

Table XV-1  
LUNG AND BRONCHUS CANCER (Invasive)

TRENDS IN SEER INCIDENCE AND U.S. MORTALITY USING THE JOINPOINT REGRESSION PROGRAM, 1973-1998  
WITH UP TO THREE JOINPOINTS BY RACE AND SEX

	All Races		Whites		Blacks	
	Year	APC	Year	APC	Year	APC
<u>SEER Cancer Incidence</u>						
Sex - Male and Female	1973-81	3.0★	1973-81	3.0★	1973-84	3.4★
	1981-91	0.9★	1981-91	1.1★	1984-98	-0.8★
	1991-98	-1.2★	1991-98	-1.2★		
Sex - Male	1973-81	1.9★	1973-81	1.7★	1973-84	3.0★
	1981-91	-0.4★	1981-91	-0.4★	1984-98	-1.8★
	1991-98	-2.4★	1991-98	-2.5★		
Sex - Female	1973-76	9.1★	1973-82	6.5★	1973-90	4.7★
	1976-83	5.2★	1982-91	3.2★	1990-98	-0.7
	1983-91	3.1★	1991-98	0.4		
	1991-98	0.2				
<u>U.S. Cancer Mortality</u>						
Sex - Male and Female	1973-80	2.9★	1973-80	2.8★	1973-82	3.3★
	1980-90	1.7★	1980-89	1.8★	1982-90	1.7★
	1990-93	-0.2	1989-93	0.3	1990-98	-1.1★
	1993-98	-0.8★	1993-98	-0.8★		
Sex - Male	1973-80	2.0★	1973-80	1.8★	1973-82	2.9★
	1980-90	0.5★	1980-90	0.5★	1982-90	1.1★
	1990-98	-1.8★	1990-98	-1.7★	1990-98	-2.2★
Sex - Female	1973-83	6.1★	1973-82	6.3★	1973-81	6.6★
	1983-91	3.7★	1982-89	4.1★	1981-90	4.1★
	1991-98	0.9★	1989-93	2.4★	1990-98	1.1★
			1993-98	0.6★		

The APC is the Annual Percent Change based on rates age-adjusted to the 1970 U.S. standard population using the Joinpoint Regression Program.

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

Table XV-2

SMALL CELL LUNG AND BRONCHUS CANCER (Invasive) AND NON-SMALL CELL LUNG AND BRONCHUS CANCER (Invasive)TRENDS IN SEER INCIDENCE USING THE JOINPOINT REGRESSION PROGRAM, 1973-1998  
WITH UP TO THREE JOINPOINTS BY RACE AND SEX

	All Races		Whites		Blacks	
	Year	APC	Year	APC	Year	APC
<u>SEER Cancer Incidence for Small Cell Lung and Bronchus</u>						
Sex - Male and Female	1973-81	6.9★	1973-81	7.1★	1973-86	4.6★
	1981-88	1.8★	1981-88	1.9★	1986-98	-2.7★
	1988-98	-2.3★	1988-98	-2.1★		
Sex - Male	1973-80	6.5★	1973-80	6.5★	1973-86	3.9★
	1980-88	0.4	1980-88	0.4	1986-98	-4.2★
	1988-98	-3.6★	1988-98	-3.5★		
Sex - Female	1973-82	9.3★	1973-82	9.8★	1973-91	5.0★
	1982-89	3.6★	1982-89	3.6★	1991-98	-4.2
	1989-98	-1.1★	1989-98	-0.9		
<u>SEER Cancer Incidence for Non-Small Cell Lung and Bronchus</u>						
Sex - Male and Female	1973-81	2.3★	1973-77	3.3★	1973-84	3.1★
	1981-92	0.9★	1977-91	1.3★	1984-98	-0.7★
	1992-98	-1.2★	1991-98	-0.9★		
Sex - Male	1973-81	1.2★	1973-81	1.0★	1973-84	2.7★
	1981-92	-0.4★	1981-92	-0.4★	1984-98	-1.7★
	1992-98	-2.4★	1992-98	-2.5★		
Sex - Female	1973-76	8.9★	1973-76	9.8★	1973-90	4.6★
	1976-84	4.4★	1976-88	4.3★	1990-98	-0.3
	1984-91	3.2★	1988-98	1.4★		
	1991-98	0.7★				

The APC is the Annual Percent Change based on rates age-adjusted to the 1970 U.S. standard population using the Joinpoint Regression Program.

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

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	42.5	73.2	18.3	41.6	72.5	17.8	59.0	105.1	20.9
1974	43.9	74.6	19.9	43.4	74.2	19.8	58.7	101.7	21.7
1975	45.4	76.2	21.5	45.2	75.9	21.9	56.5	101.0	20.6
1976	47.8	79.4	23.8	47.2	78.5	23.8	62.5	110.7	25.2
1977	49.0	80.8	24.8	48.3	80.0	24.7	64.2	108.7	28.9
1978	50.2	82.0	26.2	49.8	81.2	26.5	65.0	113.5	27.1
1979	50.9	81.4	27.8	50.5	80.7	28.0	65.2	111.3	29.4
1980	52.4	84.5	28.2	51.3	82.3	28.3	76.0	131.0	33.8
1981	53.9	84.5	30.9	53.5	83.4	31.3	73.2	126.1	33.0
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	54.6	82.2	34.4	75.9	130.8	34.7
1984	56.8	86.5	34.7	55.7	84.2	34.9	82.7	140.4	39.8
1985	56.1	83.8	35.3	55.5	82.0	36.0	79.0	131.3	40.2
1986	56.9	83.7	37.0	56.4	82.0	37.7	81.4	134.2	43.0
1987	58.6	85.4	38.6	58.7	84.5	39.8	74.4	124.0	38.4
1988	58.8	83.5	40.4	58.9	82.4	41.7	77.9	126.1	42.8
1989	58.1	82.4	40.1	58.1	81.3	41.2	78.4	123.6	45.8
1990	58.7	81.8	41.6	58.9	81.0	42.6	76.2	117.5	46.8
1991	59.6	81.7	43.1	59.3	80.2	44.2	81.5	125.2	49.7
1992	59.6	81.7	43.1	59.2	79.5	44.4	81.7	127.3	48.7
1993	57.9	78.6	42.3	58.0	77.2	43.8	75.1	115.8	45.7
1994	57.2	75.6	43.4	57.3	74.7	44.5	76.1	112.9	49.2
1995	56.8	74.7	43.1	57.0	73.0	44.9	74.0	116.6	43.2
1996	56.0	72.6	43.5	56.3	71.2	45.1	72.3	105.5	48.4
1997	55.8	70.8	44.3	56.2	69.3	46.3	69.9	106.6	43.4
1998	54.8	69.8	43.4	55.0	68.4	44.8	70.1	100.6	47.9
<u>AGE-ADJUSTED RATES, 1994-98</u>									
AGE AT DIAGNOSIS:									
All ages	56.1	72.6	43.5	56.3	71.3	45.1	72.4	108.3	46.4
Under 65	24.0	28.4	19.9	23.6	26.9	20.4	36.9	52.1	24.6
65 and over	349.1	476.5	259.6	355.0	476.2	270.6	396.5	620.8	245.3
All ages (world std.) <sup>λ</sup>	43.7	55.7	34.3	43.8	54.4	35.5	57.8	85.3	37.5
<u>AGE-SPECIFIC RATES, 1994-98</u>									
AGE AT DIAGNOSIS:									
0-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	0.4	-	-	-	-	-	-	-	-
25-29	0.5	0.6	-	0.5	-	-	-	-	-
30-34	1.7	1.8	1.5	1.6	1.7	1.5	2.3	-	-
35-39	4.9	5.1	4.8	4.4	4.3	4.5	9.7	12.3	7.5
40-44	11.8	13.3	10.2	10.0	10.8	9.3	25.8	33.9	18.8
45-49	28.9	31.9	26.1	27.2	28.6	25.7	52.1	68.1	38.2
50-54	66.5	76.0	57.3	63.9	70.3	57.7	112.5	151.8	79.2
55-59	127.4	151.7	104.6	126.2	144.2	108.9	197.6	290.3	123.0
60-64	208.9	256.0	166.4	211.1	249.6	175.2	283.3	410.4	184.8
65-69	305.5	389.0	235.0	313.2	387.5	249.3	354.7	515.0	229.5
70-74	383.8	508.0	287.3	388.5	502.3	299.5	459.6	713.2	279.7
75-79	402.7	556.3	294.5	410.0	559.6	305.1	441.4	709.2	265.1
80-84	373.9	553.6	268.4	380.0	561.4	275.4	393.1	695.8	227.8
85+	253.0	448.3	171.9	250.9	452.3	170.8	254.1	439.0	171.2

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

SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

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

Table 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	-
1974	5.6	8.7	3.0	5.7	9.0	3.1	5.1	8.2	-
1975	6.0	9.1	3.5	6.2	9.5	3.6	5.3	7.9	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	-
1979	7.8	11.5	4.9	8.1	12.0	5.1	6.9	10.6	4.0
1980	8.1	12.5	4.7	8.4	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	4.1
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	8.3	13.3	4.6
1984	9.6	13.3	6.7	9.9	13.7	7.1	9.7	13.9	6.4
1985	9.3	13.1	6.4	9.6	13.4	6.7	10.0	15.7	5.7
1986	10.0	13.6	7.2	10.2	13.9	7.4	11.3	16.0	7.8
1987	9.5	12.3	7.5	10.0	12.6	8.1	8.7	12.8	5.7
1988	10.2	13.4	7.7	10.7	13.7	8.4	9.5	15.8	5.0
1989	10.0	12.8	7.8	10.4	13.1	8.3	10.6	15.0	7.7
1990	9.4	11.9	7.5	10.0	12.4	8.1	8.4	12.2	5.7
1991	10.0	12.1	8.4	10.4	12.4	8.8	11.0	13.9	9.0
1992	9.2	11.6	7.5	9.7	11.9	8.0	8.9	11.5	7.0
1993	8.8	10.7	7.4	9.2	10.9	8.0	8.4	11.6	6.2
1994	8.6	10.1	7.5	9.0	10.3	8.1	8.8	11.8	6.7
1995	8.6	10.5	7.2	9.1	10.8	7.8	7.9	11.4	5.6
1996	8.5	10.3	7.1	9.0	10.7	7.7	7.5	9.6	6.1
1997	8.3	9.3	7.6	8.8	9.5	8.4	6.9	9.2	5.3
1998	7.9	9.1	7.0	8.4	9.4	7.6	8.2	10.4	6.5
<u>AGE-ADJUSTED RATES, 1994-98</u>									
AGE AT DIAGNOSIS:									
All ages	8.4	9.8	7.3	8.9	10.1	7.9	7.9	10.4	6.0
Under 65	3.9	4.4	3.6	4.2	4.5	3.9	3.9	4.9	3.1
65 and over	48.9	59.9	41.2	51.4	61.4	44.4	43.9	60.8	32.7
All ages (world std.) <sup>\$</sup>	6.7	7.7	5.8	7.1	8.0	6.4	6.3	8.2	4.9
<u>AGE-SPECIFIC RATES, 1994-98</u>									
AGE AT DIAGNOSIS:									
0-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	0.4	-	0.5	0.4	-	-	-	-	-
40-44	1.3	1.4	1.3	1.4	1.5	1.3	-	-	-
45-49	4.1	4.3	4.0	4.5	4.7	4.3	3.4	-	-
50-54	10.8	12.0	9.6	11.4	12.6	10.2	11.9	13.5	10.6
55-59	22.0	24.8	19.3	23.3	25.6	21.0	23.8	31.1	18.0
60-64	36.0	39.8	32.6	38.7	41.1	36.4	32.6	44.0	23.7
65-69	48.8	55.8	43.0	51.8	57.4	47.0	45.2	55.3	37.4
70-74	56.8	67.5	48.6	59.9	68.9	52.9	50.4	71.0	35.8
75-79	54.6	69.4	44.1	57.0	71.6	46.7	48.3	66.3	36.5
80-84	41.4	56.3	32.7	43.0	57.4	34.6	33.4	59.9	-
85+	17.4	32.6	11.1	17.6	33.1	11.5	-	-	-

