

Section XXVIII
Childhood Cancer by Site
Incidence, Survival and Mortality

The site groupings used in this section correspond to those used in the rest of the Cancer Statistics Review. While these groupings are not as appropriate for children as they are for adults, they are necessary in order to be able to compare incidence to mortality. Benign brain tumors(2004+) and myelodysplastic syndromes(2001-2005) are not included.

Childhood cancer is better categorized by groupings based on histologic type and site rather than primary site alone (see section XXIX for Childhood Cancer by the International Classification of Childhood Cancer). For the leukemias and lymphomas, the categories are similar, but for solid tumors the categories can be quite different and the different terminology confusing. For example, in this section 'soft tissue' refers to any type of tumor that arises in connective or soft tissue in contrast to 'soft tissue sarcomas' in the other section, which refers to soft tissue sarcomas in any primary site.

Rates are presented per 100,000 children in this section. In contrast in the other childhood cancer section rates are presented per million children.

Table XXVIII-1

AGE-ADJUSTED SEER CANCER INCIDENCE^a AND U.S. DEATH^b RATES, 2001-2005

By Primary Cancer Site

All Races, Males and Females

| Site | Ages 0-14 | | | | | | Ages 0-19 | | | | | |
|-----------------------|-----------|-------|---------|-----------|-------|---------|-----------|-------|---------|-----------|-------|---------|
| | Incidence | | | Mortality | | | Incidence | | | Mortality | | |
| | Total | Males | Females | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| All Sites | | | | | | | | | | | | |
| All Races | 15.1 | 16.1 | 14.1 | 2.5 | 2.7 | 2.3 | 16.7 | 17.8 | 15.6 | 2.7 | 3.0 | 2.4 |
| Whites | 15.9 | 17.0 | 14.8 | 2.5 | 2.7 | 2.4 | 17.7 | 18.9 | 16.4 | 2.8 | 3.1 | 2.5 |
| Blacks | 11.5 | 11.9 | 11.1 | 2.4 | 2.7 | 2.2 | 12.0 | 12.4 | 11.6 | 2.7 | 3.0 | 2.4 |
| Bone & Joint | 0.7 | 0.7 | 0.7 | 0.1 | 0.1 | 0.1 | 0.9 | 1.0 | 0.8 | 0.2 | 0.3 | 0.2 |
| Brain & Other nervous | 3.2 | 3.4 | 3.1 | 0.7 | 0.8 | 0.7 | 2.9 | 3.1 | 2.8 | 0.7 | 0.7 | 0.6 |
| Hodgkin lymphoma | 0.5 | 0.7 | 0.4 | 0.0 | 0.0 | - | 1.1 | 1.2 | 1.1 | 0.0 | 0.0 | 0.0 |
| Kidney & Renal pelvis | 0.8 | 0.8 | 0.8 | 0.1 | 0.1 | 0.1 | 0.6 | 0.6 | 0.6 | 0.1 | 0.1 | 0.1 |
| Leukemia | 5.0 | 5.4 | 4.5 | 0.8 | 0.8 | 0.7 | 4.5 | 5.0 | 3.9 | 0.8 | 0.9 | 0.7 |
| Acute lymphocytic | 3.9 | 4.3 | 3.6 | 0.4 | 0.4 | 0.3 | 3.4 | 3.8 | 2.9 | 0.4 | 0.5 | 0.3 |
| Non-Hodgkin lymphoma | 0.9 | 1.2 | 0.6 | 0.1 | 0.1 | 0.1 | 1.1 | 1.4 | 0.8 | 0.1 | 0.2 | 0.1 |
| Soft tissue | 1.1 | 1.1 | 1.0 | 0.1 | 0.1 | 0.1 | 1.1 | 1.1 | 1.0 | 0.2 | 0.2 | 0.2 |

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

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

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

Table XXVIII-2

AGE-ADJUSTED SEER CANCER INCIDENCE RATES^a, 1975-2005

By Primary Cancer Site

All Races, Males and Females

Year of Diagnosis

| Age/Site | 1975 | 1980 | 1985 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <u>Ages 0-14</u> | | | | | | | | | | | | | | | | | | | |
| All Sites | | | | | | | | | | | | | | | | | | | |
| All Races | 11.5 | 12.9 | 14.5 | 14.2 | 15.1 | 13.4 | 14.9 | 13.9 | 14.0 | 14.7 | 14.0 | 15.3 | 14.4 | 15.3 | 15.6 | 15.2 | 13.0 | 14.9 | 15.9 |
| Whites | 12.0 | 13.1 | 15.5 | 14.3 | 16.2 | 13.9 | 15.2 | 14.5 | 14.8 | 14.9 | 14.7 | 16.2 | 15.5 | 16.6 | 16.8 | 16.6 | 13.8 | 15.6 | 16.9 |
| Blacks | 8.6 | 11.1 | 10.1 | 12.3 | 11.6 | 12.0 | 12.4 | 12.2 | 11.3 | 11.6 | 11.2 | 10.0 | 10.3 | 11.8 | 10.6 | 11.1 | 9.8 | 13.5 | 12.5 |
| Bone & Joint | 0.5 | 0.7 | 0.8 | 0.7 | 0.9 | 0.5 | 0.6 | 0.8 | 0.8 | 0.5 | 0.9 | 0.6 | 0.6 | 0.6 | 0.6 | 0.7 | 0.5 | 0.6 | 0.6 |
| Brain & Other nervous | 2.3 | 2.8 | 3.0 | 3.5 | 3.5 | 3.2 | 3.4 | 3.3 | 3.3 | 3.1 | 2.7 | 3.2 | 3.4 | 3.4 | 3.8 | 3.6 | 3.0 | 3.2 | 3.2 |
| Hodgkin lymphoma | 0.7 | 0.5 | 0.7 | 0.7 | 0.6 | 0.5 | 0.6 | 0.5 | - | 0.6 | 0.6 | 0.6 | 0.4 | 0.6 | 0.5 | 0.5 | 0.4 | 0.5 | 0.5 |
| Kidney & Renal pelvis | 0.7 | 0.8 | 0.9 | 0.8 | 0.9 | 0.7 | 1.0 | 1.2 | 0.6 | 1.0 | 1.0 | 1.1 | 0.7 | 1.0 | 0.9 | 0.9 | 0.7 | 0.7 | 0.9 |
| Leukemia | 3.3 | 4.0 | 4.6 | 4.4 | 4.6 | 4.0 | 4.2 | 3.7 | 4.4 | 4.6 | 4.2 | 4.8 | 4.7 | 4.6 | 4.4 | 4.8 | 4.0 | 5.0 | 5.1 |
| Acute lymphocytic | 2.2 | 3.1 | 3.5 | 3.4 | 3.5 | 3.2 | 3.1 | 2.9 | 3.6 | 3.5 | 3.5 | 3.9 | 3.6 | 3.5 | 3.5 | 4.0 | 3.1 | 3.7 | 4.0 |
| Non-Hodgkin lymphoma | 1.0 | 0.7 | 0.7 | 0.8 | 0.9 | 0.8 | 0.8 | 1.0 | 0.9 | 0.6 | 0.9 | 0.9 | 0.8 | 1.0 | 1.0 | 1.0 | 1.0 | 0.7 | 1.1 |
| Soft tissue | 0.9 | 0.9 | 0.9 | 0.7 | 1.1 | 0.8 | 0.6 | 0.9 | 0.9 | 1.1 | 1.0 | 1.1 | 0.9 | 1.0 | 1.2 | 1.0 | 0.8 | 1.0 | 1.5 |
| <u>Ages 0-19</u> | | | | | | | | | | | | | | | | | | | |
| All Sites | | | | | | | | | | | | | | | | | | | |
| All Races | 12.9 | 14.3 | 15.9 | 15.6 | 16.4 | 16.0 | 16.1 | 15.5 | 15.7 | 16.1 | 15.6 | 16.3 | 15.6 | 16.8 | 16.9 | 17.2 | 15.6 | 16.2 | 17.2 |
| Whites | 13.4 | 14.8 | 17.0 | 16.0 | 17.5 | 16.9 | 16.6 | 16.1 | 16.7 | 16.5 | 16.7 | 17.4 | 16.7 | 18.2 | 18.3 | 19.1 | 16.7 | 17.3 | 18.5 |
| Blacks | 10.8 | 10.9 | 10.5 | 13.2 | 12.3 | 12.3 | 13.0 | 13.0 | 12.1 | 12.6 | 11.1 | 11.3 | 10.9 | 12.8 | 11.3 | 10.9 | 11.0 | 13.3 | 12.7 |
| Bone & Joint | 0.7 | 0.9 | 1.0 | 0.8 | 1.0 | 0.9 | 0.8 | 1.0 | 0.9 | 0.7 | 1.2 | 0.8 | 0.7 | 0.8 | 0.9 | 1.0 | 0.8 | 0.7 | 0.8 |
| Brain & Other nervous | 2.1 | 2.5 | 2.7 | 3.2 | 3.0 | 3.3 | 3.0 | 2.9 | 3.0 | 3.0 | 2.5 | 2.8 | 3.0 | 3.1 | 3.4 | 3.3 | 2.9 | 2.9 | 2.8 |
| Hodgkin lymphoma | 1.5 | 1.2 | 1.4 | 1.3 | 1.4 | 1.4 | 1.3 | 1.3 | 0.9 | 1.4 | 1.3 | 1.4 | 1.1 | 1.1 | 1.1 | 1.2 | 1.0 | 1.1 | 0.9 |
| Kidney & Renal pelvis | 0.5 | 0.6 | 0.7 | 0.6 | 0.7 | 0.6 | 0.8 | 0.9 | 0.5 | 0.7 | 0.8 | 0.8 | 0.6 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.7 |
| Leukemia | 3.0 | 3.5 | 4.0 | 3.8 | 4.1 | 3.7 | 3.7 | 3.4 | 3.9 | 3.9 | 3.7 | 4.2 | 4.0 | 4.1 | 3.9 | 4.5 | 3.7 | 4.4 | 4.5 |
| Acute lymphocytic | 1.9 | 2.5 | 2.9 | 2.9 | 3.0 | 2.6 | 2.6 | 2.5 | 3.1 | 2.9 | 2.9 | 3.3 | 2.9 | 3.0 | 2.8 | 3.4 | 2.8 | 3.2 | 3.3 |
| Non-Hodgkin lymphoma | 1.0 | 0.8 | 1.0 | 1.0 | 1.1 | 1.0 | 0.9 | 1.2 | 1.1 | 1.0 | 1.1 | 1.0 | 0.9 | 1.3 | 1.1 | 1.2 | 1.3 | 1.1 | 1.3 |
| Soft tissue | 0.8 | 0.9 | 0.9 | 0.8 | 1.1 | 0.7 | 0.7 | 0.7 | 1.1 | 1.0 | 1.0 | 1.1 | 1.0 | 1.2 | 1.1 | 1.0 | 0.8 | 1.0 | 1.5 |

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Table XXVIII-3

AGE-ADJUSTED CANCER U.S. DEATH RATES^a, 1975-2005

By Primary Cancer Site

All Races, Males and Females

Year of Death

| Age/Site | 1975 | 1980 | 1985 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <u>Ages 0-14</u> | | | | | | | | | | | | | | | | | | | |
| All Sites | 4.9 | 4.3 | 3.6 | 3.1 | 3.1 | 3.0 | 3.0 | 2.8 | 2.7 | 2.6 | 2.6 | 2.4 | 2.5 | 2.5 | 2.5 | 2.6 | 2.5 | 2.5 | 2.4 |
| Bone & Joint | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Brain & Other nervous | 1.0 | 0.9 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 |
| Hodgkin lymphoma | 0.0 | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Kidney & Renal pelvis | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Leukemia | 2.1 | 1.7 | 1.4 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.7 | 0.7 |
| Acute lymphocytic | 1.2 | 0.9 | 0.8 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 |
| Non-Hodgkin lymphoma | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Soft tissue | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 |
| <u>Ages 0-19</u> | | | | | | | | | | | | | | | | | | | |
| All Sites | 5.1 | 4.6 | 3.8 | 3.4 | 3.4 | 3.3 | 3.3 | 3.1 | 3.0 | 2.9 | 2.9 | 2.7 | 2.8 | 2.8 | 2.8 | 2.8 | 2.7 | 2.7 | 2.7 |
| Bone & Joint | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 |
| Brain & Other nervous | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 |
| Hodgkin lymphoma | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kidney & Renal pelvis | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Leukemia | 2.0 | 1.8 | 1.4 | 1.2 | 1.2 | 1.2 | 1.1 | 1.1 | 1.0 | 0.9 | 1.0 | 0.8 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 |
| Acute lymphocytic | 1.0 | 0.9 | 0.7 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 |
| Non-Hodgkin lymphoma | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Soft tissue | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Table XXVIII-4

