F. Oral Cancers

Combining tobacco and alcohol increases one's risk of oral cancers dramatically, and the risk rises with the amount and length of use. Over 80% of people with oral cancers are considered heavy tobacco and/or alcohol users. In addition to the 20% of Oregonians who smoke, an estimated 3% of Oregon adults used smokeless (chewing) tobacco in 2002. Among Oregon youth, an estimated 3% of 8th graders and 7% of 11th graders used smokeless tobacco in 2002. In 2002, 8% of adult males and 6% of adult females were considered heavy drinkers. In 2002, an estimated 24% of 8th graders and 44% of 11th graders reported drinking alcohol in the 30 days preceding the survey.

Over 80% of people with oral cancers are considered heavy tobacco and/or alcohol users.

About 15% of newly diagnosed patients with oral cancers will have another cancer in nearby areas such as the larynx, esophagus, or lung. Another 10% to 40% will develop cancer of one of these organs or a second cancer of the oral cavity later. For this reason, it is very important for patients with oral cancers to have follow-up examinations throughout their lives and to avoid risk factors, like tobacco and alcohol use, which increase the risk for these secondary cancers.

Early detection is possible through an oral exam to look for precancerous plaques or early disease. Regular dental and medical check-ups for evaluation of symptoms and precancerous lesions may be useful in detecting oral cancers early. Due to the potential for primary prevention through tobacco control efforts, the reduction of oral cancers incidence and mortality has been identified as a priority for the Oregon Partnership for Cancer Control.

Oral Cancers Fast Facts Overview

Oral cancers are the 8th leading cancer site for men. A brief overview of Oregon's oral cancers data shows the following: (See Figure VII-F-1.)

1. In 2002, 398 new cases of oral cancers were diagnosed in Oregonians, of which 385 were invasive. In 2002, 98 Oregonians died due to oral cancers.

2. There has been a 2% annual decrease in oral cancer incidence rates over the past five years in Oregon. Mortality has also declined over this period, but this reduction is artificially amplified by a change in mortality coding in 1999. Please review the *Technical Section* for discussion of ICD-9 versus ICD-10 coding for oral cancers.

3. Oregon's age-adjusted oral cancer incidence and mortality rates are similar to national rates. As seen nationally, age-adjusted incidence and mortality rates were higher for men than women in Oregon.

4. Of all 50 states, Oregon tied for 18th for oral cancer mortality rates in 2002.

5. Over half, 51%, of oral cancers were diagnosed at an early stage (*in situ* or localized).

6. During 1998-2002, Oregon's M/I ratio for oral cancers was 0.27, suggesting a good prognosis for this disease. The M/I ratio was worse for women than men. Oral cancers leads to 432 YPLL each year in Oregon.

Oral Cancers Fast Facts

Figure VII-F-1

Oral Cancers Fast Facts ***Oregon 2002***	***All Sexes*** [1]	***Male***	***Female***
Cancer Incidence			
All Cases Total	***398***	***256***	***142***
In situ	13	7	6
Localized	183	107	76
Regional	162	114	48
Distant	23	15	8
Unstaged	17	13	4
Invasive Rates			
Oregon Crude	10.9	14.2	7.7
Oregon Age-adjusted	10.5	14.5	6.9
Oregon Current Annual Trend (5-Year)	-2.3	-2.8	-1.6
US SEER Age-adjusted[2]	10.4	14.9	6.6
US SEER Annual Trend[2a]	-2.4	-3.2	-1.2
Cancer Mortality			
Total Deaths	***98***	***60***	***38***
Mortality Rates			
Oregon Crude	2.8	3.4	2.1
Oregon Age-adjusted	2.7	3.7	1.8
Oregon Current Annual Trend (5-Year)	-4.7	-1.6	-9.2
US Age-adjusted[3]	2.7	4.1	1.6
US Annual Trend[4]	n/a	*2.8	*-2.5
Prognosis and Burden [5]			
Prognosis: M/I Ratio	0.27	0.24	0.31
Burden: YPLL before age 65	432	327	105

* Indicates a statistically significant trend

M/I = Mortality-to-Incidence Ratio

YPLL = Years of Potential Life Lost

[1] All Sexes counts may exceed male/female combined due to additional sex coding

[2] Year 2001, SEER 9 Registry data, SEERSTAT 5.2.2

[2a] Years 1997-2001, SEER 9 Registry data, SEERSTAT 5.2.2

[3] 2001 mortality rate calculated from CDC Wonder: http://wonder.cdc.gov

[4] *Annual Report to the Nation on the Status of Cancer* for the period 1992 - 2001

[5] Calculations based on combined years 1998-2002

Stage at Diagnosis

Identifying and treating precancerous conditions could nearly eliminate this group of cancers. Periodic examination of the mouth, by a health professional or by self-exam, to detect early precancerous lesions is an important prevention strategy. The Healthy People 2010 target is for 85% of dentists to counsel their patients about smoking cessation. In 1997, the only year for which data are available, 59% of dentists nationally were counseling their patients to stop using tobacco.

