Section XXVIII Childhood Cancer by Site Incidence, Survival and Mortality

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

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

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

AGE-ADJUSTED SEER CANCER INCIDENCE AND U.S. DEATH RATES, 2000-2004

By Primary Cancer Site

All Races, Males and Females

			Ages	0-14					Ages	0-19		
		Incidenc	ce	1	Mortalit	.у		Incidenc	te	I	Mortalit	У
Site	Total	Males	Females									
All Sites												
All Races	14.9	15.8	14.0	2.5	2.7	2.3	16.4	17.5	15.3	2.8	3.1	2.5
Whites	15.7	16.7	14.6	2.6	2.7	2.4	17.5	18.7	16.2	2.8	3.1	2.5
Blacks	10.9	11.2	10.7	2.4	2.6	2.2	11.6	11.9	11.2	2.7	3.0	2.4
Bone & Joint	0.7	0.7	0.7	0.1	0.1	0.1	0.9	1.0	0.8	0.2	0.3	0.2
Brain & Other nervous	3.2	3.4	3.1	0.7	0.8	0.7	2.9	3.1	2.8	0.7	0.7	0.6
Hodgkin lymphoma	0.5	0.7	0.4	0.0	0.0	-	1.1	1.2	1.1	0.0	0.0	0.0
Kidney & Renal pelvis	0.8	0.8	0.8	0.1	0.1	0.1	0.6	0.6	0.6	0.1	0.1	0.1
Leukemia	4.9	5.3	4.5	0.8	0.9	0.7	4.4	4.9	3.9	0.9	1.0	0.7
Acute lymphocytic	3.8	4.1	3.5	0.4	0.4	0.3	3.3	3.7	2.9	0.4	0.5	0.3
Non-Hodgkin lymphoma	0.9	1.1	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

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

⁽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 RATESa, 1975-2004

By Primary Cancer Site

All Races, Males and Females

Year of Diagnosis

Age/Site	1975	1980	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Ages 0-14																		
All Sites																		
All Races	11.5	12.9	14.5	14.2	15.1	13.4	14.9	13.9	14.0	14.7	14.0	15.3	14.4	15.4	15.6	15.2	12.9	14.8
Whites	12.0	13.1	15.5	14.2	16.2	13.8	15.2	14.5	14.8	14.9	14.7	16.2	15.4	16.6	16.8	16.6	13.7	15.4
Blacks	8.6	11.1	10.1	12.3	11.5	12.0	12.4	12.2	11.3	11.6	11.2	10.0	10.4	11.9	10.9	11.1	9.7	13.3
Bone & Joint	0.5	0.7	0.8	0.7	0.9	0.5	0.6	0.8	0.8	0.5	0.9	0.6	0.6	0.6	0.6	0.7	0.5	0.6
Brain & Other nervous	2.3	2.8	3.0	3.5	3.5	3.2	3.4	3.3	3.3	3.1	2.7	3.2	3.4	3.4	3.8	3.6	2.9	3.2
Hodgkin lymphoma	0.7	0.5	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	0.5
Kidney & Renal pelvis	0.7	0.8	0.9	0.8	0.9	0.7	1.0	1.2	0.6	1.0	1.0	1.1	0.7	1.0	0.9	0.9	0.7	0.7
Leukemia	3.3	4.0	4.6	4.4	4.6	4.0	4.2	3.7	4.4	4.6	4.2	4.8	4.7	4.6	4.4	4.8	4.0	4.9
Acute lymphocytic	2.2	3.1	3.5	3.4	3.5	3.1	3.1	2.9	3.6	3.5	3.5	3.9	3.6	3.5	3.5	4.0	3.1	3.6
Non-Hodgkin lymphoma	1.0	0.7	0.7	0.8	0.9	0.8	0.8	1.0	0.9	0.6	0.9	0.9	0.8	1.0	1.0	1.0	1.0	0.8
Soft tissue	0.9	0.9	0.9	0.7	1.1	0.8	0.6	0.9	0.9	1.1	1.0	1.1	0.9	1.0	1.2	1.0	0.8	0.9
Ages 0-19																		
All Sites																		
All Races	12.9	14.3	15.9	15.6	16.3	16.0	16.1	15.5	15.7	16.1	15.6	16.2	15.6	16.8	16.9	17.2	15.5	16.0
Whites	13.4	14.8	17.0	15.9	17.5	16.8	16.6	16.1	16.6	16.5	16.7	17.3	16.6	18.2	18.3	19.1	16.6	17.1
Blacks	10.8	10.9	10.5	13.2	12.2	12.3	13.0	13.0	12.0	12.6	11.1	11.3	11.0	12.9	11.3	10.9	10.9	12.9
Bone & Joint	0.7	0.9	1.0	0.8	1.0	0.9	0.8	1.0	0.9	0.7	1.2	0.8	0.7	0.8	0.9	1.0	0.8	0.8
Brain & Other nervous	2.1	2.5	2.7	3.2	3.0	3.3	3.0	2.9	3.0	3.0	2.5	2.8	3.0	3.1	3.4	3.3	2.8	2.8
Hodgkin lymphoma	1.5	1.2	1.4	1.3	1.4	1.4	1.3	1.3	0.9	1.4	1.3	1.4	1.1	1.1	1.1	1.2	1.1	1.1
Kidney & Renal pelvis	0.5	0.6	0.7	0.6	0.7	0.6	0.8	0.9	0.5	0.7	0.8	0.8	0.6	0.8	0.7	0.7	0.6	0.6
Leukemia	3.0	3.5	4.0	3.8	4.1	3.7	3.7	3.4	3.9	3.9	3.7	4.2	4.0	4.1	3.9	4.5	3.7	4.3
Acute lymphocytic	1.9	2.5	2.9	2.9	3.0	2.6	2.6	2.5	3.1	2.9	2.9	3.3	2.9	3.0	2.8	3.5	2.8	3.1
Non-Hodgkin lymphoma	1.0	0.8	1.0	1.0	1.1	1.0	0.9	1.2	1.1	1.0	1.1	1.0	0.9	1.3	1.1	1.2	1.3	1.1
Soft tissue	0.8	0.9	0.9	0.8	1.1	0.7	0.7	0.7	1.1	1.0	1.0	1.1	1.0	1.2	1.1	1.0	0.9	1.0

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.

AGE-ADJUSTED CANCER U.S. DEATH RATESa, 1975-2004

By Primary Cancer Site

All Races, Males and Females

Year of Death

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

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.

AGE-ADJUSTED CANCER U.S. DEATH RATESa, 1975-2004

By Primary Cancer Site

Whites, Males and Females

Year of Death

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

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.

