

Table 29.1

Age-Adjusted and Age-Specific SEER Cancer Incidence Rates, 2003-2007^a

By International Classification of Childhood Cancer (ICCC)^b Group and Subgroup^c and Age
Including Group III benign brain/CNS tumors (2004+) and myelodysplastic syndromes (2003-2007)
All Races, Males and Females

ICCC Group and Subgroup	0-14	0-19	<1	1-4	5-9	10-14	15-19
All ICCC Groups Combined							
Excluding benign brain (2003-2007)	152.7	167.9	238.6	208.2	114.4	132.6	213.2
Including Group III benign brain/CNS tumors (2004+)	165.8	183.2	253.8	218.0	126.4	148.6	235.1
I Leukemia (includes myelodysplastic syndromes)	52.0	47.4	53.9	92.3	41.0	32.1	33.4
I(a) Lymphoid leukemia	40.4	34.8	21.9	78.0	34.0	21.7	18.2
I(b) Acute myeloid leukemia	7.9	8.3	20.5	10.1	4.3	7.3	9.4
I(c) Chronic myeloproliferative diseases	1.2	1.8	3.4	-	0.8	1.5	3.5
I(d) Myelodysplastic syndrome and other myeloproliferative	1.4	1.4	4.9	2.1	1.0	0.7	1.3
I(e) Unspecified and other specified leukemias	1.2	1.1	3.2	1.5	0.8	1.0	1.0
II Lymphomas and reticuloendothelial neoplasms	15.8	23.8	7.4	8.4	14.0	24.7	47.8
II(a) Hodgkin lymphoma	6.0	11.8	-	0.8	4.8	12.1	29.0
II(b) Non-Hodgkin lymphoma (except Burkitt lymphoma)	6.1	8.5	-	3.5	5.4	9.7	15.5
II(c) Burkitt lymphoma	2.4	2.4	-	1.9	3.0	2.5	2.4
II(d) Miscellaneous lymphoreticular neoplasms	1.2	1.0	6.1	1.9	0.6	-	-
II(e) Unspecified lymphomas	-	0.2	-	-	-	-	0.6
III CNS and misc intracranial and intraspinal neoplasms (2004+ only)	41.0	41.4	42.6	46.6	40.4	37.1	42.6
III(a) Ependymomas and choroid plexus tumor	4.5	4.2	10.8	6.0	3.7	2.9	3.4
III(b) Astrocytoma	14.8	14.1	12.8	16.9	14.6	13.7	12.2
III(c) Intracranial and intraspinal embryonal tumors	7.2	6.1	9.9	12.1	6.9	3.4	2.8
III(d) Other gliomas	5.7	5.2	-	4.7	7.2	5.5	3.8
III(e) Other specified intracranial/intraspinal neoplasms	7.8	10.6	4.7	5.8	7.3	10.2	19.2
III(f) Unspecified intracranial and intraspinal neoplasms	1.1	1.1	-	1.1	-	1.4	1.2
IV Neuroblastoma and other peripheral nervous cell tumor	10.2	7.9	52.9	19.8	3.4	1.7	0.8
IV(a) Neuroblastoma and ganglioneuroblastoma	10.1	7.7	52.7	19.8	3.4	1.4	-
IV(b) Other peripheral nervous cell tumors	-	0.2	-	-	-	-	-
V Retinoblastoma	4.1	3.1	24.5	9.2	-	-	-
VI Renal tumors	7.4	5.9	12.4	17.6	4.9	1.2	1.5
VI(a) Nephroblastoma and other nonepithelial renal tumor	7.0	5.4	12.4	17.4	4.5	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.
- 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, 2003-2007^a

By International Classification of Childhood Cancer (ICCC)^b Group and Subgroup^c and Age
Including Group III benign brain/CNS tumors (2004+) and myelodysplastic syndromes (2003-2007)
All Races, Males and Females

ICCC Group and Subgroup	0-14	0-19	<1	1-4	5-9	10-14	15-19
VII Hepatic tumors	2.7	2.4	12.4	5.0	0.8	0.9	1.5
VII(a) Hepatoblastoma	2.2	1.6	11.9	4.8	-	-	-
VII(b) Hepatic carcinoma	0.5	0.7	-	-	-	0.8	1.5
VII(c) Unspecified malignant hepatic tumors	-	-	-	-	-	-	-
VIII Malignant bone tumors	6.7	8.6	-	1.7	5.4	12.8	14.4
VIII(a) Osteosarcoma	3.9	5.0	-	-	2.8	8.2	8.3
VIII(b) Chondrosarcoma	-	0.3	-	-	-	-	-
VIII(c) Ewing tumor and related sarcomas of bone	2.1	2.7	-	1.1	1.9	3.5	4.2
VIII(d) Other specified malignant bone tumors	0.3	0.5	-	-	-	-	1.1
VIII(e) Unspecified malignant bone tumors	-	0.2	-	-	-	-	-
IX Soft tissue and other extraosseous sarcomas	10.7	12.2	19.2	9.9	7.5	12.7	16.7
IX(a) Rhabdomyosarcoma	5.3	4.8	6.3	7.3	4.3	4.5	3.4
IX(b) Fibrosarcoma, peripheral nerve & other fibrous	1.2	1.4	5.8	-	0.7	1.3	1.9
IX(c) Kaposi sarcoma	-	-	-	-	-	-	-
IX(d) Other specified soft tissue sarcomas	3.4	4.9	5.8	1.6	2.1	5.7	9.4
IX(e) Unspecified soft-tissue sarcomas	0.7	1.0	-	-	-	1.2	2.0
X Germ cell & trophoblastic tumors & neoplasms of gonads	5.7	11.6	19.1	3.3	2.2	8.6	28.9
X(a) Intracranial and intraspinal germ-cell tumors	1.5	1.8	-	-	0.8	3.2	2.8
X(b) Extracranial & extragonadal germ cell tumors	1.5	1.5	13.5	1.6	-	-	1.7
X(c) Malignant gonadal germ cell tumors	2.5	7.5	3.6	1.6	1.2	4.4	22.2
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	6.4	16.5	-	1.6	4.0	13.4	46.6
XI(a) Adrenocortical carcinoma	-	-	-	-	-	-	-
XI(b) Thyroid carcinoma	2.2	6.4	-	-	1.3	5.0	18.8
XI(c) Nasopharyngeal carcinoma	0.3	0.5	-	-	-	0.7	1.4
XI(d) Malignant melanoma	2.3	5.8	-	0.8	1.9	4.2	16.1
XI(e) Skin carcinoma	-	-	-	-	-	-	-
XI(f) Other and unspecified carcinomas	1.4	3.6	-	-	0.7	3.3	10.0
XII Other and unspecified malignant neoplasms	0.4	0.5	-	-	-	-	0.8
XII(a) Other specified malignant tumors	0.2	0.3	-	-	-	-	-
XII(b) Other unspecified malignant tumors	-	0.2	-	-	-	-	-
Not classified by ICC	0.4	0.6	-	-	-	-	1.3

