

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.

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.
2. Barr RD, Holowaty EJ, Birch JM. Classification schemes for tumors diagnosed in adolescents and young adults. *Cancer* 2006; 106: 1425-1430.
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: (<http://seer.cancer.gov/tools/conversion/>) Accessed May 28, 2008.
5. National Cancer Institute Cancer Statistics Review 1975-2010. Appendix.  
Worldwide web: ([http://seer.cancer.gov/csr/1975\\_2010/results\\_merged/topic\\_siterecode.pdf](http://seer.cancer.gov/csr/1975_2010/results_merged/topic_siterecode.pdf).)  
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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, 2006-2010

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	16.9	14.8	52.6	84.4	1193.5	878.6
1. LEUKEMIAS	5.6	4.7	3.5	2.8	32.1	18.5
1.1 Acute lymphoid leukemia	4.5	3.7	1.2	0.8	1.2	0.9
1.2 Acute myeloid leukemia	0.8	0.8	1.3	1.3	9.7	6.4
1.3 Chronic myeloid leukemia	0.1	0.1	0.7	0.5	4.2	2.4
1.4 Other and unspecified leukemias	0.2	0.1	0.4	0.3	17.0	8.8
2. LYMPHOMAS	2.0	1.1	8.6	6.8	54.7	37.6
2.1 Non-Hodgkin Lymphoma	1.3	0.6	4.8	3.2	50.9	35.1
2.2 Hodgkin Lymphoma	0.7	0.5	3.8	3.6	3.8	2.4
3. CNS, INTRACRANIAL, INTRASPINAL	3.3	3.0	3.2	2.4	13.3	9.0
3.1 Astrocytoma	1.6	1.6	1.7	1.2	10.3	6.6
3.1.1 Specified low-grade astrocytic tumors	1.1	1.2	0.5	0.4	0.4	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.2	0.2	0.8	0.5	9.3	5.9
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.3	0.7	0.4
3.2 Other glioma	0.5	0.6	1.0	0.7	1.5	1.2
3.3 Ependymoma	0.3	0.2	0.2	0.2	0.3	0.3
3.4 Medulloblastoma and other PNET	0.8	0.5	0.2	0.2	0.1	0.1
3.4.1 Medulloblastoma	0.5	0.3	0.1	0.1	0.0	0.0
3.4.2 Supratentorial PNET	0.3	0.2	0.1	0.1	0.0	0.0
3.5 Other specified intracranial and intraspinal neoplasms	0.1	0.0	0.1	0.1	0.2	0.3
3.6 Unspecified intracranial and intraspinal neoplasms	0.0	-	0.1	0.0	0.8	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.9	0.7	1.1	0.7	1.5	1.0
4.1 Osteosarcoma	0.4	0.4	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	0.0	-	0.2	0.2	0.7	0.5
4.3 Ewing tumor	0.4	0.3	0.3	0.2	0.1	0.1
4.4 Other specified and unspecified bone tumors	0.1	0.0	0.1	0.1	0.4	0.3
5. SOFT TISSUE SARCOMAS	1.0	0.9	3.3	2.4	12.5	8.9
5.1 Fibromatous neoplasms	0.1	0.1	0.7	0.8	3.0	1.7
5.2 Rhabdomyosarcoma	0.6	0.5	0.2	0.1	0.2	0.2
5.3 Other specified soft tissue sarcoma	0.3	0.3	2.4	1.5	9.3	7.0
5.3.1 Specified soft tissue sarcoma	0.2	0.2	2.1	1.2	6.9	5.3
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.1	1.2	5.3	5.1
5.3.1.2 Kaposi sarcoma	-	-	1.0	0.0	1.6	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.4	0.3	2.4	1.8
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.5	0.6	10.8	1.0	4.1	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.4	10.3	0.7	4.0	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.3	0.3	0.5	0.3	0.2	0.1
6.2.1 Intracranial sites	0.2	0.1	0.2	0.0	-	-
6.2.2 Other nongonadal sites	0.1	0.2	0.3	0.3	0.1	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, 2006-2010

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.2	5.4	9.2	65.2	35.1
7.1 Melanoma	0.2	0.2	5.3	9.1	61.1	33.1
7.2 Skin carcinomas	-	-	0.1	0.1	4.1	2.0
8. CARCINOMAS (excluding skin)	0.4	0.7	15.8	57.5	947.6	721.2
8.1 Thyroid carcinoma	0.1	0.4	3.2	15.8	11.4	28.8
8.2 Other carcinoma of head and neck	0.1	0.1	1.8	1.4	51.4	16.6
8.2.1 Nasopharyngeal carcinoma	0.0	-	0.3	0.2	1.8	0.7
8.2.2 Other sites in lip, oral cavity and pharynx	0.1	0.1	1.2	1.1	33.6	12.2
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.2	15.9	3.7
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.0	1.1	158.7	110.8
8.4 Carcinoma of breast	-	-	0.1	20.2	2.8	267.1
8.5 Carcinoma of genitourinary tract	0.0	0.1	3.4	13.1	480.1	135.9
8.5.1 Carcinoma of kidney	-	0.0	2.1	1.5	42.8	20.7
8.5.2 Carcinoma of bladder	-	-	0.8	0.3	83.2	19.9
8.5.3 Carcinoma of gonads	-	-	0.1	1.8	0.0	23.8
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.0	-	60.8
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.4	0.4	354.2	10.7
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	5.8	5.2	224.5	145.7
8.6.1 Carcinoma of colon and rectum	-	-	3.7	3.5	118.9	90.4
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	21.8	10.6
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.5	0.3	25.7	8.3
8.6.4 Carcinoma of pancreas	-	-	0.4	0.4	28.0	21.5
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.3	30.1	14.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	0.0	0.5	0.6	18.7	16.5
8.7.1 Adrenocortical carcinoma	-	-	0.0	0.1	0.3	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.5	0.5	18.4	16.2
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.9	2.7	0.7	1.1	25.5	20.4
9.1 Other pediatric and embryonal tumors, NOS	2.7	2.6	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	0.8	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.6	1.0	25.3	20.3
9.2.1 Paraganglioma and glomus tumors	-	-	0.1	0.0	0.1	0.1
9.2.2 Other specified gonadal tumors	-	-	0.0	0.1	0.0	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.4	0.2	18.5	11.6
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.7	8.1
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	36.9	26.7

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, 2006-2010

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	18.0	15.7	56.6	89.6	1197.1	904.5
1. LEUKEMIAS	6.1	5.2	3.7	2.9	33.7	19.3
1.1 Acute lymphoid leukemia	4.9	4.2	1.3	0.9	1.3	1.0
1.2 Acute myeloid leukemia	0.8	0.7	1.3	1.3	10.1	6.5
1.3 Chronic myeloid leukemia	0.2	0.1	0.7	0.5	4.3	2.4
1.4 Other and unspecified leukemias	0.1	0.1	0.4	0.3	18.0	9.4
2. LYMPHOMAS	2.1	1.1	8.8	7.1	57.4	39.9
2.1 Non-Hodgkin Lymphoma	1.3	0.6	4.8	3.2	53.4	37.2
2.2 Hodgkin Lymphoma	0.8	0.5	4.0	3.9	4.1	2.6
3. CNS, INTRACRANIAL, INTRASPINAL	3.6	3.3	3.6	2.6	14.6	9.9
3.1 Astrocytoma	1.7	1.7	1.9	1.3	11.5	7.4
3.1.1 Specified low-grade astrocytic tumors	1.2	1.3	0.5	0.4	0.4	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.2	1.0	0.6	10.3	6.6
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.3	0.8	0.5
3.2 Other glioma	0.6	0.7	1.1	0.8	1.7	1.3
3.3 Ependymoma	0.3	0.3	0.2	0.2	0.4	0.3
3.4 Medulloblastoma and other PNET	0.9	0.5	0.3	0.2	0.1	0.1
3.4.1 Medulloblastoma	0.5	0.3	0.2	0.1	0.0	-
3.4.2 Supratentorial PNET	0.3	0.2	0.1	0.1	0.0	0.1
3.5 Other specified intracranial and intraspinal neoplasms	0.1	-	0.1	0.1	0.2	0.2
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	0.1	-	0.8	0.7
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	1.0	0.8	1.1	0.8	1.6	1.0
4.1 Osteosarcoma	0.4	0.4	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	-	-	0.2	0.2	0.7	0.5
4.3 Ewing tumor	0.5	0.4	0.4	0.2	0.1	0.1
4.4 Other specified and unspecified bone tumors	-	-	0.1	0.1	0.4	0.3
5. SOFT TISSUE SARCOMAS	1.1	0.9	2.9	2.3	12.9	8.7
5.1 Fibromatous neoplasms	0.1	0.1	0.6	0.8	3.1	1.7
5.2 Rhabdomyosarcoma	0.6	0.5	0.2	0.1	0.2	0.2
5.3 Other specified soft tissue sarcoma	0.3	0.3	2.2	1.4	9.6	6.9
5.3.1 Specified soft tissue sarcoma	0.2	0.2	1.8	1.1	7.1	5.2
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.1	1.1	5.6	5.0
5.3.1.2 Kaposi sarcoma	-	-	0.8	-	1.5	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.4	0.3	2.5	1.7
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.6	0.6	13.0	1.0	4.8	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.3	0.3	12.4	0.7	4.6	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.3	0.2	0.6	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	0.4	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, 2006-2010

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.2	6.6	11.5	75.3	41.3
7.1 Melanoma	0.2	0.2	6.5	11.4	70.9	39.1
7.2 Skin carcinomas	-	-	0.1	0.1	4.4	2.1
8. CARCINOMAS (excluding skin)	0.4	0.8	15.8	59.8	935.7	738.3
8.1 Thyroid carcinoma	0.2	0.5	3.5	17.7	12.2	30.1
8.2 Other carcinoma of head and neck	0.1	0.1	1.7	1.3	52.7	17.1
8.2.1 Nasopharyngeal carcinoma	-	-	0.1	0.1	1.2	0.5
8.2.2 Other sites in lip, oral cavity and pharynx	0.1	0.1	1.3	1.1	35.6	12.8
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.2	15.9	3.8
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.0	1.1	159.1	116.3
8.4 Carcinoma of breast	-	-	0.0	20.0	2.7	275.6
8.5 Carcinoma of genitourinary tract	-	0.1	3.5	14.0	472.8	142.1
8.5.1 Carcinoma of kidney	-	-	2.1	1.6	43.8	21.3
8.5.2 Carcinoma of bladder	-	-	0.9	0.4	90.5	21.4
8.5.3 Carcinoma of gonads	-	-	0.1	1.9	0.0	25.3
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.6	-	62.7
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.4	0.5	338.5	11.4
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	5.7	5.1	217.4	140.4
8.6.1 Carcinoma of colon and rectum	-	-	3.8	3.5	117.0	88.9
8.6.2 Carcinoma of stomach	-	-	0.7	0.6	19.5	8.9
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.3	0.3	22.4	7.1
8.6.4 Carcinoma of pancreas	-	-	0.4	0.4	28.0	21.1
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.3	30.5	14.4
8.7 Carcinoma of other and ill-defined sites, NOS	-	0.1	0.5	0.6	18.9	16.7
8.7.1 Adrenocortical carcinoma	-	-	0.0	0.1	0.3	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.4	0.5	18.6	16.4
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	3.0	2.8	0.8	1.0	24.8	18.8
9.1 Other pediatric and embryonal tumors, NOS	2.8	2.7	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	0.9	24.6	18.7
9.2.1 Paraganglioma and glomus tumors	-	-	0.1	0.0	0.1	0.1
9.2.2 Other specified gonadal tumors	-	-	-	0.1	0.0	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.4	0.2	17.6	10.5
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.9	7.7
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	36.2	27.1

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).

