

Table XIX-1
ORAL CAVITY AND PHARYNX CANCER (Invasive)

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

	<u>All Races</u>		<u>Whites</u>		<u>Blacks</u>	
	<u>Year</u>	<u>APC</u>	<u>Year</u>	<u>APC</u>	<u>Year</u>	<u>APC</u>
<u>SEER Cancer Incidence^a</u>						
Sex - Male and Female	1973-81	0.7	1973-93	-0.4★	1973-79	6.4★
	1981-97	-0.9★	1993-99	-2.7★	1979-94	-0.8
	1997-99	-5.9			1994-99	-5.0★
Sex - Male	1973-93	-0.6★	1973-93	-0.7★	1973-84	3.6★
	1993-99	-3.2★	1993-99	-3.1★	1984-99	-2.2★
Sex - Female	1973-81	1.6★	1973-82	1.4★	1973-79	5.5
	1981-99	-1.0★	1982-99	-1.0★	1979-99	-1.9★
<u>U.S. Cancer Mortality^b</u>						
Sex - Male and Female	1973-79	-0.2	1973-77	-0.5	1973-80	3.1★
	1979-99	-1.9★	1977-99	-1.9★	1980-93	-1.4★
					1993-99	-4.0★
Sex - Male	1973-80	-0.8	1973-99	-2.1★	1973-80	3.9★
	1980-99	-2.2★			1980-93	-1.4★
					1993-99	-4.5★
Sex - Female	1973-79	0.4	1973-79	0.3	1973-81	1.5
	1979-91	-1.2★	1979-91	-1.2★	1981-99	-1.5★
	1991-99	-2.2★	1991-99	-2.2★		

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

^a Trends are from the SEER 9 areas.

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

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

Table XIX-2
 ORAL CAVITY AND PHARYNX 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>									
<u>YEAR OF DIAGNOSIS:</u>									
1973	13.1	20.8	7.2	13.0	20.9	7.1	12.5	19.2	6.8
1974	12.9	20.4	7.1	12.9	20.7	7.0	12.5	18.9	7.1
1975	13.2	21.2	7.1	13.3	21.7	6.9	13.4	20.2	8.3
1976	13.3	21.0	7.4	13.2	20.9	7.4	15.1	23.8	8.2
1977	12.7	20.1	7.0	12.6	19.9	7.0	14.5	23.9	6.8
1978	13.4	20.9	7.7	13.2	20.8	7.6	15.7	25.8	7.9
1979	14.0	21.9	8.0	13.7	21.6	7.7	18.5	28.2	10.8
1980	13.3	20.3	7.9	13.0	20.0	7.6	16.8	25.1	9.8
1981	13.6	20.8	7.9	13.4	20.5	7.9	16.7	28.2	7.5
1982	13.3	20.3	7.9	13.1	19.9	7.9	17.1	27.4	8.9
1983	13.3	21.3	7.2	13.3	21.3	7.3	16.1	26.0	8.3
1984	13.5	20.9	7.9	13.0	20.2	7.6	19.1	30.2	10.2
1985	13.4	20.0	8.2	13.3	19.7	8.3	16.0	25.8	8.5
1986	12.7	19.5	7.2	12.5	19.2	7.3	16.2	28.1	7.0
1987	13.4	21.0	7.5	13.3	20.6	7.7	16.8	30.2	6.8
1988	12.3	18.6	7.3	12.0	18.1	7.0	16.6	25.7	9.2
1989	12.4	18.9	7.3	12.2	18.3	7.3	16.0	27.7	7.0
1990	13.0	20.0	7.3	12.7	19.5	7.4	16.2	28.2	6.9
1991	12.5	19.1	7.2	12.5	18.9	7.2	14.7	24.2	7.4
1992	12.2	18.8	7.0	12.1	18.6	6.9	15.2	25.7	7.1
1993	12.7	19.2	7.3	12.4	18.9	7.2	15.9	25.7	8.1
1994	12.0	18.2	6.8	11.6	17.4	6.9	16.0	27.2	7.2
1995	11.7	17.3	7.2	11.7	17.1	7.2	13.9	22.9	6.9
1996	11.9	17.9	7.0	11.5	17.2	6.8	15.5	25.3	7.8
1997	11.5	17.3	6.8	11.4	17.0	6.8	12.0	19.1	6.4
1998	11.1	16.5	6.7	11.0	16.1	6.8	13.2	22.2	6.5
1999	10.3	15.2	6.3	10.1	14.9	6.1	11.8	19.8	5.7
<u>AGE-ADJUSTED RATES, 1995-99</u>									
<u>AGE AT DIAGNOSIS:</u>									
All ages	11.3	16.8	6.8	11.1	16.5	6.7	13.2	21.8	6.6
Under 65	6.7	9.8	3.8	6.4	9.2	3.6	9.8	15.9	4.7
65 and over	43.1	65.5	27.4	44.2	66.8	28.5	37.2	62.4	19.8
All ages (world std.)ë	8.1	11.9	4.8	7.9	11.5	4.7	10.2	16.7	5.1
<u>AGE-SPECIFIC RATES, 1995-99</u>									
<u>AGE AT DIAGNOSIS:</u>									
0-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.3	-	-	-	-	-	-	-	-
15-19	0.5	-	-	0.4	-	-	-	-	-
20-24	0.7	0.6	0.8	0.7	-	-	-	-	-
25-29	1.3	1.2	1.3	1.2	1.1	1.3	-	-	-
30-34	2.2	2.8	1.5	1.9	2.6	1.1	2.0	-	-
35-39	3.5	4.7	2.2	3.0	4.1	2.0	3.7	5.8	-
40-44	6.2	8.7	3.7	5.5	7.8	3.1	9.2	13.5	5.4
45-49	12.3	18.3	6.4	10.9	16.4	5.4	19.6	31.6	9.3
50-54	19.5	29.7	9.7	18.2	27.6	8.9	32.7	55.1	13.7
55-59	27.3	41.0	14.5	27.0	39.7	14.7	39.4	65.4	18.5
60-64	33.4	49.0	19.3	33.4	48.0	19.8	46.4	78.9	21.5
65-69	40.5	60.2	23.9	40.9	59.2	25.1	45.9	74.9	23.2
70-74	43.6	65.9	26.2	44.6	67.0	27.1	40.8	67.4	21.7
75-79	45.0	66.8	29.5	46.7	69.0	31.0	38.4	66.7	19.5
80-84	45.6	72.2	29.8	47.7	75.4	31.4	25.6	-	-
85+	41.6	66.0	31.2	42.4	69.0	31.7	-	-	-

§ 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.

