

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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1. The distinctive biology of cancer in adolescents and young adults. Bleyer A, Barr R, Hayes-Lattin B, et al. *Nat Rev Cancer*. 2008; 8: 288-98.
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3. International Classification of Diseases for Oncology, Third Edition Edited by A. Fritz, C. Percy, A. Jack, K. Shanmugaratnam, L. Sobin, D.M. Parkin and S. Whelan. World Health Organization. Geneva, Switzerland, 2000. 240 pp.
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Worldwide web: (<http://seer.cancer.gov/tools/conversion/>) Accessed May 28, 2008.
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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, 2008-2012

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	16.9	15.1	53.5	87.0	1148.0	876.2
1. LEUKEMIAS	5.5	4.9	3.7	2.9	33.7	19.2
1.1 Acute lymphoid leukemia	4.4	3.8	1.2	0.7	1.2	1.0
1.2 Acute myeloid leukemia	0.9	0.8	1.3	1.3	10.4	6.7
1.3 Chronic myeloid leukemia	0.1	0.1	0.8	0.5	4.4	2.6
1.4 Other and unspecified leukemias	0.2	0.1	0.4	0.3	17.6	9.0
2. LYMPHOMAS	2.0	1.1	8.5	6.8	54.4	37.2
2.1 Non-Hodgkin Lymphoma	1.3	0.7	4.9	3.3	50.8	34.8
2.2 Hodgkin Lymphoma	0.7	0.5	3.6	3.5	3.6	2.4
3. CNS, INTRACRANIAL, INTRASPINAL	3.3	3.1	3.2	2.5	13.3	8.8
3.1 Astrocytoma	1.7	1.7	1.8	1.3	10.3	6.6
3.1.1 Specified low-grade astrocytic tumors	1.2	1.3	0.4	0.4	0.4	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.2	0.2	0.9	0.6	9.4	5.9
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.3	0.6	0.4
3.2 Other glioma	0.5	0.6	0.9	0.7	1.5	1.1
3.3 Ependymoma	0.3	0.3	0.2	0.2	0.3	0.3
3.4 Medulloblastoma and other PNET	0.7	0.4	0.2	0.2	0.1	0.1
3.4.1 Medulloblastoma	0.5	0.3	0.1	0.1	0.0	0.0
3.4.2 Supratentorial PNET	0.3	0.2	0.1	0.1	0.1	0.1
3.5 Other specified intracranial and intraspinal neoplasms	0.1	0.1	0.1	0.1	0.2	0.2
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	1.4	1.0
4.1 Osteosarcoma	0.4	0.4	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	0.1	-	0.2	0.2	0.7	0.5
4.3 Ewing tumor	0.4	0.3	0.4	0.2	0.1	0.1
4.4 Other specified and unspecified bone tumors	0.0	-	0.1	0.1	0.4	0.3
5. SOFT TISSUE SARCOMAS	1.1	0.9	3.2	2.4	12.6	9.1
5.1 Fibromatous neoplasms	0.1	0.1	0.7	0.8	2.8	1.7
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	2.4	1.4	9.6	7.3
5.3.1 Specified soft tissue sarcoma	0.2	0.2	2.0	1.2	7.0	5.4
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.1	1.1	5.4	5.2
5.3.1.2 Kaposi sarcoma	-	-	1.0	-	1.5	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.4	0.3	2.6	1.9
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.5	0.6	11.0	1.1	4.1	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.3	10.5	0.7	3.9	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.3	0.3	0.5	0.3	0.1	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	0.1	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, 2008-2012

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.2	5.3	8.7	67.3	35.7
7.1 Melanoma	0.2	0.2	5.2	8.6	63.1	33.7
7.2 Skin carcinomas	-	-	0.1	0.1	4.2	2.0
8. CARCINOMAS (excluding skin)	0.4	0.8	16.4	60.2	898.9	717.7
8.1 Thyroid carcinoma	0.1	0.5	3.5	17.4	12.5	31.7
8.2 Other carcinoma of head and neck	0.1	0.1	1.8	1.5	51.6	16.4
8.2.1 Nasopharyngeal carcinoma	0.0	-	0.3	0.2	1.8	0.6
8.2.2 Other sites in lip, oral cavity and pharynx	0.1	0.1	1.2	1.1	34.4	12.3
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.2	15.4	3.5
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.0	1.1	149.6	107.3
8.4 Carcinoma of breast	-	-	0.1	20.7	2.7	269.2
8.5 Carcinoma of genitourinary tract	-	0.1	3.5	13.4	446.6	136.3
8.5.1 Carcinoma of kidney	-	-	2.3	1.7	43.5	21.0
8.5.2 Carcinoma of bladder	-	-	0.8	0.3	81.3	19.6
8.5.3 Carcinoma of gonads	-	-	0.0	1.8	0.0	22.8
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.1	-	61.9
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.4	0.4	321.8	11.1
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	6.0	5.5	218.6	141.5
8.6.1 Carcinoma of colon and rectum	-	-	3.9	3.7	111.2	85.5
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	21.2	10.4
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.5	0.3	27.5	8.9
8.6.4 Carcinoma of pancreas	-	-	0.4	0.4	28.4	21.9
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.4	30.4	14.9
8.7 Carcinoma of other and ill-defined sites, NOS	0.1	0.1	0.5	0.6	17.3	15.3
8.7.1 Adrenocortical carcinoma	-	0.0	0.0	0.1	0.2	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.4	0.5	17.0	15.1
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.9	2.7	0.8	1.2	26.7	21.4
9.1 Other pediatric and embryonal tumors, NOS	2.8	2.6	0.1	0.1	0.2	0.2
9.1.1 Wilms tumor	0.7	0.8	-	0.0	0.0	0.0
9.1.2 Neuroblastoma	1.0	1.0	0.0	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	1.0	0.8	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.7	1.1	26.5	21.3
9.2.1 Paraganglioma and glomus tumors	-	-	0.1	0.0	0.1	0.1
9.2.2 Other specified gonadal tumors	-	-	0.0	0.2	0.0	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.4	0.3	19.6	12.3
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.8	8.4
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	35.7	25.8

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, 2008-2012

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	17.8	16.1	57.6	92.1	1151.5	901.2
1. LEUKEMIAS	5.9	5.5	3.9	3.0	35.3	20.1
1.1 Acute lymphoid leukemia	4.8	4.4	1.4	0.8	1.3	1.0
1.2 Acute myeloid leukemia	0.8	0.8	1.3	1.4	10.8	6.8
1.3 Chronic myeloid leukemia	0.1	0.1	0.7	0.5	4.5	2.6
1.4 Other and unspecified leukemias	0.2	0.1	0.4	0.3	18.7	9.7
2. LYMPHOMAS	2.0	1.1	8.7	7.1	57.0	39.3
2.1 Non-Hodgkin Lymphoma	1.3	0.6	4.8	3.2	53.2	36.7
2.2 Hodgkin Lymphoma	0.7	0.5	3.9	3.8	3.8	2.6
3. CNS, INTRACRANIAL, INTRASPINAL	3.6	3.3	3.6	2.8	14.6	9.8
3.1 Astrocytoma	1.8	1.8	1.9	1.4	11.5	7.4
3.1.1 Specified low-grade astrocytic tumors	1.4	1.4	0.5	0.4	0.4	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.2	1.0	0.6	10.4	6.6
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.4	0.7	0.4
3.2 Other glioma	0.5	0.6	1.0	0.9	1.7	1.2
3.3 Ependymoma	0.3	0.3	0.2	0.2	0.4	0.3
3.4 Medulloblastoma and other PNET	0.9	0.5	0.3	0.2	0.1	0.1
3.4.1 Medulloblastoma	0.5	0.2	0.1	0.1	0.0	-
3.4.2 Supratentorial PNET	0.3	0.2	0.1	0.1	0.1	0.1
3.5 Other specified intracranial and intraspinal neoplasms	0.1	0.1	0.1	0.1	0.2	0.2
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	0.1	-	0.8	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	1.0	0.9	1.2	0.9	1.5	1.1
4.1 Osteosarcoma	0.4	0.5	0.5	0.3	0.3	0.2
4.2 Chondrosarcoma	0.1	-	0.2	0.2	0.7	0.5
4.3 Ewing tumor	0.4	0.4	0.4	0.3	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	2.8	2.2	12.9	8.8
5.1 Fibromatous neoplasms	0.2	0.1	0.6	0.7	2.9	1.6
5.2 Rhabdomyosarcoma	0.6	0.5	0.2	0.1	0.2	0.1
5.3 Other specified soft tissue sarcoma	0.3	0.3	2.1	1.4	9.8	7.1
5.3.1 Specified soft tissue sarcoma	0.2	0.2	1.7	1.1	7.1	5.2
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.1	1.1	5.6	5.1
5.3.1.2 Kaposi sarcoma	-	-	0.7	-	1.4	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.4	0.3	2.7	1.8
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.5	0.6	13.2	1.0	4.7	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.3	12.7	0.7	4.6	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.3	0.2	0.5	0.3	0.1	0.1
6.2.1 Intracranial sites	0.2	0.1	0.2	-	-	-
6.2.2 Other nongonadal sites	0.1	0.2	0.3	0.3	0.1	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, 2008-2012

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.2	6.5	11.0	78.1	42.3
7.1 Melanoma	0.2	0.2	6.4	10.9	73.6	40.1
7.2 Skin carcinomas	-	-	0.1	0.1	4.6	2.2
8. CARCINOMAS (excluding skin)	0.4	0.8	16.7	62.4	886.3	733.7
8.1 Thyroid carcinoma	0.2	0.5	3.9	19.3	13.2	33.2
8.2 Other carcinoma of head and neck	0.1	0.1	1.8	1.4	53.2	17.0
8.2.1 Nasopharyngeal carcinoma	-	-	0.2	0.1	1.1	0.4
8.2.2 Other sites in lip, oral cavity and pharynx	0.1	0.1	1.3	1.2	36.6	13.0
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.2	15.4	3.6
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.0	1.1	149.8	112.4
8.4 Carcinoma of breast	-	-	0.1	20.3	2.7	276.7
8.5 Carcinoma of genitourinary tract	-	-	3.6	14.3	438.1	142.5
8.5.1 Carcinoma of kidney	-	-	2.3	1.8	44.4	21.6
8.5.2 Carcinoma of bladder	-	-	0.9	0.4	88.6	21.1
8.5.3 Carcinoma of gonads	-	-	0.1	1.9	0.0	24.3
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.7	-	63.7
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.3	0.5	305.1	11.7
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	5.9	5.5	211.7	136.4
8.6.1 Carcinoma of colon and rectum	-	-	4.0	3.8	108.8	84.0
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	19.2	8.8
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.3	0.3	24.3	7.6
8.6.4 Carcinoma of pancreas	-	-	0.4	0.4	28.4	21.4
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.4	30.9	14.5
8.7 Carcinoma of other and ill-defined sites, NOS	-	0.1	0.4	0.5	17.5	15.6
8.7.1 Adrenocortical carcinoma	-	-	0.0	0.1	0.2	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.4	0.4	17.3	15.3
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	3.0	2.8	0.8	1.1	25.9	19.6
9.1 Other pediatric and embryonal tumors, NOS	2.9	2.7	0.1	0.1	0.2	0.2
9.1.1 Wilms tumor	0.7	0.8	-	0.0	0.0	0.0
9.1.2 Neuroblastoma	1.1	1.0	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	1.1	0.9	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.7	1.1	25.7	19.4
9.2.1 Paraganglioma and glomus tumors	-	-	0.1	0.0	0.1	0.1
9.2.2 Other specified gonadal tumors	-	-	0.0	0.2	0.0	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.4	0.3	18.6	11.0
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	7.0	7.9
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	35.1	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 32.3

