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.

AGE-ADJUSTED SEER CANCER INCIDENCE^a AND U.S. DEATH^b RATES, 2000-2003

By Primary Cancer Site

All Races, Males and Females

			Ages	0-14					Ages	0-19		
		Incidenc	e]	Mortalit	У		Incidenc	e]	Mortalit	У
Site	Total	Males	Females									
All Sites												
All Races	14.8	15.7	13.9	2.5	2.7	2.3	16.4	17.4	15.2	2.8	3.1	2.5
Whites	15.7	16.7	14.7	2.6	2.7	2.4	17.5	18.8	16.2	2.8	3.1	2.5
Blacks	10.7	10.9	10.4	2.4	2.6	2.1	11.3	11.7	10.9	2.7	3.0	2.4
Bone & Joint	0.7	0.7	0.6	0.1	0.1	0.1	0.9	1.0	0.7	0.2	0.3	0.2
Brain & Other nervous	3.3	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	4.8	5.1	4.5	0.8	0.9	0.7	4.3	4.7	3.9	0.9	1.0	0.8
Acute lymphocytic	3.8	4.0	3.5	0.4	0.4	0.3	3.2	3.5	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	1.5	0.7	0.1	0.2	0.1
Soft tissue	1.0	1.0	1.0	0.1	0.1	0.1	1.1	1.1	1.0	0.2	0.2	0.2

а

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

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

AGE-ADJUSTED SEER CANCER INCIDENCE RATES^a, 1975-2003

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 2003

<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	14.4	15.4	15.6	15.2	12.8
Whites	12.1	13.1	15.6	14.9	14.7	14.0	15.6	14.2	16.1	13.8	15.2	14.5	14.8	14.9	14.7	16.2	15.4	16.6	16.8	16.5	13.6
Blacks	8.6	11.1	10.1	10.9	11.6	11.9	13.7	12.3	11.5	12.0	12.4	12.2	11.3	11.4	11.3	9.9	10.3	11.9	10.9	11.0	9.9
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	0.5
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	2.8	3.1	3.4	3.4	3.8	3.7	2.9
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	-	0.6	0.6	0.6	0.4	0.6	0.5	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	0.9	0.9	0.7
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	4.4	4.8	3.9
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	3.5	4.0	3.1
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	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	1.0	0.8

<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	16.2	15.6	16.8	16.9	17.2	15.4
Whites	13.4	14.8	17.1	16.7	16.3	15.6	17.2	15.9	17.5	16.7	16.6	16.1	16.6	16.5	16.7	17.3	16.6	18.2	18.3	19.1	16.5
Blacks	10.8	11.0	10.6	12.6	11.3	12.9	14.0	13.2	12.2	12.3	13.1	13.0	12.0	12.6	11.2	11.2	10.9	12.9	11.3	10.9	11.1
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	0.7
Brain & Other nervous	2.1	2.5	2.7	3.2	2.9	3.0	3.0	3.2	3.0	3.3	3.0	2.9	3.0	3.0	2.6	2.7	3.0	3.1	3.4	3.3	2.7
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	1.2	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	0.7	0.7	0.6
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	4.2	4.0	4.1	3.9	4.5	3.7
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	3.4	2.8
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	1.0	0.9	1.4	1.1	1.2	1.3
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	1.0	1.1	1.0	1.2	1.1	1.0	0.9

- 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. а

AGE-ADJUSTED CANCER U.S. DEATH RATES^a, 1975-2003

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	2003
<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	2.5
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	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	0.8
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	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	0.8
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	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	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	0.1
<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	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	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	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	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	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	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	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	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	0.2

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

AGE-ADJUSTED CANCER U.S. DEATH RATES^a, 1975-2003

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	2003
<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	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	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	0.8
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	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	0.9
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	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	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	0.1
<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	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	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	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	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	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	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	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	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	0.2

- National Cancer Institute
- 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). Statistic could not be calculated. Rate based on less than 16 cases for the time interval. а

AGE-ADJUSTED CANCER U.S. DEATH RATES^a, 1975-2003

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	2003
<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	2.4
Bone & Joint	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	0.7
Hodgkin lymphoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kidney & Renal pelvis	-	-	0.2	-	-	-	-	-	-	-	0.2	-	-	-	0.2	-	-	-	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	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	0.2
Non-Hodgkin lymphoma	0.4	0.2	-	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soft tissue	-	-	-	-	0.3	0.2	0.2	0.3	-	-	0.2	0.3	-	-	0.2	0.2	0.2	-	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	2.5
Bone & Joint	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	-	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.2	0.3	0.2	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	0.6
Hodgkin lymphoma	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kidney & Renal pelvis	0.2	-	0.2	0.2	-	0.2	-	-	-	-	0.1	-	-	-	0.1	0.1	-	0.1	0.2	-	-
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	0.6
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	0.2
Non-Hodgkin lymphoma	0.4	0.3	0.2	0.3	0.2	-	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
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	0.2

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

AGE-ADJUSTED SEER CANCER INCIDENCE TRENDS, 1975-2003, 1975-1988, 1989-2003^a

By Primary Cancer Site

All Races, Males and Females

		Ages	0-14			Ages	0-19	
Site	% Change 1975-2003	APC 1975-2003	APC 1975-1988	APC 1989-2003	% Change 1975-2003	APC 1975-2003	APC 1975-1988	APC 1989-2003
All Sites								
All Races	11.6	0.6*	1.1*	0.1#	19.2	0.6*	1.1*	0.2#
Whites	12.6	0.7*	1.1*	0.5	23.3	0.7*	1.2*	0.6
Blacks	15.0	0.2	1.2	-1.5*#	2.7	0.0	0.8	-1.4*#
Bone & Joint	6.4	0.1	2.1	-0.9 [@]	2.6	0.3	1.8*	-0.3
Brain & Other nervous	29.1	1.1*	2.1*	0.1#	27.5	1.0*	2.0*	0.0#
Hodgkin lymphoma	-38.8	-1.3*	-1.5	-2.0	-29.7	-0.9*	-0.5	-2.0*@
Kidney & Renal pelvis	4.3	0.1	0.3	-1.0	9.4	0.2	0.3	-0.9
Leukemia	20.2	0.6*	1.3*	0.1@	22.0	0.7*	1.0*	0.3
Acute lymphocytic	40.1	0.8*	1.8*	0.2®	44.7	0.9*	1.8*	0.3@
Non-Hodgkin lymphoma	-4.5	0.5	0.3	1.8*	26.2	0.9*	1.3*	1.4*
Soft tissue	-5.8	1.1*	0.3	1.3	10.1	1.1*	1.1	1.5

- The APC is the Annual Percent Change over the time interval. SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). The APC is significantly different from zero (p<.05) The APC for 1989-2003 is significantly different from the APC for 1975-1988 (p<.05). The APC for 1989-2003 is significantly different from the APC for 1975-1988 (p<.10).
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Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval.