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

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

Table XIX-3
 ORAL CAVITY AND PHARYNX CANCER (Invasive)

U.S. DEATH RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES^ä, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
<u>YEAR OF DEATH:</u>									
1973	4.3	7.0	2.3	4.2	6.8	2.2	5.7	9.5	2.7
1974	4.3	7.1	2.2	4.2	6.9	2.2	5.4	9.0	2.5
1975	4.3	6.9	2.3	4.1	6.6	2.3	5.8	9.9	2.5
1976	4.2	6.9	2.2	4.0	6.6	2.2	6.1	10.6	2.6
1977	4.3	7.0	2.3	4.1	6.7	2.2	6.2	10.9	2.6
1978	4.2	6.8	2.3	4.0	6.4	2.2	6.1	10.7	2.7
1979	4.2	6.7	2.4	4.0	6.3	2.3	6.6	11.5	3.0
1980	4.2	6.7	2.3	3.9	6.1	2.2	7.0	12.5	2.8
1981	4.1	6.5	2.2	3.8	6.0	2.2	6.5	11.4	2.8
1982	4.0	6.5	2.2	3.7	6.0	2.1	6.6	11.5	2.9
1983	3.9	6.3	2.2	3.6	5.7	2.1	6.6	11.8	2.8
1984	3.9	6.2	2.2	3.6	5.6	2.1	6.4	11.7	2.4
1985	3.8	5.9	2.1	3.5	5.4	2.0	6.2	11.0	2.6
1986	3.7	5.8	2.2	3.4	5.3	2.1	6.5	11.4	2.9
1987	3.5	5.5	2.1	3.3	5.0	2.0	5.7	10.0	2.5
1988	3.6	5.6	2.0	3.3	5.1	2.0	6.0	10.7	2.5
1989	3.5	5.3	2.1	3.2	4.8	2.0	5.9	10.4	2.6
1990	3.6	5.6	2.0	3.3	5.1	2.0	6.1	11.0	2.5
1991	3.5	5.3	2.0	3.2	4.9	2.0	5.8	10.1	2.7
1992	3.3	5.2	1.9	3.1	4.7	1.9	5.6	10.0	2.3
1993	3.4	5.2	1.9	3.1	4.7	1.8	5.7	10.1	2.4
1994	3.2	4.9	1.8	2.9	4.4	1.8	5.3	9.3	2.4
1995	3.2	4.9	1.9	2.9	4.4	1.8	5.4	9.3	2.6
1996	3.0	4.7	1.8	2.8	4.3	1.7	4.9	8.7	2.1
1997	3.0	4.6	1.8	2.8	4.2	1.7	4.7	8.1	2.2
1998	3.0	4.6	1.7	2.8	4.2	1.7	4.6	8.0	2.1
1999	2.8	4.2	1.6	2.6	3.8	1.6	4.4	7.6	2.2
<u>AGE-ADJUSTED RATES, 1995-99</u>									
<u>AGE AT DEATH:</u>									
All ages	3.0	4.6	1.8	2.8	4.2	1.7	4.8	8.3	2.2
Under 65	1.4	2.2	0.7	1.2	1.9	0.6	3.1	5.4	1.2
65 and over	13.9	20.8	9.2	13.8	20.3	9.3	16.7	28.6	9.0
All ages (world std.) ^ö	2.0	3.1	1.1	1.8	2.8	1.0	3.5	6.1	1.6
<u>AGE-SPECIFIC RATES, 1995-99</u>									
<u>AGE AT DEATH:</u>									
0-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.0	0.1	-	0.0	-	-	-	-	-
20-24	0.1	0.1	-	0.1	0.1	-	-	-	-
25-29	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-
30-34	0.2	0.2	0.1	0.1	0.2	0.1	0.3	0.4	-
35-39	0.4	0.6	0.3	0.4	0.5	0.2	0.8	1.3	0.4
40-44	1.0	1.5	0.5	0.8	1.2	0.4	2.2	3.5	1.1
45-49	2.3	3.7	1.0	1.8	2.8	0.8	5.9	10.5	2.0
50-54	4.0	6.4	1.7	3.3	5.2	1.5	10.1	18.1	3.5
55-59	6.6	10.3	3.1	5.7	8.8	2.8	14.3	25.1	5.9
60-64	9.0	14.1	4.5	8.3	12.7	4.2	16.5	29.4	6.9
65-69	11.1	17.2	6.0	10.7	16.4	5.8	16.5	27.5	8.3
70-74	12.7	19.5	7.4	12.3	18.7	7.3	18.1	31.4	9.0
75-79	13.6	20.2	9.0	13.4	19.6	9.0	16.7	29.4	8.6
80-84	16.3	23.5	12.1	16.4	23.4	12.4	15.2	26.1	9.5
85+	20.5	29.3	17.0	21.1	29.8	17.6	15.7	26.7	11.1

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

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

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

Table XIX-4
ORAL CAVITY AND PHARYNX CANCER (Invasive)

