

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,
1975-2017 With up to Five Joinpoints, 2000-2017 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	2008-17	2013-17
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-81	0.8	1981-03	-1.2*	2003-17	0.9*							0.9*	0.9*
White	1975-03	-0.9*	2003-17	1.2*									1.2*	1.2*
Black	1975-84	2.1*	1984-17	-2.3*									-2.3*	-2.3*
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-04	-0.4	2004-17	0.8*									0.8*	0.8*
White	2000-17	1.0*											1.0*	1.0*
White NH ^{ef}	2000-17	1.3*											1.3*	1.3*
Black	2000-17	-1.6*											-1.6*	-1.6*
Black NH ^{ef}	2000-17	-1.6*											-1.6*	-1.6*
API ^e	2000-07	-1.5	2007-17	1.2*									1.2*	1.2*
AI/AN ^{eg}	2000-17	1.0											1.0	1.0
Hispanic ^f	2000-17	-0.1											-0.1	-0.1
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-79	-0.5	1979-93	-1.7*	1993-00	-2.7*	2000-09	-1.4*	2009-17	0.7*			0.5*	0.7*
White	1975-06	-1.9*	2006-17	0.7*									0.7*	0.7*
Black	1975-80	3.3*	1980-93	-1.5*	1993-08	-4.0*	2008-17	-1.9*					-1.9*	-1.9*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-09	-1.4*	2009-17	0.7*									0.5*	0.7*
White	2000-09	-0.9*	2009-17	1.1*									0.9*	1.1*
White NH ^{ef}	2000-09	-0.8*	2009-17	1.2*									1.0*	1.2*
Black	2000-17	-2.8*											-2.8*	-2.8*
Black NH ^{ef}	2000-17	-2.7*											-2.7*	-2.7*
API ^e	2000-07	-3.6*	2007-17	0.5									0.5	0.5
AI/AN ^{eg}	2000-17	-0.8											-0.8	-0.8
Hispanic ^f	2000-17	-0.6*											-0.6*	-0.6*

^aJoinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<https://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).

^bTrends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

^fHispanic 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.

^gData for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) 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,
1975-2017 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	2013-17
Cancer of the Tongue														
All Races	Both Sexes	1975-99	0.4*	1999-17	2.1*									2.1*
All Races	Male	1975-98	0.4	1998-17	2.3*									2.3*
All Races	Female	1975-10	0.5*	2010-17	3.4*									3.4*
White	Male	1975-98	0.6*	1998-17	2.9*									2.9*
White	Female	1975-00	0.4	2000-17	1.8*									1.8*
Black	Male	1975-89	1.1	1989-17	-2.5*									-2.5*
Black	Female	1975-17	-1.6*											-1.6*
Cancer of the Floor of Mouth, Gum and Other Mouth														
All Races	Both Sexes	1975-87	-1.1	1987-17	-3.9*									-3.9*
All Races	Male	1975-87	-1.4	1987-17	-4.1*									-4.1*
All Races	Female	1975-80	4.7	1980-17	-3.4*									-3.4*
White	Male	1975-87	-1.6*	1987-17	-3.7*									-3.7*
White	Female	1975-82	1.9	1982-17	-3.3*									-3.3*
Black	Male	1975-77	55.9	1977-93	-2.6*	1993-17	-6.9*							-6.9*
Black	Female	-	-											-
Cancer of the Oropharynx and Tonsil														
All Races	Both Sexes	1975-99	0.0	1999-17	2.8*									2.8*
All Races	Male	1975-97	0.3	1997-17	3.0*									3.0*
All Races	Female	1975-00	-1.5*	2000-17	1.2*									1.2*
White	Male	1975-96	0.3	1996-17	3.7*									3.7*
White	Female	1975-00	-1.3*	2000-17	1.7*									1.7*
Black	Male	1975-17	-0.6*											-0.6*
Black	Female	1975-17	-1.5*											-1.5*
Cancer of the Salivary Gland														
All Races	Both Sexes	1975-17	0.5*											0.5*
All Races	Male	1975-17	0.4*											0.4*
All Races	Female	1975-17	0.5*											0.5*
White	Male	1975-17	0.4*											0.4*
White	Female	1975-17	0.3*											0.3*
Black	Male	1975-96	3.2*	1996-10	-4.0*	2010-17	10.1*							10.1*
Black	Female	1975-17	0.7											0.7
Cancer of the Lip														
All Races	Both Sexes	1975-98	-3.2*	1998-08	-5.4*	2008-17	0.4							0.4
All Races	Male	1975-96	-3.7*	1996-08	-6.0*	2008-17	-0.9							-0.9
All Races	Female	1975-96	0.2	1996-11	-2.3*	2011-17	5.8*							5.8*
White	Male	1975-96	-3.4*	1996-08	-5.9*	2008-17	-0.7							-0.7
White	Female	1975-17	-0.3											-0.3
Black	Male	-	-											-
Black	Female	-	-											-

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<https://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 1975-2017.

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

^a
^b
^{*}
⁻

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,
1975-2017 With up to Five Joinpoints, 2000-2017 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	2008-17	2013-17
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-83	-0.2	1983-03	-1.4*	2003-17	1.0*							1.0*	1.0*
White	1975-03	-1.2*	2003-17	1.4*									1.4*	1.4*
Black	1975-87	1.9*	1987-10	-3.1*	2010-17	0.1							-0.6	0.1
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-17	0.7*											0.7*	0.7*
White	2000-17	1.1*											1.1*	1.1*
White NH ^{ef}	2000-17	1.4*											1.4*	1.4*
Black	2000-06	-3.6*	2006-17	-1.2*									-1.2*	-1.2*
Black NH ^{ef}	2000-06	-3.7*	2006-17	-1.2*									-1.2*	-1.2*
API ^e	2000-17	0.5											0.5	0.5
AI/AN ^{eg}	2000-17	1.2											1.2	1.2
Hispanic ^f	2000-17	-0.4											-0.4	-0.4
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-93	-1.9*	1993-00	-3.0*	2000-09	-1.2*	2009-17	0.9*					0.7*	0.9*
White	1975-05	-2.1*	2005-17	0.9*									0.9*	0.9*
Black	1975-80	3.7*	1980-92	-1.4*	1992-08	-3.9*	2008-17	-2.3*					-2.3*	-2.3*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-09	-1.3*	2009-17	1.0*									0.7*	1.0*
White	2000-09	-0.7*	2009-17	1.4*									1.1*	1.4*
White NH ^{ef}	2000-09	-0.6	2009-17	1.5*									1.3*	1.5*
Black	2000-17	-3.0*											-3.0*	-3.0*
Black NH ^{ef}	2000-17	-2.9*											-2.9*	-2.9*
API ^e	2000-08	-3.4*	2008-17	1.3									1.3	1.3
AI/AN ^{eg}	2000-17	-0.6											-0.6	-0.6
Hispanic ^f	2000-08	-2.9*	2008-17	0.4									0.4	0.4

^aJoinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<https://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).

^bTrends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

^fHispanic 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.

^gData for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) 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,
1975-2017 With up to Five Joinpoints, 2000-2017 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	2008-17	2013-17
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-80	2.5	1980-07	-0.9*	2007-17	1.0*							1.0*	1.0*
White	1975-81	2.1*	1981-05	-0.9*	2005-17	0.9*							0.9*	0.9*
Black	1975-17	-1.5*											-1.5*	-1.5*
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-17	0.3*											0.3*	0.3*
White	2000-17	0.5*											0.5*	0.5*
White NH ^{ef}	2000-05	-0.3	2005-17	1.1*									1.1*	1.1*
Black	2000-17	-1.0*											-1.0*	-1.0*
Black NH ^{ef}	2000-17	-1.0*											-1.0*	-1.0*
API ^e	2000-17	-0.1											-0.1	-0.1
AI/AN ^{eg}	2000-17	0.0											0.0	0.0
Hispanic ^f	2000-17	0.2											0.2	0.2
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-89	-0.9*	1989-09	-2.2*	2009-17	0.2							0.0	0.2
White	1975-89	-1.0*	1989-09	-2.0*	2009-17	0.5							0.3	0.5
Black	1975-94	-0.6*	1994-05	-4.5*	2005-17	-1.7*							-1.7*	-1.7*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-11	-1.6*	2011-17	0.5									-0.2	0.5
White	2000-13	-1.3*	2013-17	2.1									0.2	2.1
White NH ^{ef}	2000-13	-1.2*	2013-17	2.1									0.3	2.1
Black	2000-17	-2.2*											-2.2*	-2.2*
Black NH ^{ef}	2000-17	-2.1*											-2.1*	-2.1*
API ^e	2000-17	-1.5*											-1.5*	-1.5*
AI/AN ^{eg}	2000-17	-2.6											-2.6	-2.6
Hispanic ^f	2000-17	-0.1											-0.1	-0.1

^aJoinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<https://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).

^bTrends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

^fHispanic 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.

