

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.

REFERENCES:

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.
4. National Cancer Institute SEER Conversion Programs.
Worldwide web: (<https://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, 2011-2015

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	17.0	15.9	54.8	89.8	1068.8	870.7
1. LEUKEMIAS	5.5	5.0	4.0	2.9	34.9	20.1
1.1 Acute lymphoid leukemia	4.3	4.0	1.3	0.8	1.3	1.0
1.2 Acute myeloid leukemia	0.9	0.8	1.3	1.4	11.1	7.2
1.3 Chronic myeloid leukemia	0.1	0.1	0.9	0.5	4.7	2.7
1.4 Other and unspecified leukemias	0.2	0.1	0.5	0.3	17.8	9.1
2. LYMPHOMAS	2.1	1.1	8.1	6.6	53.8	36.2
2.1 Non-Hodgkin Lymphoma	1.4	0.7	4.7	3.3	50.3	34.0
2.2 Hodgkin Lymphoma	0.7	0.4	3.5	3.3	3.5	2.2
3. CNS, INTRACRANIAL, INTRASPINAL	3.3	3.0	3.2	2.6	13.0	8.7
3.1 Astrocytoma	1.7	1.7	1.8	1.4	10.2	6.6
3.1.1 Specified low-grade astrocytic tumors	1.2	1.2	0.5	0.4	0.2	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.3	1.0	0.7	9.5	6.0
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.3	0.5	0.4
3.2 Other glioma	0.5	0.5	0.9	0.7	1.4	1.0
3.3 Ependymoma	0.3	0.3	0.2	0.2	0.3	0.3
3.4 Medulloblastoma and other PNET	0.7	0.5	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	0.2	0.2	0.1	0.1	0.0	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	0.7	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.9	0.9	1.1	0.8	1.5	1.0
4.1 Osteosarcoma	0.4	0.5	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	0.0	-	0.2	0.2	0.7	0.4
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	-	0.1	0.1	0.4	0.3
5. SOFT TISSUE SARCOMAS	1.1	0.9	3.2	2.3	12.8	9.2
5.1 Fibromatous neoplasms	0.2	0.2	0.7	0.7	2.6	1.5
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	1.5	10.0	7.5
5.3.1 Specified soft tissue sarcoma	0.2	0.2	2.0	1.2	7.0	5.5
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.1	1.1	5.7	5.3
5.3.1.2 Kaposi sarcoma	-	-	1.0	0.0	1.4	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.4	0.3	3.0	2.0
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.4	0.6	11.4	1.0	4.1	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.1	0.3	10.9	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	-	-	-
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, 2011-2015

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.2	5.2	8.6	71.6	38.2
7.1 Melanoma	0.2	0.2	5.1	8.5	67.1	36.0
7.2 Skin carcinomas	-	-	0.1	0.1	4.4	2.2
8. CARCINOMAS (excluding skin)	0.6	1.0	17.4	63.0	813.5	708.8
8.1 Thyroid carcinoma	0.2	0.6	4.0	19.0	13.5	33.6
8.2 Other carcinoma of head and neck	0.1	0.1	1.7	1.4	51.5	16.3
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	35.6	12.4
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.1	14.1	3.3
8.3 Carcinoma of trachea, bronchus, and lung	-	-	0.9	1.0	134.7	101.4
8.4 Carcinoma of breast	-	-	0.1	21.4	2.6	271.4
8.5 Carcinoma of genitourinary tract	0.0	0.1	3.6	13.4	384.9	135.9
8.5.1 Carcinoma of kidney	0.0	-	2.5	1.8	44.2	21.3
8.5.2 Carcinoma of bladder	-	-	0.8	0.3	77.6	18.5
8.5.3 Carcinoma of gonads	-	-	0.0	1.8	0.0	21.5
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.0	-	63.0
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.3	0.4	263.0	11.6
8.6 Carcinoma of gastrointestinal tract	0.2	0.2	6.6	6.3	211.0	136.8
8.6.1 Carcinoma of colon and rectum	0.1	0.1	4.4	4.3	102.0	79.2
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	20.3	10.0
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.0	-	0.5	0.3	29.5	9.8
8.6.4 Carcinoma of pancreas	-	-	0.5	0.5	29.2	22.3
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.4	30.0	15.4
8.7 Carcinoma of other and ill-defined sites, NOS	0.0	-	0.4	0.5	15.3	13.5
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	0.5	15.1	13.3
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.9	3.0	0.8	1.3	27.3	22.2
9.1 Other pediatric and embryonal tumors, NOS	2.8	2.9	0.1	0.1	0.2	0.2
9.1.1 Wilms tumor	0.7	0.9	-	-	0.0	0.0
9.1.2 Neuroblastoma	1.1	1.0	-	0.0	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	1.0	1.0	0.0	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.8	1.2	27.1	22.0
9.2.1 Paraganglioma and glomus tumors	-	-	0.1	0.0	0.1	0.1
9.2.2 Other specified gonadal tumors	-	-	0.0	0.2	0.0	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.4	0.4	20.5	12.9
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.7	6.4	8.6
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	36.4	26.1

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

Age-Adjusted SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
White, 2011-2015

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	17.9	16.6	58.9	94.9	1077.7	896.6
1. LEUKEMIAS	5.9	5.5	4.2	3.0	36.8	21.2
1.1 Acute lymphoid leukemia	4.8	4.5	1.5	0.8	1.4	1.1
1.2 Acute myeloid leukemia	0.8	0.7	1.4	1.4	11.6	7.5
1.3 Chronic myeloid leukemia	0.1	0.1	0.9	0.5	4.9	2.8
1.4 Other and unspecified leukemias	0.2	0.1	0.5	0.3	19.0	9.8
2. LYMPHOMAS	2.1	1.1	8.2	6.9	56.6	38.3
2.1 Non-Hodgkin Lymphoma	1.5	0.7	4.5	3.2	52.9	35.9
2.2 Hodgkin Lymphoma	0.7	0.4	3.7	3.6	3.7	2.3
3. CNS, INTRACRANIAL, INTRASPINAL	3.5	3.2	3.6	2.9	14.4	9.7
3.1 Astrocytoma	1.8	1.8	2.0	1.6	11.4	7.4
3.1.1 Specified low-grade astrocytic tumors	1.4	1.3	0.5	0.4	0.3	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.3	1.1	0.8	10.6	6.8
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.4	0.6	0.4
3.2 Other glioma	0.5	0.5	1.0	0.8	1.6	1.1
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	0.2	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	0.2	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	0.2
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	0.1	0.0	0.7	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	1.0	0.9	1.2	0.9	1.6	1.1
4.1 Osteosarcoma	0.4	0.5	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	-	-	0.2	0.2	0.8	0.5
4.3 Ewing tumor	0.5	0.4	0.4	0.3	0.1	0.1
4.4 Other specified and unspecified bone tumors	-	-	0.1	0.1	0.5	0.3
5. SOFT TISSUE SARCOMAS	1.0	0.9	2.8	2.2	13.1	8.9
5.1 Fibromatous neoplasms	0.2	0.1	0.5	0.6	2.7	1.4
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	2.1	1.4	10.2	7.3
5.3.1 Specified soft tissue sarcoma	0.2	0.2	1.7	1.1	7.1	5.3
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.1	0.2	1.1	1.1	5.9	5.2
5.3.1.2 Kaposi sarcoma	-	-	0.6	-	1.2	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.4	0.3	3.1	1.9
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.5	0.6	13.7	0.9	4.7	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.1	0.3	13.2	0.6	4.6	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.3	0.3	0.5	0.3	0.2	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	0.2	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, 2011-2015

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.3	6.4	10.9	83.8	45.6
7.1 Melanoma	0.2	0.3	6.3	10.8	79.0	43.3
7.2 Skin carcinomas	-	-	0.1	0.1	4.9	2.3
8. CARCINOMAS (excluding skin)	0.6	1.1	17.8	65.5	804.3	724.8
8.1 Thyroid carcinoma	0.2	0.6	4.4	21.0	14.3	35.0
8.2 Other carcinoma of head and neck	0.1	0.1	1.6	1.4	53.8	16.9
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	1.2	1.1	38.5	13.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.2	14.2	3.4
8.3 Carcinoma of trachea, bronchus, and lung	-	-	0.9	1.0	134.9	106.5
8.4 Carcinoma of breast	-	-	0.0	21.1	2.7	277.8
8.5 Carcinoma of genitourinary tract	-	0.1	3.8	14.3	378.0	141.8
8.5.1 Carcinoma of kidney	-	-	2.6	1.9	45.2	21.9
8.5.2 Carcinoma of bladder	-	-	0.9	0.4	85.0	20.0
8.5.3 Carcinoma of gonads	-	-	0.0	2.0	0.0	22.8
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.6	-	64.8
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.3	0.4	247.8	12.4
8.6 Carcinoma of gastrointestinal tract	0.2	0.2	6.6	6.3	205.2	133.0
8.6.1 Carcinoma of colon and rectum	0.1	0.2	4.5	4.4	100.1	78.4
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	18.5	8.6
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.3	0.3	26.4	8.9
8.6.4 Carcinoma of pancreas	-	-	0.5	0.5	29.4	22.1
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.4	30.8	15.0
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.4	0.4	15.5	13.7
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	15.3	13.4
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	3.0	3.0	0.8	1.2	26.4	20.2
9.1 Other pediatric and embryonal tumors, NOS	2.9	2.9	0.1	0.1	0.2	0.2
9.1.1 Wilms tumor	0.7	0.9	-	-	0.0	0.0
9.1.2 Neuroblastoma	1.1	1.0	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	1.0	1.0	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.7	1.2	26.2	20.0
9.2.1 Paraganglioma and glomus tumors	-	-	0.1	-	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	19.5	11.5
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.5	8.1
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	36.0	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, 2011-2015

