

Section 32
Adolescent and Young Adult Cancer by Site
Incidence, Survival and Mortality

Tumors affecting adolescents and young adults often differ from those affecting pediatric and older adult populations¹. For this reason, a classification scheme has been proposed for tumors diagnosed in adolescents and young adults². This classification scheme was updated based on site and histology codes of the International Classification of Diseases for Oncology, Third Edition³. Effective 2001, all cases reported to SEER were required to have an ICD-O-3 histology and behavior code and all previous cases were converted to ICD-O-3⁴. In addition, although benign brain tumors have also been reported to SEER since 2004, not enough time has elapsed to present rates and trend data for these tumors. These site / histology groupings, however, are not comparable with the groupings of ICD-10 for mortality. Therefore, for incidence and mortality comparisons, the SEER site recode as described in the appendix was used⁵. In this chapter, the incidence of malignant cancers in adolescent and young adults, 15 to 39 years of age, are presented based on the 2 different classification schemes described above.

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Table 32.1

Age-Adjusted SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
All Races, 2005-2009

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	16.4	14.4	51.6	84.6	1208.3	881.1
1. LEUKEMIAS	5.5	4.5	3.5	2.7	31.5	18.1
1.1 Acute lymphoid leukemia	4.4	3.6	1.2	0.8	1.2	1.0
1.2 Acute myeloid leukemia	0.8	0.7	1.2	1.3	9.4	6.2
1.3 Chronic myeloid leukemia	0.1	0.1	0.7	0.4	2.7	1.8
1.4 Other and unspecified leukemias	0.2	0.1	0.4	0.3	18.2	9.2
2. LYMPHOMAS	2.0	1.1	8.5	7.0	54.7	37.4
2.1 Non-Hodgkin Lymphoma	1.2	0.6	4.7	3.2	50.8	34.9
2.2 Hodgkin Lymphoma	0.8	0.5	3.7	3.7	3.9	2.5
3. CNS, INTRACRANIAL, INTRASPINAL	3.2	2.9	3.1	2.5	13.6	9.0
3.1 Astrocytoma	1.5	1.5	1.6	1.2	10.6	6.6
3.1.1 Specified low-grade astrocytic tumors	1.0	1.1	0.5	0.4	0.4	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.2	0.2	0.8	0.5	9.5	5.9
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.3	0.7	0.5
3.2 Other glioma	0.5	0.6	0.9	0.7	1.6	1.2
3.3 Ependymoma	0.3	0.2	0.2	0.2	0.3	0.3
3.4 Medulloblastoma and other PNET	0.8	0.5	0.2	0.2	0.1	0.1
3.4.1 Medulloblastoma	0.4	0.3	0.1	0.1	0.0	0.0
3.4.2 Supratentorial PNET	0.3	0.2	0.1	0.1	0.0	0.0
3.5 Other specified intracranial and intraspinal neoplasms	0.1	0.1	0.1	0.1	0.2	0.3
3.6 Unspecified intracranial and intraspinal neoplasms	0.0	-	0.1	0.0	0.8	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.9	0.8	1.1	0.8	1.5	1.0
4.1 Osteosarcoma	0.4	0.4	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	0.0	-	0.2	0.2	0.7	0.5
4.3 Ewing tumor	0.4	0.3	0.3	0.2	0.1	0.1
4.4 Other specified and unspecified bone tumors	0.0	0.0	0.1	0.1	0.4	0.3
5. SOFT TISSUE SARCOMAS	1.0	0.9	3.3	2.4	12.5	9.0
5.1 Fibromatous neoplasms	0.1	0.1	0.7	0.8	3.0	1.9
5.2 Rhabdomyosarcoma	0.6	0.4	0.2	0.1	0.2	0.2
5.3 Other specified soft tissue sarcoma	0.3	0.3	2.4	1.4	9.3	7.0
5.3.1 Specified soft tissue sarcoma	0.2	0.2	2.1	1.2	7.0	5.3
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.0	1.1	5.3	5.1
5.3.1.2 Kaposi sarcoma	-	-	1.0	0.0	1.7	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.3	0.3	2.3	1.7
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.5	0.6	10.5	1.1	4.1	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.4	10.0	0.7	3.9	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.3	0.2	0.5	0.3	0.2	0.1
6.2.1 Intracranial sites	0.2	0.1	0.2	0.0	-	-
6.2.2 Other nongonadal sites	0.1	0.2	0.3	0.3	0.2	0.1

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^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 Adapted from RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 1067; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

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

Table 32.1 - continued

Age-Adjusted SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
All Races, 2005-2009

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.2	5.5	9.5	64.7	34.9
7.1 Melanoma	0.2	0.2	5.4	9.4	60.6	32.9
7.2 Skin carcinomas	-	-	0.1	0.1	4.0	2.0
8. CARCINOMAS (excluding skin)	0.4	0.7	15.2	57.2	963.3	724.9
8.1 Thyroid carcinoma	0.1	0.4	3.0	15.2	11.0	27.3
8.2 Other carcinoma of head and neck	0.1	0.1	1.8	1.5	51.5	16.6
8.2.1 Nasopharyngeal carcinoma	0.1	-	0.3	0.2	1.8	0.7
8.2.2 Other sites in lip, oral cavity and pharynx	0.1	0.1	1.2	1.1	33.4	12.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.2	16.2	3.7
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.0	1.2	163.2	112.5
8.4 Carcinoma of breast	-	-	0.0	20.5	2.8	268.2
8.5 Carcinoma of genitourinary tract	0.0	0.1	3.2	13.2	487.1	135.8
8.5.1 Carcinoma of kidney	-	0.0	1.9	1.4	42.4	20.5
8.5.2 Carcinoma of bladder	-	-	0.8	0.3	84.0	20.1
8.5.3 Carcinoma of gonads	-	-	0.0	1.8	0.0	24.2
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.2	-	60.6
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.4	0.4	360.7	10.4
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	5.7	5.1	228.5	147.5
8.6.1 Carcinoma of colon and rectum	-	-	3.7	3.5	123.2	92.5
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	22.3	10.7
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.5	0.3	25.0	8.1
8.6.4 Carcinoma of pancreas	-	-	0.4	0.4	27.9	21.4
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.3	30.2	14.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	0.0	0.5	0.6	19.2	17.0
8.7.1 Adrenocortical carcinoma	-	-	0.0	0.1	0.3	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.5	0.6	18.9	16.7
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.7	2.6	0.7	1.1	25.3	20.2
9.1 Other pediatric and embryonal tumors, NOS	2.6	2.5	0.1	0.1	0.2	0.1
9.1.1 Wilms tumor	0.7	0.8	-	0.0	-	0.0
9.1.2 Neuroblastoma	1.0	1.0	0.0	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.9	0.8	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.6	1.0	25.0	20.0
9.2.1 Paraganglioma and glomus tumors	-	-	0.1	0.0	0.1	0.1
9.2.2 Other specified gonadal tumors	-	-	0.0	0.1	0.0	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.3	0.2	18.2	11.4
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.7	8.1
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.4	37.2	26.3

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^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 Adapted from RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 1067; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

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

Table 32.2

Age-Adjusted SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
White, 2005-2009

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	17.2	15.0	54.9	88.5	1207.4	902.8
1. LEUKEMIAS	5.8	4.9	3.7	2.8	33.0	18.8
1.1 Acute lymphoid leukemia	4.7	4.0	1.3	0.8	1.3	1.0
1.2 Acute myeloid leukemia	0.8	0.6	1.3	1.3	9.8	6.3
1.3 Chronic myeloid leukemia	0.1	0.1	0.7	0.4	2.7	1.8
1.4 Other and unspecified leukemias	0.2	0.1	0.4	0.3	19.2	9.7
2. LYMPHOMAS	2.0	1.1	8.6	7.2	57.3	39.5
2.1 Non-Hodgkin Lymphoma	1.2	0.5	4.7	3.2	53.2	36.8
2.2 Hodgkin Lymphoma	0.8	0.5	3.9	4.0	4.1	2.7
3. CNS, INTRACRANIAL, INTRASPINAL	3.4	3.0	3.4	2.7	14.9	9.9
3.1 Astrocytoma	1.6	1.6	1.8	1.4	11.7	7.3
3.1.1 Specified low-grade astrocytic tumors	1.1	1.2	0.5	0.5	0.4	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.2	0.2	0.9	0.6	10.5	6.6
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.4	0.8	0.5
3.2 Other glioma	0.6	0.6	1.0	0.8	1.7	1.3
3.3 Ependymoma	0.3	0.3	0.2	0.2	0.3	0.3
3.4 Medulloblastoma and other PNET	0.8	0.5	0.3	0.2	0.1	0.1
3.4.1 Medulloblastoma	0.5	0.3	0.2	0.1	0.0	0.0
3.4.2 Supratentorial PNET	0.3	0.2	0.1	0.1	0.0	0.0
3.5 Other specified intracranial and intraspinal neoplasms	0.1	0.1	0.1	0.1	0.2	0.3
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	0.1	-	0.8	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	1.0	0.8	1.1	0.8	1.5	1.1
4.1 Osteosarcoma	0.4	0.4	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	-	-	0.2	0.2	0.7	0.5
4.3 Ewing tumor	0.5	0.3	0.4	0.2	0.1	0.1
4.4 Other specified and unspecified bone tumors	-	-	0.1	0.1	0.4	0.3
5. SOFT TISSUE SARCOMAS	1.0	0.9	2.9	2.2	12.8	8.8
5.1 Fibromatous neoplasms	0.1	0.1	0.6	0.7	3.1	1.8
5.2 Rhabdomyosarcoma	0.6	0.5	0.2	0.1	0.2	0.2
5.3 Other specified soft tissue sarcoma	0.3	0.3	2.2	1.4	9.5	6.8
5.3.1 Specified soft tissue sarcoma	0.2	0.2	1.8	1.1	7.1	5.2
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.0	1.1	5.6	5.1
5.3.1.2 Kaposi sarcoma	-	-	0.8	-	1.5	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.3	0.3	2.4	1.6
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.6	0.6	12.5	1.0	4.7	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.4	11.9	0.7	4.5	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.4	0.2	0.5	0.3	0.2	0.1
6.2.1 Intracranial sites	0.2	0.1	0.2	0.0	-	-
6.2.2 Other nongonadal sites	0.1	0.1	0.4	0.3	0.2	0.1

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^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 Adapted from RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 1067; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

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

Table 32.2 - continued

Age-Adjusted SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
White, 2005-2009

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.2	6.6	11.8	74.5	40.7
7.1 Melanoma	0.2	0.2	6.5	11.7	70.1	38.6
7.2 Skin carcinomas	-	-	0.1	0.1	4.4	2.1
8. CARCINOMAS (excluding skin)	0.4	0.8	15.1	58.5	947.7	738.6
8.1 Thyroid carcinoma	0.1	0.4	3.2	16.6	11.6	28.4
8.2 Other carcinoma of head and neck	0.1	0.1	1.7	1.3	52.5	16.9
8.2.1 Nasopharyngeal carcinoma	-	-	0.1	0.1	1.2	0.5
8.2.2 Other sites in lip, oral cavity and pharynx	0.1	0.1	1.3	1.1	35.1	12.6
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.2	16.2	3.8
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.0	1.2	163.2	117.7
8.4 Carcinoma of breast	-	-	0.0	20.1	2.8	275.4
8.5 Carcinoma of genitourinary tract	-	0.1	3.2	13.8	477.3	141.2
8.5.1 Carcinoma of kidney	-	-	1.9	1.5	43.1	20.9
8.5.2 Carcinoma of bladder	-	-	0.9	0.3	90.9	21.5
8.5.3 Carcinoma of gonads	-	-	0.1	1.9	0.0	25.6
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.6	-	62.2
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.4	0.4	343.2	11.0
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	5.5	4.9	220.8	141.7
8.6.1 Carcinoma of colon and rectum	-	-	3.6	3.4	121.3	90.7
8.6.2 Carcinoma of stomach	-	-	0.6	0.6	19.7	8.9
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.0	-	0.3	0.3	21.6	6.8
8.6.4 Carcinoma of pancreas	-	-	0.4	0.4	27.8	20.9
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.3	30.5	14.3
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.5	0.6	19.4	17.3
8.7.1 Adrenocortical carcinoma	-	-	0.0	0.1	0.3	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.4	0.5	19.2	17.0
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.8	2.7	0.7	1.0	24.5	18.5
9.1 Other pediatric and embryonal tumors, NOS	2.7	2.6	0.1	0.1	0.2	0.2
9.1.1 Wilms tumor	0.7	0.8	-	-	-	0.0
9.1.2 Neuroblastoma	1.1	1.0	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.9	0.8	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.6	0.9	24.3	18.3
9.2.1 Paraganglioma and glomus tumors	-	-	0.1	0.0	0.1	0.1
9.2.2 Other specified gonadal tumors	-	-	0.0	0.1	0.0	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.3	0.2	17.2	10.3
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.9	7.6
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.4	36.4	26.7