^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, 1975-2007, 1975-1983, 1984-1991, 1992-1999, 2000-2007^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>1975-2007</u>	<u>1975-1983</u>	<u>1984-1991</u>	<u>1992-1999</u>	<u>2000-2007</u>
All ICCC Groups Combined	156.0	142.3	157.8	158.6	165.8
I Leukemia	38.4	34.3	38.9	38.3	41.8
I(a) Lymphoid leukemia	28.7	25.1	29.4	28.8	31.3
I(b) Acute myeloid leukemia	7.0	5.9	6.6	7.4	7.9
II Lymphomas and reticuloendothelial neoplasms	24.2	24.5	25.0	23.6	23.8
II(a) Hodgkin lymphoma	13.1	14.3	14.2	12.6	11.2
II(b,c,e) Non-Hodgkin lymphoma	10.5	9.4	10.2	10.4	12.2
III CNS & misc intracranial & intraspinal neoplasms	27.5	23.0	28.9	28.6	29.7
III(a) Ependymomas and choroid plexus tumor	2.3	1.8	2.5	2.4	2.5
III(b) Astrocytoma	13.8	11.4	15.2	14.2	14.6
III(c) Intracranial and intraspinal embryonal tumors	5.5	4.4	5.2	6.4	6.1
III(d) Other gliomas	5.0	4.5	5.0	4.9	5.8
IV Neuroblastoma and other peripheral nervous cell tumors	8.4	7.9	8.3	8.5	8.9
IV(a) Neuroblastoma and ganglioneuroblastoma	8.2	7.7	8.0	8.3	8.7
V Retinoblastoma	3.0	2.8	3.1	3.4	3.0
VI Renal tumors	6.6	6.6	6.6	6.9	6.3
VI(a) Nephroblastoma and other nonepithelial renal tumor	6.1	6.3	6.2	6.4	5.5
VII Hepatic tumors	1.8	1.2	1.7	2.0	2.3
VII(a) Hepatoblastoma	1.3	0.8	1.2	1.4	1.6
VIII Malignant bone tumors	8.5	8.1	9.0	8.8	8.1
VIII(a) Osteosarcoma	4.6	4.2	5.0	4.9	4.5
VIII(c) Ewing tumor and related sarcomas of bone	2.9	2.9	3.1	2.9	2.7
IX Soft tissue and other extraosseous sarcomas	11.4	10.4	11.3	11.1	12.8
IX(a) Rhabdomyosarcoma	4.5	4.0	4.9	4.4	4.8
X Germ cell & trophoblastic tumors & neoplasms of gonads	10.4	9.3	10.0	10.8	11.3
X(a) Intracranial and intraspinal germ-cell tumor	1.4	0.9	1.2	1.9	1.7
X(c) Malignant gonadal germ cell tumor	6.6	5.9	6.4	6.7	7.5
XI Other malignant epithelial neoplasms and melanomas	15.1	13.4	14.2	15.8	17.3
XI(b) Thyroid carcinoma	5.5	4.9	5.0	5.7	6.3
XI(d) Malignant melanoma	5.1	4.0	5.0	5.1	6.4

