

Table 29.1

Age-Adjusted and Age-Specific SEER Cancer Incidence Rates, 2006-2010^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

ICCC Group and Subgroup	0-14	0-19	<1	1-4	5-9	10-14	15-19
All ICCC Groups Combined							
Excluding Group III benign brain/CNS tumors	159.8	173.4	243.2	217.5	124.6	135.4	213.8
Including Group III benign brain/CNS tumors ^d	170.5	187.9	255.0	225.5	134.1	149.1	239.5
I Leukemia (includes myelodysplastic syndromes)	53.4	48.5	54.7	93.3	42.5	33.6	34.0
I(a) Lymphoid leukemia	41.0	35.3	20.6	78.8	35.2	22.1	18.1
I(b) Acute myeloid leukemia	7.9	8.4	19.9	10.1	4.2	7.6	9.8
I(c) Chronic myeloproliferative diseases	1.6	2.2	5.8	1.0	0.9	2.0	4.0
I(d) Myelodysplastic syndrome and other myeloproliferative	1.6	1.5	5.7	1.8	1.2	1.0	1.4
I(e) Unspecified and other specified leukemias	1.2	1.1	2.7	1.6	1.0	1.0	0.7
II Lymphomas and reticuloendothelial neoplasms	16.7	25.0	5.8	9.1	15.9	25.2	49.6
II(a) Hodgkin lymphoma	6.2	12.6	-	1.0	5.4	12.2	31.7
II(b) Non-Hodgkin lymphoma (except Burkitt lymphoma)	6.8	8.7	-	4.5	6.7	9.6	14.6
II(c) Burkitt lymphoma	2.6	2.5	-	2.0	3.0	3.0	2.3
II(d) Miscellaneous lymphoreticular neoplasms	0.9	0.7	3.6	1.4	-	-	-
II(e) Unspecified lymphomas	0.2	0.4	-	-	-	-	0.7
III CNS and misc intracranial and intraspinal neoplasms ^d	43.9	44.3	48.3	50.4	43.0	39.1	45.5
III(a) Ependymomas and choroid plexus tumor	4.0	3.8	7.9	6.5	3.0	2.4	3.0
III(b) Astrocytoma	16.8	15.4	16.3	19.1	16.9	15.0	11.5
III(c) Intracranial and intraspinal embryonal tumors	7.7	6.3	12.3	11.9	7.2	4.0	2.4
III(d) Other gliomas	6.0	5.5	3.4	5.9	7.7	5.0	4.1
III(e) Other specified intracranial/intraspinal neoplasms	8.3	11.9	6.7	5.9	7.3	11.3	22.6
III(f) Unspecified intracranial and intraspinal neoplasms	1.2	1.4	-	1.2	1.0	1.4	2.0
IV Neuroblastoma and other peripheral nervous cell tumor	10.2	7.8	49.9	20.1	4.0	1.3	0.8
IV(a) Neuroblastoma and ganglioneuroblastoma	10.1	7.7	49.9	19.9	3.9	1.2	-
IV(b) Other peripheral nervous cell tumors	-	0.2	-	-	-	-	-
V Retinoblastoma	4.3	3.2	28.4	8.9	-	-	-
VI Renal tumors	8.1	6.5	14.7	19.2	5.7	0.9	1.8
VI(a) Nephroblastoma and other nonepithelial renal tumor	7.8	5.9	14.6	19.1	5.3	0.5	-
VI(b) Renal carcinoma	0.3	0.6	-	-	-	-	1.4
VI(c) Unspecified malignant renal tumors	-	-	-	-	-	-	-

- ^a SEER 18 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, New Jersey and Georgia excluding ATL/RG).
- ^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 except as noted.
- ^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, 2006-2010^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	2.7	2.5	9.8	5.7	0.8	1.0	1.7
VII(a) Hepatoblastoma	2.2	1.7	9.4	5.5	-	-	-
VII(b) Hepatic carcinoma	0.5	0.8	-	-	-	0.9	1.6
VII(c) Unspecified malignant hepatic tumors	-	-	-	-	-	-	-
VIII Malignant bone tumors	7.1	8.7	-	1.7	6.1	13.4	13.7
VIII(a) Osteosarcoma	4.0	4.9	-	-	3.1	8.2	7.9
VIII(b) Chondrosarcoma	0.2	0.4	-	-	-	-	1.0
VIII(c) Ewing tumor and related sarcomas of bone	2.5	2.8	-	1.0	2.4	4.0	3.6
VIII(d) Other specified malignant bone tumors	0.3	0.4	-	-	-	-	0.9
VIII(e) Unspecified malignant bone tumors	0.2	0.2	-	-	-	-	-
IX Soft tissue and other extraosseous sarcomas	11.1	12.1	19.2	11.0	8.5	12.1	15.4
IX(a) Rhabdomyosarcoma	5.3	4.8	5.1	7.5	4.7	4.2	3.2
IX(b) Fibrosarcoma, peripheral nerve & other fibrous	1.0	1.1	5.1	0.7	-	0.9	1.7
IX(c) Kaposi sarcoma	-	-	-	-	-	-	-
IX(d) Other specified soft tissue sarcomas	3.7	4.9	6.3	2.1	2.6	5.4	8.4
IX(e) Unspecified soft-tissue sarcomas	1.1	1.4	-	0.7	0.7	1.6	2.0
X Germ cell & trophoblastic tumors & neoplasms of gonads	6.0	11.9	20.1	3.7	3.1	7.9	29.4
X(a) Intracranial and intraspinal germ-cell tumors	1.5	1.9	-	-	1.5	2.6	3.0
X(b) Extracranial & extragonadal germ cell tumors	1.4	1.5	12.3	1.3	-	0.6	1.9
X(c) Malignant gonadal germ cell tumors	2.9	7.8	6.3	2.1	1.4	4.3	22.4
X(d) Gonadal carcinomas	-	0.5	-	-	-	-	1.7
X(e) Other and unspecified malignant gonadal tumors	-	0.2	-	-	-	-	-
XI Other malignant epithelial neoplasms and melanomas ^d	6.6	16.8	-	1.6	3.9	14.1	47.0
XI(a) Adrenocortical carcinoma	0.2	0.2	-	-	-	-	-
XI(b) Thyroid carcinoma	2.7	7.7	-	-	1.3	6.4	22.7
XI(c) Nasopharyngeal carcinoma	0.4	0.6	-	-	-	1.0	1.3
XI(d) Malignant melanoma	1.8	4.3	-	0.8	1.3	3.4	11.7
XI(e) Skin carcinoma	-	-	-	-	-	-	-
XI(f) Other and unspecified carcinomas ^d	1.4	3.9	-	-	1.1	3.0	11.0
XII Other and unspecified malignant neoplasms	0.5	0.5	-	0.7	-	-	0.6
XII(a) Other specified malignant tumors	0.3	0.3	-	-	-	-	-
XII(b) Other unspecified malignant tumors	0.2	0.2	-	-	-	-	-
Not classified by ICC	0.3	0.3	-	-	-	-	-