AGE-ADJUSTED CANCER U.S. DEATH RATESa, 1975-2004

By Primary Cancer Site

Blacks, Males and Females

Year of Death

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

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.

Table XXVIII-6 AGE-ADJUSTED SEER CANCER INCIDENCE TRENDS, 1975-2004, 1975-1989, 1990-2004a

By Primary Cancer Site

All Races, Males and Females

		Ages	0-14			Ages	0-19	
<u>Site</u>	% Change 1975-2004	APC 1975-2004	APC 1975-1989	APC 1990-2004	% Change 1975-2004	APC 1975-2004	APC 1975-1989	APC 1990-2004
All Sites								
All Races	28.6	0.6*	1.2*	0.2#	23.7	0.6*	1.2*	0.2#
Whites	27.6	0.7*	1.2*	0.5	28.1	0.7*	1.3*	0.6*@
Blacks	54.6	0.3	1.7*	-0.5#	19.8	0.1	1.2*	-0.7#
Bone & Joint	40.8	0.2	1.4	-1.0@	3.7	0.2	1.4	-0.7
Brain & Other nervous	39.9	1.0*	2.1*	0.0#	33.3	0.9*	2.0*	-0.2#
Hodgkin lymphoma	-23.0	-1.2*	-0.8	-1.1	-26.9	-0.9*	0.1	-1.4*@
Kidney & Renal pelvis	0.9	-0.1	1.1	-0.9	8.6	0.1	1.0	-0.8
Leukemia	49.6	0.7*	1.5*	0.6	41.9	0.7*	1.3*	0.8*
Acute lymphocytic	63.5	0.8*	2.2*	0.7#	62.7	0.9*	2.2*	0.9@
Non-Hodgkin lymphoma	-27.0	0.3	-0.1	1.1	6.7	0.9*	1.1	1.1
Soft tissue	7.6	1.0*	0.7	1.1	22.1	1.0*	1.2	1.3

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 1990-2004 is significantly different from the APC for 1975-1989 (p<.05).
The APC for 1990-2004 is significantly different from the APC for 1975-1989 (p<.10).

Statistic could not be calculated. Trend based on less than 10 cases for at least one year within the time interval.

AGE-ADJUSTED CANCER U.S. MORTALITY TRENDS, 1975-2004, 1975-1989, 1990-2004a

By Race and Primary Cancer Site

Males and Females

		Ages	0-14			Ages	0-19	
Site	% Change 1975-2004	APC 1975-2004	APC 1975-1989	APC 1990-2004	% Change 1975-2004	APC 1975-2004	APC 1975-1989	APC 1990-2004
All Races								
All Sites Bone & Joint Brain & Other nervous Hodgkin lymphoma Kidney & Renal pelvis Leukemia Acute lymphocytic Non-Hodgkin lymphoma	-49.7 -44.9 -26.0 - -52.5 -65.0 -71.1 -79.5	-2.6* -1.8* -1.0* -2.9* -3.8* -4.6* -5.0*	-2.9* -3.6* -1.2*3.7* -4.4* -5.2* -4.2*	-1.8*# 0.3# -1.0*0.6# -3.0*# -3.0*# -5.0*	-47.0 -33.6 -26.0 -77.3 -49.3 -59.9 -65.1 -72.1	-2.4* -1.6* -1.1* -4.6* -2.6* -3.3* -4.0* -4.1*	-2.8* -3.2* -1.2* -3.8* -3.6* -3.9* -4.5* -3.6*	-1.7*# 0.3# -1.0* -4.6* -0.7# -2.9*# -2.9*# -4.3*
Soft tissue	20.5	-1.2*	0.6	-0.5	16.4	-0.6*	1.0	-0.8*#
Whites								
All Sites Bone & Joint Brain & Other nervous Hodgkin lymphoma Kidney & Renal pelvis Leukemia Acute lymphocytic Non-Hodgkin lymphoma Soft tissue	-50.4 -41.9 -26.6 - -51.9 -65.9 -71.3 -79.7 19.7	-2.6* -1.7* -1.0* -2.7* -3.8* -4.6* -5.1* -1.2*	-3.0* -3.1* -1.1* -3.8* -4.6* -5.5* -4.0* 0.8	-1.8*# 0.2# -1.1*0.5# -2.9*# -2.9*# -5.6*	-47.6 -32.3 -25.9 -75.2 -45.6 -60.7 -63.9 -72.1 16.1	-2.4* -1.4* -1.0* -4.7* -2.5* -3.4* -3.9* -4.2* -0.6*	-2.8* -2.8* -1.1* -4.1* -3.4* -4.1* -4.7* -3.5*	-1.7*# 0.2# -1.1* -4.4* -0.3# -2.8*# -2.6*# -5.0*# -0.6®
Blacks								
All Sites Bone & Joint Brain & Other nervous Hodgkin lymphoma Kidney & Renal pelvis Leukemia	-46.0 -48.4 -27.1 - - -61.9	-2.4* -1.1* - -3.4*	-2.6* -1.3 - -3.5*	-1.6*# -0.6 -	-41.5 -31.3 -26.2 - - -53.1	-2.1* -1.7* -1.0* - - -2.8*	-2.4* -5.3* -1.1 - -2.6*	-1.6** 1.3# -0.8 - - -3.0*
Leukemia Acute lymphocytic Non-Hodgkin lymphoma Soft tissue	-61.9 -78.8 - 26.1	-3.4 -4.8* -	-3.5 -2.8* -	-3.0 -5.1* -	-53.1 -77.9 -70.3 12.7	-2.8 -4.0* -3.4* -0.6	-2.6 -2.1* -4.5* 0.7	-3.0 -5.0*# -0.5# -1.0

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 1990-2004 is significantly different from the APC for 1975-1989 (p<.05).

