

Table 20.1  
Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,  
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-81	0.7	1981-03	-1.1*	2003-08	0.4							-0.3	0.4
White	1975-03	-0.9*	2003-08	0.8									0.1	0.8
Black	1975-84	2.5*	1984-08	-2.6*									-2.6*	-2.6*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-06	-1.2*	2006-08	3.0									-0.2	0.9
White	1992-06	-0.9*	2006-08	3.8									0.1	1.4
Black	1992-08	-2.6*											-2.6*	-2.6*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-79	1.4	1979-08	-1.0*									-1.0*	-1.0*
White	1975-83	0.1	1983-00	-1.2*	2000-08	0.1							0.0	0.1
Black	1975-84	2.5*	1984-08	-2.6*									-2.6*	-2.6*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-08	-1.0*											-1.0*	-1.0*
White	1992-08	-0.8*											-0.8*	-0.8*
White NH <sup>ef</sup>	1992-08	-0.5*											-0.5*	-0.5*
Black	1992-08	-2.8*											-2.8*	-2.8*
Black NH <sup>ef</sup>	1992-08	-2.7*											-2.7*	-2.7*
API <sup>e</sup>	1992-08	-0.9*											-0.9*	-0.9*
AI/AN <sup>eg</sup>	1992-08	-3.5*											-3.5*	-3.5*
Hispanic <sup>f</sup>	1992-06	-1.9*	2006-08	5.8									-0.3	1.9
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2008</u>														
All Races	1975-79	-0.5	1979-93	-1.7*	1993-00	-2.7*	2000-08	-1.3*					-1.5*	-1.3*
White	1975-05	-1.9*	2005-08	0.1									-1.2*	-0.4
Black	1975-80	3.3*	1980-93	-1.5*	1993-08	-3.9*							-3.9*	-3.9*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2008</u>														
All Races	1992-00	-2.6*	2000-08	-1.3*									-1.5*	-1.3*
White	1992-00	-2.3*	2000-08	-0.9*									-1.1*	-0.9*
White NH <sup>ef</sup>	1992-00	-2.1*	2000-08	-0.6*									-0.8*	-0.6*
Black	1992-08	-3.8*											-3.8*	-3.8*
Black NH <sup>ef</sup>	1992-08	-3.5*											-3.5*	-3.5*
API <sup>e</sup>	1992-08	-2.4*											-2.4*	-2.4*
AI/AN <sup>eg</sup>	1992-08	-2.0*											-2.0*	-2.0*
Hispanic <sup>f</sup>	1992-08	-2.9*											-2.9*	-2.9*

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

<sup>a</sup> Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

<sup>b</sup> Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

<sup>c</sup> Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

<sup>d</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

<sup>e</sup> API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

<sup>f</sup> 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 are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

<sup>g</sup> Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

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

- Joinpoint regression line analysis could not be performed on data series.

Table 20.2  
Cancer of the Oral Cavity and Pharynx for Selected Subsites (Invasive)

Trends in SEER 9 Observed Incidence<sup>a</sup> Using the Joinpoint Regression Program,  
1975-2008 With up to Five Joinpoints,  
By Race and Sex

		JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>
		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2004-08
<u>Cancer of the Tongue</u>														
All Races	Both Sexes	1975-99	0.4*	1999-08	2.2*									2.2*
All Races	Male	1975-99	0.3	1999-08	2.6*									2.6*
All Races	Female	1975-08	0.4*											0.4*
White	Male	1975-98	0.5*	1998-08	3.0*									3.0*
White	Female	1975-08	0.6*											0.6*
Black	Male	1975-89	1.3	1989-08	-2.8*									-2.8*
Black	Female	1975-08	-1.4*											-1.4*
<u>Cancer of the Floor of Mouth, Gum and Other Mouth</u>														
All Races	Both Sexes	1975-83	0.9	1983-08	-2.5*									-2.5*
All Races	Male	1975-83	0.7	1983-08	-2.9*									-2.9*
All Races	Female	1975-85	0.5	1985-08	-2.0*									-2.0*
White	Male	1975-84	-0.2	1984-08	-2.7*									-2.7*
White	Female	1975-86	0.6	1986-08	-2.1*									-2.1*
Black	Male	1975-77	54.7*	1977-98	-2.3*	1998-08	-9.1*							-9.1*
Black	Female	1975-08	-1.7*											-1.7*
<u>Cancer of the Oropharynx and Tonsil</u>														
All Races	Both Sexes	1975-99	-0.1	1999-08	3.2*									3.2*
All Races	Male	1975-99	0.4	1999-08	3.6*									3.6*
All Races	Female	1975-08	-1.1*											-1.1*
White	Male	1975-99	0.5*	1999-08	4.9*									4.9*
White	Female	1975-08	-0.9*											-0.9*
Black	Male	1975-08	-0.5											-0.5
Black	Female	1975-08	-2.0*											-2.0*
<u>Cancer of the Salivary Gland</u>														
All Races	Both Sexes	1975-08	0.5*											0.5*
All Races	Male	1975-08	0.6*											0.6*
All Races	Female	1975-08	0.3*											0.3*
White	Male	1975-08	0.7*											0.7*
White	Female	1975-08	0.3											0.3
Black	Male	1975-99	2.6*	1999-08	-7.3*									-7.3*
Black	Female	1975-08	0.6											0.6
<u>Cancer of the Lip</u>														
All Races	Both Sexes	1975-98	-3.2*	1998-08	-5.9*									-5.9*
All Races	Male	1975-97	-3.7*	1997-08	-6.6*									-6.6*
All Races	Female	1975-01	-0.1	2001-08	-5.5*									-5.5*
White	Male	1975-96	-3.4*	1996-08	-6.4*									-6.4*
White	Female	1975-98	0.3	1998-08	-3.8*									-3.8*
Black	Male	-	-											-
Black	Female	-	-											-

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint over the time range of 1975-2008.

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

- Joinpoint regression line analysis could not be performed on data series.

<sup>a</sup>  
<sup>b</sup>  
<sup>\*</sup>  
<sup>-</sup>

Table 20.3  
Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,  
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-83	-0.1	1983-01	-1.5*	2001-08	0.1							-0.3	0.1
White	1975-01	-1.2*	2001-08	0.5									0.1	0.5
Black	1975-87	1.9*	1987-08	-3.2*									-3.2*	-3.2*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-06	-1.4*	2006-08	3.8									-0.2	1.2
White	1992-06	-1.0*	2006-08	4.3									0.1	1.6
Black	1992-08	-3.1*											-3.1*	-3.1*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-83	-0.1	1983-01	-1.5*	2001-08	-0.1							-0.4	-0.1
White	1975-01	-1.2*	2001-08	0.2									-0.1	0.2
Black	1975-87	1.9*	1987-08	-3.2*									-3.2*	-3.2*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-06	-1.4*	2006-08	3.0									-0.4	0.8
White	1992-06	-1.1*	2006-08	3.3									-0.1	1.1
White NH <sup>ef</sup>	1992-99	-1.5*	1999-08	0.1									0.1	0.1
Black	1992-08	-3.2*											-3.2*	-3.2*
Black NH <sup>ef</sup>	1992-08	-3.2*											-3.2*	-3.2*
API <sup>e</sup>	1992-08	-1.0*											-1.0*	-1.0*
AI/AN <sup>eg</sup>	1992-08	-5.9*											-5.9*	-5.9*
Hispanic <sup>f</sup>	1992-08	-1.9*											-1.9*	-1.9*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2008</u>														
All Races	1975-93	-1.9*	1993-00	-3.0*	2000-08	-1.2*							-1.4*	-1.2*
White	1975-00	-2.2*	2000-08	-1.0*									-1.1*	-1.0*
Black	1975-80	3.7*	1980-93	-1.4*	1993-01	-4.8*	2001-04	0.7	2004-08	-6.7*			-3.9*	-6.7*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2008</u>														
All Races	1992-00	-2.8*	2000-08	-1.2*									-1.4*	-1.2*
White	1992-00	-2.6*	2000-08	-0.7*									-0.9*	-0.7*
White NH <sup>ef</sup>	1992-00	-2.4*	2000-08	-0.4									-0.6*	-0.4
Black	1992-08	-3.8*											-3.8*	-3.8*
Black NH <sup>ef</sup>	1992-08	-3.5*											-3.5*	-3.5*
API <sup>e</sup>	1992-08	-2.7*											-2.7*	-2.7*
AI/AN <sup>eg</sup>	1992-08	-2.4											-2.4	-2.4
Hispanic <sup>f</sup>	1992-08	-3.7*											-3.7*	-3.7*

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

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 are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

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

- Joinpoint regression line analysis could not be performed on data series.

Table 20.4  
Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,  
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-80	2.4	1980-08	-0.9*									-0.9*	-0.9*
White	1975-81	1.9	1981-08	-0.8*									-0.8*	-0.8*
Black	1975-08	-1.4*											-1.4*	-1.4*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-08	-1.0*											-1.0*	-1.0*
White	1992-08	-1.0*											-1.0*	-1.0*
Black	1992-08	-1.5*											-1.5*	-1.5*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-80	2.5*	1980-08	-0.9*									-0.9*	-0.9*
White	1975-81	2.0	1981-08	-0.9*									-0.9*	-0.9*
Black	1975-08	-1.5*											-1.5*	-1.5*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-08	-1.0*											-1.0*	-1.0*
White	1992-08	-1.1*											-1.1*	-1.1*
White NH <sup>ef</sup>	1992-08	-0.9*											-0.9*	-0.9*
Black	1992-08	-1.6*											-1.6*	-1.6*
Black NH <sup>ef</sup>	1992-08	-1.5*											-1.5*	-1.5*
API <sup>e</sup>	1992-08	-0.5											-0.5	-0.5
AI/AN <sup>eg</sup>	1992-08	0.7											0.7	0.7
Hispanic <sup>f</sup>	1992-08	-0.9											-0.9	-0.9
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2008</u>														
All Races	1975-89	-0.9*	1989-08	-2.2*									-2.2*	-2.2*
White	1975-89	-1.0*	1989-08	-2.1*									-2.1*	-2.1*
Black	1975-91	-0.3	1991-08	-3.6*									-3.6*	-3.6*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2008</u>														
All Races	1992-08	-2.2*											-2.2*	-2.2*
White	1992-08	-2.0*											-2.0*	-2.0*
White NH <sup>ef</sup>	1992-08	-1.8*											-1.8*	-1.8*
Black	1992-08	-3.5*											-3.5*	-3.5*
Black NH <sup>ef</sup>	1992-08	-3.3*											-3.3*	-3.3*
API <sup>e</sup>	1992-08	-1.6*											-1.6*	-1.6*
AI/AN <sup>eg</sup>	1992-08	-0.7											-0.7	-0.7
Hispanic <sup>f</sup>	1992-08	-1.6*											-1.6*	-1.6*

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

<sup>a</sup> Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

<sup>b</sup> Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

<sup>c</sup> Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

<sup>d</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

<sup>e</sup> API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

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<sup>g</sup> Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

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

- Joinpoint regression line analysis could not be performed on data series.

Table 20.5  
Cancer of the Oral Cavity and Pharynx (Invasive)

Delay-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	13.21	21.19	7.10	13.30	21.72	6.93	13.38	20.16	8.25
1976	13.28	21.01	7.38	13.23	21.03	7.37	15.18	23.76	8.37
1977	12.73	20.10	6.95	12.60	19.85	7.02	14.45	23.86	6.65
1978	13.38	20.86	7.71	13.21	20.76	7.58	15.83	25.97	8.05
1979	14.04	21.94	8.01	13.72	21.63	7.74	18.39	28.16	10.64
1980	13.34	20.26	7.91	12.98	19.98	7.60	16.82	25.39	9.59
1981	13.59	20.85	7.92	13.39	20.51	7.94	16.65	28.16	7.46
1982	13.34	20.33	7.93	13.08	19.94	7.85	17.12	27.39	8.86
1983	13.29	21.21	7.25	13.26	21.22	7.31	16.13	26.09	8.32
1984	13.47	20.78	7.86	13.00	20.15	7.64	18.92	30.01	10.08
1985	13.34	19.84	8.24	13.28	19.62	8.36	16.13	25.99	8.54
1986	12.47	19.14	7.19	12.36	18.88	7.29	16.19	28.11	6.97
1987	13.20	20.53	7.52	13.11	20.17	7.68	16.82	30.03	7.00
1988	12.13	18.16	7.31	11.79	17.71	7.09	16.45	25.58	9.09
1989	12.12	18.31	7.26	11.85	17.73	7.30	15.77	27.19	7.06
1990	12.65	19.40	7.34	12.39	18.82	7.41	16.07	27.94	6.93
1991	12.18	18.37	7.26	12.10	18.15	7.31	14.43	23.75	7.33
1992	11.96	18.32	6.92	11.83	18.04	6.94	14.82	25.12	6.95
1993	12.44	18.73	7.30	12.25	18.44	7.23	15.57	24.91	8.12
1994	11.73	17.69	6.85	11.44	16.90	6.94	15.66	26.70	7.00
1995	11.55	16.97	7.20	11.55	16.76	7.35	13.66	22.86	6.68
1996	11.79	17.79	7.00	11.49	17.30	6.88	15.06	24.51	7.65
1997	11.53	17.37	6.77	11.57	17.26	6.89	11.53	18.39	6.22
1998	11.26	16.73	6.77	11.29	16.50	6.94	13.10	22.50	6.35
1999	10.60	15.58	6.48	10.52	15.48	6.39	11.84	19.98	5.85
2000	10.76	16.07	6.30	10.71	15.69	6.45	11.74	20.80	4.89
2001	10.83	15.50	6.92	10.93	15.62	6.96	11.97	18.77	6.96
2002	11.13	16.32	6.74	11.35	16.62	6.84	11.22	17.10	6.57
2003	10.51	15.62	6.17	10.49	15.65	6.03	11.79	17.00	7.62
2004	10.81	16.08	6.25	11.05	16.43	6.29	10.21	16.46	5.65
2005	10.69	15.58	6.52	10.85	16.00	6.38	11.12	16.68	6.98
2006	10.70	15.70	6.39	10.92	15.89	6.56	9.94	16.51	5.06
2007	10.73	15.93	6.22	11.06	16.36	6.32	10.04	16.00	5.52
2008	10.97	16.27	6.39	11.42	16.87	6.60	8.99	14.11	5.15

Additional information on the model used to delay-adjust SEER Incidence rates can be found at [\(http://surveillance.cancer.gov/delay/\)](http://surveillance.cancer.gov/delay/).