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	13.0	13.2	41.1	72.2	1202.9	858.3
1. LEUKEMIAS	3.2	2.9	2.9	2.7	28.5	17.2
1.1 Acute lymphoid leukemia	2.1	1.9	0.6	0.4	0.9	0.8
1.2 Acute myeloid leukemia	0.8	0.7	1.2	1.4	9.3	6.5
1.3 Chronic myeloid leukemia	-	-	0.7	0.6	4.0	2.9
1.4 Other and unspecified leukemias	-	-	0.4	0.3	14.3	7.1
2. LYMPHOMAS	2.1	1.2	9.4	6.4	39.0	27.3
2.1 Non-Hodgkin Lymphoma	1.2	0.7	5.8	3.4	35.1	24.9
2.2 Hodgkin Lymphoma	0.8	0.5	3.5	2.9	3.8	2.4
3. CNS, INTRACRANIAL, INTRASPINAL	2.5	2.7	2.0	1.7	8.1	5.3
3.1 Astrocytoma	1.2	1.5	1.1	0.9	5.9	3.6
3.1.1 Specified low-grade astrocytic tumors	0.8	1.0	0.3	0.4	0.2	-
3.1.2 Glioblastoma and anaplastic astrocytoma	-	0.3	0.5	0.4	5.3	3.3
3.1.3 Astrocytoma, NOS	-	-	0.3	-	0.4	0.2
3.2 Other glioma	0.5	0.5	0.5	0.4	0.8	0.6
3.3 Ependymoma	-	-	-	0.2	0.2	0.2
3.4 Medulloblastoma and other PNET	0.4	0.3	-	-	-	-
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	-	-	-	-	0.7	0.5
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.7	0.6	0.8	0.6	1.0	0.7
4.1 Osteosarcoma	0.5	0.6	0.5	0.3	0.4	0.2
4.2 Chondrosarcoma	-	-	0.2	-	0.3	0.3
4.3 Ewing tumor	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	0.2	0.2
5. SOFT TISSUE SARCOMAS	1.2	1.1	6.3	3.1	10.9	12.4
5.1 Fibromatous neoplasms	0.2	0.3	1.4	1.0	1.8	1.8
5.2 Rhabdomyosarcoma	0.6	0.5	0.2	0.2	0.2	0.3
5.3 Other specified soft tissue sarcoma	0.4	0.3	4.7	1.9	8.8	10.2
5.3.1 Specified soft tissue sarcoma	-	-	4.3	1.5	6.6	7.7
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	0.8	1.4	4.5	7.4
5.3.1.2 Kaposi sarcoma	-	-	3.4	-	2.1	0.3
5.3.2 Unspecified soft tissue sarcoma	-	-	0.4	0.4	2.2	2.5
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	-	0.7	2.5	1.1	1.4	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	-	0.4	2.3	0.7	1.3	-
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	-	-	-	0.4	-	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, 2011-2015

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	-	-	0.3	0.4	4.0	3.5
7.1 Melanoma	-	-	0.2	0.4	2.9	2.6
7.2 Skin carcinomas	-	-	-	-	1.1	0.9
8. CARCINOMAS (excluding skin)	0.4	0.5	15.4	53.6	1015.1	721.2
8.1 Thyroid carcinoma	-	-	1.4	8.6	7.7	23.5
8.2 Other carcinoma of head and neck	-	-	1.5	1.2	51.3	14.6
8.2.1 Nasopharyngeal carcinoma	-	-	0.3	0.3	1.9	0.6
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	0.8	0.8	28.7	9.7
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.4	-	20.7	4.3
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.2	0.9	172.9	103.0
8.4 Carcinoma of breast	-	-	-	24.4	3.9	269.9
8.5 Carcinoma of genitourinary tract	-	-	3.9	11.0	505.2	124.8
8.5.1 Carcinoma of kidney	-	-	3.0	1.7	53.2	25.9
8.5.2 Carcinoma of bladder	-	-	0.4	0.2	46.0	14.9
8.5.3 Carcinoma of gonads	-	-	-	1.2	-	16.2
8.5.4 Carcinoma of cervix and uterus	-	-	-	7.3	-	58.7
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.5	0.7	406.0	9.0
8.6 Carcinoma of gastrointestinal tract	-	-	6.9	6.7	257.3	170.0
8.6.1 Carcinoma of colon and rectum	-	-	4.6	4.4	125.9	95.0
8.6.2 Carcinoma of stomach	-	-	0.6	0.6	26.8	14.4
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.7	0.3	37.9	10.7
8.6.4 Carcinoma of pancreas	-	-	0.4	0.6	34.3	28.8
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.7	32.4	21.2
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.5	0.9	16.9	15.3
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	0.2
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.4	0.8	16.8	15.1
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.7	3.4	1.3	1.9	44.3	42.0
9.1 Other pediatric and embryonal tumors, NOS	2.6	3.3	-	-	0.2	0.2
9.1.1 Wilms tumor	0.9	1.3	-	-	-	-
9.1.2 Neuroblastoma	0.9	1.1	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.8	1.0	-	-	-	-
9.2 Other specified neoplasms, NOS	-	-	1.2	1.8	44.1	41.8
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	0.2
9.2.2 Other specified gonadal tumors	-	-	-	0.4	-	0.8
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.8	0.6	37.0	27.1
9.2.4 Other specified neoplasms, NOS	-	-	0.3	0.8	6.8	13.8
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.4	0.7	50.7	28.5

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, 2011-2015

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	23.8	22.7	34.8	37.9	50.1	68.1	67.8	118.2	91.1	184.6
1. LEUKEMIAS	3.8	2.6	3.2	2.3	3.5	2.6	4.0	3.1	5.1	3.9
1.1 Acute lymphoid leukemia	2.2	1.3	1.3	0.6	1.0	0.7	0.8	0.5	1.0	0.7
1.2 Acute myeloid leukemia	1.0	1.0	1.1	1.1	1.2	1.2	1.6	1.6	1.6	1.7
1.3 Chronic myeloid leukemia	0.3	0.2	0.5	0.3	1.0	0.5	1.1	0.7	1.4	0.9
1.4 Other and unspecified leukemias	0.2	0.2	0.2	0.2	0.3	0.2	0.5	0.3	1.1	0.6
2. LYMPHOMAS	5.6	4.4	6.9	6.2	7.7	6.8	9.0	7.0	11.1	8.3
2.1 Non-Hodgkin Lymphoma	2.6	1.4	3.0	2.1	3.9	2.9	5.3	3.9	8.1	5.7
2.2 Hodgkin Lymphoma	3.0	3.0	3.9	4.2	3.8	3.9	3.7	3.1	3.0	2.5
3. CNS, INTRACRANIAL, INTRASPINAL	2.5	2.3	2.3	2.1	3.1	2.5	3.8	2.9	4.2	3.1
3.1 Astrocytoma	1.5	1.3	1.4	1.0	1.7	1.3	2.2	1.5	2.3	1.8
3.1.1 Specified low-grade astrocytic tumors	0.9	0.7	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.4	0.3	0.6	0.4	1.0	0.7	1.4	0.8	1.6	1.2
3.1.3 Astrocytoma, NOS	0.3	0.3	0.4	0.2	0.4	0.3	0.4	0.4	0.4	0.3
3.2 Other glioma	0.4	0.4	0.5	0.6	0.9	0.8	1.1	1.0	1.3	0.9
3.3 Ependymoma	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.2
3.4 Medulloblastoma and other PNET	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	-
3.4.1 Medulloblastoma	0.2	0.2	-	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	2.1	1.2	1.0	0.8	0.8	0.8	0.8	0.5	0.8	0.8
4.1 Osteosarcoma	1.1	0.6	0.4	0.3	0.3	0.3	0.2	0.1	0.2	0.2
4.2 Chondrosarcoma	0.1	-	0.2	0.1	0.2	0.2	0.3	0.2	0.3	0.3
4.3 Ewing tumor	0.8	0.4	0.4	0.2	0.3	0.2	0.2	0.1	-	0.1
4.4 Other specified and unspecified bone tumors	-	0.1	-	-	0.1	-	0.1	-	0.2	0.2
5. SOFT TISSUE SARCOMAS	1.4	1.4	2.2	1.6	3.3	2.0	4.7	2.8	4.4	3.7
5.1 Fibromatous neoplasms	0.3	0.3	0.4	0.5	0.7	0.7	1.0	1.0	0.9	1.1
5.2 Rhabdomyosarcoma	0.4	0.3	0.1	0.2	0.1	-	0.1	-	0.1	-
5.3 Other specified soft tissue sarcoma	0.8	0.8	1.7	1.0	2.5	1.1	3.5	1.7	3.4	2.5
5.3.1 Specified soft tissue sarcoma	0.5	0.6	1.3	0.7	2.2	0.8	3.1	1.4	2.9	2.0
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.5	0.6	0.8	0.7	1.0	0.8	1.4	1.3	1.6	2.0
5.3.1.2 Kaposi sarcoma	-	-	0.5	-	1.2	-	1.7	-	1.3	-
5.3.2 Unspecified soft tissue sarcoma	0.3	0.2	0.4	0.2	0.3	0.3	0.5	0.3	0.5	0.5
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	4.6	1.2	10.9	1.2	15.3	1.1	14.6	0.9	11.9	0.7
6.1 Germ cell and trophoblastic neoplasms of gonads	4.0	1.0	10.2	0.9	14.9	0.7	14.2	0.5	11.7	0.4
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.7	0.2	0.6	0.3	0.4	0.4	0.5	0.4	0.2	0.3
6.2.1 Intracranial sites	0.4	-	0.2	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	0.1	0.4	0.3	0.4	0.4	0.4	0.4	0.1	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 32.4 - 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, 2011-2015

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	1.3	2.0	4.8	4.3	8.4	7.0	13.0	10.6	14.6
7.1 Melanoma	0.8	1.2	2.0	4.8	4.2	8.4	6.9	12.9	10.4	14.5
7.2 Skin carcinomas	-	-	-	-	-	-	0.1	0.1	0.2	0.2
8. CARCINOMAS (excluding skin)	2.7	7.9	5.8	18.2	11.4	42.5	22.4	85.7	40.7	145.7
8.1 Thyroid carcinoma	0.9	5.3	2.0	10.7	3.5	17.8	5.7	26.3	7.4	32.6
8.2 Other carcinoma of head and neck	0.5	0.5	0.7	0.6	1.1	1.0	2.1	1.8	3.9	2.9
8.2.1 Nasopharyngeal carcinoma	0.2	-	0.2	-	0.2	0.1	0.3	0.3	0.6	0.4
8.2.2 Other sites in lip, oral cavity and pharynx	0.2	0.4	0.5	0.5	0.8	0.9	1.5	1.4	2.6	2.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	0.1	-	0.3	0.2	0.7	0.4
8.3 Carcinoma of trachea, bronchus, and lung	-	0.1	0.3	0.3	0.5	0.6	1.0	1.1	2.6	2.5
8.4 Carcinoma of breast	-	-	-	1.5	-	9.1	-	27.6	0.2	61.2
8.5 Carcinoma of genitourinary tract	0.3	0.7	0.7	2.7	1.8	9.6	4.8	20.0	9.4	30.9
8.5.1 Carcinoma of kidney	0.2	0.2	0.4	0.5	1.2	1.2	3.4	2.3	6.5	4.2
8.5.2 Carcinoma of bladder	0.1	-	0.3	0.1	0.5	0.2	1.0	0.4	1.9	0.7
8.5.3 Carcinoma of gonads	-	0.3	-	0.8	-	1.5	-	2.6	-	3.8
8.5.4 Carcinoma of cervix and uterus	-	0.1	-	1.3	-	6.5	-	14.0	-	21.0
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.2	0.3	0.6	1.0	1.1
8.6 Carcinoma of gastrointestinal tract	0.8	1.1	1.9	2.0	4.2	3.9	8.2	8.3	16.3	14.5
8.6.1 Carcinoma of colon and rectum	0.6	0.8	1.4	1.4	3.0	2.8	5.4	5.7	10.7	9.9
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.4	0.4	0.9	1.0	1.6	1.8
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.2	0.2	0.4	0.2	0.6	0.3	1.0	0.6
8.6.4 Carcinoma of pancreas	-	0.1	0.1	0.2	0.1	0.3	0.6	0.7	1.3	1.1
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.2	0.1	0.3	0.2	0.8	0.6	1.6	1.1
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.3	0.5	0.6	0.6	0.9	1.1
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.1	0.2	0.3	0.4	0.5	0.5	0.8	1.0
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.5	0.4	0.5	0.5	1.0	1.0	1.7	1.9	2.7
9.1 Other pediatric and embryonal tumors, NOS	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	0.2	0.4	0.3	0.4	0.4	0.9	0.9	1.6	1.8	2.6
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	0.2	-	-	-	0.2	-	0.2	-	0.3
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.1	-	0.2	0.2	0.5	0.5	1.2	0.8
9.2.4 Other specified neoplasms, NOS ^c	-	0.1	0.1	0.2	0.1	0.5	0.3	0.9	0.4	1.4
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.1	0.3	0.2	0.4	0.4	0.7	0.5	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, 2011-2015