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^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 Adapted from RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 1067; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

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

Table 32.3

Age-Adjusted SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
Black, 2005-2009

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	12.9	11.7	39.7	68.8	1418.2	863.0
1. LEUKEMIAS	3.7	2.8	2.8	2.2	24.7	14.8
1.1 Acute lymphoid leukemia	2.7	1.6	0.8	0.4	1.0	0.9
1.2 Acute myeloid leukemia	0.8	1.0	0.9	1.0	7.4	5.4
1.3 Chronic myeloid leukemia	-	-	0.8	0.5	2.9	1.8
1.4 Other and unspecified leukemias	-	-	0.4	0.2	13.5	6.7
2. LYMPHOMAS	1.9	1.3	10.0	6.9	38.5	26.5
2.1 Non-Hodgkin Lymphoma	1.1	0.7	6.4	3.6	34.7	24.1
2.2 Hodgkin Lymphoma	0.8	0.6	3.6	3.3	3.8	2.4
3. CNS, INTRACRANIAL, INTRASPINAL	2.2	2.5	1.8	1.7	8.3	5.7
3.1 Astrocytoma	1.1	1.3	0.9	0.8	5.9	3.8
3.1.1 Specified low-grade astrocytic tumors	0.7	0.8	0.2	0.3	0.2	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	-	0.3	0.4	0.3	5.3	3.2
3.1.3 Astrocytoma, NOS	-	-	0.3	0.2	0.4	0.4
3.2 Other glioma	0.5	0.5	0.4	0.5	0.9	0.6
3.3 Ependymoma	-	-	-	-	0.2	0.2
3.4 Medulloblastoma and other PNET	0.3	0.4	-	-	-	-
3.4.1 Medulloblastoma	-	-	-	-	-	-
3.4.2 Supratentorial PNET	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	0.4	0.4
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	0.9	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.6	0.5	0.9	0.7	1.1	1.1
4.1 Osteosarcoma	0.4	0.4	0.5	0.4	0.3	0.5
4.2 Chondrosarcoma	-	-	0.3	0.2	0.5	0.3
4.3 Ewing tumor	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	0.3	0.2
5. SOFT TISSUE SARCOMAS	1.4	1.0	5.9	3.4	10.8	11.2
5.1 Fibromatous neoplasms	-	-	1.1	1.3	2.4	2.2
5.2 Rhabdomyosarcoma	0.9	0.4	0.2	0.1	-	0.4
5.3 Other specified soft tissue sarcoma	0.3	0.4	4.6	1.9	8.3	8.6
5.3.1 Specified soft tissue sarcoma	-	0.3	4.1	1.6	6.3	6.4
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	0.3	1.2	1.4	3.7	6.1
5.3.1.2 Kaposi sarcoma	-	-	2.8	0.2	2.6	0.3
5.3.2 Unspecified soft tissue sarcoma	-	-	0.5	0.4	2.0	2.2
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	-	0.5	2.1	1.0	1.2	0.4
6.1 Germ cell and trophoblastic neoplasms of gonads	-	0.3	1.9	0.6	1.1	0.2
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	-	0.3	0.2	0.4	-	0.2
6.2.1 Intracranial sites	-	-	-	-	-	-
6.2.2 Other nongonadal sites	-	-	-	0.3	-	0.2

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^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 Adapted from RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 1067; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

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

Table 32.3 - continued

Age-Adjusted SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
Black, 2005-2009

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	-	-	0.2	0.4	3.6	3.0
7.1 Melanoma	-	-	0.2	0.4	2.6	2.2
7.2 Skin carcinomas	-	-	-	-	1.0	0.8
8. CARCINOMAS (excluding skin)	0.5	0.4	14.5	50.3	1234.1	732.5
8.1 Thyroid carcinoma	-	-	1.1	6.6	6.7	17.6
8.2 Other carcinoma of head and neck	-	-	1.6	1.4	58.5	16.0
8.2.1 Nasopharyngeal carcinoma	-	-	0.4	-	2.2	0.6
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	0.8	1.2	31.7	10.6
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.4	-	24.7	4.8
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.2	1.0	213.4	113.6
8.4 Carcinoma of breast	-	-	-	23.9	3.8	257.2
8.5 Carcinoma of genitourinary tract	-	-	3.5	10.6	638.5	121.2
8.5.1 Carcinoma of kidney	-	-	2.2	1.5	51.6	24.1
8.5.2 Carcinoma of bladder	-	-	0.5	-	47.8	15.8
8.5.3 Carcinoma of gonads	-	-	-	1.1	-	17.7
8.5.4 Carcinoma of cervix and uterus	-	-	-	7.4	-	55.0
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.8	0.6	539.2	8.7
8.6 Carcinoma of gastrointestinal tract	-	-	6.2	5.9	291.5	188.8
8.6.1 Carcinoma of colon and rectum	-	-	3.8	3.6	152.3	114.0
8.6.2 Carcinoma of stomach	-	-	0.7	0.8	35.3	16.9
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.7	0.3	32.2	9.2
8.6.4 Carcinoma of pancreas	-	-	0.4	0.5	35.7	28.7
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.5	36.0	20.1
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.8	0.8	21.7	18.0
8.7.1 Adrenocortical carcinoma	-	-	-	-	0.3	0.2
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.8	0.8	21.3	17.8
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.4	2.6	1.1	1.6	40.7	37.8
9.1 Other pediatric and embryonal tumors, NOS	2.4	2.6	-	-	0.2	0.2
9.1.1 Wilms tumor	0.7	1.0	-	-	-	-
9.1.2 Neuroblastoma	0.9	1.1	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.8	0.6	-	-	-	-
9.2 Other specified neoplasms, NOS	-	-	0.9	1.5	40.5	37.6
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	0.3	0.2
9.2.2 Other specified gonadal tumors	-	-	-	0.2	-	0.7
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.5	0.5	33.8	23.6
9.2.4 Other specified neoplasms, NOS	-	-	0.3	0.8	6.4	13.2
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	55.1	29.9

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^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 Adapted from RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 1067; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

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

Table 32.4
Age-Specific SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
All Races, 2005-2009

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All Sites Combined	22.7	20.8	33.7	37.8	46.3	63.2	61.7	108.8	87.5	175.8
1. LEUKEMIAS	3.6	2.6	3.0	2.3	3.2	2.2	3.4	2.9	4.3	3.3
1.1 Acute lymphoid leukemia	2.3	1.2	1.3	0.8	0.9	0.6	0.8	0.7	0.8	0.5
1.2 Acute myeloid leukemia	1.0	1.0	1.0	1.1	1.3	1.1	1.2	1.4	1.5	1.6
1.3 Chronic myeloid leukemia	0.2	0.2	0.5	0.4	0.7	0.3	0.9	0.6	1.1	0.7
1.4 Other and unspecified leukemias	0.1	0.1	0.3	0.1	0.3	0.2	0.4	0.3	0.9	0.5
2. LYMPHOMAS	5.3	4.7	7.3	6.5	7.8	7.2	9.5	7.8	11.8	8.3
2.1 Non-Hodgkin Lymphoma	2.2	1.4	3.0	1.9	3.8	2.9	5.6	4.1	8.5	5.5
2.2 Hodgkin Lymphoma	3.1	3.3	4.4	4.7	4.0	4.4	3.9	3.7	3.3	2.8
3. CNS, INTRACRANIAL, INTRASPINAL	2.2	1.9	2.2	2.3	3.0	2.2	3.5	2.6	4.3	3.1
3.1 Astrocytoma	1.2	1.0	1.1	1.2	1.5	1.1	1.7	1.2	2.6	1.6
3.1.1 Specified low-grade astrocytic tumors	0.7	0.7	0.4	0.5	0.4	0.3	0.4	0.3	0.5	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.2	0.4	0.4	0.7	0.5	0.9	0.6	1.6	0.9
3.1.3 Astrocytoma, NOS	0.2	0.2	0.3	0.3	0.3	0.3	0.5	0.4	0.5	0.5
3.2 Other glioma	0.4	0.3	0.6	0.6	1.1	0.7	1.3	0.9	1.2	1.0
3.3 Ependymoma	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3.4 Medulloblastoma and other PNET	0.3	0.2	0.3	0.3	0.2	0.2	0.2	-	0.2	-
3.4.1 Medulloblastoma	0.2	0.1	0.2	0.2	0.1	-	0.1	-	-	-
3.4.2 Supratentorial PNET	0.1	0.1	0.1	-	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	2.1	1.2	1.1	0.9	0.7	0.8	0.7	0.5	0.7	0.6
4.1 Osteosarcoma	1.1	0.7	0.5	0.4	0.1	0.3	0.1	0.2	0.2	0.2
4.2 Chondrosarcoma	0.1	-	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.2
4.3 Ewing tumor	0.8	0.4	0.4	0.2	0.2	0.2	0.2	-	0.1	0.1
4.4 Other specified and unspecified bone tumors	-	-	-	0.1	0.1	0.1	0.1	0.1	0.2	-
5. SOFT TISSUE SARCOMAS	1.4	1.5	1.9	1.7	3.2	1.9	4.1	2.9	5.5	3.6
5.1 Fibromatous neoplasms	0.3	0.4	0.4	0.5	0.7	0.8	0.8	1.1	1.1	1.2
5.2 Rhabdomyosarcoma	0.4	0.2	0.2	0.1	0.2	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.8	0.8	1.3	1.0	2.3	1.0	3.2	1.7	4.3	2.4
5.3.1 Specified soft tissue sarcoma	0.6	0.6	1.0	0.7	1.9	0.8	2.8	1.4	3.8	2.1
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.6	0.6	0.7	0.7	0.9	0.8	1.3	1.3	1.7	2.0
5.3.1.2 Kaposi sarcoma	-	-	0.3	-	1.0	-	1.5	-	2.2	-
5.3.2 Unspecified soft tissue sarcoma	0.2	0.2	0.3	0.3	0.4	0.2	0.4	0.3	0.4	0.4
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	4.4	1.2	10.6	1.4	13.6	1.2	13.4	1.0	10.8	0.8
6.1 Germ cell and trophoblastic neoplasms of gonads	3.7	0.9	10.0	1.0	13.0	0.8	12.9	0.6	10.5	0.4
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.7	0.2	0.6	0.4	0.6	0.3	0.5	0.4	0.3	0.4
6.2.1 Intracranial sites	0.5	-	0.2	-	0.1	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	0.2	0.4	0.3	0.5	0.3	0.4	0.4	0.3	0.4

Rates are per 100,000.