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

- Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 20.6  
Cancer of the Oral Cavity and Pharynx (Invasive)  
Age-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	13.21	21.19	7.10	13.30	21.72	6.93	13.38	20.16	8.25
1976	13.28	21.01	7.38	13.23	21.03	7.37	15.18	23.76	8.37
1977	12.73	20.10	6.95	12.60	19.85	7.02	14.45	23.86	6.65
1978	13.38	20.86	7.71	13.21	20.76	7.58	15.83	25.97	8.05
1979	14.04	21.94	8.01	13.72	21.63	7.74	18.39	28.16	10.64
1980	13.34	20.26	7.91	12.98	19.98	7.60	16.82	25.39	9.59
1981	13.59	20.85	7.92	13.39	20.51	7.94	16.65	28.16	7.46
1982	13.34	20.33	7.93	13.08	19.93	7.85	17.12	27.39	8.86
1983	13.29	21.21	7.25	13.26	21.21	7.30	16.13	26.08	8.32
1984	13.46	20.78	7.86	13.00	20.14	7.64	18.91	29.99	10.07
1985	13.33	19.84	8.24	13.27	19.61	8.35	16.12	25.98	8.53
1986	12.46	19.13	7.19	12.35	18.87	7.29	16.18	28.09	6.97
1987	13.20	20.52	7.52	13.10	20.15	7.67	16.81	30.00	6.99
1988	12.13	18.15	7.30	11.78	17.70	7.09	16.43	25.56	9.08
1989	12.12	18.30	7.26	11.84	17.71	7.30	15.75	27.16	7.05
1990	12.64	19.38	7.34	12.37	18.79	7.39	16.05	27.89	6.92
1991	12.17	18.36	7.25	12.08	18.12	7.30	14.41	23.71	7.32
1992	11.95	18.31	6.92	11.80	18.01	6.93	14.79	25.08	6.94
1993	12.43	18.71	7.29	12.23	18.41	7.21	15.54	24.85	8.10
1994	11.72	17.68	6.84	11.41	16.86	6.93	15.62	26.64	6.99
1995	11.54	16.95	7.19	11.52	16.72	7.33	13.63	22.80	6.66
1996	11.78	17.77	6.99	11.46	17.25	6.87	15.02	24.44	7.63
1997	11.51	17.35	6.76	11.53	17.20	6.86	11.49	18.32	6.20
1998	11.24	16.70	6.76	11.24	16.43	6.91	13.05	22.41	6.32
1999	10.57	15.54	6.47	10.47	15.41	6.36	11.79	19.89	5.82
2000	10.73	16.03	6.29	10.65	15.61	6.42	11.68	20.70	4.87
2001	10.80	15.45	6.90	10.87	15.54	6.92	11.90	18.67	6.92
2002	11.09	16.27	6.72	11.28	16.51	6.79	11.14	16.99	6.53
2003	10.48	15.56	6.15	10.41	15.53	5.99	11.70	16.88	7.56
2004	10.76	16.02	6.22	10.95	16.30	6.24	10.13	16.32	5.60
2005	10.64	15.51	6.49	10.75	15.85	6.32	11.01	16.53	6.91
2006	10.63	15.60	6.35	10.79	15.70	6.48	9.82	16.31	5.00
2007	10.63	15.78	6.16	10.88	16.10	6.22	9.87	15.74	5.43
2008	10.77	15.99	6.28	11.11	16.42	6.43	8.75	13.73	5.01
1975-2008	11.94	18.00	7.03	11.92	17.92	7.05	13.40	21.79	6.95

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).  
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.7  
Cancer of the Oral Cavity and Pharynx (Invasive)  
Age-adjusted U.S. Death<sup>a</sup> Rates by Year, Race and Sex

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	4.30	6.93	2.33	4.12	6.64	2.29	5.79	9.93	2.52
1976	4.22	6.89	2.22	4.03	6.55	2.17	6.08	10.55	2.62
1977	4.32	7.03	2.30	4.11	6.67	2.25	6.22	10.87	2.65
1978	4.19	6.78	2.26	3.99	6.41	2.21	6.15	10.69	2.68
1979	4.24	6.71	2.39	3.99	6.25	2.32	6.65	11.47	2.97
1980	4.16	6.69	2.27	3.87	6.12	2.22	6.97	12.48	2.76
1981	4.05	6.46	2.24	3.78	5.96	2.17	6.52	11.36	2.84
1982	4.02	6.46	2.22	3.74	5.96	2.13	6.62	11.46	2.94
1983	3.94	6.27	2.20	3.64	5.73	2.10	6.65	11.83	2.76
1984	3.88	6.18	2.17	3.61	5.64	2.12	6.37	11.70	2.38
1985	3.75	5.93	2.11	3.49	5.44	2.05	6.23	11.03	2.62
1986	3.72	5.80	2.16	3.42	5.27	2.07	6.51	11.35	2.93
1987	3.53	5.46	2.05	3.29	5.01	2.00	5.70	9.95	2.54
1988	3.59	5.63	2.05	3.33	5.14	1.98	5.99	10.67	2.55
1989	3.50	5.34	2.07	3.23	4.84	2.00	5.92	10.44	2.59
1990	3.58	5.61	2.03	3.29	5.07	1.96	6.12	11.05	2.52
1991	3.47	5.34	2.03	3.21	4.87	1.95	5.84	10.06	2.70
1992	3.34	5.15	1.94	3.09	4.66	1.89	5.56	9.97	2.31
1993	3.34	5.19	1.90	3.07	4.68	1.83	5.68	10.09	2.44
1994	3.15	4.84	1.83	2.92	4.41	1.77	5.33	9.26	2.39
1995	3.16	4.87	1.84	2.91	4.42	1.75	5.37	9.28	2.54
1996	3.03	4.64	1.75	2.82	4.24	1.71	4.86	8.69	2.07
1997	2.98	4.53	1.76	2.79	4.17	1.70	4.68	8.10	2.19
1998	2.96	4.53	1.72	2.80	4.20	1.68	4.53	7.91	2.09
1999	2.73	4.15	1.60	2.55	3.80	1.54	4.37	7.49	2.12
2000	2.69	4.06	1.58	2.52	3.72	1.55	4.12	7.31	1.76
2001	2.72	4.15	1.56	2.58	3.87	1.52	3.88	6.69	1.81
2002	2.68	4.09	1.54	2.56	3.87	1.50	3.68	6.33	1.73
2003	2.64	4.07	1.47	2.51	3.80	1.45	3.86	6.95	1.65
2004	2.61	4.00	1.47	2.48	3.72	1.46	3.84	6.95	1.63
2005	2.53	3.86	1.43	2.42	3.60	1.43	3.53	6.54	1.38
2006	2.48	3.79	1.39	2.39	3.61	1.37	3.26	5.70	1.50
2007	2.52	3.87	1.42	2.44	3.71	1.39	3.33	5.76	1.60
2008	2.45	3.76	1.38	2.39	3.62	1.37	3.04	5.21	1.47
1975-2008	3.27	5.08	1.86	3.09	4.72	1.82	4.98	8.74	2.20

<sup>a</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.  
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.8  
Cancer of the Oral Cavity and Pharynx (Invasive)  
SEER Incidence<sup>a</sup> and U.S. Death<sup>b</sup> 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>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2004-2008									
All ages	10.6	15.7	6.2	10.8	16.1	6.2	9.9	15.6	5.6
Under 65	6.4	9.5	3.4	6.4	9.6	3.3	6.5	10.0	3.7
65 and over	39.3	58.5	25.0	40.7	60.5	26.0	33.1	54.5	18.7
All ages (IARC world std) <sup>c</sup>	7.6	11.3	4.3	7.7	11.5	4.3	7.4	11.7	4.1
Age-Specific Rates, 2004-2008									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	0.1	-	0.1	0.1	-	-	-	-	-
10-14	0.3	0.3	0.3	0.3	0.2	0.3	0.5	-	-
15-19	0.4	0.5	0.4	0.4	0.4	0.3	0.6	-	-
20-24	0.8	0.7	0.9	0.7	0.7	0.8	0.8	-	1.0
25-29	1.0	1.0	1.0	0.9	0.8	0.9	1.0	1.0	0.9
30-34	1.7	1.7	1.6	1.5	1.5	1.4	1.5	1.2	1.8
35-39	3.0	3.6	2.5	2.7	3.3	2.1	2.7	3.1	2.4
40-44	5.8	8.1	3.5	5.6	8.0	3.2	5.6	7.7	3.8
45-49	11.4	17.1	5.9	11.5	17.4	5.5	11.6	15.8	7.9
50-54	19.4	29.7	9.4	19.7	30.3	9.1	21.3	33.1	11.1
55-59	26.5	41.7	12.1	27.1	42.4	12.3	27.8	47.3	11.7
60-64	32.2	50.4	15.6	33.5	52.1	16.1	30.7	51.6	14.2
65-69	37.2	56.3	20.5	38.3	57.0	21.6	37.4	64.5	16.8
70-74	39.0	58.1	23.5	40.7	59.9	24.7	36.9	63.6	17.8
75-79	40.2	58.5	26.8	41.8	60.7	27.6	33.0	48.5	23.2
80-84	41.0	60.4	28.7	42.8	63.7	29.5	25.3	42.9	15.7
85+	40.6	62.3	30.6	41.9	65.1	31.3	24.7	37.4	19.9
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2004-2008									
All ages	2.5	3.9	1.4	2.4	3.7	1.4	3.4	6.0	1.5
Under 65	1.2	1.8	0.5	1.1	1.6	0.5	1.9	3.3	0.8
65 and over	11.9	17.9	7.6	11.9	17.5	7.8	13.4	24.7	6.4
All ages (IARC world std) <sup>c</sup>	1.6	2.6	0.9	1.6	2.4	0.8	2.4	4.3	1.0
Age-Specific Rates, 2004-2008									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.0	0.0	-	0.0	0.0	-	-	-	-
20-24	0.1	0.1	0.0	0.0	0.0	0.0	0.1	-	-
25-29	0.1	0.1	0.0	0.1	0.1	-	0.1	-	-
30-34	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.3	-
35-39	0.3	0.4	0.2	0.3	0.4	0.2	0.5	0.8	0.3
40-44	0.8	1.2	0.5	0.7	1.0	0.4	1.4	2.1	0.8
45-49	1.9	2.8	0.9	1.6	2.5	0.8	3.5	5.6	1.7
50-54	3.6	5.7	1.5	3.2	5.1	1.4	6.1	10.5	2.4
55-59	5.3	8.7	2.1	4.9	7.9	1.9	8.9	16.0	3.0
60-64	7.1	11.5	3.2	6.8	10.9	3.0	11.3	19.8	4.6
65-69	9.1	14.5	4.4	8.7	13.6	4.4	13.7	25.8	4.7
70-74	10.6	16.0	6.2	10.6	15.5	6.5	12.8	23.7	5.3
75-79	12.3	18.5	7.6	12.3	18.2	7.8	13.1	23.4	6.9
80-84	14.0	20.4	10.0	14.2	20.3	10.2	13.1	24.0	7.4
85+	18.0	25.6	14.6	18.2	25.6	15.0	15.0	27.0	10.6

<sup>a</sup> SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

<sup>b</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

<sup>c</sup> Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

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

- Statistic not shown. Rate based on less than 16 cases for the time interval.



Table 20.9  
 Cancer of the Oral Cavity and Pharynx by Subsite (Invasive)  
 SEER Incidence<sup>a</sup> Stage Distribution by Site,  
 Age-Adjusted SEER Incidence<sup>a</sup> and U.S. Death<sup>b</sup> Rates by Age, Race and Sex

	Site									
	Oral Cavity & Pharynx	Lip	Tongue	Floor of Mouth	Gum & Other Mouth <sup>c</sup>	Oropharynx & Tonsil <sup>c</sup>	Hypophar. <sup>c</sup>	Salivary Gland	Nasophar. <sup>c</sup>	Other Oral Cavity & Pharynx <sup>c</sup>
<u>SEER Incidence</u>										
Stage Distribution, 2004-2008										
Percent of Total <sup>d</sup>										
Localized	33	87	35	40	-	-	-	43	-	-
Regional	44	4	44	48	-	-	-	33	-	-
Distant	17	2	16	6	-	-	-	16	-	-
Unstaged	7	7	5	6	-	-	-	7	-	-
Age-Adjusted Rates, 2004-2008										
Age at Diagnosis										
All ages	10.6	0.7	3.0	0.6	1.5	2.0	0.7	1.3	0.7	0.2
Under 65	6.4	0.3	1.9	0.3	0.7	1.5	0.3	0.7	0.5	0.1
65+	39.3	3.6	10.6	2.3	7.0	5.0	2.9	5.4	1.6	0.9
All ages(IARC world std) <sup>e</sup>	7.6	0.4	2.2	0.4	1.0	1.5	0.5	0.9	0.5	0.1
Sex										
Male	15.7	1.2	4.5	0.9	1.8	3.3	1.1	1.7	1.0	0.3
Female	6.2	0.3	1.7	0.3	1.2	0.8	0.2	1.0	0.4	0.1
Race										
White	10.8	0.8	3.2	0.6	1.5	2.1	0.6	1.3	0.4	0.2
Black	9.9	0.1	2.3	0.6	1.5	2.3	1.1	1.0	0.7	0.3
Other	9.0	0.4	2.1	0.3	1.4	0.8	0.4	1.1	2.4	0.1
<u>U.S. Mortality</u>										
Age-Adjusted Rates, 2004-2008										
Age at Death										
All ages	2.5	0.0	0.6	0.0	0.4	0.4	0.1	0.2	0.2	0.5
Under 65	1.2	0.0	0.3	0.0	0.1	0.2	0.0	0.1	0.1	0.2
65+	11.9	0.1	2.8	0.2	2.1	1.7	0.5	1.3	0.8	2.5
All ages(IARC world std) <sup>e</sup>	1.6	0.0	0.4	0.0	0.2	0.3	0.1	0.1	0.1	0.3
Sex										
Male	3.9	0.0	0.9	0.1	0.5	0.7	0.2	0.4	0.3	0.9
Female	1.4	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1	0.2
Race										
White	2.4	0.0	0.6	0.0	0.4	0.4	0.1	0.2	0.2	0.5
Black	3.4	-	0.6	0.0	0.4	0.7	0.2	0.2	0.3	0.9
Other	2.0	-	0.4	-	0.2	0.2	0.1	0.2	0.7	0.2

<sup>a</sup> SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

<sup>b</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

<sup>c</sup> Stage distribution was not calculated for this site due to inconsistent coding of stage over time.

<sup>d</sup> Percents may not sum to 100 due to rounding.

