

G. PROSTATE CANCERS

Age is the most important risk factor for prostate cancers with 65% of the diagnoses in men age 65 and older. While screening tests are available, routine screening for prostate cancer is controversial. There are some highly aggressive prostate cancers with high mortality, which warrant treatment. However, most prostate cancers occur in older men and are indolent tumors. They grow slowly and do not generally result in death even when left untreated. Current screening tests cannot reliably differentiate between slow growing and aggressive forms of prostate cancer. Unfortunately, the potential harms of treatment, including unnecessary surgery or surgical complications such as incontinence and impotence, can significantly affect a man's quality of life. Currently, there is no consensus public health recommendation regarding prostate cancer screening except to encourage men to discuss options with their health care providers.

Prostate cancer is the 2nd most common cancer diagnosed in Oregon, and the 2nd leading cause of cancer-related death among Oregon men. Oregon's prostate cancer mortality rate of 29.4 for 2002 was 2% above the Healthy People 2010 target of 28.8 deaths per 100,000 men. Despite a lack of consensus on screening and treatment issues, the Oregon Partnership for Cancer Control has identified reducing prostate cancer mortality as a priority because of the large number of Oregonians affected by prostate cancer.

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PROSTATE CANCERS FAST FACTS OVERVIEW

A brief overview of Oregon's prostate cancer data shows the following: (See Figure VII-G-1.)

1. In 2002, 2,519 Oregon men were diagnosed with prostate cancers; of which all were invasive. Prostate cancer was the cause of death for 435 Oregon men.
2. Prostate cancer incidence in Oregon has decreased 2% annually in the past five years. Nationally, there has been a 1% yearly increase. However, prostate cancer mortality rates have declined 4% per year during this period both in Oregon and nationally.
3. Oregon's age-adjusted 2002 incidence rate of 153.1 was 13% lower than the national rate of 176.8. In contrast, the Oregon 2002 mortality rate was 5% higher than the national rate.
4. Of the 43 states with central registries meeting national data quality standards in 2001, Oregon ranked 18th for prostate cancer incidence. Of the 50 states, Oregon tied for 19th in prostate cancer mortality in 2002.
5. Prostate is the leading cancer incidence site for males regardless of race or ethnicity. Prostate cancers are the 2nd leading cancer mortality site for African Americans and Whites as well as Hispanics. Prostate cancers rank 3rd for cancer mortality among American Indian/Alaskan Natives, 5th among Pacific Islanders, and 3rd among Non-Hispanic males.
6. The majority, 81%, of prostate cancers were diagnosed at an early (*in situ* or localized) stage in 2002.
7. During 1998-2002, Oregon's M/I ratio for cancer of the prostate was 0.17, suggesting a relatively good prognosis for this disease. Prostate cancers are responsible for 229 YPLL each year among Oregon men.

PROSTATE CANCERS FAST FACTS

FIGURE VII-G-1

Prostate Cancers Fast Facts		
Oregon 2002		Male
Cancer Incidence		
	All Cases Total	2,519
	In situ	0
	Localized	1,891
	Regional	317
	Distant	113
	Unstaged	198
Invasive Rates		
	Oregon Crude	144.1
	Oregon Age-adjusted	153.1
	Oregon Current Annual Trend (5-Year)	-1.9
	US SEER Age-adjusted ¹	176.8
	US SEER Annual Trend (5-Year) ^{1a}	+1.1
Cancer Mortality		
	Total Deaths	435
Mortality Rates		
	Oregon Crude	24.9
	Oregon Age-adjusted	29.4
	Oregon Current Annual Trend (5-Year)	*-3.7
	US Age-adjusted ²	27.9
	US Annual Trend ³	*-4.1
Prognosis and Burden ⁴		
	Prognosis: M/I Ratio	0.17
	Burden: YPLL before age 65	229

* Indicates a statistically significant trend
M/I = Mortality-to-Incidence Ratio
YPLL = Years of Potential Life Lost
¹ Year 2001, SEER 9 Registry data, SEERSTAT 5.2.2
^{1a} Years 1997-2001, SEER 9 Registry data, SEERSTAT 5.2.2
² 2002 mortality rate calculated from CDC Wonder: <http://wonder.cdc.gov>
³ *Annual Report to the Nation on the Status of Cancer*, most current trend of 3 years or more.
⁴ Calculations based on combined years 1998-2002

STAGE AT DIAGNOSIS

The majority of prostate cancer diagnoses in 2002 were made at an early stage. (See Figure VII-G-2.) This represents a 4% increase in the percentage diagnosed at an early stage since 1996.

