

Supplementary Table 1. Joinpoint incidence trends for the ICC3 cancer group in children and adolescents (Ages 0-19 years), United States, 1975-2018.

	Trends in 1975-2018													
	1st segment			2nd segment			3rd segment			4th segment			AAPC ^a	
	Years	APC (95% CI)	<i>P</i>	Years	APC (95% CI)	<i>P</i>	Years	APC (95% CI)	<i>P</i>	Years	APC (95% CI)	<i>P</i>	2008-2018	<i>P</i>
All sites														
Both sexes combined	1975-2018	0.8 (0.7 to 0.9)	< .001	–	–	–	–	–	–	–	–	–	0.8 (0.7 to 0.9)	< .001
Males	1975-2018	0.8 (0.7 to 0.9)	< .001	–	–	–	–	–	–	–	–	–	0.8 (0.7 to 0.9)	< .001
Females	1975-2006	0.6 (0.4 to 0.7)	< .001	2006-2015	1.8 (1.0 to 2.7)	< .001	2015-2018	–2.0 (–5.5 to 1.7)	.27	–	–	–	0.7 (–0.5 to 1.9)	.28
Ages 0-4 years	1975-2015	0.8 (0.7 to 0.9)	< .001	2015-2018	–2.9 (–6.8 to 1.2)	.16	–	–	–	–	–	–	–0.3 (–1.5 to 0.9)	.60
Ages 5-9 years	1975-2006	0.5 (0.2 to 0.7)	.001	2006-2009	4.7 (–6.7 to 17.4)	.43	2009-2018	–0.0 (–1.0 to 1.0)	.94	–	–	–	0.4 (–1.0 to 1.9)	.56

Ages 10-14 years	1975-2006	0.7 (0.5 to 1.0)	< .001	2006-2018	1.8 (1.1 to 2.4)	< .001	-	-	-	-	-	-	1.8 (1.1 to 2.4)	< .001
Ages 0-14 years	1975-2018	0.8 (0.7 to 0.9)	< .001	-	-	-	-	-	-	-	-	-	0.8 (0.7 to 0.9)	< .001
Ages 15-19 years	1975-2006	0.5 (0.3 to 0.7)	< .001	2006-2018	1.3 (0.8 to 1.8)	< .001	-	-	-	-	-	-	1.3 (0.8 to 1.8)	< .001
Non-Hispanic White ^b	1992-2018	0.9 (0.7 to 1.1)	< .001	-	-	-	-	-	-	-	-	-	0.9 (0.7 to 1.1)	< .001
Non-Hispanic Black	1992-1998	-2.6 (-6.0 to 0.9)	.13	1998-2013	2.0 (1.4 to 2.7)	< .001	2013-2018	-1.6 (-4.3 to 1.2)	.25	-	-	-	0.2 (-1.1 to 1.6)	.75
Non-Hispanic API	1992-2004	-0.4 (-1.7 to 1.0)	.56	2004-2018	2.0 (1.2 to 2.8)	< .001	-	-	-	-	-	-	2.0 (1.2 to 2.8)	< .001
Non-Hispanic AI/AN	1992-2018	1.4 (0.7 to 2.2)	< .001	-	-	-	-	-	-	-	-	-	1.4 (0.7 to 2.2)	< .001
Hispanic	1992-2018	1.0 (0.8 to 1.3)	< .001	-	-	-	-	-	-	-	-	-	1.0 (0.8 to 1.3)	< .001

ICCC-3 cancer group,
both sexes

I Leukemias, myeloproliferative diseases, and myelodysplastic diseases	1975-2009	1.2 (1.0 to 1.4)	< .001	2009-2018	0.3 (-0.4 to 1.1)	-	-	-	-	-	-	0.4 (-0.2 to 1.1)	.20
II Lymphomas and reticuloendothelial neoplasms	1975-2004	-0.3 (-0.5 to 0.0)	.06	2004-2015	3.2 (2.3 to 4.1)	< .001	2015-2018	-2.6 (-7.8 to 2.9)	.33	-	-	1.4 (-0.3 to 3.2)	.10
III CNS and miscellaneous intracranial and intraspinal neoplasms	1975-1988	2.1 (0.6 to 3.7)	.008	1988-2018	0.3 (0.0 to 0.6)	.03	-	-	-	-	-	0.3 (0.0 to 0.6)	.037
IV Neuroblastoma, other peripheral nervous cell tumors	1975-2018	-0.0 (-0.3 to 0.3)	.82	-	-	-	-	-	-	-	-	-0.0 (-0.3 to 0.3)	.82
V Retinoblastoma	1975-2018	0.3 (-0.0 to 0.6)	.07	-	-	-	-	-	-	-	-	0.3 (0.0 to 0.6)	.07
VI Renal tumors	1975-2018	0.1 (-0.1 to 0.4)	.30	-	-	-	-	-	-	-	-	0.1 (-0.1 to 0.4)	.30
VII Hepatic tumors	1975-2018	1.9 (1.3 to 2.4)	< .001	-	-	-	-	-	-	-	-	1.9 (1.3 to 2.4)	< .001
VIII Malignant bone tumors	1975-2018	0.3 (0.0 to 0.6)	.03	-	-	-	-	-	-	-	-	0.3 (0.0 to 0.6)	.03