Despite the lack of a specific population-based screening test, 51% of the oral cancers cases were diagnosed at an early stage. (See Figure VII-F-2.)

As seen with lung cancer, women have a greater percentage of early stage oral cancers at diagnosis than men. (See Figure VII-F-3.)

Following the curve by age seen with lung cancer, Oregonians less than 40 years of age are more likely to have oral cancers diagnosed at an early stage. The percentage of early stage cases increases with age from age 50 on. (See Figure VII-F-4.)

Figure VII-F-2

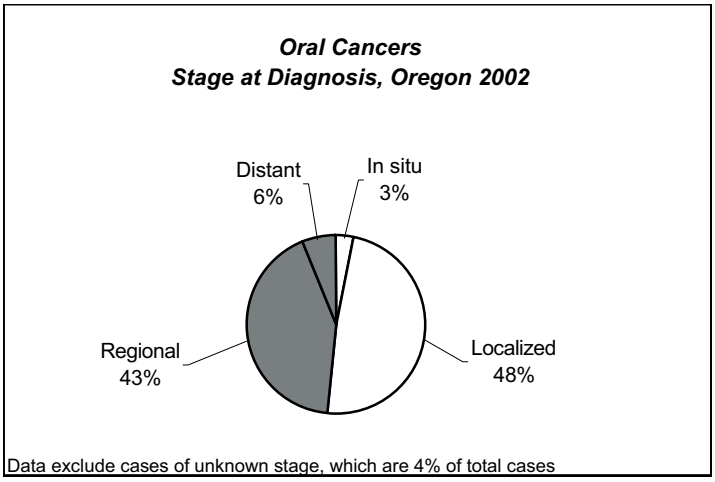


Figure VII-F-3

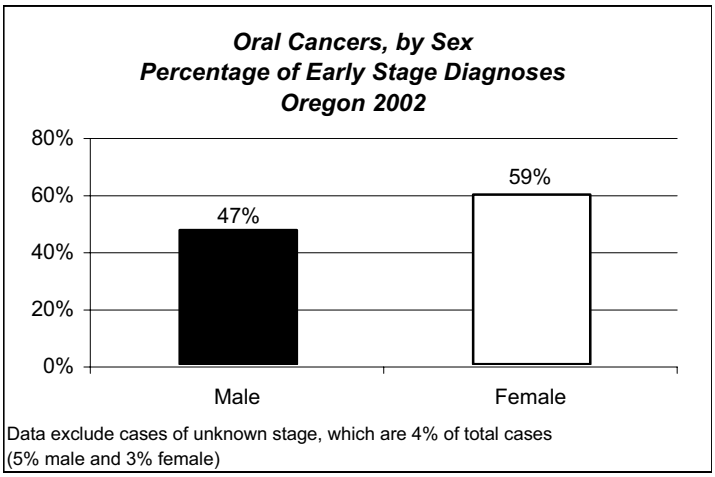
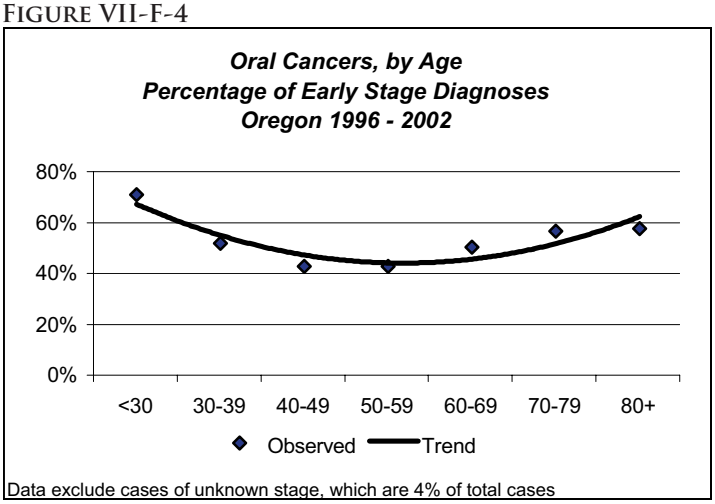
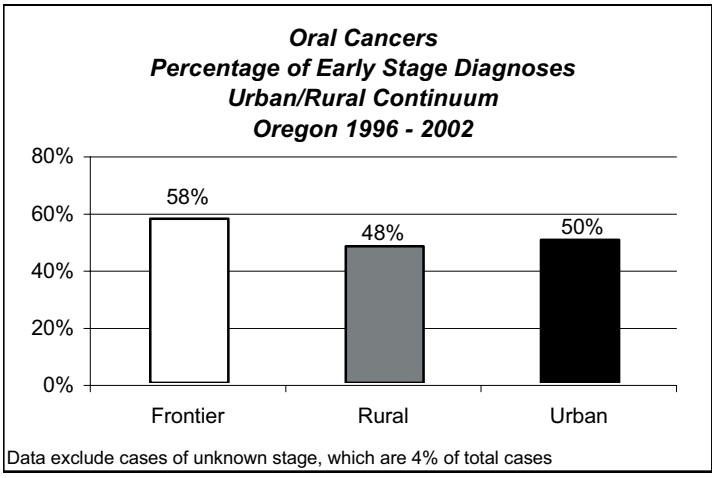