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

SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

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

Table 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	65.1	15.6	36.6	64.4	15.1	52.0	93.1	18.2
1974	38.4	65.8	16.9	37.7	65.2	16.8	53.6	93.5	19.2
1975	39.4	67.1	18.0	38.9	66.4	18.2	51.2	93.1	17.4
1976	41.5	69.4	20.3	40.8	68.4	20.2	55.2	99.6	20.8
1977	42.1	69.9	20.9	41.3	68.9	20.7	56.9	98.8	23.7
1978	42.5	70.2	21.5	41.8	69.2	21.6	57.8	100.6	24.3
1979	43.1	69.9	22.9	42.3	68.7	22.8	58.3	100.7	25.4
1980	44.3	72.0	23.5	43.0	69.6	23.3	67.0	115.7	29.7
1981	45.2	71.7	25.3	44.5	70.4	25.4	64.6	111.6	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	67.6	117.5	30.2
1984	47.2	73.2	27.9	45.8	70.5	27.8	73.1	126.5	33.4
1985	46.8	70.7	28.9	45.9	68.6	29.2	69.1	115.6	34.5
1986	47.0	70.1	29.9	46.2	68.0	30.3	70.1	118.2	35.3
1987	49.0	73.1	31.1	48.7	71.9	31.7	65.7	111.2	32.7
1988	48.6	70.1	32.7	48.3	68.7	33.3	68.3	110.3	37.8
1989	48.2	69.6	32.3	47.8	68.2	32.8	67.8	108.6	38.1
1990	49.3	69.8	34.1	48.9	68.5	34.5	67.7	105.3	41.2
1991	49.6	69.6	34.8	49.0	67.8	35.3	70.4	111.3	40.6
1992	50.4	70.1	35.6	49.6	67.6	36.4	72.8	115.8	41.7
1993	49.1	67.9	34.9	48.8	66.2	35.9	66.7	104.2	39.5
1994	48.6	65.6	35.9	48.3	64.4	36.4	67.3	101.1	42.6
1995	48.2	64.3	36.0	47.9	62.2	37.2	66.0	105.3	37.7
1996	47.5	62.2	36.5	47.3	60.5	37.4	64.7	95.8	42.3
1997	47.5	61.5	36.7	47.3	59.8	37.9	63.0	97.4	38.1
1998	46.8	60.7	36.3	46.6	59.1	37.2	62.0	90.1	41.4
<u>AGE-ADJUSTED RATES, 1994-98</u>									
AGE AT DIAGNOSIS:									
All ages	47.7	62.8	36.3	47.5	61.1	37.2	64.5	97.8	40.4
Under 65	20.0	24.0	16.3	19.4	22.4	16.5	33.0	47.2	21.5
65 and over	300.2	416.6	218.4	303.6	414.8	226.2	352.7	560.0	212.7
All ages (world std.)λ	37.0	48.0	28.5	36.7	46.5	29.2	51.5	77.0	32.6
<u>AGE-SPECIFIC RATES, 1994-98</u>									
AGE AT DIAGNOSIS:									
0-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	0.4	-	-	-	-	-	-	-	-
25-29	0.5	0.6	-	0.5	-	-	-	-	-
30-34	1.6	1.7	1.4	1.5	1.6	1.3	2.2	-	-
35-39	4.5	4.7	4.3	4.0	3.9	4.1	8.9	11.3	6.8
40-44	10.4	11.9	9.0	8.6	9.3	7.9	24.4	32.6	17.4
45-49	24.8	27.6	22.1	22.7	23.9	21.4	48.7	65.2	34.4
50-54	55.7	64.0	47.7	52.6	57.7	47.5	100.6	138.3	68.6
55-59	105.4	126.9	85.2	102.9	118.7	87.8	173.8	259.2	105.0
60-64	172.9	216.2	133.9	172.4	208.5	138.8	250.8	366.4	161.2
65-69	256.6	333.3	192.0	261.4	330.2	202.3	309.5	459.8	192.1
70-74	327.0	440.5	238.7	328.6	433.4	246.6	409.2	642.2	243.9
75-79	348.1	486.9	250.4	353.0	488.0	258.4	393.0	642.9	228.6
80-84	332.5	497.4	235.6	337.0	504.0	240.7	359.7	635.9	208.9
85+	235.6	415.6	160.7	233.3	419.3	159.3	235.4	402.6	160.3

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

SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

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

Table XV-6  
LUNG AND BRONCHUS CANCER (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
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	75.2	31.6	49.4	73.2	32.0	62.5	107.0	31.8
1991	50.0	74.4	32.2	49.5	72.5	32.6	61.6	104.6	32.0
1992	49.9	72.8	33.1	49.4	71.0	33.5	61.5	102.4	33.4
1993	50.1	72.5	33.5	49.7	70.7	34.1	60.9	102.3	32.3
1994	49.5	70.8	33.7	49.2	69.1	34.4	60.0	99.0	33.2
1995	49.2	69.4	34.2	48.9	67.9	34.8	59.3	97.0	33.4
1996	48.8	68.1	34.3	48.6	66.6	35.0	58.3	94.3	33.4
1997	48.3	66.6	34.5	48.1	65.3	35.1	57.6	91.2	34.5
1998	47.9	65.4	34.6	47.8	64.2	35.3	56.8	88.8	34.7
<u>AGE-ADJUSTED RATES, 1994-98</u>									
AGE AT DEATH:									
All ages	48.7	68.0	34.3	48.5	66.6	34.9	58.4	94.0	33.9
Under 65	19.7	25.3	14.5	19.3	24.1	14.7	27.4	42.1	16.0
65 and over	313.8	457.6	214.5	315.4	454.1	219.2	341.0	567.7	197.2
All ages (world std.) <sup>φ</sup>	37.5	51.7	26.6	37.3	50.4	27.1	46.0	73.1	26.8
<u>AGE-SPECIFIC RATES, 1994-98</u>									
AGE AT DEATH:									
0-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.0	-	-	-	-	-	-	-	-
20-24	0.1	0.1	-	0.1	0.1	-	-	-	-
25-29	0.2	0.3	0.2	0.2	0.2	0.2	0.3	-	-
30-34	1.0	1.1	0.9	1.0	1.1	0.9	1.1	1.3	0.9
35-39	3.3	3.6	3.0	3.1	3.2	2.9	5.3	6.7	4.0
40-44	9.2	11.0	7.4	8.4	9.8	7.1	16.2	22.4	10.9
45-49	22.4	27.4	17.6	21.0	24.8	17.3	37.9	54.9	23.6
50-54	53.5	67.1	40.7	51.6	62.5	41.0	82.8	126.2	47.4
55-59	103.9	133.6	76.5	101.9	127.4	77.9	144.2	223.1	82.5
60-64	178.7	237.0	126.8	177.7	230.1	130.0	224.2	353.4	127.3
65-69	261.1	357.0	180.9	262.9	353.5	185.9	290.3	449.2	171.8
70-74	335.4	471.1	230.6	335.6	465.0	234.7	387.5	620.9	227.7
75-79	361.4	525.7	247.1	363.9	522.1	253.1	377.4	644.7	210.6
80-84	365.1	577.0	243.3	367.9	575.5	248.3	364.6	684.8	199.7
85+	281.8	521.3	185.5	283.2	523.9	187.5	279.8	551.9	167.6

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

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

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

Table 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
<b>5-YR RELATIVE SURVIVAL RATES</b>									
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	11.2	15.8	12.5	11.1	16.0	11.5	11.0	13.1
1977-79 <sup>b</sup>	13.4	11.8	17.1	13.6	12.0	17.2	11.1	9.1	17.2
1980-82 <sup>b</sup>	13.4	12.1	16.1	13.5	12.2	16.2	12.1	10.9	15.5
1983-85 <sup>b</sup>	13.6	11.9	16.8	13.8	12.0	17.0	11.4	10.3	14.1
1986-88 <sup>b</sup>	13.3	12.0	15.4	13.5	12.0	15.8	11.9	11.9	11.8
1989-91 <sup>b</sup>	13.9	12.4	16.2	14.3	12.7	16.5	10.7	9.5	13.1
1992-97 <sup>b</sup>	14.5 <sup>Q</sup>	13.0 <sup>Q</sup>	16.5 <sup>Q</sup>	14.8 <sup>Q</sup>	13.3 <sup>Q</sup>	16.8 <sup>Q</sup>	11.7	10.4	14.1
1992-97 <sup>b</sup>									
ALL STAGES	14.5	13.0	16.5	14.8	13.3	16.8	11.7	10.4	14.1
LOCALIZED	48.0	44.2	52.2	48.8	45.0	52.7	41.2	36.9	47.5
REGIONAL	21.4	20.0	23.4	21.9	20.7	23.5	17.1	15.9	19.1
DISTANT	2.5	2.2	2.9	2.4	2.0	2.8	2.8	2.3	3.7
UNSTAGED	8.5	7.6	9.7	8.9	7.8	10.1	8.3	8.1	8.7
<b>STAGE DISTRIBUTION (%) 1992-97<sup>b</sup></b>									
ALL STAGES									
Number of cases	74,817	43,670	31,147	62,577	35,800	26,777	7,894	5,084	2,810
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	15	14	16	15	14	16	13	13	15
REGIONAL	24	24	23	24	24	23	24	24	23
DISTANT	48	49	47	47	48	46	51	52	50
UNSTAGED	14	13	14	14	14	15	12	12	13
<b>5-YR RELATIVE SURVIVAL RATES, 1992-97<sup>b</sup></b>									
AGE AT DIAGNOSIS:									
<45	21.9	18.6	26.3	24.4	21.0	28.7	15.4	11.0	22.9
45-54	17.4	15.7	19.8	18.5	16.6	20.8	12.4	11.9	13.2
55-64	16.4	14.2	19.5	16.8	14.7	19.7	13.2	11.2	17.2
65-74	14.6	13.3	16.4	15.0	13.5	16.9	10.6	10.0	11.7
75+	9.1	7.9	10.4	9.3	8.1	10.6	8.4	6.7	10.6
Under 65	17.1	15.0	20.2	17.8	15.7	20.7	13.2	11.3	16.8
65 and over	12.6	11.5	14.1	12.9	11.7	14.4	10.0	9.1	11.3

<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 1997.

The difference in rates between 1974-76 and 1992-97 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.

<sup>Q</sup>  
<sup>↑</sup>  
<sup>-</sup>

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	3.0	5.0	3.6	2.9	5.0	3.4	3.6	3.1			
1977-79 <sup>b</sup>	4.5	3.3	6.8	4.5	3.3	6.8	3.8	3.4	4.8			
1980-82 <sup>b</sup>	4.7	3.8	6.2	4.8	4.0	6.1	4.0	3.0	6.4			
1983-85 <sup>b</sup>	4.8	3.5	6.7	4.8	3.6	6.6	4.7	2.5	8.5			
1986-88 <sup>b</sup>	5.0	3.9	6.4	5.2	4.0	6.7	3.9	3.4	4.6			
1989-91 <sup>b</sup>	5.4	4.6	6.5	5.5	4.4	6.8	3.7	4.3	2.9			
1992-97 <sup>b</sup>	6.2 <sup>Q</sup>	5.1 <sup>Q</sup>	7.5 <sup>Q</sup>	6.3 <sup>Q</sup>	5.2 <sup>Q</sup>	7.4 <sup>Q</sup>	4.4 <sup>Q</sup>	2.7 <sup>Q</sup>	6.6			
1992-97 <sup>b</sup>	ALL STAGES			6.2	5.1	7.5	6.3	5.2	7.4			
	LOCALIZED			18.8	16.7	21.0	19.9	17.7	22.4			
	REGIONAL			13.1	11.6	14.5	13.4	11.9	14.7			
	DISTANT			2.4	1.7	3.1	2.2	1.7	2.8			
	UNSTAGED			9.2	7.6	10.8	9.6	7.8	11.2			
<b>STAGE DISTRIBUTION (%) 1992-97<sup>b</sup></b>												
ALL STAGES												
Number of cases	11,637	6,266	5,371	10,238	5,421	4,817	872	494	378			
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%			
LOCALIZED	6	6	6	6	6	6	7	7	7			
REGIONAL	20	18	21	19	18	21	22	22	24			
DISTANT	62	64	60	63	65	60	62	64	60			
UNSTAGED	12	11	13	12	12	13	9	8	10			
<b>5-YR RELATIVE SURVIVAL RATES, 1992-97<sup>b</sup></b>												
AGE AT DIAGNOSIS:												
<45	8.8	6.0	11.7	11.1	7.2	15.2	1.9	-	-			
45-54	9.4	8.4	10.7	9.8	9.2	10.6	5.7	3.8	0.0			
55-64	7.2	5.3	9.3	7.3	5.4	9.3	3.4	1.0	6.1			
65-74	5.6	4.4	6.9	5.6	4.3	6.9	4.5	2.3	6.6			
75+	3.7	3.4	4.0	3.5	3.5	3.6	6.6	4.5	7.9			
Under 65	7.9	6.3	9.8	8.2	6.6	10.0	3.7	2.3	5.8			
65 and over	5.0	4.1	5.9	4.9	4.1	5.7	5.1	2.9	7.2			

<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 1997.