^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, 1975-2007, 1975-1991, 1992-2007^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 1975-2007	APC 1975-2007	APC 1975-1991	APC 1992-2007	% Change 1975-2007	APC 1975-2007	APC 1975-1991	APC 1992-2007
All ICCG Groups Combined	24.2	0.6*	1.2*	0.4 [#]	28.8	0.6*	1.1*	0.3 [#]
I Leukemia	26.7	0.6*	1.4*	0.8	33.0	0.7*	1.3*	1.1*
I(a) Lymphoid leukemia	53.1	0.7*	1.7*	0.8	61.8	0.8*	1.7*	1.2*
I(b) Acute myeloid leukemia	-15.7	1.1*	2.0	0.9	-3.7	1.2*	1.2	0.7
II Lymphomas and reticuloendothelial neo.	-8.2	-0.2	-0.5	0.9 [#]	3.5	-0.2	0.2	0.0
II(a) Hodgkin lymphoma	-8.2	-1.0*	-0.6	0.6	-7.3	-0.9*	-0.1	-1.0
II(b,c,e) Non-Hodgkin lymphoma	-4.4	0.5	-0.1	1.2	23.2	0.9*	0.9*	1.3*
III CNS & misc intracranial & intraspinal neo.	46.9	0.9*	2.6*	-0.1 [#]	44.3	0.8*	2.2*	-0.2 [#]
III(a) Ependymomas and choroid plexus tumors	-	-	-	-0.3	-	-	-	0.1
III(b) Astrocytoma	47.6	1.0*	3.5*	-0.7 [#]	43.7	0.7*	3.0*	-0.7 [#]
III(c) Intracranial and intraspinal embryonal tum.	167.0	1.2*	1.5	-0.4	191.8	1.3*	1.5	-0.3
III(d) Other gliomas	-16.7	0.5	0.7	1.5	-13.5	0.7*	0.8	1.0
IV Neuroblastoma and other peripheral nervous cell tumors	7.0	0.4	-0.2	0.0	10.1	0.4	-0.1	0.0
IV(a) Neuroblastoma and ganglioneuroblastoma	5.3	0.4	-0.4	0.1	8.4	0.4	-0.3	0.1
V Retinoblastoma	-10.3	0.3	0.9	-1.4 [@]	-10.3	0.3	1.0	-1.5 [@]
VI Renal tumors	3.8	-0.2	0.8	-2.1 [#]	8.6	-0.1	0.9	-1.8 [#]
VI(a) Nephroblastoma and other nonepithelial renal tumors	4.3	-0.3	0.7	-2.2* [#]	4.3	-0.3	0.9	-2.1* [#]
VII Hepatic tumors	-	-	-	-	-	-	-	-
VII(a) Hepatoblastoma	-	-	-	-	-	-	-	-
VIII Malignant bone tumors	28.5	-0.2	1.8*	-0.8 [#]	13.8	0.0	1.3	-1.0 [#]
VIII(a) Osteosarcoma	-	-	-	-0.9	54.4	0.4	2.5*	-1.1 [#]
VIII(c) Ewing tum. and related sarcomas of bone	-	-	-	-	-13.0	-0.6	0.5	-1.6
IX Soft tissue and other extraosseous sarcomas	63.6	0.8*	1.5	1.6*	73.4	0.8*	1.2	1.9*
IX(a) Rhabdomyosarcoma	59.8	0.5	2.0	0.6	60.8	0.5	2.1	0.8
X Germ cell & trophoblastic tum. & neo. of gonads	32.5	1.3*	2.0	1.4	22.7	0.8*	1.5*	0.2
X(a) Intracranial and intraspinal germ-cell tum.	-	-	-	-	-	-	-	-
X(c) Malignant gonadal germ cell tumors	25.8	-	-	-	77.0	1.0*	1.4	1.1
XI Other malignant epithelial neo. and melanomas	-2.2	0.9*	-1.0	0.8	40.5	1.0*	0.3	0.8
XI(b) Thyroid carcinoma	12.7	-	-	-	91.2	1.0*	0.2	0.9
XI(d) Malignant melanoma	-	-	-	-	73.8	1.6*	2.1	1.9

^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.

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^d 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 1992-2007 is significantly different from the APC for 1975-1991 (p<.05).

[@] The APC for 1992-2007 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, 1975-2007, 1975-1991, 1992-2007^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 1975-2007	APC 1975-2007	APC 1975-1991	APC 1992-2007	% Change 1975-2007	APC 1975-2007	APC 1975-1991	APC 1992-2007
All ICCG Groups Combined	19.5	0.6*	1.3*	0.2 [#]	25.5	0.6*	1.3*	0.3 [#]
I Leukemia	14.3	0.7*	1.2*	0.7	17.0	0.7*	1.0*	1.0
I(a) Lymphoid leukemia	39.4	0.8*	1.7*	0.6	47.6	0.8*	1.8*	1.0
I(b) Acute myeloid leukemia	-18.9	-	-	0.3	-19.6	1.3*	-0.2	0.8
II Lymphomas and reticuloendothelial neo.	-9.4	-0.5	-0.2	0.5	-4.8	-0.3	0.4	0.2
II(a) Hodgkin lymphoma	3.3	-	-	-	-14.4	-1.0*	0.1	0.5
II(b,c,e) Non-Hodgkin lymphoma	-15.1	-0.1	-0.1	-0.1	7.6	0.5	0.8	0.1
III CNS & misc intracranial & intraspinal neo.	60.6	1.0*	2.9*	-0.3 [#]	50.8	0.9*	2.5*	-0.4 [#]
III(a) Ependymomas and choroid plexus tumors	-	-	-	-	-	-	-	-
III(b) Astrocytoma	50.7	0.8*	3.7*	-1.1 [#]	42.3	0.6*	3.0*	-0.8 [#]
III(c) Intracranial and intraspinal embryonal tum.	-	-	-	-0.3	-	-	-	-0.4
III(d) Other gliomas	-26.4	-	-	-	-28.2	-	-	0.8
IV Neuroblastoma and other peripheral nervous cell tumors	46.4	0.4	0.1	-0.5	41.4	0.4	0.5	-0.6
IV(a) Neuroblastoma and ganglioneuroblastoma	46.4	0.5	0.0	-0.3	41.4	0.5	0.2	-0.3
V Retinoblastoma	-	-	-	-	-	-	-	-
VI Renal tumors	2.4	-0.1	1.9	-2.3** [#]	-2.6	0.0	1.5	-2.0** [#]
VI(a) Nephroblastoma and other nonepithelial renal tumors	15.4	-0.1	1.7	-2.2** [#]	15.4	-0.2	1.7	-2.3** [#]
VII Hepatic tumors	-	-	-	-	-	-	-	-
VII(a) Hepatoblastoma	-	-	-	-	-	-	-	-
VIII Malignant bone tumors	16.0	0.0	1.6	-2.1 [@]	27.4	0.2	1.9*	-2.0 [#]
VIII(a) Osteosarcoma	-	-	-	-	-	-	-	-1.5
VIII(c) Ewing tum. and related sarcomas of bone	-	-	-	-	-28.5	-	-	-
IX Soft tissue and other extraosseous sarcomas	52.4	0.7*	1.3	1.4	55.9	0.8*	1.4	1.5*
IX(a) Rhabdomyosarcoma	39.5	-	-	-	48.2	-	-	0.1
X Germ cell & trophoblastic tum. & neo. of gonads	27.0	-	-	-	97.0	1.4*	1.8	1.0
X(a) Intracranial and intraspinal germ-cell tum.	-	-	-	-	-	-	-	-
X(c) Malignant gonadal germ cell tum. (testis)	-	-	-	-	159.8	1.3*	1.3	1.9
XI Other malignant epithelial neo. and melanomas	-	-	-	-	22.1	1.1*	0.6	1.2
XI(b) Thyroid carcinoma	-	-	-	-	-	-	-	-
XI(d) Malignant melanoma	-	-	-	-	5.0	-	-	-