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AGE-ADJUSTED CANCER U.S. MORTALITY TRENDS, 1975-2003, 1975-1988, 1989-2003^a

By Race and Primary Cancer Site

Males and Females

		Ages	0-14			Ages	0-19	
Site	% Change 1975-2003	APC 1975-2003	APC 1975-1988	APC 1989-2003	% Change 1975-2003	APC 1975-2003	APC 1975-1988	APC 1989-2003
All Races								
All Sites Bone & Joint Brain & Other nervous Hodgkin lymphoma Kidney & Renal pelvis Leukemia Acute lymphocytic Non-Hodgkin lymphoma Soft tissue	-48.0 -39.8 -24.2 - - 49.5 -61.3 -65.0 -77.0 -3.9	-2.7^{*} -1.9^{*} -1.1^{*} -3.0^{*} -3.8^{*} -4.7^{*} -5.0^{*} -1.3^{*}	$ \begin{array}{r} -3.0^{*} \\ -3.5^{*} \\ -1.5^{*} \\ -3.7^{*} \\ -4.4^{*} \\ -5.2^{*} \\ -4.6^{*} \\ 0.6 \end{array} $	-2.0*# 0.6# -1.2* - -3.1*# -3.3*# -5.6* -1.6*@	$ \begin{array}{r} -46.6\\ -34.2\\ -23.1\\ -79.1\\ -43.8\\ -58.4\\ -61.2\\ -71.3\\ 4.2\end{array} $	$\begin{array}{c} -2 \cdot 4^{*} \\ -1 \cdot 6^{*} \\ -1 \cdot 1^{*} \\ -4 \cdot 5^{*} \\ -2 \cdot 7^{*} \\ -3 \cdot 4^{*} \\ -4 \cdot 0^{*} \\ -4 \cdot 1^{*} \\ -0 \cdot 7^{*} \end{array}$	-2.8* -3.1* -1.4* -3.5* -3.6* -3.9* -4.4* -3.8* 0.8	$\begin{array}{c} -1.9^{*\#} \\ 0.3^{\#} \\ -1.2^{*} \\ -4.3^{*} \\ -0.9^{\#} \\ -2.9^{*\#} \\ -3.0^{*\#} \\ -4.6^{*} \\ -1.6^{*\#} \end{array}$
Whites								
All Sites Bone & Joint Brain & Other nervous Hodgkin lymphoma Kidney & Renal pelvis Leukemia Acute lymphocytic Non-Hodgkin lymphoma Soft tissue	-47.5 -34.1 -22.2 - - 46.7 -61.1 -63.8 -78.7 3.3	-2.7^{*} -1.7^{*} -1.0^{*} -2.9^{*} -3.9^{*} -4.6^{*} -5.0^{*} -1.3^{*}	-3.0^{*} -2.9^{*} -1.4^{*} -4.0^{*} -4.6^{*} -5.6^{*} -4.3^{*} 0.7	$\begin{array}{c} -2.0^{*\#} \\ 0.5^{\#} \\ -1.3^{*} \\ - \\ -3.1^{*\#} \\ -3.0^{*\#} \\ -6.1^{*} \\ -1.4^{@} \end{array}$	$ \begin{array}{r} -45.9\\ -27.8\\ -20.9\\ -75.0\\ -39.4\\ -58.4\\ -59.9\\ -73.9\\ 17.4 \end{array} $	$\begin{array}{c} -2.5^{*} \\ -1.5^{*} \\ -1.1^{*} \\ -4.6^{*} \\ -2.7^{*} \\ -3.4^{*} \\ -4.0^{*} \\ -4.2^{*} \\ -0.6^{*} \end{array}$	$\begin{array}{c} -2.8^{*} \\ -2.7^{*} \\ -1.3^{*} \\ -3.9^{*} \\ -3.5^{*} \\ -4.1^{*} \\ -4.7^{*} \\ -3.6^{*} \\ 1.0 \end{array}$	$\begin{array}{c} -1 \cdot 9^{*\#} \\ 0 \cdot 3^{\#} \\ -1 \cdot 3^{*} \\ -4 \cdot 2^{*} \\ -1 \cdot 0^{\#} \\ -2 \cdot 8^{*\#} \\ -2 \cdot 8^{*\#} \\ -5 \cdot 4^{*\#} \\ -1 \cdot 3^{*\#} \end{array}$
Blacks								
All Sites Bone & Joint Brain & Other nervous Hodgkin lymphoma Kidney & Renal pelvis Leukemia Acute lymphocytic Non-Hodgkin lymphoma Soft tissue	-47.4 -56.0 -28.2 - - 62.1 -71.7 -77.6 -15.9	-2.4* -1.1* - -3.5* -4.8* -	-2.6* -1.3 - -3.4* -2.6* -	-2.0* -0.7 - -3.1* -5.2*@	$ \begin{array}{r} -47.3 \\ -58.8 \\ -26.7 \\ -100.0 \\ -50.1 \\ -58.9 \\ -69.6 \\ -63.3 \\ -26.1 \\ \end{array} $	-2.2* -2.1* -1.1* - - -2.9* -3.8* -3.5* -0.9	-2.5^{*} -5.4^{*} -1.1 -2.7^{*} -2.0^{*} -5.2^{*} 0.9	$ \begin{array}{c} -1.9^{*} \\ 0.6^{\#} \\ -0.8 \\ - \\ -3.3^{*} \\ -4.6^{*\#} \\ -1.4^{\#} \\ -2.0^{\odot} \end{array} $

