

Table XV-1  
LUNG AND BRONCHUS CANCER (Invasive)

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>1973-93</u>									
All Ages									
Percent Change (PC)	34.8	7.6	122.4	36.1	5.5	131.4	33.1	17.5	121.1
Est. Annual PC (EAPC)	1.6★	0.3★	4.3★	1.6★	0.2	4.5★	1.7★	0.9★	4.5★
Under 65									
Percent Change (PC)	9.0	-10.9	61.9	9.0	-13.8	67.1	11.5	-1.2	66.7
Est. Annual PC (EAPC)	0.5★	-0.6★	2.5★	0.5★	-0.7★	2.6★	0.7★	0.0	3.0★
65 and over									
Percent Change (PC)	61.1	22.3	216.1	62.9	20.1	231.8	61.6	38.6	225.6
Est. Annual PC (EAPC)	2.5★	0.9★	6.3★	2.6★	0.9★	6.6★	2.8★	1.9★	6.7★
<u>1975-79 - ALL AGES</u>									
Percent Change (PC)	8.6	5.1	19.0	8.5	4.9	19.0	9.3	6.0	23.5
Est. Annual PC (EAPC)	2.9★	1.7★	6.2★	2.8★	1.6★	6.1★	3.3	2.2	8.2
<u>1989-93 - ALL AGES</u>									
Percent Change (PC)	0.0	-2.9	4.0	-0.8	-4.4	4.2	1.4	0.5	2.4
Est. Annual PC (EAPC)	-0.2◆	-1.2◆	1.2◆	-0.4◆	-1.6★◆	1.3◆	-0.2	-0.6	0.6◊
<u>MORTALITY TRENDS (expressed in percents)δ:</u>									
<u>1973-93</u>									
All Ages									
Percent Change (PC)	41.4	15.0	141.2	41.9	13.6	144.8	47.0	33.5	136.3
Est. Annual PC (EAPC)	1.9★	0.8★	4.8★	1.9★	0.7★	4.8★	2.2★	1.7★	4.8★
Under 65									
Percent Change (PC)	11.3	-8.0	71.3	12.2	-8.6	74.0	12.0	-0.9	72.6
Est. Annual PC (EAPC)	0.7★	-0.3★	2.9★	0.7★	-0.4★	2.9★	0.7★	0.0	3.1★
65 and over									
Percent Change (PC)	71.3	33.6	239.2	70.2	30.6	242.1	98.1	78.7	251.3
Est. Annual PC (EAPC)	2.9★	1.5★	6.8★	2.9★	1.4★	6.8★	3.8★	3.3★	7.0★
<u>1975-79 - ALL AGES</u>									
Percent Change (PC)	8.8	5.9	20.2	8.6	5.5	20.1	11.3	10.4	20.8
Est. Annual PC (EAPC)	2.8★	1.9★	6.3★	2.8★	1.8★	6.3★	3.5★	3.2★	6.5★
<u>1989-93 - ALL AGES</u>									
Percent Change (PC)	0.7	-3.0	6.7	1.0	-2.8	6.9	-1.3	-4.0	5.9
Est. Annual PC (EAPC)	0.3◆	-0.9★◆	2.2★◆	0.4◆	-0.8◆	2.3★◆	-0.4◆	-1.2★◆	1.8◆

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 1989-93 is significantly different from the EAPC for 1975-79 ( $p < .05$ ).

◊ The EAPC for 1989-93 is significantly different from the EAPC for 1975-79 ( $p < .10$ ).

- Statistic could not be calculated.

Table XV-2  
SMALL CELL LUNG AND BRONCHUS CANCER (Invasive) AND NON-SMALL CELL LUNG AND BRONCHUS CANCER (Invasive)

TRENDS IN SEER INCIDENCE, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>INCIDENCE TRENDS FOR SMALL CELL (expressed in percents):</u>									
<u>1973-93</u>									
All Ages									
Percent Change (PC)	69.2	31.3	164.7	75.2	33.1	178.5	44.3	15.3	150.0
Est. Annual PC (EAPC)	2.9*	1.4*	5.5*	3.1*	1.5*	5.7*	2.5*	1.6*	5.0*
Under 65									
Percent Change (PC)	23.0	-1.1	73.5	27.8	0.0	85.3	5.9	-12.5	52.1
Est. Annual PC (EAPC)	1.3*	0.2	3.2*	1.4*	0.1	3.4*	1.3	0.5	2.8*
65 and over									
Percent Change (PC)	135.3	66.3	375.8	143.0	68.5	390.2	104.6	47.9	526.8
Est. Annual PC (EAPC)	4.5*	2.5*	8.7*	4.8*	2.6*	8.9*	4.1*	2.7*	8.6*
<u>1975-79 - ALL AGES</u>									
Percent Change (PC)	26.3	22.2	35.2	27.4	22.6	37.8	12.0	23.0	-9.5
Est. Annual PC (EAPC)	7.6*	6.6*	9.9*	7.8*	6.6*	10.3*	5.3	7.5	0.3
<u>1989-93 - ALL AGES</u>									
Percent Change (PC)	-6.9	-10.4	-2.9	-6.9	-10.8	-2.7	-8.4	-13.2	-2.5
Est. Annual PC (EAPC)	-2.7♦	-4.0*♦	-1.2♦	-2.6♦	-4.1*♦	-1.0♦	-3.7	-4.9◊	-2.3
<u>INCIDENCE TRENDS FOR NON-SMALL CELL (expressed in percents):</u>									
<u>1973-93</u>									
All Ages									
Percent Change (PC)	30.0	4.5	115.0	30.4	1.8	123.0	31.9	17.7	117.1
Est. Annual PC (EAPC)	1.3*	0.1	4.0*	1.4*	0.1	4.2*	1.6*	0.9*	4.4*
Under 65									
Percent Change (PC)	6.6	-12.5	59.5	5.7	-16.1	63.3	12.2	0.1	69.2
Est. Annual PC (EAPC)	0.3	-0.7*	2.3*	0.3	-0.9*	2.4*	0.7*	0.0	3.0*
65 and over									
Percent Change (PC)	52.7	17.5	195.7	53.6	14.8	210.4	57.2	37.6	201.5
Est. Annual PC (EAPC)	2.2*	0.7*	5.9*	2.3*	0.6*	6.2*	2.6*	1.8*	6.5*
<u>1975-79 - ALL AGES</u>									
Percent Change (PC)	5.8	2.6	16.0	5.5	2.3	15.5	9.0	4.3	30.0
Est. Annual PC (EAPC)	2.1*	0.9	5.5*	1.9*	0.8	5.3*	3.1*	1.6	9.5*
<u>1989-93 - ALL AGES</u>									
Percent Change (PC)	1.3	-1.6	5.6	0.5	-3.2	5.8	2.8	2.3	3.3
Est. Annual PC (EAPC)	0.3◊	-0.7◊	1.8♦	0.1♦	-1.1♦	1.8♦	0.3	-0.1	1.1♦

The Est. Annual PC is the Estimated Annual Percent Change (EAPC) over the time interval.

SEER Program.

\* The EAPC is significantly different from zero ( $p < .05$ ).

♦ The EAPC for 1989-93 is significantly different from the EAPC for 1975-79 ( $p < .05$ ).

◊ The EAPC for 1989-93 is significantly different from the EAPC for 1975-79 ( $p < .10$ ).

- Statistic could not be calculated.

Table XV-3  
LUNG AND BRONCHUS CANCER (Invasive)  
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>									
YEAR OF DIAGNOSIS:									
1973	42.4	73.2	18.2	41.6	72.4	17.8	58.8	104.8	20.9
1974	43.9	74.5	19.9	43.4	74.1	19.8	58.9	102.0	21.7
1975	45.3	76.2	21.5	45.1	75.9	21.8	56.7	101.4	20.6
1976	47.8	79.4	23.8	47.2	78.4	23.8	62.6	110.9	25.2
1977	48.9	80.7	24.7	48.3	80.0	24.6	64.2	108.7	28.9
1978	50.2	82.0	26.2	49.7	81.1	26.5	65.0	113.3	27.1
1979	50.9	81.5	27.8	50.4	80.7	27.9	65.4	111.6	29.4
1980	52.3	84.4	28.1	51.2	82.2	28.2	76.0	131.0	33.8
1981	53.9	84.5	30.8	53.4	83.3	31.3	73.3	126.1	33.1
1982	54.9	85.1	32.4	54.6	83.8	33.3	71.1	123.5	31.4
1983	55.0	84.1	33.3	54.5	82.2	34.4	75.9	130.9	34.7
1984	56.8	86.5	34.6	55.7	84.1	34.8	82.7	140.6	39.6
1985	56.2	83.9	35.3	55.6	82.1	35.9	79.0	131.3	40.2
1986	56.9	83.6	37.0	56.3	81.9	37.6	81.4	134.1	43.2
1987	58.5	85.2	38.6	58.6	84.2	39.8	74.5	124.1	38.4
1988	58.7	83.3	40.4	58.8	82.3	41.6	77.8	125.9	42.8
1989	58.0	82.2	40.0	57.9	81.0	41.0	78.0	123.1	45.3
1990	58.6	81.5	41.5	58.6	80.6	42.5	76.5	118.5	46.8
1991	59.5	81.7	43.1	59.2	80.0	44.0	81.7	125.7	49.7
1992	59.5	81.5	43.0	58.8	79.0	44.1	82.0	128.0	48.6
1993	57.0	77.4	41.7	56.8	75.5	42.9	74.7	114.9	45.8
<u>AGE-ADJUSTED RATES, 1989-93</u>									
AGE AT DIAGNOSIS:									
All ages	58.5	80.8	41.9	58.3	79.2	42.9	78.6	122.1	47.3
Under 65	27.4	34.0	21.3	26.7	32.0	21.7	43.0	62.8	26.7
65 and over	342.7	508.5	229.7	346.0	509.5	236.0	403.8	663.1	235.0
All ages (world std.) <sup>λ</sup>	46.3	62.7	33.5	45.9	61.1	34.3	64.1	97.9	39.0
<u>AGE-SPECIFIC RATES, 1989-93</u>									
AGE AT DIAGNOSIS:									
0-4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
15-19	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.0	0.2
20-24	0.3	0.2	0.3	0.3	0.2	0.4	0.3	0.5	0.0
25-29	0.6	0.6	0.7	0.6	0.5	0.6	1.1	1.2	0.9
30-34	1.8	2.0	1.5	1.6	1.9	1.2	3.9	4.2	3.6
35-39	5.2	6.3	4.1	4.4	5.0	3.7	11.5	16.6	7.1
40-44	13.1	15.4	10.8	11.7	13.2	10.3	27.6	38.6	18.0
45-49	35.9	41.8	30.1	33.7	37.1	30.2	68.1	95.2	44.3
50-54	80.7	95.2	66.7	77.4	87.4	67.6	139.6	200.6	87.5
55-59	144.4	175.8	115.2	141.6	165.8	118.5	220.5	326.0	134.9
60-64	230.7	303.0	166.3	231.3	295.6	172.5	321.8	481.4	195.6
65-69	318.7	436.6	221.5	320.7	433.4	226.7	419.0	617.0	268.9
70-74	373.5	527.6	255.8	376.8	523.7	264.6	462.8	762.4	256.0
75-79	387.1	583.3	255.7	395.8	592.9	265.4	375.3	657.4	204.2
80-84	343.8	586.5	210.6	346.1	592.8	215.0	382.2	732.9	196.7
85+	228.5	464.7	137.1	225.1	472.6	133.1	225.3	427.1	138.4

SEER Program. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.  
 SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