Age-Adjusted SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
Black, 2008-2012

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	14.0	12.7	40.4	71.4	1331.0	867.1
1. LEUKEMIAS	3.6	2.8	3.0	2.4	26.8	16.3
1.1 Acute lymphoid leukemia	2.5	1.8	0.7	0.3	0.9	0.7
1.2 Acute myeloid leukemia	0.8	0.8	1.1	1.3	8.4	6.1
1.3 Chronic myeloid leukemia	-	-	0.8	0.6	3.9	2.7
1.4 Other and unspecified leukemias	-	-	0.4	0.2	13.6	6.8
2. LYMPHOMAS	2.1	1.4	9.9	7.2	39.2	26.9
2.1 Non-Hodgkin Lymphoma	1.4	0.8	6.3	3.8	35.5	24.5
2.2 Hodgkin Lymphoma	0.7	0.6	3.6	3.3	3.7	2.4
3. CNS, INTRACRANIAL, INTRASPINAL	2.7	2.8	1.9	1.8	8.5	5.5
3.1 Astrocytoma	1.3	1.5	1.1	0.9	6.1	3.8
3.1.1 Specified low-grade astrocytic tumors	0.9	1.0	0.2	0.3	0.3	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	-	0.5	0.4	5.6	3.4
3.1.3 Astrocytoma, NOS	-	0.2	0.3	0.2	0.2	0.3
3.2 Other glioma	0.5	0.5	0.4	0.4	0.9	0.6
3.3 Ependymoma	-	0.2	0.2	-	0.2	0.2
3.4 Medulloblastoma and other PNET	0.4	0.3	-	0.1	-	-
3.4.1 Medulloblastoma	-	0.3	-	-	-	-
3.4.2 Supratentorial PNET	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	0.4	0.3
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	0.8	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.8	0.6	0.8	0.6	1.0	0.9
4.1 Osteosarcoma	0.5	0.4	0.4	0.3	0.3	0.4
4.2 Chondrosarcoma	-	-	0.3	-	0.5	0.3
4.3 Ewing tumor	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	0.2
5. SOFT TISSUE SARCOMAS	1.4	1.0	6.1	3.4	11.3	11.6
5.1 Fibromatous neoplasms	-	-	1.2	1.2	2.1	1.9
5.2 Rhabdomyosarcoma	0.9	0.3	0.2	0.1	-	0.3
5.3 Other specified soft tissue sarcoma	0.3	0.5	4.7	2.0	9.0	9.5
5.3.1 Specified soft tissue sarcoma	-	0.4	4.2	1.6	6.9	7.2
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	0.4	1.1	1.5	4.3	6.9
5.3.1.2 Kaposi sarcoma	-	-	3.1	-	2.5	0.3
5.3.2 Unspecified soft tissue sarcoma	-	-	0.4	0.4	2.2	2.3
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	-	0.6	2.5	1.1	1.4	0.3
6.1 Germ cell and trophoblastic neoplasms of gonads	-	0.4	2.3	0.7	1.2	-
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	-	0.2	0.2	0.4	0.2	0.2
6.2.1 Intracranial sites	-	-	-	-	-	-
6.2.2 Other nongonadal sites	-	-	-	0.4	0.2	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, 2008-2012

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	-	-	0.3	0.4	3.9	3.3
7.1 Melanoma	-	-	0.2	0.4	2.9	2.5
7.2 Skin carcinomas	-	-	-	-	1.0	0.8
8. CARCINOMAS (excluding skin)	0.5	0.5	14.5	52.3	1144.9	732.9
8.1 Thyroid carcinoma	-	-	1.2	7.7	6.9	20.8
8.2 Other carcinoma of head and neck	-	-	1.5	1.3	54.2	15.0
8.2.1 Nasopharyngeal carcinoma	-	-	0.4	0.2	2.0	0.5
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	0.8	0.9	30.1	9.9
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	-	22.1	4.6
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.2	0.9	194.6	110.1
8.4 Carcinoma of breast	-	-	-	24.6	3.9	264.2
8.5 Carcinoma of genitourinary tract	-	-	3.9	10.9	591.0	125.7
8.5.1 Carcinoma of kidney	-	-	2.7	1.7	52.9	25.6
8.5.2 Carcinoma of bladder	-	-	0.4	-	47.9	15.4
8.5.3 Carcinoma of gonads	-	-	-	1.2	-	17.3
8.5.4 Carcinoma of cervix and uterus	-	-	-	7.3	-	58.1
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.8	0.5	490.2	9.3
8.6 Carcinoma of gastrointestinal tract	-	-	6.0	6.2	274.8	179.9
8.6.1 Carcinoma of colon and rectum	-	-	3.8	3.9	140.0	104.2
8.6.2 Carcinoma of stomach	-	-	0.6	0.8	29.7	15.9
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.7	0.2	35.2	10.2
8.6.4 Carcinoma of pancreas	-	-	0.4	0.7	34.8	29.0
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.5	35.1	20.6
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.6	0.8	19.4	17.2
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	0.2
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.6	0.8	19.2	17.0
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.8	2.9	0.9	1.7	43.0	40.7
9.1 Other pediatric and embryonal tumors, NOS	2.6	2.8	-	-	0.2	0.2
9.1.1 Wilms tumor	0.8	1.0	-	-	-	-
9.1.2 Neuroblastoma	1.0	1.0	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.9	0.8	-	-	-	-
9.2 Other specified neoplasms, NOS	-	-	0.8	1.6	42.8	40.5
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	0.2	0.2
9.2.2 Other specified gonadal tumors	-	-	-	0.4	-	0.8
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.5	0.4	35.6	26.2
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.7	7.0	13.4
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.4	0.6	50.9	28.6

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, 2008-2012

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	22.9	21.3	34.6	37.3	48.3	67.0	65.8	113.0	89.7	179.9
1. LEUKEMIAS	3.6	2.6	3.0	2.2	3.1	2.4	3.7	3.0	4.7	3.9
1.1 Acute lymphoid leukemia	2.2	1.2	1.3	0.7	0.9	0.5	0.8	0.6	0.8	0.7
1.2 Acute myeloid leukemia	0.9	1.1	0.9	1.1	1.2	1.2	1.5	1.6	1.7	1.8
1.3 Chronic myeloid leukemia	0.3	0.2	0.5	0.4	0.8	0.5	0.9	0.6	1.3	0.9
1.4 Other and unspecified leukemias	0.2	-	0.2	0.1	0.3	0.2	0.4	0.3	0.9	0.6
2. LYMPHOMAS	5.3	4.5	7.4	6.5	8.0	7.1	9.6	7.4	11.7	8.5
2.1 Non-Hodgkin Lymphoma	2.3	1.2	3.1	1.9	4.0	3.0	5.7	3.9	8.6	6.0
2.2 Hodgkin Lymphoma	3.0	3.3	4.3	4.6	4.0	4.1	3.8	3.5	3.1	2.5
3. CNS, INTRACRANIAL, INTRASPINAL	2.2	2.0	2.3	2.2	3.0	2.6	4.0	2.9	4.4	2.9
3.1 Astrocytoma	1.2	1.2	1.2	1.1	1.6	1.2	2.1	1.4	2.4	1.5
3.1.1 Specified low-grade astrocytic tumors	0.7	0.7	0.4	0.5	0.4	0.3	0.4	0.4	0.4	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.3	0.5	0.4	0.9	0.7	1.3	0.6	1.6	0.9
3.1.3 Astrocytoma, NOS	0.2	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.5	0.4
3.2 Other glioma	0.4	0.3	0.5	0.6	0.9	0.8	1.4	1.0	1.2	1.0
3.3 Ependymoma	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2
3.4 Medulloblastoma and other PNET	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1
3.4.1 Medulloblastoma	0.2	0.1	0.1	0.1	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	2.0	1.1	1.2	0.9	0.8	0.8	0.8	0.5	0.8	0.7
4.1 Osteosarcoma	1.0	0.6	0.5	0.3	0.2	0.3	0.2	-	0.2	0.2
4.2 Chondrosarcoma	0.2	-	0.2	0.1	0.2	0.2	0.3	0.2	0.3	0.2
4.3 Ewing tumor	0.7	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1
4.4 Other specified and unspecified bone tumors	-	-	-	-	0.1	-	0.1	0.1	0.1	0.1
5. SOFT TISSUE SARCOMAS	1.4	1.3	2.1	1.7	3.2	2.1	4.3	2.9	4.9	3.6
5.1 Fibromatous neoplasms	0.3	0.3	0.4	0.6	0.7	0.7	0.8	1.1	1.1	1.2
5.2 Rhabdomyosarcoma	0.4	0.3	0.1	0.1	0.1	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.8	0.7	1.5	1.0	2.4	1.3	3.4	1.7	3.7	2.3
5.3.1 Specified soft tissue sarcoma	0.5	0.5	1.2	0.8	2.1	1.0	3.0	1.4	3.2	1.9
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.5	0.5	0.7	0.8	1.0	0.9	1.4	1.4	1.6	1.9
5.3.1.2 Kaposi sarcoma	-	-	0.4	-	1.1	-	1.6	-	1.6	-
5.3.2 Unspecified soft tissue sarcoma	0.2	0.2	0.4	0.3	0.3	0.3	0.4	0.3	0.5	0.5
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	4.6	1.2	10.9	1.3	14.8	1.2	13.9	1.0	11.0	0.8
6.1 Germ cell and trophoblastic neoplasms of gonads	3.8	1.0	10.3	1.0	14.3	0.8	13.5	0.5	10.8	0.4
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.8	0.2	0.6	0.3	0.5	0.4	0.3	0.4	0.2	0.4
6.2.1 Intracranial sites	0.5	-	0.2	-	0.1	-	-	-	-	-
6.2.2 Other nongonadal sites	0.3	0.1	0.4	0.3	0.4	0.4	0.3	0.4	0.2	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, 2008-2012