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	25.7	24.7	38.6	41.8	55.0	73.0	72.8	125.4	96.2	192.2
1. LEUKEMIAS	4.2	2.8	3.5	2.4	3.6	2.7	4.2	3.1	5.3	3.9
1.1 Acute lymphoid leukemia	2.6	1.5	1.6	0.7	1.2	0.7	0.9	0.5	1.1	0.7
1.2 Acute myeloid leukemia	1.0	1.0	1.1	1.2	1.2	1.2	1.7	1.6	1.7	1.7
1.3 Chronic myeloid leukemia	0.3	-	0.6	0.3	1.0	0.5	1.1	0.7	1.4	0.9
1.4 Other and unspecified leukemias	0.2	0.2	0.2	0.1	0.3	0.2	0.5	0.3	1.2	0.6
2. LYMPHOMAS	5.6	4.8	7.1	6.7	7.9	7.1	9.0	7.1	11.0	8.5
2.1 Non-Hodgkin Lymphoma	2.4	1.4	2.9	2.0	3.9	2.7	5.0	3.8	7.8	5.8
2.2 Hodgkin Lymphoma	3.2	3.4	4.2	4.6	3.9	4.4	3.9	3.3	3.1	2.7
3. CNS, INTRACRANIAL, INTRASPINAL	2.6	2.5	2.7	2.3	3.5	2.9	4.3	3.3	4.6	3.4
3.1 Astrocytoma	1.6	1.5	1.6	1.1	1.9	1.5	2.4	1.7	2.6	1.9
3.1.1 Specified low-grade astrocytic tumors	0.9	0.7	0.5	0.4	0.4	0.3	0.5	0.3	0.3	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.4	0.4	0.7	0.5	1.1	0.8	1.5	0.9	1.8	1.2
3.1.3 Astrocytoma, NOS	0.3	0.4	0.5	0.3	0.4	0.3	0.5	0.5	0.4	0.4
3.2 Other glioma	0.4	0.5	0.6	0.7	0.9	0.9	1.3	1.1	1.4	1.0
3.3 Ependymoma	0.2	0.2	0.2	0.1	0.3	0.1	0.2	0.2	0.4	0.3
3.4 Medulloblastoma and other PNET	0.4	0.3	0.2	0.2	0.3	0.2	0.2	-	-	-
3.4.1 Medulloblastoma	0.2	0.2	-	-	0.2	0.1	0.2	-	-	-
3.4.2 Supratentorial PNET	0.1	-	-	-	0.2	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	2.3	1.3	1.1	0.9	0.9	0.8	1.0	0.6	0.8	0.8
4.1 Osteosarcoma	1.2	0.6	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2
4.2 Chondrosarcoma	-	-	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.3
4.3 Ewing tumor	0.9	0.5	0.5	0.3	0.3	0.3	0.3	-	-	-
4.4 Other specified and unspecified bone tumors	-	0.2	-	-	-	-	0.2	-	0.2	0.2
5. SOFT TISSUE SARCOMAS	1.4	1.4	1.7	1.6	2.7	1.9	3.8	2.6	4.0	3.3
5.1 Fibromatous neoplasms	0.2	0.3	0.3	0.4	0.5	0.7	0.8	0.9	0.8	0.9
5.2 Rhabdomyosarcoma	0.4	0.3	-	0.2	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.8	0.8	1.3	1.1	2.1	1.1	2.9	1.6	3.1	2.3
5.3.1 Specified soft tissue sarcoma	0.5	0.6	0.9	0.8	1.8	0.8	2.4	1.3	2.7	1.9
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.5	0.6	0.7	0.8	1.1	0.8	1.4	1.3	1.6	1.8
5.3.1.2 Kaposi sarcoma	-	-	0.2	-	0.7	-	1.1	-	1.0	-
5.3.2 Unspecified soft tissue sarcoma	0.3	0.2	0.4	0.3	0.3	0.3	0.4	0.3	0.5	0.5
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	5.5	1.1	13.3	1.1	18.4	1.0	17.5	0.7	14.2	0.6
6.1 Germ cell and trophoblastic neoplasms of gonads	4.9	0.9	12.6	0.8	17.9	0.7	17.0	0.4	14.0	0.4
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.6	0.2	0.7	0.3	0.5	0.3	0.5	0.4	0.2	0.2
6.2.1 Intracranial sites	0.4	-	0.3	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	-	0.4	0.3	0.4	0.3	0.4	0.4	0.2	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 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, 2011-2015

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	1.6	2.5	6.2	5.4	10.6	8.7	16.4	13.1	18.6
7.1 Melanoma	1.1	1.6	2.5	6.1	5.3	10.5	8.5	16.3	12.9	18.4
7.2 Skin carcinomas	-	-	-	-	-	-	0.2	-	0.2	-
8. CARCINOMAS (excluding skin)	2.7	8.7	6.3	19.9	11.9	44.6	23.0	89.1	40.9	149.6
8.1 Thyroid carcinoma	1.0	6.0	2.3	12.4	4.0	19.9	6.3	29.0	7.8	35.2
8.2 Other carcinoma of head and neck	0.4	0.4	0.7	0.6	1.1	1.1	2.0	1.6	3.6	2.8
8.2.1 Nasopharyngeal carcinoma	0.2	-	-	-	-	-	0.2	-	0.3	0.2
8.2.2 Other sites in lip, oral cavity and pharynx	0.2	0.4	0.5	0.5	0.8	1.0	1.6	1.4	2.6	2.2
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	0.3	0.2	0.7	0.5
8.3 Carcinoma of trachea, bronchus, and lung	-	0.2	0.3	0.3	0.5	0.6	0.8	1.1	2.6	2.7
8.4 Carcinoma of breast	-	-	-	1.5	-	8.7	-	26.9	0.2	60.8
8.5 Carcinoma of genitourinary tract	0.3	0.7	0.7	2.8	1.9	9.8	5.2	21.6	9.6	33.0
8.5.1 Carcinoma of kidney	0.2	0.2	0.4	0.5	1.2	1.2	3.7	2.6	6.5	4.7
8.5.2 Carcinoma of bladder	-	-	0.3	-	0.6	0.2	1.1	0.5	2.1	0.9
8.5.3 Carcinoma of gonads	-	0.3	-	0.8	-	1.6	-	2.8	-	4.0
8.5.4 Carcinoma of cervix and uterus	-	-	-	1.4	-	6.6	-	15.0	-	22.4
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.2	0.3	0.6	0.9	1.1
8.6 Carcinoma of gastrointestinal tract	0.8	1.2	2.1	2.0	4.2	4.0	8.0	8.3	16.3	14.2
8.6.1 Carcinoma of colon and rectum	0.6	0.9	1.5	1.4	3.0	2.9	5.4	5.9	10.9	9.9
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.4	0.4	1.0	0.9	1.7	1.6
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.2	0.2	0.3	-	0.4	0.3	0.6	0.5
8.6.4 Carcinoma of pancreas	-	-	-	0.2	0.2	0.3	0.5	0.6	1.4	1.1
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.1	-	0.3	0.3	0.8	0.6	1.7	1.0
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.3	0.4	0.6	0.5	0.9	0.9
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.2	0.4	0.5	0.4	0.8	0.8
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.2	0.5	0.3	0.5	0.5	1.0	0.9	1.6	1.7	2.5
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	-	0.3	0.3	0.4	0.4	0.9	0.9	1.5	1.6	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	-	-	-	-	0.2	0.2	0.4	0.4	1.1	0.8
9.2.4 Other specified neoplasms, NOS ^c	-	-	-	0.2	0.1	0.6	0.3	0.8	0.4	1.3
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.1	0.3	0.2	0.5	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 32.6
Age-Specific SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
Black, 2011-2015

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	16.0	14.9	20.5	23.5	33.1	50.7	51.8	93.8	77.4	161.8
1. LEUKEMIAS	2.2	1.5	1.5	2.3	2.3	2.5	3.2	2.9	4.7	4.3
1.1 Acute lymphoid leukemia	1.0	-	-	-	-	-	-	-	-	-
1.2 Acute myeloid leukemia	0.7	-	1.0	1.2	0.8	1.5	1.6	1.7	1.8	2.0
1.3 Chronic myeloid leukemia	-	-	-	-	0.8	-	-	-	1.3	1.0
1.4 Other and unspecified leukemias	-	-	-	-	-	-	-	-	1.0	-
2. LYMPHOMAS	5.6	3.0	6.5	4.8	7.9	6.2	10.9	8.2	14.7	9.2
2.1 Non-Hodgkin Lymphoma	2.8	1.0	3.6	1.6	4.1	3.4	7.0	4.6	10.7	6.2
2.2 Hodgkin Lymphoma	2.8	2.0	2.9	3.2	3.8	2.8	4.0	3.6	4.0	3.0
3. CNS, INTRACRANIAL, INTRASPINAL	1.9	1.9	1.1	1.2	1.6	1.6	2.0	1.7	3.0	1.9
3.1 Astrocytoma	1.2	1.0	0.7	-	0.8	0.8	1.3	0.9	1.3	1.4
3.1.1 Specified low-grade astrocytic tumors	-	0.8	-	-	-	-	-	-	-	-
3.1.2 Glioblastoma and anaplastic astrocytoma	-	-	-	-	-	-	-	-	0.9	1.0
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	1.0	0.7	-	-	-	-	-	0.9	-
4.1 Osteosarcoma	0.9	0.8	-	-	-	-	-	-	-	-
4.2 Chondrosarcoma	-	-	-	-	-	-	-	-	-	-
4.3 Ewing tumor	-	-	-	-	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	-	-
5. SOFT TISSUE SARCOMAS	1.7	1.3	5.1	1.7	7.3	2.4	10.3	3.6	6.9	5.8
5.1 Fibromatous neoplasms	0.7	-	0.7	0.8	1.6	0.9	2.1	1.2	1.7	1.6
5.2 Rhabdomyosarcoma	-	-	-	-	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	-	-	4.2	0.7	5.6	1.4	8.2	2.4	5.0	4.1
5.3.1 Specified soft tissue sarcoma	-	-	3.7	-	5.3	1.0	7.6	2.1	4.5	3.3
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	1.1	-	-	0.9	1.3	1.8	1.0	3.0
5.3.1.2 Kaposi sarcoma	-	-	2.6	-	4.7	-	6.3	-	3.6	-
5.3.2 Unspecified soft tissue sarcoma	-	-	-	-	-	-	-	-	-	-
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.7	1.4	1.5	1.2	2.9	1.4	3.9	1.2	3.4	-
6.1 Germ cell and trophoblastic neoplasms of gonads	-	1.2	1.4	0.7	2.7	0.8	3.6	-	3.3	-
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, 2011-2015

