

Table 29.1

Age-Adjusted and Age-Specific SEER Cancer Incidence Rates, 2004-2008^a
 By International Classification of Childhood Cancer (ICCC)^b Group and Subgroup^c and Age at Diagnosis
 Including myelodysplastic syndromes and Group III benign brain/CNS tumors
 All Races, Males and Females

<u>ICCC Group and Subgroup</u>	<u>0-14</u>	<u>0-19</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>
All ICCC Groups Combined							
Excluding Group III benign brain/CNS tumors	154.9	170.6	240.3	207.7	116.4	137.0	217.5
Including Group III benign brain/CNS tumors ^d	165.3	184.2	250.3	215.6	126.1	150.2	240.4
I Leukemia (includes myelodysplastic syndromes)	52.2	47.6	54.1	91.0	41.3	33.4	33.9
I(a) Lymphoid leukemia	40.5	35.0	22.6	77.2	33.8	22.9	18.7
I(b) Acute myeloid leukemia	7.8	8.3	20.3	9.9	4.5	7.1	9.7
I(c) Chronic myeloproliferative diseases	1.2	1.8	3.4	-	0.8	1.7	3.5
I(d) Myelodysplastic syndrome and other myeloproliferative	1.5	1.4	5.0	2.0	1.2	0.7	1.3
I(e) Unspecified and other specified leukemias	1.2	1.1	2.8	1.5	0.9	1.0	0.7
II Lymphomas and reticuloendothelial neoplasms	16.5	24.8	7.8	8.6	14.1	26.6	49.2
II(a) Hodgkin lymphoma	6.3	12.3	-	-	5.0	13.0	30.4
II(b) Non-Hodgkin lymphoma (except Burkitt lymphoma)	6.5	8.8	-	4.3	5.3	10.2	15.6
II(c) Burkitt lymphoma	2.5	2.4	-	1.8	2.9	2.9	2.3
II(d) Miscellaneous lymphoreticular neoplasms	1.1	0.9	5.5	1.6	0.7	-	-
II(e) Unspecified lymphomas	-	0.3	-	-	-	-	-
III CNS and misc intracranial and intraspinal neoplasms ^d	41.1	42.0	43.8	46.6	39.9	37.6	44.5
III(a) Ependymomas and choroid plexus tumor	4.3	4.1	10.1	5.9	3.4	2.9	3.3
III(b) Astrocytoma	15.0	14.3	13.0	17.2	14.9	13.9	12.1
III(c) Intracranial and intraspinal embryonal tumors	7.3	6.2	10.9	11.7	6.8	3.8	2.9
III(d) Other gliomas	5.5	5.2	3.2	4.9	6.7	5.2	4.4
III(e) Other specified intracranial/intraspinal neoplasms	8.0	11.0	5.0	6.0	7.2	10.7	20.3
III(f) Unspecified intracranial and intraspinal neoplasms	1.0	1.1	-	1.0	0.8	1.2	1.4
IV Neuroblastoma and other peripheral nervous cell tumor	10.1	7.8	53.2	19.4	3.4	1.5	0.9
IV(a) Neuroblastoma and ganglioneuroblastoma	10.0	7.6	53.0	19.3	3.4	1.2	-
IV(b) Other peripheral nervous cell tumors	-	0.2	-	-	-	-	-
V Retinoblastoma	4.2	3.1	25.3	9.2	-	-	-
VI Renal tumors	7.7	6.1	13.3	17.9	5.4	1.1	1.6
VI(a) Nephroblastoma and other nonepithelial renal tumor	7.3	5.6	13.3	17.7	5.1	0.6	-
VI(b) Renal carcinoma	0.3	0.5	-	-	-	-	1.2
VI(c) Unspecified malignant renal tumors	-	-	-	-	-	-	-

- ^a SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).
- ^b International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005: Vol 103, No. 7, pg 1457-1467.
- ^c Classifications are shown for invasive cases only except as noted. For ICCC groups and subgroups that include *in situ* behavior, only invasive cases are shown.
- ^d Group III and Group III subgroups include benign brain/CNS tumors.
- Rates are per 1,000,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
 - Statistic could not be calculated. Rate based on less than 16 cases for the time interval.

Table 29.1 - continued

Age-Adjusted and Age-Specific SEER Cancer Incidence Rates, 2004-2008^a
 By International Classification of Childhood Cancer (ICCC)^b Group and Subgroup^c and Age at Diagnosis
 Including myelodysplastic syndromes and Group III benign brain/CNS tumors
 All Races, Males and Females