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

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.10  
Cancer of the Oral Cavity and Pharynx (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 <sup>a</sup>	-	-	-	45	-	-	-	-	-
1970-1973 <sup>a</sup>	-	-	-	43	-	-	-	-	-
1975-1977 <sup>b</sup>	52.9	51.9	55.2	54.4	54.0	55.1	36.1	29.8	49.0
1978-1980 <sup>b</sup>	53.5	52.0	56.7	55.5	54.6	57.5	34.9	30.0	45.8
1981-1983 <sup>b</sup>	51.9	50.4	55.2	54.2	53.1	56.6	31.4	26.0	45.9
1984-1986 <sup>b</sup>	54.2	51.8	59.1	56.4	54.9	59.4	35.1	29.5	49.4
1987-1989 <sup>b</sup>	53.8	51.2	59.4	56.3	54.2	60.4	33.9	29.8	44.2
1990-1992 <sup>b</sup>	55.5	53.3	60.2	58.1	56.5	61.2	32.5	27.8	45.7
1993-1995 <sup>b</sup>	57.8	56.4	60.7	60.3	59.7	61.4	38.0	33.1	50.7
1996-2000 <sup>b</sup>	58.9	57.5	61.9	60.9	60.4	62.0	39.8	34.5	53.8
2001-2007 <sup>b</sup>	63.2 <sup>e</sup>	62.7 <sup>e</sup>	64.2 <sup>e</sup>	65.1 <sup>e</sup>	65.2 <sup>e</sup>	64.9 <sup>e</sup>	44.7 <sup>e</sup>	40.5 <sup>e</sup>	53.4
5-Year Period Survival (Percent) <sup>cd</sup>									
2007	61.5	60.8	63.1	63.2	63.0	63.7	41.7	36.8	52.0
Stage Distribution (%) 2001-2007 <sup>c</sup>									
All Stages									
Number of cases	43,977	30,455	13,522	35,891	25,082	10,809	4,148	2,874	1,274
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	33	29	42	34	30	43	21	17	32
Regional	46	50	38	46	50	38	50	54	42
Distant	15	16	13	14	14	12	23	24	19
Unstaged	6	6	7	6	6	7	6	5	6
5-Year Relative Survival (Percent), 2001-2007 <sup>c</sup>									
Age at Diagnosis:									
Ages <45	78.0	74.5	84.0	79.8	77.0	85.0	62.7	52.7	76.3
Ages 45-54	66.1	64.7	70.6	69.5	68.3	73.7	40.8	37.9	47.5
Ages 55-64	61.0	59.7	65.4	63.1	61.9	66.9	38.8	36.8	45.9
Ages 65-74	55.2	54.3	57.2	57.0	57.0	57.1	35.1	28.9	50.5
Ages 75+	47.7	46.8	48.7	48.9	48.1	49.7	35.3	30.0	39.9
Ages <65	66.1	64.0	72.1	68.3	66.6	73.6	44.5	39.9	55.7
Ages 65+	51.7	51.3	52.3	53.1	53.3	52.8	35.3	29.2	45.7
Stage:									
All Stages	60.8	59.8	62.9	62.4	62.0	63.2	42.1	37.3	52.6
Localized	82.4	81.8	83.2	82.6	82.4	82.8	75.0	67.8	82.6
Regional	55.5	56.7	52.0	57.5	59.3	52.1	36.8	35.2	41.4
Distant	33.2	32.7	34.3	33.2	33.1	33.2	23.3	20.6	30.6
Unstaged	50.4	49.3	52.5	50.2	49.1	52.4	38.4	36.4	42.3 <sup>f</sup>

<sup>a</sup> Based on End Results data from a series of hospital registries and one population-based registry.

<sup>b</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).  
Based on follow-up of patients into 2008.

<sup>c</sup> SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).  
Based on follow-up of patients into 2008.

<sup>d</sup> Period survival provides a 2007 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2005-2007: 0-1 year survival), (2004-2006: 1-2 year survival), (2003-2005: 2-3 year survival), (2002-2004: 3-4 year survival), (2001-2003: 4-5 years survival).

<sup>e</sup> The difference between 1975-1977 and 2001-2007 is statistically significant ( $p < .05$ ).

<sup>f</sup> The standard error is between 5 and 10 percentage points.

<sup>g</sup> The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 20.11  
Cancer of the Oral Cavity and Pharynx by Subsite (Invasive)  
SEER<sup>a</sup> Relative Survival (Percent) by Cancer Site, 2001-2007

Site	Number of Cases	Case Distribution (%)	Survival Time				
			1-Year Percent	2-Year Percent	3-Year Percent	4-Year Percent	5-Year Percent
Oral Cavity & Pharynx	43977	100	83.0	72.5	67.1	63.4	60.8
Lip	3258	7	98.7	96.0	94.3	91.8	90.5
Tongue	12112	28	82.7	70.4	64.8	61.4	59.4
Gum & Other Mouth	5875	13	81.1	70.9	65.4	61.9	58.1
Floor of Mouth	2571	6	79.9	67.3	59.3	54.8	51.2
Oropharynx & Tonsil	8509	19	83.8	74.1	69.4	65.6	62.9
Hypopharynx	2679	6	66.0	48.2	39.3	34.6	30.2
Salivary Gland	5088	12	88.9	81.1	76.3	73.2	71.3
Nasopharynx	3116	7	82.9	73.2	66.6	61.8	58.3
Other Oral Cavity & Pharynx	769	2	59.0	46.9	41.0	37.8	35.8

5-Year Relative Survival (Percent), 2001-2007

SITE	Stage					All Stages			
	All Stages	Localized	Regional	Distant	Unstaged	White Male	White Female	Black Male	Black Female
Oral Cavity & Pharynx	60.8	82.4	55.5	33.2	50.4	62.0	63.2	37.3	52.6
Lip	90.5	93.6	56.3 <sup>b</sup>	37.6 <sup>c</sup>	79.7	90.7	89.7	-	-
Tongue	59.4	77.2	56.0	30.9	51.8	61.8	60.3	30.5	38.1
Gum & Other Mouth <sup>d</sup>	58.1	-	-	-	-	56.7	61.6	41.4	64.1
Floor of Mouth	51.2	73.7	37.0	19.8	41.2 <sup>b</sup>	50.3	58.0	36.0	51.3 <sup>b</sup>
Oropharynx & Tonsil <sup>d</sup>	62.9	-	-	-	-	67.3	60.6	38.0	38.6
Hypopharynx <sup>d</sup>	30.2	-	-	-	-	32.7	32.1	19.2	21.8 <sup>b</sup>
Salivary Gland	71.3	92.9	60.2	36.2	53.1	63.3	78.9	66.7	78.1
Nasopharynx <sup>d</sup>	58.3	-	-	-	-	53.3	49.4	50.0	62.3 <sup>b</sup>
Other Oral Cavity & Pharynx <sup>d</sup>	35.8	-	-	-	-	42.5	27.5	23.1 <sup>b</sup>	15.3 <sup>b</sup>

<sup>a</sup> SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Based on follow-up of patients into 2008.

<sup>b</sup> The standard error is between 5 and 10 percentage points.

<sup>c</sup> The standard error is greater than 10 percentage points.

<sup>d</sup> Survival by stage was not calculated for this site due to inconsistent coding of stage over time.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 20.12  
Cancer of the Oral Cavity and Pharynx (Invasive)

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Males and Females

Survival Time	Year of Diagnosis																				
	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1-year	80.3	80.0	81.3	82.0	81.8	80.3	82.0	83.7	83.4	82.2	84.2	81.5	84.1	85.3	83.3	84.2	84.4	84.8	83.8	85.6	85.1
2-year	66.3	66.3	68.0	69.9	69.5	69.0	68.8	72.1	71.9	70.3	71.4	70.4	72.6	73.7	73.3	73.2	75.0	75.5	74.3	75.4	
3-year	60.0	59.8	61.3	63.2	62.9	61.7	62.8	66.4	65.6	63.8	66.2	64.5	65.6	68.7	67.4	67.7	70.1	70.6	68.6		
4-year	56.0	55.7	57.4	59.9	58.2	57.0	58.6	62.1	61.8	60.1	62.2	60.2	62.0	64.9	62.8	64.3	67.3	66.5			
5-year	53.0	52.5	54.2	57.0	54.8	54.7	55.7	59.2	58.7	57.9	58.6	57.1	58.9	62.0	60.1	62.1	65.0				
6-year	50.6	49.8	51.7	54.9	52.1	52.2	53.4	56.3	56.1	55.4	56.1	55.8	56.1	60.1	58.2	59.8					
7-year	48.5	47.6	49.1	52.6	50.0	49.4	50.9	55.1	53.5	53.6	54.4	53.8	53.7	58.0	56.3						
8-year	46.3	46.0	47.0	50.9	48.6	47.2	48.8	51.9	51.3	51.2	53.1	52.7	51.9	55.6							
9-year	44.4	44.1	45.1	48.3	47.0	45.2	46.5	49.3	49.3	49.8	51.7	52.1	50.1								
10-year	42.4	42.4	43.4	46.5	45.2	43.7	45.0	47.0	47.7	47.6	49.9	50.9									
11-year	40.6	40.8	42.1	45.3	43.0	41.5	43.3	45.2	45.8	46.3	47.8										
12-year	39.1	39.4	40.6	44.3	40.8	40.3	42.5	44.0	44.0	45.4											
13-year	37.9	37.6	39.1	42.3	39.9	38.7	41.1	42.2	42.6												
14-year	36.8	36.6	37.8	41.0	38.9	37.3	40.0	40.3													
15-year	35.3	35.0	36.7	40.3	37.9	36.0	39.1														
16-year	34.0	33.9	35.6	39.8	36.0	35.3															
17-year	33.1	32.9	34.6	38.9	34.4																
18-year	32.0	31.9	33.2	38.0																	
19-year	31.3	30.3	31.9																		
20-year	30.1	29.8																			

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 20.13  
Cancer of the Oral Cavity and Pharynx For Selected Subsites (Invasive)

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
<u>Cancer of the Tongue</u>																					
1-year	75.3	74.3	77.7	80.3	82.2	77.1	81.8	82.0	80.1	80.0	82.4	80.2	82.0	85.4	82.2	82.0	85.2	87.3	85.1	84.7	86.2
2-year	55.3	57.8	60.7	64.3	67.2	60.2	65.4	68.5	65.6	67.2	71.1	66.2	68.2	71.8	71.1	69.5	71.7	75.8	72.6	73.9	
3-year	47.7	51.0	54.7	58.1	59.1	50.6	57.0	62.9	58.7	61.2	65.1	59.3	60.1	66.5	64.6	64.0	67.1	71.0	65.2		
4-year	43.7	47.5	50.2	55.4	53.7	46.6	54.0	58.4	56.5	57.3	61.9	55.6	57.8	63.6	61.2	61.6	64.9	66.5			
5-year	40.3	44.8	47.5	52.4	52.8	43.7	51.6	54.4	54.2	55.5	57.9	52.9	54.8	62.1	58.5	59.9	62.0				
6-year	38.4	41.9	45.3	50.3	49.2	42.2	49.5	52.0	50.6	53.0	56.2	52.4	52.8	60.4	57.2	57.3					
7-year	37.2	39.3	42.5	47.7	47.4	40.3	46.7	51.2	48.6	51.7	55.3	49.4	50.4	58.4	54.5						
8-year	35.7	37.5	40.6	45.6	46.7	38.8	44.4	47.5	46.5	49.9	53.8	47.9	50.4	56.1							
9-year	34.4	34.8	38.9	42.6	45.0	35.0	41.9	45.4	44.8	48.6	52.8	47.2	48.6								
10-year	32.6	33.4	37.7	40.7	42.3	32.6	41.3	43.8	43.5	46.5	52.3	45.7									
<u>Cancer of the Lip</u>																					
1-year	99.4	98.1	99.6	98.9	100.0	100.0	99.3	100.0	99.9	98.5	100.0	99.5	97.6	98.0	95.0	99.6	99.4	99.6	98.1	96.7	95.8
2-year	97.6	96.2	98.2	97.7	98.3	98.3	98.4	100.0	99.7	94.3	97.3	98.3	95.4	96.0	94.0	99.6	99.4	99.6	95.5	93.8	
3-year	97.3	93.8	97.3	96.2	98.3	96.4	98.2	100.0	99.1	92.7	95.4	96.2	93.9	95.2	94.0	97.5	97.6	98.4	95.1		
4-year	96.0	92.4	97.1	96.2	97.7	94.5	98.2	98.8	96.4	91.3	93.9	94.2	92.1	92.5	91.4	97.5	97.6	95.5			
5-year	94.7	90.1	96.2	94.8	95.4	93.8	96.1	98.4	95.4	88.6	91.4	91.8	90.5	90.0	90.5	94.8	97.6				
6-year	92.8	88.0	95.4	92.8	95.4	90.3	95.6	98.1	95.4	87.4	89.7	90.3	89.4	90.0	87.6	93.0					
7-year	91.5	86.6	93.5	92.1	95.4	87.2	94.0	98.0	95.4	86.4	88.7	90.1	88.9	89.9	84.8						
8-year	90.1	86.2	92.1	92.0	95.4	84.5	91.2	96.7	91.5	83.1	88.7	87.3	88.9	89.9							
9-year	88.0	85.3	91.4	89.9	94.8	83.1	89.9	94.6	86.7	82.7	88.7	87.2	88.3								
10-year	86.0	83.9	91.3	89.3	92.9	81.0	87.7	91.0	82.1	82.7	86.2	86.7									
<u>Cancer of the Oropharynx and Tonsil</u>																					
1-year	71.3	72.3	73.9	76.8	76.6	71.4	77.5	74.5	81.0	80.4	81.8	81.5	87.4	82.8	84.0	85.7	82.7	84.3	84.3	85.5	86.6
2-year	54.0	53.1	56.6	60.4	62.5	58.3	64.5	63.4	70.0	66.7	67.0	66.7	75.3	67.5	72.4	76.5	75.8	74.8	74.2	75.6	
3-year	44.5	44.7	46.1	51.5	56.9	49.5	55.3	57.2	62.6	60.2	61.8	59.8	67.6	62.2	67.1	71.7	71.3	71.2	70.5		
4-year	39.0	39.5	41.7	47.6	52.2	44.6	49.3	52.7	58.3	53.8	56.2	54.6	63.1	57.3	60.8	67.5	68.4	67.0			
5-year	35.8	35.4	38.0	42.9	45.5	41.0	45.7	49.3	54.0	52.5	51.5	52.7	60.4	53.4	59.1	64.4	64.9				
6-year	32.2	32.2	34.8	42.6	40.5	39.8	43.6	46.1	50.2	47.8	48.2	51.0	57.2	52.2	55.0	63.4					
7-year	30.3	29.6	32.1	40.5	38.8	38.3	42.5	45.3	46.5	43.5	47.2	49.5	55.1	48.4	53.1						
8-year	26.6	28.0	30.4	39.1	36.0	37.0	40.4	41.7	45.3	42.0	46.2	48.7	51.5	46.4							
9-year	23.8	25.7	28.4	35.4	33.9	35.2	37.6	40.3	43.9	41.0	44.2	48.4	51.3								
10-year	22.5	23.2	26.3	35.2	32.0	35.2	34.2	39.3	42.6	39.8	43.1	45.9									

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 20.14  
Cancer of the Oral Cavity and Pharynx (Invasive)

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	79.7	79.5	80.5	81.2	81.4	79.6	80.9	83.8	83.3	82.0	83.4	81.1	84.5	85.1	83.9	84.4	84.8	85.4	84.4	85.6	86.2
2-year	65.5	65.4	66.5	67.8	68.5	67.7	67.3	72.3	71.1	69.7	69.9	70.3	71.6	73.2	73.4	72.0	74.8	75.4	74.7	74.9	
3-year	59.2	58.4	59.2	61.3	61.2	59.7	60.5	65.2	65.1	62.8	64.7	63.9	64.1	67.6	67.8	65.6	69.7	69.8	68.4		
4-year	54.8	54.2	55.1	57.8	55.2	55.5	56.7	60.6	60.8	58.8	60.0	59.3	60.3	64.0	62.5	62.4	66.8	65.4			
5-year	51.8	50.9	51.6	54.9	51.7	53.2	53.7	58.0	57.8	56.6	56.4	56.1	57.4	60.9	59.8	60.5	64.9				
6-year	49.5	48.2	49.4	52.7	49.2	50.9	51.1	55.5	55.0	53.6	53.9	54.8	54.4	58.6	57.5	58.3					
7-year	47.3	46.0	47.1	50.3	46.9	47.8	48.2	54.4	52.0	51.3	52.6	52.6	52.4	56.3	55.5						
8-year	45.3	44.4	44.8	49.0	45.6	45.6	46.9	51.4	49.7	49.1	51.4	51.2	50.8	53.7							
9-year	43.3	42.7	42.9	46.4	44.1	43.6	44.4	48.7	47.6	48.0	49.8	50.4	49.3								
10-year	41.2	40.7	40.9	45.3	42.0	42.1	43.2	46.5	45.8	45.8	48.2	49.2									
11-year	39.4	39.2	39.7	44.1	40.1	40.3	41.6	45.0	43.8	44.1	46.3										
12-year	38.0	37.8	38.3	43.3	37.6	39.0	40.6	43.8	42.0	43.2											
13-year	36.9	36.4	36.9	41.3	36.9	37.5	38.7	42.1	40.4												
14-year	35.9	35.4	35.7	39.8	36.3	36.0	37.8	39.8													
15-year	34.5	34.0	34.7	39.0	35.5	34.5	37.2														
16-year	33.1	32.8	33.7	38.2	33.0	33.9															
17-year	32.2	31.8	32.7	37.4	31.8																
18-year	31.2	30.7	31.5	36.2																	
19-year	30.6	28.9	30.0																		
20-year	29.5	28.3																			

