

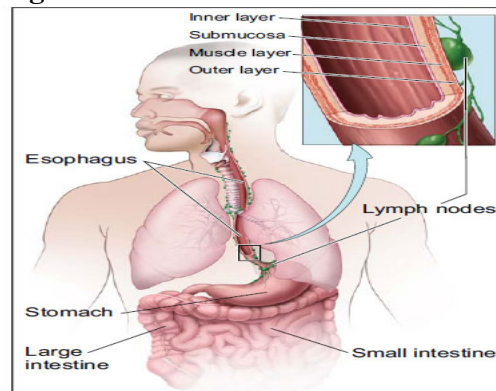
# Esophageal Cancers

**Definition:** The esophagus connects the throat to the stomach by way of a hollow, muscular tube.<sup>1</sup> Cancers of the esophagus start in the inner mucosa layer and spread outward to the outer submucosa layer and the muscle layer.<sup>1</sup>

**Background:** From 2002 to 2006, there was a yearly average of approximately **682** newly diagnosed cases of esophageal cancer in Ohio. During this same time period, Ohio experienced approximately **638** deaths each year due to esophageal cancer.<sup>2</sup>

Esophageal cancer is three times more common in men than women.<sup>1</sup> Also, this cancer is as common in whites as it is in African Americans.<sup>1</sup> Treatment for cancer of the esophagus has improved over the past few decades.<sup>1</sup> White patients have a 20% survival rate of at least 5 years after diagnosis, and African Americans have a 13% survival rate of at least 5 years after diagnosis.<sup>1</sup>

Figure 8



This picture shows the esophagus and nearby organs.

### Cuyahoga County Data:

- The average annual number of newly diagnosed esophageal cancer cases from 2002-2006 was **91**, with an age-adjusted incidence rate of **5.7** per 100,000 people.
- This is **higher** than the **5.5** incidence rate for Ohio and **higher** than the **4.5** incidence rate for the Nation.
- The average annual number of esophageal cancer deaths from 2002-2006 was **80**, with an age-adjusted mortality rate of **5.0** per 100,000 people.
- This is **lower** than the **5.2** mortality rate for Ohio and **higher** than the **4.4** mortality rate for the Nation.

**Table 8a Esophageal Cancers**

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

Incidence	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
<b>Cuyahoga County</b>	66	9.9	26	2.7	91	5.7
<b>Ohio</b>	533	10.0	149	2.1	682	5.5
<b>National SEER</b>		7.7		2.0		4.5

\* Rate is calculated per 100,000 people.