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
7.1 Melanoma	-	-	-	-	-	-	-	-	-	0.8
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	-	-
8. CARCINOMAS (excluding skin)	2.0	4.2	3.2	10.8	9.5	34.0	18.6	72.0	39.3	132.5
8.1 Thyroid carcinoma	-	1.8	-	3.2	1.1	7.1	1.6	11.3	3.2	18.0
8.2 Other carcinoma of head and neck	-	-	-	-	1.0	-	1.3	1.4	3.5	2.6
8.2.1 Nasopharyngeal carcinoma	-	-	-	-	-	-	-	-	-	-
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	-	-	-	-	-	1.1	2.1	1.6
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	-	-	1.0	-
8.3 Carcinoma of trachea, bronchus, and lung	-	-	-	-	-	-	1.8	1.1	2.9	2.1
8.4 Carcinoma of breast	-	-	-	2.2	-	12.3	-	32.8	-	66.4
8.5 Carcinoma of genitourinary tract	-	-	0.7	2.5	2.1	8.8	4.1	15.9	11.2	24.9
8.5.1 Carcinoma of kidney	-	-	-	-	1.8	1.2	3.4	2.0	8.0	4.1
8.5.2 Carcinoma of bladder	-	-	-	-	-	-	-	-	1.2	-
8.5.3 Carcinoma of gonads	-	-	-	0.7	-	-	-	1.6	-	2.5
8.5.4 Carcinoma of cervix and uterus	-	-	-	1.2	-	6.3	-	11.4	-	15.8
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	-	0.8	1.9	2.0
8.6 Carcinoma of gastrointestinal tract	0.7	0.8	1.2	2.0	4.4	3.7	9.0	8.4	17.4	16.7
8.6.1 Carcinoma of colon and rectum	-	-	0.9	1.1	3.0	2.7	6.1	5.7	11.4	11.1
8.6.2 Carcinoma of stomach	-	-	-	-	-	-	0.8	0.8	1.6	1.6
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	-	-	-	-	-	-	1.5	0.8
8.6.4 Carcinoma of pancreas	-	-	-	-	-	-	-	-	1.1	1.5
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	-	-	-	0.9	1.9	1.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	0.8	-	1.1	-	1.9
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	-	1.0	-	1.8
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	-	-	-	-	-	1.3	1.5	2.5	3.1	4.1
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	-	-	-	-	-	1.1	1.4	2.5	3.1	4.0
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	-	-	-
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	-	-	-	-	1.0	1.0	2.4	1.4
9.2.4 Other specified neoplasms, NOS ^c	-	-	-	-	-	-	-	0.9	-	1.9
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	-	-	-	-	-	0.8	-	1.5

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 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	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	15,870	20.9	0.7*	4,613	23.3	0.7*
1. Leukemias	1,873	2.5	0.7*	535	2.7	0.7*
2. Lymphomas	3,900	5.1	0.2	1,077	5.4	0.2
3. CNS, intracranial, intraspinal	1,557	2.1	0.7*	454	2.3	0.7*
4. Osseous & chondromatous neoplasms	1,221	1.6	0.5*	338	1.7	0.5*
5. Soft tissue sarcomas	1,130	1.5	0.2	285	1.4	0.2
6. Germ cell and trophoblastic neoplasms	1,902	2.5	0.8*	538	2.7	0.8*
7. Melanoma and skin carcinomas	1,144	1.5	0.1	290	1.5	-3.4*
8. Carcinomas (excluding skin)	2,829	3.7	2.0*	1,010	5.1	6.0*
9. Miscellaneous specified neoplasms, NOS	255	0.3	0.7	79	0.4	0.7
10. Unspecified malignant neoplasms	59	0.1	-	-	-	-

Males	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	8,302	21.4	0.7*	2,382	23.4	0.7*
1. Leukemias	1,104	2.8	0.3	291	2.9	0.3
2. Lymphomas	2,109	5.4	0.4*	604	5.9	0.4*
3. CNS, intracranial, intraspinal	883	2.3	0.4	244	2.4	0.4
4. Osseous & chondromatous neoplasms	806	2.1	0.8*	232	2.3	0.8*
5. Soft tissue sarcomas	597	1.5	0.1	151	1.5	0.1
6. Germ cell and trophoblastic neoplasms	1,406	3.6	1.1*	421	4.1	1.1*
7. Melanoma and skin carcinomas	457	1.2	0.8	122	1.2	0.8
8. Carcinomas (excluding skin)	798	2.1	1.6*	275	2.7	1.6*
9. Miscellaneous specified neoplasms, NOS	115	0.3	-	38	0.4	-
10. Unspecified malignant neoplasms	27	0.1	-	-	-	-

Females	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	7,568	20.4	0.7*	2,231	23.1	0.7*
1. Leukemias	769	2.1	1.4*	244	2.5	1.4*
2. Lymphomas	1,791	4.8	-0.1	473	4.9	-0.1
3. CNS, intracranial, intraspinal	674	1.8	0.9*	210	2.2	0.9*
4. Osseous & chondromatous neoplasms	415	1.1	0.1	106	1.1	0.1
5. Soft tissue sarcomas	533	1.4	0.2	134	1.4	0.2
6. Germ cell and trophoblastic neoplasms	496	1.3	-0.3	117	1.2	-0.3
7. Melanoma and skin carcinomas	687	1.9	0.3	168	1.7	0.3
8. Carcinomas (excluding skin)	2,031	5.5	2.1*	735	7.6	7.2*
9. Miscellaneous specified neoplasms, NOS	140	0.4	-	41	0.4	-
10. Unspecified malignant neoplasms	32	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 1975-2015.

- 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	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	27,031	34.7	0.8*	7,734	38.5	0.8*
1. Leukemias	1,742	2.2	0.8*	488	2.4	0.8*
2. Lymphomas	5,570	7.2	0.7*	1,486	7.4	-0.2
3. CNS, intracranial, intraspinal	1,767	2.3	0.1	481	2.4	-2.7
4. Osseous & chondromatous neoplasms	719	0.9	1.0*	213	1.1	1.0*
5. Soft tissue sarcomas	1,632	2.1	0.8	403	2.0	-1.0*
6. Germ cell and trophoblastic neoplasms	4,205	5.4	0.8*	1,219	6.1	0.8*
7. Melanoma and skin carcinomas	3,348	4.3	0.5	917	4.6	-2.7*
8. Carcinomas (excluding skin)	7,587	9.7	0.7*	2,393	11.9	1.9*
9. Miscellaneous specified neoplasms, NOS	296	0.4	2.2*	100	0.5	2.2*
10. Unspecified malignant neoplasms	165	0.2	-0.1	34	0.2	-0.1

Males	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	13,260	33.5	0.5*	3,709	36.0	0.5*
1. Leukemias	1,001	2.5	0.6*	265	2.6	0.6*
2. Lymphomas	2,994	7.6	0.2	804	7.8	0.2
3. CNS, intracranial, intraspinal	993	2.5	0.1	258	2.5	0.1
4. Osseous & chondromatous neoplasms	423	1.1	0.8	124	1.2	0.8
5. Soft tissue sarcomas	974	2.5	0.9	238	2.3	-1.5*
6. Germ cell and trophoblastic neoplasms	3,757	9.5	0.9	1,088	10.6	-0.4
7. Melanoma and skin carcinomas	1,142	2.9	0.0	282	2.7	0.0
8. Carcinomas (excluding skin)	1,798	4.5	1.2*	595	5.8	4.6*
9. Miscellaneous specified neoplasms, NOS	117	0.3	-	41	0.4	-
10. Unspecified malignant neoplasms	61	0.2	-	-	-	-

Females	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	13,771	35.9	1.0*	4,025	41.2	1.0*
1. Leukemias	741	1.9	0.1	223	2.3	-0.1
2. Lymphomas	2,576	6.7	1.0*	682	7.0	-0.3
3. CNS, intracranial, intraspinal	774	2.0	1.1*	223	2.3	1.1*
4. Osseous & chondromatous neoplasms	296	0.8	1.2*	89	0.9	1.2*
5. Soft tissue sarcomas	658	1.7	0.4	165	1.7	0.4
6. Germ cell and trophoblastic neoplasms	448	1.2	0.5	131	1.3	0.5
7. Melanoma and skin carcinomas	2,206	5.8	0.9	635	6.5	-2.6
8. Carcinomas (excluding skin)	5,789	15.1	0.7*	1,798	18.4	1.7*
9. Miscellaneous specified neoplasms, NOS	179	0.5	1.9*	59	0.6	1.9*
10. Unspecified malignant neoplasms	104	0.3	-	20	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 1975-2015.