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	0.9	1.4	2.0	5.3	4.3	9.0	7.3	11.7	10.8	15.1
7.1 Melanoma	0.9	1.3	2.0	5.2	4.2	9.0	7.2	11.6	10.6	14.9
7.2 Skin carcinomas	-	-	-	-	-	-	0.1	-	0.2	0.2
8. CARCINOMAS (excluding skin)	2.4	6.7	5.3	16.5	10.3	40.5	20.8	81.6	39.2	140.9
8.1 Thyroid carcinoma	0.9	4.6	1.7	9.6	2.9	17.0	4.8	24.3	6.8	29.8
8.2 Other carcinoma of head and neck	0.5	0.5	0.7	0.8	1.0	1.1	2.0	1.9	4.5	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	0.2	0.4	0.5	0.6	0.7	0.9	1.4	1.4	3.0	2.2
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	0.1	-	0.3	0.2	0.8	0.4
8.3 Carcinoma of trachea, bronchus, and lung	-	0.1	0.3	0.3	0.5	0.7	1.2	1.2	2.7	2.8
8.4 Carcinoma of breast	-	-	-	1.3	-	8.5	-	26.8	0.2	59.5
8.5 Carcinoma of genitourinary tract	0.3	0.7	0.7	2.8	1.8	9.6	4.4	19.6	9.3	31.0
8.5.1 Carcinoma of kidney	0.2	0.2	0.4	0.5	1.2	1.2	3.0	2.2	6.1	3.9
8.5.2 Carcinoma of bladder	-	-	0.3	-	0.5	0.2	1.0	0.4	1.8	0.8
8.5.3 Carcinoma of gonads	-	0.3	-	0.6	-	1.4	-	2.4	-	4.0
8.5.4 Carcinoma of cervix and uterus	-	0.1	-	1.5	-	6.6	-	13.9	-	21.3
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.3	0.3	0.7	1.3	1.1
8.6 Carcinoma of gastrointestinal tract	0.6	0.6	1.6	1.5	3.6	3.3	7.7	7.2	14.8	13.6
8.6.1 Carcinoma of colon and rectum	0.3	0.4	1.1	0.9	2.4	2.3	5.2	4.7	9.4	9.4
8.6.2 Carcinoma of stomach	-	-	0.1	0.2	0.4	0.4	1.0	1.1	1.7	1.7
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.2	0.1	0.4	0.2	0.5	0.3	1.1	0.6
8.6.4 Carcinoma of pancreas	-	-	-	0.1	0.2	0.2	0.4	0.6	1.2	0.9
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	0.3	0.2	0.6	0.4	1.5	1.0
8.7 Carcinoma of other and ill-defined sites, NOS	0.1	-	0.2	0.3	0.4	0.4	0.6	0.7	1.0	1.2
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	0.5	0.6	1.0	1.1
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.4	0.3	0.5	0.5	0.9	1.0	1.5	1.6	2.5
9.1 Other pediatric and embryonal tumors, NOS	0.2	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	0.2	0.3	0.2	0.4	0.5	0.8	0.9	1.4	1.5	2.4
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	0.2	-	0.2	-	0.3
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.1	-	0.3	0.2	0.5	0.3	1.0	0.8
9.2.4 Other specified neoplasms, NOS ^c	-	0.1	-	0.2	0.1	0.5	0.3	0.8	0.4	1.2
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.1	0.3	0.3	0.4	0.4	0.7	0.6	1.1

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, 2008-2012

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	25.2	23.1	38.6	40.7	52.9	72.3	70.1	120.3	95.2	186.9
1. LEUKEMIAS	4.0	2.8	3.2	2.5	3.4	2.5	3.8	3.0	4.7	3.9
1.1 Acute lymphoid leukemia	2.6	1.4	1.6	0.8	1.0	0.6	0.9	0.6	0.9	0.7
1.2 Acute myeloid leukemia	1.1	1.1	1.0	1.1	1.2	1.2	1.6	1.5	1.7	1.7
1.3 Chronic myeloid leukemia	0.2	0.3	0.5	0.4	0.8	0.5	0.9	0.6	1.2	0.8
1.4 Other and unspecified leukemias	0.2	-	0.2	-	0.3	0.2	0.5	0.3	0.9	0.7
2. LYMPHOMAS	5.7	4.9	7.7	6.9	8.0	7.3	9.6	7.6	11.9	8.5
2.1 Non-Hodgkin Lymphoma	2.3	1.2	3.1	2.0	3.8	2.8	5.5	3.8	8.6	5.9
2.2 Hodgkin Lymphoma	3.4	3.6	4.6	4.9	4.2	4.5	4.1	3.8	3.3	2.5
3. CNS, INTRACRANIAL, INTRASPINAL	2.4	2.1	2.5	2.3	3.5	3.0	4.2	3.3	5.0	3.2
3.1 Astrocytoma	1.3	1.3	1.4	1.3	1.9	1.4	2.2	1.7	2.8	1.5
3.1.1 Specified low-grade astrocytic tumors	0.8	0.7	0.5	0.5	0.4	0.3	0.5	0.4	0.5	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.3	0.5	0.4	1.0	0.8	1.3	0.7	1.9	0.9
3.1.3 Astrocytoma, NOS	0.2	0.3	0.4	0.3	0.4	0.3	0.4	0.5	0.5	0.4
3.2 Other glioma	0.5	0.4	0.6	0.6	1.1	1.0	1.5	1.1	1.4	1.1
3.3 Ependymoma	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
3.4 Medulloblastoma and other PNET	0.3	0.2	0.3	0.2	0.2	0.3	0.2	-	0.2	-
3.4.1 Medulloblastoma	0.2	-	-	-	0.1	-	-	-	-	-
3.4.2 Supratentorial PNET	-	-	0.2	-	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	2.2	1.2	1.3	0.9	0.9	0.9	0.9	0.6	0.8	0.7
4.1 Osteosarcoma	1.1	0.6	0.5	0.3	0.2	0.3	0.3	-	0.2	0.2
4.2 Chondrosarcoma	0.1	-	0.2	-	0.2	0.3	0.3	0.2	0.4	0.2
4.3 Ewing tumor	0.9	0.5	0.5	0.4	0.3	0.3	0.2	0.2	-	0.2
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	0.2	-	-	0.2
5. SOFT TISSUE SARCOMAS	1.4	1.4	1.6	1.6	2.7	2.0	3.8	2.6	4.4	3.3
5.1 Fibromatous neoplasms	0.2	0.3	0.3	0.5	0.6	0.7	0.8	1.1	0.8	1.0
5.2 Rhabdomyosarcoma	0.4	0.3	-	-	0.2	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.7	0.8	1.2	1.0	1.9	1.3	2.9	1.4	3.5	2.3
5.3.1 Specified soft tissue sarcoma	0.6	0.6	0.8	0.8	1.6	1.0	2.5	1.2	3.0	1.8
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.5	0.6	0.7	0.8	1.0	1.0	1.3	1.2	1.7	1.8
5.3.1.2 Kaposi sarcoma	-	-	0.1	-	0.7	-	1.2	-	1.3	-
5.3.2 Unspecified soft tissue sarcoma	0.2	0.2	0.4	0.2	0.3	0.3	0.4	0.2	0.5	0.5
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	5.6	1.1	13.4	1.3	17.6	1.2	16.6	0.9	13.2	0.7
6.1 Germ cell and trophoblastic neoplasms of gonads	4.9	1.0	12.7	1.0	17.1	0.9	16.2	0.5	13.0	0.4
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.8	-	0.7	0.3	0.6	0.3	0.4	0.4	0.2	0.3
6.2.1 Intracranial sites	0.5	-	0.2	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	0.3	-	0.4	0.3	0.4	0.3	0.3	0.4	0.2	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, 2008-2012

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	2.6	6.7	5.2	11.3	8.9	14.9	13.3	19.1
7.1 Melanoma	1.1	1.7	2.6	6.6	5.2	11.2	8.8	14.9	13.2	19.0
7.2 Skin carcinomas	-	-	-	-	-	-	0.1	-	0.2	0.2
8. CARCINOMAS (excluding skin)	2.3	7.3	5.8	17.9	10.7	42.8	21.1	85.3	39.6	143.9
8.1 Thyroid carcinoma	1.0	5.1	2.0	11.3	3.3	19.0	5.3	27.1	7.4	32.0
8.2 Other carcinoma of head and neck	0.4	0.5	0.7	0.7	1.0	1.1	1.8	1.8	4.4	2.7
8.2.1 Nasopharyngeal carcinoma	-	-	0.1	-	-	-	0.2	-	0.4	0.2
8.2.2 Other sites in lip, oral cavity and pharynx	0.3	0.5	0.5	0.6	0.7	0.9	1.4	1.5	3.1	2.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	0.1	-	0.3	0.2	0.9	0.4
8.3 Carcinoma of trachea, bronchus, and lung	-	0.1	0.4	0.4	0.5	0.6	1.1	1.2	2.7	2.9
8.4 Carcinoma of breast	-	-	-	1.1	-	8.2	-	26.2	0.2	58.8
8.5 Carcinoma of genitourinary tract	0.3	0.7	0.8	2.8	2.0	10.2	4.6	21.2	9.4	33.1
8.5.1 Carcinoma of kidney	0.2	0.2	0.3	0.5	1.2	1.2	3.1	2.5	6.1	4.2
8.5.2 Carcinoma of bladder	-	-	0.3	-	0.6	0.2	1.2	0.5	2.1	0.9
8.5.3 Carcinoma of gonads	-	0.3	-	0.6	-	1.4	-	2.6	-	4.2
8.5.4 Carcinoma of cervix and uterus	-	0.2	-	1.5	-	7.1	-	14.9	-	22.6
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.2	0.3	0.7	1.2	1.1
8.6 Carcinoma of gastrointestinal tract	0.5	0.7	1.8	1.5	3.6	3.2	7.7	7.2	14.5	13.4
8.6.1 Carcinoma of colon and rectum	0.3	0.4	1.3	1.0	2.5	2.3	5.3	4.8	9.5	9.6
8.6.2 Carcinoma of stomach	-	-	-	0.2	0.4	0.4	1.1	1.0	1.6	1.4
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.2	0.1	0.3	0.2	0.3	0.3	0.6	0.5
8.6.4 Carcinoma of pancreas	-	-	-	-	0.2	0.2	0.4	0.6	1.2	0.9
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	0.3	0.2	0.6	0.4	1.6	1.0
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.4	0.4	0.6	0.7	0.9	1.1
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.3	0.4	0.5	0.6	0.8	1.0
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.3	0.3	0.4	0.6	0.9	1.0	1.3	1.7	2.4
9.1 Other pediatric and embryonal tumors, NOS	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	-	0.2	0.2	0.4	0.5	0.9	0.9	1.2	1.6	2.3
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	0.2	-	-	-	0.3
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	-	-	0.3	-	0.5	0.3	1.0	0.7
9.2.4 Other specified neoplasms, NOS ^c	-	-	-	0.2	-	0.5	0.3	0.7	0.4	1.2
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.1	0.3	0.2	0.4	0.3	0.7	0.6	1.1

