

Table XII-1
LARYNX CANCER (Invasive)

TRENDS IN SEER INCIDENCE^a AND U.S. MORTALITY^b USING THE JOINTPOINT REGRESSION PROGRAM, 1975-2001
WITH UP TO THREE JOINTPOINTS BY RACE AND SEX

		<u>Jointpoint Segment 1</u>		<u>Jointpoint Segment 2</u>		<u>Jointpoint Segment 3</u>		<u>Jointpoint Segment 4</u>	
		Year	APC	Year	APC	Year	APC	Year	APC
<u>SEER Cancer Incidence^a</u>									
All Races	Male and Female	1975-1988	0.1	1988-2001	-2.5 ^c				
All Races	Male	1975-1988	-0.2	1988-2001	-2.8 ^c				
All Races	Female	1975-1989	1.7 ^c	1989-2001	-2.2 ^c				
White	Male and Female	1975-1988	0.0	1988-2001	-2.6 ^c				
White	Male	1975-1988	-0.3	1988-2001	-3.0 ^c				
White	Female	1975-1989	1.6 ^c	1989-2001	-2.1 ^c				
Black	Male and Female	1975-1990	1.2 ^c	1990-2001	-2.8 ^c				
Black	Male	1975-1990	1.0	1990-2001	-2.8 ^c				
Black	Female	1975-2001	0.6						
<u>U.S. Cancer Mortality^b</u>									
All Races	Male and Female	1975-1988	-0.7 ^c	1988-1992	0.8	1992-2001	-2.1 ^c		
All Races	Male	1975-1993	-0.8 ^c	1993-2001	-2.3 ^c				
All Races	Female	1975-1992	1.5 ^c	1992-2001	-1.7 ^c				
White	Male and Female	1975-1988	-1.0 ^c	1988-1991	1.2	1991-2001	-1.8 ^c		
White	Male	1975-1993	-1.1 ^c	1993-2001	-2.1 ^c				
White	Female	1975-1992	1.4 ^c	1992-2001	-1.5 ^c				
Black	Male and Female	1975-1993	1.2 ^c	1993-2001	-2.9 ^c				
Black	Male	1975-1993	1.3 ^c	1993-2001	-3.1 ^c				
Black	Female	1975-1992	2.4 ^c	1992-2001	-2.2				

Jointpoint Regression Program Version 2.7, September 2003, National Cancer Institute. (<http://srab.cancer.gov/jointpoint/>).

^a The APC is the Annual Percent Change based on rates age-adjusted to the 2000 U.S. standard population by 5-year age groups. Trends are from the SEER 9 areas.

^b Trends are from the NCHS public use data file for the total US.

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

Table XII-2
LARYNX CANCER (Invasive)

SEER INCIDENCE RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES^a, 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:									
1975	5.0	9.5	1.5	5.0	9.4	1.5	7.0	13.2	-
1976	5.2	10.0	1.4	5.2	9.9	1.4	7.3	14.6	-
1977	5.0	9.7	1.4	5.0	9.7	1.3	7.5	13.9	-
1978	5.3	9.8	1.8	5.3	9.8	1.9	6.9	13.2	-
1979	5.4	10.1	1.7	5.4	10.2	1.6	7.5	13.2	-
1980	5.2	10.0	1.6	5.2	9.9	1.5	7.3	14.3	-
1981	5.4	9.8	1.9	5.3	9.6	2.0	8.1	16.3	-
1982	5.3	9.8	1.8	5.3	9.8	1.8	7.9	14.4	-
1983	5.3	9.9	1.7	5.4	10.2	1.7	6.8	12.2	-
1984	5.1	9.6	1.6	5.0	9.6	1.5	8.5	14.9	3.4
1985	5.4	9.9	1.9	5.4	10.0	1.9	8.4	15.5	3.2
1986	5.0	9.4	1.6	4.9	9.2	1.7	7.8	15.5	-
1987	5.2	9.4	1.9	5.1	9.3	1.9	8.3	15.2	3.1
1988	5.2	9.6	1.9	5.2	9.6	1.8	8.2	14.8	3.3
1989	5.0	8.9	2.0	5.0	8.9	1.9	7.9	14.3	3.3
1990	5.1	9.2	1.9	5.0	9.0	1.9	9.5	17.8	3.6
1991	4.7	8.5	1.8	4.8	8.5	1.9	6.7	12.6	-
1992	5.0	9.1	1.8	4.9	8.9	1.7	8.7	15.8	3.4
1993	4.4	8.1	1.5	4.4	8.0	1.5	6.9	14.1	-
1994	4.7	8.3	1.8	4.5	8.1	1.7	8.9	16.0	3.7
1995	4.4	7.9	1.6	4.4	7.8	1.6	6.8	13.0	2.2
1996	4.3	7.6	1.7	4.3	7.5	1.6	6.4	11.4	2.8
1997	4.2	7.5	1.6	4.1	7.3	1.6	7.2	13.3	2.7
1998	3.8	6.7	1.6	3.7	6.5	1.6	6.5	11.7	2.8
1999	4.2	7.0	1.8	4.1	7.0	1.8	7.2	12.3	3.6
2000	4.0	7.2	1.5	4.0	7.1	1.5	6.1	11.3	2.3
2001	3.6	6.4	1.2	3.5	6.1	1.3	6.1	11.9	1.9
<u>AGE-ADJUSTED RATES, 1997-2001</u>									
AGE AT DIAGNOSIS:									
All ages	4.0	7.0	1.6	3.9	6.8	1.5	6.6	12.1	2.7
Under 65	2.1	3.4	0.9	2.1	3.3	0.9	3.9	6.5	1.7
65 and over	16.8	31.7	6.1	16.7	31.1	6.2	25.3	51.1	9.0
All ages(IARC world std) ^b	2.8	4.9	1.1	2.8	4.8	1.1	4.8	8.5	2.0
<u>AGE-SPECIFIC RATES, 1997-2001</u>									
AGE AT DIAGNOSIS:									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	0.4	0.5	-	0.4	-	-	-	-	-
40-44	1.5	2.3	0.8	1.4	2.0	0.8	3.3	5.4	-
45-49	2.8	4.3	1.4	2.7	4.2	1.2	6.1	9.2	-
50-54	6.2	10.0	2.5	5.9	9.6	2.3	12.1	19.8	-
55-59	10.0	16.9	3.5	9.7	16.2	3.3	19.5	35.1	-
60-64	15.1	24.4	6.5	15.4	24.7	6.7	23.7	39.8	10.8
65-69	18.4	31.6	7.1	18.3	31.3	7.0	28.3	48.6	13.0
70-74	19.8	36.2	7.0	19.8	35.6	7.2	29.9	60.1	-
75-79	17.2	32.8	6.2	16.9	31.9	6.3	28.0	58.9	-
80-84	14.3	30.0	4.8	14.3	29.3	5.2	20.4	53.2	-
85+	9.2	22.8	3.5	8.9	22.5	3.4	-	-	-

