Belgian Cancer Registry

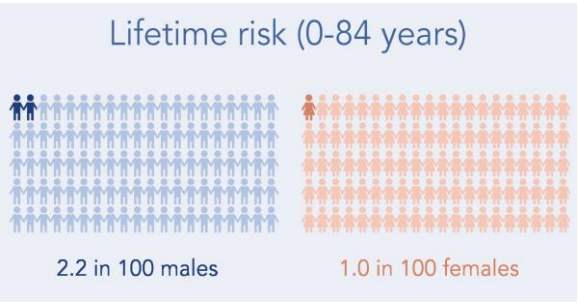
CANCER FACT SHEET 2024

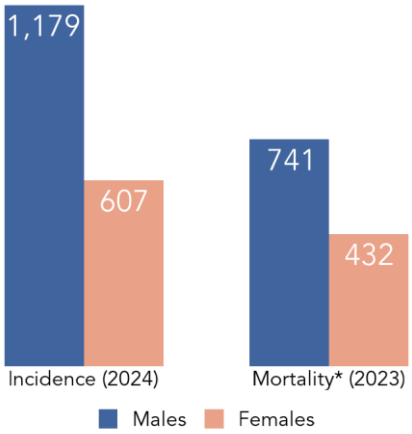
CANCER OF THE BILIARY SYSTEM

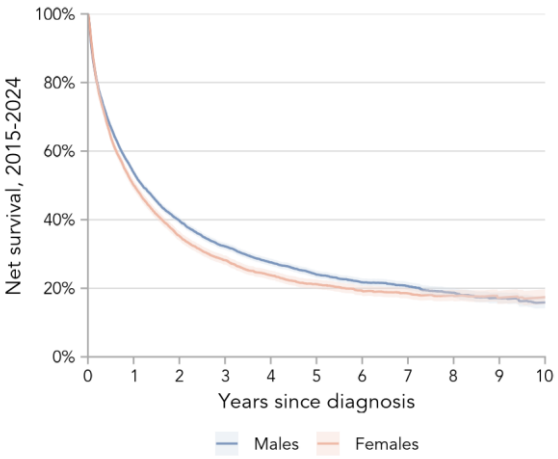
ICD-10 C22-C24

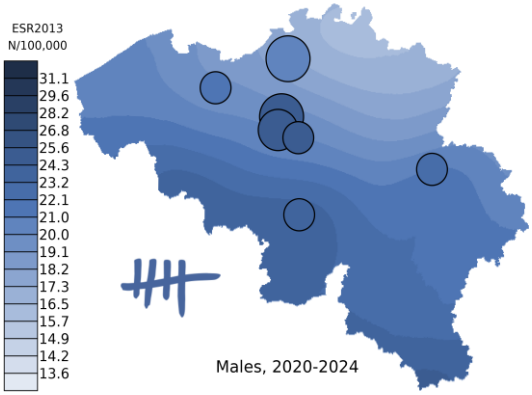
Key facts

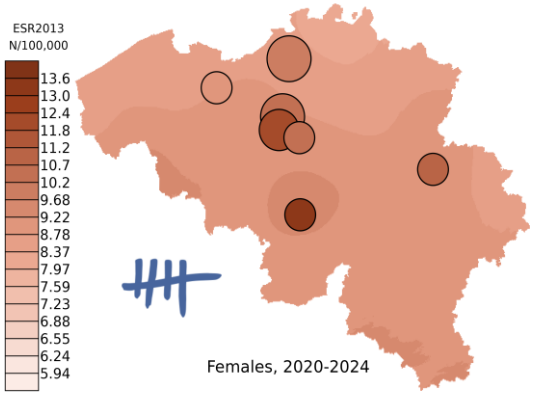
- Cancers of the biliary system include cancers of the liver, gallbladder and bile ducts
- **1,786** new diagnoses in 2024
- **1,173** deaths due to cancer of the biliary system in 2023
- 5-year net survival of **23.7%**











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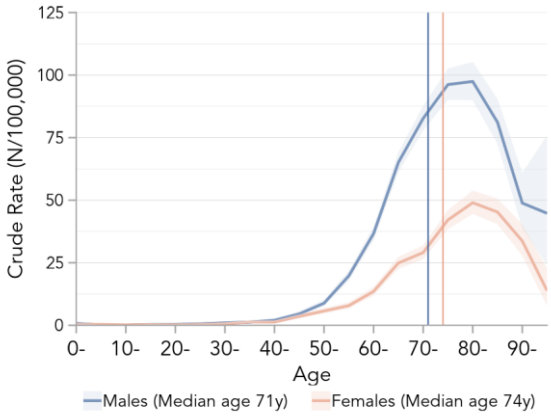
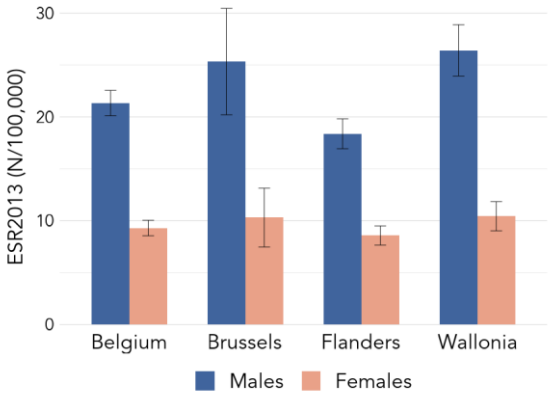
INCIDENCE

