

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 populations<sup>1</sup>. For this reason, a classification scheme has been proposed for tumors diagnosed in adolescents and young adults<sup>2</sup>. This classification scheme was updated based on site and histology codes of the International Classification of Diseases for Oncology, Third Edition<sup>3</sup>. 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-3<sup>4</sup>. 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 used<sup>5</sup>. In this chapter, the incidence of malignant cancers in adolescent and young adults, 15 to 39 years of age, are presented based on the 2 different classification schemes described above.

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Table 32.1

Age-Adjusted SEER Incidence<sup>a</sup>, by Age Group and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
All Races, 2010-2014

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	16.9	15.5	54.2	87.8	1091.0	869.6
1. LEUKEMIAS	5.5	4.9	3.9	2.9	34.9	20.0
1.1 Acute lymphoid leukemia	4.3	3.9	1.2	0.7	1.3	1.0
1.2 Acute myeloid leukemia	0.9	0.8	1.3	1.4	11.1	7.1
1.3 Chronic myeloid leukemia	0.1	0.1	0.8	0.5	4.6	2.7
1.4 Other and unspecified leukemias	0.2	0.1	0.5	0.3	17.9	9.1
2. LYMPHOMAS	2.1	1.1	8.2	6.6	54.2	36.5
2.1 Non-Hodgkin Lymphoma	1.4	0.7	4.7	3.2	50.6	34.2
2.2 Hodgkin Lymphoma	0.7	0.4	3.5	3.4	3.6	2.3
3. CNS, INTRACRANIAL, INTRASPINAL	3.3	3.0	3.3	2.5	13.0	8.7
3.1 Astrocytoma	1.7	1.7	1.8	1.3	10.2	6.5
3.1.1 Specified low-grade astrocytic tumors	1.2	1.2	0.5	0.4	0.3	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.3	1.0	0.7	9.4	5.9
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	1.5	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	0.4	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	0.2	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	0.8	1.1	0.8	1.5	1.0
4.1 Osteosarcoma	0.4	0.4	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	0.0	-	0.2	0.2	0.7	0.4
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	12.9	9.2
5.1 Fibromatous neoplasms	0.2	0.1	0.7	0.7	2.7	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	9.9	7.4
5.3.1 Specified soft tissue sarcoma	0.2	0.2	2.0	1.1	7.1	5.5
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.1	1.1	5.6	5.3
5.3.1.2 Kaposi sarcoma	-	-	0.9	0.0	1.4	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.4	0.3	2.8	1.9
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.5	0.7	11.2	1.0	4.1	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.3	10.8	0.7	4.0	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).

<sup>a</sup> 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).

<sup>b</sup> 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<sup>a</sup>, by Age Group and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
All Races, 2010-2014

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.2	5.1	8.6	70.1	37.1
7.1 Melanoma	0.2	0.2	5.0	8.5	65.7	35.0
7.2 Skin carcinomas	-	-	0.1	0.1	4.3	2.1
8. CARCINOMAS (excluding skin)	0.5	0.9	17.0	61.3	837.1	709.1
8.1 Thyroid carcinoma	0.2	0.5	3.9	18.3	13.0	33.2
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	35.2	12.3
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.1	14.5	3.4
8.3 Carcinoma of trachea, bronchus, and lung	-	-	0.9	1.0	139.4	103.0
8.4 Carcinoma of breast	-	-	0.1	21.0	2.7	269.2
8.5 Carcinoma of genitourinary tract	0.0	0.1	3.6	13.2	402.2	135.5
8.5.1 Carcinoma of kidney	-	-	2.4	1.7	43.6	20.9
8.5.2 Carcinoma of bladder	-	-	0.8	0.3	79.0	18.8
8.5.3 Carcinoma of gonads	-	-	0.0	1.8	0.0	21.9
8.5.4 Carcinoma of cervix and uterus	-	-	-	8.9	-	62.5
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.3	0.4	279.5	11.4
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	6.4	5.9	212.4	137.8
8.6.1 Carcinoma of colon and rectum	0.1	0.1	4.2	4.0	104.1	80.8
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	20.6	10.1
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.5	0.3	28.7	9.6
8.6.4 Carcinoma of pancreas	-	-	0.4	0.5	28.9	22.1
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.4	30.1	15.3
8.7 Carcinoma of other and ill-defined sites, NOS	0.1	0.0	0.4	0.5	15.9	14.1
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	15.7	13.8
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.8	2.9	0.9	1.3	27.1	21.9
9.1 Other pediatric and embryonal tumors, NOS	2.7	2.8	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	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	1.0	0.9	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.8	1.2	26.9	21.7
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	0.0	0.5	0.3	20.3	12.7
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.5	8.5
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	36.3	25.9

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

<sup>a</sup> 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).

<sup>b</sup> 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<sup>a</sup>, by Age Group and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
White, 2010-2014

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	17.8	16.3	58.3	92.9	1098.3	894.8
1. LEUKEMIAS	6.0	5.4	4.1	3.0	36.7	21.1
1.1 Acute lymphoid leukemia	4.8	4.4	1.4	0.8	1.4	1.1
1.2 Acute myeloid leukemia	0.9	0.8	1.4	1.4	11.6	7.4
1.3 Chronic myeloid leukemia	0.1	0.1	0.8	0.6	4.7	2.7
1.4 Other and unspecified leukemias	0.2	0.1	0.5	0.3	19.0	9.9
2. LYMPHOMAS	2.1	1.1	8.3	6.9	56.9	38.5
2.1 Non-Hodgkin Lymphoma	1.4	0.7	4.6	3.2	53.1	36.2
2.2 Hodgkin Lymphoma	0.7	0.4	3.7	3.7	3.7	2.4
3. CNS, INTRACRANIAL, INTRASPINAL	3.6	3.2	3.7	2.8	14.3	9.7
3.1 Astrocytoma	1.8	1.8	2.0	1.5	11.4	7.4
3.1.1 Specified low-grade astrocytic tumors	1.3	1.3	0.5	0.4	0.3	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.3	1.1	0.7	10.5	6.7
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	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	0.4	0.3	0.2	0.1	0.1
3.4.1 Medulloblastoma	0.5	0.2	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	-	-	0.1	0.0	0.7	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.9	0.9	1.2	0.9	1.6	1.1
4.1 Osteosarcoma	0.4	0.4	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	0.0	-	0.2	0.2	0.8	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	13.1	8.9
5.1 Fibromatous neoplasms	0.2	0.1	0.5	0.6	2.9	1.5
5.2 Rhabdomyosarcoma	0.6	0.5	0.1	0.1	0.2	0.2
5.3 Other specified soft tissue sarcoma	0.3	0.3	2.1	1.4	10.1	7.2
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)	0.2	0.2	1.1	1.1	5.8	5.2
5.3.1.2 Kaposi sarcoma	-	-	0.6	-	1.3	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.4	0.3	3.0	1.9
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.5	0.6	13.5	0.9	4.8	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.3	13.0	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	0.1	0.1

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

<sup>a</sup> 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).

<sup>b</sup> 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<sup>a</sup>, by Age Group and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
White, 2010-2014

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.3	6.3	11.0	81.8	44.2
7.1 Melanoma	0.2	0.3	6.2	10.9	77.0	41.9
7.2 Skin carcinomas	-	-	0.1	0.1	4.8	2.3
8. CARCINOMAS (excluding skin)	0.6	1.0	17.3	63.6	827.4	724.9
8.1 Thyroid carcinoma	0.2	0.6	4.3	20.2	13.9	34.7
8.2 Other carcinoma of head and neck	0.1	0.1	1.7	1.4	53.5	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	37.8	13.0
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.2	14.6	3.5
8.3 Carcinoma of trachea, bronchus, and lung	-	-	0.9	1.1	139.7	108.1
8.4 Carcinoma of breast	-	-	0.1	20.6	2.6	276.1
8.5 Carcinoma of genitourinary tract	0.0	0.1	3.7	14.0	395.3	141.3
8.5.1 Carcinoma of kidney	-	-	2.5	1.9	44.6	21.5
8.5.2 Carcinoma of bladder	-	-	0.9	0.4	86.4	20.3
8.5.3 Carcinoma of gonads	-	-	0.0	1.9	0.1	23.1
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.4	-	64.2
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.3	0.4	264.3	12.1
8.6 Carcinoma of gastrointestinal tract	0.2	0.1	6.3	5.8	206.2	133.6
8.6.1 Carcinoma of colon and rectum	0.1	0.1	4.2	4.1	102.0	79.7
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	18.7	8.8
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.3	0.2	25.8	8.5
8.6.4 Carcinoma of pancreas	-	-	0.4	0.5	29.0	21.8
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.4	30.7	14.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	0.1	0.4	0.4	16.2	14.2
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	16.0	13.9
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.9	2.9	0.8	1.2	26.3	20.0
9.1 Other pediatric and embryonal tumors, NOS	2.8	2.8	0.1	0.1	0.2	0.1
9.1.1 Wilms tumor	0.7	0.8	-	-	0.0	0.0
9.1.2 Neuroblastoma	1.1	1.0	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	1.0	0.9	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.7	1.1	26.0	19.8
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	-	0.4	0.3	19.3	11.3
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.6	8.0
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	35.5	26.2

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

<sup>a</sup> 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).

<sup>b</sup> 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<sup>a</sup>, by Age Group and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
Black, 2010-2014

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	13.3	13.3	40.6	71.3	1237.4	858.1
1. LEUKEMIAS	3.4	2.9	2.8	2.6	28.6	16.9
1.1 Acute lymphoid leukemia	2.3	2.1	0.6	0.4	0.9	0.8
1.2 Acute myeloid leukemia	0.7	0.6	1.1	1.3	9.5	6.4
1.3 Chronic myeloid leukemia	-	-	0.7	0.6	3.9	2.7
1.4 Other and unspecified leukemias	-	-	0.4	0.3	14.3	7.0
2. LYMPHOMAS	2.0	1.3	9.4	6.7	39.4	27.3
2.1 Non-Hodgkin Lymphoma	1.3	0.8	5.7	3.7	35.6	24.9
2.2 Hodgkin Lymphoma	0.7	0.5	3.7	3.0	3.8	2.4
3. CNS, INTRACRANIAL, INTRASPINAL	2.6	2.9	1.9	1.6	8.1	5.3
3.1 Astrocytoma	1.2	1.5	1.1	0.9	5.9	3.7
3.1.1 Specified low-grade astrocytic tumors	0.9	1.1	0.2	0.3	0.2	-
3.1.2 Glioblastoma and anaplastic astrocytoma	-	0.3	0.6	0.4	5.4	3.4
3.1.3 Astrocytoma, NOS	-	-	0.3	-	0.3	0.2
3.2 Other glioma	0.5	0.6	0.5	0.4	0.8	0.6
3.3 Ependymoma	-	0.3	-	0.1	0.2	0.1
3.4 Medulloblastoma and other PNET	0.4	0.4	-	-	-	-
3.4.1 Medulloblastoma	-	0.3	-	-	-	-
3.4.2 Supratentorial PNET	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	0.4	0.4
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	0.7	0.5
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.7	0.6	0.8	0.6	0.9	0.8
4.1 Osteosarcoma	0.4	0.5	0.4	0.3	0.3	0.3
4.2 Chondrosarcoma	-	-	0.2	-	0.4	0.3
4.3 Ewing tumor	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	0.2	0.2
5. SOFT TISSUE SARCOMAS	1.2	0.9	6.0	3.2	11.1	12.0
5.1 Fibromatous neoplasms	0.2	0.3	1.3	1.0	1.8	1.8
5.2 Rhabdomyosarcoma	0.7	0.3	0.2	0.2	0.2	0.3
5.3 Other specified soft tissue sarcoma	0.3	0.3	4.5	2.0	9.0	9.9
5.3.1 Specified soft tissue sarcoma	-	-	4.2	1.6	6.8	7.6
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	0.8	1.5	4.6	7.3
5.3.1.2 Kaposi sarcoma	-	-	3.4	-	2.2	0.3
5.3.2 Unspecified soft tissue sarcoma	-	-	0.4	0.4	2.2	2.3
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	-	0.8	2.5	1.1	1.4	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	-	0.4	2.3	0.6	1.3	-
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	-	0.3	0.2	0.5	-	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).

