

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.

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 TRENDS, 1975-2002, 1975-1988, 1989-2002^a

By Primary Cancer Site

All Races, Males and Females

Site	Ages 0-14				Ages 0-19			
	% Change 1975-2002	APC 1975-2002	APC 1975-1988	APC 1989-2002	% Change 1975-2002	APC 1975-2002	APC 1975-1988	APC 1989-2002
All Sites								
All Races	27.1	0.7 ^b	1.1 ^b	0.3 ^d	28.7	0.6 ^b	1.1 ^b	0.2 ^c
Whites	31.8	0.8 ^b	1.1 ^b	0.7 ^b	38.0	0.8 ^b	1.2 ^b	0.7 ^b
Blacks	24.9	0.2	1.2	-1.5 ^{bc}	-2.2	0.1	0.8	-1.5 ^{bc}
Bone & Joint	47.6	0.3	2.1	-0.4	37.1	0.4	1.8 ^b	0.1
Brain & Other nervous	56.5	1.2 ^b	2.1 ^b	0.4 ^d	49.2	1.1 ^b	2.0 ^b	0.1 ^c
Hodgkin lymphoma	-36.5	-1.2 ^b	-1.5	-1.8	-23.8	-0.9 ^b	-0.5	-2.1 ^{bd}
Kidney & Renal pelvis	33.2	0.2	0.3	-0.6	31.3	0.3	0.3	-0.6
Leukemia	37.1	0.7 ^b	1.3 ^b	0.2	40.5	0.7 ^b	1.0 ^b	0.4
Acute lymphocytic	68.7	0.9 ^b	1.8 ^b	0.3 ^d	71.0	0.9 ^b	1.8 ^b	0.4 ^d
Non-Hodgkin lymphoma	-6.6	0.4	0.3	1.8 ^b	16.5	0.9 ^b	1.3 ^b	1.2
Soft tissue	11.1	1.2 ^b	0.3	1.9	17.0	1.2 ^b	1.1	2.1

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

^b SEER 9 areas.

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

^d The APC for 1989-2002 is significantly different from the APC for 1975-1988 (p<.05).

^e The APC for 1989-2002 is significantly different from the APC for 1975-1988 (p<.10).

- Statistic could not be calculated.

Table XXVIII-2

AGE-ADJUSTED CANCER U.S. MORTALITY TRENDS, 1975-2002, 1975-1988, 1989-2002^a

By Race and Primary Cancer Site

Males and Females

Site	Ages 0-14				Ages 0-19			
	% Change 1975-2002	APC 1975-2002	APC 1975-1988	APC 1989-2002	% Change 1975-2002	APC 1975-2002	APC 1975-1988	APC 1989-2002
<u>All Races</u>								
All Sites	-47.7	-2.7 ^b	-3.0 ^b	-2.2 ^{bc}	-45.5	-2.5 ^b	-2.8 ^b	-2.0 ^{bc}
Bone & Joint	-37.2	-2.0 ^b	-3.5 ^b	0.6 ^c	-36.3	-1.7 ^b	-3.1 ^b	0.4 ^c
Brain & Other nervous	-23.1	-1.1 ^b	-1.5 ^b	-1.5 ^b	-23.6	-1.1 ^b	-1.4 ^b	-1.4 ^b
Hodgkin lymphoma	-74.8	-4.9 ^b	-5.2 ^b	-3.5	-66.8	-4.4 ^b	-3.5 ^b	-3.8 ^b
Kidney & Renal pelvis	-60.8	-3.1 ^b	-3.7 ^b	-1.3 ^c	-57.7	-2.9 ^b	-3.6 ^b	-1.2 ^c
Leukemia	-66.1	-3.9 ^b	-4.4 ^b	-3.5 ^{bc}	-58.8	-3.4 ^b	-3.9 ^b	-3.1 ^{bc}
Acute lymphocytic	-69.1	-4.9 ^b	-5.2 ^b	-3.9 ^{bc}	-61.7	-4.2 ^b	-4.4 ^b	-3.3 ^{bc}
Non-Hodgkin lymphoma	-66.2	-5.0 ^b	-4.6 ^b	-5.6 ^b	-67.1	-4.1 ^b	-3.8 ^b	-4.7 ^b
Soft tissue	17.1	-1.3 ^b	0.6	-1.6	9.6	-0.6 ^b	0.8	-1.6 ^{bc}
<u>Whites</u>								
All Sites	-48.6	-2.8 ^b	-3.0 ^b	-2.3 ^{bc}	-46.3	-2.5 ^b	-2.8 ^b	-2.1 ^{bc}
Bone & Joint	-30.9	-1.8 ^b	-2.9 ^b	0.5 ^c	-29.8	-1.6 ^b	-2.7 ^b	0.3 ^c
Brain & Other nervous	-25.9	-1.1 ^b	-1.4 ^b	-1.6 ^b	-25.6	-1.1 ^b	-1.3 ^b	-1.6 ^b
Hodgkin lymphoma	-70.5	-5.5 ^b	-5.7 ^b	-2.7	-67.2	-4.6 ^b	-3.9 ^b	-4.0 ^b
Kidney & Renal pelvis	-57.6	-3.1 ^b	-4.0 ^b	-2.0 ^b	-53.3	-2.9 ^b	-3.5 ^b	-1.8 ^b
Leukemia	-66.9	-4.0 ^b	-4.6 ^b	-3.5 ^{bc}	-59.6	-3.5 ^b	-4.1 ^b	-3.0 ^{bc}
Acute lymphocytic	-68.2	-4.8 ^b	-5.6 ^b	-3.6 ^{bc}	-61.1	-4.2 ^b	-4.7 ^b	-3.2 ^{bc}
Non-Hodgkin lymphoma	-63.8	-4.9 ^b	-4.3 ^b	-6.0 ^b	-68.9	-4.1 ^b	-3.6 ^b	-5.3 ^{bc}
Soft tissue	21.0	-1.3 ^b	0.7	-1.5	14.6	-0.6 ^b	1.0	-1.5 ^{bc}
<u>Blacks</u>								
All Sites	-42.5	-2.5 ^b	-2.6 ^b	-2.0 ^b	-40.1	-2.2 ^b	-2.5 ^b	-1.8 ^b
Bone & Joint	-51.6	-2.2 ^b	-6.1 ^b	1.0 ^c	-54.2	-2.0 ^b	-5.4 ^b	1.4 ^c
Brain & Other nervous	-9.8	-1.1 ^b	-1.3	-0.6	-12.5	-1.1 ^b	-1.1	-0.7
Hodgkin lymphoma	-80.8	-	-4.4	-	-66.6	-3.3 ^b	-1.3	-4.0
Kidney & Renal pelvis	-64.6	-2.9 ^b	-2.5	0.4	-66.1	-2.6 ^b	-3.4 ^b	0.2
Leukemia	-62.5	-3.5 ^b	-3.4 ^b	-3.1 ^b	-55.4	-2.8 ^b	-2.7 ^b	-3.2 ^b
Acute lymphocytic	-75.2	-4.7 ^b	-2.6 ^b	-5.2 ^b	-65.5	-3.7 ^b	-2.0 ^b	-4.3 ^{bd}
Non-Hodgkin lymphoma	-73.4	-5.0 ^b	-6.9 ^b	-2.7	-59.8	-3.6 ^b	-5.2 ^b	-1.5 ^d
Soft tissue	-2.4	-1.4	1.0	-2.9	-9.2	-0.7	0.9	-1.7

