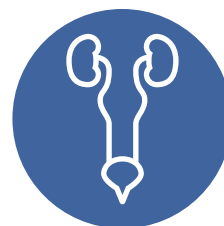# CANCER FACT SHEET 2023
## KIDNEY CANCER
### ICD-10 C64

## CONCEPTS AND 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.

**Average Annual Percentage Change (AAPC):** The average relative chance in incidence risk from one year to the next. For example an AAPC of 1.05 (a 5% increase) applied to a cancer risk of 200/100,000 results in a risk of 210/100,000 one year later (=200*1.05) and 255/100,000 over 5 years (=200*(1.05)$^5$).

**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 2023, 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. 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.

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**Belgian Cancer Registry**

## 1.1. Kidney cancer incidence: by region

*1.1.1. Kidney cancer incidence by region and sex: number of new diagnoses, age-specific, crude and age-standardised incidence rates, 2023*

| Region | N [CR] 0- | 5- | 10- | 15- | 20- | 25- | 30- | 35- | 40- | 45- | 50- | 55- | 60- | 65- | 70- | 75- | 80- | 85- | 90- | 95- | All ages | ESR2013 (95%CI) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Males** | | | | | | | | | | | | | | | | | | | | | | |
| **Belgium** | 5 | 2 | 0 | 1 | 1 | 4 | 6 | 18 | 41 | 62 | 93 | 164 | 200 | 251 | 235 | 217 | 133 | 65 | 18 | 1 | 1,517 | 27.5 |
| | [1.6] | [0.6] | [0.0] | [0.3] | [0.3] | [1.1] | [1.5] | [4.8] | [10.7] | [16.6] | [23.5] | [40.8] | [53.4] | [78.9] | [88.2] | [106.7] | [106.5] | [81.5] | [57.4] | [16.5] | [26.3] | (26.1; 28.8) |
| Brussels | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 3 | 6 | 7 | 10 | 9 | 11 | 8 | 8 | 3 | 0 | 0 | 70 | 17.1 |
| | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [2.0] | [0.0] | [4.3] | [4.3] | [6.8] | [14.6] | [19.8] | [34.7] | [42.1] | [65.4] | [63.4] | [99.5] | [60.0] | [0.0] | [0.0] | [11.5] | (13.0; 21.2) |
| Flanders | 5 | 2 | 0 | 1 | 1 | 2 | 3 | 7 | 25 | 37 | 51 | 105 | 127 | 178 | 151 | 148 | 94 | 50 | 16 | 1 | 1,004 | 29.4 |
| | [2.9] | [1.1] | [0.0] | [0.5] | [0.5] | [1.0] | [1.4] | [3.3] | [11.3] | [17.5] | [22.3] | [43.3] | [55.5] | [90.9] | [92.0] | [113.5] | [114.0] | [92.9] | [76.9] | [25.2] | [29.9] | (27.6; 31.2) |
| Wallonia | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 9 | 14 | 22 | 36 | 52 | 63 | 64 | 73 | 61 | 31 | 12 | 2 | 0 | 443 | 26.0 |
| | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.9] | [2.5] | [7.7] | [12.0] | [18.6] | [28.7] | [41.7] | [53.9] | [63.5] | [85.5] | [101.1] | [90.1] | [57.3] | [24.3] | [0.0] | [24.6] | (23.5; 28.4) |
| **Females** | | | | | | | | | | | | | | | | | | | | | | |
| **Belgium** | 4 | 4 | 0 | 0 | 4 | 5 | 7 | 11 | 21 | 28 | 40 | 52 | 88 | 101 | 83 | 119 | 72 | 55 | 18 | 2 | 714 | 11.3 |
| | [1.4] | [1.3] | [0.0] | [0.0] | [1.2] | [1.4] | [1.8] | [2.9] | [5.5] | [7.6] | [10.3] | [13.1] | [23.1] | [29.8] | [27.9] | [48.4] | [41.3] | [41.1] | [25.4] | [9.6] | [12.0] | (10.5; 12.2) |
| Brussels | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 1 | 4 | 6 | 5 | 3 | 2 | 10 | 4 | 0 | 0 | 1 | 43 | 8.3 |
| | [0.0] | [5.2] | [0.0] | [0.0] | [2.4] | [0.0] | [0.0] | [2.1] | [6.6] | [2.4] | [10.5] | [17.6] | [16.5] | [12.0] | [9.3] | [55.5] | [31.1] | [0.0] | [0.0] | [48.0] | [6.8] | (5.8; 10.8) |

| Region | N [CR] 0- | 5- | 10- | 15- | 20- | 25- | 30- | 35- | 40- | 45- | 50- | 55- | 60- | 65- | 70- | 75- | 80- | 85- | 90- | 95- | All ages | ESR2013 (95%CI) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flanders | 4 [2.5] | 2 [1.1] | 0 [0.0] | 0 [0.0] | 2 [1.1] | 5 [2.5] | 4 [1.8] | 6 [2.8] | 13 [5.9] | 18 [8.7] | 21 [9.3] | 26 [11.0] | 52 [22.8] | 68 [33.6] | 58 [33.0] | 90 [59.9] | 52 [47.5] | 44 [51.6] | 15 [34.1] | 0 [0.0] | 480 [14.0] | 12.6 (11.5; 13.7) |
| Wallonia | 0 [0.0] | 0 [0.0] | 0 [0.0] | 0 [0.0] | 1 [0.9] | 0 [0.0] | 3 [2.5] | 4 [3.4] | 5 [4.2] | 9 [7.6] | 15 [12.0] | 20 [15.8] | 31 [25.2] | 30 [26.9] | 23 [23.0] | 19 [24.5] | 16 [30.8] | 11 [28.4] | 3 [14.2] | 1 [15.4] | 191 [10.2] | 9.6 (8.2; 11.0) |

## 1.2. Kidney cancer incidence: by tumour stage

*1.2.1. Kidney cancer incidence by clinical stage (cStage), sex and age group: number of new diagnoses, crude and age-standardised incidence rates, 2023*

| cStage | Males | | | | | Females | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N[CR] | | | | ESR2013 (95%CI) | N[CR] | | | | ESR2013 (95%CI) |
| | 15-59 | 60-74 | 75+ | All ages | | 15-59 | 60-74 | 75+ | All ages | |
| I | 255 [7.6] | 410 [42.7] | 250 [56.1] | 915 [15.9] | 16.5 (15.5; 17.6) | 111 [3.3] | 177 [17.4] | 147 [22.8] | 435 [7.3] | 7.0 (6.3; 7.6) |
| II | 43 [1.3] | 55 [5.7] | 45 [10.1] | 143 [2.5] | 2.6 (2.2; 3.0) | 16 [0.5] | 30 [2.9] | 23 [3.6] | 69 [1.2] | 1.1 (0.8; 1.4) |
| III | 26 [0.8] | 70 [7.3] | 53 [11.9] | 149 [2.6] | 2.7 (2.3; 3.1) | 10 [0.3] | 22 [2.2] | 33 [5.1] | 65 [1.1] | 1.0 (0.8; 1.2) |
| IV | 34 [1.0] | 95 [9.9] | 53 [11.9] | 182 [3.2] | 3.3 (2.8; 3.8) | 15 [0.5] | 16 [1.6] | 45 [7.0] | 76 [1.3] | 1.1 (0.9; 1.4) |
| X/NA | 32 [0.9] | 56 [5.8] | 33 [7.4] | 128 [2.2] | 2.3 (1.9; 2.7) | 16 [0.5] | 27 [2.7] | 18 [2.8] | 69 [1.2] | 1.1 (0.9; 1.4) |

*1.2.2. Kidney cancer incidence by pathological stage (pStage), sex and age group: number of new diagnoses, crude and age-standardised incidence rates, 2023*

| pStage | Males | | | | | Females | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | N[CR] | | | | ESR2013 (95%CI) | N[CR] | | | | ESR2013 (95%CI) |
| | 15-59 | 60-74 | 75+ | All ages | | 15-59 | 60-74 | 75+ | All ages | |
| I | 251 [7.5] | 378 [39.4] | 149 [33.5] | 778 [13.5] | 13.9 (12.9; 14.8) | 105 [3.2] | 168 [16.5] | 82 [12.7] | 355 [6.0] | 5.9 (5.2; 6.5) |
| II | 32 [0.9] | 44 [4.6] | 27 [6.1] | 103 [1.8] | 1.9 (1.5; 2.2) | 16 [0.5] | 18 [1.8] | 15 [2.3] | 49 [0.8] | 0.8 (0.6; 1.0) |
| III | 50 [1.5] | 102 [10.6] | 55 [12.4] | 207 [3.6] | 3.7 (3.2; 4.3) | 22 [0.7] | 39 [3.8] | 33 [5.1] | 94 [1.6] | 1.5 (1.2; 1.8) |
| IV | 20 [0.6] | 27 [2.8] | 15 [3.4] | 62 [1.1] | 1.1 (0.8; 1.4) | 4 [0.1] | 4 [0.4] | 9 [1.4] | 17 [0.3] | 0.3 (0.1; 0.4) |
| X/NA | 37 [1.1] | 135 [14.1] | 188 [42.2] | 367 [6.4] | 6.9 (6.2; 7.6) | 21 [0.6] | 43 [4.2] | 127 [19.7] | 199 [3.4] | 2.9 (2.5; 3.3) |

