

Table XVIII-1  
 NON-HODGKIN LYMPHOMA (Invasive)

TRENDS IN SEER INCIDENCE<sup>a</sup> AND U.S. MORTALITY<sup>b</sup> USING THE JOINPOINT REGRESSION PROGRAM, 1973-1999  
WITH UP TO THREE JOINPOINTS BY RACE AND SEX

	<u>All Races</u>		<u>Whites</u>		<u>Blacks</u>	
	<u>Year</u>	<u>APC</u>	<u>Year</u>	<u>APC</u>	<u>Year</u>	<u>APC</u>
<u>SEER Cancer Incidence<sup>a</sup></u>						
Sex - Male and Female	1973-90	3.6★	1973-91	3.7★	1973-97	4.1★
	1990-95	1.6	1991-99	0.1	1997-99	-11.0
	1995-99	-0.9				
Sex - Male	1973-90	4.1★	1973-80	2.9★	1973-95	5.2★
	1990-95	1.8	1980-88	5.2★	1995-99	-5.1
	1995-99	-2.1	1988-95	1.7★		
			1995-99	-2.2★		
Sex - Female	1973-88	3.1★	1973-88	3.1★	1973-99	2.9★
	1988-99	1.3★	1988-99	1.3★		
<u>U.S. Cancer Mortality<sup>b</sup></u>						
Sex - Male and Female	1973-77	-0.1	1973-76	-0.5	1973-79	0.4
	1977-91	2.6★	1976-96	2.4★	1979-97	2.9★
	1991-97	1.7★	1996-99	-2.0★	1997-99	-5.6
	1997-99	-3.2				
Sex - Male	1973-77	-0.6	1973-77	-0.1	1973-97	2.5★
	1977-90	2.8★	1977-95	2.6★	1997-99	-5.4
	1990-97	1.7★	1995-99	-1.1		
	1997-99	-3.3				
Sex - Female	1973-75	-1.3	1973-96	2.1★	1973-99	2.5★
	1975-96	2.2★	1996-99	-1.5		
	1996-99	-1.7				

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 U.S. standard population by 5-year age groups using the Joinpoint Regression Program.

<sup>a</sup> Trends are from the SEER 9 areas.

<sup>b</sup> Trends are from the NCHS public use data file.

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

Table XVIII-2  
NON-HODGKIN LYMPHOMASEER INCIDENCE RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES<sup>§</sup>, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
<u>YEAR OF DIAGNOSIS:</u>									
1973	10.2	12.0	8.9	10.4	12.4	9.0	8.3	10.0	6.6
1974	10.5	12.4	9.1	10.9	12.8	9.4	6.9	8.9	5.4
1975	11.1	12.9	9.6	11.6	13.5	10.1	6.4	7.3	5.3
1976	11.2	12.8	10.0	11.6	13.2	10.5	6.0	7.4	4.9
1977	11.2	12.9	9.8	11.6	13.5	10.2	6.6	7.1	6.1
1978	11.9	14.3	10.1	12.5	14.8	10.7	7.2	9.5	5.2
1979	12.5	14.2	11.2	13.0	14.5	11.7	8.5	12.0	5.9
1980	12.6	15.0	10.8	12.9	15.3	11.2	8.7	10.9	7.0
1981	13.5	15.9	11.8	14.0	16.3	12.3	7.4	10.5	5.0
1982	13.4	15.5	11.6	14.0	16.4	12.0	10.2	10.1	10.0
1983	13.9	16.5	11.9	14.6	17.4	12.4	10.3	10.9	9.6
1984	15.2	18.3	12.8	15.9	19.0	13.5	9.4	12.5	6.7
1985	15.5	18.3	13.2	16.2	19.1	13.8	9.9	12.0	8.3
1986	15.9	19.4	13.0	16.8	20.5	13.7	10.6	13.1	8.5
1987	16.7	20.8	13.4	17.7	22.1	14.0	10.4	10.4	10.0
1988	17.2	21.3	14.1	18.2	22.4	14.9	11.6	15.8	8.5
1989	17.3	21.6	13.8	18.3	23.0	14.4	11.6	14.4	9.6
1990	18.5	23.0	14.7	19.3	24.0	15.4	13.8	17.6	10.8
1991	18.8	23.7	14.5	19.6	24.8	15.2	14.1	19.0	10.2
1992	18.6	23.1	14.9	19.5	23.9	15.8	13.6	18.7	9.6
1993	18.9	23.4	15.0	19.6	24.3	15.7	14.0	19.0	9.8
1994	19.9	24.9	15.8	20.6	25.4	16.5	14.4	21.4	8.7
1995	19.8	25.2	15.3	20.4	25.9	15.8	16.5	23.5	11.0
1996	19.3	24.1	15.3	20.0	24.9	15.9	15.0	18.9	11.8
1997	19.8	24.2	16.3	20.5	24.7	17.1	16.4	23.5	11.2
1998	19.2	22.4	16.4	20.0	23.3	17.3	13.7	16.0	11.7
1999	19.1	23.4	15.6	19.7	23.9	16.3	13.7	18.0	10.4
<u>AGE-ADJUSTED RATES, 1995-99</u>									
<u>AGE AT DIAGNOSIS:</u>									
All ages	19.4	23.9	15.8	20.1	24.5	16.5	15.0	19.9	11.2
Under 65	10.2	12.7	7.7	10.4	12.9	8.0	10.4	14.4	7.0
65 and over	83.4	100.9	71.7	87.3	105.2	75.4	47.0	58.1	40.2
All ages (world std.) <sup>ë</sup>	13.2	16.2	10.5	13.6	16.6	11.0	11.0	14.6	8.0
<u>AGE-SPECIFIC RATES, 1995-99</u>									
<u>AGE AT DIAGNOSIS:</u>									
0-4	0.4	0.6	-	-	-	-	-	-	-
5-9	0.9	1.4	-	0.9	1.4	-	-	-	-
10-14	1.2	1.7	0.6	1.2	1.8	-	-	-	-
15-19	1.6	2.1	1.1	1.7	2.2	1.2	-	-	-
20-24	2.5	3.4	1.6	2.4	3.1	1.6	3.3	4.9	-
25-29	4.0	5.1	2.9	3.9	5.0	2.7	4.7	6.5	-
30-34	7.3	10.5	4.1	7.0	10.1	3.9	10.6	16.4	5.6
35-39	8.6	12.2	5.1	8.5	11.8	5.2	10.8	17.6	5.0
40-44	12.1	16.5	7.9	12.0	16.4	7.7	15.1	21.2	9.8
45-49	16.2	20.2	12.4	16.4	20.1	12.7	18.8	26.2	12.5
50-54	23.7	28.8	18.8	24.2	29.1	19.3	25.1	33.8	17.7
55-59	32.8	37.4	28.5	34.9	39.3	30.7	25.7	33.6	19.2
60-64	44.2	51.5	37.7	47.1	54.2	40.5	33.5	39.1	29.2
65-69	59.5	71.9	49.1	62.9	75.6	51.9	39.4	47.1	33.4
70-74	79.8	92.1	70.1	84.0	95.6	74.8	45.7	52.2	41.0
75-79	96.3	114.8	83.1	101.5	121.2	87.6	45.4	57.4	37.4
80-84	105.3	130.9	90.1	109.0	136.5	92.9	66.4	71.6	63.6
85+	95.6	124.2	83.6	98.3	126.1	87.0	46.6	80.3	-

<sup>§</sup> SEER 9 areas. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

<sup>ë</sup> SEER 9 areas. Rates are per 100,000 and are age-adjusted to the world standard population.

- Statistic not shown. Rate based on less than 25 cases for the time interval.

