

I. EXECUTIVE SUMMARY

On an average day in 2003, 46 Oregonians were diagnosed with a reportable cancer¹, and 20 Oregonians died due to malignant cancer. Altogether, 18,465 reportable cancers were added to the registry. Cancer risk increases with age, and Oregon's population is aging; more than 75% of cancers in Oregon occur in people over the age of 55. Consequently, there is the potential for an upsurge in cancer incidence and mortality.

It is estimated that more than half of all cancers could be prevented through smoking cessation and improved diet. By controlling modifiable risk factors (see *Cancer Risks*) and appropriately screening for cancers that can be detected at an early stage (see *Cancer Screening and Prevention*), Oregonians can help reduce the burden of cancer in their state.

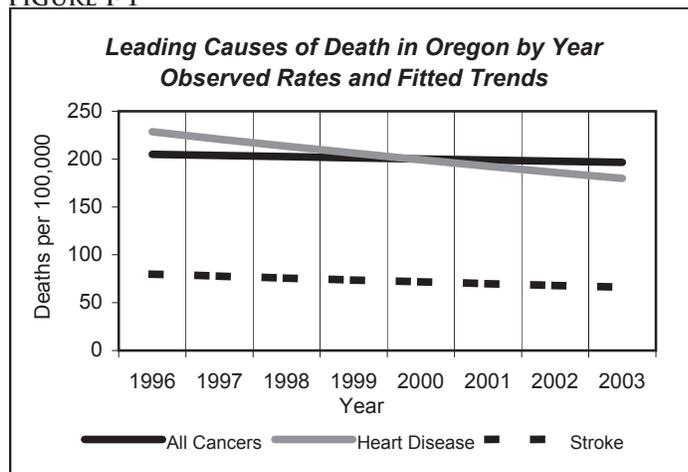
CANCER LEADING CAUSE OF DEATH AMONG OREGONIANS

In 2000, a long-standing trend was broken when cancers surpassed heart disease to become the leading cause of death among Oregonians². (See Figure I-1.)

Mortality rates due to cancers³ have been declining by 1% a year since 1996. In 2003, the mortality rate for all cancers combined was 194.7; the rate was 179.8 for heart disease and 64.7 for stroke.

The average age of death due to cancer is younger than the age of deaths due to heart disease. This results in over 30% more years of potential life lost⁴ (YPLL) due to cancer than to heart disease. Cancer is the 2nd leading cause of YPLL for men, following unintentional injuries and is the leading cause of YPLL for Oregon women. Annually, about 22,700 YPLLs in Oregon are attributable to cancer mortality.

FIGURE I-1



¹ 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 genitalia) and carcinoma *in situ* of the cervix.

² Although there were more heart disease deaths in 2000 and in 2002 than cancer deaths, the age-adjusted rate was higher for cancer deaths, which indicates a greater burden among Oregonians. In 2001, both the counts and age-adjusted rates for cancer deaths exceeded those for heart disease.

³ The all-cancers mortality data exclude *in situ* cases, cases of unknown or uncertain behavior (there is an average of 50 such deaths a year in Oregon), as well as benign neoplasms. Cancers that first became reportable in 2001 are not included in the all-cancers mortality trends. Including these additional cases raises the all-cancers mortality rate and artificially affects the historical trends. Please see the *Technical Section* and/or *Appendix A* for additional information about these newly reportable cases.

⁴ YPLL calculated on combined mortality data from 1999-2003 with age 65 as the threshold for age of death.

LEADING CANCER SITES

Breast Cancer is the most common reportable malignancy, with 2,565 invasive cases diagnosed among women and 14 among men in 2003. It is the 3rd leading cause of cancer death in Oregon. Among 44 states with high quality cancer incidence data, Oregon consistently has one of the highest female breast cancer incidence rates (ranking 2nd in 2002). However, the mortality rate due to female breast cancer in Oregon is below that seen nationally (ranking 31st in 2002). Appropriate screening through breast exams and mammography may decrease the number of women diagnosed at advanced stages of disease and, thereby, decrease mortality.