*1.2.3. Kidney cancer incidence by stage, sex and age group: number of new diagnoses, crude and age-standardised incidence rates, 2023*

| Stage | Males | | | | | Females | | | | |
|-------|-------|---|---|---|---|---------|---|---|---|---|
| | N[CR] | | | | ESR2013 (95%CI) | N[CR] | | | | ESR2013 (95%CI) |
| | 15-59 | 60-74 | 75+ | All ages | | 15-59 | 60-74 | 75+ | All ages | |
| I | 269 [8.0] | 447 [46.6] | 264 [59.3] | 980 [17.0] | 17.7 (16.6; 18.8) | 114 [3.4] | 192 [18.9] | 152 [23.6] | 458 [7.7] | 7.3 (6.7; 8.0) |
| II | 31 [0.9] | 44 [4.6] | 29 [6.5] | 104 [1.8] | 1.9 (1.5; 2.3) | 15 [0.5] | 19 [1.9] | 19 [2.9] | 53 [0.9] | 0.8 (0.6; 1.1) |
| III | 48 [1.4] | 88 [9.2] | 73 [16.4] | 209 [3.6] | 3.8 (3.3; 4.3) | 22 [0.7] | 38 [3.7] | 44 [6.8] | 104 [1.8] | 1.6 (1.3; 2.0) |
| IV | 37 [1.1] | 97 [10.1] | 57 [12.8] | 191 [3.3] | 3.5 (3.0; 4.0) | 15 [0.5] | 16 [1.6] | 47 [7.3] | 78 [1.3] | 1.2 (0.9; 1.4) |
| X/NA | 5 [0.1] | 10 [1.0] | 11 [2.5] | 33 [0.6] | 0.6 (0.4; 0.8) | 2 [0.1] | 7 [0.7] | 4 [0.6] | 21 [0.4] | 0.3 (0.2; 0.5) |

**Belgian Cancer Registry**

## 2.1. Kidney cancer incidence trends: by region

*2.1.1. Kidney cancer incidence trends in males, by region: number of new diagnoses, crude and age-standardised incidence rates, including average annual percentage change, 2004-2023*

| Region | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | AAPC, % (95%CI) | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Belgium** | **N** | 816 | 845 | 859 | 895 | 953 | 964 | 995 | 1,007 | 1,051 | 1,070 | 1,080 | 1,152 | 1,191 | 1,140 | 1,175 | 1,310 | 1,281 | 1,304 | 1,377 | 1,517 | | |
| | **CR** | 16.0 | 16.5 | 16.7 | 17.3 | 18.2 | 18.3 | 18.7 | 18.8 | 19.4 | 19.6 | 19.7 | 20.9 | 21.5 | 20.5 | 21.0 | 23.3 | 22.6 | 23.0 | 24.1 | 26.3 | | |
| | **ESR2013** | 19.1 | 19.6 | 19.7 | 20.2 | 21.3 | 21.3 | 21.9 | 21.2 | 22.1 | 22.2 | 22.2 | 23.3 | 23.7 | 22.5 | 22.8 | 25.1 | 24.3 | 24.3 | 25.3 | 27.5 | 1.5 (1.3; 1.8) | 2004-2023 |
| Brussels | **N** | 57 | 70 | 42 | 56 | 76 | 62 | 74 | 69 | 82 | 84 | 67 | 84 | 79 | 65 | 91 | 95 | 80 | 84 | 93 | 70 | | |
| | **CR** | 11.9 | 14.5 | 8.6 | 11.3 | 15.0 | 12.0 | 14.0 | 12.7 | 14.8 | 15.0 | 11.8 | 14.7 | 13.6 | 11.2 | 15.5 | 16.0 | 13.4 | 14.0 | 15.5 | 11.5 | | |
| | **ESR2013** | 16.4 | 20.4 | 11.9 | 16.0 | 22.2 | 16.8 | 19.6 | 17.6 | 22.4 | 22.4 | 17.9 | 21.2 | 19.9 | 16.7 | 23.3 | 23.1 | 20.0 | 20.3 | 23.0 | 17.1 | 1.2 (0.0; 2.5) | 2004-2023 |
| Flanders | **N** | 502 | 522 | 540 | 571 | 584 | 600 | 656 | 650 | 662 | 668 | 714 | 716 | 740 | 743 | 741 | 818 | 850 | 797 | 901 | 1,004 | | |
| | **CR** | 16.9 | 17.5 | 18.0 | 18.9 | 19.2 | 19.6 | 21.3 | 20.9 | 21.1 | 21.2 | 22.6 | 22.5 | 23.1 | 23.1 | 22.9 | 25.1 | 25.9 | 24.2 | 27.2 | 29.9 | | |
| | **ESR2013** | 19.6 | 19.9 | 20.5 | 21.1 | 21.3 | 21.9 | 23.9 | 22.4 | 22.8 | 22.8 | 24.0 | 23.8 | 24.0 | 23.8 | 23.3 | 25.4 | 26.2 | 24.1 | 26.8 | 29.4 | 1.6 (1.3; 1.9) | 2004-2023 |
| Wallonia | **N** | 257 | 253 | 277 | 268 | 293 | 302 | 265 | 288 | 307 | 318 | 299 | 352 | 372 | 332 | 343 | 397 | 351 | 423 | 383 | 443 | | |
| | **CR** | 15.7 | 15.4 | 16.7 | 16.1 | 17.5 | 17.9 | 15.6 | 16.8 | 17.8 | 18.3 | 17.2 | 20.1 | 21.2 | 18.8 | 19.4 | 22.4 | 19.7 | 23.7 | 21.4 | 24.6 | | |
| | **ESR2013** | 18.8 | 18.7 | 20.2 | 19.6 | 21.0 | 21.1 | 18.5 | 19.7 | 20.2 | 21.0 | 19.5 | 22.6 | 24.1 | 21.1 | 21.6 | 24.8 | 21.1 | 25.3 | 22.6 | 26.0 | 1.4 (0.8; 1.9) | 2004-2023 |

Note: In case a change in trend is detected, an estimated APC per time segment is given as well as Average Annual Percentage Change (AAPC) for the full incidence period.

*2.1.2. Kidney cancer incidence trends in females, by region: number of new diagnoses, crude and age-standardised incidence rates, including average annual percentage change, 2004-2023*

| Region | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | AAPC, % (95%CI) | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Belgium** | **N** | 526 | 536 | 534 | 522 | 547 | 528 | 560 | 658 | 602 | 619 | 615 | 591 | 639 | 652 | 642 | 686 | 651 | 661 | 698 | 714 | | |
| | **CR** | 9.9 | 10.0 | 9.9 | 9.7 | 10.1 | 9.6 | 10.1 | 11.8 | 10.7 | 11.0 | 10.8 | 10.4 | 11.2 | 11.3 | 11.1 | 11.8 | 11.2 | 11.3 | 11.9 | 12.0 | | |
| | **ESR2013** | 10.2 | 10.2 | 10.1 | 9.8 | 10.1 | 9.7 | 10.2 | 11.6 | 10.6 | 10.8 | 10.7 | 10.2 | 10.8 | 11.0 | 10.8 | 11.3 | 10.6 | 10.7 | 11.2 | 11.3 | 0.6 (0.3; 0.9) | 2004-2023 |
| Brussels | **N** | 28 | 33 | 35 | 27 | 34 | 36 | 38 | 45 | 40 | 49 | 42 | 42 | 41 | 30 | 37 | 41 | 48 | 41 | 45 | 43 | | |
| | **CR** | 5.4 | 6.3 | 6.6 | 5.1 | 6.3 | 6.5 | 6.8 | 7.8 | 6.8 | 8.3 | 7.0 | 7.0 | 6.7 | 4.9 | 6.0 | 6.7 | 7.7 | 6.6 | 7.2 | 6.8 | | |
| | **ESR2013** | 6.0 | 7.1 | 7.6 | 5.9 | 7.2 | 7.4 | 7.8 | 8.9 | 8.3 | 10.2 | 8.8 | 8.8 | 8.2 | 6.2 | 7.7 | 8.2 | 9.1 | 7.7 | 8.7 | 8.3 | 1.5 (0.5; 2.5) | 2004-2023 |
| | | | | | | | | | | | | | | | | | | | | | | 5.1 (1.3; 9.0) | 2004-2010 |
| | | | | | | | | | | | | | | | | | | | | | | -0.1 (-1.6; 1.4) | 2011-2023 |
| Flanders | **N** | 350 | 337 | 336 | 348 | 352 | 343 | 373 | 413 | 388 | 386 | 401 | 372 | 417 | 415 | 432 | 462 | 421 | 420 | 431 | 480 | | |
| | **CR** | 11.5 | 11.0 | 10.9 | 11.2 | 11.3 | 10.9 | 11.8 | 12.9 | 12.1 | 11.9 | 12.4 | 11.4 | 12.7 | 12.6 | 13.0 | 13.9 | 12.6 | 12.5 | 12.7 | 14.0 | | |
| | **ESR2013** | 11.6 | 10.9 | 10.8 | 11.1 | 10.9 | 10.6 | 11.4 | 12.3 | 11.3 | 11.2 | 11.5 | 10.7 | 11.7 | 11.7 | 12.0 | 12.6 | 11.3 | 11.2 | 11.5 | 12.6 | 0.4 (0.1; 0.8) | 2004-2023 |
| Wallonia | **N** | 148 | 166 | 163 | 147 | 161 | 149 | 149 | 200 | 174 | 184 | 172 | 177 | 181 | 207 | 173 | 183 | 182 | 200 | 222 | 191 | | |
| | **CR** | 8.5 | 9.5 | 9.3 | 8.3 | 9.1 | 8.3 | 8.3 | 11.0 | 9.6 | 10.1 | 9.4 | 9.6 | 9.8 | 11.2 | 9.3 | 9.8 | 9.8 | 10.7 | 11.9 | 10.2 | | |
| | **ESR2013** | 8.8 | 9.8 | 9.3 | 8.4 | 9.4 | 8.4 | 8.6 | 11.0 | 9.8 | 10.2 | 9.5 | 9.7 | 9.8 | 11.1 | 9.2 | 9.6 | 9.4 | 10.3 | 11.3 | 9.6 | 0.7 (0.1; 1.3) | 2004-2023 |

Note: In case a change in trend is detected, an estimated APC per time segment is given as well as Average Annual Percentage Change (AAPC) for the full incidence period.