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 20.15  
Cancer of the Oral Cavity and Pharynx (Invasive)

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	81.6	81.2	82.7	83.8	82.7	81.8	84.3	83.3	83.4	82.5	86.1	82.3	83.3	85.7	82.3	83.7	83.6	83.3	82.7	85.6	82.4
2-year	68.2	68.1	70.9	74.3	71.3	71.8	72.2	71.6	73.4	71.4	74.6	70.5	74.5	74.8	73.0	75.7	75.4	75.7	73.5	76.6	
3-year	61.8	62.7	65.5	67.3	66.3	65.7	67.7	68.8	66.6	66.0	69.5	65.7	68.7	71.2	66.6	72.1	70.9	72.4	69.0		
4-year	58.8	58.7	62.1	64.4	64.1	60.2	62.8	65.2	63.6	62.7	66.9	62.1	65.8	67.0	63.2	68.4	68.3	69.2			
5-year	55.8	56.0	59.6	61.7	61.0	58.0	59.7	61.7	60.4	60.5	63.5	59.2	62.1	64.3	60.8	65.3	65.2				
6-year	53.2	53.2	56.4	59.7	58.0	54.8	58.3	58.1	58.3	59.0	60.9	57.7	59.6	63.3	59.6	63.0					
7-year	51.2	50.9	53.2	57.5	56.4	52.8	56.6	56.5	56.3	58.3	58.5	56.4	56.3	61.7	58.0						
8-year	48.7	49.3	51.6	55.1	54.5	50.7	52.8	52.8	54.4	55.5	56.9	55.8	54.1	59.9							
9-year	47.0	47.1	49.7	52.4	52.7	48.5	50.8	50.5	52.4	53.3	55.9	55.8	51.9								
10-year	45.1	45.7	48.5	49.0	51.5	47.0	48.9	48.3	51.0	51.4	53.5	54.5									
11-year	43.1	44.3	47.0	47.8	48.7	43.9	46.9	45.5	49.4	50.9	51.0										
12-year	41.6	42.6	45.2	46.4	47.2	42.6	46.5	44.7	47.5	49.7											
13-year	40.1	40.3	43.5	44.6	45.6	41.4	46.0	42.5	46.6												
14-year	38.8	39.3	42.0	43.5	44.0	39.9	44.7	41.3													
15-year	37.2	37.3	40.8	43.0	42.9	38.9	43.1														
16-year	36.1	36.2	39.4	43.0	41.8	38.2															
17-year	35.2	35.2	38.6	42.2	39.6																
18-year	33.9	34.3	36.8	41.7																	
19-year	32.8	33.2	35.9																		
20-year	31.5	32.7																			

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 20.16  
Cancer of the Oral Cavity and Pharynx (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,  
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and  
Lifetime Risk of Dying from Cancer Given Alive at Current Age  
Both Sexes, 2006-2008 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.01	0.01	1.05	0.28	Asian/ Pacific Islander	0	0.00	0.01	0.02	0.87	0.29
	10	0.00	0.01	0.04	1.06	0.28		10	0.01	0.02	0.06	0.88	0.29
	20	0.01	0.03	0.12	1.06	0.28		20	0.01	0.05	0.14	0.88	0.29
	30	0.02	0.11	0.32	1.06	0.29		30	0.04	0.12	0.27	0.87	0.29
	40	0.09	0.29	0.58	1.05	0.29		40	0.09	0.23	0.42	0.83	0.29
	50	0.21	0.51	0.77	0.99	0.28		50	0.15	0.34	0.54	0.76	0.28
	60	0.31	0.60	0.77	0.82	0.25		60	0.20	0.41	0.57	0.63	0.25
	70	0.33	0.53	-	0.59	0.21		70	0.22	0.40	-	0.47	0.21
80	0.28	-	-	0.36	0.15	80	0.21	-	-	0.30	0.17		
White	0	0.00	0.00	0.01	1.08	0.28	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.01	0.79	0.25
	10	0.00	0.01	0.03	1.09	0.28		10	0.00	0.01	0.02	0.80	0.25
	20	0.01	0.03	0.11	1.09	0.28		20	0.01	0.02	0.06	0.80	0.26
	30	0.02	0.11	0.32	1.09	0.28		30	0.01	0.05	0.20	0.81	0.26
	40	0.09	0.30	0.60	1.08	0.28		40	0.04	0.19	0.41	0.82	0.27
	50	0.22	0.52	0.80	1.02	0.28		50	0.16	0.39	0.56	0.82	0.27
	60	0.32	0.62	0.80	0.85	0.25		60	0.25	0.44	0.53	0.71	0.26
	70	0.34	0.55	-	0.61	0.21		70	0.22	0.32	-	0.54	0.23
80	0.29	-	-	0.37	0.15	80	0.15	-	-	0.44	0.19		
Black	0	0.00	0.01	0.02	0.79	0.30	Hispanic <sup>b</sup>	0	0.00	0.00	0.01	0.70	0.21
	10	0.01	0.01	0.04	0.81	0.30		10	0.00	0.01	0.02	0.71	0.21
	20	0.01	0.03	0.11	0.81	0.30		20	0.01	0.02	0.06	0.71	0.21
	30	0.02	0.10	0.30	0.81	0.31		30	0.01	0.06	0.17	0.71	0.21
	40	0.08	0.28	0.53	0.80	0.31		40	0.04	0.15	0.32	0.70	0.22
	50	0.21	0.47	0.66	0.76	0.30		50	0.11	0.28	0.46	0.67	0.21
	60	0.29	0.50	0.59	0.61	0.26		60	0.18	0.36	0.52	0.59	0.20
	70	0.26	0.36	-	0.40	0.19		70	0.21	0.38	-	0.45	0.17
80	0.15	-	-	0.20	0.13	80	0.22	-	-	0.32	0.13		

Devcan Version 6.6.0, October 2011, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Mortality data are from the NCHS public use data file for the total US.

<sup>a</sup> Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>b</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire and North Dakota.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.



Table 20.17  
Cancer of the Oral Cavity and Pharynx (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,  
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and  
Lifetime Risk of Dying from Cancer Given Alive at Current Age  
Males, 2006-2008 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.01	0.01	1.45	0.38	Asian/ Pacific Islander	0	0.00	0.01	0.02	1.17	0.40
	10	0.00	0.01	0.04	1.47	0.39		10	0.01	0.02	0.06	1.18	0.40
	20	0.01	0.04	0.16	1.47	0.39		20	0.01	0.06	0.17	1.18	0.40
	30	0.03	0.15	0.47	1.48	0.39		30	0.04	0.16	0.36	1.17	0.40
	40	0.13	0.44	0.87	1.48	0.40		40	0.12	0.32	0.62	1.14	0.40
	50	0.33	0.77	1.14	1.40	0.39		50	0.21	0.51	0.79	1.04	0.38
	60	0.47	0.87	1.10	1.16	0.35		60	0.32	0.61	0.81	0.86	0.34
	70	0.47	0.74	-	0.80	0.27		70	0.32	0.54	-	0.61	0.29
80	0.40	-	-	0.49	0.19	80	0.28	-	-	0.37	0.23		
White	0	0.00	0.00	0.01	1.49	0.37	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.01	0.99	0.32
	10	0.00	0.01	0.04	1.51	0.38		10	0.00	0.01	0.02	1.01	0.33
	20	0.01	0.03	0.16	1.51	0.38		20	0.01	0.02	0.07	1.02	0.33
	30	0.03	0.15	0.48	1.53	0.38		30	0.01	0.06	0.31	1.03	0.34
	40	0.13	0.46	0.89	1.52	0.39		40	0.05	0.31	0.58	1.06	0.35
	50	0.34	0.79	1.17	1.44	0.38		50	0.27	0.56	0.77	1.07	0.36
	60	0.48	0.90	1.13	1.19	0.34		60	0.32	0.54	0.61	0.87	0.35
	70	0.48	0.76	-	0.83	0.27		70	0.27	0.35	-	0.67	0.30
80	0.41	-	-	0.50	0.19	80	0.11	-	-	0.58	0.18		
Black	0	0.00	0.01	0.02	1.14	0.44	Hispanic <sup>b</sup>	0	0.00	0.00	0.01	0.91	0.29
	10	0.01	0.02	0.04	1.17	0.46		10	0.00	0.01	0.02	0.92	0.30
	20	0.01	0.03	0.14	1.17	0.46		20	0.01	0.02	0.07	0.92	0.30
	30	0.02	0.13	0.44	1.19	0.47		30	0.01	0.07	0.22	0.93	0.30
	40	0.11	0.43	0.83	1.20	0.48		40	0.05	0.21	0.46	0.93	0.30
	50	0.33	0.76	1.04	1.15	0.47		50	0.16	0.41	0.64	0.90	0.30
	60	0.49	0.81	0.93	0.94	0.41		60	0.27	0.51	0.71	0.79	0.28
	70	0.43	0.58	-	0.60	0.29		70	0.28	0.51	-	0.59	0.23
80	0.25	-	-	0.28	0.18	80	0.31	-	-	0.42	0.17		

Devcan Version 6.6.0, October 2011, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Mortality data are from the NCHS public use data file for the total US.

<sup>a</sup> Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>b</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire and North Dakota.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 20.18  
Cancer of the Oral Cavity and Pharynx (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,  
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and  
Lifetime Risk of Dying from Cancer Given Alive at Current Age  
Females, 2006-2008 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.01	0.67	0.18	Asian/ Pacific Islander	0	0.00	0.00	0.02	0.61	0.20
	10	0.00	0.01	0.03	0.67	0.19		10	0.00	0.01	0.05	0.62	0.20
	20	0.01	0.03	0.08	0.67	0.19		20	0.01	0.05	0.10	0.62	0.20
	30	0.02	0.07	0.17	0.67	0.19		30	0.03	0.09	0.18	0.61	0.20
	40	0.05	0.15	0.30	0.65	0.19		40	0.05	0.15	0.25	0.57	0.20
	50	0.10	0.26	0.43	0.62	0.18		50	0.09	0.20	0.33	0.53	0.19
	60	0.16	0.35	0.49	0.54	0.17		60	0.10	0.24	0.37	0.44	0.17
	70	0.21	0.36	-	0.42	0.15		70	0.15	0.28	-	0.36	0.16
80	0.21	-	-	0.28	0.12	80	0.16	-	-	0.25	0.13		
White	0	0.00	0.00	0.01	0.68	0.18	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.01	0.63	0.18
	10	0.00	0.01	0.03	0.69	0.19		10	0.00	0.01	0.02	0.63	0.18
	20	0.01	0.03	0.07	0.69	0.19		20	0.01	0.02	0.05	0.63	0.18
	30	0.02	0.06	0.16	0.68	0.19		30	0.01	0.04	0.09	0.63	0.19
	40	0.04	0.14	0.30	0.67	0.19		40	0.03	0.08	0.26	0.63	0.19
	50	0.10	0.26	0.45	0.64	0.18		50	0.06	0.23	0.38	0.63	0.18
	60	0.17	0.36	0.51	0.56	0.18		60	0.19	0.34	0.46	0.60	0.18
	70	0.22	0.38	-	0.43	0.16		70	0.17	0.31	-	0.47	0.18
80	0.21	-	-	0.28	0.12	80	0.18	-	-	0.39	0.19		
Black	0	0.00	0.01	0.02	0.47	0.16	Hispanic <sup>b</sup>	0	0.00	0.00	0.01	0.51	0.14
	10	0.00	0.01	0.03	0.48	0.17		10	0.00	0.01	0.03	0.52	0.14
	20	0.01	0.03	0.09	0.48	0.17		20	0.01	0.02	0.05	0.51	0.14
	30	0.02	0.08	0.17	0.47	0.17		30	0.01	0.04	0.11	0.51	0.14
	40	0.06	0.15	0.27	0.46	0.17		40	0.03	0.09	0.19	0.50	0.14
	50	0.10	0.22	0.33	0.42	0.16		50	0.07	0.17	0.30	0.48	0.14
	60	0.13	0.25	0.31	0.34	0.15		60	0.10	0.24	0.36	0.42	0.13
	70	0.15	0.21	-	0.25	0.12		70	0.15	0.28	-	0.35	0.13
80	0.09	-	-	0.15	0.10	80	0.16	-	-	0.25	0.11		

Devcan Version 6.6.0, October 2011, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Mortality data are from the NCHS public use data file for the total US.

<sup>a</sup> Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>b</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire and North Dakota.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 20.19  
Cancer of the Oral Cavity and Pharynx (Invasive)

SEER Incidence and U.S. Mortality  
Age-Adjusted Rates and Trends<sup>a</sup>  
By Race/Ethnicity and Sex

SEER Incidence	SEER 17 Areas <sup>b</sup>			SEER 13 Areas <sup>b</sup>			SEER 9 Areas <sup>b</sup>		
	Rate 2004-2008			Trend 1999-2008 <sup>c</sup>			Trend 1999-2008 <sup>d</sup>		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	10.6	15.7	6.2	-1.0*	-0.4	-1.0*	-1.0*	-0.4	-0.9*
White	10.8	16.1	6.2	-0.8*	-0.1	-1.1*	0.0	-0.1	-0.9*
White Hispanic <sup>e</sup>	6.3	9.2	4.0	-1.6*	-2.0*	-1.0	-	-	-
White Non-Hispanic <sup>e</sup>	11.6	17.3	6.6	-0.5*	0.1	-0.9*	-	-	-
Black	9.9	15.6	5.6	-2.8*	-3.2*	-1.6*	-2.6*	-3.2*	-1.5*
Asian/Pacific Islander	7.9	10.9	5.3	-0.9*	-1.0*	-0.5	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	7.0	9.1	5.1	-3.5*	-	-	-	-	-
Hispanic <sup>e</sup>	6.2	9.0	3.9	-0.3	-1.9*	-0.9	-	-	-
<u>U.S. Mortality<sup>g</sup></u>									
RACE/ETHNICITY	Rate 2004-2008			Trend 1999-2008 <sup>h</sup>					
	Rate per 100,000 persons			AAPC (%)					
	Total	Males	Females	Total	Males	Females			
All Races	2.5	3.9	1.4	-1.5*	-1.4*	-2.2*			
White	2.4	3.7	1.4	-1.1*	-0.9*	-2.0*			
White Hispanic <sup>e</sup>	1.6	2.5	0.8	-2.9*	-3.6*	-1.7*			
White Non-Hispanic <sup>e</sup>	2.5	3.8	1.5	-0.8*	-0.6*	-1.8*			
Black	3.4	6.0	1.5	-3.8*	-3.8*	-3.5*			
Asian/Pacific Islander	2.0	3.0	1.3	-2.4*	-2.7*	-1.6*			
Amer Ind/Alaska Nat									
Total U.S.	2.0	3.2	1.1	-1.4*	-1.7	-			
CHSDA Counties	2.4	3.8	1.2	-2.0*	-	-			
Non-CHSDA Counties	1.5	2.3	0.8	-	-	-			
Hispanic <sup>e</sup>	1.5	2.4	0.8	-2.9*	-3.7*	-1.6*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Trend based on less than 10 cases for at least one year within the time interval.

a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends

are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

c The 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2008.

d The 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2008.

e 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 are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia and North Dakota.

