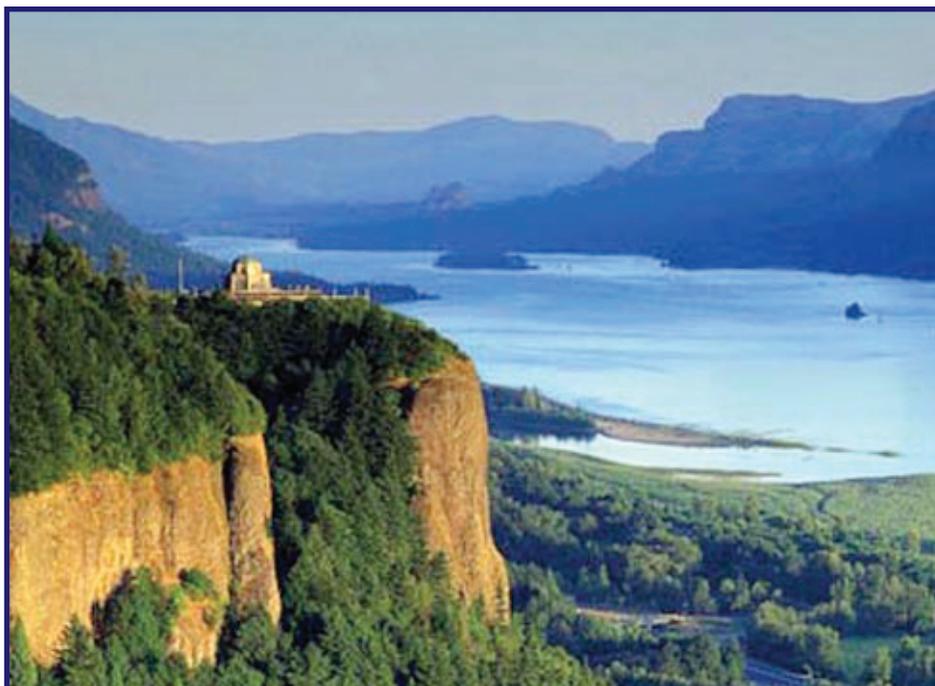


CANCER IN OREGON

Annual report on cancer incidence and mortality among Oregonians

2005



August 2007

Oregon State Cancer Registry (OSCaR)

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Funding Source

This publication was supported by Grant/Cooperative Agreement #U55/CCU021984 from the Centers for Disease Control and Prevention (CDC), National Program of Cancer Registries (NPCR). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC.

Suggested Citation

Riddell C, Pliska JM. Cancer in Oregon, 2005: Annual Report on Cancer Incidence and Mortality among Oregonians. Department of Human Services, Oregon Public Health Division, Oregon State Cancer Registry, Portland, Oregon, 2008.

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Executive Summary

Executive Summary

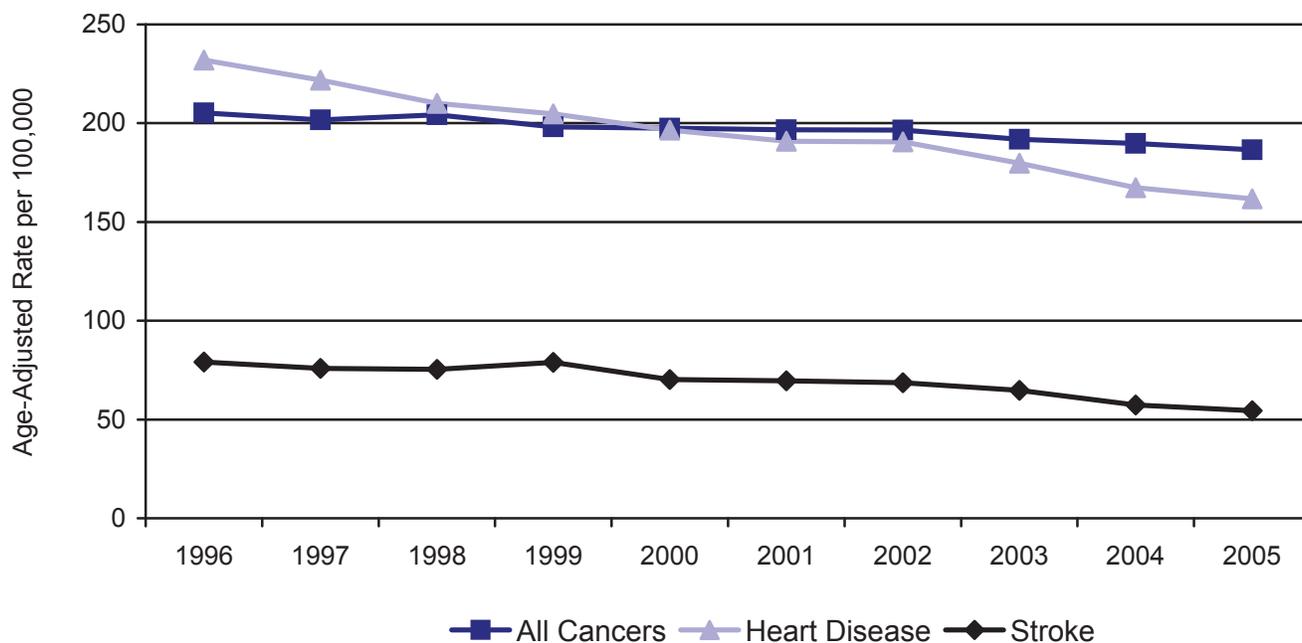
On an average day in 2005, 54 Oregonians were diagnosed with a reportable cancer, and 20 Oregonians died from it. Altogether, 19,788 reportable cancers were diagnosed in 2005 and added to the registry.

Cancer is the leading cause of death among Oregonians. For state rankings, see <http://www.statecancerprofiles.cancer.gov/index.html>.

The median age at death due to cancer is 71 years compared to a median age at death of

82 for deaths due to heart disease. Reportable cancers include all cancers that are *in situ* or invasive with the following exceptions: basal and squamous cell carcinoma of the skin (except of the genitalia) and carcinoma *in situ* of the cervix. Cancer leads to twice as many years of potential life lost (YPLL) before age 65 compared with heart disease. In Oregon, cancer is the second leading cause of YPLL for men, following unintentional injuries. For Oregon women, cancer is the leading cause of YPLL. Annually, about 23,000 YPLLs in Oregon are attributable to cancer deaths.

**Leading Causes of Death in Oregon,
Age-Adjusted Rates, 1996-2005**



Executive Summary

Breast Cancer is the most common reportable malignancy, with 2,685 invasive cases diagnosed in women and 22 in men during 2005. It is the 2nd most common cause of cancer death among Oregon women. Among states with high quality cancer incidence data, Oregon consistently has one of the highest female breast cancer incidence rates and was 2nd among the states in 2004. However, the mortality rate due to female breast cancer in Oregon is below that seen nationally, ranking 27th in 2004. The trend in breast cancer mortality nationally and in Oregon has been downward since the mid-1980s.

Prostate Cancer is the 2nd most common reportable malignancy (2,581 invasive cases diagnosed in 2005) and is the 2nd most common cause of cancer death among Oregon men. Among states with high quality cancer incidence data, Oregon ranked 29th for prostate cancer incidence in 2004.

Lung Cancer is the 3rd most common reportable malignancy, with 2,594 invasive cases diagnosed in 2005. It is also the leading cause of cancer death in Oregon for both men and women. At present, there are no effective early detection tools for lung cancer. Therefore, this malignancy is often diagnosed at an advanced stage, resulting in a poor prognosis. Tobacco use is the single greatest risk factor for lung cancer. In 2005, according to death certificate data, tobacco use was implicated in 81% of lung cancer deaths. Lung cancer incidence rates among Oregon men are lower than those seen nationally (ranking 30th in 2004). Lung cancer incidence among Oregon women is higher in comparison to other states (ranking 12th in 2004). Decreasing tobacco use in Oregon could significantly lower lung cancer incidence and mortality.

Colorectal Cancer is the 4th most common reportable malignancy, with 1,776 invasive cases diagnosed in 2005. It is the 2nd most common cause of cancer death among Oregonians. Routine screening can reduce both the incidence and mortality of colorectal cancer through early detection and removal of precancerous polyps. Oregon has a favorable ranking among the states, 38th in incidence in 2004 and 39th in mortality.

Melanoma is the 5th most common reportable malignancy with 1,029 invasive cases diagnosed in 2005. Oregon has one of the higher melanoma incidence rates in the nation (ranking 4th in 2004), and a higher melanoma mortality rate than the national average (ranking 9th in 2004). Sun avoidance, particularly during childhood, is perhaps the best protective strategy to prevent melanoma.

Bladder Cancer is the 6th most common invasive malignancy with 926 cases diagnosed in 2005. Oregon's incidence ranked 15th among the states in 2004. Smoking is the greatest risk factor for bladder cancer. Exposure to chemicals in the workplace can also increase the risk for bladder cancer if safety measures are not taken. Workers at highest risk are rubber, leather, textiles, and paint products workers as well as hairdressers, machinists, printers, and truck drivers. Although there are no recommendations for routine screening tests, blood in the urine is an early sign of bladder cancer. Having the bladder checked by a health care provider at the first sign of blood in the urine can identify bladder cancer in the earliest and most treatable stage.

Introduction

The Oregon State Cancer Registry (OSCaR) was established by the 1995 Oregon Legislature to conduct statewide cancer surveillance and to guide cancer control program planning. The registry began collecting information on all reportable cancers diagnosed in Oregon as of January 1, 1996. The enabling statute defines the purpose of OSCaR as follows:

“The purpose of the registry shall be to provide information to design, target, monitor, facilitate, and evaluate efforts to determine the causes or sources of cancer and benign tumors among the residents of Oregon and to reduce the burden of cancer and benign tumors in Oregon.”

Data from OSCaR provide an overview of all reportable cancers diagnosed in Oregon, including all cancers except basal or squamous cell carcinomas of the skin and *in situ* cervical cancers. Non-melanoma skin cancer is reportable when it occurs on the skin of the genitalia. Cancer incidence data, which are collected by registrars trained in cancer reporting, provide a more complete picture of cancer among Oregonians than can be obtained from mortality data alone. This information is useful for cancer prevention program staff, clinicians, policymakers, and for the public to understand the impact of cancer among Oregonians.

By combining information from the statewide cancer registry, death certificates, and health behavior surveys, it becomes possible to answer a variety of epidemiological questions. This information helps cancer control programs identify at-risk populations as well as support epidemiologic studies of risk factors and cancer

etiology. Many such questions are addressed in this report, including the following:

- How many Oregonians are diagnosed with cancer each year?
- Which cancers are the most common?
- Which cancers are the deadliest (most deaths per diagnosed case)?
- What are the trends in cancer incidence and mortality?
- Which groups of Oregonians are disproportionately affected by cancer?
- What geographic areas in the state have higher cancer mortality?

OSCaR also collects information on the stage of disease (the level of a cancer’s progression) at the time of diagnosis. This is an important indicator of the effectiveness of screening efforts, as well as a determinant of treatment options and a predictor of survival for many types of cancers. For example, detecting female breast cancer in the early stages (e.g. through screening mammography) reduces mortality and has a strong influence over whether a woman with breast cancer can be successfully treated.

What's New

Diagnosis year 2005 marks the tenth year of complete cancer reporting for Oregon. Ten years (1996-2005) of complete data are included in this annual report and state-level annual counts and trends for 2001-2005. For historical data, please review prior reports on our website: www.healthoregon.org/oscar. In this issue of *Cancer in Oregon*, information will be provided in two sections: a data report, and a separate risks and screening report. This document is the data report and will be published primarily as a web document.

Beginning in reporting year 2004, benign and borderline brain and CNS tumors became reportable cases. Though not included in total cancer counts, they are addressed in this report in a separate section, "Brain and CNS Tumors, Non-Malignant".

In addition to statewide incidence and mortality data for 42 sites, this year's report includes additional national comparison, regional maps and county-level data on 22 selected sites.

Regional maps, in this year's report, show age-adjusted rates at the county level instead of geographically smoothed rates as shown in previous years. In order to avoid data suppression due to small numbers, counties with small populations have been combined into regions. Regions for the cancer maps are Central Columbia (Hood River, Jefferson, Sherman and Wasco counties), North Central (Crook, Gilliam, Grant, Morrow and Wheeler counties), Northeast (Baker, Umatilla, Union and Wallowa counties), and Southeast (Harney, Lake and Malheur counties).

Cancer Data Overview

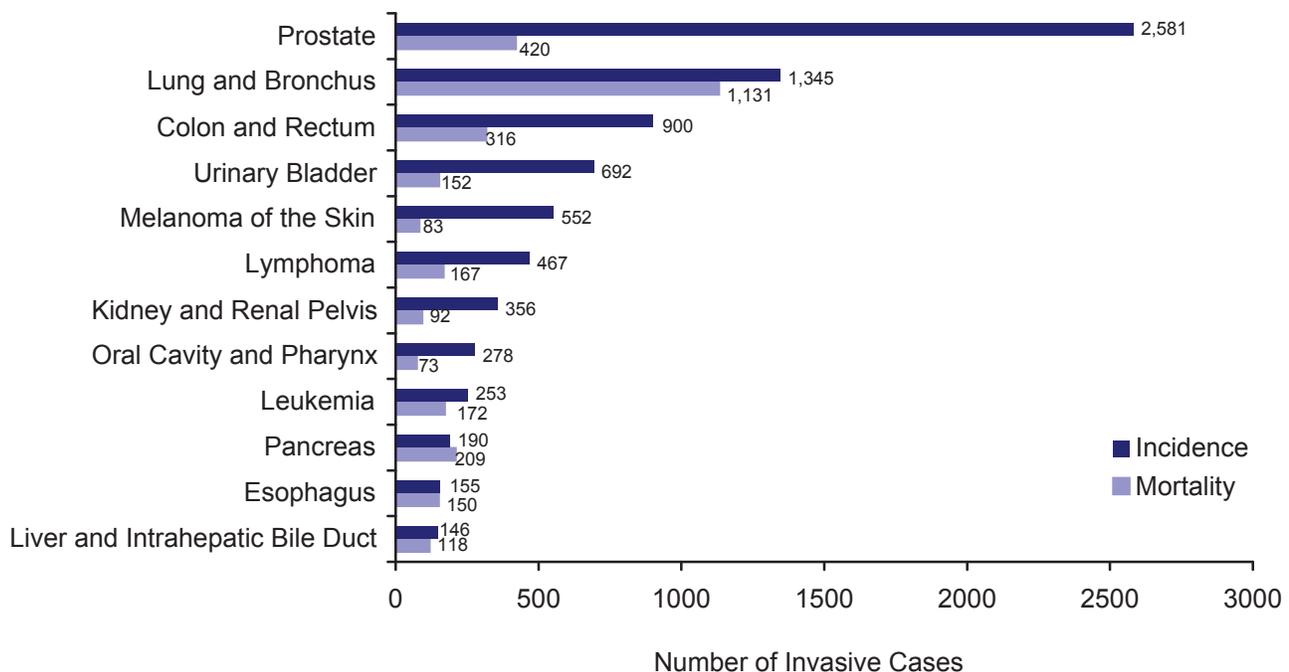
Cancer Data Overview

During 2005, 19,788 new, reportable cancers were diagnosed among Oregonians; of these, 18,083 were invasive. Also during 2005, 7,396 Oregonians died due to cancer as the underlying cause of death. The 2005 Oregon total cancer mortality rate, 189.4, was 18% above the Healthy People 2010 target of 159.9 deaths per 100,000.

A brief overview of Oregon's 2005 cancer data reveals the following:

1. Oregon's 2005 age-adjusted cancer incidence rate of 467.4 per 100,000 was 1 percent lower than the 2004 national age-adjusted rate of 470.7.
2. Oregon's age-adjusted cancer mortality rate of 189.4 was 2 percent higher than the 2004 national rate of 185.7.
3. Although more cancers were reported in women, men had a higher incidence rate of invasive cancers and a higher mortality rate than women.
4. Breast cancers have the highest incidence in Oregon and lung cancers have the highest mortality.
5. Among Oregon females, breast cancer was the most frequently diagnosed cancer followed by lung, colorectal, and uterine cancer, and then melanoma. Lung cancer had the highest mortality for females, followed by breast, colorectal, pancreatic, and ovarian cancers.
6. Among Oregon males, prostate cancer was the most frequently diagnosed, followed by lung, colorectal, and urinary bladder cancer, and by melanoma. Lung cancer had the highest mortality for males followed by prostate, colorectal, and pancreatic cancer, and by leukemia.

**Leading Sites of Cancer Incidence and Mortality,
Oregon Males, 2005**



Cancer Data Overview

7. Of the 49 states with central registry data meeting national data quality standards in 2004, Oregon males ranked 27th for all-cancer incidence and Oregon females ranked 10th. For state rankings, see <http://www.statecancerprofiles.cancer.gov/incidencerates/index.php>.
8. Among the 50 states, Oregon males ranked 28th, and Oregon females ranked 14th in all-cancer mortality for 2004. The higher ranking for Oregon females is primarily due to higher rates of lung cancer mortality.

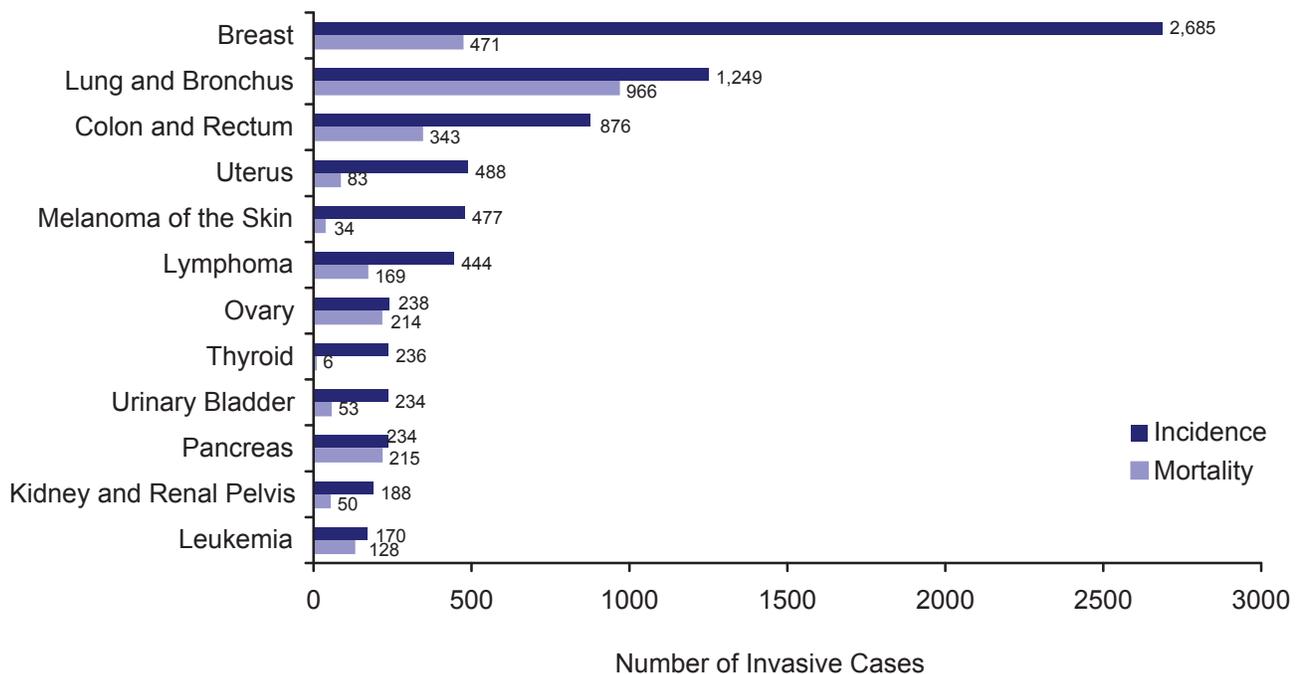
Stage at Diagnosis

For some cancers, early stage diagnosis is a measure of success for population-based screening efforts. (See figures on opposite page.) From 1996 through 2005, the percentage of early stage diagnoses decreased for cervical

cancer. The percentage of early stage diagnoses for colorectal cancers increased, and, though there is no national recommendation for prostate cancer screening, the percentage of early stage prostate cancer diagnoses has also increased. Although the percentage of female breast cancers diagnosed at an early stage has remained stable, the percentage of *in situ* diagnoses has increased, which will likely improve outcomes.

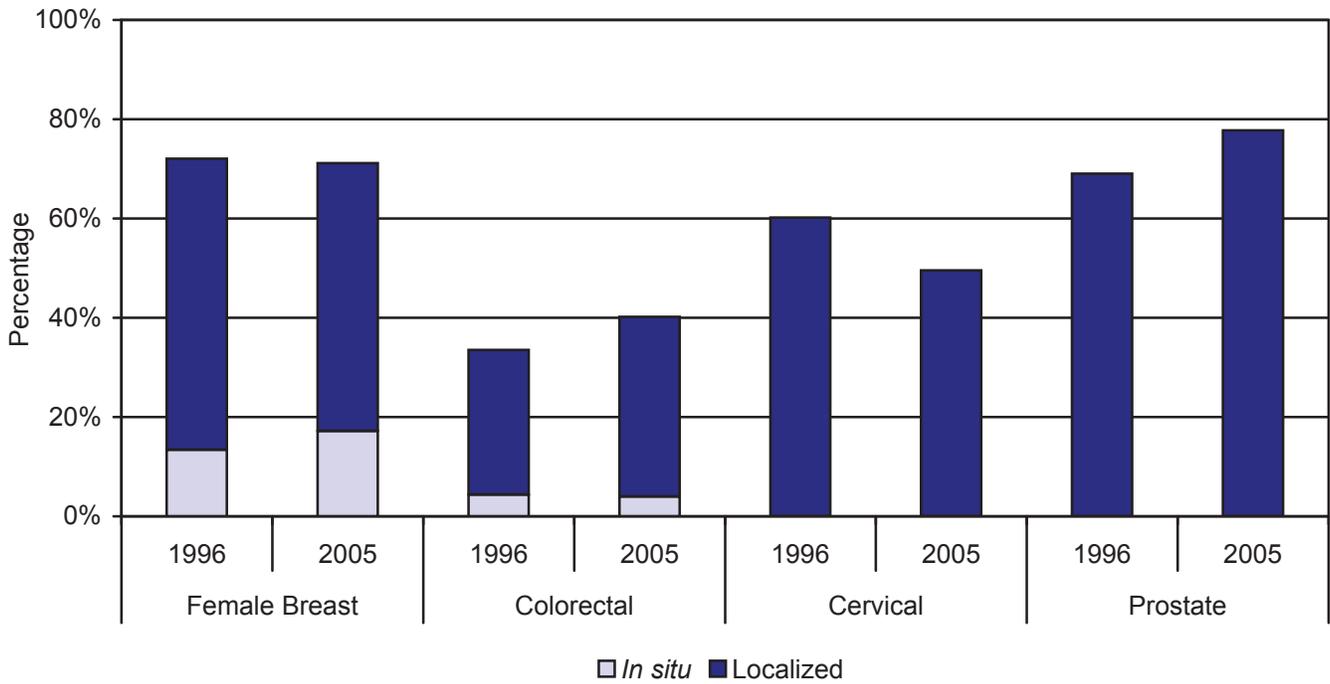
Despite variability in the percentage of cases diagnosed at an early stage, all of these screenable cancers demonstrated mortality reductions—likely due to improved screening and enhanced treatment.

**Leading Sites of Cancer Incidence and Mortality,
Oregon Females, 2005**

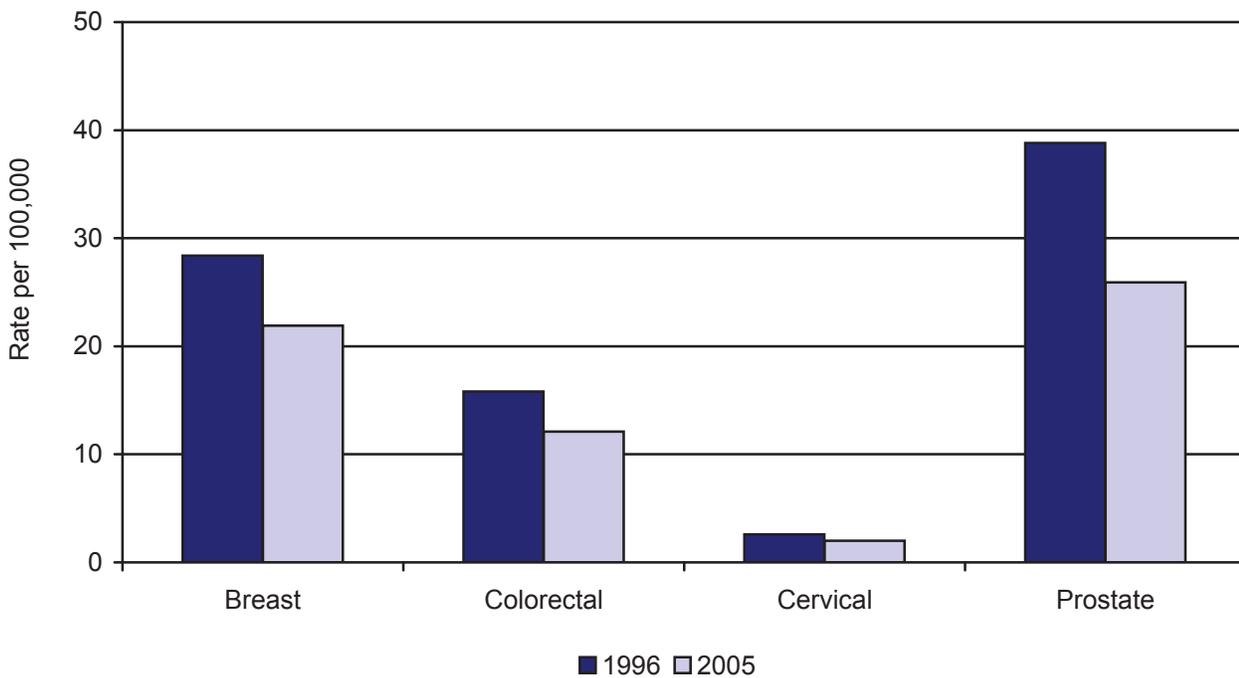


Cancer Data Overview

Screenable Cancers Diagnosed at an Early (In situ or Local) Stage, Oregon, 1996 and 2005



Screenable Cancers, Age-Adjusted Mortality Rates, Oregon, 1996 and 2005



Cancer Data Overview

Mortality to Incidence (M/I) Ratios, Oregon, 2001-2005

	Total	Male	Female
All Malignant Sites	0.41	0.41	0.40
Pancreas	1.00	1.01	0.99
Esophagus	0.96	0.96	0.94
Mesothelioma	0.95	1.02	0.70
Liver and Intrahepatic Bile Duct	0.92	0.86	1.08
Lung and Bronchus	0.81	0.82	0.79
Myeloma	0.81	0.79	0.85
Brain and CNS	0.78	0.81	0.75
Ovary	0.77	n/a	0.77
Leukemia	0.69	0.68	0.70
Gallbladder	0.59	0.60	0.58
Stomach	0.58	0.55	0.62
Soft Tissue including Heart	0.46	0.44	0.48
Non-Hodgkin Lymphoma	0.41	0.41	0.42
Lymphoma	0.39	0.38	0.39
Bones and Joints	0.38	0.50	0.24
Colorectal	0.38	0.37	0.38
Cervical	0.35	n/a	0.35
Larynx	0.34	0.32	0.39
Kidney and Renal Pelvis	0.31	0.32	0.30
Oral Cavity and Pharynx	0.25	0.23	0.31
Bladder	0.22	0.21	0.25
Small Intestine	0.21	0.17	0.27
Breast	0.19	0.25	0.19
Uterine	0.17	n/a	0.17
Hodgkin Lymphoma	0.16	0.17	0.16
Prostate	0.16	0.16	n/a
Melanoma of the Skin	0.13	0.17	0.10
Eye and Orbit	0.10	0.12	0.07
Testis	0.06	0.09	n/a
Thyroid	0.06	0.06	0.05

Oregon Data Sources: OSCaR (Incidence) and Center for Health Statistics (Mortality)

n/a = Not applicable

Disease Severity

The mortality-to-incidence (M/I) ratio provides a measure of disease severity. In general, the higher the M/I ratio, the poorer the expected outcome for a patient with cancer of that type. An M/I ratio over 1.0 indicates the poorest prognosis. This means more people died due to the particular cancer type than were diagnosed during the same year.

Overall, Oregon's M/I ratio for all cancers was 0.41 for the years 2001-2005. Pancreatic cancer had the worst prognosis with a ratio of 1.00. This was followed by cancer of the esophagus with a ratio of 0.96.

Cancer Data Overview

Years of Potential Life Lost (YPLL) by Average Number of Years Lost Annually, Prior to Age 65, Oregon, Years 2001-2005

	Total	Male	Female
All Causes of Death	136,880	79,353	57,527
Accidents and Adverse Effects	23,959	16,630	7,328
All Malignant Cancers	23,097	11,595	11,502
Lung and Bronchus	4,539	2,488	2,051
Breast	2,480	19	2,461
Brain and CNS	1,926	1,119	807
Colorectal	1,725	927	798
Leukemia	1,536	887	650
Lymphoma	1,182	712	470
Pancreas	977	573	404
Liver and Bile Duct	801	548	253
Melanoma of the Skin	771	481	290
Ovary	682	n/a	682
Esophagus	552	444	108
Kidney and Renal Pelvis	513	354	159
Soft Tissue including Heart	503	308	195
Cervical	431	n/a	431
Stomach	429	253	176
Oral Cavity and Pharynx	393	293	100
Prostate	320	320	n/a
Bones and Joints	296	211	84
Myeloma	293	191	102
Urinary Bladder	269	179	90
Testis	190	190	n/a
Uterus	180	n/a	180
Diseases of Heart	16,937	9,393	7,544
Suicide and Self-Inflicted Injury	10,451	8,263	2,188
Congenital Anomalies	4,820	2,564	2,256
Cerebrovascular Diseases	4,167	1,658	2,509
Homicide and Legal Intervention	3,493	2,528	965
Chronic Liver Disease and Cirrhosis	3,444	2,232	1,212
Diabetes Mellitus	3,299	1,977	1,322
Pneumonia and Influenza	2,096	775	1,321
Chronic Obstructive Pulmonary Disease and Allied Conditions	2,028	951	1,077
Human Immunodeficiency Virus (HIV)	1,496	1,320	176

Data source: Center for Health Statistics

YPLL calculations are rounded to the nearest whole year.

n/a = not applicable

Years of Potential Life Lost

Years of potential life lost (YPLLs) are a measurement of the risk of early death due to a particular cause. For example, using 65 years as a standard age of death, a person dying of cancer at age 25 would have 40 years of potential life lost before age 65. The YPLL measure is one way of evaluating the burden of a disease upon a defined population.

Unintentional injury was the leading cause of YPLL for male Oregonians, and cancer was the leading cause of YPLL for female Oregonians. However, due to the high injury rate for men, unintentional injuries were the leading cause of YPLL with both sexes combined. It is interesting to note that, when a standard age at death of 70 or greater (rather than 65) is used in the calculation, cancer becomes the leading cause of YPLL among all Oregonians.

Among the various cancer sites, lung had the highest YPLL for men (2,488) and breast had the highest YPLL for women (2,461). For men, the second highest YPLL was due to brain cancer and for women, it was lung cancer. Colorectal cancer, leukemia, and lymphomas all caused over 1,000 YPLL per year.

Cancer Data Overview

Race and Ethnicity

Differences in age-adjusted incidence and death rates among population groups are important because they may reflect differences in screening rates, treatment, access to care,

or modifiable risk behaviors. However, due to issues with completeness and accuracy of race and ethnicity reporting, data must be interpreted with care. Please refer to the Technical Section for additional information.

**Incidence - Five Most Common Cancers
Percentage of All Cancer Cases by Sex, Race, and Ethnicity
Oregon (1996 - 2005) vs US (SEER 1996 - 2004)**

MEN			WOMEN		
U.S.		OREGON	U.S.		OREGON
African American Men			African American Women		
Prostate	38%	32%	Prostate		
Lung and Bronchus	16%	19%	Lung and Bronchus		
Colon and Rectum	10%	9%	Colon and Rectum		
Lymphoma	4%	5%	Lymphoma		
Oral and Pharynx	3%	4%	Oral and Pharynx		
American Indian or Alaska Native Men			American Indian or Alaska Native Women		
Prostate	20%	18%	Prostate		
Lung and Bronchus	15%	18%	Lung and Bronchus		
Colon and Rectum	14%	13%	Colon and Rectum		
Kidney and Renal	6%	6%	Kidney and Renal		
Stomach	5%	4%	Stomach		
Asian or Pacific Islander Men			Asian or Pacific Islander Women		
Prostate	25%	19%	Prostate		
Lung and Bronchus	15%	14%	Lung and Bronchus		
Colon and Rectum	14%	14%	Colon and Rectum		
Liver and Bile Duct	6%	11%	Liver and Bile Duct		
Stomach	5%	6%	Stomach		
White Men			White Women		
Prostate	30%	29%	Prostate		
Lung and Bronchus	13%	15%	Lung and Bronchus		
Colon and Rectum	11%	10%	Colon and Rectum		
Urinary Bladder	7%	7%	Urinary Bladder		
Lymphoma	5%	5%	Lymphoma		
Hispanic Men			Hispanic Women		
Prostate	29%	24%	Prostate		
Colon and Rectum	11%	13%	Colon and Rectum		
Lung and Bronchus	9%	8%	Lung and Bronchus		
Lymphoma	7%	8%	Lymphoma		
Leukemia	4%	5%	Leukemia		
Non-Hispanic Men			Non-Hispanic Women		
Prostate	31%	29%	Prostate		
Lung and Bronchus	14%	16%	Lung and Bronchus		
Colon and Rectum	11%	10%	Colon and Rectum		
Urinary Bladder	6%	7%	Urinary Bladder		
Lymphoma	5%	5%	Lymphoma		

US Data: Incidence SEER 13 Registry Data using SEER Stat 6.3.5 released April 2007

Oregon Data: OSCaR 1996-2004

Cancer Data Overview

As seen nationally, African American (AA) men in Oregon have the highest rate of cancer incidence and mortality, followed by whites. Among women in Oregon and nationally, whites have the highest cancer incidence rates, but AA women have higher mortality rates. American Indians/Alaskan Natives (AI/AN) in

Oregon have higher cancer rates than are seen nationally. Nationwide, AI/AN cancer incidence and mortality are the lowest among the four reported racial groups. Hispanics have lower cancer incidence and mortality rates than non-Hispanics both in Oregon and nationally.

Mortality - Five Most Common Cancers
Percentage of All Cancer Cases by Sex, Race, and Ethnicity
Oregon (1996 - 2005) vs US (SEER 1996 - 2004)

MEN				WOMEN			
U.S.		OREGON		U.S.		OREGON	
African American Men				African American Women			
Lung and Bronchus	32%	32%	Lung and Bronchus	Lung and Bronchus	20%	21%	Lung and Bronchus
Prostate	16%	17%	Prostate	Breast	19%	17%	Breast
Colon and Rectum	9%	8%	Colon and Rectum	Colon and Rectum	12%	11%	Colon and Rectum
Pancreas	5%	5%	Pancreas	Pancreas	6%	9%	Pancreas
Esophagus	4%	4%	Stomach	Ovary	4%	4%	Lymphoma
American Indian or Alaska Native Men				American Indian or Alaska Native Women			
Lung and Bronchus	30%	31%	Lung and Bronchus	Lung and Bronchus	22%	32%	Lung and Bronchus
Colon and Rectum	10%	13%	Colon and Rectum	Breast	14%	11%	Breast
Prostate	9%	7%	Prostate	Colon and Rectum	10%	8%	Colon and Rectum
Liver and Bile Duct	5%	5%	Brain and CNS	Pancreas	5%	6%	Lymphoma
Stomach	5%	5%	Esophageal	Ovary	5%	5%	Leukemia
Asian or Pacific Islander Men				Asian or Pacific Islander Women			
Lung and Bronchus	26%	24%	Lung and Bronchus	Lung and Bronchus	18%	17%	Breast
Liver and Bile Duct	12%	19%	Liver and Bile Duct	Breast	15%	16%	Lung and Bronchus
Colon and Rectum	10%	9%	Colon and Rectum	Colon and Rectum	10%	10%	Colon and Rectum
Stomach	8%	7%	Stomach	Stomach	7%	8%	Stomach
Prostate	7%	6%	Pancreas	Liver and Bile Duct	6%	6%	Liver and Bile Duct
White Men				White Women			
Lung and Bronchus	32%	31%	Lung and Bronchus	Lung and Bronchus	24%	27%	Lung and Bronchus
Prostate	11%	12%	Prostate	Breast	16%	15%	Breast
Colon and Rectum	10%	9%	Colon and Rectum	Colon and Rectum	11%	10%	Colon and Rectum
Pancreas	5%	5%	Pancreas	Pancreas	6%	6%	Ovary
Lymphoma	5%	5%	Lymphoma	Ovary	5%	6%	Pancreas
Hispanic Men				Hispanic Women			
Lung and Bronchus	22%	23%	Lung and Bronchus	Breast	17%	15%	Lung and Bronchus
Prostate	10%	10%	Prostate	Lung and Bronchus	13%	13%	Breast
Colon and Rectum	10%	8%	Leukemia	Colon and Rectum	10%	9%	Colon and Rectum
Liver and Bile Duct	6%	8%	Lymphoma	Pancreas	6%	7%	Leukemia
Stomach	6%	7%	Colon and Rectum	Ovary	6%	7%	Pancreas
Non-Hispanic Men				Non-Hispanic Women			
Lung and Bronchus	33%	31%	Lung and Bronchus	Lung and Bronchus	24%	27%	Lung and Bronchus
Prostate	12%	12%	Prostate	Breast	16%	15%	Breast
Colon and Rectum	10%	9%	Colon and Rectum	Colon and Rectum	11%	10%	Colon and Rectum
Pancreas	5%	5%	Pancreas	Pancreas	6%	6%	Ovary
Lymphoma	4%	5%	Lymphoma	Ovary	5%	6%	Pancreas

US Data: SEER*Stat database, Mortality-All Cause of Death, Public-Use
 Oregon Data: OSCaR 1996-2005

Cancer Data Overview

Historically, Oregon's American Indian/Alaska Native (AI/AN) population has had the lowest incidence and mortality rates of cancer of all racial/ethnic groups. OSCaR and other registries have found that AI/AN cases are often misclassified as another race or Hispanic. When AI/AN individuals are properly classified, rates are substantially higher. OSCaR links annually with local and national Indian Health Service and tribal clinic registries to correct racial coding for AI/AN persons. Perhaps this is why Oregon has higher rates than those seen nationally.

There are differences in distribution of cancer by site among racial and ethnic groups. Regardless of race or ethnicity, prostate cancer was the most common cancer for men in Oregon and nationwide, while breast cancer was the most common cancer for women. However, lung cancers represent a greater burden among Hispanics and AI/AN women in Oregon than nationally. Cervical cancer could potentially be eliminated with appropriate, population-based screening and early Human Papilloma Virus (HPV) vaccination, but it is the 4th most common cancer among Hispanic women for both Oregon and the nation. Melanoma of the skin is the 5th most common cancer among white men and women in Oregon, but is not among the five leading cancer sites nationally. Lymphomas also represent a greater burden among AI/AN and AA women in Oregon than they do nationally.

For men, lung cancers were the most common cause of cancer death among all racial and ethnic groups in Oregon. For women, lung cancers were also the leading cause of cancer death except among Asian and Pacific Islanders (A/PI), where breast cancers were the leading cause of cancer death. Nationally and in Oregon

A/PI have a higher percentage of liver cancer deaths compared to other racial groups. Deaths from stomach cancers are also more common in A/PI men as well as in AA men. Generally considered rare cancers, multiple myeloma and brain/central nervous system cancers are among the top 5 cancer causes of death among AA men and AI/AN men, respectively.

Some of these differences in mortality may be driven by stage at diagnosis. Whites have the highest percentage of cancers diagnosed at an early stage and AI/AN have the lowest. Hispanics have a lower percentage of cases diagnosed at an early stage than non-Hispanics.

All Cancers

ALL CANCERS - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	19,788	9,776	10,010
RATES			
Oregon Crude Rate (2005)	496.6	510.4	483.0
Oregon Age-adjusted Rate (2005)	467.4	525.9	425.4
US Age-adjusted Rate (2004) ¹	458.2	537.6	403.1
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-1.3	-1.4	-1.3
CANCER MORTALITY			
Total Cancer Deaths (2005)	7,396	3,856	3,540
RATES			
Oregon Crude Rate (2005)	203.1	212.9	193.4
Oregon Age-adjusted Rate (2005)	189.4	226.8	162.4
US Age-Adjusted Rate (2004) ²	185.7	228.3	157.0
TRENDS - APC			
Oregon Annual Trend (2001-2005)	*-1.4	*-1.5	*-1.7
US Annual Trend (2000-2004) ²	*-1.6	*-2.1	*-1.4
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.41	0.41	0.40
Burden: YPLL (2001-2005)	23,097	11,595	11,502

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

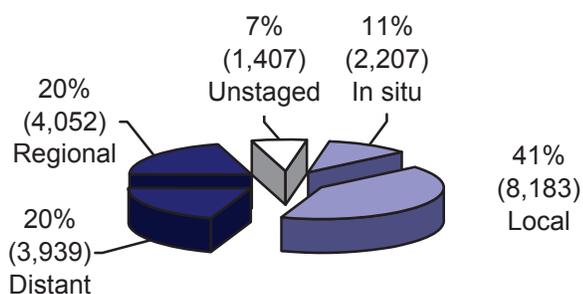
A total of 19,788 cancers were diagnosed among Oregonians in 2005 and reported to the central registry. Median age at diagnosis was 66. During the same year, 7,277 Oregonians died due to cancer. Median age at death was 71.

Just over half (53 percent) of new cancers were diagnosed at the *in situ* or localized stages when cancer is most effectively treated; 40 percent were diagnosed at the regional or distant stage. Another 7 percent had an unknown stage of diagnosis.

In 2005, Oregon's age-adjusted cancer incidence rate was 467 cases per 100,000 population, about one cancer for every 200 people. Oregon's age-adjusted cancer mortality rate was 189 deaths per 100,000 population, about one death for every 500 people. An average of 23,097 years of life were lost annually due to cancer deaths before age 65.

During 1996-2005, Columbia, Coos, Deschutes, Douglas, Jackson, and Multnomah counties had cancer incidence significantly higher than the state average, while mortality was significantly higher in Columbia, Coos, Douglas, Josephine, Lincoln, and Multnomah counties. Incidence was significantly lower in Lane, Linn, Tillamook, Washington, and Yamhill counties, and the central Columbia, northeast and southeast regions, while mortality was significantly lower in Benton, Deschutes, Polk, and Washington counties and the southeast region. There has been a significant decrease in mortality over the 10 year period for the state as a whole. See All Cancer maps.

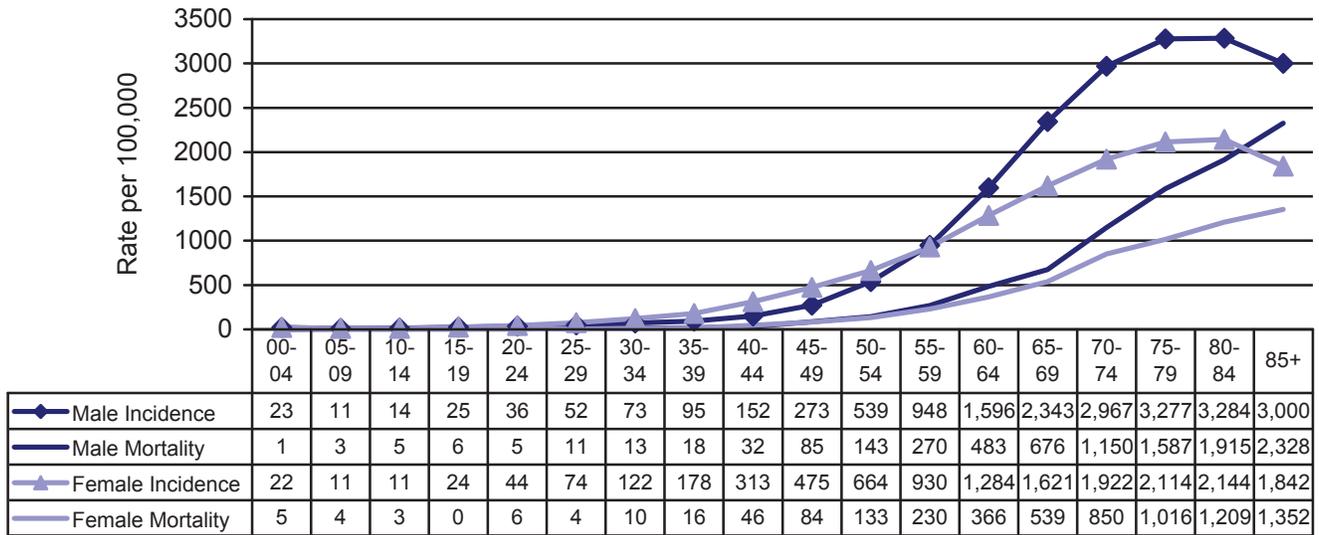
All Cancers Stage at Diagnosis, Oregon, 2005



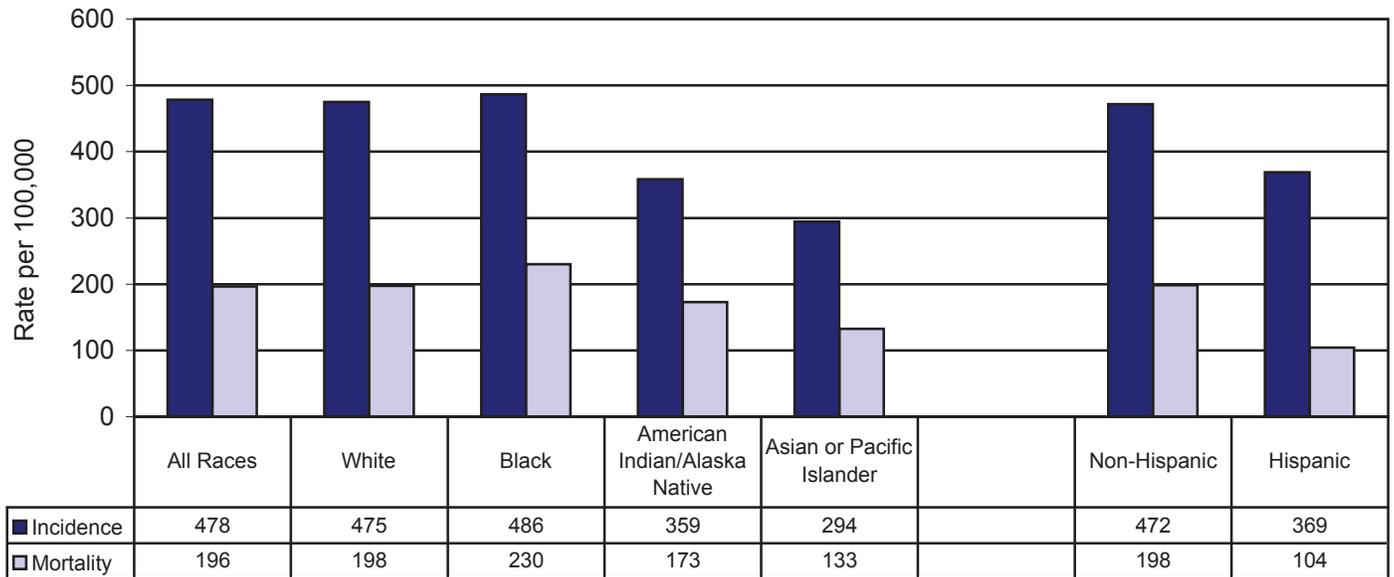
Total does not equal 100% due to rounding

All Cancers

**All Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



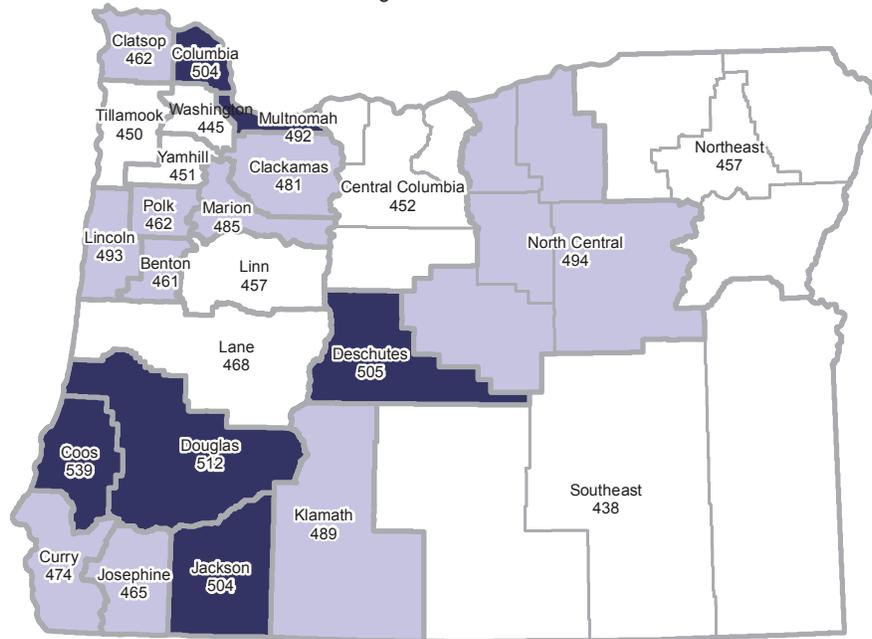
**All Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



All Cancers

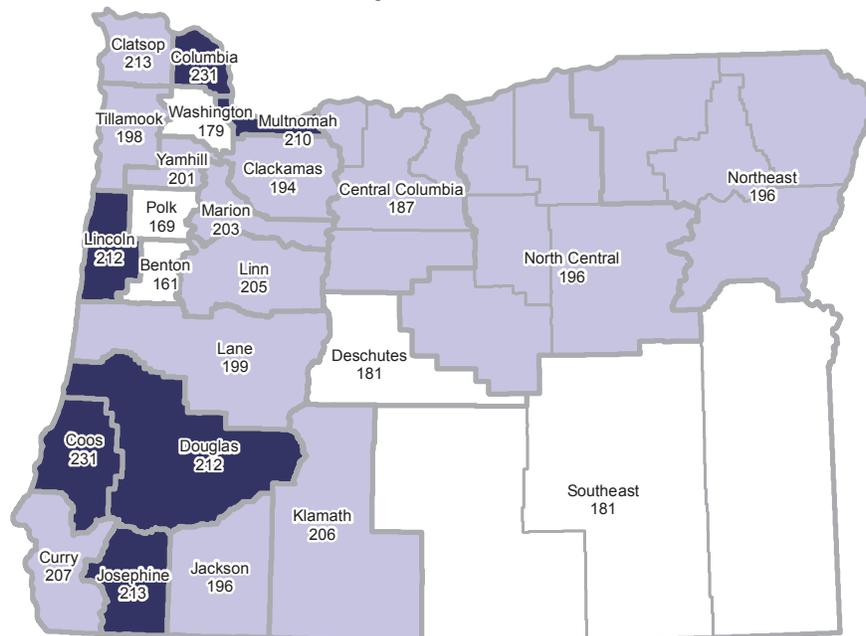
Rates of All Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 478.



