

Table 32.4
Age-Specific SEER Incidence^a, by Age Group and Sex
By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
All Races, 2009-2013

| 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 | 22.9 | 21.4 | 34.6 | 37.0 | 48.8 | 67.2 | 66.1 | 113.4 | 89.5 | 179.4 |
| 1. LEUKEMIAS | 3.6 | 2.5 | 3.0 | 2.2 | 3.1 | 2.4 | 3.8 | 3.1 | 4.9 | 3.7 |
| 1.1 Acute lymphoid leukemia | 2.2 | 1.2 | 1.3 | 0.7 | 1.0 | 0.5 | 0.8 | 0.6 | 0.8 | 0.6 |
| 1.2 Acute myeloid leukemia | 1.0 | 1.1 | 1.0 | 1.1 | 1.1 | 1.2 | 1.6 | 1.6 | 1.8 | 1.6 |
| 1.3 Chronic myeloid leukemia | 0.3 | 0.2 | 0.5 | 0.4 | 0.8 | 0.5 | 1.0 | 0.7 | 1.3 | 0.9 |
| 1.4 Other and unspecified leukemias | 0.2 | - | 0.2 | 0.1 | 0.3 | 0.2 | 0.5 | 0.3 | 1.0 | 0.6 |
| 2. LYMPHOMAS | 5.4 | 4.2 | 7.2 | 6.4 | 7.8 | 6.8 | 9.4 | 7.4 | 11.3 | 8.4 |
| 2.1 Non-Hodgkin Lymphoma | 2.4 | 1.1 | 3.1 | 1.9 | 3.9 | 2.9 | 5.7 | 4.0 | 8.3 | 5.9 |
| 2.2 Hodgkin Lymphoma | 3.0 | 3.1 | 4.1 | 4.5 | 3.9 | 3.9 | 3.7 | 3.4 | 3.0 | 2.5 |
| 3. CNS, INTRACRANIAL, INTRASPINAL | 2.2 | 2.0 | 2.2 | 2.1 | 3.1 | 2.5 | 3.9 | 2.9 | 4.5 | 2.9 |
| 3.1 Astrocytoma | 1.3 | 1.3 | 1.2 | 1.1 | 1.6 | 1.2 | 2.0 | 1.5 | 2.4 | 1.6 |
| 3.1.1 Specified low-grade astrocytic tumors | 0.7 | 0.7 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 |
| 3.1.2 Glioblastoma and anaplastic astrocytoma | 0.4 | 0.3 | 0.5 | 0.4 | 0.9 | 0.7 | 1.3 | 0.7 | 1.6 | 1.0 |
| 3.1.3 Astrocytoma, NOS | 0.2 | 0.3 | 0.3 | 0.2 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 |
| 3.2 Other glioma | 0.4 | 0.4 | 0.6 | 0.6 | 0.9 | 0.8 | 1.4 | 1.0 | 1.4 | 0.9 |
| 3.3 Ependymoma | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 |
| 3.4 Medulloblastoma and other PNET | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.2 | - |
| 3.4.1 Medulloblastoma | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | - | - | - | 0.1 | - |
| 3.4.2 Supratentorial PNET | - | - | 0.1 | - | 0.1 | 0.1 | - | - | - | - |
| 3.5 Other specified intracranial and intraspinal neoplasms | - | - | - | - | - | - | - | - | - | - |
| 3.6 Unspecified intracranial and intraspinal neoplasms | - | - | - | - | - | - | - | - | 0.1 | - |
| 4. OSSEOUS & CHONDROMATOUS NEOPLASMS | 2.0 | 1.2 | 1.1 | 0.8 | 0.8 | 0.8 | 0.8 | 0.5 | 0.7 | 0.7 |
| 4.1 Osteosarcoma | 1.0 | 0.6 | 0.4 | 0.3 | 0.2 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 |
| 4.2 Chondrosarcoma | 0.2 | - | 0.2 | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.3 |
| 4.3 Ewing tumor | 0.8 | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |
| 4.4 Other specified and unspecified bone tumors | - | 0.1 | - | - | 0.2 | - | 0.1 | - | 0.2 | 0.2 |
| 5. SOFT TISSUE SARCOMAS | 1.4 | 1.4 | 2.1 | 1.6 | 3.3 | 2.0 | 4.5 | 2.8 | 4.5 | 3.5 |
| 5.1 Fibromatous neoplasms | 0.3 | 0.3 | 0.3 | 0.5 | 0.7 | 0.7 | 1.0 | 1.1 | 1.0 | 1.1 |
| 5.2 Rhabdomyosarcoma | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 | - | - | 0.1 | - | - |
| 5.3 Other specified soft tissue sarcoma | 0.8 | 0.7 | 1.6 | 1.0 | 2.4 | 1.2 | 3.5 | 1.6 | 3.4 | 2.4 |
| 5.3.1 Specified soft tissue sarcoma | 0.5 | 0.5 | 1.2 | 0.8 | 2.1 | 1.0 | 3.0 | 1.3 | 2.9 | 1.9 |
| 5.3.1.1 Specified (excluding Kaposi sarcoma) | 0.5 | 0.5 | 0.7 | 0.8 | 1.0 | 0.9 | 1.3 | 1.3 | 1.5 | 1.8 |
| 5.3.1.2 Kaposi sarcoma | - | - | 0.5 | - | 1.1 | - | 1.7 | - | 1.4 | - |
| 5.3.2 Unspecified soft tissue sarcoma | 0.2 | 0.2 | 0.4 | 0.2 | 0.3 | 0.3 | 0.5 | 0.3 | 0.4 | 0.5 |
| 6. GERM CELL AND TROPHOBLASTIC NEOPLASMS | 4.6 | 1.3 | 11.0 | 1.3 | 15.3 | 1.1 | 14.0 | 0.9 | 11.1 | 0.8 |
| 6.1 Germ cell and trophoblastic neoplasms of gonads | 3.9 | 1.0 | 10.4 | 0.9 | 14.8 | 0.8 | 13.7 | 0.5 | 10.8 | 0.4 |
| 6.2 Germ cell and trophoblastic neoplasms of nongonadal sites | 0.7 | 0.2 | 0.6 | 0.3 | 0.5 | 0.4 | 0.3 | 0.4 | 0.2 | 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 | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.2 | 0.4 |