The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

f Incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

g US Mortality Files, National Center for Health Statistics, CDC.

h The 1999-2008 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2008.

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

Table 20.20  
Cancer of the Oral Cavity and Pharynx by Subsite (Invasive)

SEER Incidence  
Age-Adjusted Rates and Trends<sup>a</sup> by Race and Sex

	Site									
	Oral Cavity & Pharynx	Lip	Tongue	Floor of Mouth	Gum & Other Mouth	Oropharynx & Tonsil	Hypophar.	Salivary Gland	Nasophar.	Other Oral Cavity & Pharynx
<u>2004-2008, Rate per 100,000 persons<sup>b</sup></u>										
All Races										
Male and Female	10.6	0.7	3.0	0.6	1.5	2.0	0.7	1.3	0.7	0.2
Male	15.7	1.2	4.5	0.9	1.8	3.3	1.1	1.7	1.0	0.3
Female	6.2	0.3	1.7	0.3	1.2	0.8	0.2	1.0	0.4	0.1
White										
Male and Female	10.8	0.8	3.2	0.6	1.5	2.1	0.6	1.3	0.4	0.2
Male	16.1	1.4	4.7	0.9	1.8	3.5	1.1	1.8	0.6	0.3
Female	6.2	0.4	1.8	0.3	1.2	0.8	0.3	1.0	0.3	0.1
Black										
Male and Female	9.9	0.1	2.3	0.6	1.5	2.3	1.1	1.0	0.7	0.3
Male	15.6	0.1	3.7	1.0	1.9	4.2	2.1	1.0	1.2	0.5
Female	5.6	-	1.2	0.3	1.3	0.8	0.3	1.0	0.3	0.2
<u>Trend 1999-2008<sup>c</sup>, APC(%)</u>										
All Races										
Male and Female	-0.4	-6.3*	1.7*	-4.2*	-1.9*	2.5*	-3.4*	0.7	0.5	-5.3*
Male	-0.4	-6.8*	2.1*	-4.6*	-2.3*	2.8*	-3.0*	0.6	0.3	-5.0*
Female	-0.6	-4.6*	1.0	-3.7*	-1.4	0.6	-4.5*	0.6	0.7	-5.9*
White										
Male and Female	-0.1	-6.0*	2.3*	-3.6*	-1.9*	3.1*	-3.0*	0.5	1.1	-5.6*
Male	-0.1	-6.6*	2.4*	-4.1*	-2.0*	3.5*	-2.8*	0.6	0.6	-4.6*
Female	-0.5	-4.2*	2.0*	-3.3*	-1.8*	0.8	-4.0	0.0	2.0	-
Black										
Male and Female	-2.8*	-	-3.0*	-8.7*	-4.1	0.2	-2.5	-0.7	-1.6	-
Male	-3.3*	-	-2.9*	-10.3*	-6.7*	0.2	-1.5	-4.3*	-1.8	-
Female	-1.4	-	-2.8	-	-0.7	0.0	-	2.3	-	-

The APC is the Annual Percent Change over the time interval.

<sup>a</sup> Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

<sup>b</sup> Incidence data used in calculating the rates are from the 17 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).

<sup>c</sup> Incidence data used in calculating the trends are from the 13 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).

- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

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

Table 20.21  
Cancer of the Oral Cavity and Pharynx by Subsite  
U.S. Mortality<sup>a</sup>  
Age-Adjusted Rates and Trends<sup>b</sup> by Race and Sex

	Site									
	Oral Cavity & Pharynx	Lip	Tongue	Floor of Mouth	Gum & Other Mouth	Oropharynx & Tonsil	Hypophar.	Salivary Gland	Nasophar.	Other Oral Cavity & Pharynx
<u>2004-2008, Rate per 100,000 persons</u>										
All Races										
Male and Female	2.5	0.0	0.6	0.0	0.4	0.4	0.1	0.2	0.2	0.5
Male	3.9	0.0	0.9	0.1	0.5	0.7	0.2	0.4	0.3	0.9
Female	1.4	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1	0.2
White										
Male and Female	2.4	0.0	0.6	0.0	0.4	0.4	0.1	0.2	0.2	0.5
Male	3.7	0.0	0.9	0.1	0.4	0.7	0.2	0.4	0.2	0.8
Female	1.4	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1	0.2
Black										
Male and Female	3.4	-	0.6	0.0	0.4	0.7	0.2	0.2	0.3	0.9
Male	6.0	-	1.1	0.1	0.6	1.2	0.4	0.2	0.5	1.8
Female	1.5	-	0.3	0.0	0.2	0.3	0.1	0.1	0.2	0.4
<u>Trend 1999-2008 ,APC(%)</u>										
All Races										
Male and Female	-1.2*	-2.2	-0.4*	-7.4*	-2.8*	0.7	-4.4*	-0.9*	-1.5*	-1.4*
Male	-1.1*	-3.9	-0.4	-8.2*	-2.8*	0.9	-4.4*	-0.3	-1.4*	-1.4*
Female	-1.7*	2.0	-0.7	-5.6*	-2.8*	-0.3	-4.8*	-2.2*	-1.9	-2.1*
White										
Male and Female	-0.8*	-2.1	0.1	-6.6*	-2.5*	1.4*	-4.2*	-0.8*	-1.4*	-0.8
Male	-0.6*	-3.9	0.1	-7.5*	-2.5*	1.8*	-4.3*	-0.4	-1.3*	-0.7
Female	-1.5*	2.6	-0.2	-5.1*	-2.6*	-0.5	-4.4*	-2.0*	-2.0*	-1.7*
Black										
Male and Female	-3.4*	-	-3.8*	-11.9*	-4.5*	-1.6*	-5.0*	-2.3	-1.8	-3.7*
Male	-3.3*	-	-3.5*	-	-5.1*	-2.1*	-4.8	0.5	-0.8	-3.5*
Female	-3.3*	-	-3.3	-	-3.7*	0.3	-	-5.1	-3.6	-3.8*

<sup>a</sup> The APC is the Annual Percent Change over the time interval.

<sup>b</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

- Statistic not shown. Rate based on less than 16 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

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

Table 20.22  
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted SEER Incidence Rates<sup>a</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates<sup>a</sup>, 2004-2008</u>									
Atlanta & Rural Georgia	9.45	14.56	5.25	10.07	15.21	5.51	8.27	13.83	4.52
Atlanta	9.34	14.49	5.15	9.87	14.99	5.36	8.42	14.33	4.49
Rural Georgia	10.98	15.86	6.57	13.49	18.77	8.20	6.21	-	-
California	10.23	15.05	6.12	10.53	15.63	6.09	9.34	13.72	5.82
Greater Bay Area	10.55	15.01	6.65	11.04	15.94	6.66	8.79	12.44	5.86
San Francisco-Oakland	10.97	15.53	7.03	11.60	16.59	7.11	8.77	12.34	6.06
San Jose-Monterey	9.72	14.01	5.92	10.07	14.81	5.88	9.18	12.81	-
Los Angeles	8.78	12.87	5.45	8.74	12.88	5.29	9.93	15.10	6.15
Greater California	10.80	16.07	6.24	11.08	16.63	6.24	9.15	13.06	5.58
Connecticut	10.70	16.11	6.12	10.52	15.72	6.08	12.46	20.96	6.23
Detroit	11.74	17.60	7.00	11.78	17.49	7.02	11.95	18.71	7.05
Hawaii	12.11	17.52	7.20	17.88	25.60	9.73	-	-	-
Iowa	11.40	17.39	6.27	11.18	17.05	6.15	11.49	19.20	-
Kentucky	12.33	19.15	6.59	12.29	19.11	6.50	11.43	17.44	6.76
Louisiana	12.28	19.52	6.18	12.70	19.98	6.30	11.19	18.53	5.66
New Jersey	9.93	14.67	5.97	10.05	14.71	6.11	9.10	15.07	4.85
New Mexico	9.29	13.70	5.35	9.70	14.41	5.46	-	-	-
Seattle-Puget Sound	11.32	16.35	6.81	11.73	16.85	7.07	7.15	11.01	-
Utah	7.65	10.78	4.76	7.72	10.87	4.79	-	-	-
9 SEER Areas <sup>b</sup>	10.69	15.78	6.30	10.90	16.08	6.34	9.90	15.70	5.59
11 SEER Areas <sup>b</sup>	10.21	15.04	6.09	10.41	15.34	6.10	9.87	15.46	5.70
13 SEER Areas <sup>b</sup>	10.22	15.05	6.10	10.42	15.35	6.11	9.83	15.36	5.69
17 SEER Areas <sup>b</sup>	10.56	15.72	6.15	10.77	16.06	6.17	9.90	15.59	5.57

<sup>a</sup> Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)

<sup>b</sup> The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.23  
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted SEER Death Rates<sup>a</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Death Rates<sup>a</sup>, 2004-2008</u>									
Atlanta & Rural Georgia	2.22	3.39	1.34	2.00	2.90	1.35	2.77	4.92	1.32
Atlanta	2.20	3.40	1.33	2.00	2.96	1.31	2.75	4.83	1.37
Rural Georgia	2.60	-	-	-	-	-	-	-	-
California	2.54	3.79	1.51	2.53	3.78	1.50	3.18	5.13	1.65
Greater Bay Area	2.31	3.33	1.44	2.17	3.12	1.37	2.83	4.76	1.35
San Francisco-Oakland	2.46	3.52	1.59	2.25	3.22	1.46	2.87	4.64	1.51
San Jose-Monterey	2.01	2.97	1.15	2.02	2.92	1.22	-	-	-
Los Angeles	2.37	3.66	1.36	2.28	3.50	1.31	3.38	5.86	1.59
Greater California	2.69	4.02	1.60	2.74	4.09	1.62	3.27	4.62	2.05
Connecticut	2.06	3.19	1.18	1.99	3.08	1.15	3.05	5.03	-
Detroit	2.74	4.40	1.43	2.50	4.00	1.26	3.70	6.25	1.97
Hawaii	3.02	4.56	1.65	4.07	5.91	2.00	-	-	-
Iowa	2.48	3.71	1.46	2.45	3.65	1.45	-	-	-
Kentucky	2.74	4.31	1.46	2.73	4.27	1.45	3.03	5.29	-
Louisiana	3.22	5.33	1.52	2.88	4.46	1.56	4.24	8.20	1.43
New Jersey	2.23	3.33	1.35	2.10	3.08	1.32	3.44	6.07	1.64
New Mexico	2.17	3.54	0.96	2.28	3.66	1.05	-	-	-
Seattle-Puget Sound	2.96	4.20	1.92	3.03	4.25	2.00	-	-	-
Utah	1.42	2.00	0.87	1.40	1.95	0.86	-	-	-
9 SEER Areas <sup>b</sup>	2.43	3.66	1.42	2.34	3.50	1.38	3.04	5.13	1.53
11 SEER Areas <sup>b</sup>	2.39	3.62	1.39	2.31	3.47	1.35	3.10	5.30	1.51
13 SEER Areas <sup>b</sup>	2.39	3.61	1.40	2.31	3.45	1.36	3.09	5.30	1.50
17 SEER Areas <sup>b</sup>	2.51	3.82	1.45	2.45	3.68	1.43	3.35	5.82	1.55
Total U.S.	2.52	3.85	1.42	2.43	3.65	1.40	3.39	6.01	1.52

<sup>a</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

<sup>b</sup> The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta. The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles. The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia. The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

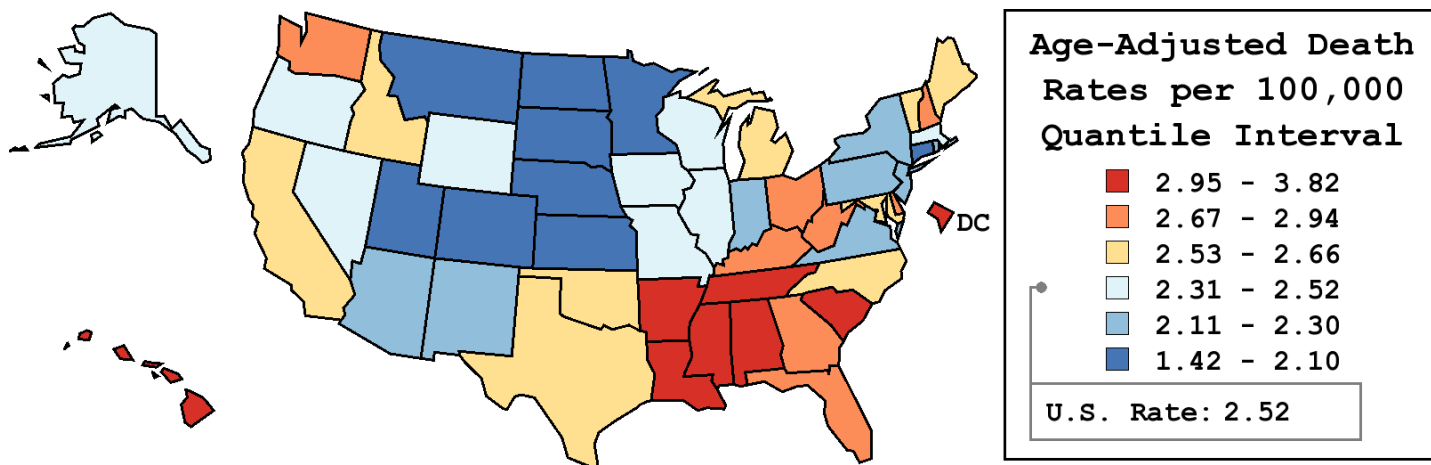
Table 20.24  
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2004-2008

Males and Females

State	Rate	SE	Rank	PD
TOTAL U.S.	2.52	0.01		
High Five States				
D.C.	3.82 <sup>b</sup>	0.36	(01)	51.61 <sup>c</sup>
Mississippi	3.35 <sup>b</sup>	0.15	(02)	33.09 <sup>c</sup>
Louisiana	3.22 <sup>b</sup>	0.12	(03)	28.00 <sup>c</sup>
Alabama	3.02 <sup>b</sup>	0.11	(04)	20.14 <sup>c</sup>
South Carolina	3.02 <sup>b</sup>	0.11	(05)	19.98 <sup>c</sup>
Low Five States				
Colorado	2.04 <sup>b</sup>	0.10	(47)	-19.00 <sup>c</sup>
Minnesota	2.03 <sup>b</sup>	0.09	(48)	-19.31 <sup>c</sup>
Nebraska	1.97 <sup>b</sup>	0.15	(49)	-21.87 <sup>c</sup>
South Dakota	1.84	0.20	(50)	-27.09 <sup>c</sup>
Utah	1.42 <sup>b</sup>	0.12	(51)	-43.42 <sup>c</sup>