Rates of All Cancer Mortality, 1996-2005

1996-2005 Oregon Rate = 198.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

All Cancers

All Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

1996-2005 Oregon Counties	NEW CASES			DEATHS		
	Invasive Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	17,037	478.3	0.0	7,125	198.3	-1.4 *
Baker	107	461.0	-1.3	50	200.8	6.2
Benton	317	461.4	0.7	110	161.1 L	3.0
Clackamas	1,632	480.6	-0.1	641	194.1	-2.8
Clatsop	198	462.5	0.1	93	212.9	-1.5
Columbia	223	504.3 H	-0.6	99	231.3 H	-2.9
Coos	472	538.8 H	-1.4	211	231.2 H	0.0
Crook	113	495.2	1.0	41	180.3	-3.3
Curry	181	474.5	-0.5	83	207.1	-0.7
Deschutes	642	504.9 H	-0.3	226	181.2 L	-2.3
Douglas	677	511.8 H	-0.4	291	212.3 H	-0.6
Gilliam	15	576.9 H	3.1	6	202.6	^
Grant	44	437.2	-2.0	23	216.5	-6.5
Harney	42	467.2	0.9	18	197.0	-5.3
Hood River	89	438.0 L	0.0	37	177.5 L	-2.7
Jackson	1,106	503.6 H	0.7	448	196.1	-1.0
Jefferson	79	414.3 L	1.1	34	181.1	-7.3
Josephine	507	464.6	1.8 *	244	213.3 H	-1.6
Klamath	359	489.0	0.1	152	205.6	-0.6
Lake	53	537.2 H	-0.3	22	221.8	4.3
Lane	1,615	467.9 L	0.1	697	198.6	-0.8
Lincoln	312	493.1	-0.3	136	212.2 H	-3.2
Linn	533	457.1 L	0.4	246	205.3	-1.3
Malheur	130	398.3 L	1.5	56	163.8 L	2.0
Marion	1,353	485.1	0.3	575	202.6	-2.7
Morrow	55	553.6 H	-2.1	21	215.4	9.2
Multnomah	3,044	491.8 H	-0.6	1,291	209.5 H	-1.3
Polk	326	461.7	1.0 *	126	168.7 L	-3.6
Sherman	11	428.5	-1.1	4	153.1	^
Tillamook	155	449.6 L	-1.3	70	197.7	3.2
Umatilla	316	455.0 L	-0.2	141	200.9	-0.5
Union	128	460.8	1.1	54	186.8	1.1
Wallowa	45	445.2	0.4	19	179.8	-5.9
Wasco	145	496.6	1.5	61	200.8	-3.6
Washington	1,636	444.8 L	-0.3	629	179.1 L	-0.9
Wheeler	9	355.2 L	^	5	171.8	^
Yamhill	369	451.2 L	0.5	166	201.3	3.7

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Bladder Cancer

BLADDER CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	926	692	234
RATES			
Oregon Crude Rate (2005)	25.4	38.2	12.8
Oregon Age-adjusted Rate (2005)	23.8	40.4	10.6
US Age-adjusted Rate (2004) ¹	21.3	37.3	9.6
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-0.9	-1.4	-0.8
CANCER MORTALITY			
Total Cancer Deaths (2005)	205	152	53
RATES			
Oregon Crude Rate (2005)	5.6	8.4	2.9
Oregon Age-adjusted Rate (2005)	5.1	9.4	2.2
US Age-Adjusted Rate (2004) ²	4.4	7.6	2.2
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-0.2	+0.1	-2.4
US Annual Trend (2000-2004) ²	+0.0	-0.2	-0.4
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.22	0.21	0.25
Burden: YPLL (2001-2005)	269	179	90

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

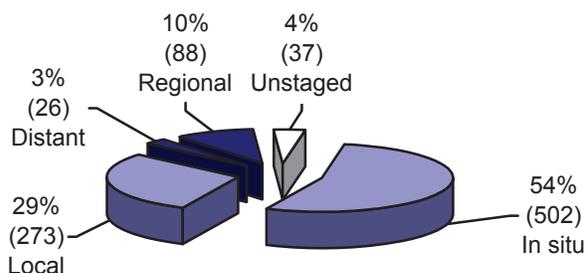
APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

**Bladder Cancer
Stage at Diagnosis, Oregon, 2005**



A total of 926 cancers of the urinary bladder were diagnosed among Oregonians in 2005 and reported to the central registry. Median age at diagnosis was 71. During the same year, 205 Oregonians died due to bladder cancer. Median age at death was 78.

Most (84 percent) were diagnosed at in situ or local stage and 12 percent were diagnosed at regional or distant stage. Another 4 percent were unstaged.

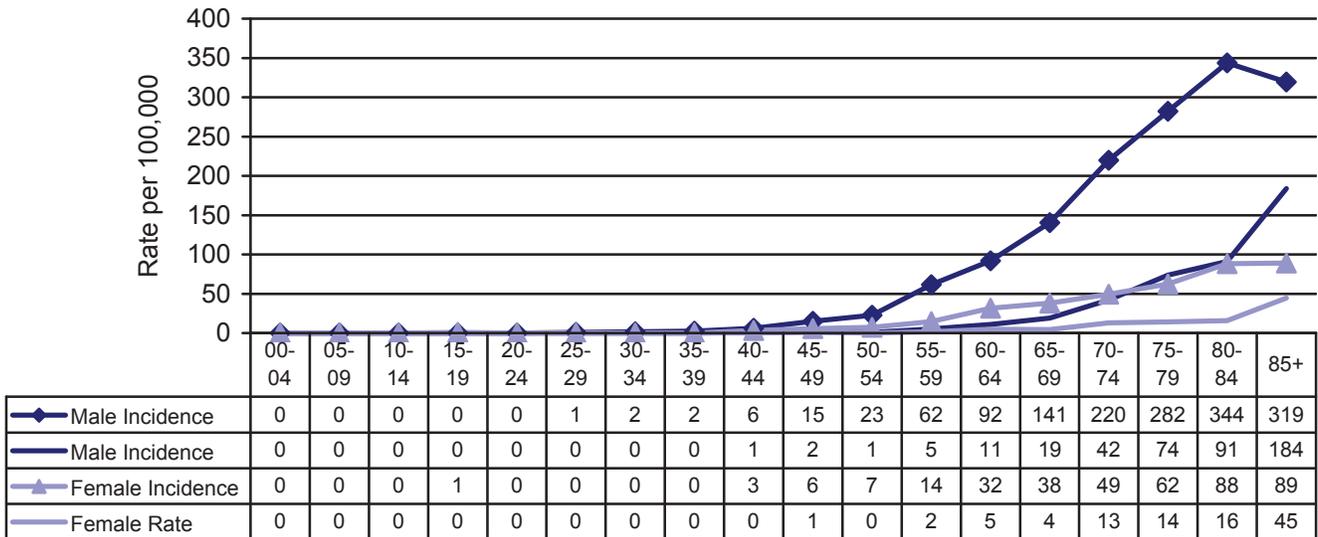
In 2005, the age-adjusted incidence rate for bladder cancer was 24 cases per 100,000 people and the age-adjusted mortality rate was 5 per 100,000. Both incidence and mortality were higher among men. Among men, the incidence rate was 40 per 100,000 compared to 11 per 100,000 among women. The age-adjusted mortality rate was 9 per 100,000 for men compared to 2 per 100,000 among women. Incidence for men increased sharply after age 50.

During 2001-2005, there were 22 deaths for every 100 new diagnoses of bladder cancer. Based on a life expectancy of 65 years, an average of 269 years of life were lost annually due to bladder cancer deaths before age 65.

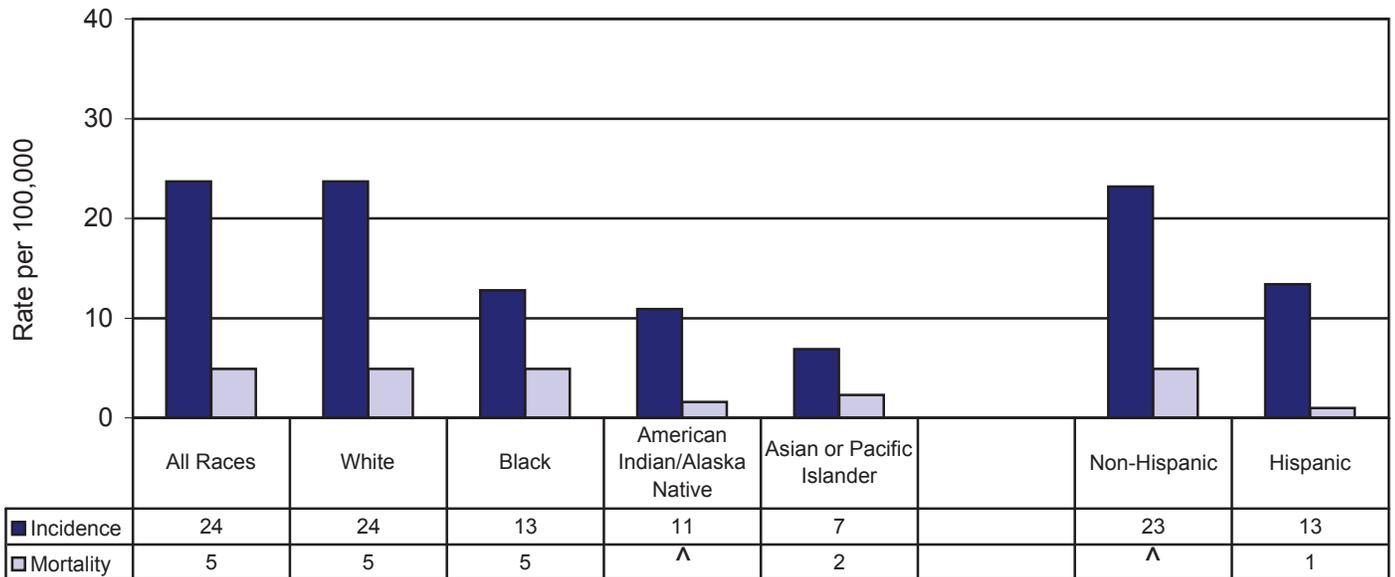
Incidence during 1996-2005 was significantly higher in Coos county than the state average and significantly lower in Washington county. Mortality during 1996-2005 was significantly higher than the state average in Curry county and significantly lower in Benton county. See Bladder Cancer maps.

Bladder Cancer

**Bladder Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



**Bladder Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**

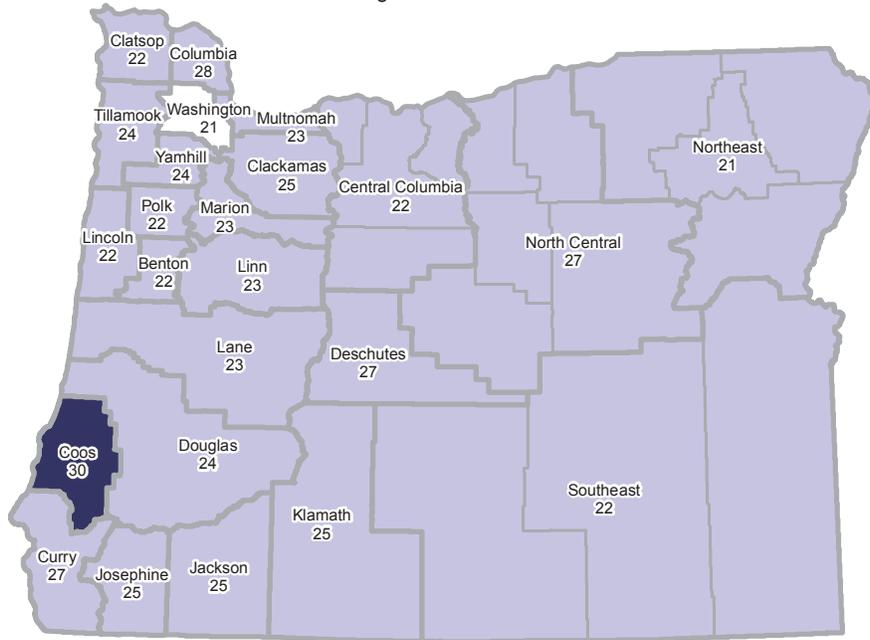


^ Rate not calculated due to instability of small numbers

Bladder Cancer

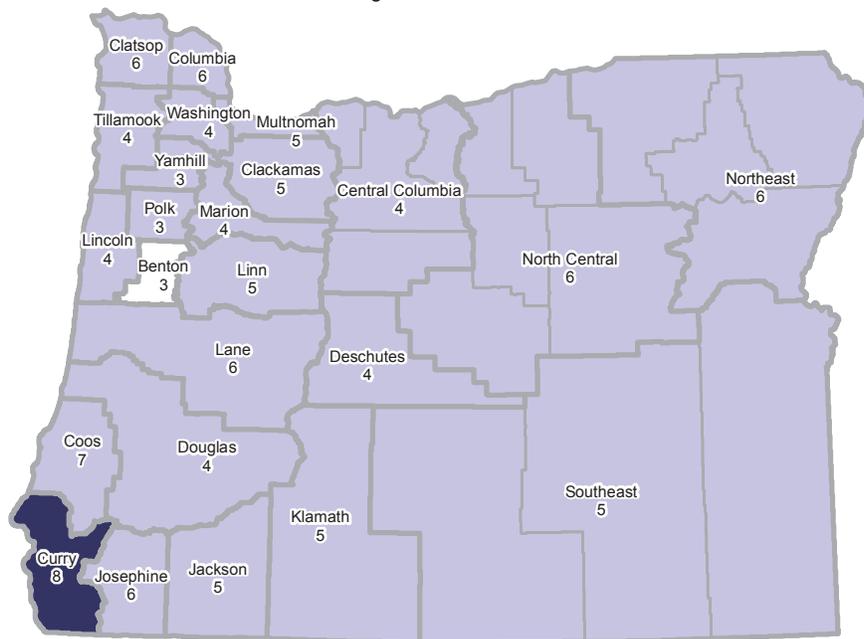
Rates of Bladder Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 24.



Rates of Bladder Cancer Mortality, 1996-2005

1996-2005 Oregon Rate = 5.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Bladder Cancer

Bladder Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

BLADDER	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	846	23.7	-0.3	177	4.9	-0.2
Baker	5	21.2	^	2	6.2	^
Benton	15	22.1	1.3	2	2.8 L	^
Clackamas	84	25.3	-2.4	17	5.2	-5.9
Clatsop	10	22.1	^	3	6.4	^
Columbia	12	27.6	-3.8	3	6.3	^
Coos	28	30.4 H	-2.3	6	6.7	^
Crook	7	28.5	^	1	6.3	^
Curry	11	27.1	-1.4	3	7.9 H	^
Deschutes	34	26.8	4.3	5	3.9	^
Douglas	33	23.7	-0.8	6	4.4	^
Gilliam	1	^	^	0	^	^
Grant	2	21.1	^	1	^	^
Harney	2	24.0	^	1	^	^
Hood River	3	16.3 L	^	1	^	^
Jackson	58	25.2	0.3	12	4.9	-9.6
Jefferson	4	18.4	^	1	^	^
Josephine	30	25.3	-2.1	7	6.0	^
Klamath	19	25.3	1.0	4	5.0	^
Lake	3	24.7	^	1	^	^
Lane	81	23.2	2.1 *	20	5.6	-3.2
Lincoln	15	22.2	-6.7 *	3	4.1	^
Linn	27	23.0	-1.4	6	5.0	^
Malheur	7	20.4	^	2	4.4	^
Marion	65	22.9	1.0	13	4.4	5.0
Morrow	3	27.7	^	0	^	^
Multnomah	140	22.9	-2.1	31	4.9	1.4
Polk	16	22.1	3.7	3	3.4	^
Sherman	1	^	^	0	^	^
Tillamook	9	23.9	^	2	4.5	^
Umatilla	14	20.3	1.9	3	4.8	^
Union	7	24.5	^	2	5.5	^
Wallowa	2	18.3	^	1	^	^
Wasco	8	25.6	^	2	4.8	^
Washington	73	20.9 L	-0.2	14	4.0	-1.2
Wheeler	1	^	^	0	^	^
Yamhill	19	23.7	-2.8	3	3.3	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Brain and CNS Tumors - Malignant

BRAIN AND CNS CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	268	141	127
RATES			
Oregon Crude Rate (2005)	7.4	7.8	6.9
Oregon Age-adjusted Rate (2005)	7.1	7.8	6.6
US Age-adjusted Rate (2004) ¹	6.6	7.8	5.6
TRENDS - APC			
Oregon Annual Trend (2001-2005)	+0.6	-1.1	+3.1
CANCER MORTALITY			
Total Cancer Deaths (2005)	231	139	92
RATES			
Oregon Crude Rate (2005)	6.3	7.7	5.0
Oregon Age-adjusted Rate (2005)	6.0	7.7	4.6
US Age-Adjusted Rate (2004) ²	4.3	5.2	3.5
TRENDS - APC			
Oregon Annual Trend (2001-2005)	+1.0	+2.3	-0.3
US Annual Trend (2000-2004) ²	*-1.1	*-1.6	-0.7
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.78	0.81	0.75
Burden: YPLL (2001-2005)	1,926	1,119	807

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

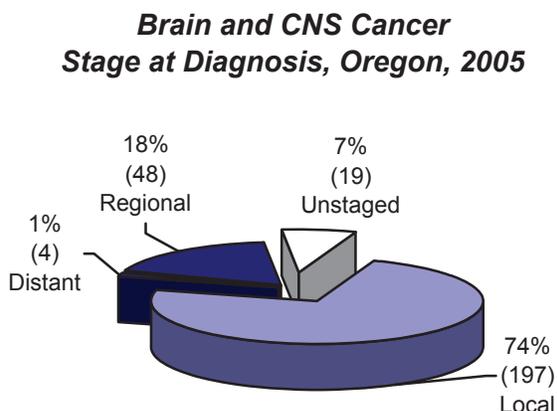
* Indicates a statistically significant trend.

During 2005, 268 Oregonians were diagnosed with a malignant tumor of the brain or central nervous system. Median age at diagnosis was 55. During the same year, 231 people died of the disease. Median age at death was 61. While brain cancer was the second most common cancer among children, the highest age-specific rates of brain cancer incidence and mortality were after age 60.

Oregon's 2005 age-adjusted incidence rate for cancer of the brain was 7 per 100,000 while the mortality rate was 6 per 100,000. Among men, age-adjusted brain cancer incidence and mortality were both 8 per 100,000. Among women, age-adjusted brain cancer incidence was 7 per 100,000 and mortality was 5 per 100,000.

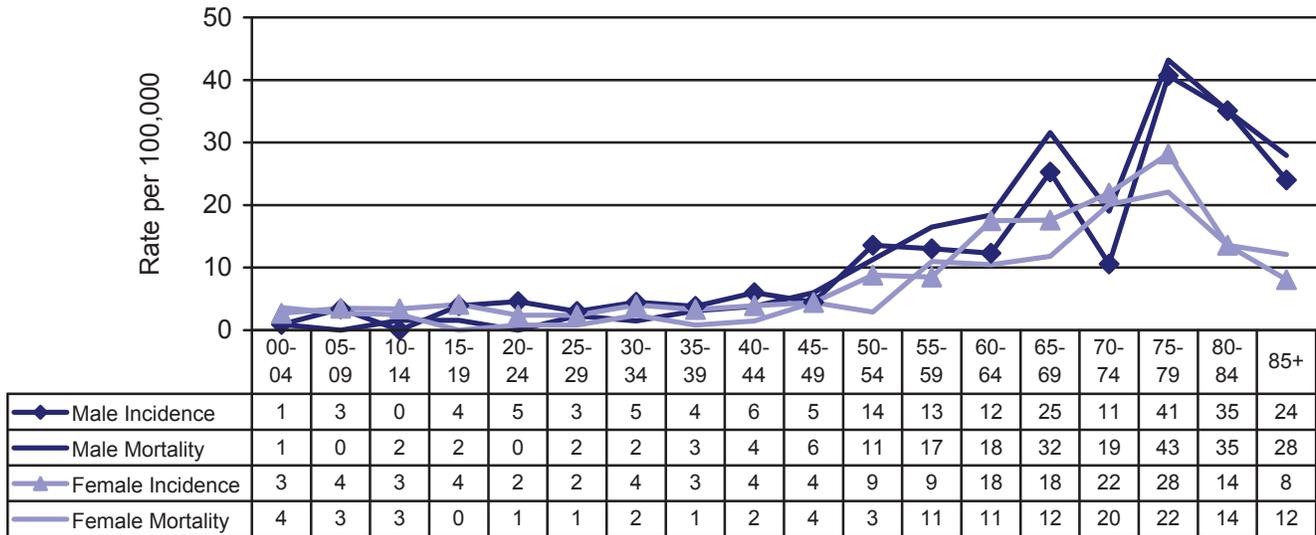
During the five year period 2001-2005, 78 people died of brain cancer for every 100 cases diagnosed.

During the period 1996-2005, brain cancer incidence was significantly higher than the state average in Lincoln county and significantly lower in the southeast region of the state. During the same time period, no area of the state had mortality rates statistically higher or lower than the rest of the state. See Brain Cancer maps.

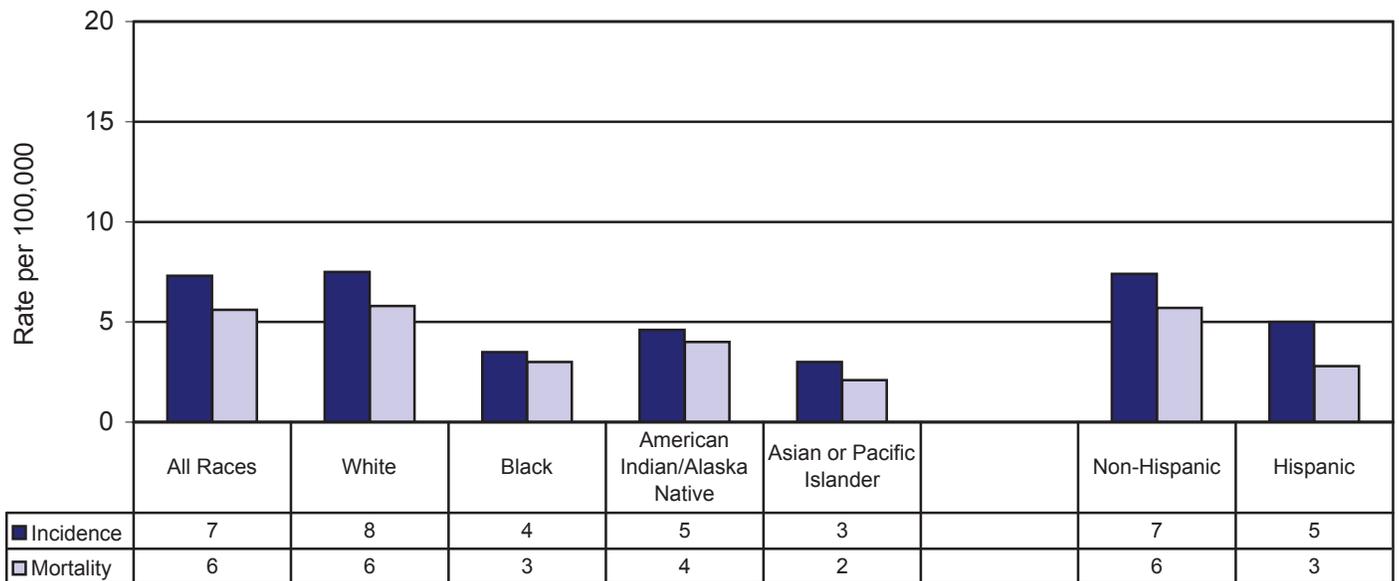


Brain and CNS Tumors - Malignant

**Brain and CNS Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



**Brain Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**

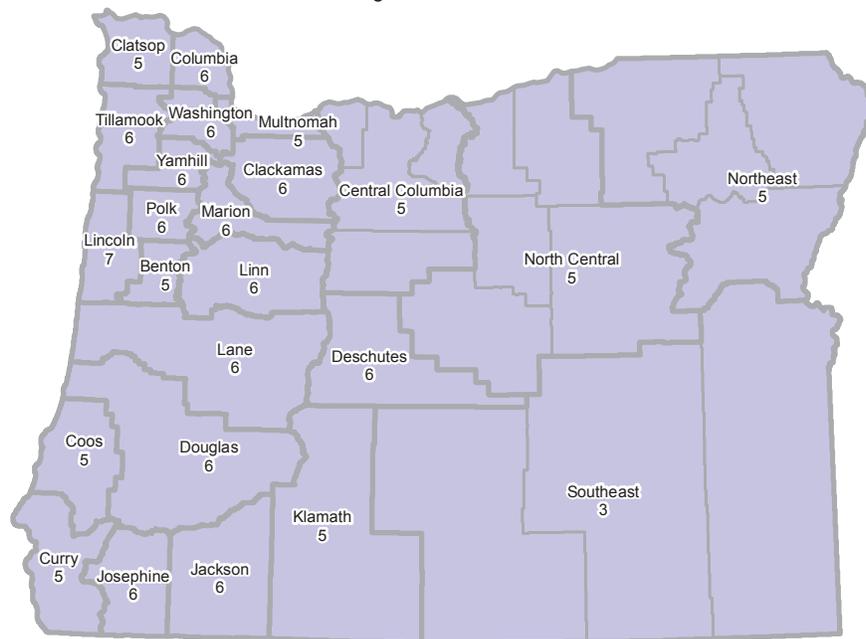


Brain and CNS Tumors - Malignant

Rates of Brain Cancer Incidence, 1996-2005
1996-2005 Oregon Rate = 7.



Rates of Brain Cancer Mortality, 1996-2005
1996-2005 Oregon Rate = 6.



Rates = Incidence count per 100,000 persons
age-adjusted to 2000 U.S. Census
19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Brain and CNS Tumors - Malignant

Brain and CNS Cancer Incidence and Mortality by County, 1996-2005:
Average Count, Annual Rate, and 10-Year Trend

BRAIN & CNS 1996-2005 Oregon Counties	NEW CASES			DEATHS		
	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	258	7.3	-0.3	200	5.6	1.0
Baker	2	8.5	^	2	7.7	^
Benton	5	6.8	^	4	5.2	^
Clackamas	27	7.8	-1.2	21	6.1	-13.4
Clatsop	4	10.4	^	2	5.3	^
Columbia	4	8.2	^	3	6.3	^
Coos	5	6.9	^	4	4.9	^
Crook	2	6.6	^	1	4.8	^
Curry	2	7.0	^	2	4.9	^
Deschutes	10	8.0	^	7	5.7	^
Douglas	9	7.7	^	8	6.2	^
Gilliam	0	^	^	0	^	^
Grant	0	^	^	0	^	^
Harney	0	^	^	0	^	^
Hood River	1	^	^	1	^	^
Jackson	14	6.9	0.1	13	5.9	10.8
Jefferson	2	8.7	^	1	^	^
Josephine	7	7.0	^	6	6.1	^
Klamath	5	6.6	^	4	4.9	^
Lake	1	^	^	1	^	^
Lane	24	7.1	-0.8	20	5.8	-1.7
Lincoln	6	10.7 H	^	4	7.0	^
Linn	8	7.4	^	6	5.6	^
Malheur	1	3.6 L	^	1	^	^
Marion	23	8.3	-3.0	15	5.5	0.1
Morrow	1	^	^	1	^	^
Multnomah	46	7.2	1.7	34	5.4	2.1
Polk	6	8.3	^	4	6.2	^
Sherman	0	^	^	0	^	^
Tillamook	2	7.1	^	2	5.6	^
Umatilla	5	6.9	^	3	4.7	^
Union	1	^	^	1	^	^
Wallowa	0	^	^	0	^	^
Wasco	1	4.9	^	2	6.6	^
Washington	30	7.4	-0.5	22	5.7	0.9
Wheeler	0	^	^	1	^	^
Yamhill	5	6.5	^	5	5.7	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Brain and CNS Tumors - Non-Malignant

BRAIN AND CNS TUMORS - NON-MALIGNANT¹ FAST FACTS - OREGON

	<i>Total</i>	<i>Male</i>	<i>Female</i>
NON-MALIGNANT INCIDENCE			
Total Cases (2005)	404	153	251
RATES (2005)			
Oregon Crude Rate	11.1	8.4	13.7
Oregon Age-adjusted Rate	10.3	8.2	12.3
NON-MALIGNANT MORTALITY			
Total Deaths (2004)	13	5	8
RATES (2004)			
Oregon Crude Rate	0.4	0.3	0.4
Oregon Age-adjusted Rate	0.3	0.3	0.3

Rates are per 100,000 people; age-adjusted to the 19-age-group 2000 U.S. Standard Population.

¹Non-malignant brain and CNS tumors include benign tumors of the meninges; brain; spinal cord; cranial nerves, and other CNS; and neuroendocrine and related structures.

Brain and CNS Tumors, Non-Malignant, by County of Residence Oregon, 2004-2005 (2-Year Average)

State	416				
Baker	2	Harney	2	Morrow	1
Benton	7	Hood River	2	Multnomah	85
Clackamas	45	Jackson	21	Polk	10
Clatsop	8	Jefferson	1	Sherman	1
Columbia	8	Josephine	9	Tillamook	3
Coos	7	Klamath	8	Umatilla	6
Crook	3	Lake	1	Union	3
Curry	1	Lane	26	Wallowa	1
Deschutes	11	Lincoln	4	Wasco	2
Douglas	12	Linn	14	Washington	68
Gilliam	0	Malheur	4	Wheeler	0
Grant	0	Marion	38	Yamhill	9

Brain and CNS Tumors, Non-Malignant, by Site Oregon, 2005

Cerebral Meninges	122	Overlapping Lesion	2
Pituitary Gland	89	Crainial Nerve, NOS	2
Acoustic Nerve	76	Overlapping Lesion	2
Meninges, NOS	50	Crainiopharyngeal duct	2
Spinal Cord	20	Pineal Gland	2
Spinal Meninges	12	Cerebrum	1
Temporal Lobe	5	Brain Stem	1
Frontal Lobe	3	Cauda equina	1
Ventricle, NOS	6	Optic Nerve	1
Brain, NOS	4	CNS, NOS	1
Cerebellum	2		

Newly reportable in 2004, a total of 404 benign brain and central nervous system (CNS) tumors were diagnosed and reported in 2005, for an incidence rate of 11 tumors per 100,000 population.

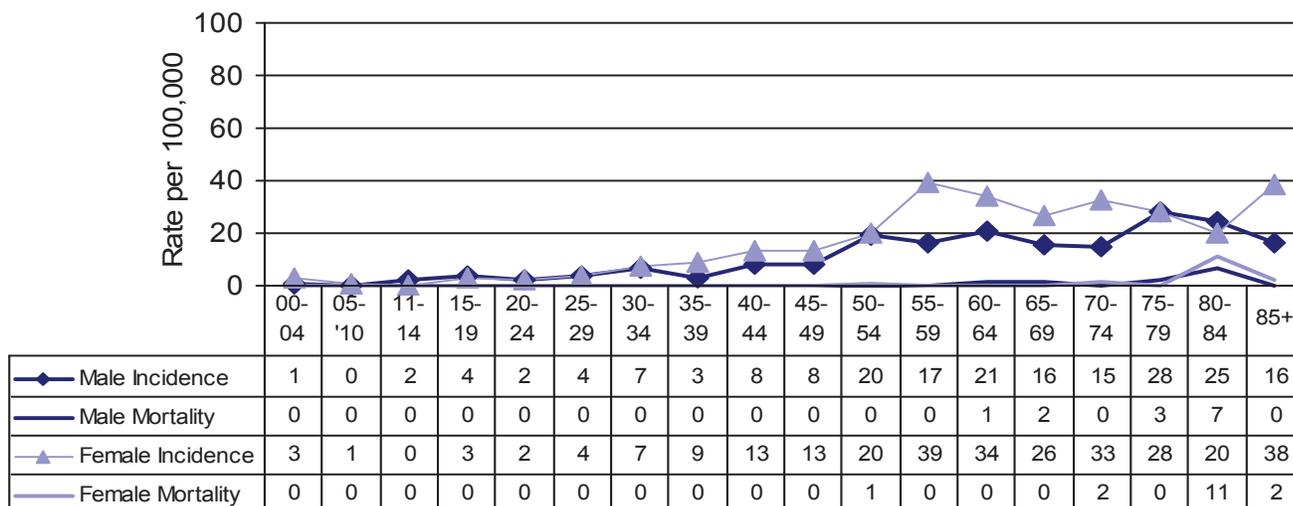
Benign brain tumors do not contain cancer cells and do not invade tissues around them or spread to other parts of the body, but may press on sensitive areas of the brain. Of the tumors reported in 2005, 283 were treated with surgery and 46 with radiation. Three deaths were reported for every 100 diagnoses.

The greatest number of benign brain and CNS tumors were of the cerebral meninges (122), followed by tumors of the pituitary gland (89), and the acoustic nerve (76).

About three-fifths of the benign tumors occurred to females (63 percent). Numbers of benign brain and CNS tumors were highest among women age 55-59 and among men age 75-79.

Brain and CNS Tumors - Non-Malignant

Brain and CNS Tumors, Non-Malignant, Incidence and Mortality Rates, by Age Group and Sex, Oregon, 2005



Breast Cancer - Female

BREAST CANCER, FEMALE - FAST FACTS OREGON

	<i>In situ</i>	<i>Invasive</i>
CANCER INCIDENCE		
Total Cancer Cases (2005)	576	2,685
RATES		
Oregon Crude Rate (2005)	31.5	146.7
Oregon Age-adjusted Rate (2005)	28.3	130.5
US Age-adjusted Rate (2004) ¹	n/a	117.7
TRENDS - APC		
Oregon Annual Trend (2001-2005)	-3.2	-3.1
CANCER MORTALITY		
Total Cancer Deaths (2005)		471
RATES		
Oregon Crude Rate (2005)		25.7
Oregon Age-adjusted Rate (2005)		21.9
US Age-Adjusted Rate (2004) ²		24.4
TRENDS - APC		
Oregon Annual Trend (2001-2005)		-3.9
US Annual Trend (2000-2004) ²		*-2.1
PROGNOSIS AND BURDEN		
Prognosis: M/I Ratio (2001-2005)		0.19
Burden: YPLL (2001-2005)		2,461

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

n/a = not applicable

* Indicates a statistically significant trend.

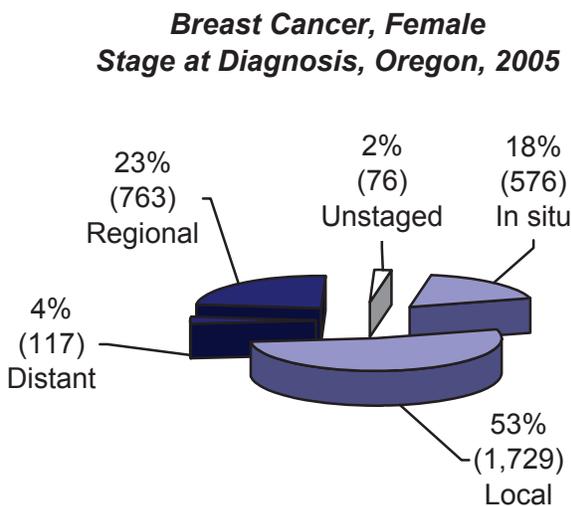
Among Oregon women, 3,261 breast cancers were diagnosed in 2005 and reported to the central registry. Of the 2,685 cancers which were invasive, median age at diagnosis was 63. During the same time period, 471 Oregon women died due to breast cancer at a median age of 70.

A large majority (71 percent) of female breast tumors were diagnosed during the *in situ* or local stage, 27 percent were diagnosed at regional or distant stage, and 2 percent were unstaged.

There was approximately one death for every five new invasive diagnoses. Based on a life expectancy of 65 years, an average of 2,461 years of life were lost annually among Oregon women due to early deaths from breast cancer.

Oregon and Washington consistently rank among the top five states for female breast cancer incidence while having average rates for breast cancer mortality. During the five-year period from 2001-2005, incidence of invasive breast cancer among Oregon women dropped an average of 3.1 percent each year. This decline mirrors a national decline through 2004, which may in part be attributable to a reduction in the use of hormone replacement therapy.*

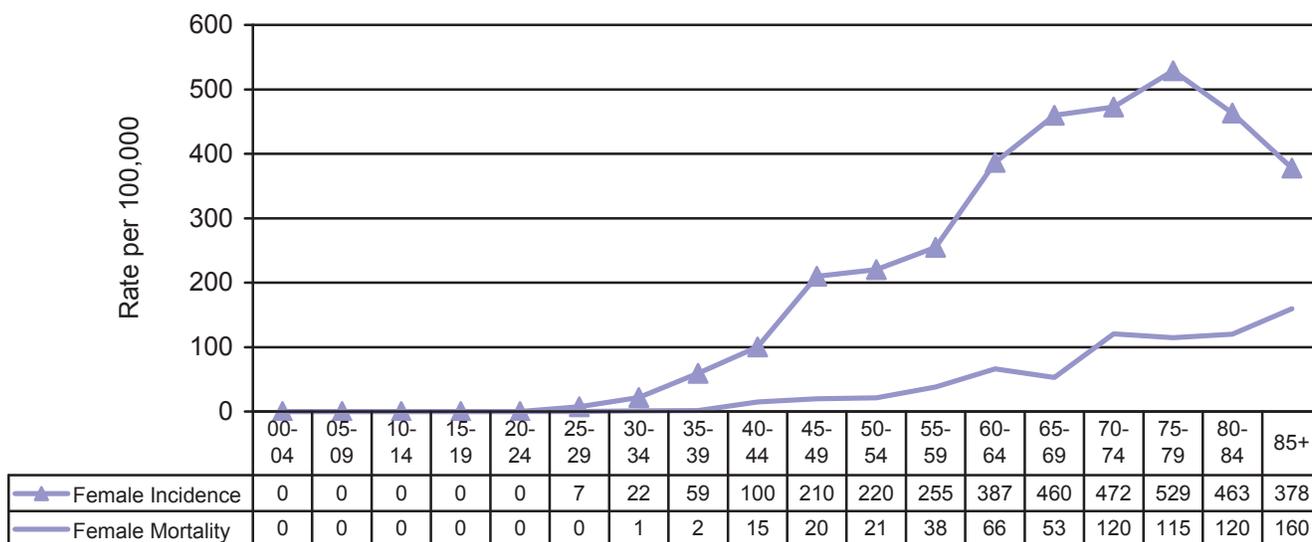
Incidence was significantly higher than the state average in Clackamas and Marion counties and was significantly lower in Douglas county and the northeast and southeast regions. No areas of the state had significantly higher or lower mortality. See Breast Cancer maps.



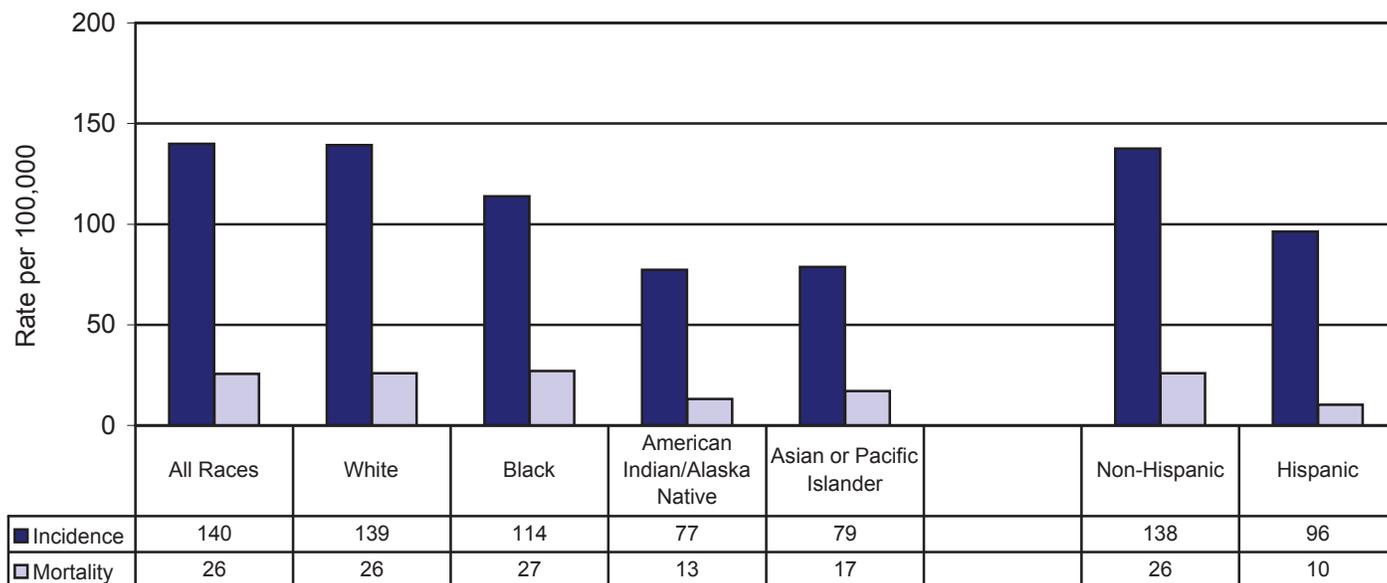
*Decline in Breast Cancer Incidence – United States, 1999 – 2003, MMWR, June 8, 2007 / 56 (22):549-553.

Breast Cancer - Female

**Breast Cancer, Female, Cancer Incidence and Mortality Rates,
by Age Group, Oregon, 2005**

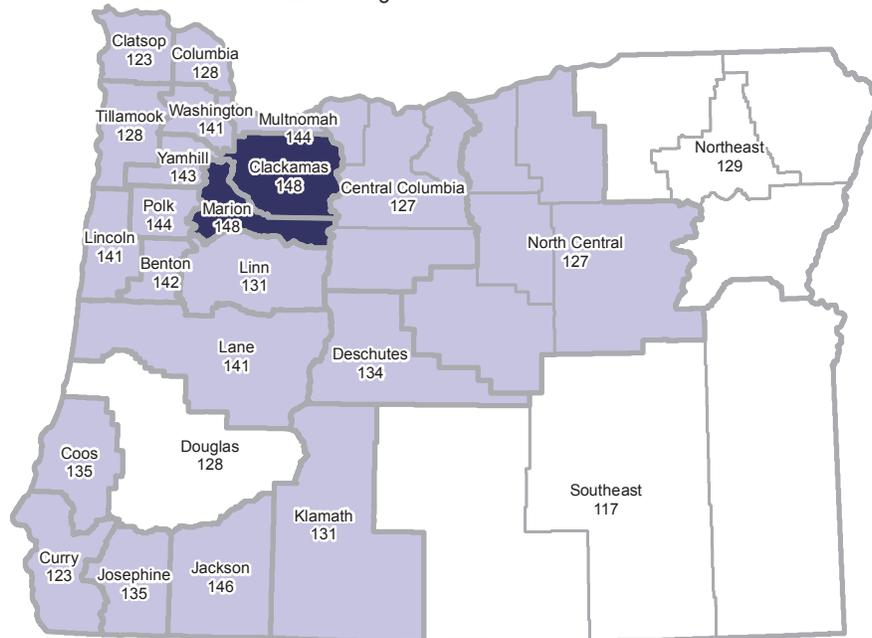


**Breast Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**

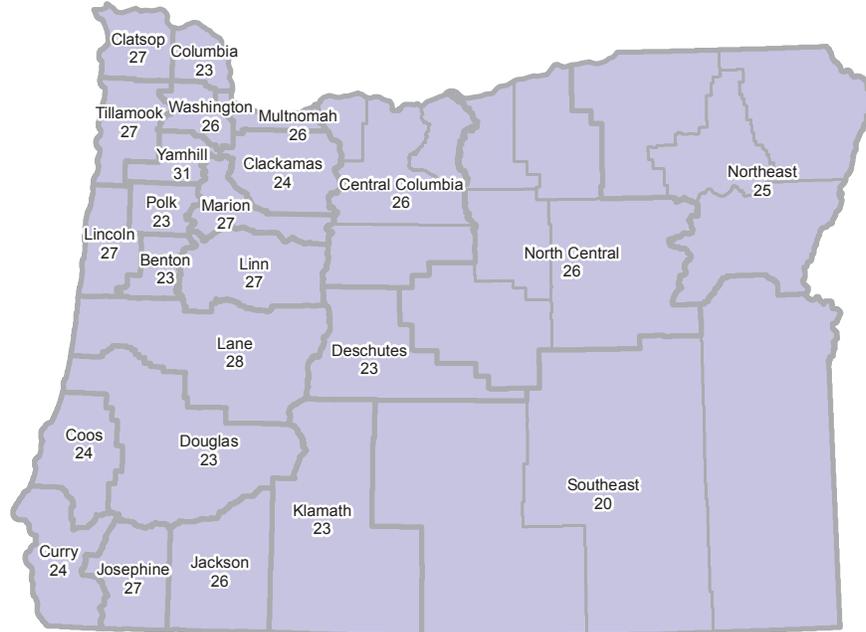


Breast Cancer - Female

Rates of Female Breast Cancer Incidence, 1996-2005
1996-2005 Oregon Rate = 140.



Rates of Female Breast Cancer Mortality, 1996-2005
1996-2005 Oregon Rate = 26.



Rates = Incidence count per 100,000 persons
age-adjusted to 2000 U.S. Census
19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Breast Cancer - Female

Breast Cancer (Female) Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

BREAST, FEMALE 1996-2005 Oregon Counties	NEW CASES			DEATHS		
	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	2,667	139.9	-1.1	507	25.6	-3.9
Baker	17	143.7	-2.8	3	22.9	^
Benton	53	142.3	0.6	9	23.1	^
Clackamas	278	147.7 H	-1.4	45	23.9	3.2
Clatsop	28	123.2	0.2	7	26.6	^
Columbia	30	128.5	0.6	5	22.9	^
Coos	61	135.1	-2.7	12	24.4	0.4
Crook	17	149.2	5.4 *	3	25.9	^
Curry	22	123.2	-2.9	5	24.0	^
Deschutes	90	133.9	-1.5	16	23.1	-12.1 *
Douglas	86	128.4 L	0.0	16	23.0	-6.8
Gilliam	2	119.1	^	1	^	^
Grant	5	100.8 L	^	2	27.5	^
Harney	6	135.0	^	1	30.2	^
Hood River	14	126.2	-1.8	4	30.1	^
Jackson	168	146.5	-1.3	32	26.3	-4.2
Jefferson	11	115.4	5.4	2	23.4	^
Josephine	74	134.7	0.3	17	27.1	8.0
Klamath	49	131.1	-0.4	9	22.9	^
Lake	7	132.0	^	1	26.9	^
Lane	260	141.2	-1.9	53	27.5	-3.0
Lincoln	48	141.3	-1.0	10	27.2	^
Linn	80	130.7	-3.1	17	27.3	16.3
Malheur	17	107.6 L	1.1	3	16.3 L	^
Marion	222	148.3 H	-1.7	43	27.3	-5.2
Morrow	6	118.8	^	1	23.6	^
Multnomah	494	144.5	-1.1	92	25.9	-6.1
Polk	54	143.8	-0.6	9	23.4	^
Sherman	1	108.8	^	0	^	^
Tillamook	23	127.5	-0.4	5	27.1	^
Umatilla	43	120.7 L	-0.5	11	28.0	-3.2
Union	20	133.4	1.2	3	19.7	^
Wallowa	7	134.8	^	1	23.7	^
Wasco	21	139.9	1.9	4	26.5	^
Washington	292	141.1	-0.6	53	25.8	-5.2
Wheeler	1	^	^	0	^	^
Yamhill	61	142.8	-0.8	14	30.7	-4.9

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Cervical Cancer

CERVICAL CANCER - FAST FACTS OREGON

	Female
CANCER INCIDENCE	
Total Cancer Cases (2005)	111
RATES	
Oregon Crude Rate (2005)	6.1
Oregon Age-adjusted Rate (2005)	5.8
US Age-adjusted Rate (2004) ¹	7.9
TRENDS - APC	
Oregon Annual Trend (2001-2005)	*-8.8
CANCER MORTALITY	
Total Cancer Deaths (2005)	41
RATES	
Oregon Crude Rate (2005)	2.2
Oregon Age-adjusted Rate (2005)	2.0
US Age-Adjusted Rate (2004) ²	2.4
TRENDS - APC	
Oregon Annual Trend (2001-2005)	-9.6
US Annual Trend (2000-2004) ²	*-3.5
PROGNOSIS AND BURDEN	
Prognosis: M/I Ratio (2001-2005)	0.35
Burden: YPLL (2001-2005)	431

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

During 2005, 111 Oregon women were diagnosed with invasive cervical cancer and 41 died of the disease. The incidence rate for cervical cancer was 6 per 100,000 women, 27 percent lower than the 2004 national rate of 8 per 100,000. The mortality rate was 2 deaths per 100,000 women, similar to the 2004 national rate. In Oregon, median age at diagnosis was 52 and median age at death was 58.

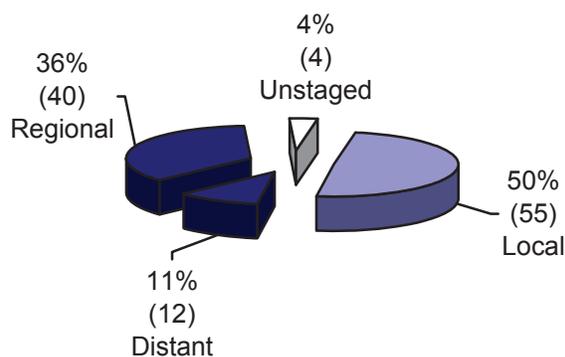
Declining trends in Oregon and the U.S. are statistically significant. Oregon's incidence has declined an average of 8.8 percent per year, while mortality has declined 9.6 percent per year. Nationally, mortality has declined 3.5 percent.

Because of routine Pap testing, the majority of cases are now diagnosed at the in situ stage. In 2005, of all reportable cases, half were diagnosed at the localized stage. The most important risk factor for cervical cancer is infection by the human papilloma virus (HPV). Increased vaccination for HPV should further reduce the incidence of cervical cancer, although, since the vaccine does not cover viral subtypes currently responsible for 30% of cervical cancer, continued Pap testing is recommended

Incidence was highest for Hispanic women and mortality was highest for African American women.

Incidence was significantly higher than the rest of the state in Jackson county and significantly lower in Clackamas county. No area of the state had significantly higher or lower mortality. See Cervical Cancer maps.

