

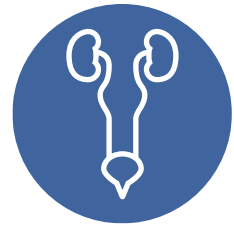


Belgian Cancer Registry

CANCER FACT SHEET 2022

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 change 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 ($=200 \times 1.05$) and 255/100,000 over 5 years ($=200 \times (1.05)^5$).

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).

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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1. CANCER INCIDENCE



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, 2022

Region	N [CR]																				ESR2013 (95%CI)	
	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85-	90-	95-		All ages
Males																						
Belgium	5	1	0	0	1	2	9	10	22	44	85	141	198	228	242	181	128	64	15	1	1,377	25.3
	[1.6]	[0.3]	[0.0]	[0.0]	[0.3]	[0.5]	[2.4]	[2.7]	[5.8]	[11.7]	[21.5]	[34.9]	[53.7]	[73.0]	[91.7]	[95.1]	[101.1]	[81.6]	[50.0]	[17.1]	[24.1]	(24.0; 26.6)
Brussels	2	0	0	0	0	0	0	0	0	8	10	11	10	10	12	12	10	4	1	0	90	22.3
	[5.0]	[0.0]	[0.0]	[0.0]	[0.0]	[0.0]	[0.0]	[0.0]	[0.0]	[18.4]	[24.7]	[31.7]	[35.8]	[47.2]	[72.6]	[98.6]	[123.8]	[78.6]	[46.1]	[0.0]	[15.0]	(17.5; 27.1)
Flanders	0	0	0	0	0	1	6	8	15	19	57	92	120	155	152	126	96	47	12	1	907	26.9
	[0.0]	[0.0]	[0.0]	[0.0]	[0.0]	[0.5]	[2.8]	[3.8]	[6.9]	[9.0]	[24.6]	[37.7]	[53.4]	[80.7]	[94.0]	[102.1]	[114.9]	[89.6]	[60.2]	[26.5]	[27.3]	(25.2; 28.7)
Wallonia	3	1	0	0	1	1	3	2	7	17	18	38	68	63	78	43	22	13	2	0	380	22.4
	[3.2]	[0.9]	[0.0]	[0.0]	[0.9]	[0.9]	[2.5]	[1.7]	[6.0]	[14.1]	[14.5]	[30.4]	[58.5]	[63.5]	[90.9]	[78.7]	[62.9]	[62.2]	[25.2]	[0.0]	[21.2]	(20.1; 24.7)
Females																						
Belgium	7	2	1	1	0	1	3	12	12	30	35	63	93	93	85	119	78	39	22	3	699	11.3
	[2.4]	[0.6]	[0.3]	[0.3]	[0.0]	[0.3]	[0.8]	[3.2]	[3.2]	[8.2]	[9.0]	[15.8]	[24.7]	[28.0]	[28.8]	[51.5]	[43.8]	[29.0]	[31.7]	[14.6]	[11.9]	(10.4; 12.1)
Brussels	0	1	0	0	0	0	0	2	2	3	4	6	5	9	2	4	2	4	1	0	45	8.7
	[0.0]	[2.6]	[0.0]	[0.0]	[0.0]	[0.0]	[0.0]	[4.2]	[4.4]	[7.5]	[10.7]	[17.8]	[16.8]	[36.1]	[9.4]	[23.2]	[15.4]	[39.8]	[17.3]	[0.0]	[7.2]	(6.1; 11.3)

Region	N [CR]																				ESR2013 (95%CI)	
	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85-	90-	95-		All ages
Flanders	4	1	1	1	0	0	1	6	7	16	17	40	54	52	48	81	62	23	15	2	431	11.5
	[2.5]	[0.6]	[0.5]	[0.6]	[0.0]	[0.0]	[0.5]	[2.9]	[3.2]	[7.7]	[7.5]	[16.8]	[24.1]	[26.3]	[27.6]	[56.7]	[55.4]	[27.0]	[35.2]	[16.6]	[12.7]	(10.4; 12.6)
Wallonia	3	0	0	0	0	1	2	4	3	11	14	17	34	32	35	34	14	12	6	1	223	11.4
	[3.3]	[0.0]	[0.0]	[0.0]	[0.0]	[0.9]	[1.7]	[3.5]	[2.6]	[9.2]	[11.3]	[13.4]	[27.8]	[29.1]	[34.9]	[48.0]	[26.3]	[30.4]	[28.5]	[15.7]	[11.9]	(9.9; 12.9)

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, 2022

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	192 [5.7]	379 [40.1]	199 [46.2]	770 [13.5]	14.1 (13.1; 15.1)	98 [3.0]	145 [14.4]	137 [21.6]	380 [6.5]	6.2 (5.5; 6.8)
II	30 [0.9]	69 [7.3]	42 [9.7]	141 [2.5]	2.6 (2.2; 3.0)	16 [0.5]	27 [2.7]	28 [4.4]	71 [1.2]	1.1 (0.9; 1.4)
III	21 [0.6]	46 [4.9]	31 [7.2]	98 [1.7]	1.8 (1.5; 2.2)	5 [0.2]	23 [2.3]	33 [5.2]	62 [1.1]	1.0 (0.7; 1.2)
IV	27 [0.8]	96 [10.2]	70 [16.2]	193 [3.4]	3.6 (3.1; 4.1)	15 [0.5]	39 [3.9]	42 [6.6]	96 [1.6]	1.5 (1.2; 1.8)
X/NA	44 [1.3]	78 [8.2]	47 [10.9]	175 [3.1]	3.2 (2.7; 3.7)	23 [0.7]	37 [3.7]	21 [3.3]	90 [1.5]	1.5 (1.2; 1.8)