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

^b SEER 9 areas. Rates are per 100,000 and are age-adjusted to the IARC world standard population.

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

Table XII-3
LARYNX CANCER (Invasive)

U.S. DEATH RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES^a, 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:									
1975	1.7	3.3	0.5	1.6	3.2	0.4	2.6	5.0	0.8
1976	1.7	3.4	0.5	1.6	3.3	0.5	2.6	5.1	0.7
1977	1.7	3.4	0.5	1.6	3.3	0.4	2.7	5.5	0.7
1978	1.7	3.4	0.5	1.6	3.2	0.5	2.9	5.9	0.7
1979	1.7	3.3	0.5	1.6	3.2	0.4	2.6	5.2	0.6
1980	1.6	3.2	0.5	1.5	3.0	0.4	2.9	5.7	0.9
1981	1.7	3.3	0.5	1.5	3.1	0.5	3.0	5.6	1.1
1982	1.7	3.2	0.5	1.6	3.0	0.5	2.8	5.5	0.8
1983	1.6	3.2	0.5	1.5	3.0	0.5	2.7	5.3	0.9
1984	1.6	3.2	0.5	1.5	2.9	0.5	3.0	6.2	0.7
1985	1.6	3.0	0.5	1.4	2.8	0.5	3.0	5.8	0.9
1986	1.6	3.1	0.5	1.5	2.8	0.5	3.1	6.1	1.0
1987	1.6	3.1	0.5	1.5	2.9	0.5	2.9	5.9	0.9
1988	1.6	3.0	0.5	1.4	2.7	0.5	3.2	6.7	0.8
1989	1.6	3.0	0.6	1.4	2.7	0.6	3.2	6.6	0.8
1990	1.6	3.0	0.5	1.4	2.7	0.5	3.0	5.8	1.1
1991	1.7	3.1	0.6	1.5	2.8	0.6	3.3	6.4	1.2
1992	1.6	3.0	0.6	1.5	2.7	0.6	3.3	6.4	1.1
1993	1.6	3.0	0.6	1.5	2.7	0.5	3.2	6.4	1.1
1994	1.6	2.9	0.6	1.4	2.6	0.5	3.2	6.4	1.0
1995	1.5	2.8	0.5	1.4	2.6	0.5	3.0	6.0	1.0
1996	1.5	2.8	0.6	1.4	2.5	0.5	3.2	6.3	1.0
1997	1.4	2.7	0.5	1.3	2.4	0.5	3.0	6.1	0.9
1998	1.4	2.6	0.6	1.3	2.3	0.5	2.8	5.6	0.9
1999	1.4	2.5	0.5	1.3	2.3	0.5	2.6	5.1	0.9
2000	1.4	2.5	0.5	1.3	2.3	0.5	2.8	5.5	1.0
2001	1.3	2.5	0.5	1.2	2.3	0.5	2.6	5.0	0.9
<u>AGE-ADJUSTED RATES, 1997-2001</u>									
AGE AT DEATH:									
All ages	1.4	2.6	0.5	1.3	2.3	0.5	2.7	5.4	0.9
Under 65	0.6	1.0	0.2	0.5	0.8	0.2	1.5	2.7	0.4
65 and over	7.0	13.4	2.7	6.6	12.6	2.6	11.6	24.4	4.0
All ages(IARC world std) ^b	0.9	1.6	0.4	0.8	1.5	0.3	2.0	3.7	0.6
<u>AGE-SPECIFIC RATES, 1997-2001</u>									
AGE AT DEATH:									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	0.1	0.1	-	0.1	0.1	-	0.2	-	-
40-44	0.3	0.4	0.1	0.2	0.3	0.1	0.7	1.2	-
45-49	0.8	1.3	0.3	0.6	1.0	0.2	2.3	4.1	0.8
50-54	1.6	2.6	0.5	1.3	2.2	0.5	4.0	7.4	1.1
55-59	3.1	5.2	1.0	2.6	4.4	1.0	7.8	14.8	2.1
60-64	4.8	8.1	1.8	4.3	7.1	1.6	10.5	19.6	3.3
65-69	6.1	10.2	2.5	5.6	9.5	2.3	11.3	20.4	4.5
70-74	7.3	12.9	2.9	6.8	11.9	2.8	13.8	27.4	4.7
75-79	7.6	14.2	3.0	7.3	13.3	3.0	12.5	27.1	3.8
80-84	7.6	15.6	2.9	7.4	15.2	2.9	10.2	24.5	3.2
85+	6.5	17.5	2.1	6.4	17.2	2.1	7.9	21.9	2.6