<sup>a</sup> 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).

<sup>b</sup> 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<sup>a</sup>, by Age Group and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
Black, 2010-2014

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	-	-	0.3	0.5	4.0	3.4
7.1 Melanoma	-	-	0.2	0.4	2.9	2.5
7.2 Skin carcinomas	-	-	-	-	1.0	0.9
8. CARCINOMAS (excluding skin)	0.4	0.5	15.2	52.7	1050.3	723.7
8.1 Thyroid carcinoma	-	-	1.4	8.6	7.3	22.7
8.2 Other carcinoma of head and neck	-	-	1.5	1.1	52.5	14.7
8.2.1 Nasopharyngeal carcinoma	-	-	0.3	0.3	1.7	0.6
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	0.8	0.7	29.4	9.7
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.4	-	21.3	4.4
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.1	0.9	178.5	105.6
8.4 Carcinoma of breast	-	-	-	24.1	4.2	266.3
8.5 Carcinoma of genitourinary tract	-	-	4.0	10.6	529.9	124.9
8.5.1 Carcinoma of kidney	-	-	2.9	1.6	52.4	25.6
8.5.2 Carcinoma of bladder	-	-	0.4	0.2	47.0	15.1
8.5.3 Carcinoma of gonads	-	-	-	1.1	-	16.5
8.5.4 Carcinoma of cervix and uterus	-	-	-	7.1	-	58.7
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.6	0.6	430.4	8.9
8.6 Carcinoma of gastrointestinal tract	-	-	6.7	6.5	260.5	173.5
8.6.1 Carcinoma of colon and rectum	-	-	4.4	4.3	128.5	98.1
8.6.2 Carcinoma of stomach	-	-	0.6	0.7	27.3	14.7
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.7	0.3	36.7	10.6
8.6.4 Carcinoma of pancreas	-	-	0.4	0.6	34.6	28.8
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.6	33.5	21.3
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.5	0.8	17.4	16.0
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	0.2
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.4	0.7	17.3	15.8
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.7	3.4	1.2	1.7	44.3	40.8
9.1 Other pediatric and embryonal tumors, NOS	2.6	3.2	-	-	-	0.2
9.1.1 Wilms tumor	0.9	1.2	-	-	-	-
9.1.2 Neuroblastoma	0.9	1.1	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.7	1.0	-	-	-	-
9.2 Other specified neoplasms, NOS	-	-	1.1	1.7	44.1	40.7
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	0.5	37.0	26.5
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.7	6.9	13.2
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.4	0.7	49.3	27.6

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

<sup>a</sup> 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).

<sup>b</sup> 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<sup>a</sup>, by Age Group and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
All Races, 2010-2014

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	23.4	21.6	35.1	37.1	49.3	67.5	67.1	115.2	90.1	181.0
1. LEUKEMIAS	3.8	2.6	3.1	2.3	3.3	2.5	3.9	3.1	5.0	3.9
1.1 Acute lymphoid leukemia	2.3	1.2	1.3	0.6	0.9	0.6	0.8	0.5	0.9	0.7
1.2 Acute myeloid leukemia	1.0	1.1	1.1	1.1	1.1	1.3	1.6	1.6	1.8	1.7
1.3 Chronic myeloid leukemia	0.2	0.2	0.6	0.4	0.9	0.5	1.0	0.7	1.4	0.9
1.4 Other and unspecified leukemias	0.2	0.1	0.2	0.2	0.3	0.2	0.5	0.3	1.0	0.6
2. LYMPHOMAS	5.5	4.3	7.1	6.4	7.7	6.8	9.2	7.1	11.0	8.4
2.1 Non-Hodgkin Lymphoma	2.5	1.2	3.1	2.1	3.8	2.8	5.5	3.9	8.0	5.8
2.2 Hodgkin Lymphoma	3.1	3.0	4.0	4.3	3.9	4.0	3.7	3.2	3.0	2.6
3. CNS, INTRACRANIAL, INTRASPINAL	2.4	2.1	2.3	2.0	3.2	2.6	3.9	2.8	4.3	2.9
3.1 Astrocytoma	1.5	1.3	1.3	1.0	1.8	1.3	2.2	1.4	2.3	1.6
3.1.1 Specified low-grade astrocytic tumors	0.8	0.7	0.4	0.4	0.4	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	0.7	1.6	1.0
3.1.3 Astrocytoma, NOS	0.3	0.3	0.3	0.2	0.4	0.2	0.4	0.4	0.4	0.3
3.2 Other glioma	0.4	0.4	0.5	0.6	0.9	0.8	1.3	1.0	1.4	0.9
3.3 Ependymoma	0.2	0.1	0.2	0.1	0.2	0.2	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	0.1	0.1	0.2	-
3.4.1 Medulloblastoma	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	1.9	1.2	1.2	0.8	0.8	0.8	0.8	0.5	0.8	0.8
4.1 Osteosarcoma	1.0	0.6	0.4	0.3	0.2	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	0.7	0.4	0.5	0.2	0.3	0.2	0.2	0.1	-	0.2
4.4 Other specified and unspecified bone tumors	-	0.1	-	0.1	0.2	-	0.1	-	0.2	0.2
5. SOFT TISSUE SARCOMAS	1.4	1.3	2.2	1.6	3.2	2.1	4.6	2.8	4.5	3.5
5.1 Fibromatous neoplasms	0.2	0.3	0.4	0.5	0.7	0.7	1.0	1.0	1.0	1.1
5.2 Rhabdomyosarcoma	0.4	0.3	0.1	0.1	0.1	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.8	0.7	1.7	1.0	2.4	1.3	3.5	1.7	3.4	2.4
5.3.1 Specified soft tissue sarcoma	0.5	0.5	1.2	0.7	2.0	1.0	3.1	1.4	3.0	1.9
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.5	0.5	0.8	0.7	1.0	0.9	1.4	1.4	1.6	1.8
5.3.1.2 Kaposi sarcoma	-	-	0.5	-	1.0	-	1.7	-	1.4	-
5.3.2 Unspecified soft tissue sarcoma	0.3	0.2	0.4	0.2	0.3	0.3	0.4	0.3	0.5	0.5
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	4.5	1.2	11.0	1.2	15.4	1.1	14.3	0.9	11.5	0.7
6.1 Germ cell and trophoblastic neoplasms of gonads	3.8	1.0	10.3	0.9	14.9	0.7	13.9	0.5	11.3	0.3
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.7	0.2	0.7	0.3	0.4	0.4	0.4	0.4	0.2	0.4
6.2.1 Intracranial sites	0.4	-	0.3	-	0.1	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	0.1	0.4	0.3	0.3	0.4	0.3	0.4	0.2	0.4

Rates are per 100,000.

<sup>a</sup> 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).

<sup>b</sup> 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<sup>a</sup>, by Age Group and Sex  
 By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
 All Races, 2010-2014

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	1.2	2.0	5.1	4.3	8.7	7.1	12.6	10.4	14.7
7.1 Melanoma	0.9	1.1	2.0	5.0	4.3	8.7	6.9	12.5	10.2	14.5
7.2 Skin carcinomas	-	-	-	-	-	-	0.2	-	0.2	0.2
8. CARCINOMAS (excluding skin)	2.5	7.2	5.5	17.0	10.8	41.6	21.8	83.1	40.2	142.6
8.1 Thyroid carcinoma	0.9	4.9	1.9	9.9	3.2	17.6	5.4	25.2	7.5	31.8
8.2 Other carcinoma of head and neck	0.5	0.5	0.8	0.7	1.1	1.0	2.0	1.8	3.9	2.8
8.2.1 Nasopharyngeal carcinoma	0.2	-	0.2	0.1	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	0.8	1.4	1.3	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	-	-	-	1.4	-	8.9	-	26.9	0.2	60.1
8.5 Carcinoma of genitourinary tract	0.3	0.7	0.7	2.7	1.7	9.4	4.6	19.7	9.5	30.3
8.5.1 Carcinoma of kidney	0.2	0.2	0.4	0.4	1.2	1.2	3.2	2.3	6.4	4.0
8.5.2 Carcinoma of bladder	0.1	-	0.3	0.1	0.4	0.2	1.0	0.4	1.9	0.8
8.5.3 Carcinoma of gonads	-	0.3	-	0.7	-	1.3	-	2.5	-	3.7
8.5.4 Carcinoma of cervix and uterus	-	0.1	-	1.4	-	6.4	-	13.9	-	20.7
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.2	0.3	0.6	1.1	1.1
8.6 Carcinoma of gastrointestinal tract	0.7	0.8	1.8	1.7	3.9	3.7	8.1	7.8	15.6	13.9
8.6.1 Carcinoma of colon and rectum	0.4	0.5	1.2	1.1	2.7	2.6	5.4	5.3	10.1	9.5
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.4	0.4	1.0	1.0	1.7	1.8
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.2	0.2	0.4	0.1	0.5	0.3	1.1	0.5
8.6.4 Carcinoma of pancreas	-	-	-	0.2	0.1	0.3	0.5	0.6	1.2	1.1
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.1	-	0.3	0.2	0.7	0.5	1.6	1.0
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.1	0.3	0.3	0.5	0.6	0.6	0.9	1.1
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	0.1
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.1	0.2	0.3	0.4	0.5	0.6	0.9	1.0
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.5	0.4	0.5	0.5	0.9	1.1	1.7	1.8	2.5
9.1 Other pediatric and embryonal tumors, NOS	0.2	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	0.8	1.0	1.6	1.8	2.4
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	0.1	-	-	-	0.2	-	0.2	-	0.3
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.1	-	0.2	0.2	0.6	0.4	1.2	0.8
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	0.1	-	0.2	0.1	0.5	0.3	0.9	0.4	1.3
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.3	0.2	0.5	0.4	0.7	0.6	1.0

Rates are per 100,000.

<sup>a</sup> 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).

<sup>b</sup> 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).