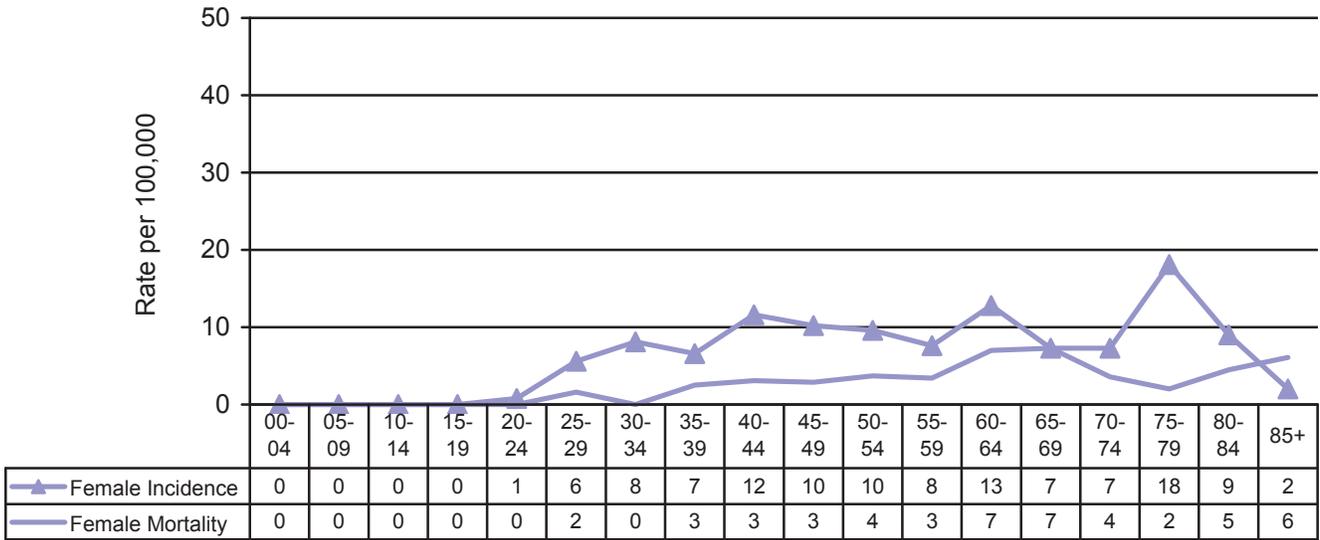
**Cervical Cancer
Stage at Diagnosis, Oregon, 2005**



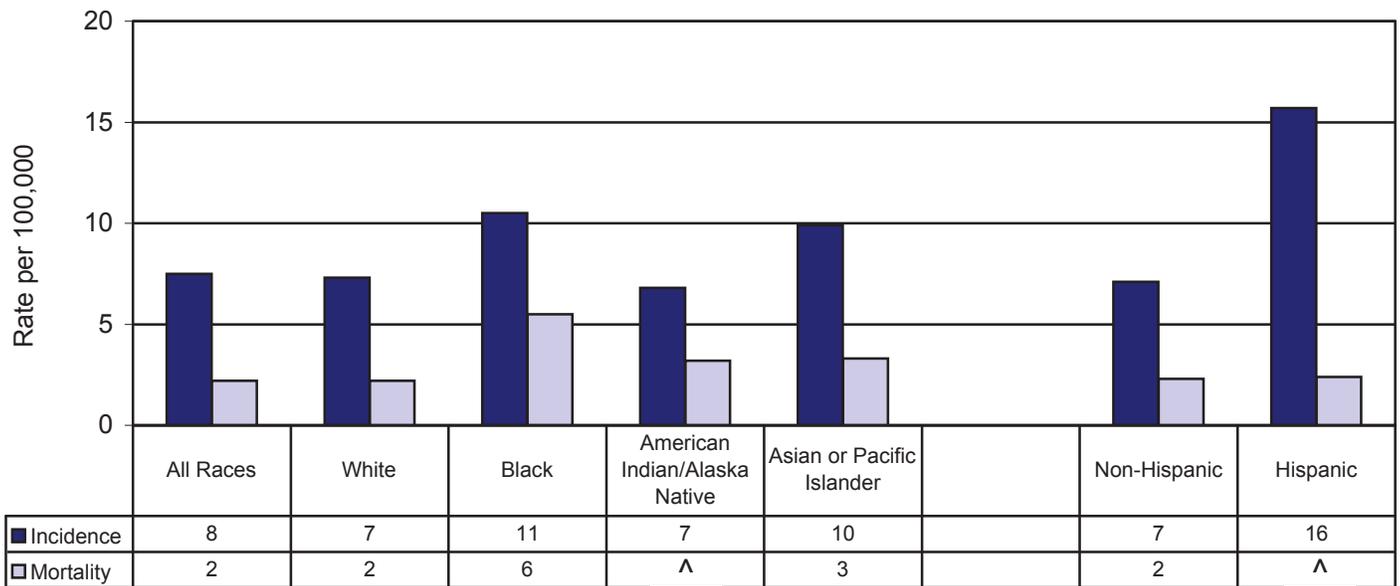
Total does not equal 100% due to rounding

Cervical Cancer

**Cervical Cancer, Cancer Incidence and Mortality Rates,
by Age Group, Oregon, 2005**



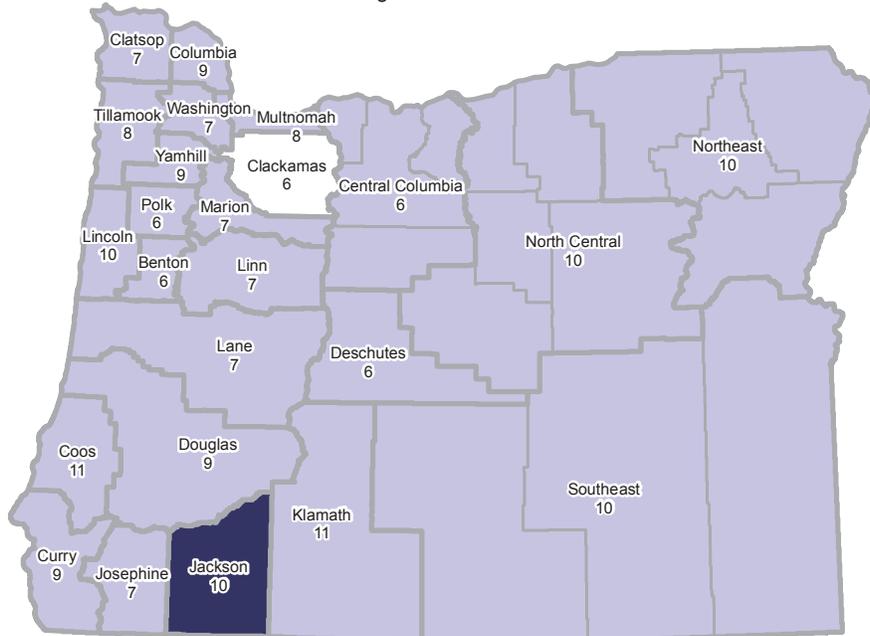
**Cervical Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



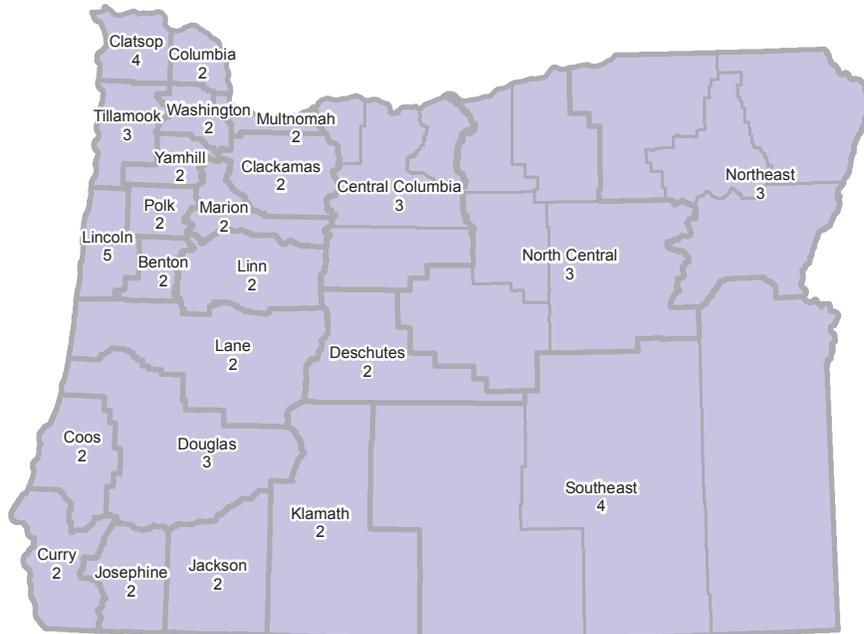
^ Rate not calculated due to instability of small numbers

Cervical Cancer

Rates of Cervical Cancer Incidence, 1996-2005
1996-2005 Oregon Rate = 8.



Rates of Cervical Cancer Mortality, 1996-2005
1996-2005 Oregon Rate = 2.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Cervical Cancer

Cervical Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

CERVICAL	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	133	7.5	-4.4 *	42	2.2	-9.6
Baker	1	^	^	0	^	^
Benton	2	5.7	^	1	^	^
Clackamas	10	5.5 L	^	4	2.0	^
Clatsop	1	7.4	^	1	^	^
Columbia	2	8.6	^	1	^	^
Coos	4	10.9	^	1	^	^
Crook	1	^	^	0	^	^
Curry	1	8.6	^	0	^	^
Deschutes	4	6.1	^	1	1.8	^
Douglas	5	9.2	^	2	2.9	^
Gilliam	0	^	^	0	^	^
Grant	0	^	^	0	^	^
Harney	1	^	^	0	^	^
Hood River	1	^	^	0	^	^
Jackson	10	10.5 H	^	3	2.5	^
Jefferson	0	^	^	0	^	^
Josephine	3	7.2	^	1	2.1	^
Klamath	3	10.6	^	1	^	^
Lake	0	^	^	0	^	^
Lane	11	6.9	3.5	3	1.6	^
Lincoln	3	10.2	^	1	4.7	^
Linn	4	7.2	^	1	2.1	^
Malheur	1	9.4	^	0	^	^
Marion	10	7.2	^	4	2.5	^
Morrow	1	^	^	0	^	^
Multnomah	26	7.6	-8.8 *	8	2.3	^
Polk	2	5.6	^	1	^	^
Sherman	0	^	^	0	^	^
Tillamook	1	7.8	^	1	^	^
Umatilla	4	11.2	^	1	^	^
Union	1	10.0	^	0	^	^
Wallowa	0	0.0	^	0	^	^
Wasco	1	8.1	^	1	^	^
Washington	15	6.6	-3.4	4	2.0	^
Wheeler	0	^	^	0	^	^
Yamhill	4	8.9	^	1	^	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Childhood Cancer

CHILDHOOD CANCER - FAST FACTS OREGON

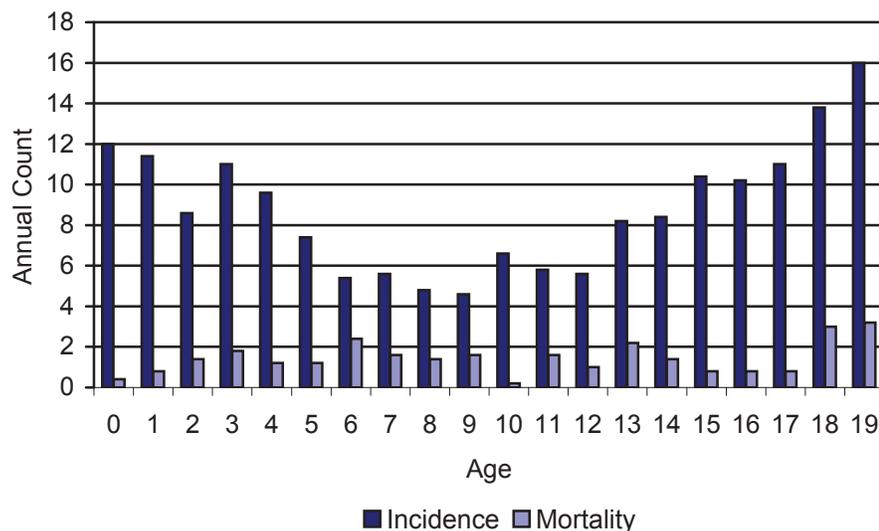
	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)			
Age 0-14	95	49	46
Age 15-19	63	38	25
CANCER MORTALITY			
Total Cancer Deaths (2005)			
Age 0-14	24	11	13
Age 15-19	8	8	0

During 2001-2005, an average of 165 children under 20 were diagnosed with cancer per year: 87 males and 79 females. The incidence rate was 174 cases per 1,000,000 children.

Leukemia was the most common diagnosis with an average of 44 newly diagnosed cases per year. An average of 36 tumors of the central nervous system were diagnosed each year. For lymphoma, the average number of new cases annually was 29.

During the same time period, an average of 29 children died per year, 17 males and 12 females. The mortality rate was 30 deaths per 1,000,000 children

Childhood Cancers, Ages 0-19, Average Annual Incidence and Mortality, Oregon, 2001-2005



Childhood Cancer

Average Annual Counts of Childhood Cancers by Sex and Age Group, Oregonians Age 0-19, 2001-2005

	Sex			Age			
	Total	Male	Female	<5	5-9	10-14	15-19
Total	172	90	81	53	28	34	57
Leukemias, myeloproliferative & myelodysplastic diseases	44	24	20	21	9	7	7
Lymphomas and reticuloendothelial neoplasms	29	17	12	2	3	8	15
<i>Hodgkin lymphomas</i>	16	8	8	0	1	4	11
<i>Non-Hodgkin lymphomas (except Burkitt lymphoma)</i>	9	7	2	1	2	3	3
CNS and misc intracranial and intraspinal neoplasms	36	18	18	10	9	9	8
Neuroblastoma and other peripheral nervous cell tumors	6	4	3	6	1	0	0
Retinoblastoma	1	1	1	1	0	0	0
Renal tumors	6	3	3	4	2	0	0
Hepatic tumors	2	1	1	1	0	0	1
Malignant bone tumors	7	5	3	1	1	2	4
<i>Osteosarcomas</i>	3	2	1	0	0	1	2
<i>Ewing tumor and related sarcomas of bone</i>	4	2	2	1	1	1	2
Soft tissue and other extraosseous sarcomas	11	5	6	4	1	2	4
Germ cell & trophoblastic tumors & neoplasms of gonads	12	9	3	1	1	2	8
Other malignant epithelial neoplasms and melanomas	17	5	12	1	2	4	11

Rates of Childhood Cancer Incidence by Sex and Age Group, Oregonians Age 0-19, 2001-2005

	Sex			Age			
	Total	Male	Female	<5	5-9	10-14	15-19
Total	180.5	185.0	175.6	233.7	119.9	139.6	231.7
Leukemias, myeloproliferative & myelodysplastic diseases	46.6	49.0	44.1	94.1	37.1	30.0	27.6
Lymphomas and reticuloendothelial neoplasms	29.7	34.5	24.6	10.7	13.8	33.3	60.2
<i>Hodgkin lymphomas</i>	16.0	15.7	16.4	0.9	2.6	17.0	43.1
<i>Non-Hodgkin lymphomas (except Burkitt lymphoma)</i>	9.4	13.9	4.7	2.7	8.6	12.2	13.8
CNS and misc intracranial and intraspinal neoplasms	37.6	37.1	38.1	46.1	37.1	35.7	31.7
Neuroblastoma and other peripheral nervous cell tumors	6.9	7.6	6.2	25.0	3.4	0.0	0.0
Retinoblastoma	1.3	1.3	1.3	5.4	0.0	0.0	0.0
Renal tumors	6.0	5.5	6.6	16.0	6.9	0.8	0.8
Hepatic tumors	2.3	2.5	2.2	6.2	0.9	0.0	2.4
Malignant bone tumors	7.7	9.3	6.0	2.7	3.4	7.3	17.1
<i>Osteosarcomas</i>	3.1	4.8	1.3	0.0	0.0	4.1	8.1
<i>Ewing tumor and related sarcomas of bone</i>	3.8	3.7	3.9	2.7	3.4	2.4	6.5
Soft tissue and other extraosseous sarcomas	11.8	9.8	13.8	17.8	6.0	8.9	14.6
Germ cell & trophoblastic tumors & neoplasms of gonads	12.4	18.1	6.5	5.4	3.4	8.9	31.7
Other malignant epithelial neoplasms and melanomas	17.8	9.6	26.3	2.7	7.8	14.6	45.5

Rates are per 1,000,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130) standard.

Colorectal Cancer

COLORECTAL CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	1,850	937	913
RATES			
Oregon Crude Rate (2005)	48.8	49.7	47.9
Oregon Age-adjusted Rate (2005)	45.7	51.7	40.7
US Age-adjusted Rate (2004) ¹	49.5	58.2	42.7
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-1.5	-1.6	-1.8
CANCER MORTALITY			
Total Cancer Deaths (2005)	659	316	343
RATES			
Oregon Crude Rate (2005)	18.1	17.4	18.7
Oregon Age-adjusted Rate (2005)	16.6	18.5	15.0
US Age-Adjusted Rate (2004) ²	16.5	20.2	13.8
TRENDS - APC			
Oregon Annual Trend (2001-2005)	*-3.7	*-6.4	-0.7
US Annual Trend (2000-2004) ²	*-3.3	*-3.5	*-3.4
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.38	0.37	0.38
Burden: YPLL (2001-2005)	1,725	927	798

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

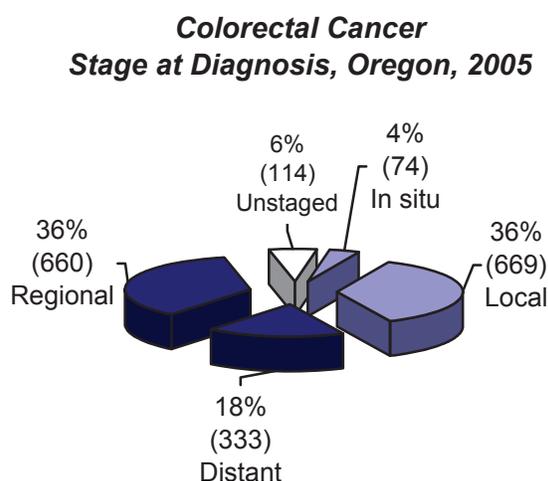
During 2005, 1,850 colorectal tumors were diagnosed and reported to the central registry. Median age at diagnosis was 70. During the same year, 659 Oregonians died due to colorectal cancer. Median age at death was 74.

Two in five (40 percent) newly diagnosed colorectal cancer cases were found at the *in situ* or localized stage when colorectal cancer can be effectively treated, and 54 percent were diagnosed at the regional or distant stage. Another 6 percent were unstaged.

The age-adjusted annual rate of new colorectal cancers in 2005 was 46 per 100,000, about one cancer for every 2,000 persons. The age-adjusted mortality rate in 2005 was 17 per 100,000.

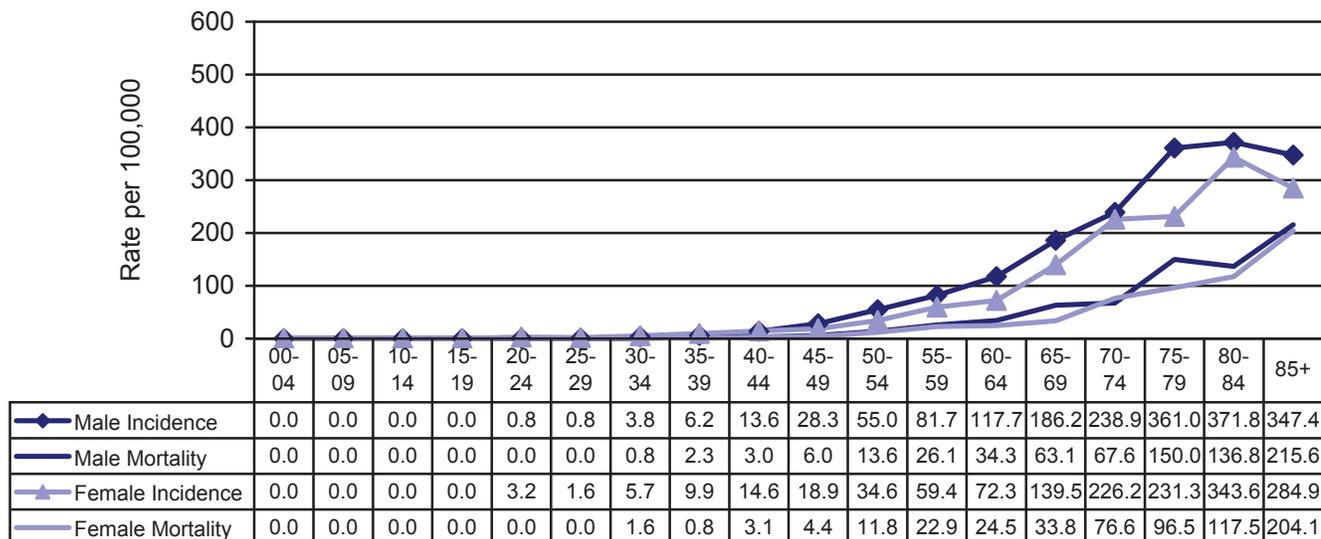
Colorectal cancer is the second leading cause of cancer death in Oregon. During the period 2001-2005, there was one death for every three new colorectal cancer diagnoses. Based on a life expectancy of 65 years, a total of 1,725 years of life were lost annually due to early deaths from colorectal cancer.

During 1996-2005, compared to Oregon as a whole, colorectal cancer incidence was significantly higher in Lincoln and Marion counties and the north central region of the state. Incidence was significantly lower than the state average in Lane and Washington counties. Mortality was significantly higher in Clatsop and Marion counties compared to the state as a whole and significantly lower in Lane county. See Colorectal Cancer maps.

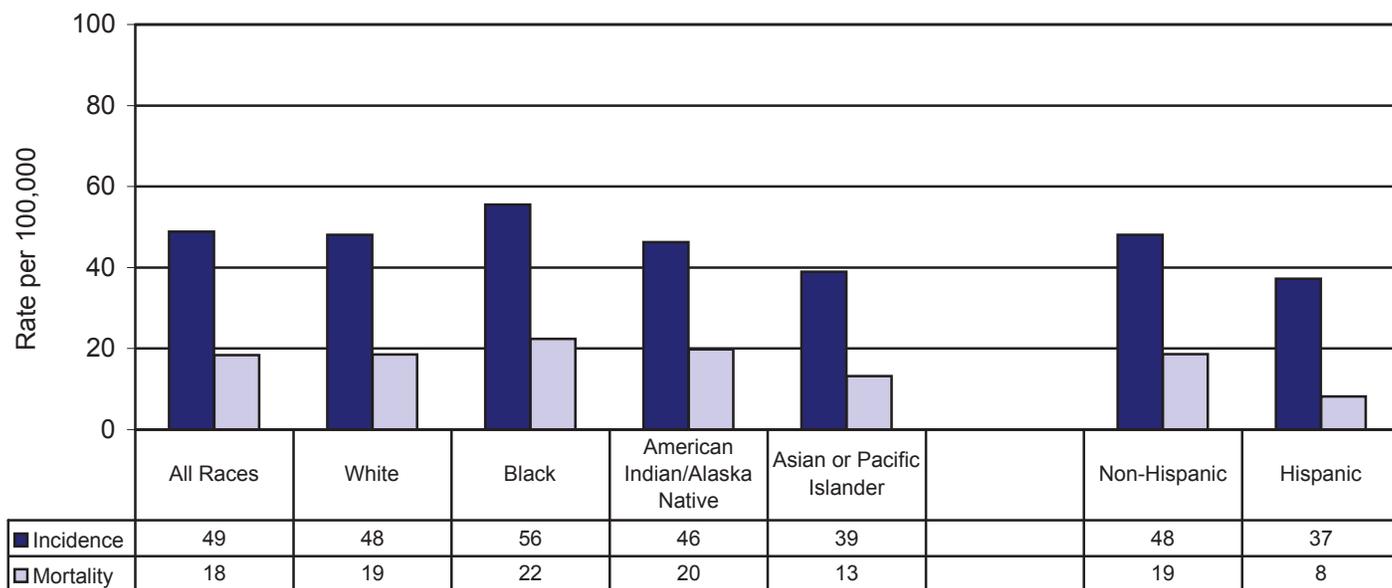


Colorectal Cancer

**Colorectal Cancer Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



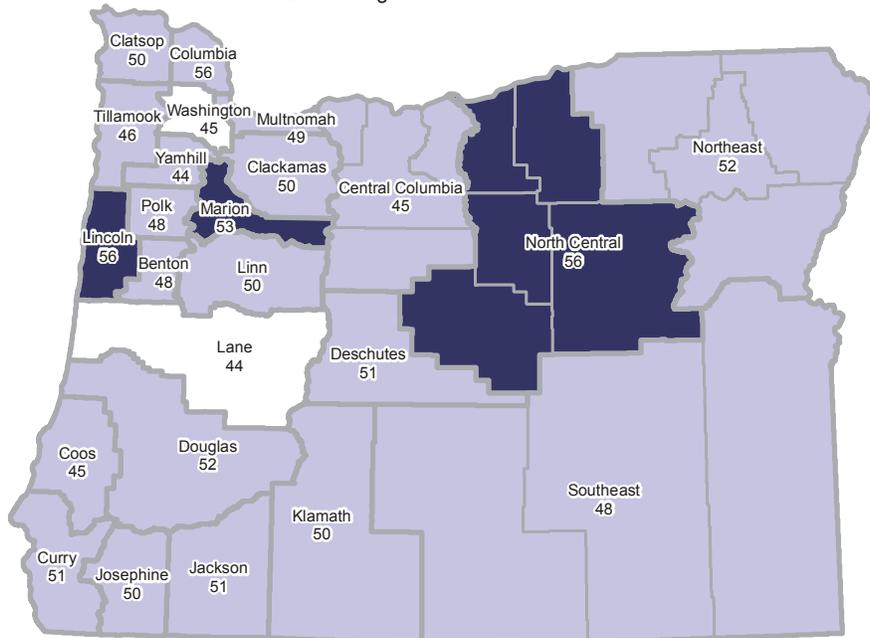
**Colorectal Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



Colorectal Cancer

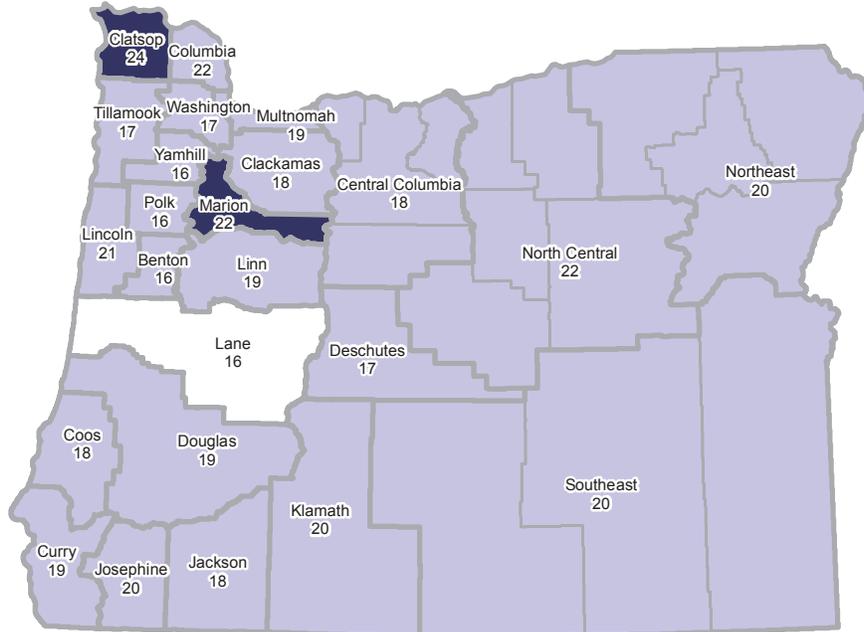
Rates of Colorectal Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 49.



Rates of Colorectal Cancer Mortality, 1996-2005

1996-2005 Oregon Rate = 18.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Colorectal Cancer

Colorectal Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

COLORECTAL	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	1,755	48.9	-0.8	667	18.4	-3.7 *
Baker	12	48.8	^	5	17.8	^
Benton	33	48.2	-2.5	11	15.8	11.4
Clackamas	166	49.7	1.1	59	17.8	-5.6 *
Clatsop	22	49.9	2.0	11	24.1 H	-1.3
Columbia	24	56.1	-4.7 *	10	22.5	^
Coos	41	44.8	-3.0	17	18.1	8.0
Crook	12	50.9	-0.5	4	17.9	^
Curry	21	51.4	-3.0	8	19.3	^
Deschutes	64	50.7	-2.2	21	17.3	-5.8
Douglas	71	52.3	0.6	26	19.2	2.5
Gilliam	2	66.9	^	1	^	^
Grant	6	55.3	^	3	28.6 H	^
Harney	4	45.5	^	2	20.2	^
Hood River	10	48.9	^	4	16.8	^
Jackson	115	50.6	0.0	41	17.9	-10.1
Jefferson	8	43.4	^	3	16.7	^
Josephine	56	49.7	2.5	23	19.6	-3.3
Klamath	38	50.4	0.6	15	20.5	3.2
Lake	6	60.7	^	2	18.9	^
Lane	156	44.5 L	-1.6	57	16.2 L	-3.7
Lincoln	37	56.2 H	1.9	13	20.9	7.0
Linn	60	50.5	-0.6	23	18.7	-14.8
Malheur	15	45.5	-1.3	7	20.0	^
Marion	149	52.7 H	-0.7	62	21.5 H	-3.5
Morrow	7	71.7 H	^	2	23.5	^
Multnomah	300	48.7	-1.6	117	18.8	-1.2
Polk	36	47.7	2.6	12	15.6	-11.0
Sherman	1	^	^	0	^	^
Tillamook	17	46.2	-9.7* *	6	16.7	^
Umatilla	38	54.0	-0.9	15	21.1	-3.5
Union	16	55.6	-2.4	7	24.6 H	^
Wallowa	5	41.9	^	1	10.7	^
Wasco	14	46.4	3.0	6	19.8	^
Washington	160	45.2 L	-0.7	59	16.6	-0.9
Wheeler	1	^	^	0	^	^
Yamhill	37	44.2	1.7	14	16.5	3.7

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Esophageal Cancer

ESOPHAGEAL CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	211	160	51
RATES			
Oregon Crude Rate (2005)	5.6	8.6	2.7
Oregon Age-adjusted Rate (2005)	5.3	8.8	2.3
US Age-adjusted Rate (2004) ¹	5.0	8.7	2.0
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-1.2	-1.2	-1.1
CANCER MORTALITY			
Total Cancer Deaths (2005)	197	150	47
RATES			
Oregon Crude Rate (2005)	5.4	8.3	2.6
Oregon Age-adjusted Rate (2005)	5.1	8.8	2.1
US Age-Adjusted Rate (2004) ²	4.4	7.7	1.7
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-1.0	-1.5	+0.1
US Annual Trend (2000-2004) ²	-0.3	-0.1	*-1.5
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.96	0.96	0.94
Burden: YPLL (2001-2005)	552	444	108

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

In 2005, 211 esophageal cancers were diagnosed among Oregonians and reported to the Oregon central registry. Median age at diagnosis was 69.

During the same year, 197 Oregonians died due to esophageal cancer. The median age at death was 71.

About 22 percent of esophageal cancers were diagnosed at the in situ or local stage and 67 percent were diagnosed at the regional or distant stage.

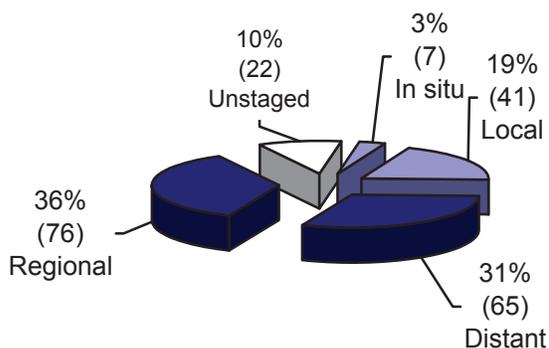
The age-adjusted incidence and mortality rates for esophageal cancer in 2005 were identical at 5 per 100,000. Among men, the incidence and mortality rates were 9 per 100,000 while among women the rates were 2 per 100,000. Incidence for males increased sharply after age 45.

During the period 2001-2005, there were 96 deaths for every 100 diagnoses of esophageal cancer. Based on a life expectancy of 65 years, an average of 552 years of life were lost annually due to early deaths from esophageal cancer.

Incidence was highest for African Americans and American Indians /Alaska Natives. Incidence and mortality were lowest for Asian and Pacific Islanders and Hispanics.

For the period 1996-2005, incidence and mortality rates were significantly higher than the rest of the state in Coos county. No area of the state had significantly lower incidence or mortality rates. See Esophageal Cancer maps.

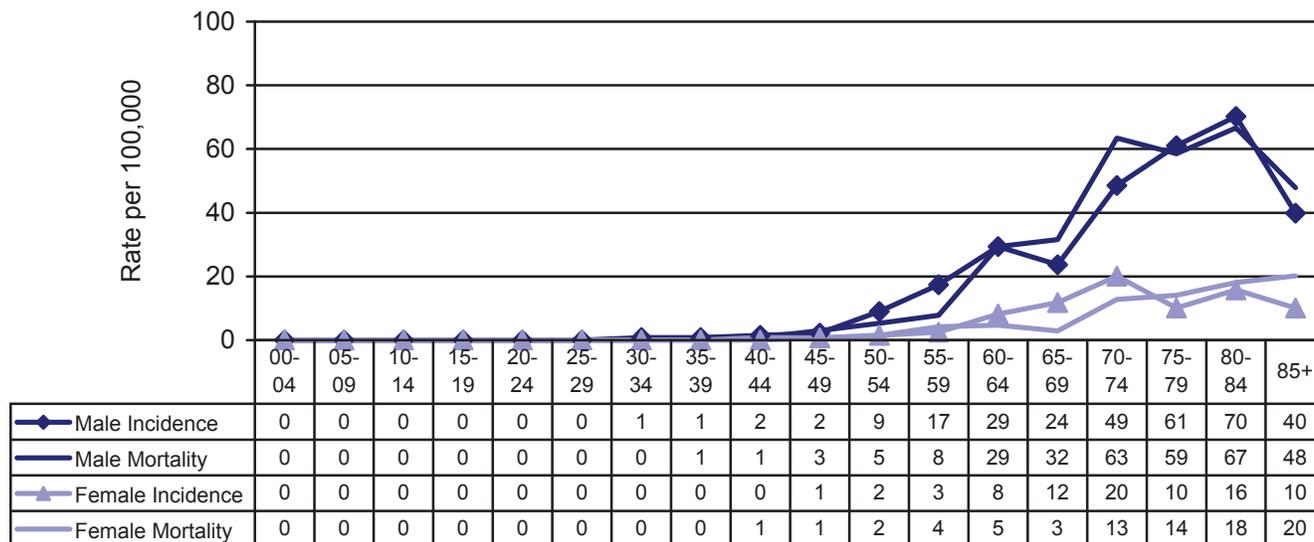
**Esophageal Cancer
Stage at Diagnosis, Oregon, 2005**



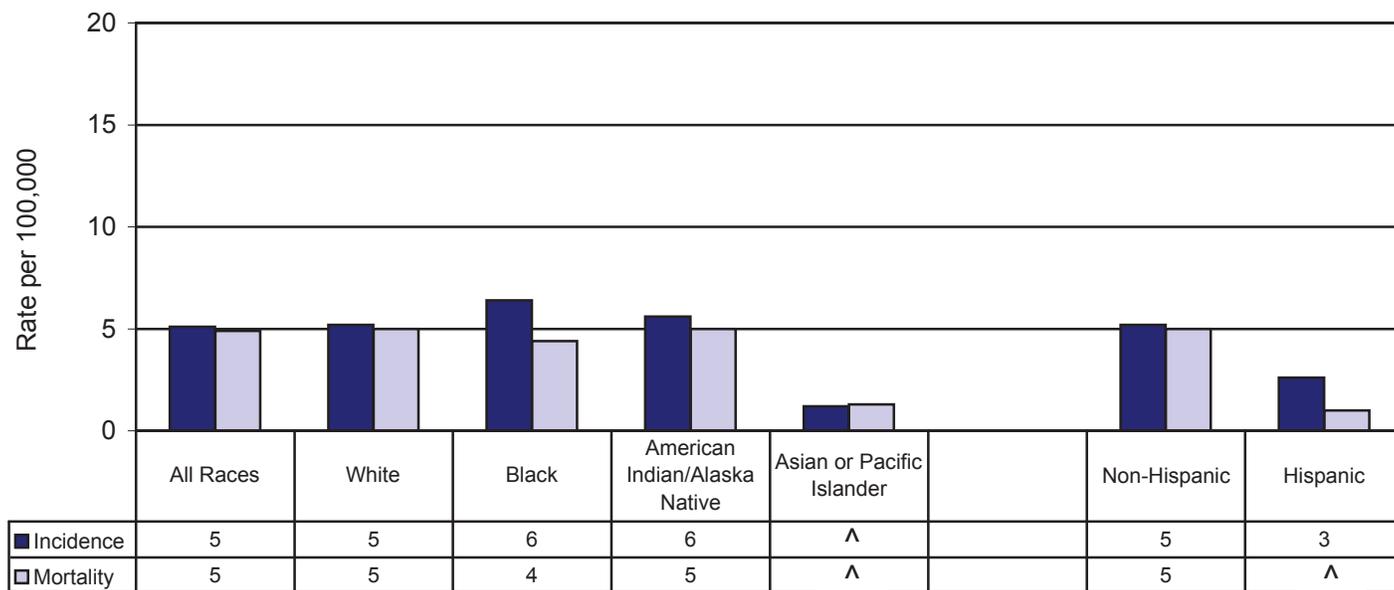
Total does not equal 100% due to rounding

Esophageal Cancer

**Esophageal Cancer Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



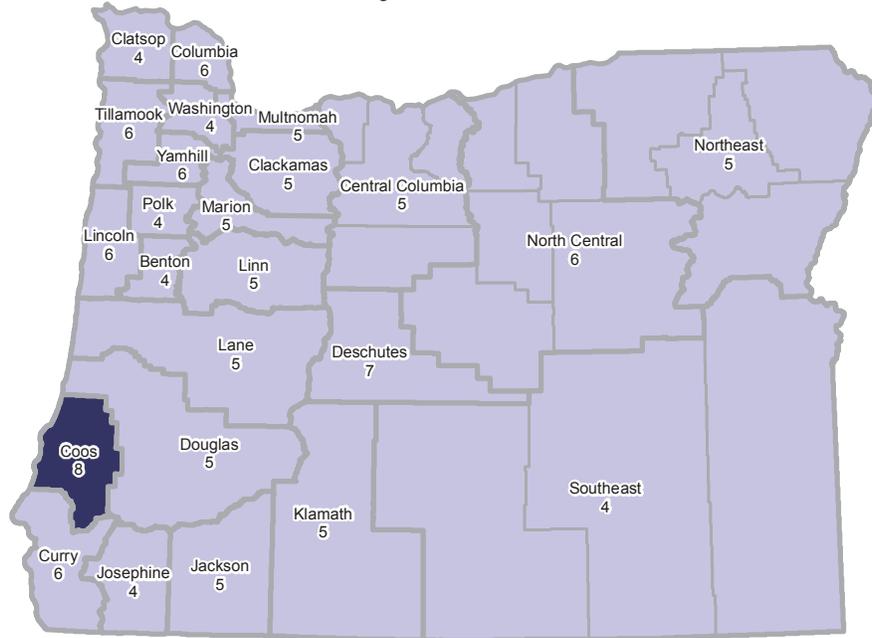
**Esophageal Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



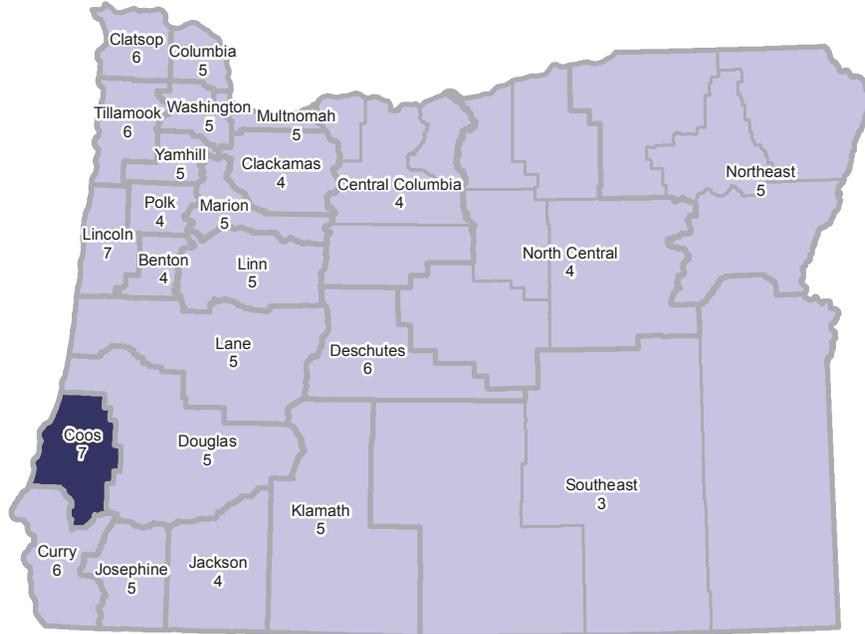
^ Rate not calculated due to instability of small numbers

Esophageal Cancer

Rates of Esophageal Cancer Incidence, 1996-2005
1996-2005 Oregon Rate = 5.



Rates of Esophageal Cancer Mortality, 1996-2005
1996-2005 Oregon Rate = 5.



Rates = Incidence count per 100,000 persons
age-adjusted to 2000 U.S. Census
19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Esophageal Cancer

Esophageal Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

ESOPHAGEAL 1996-2005 Oregon Counties	NEW CASES			DEATHS		
	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	184	5.1	2.4 *	175	4.9	-1.0
Baker	2	6.0	^	1	^	^
Benton	2	3.5	^	2	3.6	^
Clackamas	15	4.6	1.5	15	4.4	-10.2
Clatsop	2	4.5	^	3	5.6	^
Columbia	3	6.1	^	2	5.3	^
Coos	7	7.9 H	^	6	6.9 H	^
Crook	2	6.9	^	1	^	^
Curry	2	5.7	^	2	5.7	^
Deschutes	9	6.7	^	8	6.2	^
Douglas	7	5.1	^	7	5.0	^
Gilliam	0	^	^	0	^	^
Grant	1	^	^	0	^	^
Harney	0	^	^	0	^	^
Hood River	1	^	^	1	^	^
Jackson	11	5.0	4.3	9	3.8	^
Jefferson	1	^	^	1	^	^
Josephine	5	4.5	^	6	4.8	^
Klamath	4	4.9	^	4	4.7	^
Lake	1	^	^	0	^	^
Lane	18	5.2	0.9	18	5.1	-3.1
Lincoln	4	5.8	^	5	7.0	^
Linn	6	5.3	^	7	5.4	^
Malheur	1	3.4	^	1	^	^
Marion	14	4.9	3.2	13	4.7	-12.3
Morrow	1	^	^	1	^	^
Multnomah	32	5.3	3.5	31	5.0	-2.9
Polk	3	4.3	^	3	4.2	^
Sherman	0	^	^	0	^	^
Tillamook	2	6.4	^	2	6.0	^
Umatilla	4	5.4	^	4	5.9	^
Union	1	4.5	^	1	4.1	^
Wallowa	0	^	^	0	^	^
Wasco	2	6.0	^	1	4.6	^
Washington	16	4.5	4.5	17	4.8	7.6
Wheeler	0	^	^	0	^	^
Yamhill	5	5.7	^	4	5.1	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Kidney Cancer

KIDNEY CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	560	366	194
RATES			
Oregon Crude Rate (2005)	14.9	19.7	10.3
Oregon Age-adjusted Rate (2005)	13.9	19.8	9.1
US Age-adjusted Rate (2004) ¹	14.1	19.1	10.0
TRENDS - APC			
Oregon Annual Trend (2001-2005)	*5.5	*5.9	4.9
CANCER MORTALITY			
Total Cancer Deaths (2005)	142	92	50
RATES			
Oregon Crude Rate (2005)	3.9	5.1	2.7
Oregon Age-adjusted Rate (2005)	3.6	5.3	2.2
US Age-Adjusted Rate (2004) ²	4.1	5.9	2.7
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-1.8	-2.3	-2.3
US Annual Trend (2000-2004) ²	-0.7	-1.0	*-0.7
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.31	0.32	0.30
Burden: YPLL (2001-2005)	513	354	159

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

Kidney cancer includes renal cell carcinoma (cancer that forms in the lining of very small tubes in the kidney that filter the blood and remove waste products) and renal pelvis carcinoma (cancer that forms in the center of the kidney where urine collects).

In 2005, 560 cancers of the kidney were diagnosed among Oregonians and reported to Oregon's central registry. Median age at diagnosis was 65. During the same year, 142 Oregonians died due to cancer of the kidney. Median age at death was 70. More than three in five (61 percent) were diagnosed at the local or *in situ* stage.

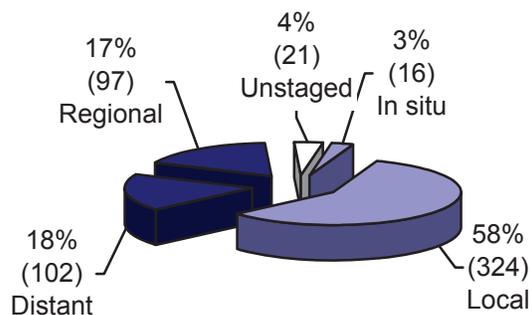
The age-adjusted incidence rate for cancer of the kidney in 2005 was 14 per 100,000. Among men, the incidence rate was 20 per 100,000 and among women the rate was 9 per 100,000.

The age-adjusted mortality rate for cancer of the kidney in 2005 was 4 per 100,000. Among men, the mortality rate was 5 per 100,000 and among women the rate was 2 per 100,000.

During the period 2001-2005, there were 31 deaths for every 100 diagnoses. Based on a life expectancy of 65 years, a total of 513 years of life were lost annually due to early deaths from kidney cancer.

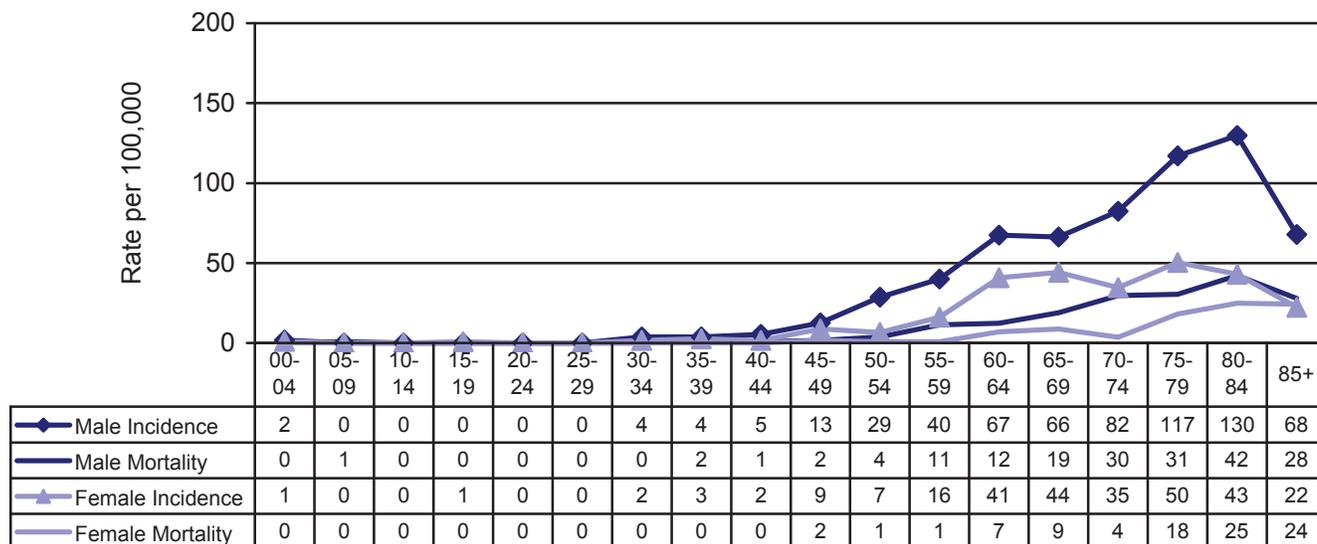
During 1996-2005, incidence of kidney cancer was significantly higher in Coos county. Over the same period, incidence significantly increased for the state as a whole and Deschutes, Jackson, and Linn counties. See Kidney Cancer maps.

**Kidney Cancer
Stage at Diagnosis, Oregon, 2005**

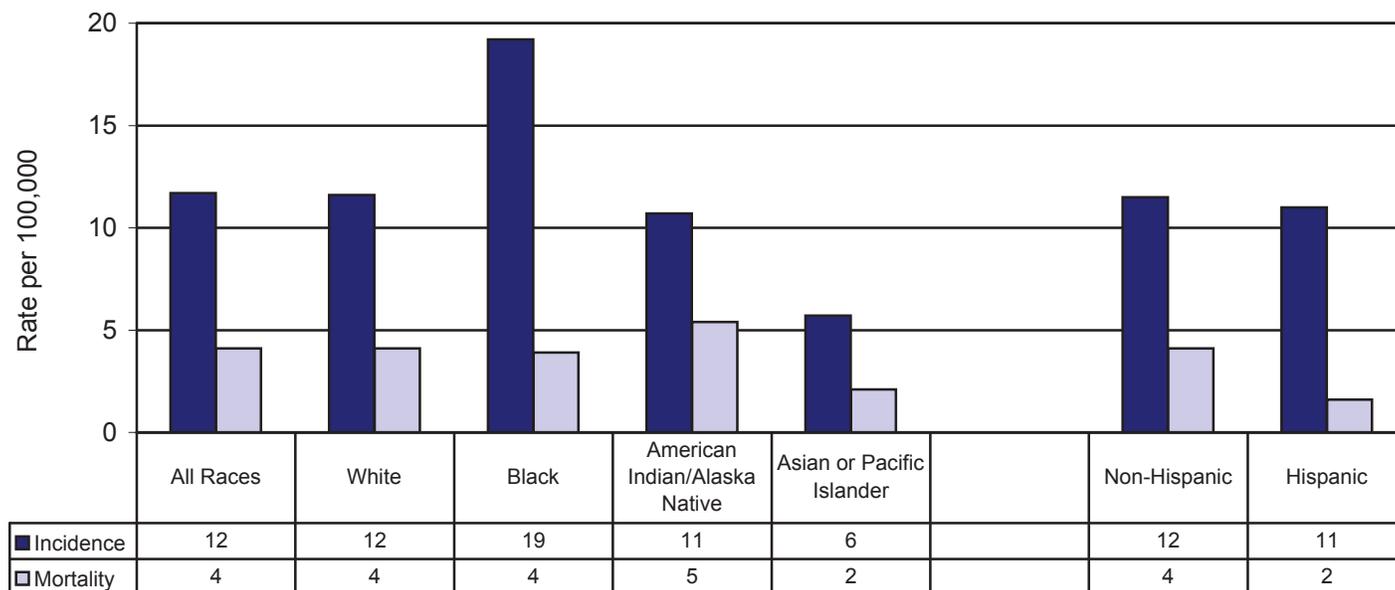


Kidney Cancer

**Kidney Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



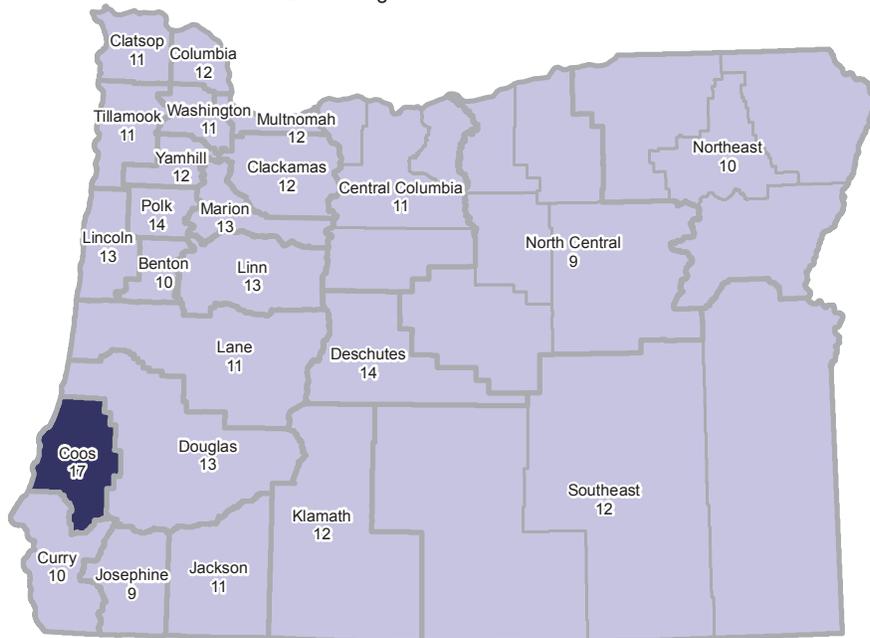
**Kidney Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



Kidney Cancer

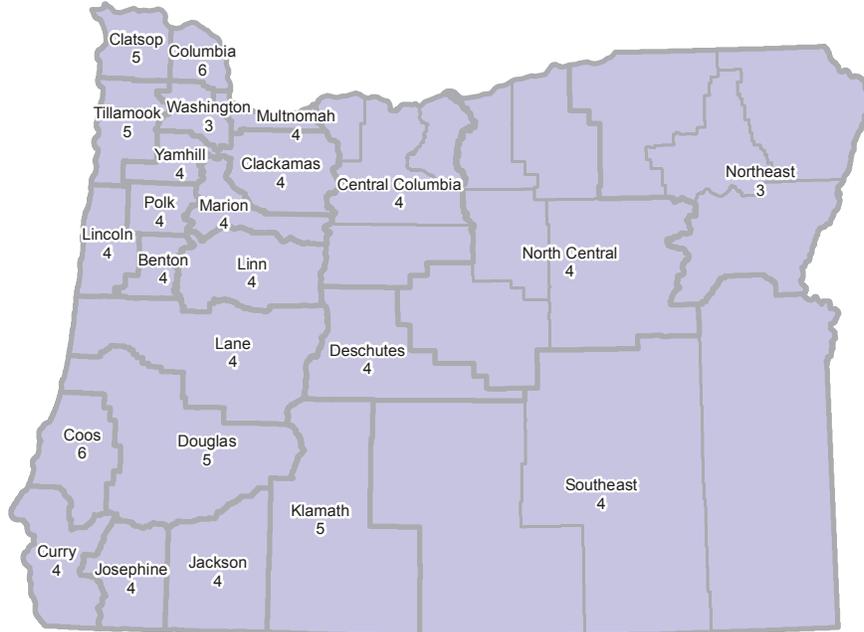
Rates of Kidney Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 11.



