Table 18a Oral Cavity and Pharynx Cancer
Average Annual Number of Cancer Cases and Age-Adjusted Incidence Rates* for 2002-2006

<table>
<thead>
<tr>
<th></th>
<th>Incidence</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cases</td>
<td>Rate</td>
<td>Cases</td>
<td>Rate</td>
</tr>
<tr>
<td>Cuyahoga County</td>
<td>110</td>
<td>16.7</td>
<td>48</td>
<td>5.5</td>
</tr>
<tr>
<td>Ohio</td>
<td>815</td>
<td>14.5</td>
<td>366</td>
<td>5.4</td>
</tr>
<tr>
<td>National SEER</td>
<td>15.4</td>
<td></td>
<td>6.1</td>
<td></td>
</tr>
</tbody>
</table>

* Rate is calculated per 100,000 people.

Table 18b Oral Cavity and Pharynx Cancer
Average Annual Number of Cancer Deaths and Age-Adjusted Mortality Rates* for 2002-2006

<table>
<thead>
<tr>
<th></th>
<th>Mortality</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cases</td>
<td>Rate</td>
<td>Cases</td>
<td>Rate</td>
</tr>
<tr>
<td>Cuyahoga County</td>
<td>34</td>
<td>5.2</td>
<td>15</td>
<td>1.5</td>
</tr>
<tr>
<td>Ohio</td>
<td>219</td>
<td>4.0</td>
<td>106</td>
<td>1.4</td>
</tr>
<tr>
<td>National SEER</td>
<td>3.9</td>
<td></td>
<td>1.5</td>
<td></td>
</tr>
</tbody>
</table>

* Rate is calculated per 100,000 people.

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. 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.

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. During this same time period, Ohio experienced approximately 325 deaths each year due to oral cavity and pharynx cancer.

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

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 higher than the 9.6 incidence rate for Ohio and the same as 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 higher than the 2.6 mortality rate for Ohio and higher than the 2.6 mortality rate for the Nation.
*Data were suppressed to help maintain confidentiality and/or due to concerns over unstable numbers. See methods/limitations section for additional details.
Chart 18a

Average Annual Age-Adjusted Incidence Rates for Oral Cavity and Pharynx Cancer by Race and Place from 2002-2006 (per 100,000 people)

- City of Cleveland
- First Ring Suburbs
- Outer Ring Suburbs
- Cuyahoga County
- Ohio
- National

Chart 18b

Average Annual Age-Adjusted Mortality Rates for Oral Cavity and Pharynx Cancer from 2002-2006 (per 100,000 people)

- City of Cleveland
- First Ring Suburbs
- Outer Ring Suburbs
- Cuyahoga County
- Ohio (2003-2005)
- National

▲ 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 develop oral cavity and pharynx cancer and 1 in 263 males will die from oral cavity and pharynx cancer.³

Females: In the United States, 1 in 152 females will develop oral cavity and pharynx cancer and 1 in 556 females will die from oral cavity and pharynx cancer.³

Several risk factors may contribute to the development of oral cavity and pharynx cancer. They include: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

Symptoms⁴

- 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:¹

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:**

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.\(^5\) Cancer staging is important in helping physicians plan appropriate treatment, as well as to estimate a patient’s prognosis.\(^5\) 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.\(^2\) Detecting cancers at an early stage may increase long-term survival and can lead to a reduction in mortality.\(^2\)

The National Cancer Institute groups staging into five main categories:\(^5\)

- **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.

**Chart 18c**

**Stage at Diagnosis for Invasive Oral Cavity and Pharynx Cancer Diagnosed in Cuyahoga County from 2002-2006**

- Localized: 32%
- Regional: 44%
- Distant: 16%
- Unstaged: 8%
Table 18c

5-year Relative Survival* by Stage at Diagnosis for Oral Cavity and Pharynx Cancer in the United States
1999-2006, All Races, Both Sexes

<table>
<thead>
<tr>
<th>Stage at Diagnosis</th>
<th>5-year Relative Survival (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized (confined to primary site)</td>
<td>82.5</td>
</tr>
<tr>
<td>Regional (spread to regional lymph nodes)</td>
<td>54.7</td>
</tr>
<tr>
<td>Distant (cancer has metastasized)</td>
<td>32.2</td>
</tr>
<tr>
<td>Unknown/Unstaged</td>
<td>53.2</td>
</tr>
</tbody>
</table>

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

Figure 18c

Average Annual Percentage of Oral Cavity and Pharynx Cancers Diagnosed in the Early Stages (In Situ or Localized) for Cuyahoga County during 2002-2006
Figure 18d

*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.
**Chart 18e**

Average Annual Percentage of Oral and Pharynx Cancer by Stage of Diagnosis and Gender for Cuyahoga County from 2002-2006

*All races are included in staging calculations.*

**More Information**

American Cancer Society [http://www.cancer.org](http://www.cancer.org)

**Resources**