- 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	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	45,891	56.3	0.7*	12,913	62.9	0.6*
1. Leukemias	1,969	2.4	0.8*	574	2.8	0.8*
2. Lymphomas	6,762	8.3	0.5	1,729	8.4	0.0
3. CNS, intracranial, intraspinal	2,370	2.9	0.8*	633	3.1	0.8*
4. Osseous & chondromatous neoplasms	572	0.7	1.3*	182	0.9	1.3*
5. Soft tissue sarcomas	3,270	4.0	1.3	616	3.0	-0.4
6. Germ cell and trophoblastic neoplasms	5,872	7.2	1.4*	1,729	8.4	1.6*
7. Melanoma and skin carcinomas	6,233	7.7	0.5	1,735	8.5	-2.2
8. Carcinomas (excluding skin)	18,175	22.3	0.6*	5,527	26.9	1.6*
9. Miscellaneous specified neoplasms, NOS	443	0.5	1.8*	135	0.7	1.8*
10. Unspecified malignant neoplasms	225	0.3	-	53	0.3	-

Males	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	20,630	50.4	0.7*	5,609	54.2	-0.1
1. Leukemias	1,137	2.8	0.0	319	3.1	1.2*
2. Lymphomas	3,857	9.4	0.6	970	9.4	0.4
3. CNS, intracranial, intraspinal	1,299	3.2	0.9*	363	3.5	0.9*
4. Osseous & chondromatous neoplasms	325	0.8	0.5	96	0.9	0.5
5. Soft tissue sarcomas	2,386	5.8	1.6	401	3.9	-0.3
6. Germ cell and trophoblastic neoplasms	5,422	13.2	1.3*	1,616	15.6	0.8*
7. Melanoma and skin carcinomas	2,202	5.4	0.1	551	5.3	0.1
8. Carcinomas (excluding skin)	3,740	9.1	0.5	1,217	11.8	1.9*
9. Miscellaneous specified neoplasms, NOS	165	0.4	-	51	0.5	-
10. Unspecified malignant neoplasms	97	0.2	-	25	0.2	-

Females	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	25,261	62.4	0.7*	7,304	71.9	1.0*
1. Leukemias	832	2.1	1.1*	255	2.5	1.1*
2. Lymphomas	2,905	7.2	0.6	759	7.5	-0.5
3. CNS, intracranial, intraspinal	1,071	2.6	0.8*	270	2.7	0.8*
4. Osseous & chondromatous neoplasms	247	0.6	1.8*	86	0.8	1.8*
5. Soft tissue sarcomas	884	2.2	0.4	215	2.1	-1.5*
6. Germ cell and trophoblastic neoplasms	450	1.1	-0.4	113	1.1	-0.4
7. Melanoma and skin carcinomas	4,031	10.0	0.9*	1,184	11.6	-2.4
8. Carcinomas (excluding skin)	14,435	35.6	0.7*	4,310	42.4	1.7*
9. Miscellaneous specified neoplasms, NOS	278	0.7	1.4*	84	0.8	1.4*
10. Unspecified malignant neoplasms	128	0.3	-	28	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 1975-2015.

- 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	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	70,530	86.6	1.0*	19,087	95.3	1.1*
1. Leukemias	2,349	2.9	0.6*	625	3.1	0.6*
2. Lymphomas	7,528	9.2	0.8	1,823	9.1	-2.7*
3. CNS, intracranial, intraspinal	2,785	3.4	0.5*	725	3.6	0.5*
4. Osseous & chondromatous neoplasms	521	0.6	0.5	128	0.6	0.5
5. Soft tissue sarcomas	5,368	6.6	1.2	764	3.8	-0.6
6. Germ cell and trophoblastic neoplasms	5,880	7.2	1.7*	1,672	8.3	0.6*
7. Melanoma and skin carcinomas	8,994	11.0	1.5*	2,444	12.2	0.3
8. Carcinomas (excluding skin)	35,959	44.2	0.7*	10,556	52.7	2.0*
9. Miscellaneous specified neoplasms, NOS	785	1.0	1.8*	255	1.3	1.8*
10. Unspecified malignant neoplasms	360	0.4	1.1	94	0.5	1.1

Males	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	28,959	71.1	0.9*	7,214	71.9	0.9*
1. Leukemias	1,356	3.3	0.6*	354	3.5	0.6*
2. Lymphomas	4,642	11.4	0.4	1,056	10.5	-2.2
3. CNS, intracranial, intraspinal	1,630	4.0	0.5*	428	4.3	0.5*
4. Osseous & chondromatous neoplasms	295	0.7	0.7	79	0.8	0.7
5. Soft tissue sarcomas	4,272	10.5	1.3	473	4.7	-1.5
6. Germ cell and trophoblastic neoplasms	5,503	13.5	1.8*	1,569	15.6	0.6*
7. Melanoma and skin carcinomas	3,557	8.7	0.1	898	9.0	0.1
8. Carcinomas (excluding skin)	7,266	17.8	0.9*	2,209	22.0	2.8*
9. Miscellaneous specified neoplasms, NOS	305	0.7	2.2*	108	1.1	2.2*
10. Unspecified malignant neoplasms	133	0.3	-	40	0.4	-

Females	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	41,571	102.2	0.8*	11,873	118.7	1.4*
1. Leukemias	993	2.4	0.5	271	2.7	0.5
2. Lymphomas	2,886	7.1	0.5	767	7.7	-3.5*
3. CNS, intracranial, intraspinal	1,155	2.8	0.5	297	3.0	0.5
4. Osseous & chondromatous neoplasms	226	0.6	-	49	0.5	-
5. Soft tissue sarcomas	1,096	2.7	0.3	291	2.9	0.3
6. Germ cell and trophoblastic neoplasms	377	0.9	0.1	103	1.0	0.1
7. Melanoma and skin carcinomas	5,437	13.4	2.1*	1,546	15.5	1.0*
8. Carcinomas (excluding skin)	28,693	70.5	0.7*	8,347	83.5	1.7*
9. Miscellaneous specified neoplasms, NOS	480	1.2	1.7*	147	1.5	1.7*
10. Unspecified malignant neoplasms	227	0.6	-	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 1975-2015.

- 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	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	103,155	134.0	0.7*	28,075	142.0	0.3
1. Leukemias	2,941	3.8	0.5	842	4.3	2.3*
2. Lymphomas	8,539	11.1	1.3*	2,121	10.7	-1.3*
3. CNS, intracranial, intraspinal	3,036	3.9	-0.2	743	3.8	-0.2
4. Osseous & chondromatous neoplasms	517	0.7	1.2*	157	0.8	1.2*
5. Soft tissue sarcomas	6,277	8.2	0.7	925	4.7	-1.6*
6. Germ cell and trophoblastic neoplasms	4,593	6.0	1.6*	1,283	6.5	0.3
7. Melanoma and skin carcinomas	11,226	14.6	1.5*	3,126	15.8	0.4*
8. Carcinomas (excluding skin)	64,108	83.3	0.5*	18,337	92.7	0.7*
9. Miscellaneous specified neoplasms, NOS	1,389	1.8	1.4*	425	2.1	1.4*
10. Unspecified malignant neoplasms	529	0.7	-0.3	116	0.6	-0.3

Males	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	38,369	100.0	0.5	9,503	96.4	0.1
1. Leukemias	1,691	4.4	0.2	465	4.7	0.2
2. Lymphomas	5,501	14.3	1.1*	1,243	12.6	-2.4*
3. CNS, intracranial, intraspinal	1,776	4.6	-0.2	440	4.5	-0.2
4. Osseous & chondromatous neoplasms	292	0.8	0.5	84	0.9	0.5
5. Soft tissue sarcomas	4,882	12.7	1.9	569	5.8	-2.2*
6. Germ cell and trophoblastic neoplasms	4,358	11.4	1.7*	1,217	12.3	0.4
7. Melanoma and skin carcinomas	4,853	12.7	0.6	1,238	12.6	-0.4
8. Carcinomas (excluding skin)	14,244	37.1	0.3	4,037	41.0	1.2*
9. Miscellaneous specified neoplasms, NOS	562	1.5	1.1*	170	1.7	1.1*
10. Unspecified malignant neoplasms	210	0.5	-0.8	40	0.4	-0.8

Females	1975-2015			2006-2015		
	No.	Rate	AAPC ^c	No.	Rate	AAPC ^c
All Sites Combined	64,786	167.8	0.8*	18,572	187.3	1.1*
1. Leukemias	1,250	3.2	1.1	377	3.8	2.4*
2. Lymphomas	3,038	7.9	1.2*	878	8.9	-0.4
3. CNS, intracranial, intraspinal	1,260	3.3	-0.3	303	3.1	-0.3
4. Osseous & chondromatous neoplasms	225	0.6	-	73	0.7	-
5. Soft tissue sarcomas	1,395	3.6	-0.5	356	3.6	-0.5
6. Germ cell and trophoblastic neoplasms	235	0.6	0.1	66	0.7	0.1
7. Melanoma and skin carcinomas	6,373	16.5	1.7	1,888	19.0	-0.7
8. Carcinomas (excluding skin)	49,864	129.1	0.6*	14,300	144.2	1.3*
9. Miscellaneous specified neoplasms, NOS	827	2.1	1.5*	255	2.6	1.5*
10. Unspecified malignant neoplasms	319	0.8	-0.1	76	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 1975-2015.

- 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, 2011-2015
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	23.8	25.7	16.0	20.4	24.0	3.4	3.4	3.1	3.7	3.8
Leukemia	3.8	4.2	2.2	3.3	5.1	0.9	0.9	0.8	1.3	1.3
Lymphoma	5.6	5.6	5.6	5.1	4.2	0.2	0.2	0.2	-	0.2
Hodgkin Lymphoma	3.0	3.2	2.8	1.9	2.2	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	2.6	2.4	2.8	3.2	1.9	0.2	0.2	-	-	0.1
Brain and Other Nervous System	2.6	2.7	2.1	2.2	1.8	0.6	0.6	0.7	0.7	0.5
Bones and Joints	1.9	2.0	1.4	1.7	1.8	0.6	0.7	0.5	-	0.8
Soft Tissue including Heart	1.2	1.3	1.1	-	1.2	0.4	0.3	0.4	-	0.3
Skin excluding Basal and Squamous	1.0	1.1	-	-	-	-	-	-	-	-
Respiratory System	0.4	0.4	-	-	0.6	0.1	0.1	-	-	-
Male Genital System	4.1	5.1	-	2.2	6.3	0.1	0.1	-	-	0.2
Digestive System	0.9	0.9	0.7	-	0.6	0.1	0.1	-	-	0.1

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	22.7	24.7	14.9	17.7	19.7	2.4	2.5	2.3	2.3	2.5
Leukemia	2.6	2.8	1.5	3.2	3.1	0.6	0.6	0.4	0.6	0.9
Lymphoma	4.4	4.8	3.0	3.2	3.4	0.1	0.1	0.2	-	-
Hodgkin Lymphoma	3.0	3.4	2.0	1.5	2.3	0.0	-	-	-	-
Non-Hodgkin Lymphoma	1.4	1.4	1.0	1.7	1.2	0.1	0.1	-	-	-
Brain and Other Nervous System	2.2	2.4	1.8	1.4	1.4	0.5	0.5	0.5	-	0.5
Bones and Joints	1.1	1.1	1.0	1.1	0.8	0.4	0.4	0.4	-	0.3
Soft Tissue including Heart	1.1	1.2	0.8	-	1.3	0.3	0.3	0.3	-	0.2
Skin excluding Basal and Squamous	1.3	1.7	-	-	0.4	-	-	-	-	-
Respiratory System	0.2	0.3	-	-	-	0.0	-	-	-	-
Breast	0.1	-	-	-	-	-	-	-	-	-
Female Genital System	1.9	1.8	2.2	1.1	2.1	0.1	0.1	-	-	-
Digestive System	1.2	1.4	0.9	-	1.1	0.1	0.1	-	-	-

