

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

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2012 With up to Five Joinpoints, 1992-2012 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 ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2003-12	2008-12
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2012</u>														
All Races	1975-81	0.7	1981-03	-1.1*	2003-12	0.8*							0.8*	0.8*
White	1975-03	-0.9*	2003-12	1.2*									1.2*	1.2*
Black	1975-84	2.4*	1984-12	-2.5*									-2.5*	-2.5*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2012</u>														
All Races	1992-04	-1.2*	2004-12	0.8*									0.6*	0.8*
White	1992-03	-1.1*	2003-12	1.2*									1.2*	1.2*
Black	1992-12	-2.5*											-2.5*	-2.5*
<u>SEER 9 Observed Incidence^a, 1975-2012</u>														
All Races	1975-81	0.7	1981-03	-1.1*	2003-12	0.5							0.5	0.5
White	1975-03	-0.9*	2003-12	0.9*									0.9*	0.9*
Black	1975-84	2.5*	1984-12	-2.5*									-2.5*	-2.5*
<u>SEER 13 Observed Incidence^b, 1992-2012</u>														
All Races	1992-03	-1.3*	2003-12	0.4									0.4	0.4
White	1992-03	-1.1*	2003-12	0.9*									0.9*	0.9*
White NH ^{ef}	1992-03	-0.8*	2003-12	1.0*									1.0*	1.0*
Black	1992-12	-2.6*											-2.6*	-2.6*
Black NH ^{ef}	1992-12	-2.5*											-2.5*	-2.5*
API ^e	1992-12	-1.0*											-1.0*	-1.0*
AI/AN ^{eg}	1992-12	-1.3											-1.3	-1.3
Hispanic ^f	1992-03	-2.0*	2003-12	1.3									1.3	1.3
<u>U.S. Cancer Mortality^c, 1975-2012</u>														
All Races	1975-79	-0.5	1979-93	-1.7*	1993-00	-2.7*	2000-09	-1.4*	2009-12	1.2			-0.5	0.6
White	1975-05	-1.9*	2005-12	0.2									-0.3	0.2
Black	1975-80	3.2*	1980-93	-1.5*	1993-09	-4.1*	2009-12	0.5					-2.5*	-0.6
<u>U.S. Cancer Mortality^c, 1992-2012</u>														
All Races	1992-00	-2.6*	2000-09	-1.4*	2009-12	1.3							-0.5	0.6
White	1992-05	-1.9*	2005-12	0.2									-0.2	0.2
White NH ^{ef}	1992-05	-1.7*	2005-12	0.3									-0.1	0.3
Black	1992-12	-3.7*											-3.7*	-3.7*
Black NH ^{ef}	1992-09	-3.9*	2009-12	0.5									-2.5*	-0.7
API ^e	1992-12	-2.1*											-2.1*	-2.1*
AI/AN ^{eg}	1992-12	-1.6*											-1.6*	-1.6*
Hispanic ^f	1992-05	-3.1*	2005-12	-0.1									-0.8	-0.1

Joinpoint Regression Program Version 4.2.0, April 2015, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).
^a The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
^b Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
^c Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
^d Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
^e The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
^f 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 New Hampshire and Oklahoma.
^g 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^a Using the Joinpoint Regression Program,
1975-2012 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 ^d
		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2008-12
<u>Cancer of the Tongue</u>														
All Races	Both Sexes	1975-99	0.4*	1999-12	2.1*									2.1*
All Races	Male	1975-99	0.4*	1999-12	2.4*									2.4*
All Races	Female	1975-12	0.6*											0.6*
White	Male	1975-98	0.5*	1998-12	3.0*									3.0*
White	Female	1975-12	0.8*											0.8*
Black	Male	1975-89	1.3	1989-12	-2.7*									-2.7*
Black	Female	1975-12	-1.7*											-1.7*
<u>Cancer of the Floor of Mouth, Gum and Other Mouth</u>														
All Races	Both Sexes	1975-83	0.1	1983-12	-3.6*									-3.6*
All Races	Male	1975-87	-1.4	1987-12	-4.0*									-4.0*
All Races	Female	1975-80	4.4	1980-12	-3.3*									-3.3*
White	Male	1975-12	-3.1*											-3.1*
White	Female	1975-81	2.8	1981-12	-3.2*									-3.2*
Black	Male	1975-77	56.2	1977-93	-2.6*	1993-12	-6.7*							-6.7*
Black	Female	1975-12	-2.8*											-2.8*
<u>Cancer of the Oropharynx and Tonsil</u>														
All Races	Both Sexes	1975-99	0.0	1999-12	3.0*									3.0*
All Races	Male	1975-97	0.3	1997-12	3.0*									3.0*
All Races	Female	1975-00	-1.6*	2000-12	1.3									1.3
White	Male	1975-96	0.2	1996-12	3.8*									3.8*
White	Female	1975-04	-1.1*	2004-12	3.5*									3.5*
Black	Male	1975-12	-0.6*											-0.6*
Black	Female	1975-12	-1.7*											-1.7*
<u>Cancer of the Salivary Gland</u>														
All Races	Both Sexes	1975-12	0.6*											0.6*
All Races	Male	1975-12	0.6*											0.6*
All Races	Female	1975-12	0.5*											0.5*
White	Male	1975-12	0.6*											0.6*
White	Female	1975-12	0.4*											0.4*
Black	Male	1975-95	3.4*	1995-12	-3.2*									-3.2*
Black	Female	1975-12	0.6											0.6
<u>Cancer of the Lip</u>														
All Races	Both Sexes	1975-96	-3.2*	1996-12	-4.6*									-4.6*
All Races	Male	1975-96	-3.7*	1996-12	-5.6*									-5.6*
All Races	Female	1975-96	0.2	1996-12	-2.1*									-2.1*
White	Male	1975-96	-3.5*	1996-12	-5.6*									-5.6*
White	Female	1975-12	-0.6*											-0.6*
Black	Male	-	-											-
Black	Female	-	-											-

Joinpoint Regression Program Version 4.2.0, April 2015, 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 1975-2012.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2012 With up to Five Joinpoints, 1992-2012 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 ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2003-12	2008-12
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2012</u>														
All Races	1975-83	-0.1	1983-01	-1.5*	2001-12	0.5							0.5	0.5
White	1975-01	-1.2*	2001-12	0.9*									0.9*	0.9*
Black	1975-87	1.8*	1987-12	-3.0*									-3.0*	-3.0*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2012</u>														
All Races	1992-03	-1.5*	2003-12	0.8*									0.8*	0.8*
White	1992-03	-1.2*	2003-12	1.3*									1.3*	1.3*
Black	1992-12	-2.8*											-2.8*	-2.8*
<u>SEER 9 Observed Incidence^a, 1975-2012</u>														
All Races	1975-83	-0.1	1983-01	-1.5*	2001-12	0.3							0.3	0.3
White	1975-01	-1.2*	2001-12	0.7*									0.7*	0.7*
Black	1975-87	1.8*	1987-12	-3.1*									-3.1*	-3.1*
<u>SEER 13 Observed Incidence^b, 1992-2012</u>														
All Races	1992-01	-1.8*	2001-12	0.2									0.2	0.2
White	1992-01	-1.6*	2001-12	0.7*									0.7*	0.7*
White NH ^{ef}	1992-01	-1.3*	2001-12	0.9*									0.9*	0.9*
Black	1992-12	-2.9*											-2.9*	-2.9*
Black NH ^{ef}	1992-12	-2.9*											-2.9*	-2.9*
API ^e	1992-12	-1.1*											-1.1*	-1.1*
AI/AN ^{eg}	1992-06	-6.1*	2006-12	10.3									4.5	10.3
Hispanic ^f	1992-12	-0.6											-0.6	-0.6
<u>U.S. Cancer Mortality^c, 1975-2012</u>														
All Races	1975-77	0.7	1977-93	-2.0*	1993-00	-2.9*	2000-09	-1.3*	2009-12	1.7			-0.3	1.0
White	1975-05	-2.1*	2005-12	0.8									0.1	0.8
Black	1975-80	3.9*	1980-93	-1.5*	1993-10	-4.1*	2010-12	3.5					-2.4	-0.4
<u>U.S. Cancer Mortality^c, 1992-2012</u>														
All Races	1992-00	-2.8*	2000-09	-1.3*	2009-12	1.8							-0.3	1.0
White	1992-05	-2.0*	2005-12	0.6									0.0	0.6
White NH ^{ef}	1992-05	-1.8*	2005-12	0.8									0.2	0.8
Black	1992-10	-4.0*	2010-12	3.2									-2.4	-0.5
Black NH ^{ef}	1992-10	-4.0*	2010-12	3.4									-2.4	-0.3
API ^e	1992-12	-2.3*											-2.3*	-2.3*
AI/AN ^{eg}	1992-12	-1.8											-1.8	-1.8
Hispanic ^f	1992-05	-3.7*	2005-12	-0.8									-1.4*	-0.8

Joinpoint Regression Program Version 4.2.0, April 2015, 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 New Hampshire and Oklahoma.

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^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2012 With up to Five Joinpoints, 1992-2012 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 ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2003-12	2008-12
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2012</u>														
All Races	1975-80	2.5	1980-07	-0.9*	2007-12	1.5							0.4	1.5
White	1975-81	2.1*	1981-05	-0.9*	2005-12	1.2							0.7	1.2
Black	1975-12	-1.5*											-1.5*	-1.5*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2012</u>														
All Races	1992-05	-1.1*	2005-12	0.5									0.1	0.5
White	1992-05	-1.3*	2005-12	1.1									0.6	1.1
Black	1992-12	-1.6*											-1.6*	-1.6*
<u>SEER 9 Observed Incidence^a, 1975-2012</u>														
All Races	1975-80	2.5*	1980-07	-0.9*	2007-12	1.1							0.2	1.1
White	1975-81	2.1*	1981-05	-0.9*	2005-12	0.9							0.5	0.9
Black	1975-12	-1.6*											-1.6*	-1.6*
<u>SEER 13 Observed Incidence^b, 1992-2012</u>														
All Races	1992-12	-0.7*											-0.7*	-0.7*
White	1992-04	-1.3*	2004-12	0.6									0.4	0.6
White NH ^{ef}	1992-05	-1.1*	2005-12	0.9									0.5	0.9
Black	1992-12	-1.7*											-1.7*	-1.7*
Black NH ^{ef}	1992-12	-1.7*											-1.7*	-1.7*
API ^e	1992-12	-0.7*											-0.7*	-0.7*
AI/AN ^{eg}	1992-12	0.3											0.3	0.3
Hispanic ^f	1992-12	-0.5											-0.5	-0.5
<u>U.S. Cancer Mortality^c, 1975-2012</u>														
All Races	1975-90	-0.9*	1990-05	-2.4*	2005-12	-1.0*							-1.3*	-1.0*
White	1975-90	-1.0*	1990-03	-2.3*	2003-12	-1.1*							-1.1*	-1.1*
Black	1975-91	-0.3	1991-12	-3.5*									-3.5*	-3.5*
<u>U.S. Cancer Mortality^c, 1992-2012</u>														
All Races	1992-05	-2.3*	2005-12	-1.0*									-1.3*	-1.0*
White	1992-03	-2.3*	2003-12	-1.1*									-1.1*	-1.1*
White NH ^{ef}	1992-03	-2.2*	2003-12	-1.0*									-1.0*	-1.0*
Black	1992-12	-3.4*											-3.4*	-3.4*
Black NH ^{ef}	1992-12	-3.4*											-3.4*	-3.4*
API ^e	1992-12	-1.7*											-1.7*	-1.7*
AI/AN ^{eg}	1992-12	-1.1											-1.1	-1.1
Hispanic ^f	1992-12	-0.8											-0.8	-0.8

Joinpoint Regression Program Version 4.2.0, April 2015, 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).

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

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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^a 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	21.20	7.09	13.30	21.73	6.92	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	12.74	20.11	6.94	12.60	19.86	7.01	14.51	23.86	6.77
1978	13.38	20.88	7.71	13.21	20.76	7.57	15.90	25.97	8.18
1979	14.03	21.91	8.00	13.71	21.60	7.73	18.46	28.16	10.77
1980	13.34	20.26	7.91	12.98	19.98	7.62	16.82	25.39	9.59
1981	13.58	20.84	7.92	13.40	20.53	7.94	16.65	28.16	7.46
1982	13.35	20.32	7.94	13.08	19.94	7.85	17.12	27.39	8.86
1983	13.28	21.20	7.24	13.25	21.21	7.28	16.13	26.08	8.32
1984	13.47	20.79	7.86	13.00	20.16	7.64	18.91	29.99	10.07
1985	13.33	19.83	8.25	13.27	19.61	8.36	16.05	25.82	8.53
1986	12.46	19.13	7.20	12.35	18.85	7.30	16.18	28.09	6.97
1987	13.20	20.52	7.52	13.10	20.14	7.68	16.81	30.00	6.99
1988	12.12	18.14	7.30	11.78	17.69	7.09	16.48	25.67	9.08
1989	12.12	18.31	7.27	11.84	17.72	7.30	15.75	27.16	7.05
1990	12.66	19.41	7.35	12.40	18.83	7.40	16.05	27.89	6.92
1991	12.17	18.35	7.26	12.09	18.11	7.31	14.50	23.79	7.41
1992	11.97	18.34	6.92	11.82	18.03	6.93	14.85	25.21	6.94
1993	12.42	18.70	7.29	12.22	18.38	7.21	15.54	24.85	8.10
1994	11.72	17.69	6.84	11.41	16.87	6.92	15.74	26.82	7.07
1995	11.54	16.95	7.20	11.52	16.73	7.34	13.57	22.69	6.66
1996	11.78	17.77	6.98	11.46	17.26	6.85	15.07	24.44	7.72
1997	11.51	17.36	6.73	11.52	17.20	6.85	11.59	18.55	6.20
1998	11.25	16.70	6.77	11.25	16.42	6.93	13.09	22.52	6.32
1999	10.59	15.57	6.48	10.47	15.42	6.36	11.99	20.35	5.83
2000	10.77	16.09	6.31	10.68	15.67	6.42	11.73	20.73	4.94
2001	10.85	15.55	6.92	10.90	15.59	6.94	12.12	19.05	7.02
2002	11.14	16.37	6.73	11.33	16.64	6.79	11.16	16.97	6.55
2003	10.55	15.70	6.18	10.49	15.66	6.03	11.88	17.24	7.61
2004	10.86	16.17	6.30	11.09	16.53	6.31	10.22	16.14	5.84
2005	10.77	15.70	6.56	10.92	16.09	6.44	11.17	16.71	7.03
2006	10.81	15.90	6.43	11.07	16.12	6.62	10.07	16.70	5.12
2007	10.88	16.18	6.28	11.19	16.65	6.32	10.11	15.80	5.78
2008	11.07	16.47	6.42	11.51	17.03	6.64	8.92	14.09	4.99
2009	11.13	16.52	6.43	11.37	16.82	6.50	10.74	16.29	6.47
2010	11.04	16.44	6.29	11.48	16.98	6.49	8.88	13.54	5.21
2011	11.45	17.02	6.61	12.08	17.94	6.83	9.20	14.48	5.18
2012	11.42	16.62	6.86	12.02	17.45	7.10	8.67	14.35	4.28

Additional information on the model used to delay-adjust SEER Incidence rates can be found at <http://surveillance.cancer.gov/delay/>.

