

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:**

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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, 2004-2008

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	16.4	14.3	51.7	83.4	1206.4	880.7
1. LEUKEMIAS	5.6	4.5	3.5	2.6	31.6	18.2
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	9.4	6.2
1.3 Chronic myeloid leukemia	0.1	0.1	0.7	0.4	2.7	1.8
1.4 Other and unspecified leukemias	0.2	0.1	0.4	0.3	18.3	9.2
2. LYMPHOMAS	1.9	1.1	8.5	6.9	55.1	38.0
2.1 Non-Hodgkin Lymphoma	1.2	0.6	4.7	3.2	51.2	35.4
2.2 Hodgkin Lymphoma	0.7	0.5	3.7	3.7	3.9	2.6
3. CNS, INTRACRANIAL, INTRASPINAL	3.1	2.7	3.1	2.4	13.6	9.1
3.1.1 Astrocytoma	1.4	1.4	1.7	1.2	10.6	6.6
3.1.2 Glioblastoma and anaplastic astrocytoma	1.0	1.0	0.5	0.4	0.4	0.2
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	0.9	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	0.1
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	-	0.0	0.1	-	0.8	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.8	0.8	1.0	0.8	1.4	1.0
4.1 Osteosarcoma	0.4	0.4	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	0.1	-	0.2	0.2	0.7	0.5
4.3 Ewing tumor	0.4	0.3	0.3	0.2	0.1	0.1
4.4 Other specified and unspecified bone tumors	0.0	-	0.1	0.1	0.4	0.3
5. SOFT TISSUE SARCOMAS	1.0	0.9	3.4	2.4	12.6	9.0
5.1 Fibromatous neoplasms	0.1	0.1	0.7	0.8	3.2	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	2.5	1.5	9.2	6.9
5.3.1 Specified soft tissue sarcoma	0.2	0.2	2.2	1.2	7.0	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	-	-	1.1	0.0	1.7	0.2
5.3.2 Unspecified soft tissue sarcoma	0.1	0.1	0.3	0.3	2.2	1.5
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.6	0.6	10.6	1.0	4.2	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.3	10.1	0.7	4.0	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.3	0.2	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, 2004-2008

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	63.3	34.7
7.1 Melanoma	0.2	0.3	5.5	9.5	59.4	32.7
7.2 Skin carcinomas	-	-	0.1	0.1	3.9	2.0
8. CARCINOMAS (excluding skin)	0.4	0.7	14.9	56.1	964.1	725.2
8.1 Thyroid carcinoma	0.1	0.4	2.9	14.6	10.4	25.6
8.2 Other carcinoma of head and neck	0.1	0.1	1.7	1.4	50.3	16.6
8.2.1 Nasopharyngeal carcinoma	0.1	-	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	32.6	12.1
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.2	0.2	15.9	3.8
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.0	1.1	161.1	112.2
8.4 Carcinoma of breast	-	-	0.0	20.4	2.7	267.6
8.5 Carcinoma of genitourinary tract	-	0.1	3.0	13.0	489.8	136.0
8.5.1 Carcinoma of kidney	-	0.0	1.8	1.3	40.8	20.0
8.5.2 Carcinoma of bladder	-	-	0.8	0.3	85.3	20.6
8.5.3 Carcinoma of gonads	-	-	0.0	1.8	0.0	24.6
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.1	-	60.6
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.4	0.4	363.7	10.2
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	5.7	5.0	230.2	149.5
8.6.1 Carcinoma of colon and rectum	-	-	3.6	3.4	125.4	94.3
8.6.2 Carcinoma of stomach	-	-	0.7	0.7	23.0	10.9
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.1	-	0.5	0.3	24.1	8.0
8.6.4 Carcinoma of pancreas	-	-	0.4	0.3	27.5	21.4
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.3	30.2	14.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	0.0	0.5	0.6	19.5	17.7
8.7.1 Adrenocortical carcinoma	-	-	0.0	0.1	0.3	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.5	0.5	19.3	17.5
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.8	2.6	0.8	1.1	24.9	20.0
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	0.8	-	0.0	-	0.0
9.1.2 Neuroblastoma	1.0	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	0.7	1.0	24.8	19.8
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	0.1	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.4	0.2	17.9	11.3
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.7	8.0
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.4	35.7	25.3

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

<sup>a</sup> 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, 2004-2008

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	17.3	14.9	55.2	87.2	1209.1	903.5
1. LEUKEMIAS	6.0	4.8	3.7	2.7	33.0	18.9
1.1 Acute lymphoid leukemia	4.9	4.0	1.4	0.8	1.2	1.0
1.2 Acute myeloid leukemia	0.8	0.6	1.2	1.3	9.7	6.3
1.3 Chronic myeloid leukemia	0.1	0.1	0.7	0.4	2.7	1.8
1.4 Other and unspecified leukemias	0.2	0.1	0.4	0.3	19.3	9.8
2. LYMPHOMAS	1.9	1.1	8.6	7.2	57.6	40.1
2.1 Non-Hodgkin Lymphoma	1.2	0.6	4.7	3.2	53.5	37.3
2.2 Hodgkin Lymphoma	0.7	0.6	3.9	4.0	4.1	2.8
3. CNS, INTRACRANIAL, INTRASPINAL	3.4	2.9	3.5	2.7	14.9	10.0
3.1 Astrocytoma	1.5	1.5	1.8	1.4	11.7	7.4
3.1.1 Specified low-grade astrocytic tumors	1.1	1.1	0.5	0.5	0.4	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.2	0.2	0.9	0.6	10.5	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	0.5	1.0	0.8	1.7	1.3
3.3 Ependymoma	0.3	0.3	0.2	0.2	0.3	0.3
3.4 Medulloblastoma and other PNET	0.8	0.5	0.3	0.2	0.1	0.1
3.4.1 Medulloblastoma	0.5	0.3	0.1	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	0.1	0.3	0.3
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	0.1	-	0.8	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	1.0	0.9	1.1	0.8	1.5	1.0
4.1 Osteosarcoma	0.4	0.5	0.4	0.3	0.3	0.2
4.2 Chondrosarcoma	0.1	-	0.2	0.2	0.8	0.5
4.3 Ewing tumor	0.4	0.3	0.4	0.2	0.1	0.1
4.4 Other specified and unspecified bone tumors	-	-	0.1	0.1	0.4	0.3
5. SOFT TISSUE SARCOMAS	1.0	0.9	3.1	2.2	12.8	8.9
5.1 Fibromatous neoplasms	0.1	0.1	0.6	0.7	3.3	1.9
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	9.4	6.8
5.3.1 Specified soft tissue sarcoma	0.2	0.2	2.0	1.2	7.1	5.3
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.2	0.2	1.1	1.1	5.5	5.1
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	0.3	2.2	1.5
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	0.6	0.6	12.6	1.0	4.8	0.2
6.1 Germ cell and trophoblastic neoplasms of gonads	0.2	0.4	12.1	0.7	4.6	0.1
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.4	0.2	0.6	0.3	0.2	0.1
6.2.1 Intracranial sites	0.3	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, 2004-2008

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	0.2	0.3	6.8	11.8	72.7	40.3
7.1 Melanoma	0.2	0.3	6.7	11.7	68.5	38.3
7.2 Skin carcinomas	-	-	0.1	0.1	4.2	2.1
8. CARCINOMAS (excluding skin)	0.4	0.8	14.8	57.4	952.0	740.0
8.1 Thyroid carcinoma	0.1	0.4	3.1	15.9	11.0	26.6
8.2 Other carcinoma of head and neck	0.1	0.1	1.6	1.3	51.3	16.9
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	1.2	1.0	34.2	12.5
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.2	0.2	16.0	3.9
8.3 Carcinoma of trachea, bronchus, and lung	-	-	0.9	1.1	161.0	117.1
8.4 Carcinoma of breast	-	-	0.0	20.2	2.7	275.5
8.5 Carcinoma of genitourinary tract	-	0.1	3.1	13.6	483.2	141.7
8.5.1 Carcinoma of kidney	-	-	1.8	1.4	41.8	20.5
8.5.2 Carcinoma of bladder	-	-	0.9	0.4	92.4	22.0
8.5.3 Carcinoma of gonads	-	-	0.1	1.8	0.0	26.0
8.5.4 Carcinoma of cervix and uterus	-	-	-	9.6	-	62.4
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.3	0.4	349.0	10.7
8.6 Carcinoma of gastrointestinal tract	0.1	0.1	5.5	4.8	223.1	144.2
8.6.1 Carcinoma of colon and rectum	-	-	3.6	3.3	124.2	92.9
8.6.2 Carcinoma of stomach	-	-	0.7	0.6	20.3	9.3
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.3	0.2	20.5	6.6
8.6.4 Carcinoma of pancreas	-	-	0.4	0.3	27.5	21.0
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.6	0.3	30.6	14.4
8.7 Carcinoma of other and ill-defined sites, NOS	-	0.1	0.5	0.6	19.7	18.0
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	19.5	17.8
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.8	2.7	0.7	1.0	24.4	18.6
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	-	-	-	-
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	0.9	24.2	18.4
9.2.1 Paraganglioma and glomus tumors	-	-	0.0	-	0.1	0.1
9.2.2 Other specified gonadal tumors	-	-	-	0.1	0.1	0.4
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	0.1	0.1	0.3	0.2	17.1	10.3
9.2.4 Other specified neoplasms, NOS	-	-	0.2	0.6	6.9	7.6
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.4	35.3	25.7

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 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, 2004-2008

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
All Sites Combined	12.7	11.4	39.9	68.0	1415.6	870.0
1. LEUKEMIAS	3.8	2.6	2.8	2.2	25.6	14.8
1.1 Acute lymphoid leukemia	2.8	1.5	0.7	0.4	1.0	1.0
1.2 Acute myeloid leukemia	0.8	0.9	1.0	1.0	7.3	5.6
1.3 Chronic myeloid leukemia	-	-	0.7	0.6	2.9	1.8
1.4 Other and unspecified leukemias	-	-	0.4	0.3	14.4	6.5
2. LYMPHOMAS	1.8	1.4	10.0	7.1	39.8	27.7
2.1 Non-Hodgkin Lymphoma	1.0	0.8	6.2	3.7	36.0	25.1
2.2 Hodgkin Lymphoma	0.8	0.6	3.9	3.4	3.8	2.6
3. CNS, INTRACRANIAL, INTRASPINAL	2.0	2.3	1.5	1.5	8.4	5.5
3.1 Astrocytoma	1.0	1.2	0.9	0.7	5.8	3.5
3.1.1 Specified low-grade astrocytic tumors	0.7	0.8	0.3	0.3	-	-
3.1.2 Glioblastoma and anaplastic astrocytoma	-	-	0.4	0.3	5.1	3.0
3.1.3 Astrocytoma, NOS	-	-	0.3	-	0.4	0.4
3.2 Other glioma	0.4	0.4	0.4	0.5	1.0	0.6
3.3 Ependymoma	-	-	-	-	0.2	-
3.4 Medulloblastoma and other PNET	0.3	0.4	-	-	-	-
3.4.1 Medulloblastoma	-	-	-	-	-	-
3.4.2 Supratentorial PNET	-	-	-	-	-	-
3.5 Other specified intracranial and intraspinal neoplasms	-	-	-	-	0.5	0.5
3.6 Unspecified intracranial and intraspinal neoplasms	-	-	-	-	0.9	0.6
4. OSSEOUS & CHONDROMATOUS NEOPLASMS	0.4	0.5	0.8	0.6	1.1	1.0
4.1 Osteosarcoma	0.3	0.4	0.5	0.4	0.3	0.4
4.2 Chondrosarcoma	-	-	0.2	-	0.5	0.3
4.3 Ewing tumor	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	0.3	0.2
5. SOFT TISSUE SARCOMAS	1.4	1.0	6.2	3.6	11.3	11.4
5.1 Fibromatous neoplasms	-	-	0.9	1.4	2.5	2.3
5.2 Rhabdomyosarcoma	1.0	0.4	0.3	0.2	-	0.4
5.3 Other specified soft tissue sarcoma	-	0.4	5.0	2.1	8.6	8.7
5.3.1 Specified soft tissue sarcoma	-	-	4.4	1.7	6.7	6.6
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	1.3	1.5	3.8	6.2
5.3.1.2 Kaposi sarcoma	-	-	3.1	-	2.9	0.4
5.3.2 Unspecified soft tissue sarcoma	-	-	0.6	0.4	1.9	2.1
6. GERM CELL AND TROPHOBLASTIC NEOPLASMS	-	0.6	2.1	0.9	1.2	0.4
6.1 Germ cell and trophoblastic neoplasms of gonads	-	-	1.9	0.5	1.1	-
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	-	-	0.2	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, 2004-2008