Figure VII-F-4



Like lung cancer, the percentage of oral cancers diagnosed at an early stage is similar for Rural and Urban counties. However, Frontier counties (extremely rural counties with less than 6 persons per square mile) have a larger percentage of cases diagnosed at an early stage. (See Figure VII-F-5.)

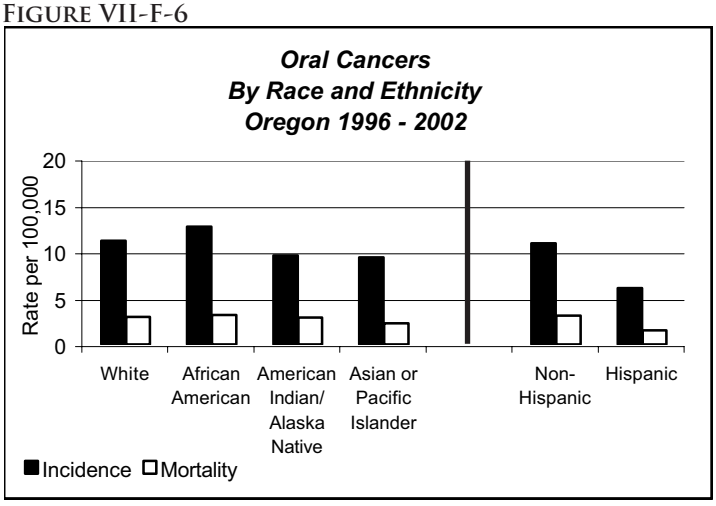
Figure VII-F-5



Race and Ethnicity

Although race and ethnicity data need to be interpreted cautiously due to reporting issues (see the *What's New in 2002?* and *Technical Section* for additional details), oral cancer incidence varies by race and ethnicity. (See Figure VII-F-6.) African Americans (AA) have the highest oral cancer incidence and mortality rates and Asian/Pacific Islanders (A/PI) have the lowest oral cancer rates. Nationally, it is American Indian/Alaska Natives (AI/AN) who have the lowest oral 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. There are too few deaths due to oral cancers to evaluate stage at diagnosis by race or ethnicity.

Figure VII-F-6



Among racial groups in Oregon, the ranking of oral cancer incidence does not correlate with reported rates of smokeless tobacco use. (See Figure VII-F-7.) As with smoking rates, AI/AN report the highest smokeless tobacco usage while AA have the lowest rate of smokeless tobacco use but the highest oral cancer incidence rate.

Figure VII-F-7

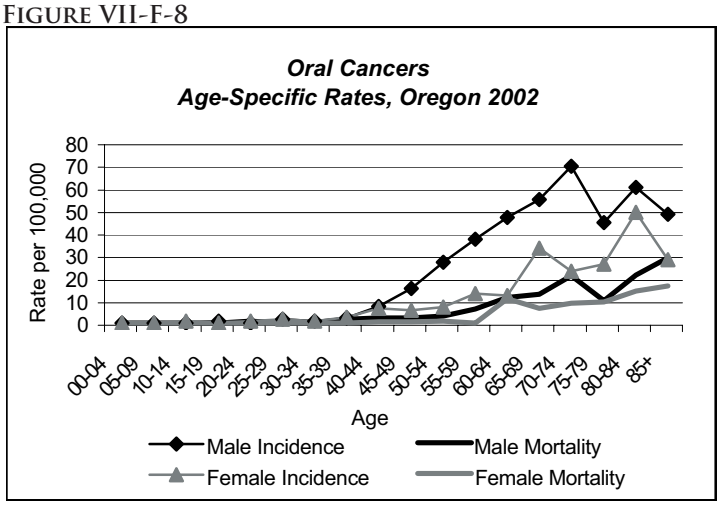
Percentage of Adults Who Use Smokeless Tobacco, by Race and Ethnicity Oregon 2000 - 2001

Race and Ethnicity	Percent
American Indian/Alaskan Native	16%
White (Non-Hispanic)	8%
Asian/Pacific Islander	2%
African American	1%
Hispanic	2%

Age-Specific Rates

Oral cancer incidence and mortality rates increase with age. Incidence and mortality rates are greater for men than women in all age groups. (See Figure VII-F-8.)