<u>ICCC Group and Subgroup</u>	<u>0-14</u>	<u>0-19</u>	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>
VII Hepatic tumors	2.6	2.4	11.0	5.3	0.7	0.8	1.7
VII(a) Hepatoblastoma	2.2	1.6	10.5	5.2	-	-	-
VII(b) Hepatic carcinoma	0.4	0.8	-	-	-	0.7	1.7
VII(c) Unspecified malignant hepatic tumors	-	-	-	-	-	-	-
VIII Malignant bone tumors	7.1	9.0	-	1.8	5.7	13.6	14.9
VIII(a) Osteosarcoma	4.1	5.2	-	-	3.1	8.6	8.3
VIII(b) Chondrosarcoma	0.2	0.4	-	-	-	-	0.8
VIII(c) Ewing tumor and related sarcomas of bone	2.3	2.8	-	1.1	1.9	4.0	4.3
VIII(d) Other specified malignant bone tumors	0.2	0.5	-	-	-	-	1.2
VIII(e) Unspecified malignant bone tumors	-	0.2	-	-	-	-	-
IX Soft tissue and other extraosseous sarcomas	10.9	12.3	18.7	10.2	8.2	12.6	16.5
IX(a) Rhabdomyosarcoma	5.4	4.8	6.1	7.6	4.6	4.4	3.2
IX(b) Fibrosarcoma, peripheral nerve & other fibrous	1.2	1.3	5.5	-	0.6	1.3	1.9
IX(c) Kaposi sarcoma	-	-	-	-	-	-	-
IX(d) Other specified soft tissue sarcomas	3.5	5.0	5.9	1.5	2.4	5.7	9.5
IX(e) Unspecified soft-tissue sarcomas	0.8	1.1	-	-	-	1.2	1.8
X Germ cell & trophoblastic tumors & neoplasms of gonads	5.9	11.8	19.6	3.0	2.6	8.7	29.6
X(a) Intracranial and intraspinal germ-cell tumors	1.5	1.9	-	-	1.0	3.0	2.9
X(b) Extracranial & extragonadal germ cell tumors	1.4	1.5	13.0	1.4	-	-	1.7
X(c) Malignant gonadal germ cell tumors	2.7	7.8	4.6	1.5	1.3	4.7	23.0
X(d) Gonadal carcinomas	-	0.5	-	-	-	-	1.6
X(e) Other and unspecified malignant gonadal tumors	-	0.2	-	-	-	-	-
XI Other malignant epithelial neoplasms and melanomas	6.7	16.8	-	1.8	4.1	13.9	46.9
XI(a) Adrenocortical carcinoma	-	0.2	-	-	-	-	-
XI(b) Thyroid carcinoma	2.3	6.7	-	-	1.4	5.2	19.9
XI(c) Nasopharyngeal carcinoma	0.3	0.6	-	-	-	1.0	1.2
XI(d) Malignant melanoma	2.3	5.6	-	1.0	1.9	4.1	15.3
XI(e) Skin carcinoma	-	-	-	-	-	-	-
XI(f) Other and unspecified carcinomas	1.5	3.7	-	-	0.8	3.4	10.1
XII Other and unspecified malignant neoplasms	0.4	0.5	-	-	-	-	0.8
XII(a) Other specified malignant tumors	0.3	0.3	-	-	-	-	-
XII(b) Other unspecified malignant tumors	-	0.2	-	-	-	-	-
Not classified by ICC	0.4	0.6	-	-	-	-	1.2

- ^a SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).
- ^b International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005: Vol 103, No. 7, pg 1457-1467.
- ^c Classifications are shown for invasive cases only except as noted. For ICC groups and subgroups that include *in situ* behavior, only invasive cases are shown.
- Rates are per 1,000,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
- Statistic could not be calculated. Rate based on less than 16 cases for the time interval.

Table 29.2

Age-Adjusted SEER Cancer Incidence Rates^a
 By International Classification of Childhood Cancer (ICCC)^b Selected Group and Subgroup^c and Year of Diagnosis
 Excluding benign brain and myelodysplastic syndromes
 All Races, Males and Females, Ages 0-19

<u>ICCC Group and Subgroup</u>	<u>1975-2008</u>	<u>1975-1983</u>	<u>1984-1991</u>	<u>1992-2000</u>	<u>2001-2008</u>
All ICCC Groups Combined	156.5	142.3	157.9	159.7	166.0
I Leukemia	38.4	34.3	38.9	38.7	41.6
I(a) Lymphoid leukemia	28.7	25.1	29.4	29.0	31.1
I(b) Acute myeloid leukemia	7.0	5.9	6.6	7.5	7.9
II Lymphomas and reticuloendothelial neoplasms	24.3	24.5	25.0	23.7	24.2
II(a) Hodgkin lymphoma	13.1	14.3	14.2	12.4	11.4
II(b,c,e) Non-Hodgkin lymphoma	10.6	9.4	10.2	10.8	12.2
III CNS & misc intracranial & intraspinal neoplasms	27.6	23.0	29.0	28.8	29.6
III(a) Ependymomas and choroid plexus tumor	2.3	1.8	2.5	2.4	2.5
III(b) Astrocytoma	13.9	11.4	15.3	14.4	14.5
III(c) Intracranial and intraspinal embryonal tumors	5.5	4.4	5.2	6.4	6.0
III(d) Other gliomas	5.1	4.5	5.0	5.0	5.8
IV Neuroblastoma and other peripheral nervous cell tumors	8.4	7.9	8.3	8.6	8.8
IV(a) Neuroblastoma and ganglioneuroblastoma	8.2	7.7	7.9	8.3	8.6
V Retinoblastoma	3.0	2.8	3.1	3.3	2.8
VI Renal tumors	6.6	6.6	6.6	7.0	6.3
VI(a) Nephroblastoma and other nonepithelial renal tumor	6.1	6.3	6.2	6.5	5.6
VII Hepatic tumors	1.8	1.2	1.7	2.0	2.3
VII(a) Hepatoblastoma	1.3	0.8	1.2	1.5	1.5
VIII Malignant bone tumors	8.5	8.1	9.0	8.6	8.4
VIII(a) Osteosarcoma	4.6	4.2	5.0	4.8	4.6
VIII(c) Ewing tumor and related sarcomas of bone	2.9	2.9	3.1	2.8	2.8
IX Soft tissue and other extraosseous sarcomas	11.4	10.4	11.3	11.5	12.5
IX(a) Rhabdomyosarcoma	4.5	4.0	4.9	4.5	4.8
X Germ cell & trophoblastic tumors & neoplasms of gonads	10.4	9.3	10.0	10.8	11.5
X(a) Intracranial and intraspinal germ-cell tumor	1.4	0.9	1.2	1.8	1.7
X(c) Malignant gonadal germ cell tumor	6.6	5.9	6.4	6.8	7.5
XI Other malignant epithelial neoplasms and melanomas	15.3	13.4	14.3	15.9	17.6
XI(b) Thyroid carcinoma	5.6	4.9	5.0	5.8	6.5
XI(d) Malignant melanoma	5.1	4.0	5.0	5.1	6.5

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Rates are per 1,000,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005: Vol 103, No. 7, pg 1457-1467.

^c Classifications are shown for invasive cases only except as noted. For ICCC groups and subgroups that include *in situ* behavior, only invasive cases are shown.

- Statistic could not be calculated. Rate based on less than 16 cases for the time interval.