The APC for 1990-2004 is significantly different from the APC for 1975-1989 (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	1996-2003
All Sites								
All Races	58.1	62.7	66.9	68.3	71.4	75.6	77.3	79.6ª
Whites	58.1	63.0	67.6	70.1	72.2	76.6	78.2	81.0ª
Blacks	57.3	57.7	62.2	56.7	65.3	70.8	72.6	73.1ª
Bone & Joint	50.6 ^b	48.7	56.8 ^b	58.9 ^b	66.8 ^b	66.8	73.9	71.5ª
Brain & ONS	56.9	57.5	56.2	61.8	63.9	64.4	70.3	74.1ª
Hodgkin lymphoma	80.5	87.7	88.0	90.9	87.1	96.7	94.6	95.4ª
Leukemia	50.3	58.4	63.0	63.8	70.9	75.4	76.0	81.3ª
Acute lymphocytic	57.6	66.3	71.4	72.5	77.7	83.0	83.8	87.2ª
Acute myeloid	18.8	25.8	26.7 ^b	30.5 ^b	37.1 ^b	41.0	41.7 ^b	54.1ª
Neuroblastoma	52.4	56.9	54.5	52.3	61.9	76.1	67.3	69.1ª
Non-Hodgkin lymphoma	43.1	52.7	66.9	70.3	70.7	76.1	80.6	87.1 ^a
Soft tissue	61.0	74.8	69.2	73.9	65.4	79.7	76.5	72.4ª
Wilms' tumor	73.1	79.0	86.6	90.7	92.1	91.9	91.5	91.6ª

				Ages	0-19			
Site	1975-1977	1978-1980	1981-1983	1984-1986	1987-1989	1990-1992	1993-1995	1996-2003
All Sites								
All Races	61.7	65.3	68.2	70.6	73.4	76.1	77.6	79.9ª
Whites	61.5	65.8	69.1	72.5	74.9	77.5	78.5	81.2ª
Blacks	59.8	60.0	62.2	58.3	64.3	68.5	73.6	72.7ª
Bone & Joint	50.8	48.4	51.2	57.1	64.0	68.4	68.6	69.0ª
Brain & ONS	58.8	57.9	58.0	63.9	65.9	66.3	71.3	75.2ª
Hodgkin lymphoma	86.0	88.7	85.5	90.9	89.0	94.2	93.9	95.2ª
Leukemia	45.5	53.5	58.1	60.4	67.5	71.2	72.0	77.0ª
Acute lymphocytic	54.0	62.3	67.2	70.1	75.0	79.7	81.4	84.0 ^a
Acute myeloid	18.7	26.2	26.4	31.4	37.6	41.0	39.4	49.7ª
Neuroblastoma	52.7	57.0	53.4	52.5	60.5	75.8	67.3	68.8ª
Non-Hodgkin lymphoma	44.0	53.4	63.8	67.7	70.4	72.2	77.8	83.5 ^a
Soft tissue	65.2	69.2	68.2	73.3	67.3	69.6	74.1	70.5
Wilms' tumor	72.6	78.4	86.7	91.0	92.1	91.3	91.6	91.7ª

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 2004.

The difference in rates between 1975-1977 and 1996-2003 is statistically significant (p<.05). The standard error of the survival rate is between 5 and 10 percentage points. b

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

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

CHILDHOOD CANCER

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

			SEER Incid	ence ^a				US Mortal	ity ^b		Survi	vala
- 4-1:	2000-200			1975-1989	1990-2004	2000-200		1975-2004	1975-1989	1990-2004		
Age/Site	Num Cases	Rate	APC	APC	APC	Num Deaths	Rate	APC	APC	APC	1975-1977	1996-2003
Ages 0-4												
All Sites Soft tissue Kidney and Renal pelvis Eye and Orbit Brain and Other nervous Other endocrine Leukemia Acute lymphocytic	5,638 439 475 347 1,052 360 2,118 1,699	21.2 1.6 1.8 1.3 4.0 1.3 8.0 6.4	0.7* 0.7 0.0 0.5 1.3* - 0.8* 0.8*	1.3* 0.9 0.6 1.1 3.5* - 1.1* 1.6*	0.3° 1.8 -0.5 -1.4 0.4* - 1.0 0.8	2,414 121 89 31 609 403 786 273	2.5 0.1 0.1 0.0 0.6 0.4 0.8 0.3	-2.8* -2.0* -3.8* - -1.3* -3.2* -4.5*	-2.8* -0.1 -5.9* - -1.4* -4.0* -5.8*	-2.2* -1.3 -0.2#1.9* -2.5*# -2.0*#	57.3 61.1 ^d 72.2 87.1 ^d 52.4 33.8 ^d 55.4 63.1	80.2° 70.9 91.6° 95.3° 70.1° 65.7° 84.9° 90.4°
Ages 5-9 All Sites Brain and Other nervous Leukemia Acute lymphocytic	3,067 866 1,080 898	11.2 3.2 3.9 3.3	0.2 0.4 0.5 0.8*	1.2* 1.4 1.9* 2.6*	-0.1 [®] -0.5 -0.4 [®] 0.1 [®]	2,561 899 755 414	2.6 0.9 0.8 0.4	-2.8* -0.7* -4.9* -5.6*	-3.3* -0.6 -5.6* -6.6*	-1.7*# -0.6 -3.7*# -3.6*#	58.5 58.0 52.3 55.6	78.3° 72.9° 81.9° 85.0°
Ages 10-14 All Sites Bone and Joint Brain and Other nervous Hodgkin lymphoma Leukemia Acute lymphocytic	3,579 369 740 316 809 564	12.6 1.3 2.6 1.1 2.9 2.0	0.7* 0.1 1.2* -1.1* 0.5	1.2* 2.1 1.0 -0.9 2.7 3.9*	0.5 -1.3* -0.2 -2.2 1.1 1.5	2,628 316 715 23 853 420	2.5 0.3 0.7 0.0 0.8 0.4	-2.2* -1.4* -1.2* -3.0* -3.4*	-2.6* -3.4* -1.9* -3.2* -2.8*	-1.4*# 0.7# -0.5 - -2.8* -3.1*	58.9 52.8 ^d 59.5 78.7 35.2 43.6 ^d	79.9° 68.2° 80.7° 95.7° 70.3° 80.7°
Ages 15-19 All Sites Bone and Joint Melanoma of the skin Testis(males) Brain and Other nervous Thyroid Hodgkin lymphoma Non-Hodgkin lymphoma Leukemia Acute lymphocytic	5,649 410 467 475 550 481 779 488 792 458	21.0 1.5 1.7 3.4 2.0 1.8 2.9 1.8 3.0	0.6* 0.3 1.6* 1.4* 0.3 1.3* -0.8* 1.8* 0.9* 1.2*	1.1* 1.4 1.8 1.5 1.4 1.1 0.5 3.5* 0.0 2.2	0.3 -0.3 1.0 1.1 -1.1 1.9 -1.6*# 1.3 1.8 2.6*	3,621 511 44 46 545 	3.5 0.5 0.0 0.1 0.5 - 0.1 0.3 1.1	-1.9* -1.4* - - -1.1* -4.4* -2.7* -2.1* -2.0*	-2.4* -2.8* - -1.2* -3.1* -2.6* -2.3* -1.6*	-1.6*# 0.3#1.2* -4.8* -3.3* -2.6* -2.4*	68.0 51.0 ^d 76.2 ^d 66.0 ^d 65.0 100.0 88.9 46.1 ^d 24.4 29.5 ^d	80.5° 65.7° 98.1° 92.6° 80.9° 97.5 95.0° 77.6° 51.7° 55.3°

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

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

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).