Site	Ages 0-14		Ages 15-39		Ages 40+	
	Male	Female	Male	Female	Male	Female
7. MELANOMA AND SKIN CARCINOMAS	-	-	0.3	0.5	4.0	3.0
7.1 Melanoma	-	-	0.2	0.4	2.9	2.3
7.2 Skin carcinomas	-	-	-	-	1.0	0.8
8. CARCINOMAS (excluding skin)	0.5	0.4	14.6	49.3	1234.3	739.1
8.1 Thyroid carcinoma	-	-	1.2	6.5	6.3	16.1
8.2 Other carcinoma of head and neck	0.3	-	1.7	1.4	58.6	16.5
8.2.1 Nasopharyngeal carcinoma	-	-	0.4	-	2.2	0.6
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	0.9	1.2	31.9	10.7
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	0.3	-	24.4	5.2
8.3 Carcinoma of trachea, bronchus, and lung	-	-	1.2	1.2	214.4	118.4
8.4 Carcinoma of breast	-	-	-	23.3	3.7	255.0
8.5 Carcinoma of genitourinary tract	-	-	3.5	10.6	635.7	121.4
8.5.1 Carcinoma of kidney	-	-	2.3	1.4	49.1	23.4
8.5.2 Carcinoma of bladder	-	-	0.5	-	48.8	16.8
8.5.3 Carcinoma of gonads	-	-	-	1.3	-	18.4
8.5.4 Carcinoma of cervix and uterus	-	-	-	7.2	-	53.9
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	0.7	0.6	537.8	8.9
8.6 Carcinoma of gastrointestinal tract	-	-	6.1	5.6	293.1	192.0
8.6.1 Carcinoma of colon and rectum	-	-	3.7	3.6	154.8	116.4
8.6.2 Carcinoma of stomach	-	-	0.7	0.8	36.2	16.7
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	0.8	0.3	32.4	9.5
8.6.4 Carcinoma of pancreas	-	-	0.4	0.4	35.0	29.6
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	0.5	0.5	34.8	19.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.8	0.8	22.4	19.7
8.7.1 Adrenocortical carcinoma	-	-	-	-	0.3	0.3
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.8	0.7	22.0	19.5
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	2.5	2.6	1.2	1.7	40.8	37.5
9.1 Other pediatric and embryonal tumors, NOS	2.4	2.6	-	-	-	-
9.1.1 Wilms tumor	0.8	0.8	-	-	-	-
9.1.2 Neuroblastoma	0.9	1.1	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	0.7	0.7	-	-	-	-
9.2 Other specified neoplasms, NOS	-	-	1.1	1.5	40.6	37.3
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	0.3	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	0.5
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.6	0.6	34.0	23.9
9.2.4 Other specified neoplasms, NOS	-	-	0.3	0.8	6.2	12.7
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.3	0.5	49.1	29.5

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

<sup>a</sup> 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, 2004-2008

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female								
All Sites Combined	22.6	20.6	33.9	37.7	46.5	62.1	61.8	107.6	87.7	172.6
1. LEUKEMIAS	3.7	2.6	3.0	2.3	3.0	2.2	3.4	2.8	4.2	3.2
1.1 Acute lymphoid leukemia	2.4	1.2	1.3	0.7	0.9	0.6	0.8	0.6	0.8	0.5
1.2 Acute myeloid leukemia	1.0	1.0	0.9	1.1	1.2	1.1	1.3	1.4	1.4	1.5
1.3 Chronic myeloid leukemia	0.2	0.2	0.5	0.3	0.7	0.3	0.9	0.6	1.1	0.6
1.4 Other and unspecified leukemias	-	0.1	0.3	0.2	0.3	0.2	0.4	0.2	0.8	0.5
2. LYMPHOMAS	5.1	4.6	7.2	6.6	7.8	7.3	9.6	7.7	12.0	8.2
2.1 Non-Hodgkin Lymphoma	2.1	1.5	2.9	1.9	3.8	2.8	5.5	4.0	8.6	5.5
2.2 Hodgkin Lymphoma	3.0	3.1	4.3	4.7	4.0	4.5	4.0	3.8	3.4	2.7
3. CNS, INTRACRANIAL, INTRASPINAL	2.2	2.1	2.2	2.3	3.1	2.2	3.6	2.6	4.2	3.0
3.1 Astrocytoma	1.3	1.1	1.2	1.1	1.5	1.1	1.7	1.2	2.4	1.5
3.1.1 Specified low-grade astrocytic tumors	0.7	0.7	0.4	0.5	0.4	0.4	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	0.9	0.6	1.5	0.8
3.1.3 Astrocytoma, NOS	0.2	0.1	0.3	0.3	0.4	0.3	0.5	0.3	0.5	0.4
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	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2
3.4 Medulloblastoma and other PNET	0.3	0.3	0.3	0.3	0.2	0.1	0.2	0.1	0.1	-
3.4.1 Medulloblastoma	0.1	0.1	0.2	0.2	0.1	-	-	-	-	-
3.4.2 Supratentorial PNET	0.2	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	2.1	1.3	1.2	0.9	0.7	0.7	0.6	0.6	0.7	0.6
4.1 Osteosarcoma	1.0	0.7	0.6	0.4	0.1	0.2	0.2	0.2	0.2	0.2
4.2 Chondrosarcoma	0.1	-	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	0.2	0.2	0.2	-	-	0.1
4.4 Other specified and unspecified bone tumors	-	-	-	0.1	-	-	-	0.1	0.1	-
5. SOFT TISSUE SARCOMAS	1.4	1.5	2.0	1.7	3.1	2.1	4.2	2.8	5.9	3.7
5.1 Fibromatous neoplasms	0.2	0.4	0.4	0.5	0.6	0.9	0.8	1.1	1.1	1.2
5.2 Rhabdomyosarcoma	0.4	0.2	0.2	-	0.1	-	-	-	0.1	-
5.3 Other specified soft tissue sarcoma	0.7	0.8	1.4	1.0	2.3	1.1	3.2	1.7	4.7	2.5
5.3.1 Specified soft tissue sarcoma	0.5	0.6	1.1	0.8	1.9	0.9	2.9	1.4	4.3	2.1
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.5	0.6	0.7	0.8	0.9	0.9	1.3	1.3	1.7	2.0
5.3.1.2 Kaposi sarcoma	-	-	0.3	-	0.9	-	1.6	-	2.6	-
5.3.2 Unspecified soft tissue sarcoma	0.2	0.2	0.3	0.3	0.4	0.2	0.3	0.3	0.4	0.4
6. GERM CELL AND TROPHOBlastic NEOPLASMS	4.3	1.1	10.6	1.2	14.0	1.1	13.4	0.9	11.1	0.7
6.1 Germ cell and trophoblastic neoplasms of gonads	3.6	0.9	9.9	0.9	13.3	0.8	13.0	0.6	10.8	0.3
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.7	0.2	0.7	0.3	0.6	0.3	0.4	0.4	0.3	0.4
6.2.1 Intracranial sites	0.5	-	0.2	-	0.1	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	0.1	0.4	0.2	0.5	0.3	0.4	0.3	0.3	0.3

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

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).

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, 2004-2008

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female								
7. MELANOMA AND SKIN CARCINOMAS	1.2	1.9	2.6	6.1	4.8	10.0	7.6	12.4	11.0	16.6
7.1 Melanoma	1.2	1.9	2.5	6.0	4.7	9.9	7.4	12.3	10.9	16.5
7.2 Skin carcinomas	-	-	-	-	-	-	0.1	0.1	0.2	-
8. CARCINOMAS (excluding skin)	2.2	5.2	4.6	16.1	9.4	35.6	18.3	76.1	36.3	133.5
8.1 Thyroid carcinoma	0.7	3.4	1.3	8.8	2.7	14.2	4.0	20.2	5.3	24.6
8.2 Other carcinoma of head and neck	0.5	0.4	0.7	0.9	1.1	1.0	1.9	1.8	4.1	2.7
8.2.1 Nasopharyngeal carcinoma	0.2	-	0.2	-	0.2	-	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	0.7	0.8	1.3	1.4	2.9	2.0
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	0.1	0.1	0.2	0.2	0.7	0.3
8.3 Carcinoma of trachea, bronchus, and lung	-	-	0.3	0.3	0.5	0.6	1.1	1.3	2.8	3.1
8.4 Carcinoma of breast	-	-	-	1.4	-	7.8	-	26.1	0.1	59.5
8.5 Carcinoma of genitourinary tract	0.2	0.7	0.7	3.0	1.5	8.6	3.7	19.4	8.1	30.0
8.5.1 Carcinoma of kidney	-	0.2	0.3	0.4	0.9	0.9	2.3	1.9	4.7	3.0
8.5.2 Carcinoma of bladder	0.1	-	0.2	0.2	0.5	0.2	1.0	0.4	2.1	0.8
8.5.3 Carcinoma of gonads	-	0.4	-	0.7	-	1.1	-	2.3	-	4.1
8.5.4 Carcinoma of cervix and uterus	-	-	-	1.7	-	6.3	-	14.3	-	20.9
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	0.1	0.3	0.5	1.2	1.2
8.6 Carcinoma of gastrointestinal tract	0.6	0.6	1.4	1.5	3.2	2.9	7.0	6.5	14.8	12.2
8.6.1 Carcinoma of colon and rectum	0.3	0.3	0.9	1.0	2.1	1.9	4.4	4.5	9.3	8.3
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.3	0.5	1.0	1.0	1.8	1.6
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.2	-	0.2	-	0.3	0.2	0.6	0.3	1.2	0.6
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	-	-	0.1	-	0.2	0.2	0.6	0.3	1.4	0.8
8.7 Carcinoma of other and ill-defined sites, NOS	0.1	-	0.2	0.2	0.4	0.4	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	-	-	0.2	0.2	0.4	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	0.7	0.9	1.2	1.7	2.3
9.1 Other pediatric and embryonal tumors, NOS	0.1	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	0.4	0.7	0.8	1.0	1.5	2.2
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
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	-	0.1	-	0.4	0.2	0.9	0.7
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	0.1	-	0.3	0.2	0.5	0.2	0.6	0.5	1.3
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.9

a Rates are per 100,000.