^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.

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^d 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 1992-2007 is significantly different from the APC for 1975-1991 (p<.05).

[@] The APC for 1992-2007 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, 1975-2007, 1975-1991, 1992-2007^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 1975-2007	APC 1975-2007	APC 1975-1991	APC 1992-2007	% Change 1975-2007	APC 1975-2007	APC 1975-1991	APC 1992-2007
All ICCG Groups Combined	30.0	0.5*	1.0*	0.5	32.5	0.5*	0.8*	0.4
I Leukemia	46.5	0.6*	1.7*	1.0	58.1	0.7*	1.5*	1.1*
I(a) Lymphoid leukemia	73.3	0.7*	1.7*	0.9	82.4	0.8*	1.6*	1.4*
I(b) Acute myeloid leukemia	-11.6	0.8	2.9*	1.7	17.4	0.9*	2.8*	0.6 [@]
II Lymphomas and reticuloendothelial neo.	-6.2	0.2	-1.3	1.4 [@]	15.9	0.0	-0.1	-0.2
II(a) Hodgkin lymphoma	-23.7	-	-	-	1.5	-0.9*	-0.4	-2.4*
II(b,c,e) Non-Hodgkin lymphoma	25.7	-	-	-	55.8	1.9*	1.0	3.7* [@]
III CNS & misc intracranial & intraspinal neo.	34.2	0.8*	2.1*	0.0 [@]	37.1	0.7*	1.9*	0.0 [@]
III(a) Ependymomas and choroid plexus tumors	-	-	-	-	-	-	-	-
III(b) Astrocytoma	44.7	1.1*	3.4*	-0.3 [#]	44.9	0.7	3.0*	-0.6 [#]
III(c) Intracranial and intraspinal embryonal tum.	-	-	-	-0.6	-	-	-	-0.3
III(d) Other gliomas	-7.7	-	-	-	1.8	-	-	-
IV Neuroblastoma and other peripheral nervous cell tumors	-26.7	0.3	-0.8	0.5	-17.6	0.3	-0.9	0.6
IV(a) Neuroblastoma and ganglioneuroblastoma	-29.9	0.3	-1.0	0.5	-20.8	0.2	-1.1	0.5
V Retinoblastoma	-	-	-	-	-	-	-	-
VI Renal tumors	5.4	-0.4	-0.1	-2.1	21.9	-0.2	0.2	-1.8
VI(a) Nephroblastoma and other nonepithelial renal tumors	-7.0	-0.6	-0.2	-2.4	-7.0	-0.5	0.1	-2.2
VII Hepatic tumors	-	-	-	-	-	-	-	-
VII(a) Hepatoblastoma	-	-	-	-	-	-	-	-
VIII Malignant bone tumors	46.2	-	2.3	-	-3.3	-0.3	0.7	0.2
VIII(a) Osteosarcoma	-	-	-	-	-18.9	-0.1	1.3	-0.3
VIII(c) Ewing tum. and related sarcomas of bone	-	-	-	-	-	-	-	-
IX Soft tissue and other extraosseous sarcomas	75.9	0.8*	1.6	1.7	93.0	0.9*	1.0	2.6*
IX(a) Rhabdomyosarcoma	-	-	-	-	75.4	-	-	-
X Germ cell & trophoblastic tum. & neo. of gonads	38.4	-	-	1.5	-39.3	0.1	1.0	-0.9
X(a) Intracranial and intraspinal germ-cell tum.	-	-	-	-	-	-	-	-
X(c) Malignant gonadal germ cell tum. (ovary)	-	-	-	-	-15.6	-	-	-0.5
XI Other malignant epithelial neo. and melanomas	25.6	-	-	1.2	51.4	0.9*	0.2	0.5
XI(b) Thyroid carcinoma	-	-	-	-	107.6	1.1*	0.7	0.6
XI(d) Malignant melanoma	-	-	-	-	150.2	-	-	1.6

^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 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 1992-2007 is significantly different from the APC for 1975-1991 (p<.05).