0.6)

IX Soft tissue and other extraosseous sarcomas	1975-2018	0.4 (0.1 to 0.6)	.002	–	–	–	–	–	–	–	–	–	0.4 (0.1 to 0.6)	.002
X Germ cell tumors, trophoblastic tumors, and neoplasms of gonads	1975-2018	0.7 (0.4 to 0.9)	< .001	–	–	–	–	–	–	–	–	–	0.7 (0.4 to 0.9)	< .001
XI Other malignant epithelial neoplasms and malignant melanomas	1975-2008	0.8 (0.4 to 1.1)	< .001	2008-2018	4.6 (3.4 to 5.8)	< .001	–	–	–	–	–	–	4.6 (3.4 to 5.8)	< .001
XII Other and unspecified malignant neoplasms ICCC-3 cancer group, male	1975-2018	–0.2 (–1.0 to 0.6)	.68	–	–	–	–	–	–	–	–	–	–0.2 (–1.0 to 0.6)	.68
I Leukemias, myeloproliferative diseases, and myelodysplastic diseases	1975-2018	1.0 (0.9 to 1.2)	< .001	–	–	–	–	–	–	–	–	–	1.0 (0.9 to 1.2)	< .001
II Lymphomas and reticuloendothelial neoplasms	1975-2004	–0.3 (–0.7 to 0.0)	.08	2004-2014	3.9 (2.5 to 5.3)	< .001	2014-2018	–1.9 (–6.1 to 2.5)	.39	–	–	–	1.6 (–0.3 to 3.5)	.10

III CNS and miscellaneous intracranial and intraspinal neoplasms	1975-2018	2.4 (0.6 to 4.2)	.008	1988-2018	0.1 (-0.2 to 0.4)	-	-	-	-	-	-	-	0.1 (-0.2 to 0.4)	.39
IV Neuroblastoma, other peripheral nervous cell tumors	1975-2018	-0.1 (-0.5 to 0.3)	.64	-	-	-	-	-	-	-	-	-	-0.1 (-0.5 to 0.3)	.64
V Retinoblastoma	1975-2018	0.3 (-0.3 to 0.9)	.34	-	-	-	-	-	-	-	-	-	0.3 (-0.3 to 0.9)	.34
VI Renal tumors	1975-2018	0.1 (-0.3 to 0.4)	.73	-	-	-	-	-	-	-	-	-	0.1 (-0.3 to 0.4)	.73
VII Hepatic tumors	1975-2018	2.1 (1.3 to 2.8)	< .001	-	-	-	-	-	-	-	-	-	2.1 (1.3 to 2.8)	< .001
VIII Malignant bone tumors	1975-2018	0.4 (0.0 to 0.8)	.05	-	-	-	-	-	-	-	-	-	0.4 (0.0 to 0.8)	.05
IX Soft tissue and other extrasosseous sarcomas	1975-2018	0.4 (0.1 to 0.7)	.008	-	-	-	-	-	-	-	-	-	0.4 (0.1 to 0.7)	.008
X Germ cell tumors, trophoblastic tumors, and neoplasms of gonads	1975-2018	1.0 (0.6 to 1.3)	< .001	-	-	-	-	-	-	-	-	-	1.0 (0.6 to 1.3)	< .001