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

	<u>All Races</u>			<u>Whites</u>			<u>Blacks</u>		
	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>	<u>Total</u>	<u>Males</u>	<u>Females</u>
<u>5-YR RELATIVE SURVIVAL RATES</u>									
<u>YEAR OF DIAGNOSIS:</u>									
1960-63 ^a	-	-	-	45	-	-	-	-	-
1970-73 ^a	-	-	-	43	-	-	-	-	-
1974-76 ^b	53.4	52.4	55.6	55.1	54.6	56.0	36.3	31.6	45.4
1977-79 ^b	52.9	51.7	55.5	54.8	54.2	56.2	36.6	30.9	48.8
1980-82 ^b	53.0	51.3	56.2	55.6	54.6	57.8	31.0	26.5	42.5
1983-85 ^b	53.2	51.6	56.4	55.3	54.4	57.0	35.2	29.9	47.7
1986-88 ^b	52.9	49.3	60.7	55.2	52.2	61.9	34.7	29.3	49.1
1989-91 ^b	53.1	49.3	61.3	55.4	52.1	62.5	32.6	27.9	44.8
1992-98 ^b	56.4 \bar{U}	54.6 \bar{U}	60.1 \bar{U}	58.8 \bar{U}	57.8 \bar{U}	60.9 \bar{U}	34.9	29.5	49.3
1992-98 ^b									
ALL STAGES	56.4	54.6	60.1	58.8	57.8	60.9	34.9	29.5	49.3
LOCALIZED	81.9	81.1	83.1	82.4	81.9	83.3	68.2	62.5	76.3 \uparrow
REGIONAL	46.7	46.6	47.1	48.6	49.0	47.7	28.9	26.2	37.8
DISTANT	23.4	21.8	27.5	23.6	23.2	24.4	19.4	12.4	35.7 \uparrow
UNSTAGED	42.5	39.9	49.2	44.3	42.9	48.0	26.2	20.8	45.2 \uparrow
<u>STAGE DISTRIBUTION (%) 1992-98^b</u>									
ALL STAGES									
Number of cases	15,705	10,756	4,949	12,779	8,670	4,109	1,717	1,262	455
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	34	32	39	37	36	41	19	16	29
REGIONAL	46	48	43	44	45	42	55	58	49
DISTANT	9	9	8	8	8	7	13	13	13
UNSTAGED	11	11	10	11	11	10	12	13	9
<u>5-YR RELATIVE SURVIVAL RATES, 1992-98^b</u>									
<u>AGE AT DIAGNOSIS:</u>									
<45	67.4	61.4	80.5	70.3	64.7	83.1	45.9	36.7	68.7 \uparrow
45-54	58.4	55.9	66.4	63.9	61.4	71.9	32.0	28.9	43.0 \uparrow
55-64	55.4	53.2	61.2	58.6	56.7	63.6	33.7	29.6	45.6 \uparrow
65-74	54.4	53.5	55.9	55.8	55.4	56.7	30.6	25.2	41.7 \uparrow
75+	47.9	49.7	45.9	49.2	52.4	45.8	30.3 \uparrow	18.3 \uparrow	47.2 \uparrow
Under 65	59.3	56.0	68.1	63.0	60.1	70.9	36.0	30.8	51.5
65 and over	52.0	52.3	51.6	53.4	54.4	51.8	30.6	24.2	43.5 \uparrow

^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 1999.
 \bar{U} The difference in rates between 1974-76 and 1992-98 is statistically significant ($p < .05$).
 \uparrow The standard error of the survival rate is between 5 and 10 percentage points.
 \uparrow The standard error of the survival rate is greater than 10 percentage points.
 $-$ Statistic could not be calculated.

Table XIX-5
ORAL CAVITY AND PHARYNX CANCER (Invasive)

INCIDENCE, DEATH, AND SURVIVAL RATES*

By Year of Diagnosis/Death

All Races, Males and Females

Year of Diagnosis/Death

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Incidence																					
SEER ^a	13.2	13.3	13.6	13.3	13.3	13.5	13.4	12.7	13.4	12.3	12.4	13.0	12.5	12.2	12.7	12.0	11.7	11.9	11.5	11.1	10.3
Mortality																					
U.S. ^b	4.3	4.2	4.1	4.0	3.9	3.9	3.8	3.7	3.5	3.6	3.5	3.6	3.5	3.3	3.4	3.2	3.2	3.0	3.0	3.0	2.8
SEER ^a	4.4	4.2	4.2	4.1	4.0	4.2	3.8	4.0	3.5	3.4	3.7	3.5	3.5	3.3	3.2	3.2	3.0	2.7	3.0	2.7	2.7
Relative Survival Rates (SEER ^a)																					
1-year	79.7	79.6	80.5	80.0	79.1	81.0	81.7	80.2	80.7	81.6	79.2	81.3	80.9	79.6	81.5	83.0	82.9	81.9	83.8	80.9	
2-year	66.2	67.3	66.6	66.2	65.4	66.4	68.3	66.4	67.7	66.3	66.8	68.4	67.5	68.1	68.1	70.7	71.2	70.0	70.9		
3-year	60.2	60.6	59.8	59.1	60.4	59.6	61.0	60.4	61.1	58.6	59.8	61.3	60.3	60.6	61.9	65.2	65.1	63.4			
4-year	55.8	57.0	56.3	54.6	55.7	55.9	57.3	56.9	57.7	53.7	55.2	58.0	55.6	56.0	57.7	61.1	61.4				
5-year	52.7	54.2	53.6	51.1	52.4	52.9	54.3	53.8	54.3	50.5	51.8	55.1	52.4	53.8	54.9	58.4					
6-year	50.6	51.5	51.2	48.4	50.0	49.8	52.4	51.5	52.1	47.5	49.0	53.0	49.8	51.5	52.7						
7-year	49.3	49.3	48.7	46.1	48.3	47.6	49.9	49.5	49.7	44.6	46.4	50.8	47.6	48.9							
8-year	47.8	48.0	47.2	44.5	46.4	46.4	48.5	47.6	46.8	42.4	45.0	49.2	46.3								
9-year	46.1	46.0	45.6	42.7	44.7	44.3	46.6	45.5	45.1	40.7	43.3	46.3									
10-year	44.6	44.5	43.8	41.0	42.8	42.7	45.3	43.7	43.7	39.3	41.2										
11-year	42.4	43.3	42.7	39.8	41.0	41.3	44.3	42.6	42.5	37.5											
12-year	40.8	42.3	41.7	37.9	39.3	40.0	42.7	41.5	40.9												
13-year	39.4	40.1	39.9	37.0	37.8	38.5	41.4	40.2													
14-year	38.8	39.5	38.4	36.3	37.4	37.2	39.8														
15-year	37.6	38.4	36.1	35.2	35.6	35.7															
16-year	36.3	37.8	34.7	34.1	34.6																
17-year	35.1	37.0	33.9	32.8																	
18-year	33.4	35.9	33.1																		
19-year	32.9	35.0																			
20-year	30.8																				
21-year	29.0																				
22-year	29.0																				
23-year	29.0																				
24-year	28.4																				

^a Rates are from the SEER 9 areas.