^gData for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) 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
1975-1979	13.33	21.02	7.43	13.21	21.00	7.33	15.51	24.44	8.46
1980	13.34	20.25	7.91	12.98	19.96	7.62	16.82	25.39	9.59
1981	13.58	20.84	7.91	13.41	20.53	7.95	16.60	28.16	7.36
1982	13.34	20.32	7.93	13.08	19.94	7.84	17.06	27.39	8.75
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	19.82	8.24	13.28	19.62	8.36	15.98	25.82	8.41
1986	12.47	19.14	7.20	12.36	18.86	7.30	16.18	28.09	6.97
1987	13.21	20.54	7.52	13.11	20.17	7.68	16.81	30.00	6.99
1988	12.14	18.15	7.32	11.79	17.69	7.11	16.55	25.67	9.22
1989	12.13	18.31	7.29	11.86	17.72	7.33	15.75	27.16	7.05
1990	12.67	19.42	7.35	12.40	18.85	7.39	16.05	27.89	6.92
1991	12.17	18.34	7.26	12.08	18.09	7.32	14.56	23.93	7.41
1992	11.97	18.34	6.92	11.82	18.05	6.93	14.85	25.21	6.94
1993	12.43	18.70	7.30	12.20	18.35	7.21	15.64	25.06	8.10
1994	11.72	17.69	6.84	11.40	16.86	6.92	15.74	26.82	7.07
1995	11.54	16.95	7.20	11.52	16.72	7.34	13.58	22.71	6.66
1996	11.78	17.78	6.98	11.47	17.28	6.85	15.12	24.44	7.81
1997	11.52	17.38	6.73	11.52	17.22	6.84	11.58	18.55	6.18
1998	11.24	16.68	6.77	11.24	16.37	6.96	13.20	22.61	6.42
1999	10.59	15.56	6.48	10.48	15.43	6.35	11.92	20.21	5.83
2000	10.77	16.09	6.32	10.69	15.69	6.42	11.75	20.76	4.93
2001	10.85	15.57	6.91	10.93	15.64	6.94	12.11	19.03	7.01
2002	11.14	16.35	6.74	11.31	16.59	6.79	11.18	17.02	6.55
2003	10.54	15.67	6.18	10.49	15.66	6.02	11.89	17.22	7.66
2004	10.85	16.14	6.29	11.09	16.52	6.31	10.26	16.18	5.89
2005	10.75	15.70	6.53	10.90	16.09	6.39	11.25	16.78	7.12
2006	10.80	15.88	6.43	11.06	16.11	6.61	10.14	16.70	5.24
2007	10.85	16.11	6.28	11.14	16.57	6.30	10.17	15.78	5.89
2008	11.03	16.40	6.41	11.47	16.95	6.64	8.86	14.00	4.96
2009	11.06	16.42	6.38	11.33	16.77	6.45	10.67	16.24	6.37
2010	10.99	16.35	6.26	11.47	16.93	6.51	8.72	13.26	5.16
2011	11.33	16.83	6.55	11.98	17.76	6.80	9.09	14.32	5.10
2012	11.24	16.40	6.71	11.81	17.19	6.93	8.61	14.24	4.25
2013	11.55	17.33	6.54	12.11	18.19	6.69	9.58	14.86	5.53
2014	11.54	17.63	6.18	12.14	18.46	6.39	9.34	15.41	4.72
2015	11.93	17.65	6.93	12.66	18.88	7.06	8.92	13.85	5.36
2016	12.03	17.77	6.96	12.69	18.77	7.12	8.69	13.21	5.27
2017	11.90	17.61	6.89	12.56	18.44	7.24	9.00	14.99	4.37

Reference: [Cancer Incidence Rates Adjusted for Reporting Delay](#).

Individual rates for diagnosis years 1975-1979 available in web browser version of [Cancer Statistics Review](#).

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2017	11.84	17.78	6.90	11.98	17.96	6.97	12.04	19.40	6.38
1975-1979	13.33	21.02	7.43	13.21	21.00	7.33	15.51	24.44	8.46
1980	13.34	20.25	7.91	12.98	19.96	7.62	16.82	25.39	9.59
1981	13.58	20.84	7.91	13.41	20.53	7.95	16.60	28.16	7.36
1982	13.34	20.32	7.93	13.08	19.94	7.84	17.06	27.39	8.75
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	19.82	8.24	13.28	19.62	8.36	15.98	25.82	8.41
1986	12.47	19.14	7.20	12.36	18.86	7.30	16.18	28.09	6.97
1987	13.21	20.54	7.52	13.11	20.17	7.68	16.81	30.00	6.99
1988	12.14	18.15	7.32	11.79	17.69	7.11	16.55	25.67	9.22
1989	12.13	18.31	7.29	11.86	17.72	7.33	15.75	27.16	7.05
1990	12.67	19.42	7.35	12.40	18.85	7.39	16.05	27.89	6.92
1991	12.17	18.34	7.26	12.08	18.09	7.32	14.56	23.93	7.41
1992	11.97	18.34	6.92	11.82	18.05	6.93	14.85	25.21	6.94
1993	12.43	18.70	7.30	12.20	18.35	7.21	15.64	25.06	8.10
1994	11.72	17.69	6.84	11.40	16.86	6.92	15.74	26.82	7.07
1995	11.54	16.95	7.20	11.52	16.72	7.34	13.58	22.71	6.66
1996	11.78	17.78	6.98	11.47	17.28	6.85	15.12	24.44	7.81
1997	11.52	17.38	6.73	11.52	17.22	6.84	11.58	18.55	6.18
1998	11.24	16.68	6.77	11.24	16.37	6.96	13.20	22.61	6.42
1999	10.59	15.56	6.48	10.48	15.43	6.35	11.92	20.21	5.83
2000	10.77	16.09	6.32	10.69	15.69	6.42	11.75	20.76	4.93
2001	10.85	15.57	6.91	10.93	15.64	6.94	12.11	19.03	7.01
2002	11.14	16.35	6.74	11.31	16.59	6.79	11.18	17.02	6.55
2003	10.54	15.67	6.18	10.49	15.66	6.02	11.89	17.22	7.66
2004	10.85	16.14	6.29	11.09	16.52	6.31	10.26	16.18	5.89
2005	10.75	15.70	6.53	10.90	16.09	6.39	11.25	16.78	7.12
2006	10.80	15.88	6.43	11.06	16.11	6.61	10.14	16.70	5.24
2007	10.85	16.11	6.28	11.14	16.57	6.30	10.17	15.78	5.89
2008	11.03	16.40	6.41	11.47	16.95	6.64	8.86	14.00	4.96
2009	11.06	16.41	6.38	11.31	16.76	6.45	10.66	16.22	6.36
2010	10.97	16.32	6.25	11.44	16.89	6.49	8.70	13.22	5.14
2011	11.31	16.79	6.54	11.94	17.70	6.77	9.05	14.26	5.08
2012	11.21	16.35	6.69	11.75	17.11	6.90	8.56	14.15	4.23
2013	11.51	17.26	6.51	12.04	18.09	6.65	9.51	14.75	5.50
2014	11.49	17.55	6.15	12.05	18.33	6.35	9.25	15.27	4.68
2015	11.85	17.54	6.89	12.54	18.69	6.99	8.82	13.70	5.30
2016	11.91	17.59	6.89	12.50	18.48	7.01	8.56	13.00	5.18
2017	11.68	17.28	6.76	12.23	17.95	7.06	8.77	14.60	4.27

^a Individual rates for diagnosis years 1975-1979 available in web browser version of [Cancer Statistics Review](#). 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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Death:									
1975-2017	3.05	4.72	1.72	2.92	4.46	1.70	4.26	7.42	1.92
1975-1979	4.25	6.87	2.30	4.05	6.50	2.25	6.18	10.71	2.69
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	3.69	1.40	2.79	4.76	1.36
2011	2.47	3.87	1.31	2.42	3.74	1.30	3.06	5.36	1.37
2012	2.49	3.86	1.35	2.46	3.77	1.35	2.88	5.04	1.32
2013	2.41	3.72	1.30	2.39	3.66	1.29	2.81	4.78	1.38
2014	2.51	3.97	1.29	2.51	3.91	1.30	2.79	4.88	1.28
2015	2.53	3.93	1.36	2.54	3.92	1.36	2.57	4.13	1.39
2016	2.59	3.98	1.41	2.60	3.96	1.44	2.64	4.51	1.24
2017	2.53	3.96	1.32	2.57	3.97	1.36	2.46	4.27	1.13

^a Individual rates for years of death 1975-1979 available in web browser version of [Cancer Statistics Review](#). 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
SEER Incidence									
Age at Diagnosis									
Age-Adjusted Rates, 2013-2017									
All ages	11.4	17.2	6.4	12.0	18.1	6.6	8.5	13.3	4.9
Under 65	6.8	10.1	3.7	7.0	10.4	3.7	5.6	8.2	3.3
65 and over	43.4	66.5	25.4	46.4	70.7	26.9	28.9	48.0	16.1
All ages (WHO world std) ^c	8.9	13.4	4.9	9.4	14.1	5.1	6.9	10.6	3.9
Age-Specific Rates, 2013-2017									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	0.1	0.1	0.1	0.1	-	-	-	-	-
10-14	0.3	0.3	0.3	0.3	0.2	0.3	-	-	-
15-19	0.4	0.4	0.4	0.4	0.3	0.4	0.5	-	0.6
20-24	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5
25-29	1.1	1.2	1.1	1.0	1.0	1.0	1.0	1.0	0.9
30-34	1.9	2.0	1.7	1.7	1.9	1.6	1.3	1.1	1.6
35-39	2.9	3.4	2.4	2.6	3.0	2.3	2.5	2.9	2.1
40-44	5.6	7.7	3.5	5.4	7.4	3.4	4.6	6.5	2.9
45-49	11.3	16.5	6.2	11.5	17.0	6.0	9.4	13.5	5.7
50-54	19.7	30.0	9.8	20.8	31.7	10.0	16.3	24.4	9.3
55-59	29.7	46.3	13.9	31.7	49.7	14.2	24.1	36.5	13.4
60-64	36.7	57.8	17.5	39.1	61.2	18.3	30.0	49.0	14.7
65-69	40.8	64.3	20.1	43.5	68.2	21.1	29.6	50.7	13.6
70-74	44.1	68.3	23.8	46.9	71.9	25.5	31.4	54.5	15.1
75-79	45.1	67.6	27.6	48.4	72.1	29.6	29.5	47.8	17.7
80-84	45.0	66.9	29.8	48.0	71.4	31.3	29.1	44.6	20.4
85+	43.0	65.6	31.2	45.8	70.2	32.9	20.9	32.8	15.9
U.S. Mortality									
Age at Death									
Age-Adjusted Rates, 2013-2017									
All ages	2.5	3.9	1.3	2.5	3.9	1.4	2.7	4.5	1.3
Under 65	1.1	1.7	0.5	1.1	1.7	0.5	1.3	2.2	0.6
65 and over	12.3	19.0	7.1	12.5	19.1	7.3	11.6	20.6	5.7
All ages (WHO world std) ^c	1.6	2.6	0.8	1.6	2.5	0.8	1.8	3.1	0.8
Age-Specific Rates, 2013-2017									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.0	0.0	-	-	-	-	-	-	-
20-24	0.0	0.1	-	0.0	0.1	-	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	0.2	0.2	0.1	0.2	0.3	-
35-39	0.3	0.4	0.2	0.3	0.4	0.2	0.2	0.3	-
40-44	0.6	0.9	0.3	0.6	0.8	0.3	0.7	1.1	0.4
45-49	1.6	2.4	0.8	1.4	2.1	0.7	2.2	3.4	1.1
50-54	3.2	4.9	1.5	3.1	4.8	1.4	4.1	6.1	2.2
55-59	5.4	8.7	2.4	5.4	8.7	2.3	6.4	10.3	3.1
60-64	7.4	12.3	3.0	7.4	12.1	3.0	9.0	15.8	3.5
65-69	9.0	14.8	3.9	9.2	14.8	4.0	10.0	18.0	3.9
70-74	10.4	16.4	5.3	10.4	16.0	5.5	12.5	23.0	5.0
75-79	12.4	19.1	6.9	12.7	19.4	7.2	11.3	19.5	5.9
80-84	15.1	22.7	9.7	15.5	22.9	10.1	12.8	22.4	7.3
85+	19.8	29.0	14.9	20.5	29.9	15.5	12.8	21.4	9.1

