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Thyroid Cancer

What is thyroid cancer?

Thyroid cancer is a cancer that starts in the tissues of the thyroid. Your thyroid is a small, butterfly-shaped gland in the front of your neck. It makes hormones [<https://medlineplus.gov/hormones.html>] that control the way the body uses energy. These hormones affect nearly every organ in your body and control many of your body's most important functions. For example, they affect your breathing, heart rate, weight, digestion, and moods.

What are the different types of thyroid cancer?

There are different types of thyroid cancer; the main ones include:

- Differentiated thyroid cancer, which includes papillary cancer and follicular cancer
- Medullary thyroid cancer
- Anaplastic thyroid cancer

Who is more likely to develop thyroid cancer?

Certain people are more likely to develop thyroid cancer. Your risk is higher if you:

- Are between ages 25 and 65
- Are a woman
- Are Asian
- Were exposed to certain types of radiation, including from radiation treatments [<https://medlineplus.gov/radiationtherapy.html>] to your head or neck as a child or from a radiation emergency [<https://medlineplus.gov/radiationemergencies.html>]
- Have had a goiter (enlarged thyroid)
- Having certain genetic conditions [<https://medlineplus.gov/geneticdisorders.html>] , including certain types of multiple endocrine neoplasia [<https://medlineplus.gov/genetics/condition/multiple-endocrine-neoplasia/>]
- Have a family history of thyroid cancer or thyroid disease

What are the symptoms of thyroid cancer?

Thyroid cancer may not cause symptoms at first. It is sometimes found during a routine physical exam. You may get signs or symptoms as the cancer gets bigger. The symptoms may include:

- A lump (nodule) in the neck
- Trouble breathing [<https://medlineplus.gov/breathingproblems.html>]
- Trouble swallowing [<https://medlineplus.gov/swallowingdisorders.html>]
- Pain when swallowing
- Hoarseness or other changes to your voice that do not get better

How is thyroid cancer diagnosed?

To find out if you have thyroid cancer, your health care provider may use:

- A physical exam, including checking your neck for swelling, lumps, or anything that seems unusual
- A medical history
- Thyroid tests [<https://medlineplus.gov/thyroidtests.html>]
- Other blood or imaging [<https://medlineplus.gov/diagnosticimaging.html>] tests
- A biopsy [<https://medlineplus.gov/biopsy.html>]

What are the treatments for thyroid cancer?

Treatment for thyroid cancer depends on the type of cancer you have and whether the cancer has spread. Often, more than one type of treatment may be needed. The treatment options include:

- Surgery.
- Radiation therapy, including radioactive iodine therapy.
- Chemotherapy [<https://medlineplus.gov/cancerchemotherapy.html>].
- Thyroid hormone therapy.
- Targeted therapy, which uses drugs or other substances that attack specific cancer cells with less harm to normal cells.
- Watchful waiting, which means that you don't get treatment right away. You regularly checks to see if your signs or symptoms appear or change.

NIH: National Cancer Institute

Start Here

- General Information about Thyroid Cancer [https://www.cancer.gov/types/thyroid/patient/thyroid-treatment-pdq#_1]  (National Cancer Institute)
Also in Spanish [https://www.cancer.gov/espanol/tipos/tiroides/paciente/tratamiento-tiroides-pdq#_1]
- What Is Thyroid Cancer? [<https://www.cancer.org/cancer/types/thyroid-cancer/about/what-is-thyroid-cancer.html>] (American Cancer Society)
Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/acerca/que-es-cancer-de-tiroides.html>]

Symptoms

- Signs and Symptoms of Thyroid Cancer [<https://www.cancer.org/cancer/types/thyroid-cancer/detection-diagnosis-staging/signs-symptoms.html>] (American Cancer Society)
Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/deteccion-diagnostico-clasificacion-por-etapas/senales-sintomas.html>]