The difference in rates between 1974-76 and 1992-97 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	12.4	17.8	14.0	12.4	18.1	12.4	11.7	15.0
1977-79 <sup>b</sup>	15.1	13.3	19.4	15.4	13.7	19.6	12.1	9.8	19.4
1980-82 <sup>b</sup>	15.2	13.6	18.4	15.4	13.8	18.7	13.2	12.0	16.9
1983-85 <sup>b</sup>	15.5	13.5	19.2	15.9	13.8	19.7	12.3	11.3	15.1
1986-88 <sup>b</sup>	15.1	13.6	17.6	15.4	13.7	18.2	13.1	13.1	13.1
1989-91 <sup>b</sup>	15.7	13.9	18.5	16.3	14.4	19.0	11.8	10.1	14.9
1992-97 <sup>b</sup>	16.1 <sup>Q</sup>	14.3 <sup>Q</sup>	18.4 <sup>Q</sup>	16.6 <sup>Q</sup>	14.8 <sup>Q</sup>	18.9 <sup>Q</sup>	12.7	11.3	15.3
1992-97 <sup>b</sup>									
ALL STAGES	16.1	14.3	18.4	16.6	14.8	18.9	12.7	11.3	15.3
LOCALIZED	50.1	46.3	54.4	50.9	47.2	54.9	43.5	39.0	50.1
REGIONAL	22.6	21.0	25.0	23.2	21.7	25.3	18.1	16.7	20.6
DISTANT	2.5	2.3	2.9	2.4	2.1	2.8	3.0	2.6	3.6
UNSTAGED	8.4	7.6	9.5	8.7	7.8	9.8	8.2	8.0	8.7
<b>STAGE DISTRIBUTION (%) 1992-97<sup>b</sup></b>									
ALL STAGES									
Number of cases	63,180	37,404	25,776	52,339	30,379	21,960	7,022	4,590	2,432
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	16	15	18	17	15	19	14	13	16
REGIONAL	25	25	23	25	25	23	24	24	23
DISTANT	45	46	44	44	45	43	50	51	48
UNSTAGED	14	14	14	14	14	15	12	12	13
<b>5-YR RELATIVE SURVIVAL RATES, 1992-97<sup>b</sup></b>									
AGE AT DIAGNOSIS:									
<45	23.6	20.1	28.5	26.5	23.0	30.9	16.8	11.9	25.6
45-54	19.0	17.0	21.7	20.4	18.3	23.2	13.0	12.8	13.7
55-64	18.4	15.9	22.2	19.0	16.7	22.5	14.6	12.3	19.5
65-74	16.4	14.9	18.6	16.9	15.2	19.3	11.6	11.0	12.5
75+	10.0	8.5	11.6	10.3	8.7	11.9	8.6	6.9	11.0
Under 65	19.0	16.6	22.6	20.0	17.6	23.4	14.4	12.4	18.4
65 and over	14.0	12.7	15.8	14.4	13.0	16.3	10.7	9.8	12.1

<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 1997.

The difference in rates between 1974-76 and 1992-97 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-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																				
	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
<b>Incidence</b>																					
SEER	45.4	52.4	53.9	54.9	55.0	56.8	56.1	56.9	58.6	58.8	58.1	58.7	59.6	59.6	57.9	57.2	56.8	56.0	55.8	54.8	
<b>Mortality</b>																					
U.S.	36.8	42.5	43.0	44.2	44.9	45.8	46.6	47.1	48.1	48.6	49.3	50.1	50.0	49.9	50.1	49.5	49.2	48.8	48.3	47.9	
SEER	35.5	40.0	40.2	41.5	42.5	42.0	43.4	42.4	43.7	44.5	44.8	44.2	45.7	44.7	44.2	44.0	43.2	42.3	41.8	41.9	
<b>Relative Survival Rates (SEER)</b>																					
1-year	34.3	38.3	37.7	39.2	39.6	39.1	39.7	40.4	39.7	40.2	40.4	40.4	41.2	41.1	40.8	40.9	41.4	41.0	41.0		
2-year	20.5	22.1	22.1	22.8	23.5	22.5	23.1	23.2	22.8	23.3	23.5	23.7	23.9	24.7	24.6	24.5	25.1	25.1			
3-year	15.5	16.9	16.9	17.9	18.1	17.5	17.8	17.7	17.1	17.6	17.6	18.1	18.7	18.9	18.9	19.0	19.1				
4-year	13.4	14.4	14.7	15.6	15.4	14.7	15.2	14.8	14.8	15.1	15.2	15.3	15.9	16.1	16.2	16.3					
5-year	12.1	13.0	13.2	13.9	14.1	13.1	13.7	13.2	13.3	13.3	13.9	13.7	14.0	14.2	14.7						
6-year	11.0	12.1	12.1	12.5	12.9	12.0	12.7	12.1	12.2	12.1	12.9	12.7	13.1	13.0							
7-year	10.4	11.2	11.1	11.9	11.9	11.2	11.6	11.3	11.1	11.2	11.9	11.8	11.9								
8-year	10.1	10.4	10.3	11.1	11.1	10.4	10.9	10.5	10.5	10.5	11.1	11.0									
9-year	9.8	9.7	9.6	10.5	10.4	9.6	10.2	10.0	9.8	9.8	10.4										
10-year	9.3	8.9	9.1	9.9	9.8	9.1	9.7	9.4	9.3	9.3											
11-year	9.1	8.4	8.7	9.6	9.5	8.8	9.3	8.8	8.9												
12-year	8.8	8.0	8.4	8.9	9.0	8.4	8.8	8.3													
13-year	8.4	7.5	7.9	8.6	8.6	8.1	8.4														
14-year	8.2	7.0	7.5	8.3	8.4	7.7															
15-year	7.8	6.7	7.2	7.8	8.1																
16-year	7.5	6.6	6.8	7.2																	
17-year	7.2	6.3	6.6																		
18-year	7.0	6.2																			
19-year	6.9																				
20-year	6.8																				
21-year	6.7																				
22-year	6.5																				
23-year	6.0																				

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

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Incidence</b>																				
SEER	76.2	84.5	84.5	85.1	84.1	86.5	83.8	83.7	85.4	83.5	82.4	81.8	81.7	81.7	78.6	75.6	74.7	72.6	70.8	69.8
<b>Mortality</b>																				
U.S.	65.1	71.5	71.7	72.9	72.9	73.9	74.1	74.3	75.1	74.8	74.7	75.2	74.4	72.8	72.5	70.8	69.4	68.1	66.6	65.4
SEER	61.9	65.9	65.3	65.6	67.0	65.3	66.5	64.8	65.5	65.8	65.4	63.8	64.2	62.9	61.7	60.9	58.2	56.5	54.9	55.1
<b>Relative Survival Rates (SEER)</b>																				
1-year	33.1	36.7	35.6	37.2	37.7	37.2	37.1	38.4	38.3	38.1	38.0	38.0	38.9	39.1	38.2	38.6	39.2	39.2	39.0	
2-year	19.2	20.9	20.3	21.1	21.3	20.9	21.1	21.0	21.8	21.8	22.0	21.4	22.0	23.3	22.3	22.1	23.4	23.5		
3-year	14.2	15.9	15.0	16.3	16.0	15.7	15.8	16.0	16.0	16.4	16.2	16.1	17.0	17.7	16.5	16.7	17.4			
4-year	12.2	13.5	13.1	14.0	13.6	13.0	13.1	13.1	13.7	13.6	14.0	13.4	14.0	14.8	14.0	14.0				
5-year	10.9	12.1	11.7	12.4	12.4	11.5	11.8	11.6	12.3	12.0	12.8	11.9	12.5	13.1	12.7					
6-year	9.8	11.3	10.6	11.2	11.2	10.5	10.8	10.6	11.3	10.7	11.9	11.0	11.6							
7-year	9.3	10.5	9.7	10.4	10.4	9.6	9.9	9.9	10.4	9.8	11.2	10.2	10.5							
8-year	9.0	9.6	8.8	9.8	9.6	8.7	9.2	9.1	9.9	9.1	10.6	9.3								
9-year	8.8	8.9	8.2	9.3	8.8	8.2	8.7	8.6	9.3	8.5	10.0									
10-year	8.4	8.2	7.8	8.7	8.3	7.8	8.2	8.1	8.7	8.1										
11-year	8.1	7.8	7.5	8.4	7.9	7.6	7.9	7.5	8.3											
12-year	7.8	7.2	7.1	8.0	7.5	7.4	7.5	6.9												
13-year	7.3	6.9	6.6	7.8	7.1	7.1	7.2													
14-year	7.1	6.7	6.2	7.5	6.8	6.6														
15-year	6.7	6.4	5.9	7.1	6.5															
16-year	6.6	6.2	5.6	6.4																
17-year	6.4	5.8	5.2																	
18-year	6.0	5.8																		
19-year	6.0																			
20-year	6.0																			
21-year	6.0																			
22-year	6.0																			
23-year	5.6																			

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 XV-12  
LUNG AND BRONCHUS CANCER (Invasive)  
INCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Females

Year of Diagnosis/Death

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
<b>Incidence</b>																				
SEER	21.5	28.2	30.9	32.4	33.3	34.7	35.3	37.0	38.6	40.4	40.1	41.6	43.1	43.1	42.3	43.4	43.1	43.5	44.3	43.4
<b>Mortality</b>																				
U.S.	15.2	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	33.7	34.2	34.3	34.5	34.6
SEER	15.2	20.6	21.6	23.7	24.5	24.9	26.4	25.9	27.5	28.9	29.7	29.9	32.2	31.2	31.3	31.5	32.2	31.8	31.9	32.0
<b>Relative Survival Rates (SEER)</b>																				
1-year	37.8	42.3	42.3	43.2	43.4	42.7	44.8	44.0	42.2	43.5	44.3	44.0	44.7	44.1	44.6	44.0	44.4	43.3	43.6	
2-year	24.3	25.0	26.2	26.4	27.7	25.7	26.8	27.1	24.6	25.6	25.8	27.2	26.9	26.8	28.0	27.8	27.5	27.2		
3-year	19.2	19.5	20.8	21.0	22.1	20.9	21.6	20.6	19.0	19.5	19.7	21.1	21.2	20.8	22.2	22.1	21.5			
4-year	16.7	16.6	18.2	18.7	18.9	17.8	19.1	17.8	16.6	17.3	17.2	18.1	18.6	18.0	19.2	19.1				
5-year	15.1	14.9	16.4	16.8	17.2	16.1	17.1	15.9	14.8	15.4	15.6	16.4	16.3	15.8	17.5					
6-year	14.1	13.8	15.0	15.0	16.0	14.9	16.0	14.6	13.6	14.2	14.4	15.1	15.1	14.7						
7-year	13.2	12.8	13.9	14.6	14.7	14.0	14.6	13.7	12.2	13.3	13.0	13.9	13.9							
8-year	12.7	12.1	13.1	13.6	13.8	13.2	13.8	12.8	11.5	12.5	11.8	13.2								
9-year	12.2	11.5	12.3	12.7	13.1	11.9	12.9	12.3	10.6	11.8	11.0									
10-year	11.5	10.4	11.6	12.1	12.4	11.4	12.2	11.4	10.3	11.1										
11-year	11.4	9.7	11.1	11.6	12.0	10.8	11.4	10.9	9.9											
12-year	11.2	9.5	10.7	10.5	11.4	10.1	10.9	10.5												
13-year	10.9	8.5	10.1	10.1	11.0	9.6	10.4													
14-year	10.5	7.7	9.8	9.6	10.8	9.3														
15-year	10.3	7.3	9.3	9.0	10.5															
16-year	9.5	7.2	8.7	8.4																
17-year	8.7	7.1	8.7																	
18-year	8.7	6.8																		
19-year	8.5																			
20-year	8.0																			
21-year	7.4																			
22-year	7.2																			
23-year	6.6																			

