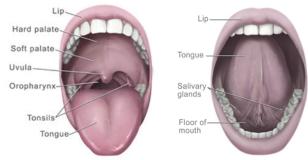
# Oral Cavity and Pharynx Cancer

**Definition**: Oral cancer begins in the mouth and can include the lips, cheeks, teeth, gums, the floor of the tongue, the roof of the mouth, and the front two-thirds of the tongue.<sup>1</sup> Oropharyngeal cancer begins in the part of the throat just behind the mouth and includes the back third of the tongue, the soft palate, the tonsils, and walls of the throat.<sup>1</sup>

**Background:** From 2002 to 2006, there was a yearly average of approximately **1,181** newly diagnosed cases of oral cavity and pharynx cancer in Ohio.<sup>2</sup> During this same time period, Ohio experienced approximately **325** deaths each year due to oral cavity and pharynx cancer.<sup>2</sup>

Oral cancers are about twice as common in men than women.<sup>1</sup> The incidence and mortality rates for these cancers have been dropping over the last 30 years.<sup>1</sup>

### Figure 18



### **Cuyahoga County Data:**

- The average annual number of newly diagnosed oral cavity and pharynx cancer cases from 2002-2006 was **158**, with an age-adjusted incidence rate of **10.4** per 100,000 people.
- This is <u>higher</u> than the **9.6** incidence rate for Ohio and <u>the same as</u> than the **10.4** incidence rate for the Nation.
- The average annual number of oral cavity and pharynx cancer deaths from 2002-2006 was **49**, with an age-adjusted mortality rate of **3.1** per 100,000 people.
- This is <u>higher</u> than the **2.6** mortality rate for Ohio and <u>higher</u> than the **2.6** mortality rate for the Nation.

### Table 18aOral Cavity and Pharynx Cancer

Average Annual Number of Cancer Cases and Age-Adjusted Incidence Rates\* for 2002-2006

Incidence	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
Cuyahoga County	110	16.7	48	5.5	158	10.4
Ohio	815	14.5	366	5.4	1,181	9.6
National SEER		15.4		6.1		10.4

\* Rate is calculated per 100,000 people.

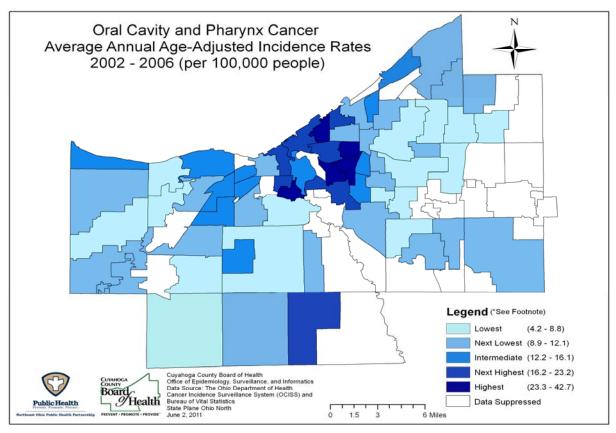
### Table 18bOral Cavity and Pharynx Cancer

Average Annual Number of Cancer Deaths and Age-Adjusted Mortality Rates\* for 2002-2006

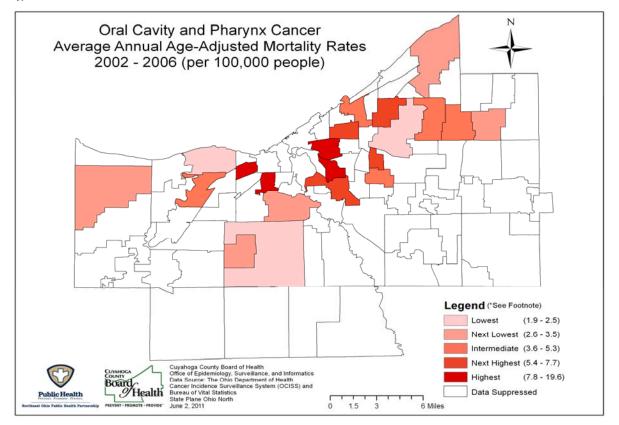
Mortality	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
Cuyahoga County	34	5.2	15	1.5	49	3.1
Ohio	219	4.0	106	1.4	325	2.6
National SEER		3.9		1.5		2.6

\* Rate is calculated per 100,000 people.