@ The APC for 1992-2007 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), 1999-2006^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	79.8	78.4	81.4	74.8	82.1	79.3	79.4	79.7	79.9
I Leukemia	78.4	77.3	80.0	58.7	87.8	84.7	74.2	58.2	82.3
I(a) Lymphoid leukemia	84.0	82.8	85.7	55.7	91.7	88.3	78.8	62.1	87.1
I(b) Acute myeloid leukemia	58.0	56.1	60.2	54.8	64.0	63.1	62.9	47.3	62.0
II Lymphomas and reticuloendothelial neo.	88.4	88.2	88.6	72.2 ^d	86.5	91.3	88.3	88.4	88.4
II(a) Hodgkin lymphoma	95.1	96.1	93.9	-	96.3	93.8	94.9	95.2	94.7
II(b,c,e) Non-Hodgkin lymphoma	81.7	81.7	81.9	-	84.2	89.7	81.9	77.2	84.8
III CNS & misc intracranial & intraspinal neo.	71.6	70.5	72.8	49.4	72.1	69.5	78.3	72.2	71.4
III(a) Ependymomas and choroid plexus tumor	71.0	66.4	76.7	50.7 ^e	63.3	71.7 ^d	80.0 ^d	89.5	67.7
III(b) Astrocytoma	82.8	81.5	84.2	69.9 ^d	92.3	82.8	81.9	73.9	84.8
III(c) Intracranial and intraspinal embryonal tumors	61.8	62.3	61.0	25.0 ^d	55.3	74.0	74.1	58.4	62.3
III(d) Other gliomas	54.9	56.2	53.5	-	45.3	35.9	72.0	75.9	49.8
IV Neuroblastoma and other peripheral nervous cell tumors	72.6	69.9	75.3	90.1	66.8	51.2 ^d	63.7 ^d	66.8 ^e	72.6
IV(a) Neuroblastoma and ganglioneuroblastoma	72.5	70.1	75.0	90.3	67.1	51.1 ^d	59.7 ^d	-	72.8
V Retinoblastoma	97.6	97.5	97.7	100.0	95.7	-	-	-	97.6
VI Renal tumors	87.7	89.3	86.1	82.4	90.9	87.8	71.2 ^d	77.8 ^d	88.2
VI(a) Nephroblastoma and other nonepithelial renal tumor	88.7	90.8	86.6	82.4	91.0	87.0	-	-	88.7
VII Hepatic tumors	62.0	60.9	63.7	74.7	74.3	44.2 ^e	20.2 ^e	33.7 ^d	66.4
VII(a) Hepatoblastoma	71.3	67.8	76.8	75.8	73.8	-	-	-	71.5
VIII Malignant bone tumors	68.5	67.0	70.6	-	63.2 ^d	74.3	70.1	65.3	70.9
VIII(a) Osteosarcoma	68.1	65.0	71.8	-	-	71.6	70.2	65.0	70.3
VIII(c) Ewing tumor and related sarcomas of bone	63.2	63.7	62.1	-	69.2 ^d	74.3 ^d	64.8	55.0	68.2
IX Soft tissue and other extraosseous sarcomas	70.7	69.9	71.6	65.8	72.6	74.7	72.7	67.6	72.3
IX(a) Rhabdomyosarcoma	62.1	63.3	60.4	58.4 ^d	71.5	69.4	55.2	45.4	65.9
X Germ cell & trophoblastic tumors & neo. of gonads	89.6	89.1	90.3	84.7	89.0	87.4	92.1	89.7	89.2
X(a) Intracranial and intraspinal germ-cell tumor	84.0	86.1	77.6 ^d	-	-	88.8 ^d	88.3	82.6	84.8
X(c) Malignant gonadal germ cell tumor	94.6	93.1	97.4	100.0	90.3 ^d	93.3	97.9	93.9	96.2
XI Other malignant epithelial neo. and melanomas	91.3	86.6	93.7	-	95.1	90.9	90.5	91.4	90.8
XI(b) Thyroid carcinoma	98.8	95.7	99.5	-	-	100.0	98.0	98.9	98.4
XI(d) Malignant melanoma	94.7	93.5	95.7	-	96.2	94.8	93.0	95.2	93.5

^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). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2006. The remaining 13 SEER Areas contribute cases for the entire period 1999-2006. Based on follow-up of patients into 2007.