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	3.02 <sup>b</sup>	0.11	(04)	20.14 <sup>c</sup>	Montana	2.10	0.20	(43)	-16.47 <sup>c</sup>
Alaska	2.38	0.34	(33)	-5.63	Nebraska	1.97 <sup>b</sup>	0.15	(49)	-21.87 <sup>c</sup>
Arizona	2.13 <sup>b</sup>	0.08	(41)	-15.29 <sup>c</sup>	Nevada	2.52	0.15	(26)	0.05
Arkansas	3.00	0.14	(07)	19.33 <sup>c</sup>	New Hampshire	2.76	0.20	(12)	9.67
California	2.54	0.04	(25)	0.74	New Jersey	2.23 <sup>b</sup>	0.07	(38)	-11.55
Colorado	2.04 <sup>b</sup>	0.10	(47)	-19.00 <sup>c</sup>	New Mexico	2.17	0.15	(40)	-13.69
Connecticut	2.06 <sup>b</sup>	0.10	(46)	-18.35 <sup>c</sup>	New York	2.22 <sup>b</sup>	0.05	(39)	-11.65
Delaware	2.67	0.24	(16)	6.10	North Carolina	2.61	0.08	(20)	3.58
D.C.	3.82 <sup>b</sup>	0.36	(01)	51.61 <sup>c</sup>	North Dakota	2.10	0.24	(44)	-16.73 <sup>c</sup>
Florida	2.82 <sup>b</sup>	0.05	(11)	11.86	Ohio	2.67	0.06	(15)	6.25
Georgia	2.69	0.08	(14)	6.93	Oklahoma	2.66	0.12	(17)	5.76
Hawaii	3.02	0.21	(06)	19.86 <sup>c</sup>	Oregon	2.46	0.11	(31)	-2.44
Idaho	2.59	0.19	(23)	2.87	Pennsylvania	2.30 <sup>b</sup>	0.06	(35)	-8.62
Illinois	2.49	0.06	(27)	-0.91	Rhode Island	2.12	0.19	(42)	-15.63 <sup>c</sup>
Indiana	2.28	0.08	(36)	-9.40	South Carolina	3.02 <sup>b</sup>	0.11	(05)	19.98 <sup>c</sup>
Iowa	2.48	0.12	(29)	-1.58	South Dakota	1.84	0.20	(50)	-27.09 <sup>c</sup>
Kansas	2.08 <sup>b</sup>	0.12	(45)	-17.39 <sup>c</sup>	Tennessee	2.95 <sup>b</sup>	0.10	(08)	17.03 <sup>c</sup>
Kentucky	2.74	0.11	(13)	8.79	Texas	2.57	0.05	(24)	2.17
Louisiana	3.22 <sup>b</sup>	0.12	(03)	28.00 <sup>c</sup>	Utah	1.42 <sup>b</sup>	0.12	(51)	-43.42 <sup>c</sup>
Maine	2.59	0.18	(22)	3.04	Vermont	2.63	0.27	(18)	4.38
Maryland	2.59	0.10	(21)	3.04	Virginia	2.26	0.08	(37)	-10.18
Massachusetts	2.49	0.08	(28)	-1.05	Washington	2.94 <sup>b</sup>	0.10	(09)	16.81 <sup>c</sup>
Michigan	2.61	0.07	(19)	3.61	West Virginia	2.87	0.16	(10)	14.01
Minnesota	2.03 <sup>b</sup>	0.09	(48)	-19.31 <sup>c</sup>	Wisconsin	2.47	0.09	(30)	-1.69
Mississippi	3.35 <sup>b</sup>	0.15	(02)	33.09 <sup>c</sup>	Wyoming	2.41	0.30	(32)	-4.23
Missouri	2.33	0.09	(34)	-7.35					



<sup>a</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).  
<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.  
SE Standard error of the rate.  
PD Percent difference between state rate and total U.S. rate.  
- Statistic not shown. Rate based on less than 16 cases for the time interval.



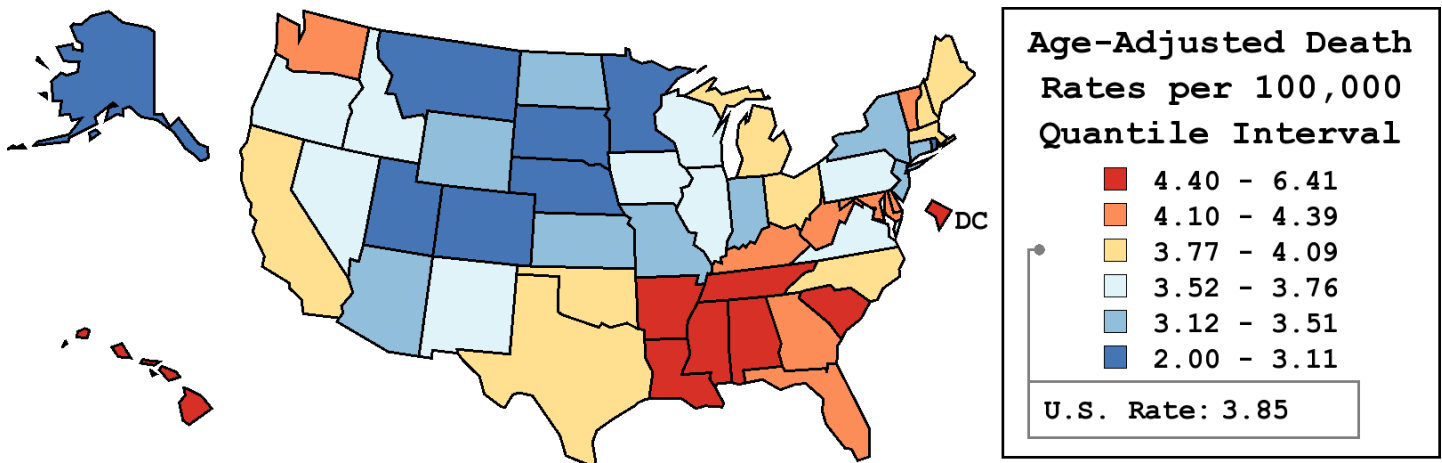
Table 20.25  
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2004-2008

Males

State	Rate	SE	Rank	PD
TOTAL U.S.	3.85	0.02		
High Five States				
D.C.	6.41	0.74	(01)	66.17 <sup>c</sup>
Mississippi	5.60 <sup>b</sup>	0.30	(02)	45.40 <sup>c</sup>
Louisiana	5.33 <sup>b</sup>	0.24	(03)	38.22 <sup>c</sup>
South Carolina	4.89 <sup>b</sup>	0.22	(04)	26.83 <sup>c</sup>
Arkansas	4.86 <sup>b</sup>	0.27	(05)	26.17 <sup>c</sup>
Low Five States				
Minnesota	2.91 <sup>b</sup>	0.16	(47)	-24.47 <sup>c</sup>
Colorado	2.81 <sup>b</sup>	0.18	(48)	-27.02 <sup>c</sup>
Nebraska	2.70 <sup>b</sup>	0.26	(49)	-29.86 <sup>c</sup>
South Dakota	2.62	0.36	(50)	-32.03 <sup>c</sup>
Utah	2.00 <sup>b</sup>	0.21	(51)	-48.15 <sup>c</sup>

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	4.80 <sup>b</sup>	0.21	(06)	24.56 <sup>c</sup>	Montana	3.06	0.35	(45)	-20.63 <sup>c</sup>
Alaska	2.93	0.55	(46)	-23.90 <sup>c</sup>	Nebraska	2.70 <sup>b</sup>	0.26	(49)	-29.86 <sup>c</sup>
Arizona	3.15 <sup>b</sup>	0.15	(42)	-18.31 <sup>c</sup>	Nevada	3.56	0.26	(31)	-7.60
Arkansas	4.86 <sup>b</sup>	0.27	(05)	26.17 <sup>c</sup>	New Hampshire	4.01	0.37	(21)	4.09
California	3.79	0.07	(25)	-1.61	New Jersey	3.33 <sup>b</sup>	0.13	(38)	-13.59
Colorado	2.81 <sup>b</sup>	0.18	(48)	-27.02 <sup>c</sup>	New Mexico	3.54	0.28	(32)	-8.12
Connecticut	3.19	0.20	(40)	-17.23 <sup>c</sup>	New York	3.51 <sup>b</sup>	0.09	(35)	-9.07
Delaware	4.22	0.45	(14)	9.40	North Carolina	3.94	0.14	(22)	2.25
D.C.	6.41	0.74	(01)	66.17 <sup>c</sup>	North Dakota	3.13	0.44	(43)	-18.68 <sup>c</sup>
Florida	4.33 <sup>b</sup>	0.09	(12)	12.23	Ohio	4.09	0.12	(17)	6.18
Georgia	4.35	0.17	(10)	12.97	Oklahoma	4.06	0.22	(19)	5.33
Hawaii	4.56	0.38	(08)	18.39 <sup>c</sup>	Oregon	3.76	0.21	(26)	-2.46
Idaho	3.58	0.33	(29)	-7.01	Pennsylvania	3.57	0.11	(30)	-7.26
Illinois	3.74	0.12	(27)	-2.86	Rhode Island	3.11	0.35	(44)	-19.38 <sup>c</sup>
Indiana	3.43	0.16	(37)	-11.12	South Carolina	4.89 <sup>b</sup>	0.22	(04)	26.83 <sup>c</sup>
Iowa	3.71	0.22	(28)	-3.78	South Dakota	2.62	0.36	(50)	-32.03 <sup>c</sup>
Kansas	3.16	0.22	(41)	-18.09 <sup>c</sup>	Tennessee	4.68 <sup>b</sup>	0.18	(07)	21.28 <sup>c</sup>
Kentucky	4.31	0.21	(13)	11.80	Texas	4.08	0.10	(18)	5.85
Louisiana	5.33 <sup>b</sup>	0.24	(03)	38.22 <sup>c</sup>	Utah	2.00 <sup>b</sup>	0.21	(51)	-48.15 <sup>c</sup>
Maine	3.88	0.34	(24)	0.73	Vermont	4.39	0.54	(09)	13.89
Maryland	4.16	0.19	(16)	7.95	Virginia	3.53	0.15	(33)	-8.47
Massachusetts	3.93	0.16	(23)	1.92	Washington	4.18	0.17	(15)	8.40
Michigan	4.04	0.13	(20)	4.71	West Virginia	4.35	0.29	(11)	12.81
Minnesota	2.91 <sup>b</sup>	0.16	(47)	-24.47 <sup>c</sup>	Wisconsin	3.52	0.16	(34)	-8.61
Mississippi	5.60 <sup>b</sup>	0.30	(02)	45.40 <sup>c</sup>	Wyoming	3.20	0.52	(39)	-16.94 <sup>c</sup>
Missouri	3.46	0.16	(36)	-10.37					



<sup>a</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).  
<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.  
SE Standard error of the rate.  
PD Percent difference between state rate and total U.S. rate.  
- Statistic not shown. Rate based on less than 16 cases for the time interval.

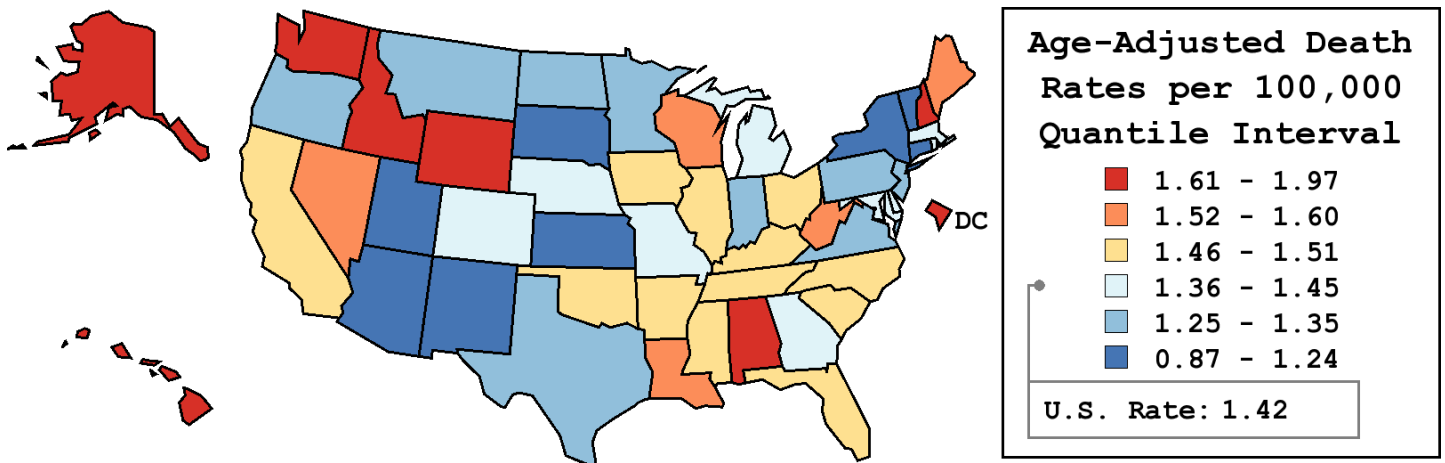
Table 20.26  
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2004-2008

Females

State	Rate	SE	Rank	PD
TOTAL U.S.	1.42	0.01		
High Five States				
D.C.	1.97	0.34	(01)	39.10 <sup>c</sup>
Washington	1.88 <sup>b</sup>	0.11	(02)	32.56 <sup>c</sup>
Alaska	1.85	0.43	(03)	30.41 <sup>c</sup>
New Hampshire	1.72	0.22	(04)	21.60 <sup>c</sup>
Wyoming	1.72	0.35	(05)	21.52 <sup>c</sup>
Low Five States				
Kansas	1.21	0.12	(47)	-14.98
Connecticut	1.18	0.10	(48)	-16.81 <sup>c</sup>
South Dakota	1.14	0.21	(49)	-19.31 <sup>c</sup>
New Mexico	0.96	0.13	(50)	-32.55 <sup>c</sup>
Utah	0.87 <sup>b</sup>	0.13	(51)	-38.72 <sup>c</sup>