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 XV-13

LUNG AND BRONCHUS CANCER (Invasive)AGE-SPECIFIC CANCER SEER INCIDENCE RATES AND 26-YEAR TRENDS, 1973-98

By Race, Sex and Age Group

Sex/Age	All Races				Whites				Blacks			
	Average 1973-74	Rate <sup>⊕</sup> 97-98	% Change 73-98	EAPC 73-98	Average 1973-74	Rate <sup>⊕</sup> 97-98	% Change 73-98	EAPC 73-98	Average 1973-74	Rate <sup>⊕</sup> 97-98	% Change 73-98	EAPC 73-98
Males & Females	43.2	55.3	27.9	0.9*	42.5	55.6	30.6	1.0*	58.9	70.0	19.0	0.7*
0-54:	10.5	7.5	-28.6	-1.6*	10.0	7.1	-29.2	-1.7*	18.1	13.1	-27.9	-1.5*
0-14	0.1	0.0	-15.8	-	0.1	0.1	-2.5	-	0.1	0.1	-41.6	-
15-34	0.7	0.6	-10.6	-0.2	0.6	0.5	-15.5	-0.5	0.8	1.0	14.8	0.7
35-44	13.8	8.3	-39.7	-2.6*	13.1	7.2	-45.0	-2.9*	20.6	17.5	-15.5	-1.8*
45-54	58.6	43.0	-26.6	-1.5*	55.7	41.2	-26.0	-1.5*	105.1	72.4	-31.2	-1.5*
55-64	145.5	162.0	11.4	0.3	143.5	162.9	13.6	0.4	205.0	223.6	9.1	0.3
65+:	217.2	348.5	60.5	1.9*	216.4	354.2	63.7	2.0*	258.1	395.5	53.2	1.8*
65-74	227.3	338.4	48.9	1.5*	227.1	344.6	51.7	1.6*	283.3	397.3	40.2	1.5*
75+	200.8	365.1	81.8	2.4*	199.0	369.9	85.9	2.5*	216.9	392.4	81.0	2.6*
Males	73.9	70.3	-4.8	-0.3*	73.4	68.9	-6.1	-0.4*	103.4	103.6	0.1	-0.1
0-54:	14.6	8.4	-42.9	-2.4*	13.7	7.5	-45.2	-2.6*	27.8	17.4	-37.5	-2.1*
0-14	0.0	0.0	-25.0	-	0.1	0.0	-16.9	-	0.0	0.0	-	-
15-34	0.8	0.6	-24.2	-0.3	0.7	0.6	-20.1	-0.4	1.5	1.0	-31.6	-0.7
35-44	17.3	9.2	-47.0	-2.8*	16.3	7.8	-52.3	-3.2*	28.6	21.0	-26.7	-2.2*
45-54	84.0	48.3	-42.5	-2.4*	79.2	44.0	-44.4	-2.5*	164.1	99.4	-39.5	-2.0*
55-64	228.1	192.7	-15.5	-0.7*	224.3	186.7	-16.8	-0.8*	353.2	321.1	-9.1	-0.4
65+:	417.5	465.3	11.4	0.3*	422.6	463.2	9.6	0.3	492.8	609.1	23.6	0.7*
65-74	415.3	432.0	4.0	0.1	421.1	427.0	1.4	0.0	529.8	589.7	11.3	0.3
75+	421.1	519.5	23.4	0.6*	425.1	522.1	22.8	0.6*	432.5	640.9	48.2	1.5*
Females	19.1	43.8	129.9	3.0*	18.8	45.6	142.2	3.2*	21.3	45.7	113.9	2.9*
0-54:	6.6	6.6	1.2	-0.4	6.4	6.6	3.7	-0.3	9.4	9.4	0.1	-0.3
0-14	0.1	0.1	-12.3	-	0.1	0.1	5.4	-	0.2	0.2	-40.7	-
15-34	0.6	0.7	7.3	-0.1	0.7	0.6	-10.4	-0.7	0.2	0.9	334.7	-
35-44	10.3	7.5	-28.0	-2.3*	10.0	6.6	-33.5	-2.6*	13.7	14.4	5.3	-1.1*
45-54	34.5	37.8	9.7	0.0	33.3	38.4	15.4	0.1	51.6	49.4	-4.1	-0.2
55-64	68.8	133.8	94.6	2.3*	69.5	140.5	102.5	2.4*	70.7	147.6	108.7	2.6*
65+:	75.7	265.6	251.0	4.8*	74.4	277.5	273.2	5.0*	74.1	249.0	236.2	4.9*
65-74	79.9	262.6	228.7	4.4*	79.4	276.8	248.8	4.5*	72.7	253.9	249.6	4.8*
75+	68.9	270.6	293.0	5.7*	66.3	278.7	320.8	6.0*	76.4	241.1	215.5	5.0*

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 26-YEAR TRENDS, 1973-98

By Race, Sex and Age Group

Sex/Age	All Races				Whites				Blacks			
	Average 1973-74	Rate <sup>⊕</sup> 97-98	% Change 73-98	EAPC 73-98	Average 1973-74	Rate <sup>⊕</sup> 97-98	% Change 73-98	EAPC 73-98	Average 1973-74	Rate <sup>⊕</sup> 97-98	% Change 73-98	EAPC 73-98
Males & Females	35.4	48.1	35.9	1.3*	34.9	48.0	37.3	1.3*	41.7	57.2	37.3	1.3*
0-54:	8.3	5.9	-29.3	-1.5*	7.9	5.6	-28.7	-1.4*	13.7	9.6	-30.1	-1.5*
0-14	0.0	0.0	-74.0	-2.7	0.0	0.0	-71.3	-2.4	0.0	0.0	-76.4	-
15-34	0.4	0.3	-31.3	-1.3*	0.4	0.3	-27.6	-1.3*	0.6	0.3	-48.3	-1.6*
35-44	10.7	6.4	-40.2	-2.5*	10.0	5.9	-41.1	-2.6*	17.3	10.7	-38.0	-2.2*
45-54	47.3	34.7	-26.7	-1.3*	44.5	32.9	-25.9	-1.2*	78.5	56.5	-28.0	-1.4*
55-64	119.1	133.3	12.0	0.6*	116.9	131.8	12.8	0.7*	149.2	174.3	16.8	0.6
65+:	179.9	315.4	75.3	2.3*	181.3	317.6	75.2	2.3*	171.6	339.6	98.0	2.8*
65-74	184.5	292.7	58.7	1.9*	185.4	294.7	58.9	1.9*	184.5	325.5	76.4	2.4*
75+	172.4	352.4	104.4	2.9*	174.5	355.0	103.5	2.9*	150.5	362.8	141.1	3.6*
Males	63.3	66.0	4.4	0.2	62.4	64.8	3.8	0.1	76.8	90.0	17.1	0.7*
0-54:	12.5	7.2	-42.5	-2.3*	11.5	6.6	-42.8	-2.3*	23.0	13.8	-40.3	-2.0*
0-14	0.0	0.0	-83.6	-	0.0	0.0	-86.8	-	0.1	0.0	-69.6	-
15-34	0.5	0.3	-40.1	-1.9*	0.4	0.3	-34.5	-1.9*	0.8	0.3	-63.7	-2.3*
35-44	15.0	7.3	-51.7	-3.2*	13.8	6.6	-52.7	-3.3*	27.3	13.7	-49.8	-2.9*
45-54	72.0	42.8	-40.6	-2.1*	66.6	39.3	-40.9	-2.1*	133.9	83.0	-38.0	-1.9*
55-64	198.8	172.1	-13.4	-0.4*	193.5	166.0	-14.2	-0.4*	273.0	268.6	-1.6	-0.1
65+:	354.4	450.7	27.2	0.9*	358.2	448.1	25.1	0.8*	336.5	549.8	63.4	2.0*
65-74	350.5	399.0	13.8	0.5*	352.7	395.7	12.2	0.4*	355.8	499.2	40.3	1.4*
75+	360.8	535.0	48.3	1.4*	367.3	533.6	45.3	1.3*	305.0	632.3	107.3	3.0*
Females	13.8	34.6	150.6	3.6*	13.8	35.2	154.8	3.7*	13.9	34.6	148.8	3.5*
0-54:	4.5	4.7	4.4	-0.1	4.4	4.6	5.6	0.0	5.9	6.2	5.0	-0.2
0-14	0.0	0.0	-61.3	-1.4	0.0	0.0	-51.7	-	0.0	0.0	-	-
15-34	0.3	0.2	-17.5	-0.5	0.3	0.2	-17.6	-0.5	0.3	0.3	-9.1	-0.3
35-44	6.5	5.6	-15.1	-1.5*	6.3	5.3	-16.6	-1.6*	9.0	8.1	-9.6	-1.0*
45-54	24.4	26.9	10.4	0.2	23.8	26.7	12.3	0.3	31.8	34.7	9.4	0.0
55-64	48.6	98.2	102.2	2.7*	49.0	100.3	104.8	2.8*	46.3	102.5	121.2	2.8*
65+:	58.2	220.9	279.9	5.4*	58.9	225.9	283.6	5.4*	50.2	205.6	309.3	5.8*
65-74	57.2	206.9	262.0	5.0*	57.9	211.9	266.2	5.0*	51.6	200.9	289.7	5.7*
75+	59.8	243.8	307.8	6.1*	60.6	248.8	310.8	6.1*	48.1	213.2	343.5	6.1*

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.