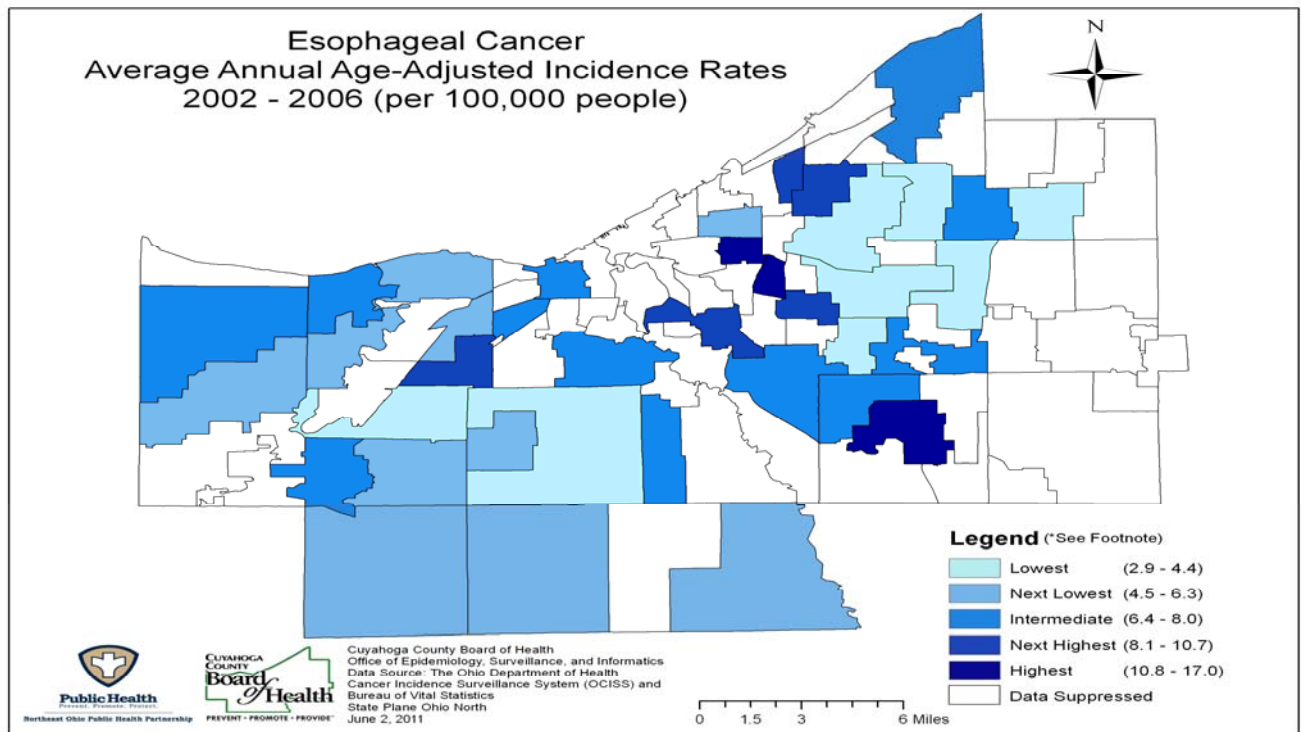
**Table 8b Esophageal Cancers**

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

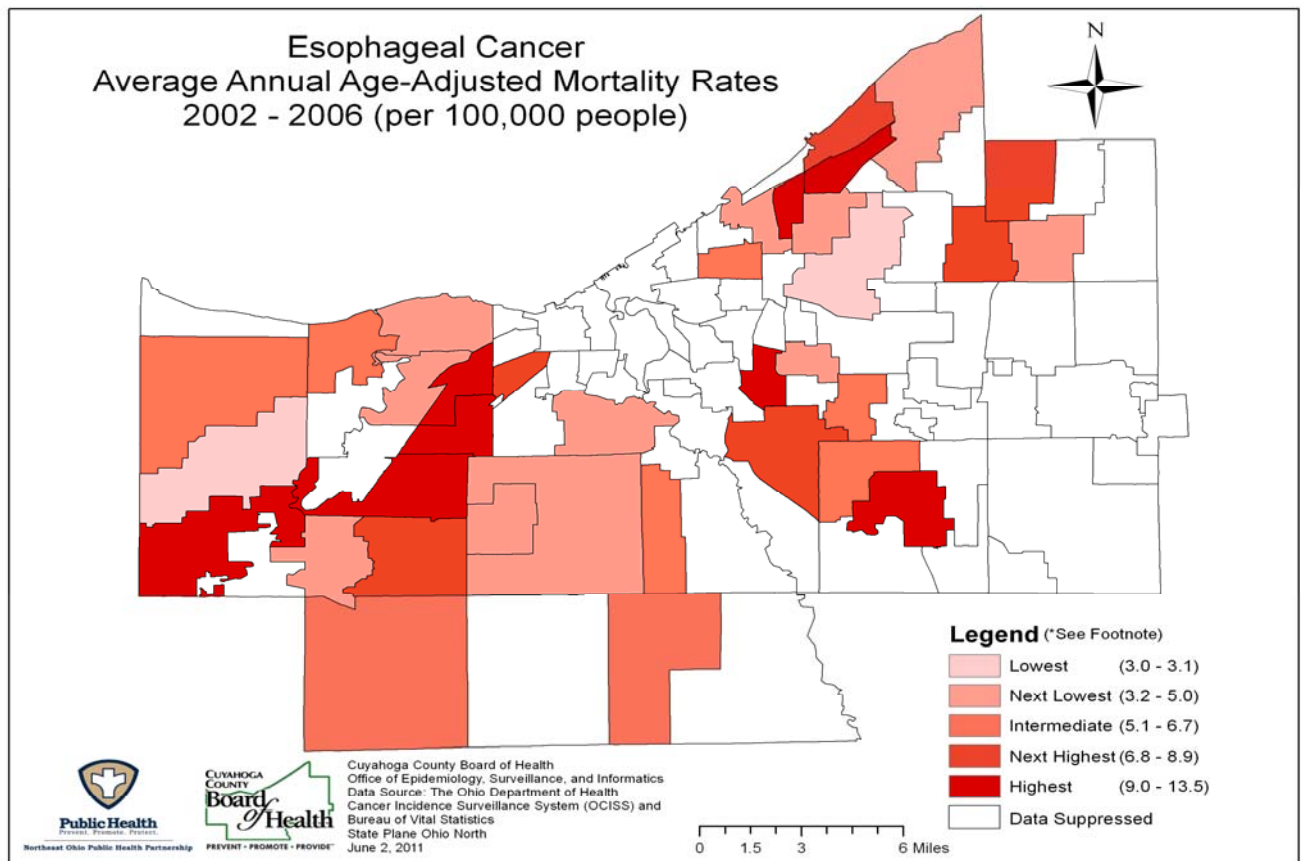
Mortality	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
<b>Cuyahoga County</b>	60	9.1	20	2.1	80	5.0
<b>Ohio</b>	500	9.5	138	1.9	638	5.2
<b>National SEER</b>		7.9		1.7		4.4