Rates of Kidney Cancer Mortality, 1996-2005

2005 Oregon Rate = 8.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Kidney Cancer

Kidney and Renal Bladder Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

KIDNEY / RENAL 1996-2005 Oregon Counties	NEW CASES			DEATHS		
	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	418	11.7	4.0 *	147	4.1	-1.8
Baker	2	9.5	^	1	4.7	^
Benton	7	9.9	^	3	3.8	^
Clackamas	41	12.0	3.7	14	4.0	18.0
Clatsop	5	11.4	^	2	4.7	^
Columbia	5	11.5	^	3	6.3	^
Coos	15	17.1 H	-0.2	5	5.6	^
Crook	2	9.2	^	1	^	^
Curry	4	10.4	^	1	3.6	^
Deschutes	17	13.7	9.3 *	6	4.5	^
Douglas	17	12.6	3.2	6	4.6	^
Gilliam	0	^	^	0	^	^
Grant	1	^	^	0	^	^
Harney	1	13.8	^	0	^	^
Hood River	2	8.9	^	1	^	^
Jackson	24	10.8	8.8 *	9	3.8	^
Jefferson	2	12.3	^	1	5.3	^
Josephine	10	9.3	^	5	4.1	^
Klamath	9	12.3	^	4	4.7	^
Lake	2	18.5	^	1	^	^
Lane	38	10.9	4.0	15	4.1	9.3
Lincoln	8	13.0	^	3	4.2	^
Linn	15	12.7	10.9 *	5	4.4	^
Malheur	3	9.7	^	1	3.2	^
Marion	36	12.8	4.8	13	4.5	-14.4
Morrow	1	^	^	1	^	^
Multnomah	75	12.1	2.8	25	4.0	-3.8
Polk	10	13.9	^	3	3.7	^
Sherman	1	^	^	0	^	^
Tillamook	4	10.8	^	2	4.6	^
Umatilla	6	9.1	^	2	2.9	^
Union	2	8.2	^	1	^	^
Wallowa	2	17.2	^	0	^	^
Wasco	3	10.6	^	2	5.2	^
Washington	40	10.8	3.2	12	3.3	-10.4
Wheeler	0	^	^	0	^	^
Yamhill	10	12.5	^	3	3.7	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Leukemia

LEUKEMIA - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	423	253	170
RATES			
Oregon Crude Rate (2005)	11.6	14.0	9.3
Oregon Age-adjusted Rate (2005)	11.0	14.7	8.0
US Age-adjusted Rate (2004) ¹	11.7	15.2	9.1
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-4.6	-3.5	-6.8
CANCER MORTALITY			
Total Cancer Deaths (2005)	300	172	128
RATES			
Oregon Crude Rate (2005)	8.2	9.5	7.0
Oregon Age-adjusted Rate (2005)	7.7	10.2	5.6
US Age-Adjusted Rate (2004) ²	7.2	9.7	5.5
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-1.0	-0.5	-2.2
US Annual Trend (2000-2004) ²	*-1.5	*-1.4	*-2.0
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.69	0.68	0.70
Burden: YPLL (2001-2005)	1,536	887	650

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

Leukemia is a cancer that starts in blood-forming tissue such as bone marrow and causes large numbers of abnormal blood cells to be produced and enter the bloodstream.

In 2005, a total of 423 Oregonians were diagnosed with leukemia and reported to the central registry. Median age at diagnosis was 63. During the same year, 300 Oregonians died due to leukemia. Median age at death was 70.

The age-adjusted annual incidence rate for leukemia in 2005 was 11 per 100,000. The age-adjusted incidence rate among men was 15 per 100,000 and among women it was 8 per 100,000.

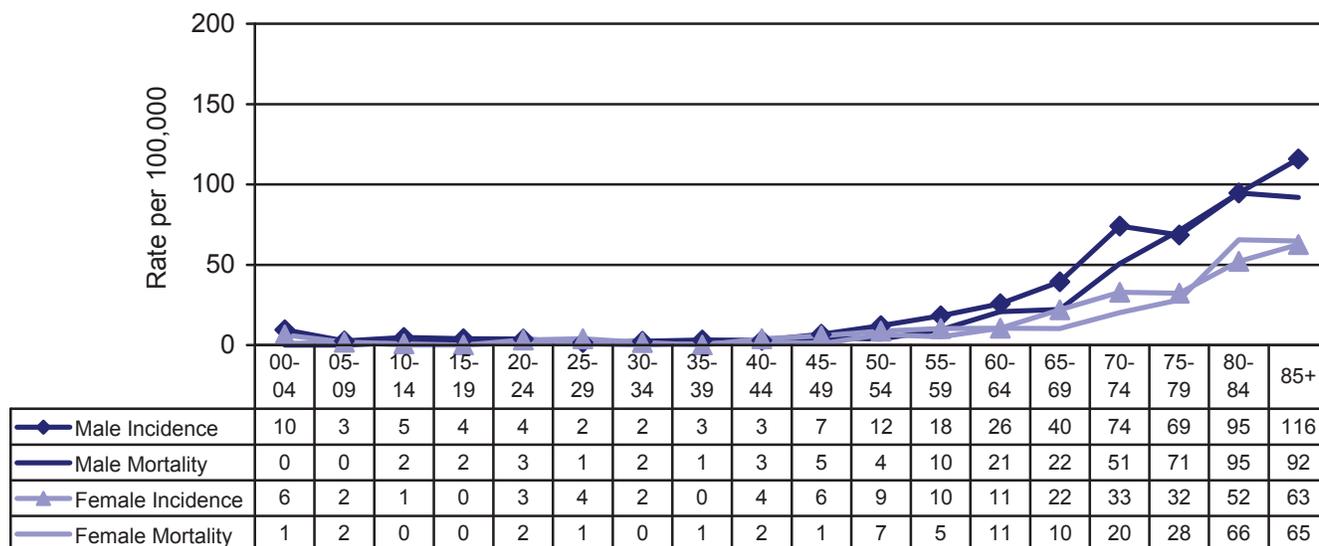
The age-adjusted mortality rate for leukemia in 2005 was 8 per 100,000. Among men, the rate was 10 per 100,000 and among women the rate was 6 per 100,000.

During the period 2001-2005, the mortality-to-incidence ratio was 69 deaths for every hundred new diagnoses. Based on a life expectancy of 65 years, a total of 1,536 years of potential life were lost annually due to early deaths from leukemia.

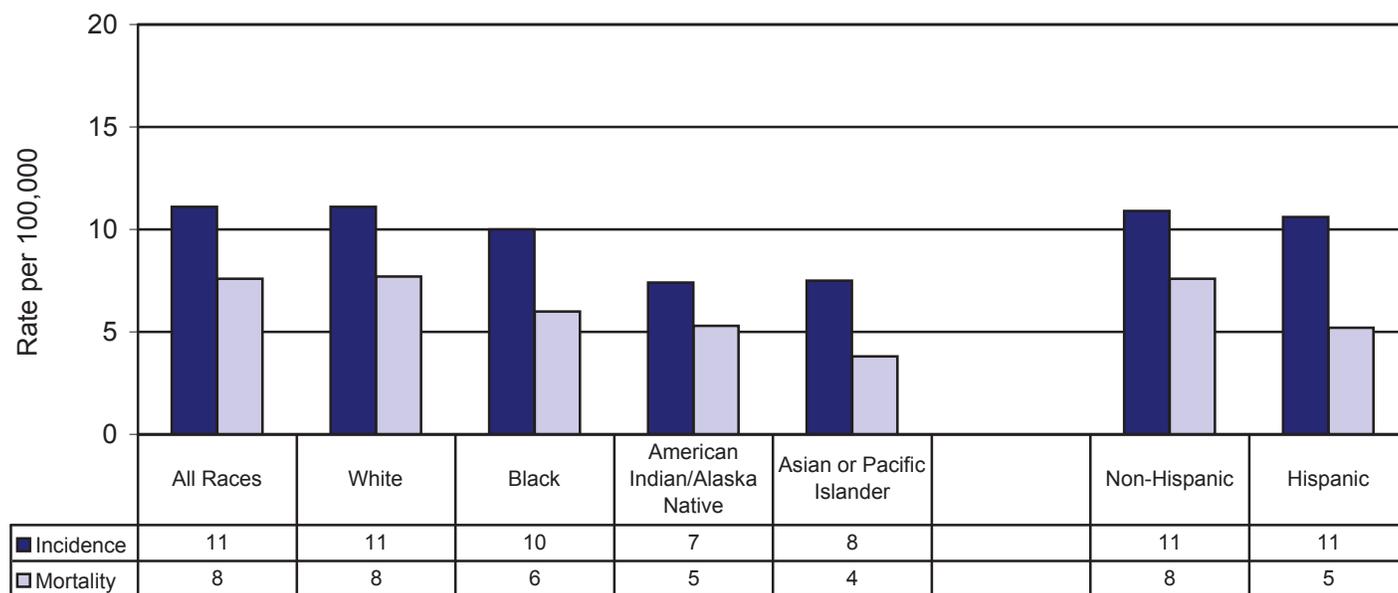
During 1996-2005, leukemia incidence was significantly higher than the state average in Multnomah county and significantly lower in Deschutes, Josephine, and Lincoln counties. Leukemia mortality was significantly lower than the rest of the state in Lincoln county. See Leukemia Maps.

Leukemia

**Leukemia Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



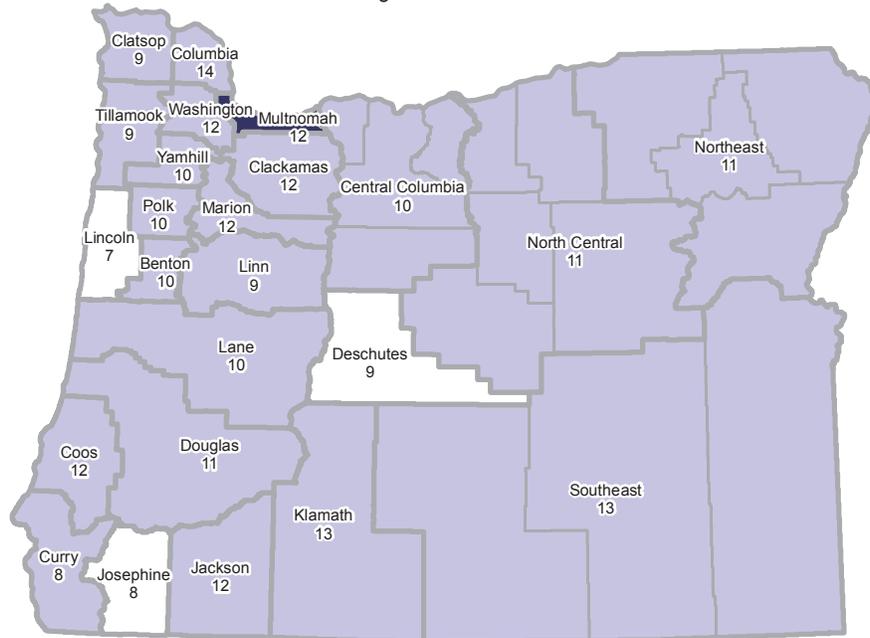
**Leukemia Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



Leukemia

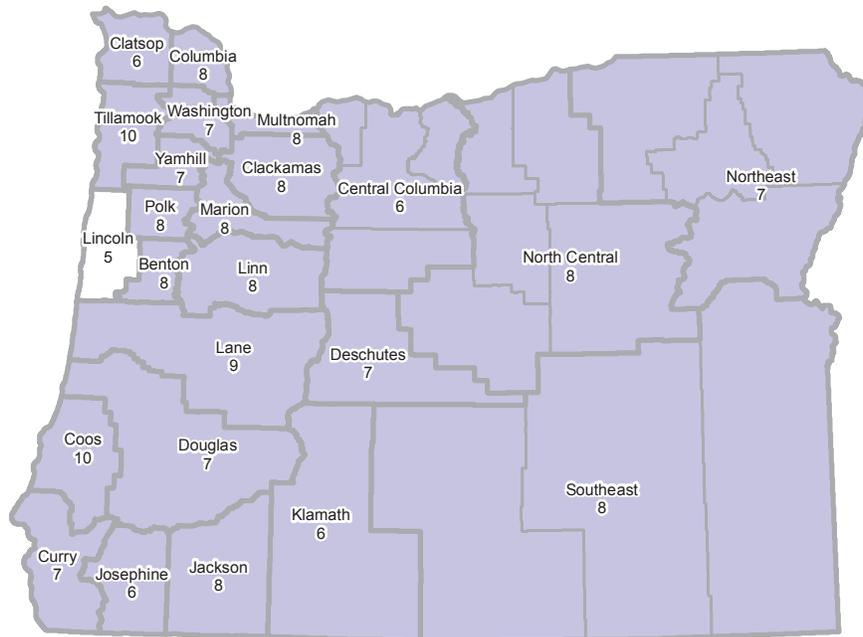
Rates of Leukemia Incidence, 1996-2005

1996-2005 Oregon Rate = 11.

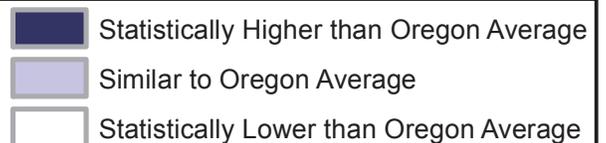


Rates of Leukemia Mortality, 1996-2005

1996-2005 Oregon Rate = 8.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.



Leukemia

Leukemia Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

LEUKEMIA	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	394	11.1	-0.5	273	7.6	-1.0
Baker	2	11.9	^	2	7.6	^
Benton	7	10.3	^	5	7.6	^
Clackamas	40	11.8	-1.8	26	7.9	-9.1
Clatsop	4	9.0	^	2	5.6	^
Columbia	6	14.3	^	3	7.9	^
Coos	10	11.6	^	9	9.8	^
Crook	2	8.7	^	2	6.7	^
Curry	4	8.4	^	3	7.3	^
Deschutes	11	8.8 L	-1.7	8	6.8	^
Douglas	14	11.1	1.0	10	7.4	^
Gilliam	1	^	^	0	^	^
Grant	1	^	^	1	^	^
Harney	2	18.9	^	1	^	^
Hood River	2	7.6	^	1	5.3	^
Jackson	25	11.5	-2.1	18	8.0	12.5
Jefferson	2	12.7	^	2	8.9	^
Josephine	9	8.4 L	^	7	5.9	^
Klamath	10	13.3	^	5	6.4	^
Lake	1	13.2	^	1	^	^
Lane	35	10.3	3.7	31	8.7	-2.9
Lincoln	4	7.1 L	^	3	4.6 L	^
Linn	11	9.2	1.0	9	7.7	^
Malheur	4	10.8	^	2	7.0	^
Marion	34	12.0	-3.0	22	7.5	-1.3
Morrow	1	12.1	^	1	^	^
Multnomah	77	12.4 H	-0.4	49	7.8	-8.1
Polk	7	10.3	^	6	7.5	^
Sherman	0	^	^	0	^	^
Tillamook	3	9.1	^	4	10.2	^
Umatilla	7	9.8	^	5	7.7	^
Union	3	10.5	^	2	7.2	^
Wallowa	2	16.7	^	1	^	^
Wasco	3	10.4	^	2	4.7	^
Washington	45	11.8	-0.8	27	7.4	-0.6
Wheeler	0	^	^	0	^	^
Yamhill	8	9.7	^	6	7.4	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Liver Cancer

LIVER CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	205	146	59
RATES			
Oregon Crude Rate (2005)	5.6	8.1	3.2
Oregon Age-adjusted Rate (2005)	5.1	7.6	2.8
US Age-adjusted Rate (2004) ¹	5.6	8.7	3.0
TRENDS - APC			
Oregon Annual Trend (2001-2005)	*+9.0	*+12.1	+2.0
CANCER MORTALITY			
Total Cancer Deaths (2005)	182	118	64
RATES			
Oregon Crude Rate (2005)	5.0	6.5	3.5
Oregon Age-adjusted Rate (2005)	4.6	6.3	3.0
US Age-Adjusted Rate (2004) ²	5.1	7.4	3.2
TRENDS - APC			
Oregon Annual Trend (2001-2005)	+6.5	+7.8	+3.8
US Annual Trend (2000-2004) ²	*+2.6	*+2.4	*+2.3
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.92	0.86	1.08
Burden: YPLL (2001-2005)	801	548	253

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

In 2005, 205 liver cancers were diagnosed among Oregon residents and reported to the central registry. Median age at diagnosis was 63. During the same time period, 182 Oregonians died due to liver cancer. Median age at death was 66.

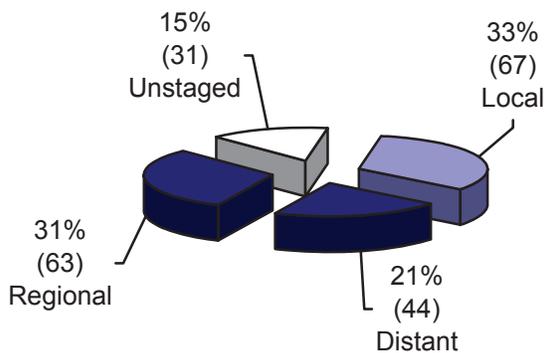
About a third (33 percent) of the new liver cancers were diagnosed at the local stage and just over a half (52 percent) were diagnosed at the regional or distant stage. Another 15 percent were unstaged.

Incidence and mortality rates for liver cancer were higher among Asians and Pacific Islanders.

During the period 2001-2005, the mortality to incidence ratio was 0.92. Based on a life expectancy of 65 years, a total of 801 years of life were lost annually due to early deaths from liver cancer.

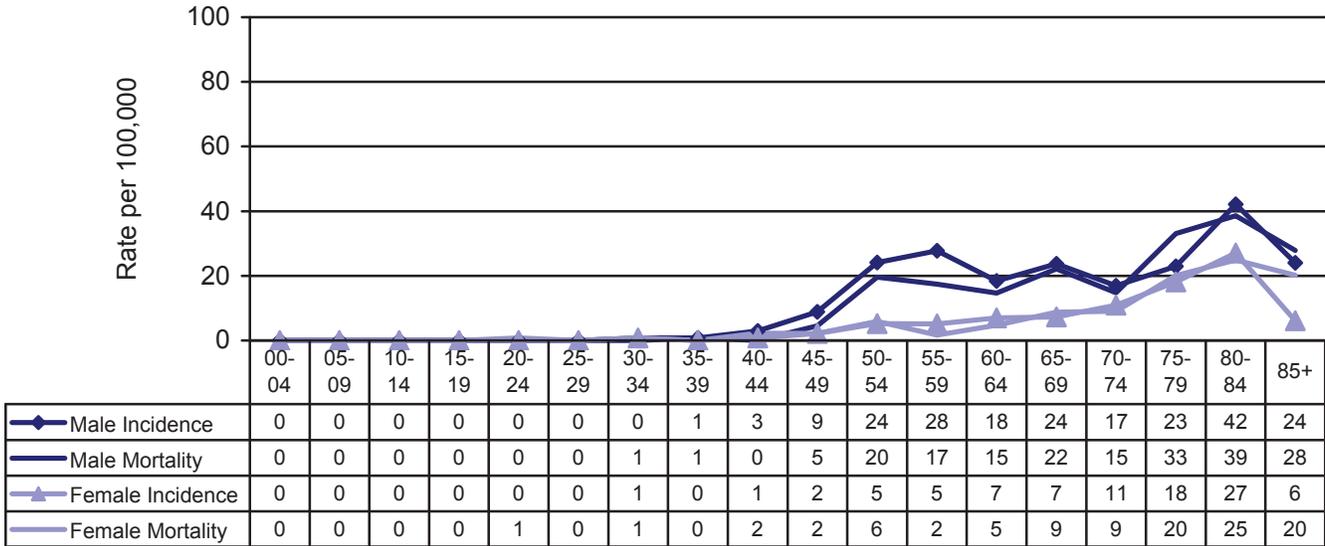
Liver cancer incidence was significantly higher than the rest of the state in Multnomah county and significantly lower in Deschutes county and the southeast region of the state. Multnomah county had significantly higher mortality than the rest of the state. See Liver Cancer maps.

**Liver Cancer
Stage at Diagnosis, Oregon, 2005**

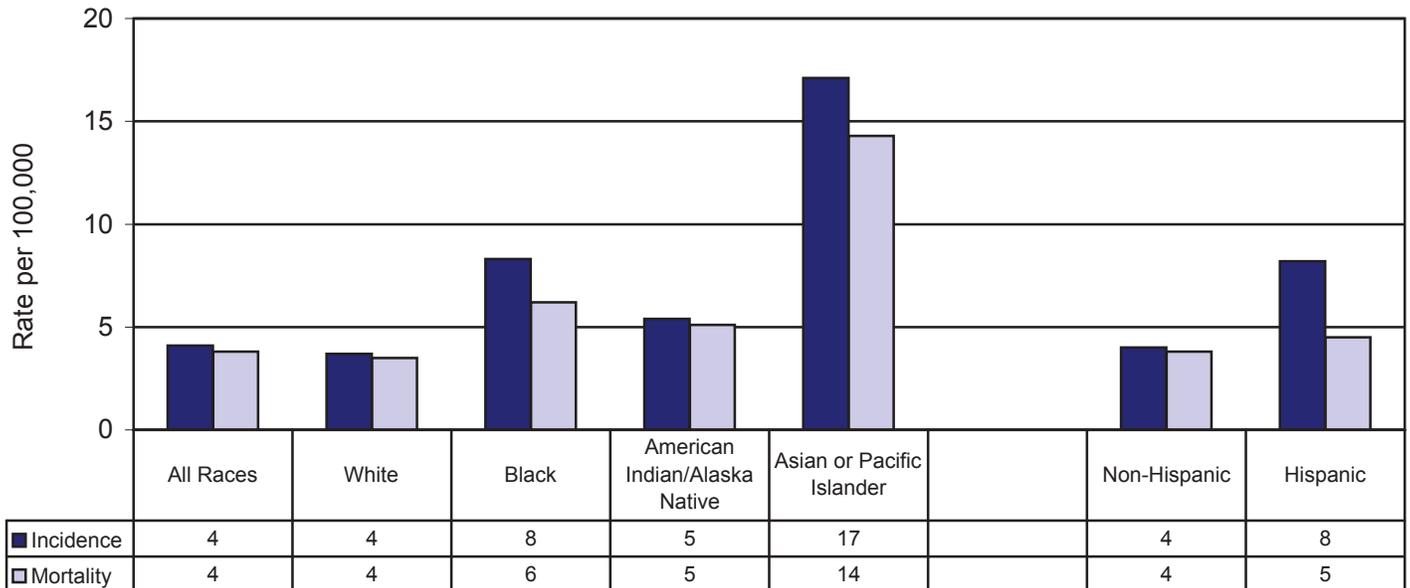


Liver Cancer

**Liver Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



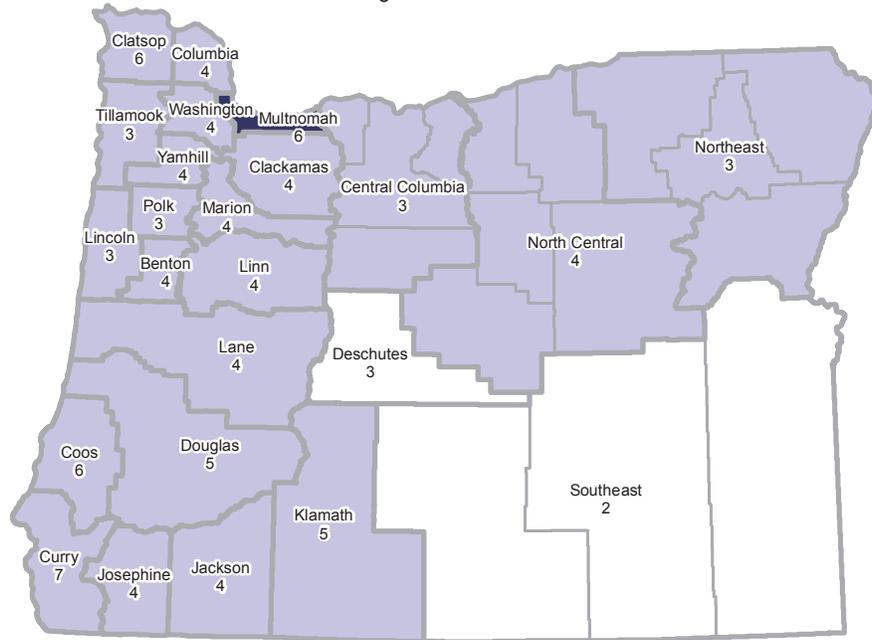
**Liver Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



Liver Cancer

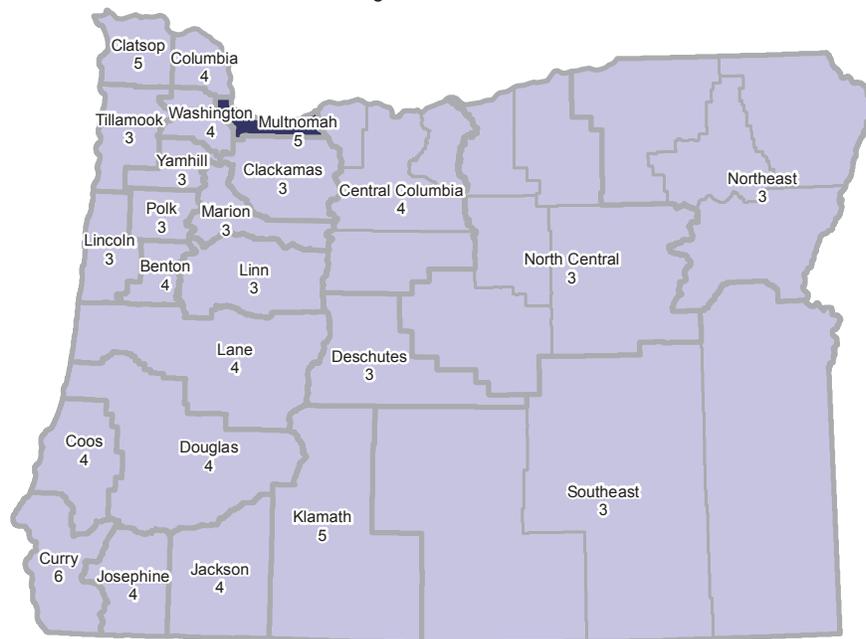
Rates of Liver Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 4.



Rates of Liver Cancer Mortality, 1996-2005

1996-2005 Oregon Rate = 4.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Liver Cancer

Liver and Intrahepatic Bile Duct Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

LIVER / BILE DUCT 1996-2005 Oregon Counties	NEW CASES			DEATHS		
	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	148	4.1	6.0 *	138	3.8	6.5
Baker	1	^	^	1	^	^
Benton	3	4.1	^	3	4.1	^
Clackamas	12	3.5	4.0	11	3.4	2.8
Clatsop	3	6.0	^	2	4.9	^
Columbia	2	4.4	^	2	4.5	^
Coos	5	5.6	^	4	4.5	^
Crook	1	^	^	1	^	^
Curry	2	6.8	^	2	6.3	^
Deschutes	3	2.6 L	^	4	2.7	^
Douglas	7	5.0	^	6	4.4	^
Gilliam	0	^	^	0	^	^
Grant	0	^	^	0	^	^
Harney	0	^	^	0	^	^
Hood River	1	^	^	1	^	^
Jackson	8	3.5	^	8	3.7	^
Jefferson	1	^	^	1	^	^
Josephine	4	3.5	^	4	3.9	^
Klamath	4	4.7	^	4	5.0	^
Lake	0	^	^	0	^	^
Lane	13	3.8	0.4	13	3.6	24.1 *
Lincoln	2	3.1	^	2	2.9	^
Linn	5	4.0	^	4	3.2	^
Malheur	1	^	^	1	3.4	^
Marion	10	3.5	^	9	3.2	^
Morrow	1	^	^	1	^	^
Multnomah	37	5.9 H	8.1 *	31	5.0 H	4.1
Polk	2	2.7	^	2	3.0	^
Sherman	0	^	^	0	^	^
Tillamook	1	^	^	1	3.1	^
Umatilla	2	3.0	^	3	3.7	^
Union	1	^	^	1	^	^
Wallowa	0	^	^	0	^	^
Wasco	1	^	^	1	^	^
Washington	15	3.9	11.8 *	13	3.5	17.1
Wheeler	0	^	^	0	^	^
Yamhill	3	3.8	^	3	3.4	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Lung and Bronchial Cancer

LUNG AND BRONCHIAL CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	2,597	1,346	1,251
RATES			
Oregon Crude Rate (2005)	71.2	74.3	68.2
Oregon Age-adjusted Rate (2005)	68.1	79.1	60.3
US Age-adjusted Rate (2004) ¹	67.4	85.3	54.2
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-1.3	-1.2	-1.5
CANCER MORTALITY			
Total Cancer Deaths (2005)	2,097	1,131	966
RATES			
Oregon Crude Rate (2005)	57.6	62.5	52.8
Oregon Age-adjusted Rate (2005)	54.8	66.9	45.7
US Age-Adjusted Rate (2004) ²	53.3	70.3	40.9
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-0.6	-0.2	-1.2
US Annual Trend (2000-2004) ²	*-1.1	*-2.1	-0.1
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.81	0.82	0.79
Burden: YPLL (2001-2005)	4,539	2,488	2,051

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

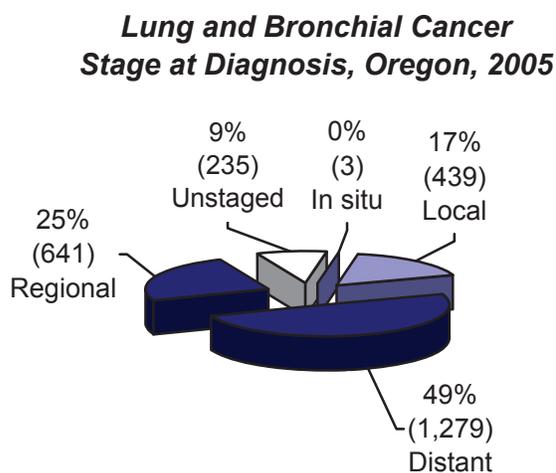
² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.



Among Oregon residents, 2,597 lung cancers were diagnosed in 2005 and reported to the central registry. Median age at diagnosis was 70. During the same time period, 2,097 Oregonians died due to lung cancer. Median age at death was 71. Nearly three-fourths of lung cancers (74 percent) were diagnosed at the regional or distant stage.

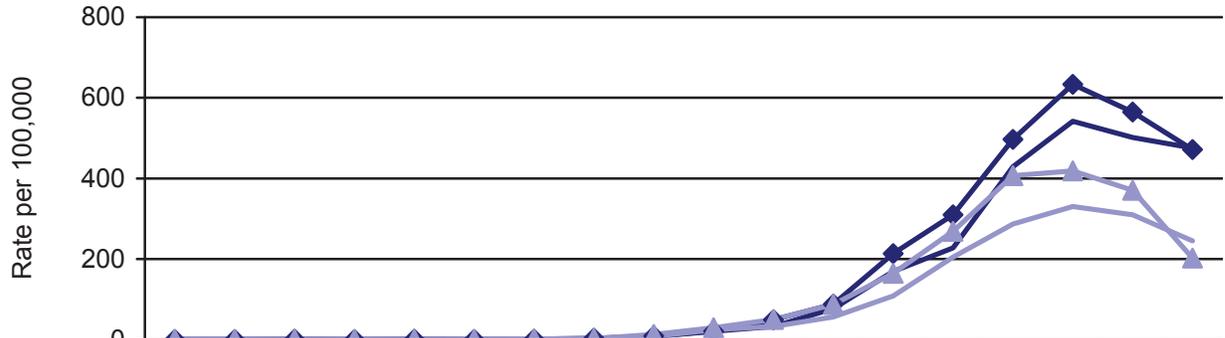
Lung cancer is the leading cause of cancer death in Oregon. During the period 2001-2005, there were four deaths for every five new lung cancer diagnoses. Based on a life expectancy of 65 years, a total of 4,539 years of life were lost annually due to early deaths from lung cancer.

Highest lung cancer incidence was among African Americans and American Indians/Alaska Natives. Lowest incidence and mortality was among Asians and Pacific Islanders and among Hispanics.

During the period 1996-2005, lung cancer incidence and mortality were significantly higher than the state average in Columbia, Coos, Douglas, Josephine, Lincoln, and Multnomah counties. Lung cancer incidence was significantly lower than the state average in Benton, Deschutes, Polk, and Washington counties, as well as the northeast region. Lung cancer mortality was significantly lower than the rest of the state in Benton, Clackamas, Deschutes, Polk, and Washington counties, as well as the southeast region. During the same period, the incidence of lung cancer decreased significantly for the state as a whole, as well as for Douglas, Klamath, Marion, and Washington counties. See Lung Cancer maps.

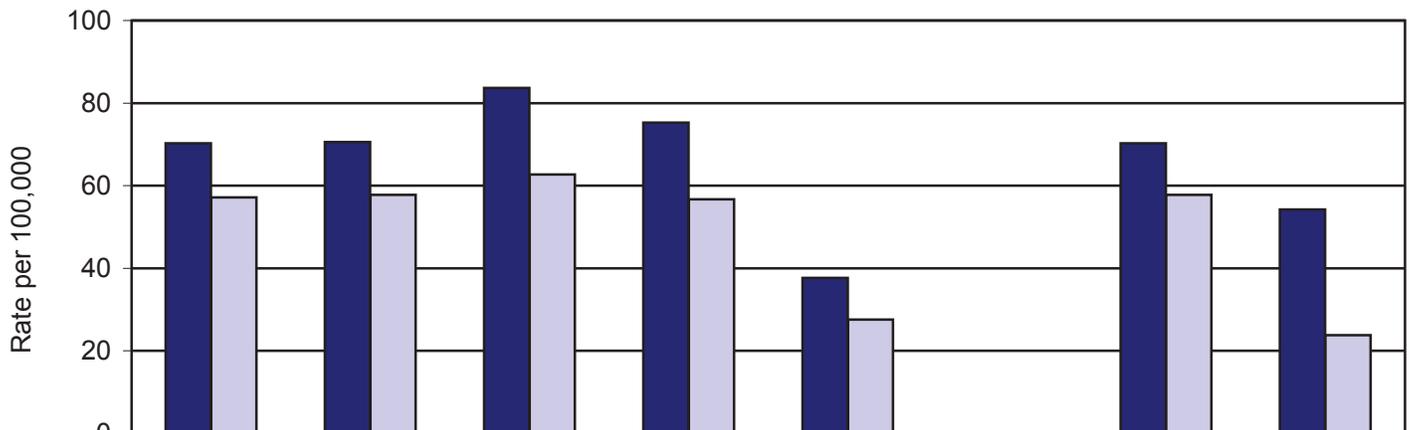
Lung and Bronchial Cancer

**Lung and Bronchial Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



	00-04	05-09	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+
◆ Male Incidence	0	0	0.8	0	0.8	0	0.8	3.1	8.3	20.8	49	87.8	213.4	309.4	496.7	633.1	564.7	471.2
■ Male Mortality	0	0	0	0	0	0	0	1.5	7.5	20.8	32.4	76.5	169.2	227.3	429.1	541.5	501.6	475.1
▲ Female Incidence	0	0	0	0	0	0	1.6	2.5	12.3	29	49.4	86.6	164.3	268.8	406.7	418.3	370.7	202.1
● Female Mortality	0	0	0	0	0	0	0	1.6	6.9	24.7	32.4	56	108.4	204.2	286.4	329.8	309.7	244.5

**Lung and Bronchial Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**

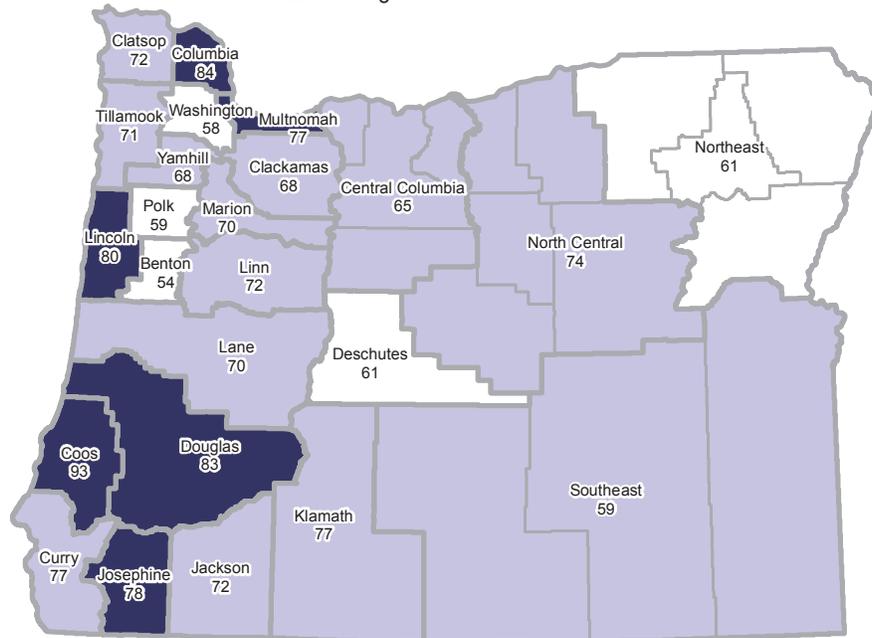


	All Races	White	Black	American Indian/Alaska Native	Asian or Pacific Islander	Non-Hispanic	Hispanic
■ Incidence	70	71	84	75	38	70	54
□ Mortality	57	58	63	57	28	58	24

Lung and Bronchial Cancer

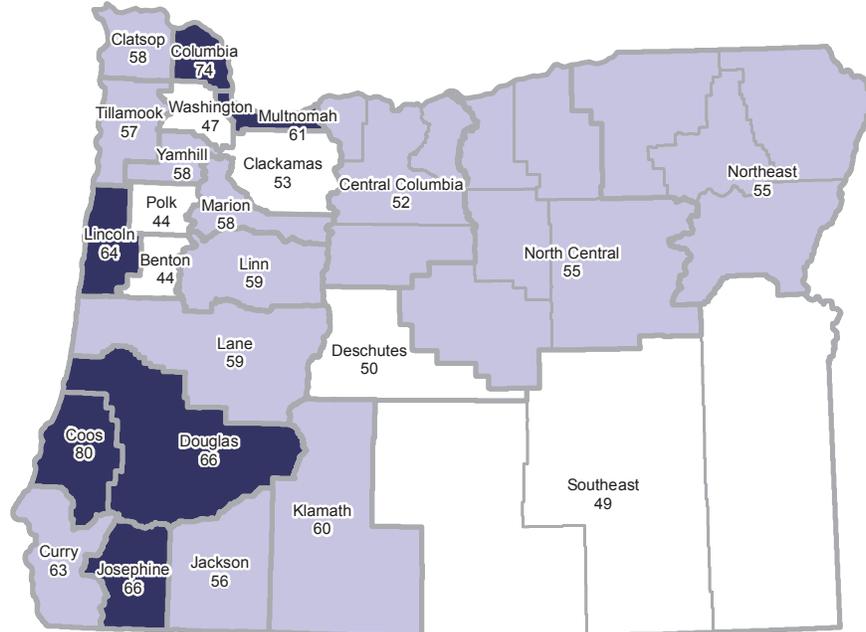
Rates of Lung Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 70.



Rates of Lung Cancer Mortality, 1996-2005

1996-2005 Oregon Rate = 57.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Lung and Bronchial Cancer

Lung and Bronchial Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

LUNG / BRONCHIAL 1996-2005 Oregon Counties	NEW CASES			DEATHS		
	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	2,494	70.3	-0.7 *	2,035	57.2	-0.6
Baker	15	61.3	3.3	14	55.9	9.9
Benton	36	53.6 L	-2.3	30	44.4 L	6.7
Clackamas	225	68.1	-0.3	175	53.3 L	-0.5
Clatsop	31	71.6	0.2	25	57.8	4.2
Columbia	37	83.8 H	-2.0	32	73.8 H	-4.0
Coos	85	92.9 H	-2.3	73	79.5 H	-0.1
Crook	18	76.7	1.3	13	55.7	-1.2
Curry	32	77.4	2.8	26	63.2	5.1
Deschutes	77	60.7 L	0.7	63	49.9 L	-0.1
Douglas	116	83.3 H	-2.2 *	91	65.5 H	-2.3
Gilliam	2	54.4	^	1	^	^
Grant	6	61.5	^	5	48.2	^
Harney	5	55.8	^	5	50.0	^
Hood River	12	57.3 L	-1.1	10	49.0	^
Jackson	163	72.3	-0.2	128	56.5	-2.6
Jefferson	11	58.1	1.1	9	46.8	^
Josephine	89	77.8 H	0.7	76	66.0 H	-3.1
Klamath	58	76.6	-4.2 *	46	60.4	4.0
Lake	7	66.1	^	6	57.7	^
Lane	243	70.2	0.3	204	58.6	-0.6
Lincoln	53	80.0 H	-0.8	42	64.5 H	-2.9
Linn	85	71.9	1.6	71	59.2	4.8
Malheur	19	57.5 L	0.9	15	45.6 L	-3.8
Marion	194	70.0	-1.9 *	161	57.8	-0.3
Morrow	9	90.5 H	^	7	66.7	^
Multnomah	459	76.9 H	-0.1	367	61.3 H	-0.1
Polk	42	59.1 L	0.7	32	43.8 L	-1.9
Sherman	2	56.8	^	2	56.7	^
Tillamook	25	70.7	-2.3	21	57.1	-3.9
Umatilla	44	63.8	-2.3	42	59.8	1.3
Union	16	56.6 L	-1.3	14	47.9	-7.9
Wallowa	5	48.0 L	^	5	45.0	^
Wasco	23	75.2	1.8	18	57.4	-6.5
Washington	198	57.7 L	-1.6 *	161	47.2 L	-0.7 *
Wheeler	2	55.6	^	1	48.7	^
Yamhill	55	67.8	-0.6	47	57.7	5.7

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Lymphoma

LYMPHOMA - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	911	467	444
RATES			
Oregon Crude Rate (2005)	25.0	25.8	24.3
Oregon Age-adjusted Rate (2005)	23.6	26.5	21.4
US Age-adjusted Rate (2004) ¹	21.7	25.7	18.6
TRENDS - APC			
Oregon Annual Trend (2001-2005)	+1.6	+2.1	+1.5
CANCER MORTALITY			
Total Cancer Deaths (2005)	336	167	169
RATES			
Oregon Crude Rate (2005)	9.2	9.2	9.2
Oregon Age-adjusted Rate (2005)	8.5	9.9	7.4
US Age-Adjusted Rate (2004) ²	7.5	9.4	6.0
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-2.4	-1.2	-4.1
US Annual Trend (2000-2004) ²	*-3.5	*-3.3	*-4.0
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.39	0.38	0.39
Burden: YPLL (2001-2005)	1,182	712	470

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

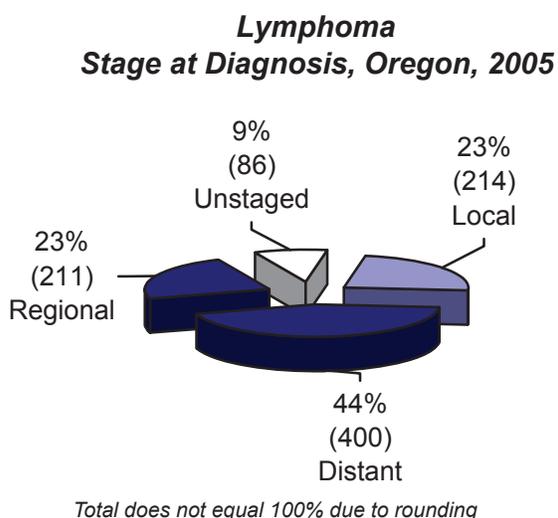
Among Oregon residents, 911 lymphomas were diagnosed in 2005 and reported to the central registry. Median age at diagnosis was 63. During the same year, 336 Oregonians died due to lymphoma. Median age at death was 72.

The age-adjusted incidence of lymphoma in 2005 was 24 cases per 100,000 population. Among men, incidence was 27 per 100,000 and among women 21 per 100,000.

The age-adjusted mortality rate for lymphoma was 9 per 100,000. Among men, the mortality rate was 10 per 100,000 and among women 7 per 100,000.

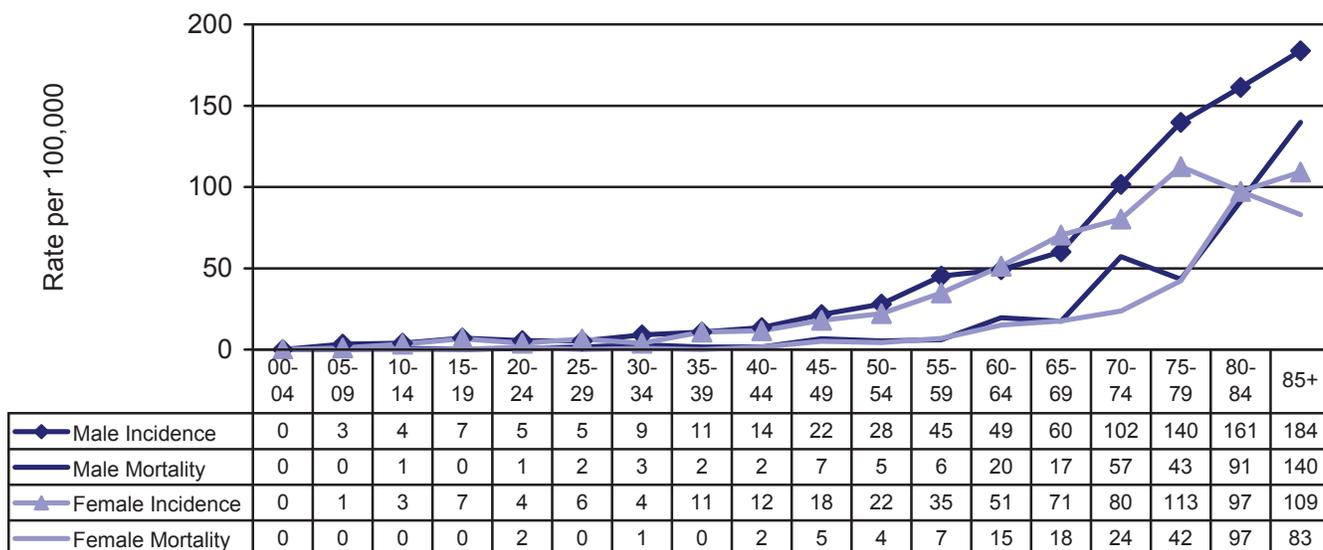
During the period 2001-2005, the mortality-to-incidence ratio was 0.39, meaning there were about two deaths for every five new lymphoma diagnoses. Based on a life expectancy of 65 years, a total of 1,182 years of life were lost annually due to early deaths from lymphoma.

For the period 1996-2005, lymphoma incidence was significantly higher in Jackson county than it was for the state as a whole. Lymphoma mortality was not significantly higher or lower in any portion of the state. During the same period, the incidence rate for lymphoma increased significantly for the state as a whole, as well as for Deschutes, Jackson, Josephine, Klamath, Lane, and Linn counties. See Lymphoma maps.

