteri cancer incidence rates decreased about 1.2% per year in Idaho from 1975 to 2003, and have increased by 1.2% per year since 2003.

Esophagus



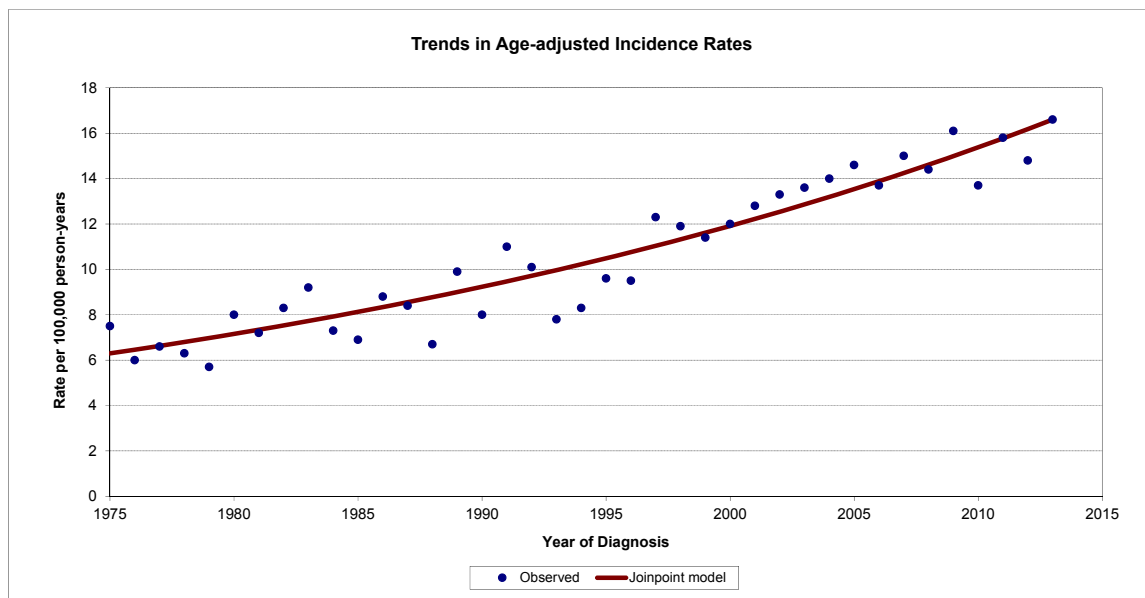
Esophageal cancer incidence increased at a rate of about 3.8% per year in Idaho from 1975 to 2004. From 2004 to 2013, the rate decreased about 1.6% per year. Rates of esophageal cancers among males were about 3-4 times higher than those among females.

Hodgkin Lymphoma



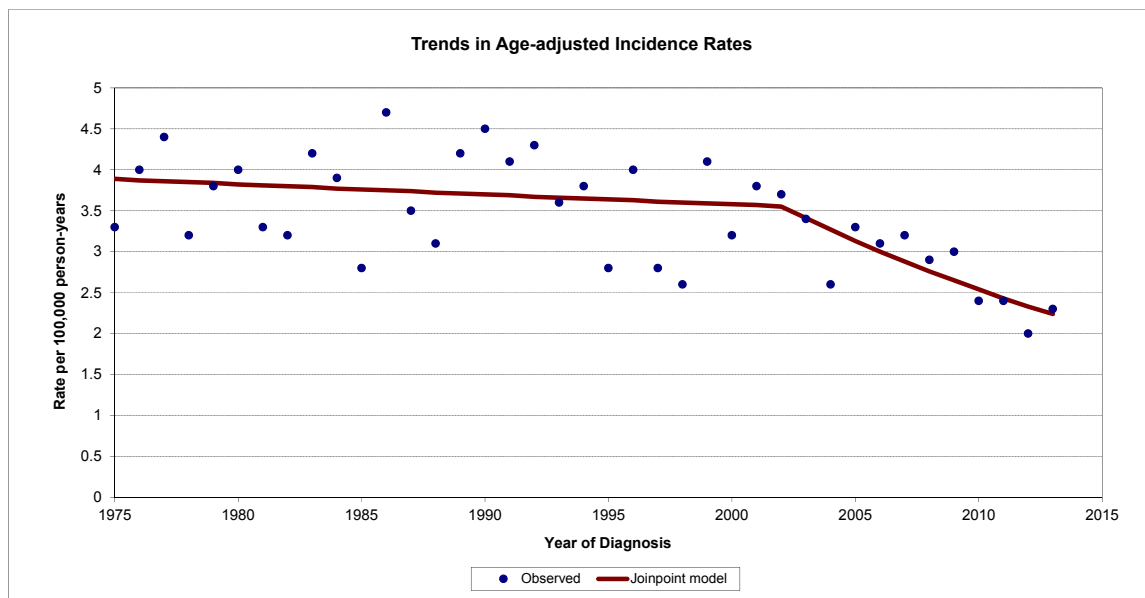
There was no statistically significant trend in Hodgkin lymphoma incidence in Idaho from 1975 to 2013; rates were stable but showed year-to-year variability due to the relatively small numbers of cases diagnosed annually.

Kidney and Renal Pelvis



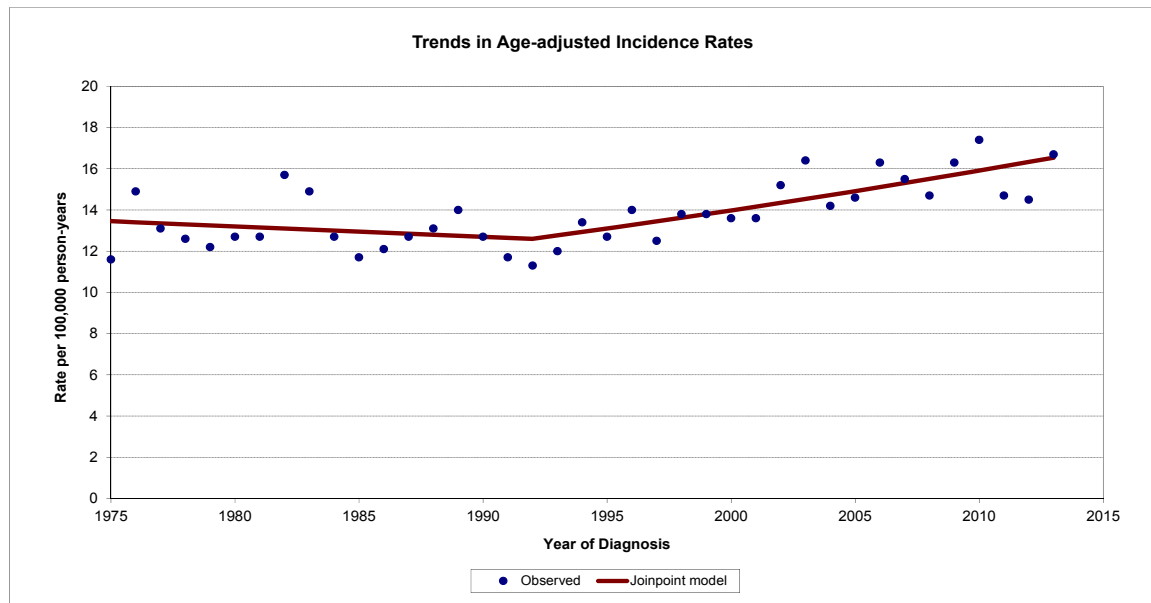
Kidney and renal pelvis cancer incidence increased at a rate of about 2.6% per year in Idaho from 1975 to 2013. The rate of increase was similar for males and females, although rates of kidney and renal pelvis cancers among males were about twice as high as among females.