Figure 18a



#### Figure 18b



\*Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details.

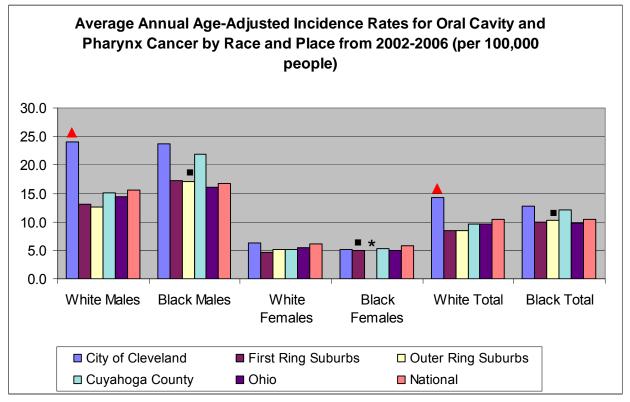
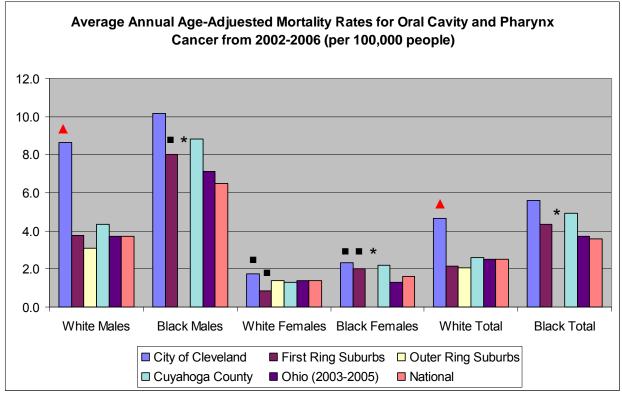


Chart 18b



▲ Rates are statistically significantly higher when compared to Cuyahoga County.

▼ Rates are statistically significantly lower when compared to Cuyahoga County.

■ Rates are not compared to Cuyahoga County when there are <20 cases total for 2002-2006 due to instability. \*Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details.

# **Risk Factors**

**Males:** In the United States, 1 in 71 males will <u>develop</u> oral cavity and pharynx cancer and 1 in 263 males will <u>die</u> from oral cavity and pharynx cancer.<sup>3</sup>

**Females**: In the United States, 1 in 152 females will <u>develop</u> oral cavity and pharynx cancer and 1 in 556 females will <u>die</u> from oral cavity and pharynx cancer.<sup>3</sup>

Several risk factors may contribute to the development of oral cavity and pharynx cancer. They include:  $^{\rm 1}$ 

- Tobacco use
- Alcohol use
- Heavy drinking and smoking- The risk for oral cavity and pharynx cancer may be increased by 100 times in those who regularly drink and smoke heavily, than in those who do not smoke or drink.
- **Betel quid use-** Betel leaves are chewed and used as a stimulant and antiseptic especially in Southeast Asia.
- Gender- Men are twice as likely to develop oral cavity and pharynx cancer as women.
- Ultraviolet light
- Poor Nutrition
- Human papilloma virus infection
- Immune system suppression
- Lichen planus- This is a chronic disease affecting the oral mucosa and presenting itself in the form of papules, lesions or rashes.
- Graft-versus-host disease
- Genetic syndromes

## **Symptoms**<sup>4</sup>

- Patches inside the mouth or on the lips
- Sores that do not heal
- Bleeding in the mouth
- Loose teeth
- Difficulty or pain when swallowing
- Difficulty wearing dentures
- A lump in your neck
- Earache that does not go away
- Numbness of the lower lip and chin

# Screening, Prevention and Early Detection

#### Screening:<sup>1</sup>

Regular dental checkups that include examination of the entire mouth are important for finding oral cavity and pharynx cancer. An examination by a doctor that includes the mouth and throat as part of a routine cancer-related checkup is recommended by the American Cancer Society.