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	1.62	0.11	(08)	14.34	Montana	1.28	0.21	(41)	-9.97
Alaska	1.85	0.43	(03)	30.41 <sup>c</sup>	Nebraska	1.36	0.16	(34)	-4.29
Arizona	1.24	0.09	(44)	-12.38	Nevada	1.56	0.16	(10)	9.95
Arkansas	1.47	0.13	(23)	3.34	New Hampshire	1.72	0.22	(04)	21.60 <sup>c</sup>
California	1.51	0.04	(17)	6.35	New Jersey	1.35	0.07	(35)	-4.51
Colorado	1.42	0.11	(28)	0.34	New Mexico	0.96	0.13	(50)	-32.55 <sup>c</sup>
Connecticut	1.18	0.10	(48)	-16.81 <sup>c</sup>	New York	1.22 <sup>b</sup>	0.05	(46)	-13.99
Delaware	1.40	0.23	(29)	-0.93	North Carolina	1.49	0.08	(20)	4.89
D.C.	1.97	0.34	(01)	39.10 <sup>c</sup>	North Dakota	1.26	0.26	(42)	-10.88
Florida	1.51	0.05	(15)	6.71	Ohio	1.51	0.06	(18)	6.19
Georgia	1.45	0.08	(26)	1.94	Oklahoma	1.51	0.12	(16)	6.49
Hawaii	1.65	0.20	(06)	16.63 <sup>c</sup>	Oregon	1.35	0.11	(36)	-4.77
Idaho	1.63	0.21	(07)	15.12 <sup>c</sup>	Pennsylvania	1.30	0.06	(40)	-8.36
Illinois	1.48	0.06	(21)	4.35	Rhode Island	1.39	0.21	(31)	-1.95
Indiana	1.32	0.08	(39)	-6.60	South Carolina	1.49	0.11	(19)	5.05
Iowa	1.46	0.12	(24)	2.77	South Dakota	1.14	0.21	(49)	-19.31 <sup>c</sup>
Kansas	1.21	0.12	(47)	-14.98	Tennessee	1.51	0.09	(14)	6.76
Kentucky	1.46	0.11	(25)	2.70	Texas	1.34	0.05	(37)	-5.34
Louisiana	1.52	0.11	(13)	7.54	Utah	0.87 <sup>b</sup>	0.13	(51)	-38.72 <sup>c</sup>
Maine	1.53	0.18	(12)	7.99	Vermont	1.23	0.24	(45)	-13.52
Maryland	1.37	0.09	(33)	-3.67	Virginia	1.25	0.08	(43)	-11.87
Massachusetts	1.37	0.08	(32)	-3.31	Washington	1.88 <sup>b</sup>	0.11	(02)	32.56 <sup>c</sup>
Michigan	1.44	0.07	(27)	1.84	West Virginia	1.54	0.16	(11)	8.52
Minnesota	1.33	0.09	(38)	-6.05	Wisconsin	1.60	0.10	(09)	12.70
Mississippi	1.47	0.13	(22)	3.67	Wyoming	1.72	0.35	(05)	21.52 <sup>c</sup>
Missouri	1.39	0.09	(30)	-1.65					



<sup>a</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant (p<=.0002).  
<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.  
SE Standard error of the rate.  
PD Percent difference between state rate and total U.S. rate.  
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 20.27  
Cancer of the Oral Cavity and Pharynx (Invasive)

Estimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2008  
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	25 to <30	0 to <18 <sup>e</sup>	0 to <33 <sup>e</sup>	>=33 <sup>g</sup>	Complete <sup>h</sup>	
Race	Sex											
All Races <sup>b</sup>	Both Sexes	91,329	55,615	36,520	23,518	15,736	10,003	202,684	240,722	12,443	253,165	
	Males	62,730	36,405	23,300	14,212	9,267	5,866	134,834	156,987	7,172	164,159	
	Females	28,599	19,210	13,220	9,306	6,469	4,137	67,850	83,735	5,271	89,006	
White <sup>b</sup>	Both Sexes	78,234	48,573	31,799	21,004	14,028	8,815	175,746	209,525	10,587	220,112	
	Males	54,395	32,127	20,614	12,905	8,482	5,352	118,404	138,541	6,142	144,683	
	Females	23,839	16,446	11,185	8,099	5,546	3,463	57,342	70,984	4,445	75,429	
Black <sup>b</sup>	Both Sexes	7,522	3,959	2,683	1,322	1,047	658	15,113	17,506	620	18,126	
	Males	4,854	2,365	1,467	660	450	227	9,101	10,123	237	10,360	
	Females	2,668	1,594	1,216	662	597	431	6,012	7,383	383	7,766	
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	3,429	2,080	1,505	+	+	+	7,516	+	+	+	
	Males	2,163	1,239	896	+	+	+	4,607	+	+	+	
	Females	1,266	841	609	+	+	+	2,909	+	+	+	
Hispanic <sup>d</sup>	Both Sexes	4,509	2,576	1,701	+	+	+	9,403	+	+	+	
	Males	2,849	1,620	982	+	+	+	5,733	+	+	+	
	Females	1,660	956	719	+	+	+	3,670	+	+	+	

Estimated prevalence percent<sup>a</sup> on January 1, 2008, of the SEER 11 population diagnosed in the previous 18 years  
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		Age Specific (Crude)										Age-Adjusted <sup>f</sup>
		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 <sup>c</sup>	Both Sexes	0.0571%	0.0004%	0.0019%	0.0056%	0.0147%	0.0437%	0.1162%	0.1948%	0.2169%	0.2043%	0.0566%
	Males	0.0765%	0.0003%	0.0018%	0.0056%	0.0141%	0.0573%	0.1712%	0.2958%	0.3169%	0.3071%	0.0813%
	Females	0.0380%	0.0005%	0.0020%	0.0056%	0.0153%	0.0301%	0.0636%	0.1033%	0.1380%	0.1475%	0.0357%
White <sup>c</sup>	Both Sexes	0.0608%	0.0005%	0.0017%	0.0053%	0.0133%	0.0414%	0.1189%	0.2035%	0.2305%	0.2139%	0.0580%
	Males	0.0823%	0.0004%	0.0012%	0.0050%	0.0131%	0.0555%	0.1773%	0.3081%	0.3386%	0.3236%	0.0840%
	Females	0.0392%	0.0005%	0.0022%	0.0058%	0.0134%	0.0268%	0.0611%	0.1060%	0.1433%	0.1535%	0.0353%
Black <sup>c</sup>	Both Sexes	0.0366%	0.0007%	0.0029%	0.0054%	0.0121%	0.0364%	0.0970%	0.1570%	0.1496%	0.1227%	0.0438%
	Males	0.0470%	-	0.0039%	0.0076%	0.0087%	0.0418%	0.1396%	0.2499%	0.2257%	0.1631%	0.0616%
	Females	0.0272%	-	0.0019%	0.0033%	0.0150%	0.0317%	0.0616%	0.0854%	0.0974%	0.1039%	0.0303%
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	0.0517%	-	0.0017%	0.0072%	0.0224%	0.0605%	0.1081%	0.1509%	0.1654%	0.1579%	0.0519%
	Males	0.0653%	-	0.0025%	0.0071%	0.0232%	0.0778%	0.1466%	0.2244%	0.2148%	0.2356%	0.0698%
	Females	0.0389%	-	-	0.0073%	0.0217%	0.0446%	0.0746%	0.0883%	0.1285%	0.1091%	0.0372%
Hispanic <sup>d</sup>	Both Sexes	-	-	-	-	-	-	-	-	-	-	-
	Males	-	-	-	-	-	-	-	-	-	-	-
	Females	-	-	-	-	-	-	-	-	-	-	-

<sup>a</sup> US 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

<sup>b c d</sup> Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.

<sup>e</sup> Maximum limited-duration prevalence: 33 years for 1975-2008 SEER 9 data; 18 years for 1990-2008 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

<sup>f</sup> Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

<sup>g h i</sup> (g) Cases diagnosed more than 33 years 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 <33 and >=33. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

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

+ Not available.

Table 20.28

## Cancer of the Oral Cavity and Pharynx (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2004-2008  
All Races, Both Sexes, by site

Histology <sup>a</sup>	Oral Cavity and Pharynx		Lip		Tongue		Salivary Gland		Floor of Mouth	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Epidermoid carcinoma <sup>b</sup> (8051-8131)	33,054	82.8%	2,522	95.0%	11,107	96.7%	1,008	21.1%	2,132	95.8%
Squamous cell carcinoma (8070-8078,8083-8084)	32,093	80.4%	2,419	91.1%	10,907	94.9%	954	19.9%	2,104	94.5%
Adenocarcinoma <sup>c</sup>	4,432	11.1%	97	3.7%	186	1.6%	3,008	62.9%	73	3.3%
Other specific carcinomas <sup>d</sup>	484	1.2%	-	-	35	0.3%	269	5.6%	-	-
Unspecified, Carcinoma, NOS (8010-8011,8020-8022)	1,438	3.6%	-	-	110	1.0%	320	6.7%	-	-
Sarcoma and soft tissue <sup>e</sup>	172	0.4%	-	-	22	0.2%	50	1.0%	-	-
Other specific types <sup>f</sup>	207	0.5%	-	-	-	-	89	1.9%	-	-
Unspecified (8000-8005)	116	0.3%	-	-	22	0.2%	38	0.8%	-	-
Total	39,903	100.0%	2,656	100.0%	11,491	100.0%	4,782	100.0%	2,226	100.0%

Histology <sup>a</sup>	Gum and Other Mouth		Nasopharynx		Oropharynx and Tonsil		Hypopharynx		Other Oral Cavity and Pharynx	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Epidermoid carcinoma <sup>b</sup> (8051-8131)	4,393	79.9%	1,526	61.9%	7,463	96.9%	2,351	96.2%	552	86.7%
Squamous cell carcinoma (8070-8078,8083-8084)	4,167	75.8%	1,303	52.8%	7,367	95.7%	2,324	95.1%	548	86.0%
Adenocarcinoma <sup>c</sup>	906	16.5%	65	2.6%	55	0.7%	25	1.0%	17	2.7%
Other specific carcinomas <sup>d</sup>	29	0.5%	65	2.6%	38	0.5%	22	0.9%	-	-
Unspecified, Carcinoma, NOS (8010-8011,8020-8022)	50	0.9%	747	30.3%	121	1.6%	30	1.2%	37	5.8%
Sarcoma and soft tissue <sup>e</sup>	31	0.6%	38	1.5%	-	-	-	-	-	-
Other specific types <sup>f</sup>	76	1.4%	16	0.6%	-	-	-	-	-	-
Unspecified (8000-8005)	-	-	-	-	-	-	-	-	-	-
Total	5,500	100.0%	2,466	100.0%	7,702	100.0%	2,443	100.0%	637	100.0%

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Percents may not sum to 100 due to rounding.

<sup>a</sup> Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

<sup>b</sup> Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

<sup>c</sup> Adenocarcinoma includes histologies 8050, 8140-8147, 8160-8162, 8180-8221, 8250-8507, 8514, 8520-8551, 8560, 8570-8574, 8576, 8940-8941.

<sup>d</sup> Other specific carcinomas includes histologies 8012-8015, 8030-8046, 8150-8155, 8170-8180, 8230-8249, 8508, 8510-8513, 8561-8562, 8575, 8580-8671.

<sup>e</sup> Sarcoma and soft tissue includes histologies 8680-8713, 8800-8921, 8990-8991, 9040-9044, 9120-9136, 9150-9252, 9370-9373, 9540-9582.

<sup>f</sup> Other specific types includes histologies 8720-8790, 8930-8936, 8950-8983, 9060-9110, 9260-9365, 9380-9539.

- Statistic not shown due to fewer than 16 cases during the time period.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Oral Cavity and Pharynx, by Race and Sex

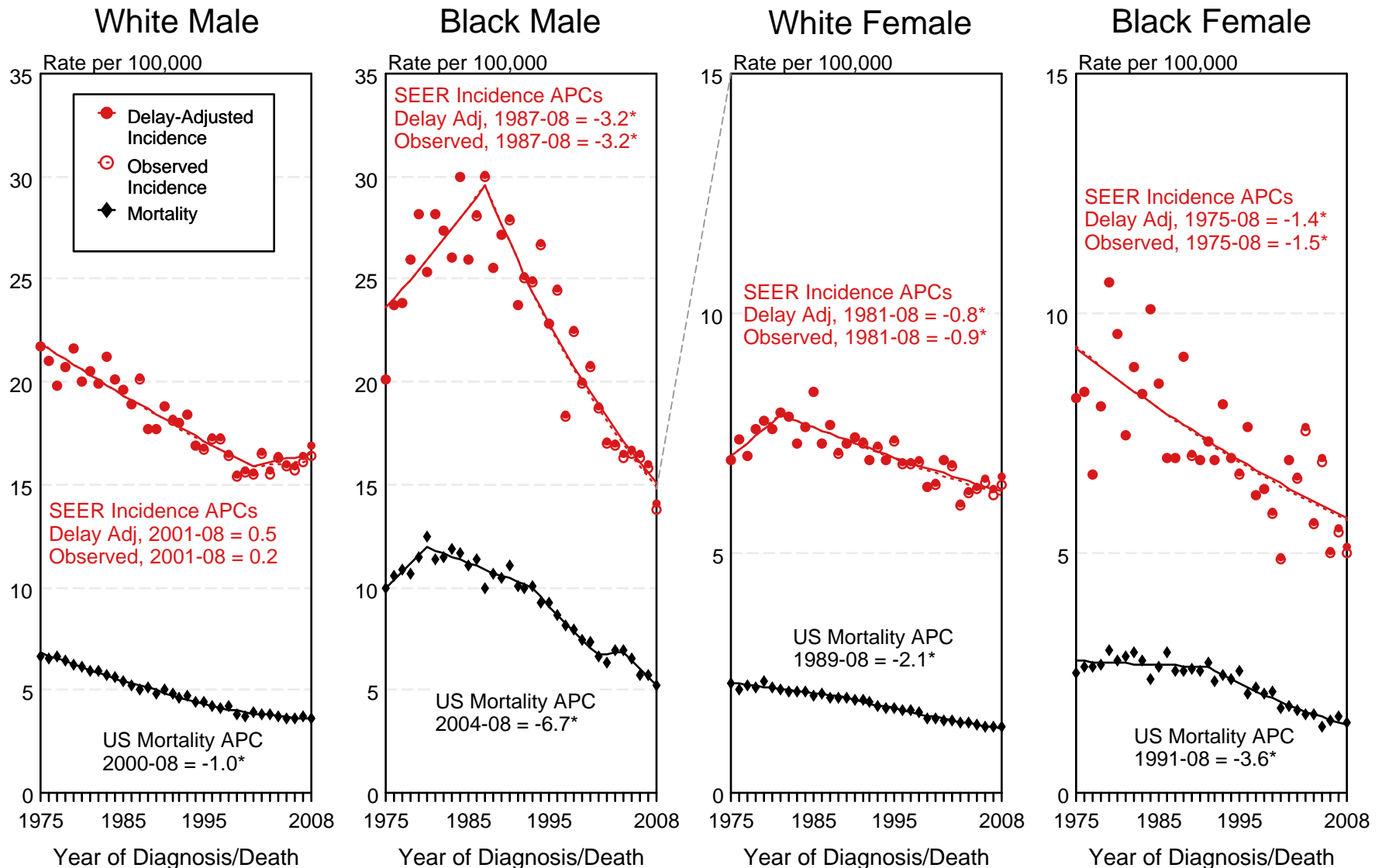


Figure 20.1

<sup>a</sup> Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.  
\* The APC is significantly different from zero ( $p < 0.05$ ).

