

Table 1. Overview of the data included in the analyses of incidence of renal tumours for the period 2001-2010. Source: International Incidence of Childhood Cancer, volume 3²³

	Age 0-14 years						Age 15-19 years					
	Person-years ¹ (thousands)	Renal tumour cases	Proportion of renal tumours in all cancer cases (%)	Renal tumours			Person-years ¹ (thousands)	Renal tumour cases	Proportion of renal tumours in all cancer cases (%)	Renal tumours		
				DCO (%)	MV (%)	NOS (%)				DCO (%)	MV (%)	NOS (%)
All world regions	2,100,273	15,320	5.2	0.4	96.6	1.2	582,537	800	0.7	2.1	91.8	5.5
World region												
North Africa	18,606	104	5.2	2.9	92.3	5.8	6,980	7	0.7	14.3	85.7	28.6
Sub-Saharan Africa	167,696	1,030	11.1	1.3	91.7	0.6	6,780	16	1.6	0.0	75.0	12.5
Central America and Caribbean	50,637	295	4.7	3.4	94.9	2.7	16,333	22	0.9	22.7	77.3	4.5
South America	140,549	844	4.6	0.6	97.3	2.3	14,737	13	0.5	15.4	76.9	23.1
North America	661,232	5,563	5.2	0.3	98.3	0.6	235,385	380	0.7	0.5	95.5	1.6
East Asia	133,678	541	3.2	0.6	94.1	2.6	53,486	52	0.7	0.0	90.4	7.7
South Asia	65,713	229	4.0	0.9	98.3	1.7	25,901	17	0.7	11.8	88.2	5.9
Southeast Asia	76,729	376	4.2	2.2	81.1	6.1	28,944	28	0.9	11.5	67.9	17.9
West Asia	78,603	494	4.9	0.8	96.2	1.0	23,316	24	0.6	0.0	95.8	0.0
Eastern Europe	134,174	1,093	6.0	0.8	95.3	4.1	50,525	85	1.0	0.0	85.9	16.5
Northern Europe	151,598	1,226	5.5	0.2	98.2	0.6	54,498	63	0.6	0.0	95.2	1.6
Southern Europe	85,322	699	4.9	0.0	92.7	1.1	21,679	35	0.7	0.0	94.3	5.7
Western Europe	285,149	2,445	5.6	0.0	98.6	0.1	26,482	36	0.6	6.7	97.2	2.8
Oceania	50,585	381	5.1	0.0	97.6	0.5	17,492	22	0.5	4.5	95.5	9.1
Ethnic group in the USA												
Asian and Pacific Islander	30,560	122	3.3	0.0	99.2	0.8	10,437	9	0.6	11.1	88.9	0.0
Black	99,659	970	7.7	0.2	98.5	0.4	35,134	86	1.5	0.0	97.7	0.0
Hispanic White	114,987	811	4.2	0.1	98.8	0.4	35,053	38	0.5	0.0	94.7	2.6
Native American	9,863	49	5.9	0.0	100	0.0	3,533	6	1.4	0.0	83.3	0.0
White non-Hispanic	351,453	3,027	5.0	0.4	98.9	0.5	130,310	196	0.6	0.5	95.9	1.5

¹ Person-years have been rounded to the nearest thousand, so they do not add up exactly. The registries' contribution to the analyses is shown in Table S2.

DCO, registrations from death certificate only (the percentages were calculated after exclusion of the registries that do not have access to death certificates); MV, microscopic verification; NOS, not otherwise specified (unspecified tumours classified to VIc of International Classification of Childhood Cancer²⁵, see Table S1).

