

Risk Factors

Oropharyngeal cancer, also known as oral cancer, affects the oral cavity (mouth, including tongue), pharynx (throat) and lip. The best known risk factors of developing oral cancer are use of tobacco (cigarettes, pipes, cigars, smokeless tobacco) and excessive use of alcohol. Some studies indicate that the human papillomavirus (HPV) may be the cause of other types of oral cancers.¹



Warning Signs and Symptoms

Early warning signs of oral cancer include growths (e.g., sore, red or white patch, lump or thickening) in or around the mouth. The sore will usually bleed and not heal. Other symptoms include a neck mass, ear pain, and coughing up blood. Later symptoms are difficulty chewing, swallowing, or moving the tongue or jaw.¹

Early Detection

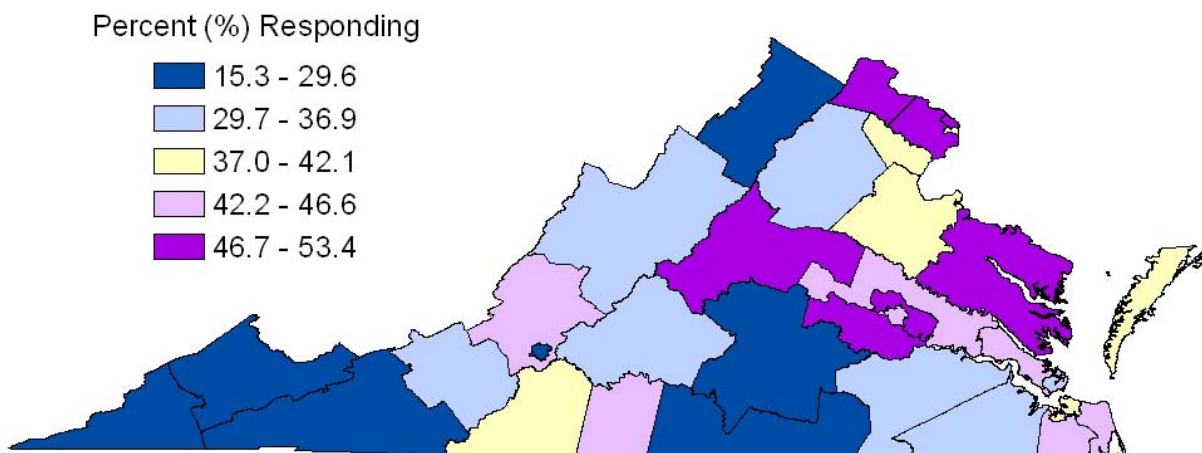
Dentists and primary care physicians can identify changes at an early stage by visually examining the inside of your mouth and feeling your throat.¹

Oral Cancer in Virginia

- Oral cancer is among the top ten most commonly diagnosed cancers, particularly for men in the U.S. and in Virginia.^{2,3} According to the American Cancer Society, an estimated **35,310 people** in the U.S. will be diagnosed with oral cancer in 2008.¹ On average, 725 cases of oral cancer were diagnosed each year in Virginia between 2001 and 2005.³
- Oral cancer is even more rare as a cause of death. An estimated **7,590 people** will die from oral cancer nationwide in 2008.¹ On average, 170 deaths from oral cancer occurred each year in Virginia between 2001 and 2005.⁴
- Between 2001 and 2005, Virginians were diagnosed with oral cancer at a rate of **9.8 cases** per 100,000,³ and died at a rate of **2.4 deaths** per 100,000.⁴ The national incidence and mortality rates were, respectively, 10.4 cases and 2.6 deaths per 100,000.²
- Four of five (81%) oral cancer cases are diagnosed in adults ages 50 and older.³ Men have a 1.4% chance of being diagnosed with oral cancer during their lifetime, while the probability for women is less than one percent (0.7%).¹
- In Virginia, men are 2.5 times more likely to be diagnosed and to die from oral cancer, compared to women. Black men were more likely to be diagnosed with oral cancer and twice as likely to die from oral cancer than white men.^{3,4} National data indicates Hispanics, Asians, and American Indians had lower oral cancer incidence and mortality rates.²
- From 1995 to 2005, the oral cancer annual incidence rate in Virginia declined slightly while the mortality rate declined by a third—from 3.2 to 2.1 deaths per 100,000.^{3,4}

- The five-year relative survival rate for oral cancers is **60%** if diagnosed early.¹ In Virginia, a third (33%) of all oral cancer cases were diagnosed in its earliest (local) stage when it's most curable. Women were more often diagnosed at an early stage compared to men (41.6% versus 28.9%). Whites were more often diagnosed at an early stage compared to blacks (35% vs. 23.7%).³
- According to a 2005 state health behavior survey, about three percent of adults currently use smokeless tobacco, which is a major risk factor for developing oral cavity cancer. Survey findings from 2006 indicate that **42%** of adults 40 years and older had a healthcare provider check their mouth for signs of oral cancer within the past 12 months, which is higher than the previous year's rate of 39%.⁵ Figure 1 shows that Cumberland Plateau (15.3%), Lenowisco (20.3%), Piedmont (26.7%), and Mount Rogers (27.4%) had the lowest oral cancer screening rates among the 35 health districts. These areas also had high rates of smokeless tobacco use.

Figure 1 – Oral Cancer Screening in Past Twelve Months by Health District, Adults 40 and Older, Virginia, 2005-2006



Source: Virginia Behavioral Risk Factor Surveillance System. Percentages are weighted.

- In Virginia, there were 384 inpatient hospitalizations for oral cancer that occurred in 2006, at a total charge (cost) of \$15 million. The average length of stay was seven days, and the average charge per stay was \$39,307.⁶

¹ American Cancer Society *Cancer Facts & Figures 2008* (<http://www.cancer.org>).

² Ries LAG, Melbert D, Krapcho M, Stinchcomb DG, et al. (eds.), *SEER Cancer Statistics Review, 1975-2005*, National Cancer Institute. Bethesda, MD: 2008 (http://seer.cancer.gov/csr/1975_2005/).

³ Virginia Cancer Registry. Based on combined data from 2001 to 2005. Rates are age-adjusted to the 2000 U.S. standard population.

⁴ VDH Division of Health Statistics. Based on combined data from 2001 to 2005. Rates are age-adjusted to the 2000 U.S. standard population.

⁵ Virginia Behavioral Risk Factor Surveillance System. Rates are population-weighted.

⁶ Virginia Health Information Hospital Discharge Patient-Level Dataset.