### **Prevention:**<sup>1</sup>

Oral cavity and pharyngeal cancers may be preventable by avoiding the known risk factors, including:

- Limit drinking and smoking
- Limit exposure to ultraviolet light
- Wear properly fitting dentures
- Consume a healthy diet, with an emphasis on foods from plant sources
- Avoid HPV infection
- Chemoprevention

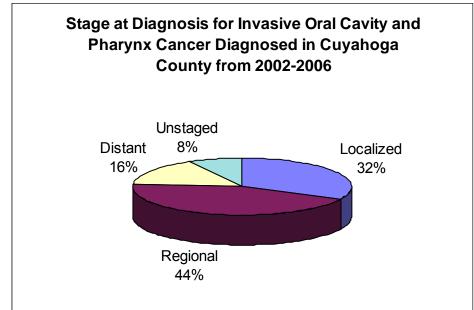
# Staging

Stage at Diagnosis describes the severity of a person's cancer and the extent to which it has or has not spread throughout the body.<sup>5</sup> Cancer staging is important in helping physicians plan appropriate treatment, as well as to estimate a patient's prognosis.<sup>5</sup> Cancer diagnosed in the *in situ* and localized stages are generally referred to as early-stage tumors, whereas regional and distant tumors are referred to as late-stage tumors.<sup>2</sup> Detecting cancers at an early stage may increase long-term survival and can lead to a reduction in mortality.<sup>2</sup>

The National Cancer Institute groups staging into five main categories:<sup>5</sup>

• *In situ*: Abnormal cells are present only in the layer of cells in which they developed. In this report, *in situ* cases are only included for bladder cancer.

- Localized: Cancer is limited to the organ in which it began, without evidence of spread.
- **Regional**: Cancer has spread beyond the primary site to nearby lymph nodes or organs and tissues.
- **Distant**: Cancer has spread from the primary site to distant organs or distant lymph nodes.
- Unstaged/Unknown: There is not enough information to determine the stage.



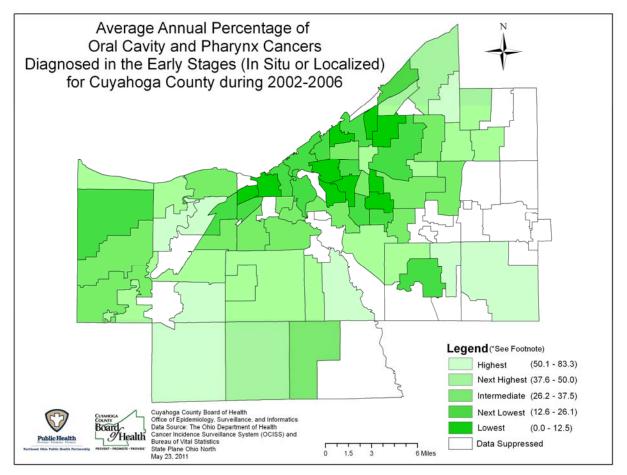


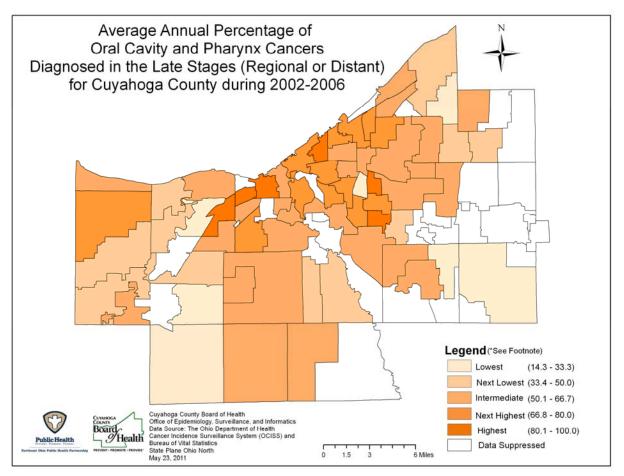
Γ

5-year Relative Survival* by Stage at Diagnosis for Oral Cavity and Pharynx Cancer in the United States 1999-2006, All Races, Both Sexes <sup>6</sup>				
	5-year			
Stage at Diagnosis	<b>Relative Survival (%)</b>			
Localized				
(confined to primary site)	82.5			
Regional				
(spread to regional lymph nodes)	54.7			
Distant				
(cancer has metastasized)	32.2			
Unknown/Unstaged	53.2			

\*Relative survival compares observed survival for those with cancer to the expected survival for those without cancer.