^a 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^a Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2012	11.85	17.81	6.96	11.90	17.85	7.00	12.74	20.60	6.68
1975	13.21	21.20	7.09	13.30	21.73	6.92	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	12.74	20.11	6.94	12.60	19.86	7.01	14.51	23.86	6.77
1978	13.38	20.88	7.71	13.21	20.76	7.57	15.90	25.97	8.18
1979	14.03	21.91	8.00	13.71	21.60	7.73	18.46	28.16	10.77
1980	13.34	20.26	7.91	12.98	19.98	7.62	16.82	25.39	9.59
1981	13.58	20.84	7.92	13.40	20.53	7.94	16.65	28.16	7.46
1982	13.35	20.32	7.94	13.08	19.94	7.85	17.12	27.39	8.86
1983	13.28	21.20	7.24	13.25	21.21	7.28	16.13	26.08	8.32
1984	13.47	20.79	7.86	13.00	20.16	7.64	18.91	29.99	10.07
1985	13.33	19.83	8.25	13.27	19.61	8.36	16.05	25.82	8.53
1986	12.46	19.13	7.20	12.35	18.85	7.30	16.18	28.09	6.97
1987	13.20	20.52	7.52	13.10	20.14	7.68	16.81	30.00	6.99
1988	12.12	18.14	7.30	11.78	17.69	7.09	16.48	25.67	9.08
1989	12.12	18.31	7.27	11.84	17.72	7.30	15.75	27.16	7.05
1990	12.66	19.41	7.35	12.40	18.83	7.40	16.05	27.89	6.92
1991	12.17	18.35	7.26	12.09	18.11	7.31	14.50	23.79	7.41
1992	11.97	18.34	6.92	11.82	18.03	6.93	14.85	25.21	6.94
1993	12.42	18.70	7.29	12.22	18.38	7.21	15.54	24.85	8.10
1994	11.72	17.69	6.84	11.41	16.87	6.92	15.74	26.82	7.07
1995	11.54	16.95	7.20	11.52	16.73	7.34	13.57	22.69	6.66
1996	11.78	17.77	6.98	11.46	17.26	6.85	15.07	24.44	7.72
1997	11.51	17.36	6.73	11.52	17.20	6.85	11.59	18.55	6.20
1998	11.25	16.70	6.76	11.25	16.41	6.93	13.09	22.51	6.32
1999	10.59	15.56	6.48	10.47	15.41	6.35	11.98	20.34	5.83
2000	10.76	16.08	6.31	10.67	15.66	6.42	11.72	20.72	4.93
2001	10.84	15.53	6.91	10.89	15.57	6.93	12.11	19.03	7.01
2002	11.12	16.34	6.72	11.31	16.60	6.78	11.15	16.95	6.55
2003	10.53	15.66	6.17	10.47	15.62	6.01	11.86	17.21	7.60
2004	10.84	16.12	6.29	11.06	16.47	6.29	10.20	16.11	5.83
2005	10.73	15.65	6.54	10.88	16.02	6.41	11.13	16.67	7.00
2006	10.77	15.83	6.41	11.01	16.03	6.59	10.03	16.63	5.10
2007	10.82	16.10	6.26	11.12	16.54	6.28	10.06	15.72	5.75
2008	11.00	16.36	6.39	11.42	16.89	6.59	8.86	14.00	4.96
2009	11.04	16.37	6.38	11.25	16.64	6.43	10.65	16.14	6.41
2010	10.91	16.23	6.23	11.32	16.73	6.40	8.76	13.37	5.14
2011	11.25	16.69	6.51	11.82	17.53	6.70	9.04	14.23	5.08
2012	11.09	16.11	6.69	11.59	16.81	6.88	8.41	13.92	4.14

^a 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^a Rates by Year, Race and Sex

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2012	3.16	4.88	1.79	3.00	4.57	1.76	4.62	8.08	2.06
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	7.30	1.76
2001	2.72	4.15	1.56	2.58	3.87	1.53	3.86	6.65	1.80
2002	2.68	4.08	1.55	2.57	3.87	1.51	3.65	6.26	1.73
2003	2.64	4.07	1.48	2.51	3.80	1.45	3.83	6.86	1.65
2004	2.61	3.99	1.48	2.49	3.72	1.46	3.81	6.84	1.62
2005	2.53	3.84	1.44	2.42	3.59	1.44	3.49	6.42	1.37
2006	2.48	3.78	1.40	2.39	3.60	1.38	3.22	5.57	1.49
2007	2.52	3.85	1.43	2.45	3.70	1.41	3.27	5.60	1.59
2008	2.45	3.74	1.39	2.40	3.61	1.38	2.98	5.04	1.47
2009	2.37	3.64	1.31	2.33	3.53	1.32	2.80	4.97	1.22
2010	2.47	3.75	1.40	2.45	3.68	1.40	2.79	4.76	1.37
2011	2.47	3.86	1.31	2.42	3.73	1.30	3.06	5.36	1.37
2012	2.49	3.86	1.35	2.46	3.77	1.35	2.88	5.05	1.32

^a 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^a and U.S. Death^b 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, 2008-2012									
All ages	11.0	16.5	6.3	11.5	17.1	6.4	9.3	14.6	5.2
Under 65	6.7	10.0	3.5	6.9	10.3	3.5	6.2	9.4	3.4
65 and over	41.1	61.9	25.2	43.3	64.6	26.7	30.8	51.0	17.2
All ages (IARC world std) ^c	7.9	11.8	4.3	8.2	12.3	4.4	7.0	10.9	3.8
Age-Specific Rates, 2008-2012									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	0.1	0.1	-	0.1	-	-	-	-	-
10-14	0.3	0.3	0.3	0.3	0.3	0.3	0.4	-	-
15-19	0.5	0.5	0.5	0.5	0.4	0.5	0.5	-	-
20-24	0.7	0.7	0.7	0.7	0.7	0.7	0.5	-	-
25-29	1.0	0.9	1.0	0.9	0.9	1.0	0.9	0.9	0.9
30-34	1.8	1.8	1.7	1.6	1.6	1.6	1.3	1.2	1.4
35-39	3.2	3.8	2.6	3.0	3.6	2.4	2.7	3.0	2.5
40-44	6.0	8.4	3.5	5.9	8.4	3.3	4.9	7.0	2.9
45-49	11.6	17.2	6.0	11.9	17.8	6.0	10.4	15.5	5.8
50-54	20.1	31.0	9.6	21.0	32.4	9.6	20.3	31.1	10.7
55-59	27.9	44.1	12.7	29.3	46.4	12.7	26.9	41.9	14.1
60-64	33.9	53.5	15.9	35.7	55.9	16.7	30.9	52.3	13.5
65-69	38.6	59.8	19.8	40.6	62.2	21.0	35.2	59.4	16.4
70-74	41.2	61.5	24.2	43.5	64.5	25.7	33.0	53.6	18.0
75-79	42.5	62.3	27.4	44.8	64.9	29.0	30.8	50.6	18.1
80-84	42.5	64.6	27.9	45.0	67.9	29.4	27.2	45.7	17.2
85+	42.6	63.4	32.2	44.5	65.7	34.0	20.7	33.8	15.4
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2008-2012									
All ages	2.5	3.8	1.4	2.4	3.7	1.3	2.9	5.0	1.3
Under 65	1.1	1.7	0.5	1.0	1.6	0.5	1.5	2.6	0.7
65 and over	11.8	17.8	7.2	11.9	17.7	7.4	12.3	22.2	5.9
All ages (IARC world std) ^c	1.6	2.5	0.8	1.5	2.4	0.8	2.0	3.5	0.9
Age-Specific Rates, 2008-2012									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.0	0.0	-	0.0	-	-	-	-	-
20-24	0.1	0.1	0.1	0.1	0.1	0.0	0.1	-	-
25-29	0.1	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	0.2	0.3	-
35-39	0.3	0.5	0.2	0.3	0.4	0.2	0.4	0.6	0.3
40-44	0.7	1.0	0.4	0.6	0.9	0.3	0.9	1.3	0.6
45-49	1.7	2.6	0.8	1.5	2.3	0.7	2.6	4.0	1.4
50-54	3.4	5.3	1.5	3.2	5.1	1.4	4.8	7.6	2.4
55-59	5.2	8.4	2.1	5.0	8.1	2.0	7.3	12.5	2.9
60-64	6.9	11.3	2.9	6.7	10.9	2.8	9.5	17.1	3.2
65-69	8.5	13.5	4.1	8.4	13.0	4.2	11.6	21.6	3.9
70-74	10.2	15.9	5.4	10.2	15.7	5.5	12.3	21.5	5.8
75-79	11.9	18.1	7.2	12.1	17.9	7.4	11.7	21.8	5.4
80-84	14.5	21.4	9.9	14.7	21.4	10.1	13.4	23.9	7.8
85+	18.8	26.9	14.9	19.3	27.2	15.5	13.5	24.1	9.4

^a SEER 18 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c 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^a Stage Distribution by Site,
 Age-Adjusted SEER Incidence^a and U.S. Death^b Rates by Age, Race and Sex

	Site									
	Oral Cavity & Pharynx	Lip	Tongue	Floor of Mouth	Gum & Other Mouth ^c	Oropharynx & Tonsil ^c	Hypophar. ^c	Salivary Gland	Nasophar. ^c	Other Oral Cavity & Pharynx ^c
<u>SEER Incidence</u>										
Stage Distribution, 2008-2012										
Percent of Total ^d										
Localized	32	86	34	43	-	-	-	45	-	-
Regional	44	5	46	45	-	-	-	30	-	-
Distant	18	2	16	8	-	-	-	19	-	-
Unstaged	5	7	4	4	-	-	-	6	-	-
Age-Adjusted Rates, 2008-2012										
Age at Diagnosis										
All ages	11.0	0.7	3.3	0.6	1.5	2.3	0.6	1.3	0.6	0.2
Under 65	6.7	0.3	2.0	0.3	0.7	1.7	0.3	0.7	0.5	0.1
65+	41.1	3.3	11.8	2.2	7.4	5.8	2.7	5.4	1.5	0.9
All ages(IARC world std) ^e	7.9	0.4	2.4	0.4	1.0	1.8	0.4	0.9	0.5	0.2
Sex										
Male	16.5	1.1	4.9	0.8	1.8	3.9	1.1	1.7	0.9	0.3
Female	6.3	0.3	1.8	0.3	1.3	0.8	0.2	1.0	0.4	0.1
Race										
White	11.5	0.8	3.5	0.6	1.5	2.5	0.6	1.3	0.4	0.2
Black	9.3	0.1	2.2	0.5	1.4	2.3	0.9	1.0	0.6	0.3
Other	8.9	0.4	2.2	0.3	1.4	0.9	0.4	1.1	2.2	0.1
<u>U.S. Mortality</u>										
Age-Adjusted Rates, 2008-2012										
Age at Death										
All ages	2.5	0.0	0.6	0.0	0.4	0.5	0.1	0.2	0.2	0.5
Under 65	1.1	0.0	0.3	0.0	0.1	0.2	0.0	0.1	0.1	0.2
65+	11.8	0.1	2.8	0.1	2.0	1.9	0.4	1.4	0.7	2.2
All ages(IARC world std) ^e	1.6	0.0	0.4	0.0	0.2	0.3	0.1	0.1	0.1	0.3
Sex										
Male	3.8	0.0	0.9	0.0	0.4	0.8	0.2	0.4	0.3	0.8
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	0.5	0.1	0.2	0.1	0.4
Black	2.9	-	0.5	0.0	0.3	0.6	0.1	0.2	0.3	0.8
Other	1.9	-	0.4	-	0.2	0.2	0.1	0.1	0.7	0.2

^a SEER 18 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b 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.

^c Stage distribution was not calculated for this site due to inconsistent coding of stage over time.

^d Percents may not sum to 100 due to rounding.