1.2.2. Kidney cancer incidence by pathological stage (pStage), sex and age group: number of new diagnoses, crude and age-standardised incidence rates, 2022

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	199 [5.9]	352 [37.2]	130 [30.2]	681 [11.9]	12.3 (11.4; 13.2)	103 [3.1]	145 [14.4]	84 [13.3]	332 [5.7]	5.5 (4.9; 6.1)
II	30 [0.9]	47 [5.0]	26 [6.0]	103 [1.8]	1.9 (1.5; 2.3)	14 [0.4]	21 [2.1]	11 [1.7]	46 [0.8]	0.8 (0.5; 1.0)
III	35 [1.0]	95 [10.0]	47 [10.9]	177 [3.1]	3.2 (2.8; 3.7)	12 [0.4]	41 [4.1]	38 [6.0]	91 [1.5]	1.5 (1.2; 1.8)
IV	14 [0.4]	31 [3.3]	25 [5.8]	70 [1.2]	1.3 (1.0; 1.6)	5 [0.2]	18 [1.8]	12 [1.9]	36 [0.6]	0.6 (0.4; 0.8)
X/NA	36 [1.1]	143 [15.1]	161 [37.3]	346 [6.1]	6.6 (5.9; 7.3)	23 [0.7]	46 [4.6]	116 [18.3]	194 [3.3]	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, 2022

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	215 [6.4]	417 [44.1]	215 [49.9]	847 [14.8]	15.5 (14.4; 16.5)	112 [3.4]	164 [16.3]	144 [22.7]	420 [7.1]	6.9 (6.2; 7.5)
II	29 [0.9]	51 [5.4]	35 [8.1]	115 [2.0]	2.1 (1.7; 2.5)	14 [0.4]	23 [2.3]	22 [3.5]	59 [1.0]	0.9 (0.7; 1.2)
III	34 [1.0]	87 [9.2]	55 [12.8]	176 [3.1]	3.3 (2.8; 3.8)	12 [0.4]	38 [3.8]	45 [7.1]	95 [1.6]	1.5 (1.2; 1.8)
IV	30 [0.9]	97 [10.3]	70 [16.2]	197 [3.5]	3.6 (3.1; 4.2)	14 [0.4]	41 [4.1]	42 [6.6]	98 [1.7]	1.5 (1.2; 1.8)
X/NA	6 [0.2]	16 [1.7]	14 [3.2]	42 [0.7]	0.8 (0.5; 1.0)	5 [0.2]	5 [0.5]	8 [1.3]	27 [0.5]	0.4 (0.3; 0.6)

2. CANCER INCIDENCE TRENDS



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, 2004-2022*

Region		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAPC, % (95%CI)	Period
Belgium	N	815	845	858	895	953	964	995	1,007	1,051	1,069	1,079	1,152	1,191	1,140	1,175	1,309	1,281	1,300	1,377		
	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	22.9	24.1		
	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	24.2	25.3	1.4 (1.2; 1.6)	2004-2022
Brussels	N	57	69	42	56	76	61	74	69	83	84	66	85	79	64	91	94	78	84	90		
	CR	11.9	14.3	8.6	11.3	15.0	11.8	14.0	12.7	15.0	15.0	11.6	14.8	13.6	11.0	15.5	15.9	13.0	14.0	15.0		
	ESR2013	16.3	20.2	11.9	16.0	22.2	16.6	19.6	17.6	22.6	22.4	17.5	21.3	19.9	16.5	23.3	23.0	19.6	20.3	22.3	1.6 (0.2; 3.0)	2004-2022
Flanders	N	501	522	540	571	584	601	656	650	662	668	714	716	740	744	741	816	850	794	907		
	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	25.0	25.9	24.1	27.3		
	ESR2013	19.6	19.9	20.5	21.1	21.3	22.0	23.9	22.4	22.8	22.8	24.0	23.8	24.0	23.9	23.3	25.4	26.2	24.0	26.9	1.4 (1.1; 1.8)	2004-2022
Wallonia	N	257	254	276	268	293	302	265	288	306	317	299	351	372	332	343	399	353	422	380		
	CR	15.7	15.4	16.7	16.1	17.5	17.9	15.6	16.8	17.7	18.3	17.2	20.1	21.2	18.8	19.4	22.5	19.8	23.6	21.2		
	ESR2013	18.8	18.7	20.1	19.6	21.0	21.1	18.5	19.7	20.1	21.0	19.5	22.5	24.1	21.1	21.6	24.9	21.2	25.3	22.4	1.2 (0.7; 1.8)	2004-2022

