Belgian Cancer Registry

CANCER FACT SHEET 2024

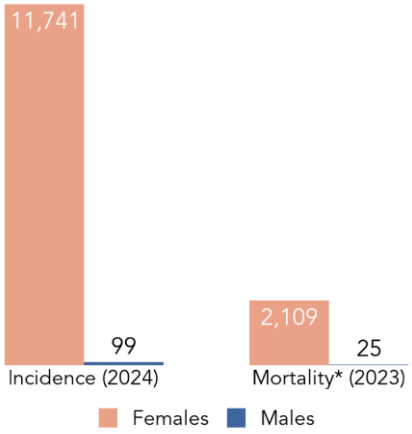
BREAST CANCER

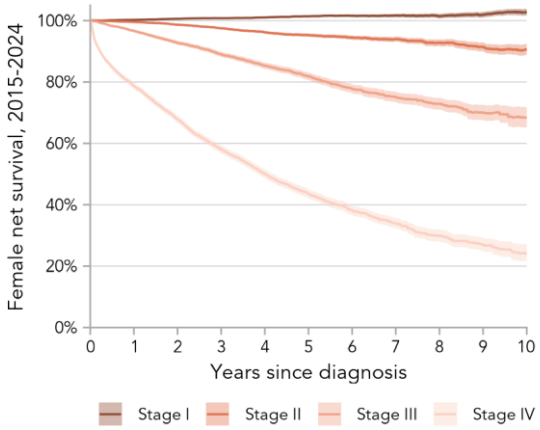
ICD-10 C50

Key facts

- Most common cancer in females
- Breast cancer is a predominantly **female cancer**; male to female ratio of 0.01
- **11,840** new diagnoses in 2024
- **2,134** deaths due to breast cancer in 2023
- 5-year net survival of **92.7%**

Lifetime risk (0-84 years)





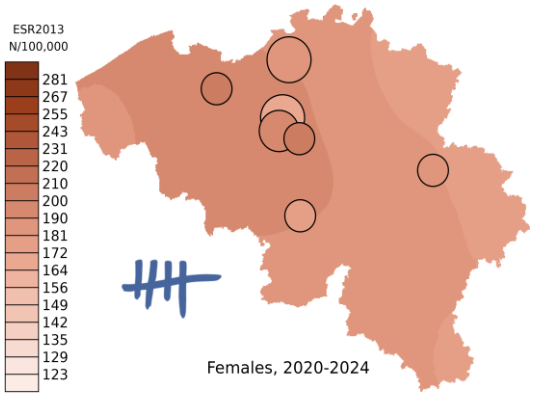
Population screening
in Females, aged 50-69 years

Flanders — BEVOLKINGSONDERZOEK BORSTKANKER

Wallonia — CCR, Centre Communautaire de Référence pour le dépistage des cancers

Brussels — Borstkanker Opsporing

Brussels — Dépistage du Cancer du Sein



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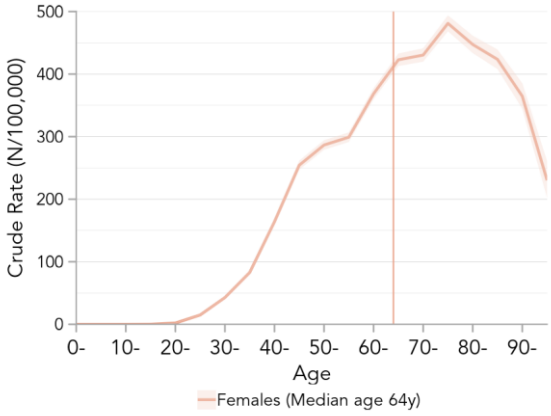
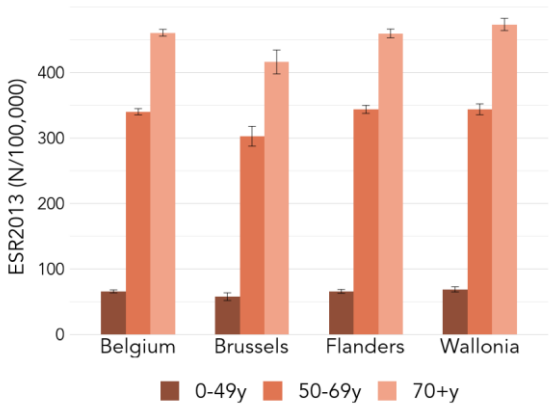
INCIDENCE (FEMALES)

