Belgian Cancer Registry

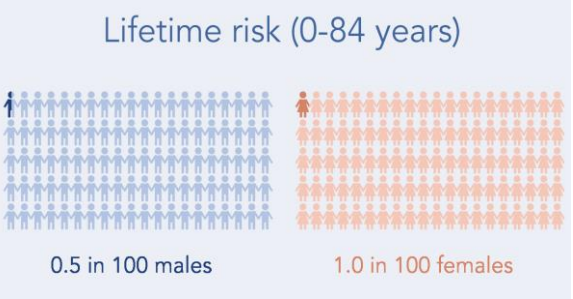
CANCER FACT SHEET 2024

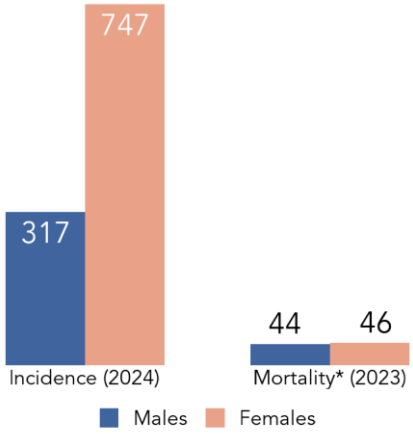
THYROID CANCER

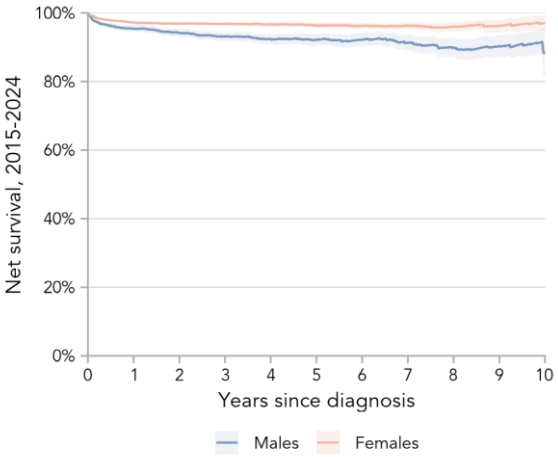
ICD-10 C73

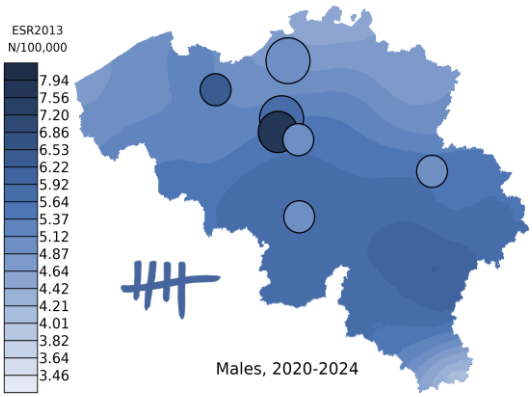
Key facts

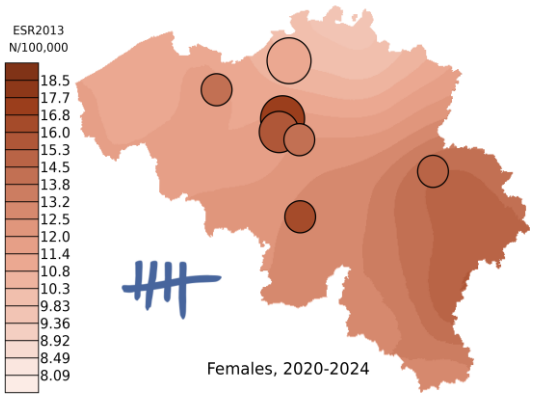
- **1,064** new diagnoses in 2024
- **15.1%** of thyroid cancers is diagnosed between **16 and 35 years old**
- **90** deaths due to thyroid cancer in 2023
- 5-year net survival of **95.3%**