<sup>c</sup> 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<sup>a</sup>, by Age Group and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
White, 2010-2014

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	25.4	23.4	38.7	41.1	54.2	72.9	71.7	122.1	95.2	188.0
1. LEUKEMIAS	4.2	2.8	3.4	2.4	3.4	2.7	4.1	3.1	5.2	4.0
1.1 Acute lymphoid leukemia	2.7	1.4	1.5	0.7	1.1	0.7	0.9	0.5	1.0	0.7
1.2 Acute myeloid leukemia	1.1	1.1	1.1	1.2	1.2	1.3	1.7	1.5	1.8	1.7
1.3 Chronic myeloid leukemia	0.2	0.2	0.6	0.3	0.8	0.5	1.1	0.7	1.4	0.9
1.4 Other and unspecified leukemias	0.3	-	0.2	-	0.3	0.2	0.5	0.3	1.0	0.6
2. LYMPHOMAS	5.7	4.7	7.3	6.7	7.8	7.1	9.1	7.2	11.0	8.4
2.1 Non-Hodgkin Lymphoma	2.4	1.3	3.0	2.1	3.7	2.7	5.2	3.8	7.9	5.7
2.2 Hodgkin Lymphoma	3.3	3.4	4.3	4.6	4.1	4.4	3.9	3.5	3.1	2.7
3. CNS, INTRACRANIAL, INTRASPINAL	2.5	2.2	2.6	2.3	3.7	3.1	4.4	3.2	4.8	3.2
3.1 Astrocytoma	1.5	1.3	1.5	1.2	2.0	1.5	2.4	1.7	2.6	1.7
3.1.1 Specified low-grade astrocytic tumors	0.9	0.7	0.5	0.5	0.4	0.4	0.5	0.4	0.3	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.4	0.4	0.6	0.4	1.2	0.8	1.4	0.9	1.8	1.1
3.1.3 Astrocytoma, NOS	0.3	0.3	0.4	0.2	0.5	0.3	0.4	0.5	0.4	0.3
3.2 Other glioma	0.4	0.4	0.6	0.6	1.0	1.0	1.5	1.0	1.5	1.0
3.3 Ependymoma	0.2	-	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3
3.4 Medulloblastoma and other PNET	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	-
3.4.1 Medulloblastoma	0.2	0.1	-	-	0.2	-	0.1	-	-	-
3.4.2 Supratentorial PNET	-	-	0.2	-	0.2	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	2.1	1.3	1.3	0.9	0.9	0.8	0.9	0.6	0.8	0.8
4.1 Osteosarcoma	1.1	0.6	0.4	0.3	0.3	0.3	0.2	-	-	0.2
4.2 Chondrosarcoma	-	-	0.2	0.1	0.2	0.2	0.3	0.2	0.4	0.3
4.3 Ewing tumor	0.8	0.5	0.6	0.3	0.3	0.3	0.2	0.2	-	0.2
4.4 Other specified and unspecified bone tumors	-	-	-	-	0.2	-	0.2	-	0.2	0.2
5. SOFT TISSUE SARCOMAS	1.4	1.3	1.6	1.6	2.7	2.0	3.8	2.6	4.1	3.2
5.1 Fibromatous neoplasms	0.2	0.3	0.3	0.4	0.6	0.6	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	1.0	2.0	1.2	2.9	1.6	3.2	2.2
5.3.1 Specified soft tissue sarcoma	0.5	0.6	0.8	0.8	1.7	0.9	2.4	1.3	2.7	1.7
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.5	0.6	0.7	0.8	1.1	0.9	1.4	1.3	1.7	1.7
5.3.1.2 Kaposi sarcoma	-	-	0.1	-	0.6	-	1.1	-	1.0	-
5.3.2 Unspecified soft tissue sarcoma	0.3	0.2	0.4	0.2	0.3	0.3	0.4	0.3	0.5	0.5
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	5.4	1.1	13.4	1.1	18.4	1.0	17.0	0.7	13.7	0.6
6.1 Germ cell and trophoblastic neoplasms of gonads	4.8	0.9	12.6	0.8	18.0	0.7	16.6	0.3	13.5	0.4
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.6	0.2	0.7	0.3	0.4	0.3	0.4	0.4	0.2	0.3
6.2.1 Intracranial sites	0.4	-	0.3	-	-	-	-	-	-	-
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.

<sup>a</sup> 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).

<sup>b</sup> 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<sup>a</sup>, by Age Group and Sex  
 By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
 White, 2010-2014

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	1.5	2.5	6.5	5.4	10.9	8.7	16.1	12.9	18.6
7.1 Melanoma	1.1	1.5	2.5	6.5	5.3	10.9	8.5	16.0	12.7	18.5
7.2 Skin carcinomas	-	-	-	-	-	-	0.2	-	0.2	-
8. CARCINOMAS (excluding skin)	2.6	7.9	6.1	18.9	11.2	43.8	22.2	86.2	40.4	145.8
8.1 Thyroid carcinoma	1.0	5.6	2.1	11.7	3.6	19.8	5.9	27.8	8.0	34.0
8.2 Other carcinoma of head and neck	0.4	0.5	0.8	0.7	1.0	1.1	1.9	1.6	3.8	2.8
8.2.1 Nasopharyngeal carcinoma	0.2	-	0.1	-	-	-	0.1	-	0.4	0.2
8.2.2 Other sites in lip, oral cavity and pharynx	0.3	0.4	0.6	0.5	0.8	0.9	1.4	1.4	2.7	2.2
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	0.3	0.2	0.7	0.4
8.3 Carcinoma of trachea, bronchus, and lung	-	0.1	0.3	0.4	0.5	0.5	0.9	1.2	2.6	2.7
8.4 Carcinoma of breast	-	-	-	1.4	-	8.5	-	26.1	0.2	59.6
8.5 Carcinoma of genitourinary tract	0.3	0.7	0.8	2.9	1.9	9.7	4.9	21.2	9.6	32.2
8.5.1 Carcinoma of kidney	0.2	0.2	0.4	0.5	1.2	1.3	3.3	2.6	6.4	4.4
8.5.2 Carcinoma of bladder	-	-	0.3	-	0.5	0.2	1.2	0.4	2.0	0.9
8.5.3 Carcinoma of gonads	-	0.3	-	0.8	-	1.5	-	2.8	-	3.8
8.5.4 Carcinoma of cervix and uterus	-	0.1	-	1.5	-	6.6	-	14.7	-	21.9
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	0.7	0.8	1.9	1.7	3.9	3.7	7.9	7.9	15.4	13.6
8.6.1 Carcinoma of colon and rectum	0.5	0.6	1.3	1.1	2.7	2.6	5.4	5.5	10.2	9.5
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.4	0.4	1.0	1.0	1.7	1.5
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.2	0.2	0.3	0.1	0.3	0.3	0.6	0.4
8.6.4 Carcinoma of pancreas	-	-	-	0.2	0.1	0.3	0.4	0.5	1.2	1.1
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	0.3	0.2	0.8	0.5	1.7	1.0
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.3	0.5	0.6	0.5	0.9	0.9
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.1	0.2	0.3	0.4	0.5	0.5	0.9	0.8
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.4	0.3	0.5	0.5	0.9	1.0	1.6	1.7	2.3
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	0.1	0.3	0.3	0.4	0.4	0.9	0.9	1.5	1.6	2.3
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	0.1	0.5	0.4	1.1	0.7
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	-	-	0.2	-	0.5	0.3	0.9	0.4	1.2
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.3	0.2	0.5	0.4	0.7	0.6	1.0

Rates are per 100,000.

<sup>a</sup> 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).

<sup>b</sup> 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).

<sup>c</sup> 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<sup>a</sup>, by Age Group and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
Black, 2010-2014

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	15.5	14.6	21.6	22.4	31.6	50.3	51.0	93.9	76.5	159.1
1. LEUKEMIAS	2.2	1.5	1.8	2.1	2.2	2.3	2.6	2.8	4.7	4.0
1.1 Acute lymphoid leukemia	1.1	-	-	-	-	-	-	-	-	-
1.2 Acute myeloid leukemia	-	-	0.8	1.1	-	1.4	1.2	1.6	2.1	1.6
1.3 Chronic myeloid leukemia	-	-	-	-	0.9	-	-	-	1.1	1.1
1.4 Other and unspecified leukemias	-	-	-	-	-	-	-	-	1.1	-
2. LYMPHOMAS	4.9	2.9	6.7	5.2	8.8	6.7	11.3	8.2	14.5	10.2
2.1 Non-Hodgkin Lymphoma	2.4	0.9	3.6	1.7	4.4	3.4	7.1	4.9	10.3	6.9
2.2 Hodgkin Lymphoma	2.5	1.9	3.1	3.5	4.4	3.3	4.2	3.3	4.2	3.3
3. CNS, INTRACRANIAL, INTRASPINAL	1.9	1.7	1.3	1.2	1.4	1.6	2.4	1.7	2.5	1.7
3.1 Astrocytoma	1.0	1.1	0.8	-	-	1.0	1.5	-	1.2	1.2
3.1.1 Specified low-grade astrocytic tumors	-	0.7	-	-	-	-	-	-	-	-
3.1.2 Glioblastoma and anaplastic astrocytoma	-	-	-	-	-	-	-	-	-	0.9
3.1.3 Astrocytoma, NOS	-	-	-	-	-	-	-	-	-	-
3.2 Other glioma	-	-	-	-	-	-	-	0.8	-	-
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	0.8	-	-	-	-	-	1.1	-
4.1 Osteosarcoma	0.8	0.8	-	-	-	-	-	-	-	-
4.2 Chondrosarcoma	-	-	-	-	-	-	-	-	-	-
4.3 Ewing tumor	-	-	-	-	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	-	-
5. SOFT TISSUE SARCOMAS	1.6	1.2	5.3	1.9	6.3	2.5	9.4	4.2	7.4	5.5
5.1 Fibromatous neoplasms	-	-	0.7	0.7	1.5	-	1.7	1.3	1.8	1.6
5.2 Rhabdomyosarcoma	-	-	-	-	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	-	-	4.2	1.0	4.8	1.7	7.6	2.8	5.5	3.7
5.3.1 Specified soft tissue sarcoma	-	-	3.7	0.7	4.5	1.3	7.1	2.3	5.2	3.0
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	1.1	-	-	1.2	1.1	2.2	1.1	2.7
5.3.1.2 Kaposi sarcoma	-	-	2.6	-	4.0	-	6.0	-	4.0	-
5.3.2 Unspecified soft tissue sarcoma	-	-	-	-	-	-	-	-	-	-
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.7	1.3	1.8	1.2	2.5	1.4	4.0	1.1	3.2	-
6.1 Germ cell and trophoblastic neoplasms of gonads	-	1.0	1.7	0.8	2.4	0.8	3.8	-	3.0	-
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.

<sup>a</sup> 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).