Table 29.3

Age-Adjusted SEER Cancer Incidence Trends, 1975-2008^a
 By International Classification of Childhood Cancer (ICCC)^b Selected Group and Subgroup^c
 Excluding benign brain and myelodysplastic syndromes
 All Races, Males and Females

ICCC Group and Subgroup	Ages 0-14				Ages 0-19			
	% Change 1975-2008	APC 1975-2008	APC 1975-1991	APC 1992-2008	% Change 1975-2008	APC 1975-2008	APC 1975-1991	APC 1992-2008
All ICCC Groups Combined	31.8	0.5*	1.2*	0.4 [#]	33.3	0.5*	1.1*	0.4 [#]
I Leukemia	43.6	0.6*	1.4*	0.7	38.4	0.7*	1.2*	0.9*
I(a) Lymphoid leukemia	53.2	0.7*	1.7*	0.6 [@]	55.1	0.8*	1.7*	1.0*
I(b) Acute myeloid leukemia	76.1	1.2*	2.0	1.3	45.1	1.2*	1.2	0.8
II Lymphomas and reticuloendothelial neo.	5.9	0.0	-0.6	1.2* [#]	8.6	-0.1	0.2	0.4
II(a) Hodgkin lymphoma	-1.8	-0.8*	-0.6	0.9	-10.4	-0.8*	-0.1	-0.5
II(b,c,e) Non-Hodgkin lymphoma	5.7	0.6*	-0.1	1.5* [@]	32.1	1.0*	0.9*	1.4*
III CNS & misc intracranial & intraspinal neo.	48.9	0.8*	2.6*	-0.1 [#]	46.4	0.8*	2.3*	-0.1 [#]
III(a) Ependymomas and choroid plexus tumors	-	-	-	-0.4	-	-	-	0.0
III(b) Astrocytoma	92.0	1.0*	3.5*	-0.3 [#]	64.1	0.7*	3.0*	-0.5 [#]
III(c) Intracranial and intraspinal embryonal tum.	95.2	1.0*	1.6	-0.8	129.7	1.2*	1.5	-0.6
III(d) Other gliomas	-27.4	0.4	0.7	1.1	-12.3	0.7*	0.8	0.9
IV Neuroblastoma and other peripheral nervous cell tumors	6.7	0.3	-0.2	-0.1	6.6	0.3	-0.2	-0.1
IV(a) Neuroblastoma and ganglioneuroblastoma	5.0	0.4	-0.4	-0.1	4.9	0.3	-0.4	0.0
V Retinoblastoma	-31.6	0.1	0.9	-1.9 [#]	-31.6	0.1	1.0	-2.0* [#]
VI Renal tumors	59.7	-0.1	0.8	-1.2	60.3	0.0	0.9	-1.0
VI(a) Nephroblastoma and other nonepithelial renal tumors	64.1	-0.2	0.7	-1.3	67.0	-0.2	0.9	-1.3 [@]
VII Hepatic tumors	-	-	-	-	-	-	-	-
VII(a) Hepatoblastoma	-	-	-	-	-	-	-	-
VIII Malignant bone tumors	49.3	-0.1	1.8*	-0.5 [#]	38.1	0.1	1.3	-0.6 [@]
VIII(a) Osteosarcoma	-	-	-	-0.8	75.6	0.4	2.5*	-0.7 [#]
VIII(c) Ewing tum. and related sarcomas of bone	50.1	-	-	-	31.4	-0.4	0.5	-0.8
IX Soft tissue and other extrasosseous sarcomas	24.0	0.7*	1.5	1.2*	44.0	0.8*	1.2	1.5*
IX(a) Rhabdomyosarcoma	40.3	0.5	2.0	0.6	59.3	0.5	2.1	0.8
X Germ cell & trophoblastic tum. & neo. of gonads	19.2	1.1*	2.0	1.0	26.5	0.8*	1.5*	0.2
X(a) Intracranial and intraspinal germ-cell tum.	-	-	-	-	-	-	-	-
X(c) Malignant gonadal germ cell tumors	3.7	-	-	-	61.1	1.0*	1.4	1.1
XI Other malignant epithelial neo. and melanomas	20.1	0.9*	-1.0	0.7	58.1	1.0*	0.3	0.9
XI(b) Thyroid carcinoma	14.5	-	-	-	111.4	1.2*	0.2	1.4
XI(d) Malignant melanoma	-	-	-	-	92.0	1.5*	2.1	1.7

The APC is the Annual Percent Change over the time interval.

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

^b International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005; Vol 103, No. 7, pg 1457-1467.

^c Classifications are shown for invasive cases only except as noted. For ICCC groups and subgroups that include *in situ* behavior, only invasive cases are shown.

* The APC is significantly different from zero (p<.05)

[#] The APC for 1992-2008 is significantly different from the APC for 1975-1991 (p<.05).

[@] The APC for 1992-2008 is significantly different from the APC for 1975-1991 (p<.10).

- Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval. Neoplasms are abbreviated as neo. Tumors are abbreviated as tum.

Table 29.4

Age-Adjusted SEER Cancer Incidence Trends, 1975-2008^a
 By International Classification of Childhood Cancer (ICCC)^b Selected Group and Subgroup^c
 Excluding benign brain and myelodysplastic syndromes
 All Races, Males