- NCHS public use data file for the total US.
- The difference in rates between 1975-1977 and 1996-2003 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.

- Sites were chosen based on more than 100 SEER incident cases between 2000-2004.
- The APC is significantly different from zero (p<.05).
- The APC for 1990-2004 is significantly different from the APC for 1975-1989 (p<.05).
- The APC for 1990-2004 is significantly different from the APC for 1975-1989 (p<.10).
- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

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).

Table XXVIII-10 ALL CANCER SITES (Invasive)

SURVIVAL RATESa

By Year of Diagnosis

All Races, Males and Females

Ages 0-14

Year of Diagnosis

```
1975- 1980-
              1979 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003
Relative Survival Rates (SEERb)
                                                                   88.6 90.6
 1-year
              81.4 85.0 87.1 85.6 86.0
                                         88.8 88.3 89.5 91.0
                                                               91.0
                                                                              90.5 92.9
                                                                                         91.2 91.0
                                                                                                    91.4 92.4
                                                                                                               91.9 91.5 94.0
 2-year
                        77.9
                              76.2 77.1
                                         80.3
                                              79.9
                                                    81.9
                                                         82.5
                                                               84.0
                                                                    82.2
                                                                          84.7 84.7
                                                                                     86.4
                                                                                          84.7 84.2
                                                                                                     85.3
                                                                                                          86.0
                                                                                                               86.8
 3-year
                         73.6
                              72.5 72.9
                                         76.6
                                              75.4
                                                    77.5
                                                         79.1
                                                               80.9
                                                                    78.9
                                                                          81.7
                                                                               81.1
                                                                                     83.7
                                                                                          82.2
                                                                                               81.6
                                                                                                     82.7
                                                                                                          83.5
              62.2 67.6 70.4 71.2 70.9
                                         73.4
                                              72.9
                                                    75.2
                                                         76.3
                                                               78.7
                                                                    78.0 78.9
                                                                               78.7
                                                                                     80.6
                                                                                          80.4 78.7
 4-year
                                                                                                    80.8
                                                                                                         81.5
                              69.0 70.3
                                         72.6 71.5
                                                    74.1 75.2 77.6
                                                                   76.4 78.2 77.2 80.2
 5-year
              60.0 65.9
                         69.6
                                                                                         79.0 77.7 78.6
 6-year
              58.3 64.7
                         68.3 68.1
                                    69.0
                                         72.1
                                               70.4
                                                    73.3
                                                         74.5
                                                               76.2
                                                                    75.9
                                                                          78.0
                                                                               76.2
                                                                                    79.4
                                                                                          78.2 76.2
              57.2 63.8 67.2 68.0 67.8
 7-year
                                         71.2
                                              69.0
                                                    72.4 74.0
                                                               75.9
                                                                    75.4 77.2 75.6 78.8
                                         70.7 68.0
 8-year
              56.5 63.0
                         66.0 67.8 67.8
                                                    72.0 73.2 75.8
                                                                    74.8 76.9 74.7 78.3
 9-year
              56.1 62.5 65.4 67.2 67.6
                                         70.4 67.7 71.4 72.9 75.7 74.4 76.1 74.3
                                                    71.1 72.8 75.5
10-year
              55.8 62.0
                         64.7 67.1 67.0
                                         70.1
                                              67.3
                                                                   74.4
11-year
              55.4 61.6 64.0 67.1 66.7
                                         70.0 67.0
                                                    70.5 72.2 75.4
                              66.4 66.6
                                         69.7 66.8
                                                    70.4 72.1 75.3
12-year
              55.1 61.1
                         63.6
13-year
              54.9 60.8 63.3 66.1 66.2
                                         69.4 66.8
                                                    69.7 72.0
14-year
              54.5 60.5 63.2 64.9 66.2 68.9 66.5
15-year
              54.3 60.2
                         63.0 64.9 65.9
                                         68.7
              53.9 59.9 62.9 64.5 65.5 68.6
16-year
17-year
              53.5 59.6 62.9 64.2 65.2
18-year
              53.3 59.3 62.8 63.9
19-year
              53.0 59.0
                         62.7
              52.8 58.9
20-year
```

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 CANCER SITES (Invasive)

SURVIVAL RATESa

By Year of Diagnosis

All Races, Males and Females

Ages 0-19

Year of Diagnosis

```
1975- 1980-
              1979 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003
Relative Survival Rates (SEERb)
                                                   90.6 91.5 90.4 89.8 90.8
                                                                              90.3 93.2 91.6 92.1 91.4 91.1 92.2 92.4 94.0
 1-year
              83.1 86.3 87.9
                              88.0 88.1
                                         89.9 89.5
 2-year
              73.2 77.4 78.6
                              79.2 80.0
                                         82.4 81.3
                                                    83.1 83.6
                                                               83.4
                                                                    82.8
                                                                          84.3
                                                                              84.7
                                                                                    87.4
                                                                                          85.1 85.3
                                                                                                    85.8
                                                                                                          84.2
                                                                                                               87.1 87.3
 3-year
              68.2 72.5 75.1
                              75.8
                                   75.8
                                         78.2
                                              77.2
                                                    78.7
                                                         79.9
                                                               80.4
                                                                    79.7
                                                                          80.8
                                                                               81.4
                                                                                    85.2
                                                                                          81.9
                                                                                               82.6
                                                                                                    82.9
                                                                                                          82.0
                                                                                                               83.7
              64.9 69.5 72.4 74.1 73.4
                                         75.4 74.0
                                                    76.3
                                                         77.7
                                                               78.2
                                                                    78.3
                                                                         78.7
                                                                               79.7
                                                                                    82.1
                                                                                          80.3 79.8
 4-year
                                                                                                    81.0
                                                                                                         80.1
              62.9 67.8 71.4 72.3 72.8
                                                                    76.6 78.0
                                                                              78.3 81.5
 5-year
                                         74.6 72.8
                                                    75.0 76.4 76.9
                                                                                         78.7 78.6
 6-year
              61.2 66.4 70.3 71.7
                                   71.8
                                         74.1
                                              71.5
                                                    74.1
                                                         75.7
                                                               75.6
                                                                    76.1
                                                                          77.5
                                                                               77.3
                                                                                    80.9
                                                                                         77.7 77.3
                         69.1 71.3 70.7
                                                                         76.9
 7-year
              60.3 65.7
                                         73.2 70.5
                                                    73.1
                                                         75.0
                                                              75.2
                                                                    75.7
                                                                              76.7
                                                                                    80.3
                                                                                         77.2
                                                   72.5 74.4 75.0
                                                                    74.9 76.6 75.7 79.7
 8-year
              59.5 64.8
                         68.3 71.0 70.3
                                        72.3 69.9
              58.9 64.1 67.7 70.4 69.7 72.1 69.4 72.0 74.0 74.8
                                                                   74.6 75.8 75.5
 9-year
                                        71.5 69.1 71.8 73.6 74.8
10-year
              58.6 63.7
                         67.1 70.1 69.4
                                                                    74.5 75.4
11-year
              58.2 63.3
                         66.4 69.9 69.1 71.4 69.0
                                                   71.1 73.0 74.8
                              69.5 68.9
                                         71.1
                                              68.8
                                                    70.9 72.8 74.7
12-year
                   62.9
                         66.1
13-year
              57.7 62.6
                         65.7 68.9 68.6
                                         70.9 68.7 70.3 72.6
14-year
              57.4 62.2
                         65.5 67.7 68.3 70.2 68.5
15-year
              57.2 61.9
                         65.4 67.6 67.8 70.1
              56.8 61.4 64.9 66.9 67.4 70.0
16-year
17-year
              56.5 61.2 64.8 66.7 67.1
18-year
              56.2 60.9 64.8 66.4
19-year
              56.0 60.6 64.7
              55.6 60.4
20-year
```