Lung Cancer is the 2nd most common reportable malignancy, with 2,448 invasive cases diagnosed in 2003. Lung cancer is the leading cause of cancer death in Oregon. 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 2003, tobacco use was implicated in 80% of lung cancer deaths. Although lung cancer incidence rates among Oregon men are similar to those seen nationally (ranking 25th in 2002). Oregon ranks as one of the states with the highest lung cancer incidence among women (14th among the states in 2002). Decreasing tobacco use in Oregon could significantly lower lung cancer incidence and mortality.

Prostate Cancer is the 3rd most common reportable malignancy, with 2,384 invasive cases diagnosed in 2003. It is also the 4th

leading cause of cancer death in Oregon. Among 44 states with high quality cancer incidence data, Oregon men ranked 34th for prostate cancer in 2002. Currently, the causes of prostate cancer are poorly understood and there is no consensus on the benefit of prostate cancer screening.

Colorectal Cancer is the 4th most common reportable malignancy, with 1,804 invasive cases diagnosed in 2003. Colorectal cancer 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.

Bladder Cancer is the 5th most common invasive malignancy with 820 invasive cases diagnosed in 2003. 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.

Melanomas are the 6th most common reportable malignancy with 789 invasive cases diagnosed in 2003¹. Oregon has one of the highest melanoma incidence rates in the nation (ranking 5th in 2002) particularly among women, and a higher melanoma mortality rate than the national average. Sun avoidance, particularly during childhood, is the best protective measure against developing melanomas.

¹ Cancer incidence rates are calculated on invasive cancers (excluding *in situ*) with the exception of bladder cancer. Although there were more total cases of melanomas of the skin, there were fewer invasive cases (1,472 total melanomas, of which 789 were invasive, compared to 820 bladder; all of which were invasive).

OREGON POPULATION OVERVIEW

Although the causes of most cancers are unknown, there are specific community characteristics that can influence a population's burden of cancer. The most significant risk factor for cancer is age. According to the 2000 US Census, 12% of Oregonians are aged 65 and over. However, the distribution of Oregon seniors is not constant across the state. (See Figure I-2.)

Regardless of the age of the underlying population, the burden of cancer among Oregonians can be lessened with appropriate, population-based screening for cancers that can be detected at an early or premalignant stage, such as colorectal and cervical cancers. Access to medical care for appropriate screening, as well as treatment, is imperative to reduce the toll of cancer among Oregonians.

An important factor affecting access to medical care is the physical distance the population lives from medical services. The majority of Oregon counties are classified as Rural or Frontier (< 6 persons per square mile). In many counties, there are urban centers with medical services, however, the distribution of the population living outside of those areas is variable by county. (See Figure I-3.) Most counties with a high percentage of residents residing outside urban areas also have a high percentage of senior residents.

FIGURE I-2

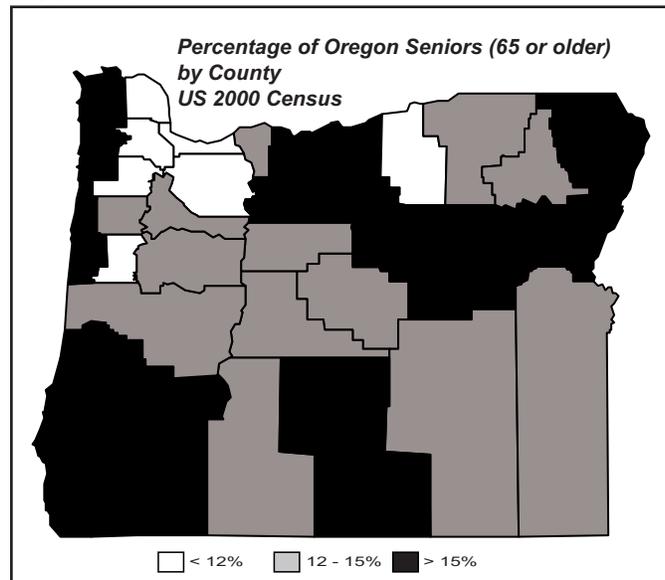


FIGURE I-3