^e 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 ^a	-	-	-	45	-	-	-	-	-
1970-1973 ^a	-	-	-	43	-	-	-	-	-
1975-1977 ^b	52.5	51.5	54.9	54.0	53.7	54.9	36.0	29.7	49.0
1978-1980 ^b	53.3	51.8	56.5	55.4	54.4	57.3	34.8	29.7	45.8
1981-1983 ^b	51.7	50.0	55.2	54.0	52.8	56.5	30.9	25.3	45.9
1984-1986 ^b	54.0	51.6	59.0	56.3	54.7	59.3	35.1	29.5	49.4
1987-1989 ^b	53.6	51.0	58.8	55.9	54.0	59.8	34.0	30.0	44.2
1990-1992 ^b	55.4	53.1	60.0	57.9	56.4	60.9	32.9	28.2	45.7
1993-1995 ^b	57.6	56.2	60.5	60.0	59.4	61.3	37.9	33.0	50.3
1996-1998 ^b	57.7	56.2	60.9	59.8	59.1	61.3	35.9	30.9	48.9
1999-2001 ^b	60.3	59.2	62.5	62.2	62.0	62.7	44.6	39.4	57.1
2002-2004 ^b	63.8	63.1	65.6	65.6	65.6	65.5	48.1	42.8	58.4
2005-2011 ^b	66.3 ^f	65.8 ^f	67.4 ^f	68.1 ^f	68.0 ^f	68.3 ^f	44.9 ^f	42.1 ^f	51.1
5-Year Period Survival (Percent) ^{cd}									
2011	64.3	63.5	66.1	65.8	65.5	66.6	46.3	42.7	54.1
Stage Distribution (%) 2005-2011 ^{ce}									
All Stages									
Number of cases	52,240	36,950	15,290	42,755	30,550	12,205	4,896	3,367	1,529
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	31	26	42	32	27	43	20	15	31
Regional	47	51	38	47	51	38	49	53	41
Distant	18	19	15	16	17	14	27	29	23
Unstaged	5	4	6	5	4	6	4	3	5
5-Year Relative Survival (Percent), 2005-2011 ^c									
Age at Diagnosis:									
Ages <45	78.4	75.0	83.9	80.6	78.0	85.1	67.0	56.8	79.2
Ages 45-54	68.4	67.4	71.6	71.2	70.2	75.0	44.5	42.8	47.6
Ages 55-64	64.3	63.3	67.8	66.4	65.6	69.2	41.8	39.5	49.5
Ages 65-74	58.5	57.0	62.1	60.4	59.3	63.1	38.3	33.7	48.6
Ages 75+	49.4	48.9	50.1	50.4	50.1	50.8	31.0	26.3	35.9
Ages <65	68.1	66.4	73.0	70.2	68.8	74.6	47.6	43.3	57.5
Ages 65+	54.4	53.8	55.5	55.8	55.5	56.2	36.0	32.0	43.4
Stage ^e :									
All Stages	63.2	62.3	65.3	64.8	64.4	65.9	44.6	40.5	53.3
Localized	83.0	82.1	84.5	83.0	82.2	84.2	77.1	72.0	82.1
Regional	61.5	62.8	57.5	63.3	65.0	57.7	42.3	41.0	45.9
Distant	37.7	37.7	38.0	38.7	38.9	37.9	25.2	23.9	28.9
Unstaged	47.9	47.3	49.0	47.3	47.3	47.1	38.2	33.6 ^g	43.3 ^g

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

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2012.

^c SEER 18 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, New Jersey and Georgia excluding ATL/RG).

Based on follow-up of patients into 2012.

^d Period survival provides a 2011 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2009-2011: 0-1 year survival), (2008-2010: 1-2 year survival), (2007-2009: 2-3 year survival), (2006-2008: 3-4 year survival), (2005-2007: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2005-2011 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h 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^a Relative Survival (Percent) by Cancer Site, 2005-2011

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	52240	100	83.7	74.2	69.2	65.7	63.2
Lip	3158	6	98.2	94.6	92.6	91.1	90.2
Tongue	15237	29	84.0	73.6	68.5	65.4	63.4
Gum & Other Mouth	6529	12	81.2	71.3	65.9	62.4	59.6
Floor of Mouth	2650	5	79.7	67.5	60.3	55.3	50.5
Oropharynx & Tonsil	11531	22	85.6	77.1	72.4	69.1	66.8
Hypopharynx	2905	6	65.4	48.6	41.5	36.7	32.2
Salivary Gland	5896	11	88.7	81.6	77.5	74.1	72.7
Nasopharynx	3464	7	83.4	74.5	68.3	63.8	59.6
Other Oral Cavity & Pharynx	870	2	61.5	51.7	47.4	44.6	39.3

5-Year Relative Survival (Percent), 2005-2011

Site	Stage					All Stages			
	All Stages	Localized	Regional	Distant	Unstaged	White Male	White Female	Black Male	Black Female
Oral Cavity & Pharynx	63.2	83.0	61.5	37.7	47.9	64.4	65.9	40.5	53.3
Lip	90.2	94.3	51.9 ^b	38.8 ^b	78.0	90.8	88.2	-	-
Tongue	63.4	78.4	63.4	36.3	52.1	65.7	64.0	36.8	41.0
Gum & Other Mouth ^d	59.6	-	-	-	-	56.9	62.9	46.5	60.6
Floor of Mouth	50.5	75.4	36.1	16.9	41.7 ^b	49.8	56.7	32.6	40.8 ^b
Oropharynx & Tonsil ^d	66.8	-	-	-	-	70.4	63.3	45.2	40.8
Hypopharynx ^d	32.2	-	-	-	-	35.3	34.5	15.7	27.3 ^b
Salivary Gland	72.7	93.2	66.4	37.9	53.9	64.0	82.5	66.4	81.4
Nasopharynx ^d	59.6	-	-	-	-	56.3	57.0	50.5	57.6 ^b
Other Oral Cavity & Pharynx ^d	39.3	-	-	-	-	46.1	35.1	25.4 ^b	15.3 ^b

^a SEER 18 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, New Jersey and Georgia excluding ATL/RG). Based on follow-up of patients into 2012.

^b The standard error is between 5 and 10 percentage points.

^c The standard error is greater than 10 percentage points.

^d 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^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Survival Time																					
1-year	79.3	79.0	80.4	81.0	82.9	81.7	83.0	80.5	83.7	84.3	82.3	83.2	84.1	84.3	83.2	85.0	84.8	86.1	85.7	87.2	87.0
2-year	65.8	65.8	67.5	69.5	71.6	69.7	71.1	70.0	72.3	73.4	73.0	72.7	75.0	75.3	73.8	75.3	76.0	77.3	77.3	78.3	
3-year	59.8	59.5	61.1	63.2	65.3	63.5	66.1	64.2	65.5	68.6	67.2	67.4	70.3	70.6	68.6	70.5	71.2	71.6	72.9		
4-year	55.8	55.5	57.2	59.0	61.3	60.0	62.1	60.0	62.1	64.8	62.5	64.1	67.1	66.8	65.7	67.2	68.3	68.2			
5-year	52.8	52.3	53.9	56.1	58.5	57.7	58.4	57.0	58.9	62.0	60.0	61.7	65.1	64.8	63.8	64.7	66.3				
6-year	50.4	49.6	51.5	53.6	55.9	55.2	55.9	55.3	56.2	59.8	57.8	59.8	63.8	62.0	61.5	62.5					
7-year	48.4	47.4	49.0	51.5	53.4	53.3	54.3	53.8	53.9	57.8	56.1	58.4	62.3	60.3	59.8						
8-year	46.2	45.9	46.9	49.4	51.3	51.1	53.1	52.6	52.0	55.6	53.8	56.2	60.6	59.0							
9-year	44.3	43.9	45.0	47.1	49.2	49.7	51.6	52.0	50.3	53.8	51.4	54.3	58.2								
10-year	42.3	42.2	43.3	45.4	47.8	47.6	49.8	50.8	48.9	52.1	49.2	52.3									
11-year	40.4	40.7	42.0	43.6	45.9	46.2	47.7	48.6	47.9	50.3	48.0										
12-year	39.0	39.3	40.5	42.4	43.9	45.3	46.0	47.4	46.5	48.8											
13-year	37.7	37.6	38.9	40.8	42.3	42.9	44.5	45.8	45.8												
14-year	36.7	36.5	37.6	39.6	39.8	41.2	43.6	43.9													
15-year	35.2	35.0	36.6	38.5	38.3	39.8	42.3														
16-year	33.9	33.7	35.5	37.4	37.3	38.8															
17-year	32.9	32.8	34.5	36.2	36.3																
18-year	31.8	31.7	33.1	35.1																	
19-year	31.1	30.2	31.9																		
20-year	29.9	29.6	31.3																		

^a 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^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Survival Time																					
<u>Cancer of the Tongue</u>																					
1-year	74.2	73.1	76.6	79.4	79.3	79.2	81.2	79.7	80.7	84.4	80.8	81.0	84.6	86.1	84.7	84.2	85.9	86.2	87.3	86.6	87.9
2-year	54.9	57.5	60.5	64.9	65.1	66.6	70.8	65.7	68.2	71.5	70.6	69.5	71.3	75.6	71.8	73.9	76.3	76.6	78.9	76.4	
3-year	47.4	50.8	54.3	57.4	58.5	60.4	65.0	59.1	60.0	65.8	64.2	63.8	66.8	70.9	65.0	69.1	70.4	71.8	73.8		
4-year	43.5	47.4	49.9	53.7	56.4	57.3	61.9	55.4	57.9	63.3	61.0	61.6	64.1	66.5	61.5	66.7	68.7	69.5			
5-year	40.1	44.5	47.3	50.8	53.9	55.4	57.9	52.7	54.8	62.0	58.4	59.6	61.4	64.8	60.1	64.9	66.7				
6-year	38.4	41.8	45.0	48.5	50.3	52.8	56.3	52.1	52.8	59.9	56.3	57.5	60.9	61.5	59.1	63.3					
7-year	37.2	38.9	42.3	46.7	48.5	51.2	55.0	49.3	50.5	57.8	54.3	56.5	59.4	59.1	57.6						
8-year	35.7	37.3	40.4	44.4	46.4	49.8	53.8	47.7	50.5	55.6	50.6	53.4	58.8	56.8							
9-year	34.2	34.8	38.8	42.0	44.5	48.6	52.8	47.1	48.5	54.6	48.0	51.9	57.0								
10-year	32.5	33.3	37.4	40.1	43.4	46.5	52.3	45.3	47.9	53.0	46.1	49.4									
<u>Cancer of the Lip</u>																					
1-year	99.2	97.6	99.2	100.0	99.9	98.1	100.0	99.2	97.6	98.1	95.1	99.3	99.3	99.3	98.2	96.8	96.1	99.8	93.3	100.0	98.0
2-year	97.4	95.8	98.0	98.8	99.4	94.1	97.3	97.9	95.1	96.2	93.7	99.3	99.3	99.3	95.3	94.4	95.5	98.2	91.5	99.5	
3-year	96.9	93.4	97.2	98.4	98.7	92.8	95.8	95.1	93.7	95.1	93.7	97.1	98.1	98.7	95.1	93.1	95.5	97.4	91.0		
4-year	95.7	92.0	96.9	97.3	96.3	91.3	93.9	93.2	92.1	92.6	90.9	97.1	98.1	95.7	95.1	89.8	95.1	93.0			
5-year	94.1	90.0	95.7	96.0	95.4	88.6	91.2	91.1	90.5	90.3	90.6	93.9	98.1	94.1	95.1	88.3	94.9				
6-year	92.2	87.6	94.9	94.6	95.4	87.4	89.5	89.4	89.3	90.3	87.6	93.6	98.1	94.1	95.1	85.3					
7-year	91.2	86.5	93.4	93.4	95.4	86.6	88.3	89.2	88.8	90.2	84.5	93.6	97.3	93.4	94.9						
8-year	89.8	86.0	91.8	92.2	90.4	83.2	88.3	86.9	88.6	90.2	82.2	93.3	97.3	93.1							
9-year	87.5	85.0	91.3	90.0	86.0	82.5	88.0	86.3	88.1	88.5	78.4	90.2	95.7								
10-year	85.8	83.5	91.3	88.2	81.9	82.5	85.5	86.3	88.1	88.3	75.5	87.4									
<u>Cancer of the Oropharynx and Tonsil</u>																					
1-year	70.5	70.4	72.8	74.4	80.3	79.4	80.8	80.6	87.2	82.2	83.4	85.2	82.6	83.8	83.9	85.2	86.2	86.1	88.4	90.2	90.9
2-year	53.3	52.8	55.8	61.5	69.6	66.3	66.7	66.8	75.1	66.8	72.0	75.8	75.6	74.8	74.3	75.0	77.5	78.4	81.0	83.4	
3-year	44.4	44.5	45.8	53.7	62.6	60.6	61.7	59.6	66.9	62.2	66.8	71.5	71.4	71.1	70.5	70.4	72.5	73.0	76.6		
4-year	38.9	39.3	41.7	49.0	58.3	54.1	56.2	54.7	63.0	57.2	60.6	67.4	68.4	67.0	66.7	68.2	70.7	69.8			
5-year	35.5	35.3	37.9	44.8	53.9	52.6	51.2	52.6	59.7	53.4	58.7	64.5	65.2	64.4	64.9	65.3	68.1				
6-year	32.1	31.8	34.5	42.5	50.2	47.7	48.2	50.8	57.4	52.0	54.7	63.6	63.6	62.3	63.8	64.7					
7-year	30.2	29.5	31.9	41.2	46.4	43.7	47.1	49.5	55.6	48.5	52.8	62.8	62.9	61.5	61.2						
8-year	26.3	28.0	30.2	39.0	45.2	42.3	45.9	48.8	52.0	46.3	52.8	59.6	60.8	60.7							
9-year	23.8	25.8	28.4	36.5	43.9	41.3	44.1	48.5	51.9	44.6	49.5	59.0	60.5								
10-year	22.4	23.1	26.2	35.3	42.7	40.1	43.4	46.0	49.7	42.7	48.5	57.1									

^a 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^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Survival Time																					
1-year	78.7	78.5	79.5	80.4	82.7	81.5	82.2	80.2	84.0	84.0	82.7	83.5	84.4	84.9	83.7	84.9	85.9	86.5	86.1	87.2	87.8
2-year	65.0	65.0	66.1	68.2	70.6	69.0	69.7	70.0	71.3	72.9	73.2	71.6	74.8	75.1	74.1	74.6	76.7	77.9	77.7	77.8	
3-year	59.0	58.2	59.0	61.4	64.7	62.6	64.6	63.7	64.0	67.3	67.5	65.5	69.9	69.8	68.3	69.2	71.0	72.3	72.1		
4-year	54.7	54.0	54.9	57.0	60.3	58.8	60.0	59.1	60.5	63.8	62.2	62.4	66.7	65.5	65.5	65.9	67.8	68.5			
5-year	51.6	50.6	51.4	54.1	57.6	56.3	56.3	55.9	57.2	60.8	59.6	60.4	65.1	63.7	63.6	63.9	65.7				
6-year	49.3	48.0	49.2	51.6	54.9	53.4	53.8	54.3	54.5	58.1	57.1	58.4	64.0	61.1	60.8	61.9					
7-year	47.2	45.9	47.0	49.4	51.9	51.0	52.6	52.6	52.6	56.0	55.3	57.5	62.7	59.9	59.1						
8-year	45.2	44.3	44.7	47.6	49.6	49.1	51.4	51.2	51.1	53.6	52.6	55.3	60.9	58.0							
9-year	43.1	42.5	42.7	45.3	47.5	48.0	49.7	50.2	49.4	51.7	50.5	53.0	58.2								
10-year	41.2	40.6	40.8	43.8	45.7	45.8	48.2	49.2	48.4	49.9	48.7	50.9									
11-year	39.2	39.0	39.5	42.2	43.7	44.1	46.3	47.0	47.3	48.2	47.3										
12-year	37.9	37.8	38.2	40.8	42.0	43.2	44.5	46.1	46.3	46.5											
13-year	36.8	36.3	36.7	39.3	40.2	40.9	42.8	44.5	45.6												
14-year	35.8	35.3	35.5	38.0	36.9	39.8	41.3	42.7													
15-year	34.5	33.9	34.5	36.9	34.9	38.1	40.1														
16-year	33.1	32.7	33.6	35.7	33.9	37.1															
17-year	32.0	31.7	32.6	34.5	32.9																
18-year	31.1	30.5	31.4	33.4																	
19-year	30.4	28.7	29.8																		
20-year	29.3	28.1	29.1																		