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The APC is the Annual Percent Change over the time interval. NCHS public use data file for the total US. The APC is significantly different from zero (p<.05) The APC for 1989-2003 is significantly different from the APC for 1975-1988 (p<.05). The APC for 1989-2003 is significantly different from the APC for 1975-1988 (p<.10). Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval. _

5-YEAR RELATIVE SURVIVAL RATES (Percent)

By Selected Primary Cancer Site and Year of Diagnosis

All Races, Males and Females

				Ages	0-14			
Site	1975-1977	1978-1980	1981-1983	1984-1986	1987-1989	1990-1992	1993-1995	1996-2002
All Sites								
All Races	58.0	62.6	66.7	68.2	71.4	75.4	77.0	79.4ª
Whites	58.2	63.0	67.5	70.1	72.2	76.6	78.1	80.9ª
Blacks	57.7	57.7	62.2	56.3	65.3	70.8	72.7	73.7ª
Bone & Joint	51.3 ^b	48.7	56.8 ^b	59.4 ^b	66.8 ^b	66.8	73.9	71.6ª
Brain & ONS	56.9	57.7	56.0	61.8	63.8	64.0	70.1	74.1ª
Hodgkin lymphoma	80.5	87.7	87.7	90.8	87.1	96.7	94.6	95.3ª
Leukemia	50.3	58.4	62.9	63.8	71.0	75.3	75.7	81.0 ^a
Acute lymphocytic	57.6	66.4	71.3	72.5	77.7	83.0	83.8	87.0 ^a
Acute myeloid	18.8	25.8	26.7 ^b	30.0 ^b	36.2 ^b	41.0	41.0 ^b	53.1ª
Neuroblastoma	52.4	56.9	54.5	52.0	61.9	76.6	67.2	68.7ª
Non-Hodgkin lymphoma	42.6	52.7	66.9	70.3	70.7	75.9	80.6	86.0ª
Soft tissue	61.0	74.3	69.2	73.4	65.4	79.2	76.4	71.7ª
Wilms' tumor	73.1	78.6	86.4	90.7	92.2	91.9	91.4	92.1ª

				Ages	0-19			
Site	1975-1977	1978-1980	1981-1983	1984-1986	1987-1989	1990-1992	1993-1995	1996-2002
All Sites								
All Races	61.5	65.2	68.0	70.6	73.3	76.0	77.4	79.5ª
Whites	61.5	65.8	69.0	72.5	74.8	77.5	78.4	80.9 ^a
Blacks	60.0	60.1	62.3	58.2	64.3	68.5	73.8	72.7ª
Bone & Joint	51.1	48.4	51.2	57.2	63.5	68.2	68.6	68.0 ^ª
Brain & ONS	58.7	58.1	57.6	64.0	65.9	66.1	71.0	75.1ª
Hodgkin lymphoma	86.0	88.7	85.4	90.8	88.9	94.2	93.9	95.1ª
Leukemia	45.5	53.6	58.1	60.4	67.5	71.2	71.8	76.4ª
Acute lymphocytic	54.1	62.4	67.1	70.1	75.0	79.7	81.3	83.5 ^a
Acute myeloid	18.7	26.2	26.4	31.7	36.9	41.0	39.4	48.4ª
Neuroblastoma	52.7	57.0	53.4	52.0	60.5	76.3	67.0	69.0 ^a
Non-Hodgkin lymphoma	43.4	53.9	63.5	68.1	70.3	72.1	77.8	81.9 ^a
Soft tissue	65.2	68.8	68.2	72.4	67.2	68.9	73.8	70.9
Wilms' tumor	72.6	78.0	86.5	91.0	92.2	91.3	91.5	92.1ª

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 2003.

The difference in rates between 1975-1977 and 1996-2002 is statistically significant (p<.05). The standard error of the survival rate is between 5 and 10 percentage points. The standard error of the survival rate is greater than 10 percentage points. а b