XI Other malignant epithelial neoplasms and malignant melanomas	1975-2011	0.9 (0.4 to 1.3)	< .001	2011-2018	4.6 (1.5 to 7.8)	.004	-	-	-	-	-	-	3.5 (1.4 to 5.6)	.001
XII Other and unspecified malignant neoplasms	-													
ICCC-3 cancer group, female														
I Leukemias, myeloproliferative diseases, and myelodysplastic diseases	1975-2018	1.1 (0.9 to 1.3)	< .001	-	-	-	-	-	-	-	-	-	1.1 (0.9 to 1.3)	< .001
II Lymphomas and reticuloendothelial neoplasms	1975-2003	-0.2 (-0.7 to 0.2)	.24	2003-2018	2.0 (1.3 to 2.7)	< .001	-	-	-	-	-	-	2.0 (1.3 to 2.7)	< .001
III CNS and miscellaneous intracranial and intraspinal neoplasms	1975-2018	0.7 (0.4 to 1.0)	< .001	-	-	-	-	-	-	-	-	-	0.7 (0.4 to 1.0)	< .001
IV Neuroblastoma, other peripheral nervous cell tumors	1975-2018	-0.0 (-0.4 to 0.4)	.83	-	-	-	-	-	-	-	-	-	0.0 (-0.4 to 0.4)	.83
V Retinoblastoma	1975-2018	0.1 (-0.4 to 0.7)	.62	-	-	-	-	-	-	-	-	-	0.1 (-0.4 to 0.7)	.62

VI Renal tumors	1975-2018	0.2 (-0.2 to 0.6)	.31	-	-	-	-	-	-	-	-	-	0.2 (-0.2 to 0.6)	.31
VII Hepatic tumors	1975-2018	1.4 (0.6 to 2.3)	.001	-	-	-	-	-	-	-	-	-	1.4 (0.6 to 2.3)	.001
VIII Malignant bone tumors	1975-2018	0.1 (-0.3 to 0.6)	.48	-	-	-	-	-	-	-	-	-	0.1 (-0.3 to 0.6)	.48
IX Soft tissue and other extrasosseous sarcomas	1975-2018	0.3 (0.0 to 0.7)	.05	-	-	-	-	-	-	-	-	-	0.3 (0.0 to 0.7)	.05
X Germ cell tumors, trophoblastic tumors, and neoplasms of gonads	1975-2018	0.2 (-0.2 to 0.5)	.33	-	-	-	-	-	-	-	-	-	0.2 (-0.2 to 0.5)	.33
XI Other malignant epithelial neoplasms and malignant melanomas	1975-2006	0.6 (0.2 to 1.0)	.008	2006-2018	4.5 (3.5 to 5.6)	< .001	-	-	-	-	-	-	4.5 (3.5 to 5.6)	< .001
XII Other and unspecified malignant neoplasms	-	-	-	-	-	-	-	-	-	-	-	-	-	-

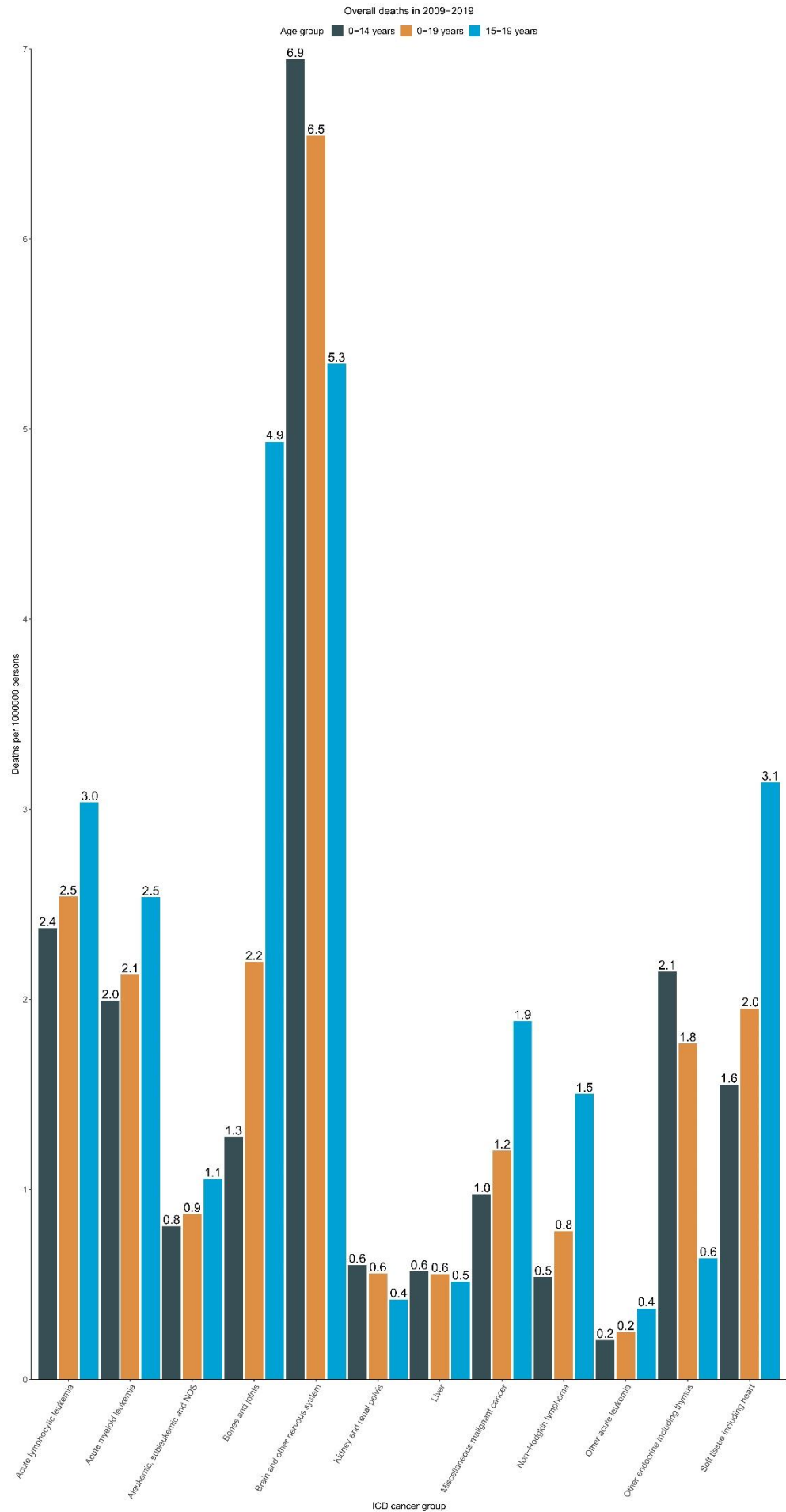
^a AAPC is the average annual percent change and is a weighted average of the APCs over the fixed interval 2008-2018 using the underlying Joinpoint model for the period of 1975-2018.