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).

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).

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, 2004-2008

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female								
All Sites Combined	24.4	21.8	37.3	39.9	50.6	66.4	65.6	113.6	91.9	178.0
1. LEUKEMIAS	4.0	2.7	3.3	2.3	3.2	2.3	3.5	2.9	4.3	3.2
1.1 Acute lymphoid leukemia	2.7	1.4	1.5	0.7	1.0	0.7	0.9	0.7	0.9	0.5
1.2 Acute myeloid leukemia	1.0	1.0	1.0	1.2	1.2	1.1	1.4	1.5	1.4	1.5
1.3 Chronic myeloid leukemia	0.2	0.2	0.5	0.3	0.7	0.3	0.8	0.5	1.1	0.6
1.4 Other and unspecified leukemias	-	-	0.3	0.2	0.3	0.2	0.4	0.2	0.9	0.6
2. LYMPHOMAS	5.4	4.8	7.4	6.9	8.0	7.8	9.5	7.9	12.3	8.4
2.1 Non-Hodgkin Lymphoma	2.2	1.4	2.9	1.9	3.8	3.0	5.2	3.7	8.7	5.4
2.2 Hodgkin Lymphoma	3.2	3.4	4.5	5.1	4.1	4.8	4.3	4.1	3.6	3.0
3. CNS, INTRACRANIAL, INTRASPINAL	2.4	2.2	2.5	2.5	3.6	2.5	3.9	2.8	4.7	3.4
3.1 Astrocytoma	1.4	1.1	1.3	1.3	1.8	1.3	1.9	1.4	2.7	1.7
3.1.1 Specified low-grade astrocytic tumors	0.8	0.8	0.4	0.6	0.5	0.4	0.4	0.3	0.5	0.3
3.1.2 Glioblastoma and anaplastic astrocytoma	0.4	-	0.6	0.4	0.8	0.6	1.0	0.7	1.7	1.0
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	0.4	0.5	0.6	0.7	1.3	0.8	1.4	1.0	1.5	1.2
3.3 Ependymoma	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.2	0.3	0.3
3.4 Medulloblastoma and other PNET	0.3	0.3	0.3	0.3	0.2	0.2	0.3	-	-	-
3.4.1 Medulloblastoma	0.1	-	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	2.1	1.3	1.3	0.9	0.7	0.7	0.6	0.6	0.8	0.7
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	0.2	0.3	0.3
4.3 Ewing tumor	0.9	0.5	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	2.7	1.9	3.7	2.7	5.2	3.4
5.1 Fibromatous neoplasms	0.3	0.4	0.4	0.4	0.6	0.7	0.7	1.0	0.9	1.0
5.2 Rhabdomyosarcoma	0.4	0.2	0.2	-	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	0.7	0.9	1.2	1.0	2.0	1.1	2.9	1.6	4.3	2.3
5.3.1 Specified (excluding Kaposi sarcoma)	0.6	0.7	0.9	0.8	1.6	1.0	2.7	1.3	3.8	1.9
5.3.1.1 Specified (excluding Kaposi sarcoma)	0.6	0.7	0.7	0.8	0.9	1.0	1.3	1.2	1.7	1.9
5.3.1.2 Kaposi sarcoma	-	-	0.2	-	0.7	-	1.3	-	2.2	-
5.3.2 Unspecified soft tissue sarcoma	-	0.2	0.3	0.2	0.4	0.2	0.3	0.3	0.4	0.3
6. GERM CELL AND TROPHOBlastic NEOPLASMS	5.1	1.1	12.6	1.2	16.8	1.2	16.0	0.9	13.1	0.6
6.1 Germ cell and trophoblastic neoplasms of gonads	4.4	0.9	11.9	0.9	16.1	0.8	15.5	0.5	12.8	0.3
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	0.7	0.2	0.7	0.3	0.7	0.4	0.5	0.3	0.4	0.3
6.2.1 Intracranial sites	0.5	-	0.2	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	0.2	-	0.5	0.2	0.6	0.3	0.4	0.3	0.3	0.3

<sup>a</sup> Rates are per 100,000.<sup>b</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).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, 2004-2008

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female								
7. MELANOMA AND SKIN CARCINOMAS	1.4	2.3	3.1	7.2	5.7	12.3	9.0	15.4	13.4	20.3
7.1 Melanoma	1.4	2.3	3.1	7.2	5.7	12.2	8.8	15.3	13.2	20.2
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	0.2	-
8. CARCINOMAS (excluding skin)	2.2	5.5	4.6	16.6	9.2	36.7	18.1	78.7	35.9	135.1
8.1 Thyroid carcinoma	0.8	3.7	1.4	9.6	2.9	15.4	4.3	22.9	5.8	26.2
8.2 Other carcinoma of head and neck	0.4	0.3	0.7	0.8	0.9	0.9	1.7	1.7	3.8	2.4
8.2.1 Nasopharyngeal carcinoma	-	-	0.2	-	-	-	-	-	0.2	-
8.2.2 Other sites in lip, oral cavity and pharynx	0.3	0.3	0.5	0.7	0.7	0.8	1.3	1.3	3.0	1.9
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	0.2	0.3	0.7	0.3
8.3 Carcinoma of trachea, bronchus, and lung	-	-	0.3	0.3	0.5	0.6	1.0	1.2	2.6	3.1
8.4 Carcinoma of breast	-	-	-	1.3	-	7.3	-	25.5	-	59.2
8.5 Carcinoma of genitourinary tract	0.2	0.7	0.7	3.0	1.5	9.3	3.7	20.5	8.3	31.2
8.5.1 Carcinoma of kidney	-	0.2	0.3	0.4	0.9	0.9	2.3	2.1	4.9	3.1
8.5.2 Carcinoma of bladder	-	-	0.2	0.2	0.5	0.3	1.1	0.4	2.3	0.9
8.5.3 Carcinoma of gonads	-	0.3	-	0.7	-	1.2	-	2.4	-	4.1
8.5.4 Carcinoma of cervix and uterus	-	-	-	1.7	-	6.8	-	15.1	-	21.9
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	0.3	0.5	1.1	1.3
8.6 Carcinoma of gastrointestinal tract	0.6	0.6	1.4	1.5	3.1	2.8	6.9	6.2	14.1	11.6
8.6.1 Carcinoma of colon and rectum	0.3	0.3	0.8	1.1	2.1	1.9	4.5	4.3	9.2	8.1
8.6.2 Carcinoma of stomach	-	-	0.2	0.2	0.4	0.4	1.0	0.9	1.6	1.4
8.6.3 Carcinoma of liver and intrahepatic bile ducts	0.2	-	0.2	-	0.3	-	0.4	0.3	0.7	0.5
8.6.4 Carcinoma of pancreas	-	-	-	-	0.2	0.2	0.3	0.4	1.1	0.8
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	0.2	0.2	0.7	0.3	1.5	0.8
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.3	0.4	0.6	0.7	1.1	1.4
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	0.2	0.2	0.3	0.4	0.5	0.6	1.0	1.2
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	0.3	0.4	0.3	0.5	0.4	0.7	0.9	1.2	1.5	2.1
9.1 Other pediatric and embryonal tumors, NOS	0.1	-	-	-	-	-	-	-	-	-
9.1.1 Wilms tumor	-	-	-	-	-	-	-	-	-	-
9.1.2 Neuroblastoma	-	-	-	-	-	-	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.2 Other specified neoplasms, NOS	-	0.2	0.3	0.4	0.4	0.7	0.8	1.0	1.4	2.0
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	0.2	-	-
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	0.2	-	-	-	0.4	0.2	0.8	0.6
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	-	-	0.2	0.2	0.5	0.3	0.6	0.4	1.3
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	0.2	0.2	0.2	0.2	0.3	0.6	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 32.6

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, 2004-2008

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female								
All Sites Combined	14.4	15.0	19.7	25.8	32.7	45.2	48.4	90.7	77.6	148.2
1. LEUKEMIAS	2.0	2.3	2.1	2.4	2.4	1.5	3.0	2.3	4.1	2.6
1.1 Acute lymphoid leukemia	1.2	0.9	-	-	-	-	-	-	-	-
1.2 Acute myeloid leukemia	-	0.9	-	1.1	-	-	1.1	-	1.4	1.3
1.3 Chronic myeloid leukemia	-	-	-	-	-	-	1.1	1.0	1.4	-
1.4 Other and unspecified leukemias	-	-	-	-	-	-	-	-	-	-
2. LYMPHOMAS	4.6	4.6	6.7	4.9	9.9	6.9	13.1	9.8	15.1	9.0
2.1 Non-Hodgkin Lymphoma	2.4	1.8	3.3	1.7	5.1	2.3	8.3	5.5	10.9	6.5
2.2 Hodgkin Lymphoma	2.2	2.7	3.3	3.2	4.7	4.6	4.8	4.3	4.2	2.5
3. CNS, INTRACRANIAL, INTRASPINAL	1.3	1.3	1.4	1.3	1.2	1.8	1.5	1.6	2.2	1.7
3.1 Astrocytoma	-	-	1.0	-	-	-	-	-	1.4	-
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	1.7	1.0	-	-	-	-	-	-	-	-
4.1 Osteosarcoma	1.4	0.9	-	-	-	-	-	-	-	-
4.2 Chondrosarcoma	-	-	-	-	-	-	-	-	-	-
4.3 Ewing tumor	-	-	-	-	-	-	-	-	-	-
4.4 Other specified and unspecified bone tumors	-	-	-	-	-	-	-	-	-	-
5. SOFT TISSUE SARCOMAS	1.3	1.8	3.0	3.0	6.2	3.0	8.1	4.1	11.7	5.8
5.1 Fibromatous neoplasms	-	0.9	-	1.0	-	1.4	1.4	1.7	1.9	1.8
5.2 Rhabdomyosarcoma	-	-	-	-	-	-	-	-	-	-
5.3 Other specified soft tissue sarcoma	-	-	2.6	1.6	5.1	1.5	6.4	2.4	9.6	3.9
5.3.1 Specified soft tissue sarcoma	-	-	2.1	1.2	4.3	1.2	5.6	2.2	9.1	3.0
5.3.1.1 Specified (excluding Kaposi sarcoma)	-	-	0.9	1.2	1.2	1.0	1.2	1.9	2.6	2.7
5.3.1.2 Kaposi sarcoma	-	-	1.2	-	3.0	-	4.4	-	6.5	-
5.3.2 Unspecified soft tissue sarcoma	-	-	-	-	-	-	-	-	-	-
6. GERM CELL AND TROPHOBlastic NEOPLASMS	0.9	1.0	1.4	-	2.3	-	3.5	-	2.4	-
6.1 Germ cell and trophoblastic neoplasms of gonads	-	-	1.3	-	2.0	-	3.4	-	2.2	-
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites	-	-	-	-	-	-	-	-	-	-
6.2.1 Intracranial sites	-	-	-	-	-	-	-	-	-	-
6.2.2 Other nongonadal sites	-	-	-	-	-	-	-	-	-	-

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

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).