AGE-ADJUSTED CANCER U.S. DEATH RATES^a, 1975-2005

By Primary Cancer Site

Whites, Males and Females

Year of Death

| Age/Site | 1975 | 1980 | 1985 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <u>Ages 0-14</u> | | | | | | | | | | | | | | | | | | | |
| All Sites | 5.0 | 4.4 | 3.7 | 3.2 | 3.2 | 3.1 | 3.1 | 2.8 | 2.7 | 2.7 | 2.7 | 2.5 | 2.5 | 2.6 | 2.5 | 2.6 | 2.6 | 2.5 | 2.4 |
| Bone & Joint | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Brain & Other nervous | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 |
| Hodgkin lymphoma | 0.0 | 0.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Kidney & Renal pelvis | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Leukemia | 2.3 | 1.8 | 1.4 | 1.1 | 1.1 | 1.2 | 1.1 | 1.0 | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 0.9 | 0.8 | 0.7 | 0.9 | 0.8 | 0.7 |
| Acute lymphocytic | 1.2 | 1.0 | 0.8 | 0.5 | 0.5 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.3 |
| Non-Hodgkin lymphoma | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Soft tissue | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 |
| <u>Ages 0-19</u> | | | | | | | | | | | | | | | | | | | |
| All Sites | 5.3 | 4.7 | 3.9 | 3.5 | 3.5 | 3.4 | 3.3 | 3.1 | 2.9 | 2.9 | 2.9 | 2.8 | 2.8 | 2.9 | 2.8 | 2.8 | 2.8 | 2.8 | 2.7 |
| Bone & Joint | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 |
| Brain & Other nervous | 0.9 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| Hodgkin lymphoma | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Kidney & Renal pelvis | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Leukemia | 2.1 | 1.8 | 1.4 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 |
| Acute lymphocytic | 1.1 | 1.0 | 0.7 | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | 0.5 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Non-Hodgkin lymphoma | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Soft tissue | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Table XXVIII-5

AGE-ADJUSTED CANCER U.S. DEATH RATES^a, 1975-2005

By Primary Cancer Site

Blacks, Males and Females

Year of Death

| Age/Site | 1975 | 1980 | 1985 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|-----------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| <u>Ages 0-14</u> | | | | | | | | | | | | | | | | | | | |
| All Sites | 4.5 | 3.8 | 3.3 | 3.0 | 3.0 | 2.7 | 2.6 | 2.8 | 2.9 | 2.5 | 2.5 | 2.4 | 2.5 | 2.3 | 2.3 | 2.6 | 2.4 | 2.4 | 2.5 |
| Bone & Joint | 0.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.2 |
| Brain & Other nervous | 0.9 | 0.9 | 0.6 | 0.7 | 0.8 | 0.7 | 0.6 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.6 | 0.8 | 0.7 | 0.7 | 0.7 |
| Hodgkin lymphoma | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Kidney & Renal pelvis | - | - | 0.2 | - | - | - | 0.2 | - | - | - | 0.2 | - | - | - | 0.2 | - | - | - | - |
| Leukemia | 1.6 | 1.2 | 1.2 | 0.9 | 1.0 | 0.8 | 0.9 | 0.8 | 1.0 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.8 | 0.6 | 0.6 | 0.6 | 0.6 |
| Acute lymphocytic | 0.8 | 0.6 | 0.7 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| Non-Hodgkin lymphoma | 0.4 | 0.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Soft tissue | - | - | - | 0.3 | - | - | 0.2 | 0.3 | - | - | 0.2 | 0.2 | 0.2 | - | 0.2 | 0.2 | - | 0.2 | - |
| <u>Ages 0-19</u> | | | | | | | | | | | | | | | | | | | |
| All Sites | 4.8 | 4.2 | 3.5 | 3.4 | 3.3 | 3.0 | 3.1 | 3.2 | 3.1 | 2.9 | 2.9 | 2.6 | 3.0 | 2.8 | 2.6 | 2.8 | 2.5 | 2.8 | 2.6 |
| Bone & Joint | 0.4 | 0.3 | 0.2 | 0.2 | - | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 |
| Brain & Other nervous | 0.9 | 0.8 | 0.6 | 0.7 | 0.7 | 0.7 | 0.6 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.7 | 0.7 | 0.5 | 0.8 | 0.6 | 0.6 | 0.6 |
| Hodgkin lymphoma | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Kidney & Renal pelvis | 0.2 | - | 0.2 | - | - | - | 0.1 | - | - | - | 0.1 | 0.1 | - | 0.1 | 0.2 | - | - | - | - |
| Leukemia | 1.6 | 1.4 | 1.1 | 1.0 | 1.1 | 0.8 | 1.0 | 1.0 | 1.1 | 0.8 | 0.8 | 0.7 | 0.8 | 0.8 | 0.8 | 0.7 | 0.6 | 0.7 | 0.7 |
| Acute lymphocytic | 0.7 | 0.6 | 0.6 | 0.5 | 0.4 | 0.3 | 0.3 | 0.3 | 0.5 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| Non-Hodgkin lymphoma | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 | - | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | - | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 |
| Soft tissue | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 | 0.3 | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.2 |

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Table XXVIII-6

TRENDS IN SEER INCIDENCE^a USING THE JOINPOINT REGRESSION PROGRAM, 1975-2005
 WITH UP TO THREE JOINPOINTS BY PRIMARY CANCER SITE AND AGE AT DIAGNOSIS
 Males and Females

| | Joinpoint Trend 1 | | Joinpoint Trend 2 | | Joinpoint Trend 3 | | Joinpoint Trend 4 | | AAPC ^b | |
|-----------------------|-------------------|-------|-------------------|------|-------------------|------|-------------------|------|-------------------|-----------|
| | Years | APC | Years | APC | Years | APC | Years | APC | 1996-2005 | 2001-2005 |
| <u>Ages 0-14</u> | | | | | | | | | | |
| All Sites | | | | | | | | | | |
| All Races | 1975-2005 | 0.6* | | | | | | | 0.6* | 0.6* |
| Whites | 1975-2005 | 0.7* | | | | | | | 0.7* | 0.7* |
| Blacks | 1975-2005 | 0.3 | | | | | | | 0.3 | 0.3 |
| Bone & Joint | 1975-1979 | 12.4 | 1979-2005 | -0.5 | | | | | -0.5 | -0.5 |
| Brain & Other nervous | 1975-1977 | 15.6 | 1977-1983 | -3.3 | 1983-1986 | 11.6 | 1986-2005 | -0.1 | -0.1 | -0.1 |
| Hodgkin lymphoma | 1975-2005 | -1.3* | | | | | | | -1.3* | -1.3* |
| Kidney & Renal pelvis | 1975-2005 | -0.1 | | | | | | | -0.1 | -0.1 |
| Leukemia | 1975-2005 | 0.7* | | | | | | | 0.7* | 0.7* |
| Acute lymphocytic | 1975-2005 | 0.9* | | | | | | | 0.9* | 0.9* |
| Non-Hodgkin lymphoma | 1975-2005 | 0.5 | | | | | | | 0.5 | 0.5 |
| Soft tissue | 1975-2005 | 1.4* | | | | | | | 1.4* | 1.4* |
| <u>Ages 0-19</u> | | | | | | | | | | |
| All Sites | | | | | | | | | | |
| All Races | 1975-2005 | 0.6* | | | | | | | 0.6* | 0.6* |
| Whites | 1975-2005 | 0.7* | | | | | | | 0.7* | 0.7* |
| Blacks | 1975-1989 | 1.1 | 1989-2005 | -0.5 | | | | | -0.5 | -0.5 |
| Bone & Joint | 1975-2005 | 0.1 | | | | | | | 0.1 | 0.1 |
| Brain & Other nervous | 1975-1977 | 14.4 | 1977-1983 | -3.2 | 1983-1986 | 11.2 | 1986-2005 | -0.2 | -0.2 | -0.2 |
| Hodgkin lymphoma | 1975-2005 | -1.1* | | | | | | | -1.1* | -1.1* |
| Kidney & Renal pelvis | 1975-2005 | 0.1 | | | | | | | 0.1 | 0.1 |
| Leukemia | 1975-2005 | 0.8* | | | | | | | 0.8* | 0.8* |
| Acute lymphocytic | 1975-2005 | 0.9* | | | | | | | 0.9* | 0.9* |
| Non-Hodgkin lymphoma | 1975-2005 | 0.9* | | | | | | | 0.9* | 0.9* |
| Soft tissue | 1975-2005 | 1.4* | | | | | | | 1.4* | 1.4* |

Joinpoint Regression Program Version 3.3.1, April 2008, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2005.

The APC/AAPC is significantly different from zero ($p < .05$).

^a
^b
*

Table XXVIII-6a

TRENDS IN SEER INCIDENCE^a USING THE JOINPOINT REGRESSION PROGRAM, 1975-2005
 WITH UP TO FOUR JOINPOINTS BY PRIMARY CANCER SITE AND AGE AT DIAGNOSIS
 Males and Females

| | <u>Joinpoint Trend 1</u> | | <u>Joinpoint Trend 2</u> | | <u>Joinpoint Trend 3</u> | | <u>Joinpoint Trend 4</u> | | <u>Joinpoint Trend 5</u> | | <u>AAPC^c</u> 2001-2005 |
|-----------------------|--------------------------|-------|--------------------------|------|--------------------------|------|--------------------------|------|--------------------------|-----|--------------------------------------|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | |
| <u>Ages 0-14</u> | | | | | | | | | | | |
| All Sites | | | | | | | | | | | |
| All Races | 1975-2005 | 0.6* | | | | | | | | | 0.6* |
| Whites | 1975-2005 | 0.7* | | | | | | | | | 0.7* |
| Blacks | 1975-2005 | 0.3 | | | | | | | | | 0.3 |
| Bone & Joint | 1975-1979 | 12.4 | 1979-2005 | -0.5 | | | | | | | -0.5 |
| Brain & Other nervous | 1975-1983 | -0.4 | 1983-1986 | 9.3 | 1986-2005 | -0.1 | | | | | -0.1 |
| Hodgkin lymphoma | 1975-2005 | -1.3* | | | | | | | | | -1.3* |
| Kidney & Renal pelvis | 1975-2005 | -0.1 | | | | | | | | | -0.1 |
| Leukemia | 1975-2005 | 0.7* | | | | | | | | | 0.7* |
| Acute lymphocytic | 1975-2005 | 0.9* | | | | | | | | | 0.9* |
| Non-Hodgkin lymphoma | 1975-2005 | 0.5 | | | | | | | | | 0.5 |
| Soft tissue | 1975-2005 | 1.4* | | | | | | | | | 1.4* |
| <u>Ages 0-19</u> | | | | | | | | | | | |
| All Sites | | | | | | | | | | | |
| All Races | 1975-2005 | 0.6* | | | | | | | | | 0.6* |
| Whites | 1975-2005 | 0.7* | | | | | | | | | 0.7* |
| Blacks | 1975-2005 | 0.2 | | | | | | | | | 0.2 |
| Bone & Joint | 1975-2005 | 0.1 | | | | | | | | | 0.1 |
| Brain & Other nervous | 1975-1977 | 14.4 | 1977-1983 | -3.2 | 1983-1986 | 11.2 | 1986-2005 | -0.2 | | | -0.2 |
| Hodgkin lymphoma | 1975-2005 | -1.1* | | | | | | | | | -1.1* |
| Kidney & Renal pelvis | 1975-2005 | 0.1 | | | | | | | | | 0.1 |
| Leukemia | 1975-2005 | 0.8* | | | | | | | | | 0.8* |
| Acute lymphocytic | 1975-2005 | 0.9* | | | | | | | | | 0.9* |
| Non-Hodgkin lymphoma | 1975-2005 | 0.9* | | | | | | | | | 0.9* |
| Soft tissue | 1975-2005 | 1.4* | | | | | | | | | 1.4* |

Joinpoint Regression Program Version 3.3.1, April 2008, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2005.