^a SEER 21 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 Rates are per 100,000 and are age-adjusted to the world (WHO 2000-2025) standard million.

- 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								Other Oral Cavity & Pharynx ^c	
	Oral Cavity & Pharynx	Lip	Tongue	Floor of Mouth	Gum & Other Mouth ^c	Oropharynx & Tonsil ^c	Hypophar. ^c	Salivary Gland	Nasophar. ^c	
SEER Incidence										
Stage Distribution, 2013-2017										
Percent of Total ^d										
Localized	31	82	33	44	-	-	-	47	-	-
Regional	47	5	50	44	-	-	-	28	-	-
Distant	16	1	14	8	-	-	-	18	-	-
Unstaged/Unknown	6	12	4	5	-	-	-	7	-	-
Age-Adjusted Rates, 2013-2017										
Age at Diagnosis										
All ages	11.4	0.6	3.5	0.5	1.5	2.5	0.6	1.3	0.6	0.3
Under 65	6.8	0.3	2.1	0.3	0.7	1.8	0.3	0.7	0.5	0.1
65+	43.4	3.1	13.3	1.8	7.5	7.2	2.5	5.6	1.4	1.1
All ages(WHO world std) ^e	8.9	0.4	2.8	0.4	1.1	2.1	0.4	1.0	0.5	0.2
Sex										
Male	17.2	1.0	5.3	0.7	1.9	4.3	1.0	1.7	0.9	0.5
Female	6.4	0.3	1.9	0.3	1.3	0.9	0.2	1.0	0.3	0.1
Race										
White	12.0	0.7	3.9	0.5	1.6	2.8	0.5	1.3	0.4	0.3
Black	8.5	0.1	1.9	0.4	1.2	2.1	0.8	1.1	0.7	0.2
Other	9.6	0.3	2.4	0.3	1.5	1.0	0.4	1.2	2.3	0.1
U.S. Mortality										
Age-Adjusted Rates, 2013-2017										
Age at Death										
All ages	2.5	0.0	0.7	0.0	0.4	0.5	0.1	0.3	0.2	0.4
Under 65	1.1	0.0	0.3	0.0	0.1	0.3	0.0	0.1	0.1	0.2
65+	12.3	0.1	3.1	0.1	2.0	2.2	0.5	1.5	0.7	2.0
All ages(WHO world std) ^e	1.8	0.0	0.5	0.0	0.2	0.4	0.1	0.2	0.1	0.3
Sex										
Male	3.9	0.0	1.0	0.0	0.5	0.9	0.2	0.4	0.3	0.7
Female	1.3	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1	0.2
Race										
White	2.5	0.0	0.7	0.0	0.4	0.5	0.1	0.3	0.1	0.4
Black	2.7	-	0.5	0.0	0.3	0.6	0.2	0.2	0.2	0.6
Other	1.9	-	0.4	0.0	0.3	0.2	0.1	0.1	0.6	0.2

^a SEER 21 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 world (WHO 2000-2025) standard million.

- 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	54.7	54.0	53.7	54.7	36.0	29.7	49.0
1978-1980 ^b	53.3	51.8	56.5	55.4	54.5	57.4	34.9	29.8	45.8
1981-1983 ^b	51.7	50.1	55.1	54.0	52.9	56.5	30.9	25.4	45.6
1984-1986 ^b	54.1	51.6	59.0	56.3	54.8	59.4	35.0	29.5	49.1
1987-1989 ^b	53.6	51.1	58.8	56.0	54.1	59.8	34.0	30.0	44.0
1990-1992 ^b	55.4	53.1	60.1	57.9	56.4	61.0	33.1	28.4	46.0
1993-1995 ^b	57.6	56.2	60.5	60.0	59.4	61.3	38.0	33.1	50.5
1996-1998 ^b	57.8	56.2	61.0	59.9	59.1	61.5	36.3	31.3	49.2
1999-2001 ^b	60.3	59.2	62.6	62.3	62.1	62.7	44.6	39.4	57.3
2002-2004 ^b	63.9	63.1	65.8	65.7	65.7	65.7	48.4	43.1	58.8
2005-2009 ^b	65.9	65.4	67.2	67.7	67.5	68.2	44.8	42.2	50.4
2010-2016 ^b	69.2 ^f	68.5 ^f	71.1 ^f	71.2 ^f	70.9 ^f	72.2 ^f	51.3 ^e	49.6 ^e	54.9
5-Year Period Survival (Percent)^{cd}									
2016	66.5	66.2	67.2	67.6	67.6	67.7	50.1	49.7	50.6
Stage Distribution (%) 2010-2016^{ce}									
All Stages									
Number of cases	59,271	42,757	16,514	48,501	35,464	13,037	5,199	3,615	1,584
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	29	24	41	29	25	43	19	15	30
Regional	48	52	38	49	53	38	48	51	39
Distant	19	20	16	18	19	14	29	31	26
Unstaged/Unknown	4	4	5	4	4	5	4	3	4
5-Year Relative Survival (Percent), 2010-2016^c									
Age at Diagnosis:									
Ages <45	80.6	78.1	84.7	81.9	79.5	85.8	73.4	70.5	77.1
Ages 45-54	71.2	70.6	73.2	73.9	73.5	75.2	50.7	48.8	55.7
Ages 55-64	67.8	67.0	70.5	69.7	68.9	72.5	48.5	47.7	50.5
Ages 65-74	63.3	61.8	67.5	64.6	63.5	67.8	43.8	39.4	53.9
Ages 75+	51.9	52.1	51.6	52.8	53.4	52.0	34.1	36.0	32.2
Ages <65	70.7	69.5	74.4	72.6	71.5	75.9	52.8	50.7	58.0
Ages 65+	58.7	58.4	59.4	59.8	59.9	59.7	41.0	38.7	44.6
Stage^e:									
All Stages	66.2	65.6	67.7	67.6	67.3	68.3	49.5	47.6	53.8
Localized	85.1	84.3	86.1	85.3	85.1	85.7	77.3	72.6	81.6
Regional	66.8	68.1	62.2	68.1	69.6	62.6	51.7	52.2	50.2
Distant	40.1	40.5	38.7	41.1	41.8	38.4	29.3	28.9	30.4
Unstaged/Unknown	54.0	54.0	53.4	51.5	51.6	51.0	39.2	40.9 ^g	36.1 ^g

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

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

Based on follow-up of patients into 2017. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2017.

Period survival provides a 2016 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

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

The difference between 1975-1977 and 2010-2016 is statistically significant ($p<.05$).

The standard error is between 5 and 10 percentage points.

The standard error is greater than 10 percentage points.

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

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b

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Table 20.11
Cancer of the Oral Cavity and Pharynx by Subsite (Invasive)
SEER^a Relative Survival (Percent) by Cancer Site, 2010-2016

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	59271	100	85.1	76.5	71.8	68.7	66.2
Lip	3424	6	98.5	96.2	94.3	92.8	92.0
Tongue	18186	31	85.7	76.5	72.0	69.4	67.1
Gum & Other Mouth	6951	12	80.7	70.9	65.9	62.2	59.8
Floor of Mouth	2429	4	79.8	67.6	61.4	57.0	51.1
Oropharynx & Tonsil	14427	24	87.5	80.4	76.1	73.1	70.8
Hypopharynx	2786	5	67.6	51.6	43.4	38.7	36.1
Salivary Gland	6278	11	88.9	82.3	77.8	74.7	72.3
Nasopharynx	3573	6	84.4	75.0	68.9	65.4	61.3
Other Oral Cavity & Pharynx	1217	2	69.0	60.0	54.9	51.4	47.9

5-Year Relative Survival (Percent), 2010-2016

Site	All Stages	Stage				All Stages			
		Localized	Regional	Distant	Unstaged/Unknown	White Male	White Female	Black Male	Black Female
Oral Cavity & Pharynx	66.2	85.1	66.8	40.1	54.0	67.3	68.3	47.6	53.8
Lip	92.0	94.1	65.5	32.3 ^b	92.4	91.9	90.1	63.8 ^c	-
Tongue	67.1	82.1	68.4	39.8	51.9	69.0	67.3	47.1	44.6
Gum & Other Mouth ^d	59.8	-	-	-	-	57.2	62.9	48.7	58.9
Floor of Mouth	51.1	76.0	37.5	19.9	38.9 ^b	50.2	56.9	40.1	39.1 ^b
Oropharynx & Tonsil ^d	70.8	-	-	-	-	73.3	68.4	52.6	49.7
Hypopharynx ^d	36.1	-	-	-	-	39.3	39.1	21.1	21.7 ^b
Salivary Gland	72.3	93.9	65.7	36.5	50.8	63.6	80.9	68.6	78.9
Nasopharynx ^d	61.3	-	-	-	-	55.8	63.8	53.8	48.9 ^b
Other Oral Cavity & Pharynx ^d	47.9	-	-	-	-	54.1	38.3	29.0 ^b	35.4 ^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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program. Based on follow-up of patients into 2017.