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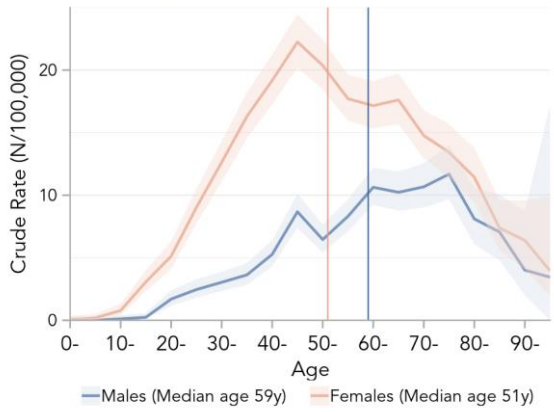
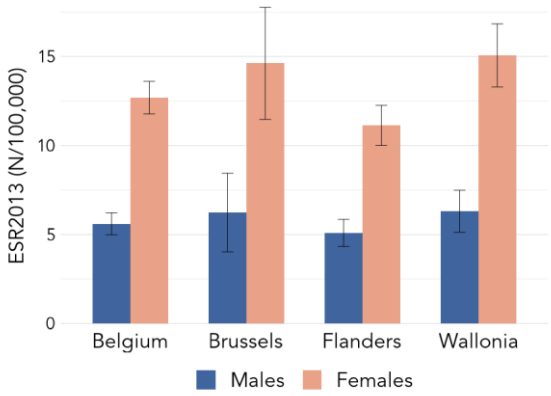
INCIDENCE (1)

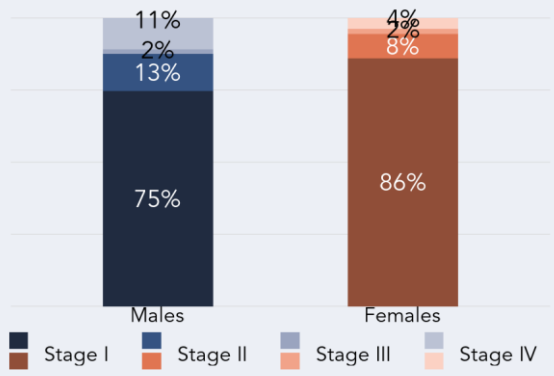
Age-specific incidence, 2020-2024



Incidence by region



Stage distribution



Excluding unregistered stage (3.9%)

- Median age at diagnosis for thyroid cancer is **53 years and notably higher in males compared to females**
- The majority of thyroid cancer are diagnosed in **stage I**
- There is a higher risk of a thyroid cancer diagnosis **towards the south-eastern border**
- Although proportions differ between males and females, the most common subtype of thyroid cancer is **papillary carcinoma**

Incidence by subtype, N(%)	Males		Females	
Papillary carcinoma <55y	121	(38.2%)	377	(50.5%)
Papillary carcinoma 55+y	110	(34.7%)	240	(32.1%)
Follicular carcinoma <55y	12	(3.8%)	37	(5.0%)
Follicular carcinoma 55+y	43	(13.6%)	48	(6.4%)
Medullary carcinoma	13	(4.1%)	30	(4.0%)
Anaplastic carcinoma	11	(3.5%)	8	(1.1%)
Other	7	(2.2%)	7	(0.9%)