* The APC/AAPC is significantly different from zero ($p < .05$).

a

b

*

Table XXVIII-7

TRENDS IN U.S. MORTALITY^a USING THE JOINTPOINT REGRESSION PROGRAM, 1975-2005
WITH UP TO THREE JOINTPOINTS BY PRIMARY CANCER SITE AND AGE AT DEATH

All Races, Both Sexes

| | Joinpoint Trend 1 | | Joinpoint Trend 2 | | Joinpoint Trend 3 | | Joinpoint Trend 4 | | AAPC ^b | |
|-----------------------|-------------------|-------|-------------------|-------|-------------------|-----|-------------------|-----|-------------------|-----------|
| | Years | APC | Years | APC | Years | APC | Years | APC | 1996-2005 | 2001-2005 |
| <u>Ages 0-14</u> | | | | | | | | | | |
| All Sites | 1975-1998 | -2.9* | 1998-2005 | -0.2 | | | | | -0.8* | -0.2 |
| Bone & Joint | 1975-1991 | -3.4* | 1991-2005 | 0.7 | | | | | 0.7 | 0.7 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | -1.0* | -1.0* |
| Hodgkin lymphoma | 1975-2005 | -4.6* | | | | | | | -4.6* | -4.6* |
| Kidney & Renal pelvis | 1975-1994 | -3.9* | 1994-2005 | 0.2 | | | | | 0.2 | 0.2 |
| Leukemia | 1975-1998 | -4.0* | 1998-2005 | -1.6 | | | | | -2.1* | -1.6 |
| Acute lymphocytic | 1975-1998 | -5.0* | 1998-2005 | -1.1 | | | | | -2.0 | -1.1 |
| Non-Hodgkin lymphoma | 1975-2005 | -4.9* | | | | | | | -4.9* | -4.9* |
| Soft tissue | 1975-1977 | 25.5 | 1977-2005 | -1.5* | | | | | -1.5* | -1.5* |
| <u>Ages 0-19</u> | | | | | | | | | | |
| All Sites | 1975-1997 | -2.7* | 1997-2005 | -0.6 | | | | | -0.9* | -0.6 |
| Bone & Joint | 1975-1990 | -3.2* | 1990-2005 | 0.6 | | | | | 0.6 | 0.6 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | -1.0* | -1.0* |
| Hodgkin lymphoma | 1975-2005 | -4.6* | | | | | | | -4.6* | -4.6* |
| Kidney & Renal pelvis | 1975-1993 | -3.7* | 1993-2005 | -0.2 | | | | | -0.2 | -0.2 |
| Leukemia | 1975-1998 | -3.5* | 1998-2005 | -1.5* | | | | | -1.9* | -1.5* |
| Acute lymphocytic | 1975-1998 | -4.3* | 1998-2005 | -1.2 | | | | | -1.9* | -1.2 |
| Non-Hodgkin lymphoma | 1975-2005 | -4.0* | | | | | | | -4.0* | -4.0* |
| Soft tissue | 1975-1979 | 9.2* | 1979-2005 | -1.1* | | | | | -1.1* | -1.1* |

Joinpoint Regression Program Version 3.3.1, April 2008, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2005.

The APC/AAPC is significantly different from zero ($p < .05$).

^a
^b
*

Table XXVIII-7 - continued

TRENDS IN U.S. MORTALITY^a USING THE JOINPOINT REGRESSION PROGRAM, 1975-2005
WITH UP TO THREE JOINPOINTS BY PRIMARY CANCER SITE AND AGE AT DEATH

Whites, Both Sexes

| | <u>Joinpoint Trend 1</u> | | <u>Joinpoint Trend 2</u> | | <u>Joinpoint Trend 3</u> | | <u>Joinpoint Trend 4</u> | | <u>AAPC^b</u> | |
|-----------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|-------------------------|------------------|
| | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>1996-2005</u> | <u>2001-2005</u> |
| <u>Ages 0-14</u> | | | | | | | | | | |
| All Sites | 1975-1998 | -2.9* | 1998-2005 | -0.2 | | | | | -0.8 | -0.2 |
| Bone & Joint | 1975-1996 | -2.6* | 1996-2005 | 2.3 | | | | | 2.3 | 2.3 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | -1.0* | -1.0* |
| Hodgkin lymphoma | 1975-2005 | -4.5* | | | | | | | -4.5* | -4.5* |
| Kidney & Renal pelvis | 1975-1995 | -3.8* | 1995-2005 | 1.0 | | | | | 1.0 | 1.0 |
| Leukemia | 1975-1984 | -5.1* | 1984-2005 | -3.3* | | | | | -3.3* | -3.3* |
| Acute lymphocytic | 1975-1991 | -5.5* | 1991-2005 | -2.9* | | | | | -2.9* | -2.9* |
| Non-Hodgkin lymphoma | 1975-2005 | -5.0* | | | | | | | -5.0* | -5.0* |
| Soft tissue | 1975-1979 | 12.7* | 1979-1995 | -2.8* | 1995-2005 | 0.6 | | | 0.6 | 0.6 |
| <u>Ages 0-19</u> | | | | | | | | | | |
| All Sites | 1975-1997 | -2.7* | 1997-2005 | -0.5 | | | | | -0.8* | -0.5 |
| Bone & Joint | 1975-1990 | -2.8* | 1990-2005 | 0.4 | | | | | 0.4 | 0.4 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | -1.0* | -1.0* |
| Hodgkin lymphoma | 1975-2005 | -4.7* | | | | | | | -4.7* | -4.7* |
| Kidney & Renal pelvis | 1975-1993 | -3.7* | 1993-2005 | 0.1 | | | | | 0.1 | 0.1 |
| Leukemia | 1975-1998 | -3.7* | 1998-2005 | -1.2 | | | | | -1.8* | -1.2 |
| Acute lymphocytic | 1975-1996 | -4.5* | 1996-2005 | -1.4 | | | | | -1.4 | -1.4 |
| Non-Hodgkin lymphoma | 1975-2005 | -4.1* | | | | | | | -4.1* | -4.1* |
| Soft tissue | 1975-1979 | 10.2* | 1979-2005 | -1.1* | | | | | -1.1* | -1.1* |

Joinpoint Regression Program Version 3.3.1, April 2008, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2005.
The APC/AAPC is significantly different from zero (p<.05).

a
b
*

Table XXVIII-7 - continued

TRENDS IN U.S. MORTALITY^a USING THE JOINPOINT REGRESSION PROGRAM, 1975-2005
WITH UP TO THREE JOINPOINTS BY PRIMARY CANCER SITE AND AGE AT DEATH

Blacks, Both Sexes

| | <u>Joinpoint Trend 1</u> | | <u>Joinpoint Trend 2</u> | | <u>Joinpoint Trend 3</u> | | <u>Joinpoint Trend 4</u> | | <u>AAPC^b</u> | |
|-----------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|-------------------------|------------------|
| | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>1996-2005</u> | <u>2001-2005</u> |
| <u>Ages 0-14</u> | | | | | | | | | | |
| All Sites | 1975-2000 | -2.6* | 2000-2005 | 1.4 | | | | | -0.4 | 1.4 |
| Bone & Joint | 1975-1987 | -6.4* | 1987-2005 | 1.5 | | | | | 1.5 | 1.5 |
| Brain & Other nervous | 1975-2005 | -1.1* | | | | | | | -1.1* | -1.1* |
| Hodgkin lymphoma | | - | | | | | | | | |
| Kidney & Renal pelvis | 1975-2005 | -3.0* | | | | | | | -3.0* | -3.0* |
| Leukemia | 1975-2005 | -3.4* | | | | | | | -3.4* | -3.4* |
| Acute lymphocytic | 1975-1983 | -1.1 | 1983-2005 | -5.9* | | | | | -5.9* | -5.9* |
| Non-Hodgkin lymphoma | 1975-2005 | -4.7* | | | | | | | -4.7* | -4.7* |
| Soft tissue | 1975-2005 | -1.3* | | | | | | | -1.3* | -1.3* |
| <u>Ages 0-19</u> | | | | | | | | | | |
| All Sites | 1975-2005 | -2.1* | | | | | | | -2.1* | -2.1* |
| Bone & Joint | 1975-1987 | -5.8* | 1987-2005 | 1.1 | | | | | 1.1 | 1.1 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | -1.0* | -1.0* |
| Hodgkin lymphoma | | - | | | | | | | | |
| Kidney & Renal pelvis | 1975-2005 | -2.7* | | | | | | | -2.7* | -2.7* |
| Leukemia | 1975-2005 | -2.8* | | | | | | | -2.8* | -2.8* |
| Acute lymphocytic | 1975-1982 | 0.4 | 1982-2005 | -5.0* | | | | | -5.0* | -5.0* |
| Non-Hodgkin lymphoma | 1975-2005 | -3.4* | | | | | | | -3.4* | -3.4* |
| Soft tissue | 1975-2005 | -0.8 | | | | | | | -0.8* | -0.8* |

Joinpoint Regression Program Version 3.3.1, April 2008, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2005.

The APC/AAPC is significantly different from zero (p<.05).

- Trend could not be calculated. At least one diagnosis year had a zero case count.

Table XXVIII-7a

TRENDS IN U.S. MORTALITY^a USING THE JOINTPOINT REGRESSION PROGRAM, 1975-2005
WITH UP TO FOUR JOINTPOINTS BY PRIMARY CANCER SITE AND AGE AT DEATH

All Races, Both Sexes

| | Joinpoint Trend 1 | | Joinpoint Trend 2 | | Joinpoint Trend 3 | | Joinpoint Trend 4 | | Joinpoint Trend 5 | | AAPC ^c 2001-2005 |
|-----------------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-----|-------------------|-------|--------------------------------|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | |
| <u>Ages 0-14</u> | | | | | | | | | | | |
| All Sites | 1975-1998 | -2.9* | 1998-2005 | -0.2 | | | | | | | -0.2 |
| Bone & Joint | 1975-1991 | -3.4* | 1991-2005 | 0.7 | | | | | | | 0.7 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | | | -1.0* |
| Hodgkin lymphoma | 1975-2005 | -4.6* | | | | | | | | | -4.6* |
| Kidney & Renal pelvis | 1975-1994 | -3.9* | 1994-2005 | 0.2 | | | | | | | 0.2 |
| Leukemia | 1975-1998 | -4.0* | 1998-2005 | -1.6 | | | | | | | -1.6 |
| Acute lymphocytic | 1975-1998 | -5.0* | 1998-2005 | -1.1 | | | | | | | -1.1 |
| Non-Hodgkin lymphoma | 1975-2005 | -4.9* | | | | | | | | | -4.9* |
| Soft tissue | 1975-1977 | 25.5 | 1977-2005 | -1.5* | | | | | | | -1.5* |
| <u>Ages 0-19</u> | | | | | | | | | | | |
| All Sites | 1975-1997 | -2.7* | 1997-2005 | -0.6 | | | | | | | -0.6 |
| Bone & Joint | 1975-1990 | -3.2* | 1990-2005 | 0.6 | | | | | | | 0.6 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | | | -1.0* |
| Hodgkin lymphoma | 1975-2005 | -4.6* | | | | | | | | | -4.6* |
| Kidney & Renal pelvis | 1975-1993 | -3.7* | 1993-2005 | -0.2 | | | | | | | -0.2 |
| Leukemia | 1975-1998 | -3.5* | 1998-2005 | -1.5* | | | | | | | -1.5* |
| Acute lymphocytic | 1975-1982 | -2.9* | 1982-1986 | -6.8* | 1986-1999 | -4.0* | 1999-2003 | 1.4 | 2003-2005 | -10.2 | -4.6 |
| Non-Hodgkin lymphoma | 1975-2005 | -4.0* | | | | | | | | | -4.0* |
| Soft tissue | 1975-1979 | 9.2* | 1979-2005 | -1.1* | | | | | | | -1.1* |

Joinpoint Regression Program Version 3.3.1, April 2008, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2005.

The APC/AAPC is significantly different from zero ($p < .05$).