Table XVIII-3  
NON-HODGKIN LYMPHOMAU.S. DEATH RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES<sup>a</sup>, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
<u>YEAR OF DEATH:</u>									
1973	5.7	7.0	4.8	5.9	7.2	5.0	3.7	5.1	2.7
1974	5.8	7.1	4.8	6.0	7.4	5.0	3.9	5.2	2.9
1975	5.6	6.9	4.6	5.8	7.2	4.8	3.7	4.8	2.9
1976	5.7	6.9	4.8	5.9	7.1	5.0	3.5	4.5	2.8
1977	5.8	6.9	4.9	6.0	7.1	5.1	3.9	4.9	3.1
1978	5.9	7.3	4.9	6.2	7.5	5.1	3.9	5.4	2.8
1979	5.9	7.4	4.9	6.2	7.7	5.1	3.6	4.5	3.0
1980	6.2	7.5	5.3	6.5	7.7	5.5	4.0	5.1	3.1
1981	6.2	7.4	5.3	6.4	7.7	5.5	4.0	5.0	3.3
1982	6.6	8.0	5.5	6.8	8.3	5.7	4.1	5.2	3.3
1983	6.7	8.1	5.6	6.9	8.4	5.8	4.3	5.8	3.2
1984	6.8	8.2	5.8	7.1	8.5	6.0	4.2	5.3	3.4
1985	7.1	8.8	5.8	7.3	9.2	6.0	4.6	5.6	3.9
1986	7.3	9.0	6.0	7.6	9.3	6.3	4.9	6.6	3.7
1987	7.3	8.8	6.1	7.6	9.1	6.4	4.7	6.3	3.6
1988	7.5	9.3	6.2	7.8	9.6	6.5	5.0	6.8	3.7
1989	7.8	9.7	6.4	8.1	10.0	6.7	5.3	7.1	4.1
1990	7.9	10.0	6.3	8.2	10.3	6.6	5.4	7.1	4.2
1991	8.2	10.1	6.8	8.5	10.5	7.0	5.7	7.2	4.6
1992	8.2	10.3	6.7	8.6	10.7	7.0	5.6	7.2	4.5
1993	8.3	10.1	6.9	8.6	10.5	7.2	5.7	7.5	4.4
1994	8.7	10.8	7.2	9.1	11.2	7.5	5.6	6.8	4.6
1995	8.8	10.8	7.2	9.1	11.2	7.6	5.8	7.6	4.5
1996	8.8	11.0	7.2	9.2	11.3	7.5	6.3	8.2	4.8
1997	9.0	11.1	7.3	9.3	11.4	7.7	6.4	8.4	4.9
1998	8.8	10.9	7.2	9.1	11.3	7.5	6.1	7.5	5.0
1999	8.4	10.4	7.0	8.8	10.7	7.3	5.7	7.4	4.5
<u>AGE-ADJUSTED RATES, 1995-99</u>									
<u>AGE AT DEATH:</u>									
All ages	8.7	10.8	7.2	9.1	11.2	7.5	6.1	7.8	4.7
Under 65	3.0	3.9	2.2	3.0	3.9	2.2	3.1	4.2	2.1
65 and over	48.5	58.9	41.9	50.9	61.7	44.0	26.8	32.8	23.1
All ages (world std.) <sup>ö</sup>	5.2	6.5	4.1	5.4	6.7	4.3	4.0	5.2	3.0
<u>AGE-SPECIFIC RATES, 1995-99</u>									
<u>AGE AT DEATH:</u>									
0-4	0.1	0.1	0.1	0.1	0.1	-	-	-	-
5-9	0.1	0.2	0.1	0.1	0.2	-	0.2	-	-
10-14	0.2	0.2	0.1	0.2	0.2	0.1	-	-	-
15-19	0.3	0.4	0.2	0.3	0.4	0.2	0.3	0.3	-
20-24	0.6	0.7	0.4	0.6	0.7	0.5	0.7	0.9	0.4
25-29	0.8	1.2	0.5	0.8	1.1	0.5	1.2	1.7	0.8
30-34	1.4	2.0	0.8	1.3	1.9	0.8	1.8	2.5	1.1
35-39	1.9	2.6	1.2	1.8	2.5	1.1	2.7	3.7	1.9
40-44	2.8	3.8	1.8	2.7	3.7	1.7	3.7	5.1	2.4
45-49	4.2	5.7	2.8	4.2	5.6	2.9	5.0	7.4	2.9
50-54	7.1	9.2	5.2	7.2	9.2	5.3	7.6	11.0	4.8
55-59	11.4	14.2	8.8	11.9	14.7	9.2	9.8	12.5	7.7
60-64	17.7	21.9	14.0	18.5	22.7	14.8	13.9	19.0	10.1
65-69	26.5	32.2	21.6	28.0	33.8	23.0	17.0	21.7	13.5
70-74	39.9	47.9	33.6	41.8	50.2	35.3	23.7	28.3	20.6
75-79	55.1	65.5	47.7	57.7	68.2	50.3	29.3	36.5	24.7
80-84	71.6	86.0	63.2	74.9	89.8	66.2	37.4	44.9	33.6
85+	77.1	97.6	68.8	81.0	102.9	72.1	37.8	45.9	34.5

<sup>ä</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

<sup>ö</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the world standard population.

- Statistic not shown. Rate based on less than 25 cases for the time interval.

Table XVIII-4  
NON-HODGKIN LYMPHOMA

## SURVIVAL RATES, BY RACE, SEX, DIAGNOSIS YEAR AND AGE

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>5-YR RELATIVE SURVIVAL RATES</u>									
YEAR OF DIAGNOSIS:									
1960-63 <sup>a</sup>	-	-	-	31	31	31	-	-	-
1970-73 <sup>a</sup>	-	-	-	41	39	43	-	-	-
1974-76 <sup>b</sup>	47.3	47.1	47.4	47.8	48.1	47.5	48.6	44.3↑	54.1↑
1977-79 <sup>b</sup>	48.5	45.8	51.2	48.7	46.4	50.9	51.6	45.0	60.2↑
1980-82 <sup>b</sup>	51.4	50.2	52.6	51.9	50.9	52.9	50.2	47.2	53.7
1983-85 <sup>b</sup>	53.9	52.8	55.1	54.4	53.4	55.5	45.1	43.6	46.9
1986-88 <sup>b</sup>	52.3	49.4	55.8	52.9	50.1	56.2	50.2	46.6	54.8
1989-91 <sup>b</sup>	51.1	47.0	56.3	51.9	47.7	57.1	43.7	38.7	50.8
1992-98 <sup>b</sup>	55.0Û	51.4Û	59.5Û	56.1Û	52.7Û	60.2Û	46.1	41.4	53.8
<u>5-YR RELATIVE SURVIVAL RATES, 1992-98<sup>b</sup></u>									
AGE AT DIAGNOSIS:									
<45	55.1	48.2	71.1	57.2	49.9	74.4	41.0	34.8	56.3
45-54	63.9	58.3	73.2	65.1	59.4	74.4	54.0	49.7	63.0
55-64	61.4	57.2	66.6	62.0	58.1	67.0	55.7	49.2↑	63.7↑
65-74	54.9	53.8	55.9	56.0	55.0	57.1	44.2	45.8↑	43.0↑
75+	41.5	38.2	43.7	42.2	39.2	44.1	37.7↑	40.8↑	35.5↑
Under 65	59.6	53.5	70.0	61.1	55.0	71.5	47.5	41.1	60.4
65 and over	49.1	47.8	50.1	50.0	48.9	50.9	41.6	44.5↑	39.2

<sup>a</sup> Rates are based on End Results data from a series of hospital registries and one population-based registry.  
<sup>b</sup> Rates are from the SEER 9 areas. They are based on data from population-based registries in Connecticut, New Mexico, Utah, Iowa, Hawaii, Atlanta, Detroit, Seattle-Puget Sound and San Francisco-Oakland. Rates are based on follow-up of patients into 1999.

Û The difference in rates between 1974-76 and 1992-98 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.  
- Statistic could not be calculated.

Table XVIII-5  
NON-HODGKIN LYMPHOMA

INCIDENCE, DEATH, AND SURVIVAL RATES\*

By Year of Diagnosis/Death

All Races, Males and Females

Year of Diagnosis/Death

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Incidence																					
SEER <sup>a</sup>	11.1	12.6	13.5	13.4	13.9	15.2	15.5	15.9	16.7	17.2	17.3	18.5	18.8	18.6	18.9	19.9	19.8	19.3	19.8	19.2	19.1
Mortality																					
U.S. <sup>b</sup>	5.6	6.2	6.2	6.6	6.7	6.8	7.1	7.3	7.3	7.5	7.8	7.9	8.2	8.2	8.3	8.7	8.8	8.8	9.0	8.8	8.4
SEER <sup>a</sup>	5.7	6.7	6.6	6.8	6.9	7.1	7.5	7.8	7.5	7.4	7.8	7.9	8.1	8.3	8.0	8.7	8.4	8.7	8.7	8.6	8.1
Relative Survival Rates (SEER <sup>a</sup> )																					
1-year	69.3	72.7	74.6	72.4	76.2	74.2	72.9	71.0	73.1	71.9	71.3	70.6	70.3	71.3	71.6	71.1	70.5	73.6	76.1	76.9	
2-year	58.8	62.6	64.9	63.2	67.1	65.5	64.1	62.5	64.1	62.9	63.1	61.4	61.3	62.6	63.7	63.3	62.1	66.1	68.3		
3-year	54.7	57.4	59.7	58.5	61.4	61.0	59.6	58.5	59.4	59.2	57.9	56.8	57.0	58.4	59.1	58.9	57.6	62.5			
4-year	51.0	54.8	54.8	55.4	57.2	57.2	56.0	54.8	56.2	55.2	54.4	52.9	54.4	55.2	56.3	55.5	55.0				
5-year	47.5	50.9	51.8	51.4	53.8	54.4	53.4	51.5	53.0	52.4	51.1	50.6	51.6	52.1	53.6	53.2					
6-year	43.2	48.6	48.7	48.2	50.4	51.4	51.3	48.8	50.2	50.3	48.6	48.3	48.9	49.7	51.4						
7-year	40.8	46.2	46.6	45.6	48.0	49.5	48.4	47.1	48.0	48.3	46.3	45.7	45.9	47.2							
8-year	39.0	44.1	45.0	44.5	46.3	46.5	46.5	44.8	45.6	46.2	43.6	43.8	43.7								
9-year	37.7	41.8	42.3	43.5	44.9	44.9	44.9	42.8	43.7	44.6	42.2	42.5									
10-year	36.5	40.2	40.6	42.1	43.4	42.9	43.3	41.2	42.5	43.3	40.2										
11-year	34.8	39.3	39.6	40.8	41.8	42.0	42.1	40.7	41.4	42.1											
12-year	33.9	38.0	38.6	39.4	40.3	41.3	41.1	39.2	39.9												
13-year	32.9	36.7	38.1	38.4	39.0	40.7	39.6	37.8													
14-year	31.9	36.2	37.4	37.3	38.1	39.6	38.5														
15-year	31.4	35.5	35.7	37.3	37.1	37.6															
16-year	30.5	35.5	34.4	36.5	36.3																
17-year	30.5	35.5	34.0	35.4																	
18-year	30.5	34.7	33.1																		
19-year	30.3	34.1																			
20-year	29.8																				
21-year	29.2																				
22-year	29.0																				
23-year	27.5																				
24-year	26.1																				

<sup>a</sup> Rates are from the SEER 9 areas.