^a NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

^b NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the IARC world standard population.

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

Table XII-4
LARYNX 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:									
1960-1963 ^a	-	-	-	53	54	46	-	-	-
1970-1973 ^a	-	-	-	62	63	56	-	-	-
1974-1976 ^b	65.7	65.4	67.2	66.4	66.1	67.9	59.9	59.1	64.0 ^d
1977-1979 ^b	67.0	67.9	62.8	68.3	69.4	62.6	55.8	54.0	63.0 ^d
1980-1982 ^b	68.1	68.0	68.5	69.3	69.0	70.4	58.3	59.7	50.6 ^d
1983-1985 ^b	67.1	68.3	61.9	68.6	69.6	63.7	55.3	56.5	51.3 ^d
1986-1988 ^b	66.7	67.4	64.2	68.7	69.8	64.2	54.1	52.3	61.5 ^d
1989-1991 ^b	65.6	66.9	61.0	66.7	68.0	61.9	55.9	56.1	55.2 ^d
1992-1994 ^b	64.2	65.7	58.6	66.2	67.5	60.7	53.8	55.7	46.6 ^d
1995-2000 ^b	65.1	66.7	59.6	67.4	68.9	62.0	51.0	52.5	46.5 ^d
1995-2000 ^b									
ALL STAGES	65.1	66.7	59.6	67.4	68.9	62.0	51.0	52.5	46.5 ^d
LOCALIZED	83.7	85.6	76.3	85.9	87.9	78.0	67.7	70.2 ^d	60.0 ^d
REGIONAL	48.7	48.9	48.0	49.9	50.2	49.2	42.7	42.3	43.6 ^d
DISTANT	18.7	20.5	9.5 ^d	16.9	19.6	-	19.4 ^d	0.0	-
UNSTAGED	55.6	60.3 ^d	45.2 ^d	58.9 ^d	61.3 ^d	53.7 ^d	-	-	-
<u>STAGE DISTRIBUTION (%) 1995-2000^b</u>									
ALL STAGES									
Number of cases	4,937	3,884	1,053	4,025	3,184	841	693	520	173
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	49	50	44	50	52	46	38	39	34
REGIONAL	44	43	47	42	41	46	53	53	54
DISTANT	4	4	3	4	4	3	6	6	5
UNSTAGED	4	3	5	4	4	5	3	2	7
<u>5-YR RELATIVE SURVIVAL RATES, 1995-2000^b</u>									
AGE AT DIAGNOSIS:									
<45	69.1	67.5	72.0 ^d	73.7	73.8	73.1 ^d	50.3 ^d	43.0 ^d	-
45-54	68.1	69.0	63.6 ^d	72.2	73.1	66.7 ^d	51.7	51.6 ^d	52.4 ^d
55-64	64.6	65.2	62.4	65.7	65.9	64.6	59.4	60.5 ^d	57.3 ^d
65-74	65.5	68.5	55.1	67.6	69.9	59.4	47.3 ^d	56.0 ^d	27.9 ^d
75+	60.5	63.4	52.8 ^d	63.6	67.7	52.9 ^d	31.0 ^d	30.9 ^e	-
Under 65	66.3	66.8	64.3	68.7	69.1	66.8	55.0	54.6	56.1 ^d
65 and over	64.0	67.0	54.4	66.4	69.3	57.1	43.5	48.6 ^d	29.9 ^d

^a Rates are based on End Results data from a series of hospital registries and one population-based registry.

^b Rates are from the SEER 9 areas. They are based on data from population-based registries in Connecticut, New Mexico, Utah, Iowa, Hawaii, Atlanta, Detroit, Seattle-Puget Sound and San Francisco-Oakland. Rates are based on follow-up of patients into 2001.

^c The difference in rates between 1974-1976 and 1995-2000 is statistically significant (p<.05).

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

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

- Statistic could not be calculated.