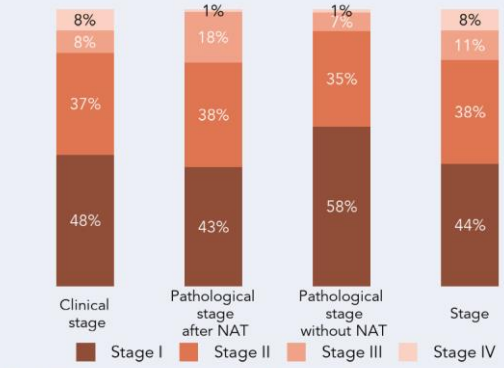
Age-specific incidence, 2020-2024



Incidence by region

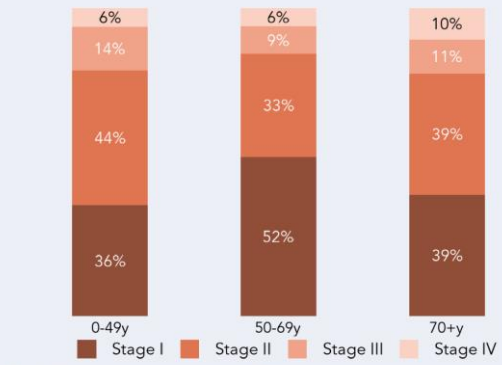


Stage distribution



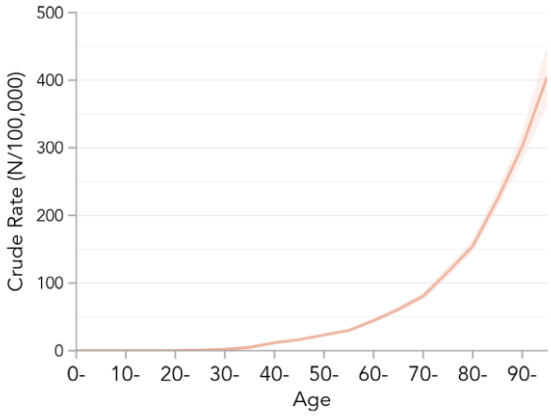
Excluding unregistered stage; NAT, neo-adjuvant therapy

Stage distribution by age



Excluding unregistered stage (1.0%)

Age-specific mortality, 2019-2023



- Median age at diagnosis for female breast cancer is **64 years**
- **More than 3 out of 4** of the female breast cancers are diagnosed at an **early stage** (stage I or II)
- There are more female breast cancer diagnoses at stage I in the **age group 50-69 years**, which is probably a consequence of breast cancer screening
- **44.1%** of the female breast cancers are diagnosed between 50-69 years (age group invited for screening)