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, 2004-2008

Site	Ages 15-19		Ages 20-24		Ages 25-29		Ages 30-34		Ages 35-39	
	Male	Female								
7. MELANOMA AND SKIN CARCINOMAS	-	-	-	-	-	-	-	-	-	-
7.1 Melanoma	-	-	-	-	-	-	-	-	-	-
7.2 Skin carcinomas	-	-	-	-	-	-	-	-	-	-
8. CARCINOMAS (excluding skin)	2.2	2.3	4.2	11.5	8.6	29.4	16.9	68.5	37.0	121.6
8.1 Thyroid carcinoma	-	1.0	-	3.7	1.2	6.6	1.5	8.3	2.2	12.2
8.2 Other carcinoma of head and neck	-	-	-	1.0	1.4	1.1	1.4	1.9	3.9	2.6
8.2.1 Nasopharyngeal carcinoma	-	-	-	-	-	-	-	-	-	-
8.2.2 Other sites in lip, oral cavity and pharynx	-	-	-	-	-	-	-	1.7	2.5	2.2
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	-	-	-	-	-	-	-	-	-	-
8.3 Carcinoma of trachea, bronchus, and lung	-	-	-	-	-	-	1.6	1.7	3.1	3.3
8.4 Carcinoma of breast	-	-	-	2.0	-	11.0	-	31.5	-	64.3
8.5 Carcinoma of genitourinary tract	-	-	-	3.3	1.7	7.1	4.5	15.6	9.3	24.0
8.5.1 Carcinoma of kidney	-	-	-	-	1.4	-	3.4	1.4	5.4	3.6
8.5.2 Carcinoma of bladder	-	-	-	-	-	-	-	-	1.4	-
8.5.3 Carcinoma of gonads	-	-	-	-	-	-	-	1.4	-	3.2
8.5.4 Carcinoma of cervix and uterus	-	-	-	2.4	-	5.0	-	12.0	-	15.1
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	-	-	-	-	-	-	-	-	2.4	1.5
8.6 Carcinoma of gastrointestinal tract	0.9	-	1.5	1.1	2.8	2.7	6.8	8.1	16.7	14.0
8.6.1 Carcinoma of colon and rectum	-	-	0.9	-	1.5	1.7	3.9	5.3	10.7	9.1
8.6.2 Carcinoma of stomach	-	-	-	-	-	-	-	1.1	2.2	1.9
8.6.3 Carcinoma of liver and intrahepatic bile ducts	-	-	-	-	-	-	1.4	-	1.4	-
8.6.4 Carcinoma of pancreas	-	-	-	-	-	-	-	-	-	-
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	-	-	-	-	-	-	-	-	1.4	1.4
8.7 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	-	-	1.4	1.4
8.7.1 Adrenocortical carcinoma	-	-	-	-	-	-	-	-	-	-
8.7.2 Carcinoma of other and ill-defined sites, NOS	-	-	-	-	-	-	-	1.4	1.6	1.2
9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS	-	-	-	-	1.1	-	1.1	1.7	3.1	4.2
9.1 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.1.1 Wilms tumor	-	-	-	-	-	-	-	-	-	-
9.1.2 Neuroblastoma	-	-	-	-	-	-	-	-	-	-
9.1.3 Other pediatric and embryonal tumors, NOS	-	-	-	-	-	-	-	-	-	-
9.2 Other specified neoplasms, NOS	-	-	-	-	1.0	-	-	1.7	3.1	4.0
9.2.1 Paraganglioma and glomus tumors	-	-	-	-	-	-	-	-	-	-
9.2.2 Other specified gonadal tumors	-	-	-	-	-	-	-	-	-	-
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	-	-	-	-	-	-	-	-	1.9	1.8
9.2.4 Other specified neoplasms, NOS <sup>c</sup>	-	-	-	-	-	-	-	-	1.0	1.7
10. UNSPECIFIED MALIGNANT NEOPLASMS	-	-	-	-	-	-	-	-	-	1.2

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

	1975-2008			1999-2008		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
<b>Both Sexes</b>						
All Sites Combined	12,540	20.3	0.6*	4,135	21.6	0.6*
1. Leukemias	1,515	2.4	1.1*	549	2.9	1.1*
2. Lymphomas	3,124	5.0	0.0	922	4.8	0.0
3. CNS, intracranial, intraspinal	1,230	2.0	0.5	396	2.1	0.5
4. Osseous & chondromatous neoplasms	990	1.6	0.9*	323	1.7	0.9*
5. Soft tissue sarcomas	924	1.5	0.4	311	1.6	0.4
6. Germ cell and trophoblastic neoplasms	1,512	2.4	0.9*	515	2.7	0.9*
7. Melanoma and skin carcinomas	950	1.5	1.2*	339	1.8	1.2*
8. Carcinomas (excluding skin)	2,053	3.3	0.9*	717	3.7	0.9*
9. Miscellaneous specified neoplasms, NOS	189	0.3	-0.4	55	0.3	-0.4
10. Unspecified malignant neoplasms	53	0.1	-	-	-	-
 <b>Males</b>						
All Sites Combined	6,619	21.0	0.7*	2,233	22.7	0.7*
1. Leukemias	914	2.9	0.7*	321	3.3	0.7*
2. Lymphomas	1,663	5.3	0.0	502	5.1	0.0
3. CNS, intracranial, intraspinal	719	2.3	0.6	243	2.5	0.6
4. Osseous & chondromatous neoplasms	638	2.0	0.9*	201	2.0	0.9*
5. Soft tissue sarcomas	487	1.5	1.5	165	1.7	-0.2
6. Germ cell and trophoblastic neoplasms	1,104	3.5	1.3*	401	4.1	1.3*
7. Melanoma and skin carcinomas	381	1.2	1.7*	141	1.4	1.7*
8. Carcinomas (excluding skin)	608	1.9	1.6*	235	2.4	1.6*
9. Miscellaneous specified neoplasms, NOS	81	0.3	-	20	0.2	-
10. Unspecified malignant neoplasms	24	0.1	-	-	-	-
 <b>Females</b>						
All Sites Combined	5,921	19.5	0.4*	1,902	20.4	0.4*
1. Leukemias	601	2.0	1.6*	228	2.4	1.6*
2. Lymphomas	1,461	4.8	-0.1	420	4.5	-0.1
3. CNS, intracranial, intraspinal	511	1.7	0.2	153	1.6	0.2
4. Osseous & chondromatous neoplasms	352	1.2	0.7	122	1.3	0.7
5. Soft tissue sarcomas	437	1.4	0.7	146	1.6	0.7
6. Germ cell and trophoblastic neoplasms	408	1.3	-0.3	114	1.2	-0.3
7. Melanoma and skin carcinomas	569	1.9	0.9	198	2.1	0.9
8. Carcinomas (excluding skin)	1,445	4.8	0.6*	482	5.2	0.6*
9. Miscellaneous specified neoplasms, NOS	108	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 1975-2008.

- 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

	1975-2008			1999-2008		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
<b>Both Sexes</b>						
All Sites Combined	21,411	33.6	0.8*	7,006	36.8	0.8*
1. Leukemias	1,390	2.2	1.0*	464	2.4	1.0*
2. Lymphomas	4,541	7.1	0.9*	1,439	7.6	-0.1
3. CNS, intracranial, intraspinal	1,421	2.2	0.8*	458	2.4	0.8*
4. Osseous & chondromatous neoplasms	565	0.9	1.2*	190	1.0	1.2*
5. Soft tissue sarcomas	1,335	2.1	0.8	381	2.0	-1.9*
6. Germ cell and trophoblastic neoplasms	3,339	5.2	0.8*	1,145	6.0	0.8*
7. Melanoma and skin carcinomas	2,712	4.3	1.3*	969	5.1	1.3*
8. Carcinomas (excluding skin)	5,765	9.0	0.0	1,850	9.7	1.0*
9. Miscellaneous specified neoplasms, NOS	209	0.3	1.2*	72	0.4	1.2*
10. Unspecified malignant neoplasms	134	0.2	0.5	38	0.2	0.5
 <b>Males</b>						
All Sites Combined	10,578	32.7	0.5*	3,374	34.4	0.5*
1. Leukemias	811	2.5	0.8*	267	2.7	0.8*
2. Lymphomas	2,438	7.5	0.4	758	7.7	0.4
3. CNS, intracranial, intraspinal	802	2.5	0.2	231	2.4	0.2
4. Osseous & chondromatous neoplasms	333	1.0	0.9	111	1.1	0.9
5. Soft tissue sarcomas	795	2.5	0.5	208	2.1	-3.5*
6. Germ cell and trophoblastic neoplasms	2,984	9.2	0.8*	1,033	10.5	0.8*
7. Melanoma and skin carcinomas	939	2.9	0.4	310	3.2	0.4
8. Carcinomas (excluding skin)	1,346	4.2	0.0	422	4.3	0.0
9. Miscellaneous specified neoplasms, NOS	81	0.3	-	24	0.2	-
10. Unspecified malignant neoplasms	49	0.2	-	-	-	-
 <b>Females</b>						
All Sites Combined	10,833	34.5	1.0*	3,632	39.3	1.0*
1. Leukemias	579	1.8	0.1	197	2.1	-0.5
2. Lymphomas	2,103	6.7	1.3*	681	7.4	-0.1
3. CNS, intracranial, intraspinal	619	2.0	1.7*	227	2.5	1.7*
4. Osseous & chondromatous neoplasms	232	0.7	1.5*	79	0.9	1.5*
5. Soft tissue sarcomas	540	1.7	1.6	173	1.9	1.2
6. Germ cell and trophoblastic neoplasms	355	1.1	0.2	112	1.2	0.2
7. Melanoma and skin carcinomas	1,773	5.6	1.9*	659	7.1	1.9*
8. Carcinomas (excluding skin)	4,419	14.1	0.2	1,428	15.4	1.2*
9. Miscellaneous specified neoplasms, NOS	128	0.4	1.6*	48	0.5	1.6*
10. Unspecified malignant neoplasms	85	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 1975-2008.