⊕ 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 (11 SEER Areas) With Cancer and  
Lifetime Risk (Percent) of Dying (Total U.S.) From Cancer

1996-1998

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	0.00	7.85	0.00	0.00	0.01	5.75
10	0.00	0.00	0.03	7.92	0.00	0.00	0.03	5.80
20	0.00	0.03	0.22	7.97	0.00	0.03	0.19	5.81
30	0.03	0.22	1.13	8.08	0.03	0.18	0.88	5.84
40	0.19	1.13	3.51	8.21	0.16	0.86	2.50	5.86
50	0.97	3.45	6.52	8.32	0.72	2.39	4.49	5.82
60	2.69	6.02	7.71	7.97	1.76	3.97	5.17	5.36

Lifetime Risk of Being Diagnosed = 7.85%      Lifetime Risk of Being Diagnosed = 5.75%  
Lifetime Risk of Dying = 7.61%      Lifetime Risk of Dying = 4.84%

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	7.83	0.00	0.00	0.00	6.04
10	0.00	0.00	0.03	7.89	0.00	0.00	0.03	6.08
20	0.00	0.03	0.19	7.93	0.00	0.03	0.18	6.10
30	0.03	0.19	1.06	8.03	0.03	0.18	0.91	6.12
40	0.17	1.06	3.43	8.15	0.15	0.89	2.64	6.14
50	0.92	3.38	6.45	8.25	0.75	2.53	4.75	6.09
60	2.65	5.96	7.66	7.91	1.87	4.20	5.43	5.60

Lifetime Risk of Being Diagnosed = 7.83%      Lifetime Risk of Being Diagnosed = 6.04%  
Lifetime Risk of Dying = 7.67%      Lifetime Risk of Dying = 5.02%

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	8.47	0.00	0.00	0.01	5.06
10	0.00	0.01	0.06	8.65	0.00	0.00	0.04	5.15
20	0.01	0.07	0.47	8.74	0.00	0.04	0.28	5.17
30	0.06	0.48	2.07	8.99	0.04	0.28	1.13	5.21
40	0.43	2.08	5.00	9.29	0.24	1.11	2.76	5.27
50	1.79	4.96	8.19	9.62	0.90	2.62	4.36	5.25
60	3.73	7.55	9.00	9.23	1.89	3.79	4.60	4.77

Lifetime Risk of Being Diagnosed = 8.47%      Lifetime Risk of Being Diagnosed = 5.06%  
Lifetime Risk of Dying = 7.68%      Lifetime Risk of Dying = 3.98%

Table XV-16  
LUNG AND BRONCHUS (Invasive)  
AGE-ADJUSTED SEER INCIDENCE AND U.S. MORTALITY RATES  
By Race/Ethnicity and Sex

Incidence

RACE/ETHNICITY	Rate 1992-1998 Rate per 100,000 persons			Trend 1992-1998 EAPC (%)		
	Total	Males	Females	Total	Males	Females
All Races	54.4	71.1	41.8	-1.6*	-2.7*	-0.1
White	54.7	69.6	43.6	-1.5*	-2.7*	-0.1
White Hispanic	27.5	38.0	19.8	-2.8*	-3.2*	-2.7*
White Non-Hispanic	57.8	73.0	46.5	-1.2*	-2.6*	0.3
Black	71.6	107.2	45.7	-2.1*	-3.2*	-0.3
Asian/Pacific Islander	35.5	51.9	22.7	-1.1	-1.3	-0.1
Amer Ind/Alask Nat	31.0	44.3	20.6	-2.2	-2.3	-2.8
Hispanic <sup>®</sup>	26.0	36.0	18.7	-3.0*	-3.2*	-3.0*

Mortality<sup>♦</sup>

RACE/ETHNICITY	Rate 1992-1998 Rate per 100,000 persons			Trend 1992-1998 EAPC (%)		
	Total	Males	Females	Total	Males	Females
All Races	49.1	69.3	34.0	-0.8*	-1.9*	0.8*
White	48.8	67.8	34.6	-0.6*	-1.8*	0.8*
White Hispanic	20.4	32.2	11.6	-0.9*	-1.6*	0.2
White Non-Hispanic	50.2	69.3	35.8	-0.4*	-1.6*	1.0*
Black	59.1	96.2	33.6	-1.3*	-2.5*	0.9*
Asian/Pacific Islander	23.3	33.8	15.1	-0.9*	-1.6	0.9
Amer Ind/Alask Nat	30.1	41.8	20.9	2.1*	2.4*	1.4
Hispanic <sup>®</sup>	19.3	30.5	10.9	-1.0*	-1.8*	0.2

- The EAPC is the Estimated Annual Percent Change over the time interval.
- Statistic not shown. Rate based on less than 25 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.
- <sup>x</sup> Incidence data are from the 11 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, and Los Angeles) and Alaska. Unless specified, other tables use data from 9 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
- <sup>®</sup> Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Native Alaskans. 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).
- \* The EAPC is significantly different from zero ( $p < .05$ ).

Table XV-17  
LUNG AND BRONCHUS CANCER (Invasive)

AGE-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
<b>SEER INCIDENCE RATES\$, 1994-98</b>									
REGISTRY									
11 registries	53.5	69.0	41.8	53.9	67.7	43.6	70.1	103.7	45.6
9 registries	56.1	72.6	43.5	56.3	71.3	45.1	72.4	108.3	46.4
San Francisco-Oakland	52.7	64.8	43.5	54.9	64.0	48.0	66.5	93.4	46.1
Connecticut	59.9	75.4	48.5	59.8	74.2	49.5	63.1	99.4	38.5
Metropolitan Detroit	68.2	91.0	51.6	65.5	85.0	51.8	79.9	118.5	52.1
Hawaii	44.0	59.5	30.6	56.9	68.7	45.9	-	-	-
Iowa	57.7	80.8	40.3	57.5	80.5	40.2	-	-	-
New Mexico	40.8	52.8	31.4	42.2	54.2	32.7	-	-	-
Seattle-Puget Sound	60.7	73.0	51.3	61.9	73.4	53.1	72.1	98.7	47.4
Utah	26.5	35.6	19.0	26.5	35.6	19.2	-	-	-
Metropolitan Atlanta	62.1	86.8	44.9	60.2	79.8	46.6	70.1	117.6	40.1
San Jose-Monterey	46.8	57.7	38.5	48.9	58.5	41.8	65.1	93.4	40.3
Los Angeles	47.0	60.2	37.1	46.9	57.6	39.0	65.1	93.9	43.8
<b>SEER MORTALITY RATES§, 1994-98</b>									
REGISTRY									
11 registries	41.1	54.6	30.9	41.4	53.7	32.3	55.7	84.6	34.8
9 registries	42.6	57.1	31.9	42.9	56.2	33.0	56.6	86.7	35.0
San Francisco-Oakland	40.6	51.4	32.7	42.6	51.4	36.2	55.5	77.9	38.9
Connecticut	43.9	57.9	33.9	43.9	57.2	34.4	48.6	76.6	29.5
Metropolitan Detroit	49.8	68.9	36.0	47.8	64.5	36.0	59.2	90.2	37.0
Hawaii	33.8	46.2	23.1	44.9	55.9	34.9	-	-	-
Iowa	45.0	64.5	30.5	44.9	64.2	30.6	-	-	-
New Mexico	34.6	45.8	25.8	35.8	47.1	26.8	-	-	-
Seattle-Puget Sound	46.3	57.6	37.7	47.1	57.9	38.9	55.9	76.7	35.8
Utah	20.6	28.6	14.0	20.4	28.2	14.1	-	-	-
Metropolitan Atlanta	48.4	69.7	33.8	46.3	63.0	34.9	58.3	101.7	31.4
San Jose-Monterey	35.4	44.8	28.4	37.3	45.8	31.0	48.5	71.1	31.6
Los Angeles	37.4	49.1	28.7	37.4	47.1	30.2	53.9	81.1	34.3

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 XV-18  
LUNG AND BRONCHUS CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY<sup>d</sup> RATES BY STATE, 1994-98

All Races, Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	48.7	0.06			Montana	43.6 <sup>3/4</sup>	0.91	(37)	-10.5
High Five States					Nebraska	42.5 <sup>3/4</sup>	0.67	(40)	-12.7
Kentucky	67.6 <sup>3/4</sup>	0.55	(01)	38.8	Nevada	56.7 <sup>3/4</sup>	0.80	(08)	16.4
Arkansas	61.2 <sup>3/4</sup>	0.63	(02)	25.7	New Hampshire	50.9	0.92	(22)	4.5
West Virginia	60.6 <sup>3/4</sup>	0.71	(03)	24.4	New Jersey	46.7 <sup>3/4</sup>	0.31	(33)	-4.1
Tennessee	60.1 <sup>3/4</sup>	0.45	(04)	23.4	New Mexico	34.6 <sup>3/4</sup>	0.62	(49)	-29.0
Delaware	58.5 <sup>3/4</sup>	1.19	(05)	20.1	New York	43.5 <sup>3/4</sup>	0.20	(38)	-10.7
Low Five States					North Carolina	53.8 <sup>3/4</sup>	0.36	(15)	10.5
Idaho	38.4 <sup>3/4</sup>	0.78	(47)	-21.1	North Dakota	39.4 <sup>3/4</sup>	1.02	(46)	-19.1
Colorado	34.7 <sup>3/4</sup>	0.43	(48)	-28.7	Ohio	53.3 <sup>3/4</sup>	0.29	(16)	9.4
New Mexico	34.6 <sup>3/4</sup>	0.62	(49)	-29.0	Oklahoma	55.9 <sup>3/4</sup>	0.53	(09)	14.8
Hawaii	33.8 <sup>3/4</sup>	0.70	(50)	-30.6	Oregon	49.4	0.51	(28)	1.4
Utah	20.6 <sup>3/4</sup>	0.50	(51)	-57.7	Pennsylvania	48.3	0.25	(30)	-0.8
State	Rate	SE	Rank	PD	Rhode Island	52.8 <sup>3/4</sup>	0.94	(18)	8.4
Alabama	54.0 <sup>3/4</sup>	0.46	(13)	10.9	South Carolina	51.9 <sup>3/4</sup>	0.50	(21)	6.6
Alaska	50.1	1.71	(24)	2.9	South Dakota	41.1 <sup>3/4</sup>	0.97	(44)	-15.6
Arizona	43.2 <sup>3/4</sup>	0.41	(39)	-11.3	Tennessee	60.1 <sup>3/4</sup>	0.45	(04)	23.4
Arkansas	61.2 <sup>3/4</sup>	0.63	(02)	25.7	Texas	49.5	0.23	(27)	1.6
California	41.6 <sup>3/4</sup>	0.16	(42)	-14.6	Utah	20.6 <sup>3/4</sup>	0.50	(51)	-57.7
Colorado	34.7 <sup>3/4</sup>	0.43	(48)	-28.7	Vermont	48.7	1.24	(29)	0.0
Connecticut	43.9 <sup>3/4</sup>	0.47	(36)	-9.9	Virginia	52.3 <sup>3/4</sup>	0.39	(19)	7.4
Delaware	58.5 <sup>3/4</sup>	1.19	(05)	20.1	Washington	47.2 <sup>3/4</sup>	0.40	(32)	-3.1
District of Columbia	52.2 <sup>1</sup>	1.28	(20)	7.2	West Virginia	60.6 <sup>3/4</sup>	0.71	(03)	24.4
Florida	50.3 <sup>3/4</sup>	0.22	(23)	3.3	Wisconsin	41.6 <sup>3/4</sup>	0.37	(41)	-14.6
Georgia	53.9 <sup>3/4</sup>	0.39	(14)	10.7	Wyoming	41.1 <sup>3/4</sup>	1.26	(43)	-15.6
Hawaii	33.8 <sup>3/4</sup>	0.70	(50)	-30.6					
Idaho	38.4 <sup>3/4</sup>	0.78	(47)	-21.1					
Illinois	49.6	0.27	(26)	1.8					
Indiana	55.1 <sup>3/4</sup>	0.41	(12)	13.1					
Iowa	45.0 <sup>3/4</sup>	0.50	(35)	-7.6					
Kansas	46.2 <sup>3/4</sup>	0.56	(34)	-5.1					
Kentucky	67.6 <sup>3/4</sup>	0.55	(01)	38.8					
Louisiana	58.4 <sup>3/4</sup>	0.50	(06)	19.9					
Maine	55.3 <sup>3/4</sup>	0.86	(11)	13.6					
Maryland	52.9 <sup>3/4</sup>	0.45	(17)	8.6					
Massachusetts	47.8	0.37	(31)	-1.8					
Michigan	49.7	0.30	(25)	2.1					
Minnesota	39.8 <sup>3/4</sup>	0.40	(45)	-18.3					
Mississippi	57.5 <sup>3/4</sup>	0.62	(07)	18.1					
Missouri	55.6 <sup>3/4</sup>	0.42	(10)	14.2					

<sup>d</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.