^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 32.13

SEER Incidence^a and U.S. Mortality^b Rate Comparison by Race/Ethnicity, 2011-2015
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	34.8	38.6	20.5	22.9	33.7	4.7	4.8	4.7	4.1	5.6
Leukemia	3.2	3.5	1.5	2.9	4.6	1.0	1.1	0.9	1.2	1.8
Lymphoma	6.9	7.1	6.5	4.8	5.3	0.5	0.4	0.5	-	0.4
Hodgkin Lymphoma	3.9	4.2	2.9	2.8	3.0	0.1	0.2	-	-	0.1
Non-Hodgkin Lymphoma	3.0	2.9	3.6	2.0	2.4	0.3	0.3	0.4	-	0.3
Brain and Other Nervous System	2.4	2.8	1.1	1.6	1.5	0.6	0.6	0.5	-	0.4
Bones and Joints	0.9	1.1	-	-	0.9	0.6	0.7	0.4	-	0.7
Soft Tissue including Heart	1.4	1.3	1.8	1.4	1.3	0.4	0.4	0.5	-	0.4
Skin excluding Basal and Squamous	2.1	2.6	-	-	0.6	0.1	0.1	-	-	-
Respiratory System	0.7	0.7	-	1.3	0.9	0.1	0.1	-	-	-
Male Genital System	10.4	12.8	1.7	4.6	13.8	0.3	0.4	-	-	0.7
Digestive System	2.2	2.3	1.5	1.6	2.0	0.5	0.4	0.6	0.5	0.5
Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	37.9	41.8	23.5	26.3	30.3	3.4	3.4	3.7	2.6	3.4
Leukemia	2.3	2.4	2.3	1.0	2.6	0.7	0.7	0.7	-	1.1
Lymphoma	6.2	6.7	4.8	4.6	4.4	0.3	0.3	0.4	-	0.3
Hodgkin Lymphoma	4.2	4.6	3.2	2.3	2.8	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	2.1	2.0	1.6	2.3	1.6	0.2	0.2	0.3	-	0.2
Brain and Other Nervous System	2.0	2.2	1.2	1.6	1.3	0.5	0.5	0.4	-	0.3
Bones and Joints	0.7	0.8	-	-	0.7	0.3	0.3	0.2	-	0.2
Soft Tissue including Heart	1.2	1.3	1.2	-	1.3	0.3	0.3	0.5	-	0.2
Skin excluding Basal and Squamous	5.0	6.2	-	-	1.0	0.1	0.1	-	-	-
Respiratory System	0.5	0.5	-	-	0.5	0.1	0.1	-	-	-
Breast	1.6	1.6	2.3	-	1.3	0.1	0.1	-	-	-
Female Genital System	3.7	3.7	3.7	3.1	4.2	0.3	0.3	0.3	-	0.3
Digestive System	2.2	2.2	2.1	1.9	1.8	0.4	0.4	0.4	-	0.4

^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 32.14

SEER Incidence^a and U.S. Mortality^b Rate Comparison by Race/Ethnicity, 2011-2015
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	50.1	55.0	33.1	31.0	40.9	6.6	6.8	6.8	5.0	6.3
Leukemia	3.5	3.6	2.3	3.1	4.0	1.1	1.1	1.1	0.8	1.3
Lymphoma	7.7	7.9	7.9	5.7	4.8	0.7	0.7	1.1	0.4	0.6
Hodgkin Lymphoma	3.8	3.9	3.8	2.6	1.9	0.2	0.2	0.3	-	0.2
Non-Hodgkin Lymphoma	3.9	3.9	4.1	3.0	2.8	0.5	0.4	0.8	-	0.4
Brain and Other Nervous System	3.1	3.4	1.8	2.2	2.1	0.9	1.0	0.6	0.7	0.5
Bones and Joints	0.7	0.7	-	-	0.7	0.3	0.4	0.3	-	0.3
Soft Tissue including Heart	1.6	1.6	1.8	1.1	1.6	0.5	0.5	0.7	-	0.5
Skin excluding Basal and Squamous	4.5	5.5	-	-	0.9	0.3	0.4	-	-	0.2
Respiratory System	1.0	1.1	0.8	0.9	0.9	0.3	0.3	0.3	-	0.3
Male Genital System	15.2	18.2	2.7	7.1	16.4	0.5	0.6	-	-	0.8
Digestive System	4.5	4.5	4.7	3.9	3.6	1.1	1.1	1.4	1.4	1.1

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	68.1	73.0	50.7	48.6	56.0	5.8	5.8	7.0	3.6	5.6
Leukemia	2.6	2.7	2.5	2.0	3.1	0.7	0.8	0.6	0.4	1.1
Lymphoma	6.8	7.1	6.2	5.0	5.0	0.5	0.4	0.7	-	0.5
Hodgkin Lymphoma	3.9	4.4	2.8	2.4	2.6	0.2	0.2	0.3	-	-
Non-Hodgkin Lymphoma	2.9	2.7	3.4	2.6	2.3	0.3	0.3	0.4	-	0.4
Brain and Other Nervous System	2.5	2.9	1.5	1.4	2.1	0.6	0.6	0.4	-	0.4
Bones and Joints	0.7	0.7	0.8	-	0.6	0.2	0.2	-	-	-
Soft Tissue including Heart	1.2	1.2	1.5	0.9	1.2	0.3	0.3	0.5	-	0.2
Skin excluding Basal and Squamous	8.7	10.8	0.8	-	2.0	0.2	0.3	-	-	-
Respiratory System	0.7	0.7	-	1.1	0.6	0.2	0.2	-	-	-
Breast	9.4	9.0	12.7	8.2	7.5	0.7	0.6	1.5	0.4	0.5
Female Genital System	10.0	10.2	9.5	8.3	11.0	1.0	1.1	1.0	0.5	1.1
Digestive System	4.2	4.3	3.8	3.1	4.4	0.8	0.7	1.0	0.7	0.8

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.

- 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, 2011-2015
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	67.8	72.8	51.8	42.8	53.0	10.0	10.1	11.5	7.5	8.5
Leukemia	4.0	4.2	3.2	3.5	4.4	1.3	1.3	1.4	1.1	1.5
Lymphoma	9.0	9.0	10.9	6.0	6.6	0.9	0.9	1.7	0.5	0.9
Hodgkin Lymphoma	3.7	3.9	4.0	1.9	2.3	0.3	0.3	0.4	-	0.2
Non-Hodgkin Lymphoma	5.3	5.0	7.0	4.1	4.3	0.7	0.6	1.3	-	0.7
Brain and Other Nervous System	4.0	4.5	2.0	2.3	2.9	1.4	1.6	0.7	0.6	0.8
Bones and Joints	0.7	0.8	-	-	0.8	0.2	0.3	-	-	0.2
Soft Tissue including Heart	2.1	1.9	2.9	1.7	2.0	0.6	0.5	0.8	0.6	0.5
Skin excluding Basal and Squamous	7.5	9.0	1.5	-	1.5	0.6	0.8	-	-	0.2
Respiratory System	1.8	1.7	2.7	1.2	1.5	0.5	0.5	1.1	0.5	0.4
Male Genital System	14.6	17.5	4.1	5.9	13.7	0.4	0.5	0.3	-	0.7
Digestive System	8.7	8.6	9.3	8.6	7.9	2.5	2.4	3.3	2.6	2.2

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	118.2	125.4	93.8	88.0	94.9	11.5	11.1	15.9	7.7	10.1
Leukemia	3.1	3.1	2.9	2.5	3.2	0.8	0.8	1.0	0.8	0.8
Lymphoma	7.0	7.1	8.2	5.0	5.3	0.6	0.5	0.8	-	0.6
Hodgkin Lymphoma	3.1	3.3	3.6	1.9	2.1	0.2	0.2	0.3	-	0.2
Non-Hodgkin Lymphoma	3.9	3.8	4.6	3.1	3.2	0.4	0.4	0.5	-	0.4
Brain and Other Nervous System	2.9	3.4	1.8	1.4	2.1	0.8	0.9	0.5	0.6	0.5
Bones and Joints	0.4	0.5	-	-	0.6	0.2	0.2	-	-	0.2
Soft Tissue including Heart	1.6	1.6	1.8	1.0	1.6	0.4	0.4	0.6	-	0.4
Skin excluding Basal and Squamous	13.3	16.6	1.2	1.1	3.4	0.4	0.5	-	-	-
Respiratory System	1.4	1.5	1.4	1.2	1.1	0.5	0.4	0.6	0.5	0.4
Breast	28.0	27.3	33.3	25.5	21.8	2.7	2.4	5.1	1.1	2.1
Female Genital System	19.1	20.1	16.6	13.8	20.2	2.2	2.2	2.7	1.3	2.1
Digestive System	8.8	8.9	9.1	7.5	8.4	2.0	1.8	3.0	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, 2011-2015
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	91.1	96.2	77.4	59.4	67.2	16.7	16.7	19.8	12.2	12.4
Leukemia	5.1	5.3	4.7	3.3	5.8	1.4	1.4	1.7	1.0	1.7
Lymphoma	11.1	11.0	14.7	6.7	8.9	1.2	1.1	1.9	0.6	1.1
Hodgkin Lymphoma	3.0	3.1	4.0	1.0	2.0	0.3	0.3	0.4	-	0.3
Non-Hodgkin Lymphoma	8.1	7.8	10.7	5.7	6.9	0.9	0.9	1.5	0.5	0.8
Brain and Other Nervous System	4.2	4.6	3.1	3.1	3.0	2.0	2.3	1.2	1.0	1.3
Bones and Joints	0.7	0.7	-	-	0.7	0.2	0.3	0.3	-	0.2
Soft Tissue including Heart	2.2	2.2	1.9	1.8	2.0	0.7	0.7	0.9	0.5	0.5
Skin excluding Basal and Squamous	10.8	13.2	1.4	1.7	1.9	1.0	1.2	-	-	0.3
Respiratory System	3.6	3.7	4.2	2.7	2.6	1.5	1.5	2.1	1.4	0.9
Male Genital System	12.8	15.1	5.4	4.1	10.0	0.5	0.5	0.3	-	0.4
Digestive System	16.9	16.9	18.5	14.7	14.5	5.5	5.3	7.2	5.1	4.4

Females	Incidence					Mortality				
	All Races	White	Black	API ^c	Hispanic ^d	All Races	White	Black	API ^c	Hispanic ^d
All Malignant Cancers	184.6	192.2	161.8	149.2	148.5	22.0	21.3	29.6	15.8	18.0
Leukemia	3.9	3.9	4.3	3.1	3.8	1.0	1.0	1.3	0.9	1.3
Lymphoma	8.3	8.5	9.2	5.5	6.6	0.7	0.6	1.3	-	0.7
Hodgkin Lymphoma	2.5	2.7	3.0	1.3	1.6	0.2	0.2	0.3	-	-
Non-Hodgkin Lymphoma	5.7	5.8	6.2	4.2	5.0	0.5	0.5	1.0	-	0.6
Brain and Other Nervous System	3.1	3.4	1.9	2.6	2.6	1.3	1.4	0.9	0.8	0.7
Bones and Joints	0.6	0.6	-	-	0.5	0.2	0.1	0.2	-	-
Soft Tissue including Heart	2.0	1.9	2.7	1.5	2.2	0.5	0.5	0.7	-	0.5
Skin excluding Basal and Squamous	14.9	18.7	1.8	1.8	4.0	0.7	0.9	-	-	0.2
Respiratory System	3.1	3.3	2.6	2.8	2.3	1.2	1.2	1.4	1.3	0.6
Breast	61.9	61.3	67.7	57.9	48.7	6.6	6.0	11.1	4.3	5.1
Female Genital System	28.6	29.9	24.2	22.8	29.2	4.0	4.0	5.0	2.8	3.5
Digestive System	15.1	14.8	17.7	13.3	13.3	3.8	3.7	4.8	3.4	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.