^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 Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

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

Table 32.4 - continued
 Age-Specific SEER Incidence^a, by Age Group and Sex
 By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
 All Races, 2005-2009

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	1.1	1.7	2.4	5.8	4.6	9.8	7.4	12.3	10.8	16.9
7.1 Melanoma	1.0	1.7	2.4	5.8	4.6	9.7	7.3	12.2	10.7	16.7
7.2 Skin carcinomas	-	-	-	-	-	-	-	0.1	0.2	0.1
8. CARCINOMAS (excluding skin)	2.3	5.5	4.7	16.1	9.5	36.8	18.6	77.1	37.1	135.9
8.1 Thyroid carcinoma	0.7	3.6	1.4	8.9	2.7	14.5	4.1	21.2	5.5	25.9
8.2 Other carcinoma of head and neck	0.5	0.4	0.6	0.9	1.1	1.1	1.9	1.7	4.4	2.9
8.2.1 Nasopharyngeal carcinoma	0.2	-	0.2	-	0.2	0.1	0.3	0.2	0.7	0.4
8.2.2 Other sites in lip, oral cavity and pharynx	0.3	0.3	0.4	0.8	0.7	0.9	1.4	1.4	2.9	2.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	0.2	0.1	0.2	0.2	0.8	0.4
8.3 Carcinoma of trachea, bronchus, and lung	0.1	0.1	0.3	0.3	0.5	0.6	1.1	1.4	2.7	3.1
8.4 Carcinoma of breast	-	-	-	1.4	-	8.1	-	26.2	0.1	59.3
8.5 Carcinoma of genitourinary tract	0.2	0.7	0.7	3.0	1.6	9.0	3.6	19.2	8.6	30.7
8.5.1 Carcinoma of kidney	0.1	0.2	0.4	0.4	0.9	1.0	2.3	2.0	5.1	3.3
8.5.2 Carcinoma of bladder	0.1	-	0.3	0.1	0.5	0.2	0.9	0.4	2.0	0.7
8.5.3 Carcinoma of gonads	-	0.4	-	0.7	-	1.2	-	2.3	-	4.2
8.5.4 Carcinoma of cervix and uterus	-	0.1	-	1.7	-	6.4	-	13.9	-	21.4
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.2	0.3	0.6	1.4	1.2
8.6 Carcinoma of gastrointestinal tract	0.6	0.6	1.4	1.4	3.2	3.0	7.1	6.7	14.6	12.6
8.6.1 Carcinoma of colon and rectum	0.3	0.3	0.9	0.9	2.1	2.0	4.7	4.5	9.2	8.6
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.3	0.5	0.9	0.9	1.7	1.5
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.2	0.1	0.2	0.1	0.3	0.2	0.6	0.4	1.1	0.6
8.6.4 Carcinoma of pancreas	-	-	-	0.1	0.2	0.1	0.3	0.5	1.1	0.9
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.1	-	0.3	0.2	0.5	0.3	1.5	0.9
8.7 Carcinoma of other and ill-defined sites, NOS	0.1	-	0.2	0.3	0.4	0.5	0.7	0.8	1.2	1.5
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	0.1
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.3	0.4	0.6	0.7	1.1	1.3
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.4	0.3	0.5	0.5	0.8	0.9	1.2	1.5	2.4
9.1 Other pediatric and embryonal tumors, NOS	0.1	0.1	-	-	-	-	-	0.1	0.1	-
9.1.1 Wilms tumor	-	-	-	-	-	-	-	-	-	-
9.1.2 Neuroblastoma	-	-	-	-	-	-	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.2 Other specified neoplasms, NOS	0.1	0.3	0.2	0.4	0.5	0.8	0.8	1.1	1.4	2.3
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	0.1	-	0.2	-	0.2
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.1	-	0.2	0.1	0.4	0.2	0.8	0.7
9.2.4 Other specified neoplasms, NOS ^c	-	0.1	-	0.3	0.2	0.5	0.3	0.7	0.5	1.4
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.1	0.2	0.2	0.2	0.2	0.5	0.6	1.0

Rates are per 100,000.

^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 Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^c Myeloproliferative disorders and myelodysplastic syndromes were first reported effective January 1, 2001 with the implementation of ICD-O 3.

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

Table 32.5
Age-Specific SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
White, 2005-2009

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All Sites Combined	24.6	22.0	37.0	40.0	50.2	67.0	65.3	115.2	91.3	181.5
1. LEUKEMIAS	3.9	2.8	3.2	2.4	3.3	2.3	3.5	3.0	4.3	3.4
1.1 Acute lymphoid leukemia	2.5	1.4	1.4	0.8	1.0	0.7	1.0	0.8	0.8	0.6
1.2 Acute myeloid leukemia	1.1	1.0	1.0	1.1	1.3	1.1	1.3	1.5	1.5	1.6
1.3 Chronic myeloid leukemia	0.2	0.2	0.5	0.4	0.7	0.3	0.9	0.5	1.0	0.7
1.4 Other and unspecified leukemias	-	-	0.3	-	0.3	0.2	0.4	0.3	1.0	0.6
2. LYMPHOMAS	5.5	5.0	7.5	7.0	7.9	7.4	9.4	8.0	12.0	8.5
2.1 Non-Hodgkin Lymphoma	2.2	1.4	2.9	1.9	3.8	2.8	5.2	3.9	8.5	5.4
2.2 Hodgkin Lymphoma	3.3	3.6	4.6	5.1	4.2	4.6	4.2	4.1	3.5	3.1
3. CNS, INTRACRANIAL, INTRASPINAL	2.4	2.0	2.5	2.6	3.5	2.5	3.8	2.9	4.8	3.4
3.1 Astrocytoma	1.4	1.1	1.2	1.3	1.7	1.2	1.9	1.4	2.9	1.8
3.1.1 Specified low-grade astrocytic tumors	0.8	0.8	0.4	0.6	0.5	0.4	0.4	0.4	0.5	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.4	0.1	0.5	0.4	0.8	0.5	1.0	0.6	1.8	1.0
3.1.3 Astrocytoma, NOS	0.2	0.2	0.3	0.3	0.4	0.3	0.5	0.4	0.6	0.5
3.2 Other glioma	0.4	0.3	0.7	0.6	1.2	0.8	1.3	1.0	1.3	1.2
3.3 Ependymoma	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3.4 Medulloblastoma and other PNET	0.4	0.3	0.3	0.3	0.2	0.2	0.2	-	0.2	-
3.4.1 Medulloblastoma	0.2	-	0.2	0.2	-	-	-	-	-	-
3.4.2 Supratentorial PNET	0.2	0.1	0.1	-	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	2.3	1.2	1.3	0.8	0.7	0.9	0.7	0.5	0.8	0.6
4.1 Osteosarcoma	1.1	0.6	0.6	0.3	-	0.3	-	0.2	0.2	0.1
4.2 Chondrosarcoma	-	-	0.2	-	0.3	0.3	0.2	0.2	0.3	0.2
4.3 Ewing tumor	0.9	0.5	0.4	0.3	0.2	0.2	0.2	-	0.1	0.1
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	0.2	-
5. SOFT TISSUE SARCOMAS	1.4	1.5	1.7	1.6	2.8	1.8	3.5	2.7	4.9	3.3
5.1 Fibromatous neoplasms	0.3	0.3	0.4	0.5	0.6	0.7	0.7	1.1	0.9	1.0
5.2 Rhabdomyosarcoma	0.4	0.2	0.2	-	0.2	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.7	0.9	1.1	1.0	2.0	1.0	2.7	1.5	3.9	2.3
5.3.1 Specified soft tissue sarcoma	0.6	0.7	0.8	0.8	1.6	0.8	2.4	1.2	3.5	1.9
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.6	0.7	0.6	0.7	0.9	0.8	1.2	1.2	1.6	1.9
5.3.1.2 Kaposi sarcoma	-	-	0.2	-	0.7	-	1.2	-	1.8	-
5.3.2 Unspecified soft tissue sarcoma	-	0.2	0.3	0.3	0.4	0.2	0.3	0.3	0.4	0.4
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	5.3	1.1	12.6	1.4	16.3	1.2	16.0	0.9	12.7	0.6
6.1 Germ cell and trophoblastic neoplasms of gonads	4.6	0.9	12.0	1.0	15.5	0.8	15.5	0.6	12.5	0.3
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.7	0.2	0.6	0.4	0.7	0.4	0.5	0.3	0.3	0.3
6.2.1 Intracranial sites	0.5	-	0.2	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	-	0.4	0.3	0.6	0.4	0.4	0.3	0.3	0.3

Rates are per 100,000.

^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 Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

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

Table 32.5 - continued
 Age-Specific SEER Incidence^a, by Age Group and Sex
 By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
 White, 2005-2009

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	1.3	2.2	3.0	7.0	5.5	12.1	8.9	15.4	13.2	20.9
7.1 Melanoma	1.2	2.2	3.0	7.0	5.5	12.0	8.8	15.3	13.0	20.8
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	0.2	-
8. CARCINOMAS (excluding skin)	2.2	5.9	4.7	16.6	9.4	38.0	18.4	80.1	36.6	137.4
8.1 Thyroid carcinoma	0.8	4.0	1.5	9.9	2.9	15.8	4.4	23.9	6.0	27.5
8.2 Other carcinoma of head and neck	0.4	0.4	0.6	0.8	1.0	1.1	1.8	1.7	4.1	2.6
8.2.1 Nasopharyngeal carcinoma	-	-	0.1	-	-	-	-	-	0.2	-
8.2.2 Other sites in lip, oral cavity and pharynx	0.3	0.3	0.4	0.7	0.7	0.9	1.4	1.3	3.1	2.0
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	0.2	-	0.2	0.2	0.8	0.4
8.3 Carcinoma of trachea, bronchus, and lung	-	0.2	0.3	0.3	0.5	0.6	1.0	1.4	2.6	3.0
8.4 Carcinoma of breast	-	-	-	1.2	-	7.5	-	25.6	-	58.7
8.5 Carcinoma of genitourinary tract	0.2	0.7	0.8	2.8	1.6	9.7	3.7	20.4	8.8	32.1
8.5.1 Carcinoma of kidney	-	0.1	0.3	0.3	0.9	1.0	2.3	2.2	5.3	3.4
8.5.2 Carcinoma of bladder	-	-	0.3	-	0.6	0.3	1.0	0.4	2.2	0.8
8.5.3 Carcinoma of gonads	-	0.4	-	0.7	-	1.3	-	2.5	-	4.4
8.5.4 Carcinoma of cervix and uterus	-	-	-	1.6	-	7.0	-	14.8	-	22.3
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	0.3	0.7	1.2	1.2
8.6 Carcinoma of gastrointestinal tract	0.6	0.6	1.4	1.4	3.2	3.0	6.9	6.4	13.9	12.0
8.6.1 Carcinoma of colon and rectum	0.3	0.3	0.9	0.9	2.1	2.0	4.8	4.4	9.0	8.6
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.3	0.4	0.9	0.8	1.5	1.3
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.2	-	0.1	-	0.3	0.2	0.3	0.3	0.7	0.5
8.6.4 Carcinoma of pancreas	-	-	-	-	0.2	0.2	0.3	0.5	1.1	0.9
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	0.3	0.2	0.6	0.3	1.6	0.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.3	0.4	0.6	0.7	1.1	1.4
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	0.2
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.1	0.2	0.3	0.4	0.5	0.6	1.0	1.3
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.3	0.3	0.4	0.5	0.7	0.9	1.2	1.4	2.3
9.1 Other pediatric and embryonal tumors, NOS	0.2	-	-	-	-	-	-	-	-	-
9.1.1 Wilms tumor	-	-	-	-	-	-	-	-	-	-
9.1.2 Neuroblastoma	-	-	-	-	-	-	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.2 Other specified neoplasms, NOS	-	0.2	0.2	0.4	0.4	0.6	0.8	1.0	1.3	2.2
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	0.2	-	0.2
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.1	-	0.2	-	0.4	0.2	0.8	0.6
9.2.4 Other specified neoplasms, NOS ^c	-	-	-	0.3	0.2	0.5	0.3	0.6	0.4	1.4
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.2	0.2	0.2	0.2	0.6	0.6	1.0

Rates are per 100,000.

^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 Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^c Myeloproliferative disorders and myelodysplastic syndromes were first reported effective January 1, 2001 with the implementation of ICD-O 3.