Table 2. Incidence of renal tumours by world region and ethnicity, 2001–2010. Source: International Incidence of Childhood Cancer, volume 3²³

a) Children (age 0-14 years)

	Renal tumours (VI)			WT and other nonepithelial renal tumours (VIa)			Wilms tumour (VIa1)					Rhabdoid renal tumour (VIa2)					Kidney sarcomas (VIa3)					Renal carcinomas (VIb)					Unspecified (VIc)		
	Cases	ASR	95%CI	Cases	ASR	95%CI	Cases	ASR	95%CI	M/F	95%CI	Cases	ASR	95%CI	M/F	95%CI	Cases	ASR	95%CI	M/F	95%CI	Cases	ASR	95%CI	M/F	95%CI	Cases	ASR	95%CI
All world regions	15,320	8.3	[8.1,8.4]	14,596	7.9	[7.8,8.1]	13,838	7.5	[7.4,7.7]	0.9	[0.8,0.9]	327	0.2	[0.2,0.2]	1.1	[0.9,1.3]	431	0.2	[0.2,0.3]	1.8	[1.5,2.2]	543	0.2	[0.2,0.3]	1.1	[0.9,1.3]	182	0.1	[0.1,0.1]
World region																													
North Africa	104	6.4	[5.2,7.6]	96	5.9	[4.7,7.1]	95	5.9	[4.7,7.0]	1.1	[0.7,1.6]	1	0.1	[0.0,0.4]	-	-	0	0.0	-	-	-	2	0.1	[0.0,0.4]	1.0	[0.1,15.3]	6	0.4	[0.1,0.8]
Sub-Saharan Africa	1,030	6.7	[6.2,7.1]	1013	6.6	[6.1,7.0]	978	6.3	[5.9,6.7]	0.9	[0.8,1.0]	12	0.1	[0.0,0.1]	1.4	[0.4,4.4]	23	0.1	[0.1,0.2]	2.4	[1.0,5.8]	11	0.1	[0.0,0.1]	0.6	[0.2,2.0]	6	0.0	[0.0,0.1]
Central America and Caribbean	295	6.7	[5.9,7.4]	280	6.3	[5.6,7.1]	264	6.0	[5.3,6.7]	0.8	[0.6,1.0]	8	0.2	[0.1,0.4]	0.6	[0.2,2.7]	8	0.2	[0.1,0.3]	1.3	[0.3,5.4]	7	0.1	[0.1,0.3]	1.2	[0.3,5.6]	8	0.2	[0.1,0.4]
South America	844	6.7	[6.3,7.2]	802	6.4	[6.0,6.9]	762	6.1	[5.7,6.6]	1.0	[0.9,1.1]	14	0.1	[0.1,0.2]	1.0	[0.3,2.8]	26	0.2	[0.1,0.3]	1.7	[0.8,3.8]	23	0.2	[0.1,0.2]	0.8	[0.4,1.9]	19	0.1	[0.1,0.2]
North America	5,563	9.5	[9.2,9.7]	5301	9.1	[8.9,9.4]	4,972	8.5	[8.3,8.8]	0.9	[0.8,0.9]	143	0.3	[0.2,0.3]	1.0	[0.7,1.4]	186	0.3	[0.3,0.4]	1.7	[1.3,2.3]	230	0.3	[0.3,0.4]	1.2	[0.9,1.5]	32	0.1	[0.0,0.1]
East Asia	541	5.1	[4.7,5.6]	498	4.8	[4.4,5.2]	446	4.3	[3.9,4.7]	1.0	[0.8,1.2]	24	0.2	[0.1,0.3]	0.9	[0.4,2.0]	28	0.3	[0.2,0.4]	1.1	[0.5,2.4]	29	0.2	[0.1,0.3]	1.4	[0.7,3.0]	14	0.1	[0.1,0.2]
South Asia	229	4.1	[3.5,4.6]	206	3.7	[3.2,4.2]	201	3.6	[3.1,4.1]	1.1	[0.8,1.5]	2	0.0	[0.0,0.1]	0.9	[0.1,15.0]	3	0.0	[0.0,0.1]	-	-	19	0.3	[0.2,0.5]	1.2	[0.5,3.1]	4	0.1	[0.0,0.2]
Southeast Asia	376	5.4	[4.9,6.0]	335	4.9	[4.3,5.4]	323	4.7	[4.2,5.2]	1.2	[1.0,1.5]	1	0.0	[0.0,0.1]	0.0	-	11	0.2	[0.1,0.3]	2.5	[0.7,9.4]	18	0.2	[0.1,0.4]	0.3	[0.1,1.0]	23	0.3	[0.2,0.5]