## 2.2. Kidney cancer incidence trends: by tumour stage

*2.2.1. Kidney cancer incidence trends by stage and sex: number of new diagnoses, crude and age-standardised incidence rates, 2019-2023, including average annual percentage change from 2004 onwards*

| Stage | | Males | | | | | | | Females | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2019 | 2020 | 2021 | 2022 | 2023 | AAPC, % (95%CI) | Period | 2019 | 2020 | 2021 | 2022 | 2023 | AAPC, % (95%CI) | Period |
| I | N | 738 | 754 | 766 | 845 | 980 | | | 388 | 380 | 385 | 423 | 458 | | |
| | CR | 13.1 | 13.3 | 13.5 | 14.8 | 17.0 | | | 6.7 | 6.5 | 6.6 | 7.2 | 7.7 | | |
| | ESR2013 | 14.0 | 14.2 | 14.2 | 15.4 | 17.7 | 4.6 (4.2; 5.0) | 2004-2023 | 6.5 | 6.2 | 6.3 | 6.9 | 7.3 | 3.0 (2.6; 3.4) | 2004-2023 |
| | | | | | | | 6.9 (5.4; 8.3) | 2004-2010 | | | | | | 5.8 (4.4; 7.2) | 2004-2011 |
| | | | | | | | 3.6 (3.0; 4.1) | 2011-2023 | | | | | | 1.4 (0.7; 2.2) | 2012-2023 |
| II | N | 130 | 105 | 110 | 114 | 104 | | | 49 | 53 | 62 | 59 | 53 | | |
| | CR | 2.3 | 1.9 | 1.9 | 2.0 | 1.8 | | | 0.8 | 0.9 | 1.1 | 1.0 | 0.9 | | |
| | ESR2013 | 2.5 | 2.0 | 2.1 | 2.1 | 1.9 | -0.3 (-1.3; 0.7) | 2004-2023 | 0.8 | 0.9 | 1.0 | 0.9 | 0.8 | -0.1 (-1.4; 1.3) | 2004-2023 |
| III | N | 179 | 181 | 195 | 178 | 209 | | | 111 | 95 | 94 | 94 | 104 | | |
| | CR | 3.2 | 3.2 | 3.4 | 3.1 | 3.6 | | | 1.9 | 1.6 | 1.6 | 1.6 | 1.8 | | |
| | ESR2013 | 3.5 | 3.4 | 3.7 | 3.3 | 3.8 | 1.6 (0.9; 2.3) | 2004-2023 | 1.9 | 1.5 | 1.5 | 1.5 | 1.6 | 1.1 (0.4; 1.8) | 2004-2023 |
| | | | | | | | 8.3 (3.9; 12.8) | 2004-2008 | | | | | | | |
| | | | | | | | -1.6 (-4.7; 1.6) | 2009-2012 | | | | | | | |
| | | | | | | | 0.4 (-0.7; 1.6) | 2013-2023 | | | | | | | |
| IV | N | 205 | 188 | 180 | 200 | 191 | | | 100 | 87 | 89 | 101 | 78 | | |
| | CR | 3.6 | 3.3 | 3.2 | 3.5 | 3.3 | | | 1.7 | 1.5 | 1.5 | 1.7 | 1.3 | | |
| | ESR2013 | 4.0 | 3.6 | 3.4 | 3.7 | 3.5 | 0.7 (0.0; 1.4) | 2004-2023 | 1.6 | 1.4 | 1.4 | 1.6 | 1.2 | -0.3 (-1.3; 0.6) | 2004-2023 |
| X/NA | N | 58 | 53 | 53 | 40 | 33 | | | 38 | 36 | 31 | 21 | 21 | | |
| | CR | 1.0 | 0.9 | 0.9 | 0.7 | 0.6 | | | 0.7 | 0.6 | 0.5 | 0.4 | 0.4 | | |
| | ESR2013 | 1.1 | 1.0 | 1.0 | 0.7 | 0.6 | -9.0 (-9.8; -8.1) | 2004-2023 | 0.6 | 0.6 | 0.5 | 0.3 | 0.3 | -8.8 (-10.0; -7.7) | 2004-2023 |

Note: In case a change in trend is detected, an estimated APC per time segment is given as well as Average Annual Percentage Change (AAPC) for the full incidence period.

## 2.3. Kidney cancer incidence trends: by age group

*2.3.1. Kidney cancer incidence trends in males, by age group: number of new diagnoses, crude and age-standardised incidence rates, including average annual percentage change, 2004-2023*

| Age | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | AAPC, % (95%CI) | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15-59 | N | 274 | 243 | 271 | 284 | 302 | 289 | 287 | 313 | 323 | 337 | 319 | 343 | 333 | 313 | 297 | 347 | 313 | 357 | 317 | 390 | | |
| | CR | 8.6 | 7.6 | 8.4 | 8.8 | 9.3 | 8.8 | 8.7 | 9.5 | 9.7 | 10.1 | 9.6 | 10.3 | 10.0 | 9.4 | 8.9 | 10.4 | 9.4 | 10.7 | 9.5 | 11.6 | | |
| | ESR2013 | 9.1 | 7.9 | 8.7 | 9.1 | 9.6 | 9.1 | 8.9 | 9.6 | 9.8 | 10.2 | 9.6 | 10.2 | 9.9 | 9.2 | 8.7 | 10.2 | 9.2 | 10.5 | 9.3 | 11.5 | 0.8 (0.3; 1.4) | 2004-2023 |
| 60-74 | N | 361 | 385 | 393 | 385 | 426 | 429 | 436 | 439 | 454 | 445 | 466 | 519 | 548 | 513 | 545 | 582 | 611 | 589 | 662 | 686 | | |
| | CR | 53.0 | 56.2 | 57.2 | 55.0 | 59.8 | 59.0 | 58.8 | 58.1 | 59.0 | 56.8 | 58.5 | 63.9 | 65.8 | 59.9 | 62.0 | 64.8 | 66.6 | 63.0 | 70.0 | 71.5 | | |
| | ESR2013 | 52.8 | 56.0 | 57.2 | 55.8 | 60.7 | 59.9 | 59.6 | 58.8 | 60.2 | 57.3 | 60.0 | 65.3 | 67.4 | 61.1 | 62.8 | 65.7 | 67.4 | 63.8 | 71.0 | 72.4 | 1.3 (0.9; 1.6) | 2004-2023 |
| 75+ | N | 168 | 205 | 187 | 220 | 223 | 237 | 266 | 242 | 269 | 280 | 283 | 286 | 297 | 309 | 326 | 371 | 346 | 351 | 392 | 434 | | |
| | CR | 57.3 | 67.7 | 59.5 | 67.5 | 66.2 | 68.6 | 75.1 | 67.0 | 72.9 | 74.5 | 73.8 | 73.1 | 75.2 | 78.3 | 82.1 | 91.8 | 83.7 | 84.4 | 90.9 | 97.5 | | |
| | ESR2013 | 53.8 | 61.0 | 56.1 | 62.1 | 63.1 | 66.6 | 74.8 | 63.4 | 70.0 | 74.1 | 72.2 | 71.8 | 73.2 | 77.3 | 80.4 | 90.3 | 83.9 | 83.7 | 89.5 | 96.1 | 2.6 (2.2; 3.0) | 2004-2023 |

Note: In case a change in trend is detected, an estimated APC per time segment is given as well as Average Annual Percentage Change (AAPC) for the full incidence period.