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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, 2006-2010

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	12.9	11.7	40.3	68.9	1378.7	861.1
1. LEUKEMIAS	3.6	2.9	2.8	2.1	24.9	14.8
1.1 Acute lymphoid leukemia	2.7	1.7	0.7	0.3	0.8	0.6
1.2 Acute myeloid leukemia	0.8	0.9	1.0	1.1	7.6	5.5
1.3 Chronic myeloid leukemia	-	-	0.8	0.6	3.8	2.4
1.4 Other and unspecified leukemias	-	-	0.4	0.2	12.6	6.3
2. LYMPHOMAS	1.9	1.2	10.1	6.9	38.4	26.3
2.1 Non-Hodgkin Lymphoma	1.2	0.7	6.2	3.7	34.7	24.0
2.2 Hodgkin Lymphoma	0.7	0.5	3.9	3.2	3.8	2.3
3. CNS, INTRACRANIAL, INTRASPINAL	2.4	2.7	1.8	1.8	8.2	5.7
3.1 Astrocytoma	1.1	1.5	0.9	0.8	5.9	3.9
3.1.1 Specified low-grade astrocytic tumors	0.7	0.9	0.2	0.3	0.2	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	-	0.3	0.4	0.4	5.3	3.4
3.1.3 Astrocytoma, NOS	-	0.2	0.3	0.2	0.3	0.3
3.2 Other glioma	0.5	0.5	0.4	0.5	0.9	0.6
3.3 Ependymoma	0.3	-	0.2	-	0.2	0.2
3.4 Medulloblastoma and other PNET	0.4	0.4	-	-	-	-
3.4.1 Medulloblastoma	-	-	-	-	-	-
3.4.2 Supratentorial PNET	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	0.4	0.3
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	0.8	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.6	0.5	0.9	0.7	1.2	1.1
4.1 Osteosarcoma	0.4	0.4	0.4	0.4	0.3	0.5
4.2 Chondrosarcoma	-	-	0.3	0.2	0.5	0.3
4.3 Ewing tumor	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	0.2	0.2
5. SOFT TISSUE SARCOMAS	1.3	1.0	6.0	3.3	10.9	11.2
5.1 Fibromatous neoplasms	-	-	1.1	1.1	2.4	2.1
5.2 Rhabdomyosarcoma	0.9	0.4	0.3	0.1	-	0.4
5.3 Other specified soft tissue sarcoma	0.3	0.5	4.6	2.1	8.4	8.8
5.3.1 Specified soft tissue sarcoma	-	0.3	4.0	1.7	6.3	6.5
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	0.3	1.3	1.5	3.8	6.3
5.3.1.2 Kaposi sarcoma	-	-	2.7	0.2	2.4	0.3
5.3.2 Unspecified soft tissue sarcoma	-	-	0.6	0.3	2.1	2.2
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	-	0.6	2.3	1.0	1.3	0.3
6.1 Germ cell and trophoblastic neoplasms of gonads	-	0.3	2.0	0.6	1.1	0.2
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	-	0.3	0.2	0.5	0.2	0.2
6.2.1 Intracranial sites	-	-	-	-	-	-
6.2.2 Other nongonadal sites	-	-	-	0.4	0.2	0.2

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

<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, 2006-2010

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	-	-	0.2	0.4	3.6	3.1
7.1 Melanoma	-	-	0.2	0.4	2.6	2.3
7.2 Skin carcinomas	-	-	-	-	1.0	0.8
8. CARCINOMAS (excluding skin)	0.4	0.5	14.9	50.4	1195.9	731.0
8.1 Thyroid carcinoma	-	-	1.2	6.8	6.3	18.5
8.2 Other carcinoma of head and neck	-	-	1.7	1.3	56.3	15.8
8.2.1 Nasopharyngeal carcinoma	-	-	0.4	0.2	2.0	0.5
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	0.9	1.1	30.6	10.4
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.4	-	23.7	4.8
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.3	1.0	204.5	112.5
8.4 Carcinoma of breast	-	-	-	24.0	4.2	257.7
8.5 Carcinoma of genitourinary tract	-	-	3.7	10.4	620.3	122.4
8.5.1 Carcinoma of kidney	-	-	2.4	1.5	50.9	24.7
8.5.2 Carcinoma of bladder	-	-	0.5	-	47.1	15.7
8.5.3 Carcinoma of gonads	-	-	-	1.1	-	17.3
8.5.4 Carcinoma of cervix and uterus	-	-	-	7.2	-	55.9
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.8	0.5	522.3	8.8
8.6 Carcinoma of gastrointestinal tract	-	-	6.1	6.0	283.6	186.3
8.6.1 Carcinoma of colon and rectum	-	-	3.9	3.8	146.6	111.5
8.6.2 Carcinoma of stomach	-	-	0.7	0.8	33.4	16.6
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.7	0.3	32.6	9.3
8.6.4 Carcinoma of pancreas	-	-	0.4	0.6	35.4	28.5
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.4	0.5	35.6	20.3
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.7	0.8	20.7	17.9
8.7.1 Adrenocortical carcinoma	-	-	-	-	0.3	0.2
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.7	0.8	20.4	17.6
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.5	2.4	1.0	1.7	40.8	37.9
9.1 Other pediatric and embryonal tumors, NOS	2.4	2.4	-	-	0.2	0.2
9.1.1 Wilms tumor	0.8	0.9	-	-	-	-
9.1.2 Neuroblastoma	0.8	0.9	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.8	0.6	-	-	-	-
9.2 Other specified neoplasms, NOS	-	-	0.9	1.6	40.6	37.7
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	0.2	0.2
9.2.2 Other specified gonadal tumors	-	-	-	0.3	-	0.7
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.5	0.5	34.0	23.9
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.8	6.3	13.0
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.6	53.5	29.7

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, 2006-2010

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All Sites Combined	22.2	20.0	34.4	37.2	48.0	64.8	64.2	109.1	88.5	174.7
1. LEUKEMIAS	3.6	2.6	3.0	2.3	3.1	2.2	3.4	3.0	4.4	3.6
1.1 Acute lymphoid leukemia	2.3	1.3	1.3	0.8	0.9	0.6	0.8	0.7	0.7	0.6
1.2 Acute myeloid leukemia	0.9	1.0	1.0	1.1	1.3	1.1	1.3	1.5	1.7	1.7
1.3 Chronic myeloid leukemia	0.3	0.2	0.5	0.4	0.7	0.4	1.0	0.6	1.1	0.8
1.4 Other and unspecified leukemias	0.1	-	0.2	-	0.2	0.2	0.3	0.3	0.9	0.5
2. LYMPHOMAS	5.3	4.5	7.4	6.5	8.1	7.1	9.9	7.6	11.7	8.3
2.1 Non-Hodgkin Lymphoma	2.1	1.3	3.1	1.9	3.9	2.8	5.9	4.0	8.4	5.7
2.2 Hodgkin Lymphoma	3.1	3.2	4.4	4.6	4.2	4.2	4.0	3.6	3.3	2.6
3. CNS, INTRACRANIAL, INTRASPINAL	2.1	1.8	2.3	2.2	3.1	2.3	3.8	2.7	4.4	2.8
3.1 Astrocytoma	1.2	1.0	1.1	1.1	1.6	1.1	1.8	1.3	2.6	1.5
3.1.1 Specified low-grade astrocytic tumors	0.6	0.7	0.4	0.5	0.4	0.3	0.4	0.4	0.5	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.3	0.2	0.4	0.4	0.8	0.5	0.9	0.6	1.6	0.8
3.1.3 Astrocytoma, NOS	0.2	0.2	0.3	0.3	0.4	0.3	0.5	0.3	0.5	0.4
3.2 Other glioma	0.4	0.3	0.6	0.5	1.1	0.7	1.4	0.9	1.3	0.9
3.3 Ependymoma	0.2	0.1	0.2	0.3	0.1	0.2	0.3	0.3	0.2	0.2
3.4 Medulloblastoma and other PNET	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1
3.4.1 Medulloblastoma	0.2	0.1	0.2	0.1	0.1	-	-	-	0.1	-
3.4.2 Supratentorial PNET	0.1	-	0.1	-	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	2.0	1.1	1.2	0.9	0.7	0.7	0.7	0.5	0.7	0.6
4.1 Osteosarcoma	1.0	0.6	0.5	0.4	0.1	0.3	-	0.2	0.1	0.2
4.2 Chondrosarcoma	0.2	-	0.2	0.1	0.3	0.2	0.3	0.2	0.3	0.2
4.3 Ewing tumor	0.7	0.4	0.4	0.2	0.2	0.2	0.1	-	0.2	0.1
4.4 Other specified and unspecified bone tumors	0.1	-	0.1	0.1	0.1	-	0.1	-	0.1	-
5. SOFT TISSUE SARCOMAS	1.3	1.4	2.0	1.8	3.3	2.1	4.2	3.0	5.3	3.6
5.1 Fibromatous neoplasms	0.2	0.3	0.4	0.6	0.7	0.8	0.9	1.1	1.2	1.1
5.2 Rhabdomyosarcoma	0.4	0.3	0.2	0.1	0.2	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.7	0.8	1.4	1.1	2.4	1.2	3.3	1.8	4.1	2.4
5.3.1 Specified soft tissue sarcoma	0.5	0.6	1.1	0.8	2.0	1.0	2.8	1.5	3.6	2.0
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.5	0.6	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.9
5.3.1.2 Kaposi sarcoma	-	-	0.4	-	1.0	-	1.4	-	1.9	-
5.3.2 Unspecified soft tissue sarcoma	0.2	0.2	0.4	0.3	0.4	0.2	0.4	0.3	0.5	0.4
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	4.3	1.1	10.9	1.3	14.4	1.2	13.8	0.9	10.9	0.7
6.1 Germ cell and trophoblastic neoplasms of gonads	3.5	0.9	10.3	1.0	13.8	0.8	13.4	0.6	10.7	0.4
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.7	0.2	0.6	0.4	0.6	0.3	0.4	0.4	0.3	0.3
6.2.1 Intracranial sites	0.5	-	0.2	-	0.2	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	0.2	0.4	0.3	0.5	0.3	0.3	0.4	0.3	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 32.4 - 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, 2006-2010