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, 2008-2012

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	13.7	22.3	23.4	31.7	49.8	50.6	95.2	76.1	158.7
1. LEUKEMIAS	2.0	1.4	1.9	1.7	2.3	2.3	3.5	2.5	4.9	4.0
1.1 Acute lymphoid leukemia	1.1	-	-	-	-	-	-	-	-	-
1.2 Acute myeloid leukemia	-	0.7	0.7	1.1	-	1.4	1.5	1.5	1.8	1.8
1.3 Chronic myeloid leukemia	-	-	-	-	-	-	1.0	-	1.6	1.2
1.4 Other and unspecified leukemias	-	-	-	-	-	-	-	-	1.0	-
2. LYMPHOMAS	4.2	3.4	7.4	5.2	9.7	7.9	12.0	8.1	15.3	10.8
2.1 Non-Hodgkin Lymphoma	2.2	1.0	3.6	1.5	5.4	3.7	7.8	4.8	11.5	7.6
2.2 Hodgkin Lymphoma	2.0	2.4	3.8	3.6	4.3	4.2	4.2	3.4	3.8	3.2
3. CNS, INTRACRANIAL, INTRASPINAL	1.9	1.6	1.6	1.4	1.1	1.6	2.8	1.8	2.1	2.3
3.1 Astrocytoma	0.9	0.9	0.9	-	-	0.8	1.6	-	1.1	1.3
3.1.1 Specified low-grade astrocytic tumors	-	-	-	-	-	-	-	-	-	-
3.1.2 Glioblastoma and anaplastic astrocytoma	-	-	-	-	-	-	0.9	-	-	-
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	1.4	0.8	0.9	0.8	-	-	-	-	1.0	-
4.1 Osteosarcoma	1.0	-	-	-	-	-	-	-	-	-
4.2 Chondrosarcoma	-	-	-	-	-	-	-	-	-	-
4.3 Ewing tumor	-	-	-	-	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	-	-
5. SOFT TISSUE SARCOMAS	1.7	1.1	5.0	2.3	6.6	2.6	8.3	4.8	8.7	5.6
5.1 Fibromatous neoplasms	-	-	-	0.9	1.5	-	1.1	1.5	2.3	2.2
5.2 Rhabdomyosarcoma	-	-	-	-	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.7	-	4.1	1.3	5.2	1.7	7.0	3.1	6.3	3.5
5.3.1 Specified soft tissue sarcoma	-	-	3.5	1.0	4.8	1.3	6.3	2.8	5.9	2.7
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	1.3	0.9	1.0	1.2	1.3	2.5	1.7	2.7
5.3.1.2 Kaposi sarcoma	-	-	2.2	-	3.9	-	5.0	-	4.2	-
5.3.2 Unspecified soft tissue sarcoma	-	-	-	-	-	-	-	-	-	-
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.8	1.1	1.8	1.3	2.5	1.3	4.0	1.1	3.2	0.8
6.1 Germ cell and trophoblastic neoplasms of gonads	-	0.8	1.7	0.8	2.5	0.8	3.7	-	3.1	-
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, 2008-2012

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	-	-	-	-	-	-	-	-	-	1.0
7.1 Melanoma	-	-	-	-	-	-	-	-	-	1.0
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	-	-
8. CARCINOMAS (excluding skin)	2.2	3.6	3.1	10.1	8.4	32.6	17.3	72.7	37.5	128.6
8.1 Thyroid carcinoma	-	1.6	-	2.5	1.3	6.4	1.4	11.4	2.3	15.1
8.2 Other carcinoma of head and neck	-	-	-	-	1.0	1.0	1.3	1.5	3.7	2.8
8.2.1 Nasopharyngeal carcinoma	-	-	-	-	-	-	-	-	-	-
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	-	-	-	-	-	1.1	2.3	2.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	-	-	-	-
8.3 Carcinoma of trachea, bronchus, and lung	-	-	-	-	-	-	1.7	1.1	2.9	2.4
8.4 Carcinoma of breast	-	-	-	2.0	-	11.7	-	33.9	-	67.1
8.5 Carcinoma of genitourinary tract	-	-	0.9	3.2	1.7	8.7	4.2	15.9	11.2	23.9
8.5.1 Carcinoma of kidney	-	-	-	0.7	1.4	1.5	3.5	1.9	6.8	3.8
8.5.2 Carcinoma of bladder	-	-	-	-	-	-	-	-	1.2	-
8.5.3 Carcinoma of gonads	-	-	-	-	-	1.1	-	1.6	-	2.3
8.5.4 Carcinoma of cervix and uterus	-	-	-	1.8	-	5.5	-	11.4	-	16.1
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	-	-	3.1	1.2
8.6 Carcinoma of gastrointestinal tract	-	0.7	1.2	1.4	3.4	3.6	7.5	8.1	15.8	15.3
8.6.1 Carcinoma of colon and rectum	-	-	0.8	0.8	2.1	2.5	4.7	5.2	10.1	9.8
8.6.2 Carcinoma of stomach	-	-	-	-	-	-	-	1.1	1.9	1.9
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	-	-	-	-	1.2	-	1.4	-
8.6.4 Carcinoma of pancreas	-	-	-	-	-	-	-	0.9	0.9	1.7
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	-	-	-	-	1.4	1.5
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	-	0.9	1.4	2.0
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	-	0.8	1.3	1.9
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	-	-	-	-	-	0.8	1.2	2.8	2.1	3.2
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	-	-	-	-	-	-	1.0	2.8	2.1	3.1
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	-	-	-
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	-	-	-	-	-	-	1.5	1.1
9.2.4 Other specified neoplasms, NOS ^c	-	-	-	-	-	-	-	1.2	-	1.3
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	-	-	-	-	-	-	-	1.6

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	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	14,393	20.6	0.6*	4,386	22.2	0.6*
1. Leukemias	1,708	2.4	0.7*	528	2.7	0.7*
2. Lymphomas	3,568	5.1	0.1	1,013	5.1	0.1
3. CNS, intracranial, intraspinal	1,390	2.0	0.3	407	2.1	0.3
4. Osseous & chondromatous neoplasms	1,115	1.6	0.6	327	1.7	0.6
5. Soft tissue sarcomas	1,049	1.5	0.3	314	1.6	0.3
6. Germ cell and trophoblastic neoplasms	1,743	2.5	0.9*	533	2.7	0.9*
7. Melanoma and skin carcinomas	1,066	1.5	0.8*	330	1.7	0.8*
8. Carcinomas (excluding skin)	2,479	3.5	1.9*	864	4.4	5.7*
9. Miscellaneous specified neoplasms, NOS	219	0.3	-0.0	65	0.3	-0.0
10. Unspecified malignant neoplasms	56	0.1	-	-	-	-

Males	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	7,546	21.1	0.6*	2,298	22.7	0.6*
1. Leukemias	1,018	2.8	0.4	305	3.0	0.4
2. Lymphomas	1,906	5.3	0.2	556	5.5	0.2
3. CNS, intracranial, intraspinal	800	2.2	0.2	223	2.2	0.2
4. Osseous & chondromatous neoplasms	732	2.0	0.8*	210	2.1	0.8*
5. Soft tissue sarcomas	554	1.5	0.3	163	1.6	0.3
6. Germ cell and trophoblastic neoplasms	1,280	3.6	1.2*	418	4.1	1.2*
7. Melanoma and skin carcinomas	423	1.2	1.0*	137	1.4	1.0*
8. Carcinomas (excluding skin)	709	2.0	1.4*	253	2.5	1.4*
9. Miscellaneous specified neoplasms, NOS	99	0.3	-	31	0.3	-
10. Unspecified malignant neoplasms	25	0.1	-	-	-	-

Females	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	6,847	20.0	0.6*	2,088	21.7	0.6*
1. Leukemias	690	2.0	1.3*	223	2.3	1.3*
2. Lymphomas	1,662	4.9	-0.0	457	4.7	-0.0
3. CNS, intracranial, intraspinal	590	1.7	0.4	184	1.9	0.4
4. Osseous & chondromatous neoplasms	383	1.1	0.2	117	1.2	0.2
5. Soft tissue sarcomas	495	1.4	0.3	151	1.6	0.3
6. Germ cell and trophoblastic neoplasms	463	1.4	-0.1	115	1.2	-0.1
7. Melanoma and skin carcinomas	643	1.9	0.6	193	2.0	0.6
8. Carcinomas (excluding skin)	1,770	5.2	2.0*	611	6.3	7.4*
9. Miscellaneous specified neoplasms, NOS	120	0.4	-	34	0.4	-
10. Unspecified malignant neoplasms	31	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 1975-2012.

- 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	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	24,504	34.3	0.8*	7,440	38.1	0.8*
1. Leukemias	1,583	2.2	0.9*	480	2.5	0.9*
2. Lymphomas	5,123	7.2	0.8*	1,483	7.6	-0.1
3. CNS, intracranial, intraspinal	1,624	2.3	0.7*	487	2.5	0.7*
4. Osseous & chondromatous neoplasms	653	0.9	1.2*	210	1.1	1.2*
5. Soft tissue sarcomas	1,498	2.1	0.9	374	1.9	-1.2*
6. Germ cell and trophoblastic neoplasms	3,809	5.3	0.8*	1,167	6.0	0.8*
7. Melanoma and skin carcinomas	3,081	4.3	1.1*	974	5.0	1.1*
8. Carcinomas (excluding skin)	6,733	9.4	0.4	2,145	11.0	1.5*
9. Miscellaneous specified neoplasms, NOS	250	0.3	1.4*	83	0.4	1.4*
10. Unspecified malignant neoplasms	150	0.2	0.1	37	0.2	0.1

Males	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	12,042	33.2	0.5*	3,549	35.5	0.5*
1. Leukemias	910	2.5	0.6	262	2.6	0.6
2. Lymphomas	2,754	7.6	0.4*	794	7.9	0.4*
3. CNS, intracranial, intraspinal	905	2.5	0.1	235	2.3	0.1
4. Osseous & chondromatous neoplasms	380	1.0	0.8	121	1.2	0.8
5. Soft tissue sarcomas	890	2.5	0.5	218	2.2	-2.4*
6. Germ cell and trophoblastic neoplasms	3,407	9.4	0.8*	1,055	10.5	0.8*
7. Melanoma and skin carcinomas	1,056	2.9	0.2	301	3.0	0.2
8. Carcinomas (excluding skin)	1,588	4.4	1.1	520	5.2	5.5*
9. Miscellaneous specified neoplasms, NOS	95	0.3	-	29	0.3	-
10. Unspecified malignant neoplasms	57	0.2	-	-	-	-

Females	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	12,462	35.4	1.0*	3,891	40.9	1.0*
1. Leukemias	673	1.9	0.3	218	2.3	0.1
2. Lymphomas	2,369	6.7	1.1*	689	7.2	-0.3
3. CNS, intracranial, intraspinal	719	2.0	1.5*	252	2.6	1.5*
4. Osseous & chondromatous neoplasms	273	0.8	1.6*	89	0.9	1.6*
5. Soft tissue sarcomas	608	1.7	-0.7	156	1.6	-5.6
6. Germ cell and trophoblastic neoplasms	402	1.1	0.2	112	1.2	0.2
7. Melanoma and skin carcinomas	2,025	5.7	1.6*	673	7.1	1.6*
8. Carcinomas (excluding skin)	5,145	14.6	0.5	1,625	17.1	1.5*
9. Miscellaneous specified neoplasms, NOS	155	0.4	1.7*	54	0.6	1.7*
10. Unspecified malignant neoplasms	93	0.3	-	23	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 1975-2012.