Table XII-5
 LARYNX CANCER (Invasive)

SURVIVAL RATES^a

By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Relative Survival Rates (SEER ^b)																		
1-year	88.5	89.1	90.6	89.5	88.1	86.8	89.3	87.6	90.7	88.3	87.4	87.6	89.7	88.7	86.3	86.6	86.3	86.0
2-year	79.2	80.3	80.8	80.2	79.0	76.8	80.0	78.0	80.9	78.2	79.1	77.6	80.4	79.7	78.7	76.3	75.7	
3-year	73.3	74.8	75.7	73.2	73.9	72.2	74.3	71.4	74.1	73.8	72.3	70.6	75.4	75.1	73.1	70.7		
4-year	69.0	70.7	70.2	68.6	70.1	69.4	67.8	66.9	70.1	69.4	66.6	66.5	70.0	70.6	69.9			
5-year	65.9	67.5	68.1	65.5	67.7	67.0	63.9	65.2	67.8	66.0	62.7	63.7	66.6	66.9				
6-year	63.7	64.8	64.2	61.4	64.6	64.3	61.8	61.1	64.0	63.0	60.7	59.4	64.4					
7-year	61.5	62.2	61.8	58.9	61.1	62.6	59.6	59.5	63.4	60.4	58.5	57.5						
8-year	59.7	60.6	59.0	57.0	57.5	60.1	56.4	57.5	59.3	57.8	56.2							
9-year	57.5	58.5	56.3	54.4	55.4	57.4	54.1	55.6	57.1	55.9								
11-year	55.4	56.8	54.3	51.7	54.0	55.9	51.5	53.5	55.2									
10-year	54.1	54.5	53.0	50.2	51.3	52.7	50.2	51.6										
12-year	52.4	52.0	51.1	48.2	50.2	50.3	48.8											
13-year	51.3	50.0	51.0	46.5	49.0	49.7												
14-year	49.9	48.9	47.0	44.4	47.5													
15-year	47.7	47.4	46.1	41.3														
16-year	45.8	45.1	44.8															
17-year	43.7	43.8																
18-year	42.8																	
19-year	41.3																	
20-year	39.5																	

^a Survival rates are relative rates expressed as percents.
^b Rates are from the SEER 9 areas.

Table XII-6
 LARYNX CANCER (Invasive)

SURVIVAL RATES^a

By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Relative Survival Rates (SEER ^b)																		
1-year	88.9	89.2	90.8	89.8	88.7	86.9	89.8	88.0	90.8	88.5	87.7	89.8	91.6	88.5	89.0	87.8	87.9	86.0
2-year	79.3	80.5	81.6	80.2	80.0	76.0	81.0	78.6	81.4	79.1	79.8	79.8	82.2	80.0	81.5	77.3	77.1	
3-year	73.7	75.2	76.2	74.0	76.2	70.9	75.1	71.5	74.3	74.0	74.0	72.8	77.0	75.4	76.0	71.6		
4-year	69.4	71.3	70.7	69.1	72.2	68.8	69.4	67.7	70.5	70.0	68.5	68.3	72.1	71.1	72.5			
5-year	66.4	68.0	68.6	65.9	69.5	66.6	65.7	66.0	68.9	66.7	64.8	65.4	68.5	68.2				
6-year	64.2	65.3	64.9	61.9	66.9	63.9	62.8	62.0	64.9	63.6	62.9	61.6	66.5					
7-year	62.1	62.8	62.7	59.3	63.3	62.6	61.5	60.7	64.4	60.8	61.0	59.7						
8-year	60.3	61.3	60.6	57.4	59.9	60.2	58.5	58.8	60.4	59.0	58.6							
9-year	58.1	59.2	58.6	55.3	58.5	57.9	56.8	57.3	58.2	57.1								
11-year	56.3	57.7	57.0	52.2	57.1	57.4	54.1	55.4	55.9									
10-year	55.3	55.5	56.3	51.0	54.8	54.7	52.6	53.4										
12-year	53.9	52.9	54.7	49.6	53.9	52.9	50.7											
13-year	52.9	50.9	54.4	48.6	53.9	52.4												
14-year	51.4	49.8	50.5	46.8	53.0													
15-year	49.3	48.0	49.7	44.2														
16-year	47.3	46.1	48.0															
17-year	45.3	45.4																
18-year	44.4																	
19-year	42.8																	
20-year	41.2																	

^a Survival rates are relative rates expressed as percents.
^b Rates are from the SEER 9 areas.

Table XII-7
 LARYNX CANCER (Invasive)

SURVIVAL RATES^a

By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
Relative Survival Rates (SEER ^b)																			
1-year	86.7	88.6	89.7	88.3	85.6	86.1	87.4	86.0	90.4	87.3	85.8	78.8	81.6	89.6	76.7	83.0	81.0	85.9	
2-year	78.3	79.2	77.3	80.1	74.8	80.2	76.4	75.4	78.8	74.1	76.0	69.2	73.2	78.9	68.5	73.4	71.4		
3-year	71.4	72.9	73.1	69.7	64.7	77.7	71.6	70.7	73.3	72.7	65.0	62.2	69.1	73.8	63.0	68.1			
4-year	66.9	68.0	67.6	66.3	62.0	72.0	62.1	64.0	68.8	66.8	58.7	59.9	61.3	68.6	61.0				
5-year	63.5	65.1	65.7	63.5	60.4	68.7	58.0	62.0	63.5	63.3	54.3	57.6	58.8	62.5					
6-year	61.4	62.3	61.2	59.3	55.7	65.9	58.0	58.0	60.6	60.4	52.0	51.5	56.1						
7-year	58.6	59.9	57.9	57.1	52.7	63.0	53.3	55.1	59.7	58.7	48.9	49.2							
8-year	57.0	57.6	52.5	55.5	48.9	60.0	50.0	52.8	55.2	53.4	47.1								
9-year	54.5	55.6	47.5	50.8	44.1	55.5	45.8	49.6	53.4	51.4									
11-year	51.4	53.0	43.7	49.8	42.7	50.7	43.4	46.8	52.9										
10-year	48.9	50.6	40.5	47.2	38.9	45.5	42.9	45.4											
12-year	46.0	48.5	38.0	42.7	37.2	40.8	42.9												
13-year	44.6	46.3	38.0	38.8	31.3	40.7													
14-year	43.8	45.8	34.9	35.5	29.1														
15-year	41.2	44.9	33.7	30.9															
16-year	39.6	41.6	33.7																
17-year	37.2	37.9																	
18-year	36.8																		
19-year	35.9																		
20-year	33.3																		