Table XV-4  
SMALL CELL LUNG AND BRONCHUS CANCER (Invasive)  
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>									
YEAR OF DIAGNOSIS:									
1973	5.1	8.1	2.6	5.1	8.1	2.7	6.9	12.0	2.8
1974	5.6	8.7	3.0	5.7	9.0	3.0	5.1	8.2	2.5
1975	6.0	9.1	3.5	6.2	9.5	3.7	5.4	8.1	3.2
1976	6.3	10.0	3.5	6.4	10.1	3.6	7.3	11.1	4.4
1977	6.9	10.8	3.9	7.0	11.2	3.9	7.3	9.9	5.3
1978	7.8	11.8	4.6	8.0	12.0	4.9	7.2	12.8	2.8
1979	7.8	11.5	4.9	8.1	12.0	5.1	7.0	10.8	4.0
1980	8.1	12.5	4.7	8.3	12.7	5.0	8.9	15.3	4.1
1981	8.7	12.8	5.6	9.0	13.0	5.9	8.6	14.5	4.2
1982	9.2	12.9	6.5	9.6	13.2	6.9	8.8	14.3	4.5
1983	9.2	13.0	6.4	9.6	13.1	6.9	8.2	13.3	4.5
1984	9.6	13.3	6.7	9.9	13.7	7.0	9.7	14.0	6.4
1985	9.3	13.1	6.4	9.9	13.4	6.7	10.0	15.7	5.7
1986	9.9	13.6	7.1	10.2	13.9	7.4	11.3	16.0	7.9
1987	9.5	12.3	7.5	10.0	12.6	8.1	8.7	12.8	5.7
1988	10.2	13.3	7.7	10.6	13.6	8.4	9.5	15.8	5.0
1989	9.9	12.8	7.8	10.3	13.1	8.3	10.5	14.7	7.7
1990	9.4	11.9	7.5	9.9	12.4	8.1	8.5	12.1	5.8
1991	10.0	12.2	8.4	10.4	12.4	8.9	11.0	13.9	9.0
1992	9.3	11.6	7.5	9.7	12.0	8.0	8.9	11.6	6.9
1993	8.7	10.6	7.4	9.2	10.8	7.9	8.5	11.7	6.3
<u>AGE-ADJUSTED RATES, 1989-93</u>									
AGE AT DIAGNOSIS:									
All ages	9.5	11.8	7.7	9.9	12.1	8.2	9.5	12.8	7.1
Under 65	4.7	5.3	4.1	4.9	5.4	4.4	5.1	6.5	3.9
65 and over	53.2	70.8	41.1	55.7	73.7	43.4	49.5	70.3	36.2
All ages (world std.) $\lambda$	7.6	9.3	6.3	7.9	9.6	6.7	7.7	10.2	5.9
<u>AGE-SPECIFIC RATES, 1989-93</u>									
AGE AT DIAGNOSIS:									
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-34	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.5	0.2
35-39	0.5	0.8	0.2	0.4	0.6	0.2	1.2	2.1	0.3
40-44	1.8	1.9	1.6	1.9	2.0	1.8	1.9	2.1	1.8
45-49	5.3	6.2	4.5	5.5	6.1	4.9	6.6	9.2	4.3
50-54	14.0	15.8	12.3	14.4	15.8	13.0	16.6	20.2	13.5
55-59	26.4	29.4	23.7	27.7	29.9	25.6	25.7	33.6	19.3
60-64	40.1	46.4	34.4	42.0	47.4	37.1	43.1	53.5	34.8
65-69	56.5	70.6	44.8	59.7	74.6	47.2	53.6	63.8	45.8
70-74	58.9	75.2	46.5	61.4	77.0	49.6	56.5	84.7	37.0
75-79	59.4	79.6	45.9	62.4	82.9	48.8	50.8	74.5	36.5
80-84	42.4	65.4	29.8	43.8	67.3	31.2	42.9	79.9	23.3
85+	17.8	41.0	8.8	18.1	43.6	8.6	11.8	23.5	6.8

SEER Program. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.  
SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

Table XV-5  
NON-SMALL CELL LUNG AND BRONCHUS CANCER (Invasive)  
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>									
YEAR OF DIAGNOSIS:									
1973	37.4	65.0	15.6	36.5	64.3	15.1	51.9	92.8	18.2
1974	38.4	65.8	16.9	37.7	65.0	16.8	53.8	93.9	19.2
1975	39.3	67.1	18.0	38.9	66.4	18.2	51.3	93.3	17.4
1976	41.5	69.4	20.3	40.8	68.3	20.2	55.3	99.7	20.8
1977	42.0	69.9	20.8	41.2	68.8	20.7	56.9	98.8	23.7
1978	42.4	70.2	21.5	41.8	69.1	21.6	57.7	100.5	24.3
1979	43.1	69.9	22.9	42.3	68.7	22.8	58.4	100.8	25.4
1980	44.2	71.9	23.4	42.9	69.6	23.3	67.0	115.7	29.7
1981	45.2	71.7	25.3	44.4	70.3	25.4	64.6	111.7	28.9
1982	45.6	72.2	25.9	45.0	70.6	26.4	62.4	109.2	26.9
1983	45.7	71.1	26.9	45.0	69.1	27.5	67.7	117.7	30.2
1984	47.2	73.1	27.9	45.8	70.5	27.8	73.0	126.6	33.2
1985	46.9	70.8	28.9	45.9	68.7	29.2	69.1	115.6	34.5
1986	47.0	70.0	29.9	46.1	68.0	30.3	70.1	118.1	35.3
1987	49.0	72.9	31.1	48.6	71.7	31.7	65.8	111.3	32.7
1988	48.6	70.0	32.7	48.2	68.6	33.3	68.2	110.1	37.8
1989	48.0	69.3	32.2	47.6	67.9	32.7	67.4	108.4	37.6
1990	49.2	69.6	34.0	48.7	68.2	34.4	68.1	106.4	41.0
1991	49.5	69.6	34.7	48.8	67.6	35.1	70.7	111.8	40.7
1992	50.2	69.9	35.5	49.1	67.0	36.0	73.1	116.4	41.8
1993	48.3	66.8	34.3	47.6	64.7	35.0	66.2	103.3	39.5
<u>AGE-ADJUSTED RATES, 1989-93</u>									
AGE AT DIAGNOSIS:									
All ages	49.0	69.0	34.1	48.4	67.0	34.7	69.1	109.3	40.2
Under 65	22.7	28.6	17.2	21.9	26.6	17.4	37.9	56.3	22.8
65 and over	289.5	437.7	188.7	290.2	435.8	192.6	354.3	592.8	198.8
All ages (world std.) <sup>λ</sup>	38.7	53.4	27.3	38.0	51.5	27.7	56.4	87.7	33.1
<u>AGE-SPECIFIC RATES, 1989-93</u>									
AGE AT DIAGNOSIS:									
0-4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
15-19	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.0	0.2
20-24	0.2	0.2	0.3	0.3	0.1	0.4	0.3	0.5	0.0
25-29	0.6	0.6	0.7	0.5	0.5	0.6	1.1	1.2	0.9
30-34	1.7	1.9	1.4	1.5	1.8	1.1	3.6	3.7	3.5
35-39	4.6	5.5	3.8	3.9	4.4	3.5	10.4	14.5	6.8
40-44	11.3	13.5	9.1	9.9	11.2	8.5	25.6	36.5	16.2
45-49	30.6	35.7	25.7	28.2	31.0	25.3	61.5	86.0	40.0
50-54	66.7	79.4	54.5	63.0	71.6	54.6	123.0	180.3	74.0
55-59	118.0	146.4	91.5	113.9	135.9	92.9	194.8	292.4	115.5
60-64	190.7	256.6	131.9	189.2	248.2	135.4	278.7	427.9	160.8
65-69	262.3	366.0	176.7	261.0	358.8	179.5	365.5	553.2	223.1
70-74	314.5	452.4	209.3	315.4	446.7	215.0	406.3	677.7	218.9
75-79	327.7	503.7	209.8	333.4	509.9	216.6	324.5	582.9	167.7
80-84	301.4	521.1	180.8	302.4	525.5	183.8	339.3	653.0	173.4
85+	210.7	423.7	128.3	207.0	428.9	124.5	213.5	403.6	131.7

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

Table XV-6  
LUNG AND BRONCHUS CANCER (Invasive)

U.S. MORTALITY RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES<sup>δ</sup>, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
YEAR OF DEATH:									
1973	34.8	62.4	13.3	34.3	61.6	13.3	40.8	75.1	13.6
1974	36.0	64.1	14.3	35.5	63.2	14.3	42.5	78.5	14.2
1975	36.8	65.1	15.2	36.4	64.2	15.3	43.3	79.7	14.9
1976	38.1	66.7	16.4	37.7	65.7	16.5	44.7	82.0	15.9
1977	39.2	68.2	17.3	38.6	66.8	17.4	47.8	87.8	17.3
1978	40.4	69.5	18.6	39.9	68.2	18.7	48.5	88.8	17.9
1979	41.1	70.1	19.4	40.5	68.8	19.5	49.4	89.7	19.2
1980	42.5	71.5	20.9	41.9	70.0	21.0	51.8	92.7	21.4
1981	43.0	71.7	21.7	42.3	70.0	21.8	53.1	95.5	21.9
1982	44.2	72.9	23.0	43.6	71.3	23.2	54.6	97.9	23.0
1983	44.9	72.9	24.4	44.3	71.3	24.6	55.7	98.0	25.0
1984	45.8	73.9	25.1	45.1	72.0	25.4	56.9	102.1	24.5
1985	46.6	74.1	26.4	46.0	72.3	26.8	57.5	101.6	26.0
1986	47.1	74.3	27.2	46.4	72.4	27.5	58.3	102.6	27.0
1987	48.1	75.1	28.3	47.4	73.3	28.5	59.8	104.6	28.4
1988	48.6	74.8	29.4	48.0	73.0	29.8	59.9	104.1	29.3
1989	49.3	74.7	30.8	48.7	72.6	31.2	61.6	106.7	30.3
1990	50.1	75.3	31.6	49.4	73.2	32.0	62.6	107.1	31.8
1991	50.0	74.5	32.2	49.5	72.5	32.6	61.7	104.8	32.0
1992	50.0	72.9	33.1	49.4	71.0	33.5	61.6	102.5	33.4
1993	50.1	72.6	33.5	49.7	70.7	34.1	60.9	102.6	32.4
<u>AGE-ADJUSTED RATES, 1989-93</u>									
AGE AT DEATH:									
All ages	49.9	74.0	32.2	49.3	72.0	32.7	61.7	104.7	32.0
Under 65	22.4	30.0	15.4	21.7	28.5	15.5	31.9	50.3	17.3
65 and over	301.4	474.9	185.9	301.4	469.2	189.7	333.6	601.0	165.9
All ages (world std.) <sup>φ</sup>	39.0	56.7	25.5	38.5	55.0	25.8	49.5	82.7	25.9
<u>AGE-SPECIFIC RATES, 1989-93</u>									
AGE AT DEATH:									
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-19	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
25-29	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.3
30-34	1.0	1.1	0.8	0.9	1.0	0.8	1.7	2.4	1.1
35-39	3.5	4.2	2.8	3.2	3.7	2.7	6.3	8.6	4.3
40-44	10.0	12.4	7.7	9.2	11.0	7.5	18.3	26.8	11.0
45-49	28.6	35.9	21.6	26.9	32.5	21.4	49.1	74.6	27.7
50-54	63.6	82.3	46.0	61.0	76.5	46.1	99.2	153.6	54.7
55-59	120.4	162.1	82.1	117.3	153.8	83.1	170.0	272.5	89.0
60-64	193.1	269.1	126.5	191.0	261.1	128.5	246.9	398.1	132.4
65-69	264.1	382.8	167.7	262.7	374.2	171.0	318.9	534.0	162.2
70-74	321.0	479.3	202.2	320.8	471.4	206.6	365.2	643.4	180.0
75-79	345.5	552.0	210.2	347.8	548.8	215.4	349.5	655.2	169.5
80-84	328.7	590.7	188.1	330.2	589.1	191.8	329.6	673.4	151.8
85+	249.4	514.4	147.4	249.3	517.8	147.4	252.7	511.5	144.7

<sup>δ</sup> NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.

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

Table XV-7  
LUNG AND BRONCHUS CANCER (Invasive)

SURVIVAL RATES, BY RACE, SEX, DIAGNOSIS YEAR, STAGE 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>	-	-	-	8	7	11	5	5	6
1970-73 <sup>a</sup>	-	-	-	10	9	14	7	6	10
1974-76 <sup>b</sup>	12.4	11.1	15.7	12.4	11.1	15.9	11.4	10.9	13.1
1977-79 <sup>b</sup>	13.4	11.8	17.1	13.6	12.1	17.3	11.0	9.0	16.9
1980-82 <sup>b</sup>	13.4	12.1	16.1	13.5	12.2	16.2	12.2	11.0	15.4
1983-85 <sup>b</sup>	13.7	12.0	16.9	14.0	12.2	17.1	11.5	10.3	14.3
1986-92 <sup>b</sup>	13.7 <sup>Q</sup>	12.4 <sup>Q</sup>	15.6 <sup>Q</sup>	14.0 <sup>Q</sup>	12.6 <sup>Q</sup>	16.0 <sup>Q</sup>	11.2	10.9	11.6
1986-92 <sup>b</sup>									
ALL STAGES	13.7	12.4	15.6	14.0	12.6	16.0	11.2	10.9	11.6
LOCALIZED	48.0	44.6	52.7	48.6	45.2	53.3	42.5	41.7	44.2
REGIONAL	17.8	16.4	20.0	18.3	16.9	20.4	14.1	12.7	16.9
DISTANT	1.9	1.6	2.2	1.8	1.5	2.4	1.9	2.0	1.6
UNSTAGED	7.5	7.0	8.4	7.4	6.6	8.6	8.6	10.0	5.1

STAGE DISTRIBUTION (%) 1986-92<sup>b</sup>

ALL STAGES									
Number of cases	84,036	52,469	31,567	71,625	44,086	27,539	8,955	6,070	2,885
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	15	14	16	15	15	16	13	13	12
REGIONAL	25	26	24	25	26	24	26	25	26
DISTANT	45	45	45	44	45	44	49	49	48
UNSTAGED	15	15	15	15	15	16	13	13	13

5-YR RELATIVE SURVIVAL RATES, 1986-92<sup>b</sup>

AGE AT DIAGNOSIS:									
<45	21.7	17.5	27.4	23.1	18.7	28.7	14.5	11.5	20.0
45-54	16.5	14.5	19.5	17.4	15.1	20.6	11.3	10.5	13.0
55-64	14.7	13.6	16.6	15.0	13.8	17.0	12.8	11.9	14.6
65-74	13.3	12.2	14.9	13.6	12.4	15.5	10.3	11.3	8.2
75+	8.9	8.0	10.1	9.1	8.1	10.5	6.2	6.8	5.3
Under 65	15.7	14.1	18.3	16.2	14.5	18.9	12.5	11.4	14.7
65 and over	11.9	10.9	13.3	12.2	11.1	13.8	9.3	10.2	7.4

<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 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 1993.