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, 2004-2022

Region	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAPC, % (95%CI)	Period		
Belgium	N	526	536	534	522	547	528	560	658	602	619	615	591	639	653	642	685	651	660	699			
	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			
	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	11.1	10.8	11.3	10.6	10.6	11.3	0.6 (0.2; 0.9)	2004-2022	
Brussels	N	28	33	35	27	34	36	38	45	40	49	41	42	41	30	37	41	48	41	45			
	CR	5.4	6.3	6.6	5.1	6.3	6.5	6.8	7.8	6.8	8.3	6.9	7.0	6.7	4.9	6.0	6.7	7.7	6.6	7.2			
	ESR2013	6.0	7.1	7.6	5.9	7.2	7.4	7.8	8.9	8.3	10.2	8.6	8.8	8.2	6.2	7.7	8.3	9.1	7.7	8.7	1.6 (0.5; 2.7)	2004-2022	
																					5.1 (1.2; 9.1)	2004-2010	
																						-0.1 (-1.8; 1.6)	2011-2022
Flanders	N	350	337	336	348	352	343	373	413	388	386	403	372	417	416	432	463	421	419	431			
	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			
	ESR2013	11.6	10.9	10.8	11.1	10.9	10.6	11.4	12.3	11.3	11.2	11.6	10.7	11.7	11.8	12.0	12.6	11.3	11.2	11.5	0.3 (-0.1; 0.7)	2004-2022	
Wallonia	N	148	166	163	147	161	149	149	200	174	184	171	177	181	207	173	181	182	200	223			
	CR	8.5	9.5	9.3	8.3	9.1	8.3	8.3	11.0	9.6	10.1	9.3	9.6	9.8	11.2	9.3	9.7	9.8	10.7	11.9			
	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	9.5	9.4	10.3	11.4	0.8 (0.1; 1.5)	2004-2022	

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, 2018-2022, including average annual percentage change from 2004 onwards

Stage	Males							Females								
	2018	2019	2020	2021	2022	AAPC, % (95%CI)	Period	2018	2019	2020	2021	2022	AAPC, % (95%CI)	Period		
I	N	690	737	754	762	847			366	387	380	385	420			
	CR	12.3	13.1	13.3	13.4	14.8			6.3	6.7	6.5	6.6	7.1			
	ESR2013		13.4	14.0	14.2	14.1	15.5	4.3 (4.0; 4.7)	2004-2022	6.2	6.4	6.2	6.3	6.9	3.1 (2.6; 3.6)	2004-2022
								6.2 (5.3; 7.2)	2004-2012						6.7 (4.9; 8.6)	2004-2010
							2.9 (2.2; 3.5)	2013-2022						1.3 (-0.9; 3.6)	2011-2014	
													1.3 (0.1; 2.6)	2015-2022		
II	N	91	130	105	110	115			55	49	53	62	59			
	CR	1.6	2.3	1.9	1.9	2.0			1.0	0.8	0.9	1.1	1.0			
	ESR2013	1.7	2.5	2.0	2.1	2.1	-0.2 (-1.4; 0.9)	2004-2022	0.9	0.8	0.9	1.0	0.9	0.1 (-1.4; 1.6)	2004-2022	
III	N	156	179	181	195	176			91	111	95	94	95			
	CR	2.8	3.2	3.2	3.4	3.1			1.6	1.9	1.6	1.6	1.6			
	ESR2013		3.0	3.5	3.4	3.7	3.3	1.5 (0.7; 2.3)	2004-2022	1.5	1.9	1.5	1.5	1.5	1.1 (0.3; 1.8)	2004-2022
								8.2 (3.8; 12.7)	2004-2008							
							-1.3 (-4.4; 2.0)	2009-2012								
						0.0 (-1.3; 1.3)	2013-2022									
IV	N	176	205	188	180	197			93	100	87	88	98			
	CR	3.1	3.6	3.3	3.2	3.5			1.6	1.7	1.5	1.5	1.7			
	ESR2013	3.5	4.0	3.6	3.4	3.6	0.8 (0.1; 1.5)	2004-2022	1.5	1.6	1.4	1.4	1.5	-0.1 (-1.1; 0.9)	2004-2022	
X/NA	N	62	58	53	53	42			37	38	36	31	27			
	CR	1.1	1.0	0.9	0.9	0.7			0.6	0.7	0.6	0.5	0.5			

Stage	Males							Females						
	2018	2019	2020	2021	2022	AAPC, % (95%CI)	Period	2018	2019	2020	2021	2022	AAPC, % (95%CI)	Period
ESR2013	1.2	1.1	1.0	1.0	0.8	-8.6 (-9.4; -7.7)	2004-2022	0.6	0.6	0.6	0.5	0.4	-8.3 (-9.5; -7.1)	2004-2022

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, 2004-2022*

Age	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAPC, % (95%CI)	Period	
15-59	N	273	243	271	284	302	289	287	313	323	337	319	343	333	313	297	347	313	356	314		
	CR	8.5	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	9.4		
	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	9.2	0.6 (0.1; 1.2)	2004-2022
60-74	N	361	385	392	385	426	429	436	439	454	444	465	519	548	513	545	582	611	589	668		
	CR	53.0	56.2	57.1	55.0	59.8	59.0	58.8	58.1	59.0	56.7	58.4	63.9	65.8	59.9	62.0	64.8	66.6	63.0	70.7		
	ESR2013	52.8	56.0	57.1	55.8	60.7	59.9	59.6	58.8	60.2	57.2	59.9	65.3	67.4	61.1	62.8	65.7	67.4	63.8	71.6	1.2 (0.8; 1.5)	2004-2022
75+	N	168	205	187	220	223	237	266	242	269	280	283	286	297	309	326	370	346	348	389		
	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	91.6	83.7	83.6	90.2		
	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	90.1	83.9	83.0	88.8	2.5 (2.0; 3.0)	2004-2022