<sup>b</sup> 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<sup>a</sup>, by Age Group and Sex  
 By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
 Black, 2010-2014

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	-	-	-	-	-	-	-	-	-	1.4
7.1 Melanoma	-	-	-	-	-	-	-	-	-	1.2
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	-	-
8. CARCINOMAS (excluding skin)	2.1	4.2	3.2	9.4	9.0	33.8	18.5	72.0	38.8	129.7
8.1 Thyroid carcinoma	-	1.9	-	2.7	1.3	7.1	1.6	11.5	3.0	18.2
8.2 Other carcinoma of head and neck	-	-	-	-	1.1	-	1.4	1.3	3.3	2.5
8.2.1 Nasopharyngeal carcinoma	-	-	-	-	-	-	-	-	-	-
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	-	-	-	-	0.9	1.0	2.0	1.5
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	-	-	-	-
8.3 Carcinoma of trachea, bronchus, and lung	-	-	-	-	-	-	1.9	1.0	2.5	2.1
8.4 Carcinoma of breast	-	-	-	1.7	-	12.2	-	32.8	-	65.9
8.5 Carcinoma of genitourinary tract	-	-	0.8	2.4	1.8	8.8	3.8	15.9	11.8	23.2
8.5.1 Carcinoma of kidney	-	-	-	-	1.6	1.3	3.2	1.9	8.0	3.7
8.5.2 Carcinoma of bladder	-	-	-	-	-	-	-	-	1.4	-
8.5.3 Carcinoma of gonads	-	-	-	-	-	0.9	-	1.6	-	2.1
8.5.4 Carcinoma of cervix and uterus	-	-	-	1.3	-	6.0	-	11.4	-	15.1
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	-	0.8	2.3	1.8
8.6 Carcinoma of gastrointestinal tract	-	0.8	1.4	1.6	3.6	3.5	8.7	8.6	17.2	16.0
8.6.1 Carcinoma of colon and rectum	-	-	1.0	0.8	2.4	2.5	5.8	5.7	11.2	11.0
8.6.2 Carcinoma of stomach	-	-	-	-	-	-	-	0.8	1.6	1.6
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	-	-	-	-	0.9	-	1.5	-
8.6.4 Carcinoma of pancreas	-	-	-	-	-	-	-	0.8	1.0	1.5
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	-	-	-	1.0	1.9	1.4
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	0.9	0.8	-	1.8
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	-	0.8	-	1.7
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	-	0.7	-	-	-	0.9	1.3	2.5	3.0	3.8
9.1 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.1.1 Wilms tumor	-	-	-	-	-	-	-	-	-	-
9.1.2 Neuroblastoma	-	-	-	-	-	-	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.2 Other specified neoplasms, NOS	-	0.7	-	-	-	-	1.2	2.5	3.0	3.7
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	-	-	-
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	-	-	-	-	0.9	0.8	2.3	1.3
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	-	-	-	-	-	-	0.9	-	1.7
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	-	-	-	-	-	0.9	-	1.5

Rates are per 100,000.

<sup>a</sup> 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).

<sup>b</sup> 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).

<sup>c</sup> 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<sup>a</sup>, by Year and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
All Races, Ages 15-19

Both Sexes	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	15,352	20.8	0.6*	4,515	22.8	0.6*
1. Leukemias	1,813	2.5	0.7*	528	2.7	0.7*
2. Lymphomas	3,778	5.1	0.1	1,031	5.2	0.1
3. CNS, intracranial, intraspinal	1,504	2.0	0.6*	438	2.2	0.6*
4. Osseous & chondromatous neoplasms	1,182	1.6	0.5	336	1.7	0.5
5. Soft tissue sarcomas	1,097	1.5	0.1	300	1.5	0.1
6. Germ cell and trophoblastic neoplasms	1,846	2.5	0.8*	540	2.7	0.8*
7. Melanoma and skin carcinomas	1,117	1.5	0.6	304	1.5	0.6
8. Carcinomas (excluding skin)	2,710	3.7	2.0*	954	4.8	6.3*
9. Miscellaneous specified neoplasms, NOS	248	0.3	0.7	79	0.4	0.7
10. Unspecified malignant neoplasms	57	0.1	-	-	-	-

  

Males	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	8,046	21.3	0.7*	2,350	23.1	0.7*
1. Leukemias	1,078	2.9	0.4	296	2.9	0.4
2. Lymphomas	2,037	5.4	0.3	579	5.7	0.3
3. CNS, intracranial, intraspinal	860	2.3	0.4	239	2.3	0.4
4. Osseous & chondromatous neoplasms	776	2.1	0.7*	224	2.2	0.7*
5. Soft tissue sarcomas	581	1.5	0.2	155	1.5	0.2
6. Germ cell and trophoblastic neoplasms	1,361	3.6	1.1*	421	4.1	1.1*
7. Melanoma and skin carcinomas	447	1.2	0.9	128	1.3	0.9
8. Carcinomas (excluding skin)	768	2.0	1.5*	267	2.6	1.5*
9. Miscellaneous specified neoplasms, NOS	113	0.3	-	39	0.4	-
10. Unspecified malignant neoplasms	25	0.1	-	-	-	-

  

Females	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	7,306	20.2	0.6*	2,165	22.4	0.6*
1. Leukemias	735	2.0	1.2*	232	2.4	1.2*
2. Lymphomas	1,741	4.8	-0.1	452	4.7	-0.1
3. CNS, intracranial, intraspinal	644	1.8	0.8*	199	2.1	0.8*
4. Osseous & chondromatous neoplasms	406	1.1	0.2	112	1.2	0.2
5. Soft tissue sarcomas	516	1.4	0.2	145	1.5	0.2
6. Germ cell and trophoblastic neoplasms	485	1.3	-0.3	119	1.2	-0.3
7. Melanoma and skin carcinomas	670	1.9	0.4	176	1.8	0.4
8. Carcinomas (excluding skin)	1,942	5.4	2.2*	687	7.1	7.9*
9. Miscellaneous specified neoplasms, NOS	135	0.4	-	40	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).

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

<sup>b</sup> 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).

<sup>c</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2014.

- 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<sup>a</sup>, by Year and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
All Races, Ages 20-24

Both Sexes	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	26,170	34.5	0.7*	7,655	38.5	0.7*
1. Leukemias	1,683	2.2	0.7*	488	2.5	0.7*
2. Lymphomas	5,434	7.2	0.7*	1,504	7.6	-0.1
3. CNS, intracranial, intraspinal	1,723	2.3	0.6*	489	2.5	0.6*
4. Osseous & chondromatous neoplasms	695	0.9	1.1*	215	1.1	1.1*
5. Soft tissue sarcomas	1,585	2.1	0.8	380	1.9	-1.1*
6. Germ cell and trophoblastic neoplasms	4,077	5.4	0.8*	1,210	6.1	0.8*
7. Melanoma and skin carcinomas	3,266	4.3	0.6	944	4.7	-2.4
8. Carcinomas (excluding skin)	7,257	9.6	0.5	2,284	11.5	1.6*
9. Miscellaneous specified neoplasms, NOS	285	0.4	3.3*	102	0.5	10.0
10. Unspecified malignant neoplasms	165	0.2	0.1	39	0.2	0.1

  

Males	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	12,850	33.4	0.5*	3,676	36.0	0.5*
1. Leukemias	963	2.5	0.5	266	2.6	0.5
2. Lymphomas	2,918	7.6	0.3	815	8.0	0.3
3. CNS, intracranial, intraspinal	963	2.5	0.1	246	2.4	0.1
4. Osseous & chondromatous neoplasms	410	1.1	0.9*	126	1.2	0.9*
5. Soft tissue sarcomas	948	2.5	0.9	224	2.2	-1.6*
6. Germ cell and trophoblastic neoplasms	3,641	9.5	0.9	1,082	10.6	-0.4
7. Melanoma and skin carcinomas	1,112	2.9	0.1	290	2.8	0.1
8. Carcinomas (excluding skin)	1,720	4.5	1.1*	568	5.6	4.5*
9. Miscellaneous specified neoplasms, NOS	113	0.3	-	42	0.4	-
10. Unspecified malignant neoplasms	62	0.2	-	17	0.2	-

  

Females	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	13,320	35.7	0.7*	3,979	41.0	1.1*
1. Leukemias	720	1.9	0.2	222	2.3	0.0
2. Lymphomas	2,516	6.7	1.0*	689	7.1	-0.2
3. CNS, intracranial, intraspinal	760	2.0	1.3*	243	2.5	1.3*
4. Osseous & chondromatous neoplasms	285	0.8	1.2*	89	0.9	1.2*
5. Soft tissue sarcomas	637	1.7	0.1	156	1.6	-2.5
6. Germ cell and trophoblastic neoplasms	436	1.2	0.5	128	1.3	0.5
7. Melanoma and skin carcinomas	2,154	5.8	1.4*	654	6.7	1.4*
8. Carcinomas (excluding skin)	5,537	14.8	0.6*	1,716	17.7	1.5*
9. Miscellaneous specified neoplasms, NOS	172	0.5	2.0*	60	0.6	2.0*
10. Unspecified malignant neoplasms	103	0.3	-	22	0.2	-

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

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

<sup>b</sup> 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).

<sup>c</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2014.

- 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<sup>a</sup>, by Year and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
All Races, Ages 25-29

Both Sexes	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	44,474	56.1	0.7*	12,645	62.4	1.0*
1. Leukemias	1,911	2.4	0.8*	561	2.8	0.8*
2. Lymphomas	6,571	8.3	0.1	1,711	8.4	-1.7
3. CNS, intracranial, intraspinal	2,314	2.9	0.9*	652	3.2	0.9*
4. Osseous & chondromatous neoplasms	549	0.7	1.2*	171	0.8	1.2*
5. Soft tissue sarcomas	3,208	4.0	1.4	606	3.0	-0.4
6. Germ cell and trophoblastic neoplasms	5,697	7.2	1.4*	1,715	8.5	1.9*
7. Melanoma and skin carcinomas	6,068	7.6	0.6	1,755	8.7	-1.9
8. Carcinomas (excluding skin)	17,514	22.1	0.6*	5,289	26.1	1.5*
9. Miscellaneous specified neoplasms, NOS	424	0.5	1.7*	135	0.7	1.7*
10. Unspecified malignant neoplasms	218	0.3	-	50	0.2	-

  

Males	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	20,030	50.2	0.7*	5,547	54.2	-0.1
1. Leukemias	1,105	2.8	0.1	313	3.1	1.4*
2. Lymphomas	3,743	9.4	0.1	946	9.2	-1.0
3. CNS, intracranial, intraspinal	1,268	3.2	1.0*	375	3.7	1.0*
4. Osseous & chondromatous neoplasms	313	0.8	0.4	91	0.9	0.4
5. Soft tissue sarcomas	2,340	5.9	1.6	391	3.8	-0.5
6. Germ cell and trophoblastic neoplasms	5,267	13.2	1.6*	1,615	15.8	1.9*
7. Melanoma and skin carcinomas	2,149	5.4	0.1	557	5.4	0.1
8. Carcinomas (excluding skin)	3,594	9.0	0.4	1,180	11.5	1.9*
9. Miscellaneous specified neoplasms, NOS	157	0.4	-	52	0.5	-
10. Unspecified malignant neoplasms	94	0.2	-	27	0.3	-

  

Females	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	24,444	62.0	0.7*	7,098	70.6	1.0*
1. Leukemias	806	2.0	1.2*	248	2.5	1.2*
2. Lymphomas	2,828	7.2	0.6	765	7.6	-0.5
3. CNS, intracranial, intraspinal	1,046	2.7	0.9*	277	2.8	0.9*
4. Osseous & chondromatous neoplasms	236	0.6	1.7*	80	0.8	1.7*
5. Soft tissue sarcomas	868	2.2	0.5	215	2.1	-1.3*
6. Germ cell and trophoblastic neoplasms	430	1.1	-0.8	100	1.0	-0.8
7. Melanoma and skin carcinomas	3,919	9.9	1.0*	1,198	11.9	-2.0
8. Carcinomas (excluding skin)	13,920	35.3	0.5*	4,109	40.9	1.4*
9. Miscellaneous specified neoplasms, NOS	267	0.7	1.4*	83	0.8	1.4*
10. Unspecified malignant neoplasms	124	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).