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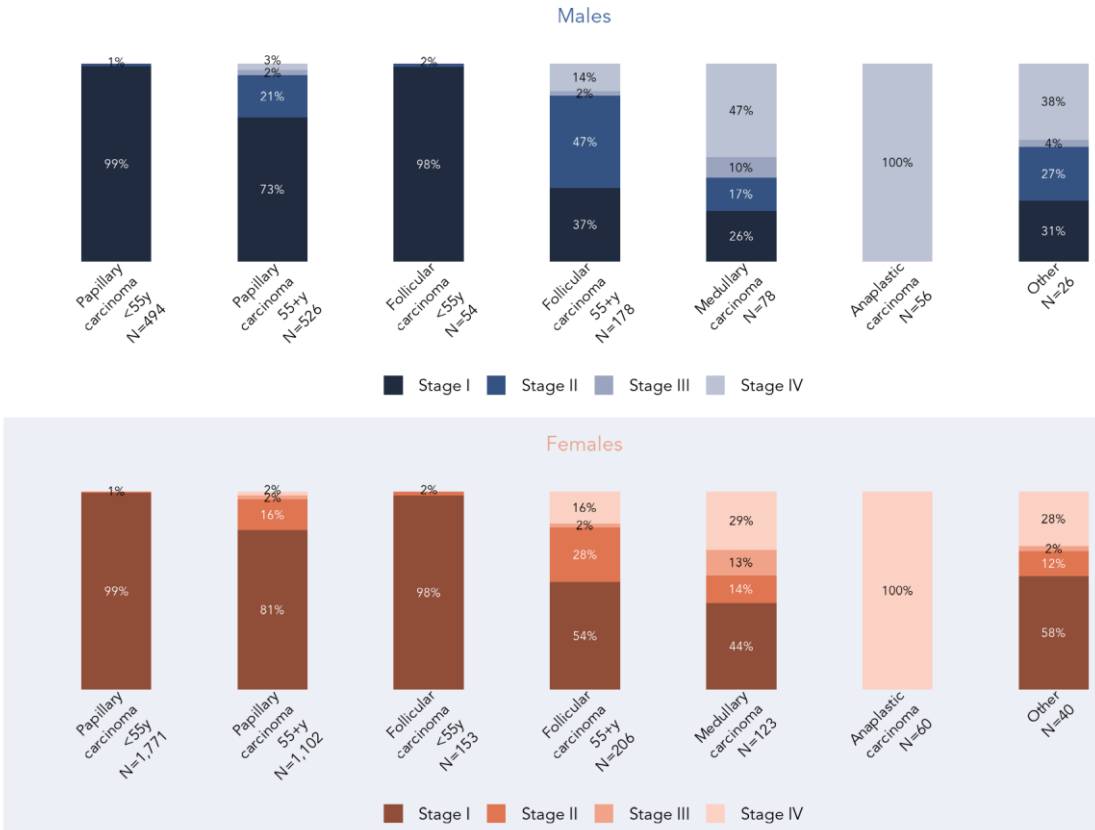
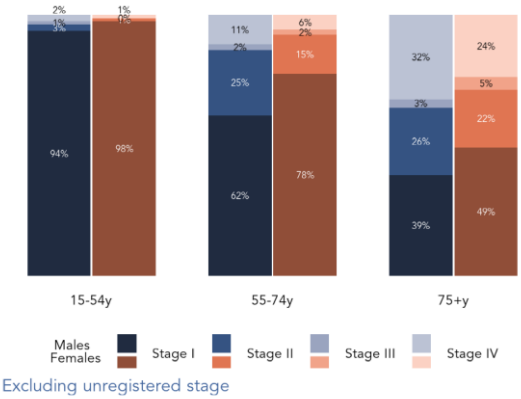
INCIDENCE (2)

Stage distribution by subtype, 2020-2024



Excluding unregistered stage

Stage distribution by age, 2020-2024



Excluding unregistered stage

- Thyroid cancer is a predominantly **female cancer**; male to female ratio of 0.4
- **Papillary carcinoma** is mostly diagnosed in **stage I**, while **anaplastic carcinoma** is by definition **stage IV**
- In addition to **age and sex**, **histological subtype** also has an impact on stage distribution