West Asia	494	6.7	[6.1,7.3]	467	6.4	[5.8,7.0]	448	6.1	[5.6,6.7]	0.9	[0.7,1.0]	4	0.1	[0.0,0.1]	1.0	[0.1,6.8]	15	0.2	[0.1,0.3]	3.7	[1.1,13.2]	22	0.3	[0.2,0.4]	1.5	[0.6,3.5]	5	0.1	[0.0,0.2]
Eastern Europe	1,093	9.7	[9.1,10.3]	1010	9.0	[8.5,9.6]	980	8.8	[8.2,9.3]	0.8	[0.7,0.9]	11	0.1	[0.0,0.2]	1.5	[0.4,5.2]	19	0.2	[0.1,0.3]	3.5	[1.2,10.7]	38	0.3	[0.2,0.3]	0.6	[0.3,1.2]	45	0.4	[0.3,0.5]
Northern Europe	1,226	9.2	[8.7,9.7]	1184	8.9	[8.4,9.4]	1,109	8.4	[7.9,8.8]	0.8	[0.7,0.9]	35	0.3	[0.2,0.4]	0.9	[0.5,1.7]	40	0.3	[0.2,0.4]	2.5	[1.2,5.0]	35	0.2	[0.1,0.3]	1.7	[0.9,3.5]	7	0.1	[0.0,0.1]
Southern Europe	699	9.1	[8.4,9.7]	671	8.7	[8.1,9.4]	643	8.4	[7.7,9.0]	1.1	[0.9,1.2]	19	0.3	[0.2,0.4]	1.1	[0.4,2.6]	9	0.1	[0.1,0.2]	0.5	[0.1,1.9]	20	0.2	[0.1,0.3]	0.8	[0.3,2.0]	8	0.1	[0.0,0.2]
Western Europe	2,445	9.8	[9.4,10.2]	2375	9.6	[9.2,10.0]	2,276	9.2	[8.8,9.6]	0.9	[0.8,1.0]	46	0.2	[0.1,0.2]	1.4	[0.8,2.6]	53	0.2	[0.2,0.3]	1.4	[0.8,2.5]	68	0.2	[0.2,0.3]	1.0	[0.6,1.6]	2	0.0	[0.0,0.0]
Oceania	381	8.4	[7.6,9.3]	358	8.0	[7.2,8.8]	341	7.6	[6.8,8.4]	0.7	[0.6,0.9]	7	0.2	[0.1,0.3]	2.4	[0.5,12.2]	10	0.2	[0.1,0.4]	1.6	[0.4,5.7]	21	0.4	[0.2,0.6]	1.2	[0.5,2.8]	2	0.0	[0.0,0.2]
Ethnic group in the USA																													
Asian and Pacific Islander	122	4.4	[3.6,5.1]	119	4.3	[3.5,5.0]	104	3.7	[3.0,4.4]	1.0	[0.7,1.4]	6	0.2	[0.1,0.5]	1.0	[0.2,4.8]	9	0.3	[0.1,0.6]	0.8	[0.2,2.8]	2	0.1	[0.0,0.2]	0.0	-	1	0.0	[0.0,0.2]
Black	970	10.9	[10.2,11.6]	889	10.2	[9.5,10.8]	848	9.7	[9.0,10.3]	0.9	[0.8,1.0]	15	0.2	[0.1,0.3]	1.8	[0.6,5.4]	26	0.3	[0.2,0.4]	4.2	[1.6,11.3]	77	0.7	[0.5,0.9]	1.7	[1.0,2.7]	4	0.0	[0.0,0.1]
Hispanic White	811	7.4	[6.9,7.9]	786	7.2	[6.7,7.7]	725	6.6	[6.2,7.1]	0.8	[0.7,0.9]	31	0.3	[0.2,0.4]	0.6	[0.3,1.2]	30	0.3	[0.2,0.4]	1.4	[0.7,3.0]	22	0.2	[0.1,0.3]	1.1	[0.5,2.6]	3	0.0	[0.0,0.1]
Native American	49	5.7	[4.1,7.3]	45	5.3	[3.7,6.8]	43	5.0	[3.5,6.5]	0.7	[0.4,1.3]	2	0.2	[0.0,0.9]	1.0	[0.1,15.6]	0	0.0	-	-	-	4	0.4	[0.1,1.1]	0.3	[0.0,3.1]	0	0.0	-
White non-Hispanic	3,027	9.9	[9.6,10.3]	2911	9.6	[9.3,10.0]	2,745	9.1	[8.7,9.4]	0.9	[0.8,0.9]	71	0.2	[0.2,0.3]	1.2	[0.8,1.9]	95	0.3	[0.3,0.4]	1.6	[1.0,2.4]	101	0.3	[0.2,0.3]	1.0	[0.6,1.4]	15	0.0	[0.0,0.1]