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

Table 32.6
Age-Specific SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
Black, 2005-2009

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All Sites Combined	14.8	14.5	19.7	25.7	31.3	47.6	49.3	91.5	76.7	149.7
1. LEUKEMIAS	2.2	1.7	1.8	2.4	2.7	1.8	3.1	2.4	4.1	2.5
1.1 Acute lymphoid leukemia	1.4	0.8	-	-	-	-	-	-	-	-
1.2 Acute myeloid leukemia	-	0.7	-	1.2	1.1	1.0	1.1	1.0	1.2	1.2
1.3 Chronic myeloid leukemia	-	-	-	-	-	-	1.2	0.9	1.5	-
1.4 Other and unspecified leukemias	-	-	-	-	-	-	-	-	-	-
2. LYMPHOMAS	4.7	4.2	6.9	4.8	9.0	7.6	13.6	9.1	14.8	8.8
2.1 Non-Hodgkin Lymphoma	2.4	1.6	3.3	1.7	4.5	2.9	9.4	5.0	11.2	6.3
2.2 Hodgkin Lymphoma	2.3	2.6	3.6	3.2	4.4	4.7	4.2	4.0	3.6	2.5
3. CNS, INTRACRANIAL, INTRASPINAL	1.4	1.4	1.6	1.5	1.4	1.9	1.9	1.7	2.3	2.1
3.1 Astrocytoma	0.7	-	0.9	0.8	-	0.9	1.1	-	1.3	1.0
3.1.1 Specified low-grade astrocytic tumors	-	-	-	-	-	-	-	-	-	-
3.1.2 Glioblastoma and anaplastic astrocytoma	-	-	-	-	-	-	-	-	-	-
3.1.3 Astrocytoma, NOS	-	-	-	-	-	-	-	-	-	-
3.2 Other glioma	-	-	-	-	-	-	-	-	-	-
3.3 Ependymoma	-	-	-	-	-	-	-	-	-	-
3.4 Medulloblastoma and other PNET	-	-	-	-	-	-	-	-	-	-
3.4.1 Medulloblastoma	-	-	-	-	-	-	-	-	-	-
3.4.2 Supratentorial PNET	-	-	-	-	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	1.8	1.1	0.9	1.0	-	-	-	-	-	-
4.1 Osteosarcoma	1.4	0.8	-	-	-	-	-	-	-	-
4.2 Chondrosarcoma	-	-	-	-	-	-	-	-	-	-
4.3 Ewing tumor	-	-	-	-	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	-	-
5. SOFT TISSUE SARCOMAS	1.3	1.6	3.0	2.4	6.4	2.5	8.2	4.5	10.1	5.4
5.1 Fibromatous neoplasms	-	0.8	-	0.8	1.1	1.0	1.5	1.7	2.0	1.9
5.2 Rhabdomyosarcoma	-	-	-	-	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.7	-	2.5	1.2	5.0	1.4	6.5	2.7	7.8	3.6
5.3.1 Specified soft tissue sarcoma	-	-	2.1	0.9	4.5	1.1	5.5	2.4	7.4	2.9
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	1.0	0.8	1.1	0.9	1.4	2.0	2.2	2.7
5.3.1.2 Kaposi sarcoma	-	-	1.1	-	3.3	-	4.1	-	5.2	-
5.3.2 Unspecified soft tissue sarcoma	-	-	-	-	-	-	1.0	-	-	-
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.9	1.1	1.5	1.1	2.3	0.9	3.4	1.2	2.6	0.9
6.1 Germ cell and trophoblastic neoplasms of gonads	-	0.8	1.4	-	2.2	-	3.1	-	2.4	-
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	-	-	-	-	-	-	-	-	-	-
6.2.1 Intracranial sites	-	-	-	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	-	-	-	-	-	-	-	-	-	-

Rates are per 100,000.

^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 Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

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

Table 32.6 - continued
 Age-Specific SEER Incidence^a, by Age Group and Sex
 By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
 Black, 2005-2009

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	-	-	-	-	-	-	-	-	-	-
7.1 Melanoma	-	-	-	-	-	-	-	-	-	-
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	-	-
8. CARCINOMAS (excluding skin)	2.1	2.5	3.8	11.7	7.8	30.8	16.7	69.0	37.9	123.8
8.1 Thyroid carcinoma	-	1.1	-	3.5	1.1	6.0	1.6	9.0	2.1	12.3
8.2 Other carcinoma of head and neck	0.7	-	-	1.0	1.0	1.3	1.2	1.8	4.1	2.4
8.2.1 Nasopharyngeal carcinoma	-	-	-	-	-	-	-	-	-	-
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	-	-	-	1.1	-	1.6	2.4	2.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	-	-	1.1	-
8.3 Carcinoma of trachea, bronchus, and lung	-	-	-	-	-	-	1.4	1.5	3.2	2.9
8.4 Carcinoma of breast	-	-	-	2.1	-	12.0	-	32.3	-	65.5
8.5 Carcinoma of genitourinary tract	-	-	-	3.5	1.4	7.2	4.3	15.0	9.8	24.4
8.5.1 Carcinoma of kidney	-	-	-	-	1.1	1.1	3.4	1.6	5.1	3.5
8.5.2 Carcinoma of bladder	-	-	-	-	-	-	-	-	1.5	-
8.5.3 Carcinoma of gonads	-	-	-	-	-	-	-	1.2	-	2.7
8.5.4 Carcinoma of cervix and uterus	-	-	-	2.2	-	4.9	-	11.3	-	16.6
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	-	-	3.2	1.4
8.6 Carcinoma of gastrointestinal tract	-	-	1.5	1.3	3.0	3.3	6.8	8.2	17.0	14.5
8.6.1 Carcinoma of colon and rectum	-	-	1.0	-	1.9	1.9	3.9	5.2	10.9	9.2
8.6.2 Carcinoma of stomach	-	-	-	-	-	-	-	1.3	2.3	2.0
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	-	-	-	-	1.2	-	1.3	-
8.6.4 Carcinoma of pancreas	-	-	-	-	-	-	-	-	1.1	1.2
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	-	-	-	-	1.4	1.4
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	1.2	1.2	1.5	1.8
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	1.2	1.2	1.5	1.7
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	-	-	-	-	-	1.0	1.2	2.1	2.7	3.7
9.1 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.1.1 Wilms tumor	-	-	-	-	-	-	-	-	-	-
9.1.2 Neuroblastoma	-	-	-	-	-	-	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.2 Other specified neoplasms, NOS	-	-	-	-	-	0.9	0.9	2.0	2.7	3.6
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	-	-	-
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	-	-	-	-	-	-	1.7	1.6
9.2.4 Other specified neoplasms, NOS ^c	-	-	-	-	-	-	-	1.1	-	1.6
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	-	-	-	-	-	-	-	1.2

Rates are per 100,000.

^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 Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^c Myeloproliferative disorders and myelodysplastic syndromes were first reported effective January 1, 2001 with the implementation of ICD-O 3.

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

Table 32.7

Age-Adjusted SEER Incidence^a, by Year and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
All Races, Ages 15-19

Both Sexes	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	12,992	20.3	0.6*	4,235	22.0	0.6*
1. Leukemias	1,556	2.4	0.9*	549	2.9	0.9*
2. Lymphomas	3,237	5.1	0.0	955	5.0	0.0
3. CNS, intracranial, intraspinal	1,265	2.0	0.4	407	2.1	0.4
4. Osseous & chondromatous neoplasms	1,024	1.6	0.8*	337	1.8	0.8*
5. Soft tissue sarcomas	952	1.5	0.4	307	1.6	0.4
6. Germ cell and trophoblastic neoplasms	1,580	2.5	1.0*	535	2.8	1.0*
7. Melanoma and skin carcinomas	980	1.5	1.2*	346	1.8	1.2*
8. Carcinomas (excluding skin)	2,152	3.4	1.0*	738	3.8	1.0*
9. Miscellaneous specified neoplasms, NOS	193	0.3	-0.5	54	0.3	-0.5
10. Unspecified malignant neoplasms	53	0.1	-	-	-	-

Males	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	6,849	21.0	0.7*	2,287	23.1	0.7*
1. Leukemias	936	2.9	0.6	316	3.2	0.6
2. Lymphomas	1,727	5.3	0.1	529	5.4	0.1
3. CNS, intracranial, intraspinal	737	2.3	0.5	242	2.4	0.5
4. Osseous & chondromatous neoplasms	667	2.0	1.0*	215	2.2	1.0*
5. Soft tissue sarcomas	503	1.5	1.5	165	1.7	-2.5
6. Germ cell and trophoblastic neoplasms	1,149	3.5	1.3*	411	4.2	1.3*
7. Melanoma and skin carcinomas	390	1.2	1.5*	146	1.5	1.5*
8. Carcinomas (excluding skin)	632	1.9	1.5*	237	2.4	1.5*
9. Miscellaneous specified neoplasms, NOS	84	0.3	-	22	0.2	-
10. Unspecified malignant neoplasms	24	0.1	-	-	-	-

Females	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	6,143	19.7	0.5*	1,948	20.8	0.5*
1. Leukemias	620	2.0	1.5*	233	2.5	1.5*
2. Lymphomas	1,510	4.8	0.0	426	4.5	0.0
3. CNS, intracranial, intraspinal	528	1.7	0.2	165	1.8	0.2
4. Osseous & chondromatous neoplasms	357	1.1	0.6	122	1.3	0.6
5. Soft tissue sarcomas	449	1.4	0.6	142	1.5	0.6
6. Germ cell and trophoblastic neoplasms	431	1.4	1.7	124	1.3	5.2
7. Melanoma and skin carcinomas	590	1.9	0.9*	200	2.1	0.9*
8. Carcinomas (excluding skin)	1,520	4.9	0.8*	501	5.3	0.8*
9. Miscellaneous specified neoplasms, NOS	109	0.3	-	32	0.3	-
10. Unspecified malignant neoplasms	29	0.1	-	-	-	-

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

^b Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^c The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2009.

- Statistic could not be calculated. Count and rate based on less than 16 cases for the time interval. AAPC could not be calculated due to insufficient data.

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

Table 32.8

Age-Adjusted SEER Incidence^a, by Year and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
All Races, Ages 20-24

Both Sexes	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	22,164	33.7	0.7*	7,146	37.1	0.7*
1. Leukemias	1,427	2.2	0.8*	461	2.4	0.8*
2. Lymphomas	4,672	7.1	0.8*	1,442	7.5	-0.2
3. CNS, intracranial, intraspinal	1,472	2.2	0.8*	469	2.4	0.8*
4. Osseous & chondromatous neoplasms	587	0.9	1.2*	202	1.0	1.2*
5. Soft tissue sarcomas	1,380	2.1	0.8	383	2.0	-1.6*
6. Germ cell and trophoblastic neoplasms	3,471	5.3	0.9*	1,175	6.1	0.9*
7. Melanoma and skin carcinomas	2,790	4.2	1.2*	968	5.0	1.2*
8. Carcinomas (excluding skin)	6,012	9.1	0.3	1,936	10.0	1.3*
9. Miscellaneous specified neoplasms, NOS	218	0.3	1.3*	74	0.4	1.3*
10. Unspecified malignant neoplasms	135	0.2	0.1	36	0.2	0.1

Males	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	10,930	32.7	0.5*	3,416	34.4	0.5*
1. Leukemias	828	2.5	0.7	260	2.6	0.7
2. Lymphomas	2,505	7.5	0.3	752	7.6	0.3
3. CNS, intracranial, intraspinal	830	2.5	0.2	240	2.4	0.2
4. Osseous & chondromatous neoplasms	342	1.0	0.8	116	1.2	0.8
5. Soft tissue sarcomas	814	2.4	0.4	208	2.1	-3.3*
6. Germ cell and trophoblastic neoplasms	3,102	9.3	0.8*	1,056	10.6	0.8*
7. Melanoma and skin carcinomas	973	2.9	0.3	307	3.1	0.3
8. Carcinomas (excluding skin)	1,402	4.2	0.2	440	4.4	0.2
9. Miscellaneous specified neoplasms, NOS	84	0.3	-	26	0.3	-
10. Unspecified malignant neoplasms	50	0.1	-	-	-	-

Females	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	11,234	34.7	1.0*	3,730	39.9	1.0*
1. Leukemias	599	1.9	0.0	201	2.2	-0.6
2. Lymphomas	2,167	6.7	1.2*	690	7.4	-0.2
3. CNS, intracranial, intraspinal	642	2.0	1.6*	229	2.5	1.6*
4. Osseous & chondromatous neoplasms	245	0.8	1.7*	86	0.9	1.7*
5. Soft tissue sarcomas	566	1.7	1.9	175	1.9	2.1
6. Germ cell and trophoblastic neoplasms	369	1.1	0.3	119	1.3	0.3
7. Melanoma and skin carcinomas	1,817	5.6	1.7*	661	7.1	1.7*
8. Carcinomas (excluding skin)	4,610	14.2	0.4	1,496	16.0	1.5*
9. Miscellaneous specified neoplasms, NOS	134	0.4	1.7*	48	0.5	1.7*
10. Unspecified malignant neoplasms	85	0.3	-	25	0.3	-

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

^b Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^c The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2009.