- 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	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	41,747	55.6	0.7*	12,108	61.2	1.1*
1. Leukemias	1,773	2.4	0.6*	520	2.6	0.6*
2. Lymphomas	6,255	8.3	0.6	1,675	8.5	0.7
3. CNS, intracranial, intraspinal	2,150	2.9	0.8*	614	3.1	0.8*
4. Osseous & chondromatous neoplasms	516	0.7	1.3*	161	0.8	1.3*
5. Soft tissue sarcomas	3,100	4.1	1.6	589	3.0	0.7
6. Germ cell and trophoblastic neoplasms	5,315	7.1	1.4*	1,619	8.2	1.9*
7. Melanoma and skin carcinomas	5,732	7.6	0.8	1,770	9.0	-1.0
8. Carcinomas (excluding skin)	16,305	21.7	0.5*	4,976	25.2	1.5*
9. Miscellaneous specified neoplasms, NOS	402	0.5	2.0*	139	0.7	2.0*
10. Unspecified malignant neoplasms	199	0.3	-	45	0.2	-

Males	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	18,872	50.0	0.9*	5,300	53.2	1.4*
1. Leukemias	1,030	2.7	0.3	294	3.0	0.3
2. Lymphomas	3,561	9.4	0.7	908	9.1	1.1
3. CNS, intracranial, intraspinal	1,177	3.1	0.9*	350	3.5	0.9*
4. Osseous & chondromatous neoplasms	298	0.8	0.5	83	0.8	0.5
5. Soft tissue sarcomas	2,274	6.0	1.9	390	3.9	0.1
6. Germ cell and trophoblastic neoplasms	4,906	13.0	1.6*	1,517	15.2	1.8*
7. Melanoma and skin carcinomas	2,040	5.4	0.2	554	5.6	0.2
8. Carcinomas (excluding skin)	3,344	8.9	0.4	1,118	11.2	2.0*
9. Miscellaneous specified neoplasms, NOS	154	0.4	-	59	0.6	-
10. Unspecified malignant neoplasms	88	0.2	-	27	0.3	-

Females	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	22,875	61.2	0.6*	6,808	69.3	1.0*
1. Leukemias	743	2.0	1.0*	226	2.3	1.0*
2. Lymphomas	2,694	7.2	0.2	767	7.8	-0.2
3. CNS, intracranial, intraspinal	973	2.6	0.8*	264	2.7	0.8*
4. Osseous & chondromatous neoplasms	218	0.6	1.7*	78	0.8	1.7*
5. Soft tissue sarcomas	826	2.2	0.6	199	2.0	-1.4
6. Germ cell and trophoblastic neoplasms	409	1.1	-0.8	102	1.0	-0.8
7. Melanoma and skin carcinomas	3,692	9.9	1.5*	1,216	12.4	1.5*
8. Carcinomas (excluding skin)	12,961	34.7	0.4*	3,858	39.3	1.2*
9. Miscellaneous specified neoplasms, NOS	248	0.7	1.4*	80	0.8	1.4*
10. Unspecified malignant neoplasms	111	0.3	-	18	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 1975-2012.

- 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	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	64,185	85.5	0.9*	18,125	92.4	1.2*
1. Leukemias	2,142	2.9	0.6*	616	3.1	0.6*
2. Lymphomas	7,011	9.3	1.5*	1,860	9.5	0.3
3. CNS, intracranial, intraspinal	2,532	3.4	0.4	691	3.5	0.4
4. Osseous & chondromatous neoplasms	477	0.6	0.6	134	0.7	0.6
5. Soft tissue sarcomas	5,119	6.8	1.2	742	3.8	-0.8
6. Germ cell and trophoblastic neoplasms	5,333	7.1	1.8*	1,591	8.1	0.5
7. Melanoma and skin carcinomas	8,178	10.9	1.6*	2,354	12.0	0.0
8. Carcinomas (excluding skin)	32,371	43.1	0.6*	9,805	50.0	2.0*
9. Miscellaneous specified neoplasms, NOS	699	0.9	1.9*	237	1.2	1.9*
10. Unspecified malignant neoplasms	322	0.4	1.1	94	0.5	1.1

Males	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	26,565	70.8	0.9*	6,853	69.6	0.9*
1. Leukemias	1,244	3.3	0.7*	355	3.6	0.7*
2. Lymphomas	4,338	11.6	0.7	1,058	10.7	-0.0
3. CNS, intracranial, intraspinal	1,478	3.9	0.3	402	4.1	0.3
4. Osseous & chondromatous neoplasms	265	0.7	0.5	69	0.7	0.5
5. Soft tissue sarcomas	4,117	11.0	1.3	462	4.7	-2.1
6. Germ cell and trophoblastic neoplasms	4,984	13.3	1.8*	1,495	15.2	0.5
7. Melanoma and skin carcinomas	3,266	8.7	0.1	877	8.9	0.1
8. Carcinomas (excluding skin)	6,489	17.3	0.7*	1,998	20.3	2.5*
9. Miscellaneous specified neoplasms, NOS	271	0.7	2.4*	105	1.1	2.4*
10. Unspecified malignant neoplasms	113	0.3	-	32	0.3	-

Females	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	37,620	100.3	0.8*	11,272	115.3	1.5*
1. Leukemias	898	2.4	0.3	261	2.7	0.3
2. Lymphomas	2,673	7.1	1.3*	802	8.2	1.3*
3. CNS, intracranial, intraspinal	1,054	2.8	0.4	289	3.0	0.4
4. Osseous & chondromatous neoplasms	212	0.6	-	65	0.7	-
5. Soft tissue sarcomas	1,002	2.7	0.3	280	2.9	0.3
6. Germ cell and trophoblastic neoplasms	349	0.9	0.3	96	1.0	0.3
7. Melanoma and skin carcinomas	4,912	13.1	2.1*	1,477	15.1	1.0*
8. Carcinomas (excluding skin)	25,882	69.0	0.7*	7,807	79.8	1.8*
9. Miscellaneous specified neoplasms, NOS	428	1.1	1.7*	132	1.3	1.7*
10. Unspecified malignant neoplasms	209	0.6	-	62	0.6	-

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 1975-2012.

- 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	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	94,586	133.1	0.8*	27,842	139.5	0.9*
1. Leukemias	2,677	3.8	0.5	796	4.0	2.9
2. Lymphomas	7,959	11.2	1.5*	2,250	11.3	-1.2*
3. CNS, intracranial, intraspinal	2,823	4.0	-0.1	765	3.8	-0.1
4. Osseous & chondromatous neoplasms	476	0.7	1.5*	161	0.8	1.5*
5. Soft tissue sarcomas	6,021	8.5	1.0	999	5.0	-1.1
6. Germ cell and trophoblastic neoplasms	4,190	5.9	1.6*	1,272	6.4	0.3
7. Melanoma and skin carcinomas	10,271	14.5	1.5*	3,125	15.7	0.3*
8. Carcinomas (excluding skin)	58,442	82.2	0.5	17,941	89.9	1.4*
9. Miscellaneous specified neoplasms, NOS	1,233	1.7	1.2*	407	2.0	1.2*
10. Unspecified malignant neoplasms	494	0.7	0.0	126	0.6	0.0

Males	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	35,510	100.3	0.5	9,608	96.4	0.1
1. Leukemias	1,546	4.4	0.1	445	4.5	0.1
2. Lymphomas	5,181	14.6	1.8*	1,361	13.7	-0.6
3. CNS, intracranial, intraspinal	1,652	4.7	-0.1	454	4.6	-0.1
4. Osseous & chondromatous neoplasms	272	0.8	0.7	90	0.9	0.7
5. Soft tissue sarcomas	4,732	13.4	2.4	648	6.5	-1.6
6. Germ cell and trophoblastic neoplasms	3,976	11.2	1.8*	1,210	12.1	0.3
7. Melanoma and skin carcinomas	4,468	12.6	0.6	1,242	12.5	-0.6*
8. Carcinomas (excluding skin)	12,988	36.7	0.2	3,960	39.7	1.3*
9. Miscellaneous specified neoplasms, NOS	496	1.4	0.7	154	1.5	0.7
10. Unspecified malignant neoplasms	199	0.6	-0.4	44	0.4	-0.4

Females	1975-2012			2003-2012		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	59,076	165.7	0.8*	18,234	182.5	1.2*
1. Leukemias	1,131	3.2	1.1	351	3.5	2.6*
2. Lymphomas	2,778	7.8	1.4*	889	8.9	1.4*
3. CNS, intracranial, intraspinal	1,171	3.3	-0.2	311	3.1	-0.2
4. Osseous & chondromatous neoplasms	204	0.6	-	71	0.7	-
5. Soft tissue sarcomas	1,289	3.6	-0.5	351	3.5	-0.5
6. Germ cell and trophoblastic neoplasms	214	0.6	0.0	62	0.6	0.0
7. Melanoma and skin carcinomas	5,803	16.3	1.7	1,883	18.8	-0.0
8. Carcinomas (excluding skin)	45,454	127.5	0.6*	13,981	139.9	1.4*
9. Miscellaneous specified neoplasms, NOS	737	2.1	1.5*	253	2.5	1.5*
10. Unspecified malignant neoplasms	295	0.8	0.1	82	0.8	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 1975-2012.

- 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, 2008-2012
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	22.9	25.2	14.8	17.6	22.7	3.4	3.5	3.3	3.6	4.0
Leukemia	3.6	4.0	2.0	3.0	5.0	0.9	1.0	0.8	0.9	1.4
Lymphoma	5.3	5.7	4.2	3.8	3.8	0.3	0.3	0.3	-	0.2
Hodgkin Lymphoma	3.0	3.4	2.0	2.1	2.2	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	2.3	2.3	2.2	1.6	1.7	0.2	0.2	0.3	-	0.2
Brain and Other Nervous System	2.4	2.5	2.0	1.7	1.9	0.6	0.6	0.5	0.7	0.5
Bones and Joints	1.8	2.0	1.4	1.5	1.8	0.6	0.6	0.5	-	0.7
Soft Tissue including Heart	1.2	1.2	1.1	1.1	1.1	0.4	0.3	0.4	-	0.3
Skin excluding Basal and Squamous	1.0	1.2	-	-	-	-	-	-	-	-
Respiratory System	0.4	0.4	-	-	0.7	0.1	0.0	-	-	-
Male Genital System	4.0	5.1	-	1.4	5.9	0.1	0.1	-	-	0.2
Digestive System	0.7	0.7	-	1.1	0.5	0.2	0.1	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	21.3	23.1	13.7	17.7	19.0	2.4	2.5	2.4	1.8	2.7
Leukemia	2.6	2.8	1.4	2.1	3.5	0.6	0.7	0.5	0.6	1.1
Lymphoma	4.5	4.9	3.4	3.5	3.5	0.2	0.2	0.2	-	-
Hodgkin Lymphoma	3.3	3.6	2.4	2.4	2.3	0.0	0.1	-	-	-
Non-Hodgkin Lymphoma	1.2	1.2	1.0	1.1	1.2	0.1	0.1	-	-	-
Brain and Other Nervous System	2.0	2.1	1.5	1.3	1.3	0.4	0.4	0.5	-	0.3
Bones and Joints	1.0	1.0	0.9	1.1	0.8	0.4	0.4	0.3	-	0.5
Soft Tissue including Heart	1.1	1.2	0.7	-	1.3	0.3	0.3	0.3	-	0.2
Skin excluding Basal and Squamous	1.5	1.8	-	-	0.5	-	-	-	-	-
Respiratory System	0.2	0.2	-	-	-	-	-	-	-	-
Breast	0.2	0.2	-	-	-	-	-	-	-	-
Female Genital System	1.8	1.8	1.6	1.9	2.2	0.1	0.1	-	-	-
Digestive System	0.7	0.7	0.7	-	0.6	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.

