

Table XVIII-1  
NON-HODGKIN'S LYMPHOMAS

## TRENDS IN SEER INCIDENCE AND U.S. MORTALITY, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>INCIDENCE TRENDS (expressed in percents)§:</u>									
<u>1973-95</u>									
All Ages									
Percent Change (PC)	85.3	98.4	67.4	84.8	96.1	68.0	95.5	122.3	62.3
Est. Annual PC (EAPC)	3.2★	3.6★	2.5★	3.2★	3.6★	2.5★	4.0★	4.4★	3.4★
Under 65									
Percent Change (PC)	92.4	117.8	59.1	88.2	111.4	56.2	195.0	248.8	121.3
Est. Annual PC (EAPC)	3.4★	4.1★	2.3★	3.3★	4.0★	2.1★	5.2★	5.9★	4.1★
65 and over									
Percent Change (PC)	77.6	78.4	76.1	81.2	80.1	80.6	14.2	16.1	17.6
Est. Annual PC (EAPC)	3.0★	3.1★	2.8★	3.1★	3.2★	2.9★	2.3★	2.1★	2.8★
<u>1975-79 - ALL AGES</u>									
Percent Change (PC)	8.3	8.9	7.5	7.9	8.1	7.7	25.2	36.9	13.3
Est. Annual PC (EAPC)	2.7★	2.4	3.0	2.5	2.1	2.9	7.6	10.4	4.9
<u>1991-95 - ALL AGES</u>									
Percent Change (PC)	4.4	4.5	4.4	2.8	2.8	2.9	8.3	15.3	-3.3
Est. Annual PC (EAPC)	1.1	1.2	1.1	0.6	0.6	0.6	2.7	4.3	-0.2
<u>MORTALITY TRENDS (expressed in percents)*:</u>									
<u>1973-95</u>									
All Ages									
Percent Change (PC)	43.8	45.0	42.6	44.9	46.3	43.2	43.4	36.4	55.5
Est. Annual PC (EAPC)	2.0★	2.0★	1.9★	2.0★	2.1★	1.9★	2.2★	2.1★	2.4★
Under 65									
Percent Change (PC)	16.1	21.5	7.7	15.9	21.5	6.9	36.2	37.4	36.7
Est. Annual PC (EAPC)	0.9★	1.2★	0.4★	0.8★	1.1★	0.4★	1.8★	2.0★	1.6★
65 and over									
Percent Change (PC)	67.8	65.5	70.8	69.7	67.5	72.2	51.8	35.2	75.2
Est. Annual PC (EAPC)	2.7★	2.7★	2.8★	2.8★	2.7★	2.8★	2.7★	2.4★	3.1★
<u>1975-79 - ALL AGES</u>									
Percent Change (PC)	3.9	5.3	2.8	4.0	5.4	3.0	2.3	3.7	1.1
Est. Annual PC (EAPC)	1.2★	1.5	1.0	1.3★	1.6	1.0	0.1	0.0	0.2
<u>1991-95 - ALL AGES</u>									
Percent Change (PC)	5.8	5.3	6.4	6.3	5.7	7.0	0.4	1.0	-0.4
Est. Annual PC (EAPC)	1.8★	1.7	1.8★	1.9★	1.8	2.0★	0.2	0.8	-0.5

The Est. Annual PC is the Estimated Annual Percent Change (EAPC) over the time interval.  
SEER Program.  
NCHS public use tape.  
The EAPC is significantly different from zero ( $p < .05$ ).  
The EAPC for 1991-95 is significantly different from the EAPC for 1975-79 ( $p < .05$ ).  
The EAPC for 1991-95 is significantly different from the EAPC for 1975-79 ( $p < .10$ ).  
Statistic could not be calculated.

Table XVIII-2  
NON-HODGKIN'S LYMPHOMAS

SEER INCIDENCE RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES, 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	8.5	10.0	7.4	8.8	10.3	7.6	7.0	8.8	5.5
1974	8.9	10.4	7.7	9.2	10.7	8.0	5.9	7.5	4.6
1975	9.4	11.0	8.0	9.8	11.4	8.5	5.6	7.0	4.2
1976	9.5	10.7	8.5	9.8	11.0	8.9	5.3	6.5	4.3
1977	9.3	10.8	8.2	9.7	11.3	8.5	5.6	6.2	5.1
1978	10.0	11.8	8.4	10.4	12.3	8.9	6.2	8.3	4.3
1979	10.4	11.8	9.3	10.8	12.1	9.8	7.4	10.1	5.4
1980	10.5	12.4	8.9	10.8	12.6	9.2	7.4	9.3	6.0
1981	11.3	13.2	9.7	11.6	13.5	10.1	6.4	9.1	4.3
1982	11.2	13.1	9.6	11.7	13.7	10.0	8.5	8.7	8.1
1983	11.6	13.8	9.8	12.1	14.5	10.2	8.8	9.7	8.1
1984	12.6	15.1	10.6	13.2	15.6	11.2	8.2	11.2	5.8
1985	12.9	15.2	10.9	13.5	15.9	11.4	8.3	10.0	7.1
1986	13.1	15.9	10.7	13.8	16.8	11.3	8.8	10.8	7.1
1987	13.9	17.3	11.1	14.7	18.4	11.5	8.8	9.3	8.2
1988	14.3	17.5	11.6	15.0	18.3	12.3	9.9	13.5	7.2
1989	14.3	17.7	11.4	15.1	18.7	12.0	9.6	11.8	7.8
1990	15.3	18.9	12.3	16.0	19.6	12.9	11.5	14.2	9.3
1991	15.6	19.7	11.9	16.3	20.5	12.5	11.8	15.9	8.6
1992	15.4	19.0	12.3	16.0	19.6	12.9	11.5	15.4	8.4
1993	15.6	19.3	12.4	16.1	20.0	12.8	11.6	15.7	8.1
1994	16.3	20.2	13.0	16.8	20.6	13.5	12.0	17.9	7.2
1995	16.0	20.3	12.3	16.4	20.7	12.6	13.2	18.2	9.1
<u>AGE-ADJUSTED RATES, 1991-95</u>									
<u>AGE AT DIAGNOSIS:</u>									
All ages	15.8	19.7	12.4	16.3	20.3	12.9	12.1	16.7	8.3
Under 65	9.4	12.2	6.7	9.6	12.4	6.8	9.1	13.2	5.5
65 and over	74.1	88.2	64.8	77.8	92.1	68.2	39.5	48.1	34.2
All ages (world std.) <sup>8</sup>	13.1	16.5	10.0	13.5	17.0	10.4	10.6	14.9	7.1
<u>AGE-SPECIFIC RATES, 1991-95</u>									
<u>AGE AT DIAGNOSIS:</u>									
0-4	0.6	0.8	0.4	0.6	0.8	0.4	0.6	0.9	0.3
5-9	0.8	1.2	0.4	0.9	1.3	0.5	0.4	0.8	0.0
10-14	1.2	1.8	0.6	1.3	1.9	0.6	1.3	1.6	1.1
15-19	1.7	2.2	1.1	1.8	2.4	1.1	1.1	1.8	0.4
20-24	2.2	2.6	1.9	2.0	2.3	1.8	3.8	4.7	2.9
25-29	5.3	7.3	3.2	5.1	7.3	2.9	6.2	8.7	3.9
30-34	8.2	12.9	3.5	8.0	12.7	3.3	10.9	17.8	4.9
35-39	10.7	16.2	5.1	10.9	16.6	5.1	11.6	19.1	5.1
40-44	13.0	18.5	7.6	13.1	18.5	7.8	15.5	24.6	7.7
45-49	18.4	24.5	12.5	18.7	24.4	13.0	21.0	34.0	9.8
50-54	24.5	31.1	18.1	25.2	31.7	18.8	22.8	29.5	17.1
55-59	30.6	36.4	25.1	31.9	38.1	26.0	22.8	34.1	13.7
60-64	41.7	49.0	35.2	43.2	50.5	36.4	31.2	39.5	24.7
65-69	54.8	63.5	47.5	58.4	67.6	50.7	28.1	33.0	24.3
70-74	74.4	85.5	65.8	77.5	88.0	69.4	45.4	51.3	41.3
75-79	90.6	107.3	79.2	95.1	112.5	83.4	47.9	58.1	41.5
80-84	95.5	120.8	81.2	99.0	125.0	84.8	45.3	61.7	36.7
85+	89.0	114.1	79.1	91.7	118.0	81.8	41.0	60.6	32.5

<sup>8</sup> SEER Program. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.