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

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

		SEER Incid	ence ^a				US Mortal	ity ^b		Surv	ival ^a
	2000-2003		1975-1988	1989-2003	2000-2003		1975-2003	1975-1988	1989-2003		
Age/Site	Num Cases Rat	e APC	APC	APC	Num Deaths F	Rate	APC	APC	APC	1975-1977	1996-2002
Ages 0-4											
All Sites Soft tissue	4,457 21. 342 1.	5 0.6	1.1 [*] 0.8	0.1 [@] 1.0	93	2.5 0.1	-2.8 [*] -2.1 [*]	-2.7* -0.1	-2.3* -2.6	57.3 61.1 ^e	80.1 ^c 71.3
Kidney and Renal pelvis Eye and Orbit	390 1. 270 1.		-0.5 1.5	-0.4 -0.3		0.1	-4.0*	-6.4*	-1.5 [#]	72.2 87.1 ^e	92.0° 94.5
Brain and Other nervous Other endocrine	845 4. 290 1.		3.6*	0.3#		0.6	-1.3*	-1.4*	-1.8*	52.4 33.8 ^e	71.0° 63.8°
Leukemia Acute lymphocytic	1,649 7. 1,332 6.		1.1 1.7*	0.5 0.7		0.8	-3.2* -4.6*	-3.9* -5.8*	-2.3 ^{*#} -1.9 ^{*#}	55.6 63.4	85.2° 90.5°
Ages 5-9											
All Sites Brain and Other nervous Leukemia Acute lymphocytic	2,475 11. 707 3. 847 3. 701 3.	2 0.5 3 0.6	1.0 1.6 1.0 1.8	-0.1 -0.1 -0.9 -0.5	713 599	2.5 0.9 0.7 0.4	-3.0* -0.8* -5.0* -5.8*	-3.5* -1.1* -5.7* -6.6*	$\begin{array}{c} -2.2^{*\#}\\ -1.3^{*}\\ -4.3^{*\#}\\ -4.2^{*\#}\end{array}$	58.2 58.0 52.0 55.2	77.9° 72.4° 80.7° 84.0°
<u>Ages 10-14</u>											
All Sites Bone and Joint Brain and Other nervous Hodgkin lymphoma Leukemia Acute lymphocytic	2,814 12. 285 1. 593 2. 242 1. 640 2. 440 1.	$\begin{array}{ccc} 3 & 0.0 \\ 5 & 1.3^* \\ 1 & -1.1^* \\ 3 & 0.4 \end{array}$	1.1 2.7* 0.6 -1.1 3.0 3.6	0.1 -1.7 [#] 0.1 -2.3 0.4 0.0 [®]	259 576 18 697	2.5 0.3 0.7 0.0 0.8 0.4	-2.2* -1.5* -1.2* - -3.0* -3.4*	-2.7* -3.3* -2.1* - -3.2* -2.8*	-1.5*# 0.9# -0.6 - -2.8* -3.1*	58.8 53.8 ^e 59.5 78.7 35.2 43.6 ^e	79.7° 69.8° 80.1° 95.2° 70.1° 80.7°
<u>Ages 15-19</u>											
All Sites Bone and Joint Melanoma of the skin Testis(males) Brain and Other nervous Thyroid Hodgkin lymphoma Non-Hodgkin lymphoma Leukemia Acute lymphocytic	4,487 21. 330 1. 364 1. 373 3. 423 2. 384 1. 629 2. 389 1. 632 3. 360 1.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$1.0^{*} \\ 1.4 \\ 0.8 \\ 1.6 \\ 1.3 \\ 1.3 \\ 0.0 \\ 3.5^{*} \\ -0.3 \\ 1.6$	$\begin{array}{c} 0.4 \\ 0.4 \\ 1.0 \\ 0.4 \\ -1.0 \\ 2.6^{*} \\ 0.1 \\ 1.0 \\ 1.9 \\ 1.6 \end{array}$	397 34 35 436 - 89 218 887	3.6 0.5 0.0 0.1 0.5 - 0.1 0.3 1.1 0.5	-2.0^{*} -1.5^{*} -1.1^{*} -4.3^{*} -2.7^{*} -2.1^{*} -2.0^{*}	-2.4^{*} -2.8^{*} -1.0 -2.8^{*} -2.5^{*} -2.2^{*} -1.2	$\begin{array}{c} -1.6^{*\#} \\ 0.2^{\#} \\ - \\ -1.0^{*} \\ -3.3^{*} \\ -2.4^{*} \\ -2.3^{*} \end{array}$	$\begin{array}{c} 67.7\\ 51.0^{e}\\ 75.1^{e}\\ 66.0^{e}\\ 64.7\\ 100.0\\ 88.9\\ 45.2^{e}\\ 24.4\\ 29.5^{e} \end{array}$	$79.7^{\circ} 63.3^{\circ} 97.5^{\circ} 91.7^{\circ} 79.9^{\circ} 97.5 94.9^{\circ} 75.5^{\circ} 48.9^{\circ} 52.7^{\circ}$

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.

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 NCHS public use data file for the total US.
- The difference in rates between 1975-1977 and 1996-2002 is statistically significant (p<.05). The standard error of the survival rate is between 5 and 10 percentage points. The standard error of the survival rate is greater than 10 percentage points. с d
- e
- f Sites were chosen based on more than 100 SEER incident cases between 2000-2003. *
- The APC is significantly different from zero (p<.05). #
- The APC for 1989-2003 is significantly different from the APC for 1975-1988 (p<.05). a
- The APC for 1989-2003 is significantly different from the APC for 1975-1988 (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 SITES (Invasive)

SURVIVAL RATES^a

By Year of Diagnosis

All Races, Males and Females

Ages 0-14

Year of Diagnosis

1975- 1980-<u>1979 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002</u>

Relative Survival Rates (SEER^b)

1-year	81.4	85.0	87.1	85.7	86.0	88.8	88.3	89.3	91.0	91.1	88.4	90.5	90.4	92.8	91.1	91.0	91.3	92.3	92.0	91.3
2-year	71.2	75.7	78.2	76.3	77.2	80.4	79.8	81.7	82.3	84.0	82.0	84.6	84.4	86.2	84.6	84.0	85.2	85.7	86.7	
3-year	65.5	70.6	73.9	72.5	72.9	76.6	75.3	77.3	78.9	80.9	78.6	81.5	80.9	83.6	82.1	81.3	82.6	83.2		
4-year	62.1	67.4	70.7	71.2	70.9	73.5	72.8	75.0	76.0	78.7	77.8	78.8	78.3	80.5	80.3	78.6	80.7			
5-year	59.9	65.7	69.8	69.0	70.3	72.6	71.4	73.9	74.9	77.6	76.1	78.1	76.9	80.1	78.9	77.6				
6-year	58.2	64.5	68.5	68.1	69.0	72.2	70.3	73.1	74.3	76.1	75.7	77.9	75.8	79.3	78.1					
7-year	57.1	63.5	67.3	68.0	67.8	71.3	68.9	72.2	73.8	75.9	75.2	77.1	75.2	78.7						
8-year	56.4	62.8	66.2	67.7	67.8	70.7	67.9	71.8	73.0	75.8	74.5	76.8	74.3							
9-year	56.0	62.2	65.6	67.1	67.6	70.4	67.5	71.3	72.6	75.6	74.2	76.0								
10-year	55.7	61.7	64.9	67.0	67.0	70.1	67.0	70.9	72.5	75.5	74.2									
11-year	55.4	61.4	64.2	67.0	66.7	70.0	66.8	70.4	72.0	75.4										
12-year	55.0	60.9	63.9	66.3	66.6	69.8	66.6	70.2	71.8											
13-year	54.9	60.5	63.7	66.0	66.2	69.5	66.6	69.5												
14-year	54.5	60.2	63.6	64.8	66.2	69.0	66.4													
15-year	54.2	59.9	63.3	64.8	66.0	68.7														
16-year	53.8	59.6	63.2	64.5	65.6															
17-year	53.4	59.4	63.2	64.2																
18-year	53.2	59.0	63.2																	
19-year	52.9	58.8																		
20-year	52.7																			

а b

Survival rates are relative rates expressed as percents. Rates are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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- 1980-<u>1979 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002</u>

Relative Survival Rates (SEER^b)

