

Oral Cancer

What is the oral cavity and pharynx?

The oral cavity includes the lips, inside lining of the lips and cheeks, teeth, gums, front two-thirds of the tongue, floor of the mouth below the tongue, bony roof of the mouth, and the area behind the wisdom teeth. The oropharynx begins where the oral cavity stops and includes the base of the tongue, soft palate, tonsils and tonsillar pillars, and the back wall of the throat. The oral cavity and oropharynx assist in breathing, talking, eating, chewing, and swallowing. Minor salivary glands located throughout the oral cavity and oropharynx make saliva that keeps the mouth moist and helps digest food.

What is oral cancer?

There are two kinds of oral cancers: oral cavity cancer which starts in the mouth; and oropharyngeal cancer, which develops in the part of the throat just behind the mouth. Many types of tumors can develop and some of these are benign and some are cancerous. Leukoplakia is a benign condition, however approximately 25 percent can develop into a cancerous lesion.

What are the risk factors?

Smoking, smokeless tobacco, and alcohol substantially increase the risk of developing oral cancer. Other risk factors include poor nutrition, irritation, HPV, ultraviolet light, persistent bad breath, numbness of tongue or other areas of the mouth, age and gender.

What are the signs and symptoms?

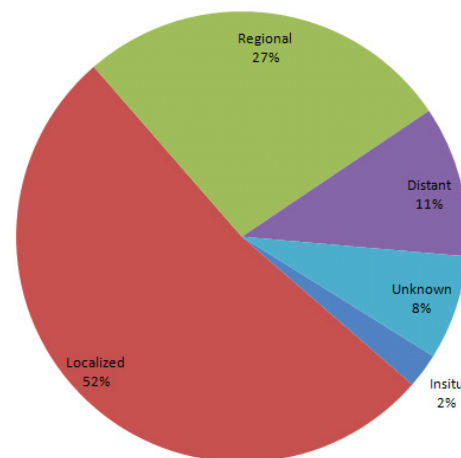
The most common symptom of oral cancer is a sore in the mouth that bleeds easily and does not heal. Other signs and symptoms include pain that does not go away; lump or thickening in the cheek; white or red patch on the gums, tongue, tonsil, or lining of the mouth; and sore throat or feeling of something caught in the throat. Difficulties with chewing, swallowing, or moving the tongue or jaw are often late symptoms of oral cancer.

How is it diagnosed?

A medical checkup including examination of the mouth and throat should be performed. A biopsy is needed to confirm that a cancer is present.

Diagnosis

In the 2003-2007 time period, 2 percent of the oral cancers were diagnosed at the in situ stage, 52 percent were diagnosed at the localized stage, 27 percent at regional stage, 11 percent at distant stage and 8 percent were of unknown stage of progression.



What are the common treatments?

Treatment options include: surgery, radiation therapy, and chemotherapy.

What are the survival outcomes?

Using 1999-2007 SEER data, the national 5-year relative survival rate estimate is 61 percent. When diagnosed at localized stage, the 5-year relative survival rate is 83 percent. For regional and distant stages, the 5-year relative survival rates are 55 percent and 32 percent respectively. The survival rate when the stage of diagnosis could not be determined was estimated at 50 percent.