Larynx



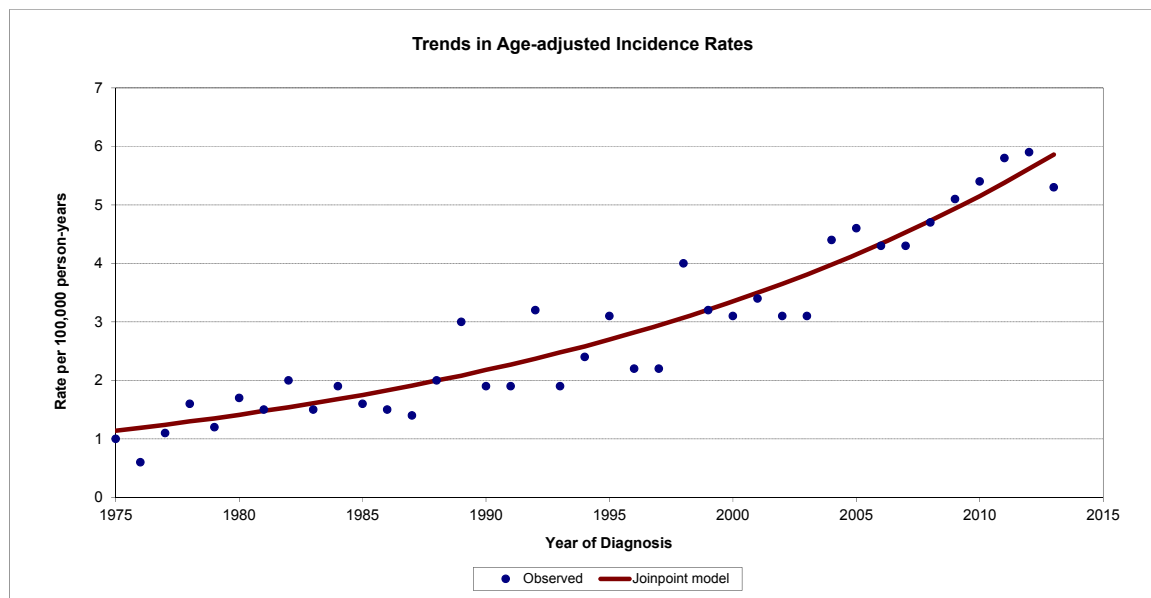
Laryngeal cancer incidence decreased about 0.3% per year in Idaho from 1975 to 2002, and decreased about 4.1% per year since 2002. Rates showed year-to-year variability due to the relatively small numbers of cases diagnosed annually. The temporal pattern was similar for males. Among females, incidence rates of laryngeal cancer decreased about 1% per year from 1975 to 2013. Incidence rates of laryngeal cancers among males were about 4 times as high as among females.

Leukemia



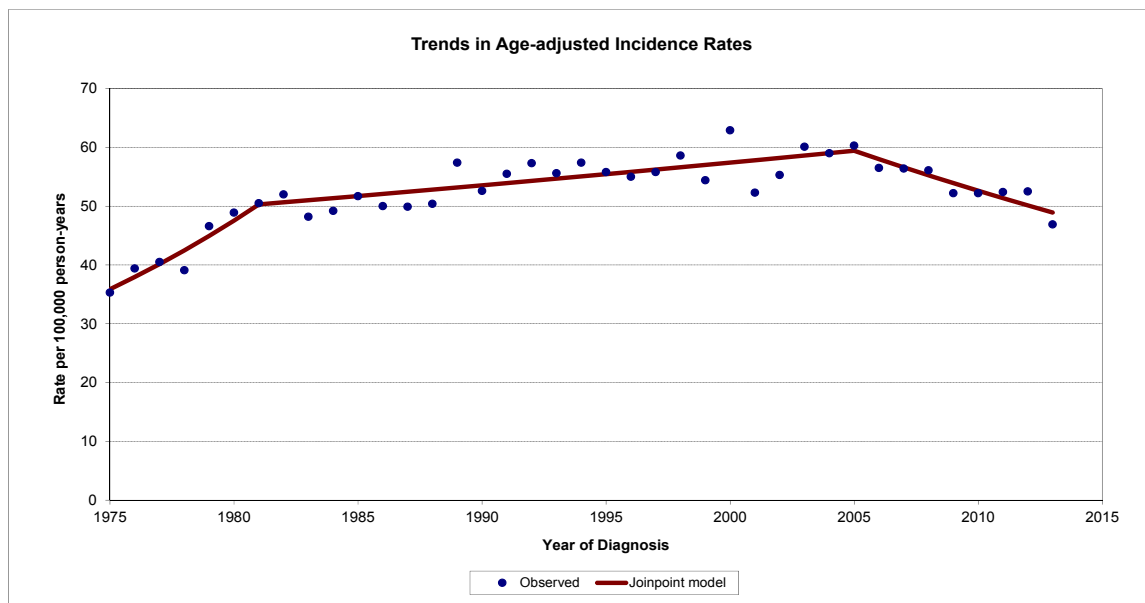
Leukemia incidence was generally stable from 1975 to 1992, and has increased about 1.3% per year since 1992. Rates showed year-to-year variability due to the relatively small numbers of cases diagnosed annually.