^a 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^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Survival Time																					
1-year	80.8	80.1	82.2	82.2	83.1	82.2	84.8	81.1	82.9	84.9	81.6	82.7	83.5	82.8	82.4	85.1	82.2	84.9	84.8	87.1	85.0
2-year	67.7	67.7	70.6	72.1	73.4	71.2	74.4	70.1	74.4	74.7	72.6	75.2	75.5	75.8	73.1	76.8	74.5	75.8	76.6	79.4	
3-year	61.5	62.4	65.3	66.9	66.4	65.4	69.3	65.2	68.5	71.5	66.6	71.5	71.1	72.5	69.2	73.6	71.4	70.1	75.0		
4-year	58.5	58.6	61.9	63.1	63.3	62.5	66.9	61.9	65.6	67.2	63.0	67.8	68.1	69.9	66.3	70.3	69.6	67.4			
5-year	55.5	56.0	59.2	60.2	60.3	60.3	63.3	59.1	62.1	64.7	60.8	64.5	65.0	67.2	64.2	66.6	67.5				
6-year	53.0	53.0	56.2	57.7	57.9	58.9	60.6	57.5	59.7	63.3	59.3	62.8	63.3	64.0	63.0	63.8					
7-year	51.0	50.7	53.1	55.9	56.4	57.9	58.1	56.3	56.6	61.7	57.7	60.3	61.3	61.3	61.2						
8-year	48.4	49.2	51.6	53.2	54.4	55.2	56.7	55.6	54.0	59.9	56.1	57.9	60.0	61.2							
9-year	46.8	46.9	49.6	50.9	52.4	53.0	55.7	55.6	52.0	58.5	53.2	56.8	58.1								
10-year	44.8	45.7	48.4	48.9	51.2	51.2	53.3	54.1	49.9	56.7	50.4	55.2									
11-year	43.0	44.3	47.1	46.6	49.7	50.5	50.7	52.1	49.1	55.0	49.3										
12-year	41.4	42.4	45.2	45.7	47.6	49.4	49.3	50.4	47.0	53.7											
13-year	39.9	40.2	43.4	44.0	46.2	46.8	48.4	48.7	46.5												
14-year	38.7	39.1	42.0	42.9	45.0	44.0	48.2	46.6													
15-year	37.0	37.2	40.8	41.9	44.4	43.2	47.1														
16-year	35.9	36.0	39.4	40.9	43.4	42.1															
17-year	34.9	35.0	38.4	39.7	42.3																
18-year	33.6	34.1	36.8	38.6																	
19-year	32.6	33.0	35.9																		
20-year	31.3	32.4	35.6																		

^a 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, 2010-2012 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	1.10	0.29	Asian/ Pacific Islander	0	0.00	0.00	0.02	0.89	0.30
	10	0.00	0.01	0.04	1.11	0.29		10	0.00	0.02	0.05	0.90	0.30
	20	0.01	0.03	0.12	1.11	0.29		20	0.01	0.05	0.12	0.90	0.30
	30	0.02	0.11	0.32	1.11	0.29		30	0.03	0.11	0.24	0.89	0.30
	40	0.09	0.30	0.60	1.10	0.29		40	0.08	0.21	0.38	0.86	0.30
	50	0.22	0.53	0.81	1.04	0.29		50	0.13	0.31	0.52	0.79	0.29
	60	0.32	0.62	0.81	0.87	0.26		60	0.18	0.40	0.57	0.68	0.26
	70	0.34	0.56	-	0.62	0.22		70	0.23	0.41	-	0.53	0.23
80	0.29	-	-	0.37	0.16	80	0.21	-	-	0.35	0.18		
White	0	0.00	0.00	0.01	1.15	0.29	American Indian/ Alaska Native ^a	0	0.00	0.01	0.01	0.89	0.26
	10	0.00	0.01	0.04	1.16	0.29		10	0.00	0.01	0.04	0.89	0.26
	20	0.01	0.03	0.12	1.16	0.29		20	0.01	0.04	0.09	0.90	0.26
	30	0.02	0.11	0.34	1.16	0.29		30	0.03	0.08	0.25	0.91	0.26
	40	0.09	0.32	0.63	1.15	0.29		40	0.05	0.22	0.45	0.89	0.27
	50	0.23	0.55	0.85	1.09	0.29		50	0.18	0.41	0.64	0.87	0.27
	60	0.34	0.66	0.85	0.91	0.26		60	0.26	0.50	0.71	0.75	0.24
	70	0.36	0.58	-	0.64	0.22		70	0.28	0.52	-	0.56	0.20
80	0.30	-	-	0.38	0.16	80	0.33	-	-	0.39	0.13		
Black	0	0.00	0.00	0.01	0.81	0.29	Hispanic ^b	0	0.00	0.00	0.01	0.79	0.22
	10	0.00	0.01	0.03	0.82	0.29		10	0.00	0.01	0.02	0.80	0.22
	20	0.01	0.03	0.10	0.82	0.29		20	0.01	0.02	0.07	0.79	0.22
	30	0.02	0.09	0.29	0.83	0.30		30	0.01	0.06	0.17	0.79	0.22
	40	0.07	0.27	0.52	0.82	0.30		40	0.05	0.16	0.35	0.79	0.22
	50	0.21	0.46	0.66	0.78	0.29		50	0.12	0.31	0.53	0.75	0.22
	60	0.28	0.50	0.60	0.63	0.26		60	0.20	0.43	0.59	0.67	0.21
	70	0.26	0.38	-	0.42	0.19		70	0.25	0.43	-	0.51	0.18
80	0.18	-	-	0.23	0.13	80	0.23	-	-	0.33	0.14		

Devcan 6.8.0, August 2014, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 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, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

^b 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.

- 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, 2010-2012 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	1.55	0.40	Asian/ Pacific Islander	0	0.00	0.00	0.02	1.21	0.41
	10	0.00	0.01	0.04	1.57	0.40		10	0.00	0.02	0.05	1.22	0.41
	20	0.01	0.04	0.16	1.57	0.41		20	0.01	0.05	0.16	1.22	0.41
	30	0.03	0.15	0.48	1.58	0.41		30	0.04	0.15	0.34	1.21	0.41
	40	0.13	0.46	0.91	1.58	0.41		40	0.11	0.31	0.56	1.18	0.41
	50	0.35	0.81	1.21	1.50	0.41		50	0.20	0.46	0.74	1.08	0.39
	60	0.50	0.93	1.18	1.25	0.37		60	0.27	0.57	0.79	0.92	0.36
	70	0.51	0.80	-	0.87	0.29		70	0.32	0.56	-	0.71	0.31
80	0.42	-	-	0.52	0.21	80	0.30	-	-	0.49	0.24		
White	0	0.00	0.00	0.01	1.62	0.39	American Indian/ Alaska Native ^a	0	0.00	0.01	0.01	1.37	0.37
	10	0.00	0.01	0.04	1.63	0.40		10	0.00	0.01	0.05	1.38	0.38
	20	0.01	0.03	0.16	1.64	0.40		20	0.01	0.05	0.13	1.39	0.38
	30	0.03	0.15	0.50	1.65	0.40		30	0.04	0.12	0.33	1.41	0.39
	40	0.13	0.48	0.95	1.65	0.41		40	0.08	0.30	0.63	1.41	0.41
	50	0.37	0.85	1.27	1.57	0.40		50	0.23	0.57	0.95	1.39	0.41
	60	0.52	0.98	1.24	1.29	0.36		60	0.37	0.78	1.18	1.27	0.36
	70	0.53	0.83	-	0.90	0.29		70	0.48	0.95	-	1.06	0.30
80	0.43	-	-	0.53	0.21	80	0.69	-	-	0.84	0.26		
Black	0	0.00	0.00	0.01	1.18	0.45	Hispanic ^b	0	0.00	0.00	0.01	1.12	0.29
	10	0.00	0.01	0.03	1.20	0.46		10	0.00	0.01	0.03	1.13	0.29
	20	0.01	0.03	0.13	1.21	0.46		20	0.00	0.02	0.08	1.13	0.29
	30	0.02	0.12	0.42	1.22	0.47		30	0.02	0.08	0.25	1.14	0.30
	40	0.11	0.41	0.80	1.23	0.47		40	0.06	0.24	0.53	1.13	0.30
	50	0.32	0.73	1.02	1.18	0.47		50	0.18	0.48	0.80	1.09	0.30
	60	0.46	0.78	0.92	0.96	0.42		60	0.32	0.66	0.89	0.97	0.28
	70	0.41	0.58	-	0.64	0.32		70	0.38	0.64	-	0.74	0.23
80	0.28	-	-	0.37	0.21	80	0.34	-	-	0.47	0.15		

Devcan 6.8.0, August 2014, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 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, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

^b 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.

- 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, 2010-2012 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	0.01	0.63	0.21
	10	0.00	0.01	0.03	0.68	0.18		10	0.00	0.01	0.04	0.63	0.21
	20	0.01	0.03	0.08	0.68	0.19		20	0.01	0.04	0.09	0.63	0.21
	30	0.02	0.07	0.17	0.67	0.19		30	0.03	0.08	0.15	0.62	0.21
	40	0.05	0.15	0.30	0.66	0.19		40	0.05	0.12	0.23	0.59	0.21
	50	0.10	0.26	0.43	0.62	0.18		50	0.08	0.18	0.34	0.55	0.20
	60	0.16	0.34	0.49	0.54	0.17		60	0.11	0.27	0.39	0.48	0.19
	70	0.21	0.36	-	0.42	0.15		70	0.16	0.30	-	0.39	0.17
80	0.20	-	-	0.28	0.13	80	0.15	-	-	0.26	0.13		
White	0	0.00	0.00	0.01	0.69	0.19	American Indian/ Alaska Native ^a	0	0.00	0.01	0.01	0.45	0.15
	10	0.00	0.01	0.03	0.70	0.19		10	0.00	0.01	0.03	0.45	0.15
	20	0.01	0.03	0.07	0.70	0.19		20	0.00	0.03	0.05	0.45	0.15
	30	0.02	0.07	0.17	0.69	0.19		30	0.02	0.05	0.17	0.45	0.15
	40	0.05	0.15	0.30	0.68	0.19		40	0.03	0.14	0.28	0.44	0.15
	50	0.11	0.26	0.45	0.64	0.19		50	0.12	0.26	0.36	0.42	0.16
	60	0.16	0.36	0.51	0.56	0.18		60	0.15	0.25	0.31	0.32	0.15
	70	0.22	0.38	-	0.44	0.16		70	0.11	0.18	-	0.19	0.12
80	0.21	-	-	0.28	0.13	80	0.09	-	-	0.10	0.05		
Black	0	0.00	0.00	0.01	0.48	0.15	Hispanic ^b	0	0.00	0.00	0.01	0.49	0.15
	10	0.00	0.01	0.03	0.49	0.15		10	0.00	0.01	0.02	0.50	0.16
	20	0.01	0.03	0.07	0.49	0.15		20	0.01	0.02	0.05	0.50	0.16
	30	0.02	0.06	0.16	0.49	0.15		30	0.01	0.04	0.10	0.49	0.16
	40	0.04	0.14	0.27	0.47	0.15		40	0.03	0.09	0.18	0.48	0.16
	50	0.11	0.23	0.35	0.45	0.15		50	0.06	0.15	0.28	0.46	0.15
	60	0.14	0.27	0.34	0.37	0.13		60	0.10	0.23	0.35	0.41	0.15
	70	0.15	0.24	-	0.26	0.11		70	0.14	0.27	-	0.34	0.14
80	0.12	-	-	0.16	0.08	80	0.15	-	-	0.23	0.13		

Devcan 6.8.0, August 2014, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 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, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

^b 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.

- 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^a
By Race/Ethnicity and Sex

SEER Incidence	SEER 18 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2008-2012			Trend 2003-2012 ^c			Trend 2003-2012 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	11.0	16.5	6.3	0.4	0.2	-0.7*	0.5	0.3	0.2
White	11.5	17.1	6.4	0.9*	0.7*	0.4	0.9*	0.7*	0.5
White Hispanic ^e	7.0	10.5	4.2	1.5	-0.6	-0.4	-	-	-
White Non-Hispanic ^e	12.3	18.4	6.9	1.0*	0.9*	0.5	-	-	-
Black	9.3	14.6	5.2	-2.6*	-2.9*	-1.7*	-2.5*	-3.1*	-1.6*
Asian/Pacific Islander	7.6	11.0	4.9	-1.0*	-1.1*	-0.7*	-	-	-
Amer Ind/Alaska Nat ^f	8.8	13.2	5.2	-1.3	4.5	0.3	-	-	-
Hispanic ^e	6.8	10.1	4.0	1.3	-0.6	-0.5	-	-	-
<u>U.S. Mortality^g</u>									
RACE/ETHNICITY	Rate 2008-2012			Trend 2003-2012 ^h					
	Rate per 100,000 persons			AAPC (%)					
	Total	Males	Females	Total	Males	Females			
All Races	2.5	3.8	1.4	-0.5	-0.3	-1.3*			
White	2.4	3.7	1.3	-0.2	0.0	-1.1*			
White Hispanic ^e	1.6	2.5	0.8	-0.5	-1.1*	-0.7			
White Non-Hispanic ^e	2.5	3.8	1.4	-0.1	0.2	-1.0*			
Black	2.9	5.0	1.3	-3.7*	-2.4	-3.4*			
Asian/Pacific Islander	1.9	2.9	1.2	-2.1*	-2.3*	-1.7*			
Amer Ind/Alaska Nat									
Total U.S.	1.7	2.6	1.0	-1.9*	-2.4*	-1.4			
CHSDA Counties	2.2	3.6	1.2	-1.6*	-1.8	-1.1			
Non-CHSDA Counties	1.2	1.5	0.9	-1.8	-	-			
Hispanic ^e	1.5	2.4	0.8	-0.8	-1.4*	-0.8			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.2.0, April 2015, 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 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG.

c The 2003-2012 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2012.

d The 2003-2012 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2012.

