

I. EXECUTIVE SUMMARY

Each day in 2002, 47 Oregonians were diagnosed with an invasive¹, reportable² cancer, and 20 Oregonians died due to malignant tumors. Cancer risk increases with age, and Oregon's population is aging. Overall, 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 80% of all cancers are due to environmental and lifestyle factors, which means that they are potentially preventable. 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

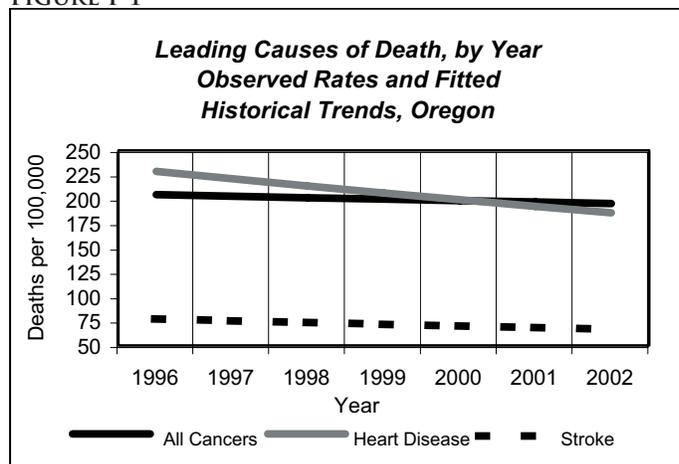
In 2000, a long-standing trend was broken when cancers surpassed heart disease to become the leading cause of death among Oregonians³. (See Figure I-1.)

Mortality rates due to cancers⁴ have been declining by 1% a year since 1996 while heart disease mortality has been variable. Initially, heart disease declined by 4% a year from 1996-2000. Then from 2000–2002, mortality due to heart disease slowed to a 2% annual decline. The 3rd leading cause of death, cerebrovascular disease (stroke), has been declining steadily by 2% a year since 1996. In 2002, the mortality rate for all cancers combined was 196.5; the rate was 190.5 for heart disease and 68.7 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 lost⁵ (YPLL) due to cancer than to heart disease. Cancer is the 2nd leading cause of YPLL for men, following accidents and adverse effects and is the leading cause of YPLL for Oregon women. About 22,750 YPLL are lost annually in Oregon due to cancer mortality.

FIGURE I-1



¹ Invasive cancers *exclude in situ* diagnoses with the exception of bladder cancers.

² Reportable cancers *do not* include basal or squamous cell carcinomas of the skin (*except* if skin of genitalia) or *in situ* cervical cancers.

³ 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.

⁴ 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.

⁵ YPLL calculated on combined mortality data from 1998-2002 with age 65 as the threshold for age of death.

LEADING CANCER SITES

Breast Cancer is the most common reportable malignancy, with 2,749 invasive cases diagnosed among women and 19 among men in 2002. It is the 3rd leading cause of cancer death in Oregon. Among 43 states with high quality cancer incidence data, Oregon consistently has one of the highest female breast cancer incidence rates. However, the mortality rate due to female breast cancer in Oregon is similar to that seen nationally. Appropriate screening through breast exams and mammography could decrease the number of women diagnosed at advanced stages of disease and, thereby, decrease mortality.

Prostate Cancer is the 2nd most common reportable malignancy, with 2,519 invasive cases diagnosed in 2002. It is also the 4th leading cause of cancer death in Oregon. Among 43 states with high quality cancer incidence data, Oregon men rank in the lower third for prostate cancer. Currently, the causes of prostate cancer are poorly understood, and there is no consensus on the benefit of prostate cancer screening.

Lung Cancer is the 3rd most common reportable malignancy, with 2,444 invasive cases diagnosed in 2002. 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 2002, tobacco use was implicated in 80% of lung cancer deaths. Although lung cancer incidence rates among Oregon men are similar to those seen nationally, Oregon

ranks as one of the states with highest lung cancer incidence among women. Decreasing tobacco use in Oregon could significantly lower lung cancer incidence and mortality.

Colorectal Cancer is the 4th most common reportable malignancy, with 1,720 invasive cases diagnosed in 2002. 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 855 invasive cases diagnosed in 2002. 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 of the Skin are the 6th most common reportable malignancy with 830 invasive cases in 2002¹. Oregon has one of the highest melanoma incidence rates in the nation, 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 (no *in situ*) with the exception of bladder cancer. Although there were more total cases of melanomas of the skin, there were fewer invasive cases (1,612 total melanomas, of which 830 were invasive, compared to 855 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 where medical services are located. The majority of Oregon counties are classified as Rural or Frontier (extremely rural with < 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

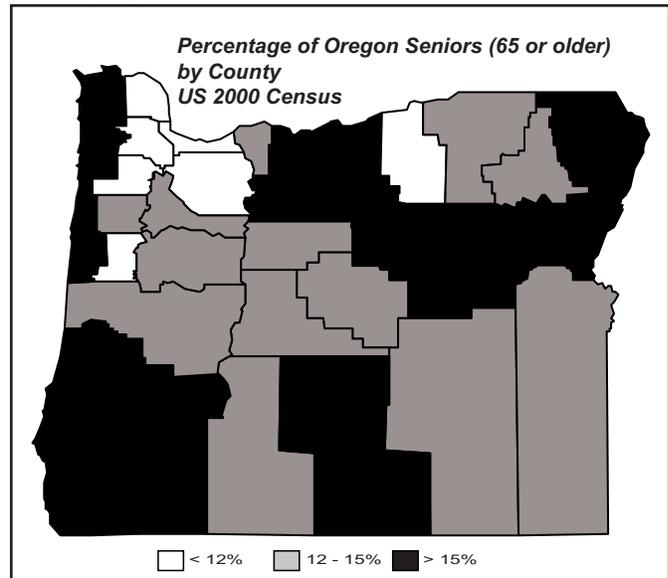


FIGURE I-3