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

^a NCHS public use data file for the total US.^b The APC is significantly different from zero (p<.05).^c The APC for 1989-2002 is significantly different from the APC for 1975-1988 (p<.05).^d The APC for 1989-2002 is significantly different from the APC for 1975-1988 (p<.10).

- Statistic could not be calculated.

Table XXVIII-3

AGE-ADJUSTED SEER CANCER INCIDENCE RATES^a, 1975-2002

By Primary Cancer Site

All Races, Males and Females

Year of Diagnosis

Age/Site	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<u>Ages 0-14</u>																				
All Sites																				
All Races	11.5	12.9	14.5	14.3	14.2	13.5	15.1	14.2	15.1	13.4	14.9	13.9	14.0	14.7	14.0	15.3	14.3	15.3	15.5	14.6
Whites	12.0	13.1	15.6	14.9	14.7	14.0	15.5	14.3	16.1	13.9	15.2	14.4	14.8	14.8	14.8	16.2	15.3	16.6	16.6	15.9
Blacks	8.6	11.1	10.1	10.9	11.6	11.9	13.7	12.3	11.6	12.0	12.5	12.2	11.4	11.3	11.2	9.9	10.3	11.8	10.7	10.7
Bone & Joint	0.5	0.7	0.8	0.7	0.7	0.6	0.6	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
Brain & Other nervous	2.3	2.8	3.0	3.5	3.1	3.3	3.2	3.5	3.5	3.2	3.4	3.3	3.3	3.1	2.7	3.1	3.4	3.5	3.8	3.5
Hodgkin lymphoma	0.7	0.5	0.7	0.5	0.6	0.6	0.7	0.6	0.6	0.5	0.6	0.5	0.3	0.6	0.6	0.6	0.4	0.6	0.5	0.4
Kidney & Renal pelvis	0.7	0.8	0.9	0.9	0.9	0.8	1.1	0.8	0.9	0.7	1.0	1.2	0.6	1.0	1.0	1.1	0.7	1.0	0.8	0.9
Leukemia	3.3	4.0	4.6	4.1	4.4	4.1	4.8	4.4	4.6	4.0	4.2	3.7	4.4	4.6	4.2	4.8	4.6	4.6	4.3	4.5
Acute lymphocytic	2.2	3.1	3.5	3.3	3.4	3.3	4.0	3.4	3.5	3.1	3.1	2.9	3.6	3.5	3.5	3.9	3.5	3.5	3.4	3.7
Non-Hodgkin lymphoma	1.0	0.7	0.7	1.0	1.1	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
Soft tissue	0.9	0.9	0.9	0.9	0.8	0.6	0.9	0.7	1.1	0.7	0.6	0.9	0.9	1.1	1.0	1.1	0.9	1.0	1.1	0.9
<u>Ages 0-19</u>																				
All Sites																				
All Races	12.9	14.4	15.9	15.9	15.4	15.1	16.6	15.6	16.3	16.0	16.2	15.5	15.7	16.1	15.6	16.3	15.5	16.8	16.8	16.6
Whites	13.4	14.8	17.1	16.6	16.3	15.7	17.2	15.9	17.5	16.8	16.6	16.1	16.6	16.4	16.8	17.4	16.6	18.2	18.2	18.4
Blacks	10.8	11.0	10.6	12.6	11.3	12.9	14.0	13.2	12.3	12.3	13.1	13.0	12.1	12.5	11.1	11.4	10.9	12.8	11.2	10.5
Bone & Joint	0.7	0.9	1.0	0.9	1.0	0.8	0.9	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
Brain & Other nervous	2.1	2.5	2.7	3.2	2.9	3.0	3.0	3.2	3.1	3.3	3.0	2.9	3.0	3.0	2.5	2.7	3.0	3.1	3.3	3.2
Hodgkin lymphoma	1.5	1.2	1.4	1.3	1.4	1.3	1.7	1.3	1.4	1.4	1.3	1.3	0.9	1.4	1.3	1.4	1.1	1.1	1.1	1.1
Kidney & Renal pelvis	0.5	0.6	0.7	0.7	0.7	0.6	0.9	0.6	0.7	0.6	0.8	0.9	0.5	0.7	0.8	0.8	0.6	0.8	0.6	0.7
Leukemia	3.0	3.5	4.0	3.7	3.7	3.6	4.2	3.8	4.1	3.7	3.7	3.4	3.9	3.9	3.7	4.1	4.0	4.1	3.9	4.2
Acute lymphocytic	1.9	2.5	2.9	2.8	2.7	2.7	3.4	2.9	3.0	2.6	2.6	2.5	3.1	2.9	2.9	3.3	2.9	3.0	2.8	3.3
Non-Hodgkin lymphoma	1.0	0.9	1.0	1.1	1.0	1.0	1.0	1.0	1.1	1.0	0.9	1.2	1.1	1.0	1.1	1.1	0.9	1.4	1.1	1.2
Soft tissue	0.8	0.9	0.9	0.9	0.9	0.7	0.9	0.8	1.1	0.7	0.7	0.7	1.1	1.0	1.1	1.1	1.0	1.2	1.1	0.9

^a SEER 9 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Table XXVIII-4

AGE-ADJUSTED CANCER U.S. DEATH RATES^a, 1975-2002

By Primary Cancer Site

All Races, Males and Females

Year of Death

Age/Site	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<u>Ages 0-14</u>																				
All Sites	4.9	4.3	3.6	3.5	3.4	3.3	3.3	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
Bone & Joint	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	0.1	0.1	0.1	0.1
Brain & Other nervous	1.0	0.9	0.8	0.9	0.7	0.8	0.9	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
Hodgkin lymphoma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.1
Leukemia	2.1	1.7	1.4	1.3	1.3	1.2	1.2	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
Acute lymphocytic	1.2	0.9	0.8	0.6	0.6	0.6	0.6	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
Non-Hodgkin lymphoma	0.4	0.3	0.2	0.2	0.2	0.2	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
Soft tissue	0.1	0.2	0.1	0.2	0.2	0.2	0.2	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
<u>Ages 0-19</u>																				
All Sites	5.1	4.6	3.8	3.8	3.7	3.6	3.5	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
Bone & Joint	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
Brain & Other nervous	0.9	0.8	0.8	0.8	0.7	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
Hodgkin lymphoma	0.1	0.1	0.1	0.1	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
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	0.1
Leukemia	2.0	1.8	1.4	1.3	1.3	1.2	1.2	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
Acute lymphocytic	1.0	0.9	0.7	0.6	0.6	0.6	0.6	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
Non-Hodgkin lymphoma	0.4	0.3	0.2	0.3	0.2	0.2	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
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	0.2

