

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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Accessed May 28, 2008.

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, 2003-2007

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	16.1	14.2	51.2	81.6	1202.0	873.8
1. LEUKEMIAS	5.6	4.5	3.5	2.5	31.1	18.0
1.1 Acute lymphoid leukemia	4.5	3.6	1.2	0.7	1.2	1.0
1.2 Acute myeloid leukemia	0.8	0.7	1.2	1.2	9.3	6.1
1.3 Chronic myeloid leukemia	0.1	0.0	0.7	0.4	2.6	1.7
1.4 Other and unspecified leukemias	0.2	0.1	0.4	0.2	17.9	9.2
2. LYMPHOMAS	1.8	1.0	8.5	6.8	54.3	37.9
2.1 Non-Hodgkin Lymphoma	1.1	0.6	4.8	3.1	50.4	35.3
2.2 Hodgkin Lymphoma	0.7	0.5	3.7	3.6	3.9	2.5
3. CNS, INTRACRANIAL, INTRASPINAL	3.1	2.8	3.1	2.5	13.5	9.1
3.1 Astrocytoma	1.4	1.5	1.6	1.3	10.5	6.6
3.1.1 Specified low-grade astrocytic tumors	1.0	1.1	0.4	0.4	0.4	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.2	0.2	0.8	0.5	9.4	5.9
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.3	0.7	0.5
3.2 Other glioma	0.5	0.5	1.0	0.7	1.6	1.2
3.3 Ependymoma	0.3	0.2	0.2	0.2	0.3	0.3
3.4 Medulloblastoma and other PNET	0.7	0.5	0.2	0.2	0.1	0.1
3.4.1 Medulloblastoma	0.4	0.3	0.1	0.1	0.0	0.0
3.4.2 Supratentorial PNET	0.3	0.2	0.1	0.1	0.1	0.0
3.5 Other specified intracranial and intraspinal neoplasms	0.1	0.1	0.1	0.1	0.3	0.3
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	0.1	0.0	0.7	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.8	0.8	1.0	0.8	1.4	1.0
4.1 Osteosarcoma	0.3	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	0.3	0.3	0.3	0.2	0.1	0.1
4.4 Other specified and unspecified bone tumors	0.0	0.0	0.1	0.1	0.4	0.3
5. SOFT TISSUE SARCOMAS	1.0	0.9	3.4	2.4	12.3	8.9
5.1 Fibromatous neoplasms	0.2	0.1	0.7	0.8	3.3	2.0
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	2.6	1.4	8.9	6.7
5.3.1 Specified soft tissue sarcoma	0.2	0.2	2.2	1.2	6.9	5.2
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.1	1.1	5.2	5.0
5.3.1.2 Kaposi sarcoma	-	-	1.2	0.0	1.8	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.3	0.3	2.0	1.4
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.5	0.6	10.5	1.0	4.1	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.3	9.9	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	0.4	0.3	0.2	0.1

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

<sup>a</sup> SEER 17 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 and New Jersey).

<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, 2003-2007

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.3	5.6	9.6	60.7	33.5
7.1 Melanoma	0.2	0.3	5.4	9.5	57.0	31.5
7.2 Skin carcinomas	-	-	0.1	0.1	3.7	1.9
8. CARCINOMAS (excluding skin)	0.3	0.7	14.7	54.5	965.3	720.8
8.1 Thyroid carcinoma	0.1	0.3	2.7	13.7	9.6	23.7
8.2 Other carcinoma of head and neck	0.1	0.1	1.7	1.4	49.8	16.4
8.2.1 Nasopharyngeal carcinoma	0.0	-	0.3	0.2	1.9	0.7
8.2.2 Other sites in lip, oral cavity and pharynx	0.0	0.1	1.1	1.0	31.9	11.9
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	0.2	16.0	3.8
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.0	1.2	163.7	112.5
8.4 Carcinoma of breast	-	-	0.1	20.1	2.7	265.2
8.5 Carcinoma of genitourinary tract	-	0.1	2.9	12.7	489.7	134.6
8.5.1 Carcinoma of kidney	-	0.0	1.7	1.2	39.1	19.3
8.5.2 Carcinoma of bladder	-	-	0.9	0.3	84.7	20.7
8.5.3 Carcinoma of gonads	-	-	0.0	1.8	0.0	24.9
8.5.4 Carcinoma of cervix and uterus	-	-	-	8.9	-	59.8
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.4	0.5	365.9	9.9
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	5.7	4.9	229.9	150.5
8.6.1 Carcinoma of colon and rectum	-	-	3.5	3.3	127.3	96.0
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	23.2	11.1
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	0.0	0.5	0.3	22.9	7.6
8.6.4 Carcinoma of pancreas	-	-	0.4	0.3	27.0	21.0
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.3	29.6	14.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	0.0	0.6	0.6	20.0	18.0
8.7.1 Adrenocortical carcinoma	-	-	0.0	0.1	0.2	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.5	0.6	19.7	17.7
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.7	2.6	0.7	1.1	24.5	19.7
9.1 Other pediatric and embryonal tumors, NOS	2.6	2.5	0.1	0.1	0.2	0.2
9.1.1 Wilms tumor	0.6	0.7	-	-	-	0.0
9.1.2 Neuroblastoma	1.0	1.0	0.0	0.0	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.9	0.7	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.2	0.6	1.0	24.3	19.5
9.2.1 Paraganglioma and glomus tumors	-	-	0.0	0.0	0.1	0.1
9.2.2 Other specified gonadal tumors	-	-	0.0	0.1	0.0	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.3	0.2	17.6	11.1
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.6	7.9
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.4	34.7	24.8

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 17 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 and New Jersey).

<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, 2003-2007

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	17.0	14.7	54.5	85.2	1204.9	897.4
1. LEUKEMIAS	6.0	4.8	3.6	2.6	32.6	18.7
1.1 Acute lymphoid leukemia	4.9	3.9	1.3	0.8	1.2	1.0
1.2 Acute myeloid leukemia	0.8	0.7	1.2	1.2	9.7	6.2
1.3 Chronic myeloid leukemia	0.1	-	0.7	0.4	2.7	1.7
1.4 Other and unspecified leukemias	0.2	0.1	0.4	0.2	19.0	9.8
2. LYMPHOMAS	1.9	1.1	8.7	7.0	56.9	39.9
2.1 Non-Hodgkin Lymphoma	1.1	0.6	4.7	3.1	52.8	37.1
2.2 Hodgkin Lymphoma	0.7	0.5	4.0	4.0	4.2	2.7
3. CNS, INTRACRANIAL, INTRASPINAL	3.4	2.9	3.5	2.7	14.8	10.0
3.1 Astrocytoma	1.5	1.6	1.8	1.4	11.6	7.4
3.1.1 Specified low-grade astrocytic tumors	1.1	1.2	0.5	0.5	0.4	0.2
3.1.2 Glioblastoma and anaplastic astrocytoma	0.2	0.2	0.9	0.6	10.4	6.6
3.1.3 Astrocytoma, NOS	0.2	0.2	0.4	0.3	0.8	0.6
3.2 Other glioma	0.6	0.5	1.1	0.8	1.8	1.3
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	-	0.1	0.1	0.3	0.3
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	0.1	-	0.7	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.8	0.8	1.1	0.9	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	0.8	0.5
4.3 Ewing tumor	0.4	0.3	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	3.1	2.2	12.5	8.7
5.1 Fibromatous neoplasms	0.1	0.1	0.6	0.7	3.3	2.0
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	2.3	1.4	9.0	6.6
5.3.1 Specified soft tissue sarcoma	0.2	0.2	2.0	1.2	7.0	5.2
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.1	1.1	5.4	5.0
5.3.1.2 Kaposi sarcoma	-	-	0.9	-	1.6	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.3	0.2	2.0	1.4
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.6	0.6	12.5	0.9	4.8	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.4	11.9	0.7	4.6	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.4	0.3	0.6	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	0.4	0.3	0.2	0.1

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

<sup>a</sup> SEER 17 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 and New Jersey).

<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, 2003-2007

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.3	0.3	6.7	11.8	69.7	38.8
7.1 Melanoma	0.3	0.3	6.5	11.7	65.7	36.8
7.2 Skin carcinomas	-	-	0.1	0.1	4.0	2.0
8. CARCINOMAS (excluding skin)	0.3	0.7	14.5	55.7	953.8	736.5
8.1 Thyroid carcinoma	0.1	0.4	2.9	14.8	10.2	24.7
8.2 Other carcinoma of head and neck	0.1	0.1	1.6	1.2	50.5	16.6
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	1.2	1.0	33.4	12.3
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.2	0.2	15.9	3.9
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.0	1.2	163.7	117.4
8.4 Carcinoma of breast	-	-	0.1	19.9	2.7	273.8
8.5 Carcinoma of genitourinary tract	-	0.1	3.0	13.2	483.3	140.3
8.5.1 Carcinoma of kidney	-	-	1.7	1.3	40.1	20.0
8.5.2 Carcinoma of bladder	-	-	1.0	0.4	91.8	22.1
8.5.3 Carcinoma of gonads	-	-	0.1	1.8	0.0	26.3
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.3	-	61.6
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.3	0.5	351.2	10.3
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	5.4	4.6	223.3	145.5
8.6.1 Carcinoma of colon and rectum	-	-	3.5	3.2	126.5	94.7
8.6.2 Carcinoma of stomach	-	-	0.7	0.6	20.6	9.5
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.3	0.2	19.4	6.3
8.6.4 Carcinoma of pancreas	-	-	0.3	0.3	27.0	20.6
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.3	29.9	14.4
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.5	0.6	20.2	18.3
8.7.1 Adrenocortical carcinoma	-	-	0.0	0.1	0.2	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.5	0.5	19.9	18.0
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.8	2.6	0.7	1.0	23.9	18.3
9.1 Other pediatric and embryonal tumors, NOS	2.7	2.5	0.1	0.1	0.2	0.2
9.1.1 Wilms tumor	0.6	0.8	-	-	-	-
9.1.2 Neuroblastoma	1.1	1.0	0.0	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	1.0	0.7	0.1	0.0	0.2	0.1
9.2 Other specified neoplasms, NOS	0.1	0.1	0.6	0.9	23.7	18.2
9.2.1 Paraganglioma and glomus tumors	-	-	0.0	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	0.3	0.2	16.8	10.2
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.8	7.5
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.4	34.4	25.2

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 17 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 and New Jersey).