^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-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																														
1-year	79.3	79.1	80.4	81.0	82.7	81.7	83.2	80.7	83.7	84.3	82.4	83.3	84.0	84.4	83.5	85.1	84.9	86.2	85.8	87.2	87.2	85.7	86.0	87.0	87.0	87.4				
2-year	65.9	65.9	67.5	69.4	71.6	69.6	71.1	70.2	72.3	73.5	72.9	72.8	75.0	75.3	74.0	75.5	76.3	77.5	77.4	78.7	78.8	78.1	78.1	79.1	79.1	79.6				
3-year	59.8	59.5	61.1	63.2	65.4	63.5	66.2	64.3	65.6	68.7	67.1	67.5	70.4	70.7	68.8	70.6	71.3	71.9	73.1	74.4	74.5	73.1	72.7	72.7	74.9					
4-year	55.9	55.5	57.1	59.0	61.6	60.0	62.1	60.2	62.2	64.9	62.6	64.1	67.1	66.9	66.0	67.4	68.4	68.5	69.7	71.3	71.9	70.8	69.4							
5-year	52.8	52.3	54.0	56.1	58.5	57.6	58.5	57.1	58.9	62.0	60.0	61.7	65.2	64.9	64.0	65.1	66.5	66.5	67.3	69.0	69.9	67.6								
6-year	50.5	49.6	51.5	53.6	56.0	55.2	56.0	55.7	56.3	59.9	57.9	60.0	63.9	62.2	61.8	62.9	65.1	64.5	65.4	67.3	68.3									
7-year	48.4	47.5	49.0	51.6	53.5	53.3	54.3	54.0	53.9	57.9	56.1	58.5	62.4	60.5	60.1	61.5	62.9	62.7	64.0	65.6										
8-year	46.2	45.9	47.0	49.4	51.3	51.1	53.2	52.9	52.1	55.6	53.9	56.2	60.8	59.3	58.4	59.5	61.5	60.7	62.4											
9-year	44.3	43.9	45.1	47.1	49.4	49.8	51.7	52.2	50.3	54.0	51.6	54.5	58.4	57.2	56.8	57.9	59.4	59.9												
10-year	42.3	42.2	43.3	45.4	47.8	47.6	49.9	51.1	49.0	52.3	49.5	52.6	57.5	55.5	54.9	56.3	58.7													
11-year	40.4	40.7	42.1	43.6	46.0	46.3	47.8	49.0	48.0	50.6	48.4	50.9	55.5	54.0	54.4	53.7														
12-year	39.1	39.3	40.5	42.4	44.1	45.3	46.1	47.9	46.7	48.9	46.6	50.3	53.1	52.9	52.6															
13-year	37.7	37.6	39.0	40.8	42.5	43.1	44.6	46.2	46.0	47.9	46.1	49.9	51.7	51.4																
14-year	36.7	36.5	37.7	39.6	40.0	41.4	43.8	44.4	44.7	46.6	45.4	48.4	50.6																	
15-year	35.3	35.0	36.6	38.6	38.6	40.0	42.5	43.8	43.1	45.8	44.3	47.9																		
16-year	33.9	33.8	35.5	37.5	37.6	39.0	41.3	42.6	42.4	44.6	43.1																			
17-year	32.9	32.8	34.5	36.4	36.6	38.1	40.4	41.0	40.9	43.4																				
18-year	31.9	31.7	33.1	35.3	35.2	37.2	39.2	40.0	40.4																					
19-year	31.1	30.2	32.0	34.3	34.6	35.7	37.6	39.1																						
20-year	29.9	29.7	31.4	33.5	33.9	34.9	35.8																							

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

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-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																														
Cancer of the Tongue																														
1-year																														
2-year																														
3-year																														
4-year																														
5-year																														
6-year																														
7-year																														
8-year																														
9-year																														
10-year																														
Cancer of the Lip																														
1-year																														
2-year																														
3-year																														
4-year																														
5-year																														
6-year																														
7-year																														
8-year																														
9-year																														
10-year																														
Cancer of the Oropharynx and Tonsil																														
1-year																														
2-year																														
3-year																														
4-year																														
5-year																														
6-year																														
7-year																														
8-year																														
9-year																														
10-year																														

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

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-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																														
1-year	78.6	78.5	79.5	80.4	82.6	81.4	82.4	80.3	84.1	84.1	82.9	83.4	84.2	84.9	84.0	84.9	85.9	86.5	86.3	87.1	88.0	86.9	85.4	86.8	87.2	87.8				
2-year	65.0	65.0	66.0	68.2	70.6	68.9	69.6	70.1	71.2	72.9	73.2	71.6	74.9	75.1	74.2	74.8	77.0	78.1	77.8	78.2	78.5	79.1	77.0	78.9	79.7					
3-year	59.1	58.2	59.0	61.4	64.8	62.6	64.7	63.8	64.1	67.4	67.4	65.5	70.0	69.8	68.6	69.3	71.2	72.4	72.3	73.6	74.0	73.9	71.4	74.6						
4-year	54.7	54.1	54.8	57.1	60.6	58.8	60.0	59.3	60.5	63.9	62.3	62.4	66.7	65.5	65.8	66.1	67.7	68.6	68.6	70.0	70.9	71.4	67.9							
5-year	51.6	50.6	51.4	54.1	57.5	56.3	56.3	56.1	57.3	60.8	59.5	60.4	65.2	63.7	63.8	64.3	65.9	66.2	66.4	67.6	68.9	68.0								
6-year	49.4	48.0	49.2	51.7	54.8	53.4	53.9	54.7	54.6	58.3	57.2	58.5	64.1	61.2	61.1	62.3	64.3	63.9	64.4	66.2	67.3									
7-year	47.2	45.9	47.0	49.5	51.9	51.0	52.5	52.9	52.6	56.1	55.3	57.5	62.9	59.9	59.5	61.0	62.0	61.9	62.9	64.6										
8-year	45.2	44.4	44.7	47.6	49.5	49.1	51.5	51.4	51.1	53.8	52.8	55.3	61.1	58.2	57.3	58.9	60.6	60.2	61.3											
9-year	43.2	42.5	42.8	45.3	47.6	48.1	49.8	50.5	49.5	51.9	50.7	53.2	58.6	55.8	55.5	57.5	58.3	59.3												
10-year	41.2	40.6	40.8	43.8	45.8	45.9	48.2	49.6	48.5	50.3	48.8	51.1	57.4	54.1	53.5	56.4	57.6													
11-year	39.2	39.1	39.6	42.2	43.8	44.1	46.4	47.3	47.3	48.5	47.7	49.7	55.6	53.2	53.3	53.7														
12-year	38.0	37.9	38.3	40.9	42.1	43.3	44.5	46.5	46.4	46.6	46.1	49.0	53.2	52.3	51.4															
13-year	36.7	36.3	36.7	39.3	40.3	41.1	42.9	44.9	45.6	45.9	46.1	48.3	51.6	50.6																
14-year	35.8	35.3	35.6	38.0	37.0	40.0	41.5	43.2	43.9	44.5	45.3	47.0	50.8																	
15-year	34.5	33.9	34.6	36.9	35.0	38.3	40.2	42.6	42.3	43.7	44.2	46.3																		
16-year	33.1	32.8	33.6	35.7	34.0	37.3	38.9	41.0	41.5	42.3	43.1																			
17-year	32.0	31.7	32.6	34.7	33.0	36.8	38.0	39.2	39.4	40.8																				
18-year	31.1	30.6	31.3	33.5	31.5	35.7	37.0	38.1	38.8																					
19-year	30.5	28.8	29.9	32.7	31.0	33.6	35.7	37.1																						
20-year	29.4	28.3	29.2	31.8	30.2	33.0	33.9																							