Diagnosis and Tests

- Calcitonin Test [<https://medlineplus.gov/lab-tests/calcitonin-test/>]  (National Library of Medicine)
Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-calcitonina/>]
- Can Thyroid Cancer Be Found Early? [<https://www.cancer.org/cancer/types/thyroid-cancer/detection-diagnosis-staging/detection.html>] (American Cancer Society)
Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/deteccion-diagnostico-clasificacion-por-etapas/deteccion.html>]
- CEA Test [<https://medlineplus.gov/lab-tests/cea-test/>]  (National Library of Medicine)
Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-ace/>]
- Needle Biopsy [<https://www.mayoclinic.org/tests-procedures/needle-biopsy/about/pac-20394749?p=1>] (Mayo Foundation for Medical Education and Research)
Also in Spanish [<https://www.mayoclinic.org/es/tests-procedures/needle-biopsy/about/pac-20394749?p=1>]
- PTEN Genetic Test [<https://medlineplus.gov/lab-tests/pten-genetic-test/>]  (National Library of Medicine)
Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-genetica-del-pten/>]
- Stages of Thyroid Cancer [https://www.cancer.gov/types/thyroid/patient/thyroid-treatment-pdq#_27] 
Also in Spanish [https://www.cancer.gov/espanol/tipos/tiroides/paciente/tratamiento-tiroides-pdq#_27]

• Tests for Thyroid Cancer [<https://www.cancer.org/cancer/types/thyroid-cancer/detection-diagnosis-staging/how-diagnosed.html>] (American Cancer Society)

Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/deteccion-diagnostico-clasificacion-por-etapas/como-se-diagnostica.html>]

• Thyroglobulin [<https://medlineplus.gov/lab-tests/thyroglobulin/>]  (National Library of Medicine)

Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/tiroglobulina/>]

• Thyroid Scan and Uptake [<https://www.radiologyinfo.org/en/info/thyroiduptake>]

 (American College of Radiology; Radiological Society of North America)

Also in Spanish [<https://www.radiologyinfo.org/es/info/thyroiduptake>]

• Thyroid Tests [<https://www.niddk.nih.gov/health-information/diagnostic-tests/thyroid>]

 (National Institute of Diabetes and Digestive and Kidney Diseases)

Also in Spanish [<https://www.niddk.nih.gov/health-information/informacion-de-la-salud/pruebas-diagnosticas/pruebas-tiroides>]

• TSH (Thyroid-stimulating hormone) test [<https://medlineplus.gov/lab-tests/tsh-thyroid-stimulating-hormone-test/>]

 (National Library of Medicine)

Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-tsh/>]

• Tumor Marker Tests [<https://medlineplus.gov/lab-tests/tumor-marker-tests/>]  (National Library of Medicine)

Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/marcadores-tumorales/>]

• Ultrasound - Thyroid [<https://www.radiologyinfo.org/en/info/us-thyroid>]

(American College of Radiology; Radiological Society of North America)

Also in Spanish [<https://www.radiologyinfo.org/es/info/us-thyroid>]

• Ultrasound-Guided Fine Needle Aspiration Biopsy of the Thyroid [<https://www.radiologyinfo.org/en/info/ThyroidBiopsy>]

(American College of Radiology; Radiological Society of North America)

Also in Spanish [<https://www.radiologyinfo.org/es/info/ThyroidBiopsy>]

Prevention and Risk Factors

• Can Thyroid Cancer Be Prevented? [<https://www.cancer.org/cancer/types/thyroid-cancer/causes-risks-prevention/prevention.html>] (American Cancer Society)

Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/causas-riesgos-prevencion/prevencion.html>]

• Thyroid Cancer Risk Factors [<https://www.cancer.org/cancer/types/thyroid-cancer/causes-risks-prevention/risk-factors.html>] (American Cancer Society)

Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/causas-riesgos-prevencion/factores-de-riesgo.html>]

Treatments and Therapies

• Chemotherapy for Thyroid Cancer [<https://www.cancer.org/cancer/types/thyroid-cancer/treating/chemotherapy.html>] (American Cancer Society)

Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/tratamiento/quimioterapia.html>]

• Drugs Approved for Thyroid Cancer [<https://www.cancer.gov/about-cancer/treatment/drugs/thyroid>] 