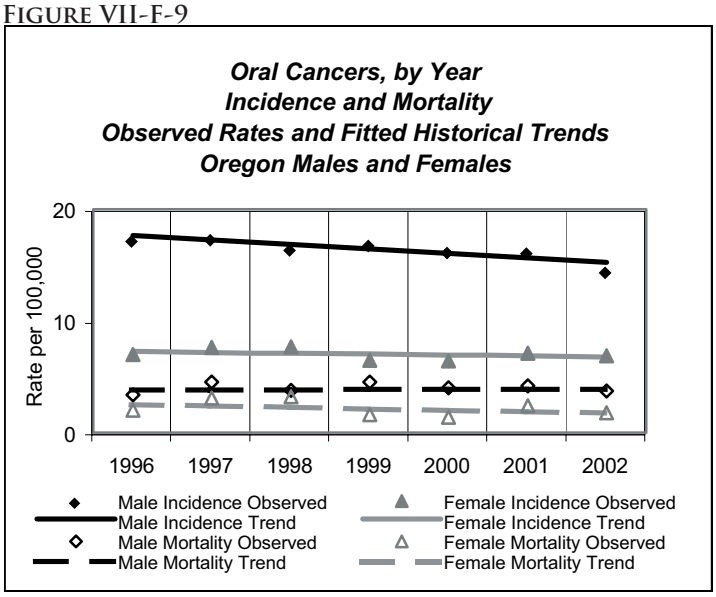
Figure VII-F-8



Historical Trends (1996-2002)

Oral cancer incidence rates have been declining, 2% a year for men and 1% a year for women. (See Figure VII-F-9.) While oral cancer mortality also decreased for women by 6% a year, mortality has risen 1% a year for men. It should be noted that oral cancer mortality is difficult to compare over this time period due to changes in coding in 1999 that significantly affect the mortality numbers for oral cancers. Please see the *Technical Section* for information about the change to ICD-10 mortality coding.

Figure VII-F-9



Regional Variation (Combined Seven-Year Rates: 1996-2002)

Oral cancer incidence has an East/West gradient. Most of the counties East of the Cascades have lower oral cancer incidence rates than are seen nationally. The Portland Metropolitan region extending through the central gorge region has higher oral cancer incidence rates than are seen nationally. (See Figure VII-F-10.).

Oral cancer mortality has a less defined geographical pattern than incidence. This may be due to regional differences in diagnosing or treating oral cancers. Mortality is higher in the Portland area, Southern Oregon, and part of Central Oregon than is seen nationally. Much of the coast, the Willamette Valley, and southeast Oregon have lower mortality rates due to oral cancers than are seen nationally. (See Figure VII-F-11.)

The high mortality areas around the Portland metropolitan area and Southern Oregon indicate areas that may benefit from targeted tobacco cessation programs.

Figure VII-F-10

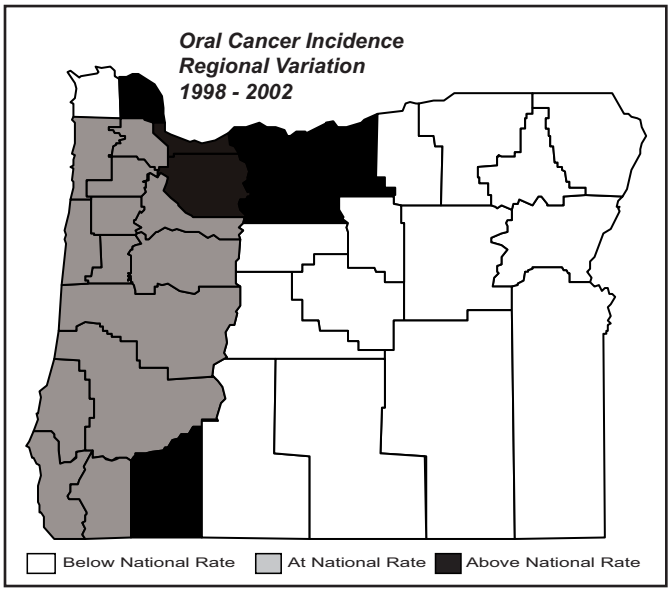


Figure VII-F-11