<sup>8</sup> SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

Table XVIII-3  
NON-HODGKIN'S LYMPHOMAS

U.S. MORTALITY RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES\*, 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	4.7	5.8	3.9	4.9	6.0	4.1	3.2	4.3	2.3
1974	4.8	5.9	4.0	5.0	6.1	4.1	3.3	4.4	2.4
1975	4.7	5.7	3.8	4.8	5.9	3.9	3.2	4.2	2.5
1976	4.7	5.7	3.9	4.9	5.9	4.1	3.0	3.9	2.3
1977	4.8	5.7	4.0	4.9	5.9	4.1	3.3	4.2	2.6
1978	4.9	6.0	4.0	5.0	6.2	4.2	3.3	4.5	2.4
1979	4.9	6.0	4.0	5.1	6.3	4.1	3.1	3.9	2.5
1980	5.1	6.1	4.2	5.3	6.3	4.4	3.3	4.3	2.5
1981	5.0	6.0	4.2	5.2	6.2	4.4	3.3	4.1	2.7
1982	5.3	6.4	4.4	5.5	6.7	4.6	3.4	4.4	2.7
1983	5.4	6.6	4.5	5.6	6.8	4.7	3.6	4.8	2.7
1984	5.4	6.5	4.6	5.7	6.8	4.8	3.5	4.4	2.8
1985	5.7	7.0	4.6	5.9	7.3	4.8	3.8	4.7	3.1
1986	5.9	7.2	4.8	6.1	7.4	5.0	4.1	5.5	3.0
1987	5.8	7.0	4.8	6.0	7.3	5.0	3.9	5.1	3.0
1988	6.0	7.4	4.9	6.2	7.6	5.1	4.1	5.5	3.0
1989	6.2	7.7	5.1	6.4	7.9	5.3	4.4	5.8	3.3
1990	6.2	7.9	5.0	6.5	8.2	5.2	4.4	5.9	3.4
1991	6.5	8.0	5.3	6.7	8.3	5.5	4.7	5.9	3.7
1992	6.5	8.1	5.3	6.8	8.4	5.5	4.6	5.9	3.6
1993	6.5	8.0	5.4	6.8	8.2	5.6	4.7	6.1	3.6
1994	6.9	8.5	5.6	7.2	8.8	5.9	4.6	5.7	3.7
1995	6.9	8.5	5.6	7.2	8.8	5.9	4.7	6.2	3.6
<u>AGE-ADJUSTED RATES, 1991-95</u>									
<u>AGE AT DEATH:</u>									
All ages	6.7	8.2	5.4	6.9	8.5	5.7	4.7	6.0	3.7
Under 65	2.8	3.6	2.1	2.9	3.7	2.1	2.6	3.6	1.8
65 and over	41.9	50.5	36.4	44.0	52.8	38.2	23.2	27.9	20.2
All ages (world std.)N	5.1	6.4	4.1	5.3	6.6	4.3	3.8	4.9	2.9
<u>AGE-SPECIFIC RATES, 1991-95</u>									
<u>AGE AT DEATH:</u>									
0-4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
5-9	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1
10-14	0.2	0.3	0.1	0.2	0.3	0.1	0.1	0.2	0.1
15-19	0.4	0.5	0.2	0.4	0.5	0.2	0.3	0.4	0.3
20-24	0.6	0.7	0.4	0.5	0.7	0.4	0.7	0.9	0.4
25-29	1.0	1.3	0.6	0.9	1.3	0.6	1.2	1.8	0.7
30-34	1.6	2.3	0.9	1.5	2.2	0.8	2.1	3.2	1.2
35-39	2.2	3.2	1.2	2.2	3.1	1.2	2.8	4.1	1.7
40-44	3.0	4.2	1.8	3.0	4.2	1.8	3.6	5.1	2.4
45-49	4.7	6.2	3.2	4.8	6.3	3.3	4.9	7.0	3.2
50-54	7.2	9.1	5.3	7.4	9.3	5.5	6.8	9.6	4.5
55-59	11.3	13.9	8.9	11.8	14.5	9.2	9.3	11.5	7.5
60-64	17.3	21.0	14.0	18.0	21.7	14.7	13.2	17.5	10.0
65-69	25.7	30.8	21.6	27.0	32.2	22.7	16.8	21.3	13.5
70-74	38.1	44.7	33.0	40.0	46.7	34.9	21.3	25.3	18.5
75-79	51.1	60.7	44.7	53.6	63.5	46.9	26.9	31.6	24.1
80-84	65.6	79.7	57.8	68.5	83.2	60.4	34.6	41.2	31.2
85+	71.8	92.4	63.7	75.3	97.6	66.8	33.4	39.0	31.0

\* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.

N NCHS public use tape. Rates are per 100,000 and are age-adjusted to the world standard population.

Table XVIII-4  
NON-HODGKIN'S LYMPHOMAS

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

	<u>All Races</u>			<u>Whites</u>			<u>Blacks</u>		
	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>
<u>5-YR RELATIVE SURVIVAL RATES</u>									
<u>YEAR OF DIAGNOSIS:</u>									
1960-63 <sup>a</sup>	-	-	-	31	31	31	-	-	-
1970-73 <sup>a</sup>	-	-	-	41	39	43	-	-	-
1974-76 <sup>b</sup>	47.1	47.0	47.3	47.5	47.8	47.3	48.2	43.6↑	53.9↑
1977-79 <sup>b</sup>	48.3	45.8	50.8	48.5	46.3	50.6	51.0	44.5	59.3↑
1980-82 <sup>b</sup>	51.3	50.2	52.5	51.8	50.9	52.8	50.4	47.9	53.3
1983-85 <sup>b</sup>	54.2	53.2	55.3	54.8	53.9	55.7	45.1	43.6	46.8
1986-88 <sup>b</sup>	52.9	50.2	56.0	53.5	50.9	56.5	50.3	47.1	54.3
1989-94 <sup>b</sup>	51.4S	47.4	56.4S	52.4S	48.5	57.3S	40.8S	37.3S	46.9
<u>5-YR RELATIVE SURVIVAL RATES, 1989-94<sup>b</sup></u>									
<u>AGE AT DIAGNOSIS:</u>									
<45	48.7	40.9	68.8	50.7	42.0	73.0	34.1	32.4	38.9↑
45-54	58.8	52.9	69.2	60.1	54.6	69.6	46.7	34.1↑	69.6↑
55-64	58.3	55.0	62.2	59.0	55.6	63.2	55.9	59.1↑	52.9↑
65-74	53.1	51.3	54.8	53.9	51.5	56.2	40.0	39.0↑	39.5↑
75+	39.5	38.5	40.2	40.1	39.6	40.3	40.4↑	31.6↑	47.3↑
Under 65	54.4	47.9	66.0	55.9	49.2	67.8	41.5	37.4	50.4
65 and over	47.5	46.8	48.1	48.1	47.3	48.7	40.1	37.2↑	42.0

<sup>a</sup>

<sup>b</sup>

Rates are based on End Results data from a series of hospital registries and one population-based registry. Rates are from the SEER Program. 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 through 1995.

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The difference in rates between 1974-76 and 1989-94 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.

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Statistic could not be calculated.

Table XVIII-5  
NON-HODGKIN'S LYMPHOMASINCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Males and Females

	Year of Diagnosis/Death																				
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Incidence																					
SEER	9.4	9.5	9.3	10.0	10.4	10.5	11.3	11.2	11.6	12.6	12.9	13.1	13.9	14.3	14.3	15.3	15.6	15.4	15.6	16.3	16.0
Mortality																					
U.S.	4.7	4.7	4.8	4.9	4.9	5.1	5.0	5.3	5.4	5.4	5.7	5.9	5.8	6.0	6.2	6.2	6.5	6.5	6.5	6.9	6.9
SEER	4.7	4.8	4.9	5.1	5.1	5.3	5.2	5.5	5.5	5.6	6.0	6.3	5.9	5.9	6.2	6.3	6.5	6.6	6.3	7.0	6.6
Relative Survival Rates (SEER)																					
1-year	69.1	72.5	70.5	72.6	70.7	72.7	74.6	72.5	76.2	74.1	72.7	71.1	73.2	72.2	71.4	70.8	70.3	71.2	71.4	70.4	
2-year	58.6	62.1	59.5	61.9	62.0	62.6	64.9	63.3	67.0	65.4	64.2	62.6	64.3	63.4	63.4	61.7	61.3	62.4	63.4		
3-year	54.6	57.3	53.3	55.9	56.0	57.2	59.6	58.6	61.4	61.0	60.0	58.7	59.7	59.7	58.2	57.3	57.1	58.2			
4-year	50.8	52.9	49.8	51.9	52.8	54.6	54.7	55.4	57.3	57.5	56.5	55.0	56.7	55.9	54.8	53.4	54.4				
5-year	47.4	48.7	47.1	48.7	48.9	50.6	51.6	51.7	54.0	54.7	54.0	51.7	53.6	53.2	51.4	51.1					
6-year	43.1	46.3	44.4	45.9	45.7	48.3	48.8	48.6	50.6	51.7	51.9	49.0	50.8	51.2	48.7						
7-year	40.6	43.7	42.3	43.1	43.7	46.0	46.8	46.3	48.3	49.9	49.1	47.3	48.6	49.1							
8-year	38.9	41.9	39.9	40.4	42.4	44.1	45.2	45.3	46.6	47.0	47.2	45.2	46.2								
9-year	37.5	40.0	37.7	38.3	41.6	41.9	42.5	44.4	45.4	45.3	45.6	43.2									
10-year	36.3	38.5	36.6	37.4	40.7	40.3	41.1	43.0	44.0	43.4	43.9										
11-year	34.5	37.2	35.7	36.6	39.4	39.5	40.1	41.8	42.4	42.5											
12-year	33.7	36.1	35.4	35.6	38.4	38.3	39.1	40.4	40.9												
13-year	32.9	36.1	34.4	35.5	37.4	37.1	38.7	39.4													
14-year	31.9	34.8	33.9	35.0	36.1	36.7	38.0														
15-year	31.5	33.2	32.6	33.7	35.5	35.8															
16-year	30.6	32.2	31.9	32.7	35.0																
17-year	30.6	32.0	31.5	31.8																	
18-year	30.6	31.4	30.9																		
19-year	30.6	30.9																			
20-year	30.2																				

Note: Incidence and mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.  
Survival rates are relative rates expressed as percents.