- 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, 2008-2012
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	34.6	38.6	22.3	19.8	32.0	5.4	5.5	5.4	4.4	5.7
Leukemia	3.0	3.2	1.9	2.5	4.0	1.2	1.2	1.0	1.1	1.7
Lymphoma	7.4	7.7	7.4	5.1	6.2	0.6	0.6	0.6	0.5	0.5
Hodgkin Lymphoma	4.3	4.6	3.8	3.2	3.2	0.2	0.2	0.2	-	0.2
Non-Hodgkin Lymphoma	3.1	3.1	3.6	1.9	3.0	0.4	0.4	0.4	-	0.4
Brain and Other Nervous System	2.3	2.6	1.6	1.4	1.6	0.6	0.7	0.6	-	0.4
Bones and Joints	1.0	1.1	0.9	-	0.9	0.7	0.7	0.6	-	0.6
Soft Tissue including Heart	1.3	1.3	1.9	-	1.0	0.4	0.4	0.6	-	0.4
Skin excluding Basal and Squamous	2.2	2.7	-	-	0.6	0.2	0.2	-	-	-
Respiratory System	0.8	0.9	-	-	1.0	0.2	0.2	0.2	-	-
Male Genital System	10.5	12.9	1.9	4.0	12.7	0.4	0.4	-	-	0.8
Digestive System	1.8	1.9	1.5	1.2	1.5	0.5	0.4	0.7	0.8	0.5

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	37.3	40.7	23.4	26.6	28.3	3.6	3.6	4.1	2.6	3.5
Leukemia	2.2	2.5	1.7	1.5	2.8	0.7	0.8	0.8	-	1.0
Lymphoma	6.5	6.9	5.2	4.9	4.7	0.4	0.3	0.5	-	0.3
Hodgkin Lymphoma	4.6	4.9	3.6	2.7	3.0	0.2	0.1	0.2	-	-
Non-Hodgkin Lymphoma	1.9	2.0	1.5	2.2	1.6	0.2	0.2	0.3	-	0.2
Brain and Other Nervous System	2.2	2.3	1.4	2.1	1.6	0.5	0.5	0.4	-	0.4
Bones and Joints	0.7	0.7	0.8	-	0.5	0.3	0.3	0.2	-	0.3
Soft Tissue including Heart	1.3	1.2	1.5	1.4	1.1	0.3	0.2	0.5	-	0.2
Skin excluding Basal and Squamous	5.6	6.8	-	-	0.9	0.1	0.1	-	-	-
Respiratory System	0.4	0.5	-	-	-	0.1	0.1	-	-	-
Breast	1.4	1.3	2.0	1.3	0.9	0.1	0.1	-	-	-
Female Genital System	3.8	3.8	4.0	3.2	4.2	0.3	0.3	0.4	-	0.3
Digestive System	1.7	1.7	1.6	1.8	1.2	0.4	0.4	0.4	0.6	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 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.

- 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, 2008-2012
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	48.3	52.9	31.7	29.7	38.5	7.1	7.1	7.6	5.1	6.4
Leukemia	3.1	3.4	2.3	2.2	3.5	1.2	1.2	1.3	1.1	1.4
Lymphoma	8.0	8.0	9.7	5.7	5.2	0.8	0.8	1.4	-	0.7
Hodgkin Lymphoma	4.0	4.2	4.3	2.6	2.1	0.3	0.3	0.4	-	0.2
Non-Hodgkin Lymphoma	4.0	3.8	5.4	3.1	3.1	0.6	0.5	1.0	-	0.6
Brain and Other Nervous System	3.0	3.5	1.2	2.1	2.1	1.0	1.1	0.6	0.5	0.5
Bones and Joints	0.7	0.8	-	-	0.6	0.4	0.4	0.4	-	0.2
Soft Tissue including Heart	1.5	1.5	1.8	1.1	1.4	0.5	0.5	0.6	-	0.5
Skin excluding Basal and Squamous	4.6	5.5	0.9	-	0.9	0.4	0.5	-	-	-
Respiratory System	1.1	1.2	-	1.1	1.0	0.3	0.3	0.4	-	0.3
Male Genital System	14.6	17.4	2.6	6.4	15.1	0.5	0.6	-	-	0.8
Digestive System	4.0	4.0	3.6	3.9	3.3	1.1	1.0	1.5	1.4	1.0

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	67.0	72.3	49.8	44.8	54.9	6.1	6.0	7.5	4.4	5.5
Leukemia	2.4	2.5	2.3	1.5	2.7	0.8	0.9	0.6	0.7	1.1
Lymphoma	7.1	7.3	7.9	4.9	5.1	0.5	0.5	0.7	-	0.5
Hodgkin Lymphoma	4.1	4.5	4.2	2.2	2.7	0.2	0.2	0.3	-	0.2
Non-Hodgkin Lymphoma	3.0	2.8	3.7	2.7	2.4	0.3	0.3	0.5	-	0.3
Brain and Other Nervous System	2.5	2.9	1.5	1.4	2.1	0.6	0.6	0.5	-	0.3
Bones and Joints	0.6	0.7	-	-	0.5	0.2	0.2	-	-	-
Soft Tissue including Heart	1.3	1.3	1.4	0.9	1.2	0.3	0.3	0.5	-	0.3
Skin excluding Basal and Squamous	9.4	11.5	-	0.9	2.0	0.3	0.3	-	-	-
Respiratory System	0.9	0.8	0.9	1.2	0.5	0.2	0.2	-	-	-
Breast	8.8	8.5	11.8	7.2	7.0	0.7	0.6	1.3	-	0.6
Female Genital System	10.1	10.7	9.1	6.4	11.7	1.0	1.0	1.3	0.6	1.0
Digestive System	3.6	3.6	3.8	3.1	3.7	0.9	0.8	1.1	0.8	0.9

^a 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.

- 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, 2008-2012
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	65.8	70.1	50.6	42.2	49.0	10.2	10.2	11.6	8.1	8.5
Leukemia	3.7	3.8	3.5	3.1	3.9	1.4	1.4	1.6	1.0	1.6
Lymphoma	9.6	9.6	12.0	5.7	6.8	1.0	1.0	1.6	-	0.9
Hodgkin Lymphoma	3.8	4.1	4.2	1.8	2.3	0.3	0.3	0.3	-	0.2
Non-Hodgkin Lymphoma	5.7	5.5	7.8	3.9	4.5	0.8	0.7	1.2	-	0.8
Brain and Other Nervous System	4.0	4.3	2.8	3.3	2.8	1.4	1.6	0.7	0.8	0.8
Bones and Joints	0.6	0.7	-	-	0.6	0.2	0.2	0.3	-	0.2
Soft Tissue including Heart	1.9	1.8	2.3	1.6	1.5	0.5	0.5	0.7	0.6	0.5
Skin excluding Basal and Squamous	7.8	9.3	1.2	1.1	1.8	0.7	0.8	-	-	0.2
Respiratory System	1.9	1.8	2.6	2.0	1.5	0.6	0.6	0.9	0.6	0.5
Male Genital System	14.0	16.7	4.1	4.4	12.1	0.4	0.5	-	-	0.6
Digestive System	8.2	8.2	7.9	8.1	7.9	2.4	2.3	3.3	2.8	2.3

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	113.0	120.3	95.2	80.2	89.3	11.8	11.5	15.5	8.0	10.1
Leukemia	3.0	3.0	2.5	2.8	3.0	0.9	0.9	0.9	0.8	1.0
Lymphoma	7.4	7.6	8.1	5.1	5.5	0.7	0.7	0.9	-	0.6
Hodgkin Lymphoma	3.5	3.8	3.4	1.7	2.3	0.3	0.3	0.4	-	0.2
Non-Hodgkin Lymphoma	3.9	3.8	4.8	3.3	3.2	0.4	0.4	0.6	-	0.4
Brain and Other Nervous System	2.9	3.3	1.9	1.5	2.2	0.8	0.9	0.6	0.5	0.6
Bones and Joints	0.4	0.5	-	-	-	0.2	0.2	-	-	-
Soft Tissue including Heart	1.6	1.6	2.4	1.0	1.4	0.4	0.4	0.4	-	0.4
Skin excluding Basal and Squamous	12.2	15.2	1.6	1.0	2.6	0.5	0.6	-	-	-
Respiratory System	1.6	1.6	1.4	1.2	1.0	0.5	0.6	0.5	-	0.4
Breast	27.2	26.6	34.3	22.6	20.8	2.7	2.3	5.5	1.2	2.1
Female Genital System	18.9	19.9	17.1	13.5	20.7	2.1	2.1	2.6	1.3	1.9
Digestive System	7.7	7.7	8.6	6.0	7.0	1.9	1.8	2.6	1.8	2.2

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.