ICCC Group and Subgroup	Ages 0-14				Ages 0-19			
	% Change 1975-2008	APC 1975-2008	APC 1975-1991	APC 1992-2008	% Change 1975-2008	APC 1975-2008	APC 1975-1991	APC 1992-2008
All ICCG Groups Combined	26.5	0.5*	1.3*	0.2 [#]	34.8	0.6*	1.3*	0.4 [#]
I Leukemia	28.9	0.7*	1.2*	0.6	27.4	0.7*	1.0*	0.9
I(a) Lymphoid leukemia	46.5	0.7*	1.7*	0.5	53.8	0.8*	1.8*	0.9
I(b) Acute myeloid leukemia	66.8	-	-	0.8	34.5	1.4*	-0.2	0.9
II Lymphomas and reticuloendothelial neo.	-1.6	-0.3	-0.3	1.0	6.8	-0.2	0.4	0.7
II(a) Hodgkin lymphoma	-9.8	-	-	-	-16.0	-0.9*	0.1	0.8
II(b,c,e) Non-Hodgkin lymphoma	-3.2	0.1	-0.2	0.4	28.3	0.6*	0.8	0.5
III CNS & misc intracranial & intraspinal neo.	50.3	0.8*	3.0*	-0.5 [#]	45.5	0.8*	2.6*	-0.5 [#]
III(a) Ependymomas and choroid plexus tumors	-	-	-	-	-	-	-	-
III(b) Astrocytoma	93.8	0.9*	3.7*	-0.7 [#]	56.2	0.6*	3.0*	-0.6 [#]
III(c) Intracranial and intraspinal embryonal tum.	-	-	-	-1.3	-	-	-	-1.1
III(d) Other gliomas	-15.6	-	-	-	-4.3	-	-	0.6
IV Neuroblastoma and other peripheral nervous cell tumors	10.7	0.3	0.1	-0.7	10.3	0.3	0.5	-0.8
IV(a) Neuroblastoma and ganglioneuroblastoma	6.9	0.4	0.0	-0.6	6.7	0.4	0.2	-0.5
V Retinoblastoma	-	-	-	-	-	-	-	-
VI Renal tumors	34.6	-0.1	1.9	-1.7 [#]	35.9	0.1	1.5	-1.4 [#]
VI(a) Nephroblastoma and other nonepithelial renal tumors	51.8	0.0	1.7	-1.6 [#]	51.8	-0.1	1.7	-1.6 [#]
VII Hepatic tumors	-	-	-	-	-	-	-	-
VII(a) Hepatoblastoma	-	-	-	-	-	-	-	-
VIII Malignant bone tumors	85.4	0.3	1.6	-0.6	62.1	0.4	1.9*	-1.1 [@]
VIII(a) Osteosarcoma	-	-	-	-	-	-	-	-0.8
VIII(c) Ewing tum. and related sarcomas of bone	-	-	-	-	19.2	-	-	-
IX Soft tissue and other extrasosseous sarcomas	33.8	0.7*	1.3	1.2	62.3	0.8*	1.4	1.4*
IX(a) Rhabdomyosarcoma	70.3	-	-	-	103.3	-	-	0.8
X Germ cell & trophoblastic tum. & neo. of gonads	16.0	-	-	-	79.8	1.3*	1.8	1.0
X(a) Intracranial and intraspinal germ-cell tum.	-	-	-	-	-	-	-	-
X(c) Malignant gonadal germ cell tum. (testis)	-	-	-	-	119.5	1.3*	1.2	1.9*
XI Other malignant epithelial neo. and melanomas	21.1	-	-	-	81.3	1.3*	0.6	1.8*
XI(b) Thyroid carcinoma	-	-	-	-	-	-	-	-
XI(d) Malignant melanoma	-	-	-	-	93.9	-	-	-

The APC is the Annual Percent Change over the time interval.

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

^b International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005: Vol 103, No. 7, pg 1457-1467.

^c Classifications are shown for invasive cases only except as noted. For ICCG groups and subgroups that include *in situ* behavior, only invasive cases are shown.

* The APC is significantly different from zero (p<.05)

[#] The APC for 1992-2008 is significantly different from the APC for 1975-1991 (p<.05).

[@] The APC for 1992-2008 is significantly different from the APC for 1975-1991 (p<.10).

- Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval. Neoplasms are abbreviated as neo. Tumors are abbreviated as tum.

Table 29.5

Age-Adjusted SEER Cancer Incidence Trends, 1975-2008^a
 By International Classification of Childhood Cancer (ICCC)^b Selected Group and Subgroup^c
 Excluding benign brain and myelodysplastic syndromes
 All Races, Females

ICCC Group and Subgroup	Ages 0-14				Ages 0-19			
	% Change 1975-2008	APC 1975-2008	APC 1975-1991	APC 1992-2008	% Change 1975-2008	APC 1975-2008	APC 1975-1991	APC 1992-2008
All ICCC Groups Combined	38.4	0.5*	1.0*	0.5	31.5	0.5*	0.9*	0.4
I Leukemia	66.7	0.5*	1.6*	0.8	55.4	0.7*	1.5*	0.9*
I(a) Lymphoid leukemia	62.9	0.6*	1.6*	0.7	56.9	0.7*	1.6*	1.0*
I(b) Acute myeloid leukemia	87.7	0.9	2.9*	2.0	59.0	0.9*	2.8*	0.7 [@]
II Lymphomas and reticuloendothelial neo.	20.8	0.3	-1.3	1.6 [#]	11.2	0.1	-0.1	0.1
II(a) Hodgkin lymphoma	8.9	-	-	-	-3.5	-0.8*	-0.4	-1.8
II(b,c,e) Non-Hodgkin lymphoma	31.4	-	-	-	39.7	1.9*	1.0	3.4* [@]
III CNS & misc intracranial & intraspinal neo.	47.6	0.8*	2.1*	0.3 [@]	47.1	0.7*	1.9*	0.3 [@]
III(a) Ependymomas and choroid plexus tumors	-	-	-	-	-	-	-	-
III(b) Astrocytoma	90.3	1.1*	3.4*	0.0 [#]	72.6	0.7*	3.0*	-0.3 [#]
III(c) Intracranial and intraspinal embryonal tum.	-	-	-	0.0	-	-	-	0.1
III(d) Other gliomas	-38.2	-	-	-	-20.9	-	-	-
IV Neuroblastoma and other peripheral nervous cell tumors	3.3	0.3	-0.8	0.5	3.3	0.2	-1.0	0.6
IV(a) Neuroblastoma and ganglioneuroblastoma	3.3	0.3	-1.0	0.5	3.3	0.2	-1.1	0.5
V Retinoblastoma	-	-	-	-	-	-	-	-
VI Renal tumors	88.4	-0.2	-0.1	-0.9	89.2	0.0	0.2	-0.9
VI(a) Nephroblastoma and other nonepithelial renal tumors	76.6	-0.4	-0.2	-1.3	82.4	-0.3	0.1	-1.1
VII Hepatic tumors	-	-	-	-	-	-	-	-
VII(a) Hepatoblastoma	-	-	-	-	-	-	-	-
VIII Malignant bone tumors	-2.7	-	2.3	-	8.1	-0.3	0.7	0.1
VIII(a) Osteosarcoma	-	-	-	-	2.3	-0.2	1.3	-0.4
VIII(c) Ewing tum. and related sarcomas of bone	-	-	-	-	-	-	-	-
IX Soft tissue and other extrasosseous sarcomas	12.7	0.6	1.7	1.2	23.1	0.8*	1.0	1.8
IX(a) Rhabdomyosarcoma	-	-	-	-	6.5	-	-	-
X Germ cell & trophoblastic tum. & neo. of gonads	22.6	-	-	0.9	-18.0	0.0	1.0	-0.9
X(a) Intracranial and intraspinal germ-cell tum.	-	-	-	-	-	-	-	-
X(c) Malignant gonadal germ cell tum. (ovary)	-	-	-	-	-4.5	-	-	-0.5
XI Other malignant epithelial neo. and melanomas	19.5	-	-	0.9	46.2	0.9*	0.2	0.5
XI(b) Thyroid carcinoma	-	-	-	-	116.6	1.3*	0.7	1.1
XI(d) Malignant melanoma	-	-	-	-	89.7	-	-	1.0

^a The APC is the Annual Percent Change over the time interval.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

^c International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005; Vol 103, No. 7, pg 1457-1467.