Table XVIII-6  
NON-HODGKIN'S LYMPHOMASINCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Males

Year of Diagnosis/Death

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Incidence																						
SEER	11.0	10.7	10.8	11.8	11.8	12.4	13.2	13.1	13.8	15.1	15.2	15.9	17.3	17.5	17.7	18.9	19.7	19.0	19.3	20.2	20.3	
Mortality																						
U.S.	5.7	5.7	5.7	6.0	6.0	6.1	6.0	6.4	6.6	6.5	7.0	7.2	7.0	7.4	7.7	7.9	8.0	8.1	8.0	8.5	8.5	
SEER	5.9	5.5	5.9	6.3	6.5	6.2	6.3	6.8	6.5	6.6	7.6	7.8	7.4	7.3	7.7	8.0	7.9	8.3	7.6	8.5	7.9	
Relative Survival Rates (SEER)																						
1-year	68.6	71.3	69.3	72.9	69.4	73.1	73.4	72.0	76.2	73.5	71.7	70.2	70.0	69.2	68.6	66.6	66.9	68.5	68.4	67.3		
2-year	61.0	60.6	57.6	61.0	60.4	63.0	64.9	63.2	67.9	64.4	63.2	61.7	61.4	60.8	59.7	57.6	57.4	58.3	59.2			
3-year	55.8	55.8	50.3	55.4	54.1	57.0	59.7	57.9	61.9	59.5	58.7	57.7	57.0	56.3	54.5	52.7	52.9	54.4				
4-year	51.9	51.2	47.2	51.3	50.3	54.2	53.8	54.4	57.8	55.9	54.3	53.2	53.8	52.2	50.8	49.0	50.2					
5-year	48.2	48.1	43.7	47.2	46.4	49.2	50.3	51.0	54.7	53.9	51.3	50.0	51.0	49.6	47.4	46.8						
6-year	44.4	45.5	41.6	44.9	43.4	46.8	47.6	47.4	51.2	50.6	48.8	46.9	48.4	48.0	44.7							
7-year	42.1	42.6	39.9	42.5	41.1	44.8	46.0	44.4	48.6	48.7	46.0	45.2	46.9	46.2								
8-year	40.9	40.7	37.7	40.3	39.7	43.0	44.6	44.1	47.0	45.5	44.1	42.8	44.2									
9-year	39.7	37.8	35.4	37.9	38.9	40.3	42.5	43.3	45.8	44.0	42.3	40.9										
10-year	38.3	35.8	33.7	37.6	38.3	38.5	41.4	41.2	43.9	42.4	41.1											
11-year	36.7	34.5	33.2	37.0	37.5	36.6	40.0	40.5	42.6	41.0												
12-year	35.8	33.7	33.0	36.1	37.0	35.8	39.4	39.2	42.2													
13-year	34.5	33.4	31.8	36.1	35.5	35.5	38.8	38.7														
14-year	33.4	31.9	31.2	35.9	34.0	35.5	38.1															
15-year	32.8	29.7	29.8	34.4	33.8	34.6																
16-year	31.7	29.0	28.9	33.8	33.2																	
17-year	31.7	28.3	28.8	33.0																		
18-year	31.7	28.3	28.3																			
19-year	31.7	28.2																				
20-year	31.7																					

Note: Incidence and mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.  
Survival rates are relative rates expressed as percents.

Table XVIII-7  
NON-HODGKIN'S LYMPHOMAS

INCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Females

Year of Diagnosis/Death

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Incidence																					
SEER	8.0	8.5	8.2	8.4	9.3	8.9	9.7	9.6	9.8	10.6	10.9	10.7	11.1	11.6	11.4	12.3	11.9	12.3	12.4	13.0	12.3
Mortality																					
U.S.	3.8	3.9	4.0	4.0	4.0	4.2	4.2	4.4	4.5	4.6	4.6	4.8	4.8	4.9	5.1	5.0	5.3	5.3	5.4	5.6	5.6
SEER	3.7	4.3	4.2	4.3	4.1	4.7	4.4	4.5	4.7	4.8	4.8	5.0	4.9	4.7	5.1	4.9	5.3	5.3	5.3	5.8	5.6
Relative Survival Rates (SEER)																					
1-year	69.7	73.7	71.8	72.2	71.9	72.3	75.8	73.0	76.2	74.8	73.8	72.0	77.1	75.8	74.9	75.9	74.9	74.5	75.3	74.6	
2-year	56.0	63.6	61.5	62.8	63.6	62.2	64.9	63.5	66.1	66.4	65.3	63.6	67.9	66.6	68.0	66.8	66.5	67.5	68.5		
3-year	53.3	58.8	56.4	56.5	57.9	57.5	59.5	59.2	60.7	62.7	61.5	59.8	63.0	63.8	62.7	62.9	62.6	62.9			
4-year	49.6	54.6	52.4	52.6	55.2	55.1	55.6	56.5	56.6	59.1	59.0	57.0	60.2	60.2	59.7	58.8	60.1				
5-year	46.4	49.4	50.7	50.3	51.2	52.0	53.0	52.4	53.2	55.5	57.0	53.7	56.8	57.5	56.3	56.3					
6-year	41.7	47.0	47.2	47.0	48.0	49.9	50.0	49.8	50.0	52.9	55.4	51.5	53.8	55.0	53.6						
7-year	39.1	44.8	44.7	43.6	46.1	47.2	47.6	48.2	48.0	51.1	52.6	49.9	50.8	52.6							
8-year	36.7	43.0	42.2	40.5	44.9	45.2	45.9	46.6	46.2	48.6	50.6	48.0	48.7								
9-year	35.2	42.1	39.9	38.8	44.2	43.6	42.6	45.6	44.9	46.8	49.3	45.9									
10-year	34.1	41.0	39.4	37.2	43.0	42.2	40.7	44.8	44.1	44.6	47.0										
11-year	32.2	39.7	38.2	36.2	41.2	42.2	40.1	43.1	42.2	44.1											
12-year	31.4	38.3	37.9	35.0	39.8	41.1	38.8	41.7	39.5												
13-year	31.1	38.3	37.1	34.8	39.3	38.7	38.6	40.1													
14-year	30.2	37.5	36.7	34.1	38.1	37.9	37.9														
15-year	30.0	36.4	35.3	32.9	37.2	37.1															
16-year	29.6	35.2	34.8	31.5	36.7																
17-year	29.6	35.2	34.1	30.5																	
18-year	29.6	33.6	33.5																		
19-year	29.5	33.2																			
20-year	28.6																				

Note: Incidence and mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.  
 Survival rates are relative rates expressed as percents.

Table XVIII-8

NON-HODGKIN'S LYMPHOMASNUMBER OF CASES

By SEER Location and Year of Diagnosis, 1973-95

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
All Areas <sup>⊕</sup>	6796	1204	1299	1299	1399	1555	1606	1715	1903	1952	2027	2208	2349	2306	2398	2547	2603
All Areas Excluding SF-Oakland SMSA	5536	1001	1086	1087	1175	1272	1316	1334	1480	1526	1555	1687	1805	1782	1875	2008	2019
San Francisco-Oakland SMSA	1260	203	213	212	224	283	290	381	423	426	472	521	544	524	523	539	584
San Francisco City/County	336	50	46	59	63	104	106	140	185	175	216	245	224	223	195	202	236

AGE-ADJUSTED CANCER INCIDENCE RATES§

By SEER Location and Year of Diagnosis, 1973-95

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
All Areas <sup>⊕</sup>	11.0	12.4	13.2	13.1	13.8	15.1	15.2	15.9	17.3	17.5	17.7	18.9	19.7	19.0	19.3	20.2	20.3
All Areas Excluding SF-Oakland SMSA	10.7	12.3	13.2	13.0	13.9	14.8	15.0	14.9	16.2	16.6	16.4	17.4	18.3	17.7	18.2	19.1	18.9
San Francisco-Oakland SMSA	12.0	12.8	13.4	13.2	13.5	16.4	16.0	21.0	22.4	21.6	23.5	26.3	26.5	25.4	25.1	25.4	27.4
San Francisco City/County	12.2	12.4	11.7	14.0	14.8	24.5	22.5	31.2	39.6	36.0	45.1	53.4	45.6	47.2	40.5	41.8	49.7

§ SEER Program. Rates are per 100,000 males and are age-adjusted to the 1970 U.S. standard population. Each rate has been age-adjusted 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's Lymphoma.