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	1.0	1.4	2.3	5.6	4.5	9.7	7.5	11.6	10.6	16.4
7.1 Melanoma	0.9	1.4	2.3	5.6	4.5	9.6	7.5	11.5	10.5	16.2
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	0.2	0.2
8. CARCINOMAS (excluding skin)	2.3	5.7	4.7	15.9	9.9	38.3	19.6	77.9	38.3	135.4
8.1 Thyroid carcinoma	0.8	3.8	1.4	9.0	2.9	15.5	4.4	22.4	5.8	26.7
8.2 Other carcinoma of head and neck	0.5	0.4	0.6	0.8	1.0	1.1	2.0	1.8	4.6	2.7
8.2.1 Nasopharyngeal carcinoma	0.2	-	0.2	-	0.2	0.1	0.3	0.2	0.7	0.3
8.2.2 Other sites in lip, oral cavity and pharynx	0.2	0.3	0.4	0.7	0.7	0.9	1.4	1.4	3.0	2.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	0.1	0.1	0.3	0.2	0.9	0.3
8.3 Carcinoma of trachea, bronchus, and lung	0.1	-	0.3	0.3	0.6	0.6	1.2	1.3	2.8	2.9
8.4 Carcinoma of breast	-	-	-	1.3	-	8.2	-	25.8	0.1	58.5
8.5 Carcinoma of genitourinary tract	0.2	0.7	0.7	2.8	1.7	9.3	3.8	19.3	9.3	30.4
8.5.1 Carcinoma of kidney	0.1	0.2	0.4	0.4	1.0	1.1	2.5	2.2	5.7	3.4
8.5.2 Carcinoma of bladder	-	-	0.2	0.1	0.5	0.2	1.0	0.3	2.0	0.7
8.5.3 Carcinoma of gonads	-	0.4	-	0.6	-	1.3	-	2.4	-	4.0
8.5.4 Carcinoma of cervix and uterus	-	0.1	-	1.6	-	6.5	-	13.7	-	21.1
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.2	0.3	0.6	1.5	1.1
8.6 Carcinoma of gastrointestinal tract	0.6	0.6	1.5	1.4	3.3	3.1	7.4	6.6	14.5	12.8
8.6.1 Carcinoma of colon and rectum	0.3	0.3	1.0	0.9	2.2	2.0	5.1	4.5	9.1	8.7
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.3	0.5	0.9	0.9	1.7	1.6
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.2	0.1	0.2	0.1	0.4	0.2	0.5	0.4	1.1	0.6
8.6.4 Carcinoma of pancreas	-	0.1	-	0.2	0.2	0.2	0.3	0.5	1.1	0.9
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	0.3	0.2	0.5	0.3	1.5	1.0
8.7 Carcinoma of other and ill-defined sites, NOS	0.1	-	0.2	0.3	0.4	0.4	0.7	0.8	1.1	1.4
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	0.2
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.1	0.2	0.3	0.4	0.6	0.7	1.1	1.3
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.4	0.3	0.5	0.5	0.8	0.9	1.3	1.5	2.3
9.1 Other pediatric and embryonal tumors, NOS	0.1	0.1	-	-	-	-	-	0.1	-	-
9.1.1 Wilms tumor	-	-	-	-	-	-	-	-	-	-
9.1.2 Neuroblastoma	-	-	-	-	-	-	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.2 Other specified neoplasms, NOS	0.1	0.3	0.2	0.4	0.5	0.7	0.8	1.2	1.4	2.2
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	0.1	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	0.1	-	0.2	-	0.2
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.1	-	0.2	0.1	0.5	0.2	0.9	0.7
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	0.1	-	0.2	0.2	0.5	0.3	0.7	0.4	1.3
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.1	0.2	0.2	0.3	0.3	0.6	0.5	1.1

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> 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, 2006-2010

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All Sites Combined	24.4	21.7	38.5	40.6	52.5	70.2	68.5	116.1	93.3	182.7
1. LEUKEMIAS	3.9	2.9	3.3	2.5	3.3	2.4	3.6	3.1	4.3	3.7
1.1 Acute lymphoid leukemia	2.5	1.5	1.5	0.9	1.0	0.7	0.9	0.7	0.7	0.7
1.2 Acute myeloid leukemia	1.0	1.0	1.1	1.1	1.3	1.1	1.5	1.5	1.7	1.7
1.3 Chronic myeloid leukemia	0.2	0.3	0.5	0.4	0.7	0.4	0.9	0.5	1.0	0.8
1.4 Other and unspecified leukemias	0.1	-	0.2	-	0.2	0.2	0.4	0.3	0.9	0.6
2. LYMPHOMAS	5.8	4.9	7.8	6.9	8.2	7.4	9.9	7.8	12.1	8.4
2.1 Non-Hodgkin Lymphoma	2.2	1.4	3.2	1.9	3.9	2.8	5.5	3.8	8.6	5.6
2.2 Hodgkin Lymphoma	3.5	3.5	4.7	5.1	4.3	4.6	4.4	4.0	3.5	2.9
3. CNS, INTRACRANIAL, INTRASPINAL	2.3	1.9	2.6	2.4	3.6	2.6	4.0	3.0	5.1	3.0
3.1 Astrocytoma	1.3	1.1	1.2	1.3	1.9	1.2	1.9	1.5	2.9	1.6
3.1.1 Specified low-grade astrocytic tumors	0.7	0.7	0.4	0.6	0.5	0.3	0.4	0.4	0.5	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.4	0.2	0.5	0.4	0.9	0.6	1.0	0.7	1.9	0.9
3.1.3 Astrocytoma, NOS	0.2	0.2	0.3	0.3	0.5	0.3	0.5	0.4	0.5	0.4
3.2 Other glioma	0.5	0.4	0.7	0.6	1.2	0.9	1.5	1.1	1.5	1.0
3.3 Ependymoma	0.2	0.1	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2
3.4 Medulloblastoma and other PNET	0.3	0.2	0.3	0.2	0.2	0.2	0.2	-	0.2	-
3.4.1 Medulloblastoma	0.2	-	0.2	-	0.1	-	-	-	-	-
3.4.2 Supratentorial PNET	-	-	-	-	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	2.2	1.1	1.4	0.8	0.8	0.8	0.7	0.5	0.7	0.6
4.1 Osteosarcoma	1.0	0.6	0.6	0.3	-	0.3	-	-	-	0.2
4.2 Chondrosarcoma	0.1	-	0.2	-	0.3	0.3	0.3	0.2	0.3	0.2
4.3 Ewing tumor	0.9	0.4	0.5	0.3	0.2	0.2	0.2	-	0.2	0.1
4.4 Other specified and unspecified bone tumors	-	-	-	-	0.1	-	-	-	0.2	-
5. SOFT TISSUE SARCOMAS	1.3	1.4	1.8	1.7	2.9	2.1	3.7	2.7	4.7	3.4
5.1 Fibromatous neoplasms	0.2	0.3	0.4	0.5	0.6	0.8	0.7	1.1	0.9	1.0
5.2 Rhabdomyosarcoma	0.4	0.2	0.2	-	0.2	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.7	0.9	1.2	1.0	2.1	1.2	2.9	1.6	3.8	2.3
5.3.1 Specified soft tissue sarcoma	0.6	0.7	0.8	0.8	1.6	1.0	2.5	1.3	3.3	1.9
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.6	0.7	0.6	0.8	0.9	1.0	1.3	1.3	1.7	1.9
5.3.1.2 Kaposi sarcoma	-	-	0.2	-	0.7	-	1.2	-	1.6	-
5.3.2 Unspecified soft tissue sarcoma	0.1	0.2	0.4	0.3	0.5	0.2	0.4	0.3	0.5	0.4
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	5.2	1.1	13.2	1.3	17.3	1.2	16.6	0.9	13.0	0.7
6.1 Germ cell and trophoblastic neoplasms of gonads	4.4	0.9	12.5	1.0	16.6	0.8	16.1	0.5	12.7	0.3
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.8	0.2	0.7	0.3	0.7	0.4	0.5	0.4	0.3	0.3
6.2.1 Intracranial sites	0.5	-	0.2	-	0.2	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	-	0.4	0.3	0.5	0.4	0.4	0.4	0.3	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, 2006-2010

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	1.8	2.9	7.0	5.5	12.2	9.1	14.6	13.1	20.5
7.1 Melanoma	1.1	1.8	2.9	6.9	5.5	12.1	9.0	14.6	12.9	20.4
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	0.2	0.2
8. CARCINOMAS (excluding skin)	2.3	6.3	5.0	17.1	10.0	40.5	19.7	81.4	38.1	139.1
8.1 Thyroid carcinoma	0.9	4.3	1.6	10.4	3.2	17.4	4.7	25.4	6.4	29.0
8.2 Other carcinoma of head and neck	0.4	0.4	0.6	0.7	0.9	1.1	1.9	1.7	4.4	2.5
8.2.1 Nasopharyngeal carcinoma	-	-	-	-	-	-	-	-	0.3	-
8.2.2 Other sites in lip, oral cavity and pharynx	0.2	0.4	0.5	0.7	0.7	0.9	1.5	1.4	3.2	2.0
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	0.2	0.2	0.9	0.4
8.3 Carcinoma of trachea, bronchus, and lung	-	-	0.3	0.3	0.6	0.6	1.1	1.3	2.7	2.9
8.4 Carcinoma of breast	-	-	-	1.2	-	7.8	-	25.2	-	58.5
8.5 Carcinoma of genitourinary tract	0.2	0.8	0.8	2.7	1.8	10.1	3.9	20.7	9.5	32.4
8.5.1 Carcinoma of kidney	-	0.2	0.4	0.4	1.0	1.2	2.5	2.5	5.9	3.7
8.5.2 Carcinoma of bladder	-	-	0.3	-	0.6	0.3	1.1	0.4	2.2	0.9
8.5.3 Carcinoma of gonads	-	0.4	-	0.6	-	1.4	-	2.6	-	4.3
8.5.4 Carcinoma of cervix and uterus	-	0.1	-	1.5	-	7.2	-	14.7	-	22.3
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.2	0.3	0.6	1.4	1.2
8.6 Carcinoma of gastrointestinal tract	0.6	0.6	1.5	1.4	3.3	3.1	7.5	6.5	14.0	12.4
8.6.1 Carcinoma of colon and rectum	0.3	0.3	1.0	0.9	2.2	2.0	5.4	4.5	8.9	8.8
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.3	0.4	1.0	0.9	1.6	1.3
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.2	-	0.1	-	0.3	0.2	0.3	0.3	0.6	0.5
8.6.4 Carcinoma of pancreas	-	-	-	-	0.2	0.2	0.3	0.5	1.1	0.8
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	0.3	0.2	0.6	0.3	1.6	1.0
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.1	0.3	0.3	0.4	0.6	0.7	1.1	1.3
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	0.2
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	-	0.2	0.3	0.4	0.5	0.6	1.0	1.2
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.3	0.3	0.5	0.5	0.7	1.0	1.3	1.5	2.1
9.1 Other pediatric and embryonal tumors, NOS	0.2	-	-	-	-	-	-	-	-	-
9.1.1 Wilms tumor	-	-	-	-	-	-	-	-	-	-
9.1.2 Neuroblastoma	-	-	-	-	-	-	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.2 Other specified neoplasms, NOS	0.2	0.2	0.2	0.4	0.5	0.7	0.9	1.1	1.4	2.1
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	0.2	-	0.2
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.2	-	0.2	-	0.5	0.2	0.8	0.6
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	-	-	0.3	0.2	0.5	0.3	0.7	0.4	1.3
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.3	0.2	0.3	0.3	0.7	0.5	1.1

