

## Esophageal Cancer

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**Source:**

### Overview

Although still relatively uncommon in Western countries, esophageal cancer is fatal in the vast majority of cases. In the United States, an estimated 17,460 new cases will be diagnosed in 2012, and 15,070 deaths will result from the disease. This high percentage of deaths rivals that of pancreatic cancer and is more than four times that of rectal cancer.

The esophagus extends from the cricopharyngeal sphincter to the gastroesophageal (GE) junction and is commonly divided into the cervical, upper- to mid-thoracic, and thoracic portions. This can be important, because histology and optimal treatment approaches may vary considerably according to the site of the cancer. It may not be possible to determine the site of origin if the cancer involves the GE junction itself.

### Epidemiology

#### Gender

Esophageal cancer is four times more common and slightly more lethal in men than in women.

#### Age

In patients with adenocarcinoma of the esophagus (now more common in the United States than the squamous cell type, and typically involving the GE junction), the median age at diagnosis is 69 years. The incidence of squamous cell cancer of the esophagus increases with age as well and peaks in the seventh decade of life.

#### Race

The incidence of squamous cell esophageal cancer is three times higher in blacks than in whites, whereas adenocarcinomas are more common in white men.

#### Geography

Evidence of an association between environment and diet and esophageal cancer comes from the profound differences in incidence observed in various parts of the world. Esophageal cancer occurs at a rate 20 to 30 times higher in China than in the United States. An esophageal "cancer belt," primarily squamous cell cancers, extends from northeast China to the Middle East.

#### Survival

Although the overall outlook for patients with esophageal cancer has improved in the past 30 years, most patients still present with advanced disease, and their survival remains poor. One-third to one-half of patients treated with either chemoradiation therapy or chemoradiation therapy plus surgery are alive at 2 years, without recurrence of esophageal cancer.

#### Disease Site

The rate of cancer of the distal esophagus is about equal to that of the more proximal two-thirds. In general, squamous cell carcinoma is found in the body of the esophagus, whereas adenocarcinoma predominates in lesions closer to the GE junction.

## Etiology and Risk Factors

### Cigarettes and Alcohol

Squamous cell carcinomas of the esophagus have been associated with cigarette smoking and/or excessive alcohol intake. Furthermore, cigarette smoking and alcohol intake appear to act synergistically, producing high relative risks in heavy users of tobacco and alcohol. Esophageal adenocarcinoma is increased twofold in smokers.

### Diet

High-fat, low-protein, and low-calorie diets have been shown to increase the risk of esophageal cancer. Exposure to nitrosamines has been proposed as a factor in the development of both squamous cell carcinoma and adenocarcinoma of the esophagus.

### Barrett's Esophagus and Other Factors

Gastroesophageal reflux disease (GERD) and Barrett's esophagus (adenomatous metaplasia of the distal esophagus) have been linked to adenocarcinoma of the esophagus. Tylosis, Plummer-Vinson syndrome, history of head and neck cancer, and achalasia have also been associated with a higher than normal risk of developing squamous cell cancer of the esophagus.

## Signs and Symptoms

Other than symptoms related to reflux disease, symptoms do not alert the patient until the disease is advanced; few esophageal cancers are diagnosed at an early stage.

### Dysphagia

The most common presenting complaint is dysphagia which, because of esophageal elasticity, is generally not noted until the esophageal lumen is narrowed to one-half to one-third of normal.

### Weight Loss

Weight loss is common and has a significant role in prognosis (> 10% of total body weight as poor prognosis).

### Cough

Cough that is induced by swallowing is suggestive of local extension into the trachea with resultant tracheoesophageal fistula.

### Odynophagia and Pain

Pain with swallowing (odynophagia) is an ominous sign. Patients who describe pain radiating to the back may well have extraesophageal spread. Supraclavicular, axillary, or cervical nodal metastases may be appreciated on examination.

### Hoarseness

Hoarseness may be a sign of recurrent laryngeal nerve involvement due to extraesophageal spread.

### Metastatic Disease

Metastatic disease may present as malignant pleural effusion or ascites. Bone metastasis can be identified by pain involving the affected site or by associated hypercalcemia. The most common metastatic sites are retroperitoneal or celiac lymph nodes, liver, and lungs.

The American College of Surgeons conducted a study using its national cancer database to assess the presentation, stage distribution, and treatment of patients with esophageal cancer between 1994 and 1997 (N = 5,044). The most common presenting symptoms were dysphagia (74%), weight loss (57.3%), reflux (20.5%), odynophagia (16.6%), and dyspnea (12.1%). The American College of Surgeons Database finds 50% of patients present with tumors in the lower third of the esophagus; 42% have adenocarcinoma histology, and 52% have squamous histology. Barrett's esophagus was found in 39% of those patients with adenocarcinoma. Patients who underwent initial surgical resection had the following stage distribution: stages I (13.3%), II (34.7%), III (35.7%), and IV (12.3%).

**Source URL:** <http://www.psychiatrictimes.com/cancer-management/esophageal>

**Links:**

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