- 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

	1975-2008			1999-2008		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
<b>Both Sexes</b>						
All Sites Combined	36,501	54.2	0.6*	11,112	56.7	0.7
1. Leukemias	1,568	2.3	0.2	519	2.7	1.5*
2. Lymphomas	5,529	8.2	0.5	1,576	8.0	0.4
3. CNS, intracranial, intraspinal	1,896	2.8	0.9*	608	3.1	0.9*
4. Osseous & chondromatous neoplasms	441	0.7	1.0	138	0.7	1.0
5. Soft tissue sarcomas	2,839	4.2	1.5	557	2.8	-0.2
6. Germ cell and trophoblastic neoplasms	4,627	6.9	1.4*	1,437	7.3	2.2*
7. Melanoma and skin carcinomas	5,020	7.5	1.1*	1,685	8.6	1.1*
8. Carcinomas (excluding skin)	14,074	20.9	0.2	4,427	22.6	1.0*
9. Miscellaneous specified neoplasms, NOS	330	0.5	1.3*	121	0.6	1.3*
10. Unspecified malignant neoplasms	177	0.3	-	44	0.2	-
 <b>Males</b>						
All Sites Combined	16,571	48.9	0.7	4,832	48.6	1.0
1. Leukemias	910	2.7	-0.2	287	2.9	1.4*
2. Lymphomas	3,150	9.3	0.6	843	8.5	-0.3
3. CNS, intracranial, intraspinal	1,027	3.0	0.7*	316	3.2	0.7*
4. Osseous & chondromatous neoplasms	253	0.7	-0.2	69	0.7	-0.2
5. Soft tissue sarcomas	2,108	6.2	1.8	365	3.7	-0.9
6. Germ cell and trophoblastic neoplasms	4,261	12.6	1.2*	1,343	13.5	0.2
7. Melanoma and skin carcinomas	1,814	5.4	0.1	546	5.5	0.1
8. Carcinomas (excluding skin)	2,849	8.4	0.1	988	9.9	1.7*
9. Miscellaneous specified neoplasms, NOS	122	0.4	-	51	0.5	-
10. Unspecified malignant neoplasms	77	0.2	-	24	0.2	-
 <b>Females</b>						
All Sites Combined	19,930	59.6	0.4*	6,280	65.2	0.8*
1. Leukemias	658	2.0	1.2*	232	2.4	1.2*
2. Lymphomas	2,379	7.1	0.9*	733	7.6	0.9*
3. CNS, intracranial, intraspinal	869	2.6	1.0*	292	3.0	1.0*
4. Osseous & chondromatous neoplasms	188	0.6	1.9*	69	0.7	1.9*
5. Soft tissue sarcomas	731	2.2	0.4	192	2.0	-2.5*
6. Germ cell and trophoblastic neoplasms	366	1.1	-1.0	94	1.0	-1.0
7. Melanoma and skin carcinomas	3,206	9.6	1.7*	1,139	11.8	1.7*
8. Carcinomas (excluding skin)	11,225	33.6	0.1	3,439	35.7	0.8*
9. Miscellaneous specified neoplasms, NOS	208	0.6	0.6	70	0.7	0.6
10. Unspecified malignant neoplasms	100	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 1975-2008.

- 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

	1975-2008			1999-2008		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
<b>Both Sexes</b>						
All Sites Combined	56,399	83.9	0.8*	17,346	86.4	0.8*
1. Leukemias	1,892	2.8	0.6	628	3.1	0.6
2. Lymphomas	6,249	9.3	1.7*	1,867	9.3	0.1
3. CNS, intracranial, intraspinal	2,242	3.3	0.3	677	3.4	0.3
4. Osseous & chondromatous neoplasms	427	0.6	0.8	136	0.7	0.8
5. Soft tissue sarcomas	4,808	7.2	1.1	763	3.8	-2.6*
6. Germ cell and trophoblastic neoplasms	4,681	7.0	1.9*	1,562	7.8	0.4
7. Melanoma and skin carcinomas	7,187	10.7	1.5*	2,360	11.8	0.1
8. Carcinomas (excluding skin)	28,063	41.7	0.4*	9,042	45.0	1.8*
9. Miscellaneous specified neoplasms, NOS	576	0.9	1.6*	219	1.1	1.6*
10. Unspecified malignant neoplasms	273	0.4	1.0	91	0.5	1.0
 <b>Males</b>						
All Sites Combined	23,656	70.2	0.8*	6,673	65.8	0.5
1. Leukemias	1,097	3.3	0.7*	363	3.6	0.7*
2. Lymphomas	3,902	11.6	1.8*	1,074	10.6	-0.2
3. CNS, intracranial, intraspinal	1,308	3.9	0.2	398	3.9	0.2
4. Osseous & chondromatous neoplasms	238	0.7	0.7	78	0.8	0.7
5. Soft tissue sarcomas	3,927	11.7	1.1	509	5.0	-4.7*
6. Germ cell and trophoblastic neoplasms	4,375	13.0	1.9*	1,469	14.5	0.4
7. Melanoma and skin carcinomas	2,907	8.6	0.0	874	8.6	0.0
8. Carcinomas (excluding skin)	5,582	16.6	0.3	1,778	17.5	1.9*
9. Miscellaneous specified neoplasms, NOS	222	0.7	2.0*	94	0.9	2.0*
10. Unspecified malignant neoplasms	98	0.3	-	36	0.4	-
 <b>Females</b>						
All Sites Combined	32,743	97.5	0.6*	10,673	107.5	1.5*
1. Leukemias	795	2.4	0.3	265	2.7	0.3
2. Lymphomas	2,347	7.0	1.5*	793	8.0	1.5*
3. CNS, intracranial, intraspinal	934	2.8	0.5	279	2.8	0.5
4. Osseous & chondromatous neoplasms	189	0.6	-	58	0.6	-
5. Soft tissue sarcomas	881	2.6	0.1	254	2.6	0.1
6. Germ cell and trophoblastic neoplasms	306	0.9	0.0	93	0.9	0.0
7. Melanoma and skin carcinomas	4,280	12.8	2.3*	1,486	15.0	1.0*
8. Carcinomas (excluding skin)	22,481	67.0	0.4*	7,264	73.2	1.6*
9. Miscellaneous specified neoplasms, NOS	354	1.1	1.4*	125	1.3	1.4*
10. Unspecified malignant neoplasms	175	0.5	-	55	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 1975-2008.

- 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

	1975-2008			1999-2008		
	No.	Rate	AAPC <sup>c</sup>	No.	Rate	AAPC <sup>c</sup>
<b>Both Sexes</b>						
All Sites Combined	83,380	131.4	0.7*	28,089	133.5	1.2*
1. Leukemias	2,314	3.6	-0.2	755	3.6	-0.2
2. Lymphomas	7,084	11.2	1.8*	2,394	11.4	-1.5*
3. CNS, intracranial, intraspinal	2,515	4.0	-0.1	842	4.0	-0.1
4. Osseous & chondromatous neoplasms	409	0.6	1.6*	158	0.8	1.6*
5. Soft tissue sarcomas	5,658	8.9	1.5	1,110	5.3	-0.2
6. Germ cell and trophoblastic neoplasms	3,706	5.8	1.8*	1,377	6.5	0.5
7. Melanoma and skin carcinomas	9,052	14.3	1.7*	3,194	15.2	0.3
8. Carcinomas (excluding skin)	51,170	80.7	0.4	17,741	84.3	1.4*
9. Miscellaneous specified neoplasms, NOS	1,045	1.6	1.0*	388	1.8	1.0*
10. Unspecified malignant neoplasms	427	0.7	-0.2	130	0.6	-0.2
 <b>Males</b>						
All Sites Combined	31,724	100.2	0.6	10,023	94.8	0.1
1. Leukemias	1,355	4.3	-0.2	440	4.2	-0.2
2. Lymphomas	4,656	14.7	2.1*	1,444	13.7	-0.4
3. CNS, intracranial, intraspinal	1,463	4.6	-0.2	483	4.6	-0.2
4. Osseous & chondromatous neoplasms	232	0.7	0.6	83	0.8	0.6
5. Soft tissue sarcomas	4,502	14.2	3.1	741	7.0	-0.4
6. Germ cell and trophoblastic neoplasms	3,520	11.1	2.0*	1,316	12.4	0.5
7. Melanoma and skin carcinomas	3,988	12.6	0.7	1,316	12.4	-0.8*
8. Carcinomas (excluding skin)	11,406	36.0	0.1	3,989	37.7	1.4*
9. Miscellaneous specified neoplasms, NOS	428	1.4	0.7	163	1.5	0.7
10. Unspecified malignant neoplasms	174	0.5	0.1	48	0.5	-4.1*
 <b>Females</b>						
All Sites Combined	51,656	162.6	0.7*	18,066	172.7	1.2*
1. Leukemias	959	3.0	0.1	315	3.0	-0.9
2. Lymphomas	2,428	7.6	1.6*	950	9.1	1.6*
3. CNS, intracranial, intraspinal	1,052	3.3	-0.2	359	3.4	-0.2
4. Osseous & chondromatous neoplasms	177	0.6	-	75	0.7	-
5. Soft tissue sarcomas	1,156	3.6	-0.6	369	3.5	-0.6
6. Germ cell and trophoblastic neoplasms	186	0.6	-0.6	61	0.6	-0.6
7. Melanoma and skin carcinomas	5,064	15.9	2.3*	1,878	18.0	1.9
8. Carcinomas (excluding skin)	39,764	125.1	0.5	13,752	131.4	1.4*
9. Miscellaneous specified neoplasms, NOS	617	1.9	1.1*	225	2.2	1.1*
10. Unspecified malignant neoplasms	253	0.8	-0.2	82	0.8	-0.2

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

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

<sup>b</sup> Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

<sup>c</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2008.

- 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, 2004-2008  
Ages 15-19

	Males	<u>Incidence</u>					<u>Mortality</u>				
		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	22.6	24.4	14.4	19.1	21.7	3.8	3.9	3.6	3.4	4.6
	Leukemia	3.7	4.0	2.0	3.3	5.6	1.1	1.2	1.0	0.7	1.7
	Lymphoma	5.1	5.4	4.6	3.3	3.6	0.4	0.4	0.4	-	0.4
	Hodgkin Lymphoma	3.0	3.2	2.2	2.1	2.1	0.1	0.1	-	-	-
	Non-Hodgkin Lymphoma	2.1	2.2	2.4	-	1.5	0.3	0.3	0.4	-	0.3
	Brain and Other Nervous System	2.4	2.5	1.4	2.3	1.6	0.6	0.6	0.4	-	0.5
	Bones and Joints	1.8	1.8	1.8	1.8	1.7	0.7	0.7	0.6	-	0.8
	Soft Tissue including Heart	1.1	1.2	-	1.3	1.3	0.3	0.3	0.3	-	0.3
	Skin excluding Basal and Squamous	1.3	1.5	-	-	-	0.0	0.0	-	-	-
	Respiratory System	0.5	0.5	-	-	0.5	0.1	0.0	-	-	-
	Male Genital System	3.8	4.5	-	2.3	4.5	0.1	0.1	-	-	-
	Digestive System	0.8	0.7	1.1	-	0.6	0.2	0.2	0.2	-	-
	Females	<u>Incidence</u>					<u>Mortality</u>				
	All Malignant Cancers	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	20.6	21.8	15.0	16.7	18.2	2.7	2.7	2.8	2.0	3.0
	Leukemia	2.6	2.7	2.3	2.1	3.3	0.8	0.8	0.9	-	1.2
	Lymphoma	4.6	4.8	4.6	3.0	3.3	0.2	0.2	0.2	-	0.3
	Hodgkin Lymphoma	3.1	3.4	2.7	1.6	2.2	0.1	0.1	-	-	-
	Non-Hodgkin Lymphoma	1.5	1.4	1.8	1.4	1.1	0.1	0.1	-	-	0.2
	Brain and Other Nervous System	2.0	2.1	1.3	1.5	1.9	0.4	0.4	0.4	-	0.4
	Bones and Joints	1.1	1.2	1.0	-	1.2	0.4	0.5	0.3	-	0.4
	Soft Tissue including Heart	1.1	1.1	1.1	-	1.2	0.3	0.3	0.3	-	0.3
	Skin excluding Basal and Squamous	2.1	2.5	-	-	0.8	0.0	0.0	-	-	-
	Respiratory System	0.2	0.3	-	-	-	-	-	-	-	-
	Breast	0.2	0.2	-	-	-	-	-	-	-	-
	Female Genital System	1.6	1.6	1.4	2.1	2.0	0.1	0.1	-	-	-
	Digestive System	0.6	0.6	-	-	0.8	0.1	0.1	-	-	0.2