- Statistic could not be calculated. Count and rate based on less than 16 cases for the time interval. AAPC could not be calculated due to insufficient data.

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

Table 32.9

Age-Adjusted SEER Incidence^a, by Year and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
All Races, Ages 25-29

Both Sexes	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	37,793	54.4	0.6*	11,360	57.5	1.0*
1. Leukemias	1,622	2.3	0.6*	512	2.6	0.6*
2. Lymphomas	5,713	8.2	0.5	1,605	8.1	0.5
3. CNS, intracranial, intraspinal	1,960	2.8	0.9*	600	3.0	0.9*
4. Osseous & chondromatous neoplasms	464	0.7	1.2*	145	0.7	1.2*
5. Soft tissue sarcomas	2,899	4.2	1.5	563	2.9	0.3
6. Germ cell and trophoblastic neoplasms	4,803	6.9	1.4*	1,492	7.6	2.6*
7. Melanoma and skin carcinomas	5,191	7.5	1.1*	1,715	8.7	1.1*
8. Carcinomas (excluding skin)	14,616	21.0	0.2	4,562	23.1	1.1*
9. Miscellaneous specified neoplasms, NOS	340	0.5	1.2*	116	0.6	1.2*
10. Unspecified malignant neoplasms	185	0.3	-	50	0.3	-

Males	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	17,131	49.0	0.7*	4,944	49.2	1.0*
1. Leukemias	943	2.7	-0.1	285	2.8	1.3*
2. Lymphomas	3,252	9.3	0.6	861	8.6	0.3
3. CNS, intracranial, intraspinal	1,063	3.0	0.7*	317	3.2	0.7*
4. Osseous & chondromatous neoplasms	265	0.8	0.0	71	0.7	0.0
5. Soft tissue sarcomas	2,147	6.1	1.9	376	3.7	-0.3
6. Germ cell and trophoblastic neoplasms	4,428	12.7	1.6*	1,398	13.9	2.4*
7. Melanoma and skin carcinomas	1,860	5.3	0.1	543	5.4	0.1
8. Carcinomas (excluding skin)	2,964	8.5	0.1	1,018	10.1	1.7*
9. Miscellaneous specified neoplasms, NOS	128	0.4	-	49	0.5	-
10. Unspecified malignant neoplasms	81	0.2	-	26	0.3	-

Females	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	20,662	59.9	0.5*	6,416	66.2	0.9*
1. Leukemias	679	2.0	1.1*	227	2.3	1.1*
2. Lymphomas	2,461	7.1	0.9*	744	7.7	0.9*
3. CNS, intracranial, intraspinal	897	2.6	1.0*	283	2.9	1.0*
4. Osseous & chondromatous neoplasms	199	0.6	2.1*	74	0.8	2.1*
5. Soft tissue sarcomas	752	2.2	0.4	187	1.9	-2.4*
6. Germ cell and trophoblastic neoplasms	375	1.1	-1.1	94	1.0	-1.1
7. Melanoma and skin carcinomas	3,331	9.7	1.7*	1,172	12.1	1.7*
8. Carcinomas (excluding skin)	11,652	33.8	0.2	3,544	36.5	0.9*
9. Miscellaneous specified neoplasms, NOS	212	0.6	0.5	67	0.7	0.5
10. Unspecified malignant neoplasms	104	0.3	-	24	0.2	-

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

^b Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^c The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2009.

- Statistic could not be calculated. Count and rate based on less than 16 cases for the time interval. AAPC could not be calculated due to insufficient data.

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

Table 32.10

Age-Adjusted SEER Incidence^a, by Year and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
All Races, Ages 30-34

Both Sexes	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	58,271	84.2	0.8*	17,507	87.5	0.9*
1. Leukemias	1,946	2.8	0.5	634	3.2	0.5
2. Lymphomas	6,450	9.3	1.7*	1,855	9.3	0.8
3. CNS, intracranial, intraspinal	2,311	3.3	0.3	670	3.3	0.3
4. Osseous & chondromatous neoplasms	438	0.6	0.7	139	0.7	0.7
5. Soft tissue sarcomas	4,883	7.1	1.2	749	3.7	-1.6
6. Germ cell and trophoblastic neoplasms	4,838	7.0	1.8*	1,559	7.8	0.4
7. Melanoma and skin carcinomas	7,415	10.7	1.5	2,345	11.7	-0.9
8. Carcinomas (excluding skin)	29,115	42.1	0.5*	9,255	46.3	1.9*
9. Miscellaneous specified neoplasms, NOS	596	0.9	1.5*	214	1.1	1.5*
10. Unspecified malignant neoplasms	278	0.4	0.7	86	0.4	0.7

Males	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	24,353	70.2	0.8*	6,688	66.1	0.5
1. Leukemias	1,125	3.2	0.6	363	3.6	0.6
2. Lymphomas	4,013	11.6	1.7*	1,056	10.4	0.9
3. CNS, intracranial, intraspinal	1,346	3.9	0.1	387	3.8	0.1
4. Osseous & chondromatous neoplasms	241	0.7	0.4	75	0.7	0.4
5. Soft tissue sarcomas	3,969	11.4	1.3	483	4.8	-3.6*
6. Germ cell and trophoblastic neoplasms	4,519	13.0	1.9*	1,460	14.4	0.3
7. Melanoma and skin carcinomas	2,995	8.6	0.0	876	8.7	0.0
8. Carcinomas (excluding skin)	5,813	16.8	0.5	1,858	18.4	2.8*
9. Miscellaneous specified neoplasms, NOS	234	0.7	2.2*	98	1.0	2.2*
10. Unspecified malignant neoplasms	98	0.3	-	32	0.3	-

Females	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	33,918	98.2	0.7*	10,819	109.4	1.5*
1. Leukemias	821	2.4	0.3	271	2.7	0.3
2. Lymphomas	2,437	7.1	1.5*	799	8.1	1.5*
3. CNS, intracranial, intraspinal	965	2.8	0.5	283	2.9	0.5
4. Osseous & chondromatous neoplasms	197	0.6	-	64	0.6	-
5. Soft tissue sarcomas	914	2.6	0.2	266	2.7	0.2
6. Germ cell and trophoblastic neoplasms	319	0.9	0.3	99	1.0	0.3
7. Melanoma and skin carcinomas	4,420	12.8	2.2*	1,469	14.9	0.9*
8. Carcinomas (excluding skin)	23,302	67.4	0.5*	7,397	74.8	1.8*
9. Miscellaneous specified neoplasms, NOS	362	1.0	1.1	116	1.2	1.1
10. Unspecified malignant neoplasms	180	0.5	-	54	0.5	-

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

^b Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^c The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2009.

- Statistic could not be calculated. Count and rate based on less than 16 cases for the time interval. AAPC could not be calculated due to insufficient data.

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

Table 32.11

Age-Adjusted SEER Incidence^a, by Year and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
All Races, Ages 35-39

Both Sexes	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	86,312	131.8	0.8*	28,103	134.9	0.9*
1. Leukemias	2,404	3.7	-0.1	758	3.6	-0.1
2. Lymphomas	7,314	11.2	1.7*	2,373	11.4	-1.4*
3. CNS, intracranial, intraspinal	2,607	4.0	0.0	833	4.0	0.0
4. Osseous & chondromatous neoplasms	425	0.6	1.5*	156	0.7	1.5*
5. Soft tissue sarcomas	5,755	8.8	1.3	1,086	5.2	-0.8
6. Germ cell and trophoblastic neoplasms	3,824	5.8	1.7*	1,343	6.4	0.3
7. Melanoma and skin carcinomas	9,365	14.3	1.6*	3,168	15.2	0.3
8. Carcinomas (excluding skin)	53,079	81.1	0.4	17,861	85.7	1.4*
9. Miscellaneous specified neoplasms, NOS	1,091	1.7	1.0*	393	1.9	1.0*
10. Unspecified malignant neoplasms	447	0.7	-0.2	131	0.6	-0.2

Males	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	32,742	100.2	0.6	10,035	95.7	0.1
1. Leukemias	1,403	4.3	-0.1	440	4.2	-0.1
2. Lymphomas	4,801	14.7	2.0*	1,455	13.9	-0.3
3. CNS, intracranial, intraspinal	1,522	4.7	-0.1	478	4.6	-0.1
4. Osseous & chondromatous neoplasms	244	0.7	0.7	85	0.8	0.7
5. Soft tissue sarcomas	4,565	14.0	2.8	727	6.9	-1.3
6. Germ cell and trophoblastic neoplasms	3,632	11.1	1.9*	1,284	12.2	0.3
7. Melanoma and skin carcinomas	4,118	12.6	0.7	1,308	12.5	-0.7*
8. Carcinomas (excluding skin)	11,834	36.2	0.2	4,052	38.7	1.5*
9. Miscellaneous specified neoplasms, NOS	439	1.3	0.5	156	1.5	0.5
10. Unspecified malignant neoplasms	184	0.6	-0.6	50	0.5	-0.6

Females	1975-2009			2000-2009		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	53,570	163.4	0.7*	18,068	174.5	1.3*
1. Leukemias	1,001	3.1	0.7	318	3.1	1.9*
2. Lymphomas	2,513	7.7	1.5*	918	8.9	1.5*
3. CNS, intracranial, intraspinal	1,085	3.3	-0.2	355	3.4	-0.2
4. Osseous & chondromatous neoplasms	181	0.6	-	71	0.7	-
5. Soft tissue sarcomas	1,190	3.6	-0.6	359	3.5	-0.6
6. Germ cell and trophoblastic neoplasms	192	0.6	-0.6	59	0.6	-0.6
7. Melanoma and skin carcinomas	5,247	16.0	2.2*	1,860	18.0	2.3*
8. Carcinomas (excluding skin)	41,245	125.8	0.5	13,809	133.4	1.5*
9. Miscellaneous specified neoplasms, NOS	652	2.0	1.4*	237	2.3	1.4*
10. Unspecified malignant neoplasms	263	0.8	-0.2	81	0.8	-0.2

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

^b Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^c The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2009.

- Statistic could not be calculated. Count and rate based on less than 16 cases for the time interval. AAPC could not be calculated due to insufficient data.