(National Cancer Institute)

• Radioactive Iodine (Radioiodine) Therapy for Thyroid Cancer [<https://www.cancer.org/cancer/types/thyroid-cancer/treating/radioactive-iodine.html>] (American Cancer Society)

Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/tratamiento/yodo-radioactivo.html>]

• Thyroid Cancer Treatment [<https://www.cancer.gov/types/thyroid/patient/thyroid-treatment-pdq>] 

(National Cancer Institute) - In English and Spanish

• Thyroid Hormone Treatment [<https://www.thyroid.org/thyroid-hormone-treatment/>] (American Thyroid Association)

Also in Spanish [<https://www.thyroid.org/tratamiento-hormona-tiroides/>]

• Thyroid Surgery [<https://www.thyroid.org/thyroid-surgery/>] (American Thyroid Association)

Also in Spanish [<https://www.thyroid.org/cirugia-de-tiroides/>]

• Thyroidectomy [<https://www.mayoclinic.org/tests-procedures/thyroidectomy/about/pac-20385195?p=1>]

(Mayo Foundation for Medical Education and Research)

Also in Spanish [<https://www.mayoclinic.org/es/tests-procedures/thyroidectomy/about/pac-20385195?p=1>]

- Treatment Option Overview (Thyroid Cancer) [https://www.cancer.gov/types/thyroid/patient/thyroid-treatment-pdq#_67]

 (National Cancer Institute)

Also in Spanish [https://www.cancer.gov/espanol/tipos/tiroides/paciente/tratamiento-tiroides-pdq#_67]

Living With

- Living as a Thyroid Cancer Survivor [<https://www.cancer.org/cancer/types/thyroid-cancer/after-treatment/follow-up.html>] (American Cancer Society)
Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/despues-del-tratamiento/cuidado-de-seguimiento.html>]

Related Issues

- Accidents at Nuclear Power Plants and Cancer Risk [<https://www.cancer.gov/about-cancer/causes-prevention/risk/radiation/nuclear-accidents-fact-sheet>]  (National Cancer Institute)
Also in Spanish [<https://www.cancer.gov/espanol/cancer/causas-prevencion/riesgo/radiacion/hoja-informativa-accidentes-plantas-nucleares>]
- Get the Facts about Exposure to I-131 Radiation [<https://www.cancer.gov/about-cancer/causes-prevention/risk/radiation/i-131>]  (National Cancer Institute)
- Nuclear Radiation and the Thyroid [https://www.thyroid.org/wp-content/uploads/patients/brochures/NuclearRadiation_brochure.pdf] (American Thyroid Association) - PDF
Also in Spanish [https://www.thyroid.org/wp-content/uploads/patients/brochures/espanol/radiacion_nuclear_y_la_glandula_tiroideas.pdf]
- Questions to Ask about Thyroid Cancer [<https://www.cancer.org/cancer/types/thyroid-cancer/detection-diagnosis-staging/talking-with-doctor.html>] (American Cancer Society)
Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/deteccion-diagnostico-clasificacion-por-etapas/la-comunicacion-con-su-medico.html>]
- What Causes Thyroid Cancer? [<https://www.cancer.org/cancer/types/thyroid-cancer/causes-risks-prevention/what-causes.html>] (American Cancer Society)
Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/causas-riesgos-prevencion/que-lo-causa.html>]

Genetics

- Multiple endocrine neoplasia: MedlinePlus Genetics [<https://medlineplus.gov/genetics/condition/multiple-endocrine-neoplasia>]  (National Library of Medicine)

Images

- Thyroidectomy - series [https://medlineplus.gov/ency/presentations/100135_1.htm] (Medical Encyclopedia)
Also in Spanish [https://medlineplus.gov/spanish/ency/esp_presentations/100135_1.htm]