<sup>a</sup> 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). US Mortality Files, National Center for Health Statistics, CDC.<sup>b</sup> Asian/Pacific Islander<sup>c</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 and North Dakota.<sup>d</sup> 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, 2004-2008  
Ages 20-24

	Males	<u>Incidence</u>					<u>Mortality</u>				
		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	33.9	37.3	19.7	22.2	31.9	5.5	5.4	5.9	5.2	5.9
	Leukemia	3.0	3.2	2.1	2.3	4.4	1.4	1.4	1.3	1.1	2.0
	Lymphoma	7.2	7.4	6.7	6.7	5.0	0.7	0.7	0.9	0.8	0.7
	Hodgkin Lymphoma	4.3	4.5	3.3	4.0	2.6	0.2	0.3	0.2	-	-
	Non-Hodgkin Lymphoma	2.9	2.9	3.3	2.7	2.4	0.5	0.5	0.7	0.6	0.6
	Brain and Other Nervous System	2.3	2.5	1.4	-	2.2	0.6	0.6	0.5	-	0.6
	Bones and Joints	1.1	1.2	-	-	1.1	0.6	0.6	0.5	-	0.5
	Soft Tissue including Heart	1.2	1.2	1.6	-	1.2	0.4	0.4	0.5	-	0.4
	Skin excluding Basal and Squamous	2.7	3.3	-	-	0.6	0.2	0.2	-	-	-
	Respiratory System	0.8	0.9	-	-	0.9	0.1	0.1	-	-	-
	Male Genital System	10.1	12.2	1.6	4.1	12.2	0.4	0.4	0.2	-	0.7
	Digestive System	1.6	1.6	1.6	1.6	1.4	0.4	0.4	0.7	0.8	0.4
	Females	<u>Incidence</u>					<u>Mortality</u>				
	All Malignant Cancers	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	37.7	39.9	25.8	28.4	29.4	3.7	3.7	4.5	3.2	4.0
	Leukemia	2.3	2.3	2.4	1.4	2.8	0.8	0.8	0.7	-	1.2
	Lymphoma	6.6	6.9	4.9	5.4	4.6	0.5	0.4	0.7	-	0.4
	Hodgkin Lymphoma	4.7	5.1	3.2	3.5	2.9	0.2	0.2	0.2	-	-
	Non-Hodgkin Lymphoma	1.9	1.9	1.7	1.9	1.7	0.3	0.2	0.5	-	0.2
	Brain and Other Nervous System	2.3	2.6	1.4	1.7	1.7	0.4	0.5	0.4	-	0.4
	Bones and Joints	0.7	0.8	-	-	0.5	0.3	0.3	0.3	-	0.2
	Soft Tissue including Heart	1.2	1.0	2.2	-	0.8	0.3	0.3	0.5	-	0.2
	Skin excluding Basal and Squamous	6.2	7.3	-	-	1.4	0.1	0.1	-	-	-
	Respiratory System	0.4	0.4	-	-	0.5	0.1	0.1	-	-	-
	Breast	1.6	1.5	2.3	1.8	1.3	0.1	0.1	0.3	-	-
	Female Genital System	4.0	4.0	3.9	4.0	4.7	0.3	0.3	0.4	-	0.3
	Digestive System	1.7	1.7	1.2	1.6	1.4	0.4	0.4	0.3	0.8	0.5

<sup>a</sup> 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). US Mortality Files, National Center for Health Statistics, CDC.<sup>b</sup> Asian/Pacific Islander<sup>c</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 and North Dakota.<sup>d</sup> 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, 2004-2008  
Ages 25-29

	Males	<u>Incidence</u>					<u>Mortality</u>				
		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	46.5	50.6	32.7	24.5	36.6	7.0	7.0	8.1	5.6	5.8
	Leukemia	3.0	3.2	2.4	2.4	3.8	1.2	1.3	1.2	1.0	1.4
	Lymphoma	7.8	8.0	9.9	4.2	5.4	0.9	0.9	1.5	0.7	0.8
	Hodgkin Lymphoma	4.0	4.1	4.7	2.0	1.9	0.3	0.3	0.4	-	0.2
	Non-Hodgkin Lymphoma	3.8	3.8	5.1	2.2	3.4	0.6	0.6	1.0	-	0.6
	Brain and Other Nervous System	3.2	3.6	1.2	1.7	2.3	0.9	1.0	0.7	-	0.5
	Bones and Joints	0.6	0.6	-	-	0.4	0.4	0.4	0.2	-	0.2
	Soft Tissue including Heart	1.5	1.5	2.6	-	1.3	0.4	0.4	0.5	-	0.3
	Skin excluding Basal and Squamous	5.1	6.1	-	-	0.9	0.4	0.5	-	-	-
	Respiratory System	1.2	1.2	1.2	1.2	1.1	0.3	0.3	0.4	-	0.2
	Male Genital System	13.6	16.4	2.3	3.5	12.6	0.4	0.4	0.3	-	0.6
	Digestive System	3.5	3.5	3.2	4.0	3.2	1.1	0.9	1.7	1.4	0.9
	Females	<u>Incidence</u>					<u>Mortality</u>				
	All Malignant Cancers	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	62.1	66.4	45.2	41.5	50.8	6.2	5.9	8.4	5.0	5.8
	Leukemia	2.2	2.3	1.5	1.9	2.6	0.9	0.8	1.0	1.1	1.1
	Lymphoma	7.3	7.8	6.9	4.0	5.2	0.6	0.6	1.0	-	0.6
	Hodgkin Lymphoma	4.5	4.8	4.6	2.1	3.0	0.3	0.3	0.3	-	0.3
	Non-Hodgkin Lymphoma	2.8	3.0	2.3	1.9	2.2	0.3	0.3	0.6	-	0.4
	Brain and Other Nervous System	2.2	2.5	1.8	-	1.5	0.6	0.6	0.4	-	0.4
	Bones and Joints	0.5	0.5	-	-	0.5	0.2	0.2	-	-	0.2
	Soft Tissue including Heart	1.2	1.2	1.5	-	1.2	0.3	0.3	0.5	-	0.2
	Skin excluding Basal and Squamous	10.4	12.6	1.1	-	2.6	0.3	0.4	-	-	-
	Respiratory System	0.8	0.8	-	-	0.5	0.2	0.2	-	-	-
	Breast	8.1	7.6	11.5	7.4	7.1	0.7	0.6	1.5	-	0.7
	Female Genital System	9.1	9.7	7.6	5.7	10.1	0.9	0.9	1.5	0.5	0.9
	Digestive System	3.1	3.0	2.8	3.4	3.2	0.9	0.8	1.2	0.8	1.0

<sup>a</sup> 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). US Mortality Files, National Center for Health Statistics, CDC.<sup>b</sup> Asian/Pacific Islander<sup>c</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 and North Dakota.<sup>d</sup> 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, 2004-2008  
Ages 30-34

	Males	<u>Incidence</u>					<u>Mortality</u>				
		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		61.8	65.6	48.4	38.0	43.7	10.3	10.2	12.5	8.0	7.9
Leukemia		3.4	3.5	3.0	2.6	3.5	1.4	1.4	1.6	1.0	1.6
Lymphoma		9.6	9.5	13.1	5.3	6.6	1.1	1.1	1.9	0.6	0.8
Hodgkin Lymphoma		4.0	4.3	4.8	1.5	2.3	0.3	0.3	0.5	-	-
Non-Hodgkin Lymphoma		5.5	5.2	8.3	3.7	4.3	0.8	0.7	1.4	0.5	0.7
Brain and Other Nervous System		3.6	3.9	1.6	2.9	2.5	1.3	1.5	0.6	1.2	0.7
Bones and Joints		0.5	0.5	-	-	0.4	0.3	0.3	0.3	-	0.2
Soft Tissue including Heart		1.9	1.8	2.7	1.3	1.6	0.6	0.5	1.0	-	0.4
Skin excluding Basal and Squamous		8.0	9.3	1.3	-	1.8	0.7	0.9	-	-	0.2
Respiratory System		1.8	1.7	1.9	2.2	1.3	0.6	0.6	0.7	0.8	0.3
Male Genital System		13.4	15.9	3.9	3.9	10.2	0.4	0.5	0.2	-	0.5
Digestive System		7.4	7.3	7.3	7.6	7.1	2.4	2.1	3.7	2.6	2.0
	Females	<u>Incidence</u>					<u>Mortality</u>				
		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		107.6	113.6	90.7	78.7	89.8	12.3	11.9	16.4	9.4	10.8
Leukemia		2.8	2.9	2.3	2.7	3.5	1.0	1.0	1.2	0.8	1.2
Lymphoma		7.7	7.9	9.8	4.5	5.8	0.8	0.7	1.2	-	0.6
Hodgkin Lymphoma		3.8	4.1	4.3	1.5	2.5	0.3	0.3	0.5	-	-
Non-Hodgkin Lymphoma		4.0	3.7	5.5	3.1	3.2	0.5	0.4	0.8	-	0.5
Brain and Other Nervous System		2.6	2.9	1.6	1.6	2.2	0.9	1.0	0.5	0.6	0.6
Bones and Joints		0.5	0.6	-	-	0.6	0.2	0.2	-	-	-
Soft Tissue including Heart		1.6	1.7	1.7	-	1.9	0.4	0.4	0.5	-	0.4
Skin excluding Basal and Squamous		12.9	15.7	2.2	1.3	3.8	0.5	0.7	-	-	-
Respiratory System		1.7	1.7	1.9	2.0	1.1	0.5	0.5	0.5	-	0.3
Breast		26.4	25.8	31.8	24.1	21.2	2.9	2.6	5.8	1.5	2.3
Female Genital System		18.9	19.8	16.3	13.8	20.9	2.1	2.1	2.8	1.2	2.1
Digestive System		6.9	6.5	8.3	7.2	6.2	2.0	1.8	2.6	2.6	2.1

<sup>a</sup> 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). US Mortality Files, National Center for Health Statistics, CDC.<sup>b</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 and North Dakota.<sup>c</sup> 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, 2004-2008  
Ages 35-39