Rates are per 100,000.

^a SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

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

- Statistic could not be calculated. Rate based on less than 16 cases for the time interval.

Table 32.4 - continued
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 By Adapted Classification Scheme for Tumors of Adolescents and Young Adults^b
 All Races, 2009-2013

| Site | Ages 15-19 | | Ages 20-24 | | Ages 25-29 | | Ages 30-34 | | Ages 35-39 | |
|------------------------------------------------------------------------------|------------|--------|------------|--------|------------|--------|------------|--------|------------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 7. MELANOMA AND SKIN CARCINOMAS | 0.9 | 1.3 | 2.0 | 5.3 | 4.3 | 9.0 | 7.1 | 12.0 | 10.5 | 14.6 |
| 7.1 Melanoma | 0.9 | 1.2 | 2.0 | 5.2 | 4.2 | 9.0 | 7.0 | 11.9 | 10.3 | 14.5 |
| 7.2 Skin carcinomas | - | - | - | - | - | - | 0.2 | - | 0.2 | 0.2 |
| 8. CARCINOMAS (excluding skin) | 2.4 | 7.0 | 5.5 | 16.5 | 10.4 | 41.2 | 21.1 | 81.3 | 39.9 | 141.1 |
| 8.1 Thyroid carcinoma | 0.9 | 4.8 | 1.8 | 9.6 | 3.0 | 17.3 | 5.0 | 24.8 | 7.2 | 30.8 |
| 8.2 Other carcinoma of head and neck | 0.4 | 0.5 | 0.7 | 0.7 | 1.1 | 1.1 | 2.0 | 1.7 | 4.3 | 2.9 |
| 8.2.1 Nasopharyngeal carcinoma | 0.2 | - | 0.2 | - | 0.2 | 0.1 | 0.3 | 0.3 | 0.7 | 0.4 |
| 8.2.2 Other sites in lip, oral cavity and pharynx | 0.2 | 0.4 | 0.5 | 0.5 | 0.8 | 0.9 | 1.4 | 1.3 | 2.8 | 2.2 |
| 8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck | - | - | - | - | 0.1 | - | 0.3 | 0.2 | 0.8 | 0.4 |
| 8.3 Carcinoma of trachea, bronchus, and lung | - | 0.2 | 0.3 | 0.3 | 0.5 | 0.6 | 1.1 | 1.1 | 2.7 | 2.7 |
| 8.4 Carcinoma of breast | - | - | - | 1.3 | - | 8.7 | - | 26.6 | 0.1 | 59.7 |
| 8.5 Carcinoma of genitourinary tract | 0.3 | 0.7 | 0.7 | 2.7 | 1.8 | 9.5 | 4.4 | 19.0 | 9.4 | 30.4 |
| 8.5.1 Carcinoma of kidney | 0.2 | 0.2 | 0.4 | 0.4 | 1.2 | 1.2 | 3.1 | 2.1 | 6.2 | 4.0 |
| 8.5.2 Carcinoma of bladder | 0.1 | - | 0.3 | - | 0.5 | 0.2 | 1.0 | 0.4 | 1.8 | 0.8 |
| 8.5.3 Carcinoma of gonads | - | 0.3 | - | 0.7 | - | 1.3 | - | 2.4 | - | 3.8 |
| 8.5.4 Carcinoma of cervix and uterus | - | 0.1 | - | 1.4 | - | 6.5 | - | 13.5 | - | 20.7 |