- 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, 2008-2012
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	89.7	95.2	76.1	58.0	62.5	17.3	17.3	19.9	13.6	12.2
Leukemia	4.7	4.7	4.9	4.1	4.6	1.6	1.5	1.9	1.4	1.8
Lymphoma	11.7	11.9	15.3	5.9	8.8	1.4	1.3	2.4	0.7	1.2
Hodgkin Lymphoma	3.1	3.3	3.8	1.1	1.8	0.4	0.3	0.6	-	0.4
Non-Hodgkin Lymphoma	8.6	8.6	11.5	4.8	7.0	1.0	1.0	1.8	0.6	0.9
Brain and Other Nervous System	4.4	5.0	2.2	3.2	3.2	2.0	2.3	1.1	1.2	1.2
Bones and Joints	0.7	0.8	-	-	0.5	0.2	0.3	0.3	-	-
Soft Tissue including Heart	2.4	2.4	2.5	1.6	2.4	0.6	0.6	0.9	-	0.4
Skin excluding Basal and Squamous	11.2	13.5	2.0	1.5	2.3	1.0	1.2	0.3	-	0.2
Respiratory System	3.9	3.9	4.1	3.4	2.7	1.7	1.7	1.7	2.0	0.9
Male Genital System	12.3	14.4	6.3	3.5	9.4	0.5	0.5	0.3	-	0.5
Digestive System	15.4	15.1	16.6	14.9	13.0	5.4	5.2	6.9	4.9	4.1

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	179.9	186.9	158.7	147.6	141.7	22.6	21.7	31.9	15.5	16.9
Leukemia	3.9	4.0	4.0	3.3	4.2	1.1	1.1	1.2	0.9	1.4
Lymphoma	8.5	8.5	10.8	5.2	6.8	0.8	0.8	1.3	-	0.6
Hodgkin Lymphoma	2.5	2.5	3.2	1.1	1.4	0.2	0.2	0.3	-	-
Non-Hodgkin Lymphoma	6.0	5.9	7.6	4.2	5.4	0.6	0.5	1.0	-	0.4
Brain and Other Nervous System	2.9	3.1	2.3	2.3	2.2	1.2	1.3	0.8	0.9	0.7
Bones and Joints	0.5	0.6	-	-	-	0.2	0.1	-	-	-
Soft Tissue including Heart	1.9	1.8	2.7	1.2	1.7	0.5	0.5	0.8	-	0.4
Skin excluding Basal and Squamous	15.5	19.3	2.3	1.6	4.2	0.7	0.9	-	-	-
Respiratory System	3.4	3.5	3.1	3.3	2.3	1.5	1.5	1.4	1.6	0.7
Breast	60.2	59.4	68.2	56.6	45.7	6.7	6.0	11.8	4.0	4.5
Female Genital System	29.0	30.5	23.2	24.6	29.4	4.0	4.0	5.2	2.2	3.5
Digestive System	14.3	14.1	16.2	12.1	12.7	3.8	3.5	5.8	3.4	3.3

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 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.

- 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, 1975-2012

	Incidence				Mortality			
	1975-2012		2003-2012		1975-2012		2003-2012	
	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d
<u>Ages 15-19</u>								
All Malignant Cancers	20.6	0.6*	22.2	0.6*	4.1	-1.9*	3.1	-1.6
Hodgkin Lymphoma	3.5	-0.5*	3.2	-0.5*	0.2	-4.9*	0.1	-4.9*
Brain and Other Nervous System	2.0	0.2	2.1	0.2	0.6	-1.2*	0.5	-1.2*
Thyroid	1.8	2.7*	2.5	7.9*	0.0	-	-	-
Non-Hodgkin Lymphoma	1.6	1.4*	1.9	1.4*	0.3	-4.1*	0.2	-7.9*
Testis	1.6	1.4*	1.9	1.4*	0.1	-5.3*	0.0	-2.5*
<u>Ages 20-24</u>								
All Malignant Cancers	34.3	0.8*	38.1	0.8*	5.5	-1.4*	4.6	-1.1*
Hodgkin Lymphoma	5.0	0.2	4.9	-0.6*	0.4	-3.8*	0.2	-4.4*
Testis	4.5	1.1	5.1	-0.5	0.3	-3.2*	0.2	2.1*
Thyroid	4.3	1.9*	5.5	1.9*	0.0	-	0.0	-
Melanoma of the Skin	4.2	1.1*	4.8	1.1*	0.2	-4.1*	0.1	-6.9
Brain and Other Nervous System	2.3	0.7*	2.5	0.7*	0.6	-0.8*	0.6	-0.8*
<u>Ages 25-29</u>								
All Malignant Cancers	55.6	0.7*	61.2	1.1*	8.3	-1.5*	6.7	-1.5*
Melanoma of the Skin	7.4	1.1*	8.8	1.1*	0.5	-2.9*	0.3	-2.9*
Thyroid	6.9	2.1*	10.1	4.0*	0.0	-	0.0	-
Testis	6.4	1.2*	7.5	1.2*	0.3	-3.0*	0.2	0.7
Hodgkin Lymphoma	4.8	-0.1	4.6	-0.1	0.6	-4.2*	0.3	-4.2*
Breast	4.1	0.0	4.3	0.0	0.5	-2.3*	0.3	-2.3*
<u>Ages 30-34</u>								
All Malignant Cancers	85.5	0.9*	92.4	1.2*	14.5	-1.5*	11.3	-1.4*
Breast	13.3	0.0	13.7	0.0	2.1	-2.0*	1.4	-2.6*
Melanoma of the Skin	10.6	1.6*	11.7	0.0	0.9	-2.1*	0.6	-1.8*
Thyroid	8.9	2.6*	14.1	5.0*	0.0	-1.3	0.0	-1.3
Testis	6.5	1.9*	7.5	0.6*	0.3	-3.1*	0.2	-1.5*
Cervix Uteri	5.8	-1.2*	4.8	-1.2*	0.9	-1.4*	0.7	-2.6*
<u>Ages 35-39</u>								
All Malignant Cancers	133.1	0.8*	139.5	0.9*	27.0	-1.6*	20.7	-1.8*
Breast	31.7	0.4	31.9	0.4*	5.1	-1.8*	3.6	-2.9*
Melanoma of the Skin	14.0	1.5*	15.0	0.3	1.3	-2.4*	0.8	-2.0*
Thyroid	10.8	3.6*	17.8	4.4*	0.1	-0.4	0.1	-0.4
Non-Hodgkin Lymphoma	8.0	2.2*	8.1	0.4	1.5	-1.6*	0.9	-3.4*
Colon and Rectum	7.2	1.0*	8.5	2.4*	2.1	-0.6*	2.1	1.1*

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 1975-2012 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 1975-2012.

- 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, 1975-2012

	<u>Incidence</u>				<u>Mortality</u>			
	<u>1975-2012</u>		<u>2003-2012</u>		<u>1975-2012</u>		<u>2003-2012</u>	
	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d
<u>Ages 15-19</u>								
All Malignant Cancers	21.1	0.6*	22.7	0.6*	4.8	-1.9*	3.6	-1.6
Hodgkin Lymphoma	3.3	-0.5*	3.2	-0.5*	0.2	-5.1*	0.1	-5.1*
Testis	3.1	1.4*	3.7	1.4*	0.2	-5.3*	0.1	-2.5*
Brain and Other Nervous System	2.3	0.2	2.3	0.2	0.7	-1.1*	0.6	-1.1*
Non-Hodgkin Lymphoma	2.0	1.2*	2.3	1.2*	0.5	-3.1*	0.3	-3.1*
Bones and Joints	1.9	0.4	1.9	0.4	0.7	-1.3*	0.6	-0.1
<u>Ages 20-24</u>								
All Malignant Cancers	33.2	0.5*	35.5	0.5*	6.6	-1.5*	5.4	-1.0*
Testis	8.8	1.0	10.0	-0.5	0.5	-3.2*	0.3	2.1*
Hodgkin Lymphoma	4.9	-0.4*	4.7	-0.4*	0.5	-4.3*	0.2	-4.3*
Melanoma of the Skin	2.8	0.2	2.9	0.2	0.2	-4.5*	0.2	-8.2
Non-Hodgkin Lymphoma	2.7	1.7*	3.2	1.7*	0.7	-2.2*	0.5	-5.3*
Brain and Other Nervous System	2.6	0.1	2.4	0.1	0.7	-0.8*	0.6	-0.8*
<u>Ages 25-29</u>								
All Malignant Cancers	50.0	0.9*	53.2	1.4*	8.8	-1.5*	7.1	-0.5
Testis	12.7	1.2*	15.0	1.2*	0.6	-3.0*	0.4	0.7
Melanoma of the Skin	5.3	0.3	5.4	0.3	0.6	-2.8*	0.4	-0.4
Hodgkin Lymphoma	5.0	-0.2	4.7	-0.2	0.7	-4.5*	0.3	-4.5*
Non-Hodgkin Lymphoma	4.4	1.6	4.4	1.9	0.9	-1.8*	0.6	-5.5*
Kaposi sarcoma	3.8	-	1.4	-	-	-	-	-
<u>Ages 30-34</u>								
All Malignant Cancers	70.8	0.9*	69.6	0.9*	13.5	-1.5*	10.4	-1.1*
Testis	13.0	1.9*	15.0	0.6*	0.6	-3.1*	0.4	-1.5*
Kaposi sarcoma	8.4	-	2.0	-	-	-	-	-
Melanoma of the Skin	8.4	0.2	8.6	0.2	1.0	-2.3*	0.7	-2.4*
Non-Hodgkin Lymphoma	7.2	1.3	6.2	0.2	1.4	-1.3	0.8	-3.4*
Hodgkin Lymphoma	4.3	0.2	4.5	0.2	0.7	-4.5*	0.3	-5.6*
<u>Ages 35-39</u>								
All Malignant Cancers	100.3	0.5	96.4	0.1	23.5	-1.6*	17.6	-1.4*
Melanoma of the Skin	12.1	0.6	11.9	-0.7*	1.6	-2.9*	1.0	-4.4*
Testis	11.0	1.9*	12.1	0.4	0.5	-2.8*	0.4	-1.2*
Non-Hodgkin Lymphoma	10.9	2.7*	10.1	0.1	2.0	-1.5*	1.1	-3.0*
Kaposi sarcoma	10.0	-	3.0	-	-	-	-	-
Colon and Rectum	7.6	1.4*	9.2	1.4*	2.3	-0.3	2.3	2.5*

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 1975-2012 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 1975-2012.