^a Survival rates are relative rates expressed as percents.
^b Rates are from the SEER 9 areas.

Table XII-8
LARYNX 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 (12 SEER Areas) With Cancer and
 Lifetime Risk (Percent) of Dying (Total U.S.) From Cancer

1999-2001

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	0.63	0.00	0.00	0.00	0.16
10	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.16
20	0.00	0.00	0.03	0.65	0.00	0.00	0.01	0.16
30	0.00	0.03	0.15	0.65	0.00	0.01	0.04	0.16
40	0.03	0.15	0.37	0.66	0.01	0.04	0.09	0.16
50	0.12	0.35	0.55	0.65	0.03	0.08	0.13	0.15
60	0.25	0.46	0.56	0.57	0.06	0.10	0.12	0.13

Lifetime Risk of Being Diagnosed = 0.63%
 Lifetime Risk of Dying = 0.24%

Lifetime Risk of Being Diagnosed = 0.16%
 Lifetime Risk of Dying = 0.06%

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	0.64	0.00	0.00	0.00	0.16
10	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.16
20	0.00	0.00	0.03	0.65	0.00	0.00	0.01	0.16
30	0.00	0.03	0.15	0.65	0.00	0.01	0.04	0.16
40	0.03	0.14	0.37	0.66	0.01	0.04	0.09	0.16
50	0.12	0.35	0.55	0.65	0.03	0.08	0.13	0.16
60	0.25	0.47	0.56	0.57	0.06	0.11	0.13	0.13

Lifetime Risk of Being Diagnosed = 0.64%
 Lifetime Risk of Dying = 0.22%

Lifetime Risk of Being Diagnosed = 0.16%
 Lifetime Risk of Dying = 0.06%

Blacks

Current Age	Males				Females			
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.22
10	0.00	0.00	0.01	0.90	0.00	0.00	0.00	0.23
20	0.00	0.01	0.07	0.91	0.00	0.00	0.02	0.23
30	0.01	0.08	0.29	0.94	0.00	0.02	0.07	0.23
40	0.07	0.29	0.58	0.96	0.02	0.07	0.16	0.23
50	0.24	0.55	0.84	0.96	0.06	0.15	0.19	0.22
60	0.36	0.70	0.83	0.84	0.10	0.15	0.17	0.18

Lifetime Risk of Being Diagnosed = 0.88%
 Lifetime Risk of Dying = 0.38%

Lifetime Risk of Being Diagnosed = 0.22%
 Lifetime Risk of Dying = 0.09%

Table XII-9
LARYNX CANCER (Invasive)

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

By Race/Ethnicity and Sex

Incidence^a

RACE/ETHNICITY	Rate 1997-2001			Trend 1992-2001		
	Rate per 100,000 persons			APC (%)		
	Total	Males	Females	Total	Males	Females
All Races	3.8	6.7	1.4	-2.9 ^d	-3.4 ^d	-1.9
White	3.8	6.6	1.5	-2.8 ^d	-3.3 ^d	-1.5
White Hispanic ^b	2.9	5.7	0.9	-0.9	-1.6 ^d	-
White Non-Hispanic ^b	3.7	6.5	1.5	-2.9 ^d	-3.4 ^d	-1.7
Black	6.4	12.1	2.4	-3.1 ^d	-2.9 ^d	-3.4
Asian/Pacific Islander	1.7	3.4	0.5	-2.5	-2.8	-
Amer Ind/Alaska Nat	-	-	-	-	-	-
Hispanic ^b	2.8	5.4	0.9	-0.7	-1.5 ^d	-

Mortality^c

RACE/ETHNICITY	Rate 1997-2001			Trend 1992-2001		
	Rate per 100,000 persons			APC (%)		
	Total	Males	Females	Total	Males	Females
All Races	1.4	2.6	0.5	-2.0 ^d	-2.3 ^d	-1.7 ^d
White	1.3	2.3	0.5	-1.9 ^d	-2.2 ^d	-1.5 ^d
White Hispanic ^b	1.1	2.3	0.2	-1.7	-1.9	-
White Non-Hispanic ^b	1.3	2.3	0.5	-1.6 ^d	-2.0 ^d	-1.1
Black	2.7	5.4	0.9	-2.7 ^d	-2.8 ^d	-2.4 ^d
Asian/Pacific Islander	0.5	1.0	0.1	-0.6	1.1	-
Amer Ind/Alaska Nat	1.3	2.4	-	-	-	-
Hispanic ^b	1.0	2.2	0.2	-1.8	-2.0	-

The APC is the 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.