^a NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Table XXVIII-5

AGE-ADJUSTED CANCER U.S. DEATH RATES^a, 1975-2002

By Primary Cancer Site

Whites, Males and Females

Year of Death

Age/Site	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<u>Ages 0-14</u>																				
All Sites	5.0	4.4	3.7	3.6	3.6	3.3	3.4	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
Bone & Joint	0.2	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	0.1	0.1	0.2	0.1	0.1
Brain & Other nervous	1.0	0.9	0.9	0.9	0.8	0.8	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
Hodgkin lymphoma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.1
Leukemia	2.3	1.8	1.4	1.4	1.4	1.2	1.2	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
Acute lymphocytic	1.2	1.0	0.8	0.7	0.7	0.6	0.6	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
Non-Hodgkin lymphoma	0.3	0.3	0.2	0.2	0.2	0.2	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
Soft tissue	0.1	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	0.2	0.1	0.1	0.1	0.1	0.2
<u>Ages 0-19</u>																				
All Sites	5.3	4.7	3.9	3.9	3.7	3.6	3.6	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
Bone & Joint	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2
Brain & Other nervous	0.9	0.8	0.8	0.8	0.7	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
Hodgkin lymphoma	0.1	0.1	0.1	0.1	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
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	0.1
Leukemia	2.1	1.8	1.4	1.4	1.4	1.3	1.2	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
Acute lymphocytic	1.1	1.0	0.7	0.7	0.7	0.6	0.6	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
Non-Hodgkin lymphoma	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	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	0.2

^a NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Table XXVIII-6

AGE-ADJUSTED CANCER U.S. DEATH RATES^a, 1975-2002

By Primary Cancer Site

Blacks, Males and Females

Year of Death

Age/Site	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<u>Ages 0-14</u>																				
All Sites	4.5	3.8	3.3	3.5	3.0	3.2	3.2	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
Bone & Joint	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Brain & Other nervous	0.9	0.9	0.6	0.9	0.7	1.0	0.8	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
Hodgkin lymphoma	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kidney & Renal pelvis	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
Leukemia	1.6	1.2	1.2	1.1	1.0	0.9	1.0	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
Acute lymphocytic	0.8	0.6	0.7	0.6	0.5	0.4	0.5	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
Non-Hodgkin lymphoma	0.4	0.2	0.2	0.3	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1
Soft tissue	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.3	0.1	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2
<u>Ages 0-19</u>																				
All Sites	4.8	4.2	3.5	3.7	3.6	3.5	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
Bone & Joint	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.2	0.3	0.2	0.2
Brain & Other nervous	0.9	0.8	0.6	0.8	0.7	0.9	0.7	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
Hodgkin lymphoma	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Kidney & Renal pelvis	0.2	0.1	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	0.2	0.1
Leukemia	1.6	1.4	1.1	1.2	1.2	1.0	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
Acute lymphocytic	0.7	0.6	0.6	0.6	0.5	0.5	0.5	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
Non-Hodgkin lymphoma	0.4	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.2
Soft tissue	0.2	0.2	0.2	0.2	0.3	0.3	0.3	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

^a NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Table XXVIII-7

AGE-ADJUSTED SEER CANCER INCIDENCE^a AND U.S. DEATH^b RATES, 1998-2002

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	15.0	15.6	14.3	2.5	2.7	2.3	16.4	17.1	15.7	2.8	3.1	2.5
Whites	16.1	16.7	15.5	2.5	2.7	2.4	17.7	18.4	17.1	2.8	3.1	2.5
Blacks	10.7	10.7	10.6	2.4	2.6	2.2	11.3	11.5	11.1	2.8	3.1	2.4
Bone & Joint	0.6	0.6	0.6	0.1	0.1	0.1	0.8	1.0	0.7	0.2	0.3	0.2
Brain & Other nervous	3.5	3.6	3.3	0.7	0.8	0.7	3.1	3.3	2.9	0.7	0.7	0.6
Hodgkin lymphoma	0.5	0.6	0.5	0.0	0.0	0.0	1.2	1.1	1.2	0.0	0.0	0.0
Kidney & Renal pelvis	0.9	0.8	1.0	0.1	0.1	0.1	0.7	0.7	0.8	0.1	0.1	0.1
Leukemia	4.6	4.9	4.2	0.8	0.8	0.7	4.1	4.4	3.7	0.9	1.0	0.8
Acute lymphocytic	3.6	3.9	3.4	0.4	0.4	0.3	3.1	3.3	2.8	0.4	0.5	0.3
Non-Hodgkin lymphoma	1.0	1.2	0.6	0.1	0.1	0.1	1.1	1.5	0.8	0.1	0.2	0.1
Soft tissue	1.0	1.1	0.9	0.1	0.1	0.1	1.1	1.2	0.9	0.2	0.2	0.2

^a SEER 9 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

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							
	1974-1976	1977-1979	1980-1982	1983-1985	1986-1988	1989-1991	1992-1994	1995-2001
All Sites								
All Races	55.9	61.6	65.0	67.7	70.5	73.5	77.2	78.6 ^a
Whites	56.0	61.9	65.4	69.3	71.7	74.7	78.4	79.9 ^a
Blacks	56.8	58.6	61.6	57.7	63.2	66.1	74.2	73.0 ^a
Bone & Joint	54.6 ^b	52.8 ^b	54.0 ^b	57.0	63.4 ^b	62.1	74.6	71.3 ^a
Brain & ONS	54.8	56.1	55.5	61.7	63.4	62.6	67.9	72.7 ^a
Hodgkin lymphoma	78.3	83.4	91.0	89.6	89.9	94.1	94.0	95.1 ^a
Leukemia	45.2	59.6	62.5	60.9	70.2	72.9	76.1	80.2 ^a
Acute lymphocytic	53.2	67.5	71.2	69.2	78.2	80.4	83.6	86.4 ^a
Acute myeloid	14.3	26.5 ^b	24.7 ^b	28.6 ^b	33.0 ^b	36.5	45.5 ^b	52.4 ^a
Neuroblastoma	52.9	53.1	53.1	55.2	59.6	68.0	70.5	66.1 ^a
Non-Hodgkin lymphoma	45.0	49.7	61.0	71.0	69.7	75.1	79.7	86.0 ^a
Soft tissue	60.5	68.2	65.4	76.3	67.0	78.0	75.2	72.6 ^a
Wilms' tumor	74.4	77.5	86.3	86.5	90.9	92.6	92.7	91.8 ^a