^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, 2007
Number of People Previously Diagnosed with Cancer as Children (Ages 0-19 Years) in the United States and Alive January 1, 2007
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 1975-2006	Diagnosed before 1975	% ^b
									Count	Count	% ^b
All Sites	Both	106,727	87,033	58,533	51,221	28,175	12,258	343,947	269,267	74,680	22
	Male	57,801	44,616	28,369	22,188	12,365	6,824	172,163	138,567	33,596	20
	Female ^c	48,926	42,417	30,164	29,033	15,810	5,434	171,784	130,700	41,084	24
I Leukemia	Both	33,113	17,870	9,164	3,369	867	61	64,444	60,174	4,270	7
	Male	18,119	9,553	4,614	1,725	400	28	34,439	32,468	1,971	6
	Female	14,994	8,317	4,550	1,644	467	33	30,005	27,706	2,299	8
Acute lymphocytic leukemia ^d	Both	28,060	14,859	8,018	2,420	119	0	53,476	50,221	3,255	6
	Male	15,511	7,954	4,262	1,320	80	0	29,127	27,390	1,737	6
	Female	12,549	6,905	3,756	1,100	39	0	24,349	22,831	1,518	6
I(b) Acute myeloid leukemia	Both	3,689	1,883	995	462	117	0	7,146	6,677	469	7
	Male	1,864	955	399	259	56	0	3,533	3,291	242	7
	Female	1,825	928	596	203	61	0	3,613	3,386	227	6
II(a) Hodgkin lymphoma	Both	3,882	9,149	7,899	7,342	3,560	566	32,398	26,669	5,729	18
	Male	2,373	4,327	4,005	3,515	1,819	305	16,344	13,261	3,083	19
	Female	1,509	4,822	3,894	3,827	1,741	261	16,054	13,408	2,646	16
II(b) Non-Hodgkin lymphoma (except Burkitt lymphoma)	Both	6,010	6,179	3,457	2,341	1,408	760	20,155	16,703	3,452	17
	Male	4,045	4,112	2,407	1,361	713	464	13,102	11,226	1,876	14
	Female	1,965	2,067	1,050	980	695	296	7,053	5,477	1,576	22
III CNS and misc intracranial & intraspinial neoplasms	Both	19,496	13,338	9,023	7,857	3,428	837	53,979	42,532	11,447	21
	Male	10,921	7,426	4,790	3,656	1,557	366	28,716	23,430	5,286	18
	Female	8,575	5,912	4,233	4,201	1,871	471	25,263	19,102	6,161	24
IV Neuroblastoma & other peripheral nervous cell tumor	Both	9,176	3,352	1,725	1,414	1,197	451	17,315	13,547	3,768	22
	Male	4,685	1,576	702	528	352	128	7,971	6,744	1,227	15
	Female	4,491	1,776	1,023	886	845	323	9,344	6,803	2,541	27
VI Renal tumors	Both	7,823	4,531	3,333	3,707	1,636	397	21,427	14,221	7,206	34
	Male	3,803	2,027	1,600	1,987	937	236	10,590	6,637	3,953	37
	Female	4,020	2,504	1,733	1,720	699	161	10,837	7,584	3,253	30
VIII Malignant bone tumors	Both	3,329	4,164	2,754	2,497	1,852	486	15,082	11,447	3,635	24
	Male	1,751	2,392	1,483	1,119	856	291	7,892	6,213	1,679	21
	Female	1,578	1,772	1,271	1,378	996	195	7,190	5,234	1,956	27
VIII(a) Osteosarcoma	Both	1,612	2,261	1,554	1,179	1,081	629	8,316	6,054	2,262	27
	Male	753	1,314	852	499	460	370	4,248	3,194	1,054	25
	Female	859	947	702	680	621	259	4,068	2,860	1,208	30
VIII(c) Ewing tumor & related sarcomas of bone	Both	1,258	1,285	819	518	389	38	4,307	3,654	653	15
	Male	734	706	362	269	130	11	2,212	1,972	240	11
	Female	524	579	457	249	259	27	2,095	1,682	413	20
IX Soft tissue & other extraosseous sarcomas	Both	6,956	6,195	4,023	4,738	3,579	3,590	29,081	18,706	10,375	36
	Male	3,842	3,360	1,984	2,179	1,627	2,041	15,033	9,945	5,088	34
	Female	3,114	2,835	2,039	2,559	1,952	1,549	14,048	8,761	5,287	38
X Germ cell & trophoblastic tumors & neoplasms of gonads	Both	4,733	7,196	5,795	6,423	5,746	5,401	35,294	20,932	14,362	41
	Male	2,493	4,497	3,361	3,305	2,892	2,366	18,914	12,183	6,731	36
	Female	2,240	2,699	2,434	3,118	2,854	3,035	16,380	8,749	7,631	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.