^a
^b
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Table XXVIII-7a - continued

TRENDS IN U.S. MORTALITY^a USING THE JOINTPOINT REGRESSION PROGRAM, 1975-2005
WITH UP TO FOUR JOINTPOINTS BY PRIMARY CANCER SITE AND AGE AT DEATH

Whites, Both Sexes

| | <u>Joinpoint Trend 1</u> | | <u>Joinpoint Trend 2</u> | | <u>Joinpoint Trend 3</u> | | <u>Joinpoint Trend 4</u> | | <u>Joinpoint Trend 5</u> | | <u>AAPC^c</u> |
|-----------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|-------------------------|
| | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>2001-2005</u> |
| <u>Ages 0-14</u> | | | | | | | | | | | |
| All Sites | 1975-1998 | -2.9* | 1998-2005 | -0.2 | | | | | | | -0.2 |
| Bone & Joint | 1975-1996 | -2.6* | 1996-2005 | 2.3 | | | | | | | 2.3 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | | | -1.0* |
| Hodgkin lymphoma | 1975-2005 | -4.5* | | | | | | | | | -4.5* |
| Kidney & Renal pelvis | 1975-1995 | -3.8* | 1995-2005 | 1.0 | | | | | | | 1.0 |
| Leukemia | 1975-1984 | -5.1* | 1984-2005 | -3.3* | | | | | | | -3.3* |
| Acute lymphocytic | 1975-1991 | -5.5* | 1991-2005 | -2.9* | | | | | | | -2.9* |
| Non-Hodgkin lymphoma | 1975-2005 | -5.0* | | | | | | | | | -5.0* |
| Soft tissue | 1975-1979 | 12.7* | 1979-1995 | -2.8* | 1995-2005 | 0.6 | | | | | 0.6 |
| <u>Ages 0-19</u> | | | | | | | | | | | |
| All Sites | 1975-1997 | -2.7* | 1997-2005 | -0.5 | | | | | | | -0.5 |
| Bone & Joint | 1975-1990 | -2.8* | 1990-2005 | 0.4 | | | | | | | 0.4 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | | | -1.0* |
| Hodgkin lymphoma | 1975-2005 | -4.7* | | | | | | | | | -4.7* |
| Kidney & Renal pelvis | 1975-1993 | -3.7* | 1993-2005 | 0.1 | | | | | | | 0.1 |
| Leukemia | 1975-1998 | -3.7* | 1998-2005 | -1.2 | | | | | | | -1.2 |
| Acute lymphocytic | 1975-1982 | -3.2* | 1982-1986 | -7.1* | 1986-1999 | -3.7* | 1999-2003 | 1.8 | 2003-2005 | -9.3 | -3.9 |
| Non-Hodgkin lymphoma | 1975-2005 | -4.1* | | | | | | | | | -4.1* |
| Soft tissue | 1975-1979 | 10.2* | 1979-2005 | -1.1* | | | | | | | -1.1* |

Joinpoint Regression Program Version 3.3.1, April 2008, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2005.

The APC/AAPC is significantly different from zero ($p < .05$).

^a
^b
*

Table XXVIII-7a - continued

TRENDS IN U.S. MORTALITY^a USING THE JOINTPOINT REGRESSION PROGRAM, 1975-2005
WITH UP TO FOUR JOINTPOINTS BY PRIMARY CANCER SITE AND AGE AT DEATH

Blacks, Both Sexes

| | <u>Joinpoint Trend 1</u> | | <u>Joinpoint Trend 2</u> | | <u>Joinpoint Trend 3</u> | | <u>Joinpoint Trend 4</u> | | <u>Joinpoint Trend 5</u> | | <u>AAPC^c</u> 2001-2005 |
|-----------------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------|------------|--------------------------------------|
| | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | <u>Years</u> | <u>APC</u> | |
| <u>Ages 0-14</u> | | | | | | | | | | | |
| All Sites | 1975-2000 | -2.6* | 2000-2005 | 1.4 | | | | | | | 1.4 |
| Bone & Joint | 1975-1987 | -6.4* | 1987-2005 | 1.5 | | | | | | | 1.5 |
| Brain & Other nervous | 1975-2005 | -1.1* | | | | | | | | | -1.1* |
| Hodgkin lymphoma | - | | | | | | | | | | |
| Kidney & Renal pelvis | 1975-2005 | -3.0* | | | | | | | | | -3.0* |
| Leukemia | 1975-2005 | -3.4* | | | | | | | | | -3.4* |
| Acute lymphocytic | 1975-2005 | -4.8* | | | | | | | | | -4.8* |
| Non-Hodgkin lymphoma | 1975-2005 | -4.7* | | | | | | | | | -4.7* |
| Soft tissue | 1975-2005 | -1.3* | | | | | | | | | -1.3* |
| <u>Ages 0-19</u> | | | | | | | | | | | |
| All Sites | 1975-2005 | -2.1* | | | | | | | | | -2.1* |
| Bone & Joint | 1975-1987 | -5.8* | 1987-2005 | 1.1 | | | | | | | 1.1 |
| Brain & Other nervous | 1975-2005 | -1.0* | | | | | | | | | -1.0* |
| Hodgkin lymphoma | - | | | | | | | | | | |
| Kidney & Renal pelvis | 1975-2005 | -2.7* | | | | | | | | | -2.7* |
| Leukemia | 1975-2005 | -2.8* | | | | | | | | | -2.8* |
| Acute lymphocytic | 1975-1982 | 0.4 | 1982-2005 | -5.0* | | | | | | | -5.0* |
| Non-Hodgkin lymphoma | 1975-2005 | -3.4* | | | | | | | | | -3.4* |
| Soft tissue | 1975-2005 | -0.8 | | | | | | | | | -0.8* |

Joinpoint Regression Program Version 3.3.1, April 2008, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^a Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^b The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2005.

* The APC/AAPC is significantly different from zero (p<.05).

- Trend could not be calculated. At least one diagnosis year had a zero case count.

Table XXVIII-8

5-YEAR RELATIVE SURVIVAL RATES (Percent)

By Selected Primary Cancer Site and Year of Diagnosis

All Races, Males and Females

| Site | Ages 0-14 | | | | | | | |
|----------------------|-------------------|-----------|-------------------|-------------------|-------------------|-----------|-------------------|-------------------|
| | 1975-1977 | 1978-1980 | 1981-1983 | 1984-1986 | 1987-1989 | 1990-1992 | 1993-1995 | 1996-2004 |
| All Sites | | | | | | | | |
| All Races | 58.1 | 62.6 | 66.9 | 68.2 | 71.4 | 75.7 | 77.3 | 80.0 ^a |
| Whites | 58.1 | 63.1 | 67.6 | 70.0 | 72.2 | 76.6 | 78.2 | 81.3 ^a |
| Blacks | 57.3 | 57.7 | 62.2 | 56.6 | 65.3 | 71.0 | 72.8 | 74.1 ^a |
| Bone & Joint | 50.6 ^b | 48.7 | 56.8 ^b | 57.9 ^b | 66.8 ^b | 66.8 | 74.1 | 70.6 ^a |
| Brain & ONS | 56.9 | 57.5 | 56.2 | 61.7 | 63.9 | 64.3 | 70.3 | 73.7 ^a |
| Hodgkin lymphoma | 80.5 | 87.7 | 88.0 | 90.9 | 87.1 | 96.8 | 94.6 | 95.9 ^a |
| Leukemia | 50.3 | 58.3 | 63.0 | 63.8 | 71.0 | 75.4 | 75.9 | 82.1 ^a |
| Acute lymphocytic | 57.6 | 66.1 | 71.4 | 72.5 | 77.8 | 83.0 | 83.8 | 88.1 ^a |
| Acute myeloid | 18.8 | 25.8 | 26.7 ^b | 30.5 ^b | 37.1 ^b | 41.0 | 41.7 ^b | 55.2 ^a |
| Neuroblastoma | 52.4 | 56.9 | 54.5 | 52.3 | 62.0 | 76.3 | 67.3 | 69.7 ^a |
| Non-Hodgkin lymphoma | 43.1 | 52.7 | 66.9 | 70.3 | 70.7 | 76.1 | 80.6 | 86.1 ^a |
| Soft tissue | 61.0 | 74.9 | 69.2 | 73.0 | 65.4 | 79.7 | 76.5 | 74.4 ^a |
| Wilms' tumor | 73.1 | 79.0 | 86.6 | 90.7 | 92.1 | 91.9 | 91.6 | 92.2 ^a |

| Site | Ages 0-19 | | | | | | | |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------|
| | 1975-1977 | 1978-1980 | 1981-1983 | 1984-1986 | 1987-1989 | 1990-1992 | 1993-1995 | 1996-2004 |
| All Sites | | | | | | | | |
| All Races | 61.7 | 65.3 | 68.2 | 70.6 | 73.4 | 76.2 | 77.7 | 80.1 ^a |
| Whites | 61.5 | 65.8 | 69.1 | 72.4 | 74.9 | 77.5 | 78.5 | 81.4 ^a |
| Blacks | 59.8 | 60.0 | 62.4 | 58.2 | 64.3 | 68.6 | 73.8 | 73.5 ^a |
| Bone & Joint | 50.8 | 48.4 | 51.2 | 56.6 | 64.0 | 68.4 | 68.7 | 67.6 ^a |
| Brain & ONS | 58.8 | 57.9 | 58.0 | 63.9 | 65.9 | 66.3 | 71.3 | 74.6 ^a |
| Hodgkin lymphoma | 86.0 | 88.7 | 85.5 | 90.9 | 89.0 | 94.3 | 93.9 | 95.3 ^a |
| Leukemia | 45.5 | 53.5 | 58.1 | 60.4 | 67.5 | 71.2 | 72.0 | 77.5 ^a |
| Acute lymphocytic | 54.0 | 62.3 | 67.2 | 70.1 | 75.0 | 79.7 | 81.3 | 84.4 ^a |
| Acute myeloid | 18.7 | 26.2 | 26.4 | 31.4 | 37.6 | 41.0 | 39.4 | 51.4 ^a |
| Neuroblastoma | 52.7 | 57.0 | 53.4 | 52.5 | 60.6 | 75.9 | 67.3 | 69.4 ^a |
| Non-Hodgkin lymphoma | 44.6 | 53.4 | 63.8 | 67.7 | 70.4 | 72.2 | 77.8 | 83.3 ^a |
| Soft tissue | 65.2 | 69.3 | 68.2 | 72.7 | 67.3 | 69.6 | 74.1 | 72.1 ^a |
| Wilms' tumor | 72.6 | 78.4 | 86.7 | 91.0 | 92.1 | 91.3 | 91.6 | 92.3 ^a |

Source: SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are based on follow-up of patients into 2005.

^a The difference in rates between 1975-1977 and 1996-2004 is statistically significant ($p < .05$).

^b The standard error of the survival rate is between 5 and 10 percentage points.

^c The standard error of the survival rate is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 16 cases during the time period.

Table XXVIII-9

CHILDHOOD CANCER
SEER Incidence, U.S. Death and 5-Year Relative Survival Rates
For Top Cancer Sites^f By 5-Year Age Groups
All Races, Males and Females

