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[Thyroid Cancer - Overview](#) [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 05/2015

ON THIS PAGE: You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net's Guide to Thyroid Cancer. To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

About the thyroid

Thyroid cancer begins in the thyroid gland. This gland is located in the front of the neck just below the larynx, which is called the voice box. The thyroid gland is part of the [endocrine system](#) [3], which regulates hormones in the body. The thyroid gland absorbs iodine from the bloodstream to produce thyroid hormones, which regulate a person's metabolism.

A normal thyroid gland has two lobes, one on each side of the windpipe, joined by a narrow strip of tissue called the isthmus. A healthy thyroid gland is barely palpable, which means it is hard to be felt when touched. If a tumor develops in the thyroid, it is felt as a lump in the neck. A swollen or enlarged thyroid gland is called a goiter, which may be due to a person not getting enough iodine. However, most Americans receive enough iodine from salt, and a goiter under these circumstances is caused by other reasons.

About thyroid tumors

Thyroid cancer starts when healthy cells in the thyroid change and grow uncontrollably, forming a mass called a tumor. The thyroid gland contains two types of cells:

- **Follicular cells.** These cells are responsible for the production of thyroid hormone.

- **C cells.** These cells make calcitonin, a hormone that participates in calcium metabolism.

A tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it can grow and spread to other parts of the body. A benign tumor means the tumor can grow but will not spread. Thyroid tumors can also be called nodules, and 90% of all thyroid nodules are benign.

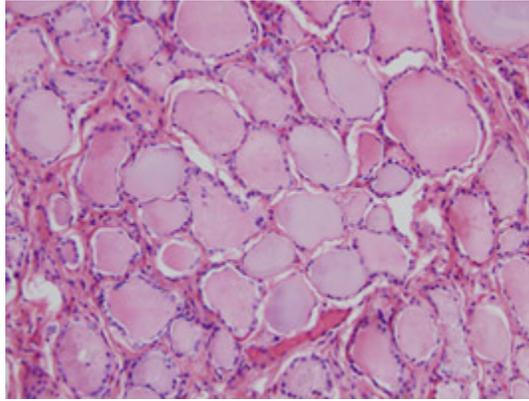
Types of thyroid cancer

There are four main types of thyroid cancer:

- **Papillary thyroid cancer.** Papillary thyroid cancer develops from follicular cells and grows slowly. It is the most common type of thyroid cancer. It is usually found in one lobe; only 10% to 20% of papillary thyroid cancer appears in both lobes. Papillary thyroid cancer is a differentiated thyroid cancer, meaning that the tumor looks similar to normal thyroid tissue under a microscope.
- **Follicular thyroid cancer.** Follicular thyroid cancer also develops from follicular cells and usually grows slowly. Follicular thyroid cancer is also a differentiated thyroid cancer, but it is less common than papillary thyroid cancer.

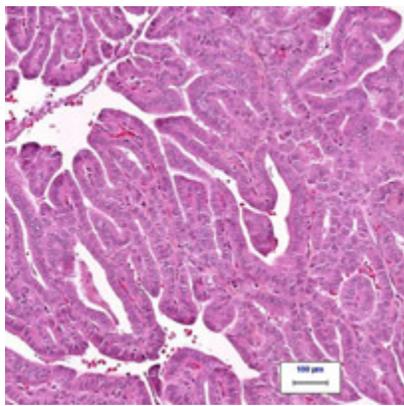
Follicular thyroid cancer and papillary cancer are very often curable, especially when found early and in people younger than 45. Together, follicular and papillary thyroid cancers make up about 90% of all thyroid cancer.

- **Medullary thyroid cancer (MTC).** MTC develops in the C cells and is sometimes the result of a genetic syndrome called [multiple endocrine neoplasia type 2 \(MEN2\)](#) [4]. This tumor has very little, if any, similarity to normal thyroid tissue. MTC can often be controlled if it is diagnosed and treated before it spreads to other parts of the body. MTC accounts for about 5% of thyroid cancer.
- **Anaplastic thyroid cancer.** This type is rare, accounting for about 2% of thyroid cancer. It is a fast-growing, poorly differentiated thyroid cancer that starts from differentiated thyroid cancer or a benign thyroid tumor. Anaplastic thyroid cancer can be subtyped into giant cell classifications. Because this type of cancer grows so quickly, it is more difficult to treat successfully.



