

# **Stomach Cancer (Gastric Cancer)**

Stomach cancer (gastric cancer) forms in the tissues of the stomach. Cancerous cells can develop in any of the five layers of the stomach, from the innermost layer, the mucosa, to the outermost layer, the serosa. Most cases begin in the mucosa, which produces stomach acid and digestive enzymes. Symptoms, treatments, and survival rates all vary, depending on the cancer's point of origin in the stomach. Cancers that begin in the mucosa, the innermost layer, are the most treatable, as they slowly grow out into the outer stomach layers. Cancers in the outer layers of the stomach are more likely to spread to nearby organs or lymph nodes. Stomach cancer that spreads into the lymph system is less treatable. Once a leading cancer killer in the United States, the disease has become less common.

#### **Statistics**

- In 2021, an estimated **26,560 people** in the United States will be diagnosed with stomach cancer.
- An estimated 11,180 Americans will die from the disease in 2021.
- In Texas, **2,137 new diagnoses** are expected and **1,096 deaths** from stomach cancer are anticipated in 2021.
- Approximately **60 percent** of those diagnosed with stomach cancer are **over 65**.

#### **Risk Factors**

- **Bacterial Infection:** A specific bacteria called Helicobacter pylori has been linked to stomach cancer as a major cause of the disease. However, most people with these bacteria do not develop stomach cancer.
- **Demographics:** More men than women are diagnosed with the disease. People over the age of 50 and those with a family history of the disease have a higher risk of developing stomach cancer. Hispanics, African Americans, Native Americans, and Asian/Pacific Islanders are more likely to develop stomach cancer
- **Blood Type:** People with Type A blood have a higher risk.
- **Diet:** Smoked foods, salted fish and meats, and pickled vegetables have been linked to an increased risk, as is food that isn't stored or prepared properly. Eating few fruits and vegetables, as well as processed, grilled, or charcoaled meats too frequently.
- **Smoking:** Smokers face twice the risk of developing stomach cancer than nonsmokers.
- **Environmental Factors:** Exposures to radiation and work exposure in the rubber, coal, and metal industries lead to higher risk.
- **CVID:** People with common variable immune deficiency have an increased risk.
- Stomach Health Issues: People with stomach lymphoma, previous stomach surgery, pernicious anemia, Menetrier disease, certain types of stomach polyps, intestinal metaplasia, chronic atrophic gastritis, and those with inherited cancer syndromes (BRCA-1, BRCA-2, familial adenomatous polyposis syndrome, hereditary diffuse gastric cancer, Li-Fraumeni syndrome, Lynch syndrome, and Peutz-Jeghers syndrome) have a higher risk.
- **Weight:** Being overweight or obese may increase the risk of certain types of stomach cancer.
- Viral Infection: The Epstein-Barr virus (EBV) is associated with some stomach cancers.

### **Symptoms**

Stomach cancer in its early stages does not trigger immediate symptoms. However, symptoms that may appear in later stages of development include:

- Stomach area pain, discomfort, or swelling
- Vomiting and nausea
- Unexplained weight loss
- Full feeling after a small meal
- Jaundice
- Heartburn or indigestion
- Feeling of food sticking in throat when

#### eating

- Loss of appetite
- Diarrhea or constipation
- Anemia
- Weakness or fatigue
- Blood in vomit or the stool
- Dark, tarry, or foul-smelling stools

## **Treatment Options**

Treatment options vary, depending on the size, location, stage, and type of the cancer, and the patient's health. Most treatment options include a combination of surgery, chemotherapy, radiation therapy, targeted therapy, proton therapy, immunotherapy, or palliative therapy. Patients with stomach cancer may also consider participation in clinical trials.

#### **Linitis Plastica**

Linitis plastica is a very rare type of stomach cancer that spreads to the muscles of the stomach wall, forming a thick and immovable layer. It develops a flat, thickened area of the mucosa and is sometimes called leather bottle stomach. When this happens, the stomach is unable to hold much food, and does not stretch out as food digests. Linitis plastica is a rapidly growing cancer. Although the survival outlook is poor and it is difficult to treat, treatment options are available in some cases. Treatment options for linitis plastica are surgery and chemotherapy, and radiotherapy may be used to relieve symptoms. A total gastrectomy (surgical removal of the stomach) may be recommended.

## **About Texas Oncology**

Texas Oncology is an independent private practice with more than 500 physicians and 210 locations across the state. Meeting the oncology needs of Texans for more than 35 years, the practice includes Texas Center for Proton Therapy, Texas Breast Specialists, Texas Oncology Surgical Specialists, Texas Urology Specialists, and Texas Center for Interventional Surgery. As a lead participant in US Oncology Research, Texas Oncology played a role in the development of more than 100 FDA-approved therapies. For more information, visit <a href="https://www.TexasOncology.com">www.TexasOncology.com</a>.

Sources: American Cancer Society, American Society of Clinical Oncology, Cancer Research UK, National Cancer Institute, Texas Cancer Registry