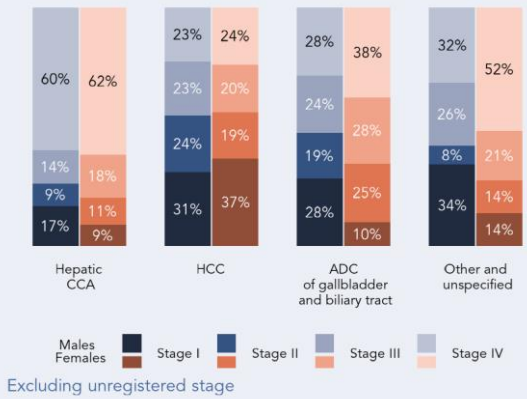
Age-specific incidence, 2020-2024



Incidence by region



Stage distribution



Excluding unregistered stage

- Median age at diagnosis for cancer of the biliary system is **72 years**
- Cancer of the biliary system is a predominantly **male cancer**; male to female ratio of 1.9
- There is a higher risk of a diagnosis of cancer of the biliary system **in males in Wallonia and Brussels**, compared to males in Flanders
- **Hepatocellular carcinoma** (HCC) is the most common histological subtype **in males**, while **cholangiocarcinoma** (CCA) is more common **in females**

Incidence by subtype, N(%)	Males		Females	
Cholangiocarcinoma (CCA)	313	(26.6%)	249	(41.0%)
Hepatocellular carcinoma (HCC)	680	(57.7%)	163	(26.9%)
Adenocarcinoma (ADC)	135	(11.4%)	149	(24.6%)
Other and unspecified	51	(4.3%)	46	(7.6%)

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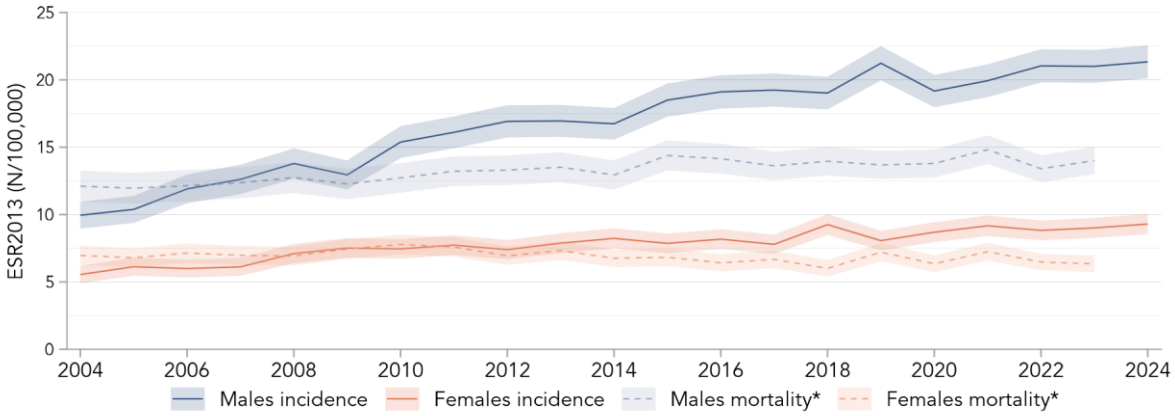
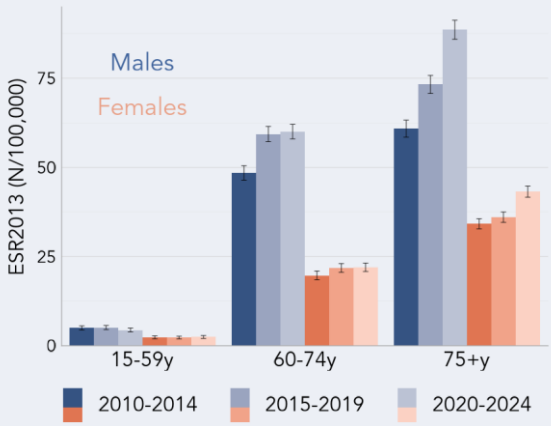
INCIDENCE TRENDS