Liver and Bile Duct



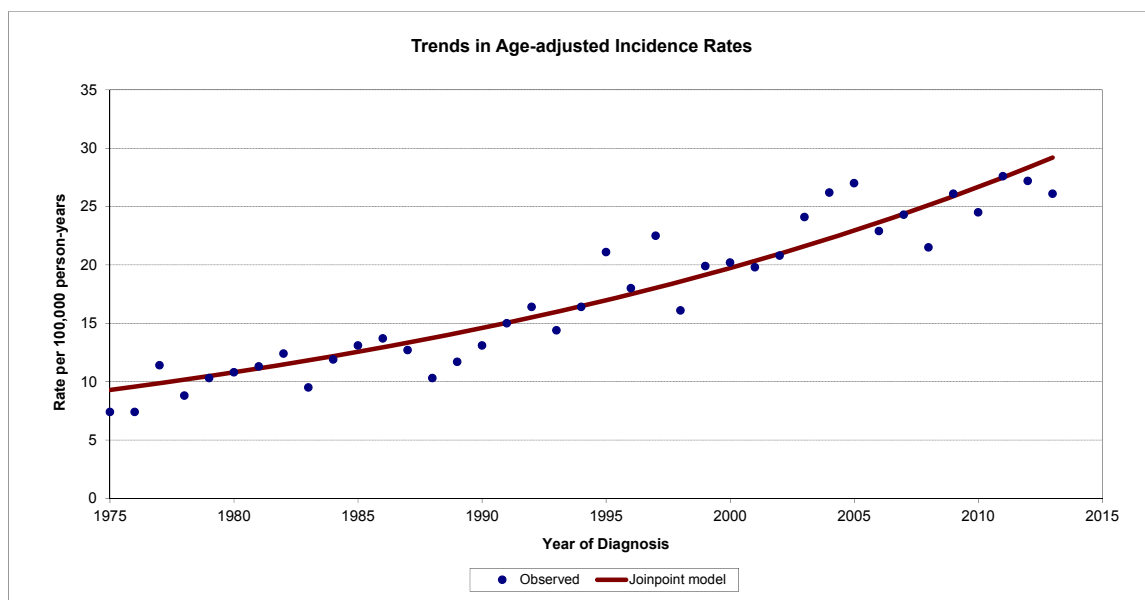
Liver cancer incidence increased at a rate of about 4.4% per year in Idaho from 1975 to 2013. The rate of increase was higher for males (5.2% per year) than for females (2.9% per year), and rates of liver cancers among males were about twice as high as among females.

Lung and Bronchus



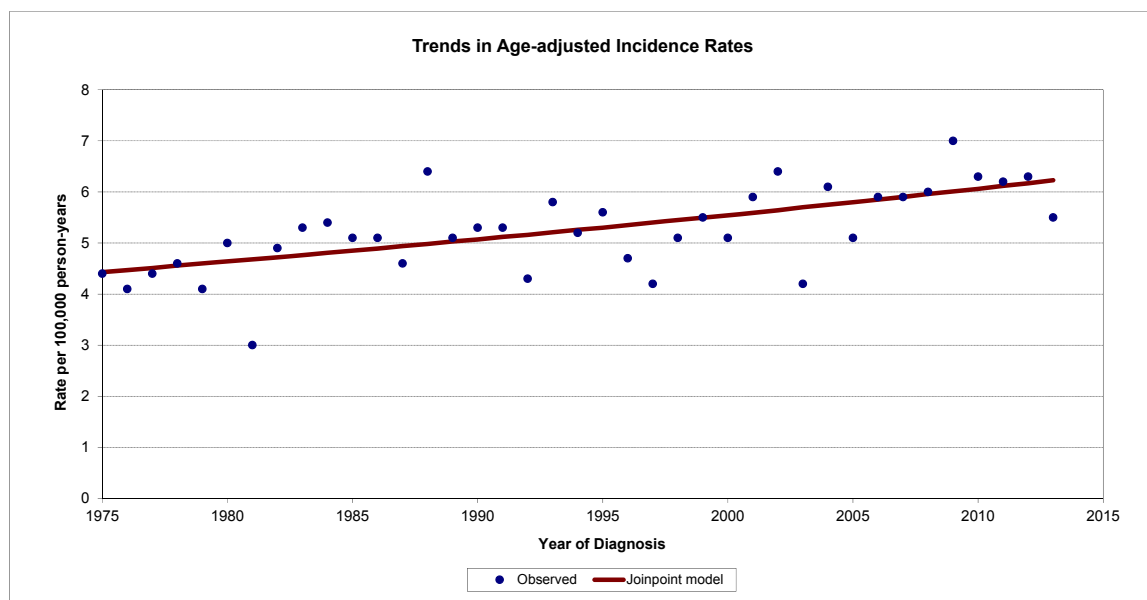
Lung cancer incidence increased at a rate of about 5.8% per year in Idaho from 1975 to 1981, after which the rate of increase lessened to about 0.7% per year until 2005. From 2005 to 2013, the rate has decreased about 2.4% per year. Lung cancer incidence trends over time were different for males and 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 2005, after which it has decreased by about 3.8% per year. For females, lung cancer incidence increased at a rate of about 5.8% per year from 1975 to 1989, after which the rate of increase lessened to about 1.7% per year until 2005. From 2005 to 2013, 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



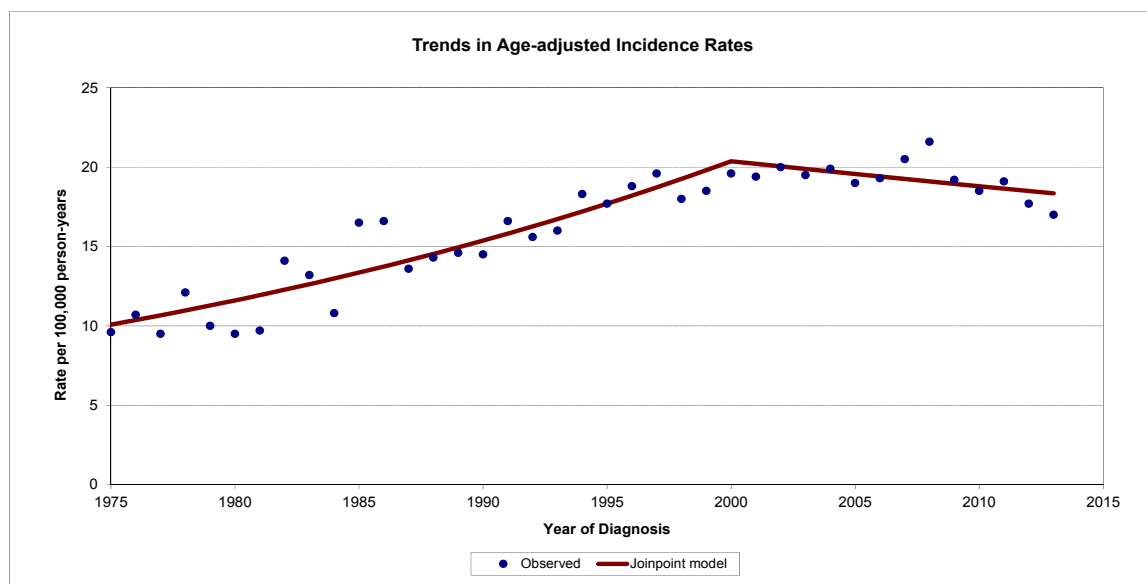
The incidence of melanoma of the skin increased at a rate of about 3.1% per year in Idaho from 1975 to 2013. The rate of increase has been higher for males (3.5% per year) than for females (2.6% per year). The incidence of in-situ melanoma of the skin increased at a higher rate (7.2% per year from 1980 to 2013) than for the invasive cases depicted in the graph.