<sup>Q</sup> The difference in rates between 1974-76 and 1986-92 is statistically significant ( $p < .05$ ).

<sup>↑</sup> The standard error of the survival rate is between 5 and 10 percentage points.

<sup>↑↑</sup> The standard error of the survival rate is greater than 10 percentage points.

<sup>-</sup> Statistic could not be calculated.

Table XV-8  
SMALL CELL LUNG AND BRONCHUS CANCER (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>5-YR RELATIVE SURVIVAL RATES</b>									
YEAR OF DIAGNOSIS:									
1974-76 <sup>b</sup>	3.6	2.9	5.0	3.5	2.9	4.9	3.4	3.6	3.0
1977-79 <sup>b</sup>	4.5	3.3	6.9	4.5	3.3	7.0	4.1	3.8	4.8
1980-82 <sup>b</sup>	4.7	3.9	6.2	4.8	4.1	6.2	3.9	2.8	6.4
1983-85 <sup>b</sup>	4.9	3.7	6.7	5.0	3.9	6.6	4.7	2.5	8.6
1986-92 <sup>b</sup>	5.5Ω	4.6Ω	6.6Ω	5.7Ω	4.6Ω	7.0Ω	4.0Ω	4.0Ω	3.8
1986-92 <sup>b</sup>	5.5	4.6	6.6	5.7	4.6	7.0	4.0	4.0	3.8
ALL STAGES	19.7	17.5	22.2	20.0	17.6	22.8	16.9↑	18.9↑	14.3↑
LOCALIZED	9.8	8.5	11.3	10.5	9.2	11.9	5.7	3.4	8.5
REGIONAL	1.8	1.5	2.3	1.8	1.4	2.5	1.7	2.5	0.6
DISTANT	7.3	6.0	8.9	7.7	6.2	9.3	0.0	0.0	0.0
UNSTAGED									
<b>STAGE DISTRIBUTION (%) 1986-92<sup>b</sup></b>									
ALL STAGES									
Number of cases	14,357	8,279	6,078	12,776	7,279	5,497	1,139	693	446
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	7	7	7	7	7	7	6	6	7
REGIONAL	20	19	22	20	18	22	22	21	25
DISTANT	59	61	57	59	62	57	60	60	60
UNSTAGED	14	13	14	14	13	15	11	14	8
<b>5-YR RELATIVE SURVIVAL RATES, 1986-92<sup>b</sup></b>									
AGE AT DIAGNOSIS:									
<45	7.8	9.8	5.0	8.4	10.1	5.9	0.0	0.0	-
45-54	7.1	5.3	9.6	7.4	5.4	10.0	4.6	0.0	7.8
55-64	6.5	4.7	8.7	6.5	4.3	9.3	6.3	6.5	4.2
65-74	4.8	4.1	5.6	5.1	4.4	5.9	2.0	2.5	1.7
75+	3.2	3.2	2.9	3.3	3.4	2.9	2.4	0.0	5.3
Under 65	6.7	5.2	8.7	6.8	4.9	9.3	5.4	5.3	5.1
65 and over	4.4	4.0	4.9	4.6	4.2	5.1	2.1	2.0	2.3

<sup>b</sup> 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 1993.

Ω The difference in rates between 1974-76 and 1986-92 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 XV-9  
NON-SMALL CELL LUNG AND BRONCHUS CANCER (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>5-YR RELATIVE SURVIVAL RATES</b>									
YEAR OF DIAGNOSIS:									
1974-76 <sup>b</sup>	13.8	12.3	17.8	13.9	12.3	18.0	12.3	11.7	15.1
1977-79 <sup>b</sup>	15.1	13.3	19.3	15.4	13.7	19.6	11.9	9.6	19.1
1980-82 <sup>b</sup>	15.1	13.6	18.4	15.4	13.8	18.6	13.3	12.1	16.9
1983-85 <sup>b</sup>	15.6	13.6	19.4	16.0	13.9	19.8	12.4	11.3	15.3
1986-92 <sup>b</sup>	15.4 <sup>Q</sup>	13.9 <sup>Q</sup>	17.7	15.9 <sup>Q</sup>	14.3 <sup>Q</sup>	18.4 <sup>Q</sup>	12.2	11.8	13.1
1986-92 <sup>b</sup>	15.4	13.9	17.7	15.9	14.3	18.4	12.2	11.8	13.1
ALL STAGES	50.4	46.8	55.7	51.2	47.5	56.2	44.2	42.8	47.0
LOCALIZED	19.1	17.5	21.9	19.6	18.0	22.3	15.2	13.6	18.4
REGIONAL	1.9	1.6	2.2	1.8	1.5	2.4	1.9	1.9	1.8
DISTANT	7.6	7.2	8.3	7.4	6.7	8.4	9.0	10.6	5.3
<b>STAGE DISTRIBUTION (%) 1986-92<sup>b</sup></b>									
ALL STAGES	69,679	44,190	25,489	58,849	36,807	22,042	7,816	5,377	2,439
Number of cases	100%	100%	100%	100%	100%	100%	100%	100%	100%
Percent	16	16	18	17	16	18	13	14	13
LOCALIZED	26	27	25	26	27	25	26	26	27
REGIONAL	42	42	42	41	41	41	47	47	46
DISTANT	15	15	15	16	16	16	14	13	14
<b>5-YR RELATIVE SURVIVAL RATES, 1986-92<sup>b</sup></b>									
AGE AT DIAGNOSIS:									
<45	23.6	18.8	30.1	25.3	20.2	31.6	15.9	12.4	22.2
45-54	18.4	16.4	21.6	19.7	17.3	23.0	12.1	11.3	13.8
55-64	16.7	15.4	18.9	17.2	15.9	19.3	13.9	12.6	16.6
65-74	15.1	13.8	17.4	15.6	14.0	18.2	11.7	12.5	9.7
75+	9.8	8.7	11.5	10.1	8.9	11.9	6.6	7.4	5.1
Under 65	17.7	15.9	20.7	18.5	16.6	21.4	13.5	12.1	16.3
65 and over	13.4	12.2	15.3	13.8	12.4	16.0	10.4	11.3	8.4

<sup>b</sup> 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 1993.

<sup>Q</sup> The difference in rates between 1974-76 and 1986-92 is statistically significant ( $p < .05$ ).

<sup>↑</sup> The standard error of the survival rate is between 5 and 10 percentage points.

<sup>↑↑</sup> The standard error of the survival rate is greater than 10 percentage points.

<sup>-</sup> Statistic could not be calculated.

Table XV-10  
LUNG AND BRONCHUS CANCER (Invasive)  
INCIDENCE, MORTALITY, AND SURVIVAL RATES  
By Year of Diagnosis/Death  
All Races, Males and Females

	Year of Diagnosis/Death																				
	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>Incidence</b>																					
SEER	42.4	43.9	45.3	47.8	48.9	50.2	50.9	52.3	53.9	54.9	55.0	56.8	56.2	56.9	58.5	58.7	58.0	58.6	59.5	59.5	57.0
<b>Mortality</b>																					
U.S.	34.8	36.0	36.8	38.1	39.2	40.4	41.1	42.5	43.0	44.2	44.9	45.8	46.6	47.1	48.1	48.6	49.3	50.1	50.0	50.0	50.1
SEER	34.3	34.7	35.5	37.2	37.4	38.1	39.4	40.0	40.2	41.5	42.5	42.0	43.4	42.4	43.7	44.5	44.8	44.2	45.8	44.9	44.5
<b>Relative Survival Rates (SEER)</b>																					
1-year	31.6	34.3	34.1	36.1	37.0	38.5	37.4	38.2	37.7	39.2	39.6	39.0	39.7	40.5	39.9	40.4	40.6	40.6	41.3	40.8	
2-year	18.2	20.2	20.3	21.4	21.9	22.6	22.1	22.2	22.2	22.9	23.5	22.5	23.1	23.4	23.0	23.5	23.6	23.8	23.8		
3-year	13.6	15.5	15.4	16.8	16.7	17.4	17.1	17.0	16.9	17.9	18.1	17.5	17.8	17.9	17.2	17.8	17.7	18.1			
4-year	12.2	13.3	13.3	14.5	14.4	15.0	14.8	14.4	14.7	15.6	15.6	14.8	15.3	15.0	15.0	15.3	15.4				
5-year	10.9	12.1	11.9	13.0	13.0	13.6	13.5	12.9	13.2	13.9	14.2	13.2	13.8	13.4	13.5	13.5					
6-year	10.2	11.3	10.9	12.0	12.3	12.5	12.5	12.0	12.1	12.6	13.1	12.1	12.8	12.4	12.3						
7-year	9.5	10.7	10.3	11.5	11.6	11.7	11.9	11.2	11.1	12.0	12.1	11.3	11.8	11.6							
8-year	9.1	10.3	10.0	10.8	11.0	11.2	11.1	10.4	10.4	11.2	11.4	10.5	11.1								
9-year	8.7	9.7	9.8	10.2	10.4	10.5	10.4	9.8	9.7	10.6	10.6	10.6	9.7								
10-year	8.1	9.2	9.3	9.7	9.9	10.0	9.7	9.0	9.2	10.0	10.0	10.0									
11-year	7.7	9.0	9.0	9.1	9.5	9.6	9.3	8.5	8.9	9.7											
12-year	7.5	8.8	8.8	8.7	9.0	9.2	9.0	8.1	8.6												
13-year	7.1	8.5	8.4	8.3	8.7	9.0	8.6	7.6													
14-year	6.8	8.3	8.2	7.9	8.5	8.5	8.3														
15-year	6.4	7.9	7.8	7.5	8.0	8.1															
16-year	6.4	7.9	7.6	7.4	7.7																
17-year	6.4	7.6	7.2	7.2																	
18-year	6.1	7.6	7.0																		
19-year	5.5	7.6																			
20-year	5.3																				

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 XV-11  
LUNG AND BRONCHUS CANCER (Invasive)  
INCIDENCE, MORTALITY, AND SURVIVAL RATES  
 By Year of Diagnosis/Death  
 All Races, Males

	Year of Diagnosis/Death																				
	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>Incidence</b>																					
SEER	73.2	74.5	76.2	79.4	80.7	82.0	81.5	84.4	84.5	85.1	84.1	86.5	83.9	83.6	85.2	83.3	82.2	81.5	81.7	81.5	77.4
<b>Mortality</b>																					
U.S.	62.4	64.1	65.1	66.7	68.2	69.5	70.1	71.5	71.7	72.9	72.9	73.9	74.1	74.3	75.1	74.8	74.7	75.3	74.5	72.9	72.6
SEER	61.4	60.4	61.9	63.7	63.1	64.2	65.5	65.9	65.3	65.6	67.0	65.3	66.5	64.8	65.5	65.8	65.4	63.9	64.5	63.2	62.1
<b>Relative Survival Rates (SEER)</b>																					
1-year	29.5	32.7	32.9	34.1	35.2	36.2	35.2	36.6	35.7	37.2	37.7	37.2	37.0	38.6	38.5	38.4	38.3	38.4	39.0	39.0	
2-year	16.7	18.9	19.1	19.8	20.4	20.7	20.4	20.9	20.4	21.2	21.4	20.8	21.2	21.3	22.0	22.1	22.3	21.6	21.9		
3-year	12.2	14.1	14.1	15.3	15.4	15.5	15.5	15.9	15.1	16.3	16.0	15.7	15.8	16.3	16.1	16.7	16.4	16.2			
4-year	11.0	12.0	12.1	13.2	12.9	13.1	13.3	13.5	13.0	13.9	13.8	13.0	13.2	13.4	14.0	14.0	14.2				
5-year	9.6	10.7	10.8	11.8	11.9	11.6	11.9	12.1	11.7	12.4	12.6	11.5	11.9	11.9	12.6	12.3					
6-year	8.9	9.8	9.7	10.7	11.3	10.6	11.0	11.3	10.7	11.2	11.4	10.5	11.0	10.9	11.6						
7-year	8.2	9.2	9.2	10.2	10.6	9.9	10.5	10.5	9.8	10.5	10.5	10.7	9.7	10.2	10.2						
8-year	7.8	8.9	8.9	9.5	10.1	9.4	9.7	9.6	8.9	9.8	9.9	9.9	8.9	9.4							
9-year	7.3	8.3	8.8	9.0	9.5	8.8	9.2	9.0	8.4	9.3	9.1	8.4									
10-year	6.7	7.8	8.4	8.6	8.9	8.2	8.7	8.3	7.9	8.7	8.6										
11-year	6.3	7.8	8.0	8.1	8.4	7.9	8.2	7.9	7.6	8.4											
12-year	6.1	7.7	7.7	7.8	7.8	7.6	7.9	7.3	7.4												
13-year	5.5	7.4	7.3	7.3	7.6	7.3	7.5	7.0													
14-year	5.2	7.0	7.2	7.0	7.4	7.0	7.4														
15-year	4.7	6.5	6.7	6.5	7.1	6.3															
16-year	4.7	6.5	6.6	6.3	6.6																
17-year	4.7	6.2	6.3	6.1																	
18-year	4.4	6.1	5.9																		
19-year	4.0	6.0																			
20-year	3.7																				