The percentage of prostate cases diagnosed at an early stage increases with age until the 80 and older group. (See Figure VII-G-3.) This decrease in early stage cases in the oldest age group may be likely due to decisions by these patients and their health care providers to be less aggressive with surgical intervention. Indeed, the percentage of unstaged cases increases with age. (See Figure VII-G-3.)

There is no distinct pattern of early stage diagnosis along the urban/ rural continuum (See Figure VII-G-4.)

ROUTINE SCREENING

Prostate cancers can often be found early by evaluating the amount of PSA (prostate-specific antigen) in blood. Another screening tool is a physician digital rectal exam (DRE). There are no national screening recommendations for prostate cancers. However, in 2002, 34% of Oregon men 40 and older reported having a PSA test within the last year, and 35% reported having a digital rectal exam.

FIGURE VII-G-2

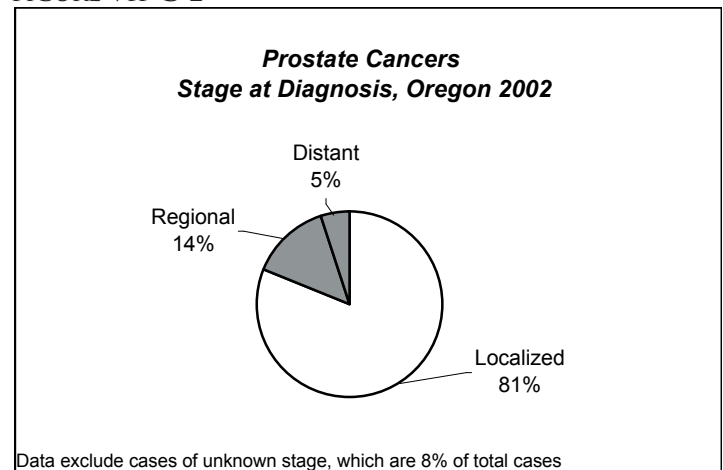


FIGURE VII-G-3

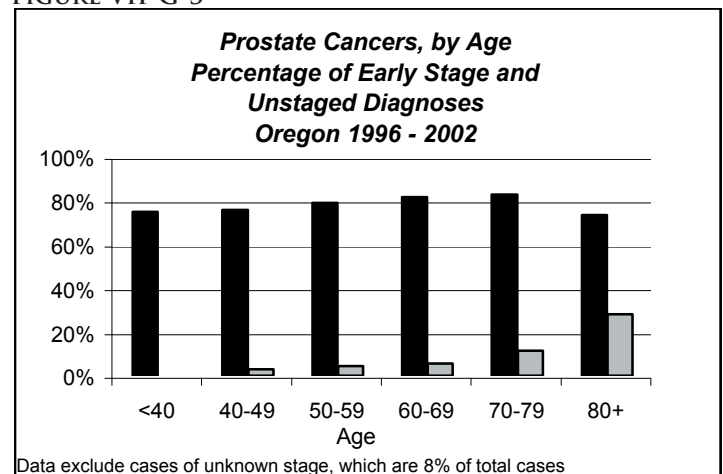
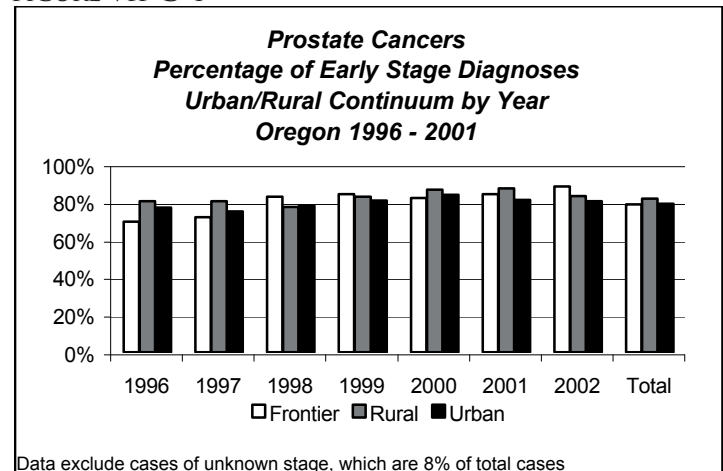