<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, 2003-2007

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	12.1	11.4	40.1	67.9	1411.0	865.7
1. LEUKEMIAS	3.6	2.6	3.0	2.1	25.0	15.0
1.1 Acute lymphoid leukemia	2.5	1.6	0.8	0.4	0.9	0.9
1.2 Acute myeloid leukemia	0.9	0.8	1.1	0.9	7.4	5.6
1.3 Chronic myeloid leukemia	-	-	0.7	0.5	2.8	1.8
1.4 Other and unspecified leukemias	-	-	0.4	0.3	13.9	6.7
2. LYMPHOMAS	1.7	1.1	9.9	7.0	39.4	27.7
2.1 Non-Hodgkin Lymphoma	1.0	0.6	6.4	3.7	35.7	25.2
2.2 Hodgkin Lymphoma	0.7	0.4	3.5	3.3	3.7	2.5
3. CNS, INTRACRANIAL, INTRASPINAL	2.1	2.4	1.5	1.5	8.5	5.7
3.1 Astrocytoma	0.9	1.1	0.9	0.8	6.0	3.4
3.1.1 Specified low-grade astrocytic tumors	0.6	0.8	0.2	0.3	-	-
3.1.2 Glioblastoma and anaplastic astrocytoma	-	-	0.4	0.3	5.4	3.0
3.1.3 Astrocytoma, NOS	-	-	0.2	-	0.5	0.4
3.2 Other glioma	0.4	0.4	0.4	0.4	1.0	0.7
3.3 Ependymoma	0.3	-	-	-	-	-
3.4 Medulloblastoma and other PNET	0.4	0.5	-	-	-	-
3.4.1 Medulloblastoma	-	-	-	-	-	-
3.4.2 Supratentorial PNET	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	0.4	0.6
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	0.8	0.7
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.4	0.6	0.8	0.6	1.1	1.0
4.1 Osteosarcoma	0.3	0.5	0.5	0.4	0.4	0.4
4.2 Chondrosarcoma	-	-	-	-	0.4	0.3
4.3 Ewing tumor	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	0.3	0.2
5. SOFT TISSUE SARCOMAS	1.2	1.1	6.4	3.7	11.4	11.1
5.1 Fibromatous neoplasms	-	-	1.0	1.4	2.5	2.4
5.2 Rhabdomyosarcoma	0.7	0.6	0.2	-	-	0.4
5.3 Other specified soft tissue sarcoma	0.3	0.3	5.2	2.2	8.6	8.3
5.3.1 Specified soft tissue sarcoma	-	-	4.6	1.7	6.8	6.3
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	1.2	1.6	4.0	6.0
5.3.1.2 Kaposi sarcoma	-	-	3.3	-	2.8	0.3
5.3.2 Unspecified soft tissue sarcoma	-	-	0.6	0.5	1.8	2.0
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	-	0.5	2.1	0.9	1.1	0.4
6.1 Germ cell and trophoblastic neoplasms of gonads	-	-	1.8	0.5	1.0	-
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	-	-	0.3	0.4	-	0.2
6.2.1 Intracranial sites	-	-	-	-	-	-
6.2.2 Other nongonadal sites	-	-	-	0.3	-	0.2

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

<sup>a</sup> SEER 17 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 and New Jersey).

<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, 2003-2007

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	-	-	0.4	0.5	4.0	3.2
7.1 Melanoma	-	-	0.3	0.4	2.9	2.3
7.2 Skin carcinomas	-	-	-	-	1.1	0.8
8. CARCINOMAS (excluding skin)	0.5	0.4	14.5	49.2	1233.7	737.2
8.1 Thyroid carcinoma	-	-	1.2	6.5	5.9	15.2
8.2 Other carcinoma of head and neck	-	-	1.7	1.5	60.5	17.0
8.2.1 Nasopharyngeal carcinoma	-	-	0.5	-	2.3	0.7
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	0.8	1.2	32.9	11.2
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.4	-	25.3	5.2
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.3	1.2	218.5	119.1
8.4 Carcinoma of breast	-	-	-	23.0	3.7	251.8
8.5 Carcinoma of genitourinary tract	-	-	3.3	10.7	632.4	119.6
8.5.1 Carcinoma of kidney	-	-	2.1	1.2	45.8	21.9
8.5.2 Carcinoma of bladder	-	-	0.5	-	47.0	17.0
8.5.3 Carcinoma of gonads	-	-	-	1.4	-	18.7
8.5.4 Carcinoma of cervix and uterus	-	-	-	7.4	-	53.7
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.7	0.6	539.6	8.3
8.6 Carcinoma of gastrointestinal tract	-	-	6.1	5.5	289.8	195.0
8.6.1 Carcinoma of colon and rectum	-	-	3.8	3.6	155.4	119.9
8.6.2 Carcinoma of stomach	-	-	0.6	0.7	35.1	17.0
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.8	0.3	30.1	9.0
8.6.4 Carcinoma of pancreas	-	-	0.4	0.4	34.2	29.0
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.5	35.0	20.1
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.9	0.8	23.0	19.6
8.7.1 Adrenocortical carcinoma	-	-	-	-	0.3	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.9	0.7	22.7	19.3
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.4	2.6	1.3	2.0	40.4	36.4
9.1 Other pediatric and embryonal tumors, NOS	2.3	2.5	-	-	-	-
9.1.1 Wilms tumor	0.6	0.7	-	-	-	-
9.1.2 Neuroblastoma	1.0	1.1	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.7	0.8	-	-	-	-
9.2 Other specified neoplasms, NOS	-	-	1.2	1.8	40.2	36.3
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	0.2	-	0.5
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.6	0.7	33.6	23.2
9.2.4 Other specified neoplasms, NOS	-	-	0.4	0.9	6.3	12.4
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	46.4	28.1

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 17 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 and New Jersey).

<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, 2003-2007

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	20.1	33.4	37.0	46.7	63.2	61.3	105.3	86.5	166.9
1. LEUKEMIAS	3.7	2.4	3.0	2.2	3.0	2.1	3.3	2.7	4.2	3.0
1.1 Acute lymphoid leukemia	2.4	1.1	1.3	0.6	0.9	0.6	0.8	0.6	0.8	0.5
1.2 Acute myeloid leukemia	0.9	0.9	1.0	1.1	1.2	1.1	1.2	1.3	1.5	1.4
1.3 Chronic myeloid leukemia	0.3	0.2	0.5	0.3	0.6	0.3	0.8	0.6	1.1	0.6
1.4 Other and unspecified leukemias	0.2	0.1	0.2	0.2	0.4	0.2	0.5	0.2	0.8	0.5
2. LYMPHOMAS	5.2	4.2	7.2	6.4	8.0	7.4	9.5	7.7	11.9	8.1
2.1 Non-Hodgkin Lymphoma	2.3	1.4	2.9	1.8	3.9	2.7	5.6	4.0	8.5	5.4
2.2 Hodgkin Lymphoma	2.9	2.9	4.3	4.6	4.1	4.7	3.9	3.7	3.4	2.7
3. CNS, INTRACRANIAL, INTRASPINAL	2.2	2.0	2.2	2.3	3.2	2.3	3.6	2.7	4.1	2.9
3.1 Astrocytoma	1.3	1.0	1.2	1.2	1.5	1.2	1.7	1.3	2.3	1.5
3.1.1 Specified low-grade astrocytic tumors	0.7	0.7	0.4	0.5	0.4	0.3	0.3	0.3	0.4	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.4	0.2	0.5	0.4	0.7	0.5	1.0	0.7	1.4	0.8
3.1.3 Astrocytoma, NOS	0.2	0.1	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.3
3.2 Other glioma	0.4	0.4	0.5	0.6	1.1	0.7	1.3	0.9	1.3	1.0
3.3 Ependymoma	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
3.4 Medulloblastoma and other PNET	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	-	-
3.4.1 Medulloblastoma	0.1	0.1	0.2	0.2	0.1	-	-	-	-	-
3.4.2 Supratentorial PNET	0.1	0.1	-	-	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	0.1
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	-	-	-	-	-	-
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	2.0	1.3	1.2	0.8	0.6	0.7	0.6	0.6	0.7	0.6
4.1 Osteosarcoma	1.0	0.6	0.5	0.3	0.1	0.3	0.2	0.2	0.2	0.1
4.2 Chondrosarcoma	-	-	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
4.3 Ewing tumor	0.8	0.5	0.4	0.2	0.1	0.2	0.1	-	0.1	0.1
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	0.2	-
5. SOFT TISSUE SARCOMAS	1.4	1.6	1.9	1.6	3.2	2.1	4.3	2.8	5.9	3.6
5.1 Fibromatous neoplasms	0.2	0.4	0.4	0.5	0.7	0.9	0.9	1.1	1.0	1.1
5.2 Rhabdomyosarcoma	0.4	0.3	0.2	0.1	0.1	-	-	-	0.1	-
5.3 Other specified soft tissue sarcoma	0.8	0.8	1.3	1.0	2.4	1.1	3.2	1.6	4.7	2.4
5.3.1 Specified soft tissue sarcoma	0.6	0.6	1.0	0.8	2.0	1.0	2.8	1.4	4.4	2.0
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.6	0.6	0.8	0.8	1.0	0.9	1.2	1.3	1.6	1.9
5.3.1.2 Kaposi sarcoma	-	-	0.3	-	1.0	-	1.6	-	2.7	-
5.3.2 Unspecified soft tissue sarcoma	0.2	0.2	0.3	0.2	0.4	0.2	0.4	0.3	0.4	0.4
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	4.1	1.1	10.4	1.1	13.7	1.2	13.4	0.9	11.0	0.6
6.1 Germ cell and trophoblastic neoplasms of gonads	3.4	0.9	9.8	0.8	13.2	0.8	12.9	0.6	10.7	0.3
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.7	0.2	0.6	0.3	0.6	0.4	0.5	0.3	0.3	0.3
6.2.1 Intracranial sites	0.5	-	0.2	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	-	0.4	0.2	0.4	0.4	0.4	0.3	0.3	0.3

Rates are per 100,000.