Myeloma



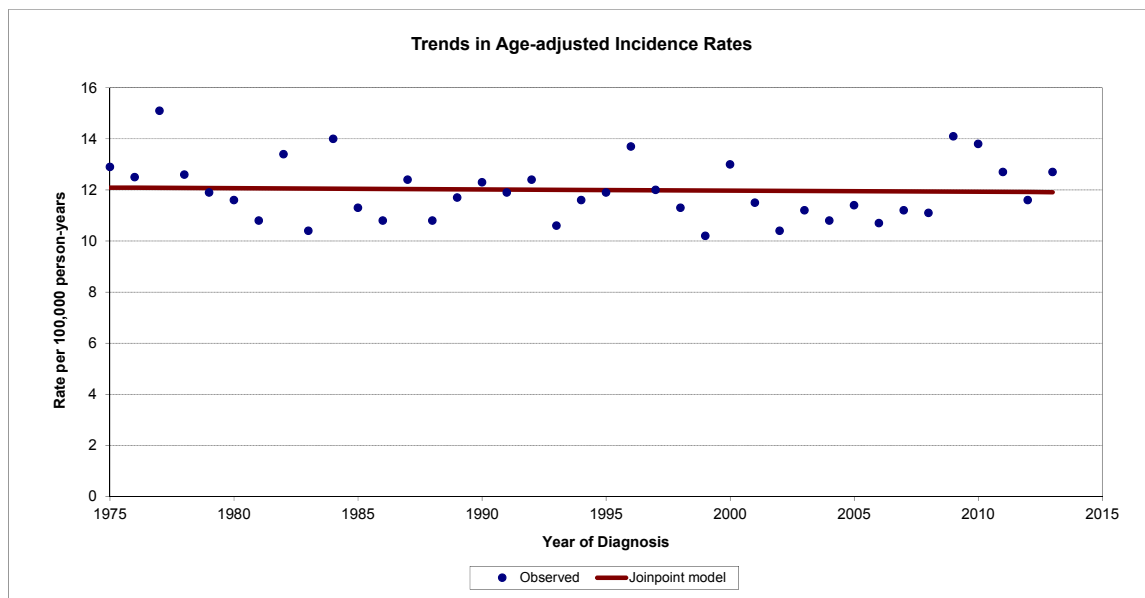
The incidence of myeloma increased at a rate of about 0.9% per year in Idaho from 1975 to 2013. The rate of increase was higher for males (1.4% per year) than for females (no significant trend), and rates of myeloma incidence among males were higher than among females.

Non-Hodgkin Lymphoma



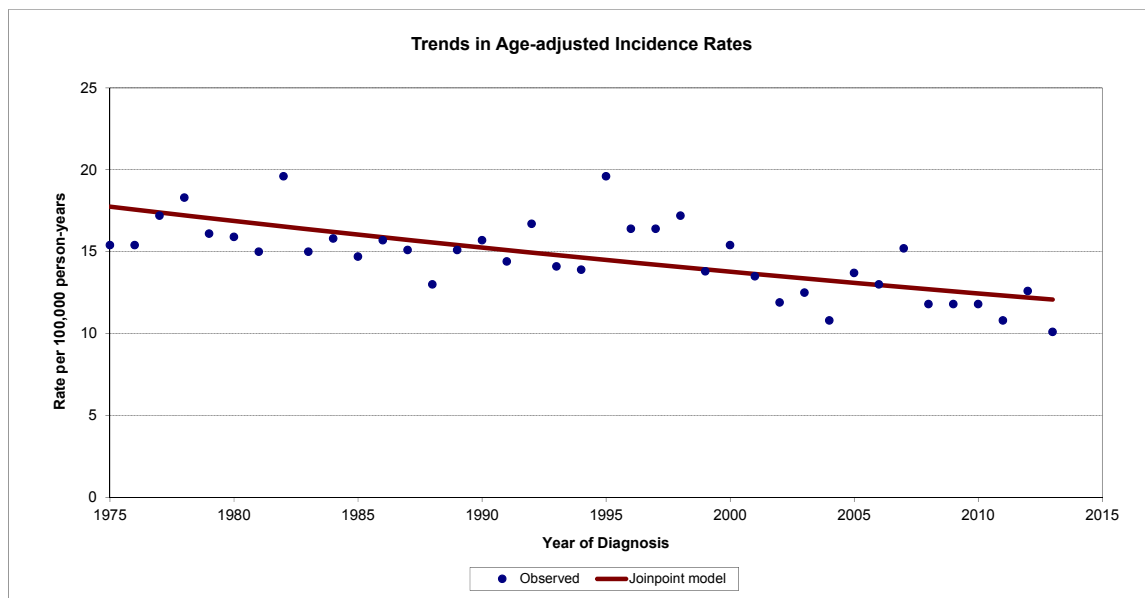
The incidence of non-Hodgkin lymphoma increased at a rate of about 2.9% per year in Idaho from 1975 to 2000, after which there has been no significant trend. Non-Hodgkin lymphoma incidence trends over time were similar for males and females, but rates of non-Hodgkin lymphoma incidence among males were higher than among females.

Oral Cavity and Pharynx



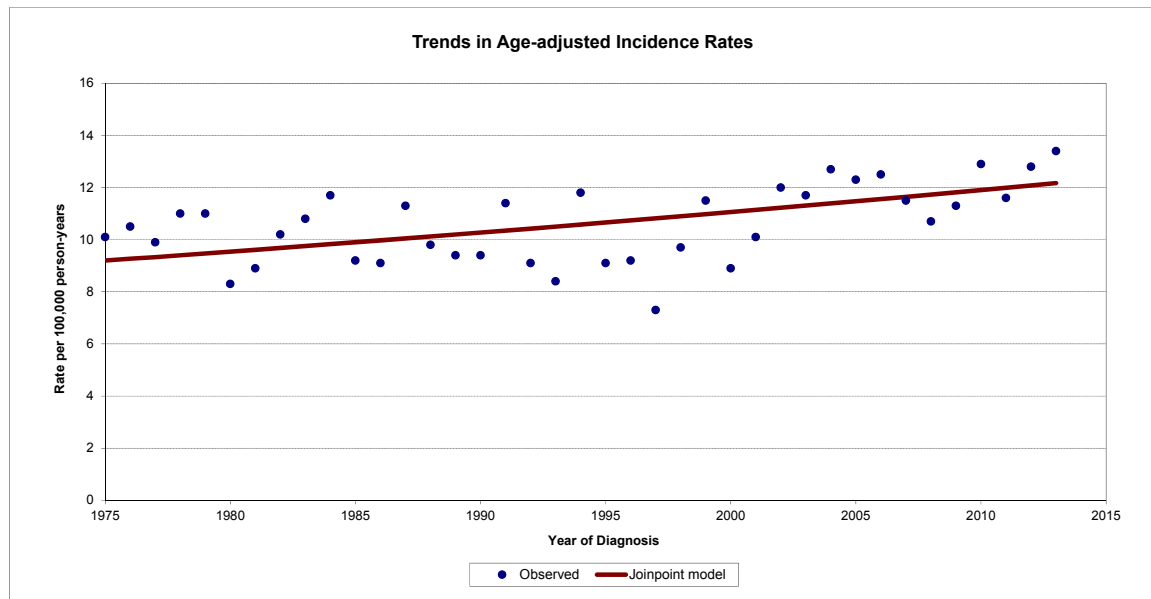
The incidence of cancers of the oral cavity and pharynx decreased at a rate of about 0.4% per year in Idaho from 1975 to 2013. Among males, the rate of decrease was about 0.5% per year for the entire time period. Among females, incidence of cancers of the oral cavity and pharynx increased at a rate of about 0.7% per year 1975 to 2013. 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