FIGURE VII-G-4



RACE AND ETHNICITY

Although race and ethnicity data need to be interpreted cautiously due to reporting issues (please see the *What's New in 2002?* and the *Technical Section* for additional details), prostate cancer rates vary by race and ethnicity. (See Figure VII-G-5.) Among the four race categories, African Americans (AA) have the highest rate of prostate cancer incidence, and Asian/Pacific Islanders (A/PI) have the lowest incidence rates in Oregon. Nationally, it is American Indian/Alaska Natives (AI/AN) who have the lowest prostate cancer rates. Oregon likely diverges from the national rates for AI/AN due to increased efforts to properly identify these persons in the Oregon Registry. As is seen nationally, Hispanics in Oregon have lower prostate cancer incidence and mortality rates than Non-Hispanics. Mortality due to prostate cancer follows the incidence patterns by race and ethnicity.

AA have the highest prostate cancer rates and the highest mortality to incidence (M/I) ratio. (See Figure VII-G-6.) AI/AN also have a higher M/I ratio than Whites. A/PI have the lowest M/I ratio. There is no difference among Hispanics or Non-Hispanics for M/I ratio. Higher M/I ratios mean poorer prognosis. Some of the differences in prognosis may be due to differences in stage at diagnosis by race and ethnicity. Among the four race categories, Whites have the highest percentage of prostate cancer cases diagnosed at an early stage followed closely by A/PI. (See Figure VII-G-6.) The poorer prognosis for AI/AN may be partially explained by the lower percentages of prostate cases diagnosed at an early stage in this population. However, Hispanics have the same M/I

ratio as Non-Hispanics, yet they have a lower percentage of prostate cases diagnosed at an early stage. These differences may represent incompatibility between how the Cancer Registry and Center for Health Statistics report race and ethnicity. This divergence could also result if Hispanics are more likely to leave Oregon after a diagnosis of prostate cancer than are Non-Hispanics.

FIGURE VII-G-5

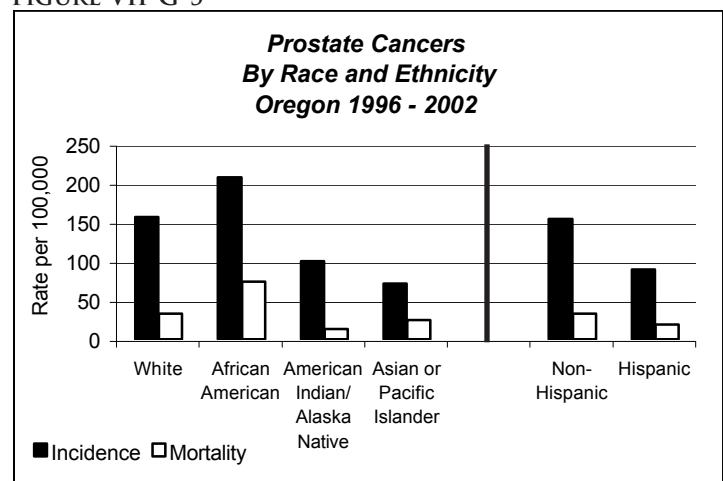


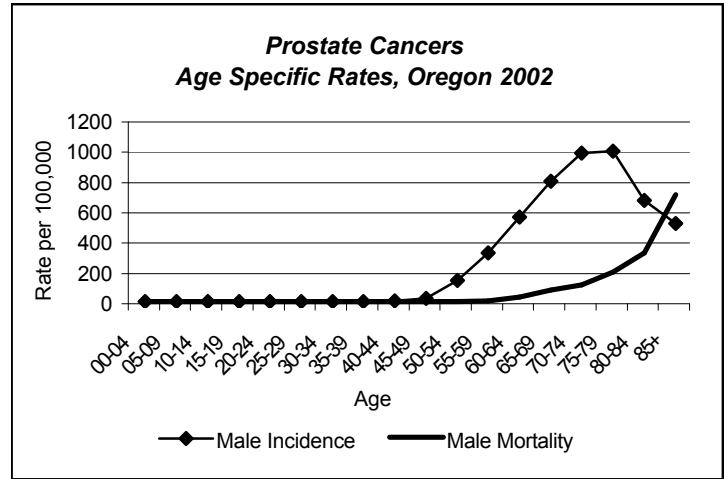
FIGURE VII-G-6

Race and Ethnicity	M/I Ratio	Percent of Early Stage
African American	0.36	76%
White	0.21	80%
American Indian/Alaska Native	0.35	73%
Asian/Pacific Islander	0.13	79%
Non-Hispanic	0.21	80%
Hispanic	0.21	74%

AGE-SPECIFIC INCIDENCE AND MORTALITY

As with other types of cancer, the risk of developing prostate cancer increases with age. Figure VII-G-7 shows the age-specific incidence and mortality rates for prostate cancer. Oregon's age-specific incidence rates sharply increase at age 50 and peak in males aged 70-74. After age 75, the incidence begins to drop. Mortality rates increase sharply at age 70 and surpass incidence rates in the 85 and over age group.