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> 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, 2006-2010

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All Sites Combined	14.8	13.7	20.8	24.6	34.2	48.1	49.3	93.4	76.0	149.8
1. LEUKEMIAS	2.4	1.9	1.8	2.1	2.5	1.7	2.9	2.2	4.3	2.6
1.1 Acute lymphoid leukemia	1.5	0.8	-	-	-	-	-	-	-	-
1.2 Acute myeloid leukemia	-	0.9	-	1.1	1.1	0.9	1.1	1.1	1.4	1.3
1.3 Chronic myeloid leukemia	-	-	-	-	-	-	1.2	-	1.4	0.9
1.4 Other and unspecified leukemias	-	-	-	-	-	-	-	-	-	-
2. LYMPHOMAS	4.3	3.7	7.1	4.9	10.7	7.6	13.5	8.8	14.2	9.2
2.1 Non-Hodgkin Lymphoma	2.1	1.4	3.3	1.7	5.6	2.9	9.0	5.1	10.3	6.6
2.2 Hodgkin Lymphoma	2.2	2.3	3.8	3.3	5.1	4.7	4.5	3.7	3.9	2.6
3. CNS, INTRACRANIAL, INTRASPINAL	1.6	1.3	1.7	1.5	1.5	2.0	2.1	1.9	1.9	2.2
3.1 Astrocytoma	0.7	0.7	0.8	0.8	-	1.0	1.2	-	1.1	1.1
3.1.1 Specified low-grade astrocytic tumors	-	-	-	-	-	-	-	-	-	-
3.1.2 Glioblastoma and anaplastic astrocytoma	-	-	-	-	-	-	-	-	-	-
3.1.3 Astrocytoma, NOS	-	-	-	-	-	-	-	-	-	-
3.2 Other glioma	-	-	-	-	-	-	-	-	-	-
3.3 Ependymoma	-	-	-	-	-	-	-	-	-	-
3.4 Medulloblastoma and other PNET	-	-	-	-	-	-	-	-	-	-
3.4.1 Medulloblastoma	-	-	-	-	-	-	-	-	-	-
3.4.2 Supratentorial PNET	-	-	-	-	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	1.8	0.9	0.9	1.1	-	-	-	-	-	-
4.1 Osteosarcoma	1.2	0.7	-	0.8	-	-	-	-	-	-
4.2 Chondrosarcoma	-	-	-	-	-	-	-	-	-	-
4.3 Ewing tumor	-	-	-	-	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	-	-
5. SOFT TISSUE SARCOMAS	1.3	1.3	3.8	2.4	7.1	2.4	7.5	4.8	9.8	5.2
5.1 Fibromatous neoplasms	-	-	-	-	1.2	-	1.4	1.6	2.2	1.7
5.2 Rhabdomyosarcoma	-	-	-	-	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.8	-	3.1	1.3	5.7	1.6	5.9	3.1	7.4	3.5
5.3.1 Specified soft tissue sarcoma	-	-	2.7	1.1	5.0	1.4	5.0	2.9	6.7	2.8
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	1.1	0.9	1.3	1.2	1.4	2.4	2.2	2.6
5.3.1.2 Kaposi sarcoma	-	-	1.6	-	3.7	-	3.6	-	4.5	-
5.3.2 Unspecified soft tissue sarcoma	-	-	-	-	-	-	0.9	-	-	-
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.9	1.0	1.7	1.3	2.4	0.9	3.8	1.1	2.6	0.9
6.1 Germ cell and trophoblastic neoplasms of gonads	-	0.7	1.5	-	2.3	-	3.4	-	2.4	-
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	-	-	-	-	-	-	-	-	-	-
6.2.1 Intracranial sites	-	-	-	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	-	-	-	-	-	-	-	-	-	-

Rates are per 100,000.

<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, 2006-2010

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	-	-	-	-	-	-	-	-	-	0.8
7.1 Melanoma	-	-	-	-	-	-	-	-	-	0.8
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	-	-
8. CARCINOMAS (excluding skin)	2.2	2.7	3.6	10.4	8.6	31.4	16.9	70.6	38.6	123.4
8.1 Thyroid carcinoma	-	1.2	-	3.1	1.2	5.8	1.6	10.1	2.1	12.6
8.2 Other carcinoma of head and neck	-	-	-	0.8	1.3	1.3	1.3	1.7	4.2	2.3
8.2.1 Nasopharyngeal carcinoma	-	-	-	-	-	-	-	-	-	-
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	-	-	-	0.9	-	1.5	2.6	2.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	-	-	1.0	-
8.3 Carcinoma of trachea, bronchus, and lung	-	-	-	-	-	-	1.6	1.4	3.4	2.6
8.4 Carcinoma of breast	-	-	-	1.8	-	11.9	-	33.0	-	65.6
8.5 Carcinoma of genitourinary tract	-	-	-	3.1	1.5	7.9	4.3	15.4	10.5	23.1
8.5.1 Carcinoma of kidney	-	-	-	-	1.3	1.3	3.5	1.6	5.9	3.6
8.5.2 Carcinoma of bladder	-	-	-	-	-	-	-	-	1.3	-
8.5.3 Carcinoma of gonads	-	-	-	-	-	1.1	-	1.4	-	2.5
8.5.4 Carcinoma of cervix and uterus	-	-	-	2.0	-	5.0	-	11.5	-	15.7
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	-	-	3.2	1.0
8.6 Carcinoma of gastrointestinal tract	-	-	1.5	1.3	3.2	3.4	6.8	7.9	16.7	15.3
8.6.1 Carcinoma of colon and rectum	-	-	1.1	0.8	1.9	2.0	3.9	5.1	11.1	9.7
8.6.2 Carcinoma of stomach	-	-	-	-	-	-	-	1.0	2.2	2.1
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	-	-	-	-	1.2	-	1.3	-
8.6.4 Carcinoma of pancreas	-	-	-	-	-	-	-	-	1.0	1.4
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	-	-	-	-	1.1	1.5
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	1.1	1.2	1.5	1.9
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	1.1	1.2	1.4	1.8
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	-	-	-	-	-	0.8	1.1	2.4	2.6	3.5
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	-	-	-	-	-	0.8	-	2.3	2.5	3.4
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	-	-	-
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	-	-	-	-	-	-	1.7	1.4
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	-	-	-	-	-	-	1.2	-	1.5
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	-	-	-	-	-	-	-	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	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	13,416	20.3	0.5*	4,254	21.7	0.5*
1. Leukemias	1,597	2.4	0.8*	538	2.7	0.8*
2. Lymphomas	3,355	5.1	0.0	978	5.0	0.0
3. CNS, intracranial, intraspinal	1,301	2.0	0.3	398	2.0	0.3
4. Osseous & chondromatous neoplasms	1,043	1.6	0.6	330	1.7	0.6
5. Soft tissue sarcomas	981	1.5	0.3	298	1.5	0.3
6. Germ cell and trophoblastic neoplasms	1,635	2.5	0.9*	542	2.8	0.9*
7. Melanoma and skin carcinomas	999	1.5	0.9*	336	1.7	0.9*
8. Carcinomas (excluding skin)	2,246	3.4	1.1*	765	3.9	1.1*
9. Miscellaneous specified neoplasms, NOS	204	0.3	-0.2	62	0.3	-0.2
10. Unspecified malignant neoplasms	55	0.1	-	-	-	-

  

Males	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	7,056	20.9	0.6*	2,279	22.6	0.6*
1. Leukemias	951	2.8	-1.7	308	3.1	-8.4
2. Lymphomas	1,796	5.3	0.2	541	5.4	0.2
3. CNS, intracranial, intraspinal	755	2.2	0.3	234	2.3	0.3
4. Osseous & chondromatous neoplasms	679	2.0	0.7	209	2.1	0.7
5. Soft tissue sarcomas	514	1.5	1.1	158	1.6	-4.3
6. Germ cell and trophoblastic neoplasms	1,191	3.5	1.2*	415	4.1	1.2*
7. Melanoma and skin carcinomas	398	1.2	1.2*	139	1.4	1.2*
8. Carcinomas (excluding skin)	656	1.9	1.5*	244	2.4	1.5*
9. Miscellaneous specified neoplasms, NOS	91	0.3	-	27	0.3	-
10. Unspecified malignant neoplasms	25	0.1	-	-	-	-

  

Females	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	6,360	19.7	0.4*	1,975	20.7	0.4*
1. Leukemias	646	2.0	1.4*	230	2.4	1.4*
2. Lymphomas	1,559	4.8	-0.1	437	4.6	-0.1
3. CNS, intracranial, intraspinal	546	1.7	0.1	164	1.7	0.1
4. Osseous & chondromatous neoplasms	364	1.1	0.4	121	1.3	0.4
5. Soft tissue sarcomas	467	1.4	0.5	140	1.5	0.5
6. Germ cell and trophoblastic neoplasms	444	1.4	0.1	127	1.3	0.1
7. Melanoma and skin carcinomas	601	1.9	0.6	197	2.1	0.6
8. Carcinomas (excluding skin)	1,590	4.9	0.9*	521	5.5	0.9*
9. Miscellaneous specified neoplasms, NOS	113	0.3	-	35	0.4	-
10. Unspecified malignant neoplasms	30	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 1975-2010.

- 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	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	22,932	34.0	0.8*	7,218	37.6	0.8*
1. Leukemias	1,481	2.2	0.9*	465	2.4	0.9*
2. Lymphomas	4,838	7.2	0.9*	1,462	7.6	0.0
3. CNS, intracranial, intraspinal	1,517	2.2	0.7*	472	2.5	0.7*
4. Osseous & chondromatous neoplasms	614	0.9	1.4*	211	1.1	1.4*
5. Soft tissue sarcomas	1,425	2.1	1.1	387	2.0	-1.1*
6. Germ cell and trophoblastic neoplasms	3,577	5.3	0.9*	1,163	6.1	0.9*
7. Melanoma and skin carcinomas	2,888	4.3	1.2*	967	5.0	1.2*
8. Carcinomas (excluding skin)	6,226	9.2	0.3	1,978	10.3	1.4*
9. Miscellaneous specified neoplasms, NOS	229	0.3	1.4*	80	0.4	1.4*
10. Unspecified malignant neoplasms	137	0.2	0.0	33	0.2	0.0

  

Males	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	11,301	33.0	0.5*	3,449	35.1	0.5*
1. Leukemias	856	2.5	0.7*	261	2.7	0.7*
2. Lymphomas	2,597	7.6	0.4*	767	7.8	0.4*
3. CNS, intracranial, intraspinal	854	2.5	0.2	242	2.5	0.2
4. Osseous & chondromatous neoplasms	359	1.0	1.1	124	1.3	1.1
5. Soft tissue sarcomas	844	2.5	0.6	216	2.2	-2.6*
6. Germ cell and trophoblastic neoplasms	3,199	9.4	0.9*	1,049	10.7	0.9*
7. Melanoma and skin carcinomas	1,000	2.9	0.3	298	3.0	0.3
8. Carcinomas (excluding skin)	1,450	4.2	0.3	449	4.6	0.3
9. Miscellaneous specified neoplasms, NOS	90	0.3	-	31	0.3	-
10. Unspecified malignant neoplasms	52	0.2	-	-	-	-

  

Females	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	11,631	35.0	1.0*	3,769	40.2	1.0*
1. Leukemias	625	1.9	0.2	204	2.2	-0.1
2. Lymphomas	2,241	6.7	1.2*	695	7.4	-0.1
3. CNS, intracranial, intraspinal	663	2.0	1.5*	230	2.5	1.5*
4. Osseous & chondromatous neoplasms	255	0.8	1.7*	87	0.9	1.7*
5. Soft tissue sarcomas	581	1.7	0.9*	171	1.8	0.9*
6. Germ cell and trophoblastic neoplasms	378	1.1	0.2	114	1.2	0.2
7. Melanoma and skin carcinomas	1,888	5.7	1.7*	669	7.1	1.7*
8. Carcinomas (excluding skin)	4,776	14.4	0.5	1,529	16.3	1.5*
9. Miscellaneous specified neoplasms, NOS	139	0.4	1.4*	49	0.5	1.4*
10. Unspecified malignant neoplasms	85	0.3	-	21	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 1975-2010.