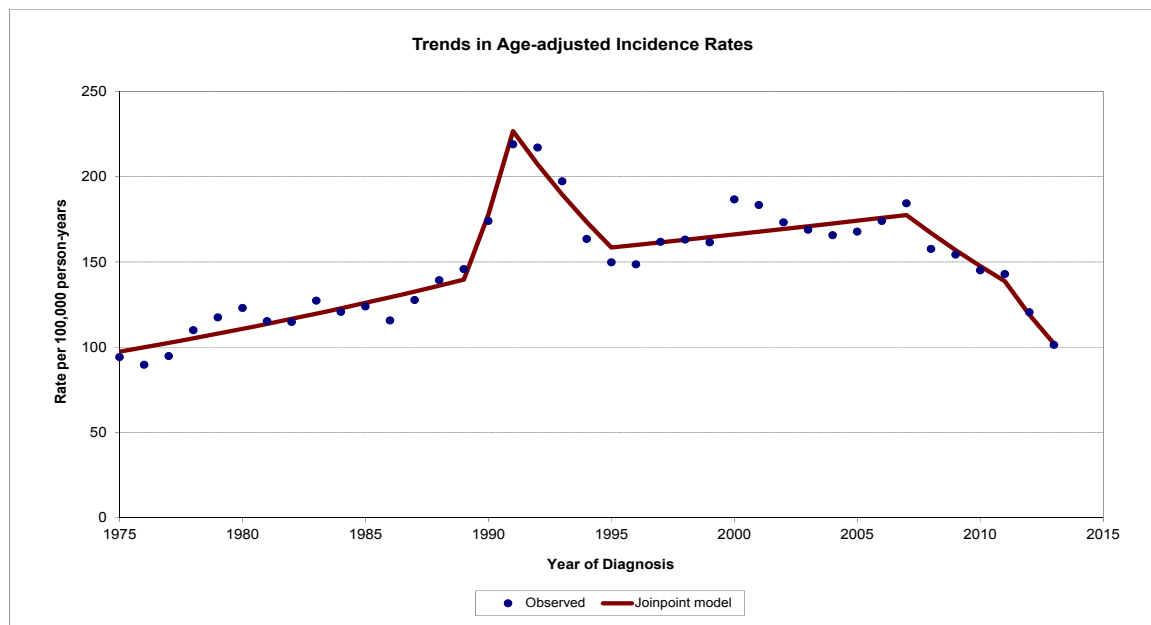
The incidence of ovarian cancer among females in Idaho decreased about 1.0% per year from 1975 to 2013. Part of the decrease in ovarian cancer incidence rates may have been due to a decrease in the use of hormone replacement therapy.

Pancreas



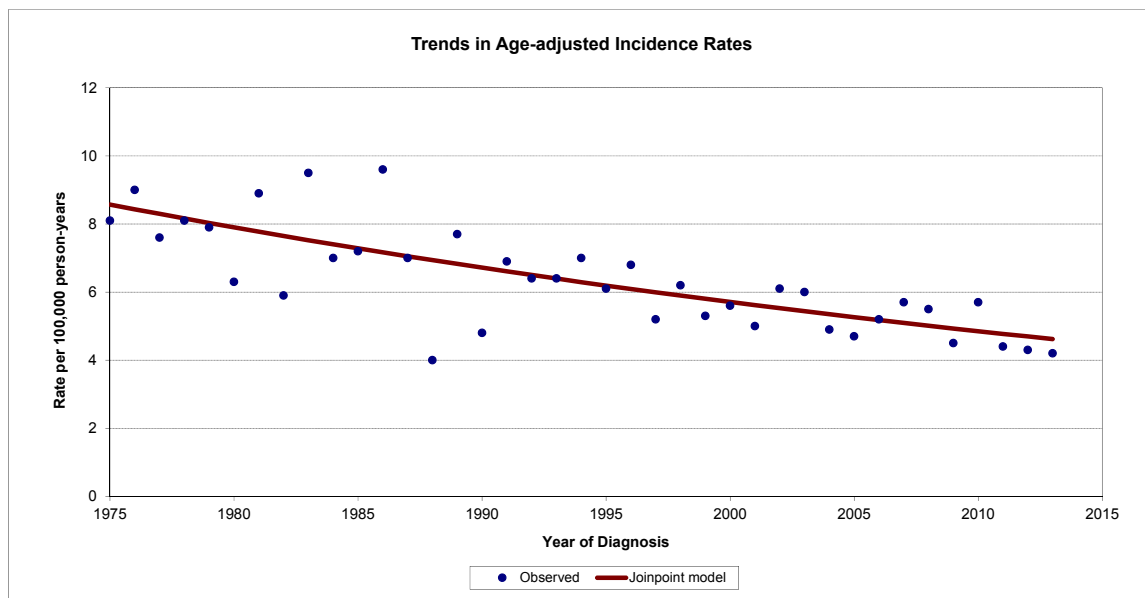
Pancreas cancer incidence increase at a rate of about 0.7 per year in Idaho from 1975 to 2013; rates showed year-to-year variability due to the relatively small numbers of cases diagnosed annually. Pancreas cancer incidence trends over time were different for males and females. Among males, pancreas cancer incidence decreased about 1.2% per year from 1975-1997, and has increased about 1.9% per year since 1997. Among females, pancreas cancer increased about 1.2% per year from 1975-2013. Rates of pancreas cancer incidence among males were higher than among females.