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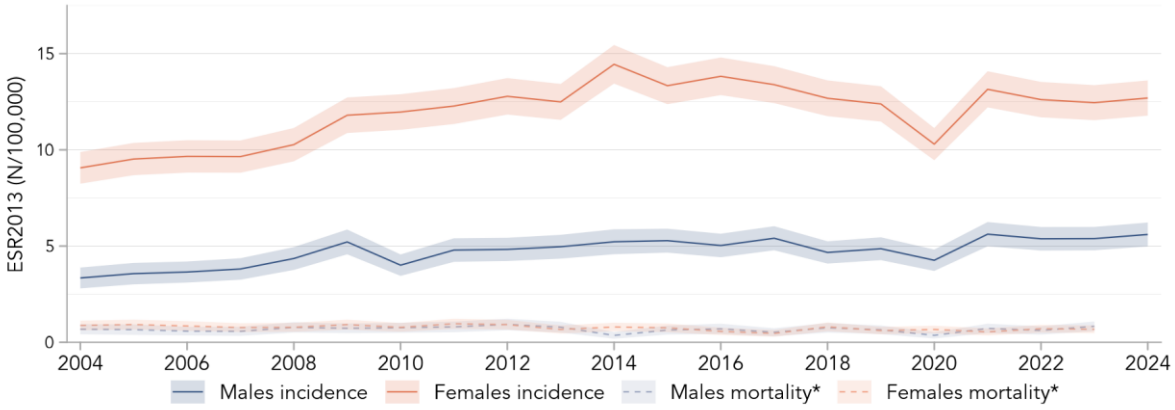
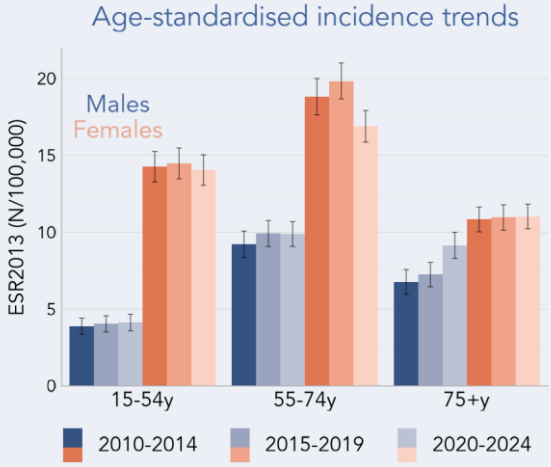
INCIDENCE TRENDS

Age-standardised incidence and mortality, 2004-2024

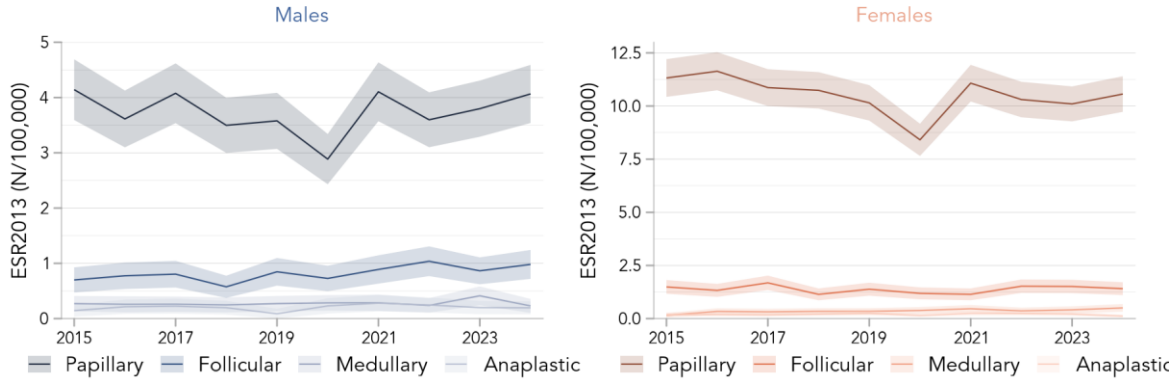


- Risk of a thyroid cancer **diagnosis in males is increasing** with an average annual percentage change of **+2.2%**
- The average annual percentage change of the risk of a thyroid cancer **mortality in males** is **−0.5%**
- Risk of a thyroid cancer **diagnosis in females is increasing** with an average annual percentage change of **+1.6%**, and risk of **mortality is decreasing** with **−2.1%**
- The COVID-19 pandemic seems to have had an impact on the thyroid cancer incidence (drop in 2020)