Site	Ages 0-19							
	1974-1976	1977-1979	1980-1982	1983-1985	1986-1988	1989-1991	1992-1994	1995-2001
All Sites								
All Races	58.6	64.1	66.7	69.8	73.1	74.5	77.0	78.9 ^a
Whites	58.9	64.6	67.5	71.4	74.6	76.3	78.4	80.2 ^a
Blacks	57.0	61.3	61.5	59.2	63.5	65.1	72.6	72.4 ^a
Bone & Joint	51.2	50.6	50.3	52.6	62.5	64.2	68.7	67.6 ^a
Brain & ONS	55.6	56.5	57.0	63.3	66.0	64.8	68.9	73.8 ^a
Hodgkin lymphoma	84.8	88.1	87.1	88.2	89.3	93.6	91.8	94.9 ^a
Leukemia	40.9	53.9	57.8	58.2	65.9	69.5	71.0	76.4 ^a
Acute lymphocytic	49.2	63.0	67.3	66.7	75.3	77.3	80.6	83.6 ^a
Acute myeloid	17.0	25.4	24.1	32.6	32.1	38.9	41.0	49.1 ^a
Neuroblastoma	52.5	53.1	53.3	54.5	58.9	66.7	70.7	66.2 ^a
Non-Hodgkin lymphoma	43.9	49.1	58.7	66.9	73.3	70.6	77.0	81.3 ^a
Soft tissue	61.8	65.3	65.1	74.5	68.7	69.3	73.0	70.7 ^a
Wilms' tumor	73.6	77.1	85.7	86.8	90.9	92.1	92.7	91.9 ^a

Rates are from the SEER 9 areas. They are based on data from population-based registries in Connecticut, New Mexico, Utah, Iowa, Hawaii, Atlanta, Detroit, Seattle-Puget Sound and San Francisco-Oakland. Rates are based on follow-up of patients into 2002.

- ^a The difference in rates between 1974-1976 and 1995-2001 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.

Table XXVIII-9

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

Age/Site	SEER Incidence ^a					US Mortality ^b					Survival ^a	
	1998-2002 Num Cases	1998-2002 Rate	1975-2002 APC	1975-1988 APC	1989-2002 APC	1998-2002 Num Deaths	1998-2002 Rate	1975-2002 APC	1975-1988 APC	1989-2002 APC	1974-1976	1995-2001
<u>Ages 0-4</u>												
All Sites	1,938	20.9	0.8 ^c	1.1 ^c	0.2 ^e	2,403	2.5	-2.8 ^c	-2.7 ^c	-2.4 ^c	56.8	78.3 ^f
Soft tissue	140	1.5	0.6	0.8	1.3	124	0.1	-2.0 ^c	-0.1	-2.0	57.0 ^g	72.9 ^f
Kidney and Renal pelvis	191	2.1	0.4	-0.5	-0.1	97	0.1	-4.0 ^c	-6.4 ^c	-1.0 ^d	74.2	90.4 ^f
Eye and Orbit	124	1.3	0.7	1.5	-0.6	32	0.0	-3.9 ^c	-3.9 ^c	-7.8 ^c	89.7	96.8
Brain and Other nervous	374	4.0	1.4 ^c	3.6 ^c	0.2 ^d	601	0.6	-1.2 ^c	-1.4 ^c	-1.7 ^c	51.4	67.5 ^f
Other endocrine	142	1.5	-	-	-	398	0.4	-	-	-	32.7 ^g	58.8 ^f
Leukemia	699	7.6	0.8 ^c	1.1	0.8	761	0.8	-3.3 ^c	-3.9 ^c	-2.5 ^c	51.2	84.0 ^f
Acute lymphocytic	568	6.1	0.9 ^c	1.7 ^c	1.0	254	0.3	-5.0 ^c	-5.8 ^c	-3.2 ^{cd}	58.4	90.2 ^f
<u>Ages 5-9</u>												
All Sites	1,114	11.5	0.4	1.0	0.2	2,515	2.5	-3.1 ^c	-3.5 ^c	-2.6 ^{ce}	55.5	78.6 ^f
Brain and Other nervous	327	3.4	0.6	1.6	0.3	890	0.9	-0.8 ^c	-1.1 ^c	-1.5 ^c	54.5	73.3 ^f
Leukemia	363	3.8	0.6	1.0	-0.9	715	0.7	-5.2 ^c	-5.7 ^c	-4.8 ^c	47.0	81.3 ^f
Acute lymphocytic	304	3.1	0.9 ^c	1.8	-0.4	387	0.4	-6.0 ^c	-6.6 ^c	-4.8 ^{cd}	54.2	84.1 ^f
<u>Ages 10-14</u>												
All Sites	1,236	12.8	0.8 ^c	1.1	0.5	2,604	2.5	-2.3 ^c	-2.7 ^c	-1.8 ^{cd}	55.1	79.2 ^f
Bone and Joint	116	1.2	0.2	2.7 ^c	-1.1 ^d	306	0.3	-1.6 ^c	-3.3 ^c	0.9 ^d	53.6 ^g	70.8 ^f
Brain and Other nervous	286	3.0	1.5 ^c	0.6	0.7	684	0.7	-1.4 ^c	-2.1 ^c	-1.2 ^c	58.7	79.1 ^f
Hodgkin lymphoma	113	1.2	-0.9 ^c	-1.1	-1.7	29	0.0	-4.4 ^c	-4.3	-3.9	75.0 ^g	95.1 ^f
Leukemia	242	2.5	0.4	2.9	0.3	872	0.8	-3.1 ^c	-3.2 ^c	-3.1 ^c	28.5	67.8 ^f
Acute lymphocytic	165	1.7	0.8	3.6	-0.4 ^e	432	0.4	-3.4 ^c	-2.8 ^c	-3.3 ^c	36.6 ^g	76.8 ^f
<u>Ages 15-19</u>												
All Sites	1,921	20.6	0.6 ^c	1.1 ^c	0.1 ^d	3,665	3.6	-2.0 ^c	-2.4 ^c	-1.6 ^{cd}	63.8	79.5 ^f
Bone and Joint	136	1.5	0.6	1.4	0.6	523	0.5	-1.5 ^c	-2.8 ^c	0.3 ^d	47.4 ^g	62.7 ^f
Melanoma of the skin	146	1.6	1.3 ^c	0.9	-0.5	44	0.0	-3.1 ^c	-4.0 ^c	-5.3 ^c	76.3 ^g	96.0 ^f
Testis(males)	163	3.4	1.4 ^c	1.6	1.1	36	0.1	-7.4 ^c	-10.6 ^c	-4.8 ^{cd}	55.3 ^g	90.9 ^f
Brain and Other nervous	178	1.9	0.4	1.4	-1.4	547	0.5	-1.2 ^c	-1.0	-1.3 ^c	58.4 ^g	79.1 ^f
Thyroid	184	2.0	1.3 ^c	1.5	2.3	-	-	-	-	-	100.0	98.4
Hodgkin lymphoma	289	3.1	-0.7 ^c	0.1	-2.2 ^{cd}	126	0.1	-4.2 ^c	-2.8 ^c	-3.9 ^c	88.3	94.7 ^f
Non-Hodgkin lymphoma	151	1.6	1.7 ^c	3.5 ^c	0.6	275	0.3	-2.7 ^c	-2.5 ^c	-3.4 ^c	40.5 ^g	74.0 ^f
Leukemia	248	2.7	0.8 ^c	-0.3	1.4	1,134	1.1	-2.0 ^c	-2.2 ^c	-2.1 ^c	21.5	52.8 ^f
Acute lymphocytic	128	1.4	1.0 ^c	1.6	0.8	491	0.5	-1.9 ^c	-1.2	-2.0 ^c	21.2 ^g	57.9 ^f