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, 2004-2022

Age	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	AAPC, % (95%CI)	Period	
15-59																						
N	144	146	129	129	140	138	131	179	163	155	148	149	141	134	152	134	146	156	157			
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	4.7	4.8			
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	-0.1 (-0.8; 0.6)	2004-2022	
60-74																						
N	218	217	221	211	215	212	219	233	217	240	228	231	252	293	253	278	255	240	271			
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	31.9	26.9	29.0	26.1	24.1	27.0			
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	32.3	27.1	29.1	26.3	24.3	27.0	-0.3 (-0.8; 0.2)	2004-2022	
75+																						
N	157	164	174	173	185	171	204	236	216	220	231	203	236	216	231	265	239	259	261			
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	41.2			
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	43.0	2.1 (1.5; 2.6)	2004-2022	

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. CANCER PREVALENCE



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 31/12/2022*

Region		Males				Females			
		1-year	5-year	10-year	15-year	1-year	5-year	10-year	15-year
Belgium	N	1,255	4,984	8,045	9,985	637	2,592	4,394	5,663
	CR	21.8	86.5	139.6	173	10.7	43.7	74.0	95
	ESR2013	22.7	90.5	146.5	182.6	10.1	40.9	69.0	88.3
Brussels	N	74	325	532	662	41	174	288	378
	CR	12.2	53.4	87.5	108.8	6.5	27.5	45.5	59.7
	ESR2013	17.8	78.4	131.3	165.5	7.9	33.4	55.8	72.7
Flanders	N	840	3,172	5,106	6,350	392	1,675	2,798	3,586
	CR	25.1	94.6	152.3	189.4	11.5	48.9	81.8	104.8
	ESR2013	24.6	93.0	149.9	186.8	10.3	43.7	72.5	92.2
Wallonia	N	341	1,487	2,407	2,973	204	743	1,308	1,699
	CR	18.9	82.6	133.7	165.1	10.8	39.5	69.5	90.3
	ESR2013	19.7	87.8	142.5	177.0	10.2	37.3	65.4	84.4



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, 2013-2022

Net Survival Probability, 2013-2022						
Region	Age	N at risk	1-y (95%CI)	3-y (95%CI)	5-y (95%CI)	10-y (95%CI)
Total	All	17,917	88.4% (87.9%; 88.9%)	81.5% (80.8%; 82.3%)	78.0% (77.0%; 79.0%)	71.1% (68.9%; 73.4%)
Males						
Belgium	All ages	11,655	88.2% (87.6%; 88.9%)	81.4% (80.5%; 82.4%)	78.0% (76.8%; 79.2%)	71.4% (68.6%; 74.2%)
	15-59	3,169	93.6% (92.8%; 94.5%)	88.3% (87.1%; 89.5%)	85.8% (84.4%; 87.2%)	79.2% (76.8%; 81.7%)
	60-74	5,344	90.2% (89.4%; 91.1%)	83.2% (82.0%; 84.4%)	79.4% (77.9%; 81.0%)	71.4% (68.3%; 74.6%)
	75+	3,158	79.5% (77.8%; 81.2%)	71.5% (69.1%; 73.9%)	67.7% (64.3%; 71.2%)	63.3% (54.9%; 73.0%)
Brussels	All ages	776	87.2% (84.6%; 89.8%)	78.9% (75.4%; 82.6%)	75.1% (70.5%; 80.0%)	75.3% (67.3%; 84.3%)
	15-59	270	90.0% (86.4%; 93.7%)	83.7% (79.2%; 88.5%)	80.9% (75.8%; 86.3%)	65.6% (55.9%; 77.0%)
	60-74	318	89.7% (86.1%; 93.4%)	81.3% (76.3%; 86.6%)	75.6% (69.6%; 82.1%)	74.8% (65.2%; 85.8%)
	75+	189	79.1% (72.5%; 86.2%)	67.4% (58.5%; 77.8%)	65.6% (52.8%; 81.7%)	88.1% (62.0%; 125.1%)
Flanders	All ages	7,427	88.3% (87.4%; 89.1%)	82.1% (81.0%; 83.3%)	79.5% (78.0%; 81.1%)	74.2% (70.7%; 78.0%)
	15-59	1,872	94.2% (93.1%; 95.3%)	89.0% (87.5%; 90.6%)	86.6% (84.8%; 88.5%)	82.9% (80.1%; 85.7%)
	60-74	3,330	90.4% (89.3%; 91.6%)	84.2% (82.7%; 85.8%)	81.6% (79.7%; 83.5%)	74.7% (70.7%; 78.9%)
	75+	2,238	80.1% (78.1%; 82.2%)	73.3% (70.5%; 76.3%)	70.5% (66.6%; 74.6%)	65.9% (55.8%; 77.8%)
Wallonia	All ages	3,453	88.4% (87.2%; 89.6%)	80.5% (78.9%; 82.1%)	75.4% (73.1%; 77.7%)	64.1% (59.5%; 69.0%)