<sup>b</sup> Rates are from the NCHS public use data file.

\* Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

Survival rates are relative rates expressed as percents.

Table XVIII-6  
NON-HODGKIN LYMPHOMA

## INCIDENCE, DEATH, AND SURVIVAL RATES\*

By Year of Diagnosis/Death

All Races, Males

Year of Diagnosis/Death

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Incidence																					
SEER <sup>a</sup>	12.9	15.0	15.9	15.5	16.5	18.3	18.3	19.4	20.8	21.3	21.6	23.0	23.7	23.1	23.4	24.9	25.2	24.1	24.2	22.4	23.4
Mortality																					
U.S. <sup>b</sup>	6.9	7.5	7.4	8.0	8.1	8.2	8.8	9.0	8.8	9.3	9.7	10.0	10.1	10.3	10.1	10.8	10.8	11.0	11.1	10.9	10.4
SEER <sup>a</sup>	7.2	7.7	7.9	8.5	8.3	8.4	9.5	9.7	9.2	9.2	9.7	10.0	9.9	10.5	9.7	10.6	10.1	10.5	10.5	10.2	10.5
Relative Survival Rates (SEER <sup>a</sup> )																					
1-year	68.9	72.9	73.5	71.8	76.3	73.7	71.8	70.0	69.8	68.7	68.5	66.4	66.8	68.4	68.3	67.8	67.3	71.8	75.4	75.3	
2-year	61.2	62.8	65.1	63.0	68.1	64.5	63.0	61.3	61.0	60.0	59.3	57.4	57.1	58.2	59.3	59.8	59.0	64.0	67.1		
3-year	56.0	57.0	60.0	57.9	62.0	59.5	58.1	57.2	56.4	55.6	54.1	52.3	52.5	54.3	54.6	55.1	54.8	60.4			
4-year	52.1	54.2	54.2	54.3	57.8	55.8	53.6	52.7	52.8	51.5	50.2	48.5	49.9	50.7	51.5	51.7	52.1				
5-year	48.3	49.4	50.6	50.6	54.5	53.6	50.5	49.4	50.0	48.7	46.8	46.3	47.8	46.8	48.6	49.2					
6-year	44.4	47.0	47.6	46.9	50.9	50.3	47.9	46.4	47.3	47.0	44.3	44.6	45.1	45.2	46.6						
7-year	42.0	44.9	45.9	43.5	48.3	48.4	45.0	44.5	45.7	45.2	41.4	42.0	42.3	42.8							
8-year	40.9	43.0	44.4	43.0	46.7	45.0	43.1	42.1	43.1	44.1	39.1	40.5	40.0								
9-year	39.7	40.2	42.3	42.1	45.4	43.4	41.3	40.2	40.7	42.7	37.8	39.3									
10-year	38.4	38.4	40.8	39.9	43.4	41.9	40.1	38.7	39.7	41.6	36.2										
11-year	36.8	36.4	39.4	39.2	42.1	40.5	39.0	37.6	38.7	40.6											
12-year	35.8	35.5	38.5	37.7	41.6	40.1	37.6	36.7	37.5												
13-year	34.4	35.1	37.8	37.3	40.9	39.2	36.4	35.4													
14-year	33.3	34.9	37.2	36.6	40.1	38.0	35.8														
15-year	32.5	34.3	35.7	36.6	39.4	35.9															
16-year	31.1	34.1	34.5	35.7	38.4																
17-year	31.1	33.8	33.4	35.4																	
18-year	31.1	33.4	32.5																		
19-year	31.1	33.4																			
20-year	30.6																				
21-year	30.0																				
22-year	30.0																				
23-year	28.4																				
24-year	26.6																				

<sup>a</sup> Rates are from the SEER 9 areas.<sup>b</sup> Rates are from the NCHS public use data file.

\* Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

Survival rates are relative rates expressed as percents.

Table XVIII-7  
NON-HODGKIN LYMPHOMA

INCIDENCE, DEATH, AND SURVIVAL RATES<sup>‡</sup>

By Year of Diagnosis/Death

All Races, Females

Year of Diagnosis/Death

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Incidence																					
SEER <sup>a</sup>	9.6	10.8	11.8	11.6	11.9	12.8	13.2	13.0	13.4	14.1	13.8	14.7	14.5	14.9	15.0	15.8	15.3	15.3	16.3	16.4	15.6
Mortality																					
U.S. <sup>b</sup>	4.6	5.3	5.3	5.5	5.6	5.8	5.8	6.0	6.1	6.2	6.4	6.3	6.8	6.7	6.9	7.2	7.2	7.2	7.3	7.2	7.0
SEER <sup>a</sup>	4.6	5.9	5.5	5.6	5.9	6.1	6.1	6.3	6.2	6.0	6.4	6.3	6.8	6.7	6.8	7.3	7.1	7.4	7.3	7.3	6.3
Relative Survival Rates (SEER <sup>a</sup> )																					
1-year	69.8	72.5	75.7	73.0	76.1	74.8	74.0	72.3	77.2	75.7	74.9	75.8	75.0	74.9	75.8	75.3	74.8	75.9	77.0	78.6	
2-year	56.1	62.5	64.8	63.5	66.1	66.5	65.3	63.9	67.9	66.4	67.9	66.3	66.8	68.1	69.2	67.8	66.4	68.8	69.7		
3-year	53.4	57.8	59.4	59.2	60.8	62.6	61.4	60.0	63.0	63.4	62.7	62.3	62.9	63.6	64.9	63.9	61.5	65.2			
4-year	49.7	55.5	55.5	56.5	56.6	58.8	58.7	57.2	60.3	59.7	59.5	58.3	60.4	60.9	62.4	60.5	59.0				
5-year	46.6	52.5	53.0	52.3	53.1	55.2	56.7	53.9	56.7	56.7	56.3	55.8	56.8	58.7	59.9	58.4					
6-year	42.0	50.4	49.9	49.5	49.7	52.5	55.0	51.6	53.8	54.3	53.9	52.8	54.0	55.5	57.6						
7-year	39.4	47.7	47.3	47.7	47.7	50.7	52.2	50.1	50.8	51.9	52.5	50.3	50.9	52.8							
8-year	37.0	45.4	45.6	46.1	45.8	48.1	50.2	48.1	48.7	48.8	49.3	47.9	48.7								
9-year	35.5	43.6	42.2	45.0	44.4	46.4	48.8	45.9	47.2	46.9	47.7	46.6									
10-year	34.5	42.1	40.4	44.3	43.4	44.1	46.7	44.2	46.0	45.4	45.2										
11-year	32.7	42.1	39.7	42.6	41.4	43.6	45.5	44.2	44.7	43.9											
12-year	31.9	40.8	38.6	41.1	38.9	42.7	44.9	42.1	43.0												
13-year	31.4	38.4	38.3	39.6	37.0	42.3	43.2	40.7													
14-year	30.4	37.5	37.7	38.1	36.0	41.3	41.5														
15-year	30.2	36.9	35.7	37.5	34.6	39.6															
16-year	29.8	36.9	34.4	37.2	34.1																
17-year	29.8	36.9	34.4	35.4																	
18-year	29.8	36.1	33.8																		
19-year	29.6	34.7																			
20-year	28.9																				
21-year	28.4																				
22-year	27.7																				
23-year	26.6																				
24-year	25.6																				

<sup>a</sup> Rates are from the SEER 9 areas.

<sup>b</sup> Rates are from the NCHS public use data file.

<sup>‡</sup> Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

Survival rates are relative rates expressed as percents.