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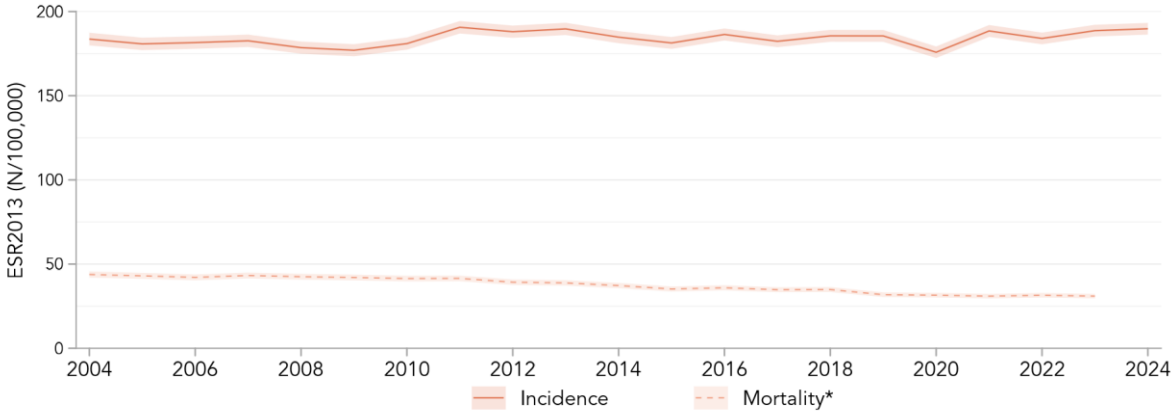
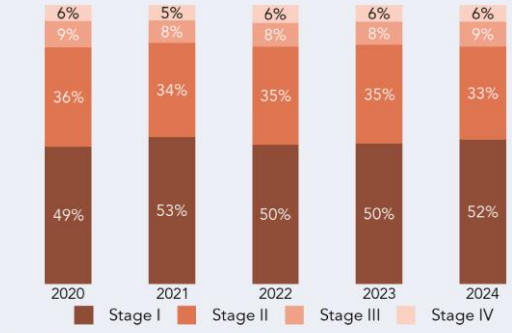
INCIDENCE TRENDS (FEMALES)

Age-standardised incidence and mortality, 2004-2024



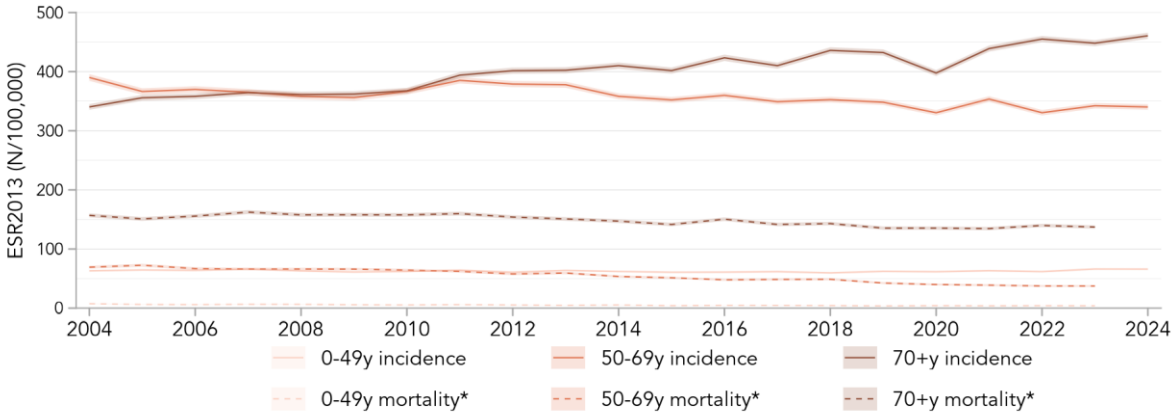
- Risk of a breast cancer **diagnosis in females is stable from 2004 to 2024**
- Risk of breast cancer **mortality in females is decreasing** with an average annual percentage change of **−1.9%**
- **Stage distribution** in female breast cancer remains **unchanged throughout recent years** in the age group 50-69 years (age group invited for screening)

Stage distribution over time in females, aged 50-69 years



Excluding unregistered stage (0.7%)