1-year	83.1	86.3	87.9	88.1	88.1	89.9	89.4	90.4	91.4	90.4	89.7	90.7	90.1	93.1	91.6	92.0	91.2	90.9	92.3	92.2
2-year	73.1	77.3	78.8	79.2	80.0	82.4	81.2	83.0	83.4	83.3	82.6	84.2	84.5	87.3	85.0	85.2	85.7	84.0	87.0	
3-year	68.1	72.3	75.3	75.8	75.8	78.2	77.1	78.5	79.7	80.2	79.5	80.7	81.2	85.0	81.8	82.4	82.8	81.7		
4-year	64.8	69.3	72.6	74.1	73.3	75.4	73.9	76.1	77.5	78.0	78.1	78.6	79.5	82.0	80.2	79.7	80.8			
5-year	62.8	67.6	71.6	72.3	72.8	74.6	72.6	74.8	76.2	76.8	76.4	77.9	78.1	81.4	78.5	78.4				
6-year	61.1	66.2	70.5	71.6	71.7	74.0	71.5	73.8	75.5	75.5	75.9	77.4	77.0	80.7	77.5					
7-year	60.1	65.4	69.3	71.3	70.6	73.2	70.5	72.9	74.8	75.1	75.5	76.8	76.4	80.2						
8-year	59.3	64.6	68.4	70.9	70.2	72.3	69.9	72.3	74.2	74.9	74.6	76.5	75.4							
9-year	58.8	63.9	67.9	70.4	69.6	72.1	69.4	71.8	73.8	74.8	74.3	75.7								
10-year	58.5	63.5	67.2	70.0	69.3	71.5	69.0	71.6	73.4	74.7	74.2									
11-year	58.1	63.1	66.6	69.9	69.0	71.4	68.9	70.9	72.8	74.7										
12-year	57.7	62.7	66.3	69.4	68.9	71.1	68.7	70.7	72.6											
13-year	57.6	62.3	66.0	68.9	68.6	71.0	68.6	70.1												
14-year	57.3	62.0	65.8	67.7	68.2	70.2	68.4													
15-year	57.0	61.6	65.7	67.5	67.7	70.1														
16-year	56.7	61.2	65.2	66.8	67.4															
17-year	56.3	60.9	65.1	66.6																
18-year	56.1	60.7	65.1																	
19-year	55.8	60.4																		
20-year	55.5																			

а b

Survival rates are relative rates expressed as percents. 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)

Years Since Diagnosis	0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	0 to <13 ^e	0 to <28 ^e	>=28 ^f	Complete ^g
Race/Sex									
All Races ^b	57,723	47,688	41,411	35,310	30,062	131,069	227,872	+	+
Males	30,378	25,199	21,883	17,935	14,601	69,413	117,016	+	+
Females	27,345	22,489	19,528	17,375	15,461	61,656	110,856	+	+
White ^b	48,687	39,754	35,270	30,871	26,365	110,249	194,768	+	+
Males	25,649	21,010	18,833	15,739	12,931	58,570	100,428	+	+
Females	23,038	18,744	16,437	15,132	13,434	51,679	94,340	+	+
Black ^b	5,798	5,098	4,107	2,953	2,619	13,408	21,893	+	+
Males	2,965	2,611	2,046	1,435	1,146	6,854	10,748	+	+
Females	2,833	2,487	2,061	1,518	1,473	6,554	11,145	+	+
Asian/Pacific Islander ^c	1,897	1,548	+	+	+	4,254	+	+	+
Males	1,028	836	+	+	+	2,258	+	+	+
Females	869	712	+	+	+	1,996	+	+	+
Hispanic ^d	8,930	6,276	+	+	+	18,521	+	+	+
Males	4,780	3,388	+	+	+	10,057	+	+	+
Females	4,150	2,888	+	+	+	8,464	+	+	+

Estimated United States Cancer Prevalence Counts^a on January 1, 2003 By Race/Ethnicity, Sex and Years Since Diagnosis

- US 2003 cancer prevalence counts are based on 2003 cancer prevalence proportions from the SEER registries and 1/1/2003 US population estimates based on the average of 2002 and 2003 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person. 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 excluding Hawaii and Seattle. Maximum limited-duration prevalence: 28 years for 1975-2003 SEER 9 data; 13 years for 1990-2003 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders). (f) Cases diagnosed more than 28 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 <28 and >=28. Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval. Not available.
- bcd ρ
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+ Not available.

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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 2000-2003

Age 1

Age 0		
	Rate	Cases
All Sites	23.2	1003
Leukemia	4.5	196
Acute Lymphocytic Leukemia	1.9	84
Brain and ONS ^d	3.7	160
Soft Tissue	3.2	139
Eye and Orbit	2.5	109
Other Endocrine	2.3	100

Age 3		
	Rate	Cases
All Sites	20.6	858
Leukemia	9.9	414
Acute Lymphocytic Leukemia	9.3	388
Brain and ONS ^d	3.6	148
Kidney and Renal Pelvis	2.0	85
Soft Tissue	1.4	57
Other Endocrine	1.0	41

Age 6		
	Rate	Cases
All Sites	11.2	488
Leukemia	3.8	163
Acute Lymphocytic Leukemia	3.0	132
Brain and ONS ^d	3.6	158
Non-Hodgkin Lymphoma	0.8	35
Kidney and Renal Pelvis	0.6	25
Soft Tissue	0.6	24

Age 9		
	Rate	Cases
All Sites	10.2	464
Leukemia	2.9	133
Acute Lymphocytic Leukemia	2.2	102
Brain and ONS ^d	2.5	113
Non-Hodgkin Lymphoma	1.3	58
Bones and Joints	0.8	37
Soft Tissue	0.6	28

	Rate	Cases
All Sites	20.7	882
Leukemia	6.3	267
Acute Lymphocytic Leukemia	4.0	169
Brain and ONS ^d	4.1	176
Kidney and Renal Pelvis	2.0	87
Other Endocrine	1.8	77
Eye and Orbit	1.6	69

Age 4		
	Rate	Cases
All Sites	17.1	716
Leukemia	7.8	329
Acute Lymphocytic Leukemia	7.1	298
Brain and ONS ^d	4.1	174
Kidney and Renal Pelvis	1.1	47
Soft Tissue	1.0	43
Non-Hodgkin Lymphoma	0.6	24