- 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, 1975-2012

	<u>Incidence</u>				<u>Mortality</u>			
	<u>1975-2012</u>		<u>2003-2012</u>		<u>1975-2012</u>		<u>2003-2012</u>	
	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d
<u>Ages 15-19</u>								
All Malignant Cancers	20.0	0.6*	21.7	0.6*	3.3	-1.8*	2.5	-1.8*
Hodgkin Lymphoma	3.7	-0.5	3.2	-0.5	0.2	-4.4*	0.1	-4.4*
Thyroid	3.1	2.8*	4.2	8.1*	0.0	-	-	-
Melanoma of the Skin	1.8	0.7	1.9	0.7	0.1	-3.3*	0.0	-3.3*
Brain and Other Nervous System	1.7	0.2	1.9	0.2	0.5	-1.3*	0.4	-1.3*
Ovary	1.5	-0.2	1.4	-0.2	0.1	-4.3*	0.1	-4.3*
<u>Ages 20-24</u>								
All Malignant Cancers	35.4	1.0*	40.9	1.0*	4.5	-1.2*	3.7	-1.2*
Thyroid	7.3	2.1*	9.5	2.1*	0.0	-	-	-
Melanoma of the Skin	5.6	1.6*	6.9	1.6*	0.2	-3.2*	0.1	-3.2*
Hodgkin Lymphoma	5.0	0.8	5.2	-0.7	0.3	-3.3*	0.2	-3.3*
Cervix Uteri	2.0	-3.0	1.4	-5.1*	0.2	-1.4*	0.1	-1.4*
Brain and Other Nervous System	2.0	1.5*	2.7	1.5*	0.5	-0.8*	0.5	-0.8*
<u>Ages 25-29</u>								
All Malignant Cancers	61.2	0.6*	69.3	1.0*	7.8	-1.4*	6.2	-1.4*
Thyroid	11.4	2.2*	17.2	4.3*	0.0	-	0.0	-
Melanoma of the Skin	9.6	1.6*	12.2	1.6*	0.4	-2.6*	0.3	-2.6*
Breast	8.2	0.0	8.6	0.0	1.0	-2.3*	0.7	-2.3*
Cervix Uteri	6.9	-2.1*	4.7	-4.0*	0.7	-1.5*	0.6	-1.5*
Hodgkin Lymphoma	4.6	0.1	4.6	0.1	0.5	-3.7*	0.2	-3.7*
<u>Ages 30-34</u>								
All Malignant Cancers	100.3	0.8*	115.3	1.5*	15.5	-1.5*	12.2	-1.8*
Breast	26.6	0.1	27.4	0.1	4.2	-2.0*	2.9	-2.6*
Thyroid	14.5	2.9*	23.4	4.9*	0.0	-	0.0	-
Melanoma of the Skin	12.7	2.3*	14.7	1.0*	0.7	-2.4*	0.5	-2.4*
Cervix Uteri	11.6	-1.2*	9.7	-1.2*	1.7	-1.4*	1.3	-2.6*
Hodgkin Lymphoma	3.7	0.3	4.0	-2.8	0.5	-3.4*	0.3	-3.4*
<u>Ages 35-39</u>								
All Malignant Cancers	165.7	0.8*	182.5	1.2*	30.4	-1.6*	23.7	-2.1*
Breast	63.0	0.4	63.6	0.4*	10.0	-1.7*	7.2	-2.9*
Thyroid	17.1	4.1*	28.8	5.9*	0.1	-0.9	0.1	-0.9
Melanoma of the Skin	15.8	1.9	18.2	0.5	1.0	-2.4*	0.7	-2.4*
Cervix Uteri	14.3	-1.2*	12.3	-1.2*	2.9	-1.3*	2.3	-0.6
Corpus and Uterus, NOS	6.9	1.1*	8.8	3.5*	0.4	-1.1	0.5	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 1975-2012 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 1975-2012.

- 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, 1975-2011

	5-year Relative Survival (Percent)					
	1975-2011	1975-1982	1983-1990	1991-1997	1998-2004	2005-2011
<u>Ages 15-19</u>						
All Malignant Cancers	77.9	68.9	76.3	79.1	80.6	85.0
Hodgkin Lymphoma	92.1	88.3	88.9	93.9	95.7	96.9
Brain and Other Nervous System	72.9	61.8	73.0	77.3	76.9	75.8
Thyroid	98.8	99.2	98.9	99.6	97.5	99.1
Non-Hodgkin Lymphoma	71.8	51.4	69.4	71.7	79.0	82.3
Testis	90.0	77.2	91.7	90.8	93.2	94.9
<u>Ages 20-24</u>						
All Malignant Cancers	80.8	74.7	78.4	81.1	84.3	85.9
Hodgkin Lymphoma	90.6	85.0	89.7	91.1	94.1	94.8
Testis	92.3	84.7	90.5	95.3	96.4	94.5
Thyroid	99.7	99.6	99.6	99.2	99.6	100.0
Melanoma of the Skin	92.7	85.8	90.5	95.2	95.8	96.8
Brain and Other Nervous System	66.7	59.0	60.9	72.0	67.0	75.9
<u>Ages 25-29</u>						
All Malignant Cancers	79.4	76.7	73.9	76.4	84.8	86.6
Melanoma of the Skin	93.2	88.1	91.5	93.7	96.1	96.5
Thyroid	99.7	99.7	99.3	99.8	99.7	99.2
Testis	94.9	88.1	95.1	96.0	97.0	97.3
Hodgkin Lymphoma	90.3	85.3	89.1	92.0	91.5	95.4
Breast	74.2	69.4	68.3	72.6	81.4	84.6
<u>Ages 30-34</u>						
All Malignant Cancers	75.6	73.4	68.4	70.8	82.5	85.6
Breast	77.0	70.0	72.8	77.0	82.9	85.2
Melanoma of the Skin	92.5	86.5	90.5	93.3	95.3	96.6
Thyroid	99.7	99.5	99.5	99.7	99.9	99.6
Testis	95.6	92.0	95.6	95.9	95.4	97.6
Cervix Uteri	84.7	84.3	83.1	84.8	88.3	83.1
<u>Ages 35-39</u>						
All Malignant Cancers	73.6	68.0	65.8	70.6	79.8	83.6
Breast	81.3	74.9	76.1	82.5	85.5	87.6
Melanoma of the Skin	92.3	87.4	90.0	92.3	94.6	95.9
Thyroid	99.5	99.0	99.2	99.3	99.4	99.8
Non-Hodgkin Lymphoma	63.2	65.9	51.6	50.8	72.4	81.9
Colon and Rectum	63.2	54.8	56.7	60.6	69.4	69.5

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

^b Top 5 cancer sites selected based on 1975-2011 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, 1975-2011

	5-year Relative Survival (Percent)					
	1975-2011	1975-1982	1983-1990	1991-1997	1998-2004	2005-2011
<u>Ages 15-19</u>						
All Malignant Cancers	73.7	62.4	71.2	75.6	77.0	83.2
Hodgkin Lymphoma	91.2	86.8	87.4	92.9	95.6	96.8
Testis	90.0	77.2	91.7	90.8	93.2	94.9
Brain and Other Nervous System	69.9	58.3	67.6	75.1	76.7	73.3
Non-Hodgkin Lymphoma	69.5	45.2	71.0	72.2	72.7	82.3
Bones and Joints	58.7	42.0	52.9	65.2	64.4	71.1
<u>Ages 20-24</u>						
All Malignant Cancers	76.3	69.5	72.2	76.4	81.9	82.8
Testis	92.3	84.7	90.5	95.3	96.4	94.5
Hodgkin Lymphoma	88.8	83.5	86.0	90.1	94.2	93.6
Melanoma of the Skin	86.1	76.9	81.9	89.8	92.4	93.2
Non-Hodgkin Lymphoma	65.6	54.8	55.4	55.5	78.6	78.2
Brain and Other Nervous System	65.6	54.8	59.1	75.3	66.0	76.4
<u>Ages 25-29</u>						
All Malignant Cancers	73.2	71.2	65.2	68.1	81.5	83.5
Testis	94.9	88.1	95.1	96.0	97.0	97.3
Melanoma of the Skin	88.4	82.6	87.0	88.5	92.9	91.9
Hodgkin Lymphoma	88.2	84.0	85.4	89.0	91.5	93.8
Non-Hodgkin Lymphoma	58.2	57.3	46.3	44.1	76.4	77.8
Kaposi sarcoma	14.7	-	9.1	11.0	44.7	57.3
<u>Ages 30-34</u>						
All Malignant Cancers	67.3	68.6	56.4	59.4	78.4	82.4
Testis	95.6	92.0	95.6	95.9	95.4	97.6
Kaposi sarcoma	17.9	32.5	8.4	18.7	52.5	67.5
Melanoma of the Skin	88.2	79.2	85.2	90.8	91.9	94.5
Non-Hodgkin Lymphoma	54.0	69.8	41.2	36.8	70.9	78.4
Hodgkin Lymphoma	86.9	78.8	83.3	86.4	92.1	94.0
<u>Ages 35-39</u>						
All Malignant Cancers	63.4	59.6	51.9	57.4	73.5	78.8
Melanoma of the Skin	88.1	82.1	85.2	88.4	91.2	93.0
Testis	96.2	92.3	95.0	96.6	96.9	97.6
Non-Hodgkin Lymphoma	55.7	61.8	43.6	43.4	65.3	77.4
Kaposi sarcoma	18.6	-	6.8	17.9	55.9	72.6
Colon and Rectum	61.9	55.5	52.9	59.2	68.6	67.8

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

^b Top 5 cancer sites selected based on 1975-2011 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, 1975-2011

	5-year Relative Survival (Percent)					
	1975-2011	1975-1982	1983-1990	1991-1997	1998-2004	2005-2011
<u>Ages 15-19</u>						
All Malignant Cancers	82.4	75.9	81.9	83.0	84.8	86.9
Hodgkin Lymphoma	93.0	89.7	90.4	94.8	95.6	97.1
Thyroid	99.2	99.0	100.0	99.5	97.8	99.6
Melanoma of the Skin	95.3	88.1	94.7	94.2	99.3	98.9
Brain and Other Nervous System	77.0	67.0	79.8	80.5	77.1	79.4
Ovary	88.2	78.5	89.7	90.4	94.6	89.2
<u>Ages 20-24</u>						
All Malignant Cancers	85.1	79.8	85.2	85.5	86.5	88.7
Thyroid	99.7	99.3	99.5	99.6	99.8	100.0
Melanoma of the Skin	96.2	91.5	95.7	97.6	97.3	98.4
Hodgkin Lymphoma	92.4	87.0	93.4	92.2	93.9	95.9
Cervix Uteri	88.1	89.1	91.0	85.6	87.1	84.9
Brain and Other Nervous System	68.2	65.2	63.3	66.1	68.0	75.7
<u>Ages 25-29</u>						
All Malignant Cancers	84.5	80.6	82.1	84.1	87.4	89.1
Thyroid	99.7	99.7	99.4	99.9	100.0	99.0
Melanoma of the Skin	95.9	91.9	94.4	96.7	97.7	98.6
Breast	74.2	69.4	68.1	72.7	81.6	84.7
Cervix Uteri	87.4	88.8	86.2	87.5	88.4	85.5
Hodgkin Lymphoma	92.7	86.8	93.2	95.3	91.5	96.9
<u>Ages 30-34</u>						
All Malignant Cancers	81.6	76.2	78.5	81.1	85.1	87.5
Breast	77.0	69.9	72.8	77.0	82.9	85.1
Thyroid	99.7	99.3	99.6	99.7	99.9	99.6
Melanoma of the Skin	95.4	92.1	94.3	94.9	97.4	97.8
Cervix Uteri	84.7	84.3	83.1	84.8	88.3	83.1
Hodgkin Lymphoma	91.2	85.1	89.9	90.2	94.0	96.0
<u>Ages 35-39</u>						
All Malignant Cancers	79.9	72.3	75.6	80.1	83.6	86.1
Breast	81.3	74.8	76.1	82.5	85.4	87.6
Thyroid	99.7	99.3	99.3	99.6	99.7	99.8
Melanoma of the Skin	95.6	92.3	94.2	95.5	97.0	97.8
Cervix Uteri	81.6	79.5	80.4	81.8	84.3	81.6
Corpus and Uterus, NOS	90.2	92.0	90.1	90.6	90.7	87.2

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

^b Top 5 cancer sites selected based on 1975-2011 SEER 9 Incidence rates for the age group.

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