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

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

Survival rates are expressed as percents.

^a SEER 9 areas.

^b NCHS public use data file for the total US.

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

^d The APC for 1989-2002 is significantly different from the APC for 1975-1988 (p<.05).

^e The APC for 1989-2002 is significantly different from the APC for 1975-1988 (p<.10).

^f The difference in rates between 1974-1976 and 1995-2001 is statistically significant (p<.05).

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

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

ⁱ Sites were chosen based on more than 100 SEER incident cases between 1998-2002.

- Statistic could not be calculated.

Table XXVIII-10
ALL 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
Relative Survival Rates (SEER ^b)																			
1-year	81.4	84.9	87.1	85.6	86.0	88.7	88.5	89.3	91.0	91.1	88.5	90.5	90.4	92.8	91.2	90.9	91.2	92.2	91.8
2-year	71.2	75.6	78.2	76.1	77.1	80.3	79.9	81.7	82.3	84.0	82.1	84.5	84.4	86.2	84.9	84.0	85.0	85.6	
3-year	65.5	70.6	73.8	72.3	72.9	76.6	75.5	77.3	78.9	80.9	78.6	81.5	80.8	83.6	82.2	81.2	82.3		
4-year	62.1	67.4	70.6	71.0	70.8	73.4	73.0	75.0	76.0	78.6	77.7	78.8	78.2	80.6	80.5	78.5			
5-year	59.9	65.7	69.7	68.8	70.2	72.5	71.6	73.9	74.9	77.5	76.1	78.2	76.8	80.2	79.0				
6-year	58.2	64.5	68.4	67.9	68.9	72.1	70.5	73.1	74.4	76.1	75.6	77.9	75.7	79.4					
7-year	57.1	63.5	67.3	67.8	67.8	71.2	69.0	72.2	73.9	75.8	75.1	77.1	75.1						
8-year	56.3	62.8	66.1	67.5	67.8	70.6	68.1	71.8	73.1	75.7	74.4	76.8							
9-year	56.0	62.2	65.5	66.9	67.5	70.3	67.7	71.2	72.7	75.6	74.0								
10-year	55.7	61.7	64.7	66.8	66.9	70.0	67.2	70.8	72.6	75.4									
11-year	55.3	61.3	63.9	66.8	66.7	69.9	66.9	70.2	72.0										
12-year	55.0	60.9	63.7	66.1	66.5	69.6	66.7	70.1											
13-year	54.8	60.5	63.4	65.8	66.1	69.2	66.7												
14-year	54.4	60.2	63.3	64.5	66.1	68.6													
15-year	54.1	59.9	63.0	64.5	65.8														
16-year	53.7	59.6	62.9	64.1															
17-year	53.3	59.3	62.9																
18-year	53.1	59.0																	
19-year	52.8																		
20-year	52.7																		

^a Survival rates are relative rates expressed as percents.
^b Rates are from the SEER 9 areas.

Table XXVIII-11
ALL 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
Relative Survival Rates (SEER ^b)																			
1-year	83.1	86.2	87.9	88.0	88.1	89.8	89.5	90.4	91.4	90.4	89.8	90.7	90.1	93.1	91.6	92.1	91.1	90.9	92.2
2-year	73.1	77.3	78.8	79.0	80.0	82.4	81.2	82.9	83.4	83.3	82.7	84.2	84.5	87.3	85.2	85.1	85.4	83.9	
3-year	68.0	72.3	75.3	75.6	75.7	78.2	77.2	78.4	79.7	80.2	79.5	80.7	81.2	85.0	81.9	82.3	82.4		
4-year	64.8	69.3	72.5	74.0	73.2	75.4	74.0	76.0	77.5	78.0	78.0	78.6	79.4	82.0	80.4	79.6			
5-year	62.8	67.6	71.6	72.1	72.5	74.6	72.7	74.7	76.2	76.8	76.3	77.9	78.1	81.4	78.5				
6-year	61.0	66.2	70.4	71.5	71.4	74.0	71.5	73.8	75.6	75.5	75.8	77.5	77.0	80.7					
7-year	60.1	65.4	69.3	71.1	70.3	73.1	70.5	72.8	74.9	75.1	75.4	76.9	76.4						
8-year	59.3	64.6	68.4	70.8	70.0	72.1	69.9	72.2	74.2	74.9	74.6	76.5							
9-year	58.7	63.9	67.8	70.2	69.4	72.0	69.4	71.7	73.9	74.7	74.2								
10-year	58.4	63.4	67.1	69.8	69.0	71.4	69.0	71.4	73.4	74.7									
11-year	58.0	63.1	66.4	69.7	68.7	71.3	68.9	70.8	72.8										
12-year	57.7	62.7	66.1	69.2	68.6	71.0	68.7	70.6											
13-year	57.5	62.3	65.7	68.7	68.3	70.8	68.6												
14-year	57.2	61.9	65.6	67.4	67.9	70.0													
15-year	56.9	61.6	65.4	67.3	67.4														
16-year	56.6	61.1	65.0	66.5															
17-year	56.2	60.9	64.9																
18-year	56.0	60.6																	
19-year	55.7																		
20-year	55.4																		

^a Survival rates are relative rates expressed as percents.
^b Rates are from the SEER 9 areas.