- <sup>a</sup> SEER 17 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 and New Jersey).
- <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, 2003-2007

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	1.2	2.1	2.6	6.3	5.0	10.5	7.4	12.4	10.6	16.1
7.1 Melanoma	1.2	2.1	2.6	6.3	5.0	10.3	7.2	12.2	10.4	15.9
7.2 Skin carcinomas	-	-	-	-	-	-	0.2	0.1	0.2	0.2
8. CARCINOMAS (excluding skin)	2.1	5.0	4.3	15.5	9.3	35.8	17.9	73.7	35.9	128.9
8.1 Thyroid carcinoma	0.6	3.2	1.3	8.3	2.5	13.9	3.7	18.7	5.1	22.9
8.2 Other carcinoma of head and neck	0.5	0.4	0.6	0.8	1.1	1.0	2.0	1.8	4.0	2.6
8.2.1 Nasopharyngeal carcinoma	0.2	-	0.2	-	0.2	0.1	0.4	0.2	0.6	0.4
8.2.2 Other sites in lip, oral cavity and pharynx	0.3	0.3	0.4	0.7	0.8	0.8	1.3	1.4	2.7	1.9
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	-	-	0.2	0.3	0.5	0.6	1.1	1.3	2.9	3.2
8.4 Carcinoma of breast	-	-	-	1.3	-	8.0	-	25.5	0.1	58.4
8.5 Carcinoma of genitourinary tract	0.2	0.7	0.7	3.0	1.5	8.9	3.5	19.0	7.8	28.8
8.5.1 Carcinoma of kidney	-	0.2	0.3	0.3	0.9	0.8	2.1	1.7	4.5	2.7
8.5.2 Carcinoma of bladder	0.1	-	0.3	0.2	0.5	0.3	1.1	0.3	2.1	0.8
8.5.3 Carcinoma of gonads	-	0.4	-	0.7	-	1.2	-	2.3	-	4.0
8.5.4 Carcinoma of cervix and uterus	-	-	-	1.7	-	6.5	-	14.0	-	20.0
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.1	0.3	0.6	1.2	1.3
8.6 Carcinoma of gastrointestinal tract	0.5	0.5	1.4	1.5	3.1	3.0	6.9	6.5	14.7	11.5
8.6.1 Carcinoma of colon and rectum	0.3	0.3	0.8	1.0	2.0	1.9	4.4	4.4	9.1	7.8
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.4	0.4	0.9	1.0	1.8	1.5
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.2	-	0.2	0.2	0.3	0.2	0.6	0.2	1.3	0.5
8.6.4 Carcinoma of pancreas	-	-	-	-	0.1	0.2	0.3	0.4	1.1	0.9
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	0.3	0.3	0.6	0.4	1.4	0.8
8.7 Carcinoma of other and ill-defined sites, NOS	0.1	-	0.2	0.3	0.4	0.5	0.7	0.8	1.2	1.4
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	0.1
8.7.2 Carcinoma of other and ill-defined sites, NOS	0.1	-	0.2	0.2	0.4	0.4	0.7	0.7	1.2	1.3
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.5	0.3	0.5	0.5	0.9	0.9	1.2	1.6	2.2
9.1 Other pediatric and embryonal tumors, NOS	0.1	0.1	-	-	-	-	-	-	-	-
9.1.1 Wilms tumor	-	-	-	-	-	-	-	-	-	-
9.1.2 Neuroblastoma	-	-	-	-	-	-	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.2 Other specified neoplasms, NOS	0.1	0.3	0.3	0.4	0.4	0.8	0.8	1.1	1.5	2.2
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	0.2	-	0.2	-	0.2
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.1	-	0.1	-	0.5	0.2	0.8	0.7
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	0.2	-	0.3	0.2	0.6	0.2	0.7	0.6	1.3
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.1	0.2	0.2	0.2	0.3	0.5	0.5	0.9

Rates are per 100,000.

<sup>a</sup> SEER 17 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 and New Jersey).

<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, 2003-2007

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	24.0	21.3	36.8	39.3	50.3	67.2	65.3	110.6	90.0	172.1
1. LEUKEMIAS	4.1	2.5	3.2	2.2	3.0	2.3	3.4	2.8	4.3	3.2
1.1 Acute lymphoid leukemia	2.7	1.3	1.4	0.7	1.0	0.7	0.9	0.7	0.8	0.6
1.2 Acute myeloid leukemia	1.0	1.0	1.1	1.2	1.2	1.1	1.3	1.4	1.5	1.5
1.3 Chronic myeloid leukemia	0.2	-	0.5	0.3	0.6	0.3	0.8	0.5	1.1	0.7
1.4 Other and unspecified leukemias	0.2	-	0.2	-	0.3	-	0.5	0.3	0.9	0.5
2. LYMPHOMAS	5.4	4.4	7.4	6.7	8.2	7.8	9.7	7.9	12.1	8.2
2.1 Non-Hodgkin Lymphoma	2.3	1.3	2.8	1.7	3.8	2.8	5.4	3.8	8.4	5.3
2.2 Hodgkin Lymphoma	3.1	3.1	4.6	5.0	4.4	4.9	4.3	4.1	3.6	2.9
3. CNS, INTRACRANIAL, INTRASPINAL	2.4	2.1	2.5	2.6	3.6	2.6	4.1	2.9	4.7	3.4
3.1 Astrocytoma	1.4	1.1	1.3	1.4	1.8	1.3	2.0	1.5	2.6	1.7
3.1.1 Specified low-grade astrocytic tumors	0.8	0.8	0.4	0.6	0.4	0.4	0.3	0.3	0.4	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.4	0.2	0.6	0.4	0.8	0.6	1.2	0.8	1.6	1.0
3.1.3 Astrocytoma, NOS	0.2	-	0.3	0.3	0.5	0.3	0.5	0.3	0.6	0.4
3.2 Other glioma	0.4	0.4	0.6	0.7	1.3	0.8	1.5	1.0	1.5	1.2
3.3 Ependymoma	0.2	0.2	-	0.2	0.2	0.2	0.2	0.2	0.3	0.2
3.4 Medulloblastoma and other PNET	0.3	0.3	0.3	0.3	0.2	0.2	0.2	-	-	-
3.4.1 Medulloblastoma	-	-	0.2	0.2	-	-	-	-	-	-
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	2.0	1.4	1.3	0.9	0.6	0.7	0.6	0.7	0.8	0.6
4.1 Osteosarcoma	1.0	0.6	0.6	0.3	-	0.3	-	0.2	0.2	-
4.2 Chondrosarcoma	-	-	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3
4.3 Ewing tumor	0.9	0.6	0.5	0.3	-	0.2	0.2	-	0.2	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	0.2	-
5. SOFT TISSUE SARCOMAS	1.4	1.5	1.9	1.5	2.8	2.0	3.8	2.6	5.3	3.2
5.1 Fibromatous neoplasms	0.3	0.4	0.5	0.4	0.6	0.7	0.8	1.0	0.8	0.9
5.2 Rhabdomyosarcoma	0.4	0.3	0.3	-	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.7	0.9	1.2	0.9	2.1	1.1	2.9	1.6	4.3	2.2
5.3.1 Specified soft tissue sarcoma	0.6	0.7	0.9	0.8	1.7	1.0	2.5	1.3	4.0	1.9
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.6	0.7	0.7	0.8	1.0	1.0	1.3	1.3	1.6	1.8
5.3.1.2 Kaposi sarcoma	-	-	0.2	-	0.7	-	1.3	-	2.3	-
5.3.2 Unspecified soft tissue sarcoma	0.2	0.2	0.3	-	0.4	-	0.3	0.3	0.4	0.3
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	4.8	1.1	12.4	1.1	16.4	1.2	16.1	0.8	13.0	0.5
6.1 Germ cell and trophoblastic neoplasms of gonads	4.1	0.9	11.8	0.9	15.8	0.8	15.5	0.5	12.6	0.2
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.6	0.2	0.7	0.2	0.6	0.4	0.5	0.3	0.4	0.3
6.2.1 Intracranial sites	0.4	-	0.2	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	-	0.5	0.2	0.5	0.4	0.5	0.3	0.3	0.3

Rates are per 100,000.

<sup>a</sup> SEER 17 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 and New Jersey).

<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, 2003-2007

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	1.5	2.5	3.2	7.5	6.0	12.9	8.8	15.1	12.8	19.6
7.1 Melanoma	1.5	2.5	3.1	7.4	5.9	12.8	8.6	15.0	12.6	19.5
7.2 Skin carcinomas	-	-	-	-	-	-	0.2	-	0.2	-
8. CARCINOMAS (excluding skin)	2.1	5.3	4.4	16.1	9.1	36.6	17.8	75.9	35.2	130.6
8.1 Thyroid carcinoma	0.7	3.6	1.4	9.0	2.7	15.0	3.8	20.8	5.6	24.4
8.2 Other carcinoma of head and neck	0.5	0.3	0.6	0.8	1.0	0.8	1.8	1.6	3.7	2.4
8.2.1 Nasopharyngeal carcinoma	-	-	0.2	-	-	-	-	-	0.2	-
8.2.2 Other sites in lip, oral cavity and pharynx	0.3	0.2	0.4	0.7	0.8	0.7	1.4	1.3	2.9	1.9
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	0.3	0.3	0.6	0.4
8.3 Carcinoma of trachea, bronchus, and lung	-	-	0.2	0.3	0.5	0.6	0.9	1.3	2.7	3.2
8.4 Carcinoma of breast	-	-	-	1.3	-	7.6	-	25.1	-	58.3
8.5 Carcinoma of genitourinary tract	0.2	0.7	0.7	3.0	1.5	9.2	3.7	20.1	8.0	30.1
8.5.1 Carcinoma of kidney	-	0.2	0.3	0.3	0.9	0.8	2.2	1.9	4.5	2.9
8.5.2 Carcinoma of bladder	-	-	0.3	0.2	0.5	0.3	1.2	0.4	2.4	0.9
8.5.3 Carcinoma of gonads	-	0.4	-	0.7	-	1.2	-	2.4	-	4.0
8.5.4 Carcinoma of cervix and uterus	-	-	-	1.7	-	6.8	-	14.9	-	20.9
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	0.2	0.5	1.1	1.4
8.6 Carcinoma of gastrointestinal tract	0.5	0.5	1.4	1.5	3.1	3.0	6.8	6.2	13.8	10.8
8.6.1 Carcinoma of colon and rectum	0.2	0.3	0.8	1.0	2.0	2.0	4.4	4.3	8.9	7.5
8.6.2 Carcinoma of stomach	-	-	0.2	-	0.4	0.4	1.0	0.9	1.7	1.3
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.2	-	0.2	0.2	0.2	-	0.4	0.2	0.7	0.4
8.6.4 Carcinoma of pancreas	-	-	-	-	-	0.2	0.3	0.4	1.0	0.9
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	0.3	0.3	0.7	0.4	1.5	0.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	-	0.3	0.3	0.4	0.7	0.7	1.2	1.4
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	0.2
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	-	0.2	0.3	0.4	0.6	0.6	1.1	1.3
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.4	0.4	0.4	0.4	0.8	0.9	1.2	1.4	1.9
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	-	0.3	0.3	0.4	0.3	0.7	0.8	1.1	1.3	1.9
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	-	-	-	0.5	0.2	0.7	0.4
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	0.2	-	0.2	0.2	0.5	0.2	0.6	0.5	1.2
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.3	0.2	0.2	0.2	0.5	0.4	0.9

Rates are per 100,000.

<sup>a</sup> SEER 17 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 and New Jersey).