^a Incidence data are from the 12 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, and Alaska Native Registry).

^b Hispanic and Non-Hispanic are not mutually exclusive from Whites, Blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics do not include cases from Detroit, Hawaii and Alaska Native Registry. For mortality, information is included for all states except Connecticut, Maine, Maryland, Oklahoma, New York, New Hampshire, North Dakota and Vermont.

^c Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS).

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

Table XII-10
LARYNX CANCER (Invasive)AGE-ADJUSTED SEER INCIDENCE RATES^a AND SEER DEATH RATES^b
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE RATES^a, 1997-2001</u>									
REGISTRY									
12 registries	3.8	6.7	1.4	3.8	6.6	1.5	6.4	12.1	2.4
11 registries	3.8	6.7	1.4	3.8	6.6	1.5	6.4	12.1	2.4
9 registries	4.0	7.0	1.6	3.9	6.8	1.5	6.6	12.1	2.7
San Francisco-Oakland	3.3	6.1	1.2	3.5	6.2	1.3	6.1	11.4	-
Connecticut	4.7	8.2	2.0	4.5	7.9	1.9	6.5	12.7	-
Metropolitan Detroit	5.3	9.3	2.3	4.8	8.3	2.1	7.7	14.0	3.3
Hawaii	3.5	6.5	1.0	6.3	11.0	-	-	-	-
Iowa	4.2	7.5	1.6	4.2	7.5	1.6	-	-	-
New Mexico	3.5	5.8	1.5	3.7	6.1	1.6	-	-	-
Seattle-Puget Sound	3.4	5.9	1.4	3.5	6.1	1.3	5.3	-	-
Utah	2.0	3.3	0.9	2.1	3.4	1.0	-	-	-
Metropolitan Atlanta	4.0	7.5	1.4	3.5	6.6	1.1	5.8	11.4	2.3
San Jose-Monterey	2.8	4.9	1.0	3.0	5.3	1.2	-	-	-
Los Angeles	3.5	6.4	1.2	3.5	6.3	1.3	6.1	12.2	1.9
<u>SEER DEATH RATES^b, 1997-2001</u>									
REGISTRY									
12 registries	1.2	2.2	0.5	1.2	2.1	0.5	2.6	5.2	0.8
11 registries	1.2	2.2	0.5	1.2	2.1	0.5	2.6	5.2	0.8
9 registries	1.2	2.2	0.5	1.2	2.0	0.5	2.7	5.4	0.8
San Francisco-Oakland	1.1	1.9	0.5	1.1	1.8	0.5	2.5	4.3	-
Connecticut	1.3	2.4	0.6	1.2	2.2	0.5	3.5	6.2	-
Metropolitan Detroit	1.7	3.3	0.6	1.4	2.6	0.6	3.0	6.1	-
Hawaii	0.8	1.6	-	-	-	-	-	-	-
Iowa	1.2	2.2	0.4	1.2	2.2	0.5	-	-	-
New Mexico	1.2	2.0	0.6	1.3	2.1	0.6	-	-	-
Seattle-Puget Sound	1.1	1.9	0.5	1.1	1.8	0.6	-	-	-
Utah	0.6	1.1	-	0.6	1.0	-	-	-	-
Metropolitan Atlanta	1.4	2.8	0.4	1.1	2.0	-	2.7	5.9	-
San Jose-Monterey	0.7	1.4	-	0.8	1.6	-	-	-	-
Los Angeles	1.3	2.3	0.5	1.3	2.3	0.5	2.5	4.9	-

Note: San Jose-Monterey and Los Angeles are new SEER areas as of 1992 and their data are only used in tables where indicated.
^a SEER 9 areas. Incidence rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.
^b NCHS public use data file for the total US. Death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

- Statistic could not be calculated or populations are inadequate.

Table XII-11
LARYNX CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH^a RATES BY STATE, ALL RACES, 1997-2001

Males and Females

State	Rate	SE	Rank	PD
TOTAL U.S.	1.4	0.01		
High Five States				
District of Columbia	3.7 ^{bc}	0.36	(01)	164.3
Louisiana	2.0 ^{bc}	0.10	(02)	42.9
Rhode Island	1.9 ^b	0.18	(03)	35.7
West Virginia	1.8 ^b	0.13	(04)	28.6
Kentucky	1.8 ^{bc}	0.10	(05)	28.6
Low Five States				
Colorado	1.0 ^{bc}	0.08	(47)	-28.6
Oregon	1.0 ^{bc}	0.07	(48)	-28.6
Nebraska	0.9 ^{bc}	0.10	(49)	-35.7
Hawaii	0.8 ^{bc}	0.11	(50)	-42.9
Utah	0.6 ^{bc}	0.09	(51)	-57.1