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 XV-12  
LUNG AND BRONCHUS CANCER (Invasive)  
INCIDENCE, MORTALITY, AND SURVIVAL RATES  
By Year of Diagnosis/Death  
All Races, Females

	Year of Diagnosis/Death																				
	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<b>Incidence</b>																					
SEER	18.2	19.9	21.5	23.8	24.7	26.2	27.8	28.1	30.8	32.4	33.3	34.6	35.3	37.0	38.6	40.4	40.0	41.5	43.1	43.0	41.7
<b>Mortality</b>																					
U.S.	13.3	14.3	15.2	16.4	17.3	18.6	19.4	20.9	21.7	23.0	24.4	25.1	26.4	27.2	28.3	29.4	30.8	31.6	32.2	33.1	33.5
SEER	13.1	14.8	15.2	17.2	18.1	18.5	19.9	20.6	21.6	23.7	24.5	24.9	26.4	25.9	27.5	28.9	29.7	29.9	32.3	31.4	31.4
<b>Relative Survival Rates (SEER)</b>																					
1-year	38.4	39.4	37.4	41.4	41.8	44.4	42.7	42.2	42.3	43.2	43.6	42.6	44.8	44.1	42.5	43.6	44.3	44.0	44.7	43.5	
2-year	23.1	24.0	23.7	25.6	25.8	27.4	26.2	25.1	26.1	26.5	27.8	25.7	26.8	27.1	24.7	25.6	25.8	27.1	26.7		
3-year	17.9	19.5	18.9	20.8	20.0	22.1	20.9	19.5	20.8	21.2	22.3	20.9	21.6	20.7	19.0	19.5	19.8	20.9			
4-year	16.0	17.1	16.5	17.9	18.0	19.6	18.3	16.5	18.1	18.8	19.1	18.0	19.2	17.9	16.7	17.3	17.2				
5-year	14.8	16.0	15.0	16.1	15.9	18.3	17.1	14.8	16.4	16.9	17.3	16.3	17.3	16.0	14.9	15.5					
6-year	13.9	15.4	14.1	15.3	14.9	16.8	15.7	13.7	15.0	15.1	16.1	15.0	16.2	14.7	13.6						
7-year	13.3	14.7	13.2	14.5	14.1	15.8	14.9	12.7	13.8	14.7	14.8	14.1	14.7	13.8							
8-year	12.7	14.2	12.8	13.7	13.0	14.9	14.0	11.9	13.1	13.7	13.9	13.3	13.9								
9-year	12.5	13.3	12.2	12.9	12.6	14.3	13.0	11.5	12.2	12.9	13.1	12.0									
10-year	11.8	12.7	11.5	12.1	12.1	13.8	11.7	10.4	11.5	12.3	12.3										
11-year	11.4	11.9	11.4	11.2	11.8	13.1	11.5	9.8	11.1	11.8											
12-year	10.9	11.3	11.3	10.6	11.5	12.5	11.0	9.5	10.8												
13-year	10.8	11.3	10.9	10.4	11.0	12.4	10.7	8.6													
14-year	10.7	11.3	10.5	9.7	10.6	11.5	10.0														
15-year	10.4	11.1	10.3	9.5	9.8	11.4															
16-year	10.2	10.9	9.7	9.5	9.7																
17-year	10.2	10.7	8.9	9.1																	
18-year	9.8	10.7	8.9																		
19-year	8.7	10.7																			
20-year	8.5																				

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 XV-13

LUNG AND BRONCHUS CANCER (Invasive)

## AGE-SPECIFIC CANCER SEER INCIDENCE RATES AND 21-YEAR TRENDS, 1973-93

By Race, Sex and Age Group

Sex/Age	All Races				Whites				Blacks			
	Average 1973-74	Rate <sup>⊕</sup> 92-93	% Change 73-93	EAPC 73-93	Average 1973-74	Rate <sup>⊕</sup> 92-93	% Change 73-93	EAPC 73-93	Average 1973-74	Rate <sup>⊕</sup> 92-93	% Change 73-93	EAPC 73-93
Males & Females	43.2	58.2	34.8	1.6★	42.5	57.8	36.1	1.6★	58.9	78.4	33.1	1.7★
0-54:	10.5	9.1	-12.9	-0.9★	9.9	8.4	-15.0	-1.0★	18.2	17.3	-4.5	-0.5
0-14	0.0	0.0	-37.9	-	0.0	0.0	-7.1	-	0.1	0.0	-	-
15-34	0.7	0.7	-0.5	-0.3	0.6	0.6	-5.1	-0.4	0.8	1.3	58.7	2.8
35-44	13.8	9.1	-34.0	-2.5★	13.0	8.2	-37.2	-2.7★	21.3	18.0	-15.7	-1.6★
45-54	58.6	53.8	-8.3	-0.6★	55.7	50.0	-10.1	-0.6★	105.1	101.7	-3.2	-0.3
55-64	145.2	178.5	22.9	1.2★	143.1	177.2	23.8	1.2★	204.9	254.2	24.0	1.6★
65+:	217.0	349.7	61.1	2.5★	216.1	352.1	62.9	2.6★	257.3	415.9	61.6	2.8★
65-74	227.2	349.7	53.9	2.3★	226.8	351.6	55.0	2.3★	283.3	453.6	60.1	2.7★
75+	200.5	349.7	74.4	3.0★	198.6	352.8	77.7	3.1★	215.0	354.3	64.8	3.0★
Males	73.9	79.5	7.6	0.3★	73.2	77.2	5.5	0.2	103.4	121.5	17.5	0.9★
0-54:	14.6	10.6	-27.3	-1.8★	13.7	9.3	-32.3	-2.0★	27.9	24.6	-11.9	-1.0★
0-14	0.0	0.1	140.9	-	0.0	0.1	166.0	-	0.0	0.0	-	-
15-34	0.8	0.7	-10.4	-0.5	0.7	0.6	-13.1	-0.5	1.5	1.4	-8.0	0.0
35-44	17.3	10.8	-37.4	-2.6★	16.1	9.4	-41.5	-2.9★	30.0	25.2	-16.2	-1.8★
45-54	84.1	62.4	-25.8	-1.7★	79.2	54.6	-31.1	-1.9★	164.1	145.7	-11.2	-0.8★
55-64	227.9	224.2	-1.6	0.0	224.0	215.4	-3.8	-0.1	353.1	375.6	6.4	0.7
65+:	417.2	510.0	22.3	0.9★	421.9	506.9	20.1	0.9★	491.1	680.6	38.6	1.9★
65-74	415.3	482.2	16.1	0.7★	420.6	474.7	12.9	0.5★	529.8	712.7	34.5	1.6★
75+	420.3	555.4	32.1	1.4★	424.0	559.3	31.9	1.4★	428.1	628.5	46.8	2.5★
Females	19.1	42.4	122.4	4.3★	18.8	43.5	131.4	4.5★	21.3	47.2	121.1	4.5★
0-54:	6.6	7.7	17.2	0.6	6.3	7.6	20.4	0.7★	9.3	11.1	18.8	0.7
0-14	0.1	0.0	-	-	0.1	0.0	-	-	0.2	0.0	-	-
15-34	0.6	0.7	12.6	0.0	0.6	0.6	3.9	-0.3	0.2	1.2	506.9	-
35-44	10.4	7.4	-28.7	-2.3★	10.0	7.0	-30.4	-2.5★	13.7	11.7	-14.2	-1.1
45-54	34.5	45.4	31.6	1.3★	33.3	45.5	36.8	1.5★	51.5	63.9	24.0	1.0★
55-64	68.5	136.9	99.8	3.8★	69.1	141.6	105.1	3.9★	70.7	157.4	122.6	5.2★
65+:	75.7	239.2	216.1	6.3★	74.3	246.7	231.8	6.6★	74.1	241.2	225.6	6.7★
65-74	79.8	243.9	205.8	6.1★	79.2	252.8	218.9	6.3★	72.6	265.9	266.1	7.3★
75+	69.0	231.4	235.7	6.8★	66.3	236.8	256.9	7.1★	76.4	200.9	162.9	5.7★

The EAPC is the Estimated Annual Percent Change over the time interval.

§ SEER Program. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population. Each rate has been age-adjusted by 5-year age groups.

⊕ The Average Rate is the Average Annual Rate over the specified two-year period.

\* The EAPC is significantly different from zero ( $p<.05$ ).

- Statistic could not be calculated.

Table XV-14

LUNG AND BRONCHUS CANCER (Invasive)AGE-SPECIFIC CANCER U.S. MORTALITY RATES<sup>δ</sup> AND 21-YEAR TRENDS, 1973-93

By Race, Sex and Age Group

Sex/Age	All Races				Whites				Blacks			
	Average 1973-74	Rate <sup>⊕</sup> 92-93	% Change 73-93	EAPC 73-93	Average 1973-74	Rate <sup>⊕</sup> 92-93	% Change 73-93	EAPC 73-93	Average 1973-74	Rate <sup>⊕</sup> 92-93	% Change 73-93	EAPC 73-93
Males & Females	35.4	50.0	41.4	1.9★	34.9	49.6	41.9	1.9★	41.7	61.3	47.0	2.2★
0-54:	8.3	7.1	-14.3	-0.8★	7.8	6.7	-13.7	-0.8★	13.7	11.7	-14.2	-0.9★
0-14	0.0	0.0	-43.1	-2.3	0.0	0.0	-44.2	-1.7	0.0	0.0	-14.7	-
15-34	0.4	0.3	-27.6	-1.6★	0.4	0.2	-31.3	-1.9★	0.5	0.5	-2.6	-0.6
35-44	10.7	6.7	-37.1	-2.6★	10.0	6.1	-38.6	-2.8★	17.2	12.1	-29.8	-2.1★
45-54	47.3	43.1	-8.9	-0.5★	44.4	41.0	-7.6	-0.4★	78.5	69.8	-11.0	-0.6★
55-64	119.0	151.3	27.1	1.4★	116.9	149.1	27.5	1.5★	149.2	198.8	33.3	1.7★
65+:	179.9	308.1	71.3	2.9★	181.3	308.4	70.2	2.9★	171.6	339.9	98.1	3.8★
65-74	184.5	293.3	59.0	2.5★	185.4	292.8	57.9	2.5★	184.5	343.0	85.9	3.5★
75+	172.4	332.1	92.7	3.5★	174.4	333.9	91.4	3.5★	150.5	334.9	122.6	4.5★
Males	63.3	72.7	15.0	0.8★	62.4	70.9	13.6	0.7★	76.8	102.6	33.5	1.7★
0-54:	12.4	9.0	-27.7	-1.7★	11.5	8.2	-28.3	-1.8★	23.0	17.7	-23.3	-1.4★
0-14	0.0	0.0	-54.9	-	0.0	0.0	-48.4	-	0.0	0.0	-76.0	-
15-34	0.5	0.3	-35.4	-2.2★	0.4	0.3	-39.1	-2.5★	0.8	0.6	-18.8	-1.1
35-44	15.0	8.2	-45.4	-3.3★	13.8	7.3	-47.6	-3.5★	27.2	17.2	-36.9	-2.6★
45-54	72.0	54.8	-23.9	-1.5★	66.5	50.5	-24.1	-1.5★	133.8	106.3	-20.6	-1.2★
55-64	198.8	204.4	2.9	0.3★	193.4	196.9	1.8	0.3★	273.0	316.1	15.8	0.9★
65+:	354.4	473.5	33.6	1.5★	358.2	467.8	30.6	1.4★	336.5	601.1	78.7	3.3★
65-74	350.5	422.1	20.4	1.0★	352.7	414.3	17.5	0.8★	355.8	575.3	61.7	2.7★
75+	360.8	557.4	54.5	2.3★	367.3	555.0	51.1	2.2★	305.0	643.3	110.9	4.3★
Females	13.8	33.3	141.2	4.8★	13.8	33.8	144.8	4.8★	13.9	32.9	136.3	4.8★
0-54:	4.5	5.3	19.7	0.9★	4.3	5.3	21.9	1.0★	5.8	6.8	17.1	0.7★
0-14	0.0	0.0	-27.2	0.0	0.0	0.0	-39.0	-	0.0	0.0	187.3	-
15-34	0.3	0.2	-15.4	-0.8	0.3	0.2	-19.9	-1.0★	0.3	0.4	36.4	0.2
35-44	6.5	5.3	-19.2	-1.6★	6.3	5.0	-19.8	-1.6★	8.9	7.7	-13.4	-1.1★
45-54	24.4	32.0	31.2	1.4★	23.8	31.9	34.3	1.5★	31.7	39.7	25.1	1.1★
55-64	48.5	103.5	113.3	4.1★	49.0	105.3	114.9	4.2★	46.3	108.6	134.4	5.0★
65+:	58.2	197.3	239.2	6.8★	58.9	201.4	242.1	6.8★	50.2	176.4	251.3	7.0★
65-74	57.2	191.9	235.7	6.7★	57.8	195.9	238.7	6.7★	51.5	180.0	249.2	7.0★
75+	59.8	206.1	244.7	6.9★	60.6	210.5	247.5	6.9★	48.1	170.7	255.1	6.9★

The EAPC is the Estimated Annual Percent Change over the time interval.