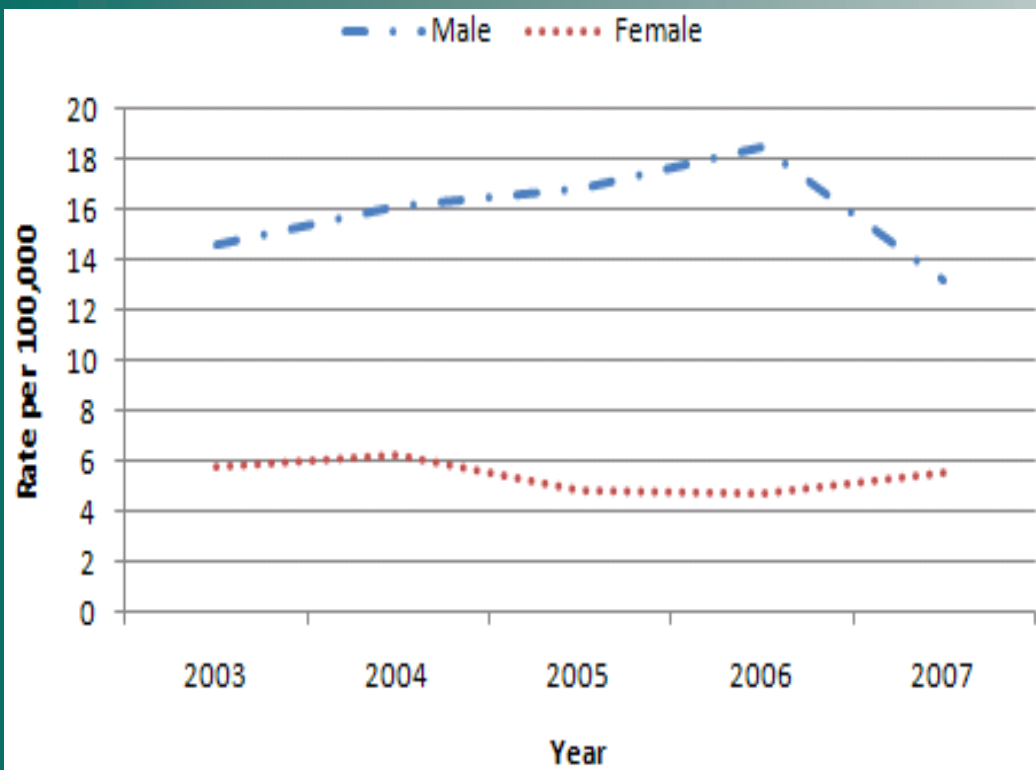
What can you tell me about this cancer in North Dakota?

Summary Statistics 2003-2007	ND	WNC	US
INCIDENCE			
Annual age-adjusted incidence rates*	9.5	10.8	10.7
Average number of new cases	68	2,295	32,988
Percent of all new cancers	2.02	2.29	2.29
MORTALITY			
Annual age-adjusted mortality rates*	2.2	2.3	2.5
Average number of deaths each year	16	491	7,833
Percent of all cancer deaths	1.25	1.24	1.40
* Rates per 100,000 and standardized to U.S. year 2000 population.	WNC and US data source: http://apps.nccd.cdc.gov/uscs		

☞ The West North Central (WNC) regions include the following states: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota and South Dakota.

INCIDENCE:

Incidence Rates by Gender, North Dakota 2003-2007

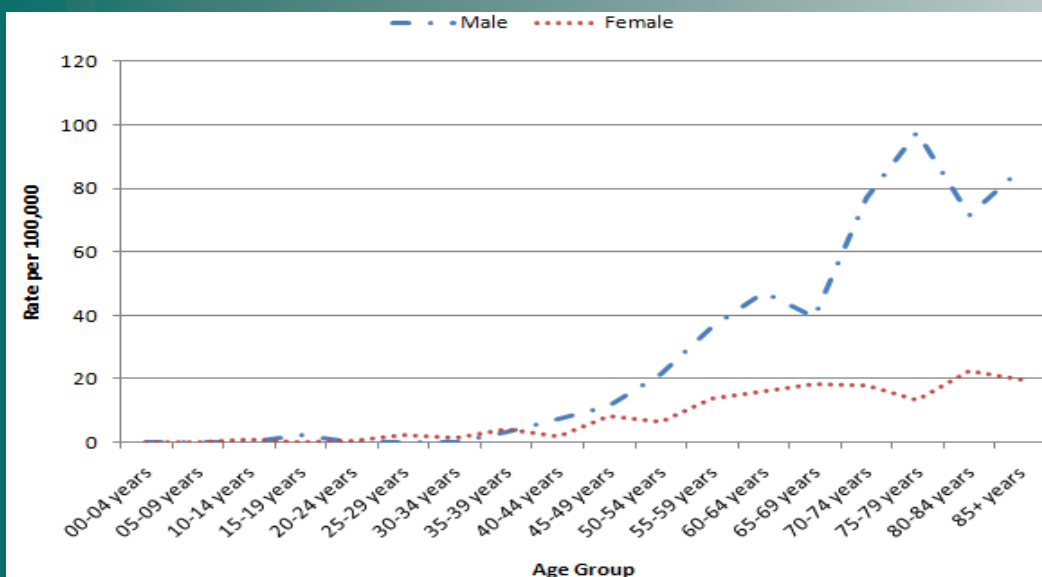


☞ An average of 68 new cases of oral cancer are diagnosed each year in North Dakota, which is about 2 percent of all cancers diagnosed in the state.