<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, 2003-2007

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	14.6	14.7	19.5	26.0	33.6	46.4	47.3	89.8	78.7	148.0
1. LEUKEMIAS	2.1	2.0	2.3	2.2	2.9	1.2	3.1	2.6	4.3	2.3
1.1 Acute lymphoid leukemia	1.0	-	0.9	-	-	-	-	-	-	-
1.2 Acute myeloid leukemia	-	-	-	1.0	-	-	1.3	1.0	1.5	1.1
1.3 Chronic myeloid leukemia	-	-	-	-	-	-	-	1.1	1.4	-
1.4 Other and unspecified leukemias	-	-	-	-	-	-	-	-	-	-
2. LYMPHOMAS	4.9	3.9	6.1	5.2	9.7	6.8	12.6	9.1	15.3	9.3
2.1 Non-Hodgkin Lymphoma	2.6	1.6	3.5	1.8	5.2	2.0	8.4	5.5	11.3	6.7
2.2 Hodgkin Lymphoma	2.3	2.3	2.6	3.4	4.5	4.8	4.2	3.6	4.0	2.6
3. CNS, INTRACRANIAL, INTRASPINAL	1.1	1.2	1.5	1.2	1.4	1.6	1.3	2.0	2.3	1.6
3.1 Astrocytoma	-	-	1.1	-	-	-	-	-	1.5	-
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	1.6	0.9	-	-	-	-	-	-	-	-
4.1 Osteosarcoma	1.3	-	-	-	-	-	-	-	-	-
4.2 Chondrosarcoma	-	-	-	-	-	-	-	-	-	-
4.3 Ewing tumor	-	-	-	-	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	-	-
5. SOFT TISSUE SARCOMAS	1.4	2.0	3.0	3.0	6.4	3.2	8.6	4.1	11.8	6.1
5.1 Fibromatous neoplasms	-	-	-	1.0	1.0	1.7	1.7	1.7	1.7	1.8
5.2 Rhabdomyosarcoma	-	-	-	-	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.8	-	2.4	1.6	5.2	1.5	6.8	2.4	9.8	4.3
5.3.1 Specified soft tissue sarcoma	-	-	2.1	1.3	4.3	1.1	5.9	2.0	9.2	3.4
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	0.9	1.1	1.1	-	1.1	1.8	2.3	3.0
5.3.1.2 Kaposi sarcoma	-	-	1.2	-	3.2	-	4.8	-	6.9	-
5.3.2 Unspecified soft tissue sarcoma	-	-	-	-	-	-	-	-	-	0.9
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	1.1	1.3	1.5	-	2.8	-	3.3	-	1.9	-
6.1 Germ cell and trophoblastic neoplasms of gonads	-	1.1	1.3	-	2.3	-	3.0	-	1.9	-
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 17 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 and New Jersey).
- <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, 2003-2007

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	-	-	-	-	-	-	-	-	1.0	-
7.1 Melanoma	-	-	-	-	-	-	-	-	-	-
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	-	-
8. CARCINOMAS (excluding skin)	2.2	2.4	3.9	11.6	8.5	30.7	15.7	67.2	38.0	120.8
8.1 Thyroid carcinoma	-	0.9	-	3.9	1.0	6.5	1.6	7.8	2.3	12.4
8.2 Other carcinoma of head and neck	-	-	-	1.0	1.4	1.3	1.5	1.9	3.8	2.6
8.2.1 Nasopharyngeal carcinoma	-	-	-	-	-	-	-	-	-	-
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	-	-	-	1.0	-	1.7	2.2	2.0
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	3.4
8.4 Carcinoma of breast	-	-	-	2.0	-	11.1	-	30.9	-	63.3
8.5 Carcinoma of genitourinary tract	-	-	-	3.2	1.6	8.2	3.4	16.2	9.6	23.5
8.5.1 Carcinoma of kidney	-	-	-	-	1.3	-	2.6	1.3	5.5	3.1
8.5.2 Carcinoma of bladder	-	-	-	-	-	-	-	-	1.6	-
8.5.3 Carcinoma of gonads	-	-	-	-	-	1.1	-	1.8	-	3.1
8.5.4 Carcinoma of cervix and uterus	-	-	-	2.3	-	6.0	-	11.9	-	15.2
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	-	1.0	2.5	1.6
8.6 Carcinoma of gastrointestinal tract	-	-	1.5	1.3	2.7	2.5	6.5	7.8	17.1	14.1
8.6.1 Carcinoma of colon and rectum	-	-	-	-	1.6	1.5	4.0	5.3	11.0	9.2
8.6.2 Carcinoma of stomach	-	-	-	-	-	-	-	1.1	2.0	1.8
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	-	-	-	-	1.1	-	1.6	-
8.6.4 Carcinoma of pancreas	-	-	-	-	-	-	-	-	1.0	-
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	-	-	-	-	1.5	1.4
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	-	1.3	1.6	1.5
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	-	1.3	1.6	1.4
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	-	-	-	-	1.1	1.0	1.1	2.0	3.2	4.8
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	-	-	-	-	1.0	1.0	-	2.0	3.0	4.5
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	-	-	-
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	-	-	-	-	-	-	1.9	2.2
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	-	-	-	-	-	-	1.0	1.0	1.9
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	-	-	-	-	-	-	-	1.1

Rates are per 100,000.

<sup>a</sup> SEER 17 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 and New Jersey).

<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	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	12,069	20.2	0.6*	4,021	21.2	0.6*
1. Leukemias	1,463	2.4	1.1*	537	2.8	1.1*
2. Lymphomas	3,014	5.0	-0.1	906	4.8	-0.1
3. CNS, intracranial, intraspinal	1,186	2.0	0.4	378	2.0	0.4
4. Osseous & chondromatous neoplasms	943	1.6	0.6	304	1.6	0.6
5. Soft tissue sarcomas	900	1.5	0.6	318	1.7	0.6
6. Germ cell and trophoblastic neoplasms	1,452	2.4	0.9*	496	2.6	0.9*
7. Melanoma and skin carcinomas	916	1.5	1.3*	334	1.8	1.3*
8. Carcinomas (excluding skin)	1,959	3.3	0.8*	687	3.6	0.8*
9. Miscellaneous specified neoplasms, NOS	183	0.3	-0.2	53	0.3	-0.2
10. Unspecified malignant neoplasms	53	0.1	-	-	-	-

  

Males	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	6,354	20.8	0.7*	2,139	22.0	0.7*
1. Leukemias	882	2.9	0.7*	313	3.2	0.7*
2. Lymphomas	1,601	5.2	-0.1	486	5.0	-0.1
3. CNS, intracranial, intraspinal	692	2.3	0.5	226	2.3	0.5
4. Osseous & chondromatous neoplasms	610	2.0	0.8	195	2.0	0.8
5. Soft tissue sarcomas	471	1.5	0.4	160	1.6	0.4
6. Germ cell and trophoblastic neoplasms	1,058	3.5	1.3*	386	4.0	1.3*
7. Melanoma and skin carcinomas	362	1.2	1.7*	134	1.4	1.7*
8. Carcinomas (excluding skin)	576	1.9	1.4*	217	2.2	1.4*
9. Miscellaneous specified neoplasms, NOS	78	0.3	-	18	0.2	-
10. Unspecified malignant neoplasms	24	0.1	-	-	-	-

  

Females	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	5,715	19.5	0.4*	1,882	20.4	0.4*
1. Leukemias	581	2.0	1.7*	224	2.4	1.7*
2. Lymphomas	1,413	4.8	-0.1	420	4.5	-0.1
3. CNS, intracranial, intraspinal	494	1.7	0.2	152	1.6	0.2
4. Osseous & chondromatous neoplasms	333	1.1	0.3	109	1.2	0.3
5. Soft tissue sarcomas	429	1.5	0.9	158	1.7	0.9
6. Germ cell and trophoblastic neoplasms	394	1.3	-1.5	110	1.2	-6.4
7. Melanoma and skin carcinomas	554	1.9	1.0*	200	2.2	1.0*
8. Carcinomas (excluding skin)	1,383	4.7	0.5	470	5.1	0.5
9. Miscellaneous specified neoplasms, NOS	105	0.4	-	35	0.4	-
10. Unspecified malignant neoplasms	29	0.1	-	-	-	-

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

<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 1975-2007.

- 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	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	20,646	33.6	0.8*	6,814	36.7	0.8*
1. Leukemias	1,345	2.2	1.1*	461	2.5	1.1*
2. Lymphomas	4,378	7.1	0.9*	1,380	7.4	-0.1
3. CNS, intracranial, intraspinal	1,366	2.2	0.8*	436	2.4	0.8*
4. Osseous & chondromatous neoplasms	535	0.9	1.1*	179	1.0	1.1*
5. Soft tissue sarcomas	1,291	2.1	0.8	369	2.0	-2.2*
6. Germ cell and trophoblastic neoplasms	3,218	5.2	0.9*	1,111	6.0	0.9*
7. Melanoma and skin carcinomas	2,617	4.3	1.5*	960	5.2	1.5*
8. Carcinomas (excluding skin)	5,560	9.0	0.2	1,801	9.7	1.3*
9. Miscellaneous specified neoplasms, NOS	205	0.3	1.7*	75	0.4	1.7*
10. Unspecified malignant neoplasms	131	0.2	0.7	42	0.2	0.7

  

Males	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	10,204	32.7	0.5*	3,268	34.2	0.5*
1. Leukemias	782	2.5	0.9*	258	2.7	0.9*
2. Lymphomas	2,345	7.5	0.4	721	7.5	0.4
3. CNS, intracranial, intraspinal	777	2.5	0.3	222	2.3	0.3
4. Osseous & chondromatous neoplasms	312	1.0	0.5	99	1.0	0.5
5. Soft tissue sarcomas	775	2.5	0.7	204	2.1	-3.4*
6. Germ cell and trophoblastic neoplasms	2,875	9.2	0.9*	1,003	10.5	0.9*
7. Melanoma and skin carcinomas	910	2.9	0.4	310	3.2	0.4
8. Carcinomas (excluding skin)	1,298	4.2	0.0	411	4.3	0.0
9. Miscellaneous specified neoplasms, NOS	81	0.3	-	26	0.3	-
10. Unspecified malignant neoplasms	49	0.2	-	-	-	-

  

Females	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	10,442	34.5	1.1*	3,546	39.4	1.1*
1. Leukemias	563	1.9	1.0	203	2.3	2.8*
2. Lymphomas	2,033	6.7	1.4*	659	7.3	0.0
3. CNS, intracranial, intraspinal	589	1.9	1.6*	214	2.4	1.6*
4. Osseous & chondromatous neoplasms	223	0.7	1.6*	80	0.9	1.6*
5. Soft tissue sarcomas	516	1.7	-0.3	165	1.8	-5.6
6. Germ cell and trophoblastic neoplasms	343	1.1	0.3	108	1.2	0.3
7. Melanoma and skin carcinomas	1,707	5.6	2.0*	650	7.2	2.0*
8. Carcinomas (excluding skin)	4,262	14.1	0.4	1,390	15.5	1.5*
9. Miscellaneous specified neoplasms, NOS	124	0.4	2.1*	49	0.5	2.1*
10. Unspecified malignant neoplasms	82	0.3	-	28	0.3	-

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

<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 1975-2007.