^a SEER 18 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, New Jersey and Georgia excluding ATL/RG).

^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 except as noted.

^d Includes *in situ* urinary bladder 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 29.2

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>1975-2010</u>	<u>1975-1983</u>	<u>1984-1992</u>	<u>1993-2001</u>	<u>2002-2010</u>
All ICCC Groups Combined	158.2	142.5	158.5	161.3	169.1
I Leukemia	38.8	34.3	38.7	39.1	42.3
I(a) Lymphoid leukemia	29.0	25.1	29.2	29.3	31.8
I(b) Acute myeloid leukemia	7.1	5.9	6.7	7.6	8.0
II Lymphomas and reticuloendothelial neoplasms	24.5	24.5	25.0	23.6	25.1
II(a) Hodgkin lymphoma	13.1	14.3	14.2	12.2	11.8
II(b,c,e) Non-Hodgkin lymphoma	10.9	9.4	10.2	10.9	12.8
III CNS & misc intracranial & intraspinal neoplasms	28.1	23.0	29.1	29.4	30.2
III(a) Ependymomas and choroid plexus tumor	2.4	1.8	2.6	2.4	2.6
III(b) Astrocytoma	14.1	11.4	15.3	14.5	15.1
III(c) Intracranial and intraspinal embryonal tumors	5.6	4.4	5.2	6.7	6.0
III(d) Other gliomas	5.2	4.5	5.0	5.2	5.8
IV Neuroblastoma and other peripheral nervous cell tumors	8.4	7.9	8.4	8.7	8.7
IV(a) Neuroblastoma and ganglioneuroblastoma	8.2	7.7	8.0	8.4	8.5
V Retinoblastoma	3.0	2.8	3.1	3.4	2.8
VI Renal tumors	6.7	6.6	6.5	7.1	6.4
VI(a) Nephroblastoma and other nonepithelial renal tumor	6.2	6.3	6.1	6.5	5.7
VII Hepatic tumors	1.9	1.2	1.8	2.0	2.4
VII(a) Hepatoblastoma	1.3	0.8	1.2	1.5	1.6
VIII Malignant bone tumors	8.5	8.1	9.0	8.5	8.6
VIII(a) Osteosarcoma	4.6	4.2	4.9	4.8	4.7
VIII(c) Ewing tumor and related sarcomas of bone	2.9	2.9	3.1	2.9	2.8
IX Soft tissue and other extraosseous sarcomas	11.5	10.4	11.1	11.8	12.4
IX(a) Rhabdomyosarcoma	4.5	4.0	4.6	4.8	4.6
X Germ cell & trophoblastic tumors & neoplasms of gonads	10.5	9.3	10.2	11.0	11.5
X(a) Intracranial and intraspinal germ-cell tumor	1.5	0.9	1.3	1.9	1.8
X(c) Malignant gonadal germ cell tumor	6.7	5.9	6.5	6.9	7.5
XI Other malignant epithelial neoplasms and melanomas ^d	15.7	13.5	14.9	16.1	18.1
XI(b) Thyroid carcinoma	5.8	4.9	5.2	5.8	7.0
XI(d) Malignant melanoma	5.1	4.0	5.1	5.2	6.0

^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 except as noted.

^d Includes *in situ* urinary bladder tumors.