Age 7		
	Rate	Cases
All Sites	10.7	473
Leukemia	3.9	173
Acute Lymphocytic Leukemia	3.3	146
Brain and ONS ^d	3.0	133
Non-Hodgkin Lymphoma	0.6	26
Bones and Joints	0.5	24
Soft Tissue	0.5	21

	Age 10		
ses		Rate	Cases
64	All Sites	9.8	453
.33	Brain and ONS ^d	2.4	112
.02	Leukemia	2.3	108
.13	Acute Lymphocytic Leukemia	1.6	76
58	Non-Hodgkin Lymphoma	1.1	51
37	Bones and Joints	0.9	41
28	Soft Tissue	0.7	32

Age 2		
	Rate	Cases
All Sites	23.7	998
Leukemia	10.5	443
Acute Lymphocytic Leukemia	9.3	393
Brain and ONS ^d	4.4	187
Kidney and Renal Pelvis	2.2	94
Eye and Orbit	1.4	59
Other Endocrine	1.2	52

Age 5		
	Rate	Cases
All Sites	13.2	562
Leukemia	5.1	219
Acute Lymphocytic Leukemia	4.5	194
Brain and ONS ^d	3.6	155
Kidney and Renal Pelvis	0.9	39
Non-Hodgkin Lymphoma	0.8	36
Soft Tissue	0.7	30

Age 8							
	Rate	Cases					
All Sites	10.9	488					
Leukemia	3.5	159					
Acute Lymphocytic Leukemia	2.8	127					
Brain and ONS ^d	3.3	148					
Non-Hodgkin Lymphoma	1.2	53					
Bones and Joints	0.6	26					
Soft Tissue	0.4	20					

Age 11		
	Rate	Cases
All Sites	11.3	520
Brain and ONS^d	2.9	132
Leukemia	2.7	123
Acute Lymphocytic Leukemia	1.9	89
Bones and Joints	1.1	50
Non-Hodgkin Lymphoma	1.0	47
Hodgkin Lymphoma	0.9	40

- b
- Top 5 cancer sites were determined based on the 2000-2003 age-adjusted rate. 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 С 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 2000-2003

Age 13

Age 12					
	Rate	Cases			
All Sites	12.3	558			
Leukemia	3.1	143			
Acute Lymphocytic Leukemia	2.0	92			
Brain and ONS ^d	2.8	127			
Bones and Joints	1.3	58			
Non-Hodgkin Lymphoma	1.0	47			
Hodgkin Lymphoma	1.0	44			

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	Rate	Cases
All Sites	13.8	616
Leukemia	3.0	133
Acute Lymphocytic Leukemia	2.2	96
Brain and ONS ^d	2.5	112
Bones and Joints	1.5	68
Hodgkin Lymphoma	1.3	57
Soft Tissue	1.3	56

Age 14		
	Rate	Cases
All Sites	15.3	667
Leukemia	3.1	133
Acute Lymphocytic Leukemia	2.0	87
Brain and ONS ^d	2.5	110
Hodgkin Lymphoma	1.7	75
Bones and Joints	1.6	68
Non-Hodgkin Lymphoma	1.5	67

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Age 15						
	Rate	Cases				
All Sites	18.2	783				
Leukemia	3.2	136				
Acute Lymphocytic Leukemia	1.9	84				
Hodgkin Lymphoma	2.2	96				
Brain and ONS ^d	2.2	95				
Bones and Joints	1.9	81				
Non-Hodgkin Lymphoma	1.5	66				

Age 18			
	Rate	Cases	
All Sites	22.0	938	All Sites
Hodgkin Lymphoma	3.6	154	Hodgkin Ly
Leukemia	2.6	110	Thyroid
Acute Lymphocytic Leukemia	1.5	62	Leukemia
Testis	2.4	103	Acute Lym
Melanoma of the Skin	2.1	89	Testis
Thyroid	2.0	85	Melanoma o:

Age 16		
	Rate	Cases
All Sites	19.6	836
Leukemia	3.6	154
Acute Lymphocytic Leukemia	2.2	95
Hodgkin Lymphoma	2.5	106
Brain and ONS ^d	2.2	93
Bones and Joints	2.0	84
Non-Hodgkin Lymphoma	1.6	69

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Age 17		
	Rate	Cases
All Sites	20.5	877
Leukemia	2.7	116
Acute Lymphocytic Leukemia	1.6	67
Hodgkin Lymphoma	2.7	114
Non-Hodgkin Lymphoma	2.0	87
Melanoma of the Skin	1.9	83
Testis	1.9	82

	Age 19		
Cases		Rate	Cases
938	All Sites	24.8	1053
154	Hodgkin Lymphoma	3.7	159
110	Thyroid	2.8	117
62	Leukemia	2.7	116
103	Acute Lymphocytic Leukemia	1.2	52
89	Testis	2.5	108
85	Melanoma of the Skin	2.2	93

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- 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 17 SEER Areas over the time period 2000-2003.
- b С
- Top 5 cancer sites were determined based on the 2000-2003 age-adjusted rate. 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 2000-2003