	Males	<u>Incidence</u>					<u>Mortality</u>				
		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		87.7	91.9	77.6	56.0	60.1	17.4	17.2	20.6	13.7	11.9
Leukemia		4.2	4.3	4.1	3.6	4.0	1.5	1.5	1.8	1.0	1.5
Lymphoma		12.1	12.3	15.1	6.1	9.8	1.5	1.4	2.1	0.5	1.0
Hodgkin Lymphoma		3.4	3.6	4.2	1.5	2.4	0.3	0.3	0.5	-	0.2
Non-Hodgkin Lymphoma		8.6	8.7	10.9	4.7	7.4	1.1	1.1	1.6	-	0.8
Brain and Other Nervous System		4.2	4.8	2.3	2.1	3.6	2.0	2.2	0.9	1.2	1.1
Bones and Joints		0.6	0.6	-	-	0.6	0.2	0.2	-	-	-
Soft Tissue including Heart		2.4	2.3	3.8	1.8	2.2	0.6	0.6	0.8	-	0.4
Skin excluding Basal and Squamous		11.3	13.5	1.6	-	2.5	1.1	1.3	0.3	-	0.3
Respiratory System		3.9	3.8	4.7	4.0	2.2	2.1	2.1	2.5	2.1	0.9
Male Genital System		12.0	14.0	4.4	3.9	8.4	0.5	0.5	0.4	-	0.4
Digestive System		15.5	14.9	17.5	17.6	12.0	5.2	4.8	7.4	5.7	4.2
Females		<u>Incidence</u>					<u>Mortality</u>				
		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		172.6	178.0	148.2	143.0	143.6	24.3	23.2	33.8	16.5	20.2
Leukemia		3.2	3.3	2.4	3.0	3.5	1.2	1.3	1.1	0.9	1.4
Lymphoma		8.2	8.4	9.1	5.1	7.2	0.9	0.9	1.3	0.5	0.8
Hodgkin Lymphoma		2.7	3.0	2.5	-	2.0	0.2	0.2	0.2	-	-
Non-Hodgkin Lymphoma		5.5	5.4	6.6	4.1	5.2	0.7	0.6	1.0	-	0.6
Brain and Other Nervous System		3.0	3.4	2.0	1.9	2.4	1.2	1.3	0.7	0.7	0.7
Bones and Joints		0.5	0.6	-	-	-	0.2	0.1	0.3	-	-
Soft Tissue including Heart		1.9	1.9	2.3	2.0	1.9	0.5	0.4	0.7	-	0.5
Skin excluding Basal and Squamous		17.1	20.6	2.1	1.4	5.1	0.7	0.9	-	-	0.2
Respiratory System		3.6	3.6	3.7	3.4	2.0	2.0	2.0	2.2	1.3	0.8
Breast		60.0	59.7	64.8	53.9	49.5	7.5	6.5	14.2	4.2	5.7
Female Genital System		28.4	29.3	23.4	26.1	32.7	4.1	4.1	5.1	2.2	4.2
Digestive System		13.0	12.3	14.8	13.3	12.7	3.7	3.4	5.1	4.3	3.9

<sup>a</sup> 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). US Mortality Files, National Center for Health Statistics, CDC.<sup>b</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 and North Dakota.<sup>c</sup> 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, 1975-2008

	Incidence				Mortality			
	1975-2008		1999-2008		1975-2008		1999-2008	
	Rate	AAPC <sup>d</sup>						
<b>Ages 15-19</b>								
All Malignant Cancers	20.3	0.6*	21.6	0.6*	4.3	-1.9*	3.4	-1.6*
Hodgkin Lymphoma	3.5	-0.8*	3.0	-0.8*	0.2	-4.7*	0.1	-4.7*
Brain and Other Nervous System	2.0	0.3	2.1	0.3	0.6	-1.2*	0.5	-1.2*
Thyroid	1.7	1.4*	2.0	1.4*	0.0	-	-	-
Non-Hodgkin Lymphoma	1.6	1.7*	1.9	1.7*	0.4	-2.8*	0.2	-2.8*
Testis	1.6	1.5*	1.9	1.5*	0.1	-5.7*	0.0	-2.8*
<b>Ages 20-24</b>								
All Malignant Cancers	33.6	0.8*	36.8	0.8*	5.7	-1.4*	4.8	-1.1*
Hodgkin Lymphoma	5.0	0.3	4.9	-0.7	0.4	-3.7*	0.3	-4.3*
Testis	4.4	1.0*	5.1	1.0*	0.3	-3.7*	0.2	2.4
Melanoma of the Skin	4.1	1.4*	4.9	1.4*	0.2	-3.0*	0.2	-1.7*
Thyroid	4.0	1.4*	4.6	1.4*	0.0	-	0.0	-
Brain and Other Nervous System	2.3	0.7*	2.4	0.7*	0.6	-0.9*	0.5	-0.9*
<b>Ages 25-29</b>								
All Malignant Cancers	54.2	0.6*	56.7	0.7	8.5	-1.6*	6.8	-1.6*
Melanoma of the Skin	7.2	1.2*	8.4	1.2*	0.5	-3.1*	0.3	-3.1*
Thyroid	6.3	1.8*	8.5	3.9*	0.0	-	0.0	-
Testis	6.1	1.3*	6.7	0.5	0.3	-4.5*	0.2	-2.8*
Hodgkin Lymphoma	4.8	0.1	4.7	0.1	0.6	-4.1*	0.3	-4.1*
Breast	4.0	-0.4	3.8	-0.4	0.5	-2.5*	0.4	-3.6*
<b>Ages 30-34</b>								
All Malignant Cancers	83.9	0.8*	86.4	0.8*	14.9	-1.6*	11.9	-2.3*
Breast	13.2	-0.1	13.3	-0.1	2.2	-2.0*	1.6	-2.7*
Melanoma of the Skin	10.3	1.6*	11.5	0.0	0.9	-2.0*	0.6	-0.7
Thyroid	8.0	2.2*	11.2	4.9*	0.0	-1.7	0.0	-1.7
Testis	6.3	2.1*	7.2	0.5	0.3	-3.5*	0.2	-2.3*
Cervix Uteri	5.9	-1.3*	5.0	-1.3*	0.9	-1.6*	0.7	-3.6*
<b>Ages 35-39</b>								
All Malignant Cancers	131.4	0.7*	133.5	1.2*	27.8	-1.7*	22.6	-2.6*
Breast	31.5	0.4	31.3	0.3	5.3	-1.7*	4.0	-3.0*
Melanoma of the Skin	13.8	1.7*	14.7	0.3	1.4	-2.7*	0.9	-4.3*
Thyroid	9.7	3.6*	14.1	6.6*	0.1	-0.3	0.1	-0.3
Non-Hodgkin Lymphoma	7.9	2.4*	7.9	0.6	1.6	-1.9*	1.1	-8.2*
Cervix Uteri	7.2	-1.5*	5.9	-1.5*	1.5	-1.3	1.2	-0.9

<sup>a</sup> Rates are per 100,000.  
<sup>b</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

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

<sup>d</sup> Top 5 cancer sites selected based on 1975-2008 SEER 9 Incidence rates for the age group.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2008.

- 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, 1975-2008

	Incidence				Mortality			
	1975-2008		1999-2008		1975-2008		1999-2008	
	Rate	AAPC <sup>d</sup>						
<b>Ages 15-19</b>								
All Malignant Cancers	21.0	0.7*	22.7	0.7*	5.1	-2.0*	4.0	-1.8*
Hodgkin Lymphoma	3.3	-0.8*	2.9	-0.8*	0.2	-5.0*	0.1	-5.0*
Testis	3.0	1.4*	3.6	1.4*	0.2	-5.8*	0.1	-2.8*
Brain and Other Nervous System	2.3	0.4	2.5	0.4	0.7	-1.1*	0.6	-1.1*
Non-Hodgkin Lymphoma	2.0	1.4*	2.2	1.4*	0.5	-2.8*	0.3	-2.8*
Bones and Joints	1.9	0.4	1.8	0.4	0.7	-1.2*	0.6	0.6
<b>Ages 20-24</b>								
All Malignant Cancers	32.7	0.5*	34.4	0.5*	6.7	-1.6*	5.6	-1.1*
Testis	8.6	0.9*	10.0	0.9*	0.5	-3.8*	0.3	2.3
Hodgkin Lymphoma	5.0	-0.5	4.6	-0.5	0.5	-4.3*	0.3	-4.3*
Melanoma of the Skin	2.8	0.4	3.1	0.4	0.3	-2.9*	0.2	-2.9*
Non-Hodgkin Lymphoma	2.6	2.0*	3.1	2.0*	0.7	-1.3*	0.6	-1.3*
Brain and Other Nervous System	2.5	0.1	2.4	0.1	0.7	-0.9*	0.6	-0.9*
<b>Ages 25-29</b>								
All Malignant Cancers	48.9	0.7	48.6	1.0	9.0	-1.8*	7.1	-1.8*
Testis	12.2	1.2*	13.1	0.4	0.7	-4.6*	0.4	-2.9*
Melanoma of the Skin	5.2	0.2	5.4	0.2	0.6	-3.0*	0.4	0.1
Hodgkin Lymphoma	5.0	-0.3	4.6	-0.3	0.7	-4.6*	0.3	-4.6*
Non-Hodgkin Lymphoma	4.3	0.9	3.9	-1.4	1.0	-1.7*	0.7	-6.3*
Kaposi sarcoma	4.1	-	1.2	-	-	-	-	-
<b>Ages 30-34</b>								
All Malignant Cancers	70.2	0.8*	65.8	0.5	13.8	-1.7*	10.8	-1.8*
Testis	12.7	2.0*	14.2	0.4	0.6	-3.6*	0.4	-2.3*
Kaposi sarcoma	9.1	-	2.3	-	-	-	-	-
Melanoma of the Skin	8.3	0.1	8.4	0.1	1.1	-2.1*	0.7	-0.7
Non-Hodgkin Lymphoma	7.3	1.2	6.2	-1.9	1.5	-1.2	0.9	-5.5*
Hodgkin Lymphoma	4.3	0.1	4.4	0.1	0.8	-4.4*	0.4	-5.7*
<b>Ages 35-39</b>								
All Malignant Cancers	100.2	0.6	94.8	0.1	24.2	-1.9*	19.1	-3.0*
Melanoma of the Skin	12.1	0.7	12.0	-0.8*	1.7	-3.0*	1.1	-5.1*
Kaposi sarcoma	10.9	-	3.5	-	-	-	-	-
Non-Hodgkin Lymphoma	10.9	3.1*	9.9	0.5	2.2	-1.9*	1.4	-8.8*
Testis	10.9	2.1*	12.3	0.6	0.5	-3.0*	0.4	-1.2*
Colon and Rectum	7.3	1.1*	8.6	1.1*	2.3	-0.7	2.2	1.6

<sup>a</sup> Rates are per 100,000.  
<sup>b</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

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

<sup>d</sup> Top 5 cancer sites selected based on 1975-2008 rates for the age group.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2008.