- 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, 1975-2010^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 1975-2010	APC 1975-2010	APC 1975-1992	APC 1993-2010	% Change 1975-2010	APC 1975-2010	APC 1975-1992	APC 1993-2010
All ICCC Groups Combined	41.2	0.6*	1.0*	0.6*	33.7	0.6*	1.0*	0.6*#
I Leukemia	50.9	0.7*	1.2*	0.8*	39.6	0.7*	1.1*	0.8*
I(a) Lymphoid leukemia	66.5	0.7*	1.4*	0.7	56.4	0.7*	1.4*	0.8*
I(b) Acute myeloid leukemia	43.6	1.2*	1.7	0.9	32.1	1.1*	1.3	0.6
II Lymphomas and reticuloendothelial neo.	2.3	0.1	-0.8	1.4*#	7.3	0.1	0.1	0.8*
II(a) Hodgkin lymphoma	-30.7	-0.8*	-1.0	0.5	-16.9	-0.7*	-0.2	0.0
II(b,c,e) Non-Hodgkin lymphoma	29.3	0.8*	-0.2	2.1*#	47.5	1.1*	0.8*	1.8*#
III CNS & misc intracranial & intraspinal neo.	81.0	1.0*	2.3*	0.5#	66.0	0.9*	2.2*	0.5#
III(a) Ependymomas and choroid plexus tumors	-	-	-	1.3	-	-	-	1.2
III(b) Astrocytoma	112.8	1.1*	3.2*	0.4#	86.1	0.8*	2.8*	0.3#
III(c) Intracranial and intraspinal embryonal tum.	191.0	1.1*	1.1	-0.5	191.4	1.2*	1.5	-0.4
III(d) Other gliomas	-17.6	0.7	0.6	1.7	-16.5	0.8*	0.9	1.3
IV Neuroblastoma and other peripheral nervous cell tumors	-12.9	0.3	0.0	-0.3	-11.1	0.3	0.1	-0.3
IV(a) Neuroblastoma and ganglioneuroblastoma	-14.5	0.3	-0.1	-0.3	-14.3	0.3	-0.1	-0.2
V Retinoblastoma	-2.0	0.1	1.0	-1.6*#	-2.0	0.1	1.2	-1.6*#
VI Renal tumors	38.8	-0.1	0.4	-1.1	30.8	0.0	0.5	-1.1
VI(a) Nephroblastoma and other nonepithelial renal tumors	44.7	-0.1	0.4	-1.1	44.7	-0.1	0.5	-1.1
VII Hepatic tumors	-	-	-	-	-	-	-	-
VII(a) Hepatoblastoma	-	-	-	-	-	-	-	-
VIII Malignant bone tumors	47.2	0.1	1.3	0.4	0.4	0.1	1.2*	-0.2
VIII(a) Osteosarcoma	-	-	-	-0.6	44.4	0.4	2.0*	-0.6#
VIII(c) Ewing tum. and related sarcomas of bone	38.1	-	-	-	-8.1	-0.3	0.5	-0.1
IX Soft tissue and other extrasosseous sarcomas	37.6	0.7*	1.0	1.0*	46.0	0.7*	0.8	0.8
IX(a) Rhabdomyosarcoma	31.5	0.4	1.2	-0.3	47.3	0.3	1.3	-0.3
X Germ cell & trophoblastic tum. & neo. of gonads	84.6	1.2*	1.6	1.1	49.2	0.9*	1.5*	0.7
X(a) Intracranial and intraspinal germ-cell tum.	-	-	-	-	-	-	-	-
X(c) Malignant gonadal germ cell tumors	10.8	-	-	-	52.4	0.9*	1.4*	1.2*
XI Other malignant epithelial neo. and melanomas ^d	9.7	1.0*	-0.5	0.7	40.9	1.0*	0.8	1.2*
XI(b) Thyroid carcinoma	11.7	-	-	-	135.4	1.5*	0.9	3.0*#
XI(d) Malignant melanoma	-	-	-	-	14.1	1.2*	2.0	0.7

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 except as noted.

^d Includes *in situ* urinary bladder tumors.

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

The APC for 1993-2010 is significantly different from the APC for 1975-1992 (p<.05).

@ The APC for 1993-2010 is significantly different from the APC for 1975-1992 (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, 1975-2010^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 1975-2010	APC 1975-2010	APC 1975-1992	APC 1993-2010	% Change 1975-2010	APC 1975-2010	APC 1975-1992	APC 1993-2010
All ICCC Groups Combined	36.5	0.6*	1.1*	0.5 [®]	30.1	0.6*	1.2*	0.5* [#]
I Leukemia	36.0	0.7*	1.2*	0.9	21.4	0.6*	1.0*	0.8
I(a) Lymphoid leukemia	58.7	0.8*	1.6*	0.9	46.1	0.8*	1.6*	0.8
I(b) Acute myeloid leukemia	22.4	-	-	0.2	2.6	1.1*	0.2	0.0
II Lymphomas and reticuloendothelial neo.	-7.2	-0.2	-0.6	1.2* [#]	7.1	0.0	0.1	1.0*
II(a) Hodgkin lymphoma	-35.0	-	-	-	-17.5	-0.8*	-0.2	1.0
II(b,c,e) Non-Hodgkin lymphoma	9.2	0.3	-0.3	1.2	38.5	0.7*	0.6	1.0
III CNS & misc intracranial & intraspinal neo.	96.3	0.9*	2.6*	-0.1 [#]	70.9	0.8*	2.5*	-0.1 [#]
III(a) Ependymomas and choroid plexus tumors	-	-	-	-	-	-	-	-
III(b) Astrocytoma	92.9	0.9*	3.2*	-0.4 [#]	60.6	0.6*	2.9*	-0.1 [#]
III(c) Intracranial and intraspinal embryonal tum.	-	-	-	-0.6	-	-	-	-0.6
III(d) Other gliomas	-11.8	-	-	-	-17.3	-	-	0.4
IV Neuroblastoma and other peripheral nervous cell tumors	8.7	0.3	0.4	-0.7	8.3	0.3	0.7	-0.7
IV(a) Neuroblastoma and ganglioneuroblastoma	5.2	0.3	0.3	-0.7	5.0	0.3	0.5	-0.6
V Retinoblastoma	-	-	-	-	-	-	-	-
VI Renal tumors	17.1	0.0	1.8	-1.2 [#]	6.2	0.1	1.4	-1.0 [®]
VI(a) Nephroblastoma and other nonepithelial renal tumors	32.0	0.0	1.8	-0.9 [#]	32.0	0.0	1.7	-1.0 [#]
VII Hepatic tumors	-	-	-	-	-	-	-	-
VII(a) Hepatoblastoma	-	-	-	-	-	-	-	-
VIII Malignant bone tumors	28.5	0.6	0.8	0.1	-2.9	0.5	1.4	-0.6
VIII(a) Osteosarcoma	-	-	-	-	-	-	-	-1.0
VIII(c) Ewing tum. and related sarcomas of bone	-	-	-	-	-21.9	-	-	-
IX Soft tissue and other extrasosseous sarcomas	32.2	0.7*	0.9	0.8	34.7	0.7*	1.0	0.5
IX(a) Rhabdomyosarcoma	39.3	-	-	-1.0	47.6	-	-	-0.5
X Germ cell & trophoblastic tum. & neo. of gonads	78.3	-	-	0.6	101.9	1.2*	1.9	1.0
X(a) Intracranial and intraspinal germ-cell tum.	-	-	-	-	-	-	-	-
X(c) Malignant gonadal germ cell tum. (testis)	-	-	-	-	99.8	1.2*	1.5	1.8*
XI Other malignant epithelial neo. and melanomas ^d	27.6	-	-	-	26.7	1.1*	1.1	1.4*
XI(b) Thyroid carcinoma	-	-	-	-	-	-	-	-
XI(d) Malignant melanoma	-	-	-	-	5.1	-	-	-