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

Estimated United States Cancer Prevalence Counts^a on January 1, 2002
 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	0 to <12 ^e	0 to <27 ^e	>=27 ^f	Complete ^g
<u>Race/Sex</u>									
All Races ^b	55,930	46,645	39,770	34,275	29,318	119,335	215,915	+	+
Males	29,328	24,549	20,805	17,308	13,920	62,959	110,475	+	+
Females	26,602	22,096	18,965	16,967	15,398	56,376	105,440	+	+
White ^b	47,142	38,768	33,956	30,073	25,780	100,231	184,521	+	+
Males	24,620	20,501	17,881	15,311	12,424	53,000	94,774	+	+
Females	22,522	18,267	16,075	14,762	13,356	47,231	89,747	+	+
Black ^b	5,776	5,116	3,932	2,820	2,544	12,511	21,023	+	+
Males	3,047	2,566	1,944	1,331	1,028	6,408	10,321	+	+
Females	2,729	2,550	1,988	1,489	1,516	6,103	10,702	+	+
Asian/Pacific Islander ^c	1,846	1,614	+	+	+	3,973	+	+	+
Males	1,000	822	+	+	+	2,085	+	+	+
Females	846	792	+	+	+	1,888	+	+	+
Hispanic ^d	8,371	6,138	+	+	+	16,498	+	+	+
Males	4,428	3,347	+	+	+	8,911	+	+	+
Females	3,943	2,791	+	+	+	7,587	+	+	+

^a US 2002 cancer prevalence counts are based on 2002 cancer prevalence proportions from the SEER registries and 1/1/2002 US population estimates based on the average of 2001 and 2002 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) SEER 11 Areas excluding Hawaii and Detroit.

^e Maximum limited-duration prevalence: 27 years for 1975-2002 SEER 9 data; 12 years for 1990-2002 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^{f g} (f) Cases diagnosed more than 27 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 <27 and >=27.

- 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 1993-2002

Age 0			Age 1			Age 2		
	Rate	Cases		Rate	Cases		Rate	Cases
All Sites	23.1	1307	All Sites	21.0	1183	All Sites	22.2	1255
Leukemia	4.1	233	Leukemia	6.5	368	Leukemia	10.2	578
Acute Lymphocytic Leukemia	2.0	115	Acute Lymphocytic Leukemia	4.5	255	Acute Lymphocytic Leukemia	9.0	511
Brain and ONS ^d	3.6	203	Brain and ONS ^d	3.6	202	Brain and ONS ^d	4.0	227
Soft Tissue	3.1	174	Kidney and Renal Pelvis	2.1	119	Kidney and Renal Pelvis	2.0	112
Eye and Orbit	2.7	153	Eye and Orbit	2.1	119	Eye and Orbit	1.3	74
Other Endocrine	2.5	142	Soft Tissue	1.7	96	Other Endocrine	1.3	71
Age 3			Age 4			Age 5		
	Rate	Cases		Rate	Cases		Rate	Cases
All Sites	20.7	1181	All Sites	16.6	959	All Sites	13.7	791
Leukemia	10.0	570	Leukemia	7.7	447	Leukemia	5.4	314
Acute Lymphocytic Leukemia	9.3	530	Acute Lymphocytic Leukemia	6.8	396	Acute Lymphocytic Leukemia	4.7	273
Brain and ONS ^d	3.9	223	Brain and ONS ^d	3.5	205	Brain and ONS ^d	3.6	208
Kidney and Renal Pelvis	2.1	121	Kidney and Renal Pelvis	1.7	99	Kidney and Renal Pelvis	1.1	63
Other Endocrine	1.0	58	Non-Hodgkin Lymphoma	0.8	48	Soft Tissue	0.8	49
Soft Tissue	0.9	52	Soft Tissue	0.7	39	Non-Hodgkin Lymphoma	0.7	41
Age 6			Age 7			Age 8		
	Rate	Cases		Rate	Cases		Rate	Cases
All Sites	10.6	603	All Sites	10.5	596	All Sites	10.7	596
Leukemia	3.8	218	Leukemia	3.5	201	Leukemia	3.9	218
Acute Lymphocytic Leukemia	3.3	186	Acute Lymphocytic Leukemia	2.9	165	Acute Lymphocytic Leukemia	3.2	179
Brain and ONS ^d	3.2	182	Brain and ONS ^d	3.2	181	Brain and ONS ^d	2.8	156
Non-Hodgkin Lymphoma	0.7	40	Non-Hodgkin Lymphoma	0.8	43	Non-Hodgkin Lymphoma	1.1	61
Kidney and Renal Pelvis	0.5	31	Bones and Joints	0.5	31	Soft Tissue	0.6	34
Soft Tissue	0.5	27	Kidney and Renal Pelvis	0.5	26	Bones and Joints	0.5	26
Age 9			Age 10			Age 11		
	Rate	Cases		Rate	Cases		Rate	Cases
All Sites	9.7	546	All Sites	10.8	606	All Sites	10.3	573
Leukemia	2.9	162	Leukemia	2.9	162	Leukemia	2.4	134
Acute Lymphocytic Leukemia	2.3	128	Acute Lymphocytic Leukemia	2.1	120	Acute Lymphocytic Leukemia	1.6	90
Brain and ONS ^d	2.3	131	Brain and ONS ^d	2.7	150	Brain and ONS ^d	2.3	127
Non-Hodgkin Lymphoma	1.0	54	Bones and Joints	1.0	58	Bones and Joints	1.1	59
Bones and Joints	0.9	48	Non-Hodgkin Lymphoma	0.9	53	Non-Hodgkin Lymphoma	1.0	56
Soft Tissue	0.6	34	Hodgkin Lymphoma	0.7	38	Hodgkin Lymphoma	0.9	51

^a Rates are per 100,000 per year and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Cases are for the 13 SEER Areas over the time period 1993-2002.

^b Top 5 cancer sites were determined based on the 1993-2002 age-adjusted rate.

^c Cases are from the 13 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).

^d ONS = Other Nervous System.