- 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, 1975-2008

	Incidence				Mortality			
	1975-2008		1999-2008		1975-2008		1999-2008	
	Rate	AAPC <sup>d</sup>						
<b>Ages 15-19</b>								
All Malignant Cancers	19.5	0.4*	20.4	0.4*	3.5	-1.8*	2.8	-1.8*
Hodgkin Lymphoma	3.6	-0.7*	3.1	-0.7*	0.2	-4.0*	0.1	-4.0*
Thyroid	2.8	1.4*	3.3	1.4*	0.0	-	-	-
Melanoma of the Skin	1.8	1.0*	2.1	1.0*	0.1	-3.1*	0.0	-3.1*
Brain and Other Nervous System	1.7	0.1	1.7	0.1	0.5	-1.4*	0.4	-1.4*
Ovary	1.5	-0.4	1.4	-0.4	0.1	-4.9*	0.1	-4.9*
<b>Ages 20-24</b>								
All Malignant Cancers	34.5	1.0*	39.3	1.0*	4.6	-1.2*	4.0	-1.2*
Thyroid	6.8	1.8*	8.2	1.8*	0.0	-	-	-
Melanoma of the Skin	5.5	1.9*	6.9	1.9*	0.2	-3.3*	0.1	-3.3*
Hodgkin Lymphoma	5.0	1.0	5.3	-0.7	0.4	-3.0*	0.2	-3.0*
Cervix Uteri	2.1	-2.1*	1.5	-2.1*	0.2	-2.1*	0.1	-6.6*
Brain and Other Nervous System	2.0	1.7*	2.5	1.7*	0.5	-1.0*	0.5	-1.0*
<b>Ages 25-29</b>								
All Malignant Cancers	59.6	0.4*	65.2	0.8*	8.0	-1.5*	6.5	-2.1*
Thyroid	10.4	2.0*	14.4	4.3*	0.0	-	0.0	-
Melanoma of the Skin	9.3	1.8*	11.6	1.8*	0.4	-2.6*	0.3	-2.6*
Breast	8.1	-0.3	7.7	-0.3	1.1	-2.4*	0.7	-3.4*
Cervix Uteri	7.2	-2.5*	5.3	-6.6*	0.8	-2.1*	0.6	-5.0*
Hodgkin Lymphoma	4.7	0.4	4.8	0.4	0.5	-3.5*	0.3	-3.5*
<b>Ages 30-34</b>								
All Malignant Cancers	97.5	0.6*	107.5	1.5*	15.9	-1.6*	12.9	-2.2*
Breast	26.4	0.0	26.9	0.0	4.4	-1.9*	3.3	-2.6*
Thyroid	13.0	2.8*	18.9	5.3*	0.0	-	0.0	-
Melanoma of the Skin	12.4	2.4*	14.7	1.0*	0.7	-2.6*	0.5	-2.6*
Cervix Uteri	11.8	-1.3*	10.0	-1.3*	1.8	-1.5*	1.4	-3.5*
Hodgkin Lymphoma	3.7	1.2*	4.2	1.2*	0.5	-3.4*	0.3	-3.4*
<b>Ages 35-39</b>								
All Malignant Cancers	162.6	0.7*	172.7	1.2*	31.4	-1.5*	26.1	-2.0*
Breast	62.7	0.4	62.8	0.4	10.5	-1.6*	8.0	-2.9*
Melanoma of the Skin	15.5	2.3	17.4	1.8	1.1	-2.5*	0.8	-2.5*
Thyroid	15.1	4.0*	22.7	6.5*	0.1	-0.7	0.1	-0.7
Cervix Uteri	14.5	-1.4*	11.8	-1.4*	3.0	-1.2	2.5	-0.8
Corpus and Uterus, NOS	6.6	1.0*	7.7	4.0*	0.4	-1.5*	0.4	1.0*

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 1975-2008 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 1975-2008.

- 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, 1975-2007**

	<u>5-year Relative Survival (Percent)</u>				
	1975-2007	1975-1983	1984-1992	1993-2000	2001-2007
<b>Ages 15-19</b>					
All Malignant Cancers	76.7	69.6	76.8	79.4	82.8
Hodgkin Lymphoma	91.6	87.6	91.2	94.8	96.0
Brain and Other Nervous System	72.8	63.1	74.0	77.7	78.0
Thyroid	98.5	98.6	99.0	99.4	96.6
Non-Hodgkin Lymphoma	69.7	54.5	66.3	74.4	82.6
Testis	89.5	79.1	92.0	91.5	95.0
<b>Ages 20-24</b>					
All Malignant Cancers	79.9	74.7	79.1	82.2	85.1
Hodgkin Lymphoma	90.0	85.0	90.5	91.4	95.2
Testis	92.0	84.5	92.0	95.7	96.4
Melanoma of the Skin	92.3	85.6	92.8	95.0	96.4
Thyroid	99.6	99.7	99.7	99.1	99.4
Brain and Other Nervous System	65.4	57.5	64.4	69.8	72.6
<b>Ages 25-29</b>					
All Malignant Cancers	78.2	76.9	73.0	80.6	85.0
Melanoma of the Skin	92.5	88.1	91.8	94.4	95.8
Thyroid	99.7	99.4	99.7	99.7	99.8
Testis	94.7	89.3	94.6	97.4	97.1
Hodgkin Lymphoma	89.7	85.7	89.4	92.7	91.9
Breast	73.1	69.4	69.3	76.5	82.8
<b>Ages 30-34</b>					
All Malignant Cancers	74.2	73.2	67.6	75.6	83.7
Breast	76.1	69.8	74.3	78.9	84.2
Melanoma of the Skin	91.9	86.3	91.1	94.1	96.4
Thyroid	99.7	99.5	99.5	99.8	99.9
Testis	95.3	92.0	95.7	95.6	96.5
Cervix Uteri	84.9	84.1	83.7	86.7	85.7
<b>Ages 35-39</b>					
All Malignant Cancers	72.1	68.2	65.7	74.6	81.4
Breast	80.5	75.1	77.7	83.5	86.4
Melanoma of the Skin	91.7	87.5	90.3	93.5	94.8
Thyroid	99.3	98.9	99.3	99.2	99.6
Non-Hodgkin Lymphoma	60.2	65.8	49.9	58.2	74.5
Cervix Uteri	81.5	79.5	79.5	84.2	83.8

<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 1975-2008 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, 1975-2007

	<u>5-year Relative Survival (Percent)</u>				
	1975-2007	1975-1983	1984-1992	1993-2000	2001-2007
<b>Ages 15-19</b>					
All Malignant Cancers	72.2	63.7	71.9	74.8	80.3
Hodgkin Lymphoma	90.5	86.0	90.0	93.4	97.0
Testis	89.5	79.1	92.0	91.5	95.0
Brain and Other Nervous System	69.6	59.7	70.4	73.6	76.5
Non-Hodgkin Lymphoma	67.3	50.0	67.2	70.9	80.8
Bones and Joints	56.8	42.2	60.1	59.8	66.8
<b>Ages 20-24</b>					
All Malignant Cancers	75.2	69.3	73.1	78.6	82.4
Testis	92.0	84.5	92.0	95.7	96.4
Hodgkin Lymphoma	88.2	83.1	87.9	89.6	96.1
Melanoma of the Skin	85.3	75.7	85.2	91.0	94.0
Non-Hodgkin Lymphoma	62.9	55.8	52.6	64.4	80.6
Brain and Other Nervous System	64.1	54.7	62.4	71.2	72.7
<b>Ages 25-29</b>					
All Malignant Cancers	71.6	71.4	63.4	75.2	81.3
Testis	94.7	89.3	94.6	97.4	97.1
Melanoma of the Skin	87.6	82.3	87.6	90.0	91.8
Hodgkin Lymphoma	87.4	84.5	85.6	90.7	90.7
Non-Hodgkin Lymphoma	55.1	58.8	41.7	56.7	74.8
Kaposi sarcoma	12.8	29.1	7.3	18.3	54.1
<b>Ages 30-34</b>					
All Malignant Cancers	65.3	68.2	54.7	66.9	80.4
Testis	95.3	92.0	95.7	95.6	96.5
Kaposi sarcoma	16.5	23.1	7.5	28.8	59.4
Melanoma of the Skin	87.2	79.2	86.8	90.8	93.7
Non-Hodgkin Lymphoma	51.1	69.4	36.7	46.5	76.7
Hodgkin Lymphoma	86.0	79.8	83.9	88.2	94.4
<b>Ages 35-39</b>					
All Malignant Cancers	61.4	59.7	50.8	64.6	75.5
Melanoma of the Skin	87.3	82.1	85.7	90.2	90.9
Kaposi sarcoma	16.7	14.1	7.0	28.6	60.7
Non-Hodgkin Lymphoma	52.6	62.3	41.7	50.6	68.4
Testis	96.0	91.9	95.8	97.2	96.8
Colon and Rectum	60.9	54.3	54.8	62.4	69.3

<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 1975-2008 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, 1975-2007

	<u>5-year Relative Survival (Percent)</u>				
	<u>1975-2007</u>	<u>1975-1983</u>	<u>1984-1992</u>	<u>1993-2000</u>	<u>2001-2007</u>
<b><u>Ages 15-19</u></b>					
All Malignant Cancers	81.8	76.0	82.2	84.3	85.9
Hodgkin Lymphoma	92.5	89.0	92.2	95.9	94.8
Thyroid	99.0	98.6	99.6	99.2	98.4
Melanoma of the Skin	94.8	87.8	95.7	95.1	100.0
Brain and Other Nervous System	77.4	68.0	79.2	83.2	80.7
Ovary	88.0	80.2	90.4	89.7	93.2
<b><u>Ages 20-24</u></b>					
All Malignant Cancers	84.5	80.0	85.3	85.6	87.5
Thyroid	99.6	99.4	99.6	99.4	99.9
Melanoma of the Skin	95.9	92.0	96.8	97.0	97.4
Hodgkin Lymphoma	91.8	87.3	92.9	93.1	94.3
Cervix Uteri	88.5	88.9	88.7	86.0	90.8
Brain and Other Nervous System	67.2	61.7	66.9	67.6	71.7
<b><u>Ages 25-29</u></b>					
All Malignant Cancers	83.7	80.8	82.4	85.2	87.8
Thyroid	99.8	99.5	99.8	99.8	99.9
Melanoma of the Skin	95.3	92.0	94.5	96.9	97.6
Breast	73.2	69.4	69.2	76.6	83.0
Cervix Uteri	87.4	88.9	86.7	86.8	87.1
Hodgkin Lymphoma	92.1	87.1	93.4	94.9	93.1
<b><u>Ages 30-34</u></b>					
All Malignant Cancers	80.7	76.1	79.3	82.5	85.7
Breast	76.1	69.8	74.2	78.9	84.2
Thyroid	99.8	99.3	99.7	99.9	99.8
Melanoma of the Skin	95.0	91.7	94.3	96.2	98.1
Cervix Uteri	84.9	84.1	83.7	86.7	85.7
Hodgkin Lymphoma	90.3	85.5	90.8	89.9	95.6
<b><u>Ages 35-39</u></b>					
All Malignant Cancers	78.9	72.7	76.5	81.1	84.7
Breast	80.5	75.1	77.7	83.5	86.4
Melanoma of the Skin	95.3	92.5	94.5	96.1	97.5
Thyroid	99.6	99.1	99.4	99.5	99.8
Cervix Uteri	81.5	79.5	79.5	84.2	83.8
Corpus and Uterus, NOS	90.6	91.3	90.6	90.5	90.1

<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 1975-2008 SEER 9 Incidence rates for the age group.

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