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)

Estimated United States Cancer Prevalence Counts^a on January 1, 2004 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 <14 ^e	0 to <29 ^e	>=29 ^f	Complete
Race/Sex									
All Races ^b	58,085	48,407	42,984	36,298	30,462	141,268	237,628	+	+
Males	30,670	25,794	22,695	18,102	15,221	74,840	122,159	+	+
Females	27,415	22,613	20,289	18,196	15,241	66,428	115,469	+	+
White ^b	48,916	40,601	36,378	31,566	26,790	118,905	203,160	+	+
Males	26,047	21,547	19,463	15,744	13,526	63,344	105,005	+	+
Females	22,869	19,054	16,915	15,822	13,264	55,561	98,155	+	+
Black ^b	5,891	4,940	4,317	3,133	2,577	14,309	22,638	+	+
Males	2,885	2,625	2,151	1,500	1,184	7,228	11,032	+	+
Females	3,006	2,315	2,166	1,633	1,393	7,081	11,606	+	+
Asian/Pacific Islander ^c	1,915	1,614	+	+	+	4,627	+	+	+
Males	1,065	881	+	+	+	2,474	+	+	+
Females	850	733	+	+	+	2,153	+	+	+
Hispanic ^d	9,087	6,640	+	+	+	20,187	+	+	+
Males	4,949	3,445	+	+	+	10,934	+	+	+
Females	4,138	3,195	+	+	+	9,253	+	+	+

US 2004 cancer prevalence counts are based on 2004 cancer prevalence proportions from the SEER registries and 1/1/2004 US population estimates based on the average of 2003 and 2004 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

bcd Georgia.

Maximum limited-duration prevalence: 29 years for 1975-2004 SEER 9 data; 14 years for 1990-2004 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

(f) Cases diagnosed more than 29 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 <29 and >=29.

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

⁺ Not available.