- 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	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	39,117	55.1	0.7*	11,637	60.0	1.3*
1. Leukemias	1,662	2.3	0.1	506	2.6	1.3*
2. Lymphomas	5,900	8.3	0.7	1,637	8.4	0.9
3. CNS, intracranial, intraspinal	2,020	2.8	0.9*	608	3.1	0.9*
4. Osseous & chondromatous neoplasms	475	0.7	1.1*	143	0.7	1.1*
5. Soft tissue sarcomas	2,973	4.2	1.7	574	3.0	1.1
6. Germ cell and trophoblastic neoplasms	4,965	7.0	1.4*	1,526	7.9	2.2*
7. Melanoma and skin carcinomas	5,395	7.6	1.2*	1,759	9.1	1.2*
8. Carcinomas (excluding skin)	15,177	21.4	0.4*	4,713	24.3	1.4*
9. Miscellaneous specified neoplasms, NOS	359	0.5	1.6*	125	0.6	1.6*
10. Unspecified malignant neoplasms	191	0.3	-	46	0.2	-

  

Males	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	17,712	49.7	0.9*	5,078	52.1	1.6*
1. Leukemias	967	2.7	-0.1	281	2.9	1.3*
2. Lymphomas	3,363	9.4	0.9	887	9.1	1.9
3. CNS, intracranial, intraspinal	1,105	3.1	0.9*	333	3.4	0.9*
4. Osseous & chondromatous neoplasms	273	0.8	0.2	71	0.7	0.2
5. Soft tissue sarcomas	2,192	6.1	2.1	383	3.9	0.3
6. Germ cell and trophoblastic neoplasms	4,582	12.8	1.4*	1,438	14.7	0.7*
7. Melanoma and skin carcinomas	1,923	5.4	0.2	550	5.6	0.2
8. Carcinomas (excluding skin)	3,083	8.6	0.3	1,054	10.8	1.9*
9. Miscellaneous specified neoplasms, NOS	140	0.4	-	55	0.6	-
10. Unspecified malignant neoplasms	84	0.2	-	26	0.3	-

  

Females	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	21,405	60.5	0.6*	6,559	68.1	1.0*
1. Leukemias	695	2.0	1.0*	225	2.3	1.0*
2. Lymphomas	2,537	7.2	0.8*	750	7.8	0.8*
3. CNS, intracranial, intraspinal	915	2.6	0.8*	275	2.9	0.8*
4. Osseous & chondromatous neoplasms	202	0.6	1.8*	72	0.7	1.8*
5. Soft tissue sarcomas	781	2.2	0.7	191	2.0	-1.5
6. Germ cell and trophoblastic neoplasms	383	1.1	-1.2*	88	0.9	-1.2*
7. Melanoma and skin carcinomas	3,472	9.8	1.7*	1,209	12.6	1.7*
8. Carcinomas (excluding skin)	12,094	34.2	0.4	3,659	38.0	1.2*
9. Miscellaneous specified neoplasms, NOS	219	0.6	0.5	70	0.7	0.5
10. Unspecified malignant neoplasms	107	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).

<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 1975-2010.

- 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	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	60,192	84.8	0.9*	17,718	90.1	1.3*
1. Leukemias	2,001	2.8	0.5	610	3.1	0.5
2. Lymphomas	6,631	9.3	1.7*	1,850	9.4	1.3
3. CNS, intracranial, intraspinal	2,386	3.4	0.4	683	3.5	0.4
4. Osseous & chondromatous neoplasms	450	0.6	0.7	136	0.7	0.7
5. Soft tissue sarcomas	4,973	7.0	1.4	752	3.8	-0.6
6. Germ cell and trophoblastic neoplasms	4,996	7.0	1.8*	1,568	8.0	0.5
7. Melanoma and skin carcinomas	7,673	10.8	1.5*	2,352	12.0	-0.1
8. Carcinomas (excluding skin)	30,154	42.5	0.6*	9,451	48.0	2.0*
9. Miscellaneous specified neoplasms, NOS	631	0.9	1.6*	222	1.1	1.6*
10. Unspecified malignant neoplasms	296	0.4	1.1	93	0.5	1.1

  

Males	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	25,085	70.7	1.0*	6,733	68.1	1.0*
1. Leukemias	1,158	3.3	0.6*	347	3.5	0.6*
2. Lymphomas	4,132	11.6	1.9*	1,064	10.8	2.5
3. CNS, intracranial, intraspinal	1,390	3.9	0.3	391	4.0	0.3
4. Osseous & chondromatous neoplasms	246	0.7	0.4	70	0.7	0.4
5. Soft tissue sarcomas	4,023	11.3	1.4	475	4.8	-2.5
6. Germ cell and trophoblastic neoplasms	4,668	13.2	1.9*	1,471	14.9	0.5
7. Melanoma and skin carcinomas	3,090	8.7	0.1	891	9.0	0.1
8. Carcinomas (excluding skin)	6,023	17.0	0.7*	1,891	19.1	3.0*
9. Miscellaneous specified neoplasms, NOS	252	0.7	2.5*	101	1.0	2.5*
10. Unspecified malignant neoplasms	103	0.3	-	32	0.3	-

  

Females	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	35,107	99.0	0.7*	10,985	112.3	1.5*
1. Leukemias	843	2.4	0.3	263	2.7	0.3
2. Lymphomas	2,499	7.0	1.4*	786	8.0	1.4*
3. CNS, intracranial, intraspinal	996	2.8	0.5	292	3.0	0.5
4. Osseous & chondromatous neoplasms	204	0.6	-	66	0.7	-
5. Soft tissue sarcomas	950	2.7	0.4	277	2.8	0.4
6. Germ cell and trophoblastic neoplasms	328	0.9	0.3	97	1.0	0.3
7. Melanoma and skin carcinomas	4,583	12.9	2.2*	1,461	14.9	1.0*
8. Carcinomas (excluding skin)	24,131	68.1	0.6*	7,560	77.3	1.9*
9. Miscellaneous specified neoplasms, NOS	379	1.1	1.1	121	1.2	1.1
10. Unspecified malignant neoplasms	193	0.5	-	61	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 1975-2010.

- 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	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	89,095	132.5	0.8*	27,960	137.0	0.9*
1. Leukemias	2,497	3.7	0.1	761	3.7	0.1
2. Lymphomas	7,542	11.2	1.7*	2,328	11.4	-1.3*
3. CNS, intracranial, intraspinal	2,663	4.0	-0.1	780	3.8	-0.1
4. Osseous & chondromatous neoplasms	444	0.7	1.7*	162	0.8	1.7*
5. Soft tissue sarcomas	5,845	8.7	1.2	1,059	5.2	-0.9
6. Germ cell and trophoblastic neoplasms	3,944	5.9	1.7*	1,315	6.4	0.3
7. Melanoma and skin carcinomas	9,691	14.4	1.6*	3,151	15.4	0.4*
8. Carcinomas (excluding skin)	54,873	81.6	0.5	17,874	87.6	1.5*
9. Miscellaneous specified neoplasms, NOS	1,134	1.7	1.0*	392	1.9	1.0*
10. Unspecified malignant neoplasms	462	0.7	-0.1	138	0.7	-0.1

  

Males	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	33,698	100.6	0.6	9,846	96.5	0.3
1. Leukemias	1,452	4.3	0.0	437	4.3	0.0
2. Lymphomas	4,931	14.7	2.0*	1,415	13.9	-0.4
3. CNS, intracranial, intraspinal	1,559	4.7	-0.1	448	4.4	-0.1
4. Osseous & chondromatous neoplasms	256	0.8	1.0	91	0.9	1.0
5. Soft tissue sarcomas	4,627	13.8	2.8	709	6.9	-1.1
6. Germ cell and trophoblastic neoplasms	3,743	11.2	1.9*	1,251	12.3	0.3
7. Melanoma and skin carcinomas	4,238	12.6	0.7	1,261	12.4	-0.6*
8. Carcinomas (excluding skin)	12,249	36.6	0.3	4,031	39.5	1.6*
9. Miscellaneous specified neoplasms, NOS	455	1.4	0.5	153	1.5	0.5
10. Unspecified malignant neoplasms	188	0.6	-0.7	50	0.5	-0.7

  

Females	1975-2010			2001-2010		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	55,397	164.2	0.7*	18,114	177.5	1.2*
1. Leukemias	1,045	3.1	0.9	324	3.2	2.4*
2. Lymphomas	2,611	7.7	1.5*	913	8.9	1.5*
3. CNS, intracranial, intraspinal	1,104	3.3	-0.3	332	3.3	-0.3
4. Osseous & chondromatous neoplasms	188	0.6	-	71	0.7	-
5. Soft tissue sarcomas	1,218	3.6	-0.6	350	3.4	-0.6
6. Germ cell and trophoblastic neoplasms	201	0.6	-0.2	64	0.6	-0.2
7. Melanoma and skin carcinomas	5,453	16.2	2.2*	1,890	18.5	2.1*
8. Carcinomas (excluding skin)	42,624	126.3	0.6	13,843	135.7	1.4*
9. Miscellaneous specified neoplasms, NOS	679	2.0	1.4*	239	2.3	1.4*
10. Unspecified malignant neoplasms	274	0.8	0.0	88	0.9	0.0

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 1975-2010.