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

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-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																														
1-year	80.8	80.2	82.2	82.2	82.9	82.2	85.1	81.5	82.8	84.8	81.7	83.0	83.5	83.3	82.4	85.4	82.4	85.3	84.4	87.3	85.1	83.0	87.4	87.6	86.4	86.4				
2-year	67.8	67.7	70.5	72.0	73.3	71.1	74.5	70.2	74.4	74.8	72.5	75.3	75.4	75.8	73.4	77.2	74.7	76.2	76.6	79.8	79.6	75.9	80.9	79.4	79.5					
3-year	61.6	62.3	65.4	67.0	66.5	65.3	69.5	65.4	68.6	71.4	66.4	71.7	71.0	72.7	69.2	73.8	71.5	70.8	74.8	76.3	75.7	71.4	76.1	75.9						
4-year	58.5	58.6	61.9	63.1	63.4	62.5	66.9	62.1	65.6	67.1	63.1	67.9	68.1	70.1	66.3	70.4	69.6	68.3	72.4	74.5	74.3	69.5	73.1							
5-year	55.4	56.0	59.2	60.3	60.4	60.2	63.4	59.2	62.1	64.7	60.9	64.6	65.0	67.6	64.3	67.0	67.8	67.1	69.5	72.4	72.4	66.5								
6-year	53.0	52.9	56.3	57.8	58.3	58.8	60.8	57.7	59.7	63.3	59.4	63.0	63.3	64.4	63.1	64.4	66.8	66.0	67.7	69.9	70.7									
7-year	51.0	50.8	53.2	56.0	56.6	57.9	58.1	56.4	56.7	61.6	57.9	60.5	61.3	61.8	61.5	62.4	65.1	64.6	66.8	68.3										
8-year	48.3	49.2	51.6	53.2	54.6	55.0	56.8	55.7	54.1	59.7	56.3	58.2	60.1	61.8	60.5	60.8	63.2	61.9	65.0											
9-year	46.8	46.9	49.7	51.0	52.7	53.1	55.9	55.7	52.1	58.6	53.5	57.1	58.1	60.3	59.4	58.8	61.6	61.4												
10-year	44.7	45.7	48.5	48.8	51.5	51.1	53.5	54.4	50.0	56.8	50.8	55.7	57.7	58.6	58.2	56.2	61.0													
11-year	42.9	44.2	47.0	46.6	50.0	50.5	50.9	52.3	49.3	55.2	49.8	53.4	55.4	55.8	56.8	53.7														
12-year	41.4	42.4	45.1	45.7	47.9	49.3	49.5	50.7	47.2	54.1	47.5	53.1	52.9	54.1	55.0															
13-year	39.9	40.2	43.5	44.1	46.6	47.1	48.4	49.0	46.8	52.4	46.3	53.1	51.9	53.0																
14-year	38.6	39.1	42.0	43.0	45.4	44.2	48.4	46.9	46.2	50.8	45.7	51.6	49.8																	
15-year	37.0	37.2	40.7	42.0	44.9	43.5	47.5	46.2	44.5	50.4	44.4	51.1																		
16-year	35.8	36.0	39.4	41.2	44.0	42.5	46.4	45.9	44.2	49.2	43.0																			
17-year	34.9	35.1	38.4	39.9	42.9	40.9	45.5	44.5	43.8	48.9																				
18-year	33.6	34.2	36.8	39.1	41.8	40.2	43.9	43.8	43.6																					
19-year	32.6	33.0	36.0	37.5	41.1	39.8	41.8	42.9																						
20-year	31.3	32.5	35.7	36.9	40.4	38.6	39.8																							

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

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, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying							
		+10 yrs			+20 yrs			+30 yrs			Ever			+10 yrs			+20 yrs			+30 yrs	
All Races	0	0.00	0.00	0.01	1.17	0.30		Asian/	0	0.00	0.01	0.02	0.97	0.33							
	10	0.00	0.01	0.04	1.18	0.30		Pacific	10	0.01	0.02	0.06	0.98	0.33							
	20	0.01	0.03	0.12	1.18	0.31		Islander	20	0.01	0.05	0.14	0.98	0.33							
	30	0.02	0.11	0.33	1.18	0.31			30	0.04	0.12	0.28	0.97	0.33							
	40	0.08	0.31	0.62	1.18	0.31			40	0.09	0.24	0.46	0.93	0.33							
	50	0.23	0.55	0.86	1.12	0.31			50	0.16	0.37	0.59	0.86	0.32							
	60	0.35	0.67	0.88	0.94	0.28			60	0.22	0.45	0.64	0.72	0.29							
	70	0.37	0.60	-	0.67	0.23			70	0.24	0.45	-	0.53	0.25							
	80	0.31	-	-	0.41	0.17			80	0.24	-	-	0.34	0.21							
White	0	0.00	0.00	0.01	1.23	0.31		American	0	0.00	0.00	0.01	0.79	0.24							
	10	0.00	0.01	0.03	1.24	0.31		Indian/	10	0.00	0.01	0.03	0.80	0.24							
	20	0.01	0.03	0.11	1.24	0.31		Alaska	20	0.01	0.03	0.08	0.81	0.24							
	30	0.02	0.11	0.34	1.24	0.31		Native ^a	30	0.01	0.07	0.22	0.81	0.25							
	40	0.09	0.32	0.66	1.24	0.31			40	0.05	0.22	0.49	0.81	0.25							
	50	0.24	0.59	0.92	1.18	0.31			50	0.17	0.45	0.66	0.79	0.25							
	60	0.37	0.71	0.93	1.00	0.29			60	0.30	0.52	0.65	0.67	0.21							
	70	0.39	0.64	-	0.71	0.24			70	0.25	0.39	-	0.42	0.18							
	80	0.33	-	-	0.42	0.18			80	0.19	-	-	0.22	0.13							
Black	0	0.00	0.00	0.01	0.78	0.26		Hispanic ^b	0	0.00	0.00	0.01	0.80	0.23							
	10	0.00	0.01	0.03	0.79	0.26			10	0.00	0.01	0.02	0.81	0.24							
	20	0.01	0.03	0.10	0.79	0.27			20	0.01	0.02	0.06	0.81	0.24							
	30	0.02	0.09	0.26	0.79	0.27			30	0.02	0.06	0.17	0.81	0.24							
	40	0.07	0.24	0.47	0.79	0.27			40	0.04	0.16	0.35	0.80	0.24							
	50	0.18	0.41	0.61	0.75	0.27			50	0.12	0.31	0.53	0.77	0.24							
	60	0.26	0.47	0.58	0.62	0.24			60	0.20	0.44	0.61	0.68	0.23							
	70	0.25	0.38	-	0.43	0.18			70	0.26	0.45	-	0.53	0.20							
	80	0.19	-	-	0.25	0.13			80	0.24	-	-	0.34	0.16							

Devcan 6.7.8, April 2020, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). 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 PRCD(A(Purchased/Referred Care Delivery Areas) 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, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying from Cancer							
		+10 yrs			+20 yrs			+30 yrs			Ever			+10 yrs			+20 yrs			+30 yrs	
All Races	0	0.00	0.00	0.01	1.66	0.42		Asian/	0	0.00	0.01	0.02	1.29	0.45							
	10	0.00	0.01	0.04	1.67	0.43		Pacific	10	0.00	0.02	0.07	1.30	0.46							
	20	0.01	0.04	0.16	1.68	0.43		Islander	20	0.02	0.06	0.19	1.29	0.46							
	30	0.03	0.15	0.48	1.69	0.43			30	0.05	0.17	0.40	1.29	0.46							
	40	0.12	0.46	0.94	1.69	0.44			40	0.12	0.35	0.65	1.25	0.45							
	50	0.35	0.85	1.29	1.62	0.44			50	0.23	0.53	0.82	1.14	0.44							
	60	0.54	1.01	1.29	1.37	0.40			60	0.31	0.62	0.86	0.95	0.40							
	70	0.55	0.88	-	0.96	0.32			70	0.33	0.60	-	0.69	0.34							
	80	0.45	-	-	0.57	0.24			80	0.33	-	-	0.44	0.26							
White	0	0.00	0.00	0.01	1.74	0.42		American	0	0.00	0.00	0.01	1.13	0.31							
	10	0.00	0.01	0.04	1.76	0.43		Indian/	10	0.00	0.01	0.03	1.14	0.31							
	20	0.01	0.03	0.15	1.76	0.43		Alaska	20	0.01	0.03	0.10	1.15	0.31							
	30	0.03	0.14	0.50	1.78	0.44		Native ^a	30	0.01	0.09	0.33	1.16	0.32							
	40	0.12	0.48	1.00	1.78	0.44			40	0.07	0.32	0.72	1.19	0.33							
	50	0.37	0.91	1.38	1.72	0.44			50	0.26	0.68	1.02	1.17	0.33							
	60	0.57	1.08	1.37	1.44	0.40			60	0.46	0.83	0.95	1.00	0.26							
	70	0.59	0.92	-	1.01	0.32			70	0.43	0.57	-	0.63	0.19							
	80	0.47	-	-	0.60	0.24			80	0.21	-	-	0.28	0.08							
Black	0	0.00	0.00	0.01	1.11	0.38		Hispanic ^b	0	0.00	0.00	0.01	1.10	0.33							
	10	0.00	0.01	0.03	1.13	0.39			10	0.00	0.01	0.03	1.11	0.34							
	20	0.01	0.03	0.13	1.14	0.40			20	0.01	0.02	0.08	1.11	0.34							
	30	0.02	0.12	0.37	1.15	0.40			30	0.02	0.07	0.24	1.11	0.34							
	40	0.10	0.36	0.71	1.16	0.41			40	0.06	0.23	0.51	1.11	0.34							
	50	0.27	0.63	0.93	1.10	0.41			50	0.17	0.47	0.79	1.08	0.34							
	60	0.41	0.73	0.89	0.93	0.37			60	0.31	0.65	0.87	0.96	0.33							
	70	0.41	0.60	-	0.65	0.28			70	0.38	0.63	-	0.74	0.29							
	80	0.29	-	-	0.37	0.19			80	0.33	-	-	0.46	0.23							