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

<sup>b</sup> 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).

<sup>c</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2014.

- 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<sup>a</sup>, by Year and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
All Races, Ages 30-34

Both Sexes	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	68,312	86.2	0.9*	18,622	93.8	1.1*
1. Leukemias	2,280	2.9	0.6*	622	3.1	0.6*
2. Lymphomas	7,359	9.3	0.9*	1,835	9.2	-2.0
3. CNS, intracranial, intraspinal	2,687	3.4	0.4	692	3.5	0.4
4. Osseous & chondromatous neoplasms	502	0.6	0.4	127	0.6	0.4
5. Soft tissue sarcomas	5,291	6.7	1.2	757	3.8	-0.5
6. Germ cell and trophoblastic neoplasms	5,706	7.2	1.7*	1,653	8.3	0.6*
7. Melanoma and skin carcinomas	8,704	11.0	1.5*	2,403	12.1	0.1
8. Carcinomas (excluding skin)	34,668	43.7	0.7*	10,181	51.3	1.9*
9. Miscellaneous specified neoplasms, NOS	764	1.0	2.0*	254	1.3	2.0*
10. Unspecified malignant neoplasms	350	0.4	1.3*	97	0.5	1.3*

  

Males	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	28,150	71.0	0.9*	7,075	71.1	0.9*
1. Leukemias	1,314	3.3	0.6*	350	3.5	0.6*
2. Lymphomas	4,536	11.4	0.4	1,057	10.6	-2.2
3. CNS, intracranial, intraspinal	1,571	4.0	0.3	410	4.1	0.3
4. Osseous & chondromatous neoplasms	283	0.7	0.5	76	0.8	0.5
5. Soft tissue sarcomas	4,228	10.7	1.4	469	4.7	-1.5
6. Germ cell and trophoblastic neoplasms	5,339	13.5	1.8*	1,551	15.6	0.6*
7. Melanoma and skin carcinomas	3,450	8.7	0.0	879	8.8	0.0
8. Carcinomas (excluding skin)	7,006	17.7	0.9*	2,135	21.5	3.0*
9. Miscellaneous specified neoplasms, NOS	296	0.7	2.3*	111	1.1	2.3*
10. Unspecified malignant neoplasms	127	0.3	-	37	0.4	-

  

Females	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	40,162	101.4	0.8*	11,547	116.6	1.4*
1. Leukemias	966	2.4	0.5	272	2.7	0.5
2. Lymphomas	2,823	7.1	0.9*	778	7.9	-1.5
3. CNS, intracranial, intraspinal	1,116	2.8	0.4	282	2.8	0.4
4. Osseous & chondromatous neoplasms	219	0.6	-	51	0.5	-
5. Soft tissue sarcomas	1,063	2.7	0.3	288	2.9	0.3
6. Germ cell and trophoblastic neoplasms	367	0.9	0.1	102	1.0	0.1
7. Melanoma and skin carcinomas	5,254	13.3	2.1*	1,524	15.4	1.0*
8. Carcinomas (excluding skin)	27,662	69.8	0.7*	8,046	81.3	1.7*
9. Miscellaneous specified neoplasms, NOS	468	1.2	1.8*	143	1.4	1.8*
10. Unspecified malignant neoplasms	223	0.6	-	60	0.6	-

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

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

<sup>b</sup> 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).

<sup>c</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2014.

- 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<sup>a</sup>, by Year and Sex  
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults<sup>b</sup>  
All Races, Ages 35-39

Both Sexes	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	100,203	133.7	0.8*	27,924	141.1	0.8*
1. Leukemias	2,855	3.8	0.6	834	4.2	2.9*
2. Lymphomas	8,327	11.1	1.3*	2,136	10.8	-1.3*
3. CNS, intracranial, intraspinal	2,961	3.9	-0.2	747	3.8	-0.2
4. Osseous & chondromatous neoplasms	506	0.7	1.4*	160	0.8	1.4*
5. Soft tissue sarcomas	6,190	8.3	0.8	948	4.8	-1.6*
6. Germ cell and trophoblastic neoplasms	4,449	5.9	1.6*	1,271	6.4	0.3
7. Melanoma and skin carcinomas	10,891	14.5	1.5*	3,137	15.8	0.4*
8. Carcinomas (excluding skin)	62,165	82.9	0.5*	18,140	91.6	1.3*
9. Miscellaneous specified neoplasms, NOS	1,344	1.8	1.4*	432	2.2	1.4*
10. Unspecified malignant neoplasms	515	0.7	-0.2	119	0.6	-0.2

  

Males	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	37,383	100.1	0.5	9,521	96.4	0.0
1. Leukemias	1,648	4.4	0.2	469	4.7	0.2
2. Lymphomas	5,380	14.4	1.4*	1,263	12.8	-1.5*
3. CNS, intracranial, intraspinal	1,738	4.7	-0.1	447	4.5	-0.1
4. Osseous & chondromatous neoplasms	287	0.8	0.6	87	0.9	0.6
5. Soft tissue sarcomas	4,829	12.9	2.0	592	6.0	-2.2*
6. Germ cell and trophoblastic neoplasms	4,218	11.3	1.7*	1,203	12.2	0.3
7. Melanoma and skin carcinomas	4,712	12.6	0.6	1,235	12.5	-0.6*
8. Carcinomas (excluding skin)	13,822	37.0	0.3	4,012	40.6	1.2*
9. Miscellaneous specified neoplasms, NOS	543	1.5	1.1*	171	1.7	1.1*
10. Unspecified malignant neoplasms	206	0.6	-0.7	42	0.4	-0.7

  

Females	1975-2014			2005-2014		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	62,820	167.0	0.8*	18,403	185.5	1.1*
1. Leukemias	1,207	3.2	1.1	365	3.7	2.5*
2. Lymphomas	2,947	7.8	1.3*	873	8.8	1.3*
3. CNS, intracranial, intraspinal	1,223	3.3	-0.3	300	3.0	-0.3
4. Osseous & chondromatous neoplasms	219	0.6	-	73	0.7	-
5. Soft tissue sarcomas	1,361	3.6	-0.5	356	3.6	-0.5
6. Germ cell and trophoblastic neoplasms	231	0.6	0.3	68	0.7	0.3
7. Melanoma and skin carcinomas	6,179	16.4	1.8	1,902	19.2	0.5
8. Carcinomas (excluding skin)	48,343	128.5	0.6*	14,128	142.4	1.3*
9. Miscellaneous specified neoplasms, NOS	801	2.1	1.6*	261	2.6	1.6*
10. Unspecified malignant neoplasms	309	0.8	-0.2	77	0.8	-0.2

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

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

<sup>b</sup> 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).

<sup>c</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2014.

- 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<sup>a</sup> and U.S. Mortality<sup>b</sup> Rate Comparison by Race/Ethnicity, 2010-2014  
Ages 15-19

Males	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	23.4	25.4	15.5	19.3	23.2	3.4	3.5	3.2	3.4	3.9
Leukemia	3.8	4.2	2.2	3.5	5.2	0.9	1.0	0.7	1.1	1.4
Lymphoma	5.5	5.7	4.9	5.0	4.2	0.2	0.3	0.2	-	0.2
Hodgkin Lymphoma	3.1	3.3	2.5	2.2	2.3	0.0	0.1	-	-	-
Non-Hodgkin Lymphoma	2.5	2.4	2.4	2.9	1.9	0.2	0.2	-	-	0.2
Brain and Other Nervous System	2.5	2.7	2.1	1.8	1.7	0.6	0.6	0.6	0.6	0.5
Bones and Joints	1.7	1.8	1.4	1.4	1.7	0.6	0.6	0.5	-	0.7
Soft Tissue including Heart	1.1	1.2	1.0	-	1.1	0.4	0.3	0.5	-	0.3
Skin excluding Basal and Squamous	1.0	1.2	-	-	-	-	-	-	-	-
Respiratory System	0.5	0.4	-	-	0.7	0.1	0.0	-	-	-
Male Genital System	4.0	5.0	-	1.8	5.9	0.1	0.1	-	-	0.2
Digestive System	0.8	0.8	-	-	0.5	0.1	0.1	0.2	-	-

  

Females	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	21.6	23.4	14.6	17.2	19.1	2.4	2.4	2.4	2.3	2.4
Leukemia	2.6	2.8	1.5	2.8	3.3	0.6	0.6	0.5	0.6	0.9
Lymphoma	4.3	4.7	2.9	3.4	3.3	0.1	0.1	0.2	-	-
Hodgkin Lymphoma	3.0	3.4	1.9	1.7	2.2	0.0	-	-	-	-
Non-Hodgkin Lymphoma	1.2	1.3	0.9	1.7	1.1	0.1	0.1	-	-	-
Brain and Other Nervous System	2.1	2.2	1.6	1.4	1.4	0.4	0.4	0.6	-	0.4
Bones and Joints	1.0	1.1	1.1	-	0.7	0.4	0.4	0.3	-	0.4
Soft Tissue including Heart	1.1	1.1	0.8	-	1.2	0.3	0.3	0.3	-	0.2
Skin excluding Basal and Squamous	1.3	1.6	-	-	0.4	0.0	0.0	-	-	-
Respiratory System	0.2	0.3	-	-	-	0.0	-	-	-	-
Breast	0.2	-	-	-	-	-	-	-	-	-
Female Genital System	1.9	1.9	1.9	1.5	2.2	0.1	0.1	-	-	-
Digestive System	0.9	0.9	0.9	-	0.7	0.1	0.1	-	-	-

Rates are per 100,000.