*2.3.2. Kidney cancer incidence trends in females, by age group: number of new diagnoses, crude and age-standardised incidence rates, including average annual percentage change, 2004-2023*

| Age | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | AAPC, % (95%CI) | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15-59 | N | 144 | 146 | 129 | 129 | 140 | 138 | 131 | 179 | 163 | 155 | 148 | 149 | 141 | 134 | 152 | 134 | 146 | 157 | 157 | 168 | | |
| | CR | 4.6 | 4.6 | 4.1 | 4.0 | 4.4 | 4.3 | 4.0 | 5.5 | 5.0 | 4.7 | 4.5 | 4.5 | 4.3 | 4.1 | 4.6 | 4.1 | 4.4 | 4.8 | 4.8 | 5.0 | | |
| | ESR2013 | 4.8 | 4.8 | 4.2 | 4.1 | 4.5 | 4.3 | 4.1 | 5.5 | 5.0 | 4.7 | 4.5 | 4.5 | 4.3 | 4.0 | 4.6 | 4.0 | 4.4 | 4.7 | 4.7 | 5.1 | 0.1 (-0.6; 0.8) | 2004-2023 |
| 60-74 | N | 218 | 217 | 221 | 211 | 215 | 212 | 219 | 233 | 217 | 240 | 228 | 231 | 252 | 292 | 253 | 279 | 255 | 240 | 269 | 272 | | |
| | CR | 28.1 | 28.0 | 28.6 | 27.1 | 27.3 | 26.5 | 27.0 | 28.3 | 26.0 | 28.3 | 26.6 | 26.5 | 28.2 | 31.8 | 26.9 | 29.1 | 26.1 | 24.1 | 26.8 | 26.7 | | |
| | ESR2013 | 27.6 | 27.5 | 28.2 | 26.9 | 27.3 | 26.7 | 27.3 | 28.3 | 26.4 | 28.7 | 27.0 | 26.9 | 28.9 | 32.2 | 27.1 | 29.2 | 26.3 | 24.3 | 26.8 | 26.8 | -0.1 (-0.6; 0.3) | 2004-2023 |
| 75+ | N | 157 | 164 | 174 | 173 | 185 | 171 | 204 | 236 | 216 | 220 | 231 | 203 | 236 | 216 | 231 | 265 | 239 | 259 | 262 | 266 | | |
| | CR | 30.2 | 30.9 | 32.0 | 31.0 | 32.5 | 29.6 | 34.8 | 39.8 | 36.0 | 36.4 | 37.9 | 32.9 | 38.3 | 35.3 | 37.8 | 43.1 | 38.5 | 41.8 | 41.3 | 41.2 | | |
| | ESR2013 | 30.2 | 30.0 | 31.1 | 30.6 | 31.8 | 28.8 | 35.1 | 39.3 | 35.8 | 36.2 | 38.4 | 33.8 | 37.4 | 35.7 | 39.2 | 44.5 | 38.6 | 42.4 | 43.2 | 42.3 | 2.0 (1.5; 2.5) | 2004-2023 |

Note: In case a change in trend is detected, an estimated APC per time segment is given as well as Average Annual Percentage Change (AAPC) for the full incidence period.

### 3.1. Kidney cancer prevalence: by region

*3.1.1. Kidney cancer prevalence by region and sex: number of prevalent cases, crude and age-standardised prevalence rates on 31/12/2023*

| Region | | Males | | | | | Females | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1-year | 5-year | 10-year | 15-year | 20-year | 1-year | 5-year | 10-year | 15-year | 20-year |
| **Belgium** | **N** | 1,396 | 5,271 | 8,428 | 10,444 | 11,663 | 669 | 2,675 | 4,510 | 5,806 | 6,605 |
| | **CR** | 24.1 | 90.9 | 145.4 | 180 | 201 | 11.2 | 44.8 | 75.6 | 97 | 111 |
| | **ESR2013** | 24.8 | 94.1 | 151.0 | 187.8 | 210.3 | 10.5 | 41.8 | 69.9 | 89.4 | 101.3 |
| Brussels | **N** | 63 | 311 | 522 | 660 | 751 | 41 | 175 | 293 | 387 | 434 |
| | **CR** | 10.3 | 50.8 | 85.3 | 107.8 | 122.7 | 6.4 | 27.5 | 46.0 | 60.7 | 68.1 |
| | **ESR2013** | 15.2 | 74.6 | 127.7 | 163.3 | 187.8 | 7.8 | 33.1 | 56.0 | 73.6 | 82.1 |
| Flanders | **N** | 924 | 3,395 | 5,387 | 6,677 | 7,423 | 453 | 1,739 | 2,911 | 3,710 | 4,217 |
| | **CR** | 27.4 | 100.5 | 159.5 | 197.7 | 219.8 | 13.2 | 50.5 | 84.5 | 107.7 | 122.4 |
| | **ESR2013** | 26.6 | 97.9 | 155.6 | 193.1 | 215.0 | 11.8 | 44.8 | 74.4 | 94.1 | 106.5 |
| Wallonia | **N** | 409 | 1,565 | 2,519 | 3,107 | 3,489 | 175 | 761 | 1,306 | 1,709 | 1,954 |
| | **CR** | 22.6 | 86.6 | 139.4 | 171.9 | 193.0 | 9.3 | 40.4 | 69.3 | 90.7 | 103.7 |
| | **ESR2013** | 23.6 | 90.9 | 146.9 | 181.8 | 205.2 | 8.8 | 37.9 | 64.6 | 84.1 | 95.7 |

## 4.1. Kidney cancer survival: by region

*4.1.1. Kidney cancer survival by region, sex and age group: number at risk and net survival probabilities, 2014-2023*

| | | | Net Survival Probability, 2014-2023 | | | |
|---|---|---|---|---|---|---|
| Region | Age | N at risk | 1-y (95%CI) | 3-y (95%CI) | 5-y (95%CI) | 10-y (95%CI) |
| Total | **All** | 18,465 | 89.0% (88.5%; 89.5%) | 82.2% (81.5%; 83.0%) | 78.5% (77.6%; 79.5%) | 70.3% (67.6%; 73.0%) |
| Males | | | | | | |
| **Belgium** | **All ages** | 12,111 | 88.7% (88.1%; 89.4%) | 82.1% (81.2%; 83.0%) | 78.3% (77.1%; 79.6%) | 69.7% (66.2%; 73.4%) |
| | **15-59** | 3,234 | 93.9% (93.0%; 94.7%) | 88.8% (87.6%; 89.9%) | 86.4% (85.1%; 87.8%) | 80.2% (77.9%; 82.6%) |
| | **60-74** | 5,573 | 90.6% (89.8%; 91.5%) | 83.8% (82.6%; 85.0%) | 79.3% (77.9%; 80.8%) | 71.3% (68.4%; 74.3%) |
| | **75+** | 3,316 | 80.5% (78.9%; 82.2%) | 72.8% (70.5%; 75.2%) | 68.8% (65.5%; 72.2%) | 56.5% (45.9%; 69.5%) |
| Brussels | **All ages** | 773 | 87.5% (85.0%; 90.2%) | 80.1% (76.6%; 83.7%) | 75.9% (71.3%; 80.8%) | 57.2% (36.2%; 90.4%) |
| | **15-59** | 269 | 90.3% (86.8%; 94.0%) | 85.2% (80.9%; 89.8%) | 82.5% (77.5%; 87.7%) | 70.8% (62.4%; 80.4%) |
| | **60-74** | 317 | 89.6% (86.0%; 93.3%) | 81.1% (76.1%; 86.4%) | 74.4% (68.3%; 81.0%) | 71.7% (62.5%; 82.4%) |
| | **75+** | 187 | 80.0% (73.5%; 87.1%) | 70.9% (61.9%; 81.1%) | 68.8% (55.8%; 84.9%) | 21.3% (4.4%; 102.7%) |
| Flanders | **All ages** | 7,755 | 88.9% (88.1%; 89.7%) | 82.9% (81.8%; 84.1%) | 79.9% (78.4%; 81.4%) | 74.8% (71.2%; 78.5%) |
| | **15-59** | 1,906 | 94.6% (93.5%; 95.7%) | 89.4% (87.9%; 91.0%) | 86.9% (85.1%; 88.7%) | 83.1% (80.3%; 86.0%) |
| | **60-74** | 3,502 | 90.9% (89.8%; 92.0%) | 84.9% (83.4%; 86.4%) | 81.7% (79.8%; 83.6%) | 74.8% (71.0%; 78.7%) |
| | **75+** | 2,358 | 81.4% (79.5%; 83.3%) | 75.0% (72.2%; 77.8%) | 71.6% (67.8%; 75.6%) | 68.1% (58.1%; 79.7%) |
| Wallonia | **All ages** | 3,584 | 88.7% (87.5%; 89.8%) | 80.7% (79.1%; 82.3%) | 75.5% (73.4%; 77.8%) | 61.8% (56.7%; 67.2%) |