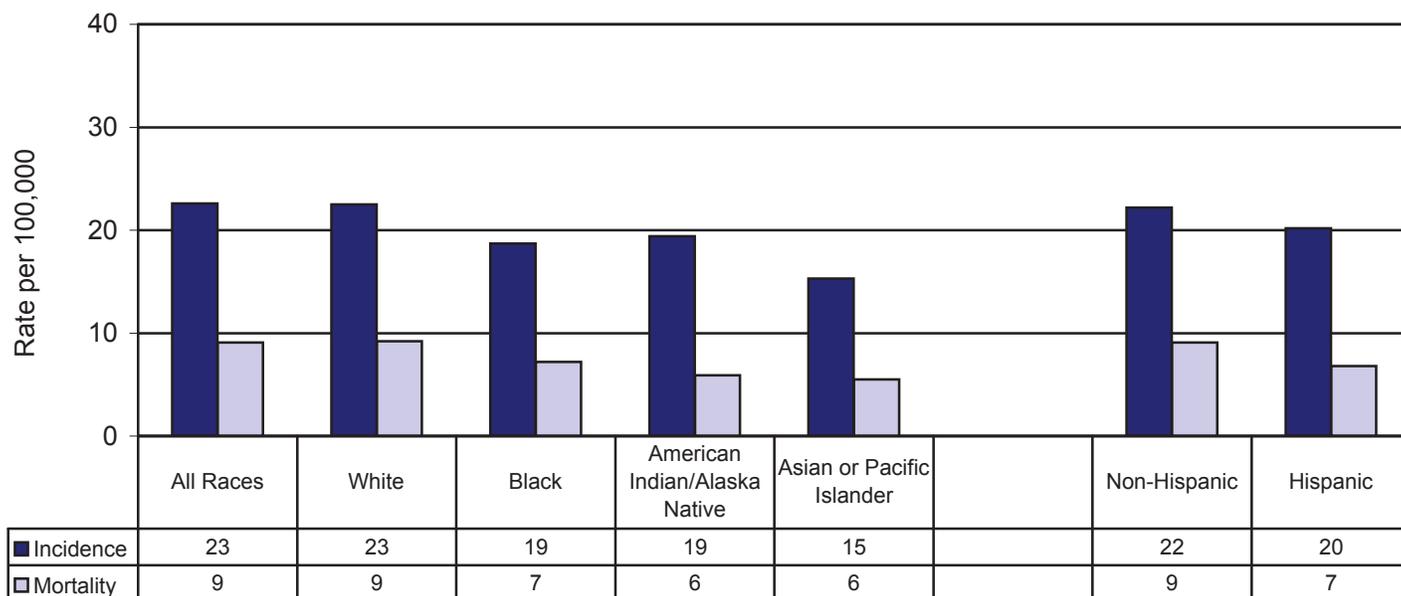


Lymphoma

**Lymphoma Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



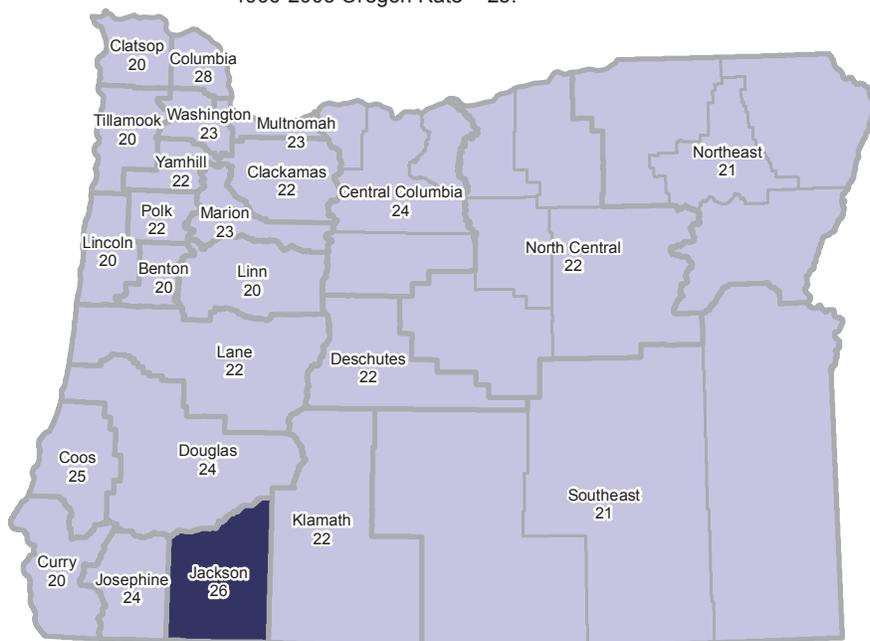
**Lymphoma Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



Lymphoma

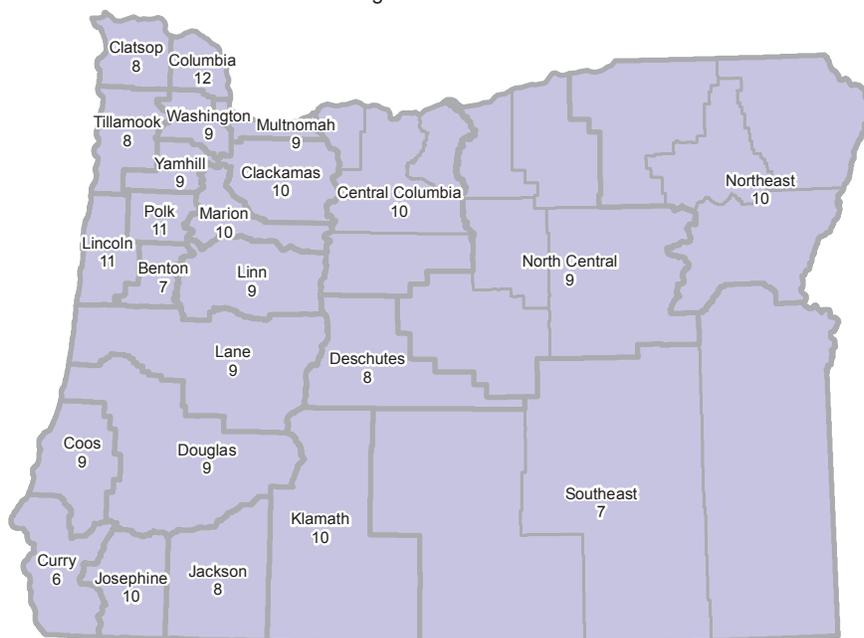
Rates of Lymphoma Incidence, 1996-2005

1996-2005 Oregon Rate = 23.



Rates of Lymphoma Mortality, 1996-2005

1996-2005 Oregon Rate = 9.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Lymphoma

Lymphoma Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

LYMPHOMA	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	806	22.6	1.5 *	327	9.1	-2.4
Baker	5	21.2	^	3	10.6	^
Benton	14	19.5	-2.4	5	6.9	^
Clackamas	76	22.2	-1.3	32	9.6	1.1
Clatsop	8	19.6	^	4	8.4	^
Columbia	12	27.7	-2.4	5	11.9	^
Coos	21	25.0	-0.1	8	8.7	^
Crook	5	21.8	^	2	7.4	^
Curry	6	19.7	^	3	6.2	^
Deschutes	28	22.5	4.0 *	10	7.9	^
Douglas	31	24.0	-0.6	12	8.9	1.1
Gilliam	1	^	^	0	^	^
Grant	2	22.8	^	1	^	^
Harney	2	19.5	^	1	^	^
Hood River	5	23.2	^	2	8.4	^
Jackson	57	26.5 H	5.5 *	18	7.7	2.5
Jefferson	4	21.1	^	2	10.3	^
Josephine	25	23.7	4.9 *	11	9.6	2.2
Klamath	16	22.1	8.2 *	7	9.8	^
Lake	3	30.3	^	1	^	^
Lane	75	21.8	4.4 *	31	8.8	5.1
Lincoln	12	20.1	3.8	7	10.8	^
Linn	23	19.7	5.4 *	11	9.4	-5.0
Malheur	6	19.0	^	2	6.3	^
Marion	64	22.7	2.5	27	9.5	1.6
Morrow	2	24.2	^	1	14.0	^
Multnomah	147	23.0	-1.0	59	9.3	-7.4
Polk	16	22.4	2.6	8	10.8	^
Sherman	0	^	^	0	^	^
Tillamook	6	19.7	^	3	7.7	^
Umatilla	14	20.6	5.2	7	9.7	^
Union	6	20.9	^	3	10.5	^
Wallowa	2	22.6	^	1	^	^
Wasco	8	28.0	^	3	10.8	^
Washington	88	22.8	0.0	32	9.2	-9.4
Wheeler	0	^	^	0	^	^
Yamhill	18	21.9	4.0	8	8.9	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Melanoma of the Skin

MELANOMA OF THE SKIN - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	1,895	978	917
RATES			
Oregon Crude Rate (2005)	28.3	30.5	26.1
Oregon Age-adjusted Rate (2005)	26.5	30.5	23.8
US Age-adjusted Rate (2004) ¹	17.1	21.5	14.0
TRENDS - APC			
Oregon Annual Trend (2001-2005)	+3.2	+2.0	+4.3
CANCER MORTALITY			
Total Cancer Deaths (2005)	117	83	34
RATES			
Oregon Crude Rate (2005)	3.2	4.6	1.9
Oregon Age-adjusted Rate (2005)	3.1	4.8	1.7
US Age-Adjusted Rate (2004) ²	2.7	3.9	1.7
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-1.6	-1.8	-0.8
US Annual Trend (2000-2004) ²	0.0	+0.7	*-1.3
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.13	0.17	0.10
Burden: YPLL (2001-2005)	771	481	290

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

Among Oregon residents, 1,895 melanomas were diagnosed in 2005 and reported to the central registry. Median age at diagnosis was 59. During the same year, 117 Oregonians died due to melanoma. Median age at death for all skin cancers was 65.

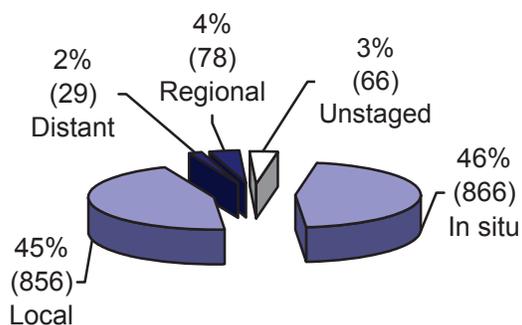
Most melanomas (91 percent) were diagnosed at the in situ or local stage when very treatable.

The age-adjusted incidence rate of melanoma in 2005 was 27 per 100,000. Among men, the incidence rate was 3 per 100,000 and among women the rate was 24 per 100,000. The age-adjusted mortality rate of melanoma in 2005 was 3 per 100,000. Among men, the mortality rate was 5 per 100,000 and among women the rate was 2 per 100,000.

During the period 2001-2005, there were 13 deaths for every 100 melanoma diagnoses. Based on a life expectancy of 65 years, an average of 771 years of life were lost annually due to early deaths from melanoma.

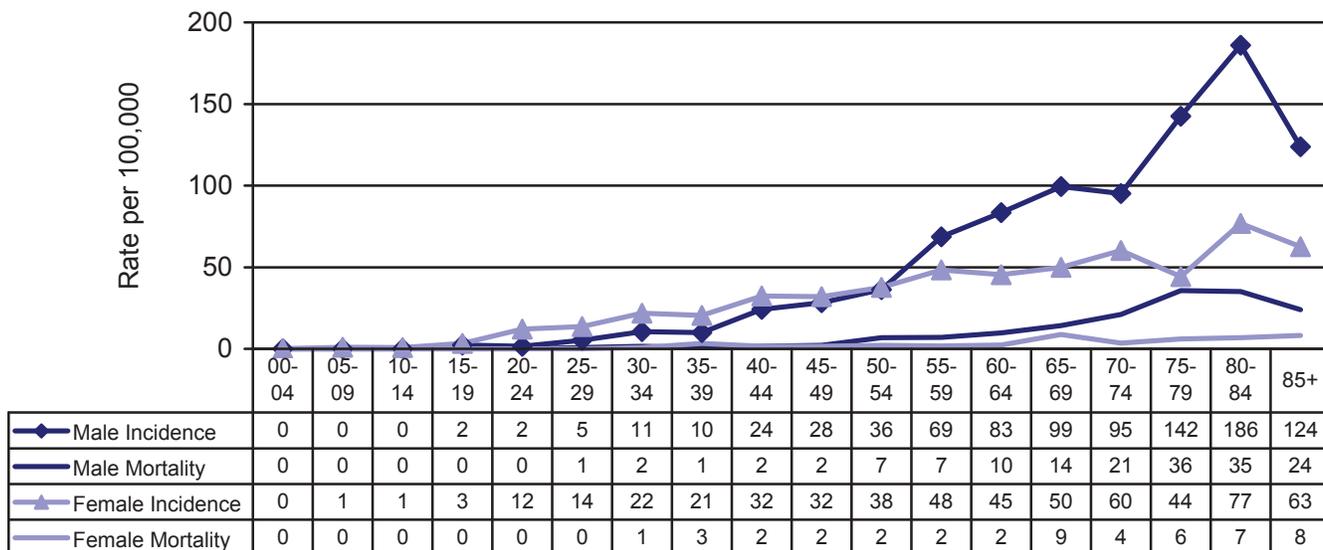
From 1996-2005, melanoma incidence was significantly higher than the state average in Clackamas, Coos, Deschutes, Douglas, and Jackson counties. Mortality was significantly higher than the state average in the north central region of the state. Incidence increased between 1996 and 2005 for the state as a whole, and for Douglas, Josephine, Marion, Multnomah, and Polk counties. See Melanoma maps.

**Melanoma of the Skin
Stage at Diagnosis, Oregon, 2005**

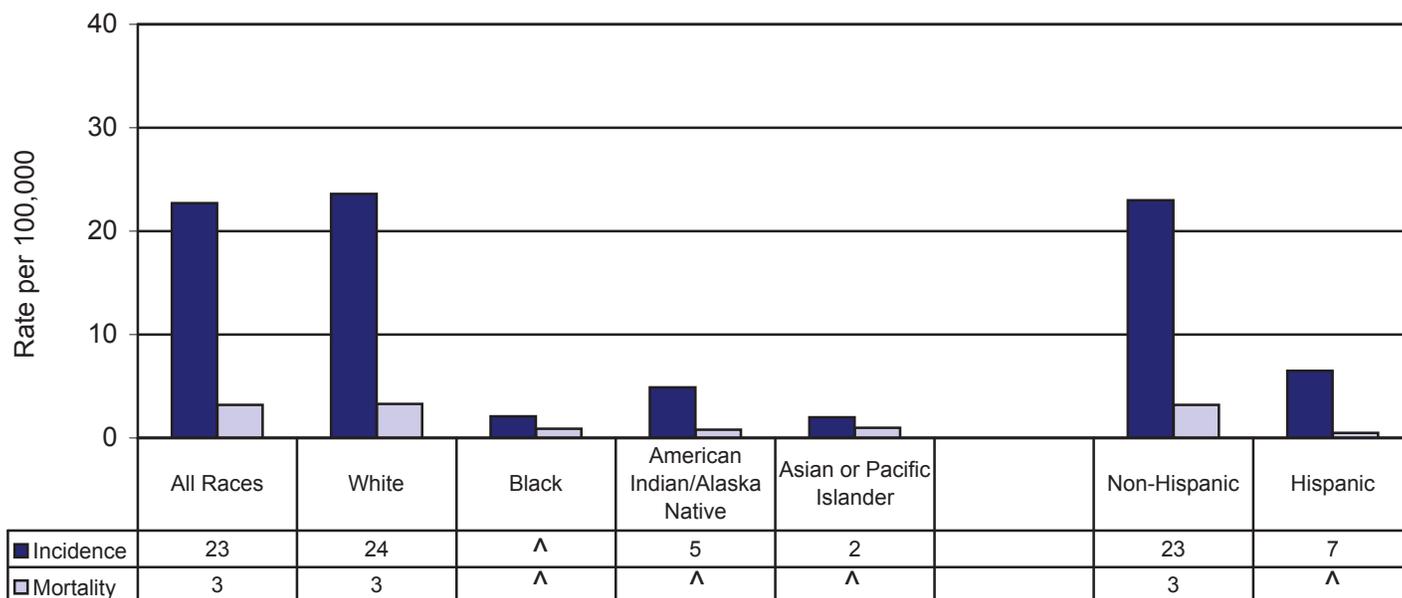


Melanoma of the Skin

**Melanoma of the Skin Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



**Melanoma of the Skin Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**

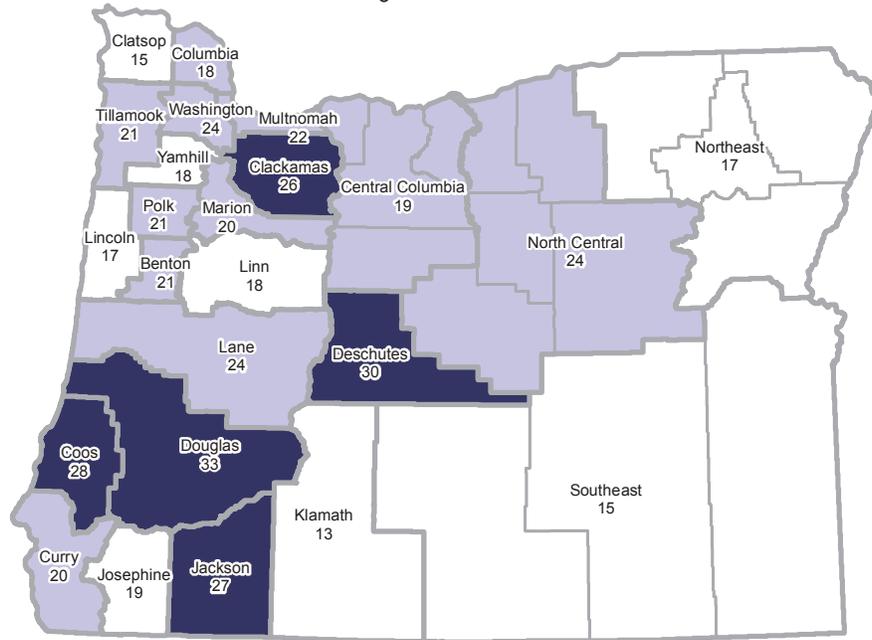


^ Rate not calculated due to instability of small numbers

Melanoma of the Skin

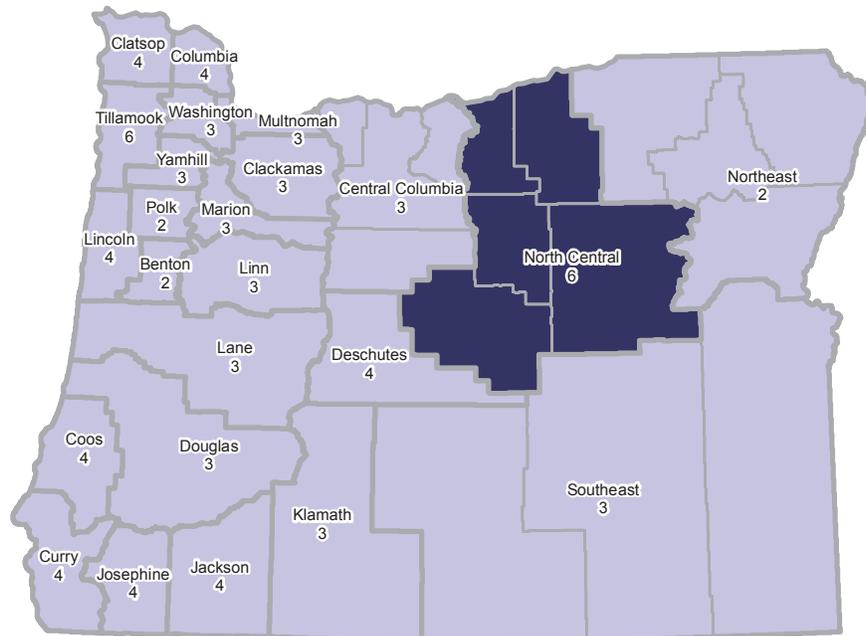
Rates of Melanoma Incidence, 1996-2005

1996-2005 Oregon Rate = 23.



Rates of Melanoma Mortality, 1996-2005

1996-2005 Oregon Rate = 3.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Melanoma of the Skin

Melanoma Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

MELANOMA	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	808	22.7	3.3 *	113	3.2	-1.6
Baker	3	15.2	^	0	^	^
Benton	15	21.0	8.3	1	1.9	^
Clackamas	91	26.1 H	2.7	11	3.2	-9.6
Clatsop	6	14.8 *	^	2	4.0	^
Columbia	8	18.0	^	2	3.6	^
Coos	22	28.3 H	-2.5	3	3.7	^
Crook	6	27.5	^	1	^	^
Curry	6	19.7	^	1	3.7	^
Deschutes	39	30.4 H	2.1	5	4.2	^
Douglas	40	33.4 H	4.1 *	3	2.6	^
Gilliam	1	^	^	0	^	^
Grant	1	14.8	^	1	^	^
Harney	1	17.3	^	0	^	^
Hood River	4	20.3	^	1	^	^
Jackson	55	27.4 H	1.8	8	3.9	^
Jefferson	3	14.2 L	^	1	^	^
Josephine	18	19.0 L	5.1 *	4	4.5	^
Klamath	9	12.6 L	^	2	2.9	^
Lake	2	19.8	^	1	^	^
Lane	82	24.3	-0.7	11	3.3	7.5
Lincoln	9	17.2 L	^	3	4.4	^
Linn	21	18.3 L	1.0	4	3.4	^
Malheur	4	12.9 L	^	1	^	^
Marion	57	20.5	8.1 *	9	3.1	^
Morrow	3	25.9	^	1	^	^
Multnomah	142	21.5	4.7 *	18	2.8	1.0
Polk	14	21.2	11.3 *	1	1.8	^
Sherman	0	^	^	0	^	^
Tillamook	6	20.7	^	2	5.7	^
Umatilla	11	16.3 L	-0.5	2	2.6	^
Union	5	18.8	^	1	^	^
Wallowa	2	19.2	^	0	^	^
Wasco	6	23.0	^	1	^	^
Washington	100	24.5	2.8	11	3.0	-5.6
Wheeler	0	^	^	0	^	^
Yamhill	15	18.2 L	4.1	3	3.4	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Oropharyngeal Cancer

OROPHARYNGEAL CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	398	289	108
RATES			
Oregon Crude Rate (2005)	10.5	15.4	5.6
Oregon Age-adjusted Rate (2005)	9.7	15.0	4.9
US Age-adjusted Rate (2004) ¹	10.4	15.7	5.9
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-2.9	-1.1	-7.6
CANCER MORTALITY			
Total Cancer Deaths (2005)	110	73	37
RATES			
Oregon Crude Rate (2005)	3.0	4.0	2.0
Oregon Age-adjusted Rate (2005)	2.8	4.0	1.7
US Age-Adjusted Rate (2004) ²	2.6	4.0	1.5
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-3.6	-1.6	*-7.9
US Annual Trend (2000-2004) ²	*-1.0	-0.6	*-2.0
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.25	0.23	0.31
Burden: YPLL (2001-2005)	393	293	100

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

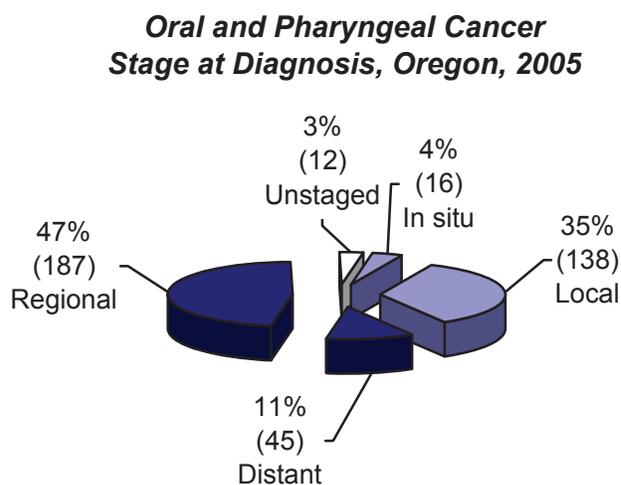
² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.



Among Oregon residents, 398 cancers of the mouth and pharynx were diagnosed in 2005 and reported to the central registry. Median age at diagnosis was 63. During the same year, 110 Oregonians died due to oropharyngeal cancer. Median age at death was 67.

Nearly two-fifths (39 percent) were diagnosed at the *in situ* or local stage.

The age-adjusted incidence rate of oropharyngeal cancer in 2005 was 10 per 100,000. Among men, the incidence rate was 15 per 100,000 and among women the rate was 5 per 100,000.

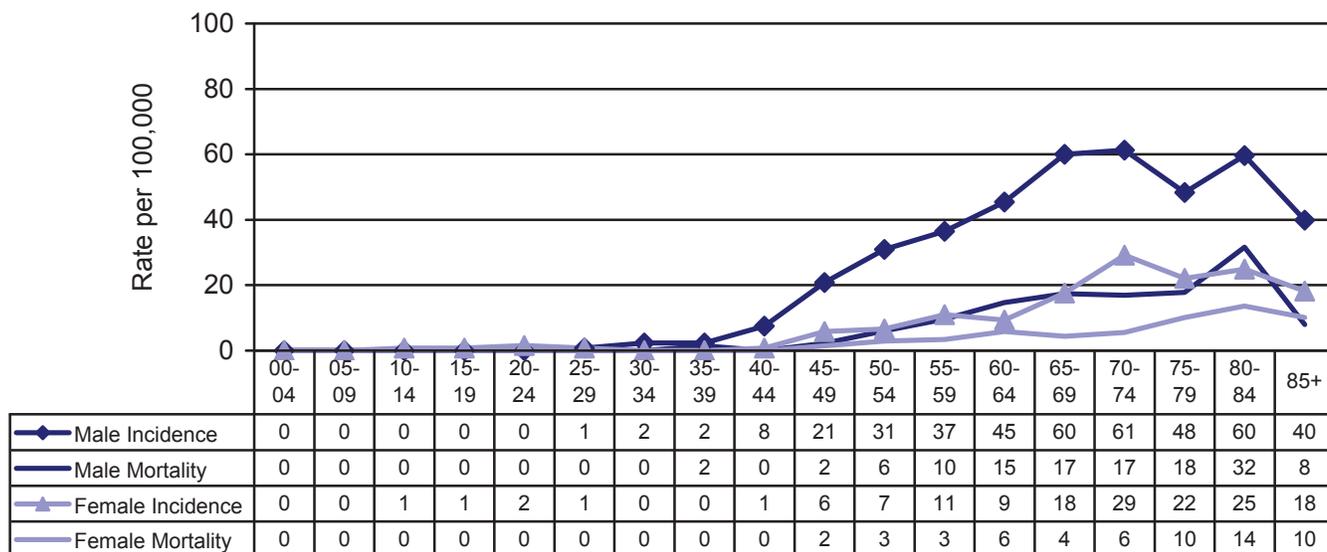
The age-adjusted mortality rate of oropharyngeal cancer in 2005 was 3 per 100,000. Among men, the mortality rate was 4 per 100,000 and among women the rate was 2 per 100,000.

During the period 2001-2005, there were 25 deaths for every 100 diagnoses of invasive oropharyngeal cancer. Based on a life expectancy of 65 years, an average of 393 years of life were lost annually due to early deaths from oropharyngeal cancer.

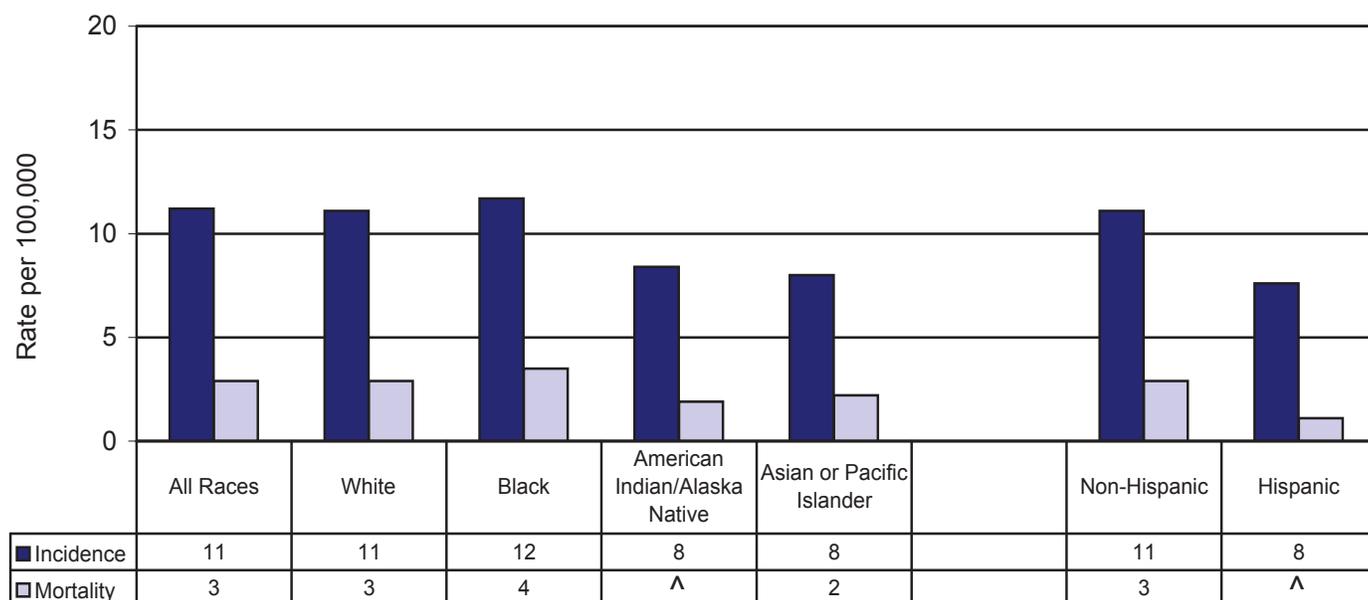
During 1996-2005, oropharyngeal incidence and mortality rates were significantly higher than the state average in Coos and Multnomah counties. Over the same time period, incidence declined for the state as a whole and Multnomah county. See Oropharyngeal Cancer maps.

Oropharyngeal Cancer

**Oral and Pharyngeal Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



**Oral and Pharyngeal Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



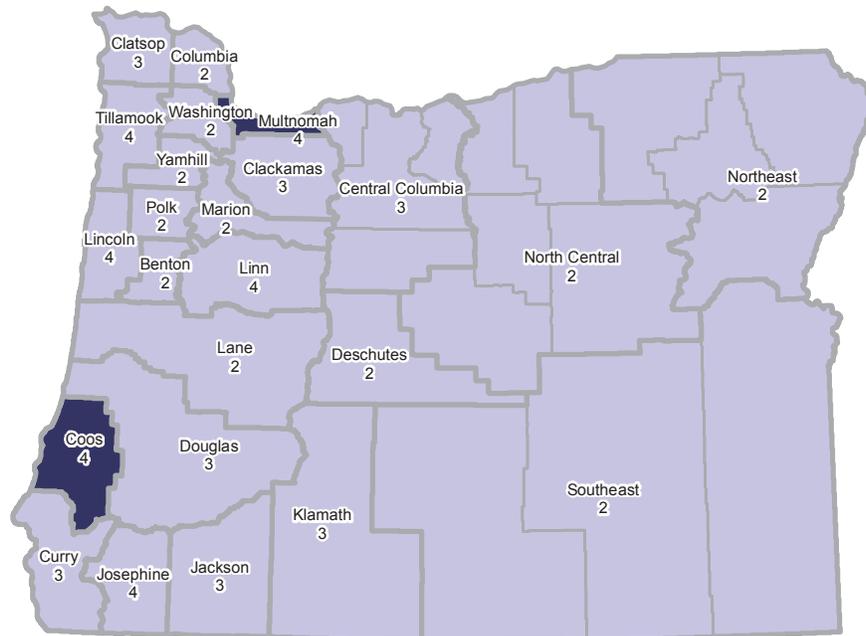
^ Rate not calculated due to instability of small numbers

Oropharyngeal Cancer

Rates of Oropharyngeal Cancer Incidence, 1996-2005
1996-2005 Oregon Rate = 11.



Rates of Oropharyngeal Cancer Mortality, 1996-2005
1996-2005 Oregon Rate = 3.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Oropharyngeal Cancer

Oropharyngeal Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

OROPHARYNGEAL	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	400	11.2	-1.7 *	103	2.9	-3.6
Baker	2	9.5	^	1	^	^
Benton	6	8.1 L	^	1	2.0	^
Clackamas	40	11.5	0.3	10	2.9	^
Clatsop	5	12.1	^	2	3.4	^
Columbia	6	12.6	^	1	2.5	^
Coos	12	14.4 H	-0.9	4	4.5 H	^
Crook	2	6.4 L	^	0	^	^
Curry	4	11.5	^	1	3.1	^
Deschutes	12	8.8 L	-3.1	3	2.3	^
Douglas	14	10.9	-8.0	4	3.1	^
Gilliam	1	^	^	0	^	^
Grant	1	^	^	0	^	^
Harney	1	^	^	0	^	^
Hood River	2	10.0	^	1	^	^
Jackson	27	12.4	0.6	7	3.0	^
Jefferson	2	9.7	^	1	^	^
Josephine	12	11.0	-1.8	4	3.5	^
Klamath	7	9.2	^	3	3.4	^
Lake	1	^	^	0	^	^
Lane	37	10.7	-1.0	8	2.3	^
Lincoln	8	13.9	^	3	3.9	^
Linn	13	11.0	-1.9	5	3.9	^
Malheur	3	7.8	^	1	^	^
Marion	29	10.5	-2.6	6	2.2	^
Morrow	2	18.4	^	0	^	^
Multnomah	85	13.6 H	-2.5 *	23	3.7 H	3.2
Polk	6	8.1 L	^	2	2.3	^
Sherman	0	^	^	0	^	^
Tillamook	4	13.3	^	1	3.5	^
Umatilla	6	9.2	^	2	2.1	^
Union	2	7.0	^	1	^	^
Wallowa	0	^	^	0	^	^
Wasco	4	13.3	^	1	^	^
Washington	38	10.1	-3.6	9	2.5	^
Wheeler	0	^	^	0	^	^
Yamhill	8	9.8	^	1	1.6	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Ovarian Cancer

OVARIAN CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)			240
RATES			
Oregon Crude Rate (2005)			13.0
Oregon Age-adjusted Rate (2005)			11.3
US Age-adjusted Rate (2004) ¹			12.5
TRENDS - APC			
Oregon Annual Trend (2001-2005)			-5.2
CANCER MORTALITY			
Total Cancer Deaths (2005)			214
RATES			
Oregon Crude Rate (2005)			11.7
Oregon Age-adjusted Rate (2005)			9.7
US Age-Adjusted Rate (2004) ²			8.8
TRENDS - APC			
Oregon Annual Trend (2001-2005)			+0.5
US Annual Trend (2000-2004) ²			-0.5
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)			0.77
Burden: YPLL (2001-2005)			682

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

Among Oregon women, 240 ovarian cancers were diagnosed in 2005 and reported to the central registry. Median age at diagnosis was 63. During the same year, 214 Oregonians died due to ovarian cancer. Median age at death was 70.

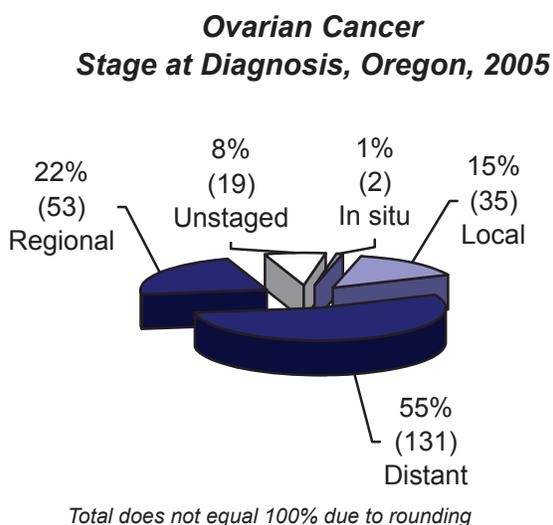
Most ovarian cancers (77 percent) were diagnosed at the regional or distant stage.

The age-adjusted incidence rate of ovarian cancer in 2005 was 11 per 100,000 compared to a national rate in 2004 of 13. The age-adjusted mortality rate for ovarian cancer in 2005 was 10 per 100,000 compared to the 2004 national rate of 9. Incidence and mortality both increased after age 40.

During the period 2001-2005, there were 77 deaths for every 100 diagnoses of invasive ovarian cancer. Based on a life expectancy of 65 years, an average of 682 years of life were lost annually due to early deaths from ovarian cancer.

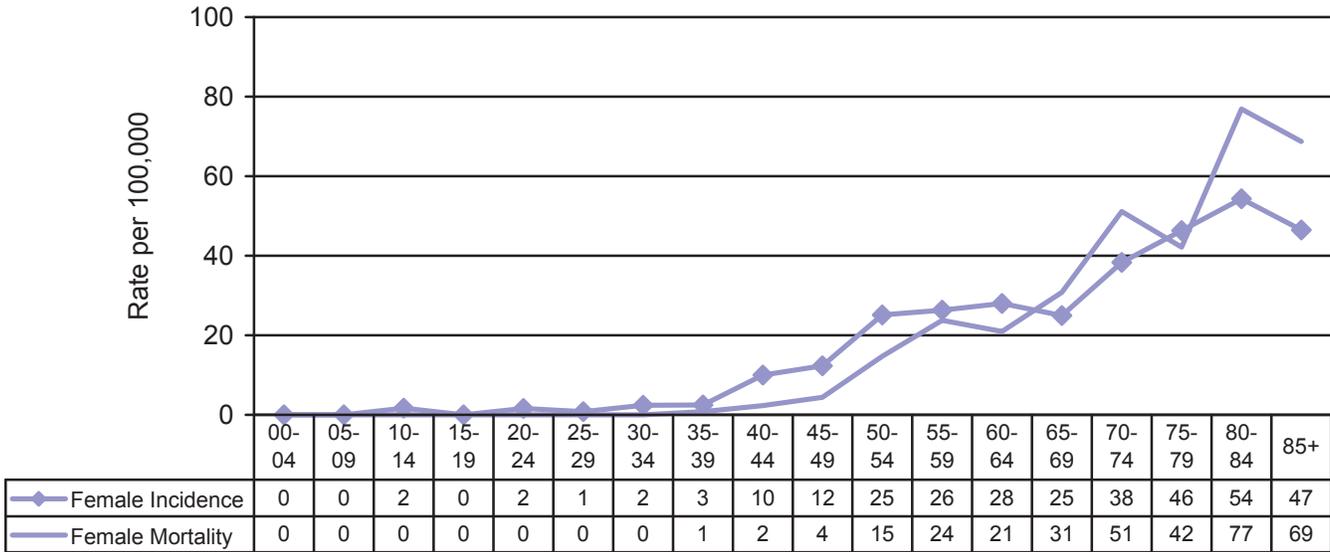
Incidence and mortality were highest for whites and non-Hispanics.

During 1996-2005, ovarian cancer incidence was significantly higher than the state average in Clatsop county and significantly lower in Columbia and Washington counties. Mortality rates were significantly lower than the state average in Washington county. See Ovarian Cancer maps.

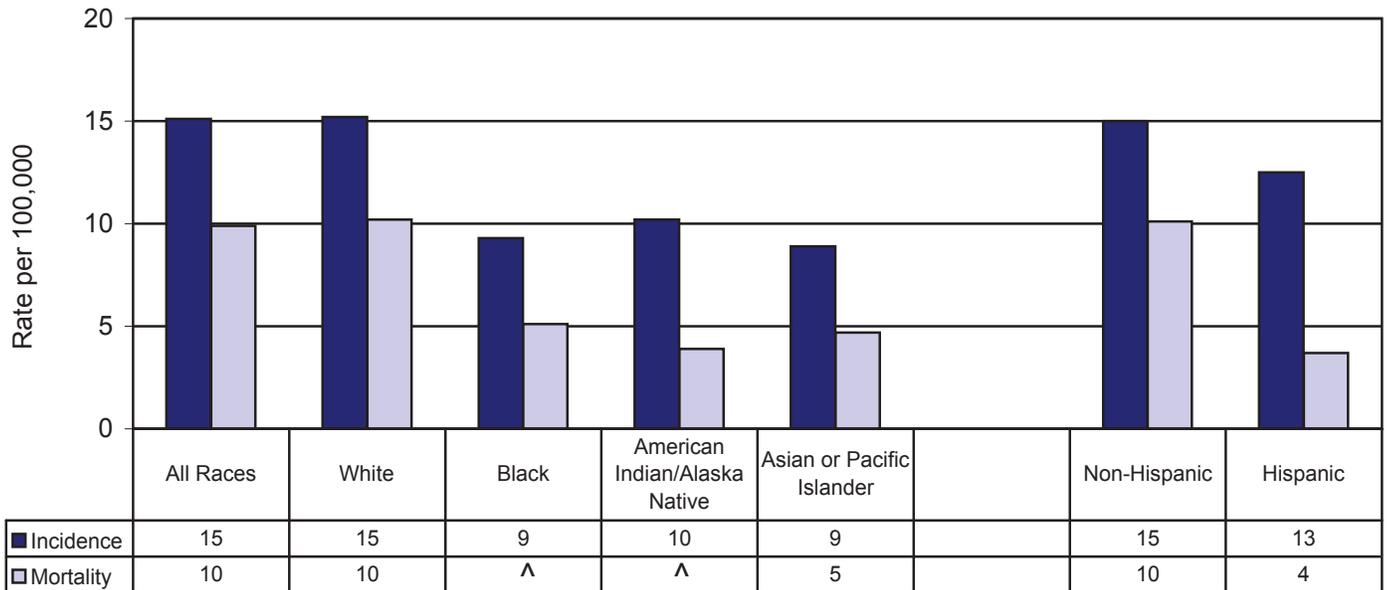


Ovarian Cancer

**Ovarian Cancer Incidence and Mortality Rates,
by Age Group, Oregon, 2005**



**Ovarian Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**

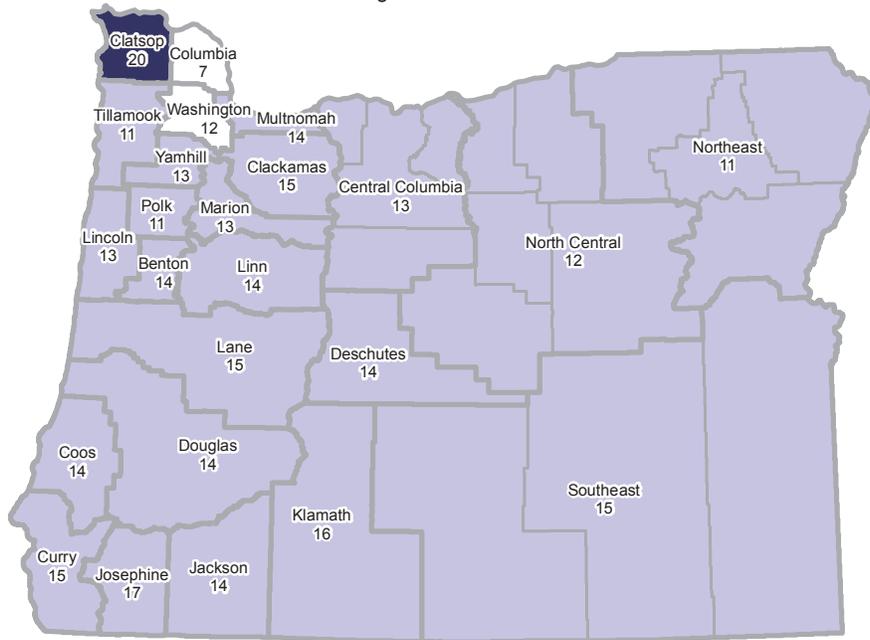


^ Rate not calculated due to instability of small numbers

Ovarian Cancer

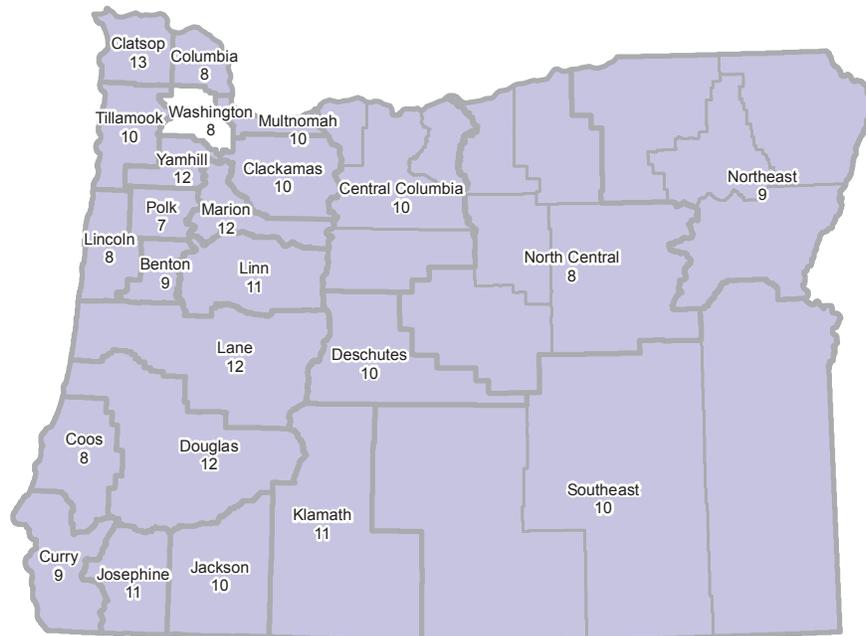
Rates of Ovarian Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 14.



Rates of Ovarian Cancer Mortality, 1996-2005

1996-2005 Oregon Rate = 10.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Ovarian Cancer

Ovarian Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

OVARIAN	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	266	13.8	-1.2	198	9.9	0.5
Baker	1	11.2	^	1	10.0	^
Benton	5	13.7	^	3	8.6	^
Clackamas	28	15.1	-2.8	20	10.5	-6.3
Clatsop	5	19.8 H	^	3	12.8	^
Columbia	2	7.0 L	^	2	7.5	^
Coos	6	13.8	^	4	8.1	^
Crook	1	10.5	^	1	^	^
Curry	3	14.7	^	2	8.7	^
Deschutes	10	14.4	^	7	10.2	^
Douglas	10	14.1	^	8	11.6	^
Gilliam	0	^	^	0	^	^
Grant	1	^	^	1	^	^
Harney	1	^	^	1	^	^
Hood River	1	12.5	^	2	12.8	^
Jackson	17	14.4	-0.6	12	9.8	-1.3
Jefferson	1	14.8	^	1	^	^
Josephine	10	17.2	^	7	10.9	^
Klamath	6	15.9	^	4	11.2	^
Lake	1	^	^	1	^	^
Lane	28	14.8	1.2	22	11.5	7.2
Lincoln	4	12.6	^	3	8.0	^
Linn	9	14.5	^	7	10.8	^
Malheur	3	14.7	^	2	9.2	^
Marion	21	13.4	-2.0	18	11.5	-6.3
Morrow	1	^	^	1	^	^
Multnomah	48	13.7	-0.5	34	9.5	7.9 *
Polk	4	11.4	^	3	6.7	^
Sherman	0	^	^	0	^	^
Tillamook	2	11.4	^	2	10.0	^
Umatilla	5	12.5	^	4	9.3	^
Union	1	9.6	^	1	8.3	^
Wallowa	0	^	^	0	^	^
Wasco	2	14.3	^	2	10.4	^
Washington	24	11.6 L	-0.2	17	7.9 L	-3.9
Wheeler	0	^	^	0	^	^
Yamhill	6	12.8	^	5	11.7	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Pancreatic Cancer

PANCREATIC CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	424	190	234
RATES			
Oregon Crude Rate (2005)	11.6	10.5	12.8
Oregon Age-adjusted Rate (2005)	10.8	10.8	10.8
US Age-adjusted Rate (2004) ¹	11.1	12.8	9.7
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-0.1	-2.6	+2.3
CANCER MORTALITY			
Total Cancer Deaths (2005)	424	209	215
RATES			
Oregon Crude Rate (2005)	11.6	11.5	11.7
Oregon Age-adjusted Rate (2005)	10.9	12.1	9.9
US Age-Adjusted Rate (2004) ²	10.6	12.3	9.2
TRENDS - APC			
Oregon Annual Trend (2001-2005)	0.0	-1.6	+1.1
US Annual Trend (2000-2004) ²	+0.1	+0.3	-0.1
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	1.00	1.01	0.99
Burden: YPLL (2001-2005)	977	573	404

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

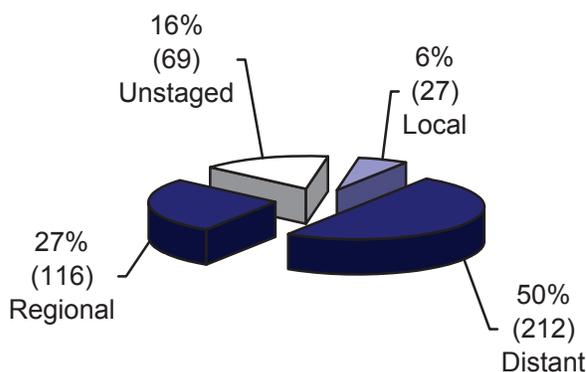
APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

Pancreatic Cancer Stage at Diagnosis, Oregon, 2005



Total does not equal 100% due to rounding

Among Oregonians, 424 pancreatic cancers were diagnosed in 2005 and reported to the central registry. Median age at diagnosis was 71. During the same year, 424 Oregonians died due to pancreatic cancer. Median age at death was 72.

The majority (77 percent) of pancreatic cancers were diagnosed at the regional or distant stage. Another 6 percent were local and 16 percent were unstaged.

Among men and women in 2005, the age-adjusted incidence rate for pancreatic cancer was 11 per 100,000. The age-adjusted mortality rate for pancreatic cancer in 2005 was 11 per 100,000. Among men, the mortality rate was 12 per 100,000 and among women the rate was 10 per 100,000.

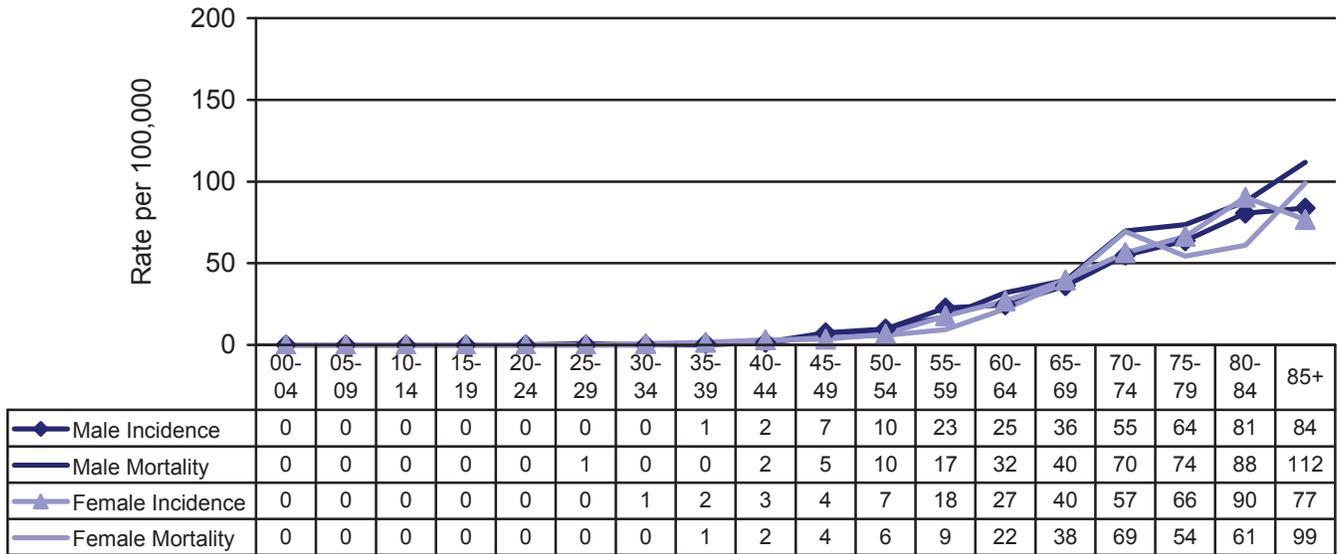
During the period 2001-2005, there were 100 deaths for every 100 diagnoses of pancreatic cancer. Based on a life expectancy of 65 years, an average of 977 years of life were lost annually due to early deaths from pancreatic cancer.

Incidence and mortality are highest for African Americans.