Age-standardised incidence and mortality by age, 2004-2024



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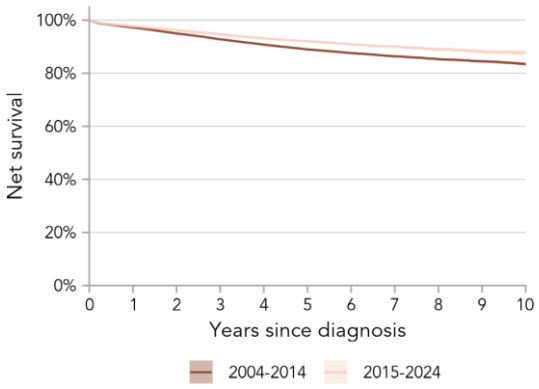
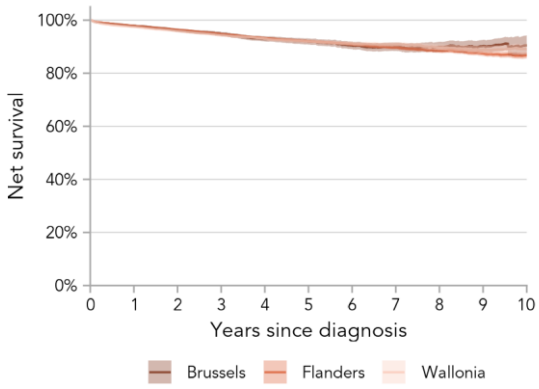
SURVIVAL (FEMALES)

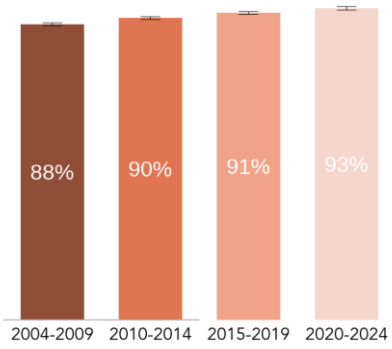
Net survival by period of diagnosis



Net survival by region, 2015-2024



5-year net survival over time



- **5-year net survival has been improving** for females in the last 21 years
- Diagnosis in **an early stage** is associated with a **better prognosis**
- More than **154,000 females** are living with the consequences of breast 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**

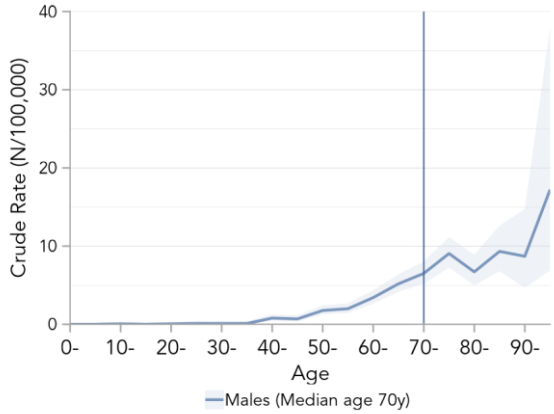
5-year net survival, 2020-2024 % (95% CI)	Total	15-49y	50-69y	70+y
Total	92.8% (92.3%; 93.4%)	95.2% (94.6%; 95.8%)	94.9% (94.4%; 95.3%)	89.0% (87.6%; 90.4%)
Stage I	101.6% (101.0%; 102.2%)	99.6% (99.1%; 100.0%)	100.0% (99.5%; 100.4%)	105.5% (103.6%; 107.4%)
Stage II	96.0% (95.1%; 96.9%)	96.4% (95.7%; 97.2%)	96.7% (96.0%; 97.4%)	94.9% (92.7%; 97.2%)
Stage III	82.3% (80.2%; 84.4%)	91.3% (89.2%; 93.4%)	89.8% (88.0%; 91.7%)	70.0% (65.6%; 74.8%)
Stage IV	46.8% (44.4%; 49.3%)	67.3% (62.7%; 72.4%)	50.3% (47.0%; 53.9%)	38.5% (34.9%; 42.6%)