<sup>3/4</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

Table XV-19  
LUNG AND BRONCHUS CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY<sup>d</sup> RATES BY STATE, 1994-98

All Races, Males

State	Rate	SE	Rank	PD
TOTAL U.S.	68.0	0.10		
High Five States				
Kentucky	99.4 <sup>3/4</sup>	1.01	(01)	46.2
Arkansas	93.0 <sup>3/4</sup>	1.16	(02)	36.8
Tennessee	92.7 <sup>3/4</sup>	0.84	(03)	36.3
Mississippi	91.9 <sup>3/4</sup>	1.20	(04)	35.1
Louisiana	87.6 <sup>3/4</sup>	0.94	(05)	28.8
Low Five States				
Idaho	51.2 <sup>3/4</sup>	1.32	(47)	-24.7
Colorado	46.6 <sup>3/4</sup>	0.75	(48)	-31.5
Hawaii	46.2 <sup>3/4</sup>	1.21	(49)	-32.1
New Mexico	45.8 <sup>3/4</sup>	1.06	(50)	-32.6
Utah	28.6 <sup>3/4</sup>	0.86	(51)	-57.9

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	84.4 <sup>3/4</sup>	0.88	(07)	24.1	Montana	56.6 <sup>3/4</sup>	1.51	(42)	-16.8
Alaska	61.2 <sup>1</sup>	2.75	(34)	-10.0	Nebraska	61.2 <sup>3/4</sup>	1.18	(35)	-10.0
Arizona	57.1 <sup>3/4</sup>	0.70	(40)	-16.0	Nevada	68.3	1.29	(25)	0.4
Arkansas	93.0 <sup>3/4</sup>	1.16	(02)	36.8	New Hampshire	65.7	1.54	(28)	-3.4
California	53.0 <sup>3/4</sup>	0.27	(46)	-22.1	New Jersey	62.9 <sup>3/4</sup>	0.55	(32)	-7.5
Colorado	46.6 <sup>3/4</sup>	0.75	(48)	-31.5	New Mexico	45.8 <sup>3/4</sup>	1.06	(50)	-32.6
Connecticut	57.9 <sup>3/4</sup>	0.81	(39)	-14.9	New York	59.6 <sup>3/4</sup>	0.36	(36)	-12.4
Delaware	79.4 <sup>3/4</sup>	2.08	(12)	16.8	North Carolina	83.4 <sup>3/4</sup>	0.68	(08)	22.6
District of Columbia	76.1 <sup>1</sup>	2.39	(15)	11.9	North Dakota	55.4 <sup>3/4</sup>	1.75	(43)	-18.5
Florida	67.9	0.39	(26)	-0.1	Ohio	75.1 <sup>3/4</sup>	0.51	(17)	10.4
Georgia	83.2 <sup>3/4</sup>	0.75	(09)	22.4	Oklahoma	81.2 <sup>3/4</sup>	0.96	(10)	19.4
Hawaii	46.2 <sup>3/4</sup>	1.21	(49)	-32.1	Oregon	62.8 <sup>3/4</sup>	0.85	(33)	-7.6
Idaho	51.2 <sup>3/4</sup>	1.32	(47)	-24.7	Pennsylvania	69.2	0.45	(23)	1.8
Illinois	69.8	0.49	(22)	2.6	Rhode Island	74.2 <sup>3/4</sup>	1.67	(18)	9.1
Indiana	79.1 <sup>3/4</sup>	0.74	(13)	16.3	South Carolina	79.7 <sup>3/4</sup>	0.95	(11)	17.2
Iowa	64.5 <sup>3/4</sup>	0.89	(30)	-5.1	South Dakota	59.2 <sup>3/4</sup>	1.70	(37)	-12.9
Kansas	65.3	0.98	(29)	-4.0	Tennessee	92.7 <sup>3/4</sup>	0.84	(03)	36.3
Kentucky	99.4 <sup>3/4</sup>	1.01	(01)	46.2	Texas	71.1 <sup>3/4</sup>	0.42	(21)	4.6
Louisiana	87.6 <sup>3/4</sup>	0.94	(05)	28.8	Utah	28.6 <sup>3/4</sup>	0.86	(51)	-57.9
Maine	73.8 <sup>3/4</sup>	1.48	(19)	8.5	Vermont	65.9	2.14	(27)	-3.1
Maryland	72.4 <sup>3/4</sup>	0.79	(20)	6.5	Virginia	76.0 <sup>3/4</sup>	0.71	(16)	11.8
Massachusetts	63.8 <sup>3/4</sup>	0.64	(31)	-6.2	Washington	59.2 <sup>3/4</sup>	0.67	(38)	-12.9
Michigan	68.9	0.54	(24)	1.3	West Virginia	86.7 <sup>3/4</sup>	1.28	(06)	27.5
Minnesota	53.1 <sup>3/4</sup>	0.68	(45)	-21.9	Wisconsin	57.0 <sup>3/4</sup>	0.65	(41)	-16.2
Mississippi	91.9 <sup>3/4</sup>	1.20	(04)	35.1	Wyoming	53.3 <sup>3/4</sup>	2.12	(44)	-21.6
Missouri	79.0 <sup>3/4</sup>	0.75	(14)	16.2					

<sup>d</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.

<sup>3/4</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

Table XV-20  
LUNG AND BRONCHUS CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY<sup>d</sup> RATES BY STATE, 1994-98

All Races, Females

State	Rate	SE	Rank	PD
TOTAL U.S.	34.3	0.06		
High Five States				
Nevada	46.7 <sup>3/4</sup> <sup>e</sup>	1.01	(01)	36.2
Kentucky	44.2 <sup>3/4</sup> <sup>e</sup>	0.61	(02)	28.9
Delaware	42.8 <sup>3/4</sup> <sup>e</sup>	1.38	(03)	24.8
West Virginia	41.7 <sup>3/4</sup> <sup>e</sup>	0.79	(04)	21.6
Maine	41.5 <sup>3/4</sup> <sup>e</sup>	1.01	(05)	21.0
Low Five States				
South Dakota	26.6 <sup>3/4</sup> <sup>e</sup>	1.09	(47)	-22.4
Colorado	25.9 <sup>3/4</sup> <sup>e</sup>	0.50	(48)	-24.5
New Mexico	25.8 <sup>3/4</sup> <sup>e</sup>	0.73	(49)	-24.8
Hawaii	23.1 <sup>3/4</sup> <sup>e</sup>	0.79	(50)	-32.7
Utah	14.0 <sup>3/4</sup> <sup>e</sup>	0.56	(51)	-59.2

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	32.2 <sup>3/4</sup>	0.48	(35)	-6.1	Montana	33.5	1.10	(28)	-2.3
Alaska	39.6 <sup>f</sup>	2.10	(07)	15.5	Nebraska	28.3 <sup>3/4</sup> <sup>e</sup>	0.75	(44)	-17.5
Arizona	31.9 <sup>3/4</sup>	0.48	(36)	-7.0	Nevada	46.7 <sup>3/4</sup> <sup>e</sup>	1.01	(01)	36.2
Arkansas	36.8 <sup>3/4</sup>	0.66	(17)	7.3	New Hampshire	40.0 <sup>3/4</sup> <sup>e</sup>	1.12	(06)	16.6
California	32.9 <sup>3/4</sup>	0.20	(32)	-4.1	New Jersey	35.2	0.36	(25)	2.6
Colorado	25.9 <sup>3/4</sup> <sup>e</sup>	0.50	(48)	-24.5	New Mexico	25.8 <sup>3/4</sup> <sup>e</sup>	0.73	(49)	-24.8
Connecticut	33.9	0.56	(27)	-1.2	New York	31.9 <sup>3/4</sup>	0.23	(37)	-7.0
Delaware	42.8 <sup>3/4</sup> <sup>e</sup>	1.38	(03)	24.8	North Carolina	32.4 <sup>3/4</sup>	0.38	(34)	-5.5
District of Columbia	35.8	1.40	(21)	4.4	North Dakota	26.7 <sup>3/4</sup> <sup>e</sup>	1.18	(46)	-22.2
Florida	36.2 <sup>3/4</sup>	0.26	(20)	5.5	Ohio	37.5 <sup>3/4</sup>	0.32	(14)	9.3
Georgia	33.1	0.41	(31)	-3.5	Oklahoma	37.0 <sup>3/4</sup>	0.59	(15)	7.9
Hawaii	23.1 <sup>3/4</sup> <sup>e</sup>	0.79	(50)	-32.7	Oregon	39.0 <sup>3/4</sup> <sup>e</sup>	0.63	(08)	13.7
Idaho	27.8 <sup>3/4</sup> <sup>e</sup>	0.92	(45)	-19.0	Pennsylvania	33.2 <sup>3/4</sup>	0.28	(30)	-3.2
Illinois	34.8	0.31	(26)	1.5	Rhode Island	37.9 <sup>f</sup>	1.09	(11)	10.5
Indiana	37.5 <sup>3/4</sup>	0.46	(13)	9.3	South Carolina	31.6 <sup>3/4</sup> <sup>e</sup>	0.52	(39)	-7.9
Iowa	30.5 <sup>3/4</sup> <sup>e</sup>	0.57	(41)	-11.1	South Dakota	26.6 <sup>3/4</sup> <sup>e</sup>	1.09	(47)	-22.4
Kansas	31.8 <sup>3/4</sup>	0.63	(38)	-7.3	Tennessee	36.2 <sup>3/4</sup>	0.46	(19)	5.5
Kentucky	44.2 <sup>3/4</sup> <sup>e</sup>	0.61	(02)	28.9	Texas	33.3 <sup>3/4</sup>	0.26	(29)	-2.9
Louisiana	37.0 <sup>3/4</sup>	0.53	(16)	7.9	Utah	14.0 <sup>3/4</sup> <sup>e</sup>	0.56	(51)	-59.2
Maine	41.5 <sup>3/4</sup> <sup>e</sup>	1.01	(05)	21.0	Vermont	35.6	1.45	(22)	3.8
Maryland	38.6 <sup>3/4</sup> <sup>e</sup>	0.51	(09)	12.5	Virginia	35.2	0.43	(24)	2.6
Massachusetts	36.7 <sup>3/4</sup>	0.44	(18)	7.0	Washington	37.8 <sup>3/4</sup> <sup>e</sup>	0.49	(12)	10.2
Michigan	35.5	0.35	(23)	3.5	West Virginia	41.7 <sup>3/4</sup> <sup>e</sup>	0.79	(04)	21.6
Minnesota	29.8 <sup>3/4</sup> <sup>e</sup>	0.48	(43)	-13.1	Wisconsin	30.0 <sup>3/4</sup> <sup>e</sup>	0.44	(42)	-12.5
Mississippi	32.8	0.63	(33)	-4.4	Wyoming	31.4	1.52	(40)	-8.5
Missouri	38.1 <sup>3/4</sup> <sup>e</sup>	0.47	(10)	11.1					

<sup>d</sup> NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.  
<sup>SE</sup> Standard error of the rate.