- 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	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	35,244	54.5	0.8*	10,916	58.0	1.6*
1. Leukemias	1,502	2.3	0.2	492	2.6	1.6*
2. Lymphomas	5,349	8.3	0.7	1,548	8.2	0.6
3. CNS, intracranial, intraspinal	1,835	2.8	1.1*	597	3.2	1.1*
4. Osseous & chondromatous neoplasms	428	0.7	1.2*	134	0.7	1.2*
5. Soft tissue sarcomas	2,779	4.3	1.7	551	2.9	0.8
6. Germ cell and trophoblastic neoplasms	4,452	6.9	1.6*	1,412	7.5	2.7*
7. Melanoma and skin carcinomas	4,856	7.5	1.6*	1,670	8.9	3.6*
8. Carcinomas (excluding skin)	13,550	21.0	0.3	4,345	23.1	1.4*
9. Miscellaneous specified neoplasms, NOS	320	0.5	1.6*	121	0.6	1.6*
10. Unspecified malignant neoplasms	173	0.3	-	46	0.2	-
Males	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	16,029	49.2	0.9*	4,773	49.8	1.3*
1. Leukemias	872	2.7	-0.2	272	2.8	1.5*
2. Lymphomas	3,056	9.4	0.8	835	8.7	-0.4
3. CNS, intracranial, intraspinal	994	3.1	0.9*	314	3.3	0.9*
4. Osseous & chondromatous neoplasms	247	0.8	0.0	69	0.7	0.0
5. Soft tissue sarcomas	2,076	6.4	2.3	375	3.9	0.6
6. Germ cell and trophoblastic neoplasms	4,096	12.6	1.7*	1,320	13.8	2.5*
7. Melanoma and skin carcinomas	1,765	5.4	0.4	557	5.8	0.4
8. Carcinomas (excluding skin)	2,731	8.4	0.8	958	10.0	2.8*
9. Miscellaneous specified neoplasms, NOS	116	0.4	-	49	0.5	-
10. Unspecified malignant neoplasms	76	0.2	-	24	0.3	-
Females	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	19,215	59.9	0.6*	6,143	66.5	1.2*
1. Leukemias	630	2.0	1.3*	220	2.4	1.3*
2. Lymphomas	2,293	7.1	1.1*	713	7.7	1.1*
3. CNS, intracranial, intraspinal	841	2.6	1.3*	283	3.1	1.3*
4. Osseous & chondromatous neoplasms	181	0.6	2.1*	65	0.7	2.1*
5. Soft tissue sarcomas	703	2.2	0.3	176	1.9	-3.2*
6. Germ cell and trophoblastic neoplasms	356	1.1	-0.8	92	1.0	-0.8
7. Melanoma and skin carcinomas	3,091	9.6	2.2*	1,113	12.0	4.8*
8. Carcinomas (excluding skin)	10,819	33.7	0.2	3,387	36.6	1.1*
9. Miscellaneous specified neoplasms, NOS	204	0.6	1.0	72	0.8	1.0
10. Unspecified malignant neoplasms	97	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 1975-2007.

- 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	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	54,546	83.6	0.8*	17,270	85.7	0.6*
1. Leukemias	1,822	2.8	0.5	613	3.0	0.5
2. Lymphomas	6,052	9.3	1.8*	1,879	9.3	-0.5
3. CNS, intracranial, intraspinal	2,155	3.3	0.2	675	3.3	0.2
4. Osseous & chondromatous neoplasms	413	0.6	0.9	139	0.7	0.9
5. Soft tissue sarcomas	4,740	7.3	1.1	788	3.9	-2.6
6. Germ cell and trophoblastic neoplasms	4,519	6.9	1.9*	1,542	7.6	0.4
7. Melanoma and skin carcinomas	6,955	10.7	1.7*	2,344	11.6	1.1
8. Carcinomas (excluding skin)	27,071	41.5	0.3*	8,975	44.5	1.7*
9. Miscellaneous specified neoplasms, NOS	554	0.8	1.6*	226	1.1	1.6*
10. Unspecified malignant neoplasms	264	0.4	1.1	88	0.4	1.1

  

Males	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	22,942	70.2	0.8*	6,657	65.4	0.3
1. Leukemias	1,052	3.2	0.6	355	3.5	0.6
2. Lymphomas	3,782	11.6	1.7*	1,075	10.6	-1.8
3. CNS, intracranial, intraspinal	1,258	3.9	0.1	395	3.9	0.1
4. Osseous & chondromatous neoplasms	231	0.7	0.8	79	0.8	0.8
5. Soft tissue sarcomas	3,884	11.9	1.4	532	5.2	-5.9*
6. Germ cell and trophoblastic neoplasms	4,225	12.9	2.0*	1,454	14.3	0.4
7. Melanoma and skin carcinomas	2,807	8.6	0.0	880	8.6	0.0
8. Carcinomas (excluding skin)	5,393	16.5	0.3	1,753	17.2	2.1*
9. Miscellaneous specified neoplasms, NOS	215	0.7	2.2*	98	1.0	2.2*
10. Unspecified malignant neoplasms	95	0.3	-	36	0.4	-

  

Females	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	31,604	97.0	0.6*	10,613	106.4	1.5*
1. Leukemias	770	2.4	0.3	258	2.6	0.3
2. Lymphomas	2,270	7.0	1.6*	804	8.1	1.6*
3. CNS, intracranial, intraspinal	897	2.8	0.3	280	2.8	0.3
4. Osseous & chondromatous neoplasms	182	0.6	-	60	0.6	-
5. Soft tissue sarcomas	856	2.6	0.1	256	2.6	0.1
6. Germ cell and trophoblastic neoplasms	294	0.9	-0.1	88	0.9	-0.1
7. Melanoma and skin carcinomas	4,148	12.7	2.3*	1,464	14.7	1.0*
8. Carcinomas (excluding skin)	21,678	66.5	0.4*	7,222	72.4	1.6*
9. Miscellaneous specified neoplasms, NOS	339	1.0	1.3*	128	1.3	1.3*
10. Unspecified malignant neoplasms	169	0.5	-	52	0.5	-

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 1975-2007.

- 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	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	80,343	130.5	0.5	27,907	130.4	0.4*
1. Leukemias	2,227	3.6	-0.4	758	3.5	-0.4
2. Lymphomas	6,832	11.1	1.8*	2,380	11.1	-1.8*
3. CNS, intracranial, intraspinal	2,435	4.0	-0.2	839	3.9	-0.2
4. Osseous & chondromatous neoplasms	390	0.6	1.5*	149	0.7	1.5*
5. Soft tissue sarcomas	5,537	9.0	1.4	1,103	5.2	-0.8
6. Germ cell and trophoblastic neoplasms	3,560	5.8	1.8*	1,381	6.5	0.3
7. Melanoma and skin carcinomas	8,687	14.1	1.6*	3,163	14.8	0.1
8. Carcinomas (excluding skin)	49,267	80.0	0.3	17,617	82.3	1.2*
9. Miscellaneous specified neoplasms, NOS	1,004	1.6	1.0*	392	1.8	1.0*
10. Unspecified malignant neoplasms	404	0.7	-0.5	125	0.6	-0.5

  

Males	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	30,658	99.8	0.5	9,995	93.0	-0.4
1. Leukemias	1,305	4.2	-0.3	446	4.1	-0.3
2. Lymphomas	4,510	14.7	1.8*	1,452	13.5	-3.2*
3. CNS, intracranial, intraspinal	1,417	4.6	-0.2	482	4.5	-0.2
4. Osseous & chondromatous neoplasms	226	0.7	0.7	81	0.8	0.7
5. Soft tissue sarcomas	4,428	14.4	2.9	749	7.0	-1.3
6. Germ cell and trophoblastic neoplasms	3,383	11.0	2.0*	1,326	12.3	0.3
7. Melanoma and skin carcinomas	3,834	12.5	0.6	1,296	12.1	-1.1*
8. Carcinomas (excluding skin)	10,976	35.7	0.0	3,953	36.8	1.2*
9. Miscellaneous specified neoplasms, NOS	411	1.3	0.7	163	1.5	0.7
10. Unspecified malignant neoplasms	168	0.5	-0.1	47	0.4	-5.0*

  

Females	1975-2007			1998-2007		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
All Sites Combined	49,685	161.1	0.6*	17,912	168.2	0.9*
1. Leukemias	922	3.0	-0.1	312	2.9	-1.9
2. Lymphomas	2,322	7.5	1.6*	928	8.7	1.6*
3. CNS, intracranial, intraspinal	1,018	3.3	-0.3	357	3.4	-0.3
4. Osseous & chondromatous neoplasms	164	0.5	-	68	0.6	-
5. Soft tissue sarcomas	1,109	3.6	-0.8	354	3.3	-0.8
6. Germ cell and trophoblastic neoplasms	177	0.6	-1.0	55	0.5	-1.0
7. Melanoma and skin carcinomas	4,853	15.7	2.0	1,867	17.5	0.2
8. Carcinomas (excluding skin)	38,291	124.2	0.4	13,664	128.3	1.2*
9. Miscellaneous specified neoplasms, NOS	593	1.9	1.1*	229	2.2	1.1*
10. Unspecified malignant neoplasms	236	0.8	-0.7	78	0.7	-0.7

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

<sup>a</sup> 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 1975-2007.