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

Table 32.12

SEER Incidence^a and U.S. Mortality^b Rate Comparison by Race/Ethnicity, 2005-2009
Ages 15-19

Males	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	22.7	24.6	14.8	18.3	22.5	3.7	3.7	3.6	3.7	4.2
Leukemia	3.6	3.9	2.2	3.2	5.5	1.1	1.1	1.0	0.7	1.6
Lymphoma	5.3	5.5	4.7	3.6	3.6	0.4	0.4	0.5	-	0.4
Hodgkin Lymphoma	3.1	3.3	2.3	2.3	2.2	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	2.2	2.2	2.4	1.2	1.5	0.3	0.3	0.4	-	0.3
Brain and Other Nervous System	2.3	2.5	1.5	2.0	1.7	0.6	0.6	0.4	0.7	0.5
Bones and Joints	2.0	2.0	1.9	1.7	2.0	0.6	0.6	0.5	-	0.6
Soft Tissue including Heart	1.2	1.2	0.7	-	1.2	0.3	0.3	0.3	-	0.3
Skin excluding Basal and Squamous	1.1	1.3	-	-	-	0.0	0.0	-	-	-
Respiratory System	0.5	0.4	-	-	0.5	0.1	0.0	-	-	-
Male Genital System	3.8	4.7	-	1.9	5.3	0.1	0.1	-	-	0.2
Digestive System	0.8	0.7	0.8	-	0.6	0.2	0.2	-	-	0.2

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	20.8	22.0	14.5	17.8	19.0	2.6	2.7	2.6	2.2	3.1
Leukemia	2.6	2.8	1.7	2.4	3.4	0.8	0.8	0.7	-	1.2
Lymphoma	4.7	5.0	4.2	3.3	3.6	0.2	0.2	0.3	-	0.2
Hodgkin Lymphoma	3.3	3.6	2.6	2.0	2.3	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	1.4	1.4	1.6	-	1.3	0.1	0.1	-	-	0.2
Brain and Other Nervous System	1.9	1.9	1.4	1.5	1.6	0.4	0.5	0.4	-	0.3
Bones and Joints	1.1	1.1	1.1	-	1.1	0.4	0.5	0.3	-	0.5
Soft Tissue including Heart	1.2	1.2	0.9	-	1.2	0.3	0.3	0.3	-	0.3
Skin excluding Basal and Squamous	1.9	2.3	-	-	0.6	0.0	-	-	-	-
Respiratory System	0.3	0.3	-	-	-	-	-	-	-	-
Breast	0.2	0.2	-	-	-	-	-	-	-	-
Female Genital System	1.7	1.6	1.6	2.1	2.1	0.1	0.1	-	-	-
Digestive System	0.7	0.6	-	-	0.8	0.1	0.1	-	-	0.2

Rates are per 100,000.

^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 US Mortality Files, National Center for Health Statistics, CDC.^c Asian/Pacific Islander^d Hispanic is not mutually exclusive from whites, blacks, and Asian/Pacific Islanders. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude deaths from the District of Columbia and North Dakota.

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

Table 32.13

SEER Incidence^a and U.S. Mortality^b Rate Comparison by Race/Ethnicity, 2005-2009
Ages 20-24

Males	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	33.7	37.0	19.7	23.0	32.9	5.5	5.5	5.6	5.0	6.1
Leukemia	3.0	3.2	1.8	2.5	4.6	1.4	1.4	1.3	1.1	2.0
Lymphoma	7.4	7.5	6.9	6.4	5.2	0.7	0.7	0.8	0.8	0.7
Hodgkin Lymphoma	4.4	4.6	3.6	3.9	2.7	0.2	0.2	0.2	-	-
Non-Hodgkin Lymphoma	3.0	2.9	3.3	2.4	2.5	0.5	0.5	0.6	0.6	0.6
Brain and Other Nervous System	2.3	2.5	1.6	-	2.1	0.6	0.7	0.5	-	0.6
Bones and Joints	1.0	1.1	-	-	0.9	0.7	0.7	0.6	-	0.5
Soft Tissue including Heart	1.2	1.2	1.5	-	1.2	0.4	0.4	0.5	-	0.4
Skin excluding Basal and Squamous	2.6	3.2	-	-	0.7	0.2	0.2	-	-	-
Respiratory System	0.8	0.8	-	-	1.0	0.1	0.1	-	-	-
Male Genital System	10.2	12.3	1.6	5.0	12.8	0.3	0.4	-	-	0.7
Digestive System	1.6	1.5	1.6	2.0	1.4	0.4	0.4	0.6	0.9	0.4

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	37.8	40.0	25.7	29.0	29.8	3.7	3.6	4.5	3.4	3.9
Leukemia	2.3	2.4	2.4	2.1	3.0	0.8	0.8	0.8	-	1.1
Lymphoma	6.5	7.0	4.8	5.0	4.9	0.5	0.4	0.7	-	0.4
Hodgkin Lymphoma	4.7	5.1	3.2	3.2	3.1	0.2	0.2	0.3	-	0.2
Non-Hodgkin Lymphoma	1.9	1.9	1.7	1.8	1.9	0.2	0.2	0.5	-	0.2
Brain and Other Nervous System	2.3	2.6	1.5	1.7	1.8	0.5	0.5	0.4	-	0.4
Bones and Joints	0.7	0.7	0.9	-	-	0.3	0.3	0.3	-	0.3
Soft Tissue including Heart	1.2	1.1	1.7	-	0.9	0.3	0.3	0.5	-	0.3
Skin excluding Basal and Squamous	6.1	7.2	-	-	1.3	0.1	0.1	-	-	-
Respiratory System	0.4	0.4	-	-	-	0.1	0.1	-	-	-
Breast	1.6	1.5	2.3	2.0	1.3	0.1	0.1	0.3	-	-
Female Genital System	4.1	4.0	4.1	4.3	4.7	0.3	0.3	0.4	-	0.3
Digestive System	1.6	1.6	1.4	1.7	1.3	0.4	0.3	0.2	0.9	0.5

Rates are per 100,000.

^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 US Mortality Files, National Center for Health Statistics, CDC.^c Asian/Pacific Islander^d Hispanic is not mutually exclusive from whites, blacks, and Asian/Pacific Islanders. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude deaths from the District of Columbia and North Dakota.

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

Table 32.14

SEER Incidence^a and U.S. Mortality^b Rate Comparison by Race/Ethnicity, 2005-2009
Ages 25-29

Males	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	46.3	50.2	31.3	26.4	37.7	7.0	6.9	8.1	5.5	6.3
Leukemia	3.2	3.3	2.7	2.3	3.9	1.3	1.3	1.3	1.0	1.6
Lymphoma	7.8	7.9	9.0	4.3	5.6	0.9	0.8	1.4	0.7	0.8
Hodgkin Lymphoma	4.0	4.2	4.4	2.2	2.3	0.3	0.3	0.4	-	0.2
Non-Hodgkin Lymphoma	3.8	3.8	4.5	2.1	3.3	0.6	0.5	0.9	-	0.6
Brain and Other Nervous System	3.1	3.5	1.4	1.9	2.1	1.0	1.1	0.7	-	0.6
Bones and Joints	0.6	0.6	-	-	0.4	0.3	0.4	0.3	-	0.2
Soft Tissue including Heart	1.6	1.5	2.5	-	1.3	0.4	0.4	0.5	-	0.3
Skin excluding Basal and Squamous	4.9	5.8	-	-	0.9	0.4	0.5	-	-	0.1
Respiratory System	1.2	1.2	0.9	1.3	1.1	0.3	0.3	0.4	-	0.3
Male Genital System	13.3	15.8	2.3	4.8	13.2	0.4	0.5	0.2	-	0.6
Digestive System	3.6	3.6	3.5	4.0	3.2	1.1	1.0	1.6	1.3	1.0

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	63.2	67.0	47.6	44.0	53.1	6.1	5.9	8.0	5.3	5.9
Leukemia	2.2	2.3	1.8	1.9	2.6	0.9	0.8	0.9	1.1	1.2
Lymphoma	7.2	7.4	7.6	4.5	5.2	0.6	0.6	0.8	-	0.6
Hodgkin Lymphoma	4.4	4.6	4.7	2.1	3.0	0.2	0.2	0.3	-	0.3
Non-Hodgkin Lymphoma	2.9	2.8	2.9	2.4	2.2	0.3	0.3	0.5	-	0.3
Brain and Other Nervous System	2.2	2.5	2.0	1.1	1.7	0.6	0.6	0.4	-	0.4
Bones and Joints	0.6	0.7	-	-	0.6	0.2	0.2	-	-	0.2
Soft Tissue including Heart	1.1	1.1	1.4	-	1.2	0.4	0.3	0.5	-	0.3
Skin excluding Basal and Squamous	10.2	12.4	0.9	1.2	2.5	0.3	0.4	-	-	-
Respiratory System	0.8	0.8	-	1.1	0.6	0.2	0.2	-	-	-
Breast	8.4	7.8	12.5	7.2	7.3	0.7	0.6	1.5	-	0.6
Female Genital System	9.5	10.1	7.7	6.0	11.1	0.9	0.9	1.3	-	0.9
Digestive System	3.3	3.2	3.4	3.1	3.3	0.9	0.8	1.2	1.0	1.0

Rates are per 100,000.

^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 US Mortality Files, National Center for Health Statistics, CDC.^c Asian/Pacific Islander^d Hispanic is not mutually exclusive from whites, blacks, and Asian/Pacific Islanders. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude deaths from the District of Columbia and North Dakota.

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

Table 32.15

SEER Incidence^a and U.S. Mortality^b Rate Comparison by Race/Ethnicity, 2005-2009
Ages 30-34

Males	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	61.7	65.3	49.3	38.6	43.9	10.3	10.1	12.5	8.0	7.8
Leukemia	3.4	3.5	3.1	2.4	3.7	1.4	1.4	1.6	1.0	1.5
Lymphoma	9.5	9.4	13.6	4.6	6.9	1.1	1.1	1.8	0.6	0.8
Hodgkin Lymphoma	3.9	4.2	4.2	1.3	2.4	0.3	0.3	0.6	-	-
Non-Hodgkin Lymphoma	5.6	5.2	9.4	3.3	4.4	0.8	0.7	1.3	0.5	0.6
Brain and Other Nervous System	3.6	3.8	1.8	3.0	2.4	1.4	1.5	0.6	1.2	0.7
Bones and Joints	0.5	0.5	-	-	0.4	0.3	0.3	0.4	-	0.2
Soft Tissue including Heart	1.8	1.7	2.7	1.6	1.4	0.5	0.5	0.9	-	0.4
Skin excluding Basal and Squamous	7.7	9.1	1.4	-	1.8	0.7	0.9	-	-	0.2
Respiratory System	1.9	1.7	2.0	2.5	1.2	0.6	0.6	0.7	0.7	0.3
Male Genital System	13.3	15.9	3.5	3.9	10.8	0.4	0.5	-	-	0.6
Digestive System	7.5	7.3	7.4	8.1	7.1	2.3	2.1	3.5	2.6	2.0

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	108.8	115.2	91.5	77.2	91.7	12.2	11.9	15.9	9.0	10.9
Leukemia	2.9	3.0	2.4	3.0	3.4	1.1	1.1	1.1	0.8	1.3
Lymphoma	7.8	8.0	9.1	4.9	6.1	0.7	0.7	1.1	-	0.6
Hodgkin Lymphoma	3.7	4.1	4.0	1.5	2.6	0.3	0.3	0.4	-	-
Non-Hodgkin Lymphoma	4.1	3.9	5.0	3.3	3.5	0.5	0.4	0.8	-	0.4
Brain and Other Nervous System	2.6	2.9	1.7	1.3	2.1	0.9	1.0	0.4	0.5	0.6
Bones and Joints	0.5	0.5	-	-	-	0.2	0.2	-	-	-
Soft Tissue including Heart	1.6	1.7	1.9	1.1	1.8	0.4	0.4	0.4	-	0.4
Skin excluding Basal and Squamous	12.7	15.7	2.0	1.1	3.7	0.5	0.7	-	-	-
Respiratory System	1.8	1.8	1.7	2.0	1.2	0.5	0.5	0.5	0.5	0.3
Breast	26.5	25.9	32.8	23.1	21.4	2.9	2.5	5.6	1.5	2.3
Female Genital System	18.7	19.6	16.0	13.1	21.1	2.1	2.1	2.8	1.3	2.1
Digestive System	7.1	6.9	8.5	6.6	6.6	1.9	1.8	2.5	2.3	2.0

Rates are per 100,000.

^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 US Mortality Files, National Center for Health Statistics, CDC.^c Asian/Pacific Islander^d Hispanic is not mutually exclusive from whites, blacks, and Asian/Pacific Islanders. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude deaths from the District of Columbia and North Dakota.