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 2003-2012 Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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 2003-2012 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2012.

* 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^a 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>2008-2012, Rate per 100,000 persons^b</u>										
All Races										
Male and Female	11.0	0.7	3.3	0.6	1.5	2.3	0.6	1.3	0.6	0.2
Male	16.5	1.1	4.9	0.8	1.8	3.9	1.1	1.7	0.9	0.3
Female	6.3	0.3	1.8	0.3	1.3	0.8	0.2	1.0	0.4	0.1
White										
Male and Female	11.5	0.8	3.5	0.6	1.5	2.5	0.6	1.3	0.4	0.2
Male	17.1	1.3	5.3	0.8	1.8	4.2	1.0	1.8	0.6	0.4
Female	6.4	0.4	1.9	0.4	1.3	0.9	0.2	1.0	0.2	0.1
Black										
Male and Female	9.3	0.1	2.2	0.5	1.4	2.3	0.9	1.0	0.6	0.3
Male	14.6	0.1	3.6	0.9	1.7	4.0	1.7	1.1	1.1	0.4
Female	5.2	0.1	1.1	0.3	1.1	0.9	0.3	1.0	0.3	0.2
<u>Trend 2003-2012^b, APC(%)</u>										
All Races										
Male and Female	0.5*	-2.5*	2.0*	-2.7*	-0.3	2.5*	-2.6*	0.2	-1.0	0.0
Male	0.5*	-2.9*	2.2*	-3.1*	-0.5	2.7*	-2.5*	-0.3	-0.8	0.5
Female	0.2	-1.7*	1.2*	-1.8	0.0	1.4*	-3.3*	0.7	-1.4	-1.8
White										
Male and Female	0.9*	-2.3*	2.3*	-2.3*	-0.2	3.2*	-2.4*	0.5	-0.6	0.7
Male	0.9*	-2.8*	2.5*	-3.0*	-0.5	3.4*	-2.4*	0.0	-0.5	1.0
Female	0.6*	-1.4*	1.7*	-0.8	0.2	2.1*	-2.9	0.8	-1.0	-1.2
Black										
Male and Female	-2.3*	-	-1.1	-3.8*	-3.0*	-1.0	-5.1*	-1.8*	-2.6	-4.0
Male	-2.4*	-	-0.8	-3.3	-4.0*	-0.8	-5.0*	-2.7	-2.9	-3.9
Female	-2.3*	-	-1.8	-5.0*	-2.1*	-1.8	-5.9*	-1.1	-1.8	-

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

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 Incidence data used in calculating the rates and trends are from the SEER 18 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, New Jersey and Georgia excluding ATL/RG).

- 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^a
Age-Adjusted Rates and Trends^b 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>2008-2012, Rate per 100,000 persons</u>										
All Races										
Male and Female	2.5	0.0	0.6	0.0	0.4	0.5	0.1	0.2	0.2	0.5
Male	3.8	0.0	0.9	0.0	0.4	0.8	0.2	0.4	0.3	0.8
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	0.5	0.1	0.2	0.1	0.4
Male	3.7	0.0	0.9	0.0	0.4	0.7	0.1	0.4	0.2	0.7
Female	1.3	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1	0.2
Black										
Male and Female	2.9	-	0.5	0.0	0.3	0.6	0.1	0.2	0.3	0.8
Male	5.0	-	0.9	0.0	0.5	1.1	0.3	0.3	0.4	1.5
Female	1.3	-	0.3	-	0.2	0.3	0.1	0.1	0.1	0.3
<u>Trend 2003-2012 ,APC(%)</u>										
All Races										
Male and Female	-0.7*	-1.1	-0.5	-8.5*	-1.1*	1.9*	-1.8	0.6	-1.0*	-2.5*
Male	-0.5	-1.4	-0.3	-8.3*	-0.9	2.0*	-2.1	0.7	-1.1*	-2.2*
Female	-1.2*	-0.5	-0.8	-8.1*	-1.5*	1.2	-0.3	0.2	-1.3	-4.2*
White										
Male and Female	-0.2	-1.0	0.0	-7.4*	-0.7	2.5*	-1.4	0.7	-1.5*	-1.9*
Male	0.0	-1.1	0.2	-6.7*	-0.2	2.8*	-1.5	0.7	-1.4*	-1.5*
Female	-1.1*	-1.0	-0.6	-8.2*	-1.2	1.4*	-0.6	0.3	-2.1	-3.7*
Black										
Male and Female	-3.4*	-	-3.5*	-	-5.2*	-0.6	-3.8*	1.6	-3.2*	-5.1*
Male	-3.8*	-	-4.4*	-	-5.8*	-1.2	-5.3*	2.7	-3.7*	-4.8*
Female	-2.3*	-	-1.8	-	-4.3*	0.9	-	0.0	-2.1	-6.5*

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

^b 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^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates^a, 2008-2012</u>									
California	10.41	15.57	5.93	10.89	16.33	6.06	8.94	13.62	5.07
Greater Bay Area	10.47	15.32	6.19	11.20	16.51	6.38	9.14	13.67	5.35
San Francisco-Oakland	10.89	15.99	6.39	11.61	17.16	6.51	9.32	14.09	5.45
San Jose-Monterey	9.67	14.11	5.78	10.48	15.39	6.12	8.24	11.75	-
Los Angeles	9.26	13.95	5.34	9.61	14.53	5.36	9.32	14.57	5.40
Greater California	10.93	16.38	6.12	11.31	16.98	6.25	8.53	12.76	4.62
Connecticut	11.05	16.13	6.69	11.23	16.44	6.67	8.80	13.55	5.27
Detroit	12.01	18.21	6.77	12.22	18.27	6.91	11.60	18.65	6.31
Georgia	11.85	18.24	6.52	13.01	19.76	7.07	8.72	14.06	4.87
Atlanta	10.84	16.70	6.08	12.76	19.47	6.86	7.61	12.36	4.42
Rural Georgia	12.85	18.93	8.00	16.12	23.38	9.95	7.71	-	-
Greater Georgia	12.35	18.98	6.75	13.07	19.84	7.12	9.67	15.57	5.24
Hawaii	11.75	17.15	6.88	16.35	22.45	9.54	-	-	-
Iowa	11.94	18.20	6.44	11.90	18.13	6.46	8.62	12.07	-
Kentucky	13.55	21.14	6.99	13.56	21.12	7.01	11.46	18.58	5.61
Louisiana	12.68	19.81	6.57	13.43	20.82	6.83	10.93	17.61	5.74
New Jersey	10.17	15.00	6.13	10.63	15.50	6.48	7.81	12.26	4.71
New Mexico	9.56	14.39	5.19	9.95	15.13	5.22	-	-	-
Seattle-Puget Sound	11.68	16.57	7.32	12.04	16.98	7.58	7.48	11.06	3.83
Utah	8.19	11.66	5.02	8.17	11.61	5.01	-	-	-
9 SEER Areas ^b	11.05	16.35	6.43	11.48	16.92	6.59	9.13	14.33	5.12
11 SEER Areas ^b	10.57	15.69	6.15	11.03	16.33	6.30	9.14	14.31	5.18
13 SEER Areas ^b	10.59	15.71	6.16	11.04	16.35	6.31	9.12	14.25	5.19
18 SEER Areas ^b	11.01	16.52	6.25	11.46	17.15	6.44	9.29	14.64	5.16

^a Rates are per 100,000 and are 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 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 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.

- 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^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Death Rates^a, 2008-2012</u>									
California	2.46	3.71	1.41	2.50	3.77	1.41	2.71	4.07	1.63
Greater Bay Area	2.35	3.54	1.34	2.28	3.40	1.30	2.63	4.27	1.30
San Francisco-Oakland	2.44	3.65	1.39	2.31	3.45	1.31	2.55	4.01	-
San Jose-Monterey	2.20	3.33	1.24	2.22	3.30	1.29	-	-	-
Los Angeles	2.33	3.52	1.37	2.27	3.48	1.27	2.93	4.25	2.00
Greater California	2.55	3.84	1.45	2.65	3.99	1.50	2.62	3.83	1.51
Connecticut	1.93	3.11	1.01	1.90	3.05	0.98	2.58	4.72	-
Detroit	2.51	3.84	1.41	2.38	3.52	1.42	3.08	5.21	1.52
Georgia	2.53	3.98	1.36	2.43	3.65	1.38	2.89	5.26	1.31
Atlanta	2.22	3.57	1.14	2.01	3.11	1.05	2.68	4.88	1.30
Rural Georgia	2.35	4.20	-	-	-	-	-	-	-
Greater Georgia	2.67	4.14	1.48	2.59	3.88	1.50	3.03	5.32	1.41
Hawaii	2.61	4.07	1.32	2.87	4.07	1.46	-	-	-
Iowa	2.17	3.47	1.07	2.12	3.36	1.08	-	-	-
Kentucky	2.80	4.38	1.51	2.76	4.31	1.48	3.88	6.47	2.10
Louisiana	3.22	5.28	1.52	3.09	4.83	1.60	3.57	6.68	1.27
New Jersey	2.06	3.10	1.25	2.03	2.96	1.30	2.39	4.45	1.01
New Mexico	2.32	3.46	1.32	2.42	3.59	1.39	-	-	-
Seattle-Puget Sound	2.84	4.00	1.86	2.89	4.05	1.90	2.19	-	-
Utah	1.54	2.00	1.12	1.51	1.94	1.12	-	-	-
9 SEER Areas ^b	2.33	3.53	1.32	2.26	3.37	1.31	2.77	4.74	1.32
11 SEER Areas ^b	2.32	3.51	1.33	2.26	3.39	1.30	2.81	4.64	1.46
13 SEER Areas ^b	2.32	3.51	1.32	2.25	3.37	1.30	2.81	4.70	1.43
18 SEER Areas ^b	2.44	3.73	1.37	2.42	3.64	1.38	2.90	4.99	1.37
Total U.S.	2.45	3.77	1.35	2.41	3.67	1.35	2.90	5.04	1.35

^a 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).

^b 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 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.

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

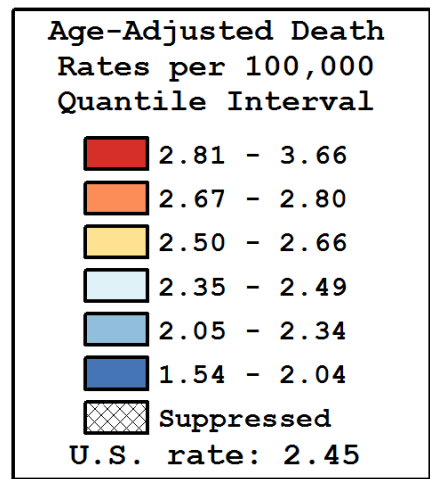
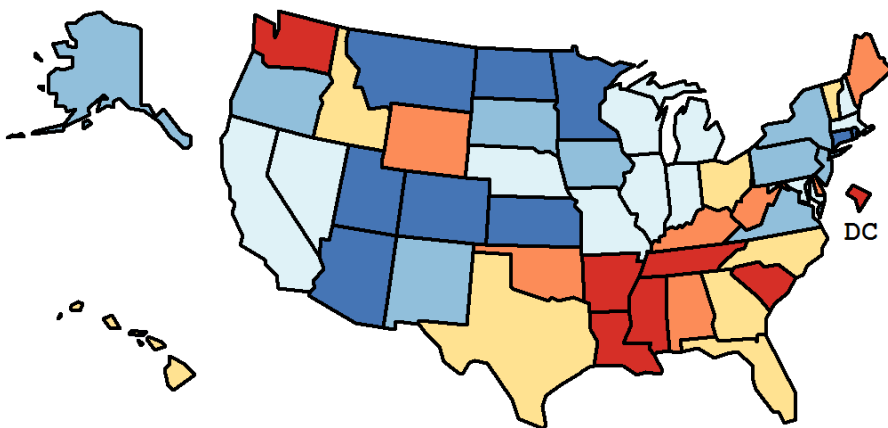
Table 20.24
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2008-2012

