Oral Cancer

Causes and Symptoms & The Oral Cancer Exam

What is oral cancer?

The term oral cancer includes cancers of the mouth and the pharynx (the back of the throat).

What puts someone at risk for developing oral cancer?

Tobacco and alcohol use. Most cases of oral cancer are linked to cigarette smoking, heavy alcohol use, or the use of both tobacco and alcohol together. Using tobacco plus alcohol poses a much greater risk than using either substance alone.

HPV. Infection with the sexually transmitted human papillomavirus (specifically the HPV 16 type) has been linked to a subset of oral cancers.

Age. Risk increases with age. Oral cancer most often occurs in people over the age of 40.

Sun exposure. Cancer of the lip can be caused by sun exposure.

Diet. A diet low in fruits and vegetables may play a role in oral cancer development.

What are the possible signs and symptoms of oral cancer?

- A sore, irritation, lump or thick patch in the mouth, lip, or throat
- A white or red patch in the mouth
- A feeling that something is caught in the throat
- Difficulty chewing or swallowing
- Difficulty moving the jaw or tongue
- Numbness in the tongue or other areas of the mouth
- Swelling of the jaw that causes dentures to fit poorly or become uncomfortable
- Pain in one ear without hearing loss

A person who has any of these symptoms for more than 2 weeks should see a dentist or doctor for an oral cancer exam. Most often, symptoms like those listed above do not mean cancer. An infection or another problem can cause the same symptoms. But it's important to have the symptoms checked out—because if it is cancer, it can be treated more successfully if it's caught early.

What is the oral cancer exam?

An oral cancer examination can detect early signs of cancer. The exam is painless and takes only a few minutes.

During the exam, a dentist or doctor checks the face, neck, lips, tongue, mouth, and the back of the throat for possible signs of cancer.

Oral Cancer

Causes and Symptoms & The Oral Cancer Exam

Additional Reading

Review articles on oral cancer

Argiris A, Karamouzis MV, Raben D, Ferris RL. Head and Neck Cancer. *The Lancet* 371(9625):1695-1709, 2008.

Báez A. Genetic and Environmental Factors in Head and Neck Cancer Genesis. J Environ Sci Health C Environ Carcinog Ecotoxicol Rev 26(2):174-200, 2008.

Brennan M, Migliorati CA, Lockhart PB, Wray D, Al-Hashimi I, Axéll T, Bruce AJ, Carpenter W, Eisenberg E, Epstein JB, Holmstrup P, Jontell M, Nair R, Sasser H, Schifter M, Silverman B, Thongprasom K, Thornhill M, Warnakulasuriya S, van der Waal I. Management of Oral Epithelial Dysplasia: A Review. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 103(Suppl):S19. e1-12, 2007.

Forastiere A, Koch W, Trotti A, Sidransky D. Head and Neck Cancer. *N Engl J Med* 345(26):1890-1900, 2001.

Erratum in: *N Engl J Med* 346(10):788, 2002. Comment in: *N Engl J Med* 346(18):1416-1417, 2002.

Haddad RI, Shin DM. Recent Advances in Head and Neck Cancer. *N Engl J Med* 359(11):1143-1154, 2008.

Marur S, Forastiere A. Head and Neck Cancer: Changing Epidemiology, Diagnosis, and Treatment. *Mayo Clin Proc* 83(4): 489-501, 2008.

Sturgis EM, Wei Q, Spitz MR. Descriptive Epidemiology and Risk Factors for Head and Neck Cancer. *Semin Oncol* 31(6):726-733, 2004.

Tobacco and alcohol use & oral cancer

Baan R, Straif K, Grosse Y, Secretan B, El Ghissassi F, Bouvard V, Altieri A, Cogliano V; WHO International Agency for Research on Cancer Monograph Working Group. Carcinogenicity of Alcoholic Beverages. *Lancet Oncol* 8(4):292-293, 2007.

Day GL, Blot WJ, Austin DF, et al. Racial Differences in Risk of Oral and Pharyngeal Cancer: Alcohol, Tobacco, and Other Determinants. *J Natl Cancer Inst* 85(6):465-473, 1993.

International Agency for Research on Cancer. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Volume 89. Smokeless Tobacco and Some Tobacco-Specific N-Nitrosamines. Lyon, 2007.

International Agency for Research on Cancer. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Volume 83. Tobacco Smoke and Involuntary Smoking. Lyon, 2004.

Oral Cancer

Causes and Symptoms & The Oral Cancer Exam

HPV and oral cancer

D'Souza G, Kreimer AR, Viscidi R, et al. Case-Control Study of Human Papillomavirus and Oropharyngeal Cancer. *N Engl J Med* 356(19): 1944-1956, 2007.

International Agency for Research on Cancer. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Volume 90. Human Papillomaviruses. Lyon, 2007.

Age and oral cancer

Ries LAG, Melbert D, Krapcho M, Stinchcomb DG, Howlader N, Horner MJ, Mariotto A, Miller BA, Feuer EJ, Altekruse SF, Lewis DR, Clegg L, Eisner MP, Reichman M, Edwards BK (eds). SEER Cancer Statistics Review, 1975-2005, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2005/, based on November 2007 SEER data submission, posted to the SEER web site, 2008.

Sun exposure and cancer of the lip

Silverman S Jr. Epidemiology. In: Oral Cancer. 3rd ed. Silverman S Jr. (ed.) Atlanta, GA: American Cancer Society; 1989, 1-7.

Diet and nutrition & cancer

Block G, Patterson B, Subar A. Fruit, Vegetables, and Cancer Prevention: A Review of the Epidemiological Evidence. *Nutr Cancer* 18(1):1-29, 1992.

McCullough ML, Giovannucci EL. Diet and Cancer Prevention. *Oncogene* 23(38): 6349-6364, 2004.

Steinmetz KA, Potter JD. Vegetables, Fruit, and Cancer. I. Epidemiology. *Cancer Causes Control* 2(5):325-357, 1991.

Steinmetz KA, Potter JD. Vegetables, Fruit, and Cancer Prevention: A Review. *J Am Diet Assoc* 96(10):1027-1039, 1996.

Winn D. Diet and Nutrition in the Etiology of Oral Cancer. *Am J Clin Nutr* 61(Suppl):437S-445S, 1995.

For additional copies of this fact sheet contact:

National Institute of Dental and Craniofacial Research National Oral Health Information Clearinghouse 1 NOHIC Way Bethesda, Maryland 20892-3500 (301) 402-7364 www.nidcr.nih.gov

This publication is not copyrighted. Make as many copies as you need.

NIH Publication No: 08-6424 Printed October 2008