| Age/Site | SEER Incidence ^a | | | | | US Mortality ^b | | | | | Survival ^a | |
|-------------------------|-----------------------------|-------------------|------------------|------------------|--------------------|---------------------------|-------------------|------------------|------------------|--------------------|-----------------------|-------------------|
| | 2001-2005 Num Cases | 2001-2005 Rate | 1975-2005 APC | 1975-1989 APC | 1990-2005 APC | 2001-2005 Num Deaths | 2001-2005 Rate | 1975-2005 APC | 1975-1989 APC | 1990-2005 APC | 1975-1977 | 1996-2004 |
| Ages 0-4 | | | | | | | | | | | | |
| All Sites | 5,742 | 21.4 | 0.8* | 1.3* | 0.5 | 2,354 | 2.4 | -2.8* | -2.8* | -2.3* | 57.3 | 80.8 ^c |
| Soft tissue | 468 | 1.7 | 1.3* | 0.9 | 3.4* | 121 | 0.1 | -1.9* | -0.1 | -1.0 | 61.1 ^d | 73.7 ^c |
| Kidney and Renal pelvis | 478 | 1.8 | 0.0 | 0.7 | -0.7 | 96 | 0.1 | -3.5* | -5.9* | 0.2 [#] | 71.8 | 91.9 ^c |
| Eye and Orbit | 343 | 1.3 | 0.5 | 1.1 | -1.1 | 32 | 0.0 | - | - | - | 87.1 ^d | 95.0 ^c |
| Brain and Other nervous | 1,046 | 3.9 | 1.2* | 3.6* | 0.3 [#] | 587 | 0.6 | -1.4* | -1.4* | -2.2* | 52.5 | 70.6 ^c |
| Other endocrine | 380 | 1.4 | - | - | - | 389 | 0.4 | - | - | - | 35.7 ^d | 65.8 ^c |
| Leukemia | 2,170 | 8.1 | 0.9* | 1.1* | 1.1 | 753 | 0.8 | -3.2* | -4.0* | -2.5* [#] | 55.4 | 85.7 ^c |
| Acute lymphocytic | 1,736 | 6.5 | 0.9* | 1.6* | 1.0 | 254 | 0.3 | -4.5* | -5.8* | -2.3* [#] | 63.1 | 91.2 ^c |
| Ages 5-9 | | | | | | | | | | | | |
| All Sites | 3,027 | 11.2 | 0.2 | 1.2* | 0.1 | 2,557 | 2.6 | -2.8* | -3.3* | -1.6* [#] | 58.5 | 78.8 ^c |
| Brain and Other nervous | 853 | 3.2 | 0.4 | 1.3 | -0.4 | 921 | 0.9 | -0.7* | -0.6 | -0.4 | 58.0 | 72.2 ^c |
| Leukemia | 1,066 | 3.9 | 0.6* | 1.8* | 0.0 [@] | 738 | 0.7 | -4.9* | -5.6* | -3.7* [#] | 52.3 | 83.0 ^c |
| Acute lymphocytic | 892 | 3.3 | 0.8* | 2.6* | 0.4 [@] | 400 | 0.4 | -5.6* | -6.6* | -3.7* [#] | 55.6 | 86.9 ^c |
| Ages 10-14 | | | | | | | | | | | | |
| All Sites | 3,717 | 13.1 | 0.7* | 1.2* | 0.5 | 2,618 | 2.5 | -2.1* | -2.6* | -1.3* [#] | 58.9 | 80.0 ^c |
| Bone and Joint | 387 | 1.4 | 0.0 | 2.1 | -1.3 [#] | 321 | 0.3 | -1.3* | -3.4* | 0.9 [#] | 52.8 ^d | 68.7 ^c |
| Brain and Other nervous | 748 | 2.6 | 1.0* | 1.0 | -0.5 | 701 | 0.7 | -1.1* | -1.9* | -0.6 [@] | 59.5 | 79.8 ^c |
| Hodgkin lymphoma | 319 | 1.1 | -1.1* | -0.9 | -2.3 | 24 | 0.0 | - | - | - | 78.7 | 96.2 ^c |
| Leukemia | 852 | 3.0 | 0.6 | 2.6 | 1.4 | 830 | 0.8 | -3.0* | -3.2* | -2.9* | 35.2 | 70.7 ^c |
| Acute lymphocytic | 594 | 2.1 | 1.0* | 3.9* | 1.5 | 407 | 0.4 | -3.4* | -2.8* | -3.0* | 43.6 ^d | 79.9 ^c |
| Ages 15-19 | | | | | | | | | | | | |
| All Sites | 5,741 | 21.3 | 0.6* | 1.1* | 0.3 [@] | 3,607 | 3.5 | -1.9* | -2.4* | -1.5* [#] | 68.0 | 80.4 ^c |
| Bone and Joint | 417 | 1.5 | 0.2 | 1.4 | -0.4 | 537 | 0.5 | -1.2* | -2.8* | 0.6 [#] | 51.0 ^d | 63.6 ^c |
| Melanoma of the skin | 479 | 1.8 | 1.6* | 1.8 | 1.2 | 44 | 0.0 | - | - | - | 76.2 ^d | 98.0 ^c |
| Testis(males) | 494 | 3.6 | 1.4* | 1.5 | 1.4 | 48 | 0.1 | - | - | - | 66.0 ^d | 92.5 ^c |
| Brain and Other nervous | 565 | 2.1 | 0.4 | 1.4 | -0.8 | 558 | 0.5 | -1.1* | -1.2* | -1.1* | 65.0 | 78.7 ^c |
| Thyroid | 473 | 1.8 | 1.1* | 1.1 | 1.1 | - | - | - | - | - | 100.0 | 97.9 |
| Hodgkin lymphoma | 790 | 2.9 | -0.9* | 0.5 | -2.2* [#] | 96 | 0.1 | -4.6* | -3.1* | -5.4* | 88.9 | 95.0 ^c |
| Non-Hodgkin lymphoma | 487 | 1.8 | 1.6* | 3.3* | 1.0 | 261 | 0.3 | -2.7* | -2.6* | -3.4* | 48.0 ^d | 78.7 ^c |
| Leukemia | 807 | 3.0 | 0.9* | 0.0 | 1.6 | 1,078 | 1.0 | -2.1* | -2.3* | -2.4* | 24.4 | 51.3 ^c |
| Acute lymphocytic | 449 | 1.7 | 1.2* | 2.3 | 2.2 | 465 | 0.5 | -2.0* | -1.6* | -2.6* | 29.5 ^d | 53.8 ^c |

The APC is the Annual Percent Change over the time interval.

Note: Incidence and death rates are per 100,000 and are age-adjusted (as appropriate) to the 2000 US Std Population (19 age groups - Census P25-1130). Survival rates are expressed as percents.

^a Incidence data used in calculating the rates are from the 17 SEER 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).

Incidence data used in calculating the trends and survival estimates are from the 9 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c The difference in rates between 1975-1977 and 1996-2004 is statistically significant (p<.05).

^d The standard error of the survival rate is between 5 and 10 percentage points.

^e The standard error of the survival rate is greater than 10 percentage points.

^f Sites were chosen based on more than 100 SEER incident cases between 2001-2005.

* The APC is significantly different from zero (p<.05).

The APC for 1990-2005 is significantly different from the APC for 1975-1989 (p<.05).

@ The APC for 1990-2005 is significantly different from the APC for 1975-1989 (p<.10).

- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

Table XXVIII-10
ALL CANCER SITES (Invasive)

SURVIVAL RATES^a

By Year of Diagnosis

All Races, Males and Females

Ages 0-14

Year of Diagnosis

| | 1975- 1979 | 1980- 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|----------------------------------------------|---------------|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Relative Survival Rates (SEER ^b) | | | | | | | | | | | | | | | | | | | | | | |
| 1-year | 81.4 | 85.0 | 87.2 | 85.6 | 86.0 | 88.8 | 88.3 | 89.5 | 91.1 | 91.0 | 88.6 | 90.6 | 90.5 | 92.9 | 91.2 | 91.0 | 91.4 | 92.4 | 91.9 | 91.6 | 94.0 | 93.0 |
| 2-year | 71.2 | 75.8 | 78.1 | 76.1 | 77.2 | 80.3 | 79.9 | 81.8 | 82.5 | 84.1 | 82.2 | 84.7 | 84.8 | 86.3 | 84.7 | 84.0 | 85.3 | 85.8 | 86.8 | 87.2 | 89.4 | |
| 3-year | 65.5 | 70.7 | 73.8 | 72.4 | 73.0 | 76.6 | 75.4 | 77.6 | 79.2 | 81.0 | 78.9 | 81.7 | 81.3 | 83.7 | 82.2 | 81.4 | 82.7 | 83.4 | 83.5 | 83.4 | | |
| 4-year | 62.1 | 67.6 | 70.5 | 70.9 | 70.9 | 73.4 | 72.9 | 75.3 | 76.5 | 78.6 | 78.0 | 78.9 | 78.8 | 80.5 | 80.3 | 78.6 | 80.9 | 81.4 | 81.7 | | | |
| 5-year | 60.0 | 65.9 | 69.6 | 68.7 | 70.3 | 72.5 | 71.5 | 74.2 | 75.3 | 77.5 | 76.4 | 78.2 | 77.3 | 80.1 | 78.9 | 77.6 | 78.9 | 80.4 | | | | |
| 6-year | 58.3 | 64.7 | 68.3 | 67.9 | 69.0 | 72.1 | 70.4 | 73.4 | 74.7 | 76.1 | 75.9 | 78.0 | 76.3 | 79.4 | 78.2 | 76.1 | 78.4 | | | | | |
| 7-year | 57.2 | 63.8 | 67.2 | 67.8 | 67.9 | 71.2 | 69.0 | 72.5 | 74.1 | 75.8 | 75.5 | 77.2 | 75.7 | 78.8 | 77.6 | 75.6 | | | | | | |
| 8-year | 56.5 | 63.1 | 66.0 | 67.5 | 67.9 | 70.6 | 68.1 | 72.1 | 73.3 | 75.7 | 74.8 | 77.0 | 74.8 | 78.2 | 76.5 | | | | | | | |
| 9-year | 56.1 | 62.5 | 65.5 | 66.9 | 67.6 | 70.4 | 67.7 | 71.5 | 72.9 | 75.6 | 74.5 | 76.2 | 74.4 | 77.9 | | | | | | | | |
| 10-year | 55.8 | 62.0 | 64.8 | 66.8 | 67.1 | 70.1 | 67.3 | 71.2 | 72.8 | 75.5 | 74.5 | 75.9 | 74.3 | | | | | | | | | |
| 11-year | 55.4 | 61.6 | 64.1 | 66.8 | 66.8 | 69.9 | 67.1 | 70.6 | 72.5 | 75.4 | 74.3 | 75.2 | | | | | | | | | | |
| 12-year | 55.1 | 61.2 | 63.7 | 66.1 | 66.7 | 69.7 | 66.8 | 70.5 | 72.2 | 75.2 | 74.3 | | | | | | | | | | | |
| 13-year | 54.9 | 60.8 | 63.4 | 65.8 | 66.3 | 69.4 | 66.8 | 69.8 | 72.1 | 75.0 | | | | | | | | | | | | |
| 14-year | 54.5 | 60.5 | 63.3 | 64.6 | 66.3 | 68.9 | 66.5 | 69.6 | 71.9 | | | | | | | | | | | | | |
| 15-year | 54.3 | 60.2 | 63.0 | 64.6 | 65.9 | 68.7 | 66.5 | 69.2 | | | | | | | | | | | | | | |
| 16-year | 53.9 | 59.9 | 62.9 | 64.3 | 65.5 | 68.6 | 66.1 | | | | | | | | | | | | | | | |
| 17-year | 53.6 | 59.7 | 62.9 | 64.0 | 65.2 | 68.2 | | | | | | | | | | | | | | | | |
| 18-year | 53.3 | 59.3 | 62.8 | 63.7 | 65.1 | | | | | | | | | | | | | | | | | |
| 19-year | 53.0 | 59.1 | 62.8 | 63.7 | | | | | | | | | | | | | | | | | | |
| 20-year | 52.9 | 58.9 | 62.6 | | | | | | | | | | | | | | | | | | | |

^a Survival rates are relative rates expressed as percents.

^b Rates are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table XXVIII-11
ALL CANCER SITES (Invasive)