^b Rates are from the NCHS public use data file.

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

Survival rates are relative rates expressed as percents.

Table XIX-6
ORAL CAVITY AND PHARYNX CANCER (Invasive)

INCIDENCE, DEATH, AND SURVIVAL RATES*

By Year of Diagnosis/Death

All Races, Males

Year of Diagnosis/Death

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Incidence																					
SEER ^a	21.2	20.3	20.8	20.3	21.3	20.9	20.0	19.5	21.0	18.6	18.9	20.0	19.1	18.8	19.2	18.2	17.3	17.9	17.3	16.5	15.2
Mortality																					
U.S. ^b	6.9	6.7	6.5	6.5	6.3	6.2	5.9	5.8	5.5	5.6	5.3	5.6	5.3	5.2	5.2	4.9	4.9	4.7	4.6	4.6	4.2
SEER ^a	7.0	6.7	6.3	6.5	6.1	6.6	5.8	6.1	5.3	5.3	5.4	5.4	5.5	4.8	4.6	4.7	4.5	4.0	4.5	4.0	3.9
Relative Survival Rates (SEER ^a)																					
1-year	78.6	78.5	80.1	79.4	78.6	81.4	82.0	78.5	80.1	80.4	77.6	80.1	80.0	78.5	80.2	83.0	82.6	81.8	83.2	80.7	
2-year	65.3	65.9	65.6	65.9	64.9	65.8	67.9	63.5	66.3	64.6	64.0	65.8	65.9	66.3	66.0	70.4	70.1	69.6	69.7		
3-year	60.0	58.7	58.0	58.8	59.6	57.9	59.9	56.2	59.4	56.1	56.4	58.7	57.6	58.0	58.9	63.4	64.5	62.5			
4-year	54.7	55.2	54.4	53.7	55.1	54.3	56.6	52.5	55.6	50.6	50.9	55.1	51.7	53.6	55.0	58.9	60.3				
5-year	51.5	52.8	51.1	50.2	51.4	50.6	53.0	48.9	51.9	47.0	47.2	52.2	48.4	51.4	52.1	56.5					
6-year	50.1	50.0	49.0	47.4	49.2	47.1	51.1	46.9	49.5	44.3	45.0	49.9	46.0	49.5	49.6						
7-year	49.2	47.9	46.6	45.1	47.6	44.7	48.7	45.2	47.7	41.7	42.5	47.7	43.5	46.5							
8-year	48.1	46.4	45.6	42.9	45.6	43.5	47.8	42.8	44.5	38.8	40.9	46.5	42.3								
9-year	46.3	44.5	44.0	41.6	43.8	41.6	46.0	41.0	43.0	36.9	38.8	43.7									
10-year	44.5	42.7	42.3	39.9	41.4	39.6	44.6	39.0	41.5	35.0	36.0										
11-year	42.1	41.4	41.2	38.7	39.8	37.6	43.8	38.7	39.7	33.2											
12-year	40.6	40.7	40.5	36.7	38.9	36.0	42.2	37.8	38.1												
13-year	39.1	39.1	39.0	35.7	37.7	34.7	40.9	36.2													
14-year	38.6	38.7	38.0	34.8	37.4	33.2	39.0														
15-year	37.6	36.8	36.2	33.8	35.5	32.6															
16-year	36.0	36.4	34.5	32.8	34.4																
17-year	34.7	35.9	33.2	32.1																	
18-year	33.8	34.9	32.3																		
19-year	33.8	34.0																			
20-year	32.1																				
21-year	30.0																				
22-year	30.0																				
23-year	30.0																				
24-year	30.0																				

^a Rates are from the SEER 9 areas.

^b Rates are from the NCHS public use data file.

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

Survival rates are relative rates expressed as percents.

Table XIX-7
ORAL CAVITY AND PHARYNX CANCER (Invasive)

INCIDENCE, DEATH, 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	1999
Incidence																					
SEER ^a	7.1	7.9	7.9	7.9	7.2	7.9	8.2	7.2	7.5	7.3	7.3	7.3	7.2	7.0	7.3	6.8	7.2	7.0	6.8	6.7	6.3
Mortality																					
U.S. ^b	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.2	2.1	2.0	2.1	2.0	2.0	1.9	1.9	1.8	1.9	1.8	1.8	1.7	1.6
SEER ^a	2.4	2.4	2.5	2.3	2.4	2.5	2.3	2.4	2.1	1.9	2.4	2.0	1.9	2.0	2.0	2.0	1.9	1.7	1.8	1.7	1.8
Relative Survival Rates (SEER ^a)																					
1-year	82.4	81.8	81.3	81.2	80.2	80.3	81.1	83.9	82.2	84.2	82.7	84.0	82.7	82.2	84.4	83.0	83.4	82.2	85.2	81.5	
2-year	68.3	70.3	68.7	66.8	66.6	67.8	68.9	73.0	70.8	69.9	72.5	74.5	71.2	72.2	72.7	71.5	73.4	71.0	73.6		
3-year	60.9	64.4	63.7	59.9	62.2	63.1	62.9	69.5	65.0	63.8	67.0	67.2	66.2	66.3	68.6	69.0	66.5	65.1			
4-year	58.4	60.5	60.4	56.3	57.0	59.4	58.6	66.5	62.6	60.2	64.2	64.4	64.0	61.2	63.5	65.7	63.6				
5-year	55.5	57.0	58.7	53.0	54.7	57.6	56.8	64.6	59.8	57.9	61.2	61.7	61.1	58.9	61.0	62.4					
6-year	51.6	54.4	55.9	50.3	51.7	55.1	54.7	61.5	57.9	54.3	57.0	59.9	57.9	56.0	59.6						
7-year	49.4	51.9	52.8	48.0	50.0	53.5	52.0	58.9	54.2	50.6	54.3	58.0	56.3	54.0							
8-year	47.1	51.0	50.4	47.6	48.3	52.1	49.7	58.1	51.8	49.8	53.2	55.1	54.7								
9-year	45.7	48.8	48.9	44.7	46.7	49.8	47.7	55.4	49.8	48.4	52.4	52.0									
10-year	44.8	48.0	46.9	42.9	45.8	48.9	46.7	53.7	48.7	48.1	51.6										
11-year	43.2	46.9	45.5	41.8	43.5	48.3	45.2	51.0	48.6	46.1											
12-year	41.3	45.4	44.1	40.2	40.3	47.6	43.7	49.3	47.2												
13-year	39.9	42.0	41.5	39.5	37.9	45.6	42.3	48.5													
14-year	39.3	41.0	39.1	39.0	37.4	44.7	41.3														
15-year	37.5	41.0	36.0	37.9	35.8	41.3															
16-year	36.8	40.5	35.0	36.5	35.1																
17-year	35.9	38.9	35.0	34.2																	
18-year	32.7	37.5	34.7																		
19-year	30.6	36.8																			
20-year	28.4																				
21-year	27.3																				
22-year	26.1																				
23-year	26.1																				
24-year	25.0																				