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

Belgian Cancer Registry

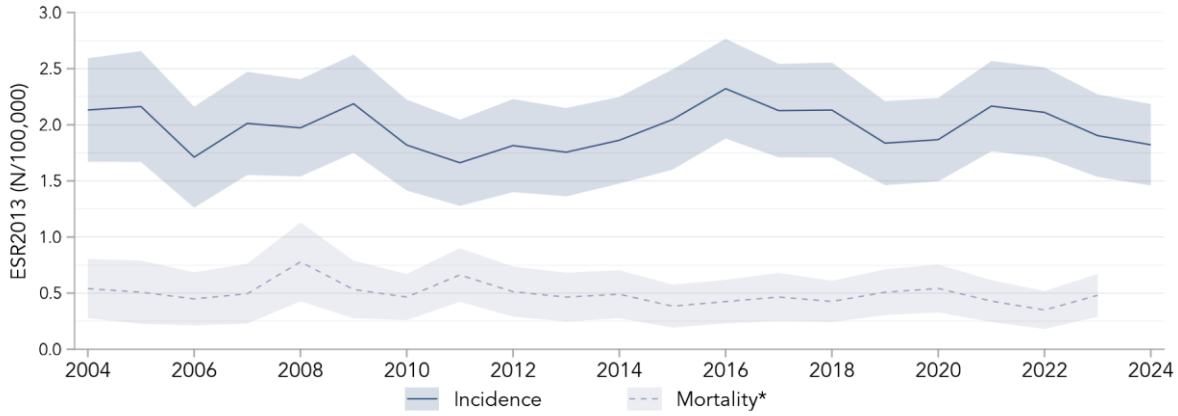
BREAST CANCER (MALES)

Age-specific incidence, 2020-2024

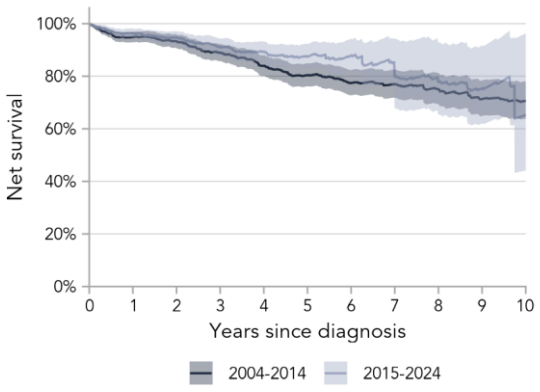


- Median age at diagnosis for male breast cancer was **70 years** between 2020 and 2024
- **Less than 1%** of the breast cancer cases are diagnosed in **males**
- Incidence and mortality rates **fluctuate** due to a low number of cases

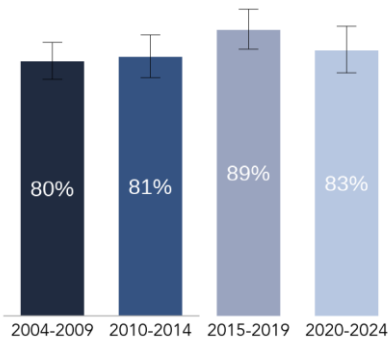
Age-standardised incidence and mortality, 2004-2024



Net survival by period of diagnosis



5-year net survival over time



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 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 clinical and pathological stage and 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. For breast cancer, stage IV means the cancer has spread to other organs. 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.
    - **Clinical stage:** Stage based on clinical examinations (e.g.: medical imaging, biopsies) to estimate the extent of the tumour. Clinical stage is established before the start of any treatment.
    - **Pathological stage:** Stage based on pathological examinations of the tumour after surgery. **Pathological stage without neo-adjuvant therapy** is the pathological stage in the population that did not receive neo-adjuvant therapy prior to surgery. **Pathological stage after neo-adjuvant therapy** is the pathological stage in the population that did receive neo-adjuvant therapy prior to surgery.
    - **Neo-adjuvant therapy (NAT):** Treatment (e.g.: chemotherapy) given prior to surgery, with the goal to shrink the tumour before operating.
- **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.*