Devcan 6.7.8, April 2020, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). 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 PRCD(A(Purchased/Referred Care Delivery Areas) 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, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying from Cancer		Risk of Being Diagnosed with Cancer						
		+10 yrs			+20 yrs			+30 yrs			Ever			+10 yrs			+20 yrs			+30 yrs		
All Races	0	0.00	0.00	0.01	0.71	0.19		Asian/	0	0.00	0.01	0.02	0.70	0.22		0.00	0.01	0.02	0.04	0.71	0.23	
	10	0.00	0.01	0.03	0.71	0.19		Pacific	10	0.01	0.02	0.04	0.71	0.23		0.01	0.01	0.04	0.09	0.70	0.23	
	20	0.01	0.03	0.08	0.71	0.19		Islander	20	0.01	0.04	0.09	0.70	0.23		0.03	0.08	0.17	0.69	0.69	0.23	
	30	0.02	0.07	0.18	0.71	0.19			30	0.03	0.08	0.17	0.69	0.23		0.05	0.15	0.29	0.67	0.67	0.22	
	40	0.05	0.16	0.32	0.69	0.19			40	0.09	0.24	0.39	0.62	0.22		0.11	0.27	0.45	0.54	0.54	0.20	
	50	0.11	0.27	0.45	0.66	0.19			50	0.09	0.24	0.39	0.62	0.22		0.17	0.31	0.46	0.54	0.54	0.20	
	60	0.17	0.36	0.51	0.57	0.18			60	0.14	0.31	0.46	0.54	0.20		0.21	0.38	0.46	0.54	0.54	0.20	
	70	0.21	0.38	-	0.44	0.16			70	0.17	0.33	-	0.41	0.19		0.21	0.38	-	0.41	0.41	0.19	
	80	0.21	-	-	0.29	0.13			80	0.18	-	-	0.28	0.17		0.21	-	-	0.28	0.28	0.17	
White	0	0.00	0.00	0.01	0.73	0.19		American	0	0.00	0.00	0.01	0.47	0.17		0.00	0.00	0.01	0.47	0.47	0.17	
	10	0.00	0.01	0.03	0.74	0.19		Indian/	10	0.00	0.01	0.02	0.47	0.17		0.01	0.02	0.04	0.47	0.47	0.17	
	20	0.01	0.03	0.07	0.73	0.19		Alaska	20	0.01	0.02	0.06	0.48	0.17		0.02	0.05	0.12	0.47	0.47	0.17	
	30	0.02	0.07	0.18	0.73	0.19		Native ^a	30	0.01	0.05	0.12	0.47	0.17		0.03	0.11	0.26	0.47	0.47	0.18	
	40	0.05	0.16	0.32	0.72	0.19			40	0.03	0.11	0.26	0.47	0.18		0.11	0.23	0.32	0.45	0.45	0.18	
	50	0.11	0.28	0.47	0.68	0.19			50	0.08	0.23	0.32	0.45	0.18		0.16	0.25	0.38	0.39	0.39	0.17	
	60	0.17	0.38	0.54	0.59	0.18			60	0.10	0.24	-	0.25	0.17		0.10	0.24	-	0.25	0.25	0.16	
	70	0.22	0.40	-	0.46	0.16			70	0.10	0.24	-	0.25	0.16		0.17	-	-	0.25	0.25	0.16	
	80	0.22	-	-	0.30	0.13			80	0.17	-	-	0.19	0.16		0.17	-	-	0.19	0.19	0.16	
Black	0	0.00	0.00	0.01	0.49	0.15		Hispanic ^b	0	0.00	0.00	0.01	0.54	0.15		0.00	0.00	0.01	0.54	0.54	0.15	
	10	0.00	0.01	0.03	0.50	0.15			10	0.00	0.01	0.02	0.55	0.15		0.01	0.02	0.05	0.55	0.55	0.15	
	20	0.01	0.03	0.07	0.49	0.15			20	0.01	0.02	0.05	0.54	0.15		0.01	0.04	0.10	0.54	0.54	0.15	
	30	0.02	0.06	0.16	0.49	0.15			30	0.01	0.04	0.10	0.54	0.15		0.03	0.09	0.19	0.53	0.53	0.15	
	40	0.04	0.14	0.26	0.48	0.15			40	0.03	0.09	0.19	0.53	0.15		0.13	0.23	0.31	0.51	0.51	0.15	
	50	0.10	0.23	0.33	0.45	0.15			50	0.06	0.16	0.31	0.51	0.15		0.11	0.26	0.39	0.46	0.46	0.15	
	60	0.13	0.25	0.34	0.37	0.13			60	0.11	0.26	0.39	0.46	0.15		0.16	0.31	-	0.38	0.38	0.13	
	70	0.13	0.23	-	0.27	0.11			70	0.16	0.31	-	0.38	0.13		0.18	-	-	0.26	0.26	0.11	
	80	0.13	-	-	0.18	0.09			80	0.18	-	-	0.26	0.13		0.18	-	-	0.26	0.26	0.11	

Devcan 6.7.8, April 2020, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). 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 PRCD(A(Purchased/Referred Care Delivery Areas) 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 21 Areas ^b			SEER 21 Areas ^b			SEER 9 Areas ^b		
	Rate 2013-2017			Trend 2008-2017 ^c			Trend 2008-2017 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
Race/Ethnicity	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	11.4	17.2	6.4	0.4	0.6*	0.2*	0.8*	0.9*	0.8*
White	12.0	18.1	6.6	0.6	1.0*	0.4*	1.1*	1.0*	0.8*
White Hispanic ^e	7.0	10.1	4.3	-1.2*	-0.5	0.1	-	-	-
White Non-Hispanic ^e	13.0	19.6	7.1	1.2*	1.3*	0.6*	-	-	-
Black	8.5	13.3	4.9	-1.7*	-2.1*	-1.1*	-2.3*	-0.8	-1.6*
Asian/Pacific Islander	8.5	12.1	5.5	0.0	0.2	-0.3	-	-	-
Amer Ind/Alaska Nat ^f	8.1	11.7	4.9	0.5	0.7	-0.5	-	-	-
Hispanic ^e	6.8	10.0	4.2	-0.2	-0.5	0.1	-	-	-
<u>U.S. Mortality^g</u>									
	Rate 2013-2017			Trend 2008-2017 ^h					
	Rate per 100,000 persons			AAPC (%)					
Race/Ethnicity	Total	Males	Females	Total	Males	Females			
All Races	2.5	3.9	1.3	0.5*	0.7*	-0.2			
White	2.5	3.9	1.4	0.9*	1.1*	0.2			
White Hispanic ^e	1.6	2.6	0.8	-0.4	0.4	0.0			
White Non-Hispanic ^e	2.6	4.0	1.4	1.0*	1.3*	0.3			
Black	2.7	4.5	1.3	-2.8*	-3.0*	-2.2*			
Asian/Pacific Islander	2.0	3.1	1.1	0.5	1.3	-1.5*			
Amer Ind/Alaska Nat									
Total U.S.	1.5	2.4	0.8	-2.5*	-2.4*	-3.9*			
PRCDA Counties	2.2	3.5	1.1	-0.8	-0.6	-2.6			
Non-PRCDA Counties	0.8	1.2	0.5	-5.0*	-5.2*	-5.5*			
Hispanic ^e	1.5	2.4	0.8	-0.6*	0.4	-0.1			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

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

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

^b 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).

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

^d The SEER 21 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts.

^e The 2008-2017 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 2000-2017.

^f The 2008-2017 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2017.

^g 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.

^h f Incidence data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

^{*} g US Mortality Files, National Center for Health Statistics, CDC.

^{*} h The 2008-2017 mortality AAPCs are based on a Joinpoint analysis using years of death 2000-2017.

^{*} * 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>2013-2017, Rate per 100,000 persons^b</u>										
All Races										
Male and Female	11.4	0.6	3.5	0.5	1.5	2.5	0.6	1.3	0.6	0.3
Male	17.2	1.0	5.3	0.7	1.9	4.3	1.0	1.7	0.9	0.5
Female	6.4	0.3	1.9	0.3	1.3	0.9	0.2	1.0	0.3	0.1
White										
Male and Female	12.0	0.7	3.9	0.5	1.6	2.8	0.5	1.3	0.4	0.3
Male	18.1	1.1	5.9	0.7	1.9	4.7	0.9	1.8	0.5	0.5
Female	6.6	0.4	2.1	0.3	1.3	1.0	0.2	1.0	0.2	0.1
Black										
Male and Female	8.5	0.1	1.9	0.4	1.2	2.1	0.8	1.1	0.7	0.2
Male	13.3	0.1	3.2	0.7	1.5	3.8	1.4	1.1	1.0	0.4
Female	4.9	0.0	1.0	0.2	1.0	0.8	0.3	1.1	0.3	0.1
<u>Trend 2008-2017^b, APC(%)</u>										
All Races										
Male and Female	0.5*	-1.0	1.4*	-3.7*	-0.2	2.1*	-2.5*	0.0	-0.9	2.4
Male	0.6*	-1.4	1.4*	-3.7*	0.0	2.3*	-2.7*	-0.6	-0.5	2.9
Female	0.1	-0.3	1.2*	-3.7*	-0.5	1.1	-2.3	0.6	-1.9*	0.4
White										
Male and Female	0.6*	-0.9	1.7*	-3.7*	-0.3	2.4*	-2.5*	-0.4	-2.0*	3.5*
Male	0.8*	-1.3	1.8*	-3.8*	-0.2	2.6*	-2.5*	-0.7	-1.6*	3.9*
Female	0.2	0.0	1.4*	-3.5*	-0.4	1.3*	-3.2	0.0	-3.0*	1.8
Black										
Male and Female	-1.2*	-5.3	-2.1*	-4.4*	-1.6	0.2	-3.1*	1.0	0.1	-3.6
Male	-1.3*	-4.2	-1.8*	-4.1*	-1.6	0.6	-4.2*	-0.4	0.1	-2.5
Female	-1.0	-5.3	-2.7*	-4.7	-1.6	-0.8	1.6	2.0	-0.6	-6.2

^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).