Net Survival Probability, 2013-2022						
Region	Age	N at risk	1-y (95%CI)	3-y (95%CI)	5-y (95%CI)	10-y (95%CI)
	15-59	1,028	93.5% (92.0%; 95.1%)	88.2% (86.1%; 90.3%)	85.5% (83.1%; 88.0%)	76.2% (71.6%; 81.1%)
	60-74	1,696	90.0% (88.5%; 91.5%)	81.7% (79.5%; 83.8%)	75.9% (73.2%; 78.7%)	63.9% (58.9%; 69.5%)
	75+	731	77.7% (74.2%; 81.3%)	66.9% (62.2%; 72.0%)	59.9% (52.9%; 67.8%)	46.8% (32.5%; 67.2%)
Females						
Belgium	All ages	6,262	88.7% (87.8%; 89.6%)	81.7% (80.5%; 83.0%)	78.0% (76.5%; 79.7%)	70.6% (66.9%; 74.5%)
	15-59	1,444	95.0% (93.8%; 96.1%)	91.2% (89.6%; 92.7%)	89.1% (87.3%; 90.9%)	84.7% (81.9%; 87.6%)
	60-74	2,498	91.4% (90.2%; 92.6%)	83.4% (81.8%; 85.1%)	79.3% (77.3%; 81.4%)	73.6% (70.2%; 77.2%)
	75+	2,324	81.8% (80.0%; 83.7%)	74.1% (71.5%; 76.7%)	69.9% (66.4%; 73.5%)	58.2% (49.1%; 68.8%)
Brussels	All ages	401	90.5% (87.3%; 93.8%)	83.6% (79.0%; 88.5%)	78.7% (72.9%; 85.0%)	80.6% (70.8%; 91.7%)
	15-59	113	92.2% (87.4%; 97.4%)	87.7% (81.6%; 94.3%)	85.8% (79.1%; 93.1%)	77.9% (67.8%; 89.6%)
	60-74	150	92.3% (87.9%; 97.0%)	85.5% (79.3%; 92.2%)	83.9% (76.9%; 91.6%)	80.5% (69.1%; 93.9%)
	75+	138	87.1% (80.4%; 94.2%)	78.3% (68.6%; 89.4%)	67.1% (54.3%; 82.9%)	79.5% (56.3%; 112.5%)
Flanders	All ages	4,036	88.6% (87.5%; 89.7%)	82.1% (80.5%; 83.6%)	78.6% (76.5%; 80.7%)	70.7% (65.5%; 76.2%)
	15-59	852	95.9% (94.5%; 97.3%)	92.4% (90.5%; 94.3%)	90.6% (88.4%; 92.9%)	86.7% (83.1%; 90.5%)
	60-74	1,557	91.8% (90.4%; 93.3%)	84.1% (82.1%; 86.3%)	80.1% (77.6%; 82.7%)	76.2% (71.8%; 80.8%)
	75+	1,630	81.7% (79.6%; 84.0%)	74.7% (71.7%; 77.9%)	70.8% (66.6%; 75.3%)	56.0% (44.7%; 70.2%)
Wallonia	All ages	1,826	88.4% (86.8%; 90.0%)	80.5% (78.4%; 82.8%)	76.7% (74.0%; 79.5%)	68.1% (63.0%; 73.6%)
	15-59	480	93.9% (91.8%; 96.1%)	89.8% (87.0%; 92.7%)	87.1% (83.8%; 90.5%)	82.5% (77.7%; 87.6%)
	60-74	791	90.4% (88.3%; 92.6%)	81.6% (78.6%; 84.7%)	76.8% (73.3%; 80.5%)	66.9% (60.9%; 73.5%)
	75+	556	80.8% (77.2%; 84.7%)	71.1% (66.1%; 76.5%)	67.6% (61.2%; 74.7%)	56.6% (43.2%; 74.0%)