- 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, 2006-2010  
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	22.2	24.4	14.8	15.3	21.2	3.5	3.5	3.4	3.1	3.8
Leukemia	3.6	3.9	2.4	2.7	5.2	1.0	1.1	0.8	0.7	1.4
Lymphoma	5.3	5.8	4.3	3.1	3.7	0.3	0.3	0.5	-	0.3
Hodgkin Lymphoma	3.1	3.5	2.2	2.0	2.3	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	2.1	2.2	2.1	1.1	1.4	0.3	0.3	0.4	-	0.2
Brain and Other Nervous System	2.3	2.5	1.6	1.5	1.6	0.5	0.5	0.3	0.6	0.4
Bones and Joints	1.8	1.9	1.8	1.1	1.7	0.6	0.6	0.5	-	0.6
Soft Tissue including Heart	1.1	1.1	0.9	-	1.0	0.3	0.3	0.3	-	0.3
Skin excluding Basal and Squamous	1.0	1.2	-	-	-	0.0	0.0	-	-	-
Respiratory System	0.4	0.4	-	-	0.6	0.1	0.0	-	-	-
Male Genital System	3.7	4.6	0.7	1.7	5.0	0.1	0.1	-	-	-
Digestive System	0.7	0.7	0.7	-	0.6	0.2	0.2	-	-	0.1
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	20.0	21.7	13.7	15.6	18.2	2.5	2.5	2.5	2.0	2.7
Leukemia	2.6	2.9	1.9	1.9	3.5	0.7	0.7	0.6	0.7	1.1
Lymphoma	4.5	4.9	3.7	3.2	3.3	0.2	0.2	0.2	-	0.2
Hodgkin Lymphoma	3.2	3.5	2.3	2.4	2.1	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	1.3	1.4	1.4	-	1.1	0.1	0.1	-	-	0.2
Brain and Other Nervous System	1.8	1.9	1.3	-	1.3	0.4	0.4	0.5	-	0.3
Bones and Joints	0.9	0.9	1.0	-	0.9	0.4	0.4	0.3	-	0.4
Soft Tissue including Heart	1.2	1.3	0.9	-	1.3	0.3	0.3	0.3	-	0.3
Skin excluding Basal and Squamous	1.6	2.0	-	-	0.6	0.0	-	-	-	-
Respiratory System	0.2	0.2	-	-	-	0.0	-	-	-	-
Breast	0.2	0.2	-	-	-	-	-	-	-	-
Female Genital System	1.7	1.7	1.4	2.0	2.1	0.1	0.1	-	-	-
Digestive System	0.6	0.6	0.7	-	0.6	0.1	0.1	-	-	0.2

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. Mortality data for Hispanics exclude deaths from the District of Columbia, North Dakota, and South Carolina.

- 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, 2006-2010  
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	34.4	38.5	20.8	20.0	32.3	5.6	5.7	5.6	4.6	5.8
Leukemia	3.0	3.3	1.8	2.3	4.3	1.3	1.4	1.2	0.9	1.7
Lymphoma	7.4	7.8	7.1	5.2	5.6	0.7	0.7	0.7	0.7	0.7
Hodgkin Lymphoma	4.4	4.7	3.8	3.1	2.8	0.2	0.3	-	-	0.1
Non-Hodgkin Lymphoma	3.1	3.2	3.3	2.1	2.8	0.5	0.5	0.5	0.5	0.5
Brain and Other Nervous System	2.3	2.6	1.6	1.4	1.9	0.6	0.7	0.5	-	0.5
Bones and Joints	1.1	1.2	0.8	-	1.0	0.7	0.7	0.6	-	0.6
Soft Tissue including Heart	1.3	1.3	1.6	-	1.0	0.4	0.4	0.6	-	0.4
Skin excluding Basal and Squamous	2.4	3.0	-	-	0.6	0.2	0.2	-	-	-
Respiratory System	0.8	0.8	-	-	0.8	0.1	0.1	0.2	-	-
Male Genital System	10.5	12.8	1.6	4.5	13.0	0.4	0.4	-	-	0.7
Digestive System	1.7	1.7	1.7	1.4	1.4	0.4	0.4	0.6	0.9	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	37.2	40.6	24.6	25.1	28.1	3.6	3.6	4.4	2.7	3.7
Leukemia	2.3	2.5	2.1	1.7	3.1	0.8	0.8	0.8	-	1.1
Lymphoma	6.5	6.9	4.9	4.7	4.7	0.4	0.4	0.6	-	0.4
Hodgkin Lymphoma	4.6	5.1	3.3	3.0	3.0	0.2	0.2	0.3	-	-
Non-Hodgkin Lymphoma	1.9	1.9	1.7	1.7	1.7	0.2	0.2	0.4	-	0.2
Brain and Other Nervous System	2.2	2.4	1.6	1.7	1.5	0.4	0.5	0.4	-	0.4
Bones and Joints	0.7	0.7	1.0	-	-	0.3	0.3	0.3	-	0.3
Soft Tissue including Heart	1.2	1.1	1.6	1.2	0.9	0.3	0.3	0.5	-	0.2
Skin excluding Basal and Squamous	5.9	7.2	-	-	1.2	0.1	0.1	-	-	-
Respiratory System	0.4	0.5	-	-	-	0.1	0.1	-	-	-
Breast	1.6	1.5	1.9	1.7	1.2	0.1	0.1	0.2	-	-
Female Genital System	3.9	3.9	4.0	3.3	4.3	0.3	0.3	0.4	-	0.3
Digestive System	1.6	1.7	1.4	1.5	1.2	0.4	0.4	0.3	0.7	0.5

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> 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. Mortality data for Hispanics exclude deaths from the District of Columbia, North Dakota, and South Carolina.

- 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, 2006-2010  
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	48.0	52.5	34.2	25.8	37.9	7.2	7.3	8.1	5.0	6.4
Leukemia	3.1	3.3	2.5	2.2	3.4	1.3	1.3	1.2	0.9	1.6
Lymphoma	8.1	8.2	10.7	4.4	5.8	0.9	0.9	1.5	0.5	0.8
Hodgkin Lymphoma	4.2	4.3	5.1	2.4	2.4	0.3	0.3	0.4	-	0.2
Non-Hodgkin Lymphoma	3.9	3.9	5.6	2.0	3.4	0.6	0.5	1.1	-	0.6
Brain and Other Nervous System	3.2	3.7	1.5	2.1	2.1	1.0	1.1	0.6	-	0.5
Bones and Joints	0.7	0.7	-	-	0.6	0.4	0.4	0.3	-	0.2
Soft Tissue including Heart	1.6	1.6	2.4	-	1.5	0.5	0.4	0.6	-	0.4
Skin excluding Basal and Squamous	4.8	5.8	0.9	-	0.7	0.4	0.5	-	-	-
Respiratory System	1.2	1.2	0.9	1.2	1.2	0.3	0.3	0.4	-	0.3
Male Genital System	14.0	16.9	2.3	4.4	14.0	0.5	0.5	-	-	0.7
Digestive System	3.7	3.7	3.7	3.8	3.3	1.1	1.0	1.6	1.3	1.0
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	64.8	70.2	48.1	41.3	52.0	6.2	6.1	7.8	4.8	5.6
Leukemia	2.2	2.4	1.7	1.8	2.5	0.8	0.9	0.7	0.9	1.1
Lymphoma	7.1	7.4	7.6	4.3	4.9	0.6	0.6	0.7	-	0.6
Hodgkin Lymphoma	4.2	4.6	4.7	1.9	2.8	0.2	0.2	0.2	-	0.3
Non-Hodgkin Lymphoma	2.8	2.8	2.9	2.4	2.1	0.3	0.3	0.5	-	0.3
Brain and Other Nervous System	2.3	2.6	2.1	1.0	1.8	0.6	0.6	0.5	0.4	0.4
Bones and Joints	0.5	0.6	-	-	0.5	0.2	0.2	-	-	0.2
Soft Tissue including Heart	1.2	1.3	1.3	0.9	1.3	0.3	0.3	0.5	-	0.2
Skin excluding Basal and Squamous	10.1	12.5	-	1.0	2.2	0.3	0.4	-	-	-
Respiratory System	0.8	0.9	0.8	0.9	0.6	0.2	0.2	-	-	-
Breast	8.6	8.1	12.4	6.8	6.8	0.7	0.6	1.4	-	0.6
Female Genital System	9.7	10.5	8.1	5.8	10.8	1.0	0.9	1.4	0.5	1.0
Digestive System	3.4	3.3	3.5	2.9	3.4	0.9	0.9	1.2	0.9	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> 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. Mortality data for Hispanics exclude deaths from the District of Columbia, North Dakota, and South Carolina.

- 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, 2006-2010  
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	64.2	68.5	49.3	41.1	46.1	10.4	10.4	12.0	7.7	8.2
Leukemia	3.4	3.6	2.9	2.7	3.8	1.4	1.4	1.6	1.1	1.6
Lymphoma	9.9	9.9	13.5	5.0	7.0	1.1	1.1	1.6	0.5	0.8
Hodgkin Lymphoma	4.0	4.4	4.5	1.4	2.5	0.3	0.4	0.4	-	0.2
Non-Hodgkin Lymphoma	5.9	5.5	9.0	3.5	4.5	0.8	0.8	1.1	-	0.7
Brain and Other Nervous System	3.8	4.1	2.1	3.4	2.5	1.4	1.5	0.7	1.1	0.8
Bones and Joints	0.6	0.6	-	-	0.5	0.3	0.3	0.3	-	0.2
Soft Tissue including Heart	1.9	1.8	2.6	1.9	1.5	0.5	0.5	0.8	-	0.5
Skin excluding Basal and Squamous	8.0	9.4	1.4	1.1	1.9	0.7	0.8	-	-	-
Respiratory System	1.9	1.7	2.4	2.7	1.3	0.7	0.7	0.9	0.6	0.4
Male Genital System	13.8	16.5	3.9	4.2	11.6	0.5	0.5	0.3	-	0.6
Digestive System	7.9	7.9	7.1	7.7	7.6	2.4	2.2	3.4	2.6	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	109.1	116.1	93.4	77.2	86.4	12.1	12.0	15.3	8.3	10.7
Leukemia	3.0	3.1	2.2	3.0	3.2	1.0	1.0	1.0	0.9	1.2
Lymphoma	7.6	7.8	8.8	4.5	5.7	0.7	0.7	1.0	-	0.6
Hodgkin Lymphoma	3.6	4.0	3.7	1.5	2.5	0.3	0.3	0.3	-	0.2
Non-Hodgkin Lymphoma	4.0	3.8	5.1	3.0	3.2	0.4	0.4	0.7	-	0.4
Brain and Other Nervous System	2.7	3.1	1.9	1.4	2.1	0.9	1.0	0.5	0.5	0.7
Bones and Joints	0.4	0.4	-	-	-	0.2	0.2	-	-	-
Soft Tissue including Heart	1.7	1.7	2.1	1.0	1.7	0.4	0.4	0.4	-	0.4
Skin excluding Basal and Squamous	12.1	15.0	2.0	-	2.8	0.5	0.7	-	-	-
Respiratory System	1.7	1.8	1.5	1.9	1.2	0.5	0.5	0.5	-	0.4
Breast	26.2	25.6	33.4	22.5	20.0	2.8	2.4	5.5	1.4	2.2
Female Genital System	18.7	19.7	16.6	13.2	20.1	2.1	2.1	2.7	1.3	2.2
Digestive System	7.0	6.9	8.3	5.7	6.0	1.9	1.8	2.4	1.9	2.0

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> 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. Mortality data for Hispanics exclude deaths from the District of Columbia, North Dakota, and South Carolina.