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 except as noted.

^d Includes *in situ* urinary bladder tumors.

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

The APC for 1993-2010 is significantly different from the APC for 1975-1992 (p<.05).

® The APC for 1993-2010 is significantly different from the APC for 1975-1992 (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, 1975-2010^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 1975-2010	APC 1975-2010	APC 1975-1992	APC 1993-2010	% Change 1975-2010	APC 1975-2010	APC 1975-1992	APC 1993-2010
All ICCG Groups Combined	47.1	0.6*	0.8*	0.7*	37.8	0.6*	0.8*	0.7*
I Leukemia	74.4	0.6*	1.2	0.7*	67.9	0.7*	1.2	0.8*
I(a) Lymphoid leukemia	77.9	0.6*	1.2	0.5	71.4	0.7*	1.2	0.7
I(b) Acute myeloid leukemia	70.3	1.0*	2.1	1.8	71.3	1.1*	2.5*	1.3*
II Lymphomas and reticuloendothelial neo.	21.6	0.5	-1.3	1.7* [#]	7.4	0.2	0.1	0.6
II(a) Hodgkin lymphoma	-24.9	-	-	-	-16.4	-0.7*	-0.2	-1.0
II(b,c,e) Non-Hodgkin lymphoma	87.9	-	-	-	66.2	1.9*	1.2	3.3* [@]
III CNS & misc intracranial & intraspinal neo.	66.7	1.1*	1.9*	1.2*	60.5	0.9*	1.9*	1.2*
III(a) Ependymomas and choroid plexus tumors	-	-	-	-	-	-	-	-
III(b) Astrocytoma	132.0	1.3*	3.1*	1.1	114.5	0.9*	2.7*	0.8
III(c) Intracranial and intraspinal embryonal tum.	-	-	-	-0.1	-	-	-	0.1
III(d) Other gliomas	-22.8	-	-	-	-15.8	-	-	-
IV Neuroblastoma and other peripheral nervous cell tumors	-31.4	0.2	-0.6	-0.1	-28.4	0.2	-0.8	0.1
IV(a) Neuroblastoma and ganglioneuroblastoma	-31.4	0.3	-0.7	0.0	-31.4	0.2	-0.8	0.1
V Retinoblastoma	-	-	-	-	-	-	-	-
VI Renal tumors	63.6	-0.2	-0.8	-1.2	60.2	0.0	-0.4	-1.2
VI(a) Nephroblastoma and other nonepithelial renal tumors	57.5	-0.3	-0.9	-1.4	57.5	-0.3	-0.6	-1.4
VII Hepatic tumors	-	-	-	-	-	-	-	-
VII(a) Hepatoblastoma	-	-	-	-	-	-	-	-
VIII Malignant bone tumors	73.6	-	2.0	-	4.4	-0.4	0.9	0.6
VIII(a) Osteosarcoma	-	-	-	-	24.3	-0.1	1.3	0.2
VIII(c) Ewing tum. and related sarcomas of bone	-	-	-	-	-	-	-	-
IX Soft tissue and other extrasosseous sarcomas	43.5	0.7*	1.1	1.1	58.6	0.7*	0.6	1.2
IX(a) Rhabdomyosarcoma	-	-	-	-	46.7	-	-	-
X Germ cell & trophoblastic tum. & neo. of gonads	91.2	-	-	1.5	5.3	0.3	1.0	0.3
X(a) Intracranial and intraspinal germ-cell tum.	-	-	-	-	-	-	-	-
X(c) Malignant gonadal germ cell tum. (ovary)	-	-	-	-	-0.8	-	-	0.1
XI Other malignant epithelial neo. and melanomas ^d	-3.7	-	-	0.6	49.8	1.0*	0.6	1.1
XI(b) Thyroid carcinoma	-	-	-	-	127.3	1.5*	1.1	2.4*
XI(d) Malignant melanoma	-	-	-	-	24.2	-	-	0.3

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 except as noted.