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

Table 32.16

SEER Incidence^a and U.S. Mortality^b Rate Comparison by Race/Ethnicity, 2005-2009
Ages 35-39

Males	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	87.5	91.3	76.7	57.1	59.1	17.3	17.0	21.0	13.7	11.8
Leukemia	4.3	4.3	4.0	3.9	4.0	1.5	1.5	1.7	1.2	1.6
Lymphoma	11.8	12.0	14.9	5.6	9.3	1.4	1.4	2.3	0.6	1.2
Hodgkin Lymphoma	3.3	3.5	3.6	1.4	2.2	0.4	0.4	0.6	-	0.3
Non-Hodgkin Lymphoma	8.5	8.5	11.3	4.2	7.1	1.1	1.0	1.7	-	0.9
Brain and Other Nervous System	4.3	4.9	2.3	2.3	3.5	2.0	2.2	1.0	1.1	1.1
Bones and Joints	0.6	0.6	-	-	0.6	0.2	0.2	-	-	-
Soft Tissue including Heart	2.3	2.2	3.2	1.7	2.0	0.6	0.6	0.9	-	0.4
Skin excluding Basal and Squamous	11.3	13.5	1.9	1.0	2.5	1.1	1.3	0.3	-	0.3
Respiratory System	4.0	3.9	4.9	3.9	2.4	2.0	2.0	2.3	2.1	0.8
Male Genital System	12.0	13.9	5.4	3.9	8.5	0.4	0.5	0.4	-	0.4
Digestive System	15.3	14.6	17.9	16.5	12.1	5.2	4.8	7.8	5.3	4.0

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	175.8	181.5	149.7	146.2	144.7	24.0	23.1	32.7	16.5	19.9
Leukemia	3.3	3.4	2.4	3.2	3.9	1.2	1.3	1.1	0.9	1.4
Lymphoma	8.3	8.5	8.9	5.7	7.0	0.9	0.9	1.4	0.5	0.8
Hodgkin Lymphoma	2.8	3.1	2.5	1.1	2.0	0.3	0.3	0.3	-	0.2
Non-Hodgkin Lymphoma	5.6	5.4	6.4	4.6	5.0	0.7	0.6	1.1	-	0.6
Brain and Other Nervous System	3.1	3.4	2.2	1.9	2.4	1.2	1.3	0.8	0.8	0.8
Bones and Joints	0.5	0.5	-	-	-	0.2	0.2	-	-	-
Soft Tissue including Heart	1.9	1.8	2.2	1.5	1.7	0.5	0.5	0.6	-	0.5
Skin excluding Basal and Squamous	17.4	21.3	2.0	1.3	4.8	0.7	0.9	-	-	0.2
Respiratory System	3.6	3.7	3.3	3.8	2.2	1.9	1.9	2.0	1.5	0.9
Breast	59.9	59.3	66.3	53.6	48.1	7.3	6.4	13.3	4.1	5.5
Female Genital System	29.2	30.2	23.9	26.1	33.4	4.1	4.1	5.0	2.2	4.2
Digestive System	13.3	12.8	15.5	13.1	12.7	3.7	3.4	5.2	3.8	3.8

Rates are per 100,000.

^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 US Mortality Files, National Center for Health Statistics, CDC.^c Asian/Pacific Islander^d Hispanic is not mutually exclusive from whites, blacks, and Asian/Pacific Islanders. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude deaths from the District of Columbia and North Dakota.

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

Table 32.17

SEER Incidence^a and U.S. Mortality^b Rates and Trends for the Top 5 Cancer Sites^c by Age
All Races, Both Sexes, 1975-2009

	Incidence				Mortality			
	1975-2009		2000-2009		1975-2009		2000-2009	
	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d
<u>Ages 15-19</u>								
All Malignant Cancers	20.3	0.6*	22.0	0.6*	4.2	-2.0*	3.4	-2.1*
Hodgkin Lymphoma	3.5	-0.8*	3.0	-0.8*	0.2	-4.7*	0.1	-4.7*
Brain and Other Nervous System	2.0	0.2	2.1	0.2	0.6	-1.2*	0.5	-1.2*
Thyroid	1.7	1.6*	2.1	1.6*	0.0	-	-	-
Non-Hodgkin Lymphoma	1.6	1.7*	2.0	1.7*	0.4	-2.8*	0.2	-2.8*
Testis	1.6	1.4*	1.9	1.4*	0.1	-5.9*	0.0	-3.4*
<u>Ages 20-24</u>								
All Malignant Cancers	33.7	0.7*	37.1	0.7*	5.6	-1.4*	4.7	-1.1*
Hodgkin Lymphoma	5.0	0.3	4.9	-0.8*	0.4	-3.7*	0.2	-4.3*
Testis	4.4	1.0*	5.2	1.0*	0.3	-3.8*	0.2	1.1
Melanoma of the Skin	4.1	1.3*	4.9	1.3*	0.2	-2.8*	0.2	-1.2*
Thyroid	4.1	2.3*	4.9	5.3*	0.0	-	0.0	-
Brain and Other Nervous System	2.3	0.7*	2.5	0.7*	0.6	-0.9*	0.6	-0.9*
<u>Ages 25-29</u>								
All Malignant Cancers	54.4	0.6*	57.5	1.0*	8.4	-1.6*	6.7	-1.6*
Melanoma of the Skin	7.3	1.1*	8.5	1.1*	0.5	-3.0*	0.3	-3.0*
Thyroid	6.4	1.9*	8.9	3.9*	0.0	-	0.0	-
Testis	6.2	1.3*	6.9	0.6*	0.3	-4.3*	0.2	-2.4*
Hodgkin Lymphoma	4.8	0.0	4.6	0.0	0.6	-4.2*	0.3	-4.2*
Breast	4.0	-0.3	3.9	-0.3	0.5	-2.3*	0.4	-2.3*
<u>Ages 30-34</u>								
All Malignant Cancers	84.2	0.8*	87.5	0.9*	14.8	-1.5*	11.7	-1.6*
Breast	13.2	-0.1	13.4	-0.1	2.2	-2.1*	1.6	-2.7*
Melanoma of the Skin	10.4	1.5*	11.4	-1.0	0.9	-1.8*	0.6	0.4
Thyroid	8.3	2.7	12.0	5.9*	0.0	-1.7*	0.0	-1.7*
Testis	6.4	2.0*	7.2	0.5	0.3	-3.5*	0.2	-2.2*
Cervix Uteri	5.9	-1.3*	4.9	-1.3*	0.9	-1.5*	0.7	-3.2*
<u>Ages 35-39</u>								
All Malignant Cancers	131.8	0.8*	134.9	0.9*	27.6	-1.5*	22.1	-2.1*
Breast	31.5	0.4	31.5	0.4	5.2	-1.7*	3.9	-3.0*
Melanoma of the Skin	13.8	1.6*	14.7	0.3	1.4	-2.7*	0.9	-4.0*
Thyroid	10.0	3.6*	15.0	6.0*	0.1	-0.4	0.1	-0.4
Non-Hodgkin Lymphoma	7.9	2.3*	8.0	0.6	1.6	-1.3*	1.0	-5.2*
Cervix Uteri	7.2	-1.4*	5.9	-1.4*	1.5	-1.6*	1.2	-2.4*

Rates are per 100,000.

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

^b US Mortality Files, National Center for Health Statistics, CDC.

^c Top 5 cancer sites selected based on 1975-2009 SEER 9 Incidence rates for the age group.

^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2009.

- Statistic could not be calculated. Count and rate based on less than 16 cases for the time interval. AAPC could not be calculated due to insufficient data.

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

Table 32.18

SEER Incidence^a and U.S. Mortality^b Rates and Trends for the Top 5 Cancer Sites^c by Age
All Races, Males, 1975-2009

	<u>Incidence</u>				<u>Mortality</u>			
	1975-2009		2000-2009		1975-2009		2000-2009	
	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d
<u>Ages 15-19</u>								
All Malignant Cancers	21.0	0.7*	23.1	0.7*	5.0	-2.2*	3.9	-2.2*
Hodgkin Lymphoma	3.3	-0.8*	2.9	-0.8*	0.2	-5.0*	0.1	-5.0*
Testis	3.1	1.4*	3.6	1.4*	0.2	-5.9*	0.1	-3.5*
Brain and Other Nervous System	2.3	0.3	2.4	0.3	0.7	-1.1*	0.6	-1.1*
Non-Hodgkin Lymphoma	2.0	1.6*	2.4	1.6*	0.5	-2.9*	0.3	-2.9*
Bones and Joints	1.9	0.6	2.0	0.6	0.7	-1.2*	0.6	0.4
<u>Ages 20-24</u>								
All Malignant Cancers	32.7	0.5*	34.4	0.5*	6.7	-1.6*	5.5	-1.0*
Testis	8.7	0.9*	10.1	0.9*	0.5	-3.9*	0.3	0.2
Hodgkin Lymphoma	4.9	-0.6*	4.5	-0.6*	0.5	-4.3*	0.2	-4.3*
Melanoma of the Skin	2.8	0.4	3.0	0.4	0.2	-2.8*	0.2	-2.8*
Non-Hodgkin Lymphoma	2.6	1.9*	3.0	1.9*	0.7	-1.4*	0.5	-1.4*
Brain and Other Nervous System	2.5	0.1	2.5	0.1	0.7	-0.8*	0.6	-0.8*
<u>Ages 25-29</u>								
All Malignant Cancers	49.0	0.7*	49.2	1.0*	9.0	-1.7*	7.0	-1.7*
Testis	12.3	1.2*	13.5	0.5	0.7	-4.3*	0.4	-2.5*
Melanoma of the Skin	5.2	0.1	5.3	0.1	0.6	-2.9*	0.4	0.0
Hodgkin Lymphoma	5.0	-0.3	4.6	-0.3	0.7	-4.6*	0.3	-4.6*
Non-Hodgkin Lymphoma	4.3	0.9	3.9	-1.1	1.0	-1.7*	0.6	-6.1*
Kaposi sarcoma	4.0	-	1.2	-	-	-	-	-
<u>Ages 30-34</u>								
All Malignant Cancers	70.2	0.8*	66.1	0.5	13.7	-1.6*	10.7	-1.3*
Testis	12.7	1.9*	14.2	0.4	0.6	-3.5*	0.4	-2.2*
Kaposi sarcoma	8.9	-	2.2	-	-	-	-	-
Melanoma of the Skin	8.3	0.1	8.4	0.1	1.1	-2.1*	0.7	-0.6
Non-Hodgkin Lymphoma	7.3	1.5	6.1	0.2	1.5	-1.2	0.9	-3.5
Hodgkin Lymphoma	4.3	0.1	4.4	0.1	0.8	-4.4*	0.4	-5.6*
<u>Ages 35-39</u>								
All Malignant Cancers	100.2	0.6	95.7	0.1	24.0	-1.6*	18.6	-1.9*
Melanoma of the Skin	12.1	0.7	11.9	-0.8*	1.7	-2.8*	1.0	-4.6*
Testis	10.9	2.0*	12.1	0.5	0.5	-3.0*	0.4	-1.3*
Non-Hodgkin Lymphoma	10.9	3.0*	10.1	0.4	2.1	-1.4*	1.3	-5.9*
Kaposi sarcoma	10.7	-	3.5	-	-	-	-	-
Colon and Rectum	7.3	1.1*	8.8	1.1*	2.3	-0.5	2.2	1.2

Rates are per 100,000.

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

^b US Mortality Files, National Center for Health Statistics, CDC.

^c Top 5 cancer sites selected based on 1975-2009 rates for the age group.

^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2009.

- Statistic could not be calculated. Count and rate based on less than 16 cases for the time interval. AAPC could not be calculated due to insufficient data.