Prostate



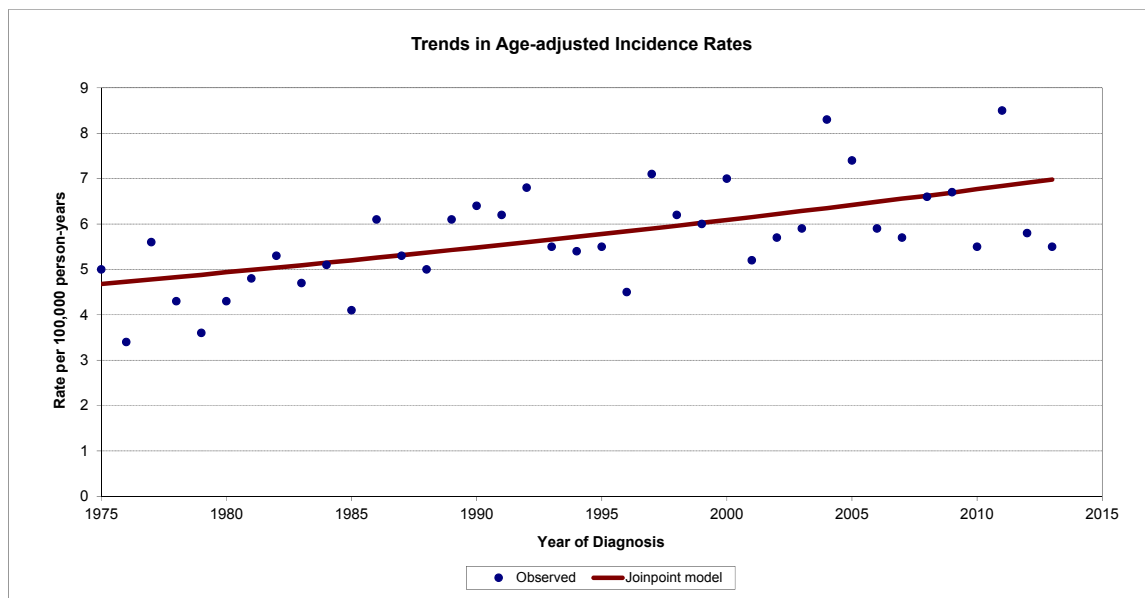
Trends in prostate cancer incidence are complicated, owing to the adoption of the Prostate-Specific Antigen (PSA) screening test in the late 1980s and early 1990s. From 1975 to 1989, prostate cancer incidence increased in Idaho at a rate of about 2.6% per year. From 1989 to 1991, prostate cancer incidence increased at a rate of about 27.4% per year. For the period 1991 to 1995, prostate cancer incidence rates decreased by about 8.6% 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 2013, prostate cancer incidence rates have decreased about 14.2% 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 2013 was similar to the rates at the beginning of the time series, before the adoption of the PSA test.

Stomach



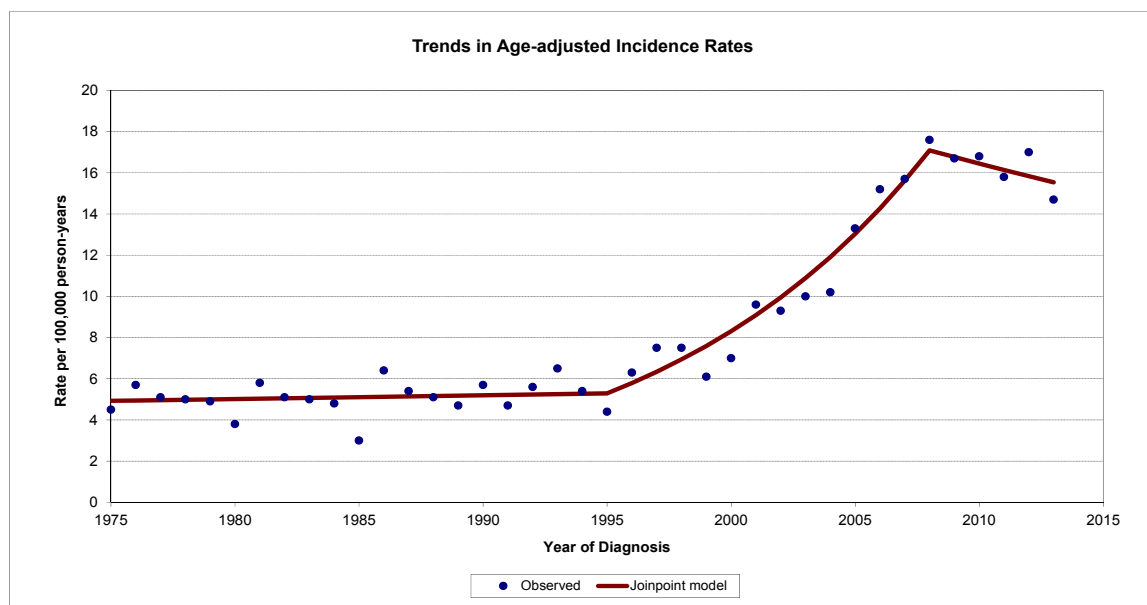
Stomach cancer incidence decreased at a rate of about 1.6% per year in Idaho from 1975 to 2013. Stomach cancer incidence trends over time were similar for males and females although stomach cancer incidence rates among males were about twice as high as among females.

Testis



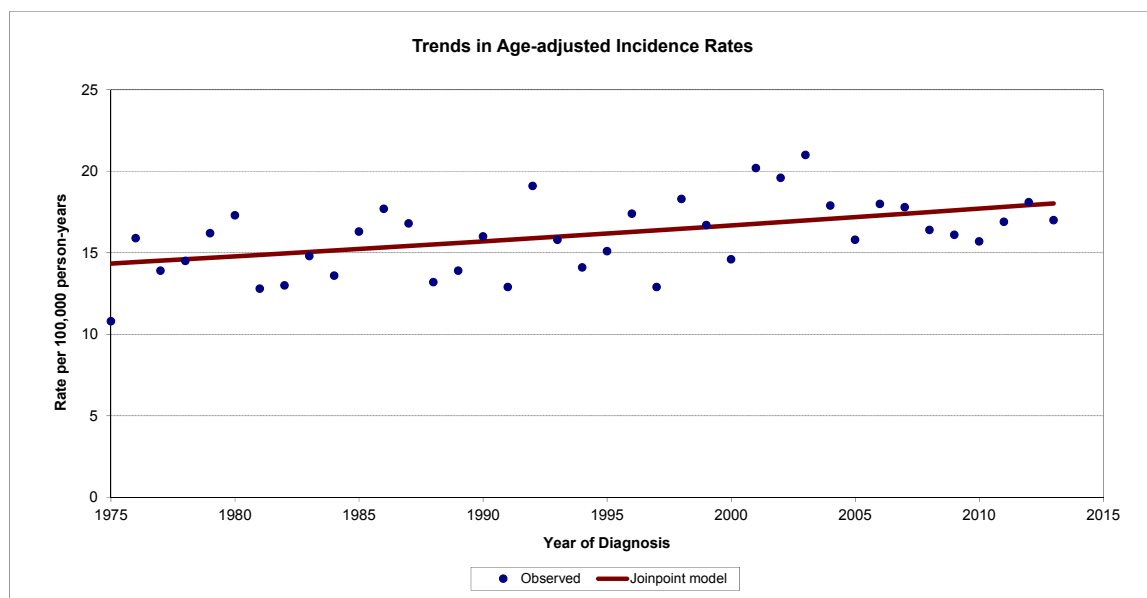
Testis cancer incidence increased at a rate of about 1.1% per year in Idaho from 1975 to 2013.