- 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, 1975-2015

	Incidence				Mortality			
	1975-2015		2006-2015		1975-2015		2006-2015	
	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d
<u>Ages 15-19</u>								
All Malignant Cancers	20.9	0.7*	23.3	0.7*	4.0	-1.8*	2.9	-1.1*
Hodgkin Lymphoma	3.5	-0.5*	3.4	-0.5*	0.2	-5.0*	0.1	-5.0*
Brain and Other Nervous System	2.1	0.5*	2.3	0.5*	0.6	-1.0*	0.5	-1.0*
Thyroid	2.0	2.7*	3.0	7.2*	0.0	-	0.0	-
Non-Hodgkin Lymphoma	1.7	1.5*	2.0	1.5*	0.3	-3.2*	0.2	-3.9*
Testis	1.6	1.2*	1.9	1.2*	0.1	-5.2*	0.0	-2.8*
<u>Ages 20-24</u>								
All Malignant Cancers	34.7	0.8*	38.5	0.8*	5.4	-1.5*	4.3	-1.2*
Hodgkin Lymphoma	4.9	0.1	4.7	-0.7*	0.4	-4.7*	0.2	-8.0*
Testis	4.5	1.0	5.2	-0.1	0.3	-3.5*	0.2	-0.3
Thyroid	4.5	2.4*	6.3	5.4*	0.0	-	0.0	-
Melanoma of the Skin	4.2	0.5	4.4	-2.8*	0.2	-4.6*	0.1	-9.8*
Brain and Other Nervous System	2.3	0.5*	2.4	0.5*	0.6	-0.8*	0.5	-0.8*
<u>Ages 25-29</u>								
All Malignant Cancers	56.3	0.7*	62.9	1.0*	8.1	-1.5*	6.5	-1.5*
Melanoma of the Skin	7.4	0.6	8.3	-2.2	0.5	-2.9*	0.3	-2.9*
Thyroid	7.3	2.1*	11.2	3.7*	0.0	-	0.0	-
Testis	6.5	1.2*	7.7	1.2*	0.3	-2.7*	0.2	0.7
Hodgkin Lymphoma	4.8	-0.1	4.6	-0.1	0.5	-4.3*	0.2	-4.3*
Breast	4.2	0.4	4.7	2.4*	0.5	-2.2*	0.3	-2.2*
<u>Ages 30-34</u>								
All Malignant Cancers	86.6	1.0*	95.3	1.1*	14.2	-1.3*	11.0	-0.7*
Breast	13.4	0.1	13.9	0.1	2.0	-2.0*	1.4	-2.5*
Melanoma of the Skin	10.7	1.5*	11.9	0.2	0.8	-2.2*	0.5	-2.3*
Thyroid	9.6	2.7*	15.9	3.4*	0.0	-1.4*	0.0	-1.4*
Testis	6.6	1.9*	7.7	0.7*	0.3	-2.6*	0.2	-0.3
Cervix Uteri	5.7	-1.3*	4.5	-1.3*	0.9	-1.0*	0.6	0.3
<u>Ages 35-39</u>								
All Malignant Cancers	134.0	0.8*	142.0	0.8*	26.4	-1.5*	19.9	-1.0*
Breast	31.7	0.4*	32.1	0.4*	4.9	-1.5*	3.4	-1.2
Melanoma of the Skin	14.1	1.4*	15.2	0.3*	1.3	-2.2*	0.8	-1.0
Thyroid	11.7	3.3*	19.5	2.8*	0.1	-0.5	0.1	-0.5
Non-Hodgkin Lymphoma	7.9	1.8	7.7	-0.5	1.4	-1.7*	0.8	-3.0*
Colon and Rectum	7.4	1.1*	9.2	2.4*	2.1	-0.4*	2.2	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 1975-2015 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 1975-2015.

- 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, 1975-2015

	<u>Incidence</u>				<u>Mortality</u>			
	<u>1975-2015</u>		<u>2006-2015</u>		<u>1975-2015</u>		<u>2006-2015</u>	
	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d
<u>Ages 15-19</u>								
All Malignant Cancers	21.4	0.7*	23.4	0.7*	4.7	-2.1*	3.4	-2.0*
Hodgkin Lymphoma	3.3	-0.4	3.4	-0.4	0.2	-5.1*	0.1	-5.1*
Testis	3.2	1.2*	3.7	1.2*	0.1	-5.3*	0.1	-2.8*
Brain and Other Nervous System	2.4	0.4	2.5	0.4	0.7	-0.9*	0.6	-0.9*
Non-Hodgkin Lymphoma	2.1	1.5*	2.5	1.5*	0.4	-3.2*	0.2	-3.2*
Bones and Joints	2.0	0.5	2.1	0.5	0.7	-1.2*	0.6	0.0
<u>Ages 20-24</u>								
All Malignant Cancers	33.5	0.5*	36.0	0.5*	6.4	-1.6*	5.2	-1.2*
Testis	9.0	1.0	10.2	-0.2	0.5	-3.5*	0.3	-0.3
Hodgkin Lymphoma	4.9	-0.5*	4.5	-0.5*	0.4	-4.4*	0.2	-4.4*
Melanoma of the Skin	2.8	0.1	2.6	0.1	0.2	-4.7*	0.1	-11.0*
Non-Hodgkin Lymphoma	2.7	1.4*	3.3	1.4*	0.6	-2.6*	0.4	-5.7*
Brain and Other Nervous System	2.6	0.1	2.6	0.1	0.7	-0.8*	0.6	-0.8*
<u>Ages 25-29</u>								
All Malignant Cancers	50.4	0.7*	54.2	-0.1	8.7	-1.5*	6.9	-0.9*
Testis	12.9	1.1*	15.3	1.1*	0.6	-2.8*	0.5	0.7
Melanoma of the Skin	5.2	0.1	5.2	0.1	0.6	-2.6*	0.3	-1.4*
Hodgkin Lymphoma	5.0	-0.3	4.9	-0.3	0.6	-4.5*	0.3	-4.5*
Non-Hodgkin Lymphoma	4.4	2.3*	4.5	0.9	0.9	-1.9*	0.5	-5.0*
Kaposi sarcoma	3.6	-	1.4	-	-	-	-	-
<u>Ages 30-34</u>								
All Malignant Cancers	71.1	0.9*	71.9	0.9*	13.2	-1.4*	10.2	-0.9*
Testis	13.2	1.8*	15.4	0.6*	0.6	-2.6*	0.4	-0.3
Melanoma of the Skin	8.4	0.2	8.7	0.2	1.0	-2.3*	0.6	-2.3*
Kaposi sarcoma	7.9	-	1.9	-	-	-	-	-
Non-Hodgkin Lymphoma	7.1	0.9	6.0	-3.3	1.4	-1.4	0.7	-3.2*
Hodgkin Lymphoma	4.3	0.1	4.5	0.1	0.7	-4.3*	0.3	-4.3*
<u>Ages 35-39</u>								
All Malignant Cancers	100.0	0.5	96.4	0.1	23.0	-1.5*	17.0	-0.7*
Melanoma of the Skin	12.2	0.6	12.1	-0.5*	1.6	-2.3*	0.9	-1.2
Testis	11.2	1.8*	12.3	0.5*	0.5	-2.7*	0.4	-1.2*
Non-Hodgkin Lymphoma	10.6	2.3	9.3	-0.8	1.9	-1.7*	1.0	-2.5*
Kaposi sarcoma	9.4	-	2.2	-	-	-	-	-
Colon and Rectum	7.8	1.0*	9.8	2.2*	2.3	-0.2	2.4	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 1975-2015 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 1975-2015.