^d Classifications are shown for invasive cases only except as noted. For ICCC groups and subgroups that include *in situ* behavior, only invasive cases are shown.

* The APC is significantly different from zero (p<.05)

The APC for 1992-2008 is significantly different from the APC for 1975-1991 (p<.05).

@ The APC for 1992-2008 is significantly different from the APC for 1975-1991 (p<.10).

- Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval. Neoplasms are abbreviated as neo. Tumors are abbreviated as tum.

Table 29.6

5-Year Relative Survival (Percent), 2001-2007^aBy International Classification of Childhood Cancer (ICCC)^b Selected Group and Subgroup^c and Sex and Age
Excluding benign brain and myelodysplastic syndromes

ICCC Group & Subgroup	Ages 0-19 by Sex			Both Sexes by Age					
	Total	Male	Female	<1	1-4	5-9	10-14	15-19	0-14
All ICCC Groups Combined	80.5	79.2	82.2	75.3	82.0	81.3	79.5	80.8	80.4
I Leukemia	79.5	78.4	81.2	57.9	88.0	86.8	75.2	61.7	83.1
I(a) Lymphoid leukemia	84.9	83.2	87.4	53.7	91.7	90.7	79.6	65.5	87.8
I(b) Acute myeloid leukemia	59.8	59.1	60.9	56.4	65.7	65.6	63.8	50.1	63.5
II Lymphomas and reticuloendothelial neo.	89.3	89.2	89.4	76.0 ^d	91.4	92.5	88.1	89.1	89.5
II(a) Hodgkin lymphoma	95.5	96.2	94.7	-	95.9	96.1	95.1	95.6	95.4
II(b,c,e) Non-Hodgkin lymphoma	82.9	82.9	83.0	-	89.2	90.3	81.5	78.9	85.7
III CNS & misc intracranial & intraspinal neo.	71.5	70.3	72.9	49.1	71.1	70.7	76.6	74.4	70.8
III(a) Ependymomas and choroid plexus tumor	70.8	62.6	80.0	49.8 ^d	66.2	71.9 ^d	80.3 ^d	84.2 ^d	68.4
III(b) Astrocytoma	82.7	81.4	84.2	72.7	90.6	83.7	80.0	76.8	84.2
III(c) Intracranial and intraspinal embryonal tumors	60.8	61.6	59.5	22.7 ^d	54.9	73.9	71.2	62.3 ^d	60.6
III(d) Other gliomas	55.7	57.6	53.8	-	46.9	36.2	70.6	75.9	50.9
IV Neuroblastoma and other peripheral nervous cell tumors	74.3	73.4	75.2	91.8	68.1	50.6 ^d	65.4 ^d	79.5 ^d	74.2
IV(a) Neuroblastoma and ganglioneuroblastoma	74.1	73.5	74.7	92.0	68.5	49.9 ^d	59.9 ^d	-	74.2
V Retinoblastoma	97.5	96.3	98.8	100.0	95.2	-	-	-	97.5
VI Renal tumors	87.6	89.5	85.6	82.2	89.6	90.1	74.7 ^d	80.4 ^d	88.0
VI(a) Nephroblastoma and other nonepithelial renal tumor	88.3	90.4	86.1	82.2	89.7	89.4	-	-	88.4
VII Hepatic tumors	64.0	61.3	68.6	76.5	74.4	55.4 ^e	0.0	32.7 ^e	68.8
VII(a) Hepatoblastoma	73.5	66.7	86.5	77.9	73.6	-	-	-	73.8
VIII Malignant bone tumors	68.6	66.8	70.9	-	70.8 ^d	73.4	71.2	64.5	71.7
VIII(a) Osteosarcoma	68.5	66.0	71.7	-	-	69.1 ^d	71.2	66.0	70.4
VIII(c) Ewing tumor and related sarcomas of bone	63.2	61.9	65.3	-	78.7 ^d	75.6 ^d	66.5	52.1	70.8
IX Soft tissue and other extraosseous sarcomas	71.3	70.4	72.4	70.1	70.0	80.1	72.0	68.0	72.9
IX(a) Rhabdomyosarcoma	64.0	64.0	64.1	67.0 ^d	70.1	75.9	57.8	45.6	68.1
X Germ cell & trophoblastic tumors & neo. of gonads	90.6	90.4	91.0	86.1	88.0	87.8	92.2	91.3	89.5
X(a) Intracranial and intraspinal germ-cell tumor	85.1	88.2	75.4 ^d	-	-	87.0 ^d	89.2	85.2	85.1
X(c) Malignant gonadal germ cell tumor	95.1	93.8	97.7	100.0	90.2 ^d	94.9	97.2	94.6	96.0
XI Other malignant epithelial neo. and melanomas	92.0	86.9	94.6	-	94.8	95.8	91.6	91.9	92.3
XI(b) Thyroid carcinoma	98.8	96.4	99.3	-	-	100.0	98.7	98.7	98.9
XI(d) Malignant melanoma	95.7	93.4	97.5	-	95.7	96.7	94.6	96.1	94.6

^a SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008.

^b International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005: Vol 103, No. 7, pg 1457-1467.

^c Classifications are shown for invasive cases only. For ICCC groups and subgroups that include *in situ* behavior, only invasive cases are shown.

^d The standard error is between 5 and 10 percentage points.

^e The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.
Neoplasms are abbreviated as neo.