Males and Females

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	2.45	0.01		
High Five States				
Mississippi	3.66 ^b	0.15	01(01,03)	49.18 ^c
D.C.	3.56	0.35	02(01,19)	45.18 ^c
Louisiana	3.22 ^b	0.12	03(01,09)	31.45 ^c
Arkansas	3.05 ^b	0.14	04(02,16)	24.23 ^c
Tennessee	3.01 ^b	0.09	05(02,12)	22.95 ^c
Low Five States				
Kansas	1.98 ^b	0.11	47(31,51)	-19.17 ^c
Minnesota	1.97 ^b	0.08	48(36,50)	-19.45 ^c
Connecticut	1.93 ^b	0.10	49(37,51)	-21.20 ^c
Colorado	1.92 ^b	0.09	50(38,51)	-21.76 ^c
Utah	1.54 ^b	0.12	51(47,51)	-37.06 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	2.70	0.10	12(05,30)	10.05	Montana	2.03	0.18	44(17,51)	-17.25 ^c
Alaska	2.06	0.29	42(06,51)	-15.97 ^c	Nebraska	2.47	0.16	26(07,45)	0.90
Arizona	2.00 ^b	0.08	45(36,50)	-18.62 ^c	Nevada	2.36	0.13	31(10,46)	-3.71
Arkansas	3.05 ^b	0.14	04(02,16)	24.23 ^c	New Hampshire	2.42	0.18	29(05,48)	-1.28
California	2.46	0.04	28(17,34)	0.21	New Jersey	2.06 ^b	0.06	41(34,49)	-15.81 ^c
Colorado	1.92 ^b	0.09	50(38,51)	-21.76 ^c	New Mexico	2.32	0.14	35(10,48)	-5.44
Connecticut	1.93 ^b	0.10	49(37,51)	-21.20 ^c	New York	2.18 ^b	0.04	38(32,45)	-11.07
Delaware	2.74	0.23	10(02,43)	11.66	North Carolina	2.60	0.07	17(08,31)	6.09
D.C.	3.56	0.35	02(01,19)	45.18 ^c	North Dakota	2.04	0.23	43(09,51)	-16.76 ^c
Florida	2.66 ^b	0.05	15(08,23)	8.46	Ohio	2.53	0.06	20(11,33)	3.05
Georgia	2.53	0.08	19(10,35)	3.15	Oklahoma	2.67	0.11	14(05,35)	8.94
Hawaii	2.61	0.18	16(03,43)	6.29	Oregon	2.34	0.10	34(14,44)	-4.61
Idaho	2.50	0.18	22(04,46)	1.92	Pennsylvania	2.20 ^b	0.05	37(30,45)	-10.35
Illinois	2.41	0.06	30(16,38)	-1.58	Rhode Island	2.00	0.18	46(16,51)	-18.62 ^c
Indiana	2.35	0.08	32(16,42)	-4.04	South Carolina	2.88 ^b	0.11	07(03,18)	17.64 ^c
Iowa	2.17	0.11	39(22,50)	-11.67	South Dakota	2.12	0.22	40(09,51)	-13.58
Kansas	1.98 ^b	0.11	47(31,51)	-19.17 ^c	Tennessee	3.01 ^b	0.09	05(02,12)	22.95 ^c
Kentucky	2.80	0.11	08(03,25)	14.36	Texas	2.54	0.05	18(12,31)	3.62
Louisiana	3.22 ^b	0.12	03(01,09)	31.45 ^c	Utah	1.54 ^b	0.12	51(47,51)	-37.06 ^c
Maine	2.69	0.18	13(03,39)	9.70	Vermont	2.52	0.26	21(03,50)	2.67
Maryland	2.35	0.09	33(14,42)	-4.14	Virginia	2.29	0.07	36(20,43)	-6.43
Massachusetts	2.49	0.08	25(10,37)	1.52	Washington	2.92 ^b	0.09	06(02,15)	18.99 ^c
Michigan	2.49	0.07	23(12,36)	1.65	West Virginia	2.70	0.15	11(03,36)	10.08
Minnesota	1.97 ^b	0.08	48(36,50)	-19.45 ^c	Wisconsin	2.49	0.09	24(10,38)	1.64
Mississippi	3.66 ^b	0.15	01(01,03)	49.18 ^c	Wyoming	2.75	0.30	09(01,49)	12.14
Missouri	2.47	0.09	27(11,37)	0.83					



^a 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).

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

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

^d Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.

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.

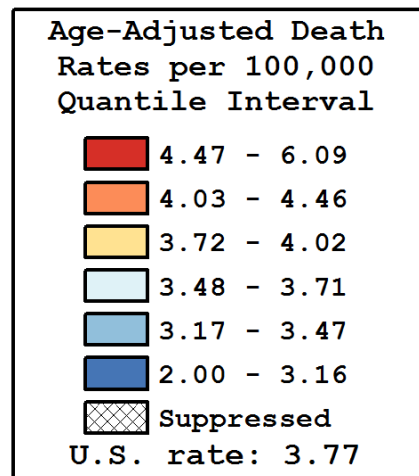
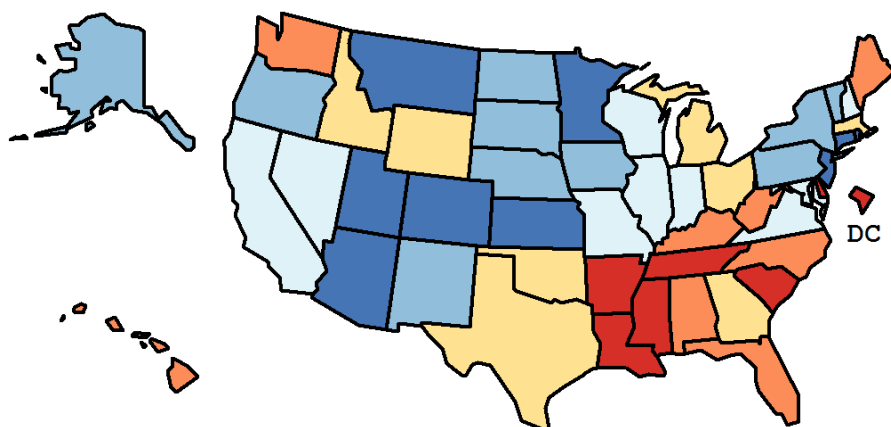
Table 20.25
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2008-2012

Males

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	3.77	0.02		
High Five States				
Mississippi	6.09 ^b	0.30	01(01,03)	61.33 ^c
D.C.	5.90	0.69	02(01,22)	56.32 ^c
Louisiana	5.28 ^b	0.23	03(01,08)	39.88 ^c
Tennessee	4.80 ^b	0.18	04(02,12)	27.19 ^c
South Carolina	4.71 ^b	0.20	05(02,15)	24.87 ^c
Low Five States				
Kansas	3.03 ^b	0.21	47(27,50)	-19.63 ^c
Montana	2.92	0.32	48(19,51)	-22.56 ^c
Minnesota	2.79 ^b	0.15	49(39,50)	-26.06 ^c
Colorado	2.65 ^b	0.16	50(42,51)	-29.76 ^c
Utah	2.00 ^b	0.20	51(49,51)	-47.10 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	4.30	0.19	10(04,27)	13.89	Montana	2.92	0.32	48(19,51)	-22.56 ^c
Alaska	3.37	0.55	39(03,51)	-10.65	Nebraska	3.47	0.28	33(10,49)	-7.90
Arizona	3.16 ^b	0.14	43(30,49)	-16.22 ^c	Nevada	3.53	0.24	32(11,48)	-6.47
Arkansas	4.67 ^b	0.25	06(02,20)	23.91 ^c	New Hampshire	3.71	0.33	24(05,49)	-1.74
California	3.71	0.07	26(18,35)	-1.77	New Jersey	3.10 ^b	0.12	46(33,49)	-17.89 ^c
Colorado	2.65 ^b	0.16	50(42,51)	-29.76 ^c	New Mexico	3.46	0.26	35(11,49)	-8.27
Connecticut	3.11 ^b	0.19	45(26,50)	-17.61 ^c	New York	3.40 ^b	0.09	38(27,44)	-9.93
Delaware	4.59	0.45	07(01,41)	21.72 ^c	North Carolina	4.10	0.14	14(07,28)	8.54
D.C.	5.90	0.69	02(01,22)	56.32 ^c	North Dakota	3.41	0.44	37(05,50)	-9.59
Florida	4.11 ^b	0.09	12(08,23)	8.88	Ohio	3.93	0.12	20(10,32)	4.21
Georgia	3.98	0.15	19(08,33)	5.51	Oklahoma	4.02	0.21	16(06,37)	6.67
Hawaii	4.07	0.34	15(03,44)	7.91	Oregon	3.44	0.19	36(16,48)	-8.84
Idaho	3.72	0.32	23(06,48)	-1.53	Pennsylvania	3.36 ^b	0.10	40(27,45)	-10.85
Illinois	3.64	0.11	28(17,40)	-3.57	Rhode Island	3.15	0.34	44(11,51)	-16.59 ^c
Indiana	3.62	0.15	29(14,43)	-4.14	South Carolina	4.71 ^b	0.20	05(02,15)	24.87 ^c
Iowa	3.47	0.21	34(13,48)	-8.01	South Dakota	3.18	0.39	42(09,51)	-15.79 ^c
Kansas	3.03 ^b	0.21	47(27,50)	-19.63 ^c	Tennessee	4.80 ^b	0.18	04(02,12)	27.19 ^c
Kentucky	4.38	0.21	09(03,24)	16.08 ^c	Texas	3.99	0.09	18(09,27)	5.68
Louisiana	5.28 ^b	0.23	03(01,08)	39.88 ^c	Utah	2.00 ^b	0.20	51(49,51)	-47.10 ^c
Maine	4.23	0.34	11(03,41)	12.03	Vermont	3.31	0.45	41(06,51)	-12.29
Maryland	3.57	0.17	31(14,45)	-5.33	Virginia	3.66	0.14	27(14,41)	-2.86
Massachusetts	3.91	0.16	21(08,35)	3.65	Washington	4.10	0.16	13(06,31)	8.66
Michigan	3.89	0.12	22(10,34)	3.20	West Virginia	4.46	0.29	08(02,30)	18.16 ^c
Minnesota	2.79 ^b	0.15	49(39,50)	-26.06 ^c	Wisconsin	3.59	0.16	30(14,44)	-4.76
Mississippi	6.09 ^b	0.30	01(01,03)	61.33 ^c	Wyoming	4.01	0.54	17(02,50)	6.40
Missouri	3.71	0.16	25(12,42)	-1.75					



^a 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).

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

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

^d Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.

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.

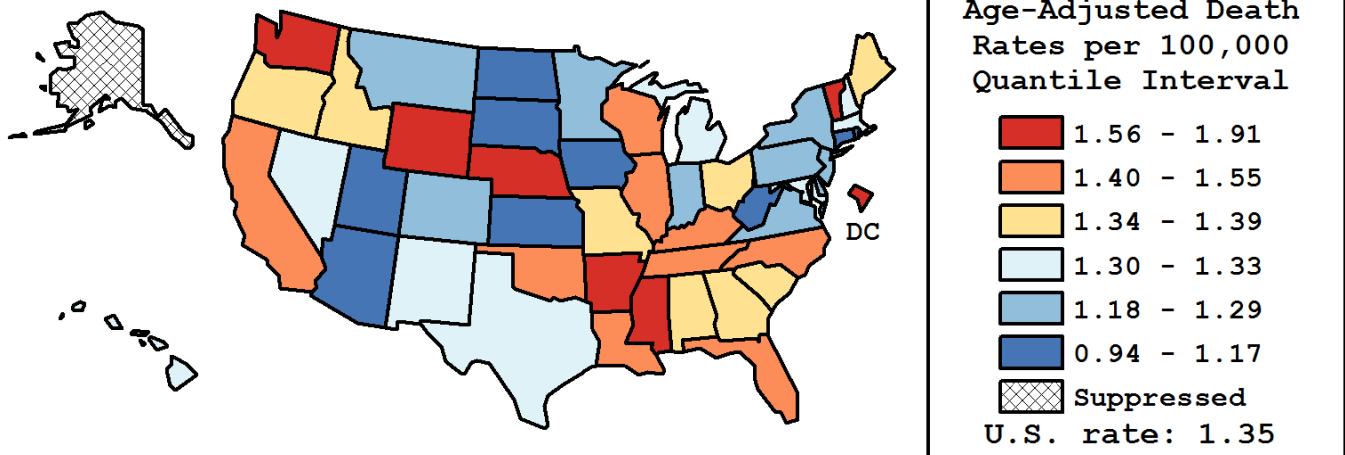
Table 20.26
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2008-2012

Females

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	1.35	0.01		
High Five States				
Washington	1.91 ^b	0.10	01(01,08)	41.31 ^c
Vermont	1.81	0.28	02(01,45)	34.40 ^c
Mississippi	1.75	0.14	03(01,29)	29.46 ^c
D.C.	1.73	0.32	04(01,50)	28.15 ^c
Arkansas	1.69	0.14	05(01,30)	25.12 ^c
Low Five States				
Rhode Island	1.08	0.18	46(05,50)	-19.84 ^c
Iowa	1.07	0.10	47(21,50)	-21.02 ^c
Connecticut	1.01 ^b	0.09	48(30,50)	-25.43 ^c
Arizona	1.00 ^b	0.07	49(36,50)	-26.19 ^c
North Dakota	0.94	0.23	50(04,50)	-30.06 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	1.39	0.10	19(05,44)	2.64	Montana	1.21	0.20	40(02,50)	-10.07
Alaska	-	-	-(-,-)	-	Nebraska	1.61	0.17	07(01,43)	19.15 ^c
Arizona	1.00 ^b	0.07	49(36,50)	-26.19 ^c	Nevada	1.31	0.14	31(04,49)	-3.14
Arkansas	1.69	0.14	05(01,30)	25.12 ^c	New Hampshire	1.30	0.19	32(02,50)	-3.86
California	1.41	0.04	15(08,32)	4.45	New Jersey	1.25	0.07	36(13,46)	-7.09
Colorado	1.28	0.10	35(07,48)	-5.31	New Mexico	1.32	0.15	28(03,50)	-2.17
Connecticut	1.01 ^b	0.09	48(30,50)	-25.43 ^c	New York	1.22	0.04	39(23,46)	-9.73
Delaware	1.24	0.21	38(02,50)	-8.10	North Carolina	1.40	0.07	16(06,40)	3.47
D.C.	1.73	0.32	04(01,50)	28.15 ^c	North Dakota	0.94	0.23	50(04,50)	-30.06 ^c
Florida	1.42	0.05	13(07,34)	5.01	Ohio	1.36	0.06	24(08,42)	0.37
Georgia	1.36	0.07	22(07,42)	0.59	Oklahoma	1.50	0.12	12(02,41)	11.21
Hawaii	1.32	0.17	30(02,50)	-2.57	Oregon	1.39	0.11	17(04,45)	3.05
Idaho	1.36	0.18	21(02,50)	0.97	Pennsylvania	1.25	0.05	37(16,45)	-7.22
Illinois	1.41	0.06	14(06,38)	4.46	Rhode Island	1.08	0.18	46(05,50)	-19.84 ^c
Indiana	1.28	0.08	34(09,47)	-5.16	South Carolina	1.36	0.10	23(05,45)	0.51
Iowa	1.07	0.10	47(21,50)	-21.02 ^c	South Dakota	1.17	0.21	42(03,50)	-13.42
Kansas	1.09	0.11	45(13,50)	-19.42 ^c	Tennessee	1.55	0.09	09(02,32)	14.62
Kentucky	1.51	0.11	11(02,39)	12.05	Texas	1.33	0.05	26(12,41)	-1.37
Louisiana	1.52	0.11	10(02,39)	12.91	Utah	1.12	0.14	44(09,50)	-16.75 ^c
Maine	1.39	0.17	18(02,50)	2.78	Vermont	1.81	0.28	02(01,45)	34.40 ^c
Maryland	1.33	0.09	25(06,46)	-1.35	Virginia	1.21	0.07	41(15,48)	-10.59
Massachusetts	1.33	0.08	27(07,45)	-1.78	Washington	1.91 ^b	0.10	01(01,08)	41.31 ^c
Michigan	1.32	0.07	29(09,44)	-2.24	West Virginia	1.14	0.13	43(08,50)	-15.79 ^c
Minnesota	1.29	0.09	33(07,47)	-4.29	Wisconsin	1.55	0.10	08(02,33)	15.10 ^c
Mississippi	1.75	0.14	03(01,29)	29.46 ^c	Wyoming	1.61	0.32	06(01,50)	19.60 ^c
Missouri	1.37	0.08	20(06,44)	1.66					



^a 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).