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, 2013-2022

cStage	Net Survival Probability, 2013-2022						
	N at risk	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	17,917	88.4% (87.9%; 88.9%)	84.3% (83.7%; 85.0%)	81.5% (80.8%; 82.3%)	79.9% (79.0%; 80.7%)	78.0% (77.0%; 79.0%)	71.1% (68.9%; 73.4%)
Males							
All	11,655	88.2% (87.6%; 88.9%)	84.2% (83.4%; 85.0%)	81.4% (80.5%; 82.4%)	79.9% (78.9%; 81.0%)	78.0% (76.8%; 79.2%)	71.4% (68.6%; 74.2%)
I	4,890	97.3% (96.6%; 98.0%)	96.4% (95.4%; 97.3%)	95.0% (93.8%; 96.2%)	94.2% (92.8%; 95.7%)	92.8% (90.9%; 94.8%)	88.6% (83.4%; 94.2%)
II	979	95.4% (93.6%; 97.2%)	92.1% (89.7%; 94.5%)	89.3% (86.3%; 92.4%)	88.4% (84.9%; 92.1%)	85.1% (80.8%; 89.6%)	76.2% (65.4%; 88.7%)
III	767	83.9% (81.1%; 86.9%)	78.1% (74.7%; 81.6%)	73.9% (70.1%; 77.9%)	69.5% (65.2%; 74.0%)	66.1% (61.3%; 71.3%)	55.3% (44.9%; 68.0%)
IV	1,684	52.0% (49.6%; 54.6%)	37.5% (35.1%; 40.1%)	29.6% (27.2%; 32.1%)	25.0% (22.7%; 27.6%)	21.4% (19.0%; 24.1%)	13.8% (10.6%; 17.9%)
X/NA	3,441	92.1% (91.1%; 93.2%)	89.0% (87.7%; 90.3%)	87.0% (85.4%; 88.5%)	86.2% (84.5%; 87.9%)	84.7% (82.7%; 86.7%)	77.1% (73.0%; 81.4%)
Females							
All	6,262	88.7% (87.8%; 89.6%)	84.5% (83.5%; 85.6%)	81.7% (80.5%; 83.0%)	79.8% (78.4%; 81.2%)	78.0% (76.5%; 79.7%)	70.6% (66.9%; 74.5%)
I	2,602	98.4% (97.6%; 99.3%)	96.7% (95.5%; 97.9%)	94.6% (93.0%; 96.3%)	93.2% (91.2%; 95.2%)	92.6% (90.1%; 95.2%)	87.0% (79.7%; 95.1%)
II	532	92.6% (90.0%; 95.3%)	89.8% (86.5%; 93.3%)	87.0% (83.0%; 91.2%)	86.7% (82.2%; 91.5%)	83.5% (78.0%; 89.3%)	74.3% (62.9%; 87.7%)
III	438	84.3% (80.6%; 88.1%)	76.8% (72.4%; 81.6%)	72.4% (67.4%; 77.8%)	68.8% (63.2%; 75.0%)	65.6% (59.3%; 72.5%)	40.0% (22.1%; 72.4%)
IV	844	48.2% (44.9%; 51.9%)	33.6% (30.4%; 37.2%)	26.1% (22.9%; 29.6%)	22.3% (19.3%; 25.9%)	18.7% (15.7%; 22.2%)	12.1% (8.9%; 16.6%)
X/NA	1,880	93.3% (92.0%; 94.6%)	90.7% (89.1%; 92.3%)	89.1% (87.2%; 91.0%)	87.3% (85.1%; 89.5%)	85.8% (83.4%; 88.3%)	78.8% (73.6%; 84.2%)

4.2.2. Kidney cancer survival by pathological stage (pStage), and sex: number at risk and net survival probabilities, 2013-2022

Net Survival Probability, 2013-2022							
pStage	N at risk	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	17,917	88.4% (87.9%; 88.9%)	84.3% (83.7%; 85.0%)	81.5% (80.8%; 82.3%)	79.9% (79.0%; 80.7%)	78.0% (77.0%; 79.0%)	71.1% (68.9%; 73.4%)
Males							
All	11,655	88.2% (87.6%; 88.9%)	84.2% (83.4%; 85.0%)	81.4% (80.5%; 82.4%)	79.9% (78.9%; 81.0%)	78.0% (76.8%; 79.2%)	71.4% (68.6%; 74.2%)
I	5,802	99.6% (99.2%; 100.0%)	99.4% (98.8%; 100.0%)	99.0% (98.2%; 99.9%)	99.2% (98.2%; 100.2%)	98.7% (97.5%; 100.0%)	93.9% (89.9%; 98.1%)
II	933	97.1% (95.6%; 98.6%)	95.0% (92.9%; 97.0%)	92.9% (90.5%; 95.5%)	92.9% (90.1%; 95.8%)	90.5% (87.1%; 94.1%)	85.3% (76.9%; 94.6%)
III	1,855	89.8% (88.2%; 91.3%)	83.5% (81.5%; 85.5%)	79.3% (77.0%; 81.7%)	75.4% (72.7%; 78.1%)	72.1% (69.1%; 75.2%)	58.7% (53.0%; 64.9%)
IV	649	58.7% (54.9%; 62.8%)	43.9% (40.1%; 48.1%)	35.3% (31.5%; 39.6%)	30.3% (26.5%; 34.7%)	26.7% (22.8%; 31.2%)	16.1% (11.8%; 21.8%)
X/NA	2,546	65.9% (63.9%; 67.9%)	57.0% (54.8%; 59.3%)	50.7% (48.2%; 53.3%)	47.1% (44.4%; 50.0%)	43.1% (39.8%; 46.7%)	38.7% (32.4%; 46.2%)
Females							
All	6,262	88.7% (87.8%; 89.6%)	84.5% (83.5%; 85.6%)	81.7% (80.5%; 83.0%)	79.8% (78.4%; 81.2%)	78.0% (76.5%; 79.7%)	70.6% (66.9%; 74.5%)
I	3,019	99.7% (99.2%; 100.2%)	99.5% (98.7%; 100.3%)	98.8% (97.8%; 99.9%)	97.9% (96.5%; 99.2%)	97.8% (96.2%; 99.3%)	91.8% (86.8%; 97.2%)
II	476	97.9% (96.1%; 99.7%)	95.9% (93.4%; 98.5%)	92.4% (88.9%; 96.0%)	92.9% (89.2%; 96.9%)	89.6% (84.9%; 94.5%)	84.3% (74.1%; 95.9%)
III	902	91.9% (89.8%; 93.9%)	85.3% (82.7%; 88.1%)	81.2% (78.1%; 84.4%)	77.1% (73.6%; 80.8%)	73.9% (70.0%; 78.1%)	59.3% (52.1%; 67.5%)
IV	280	58.4% (52.7%; 64.6%)	43.0% (37.3%; 49.5%)	33.8% (28.3%; 40.3%)	31.2% (25.7%; 38.0%)	28.1% (22.6%; 35.1%)	14.7% (5.7%; 38.1%)
X/NA	1,621	69.0% (66.6%; 71.6%)	60.2% (57.4%; 63.0%)	55.3% (52.3%; 58.5%)	51.8% (48.5%; 55.4%)	48.5% (44.5%; 52.8%)	43.6% (35.5%; 53.5%)