Table 29.7
U.S. Childhood Cancer Survivors at January 1, 2008
Number of People Previously Diagnosed with Cancer as Children (Ages 0-19 Years) in the United States and Alive January 1, 2008
By International Classification of Childhood Cancer (ICCC)^a Selected Group and Subgroup, Age Group, and Sex

Site	Sex	Complete Prevalence Counts by Age at Prevalence							All Ages		
		0-19	20-29	30-39	40-49	50-59	60+	All Ages	Diagnosed between 1975-2007	Diagnosed before 1975 Count	% ^b
All Sites	Both	108,674	86,684	59,026	52,916	31,051	14,143	352,494	277,123	75,371	21
	Male	58,583	45,136	28,547	23,218	13,499	7,741	176,724	142,911	33,813	19
	Female ^c	50,091	41,548	30,479	29,698	17,552	6,402	175,770	134,212	41,558	24
I Leukemia	Both	33,969	17,955	9,704	3,714	1,061	91	66,494	62,215	4,279	6
	Male	18,631	9,597	4,911	1,896	510	42	35,587	33,619	1,968	6
	Female	15,338	8,358	4,793	1,818	551	49	30,907	28,596	2,311	7
Acute lymphocytic leukemia ^d	Both	28,843	14,901	8,472	2,890	218	0	55,324	52,032	3,292	6
	Male	15,958	8,014	4,425	1,627	157	0	30,181	28,421	1,760	6
	Female	12,885	6,887	4,047	1,263	61	0	25,143	23,611	1,532	6
I(b) Acute myeloid leukemia	Both	3,698	1,937	986	492	164	0	7,277	6,798	479	7
	Male	1,868	959	391	256	88	0	3,562	3,312	250	7
	Female	1,830	978	595	236	76	0	3,715	3,486	229	6
II(a) Hodgkin lymphoma	Both	4,156	8,887	7,851	7,587	3,882	742	33,105	27,400	5,705	17
	Male	2,438	4,326	3,921	3,689	1,953	402	16,729	13,657	3,072	18
	Female	1,718	4,561	3,930	3,898	1,929	340	16,376	13,743	2,633	16
II(b,c,e) Non-Hodgkin lymphoma	Both	6,387	6,365	4,059	2,732	1,578	907	22,028	18,356	3,672	17
	Male	4,182	4,270	2,808	1,564	799	544	14,167	12,179	1,988	14
	Female	2,205	2,095	1,251	1,168	779	363	7,861	6,177	1,684	21
III CNS and misc intracranial & intraspinal neoplasms	Both	19,603	13,781	8,499	8,242	3,877	1,030	55,032	43,583	11,449	21
	Male	10,917	7,684	4,466	3,962	1,731	461	29,221	23,957	5,264	18
	Female	8,686	6,097	4,033	4,280	2,146	569	25,811	19,626	6,185	24
IV Neuroblastoma & other peripheral nervous cell tumor	Both	9,215	3,368	1,895	1,382	1,385	511	17,756	13,902	3,854	22
	Male	4,787	1,609	816	508	351	141	8,212	7,025	1,187	14
	Female	4,428	1,759	1,079	874	1,034	370	9,544	6,877	2,667	28
VI Renal tumors	Both	7,794	4,327	3,527	3,911	1,865	510	21,934	14,435	7,499	34
	Male	3,831	2,018	1,642	2,090	1,043	303	10,927	6,810	4,117	38
	Female	3,963	2,309	1,885	1,821	822	207	11,007	7,625	3,382	31
VIII Malignant bone tumors	Both	3,371	4,067	2,898	2,470	2,016	597	15,419	11,755	3,664	24
	Male	1,844	2,335	1,597	1,141	906	336	8,159	6,480	1,679	21
	Female	1,527	1,732	1,301	1,329	1,110	261	7,260	5,275	1,985	27
VIII(a) Osteosarcoma	Both	1,661	2,220	1,627	1,230	1,072	668	8,478	6,258	2,220	26
	Male	884	1,248	906	549	425	362	4,374	3,383	991	23
	Female	777	972	721	681	647	306	4,104	2,875	1,229	30
VIII(c) Ewing tumor & related sarcomas of bone	Both	1,266	1,263	835	572	362	63	4,361	3,743	618	14
	Male	709	734	389	283	160	18	2,293	2,046	247	11
	Female	557	529	446	289	202	45	2,068	1,697	371	18
IX Soft tissue & other extraosseous sarcomas	Both	7,120	6,259	4,034	4,789	3,828	3,859	29,889	19,404	10,485	35
	Male	3,819	3,439	2,056	2,219	1,752	2,155	15,440	10,263	5,177	34
	Female	3,301	2,820	1,978	2,570	2,076	1,704	14,449	9,141	5,308	37
X Germ cell & trophoblastic tumors & neoplasms of gonads	Both	4,775	7,246	5,528	6,538	6,093	5,787	35,967	21,455	14,512	40
	Male	2,549	4,614	3,272	3,387	3,053	2,584	19,459	12,706	6,753	35
	Female	2,226	2,632	2,256	3,151	3,040	3,203	16,508	8,749	7,759	47

^a International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005; Vol 103, No. 7, pg 1457-1467.

^b Percent diagnosed before 1975 of all ages complete prevalence counts.