- 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, 2006-2010  
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	88.5	93.3	76.0	57.1	60.3	17.4	17.3	20.3	13.8	12.3
Leukemia	4.4	4.3	4.3	4.0	4.0	1.5	1.5	1.8	1.4	1.6
Lymphoma	11.7	12.1	14.2	5.5	9.2	1.4	1.4	2.4	0.6	1.2
Hodgkin Lymphoma	3.3	3.5	3.9	1.1	2.2	0.4	0.4	0.6	-	0.3
Non-Hodgkin Lymphoma	8.4	8.6	10.3	4.4	7.0	1.1	1.0	1.8	0.5	0.9
Brain and Other Nervous System	4.4	5.1	1.9	2.7	3.4	2.0	2.3	1.0	1.3	1.2
Bones and Joints	0.6	0.6	-	-	-	0.2	0.3	0.2	-	-
Soft Tissue including Heart	2.4	2.4	3.3	1.7	2.3	0.6	0.6	0.9	-	0.4
Skin excluding Basal and Squamous	11.1	13.2	1.9	1.5	2.4	1.1	1.3	0.3	-	0.3
Respiratory System	4.0	3.9	5.1	3.8	2.5	1.9	1.9	1.9	1.9	0.9
Male Genital System	12.4	14.3	5.6	4.1	9.4	0.5	0.5	0.3	-	0.5
Digestive System	15.2	14.7	17.5	15.6	12.2	5.3	5.0	7.2	5.2	4.2
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	174.7	182.7	149.8	137.8	138.0	23.3	22.6	32.3	15.4	18.1
Leukemia	3.6	3.8	2.6	3.2	4.0	1.2	1.2	1.2	1.0	1.4
Lymphoma	8.3	8.4	9.2	5.4	6.8	0.9	0.9	1.3	0.4	0.7
Hodgkin Lymphoma	2.6	2.9	2.6	1.0	1.6	0.3	0.3	0.3	-	0.2
Non-Hodgkin Lymphoma	5.7	5.6	6.6	4.4	5.2	0.6	0.6	1.0	-	0.5
Brain and Other Nervous System	2.8	3.0	2.2	1.7	2.3	1.2	1.3	0.8	0.8	0.7
Bones and Joints	0.5	0.5	-	-	-	0.2	0.1	-	-	-
Soft Tissue including Heart	1.8	1.8	2.2	1.2	1.7	0.5	0.5	0.7	-	0.4
Skin excluding Basal and Squamous	16.9	20.8	2.2	1.4	4.6	0.7	0.9	-	-	0.2
Respiratory System	3.4	3.5	3.0	3.3	2.2	1.8	1.8	1.9	1.5	0.9
Breast	59.1	59.1	66.6	50.8	44.6	6.9	6.2	12.8	3.6	4.8
Female Genital System	28.7	30.3	22.3	24.4	30.5	4.1	4.1	5.1	2.0	3.8
Digestive System	13.6	13.1	16.2	12.6	12.6	3.8	3.5	5.4	3.8	3.5

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> 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. Mortality data for Hispanics exclude deaths from the District of Columbia, North Dakota, and South Carolina.

- 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, 1975-2010

	Incidence				Mortality			
	1975-2010		2001-2010		1975-2010		2001-2010	
	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	20.3	0.5*	21.7	0.5*	4.2	-2.1*	3.2	-2.6*
Hodgkin Lymphoma	3.5	-0.7*	3.1	-0.7*	0.2	-4.8*	0.1	-4.8*
Brain and Other Nervous System	2.0	0.2	2.0	0.2	0.6	-1.3*	0.5	-1.3*
Thyroid	1.7	2.3*	2.1	6.1*	0.0	-	-	-
Non-Hodgkin Lymphoma	1.6	1.6*	1.9	1.6*	0.4	-2.9*	0.2	-2.9*
Testis	1.6	1.3*	1.9	1.3*	0.1	-5.9*	0.0	-3.7*
<u>Ages 20-24</u>								
All Malignant Cancers	34.0	0.8*	37.6	0.8*	5.6	-1.4*	4.7	-1.0*
Hodgkin Lymphoma	5.0	0.3	5.0	-0.6	0.4	-3.8*	0.2	-4.3*
Testis	4.4	1.0*	5.2	1.0*	0.3	-3.4*	0.2	2.4
Thyroid	4.1	1.8*	5.1	1.8*	0.0	-	0.0	-
Melanoma of the Skin	4.1	1.3*	4.9	1.3*	0.2	-2.8*	0.2	-1.2*
Brain and Other Nervous System	2.3	0.7*	2.5	0.7*	0.6	-0.8*	0.5	-0.8*
<u>Ages 25-29</u>								
All Malignant Cancers	55.1	0.7*	60.0	1.3*	8.4	-1.5*	6.8	-1.5*
Melanoma of the Skin	7.4	1.3*	8.9	1.3*	0.5	-2.5*	0.4	0.0
Thyroid	6.6	2.0*	9.5	4.1*	0.0	-	0.0	-
Testis	6.3	1.2*	7.2	1.2*	0.3	-3.9*	0.2	-1.8*
Hodgkin Lymphoma	4.8	0.0	4.7	0.0	0.6	-4.1*	0.3	-4.1*
Breast	4.1	-0.2	4.1	-0.2	0.5	-2.3*	0.4	-2.3*
<u>Ages 30-34</u>								
All Malignant Cancers	84.8	0.9*	90.1	1.3*	14.7	-1.5*	11.7	-1.4*
Breast	13.3	0.0	13.7	0.0	2.1	-2.1*	1.5	-2.7*
Melanoma of the Skin	10.5	1.7*	11.7	0.0	0.9	-2.0*	0.6	-0.5
Thyroid	8.5	2.5*	12.8	5.3*	0.0	-1.5	0.0	-1.5
Testis	6.4	2.0*	7.3	0.6	0.3	-3.1*	0.2	-1.3*
Cervix Uteri	5.9	-1.3*	4.9	-1.3*	0.9	-1.5*	0.7	-3.1*
<u>Ages 35-39</u>								
All Malignant Cancers	132.5	0.8*	137.0	0.9*	27.4	-1.6*	21.6	-2.2*
Breast	31.6	0.4	31.6	0.4	5.2	-1.7*	3.8	-3.0*
Melanoma of the Skin	13.9	1.6*	14.9	0.4*	1.3	-2.1*	0.9	-1.6
Thyroid	10.3	3.7*	16.0	6.1*	0.1	-0.4	0.1	-0.4
Non-Hodgkin Lymphoma	8.0	2.3*	8.1	0.6	1.5	-1.5*	1.0	-4.9*
Cervix Uteri	7.2	-1.3*	6.0	-1.3*	1.5	-1.6*	1.2	-2.3*

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 1975-2010 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 1975-2010.

- 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, 1975-2010

	<u>Incidence</u>				<u>Mortality</u>			
	<u>1975-2010</u>		<u>2001-2010</u>		<u>1975-2010</u>		<u>2001-2010</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	20.9	0.6*	22.6	0.6*	4.9	-2.3*	3.8	-2.9*
Hodgkin Lymphoma	3.3	-0.6*	3.1	-0.6*	0.2	-5.1*	0.1	-5.1*
Testis	3.1	1.2*	3.6	1.2*	0.2	-6.0*	0.1	-3.7*
Brain and Other Nervous System	2.3	0.2	2.4	0.2	0.7	-1.2*	0.6	-1.2*
Non-Hodgkin Lymphoma	2.0	1.4*	2.3	1.4*	0.5	-3.0*	0.3	-3.0*
Bones and Joints	1.9	0.3	1.9	0.3	0.7	-1.4*	0.6	-0.1
<u>Ages 20-24</u>								
All Malignant Cancers	33.0	0.5*	35.1	0.5*	6.7	-1.5*	5.6	-0.9*
Testis	8.8	0.9*	10.1	0.9*	0.5	-3.4*	0.3	2.4
Hodgkin Lymphoma	5.0	-0.4	4.6	-0.4	0.5	-4.3*	0.2	-4.3*
Melanoma of the Skin	2.8	0.4	2.9	0.4	0.2	-1.9*	0.2	2.3
Non-Hodgkin Lymphoma	2.6	1.9*	3.2	1.9*	0.7	-1.9*	0.5	-5.0*
Brain and Other Nervous System	2.6	0.1	2.5	0.1	0.7	-0.8*	0.6	-0.8*
<u>Ages 25-29</u>								
All Malignant Cancers	49.7	0.9*	52.1	1.6*	9.0	-1.4*	7.2	-0.4
Testis	12.5	1.2*	14.4	1.2*	0.7	-3.9*	0.4	-1.9*
Melanoma of the Skin	5.2	0.3	5.5	0.3	0.6	-2.7*	0.4	0.4
Hodgkin Lymphoma	5.1	-0.2	4.7	-0.2	0.7	-4.4*	0.3	-4.4*
Non-Hodgkin Lymphoma	4.4	1.5	4.3	1.8	1.0	-1.7*	0.6	-5.7*
Kaposi sarcoma	4.0	-	1.4	-	-	-	-	-
<u>Ages 30-34</u>								
All Malignant Cancers	70.7	1.0*	68.1	1.0*	13.7	-1.5*	10.7	-1.1*
Testis	12.8	1.9*	14.6	0.5	0.6	-2.9*	0.4	-0.4
Kaposi sarcoma	8.7	-	2.1	-	-	-	-	-
Melanoma of the Skin	8.4	0.2	8.7	0.2	1.1	-2.3*	0.7	-2.2*
Non-Hodgkin Lymphoma	7.3	1.7	6.4	2.6	1.5	-1.2	0.9	-3.3
Hodgkin Lymphoma	4.3	0.2	4.4	0.2	0.8	-4.4*	0.4	-5.4*
<u>Ages 35-39</u>								
All Malignant Cancers	100.6	0.6	96.5	0.3	23.9	-1.6*	18.4	-1.6*
Melanoma of the Skin	12.2	0.7	11.8	-0.7*	1.6	-2.8*	1.0	-4.4*
Testis	11.0	2.0*	12.2	0.5	0.5	-2.9*	0.4	-1.2*
Non-Hodgkin Lymphoma	10.9	3.0*	10.1	0.4	2.1	-1.4*	1.2	-4.8*
Kaposi sarcoma	10.5	-	3.2	-	-	-	-	-
Colon and Rectum	7.4	1.2*	9.0	1.2*	2.3	-0.4	2.2	0.4

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 1975-2010 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 1975-2010.