						Age 2		
	<u>Rate</u>	Deaths		Rate	Deaths		Rate	Deaths
All Sites	1.9	307	All Sites	2.1	336	All Sites	2.6	406
Leukemia	0.7	114	Leukemia	0.8	122	Leukemia	1.0	149
Acute Lymphocytic Leukemia	0.3	42	Acute Lymphocytic Leukemia	0.2	37	Acute Lymphocytic Leukemia	0.3	47
Brain and ONS ^d	0.4	66	Brain and ONS ^d	0.6	98	Brain and ONS ^d	0.6	86
Other Endocrine	0.2	29	Other Endocrine	0.3	42	Other Endocrine	0.5	75
Soft Tissue	0.1	19	Liver & IBD ^d	0.1	21	Liver & IBD ^d	0.2	30
Liver & IBD ^d	0.1	16	Soft Tissue	-	-	Soft Tissue	0.1	19
Age 3			Age 4			Age 5		
	Rate	Deaths		Rate	Deaths		Rate	Deaths
All Sites	2.9	448	All Sites	2.9	444	All Sites	2.9	450
Leukemia	0.9	136	Brain and ONS^d	0.9	132	Brain and ONS ^d	0.9	143
Acute Lymphocytic Leukemia	0.3	50	Leukemia	0.8	122	Leukemia	0.7	114
Brain and ONS ^d	0.7	106	Acute Lymphocytic Leukemia	0.3	50	Acute Lymphocytic Leukemia	0.4	61
Other Endocrine	0.6	95	Other Endocrine	0.5	76	Other Endocrine	0.5	83
Soft Tissue	0.1	21	Kidney and Renal Pelvis	0.2	24	Soft Tissue	0.2	31
Liver & IBD^d	0.1	20	Liver & IBD ^d	0.1	21	Kidney and Renal Pelvis	0.2	27
Age 6		Age 7			Age 8			
	Rate	Deaths		Rate	Deaths	_	Rate	Deaths
All Sites	2.7	422	All Sites	2.5	403	All Sites	2.3	370
Brain and ONS ^d	1.0	161	Brain and ONS ^d	0.9	151	Brain and ONS ^d	0.8	123
Leukemia	0.7	114	Leukemia	0.8	126	Leukemia	0.7	109
Acute Lymphocytic Leukemia	0.4	60	Acute Lymphocytic Leukemia	0.4	68	Acute Lymphocytic Leukemia	0.4	68
Other Endocrine	0.3	54	Other Endocrine	0.3	46	Other Endocrine	0.3	48
Kidney and Renal Pelvis	0.2	32	Kidney and Renal Pelvis	0.1	20	Bones and Joints	0.1	21
Soft Tissue	-	_	Soft Tissue	0.1	16	Soft Tissue	0.1	19
Age 9			Age 10			Age 11		
	Rate	Deaths		Rate	Deaths		Rate	Deaths
All Sites	2.3	390	All Sites	2.5	422	All Sites	2.2	379
Leukemia	0.8	136	Brain and ONS^d	0.8	139	Leukemia	0.7	120
Acute Lymphocytic Leukemia	0.4	74	Leukemia	0.7	120	Acute Lymphocytic Leukemia	0.4	62
Brain and ONS ^d	0.8	135	Acute Lymphocytic Leukemia	0.4	74	Brain and ONS ^d	0.7	117
Other Endocrine	0.2	38	Other Endocrine	0.3	44	Bones and Joints	0.2	36
Non-Hodgkin Lymphoma	0.1	18	Bones and Joints	0.2	38	Soft Tissue	0.2	29
	0.1	16	Soft Tissue	0.1	25	Non-Hodgkin Lymphoma	0.1	23

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- 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 2000-2003. Top 5 cancer sites were determined based on the 2000-2003 age-adjusted rate. Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS). ONS = Other Nervous System. IBD = Intrahepatic Bile Duct.
- b
- с d
- 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 2000-2003

Age 12			Age 13			Age 14		
	Rate	Deaths		Rate	Deaths		Rate	Deaths
All Sites	2.4	406	All Sites	2.8	467	All Sites	2.8	461
Leukemia	0.9	145	Leukemia	1.0	160	Leukemia	0.9	152
Acute Lymphocytic Leukemia	0.5	76	Acute Lymphocytic Leukemia	0.4	69	Acute Lymphocytic Leukemia	0.4	67
Brain and ONS ^d	0.6	109	Brain and ONS ^d	0.7	109	Brain and ONS^d	0.6	102
Bones and Joints	0.3	50	Bones and Joints	0.4	65	Bones and Joints	0.4	70
Non-Hodgkin Lymphoma	0.1	18	Bones and Joints	0.2	38	Soft Tissue	0.2	29
Bones and Joints	0.1	16	Soft Tissue	0.1	25	Non-Hodgkin Lymphoma	0.1	23
Age 15			Age 16			Age 17		
	Rate	Deaths		Rate	Deaths		Rate	Deaths
All Sites	2.8	462	All Sites	3.5	559	All Sites	3.4	558
Leukemia	1.0	161	Leukemia	1.1	179	Leukemia	1.0	170

All Sites	2.8	462
Leukemia	1.0	161
Acute Lymphocytic Leukemia	0.4	72
Brain and ONS ^d	0.6	90
Bones and Joints	0.4	61
Soft Tissue	0.2	38
Non-Hodgkin Lymphoma	0.2	38

All Sites 3.5	
All Sitos 2.5	eaths
ALL SILES 5.5	559
Leukemia 1.1	179
Acute Lymphocytic Leukemia 0.5	81
Brain and ONS ^d 0.6	90
Bones and Joints 0.5	81
Soft Tissue 0.3	50
Non-Hodgkin Lymphoma 0.2	36

Age 17		
	Rate	<u>Deaths</u>
All Sites	3.4	558
Leukemia	1.0	170
Acute Lymphocytic Leukemia	0.5	78
Brain and ONS ^d	0.5	87
Bones and Joints	0.5	80
Soft Tissue	0.3	49
Non-Hodgkin Lymphoma	0.3	42

Age 18			
	Rate	Death	
All Sites	3.9	631	
Leukemia	1.1	182	
Acute Lymphocytic Leukemia	0.5	74	
Brain and ONS ^d	0.5	84	
Bones and Joints	0.5	78	
Soft Tissue	0.4	62	
Non-Hodgkin Lymphoma	0.3	54	