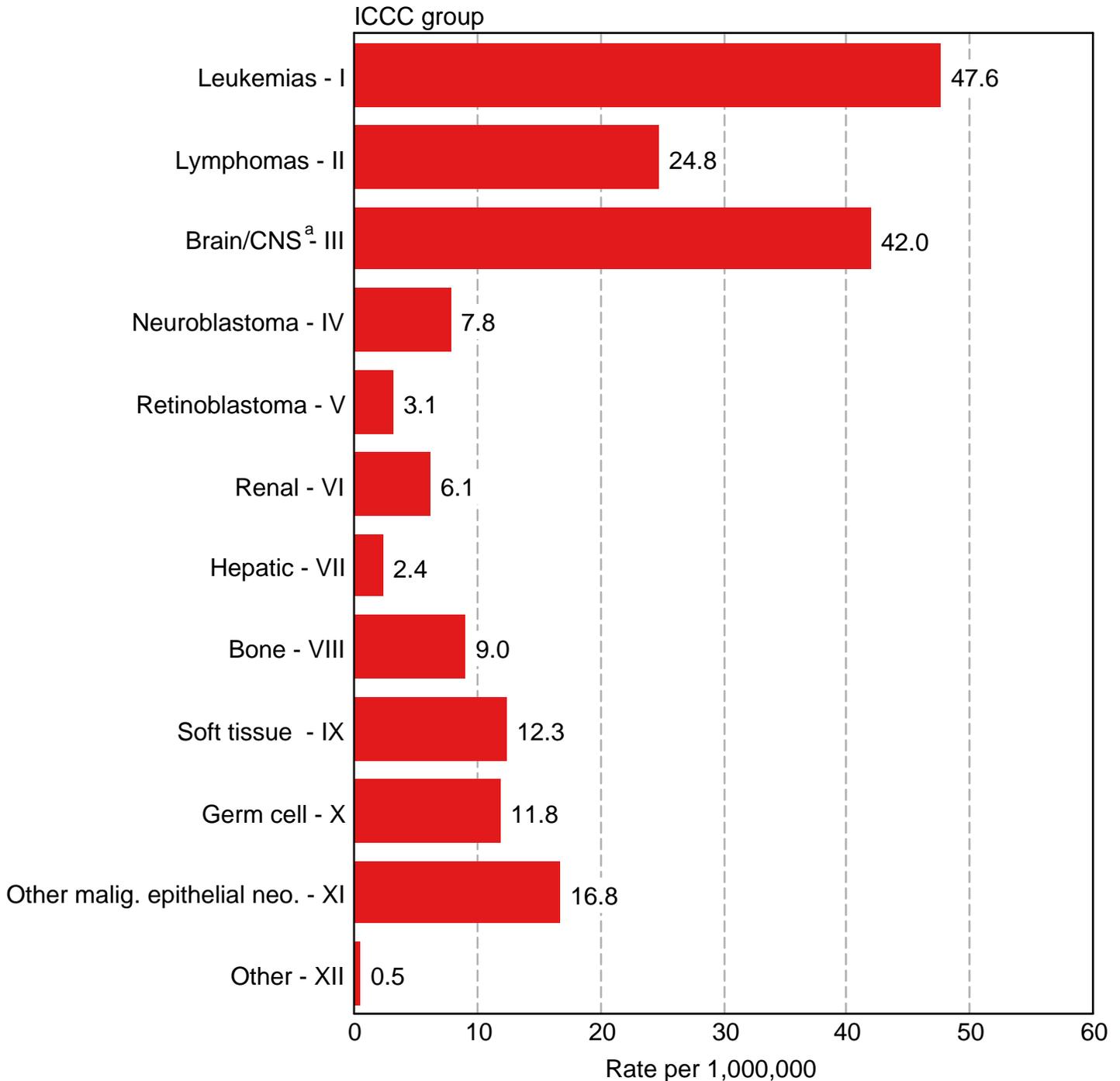
^c All sites females excludes breast cancer.

^d SEER site recode Acute Lymphocytic Leukemia was used instead of the ICCC classification lymphocytic leukemia (Ia) because of statistical modeling requirements.

For more information regarding the modeling of the prevalence estimates, see Mariotto et al. Long-Term Survivors of Childhood Cancers in the United States. Cancer Epidemiol Biomarkers Prev 2009, page 1034.

Figure 29.1

Childhood Cancer : SEER Incidence Rates 2004-2008 by ICCC Group (includes myelodysplastic syndromes and Group III benign brain) Under 20 Years of Age, Both Sexes, All Races



Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey).

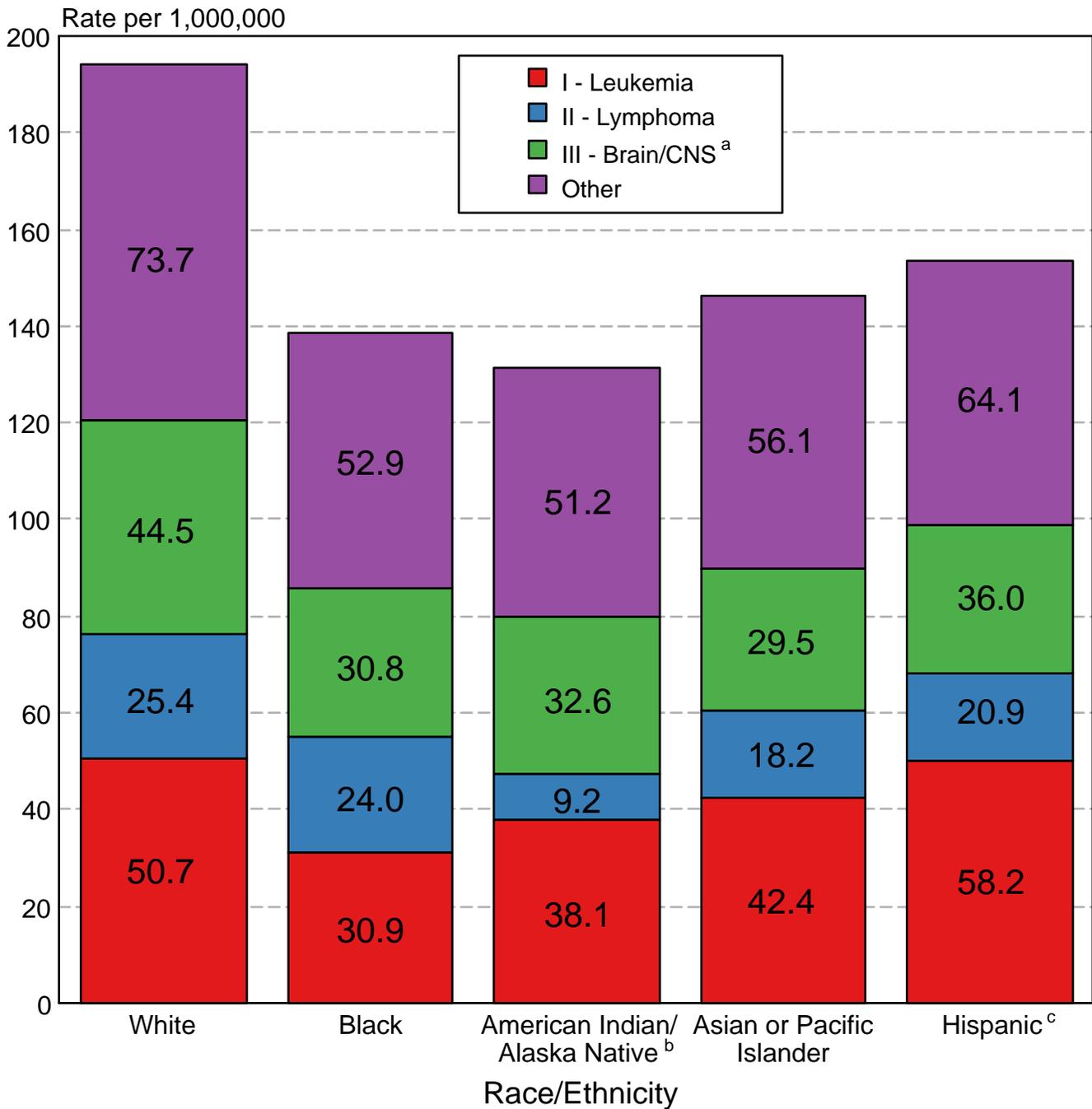
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005; Vol 103, No. 7, pg 1457-1467.