Table XVIII-9

NON-HODGKIN'S LYMPHOMASNUMBER OF CASES

By SEER Location and Year of Diagnosis, 1973-95

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
All Areas <sup>⊕</sup>	299	38	51	50	59	48	41	44	49	42	44	46	56	44	42	61	62
All Areas Excluding SF-Oakland SMSA	253	35	45	42	53	43	37	37	43	40	38	38	50	39	32	56	53
San Francisco-Oakland SMSA	46	<4	6	8	6	5	4	7	6	<4	6	8	6	5	10	5	9
San Francisco City/County	12	<4	<4	0	<4	<4	0	<4	0	0	0	<4	<4	0	<4	<4	<4

AGE-ADJUSTED CANCER INCIDENCE RATES§

By SEER Location and Year of Diagnosis, 1973-95

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
All Areas <sup>⊕</sup>	1.2	1.1	1.5	1.5	1.8	1.5	1.3	1.3	1.5	1.3	1.3	1.4	1.6	1.3	1.2	1.7	1.8
All Areas Excluding SF-Oakland SMSA	1.2	1.2	1.5	1.5	1.8	1.5	1.3	1.3	1.5	1.4	1.3	1.3	1.7	1.3	1.1	1.8	1.7
San Francisco-Oakland SMSA	1.4	-	1.4	1.8	1.5	1.2	0.9	1.6	1.4	-	1.4	1.8	1.2	1.1	2.1	1.0	1.9
San Francisco City/County	2.1	-	-	0.0	-	-	0.0	-	0.0	0.0	0.0	-	-	0.0	-	-	-

§ SEER Program. Rates are per 100,000 males aged 0-19 and are age-adjusted to the 1970 U.S. standard population. Each rate has been age-adjusted 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's Lymphoma.

Table XVIII-10

NON-HODGKIN'S LYMPHOMASNUMBER OF CASES

By SEER Location and Year of Diagnosis, 1973-95

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
All Areas⊕	1898	334	351	365	354	459	492	567	641	658	749	840	923	887	935	994	1020
All Areas Excluding SF-Oakland SMSA	1542	277	284	303	283	352	372	396	431	445	474	565	625	626	655	718	710
San Francisco-Oakland SMSA	356	57	67	62	71	107	120	171	210	213	275	275	298	261	280	276	310
San Francisco City/County	91	15	14	14	20	50	55	90	125	125	163	169	166	160	146	146	166

AGE-ADJUSTED CANCER INCIDENCE RATES§

By SEER Location and Year of Diagnosis, 1973-95

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
All Areas⊕	6.4	7.4	7.6	8.0	7.5	9.5	10.0	11.1	12.1	12.0	13.2	14.5	15.5	14.6	15.0	15.4	15.6
All Areas Excluding SF-Oakland SMSA	6.3	7.4	7.4	8.0	7.3	8.9	9.3	9.5	10.0	10.2	10.3	11.9	12.9	12.7	12.8	13.5	13.0
San Francisco-Oakland SMSA	6.8	7.4	8.6	8.1	8.6	12.5	13.2	19.1	22.3	20.8	27.1	27.0	27.9	24.1	26.0	25.0	28.3
San Francisco City/County	7.7	8.3	8.0	7.2	10.2	26.0	24.1	43.5	58.7	54.6	73.7	77.5	70.1	72.2	64.3	65.0	73.5

§ SEER Program. Rates are per 100,000 males aged 20-54 and are age-adjusted to the 1970 U.S. standard population. Each rate has been age-adjusted 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's Lymphoma.

Table XVIII-11

NON-HODGKIN'S LYMPHOMASNUMBER OF CASES

By SEER Location and Year of Diagnosis, 1973-95

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
All Areas⊕	4599	832	897	884	986	1048	1073	1104	1213	1252	1234	1322	1370	1375	1421	1492	1521
All Areas Excluding SF-Oakland SMSA	3741	689	757	742	839	877	907	901	1006	1041	1043	1084	1130	1117	1188	1234	1256
San Francisco-Oakland SMSA	858	143	140	142	147	171	166	203	207	211	191	238	240	258	233	258	265
San Francisco City/County	233	34	31	45	42	53	51	48	60	50	53	75	57	63	48	55	68

AGE-ADJUSTED CANCER INCIDENCE RATES§

By SEER Location and Year of Diagnosis, 1973-95

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
All Areas⊕	40.8	46.2	49.3	47.6	52.2	54.7	55.0	55.9	60.5	62.0	60.3	63.6	65.2	64.1	65.3	67.6	67.9
All Areas Excluding SF-Oakland SMSA	39.9	45.6	49.6	47.6	53.0	54.6	55.5	54.3	59.7	61.4	60.5	61.8	63.7	61.8	64.7	66.3	66.4
San Francisco-Oakland SMSA	45.2	49.0	47.9	47.4	48.4	55.3	52.6	63.9	64.6	65.7	59.5	73.6	73.6	76.8	69.0	74.7	75.9
San Francisco City/County	42.7	43.0	39.8	57.4	52.2	67.2	63.8	59.5	75.4	65.6	69.8	102.1	78.8	84.3	64.0	69.2	88.3

§ SEER Program. Rates are per 100,000 males aged 55+ and are age-adjusted to the 1970 U.S. standard population. Each rate has been age-adjusted 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's Lymphoma.

Table XVIII-12

NON-HODGKIN'S LYMPHOMASAGE-ADJUSTED CANCER SEER INCIDENCE RATES<sup>§</sup>, 1978-95

By The Working Formulation and Year of Diagnosis

All Races, Males and Females

Working Formulation	Year of Diagnosis																		
	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Total	10.0	10.4	10.5	11.3	11.2	11.6	12.6	12.9	13.1	13.9	14.3	14.3	15.3	15.6	15.4	15.6	16.3	16.0	
Low Grade:	2.6	2.7	2.9	2.9	2.9	3.1	3.2	3.3	3.5	3.4	3.6	3.3	3.6	3.6	3.6	3.6	3.6	3.3	
A: Small, lymphocytic	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.3	1.2	1.4	1.4	1.4	1.4	1.3	1.5	1.4	1.4	1.3	
B: Follicular, small cleaved	1.4	1.3	1.4	1.3	1.2	1.5	1.4	1.4	1.4	1.2	1.4	1.2	1.3	1.4	1.3	1.2	1.2	1.1	
C: Follicular, mixed small cleaved and large cell	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9	
Intermediate Grade:	5.3	5.3	5.1	5.6	5.3	5.4	5.8	6.0	5.9	6.3	6.4	6.3	6.8	6.6	6.3	6.6	6.8	6.7	
D: Follicular, large cell	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	
E: Diffuse, small cleaved	1.9	1.7	1.6	1.7	1.2	1.3	1.2	1.1	0.8	1.0	1.0	1.0	1.0	0.8	0.8	0.8	0.8	0.8	
F: Diffuse, mixed small and large cell	0.6	0.7	0.6	0.7	0.8	0.9	0.9	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.5	
G: Diffuse, large cell	2.6	2.7	2.8	3.0	3.1	3.0	3.4	3.6	3.8	4.0	4.2	4.1	4.6	4.6	4.5	4.6	4.8	5.0	
High Grade:	0.4	0.4	0.5	0.6	1.0	1.1	1.1	1.2	1.4	1.6	1.7	1.9	1.8	2.0	1.9	1.9	1.8	1.5	
H: Large cell, immunoblastic	0.1	0.1	0.2	0.2	0.4	0.6	0.6	0.6	0.7	0.9	0.9	1.1	1.1	1.2	1.2	1.3	1.1	0.8	
I: Lymphoblastic	0.1	0.1	0.1	0.1	0.2	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	
J: Small noncleaved; Burkitt's	0.2	0.2	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.4	0.6	0.5	0.5	0.5	0.5	
Unclassified Grade	1.6	2.0	1.9	2.2	2.0	2.0	2.4	2.4	2.3	2.6	2.6	2.9	3.1	3.4	3.5	3.6	4.1	4.5	

<sup>§</sup> SEER Program. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.