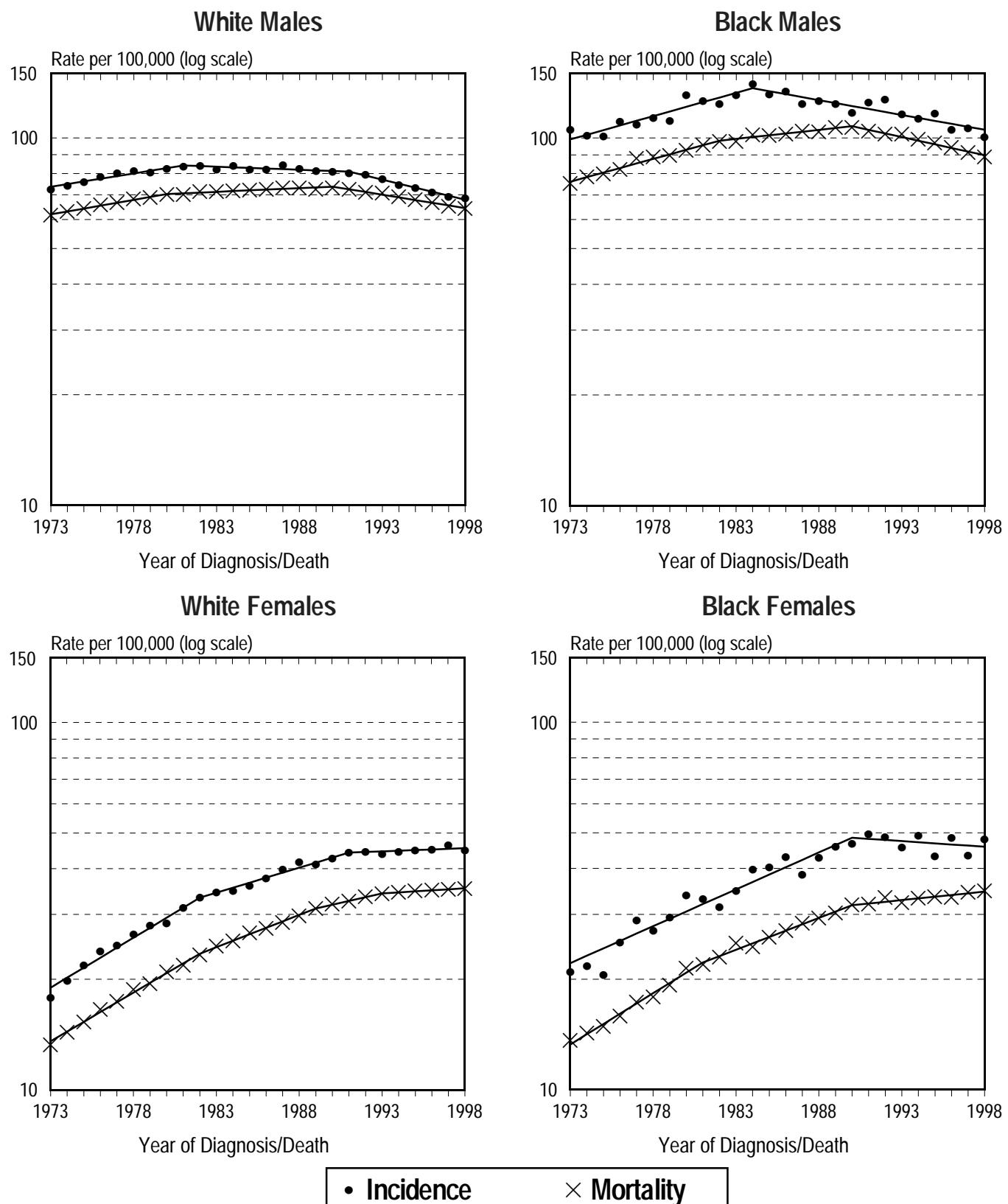
<sup>PD</sup> Percent difference between state rate and total U.S. rate.

<sup>e</sup> Absolute difference between state rate and total U.S. rate is 10% or more.

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

Figure XV-1

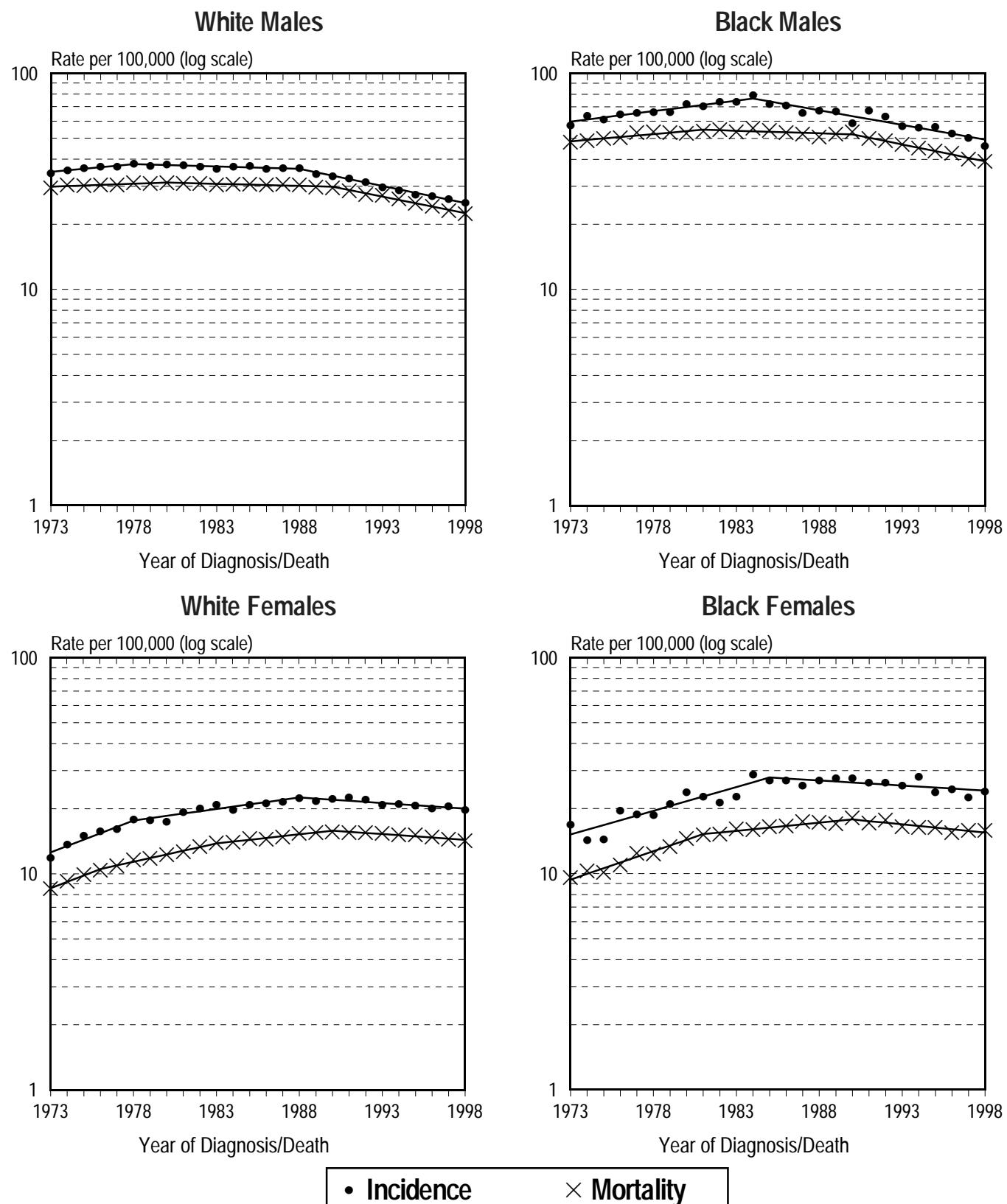
# SEER Incidence and U.S. Mortality Rates<sup>+</sup> Lung and Bronchus, All Ages



<sup>+</sup> Rates are age-adjusted to the 1970 U.S. standard million population. Regression lines are calculated using the Joinpoint Regression Program.

Figure XV-2

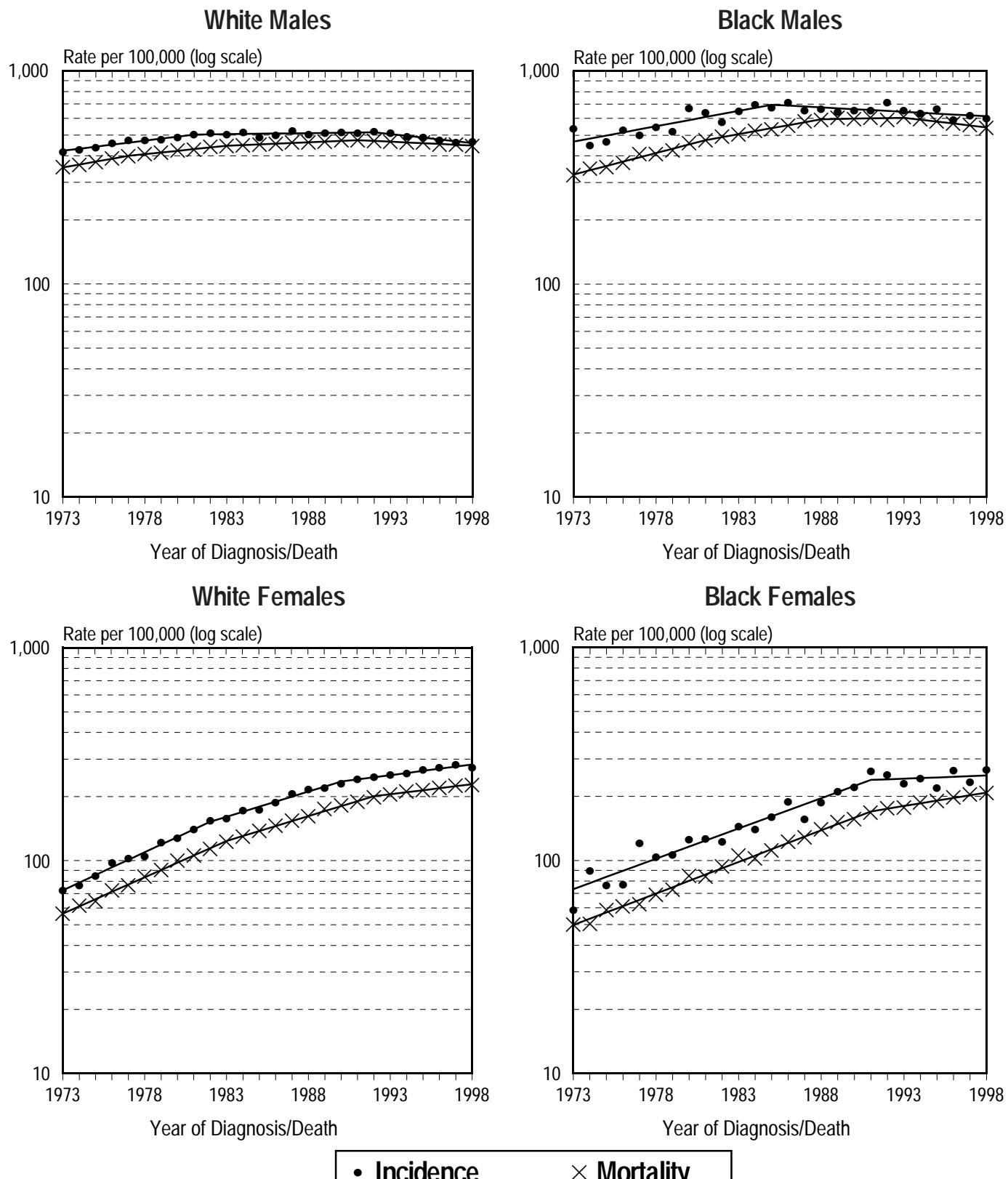
# SEER Incidence and U.S. Mortality Rates<sup>+</sup> Lung and Bronchus, Under 65 Years of Age



<sup>+</sup> Rates are age-adjusted to the 1970 U.S. standard million population. Regression lines are calculated using the Joinpoint Regression Program.