^a Rate for Group III (Brain/CNS) includes benign brain tumors.

Figure 29.2

Childhood Cancer: SEER Incidence Rates 2004-2008 by ICCC Group and Race/Ethnicity (includes myelodysplastic syndromes and Group III benign brain) Both Sexes, Under 20 Years of Age



Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey). Incidence rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130) and are not shown for fewer than 10 cases for the time period.

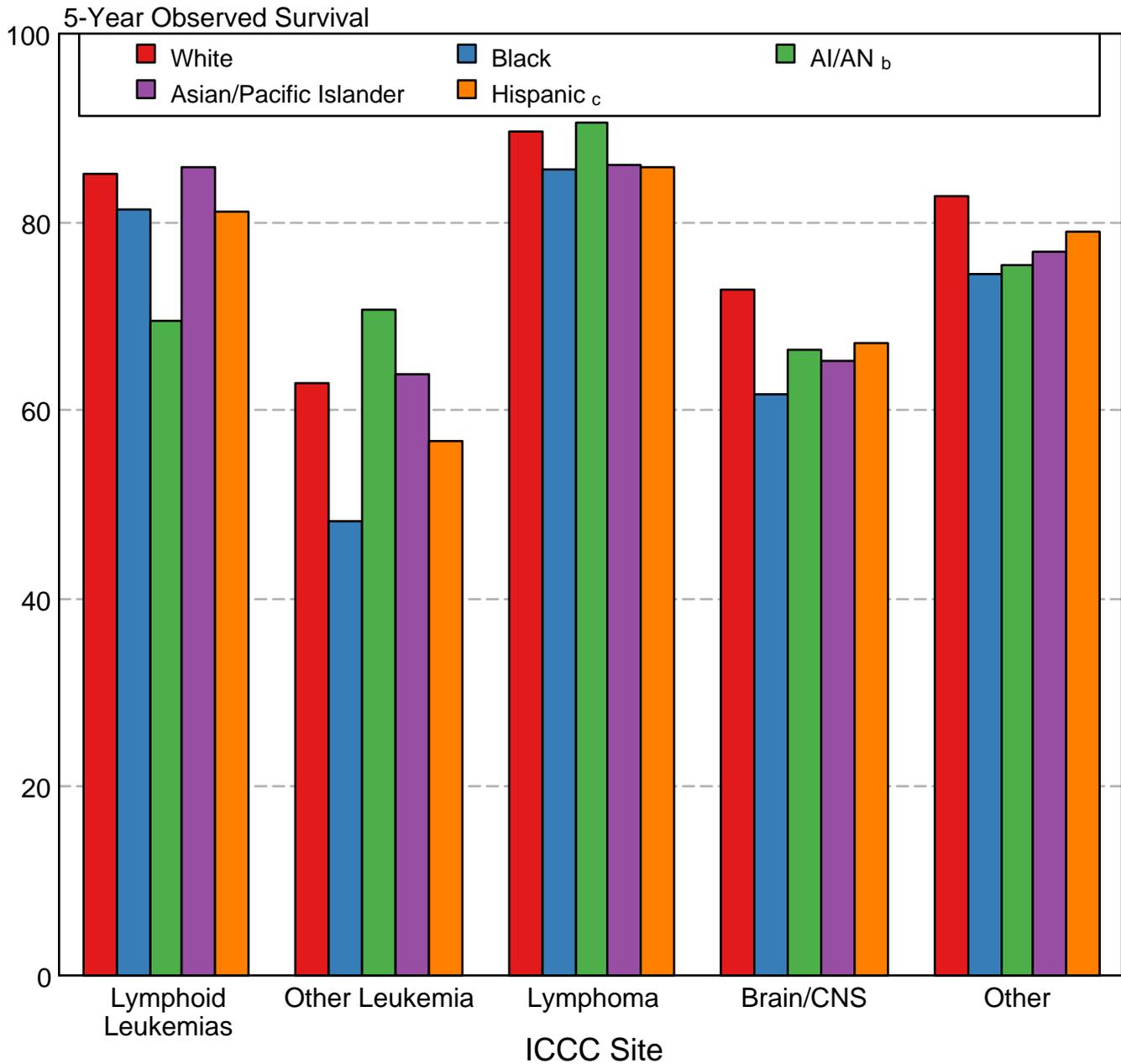
International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005; Vol 103, No. 7, pg 1457-1467.

^a Rate for Group III (Brain/CNS) includes benign brain tumors.

^b Incidence rates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Childhood Cancer 5-Year Observed Survival (%) by ICCC Group^a and Race/Ethnicity Both Sexes, Under 20 Years of Age, 2001-2007



Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey).

International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005; Vol 103, No. 7, pg 1457-1467.

^a Excludes myelodysplastic syndromes (MDS) and benign brain tumors.

^b American Indian/Alaska Native. Survival data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Survival data for Hispanics are based on NHIA and excludes cases from the Alaska Native Registry.