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

SEER Cancer Incidence^c 1993-2002

Age 12			Age 13			Age 14		
	Rate	Cases		Rate	Cases		Rate	Cases
All Sites	12.2	668	All Sites	13.5	735	All Sites	15.1	811
Brain and ONS ^d	3.1	172	Leukemia	2.8	154	Leukemia	2.9	156
Leukemia	2.8	153	Acute Lymphocytic Leukemia	2.0	107	Acute Lymphocytic Leukemia	1.8	98
Acute Lymphocytic Leukemia	1.9	103	Brain and ONS ^d	2.6	139	Brain and ONS ^d	2.6	140
Bones and Joints	1.2	66	Bones and Joints	1.5	79	Hodgkin Lymphoma	1.8	97
Non-Hodgkin Lymphoma	1.1	59	Hodgkin Lymphoma	1.4	77	Non-Hodgkin Lymphoma	1.6	86
Hodgkin Lymphoma	0.9	52	Soft Tissue	1.2	65	Bones and Joints	1.5	79
Age 15			Age 16			Age 17		
	Rate	Cases		Rate	Cases		Rate	Cases
All Sites	16.7	888	All Sites	18.1	957	All Sites	20.1	1055
Leukemia	2.8	147	Leukemia	3.2	170	Hodgkin Lymphoma	3.3	174
Acute Lymphocytic Leukemia	1.7	91	Acute Lymphocytic Leukemia	1.9	103	Leukemia	2.7	144
Hodgkin Lymphoma	2.1	110	Hodgkin Lymphoma	2.6	137	Acute Lymphocytic Leukemia	1.5	76
Brain and ONS ^d	1.9	101	Brain and ONS ^d	2.0	107	Brain and ONS ^d	1.8	96
Bones and Joints	1.8	96	Bones and Joints	1.8	96	Non-Hodgkin Lymphoma	1.8	95
Non-Hodgkin Lymphoma	1.7	88	Non-Hodgkin Lymphoma	1.3	68	Thyroid	1.8	94
Age 18			Age 19					
	Rate	Cases		Rate	Cases			
All Sites	22.1	1127	All Sites	24.2	1239			
Hodgkin Lymphoma	3.4	175	Hodgkin Lymphoma	3.9	200			
Leukemia	2.7	138	Testis	2.8	144			
Acute Lymphocytic Leukemia	1.4	70	Leukemia	2.5	130			
Testis	2.3	120	Acute Lymphocytic Leukemia	1.2	59			
Thyroid	2.1	105	Thyroid	2.4	125			
Brain and ONS ^d	1.7	85	Melanoma of the Skin	2.2	115			

^a Rates are per 100,000 per year and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Cases are for the 13 SEER Areas over the time period 1993-2002.

^b Top 5 cancer sites were determined based on the 1993-2002 age-adjusted rate.

^c Cases are from the 13 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).

^d ONS = Other Nervous System.

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 1993-2002

Age 0			Age 1			Age 2		
	Rate	Deaths		Rate	Deaths		Rate	Deaths
All Sites	2.0	773	All Sites	2.4	921	All Sites	2.9	1110
Leukemia	0.7	266	Leukemia	0.9	347	Leukemia	1.0	400
Acute Lymphocytic Leukemia	0.3	97	Acute Lymphocytic Leukemia	0.3	103	Acute Lymphocytic Leukemia	0.3	115
Brain and ONS ^d	0.5	179	Brain and ONS ^d	0.6	227	Brain and ONS ^d	0.6	246
Other Endocrine	0.2	80	Other Endocrine	0.3	114	Other Endocrine	0.6	217
Liver & IBD ^d	0.1	45	Liver & IBD ^d	0.2	62	Liver & IBD ^d	0.2	73
Soft Tissue	0.1	43	Soft Tissue	0.1	45	Soft Tissue	0.1	46
Age 3			Age 4			Age 5		
	Rate	Deaths		Rate	Deaths		Rate	Deaths
All Sites	3.1	1204	All Sites	3.0	1180	All Sites	3.0	1176
Brain and ONS ^d	0.9	333	Brain and ONS ^d	0.9	365	Brain and ONS ^d	0.9	360
Leukemia	0.8	329	Leukemia	0.8	318	Leukemia	0.8	328
Acute Lymphocytic Leukemia	0.3	104	Acute Lymphocytic Leukemia	0.3	129	Acute Lymphocytic Leukemia	0.4	156
Other Endocrine	0.7	271	Other Endocrine	0.5	210	Other Endocrine	0.5	202
Soft Tissue	0.2	59	Kidney and Renal Pelvis	0.2	64	Soft Tissue	0.2	70
Liver & IBD ^d	0.1	53	Soft Tissue	0.2	63	Kidney and Renal Pelvis	0.2	70
Age 6			Age 7			Age 8		
	Rate	Deaths		Rate	Deaths		Rate	Deaths
All Sites	2.8	1099	All Sites	2.7	1058	All Sites	2.5	977
Brain and ONS ^d	1.0	395	Brain and ONS ^d	0.9	368	Leukemia	0.9	342
Leukemia	0.8	312	Leukemia	0.9	344	Acute Lymphocytic Leukemia	0.5	202
Acute Lymphocytic Leukemia	0.4	163	Acute Lymphocytic Leukemia	0.5	188	Brain and ONS ^d	0.8	325
Other Endocrine	0.4	146	Other Endocrine	0.3	128	Other Endocrine	0.2	82
Kidney and Renal Pelvis	0.2	67	Soft Tissue	0.1	56	Bones and Joints	0.1	48
Soft Tissue	0.1	43	Kidney and Renal Pelvis	0.1	43	Soft Tissue	0.1	48
Age 9			Age 10			Age 11		
	Rate	Deaths		Rate	Deaths		Rate	Deaths
All Sites	2.3	923	All Sites	2.4	969	All Sites	2.4	953
Leukemia	0.8	310	Leukemia	0.8	333	Leukemia	0.9	375
Acute Lymphocytic Leukemia	0.4	169	Acute Lymphocytic Leukemia	0.5	196	Acute Lymphocytic Leukemia	0.5	184
Brain and ONS ^d	0.8	307	Brain and ONS ^d	0.7	291	Brain and ONS ^d	0.7	262
Other Endocrine	0.2	71	Other Endocrine	0.2	78	Bones and Joints	0.2	73
Bones and Joints	0.1	60	Bones and Joints	0.2	66	Soft Tissue	0.1	56
Soft Tissue	0.1	51	Non-Hodgkin Lymphoma	0.1	59	Non-Hodgkin Lymphoma	0.1	53

^a Rates are per 100,000 per year and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Deaths are for the entire United States over the time period 1993-2002.

^b Top 5 cancer sites were determined based on the 1993-2002 age-adjusted rate.

^c Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS).

^d ONS = Other Nervous System.