<sup>δ</sup> NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population. Each rate has been age-adjusted by 5-year age groups.

<sup>⊕</sup> The Average Rate is the Average Annual Rate over the specified two-year period.

\* The EAPC is significantly different from zero ( $p < .05$ ).

- Statistic could not be calculated.

Table XV-15  
LUNG AND BRONCHUS CANCER (Invasive)

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, 1991-93

All Races

Current Age	Males				Females			
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.01	8.60	0.00	0.00	0.01	5.48
10	0.00	0.01	0.04	8.71	0.00	0.01	0.03	5.53
20	0.00	0.04	0.30	8.77	0.01	0.03	0.23	5.55
30	0.04	0.30	1.46	8.92	0.03	0.22	1.07	5.57
40	0.27	1.46	4.33	9.12	0.20	1.05	2.75	5.60
50	1.24	4.24	7.48	9.23	0.87	2.61	4.50	5.51
60	3.28	6.82	8.51	8.73	1.83	3.83	4.74	4.90

Lifetime Risk of Being Diagnosed = 8.60%      Lifetime Risk of Being Diagnosed = 5.48%  
Lifetime Risk of Dying = 7.11%      Lifetime Risk of Dying = 4.35%

Whites

Current Age	Males				Females			
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.00	8.64	0.00	0.00	0.01	5.68
10	0.00	0.00	0.04	8.72	0.00	0.01	0.03	5.72
20	0.00	0.04	0.27	8.78	0.01	0.03	0.22	5.74
30	0.03	0.27	1.34	8.89	0.02	0.21	1.08	5.76
40	0.24	1.34	4.20	9.07	0.19	1.07	2.84	5.78
50	1.14	4.12	7.40	9.17	0.89	2.69	4.68	5.69
60	3.23	6.78	8.50	8.70	1.89	3.98	4.89	5.04

Lifetime Risk of Being Diagnosed = 8.64%      Lifetime Risk of Being Diagnosed = 5.68%  
Lifetime Risk of Dying = 7.20%      Lifetime Risk of Dying = 4.51%

Blacks

Current Age	Males				Females			
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.01	9.11	0.00	0.00	0.01	5.04
10	0.00	0.01	0.09	9.35	0.00	0.01	0.06	5.15
20	0.01	0.09	0.63	9.50	0.01	0.06	0.37	5.17
30	0.08	0.64	2.70	9.87	0.06	0.37	1.31	5.22
40	0.60	2.78	6.24	10.39	0.32	1.28	3.05	5.27
50	2.42	6.24	9.51	10.83	1.00	2.86	4.34	5.19
60	4.61	8.55	9.93	10.14	2.05	3.68	4.40	4.63

Lifetime Risk of Being Diagnosed = 9.11%      Lifetime Risk of Being Diagnosed = 5.04%  
Lifetime Risk of Dying = 7.49%      Lifetime Risk of Dying = 4.03%

Table XV-16  
LUNG AND BRONCHUS CANCER (Invasive)  
AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY<sup>δ</sup> RATES BY STATE, 1989-93  
 All Races, Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	49.9	0.06							
High Five States									
Kentucky	67.1 <sup>⊕</sup>	0.57	(01)	34.5					
Louisiana	61.6 <sup>⊕</sup>	0.53	(02)	23.4					
Arkansas	61.0 <sup>⊕</sup>	0.65	(03)	22.2					
West Virginia	60.6 <sup>⊕</sup>	0.72	(04)	21.4					
Nevada	58.7 <sup>⊕</sup>	0.94	(05)	17.6					
Low Five States									
North Dakota	37.3 <sup>⊕</sup>	1.02	(47)	-25.3					
Colorado	37.0 <sup>⊕</sup>	0.48	(48)	-25.9					
New Mexico	35.0 <sup>⊕</sup>	0.67	(49)	-29.9					
Hawaii	33.9 <sup>⊕</sup>	0.76	(50)	-32.1					
Utah	22.8 <sup>⊕</sup>	0.56	(51)	-54.3					
State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	54.6 <sup>⊕</sup>	0.48	(15)	9.4	Montana	43.3 <sup>⊕</sup>	0.96	(40)	-13.2
Alaska	53.1 <sup>⊕</sup>	2.02	(18)	6.4	Nebraska	42.8 <sup>⊕</sup>	0.69	(41)	-14.2
Arizona	45.3 <sup>⊕</sup>	0.46	(36)	-9.2	Nevada	58.7 <sup>⊕</sup>	0.94	(05)	17.6
Arkansas	61.0 <sup>⊕</sup>	0.65	(03)	22.2	New Hampshire	51.9	0.96	(22)	4.0
California	45.2 <sup>⊕</sup>	0.18	(37)	-9.4	New Jersey	49.0	0.33	(30)	-1.8
Colorado	37.0 <sup>⊕</sup>	0.48	(48)	-25.9	New Mexico	35.0 <sup>⊕</sup>	0.67	(49)	-29.9
Connecticut	44.2 <sup>⊕</sup>	0.48	(39)	-11.4	New York	45.7 <sup>⊕</sup>	0.21	(34)	-8.4
Delaware	58.6 <sup>⊕</sup>	1.25	(07)	17.4	North Carolina	52.9 <sup>⊕</sup>	0.38	(21)	6.0
District of Columbia	53.0 <sup>⊕</sup>	1.28	(20)	6.2	North Dakota	37.3 <sup>⊕</sup>	1.02	(47)	-25.3
Florida	51.8 <sup>⊕</sup>	0.24	(23)	3.8	Ohio	53.9 <sup>⊕</sup>	0.29	(16)	8.0
Georgia	54.7 <sup>⊕</sup>	0.42	(14)	9.6	Oklahoma	55.7 <sup>⊕</sup>	0.55	(10)	11.6
Hawaii	33.9 <sup>⊕</sup>	0.76	(50)	-32.1	Oregon	51.8	0.55	(24)	3.8
Idaho	38.0 <sup>⊕</sup>	0.84	(46)	-23.8	Pennsylvania	48.5 <sup>⊕</sup>	0.25	(31)	-2.8
Illinois	50.3	0.28	(27)	0.8	Rhode Island	50.1	0.92	(28)	0.4
Indiana	55.0 <sup>⊕</sup>	0.42	(12)	10.2	South Carolina	53.1 <sup>⊕</sup>	0.54	(19)	6.4
Iowa	44.5 <sup>⊕</sup>	0.51	(38)	-10.8	South Dakota	39.9 <sup>⊕</sup>	0.99	(44)	-20.0
Kansas	45.7 <sup>⊕</sup>	0.57	(35)	-8.4	Tennessee	58.7 <sup>⊕</sup>	0.46	(06)	17.6
Kentucky	67.1 <sup>⊕</sup>	0.57	(01)	34.5	Texas	51.5 <sup>⊕</sup>	0.25	(25)	3.2
Louisiana	61.6 <sup>⊕</sup>	0.53	(02)	23.4	Utah	22.8 <sup>⊕</sup>	0.56	(51)	-54.3
Maine	55.9 <sup>⊕</sup>	0.89	(09)	12.0	Vermont	48.2	1.27	(32)	-3.4
Maryland	54.9 <sup>⊕</sup>	0.47	(13)	10.0	Virginia	53.3 <sup>⊕</sup>	0.41	(17)	6.8
Massachusetts	48.0	0.37	(33)	-3.8	Washington	49.6	0.44	(29)	-0.6
Michigan	50.9	0.32	(26)	2.0	West Virginia	60.6 <sup>⊕</sup>	0.72	(04)	21.4
Minnesota	39.2 <sup>⊕</sup>	0.41	(45)	-21.4	Wisconsin	41.8 <sup>⊕</sup>	0.39	(42)	-16.2
Mississippi	56.0 <sup>⊕</sup>	0.63	(08)	12.2	Wyoming	41.0 <sup>⊕</sup>	1.34	(43)	-17.8
Missouri	55.3 <sup>⊕</sup>	0.43	(11)	10.8					

<sup>δ</sup> 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.

<sup>\*</sup> Absolute difference between state rate and total U.S. rate is 5% or more.

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

Table XV-17  
LUNG AND BRONCHUS CANCER (Invasive)  
AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY<sup>δ</sup> RATES BY STATE, 1989-93

All Races, Males

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	74.0	0.11							
High Five States									
Kentucky	103.8 <sup>⊕</sup> *	1.07	(01)	40.3					
Louisiana	98.5 <sup>⊕</sup> *	1.03	(02)	33.1					
Arkansas	96.9 <sup>⊕</sup> *	1.22	(03)	30.9					
Tennessee	95.9 <sup>⊕</sup> *	0.89	(04)	29.6					
Mississippi	93.6 <sup>⊕</sup> *	1.24	(05)	26.5					
Low Five States									
Colorado	53.3 <sup>⊕</sup> *	0.87	(47)	-28.0					
Idaho	51.5 <sup>⊕</sup> *	1.42	(48)	-30.4					
New Mexico	48.8 <sup>⊕</sup> *	1.17	(49)	-34.1					
Hawaii	46.6 <sup>⊕</sup> *	1.29	(50)	-37.0					
Utah	34.1 <sup>⊕</sup> *	1.02	(51)	-53.9					
State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	91.4 <sup>⊕</sup> *	0.96	(06)	23.5	Montana	60.4 <sup>⊕</sup> *	1.65	(42)	-18.4
Alaska	69.1*	3.45	(31)	-6.6	Nebraska	65.4 <sup>⊕</sup> *	1.25	(37)	-11.6
Arizona	62.6 <sup>⊕</sup> *	0.81	(38)	-15.4	Nevada	75.5	1.58	(23)	2.0
Arkansas	96.9 <sup>⊕</sup> *	1.22	(03)	30.9	New Hampshire	74.0	1.72	(25)	0.0
California	60.6 <sup>⊕</sup> *	0.31	(41)	-18.1	New Jersey	71.0	0.60	(28)	-4.1
Colorado	53.3 <sup>⊕</sup> *	0.87	(47)	-28.0	New Mexico	48.8 <sup>⊕</sup> *	1.17	(49)	-34.1
Connecticut	62.5 <sup>⊕</sup> *	0.86	(39)	-15.5	New York	66.0 <sup>⊕</sup> *	0.38	(36)	-10.8
Delaware	85.0*	2.29	(12)	14.9	North Carolina	87.0 <sup>⊕</sup> *	0.74	(10)	17.6
District of Columbia	82.9*	2.48	(15)	12.0	North Dakota	55.2 <sup>⊕</sup> *	1.78	(46)	-25.4
Florida	73.7	0.42	(26)	-0.4	Ohio	81.4 <sup>⊕</sup> *	0.55	(18)	10.0
Georgia	90.5 <sup>⊕</sup> *	0.83	(08)	22.3	Oklahoma	85.7 <sup>⊕</sup> *	1.02	(11)	15.8
Hawaii	46.6 <sup>⊕</sup> *	1.29	(50)	-37.0	Oregon	68.9 <sup>⊕</sup> *	0.94	(32)	-6.9
Idaho	51.5 <sup>⊕</sup> *	1.42	(48)	-30.4	Pennsylvania	73.3	0.47	(27)	-0.9
Illinois	75.5	0.52	(22)	2.0	Rhode Island	75.9	1.71	(21)	2.6
Indiana	84.1 <sup>⊕</sup> *	0.79	(14)	13.6	South Carolina	87.9 <sup>⊕</sup> *	1.06	(09)	18.8
Iowa	68.1 <sup>⊕</sup> *	0.93	(34)	-8.0	South Dakota	59.1 <sup>⊕</sup> *	1.75	(43)	-20.1
Kansas	69.2*	1.04	(30)	-6.5	Tennessee	95.9 <sup>⊕</sup> *	0.89	(04)	29.6
Kentucky	103.8 <sup>⊕</sup> *	1.07	(01)	40.3	Texas	77.9 <sup>⊕</sup> *	0.47	(20)	5.3
Louisiana	98.5 <sup>⊕</sup> *	1.03	(02)	33.1	Utah	34.1 <sup>⊕</sup> *	1.02	(51)	-53.9
Maine	81.5*	1.61	(17)	10.1	Vermont	70.4	2.30	(29)	-4.9
Maryland	79.6 <sup>⊕</sup> *	0.87	(19)	7.6	Virginia	82.1 <sup>⊕</sup> *	0.78	(16)	10.9
Massachusetts	68.3 <sup>⊕</sup> *	0.68	(33)	-7.7	Washington	67.6 <sup>⊕</sup> *	0.76	(35)	-8.6
Michigan	74.9	0.58	(24)	1.2	West Virginia	90.9 <sup>⊕</sup> *	1.34	(07)	22.8
Minnesota	56.4 <sup>⊕</sup> *	0.73	(45)	-23.8	Wisconsin	61.4 <sup>⊕</sup> *	0.70	(40)	-17.0
Mississippi	93.6 <sup>⊕</sup> *	1.24	(05)	26.5	Wyoming	57.0 <sup>⊕</sup> *	2.34	(44)	-23.0
Missouri	84.8 <sup>⊕</sup> *	0.80	(13)	14.6					

<sup>δ</sup> 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 5% or more.