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

Table 32.19

SEER Incidence^a and U.S. Mortality^b Rates and Trends for the Top 5 Cancer Sites^c by Age
All Races, Females, 1975-2009

	<u>Incidence</u>				<u>Mortality</u>			
	<u>1975-2009</u>		<u>2000-2009</u>		<u>1975-2009</u>		<u>2000-2009</u>	
	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d
<u>Ages 15-19</u>								
All Malignant Cancers	19.7	0.5*	20.8	0.5*	3.5	-1.7*	2.7	-1.7*
Hodgkin Lymphoma	3.6	-0.7	3.0	-0.7	0.2	-4.1*	0.1	-4.1*
Thyroid	2.9	1.7*	3.5	1.7*	0.0	-	-	-
Melanoma of the Skin	1.8	1.1*	2.1	1.1*	0.1	-3.2*	0.0	-3.2*
Brain and Other Nervous System	1.7	0.1	1.7	0.1	0.5	-1.3*	0.4	-1.3*
Ovary	1.5	-0.9	1.4	-1.2	0.1	-4.8*	0.1	-4.8*
<u>Ages 20-24</u>								
All Malignant Cancers	34.7	1.0*	39.9	1.0*	4.6	-1.2*	3.9	-1.2*
Thyroid	7.0	2.6*	8.7	5.1*	0.0	-	-	-
Melanoma of the Skin	5.5	1.7*	6.9	1.7*	0.2	-2.9*	0.1	-0.8
Hodgkin Lymphoma	5.0	0.9	5.3	-0.7	0.4	-3.0*	0.2	-3.0*
Cervix Uteri	2.1	-2.1*	1.5	-2.1*	0.2	-0.1	0.1	1.4
Brain and Other Nervous System	2.0	1.6*	2.5	1.6*	0.5	-1.0*	0.5	-1.0*
<u>Ages 25-29</u>								
All Malignant Cancers	59.9	0.5*	66.2	0.9*	7.9	-1.4*	6.5	-1.4*
Thyroid	10.7	2.1*	15.3	4.4*	0.0	-	0.0	-
Melanoma of the Skin	9.4	1.7*	11.8	1.7*	0.4	-2.6*	0.3	-2.6*
Breast	8.1	-0.2	7.9	-0.2	1.1	-2.3*	0.7	-2.3*
Cervix Uteri	7.1	-2.2	5.2	-3.6*	0.8	-2.0*	0.6	-4.3*
Hodgkin Lymphoma	4.6	0.3	4.6	0.3	0.5	-3.5*	0.3	-3.5*
<u>Ages 30-34</u>								
All Malignant Cancers	98.2	0.7*	109.4	1.5*	15.8	-1.5*	12.8	-1.9*
Breast	26.4	0.0	27.0	0.0	4.3	-2.0*	3.2	-2.6*
Thyroid	13.5	2.9*	20.3	5.4*	0.0	-	0.0	-
Melanoma of the Skin	12.4	2.3*	14.5	1.0*	0.7	-2.4*	0.5	-2.4*
Cervix Uteri	11.7	-1.3*	9.9	-1.3*	1.8	-1.4*	1.4	-3.1*
Hodgkin Lymphoma	3.7	1.1*	4.2	1.1*	0.5	-3.5*	0.3	-3.5*
<u>Ages 35-39</u>								
All Malignant Cancers	163.4	0.7*	174.5	1.3*	31.2	-1.5*	25.6	-2.0*
Breast	62.9	0.5	63.2	0.5	10.4	-1.6*	7.8	-2.9*
Thyroid	15.6	4.0*	24.2	6.5*	0.1	-0.9	0.1	-0.9
Melanoma of the Skin	15.6	2.0	17.5	0.8	1.1	-2.5*	0.8	-2.5*
Cervix Uteri	14.4	-1.3*	11.8	-1.3*	3.0	-1.6*	2.4	-2.3*
Corpus and Uterus, NOS	6.7	0.9*	7.9	3.4*	0.4	-1.4*	0.4	1.0*

Rates are per 100,000.

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

^b US Mortality Files, National Center for Health Statistics, CDC.

^c Top 5 cancer sites selected based on 1975-2009 rates for the age group.

^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2009.

- Statistic could not be calculated. Count and rate based on less than 16 cases for the time interval. AAPC could not be calculated due to insufficient data.

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

Table 32.20

SEER^a 5-Year Relative Survival for the Top 5 Cancer Sites^b by Age
All Races, Both Sexes, 1975-2008

	5-year Relative Survival (Percent)				
	1975-2008	1975-1983	1984-1992	1993-2001	2002-2008
<u>Ages 15-19</u>					
All Malignant Cancers	77.1	69.6	76.8	79.6	83.7
Hodgkin Lymphoma	91.7	87.6	91.2	94.6	96.6
Brain and Other Nervous System	72.9	63.1	73.9	78.2	77.1
Thyroid	98.6	98.6	99.0	98.8	97.7
Non-Hodgkin Lymphoma	70.3	54.5	66.3	75.2	82.8
Testis	89.9	79.1	92.0	92.4	95.3
<u>Ages 20-24</u>					
All Malignant Cancers	80.1	74.7	79.1	82.7	84.7
Hodgkin Lymphoma	90.1	85.0	90.6	91.5	95.0
Testis	92.0	84.5	92.0	95.7	96.2
Melanoma of the Skin	92.3	85.5	92.8	95.3	96.0
Thyroid	99.5	99.7	99.7	99.0	99.6
Brain and Other Nervous System	65.8	57.5	64.3	70.9	70.7
<u>Ages 25-29</u>					
All Malignant Cancers	78.5	76.9	73.0	80.9	85.9
Melanoma of the Skin	92.7	88.2	91.8	94.5	96.4
Thyroid	99.8	99.4	99.7	99.8	99.8
Testis	94.7	89.3	94.6	97.3	97.1
Hodgkin Lymphoma	89.8	85.7	89.4	92.2	93.2
Breast	73.3	69.4	69.3	76.7	82.7
<u>Ages 30-34</u>					
All Malignant Cancers	74.6	73.2	67.7	76.3	84.4
Breast	76.4	69.7	74.3	79.3	85.2
Melanoma of the Skin	92.1	86.3	91.2	94.4	96.7
Thyroid	99.7	99.5	99.5	99.8	99.8
Testis	95.4	92.0	95.7	95.5	97.1
Cervix Uteri	84.8	84.0	83.7	86.9	84.8
<u>Ages 35-39</u>					
All Malignant Cancers	72.6	68.2	65.7	75.1	82.5
Breast	80.8	75.1	77.8	83.7	87.5
Melanoma of the Skin	91.9	87.5	90.3	93.8	95.0
Thyroid	99.3	98.9	99.4	99.1	99.6
Non-Hodgkin Lymphoma	61.3	65.8	49.9	59.5	78.0
Cervix Uteri	81.5	79.5	79.5	84.6	82.2

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

^b Top 5 cancer sites selected based on 1975-2008 SEER 9 Incidence rates for the age group.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 32.21

SEER^a 5-Year Relative Survival for the Top 5 Cancer Sites^b by Age
All Races, Males, 1975-2008

	5-year Relative Survival (Percent)				
	1975-2008	1975-1983	1984-1992	1993-2001	2002-2008
<u>Ages 15-19</u>					
All Malignant Cancers	72.7	63.7	71.9	75.4	81.3
Hodgkin Lymphoma	90.8	86.0	90.0	93.7	97.4
Testis	89.9	79.1	92.0	92.4	95.3
Brain and Other Nervous System	69.8	59.7	70.2	74.6	75.4
Non-Hodgkin Lymphoma	67.7	50.0	67.2	71.5	80.7
Bones and Joints	57.0	42.2	60.1	60.4	66.8
<u>Ages 20-24</u>					
All Malignant Cancers	75.5	69.3	73.2	79.1	82.1
Testis	92.0	84.5	92.0	95.7	96.2
Hodgkin Lymphoma	88.3	83.1	87.9	89.9	95.4
Melanoma of the Skin	85.2	75.8	85.2	91.8	91.0
Non-Hodgkin Lymphoma	64.2	55.8	52.6	66.8	82.0
Brain and Other Nervous System	64.3	54.7	62.6	72.3	69.0
<u>Ages 25-29</u>					
All Malignant Cancers	72.1	71.5	63.4	75.6	82.4
Testis	94.7	89.3	94.6	97.3	97.1
Melanoma of the Skin	87.9	82.5	87.6	90.2	92.9
Hodgkin Lymphoma	87.6	84.5	85.6	89.9	92.7
Non-Hodgkin Lymphoma	55.7	58.8	41.7	57.5	76.7
Kaposi sarcoma	13.2	29.1	7.2	19.6	55.7
<u>Ages 30-34</u>					
All Malignant Cancers	65.9	68.2	54.8	68.0	80.9
Testis	95.4	92.0	95.7	95.5	97.1
Kaposi sarcoma	16.8	23.1	7.5	29.4	59.4
Melanoma of the Skin	87.6	79.2	86.9	91.2	94.3
Non-Hodgkin Lymphoma	51.9	69.3	36.7	48.6	77.6
Hodgkin Lymphoma	86.2	79.8	83.9	88.2	94.2
<u>Ages 35-39</u>					
All Malignant Cancers	62.0	59.7	50.8	65.3	76.8
Melanoma of the Skin	87.5	81.9	85.7	90.3	91.5
Testis	96.0	91.9	95.8	97.1	96.7
Non-Hodgkin Lymphoma	53.7	62.5	41.7	51.6	72.4
Kaposi sarcoma	17.4	14.1	7.0	30.1	63.6
Colon and Rectum	61.1	54.1	54.8	62.7	70.1

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

^b Top 5 cancer sites selected based on 1975-2008 SEER 9 Incidence rates for the age group.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 32.22

SEER^a 5-Year Relative Survival for the Top 5 Cancer Sites^b by Age
All Races, Females, 1975-2008

	5-year Relative Survival (Percent)				
	1975-2008	1975-1983	1984-1992	1993-2001	2002-2008
<u>Ages 15-19</u>					
All Malignant Cancers	82.0	76.0	82.2	84.2	86.5
Hodgkin Lymphoma	92.6	89.0	92.2	95.3	95.6
Thyroid	99.1	98.6	99.6	98.9	99.0
Melanoma of the Skin	95.0	87.8	95.7	95.7	100.0
Brain and Other Nervous System	77.4	68.0	79.1	83.2	79.8
Ovary	87.9	80.2	90.4	91.5	89.0
<u>Ages 20-24</u>					
All Malignant Cancers	84.6	80.0	85.4	86.1	87.0
Thyroid	99.6	99.4	99.6	99.4	100.0
Melanoma of the Skin	96.1	92.0	96.9	97.0	98.1
Hodgkin Lymphoma	91.9	87.3	93.0	93.1	94.6
Cervix Uteri	88.2	89.0	88.8	86.4	87.7
Brain and Other Nervous System	67.8	61.7	66.5	68.7	72.3
<u>Ages 25-29</u>					
All Malignant Cancers	83.9	80.8	82.4	85.3	88.5
Thyroid	99.8	99.5	99.8	99.9	99.9
Melanoma of the Skin	95.4	92.0	94.6	96.8	98.0
Breast	73.3	69.4	69.2	76.8	83.1
Cervix Uteri	87.4	89.0	86.7	87.3	85.6
Hodgkin Lymphoma	92.3	87.1	93.4	94.9	93.6
<u>Ages 30-34</u>					
All Malignant Cancers	80.9	76.1	79.3	82.7	86.5
Breast	76.4	69.7	74.3	79.3	85.1
Thyroid	99.8	99.3	99.7	99.9	99.8
Melanoma of the Skin	95.1	91.8	94.3	96.3	98.1
Cervix Uteri	84.8	84.0	83.7	86.9	84.8
Hodgkin Lymphoma	90.5	85.5	90.9	90.7	95.0
<u>Ages 35-39</u>					
All Malignant Cancers	79.2	72.7	76.6	81.4	85.6
Breast	80.8	75.1	77.7	83.7	87.5
Thyroid	99.6	99.1	99.5	99.5	99.7
Melanoma of the Skin	95.4	92.5	94.5	96.5	97.3
Cervix Uteri	81.5	79.5	79.5	84.6	82.2
Corpus and Uterus, NOS	90.6	91.3	90.6	90.8	89.6

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

^b Top 5 cancer sites selected based on 1975-2008 SEER 9 Incidence rates for the age group.

- Statistic could not be calculated due to fewer than 25 cases during the time period.