^a Rates are from the SEER 9 areas.

^b Rates are from the NCHS public use data file.

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

Survival rates are relative rates expressed as percents.

Table XIX-8
ORAL CAVITY AND PHARYNX 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

1997-1999

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	1.42	0.00	0.00	0.01	0.69	
10	0.00	0.01	0.05	1.43	0.00	0.01	0.03	0.70	
20	0.01	0.04	0.17	1.43	0.01	0.03	0.07	0.70	
30	0.03	0.16	0.46	1.44	0.02	0.06	0.17	0.69	
40	0.13	0.43	0.82	1.44	0.05	0.15	0.32	0.68	
50	0.31	0.72	1.11	1.35	0.10	0.28	0.48	0.65	
60	0.44	0.87	1.08	1.13	0.19	0.39	0.53	0.57	
Lifetime Risk of Being Diagnosed =				1.42%	Lifetime Risk of Being Diagnosed =				0.69%
Lifetime Risk of Dying =				0.41%	Lifetime Risk of Dying =				0.21%

Whites

Current Age	Males				Females				
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually	
0	0.00	0.00	0.01	1.42	0.00	0.00	0.01	0.70	
10	0.00	0.01	0.04	1.43	0.00	0.01	0.02	0.70	
20	0.01	0.04	0.15	1.43	0.01	0.02	0.06	0.70	
30	0.03	0.14	0.43	1.44	0.01	0.05	0.15	0.70	
40	0.11	0.40	0.80	1.43	0.04	0.14	0.32	0.69	
50	0.30	0.71	1.11	1.36	0.10	0.29	0.49	0.66	
60	0.44	0.87	1.10	1.14	0.19	0.40	0.55	0.59	
Lifetime Risk of Being Diagnosed =				1.42%	Lifetime Risk of Being Diagnosed =				0.70%
Lifetime Risk of Dying =				0.39%	Lifetime Risk of Dying =				0.21%

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	1.39	0.00	0.00	0.01	0.55	
10	0.00	0.01	0.04	1.42	0.00	0.01	0.03	0.56	
20	0.01	0.04	0.23	1.43	0.01	0.03	0.10	0.56	
30	0.04	0.23	0.65	1.46	0.02	0.09	0.21	0.55	
40	0.20	0.63	1.04	1.47	0.07	0.19	0.35	0.54	
50	0.46	0.91	1.23	1.37	0.13	0.29	0.44	0.49	
60	0.53	0.91	1.02	1.07	0.18	0.34	0.39	0.40	
Lifetime Risk of Being Diagnosed =				1.39%	Lifetime Risk of Being Diagnosed =				0.55%
Lifetime Risk of Dying =				0.56%	Lifetime Risk of Dying =				0.21%

Table XIX-9
ORAL CAVITY AND PHARYNX CANCER (Invasive)
AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES

By Race/Ethnicity and Sex

Incidenceⁱ

RACE/ETHNICITY	Rate 1992-1999			Trend 1992-1999		
	Rate per 100,000 persons			EAPC (%)		
	Total	Males	Females	Total	Males	Females
All Races	11.4	17.0	6.7	-2.1★	-2.6★	-1.3
White	11.2	16.7	6.7	-2.2★	-2.7★	-1.7★
White Hispanic	7.0	10.8	4.0	-3.1★	-3.5★	-3.2
White Non-Hispanic	11.7	17.3	7.1	-2.1★	-2.5★	-1.7
Black	13.4	21.9	6.8	-3.0★	-3.4★	-1.5
Asian/Pacific Islander	9.3	13.5	5.8	-0.7	-0.7	-0.2
Amer Ind/Alaska Nat	7.8	13.0	3.6	-2.9	-1.4	-
Hispanic [⊗]	6.7	10.3	3.8	-2.9★	-3.3★	-3.0

Mortality[❖]

RACE/ETHNICITY	Rate 1992-1999			Trend 1992-1999		
	Rate per 100,000 persons			EAPC (%)		
	Total	Males	Females	Total	Males	Females
All Races	3.1	4.7	1.8	-2.5★	-2.8★	-2.2★
White	2.9	4.3	1.7	-2.2★	-2.5★	-2.2★
White Hispanic	1.9	3.3	0.8	-3.6★	-4.8★	-1.4
White Non-Hispanic	3.0	4.4	1.8	-2.0★	-2.3★	-2.0★
Black	5.1	8.8	2.3	-3.7★	-4.2★	-2.0
Asian/Pacific Islander	2.6	4.0	1.5	-3.6★	-3.2★	-4.3★
Amer Ind/Alaska Nat	2.2	3.5	1.2	-1.6	-1.4	-
Hispanic [⊗]	1.8	3.2	0.8	-3.9★	-5.0★	-1.7