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

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

^d Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.

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^a on January 1, 2012
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 <20 ^e	0 to <37 ^e	>=37 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	108,762	66,555	42,301	26,989	17,258	11,366	252,895	282,380	8,728	291,108
	Males	76,856	45,595	27,558	16,900	10,165	6,484	171,885	188,848	4,931	193,779
	Females	31,906	20,960	14,743	10,089	7,093	4,882	81,010	93,532	3,797	97,329
White ^b	Both Sexes	93,692	57,853	36,599	23,463	15,216	9,917	218,927	244,661	7,471	252,132
	Males	66,971	40,346	24,141	14,938	9,167	5,807	150,908	166,123	4,232	170,355
	Females	26,721	17,507	12,458	8,525	6,049	4,110	68,019	78,538	3,239	81,777
Black ^b	Both Sexes	8,294	4,536	3,183	1,860	1,080	891	18,408	20,530	422	20,952
	Males	5,530	2,719	1,881	962	478	380	11,314	12,172	167	12,339
	Females	2,764	1,817	1,302	898	602	511	7,094	8,358	255	8,613
Asian/ Pacific Islander ^c	Both Sexes	4,029	2,673	1,722	+	+	+	9,517	+	+	+
	Males	2,620	1,631	1,010	+	+	+	5,892	+	+	+
	Females	1,409	1,042	712	+	+	+	3,625	+	+	+
Hispanic ^d	Both Sexes	6,104	3,112	2,047	+	+	+	12,560	+	+	+
	Males	3,997	1,887	1,250	+	+	+	7,795	+	+	+
	Females	2,107	1,225	797	+	+	+	4,765	+	+	+

Estimated prevalence percent^a on January 1, 2012, of the SEER^c population diagnosed in the previous 20 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	All Ages	Age Specific (Crude)									Age-Adjusted ^f	
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages	
<u>Race</u>	<u>Sex</u>											
All Races ^c	Both Sexes	0.0708%	0.0005%	0.0024%	0.0062%	0.0163%	0.0474%	0.1310%	0.2300%	0.2663%	0.2386%	0.0658%
	Males	0.0970%	0.0005%	0.0020%	0.0060%	0.0157%	0.0596%	0.1946%	0.3547%	0.4014%	0.3507%	0.0953%
	Females	0.0453%	0.0004%	0.0029%	0.0065%	0.0169%	0.0353%	0.0700%	0.1173%	0.1568%	0.1723%	0.0406%
White ^c	Both Sexes	0.0772%	0.0005%	0.0024%	0.0062%	0.0152%	0.0461%	0.1358%	0.2467%	0.2863%	0.2489%	0.0687%
	Males	0.1067%	0.0004%	0.0019%	0.0056%	0.0143%	0.0595%	0.2043%	0.3803%	0.4296%	0.3658%	0.1000%
	Females	0.0478%	0.0005%	0.0030%	0.0068%	0.0161%	0.0323%	0.0679%	0.1220%	0.1673%	0.1791%	0.0410%
Black ^c	Both Sexes	0.0426%	-	0.0023%	0.0063%	0.0137%	0.0354%	0.1040%	0.1634%	0.1812%	0.1263%	0.0472%
	Males	0.0557%	-	0.0017%	0.0081%	0.0123%	0.0376%	0.1473%	0.2578%	0.2760%	0.2030%	0.0672%
	Females	0.0306%	-	0.0029%	0.0046%	0.0149%	0.0335%	0.0662%	0.0894%	0.1149%	0.0891%	0.0321%
Asian/ Pacific Islander ^c	Both Sexes	0.0594%	-	0.0024%	0.0063%	0.0232%	0.0588%	0.1173%	0.1643%	0.1967%	0.2040%	0.0570%
	Males	0.0767%	-	0.0030%	0.0061%	0.0259%	0.0725%	0.1653%	0.2398%	0.2906%	0.2810%	0.0784%
	Females	0.0435%	-	0.0017%	0.0066%	0.0208%	0.0467%	0.0760%	0.1018%	0.1241%	0.1570%	0.0398%
Hispanic ^d	Both Sexes	0.0246%	0.0004%	0.0015%	0.0046%	0.0098%	0.0240%	0.0640%	0.1261%	0.1635%	0.1739%	0.0380%
	Males	0.0300%	-	0.0011%	0.0044%	0.0094%	0.0281%	0.0891%	0.1783%	0.2480%	0.2288%	0.0520%
	Females	0.0190%	-	0.0019%	0.0048%	0.0101%	0.0198%	0.0399%	0.0813%	0.1008%	0.1410%	0.0266%

^a US 2012 cancer prevalence counts are based on 2012 cancer prevalence proportions from the SEER registries and 1/1/2012 US population estimates based on the average of 2011 and 2012 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^{b c d} Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.

^e Maximum limited-duration prevalence: 37 years for 1975-2012 SEER 9 data; 20 years for 1992-2012 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

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

^{g h i} (g) Cases diagnosed more than 37 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 <37 and >=37. (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, 2008-2012
All Races, Both Sexes, by site

Histology ^a	Oral Cavity and Pharynx		Lip		Tongue		Salivary Gland		Floor of Mouth	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Epidermoid carcinoma ^b (8051-8131)	41,634	84.3%	2,759	94.4%	14,414	97.3%	1,212	21.9%	2,411	95.4%
Squamous cell carcinoma (8070-8078,8083-8084)	40,643	82.3%	2,645	90.5%	14,168	95.6%	1,160	20.9%	2,385	94.4%
Adenocarcinoma ^c	5,033	10.2%	116	4.0%	223	1.5%	3,392	61.2%	83	3.3%
Other specific carcinomas ^d	514	1.0%	-	-	37	0.2%	306	5.5%	-	-
Unspecified, Carcinoma, NOS (8010-8011,8020-8022)	1,611	3.3%	-	-	79	0.5%	414	7.5%	-	-
Sarcoma and soft tissue ^e	153	0.3%	-	-	19	0.1%	33	0.6%	-	-
Other specific types ^f	264	0.5%	17	0.6%	16	0.1%	115	2.1%	-	-
Unspecified (8000-8005)	183	0.4%	-	-	33	0.2%	70	1.3%	-	-
Total	49,393	100.0%	2,923	100.0%	14,821	100.0%	5,542	100.0%	2,526	100.0%

Histology ^a	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 ^b (8051-8131)	5,360	80.9%	1,717	62.4%	10,307	97.5%	2,712	96.9%	742	89.1%
Squamous cell carcinoma (8070-8078,8083-8084)	5,111	77.1%	1,566	56.9%	10,185	96.4%	2,691	96.1%	732	87.9%
Adenocarcinoma ^c	1,034	15.6%	87	3.2%	64	0.6%	16	0.6%	18	2.2%
Other specific carcinomas ^d	42	0.6%	39	1.4%	41	0.4%	21	0.8%	-	-
Unspecified, Carcinoma, NOS (8010-8011,8020-8022)	57	0.9%	843	30.6%	121	1.1%	35	1.3%	35	4.2%
Sarcoma and soft tissue ^e	31	0.5%	34	1.2%	-	-	-	-	-	-
Other specific types ^f	86	1.3%	16	0.6%	-	-	-	-	-	-
Unspecified (8000-8005)	17	0.3%	17	0.6%	20	0.2%	-	-	-	-
Total	6,628	100.0%	2,753	100.0%	10,568	100.0%	2,799	100.0%	833	100.0%

Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG).

Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

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

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

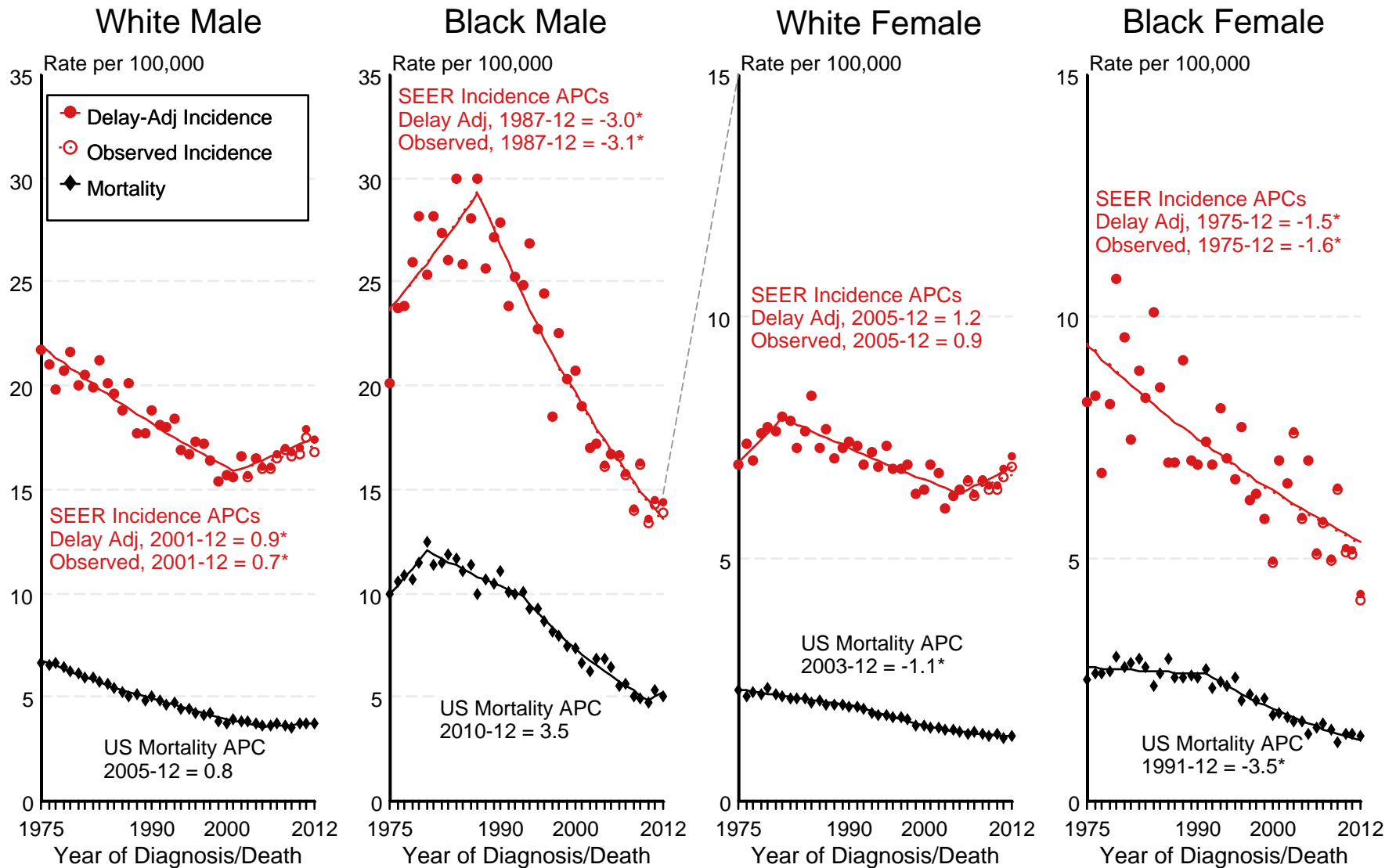
^e Sarcoma and soft tissue includes histologies 8680-8713, 8800-8921, 8990-8991, 9040-9044, 9120-9136, 9150-9252, 9370-9373, 9540-9582.

^f 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.

Figure 20.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Oral Cavity and Pharynx, by Race and Sex



Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

^a 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 4.2.0, April 2015, 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.

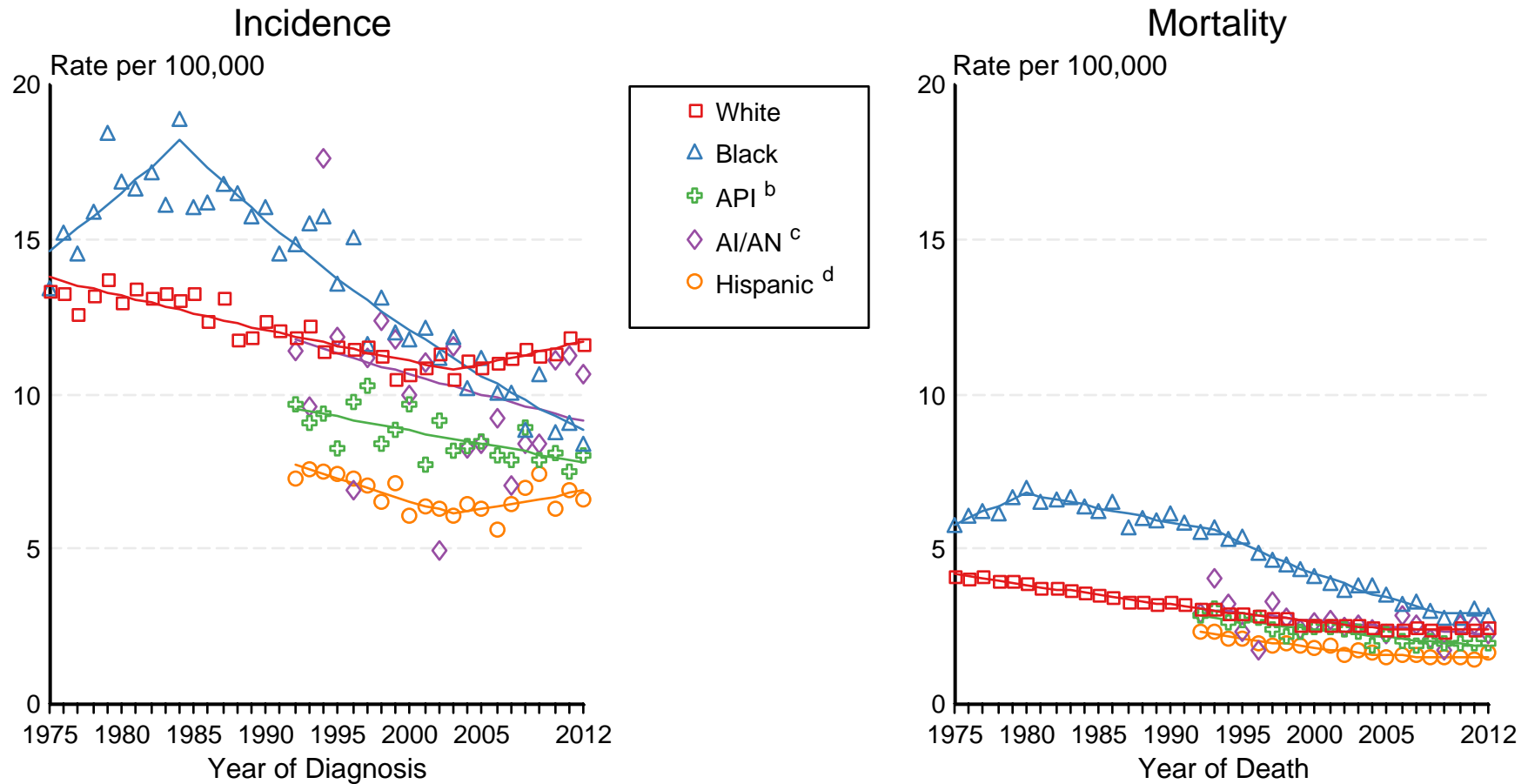
* The APC is significantly different from zero ($p < 0.05$).

