

Thyroid Cancer

Thyroid cancer forms in the thyroid gland, an organ at the base of the throat that makes hormones affecting heart rate, blood pressure, body temperature, and weight. It also plays a role in regulating the body's calcium. Papillary and follicular carcinomas are the two most common types of thyroid cancer. Additional types include oxyphil cell carcinoma, medullary thyroid carcinoma, and anaplastic carcinoma, and very rare forms are thyroid lymphomas, thyroid sarcomas, and other rare tumors.

Main Types

- Papillary thyroid cancer: About 80 percent of all thyroid cancers are diagnosed as papillary
 carcinoma. Although this type can spread to the lymph nodes, papillary cancers typically grow slowly,
 are highly treatable, and are seldom fatal.
- **Follicular thyroid cancer:** About **10 percent** of thyroid cancers are diagnosed as follicular carcinoma, which is a subtype of papillary thyroid cancer. It is most common in people without enough iodine in their diet. It doesn't usually spread to the lymph nodes, but can spread to other parts of the body.
- Hurthle cell cancer: About 3 percent of thyroid cancers are oxyphil cell carcinoma. This type of
 thyroid cancer is more difficult to diagnose and treat, and more likely to spread to lymph nodes.
- Medullary thyroid cancer (MTC): About 4 percent of all thyroid cancers are diagnosed as MTC,
 which forms from cells in the thyroid gland that typically help control calcium levels. It can spread to
 other body parts before a thyroid nodule is detected. Because it does not take in radioactive iodine,
 treatment for MTC is more difficult and the prognosis not as favorable.
- Anaplastic thyroid cancer: Less than 2 percent of all thyroid cancers are anaplastic thyroid cancer.
 This type is believed to occasionally develop from a papillary or follicular cancer. It can grow and spread quickly and is difficult to treat.

Statistics

- In 2021, **44,280 new cases** of thyroid cancer are expected to be diagnosed in the United States, with **2,200 deaths**.
- In Texas in 2021, an estimated 3,680 new thyroid cancer cases will be diagnosed, with 161 expected deaths.
- Approximately **3 of 4 cases of thyroid cancer occur in women**. It is most frequently diagnosed in people **ages 20-55**.
- The incidence rate of thyroid cancer in the U.S. had been the most rapidly increasing cancer type in the U.S. However, from 2013 to 2017 it **stabilized in men and decreased by 2 percent in women**, likely due to more conservative diagnosing criteria.

Risk Factors

- **Age:** Risk of developing thyroid cancer peaks in women during their 40s and 50s, while men are usually diagnosed in their 60s and 70s.
- **Gender:** Women are three times more likely to develop thyroid cancer than men.
- Radiation: Exposure to high levels of radiation increases risk, especially if exposed at a young age.
- Low lodine: People who do not get enough iodine in their diet have a higher risk.
- Family History: Those with a family history of thyroid cancer; familial medullary thyroid cancer (FMTC); colon growths or familial adenomatous polyposis (FAP); familial nonmedullary thyroid carcinoma; Cowden disease; Carney complex, type I; or multiple endocrine neoplasia type 2A and 2B syndrome have a higher risk.
- Personal History: Individuals with an enlarged thyroid, a condition called goiter, may have a higher risk.

Symptoms and Signs

- Enlargement of the neck
- Difficulty swallowing or breathing
- Persistent cough

- Hoarseness or voice changes
- Persistent pain in the front of the neck
- Swelling or lump in the neck

Tips for Prevention

Doctors aren't sure what causes most cases of thyroid cancer, so there's no prevention. Those with an inherited gene mutation for familial medullary thyroid cancer (MTC) may choose to have the thyroid gland removed to prevent a future thyroid cancer. Genetic counseling and testing for the gene are available.

Treatment Options

Several factors determine the best course of treatment, including the type and stage of the cancer and the patient's overall health. Thyroid cancer may be treated with surgery, thyroid hormone treatment, radioactive iodine therapy, radiation therapy, chemotherapy, targeted therapy, or palliative care. Most patients receive a combination of treatments.

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 www.TexasOncology.com.

Sources: American Cancer Society, American Society of Clinical Oncology, American Thyroid Association, National Cancer Institute, and Texas Cancer Registry