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

SEER Cancer Incidence^c 2000-2004

Age 0			Age 1			Age 2		
	<u>Rate</u>	<u>Cases</u>		<u>Rate</u>	Cases		<u>Rate</u>	<u>Cases</u>
All Sites	23.2	1263	All Sites	21.7	1161	All Sites	23.4	1240
Leukemia	4.4	242	Leukemia	6.9	372	Leukemia	10.6	561
Acute Lymphocytic Leukemia	1.9	105	Acute Lymphocytic Leukemia	4.6	245	Acute Lymphocytic Leukemia		487
Brain and ONS ^d	3.6	198	Brain and ONS ^d	4.2	223	Brain and ONS ^d	4.2	222
Soft Tissue	3.4	185	Kidney and Renal Pelvis	2.1	110	Kidney and Renal Pelvis	2.2	116
Eye and Orbit	2.5	138	Eye and Orbit	1.8	99	Eye and Orbit	1.4	73
Other Endocrine	2.4	129	Other Endocrine	1.7	90	Other Endocrine	1.2	65
Age 3			Age 4			Age 5		
	Rate	Cases		<u>Rate</u>	Cases		Rate	<u>Cases</u>
All Sites	20.5	1077	All Sites	17.1	897	All Sites	13.6	721
Leukemia	10.0	528	Leukemia	7.9	415	Leukemia	5.6	296
Acute Lymphocytic Leukemia	9.2	486	Acute Lymphocytic Leukemia	7.2	376	Acute Lymphocytic Leukemia	5.0	265
Brain and ONS ^d	3.6	191	Brain and ONS ^d	4.1	218	Brain and ONS ^d	3.6	191
Kidney and Renal Pelvis	1.9	100	Kidney and Renal Pelvis	1.1	57	Kidney and Renal Pelvis	0.9	48
Soft Tissue	1.3	66	Soft Tissue	1.0	51	Non-Hodgkin Lymphoma	0.8	44
Other Endocrine	0.9	50	Non-Hodgkin Lymphoma	0.6	31	Soft Tissue	0.7	36
Age 6			Age 7			Age 8		
Age 6	Rate	Cases		Rate	Cases		Rate	Cases
Age 6 All Sites	<u>Rate</u> 11.5	619	Age 7	10.6	<u>Cases</u> 580	Age 8	10.4	Cases 580
				10.6	580 210			580 194
All Sites	11.5	619	All Sites Leukemia Acute Lymphocytic Leukemia	10.6	580	All Sites	10.4	580
All Sites Leukemia	11.5	619 217	All Sites Leukemia	10.6 3.8 3.2 3.0	580 210	All Sites Leukemia	10.4	580 194 152 172
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma	11.5 4.0 3.4	619 217 182	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma	10.6 3.8 3.2	580 210 177	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma	10.4 3.5 2.7	580 194 152 172 59
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d	11.5 4.0 3.4 3.7	619 217 182 199 42 30	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d	10.6 3.8 3.2 3.0	580 210 177 164 38 29	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d	10.4 3.5 2.7 3.1	580 194 152 172 59 32
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma	11.5 4.0 3.4 3.7 0.8	619 217 182 199 42	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma	10.6 3.8 3.2 3.0 0.7	580 210 177 164 38	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma	10.4 3.5 2.7 3.1 1.1	580 194 152 172 59
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Soft Tissue	11.5 4.0 3.4 3.7 0.8 0.6	619 217 182 199 42 30	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints	10.6 3.8 3.2 3.0 0.7 0.5	580 210 177 164 38 29	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints	10.4 3.5 2.7 3.1 1.1 0.6	580 194 152 172 59 32
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Soft Tissue Kidney and Renal Pelvis Age 9	11.5 4.0 3.4 3.7 0.8 0.6 0.5	619 217 182 199 42 30 27	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 10	10.6 3.8 3.2 3.0 0.7 0.5 0.5	580 210 177 164 38 29 28	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 11	10.4 3.5 2.7 3.1 1.1 0.6 0.4	580 194 152 172 59 32 24
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Soft Tissue Kidney and Renal Pelvis Age 9 All Sites	11.5 4.0 3.4 3.7 0.8 0.6 0.5	619 217 182 199 42 30 27	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 10 All Sites	10.6 3.8 3.2 3.0 0.7 0.5 0.5	580 210 177 164 38 29 28	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 11 All Sites	10.4 3.5 2.7 3.1 1.1 0.6 0.4	580 194 152 172 59 32 24 Cases 655
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Soft Tissue Kidney and Renal Pelvis Age 9	11.5 4.0 3.4 3.7 0.8 0.6 0.5	619 217 182 199 42 30 27	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 10	10.6 3.8 3.2 3.0 0.7 0.5 0.5	580 210 177 164 38 29 28	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 11	10.4 3.5 2.7 3.1 1.1 0.6 0.4	580 194 152 172 59 32 24
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Soft Tissue Kidney and Renal Pelvis Age 9 All Sites Leukemia Acute Lymphocytic Leukemia	11.5 4.0 3.4 3.7 0.8 0.6 0.5	619 217 182 199 42 30 27 Cases 567 163 122	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 10 All Sites Brain and ONS ^d Leukemia	10.6 3.8 3.2 3.0 0.7 0.5 0.5	580 210 177 164 38 29 28 Cases 583 139 137	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 11 All Sites Brain and ONS ^d Leukemia	10.4 3.5 2.7 3.1 1.1 0.6 0.4	580 194 152 172 59 32 24 Cases 655 158 158
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Soft Tissue Kidney and Renal Pelvis Age 9 All Sites Leukemia	11.5 4.0 3.4 3.7 0.8 0.6 0.5	619 217 182 199 42 30 27 Cases 567 163	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 10 All Sites Brain and ONS ^d	10.6 3.8 3.2 3.0 0.7 0.5 0.5 Rate 10.2 2.4 2.4 1.7	580 210 177 164 38 29 28 Cases 583 139	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 11 All Sites Brain and ONS ^d	10.4 3.5 2.7 3.1 1.1 0.6 0.4 Rate 11.4 2.8	580 194 152 172 59 32 24 <u>Cases</u> 655 158 158
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Soft Tissue Kidney and Renal Pelvis Age 9 All Sites Leukemia Acute Lymphocytic Leukemia	11.5 4.0 3.4 3.7 0.8 0.6 0.5	619 217 182 199 42 30 27 Cases 567 163 122	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 10 All Sites Brain and ONS ^d Leukemia	10.6 3.8 3.2 3.0 0.7 0.5 0.5	580 210 177 164 38 29 28 Cases 583 139 137	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 11 All Sites Brain and ONS ^d Leukemia	10.4 3.5 2.7 3.1 1.1 0.6 0.4 Rate 11.4 2.8 2.8	580 194 152 172 59 32 24 <u>Cases</u> 655 158 158 120 63
All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Soft Tissue Kidney and Renal Pelvis Age 9 All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d	11.5 4.0 3.4 3.7 0.8 0.6 0.5	Cases 567 163 122 140	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 10 All Sites Brain and ONS ^d Leukemia Acute Lymphocytic Leukemia	10.6 3.8 3.2 3.0 0.7 0.5 0.5 Rate 10.2 2.4 2.4 1.7	580 210 177 164 38 29 28 Cases 583 139 137 97	All Sites Leukemia Acute Lymphocytic Leukemia Brain and ONS ^d Non-Hodgkin Lymphoma Bones and Joints Soft Tissue Age 11 All Sites Brain and ONS ^d Leukemia Acute Lymphocytic Leukemia	10.4 3.5 2.7 3.1 1.1 0.6 0.4 Rate 11.4 2.8 2.8 2.1	580 194 152 172 59 32 24 <u>Cases</u> 655 158 158

Rates are per 100,000 per year. Cases are for the 17 SEER Areas over the time period 2000-2004.

Top 5 cancer sites were determined based on the 2000-2004 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).

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 2000-2004

Age 12			Age 13			Age 14			
	<u>Rate</u>	Cases		<u>Rate</u>	Cases		Rate	Cases	
All Sites	12.5	712	All Sites	13.7	774	All Sites	15.4	855	
Leukemia	3.2	182	Leukemia	2.9	166	Leukemia	3.0	166	
Acute Lymphocytic Leukemia	2.1	118	Acute Lymphocytic Leukemia	2.1	121	Acute Lymphocytic Leukemia	2.0	108	
Brain and ONS ^d	2.7	154	Brain and ONS ^d	2.6	147	Brain and ONS ^d	2.6	142	
Bones and Joints	1.4	80	Bones and Joints	1.5	85	Hodgkin Lymphoma	1.8	97	
Non-Hodgkin Lymphoma	1.0	59	Hodgkin Lymphoma	1.2	70	Bones and Joints	1.7	92	
Hodgkin Lymphoma	1.0	57	Non-Hodgkin Lymphoma	1.2	70	Non-Hodgkin Lymphoma	1.5	81	
Age 15			Age 16			Age 17			
	Rate	Cases		<u>Rate</u>	Cases		Rate	Cases	
All Sites	18.3	993	All Sites	19.3	1036	All Sites	20.7	1108	
Leukemia	3.3	178	Leukemia	3.3	179	Leukemia	2.8	149	
Acute Lymphocytic Leukemia	2.1	114	Acute Lymphocytic Leukemia	2.1	113	Acute Lymphocytic Leukemia	1.5	82	
Brain and ONS ^d	2.2	122	Hodgkin Lymphoma	2.4	129	Hodgkin Lymphoma	2.6	142	
Hodgkin Lymphoma	2.2	122	Brain and ONS ^d	2.3	126	Brain and ONS ^d	2.0	108	
Bones and Joints	1.8	99	Bones and Joints	2.0	109	Non-Hodgkin Lymphoma	2.0	108	
Non-Hodgkin Lymphoma	1.6	85	Non-Hodgkin Lymphoma	1.6	85	Testis	1.9	103	
Age 18			Age 19						
	Rate	Cases		<u>Rate</u>	Cases				
All Sites	22.1	1180	All Sites	25.0	1332				
Hodgkin Lymphoma	3.4	181	Hodgkin Lymphoma	3.8	205				
Leukemia	2.6	141	Thyroid	2.8	147				
Acute Lymphocytic Leukemia	1.5	82	Leukemia	2.7	145				
Testis	2.4	131	Acute Lymphocytic Leukemia	1.3	67				
Melanoma of the Skin	2.3	123	Testis	2.6	140				
Thyroid	2.0	106	Melanoma of the Skin	2.4	128				

Rates are per 100,000 per year. Cases are for the 17 SEER Areas over the time period 2000-2004.