| 8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract | - | - | - | - | - | 0.2 | 0.3 | 0.6 | 1.3 | 1.1 |
| 8.6 Carcinoma of gastrointestinal tract | 0.6 | 0.7 | 1.7 | 1.6 | 3.6 | 3.5 | 7.9 | 7.4 | 15.1 | 13.4 |
| 8.6.1 Carcinoma of colon and rectum | 0.4 | 0.4 | 1.2 | 1.0 | 2.4 | 2.5 | 5.4 | 5.0 | 9.5 | 9.2 |
| 8.6.2 Carcinoma of stomach | - | - | 0.1 | 0.2 | 0.4 | 0.4 | 1.0 | 1.1 | 1.7 | 1.6 |
| 8.6.3 Carcinoma of liver and intrahepatic bile ducts | - | - | 0.2 | 0.2 | 0.4 | 0.2 | 0.5 | 0.3 | 1.1 | 0.5 |
| 8.6.4 Carcinoma of pancreas | - | - | - | 0.2 | 0.2 | 0.3 | 0.5 | 0.6 | 1.2 | 1.0 |
| 8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract | - | - | 0.1 | - | 0.3 | 0.2 | 0.6 | 0.5 | 1.6 | 1.0 |
| 8.7 Carcinoma of other and ill-defined sites, NOS | - | - | 0.1 | 0.3 | 0.3 | 0.4 | 0.6 | 0.6 | 1.0 | 1.2 |
| 8.7.1 Adrenocortical carcinoma | - | - | - | - | - | - | - | - | - | 0.1 |
| 8.7.2 Carcinoma of other and ill-defined sites, NOS | - | - | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.9 | 1.1 |
| 9. MISCELLANEOUS SPECIFIED NEOPLASMS, NOS | 0.3 | 0.5 | 0.3 | 0.5 | 0.5 | 0.9 | 1.1 | 1.6 | 1.7 | 2.6 |
| 9.1 Other pediatric and embryonal tumors, NOS | 0.2 | 0.1 | - | - | - | - | 0.1 | - | - | - |
| 9.1.1 Wilms tumor | - | - | - | - | - | - | - | - | - | - |
| 9.1.2 Neuroblastoma | - | - | - | - | - | - | - | - | - | - |
| 9.1.3 Other pediatric and embryonal tumors, NOS | - | - | - | - | - | - | - | - | - | - |
| 9.2 Other specified neoplasms, NOS | 0.2 | 0.4 | 0.2 | 0.4 | 0.4 | 0.9 | 0.9 | 1.6 | 1.6 | 2.5 |
| 9.2.1 Paraganglioma and glomus tumors | - | - | - | - | - | - | - | - | - | - |
| 9.2.2 Other specified gonadal tumors | - | 0.1 | - | - | - | 0.2 | - | 0.2 | - | 0.3 |
| 9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS | - | - | 0.1 | - | 0.3 | 0.2 | 0.6 | 0.4 | 1.1 | 0.7 |
| 9.2.4 Other specified neoplasms, NOS ^c | - | 0.1 | - | 0.2 | 0.1 | 0.5 | 0.3 | 0.9 | 0.4 | 1.4 |
| 10. UNSPECIFIED MALIGNANT NEOPLASMS | - | - | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.7 | 0.6 | 1.1 |

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^c Myeloproliferative disorders and myelodysplastic syndromes were first reported effective January 1, 2001 with the implementation of ICD-O 3.

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