

Table 28.9

Childhood Cancer  
SEER Incidence Rates, U.S. Death Rates and 5-Year Relative Survival Percentages  
For Top Cancer Sites<sup>f</sup> By 5-Year Age Groups  
All Races, Males and Females

| Age/Site                     | SEER Incidence <sup>a</sup> |                   |                  |                  |                    | US Mortality <sup>b</sup> |                   |                  |                  |                    | 5-year Relative Survival <sup>a</sup> |                   |
|------------------------------|-----------------------------|-------------------|------------------|------------------|--------------------|---------------------------|-------------------|------------------|------------------|--------------------|---------------------------------------|-------------------|
|                              | 2003-2007<br>Num Cases      | 2003-2007<br>Rate | 1975-2007<br>APC | 1975-1991<br>APC | 1992-2007<br>APC   | 2003-2007<br>Num Deaths   | 2003-2007<br>Rate | 1975-2007<br>APC | 1975-1991<br>APC | 1992-2007<br>APC   | 1975-1977                             | 1999-2006         |
| <b>Ages 0-4</b>              |                             |                   |                  |                  |                    |                           |                   |                  |                  |                    |                                       |                   |
| All Sites                    | 5,765                       | 21.2              | 0.7*             | 1.3*             | 0.2 <sup>#</sup>   | 2,281                     | 2.3               | -2.7*            | -2.9*            | -2.2* <sup>#</sup> | 57.3                                  | 82.3 <sup>c</sup> |
| Soft tissue                  | 433                         | 1.6               | 1.2*             | 1.3              | 3.6*               | 118                       | 0.1               | -2.0*            | -1.3             | -1.5               | 61.2 <sup>d</sup>                     | 82.9 <sup>c</sup> |
| Kidney and Renal pelvis      | 451                         | 1.7               | -0.4             | 0.2              | -2.5* <sup>@</sup> | 85                        | 0.1               | -3.7*            | -6.2*            | -1.8 <sup>#</sup>  | 71.9                                  | 91.4 <sup>c</sup> |
| Eye and Orbit                | 355                         | 1.3               | 0.4              | 1.2              | -1.4               | 26                        | 0.0               | -                | -                | -                  | 87.2 <sup>d</sup>                     | 95.9 <sup>c</sup> |
| Brain and Other nervous      | 1,056                       | 3.9               | 1.1*             | 3.2*             | 0.3 <sup>#</sup>   | 586                       | 0.6               | -1.4*            | -1.2*            | -2.2* <sup>@</sup> | 52.5                                  | 72.7 <sup>c</sup> |
| Other endocrine <sup>g</sup> | 370                         | 1.4               | -                | -                | -                  | 376                       | 0.4               | -                | -                | -                  | 35.7 <sup>d</sup>                     | 67.3 <sup>c</sup> |
| Leukemia                     | 2,227                       | 8.2               | 0.8*             | 1.2*             | 1.0                | 730                       | 0.7               | -3.1*            | -3.9*            | -2.6* <sup>#</sup> | 55.4                                  | 85.7 <sup>c</sup> |
| Acute lymphocytic            | 1,799                       | 6.7               | 0.8*             | 1.5*             | 1.0                | 264                       | 0.3               | -4.3*            | -5.8*            | -1.9* <sup>#</sup> | 63.2                                  | 90.8 <sup>c</sup> |
| <b>Ages 5-9</b>              |                             |                   |                  |                  |                    |                           |                   |                  |                  |                    |                                       |                   |
| All Sites                    | 2,977                       | 11.3              | 0.2              | 1.2*             | 0.6                | 2,466                     | 2.5               | -2.7*            | -3.3*            | -1.3* <sup>#</sup> | 58.5                                  | 80.0 <sup>c</sup> |
| Brain and Other nervous      | 813                         | 3.1               | 0.3              | 1.5              | -0.1               | 897                       | 0.9               | -0.6*            | -0.4             | 0.1                | 58.0                                  | 71.1 <sup>c</sup> |
| Leukemia                     | 1,045                       | 4.0               | 0.4              | 2.0*             | 0.3 <sup>@</sup>   | 680                       | 0.7               | -4.8*            | -5.6*            | -3.6* <sup>#</sup> | 52.3                                  | 87.6 <sup>c</sup> |
| Acute lymphocytic            | 893                         | 3.4               | 0.6*             | 2.4*             | 0.3 <sup>@</sup>   | 371                       | 0.4               | -5.4*            | -6.7*            | -3.4* <sup>#</sup> | 55.6                                  | 90.7 <sup>c</sup> |
| <b>Ages 10-14</b>            |                             |                   |                  |                  |                    |                           |                   |                  |                  |                    |                                       |                   |
| All Sites                    | 3,682                       | 13.2              | 0.7*             | 1.1*             | 0.5                | 2,495                     | 2.4               | -2.1*            | -2.5*            | -1.2* <sup>#</sup> | 58.9                                  | 81.6 <sup>c</sup> |