^b Incidence trends by races/ethnicities were calculated between 1992 and 2018. APC, annual percent change; CI, confidence interval; AAPC, average annual percent change. APC was not calculated if case count was <10 cases in any 1 calendar year.

Supplementary Table 2. Age-standardized death rates and fixed-interval trends (2009-2019) for the ICD cancer group by racial/ethnic group, ages 0-19 years.

ICD cancer group	Non-Hispanic White			Non-Hispanic Black			Hispanic		
	Rate	AAPC (95% CI)	P	Rate	AAPC (95% CI)	P	Rate	AAPC (95% CI)	P
Brain and other nervous system	6.8	-0.4 (-0.6 to -0.1)	.006	6.7	-0.1 (-0.7 to 0.4)	.63	6.0	-0.3 (-0.7 to 0.2)	.26
Acute lymphocytic leukemia	2.1	-3.5 (-3.9 to -3.1)	< .001	1.7	-3.2 (-4.3 to -2.2)	< .001	4.1	-2.9 (-3.4 to -2.3)	< .001
Bones and joints	2.2	0.0 (-0.5 to 0.5)	.89	1.9	-0.6 (-1.4 to 0.1)	.10	2.3	-0.5 (-1.2 to 0.2)	.16
Acute myeloid leukemia	1.9	-1.5 (-2.0 to -1.0)	< .001	2.2	-1.3 (-2.2 to -0.4)	.008	2.4	-0.9 (-1.6 to -0.1)	.02
Soft tissue including heart	2.0	0.4 (-0.0 to 0.8)	.08	2.2	-0.1 (-1.0 to 0.9)	.91	1.8	0.3 (-0.5 to 1.2)	.40
Other endocrine including thymus	2.1	-1.3 (-1.8 to -0.8)	< .001	2.0	-5.0 (-8.5 to -1.5)	.008	1.1	-2.1 (-3.4 to -0.7)	.004
Miscellaneous malignant cancer	1.2	0.6 (-0.2 to 1.3)	.12	1.1	-		1.2	0.5 (-0.8 to 1.8)	.45

Aleukemic, subleukemic and NOS	0.8	-2.7 (-3.4 to -1.9) < .001	0.8	-	1.0	-5.4 (-8.2 to -2.5) .001
Non-Hodgkin lymphoma	0.8	-4.3 (-4.9 to -3.7) < .001	1.1	-2.0 (-3.0 to -0.9) .001	0.7	-
Kidney and renal pelvis	0.5	-4.3 (-6.2 to -2.2) < .001	1.0	-	0.5	-
Liver	0.5	-1.2 (-2.1 to -0.4) .006	0.6	-	0.6	-
Other acute leukemia	0.2	-	0.3	-	0.3	-



Supplementary Figure 1. Cancer death rates of children, adolescents, and children and adolescents in the United States, 2009–2019, by the International Classification of Disease (ICD) group. Rates were per 1000000 persons, age-standardized to the 2000 US standard population (19 age groups, Census P25–1130).