Age-standardised incidence trends



Incidence by histological subtype



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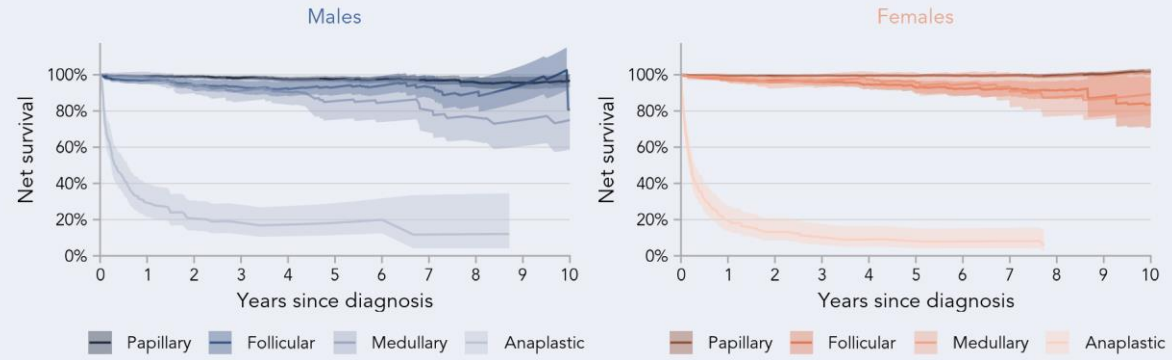
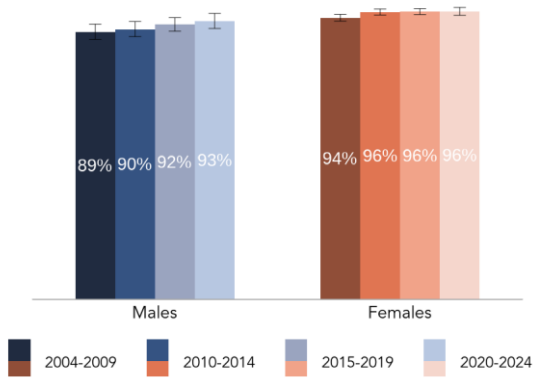
SURVIVAL

Net survival by histological subtype, 2015-2024



Note: Due to low numbers, survival of anaplastic thyroid cancer is not available for the entire period.

5-year net survival over time



- **5-year net survival has been stable** for males and females in the last 21 years
- Diagnosis of **an anaplastic carcinoma** is associated with the **lowest 5-year net survival** compared to other thyroid cancer subtypes
- More than **15,000 people** are living with the consequences of thyroid cancer

Additional detailed information (including prevalence) can be found in the **Appendix of the Cancer Fact Sheet** *and on the* **website of the Belgian Cancer Registry**

5-year net survival by type, 2020-2024, % (95% CI)

	Males		Females	
Total	**93.0%**	**(90.6%; 95.6%)**	**96.2%**	**(94.9%; 97.6%)**
Type				
Papillary carcinoma	99.0%	(96.5%; 101.5%)	99.5%	(98.4%; 100.6%)
Follicular carcinoma	94.6%	(88.7%; 101.0%)	91.2%	(84.7%; 98.2%)
Medullary carcinoma	88.3%	(75.3%; 103.6%)	96.4%	(88.7%; 104.6%)
Anaplastic carcinoma	21.9%	(12.9%; 37.0%)	9.0%	(4.1%; 20.1%)
Other	38.1%	(23.2%; 62.6%)	65.7%	(50.8%; 85.0%)