- 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, 2003-2007  
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	24.0	14.6	17.8	21.0	4.0	4.1	3.6	3.4	4.8
Leukemia	3.7	4.1	2.1	3.2	5.6	1.2	1.2	1.0	0.9	1.8
Lymphoma	5.2	5.4	4.9	3.7	3.7	0.4	0.4	0.4	-	0.5
Hodgkin Lymphoma	2.9	3.1	2.3	2.3	2.1	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	2.3	2.3	2.6	1.4	1.6	0.3	0.3	0.3	-	0.3
Brain and Other Nervous System	2.3	2.5	1.2	1.8	1.7	0.6	0.6	0.4	-	0.5
Bones and Joints	1.8	1.8	1.7	1.8	1.7	0.7	0.7	0.6	-	0.8
Soft Tissue including Heart	1.1	1.2	-	-	1.2	0.3	0.3	0.3	-	0.3
Skin excluding Basal and Squamous	1.4	1.6	-	-	-	0.0	0.1	-	-	-
Respiratory System	0.5	0.5	-	-	0.5	0.1	0.0	-	-	-
Male Genital System	3.6	4.3	0.9	2.2	4.0	0.1	0.1	-	-	-
Digestive System	0.6	0.6	0.8	-	0.5	0.2	0.2	0.2	-	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	20.1	21.3	14.7	15.1	16.8	2.7	2.7	2.8	2.1	2.8
Leukemia	2.4	2.5	2.0	1.8	3.0	0.8	0.8	0.8	-	1.0
Lymphoma	4.2	4.4	3.9	2.9	2.7	0.2	0.2	0.3	-	0.2
Hodgkin Lymphoma	2.9	3.1	2.3	1.3	1.8	0.1	0.1	-	-	-
Non-Hodgkin Lymphoma	1.4	1.3	1.6	1.6	0.9	0.1	0.1	0.2	-	-
Brain and Other Nervous System	2.0	2.1	1.3	1.6	1.8	0.4	0.5	0.4	-	0.4
Bones and Joints	1.1	1.2	-	-	1.2	0.4	0.4	0.3	-	0.3
Soft Tissue including Heart	1.2	1.2	1.1	-	1.1	0.3	0.3	0.3	-	0.3
Skin excluding Basal and Squamous	2.3	2.7	-	-	0.6	0.0	0.0	-	-	-
Respiratory System	0.3	0.3	-	-	-	-	-	-	-	-
Breast	0.2	0.2	-	-	-	-	-	-	-	-
Female Genital System	1.7	1.6	1.8	1.7	2.2	0.1	0.1	-	-	-
Digestive System	0.6	0.6	-	-	0.8	0.1	0.1	-	-	-

Rates are per 100,000.

<sup>a</sup> SEER 17 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 and New Jersey).<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 District of Columbia, New Hampshire and North Dakota.

- 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, 2003-2007  
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	33.4	36.8	19.5	20.9	30.3	5.4	5.4	5.9	4.7	5.8
Leukemia	3.0	3.2	2.3	2.6	4.3	1.4	1.4	1.4	1.0	2.0
Lymphoma	7.2	7.4	6.1	6.6	4.6	0.8	0.7	0.9	0.7	0.8
Hodgkin Lymphoma	4.3	4.6	2.6	3.4	2.5	0.2	0.3	0.3	-	-
Non-Hodgkin Lymphoma	2.9	2.8	3.5	3.2	2.1	0.5	0.5	0.7	-	0.6
Brain and Other Nervous System	2.3	2.5	1.6	-	2.0	0.6	0.6	0.5	-	0.5
Bones and Joints	1.0	1.2	-	-	1.1	0.6	0.6	0.6	-	0.4
Soft Tissue including Heart	1.2	1.2	1.5	-	1.1	0.4	0.4	0.5	-	0.3
Skin excluding Basal and Squamous	2.8	3.4	-	-	0.6	0.2	0.2	-	-	-
Respiratory System	0.8	0.8	-	-	0.8	0.1	0.1	-	-	-
Male Genital System	10.0	12.0	1.5	3.9	11.6	0.3	0.4	0.2	-	0.6
Digestive System	1.6	1.6	1.6	1.3	1.6	0.4	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	37.0	39.3	26.0	26.6	27.6	3.9	3.8	4.4	3.5	4.2
Leukemia	2.2	2.2	2.2	1.4	2.4	0.9	0.9	0.7	0.6	1.3
Lymphoma	6.4	6.7	5.2	5.2	4.0	0.5	0.5	0.7	-	0.4
Hodgkin Lymphoma	4.6	5.0	3.4	3.5	2.6	0.2	0.2	0.2	-	-
Non-Hodgkin Lymphoma	1.8	1.7	1.8	1.7	1.4	0.3	0.3	0.5	-	0.3
Brain and Other Nervous System	2.3	2.6	1.3	1.3	1.7	0.5	0.5	0.4	-	0.3
Bones and Joints	0.7	0.7	-	-	0.6	0.3	0.3	0.3	-	0.2
Soft Tissue including Heart	1.2	1.0	2.0	-	0.8	0.3	0.3	0.5	-	0.3
Skin excluding Basal and Squamous	6.5	7.6	-	-	1.6	0.1	0.1	-	-	-
Respiratory System	0.5	0.5	-	-	0.6	0.1	0.1	-	-	-
Breast	1.6	1.5	2.2	1.3	1.4	0.1	0.1	0.3	-	-
Female Genital System	4.0	3.9	4.1	3.9	4.3	0.3	0.3	0.4	-	0.3
Digestive System	1.7	1.7	1.4	1.5	1.4	0.4	0.4	0.3	0.8	0.5

Rates are per 100,000.

<sup>a</sup> SEER 17 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 and New Jersey).<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 District of Columbia, New Hampshire and North Dakota.

- 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, 2003-2007  
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	46.7	50.3	33.6	25.5	34.2	7.0	7.0	7.9	5.5	5.5
Leukemia	3.0	3.0	2.9	2.7	3.7	1.2	1.2	1.1	0.9	1.3
Lymphoma	8.0	8.2	9.7	4.3	5.2	1.0	0.9	1.4	0.8	0.8
Hodgkin Lymphoma	4.1	4.4	4.5	1.8	1.9	0.4	0.3	0.5	-	0.2
Non-Hodgkin Lymphoma	3.9	3.8	5.2	2.4	3.3	0.6	0.6	1.0	0.6	0.6
Brain and Other Nervous System	3.2	3.6	1.4	1.9	2.3	0.9	1.0	0.7	-	0.5
Bones and Joints	0.5	0.5	-	-	-	0.3	0.4	0.3	-	0.2
Soft Tissue including Heart	1.7	1.6	2.6	-	1.3	0.4	0.4	0.4	-	0.3
Skin excluding Basal and Squamous	5.4	6.3	-	1.2	0.8	0.5	0.6	-	-	-
Respiratory System	1.2	1.1	1.5	-	1.1	0.3	0.3	0.4	-	0.2
Male Genital System	13.4	16.0	2.6	3.1	11.4	0.4	0.4	0.3	-	0.5
Digestive System	3.5	3.4	3.1	4.3	3.1	1.1	1.0	1.7	1.6	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	63.2	67.2	46.4	44.2	48.2	6.3	6.0	9.1	4.5	5.7
Leukemia	2.1	2.3	1.2	2.1	2.5	0.8	0.8	1.0	0.7	1.0
Lymphoma	7.4	7.8	6.8	4.3	5.0	0.7	0.6	1.2	-	0.6
Hodgkin Lymphoma	4.7	4.9	4.8	2.4	3.0	0.3	0.3	0.5	-	0.2
Non-Hodgkin Lymphoma	2.7	2.8	2.0	1.9	2.0	0.4	0.3	0.8	-	0.4
Brain and Other Nervous System	2.3	2.6	1.7	-	1.7	0.6	0.7	0.4	-	0.4
Bones and Joints	0.6	0.6	-	-	-	0.2	0.2	-	-	0.2
Soft Tissue including Heart	1.2	1.2	1.6	-	1.0	0.3	0.3	0.6	-	0.3
Skin excluding Basal and Squamous	10.9	13.2	1.2	-	2.4	0.3	0.4	-	-	-
Respiratory System	0.7	0.8	-	-	0.5	0.2	0.2	-	-	0.3
Breast	8.3	7.9	11.6	7.3	7.2	0.7	0.5	1.6	-	0.6
Female Genital System	9.6	9.9	8.6	6.8	9.9	1.0	0.9	1.7	-	0.9
Digestive System	3.2	3.2	2.9	3.1	2.9	0.8	0.8	1.2	0.8	1.0

Rates are per 100,000.

<sup>a</sup> SEER 17 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 and New Jersey).<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 District of Columbia, New Hampshire and North Dakota.

- 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, 2003-2007  
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	61.3	65.3	47.3	37.4	42.0	10.4	10.3	13.1	8.3	7.6
Leukemia	3.3	3.4	3.1	3.0	3.4	1.4	1.4	1.6	1.0	1.6
Lymphoma	9.5	9.7	12.6	4.8	6.1	1.2	1.1	2.0	0.7	0.8
Hodgkin Lymphoma	3.9	4.3	4.2	1.3	2.2	0.4	0.4	0.6	-	0.2
Non-Hodgkin Lymphoma	5.6	5.4	8.4	3.4	3.9	0.8	0.7	1.4	0.6	0.6
Brain and Other Nervous System	3.6	4.1	1.5	2.2	2.5	1.3	1.5	0.7	1.1	0.7
Bones and Joints	0.6	0.6	-	-	0.4	0.3	0.3	0.3	-	0.2
Soft Tissue including Heart	1.9	1.8	2.9	1.2	1.6	0.6	0.5	1.0	-	0.4
Skin excluding Basal and Squamous	7.8	9.1	1.5	-	1.7	0.8	0.9	-	-	0.2
Respiratory System	1.9	1.7	2.2	2.6	1.5	0.7	0.6	0.8	0.8	0.3
Male Genital System	13.3	15.9	3.4	4.1	10.0	0.4	0.5	0.3	-	0.5
Digestive System	7.3	7.2	7.1	7.3	6.7	2.4	2.1	3.7	2.8	1.9
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	105.3	110.6	89.8	78.2	82.2	12.5	12.0	17.1	9.4	10.4
Leukemia	2.8	2.8	2.6	2.7	3.4	1.0	1.0	1.2	0.6	1.2
Lymphoma	7.7	7.9	9.1	4.6	5.3	0.8	0.7	1.3	-	0.7
Hodgkin Lymphoma	3.7	4.1	3.6	1.4	2.2	0.3	0.3	0.5	-	-
Non-Hodgkin Lymphoma	4.0	3.8	5.5	3.2	3.1	0.5	0.5	0.8	-	0.5
Brain and Other Nervous System	2.7	2.9	2.0	1.9	2.0	0.9	1.0	0.4	0.6	0.5
Bones and Joints	0.6	0.7	-	-	0.7	0.2	0.2	-	-	-
Soft Tissue including Heart	1.6	1.7	1.8	-	1.8	0.4	0.4	0.6	-	0.3
Skin excluding Basal and Squamous	12.8	15.4	2.1	1.6	3.7	0.5	0.6	-	-	-
Respiratory System	1.7	1.7	1.6	2.1	1.0	0.5	0.5	0.5	0.5	0.4
Breast	25.9	25.5	31.4	22.8	19.7	3.1	2.7	6.0	1.7	2.3
Female Genital System	18.6	19.6	16.8	13.3	19.0	2.2	2.1	2.9	1.4	1.9
Digestive System	6.9	6.5	8.2	7.4	6.3	1.9	1.7	2.6	2.6	1.9

Rates are per 100,000.

<sup>a</sup> SEER 17 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 and New Jersey).<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 District of Columbia, New Hampshire and North Dakota.