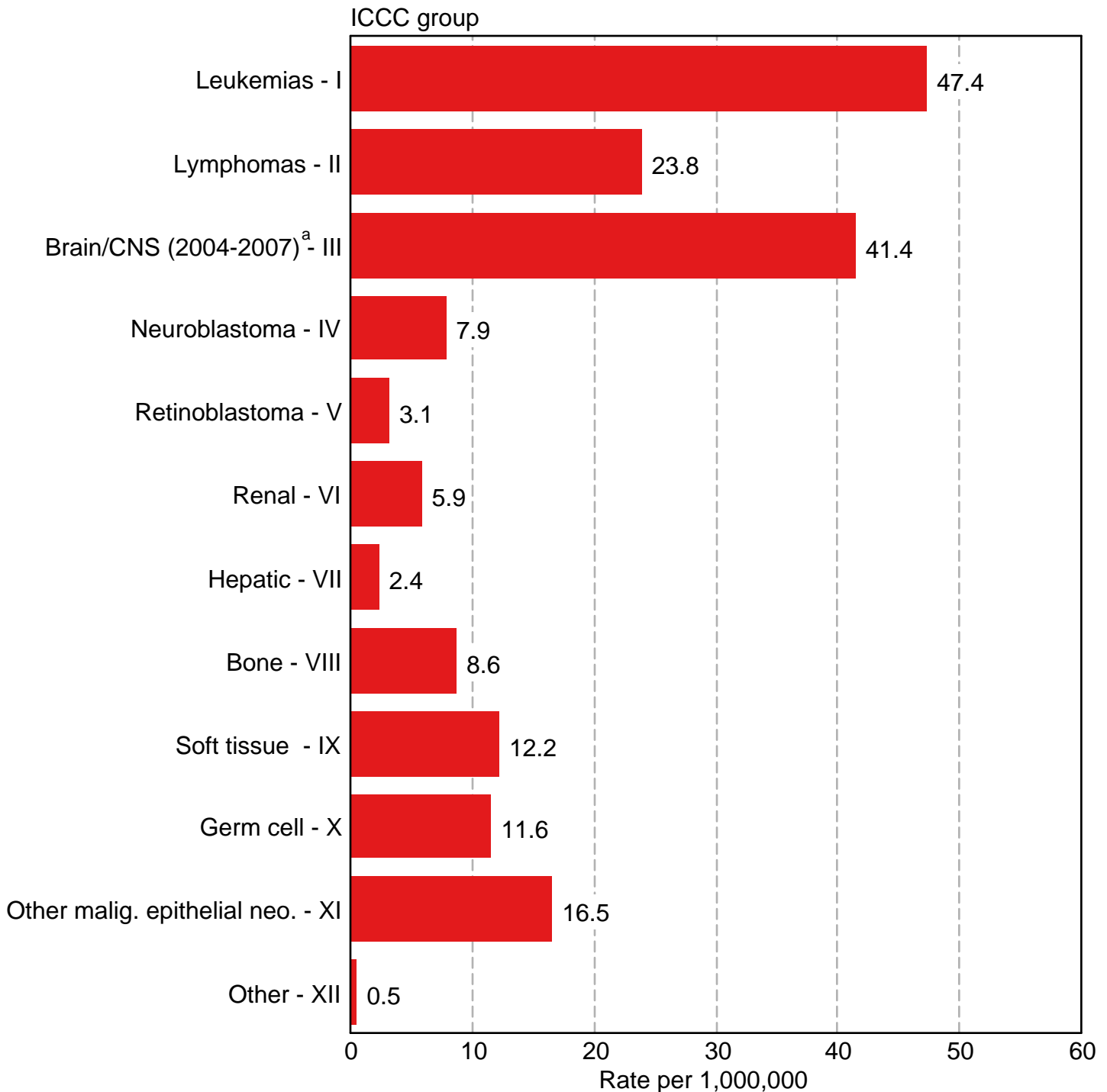
^c All sites females excludes breast cancer.

^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 2003-2007 by ICCC Group (includes Group III benign brain (2004-2007) and myelodysplastic syndromes) Under 20 Years of Age, Both Sexes, All Races



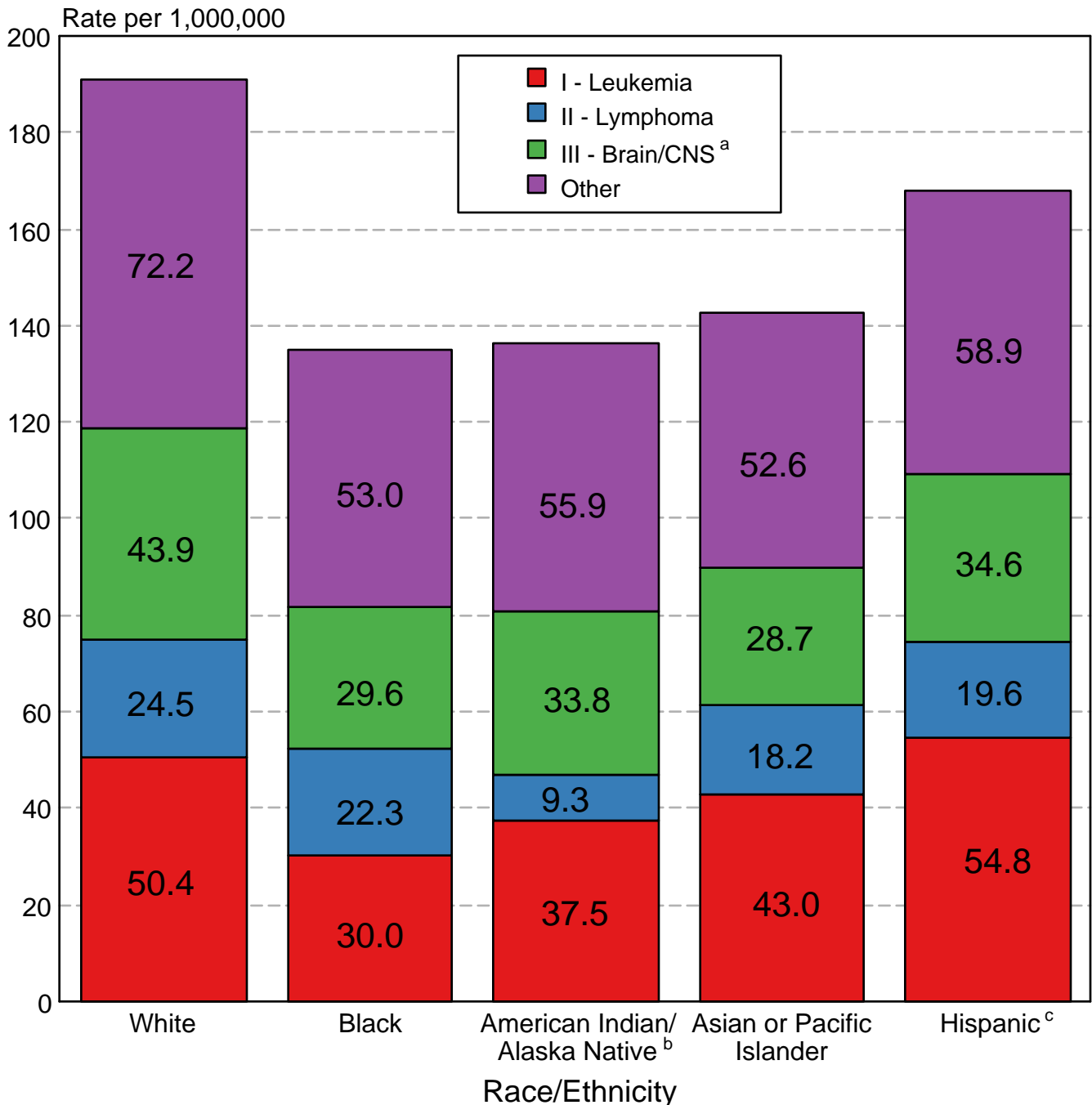
Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey). Rates are age-adjusted to the 2000 US Std Population (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 and is based only on cases diagnosed in 2004-2007.