Net survival can exceed 100%; more information in 'Concepts & Abbreviations' (last page)

CONCEPTS & ABBREVIATIONS

- **Absolute numbers (N):** The number of newly registered cancer diagnoses observed for a given period of time. All figures and numbers in this cancer fact sheet are based on diagnoses of Belgian residents.
- **Cancer maps:** Cities with at least 150,000 inhabitants are directly represented on the map as circles with a diameter relative to the population size, and a colour shading indicating the actual calculated ESR2013 in that city. The 19 municipalities of the Brussels Capital Region (more than 1,000,000 inhabitants) are divided in three separate circles, based on socio-economic parameters. The socio-economic status is lowest in the westernmost circle and highest in the easternmost circle. Methodological information is available in 'Cancer burden in Belgium 2004-2017, Belgian Cancer Registry, Brussels, 2020'.
- **Crude Rate (CR):** The crude rate is obtained by dividing the absolute number of diagnoses (N) by the corresponding population size at risk (N/100,000).
- **ESR2013:** Incidence rates standardised to the 2013 revised European Standard Population (ESP): Standardisation is necessary to accommodate for differences in population size and age distribution (over time or among regions). An important factor in interpreting trends in cancer incidence is population ageing, as cancer is an age-dependent disease. For a higher proportion of elderly people in the population, a higher total number of cancer diagnoses can be expected for the same cancer risk. When only absolute numbers (N) or Crude Rate (CR) results are used, a misleading picture of the actual changes in the risk of a cancer diagnosis could be obtained. Therefore, direct standardisation is necessary to evaluate the evolution of the risk of cancer diagnosis over time or among regions.
- **Net survival:** Often also called the relative survival, is an estimate of the survival probability when other causes of death beside the cancer type(s) under study are excluded. As examples of other causes of death, patients with the cancer type(s) under study could also die because of an accident or unrelated cardiac conditions, etc. Net survival may exceed 100%, this occurs when the observed survival probability for patients with the cancer type(s) under study is higher than the one for the matched general population (no excess mortality due to cancer).
- The net survival estimation was based on the regional lifetables 2024, obtained from Statbel.
- **Stage:** Cancers are reported with a stage, labelled with a Roman numeral with IV being the most advanced stage. Stage is based on the T-category (extent of the tumour), the N-category (absence or presence and extent of the regional lymph node metastasis) and the M-category (absence or presence of distant metastasis). Stage is reported as a combination of both clinical and pathological stage with priority given to the pathological stage. Clinical information about distant metastases (cM) will always be taken into account, and in case of neo-adjuvant therapy, priority is given to the clinical stage. If stage is unknown, not applicable or not submitted to the Belgian Cancer Registry, the stage is reported as 'unregistered stage'. Stage is reported according to the TNM 8th edition: J.D. Brierley, M.K. Gospodarowicz, Ch. Wittekind. TNM Classification of Malignant Tumours, 8th edition: UICC, 2017.
- **95% CI:** 95% Confidence Intervals are indicated with a shaded band or whiskers in the figures. The 95% CI is a range of values that has 95% chance to contain the true mean value.

**Mortality statistics in Belgium are collected and managed by the three Regions (Flemish Region: Departement Zorg; Brussels-Capital Region: Observatorium voor Gezondheid en Welzijn van Brussel-Hoofdstad/ l'Observatoire de la Santé et du Social de Bruxelles-Capitale; Walloon Region: Agence Wallonne de la Santé, de la Protection sociale, du Handicap et des Familles (AVIQ)). The Directorate General Statistics Belgium is responsible for collecting and merging the data coming from the regional agencies. Mortality data used in this cancer fact sheet are collected from the Directorate General Statistics Belgium and encompasses the period 2004-2023.*

Recommended reference: Cancer Fact Sheets 2024, Belgian Cancer Registry (BCR), 2026