- 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, 2003-2007  
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	86.5	90.0	78.7	55.6	57.4	17.8	17.6	20.9	13.9	12.1
Leukemia	4.2	4.3	4.2	3.8	4.1	1.5	1.4	1.9	1.1	1.4
Lymphoma	11.9	12.1	15.4	5.9	9.4	1.5	1.5	2.1	0.7	1.1
Hodgkin Lymphoma	3.4	3.6	4.0	1.3	2.3	0.4	0.4	0.4	-	0.2
Non-Hodgkin Lymphoma	8.5	8.4	11.4	4.6	7.1	1.2	1.1	1.6	0.6	0.9
Brain and Other Nervous System	4.2	4.7	2.3	2.0	3.3	2.1	2.3	1.2	1.1	1.1
Bones and Joints	0.7	0.7	-	-	0.6	0.3	0.3	-	-	0.2
Soft Tissue including Heart	2.3	2.2	3.8	1.6	1.9	0.6	0.6	0.7	-	0.4
Skin excluding Basal and Squamous	10.8	12.9	1.7	-	2.2	1.1	1.3	0.3	-	0.3
Respiratory System	4.1	3.9	5.0	4.2	2.0	2.3	2.2	2.7	2.1	0.9
Male Genital System	11.9	13.8	4.1	3.8	7.4	0.5	0.5	0.4	-	0.4
Digestive System	15.5	14.5	18.1	18.6	12.0	5.2	4.8	7.3	6.0	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	166.9	172.1	148.0	134.0	130.9	24.8	23.8	34.9	16.5	20.0
Leukemia	3.0	3.2	2.2	2.3	3.1	1.3	1.3	1.3	1.0	1.3
Lymphoma	8.1	8.2	9.4	5.1	6.0	1.0	0.9	1.4	0.5	0.7
Hodgkin Lymphoma	2.7	2.9	2.6	1.1	1.9	0.3	0.3	0.3	-	-
Non-Hodgkin Lymphoma	5.4	5.3	6.8	4.0	4.1	0.7	0.7	1.2	-	0.6
Brain and Other Nervous System	3.0	3.4	1.8	1.7	2.2	1.3	1.4	0.7	0.6	0.7
Bones and Joints	0.5	0.5	-	-	-	0.1	0.1	0.2	-	-
Soft Tissue including Heart	2.0	1.8	2.9	1.9	2.0	0.4	0.4	0.6	-	0.5
Skin excluding Basal and Squamous	16.5	19.9	2.1	1.2	4.9	0.8	0.9	-	-	0.2
Respiratory System	3.7	3.8	3.9	3.0	1.9	2.1	2.2	2.4	1.4	0.7
Breast	58.9	58.8	64.0	52.3	44.5	7.7	6.8	14.5	4.2	5.7
Female Genital System	27.3	28.1	23.1	24.4	30.2	4.1	4.0	5.2	2.4	4.2
Digestive System	12.4	11.7	15.0	13.0	12.3	3.7	3.3	5.2	4.2	3.9

Rates are per 100,000.

<sup>a</sup> SEER 17 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 and New Jersey).<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 District of Columbia, New Hampshire and North Dakota.

- 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, 1975-2007

	Incidence				Mortality			
	1975-2007		1998-2007		1975-2007		1998-2007	
	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*	21.2	0.6*	5.1	-2.2*	4.1	-1.8
Hodgkin Lymphoma	3.5	-0.9*	3.0	-0.9*	0.2	-4.9*	0.1	-4.9*
Brain and Other Nervous System	2.0	0.3	2.0	0.3	0.7	-1.0*	0.6	-1.0*
Thyroid	1.6	1.2*	1.9	1.2*	-	-	-	-
Non-Hodgkin Lymphoma	1.6	1.7*	1.8	1.7*	0.5	-2.9*	0.3	-2.9*
Testis	1.5	1.5*	1.8	1.5*	0.2	-5.9*	0.1	-2.8*
<u>Ages 20-24</u>								
All Malignant Cancers	33.6	0.8*	36.7	0.8*	6.8	-1.6*	5.7	-1.1*
Hodgkin Lymphoma	5.0	0.4	4.9	-0.6	0.5	-4.3*	0.3	-4.3*
Testis	4.4	1.6*	5.1	3.0*	0.5	-3.9*	0.3	1.9
Melanoma of the Skin	4.1	1.5*	5.0	1.5*	0.3	-3.1*	0.2	-3.1*
Thyroid	3.9	1.4*	4.6	1.4*	0.0	-	-	-
Brain and Other Nervous System	2.2	0.7*	2.4	0.7*	0.7	-0.9*	0.6	-0.9*
<u>Ages 25-29</u>								
All Malignant Cancers	54.5	0.8*	58.0	1.6*	9.1	-1.8*	7.2	-1.8*
Melanoma of the Skin	7.3	1.5*	8.7	2.8*	0.6	-2.6*	0.4	0.2
Thyroid	6.2	1.9*	8.5	4.4*	0.0	-	0.0	-
Testis	6.2	1.7*	6.8	2.9*	0.7	-4.6*	0.4	-2.9*
Hodgkin Lymphoma	4.9	0.3	4.8	0.3	0.7	-4.5*	0.4	-4.5*
Breast	4.1	-0.3	4.0	-0.3	0.0	-	-	-
<u>Ages 30-34</u>								
All Malignant Cancers	83.6	0.8*	85.7	0.6*	13.9	-1.7*	11.0	-2.3*
Breast	13.2	-0.1	13.3	-0.1	0.0	-	-	-
Melanoma of the Skin	10.3	1.7*	11.3	0.9	1.1	-2.7*	0.7	-4.0*
Thyroid	7.8	2.1*	10.6	4.8*	0.0	-	0.0	-
Testis	6.3	2.1*	7.1	0.5	0.6	-3.8*	0.4	-2.6*
Cervix Uteri	5.9	-1.3*	5.1	-1.3*	-	-	-	-
<u>Ages 35-39</u>								
All Malignant Cancers	130.5	0.5	130.4	0.4*	24.4	-1.9*	19.5	-3.1*
Breast	31.4	0.1	30.9	-0.6*	0.0	-0.5	0.0	-0.5
Melanoma of the Skin	13.7	1.6*	14.3	0.1	1.7	-2.9*	1.1	-5.2*
Thyroid	9.3	3.4*	13.1	5.8*	0.1	-0.3	0.1	-0.3
Non-Hodgkin Lymphoma	7.8	2.2*	7.7	-2.8*	2.2	-1.8*	1.5	-9.2*
Cervix Uteri	7.2	-1.6*	5.9	-1.6*	-	-	-	-

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 1975-2007 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 1975-2007.

- 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, 1975-2007

	Incidence				Mortality			
	1975-2007		1998-2007		1975-2007		1998-2007	
	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	0.7*	22.0	0.7*	3.5	-1.8*	2.8	-1.8*
Hodgkin Lymphoma	3.3	-0.9*	2.9	-0.9*	0.2	-3.9*	0.1	-3.9*
Testis	3.0	1.4*	3.5	1.4*	-	-	-	-
Brain and Other Nervous System	2.3	0.3	2.3	0.3	0.5	-1.4*	0.4	-1.4*
Non-Hodgkin Lymphoma	2.0	1.4*	2.1	1.4*	0.2	-2.6*	0.2	-2.6*
Bones and Joints	1.9	0.4	1.8	0.4	0.4	-0.9*	0.4	-0.9*
<u>Ages 20-24</u>								
All Malignant Cancers	32.7	0.5*	34.2	0.5*	4.6	-1.2*	4.1	-1.2*
Testis	8.6	0.9*	9.9	0.9*	-	-	-	-
Hodgkin Lymphoma	5.0	-0.5*	4.5	-0.5*	0.4	-2.9*	0.2	-2.9*
Melanoma of the Skin	2.8	0.5	3.1	0.5	0.2	-3.0*	0.1	-0.6
Non-Hodgkin Lymphoma	2.5	2.0*	3.0	2.0*	0.4	-0.4	0.3	-0.4
Brain and Other Nervous System	2.5	0.2	2.4	0.2	0.5	-1.0*	0.5	-1.0*
<u>Ages 25-29</u>								
All Malignant Cancers	49.2	0.9*	49.8	1.3*	8.1	-1.5*	6.6	-2.2*
Testis	12.2	1.1*	13.4	1.1*	-	-	-	-
Melanoma of the Skin	5.3	0.4	5.7	0.4	0.4	-2.6*	0.3	-2.6*
Hodgkin Lymphoma	5.1	-0.2	4.7	-0.2	0.5	-3.4*	0.3	-3.4*
Non-Hodgkin Lymphoma	4.3	1.0	4.0	-1.2	0.5	-0.9	0.4	-4.6*
Kaposi sarcoma	4.2	-	1.3	-	-	-	-	-
<u>Ages 30-34</u>								
All Malignant Cancers	70.2	0.8*	65.4	0.3	16.1	-1.6*	13.3	-2.2*
Testis	12.6	2.0*	14.1	0.4	-	-	-	-
Kaposi sarcoma	9.3	-	2.4	-	-	-	-	-
Melanoma of the Skin	8.3	0.1	8.4	0.1	0.7	-2.6*	0.5	-2.6*
Non-Hodgkin Lymphoma	7.3	1.2	6.4	-4.0*	0.7	-1.9*	0.6	-6.1*
Hodgkin Lymphoma	4.2	0.0	4.2	0.0	0.5	-3.5*	0.3	-3.5*
<u>Ages 35-39</u>								
All Malignant Cancers	99.8	0.5	93.0	-0.4	31.6	-1.5*	26.7	-2.1*
Melanoma of the Skin	12.0	0.7	11.6	-1.2*	1.1	-2.4*	0.8	-2.4*
Kaposi sarcoma	11.2	-	3.6	-	-	-	-	-
Non-Hodgkin Lymphoma	10.9	3.1*	9.7	0.0	1.0	-1.7*	0.9	-6.3*
Testis	10.8	2.1*	12.2	0.5	-	-	-	-
Colon and Rectum	7.2	1.0*	8.3	1.0*	1.9	-1.1*	1.8	0.1

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 1975-2007 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 1975-2007.