Incidence data used in calculating the rates and trends are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

⁻ 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>2013-2017, Rate per 100,000 persons</u>										
All Races										
Male and Female	2.5	0.0	0.7	0.0	0.4	0.5	0.1	0.3	0.2	0.4
Male	3.9	0.0	1.0	0.0	0.5	0.9	0.2	0.4	0.3	0.7
Female	1.3	0.0	0.4	0.0	0.3	0.2	0.0	0.1	0.1	0.2
White										
Male and Female	2.5	0.0	0.7	0.0	0.4	0.5	0.1	0.3	0.1	0.4
Male	3.9	0.0	1.0	0.0	0.5	0.9	0.2	0.4	0.2	0.7
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	2.7	-	0.5	0.0	0.3	0.6	0.2	0.2	0.2	0.6
Male	4.5	-	0.8	0.1	0.5	1.1	0.3	0.3	0.4	1.1
Female	1.3	-	0.3	-	0.2	0.3	0.0	0.2	0.1	0.2
<u>Trend 2008-2017 , APC(%)</u>										
All Races										
Male and Female	0.6*	-1.2	1.5*	-3.4*	0.6	2.8*	1.4	1.3*	-0.9	-2.5*
Male	0.9*	-1.9	1.8*	-2.7	1.1	3.1*	1.9*	1.5*	-0.6*	-2.6*
Female	-0.1	-0.2	0.9	-5.4	-0.1	1.5*	-1.2	0.9	-1.7	-2.8*
White										
Male and Female	1.0*	-1.3	2.0*	-3.8*	0.7	3.4*	1.5	1.5*	-1.3*	-2.2*
Male	1.3*	-2.4	2.4*	-3.0	1.2	3.7*	1.9*	1.7*	-1.2*	-2.2*
Female	0.2	0.8	1.1	-5.8	0.0	2.1*	-1.1	0.8	-1.4	-2.6*
Black										
Male and Female	-1.7*	-	-1.7	-	-0.9	-0.8	0.7	0.3	-1.4	-4.5*
Male	-2.0*	-	-2.3*	-	-1.6	-0.7	2.7	-0.9	-0.1	-5.1*
Female	-1.4	-	-0.8	-	0.3	-1.0	-	1.4	-4.0*	-3.5

^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, 2013-2017</u>									
California	10.21	15.49	5.60	10.85	16.53	5.77	7.70	11.65	4.41
Greater Bay Area	10.17	14.98	5.91	10.81	16.35	5.73	8.45	13.43	4.28
San Francisco-Oakland	10.46	15.46	6.05	11.10	16.71	5.92	8.87	14.20	4.56
San Jose-Monterey	9.62	14.10	5.65	10.30	15.70	5.41	6.12	9.35	-
Los Angeles	8.77	13.32	4.91	9.29	13.95	5.22	7.84	12.24	4.38
Greater California	10.89	16.62	5.81	11.47	17.57	6.00	7.30	10.44	4.54
Connecticut	11.90	17.30	7.22	12.20	17.64	7.42	8.25	13.32	4.57
Detroit	12.69	19.70	6.75	13.22	20.35	6.90	11.31	18.17	6.37
Georgia	12.63	19.45	6.89	14.08	21.53	7.45	8.96	13.65	5.45
Atlanta	10.83	16.74	6.08	12.62	19.05	6.99	7.96	12.63	4.68
Rural Georgia	13.60	22.91	5.14	15.09	25.07	5.43	10.46	18.04	-
Greater Georgia	13.54	20.72	7.37	14.64	22.43	7.69	9.77	14.36	6.19
Hawaii	13.22	18.82	8.11	18.62	26.81	9.55	-	-	-
Idaho	12.26	17.84	7.14	12.11	17.66	7.01	-	-	-
Iowa	13.29	19.89	7.25	13.27	19.89	7.21	9.36	15.07	-
Kentucky	14.14	21.51	7.70	14.37	21.81	7.83	8.59	14.56	3.92
Louisiana	13.22	20.47	6.99	14.41	21.94	7.68	10.27	16.74	5.23
Massachusetts	11.95	17.68	7.01	12.14	17.96	7.10	7.69	12.67	3.94
New Jersey	11.05	16.78	6.24	11.50	17.40	6.44	8.08	12.79	4.69
New Mexico	8.73	13.57	4.48	9.13	14.08	4.74	-	-	-
New York	11.12	16.67	6.48	11.69	17.49	6.68	7.73	11.85	4.83
Seattle-Puget Sound	13.31	19.67	7.61	13.93	20.61	7.84	7.84	11.59	3.76
Utah	9.62	13.77	5.80	9.64	13.80	5.81	-	-	-
SEER 9 Areas ^b	11.69	17.45	6.64	12.27	18.31	6.81	8.97	14.24	4.98
SEER 13 Areas ^b	10.94	16.36	6.20	11.54	17.26	6.39	8.68	13.71	4.81
SEER 18 Areas ^b	11.41	17.27	6.32	12.04	18.21	6.53	8.83	13.76	5.00
SEER 21 Areas ^b	11.40	17.19	6.40	11.99	18.06	6.61	8.52	13.26	4.92

^a Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)
 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.
 The SEER 21 areas comprise the SEER 18 areas plus Idaho, New York and Massachusetts.
 - 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, 2013-2017</u>									
California	2.45	3.83	1.31	2.55	3.98	1.34	2.37	3.53	1.46
Greater Bay Area	2.13	3.34	1.12	2.16	3.43	1.09	2.56	4.41	1.12
San Francisco-Oakland	2.16	3.41	1.15	2.10	3.32	1.07	2.49	4.18	-
San Jose-Monterey	2.05	3.21	1.08	2.26	3.60	1.13	-	-	-
Los Angeles	2.27	3.49	1.29	2.33	3.54	1.32	2.45	3.46	1.75
Greater California	2.65	4.14	1.38	2.75	4.30	1.42	2.20	3.14	1.36
Connecticut	1.86	2.96	0.97	1.87	2.98	0.96	1.53	2.66	-
Detroit	2.50	3.99	1.32	2.39	3.74	1.28	2.91	5.01	1.46
Georgia	2.75	4.14	1.58	2.75	4.12	1.54	2.77	4.32	1.64
Atlanta	2.38	3.54	1.43	2.38	3.37	1.49	2.33	3.81	1.31
Rural Georgia	4.00	6.75	-	4.01	6.66	-	-	-	-
Greater Georgia	2.91	4.39	1.65	2.88	4.37	1.56	3.08	4.59	1.93
Hawaii	2.83	4.05	1.79	4.00	5.70	2.24	-	-	-
Idaho	2.30	3.29	1.42	2.29	3.31	1.37	-	-	-
Iowa	2.59	4.01	1.31	2.60	4.07	1.27	-	-	-
Kentucky	3.10	4.89	1.61	3.18	5.03	1.64	2.11	3.29	-
Louisiana	3.17	5.19	1.51	2.96	4.77	1.45	3.68	6.33	1.65
Massachusetts	2.30	3.49	1.33	2.33	3.46	1.39	1.80	3.52	-
New Jersey	1.99	3.17	1.05	1.98	3.11	1.06	2.20	3.72	1.16
New Mexico	2.34	3.60	1.26	2.44	3.76	1.29	-	-	-
New York	2.15	3.40	1.14	2.16	3.39	1.13	2.05	3.39	1.14
Seattle-Puget Sound	2.56	3.80	1.50	2.61	3.90	1.49	2.03	2.76	-
Utah	1.74	2.49	1.04	1.73	2.47	1.05	-	-	-
SEER 9 Areas ^b	2.31	3.55	1.27	2.31	3.54	1.24	2.36	3.92	1.23
SEER 13 Areas ^b	2.29	3.53	1.27	2.30	3.54	1.25	2.42	3.91	1.35
SEER 18 Areas ^b	2.48	3.85	1.33	2.50	3.89	1.32	2.63	4.21	1.44
SEER 21 Areas ^b	2.40	3.74	1.29	2.42	3.76	1.29	2.45	3.99	1.33
Total U.S.	2.52	3.92	1.34	2.52	3.89	1.35	2.65	4.51	1.28

^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).

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.

The SEER 21 areas comprise the SEER 18 areas plus Idaho, New York and Massachusetts.

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

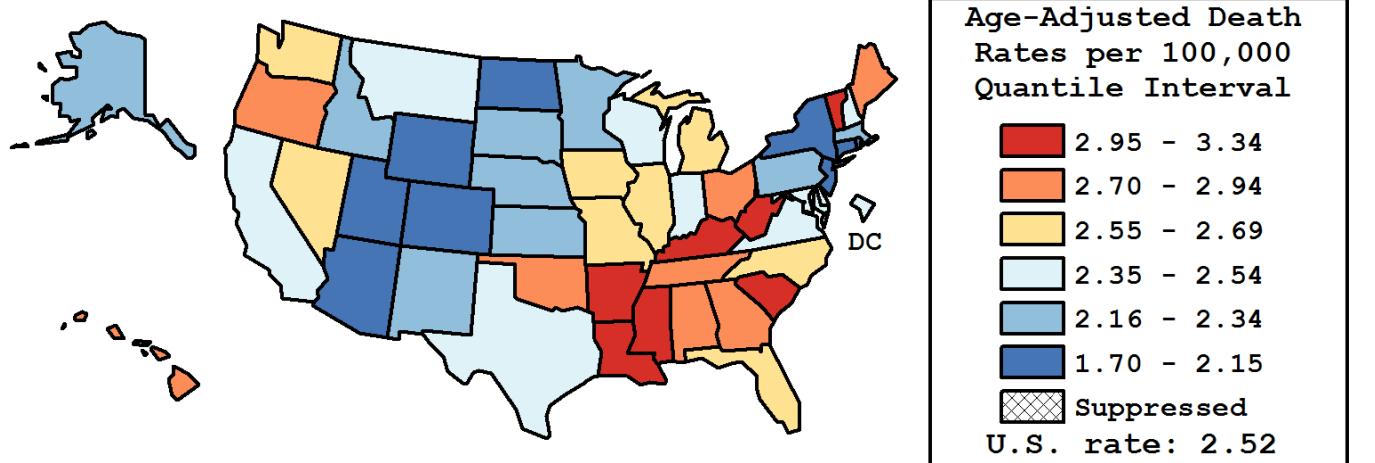
Table 20.24
Cancer of the Oral Cavity and Pharynx (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2013-2017