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

Table XV-18  
LUNG AND BRONCHUS CANCER (Invasive)  
AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY<sup>δ</sup> RATES BY STATE, 1989-93  
 All Races, Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	32.2	0.07							
High Five States									
Nevada	44.6 <sup>⊕</sup> *	1.14	(01)	38.5					
Kentucky	40.1 <sup>⊕</sup> *	0.60	(02)	24.5					
Delaware	39.4 <sup>⊕</sup> *	1.39	(03)	22.4					
Alaska	39.1*	2.37	(04)	21.4					
Oregon	38.9 <sup>⊕</sup> *	0.66	(05)	20.8					
Low Five States									
South Dakota	24.8 <sup>⊕</sup> *	1.09	(47)	-23.0					
New Mexico	24.1 <sup>⊕</sup> *	0.76	(48)	-25.2					
North Dakota	23.1 <sup>⊕</sup> *	1.13	(49)	-28.3					
Hawaii	22.5 <sup>⊕</sup> *	0.85	(50)	-30.1					
Utah	13.9 <sup>⊕</sup> *	0.60	(51)	-56.8					
State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	28.0 <sup>⊕</sup> *	0.46	(40)	-13.0	Montana	29.6	1.10	(33)	-8.1
Alaska	39.1*	2.37	(04)	21.4	Nebraska	25.8 <sup>⊕</sup> *	0.73	(45)	-19.9
Arizona	31.7	0.53	(28)	-1.6	Nevada	44.6 <sup>⊕</sup> *	1.14	(01)	38.5
Arkansas	33.5	0.66	(18)	4.0	New Hampshire	36.0*	1.10	(09)	11.8
California	33.7 <sup>⊕</sup>	0.21	(17)	4.7	New Jersey	33.4	0.36	(20)	3.7
Colorado	24.9 <sup>⊕</sup> *	0.53	(46)	-22.7	New Mexico	24.1 <sup>⊕</sup> *	0.76	(48)	-25.2
Connecticut	31.6	0.55	(30)	-1.9	New York	31.6	0.23	(31)	-1.9
Delaware	39.4 <sup>⊕</sup> *	1.39	(03)	22.4	North Carolina	28.5 <sup>⊕</sup> *	0.37	(36)	-11.5
District of Columbia	32.9	1.33	(22)	2.2	North Dakota	23.1 <sup>⊕</sup> *	1.13	(49)	-28.3
Florida	34.6 <sup>⊕</sup>	0.27	(12)	7.5	Ohio	34.2 <sup>⊕</sup>	0.31	(14)	6.2
Georgia	29.5 <sup>⊕</sup>	0.41	(34)	-8.4	Oklahoma	33.4	0.58	(19)	3.7
Hawaii	22.5 <sup>⊕</sup> *	0.85	(50)	-30.1	Oregon	38.9 <sup>⊕</sup> *	0.66	(05)	20.8
Idaho	27.1 <sup>⊕</sup> *	0.98	(42)	-15.8	Pennsylvania	30.8 <sup>⊕</sup>	0.27	(32)	-4.3
Illinois	32.4	0.31	(25)	0.6	Rhode Island	32.4	1.00	(24)	0.6
Indiana	34.1	0.45	(15)	5.9	South Carolina	28.1 <sup>⊕</sup> *	0.52	(39)	-12.7
Iowa	27.2 <sup>⊕</sup> *	0.55	(41)	-15.5	South Dakota	24.8 <sup>⊕</sup> *	1.09	(47)	-23.0
Kansas	28.2 <sup>⊕</sup> *	0.61	(38)	-12.4	Tennessee	31.7	0.45	(29)	-1.6
Kentucky	40.1 <sup>⊕</sup> *	0.60	(02)	24.5	Texas	32.0	0.27	(26)	-0.6
Louisiana	35.1 <sup>⊕</sup>	0.54	(11)	9.0	Utah	13.9 <sup>⊕</sup> *	0.60	(51)	-56.8
Maine	37.4 <sup>⊕</sup> *	0.99	(07)	16.1	Vermont	31.9	1.42	(27)	-0.9
Maryland	37.1 <sup>⊕</sup> *	0.52	(08)	15.2	Virginia	32.7	0.43	(23)	1.6
Massachusetts	34.3	0.43	(13)	6.5	Washington	35.9 <sup>⊕</sup> *	0.51	(10)	11.5
Michigan	33.4	0.35	(21)	3.7	West Virginia	38.5 <sup>⊕</sup> *	0.78	(06)	19.6
Minnesota	26.4 <sup>⊕</sup> *	0.46	(44)	-18.0	Wisconsin	27.1 <sup>⊕</sup> *	0.43	(43)	-15.8
Mississippi	28.8 <sup>⊕</sup> *	0.61	(35)	-10.6	Wyoming	28.4*	1.54	(37)	-11.8
Missouri	33.8	0.46	(16)	5.0					

<sup>δ</sup> 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 10% or more.

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

Table XV-19  
LUNG AND BRONCHUS CANCER (Invasive)  
AGE-ADJUSTED SEER INCIDENCE RATES§, SEER MORTALITY RATESδ, AND 5-YEAR RELATIVE SURVIVAL RATES◊  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE RATES§, 1989-93</u>									
REGISTRY									
Standard 9 registries	58.5	80.8	41.9	58.3	79.2	42.9	78.6	122.1	47.3
San Francisco-Oakland	58.4	75.7	45.5	59.2	73.4	48.9	83.6	122.5	54.6
Connecticut	59.9	81.5	44.8	59.5	80.0	45.3	70.2	111.6	40.9
Metropolitan Detroit	72.6	102.7	51.3	70.2	97.3	51.4	82.6	126.3	51.2
Hawaii	46.4	64.3	30.3	65.6	82.5	49.3	-	-	-
Iowa	57.0	85.0	36.2	56.6	84.4	36.1	-	-	-
New Mexico	40.5	55.5	28.7	42.3	57.7	30.2	-	-	-
Seattle-Puget Sound	62.1	81.0	47.6	62.5	80.8	48.6	78.3	119.6	39.8
Utah	26.7	39.1	16.8	26.5	38.7	16.8	-	-	-
Metropolitan Atlanta	66.5	100.2	43.2	64.9	93.9	44.9	70.5	121.5	38.1
San Jose-Monterey	51.5	67.6	39.7	53.9	69.8	42.6	61.8	90.3	38.5
Los Angeles	52.9	71.0	39.7	52.7	68.1	41.7	71.6	109.9	44.4
<u>SEER MORTALITY RATESδ, 1989-93</u>									
REGISTRY									
Standard 9 registries	44.8	63.8	30.9	44.7	62.8	31.7	61.4	97.6	35.5
San Francisco-Oakland	45.1	59.2	34.8	46.1	57.9	37.6	65.6	99.0	41.0
Connecticut	44.2	62.5	31.6	43.9	61.3	32.0	51.9	88.1	26.9
Metropolitan Detroit	53.1	77.9	35.8	50.7	73.3	35.2	63.3	97.6	38.7
Hawaii	33.9	46.6	22.5	48.9	61.0	37.7	-	-	-
Iowa	44.5	68.1	27.2	44.1	67.7	26.9	-	-	-
New Mexico	35.0	48.8	24.1	36.4	50.7	25.1	-	-	-
Seattle-Puget Sound	48.9	66.3	35.9	49.5	66.5	36.9	57.2	90.6	27.1
Utah	22.8	34.1	13.9	22.7	33.9	13.9	-	-	-
Metropolitan Atlanta	51.9	81.7	31.8	50.4	76.3	32.8	58.9	106.6	29.0
San Jose-Monterey	39.2	53.4	29.0	41.3	55.6	31.4	50.2	74.8	31.0
Los Angeles	41.7	57.3	30.4	41.7	55.4	31.9	58.6	91.8	35.1
<u>SURVIVAL RATES◊, 1986-92</u>									
REGISTRY									
Standard 9 registries	13.7	12.4	15.6	14.0	12.6	16.0	11.2	10.9	11.6
San Francisco-Oakland	13.4	12.5	14.7	13.8	12.8	15.0	12.4	12.2	12.8
Connecticut	13.7	12.6	15.3	13.9	12.9	15.4	10.9	9.2	14.3
Metropolitan Detroit	14.3	13.0	16.3	15.2	13.5	17.8	11.0	11.3	10.3
Hawaii	15.5	14.9	16.6	16.9	14.9	19.8	-	-	-
Iowa	12.0	11.2	13.7	12.1	11.3	13.8	-	-	-
New Mexico	10.4	8.5	13.4	10.3	8.5	13.0	-	-	-
Seattle-Puget Sound	14.6	13.6	16.0	14.7	13.7	16.2	14.4	15.2	11.8
Utah	12.8	10.8	16.2	12.8	10.7	16.4	-	-	-
Metropolitan Atlanta	14.6	12.2	18.7	16.0	13.4	20.2	9.7	8.6	12.3

Note: San Jose-Monterey and Los Angeles are new SEER areas as of 1992 and their data are only used in this table and not other tables in this section.

§ SEER Program. Incidence rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.

δ NCHS public use tape. 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 and are based on follow-up of patients through 1993.

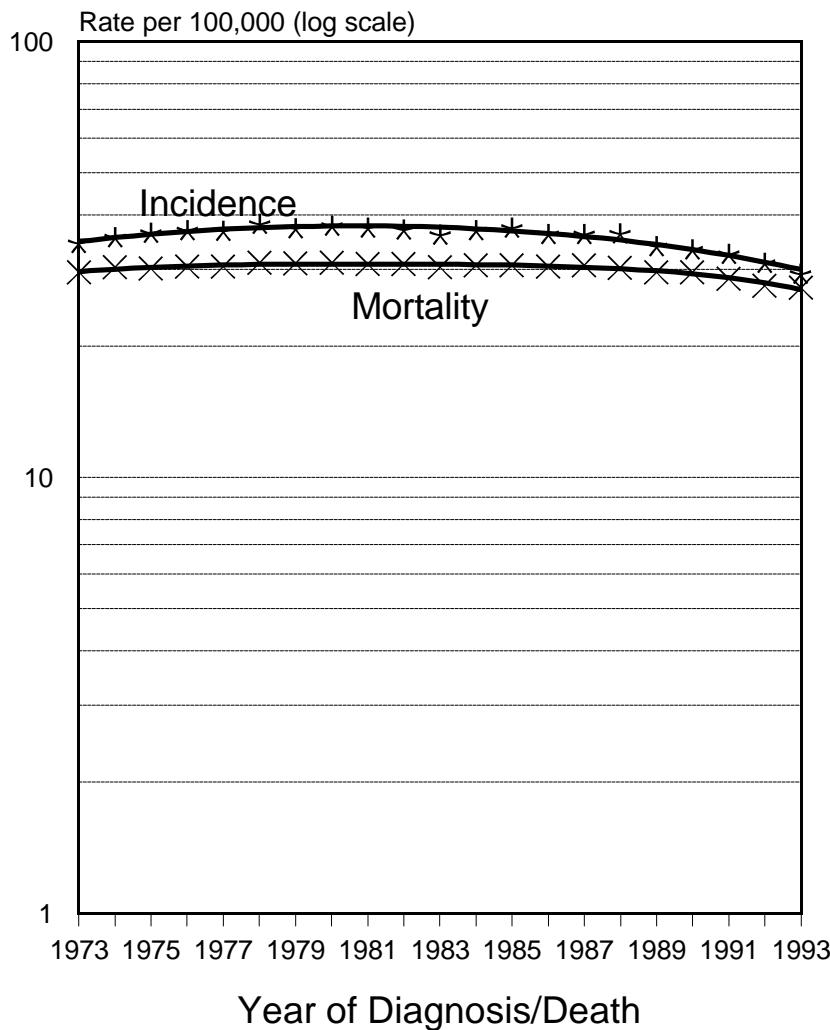
↑ The standard error of the survival rate is between 5 and 10 percentage points.

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

- Statistic could not be calculated or populations are inadequate.