- 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, 1975-2010

	<u>Incidence</u>				<u>Mortality</u>			
	<u>1975-2010</u>		<u>2001-2010</u>		<u>1975-2010</u>		<u>2001-2010</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	19.7	0.4*	20.7	0.4*	3.4	-1.8*	2.6	-1.8*
Hodgkin Lymphoma	3.6	-0.7*	3.1	-0.7*	0.2	-4.2*	0.1	-4.2*
Thyroid	2.9	1.7*	3.6	1.7*	0.0	-	-	-
Melanoma of the Skin	1.8	0.8	2.0	0.8	0.1	-3.1*	0.0	-3.1*
Brain and Other Nervous System	1.7	0.0	1.7	0.0	0.5	-1.4*	0.4	-1.4*
Ovary	1.5	-0.1	1.4	-0.1	0.1	-4.8*	0.1	-4.8*
<u>Ages 20-24</u>								
All Malignant Cancers	35.0	1.0*	40.2	1.0*	4.5	-1.2*	3.8	-1.2*
Thyroid	7.1	2.1*	9.1	2.1*	0.0	-	-	-
Melanoma of the Skin	5.5	1.7*	6.9	1.7*	0.2	-3.2*	0.1	-3.2*
Hodgkin Lymphoma	5.0	0.9	5.3	-0.6	0.4	-3.1*	0.2	-3.1*
Cervix Uteri	2.1	-2.2*	1.4	-2.2*	0.2	-1.1*	0.1	-1.1*
Brain and Other Nervous System	2.0	1.5*	2.5	1.5*	0.5	-1.0*	0.4	-1.0*
<u>Ages 25-29</u>								
All Malignant Cancers	60.5	0.6*	68.1	1.0*	7.9	-1.4*	6.4	-1.4*
Thyroid	11.0	2.2*	16.1	4.4*	0.0	-	0.0	-
Melanoma of the Skin	9.6	1.8*	12.3	1.8*	0.4	-2.5*	0.3	-2.5*
Breast	8.1	-0.1	8.2	-0.1	1.1	-2.3*	0.7	-3.2*
Cervix Uteri	7.1	-2.2	5.1	-3.4*	0.8	-1.5*	0.5	-1.5*
Hodgkin Lymphoma	4.6	0.2	4.7	0.2	0.5	-3.6*	0.3	-3.6*
<u>Ages 30-34</u>								
All Malignant Cancers	99.0	0.7*	112.3	1.5*	15.7	-1.5*	12.6	-1.9*
Breast	26.5	0.0	27.4	0.0	4.3	-2.0*	3.1	-2.6*
Thyroid	13.8	3.0*	21.6	5.5*	0.0	-	0.0	-
Melanoma of the Skin	12.6	2.3*	14.6	1.0*	0.7	-2.4*	0.5	-2.4*
Cervix Uteri	11.7	-1.2*	9.9	-1.2*	1.8	-1.5*	1.4	-3.1*
Hodgkin Lymphoma	3.7	1.0*	4.2	1.0*	0.5	-3.4*	0.3	-3.4*
<u>Ages 35-39</u>								
All Malignant Cancers	164.2	0.7*	177.5	1.2*	30.9	-1.5*	24.9	-2.1*
Breast	62.9	0.4	63.0	0.4	10.2	-1.7*	7.6	-3.0*
Thyroid	16.1	4.1*	25.9	6.4*	0.1	-0.9	0.1	-0.9
Melanoma of the Skin	15.7	2.0*	18.0	0.8	1.0	-2.4*	0.7	-2.4*
Cervix Uteri	14.3	-1.3*	12.0	-1.3*	2.9	-1.6*	2.4	-2.3*
Corpus and Uterus, NOS	6.7	1.0*	8.2	3.3*	0.4	-1.3*	0.5	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 1975-2010 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 1975-2010.

- 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, 1975-2009

	5-year Relative Survival (Percent)					
	1975-2009	1975-1981	1982-1988	1989-1995	1996-2002	2003-2009
<u>Ages 15-19</u>						
All Malignant Cancers	77.4	68.7	75.5	77.6	80.1	84.5
Hodgkin Lymphoma	91.9	88.3	88.3	92.9	95.4	97.1
Brain and Other Nervous System	72.8	62.5	71.2	75.3	78.4	75.7
Thyroid	98.7	99.5	98.1	99.6	97.7	98.1
Non-Hodgkin Lymphoma	71.1	52.4	66.7	68.1	77.0	83.6
Testis	90.0	75.9	91.0	90.7	93.0	95.9
<u>Ages 20-24</u>						
All Malignant Cancers	80.4	74.5	77.7	80.1	83.4	85.7
Hodgkin Lymphoma	90.2	85.8	88.3	90.0	93.4	94.9
Testis	92.2	83.2	90.6	94.3	95.8	95.8
Thyroid	99.6	99.5	99.7	99.6	99.1	99.7
Melanoma of the Skin	92.3	85.0	89.6	95.0	94.9	96.4
Brain and Other Nervous System	65.8	56.9	61.8	68.0	68.4	71.2
<u>Ages 25-29</u>						
All Malignant Cancers	78.7	76.3	74.7	73.8	83.6	86.1
Melanoma of the Skin	92.9	87.1	90.9	94.1	94.9	96.5
Thyroid	99.7	99.6	99.6	99.7	99.7	99.7
Testis	94.8	87.3	94.6	95.6	97.2	97.2
Hodgkin Lymphoma	90.0	85.1	88.3	90.2	92.0	95.7
Breast	73.4	69.3	67.1	71.0	79.7	83.9
<u>Ages 30-34</u>						
All Malignant Cancers	74.9	73.4	69.6	68.0	80.6	84.5
Breast	76.6	70.3	71.3	75.9	81.3	85.3
Melanoma of the Skin	92.2	85.9	90.6	91.9	94.6	96.9
Thyroid	99.6	99.7	99.0	99.8	99.7	99.6
Testis	95.4	91.8	94.1	96.1	96.0	97.0
Cervix Uteri	84.9	84.2	83.3	84.1	88.1	85.1
<u>Ages 35-39</u>						
All Malignant Cancers	72.9	67.5	66.9	67.2	78.1	82.9
Breast	80.9	73.9	76.2	80.7	84.7	87.4
Melanoma of the Skin	92.0	87.0	89.9	90.9	94.5	95.5
Thyroid	99.4	98.9	99.1	99.4	99.1	99.8
Non-Hodgkin Lymphoma	61.9	66.4	55.9	47.2	67.3	79.0
Cervix Uteri	81.7	79.4	80.4	80.5	85.0	82.8

<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 1975-2009 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, 1975-2009

	5-year Relative Survival (Percent)					
	1975-2009	1975-1981	1982-1988	1989-1995	1996-2002	2003-2009
<u>Ages 15-19</u>						
All Malignant Cancers	73.1	61.5	70.6	73.7	76.0	82.9
Hodgkin Lymphoma	91.1	85.8	88.0	91.6	94.9	98.0
Testis	90.0	75.9	91.0	90.7	93.0	95.9
Brain and Other Nervous System	69.7	58.2	66.4	74.5	73.6	76.3
Non-Hodgkin Lymphoma	68.5	45.0	66.7	71.4	71.6	80.8
Bones and Joints	57.3	42.2	49.7	61.0	65.3	66.5
<u>Ages 20-24</u>						
All Malignant Cancers	75.9	69.0	71.9	75.1	80.5	83.2
Testis	92.2	83.2	90.6	94.3	95.8	95.8
Hodgkin Lymphoma	88.3	84.3	84.7	88.1	92.7	94.3
Melanoma of the Skin	85.4	76.0	78.7	91.8	90.3	91.4
Non-Hodgkin Lymphoma	64.9	55.4	50.1	57.4	70.0	83.9
Brain and Other Nervous System	64.8	51.8	60.7	69.3	69.4	74.5
<u>Ages 25-29</u>						
All Malignant Cancers	72.3	70.6	66.7	64.5	79.9	82.8
Testis	94.8	87.3	94.6	95.6	97.2	97.2
Melanoma of the Skin	88.1	81.6	85.4	90.0	91.1	92.7
Hodgkin Lymphoma	87.8	83.7	85.1	86.2	91.8	94.6
Non-Hodgkin Lymphoma	56.5	56.4	51.8	40.2	68.7	77.2
Kaposi sarcoma	13.4	-	10.0	7.8	43.6	49.9
<u>Ages 30-34</u>						
All Malignant Cancers	66.3	68.5	59.1	54.8	75.7	80.9
Testis	95.4	91.8	94.1	96.1	96.0	97.0
Kaposi sarcoma	17.2	-	9.6	12.1	48.3	64.7
Melanoma of the Skin	87.7	78.2	85.8	88.3	91.1	94.3
Non-Hodgkin Lymphoma	52.8	69.3	49.4	32.6	62.0	78.2
Hodgkin Lymphoma	86.3	79.3	80.7	85.5	90.7	94.6
<u>Ages 35-39</u>						
All Malignant Cancers	62.4	59.3	53.8	52.4	71.2	76.9
Melanoma of the Skin	87.6	82.2	84.0	87.3	90.6	92.2
Testis	96.1	91.1	94.7	96.5	97.3	96.9
Non-Hodgkin Lymphoma	54.3	62.2	47.8	38.6	61.5	73.1
Kaposi sarcoma	17.9	-	7.5	10.7	50.9	68.7
Colon and Rectum	61.6	56.8	50.1	55.9	67.0	70.3

<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 1975-2009 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, 1975-2009

	5-year Relative Survival (Percent)					
	1975-2009	1975-1981	1982-1988	1989-1995	1996-2002	2003-2009
<u>Ages 15-19</u>						
All Malignant Cancers	82.2	76.4	80.8	81.8	84.9	86.3
Hodgkin Lymphoma	92.8	90.6	88.6	93.9	95.7	95.8
Thyroid	99.1	99.4	99.4	99.5	97.6	99.5
Melanoma of the Skin	95.0	87.4	93.4	94.9	98.4	98.9
Brain and Other Nervous System	77.2	68.9	77.6	76.4	85.4	74.9
Ovary	87.6	76.3	92.8	87.2	94.5	87.1
<u>Ages 20-24</u>						
All Malignant Cancers	84.7	79.7	84.1	85.1	86.2	87.9
Thyroid	99.7	99.2	99.6	99.4	99.7	100.0
Melanoma of the Skin	96.0	90.7	96.4	96.6	97.1	98.5
Hodgkin Lymphoma	92.1	87.7	91.9	91.7	94.0	95.5
Cervix Uteri	88.1	88.7	88.8	86.4	90.1	86.3
Brain and Other Nervous System	67.1	64.1	63.4	66.2	67.0	68.9
<u>Ages 25-29</u>						
All Malignant Cancers	84.1	80.4	81.6	83.1	86.6	88.8
Thyroid	99.8	99.7	99.7	99.7	99.9	99.7
Melanoma of the Skin	95.6	90.8	94.2	96.5	97.1	98.2
Breast	73.5	69.3	67.0	71.1	79.7	84.2
Cervix Uteri	87.2	89.0	86.6	87.1	88.3	83.7
Hodgkin Lymphoma	92.5	86.8	91.8	94.8	92.2	96.6
<u>Ages 30-34</u>						
All Malignant Cancers	81.2	76.3	77.7	80.6	83.9	86.7
Breast	76.5	70.2	71.2	75.9	81.2	85.3
Thyroid	99.7	99.5	99.2	99.7	99.9	99.5
Melanoma of the Skin	95.3	92.0	94.1	94.4	96.7	98.5
Cervix Uteri	84.9	84.2	83.3	84.1	88.1	85.1
Hodgkin Lymphoma	90.7	84.1	89.0	91.5	92.0	95.1
<u>Ages 35-39</u>						
All Malignant Cancers	79.4	71.7	75.5	78.5	82.2	86.1
Breast	80.9	73.8	76.2	80.6	84.6	87.4
Thyroid	99.7	99.4	98.9	99.6	99.7	99.7
Melanoma of the Skin	95.6	91.5	95.1	94.1	97.3	97.6
Cervix Uteri	81.7	79.4	80.4	80.5	85.0	82.8
Corpus and Uterus, NOS	90.5	92.3	91.7	88.8	90.6	90.0

<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 1975-2009 SEER 9 Incidence rates for the age group.

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