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 4.3% per year from 1975 to 2013. 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 0.6% per year in Idaho from 1975 to 2013. 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 2009-2013

Idaho Cancer Incidence Rates by Race and Ethnicity, 2009 - 2013

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	447.5	37,244	448.7	34,582	345.5	1,349	385.6	117	335.8	341	287.7	275
Bladder	22.6	1,849	22.8	1,758	12.5	34	^	^	^	^	^	^
Brain - malignant	6.1	498	6.3	460	4.7	26	^	^	^	^	^	^
Brain & other CNS - non-malignant	10.5	844	10.5	772	9.4	43	^	^	^	^	^	^
Breast	119.4	5,127	120.9	4,799	83.4	178	93.5	11	95.1	52	88.6	57
Breast - in situ	24.4	1,040	24.4	955	22.8	49	^	^	^	^	29.9	19
Cervix	6.1	234	5.9	200	6.2	20	^	^	^	^	^	^
Colorectal	37.1	3,052	36.7	2,816	31.3	113	^	^	37.8	36	31.3	29
Corpus Uteri	23.2	1,039	23.0	951	18.2	45	^	^	17.4	12	20.2	13
Esophagus	4.5	385	4.7	369	^	^	^	^	^	^	^	^
Hodgkin Lymphoma	2.7	214	2.8	187	3.4	21	^	^	^	^	^	^
Kidney and Renal Pelvis	15.4	1,289	15.1	1,166	19.2	77	^	^	19.4	19	^	^
Larynx	2.4	204	2.4	192	^	^	^	^	^	^	^	^
Leukemia	16.1	1,315	16.3	1,215	10.0	62	^	^	8.9	12	11.3	11
Liver and Bile Duct	5.5	491	4.9	406	11.3	43	^	^	18.0	19	10.6	12
Lung and Bronchus	51.1	4,228	51.8	4,038	34.2	102	57.7	13	49.1	39	38.7	29
Melanoma of the Skin	26.3	2,154	28.2	2,106	9.9	35	^	^	^	^	^	^
Myeloma	6.2	510	6.1	466	7.3	25	^	^	^	^	^	^
Non-Hodgkin Lymphoma	18.3	1,509	18.3	1,406	18.1	65	^	^	10.5	10	^	^
Oral Cavity and Pharynx	13.0	1,098	13.2	1,031	8.3	28	^	^	^	^	^	^
Ovary	11.4	500	11.6	471	7.1	20	^	^	^	^	^	^
Pancreas	12.5	1,039	12.5	986	12.9	37	^	^	^	^	^	^
Prostate	131.8	5,513	127.4	4,994	93.4	151	137.9	27	87.3	44	56.5	21
Stomach	4.6	383	4.4	337	4.7	17	^	^	^	^	13.8	12
Testis	6.4	237	6.8	209	3.5	20	^	^	^	^	^	^
Thyroid	16.2	1,259	16.7	1,142	12.4	77	^	^	9.8	14	^	^
Pediatric Age 0 to 19	16.9	401	17.3	322	15.5	64	^	^	^	^	^	^

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 2006-2012

**Actual (Crude) Measures of Cancer Prognosis at 5 Years After Diagnosis
Idaho Cases Diagnosed 2006-2012 Followed Through December 31, 2013**

Primary Site	Single or First Primary Cancers Only							All Primaries			
	N	Using Cause of Death			Using Expected Survival			N	Using Expected Survival		
		Cancer Death	Other Death	Survival	Cancer Death	Other Death	Survival		Cancer Death	Other Death	Survival
All Sites	40,266	30.5	8.7	60.8	28.9	8.9	62.2	46,484	30.6	9.4	60.0
Brain & Other Nervous System	571	69.7	2.8	27.5	68.4	1.8	29.8	645	70.9	1.9	27.2
Breast	5,624	11.9	6.5	81.6	9.1	8.4	82.5	6,685	9.3	9.3	81.4
Cervix Uteri	307	31.0	4.1	64.9	30.5	2.8	66.7	324	30.3	2.9	66.8
Colon & Rectum	3,346	35.0	10.5	54.5	31.8	11.2	57.0	4,057	33.6	11.9	54.5
Corpus & Uterus, NOS	1,231	17.6	5.0	77.4	16.1	6.0	77.9	1,403	17.3	6.5	76.2
Esophagus	404	76.8	9.7	13.5	81.2	4.0	14.8	494	81.3	4.0	14.7
Hodgkin Lymphoma	248	11.3	1.0	87.7	9.7	1.7	88.6	274	12.3	2.7	85.0
Kidney & Renal Pelvis	1,245	25.2	8.7	66.1	24.6	7.6	67.8	1,549	27.4	8.6	64.0
Larynx	245	33.4	11.0	55.6	35.2	7.2	57.6	295	35.7	8.2	56.1
Leukemia	1,194	32.9	12.0	55.1	35.1	8.9	56.0	1,496	38.2	9.1	52.7
Liver & Intrahepatic Bile Duct	449	79.9	8.9	11.2	85.7	2.2	12.1	536	84.5	2.7	12.8
Lung & Bronchus	4,248	77.4	9.4	13.2	80.4	4.7	14.9	5,488	80.1	5.2	14.7
Melanoma of the Skin	2,123	11.7	6.2	82.1	7.9	8.7	83.4	2,594	9.7	10.2	80.1
Mesothelioma	88	^	^	^	^	^	^	117	89.9	5.7	4.4
Myeloma	519	47.8	11.3	40.9	48.4	8.3	43.3	649	51.2	8.8	40.0
Non-Hodgkin Lymphoma	1,627	28.9	10.0	61.1	28.2	9.5	62.3	2,045	29.8	10.7	59.5
Oral Cavity & Pharynx	1,044	27.4	10.1	62.5	26.8	8.7	64.5	1,304	29.3	9.9	60.8
Ovary	584	59.1	3.9	37.0	55.4	4.9	39.7	696	56.0	5.3	38.7
Pancreas	977	92.2	2.4	5.4	91.1	2.4	6.5	1,217	91.9	2.6	5.5
Prostate	7,406	6.6	9.2	84.2	1.2	14.0	84.8	8,136	2.3	14.5	83.2
Stomach	430	70.3	7.1	22.6	69.8	5.8	24.4	528	71.1	5.9	23.0
Testis	304	3.3	1.8	94.9	4.6	0.7	94.7	317	4.7	0.9	94.4
Thyroid	1,516	2.6	2.0	95.4	1.8	2.9	95.3	1,708	2.6	3.8	93.6
Urinary Bladder	1,744	19.0	15.7	65.3	17.9	16.2	65.9	2,364	20.7	17.4	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 2006-2012 Followed Through December 31, 2013**