# SEER Incidence and U.S. Mortality Lung, Male, Under 65 Years of Age By Race

## White



## Black

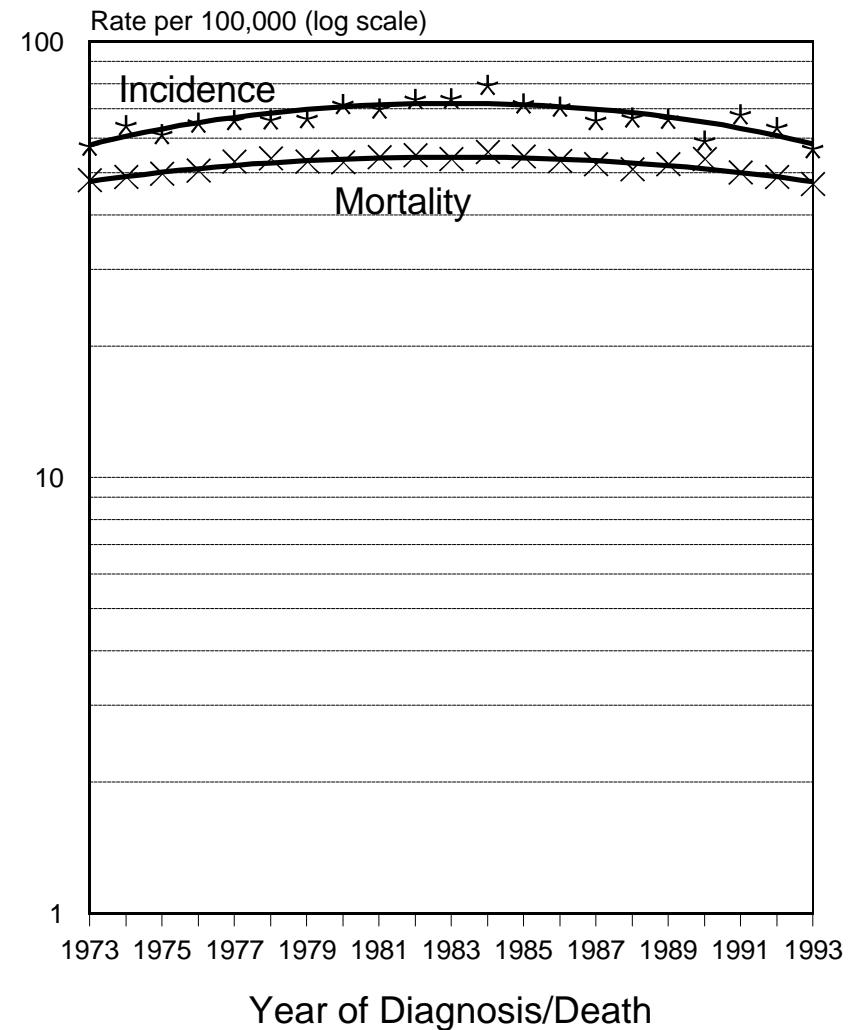
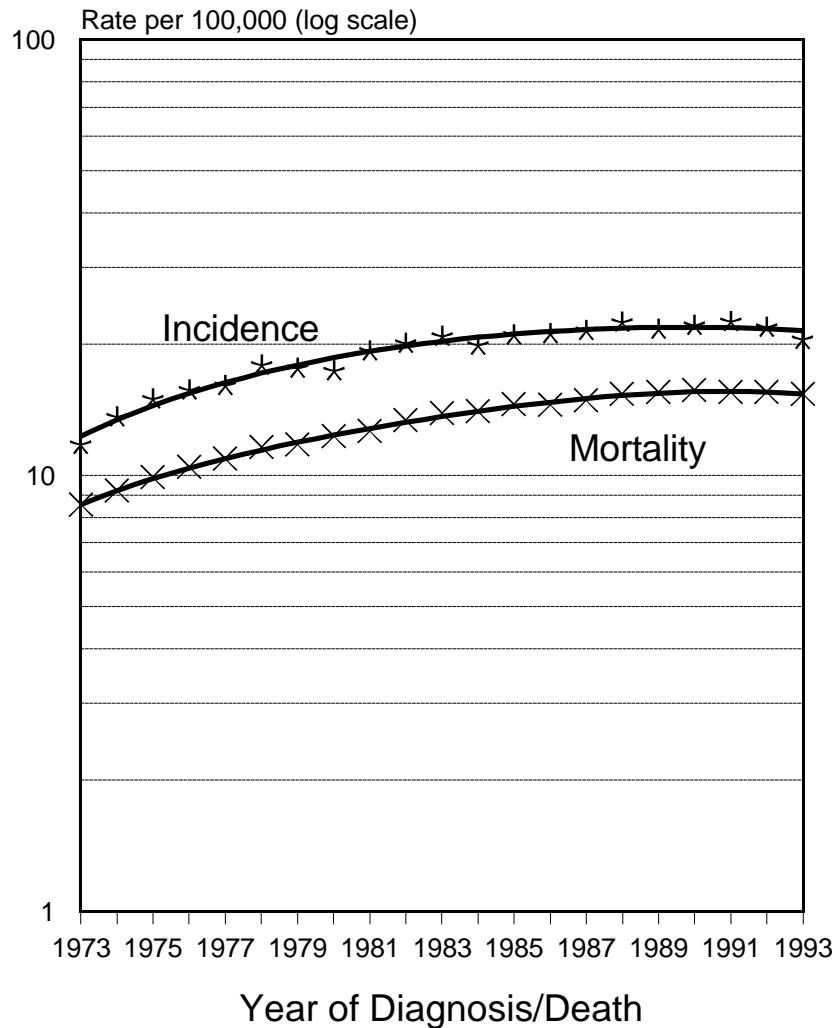


Figure XV-1

# SEER Incidence and U.S. Mortality Lung, Female, Under 65 Years of Age By Race

## White



## Black

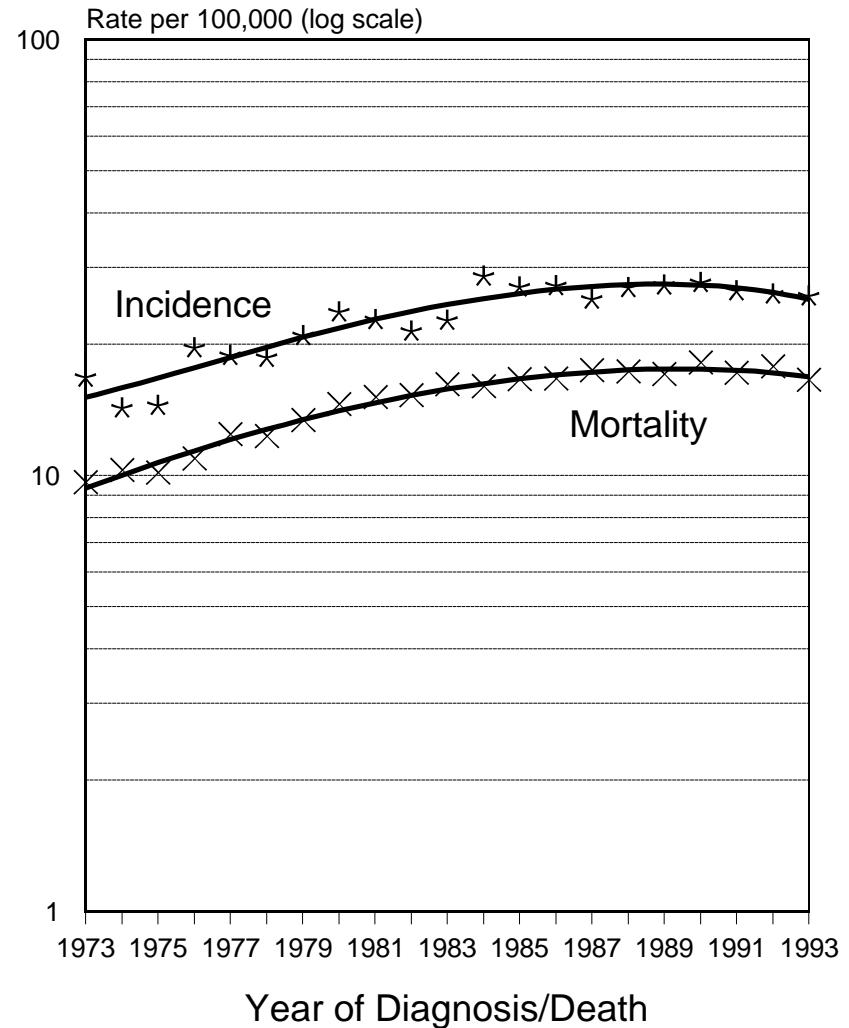
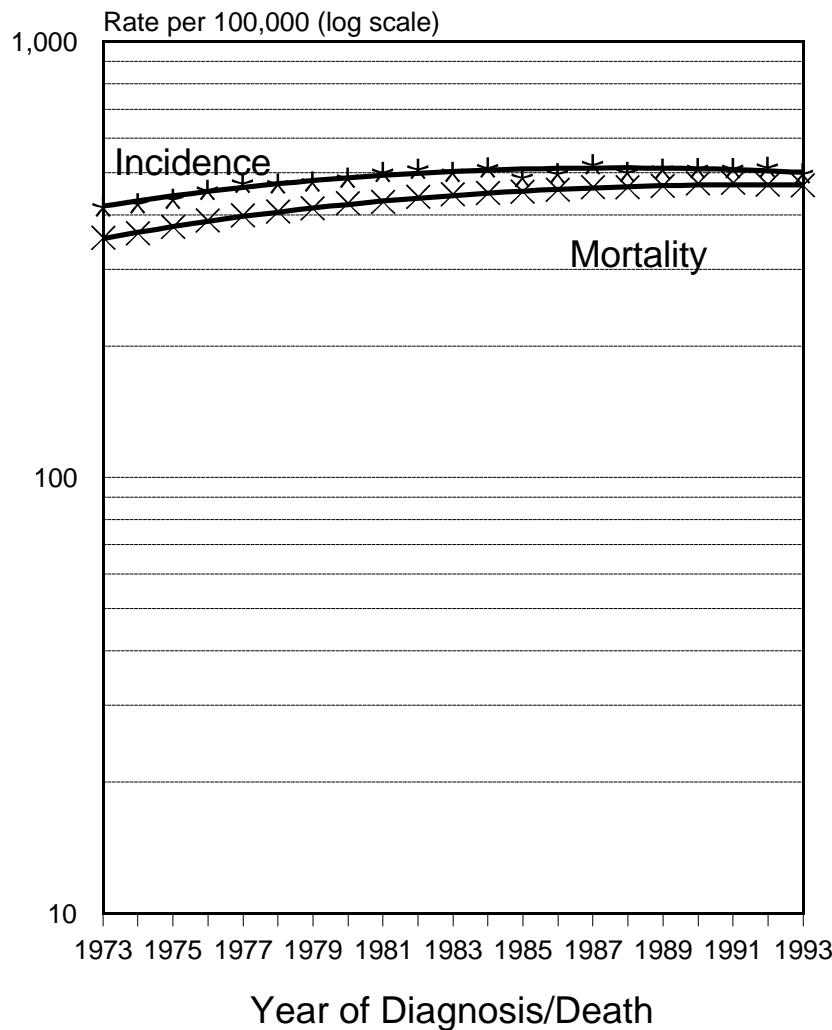