^d Includes *in situ* urinary bladder tumors.

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

The APC for 1993-2010 is significantly different from the APC for 1975-1992 (p<.05).

@ The APC for 1993-2010 is significantly different from the APC for 1975-1992 (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), 2003-2009^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	82.1	81.1	83.2	77.5	83.8	81.7	80.9	82.8	81.8
I Leukemia	81.4	80.7	82.4	61.0	89.3	86.9	75.8	68.4	84.1
I(a) Lymphoid leukemia	86.6	85.2	88.6	55.8	93.1	90.3	80.6	72.5	88.8
I(b) Acute myeloid leukemia	61.5	61.6	61.3	62.5	65.4	65.3	62.4	55.2	64.0
II Lymphomas and reticuloendothelial neo.	91.2	91.0	91.6	81.1 ^d	93.6	92.2	90.8	91.1	91.3
II(a) Hodgkin lymphoma	96.6	97.2	95.9	-	96.5	96.4	97.1	96.4	96.9
II(b,c,e) Non-Hodgkin lymphoma	85.3	85.1	85.7	-	92.4	89.4	84.4	82.5	87.4
III CNS & misc intracranial & intraspinal neo.	73.0	72.9	73.1	56.6	72.4	71.7	77.0	77.0	72.1
III(a) Ependymomas and choroid plexus tumor	75.5	71.1	80.7	59.0 ^d	74.5	73.4 ^d	79.7 ^d	85.4	73.4
III(b) Astrocytoma	84.0	83.9	84.1	82.2	91.0	85.1	81.9	77.0	85.8
III(c) Intracranial and intraspinal embryonal tumors	61.2	62.1	59.8	25.7 ^d	55.5	73.2	70.6	64.5 ^d	60.8
III(d) Other gliomas	57.4	61.1	53.7	75.3 ^d	45.7	41.3	66.7	81.2	51.2
IV Neuroblastoma and other peripheral nervous cell tumors	78.5	77.7	79.4	91.1	72.4	69.3	69.7 ^d	87.6 ^d	78.2
IV(a) Neuroblastoma and ganglioneuroblastoma	78.3	77.6	79.0	91.4	72.5	69.2	64.6 ^d	-	78.1
V Retinoblastoma	97.5	96.1	99.0	99.9	95.6	-	-	-	97.5
VI Renal tumors	88.8	89.7	88.0	90.4	89.6	88.2	81.4 ^d	86.8	88.9
VI(a) Nephroblastoma and other nonepithelial renal tumor	89.7	90.6	88.8	90.4	89.7	89.2	95.0	-	89.7
VII Hepatic tumors	68.9	68.4	70.3	80.0	78.8	65.5 ^d	35.6 ^d	45.6 ^d	73.1
VII(a) Hepatoblastoma	78.1	74.6	84.9	80.4	78.4	-	-	-	78.1
VIII Malignant bone tumors	68.7	66.7	71.1	-	74.0 ^d	73.3	72.9	63.0	72.9
VIII(a) Osteosarcoma	66.6	64.2	69.4	-	-	66.7 ^d	72.4	60.7	70.9
VIII(c) Ewing tumor and related sarcomas of bone	67.3	64.2	71.3	-	82.0 ^d	82.4 ^d	68.1	56.4	74.5
IX Soft tissue and other extraosseous sarcomas	70.5	69.3	71.8	65.4	72.5	76.6	70.0	68.4	71.6
IX(a) Rhabdomyosarcoma	63.8	63.3	64.4	63.6 ^d	71.0	74.2	55.1	50.1	66.7
X Germ cell & trophoblastic tumors & neo. of gonads	92.1	92.2	91.9	92.1	94.1	89.1	94.2	91.6	93.0
X(a) Intracranial and intraspinal germ-cell tumor	90.1	91.8	84.0 ^d	-	-	83.9 ^d	94.8	89.4	90.4
X(c) Malignant gonadal germ cell tumor	95.4	94.6	97.1	100.0	95.3	94.9	97.5	94.8	97.1
XI Other malignant epithelial neo. and melanomas ^f	92.8	88.2	95.1	-	94.8	94.0	94.7	92.2	94.1
XI(b) Thyroid carcinoma	99.2	96.4	99.7	-	-	98.1	100.0	99.0	99.6
XI(d) Malignant melanoma	95.7	93.0	97.5	-	96.0	94.8	96.1	96.1	94.5

^a SEER 18 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, New Jersey and Georgia excluding ATL/RG).

Based on follow-up of patients into 2010.

^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 except as noted.

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

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

^f Includes *in situ* urinary bladder tumors.