# SEER Incidence and US Death Rates<sup>a</sup> Cancer of the Oral Cavity and Pharynx, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2008  
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2008

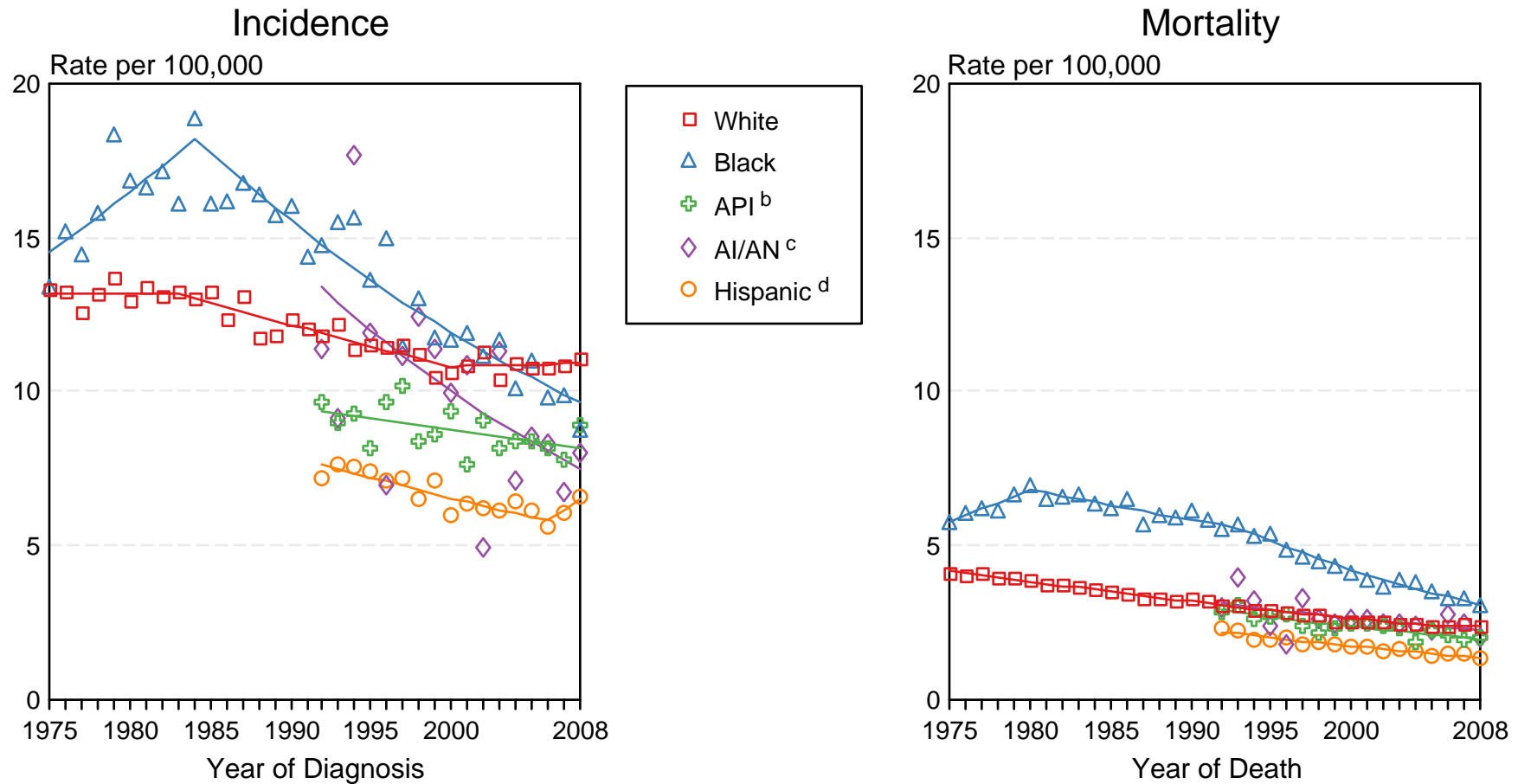


Figure 20.2

Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

<sup>a</sup> Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2008 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2008 allow a maximum of 3 joinpoints.

<sup>b</sup> API = Asian/Pacific Islander.

<sup>c</sup> AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>d</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.

SEER Incidence Rates<sup>a</sup>

# Cancer of the Oral Cavity and Pharyngeal for Selected Subsites, Both Sexes

## Joinpoint Analyses for Whites and Blacks from 1975-2008

### and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2008

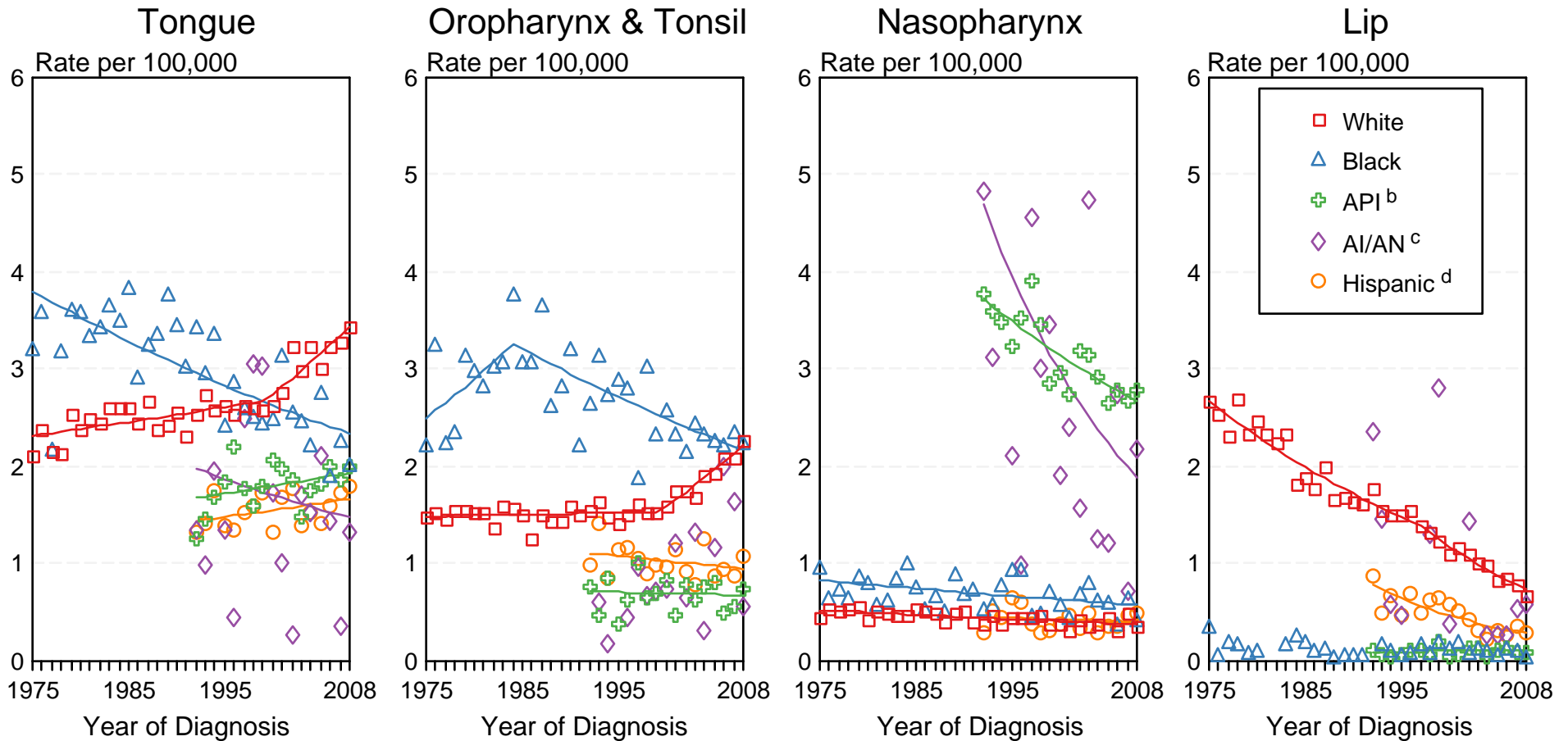


Figure 20.3

Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).

<sup>a</sup> Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2008 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2008 allow a maximum of 3 joinpoints.

Regression lines could not be calculated for data series that had at least one diagnosis year with a 0 case count.

<sup>b</sup> API = Asian/Pacific Islander.

<sup>c</sup> AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>d</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Cancer of the Oral Cavity and Pharynx, Male, by Race

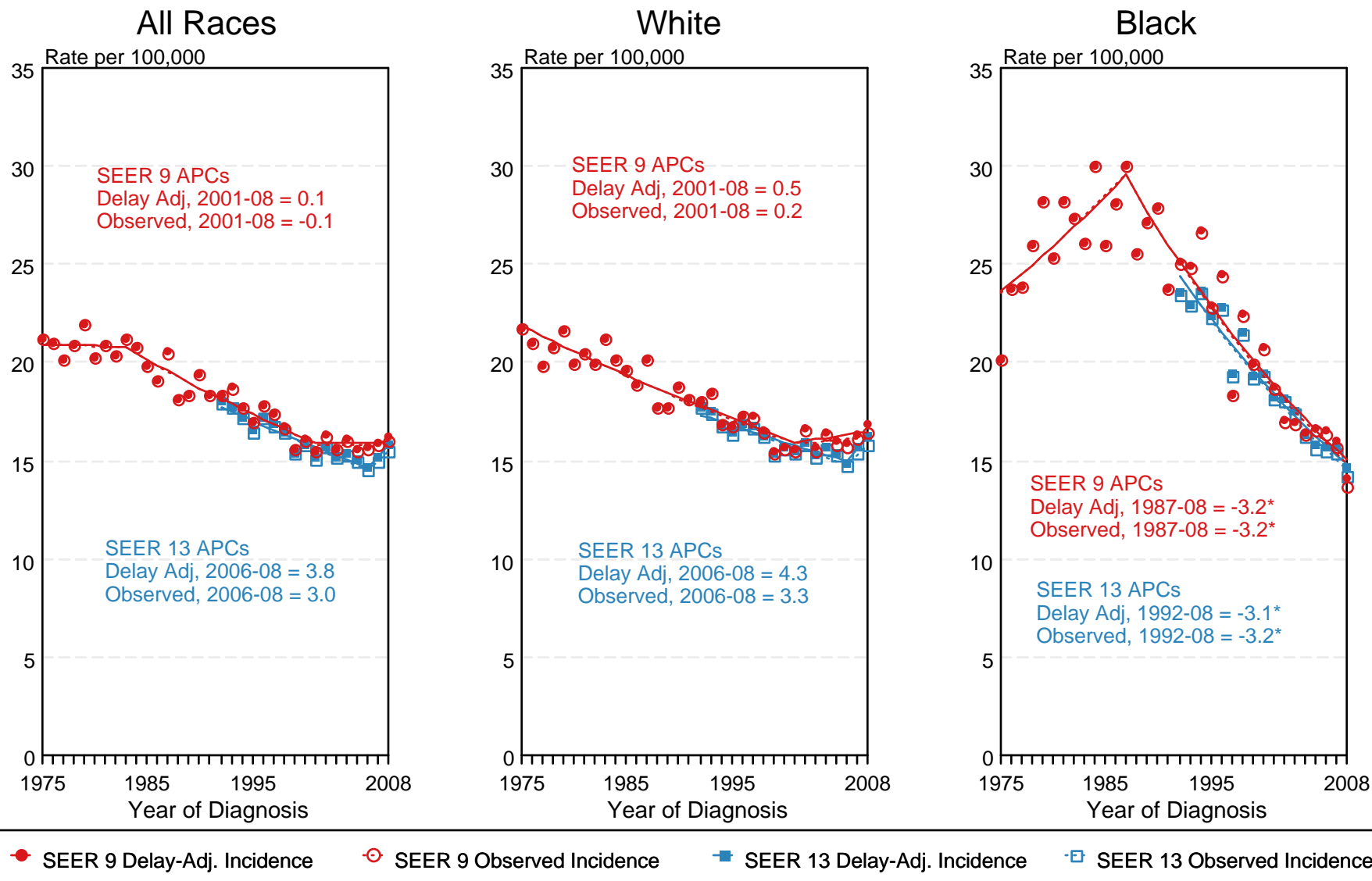


Figure 20.4

<sup>a</sup> Source: SEER 9 areas and SEER 13 areas.  
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).  
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.  
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.  
\* The APC is significantly different from zero ( $p < 0.05$ ).



# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Cancer of the Oral Cavity and Pharynx, Female, by Race

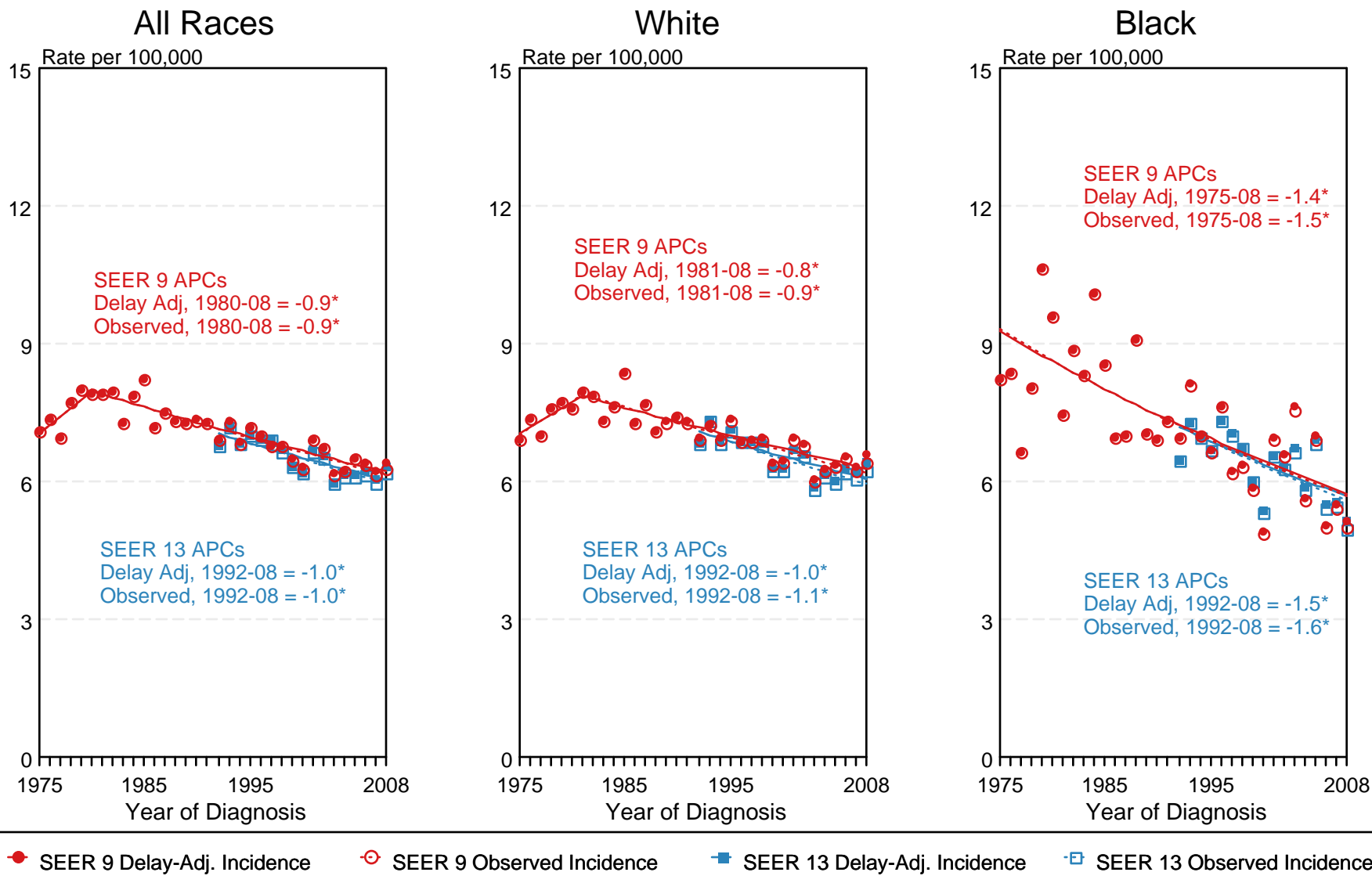


Figure 20.5

<sup>a</sup> Source: SEER 9 areas and SEER 13 areas.  
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).  
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.  
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.  
\* The APC is significantly different from zero ( $p < 0.05$ ).