SURVIVAL RATES^a

By Year of Diagnosis

All Races, Males and Females

Ages 0-19

Year of Diagnosis

| | 1975- 1979 | 1980- 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|----------------------------------------------|---------------|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Relative Survival Rates (SEER ^b) | | | | | | | | | | | | | | | | | | | | | | |
| 1-year | 83.1 | 86.3 | 88.0 | 88.0 | 88.1 | 89.8 | 89.5 | 90.6 | 91.5 | 90.4 | 89.8 | 90.8 | 90.3 | 93.2 | 91.6 | 92.1 | 91.3 | 91.2 | 92.2 | 92.4 | 94.1 | 92.5 |
| 2-year | 73.2 | 77.4 | 78.7 | 79.1 | 80.0 | 82.4 | 81.3 | 83.1 | 83.6 | 83.4 | 82.8 | 84.3 | 84.8 | 87.3 | 85.0 | 85.2 | 85.7 | 84.1 | 87.1 | 87.4 | 89.3 | |
| 3-year | 68.2 | 72.4 | 75.2 | 75.8 | 75.8 | 78.2 | 77.2 | 78.7 | 80.0 | 80.4 | 79.7 | 80.8 | 81.5 | 85.1 | 81.9 | 82.5 | 82.9 | 81.9 | 83.8 | 83.8 | | |
| 4-year | 64.9 | 69.5 | 72.4 | 74.0 | 73.5 | 75.4 | 74.0 | 76.4 | 77.8 | 78.1 | 78.3 | 78.7 | 79.9 | 82.1 | 80.2 | 79.7 | 80.9 | 80.1 | 81.9 | | | |
| 5-year | 62.9 | 67.8 | 71.4 | 72.2 | 72.9 | 74.6 | 72.8 | 75.1 | 76.6 | 76.8 | 76.7 | 78.0 | 78.4 | 81.5 | 78.5 | 78.5 | 79.3 | 79.0 | | | | |
| 6-year | 61.2 | 66.4 | 70.3 | 71.5 | 71.8 | 74.0 | 71.5 | 74.1 | 75.9 | 75.6 | 76.1 | 77.5 | 77.4 | 80.8 | 77.5 | 77.3 | 78.8 | | | | | |
| 7-year | 60.3 | 65.6 | 69.1 | 71.2 | 70.7 | 73.2 | 70.6 | 73.2 | 75.1 | 75.1 | 75.7 | 76.9 | 76.8 | 80.3 | 77.1 | 77.0 | | | | | | |
| 8-year | 59.5 | 64.8 | 68.3 | 70.8 | 70.4 | 72.3 | 70.0 | 72.5 | 74.4 | 75.0 | 74.9 | 76.6 | 75.9 | 79.7 | 76.4 | | | | | | | |
| 9-year | 59.0 | 64.1 | 67.7 | 70.3 | 69.8 | 72.1 | 69.4 | 72.1 | 74.1 | 74.8 | 74.6 | 75.8 | 75.6 | 79.3 | | | | | | | | |
| 10-year | 58.6 | 63.7 | 67.1 | 69.9 | 69.4 | 71.5 | 69.2 | 71.8 | 73.7 | 74.8 | 74.5 | 75.5 | 75.4 | | | | | | | | | |
| 11-year | 58.2 | 63.3 | 66.4 | 69.8 | 69.2 | 71.4 | 69.0 | 71.2 | 73.2 | 74.7 | 74.3 | 75.0 | | | | | | | | | | |
| 12-year | 57.9 | 62.9 | 66.1 | 69.3 | 69.0 | 71.1 | 68.8 | 71.0 | 72.9 | 74.6 | 74.3 | | | | | | | | | | | |
| 13-year | 57.8 | 62.6 | 65.7 | 68.8 | 68.7 | 70.9 | 68.8 | 70.4 | 72.7 | 74.2 | | | | | | | | | | | | |
| 14-year | 57.4 | 62.2 | 65.6 | 67.6 | 68.4 | 70.2 | 68.5 | 70.0 | 72.6 | | | | | | | | | | | | | |
| 15-year | 57.2 | 61.9 | 65.4 | 67.4 | 67.8 | 70.1 | 68.5 | 69.6 | | | | | | | | | | | | | | |
| 16-year | 56.9 | 61.5 | 65.0 | 66.8 | 67.4 | 70.0 | 68.2 | | | | | | | | | | | | | | | |
| 17-year | 56.6 | 61.2 | 64.9 | 66.5 | 67.1 | 69.7 | | | | | | | | | | | | | | | | |
| 18-year | 56.3 | 61.0 | 64.8 | 66.3 | 66.7 | | | | | | | | | | | | | | | | | |
| 19-year | 56.1 | 60.7 | 64.7 | 66.1 | | | | | | | | | | | | | | | | | | |
| 20-year | 55.7 | 60.4 | 64.6 | | | | | | | | | | | | | | | | | | | |

^a Survival rates are relative rates expressed as percents.

^b Rates are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table XXVIII-12
 CHILDHOOD CANCER (Invasive, <20 Years old at diagnosis)

Estimated United States Cancer Prevalence Counts^a on January 1, 2005
 By Race/Ethnicity, Sex and Years Since Diagnosis

| Years Since Diagnosis | 0 to <5 | 5 to <10 | 10 to <15 | 15 to <20 | 20 to <25 | 25 to <30 | 0 to <15 ^e | 0 to <30 ^e | >=30 ^g | Complete ^h |
|-------------------------------------|---------|----------|-----------|-----------|-----------|-----------|-----------------------|-----------------------|-------------------|-----------------------|
| <u>Race/Sex</u> | | | | | | | | | | |
| All Races ^b | 59,044 | 49,156 | 44,096 | 37,983 | 31,355 | 27,278 | 152,296 | 248,912 | + | + |
| Males | 31,593 | 25,700 | 23,188 | 19,236 | 15,639 | 12,448 | 80,482 | 127,804 | + | + |
| Females | 27,451 | 23,456 | 20,908 | 18,747 | 15,716 | 14,830 | 71,814 | 121,108 | + | + |
| White ^b | 49,623 | 41,351 | 37,330 | 32,907 | 27,558 | 24,164 | 128,302 | 212,932 | + | + |
| Males | 26,872 | 21,488 | 19,892 | 16,696 | 13,913 | 11,156 | 68,251 | 110,016 | + | + |
| Females | 22,751 | 19,863 | 17,438 | 16,211 | 13,645 | 13,008 | 60,051 | 102,916 | + | + |
| Black ^b | 6,262 | 4,910 | 4,400 | 3,359 | 2,656 | 2,209 | 15,572 | 23,796 | + | + |
| Males | 3,043 | 2,620 | 2,113 | 1,628 | 1,205 | 883 | 7,776 | 11,492 | + | + |
| Females | 3,219 | 2,290 | 2,287 | 1,731 | 1,451 | 1,326 | 7,796 | 12,304 | + | + |
| Asian/Pacific Islander ^c | 1,944 | 1,699 | 1,410 | + | + | + | 5,053 | + | + | + |
| Males | 1,043 | 928 | 698 | + | + | + | 2,669 | + | + | + |
| Females | 901 | 771 | 712 | + | + | + | 2,384 | + | + | + |
| Hispanic ^d | 9,728 | 7,000 | 5,800 | + | + | + | 22,527 | + | + | + |
| Males | 5,288 | 3,619 | 3,250 | + | + | + | 12,157 | + | + | + |
| Females | 4,440 | 3,381 | 2,550 | + | + | + | 10,370 | + | + | + |

^a US 2005 cancer prevalence counts are based on 2005 cancer prevalence proportions from the SEER registries and 1/1/2005 US population estimates based on the average of 2004 and 2005 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^{b c d} Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.

^e Maximum limited-duration prevalence: 30 years for 1975-2005 SEER 9 data; 15 years for 1990-2005 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^{f g} (f) Cases diagnosed more than 30 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (g) Complete prevalence is obtained by summing 0 to <30 and >=30.

- Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.

+ Not available.

Table XXVIII-13
AGE-ADJUSTED RATES^a AND COUNTS FOR THE TOP 5 CANCER SITES^b BY SINGLE YEAR OF AGE AT DIAGNOSIS

SEER Cancer Incidence^c 2001-2005

| Age <1 | | | Age 1 | | | Age 2 | | |
|----------------------------|------|-------|----------------------------|------|-------|----------------------------|------|-------|
| | Rate | Cases | | Rate | Cases | | Rate | Cases |
| All Sites | 23.7 | 1299 | All Sites | 21.9 | 1187 | All Sites | 23.2 | 1237 |
| Leukemia | 4.7 | 257 | Leukemia | 6.9 | 375 | Leukemia | 10.3 | 551 |
| Acute Lymphocytic Leukemia | 1.9 | 107 | Acute Lymphocytic Leukemia | 4.6 | 250 | Acute Lymphocytic Leukemia | 9.0 | 482 |
| Brain and ONS ^d | 3.8 | 207 | Brain and ONS ^d | 3.9 | 213 | Brain and ONS ^d | 4.0 | 213 |
| Soft Tissue | 3.8 | 206 | Kidney and Renal Pelvis | 2.1 | 116 | Kidney and Renal Pelvis | 2.2 | 117 |
| Other Endocrine | 2.5 | 137 | Eye and Orbit | 1.8 | 97 | Eye and Orbit | 1.5 | 80 |
| Eye and Orbit | 2.4 | 134 | Soft Tissue | 1.8 | 95 | Other Endocrine | 1.3 | 69 |
| Age 3 | | | Age 4 | | | Age 5 | | |
| | Rate | Cases | | Rate | Cases | | Rate | Cases |
| All Sites | 21.0 | 1110 | All Sites | 17.3 | 909 | All Sites | 13.4 | 706 |
| Leukemia | 10.6 | 562 | Leukemia | 8.1 | 425 | Leukemia | 5.5 | 290 |
| Acute Lymphocytic Leukemia | 9.7 | 513 | Acute Lymphocytic Leukemia | 7.3 | 384 | Acute Lymphocytic Leukemia | 4.9 | 256 |
| Brain and ONS ^d | 3.8 | 202 | Brain and ONS ^d | 4.0 | 211 | Brain and ONS ^d | 3.5 | 186 |
| Kidney and Renal Pelvis | 1.9 | 99 | Kidney and Renal Pelvis | 1.0 | 55 | Kidney and Renal Pelvis | 0.9 | 49 |
| Soft Tissue | 1.2 | 61 | Soft Tissue | 1.0 | 50 | Non-Hodgkin Lymphoma | 0.8 | 44 |
| Other Endocrine | 1.0 | 52 | Non-Hodgkin Lymphoma | 0.7 | 37 | Soft Tissue | 0.6 | 32 |
| Age 6 | | | Age 7 | | | Age 8 | | |
| | Rate | Cases | | Rate | Cases | | Rate | Cases |
| All Sites | 11.6 | 614 | All Sites | 10.9 | 590 | All Sites | 10.3 | 564 |
| Leukemia | 4.1 | 216 | Leukemia | 4.0 | 216 | Leukemia | 3.2 | 177 |
| Acute Lymphocytic Leukemia | 3.4 | 183 | Acute Lymphocytic Leukemia | 3.5 | 187 | Acute Lymphocytic Leukemia | 2.6 | 144 |
| Brain and ONS ^d | 3.7 | 194 | Brain and ONS ^d | 3.0 | 160 | Brain and ONS ^d | 3.2 | 174 |
| Non-Hodgkin Lymphoma | 0.8 | 45 | Non-Hodgkin Lymphoma | 0.9 | 47 | Non-Hodgkin Lymphoma | 0.9 | 49 |
| Soft Tissue | 0.6 | 31 | Bones and Joints | 0.5 | 28 | Bones and Joints | 0.6 | 35 |
| Kidney and Renal Pelvis | 0.5 | 29 | Soft Tissue | 0.5 | 27 | Soft Tissue | 0.4 | 23 |
| Age 9 | | | Age 10 | | | Age 11 | | |
| | Rate | Cases | | Rate | Cases | | Rate | Cases |
| All Sites | 9.9 | 553 | All Sites | 10.4 | 588 | All Sites | 11.7 | 670 |
| Leukemia | 3.0 | 167 | Leukemia | 2.6 | 144 | Leukemia | 3.0 | 171 |
| Acute Lymphocytic Leukemia | 2.2 | 122 | Acute Lymphocytic Leukemia | 1.9 | 105 | Acute Lymphocytic Leukemia | 2.3 | 131 |
| Brain and ONS ^d | 2.5 | 139 | Brain and ONS ^d | 2.3 | 128 | Brain and ONS ^d | 2.7 | 152 |
| Non-Hodgkin Lymphoma | 1.1 | 59 | Non-Hodgkin Lymphoma | 1.2 | 66 | Non-Hodgkin Lymphoma | 1.1 | 64 |
| Bones and Joints | 0.7 | 37 | Bones and Joints | 1.0 | 57 | Bones and Joints | 1.1 | 62 |
| Hodgkin Lymphoma | 0.6 | 34 | Soft Tissue | 0.7 | 41 | Hodgkin Lymphoma | 0.9 | 49 |

^a Rates are per 100,000 per year. Cases are for the 17 SEER Areas over the time period 2001-2005.

^b Top 5 cancer sites were determined based on the 2001-2005 age-adjusted rate.

^c Cases are from the 17 SEER 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).