Top 5 cancer sites were determined based on the 2000-2004 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).

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 AND DEATHS FOR THE TOP 5 CANCER SITES BY SINGLE YEAR OF AGE AT DEATH

U.S. Mortality^c 2000-2004

Age 0			Age 1			Age 2		
	<u>Rate</u>	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>
All Sites	1.9	381	All Sites	2.1	423	All Sites	2.5	494
Leukemia	0.7	137	Leukemia	0.8	148	Leukemia	0.9	183
Acute Lymphocytic Leukemia	0.2	47	Acute Lymphocytic Leukemia	0.2	46	Acute Lymphocytic Leukemia	0.3	57
Brain and ONS ^d	0.4	85	Brain and ONS ^d	0.6	122	Brain and ONS ^d	0.5	102
Other Endocrine	0.2	40	Other Endocrine	0.3	57	Other Endocrine	0.5	92
Soft Tissue	0.1	23	Liver & IBD ^d	0.1	26	Liver & IBD ^d	0.2	35
Liver & IBD ^d	0.1	17	Soft Tissue	0.1	21	Soft Tissue	0.1	25
Age 3			Age 4			Age 5		
	<u>Rate</u>	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>		Rate	<u>Deaths</u>
All Sites	2.9	563	All Sites	2.9	553	All Sites	2.9	563
Leukemia	0.9	169	Brain and ONS ^d	0.9	167	Brain and ONS ^d	0.9	183
Acute Lymphocytic Leukemia	0.3	62	Leukemia	0.8	149	Leukemia	0.7	142
Brain and ONS ^d	0.7	133	Acute Lymphocytic Leukemia	0.3	61	Acute Lymphocytic Leukemia	0.4	73
Other Endocrine	0.6	119	Other Endocrine	0.5	95	Other Endocrine	0.5	105
Liver & IBD ^d	0.1	27	Kidney and Renal Pelvis	0.2	33	Soft Tissue	0.2	38
Soft Tissue	0.1	25	Soft Tissue	0.1	27	Kidney and Renal Pelvis	0.2	32
Age 6			Age 7			Age 8		
	<u>Rate</u>	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>
All Sites	2.6	521	All Sites	2.6	514	All Sites	2.3	469
Brain and ONS ^d	1.0	204	Brain and ONS ^d	0.9	188	Brain and ONS ^d	0.8	159
Leukemia	0.7	137	Leukemia	0.8	158	Leukemia	0.7	142
Acute Lymphocytic Leukemia	0.4	76	Acute Lymphocytic Leukemia	0.4	83	Acute Lymphocytic Leukemia	0.4	87
Other Endocrine	0.3	67	Other Endocrine	0.3	63	Other Endocrine	0.3	59
Kidney and Renal Pelvis	0.2	38	Kidney and Renal Pelvis	0.1	24	Soft Tissue	0.1	24
Soft Tissue	0.1	17	Soft Tissue	0.1	23	Non-Hodgkin Lymphoma	0.1	23
Age 9			Age 10			Age 11		
	<u>Rate</u>	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>
All Sites	2.4	494	All Sites	2.4	506	All Sites	2.2	459
Leukemia	0.9	176	Brain and ONS ^d	0.8	164	Leukemia	0.7	146
Acute Lymphocytic Leukemia	0.5	95	Leukemia	0.7	147	Acute Lymphocytic Leukemia	0.4	76
Brain and ONS ^d	0.8	165	Acute Lymphocytic Leukemia	0.4	93	Brain and ONS ^d	0.7	143
Other Endocrine	0.2	44	Other Endocrine	0.2	49	Bones and Joints	0.2	43
Bones and Joints	0.1	23	Bones and Joints	0.2	46	Soft Tissue	0.2	35
Soft Tissue	0.1	23	Soft Tissue	0.2	32	Non-Hodgkin Lymphoma	0.1	25

Rates are per 100,000 per year. Deaths are for the entire United States over the time period 2000-2004. Top 5 cancer sites were determined based on the 2000-2004 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.

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

U.S. Mortality^c 2000-2004

Age 12			Age 13			Age 14		
	Rate	<u>Deaths</u>		Rate	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>
All Sites	2.4	511	All Sites	2.7	573	All Sites	2.8	579
Leukemia	0.9	181	Leukemia	0.9	188	Leukemia	0.9	191
Acute Lymphocytic Leukemia	0.4	90	Acute Lymphocytic Leukemia	0.4	81	Acute Lymphocytic Leukemia	0.4	80
Brain and ONS ^d	0.7	138	Brain and ONS ^d	0.7	140	Brain and ONS ^d	0.6	130
Bones and Joints	0.3	64	Bones and Joints	0.4	79	Bones and Joints	0.4	84
Non-Hodgkin Lymphoma	0.1	29	Soft Tissue	0.2	43	Soft Tissue	0.2	47
Soft Tissue	0.1	25	Other Endocrine	0.1	27	Non-Hodgkin Lymphoma	0.2	34
Age 15			Age 16			Age 17		
	Rate	<u>Deaths</u>		Rate	<u>Deaths</u>		Rate	<u>Deaths</u>
All Sites	2.9	589	All Sites	3.4	696	All Sites	3.4	701
Leukemia	1.0	204	Leukemia	1.1	214	Leukemia	1.1	218
Acute Lymphocytic Leukemia	0.4	91	Acute Lymphocytic Leukemia	0.5	97	Acute Lymphocytic Leukemia	0.5	105
Brain and ONS ^d	0.5	112	Brain and ONS ^d	0.6	114	Brain and ONS ^d	0.5	110
Bones and Joints	0.4	82	Bones and Joints	0.5	108	Bones and Joints	0.5	102
Soft Tissue	0.2	48	Soft Tissue	0.3	60	Soft Tissue	0.3	65
Non-Hodgkin Lymphoma	0.2	45	Non-Hodgkin Lymphoma	0.2	46	Non-Hodgkin Lymphoma	0.2	47
Age 18			Age 19					
	<u>Rate</u>	<u>Deaths</u>		<u>Rate</u>	<u>Deaths</u>			
All Sites	3.9	787	All Sites	4.1	848			
Leukemia	1.1	217	Leukemia	1.2	244			
Acute Lymphocytic Leukemia	0.4	87	Acute Lymphocytic Leukemia	0.5	104			
Brain and ONS ^d	0.5	106	Bones and Joints	0.6	122			
Bones and Joints	0.5	97	Brain and ONS ^d	0.5	103			
Soft Tissue	0.4	78	Soft Tissue	0.4	75			
Non-Hodgkin Lymphoma	0.4	78	Non-Hodgkin Lymphoma	0.3	58			