Table XVIII-8

NON-HODGKIN LYMPHOMANUMBER OF CASES

By SEER Location and Year of Diagnosis, 1973-99

All Races, Males, All Ages

Year of Diagnosis

SEER Location	1973-79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Areas⊕	6810	1206	1298	1296	1398	1559	1608	1720	1903	1952	2035	2216	2355	2312	2414	2600	2689	2592	2612	2478	2599
All Areas but SF-Oakland	5547	1003	1084	1084	1174	1275	1317	1339	1478	1524	1562	1694	1809	1789	1889	2039	2082	2044	2151	2073	2130
San Francisco-Oakland SMSA	1263	203	214	212	224	284	291	381	425	428	473	522	546	523	525	561	607	548	461	405	469
San Francisco City/County	336	50	46	59	63	104	106	140	185	175	217	246	224	222	195	207	240	212	143	93	117

AGE-ADJUSTED CANCER INCIDENCE RATES§

By SEER Location and Year of Diagnosis, 1973-99

All Races, Males, All Ages

Year of Diagnosis

SEER Location	1973-79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Areas⊕	13.1	15.0	15.9	15.5	16.5	18.3	18.3	19.4	20.8	21.3	21.6	23.0	23.7	23.1	23.4	24.9	25.2	24.1	24.2	22.4	23.4
All Areas but SF-Oakland	12.9	14.9	15.9	15.5	16.6	18.0	18.1	18.2	19.3	20.1	20.0	21.2	22.0	21.5	22.0	23.3	23.5	22.8	23.8	22.4	22.9
San Francisco-Oakland SMSA	14.4	15.3	16.2	15.7	16.2	19.8	19.2	25.3	27.9	27.4	29.4	31.6	32.0	31.0	30.5	32.6	34.1	31.0	26.1	22.4	25.8
San Francisco City/County	14.2	15.4	13.5	16.7	18.3	30.7	28.1	38.2	50.3	46.1	57.4	66.4	56.4	57.2	49.9	53.6	61.5	54.4	36.6	24.1	29.7

§ SEER 9 areas. Rates are per 100,000 males and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

⊕ All Areas refers to all SEER data collection areas. The San Francisco-Oakland SMSA represents 15% of all persons in the SEER areas. For this age group, all SEER areas may not be generalizable to the United States for Non-Hodgkin Lymphoma.



Table XVIII-9

NON-HODGKIN LYMPHOMANUMBER OF CASES

By SEER Location and Year of Diagnosis, 1973-99

All Races, Males, Ages 0-19

Year of Diagnosis

SEER Location	1973-79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Areas⊕	298	38	51	50	58	48	41	44	49	42	43	46	55	44	43	59	59	42	63	59	46
All Areas but SF-Oakland	252	35	45	42	53	43	37	37	43	40	37	38	49	39	33	54	51	31	53	50	42
San Francisco-Oakland SMSA	46	<4	6	8	5	5	4	7	6	<4	6	8	6	5	10	5	8	11	10	9	4
San Francisco City/County	12	<4	<4	0	<4	<4	0	<4	0	0	0	<4	<4	0	<4	<4	<4	<4	<4	<4	0

AGE-ADJUSTED CANCER INCIDENCE RATES§

By SEER Location and Year of Diagnosis, 1973-99

All Races, Males, Ages 0-19

Year of Diagnosis

SEER Location	1973-79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Areas⊕	1.2	1.1	1.5	1.5	1.7	1.4	1.2	1.3	1.5	1.3	1.3	1.4	1.6	1.3	1.2	1.7	1.6	1.2	1.7	1.6	1.2
All Areas but SF-Oakland	1.2	1.1	1.5	1.4	1.8	1.5	1.3	1.3	1.5	1.4	1.3	1.3	1.7	1.3	1.1	1.8	1.6	1.0	1.7	1.6	1.3
San Francisco-Oakland SMSA	1.4	-	1.4	1.8	1.2	1.2	0.9	1.6	1.4	-	1.4	1.7	1.2	1.1	2.1	1.0	1.7	2.2	2.0	1.8	0.8
San Francisco City/County	2.1	-	-	0.0	-	-	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	-	-	-	-	0.0

§ SEER 9 areas. Rates are per 100,000 males aged 0-19 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

⊕ All Areas refers to all SEER data collection areas. The San Francisco-Oakland SMSA represents 15% of all persons in the SEER areas. For this age group, all SEER areas may not be generalizable to the United States for Non-Hodgkin Lymphoma.

Table XVIII-10

NON-HODGKIN LYMPHOMANUMBER OF CASES

By SEER Location and Year of Diagnosis, 1973-99

All Races, Males, Ages 20-54

## Year of Diagnosis

SEER Location	1973-79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Areas⊕	1901	335	350	363	354	460	494	570	639	660	750	840	923	893	942	1015	1062	907	836	778	785
All Areas but SF-Oakland	1545	278	282	301	282	353	373	398	427	445	474	564	624	632	661	728	737	660	637	620	610
San Francisco-Oakland SMSA	356	57	68	62	72	107	121	172	212	215	276	276	299	261	281	287	325	247	199	158	175
San Francisco City/County	91	15	14	14	20	50	55	90	125	125	164	170	166	160	146	146	171	139	87	44	59

AGE-ADJUSTED CANCER INCIDENCE RATES§

By SEER Location and Year of Diagnosis, 1973-99

All Races, Males, Ages 20-54

## Year of Diagnosis

SEER Location	1973-79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Areas⊕	6.7	7.8	8.0	8.4	7.9	10.2	10.6	11.9	12.8	12.8	14.2	15.4	16.5	15.6	16.0	16.8	17.3	14.5	13.2	12.1	12.1
All Areas but SF-Oakland	6.6	7.8	7.7	8.4	7.6	9.5	9.8	10.1	10.4	10.7	10.9	12.5	13.6	13.5	13.5	14.5	14.4	12.6	12.0	11.6	11.3
San Francisco-Oakland SMSA	7.0	7.9	9.1	8.3	9.3	13.5	14.2	20.6	24.5	23.2	29.7	29.3	30.2	25.9	28.1	28.2	31.9	24.0	18.9	14.7	15.9
San Francisco City/County	7.8	9.3	8.3	7.4	11.3	28.6	26.0	47.4	65.4	61.6	81.8	86.7	78.2	78.4	70.4	70.9	83.1	67.3	41.1	20.5	27.4

§ SEER 9 areas. Rates are per 100,000 males aged 20-54 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

⊕ All Areas refers to all SEER data collection areas. The San Francisco-Oakland SMSA represents 15% of all persons in the SEER areas. For this age group, all SEER areas may not be generalizable to the United States for Non-Hodgkin Lymphoma.

Table XVIII-11

NON-HODGKIN LYMPHOMANUMBER OF CASES

By SEER Location and Year of Diagnosis, 1973-99

All Races, Males, Ages 55+

Year of Diagnosis

SEER Location	1973-79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Areas⊕	4611	833	897	883	986	1051	1073	1106	1215	1250	1242	1330	1377	1375	1429	1526	1568	1643	1713	1641	1768
All Areas but SF-Oakland	3750	690	757	741	839	879	907	904	1008	1039	1051	1092	1136	1118	1195	1257	1294	1353	1461	1403	1478
San Francisco-Oakland SMSA	861	143	140	142	147	172	166	202	207	211	191	238	241	257	234	269	274	290	252	238	290
San Francisco City/County	233	34	31	45	42	53	51	48	60	50	53	75	57	62	48	60	67	71	55	47	58

AGE-ADJUSTED CANCER INCIDENCE RATES§

By SEER Location and Year of Diagnosis, 1973-99

All Races, Males, Ages 55+

Year of Diagnosis

SEER Location	1973-79	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
All Areas⊕	44.2	50.5	53.9	51.2	56.5	59.8	59.2	61.2	65.4	68.2	66.2	69.8	70.4	69.7	70.8	74.9	75.5	77.5	80.1	74.6	79.8
All Areas but SF-Oakland	43.2	50.0	54.2	51.2	57.3	59.9	59.9	59.8	64.3	67.2	66.2	68.4	69.1	67.3	70.0	73.0	74.2	76.0	81.1	75.9	79.3
San Francisco-Oakland SMSA	49.1	52.5	52.5	51.4	52.6	59.5	55.6	68.4	71.5	73.5	66.3	77.2	77.6	83.0	74.5	85.1	82.7	85.8	75.1	68.0	82.5
San Francisco City/County	45.2	47.9	41.3	60.7	57.7	74.9	70.6	64.3	82.4	71.7	77.3	106.1	79.6	84.4	67.0	83.0	89.8	93.8	73.3	60.8	75.1

§ SEER 9 areas. Rates are per 100,000 males aged 55+ and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

⊕ All Areas refers to all SEER data collection areas. The San Francisco-Oakland SMSA represents 15% of all persons in the SEER areas. For this age group, all SEER areas may not be generalizable to the United States for Non-Hodgkin Lymphoma.