\* Rate is calculated per 100,000 people.

**Figure 8a**

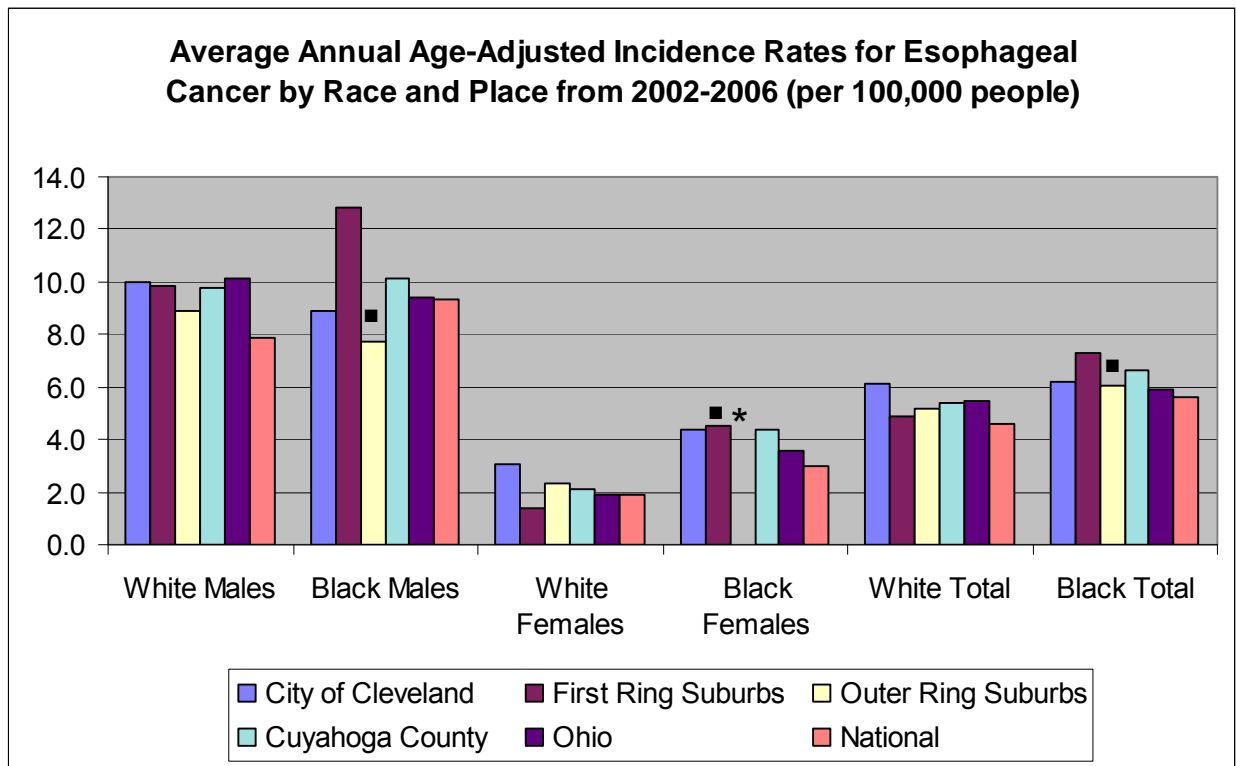


**Figure 8b**

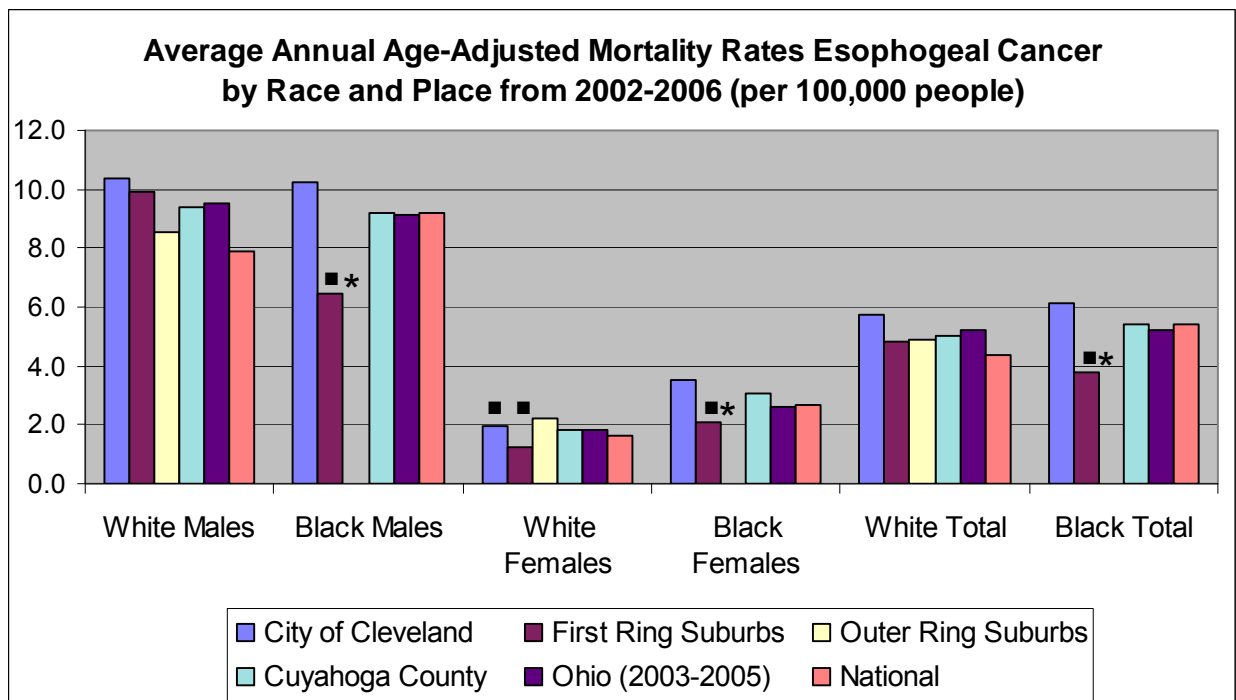


\*Data were suppressed to help maintain confidentiality and/or due to concerns over unstable numbers. See methods/limitations section for additional details.

**Chart 8a**



**Chart 8b**



- ▲ 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 128 males will develop esophageal cancer and 1 in 127 males will die from esophageal cancer.<sup>3</sup>

**Females:** In the United States, 1 in 417 females will develop esophageal cancer and 1 in 476 females will die from esophageal cancer.<sup>3</sup>

Several risk factors may contribute to the development of esophageal cancer. They include:<sup>1</sup>

- **Age-** The risk of esophageal cancer increases with age, with most cases occurring in adults 65 and older.
- **Gender-** Men are more likely to develop esophageal cancer.
- **Gastroesophageal reflux disease (GERD)**
- **Barrett's esophagus**
- **Tobacco and alcohol use**
- **Obesity**
- **Diet-** Diets high in fruits and vegetables **lower** the risk of esophageal cancer.
- **Workplace exposures**
- **Injury to the esophagus**
- **Achalasia**
- **Tylosis**
- **Esophageal webs**
- **Stomach bacteria *Helicobacter pylori***
- **Personal history of other cancers**

## Symptoms<sup>4</sup>

Early esophageal cancer may not cause symptoms, however as the cancer grows the following symptoms may occur:

- Food getting stuck in the esophagus
- Pain when swallowing
- Pain in the chest or back
- Weight Loss
- Heartburn
- A hoarse voice or cough that does not resolve within 2 weeks

## Screening, Prevention and Early Detection<sup>1</sup>

### Screening:

There are no recommended blood tests or screening tests available to detect esophageal tumors before they cause symptoms. People at high risk may be followed closely to look for early cancers and pre-cancers.