b) Adolescents (age 15-19 years)

	Renal tumours (VI)			WT and other nonepithelial renal tumours (VIa)			Wilms tumour (VIa1)			Rhabdoid renal tumour (VIa2)			Kidney sarcomas (VIa3)			Renal carcinomas (VIb)					Unspecified (VIc)		
	Cases	Rate	95%CI	Cases	Rate	95%CI	Cases	Rate	95%CI	Cases	Rate	95%CI	Cases	Rate	95%CI	Cases	Rate	95%CI	M/F	95%CI	Cases	Rate	95%CI
All world regions	800	1.4	[1.3,1.5]	192	0.3	[0.3,0.4]	181	0.3	[0.3,0.4]	4	0.0	[0.0,0.0]	7	0.0	[0.0,0.0]	564	1.0	[0.9,1.0]	0.7	[0.6,0.9]	44	0.1	[0.1,0.1]
World region																							
North Africa	7	1.0	[0.4,2.1]	0	0.0	-	0	0.0	-	0	0.0	-	0	0.0	-	5	0.7	[0.2,1.7]	1.4	[0.2,8.6]	2	0.3	[0.0,1.0]
Sub-Saharan Africa	16	2.4	[1.3,3.8]	5	0.7	[0.2,1.7]	5	0.7	[0.2,1.7]	0	0.0	-	0	0.0	-	9	1.3	[0.6,2.5]	1.0	[0.3,3.5]	2	0.3	[0.0,1.1]
Central America and Caribbean	22	1.3	[0.8,2.0]	13	0.8	[0.4,1.4]	13	0.8	[0.4,1.4]	0	0.0	-	0	0.0	-	8	0.5	[0.2,1.0]	0.6	[0.1,2.4]	1	0.1	[0.0,0.3]
South America	13	0.9	[0.5,1.5]	1	0.1	[0.0,0.4]	1	0.1	[0.0,0.4]	0	0.0	-	0	0.0	-	9	0.6	[0.3,1.2]	0.8	[0.2,3.0]	3	0.2	[0.0,0.6]
North America	380	1.6	[1.5,1.8]	76	0.3	[0.3,0.4]	70	0.3	[0.2,0.4]	2	0.0	[0.0,0.0]	4	0.0	[0.0,0.0]	298	1.3	[1.1,1.4]	0.7	[0.6,0.9]	6	0.0	[0.0,0.1]
East Asia	52	1.0	[0.7,1.2]	9	0.2	[0.1,0.3]	9	0.2	[0.1,0.3]	0	0.0	-	0	0.0	-	39	0.7	[0.5,1.0]	0.9	[0.5,1.6]	4	0.1	[0.0,0.2]
South Asia	17	0.7	[0.4,1.1]	3	0.1	[0.0,0.3]	3	0.1	[0.0,0.3]	0	0.0	-	0	0.0	-	13	0.5	[0.3,0.9]	1.0	[0.3,2.9]	1	0.0	[0.0,0.2]
Southeast Asia	28	1.0	[0.6,1.4]	6	0.2	[0.1,0.5]	4	0.1	[0.0,0.4]	1	0.0	[0.0,0.2]	1	0.0	[0.0,0.2]	17	0.6	[0.3,0.9]	0.6	[0.2,1.6]	5	0.2	[0.1,0.4]