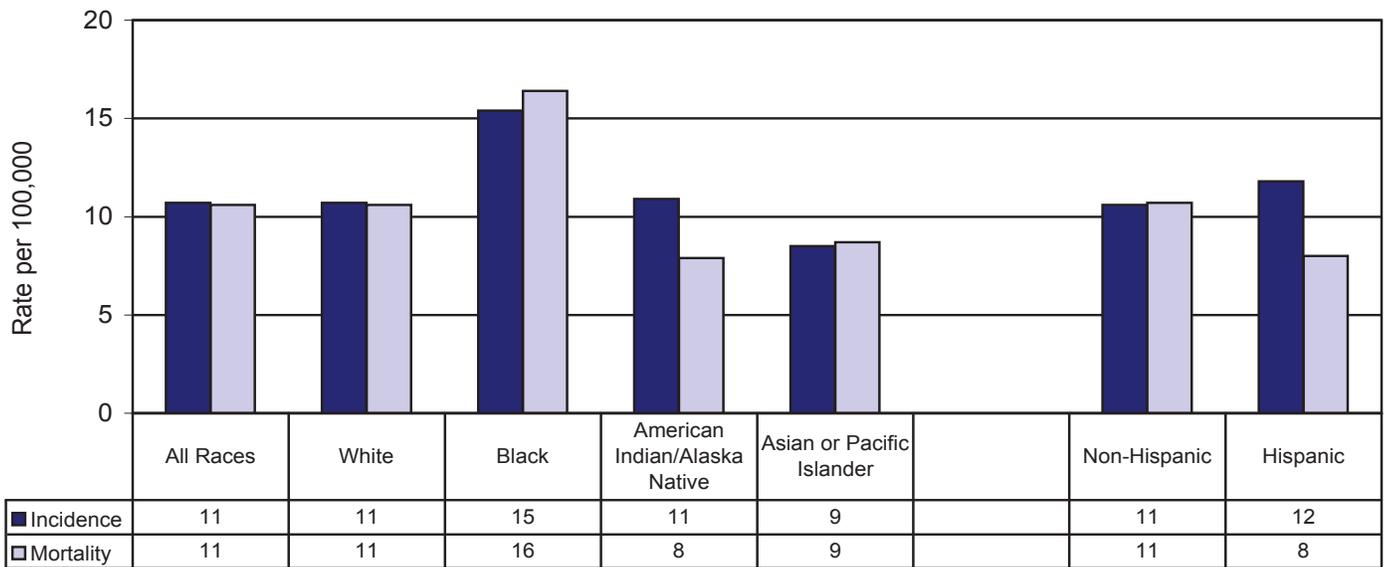
For the period 1996-2005, the incidence of pancreatic cancer was significantly lower than the state average in the northeast region of the state, while mortality was significantly lower in Polk county as well as the northeast region of the state. See Pancreatic Cancer maps.

Pancreatic Cancer

**Pancreatic Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**

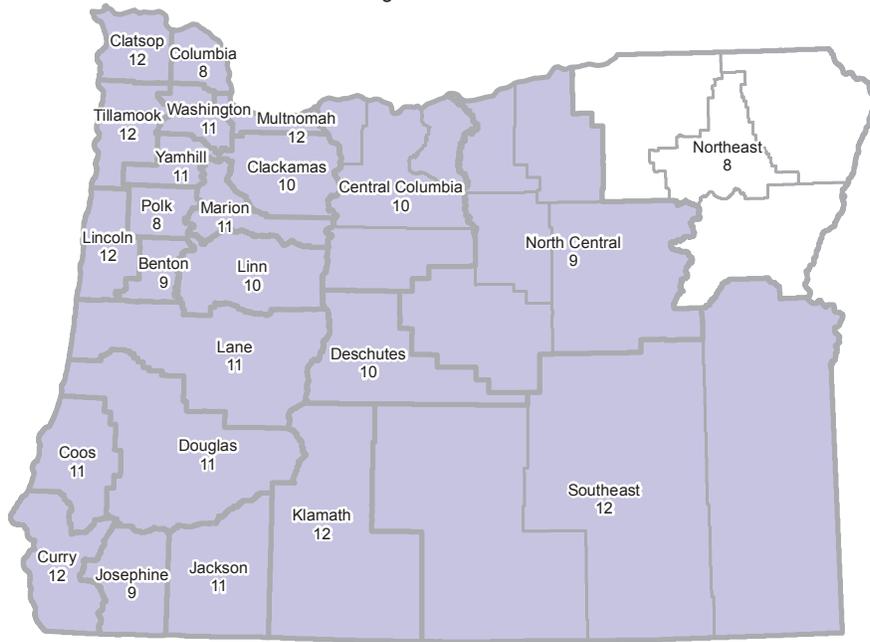


**Pancreatic Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**

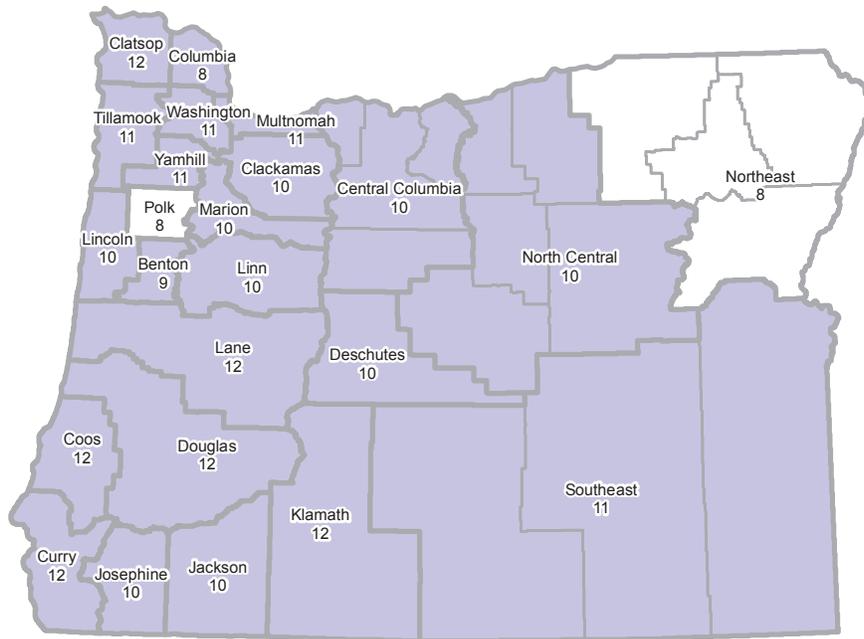


Pancreatic Cancer

Rates of Pancreatic Cancer Incidence, 1996-2005
1996-2005 Oregon Rate = 11.



Rates of Pancreatic Cancer Mortality, 1996-2005
1996-2005 Oregon Rate = 11.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Pancreatic Cancer

Pancreatic Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

PANCREATIC	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	383	10.7	0.6	381	10.6	0.0
Baker	2	5.9 L	^	2	7.2	^
Benton	6	9.4	^	6	8.7	^
Clackamas	35	10.5	3.5	34	10.2	5.5
Clatsop	6	12.5	^	5	12.1	^
Columbia	4	8.3	^	3	8.0	^
Coos	10	11.1	^	11	11.8	-21.7 *
Crook	2	8.6	^	2	8.9	^
Curry	5	12.3	^	5	12.0	^
Deschutes	13	10.2	-0.2	13	10.3	-5.7
Douglas	16	11.4	-1.4	16	11.9	-5.6
Gilliam	0	^	^	0	^	^
Grant	1	10.7	^	1	13.7	^
Harney	2	16.5	^	2	18.8	^
Hood River	1	6.5	^	1	5.5 L	^
Jackson	25	10.9	3.0	23	9.9	4.4
Jefferson	1	7.6	^	2	10.2	^
Josephine	11	9.4	0.1	11	9.5	10.5
Klamath	9	12.3	^	9	12.1	^
Lake	1	11.5	^	2	15.6	^
Lane	38	10.8	2.3	43	12.1	-5.8
Lincoln	8	11.7	^	7	10.2	^
Linn	12	10.3	1.4	13	10.5	7.6
Malheur	3	10.3	^	3	7.7	^
Marion	30	10.6	-2.9	30	10.4	-7.8
Morrow	1	^	^	1	^	^
Multnomah	72	11.7	0.0	69	11.3	1.7
Polk	6	8.4	^	6	7.7 L	^
Sherman	0	^	^	0	^	^
Tillamook	4	12.2	^	4	10.6	^
Umatilla	7	9.9	^	7	9.2	^
Union	2	6.2 L	^	1	5.0 L	^
Wallowa	1	^	^	1	10.6	^
Wasco	4	12.9	^	4	13.1	^
Washington	37	10.6	1.9	37	10.7	-2.7
Wheeler	0	^	^	0	^	^
Yamhill	9	11.0	^	10	11.4	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Prostate Cancer

PROSTATE CANCER - FAST FACTS OREGON

	<i>Male</i>
CANCER INCIDENCE	
Total Cancer Cases (2005)	2,583
RATES	
Oregon Crude Rate (2005)	142.5
Oregon Age-adjusted Rate (2005)	145.2
US Age-adjusted Rate (2004) ¹	145.3
TRENDS - APC	
Oregon Annual Trend (2001-2005)	-3.9
CANCER MORTALITY	
Total Cancer Deaths (2005)	420
RATES	
Oregon Crude Rate (2005)	23.2
Oregon Age-adjusted Rate (2005)	25.9
US Age-Adjusted Rate (2004) ²	25.4
TRENDS - APC	
Oregon Annual Trend (2001-2005)	*-4.0
US Annual Trend (2000-2004) ²	*-4.3
PROGNOSIS AND BURDEN	
Prognosis: M/I Ratio (2001-2005)	0.16
Burden: YPLL (2001-2005)	320

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

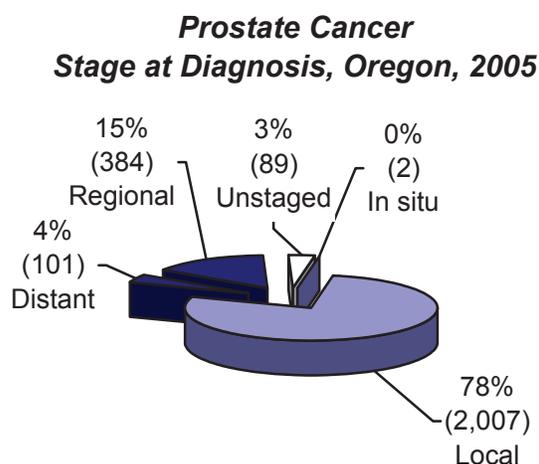
² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.



Among Oregon men, 2,583 prostate cancers were diagnosed in 2005 and reported to the central registry. Median age at invasive diagnosis was 68. During the same year, 420 Oregon men died due to prostate cancer. Median age at death was 79.

The majority of prostate cancers (78 percent) were diagnosed at the local or in situ stage.

During 2005, the age-adjusted annual incidence rate for prostate cancer was 145 per 100,000, slightly lower than the 2004 national rate of 155 per 100,000. The age-adjusted mortality rate was 26 per 100,000 similar to the U.S. rate of 25 per 100,000.

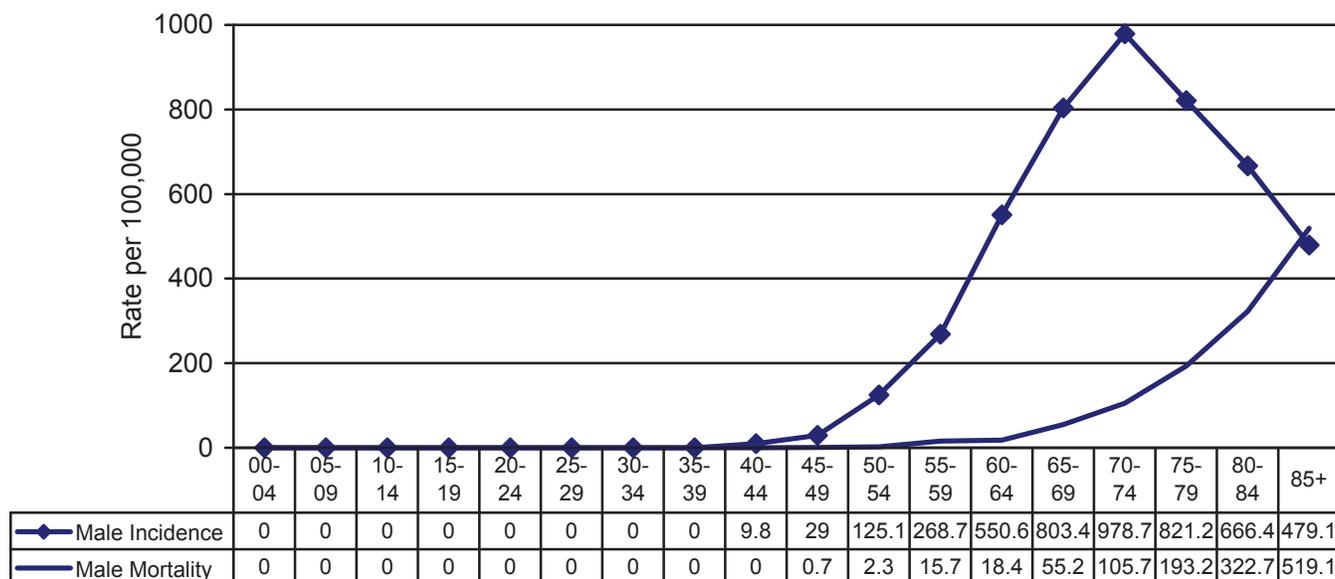
During the period 2001-2005, there was approximately one death for every six new prostate cancer diagnoses. Based on a life expectancy of 65 years, an average of 320 years of life were lost annually due to early deaths from prostate cancer.

Prostate cancer incidence and mortality both declined significantly in Oregon during 2001-2005. Incidence declined an annual average of 3.9 percent and mortality declined an annual average of 4.0 percent. Oregon's decline mirrored a similar national trend.

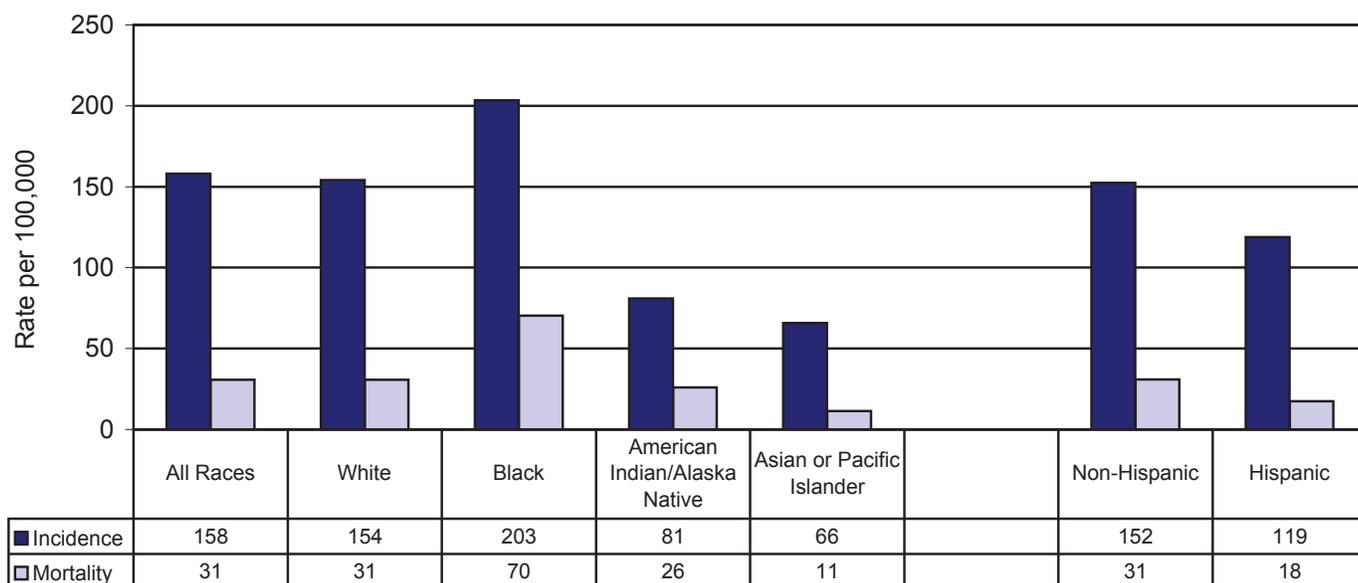
Prostate cancer incidence was significantly higher in Benton, Coos, Deschutes, and Jackson counties and the northeast region of the state. Prostate cancer mortality was significantly higher in Multnomah county and the northeast region. See Prostate Cancer maps.

Prostate Cancer

**Prostate Cancer Incidence and Mortality Rates,
by Age Group, Oregon, 2005**



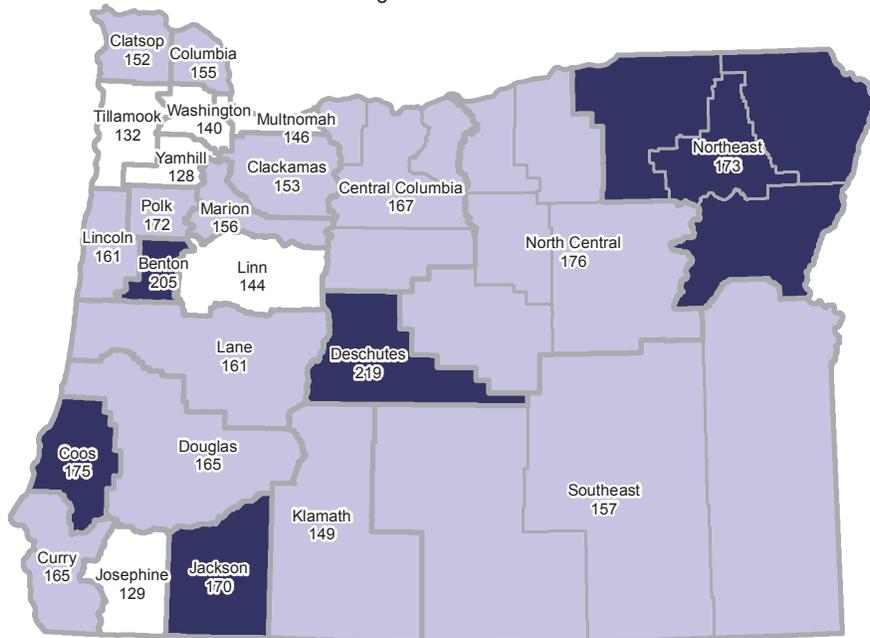
**Prostate Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



Prostate Cancer

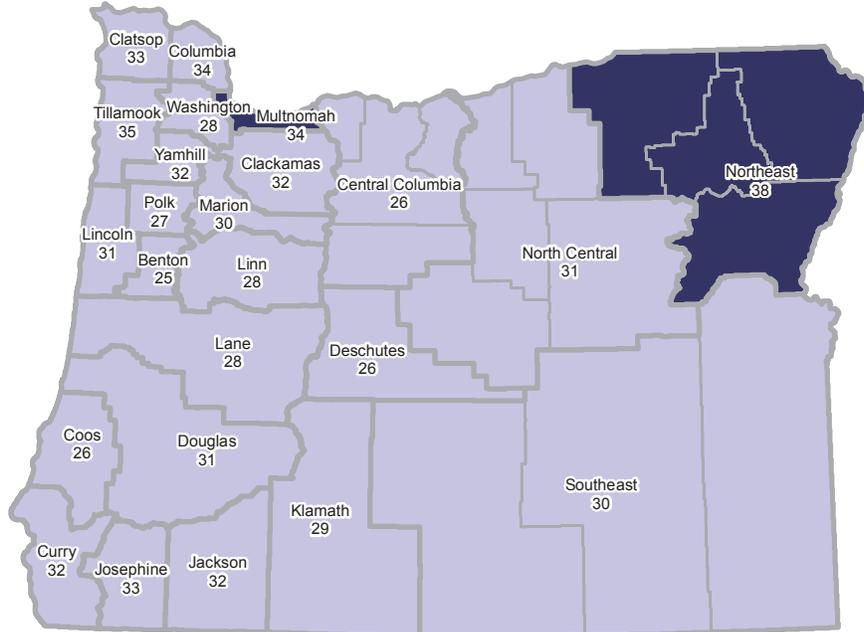
Rates of Prostate Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 158.



Rates of Prostate Cancer Mortality, 1996-2005

1996-2005 Oregon Rate = 31.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Prostate Cancer

Prostate Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

PROSTATE	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	2,523	157.8	-0.9	442	30.7	-4.0 *
Baker	19	162.1	-5.6	4	41.4	^
Benton	62	205.3 H	1.1	7	24.8	^
Clackamas	231	152.9	-1.1	39	31.6	1.8
Clatsop	30	151.8	-0.5	6	32.6	^
Columbia	32	154.7	-3.2	6	33.7	^
Coos	75	175.0 H	-0.6	11	26.0	-23.5
Crook	20	178.4	-1.9	2	25.5	^
Curry	33	165.3	-3.5	6	31.8	^
Deschutes	135	218.6 H	-3.1	13	26.0	16.1
Douglas	108	165.3	-3.9 *	19	31.0	4.5
Gilliam	3	233.1	^	0	^	^
Grant	8	161.6	^	2	42.6	^
Harney	9	201.4 H	^	1	39.0	^
Hood River	16	181.8	1.2	2	28.1	^
Jackson	175	170.0 H	1.9	32	32.4	-0.6
Jefferson	14	146.7	-2.9	2	30.7	^
Josephine	70	129.0 L	3.8	17	33.3	-19.2
Klamath	54	149.1	-1.2	9	28.6	^
Lake	10	197.5 H	^	1	30.1	^
Lane	251	161.2	-1.3	40	28.5	-4.1
Lincoln	49	161.0	-1.0	8	31.1	^
Linn	78	144.1 L	1.4	15	28.3	-24.3
Malheur	20	131.0 L	4.0	4	27.6	^
Marion	189	156.2	2.5	34	29.9	-1.0
Morrow	9	168.1	^	1	24.3	^
Multnomah	373	146.1 L	-2.2	78	34.2 H	-1.3
Polk	54	171.7	2.5	9	27.2	^
Sherman	2	177.6	^	0	^	^
Tillamook	23	132.5 L	2.7	5	34.9	^
Umatilla	54	171.1	-2.9	10	35.7	^
Union	25	189.9 H	-0.7	4	37.4	^
Wallowa	9	171.0	^	2	48.8	^
Wasco	24	175.1	-2.1	3	22.2	^
Washington	211	140.1 L	-2.7 *	36	28.4	4.2
Wheeler	2	164.7	^	1	^	^
Yamhill	47	128.5 L	-2.7	11	31.7	5.6

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H = Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Stomach Cancer

STOMACH CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	193	114	79
RATES			
Oregon Crude Rate (2005)	5.3	6.2	4.3
Oregon Age-adjusted Rate (2005)	5.1	6.8	3.7
US Age-adjusted Rate (2004) ¹	6.9	9.7	4.7
TRENDS - APC			
Oregon Annual Trend (2001-2005)	+1.1	-1.2	+4.2
CANCER MORTALITY			
Total Cancer Deaths (2005)	116	72	44
RATES			
Oregon Crude Rate (2005)	3.2	4.0	2.4
Oregon Age-adjusted Rate (2005)	3.0	4.1	2.0
US Age-Adjusted Rate (2004) ²	4.0	5.5	2.8
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-0.1	-2.1	+2.4
US Annual Trend (2000-2004) ²	*-3.2	*-3.4	*-3.0
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.58	0.55	0.62
Burden: YPLL (2001-2005)	429	253	176

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

In 2005, 193 stomach cancers were diagnosed and reported to the central registry. Median age at diagnosis was 71. During the same time period, 116 Oregonians died due to stomach cancers. Median age at death was 70.

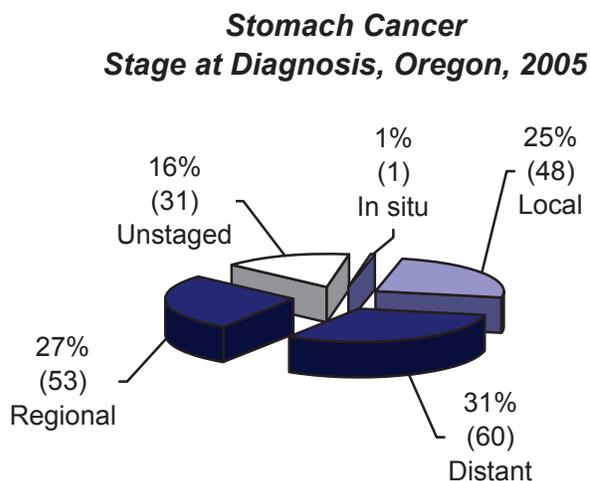
Most stomach cancers (58 percent) were diagnosed at the regional or distant stage, 26 percent were local, and another 16 percent were never staged.

The age-adjusted incidence rate of stomach cancer in 2005 was 5 per 100,000.

Stomach cancer incidence and mortality rates were highest among Asian and Pacific Islanders and African Americans.

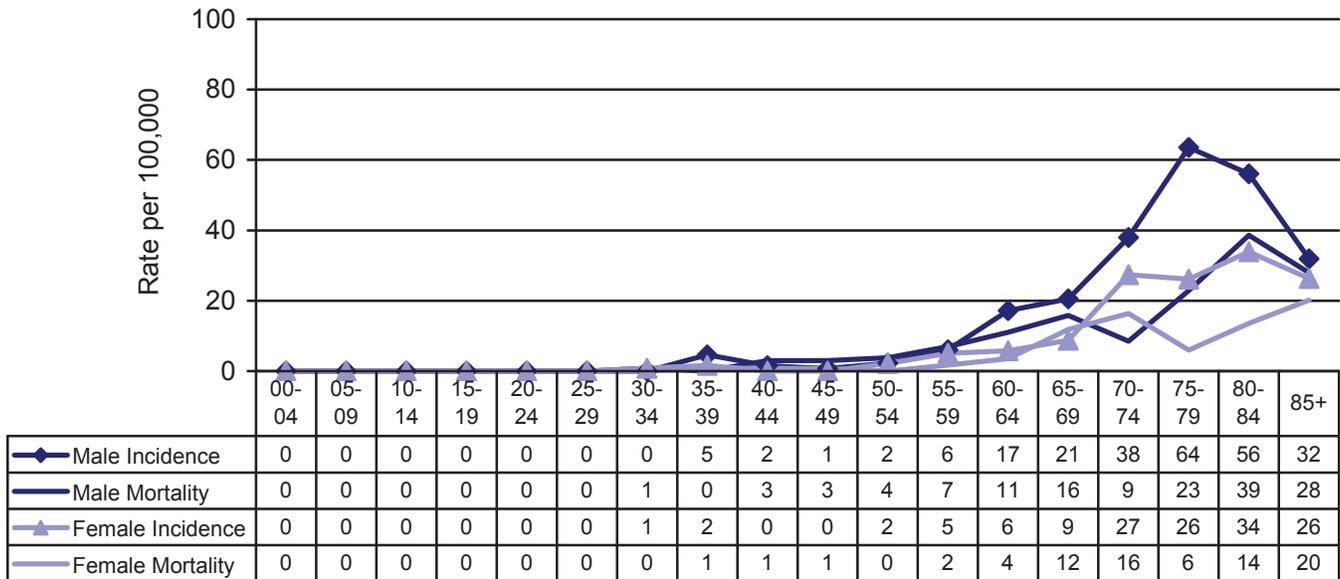
During the period 2001-2005, there were 58 deaths for every 100 diagnoses of invasive stomach cancer. Based on a life expectancy of 65 years, an average of 429 years of life were lost annually due to early deaths from stomach cancer.

For the period 1996-2005, stomach cancer incidence was significantly higher than the state average in Multnomah county, and lower than the state average in Lane county. Mortality was significantly higher than the state average in Columbia and Multnomah counties, and lower in Deschutes county. During the same period, the incidence of stomach cancer decreased significantly in Clackamas and Jackson counties. See Stomach Cancer maps.

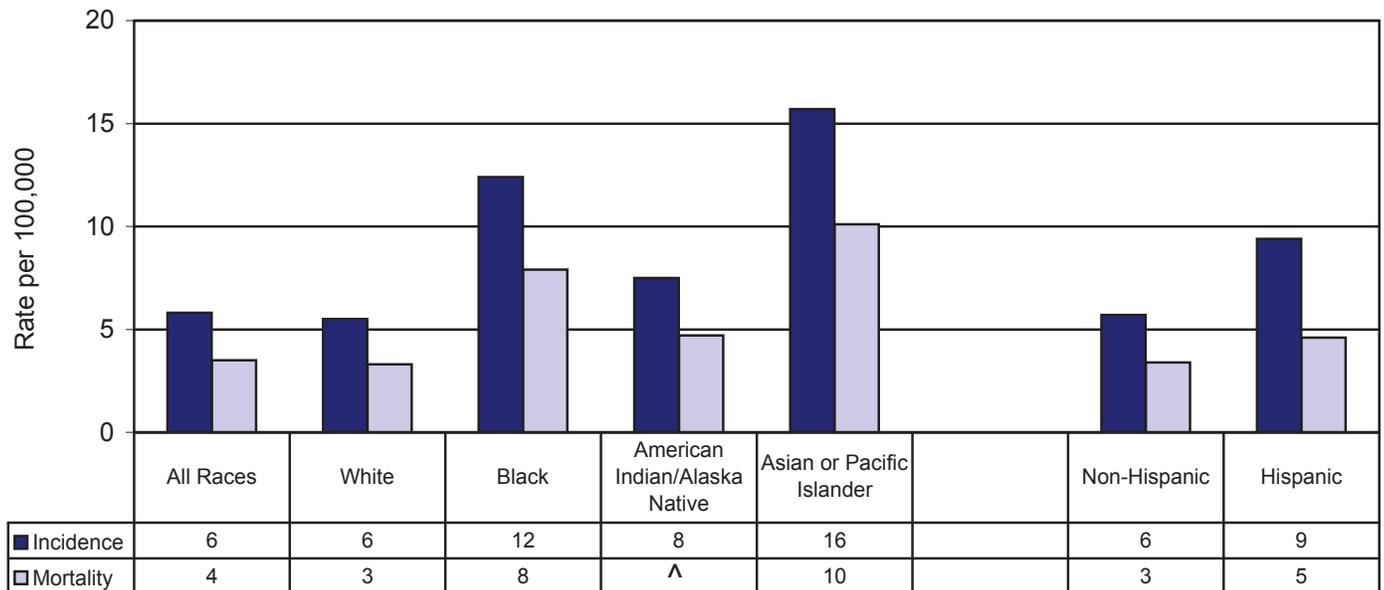


Stomach Cancer

**Stomach Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



**Stomach Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**

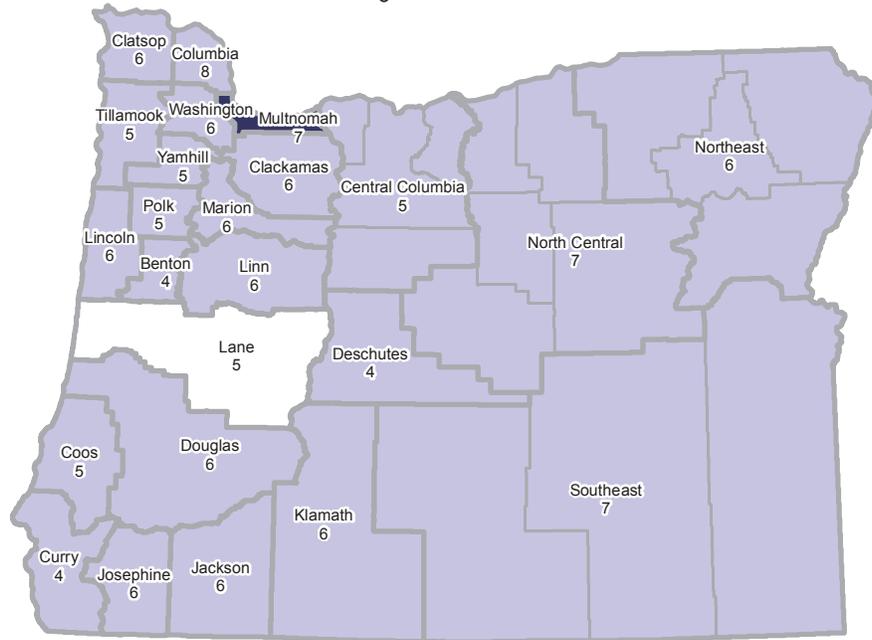


^ Rate not calculated due to instability of small numbers

Stomach Cancer

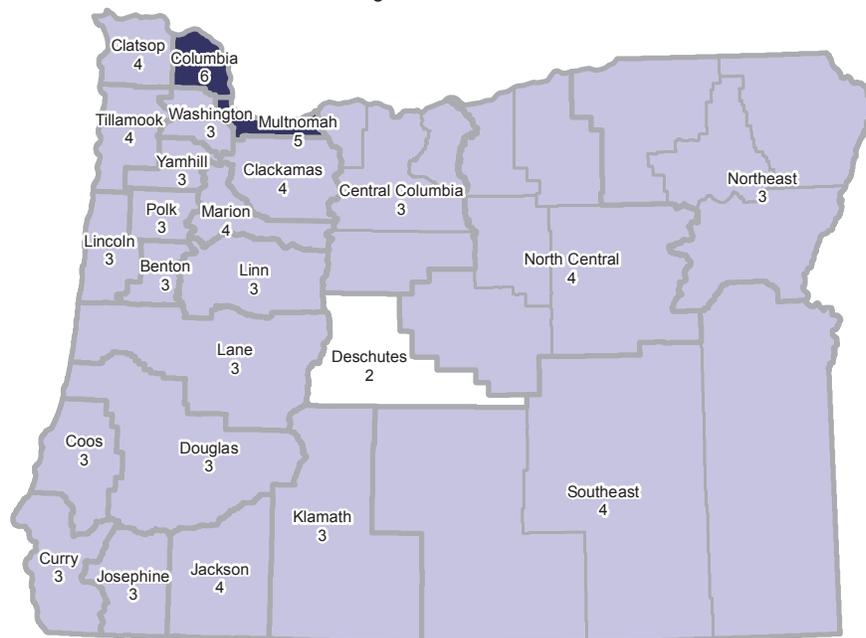
Rates of Stomach Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 6.



Rates of Stomach Cancer Mortality, 1996-2005

1996-2005 Oregon Rate = 4.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Stomach Cancer

Stomach Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

STOMACH	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	208	5.8	-1.5	125	3.5	-0.1
Baker	1	^	^	1	^	^
Benton	3	4.1	^	2	2.6	^
Clackamas	19	5.7	-5.8 *	12	3.6	0.1
Clatsop	3	5.8	^	2	3.5	^
Columbia	3	7.8	^	3	6.5 H	^
Coos	5	5.2	^	3	2.7	^
Crook	1	5.5	^	1	^	^
Curry	2	3.5	^	1	^	^
Deschutes	6	4.4	^	3	2.1 L	^
Douglas	7	5.5	^	4	2.6	^
Gilliam	0	^	^	0	^	^
Grant	1	^	^	1	^	^
Harney	1	^	^	0	^	^
Hood River	2	7.2	^	1	5.3	^
Jackson	13	5.7	-8.0 *	8	3.6	^
Jefferson	1	^	^	0	^	^
Josephine	7	6.1	^	3	2.8	^
Klamath	4	5.7	^	2	3.0	^
Lake	1	^	^	0	^	^
Lane	16	4.7 L	0.8	11	3.2	1.4
Lincoln	4	6.0	^	2	3.3	^
Linn	7	6.0	^	4	3.2	^
Malheur	2	7.5	^	2	4.7	^
Marion	17	5.9	4.4	10	3.6	^
Morrow	1	^	^	1	^	^
Multnomah	44	7.2 H	-2.9	28	4.6 H	-7.5
Polk	4	4.9	^	2	3.1	^
Sherman	0	^	^	0	^	^
Tillamook	2	5.2	^	1	3.6	^
Umatilla	4	5.4	^	2	2.7	^
Union	2	8.3	^	2	6.1	^
Wallowa	1	^	^	0	^	^
Wasco	1	^	^	1	^	^
Washington	22	6.2	2.3	12	3.4	-4.9
Wheeler	0	^	^	0	^	^
Yamhill	4	5.3	^	2	2.9	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Thyroid Cancer

THYROID CANCER - FAST FACTS OREGON

	Total	Male	Female
CANCER INCIDENCE			
Total Cancer Cases (2005)	325	89	236
RATES			
Oregon Crude Rate (2005)	8.9	4.9	12.9
Oregon Age-adjusted Rate (2005)	8.7	4.8	12.6
US Age-adjusted Rate (2004) ¹	9.3	4.6	13.8
TRENDS - APC			
Oregon Annual Trend (2001-2005)	*+5.8	+7.9	*+5.2
CANCER MORTALITY			
Total Cancer Deaths (2005)	12	6	6
RATES			
Oregon Crude Rate (2005)	0.3	0.3	0.3
Oregon Age-adjusted Rate (2005)	0.3	0.3	0.3
US Age-Adjusted Rate (2004) ²	0.5	0.5	0.5
TRENDS - APC			
Oregon Annual Trend (2001-2005)	-12.3	+4.6	*-22.6
US Annual Trend (2000-2004) ²	-0.9	-1.1	-0.9
PROGNOSIS AND BURDEN			
Prognosis: M/I Ratio (2001-2005)	0.06	0.06	0.05
Burden: YPLL (2001-2005)	51	22	29

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

In 2005, 325 cases of thyroid cancer were diagnosed and reported to the Oregon central registry. Median age at diagnosis was 49. During the same year, 12 Oregonians died due to thyroid cancer. Median age at death was 66.

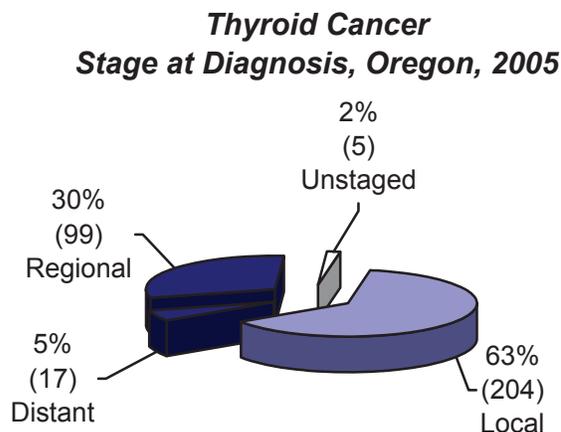
Most thyroid cancers (63 percent) were diagnosed at the local stage.

The age-adjusted incidence rate for thyroid cancer in 2005 was 9 per 100,000. Among men, the incidence rate was 5 per 100,000 and among women the rate was 13 per 100,000.

The age-adjusted mortality rate for thyroid cancer in 2005 was 0.3 per 100,000.

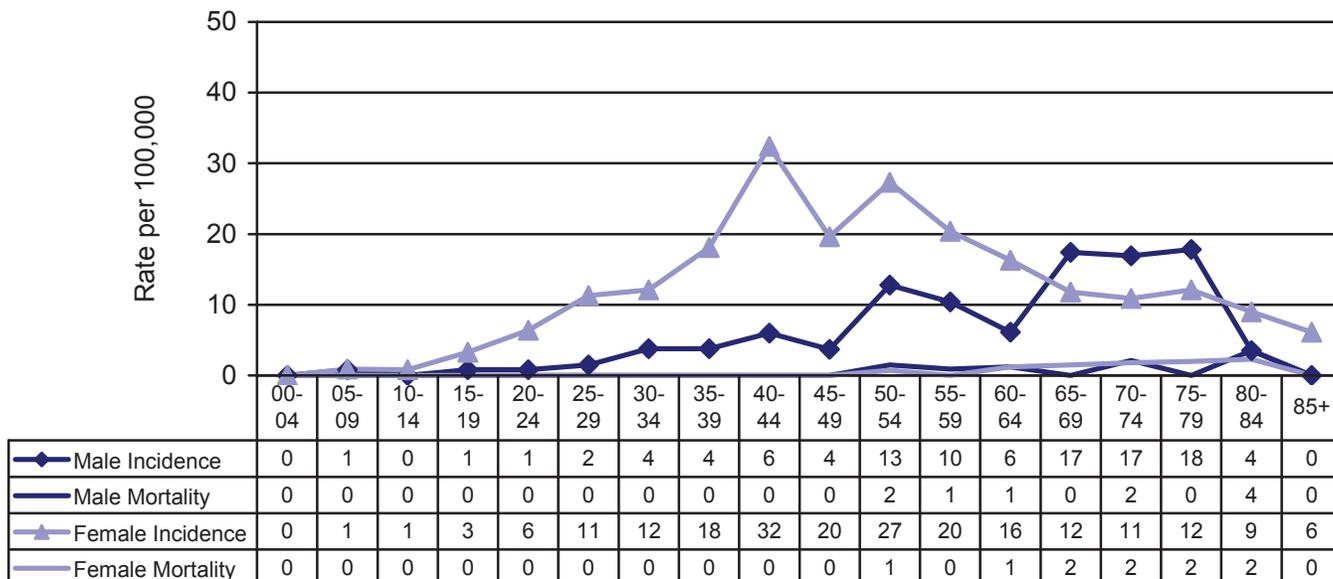
During the period 2001-2005, there were 6 deaths for every 100 thyroid cancer diagnoses. Based on a life expectancy of 65 years, an average of 51 years of life were lost annually due to early deaths from thyroid cancer.

For the period 1996-2005, thyroid cancer incidence was significantly higher than the state average in Deschutes, Klamath, and Marion counties, as well as the northeast region of the state. No area of the state had significantly higher or lower mortality rates, and the mortality trend was stable. Over the same ten-year period, thyroid cancer incidence rates increased significantly for the state as a whole, and for Lane and Marion counties. See Thyroid Cancer maps.

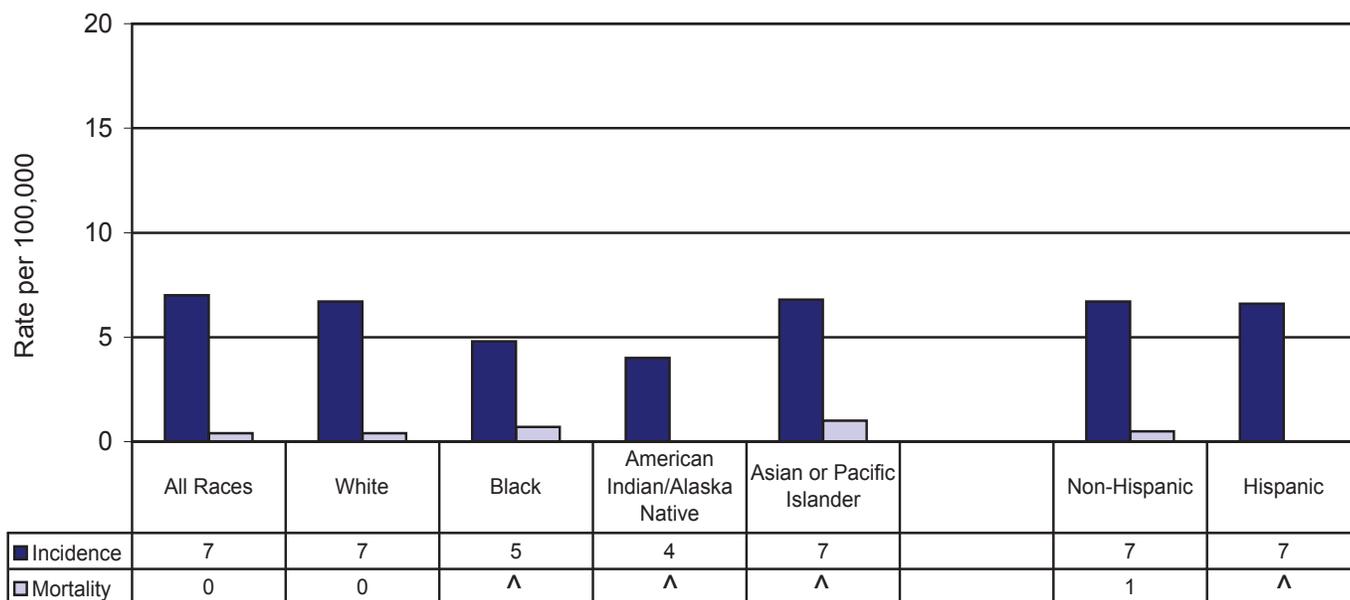


Thyroid Cancer

**Thyroid Cancer Incidence and Mortality Rates,
by Age Group and Sex, Oregon, 2005**



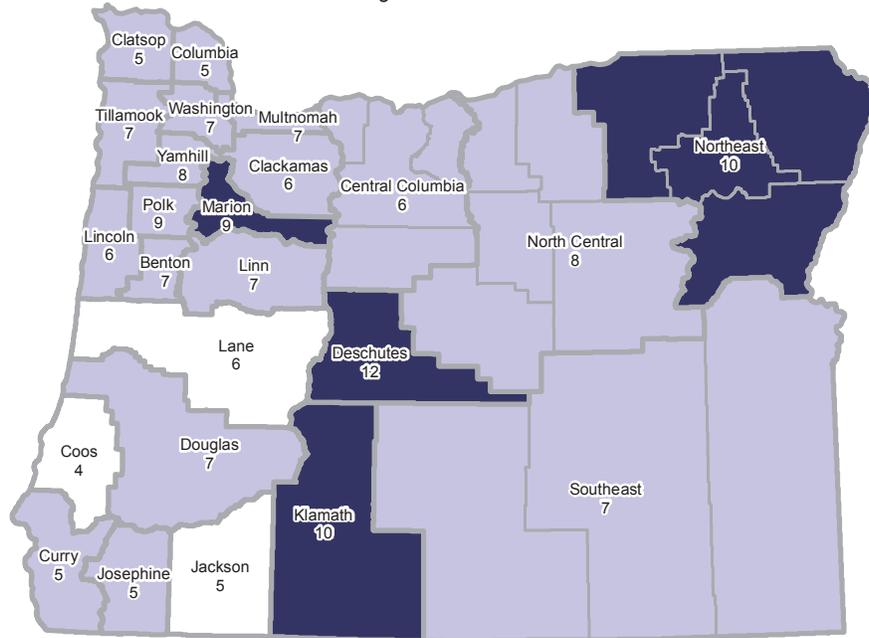
**Thyroid Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**



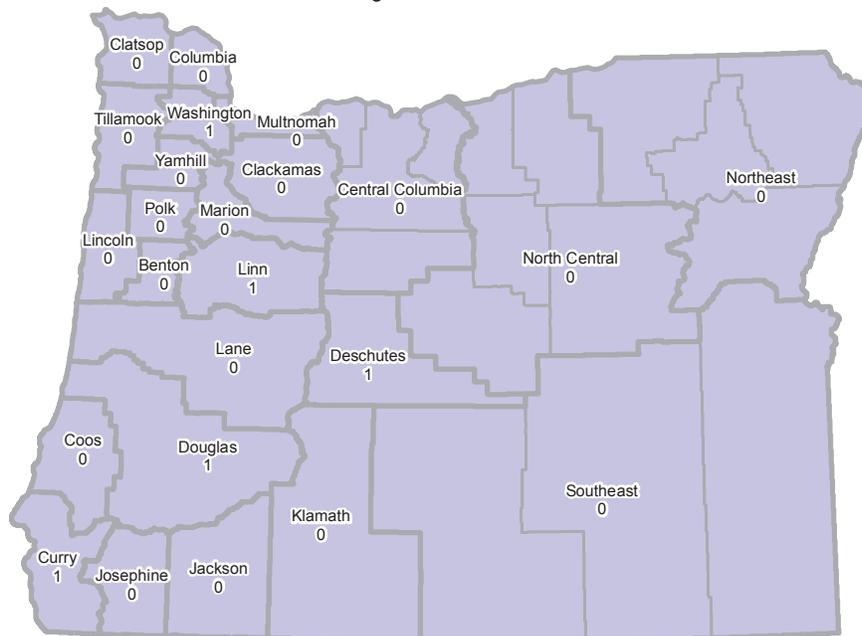
^ Rate not calculated due to instability of small numbers

Thyroid Cancer

Rates of Thyroid Cancer Incidence, 1996-2005
1996-2005 Oregon Rate = 7.



Rates of Thyroid Cancer Mortality, 1996-2005
1996-2005 Oregon Rate = 0.4



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Thyroid Cancer

Thyroid Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

THYROID	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	245	7.0	5.4 *	16	0.4	-12.3
Baker	1	5.9	^	0	^	^
Benton	5	6.8	^	0	^	^
Clackamas	22	6.1	5.3	1	0.4	^
Clatsop	2	5.3	^	0	^	^
Columbia	2	5.2	^	0	^	^
Coos	3	3.7 L	^	0	^	^
Crook	2	7.6	^	0	^	^
Curry	2	5.2	^	0	^	^
Deschutes	14	11.6 H	3.2	1	^	^
Douglas	7	7.0	^	1	^	^
Gilliam	0	^	^	0	^	^
Grant	1	^	^	0	^	^
Harney	1	^	^	0	^	^
Hood River	1	^	^	0	^	^
Jackson	10	5.0 L	^	1	0.5	^
Jefferson	0	^	^	0	^	^
Josephine	4	5.1	^	0	^	^
Klamath	6	9.5 H	^	0	^	^
Lake	0	^	^	0	^	^
Lane	18	5.6 L	10.9 *	1	0.4	^
Lincoln	3	5.5	^	0	^	^
Linn	7	6.8	^	1	^	^
Malheur	2	7.8	^	0	^	^
Marion	24	8.8 H	7.1 *	1	0.5	^
Morrow	1	^	^	0	^	^
Multnomah	47	6.8	4.7	3	0.5	^
Polk	6	9.3	^	0	^	^
Sherman	1	^	^	0	^	^
Tillamook	2	7.3	^	0	^	^
Umatilla	9	12.4 H	^	0	^	^
Union	2	7.1	^	0	^	^
Wallowa	0	^	^	0	^	^
Wasco	2	6.8	^	0	^	^
Washington	32	7.1	3.4	2	0.6	^
Wheeler	0	^	^	0	^	^
Yamhill	6	7.7	^	0	^	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Uterine Cancer

UTERINE CANCER - FAST FACTS OREGON

	Female
CANCER INCIDENCE	
Total Cancer Cases (2005)	493
RATES	
Oregon Crude Rate (2005)	26.7
Oregon Age-adjusted Rate (2005)	23.2
US Age-adjusted Rate (2004) ¹	23.1
TRENDS - APC	
Oregon Annual Trend (2001-2005)	0.6
CANCER MORTALITY	
Total Cancer Deaths (2005)	83
RATES	
Oregon Crude Rate (2005)	4.5
Oregon Age-adjusted Rate (2005)	3.9
US Age-Adjusted Rate (2004) ²	4.1
TRENDS - APC	
Oregon Annual Trend (2001-2005)	-1.4
US Annual Trend (2000-2004) ²	-0.1
PROGNOSIS AND BURDEN	
Prognosis: M/I Ratio (2001-2005)	0.17
Burden: YPLL (2001-2005)	180

Note: Incidence and mortality rates are per 100,000 population, age-adjusted to the 19-age-group 2000 U.S. standard population. Total column may exceed male/female columns due to coding to other gender.

¹ NPCR. <http://statecancerprofiles.cancer.gov/>

² US Mortality Public Use Data file, National Center for Health Statistics

APC = Average Annual Percent Change.

M/I = Mortality to Incidence Ratio.

YPLL = Years of Potential Life Lost.

* Indicates a statistically significant trend.

In 2005, 493 cancers of the uterus were diagnosed in Oregon women and reported to the central registry. Median age at diagnosis was 63. During the same time period, 83 women died due to uterine cancer. Median age at death was 71.

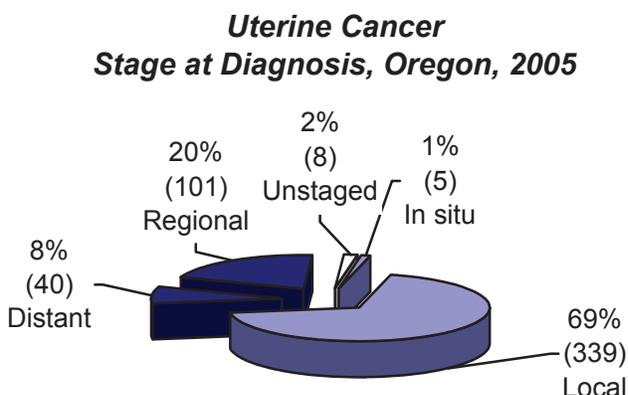
The majority of uterine cancers (70 percent) were diagnosed at the *in situ* or local stage when they are most treatable.