Males

State	Rate	SE	Rank	PD
TOTAL U.S.	2.6	0.02		
High Five States				
District of Columbia	6.7 ^{bc}	0.76	(01)	157.7
Louisiana	3.8 ^{bc}	0.21	(02)	46.2
Rhode Island	3.6 ^b	0.39	(03)	38.5
Kentucky	3.4 ^{bc}	0.20	(04)	30.8
Maryland	3.2 ^b	0.18	(05)	23.1
Low Five States				
Montana	1.8 ^b	0.29	(47)	-30.8
Nebraska	1.7 ^{bc}	0.21	(48)	-34.6
Colorado	1.7 ^{bc}	0.15	(49)	-34.6
Hawaii	1.6 ^{bc}	0.24	(50)	-38.5
Utah	1.1 ^{bc}	0.18	(51)	-57.7

Females

State	Rate	SE	Rank	PD
TOTAL U.S.	0.5	0.01		
High Five States				
District of Columbia	1.4 ^b	0.30	(01)	180.0
West Virginia	0.9 ^b	0.12	(02)	80.0
North Dakota	0.7 ^b	0.20	(03)	40.0
Wyoming	0.7 ^b	0.24	(04)	40.0
Rhode Island	0.7 ^b	0.15	(05)	40.0
Low Five States				
South Dakota	0.3 ^b	0.12	(47)	-40.0
Oregon	0.3 ^b	0.06	(48)	-40.0
Nebraska	0.3 ^b	0.08	(49)	-40.0
Utah	0.3 ^b	0.08	(50)	-40.0
Hawaii	0.1 ^{bc}	0.04	(51)	-80.0

For additional detailed cancer statistics by state, please visit the State Cancer Profiles website. <http://statecancerprofiles.cancer.gov/>

- ^a NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.
- ^b Absolute percent difference between state rate and total U.S. rate is 15% or more.
- ^c Difference between state rate and total U.S. rate is statistically significant (p<=.0002).
- SE Standard error of the rate.
- PD Percent difference between state rate and total U.S. rate.

Table XII-12
LARYNX CANCER (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2001
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis	0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	0 to <11 ^e	0 to <26 ^e	>=26 ^g	Complete ^h
Race/Sex									
All Races ^b	34,076	23,259	16,532	10,943	6,730	61,341	92,464	7,032	99,496
Males	26,759	18,794	13,348	8,792	5,554	48,693	74,006	5,737	79,743
Females	7,317	4,465	3,184	2,151	1,176	12,648	18,458	1,295	19,753
White ^b	28,697	20,104	14,370	9,910	6,071	52,321	79,936	5,767	85,703
Males	22,728	16,237	11,727	7,992	5,007	41,733	64,346	4,696	69,042
Females	5,969	3,867	2,643	1,918	1,064	10,588	15,590	1,071	16,661
Black ^b	4,613	2,709	1,804	927	553	7,727	10,725	506	11,231
Males	3,413	2,199	1,375	710	464	5,912	8,250	417	8,667
Females	1,200	510	429	217	89	1,815	2,475	89	2,564
Asian/Pacific Islander ^c	450	254	+	+	+	734	+	+	+
Males	373	217	+	+	+	616	+	+	+
Females	77	37	+	+	+	118	+	+	+
Hispanic ^d	1,388	792	+	+	+	2,365	+	+	+
Males	1,135	668	+	+	+	1,965	+	+	+
Females	253	124	+	+	+	400	+	+	+

Estimated prevalence percent^a on January 1, 2001, of the SEER 11 population diagnosed in the previous 10 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	Age Specific (Crude)										Age-Adjusted ^f
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
Race/Sex											
All Races ^c	0.0170%	-	-	0.0002%	0.0010%	0.0069%	0.0303%	0.0812%	0.1021%	0.0675%	0.0188%
Males	0.0274%	-	-	-	0.0011%	0.0102%	0.0512%	0.1392%	0.1910%	0.1534%	0.0340%
Females	0.0068%	-	-	0.0002%	0.0008%	0.0037%	0.0105%	0.0300%	0.0355%	0.0220%	0.0069%
White ^c	0.0183%	-	-	0.0002%	0.0011%	0.0072%	0.0302%	0.0852%	0.1038%	0.0687%	0.0193%
Males	0.0294%	-	-	-	0.0011%	0.0103%	0.0511%	0.1454%	0.1920%	0.1578%	0.0347%
Females	0.0073%	-	-	-	0.0010%	0.0040%	0.0099%	0.0305%	0.0369%	0.0222%	0.0071%
Black ^c	0.0190%	-	-	-	0.0008%	0.0110%	0.0536%	0.1187%	0.1430%	0.0787%	0.0276%
Males	0.0305%	-	-	-	-	0.0172%	0.0910%	0.2018%	0.2878%	0.1781%	0.0507%
Females	0.0086%	-	-	-	-	0.0056%	0.0222%	0.0529%	0.0475%	0.0331%	0.0113%
Asian/Pacific Islander ^c	0.0072%	-	-	-	-	0.0018%	0.0110%	0.0267%	0.0624%	0.0457%	0.0087%
Males	0.0126%	-	-	-	-	0.0034%	0.0194%	0.0473%	0.1245%	0.0963%	0.0169%
Females	0.0022%	-	-	-	-	-	0.0036%	0.0100%	0.0158%	0.0106%	0.0025%
Hispanic ^d	0.0057%	-	-	-	0.0010%	0.0035%	0.0155%	0.0555%	0.0738%	0.0483%	0.0125%
Males	0.0092%	-	-	-	0.0009%	0.0055%	0.0289%	0.1053%	0.1441%	0.1151%	0.0243%
Females	0.0021%	-	-	-	0.0011%	0.0016%	0.0033%	0.0146%	0.0237%	0.0121%	0.0037%

^a US 2001 cancer prevalence counts are based on 2001 cancer prevalence proportions from the SEER registries and 1/1/2001 US population estimates based on the average of 2000 and 2001 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^{b c d} Statistics based on b) SEER 9 Areas c) SEER 11 Areas d) SEER 11 Areas excluding Hawaii and Detroit.