#### Figure 18c





\*Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details.

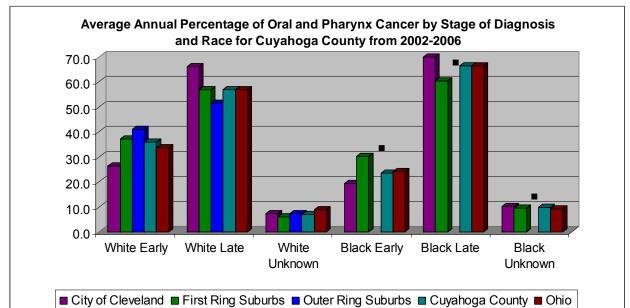
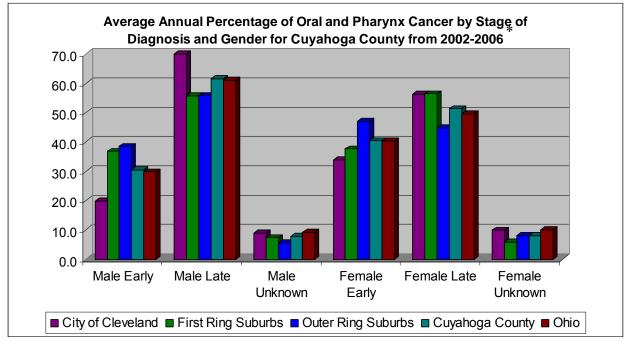


Chart 18d

• Ohio Department of Health Disclosures Limitation Standard was applied. Percentages could not be analyzed for Black Males and Females in the outer ring.





\*All races are included in staging calculations.

# **More Information**

National Cancer Institute <u>http://www.cancer.gov/</u> American Cancer Society <u>http://www.cancer.org</u> Ohio Department of Health <u>http://www.odh.ohio.gov/</u>

#### Resources

- 1. The American Cancer Society. Oral Cavity and Oropharyngeal Cancer Detailed Guide. <u>http://www.cancer.org/Cancer/OralCavityandOropharyngealCancer/DetailedGuide/index</u>. (Accessed December 20, 2010).
- Cancer Incidence and Mortality among Ohio Residents, 2002-2006. Ohio Cancer Incidence Surveillance System, Ohio Department of Health and The Ohio State University, Columbus, Ohio, December 2009.
- http://www.odh.ohio.gov/ASSETS/79F9E92E210F477D885F8EAC864E2F27/0206Monograph\_Final.pdf. 3. The American Cancer Society. Lifetime Risk of Developing or Dying From Cancer.
- <u>http://www.cancer.org/Cancer/CancerBasics/lifetime-probability-of-developing-or-dying-from-cancer</u>. (Accessed January 10, 2011).
- 4. National Cancer Institute. What you need to know about oral cancer. (Accessed December 20, 010). <u>http://www.cancer.gov/cancertopics/wyntk/oral/</u>. (Accessed December 20, 2010).
- 5. National Cancer Institute. Cancer Staging. http://www.cancer.gov/cancertopics/factsheet/Detection/staging. (Accessed December 23, 2010).
- 6. Surveillance Epidemiology and End Results. SEER Stat Fact Sheets: Oral Cavity and Pharynx. <u>http://seer.cancer.gov/statfacts/html/oralcav.html</u>. (Accessed December 20 2010).
- 7. National Cancer Institute. What you need to know about oral cancer. Oral cancer images from <a href="http://www.cancer.gov/cancertopics/wyntk/oral/page2">http://www.cancer.gov/cancertopics/wyntk/oral/page2</a>. (Accessed December 20, 2010).