The age-adjusted incidence rate of uterine cancer in 2005 was 23 per 100,000 matching the U.S. rate in 2004.

The age-adjusted mortality rate for uterine cancer in 2005 was 4 per 100,000 also matching the 2004 national rate.

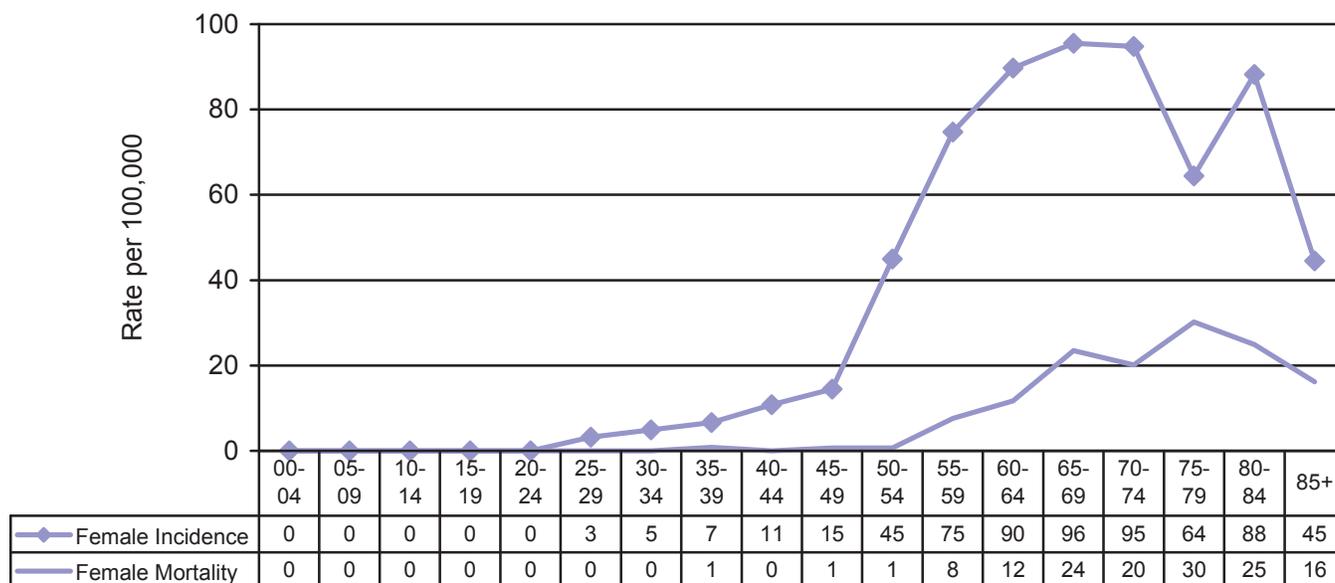
During the period 2001-2005, there were 17 deaths for every 100 uterine cancer diagnoses. Based on a life expectancy of 65 years, an average of 180 years of life were lost annually due to early deaths from uterine cancer.

During 1996-2005, the incidence of uterine cancer was significantly higher than the state average in Benton and Multnomah counties and significantly lower in Deschutes county. No area of the state had significantly higher or lower mortality than the state. During the same period, incidence declined significantly in Deschutes county. See Uterine Cancer maps.

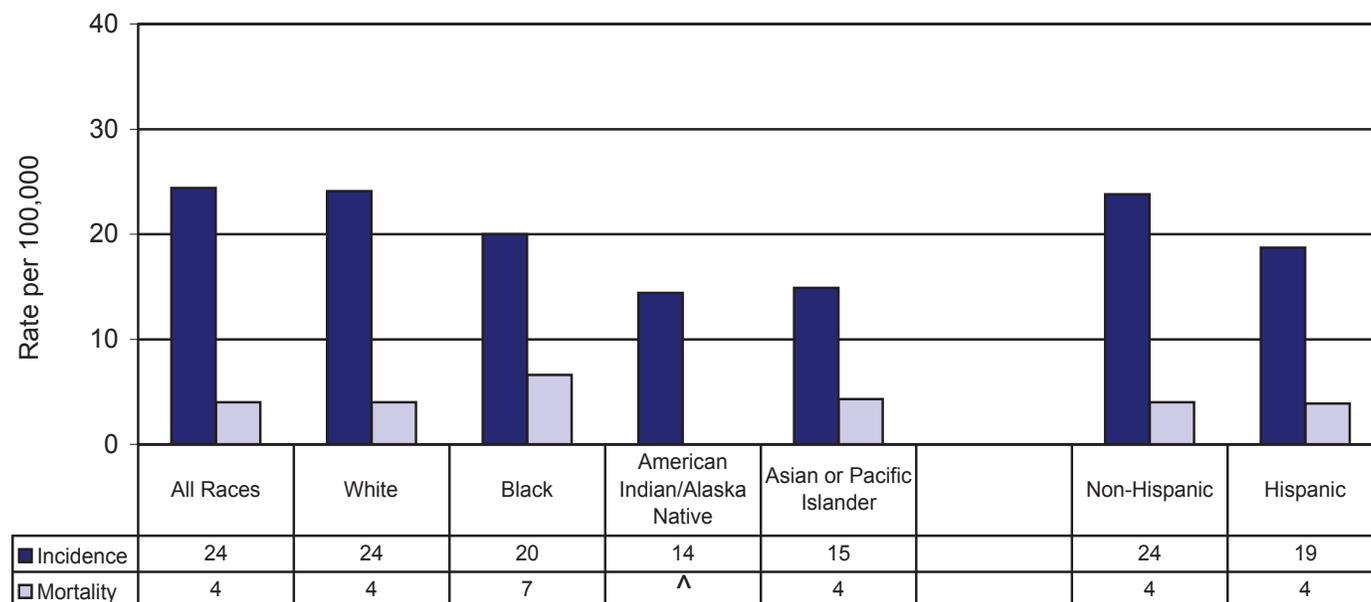


Uterine Cancer

**Uterine Cancer Incidence and Mortality Rates,
by Age Group, Oregon, 2005**



**Uterine Cancer Incidence and Mortality Rates,
by Race and Ethnicity, Oregon, 1996-2005**

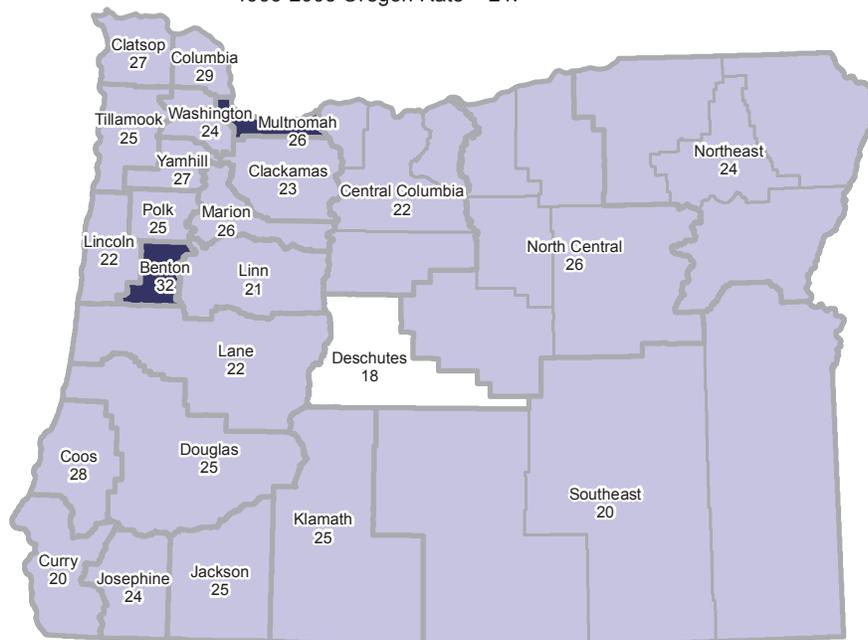


^ Rate not calculated due to instability of small numbers

Uterine Cancer

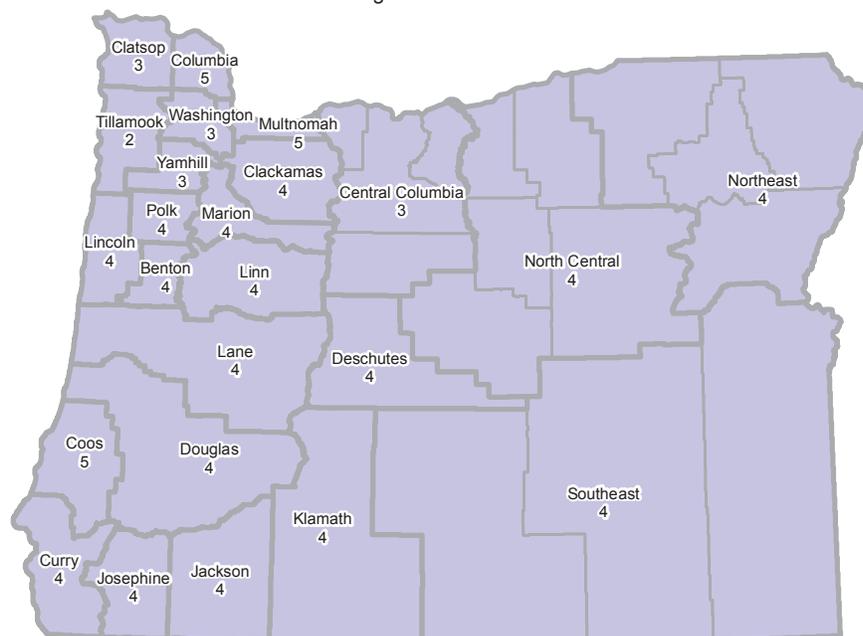
Rates of Uterine Cancer Incidence, 1996-2005

1996-2005 Oregon Rate = 24.



Rates of Uterine Cancer Mortality, 1996-2005

1996-2005 Oregon Rate = 4.



Rates = Incidence count per 100,000 persons age-adjusted to 2000 U.S. Census 19-age-group standard.

- Statistically Higher than Oregon Average
- Similar to Oregon Average
- Statistically Lower than Oregon Average

Uterine Cancer

Uterine Cancer Incidence and Mortality by County, 1996-2005: Average Count, Annual Rate, and 10-Year Trend

UTERINE	NEW CASES			DEATHS		
1996-2005 Oregon Counties	Cases Per Year	Age-Adjusted Rate	10-Year Trend / APC	Deaths Per Year	Age-Adjusted Rate	10-Year Trend / APC
Total	467	24.4	-0.7	81	4.0	-1.4
Baker	3	27.3	^	1	^	^
Benton	12	32.0 H	3.3	2	4.4	^
Clackamas	44	23.4	-0.5	7	3.8	^
Clatsop	6	26.7	^	1	^	^
Columbia	7	29.0	^	1	4.9	^
Coos	13	28.5	2.2	3	5.4	^
Crook	3	26.4	^	1	^	^
Curry	4	20.3	^	1	^	^
Deschutes	12	18.2 L	-7.5 *	3	4.1	^
Douglas	17	25.2	-0.8	3	4.2	^
Gilliam	1	^	^	0	^	^
Grant	1	25.5	^	0	^	^
Harney	1	^	^	0	^	^
Hood River	2	23.3	^	1	^	^
Jackson	30	25.4	-3.4	5	4.0	^
Jefferson	2	17.1	^	0	^	^
Josephine	14	23.9	4.2	2	3.6	^
Klamath	9	24.7	^	2	4.2	^
Lake	1	28.1	^	0	^	^
Lane	41	22.0	-0.8	7	3.6	^
Lincoln	8	21.6	^	1	3.6	^
Linn	13	21.2	-1.0	3	4.4	^
Malheur	3	17.8	^	1	^	^
Marion	38	25.6	1.8	7	4.1	^
Morrow	2	29.3	^	0	^	^
Multnomah	89	26.0	-1.4	17	4.7	13.2
Polk	9	25.0	^	2	3.5	^
Sherman	0	^	^	0	^	^
Tillamook	4	25.1	^	0	^	^
Umatilla	7	19.8	^	1	3.2	^
Union	4	24.3	^	1	^	^
Wallowa	2	37.5	^	0	^	^
Wasco	4	23.0	^	1	^	^
Washington	50	24.3	-0.3	6	3.2	^
Wheeler	0	^	^	0	^	^
Yamhill	12	26.6	3.1	1	2.9	^

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. Standard Population.

APC = Annual Percent Change.

Counts may not match Center for Health Statistics data tables due to unknown county of death.

H= Rate is statistically significantly higher (p<.05).

L = Rate is statistically significantly lower (p<.05).

* Indicates a statistically significant trend (p<.05).

^ Rate/Trend is not calculated due to instability of small numbers.

Oregon Incidence Data by Site and Sex, 2001-2005

TABLE 1: CANCER INCIDENCE		TOTAL ¹		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Invasive	Rate/ Current	Invasive	Rate/ Current	Invasive	Rate/ Current
Primary Sites	Year	Counts	Trend	Counts	Trend	Counts	Trend
ALL SITES	Annual Average	17,710	476.1	9,031	537.3	8,677	432.8
	<i>5-Year APC Trend</i>		-1.3		-1.4		-1.3
	2001	17,691	495.6	9,024	563.7	8,665	449.0
	2002	17,639	483.2	8,916	543.0	8,721	442.0
	2003	17,129	460.0	8,704	516.8	8,422	419.7
	2004	18,008	476.6	9,269	539.7	8,738	430.2
	2005	18,083	467.4	9,243	525.9	8,839	425.4
BONES AND JOINTS	Annual Average	36	1.0	19	1.1	17	0.9
	<i>5-Year APC Trend</i>		-2.0		-0.8		-4.5
	2001	33	0.9	15	0.9	18	1.0
	2002	40	1.1	24	1.4	16	0.9
	2003	36	1.0	18	1.1	18	0.9
	2004	36	1.0	20	1.1	16	0.8
	2005	35	0.9	19	1.0	16	0.9
BRAIN AND CNS	Annual Average	267	7.3	149	8.5	118	6.2
	<i>5-Year APC Trend</i>		+0.6		-1.1		+3.1
	2001	250	7.1	142	8.5	108	5.8
	2002	262	7.2	153	8.9	109	5.6
	2003	273	7.5	144	8.2	129	6.9
	2004	282	7.7	165	9.4	117	6.1
	2005	268	7.1	141	7.8	127	6.6
Brain	Annual Average	254	6.9	143	8.2	112	5.8
	<i>5-Year APC Trend</i>		+2.0		-1.5		+2.8
	2001	241	6.8	137	8.3	104	5.6
	2002	247	6.8	148	8.6	99	5.1
	2003	260	7.1	136	7.7	124	6.6
	2004	273	7.4	159	9.0	114	5.9
	2005	251	6.6	134	7.4	117	6.0
BREAST	Annual Average	2,718	72.5	16	0.9	2,702	135.7
	<i>5-Year APC Trend</i>		-3.2		+0.7		-3.1
	2001	2,823	78.6	16	1.0	2,807	146.8
	2002	2,791	75.9	19	1.1	2,772	141.8
	2003	2,588	68.9	13	0.8	2,574	129.0
	2004	2,683	70.2	9	^	2,674	131.7
	2005	2,707	69.6	22	1.2	2,685	130.5
DIGESTIVE SYSTEM	Annual Average	3,057	81.6	1,631	97.5	1,427	68.6
	<i>5-Year APC Trend</i>		-0.4		-0.6		-0.4
	2001	2,927	81.4	1,582	99.9	1,345	66.8
	2002	3,024	82.0	1,534	93.7	1,490	72.6
	2003	3,104	82.8	1,677	100.0	1,426	68.6
	2004	3,142	82.8	1,729	101.2	1,413	67.3
	2005	3,090	79.4	1,631	93.1	1,459	68.0

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. standard population.

APC = Annual Percent Change

¹Total count may exceed male and female combined due to additional sex coding.

* Indicates a statistically significant trend.

^ Rate is not calculated for counts <11 due to the instability of rates based on small numbers.

n/a = not applicable

Oregon Incidence Data by Site and Sex, 2001-2005

TABLE 1: CANCER INCIDENCE		TOTAL ¹		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend
Primary Sites	Year						
Colorectal	Annual Average	1,782	47.5	907	54.6	875	41.8
	<i>5-Year APC Trend</i>		-1.5		-1.6		-1.8
	2001	1,766	49.1	914	58.1	852	42.2
	2002	1,757	47.5	852	52.4	905	43.8
	2003	1,826	48.5	915	55.0	911	43.3
	2004	1,787	47.0	954	56.3	833	39.4
	2005	1,776	45.7	900	51.7	876	40.7
Esophagus	Annual Average	203	5.4	157	9.3	46	2.2
	<i>5-Year APC Trend</i>		-1.2		-1.2		-1.1
	2001	206	5.8	152	9.5	54	2.6
	2002	191	5.2	155	9.3	36	1.7
	2003	206	5.5	161	9.5	45	2.2
	2004	206	5.5	161	9.4	45	2.2
	2005	204	5.3	155	8.8	49	2.3
Gallbladder	Annual Average	38	1.0	10	0.6	28	1.3
	<i>5-Year APC Trend</i>		-5.6		^		-8.3
	2001	38	1.0	10	^	28	1.3
	2002	47	1.3	10	^	37	1.8
	2003	30	0.8	6	^	24	1.1
	2004	37	1.0	10	^	27	1.3
	2005	36	0.9	12	0.7	24	1.1
Liver/ Intrahepatic Bile Duct	Annual Average	173	4.6	119	6.7	53	2.7
	<i>5-Year APC Trend</i>		+9.0 *		+12.1 *		+2.0
	2001	131	3.6	83	5.0	48	2.4
	2002	157	4.3	102	5.8	55	2.8
	2003	171	4.6	117	6.6	53	2.8
	2004	201	5.3	149	8.2	52	2.6
	2005	205	5.1	146	7.6	59	2.8
Liver	Annual Average	156	4.1	110	6.1	46	2.3
	<i>5-Year APC Trend</i>		+11.1 *		+13.8 *		+4.3
	2001	109	3.0	73	4.4	36	1.8
	2002	139	3.8	90	5.1	49	2.5
	2003	158	4.2	111	6.3	46	2.4
	2004	188	4.9	142	7.8	46	2.3
	2005	187	4.6	135	7.0	52	2.4
Pancreas	Annual Average	407	10.9	199	12.0	208	9.9
	<i>5-Year APC Trend</i>		-0.1		-2.6		+2.3
	2001	386	10.7	200	12.7	186	9.1
	2002	404	11.0	181	11.2	223	10.7
	2003	410	11.0	224	13.3	186	9.0
	2004	410	10.8	201	11.9	209	9.7
	2005	424	10.8	190	10.8	234	10.8

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. standard population.

APC = Annual Percent Change

¹Total count may exceed male and female combined due to additional sex coding.

* Indicates a statistically significant trend.

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n/a = not applicable

Oregon Incidence Data by Site and Sex, 2001-2005

TABLE 1: CANCER INCIDENCE		TOTAL ¹		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend
Primary Sites	Year						
Small Intestine	Annual Average	63	1.7	35	2.1	27	1.4
	5-Year APC Trend		+2.8		+1.9		+4.7
	2001	55	1.5	34	2.1	21	1.1
	2002	62	1.7	33	2.0	29	1.5
	2003	58	1.5	31	1.8	27	1.3
	2004	76	2.0	44	2.6	32	1.6
	2005	62	1.6	34	2.0	28	1.4
Stomach	Annual Average	203	5.5	125	7.5	79	3.8
	5-Year APC Trend		+1.1		-1.2		+4.2
	2001	179	5.0	116	7.3	63	3.2
	2002	214	5.8	129	8.0	85	4.2
	2003	196	5.3	127	7.7	69	3.4
	2004	236	6.2	139	8.1	97	4.7
	2005	192	5.1	113	6.8	79	3.7
ENDOCRINE SYSTEM	Annual Average	305	8.4	83	4.7	222	12.1
	5-Year APC Trend		+6.6 *		+8.7 *		+6.0 *
	2001	261	7.4	66	3.9	195	11.0
	2002	271	7.6	73	4.1	198	11.0
	2003	311	8.5	91	5.2	220	11.9
	2004	333	9.1	87	4.9	246	13.3
	2005	351	9.4	100	5.5	251	13.3
Thyroid	Annual Average	285	7.8	73	4.1	212	11.9
	5-Year APC Trend		+5.8 *		+7.9		+5.2 *
	2001	250	7.1	62	3.6	188	10.6
	2002	254	7.1	61	3.4	193	10.7
	2003	288	7.9	79	4.5	209	11.3
	2004	310	8.4	75	4.2	235	12.7
	2005	325	8.7	89	4.8	236	12.6
EYE AND ORBIT	Annual Average	37	1.0	20	1.1	17	0.9
	5-Year APC Trend		-3.5		-2.5		-4.3
	2001	34	1.0	20	1.2	14	0.7
	2002	47	1.3	24	1.4	23	1.2
	2003	30	0.8	11	0.7	19	1.0
	2004	38	1.0	23	1.3	15	0.7
	2005	37	1.0	21	1.1	16	0.8
GENITAL SYSTEM (Female)	Annual Average	950	47.8	n/a	n/a	950	47.8
	5-Year APC Trend		-2.1		n/a		-2.1
	2001	953	50.2	n/a	n/a	953	50.2
	2002	935	47.8	n/a	n/a	935	47.8
	2003	953	47.7	n/a	n/a	953	47.7
	2004	981	48.7	n/a	n/a	981	48.7
	2005	928	44.7	n/a	n/a	928	44.7

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. standard population.

APC = Annual Percent Change

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n/a = not applicable

Oregon Incidence Data by Site and Sex, 2001-2005

TABLE 1: CANCER INCIDENCE		TOTAL ¹		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend
Primary Sites	Year						
Cervical	Annual Average	121	6.7	n/a	n/a	121	6.7
	<i>5-Year APC Trend</i>		-8.8 *		n/a		-8.8 *
	2001	144	8.2	n/a	n/a	144	8.2
	2002	130	7.3	n/a	n/a	130	7.3
	2003	115	6.4	n/a	n/a	115	6.4
	2004	103	5.7	n/a	n/a	103	5.7
	2005	111	6.1	n/a	n/a	111	6.1
Ovary	Annual Average	274	15.3	n/a	n/a	274	15.3
	<i>5-Year APC Trend</i>		-5.2		n/a		-5.2
	2001	296	16.9	n/a	n/a	296	16.9
	2002	265	15.0	n/a	n/a	265	15.0
	2003	289	16.1	n/a	n/a	289	16.1
	2004	283	15.7	n/a	n/a	283	15.7
	2005	238	13.0	n/a	n/a	238	13.0
Uterine	Annual Average	478	26.7	n/a	n/a	478	26.7
	<i>5-Year APC Trend</i>		+0.6		n/a		+0.6
	2001	448	25.6	n/a	n/a	448	25.6
	2002	459	25.9	n/a	n/a	459	25.9
	2003	475	26.5	n/a	n/a	475	26.5
	2004	518	28.7	n/a	n/a	518	28.7
	2005	488	26.7	n/a	n/a	488	26.7
GENITAL SYSTEM (MALE)	Annual Average	2,719	153.8	2,719	153.8	n/a	n/a
	<i>5-Year APC Trend</i>		-4.0		-4.0		n/a
	2001	2,896	168.0	2,896	168.0	n/a	n/a
	2002	2,734	156.3	2,734	156.3	n/a	n/a
	2003	2,546	144.0	2,546	144.0	n/a	n/a
	2004	2,711	151.7	2,711	151.7	n/a	n/a
	2005	2,710	149.6	2,710	149.6	n/a	n/a
Prostate	Annual Average	2,582	146.1	2,582	146.1	n/a	n/a
	<i>5-Year APC Trend</i>		-3.9		-3.9		n/a
	2001	2,743	159.1	2,743	159.1	n/a	n/a
	2002	2,595	148.5	2,595	148.5	n/a	n/a
	2003	2,406	136.0	2,406	136.0	n/a	n/a
	2004	2,583	144.6	2,583	144.6	n/a	n/a
	2005	2,581	142.5	2,581	142.5	n/a	n/a
Testis	Annual Average	122	6.9	122	6.9	n/a	n/a
	<i>5-Year APC Trend</i>		-5.0 *		-5.0 *		n/a
	2001	135	7.8	135	7.8	n/a	n/a
	2002	128	7.3	127	7.3	n/a	n/a
	2003	117	6.6	117	6.6	n/a	n/a
	2004	117	6.5	117	6.5	n/a	n/a
	2005	115	6.4	115	6.4	n/a	n/a

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. standard population.

APC = Annual Percent Change

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Oregon Incidence Data by Site and Sex, 2001-2005

TABLE 1: CANCER INCIDENCE		TOTAL ¹		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend
Primary Sites	Year						
KAPOSI SARCOMA	Annual Average	11	0.3	10	0.6	1	^
	5-Year APC Trend		+14.1		^		^
	2001	9	^	9	^	0	^
	2002	6	^	6	^	0	^
	2003	12	0.3	9	^	3	^
	2004	13	0.4	11	0.6	2	^
	2005	14	0.4	13	0.7	1	^
LEUKEMIA	Annual Average	404	11.0	235	14.2	169	8.5
	5-Year APC Trend		-4.6		-3.5		-6.8
	2001	468	13.2	263	16.7	205	10.7
	2002	399	11.1	233	14.3	166	8.5
	2003	353	9.6	208	12.2	145	7.4
	2004	379	10.2	219	13.0	160	7.9
	2005	423	11.0	253	14.7	170	8.0
LYMPHOMA	Annual Average	865	23.3	461	27.1	404	20.1
	5-Year APC Trend		+1.6		+2.1		+1.5
	2001	789	22.0	416	25.3	373	19.3
	2002	855	23.4	450	27.1	405	20.4
	2003	861	23.2	453	26.6	408	20.3
	2004	909	24.0	517	30.0	392	19.2
	2005	911	23.6	467	26.5	444	21.4
Hodgkin Lymphoma	Annual Average	98	2.7	52	2.9	46	2.6
	5-Year APC Trend		+3.9		+2.7		+5.3
	2001	74	2.1	40	2.3	34	2.0
	2002	109	3.1	57	3.3	52	2.9
	2003	98	2.7	53	3.0	45	2.5
	2004	109	3.0	60	3.3	49	2.7
	2005	102	2.7	50	2.7	52	2.8
Non-Hodgkin Lymphoma	Annual Average	767	20.5	409	24.2	358	17.6
	5-Year APC Trend		+1.2 *		+1.9		+0.9
	2001	715	19.9	376	23.0	339	17.3
	2002	746	20.4	393	23.8	353	17.5
	2003	763	20.5	400	23.6	363	17.9
	2004	800	21.0	457	26.6	343	16.5
	2005	809	20.8	417	23.9	392	18.6
MESOTHELIOMA	Annual Average	43	1.2	34	2.1	9	0.4
	5-Year APC Trend		-6.9		-13.2		^
	2001	37	1.1	29	1.9	8	^
	2002	56	1.5	51	3.2	5	^
	2003	53	1.4	40	2.5	13	0.6
	2004	30	0.8	27	1.7	3	^
	2005	39	1.0	22	1.4	17	0.8

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. standard population.

APC = Annual Percent Change

¹Total count may exceed male and female combined due to additional sex coding.

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n/a = not applicable

Oregon Incidence Data by Site and Sex, 2001-2005

TABLE 1: CANCER INCIDENCE		TOTAL ¹		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend
Primary Sites	Year						
MYELOMA	Annual Average	183	4.9	106	6.3	77	3.7
	<i>5-Year APC Trend</i>		-7.1		-7.9		-6.4
	2001	217	6.0	126	7.8	91	4.5
	2002	199	5.4	111	6.8	88	4.3
	2003	142	3.8	87	5.2	55	2.7
	2004	181	4.7	107	6.2	74	3.4
	2005	175	4.5	97	5.5	78	3.7
ORAL CAVITY/PHARYNX	Annual Average	406	10.8	277	15.7	128	6.3
	<i>5-Year APC Trend</i>		-2.9		-1.1		-7.6
	2001	410	11.4	271	16.3	139	7.1
	2002	397	10.8	257	15.0	140	7.1
	2003	416	11.0	291	16.3	124	6.2
	2004	424	11.0	290	16.0	134	6.5
	2005	382	9.7	278	15.0	103	4.9
RESPIRATORY SYSTEM	Annual Average	2,692	73.1	1,429	86.7	1,263	62.8
	<i>5-Year APC Trend</i>		-1.1		-1.1		-1.2
	2001	2,686	75.8	1,397	88.0	1,289	66.5
	2002	2,687	74.3	1,455	90.2	1,232	62.3
	2003	2,617	71.0	1,388	84.0	1,229	61.2
	2004	2,712	72.7	1,448	86.2	1,263	62.1
	2005	2,757	72.3	1,456	85.4	1,301	62.7
Larynx	Annual Average	115	3.1	88	5.1	27	1.3
	<i>5-Year APC Trend</i>		+3.0		-1.6		+17.9 *
	2001	107	3.0	86	5.2	21	1.1
	2002	102	2.8	86	5.2	16	0.8
	2003	120	3.2	94	5.3	26	1.3
	2004	119	3.1	88	5.0	31	1.5
	2005	125	3.3	86	4.9	39	1.9
Lung and Bronchus	Annual Average	2,546	69.2	1,321	80.4	1,224	60.9
	<i>5-Year APC Trend</i>		-1.3		-1.2		-1.5
	2001	2,549	71.9	1,296	81.9	1,253	64.6
	2002	2,552	70.6	1,348	83.8	1,204	60.8
	2003	2,467	67.0	1,276	77.6	1,191	59.3
	2004	2,566	68.8	1,340	80.1	1,225	60.2
	2005	2,594	68.1	1,345	79.1	1,249	60.3
SKIN	Annual Average	954	25.8	515	29.8	439	23.1
<i>Excluding basal and squamous cell carcinoma</i>	<i>5-Year APC Trend</i>		+3.1		+2.0		+4.2
	2001	903	25.4	501	30.3	402	21.9
	2002	901	24.7	486	28.8	415	22.2
	2003	851	22.9	462	26.7	389	20.4
	2004	1,039	27.7	546	30.9	493	25.8
	2005	1,078	27.8	580	32.1	498	24.8

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. standard population.

APC = Annual Percent Change

¹Total count may exceed male and female combined due to additional sex coding.

* Indicates a statistically significant trend.

^ Rate is not calculated for counts <11 due to the instability of rates based on small numbers.

n/a = not applicable

Oregon Incidence Data by Site and Sex, 2001-2005

TABLE 1: CANCER INCIDENCE		TOTAL ¹		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend	Invasive Cancer Counts	Rate/ Current Trend
Primary Sites	Year						
Melanoma of the Skin	Annual Average	902	24.3	485	28.0	417	22.0
	<i>5-Year APC Trend</i>		+3.2		+2.0		+4.3
	2001	858	24.1	472	28.5	386	21.1
	2002	852	23.3	463	27.3	389	20.8
	2003	794	21.4	427	24.6	367	19.3
	2004	977	26.1	510	28.7	467	24.6
	2005	1,029	26.5	552	30.5	477	23.8
SOFT TISSUE	Annual Average	115	3.1	65	3.8	50	2.6
	<i>Including heart 5-Year APC Trend</i>		+4.1 *		+9.7		-4.8
	2001	102	2.9	44	2.7	58	3.2
	2002	106	2.9	63	3.7	43	2.3
	2003	120	3.2	72	4.2	48	2.5
	2004	118	3.2	68	4.0	50	2.5
	2005	129	3.3	79	4.3	50	2.5
URINARY SYSTEM	Annual Average	1,384	37.1	975	58.9	409	19.9
	<i>5-Year APC Trend</i>		+1.3		+0.8		+1.7
	2001	1,315	36.6	939	59.6	375	19.0
	2002	1,341	36.7	946	58.7	395	19.6
	2003	1,335	35.6	923	55.5	412	20.0
	2004	1,426	37.7	995	59.2	431	20.8
	2005	1,502	38.5	1,070	61.5	432	20.1
Kidney and Renal Pelvis	Annual Average	478	12.7	297	17.2	181	9.0
	<i>5-Year APC Trend</i>		+5.5 *		+5.9 *		+4.9
	2001	406	11.3	257	15.5	149	7.7
	2002	446	12.2	277	16.5	169	8.6
	2003	474	12.6	284	16.4	190	9.3
	2004	520	13.7	311	17.7	209	10.3
	2005	544	13.9	356	19.8	188	9.1
Urinary Bladder	Annual Average	876	23.5	659	40.5	217	10.4
	<i>5-Year APC Trend</i>		-0.9		-1.4		-0.8
	2001	882	24.6	664	42.9	217	10.8
	2002	866	23.8	654	41.2	212	10.3
	2003	830	22.2	616	37.7	214	10.3
	2004	875	23.2	668	40.4	207	9.9
	2005	926	23.8	692	40.4	234	10.6
MISCELLANEOUS SITES	Annual Average	562	15.0	288	17.7	274	13.0
	<i>5-Year APC Trend</i>		-3.2		-2.7		-3.9
	2001	578	16.0	292	18.8	285	13.9
	2002	588	16.0	298	18.6	289	14.0
	2003	528	14.2	271	16.6	257	12.4
	2004	571	15.0	297	17.7	274	13.0
	2005	547	14.0	284	16.8	263	11.8

Rates are per 100,000 and age-adjusted to the 19-age-group 2000 U.S. standard population.

APC = Annual Percent Change

¹Total count may exceed male and female combined due to additional sex coding.

* Indicates a statistically significant trend.

^ Rate is not calculated for counts <11 due to the instability of rates based on small numbers.

n/a = not applicable

Oregon Mortality Data by Site and Sex, 2001-2005

TABLE 2: CANCER MORTALITY		TOTAL		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Rate/ Cancer Current		Rate/ Cancer Current		Rate/ Cancer Current	
Primary Sites	Year	Deaths	Trend	Deaths	Trend	Deaths	Trend
ALL CAUSES OF DEATH	Annual Average	30,614	796.8	15,030	935.3	15,583	685.7
	<i>5-Year APC Trend</i>		-2.1 *		-2.3 *		-2.1
	2001	30,125	821.7	14,688	964.5	15,437	710.0
	2002	31,081	828.3	15,286	977.4	15,795	710.9
	2003	30,809	802.8	15,163	940.7	15,646	689.0
	2004	30,201	771.9	14,876	907.4	15,325	664.6
	2005	30,852	764.8	15,138	893.4	15,714	658.8
ALL MALIGNANT CANCERS	Annual Average	7,315	194.8	3,762	231.9	3,553	169.1
	<i>5-Year APC Trend</i>		-1.4 *		-1.5 *		-1.7 *
	2001	7,199	199.7	3,712	240.4	3,487	172.7
	2002	7,334	199.2	3,732	235.1	3,602	174.8
	2003	7,324	194.7	3,748	230.4	3,576	169.8
	2004	7,320	192.1	3,762	228.1	3,558	167.0
	2005	7,396	189.4	3,856	226.8	3,540	162.4
BONES AND JOINTS	Annual Average	14	0.4	10	0.6	4	0.2
	<i>5-Year APC Trend</i>		+13.6		^		^
	2001	9	^	7	^	2	^
	2002	12	0.3	8	^	4	^
	2003	14	0.4	7	^	7	^
	2004	17	0.5	13	0.7	4	^
	2005	16	0.4	13	0.7	3	^
BRAIN AND CNS	Annual Average	209	5.6	120	6.9	89	4.5
	<i>5-Year APC Trend</i>		+1.0		+2.3		-0.3
	2001	194	5.4	109	6.6	85	4.4
	2002	218	5.9	122	7.0	96	4.9
	2003	195	5.3	114	6.6	81	4.1
	2004	207	5.4	116	6.4	91	4.4
	2005	231	6.0	139	7.7	92	4.6
BREAST	Annual Average	515	13.6	4	0.2	511	24.6
	<i>5-Year APC Trend</i>		-3.9		^		-3.9
	2001	530	14.7	7	^	523	26.5
	2002	503	13.6	2	^	501	24.7
	2003	550	14.5	2	^	548	26.1
	2004	515	13.3	3	^	512	24.1
	2005	477	12.1	6	^	471	21.9
DIGESTIVE SYSTEM	Annual Average	1,647	43.6	899	54.6	748	34.8
	<i>5-Year APC Trend</i>		-1.1		-2.6 *		+0.5
	2001	1,628	45.0	904	58.2	724	34.6
	2002	1,609	43.3	899	55.8	710	33.4
	2003	1,656	44.0	885	53.4	771	36.2
	2004	1,670	43.7	907	54.5	763	35.1
	2005	1,670	42.4	898	51.7	772	34.7

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age group) standard.

APC=Average Annual Percentage Change

* Indicates a statistically significant trend.

^ Rate is not calculated for counts <11 due to the instability of rates based on small numbers.

n/a = not applicable

Oregon Mortality Data by Site and Sex, 2001-2005

TABLE 2: CANCER MORTALITY		TOTAL		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Cancer	Rate/ Current	Cancer	Rate/ Current	Cancer	Rate/ Current
Primary Sites	Year	Deaths	Trend	Deaths	Trend	Deaths	Trend
Colon and Rectum	Annual Average	670	17.6	338	20.9	332	15.0
	<i>5-Year APC Trend</i>		-3.7 *		-6.4 *		-0.7
	2001	702	19.3	375	24.4	327	15.3
	2002	665	17.8	354	22.4	311	14.4
	2003	685	18.0	316	19.4	369	16.9
	2004	637	16.5	329	20.2	308	13.8
	2005	659	16.6	316	18.5	343	15.0
Esophagus	Annual Average	194	5.2	150	9.1	43	2.0
	<i>5-Year APC Trend</i>		-1.0		-1.5		+0.1
	2001	203	5.6	161	10.1	42	2.0
	2002	186	5.0	137	8.3	49	2.3
	2003	177	4.7	143	8.6	34	1.5
	2004	205	5.5	161	9.6	44	2.2
	2005	197	5.1	150	8.8	47	2.1
Gallbladder	Annual Average	22	0.6	6	0.4	16	0.8
	<i>5-Year APC Trend</i>		-7		^		-3.5
	2001	28	0.8	10	^	18	0.9
	2002	17	0.5	4	^	13	0.6
	2003	23	0.6	4	^	19	0.9
	2004	23	0.6	6	^	17	0.8
	2005	19	0.5	5	^	14	0.6
Liver/Intrahepatic Bile Duct	Annual Average	160	4.2	102	5.9	58	2.8
	<i>5-Year APC Trend</i>		+6.5		+7.8		+3.8
	2001	128	3.5	77	4.7	51	2.5
	2002	147	3.9	91	5.3	56	2.7
	2003	172	4.6	111	6.3	61	3.1
	2004	171	4.6	115	6.7	56	2.8
	2005	182	4.6	118	6.3	64	3.0
Liver	Annual Average	116	3.1	79	4.5	37	1.8
	<i>5-Year APC Trend</i>		+7.7		+10.5 *		+2.0
	2001	88	2.4	60	3.7	28	1.4
	2002	107	2.9	67	3.8	40	1.9
	2003	127	3.4	81	4.6	46	2.4
	2004	125	3.3	90	5.2	35	1.7
	2005	135	3.3	98	5.2	37	1.7
Pancreas	Annual Average	406	10.8	201	12.3	205	9.6
	<i>5-Year APC Trend</i>		0.0		-1.6		+1.1
	2001	397	11.0	195	12.6	202	9.9
	2002	402	10.9	203	12.6	199	9.5
	2003	377	10.1	204	12.4	173	8.3
	2004	430	11.2	196	11.7	234	10.6
	2005	424	10.9	209	12.1	215	9.9

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age group) standard.

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n/a = not applicable

Oregon Mortality Data by Site and Sex, 2001-2005

TABLE 2: CANCER MORTALITY		TOTAL		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend
Primary Sites	Year						
Small Intestine	Annual Average	13	0.4	6	0.4	7	0.1
	<i>5-Year APC Trend</i>		+8.6		^		^
	2001	7	^	3	^	4	^
	2002	13	0.4	5	^	8	^
	2003	18	0.5	7	^	11	0.5
	2004	14	0.4	8	^	6	^
	2005	15	0.4	7	^	8	^
Stomach	Annual Average	118	3.1	69	4.1	49	2.3
	<i>5-Year APC Trend</i>		-0.1		-2.1		+2.4
	2001	100	2.8	59	3.9	41	2.0
	2002	128	3.5	79	4.9	49	2.4
	2003	122	3.3	68	4.1	54	2.6
	2004	122	3.2	65	3.8	57	2.7
	2005	116	3.0	72	4.1	44	2.0
ENDOCRINE SYSTEM	Annual Average	30	0.8	15	0.9	15	0.7
	<i>5-Year APC Trend</i>		-5.3		+0.3		-9.4
	2001	30	0.8	13	0.8	17	0.8
	2002	36	1.0	18	1.1	18	0.9
	2003	23	0.6	11	0.7	12	0.5
	2004	34	0.9	20	1.3	14	0.7
	2005	25	0.7	13	0.7	12	0.6
Thyroid	Annual Average	16	0.4	7	0.4	10	0.5
	<i>5-Year APC Trend</i>		-12.3		^		^
	2001	17	0.5	3	^	14	0.7
	2002	21	0.6	8	^	13	0.7
	2003	17	0.4	8	^	9	^
	2004	14	0.4	8	^	6	^
	2005	12	0.3	6	^	6	^
EYE AND ORBIT	Annual Average	4	0.1	2	^	1	^
	<i>5-Year APC Trend</i>		^		^		^
	2001	0	^	0	^	0	^
	2002	9	^	6	^	3	^
	2003	2	^	2	^	0	^
	2004	2	^	2	^	0	^
	2005	5	^	2	^	3	^
GENITAL SYSTEM FEMALE	Annual Average	355	17.1	n/a	n/a	355	17.1
	<i>5-Year APC Trend</i>		-1.8		n/a		-1.8
	2001	358	18.0	n/a	n/a	358	18.0
	2002	358	17.7	n/a	n/a	358	17.7
	2003	328	15.5	n/a	n/a	328	15.5
	2004	376	17.6	n/a	n/a	376	17.6
	2005	355	16.5	n/a	n/a	355	16.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age group) standard.

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n/a = not applicable

Oregon Mortality Data by Site and Sex, 2001-2005

TABLE 2: CANCER MORTALITY		TOTAL		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend
Primary Sites	Year						
Cervix Uteri	Annual Average	42	2.2	<i>n/a</i>	<i>n/a</i>	42	2.2
	<i>5-Year APC Trend</i>		-9.6		<i>n/a</i>		-9.6
	2001	51	2.7	<i>n/a</i>	<i>n/a</i>	51	2.7
	2002	45	2.4	<i>n/a</i>	<i>n/a</i>	45	2.4
	2003	43	2.1	<i>n/a</i>	<i>n/a</i>	43	2.1
	2004	29	1.5	<i>n/a</i>	<i>n/a</i>	29	1.5
	2005	41	2.0	<i>n/a</i>	<i>n/a</i>	41	2.0
Ovary	Annual Average	211	10.1	<i>n/a</i>	<i>n/a</i>	211	10.1
	<i>5-Year APC Trend</i>		+0.5		<i>n/a</i>		+0.5
	2001	199	10.0	<i>n/a</i>	<i>n/a</i>	199	10.0
	2002	212	10.4	<i>n/a</i>	<i>n/a</i>	212	10.4
	2003	186	8.8	<i>n/a</i>	<i>n/a</i>	186	8.8
	2004	244	11.3	<i>n/a</i>	<i>n/a</i>	244	11.3
	2005	214	9.7	<i>n/a</i>	<i>n/a</i>	214	9.7
Uterus	Annual Average	80	3.8	<i>n/a</i>	<i>n/a</i>	80	3.8
	<i>5-Year APC Trend</i>		-1.4		<i>n/a</i>		-1.4
	2001	83	4.1	<i>n/a</i>	<i>n/a</i>	83	4.1
	2002	79	3.8	<i>n/a</i>	<i>n/a</i>	79	3.8
	2003	77	3.6	<i>n/a</i>	<i>n/a</i>	77	3.6
	2004	78	3.6	<i>n/a</i>	<i>n/a</i>	78	3.6
	2005	83	3.9	<i>n/a</i>	<i>n/a</i>	83	3.9
GENITAL SYSTEM (Male)	Annual Average	431	28.0	431	28.0	<i>n/a</i>	<i>n/a</i>
	<i>5-Year APC Trend</i>		-4.2 *		-4.2 *		<i>n/a</i>
	2001	442	30.4	442	30.4	<i>n/a</i>	<i>n/a</i>
	2002	448	30.1	448	30.1	<i>n/a</i>	<i>n/a</i>
	2003	422	27.5	422	27.5	<i>n/a</i>	<i>n/a</i>
	2004	415	26.4	415	26.4	<i>n/a</i>	<i>n/a</i>
	2005	426	26.3	426	26.3	<i>n/a</i>	<i>n/a</i>
Prostate	Annual Average	422	27.5	422	27.5	<i>n/a</i>	<i>n/a</i>
	<i>5-Year APC Trend</i>		-4.0 *		-4.0 *		<i>n/a</i>
	2001	434	30.0	434	30.0	<i>n/a</i>	<i>n/a</i>
	2002	435	29.4	435	29.4	<i>n/a</i>	<i>n/a</i>
	2003	415	27.1	415	27.1	<i>n/a</i>	<i>n/a</i>
	2004	406	25.9	406	25.9	<i>n/a</i>	<i>n/a</i>
	2005	420	25.9	420	25.9	<i>n/a</i>	<i>n/a</i>
Testis	Annual Average	7	0.4	7	0.4	<i>n/a</i>	<i>n/a</i>
	<i>5-Year APC Trend</i>		^		^		<i>n/a</i>
	2001	6	^	6	^	<i>n/a</i>	<i>n/a</i>
	2002	12	0.7	12	0.7	<i>n/a</i>	<i>n/a</i>
	2003	6	^	6	^	<i>n/a</i>	<i>n/a</i>
	2004	7	^	7	^	<i>n/a</i>	<i>n/a</i>
	2005	5	^	5	^	<i>n/a</i>	<i>n/a</i>

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age group) standard.

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n/a = not applicable

Oregon Mortality Data by Site and Sex, 2001-2005

TABLE 2: CANCER MORTALITY		TOTAL		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend
Primary Sites	Year						
LEUKEMIA	Annual Average	278	7.4	159	9.9	119	5.6
	<i>5-Year APC Trend</i>		-1.0		-0.5		-2.2
	2001	280	7.8	154	9.9	126	6.2
	2002	274	7.5	163	10.5	111	5.4
	2003	268	7.1	150	9.4	118	5.6
	2004	268	7.0	156	9.5	112	5.2
	2005	300	7.7	172	10.2	128	5.6
LYMPHOMA	Annual Average	334	8.8	174	10.8	159	7.3
	<i>5-Year APC Trend</i>		-2.4		-1.2		-4.1
	2001	346	9.5	172	11.2	174	8.4
	2002	320	8.6	164	10.3	156	7.3
	2003	340	9.0	181	11.0	159	7.4
	2004	327	8.5	188	11.6	139	6.2
	2005	336	8.5	167	9.9	169	7.4
Hodgkin Lymphoma	Annual Average	16	0.4	9	0.5	7	0.4
	<i>5-Year APC Trend</i>		+7.7		^		^
	2001	12	0.3	7	^	5	^
	2002	18	0.5	10	^	8	^
	2003	17	0.4	6	^	11	0.5
	2004	11	0.3	8	^	3	^
	2005	23	0.6	13	0.7	10	^
Non-Hodgkin Lymphoma	Annual Average	318	8.4	166	10.3	152	6.9
	<i>5-Year APC Trend</i>		-2.9		-1.7		-4.7
	2001	334	9.2	165	10.8	169	8.2
	2002	302	8.1	154	9.7	148	6.8
	2003	323	8.6	175	10.6	148	6.9
	2004	316	8.2	180	11.1	136	6.0
	2005	313	7.9	154	9.2	159	6.8
MESOTHELIOMA	Annual Average	41	1.1	34	2.2	6	0.3
ICD-10 only	<i>5-Year APC Trend</i>		-8.4		-6.9		^
	2001	52	1.5	44	2.8	8	^
	2002	28	0.8	22	1.4	6	^
	2003	50	1.3	43	2.7	7	^
	2004	38	1.0	33	2.0	5	^
	2005	36	0.9	30	1.9	6	^
MYELOMA	Annual Average	149	4.0	83	5.1	65	3.1
	<i>5-Year APC Trend</i>		-4.2		-3.3		-5.7
	2001	136	3.7	81	5.2	55	2.6
	2002	173	4.7	87	5.5	86	4.2
	2003	159	4.3	95	5.9	64	3.0
	2004	139	3.6	70	4.3	69	3.1
	2005	136	3.5	83	4.9	53	2.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age group) standard.

APC=Average Annual Percentage Change

* Indicates a statistically significant trend.

^ Rate is not calculated for counts <11 due to the instability of rates based on small numbers.

n/a = not applicable

Oregon Mortality Data by Site and Sex, 2001-2005

TABLE 2: CANCER MORTALITY		TOTAL		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend
Primary Sites	Year						
ORAL CAVITY AND PHARYNX	Annual Average	102	2.7	63	3.7	39	1.9
	<i>5-Year APC Trend</i>		-3.6		-1.6		-7.9 *
	2001	115	3.2	68	4.2	47	2.4
	2002	98	2.7	60	3.7	38	1.8
	2003	93	2.5	54	3.2	39	1.8
	2004	94	2.5	58	3.4	36	1.7
	2005	110	2.8	73	4.0	37	1.7
RESPIRATORY SYSTEM	Annual Average	2,105	57.0	1,125	69.1	980	47.9
	<i>5-Year APC Trend</i>		-0.7		-0.5		-1.2
	2001	2,032	57.2	1,089	69.7	943	48.1
	2002	2,109	58.1	1,101	69.0	1,008	50.0
	2003	2,122	57.1	1,144	70.0	978	47.5
	2004	2,123	56.6	1,129	67.9	994	48.0
	2005	2,141	55.9	1,162	68.6	979	46.4
Larynx	Annual Average	38	1.0	28	1.7	10	0.5
	<i>5-Year APC Trend</i>		-8.8		-14.4 *		^
	2001	40	1.1	31	2.0	9	^
	2002	46	1.3	35	2.1	11	0.6
	2003	35	0.9	29	1.7	6	^
	2004	43	1.1	26	1.5	17	0.8
	2005	28	0.7	19	1.1	9	^
Lung and Bronchus	Annual Average	2,056	55.6	1,089	66.9	966	47.2
	<i>5-Year APC Trend</i>		-0.6		-0.2		-1.2
	2001	1,981	55.7	1,052	67.3	929	47.3
	2002	2,057	56.7	1,061	66.5	996	49.4
	2003	2,069	55.7	1,104	67.6	965	46.9
	2004	2,074	55.3	1,099	66.2	975	47.1
	2005	2,097	54.8	1,131	66.9	966	45.7
SKIN	Annual Average	151	4.0	99	5.9	51	2.5
<i>Excluding basal and squamous cell carcinoma</i>	<i>5-Year APC Trend</i>		-1.1		-1.4		0.0
	2001	142	3.9	97	6.0	45	2.1
	2002	155	4.2	98	6.0	57	2.8
	2003	159	4.2	108	6.3	51	2.4
	2004	152	3.9	94	5.6	58	2.7
	2005	145	3.8	100	5.7	45	2.2
Melanoma of the Skin	Annual Average	121	3.2	80	4.7	41	2.0
	<i>5-Year APC Trend</i>		-1.6		-1.8		-0.8
	2001	118	3.2	83	5.0	35	1.7
	2002	123	3.3	77	4.8	46	2.3
	2003	127	3.4	85	4.8	42	2.0
	2004	120	3.1	74	4.4	46	2.2
	2005	117	3.1	83	4.8	34	1.7

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age group) standard.