Table XVIII-13  
NON-HODGKIN'S LYMPHOMAS

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 With Cancer and  
 Lifetime Risk (Percent) of Dying From Cancer

SEER Areas, 1993-95

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	0.08	2.03	0.00	0.01	0.04	1.70	
10	0.02	0.07	0.21	2.05	0.01	0.03	0.08	1.71	
20	0.05	0.19	0.40	2.04	0.03	0.07	0.17	1.70	
30	0.14	0.35	0.65	2.03	0.04	0.14	0.35	1.69	
40	0.22	0.52	0.98	1.94	0.10	0.31	0.67	1.66	
50	0.32	0.80	1.38	1.80	0.22	0.59	1.13	1.59	
60	0.52	1.16	1.56	1.61	0.39	0.96	1.35	1.45	
Lifetime Risk of Being Diagnosed =				2.03%	Lifetime Risk of Being Diagnosed =				1.70%
Lifetime Risk of Dying =				0.92%	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	0.08	2.13	0.00	0.01	0.04	1.78	
10	0.02	0.07	0.21	2.14	0.01	0.03	0.07	1.79	
20	0.05	0.19	0.40	2.13	0.02	0.07	0.17	1.78	
30	0.15	0.35	0.66	2.11	0.04	0.14	0.36	1.77	
40	0.21	0.53	1.02	2.02	0.10	0.32	0.71	1.74	
50	0.33	0.84	1.45	1.88	0.22	0.61	1.19	1.67	
60	0.55	1.21	1.62	1.67	0.41	1.02	1.42	1.52	
Lifetime Risk of Being Diagnosed =				2.13%	Lifetime Risk of Being Diagnosed =				1.78%
Lifetime Risk of Dying =				1.00%	Lifetime Risk of Dying =				0.96%

Blacks

Current Age	Males				Females				
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually	
0	0.01	0.03	0.08	1.27	0.00	0.01	0.04	0.84	
10	0.02	0.07	0.24	1.29	0.01	0.04	0.09	0.85	
20	0.06	0.23	0.52	1.29	0.04	0.08	0.17	0.85	
30	0.18	0.48	0.73	1.29	0.05	0.13	0.27	0.82	
40	0.32	0.59	0.83	1.18	0.09	0.22	0.39	0.79	
50	0.30	0.57	0.81	0.96	0.14	0.32	0.58	0.74	
60	0.33	0.61	0.77	0.80	0.19	0.48	0.62	0.66	
Lifetime Risk of Being Diagnosed =				1.27%	Lifetime Risk of Being Diagnosed =				0.84%
Lifetime Risk of Dying =				0.41%	Lifetime Risk of Dying =				0.46%

Table XVIII-14  
NON-HODGKIN'S LYMPHOMAS (Invasive)

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

By Race/Ethnicity and Sex

Incidence<sup>i</sup>

RACE/ETHNICITY	Rate 1990-1995 Rate per 100,000 persons			Trend 1990-1995 EAPC (%)		
	Total	Males	Females	Total	Males	Females
	All Races	15.4	19.3	12.1	1.0★	1.4★
White	16.2	20.1	12.7	0.8	1.2★	0.3
White Hispanic	12.9	15.6	10.3	0.2	0.8	-0.8
White Non-Hispanic	16.5	20.6	12.9	0.8	1.2	0.3
Black	11.4	15.4	8.1	1.1	3.2	-2.5
Asian/Pacific Islander <sup>‡</sup>	10.7	13.2	8.6	2.2	0.1	5.4
American Indian	-	-	-	-	-	-
Hispanic <sup>⊗</sup>	12.2	14.8	9.7	-0.1	0.5	-1.1

Mortality<sup>❖</sup>

RACE/ETHNICITY	Rate 1990-1995 Rate per 100,000 persons			Trend 1990-1995 EAPC (%)		
	Total	Males	Females	Total	Males	Females
	All Races	6.6	8.2	5.4	2.0★	1.5★
White	6.9	8.5	5.6	2.1★	1.6★	2.6★
White Hispanic	5.0	6.2	4.0	3.0★	3.0	3.4★
White Non-Hispanic	6.9	8.6	5.7	2.0★	1.5★	2.5★
Black	4.6	6.0	3.6	0.8	0.7	0.8
Asian/Pacific Islander <sup>‡</sup>	4.0	5.1	3.2	1.9	0.8	3.4
American Indian	3.0	3.4	2.6	0.5	1.2	0.4
Hispanic <sup>⊗</sup>	4.7	5.9	3.8	2.7★	2.8★	3.1★

- The EAPC is the Estimated Annual Percent Change over the time interval.
- Statistic not shown. Rate based on less than 10 cases per year within the time interval.
- <sup>i</sup> Incidence data are from the 11 SEER areas (San Francisco, Connecticut, Detroit, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, and Los Angeles). Unless specified, other tables use data from 9 SEER areas (San Francisco, Connecticut, Detroit, Iowa, New Mexico, Seattle, Utah, and Atlanta).
- <sup>⊗</sup> Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians. For incidence, all 11 SEER areas are included. For mortality, information is included for all states except Connecticut, Oklahoma, Louisiana, 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> Population estimates for the Asian Pacific Islanders rates are adjusted Census Bureau estimates. The population estimates used in Wingo PA, Ries LAG, Rosenberg HM, Miller DS, Edwards BK. Cancer Incidence and mortality, 1973-1995. Cancer 82:1197-207, 1998 were unadjusted.
- <sup>★</sup> The EAPC is significantly different from zero (p<.05).

Table XVIII-15  
NON-HODGKIN'S LYMPHOMASAGE-ADJUSTED SEER INCIDENCE RATES§ AND SEER MORTALITY RATES\*  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE RATES§, 1991-95</u>									
REGISTRY									
11 registries	15.5	19.5	12.1	16.2	20.3	12.7	11.4	15.6	8.0
9 registries	15.8	19.7	12.4	16.3	20.3	12.9	12.1	16.7	8.3
San Francisco-Oakland	18.7	26.0	12.1	20.8	29.0	13.1	13.8	20.1	8.4
Connecticut	16.2	19.7	13.2	16.4	19.8	13.4	12.8	17.2	9.1
Metropolitan Detroit	15.5	19.1	12.5	16.0	19.1	13.5	11.8	17.5	7.5
Hawaii	13.0	15.5	10.6	16.3	20.9	11.2	-	-	-
Iowa	15.6	18.3	13.5	15.5	18.1	13.6	-	-	-
New Mexico	11.4	13.2	9.7	11.8	13.7	10.0	-	-	-
Seattle-Puget Sound	16.4	20.2	13.0	16.4	20.2	12.9	13.0	15.5	10.4
Utah	14.5	17.0	12.3	14.6	17.3	12.3	-	-	-
Metropolitan Atlanta	14.4	18.3	11.4	15.0	19.1	11.8	11.2	13.6	9.1
San Jose-Monterey	15.5	19.0	12.6	15.9	19.4	13.1	12.1	17.1	6.4
Los Angeles	14.5	18.7	10.8	15.8	20.4	11.7	9.7	12.8	7.2
<u>SEER MORTALITY RATES*, 1991-95</u>									
REGISTRY									
11 registries	6.5	8.0	5.4	7.0	8.5	5.7	4.4	5.3	3.7
9 registries	6.6	8.0	5.5	7.0	8.5	5.8	4.5	5.5	3.8
San Francisco-Oakland	6.4	8.3	5.0	7.1	9.0	5.6	4.8	5.5	4.3
Connecticut	6.8	8.2	5.6	6.9	8.3	5.7	5.2	7.0	4.0
Metropolitan Detroit	7.1	8.5	6.0	7.6	9.1	6.5	4.9	6.2	4.0
Hawaii	5.4	6.6	4.3	7.2	8.0	6.0	-	-	-
Iowa	7.2	8.8	6.0	7.3	8.9	6.0	-	-	-
New Mexico	5.6	6.6	4.7	5.8	6.9	4.8	-	-	-
Seattle-Puget Sound	6.7	8.2	5.4	6.8	8.4	5.5	3.0	4.2	2.0
Utah	6.8	8.2	5.6	6.9	8.3	5.6	-	-	-
Metropolitan Atlanta	5.4	6.3	4.8	6.1	7.1	5.3	3.3	3.7	3.0
San Jose-Monterey	6.7	8.3	5.3	7.1	8.8	5.8	3.0	3.5	2.7
Los Angeles	6.3	8.0	5.1	6.9	8.5	5.6	4.3	5.2	3.5

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 Program. Incidence rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.  
 \* NCHS public use tape. Mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.  
 - Statistic could not be calculated or populations are inadequate.