Statistics and Research

- Advances in Thyroid Cancer Research [<https://www.cancer.gov/types/thyroid/research>]  (National Cancer Institute)
- Cancer of the Thyroid [<https://seer.cancer.gov/statfacts/html/thyro.html>]  (National Cancer Institute)
- Key Statistics for Thyroid Cancer [<https://www.cancer.org/cancer/types/thyroid-cancer/about/key-statistics.html>] (American Cancer Society)
Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/acerca/estadisticas-clave.html>]
- Thyroid Cancer Research Results and Study Updates [<https://www.cancer.gov/types/thyroid/research/articles>]  (National Cancer Institute)
Also in Spanish [<https://www.cancer.gov/espanol/tipos/tiroides/investigacion>]
- What's New in Thyroid Cancer Research? [<https://www.cancer.org/cancer/types/thyroid-cancer/about/new-research.html>] (American Cancer Society)
Also in Spanish [<https://www.cancer.org/es/cancer/tipos/cancer-de-tiroides/acerca/nuevas-investigaciones.html>]

Clinical Trials

- ClinicalTrials.gov: Thyroid Neoplasms [<https://clinicaltrials.gov/search?cond=%22Thyroid+Neoplasms%22&aggFilters=status:not%20rec>]  (National Institutes of Health)

Journal Articles

References and abstracts from MEDLINE/PubMed (National Library of Medicine)

- Article: 2025 Korean Thyroid Association Clinical Management Guideline on Active Surveillance for... [https://www.ncbi.nlm.nih.gov/pubmed/40598902]
- Article: Efficacy and safety of esketamine hydrochloride injection at different dosages for... [https://www.ncbi.nlm.nih.gov/pubmed/40596895]
- Article: Calcitonin and procalcitonin measurement after cholecystokinin-2/gastrin receptor agonist stimulation in patients... [https://www.ncbi.nlm.nih.gov/pubmed/40586407]
- Thyroid Cancer -- see more articles [https://pubmed.ncbi.nlm.nih.gov/?term=%22Thyroid+Neoplasms%22%5Bmajr%3Anoexp%5D+AND+humans%5Bmh%5D+AND+english%5Bla%5D+AND+%22last+1+Year%22+%5Bdat%5D+AND+%28patient+education+handout%5Bpt%5D+OR+guideline%5Bpt%5D+OR+clinical+trial%5Bpt%5D%29++NOT+%28letter%5Bpt%5D+OR+case+reports%5Bpt%5D+OR+editorial%5Bpt%5D+OR+comment%5Bpt%5D%29+AND+free+full+text%5Bsb%5D+]

Reference Desk

- Dictionary of Cancer Terms [https://www.cancer.gov/publications/dictionaries/cancer-terms]  (National Cancer Institute)
Also in Spanish [https://www.cancer.gov/espanol/publicaciones/diccionarios/diccionario-cancer/]

Find an Expert

- American Cancer Society [https://www.cancer.org/]
- American Thyroid Association [https://www.thyroid.org/]
- Choosing a Cancer Doctor [https://www.cancer.org/cancer/managing-cancer/finding-care/where-to-find-cancer-care/choosing-a-cancer-doctor.html] (American Cancer Society)
Also in Spanish [https://www.cancer.org/es/cancer/como-sobrelevar-el-cancer/encontrar-tratamiento/como-elegir-un-medico-y-un-hospital/como-seleccionar-a-un-medico.html]
- Find an Endocrinology - Thyroid Specialist [https://www.thyroid.org/patient-thyroid-information/endocrinology-thyroid-doctor/] (American Thyroid Association)
- National Cancer Institute [https://www.cancer.gov/] 
Also in Spanish [https://www.cancer.gov/espanol]
- NCI - Designated Cancer Centers [https://www.cancer.gov/research/infrastructure/cancer-centers] 
(National Cancer Institute)
Also in Spanish [https://www.cancer.gov/espanol/investigacion/infraestructura/centros-oncologicos]
- Organizations that Offer Cancer Support Services [https://supportorgs.cancer.gov/home.aspx] 
(National Cancer Institute)
Also in Spanish [https://supportorgs.cancer.gov/home.aspx?lang=2]