| Bone and Joint               | 359                         | 1.3               | -0.1             | 2.0*             | -1.1 <sup>#</sup>  | 273                       | 0.3               | -1.4*            | -3.1*            | 0.0 <sup>#</sup>   | 52.8 <sup>d</sup>                     | 71.7 <sup>c</sup> |
| Brain and Other nervous      | 705                         | 2.5               | 1.0*             | 1.7              | -0.3 <sup>@</sup>  | 695                       | 0.7               | -1.1*            | -1.5*            | -0.2 <sup>@</sup>  | 59.5                                  | 80.5 <sup>c</sup> |
| Hodgkin lymphoma             | 338                         | 1.2               | -0.9*            | -0.4             | -0.8               | 22                        | 0.0               | -                | -                | -                  | 78.7                                  | 97.4 <sup>c</sup> |
| Leukemia                     | 869                         | 3.1               | 0.6              | 1.5              | 1.1                | 819                       | 0.8               | -2.9*            | -3.2*            | -2.6* <sup>#</sup> | 35.2                                  | 74.1 <sup>c</sup> |
| Acute lymphocytic            | 603                         | 2.2               | 1.0*             | 2.6              | 1.4                | 387                       | 0.4               | -3.4*            | -3.2*            | -2.9* <sup>#</sup> | 43.6 <sup>d</sup>                     | 81.6 <sup>c</sup> |
| <b>Ages 15-19</b>            |                             |                   |                  |                  |                    |                           |                   |                  |                  |                    |                                       |                   |
| All Sites                    | 5,833                       | 21.2              | 0.6*             | 0.9*             | 0.3                | 3,500                     | 3.3               | -1.9*            | -2.3*            | -1.6* <sup>#</sup> | 67.8                                  | 81.3 <sup>c</sup> |
| Bone and Joint               | 398                         | 1.4               | 0.2              | 0.4              | -1.0               | 568                       | 0.5               | -1.1*            | -2.9*            | 0.1 <sup>#</sup>   | 51.0 <sup>d</sup>                     | 66.7 <sup>c</sup> |
| Melanoma of the skin         | 435                         | 1.6               | 1.5*             | 2.5              | 1.5                | 44                        | 0.0               | -                | -                | -                  | 76.2 <sup>d</sup>                     | 98.9 <sup>c</sup> |
| Testis(males)                | 498                         | 3.5               | 1.4*             | 1.7              | 1.3                | 42                        | 0.1               | -                | -                | -                  | 65.4 <sup>d</sup>                     | 94.7 <sup>c</sup> |
| Brain and Other nervous      | 589                         | 2.1               | 0.3              | 1.0              | -1.2               | 543                       | 0.5               | -1.2*            | -1.2*            | -1.5*              | 65.0                                  | 76.5 <sup>c</sup> |
| Thyroid                      | 519                         | 1.9               | 1.2*             | 0.9              | 1.1                | -                         | -                 | -                | -                | -                  | 100.0                                 | 98.1              |
| Hodgkin lymphoma             | 798                         | 2.9               | -0.9*            | 0.1              | -1.7 <sup>@</sup>  | 78                        | 0.1               | -4.6*            | -3.3*            | -4.8*              | 88.9                                  | 96.2 <sup>c</sup> |
| Non-Hodgkin lymphoma         | 504                         | 1.8               | 1.7*             | 2.9*             | 1.3                | 248                       | 0.2               | -2.8*            | -2.4*            | -3.5*              | 46.9 <sup>d</sup>                     | 80.0 <sup>c</sup> |
| Leukemia                     | 848                         | 3.1               | 1.1*             | 0.3              | 2.4* <sup>@</sup>  | 1,025                     | 1.0               | -2.1*            | -1.9*            | -1.9*              | 24.4                                  | 57.5 <sup>c</sup> |
| Acute lymphocytic            | 485                         | 1.8               | 1.5*             | 2.0              | 4.1*               | 428                       | 0.4               | -2.1*            | -1.2             | -1.7*              | 29.5 <sup>d</sup>                     | 60.7 <sup>c</sup> |

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).

<sup>a</sup> 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).

<sup>b</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

<sup>c</sup> The difference between 1975-1977 and 1999-2006 is statistically significant ( $p < .05$ ).

<sup>d</sup> The standard error is between 5 and 10 percentage points.

<sup>e</sup> The standard error is greater than 10 percentage points.

<sup>f</sup> Sites were chosen based on more than 100 SEER incident cases between 2003-2007.

<sup>g</sup> APCs suppressed because of inconsistent classification across ICD: ICD-8 (1975-1978), ICD-9 (1979-1998), ICD-10 (1999-2007).

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

# The APC for 1992-2007 is significantly different from the APC for 1975-1991 ( $p < .05$ ).

@ The APC for 1992-2007 is significantly different from the APC for 1975-1991 ( $p < .10$ ).

- Statistic not shown. Age-adjusted 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. Survival rate based on less than 25 cases for the time interval.