<sup>a</sup> 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).<sup>b</sup> US Mortality Files, National Center for Health Statistics, CDC.<sup>c</sup> Asian/Pacific Islander<sup>d</sup> 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<sup>a</sup> and U.S. Mortality<sup>b</sup> Rate Comparison by Race/Ethnicity, 2010-2014  
Ages 20-24

Males	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	35.1	38.7	21.6	22.0	33.5	5.0	5.1	4.8	4.4	5.7
Leukemia	3.1	3.4	1.8	2.8	4.4	1.1	1.1	0.9	1.2	1.8
Lymphoma	7.1	7.3	6.7	5.2	5.9	0.5	0.5	0.6	-	0.5
Hodgkin Lymphoma	4.0	4.3	3.1	2.9	3.1	0.2	0.2	-	-	0.2
Non-Hodgkin Lymphoma	3.1	3.0	3.6	2.3	2.8	0.3	0.3	0.4	-	0.3
Brain and Other Nervous System	2.4	2.7	1.3	1.6	1.4	0.6	0.6	0.5	-	0.4
Bones and Joints	1.0	1.1	0.7	-	1.0	0.6	0.7	0.5	-	0.7
Soft Tissue including Heart	1.4	1.3	1.7	1.2	1.3	0.4	0.4	0.5	-	0.4
Skin excluding Basal and Squamous	2.2	2.6	-	-	0.6	0.1	0.1	-	-	-
Respiratory System	0.7	0.7	-	1.2	0.8	0.1	0.1	-	-	0.2
Male Genital System	10.6	12.9	2.0	4.0	13.6	0.4	0.4	-	-	0.7
Digestive System	2.0	2.1	1.7	1.2	1.8	0.5	0.4	0.7	0.7	0.4

  

Females	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	37.1	41.1	22.4	25.7	29.6	3.5	3.5	3.7	2.5	3.6
Leukemia	2.3	2.4	2.1	-	2.7	0.8	0.8	0.7	0.5	1.2
Lymphoma	6.4	6.7	5.2	4.8	4.6	0.3	0.3	0.4	-	0.3
Hodgkin Lymphoma	4.3	4.6	3.5	2.5	3.0	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	2.1	2.1	1.7	2.3	1.6	0.2	0.2	0.3	-	0.2
Brain and Other Nervous System	2.0	2.2	1.2	1.8	1.3	0.5	0.5	0.4	-	0.3
Bones and Joints	0.7	0.7	-	-	0.7	0.3	0.3	0.2	-	0.2
Soft Tissue including Heart	1.2	1.2	1.3	-	1.1	0.3	0.3	0.5	-	0.3
Skin excluding Basal and Squamous	5.3	6.6	0.7	-	1.0	0.1	0.1	-	-	-
Respiratory System	0.5	0.6	-	-	0.5	0.1	0.1	-	-	-
Breast	1.5	1.5	1.8	1.0	1.3	0.1	0.1	-	-	-
Female Genital System	3.7	3.8	3.6	3.1	4.3	0.3	0.3	0.3	-	0.3
Digestive System	1.9	1.9	1.7	1.9	1.4	0.4	0.4	0.4	-	0.4

<sup>a</sup> Rates are per 100,000.

<sup>a</sup> 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).

<sup>b</sup> US Mortality Files, National Center for Health Statistics, CDC.

<sup>c</sup> Asian/Pacific Islander

<sup>d</sup> 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<sup>a</sup> and U.S. Mortality<sup>b</sup> Rate Comparison by Race/Ethnicity, 2010-2014  
Ages 25-29

Males	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	49.3	54.2	31.6	30.6	39.2	6.8	7.0	7.0	5.3	6.1
Leukemia	3.3	3.4	2.2	2.8	3.5	1.1	1.1	1.1	0.9	1.3
Lymphoma	7.7	7.8	8.8	5.8	4.8	0.8	0.7	1.2	0.5	0.6
Hodgkin Lymphoma	3.9	4.1	4.4	2.7	2.0	0.3	0.3	0.3	-	0.2
Non-Hodgkin Lymphoma	3.8	3.7	4.4	3.1	2.8	0.5	0.5	0.9	-	0.4
Brain and Other Nervous System	3.2	3.6	1.5	2.3	2.1	1.0	1.0	0.6	0.6	0.5
Bones and Joints	0.7	0.8	-	-	0.7	0.4	0.4	0.4	-	0.2
Soft Tissue including Heart	1.6	1.6	1.6	-	1.6	0.5	0.5	0.7	-	0.5
Skin excluding Basal and Squamous	4.5	5.5	-	-	0.8	0.4	0.5	-	-	0.2
Respiratory System	1.1	1.1	0.8	1.2	1.0	0.3	0.3	0.3	-	0.3
Male Genital System	15.1	18.2	2.4	6.6	15.9	0.5	0.6	-	-	0.8
Digestive System	4.2	4.2	3.9	3.8	3.4	1.1	1.1	1.4	1.5	1.1

  

Females	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	67.5	72.9	50.3	45.6	56.2	5.9	5.9	7.2	4.0	5.6
Leukemia	2.5	2.7	2.3	1.7	3.0	0.8	0.8	0.6	0.4	1.0
Lymphoma	6.8	7.1	6.7	4.9	5.0	0.5	0.4	0.8	-	0.5
Hodgkin Lymphoma	4.0	4.4	3.3	2.6	2.7	0.2	0.2	0.3	-	0.2
Non-Hodgkin Lymphoma	2.8	2.7	3.4	2.3	2.3	0.3	0.3	0.5	-	0.4
Brain and Other Nervous System	2.6	3.0	1.5	1.1	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	1.1	1.3	0.3	0.3	0.5	-	0.3
Skin excluding Basal and Squamous	9.0	11.1	0.8	-	2.0	0.2	0.3	-	-	-
Respiratory System	0.8	0.7	0.9	1.0	0.5	0.2	0.2	-	-	0.2
Breast	9.2	8.8	12.5	7.9	7.5	0.7	0.6	1.3	0.4	0.6
Female Genital System	9.7	10.0	9.2	7.0	10.9	1.0	1.0	1.1	0.7	1.1
Digestive System	4.0	4.0	3.7	3.0	4.2	0.8	0.8	1.1	0.8	0.9

<sup>a</sup> Rates are per 100,000.

<sup>a</sup> 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).

<sup>b</sup> US Mortality Files, National Center for Health Statistics, CDC.

<sup>c</sup> Asian/Pacific Islander

<sup>d</sup> 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<sup>a</sup> and U.S. Mortality<sup>b</sup> Rate Comparison by Race/Ethnicity, 2010-2014  
Ages 30-34

Males	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	67.1	71.7	51.0	43.5	50.4	10.0	10.1	11.5	7.8	8.5
Leukemia	3.9	4.1	2.6	3.4	4.2	1.3	1.3	1.4	1.1	1.5
Lymphoma	9.2	9.1	11.3	6.0	6.5	1.0	0.9	1.7	0.5	0.9
Hodgkin Lymphoma	3.7	3.9	4.2	1.8	2.3	0.3	0.3	0.4	-	0.2
Non-Hodgkin Lymphoma	5.5	5.2	7.1	4.3	4.2	0.7	0.6	1.2	-	0.7
Brain and Other Nervous System	4.0	4.5	2.4	2.6	3.0	1.4	1.6	0.6	0.6	0.8
Bones and Joints	0.7	0.8	-	-	0.8	0.2	0.2	0.2	-	0.2
Soft Tissue including Heart	2.0	2.0	2.2	1.9	1.9	0.6	0.5	0.7	0.6	0.5
Skin excluding Basal and Squamous	7.6	9.0	1.7	1.0	1.6	0.6	0.8	-	-	0.2
Respiratory System	1.8	1.7	2.9	1.3	1.6	0.6	0.5	1.1	0.5	0.4
Male Genital System	14.4	17.0	4.5	5.8	12.6	0.4	0.5	0.2	-	0.6
Digestive System	8.6	8.5	8.9	8.5	7.6	2.5	2.3	3.4	2.7	2.2

  

Females	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	115.2	122.1	93.9	85.9	91.9	11.5	11.2	15.6	8.0	10.1
Leukemia	3.1	3.1	2.8	2.8	3.2	0.9	0.9	0.9	0.8	0.9
Lymphoma	7.1	7.2	8.2	4.8	5.4	0.6	0.6	0.8	-	0.7
Hodgkin Lymphoma	3.2	3.5	3.3	1.8	2.1	0.2	0.2	0.3	-	0.2
Non-Hodgkin Lymphoma	3.9	3.8	4.9	2.9	3.3	0.4	0.4	0.5	-	0.5
Brain and Other Nervous System	2.8	3.2	1.8	1.5	2.1	0.8	0.9	0.5	0.5	0.5
Bones and Joints	0.4	0.5	-	-	0.5	0.2	0.2	-	-	0.2
Soft Tissue including Heart	1.6	1.6	2.1	1.0	1.6	0.4	0.4	0.5	-	0.4
Skin excluding Basal and Squamous	12.9	16.3	1.3	1.0	3.0	0.4	0.6	-	-	-
Respiratory System	1.4	1.5	1.3	1.2	1.1	0.5	0.5	0.5	0.5	0.4
Breast	27.3	26.5	33.3	24.8	20.7	2.6	2.3	5.2	1.2	2.0
Female Genital System	18.9	19.8	16.8	14.0	20.7	2.1	2.1	2.6	1.3	2.1
Digestive System	8.4	8.4	9.4	6.7	8.0	1.9	1.8	2.8	1.9	2.1

Rates are per 100,000.

<sup>a</sup> 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).<sup>b</sup> US Mortality Files, National Center for Health Statistics, CDC.<sup>c</sup> Asian/Pacific Islander<sup>d</sup> 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<sup>a</sup> and U.S. Mortality<sup>b</sup> Rate Comparison by Race/Ethnicity, 2010-2014  
Ages 35-39

Males	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	90.1	95.2	76.5	58.7	65.3	16.8	16.9	19.5	12.7	12.2
Leukemia	5.0	5.2	4.7	3.4	5.6	1.5	1.5	1.8	1.2	1.7
Lymphoma	11.0	11.0	14.5	6.2	9.1	1.3	1.2	2.1	0.6	1.1
Hodgkin Lymphoma	3.0	3.1	4.2	1.0	2.2	0.3	0.3	0.4	-	0.3
Non-Hodgkin Lymphoma	8.0	7.9	10.3	5.1	7.0	1.0	0.9	1.7	0.6	0.8
Brain and Other Nervous System	4.3	4.8	2.5	3.5	3.0	2.0	2.2	1.3	1.2	1.2
Bones and Joints	0.7	0.7	-	-	0.6	0.3	0.3	0.3	-	-
Soft Tissue including Heart	2.3	2.4	1.9	1.8	2.3	0.6	0.6	0.9	-	0.4
Skin excluding Basal and Squamous	10.7	12.9	1.5	1.7	1.8	1.0	1.3	-	-	0.3
Respiratory System	3.6	3.6	3.7	3.2	2.6	1.6	1.6	1.9	1.4	0.9
Male Genital System	12.6	14.7	5.6	4.3	9.5	0.5	0.5	0.3	-	0.5
Digestive System	16.3	16.0	18.2	14.9	13.6	5.4	5.2	6.9	5.3	4.3
Females	Incidence					Mortality				
	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>	All Races	White	Black	API <sup>c</sup>	Hispanic <sup>d</sup>
All Malignant Cancers	181.0	188.0	159.1	146.5	145.7	22.1	21.4	30.3	15.7	17.3
Leukemia	3.9	4.0	4.0	2.9	4.0	1.1	1.1	1.3	0.9	1.4
Lymphoma	8.4	8.4	10.2	5.5	6.5	0.7	0.7	1.3	0.4	0.6
Hodgkin Lymphoma	2.6	2.7	3.3	1.3	1.4	0.2	0.2	0.3	-	-
Non-Hodgkin Lymphoma	5.8	5.7	6.9	4.2	5.2	0.5	0.5	1.0	-	0.5
Brain and Other Nervous System	2.9	3.2	1.7	2.4	2.3	1.3	1.4	0.8	0.8	0.7
Bones and Joints	0.6	0.6	-	-	0.5	0.1	0.1	0.2	-	-
Soft Tissue including Heart	1.9	1.9	2.5	1.3	2.3	0.5	0.5	0.7	-	0.5
Skin excluding Basal and Squamous	14.9	18.7	2.2	1.7	4.3	0.7	0.9	-	-	0.2
Respiratory System	3.1	3.3	2.7	2.7	2.1	1.3	1.3	1.4	1.5	0.6
Breast	60.8	60.2	67.2	56.9	47.4	6.5	5.9	11.4	4.2	4.8
Female Genital System	28.0	29.2	22.6	23.5	28.3	4.1	4.0	5.3	2.5	3.3
Digestive System	14.5	14.2	16.7	12.6	13.1	3.8	3.6	4.9	3.3	3.6

<sup>a</sup> Rates are per 100,000.