^e Maximum limited-duration prevalence: 26 years for 1975-2001 SEER 9 data; 11 years for 1990-2001 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^f Percentages are age-adjusted to the 2000 US standard population by 5-year age groups.

^{g h} (g) Cases diagnosed 26 years or more ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <26 and >=26.

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

+ Not available.

SEER Incidence and US Death Rates+ Larynx Cancer, by Race and Sex

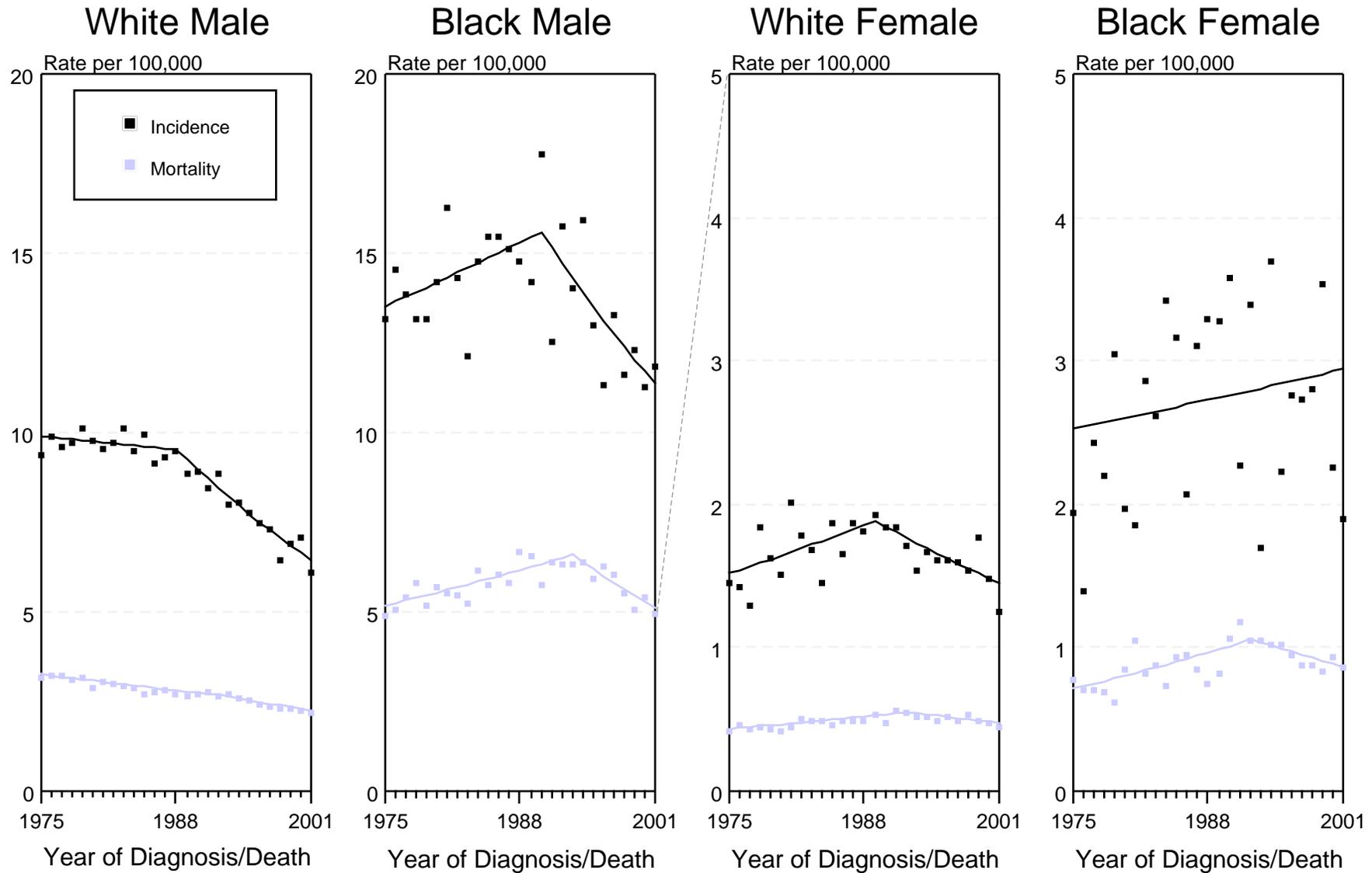


Figure XII-1

+ Source: SEER 9 areas and NCHS public use data file for the total US. Rates are age-adjusted to the 2000 US standard million population by 5-year age groups. Regression lines are calculated using the Joinpoint Regression Program Version 2.7, September 2003, National Cancer Institute.