^d ONS = Other Nervous System. IBD = Intrahepatic Bile Duct.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table XXVIII-13 - continued
 AGE-ADJUSTED RATES^a AND COUNTS FOR THE TOP 5 CANCER SITES^b BY SINGLE YEAR OF AGE AT DIAGNOSIS

SEER Cancer Incidence^c 2001-2005

| Age 12 | | | Age 13 | | | Age 14 | | |
|----------------------------|------|-------|----------------------------|------|-------|----------------------------|------|-------|
| | Rate | Cases | | Rate | Cases | | Rate | Cases |
| All Sites | 12.9 | 736 | All Sites | 14.4 | 815 | All Sites | 16.2 | 908 |
| Leukemia | 3.3 | 187 | Leukemia | 2.9 | 164 | Leukemia | 3.3 | 186 |
| Acute Lymphocytic Leukemia | 2.2 | 123 | Acute Lymphocytic Leukemia | 2.0 | 116 | Acute Lymphocytic Leukemia | 2.1 | 119 |
| Brain and ONS ^d | 2.6 | 150 | Brain and ONS ^d | 2.9 | 162 | Brain and ONS ^d | 2.8 | 156 |
| Bones and Joints | 1.5 | 83 | Bones and Joints | 1.6 | 90 | Hodgkin Lymphoma | 1.8 | 102 |
| Non-Hodgkin Lymphoma | 1.2 | 67 | Non-Hodgkin Lymphoma | 1.4 | 81 | Bones and Joints | 1.7 | 95 |
| Hodgkin Lymphoma | 1.0 | 56 | Hodgkin Lymphoma | 1.4 | 78 | Non-Hodgkin Lymphoma | 1.4 | 77 |
| Age 15 | | | Age 16 | | | Age 17 | | |
| | Rate | Cases | | Rate | Cases | | Rate | Cases |
| All Sites | 18.5 | 1020 | All Sites | 19.3 | 1048 | All Sites | 21.6 | 1158 |
| Leukemia | 3.2 | 178 | Leukemia | 3.3 | 181 | Leukemia | 2.9 | 154 |
| Acute Lymphocytic Leukemia | 2.0 | 112 | Acute Lymphocytic Leukemia | 2.0 | 106 | Acute Lymphocytic Leukemia | 1.5 | 82 |
| Hodgkin Lymphoma | 2.3 | 127 | Brain and ONS ^d | 2.4 | 130 | Hodgkin Lymphoma | 2.8 | 151 |
| Brain and ONS ^d | 2.2 | 122 | Hodgkin Lymphoma | 2.3 | 127 | Brain and ONS ^d | 2.2 | 118 |
| Bones and Joints | 1.9 | 105 | Bones and Joints | 2.0 | 108 | Testis | 2.1 | 112 |
| Non-Hodgkin Lymphoma | 1.7 | 92 | Non-Hodgkin Lymphoma | 1.6 | 86 | Non-Hodgkin Lymphoma | 2.0 | 110 |
| Age 18 | | | Age 19 | | | | | |
| | Rate | Cases | | Rate | Cases | | | |
| All Sites | 21.9 | 1183 | All Sites | 25.2 | 1332 | | | |
| Hodgkin Lymphoma | 3.3 | 178 | Hodgkin Lymphoma | 3.9 | 207 | | | |
| Leukemia | 2.6 | 143 | Testis | 3.1 | 163 | | | |
| Acute Lymphocytic Leukemia | 1.4 | 78 | Leukemia | 2.9 | 151 | | | |
| Testis | 2.4 | 130 | Acute Lymphocytic Leukemia | 1.3 | 71 | | | |
| Melanoma of the Skin | 2.3 | 126 | Thyroid | 2.6 | 135 | | | |
| Thyroid | 1.9 | 104 | Melanoma of the Skin | 2.5 | 134 | | | |

^a Rates are per 100,000 per year. Cases are for the 17 SEER Areas over the time period 2001-2005.

^b Top 5 cancer sites were determined based on the 2001-2005 age-adjusted rate.

^c Cases are from the 17 SEER 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).

^d ONS = Other Nervous System. IBD = Intrahepatic Bile Duct.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table XXVIII-14
AGE-ADJUSTED RATES^a AND DEATHS FOR THE TOP 5 CANCER SITES^b BY SINGLE YEAR OF AGE AT DEATH

U.S. Mortality^c 2001-2005

| Age <1 | | | Age 1 | | | Age 2 | | |
|----------------------------|------|--------|----------------------------|------|--------|----------------------------|------|--------|
| | Rate | Deaths | | Rate | Deaths | | Rate | Deaths |
| All Sites | 1.8 | 364 | All Sites | 2.1 | 412 | All Sites | 2.5 | 495 |
| Leukemia | 0.6 | 121 | Leukemia | 0.7 | 147 | Leukemia | 0.9 | 179 |
| Acute Lymphocytic Leukemia | 0.2 | 35 | Acute Lymphocytic Leukemia | 0.2 | 42 | Acute Lymphocytic Leukemia | 0.3 | 63 |
| Brain and ONS ^d | 0.4 | 83 | Brain and ONS ^d | 0.5 | 104 | Brain and ONS ^d | 0.5 | 103 |
| Other Endocrine | 0.2 | 35 | Other Endocrine | 0.3 | 58 | Other Endocrine | 0.5 | 94 |
| Liver & IBD ^d | 0.1 | 23 | Liver & IBD ^d | 0.1 | 29 | Liver & IBD ^d | 0.2 | 32 |
| Soft Tissue | 0.1 | 22 | Soft Tissue | 0.1 | 18 | Soft Tissue | 0.1 | 27 |
| Age 3 | | | Age 4 | | | Age 5 | | |
| | Rate | Deaths | | Rate | Deaths | | Rate | Deaths |
| All Sites | 2.8 | 540 | All Sites | 2.8 | 543 | All Sites | 2.7 | 528 |
| Leukemia | 0.9 | 169 | Brain and ONS ^d | 0.9 | 168 | Brain and ONS ^d | 1.0 | 185 |
| Acute Lymphocytic Leukemia | 0.3 | 61 | Leukemia | 0.7 | 137 | Leukemia | 0.6 | 125 |
| Brain and ONS ^d | 0.7 | 129 | Acute Lymphocytic Leukemia | 0.3 | 53 | Acute Lymphocytic Leukemia | 0.3 | 62 |
| Other Endocrine | 0.6 | 108 | Other Endocrine | 0.5 | 94 | Other Endocrine | 0.5 | 98 |
| Liver & IBD ^d | 0.1 | 27 | Kidney and Renal Pelvis | 0.2 | 36 | Soft Tissue | 0.2 | 42 |
| Soft Tissue | 0.1 | 27 | Soft Tissue | 0.1 | 27 | Kidney and Renal Pelvis | 0.1 | 25 |
| Age 6 | | | Age 7 | | | Age 8 | | |
| | Rate | Deaths | | Rate | Deaths | | Rate | Deaths |
| All Sites | 2.7 | 520 | All Sites | 2.7 | 525 | All Sites | 2.4 | 478 |
| Brain and ONS ^d | 1.0 | 198 | Brain and ONS ^d | 1.0 | 198 | Brain and ONS ^d | 0.8 | 170 |
| Leukemia | 0.7 | 140 | Leukemia | 0.7 | 148 | Leukemia | 0.7 | 142 |
| Acute Lymphocytic Leukemia | 0.4 | 78 | Acute Lymphocytic Leukemia | 0.4 | 75 | Acute Lymphocytic Leukemia | 0.4 | 86 |
| Other Endocrine | 0.4 | 72 | Other Endocrine | 0.4 | 73 | Other Endocrine | 0.3 | 52 |
| Kidney and Renal Pelvis | 0.2 | 36 | Kidney and Renal Pelvis | 0.1 | 29 | Soft Tissue | 0.1 | 23 |
| Soft Tissue | 0.1 | 19 | Soft Tissue | 0.1 | 22 | Non-Hodgkin Lymphoma | 0.1 | 22 |
| Age 9 | | | Age 10 | | | Age 11 | | |
| | Rate | Deaths | | Rate | Deaths | | Rate | Deaths |
| All Sites | 2.5 | 506 | All Sites | 2.4 | 492 | All Sites | 2.1 | 443 |
| Leukemia | 0.9 | 183 | Brain and ONS ^d | 0.8 | 162 | Leukemia | 0.6 | 133 |
| Acute Lymphocytic Leukemia | 0.5 | 99 | Leukemia | 0.7 | 150 | Acute Lymphocytic Leukemia | 0.3 | 69 |
| Brain and ONS ^d | 0.8 | 170 | Acute Lymphocytic Leukemia | 0.4 | 93 | Brain and ONS ^d | 0.6 | 129 |
| Other Endocrine | 0.2 | 45 | Bones and Joints | 0.2 | 41 | Bones and Joints | 0.2 | 46 |
| Bones and Joints | 0.1 | 26 | Other Endocrine | 0.2 | 40 | Soft Tissue | 0.2 | 37 |
| Soft Tissue | 0.1 | 23 | Soft Tissue | 0.2 | 32 | Other Endocrine | 0.1 | 28 |

^a Rates are per 100,000 per year. Deaths are for the entire United States over the time period 2001-2005.

^b Top 5 cancer sites were determined based on the 2001-2005 age-adjusted rate.

^c US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^d ONS = Other Nervous System. IBD = Intrahepatic Bile Duct.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table XXVIII-14 - continued
AGE-ADJUSTED RATES^a AND DEATHS FOR THE TOP 5 CANCER SITES^b BY SINGLE YEAR OF AGE AT DEATH

U.S. Mortality^c 2001-2005

| <u>Age 12</u> | | | <u>Age 13</u> | | | <u>Age 14</u> | | |
|----------------------------|-------------|---------------|----------------------------|-------------|---------------|----------------------------|-------------|---------------|
| | <u>Rate</u> | <u>Deaths</u> | | <u>Rate</u> | <u>Deaths</u> | | <u>Rate</u> | <u>Deaths</u> |
| All Sites | 2.3 | 498 | All Sites | 2.7 | 582 | All Sites | 2.9 | 603 |
| Leukemia | 0.8 | 179 | Leukemia | 0.9 | 184 | Leukemia | 0.9 | 184 |
| Acute Lymphocytic Leukemia | 0.4 | 87 | Acute Lymphocytic Leukemia | 0.4 | 82 | Acute Lymphocytic Leukemia | 0.4 | 76 |
| Brain and ONS ^d | 0.6 | 134 | Brain and ONS ^d | 0.7 | 139 | Brain and ONS ^d | 0.7 | 137 |
| Bones and Joints | 0.3 | 59 | Bones and Joints | 0.4 | 78 | Bones and Joints | 0.5 | 97 |
| Non-Hodgkin Lymphoma | 0.1 | 30 | Soft Tissue | 0.2 | 48 | Soft Tissue | 0.2 | 52 |
| Other Endocrine | 0.1 | 23 | Non-Hodgkin Lymphoma | 0.2 | 33 | Non-Hodgkin Lymphoma | 0.1 | 30 |
| <u>Age 15</u> | | | <u>Age 16</u> | | | <u>Age 17</u> | | |
| | <u>Rate</u> | <u>Deaths</u> | | <u>Rate</u> | <u>Deaths</u> | | <u>Rate</u> | <u>Deaths</u> |
| All Sites | 2.8 | 586 | All Sites | 3.3 | 679 | All Sites | 3.4 | 690 |
| Leukemia | 0.9 | 194 | Leukemia | 1.0 | 209 | Leukemia | 1.0 | 211 |
| Acute Lymphocytic Leukemia | 0.4 | 85 | Acute Lymphocytic Leukemia | 0.5 | 94 | Acute Lymphocytic Leukemia | 0.5 | 94 |
| Brain and ONS ^d | 0.6 | 115 | Bones and Joints | 0.5 | 113 | Brain and ONS ^d | 0.5 | 109 |
| Bones and Joints | 0.4 | 74 | Brain and ONS ^d | 0.5 | 111 | Bones and Joints | 0.5 | 108 |
| Soft Tissue | 0.3 | 55 | Soft Tissue | 0.3 | 64 | Soft Tissue | 0.3 | 67 |
| Non-Hodgkin Lymphoma | 0.2 | 46 | Non-Hodgkin Lymphoma | 0.2 | 36 | Non-Hodgkin Lymphoma | 0.2 | 43 |
| <u>Age 18</u> | | | <u>Age 19</u> | | | | | |
| | <u>Rate</u> | <u>Deaths</u> | | <u>Rate</u> | <u>Deaths</u> | | | |
| All Sites | 3.9 | 797 | All Sites | 4.2 | 855 | | | |
| Leukemia | 1.1 | 219 | Leukemia | 1.2 | 245 | | | |
| Acute Lymphocytic Leukemia | 0.4 | 84 | Acute Lymphocytic Leukemia | 0.5 | 108 | | | |
| Brain and ONS ^d | 0.6 | 114 | Bones and Joints | 0.7 | 136 | | | |
| Bones and Joints | 0.5 | 106 | Brain and ONS ^d | 0.5 | 109 | | | |
| Soft Tissue | 0.4 | 76 | Soft Tissue | 0.3 | 71 | | | |
| Non-Hodgkin Lymphoma | 0.4 | 74 | Non-Hodgkin Lymphoma | 0.3 | 62 | | | |

^a Rates are per 100,000 per year. Deaths are for the entire United States over the time period 2001-2005.