4.2.3. Kidney cancer survival by stage and sex: number at risk and net survival probabilities, 2013-2022

Net Survival Probability, 2013-2022							
Stage	N at risk	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	17,917	88.4% (87.9%; 88.9%)	84.3% (83.7%; 85.0%)	81.5% (80.8%; 82.3%)	79.9% (79.0%; 80.7%)	78.0% (77.0%; 79.0%)	71.1% (68.9%; 73.4%)
Males							
All	11,655	88.2% (87.6%; 88.9%)	84.2% (83.4%; 85.0%)	81.4% (80.5%; 82.4%)	79.9% (78.9%; 81.0%)	78.0% (76.8%; 79.2%)	71.4% (68.6%; 74.2%)
I	6,659	97.9% (97.3%; 98.4%)	97.1% (96.4%; 97.9%)	96.2% (95.2%; 97.1%)	95.8% (94.7%; 97.0%)	94.7% (93.3%; 96.2%)	89.7% (85.7%; 93.9%)
II	1,016	95.8% (94.1%; 97.4%)	93.0% (90.7%; 95.3%)	90.3% (87.5%; 93.1%)	90.2% (87.1%; 93.5%)	87.9% (84.2%; 91.8%)	79.2% (70.2%; 89.4%)
III	1,753	89.3% (87.6%; 91.0%)	83.9% (81.8%; 86.0%)	80.3% (77.9%; 82.7%)	76.4% (73.6%; 79.2%)	73.8% (70.7%; 77.0%)	60.6% (54.6%; 67.2%)
IV	1,796	52.4% (50.1%; 54.9%)	37.9% (35.6%; 40.4%)	29.8% (27.5%; 32.2%)	25.3% (23.0%; 27.8%)	21.4% (19.1%; 23.9%)	13.7% (10.9%; 17.2%)
X/NA	539	72.0% (68.0%; 76.3%)	65.0% (60.4%; 69.9%)	59.8% (54.8%; 65.2%)	58.2% (52.8%; 64.2%)	54.3% (48.2%; 61.2%)	57.0% (47.4%; 68.7%)
Females							
All	6,262	88.7% (87.8%; 89.6%)	84.5% (83.5%; 85.6%)	81.7% (80.5%; 83.0%)	79.8% (78.4%; 81.2%)	78.0% (76.5%; 79.7%)	70.6% (66.9%; 74.5%)
I	3,624	98.7% (98.0%; 99.3%)	97.6% (96.6%; 98.5%)	96.2% (95.0%; 97.4%)	95.0% (93.5%; 96.5%)	94.5% (92.7%; 96.4%)	88.8% (83.8%; 94.0%)
II	534	92.7% (90.1%; 95.4%)	90.6% (87.4%; 93.9%)	86.4% (82.3%; 90.5%)	85.8% (81.4%; 90.4%)	82.7% (77.6%; 88.1%)	79.0% (68.9%; 90.4%)
III	904	89.8% (87.6%; 92.1%)	83.0% (80.2%; 86.0%)	79.5% (76.3%; 82.9%)	75.6% (72.0%; 79.5%)	72.5% (68.4%; 76.8%)	58.0% (50.2%; 67.1%)
IV	893	49.3% (46.0%; 52.8%)	34.6% (31.5%; 38.1%)	27.2% (24.1%; 30.6%)	23.7% (20.6%; 27.2%)	20.4% (17.4%; 23.9%)	11.3% (6.2%; 20.7%)
X/NA	342	76.9% (72.2%; 82.0%)	70.9% (65.5%; 76.8%)	67.9% (61.9%; 74.4%)	65.5% (58.9%; 72.9%)	62.0% (54.4%; 70.6%)	51.8% (36.4%; 73.8%)