Table XVIII-12

NON-HODGKIN LYMPHOMAAGE-ADJUSTED CANCER SEER INCIDENCE RATES<sup>§</sup>, 1980-99

By the Working Formulation and Year of Diagnosis

All Races, Males and Females

Working Formulation	Year of Diagnosis																			
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total	12.6	13.5	13.4	13.9	15.2	15.5	15.9	16.7	17.2	17.3	18.5	18.8	18.6	18.8	19.9	19.8	19.3	19.8	19.2	19.1
Low Grade:	3.4	3.5	3.4	3.8	3.8	3.9	4.1	4.1	4.3	3.9	4.3	4.2	4.3	4.2	4.4	4.0	3.9	4.2	4.2	3.9
A: Small, lymphocytic	1.3	1.3	1.3	1.3	1.4	1.5	1.5	1.7	1.8	1.6	1.7	1.6	1.8	1.7	1.8	1.6	1.5	1.6	1.6	1.7
B: Follicular, small cleaved	1.6	1.6	1.4	1.7	1.7	1.6	1.7	1.4	1.7	1.4	1.5	1.6	1.5	1.4	1.5	1.3	1.3	1.5	1.4	1.1
C: Follicular, mixed small cleaved and large cell	0.5	0.6	0.7	0.7	0.7	0.8	0.9	0.9	0.8	0.9	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.1
Intermediate Grade:	6.2	6.8	6.4	6.6	7.1	7.2	7.3	7.6	7.9	7.6	8.2	8.1	7.7	8.0	8.3	8.2	7.9	8.2	8.2	8.3
D: Follicular, large cell	0.2	0.2	0.3	0.3	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.5	0.6
E: Diffuse, small cleaved	1.9	2.1	1.4	1.6	1.5	1.3	1.0	1.2	1.2	1.2	1.2	1.0	1.0	1.0	1.0	1.0	1.1	0.9	0.9	1.0
F: Diffuse, mixed small and large cell	0.7	0.9	0.9	1.1	1.1	1.2	1.1	1.1	1.1	1.0	0.9	1.0	0.8	0.8	0.9	0.6	0.6	0.5	0.5	0.4
G: Diffuse, large cell	3.4	3.6	3.8	3.6	4.1	4.4	4.7	4.9	5.1	5.0	5.6	5.6	5.5	5.6	5.8	6.0	5.7	6.2	6.3	6.3
High Grade:	0.6	0.6	1.1	1.2	1.3	1.3	1.6	1.9	1.9	2.2	2.1	2.3	2.2	2.3	2.0	1.7	1.7	1.4	1.1	0.9
H: Large cell, immunoblastic	0.2	0.2	0.5	0.7	0.7	0.7	0.9	1.0	1.0	1.4	1.4	1.5	1.5	1.5	1.3	1.1	1.1	0.8	0.5	0.4
I: Lymphoblastic	0.1	0.1	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1
J: Small noncleaved; Burkitt's	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.6	0.7	0.7	0.5	0.6	0.6	0.5	0.5	0.6	0.4	0.5	0.4	0.4
Unclassified Grade	2.4	2.7	2.4	2.5	3.0	3.0	2.9	3.2	3.2	3.6	3.9	4.2	4.3	4.4	5.2	5.9	5.8	5.9	5.8	6.0

<sup>§</sup> SEER 9 areas. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

Table XVIII-13  
NON-HODGKIN LYMPHOMA

Percent Diagnosed With Cancer In 10, 20 and 30 Years and In Remaining Lifetime,  
 Given Cancer Free At Current Age By Race and Sex

Lifetime Risk (Percent) of Being Diagnosed (12 SEER Areas) With Cancer and  
 Lifetime Risk (Percent) of Dying (Total U.S.) From Cancer

1997-1999

All Races

Current Age	Males				Females				
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually	
0	0.01	0.03	0.06	2.12	0.00	0.01	0.03	1.80	
10	0.02	0.05	0.15	2.13	0.01	0.03	0.08	1.81	
20	0.04	0.13	0.28	2.12	0.02	0.07	0.17	1.81	
30	0.09	0.25	0.55	2.12	0.05	0.15	0.37	1.80	
40	0.16	0.47	0.96	2.06	0.10	0.32	0.70	1.76	
50	0.32	0.83	1.48	1.97	0.22	0.61	1.18	1.70	
60	0.56	1.25	1.70	1.79	0.40	1.00	1.45	1.55	
Lifetime Risk of Being Diagnosed =				2.12%	Lifetime Risk of Being Diagnosed =				1.80%
Lifetime Risk of Dying =				0.99%	Lifetime Risk of Dying =				0.89%

Whites

Current Age	Males				Females				
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually	
0	0.01	0.03	0.06	2.22	0.00	0.01	0.03	1.90	
10	0.02	0.05	0.14	2.23	0.01	0.03	0.08	1.91	
20	0.04	0.13	0.28	2.23	0.02	0.07	0.17	1.90	
30	0.09	0.25	0.56	2.22	0.05	0.15	0.38	1.89	
40	0.16	0.48	1.01	2.16	0.10	0.34	0.74	1.86	
50	0.33	0.88	1.57	2.07	0.24	0.65	1.25	1.79	
60	0.59	1.33	1.79	1.87	0.43	1.06	1.52	1.62	
Lifetime Risk of Being Diagnosed =				2.22%	Lifetime Risk of Being Diagnosed =				1.90%
Lifetime Risk of Dying =				1.05%	Lifetime Risk of Dying =				0.94%

Blacks

Current Age	Males				Females				
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually	
0	0.01	0.02	0.07	1.31	0.00	0.01	0.03	1.07	
10	0.01	0.06	0.18	1.32	0.01	0.03	0.08	1.09	
20	0.04	0.17	0.36	1.32	0.02	0.08	0.18	1.08	
30	0.13	0.32	0.59	1.31	0.06	0.16	0.32	1.07	
40	0.20	0.48	0.76	1.23	0.10	0.27	0.55	1.03	
50	0.30	0.60	0.88	1.11	0.18	0.47	0.73	0.97	
60	0.35	0.69	0.90	0.96	0.31	0.60	0.81	0.87	
Lifetime Risk of Being Diagnosed =				1.31%	Lifetime Risk of Being Diagnosed =				1.07%
Lifetime Risk of Dying =				0.54%	Lifetime Risk of Dying =				0.47%

Table XVIII-14  
NON-HODGKIN LYMPHOMA (Invasive)

AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES

By Race/Ethnicity and Sex

Incidence<sup>i</sup>

RACE/ETHNICITY	Rate 1992-1999 Rate per 100,000 persons			Trend 1992-1999 EAPC (%)		
	Total	Males	Females	Total	Males	Females
	All Races	19.0	23.7	15.2	0.1	-0.6
White	19.9	24.6	15.9	-0.1	-0.8	0.9*
White Hispanic	15.7	19.0	12.7	-2.0	-3.3	-0.3
White Non-Hispanic	20.4	25.5	16.2	-0.1	-0.7	0.9*
Black	14.3	19.0	10.5	0.9	-0.8	3.6
Asian/Pacific Islander	13.7	17.0	11.1	1.2	1.1	1.4
Amer Ind/Alaska Nat	6.9	7.8	6.1	2.2	-	-
Hispanic <sup>⊗</sup>	14.9	17.9	12.1	-2.0	-3.2	-0.3

Mortality<sup>❖</sup>

RACE/ETHNICITY	Rate 1992-1999 Rate per 100,000 persons			Trend 1992-1999 EAPC (%)		
	Total	Males	Females	Total	Males	Females
	All Races	8.6	10.7	7.1	0.6	0.5
White	9.0	11.0	7.4	0.6	0.5	0.6
White Hispanic	6.5	8.0	5.2	0.3	-0.2	1.0
White Non-Hispanic	9.0	11.1	7.5	0.8	0.9	0.7
Black	5.9	7.6	4.7	1.0	1.0	1.1
Asian/Pacific Islander	5.4	6.9	4.2	0.0	0.0	0.1
Amer Ind/Alaska Nat	3.9	4.6	3.4	4.1	5.5	2.9
Hispanic <sup>⊗</sup>	6.2	7.7	5.0	0.3	-0.2	0.9

- The EAPC is the Estimated Annual Percent Change over the time interval.
- Statistic not shown. Rate based on less than 25 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.
- <sup>i</sup> Incidence data are from the 12 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, and Alaska Native Registry).
- <sup>⊗</sup> Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics does not include cases from Detroit, Hawaii and Alaska Native Registry. For mortality, information is included for all states except Connecticut, Oklahoma, New York, and New Hampshire.
- <sup>❖</sup> Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS).
- <sup>\*</sup> The EAPC is significantly different from zero (p<.05).