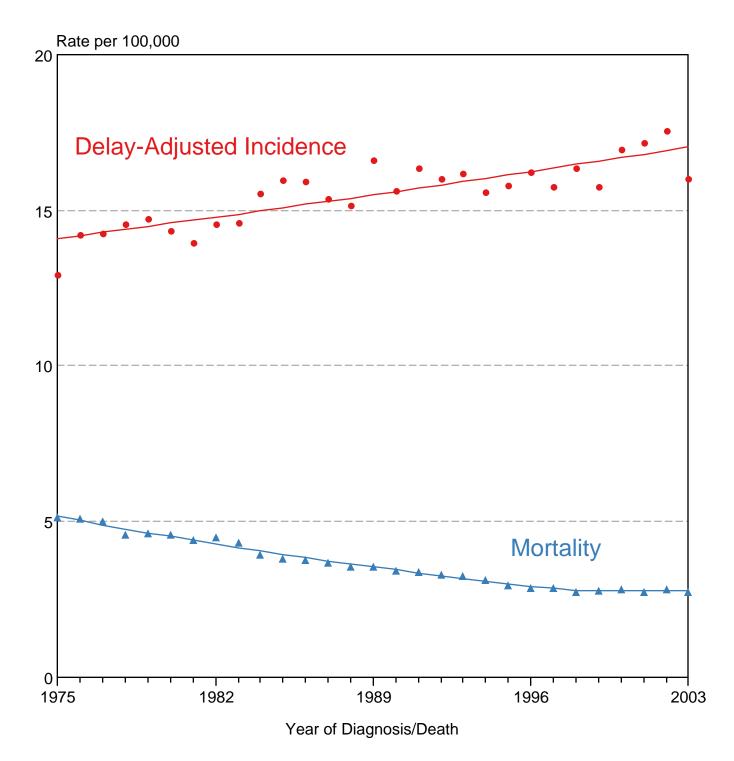
	Age 19		
Deaths		Rate	Deaths
631	All Sites	4.2	680
182	Leukemia	1.2	195
74	Acute Lymphocytic Leukemia	0.5	86
84	Bones and Joints	0.6	97
78	Brain and ONS ^d	0.5	85
62	Soft Tissue	0.4	61
54	Non-Hodgkin Lymphoma	0.3	48

National Cancer Institute

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 - 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 2000-2003. Top 5 cancer sites were determined based on the 2000-2003 age-adjusted rate. Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS). 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, 1975-2003

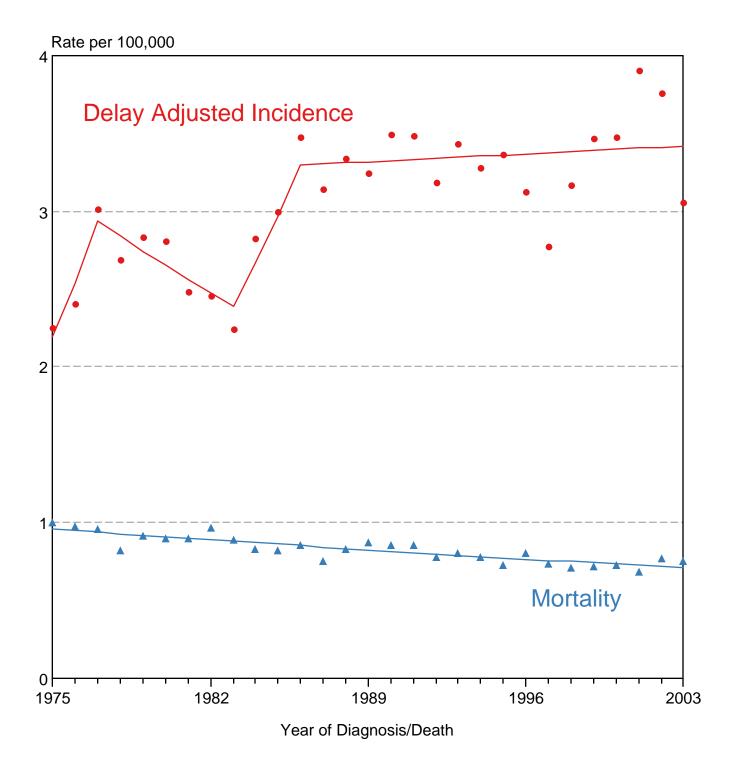


Source: SEER 9 areas and NCHS public use data file for the total US.

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

Regression lines are calculated using the Joinpoint Regression Program Version 3.1, April 2006, National Cancer Institute.

SEER Delay-Adjusted Incidence and US Mortality Brain and CNS, Under 15 Years of Age Both Sexes, All Races, 1975-2003



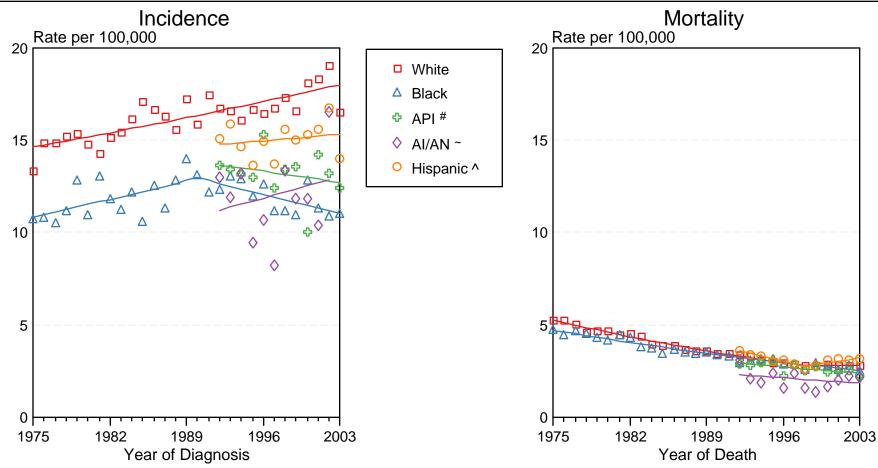
Source: SEER 9 areas and NCHS public use data file for the total US.

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

Regression lines are calculated using the Joinpoint Regression Program Version 3.1, April 2006, National Cancer Institute.

SEER Incidence and US Death Rates* All Cancer Sites, Ages <20, Both Sexes Joinpoint Analyses for Whites and Blacks from 1975-2003

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2003



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 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 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 are calculated using the Joinpoint Regression Program Version 3.1, April 2006, National Cancer Institute. # API = Asian/Pacific Islander.

- ~ AI/AN = American Indian/Alaska Native. Incidence data for AI/AN include cases from Connecticut, Detroit, Iowa, New Mexico, Seattle, Utah, Atlanta and the Alaska Native Registry for the time period 1992-2002. Mortality data are from the entire US for the time period 1992-2003.
 - ^ 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 Hawaii, Seattle, and the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.