<sup>a</sup> 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).

<sup>b</sup> US Mortality Files, National Center for Health Statistics, CDC.

<sup>c</sup> Asian/Pacific Islander

<sup>d</sup> 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<sup>a</sup> and U.S. Mortality<sup>b</sup> Rates and Trends for the Top 5 Cancer Sites<sup>c</sup> by Age  
All Races, Both Sexes, 1975-2014

	Incidence				Mortality			
	1975-2014		2005-2014		1975-2014		2005-2014	
	Rate	AAPC <sup>d</sup>	Rate	AAPC <sup>d</sup>	Rate	AAPC <sup>d</sup>	Rate	AAPC <sup>d</sup>
<u>Ages 15-19</u>								
All Malignant Cancers	20.8	0.6*	22.8	0.6*	4.0	-1.8*	3.0	-1.1
Hodgkin Lymphoma	3.5	-0.5*	3.2	-0.5*	0.2	-5.0*	0.1	-5.0*
Brain and Other Nervous System	2.1	0.5	2.2	0.5	0.6	-0.4	0.5	2.6
Thyroid	1.9	2.8*	2.8	8.5*	0.0	-	-	-
Non-Hodgkin Lymphoma	1.6	1.5*	2.0	1.5*	0.3	-3.7*	0.2	-6.3*
Testis	1.6	1.3*	1.9	1.3*	0.1	-5.2*	0.0	-2.6*
<u>Ages 20-24</u>								
All Malignant Cancers	34.5	0.7*	38.5	0.7*	5.5	-1.4*	4.4	-1.2*
Hodgkin Lymphoma	4.9	0.2	4.8	-0.6*	0.4	-4.7*	0.2	-8.1*
Testis	4.5	1.1	5.2	-0.1	0.3	-3.6*	0.2	1.0
Thyroid	4.4	2.0*	6.0	2.0*	0.0	-	0.0	-
Melanoma of the Skin	4.2	0.6	4.6	-2.6	0.2	-4.3*	0.1	-8.5*
Brain and Other Nervous System	2.3	0.6*	2.5	0.6*	0.6	-0.8*	0.5	-0.8*
<u>Ages 25-29</u>								
All Malignant Cancers	56.1	0.7*	62.4	1.0*	8.2	-1.5*	6.6	-1.5*
Melanoma of the Skin	7.4	0.6	8.5	-1.8	0.5	-2.9*	0.3	-2.9*
Thyroid	7.2	2.1*	10.8	3.8*	0.0	-	0.0	-
Testis	6.5	1.2*	7.8	1.2*	0.3	-2.8*	0.2	0.8
Hodgkin Lymphoma	4.8	-0.1	4.7	-0.1	0.5	-4.2*	0.2	-4.2*
Breast	4.2	0.4	4.5	2.6*	0.5	-2.2*	0.3	-2.2*
<u>Ages 30-34</u>								
All Malignant Cancers	86.2	0.9*	93.8	1.1*	14.3	-1.4*	11.0	-1.3*
Breast	13.4	0.1	13.7	0.1	2.1	-2.0*	1.4	-2.6*
Melanoma of the Skin	10.6	1.5*	11.8	0.1	0.9	-2.1*	0.6	-1.8*
Thyroid	9.3	2.6*	15.2	3.3*	0.0	-1.3*	0.0	-1.3*
Testis	6.6	1.9*	7.7	0.7*	0.3	-2.9*	0.2	-1.2*
Cervix Uteri	5.7	-1.3*	4.6	-1.3*	0.9	-1.1*	0.6	-0.3
<u>Ages 35-39</u>								
All Malignant Cancers	133.7	0.8*	141.1	0.8*	26.6	-1.5*	20.1	-1.0*
Breast	31.7	0.4*	31.9	0.4*	5.0	-1.5*	3.5	-1.4
Melanoma of the Skin	14.0	1.4*	15.2	0.3	1.3	-2.0*	0.8	-0.3
Thyroid	11.4	3.7*	19.1	3.8*	0.1	-0.7	0.1	-0.7
Non-Hodgkin Lymphoma	7.9	1.2	7.7	-3.1	1.5	-1.7*	0.8	-2.9*
Colon and Rectum	7.3	1.1*	9.0	2.5*	2.1	-0.5*	2.1	1.1*

Rates are per 100,000.

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

<sup>b</sup> US Mortality Files, National Center for Health Statistics, CDC.

<sup>c</sup> Top 5 cancer sites selected based on 1975-2014 SEER 9 Incidence rates for the age group.

<sup>d</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2014.

- 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<sup>a</sup> and U.S. Mortality<sup>b</sup> Rates and Trends for the Top 5 Cancer Sites<sup>c</sup> by Age  
All Races, Males, 1975-2014

	Incidence				Mortality			
	1975-2014		2005-2014		1975-2014		2005-2014	
	Rate	AAPC <sup>d</sup>	Rate	AAPC <sup>d</sup>	Rate	AAPC <sup>d</sup>	Rate	AAPC <sup>d</sup>
<u>Ages 15-19</u>								
All Malignant Cancers	21.3	0.7*	23.1	0.7*	4.8	-1.9*	3.5	-1.2
Hodgkin Lymphoma	3.3	-0.4	3.3	-0.4	0.2	-5.1*	0.1	-5.1*
Testis	3.2	1.2*	3.7	1.2*	0.1	-5.2*	0.1	-2.6*
Brain and Other Nervous System	2.4	0.4	2.4	0.4	0.7	-0.9*	0.6	-0.9*
Non-Hodgkin Lymphoma	2.1	1.5*	2.4	1.5*	0.4	-3.2*	0.2	-3.2*
Bones and Joints	1.9	0.4	2.0	0.4	0.7	-1.3*	0.6	-0.1
<u>Ages 20-24</u>								
All Malignant Cancers	33.4	0.5*	36.0	0.5*	6.5	-1.5*	5.2	-1.1*
Testis	8.9	1.0	10.2	-0.2	0.5	-3.6*	0.3	1.2
Hodgkin Lymphoma	4.9	-0.4*	4.7	-0.4*	0.5	-4.4*	0.2	-4.4*
Melanoma of the Skin	2.8	0.1	2.7	0.1	0.2	-5.0*	0.1	-11.2*
Non-Hodgkin Lymphoma	2.7	1.5*	3.3	1.5*	0.6	-2.4*	0.4	-5.5*
Brain and Other Nervous System	2.6	0.1	2.5	0.1	0.7	-0.9*	0.6	-0.9*
<u>Ages 25-29</u>								
All Malignant Cancers	50.2	0.7*	54.2	-0.1	8.7	-1.5*	7.1	-0.7
Testis	12.9	1.2*	15.5	1.2*	0.6	-2.8*	0.5	0.8
Melanoma of the Skin	5.2	0.2	5.3	0.2	0.6	-2.8*	0.4	-1.0
Hodgkin Lymphoma	5.0	-0.2	4.9	-0.2	0.7	-4.5*	0.3	-4.5*
Non-Hodgkin Lymphoma	4.4	1.2	4.4	0.3	0.9	-2.0*	0.5	-5.4*
Kaposi sarcoma	3.7	-	1.4	-	-	-	-	-
<u>Ages 30-34</u>								
All Malignant Cancers	71.0	0.9*	71.1	0.9*	13.3	-1.4*	10.2	-1.0*
Testis	13.2	1.9*	15.3	0.7*	0.6	-2.8*	0.4	-0.8
Melanoma of the Skin	8.4	0.1	8.5	0.1	1.0	-2.3*	0.6	-2.2*
Kaposi sarcoma	8.0	-	2.0	-	-	-	-	-
Non-Hodgkin Lymphoma	7.1	0.9	6.0	-2.9	1.4	-1.4	0.7	-3.4*
Hodgkin Lymphoma	4.3	0.1	4.6	0.1	0.7	-4.6*	0.3	-4.9*
<u>Ages 35-39</u>								
All Malignant Cancers	100.1	0.5	96.4	0.0	23.1	-1.6*	17.1	-1.0*
Melanoma of the Skin	12.1	0.6	12.0	-0.6*	1.6	-2.2*	1.0	-0.1
Testis	11.1	1.8*	12.2	0.4	0.5	-2.7*	0.4	-1.2*
Non-Hodgkin Lymphoma	10.7	2.3	9.5	-0.8	2.0	-1.6*	1.0	-2.3
Kaposi sarcoma	9.6	-	2.5	-	-	-	-	-
Colon and Rectum	7.7	1.1*	9.7	2.4*	2.3	-0.5	2.4	2.2

Rates are per 100,000.

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

<sup>b</sup> US Mortality Files, National Center for Health Statistics, CDC.

<sup>c</sup> Top 5 cancer sites selected based on 1975-2014 rates for the age group.

<sup>d</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2014.

- 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<sup>a</sup> and U.S. Mortality<sup>b</sup> Rates and Trends for the Top 5 Cancer Sites<sup>c</sup> by Age  
All Races, Females, 1975-2014

	<u>Incidence</u>				<u>Mortality</u>			
	<u>1975-2014</u>		<u>2005-2014</u>		<u>1975-2014</u>		<u>2005-2014</u>	
	Rate	AAPC <sup>d</sup>	Rate	AAPC <sup>d</sup>	Rate	AAPC <sup>d</sup>	Rate	AAPC <sup>d</sup>
<u>Ages 15-19</u>								
All Malignant Cancers	20.2	0.6*	22.4	0.6*	3.3	-1.8*	2.5	-1.8*
Hodgkin Lymphoma	3.6	-0.6*	3.2	-0.6*	0.2	-4.5*	0.0	-4.5*
Thyroid	3.3	3.0*	4.8	8.8*	0.0	-	-	-
Brain and Other Nervous System	1.8	0.6	2.0	0.6	0.5	-0.3	0.4	3.3
Melanoma of the Skin	1.8	0.4	1.7	0.4	0.0	-3.0*	0.0	-3.0*
Ovary	1.5	-0.1	1.5	-0.1	0.1	-3.6*	0.1	-0.3
<u>Ages 20-24</u>								
All Malignant Cancers	35.7	0.7*	41.0	1.1*	4.4	-1.2*	3.6	-1.2*
Thyroid	7.5	2.2*	10.3	2.2*	0.0	-	-	-
Melanoma of the Skin	5.6	1.4*	6.5	1.4*	0.2	-3.2*	0.1	-3.2*
Hodgkin Lymphoma	5.0	0.7	5.0	-0.7	0.3	-3.6*	0.2	-5.0*
Brain and Other Nervous System	2.0	1.3*	2.5	1.3*	0.5	-0.7*	0.5	-0.7*
Cervix Uteri	2.0	-3.2	1.2	-5.3*	0.2	-1.8*	0.1	-4.1*
<u>Ages 25-29</u>								
All Malignant Cancers	62.0	0.7*	70.6	1.0*	7.7	-1.4*	6.0	-1.4*
Thyroid	11.9	2.3*	18.2	4.1*	0.0	-	0.0	-
Melanoma of the Skin	9.7	1.0*	11.7	-2.0	0.4	-2.6*	0.3	-2.6*
Breast	8.4	0.5	9.0	3.6*	1.0	-2.2*	0.7	-2.2*
Cervix Uteri	6.8	-2.1	4.5	-3.0*	0.7	-1.4*	0.5	-1.4*
Hodgkin Lymphoma	4.6	0.1	4.6	0.1	0.4	-3.8*	0.2	-3.8*
<u>Ages 30-34</u>								
All Malignant Cancers	101.4	0.8*	116.6	1.4*	15.3	-1.5*	11.9	-1.8*
Breast	26.8	0.1	27.5	0.1	4.1	-2.0*	2.7	-2.6*
Thyroid	15.1	2.6*	24.8	2.4	0.0	-	0.0	-
Melanoma of the Skin	12.9	2.2*	15.0	1.0*	0.7	-2.5*	0.5	-2.5*
Cervix Uteri	11.5	-1.2*	9.3	-1.2*	1.7	-1.0*	1.3	-0.3
Hodgkin Lymphoma	3.7	0.1	3.8	-3.8*	0.4	-3.6*	0.2	-3.6*
<u>Ages 35-39</u>								
All Malignant Cancers	167.0	0.8*	185.5	1.1*	30.0	-1.4*	23.0	-1.3
Breast	63.0	0.4*	63.5	0.3*	9.9	-1.7*	6.9	-2.8*
Thyroid	18.0	4.0*	31.1	5.5*	0.1	-1.1	0.0	-1.1
Melanoma of the Skin	15.9	1.8	18.4	0.4	1.0	-2.4*	0.7	-2.4*
Cervix Uteri	14.1	-1.2*	12.4	-1.2*	2.9	-1.3*	2.3	-0.3
Corpus and Uterus, NOS	7.0	1.1*	8.8	2.8*	0.4	-0.6	0.5	1.7*