| Net Survival Probability, 2014-2023 | | | | | | |
|---|---|---|---|---|---|---|
| **Region** | **Age** | **N at risk** | **1-y (95%CI)** | **3-y (95%CI)** | **5-y (95%CI)** | **10-y (95%CI)** |
| | **15-59** | 1,060 | 93.5% (92.0%; 95.1%) | 88.5% (86.4%; 90.5%) | 86.6% (84.3%; 89.0%) | 77.6% (73.4%; 82.1%) |
| | **60-74** | 1,754 | 90.3% (88.9%; 91.8%) | 82.1% (80.0%; 84.2%) | 75.6% (73.0%; 78.3%) | 64.3% (59.6%; 69.4%) |
| | **75+** | 771 | 78.2% (74.8%; 81.6%) | 66.7% (62.1%; 71.6%) | 60.2% (53.3%; 67.9%) | 29.8% (15.2%; 58.5%) |
| Females | | | | | | |
| **Belgium** | **All ages** | 6,354 | 89.5% (88.7%; 90.4%) | 82.6% (81.3%; 83.8%) | 78.9% (77.3%; 80.5%) | 71.4% (67.6%; 75.4%) |
| | **15-59** | 1,459 | 95.4% (94.3%; 96.5%) | 91.7% (90.2%; 93.2%) | 89.2% (87.4%; 91.0%) | 85.3% (82.6%; 88.1%) |
| | **60-74** | 2,529 | 92.3% (91.2%; 93.4%) | 84.3% (82.6%; 85.9%) | 80.7% (78.7%; 82.6%) | 75.5% (72.3%; 78.9%) |
| | **75+** | 2,369 | 83.0% (81.3%; 84.8%) | 75.2% (72.7%; 77.8%) | 70.7% (67.2%; 74.3%) | 57.6% (48.6%; 68.2%) |
| Brussels | **All ages** | 395 | 91.1% (87.9%; 94.3%) | 84.0% (79.4%; 88.8%) | 78.3% (72.4%; 84.7%) | 86.7% (77.9%; 96.4%) |
| | **15-59** | 119 | 91.8% (87.0%; 96.9%) | 87.5% (81.5%; 94.0%) | 85.3% (78.5%; 92.7%) | 83.0% (74.7%; 92.2%) |
| | **60-74** | 139 | 92.3% (87.8%; 97.2%) | 85.9% (79.5%; 92.7%) | 84.8% (77.6%; 92.5%) | 84.4% (74.1%; 96.1%) |
| | **75+** | 137 | 89.2% (82.8%; 96.0%) | 79.2% (69.5%; 90.2%) | 65.7% (52.9%; 81.6%) | 92.2% (68.8%; 123.5%) |
| Flanders | **All ages** | 4,123 | 89.6% (88.5%; 90.7%) | 83.2% (81.7%; 84.8%) | 79.6% (77.5%; 81.7%) | 70.6% (65.4%; 76.1%) |
| | **15-59** | 858 | 96.3% (95.0%; 97.6%) | 93.2% (91.4%; 95.1%) | 90.8% (88.5%; 93.0%) | 87.3% (84.0%; 90.7%) |
| | **60-74** | 1,594 | 92.8% (91.5%; 94.2%) | 85.3% (83.3%; 87.4%) | 81.7% (79.3%; 84.2%) | 78.4% (74.3%; 82.7%) |
| | **75+** | 1,673 | 83.1% (81.0%; 85.3%) | 76.1% (73.1%; 79.2%) | 71.8% (67.6%; 76.2%) | 53.2% (42.3%; 66.9%) |
| Wallonia | **All ages** | 1,837 | 89.1% (87.5%; 90.7%) | 80.8% (78.7%; 83.1%) | 77.5% (74.9%; 80.3%) | 69.9% (65.0%; 75.3%) |
| | **15-59** | 483 | 94.6% (92.6%; 96.7%) | 90.0% (87.2%; 92.8%) | 87.3% (84.0%; 90.6%) | 82.5% (77.2%; 88.0%) |
| | **60-74** | 796 | 91.2% (89.2%; 93.3%) | 81.9% (78.9%; 84.9%) | 77.7% (74.3%; 81.3%) | 67.9% (62.0%; 74.3%) |
| | **75+** | 559 | 81.3% (77.6%; 85.1%) | 71.6% (66.6%; 76.8%) | 68.6% (62.3%; 75.6%) | 61.8% (48.9%; 78.1%) |

## 4.2. Kidney cancer survival: by tumour stage

*4.2.1. Kidney cancer survival by clinical stage (cStage) and sex: number at risk and net survival probabilities, 2014-2023*

| cStage | N at risk | **Net Survival Probability, 2014-2023** | | | | | |
| | | 1-y (95%CI) | 2-y (95%CI) | 3-y (95%CI) | 4-y (95%CI) | 5-y (95%CI) | 10-y (95%CI) |
|---|---|---|---|---|---|---|---|
| **Total** | 18,465 | 89.0% (88.5%; 89.5%) | 85.0% (84.4%; 85.6%) | 82.2% (81.5%; 83.0%) | 80.5% (79.7%; 81.3%) | 78.5% (77.6%; 79.5%) | 70.3% (67.6%; 73.0%) |
| **Males** | | | | | | | |
| All | 12,111 | 88.7% (88.1%; 89.4%) | 84.8% (84.0%; 85.5%) | 82.1% (81.2%; 83.0%) | 80.5% (79.5%; 81.5%) | 78.3% (77.1%; 79.6%) | 69.7% (66.2%; 73.4%) |
| I | 5,524 | 97.4% (96.8%; 98.0%) | 96.4% (95.5%; 97.2%) | 95.0% (93.9%; 96.2%) | 94.4% (93.1%; 95.8%) | 92.9% (91.0%; 94.7%) | 88.6% (83.6%; 94.0%) |
| II | 1,050 | 95.8% (94.1%; 97.4%) | 93.2% (90.9%; 95.4%) | 91.1% (88.3%; 94.0%) | 90.1% (86.9%; 93.6%) | 87.0% (82.9%; 91.3%) | 69.0% (58.7%; 81.3%) |
| III | 849 | 84.1% (81.4%; 86.9%) | 77.9% (74.7%; 81.3%) | 73.7% (70.0%; 77.5%) | 68.1% (63.9%; 72.5%) | 64.4% (59.8%; 69.4%) | 54.6% (43.7%; 68.3%) |
| IV | 1,719 | 52.8% (50.4%; 55.3%) | 38.7% (36.3%; 41.2%) | 31.1% (28.7%; 33.6%) | 26.0% (23.6%; 28.5%) | 22.2% (19.9%; 24.9%) | 10.0% (6.6%; 15.2%) |
| X/NA | 3,071 | 92.2% (91.1%; 93.4%) | 89.0% (87.6%; 90.4%) | 86.9% (85.3%; 88.6%) | 86.2% (84.4%; 88.0%) | 84.5% (82.4%; 86.6%) | 74.5% (68.2%; 81.4%) |
| **Females** | | | | | | | |
| All | 6,354 | 89.5% (88.7%; 90.4%) | 85.4% (84.3%; 86.4%) | 82.6% (81.3%; 83.8%) | 80.5% (79.1%; 81.9%) | 78.9% (77.3%; 80.5%) | 71.4% (67.6%; 75.4%) |
| I | 2,887 | 98.6% (97.8%; 99.3%) | 96.8% (95.6%; 97.9%) | 94.7% (93.2%; 96.2%) | 93.3% (91.4%; 95.2%) | 93.0% (90.7%; 95.5%) | 87.7% (80.4%; 95.6%) |
| II | 564 | 92.7% (90.1%; 95.3%) | 89.7% (86.5%; 93.1%) | 86.7% (82.8%; 90.8%) | 86.1% (81.5%; 90.8%) | 82.2% (76.9%; 87.9%) | 75.5% (62.6%; 91.2%) |
| III | 474 | 84.9% (81.4%; 88.5%) | 77.2% (73.0%; 81.8%) | 74.4% (69.6%; 79.4%) | 70.1% (64.7%; 76.0%) | 67.7% (61.6%; 74.3%) | 46.5% (28.6%; 75.8%) |
| IV | 829 | 50.9% (47.5%; 54.5%) | 36.0% (32.7%; 39.6%) | 27.5% (24.3%; 31.1%) | 22.9% (19.8%; 26.5%) | 18.7% (15.7%; 22.3%) | 12.0% (8.8%; 16.5%) |
| X/NA | 1,634 | 93.6% (92.2%; 95.0%) | 91.0% (89.3%; 92.8%) | 89.7% (87.7%; 91.7%) | 87.9% (85.7%; 90.3%) | 86.5% (84.0%; 89.2%) | 78.4% (73.3%; 83.9%) |