Table XVIII-15  
NON-HODGKIN LYMPHOMAAGE-ADJUSTED SEER INCIDENCE RATES§ AND SEER DEATH RATESâ  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE RATES§, 1995-99</u>									
REGISTRY									
11 registries	19.1	23.7	15.4	19.9	24.5	16.0	14.7	19.1	11.2
9 registries	19.4	23.9	15.8	20.1	24.5	16.5	15.0	19.9	11.2
San Francisco-Oakland	21.2	27.7	15.5	23.4	30.5	16.7	15.5	20.8	10.9
Connecticut	21.1	25.3	17.7	21.2	25.3	18.1	16.1	21.8	11.6
Metropolitan Detroit	18.9	22.8	15.9	19.8	23.7	17.0	14.3	18.5	11.1
Hawaii	16.0	19.4	12.9	18.9	22.3	15.6	-	-	-
Iowa	19.4	22.6	17.0	19.4	22.5	17.1	14.5	-	-
New Mexico	14.8	17.8	12.3	15.3	18.4	12.7	-	-	-
Seattle-Puget Sound	20.6	25.0	16.8	21.0	25.3	17.2	17.5	25.5	11.1
Utah	17.9	22.2	14.2	18.1	22.4	14.4	-	-	-
Metropolitan Atlanta	18.5	23.6	14.6	18.8	23.6	15.1	15.6	21.2	11.9
San Jose-Monterey	19.5	23.4	16.3	18.5	22.7	15.0	12.3	-	-
Los Angeles	18.1	23.0	14.0	19.4	24.7	14.8	14.0	17.3	11.2
<u>SEER DEATH RATESâ, 1995-99</u>									
REGISTRY									
11 registries	8.3	10.3	6.8	8.8	10.8	7.3	6.1	7.7	5.0
9 registries	8.5	10.3	7.1	8.9	10.8	7.5	6.2	7.8	5.0
San Francisco-Oakland	8.1	10.1	6.6	9.1	11.4	7.3	5.9	6.4	5.4
Connecticut	8.9	10.6	7.7	9.1	10.8	7.9	6.2	7.6	5.1
Metropolitan Detroit	8.8	10.6	7.4	9.4	11.3	8.0	6.1	8.0	4.6
Hawaii	7.6	9.3	6.2	9.6	12.0	7.2	-	-	-
Iowa	9.2	10.8	7.9	9.2	10.9	7.9	-	-	-
New Mexico	7.1	8.1	6.3	7.4	8.4	6.5	-	-	-
Seattle-Puget Sound	8.8	10.9	7.3	9.0	11.1	7.5	8.3	-	-
Utah	8.1	10.0	6.6	8.2	10.0	6.7	-	-	-
Metropolitan Atlanta	7.9	10.5	6.1	8.3	10.8	6.5	6.6	9.1	4.9
San Jose-Monterey	7.7	9.9	5.9	8.1	10.4	6.3	-	-	-
Los Angeles	7.9	10.1	6.2	8.6	10.9	6.8	6.1	7.5	4.9

Note: San Jose-Monterey and Los Angeles are new SEER areas as of 1992 and their data are only used in tables where indicated.  
 § SEER 9 areas. Incidence rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.  
 â NCHS public use data file. Death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.  
 - Statistic could not be calculated or populations are inadequate.

Table XVIII-16  
NON-HODGKIN LYMPHOMAAVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>ä</sup> RATES BY STATE, 1995-99

All Races, Males and Females

State	Rate	SE	Rank	PD
TOTAL U.S.	8.7	0.03		
High Five States				
Minnesota	9.9 <sup>⊕</sup>	0.21	(01)	13.8
South Dakota	9.7	0.49	(02)	11.5
Ohio	9.6 <sup>⊕</sup>	0.13	(03)	10.3
Maine	9.6	0.38	(04)	10.3
Vermont	9.6	0.58	(05)	10.3
Low Five States				
Hawaii	7.6	0.36	(47)	-12.6
Georgia	7.6 <sup>⊕</sup>	0.16	(48)	-12.6
Wyoming	7.2 <sup>✱</sup>	0.58	(49)	-17.2
New Mexico	7.1 <sup>⊕✱</sup>	0.31	(50)	-18.4
District of Columbia	6.7 <sup>⊕✱</sup>	0.49	(51)	-23.0

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	7.8 <sup>⊕</sup>	0.19	(45)	-10.3	Montana	8.9	0.44	(22)	2.3
Alaska	8.2	0.82	(38)	-5.7	Nebraska	8.6	0.31	(30)	-1.1
Arizona	8.5	0.20	(33)	-2.3	Nevada	8.1	0.34	(42)	-6.9
Arkansas	9.0	0.26	(20)	3.4	New Hampshire	9.4	0.42	(09)	8.0
California	8.1 <sup>⊕</sup>	0.08	(41)	-6.9	New Jersey	9.5 <sup>⊕</sup>	0.15	(08)	9.2
Colorado	8.2	0.23	(39)	-5.7	New Mexico	7.1 <sup>⊕✱</sup>	0.31	(50)	-18.4
Connecticut	8.9	0.22	(21)	2.3	New York	8.8	0.10	(29)	1.1
Delaware	8.3	0.48	(36)	-4.6	North Carolina	8.0 <sup>⊕</sup>	0.15	(43)	-8.0
District of Columbia	6.7 <sup>⊕✱</sup>	0.49	(51)	-23.0	North Dakota	8.9	0.50	(23)	2.3
Florida	8.6	0.10	(31)	-1.1	Ohio	9.6 <sup>⊕</sup>	0.13	(03)	10.3
Georgia	7.6 <sup>⊕</sup>	0.16	(48)	-12.6	Oklahoma	8.9	0.23	(25)	2.3
Hawaii	7.6	0.36	(47)	-12.6	Oregon	9.0	0.23	(18)	3.4
Idaho	8.9	0.40	(27)	2.3	Pennsylvania	9.2 <sup>⊕</sup>	0.12	(12)	5.7
Illinois	9.0	0.12	(19)	3.4	Rhode Island	9.6	0.42	(06)	10.3
Indiana	9.3	0.18	(10)	6.9	South Carolina	7.8 <sup>⊕</sup>	0.21	(46)	-10.3
Iowa	9.2	0.24	(13)	5.7	South Dakota	9.7	0.49	(02)	11.5
Kansas	8.6	0.25	(32)	-1.1	Tennessee	9.1	0.19	(14)	4.6
Kentucky	8.9	0.22	(24)	2.3	Texas	8.5	0.10	(34)	-2.3
Louisiana	9.1	0.22	(15)	4.6	Utah	8.1	0.34	(40)	-6.9
Maine	9.6	0.38	(04)	10.3	Vermont	9.6	0.58	(05)	10.3
Maryland	8.3	0.19	(35)	-4.6	Virginia	8.3	0.17	(37)	-4.6
Massachusetts	9.1	0.17	(16)	4.6	Washington	8.9	0.19	(26)	2.3
Michigan	9.3 <sup>⊕</sup>	0.14	(11)	6.9	West Virginia	8.8	0.29	(28)	1.1
Minnesota	9.9 <sup>⊕</sup>	0.21	(01)	13.8	Wisconsin	9.5 <sup>⊕</sup>	0.19	(07)	9.2
Mississippi	7.9	0.25	(44)	-9.2	Wyoming	7.2 <sup>✱</sup>	0.58	(49)	-17.2
Missouri	9.1	0.18	(17)	4.6					

ä NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

✱ Absolute percent difference between state rate and total U.S. rate is 15% or more.

⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).



Table XVIII-17  
NON-HODGKIN LYMPHOMA

## AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH RATES BY STATE, 1995-99

All Races, Males

State	Rate	SE	Rank	PD
TOTAL U.S.	10.8	0.04		
High Five States				
Vermont	12.5*	1.05	(01)	15.7
South Dakota	12.2	0.85	(02)	13.0
Minnesota	12.1⊕	0.36	(03)	12.0
Maine	12.1	0.67	(04)	12.0
Ohio	12.0⊕	0.23	(05)	11.1
Low Five States				
District of Columbia	9.6	0.95	(47)	-11.1
Colorado	9.4⊕	0.38	(48)	-13.0
Hawaii	9.3	0.59	(49)	-13.9
New Mexico	8.1⊕*	0.50	(50)	-25.0
Wyoming	8.0*	0.96	(51)	-25.9