- 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, 2010
Number of People Previously Diagnosed with Cancer as Children (Ages 0-19 Years) in the United States and Alive January 1, 2010
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 1975-2009	Diagnosed before 1975	% ^b
									Count	Count	
All Sites	Both	113,782	93,658	62,583	55,044	36,545	17,500	379,112	304,180	74,932	20
	Male	60,936	49,379	30,706	24,513	15,657	9,268	190,459	156,993	33,466	18
	Female ^c	52,846	44,279	31,877	30,531	20,888	8,232	188,653	147,187	41,466	22
I Leukemia	Both	35,749	20,000	11,075	4,605	1,422	160	73,011	68,730	4,281	6
	Male	19,543	10,789	5,622	2,377	667	72	39,070	37,116	1,954	5
	Female	16,206	9,211	5,453	2,228	755	88	33,941	31,614	2,327	7
Acute lymphocytic leukemia ^d	Both	30,171	16,529	9,420	3,992	375	2	60,489	57,232	3,257	5
	Male	16,573	9,028	4,935	2,252	215	1	33,004	31,293	1,711	5
	Female	13,598	7,501	4,485	1,740	160	1	27,485	25,939	1,546	6
I(b) Acute myeloid leukemia	Both	4,045	2,249	1,145	619	207	2	8,267	7,771	496	6
	Male	2,068	1,135	450	296	113	2	4,064	3,799	265	7
	Female	1,977	1,114	695	323	94	0	4,203	3,972	231	5
II(a) Hodgkin lymphoma	Both	4,514	8,955	8,202	7,786	4,629	1,167	35,253	29,702	5,551	16
	Male	2,501	4,496	4,124	3,816	2,328	594	17,859	14,888	2,971	17
	Female	2,013	4,459	4,078	3,970	2,301	573	17,394	14,814	2,580	15
II(b,c,e) Non-Hodgkin lymphoma	Both	6,442	6,675	4,192	2,780	1,601	1,053	22,743	19,263	3,480	15
	Male	4,223	4,450	2,886	1,743	817	622	14,741	12,861	1,880	13
	Female	2,219	2,225	1,306	1,037	784	431	8,002	6,402	1,600	20
III CNS and misc intracranial & intraspinal neoplasms	Both	20,430	15,174	8,801	8,415	4,806	1,457	59,083	47,793	11,290	19
	Male	11,018	8,350	4,754	4,074	2,243	650	31,089	25,904	5,185	17
	Female	9,412	6,824	4,047	4,341	2,563	807	27,994	21,889	6,105	22
IV Neuroblastoma & other peripheral nervous cell tumor	Both	9,704	3,628	2,190	1,617	1,573	740	19,452	14,922	4,530	23
	Male	4,959	1,854	1,013	517	499	193	9,035	7,717	1,318	15
	Female	4,745	1,774	1,177	1,100	1,074	547	10,417	7,205	3,212	31
VI Renal tumors	Both	7,831	4,651	3,801	4,192	2,323	740	23,538	15,638	7,900	34
	Male	3,894	2,167	1,718	2,356	1,288	431	11,854	7,392	4,462	38
	Female	3,937	2,484	2,083	1,836	1,035	309	11,684	8,246	3,438	29
VIII Malignant bone tumors	Both	3,766	4,194	3,184	2,489	2,320	815	16,768	13,132	3,636	22
	Male	2,252	2,433	1,755	1,237	1,009	434	9,120	7,438	1,682	18
	Female	1,514	1,761	1,429	1,252	1,311	381	7,648	5,694	1,954	26
VIII(a) Osteosarcoma	Both	1,895	2,216	1,804	1,246	1,172	770	9,103	6,951	2,152	24
	Male	1,062	1,285	1,017	601	446	377	4,788	3,831	957	20
	Female	833	931	787	645	726	393	4,315	3,120	1,195	28
VIII(c) Ewing tumor & related sarcomas of bone	Both	1,394	1,377	946	670	405	94	4,886	4,265	621	13
	Male	860	796	462	323	211	34	2,686	2,417	269	10
	Female	534	581	484	347	194	60	2,200	1,848	352	16
IX Soft tissue & other extraosseous sarcomas	Both	6,849	6,964	4,239	4,829	4,161	4,406	31,448	20,922	10,526	33
	Male	3,860	3,714	2,211	2,289	1,962	2,442	16,478	11,169	5,309	32
	Female	2,989	3,250	2,028	2,540	2,199	1,964	14,970	9,753	5,217	35
X Germ cell & trophoblastic tumors & neoplasms of gonads	Both	5,219	7,632	5,531	6,273	6,614	6,468	37,737	23,603	14,134	37
	Male	2,755	5,031	3,302	3,296	3,326	2,935	20,645	13,959	6,686	32
	Female	2,464	2,601	2,229	2,977	3,288	3,533	17,092	9,644	7,448	44

^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.