- 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, 1975-2015

	<u>Incidence</u>				<u>Mortality</u>			
	<u>1975-2015</u>		<u>2006-2015</u>		<u>1975-2015</u>		<u>2006-2015</u>	
	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d	Rate	AAPC ^d
<u>Ages 15-19</u>								
All Malignant Cancers	20.4	0.7*	23.1	0.7*	3.3	-1.8*	2.4	-1.8*
Hodgkin Lymphoma	3.6	-0.5*	3.4	-0.5*	0.2	-5.5*	0.0	-8.2*
Thyroid	3.3	2.8*	5.1	7.4*	0.0	-	-	-
Brain and Other Nervous System	1.8	0.7*	2.1	0.7*	0.5	-0.4	0.4	3.1
Melanoma of the Skin	1.8	0.3	1.6	0.3	0.0	-	0.0	-
Ovary	1.5	-0.1	1.5	-0.1	0.1	-3.6*	0.1	-0.5
<u>Ages 20-24</u>								
All Malignant Cancers	35.9	1.0*	41.2	1.0*	4.4	-1.3*	3.5	-1.3*
Thyroid	7.7	2.9*	10.9	5.5*	0.0	-	-	-
Melanoma of the Skin	5.6	0.9	6.3	-2.7	0.2	-3.3*	0.1	-3.3*
Hodgkin Lymphoma	5.0	0.6	4.8	-0.8*	0.3	-3.7*	0.1	-5.1*
Brain and Other Nervous System	2.0	1.1*	2.3	1.1*	0.5	-0.7*	0.5	-0.7*
Cervix Uteri	2.0	-3.2	1.1	-5.1*	0.2	-1.9*	0.1	-4.2*
<u>Ages 25-29</u>								
All Malignant Cancers	62.4	0.7*	71.9	1.0*	7.6	-1.4*	6.0	-1.4*
Thyroid	12.2	2.3*	19.0	4.0*	0.0	-	0.0	-
Melanoma of the Skin	9.7	1.0*	11.5	-2.3	0.4	-2.7*	0.2	-2.7*
Breast	8.4	0.4	9.4	2.4*	1.0	-1.6*	0.7	0.6
Cervix Uteri	6.8	-1.3	4.6	1.8	0.7	-1.4*	0.6	-1.4*
Hodgkin Lymphoma	4.6	0.0	4.4	0.0	0.4	-3.8*	0.2	-3.8*
<u>Ages 30-34</u>								
All Malignant Cancers	102.2	0.8*	118.7	1.4*	15.2	-1.5*	11.8	-1.7*
Breast	26.8	0.2	27.9	0.2	4.1	-2.0*	2.7	-2.5*
Thyroid	15.6	3.0*	26.2	4.6*	0.0	-	0.0	-
Melanoma of the Skin	13.0	2.2*	15.1	1.1*	0.7	-2.5*	0.5	-2.5*
Cervix Uteri	11.4	-1.2*	9.1	-1.2*	1.7	-0.9*	1.3	0.3
Hodgkin Lymphoma	3.7	0.0	3.7	-4.4*	0.4	-3.6*	0.2	-3.6*
<u>Ages 35-39</u>								
All Malignant Cancers	167.8	0.8*	187.3	1.1*	29.7	-1.4*	22.7	-1.3*
Breast	63.1	0.4*	63.7	0.3*	9.8	-1.4*	6.7	-1.2
Thyroid	18.5	3.7*	31.9	3.0*	0.1	-1.0	0.0	-1.0
Melanoma of the Skin	16.0	1.7	18.3	0.4	1.0	-2.4*	0.7	-2.4*
Cervix Uteri	14.1	-1.2*	12.3	-1.2*	2.8	-1.3*	2.3	-0.4
Corpus and Uterus, NOS	7.1	1.1*	9.0	2.8*	0.4	-0.6	0.5	1.7*

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 1975-2015 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 1975-2015.

- 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, 1975-2014

	5-year Relative Survival (Percent)					
	1975-2014	1975-1983	1984-1991	1992-1999	2000-2007	2008-2014
<u>Ages 15-19</u>						
All Malignant Cancers	78.7	69.6	77.0	79.4	82.1	86.1
Hodgkin Lymphoma	92.6	87.5	91.1	94.2	96.5	96.9
Brain and Other Nervous System	73.5	63.2	74.5	77.8	76.1	76.2
Thyroid	99.0	99.1	99.3	99.0	98.1	99.5
Non-Hodgkin Lymphoma	73.5	54.3	66.7	75.4	78.7	88.7
Testis	90.7	79.2	92.8	90.1	95.1	94.8
<u>Ages 20-24</u>						
All Malignant Cancers	81.5	74.7	79.1	81.7	85.0	87.7
Hodgkin Lymphoma	91.0	85.2	90.6	90.5	95.3	95.4
Testis	92.8	84.5	91.6	95.8	95.9	96.3
Thyroid	99.7	99.7	99.6	99.3	99.5	99.9
Melanoma of the Skin	93.2	85.2	92.3	95.0	96.5	97.2
Brain and Other Nervous System	68.0	57.6	64.1	69.7	71.1	81.1
<u>Ages 25-29</u>						
All Malignant Cancers	80.2	76.8	73.2	79.0	85.4	88.0
Melanoma of the Skin	93.5	88.4	91.6	94.6	96.3	96.2
Thyroid	99.7	99.4	99.7	99.9	99.7	99.5
Testis	95.2	89.1	95.1	96.4	97.5	97.1
Hodgkin Lymphoma	90.5	85.7	88.7	92.7	93.5	93.1
Breast	74.9	68.8	69.6	73.9	83.5	83.5
<u>Ages 30-34</u>						
All Malignant Cancers	76.7	73.2	67.9	73.8	83.9	86.4
Breast	77.8	69.6	73.9	78.5	84.2	85.4
Melanoma of the Skin	92.8	86.4	91.1	94.0	96.1	96.1
Thyroid	99.8	99.5	99.3	99.8	99.8	99.8
Testis	95.8	92.0	95.8	95.7	96.5	97.7
Cervix Uteri	84.8	84.0	82.8	86.7	86.9	83.6
<u>Ages 35-39</u>						
All Malignant Cancers	74.7	68.2	65.5	73.1	81.6	84.7
Breast	81.9	75.0	76.9	83.1	86.8	88.1
Melanoma of the Skin	92.6	87.6	90.3	92.9	95.2	95.9
Thyroid	99.5	98.9	99.3	99.4	99.5	99.8
Non-Hodgkin Lymphoma	65.0	65.7	49.8	55.5	75.7	84.9
Colon and Rectum	63.8	55.5	56.1	63.2	69.4	69.7

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^b Top 5 cancer sites selected based on 1975-2014 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, 1975-2014

	5-year Relative Survival (Percent)					
	1975-2014	1975-1983	1984-1991	1992-1999	2000-2007	2008-2014
<u>Ages 15-19</u>						
All Malignant Cancers	74.6	63.7	71.9	74.9	79.6	83.2
Hodgkin Lymphoma	91.8	86.0	90.1	92.8	97.3	95.8
Testis	90.7	79.2	92.8	90.1	95.1	94.8
Brain and Other Nervous System	70.5	59.7	68.9	75.9	74.0	74.4
Non-Hodgkin Lymphoma	71.6	49.6	68.3	72.4	75.9	87.8
Bones and Joints	58.6	42.2	57.6	60.7	66.9	65.7
<u>Ages 20-24</u>						
All Malignant Cancers	77.2	69.4	72.9	77.8	82.4	84.7
Testis	92.8	84.5	91.6	95.8	95.9	96.3
Hodgkin Lymphoma	89.3	83.2	87.4	89.4	95.3	94.7
Melanoma of the Skin	87.0	75.9	84.6	90.3	93.0	95.4
Non-Hodgkin Lymphoma	67.4	56.7	52.7	62.0	79.2	81.7
Brain and Other Nervous System	66.6	54.7	61.8	72.5	71.2	76.9
<u>Ages 25-29</u>						
All Malignant Cancers	74.3	71.5	63.7	72.6	81.8	85.2
Testis	95.2	89.1	95.1	96.4	97.5	97.1
Melanoma of the Skin	88.6	82.5	87.5	90.3	92.5	91.4
Hodgkin Lymphoma	88.6	84.5	84.6	91.0	92.2	92.8
Non-Hodgkin Lymphoma	59.8	59.0	43.3	50.8	75.4	79.8
Kaposi sarcoma	16.5	29.7	7.9	14.7	51.3	65.0
<u>Ages 30-34</u>						
All Malignant Cancers	68.7	68.2	55.2	63.8	80.4	83.6
Testis	95.8	92.0	95.8	95.7	96.5	97.7
Melanoma of the Skin	88.6	79.3	86.3	91.1	93.5	93.8
Kaposi sarcoma	19.1	24.7	7.7	23.1	60.4	72.4
Non-Hodgkin Lymphoma	56.1	69.3	38.1	42.7	75.3	82.7
Hodgkin Lymphoma	87.5	79.8	83.9	87.4	93.5	92.6
<u>Ages 35-39</u>						
All Malignant Cancers	64.7	59.6	50.8	61.8	75.7	79.7
Melanoma of the Skin	88.5	82.0	85.4	89.3	91.7	94.2
Testis	96.3	91.9	95.4	97.3	96.7	97.5
Non-Hodgkin Lymphoma	57.6	62.2	41.6	47.7	69.6	80.8
Kaposi sarcoma	19.8	14.1	6.8	23.0	62.9	77.6
Colon and Rectum	62.1	54.1	54.0	61.1	69.1	65.6

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

^b Top 5 cancer sites selected based on 1975-2014 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, 1975-2014

	5-year Relative Survival (Percent)					
	1975-2014	1975-1983	1984-1991	1992-1999	2000-2007	2008-2014
<u>Ages 15-19</u>						
All Malignant Cancers	83.3	76.0	82.5	84.3	85.1	89.2
Hodgkin Lymphoma	93.5	89.0	92.0	95.3	95.6	97.9
Thyroid	99.4	99.1	100.0	98.7	99.2	99.3
Brain and Other Nervous System	77.7	68.2	82.0	80.5	79.1	78.6
Melanoma of the Skin	95.6	87.9	96.0	94.4	99.5	100.0
Ovary	88.0	80.1	88.6	92.4	91.2	88.9
<u>Ages 20-24</u>						
All Malignant Cancers	85.6	80.0	85.7	85.5	87.4	90.4
Thyroid	99.8	99.4	99.5	99.7	99.8	99.9
Melanoma of the Skin	96.4	91.4	96.5	97.2	98.0	98.0
Hodgkin Lymphoma	92.7	87.7	93.6	91.6	95.2	95.9
Brain and Other Nervous System	69.8	61.9	67.1	65.0	71.1	85.6
Cervix Uteri	88.2	89.0	90.7	85.4	89.5	82.7
<u>Ages 25-29</u>						
All Malignant Cancers	85.1	80.7	82.4	84.7	88.1	90.2
Thyroid	99.8	99.5	99.7	99.9	99.8	99.5
Melanoma of the Skin	96.1	92.4	94.3	97.0	98.0	98.4
Breast	75.0	68.8	69.5	74.1	83.6	83.6
Cervix Uteri	87.2	89.0	86.1	87.1	87.4	85.2
Hodgkin Lymphoma	92.6	87.1	93.2	94.7	94.7	93.5
<u>Ages 30-34</u>						
All Malignant Cancers	82.3	76.1	79.0	82.2	86.2	88.2
Breast	77.8	69.5	73.9	78.5	84.1	85.6
Thyroid	99.8	99.3	99.6	99.9	99.8	99.8
Melanoma of the Skin	95.6	91.8	94.6	95.9	97.6	97.6
Cervix Uteri	84.8	84.0	82.8	86.7	86.9	83.6
Hodgkin Lymphoma	91.5	85.5	90.2	90.0	95.7	95.8
<u>Ages 35-39</u>						
All Malignant Cancers	80.7	72.7	76.1	80.8	84.9	87.2
Breast	81.9	75.0	76.9	83.1	86.8	88.1
Thyroid	99.8	99.1	99.5	99.6	99.7	99.9
Melanoma of the Skin	95.8	92.7	94.6	95.7	97.7	97.1
Cervix Uteri	81.7	79.6	80.3	82.7	84.0	81.9
Corpus and Uterus, NOS	90.3	91.4	90.2	90.4	90.1	89.0

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

^b Top 5 cancer sites selected based on 1975-2014 SEER 9 Incidence rates for the age group.

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