Figure 20.2

SEER Incidence and US Death Rates^a Cancer of the Oral Cavity and Pharynx, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2012

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2012



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.

^a 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 4.2.0, April 2015, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2012 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2012 allow a maximum of 3 joinpoints.

^b API = Asian/Pacific Islander.

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

^d 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 New Hampshire and Oklahoma.

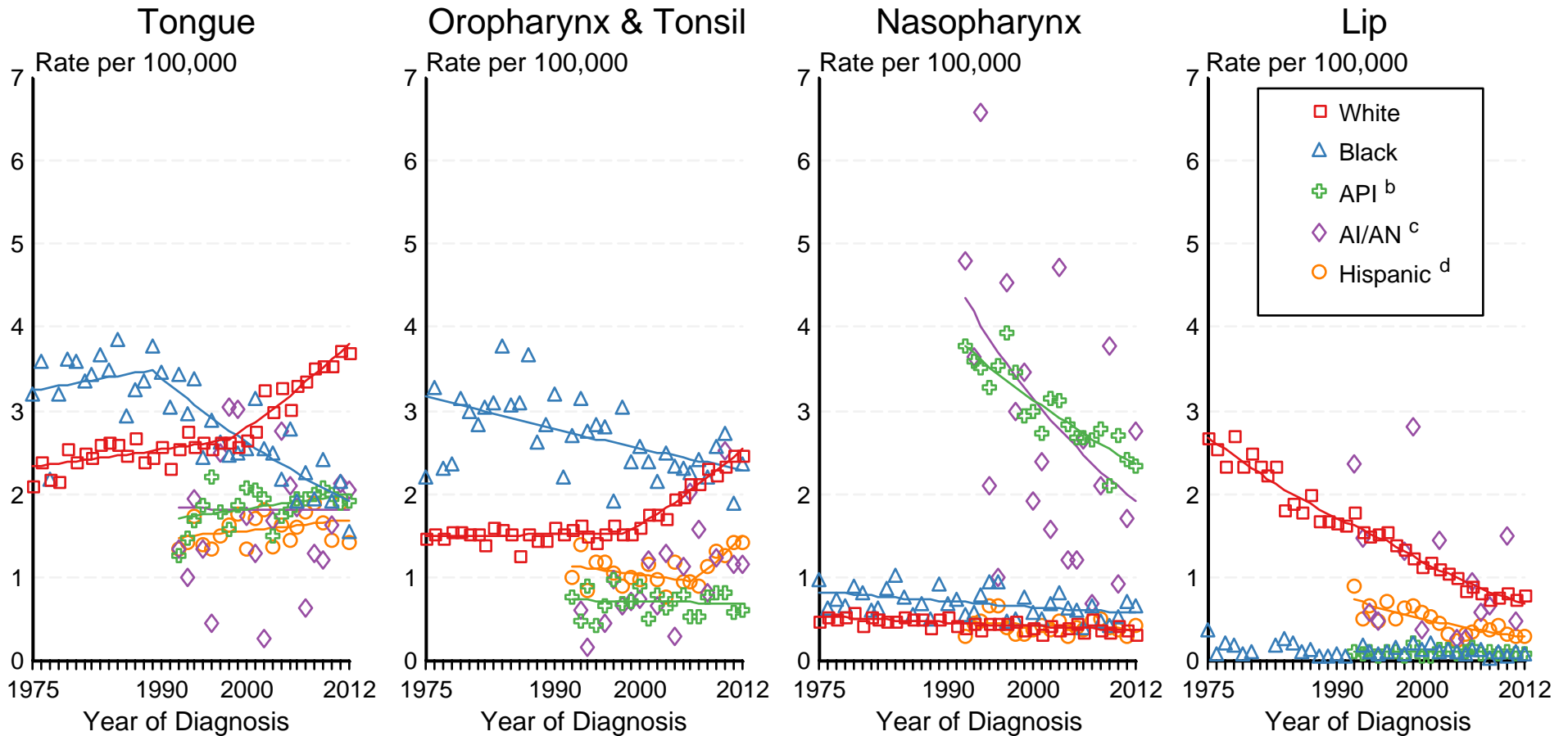
Figure 20.3

SEER Incidence Rates^a

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

Joinpoint Analyses for Whites and Blacks from 1975-2012

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2012



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).

^a 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 4.2.0, April 2015, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2012 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2012 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.

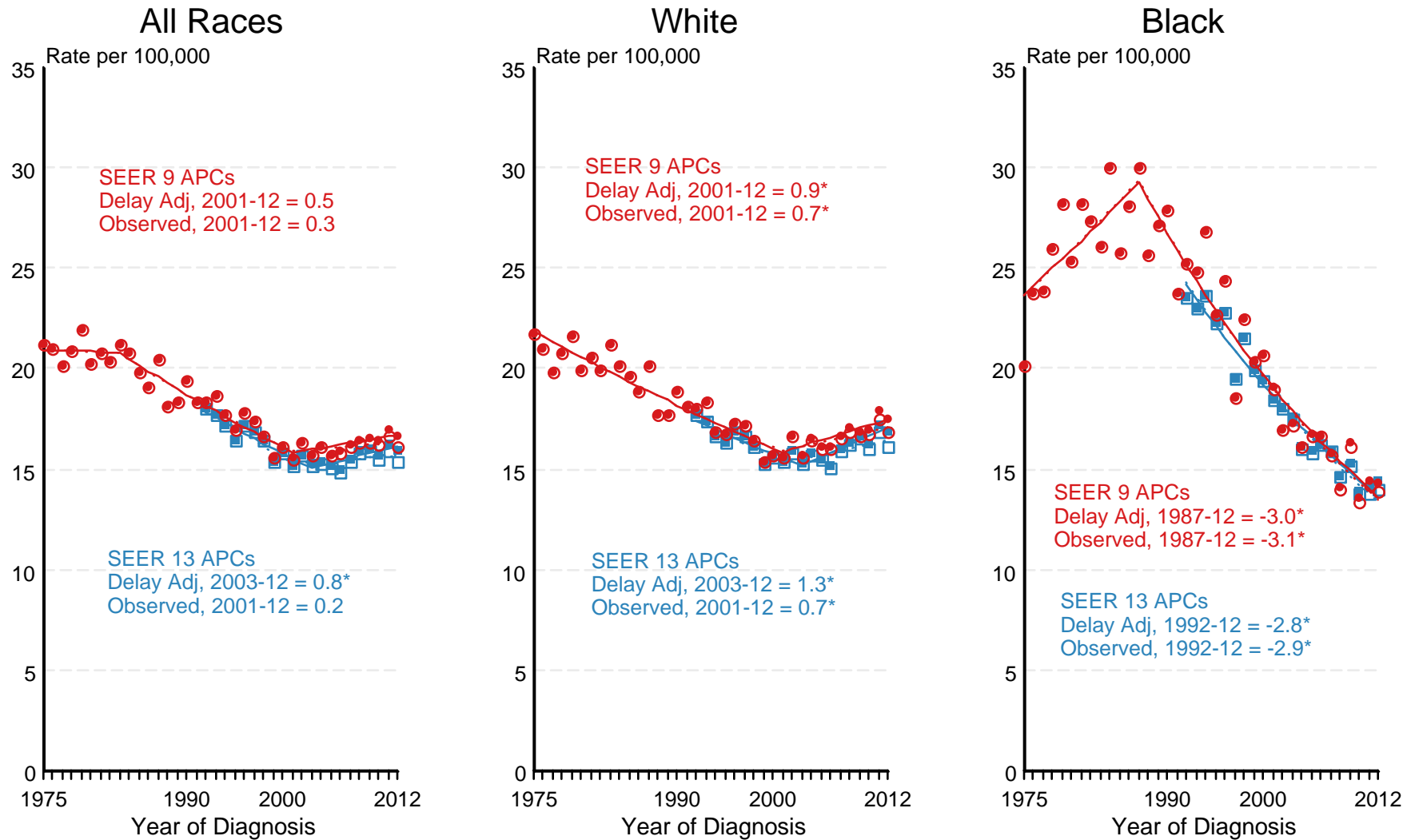
^b API = Asian/Pacific Islander.

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

^d 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.

Figure 20.4

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Oral Cavity and Pharynx, Male, by Race



● SEER 9 Delay-Adj. Incidence
 ○ SEER 9 Observed Incidence
 ■ SEER 13 Delay-Adj. Incidence
 □ SEER 13 Observed Incidence

Source: SEER 9 areas and SEER 13 areas.

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

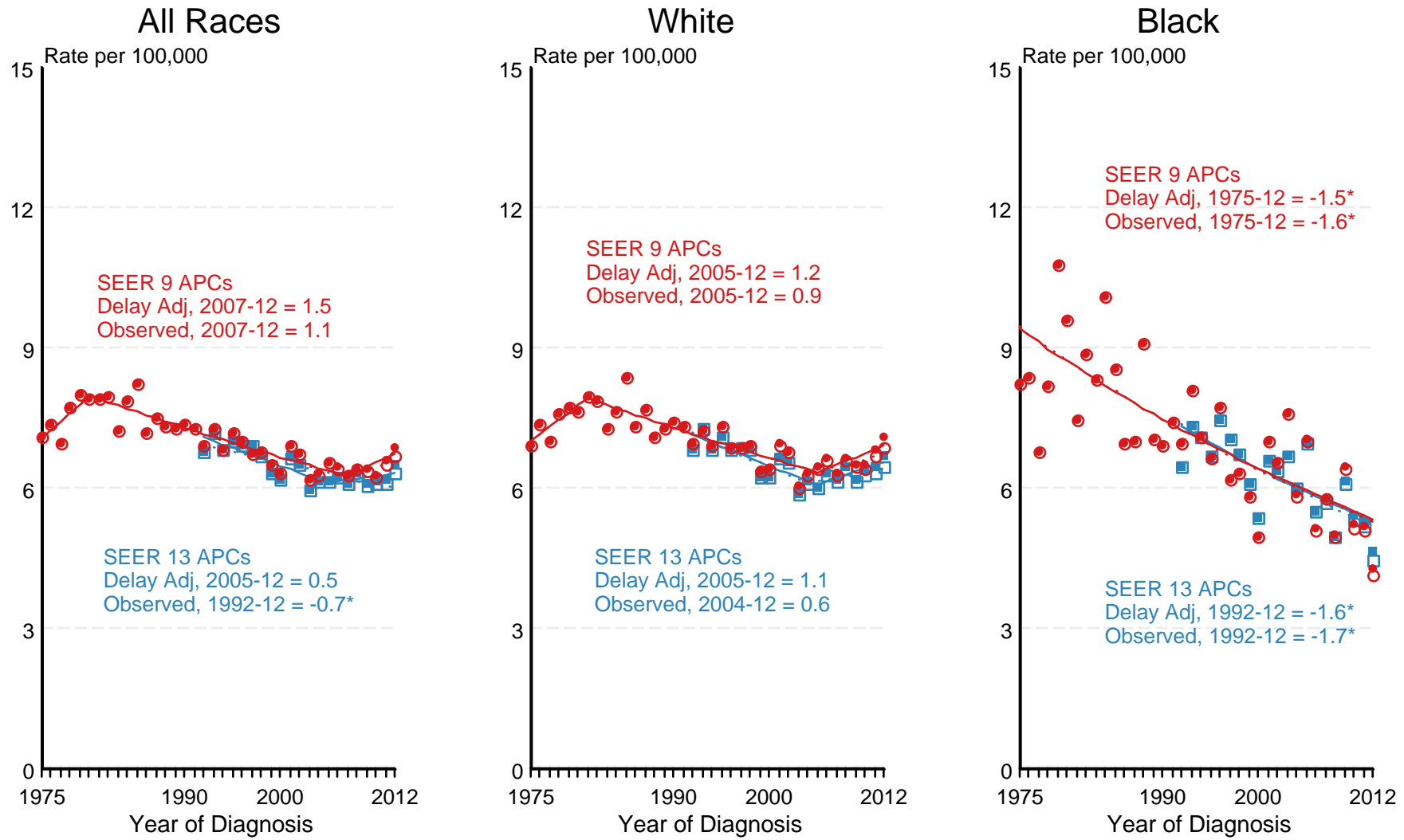
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.2.0, April 2015, National Cancer Institute.

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 ($p < 0.05$).

Figure 20.5

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Oral Cavity and Pharynx, Female, by Race



● SEER 9 Delay-Adj. Incidence
 ○ SEER 9 Observed Incidence
 ■ SEER 13 Delay-Adj. Incidence
 □ SEER 13 Observed Incidence

Source: SEER 9 areas and SEER 13 areas.
^a 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 4.2.0, April 2015, 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).