- 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.
- ⁱ 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).
- [⊗] Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics does not include cases from Detroit, Hawaii and Alaska Native Registry. For mortality, information is included for all states except Connecticut, Oklahoma, New York, and New Hampshire.
- [❖] 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 XIX-10
ORAL CAVITY AND PHARYNX CANCER (Invasive)AGE-ADJUSTED SEER INCIDENCE RATES§ AND SEER DEATH RATESâ
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE RATES§, 1995-99</u>									
REGISTRY									
11 registries	11.0	16.4	6.7	10.9	16.1	6.6	12.8	20.8	6.7
9 registries	11.3	16.8	6.8	11.1	16.5	6.7	13.2	21.8	6.6
San Francisco-Oakland	12.4	17.8	8.0	12.7	18.1	8.1	10.4	16.7	5.4
Connecticut	11.0	16.3	6.6	10.4	15.2	6.5	16.5	29.8	6.6
Metropolitan Detroit	12.2	18.9	7.0	11.4	17.3	6.7	15.1	25.4	7.5
Hawaii	11.2	16.3	6.8	16.6	22.2	11.0	-	-	-
Iowa	11.0	17.4	5.8	10.9	17.3	5.8	-	-	-
New Mexico	10.1	15.8	5.3	10.7	16.6	5.6	-	-	-
Seattle-Puget Sound	11.4	16.0	7.4	11.7	16.4	7.5	8.6	13.2	-
Utah	8.8	12.8	5.2	8.8	13.0	5.2	-	-	-
Metropolitan Atlanta	11.2	16.4	7.1	10.4	14.5	7.1	13.3	22.9	6.8
San Jose-Monterey	10.9	15.8	6.5	10.6	15.4	6.3	-	-	-
Los Angeles	10.2	15.0	6.3	10.2	14.9	6.3	12.1	19.0	6.9
<u>SEER DEATH RATESâ, 1995-99</u>									
REGISTRY									
11 registries	2.9	4.2	1.8	2.7	3.9	1.8	4.0	6.6	2.1
9 registries	2.8	4.2	1.8	2.7	3.9	1.7	3.9	6.4	2.1
San Francisco-Oakland	3.5	4.9	2.3	3.3	4.5	2.4	3.8	6.3	-
Connecticut	2.7	4.1	1.6	2.6	3.8	1.6	3.9	8.3	-
Metropolitan Detroit	2.9	4.4	1.8	2.7	4.1	1.6	4.0	6.1	2.4
Hawaii	3.5	5.3	1.9	4.2	6.2	-	-	-	-
Iowa	2.4	3.5	1.5	2.4	3.5	1.5	-	-	-
New Mexico	2.6	3.6	1.9	2.7	3.7	2.0	-	-	-
Seattle-Puget Sound	2.8	4.2	1.7	2.9	4.3	1.8	-	-	-
Utah	1.8	2.7	1.1	1.8	2.7	1.1	-	-	-
Metropolitan Atlanta	2.9	4.3	1.8	2.3	3.2	1.6	4.9	9.0	2.3
San Jose-Monterey	2.9	4.1	1.9	2.8	4.0	1.9	-	-	-
Los Angeles	3.1	4.5	1.9	2.9	4.2	1.9	4.4	7.1	2.5

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

Table XIX-11
ORAL CAVITY AND PHARYNX CANCER (Invasive)

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

All Races, Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	3.0	0.02							
High Five States									
District of Columbia	5.8 ^{⊕*}	0.46	(01)	93.3					
South Carolina	4.2 ^{⊕*}	0.15	(02)	40.0					
Louisiana	4.1 ^{⊕*}	0.14	(03)	36.7					
Mississippi	3.8 ^{⊕*}	0.17	(04)	26.7					
New Hampshire	3.7 [*]	0.26	(05)	23.3					
Low Five States									
Idaho	2.4 [*]	0.21	(47)	-20.0					
North Dakota	2.2 [*]	0.25	(48)	-26.7					
Colorado	2.1 ^{⊕*}	0.11	(49)	-30.0					
Nebraska	2.1 ^{⊕*}	0.16	(50)	-30.0					
Utah	1.8 ^{⊕*}	0.16	(51)	-40.0					
Alabama	3.3	0.12	(12)	10.0	Montana	2.8	0.25	(28)	-6.7
Alaska	2.8	0.46	(25)	-6.7	Nebraska	2.1 ^{⊕*}	0.16	(50)	-30.0
Arizona	2.6	0.11	(37)	-13.3	Nevada	2.7	0.19	(32)	-10.0
Arkansas	3.0	0.15	(19)	0.0	New Hampshire	3.7 [*]	0.26	(05)	23.3
California	3.1	0.05	(16)	3.3	New Jersey	3.0	0.08	(21)	0.0
Colorado	2.1 ^{⊕*}	0.11	(49)	-30.0	New Mexico	2.6	0.19	(36)	-13.3
Connecticut	2.7	0.12	(34)	-10.0	New York	2.9	0.06	(24)	-3.3
Delaware	3.3	0.30	(11)	10.0	North Carolina	3.2	0.09	(14)	6.7
District of Columbia	5.8 ^{⊕*}	0.46	(01)	93.3	North Dakota	2.2 [*]	0.25	(48)	-26.7
Florida	3.7 ^{⊕*}	0.07	(06)	23.3	Ohio	2.8	0.07	(26)	-6.7
Georgia	3.5 ^{⊕*}	0.11	(10)	16.7	Oklahoma	2.5 ^{⊕*}	0.12	(43)	-16.7
Hawaii	3.5 [*]	0.25	(09)	16.7	Oregon	3.0	0.13	(18)	0.0
Idaho	2.4 [*]	0.21	(47)	-20.0	Pennsylvania	2.5 ^{⊕*}	0.06	(44)	-16.7
Illinois	3.0	0.07	(20)	0.0	Rhode Island	2.7	0.22	(31)	-10.0
Indiana	2.6 [⊕]	0.10	(38)	-13.3	South Carolina	4.2 ^{⊕*}	0.15	(02)	40.0
Iowa	2.4 ^{⊕*}	0.12	(46)	-20.0	South Dakota	2.5 [*]	0.26	(42)	-16.7
Kansas	2.6	0.14	(40)	-13.3	Tennessee	3.5 ^{⊕*}	0.12	(07)	16.7
Kentucky	3.2	0.13	(15)	6.7	Texas	3.2 [⊕]	0.06	(13)	6.7
Louisiana	4.1 ^{⊕*}	0.14	(03)	36.7	Utah	1.8 ^{⊕*}	0.16	(51)	-40.0
Maine	2.8	0.21	(27)	-6.7	Vermont	2.6	0.30	(41)	-13.3
Maryland	3.5 ^{⊕*}	0.12	(08)	16.7	Virginia	2.9	0.10	(22)	-3.3
Massachusetts	3.0	0.10	(17)	0.0	Washington	2.8	0.10	(30)	-6.7
Michigan	2.7 [⊕]	0.08	(33)	-10.0	West Virginia	2.7	0.16	(35)	-10.0
Minnesota	2.4 ^{⊕*}	0.10	(45)	-20.0	Wisconsin	2.9	0.11	(23)	-3.3
Mississippi	3.8 ^{⊕*}	0.17	(04)	26.7	Wyoming	2.6	0.34	(39)	-13.3
Missouri	2.8	0.10	(29)	-6.7					

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

SE Standard error of the rate.