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	9.9	0.34	(43)	-8.3	Montana	10.3	0.72	(36)	-4.6
Alaska	10.4	1.40	(33)	-3.7	Nebraska	10.8	0.55	(25)	0.0
Arizona	10.3	0.33	(35)	-4.6	Nevada	10.2	0.58	(37)	-5.6
Arkansas	11.5	0.45	(12)	6.5	New Hampshire	11.7	0.73	(09)	8.3
California	10.0⊕	0.13	(39)	-7.4	New Jersey	11.8	0.26	(08)	9.3
Colorado	9.4⊕	0.38	(48)	-13.0	New Mexico	8.1⊕*	0.50	(50)	-25.0
Connecticut	10.6	0.38	(30)	-1.9	New York	11.0	0.17	(21)	1.9
Delaware	9.7	0.81	(44)	-10.2	North Carolina	10.0	0.27	(40)	-7.4
District of Columbia	9.6	0.95	(47)	-11.1	North Dakota	10.6	0.84	(31)	-1.9
Florida	10.8	0.17	(24)	0.0	Ohio	12.0⊕	0.23	(05)	11.1
Georgia	9.7⊕	0.29	(45)	-10.2	Oklahoma	10.8	0.39	(26)	0.0
Hawaii	9.3	0.59	(49)	-13.9	Oregon	10.9	0.39	(22)	0.9
Idaho	11.1	0.68	(19)	2.8	Pennsylvania	11.4	0.20	(14)	5.6
Illinois	11.4	0.22	(15)	5.6	Rhode Island	11.9	0.74	(06)	10.2
Indiana	11.5	0.32	(11)	6.5	South Carolina	9.6	0.38	(46)	-11.1
Iowa	10.8	0.40	(23)	0.0	South Dakota	12.2	0.85	(02)	13.0
Kansas	10.4	0.43	(34)	-3.7	Tennessee	11.4	0.34	(13)	5.6
Kentucky	11.3	0.39	(16)	4.6	Texas	10.5	0.18	(32)	-2.8
Louisiana	11.1	0.38	(18)	2.8	Utah	10.0	0.57	(41)	-7.4
Maine	12.1	0.67	(04)	12.0	Vermont	12.5*	1.05	(01)	15.7
Maryland	10.7	0.34	(28)	-0.9	Virginia	10.0	0.29	(38)	-7.4
Massachusetts	11.5	0.30	(10)	6.5	Washington	10.7	0.31	(29)	-0.9
Michigan	11.1	0.24	(20)	2.8	West Virginia	10.7	0.51	(27)	-0.9
Minnesota	12.1⊕	0.36	(03)	12.0	Wisconsin	11.9	0.33	(07)	10.2
Mississippi	9.9	0.44	(42)	-8.3	Wyoming	8.0*	0.96	(51)	-25.9
Missouri	11.2	0.31	(17)	3.7					

ä NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

\* Absolute percent difference between state rate and total U.S. rate is 15% or more.

⊕ Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

Table XVIII-18  
NON-HODGKIN LYMPHOMAAVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>ä</sup> RATES BY STATE, 1995-99

All Races, Females

State	Rate	SE	Rank	PD
TOTAL U.S.	7.2	0.03		
High Five States				
Minnesota	8.2 <sup>⊕</sup>	0.25	(01)	13.9
Rhode Island	8.0	0.49	(02)	11.1
Iowa	7.9	0.29	(03)	9.7
Ohio	7.9 <sup>⊕</sup>	0.15	(04)	9.7
Maine	7.9	0.46	(05)	9.7
Low Five States				
New Mexico	6.3	0.39	(47)	-12.5
Alaska	6.3	0.97	(48)	-12.5
Hawaii	6.2	0.44	(49)	-13.9
Georgia	6.1 <sup>⊕*</sup>	0.18	(50)	-15.3
District of Columbia	4.7 <sup>⊕*</sup>	0.52	(51)	-34.7

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	6.3 <sup>⊕</sup>	0.22	(46)	-12.5	Montana	7.8	0.55	(07)	8.3
Alaska	6.3	0.97	(48)	-12.5	Nebraska	7.1	0.37	(32)	-1.4
Arizona	7.1	0.24	(34)	-1.4	Nevada	6.3	0.40	(45)	-12.5
Arkansas	7.1	0.30	(30)	-1.4	New Hampshire	7.5	0.49	(19)	4.2
California	6.6 <sup>⊕</sup>	0.09	(42)	-8.3	New Jersey	7.8	0.18	(08)	8.3
Colorado	7.2	0.28	(28)	0.0	New Mexico	6.3	0.39	(47)	-12.5
Connecticut	7.7	0.27	(12)	6.9	New York	7.1	0.11	(29)	-1.4
Delaware	7.1	0.59	(31)	-1.4	North Carolina	6.6	0.18	(39)	-8.3
District of Columbia	4.7 <sup>⊕*</sup>	0.52	(51)	-34.7	North Dakota	7.6	0.62	(16)	5.6
Florida	6.8	0.12	(38)	-5.6	Ohio	7.9 <sup>⊕</sup>	0.15	(04)	9.7
Georgia	6.1 <sup>⊕*</sup>	0.18	(50)	-15.3	Oklahoma	7.5	0.27	(20)	4.2
Hawaii	6.2	0.44	(49)	-13.9	Oregon	7.4	0.28	(22)	2.8
Idaho	7.1	0.48	(33)	-1.4	Pennsylvania	7.7 <sup>⊕</sup>	0.14	(10)	6.9
Illinois	7.3	0.15	(27)	1.4	Rhode Island	8.0	0.49	(02)	11.1
Indiana	7.7	0.21	(13)	6.9	South Carolina	6.5	0.25	(43)	-9.7
Iowa	7.9	0.29	(03)	9.7	South Dakota	7.7	0.59	(09)	6.9
Kansas	7.3	0.31	(26)	1.4	Tennessee	7.5	0.22	(17)	4.2
Kentucky	7.4	0.26	(24)	2.8	Texas	7.0	0.12	(36)	-2.8
Louisiana	7.6	0.26	(15)	5.6	Utah	6.6	0.41	(41)	-8.3
Maine	7.9	0.46	(05)	9.7	Vermont	7.7	0.69	(11)	6.9
Maryland	6.6	0.22	(40)	-8.3	Virginia	7.0	0.20	(35)	-2.8
Massachusetts	7.4	0.20	(23)	2.8	Washington	7.4	0.23	(21)	2.8
Michigan	7.8 <sup>⊕</sup>	0.17	(06)	8.3	West Virginia	7.4	0.35	(25)	2.8
Minnesota	8.2 <sup>⊕</sup>	0.25	(01)	13.9	Wisconsin	7.6	0.22	(14)	5.6
Mississippi	6.5	0.29	(44)	-9.7	Wyoming	6.9	0.75	(37)	-4.2
Missouri	7.5	0.21	(18)	4.2					

ä NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

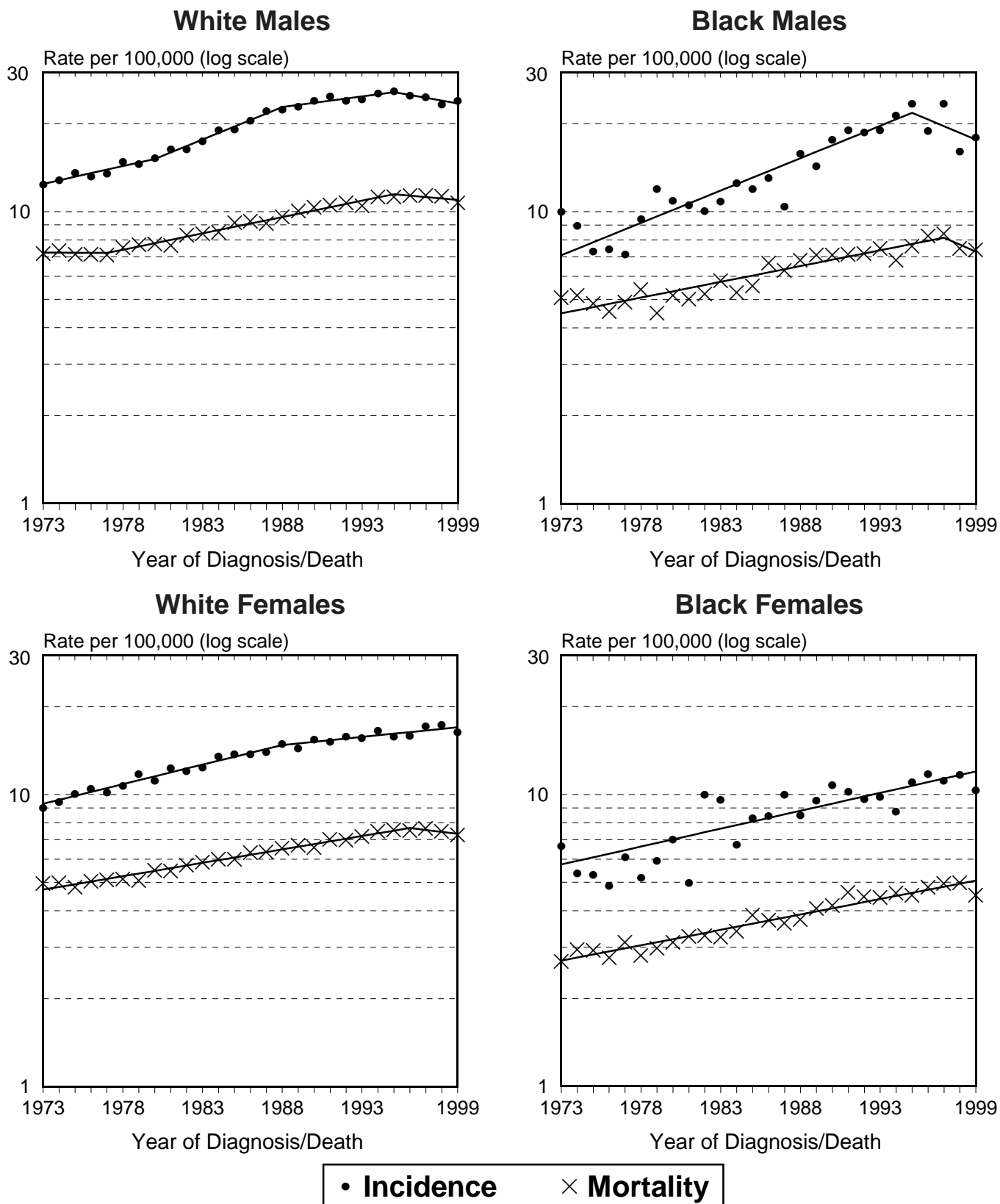
SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

\* Absolute percent difference between state rate and total U.S. rate is 15% or more.