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	40,266	66.6	(66.1, 67.1)	68.7	(68.0, 69.3)	46,484	67.5 (66.9, 68.1)
Brain & Other Nervous System	571	29.2	(25.7, 32.8)	30.7	(27.0, 34.3)	645	29.9 (26.5, 33.4)
Breast	5,624	86.4	(85.2, 87.6)	90.1	(88.1, 91.7)	6,685	90.2 (88.6, 91.6)
Cervix Uteri	307	62.3	(55.7, 68.2)	61.4	(54.2, 67.8)	324	62.3 (55.4, 68.5)
Colon & Rectum	3,346	63.3	(61.4, 65.2)	66.8	(64.4, 69.0)	4,057	65.1 (63.0, 67.1)
Corpus & Uterus, NOS	1,231	77.4	(74.1, 80.3)	77.9	(73.3, 81.8)	1,403	77.5 (73.3, 81.0)
Esophagus	404	16.5	(12.6, 21.0)	15.1	(11.0, 19.8)	494	15.1 (11.6, 19.1)
Hodgkin Lymphoma	248	85.4	(80.4, 89.3)	87.0	(81.5, 91.0)	274	86.1 (80.7, 90.1)
Kidney & Renal Pelvis	1,245	70.6	(67.4, 73.6)	71.3	(67.4, 74.8)	1,549	69.6 (66.2, 72.8)
Larynx	245	62.3	(53.7, 69.7)	60.6	(51.6, 68.5)	295	60.2 (51.8, 67.7)
Leukemia	1,194	64.6	(61.5, 67.6)	62.9	(59.2, 66.4)	1,496	60.9 (57.6, 64.0)
Liver & Intrahepatic Bile Duct	449	14.1	(10.3, 18.6)	12.0	(8.2, 16.5)	536	14.1 (10.1, 18.7)
Lung & Bronchus	4,248	18.2	(16.6, 19.8)	18.0	(16.4, 19.6)	5,488	18.2 (16.8, 19.7)
Melanoma of the Skin	2,123	88.0	(86.3, 89.6)	91.1	(89.1, 92.8)	2,594	89.7 (87.9, 91.3)
Mesothelioma	88	^	^	^	^	117	5.6 (0.7, 18.5)
Myeloma	519	47.9	(42.2, 53.4)	48.1	(42.0, 53.9)	649	47.2 (41.7, 52.4)
Non-Hodgkin Lymphoma	1,627	69.0	(66.5, 71.4)	69.6	(66.4, 72.5)	2,045	69.4 (66.7, 71.9)
Oral Cavity & Pharynx	1,044	69.2	(65.7, 72.5)	70.2	(65.9, 74.0)	1,304	68.2 (64.0, 72.1)
Ovary	584	35.3	(31.0, 39.6)	38.7	(33.7, 43.6)	696	39.2 (34.7, 43.7)
Pancreas	977	7.1	(5.2, 9.5)	8.5	(6.3, 11.1)	1,217	7.7 (5.7, 10.1)
Prostate	7,406	92.0	(91.2, 92.8)	97.2	(96.0, 98.0)	8,136	96.2 (94.9, 97.2)
Stomach	430	28.2	(23.4, 33.1)	28.2	(22.8, 33.8)	528	27.3 (22.4, 32.3)
Testis	304	96.7	(93.7, 98.3)	95.3	(91.7, 97.4)	317	95.2 (91.5, 97.4)
Thyroid	1,516	95.1	(93.1, 96.6)	95.7	(93.0, 97.4)	1,708	95.3 (93.0, 96.9)
Urinary Bladder	1,744	81.0	(78.8, 83.1)	81.7	(78.4, 84.6)	2,364	79.7 (77.0, 82.2)

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, 2015.¹⁶

APPENDIX B

2013 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	6,453	3,109	11,141	15,175	7,442	6,708	9,246	58,228
5 to 9	7,097	2,971	11,909	17,141	8,196	7,293	9,122	63,214
10 to 14	7,437	3,044	11,537	17,164	7,481	7,091	8,578	61,875
15 to 19	7,167	4,081	11,831	15,536	6,797	6,462	7,891	58,123
20 to 24	6,325	6,243	12,682	15,615	6,035	5,793	9,411	57,853
25 to 29	5,808	3,509	9,467	16,964	5,760	5,764	7,655	53,203
30 to 34	6,343	3,219	9,718	17,251	6,381	5,707	7,239	54,431
35 to 39	6,013	2,776	9,071	15,914	5,941	5,179	6,275	50,317
40 to 44	6,579	2,861	9,051	16,272	5,419	4,599	5,459	49,339
45 to 49	6,781	2,928	8,510	15,077	5,432	4,292	5,406	47,630
50 to 54	7,698	3,489	8,961	15,744	6,156	5,145	6,124	52,343
55 to 59	7,971	3,734	8,825	14,244	5,968	5,361	5,727	50,551
60 to 64	7,839	3,616	8,061	12,467	5,181	4,741	5,067	45,701
65 to 69	6,725	2,965	6,798	10,117	4,271	3,606	3,878	37,509
70 to 74	5,006	2,279	5,075	6,461	3,319	2,647	2,914	27,218
75 to 79	3,259	1,641	3,412	4,081	2,245	1,834	1,967	18,061
80 to 84	2,075	1,062	2,176	2,811	1,518	1,323	1,291	11,938
85+	1,468	956	1,908	2,525	1,290	1,029	1,087	9,867
Total	108,044	54,483	150,133	230,559	94,832	84,574	104,337	807,401
	HD 1	HD 2	HD 3	HD 4	HD 5	HD 6	HD 7	STATE
Females								
< 5	6,140	2,898	10,815	14,371	7,216	6,681	8,965	56,254
5 to 9	6,549	2,716	11,323	16,357	7,694	6,902	8,728	59,843
10 to 14	7,241	2,824	10,983	16,546	7,241	6,527	8,222	59,184
15 to 19	6,581	3,696	11,080	14,491	6,321	5,976	8,734	55,419
20 to 24	5,940	5,178	11,779	14,485	5,673	5,732	8,970	54,292
25 to 29	6,091	3,178	9,674	15,981	5,851	5,693	7,105	51,979
30 to 34	6,218	2,943	9,765	16,402	6,101	5,689	6,953	52,926
35 to 39	6,167	2,491	9,014	15,146	5,524	4,981	6,033	48,669
40 to 44	6,580	2,759	8,914	15,615	5,279	4,607	5,462	48,434
45 to 49	6,991	2,988	8,600	14,781	5,259	4,484	5,171	47,448
50 to 54	8,116	3,654	9,392	15,611	6,155	5,193	5,981	53,034
55 to 59	8,666	3,768	9,068	14,964	6,054	5,367	5,827	52,407
60 to 64	8,261	3,461	8,423	13,084	5,291	4,657	5,020	47,071
65 to 69	6,772	2,936	7,161	10,252	4,420	3,704	3,891	38,340
70 to 74	4,915	2,307	5,332	7,208	3,349	2,747	3,040	28,352
75 to 79	3,259	1,646	3,608	4,903	2,589	2,146	2,142	19,899
80 to 84	2,390	1,296	2,738	3,767	1,930	1,638	1,662	14,966
85+	2,738	1,567	3,254	4,519	2,080	1,639	1,781	16,925
Total	109,615	52,306	150,923	228,483	94,027	84,363	103,687	805,442
Total	217,659	106,789	301,056	459,042	188,859	168,937	208,024	1,612,843

Source: National Center for Health Statistics, 2015.