West Asia	24	1.0	[0.7,1.5]	11	0.5	[0.2,0.8]	11	0.5	[0.2,0.8]	0	0.0	-	0	0.0	-	13	0.6	[0.3,1.0]	0.3	[0.1,0.9]	0	0.0	-
Eastern Europe	85	1.7	[1.3,2.0]	32	0.6	[0.4,0.9]	32	0.6	[0.4,0.9]	0	0.0	-	0	0.0	-	39	0.8	[0.5,1.0]	0.6	[0.3,1.1]	14	0.3	[0.2,0.5]
Northern Europe	63	1.2	[0.9,1.4]	12	0.2	[0.1,0.4]	12	0.2	[0.1,0.4]	0	0.0	-	0	0.0	-	50	0.9	[0.7,1.2]	0.5	[0.3,1.0]	1	0.0	[0.0,0.1]
Southern Europe	35	1.6	[1.1,2.1]	5	0.2	[0.1,0.5]	4	0.2	[0.1,0.5]	0	0.0	-	1	0.0	[0.0,0.3]	28	1.3	[0.9,1.9]	1.1	[0.5,2.3]	2	0.1	[0.0,0.3]
Western Europe	36	1.4	[0.9,1.8]	11	0.4	[0.2,0.7]	9	0.3	[0.2,0.6]	1	0.0	[0.0,0.2]	1	0.0	[0.0,0.2]	24	0.9	[0.6,1.3]	0.8	[0.4,1.8]	1	0.0	[0.0,0.2]
Oceania	22	1.3	[0.8,1.9]	8	0.5	[0.2,0.9]	8	0.5	[0.2,0.9]	0	0.0	-	0	0.0	-	12	0.7	[0.4,1.2]	0.7	[0.2,2.2]	2	0.1	[0.0,0.4]
Ethnic group in the USA																							
Asian and Pacific Islander	9	0.9	[0.4,1.6]	2	0.2	[0.0,0.7]	2	0.2	[0.0,0.7]	0	0.0	-	0	0.0	-	7	0.7	[0.3,1.4]	5.7	[0.7,47.4]	0	0.0	-
Black	86	2.4	[1.9,3.0]	14	0.4	[0.2,0.7]	13	0.4	[0.2,0.6]	0	0.0	-	1	0.0	[0.0,0.2]	72	2.0	[1.6,2.5]	1.0	[0.6,1.6]	0	0.0	-
Hispanic White	38	1.1	[0.7,1.4]	4	0.1	[0.0,0.3]	2	0.1	[0.0,0.2]	1	0.0	[0.0,0.2]	1	0.0	[0.0,0.2]	33	0.9	[0.6,1.3]	1.0	[0.5,1.9]	1	0.0	[0.0,0.2]
Native American	6	1.7	[0.6,3.7]	1	0.3	[0.0,1.6]	1	0.3	[0.0,1.6]	0	0.0	-	0	0.0	-	5	1.4	[0.5,3.3]	0.2	[0.0,2.1]	0	0.0	-
White non-Hispanic	196	1.5	[1.3,1.7]	47	0.4	[0.3,0.5]	44	0.3	[0.2														

M/F, male to female incidence rate ratio; Rate, age-specific incidence rate; Unspecified, unspecified malignant renal tumours; WT, Wilms tumour; -, not calculated due to insufficient number.