*4.2.2. Kidney cancer survival by pathological stage (pStage), and sex: number at risk and net survival probabilities, 2014-2023*

| pStage | N at risk | Net Survival Probability, 2014-2023 | | | | | |
| | | 1-y (95%CI) | 2-y (95%CI) | 3-y (95%CI) | 4-y (95%CI) | 5-y (95%CI) | 10-y (95%CI) |
|---|---|---|---|---|---|---|---|
| **Total** | 18,465 | 89.0% (88.5%; 89.5%) | 85.0% (84.4%; 85.6%) | 82.2% (81.5%; 83.0%) | 80.5% (79.7%; 81.3%) | 78.5% (77.6%; 79.5%) | 70.3% (67.6%; 73.0%) |
| **Males** | | | | | | | |
| **All** | 12,111 | 88.7% (88.1%; 89.4%) | 84.8% (84.0%; 85.5%) | 82.1% (81.2%; 83.0%) | 80.5% (79.5%; 81.5%) | 78.3% (77.1%; 79.6%) | 69.7% (66.2%; 73.4%) |
| **I** | 6,057 | 99.9% (99.6%; 100.3%) | 99.7% (99.1%; 100.3%) | 99.2% (98.4%; 100.0%) | 99.4% (98.5%; 100.4%) | 98.7% (97.5%; 100.0%) | 95.5% (91.8%; 99.3%) |
| **II** | 963 | 97.0% (95.6%; 98.5%) | 95.4% (93.4%; 97.4%) | 93.4% (90.9%; 95.9%) | 93.0% (90.3%; 95.9%) | 90.9% (87.5%; 94.4%) | 80.2% (69.9%; 92.0%) |
| **III** | 1,874 | 90.5% (89.0%; 92.0%) | 84.6% (82.7%; 86.6%) | 80.7% (78.4%; 83.0%) | 76.8% (74.2%; 79.5%) | 73.6% (70.7%; 76.7%) | 57.5% (50.9%; 64.9%) |
| **IV** | 654 | 57.8% (54.0%; 61.8%) | 43.6% (39.8%; 47.8%) | 36.0% (32.2%; 40.2%) | 31.2% (27.3%; 35.5%) | 27.5% (23.6%; 32.1%) | 11.9% (7.2%; 19.7%) |
| **X/NA** | 2,697 | 67.2% (65.3%; 69.2%) | 58.0% (55.9%; 60.3%) | 52.2% (49.8%; 54.7%) | 48.3% (45.7%; 51.2%) | 43.6% (40.3%; 47.1%) | 28.4% (18.2%; 44.3%) |
| **Females** | | | | | | | |
| **All** | 6,354 | 89.5% (88.7%; 90.4%) | 85.4% (84.3%; 86.4%) | 82.6% (81.3%; 83.8%) | 80.5% (79.1%; 81.9%) | 78.9% (77.3%; 80.5%) | 71.4% (67.6%; 75.4%) |
| **I** | 3,077 | 99.9% (99.4%; 100.4%) | 99.7% (99.0%; 100.5%) | 99.0% (98.0%; 100.0%) | 98.3% (97.0%; 99.6%) | 98.4% (96.9%; 99.9%) | 92.8% (87.9%; 97.9%) |
| **II** | 473 | 98.3% (96.6%; 100.1%) | 96.3% (93.8%; 98.9%) | 92.9% (89.5%; 96.5%) | 93.1% (89.4%; 97.0%) | 89.5% (84.8%; 94.5%) | 87.7% (76.6%; 100.5%) |
| **III** | 895 | 92.8% (90.8%; 94.8%) | 86.6% (84.0%; 89.3%) | 83.0% (80.0%; 86.2%) | 79.1% (75.6%; 82.7%) | 75.9% (72.0%; 80.1%) | 61.5% (53.8%; 70.3%) |
| **IV** | 280 | 60.6% (55.0%; 66.8%) | 45.8% (40.1%; 52.4%) | 35.2% (29.6%; 41.9%) | 32.6% (26.9%; 39.4%) | 29.1% (23.4%; 36.1%) | 16.3% (7.4%; 35.8%) |
| **X/NA** | 1,664 | 71.2% (68.8%; 73.6%) | 61.8% (59.2%; 64.6%) | 57.0% (54.0%; 60.1%) | 52.9% (49.6%; 56.4%) | 49.7% (45.8%; 53.9%) | 42.3% (34.0%; 52.6%) |

*4.2.3. Kidney cancer survival by stage and sex: number at risk and net survival probabilities, 2014-2023*

| Stage | N at risk | Net Survival Probability, 2014-2023 | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1-y (95%CI) | 2-y (95%CI) | 3-y (95%CI) | 4-y (95%CI) | 5-y (95%CI) | 10-y (95%CI) |
| **Total** | 18,465 | 89.0% (88.5%; 89.5%) | 85.0% (84.4%; 85.6%) | 82.2% (81.5%; 83.0%) | 80.5% (79.7%; 81.3%) | 78.5% (77.6%; 79.5%) | 70.3% (67.6%; 73.0%) |
| **Males** | | | | | | | |
| **All** | 12,111 | 88.7% (88.1%; 89.4%) | 84.8% (84.0%; 85.5%) | 82.1% (81.2%; 83.0%) | 80.5% (79.5%; 81.5%) | 78.3% (77.1%; 79.6%) | 69.7% (66.2%; 73.4%) |
| **I** | 7,074 | 98.0% (97.5%; 98.5%) | 97.1% (96.4%; 97.8%) | 96.1% (95.2%; 97.0%) | 95.7% (94.6%; 96.9%) | 94.4% (93.0%; 95.9%) | 90.1% (86.3%; 94.1%) |
| **II** | 1,034 | 95.9% (94.3%; 97.6%) | 93.7% (91.5%; 95.9%) | 91.1% (88.4%; 94.0%) | 90.9% (87.8%; 94.1%) | 88.6% (84.9%; 92.5%) | 73.7% (63.4%; 85.7%) |
| **III** | 1,797 | 88.9% (87.3%; 90.6%) | 83.7% (81.7%; 85.8%) | 80.3% (77.9%; 82.7%) | 76.5% (73.8%; 79.3%) | 73.9% (70.9%; 77.1%) | 58.7% (51.9%; 66.4%) |
| **IV** | 1,815 | 53.0% (50.7%; 55.4%) | 38.9% (36.6%; 41.4%) | 31.3% (29.0%; 33.8%) | 26.3% (24.0%; 28.8%) | 22.2% (19.9%; 24.8%) | 10.3% (7.2%; 14.7%) |
| **X/NA** | 500 | 73.2% (69.1%; 77.6%) | 64.6% (59.8%; 69.7%) | 59.3% (54.2%; 65.0%) | 57.0% (51.5%; 63.2%) | 52.3% (46.1%; 59.5%) | 34.8% (16.4%; 74.1%) |
| **Females** | | | | | | | |
| **All** | 6,354 | 89.5% (88.7%; 90.4%) | 85.4% (84.3%; 86.4%) | 82.6% (81.3%; 83.8%) | 80.5% (79.1%; 81.9%) | 78.9% (77.3%; 80.5%) | 71.4% (67.6%; 75.4%) |
| **I** | 3,757 | 98.8% (98.1%; 99.4%) | 97.5% (96.6%; 98.4%) | 96.1% (94.9%; 97.3%) | 94.8% (93.3%; 96.4%) | 94.6% (92.8%; 96.5%) | 89.1% (84.3%; 94.1%) |
| **II** | 536 | 92.6% (90.0%; 95.3%) | 90.4% (87.2%; 93.7%) | 86.2% (82.2%; 90.5%) | 85.2% (80.7%; 90.0%) | 82.0% (76.8%; 87.5%) | 75.1% (63.1%; 89.5%) |
| **III** | 918 | 89.8% (87.6%; 92.1%) | 82.9% (80.0%; 85.8%) | 80.1% (76.9%; 83.4%) | 76.2% (72.6%; 80.1%) | 73.4% (69.3%; 77.7%) | 58.9% (50.6%; 68.5%) |
| **IV** | 876 | 52.0% (48.7%; 55.5%) | 37.2% (34.0%; 40.8%) | 28.7% (25.6%; 32.3%) | 24.6% (21.5%; 28.2%) | 20.8% (17.7%; 24.4%) | 11.9% (6.8%; 20.7%) |
| **X/NA** | 300 | 78.0% (73.0%; 83.3%) | 72.4% (66.7%; 78.6%) | 70.2% (63.9%; 77.1%) | 68.5% (61.5%; 76.3%) | 64.4% (56.4%; 73.5%) | 56.5% (40.4%; 79.0%) |

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## 5.1. Kidney cancer survival trends: by tumour stage

*5.1.1. Kidney cancer survival trends by stage and sex: number at risk and net survival probabilities, 2004-2023*