Figure 29.2

Childhood Cancer: SEER Incidence Rates 2003- 2007 by ICCG Group (includes Group III benign brain (2004-2007) and myelodysplastic syndromes) and Race/Ethnicity 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.

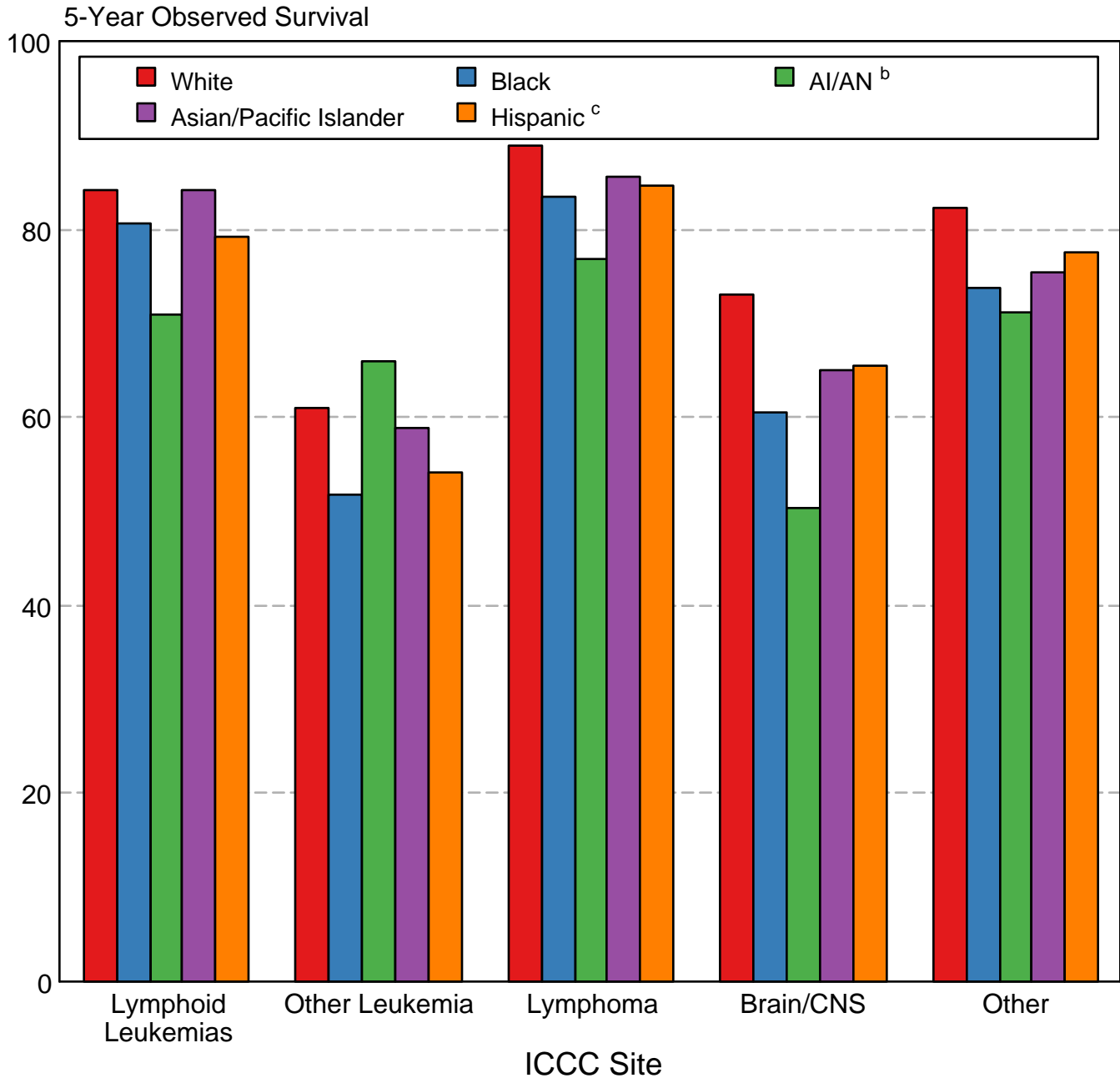
^a Rate for Group III (Brain/CNS) includes benign brain tumors and is based only on cases diagnosed in 2004-2007

^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 and Kentucky.

Figure 29.3

Childhood Cancer 5-Year Observed Survival (%) by ICCC Group^a and Race/Ethnicity Both Sexes, Under 20 Years of Age, 1999-2006



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). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2006. The remaining 13 SEER Areas contribute cases for the entire period 1999-2006.

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, 2006; 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 and Kentucky.