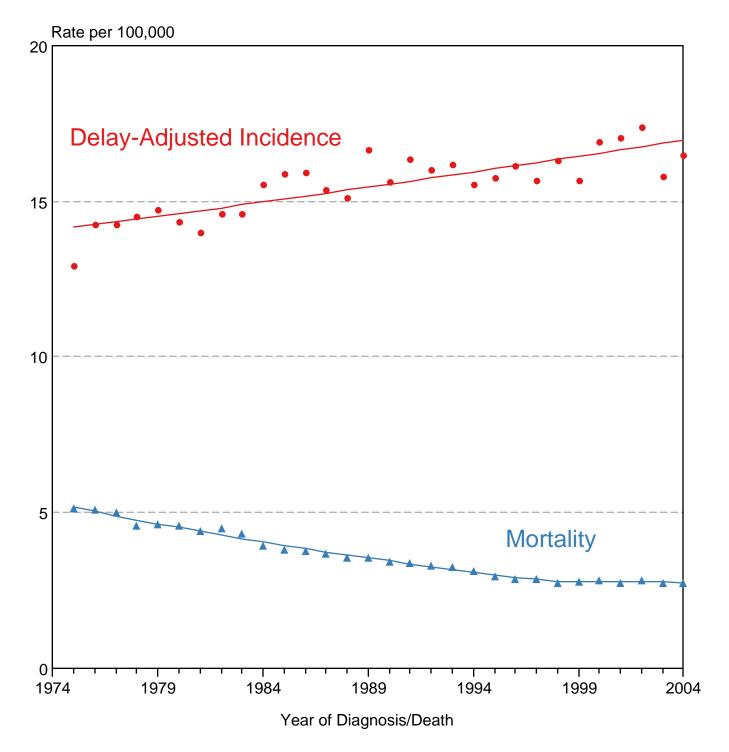
Rates are per 100,000 per year. Deaths are for the entire United States over the time period 2000-2004. Top 5 cancer sites were determined based on the 2000-2004 age-adjusted rate.

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.

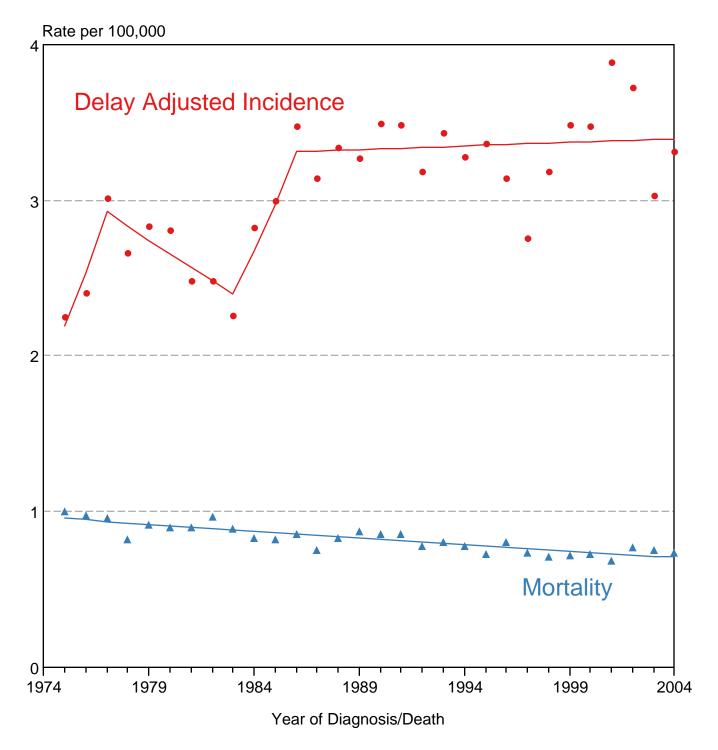
Statistic not shown. Rate based on less than 16 cases for the time interval.

SEER Delay-Adjusted Incidence and US Mortality All Childhood Cancers, Under 20 Years of Age Both Sexes, All Races, 1975-2004



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 3.0, April 2005, National Cancer Institute.

SEER Delay-Adjusted Incidence and US Mortality Brain and CNS, Under 15 Years of Age Both Sexes, All Races, 1975-2004



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 3.0, April 2005, National Cancer Institute.

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

Joinpoint Analyses for Whites and Blacks from 1975-2004 and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2004

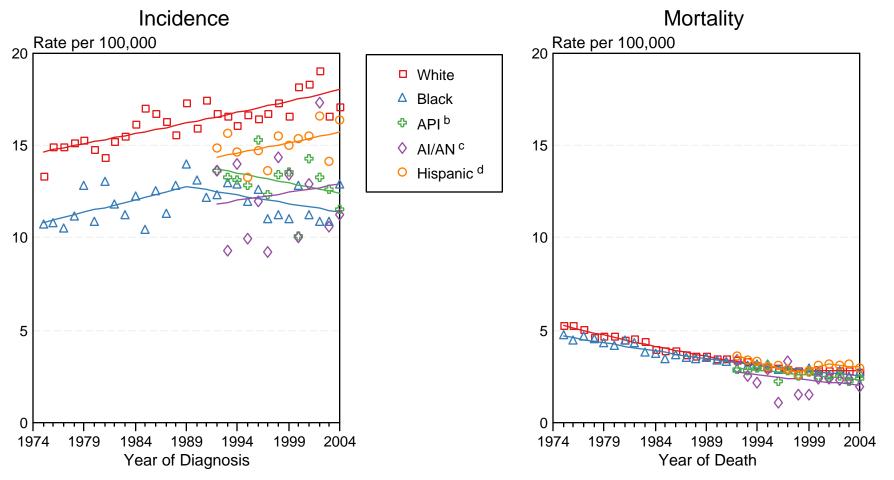


Figure XXVIII-3

Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from NCHS public use data file for the total US.

Regression lines are calculated using the Joinpoint Regression Program Version 3.0, April 2005, National Cancer Institute.

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

b API = Asian/Pacific Islander.

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

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