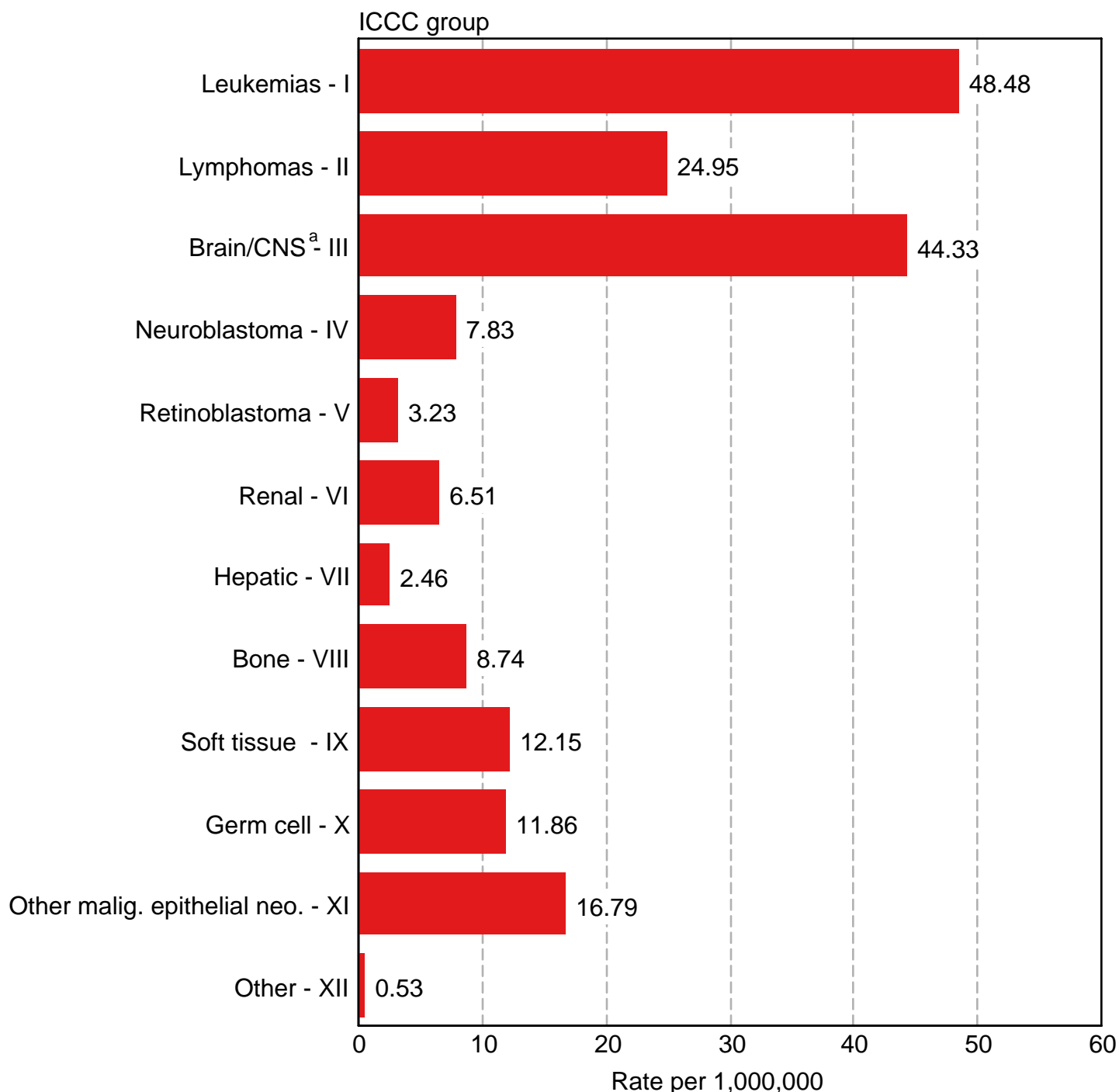
^c All sites females excludes breast cancer.

^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 2006-2010 by ICCC Group (includes myelodysplastic syndromes and Group III benign brain) Under 20 Years of Age, Both Sexes, All Races



Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).

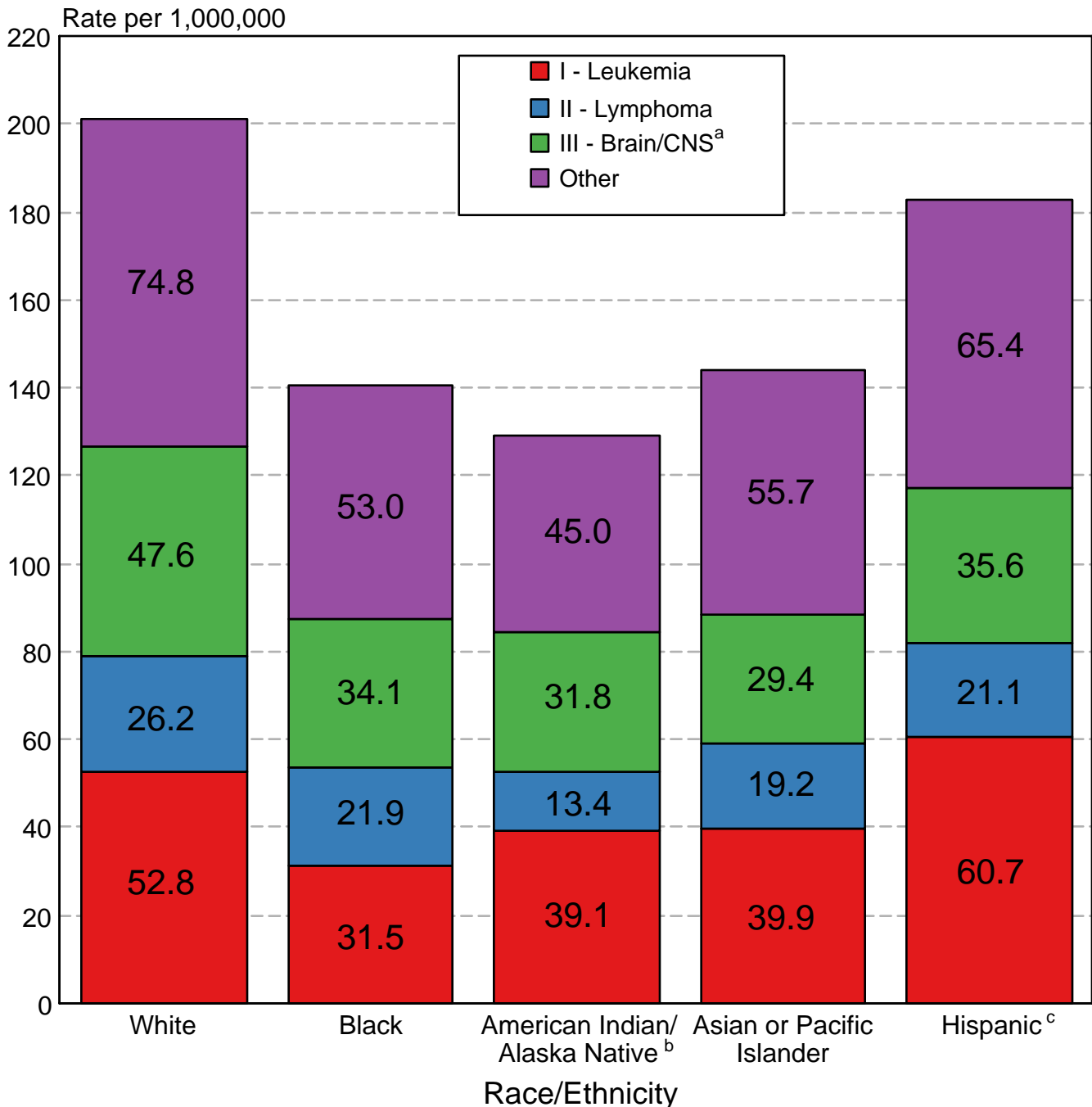
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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 2006- 2010 by ICCC Group and Race/Ethnicity (includes myelodysplastic syndromes and Group III benign brain) Both Sexes, Under 20 Years of Age



Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG). Incidence 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.

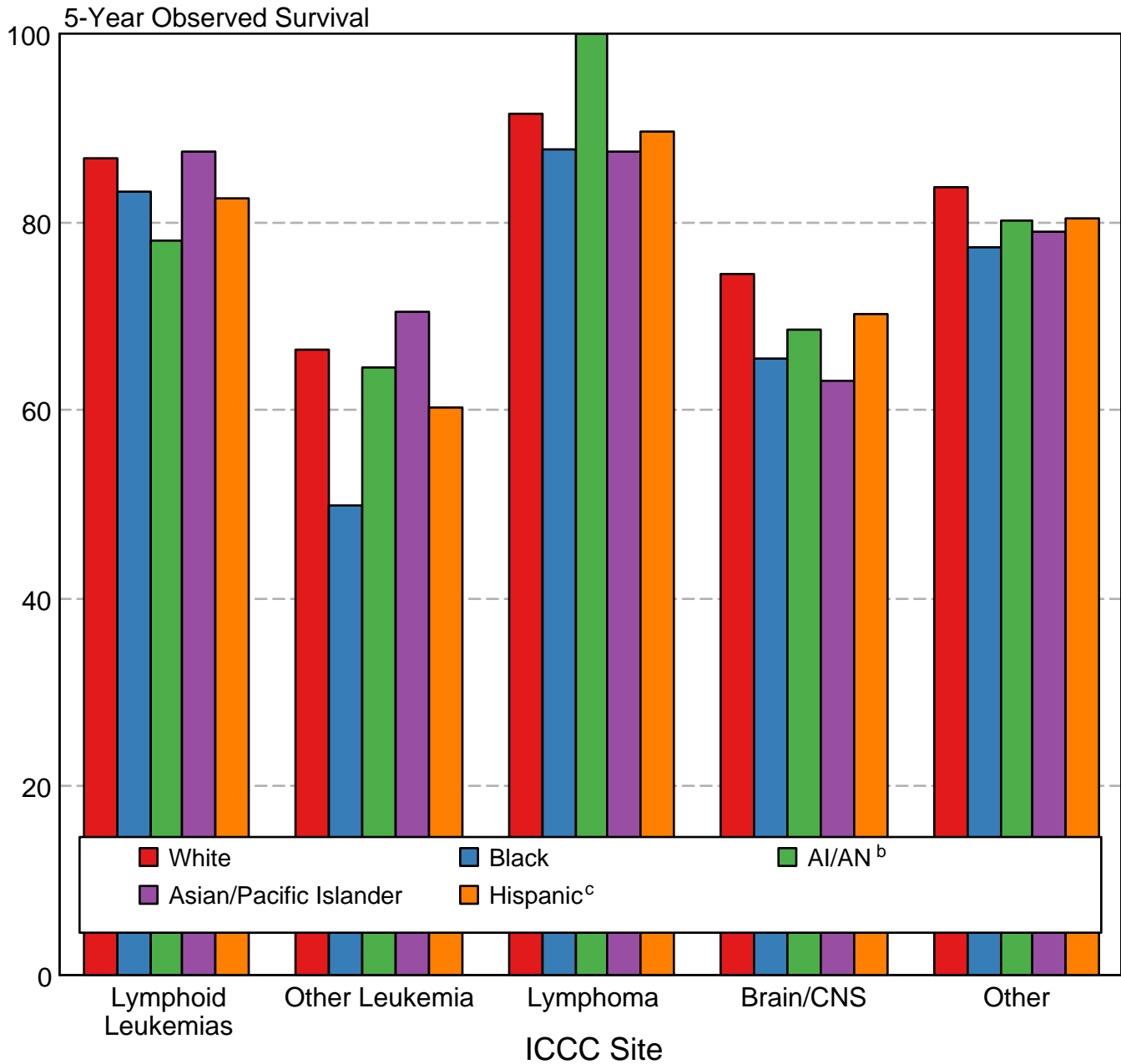
^a Rate for Group III (Brain/CNS) includes benign brain tumors.

^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.

Figure 29.3

Childhood Cancer 5-Year Observed Survival (%) by ICCC Group^a and Race/Ethnicity Both Sexes, Under 20 Years of Age, 2003-2009



Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).

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.