⊕ Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

# SEER Incidence and U.S. Death Rates<sup>+</sup> Non-Hodgkin Lymphoma

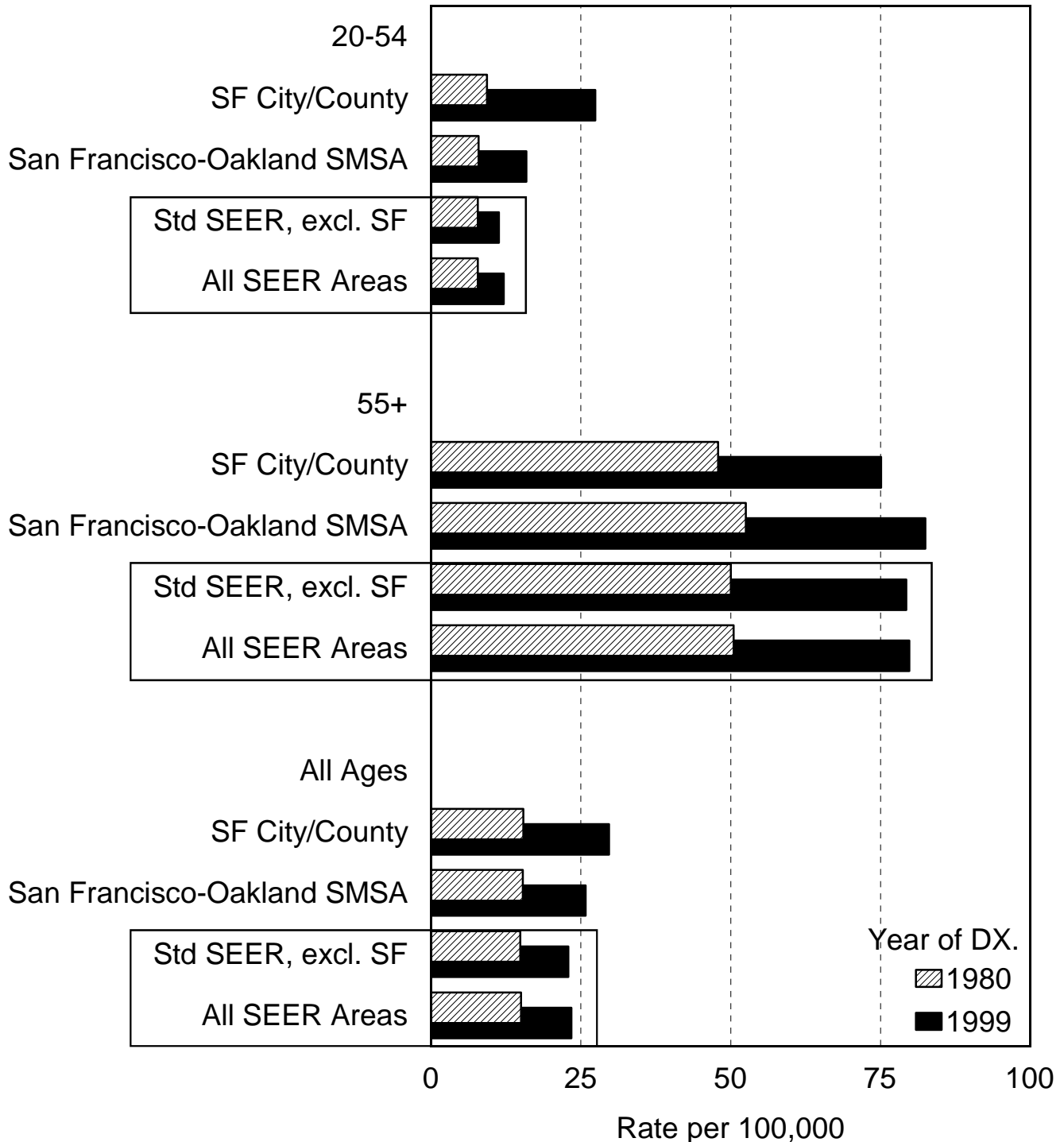


<sup>+</sup> Source: SEER 9 areas and NCHS public use data file. Rates are age-adjusted to the 2000 U.S. standard million population by 5-year age groups. Regression lines are calculated using the Joinpoint Regression Program.

Figure XVIII-2

# Non-Hodgkin Lymphoma Incidence Rates<sup>+</sup> Males

AGE/AREA



<sup>+</sup> Source: SEER 9 areas. Rates are age-adjusted to the 2000 U.S. standard million population by 5-year age groups.

# Non-Hodgkin Lymphoma SEER Incidence by Age 1973-1975 vs. 1997-1999 All Races, Males

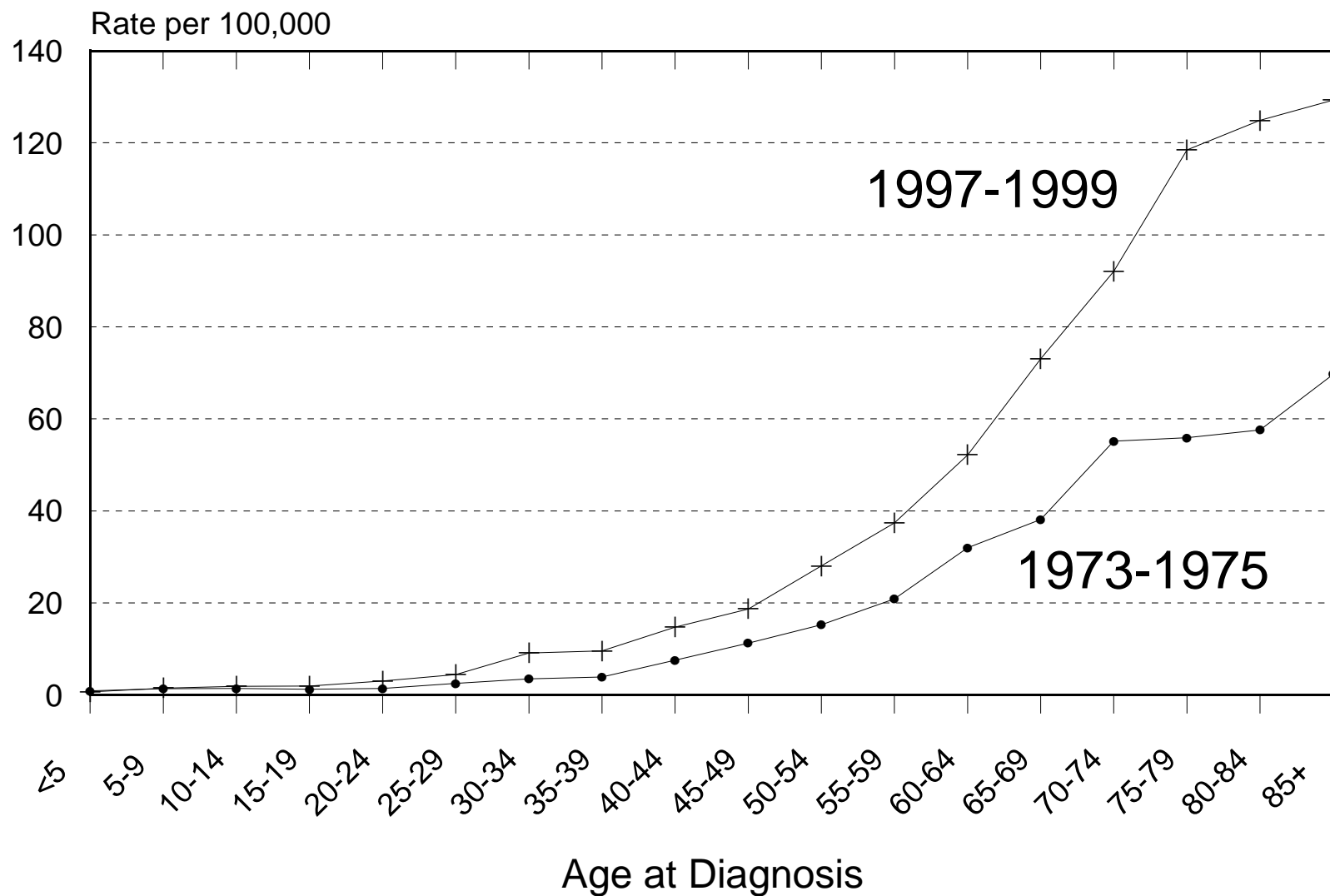


Figure XVIII-3

Source: SEER 9 areas. Rates are age-adjusted to the 2000 U.S. standard million population by 5-year age groups.