Figure XV-3

# SEER Incidence and U.S. Mortality Rates<sup>+</sup> Lung and Bronchus, Ages 65 and Over



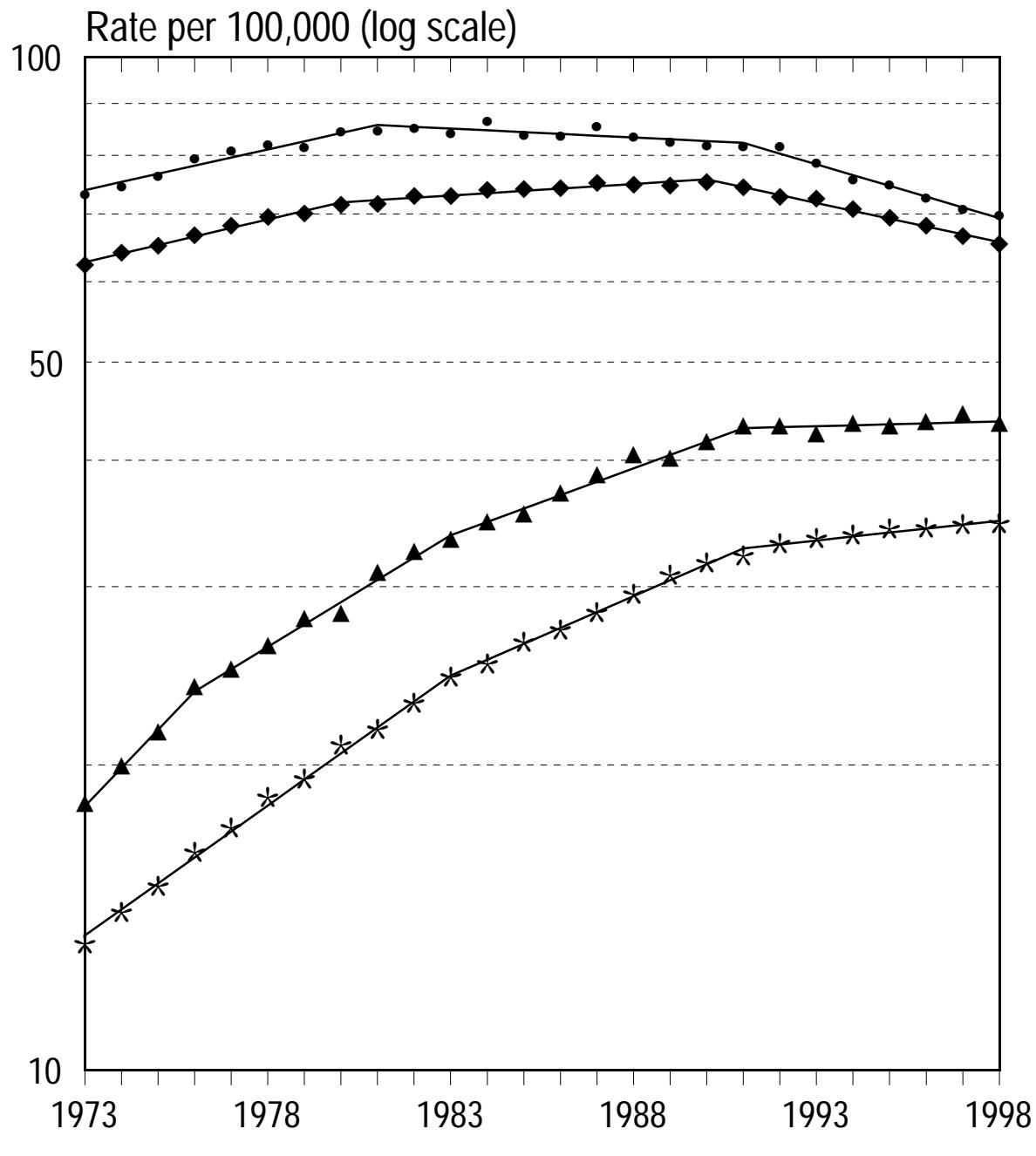
<sup>+</sup> Rates are age-adjusted to the 1970 U.S. standard million population. Regression lines are calculated using the Joinpoint Regression Program.

Figure XV-4

# Cancer of the Lung & Bronchus

## SEER Incidence & U.S. Mortality Rates, 1973-1998

### By Sex, All Races



- Male Incidence      ▲ Female Incidence
- ◆ Male Mortality      \* Female Mortality

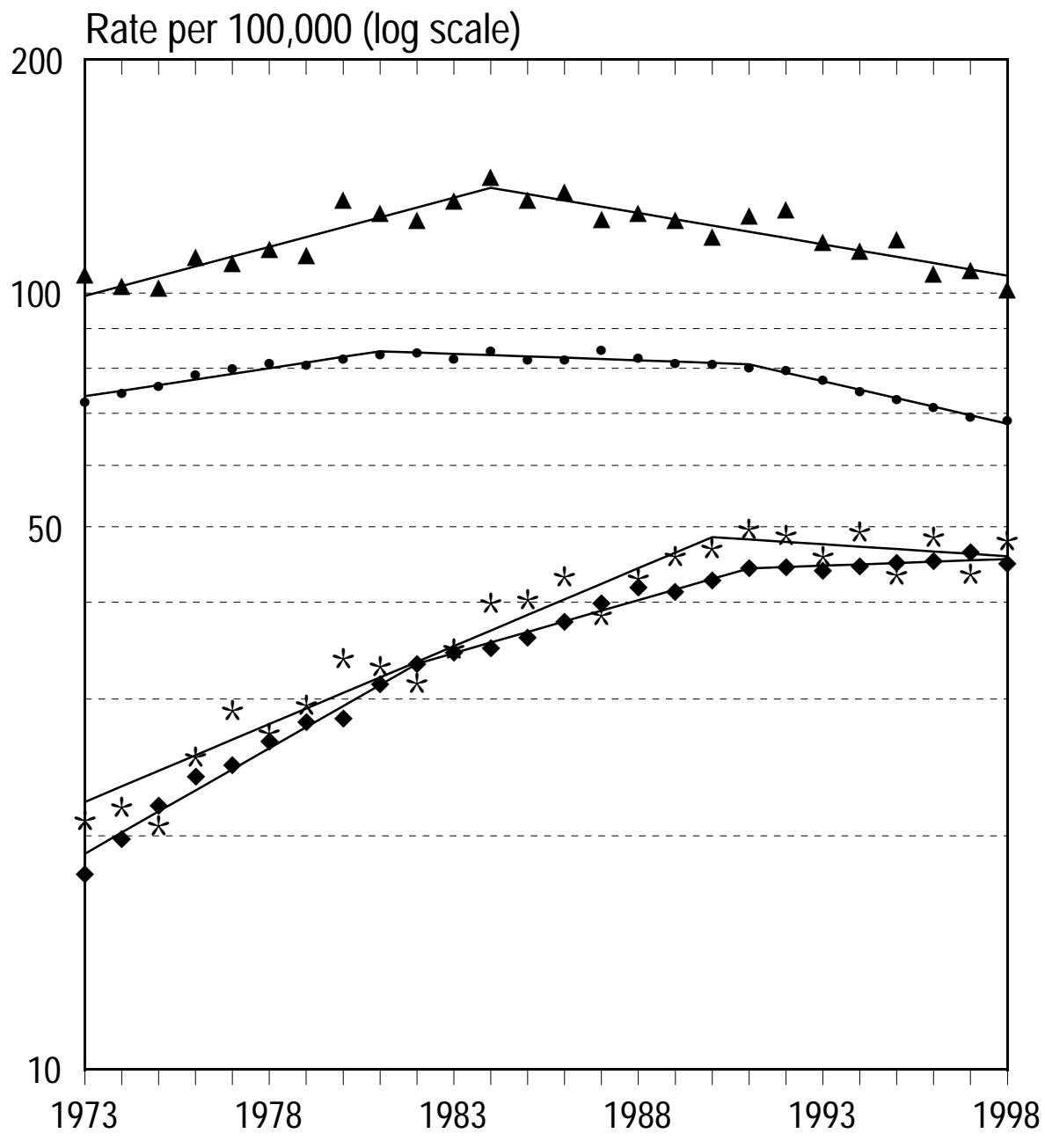
Rates are age-adjusted to the 1970 U.S. standard million population. Regression lines are calculated using the Joinpoint Regression Program.

Figure XV-5

# Cancer of the Lung & Bronchus

## SEER Incidence, 1973-1998

### By Sex and Race

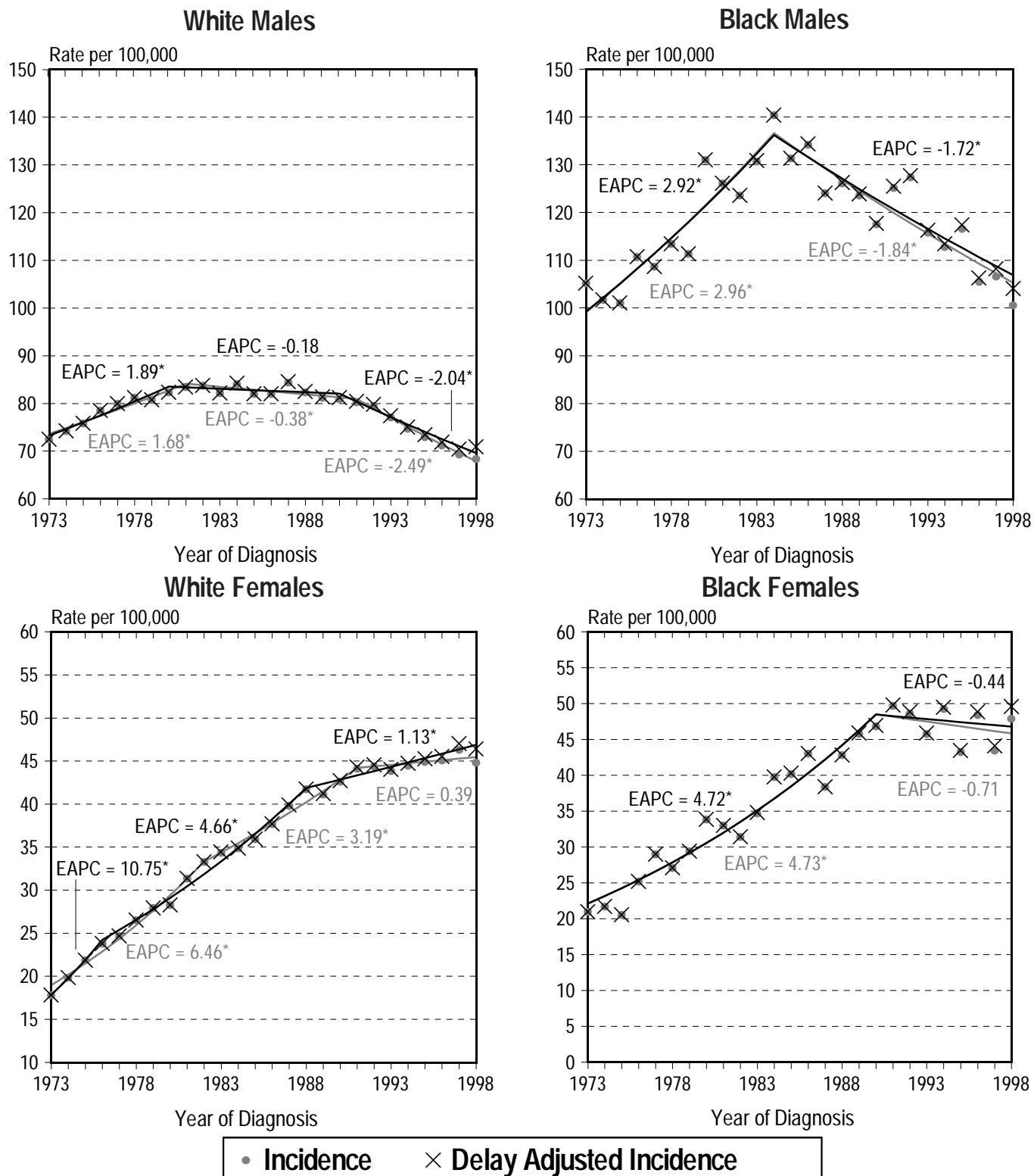


- White Male      ▲ Black Male
- ◆ White Female    \* Black Female

Rates are age-adjusted to the 1970 U.S. standard million population. Regression lines are calculated using the Joinpoint Regression Program.

Figure XV-6

# SEER Incidence and Delay Adjusted Incidence Rates<sup>+</sup> Lung and Bronchus By Race and Sex



<sup>+</sup> Rates are age-adjusted to the 1970 U.S. standard million population. Regression lines are calculated using the Joinpoint Regression Program. The EAPC is the Estimated Annual Percent Change for the regression line segments. The EAPC is calculated by the Joinpoint Regression Program.

\* The EAPC is significantly different from zero ( $p < 0.05$ ).