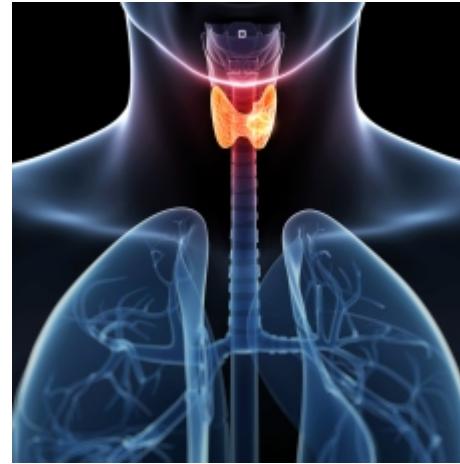
Children

- Childhood Thyroid Cancer Treatment [https://www.cancer.gov/types/thyroid/patient/child-thyroid-treatment-pdq] 
(National Cancer Institute)
Also in Spanish [https://www.cancer.gov/espanol/tipos/tiroides/paciente/tratamiento-tiroides-infantil-pdq]
- Thyroid Cancer (For Parents) [https://kidshealth.org/en/parents/thyroid-cancer.html] (Nemours Foundation)
Also in Spanish [https://kidshealth.org/es/parents/thyroid-cancer.html]

Patient Handouts

- Anaplastic thyroid cancer [https://medlineplus.gov/ency/article/000352.htm] (Medical Encyclopedia)
Also in Spanish [https://medlineplus.gov/spanish/ency/article/000352.htm]
- Fine needle aspiration of the thyroid [https://medlineplus.gov/ency/article/003899.htm] (Medical Encyclopedia)
Also in Spanish [https://medlineplus.gov/spanish/ency/article/003899.htm]

- Thyroid cancer [<https://medlineplus.gov/ency/article/001213.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/001213.htm>]
- Thyroid cancer - medullary carcinoma [<https://medlineplus.gov/ency/article/000374.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000374.htm>]
- Thyroid cancer - papillary carcinoma [<https://medlineplus.gov/ency/article/000331.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000331.htm>]
- Thyroid gland removal [<https://medlineplus.gov/ency/article/002933.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/002933.htm>]
- Thyroid Tests [<https://www.niddk.nih.gov/health-information/diagnostic-tests/thyroid>]
 (National Institute of Diabetes and Digestive and Kidney Diseases)
Also in Spanish [<https://www.niddk.nih.gov/health-information/informacion-de-la-salud/pruebas-diagnosticas/pruebas-tiroides>]
- Thyroid ultrasound [<https://medlineplus.gov/ency/article/003776.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/003776.htm>]



MEDICAL ENCYCLOPEDIA

- After chemotherapy - discharge [<https://medlineplus.gov/ency/patientinstructions/000012.htm>]
- Anaplastic thyroid cancer [<https://medlineplus.gov/ency/article/000352.htm>]
- Calcitonin blood test [<https://medlineplus.gov/ency/article/003699.htm>]
- Fine needle aspiration of the thyroid [<https://medlineplus.gov/ency/article/003899.htm>]
- Radioiodine therapy [<https://medlineplus.gov/ency/article/007702.htm>]
- Thyroid cancer [<https://medlineplus.gov/ency/article/001213.htm>]
- Thyroid cancer - medullary carcinoma [<https://medlineplus.gov/ency/article/000374.htm>]
- Thyroid cancer - papillary carcinoma [<https://medlineplus.gov/ency/article/000331.htm>]
- Thyroid gland removal [<https://medlineplus.gov/ency/article/002933.htm>]
- Thyroid scan [<https://medlineplus.gov/ency/article/003829.htm>]
- Thyroid ultrasound [<https://medlineplus.gov/ency/article/003776.htm>]
- Thyroidectomy - series [https://medlineplus.gov/ency/presentations/100135_1.htm]

Related Health Topics

- Thyroid Diseases [<https://medlineplus.gov/thyroiddiseases.html>]
- Thyroid Tests [<https://medlineplus.gov/thyroidtests.html>]

The primary NIH organization for research on *Thyroid Cancer* is the National Cancer Institute [<http://www.cancer.gov/>]

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