## Prevention:

The risk of esophageal cancer can be reduced, but cannot always be prevented. Reducing risk factors such as avoiding tobacco and alcohol may help lower the risk for this cancer. The American Cancer Society recommends eating a diet rich in fruits and vegetables and exercising regularly, because obesity has been linked with adenocarcinoma esophageal cancer.

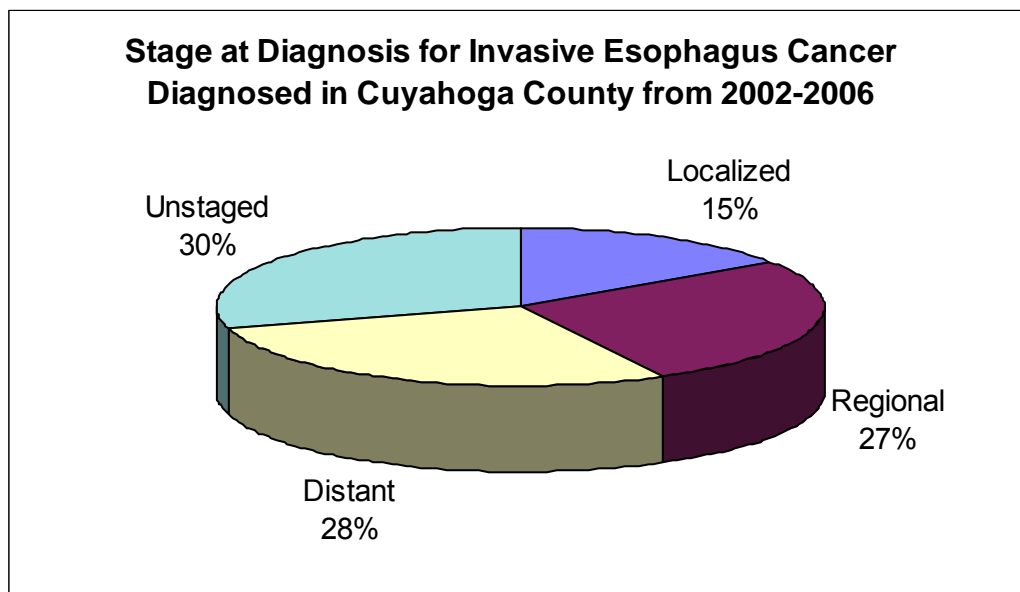
## Staging

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.

Chart 8c



**Table 8c**

<b>5-year Relative Survival* by Stage at Diagnosis for Esophageal Cancer in the United States for 1999-2006, All Races, Both Sexes<sup>6</sup></b>	
<b>Stage at Diagnosis</b>	<b>5-year Relative Survival (%)</b>
Localized (confined to primary site)	37.4
Regional (spread to regional lymph nodes)	18.8
Distant (cancer has metastasized)	3.2
Unknown/Unstaged	12.1

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

## **More information**

National Cancer Institute <http://www.cancer.gov/>

American Cancer Society <http://www.cancer.org>

Ohio Department of Health <http://www.odh.ohio.gov/>

## Resources

1. The American Cancer Society. Esophagus Cancer Detailed Guide. <http://www.cancer.org/Cancer/EsophagusCancer/DetailedGuide/esophagus-cancer-what-is-cancer-of-the-esophagus>. (Accessed December 11, 2010).
2. *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.
3. The American Cancer Society. Lifetime Risk of Developing or Dying From Cancer. <http://www.cancer.org/Cancer/CancerBasics/lifetime-probability-of-developing-or-dying-from-cancer>. (Accessed January 10, 2011).
4. National Cancer Institute. What you need to know about cancer of the esophagus. <http://www.cancer.gov/cancertopics/wyntk/esophagus/page6>. (Accessed December 11, 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: Esophagus. <http://seer.cancer.gov/statfacts/html/esophageal.html>. (Accessed December 11, 2010).
7. National Cancer Institute. What you need to know about cancer of the esophagus. Esophagus images from <http://www.cancer.gov/cancertopics/wyntk/esophagus/page2>. (Accessed December 11, 2010).