5. CANCER SURVIVAL TRENDS



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, 2008-2022

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)
2008-2012	All	4,829	85.7% (84.6%; 86.8%)	77.6% (76.1%; 79.0%)	73.2% (71.5%; 74.9%)	2,818	87.6% (86.3%; 89.0%)	79.7% (77.9%; 81.5%)	76.2% (74.2%; 78.4%)
	I	2,335	97.5% (96.6%; 98.4%)	96.0% (94.5%; 97.4%)	93.9% (92.0%; 96.0%)	1,459	98.7% (97.8%; 99.7%)	96.0% (94.2%; 97.7%)	95.9% (93.6%; 98.2%)
	II	489	96.5% (94.3%; 98.8%)	90.9% (87.1%; 94.9%)	85.5% (80.6%; 90.7%)	288	96.6% (93.9%; 99.4%)	94.4% (90.3%; 98.6%)	87.7% (82.0%; 93.8%)
	III	784	88.6% (86.1%; 91.2%)	74.4% (70.7%; 78.3%)	66.5% (62.3%; 71.1%)	386	87.9% (84.4%; 91.6%)	75.8% (70.9%; 81.1%)	69.6% (63.9%; 75.9%)
	IV	729	46.3% (42.7%; 50.2%)	23.2% (20.1%; 26.7%)	15.9% (13.2%; 19.2%)	383	46.1% (41.2%; 51.5%)	23.0% (18.9%; 28.0%)	12.5% (9.3%; 16.8%)
	X/NA	520	73.4% (69.4%; 77.6%)	63.9% (59.2%; 68.9%)	59.7% (54.4%; 65.5%)	313	77.8% (73.0%; 82.9%)	64.2% (58.3%; 70.7%)	59.7% (53.3%; 66.9%)
2013-2017	All	5,448	87.5% (86.5%; 88.5%)	80.1% (78.7%; 81.4%)	76.7% (75.1%; 78.4%)	3,034	88.5% (87.2%; 89.8%)	81.6% (79.9%; 83.3%)	77.4% (75.3%; 79.5%)
	I	2,977	98.1% (97.4%; 98.9%)	97.0% (95.7%; 98.3%)	95.8% (93.9%; 97.7%)	1,724	99.0% (98.2%; 99.9%)	96.6% (95.0%; 98.3%)	94.3% (92.0%; 96.6%)
	II	468	94.6% (92.1%; 97.2%)	88.6% (84.7%; 92.7%)	86.1% (81.2%; 91.4%)	257	95.4% (92.2%; 98.8%)	91.2% (86.2%; 96.6%)	86.6% (80.1%; 93.6%)
	III	871	88.3% (85.9%; 90.8%)	77.5% (74.1%; 81.0%)	70.8% (66.9%; 75.0%)	422	88.4% (85.1%; 91.9%)	75.6% (71.0%; 80.6%)	69.4% (64.1%; 75.2%)
	IV	856	51.3% (48.0%; 54.9%)	27.0% (24.0%; 30.4%)	19.6% (16.8%; 22.7%)	430	47.7% (43.1%; 52.8%)	27.3% (23.1%; 32.3%)	20.4% (16.5%; 25.1%)
	X/NA	317	73.4% (68.2%; 78.9%)	60.5% (54.1%; 67.6%)	54.5% (46.9%; 63.3%)	213	77.4% (71.4%; 83.8%)	68.7% (61.4%; 76.9%)	60.1% (51.2%; 70.5%)
2018-2022	All	6,259	88.9% (88.0%; 89.8%)	82.7% (81.4%; 84.0%)	79.4% (77.5%; 81.3%)	3,240	88.9% (87.7%; 90.1%)	81.9% (80.2%; 83.7%)	79.3% (76.7%; 82.1%)
	I	3,709	97.6% (96.9%; 98.4%)	95.4% (94.0%; 96.8%)	93.9% (91.6%; 96.2%)	1,906	98.3% (97.4%; 99.3%)	95.9% (94.0%; 97.7%)	95.3% (91.9%; 98.8%)
	II	548	96.8% (94.6%; 98.9%)	91.5% (87.5%; 95.7%)	89.4% (83.6%; 95.7%)	277	90.1% (86.1%; 94.3%)	81.4% (75.4%; 87.9%)	80.7% (73.1%; 89.1%)

Period	Stage	Males				Females			
		N at risk	Net Survival Probability			N at risk	Net Survival Probability		
			1-y (95%CI)	3-y (95%CI)	5-y (95%CI)		1-y (95%CI)	3-y (95%CI)	5-y (95%CI)
	III	882	90.3% (88.0%; 92.6%)	83.2% (79.8%; 86.8%)	77.5% (72.3%; 83.1%)	482	91.0% (88.0%; 94.0%)	83.3% (78.9%; 87.8%)	74.3% (67.7%; 81.6%)
	IV	940	53.4% (50.2%; 56.9%)	32.6% (29.3%; 36.3%)	23.1% (19.3%; 27.7%)	463	50.8% (46.3%; 55.7%)	26.9% (22.7%; 32.0%)	20.5% (15.9%; 26.6%)
	X/NA	222	70.2% (64.0%; 77.0%)	58.8% (51.1%; 67.6%)	54.2% (44.7%; 65.8%)	129	76.3% (68.6%; 84.8%)	66.6% (56.8%; 78.0%)	70.8% (58.0%; 86.4%)

6. CANCER MORTALITY



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]																				ESR2013 (95%CI)	
	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85-	90-	95-		All ages
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]																				ESR2013 (95%CI)	
	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85-	90-	95-		All ages
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)

7. CANCER MORTALITY TRENDS



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 2022, Belgian Cancer Registry (BCR), 2024