APC=Average Annual Percentage Change

* Indicates a statistically significant trend.

^ Rate is not calculated for counts <11 due to the instability of rates based on small numbers.

n/a = not applicable

Oregon Mortality Data by Site and Sex, 2001-2005

TABLE 2: CANCER MORTALITY		TOTAL		MALE		FEMALE	
by Site, Sex, and Year (2001-2005)		Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend	Cancer Deaths	Rate/Current Trend
Primary Sites	Year						
SOFT TISSUE	Annual Average	52	1.4	29	1.7	24	1.2
	<i>Includes heart 5-Year APC Trend</i>		+2.2		+10.0 *		-6.5
	2001	47	1.3	23	1.4	24	1.2
	2002	52	1.4	23	1.4	29	1.5
	2003	51	1.4	30	1.8	21	1.0
	2004	56	1.5	34	2.0	22	1.1
	2005	56	1.5	33	1.9	23	1.1
URINARY SYSTEM	Annual Average	354	9.3	240	15.0	114	5.2
	<i>5-Year APC Trend</i>		-0.9		-1.1		-2.2
	2001	328	9.0	233	15.5	95	4.5
	2002	379	10.2	242	15.3	137	6.4
	2003	346	9.1	231	14.4	115	5.3
	2004	356	9.2	244	14.8	112	5.1
	2005	359	9.1	248	14.9	111	4.7
Kidney and Renal Pelvis	Annual Average	149	3.9	95	5.7	54	2.5
	<i>5-Year APC Trend</i>		-1.8		-2.3		-2.3
	2001	137	3.8	92	5.9	45	2.2
	2002	165	4.4	101	6.0	64	3.0
	2003	143	3.8	91	5.6	52	2.4
	2004	158	4.1	101	6.0	57	2.6
	2005	142	3.6	92	5.3	50	2.2
Urinary Bladder	Annual Average	194	5.1	139	8.8	55	2.5
	<i>5-Year APC Trend</i>		-0.2		+0.1		-2.4
	2001	183	4.9	136	9.2	47	2.1
	2002	200	5.4	133	8.7	67	3.1
	2003	190	5.0	134	8.4	56	2.5
	2004	191	4.9	138	8.5	53	2.4
	2005	205	5.1	152	9.4	53	2.2
MISCELLANEOUS SITES	Annual Average	546	14.4	275	17.2	271	12.3
	<i>5-Year APC Trend</i>		-0.9		-0.6		-1.0
	2001	530	14.6	269	17.6	261	12.3
	2002	553	14.8	269	17.2	284	13.1
	2003	546	14.4	269	17.0	277	12.6
	2004	528	13.8	278	17.3	250	11.5
	2005	572	14.4	291	17.2	281	12.2

Rates are per 100,000 and age-adjusted to the 2000 U.S. (19 age group) standard.

APC=Average Annual Percentage Change

* Indicates a statistically significant trend.

^ Rate is not calculated for counts <11 due to the instability of rates based on small numbers.

n/a = not applicable

TECHNICAL NOTES

To understand the data provided in *Cancer in Oregon*, it is important to understand the sources of data, collection methods, data quality, and the significance of reported measures. The following provides background for understanding and interpreting the data contained in this report.

DATA SOURCES

Oregon Incidence Data

All cancer incidence data were obtained directly from the Oregon State Cancer Registry (OSCaR). Reportable diagnoses include all malignant neoplasms diagnosed beginning January 1, 1996, that are *in situ* or invasive with the following exceptions: basal and squamous cell carcinoma of the skin (except of genitalia), and carcinoma *in situ* of the cervix. In addition, beginning with cases diagnosed January 1, 2004, benign brain and central nervous system tumors also became reportable, though they are not included in total incidence counts. (See Appendix A – Reportable Incidence Cases.)

By law, all reportable cancers and benign brain and CNS tumors diagnosed or treated in Oregon must be reported to OSCaR by the patient's physician. In practice, most of the cases included in this report were reported by hospital cancer registrars, who are trained to collect and report cases according to national standards. Since cancer reporting started in 1996, 89 percent of new cancer diagnoses have come from hospitals, 9 percent from physician offices, and 1 percent were identified from review of death certificates. The remaining cases were identified by review of pathology reports from laboratories or by autopsy. Many of the physician office cases were initially identified through follow-up on laboratory reports and death certificates.

The majority of cancer diagnoses reported to OSCaR are the first primary cancer diagnosed for the patient. However, nearly 20% of the cancer diagnoses occur in individuals with a previous cancer. Incidence rates are calculated using the total number of new invasive primary cancers (and *in situ* bladder cancers) diagnosed in a specific time period as the numerator and the population as the denominator.

Cancer data presented in this report follow nationally accepted standards for groupings of site categories for analysis. Cancer groupings for analysis are classified using the National Cancer Institute's SEER Program SEER Site Recodes. (Please see Appendix D, SEER Site Recode ICD-O-3 from NCI SEER program.) The majority of neoplasms are grouped by the site in which they originate. Neoplasms of the lymphatic, hematopoietic, and reticuloendothelial systems, however, are grouped by their histologies (leukemias, lymphomas, etc.) and not by the primary site where they occurred. Melanoma of the skin is a combination of both anatomic site and histological type.

Oregon Mortality Data

All cancer mortality data were obtained from the Center for Health Statistics (CHS) death certificate database. CHS is the state's repository for all vital records and is a major information source for vital statistics and health survey data about Oregonians. Because of different age groups used in age-adjusting, mortality rates in this report are not comparable to rates published by CHS.

Beginning with deaths occurring in 1999, cause of death has been classified using the tenth revision of the International Classification of Disease (ICD-10). The ICD-10 system is closely

compatible with the ICD-Oncology (ICD-O) system used for reporting cancer cases, based on site of origin, whereas the ICD-9 system was not. (See Appendix B, Cancer Causes of Death for SEERSite recodes used in this report and a comparison of ICD-9 and ICD-10.)

For mortality years 1996-1998, the ICD-9 codes did not directly match ICD-O codes. Therefore, discrepancies exist for those years between Oregon's Center for Health Statistics (CHS) counts and the mortality counts reported in this publication. Beginning in 1999, with the change to ICD-10 coding, mortality coding matches exactly for most sites. However, since 2001, the Registry includes newly reportable cancers which are excluded from the CHS cancer counts: polycythaemia vera, refractory anemia and other myelodysplastic syndromes, chronic myeloproliferative disease, and essential thrombocythaemia. (See Appendix B Mortality Recodes for Cancers Newly Reportable in 2001 for a complete list of these causes of death; for further information see Comparability of Cause of Death Between ICD-9 and ICD-10: Preliminary Estimates in *National Vital Statistics Report*, Vol. 49, No. 2, May 18, 2001, Anderson, Minino, Hoyert, Rosenberg.)

Population Data

Population denominators used to calculate Oregon incidence and mortality rates are from the Population Estimates Branch of the US Census Bureau. Denominator data for 1996-1999 are based on the State and County Characteristics Population Estimates from the US Census. Denominator data for 2001-2005 were based on the National Center for Health Statistics (NCHS) estimates of the July 1, 2001-July 1, 2005, United States resident population from the Bridged-race Vintage 2005 postcensal population estimate by year, county, single-year of age, bridged-race,

Hispanic origin, and sex prepared under a collaborative arrangement with the US Census Bureau 2006. Available on the Internet: <http://www.cdc.gov/nchs/about/major/dvs/pop-bridge/popbridge.htm>.

Beginning with the 2000 US Census, respondents have had the option of self-ascribing more than one race. Because cancer registry data continue to be reported with ascription to a single race, it is essential to have comparable numerator data (cancer counts) and denominator data (population counts) to calculate rates. Therefore, population data for the year 2000 and forward are from the 2000 US Census bridged data set, which uses allocation probabilities developed by NCHS to assign the Census's multiple race variables and 31 race categories to a single-race variable with four race categories. For specific information about the bridging methodology, see the NCHS website link above.

Screening Data

Cancer screening data were obtained from the Behavioral Risk Factor Surveillance System (BRFSS) maintained by Oregon's Center for Health Statistics. BRFSS is an ongoing random-digit-dialed telephone survey of adults concerning health-related behaviors. Information is used to guide health promotion and disease prevention programs. BRFSS includes questions on health behavior risk factors such as seat belt use, diet, weight control, tobacco and alcohol use, physical exercise, preventive health screening, and use of preventive and other health care services. See the Oregon BRFSS website: <http://www.dhs.state.or.us/dhs/ph/chs/brfs/brfss.shtml>.

National Data

National incidence data are from the *State Cancer Profiles* by National Cancer Institute's National Program of Cancer Registries (<http://www.statecancerprofiles.cancer.gov>).

National mortality data were calculated using the Surveillance, Epidemiology, and End Results (SEER) Program's SEER*Stat Database: Mortality - All Cause of Death, Public-Use With State, Total U.S. (1969-2004), National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2007. Underlying mortality data were provided by NCHS. [www.cdc.gov/nchs].

National incidence rankings were obtained from the U.S. Cancer Statistics Working Group. *United States Cancer Statistics: 2004 Incidence and Mortality*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2006, available at: <http://apps.nccd.cdc.gov/uscs/>. Mortality rankings were obtained from profiles generated by the National Cancer Institute's State Cancer Profiles available at the following website: <http://www.statecancerprofiles.cancer.gov/>.

DATA QUALITY AND CASE COMPLETENESS

Internal Data Review

When OSCaR receives reports, they are closely reviewed and edited for quality control. The accuracy and usability of OSCaR data has increased through efforts on several different levels. Registry operations and linkage projects including monthly linkage with vital statistics death information help ensure that Registry data are reviewed and corrected on many levels.

Audits. OSCaR conducts random audits of reporting hospitals and facilities across the state to assess quality and completeness of data maintained in the central registry. Hospitals are divided into groups for random selection based on hospital size. In addition, the Registry audits case-reporting completeness from hospitals anytime there is a reduction in case reporting.

Case Completeness. Identifying missed cases through review of pathology reports and death certificates is part of normal Registry procedure. In addition, through data sharing agreements, neighboring states supply records for Oregon residents diagnosed out of state.

Death Clearance. Death clearance is a death certificate review process used to identify additional cases by comparing cancer cases identified from the death certificate file with cases in the Registry file. Deaths due to cancers that have not been reported to the Registry are investigated by contacting the physician who certified the death. After physician inquiry is completed, cases found through the death certificate that still have no physician report are classified as death certificate only (DCO) cases. Cases for which a response and full report are received are classified as physician office reports. Deaths due to cancer diagnosed prior to the Registry's starting date, January 1, 1996, are not added to the Registry.

Full death clearance procedures were not necessary during the first few years of Registry operation since most cancer deaths were due to cancers diagnosed prior to 1996. Initially, death clearance was performed only for selected cancer sites that have low short-term survival: esophagus, liver, lung, pancreas, stomach, multiple myeloma, and unknown cancers. In 1999, death certificate review procedures were expanded to include all

cancer sites. Typically, cancer cases identified by death certificate are those with a poor prognosis, often diagnosed at distant stage or that are not staged due to the patient's poor health.

Due to increased review, more death-certificate only cases were identified from 1999 to present. DCO cases differ from other cases due to increased severity of disease but are categorized as "unknown stage" due to lack of staging information.

Linkages. One notable data quality effort involves assessing and correcting race misclassification for American Indian/Alaska Native patients. Through a cooperative effort between the Oregon State Cancer Registry and the Northwest Portland Area Indian Health Board (NPAIHB), a linkage is done annually with local tribal clinic registry data to determine if AI/ANs have been misclassified as another race. One-fourth of the AI/AN cases currently in the OSCaR database were identified through data linkages.

External Data Review

Federal funding requires that OSCaR be audited by an outside agency every five years to assess the quality and completeness of registry data. In July 2003, Macro International Inc. conducted an audit of OSCaR data. The audit estimated OSCaR's overall case completeness rate at 98.9%, and the overall data accuracy rate for 13 essential data elements at 96.0%. OSCaR was commended for exceeding national standards for both outcomes.

The North American Association of Central Cancer Registries (NAACCR) annually reviews cancer registries for their ability to produce complete, accurate, and timely data. The NAACCR certification program recognizes registries that meet the highest standards with a Gold or Silver Certification. OSCaR data for

diagnosis year 2004 received Gold Certification. OSCaR has received certification for every year of complete data. Additional information about NAACCR certification is available on the web: http://www.naacr.org/index.asp?Col_SectionKey=11&Col_ContentID=54.

EPIDEMIOLOGICAL MEASURES

Cancer Counts

All malignant and non-malignant brain and CNS tumors diagnosed among Oregon residents are reported to OSCaR. Cases are categorized based on the International Classification of Diseases for Oncology (ICD-O) and are presented using the Surveillance, Epidemiology, and End Results (SEER) Program SEERSite recodes.

Cancer counts represent the number of primary cancers reported to OSCaR, not the number of persons with cancer. People diagnosed with more than one primary tumor count as more than one "case". About 20% of the cases reported to OSCaR occur in a person who has already been diagnosed with another cancer.

The number of cancers is reported in two ways - total cancers and invasive cancers. With the exception of *in situ* bladder cancers, the invasive cancer category excludes *in situ* cancers. The total cancer category includes all cancers, regardless of stage at diagnosis, with the exception of *in situ* cervical cancer and basal and squamous cell carcinoma of the non-genital skin since they are not reported to the Registry.

Total count may exceed sum of male and female counts due to the inclusion in the total of persons identified in case reports as hermaphrodites and transsexuals.

Cancer Rates

In analyzing Oregon's cancer data, we looked at various measures commonly used in epidemiologic studies of cancer. One measure is a rate. Rates help compare the burden of disease across populations of various sizes.

Incidence rates provide information on the frequency with which cancers occur in the population. Only invasive cancers (and *in situ* bladder cancers) are included in rate calculations. The mortality rate describes the frequency of deaths due to invasive (and *in situ* bladder) cancer. Unless otherwise noted, all rates in this report are per 100,000 population. Rates based on counts of fewer than 11 cases are considered unstable and are not displayed in tables.

Crude Rates. Crude rates are used when a summary measurement of burden is needed and there is no need to adjust for age. Since cancer risk is very dependent upon age, age-adjusted rates are more useful for comparison among regions, time periods, etc. Crude rates are not included in the tables in the annual report but are still reported for individual sites in the *FastFacts* sections.

The following population denominators were used to calculate crude rates:

Oregon's Population by Year			
Year	Total	Male	Female
1996	3,247,111	1,604,527	1,642,584
1997	3,304,469	1,634,309	1,670,160
1998	3,352,449	1,659,190	1,693,259
1999	3,393,941	1,681,715	1,712,226
2000	3,430,707	1,701,604	1,729,103
2001	3,472,629	1,723,589	1,749,040
2002	3,520,355	1,748,055	1,772,300
2003	3,559,596	1,768,478	1,791,118
2004	3,594,586	1,786,769	1,807,817
2005	3,641,056	1,810,911	1,830,145

Age-Adjusted Rates. Age-adjusted rates are calculated to allow comparisons between two different populations with different age distributions. Age-adjusted rates are expressed as events per 100,000 individuals per year. All age-adjusted rates in this report are calculated using the Year 2000 standard population with 19 age groups (<1, 1-4, 5-9, 10-14, 15-19, 20-24...85+).

Cancer Trends

All trend data should be interpreted with caution. Over the years, changes in coding and collection standards have occurred, which affect the comparability of the data. In 1999, the national change from ICD-9 classification to ICD-10 changed how cause of death is recorded and how cancer mortality data correlate with cancer incidence data. In 2001, major changes affecting coding for staging and cancer reporting came into effect for cases collected by cancer registries nationwide.

Trends were calculated using two-year averages of the age-adjusted rates as endpoints. The trends are used to compare general Oregon trends with national trends based on direction (increase or decrease) and slope (rapid or slow change). This trend analysis is intended to describe broad, temporal changes of cancer rates in Oregon.

Trends are affected by a number of factors including the following:

- improved reporting from hospitals,
- recent increases in treatment at outpatient facilities,
- changes in reporting requirements,
- changes in coding instructions,
- changes in demographic characteristics of underlying populations,
- random variation, and
- true changes in the cancer burden.

All trends are based on rates per 100,000 population that are age-adjusted to the 19-age-group Year 2000 Standard Population (Census P25-1130, <http://seer.cancer.gov/stdpopulations/19ages.proportions.html>).

Geographic Comparisons

County Comparisons. This report compares incidence and mortality rates by county.

These analyses may help target screening and educational efforts. Because some counties with small populations only have a few cases reported, rates for those counties are unstable and must be interpreted with caution.

Regional Comparisons. It is important to recognize that multiple factors influence geographic variation in cancer rates. Despite the multitude of factors influencing cancer variation by region, these maps may be used to suggest regions to target screening and prevention programs or to expand treatment facilities.

In counties where the number of cases was too small to come up with reliable incidence rates and trends, those counties have been grouped with neighboring counties in order to provide more reliable rates and trends

In addition to random variation, the following are also responsible for geographic variation of cancer rates:

Population Demographics. Some cancers have different rates among different racial or ethnic groups. For example, breast cancer rates are generally higher in white women and prostate cancer rates are generally higher in black men. Therefore, racial makeup of an area should be considered when evaluating regional differences.

Screening. In areas with higher cancer screening rates, more cancers will be diagnosed. For several cancers, notably cervical, breast, and colorectal, a higher percentage of early stage diagnoses associated with higher screening rates can result in more favorable prognosis for these cancers. Comparing both incidence and mortality rates is important to gain a more complete picture of regional cancer differences.

Reporting. Although OSCaR has a total case completeness rate of over 95%, cancer reporting may differ by region in terms of completeness and type of report source (hospital vs. physician office).

Software

All incidence and mortality counts were generated using SEER*Stat [Surveillance Research Program, National Cancer Institute SEER*Stat software (<http://www.seer.cancer.gov/seerstat>) Version 6.3.6, March 16, 2007]. Data were formatted for SEER*Stat using SEER Prep [Surveillance Research Program, National Cancer Institute SEER*Prep software (<http://www.seer.cancer.gov/seerprep/>) Version 2.3.6, May 2006]. Trends were calculated using age-adjusted rates and reported as an annual percent change (APC). The APC is calculated by fitting a weighted, least-squares regression line to the natural logarithm of the rates using year as a regression variable.

GLOSSARY

Age. The age of the patient is in completed years at the time of diagnosis or death.

Age-Adjusted Rate. The age-adjusted rate is “the rate that would occur if the observed age-specific rates were present in a population with an age distribution equal to that of a standard population” (Anderson RN, Rosenberg HM. Age standardization of death rates: Implementation of the Year 2000 Standard. National Vital Statistics Reports; vol. 47 no. 3. Hyattsville, Maryland: National Center for Health Statistics, 1998).

Since cancer rates vary with age and populations vary with respect to their age distribution, cancer incidence and mortality rates are age-adjusted to allow comparison of rates. In this report, age-adjusted rates are calculated by the direct method, multiplying age-specific rates by the age distribution of the 2000 United States Standard Population with 19 age groups.

Age-Specific Rate. The age-specific rate is the average annual rate per 100,000 population for a specific age group.

Annual Percent Change. The Annual Percent Change (APC), or trend, is the average percent change in the annual rate among years for the time period analyzed. This is calculated using SEER methodology.

Benign. A benign tumor has abnormal growth without cancerous behavior. It is non-malignant. A benign tumor can be life threatening because of rapid growth or its location.

Childhood Cancer. This report includes all cancers occurring in individuals under the age of 20 in the section on childhood cancer. Children’s

cancer rates are usually expressed per 1,000,000 population. The International Classification of Childhood Cancer (ICCC), which emphasizes tumor morphology, is used for defining tumors occurring in children.

Confidence Interval. Confidence intervals show range of random variation. When two confidence intervals do not overlap, the two rates are considered statistically significantly different and the difference between the two rates is more than that expected by random chance. However, with a 95% confidence interval, we expect that five times out of 100, the differences will occur by chance. With 36 counties and 20 cancer sites, we might see as many as 36 instances where the rate for a county is statistically significantly different from the state rate just by chance. Confidence intervals were calculated using SEER methodology.

Crude Rate. The crude rate is the number of events in the population, without regard to the age distribution of the population.

Ethnicity. Hispanic or Latino ethnicity is calculated separately from race and includes Mexican, Puerto Rican, Cuban, South or Central American (other than Brazil), and other specified Hispanic, Latino, or Spanish.

ICD-9. The Ninth Revision of the International Classification of Diseases. Mortality data for years 1996-1998 are recorded using ICD-9. This classification system is not directly compatible with the ICD-O classification system used for cancer reporting.

ICD-10. The 10th Revision of the International Classification of Diseases. Mortality data recording converted to ICD-10 beginning with death year 1999. This classification system

mirrors the ICD-O system used for cancer reporting.

ICD-O-3. ICD-O-3 is the Third Edition of the International Classification of Diseases for Oncology, a variation of the ICD system specifically designed for cancer coding. Cancer incidence is reported to the Registry using the ICD-O system. The ICD-10 cancer site classifications closely follow this system.

Incidence. Cancer incidence is the annual or average annual count of new invasive cancers and *in situ* bladder cancers. Cancer incidence is the number of new diagnoses and not the same as the number of Oregonians living with cancer.

Malignant. A tumor made up of cancer cells of a type that can spread to other parts of the body is considered malignant.

Metastatic/Distant. The most advanced stage of a cancer in which cells from the original tumor break away, travel to other parts of the body, and continue to grow. Although the cancer has spread to an additional site or sites, it is still named after the original site of the tumor. These cancers are classified as late-stage cancers.

Mortality. Cancer mortality is the annual or average annual number of deaths due to cancer.

M/I Ratio. The M/I (mortality-to-incidence) ratio provides a measure of disease severity. The M/I ratio is the number of deaths divided by the number of invasive incidence cases for a specified cancer during a specific time period. The higher the value, the poorer the prognosis for that cancer. It is possible to have an M/I Ratio exceed 1.0 if the number of deaths for a population is greater than the number of new diagnoses during the specific time period.

NAACCR (North American Association of Central Cancer Registries). NAACCR is a professional organization that develops and promotes uniform data standards for cancer registration; provides education and training; certifies population-based registries; aggregates and publishes data from central cancer registries; and promotes the use of cancer surveillance data and systems for cancer control and epidemiologic research, public health programs, and patient care to reduce the burden of cancer in North America.

NPCR (National Program of Cancer Registries). NPCR was established at the Centers for Disease Control and Prevention by the passage of Public Law 102-515. NPCR collects information on cancer cases from registries covering 96% of the nation's population.

Prevalence. Cancer prevalence is the rate or number of people in a specific population living with cancer.

Primary Site. The primary site is the human organ or system in which the malignancy originates.

Race. In this report, race consists of one variable with four race categories: African American, American Indian/Alaskan Native, Asian/Pacific Islander, and white.

SEER (Surveillance, Epidemiology, and End Results). The National Cancer Institute provides information on cancer incidence and survival in the United States through the SEER program.

Stage at Diagnosis. Stage at diagnosis describes how far a tumor has spread from its site of origin at the time of diagnosis. The cancer stages, in order of severity and spread, are *in situ*, localized, regional, and distant. Local, regional and distant

stages are considered invasive. A number of cancers are also reported as unstaged (unknown stage at diagnosis). Except for *in situ* bladder cancer, *in situ* cancers are not included in the calculation of incidence rates. All reported cancers are included in the calculation of stage at diagnosis.

<i>In Situ</i>	A tumor that fulfills all microscopic criteria for malignancy, but does not invade or penetrate surrounding tissue.
Localized	A tumor that is invasive but remains restricted to the organ of origin.
Regional	A tumor that has spread by direct extension to immediately adjacent organs or tissues and/or metastasized (spread through the blood stream) to regional lymph nodes, but appears to have spread no further.
Distant	A tumor that has spread by direct extension beyond the immediately adjacent organs or tissues, and/or metastasized to distant lymph nodes or other distant tissues.
Unstaged	Insufficient information available to determine the stage of disease at diagnosis.

YPLL. The years of potential life lost (YPLL) index measures years before a specific age that a person dying prematurely would otherwise have contributed to society. In this report, years of potential life is indexed to age 65. For example, a person dying of cancer at age 35 would have a YPLL at age 65 of 30 years.

Appendices

A. List of Reportable Conditions with ICD-9-CM Diagnosis Code and Preferred ICD-0-3 Terminology

Reportable cases (with diagnosis date 2004 or later) include all invasive and *in situ* malignant neoplasms and specified benign neoplasms of the brain and CNS as listed below:

<u>ICD-9-CM</u>	<u>Terminology</u>
140.0 – 208.9	Malignant neoplasms (primary and secondary diagnosis)
225.0	Benign neoplasm of brain
225.1	Benign neoplasm of cranial nerves
225.2	Benign neoplasm of cerebral meninges; cerebral meningioma
225.3	Benign neoplasm of spinal cord, cauda equina
225.4	Benign neoplasm of spinal meninges; spinal meningioma
225.8	Benign neoplasm of other specified sites of nervous system
225.9	Benign neoplasm of nervous system, part unspecified
227.3	Benign neoplasm of pituitary, craniopharyngeal duct, craniobuccal pouch, hypophysis, Rathke's pouch, sella turcica
227.4	Benign neoplasm of pineal gland, pineal body
230.0 – 234.9	Carcinoma <i>in situ</i> (excludes 232-skin* and 233.1-cervix uteri*)
237.0	Neoplasm of uncertain behavior of pituitary gland and craniopharyngeal duct
237.1	Neoplasm of uncertain behavior of pineal gland
237.5	Neoplasm of uncertain behavior of brain and spinal cord
237.6	Neoplasm of uncertain behavior of meninges; NOS, cerebral, spinal
237.70	Neurofibromatosis, Unspecified von Recklinghausen's Disease
237.71	Neurofibromatosis, Type One von Recklinghausen's Disease
237.72	Neurofibromatosis, Type Two von Recklinghausen's Disease
237.9	Neoplasm of uncertain behavior of other and unspecified parts of the nervous system; cranial nerves
238.4	Polycythemia vera
238.6	Solitary plasmacytoma, extramedullary plasmacytoma
238.7	Other lymphatic and hematopoietic tissue diseases: Chronic myeloproliferative disease Myelosclerosis with myeloid metaplasia Essential thrombocythemia Refractory cytopenia with multilineage dysplasia Myelodysplastic syndrome with 5q syndrome Therapy-related myelodysplastic syndrome
239.0 – 239.9**	Neoplasms of unspecified nature
273.2	Gamma heavy chain disease; Franklin disease
273.3	Waldenstrom's macroglobulinemia
284.9	Refractory anemia without sideroblasts, Refractory anemia, unspecified
285.0	Refractory anemia with ringed sideroblasts, Refractory anemia with excess blasts, Refractory anemia with excess blasts in transformation
288.3	Hypereosinophilic Syndrome
289.8	Acute myelofibrosis

Note: Reportable diagnoses include VIN III, VAIN III, AIN III, juvenile astrocytoma, pilocytic astrocytoma, and piloid astrocytoma.

Prior to 2004, benign tumors of the brain and central nervous system were not reportable

*Exclusions: Basal / squamous cell carcinoma of skin, except of the genitalia, and *in situ* carcinoma of the cervix uteri and PIN III are not reportable.

**Code 237.71 and Codes 239.0 – 239.9 may not be reportable, however, these diagnoses may indicate a reportable condition and should be reviewed.

**B. Mortality Codes for Cancer Deaths
Newly Reportable in 2001**

ICD-9	ICD-O Histology (Site C42.1)	ICD-10	Added to Miscellaneous Mortality Category
238.4 207.1	9950/3	D45.0	Polycythemia vera
284.9 238.7	9980/3 9982/3 9983/3 9984/3 9985/3 9986/3 9987/3 9989/3	D46.0	Myelodysplastic syndrome
238.7	9960/3 9961/3	D47.1	Chronic myeloproliferative disease (myelofibrosis with myeloid metaplasia, myeloproliferative disease, NOS, myelosclerosis (megakaryocytic) with myeloid metaplasia)
238.7	9962/3	D47.3	Essential (hemorrhagic) thrombocytopenia (idiopathic hemorrhagic thrombocytopenia)

Appendices

C. SEER Site Recode for Incidence, ICD-O-3 Definition

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)	SEER Site Recode	
Oral Cavity and Pharynx				
Lip	C000-C009	excluding 9590-9989, 9050-9055, 9140	20010	
Tongue	C019-C029		20020	
Salivary Gland	C079-C089		20030	
Floor of Mouth	C040-C049		20040	
Gum and Other Mouth	C030-C039, C050-C059, C060-C069		20050	
Nasopharynx	C110-C119		20060	
Tonsil	C090-C099		20070	
Oropharynx	C100-C109		20080	
Hypopharynx	C129, C130-C139		20090	
Other Oral Cavity and Pharynx	C140, C142-C148		20100	
Digestive System				
Esophagus	C150-C159		excluding 9590-9989, 9050-9055, 9140	21010
Stomach	C160-C169			21020
Small Intestine	C170-C179	21030		
Colon and Rectum				
Colon excluding Rectum				
Cecum	C180	excluding 9590-9989, 9050-9055, 9140	21041	
Appendix	C181		21042	
Ascending Colon	C182		21043	
Hepatic Flexure	C183		21044	
Transverse Colon	C184		21045	
Splenic Flexure	C185		21046	
Descending Colon	C186		21047	
Sigmoid Colon	C187		21048	
Large Intestine, NOS	C188-C189, C260		21049	
Rectum and Rectosigmoid Junction				
Rectosigmoid Junction	C199	excluding 9590-9989, 9050-9055, 9140	21051	
Rectum	C209		21052	
Anus, Anal Canal and Anorectum	C210-C212, C218		21060	
Liver and Intrahepatic Bile Duct				
Liver	C220	excluding 9590-9989, 9050-9055, 9140	21071	
Intrahepatic Bile Duct	C221		21072	
Gallbladder	C239		21080	
Other Biliary	C240-C249		21090	
Pancreas	C250-C259		21100	
Retroperitoneum	C480		21110	
Peritoneum, Omentum and Mesentery	C481-C482		21120	
Other Digestive Organs	C268-C269, C488		21130	

Appendices

C. SEER Site Recode for Incidence, ICD-O-3 Definition (Continued)

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)	SEERSite Recode
Respiratory System			
Nose, Nasal Cavity and Middle Ear	C300-C301, C310-C319	excluding 9590-9989, 9050-9055, 9140	22010
Larynx	C320-C329		22020
Lung and Bronchus	C340-C349		22030
Pleura	C384		22050
Trachea, Mediastinum and Other Respiratory Organs	C339, C381-C383, C388, C390, C398, C399		22060
Bones and Joints	C400-C419	excluding 9590-9989, 9050-9055, 9140	23000
Soft Tissue including Heart	C380, C470-C479, C490-C499	excluding 9590-9989, 9050-9055, 9140	24000
Skin excluding Basal and Squamous			
Melanoma of the Skin	C440-C449	8720-8790	25010
Other Non-Epithelial Skin	C440-C449	excluding 8000-8005, 8010-8045, 8050-8084, 8090-8110, 8720-8790, 9590-9989, 9050-9055, 9140	25020
Breast	C500-C509	excluding 9590-9989, 9050-9055, 9140	26000
Female Genital System			
Cervix Uteri	C530-C539	excluding 9590-9989, 9050-9055, 9140	27010
Corpus and Uterus, NOS			
Corpus Uteri	C540-C549	excluding 9590-9989, 9050-9055, 9140	27020
Uterus, NOS	C559		27030
Ovary	C569		27040
Vagina	C529		27050
Vulva	C510-C519		27060
Other Female Genital Organs	C570-C589		27070
Male Genital System			
Prostate	C619	excluding 9590-9989, 9050-9055, 9140	28010
Testis	C620-C629		28020
Penis	C600-C609		28030
Other Male Genital Organs	C630-C639		28040
Urinary System			
Urinary Bladder	C670-C679	excluding 9590-9989, 9050-9055, 9140	29010
Kidney and Renal Pelvis	C649, C659		29020
Ureter	C669		29030
Other Urinary Organs	C680-C689		29040
Eye and Orbit	C690-C699	excluding 9590-9989, 9050-9055, 9140	30000
Brain and Other Nervous System			
Brain	C710-C719	excluding 9530-9539, 9590-9989, 9050-9055, 9140	31010
Cranial Nerves Other Nervous System	C710-C719	9530-9539	31040
	C700-C709, C720-C729	excluding 9590-9989, 9050-9055, 9140	
Endocrine System			
Thyroid	C739	excluding 9590-9989, 9050-9055, 9140	32010
Other Endocrine including Thymus	C379, C740-C749, C750-C759		32020

Appendices

C. SEER Site Recode for Incidence, ICD-O-3 Definition (Continued)

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)	SEER Site Recode
Lymphoma			
Hodgkin Lymphoma			
Hodgkin - Nodal	C024, C098-C099, C111, C142, C379, C422, C770-C779	9650-9667	33011
Hodgkin - Extranodal	All other sites		33012
Non-Hodgkin Lymphoma			
NHL - Nodal	C024, C098, C099, C111, C142, C379, C422, C770-C779	9590-9596, 9670-9671, 9673, 9675, 9678-9680, 9684, 9687, 9689-9691, 9695, 9698-9702, 9705, 9708-9709, 9714-9719, 9727-9729, 9823, 9827	33041
NHL - Extranodal	All sites except C024, C098-C099, C111, C142, C379, C422, C770-C779	9590-9596, 9670-9671, 9673, 9675, 9678-9680, 9684, 9687, 9689-9691, 9695, 9698-9702, 9705, 9708-9709, 9714-9719, 9727-9729	33042
Myeloma			
Leukemia			
Lymphocytic Leukemia			
Acute Lymphocytic Leukemia		9826, 9835-9837	35011
Chronic Lymphocytic Leukemia	C420, C421, C424	9823	35012
Other Lymphocytic Leukemia		9820, 9832-9834, 9940	35013
Myeloid and Monocytic Leukemia			
Acute Myeloid Leukemia		9840, 9861, 9866, 9867, 9871-9874, 9895-9897, 9910, 9920	35021
Acute Monocytic Leukemia		9891	35031
Chronic Myeloid Leukemia		9863, 9875, 9876, 9945, 9946	35022
Other Myeloid/Monocytic Leukemia		9860, 9930	35023
Other Leukemia			
Other Acute Leukemia		9801, 9805, 9931	35041
Aleukemic, subleukemic and NOS		9733, 9742, 9800, 9831, 9870, 9948, 9963, 9964	35043
	C420, C421, C424	9827	
Mesothelioma			
Kaposi Sarcoma			
Miscellaneous			
		9740-9741, 9750-9758, 9760-9769, 9950, 9960-9962, 9970, 9975, 9980, 9982-9987, 9989	
	C760-C768, C809	excluding 9590-9989, 9050-9055, 9140	37000
	C420-C424		
	C770-C779		
Invalid	Site or histology code not within valid range or site code not found in this table.		99999

The values of SEER site recode variables are based on the primary site and histology data fields submitted to SEER by the registries. The site recode variables define the major cancer sites that are commonly used in the reporting of cancer incidence data. For example, there is a section of the SEER Cancer Statistics Review for each major site corresponding to groupings in a site recode variable. The site recode variables are added to the SEER databases as a convenience for researchers.

Appendices

D. SEER Causes of Death Recodes

Cancer Causes of Death	ICD-9 - 1996-1998	ICD-10 - 1999+	Recode
All Malignant Cancers	140-208, 238.6	C00-C97	--
Oral Cavity and Pharynx			
Lip	140	C00	20010
Tongue	141	C01-C02	20020
Salivary Gland	142	C07-C08	20030
Floor of Mouth	144	C04	20040
Gum and Other Mouth	143, 145	C03, C05-C06	20050
Nasopharynx	147	C11	20060
Tonsil	146.0-146.2	C09	20070
Oropharynx	146.3-146.9	C10	20080
Hypopharynx	148	C12-C13	20090
Other Oral Cavity and Pharynx	149	C14	20100
Digestive System			
Esophagus	150	C15	21010
Stomach	151	C16	21020
Small Intestine	152	C17	21030
Colon and Rectum			
Colon excluding Rectum	153, 159.0	C18, C26.0	21040
Rectum and Rectosigmoid Junction	154.0-154.1	C19-C20	21050
Anus, Anal Canal and Anorectum	154.2-154.3, 154.8	C21	21060
Liver and Intrahepatic Bile Duct			
Liver	155.0, 155.2	C22.0, C22.2-C22.4, C22.7, C22.9	21071
Intrahepatic Bile Duct	155.1	C22.1	21072
Gallbladder	156	C23	21080
Other Biliary	156.1-156.2, 156.8-156.9	C24	21090
Pancreas	157	C25	21100
Retroperitoneum	158	C48.0	21110
Peritoneum, Omentum and Mesentery	158.8-158.9	C45.1, C48.1-C48.2	21120
Other Digestive Organs	159.8-159.9	C26.8-C26.9, C48.8	21130
Respiratory System			
Nose, Nasal Cavity and Middle Ear	160	C30-C31	22010
Larynx	161	C32	22020
Lung and Bronchus	162.2-162.5, 162.8-162.9	C34	22030
Pleura	163	C38.4, C45.0	22050
Trachea, Mediastinum and Other Respiratory Organs	162.0, 164.2-164.3, 164.8-164.9, 165	C33, C38.1-C38.3, C38.8, C39	22060
Bones and Joints	170	C40-C41	23000
Soft Tissue Include Heart	164.1, 171	C47, C49, C38.0, C45.2	24000
Skin excluding Basal and Squamous			
Melanoma of the Skin	172	C43	25010
Other Non-Epithelial Skin	173	C44, C46	25020
Breast	174-175	C50	26000
Female Genital System			
Cervix Uteri	180	C53	27010
Corpus and Uterus, NOS			
Corpus Uteri	182	C54	27020
Uterus, NOS	179	C55	27030

Appendices

D. SEER Causes of Death Recodes (Continued)

Cancer Causes of Death	ICD-9 - 1996-1998	ICD-10 - 1999+	Recode
Ovary	183	C56	27040
Vagina	184	C52	27050
Vulva	184.1-184.4	C51	27060
Other Female Genital Organs	181, 183.2-183.5, 183.8-183.9, 184.8-184.9	C57-C58	27070
Male Genital System			
Prostate	185	C61	28010
Testis	186	C62	28020
Penis	187.1-187.4	C60	28030
Other Male Genital Organs	187.5-187.9	C63	28040
Urinary System			
Urinary Bladder	188	C67	29010
Kidney and Renal Pelvis	189.0-189.1	C64-C65	29020
Ureter	189.2	C66	29030
Other Urinary Organs	189.3-189.4, 189.8-189.9	C68	29040
Eye and Orbit	190	C69	30000
Brain and Other Nervous System	191, 192	C70, C71, C72	31010
Endocrine System			
Thyroid	193	C73	32010
Other Endocrine including Thymus	164.0, 194	C37, C74-C75	32020
Lymphoma			
Hodgkin Lymphoma	201	C81	33010
Non-Hodgkin Lymphoma	200, 202.0-202.2, 202.8-202.9	C82-C85, C96.3	33040
Myeloma	203.0, 238.6	C90.0, C90.2	34000
Leukemia			
Lymphocytic Leukemia			
Acute Lymphocytic Leukemia	204	C91.0	35011
Chronic Lymphocytic Leukemia	204.1	C91.1	35012
Other Lymphocytic Leukemia	202.4, 204.2, 204.8-204.9	C91.2-C91.4, C91.7, C91.9	35013
Myeloid and Monocytic Leukemia			
Acute myeloid	205.0, 207.0, 207.2	C92.0, C92.4-C92.5, C94.0, C94.2	35021
Acute Monocytic Leukemia	206	C93.0	35031
Chronic Myeloid Leukemia	205.1	C92.1	35022
Other Myeloid/Monocytic Leukemia	205.2-205.3, 205.8-205.9, 206.1-206.2, 206.8-206.9	C92.2-C92.3, C92.7, C92.9, C93.1-C93.2, C93.7, C93.9	35023
Other Leukemia			
Other Acute Leukemia	208	C94.4, C94.5, C95.0	35041
Aleukemic, subleukemic and NOS	203.1, 207.1, 207.8, 208.1-208.2, 208.8-208.9	C90.1, C91.5, C94.1, C94.3, C94.7, C95.1, C95.2, C95.7, C95.9	35043
Mesothelioma	N/A	C45	36010
Kaposi Sarcoma	N/A	C46	36020
Miscellaneous Malignant Cancer	159.1, 195-199, 202.3, 202.5-202.6, 203.8	C26.1, C45.7+, C45.9+, C76-C80, C88, C96.0-C96.2, C96.7, C96.9, C97	37000
In Situ, Benign or Unknown Behavior Neoplasms	210-237, 238.0-238.5, 238.7-238.9, 239	D00-D48	38000

Appendices

E. Site/Histology Recodes Based on International Classification of Childhood Cancer

Site Group	ICD-O-3 Histology (Type)	ICD-O-2/3	Recode
I Leukemias, myeloproliferative diseases, and myelodysplastic diseases			
(a) Lymphoid leukemias	9820, 9823, 9826, 9827, 9831-9837, 9940, 9948	C000-C809	11
(b) Acute myeloid leukemias	9840, 9861, 9866, 9867, 9870-9874, 9891, 9895-9897, 9910, 9920, 9931	C000-C809	12
(c) Chronic myeloproliferative diseases	9863, 9875, 9876, 9950, 9960-9964	C000-C809	13
(d) Myelodysplastic syndrome and other myeloproliferative diseases	9945, 9946, 9975, 9980, 9982-9987, 9989	C000-C809	14
(e) Unspecified and other specified leukemias	9800, 9801, 9805, 9860, 9930	C000-C809	15
II Lymphomas and reticuloendothelial neoplasms			
(a) Hodgkin lymphomas	9650-9655, 9659, 9661-9665, 9667	C000-C809	21
(b) Non-Hodgkin lymphomas (except Burkitt lymphoma)	9591, 9670, 9671, 9673, 9675, 9678-9680, 9684, 9689-9691, 9695, 9698-9702, 9705, 9708, 9709, 9714, 9716-9719, 9727-9729, 9731-9734, 9760-9762, 9764-9769, 9970	C000-C809	22
(c) Burkitt lymphoma	9687	C000-C809	23
(d) Miscellaneous lymphoreticular neoplasms	9740-9742, 9750, 9754-9758	C000-C809	24
(e) Unspecified lymphomas	9590, 9596	C000-C809	25
III CNS and miscellaneous intracranial and intraspinal neoplasms			
(a) Ependymomas and choroid plexus tumor	9383, 9390-9394	C000-C809	31
(b) Astrocytomas	9380	C723	32
	9384, 9400-9411, 9420, 9421-9424, 9440-9442	C000-C809	32
(c) Intracranial and intraspinal embryonal tumors	9470-9474, 9480, 9508	C000-C809	33
	9501-9504	C700-C729	33
(d) Other gliomas	9380	C700-C722, C724-C729, C751, C753	34
	9381, 9382, 9430, 9444, 9450, 9451, 9460	C000-C809	34
(e) Other specified intracranial and intraspinal neoplasms	8270-8281, 8300, 9350-9352, 9360-9362, 9412, 9413, 9492, 9493, 9505-9507, 9530-9539, 9582	C000-C809	35
(f) Unspecified intracranial and intraspinal neoplasms	8000-8005	C700-C729, C751-C753	36
IV Neuroblastoma and other peripheral nervous cell tumors			
(a) Neuroblastoma and ganglioneuroblastoma	9490, 9500	C000-C809	41
(b) Other peripheral nervous cell tumors	8680-8683, 8690-8693, 8700, 9520-9523	C000-C809	42
	9501-9504	C000-C699, C739-C768, C809	42

Appendices

E. Site/Histology Recodes Based on International Classification of Childhood Cancer (Continued)

Site Group	ICD-O-3 Histology (Type)	ICD-O-2/3	Recode
V Retinoblastoma	9510-9514	C000-C809	50
VI Renal tumors			
(a) Nephroblastoma and other nonepithelial renal tumors	8959, 8960, 8964-8967 8963, 9364	C000-C809 C649	61 61
(b) Renal carcinomas	8010-8041, 8050-8075, 8082, 8120-8122, 8130-8141, 8143, 8155, 8190-8201, 8210, 8211, 8221-8231, 8240, 8241, 8244-8246, 8260-8263, 8290, 8310, 8320, 8323, 8401, 8430, 8440, 8480-8490, 8504, 8510, 8550, 8560-8576 8311, 8312, 8316-8319, 8361	C649 C000-C809	62 62
(c) Unspecified malignant renal tumors	8000-8005	C649	63
VII Hepatic tumors			
(a) Hepatoblastoma	8970	C000-C809	71
(b) Hepatic carcinomas	8010-8041, 8050-8075, 8082, 8120-8122, 8140, 8141, 8143, 8155, 8190-8201, 8210, 8211, 8230, 8231, 8240, 8241, 8244-8246, 8260-8264, 8310, 8320, 8323, 8401, 8430, 8440, 8480-8490, 8504, 8510, 8550, 8560-8576 8160-8180	C220, C221 C000-C809	72 72
(c) Unspecified malignant hepatic tumors	8000-8005	C220, C221	73
VIII Malignant bone tumors			
(a) Osteosarcomas	9180-9187, 9191-9195, 9200	C400-C419, C760-C768, C809	81
(b) Chondrosarcomas	9210, 9220, 9240 9221, 9230, 9241-9243	C400-C419, C760-C768, C809 C000-C809	82 82
(c) Ewing tumor and related sarcomas of bone	9260 9363-9365	C400-C419, C760-C768, C809 C400-C419	83 83
(d) Other specified malignant bone tumors	8810, 8811, 8823, 8830 8812, 9250, 9261, 9262, 9270-9275, 9280-9282, 9290, 9300-9302, 9310-9312, 9320-9322, 9330, 9340-9342, 9370-9372	C400-C419 C000-C809	84 84
(e) Unspecified malignant bone tumors	8000-8005, 8800, 8801, 8803-8805	C400-C419	85
IX Soft tissue and other extrasosseous sarcomas			
(a) Rhabdomyosarcomas	8900-8905, 8910, 8912, 8920, 8991	C000-C809	91
(b) Fibrosarcomas, peripheral nerve sheath tumors, and other fibrous neoplasms	8810, 8811, 8813-8815, 8821, 8823, 8834-8835 8820, 8822, 8824-8827, 9150, 9160, 9491, 9540-9571, 9580	C000-C399, C440-C768, C809 C000-C809	92 92

Appendices

E. Site/Histology Recodes Based on International Classification of Childhood Cancer (Continued)

Site Group	ICD-O-3 Histology (Type)	ICD-O-2/3	Recode
(c) Kaposi sarcoma	9140	C000-C809	93
(d) Other specified soft tissue sarcomas	8587, 8710-8713, 8806, 8831-8833, 8836, 8840-8842, 8850-8858, 8860-8862, 8870, 8880, 8881, 8890-8898, 8921, 8982, 8990, 9040-9044, 9120-9125, 9130-9133, 9135, 9136, 9141, 9142, 9161, 9170-9175, 9231, 9251, 9252, 9373, 9581	C000-C809	94
	8830	C000-C399, C440-C768, C809	94
	8963	C000-C639, C659-C699, C739-C768, C809	94
	9180, 9210, 9220, 9240	C490-C499	94
	9260	C000-C399, C470-C759	94
	9364	C000-C399, C470-C639, C659-C699, C739-C768, C809	94
	9365	C000-C399, C470-C639, C659-C768, C809	94
(e) Unspecified soft tissue sarcomas	8800-8805	C000-C399, C440-C768, C809	95
X Germ cell tumors, trophoblastic tumors, and neoplasms of gonads			
(a) Intracranial and intraspinal germ cell tumors	9060-9065, 9070-9072, 9080-9085, 9100, 9101	C700-C729, C751-C753	101
(b) Malignant extracranial and extragonadal germ cell tumors	9060-9065, 9070-9072, 9080-9085, 9100-9105	C000-C559, C570-C619, C630-C699, C739-C750, C754-C768, C809	102
(c) Malignant gonadal germ cell tumors	9060-9065, 9070-9073, 9080-9085, 9090, 9091, 9100, 9101	C569, C620-C629	103
(d) Gonadal carcinomas	8010-8041, 8050-8075, 8082, 8120-8122, 8130-8141, 8143, 8190-8201, 8210, 8211, 8221-8241, 8244-8246, 8260-8263, 8290, 8310, 8313, 8320, 8323, 8380-8384, 8430, 8440, 8480-8490, 8504, 8510, 8550, 8560-8573, 9000, 9014, 9015	C569, C620-C629	104
	8441-8444, 8450, 8451, 8460-8473	C000-C809	104

Appendices

E. Site/Histology Recodes Based on International Classification of Childhood Cancer (Continued)

Site Group	ICD-O-3 Histology (Type)	ICD-O-2/3	Recode
(e) Other and unspecified malignant gonadal tumors	8590-8671	C000-C809	105
	8000-8005	C569, C620-C629	105
XI Other malignant epithelial neoplasms and malignant melanomas			
(a) Adrenocortical carcinomas	8370-8375	C000-C809	111
(b) Thyroid carcinomas	8010-8041, 8050-8075, 8082, 8120-8122, 8130-8141, 8190, 8200, 8201, 8211, 8230, 8231, 8244-8246, 8260-8263, 8290, 8310, 8320, 8323, 8430, 8440, 8480, 8481, 8510, 8560-8573	C739	112
	8330-8337, 8340-8347, 8350	C000-C809	112
(c) Nasopharyngeal carcinomas	8010-8041, 8050-8075, 8082, 8083, 8120-8122, 8130-8141, 8190, 8200, 8201, 8211, 8230, 8231, 8244-8246, 8260-8263, 8290, 8310, 8320, 8323, 8430, 8440, 8480, 8481, 8500-8576	C110-C119	113
(d) Malignant melanomas	8720-8780, 8790	C000-C809	114
(e) Skin carcinomas	8010-8041, 8050-8075, 8078, 8082, 8090-8110, 8140, 8143, 8147, 8190, 8200, 8240, 8246, 8247, 8260, 8310, 8320, 8323, 8390-8420, 8430, 8480, 8542, 8560, 8570-8573, 8940, 8941	C440-C449	115
(f) Other and unspecified carcinomas	8010-8084, 8120-8157, 8190-8264, 8290, 8310, 8313-8315, 8320-8325, 8360, 8380-8384, 8430-8440, 8452-8454, 8480-8586, 8588-8589, 8940, 8941, 8983, 9000, 9010-9016, 9020, 9030	C000-C109, C129-C218, C239-C399, C480-C488, C500-C559, C570-C619, C630-C639, C659-C729, C750-C768, C809	116
XII Other and unspecified malignant neoplasms			
(a) Other specified malignant tumors	8930-8936, 8950, 8951, 8971-8981, 9050-9055, 9110	C000-C809	121
	9363	C000-C399, C470-C759	121
(b) Other unspecified malignant tumors	8000-8005	C000-C218, C239-C399, C420-C559, C570-C619, C630-C639, C659-C699, C739-C750, C754-C809	122
Not Classified by ICCC or in situ			999