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

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

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

Table XIX-12
ORAL CAVITY AND PHARYNX CANCER (Invasive)

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

All Races, Males

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	4.6	0.03							
High Five States									
District of Columbia	9.6⊕*	0.91	(01)	108.7					
Mississippi	6.5⊕*	0.35	(02)	41.3					
South Carolina	6.5⊕*	0.30	(03)	41.3					
Louisiana	6.2⊕*	0.28	(04)	34.8					
Delaware	5.8*	0.62	(05)	26.1					
Low Five States									
Idaho	3.3*	0.36	(47)	-28.3					
Wyoming	3.2*	0.58	(48)	-30.4					
Nebraska	3.1⊕*	0.29	(49)	-32.6					
Colorado	3.1⊕*	0.21	(50)	-32.6					
Utah	2.7⊕*	0.29	(51)	-41.3					
Alabama	5.2	0.24	(12)	13.0	Montana	3.9*	0.44	(37)	-15.2
Alaska	3.6*	0.75	(41)	-21.7	Nebraska	3.1⊕*	0.29	(49)	-32.6
Arizona	3.9*	0.20	(34)	-15.2	Nevada	3.4⊕*	0.32	(45)	-26.1
Arkansas	4.6	0.28	(18)	0.0	New Hampshire	5.5*	0.50	(08)	19.6
California	4.4	0.09	(22)	-4.3	New Jersey	4.5	0.16	(21)	-2.2
Colorado	3.1⊕*	0.21	(50)	-32.6	New Mexico	3.6*	0.33	(42)	-21.7
Connecticut	4.1	0.24	(29)	-10.9	New York	4.5	0.11	(20)	-2.2
Delaware	5.8*	0.62	(05)	26.1	North Carolina	4.7	0.18	(17)	2.2
District of Columbia	9.6⊕*	0.91	(01)	108.7	North Dakota	3.4*	0.47	(46)	-26.1
Florida	5.7⊕*	0.12	(06)	23.9	Ohio	4.4	0.14	(23)	-4.3
Georgia	5.4⊕*	0.21	(09)	17.4	Oklahoma	3.8*	0.23	(39)	-17.4
Hawaii	5.3*	0.45	(11)	15.2	Oregon	3.9*	0.23	(36)	-15.2
Idaho	3.3*	0.36	(47)	-28.3	Pennsylvania	3.9⊕*	0.12	(35)	-15.2
Illinois	4.8	0.14	(15)	4.3	Rhode Island	4.1	0.44	(27)	-10.9
Indiana	4.0	0.18	(33)	-13.0	South Carolina	6.5⊕*	0.30	(03)	41.3
Iowa	3.5⊕*	0.23	(44)	-23.9	South Dakota	3.8*	0.47	(40)	-17.4
Kansas	3.9*	0.26	(38)	-15.2	Tennessee	5.3*	0.22	(10)	15.2
Kentucky	5.0	0.25	(14)	8.7	Texas	5.0⊕	0.12	(13)	8.7
Louisiana	6.2⊕*	0.28	(04)	34.8	Utah	2.7⊕*	0.29	(51)	-41.3
Maine	4.4	0.39	(25)	-4.3	Vermont	4.0	0.58	(30)	-13.0
Maryland	5.6⊕*	0.25	(07)	21.7	Virginia	4.8	0.20	(16)	4.3
Massachusetts	4.6	0.19	(19)	0.0	Washington	4.0	0.19	(32)	-13.0
Michigan	4.0⊕	0.14	(31)	-13.0	West Virginia	4.4	0.32	(24)	-4.3
Minnesota	3.5⊕*	0.19	(43)	-23.9	Wisconsin	4.3	0.20	(26)	-6.5
Mississippi	6.5⊕*	0.35	(02)	41.3	Wyoming	3.2*	0.58	(48)	-30.4
Missouri	4.1	0.19	(28)	-10.9					

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

SE Standard error of the rate.

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

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

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

Table XIX-13
ORAL CAVITY AND PHARYNX CANCER (Invasive)

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

All Races, Females

State	Rate	SE	Rank	PD
TOTAL U.S.	1.8	0.02		
High Five States				
District of Columbia	2.7*	0.41	(01)	50.0
Louisiana	2.4⊕*	0.15	(02)	33.3
New Hampshire	2.4*	0.28	(03)	33.3
South Carolina	2.3⊕*	0.15	(04)	27.8
Oregon	2.2*	0.15	(05)	22.2
Low Five States				
Colorado	1.4*	0.12	(47)	-22.2
North Dakota	1.4*	0.27	(48)	-22.2
Delaware	1.3*	0.25	(49)	-27.8
Nebraska	1.3*	0.16	(50)	-27.8
Utah	1.1⊕*	0.17	(51)	-38.9