☞ The incidence of oral cancer is higher among men than women.

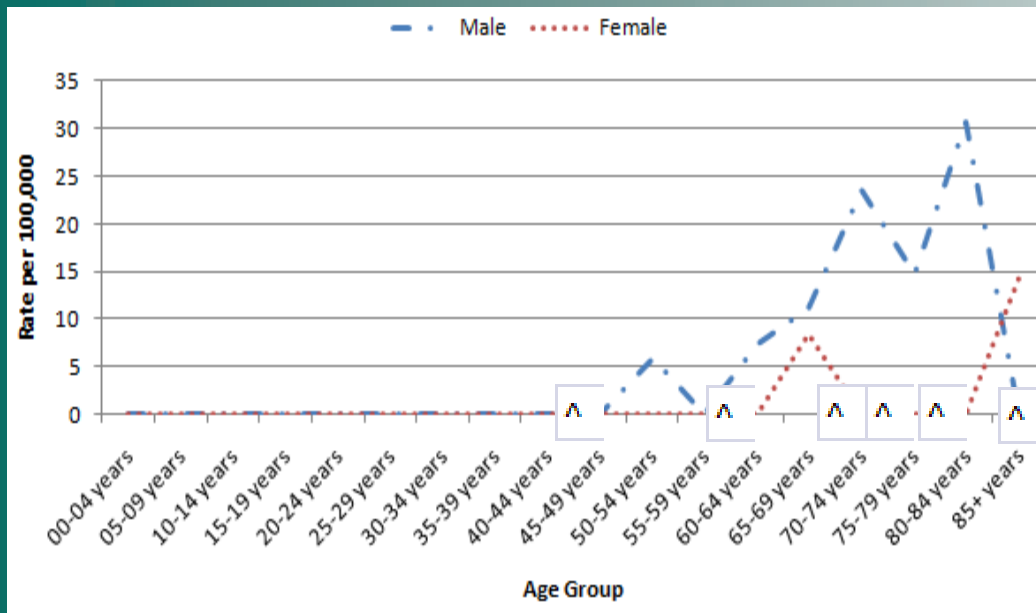
☞ The average annual incidence rate for men is 15.8 per 100,000 men, and the average annual incidence rate for women is 5.4 per 100,000 women.

Age-Specific Incidence Rates, North Dakota 2003-2007



☞ The annual incidence rate increases with age.

Age-Specific Mortality Rates, North Dakota 2003-2007



☞ An average of 16 deaths due to oral cancer occur each year in North Dakota, which is about 1 percent of all cancer deaths in the state.

☞ The average annual death rate for men is 3.2 per 100,000 men, and for women it is 1.4 per 100,000 women.

☞ Death rate increases with age.

^ Statistic not displayed due to fewer than five cases.

Glossary of Cancer Terminology

- ☞ **Age-adjusted rate:** Since cancer rates tend to vary with age, and since populations vary with respect to their age-distribution, incidence and mortality rates are age-adjusted to allow comparison of rates between different populations (i.e. county or regional boundaries).
- ☞ **Age-specific rate:** The number of new cases diagnosed per 100,000 individuals over a specified time period for a specified age-group.
- ☞ **Incidence:** The number of new cases of a given type of cancer diagnosed during the year.
- ☞ **Mortality:** The number of deaths attributed to the particular type of cancer that occurred during the year. Includes deaths of patients diagnosed in earlier years, individuals newly diagnosed during the year, and patients for whom a diagnosis of cancer is made only after death.
- ☞ **Risk factor:** Anything that increases a person's chance of getting a disease.
- ☞ **Stage at diagnosis:** How far a cancer has spread from its site of origin when it is diagnosed. There are several different systems for the staging of cancers. This report uses the general summary stage system. The stages, in order of increasing spread, are in situ, localized, regional and distant. Cancers diagnosed at the localized, regional or distant stage are referred to as invasive.



For more information, visit
www.ndhealth.gov/cancerregistry/
 or call 701.328.2306