| Period | Stage | Males | | | | Females | | | |
|--------|-------|-------|---|---|---|---------|---|---|---|
| | | Net Survival Probability | | | | Net Survival Probability | | | |
| | | N at risk | 1-y (95%CI) | 3-y (95%CI) | 5-y (95%CI) | N at risk | 1-y (95%CI) | 3-y (95%CI) | 5-y (95%CI) |
| **2004-2008** | **All** | 4,255 | 83.8% (82.6%; 85.0%) | 75.6% (74.1%; 77.2%) | 71.9% (70.1%; 73.7%) | 2,576 | 85.0% (83.5%; 86.5%) | 76.6% (74.7%; 78.6%) | 71.4% (69.2%; 73.7%) |
| | I | 1,705 | 96.5% (95.3%; 97.6%) | 94.6% (92.8%; 96.4%) | 93.6% (91.3%; 95.9%) | 1,133 | 97.8% (96.6%; 99.1%) | 95.5% (93.5%; 97.6%) | 92.7% (89.9%; 95.6%) |
| | II | 461 | 94.9% (92.4%; 97.5%) | 88.0% (84.0%; 92.3%) | 82.1% (77.0%; 87.4%) | 237 | 95.8% (92.7%; 99.0%) | 86.1% (80.8%; 91.8%) | 80.9% (74.4%; 88.0%) |
| | III | 666 | 87.9% (85.1%; 90.7%) | 74.3% (70.4%; 78.4%) | 67.0% (62.5%; 71.9%) | 355 | 87.2% (83.5%; 91.1%) | 73.4% (68.3%; 79.0%) | 64.9% (59.0%; 71.4%) |
| | IV | 689 | 45.3% (41.6%; 49.2%) | 23.8% (20.6%; 27.4%) | 18.3% (15.3%; 21.8%) | 395 | 43.0% (38.3%; 48.3%) | 21.8% (17.9%; 26.6%) | 14.9% (11.4%; 19.5%) |
| | X/NA | 747 | 80.1% (77.1%; 83.3%) | 73.7% (70.0%; 77.5%) | 69.8% (65.7%; 74.2%) | 469 | 82.2% (78.5%; 86.0%) | 74.1% (69.6%; 79.0%) | 66.9% (61.7%; 72.6%) |
| **2009-2013** | **All** | 4,943 | 86.4% (85.4%; 87.5%) | 78.4% (77.0%; 79.8%) | 74.1% (72.5%; 75.8%) | 2,891 | 87.0% (85.7%; 88.4%) | 79.8% (78.0%; 81.6%) | 76.4% (74.4%; 78.5%) |
| | I | 2,521 | 97.9% (97.1%; 98.8%) | 96.7% (95.4%; 98.1%) | 94.7% (92.8%; 96.6%) | 1,533 | 98.6% (97.6%; 99.5%) | 96.4% (94.8%; 98.1%) | 95.2% (92.9%; 97.5%) |
| | II | 461 | 95.6% (93.2%; 98.1%) | 89.4% (85.4%; 93.6%) | 84.3% (79.3%; 89.7%) | 283 | 96.1% (93.3%; 99.0%) | 93.7% (89.5%; 98.1%) | 87.9% (82.1%; 94.0%) |
| | III | 791 | 90.0% (87.6%; 92.5%) | 75.1% (71.4%; 78.9%) | 67.0% (62.8%; 71.6%) | 401 | 88.9% (85.5%; 92.4%) | 76.5% (71.7%; 81.6%) | 71.0% (65.4%; 77.0%) |
| | IV | 738 | 46.8% (43.2%; 50.6%) | 23.0% (20.0%; 26.4%) | 15.9% (13.2%; 19.1%) | 400 | 41.8% (37.1%; 47.1%) | 20.4% (16.6%; 25.1%) | 12.8% (9.7%; 17.0%) |
| | X/NA | 458 | 71.4% (67.1%; 76.0%) | 61.5% (56.5%; 67.1%) | 57.1% (51.4%; 63.5%) | 287 | 76.9% (71.8%; 82.3%) | 63.9% (57.7%; 70.9%) | 60.7% (53.7%; 68.5%) |
| **2014-2018** | **All** | 5,563 | 87.7% (86.7%; 88.7%) | 81.0% (79.7%; 82.3%) | 77.5% (75.9%; 79.2%) | 3,053 | 89.4% (88.2%; 90.6%) | 82.4% (80.7%; 84.1%) | 78.5% (76.4%; 80.6%) |
| | I | 3,104 | 97.9% (97.1%; 98.7%) | 96.9% (95.7%; 98.2%) | 95.6% (93.7%; 97.5%) | 1,759 | 99.3% (98.4%; 100.1%) | 96.5% (94.8%; 98.1%) | 94.8% (92.5%; 97.0%) |
| | II | 474 | 95.2% (92.8%; 97.7%) | 90.7% (86.9%; 94.6%) | 88.1% (83.3%; 93.3%) | 261 | 94.7% (91.4%; 98.2%) | 89.2% (84.0%; 94.8%) | 85.5% (79.0%; 92.5%) |

| Period | Stage | Males | | | | Females | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Net Survival Probability** | | | | **Net Survival Probability** | | | |
| | | N at risk | 1-y (95%CI) | 3-y (95%CI) | 5-y (95%CI) | N at risk | 1-y (95%CI) | 3-y (95%CI) | 5-y (95%CI) |
| | III | 859 | 87.9% (85.5%; 90.4%) | 77.8% (74.4%; 81.3%) | 71.5% (67.5%; 75.7%) | 424 | 88.1% (84.7%; 91.6%) | 78.0% (73.4%; 82.9%) | 71.2% (65.8%; 77.1%) |
| | IV | 858 | 51.1% (47.8%; 54.7%) | 28.4% (25.4%; 31.9%) | 19.7% (16.9%; 23.0%) | 425 | 51.7% (47.0%; 56.8%) | 28.3% (24.0%; 33.4%) | 20.1% (16.3%; 24.9%) |
| | X/NA | 308 | 75.3% (70.1%; 80.8%) | 62.1% (55.7%; 69.3%) | 57.3% (49.6%; 66.2%) | 194 | 78.2% (72.0%; 85.0%) | 71.7% (64.0%; 80.4%) | 64.1% (54.5%; 75.3%) |
| **2019-2023** | **All** | 6,593 | 89.7% (88.8%; 90.5%) | 83.1% (81.8%; 84.3%) | 79.1% (77.3%; 80.9%) | 3,317 | 89.7% (88.5%; 90.9%) | 82.8% (81.1%; 84.6%) | 79.4% (76.6%; 82.3%) |
| | I | 3,991 | 98.0% (97.3%; 98.7%) | 95.3% (94.0%; 96.6%) | 93.3% (91.1%; 95.5%) | 2,005 | 98.3% (97.4%; 99.3%) | 95.9% (94.1%; 97.7%) | 94.2% (90.5%; 98.0%) |
| | II | 560 | 96.5% (94.4%; 98.7%) | 91.2% (87.2%; 95.4%) | 89.3% (83.5%; 95.5%) | 275 | 90.6% (86.6%; 94.7%) | 83.3% (77.3%; 89.7%) | 76.3% (67.2%; 86.7%) |
| | III | 938 | 89.8% (87.6%; 92.1%) | 82.9% (79.6%; 86.2%) | 77.3% (72.6%; 82.2%) | 495 | 91.3% (88.4%; 94.2%) | 81.9% (77.6%; 86.5%) | 76.2% (70.2%; 82.7%) |
| | IV | 957 | 54.7% (51.5%; 58.1%) | 34.0% (30.7%; 37.6%) | 25.4% (21.6%; 29.7%) | 451 | 52.3% (47.7%; 57.3%) | 29.2% (24.8%; 34.4%) | 21.7% (16.9%; 27.9%) |
| | X/NA | 192 | 70.0% (63.3%; 77.4%) | 54.8% (46.7%; 64.3%) | 41.2% (31.5%; 53.9%) | 106 | 77.6% (69.5%; 86.7%) | 67.0% (56.8%; 79.1%) | 66.0% (52.6%; 83.0%) |

## 6.1. Kidney cancer mortality: by region

*6.1.1. Kidney cancer mortality\* by region and sex: number of cancer deaths, age-specific, crude and age-standardised mortality rates, 2021*

| Region | N [CR] 0- | 5- | 10- | 15- | 20- | 25- | 30- | 35- | 40- | 45- | 50- | 55- | 60- | 65- | 70- | 75- | 80- | 85- | 90- | 95- | All ages | ESR2013 (95%CI) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Males** | | | | | | | | | | | | | | | | | | | | | | |
| **Belgium** | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 5 | 19 | 34 | 38 | 51 | 45 | 51 | 42 | 30 | 4 | 325 | 6.5 |
| | [0.0] | [0.0] | [0.3] | [0.0] | [0.0] | [0.0] | [0.0] | [0.3] | [0.3] | [0.8] | [1.3] | [4.7] | [9.4] | [12.4] | [19.2] | [25.8] | [39.0] | [54.1] | [106.9] | [73.3] | [5.7] | (5.8; 7.3) |
| Brussels | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 2 | 2 | 3 | 2 | 2 | 1 | 16 | 4.8 |
| | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [2.5] | [2.9] | [0.0] | [9.6] | [12.0] | [17.4] | [35.5] | [39.6] | [92.0] | [214.1] | [2.7] | (2.4; 7.3) |
| Flanders | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 11 | 24 | 27 | 30 | 31 | 32 | 29 | 22 | 1 | 212 | 6.7 |
| | [0.0] | [0.0] | [0.5] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.9] | [0.9] | [4.5] | [10.9] | [14.4] | [18.5] | [27.2] | [37.1] | [56.1] | [120.1] | [27.9] | [6.4] | (5.8; 7.6) |
| Wallonia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 7 | 10 | 9 | 19 | 12 | 16 | 11 | 6 | 2 | 97 | 6.6 |
| | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.9] | [0.9] | [0.8] | [1.6] | [5.6] | [8.7] | [9.2] | [22.0] | [24.7] | [44.5] | [52.5] | [79.2] | [142.2] | [5.4] | (5.2; 7.9) |
| **Females** | | | | | | | | | | | | | | | | | | | | | | |
| **Belgium** | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 3 | 12 | 18 | 23 | 25 | 38 | 41 | 20 | 4 | 187 | 2.7 |
| | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.3] | [0.3] | [0.0] | [0.3] | [0.0] | [0.7] | [3.2] | [5.5] | [7.8] | [11.7] | [20.5] | [30.3] | [30.2] | [20.8] | [3.2] | (2.3; 3.1) |
| Brussels | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 3 | 2 | 0 | 0 | 9 | 1.7 |
| | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [3.0] | [0.0] | [4.1] | [4.6] | [6.2] | [21.9] | [19.7] | [0.0] | [0.0] | [1.4] | (0.6; 2.9) |

| Region | N [CR] 0- | 5- | 10- | 15- | 20- | 25- | 30- | 35- | 40- | 45- | 50- | 55- | 60- | 65- | 70- | 75- | 80- | 85- | 90- | 95- | All ages | ESR2013 (95%CI) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flanders | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 5 | 11 | 17 | 17 | 27 | 26 | 12 | 1 | 119 | 2.8 |
| | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.5] | [0.0] | [0.0] | [0.0] | [0.8] | [2.3] | [5.7] | [9.8] | [12.8] | [23.3] | [30.6] | [29.9] | [8.9] | [3.5] | (2.3; 3.4) |
| Wallonia | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 7 | 6 | 5 | 7 | 8 | 13 | 8 | 3 | 59 | 2.7 |
| | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.0] | [0.9] | [0.0] | [0.0] | [0.8] | [0.0] | [0.0] | [5.8] | [5.5] | [5.0] | [11.0] | [14.5] | [32.5] | [39.2] | [49.7] | [3.2] | (2.0; 3.4) |