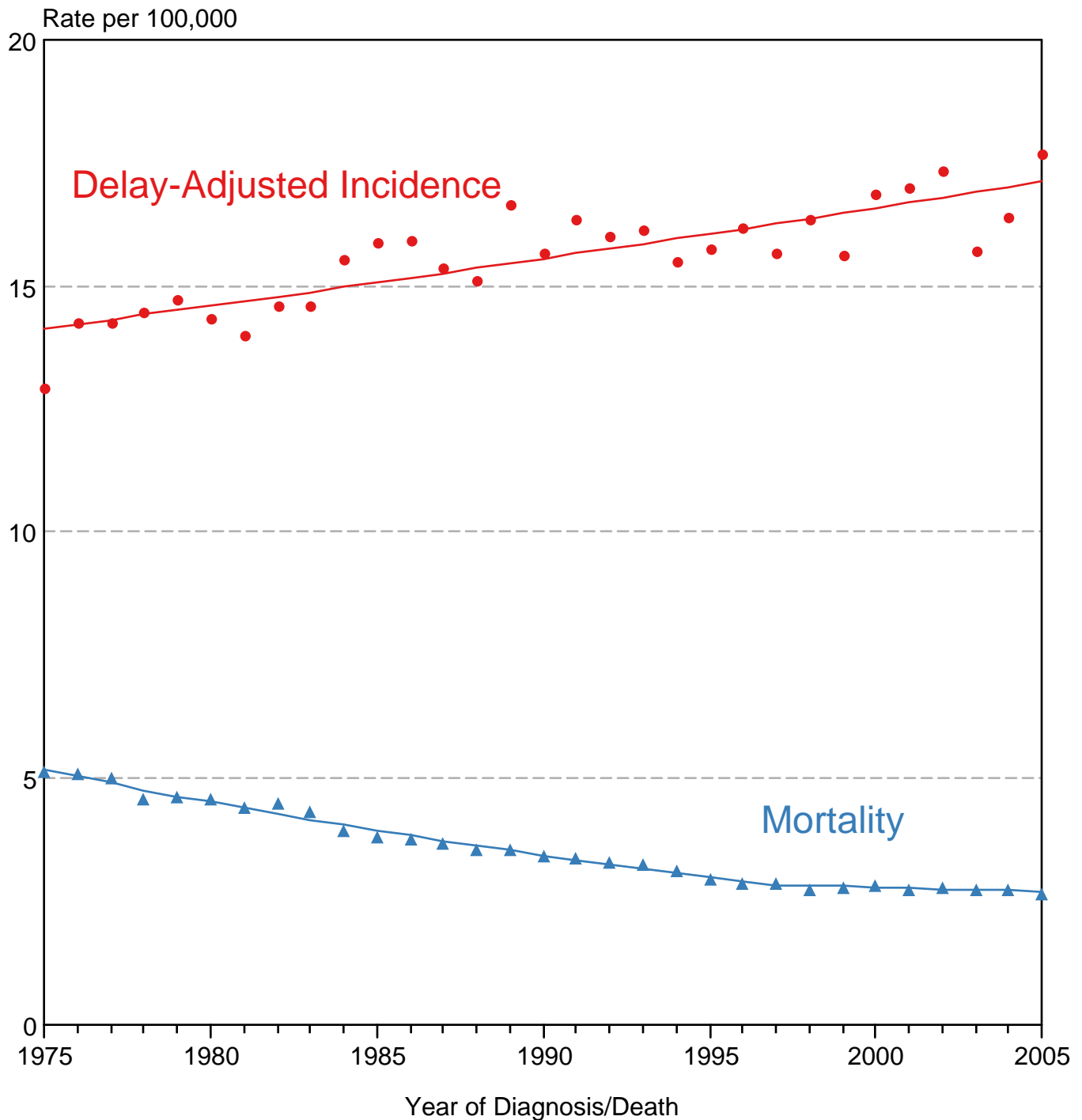
^b Top 5 cancer sites were determined based on the 2001-2005 age-adjusted rate.

^c US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^d ONS = Other Nervous System. IBD = Intrahepatic Bile Duct.

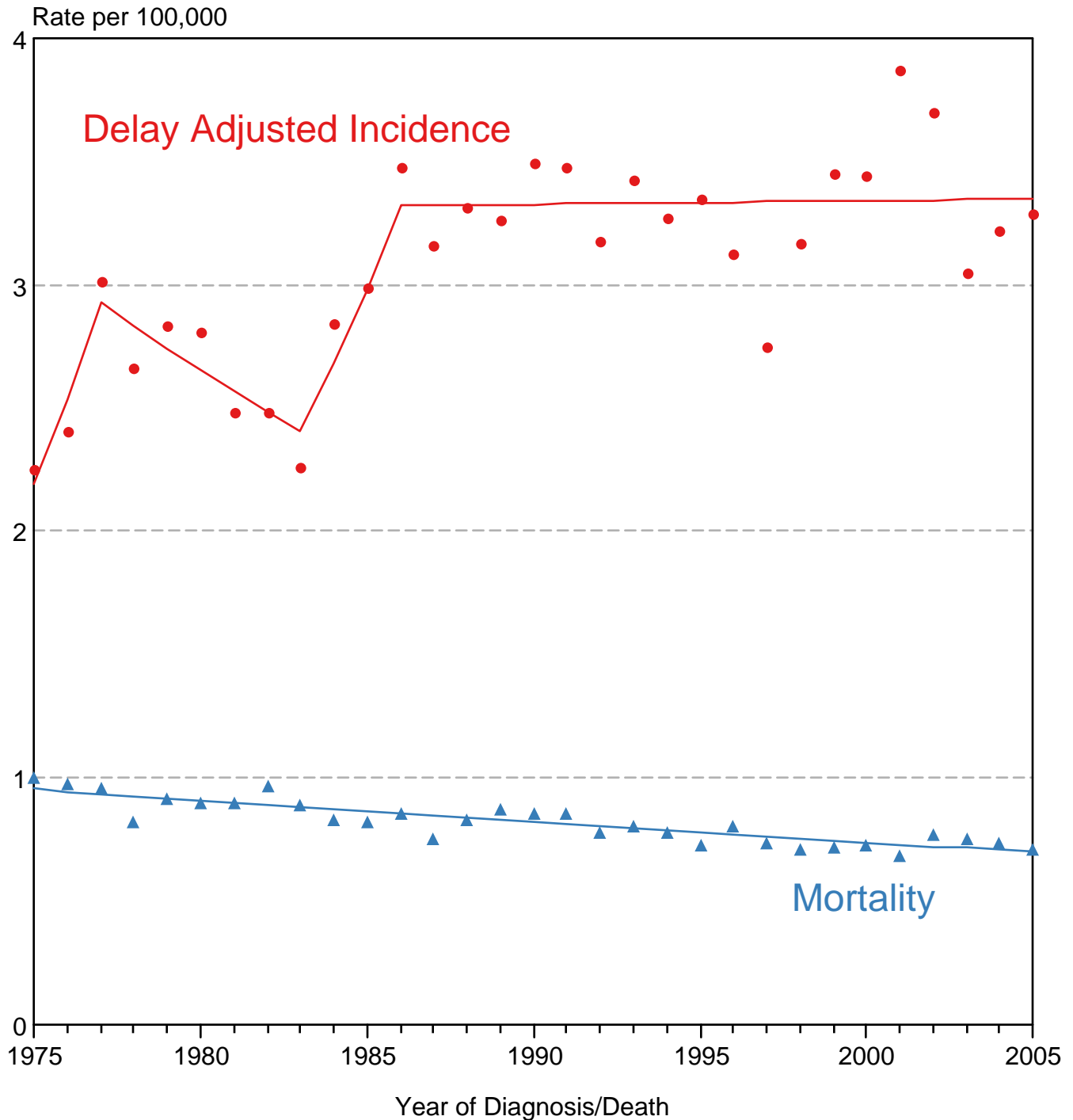
- Statistic not shown. Rate based on less than 16 cases for the time interval.

SEER Delay-Adjusted Incidence and US Mortality All Childhood Cancers, Under 20 Years of Age Both Sexes, All Races, 1975-2005



Source: SEER 9 areas and US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.3, April 2008, National Cancer Institute.

SEER Delay-Adjusted Incidence and US Mortality Brain and CNS, Under 15 Years of Age Both Sexes, All Races, 1975-2005



Source: SEER 9 areas and US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.3, April 2008, National Cancer Institute.

SEER Incidence and US Death Rates^a All Cancer Sites, Ages <20, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2005 and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2005

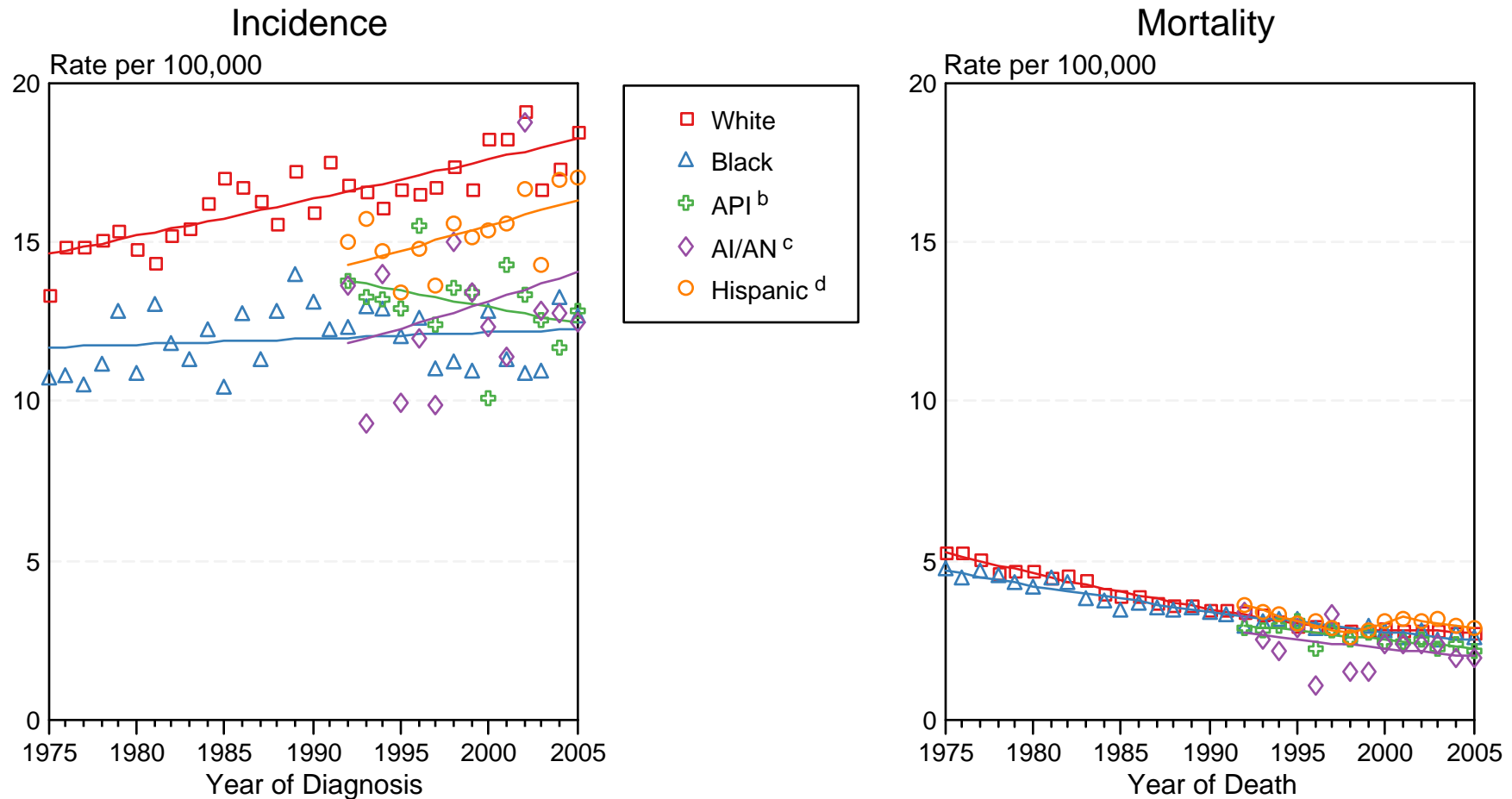


Figure XXVIII-3

Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 3.3.1, April 2008, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2005 period allow a maximum of 4 joinpoints. Analyses for other ethnic groups during the period 1992-2005 allow a maximum of 3 joinpoints.

^b API = Asian/Pacific Islander.

^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.