

# Esophageal Squamous Cell Carcinoma (ESCC)

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## 1 What Is Esophageal Squamous Cell Carcinoma (ESCC)?

- ESCC is the most common type of esophageal cancer worldwide, accounting for nearly 90% of the 604,100 cases of esophageal cancer each year.<sup>iii,iv</sup>
- More than 21,000 people in the United States are diagnosed with esophageal cancer annually, with more than 16,000 deaths from the disease.<sup>v</sup>

- One of the two main types of esophageal cancer, ESCC, is a type of cancer that forms in the flat, thin squamous cells that line the inner layer of the esophagus.<sup>i,ii</sup>
- The cancer is mostly found in the upper two-thirds of the chest cavity (upper and middle thoracic esophagus) and the neck region (cervical esophagus).<sup>ii</sup>

## Prevalence & Incidence 2

## 3 Risk Factors

Known risk factors include, but are not limited to:<sup>vi,vii</sup>



### Age

The likelihood of getting ESCC increases with age, with fewer than 15% of cases occurring in people under 55.



### Lifestyle Factors

- Tobacco use
  - Alcohol use
- The combination of tobacco and alcohol further increases risk.*



### Other Medical Conditions

- Achalasia (a rare swallowing disorder)
- Tylosis (focal thickening of the skin of the hands and feet)
- Plummer-Vinson syndrome (dysphagia, iron-deficiency anemia and esophageal webs)
- Esophageal strictures
- Human papillomavirus infection



### Other Cancers


A history of other cancers, including lung, mouth and throat cancer, increases the risk of ESCC.


- Often, symptoms will not appear until the tumor is already in the advanced stage.<sup>viii</sup>
- Common signs or symptoms may include:<sup>i,viii</sup>
  - Trouble swallowing
  - Chest pain
  - Weight loss
  - Indigestion and heartburn
  - Hoarseness

## Symptoms 4

- Chronic cough
- Vomiting
- A lump under the skin
- Bone pain (occurs if cancer has spread to the bone)
- Bleeding into the esophagus

## 5 Prognosis

 ESCC has a five-year survival rate of 20%–30%, due to a lack of available, effective treatment options and difficulty with early detection.<sup>ix,x</sup>

 Certain factors, including the stage of the cancer and the patient’s overall health, can affect the chance of recovery from ESCC.<sup>i</sup>

## Diagnosis 6

Esophageal cancers are usually found after a person experiences signs or symptoms. If medical history and an exam suggest that a person may have cancer, tests may be done to make a diagnosis and assess if the cancer has spread to other parts of the body. Diagnostic tests may include:<sup>xi</sup>

### Imaging tests

- Barium swallow test
- Computed tomography (CT) scan
- Magnetic resonance imaging (MRI) scan
- Positron emission tomography (PET) scan

### Endoscopy

- Upper endoscopy
- Endoscopic ultrasound
- Bronchoscopy
- Thoracoscopy and laparoscopy

### Lab tests of biopsy samples, which can help identify genetic markers to inform treatment decisions

- Human epidermal growth factor receptor 2 (HER2)
- Programmed death-ligand 1 (PD-L1)
- DNA mismatch repair (MMR) and microsatellite instability (MSI) testing

### Blood tests

- Complete blood count (CBC)
- Liver enzymes

## 7 Treatment

Treatment options and recommendations for esophageal cancer may vary based on the type and stage of the cancer, possible side effects and other conditions. ESCC may be treated with:<sup>xii,xiii,xiv</sup>



Esophagectomy



Chemotherapy



Immunotherapy



Chemoradiotherapy



Radiation therapy



Targeted drug therapy



Endoscopic Treatments

The primary goals of treatment for advanced ESCC include:<sup>xv</sup>

## Goals of Therapy

## 8



Alleviating symptoms



Prolonging survival

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