- 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, 1975-2007

	<u>Incidence</u>				<u>Mortality</u>			
	<u>1975-2007</u>		<u>1998-2007</u>		<u>1975-2007</u>		<u>1998-2007</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	19.5	0.4*	20.4	0.4*	4.3	-2.0*	3.5	-1.8*
Hodgkin Lymphoma	3.7	-0.8*	3.1	-0.8*	0.2	-4.6*	0.1	-4.6*
Thyroid	2.8	1.3*	3.2	1.3*	0.0	-	-	-
Melanoma of the Skin	1.8	1.2*	2.1	1.2*	0.1	-2.9*	0.0	-2.9*
Brain and Other Nervous System	1.7	0.2	1.7	0.2	0.6	-1.2*	0.5	-1.2*
Ovary	1.5	-0.4	1.3	-0.4	0.1	-4.8*	0.0	-4.8*
<u>Ages 20-24</u>								
All Malignant Cancers	34.5	1.1*	39.4	1.1*	5.7	-1.4*	4.9	-1.1*
Thyroid	6.7	1.8*	8.2	1.8*	0.0	-	0.0	-
Melanoma of the Skin	5.5	2.1*	7.0	2.1*	0.2	-3.1*	0.2	-1.8*
Hodgkin Lymphoma	5.0	1.1	5.3	-0.5	0.5	-3.7*	0.3	-4.2*
Cervix Uteri	2.2	-2.0*	1.5	-2.0*	0.1	-2.1*	0.1	-6.9*
Brain and Other Nervous System	1.9	1.6*	2.4	1.6*	0.6	-0.9*	0.6	-0.9*
<u>Ages 25-29</u>								
All Malignant Cancers	59.9	0.6*	66.5	1.2*	8.6	-1.6*	6.9	-1.6*
Thyroid	10.3	2.1*	14.3	4.9*	0.0	-	0.0	-
Melanoma of the Skin	9.4	2.3*	11.8	4.7*	0.5	-3.1*	0.3	-3.1*
Breast	8.1	-0.2	8.1	-0.2	0.5	-2.3*	0.4	-2.3*
Cervix Uteri	7.4	-2.1	5.8	-3.4*	0.4	-2.1*	0.3	-5.3*
Hodgkin Lymphoma	4.7	0.7*	4.9	0.7*	0.6	-4.1*	0.4	-4.1*
<u>Ages 30-34</u>								
All Malignant Cancers	97.0	0.6*	106.4	1.5*	15.0	-1.6*	12.1	-2.1*
Breast	26.4	-0.1	26.8	-0.1	2.2	-2.0*	1.7	-2.7*
Thyroid	12.7	2.7*	18.0	5.1*	0.0	-1.5	0.0	-1.5
Melanoma of the Skin	12.4	2.5*	14.4	1.1*	0.9	-2.6*	0.6	-3.8*
Cervix Uteri	11.9	-1.2*	10.4	-1.2*	0.9	-1.4*	0.7	-3.2*
Hodgkin Lymphoma	3.7	1.2*	4.2	1.2*	0.6	-4.3*	0.4	-4.5*
<u>Ages 35-39</u>								
All Malignant Cancers	161.1	0.6*	168.2	0.9*	28.1	-1.7*	23.1	-2.9*
Breast	62.5	0.3	62.0	-0.4*	5.3	-1.6*	4.1	-3.0*
Melanoma of the Skin	15.3	2.1*	17.0	0.8*	1.4	-2.7*	1.0	-4.3*
Thyroid	14.5	3.8*	20.9	6.2*	0.1	-0.3	0.1	-0.3
Cervix Uteri	14.5	-1.5*	11.9	-1.5*	1.5	-1.2	1.3	-0.8
Corpus and Uterus, NOS	6.5	0.8*	7.3	3.5*	0.2	-1.1	0.2	4.1*

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 1975-2007 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 1975-2007.

- 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, 1975-2006

	5-year Relative Survival (Percent)				
	1975-2006	1975-1982	1983-1990	1991-1998	1999-2006
<u>Ages 15-19</u>					
All Malignant Cancers	76.4	68.9	76.4	79.3	81.3
Hodgkin Lymphoma	91.4	88.3	89.1	94.0	96.2
Brain and Other Nervous System	72.6	62.3	73.6	78.2	76.5
Thyroid	98.7	98.9	98.9	98.8	98.1
Non-Hodgkin Lymphoma	69.3	51.4	69.3	72.2	80.0
Testis	88.9	77.1	91.7	90.1	94.7
<u>Ages 20-24</u>					
All Malignant Cancers	79.7	74.7	78.4	80.9	84.9
Hodgkin Lymphoma	89.7	85.0	89.7	91.0	93.8
Testis	91.8	84.7	90.5	95.0	96.4
Melanoma of the Skin	92.1	86.2	90.5	94.2	97.4
Thyroid	99.6	99.6	99.6	99.2	99.6
Brain and Other Nervous System	64.8	59.0	60.5	71.6	69.4
<u>Ages 25-29</u>					
All Malignant Cancers	77.9	76.8	74.0	77.3	84.3
Melanoma of the Skin	92.4	87.8	91.5	94.0	95.7
Thyroid	99.7	99.7	99.3	99.9	99.7
Testis	94.5	88.4	95.1	96.1	97.3
Hodgkin Lymphoma	89.4	85.3	89.2	92.0	91.1
Breast	72.6	70.1	68.7	73.1	82.2
<u>Ages 30-34</u>					
All Malignant Cancers	73.8	73.5	68.4	71.8	82.9
Breast	75.8	70.3	73.0	77.5	83.1
Melanoma of the Skin	91.7	86.5	90.4	93.4	95.7
Thyroid	99.7	99.5	99.5	99.8	99.7
Testis	95.2	92.0	95.6	95.9	95.4
Cervix Uteri	84.7	84.4	83.1	85.0	86.8
<u>Ages 35-39</u>					
All Malignant Cancers	71.8	68.0	65.9	71.6	80.4
Breast	80.2	74.9	76.3	82.7	85.5
Melanoma of the Skin	91.6	87.5	90.0	92.4	94.8
Thyroid	99.3	99.0	99.1	99.4	99.2
Non-Hodgkin Lymphoma	59.6	66.0	51.7	52.7	73.2
Cervix Uteri	81.3	79.5	80.3	81.5	84.9

<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 1975-2007 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, 1975-2006

	5-year Relative Survival (Percent)				
	1975-2006	1975-1982	1983-1990	1991-1998	1999-2006
<u>Ages 15-19</u>					
All Malignant Cancers	71.8	62.3	71.3	75.6	77.9
Hodgkin Lymphoma	90.2	86.7	87.4	93.1	96.4
Testis	88.9	77.1	91.7	90.1	94.7
Brain and Other Nervous System	69.5	58.5	68.3	76.5	74.8
Non-Hodgkin Lymphoma	66.8	45.3	70.8	70.6	76.0
Bones and Joints	56.5	42.0	53.6	64.3	64.9
<u>Ages 20-24</u>					
All Malignant Cancers	75.0	69.4	72.2	76.5	82.6
Testis	91.8	84.7	90.5	95.0	96.4
Hodgkin Lymphoma	87.9	83.5	86.0	89.9	94.1
Melanoma of the Skin	85.1	76.8	82.0	88.2	95.4
Non-Hodgkin Lymphoma	62.5	54.0	55.5	55.7	80.8
Brain and Other Nervous System	63.4	54.8	58.3	74.2	68.2
<u>Ages 25-29</u>					
All Malignant Cancers	71.2	71.3	65.2	69.8	80.6
Testis	94.5	88.4	95.1	96.1	97.3
Melanoma of the Skin	87.6	82.2	87.1	89.4	91.6
Hodgkin Lymphoma	87.1	84.0	85.5	89.5	90.1
Non-Hodgkin Lymphoma	54.1	57.0	46.3	47.4	73.5
Kaposi sarcoma	12.3	-	9.0	11.6	43.2
<u>Ages 30-34</u>					
All Malignant Cancers	64.8	68.6	56.4	60.9	79.2
Testis	95.2	92.0	95.6	95.9	95.4
Kaposi sarcoma	16.2	31.3	8.5	19.5	53.0
Melanoma of the Skin	87.1	79.2	85.2	90.5	92.8
Non-Hodgkin Lymphoma	50.4	70.0	41.2	39.7	72.7
Hodgkin Lymphoma	85.6	78.4	83.3	86.9	93.3
<u>Ages 35-39</u>					
All Malignant Cancers	60.9	59.7	51.9	59.0	74.2
Melanoma of the Skin	87.2	82.1	85.3	88.4	91.4
Kaposi sarcoma	16.1	-	6.6	18.9	57.8
Non-Hodgkin Lymphoma	52.0	62.4	43.8	45.2	67.0
Testis	95.9	92.2	95.0	96.9	97.0
Colon and Rectum	60.8	55.7	53.3	60.7	68.4

<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 1975-2007 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, 1975-2006

	5-year Relative Survival (Percent)				
	1975-2006	1975-1982	1983-1990	1991-1998	1999-2006
<u>Ages 15-19</u>					
All Malignant Cancers	81.5	75.9	82.0	83.4	85.3
Hodgkin Lymphoma	92.4	89.7	90.7	94.7	95.9
Thyroid	99.0	98.4	100.0	98.6	98.7
Melanoma of the Skin	94.5	88.1	94.7	95.0	99.4
Brain and Other Nervous System	77.1	67.9	80.5	80.5	79.3
Ovary	88.0	78.5	90.5	91.3	91.7
<u>Ages 20-24</u>					
All Malignant Cancers	84.3	79.8	85.2	85.1	87.0
Thyroid	99.6	99.3	99.5	99.6	99.7
Melanoma of the Skin	95.9	92.2	95.7	96.9	98.3
Hodgkin Lymphoma	91.6	86.9	93.3	92.1	93.5
Cervix Uteri	88.6	88.9	91.0	85.1	89.9
Brain and Other Nervous System	66.7	65.1	63.4	67.4	70.4
<u>Ages 25-29</u>					
All Malignant Cancers	83.5	80.7	82.2	84.3	87.1
Thyroid	99.8	99.8	99.4	99.9	99.9
Melanoma of the Skin	95.3	91.5	94.3	96.6	97.8
Breast	72.7	70.1	68.6	73.2	82.4
Cervix Uteri	87.5	88.7	86.4	87.4	87.4
Hodgkin Lymphoma	91.9	86.9	93.2	94.7	92.0
<u>Ages 30-34</u>					
All Malignant Cancers	80.4	76.4	78.5	81.2	85.2
Breast	75.7	70.2	72.9	77.5	83.1
Thyroid	99.7	99.3	99.7	99.8	99.7
Melanoma of the Skin	94.9	92.1	94.2	95.3	97.3
Cervix Uteri	84.7	84.4	83.1	85.0	86.8
Hodgkin Lymphoma	90.0	85.1	89.9	89.4	94.7
<u>Ages 35-39</u>					
All Malignant Cancers	78.6	72.4	75.6	80.3	83.9
Breast	80.1	74.9	76.3	82.7	85.5
Melanoma of the Skin	95.1	92.2	94.2	95.6	97.2
Thyroid	99.6	99.3	99.1	99.7	99.5
Cervix Uteri	81.3	79.5	80.3	81.5	84.9
Corpus and Uterus, NOS	90.9	92.0	90.4	90.5	90.6

<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 1975-2007 SEER 9 Incidence rates for the age group.

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