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## 7.1. Kidney cancer mortality trends: by region

*7.1.1. Kidney cancer mortality\* trends in males, by region: number of cancer deaths, crude and age-standardised mortality rates, including average annual percentage change, 2004-2021*

| Region | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | AAPC, % (95%CI) | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Belgium** | **N** | 312 | 313 | 307 | 348 | 345 | 332 | 353 | 313 | 335 | 352 | 359 | 338 | 359 | 327 | 324 | 351 | 307 | 325 | | |
| | **CR** | 6.1 | 6.1 | 6.0 | 6.7 | 6.6 | 6.3 | 6.6 | 5.8 | 6.2 | 6.5 | 6.6 | 6.1 | 6.5 | 5.9 | 5.8 | 6.2 | 5.4 | 5.7 | | |
| | **ESR2013** | 8.8 | 8.6 | 8.0 | 8.8 | 8.5 | 8.3 | 8.5 | 7.3 | 7.8 | 8.2 | 8.0 | 7.6 | 7.6 | 7.1 | 6.7 | 7.2 | 6.1 | 6.5 | -1.7 (-2.3; -1.2) | 2004-2021 |
| Brussels | **N** | 26 | 28 | 21 | 14 | 32 | 17 | 24 | 24 | 20 | 21 | 29 | 19 | 28 | 20 | 16 | 24 | 17 | 16 | | |
| | **CR** | 5.4 | 5.8 | 4.3 | 2.8 | 6.3 | 3.3 | 4.6 | 4.4 | 3.6 | 3.7 | 5.1 | 3.3 | 4.8 | 3.4 | 2.7 | 4.1 | 2.8 | 2.7 | | |
| | **ESR2013** | 8.8 | 8.6 | 7.5 | 4.8 | 9.6 | 4.8 | 7.2 | 7.0 | 5.9 | 6.5 | 8.7 | 5.3 | 8.2 | 5.4 | 4.8 | 7.3 | 4.7 | 4.8 | -2.2 (-4.3; -0.1) | 2004-2021 |
| Flanders | **N** | 218 | 195 | 206 | 223 | 217 | 198 | 221 | 196 | 205 | 226 | 216 | 218 | 231 | 189 | 215 | 210 | 203 | 212 | | |
| | **CR** | 7.3 | 6.5 | 6.9 | 7.4 | 7.1 | 6.5 | 7.2 | 6.3 | 6.5 | 7.2 | 6.8 | 6.8 | 7.2 | 5.9 | 6.6 | 6.4 | 6.2 | 6.4 | | |
| | **ESR2013** | 10.4 | 8.7 | 8.8 | 9.1 | 8.8 | 7.9 | 8.5 | 7.3 | 7.6 | 8.3 | 7.7 | 8.0 | 7.7 | 6.6 | 7.1 | 6.8 | 6.4 | 6.7 | -2.2 (-2.7; -1.6) | 2004-2021 |
| Wallonia | **N** | 68 | 90 | 80 | 111 | 96 | 117 | 108 | 93 | 110 | 105 | 114 | 101 | 100 | 118 | 93 | 117 | 87 | 97 | | |
| | **CR** | 4.1 | 5.5 | 4.8 | 6.7 | 5.7 | 6.9 | 6.4 | 5.4 | 6.4 | 6.1 | 6.5 | 5.8 | 5.7 | 6.7 | 5.3 | 6.6 | 4.9 | 5.4 | | |
| | **ESR2013** | 5.6 | 8.6 | 6.1 | 9.1 | 7.6 | 10.0 | 8.9 | 7.6 | 8.8 | 8.3 | 8.3 | 7.5 | 7.1 | 8.6 | 6.4 | 8.2 | 5.7 | 6.6 | -0.3 (-1.7; 1.1) | 2004-2021 |
| | | | | | | | | | | | | | | | | | | | | 4.2 (0.3; 8.3) | 2004-2011 |
| | | | | | | | | | | | | | | | | | | | | -3.4 (-5.8; -0.8) | 2012-2021 |

Note: In case a change in trend is detected, an estimated APC per time segment is given as well as Average Annual Percentage Change (AAPC) for the full incidence period.

*7.1.2. Kidney cancer mortality* trends in females, by region: number of cancer deaths, crude and age-standardised mortality rates, including average annual percentage change, 2004-2021*

| Region | | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | AAPC, % (95%CI) | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Belgium** | **N** | 247 | 220 | 210 | 238 | 223 | 216 | 231 | 193 | 207 | 261 | 235 | 176 | 234 | 196 | 191 | 203 | 205 | 187 | | |
| | **CR** | 4.7 | 4.1 | 3.9 | 4.4 | 4.1 | 3.9 | 4.2 | 3.5 | 3.7 | 4.6 | 4.1 | 3.1 | 4.1 | 3.4 | 3.3 | 3.5 | 3.5 | 3.2 | | |
| | **ESR2013** | 4.7 | 4.1 | 3.8 | 4.3 | 3.9 | 3.8 | 3.9 | 3.2 | 3.4 | 4.1 | 3.7 | 2.8 | 3.7 | 2.9 | 2.8 | 3.0 | 3.0 | 2.7 | -2.6 (-3.4; -1.7) | 2004-2021 |
| Brussels | **N** | 27 | 22 | 19 | 24 | 16 | 20 | 17 | 8 | 14 | 21 | 13 | 16 | 18 | 11 | 15 | 7 | 9 | 9 | | |
| | **CR** | 5.2 | 4.2 | 3.6 | 4.5 | 3.0 | 3.6 | 3.0 | 1.4 | 2.4 | 3.5 | 2.2 | 2.7 | 3.0 | 1.8 | 2.5 | 1.1 | 1.5 | 1.4 | | |
| | **ESR2013** | 5.0 | 4.4 | 3.6 | 4.9 | 3.1 | 3.5 | 3.4 | 1.7 | 2.8 | 3.4 | 2.7 | 3.2 | 3.2 | 2.3 | 2.3 | 1.1 | 1.3 | 1.7 | -6.1 (-8.4; -3.7) | 2004-2021 |
| Flanders | **N** | 143 | 130 | 127 | 129 | 136 | 123 | 145 | 129 | 131 | 178 | 151 | 102 | 142 | 117 | 116 | 132 | 130 | 119 | | |
| | **CR** | 4.7 | 4.2 | 4.1 | 4.2 | 4.4 | 3.9 | 4.6 | 4.0 | 4.1 | 5.5 | 4.7 | 3.1 | 4.3 | 3.6 | 3.5 | 4.0 | 3.9 | 3.5 | | |
| | **ESR2013** | 4.7 | 4.2 | 3.9 | 4.0 | 4.1 | 3.7 | 4.2 | 3.7 | 3.7 | 4.8 | 3.9 | 2.8 | 3.7 | 2.9 | 2.8 | 3.2 | 3.1 | 2.8 | -2.5 (-3.5; -1.4) | 2004-2021 |
| Wallonia | **N** | 77 | 68 | 64 | 85 | 71 | 73 | 69 | 56 | 62 | 62 | 71 | 58 | 74 | 68 | 60 | 64 | 66 | 59 | | |
| | **CR** | 4.4 | 3.9 | 3.6 | 4.8 | 4.0 | 4.1 | 3.8 | 3.1 | 3.4 | 3.4 | 3.9 | 3.2 | 4.0 | 3.7 | 3.2 | 3.4 | 3.5 | 3.2 | | |
| | **ESR2013** | 4.5 | 3.8 | 3.4 | 4.6 | 3.6 | 4.0 | 3.6 | 2.8 | 3.1 | 3.1 | 3.5 | 2.9 | 3.8 | 3.2 | 2.8 | 3.1 | 3.1 | 2.7 | -2.1 (-3.2; -1.0) | 2004-2021 |

Note: In case a change in trend is detected, an estimated APC per time segment is given as well as Average Annual Percentage Change (AAPC) for the full incidence period.

*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 2004-2021.

Recommended reference: Cancer Fact Sheets 2023, Belgian Cancer Registry (BCR), 2025