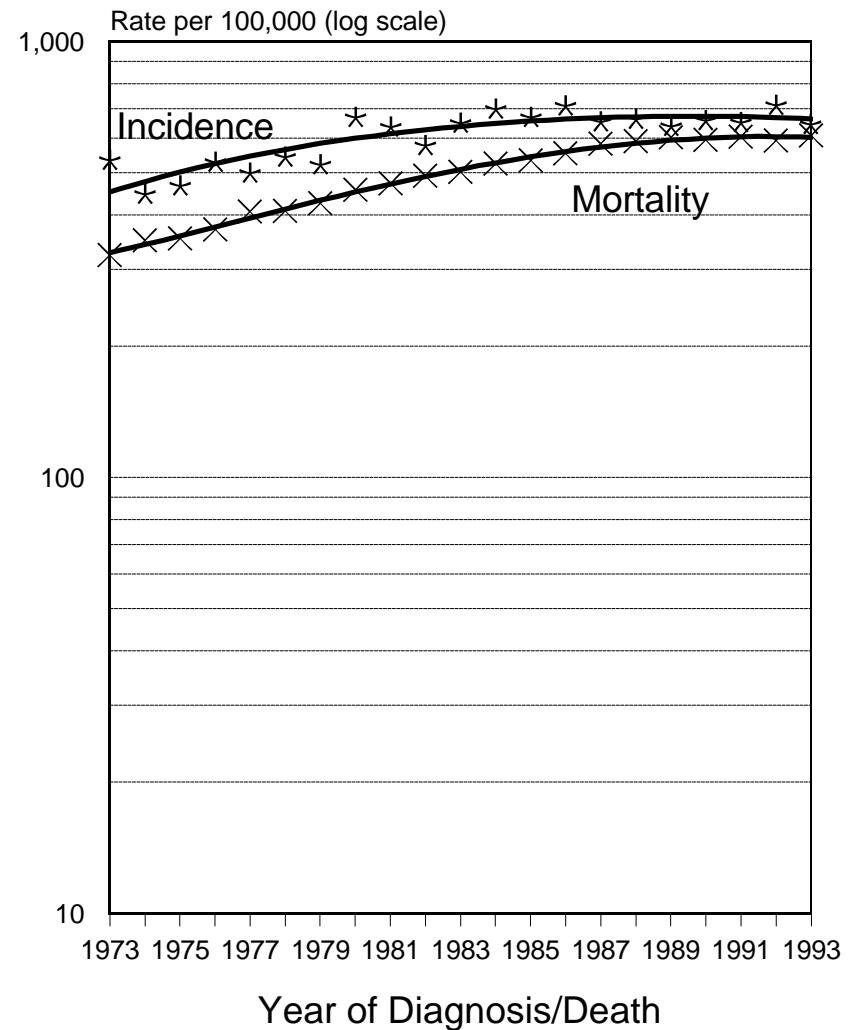
Figure XV-2

# SEER Incidence and U.S. Mortality Lung, Male, Ages 65 and Over By Race

## White

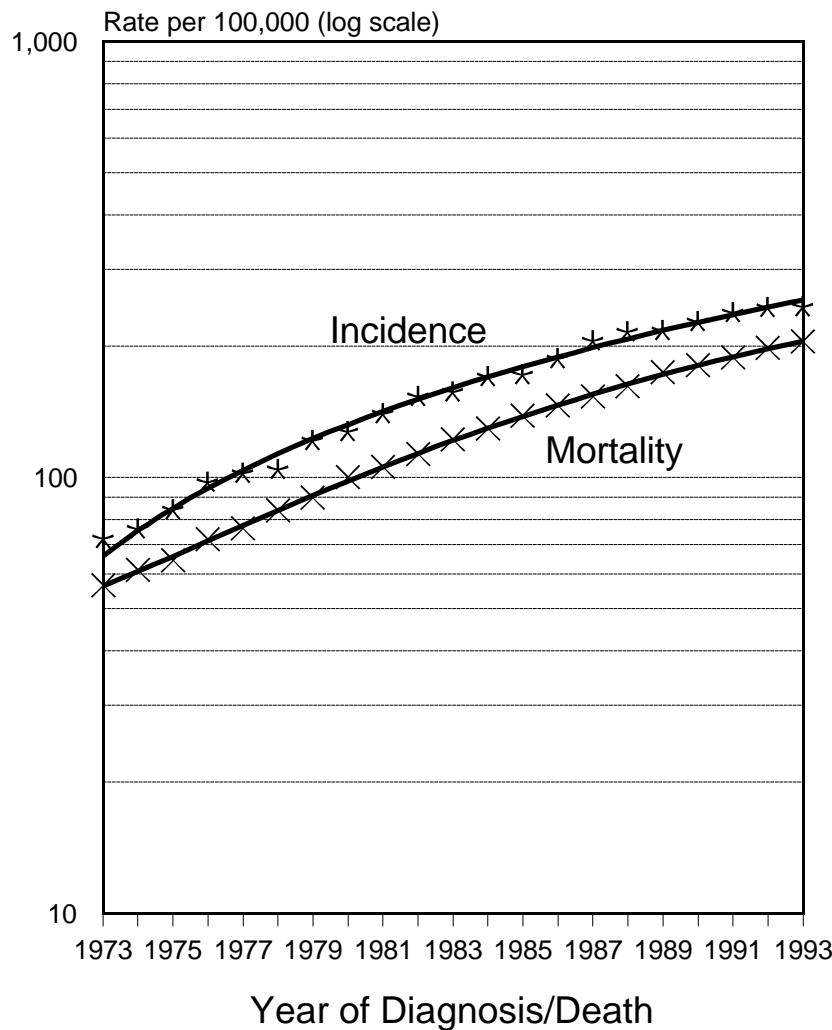


## Black



# SEER Incidence and U.S. Mortality Lung, Female, Ages 65 and Over By Race

## White



## Black

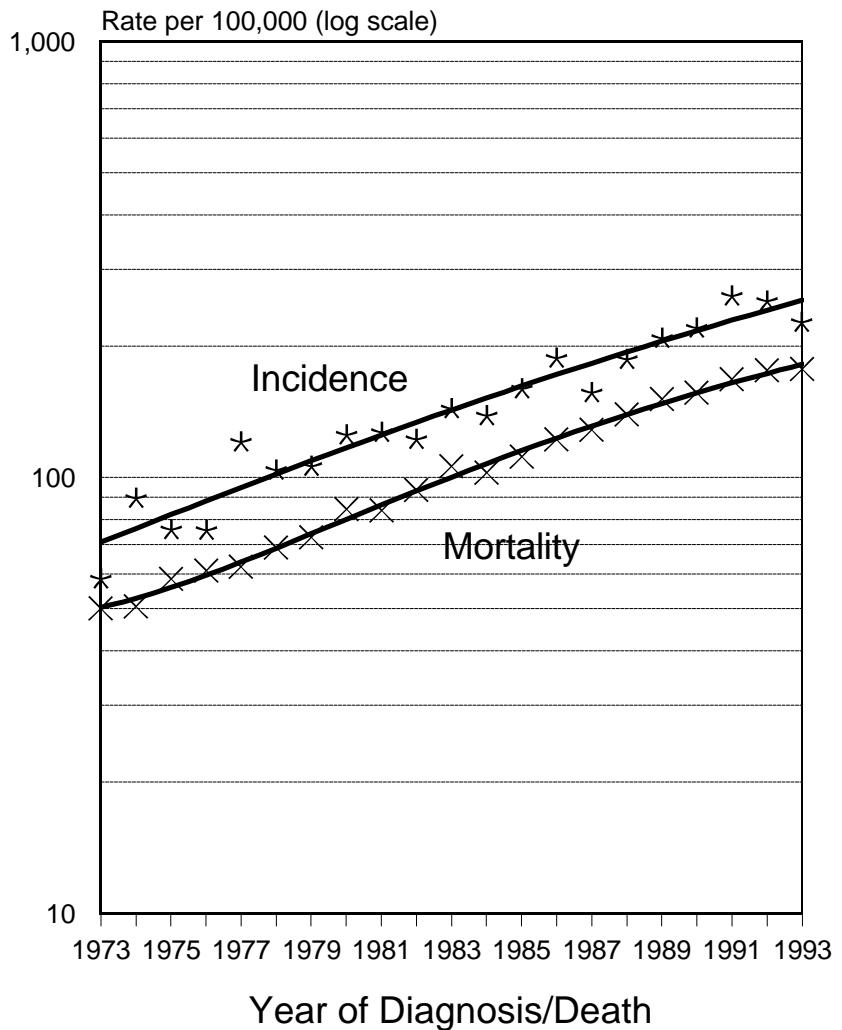
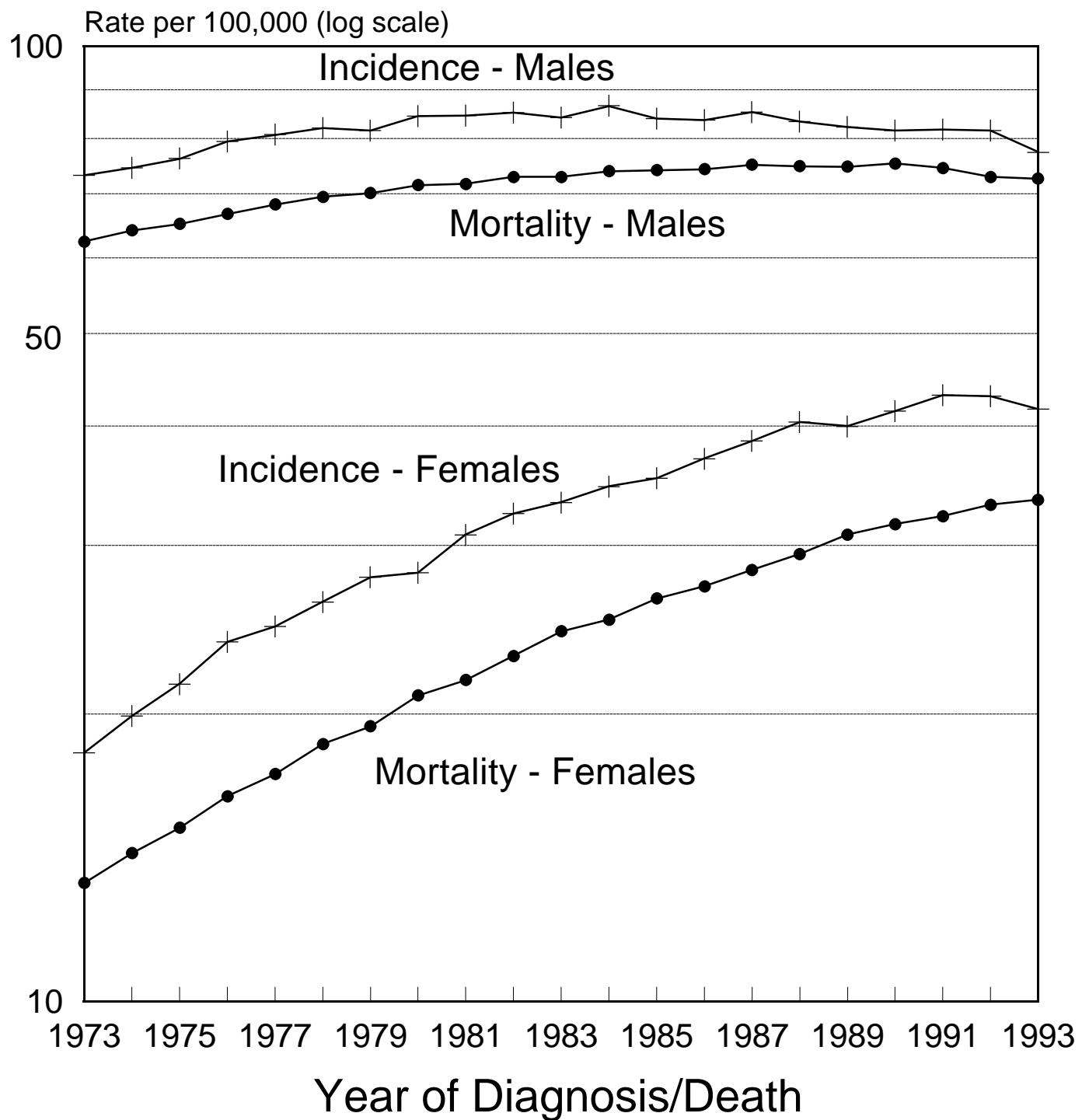


Figure XV-5

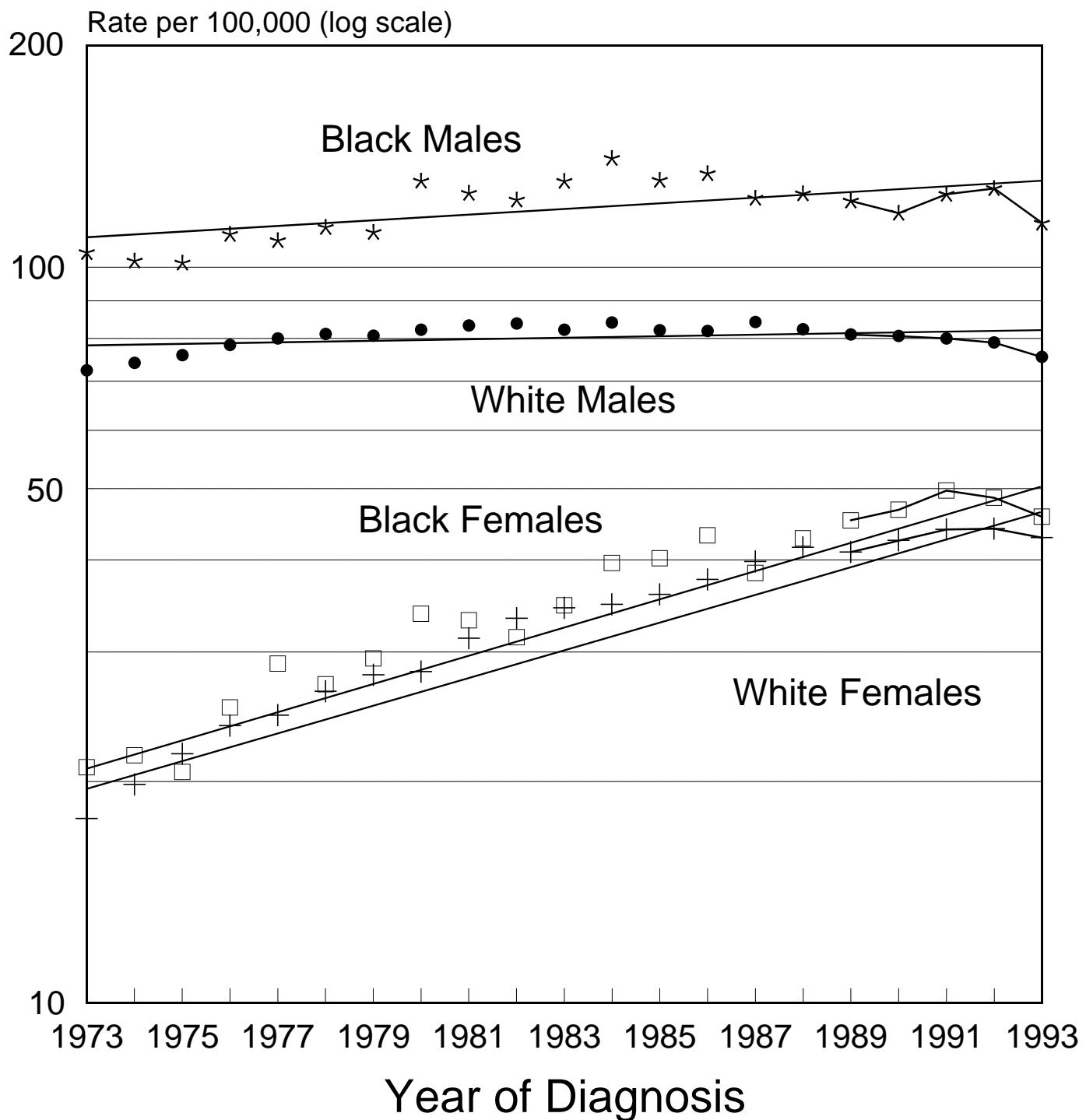
# Cancer of the Lung & Bronchus SEER Incidence & U.S. Mortality Rates, 1973-93 By Sex, All Races



Age-adjusted to 1970 Standard

Figure XV-6

# Cancer of the Lung & Bronchus SEER Incidence, 1973-93 By Sex and Race



Age-adjusted to 1970 Standard  
Recent trend, 1989-93, highlighted