Rates are per 100,000.

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

<sup>b</sup> US Mortality Files, National Center for Health Statistics, CDC.

<sup>c</sup> Top 5 cancer sites selected based on 1975-2014 rates for the age group.

<sup>d</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2014.

- 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<sup>a</sup> 5-Year Relative Survival for the Top 5 Cancer Sites<sup>b</sup> by Age  
All Races, Both Sexes, 1975-2013

	5-year Relative Survival (Percent)					
	1975-2013	1975-1982	1983-1990	1991-1998	1999-2006	2007-2013
<u>Ages 15-19</u>						
All Malignant Cancers	78.5	69.0	76.3	79.3	81.7	85.4
Hodgkin Lymphoma	92.5	88.3	88.9	94.2	96.2	97.1
Brain and Other Nervous System	73.5	62.3	73.0	78.0	76.8	76.8
Thyroid	98.9	99.2	98.9	98.8	98.4	99.2
Non-Hodgkin Lymphoma	72.8	51.4	69.3	72.0	78.9	86.1
Testis	90.4	77.2	91.8	90.1	95.1	93.9
<u>Ages 20-24</u>						
All Malignant Cancers	81.3	74.7	78.5	81.1	85.0	87.1
Hodgkin Lymphoma	90.8	85.1	89.8	91.0	94.2	95.5
Testis	92.6	84.7	90.5	95.0	96.4	95.3
Thyroid	99.7	99.6	99.6	99.3	99.5	99.9
Melanoma of the Skin	93.0	85.8	90.6	94.5	96.6	97.2
Brain and Other Nervous System	67.8	59.1	61.2	71.5	68.7	80.8
<u>Ages 25-29</u>						
All Malignant Cancers	80.0	76.7	74.0	77.4	85.1	87.5
Melanoma of the Skin	93.4	88.1	91.6	94.1	96.4	95.7
Thyroid	99.7	99.7	99.3	99.9	99.7	99.3
Testis	95.1	88.1	95.1	96.1	97.6	96.8
Hodgkin Lymphoma	90.5	85.3	89.1	92.0	92.7	94.1
Breast	74.7	69.4	68.3	73.1	84.0	82.1
<u>Ages 30-34</u>						
All Malignant Cancers	76.4	73.5	68.4	71.9	83.3	86.7
Breast	77.6	70.0	72.9	77.5	83.9	86.1
Melanoma of the Skin	92.7	86.5	90.5	93.5	95.9	96.2
Thyroid	99.7	99.5	99.5	99.8	99.8	99.7
Testis	95.7	92.0	95.6	96.0	95.9	97.4
Cervix Uteri	84.7	84.3	83.1	85.1	86.9	84.4
<u>Ages 35-39</u>						
All Malignant Cancers	74.3	68.0	65.8	71.5	80.8	84.3
Breast	81.7	74.9	76.1	82.7	86.2	87.9
Melanoma of the Skin	92.5	87.5	90.0	92.5	94.9	95.9
Thyroid	99.5	99.0	99.2	99.4	99.4	99.9
Non-Hodgkin Lymphoma	64.5	65.9	51.6	52.6	73.7	85.2
Colon and Rectum	63.5	54.8	56.7	61.6	69.5	69.4

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

<sup>b</sup> Top 5 cancer sites selected based on 1975-2013 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<sup>a</sup> 5-Year Relative Survival for the Top 5 Cancer Sites<sup>b</sup> by Age  
All Races, Males, 1975-2013

	5-year Relative Survival (Percent)					
	1975-2013	1975-1982	1983-1990	1991-1998	1999-2006	2007-2013
<u>Ages 15-19</u>						
All Malignant Cancers	74.3	62.4	71.2	75.6	78.7	82.5
Hodgkin Lymphoma	91.6	86.8	87.4	93.2	97.1	95.5
Testis	90.4	77.2	91.8	90.1	95.1	93.9
Brain and Other Nervous System	70.7	58.3	67.6	76.2	75.0	76.1
Non-Hodgkin Lymphoma	70.7	45.2	70.8	70.4	74.5	86.4
Bones and Joints	58.5	42.0	53.0	64.3	65.9	66.0
<u>Ages 20-24</u>						
All Malignant Cancers	76.9	69.5	72.3	76.7	82.6	83.9
Testis	92.6	84.7	90.5	95.0	96.4	95.3
Hodgkin Lymphoma	89.0	83.5	86.1	90.0	94.3	94.1
Melanoma of the Skin	86.8	77.0	82.0	88.6	93.9	95.3
Non-Hodgkin Lymphoma	66.9	55.1	55.4	56.5	80.9	79.8
Brain and Other Nervous System	66.4	54.8	59.6	74.5	68.9	76.8
<u>Ages 25-29</u>						
All Malignant Cancers	73.9	71.3	65.2	69.9	81.4	84.5
Testis	95.1	88.1	95.1	96.1	97.6	96.8
Melanoma of the Skin	88.5	82.6	87.2	89.5	92.6	90.3
Hodgkin Lymphoma	88.4	84.1	85.5	89.5	91.6	93.3
Non-Hodgkin Lymphoma	59.4	57.3	46.4	47.3	73.5	81.0
Kaposi sarcoma	15.9	-	9.1	12.0	44.3	67.2
<u>Ages 30-34</u>						
All Malignant Cancers	68.3	68.6	56.5	60.9	79.6	83.7
Testis	95.7	92.0	95.6	96.0	95.9	97.4
Melanoma of the Skin	88.5	79.2	85.4	90.6	93.1	93.8
Kaposi sarcoma	18.7	34.8	8.4	19.6	54.4	70.5
Non-Hodgkin Lymphoma	55.6	69.8	41.2	39.6	72.3	81.6
Hodgkin Lymphoma	87.3	78.7	83.3	86.9	93.7	92.6
<u>Ages 35-39</u>						
All Malignant Cancers	64.3	59.6	51.9	59.1	74.6	79.4
Melanoma of the Skin	88.4	82.2	85.3	88.5	91.2	94.0
Testis	96.3	92.1	95.0	96.9	97.0	97.5
Non-Hodgkin Lymphoma	57.0	61.8	43.7	45.2	67.3	81.2
Kaposi sarcoma	19.4	-	6.8	19.0	61.2	75.6
Colon and Rectum	61.8	55.5	52.8	60.7	68.8	64.8

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

<sup>b</sup> Top 5 cancer sites selected based on 1975-2013 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<sup>a</sup> 5-Year Relative Survival for the Top 5 Cancer Sites<sup>b</sup> by Age  
All Races, Females, 1975-2013

	5-year Relative Survival (Percent)					
	1975-2013	1975-1982	1983-1990	1991-1998	1999-2006	2007-2013
<u>Ages 15-19</u>						
All Malignant Cancers	83.1	76.0	81.9	83.5	85.3	88.4
Hodgkin Lymphoma	93.4	89.7	90.4	95.1	95.0	98.5
Thyroid	99.3	99.0	100.0	98.6	99.2	99.2
Brain and Other Nervous System	77.4	68.1	79.8	80.5	79.5	78.0
Melanoma of the Skin	95.5	88.2	94.7	95.0	98.9	100.0
Ovary	88.3	78.3	89.7	91.3	91.7	90.7
<u>Ages 20-24</u>						
All Malignant Cancers	85.5	79.8	85.2	85.3	87.1	90.0
Thyroid	99.7	99.3	99.5	99.7	99.8	99.9
Melanoma of the Skin	96.2	91.5	95.7	97.2	97.8	98.0
Hodgkin Lymphoma	92.6	87.0	93.4	92.1	94.1	96.8
Brain and Other Nervous System	69.5	65.4	63.3	66.5	68.6	85.0
Cervix Uteri	88.1	89.1	91.0	85.3	89.8	79.7
<u>Ages 25-29</u>						
All Malignant Cancers	84.9	80.6	82.1	84.3	87.9	89.8
Thyroid	99.7	99.8	99.4	99.9	99.8	99.3
Melanoma of the Skin	96.1	91.9	94.4	96.7	98.3	98.1
Breast	74.7	69.4	68.1	73.2	84.1	82.2
Cervix Uteri	87.2	88.8	86.2	87.3	87.6	84.9
Hodgkin Lymphoma	92.8	86.8	93.2	94.7	93.8	95.0
<u>Ages 30-34</u>						
All Malignant Cancers	82.1	76.3	78.5	81.3	85.7	88.6
Breast	77.6	69.9	72.8	77.5	83.8	86.2
Thyroid	99.8	99.3	99.6	99.8	99.8	99.8
Melanoma of the Skin	95.6	92.1	94.3	95.4	97.4	97.8
Cervix Uteri	84.7	84.3	83.1	85.1	86.9	84.4
Hodgkin Lymphoma	91.5	85.2	89.9	89.4	95.2	97.0
<u>Ages 35-39</u>						
All Malignant Cancers	80.4	72.3	75.6	80.2	84.4	86.8
Breast	81.7	74.8	76.1	82.7	86.2	87.9
Thyroid	99.7	99.3	99.3	99.7	99.6	99.9
Melanoma of the Skin	95.7	92.3	94.2	95.6	97.5	97.1
Cervix Uteri	81.6	79.5	80.6	81.4	84.3	82.4
Corpus and Uterus, NOS	90.2	92.0	90.2	90.6	91.0	86.6

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

<sup>b</sup> Top 5 cancer sites selected based on 1975-2013 SEER 9 Incidence rates for the age group.

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