Age-standardised incidence and mortality, 2004-2024

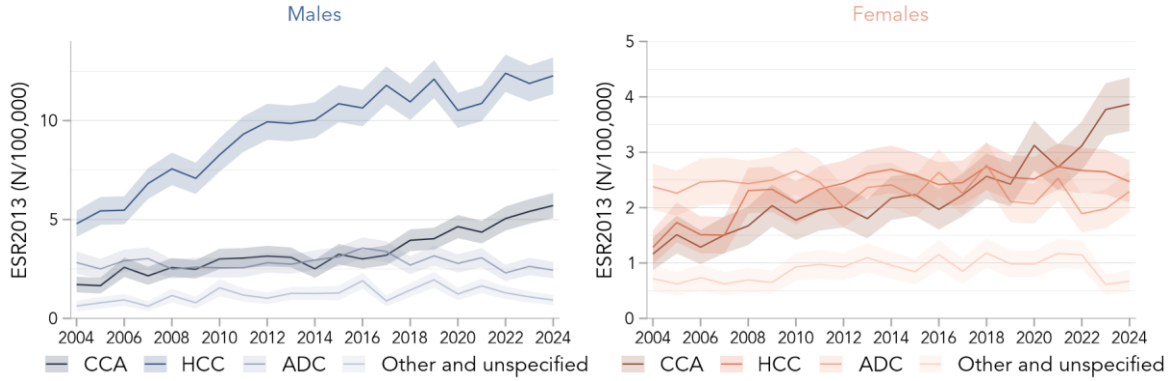


- Risk of a cancer of the biliary system **diagnosis in males is increasing** with an average annual percentage change of **+3.9%**
- The average annual percentage change of the risk of a cancer of the biliary system **mortality in males** is **+0.9%**
- Risk of a cancer of the biliary system **diagnosis in females is increasing** with an average annual percentage change of **+2.5%**, and the average annual percentage change of the risk of **mortality is −0.5%**

Age-standardised incidence trends



Incidence by histological subtype



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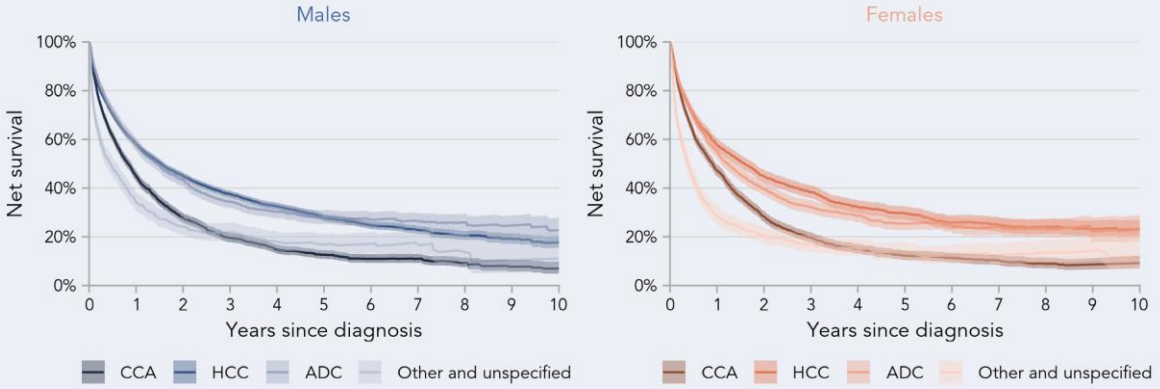
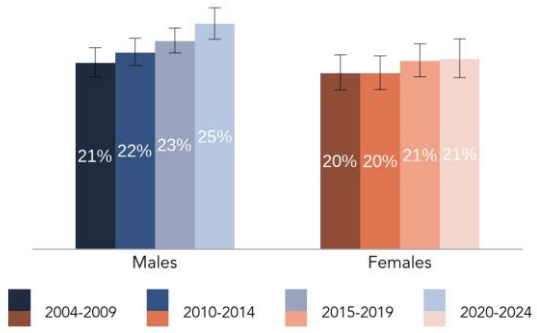
SURVIVAL

Net survival by histological subtype, 2015-2024



5-year net survival over time



- **5-year net survival has been stable** for males and females in the last 21 years
- Although survival differs between the histological subtypes, cancer of the biliary system has a **poor prognosis**
- More than **5,000 people** are living with the consequences of cancer of the biliary system

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	**25.0%**	**(23.4%; 26.8%)**	**21.1%**	**(19.1%; 23.4%)**
Type				
Cholangiocarcinoma (CCA)	12.8%	(10.3%; 15.9%)	11.4%	(8.8%; 14.8%)
Hepatocellular carcinoma (HCC)	29.9%	(27.6%; 32.5%)	28.7%	(24.6%; 33.4%)
Adenocarcinoma (ADC)	29.4%	(24.8%; 34.8%)	30.2%	(25.6%; 35.6%)
Other and unspecified	17.0%	(12.1%; 23.8%)	13.4%	(9.0%; 19.8%)

- **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 the 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.
- **CCA:** Cholangiocarcinoma
- **HCC:** Hepatocellular carcinoma
- **ADC:** Adenocarcinoma

**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