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	1.8	0.12	(19)	0.0	Montana	1.9	0.27	(16)	5.6
Alaska	2.1*	0.54	(08)	16.7	Nebraska	1.3*	0.16	(50)	-27.8
Arizona	1.6	0.11	(38)	-11.1	Nevada	2.0	0.23	(09)	11.1
Arkansas	1.6	0.14	(35)	-11.1	New Hampshire	2.4*	0.28	(03)	33.3
California	2.0⊕	0.05	(12)	11.1	New Jersey	1.8	0.09	(23)	0.0
Colorado	1.4*	0.12	(47)	-22.2	New Mexico	1.9	0.21	(15)	5.6
Connecticut	1.6	0.13	(34)	-11.1	New York	1.6	0.06	(29)	-11.1
Delaware	1.3*	0.25	(49)	-27.8	North Carolina	1.9	0.09	(14)	5.6
District of Columbia	2.7*	0.41	(01)	50.0	North Dakota	1.4*	0.27	(48)	-22.2
Florida	2.0⊕	0.06	(10)	11.1	Ohio	1.6	0.07	(30)	-11.1
Georgia	2.0	0.11	(11)	11.1	Oklahoma	1.5*	0.12	(41)	-16.7
Hawaii	1.9	0.25	(17)	5.6	Oregon	2.2*	0.15	(05)	22.2
Idaho	1.5*	0.22	(42)	-16.7	Pennsylvania	1.4⊕*	0.06	(43)	-22.2
Illinois	1.5*	0.07	(39)	-16.7	Rhode Island	1.7	0.22	(26)	-5.6
Indiana	1.6	0.10	(33)	-11.1	South Carolina	2.3⊕*	0.15	(04)	27.8
Iowa	1.5*	0.13	(40)	-16.7	South Dakota	1.4*	0.25	(45)	-22.2
Kansas	1.6	0.14	(32)	-11.1	Tennessee	2.1*	0.12	(06)	16.7
Kentucky	1.8	0.13	(21)	0.0	Texas	1.8	0.06	(18)	0.0
Louisiana	2.4⊕*	0.15	(02)	33.3	Utah	1.1⊕*	0.17	(51)	-38.9
Maine	1.6	0.21	(31)	-11.1	Vermont	1.4*	0.30	(44)	-22.2
Maryland	2.0	0.12	(13)	11.1	Virginia	1.6	0.09	(37)	-11.1
Massachusetts	1.8	0.10	(22)	0.0	Washington	1.7	0.11	(24)	-5.6
Michigan	1.7	0.08	(28)	-5.6	West Virginia	1.4*	0.15	(46)	-22.2
Minnesota	1.6	0.11	(36)	-11.1	Wisconsin	1.7	0.11	(25)	-5.6
Mississippi	1.8	0.15	(20)	0.0	Wyoming	2.1*	0.41	(07)	16.7
Missouri	1.7	0.10	(27)	-5.6					

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

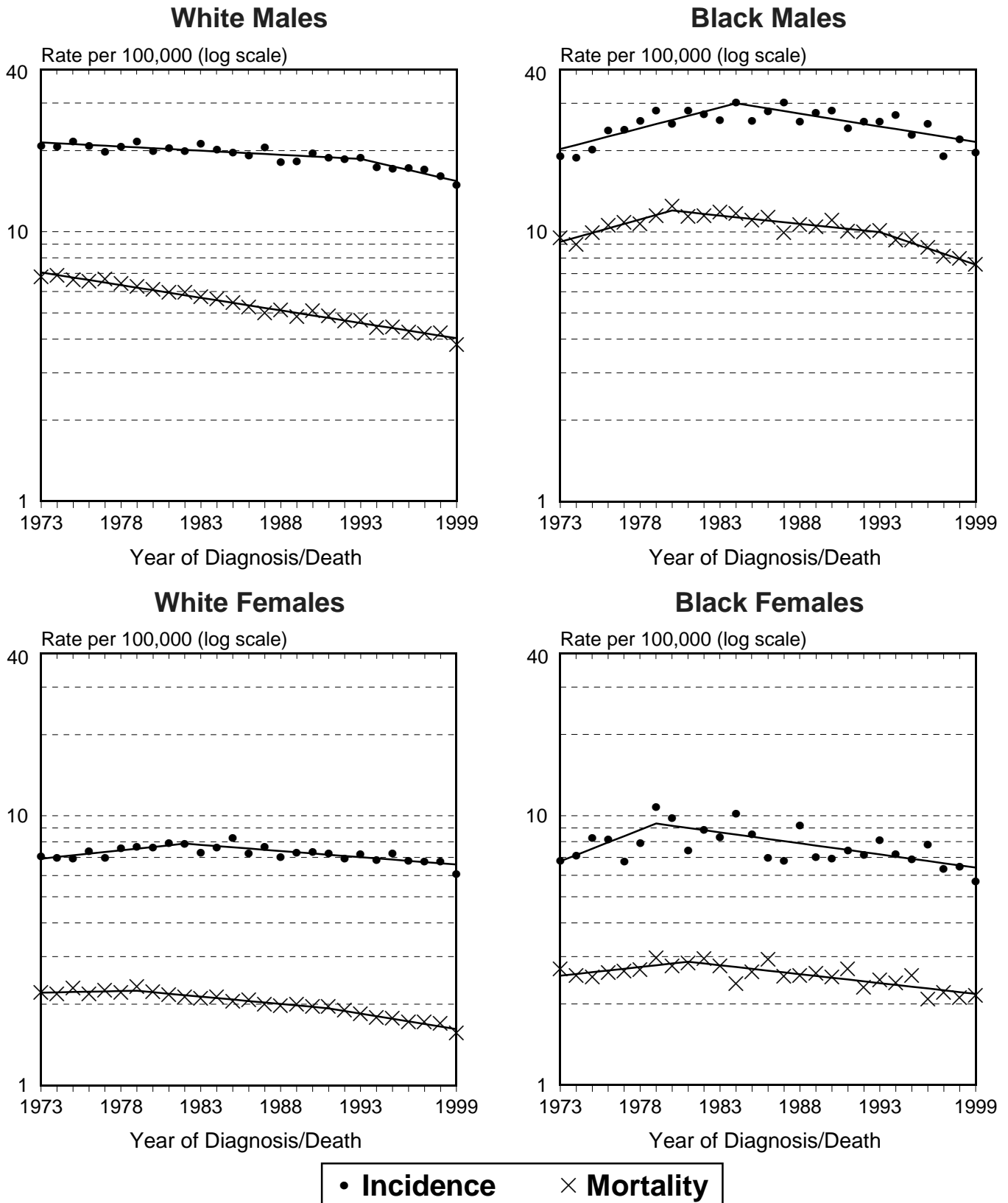
SE Standard error of the rate.

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

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

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

SEER Incidence and U.S. Death Rates⁺ Oral Cavity and Pharynx



• Incidence × Mortality

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