Table XVIII-16  
NON-HODGKIN'S LYMPHOMAS

## AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY\* RATES BY STATE, 1991-95

All Races, Males and Females

State	Rate	SE	Rank	PD
TOTAL U.S.	6.7	0.02		
High Five States				
Vermont	7.7	0.50	(01)	14.9
Minnesota	7.5	0.17	(02)	11.9
Rhode Island	7.3	0.34	(03)	9.0
New Hampshire	7.3	0.35	(04)	9.0
Iowa	7.2	0.20	(05)	7.5
Low Five States				
Georgia	5.6⊕*	0.13	(47)	-16.4
New Mexico	5.6*	0.26	(48)	-16.4
South Carolina	5.5⊕*	0.17	(49)	-17.9
Hawaii	5.4*	0.29	(50)	-19.4
Alaska	4.8*	0.57	(51)	-28.4

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	6.2	0.16	(43)	-7.5	Montana	6.7	0.36	(25)	0.0
Alaska	4.8*	0.57	(51)	-28.4	Nebraska	6.7	0.26	(27)	0.0
Arizona	6.4	0.17	(36)	-4.5	Nevada	6.5	0.29	(35)	-3.0
Arkansas	6.7	0.21	(26)	0.0	New Hampshire	7.3	0.35	(04)	9.0
California	6.3⊕	0.06	(42)	-6.0	New Jersey	7.1	0.12	(11)	6.0
Colorado	6.4	0.19	(38)	-4.5	New Mexico	5.6*	0.26	(48)	-16.4
Connecticut	6.8	0.18	(23)	1.5	New York	7.1⊕	0.08	(08)	6.0
Delaware	6.7	0.41	(28)	0.0	North Carolina	6.1	0.12	(44)	-9.0
District of Columbia	6.8	0.44	(24)	1.5	North Dakota	7.1	0.42	(09)	6.0
Florida	6.4	0.08	(37)	-4.5	Ohio	7.2	0.10	(06)	7.5
Georgia	5.6⊕*	0.13	(47)	-16.4	Oklahoma	6.9	0.19	(18)	3.0
Hawaii	5.4*	0.29	(50)	-19.4	Oregon	6.9	0.19	(21)	3.0
Idaho	7.0	0.34	(15)	4.5	Pennsylvania	7.0	0.09	(13)	4.5
Illinois	7.0	0.10	(16)	4.5	Rhode Island	7.3	0.34	(03)	9.0
Indiana	7.0	0.14	(17)	4.5	South Carolina	5.5⊕*	0.17	(49)	-17.9
Iowa	7.2	0.20	(05)	7.5	South Dakota	6.5	0.38	(33)	-3.0
Kansas	7.0	0.22	(14)	4.5	Tennessee	6.6	0.15	(31)	-1.5
Kentucky	6.5	0.17	(34)	-3.0	Texas	6.6	0.09	(30)	-1.5
Louisiana	6.6	0.17	(29)	-1.5	Utah	6.8	0.29	(22)	1.5
Maine	7.1	0.31	(07)	6.0	Vermont	7.7	0.50	(01)	14.9
Maryland	6.3	0.15	(40)	-6.0	Virginia	6.3	0.14	(39)	-6.0
Massachusetts	7.0	0.14	(12)	4.5	Washington	6.6	0.15	(32)	-1.5
Michigan	7.1	0.11	(10)	6.0	West Virginia	6.3	0.23	(41)	-6.0
Minnesota	7.5	0.17	(02)	11.9	Wisconsin	6.9	0.15	(19)	3.0
Mississippi	5.7	0.20	(46)	-14.9	Wyoming	5.9	0.48	(45)	-11.9
Missouri	6.9	0.15	(20)	3.0					

\* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.  
SE Standard error of the rate.  
PD Percent difference between state rate and total U.S. rate.  
\* Absolute 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'S LYMPHOMAS

## AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY\* RATES BY STATE, 1991-95

All Races, Males

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	8.2	0.04							
High Five States									
Vermont	10.3*	0.86	(01)	25.6					
District of Columbia	9.9*	0.82	(02)	20.7					
Rhode Island	9.8*	0.60	(03)	19.5					
New Hampshire	9.4	0.60	(04)	14.6					
New York	9.2⊕	0.14	(05)	12.2					
Low Five States									
South Carolina	6.8⊕*	0.29	(47)	-17.1					
Wyoming	6.7*	0.78	(48)	-18.3					
Hawaii	6.6*	0.46	(49)	-19.5					
New Mexico	6.6*	0.42	(50)	-19.5					
Alaska	5.6*	0.91	(51)	-31.7					
Alabama	7.5	0.27	(44)	-8.5	Montana	8.2	0.59	(28)	0.0
Alaska	5.6*	0.91	(51)	-31.7	Nebraska	8.1	0.43	(31)	-1.2
Arizona	7.7	0.27	(40)	-6.1	Nevada	8.1	0.48	(30)	-1.2
Arkansas	8.4	0.35	(22)	2.4	New Hampshire	9.4	0.60	(04)	14.6
California	7.8	0.11	(39)	-4.9	New Jersey	8.7	0.20	(13)	6.1
Colorado	7.7	0.31	(41)	-6.1	New Mexico	6.6*	0.42	(50)	-19.5
Connecticut	8.2	0.31	(25)	0.0	New York	9.2⊕	0.14	(05)	12.2
Delaware	8.0	0.68	(32)	-2.4	North Carolina	7.6	0.21	(42)	-7.3
District of Columbia	9.9*	0.82	(02)	20.7	North Dakota	8.1	0.68	(29)	-1.2
Florida	7.9	0.13	(34)	-3.7	Ohio	8.9	0.18	(07)	8.5
Georgia	6.8⊕*	0.22	(46)	-17.1	Oklahoma	8.5	0.32	(16)	3.7
Hawaii	6.6*	0.46	(49)	-19.5	Oregon	8.8	0.32	(09)	7.3
Idaho	7.9	0.54	(33)	-3.7	Pennsylvania	8.6	0.16	(14)	4.9
Illinois	8.8	0.17	(10)	7.3	Rhode Island	9.8*	0.60	(03)	19.5
Indiana	8.5	0.25	(17)	3.7	South Carolina	6.8⊕*	0.29	(47)	-17.1
Iowa	8.8	0.33	(08)	7.3	South Dakota	8.4	0.65	(20)	2.4
Kansas	8.6	0.36	(15)	4.9	Tennessee	8.5	0.26	(18)	3.7
Kentucky	7.8	0.29	(37)	-4.9	Texas	8.2	0.15	(24)	0.0
Louisiana	8.4	0.29	(21)	2.4	Utah	8.2	0.48	(27)	0.0
Maine	8.7	0.51	(12)	6.1	Vermont	10.3*	0.86	(01)	25.6
Maryland	7.8	0.26	(38)	-4.9	Virginia	7.8	0.23	(36)	-4.9
Massachusetts	8.7	0.24	(11)	6.1	Washington	7.9	0.25	(35)	-3.7
Michigan	8.3	0.19	(23)	1.2	West Virginia	7.5	0.38	(43)	-8.5
Minnesota	9.0	0.28	(06)	9.8	Wisconsin	8.4	0.25	(19)	2.4
Mississippi	7.2	0.34	(45)	-12.2	Wyoming	6.7*	0.78	(48)	-18.3
Missouri	8.2	0.24	(26)	0.0					

\* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.  
SE Standard error of the rate.  
PD Percent difference between state rate and total U.S. rate.  
\* Absolute 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-18  
NON-HODGKIN'S LYMPHOMAS

## AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY\* RATES BY STATE, 1991-95

All Races, Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	5.4	0.03							
High Five States									
Minnesota	6.3⊕	0.21	(01)	16.7					
Idaho	6.2	0.44	(02)	14.8					
North Dakota	6.2	0.53	(03)	14.8					
Michigan	6.1	0.14	(04)	13.0					
Iowa	6.0	0.24	(05)	11.1					
Low Five States									
South Carolina	4.6	0.20	(47)	-14.8					
Mississippi	4.6	0.23	(48)	-14.8					
District of Columbia	4.3⊕	0.46	(49)	-20.4					
Hawaii	4.3⊕	0.35	(50)	-20.4					
Alaska	4.0⊕	0.72	(51)	-25.9					
Alabama	5.3	0.19	(33)	-1.9	Montana	5.4	0.44	(29)	0.0
Alaska	4.0⊕	0.72	(51)	-25.9	Nebraska	5.6	0.33	(18)	3.7
Arizona	5.2	0.20	(36)	-3.7	Nevada	4.9	0.35	(43)	-9.3
Arkansas	5.4	0.25	(27)	0.0	New Hampshire	5.4	0.39	(26)	0.0
California	5.1	0.08	(41)	-5.6	New Jersey	5.8	0.15	(12)	7.4
Colorado	5.4	0.23	(32)	0.0	New Mexico	4.7	0.32	(46)	-13.0
Connecticut	5.6	0.22	(21)	3.7	New York	5.5	0.09	(25)	1.9
Delaware	5.6	0.50	(19)	3.7	North Carolina	5.0	0.15	(42)	-7.4
District of Columbia	4.3⊕	0.46	(49)	-20.4	North Dakota	6.2	0.53	(03)	14.8
Florida	5.1	0.10	(40)	-5.6	Ohio	5.9	0.12	(07)	9.3
Georgia	4.7	0.15	(45)	-13.0	Oklahoma	5.7	0.23	(16)	5.6
Hawaii	4.3⊕	0.35	(50)	-20.4	Oregon	5.2	0.23	(37)	-3.7
Idaho	6.2	0.44	(02)	14.8	Pennsylvania	5.9	0.11	(08)	9.3
Illinois	5.6	0.12	(17)	3.7	Rhode Island	5.6	0.40	(20)	3.7
Indiana	5.8	0.17	(13)	7.4	South Carolina	4.6	0.20	(47)	-14.8
Iowa	6.0	0.24	(05)	11.1	South Dakota	4.9	0.44	(44)	-9.3
Kansas	5.8	0.26	(11)	7.4	Tennessee	5.2	0.17	(39)	-3.7
Kentucky	5.5	0.21	(23)	1.9	Texas	5.3	0.10	(34)	-1.9
Louisiana	5.4	0.20	(30)	0.0	Utah	5.6	0.36	(22)	3.7
Maine	6.0	0.37	(06)	11.1	Vermont	5.7	0.58	(14)	5.6
Maryland	5.2	0.19	(38)	-3.7	Virginia	5.3	0.16	(35)	-1.9
Massachusetts	5.8	0.17	(10)	7.4	Washington	5.5	0.19	(24)	1.9
Michigan	6.1	0.14	(04)	13.0	West Virginia	5.4	0.28	(31)	0.0
Minnesota	6.3⊕	0.21	(01)	16.7	Wisconsin	5.7	0.18	(15)	5.6
Mississippi	4.6	0.23	(48)	-14.8	Wyoming	5.4	0.63	(28)	0.0
Missouri	5.8	0.18	(09)	7.4					

\* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.  
SE Standard error of the rate.  
PD Percent difference between state rate and total U.S. rate.  
⊕ Absolute 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).

# SEER Incidence and U.S. Mortality Non-Hodgkin's Lymphoma, Male By Race

## White

## Black

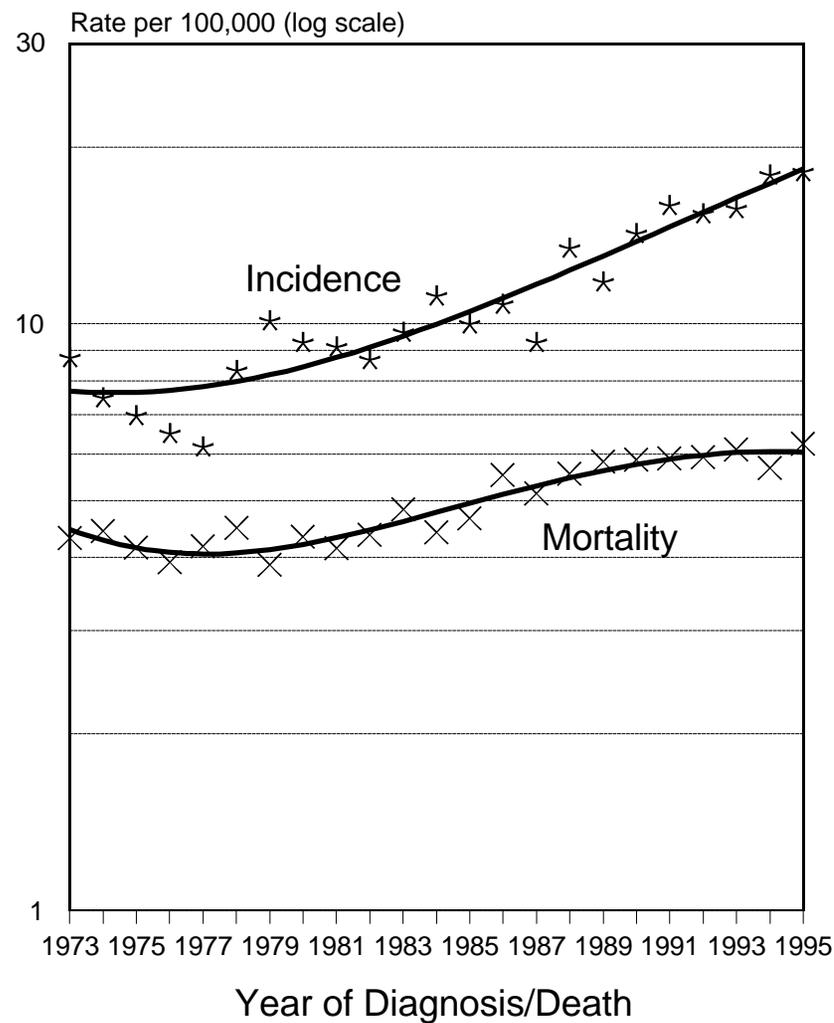
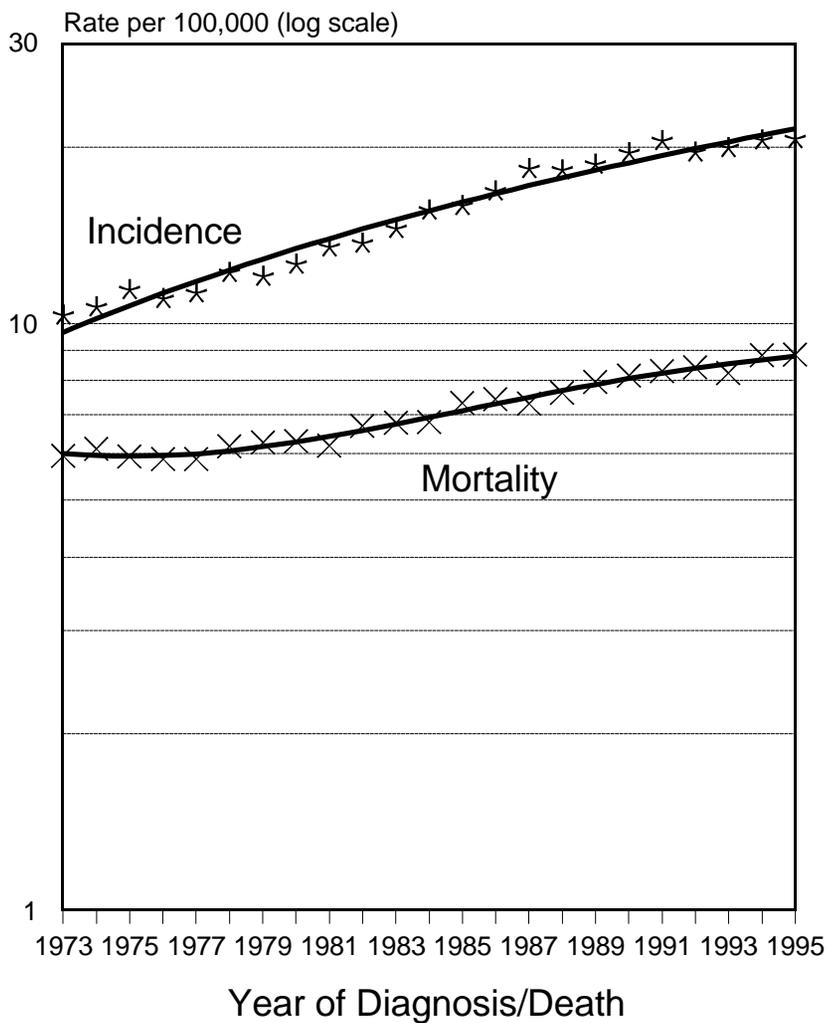