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

U.S. Mortality^c 1993-2002

<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	2.5	994	All Sites	2.6	1043	All Sites	2.9	1153
Leukemia	0.9	366	Leukemia	0.9	349	Leukemia	1.1	413
Acute Lymphocytic Leukemia	0.5	181	Acute Lymphocytic Leukemia	0.4	172	Acute Lymphocytic Leukemia	0.5	185
Brain and ONS ^d	0.6	245	Brain and ONS ^d	0.6	241	Brain and ONS ^d	0.7	269
Bones and Joints	0.3	108	Bones and Joints	0.4	150	Bones and Joints	0.4	145
Bones and Joints	0.1	60	Bones and Joints	0.2	66	Soft Tissue	0.1	56
Soft Tissue	0.1	51	Non-Hodgkin Lymphoma	0.1	59	Non-Hodgkin Lymphoma	0.1	53
<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	3.2	1236	All Sites	3.6	1393	All Sites	3.6	1399
Leukemia	1.1	441	Leukemia	1.2	461	Leukemia	1.1	424
Acute Lymphocytic Leukemia	0.5	191	Acute Lymphocytic Leukemia	0.5	200	Acute Lymphocytic Leukemia	0.5	173
Brain and ONS ^d	0.6	233	Brain and ONS ^d	0.6	223	Bones and Joints	0.5	207
Bones and Joints	0.4	169	Bones and Joints	0.5	208	Brain and ONS ^d	0.5	202
Soft Tissue	0.3	111	Soft Tissue	0.3	132	Soft Tissue	0.3	132
Non-Hodgkin Lymphoma	0.2	91	Non-Hodgkin Lymphoma	0.2	92	Non-Hodgkin Lymphoma	0.3	112
<u>Age 18</u>			<u>Age 19</u>					
	<u>Rate</u>	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>			
All Sites	4.0	1534	All Sites	4.2	1625			
Leukemia	1.2	457	Leukemia	1.1	440			
Acute Lymphocytic Leukemia	0.5	180	Acute Lymphocytic Leukemia	0.5	188			
Brain and ONS ^d	0.6	215	Bones and Joints	0.6	219			
Bones and Joints	0.5	196	Brain and ONS ^d	0.5	207			
Soft Tissue	0.3	127	Non-Hodgkin Lymphoma	0.4	152			
Non-Hodgkin Lymphoma	0.3	121	Soft Tissue	0.4	137			

^a Rates are per 100,000 per year and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Deaths are for the entire United States over the time period 1993-2002.

^b Top 5 cancer sites were determined based on the 1993-2002 age-adjusted rate.

^c Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS).

^d ONS = Other Nervous System.

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

Joinpoint Analyses for 1975-2002 for Whites and Blacks

Rates for 1992-2002 for Asian/Pacific Islander, American Indian/Alaska Native and Hispanic

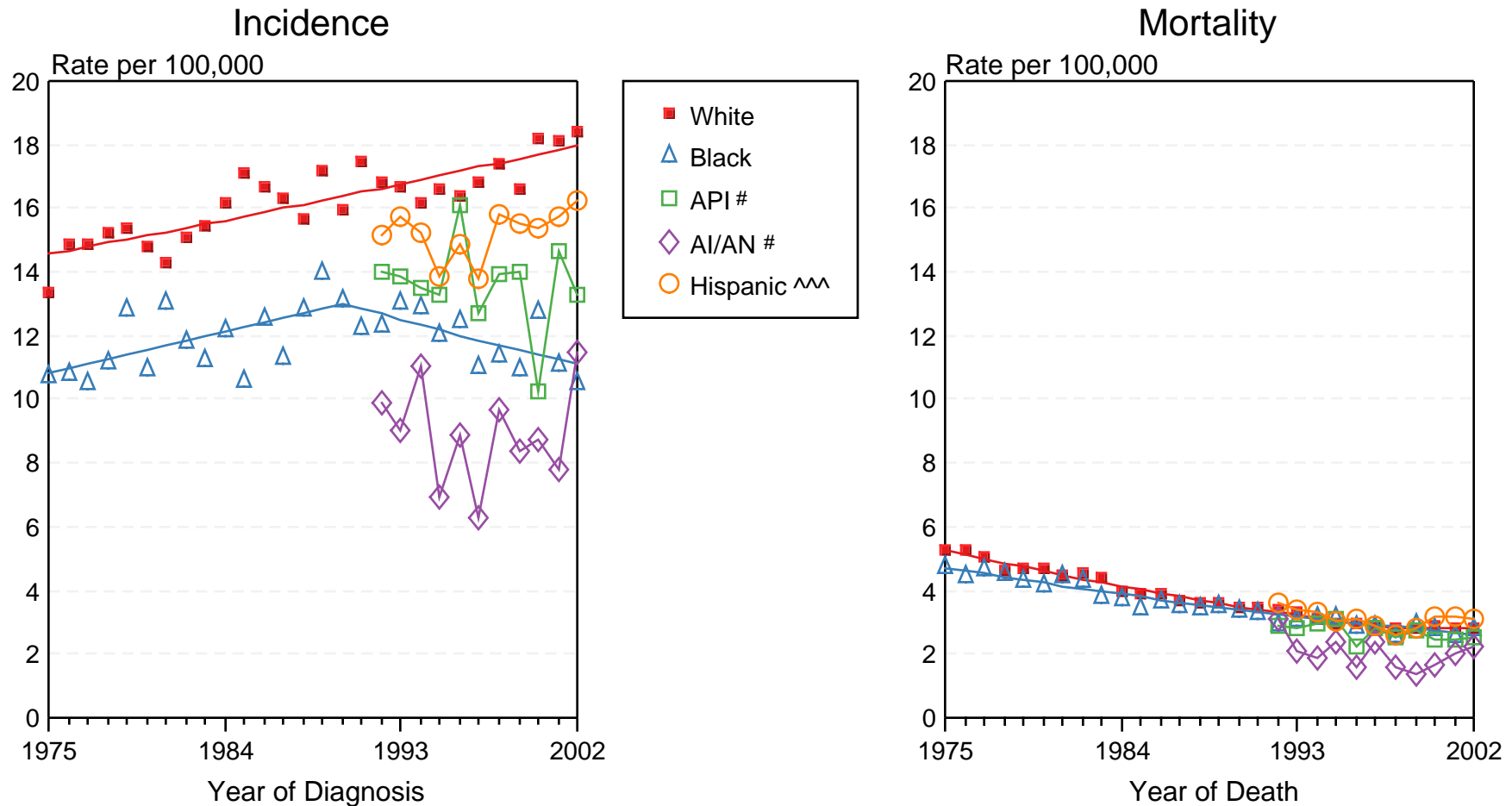


Figure XXVIII-1

+ Source: Incidence data for whites and blacks is from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indian/Alaska Natives and Hispanics is from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data is from NCHS public use data file for the total US. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines for whites and blacks are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.

API = Asian/Pacific Islander. AI/AN = American Indian/Alaska Native.

^^ Hispanic is not mutually exclusive from Whites, Blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics excludes cases from Detroit, Hawaii, Alaska Native Registry and Rural Georgia. Mortality data for Hispanics excludes cases from Connecticut, Maine, Maryland, Minnesota, Oklahoma, New Hampshire, New York, North Dakota, and Vermont.