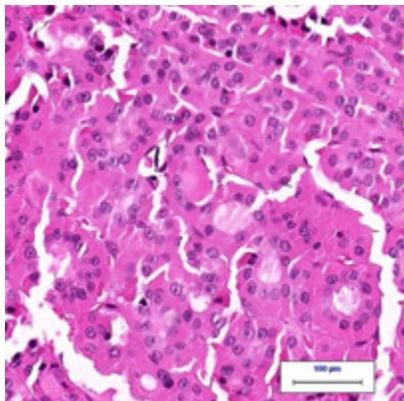
Normal Thyroid Tissue

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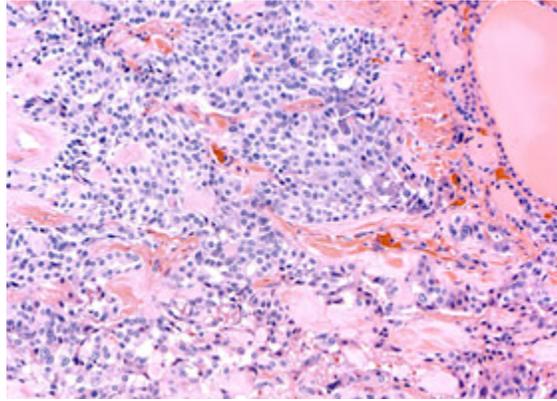
Thyroid - Papillary Cancer

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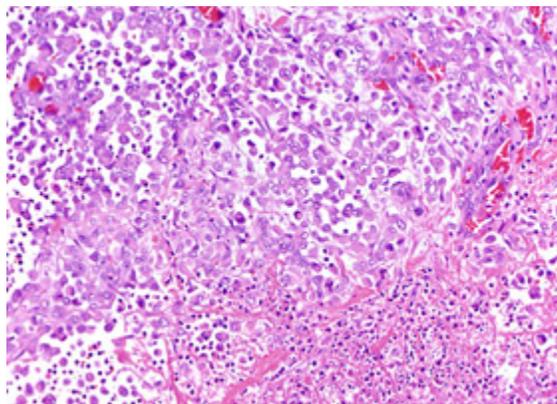
Thyroid - Follicular Cancer

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Thyroid - Medullary Cancer

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Thyroid - Anaplastic Cancer

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There are also subtypes (or variants) within these four main types of thyroid cancer, such as the follicular thyroid cancer variant called Hürthle cell cancer.

In addition, other types of cancer may start in or around the thyroid gland. For lymphoma in the thyroid, read Cancer.Net's Guide to [Lymphoma, Non-Hodgkin](#) [5]. For more information on sarcoma in the thyroid, read the Cancer.Net Guide to [Sarcoma](#) [6]. For information on a tumor in the nearby parathyroid gland, read Cancer.Net's Guide to [Parathyroid Cancer](#) [7].

Looking for More of an Overview?

If you would like additional introductory information, explore this related item. Please note this link will take you to another section on Cancer.Net:

- [ASCO Answers Fact Sheet](#) [8]: Read a one-page fact sheet (available as a PDF) that offers an easy-to-print introduction to thyroid cancer.

The [next section in this guide is Statistics](#) [9] and it helps explain how many people are diagnosed with this disease and general survival rates. Or, use the menu on the side of your screen to choose another section to continue reading this guide.

Links

[1] <http://www.cancer.net/cancer-types/thyroid-cancer/overview>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/31313>

[4] <http://www.cancer.net/node/19365>

[5] <http://www.cancer.net/node/31269>

[6] <http://www.cancer.net/node/31379>

[7] <http://www.cancer.net/node/31387>

[8] http://www.cancer.net/sites/cancer.net/files/asco_answers_thyroid.pdf

[9] <http://www.cancer.net/node/19294>