Figure XVIII-1

# SEER Incidence and U.S. Mortality Non-Hodgkin's Lymphoma, Female By Race

## White

## Black

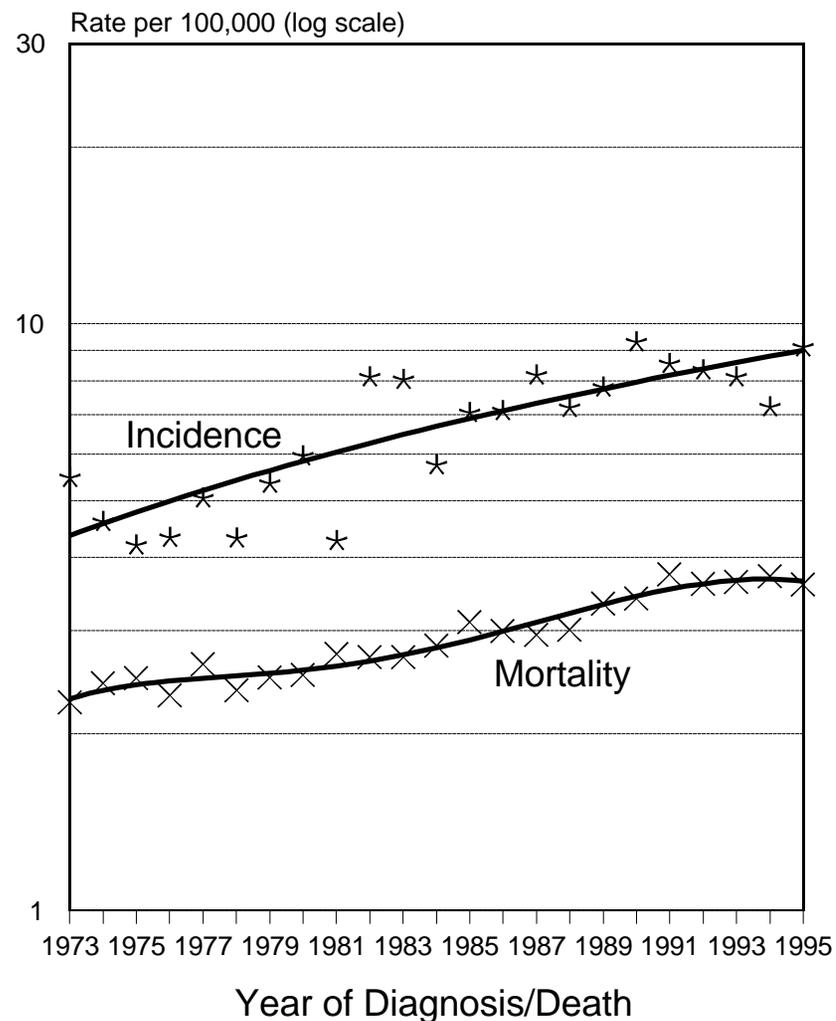
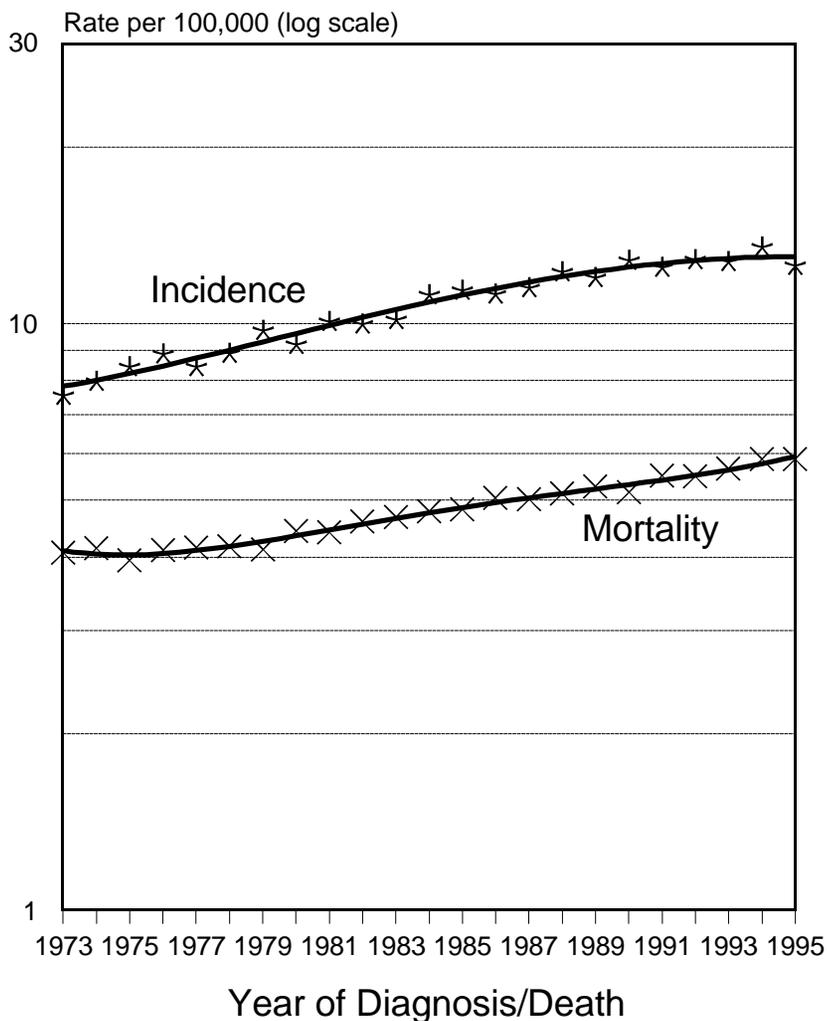
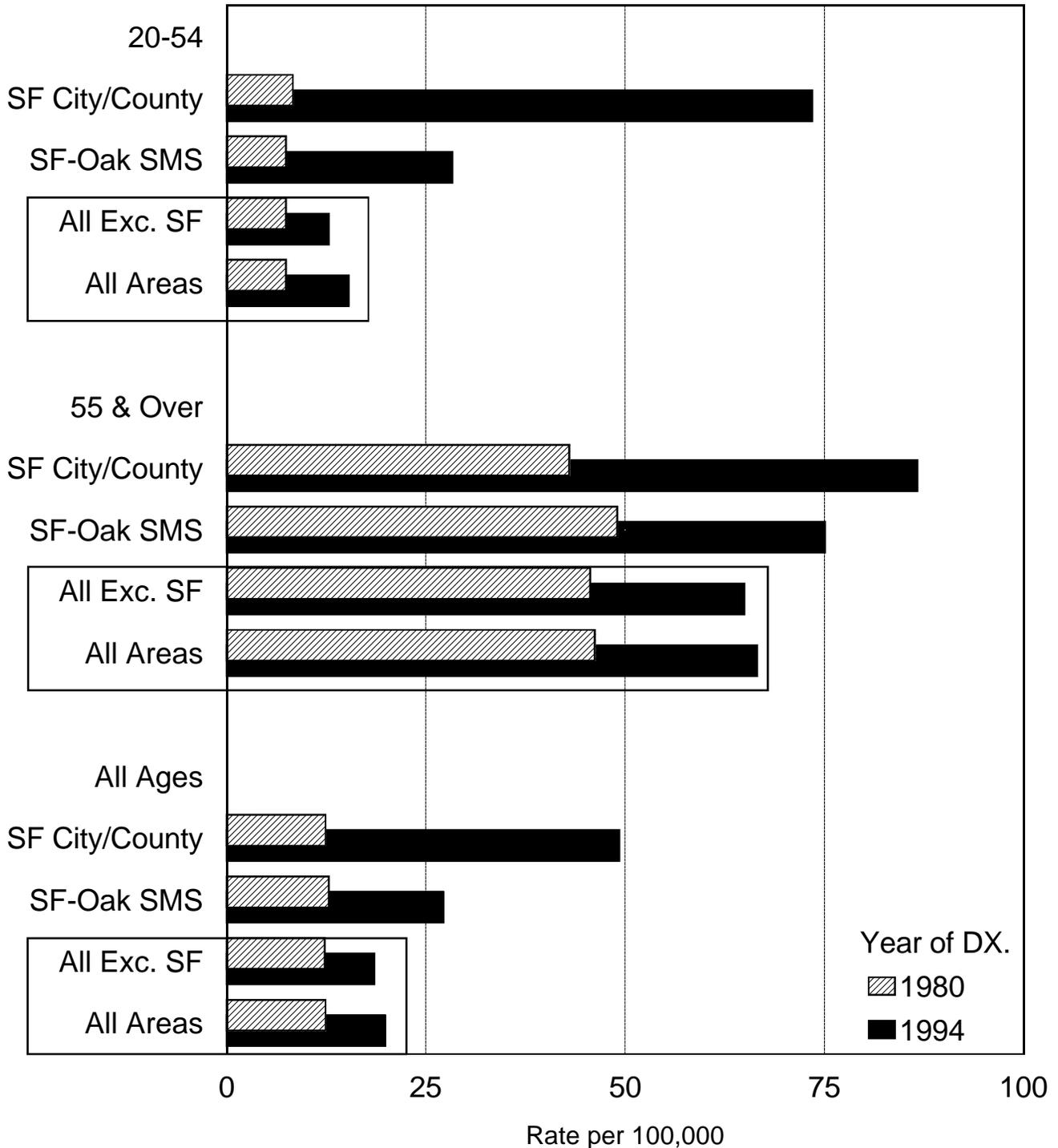


Figure XVIII-2

# Non-Hodgkin's Lymphoma Incidence Rates Males

AGE/AREA



# Non-Hodgkin's Lymphoma SEER Incidence by Age 1973-1975 vs. 1993-1995 All Races, Males