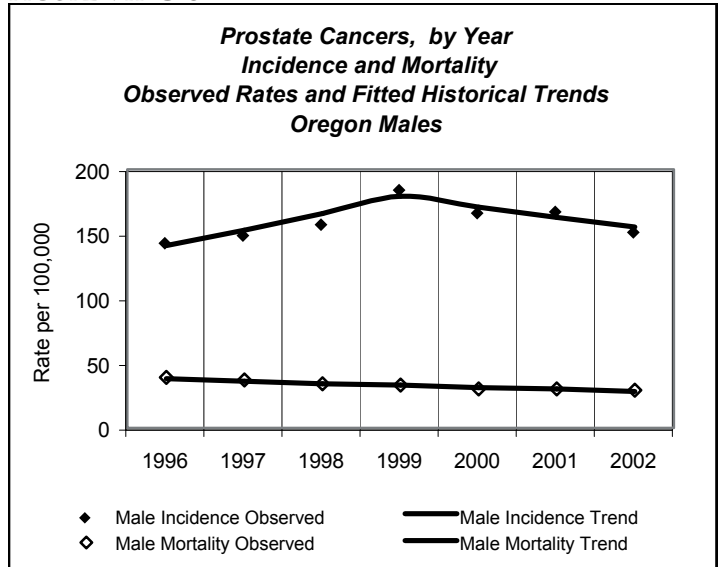
FIGURE VII-G-7



HISTORICAL TRENDS (1996-2002)

Prostate cancer incidence and mortality trends have been variable since 1996. Initially, prostate cancer incidence was increasing 9% a year from 1996-1999. From 1999-2002, the trend reversed and incidence began to decrease 5% a year. Mortality due to prostate cancer has been consistently decreasing over the same time period, but the rate of decrease has slowed in the last couple of years. Initially, mortality decreased 6% a year from 1996-2000 and then slowed to a 1% annual decrease from 2000-2002. (See Figure VII-G-8.)

FIGURE VII-G-8



REGIONAL VARIATION (COMBINED FIVE-YEAR RATES: 1998-2002)

Prostate cancer incidence has a loose diagonal gradient across Oregon. (See Figure VII-G-9.) However, because prostate cancer screening rates vary throughout the state, it is difficult to interpret this distribution of incidence rates. Prostate cancer incidence rates are higher than are seen nationally in Northeast Oregon. Rates are lower than are seen nationally in the Portland area and most of the Willamette Valley region, the north and south tips of the coast, and sections of Central and Southeast Oregon.

Most of Oregon has higher prostate cancer mortality rates than are seen nationally. (See Figure VII-G-10.) Sections of the state with lower prostate cancer incidence rates than the nation but higher mortality may represent areas of under-reporting or lower screening rates than the national average.

FIGURE VII-G-9

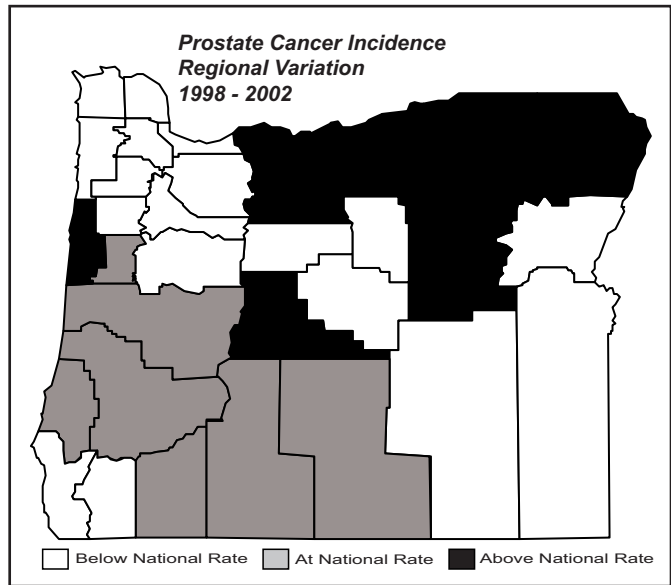


FIGURE VII-G-10