Males and Females

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	2.52	0.01							
High Five States									
Mississippi	3.34	0.14	01(01,08)	32.77 ^c					
Louisiana	3.17	0.11	02(01,11)	25.80 ^c					
Arkansas	3.15	0.13	03(01,14)	25.27 ^c					
Kentucky	3.10	0.11	04(01,14)	23.14 ^c					
South Carolina	3.03	0.10	05(01,15)	20.54 ^c					
Low Five States									
New Jersey	1.99	0.06	47(40,50)	-21.04 ^c					
Colorado	1.99	0.08	48(38,51)	-21.04 ^c					
Connecticut	1.86	0.09	49(42,51)	-26.06 ^c					
Utah	1.74	0.12	50(43,51)	-30.99 ^c					
Rhode Island	1.70	0.16	51(40,51)	-32.58 ^c					

Alabama	2.85	0.10	09(03,25)	13.14	Montana	2.43	0.19	33(05,49)	-3.40
Alaska	2.20	0.27	42(05,51)	-12.76	Nebraska	2.23	0.14	40(18,49)	-11.32
Arizona	2.03	0.07	46(39,50)	-19.50 ^c	Nevada	2.65	0.13	20(05,40)	5.48
Arkansas	3.15	0.13	03(01,14)	25.27 ^c	New Hampshire	2.46	0.17	29(06,47)	-2.39
California	2.45	0.03	31(23,37)	-2.53	New Jersey	1.99	0.06	47(40,50)	-21.04 ^c
Colorado	1.99	0.08	48(38,51)	-21.04 ^c	New Mexico	2.34	0.14	34(13,48)	-6.83
Connecticut	1.86	0.09	49(42,51)	-26.06 ^c	New York	2.15	0.04	43(36,47)	-14.58
Delaware	2.54	0.21	25(03,48)	0.81	North Carolina	2.59	0.07	23(11,35)	2.77
D.C.	2.54	0.28	24(01,50)	1.01	North Dakota	2.11	0.23	45(10,51)	-16.04 ^c
Florida	2.69	0.04	16(09,26)	7.06	Ohio	2.73	0.06	14(07,26)	8.38
Georgia	2.75	0.07	13(06,27)	9.14	Oklahoma	2.79	0.11	12(03,31)	10.88
Hawaii	2.83	0.18	10(01,38)	12.40	Oregon	2.81	0.11	11(03,29)	11.60
Idaho	2.30	0.16	37(11,49)	-8.48	Pennsylvania	2.31	0.05	36(28,43)	-8.24
Illinois	2.62	0.06	21(10,32)	4.08	Rhode Island	1.70	0.16	51(40,51)	-32.58 ^c
Indiana	2.45	0.08	30(16,42)	-2.49	South Carolina	3.03	0.10	05(01,15)	20.54 ^c
Iowa	2.59	0.12	22(07,40)	2.91	South Dakota	2.20	0.21	41(08,51)	-12.39
Kansas	2.30	0.12	39(18,48)	-8.71	Tennessee	2.94	0.09	08(02,18)	16.91 ^c
Kentucky	3.10	0.11	04(01,14)	23.14 ^c	Texas	2.54	0.04	26(17,34)	0.80
Louisiana	3.17	0.11	02(01,11)	25.80 ^c	Utah	1.74	0.12	50(43,51)	-30.99 ^c
Maine	2.70	0.17	15(02,41)	7.28	Vermont	3.01	0.27	06(01,41)	19.62 ^c
Maryland	2.49	0.09	27(14,41)	-1.20	Virginia	2.47	0.07	28(16,40)	-1.71
Massachusetts	2.30	0.07	38(25,45)	-8.65	Washington	2.67	0.08	19(07,31)	6.08
Michigan	2.68	0.07	17(08,29)	6.58	West Virginia	2.96	0.16	07(01,27)	17.53 ^c
Minnesota	2.32	0.09	35(23,45)	-7.84	Wisconsin	2.45	0.08	32(16,42)	-2.58
Mississippi	3.34	0.14	01(01,08)	32.77 ^c	Wyoming	2.12	0.26	44(06,51)	-15.87 ^c
Missouri	2.68	0.09	18(07,32)	6.37					



^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 ($p \leq .0002$).

^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.

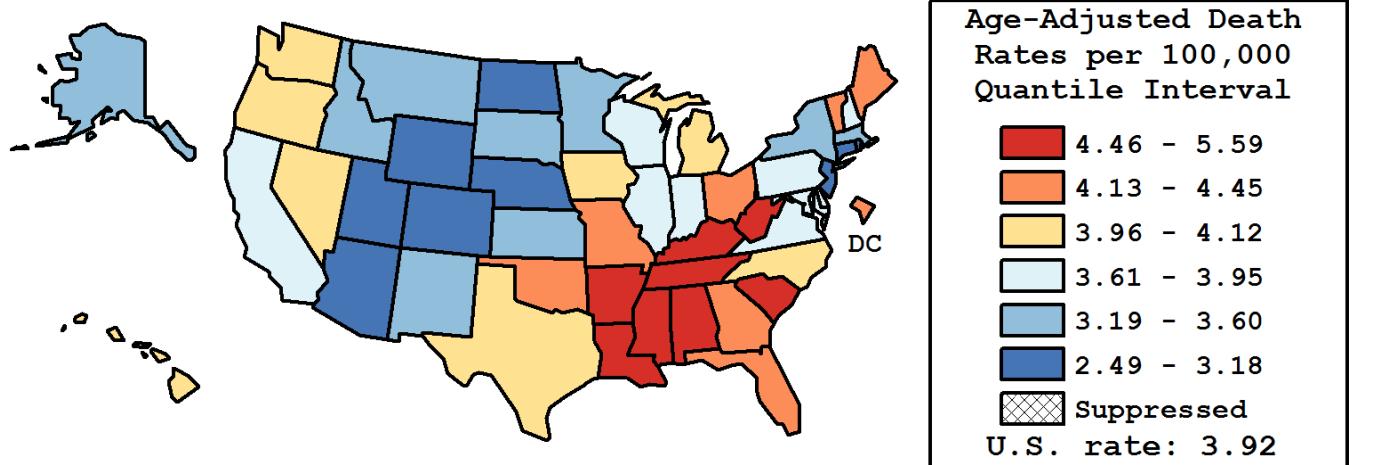
PD Percent difference between state rate and total U.S. rate.

- 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, 2013-2017

Males									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	3.92	0.02							
High Five States									
Mississippi	5.59	0.27	01(01,07)	42.74 ^c					
Louisiana	5.19	0.21	02(01,09)	32.47 ^c					
Arkansas	5.04	0.25	03(01,13)	28.78 ^c					
Kentucky	4.89	0.21	04(01,14)	24.90 ^c					
South Carolina	4.82	0.19	05(01,14)	23.13 ^c					
Low Five States									
Colorado	2.98	0.15	47(37,51)	-23.85 ^c					
Connecticut	2.96	0.17	48(37,51)	-24.37 ^c					
North Dakota	2.74	0.38	49(24,51)	-29.96 ^c					
Rhode Island	2.65	0.30	50(34,51)	-32.23 ^c					
Utah	2.49	0.21	51(43,51)	-36.44 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	4.74	0.19	06(02,17)	21.08 ^c	Montana	3.53	0.34	36(07,50)	-9.77
Alaska	3.21	0.46	42(06,51)	-18.11 ^c	Nebraska	3.18	0.25	43(22,51)	-18.73 ^c
Arizona	3.13	0.13	45(35,50)	-19.97 ^c	Nevada	4.07	0.23	20(06,41)	3.83
Arkansas	5.04	0.25	03(01,13)	28.78 ^c	New Hampshire	3.85	0.31	29(05,47)	-1.62
California	3.83	0.06	30(20,36)	-2.32	New Jersey	3.17	0.12	44(35,49)	-19.18 ^c
Colorado	2.98	0.15	47(37,51)	-23.85 ^c	New Mexico	3.60	0.25	34(10,48)	-8.07
Connecticut	2.96	0.17	48(37,51)	-24.37 ^c	New York	3.40	0.08	40(32,45)	-13.21
Delaware	3.90	0.38	26(03,48)	-0.30	North Carolina	4.12	0.13	17(08,32)	5.22
D.C.	4.19	0.56	13(01,50)	6.86	North Dakota	2.74	0.38	49(24,51)	-29.96 ^c
Florida	4.24	0.08	12(08,24)	8.24	Ohio	4.28	0.12	10(07,26)	9.22
Georgia	4.14	0.14	16(08,33)	5.70	Oklahoma	4.27	0.21	11(04,34)	9.11
Hawaii	4.05	0.32	21(03,44)	3.35	Oregon	4.09	0.19	19(07,37)	4.42
Idaho	3.29	0.28	41(15,51)	-16.02 ^c	Pennsylvania	3.67	0.10	33(21,41)	-6.17
Illinois	3.95	0.11	25(12,35)	0.99	Rhode Island	2.65	0.30	50(34,51)	-32.23 ^c
Indiana	3.85	0.15	28(11,40)	-1.61	South Carolina	4.82	0.19	05(01,14)	23.13 ^c
Iowa	4.01	0.21	23(06,40)	2.41	South Dakota	3.54	0.40	35(06,51)	-9.49
Kansas	3.49	0.21	38(16,49)	-10.94	Tennessee	4.63	0.16	08(02,18)	18.31 ^c
Kentucky	4.89	0.21	04(01,14)	24.90 ^c	Texas	4.01	0.08	24(12,32)	2.34
Louisiana	5.19	0.21	02(01,09)	32.47 ^c	Utah	2.49	0.21	51(43,51)	-36.44 ^c
Maine	4.18	0.31	14(03,42)	6.78	Vermont	4.45	0.49	09(01,44)	13.65
Maryland	3.89	0.16	27(10,40)	-0.78	Virginia	3.77	0.13	31(15,41)	-3.86
Massachusetts	3.49	0.14	39(24,46)	-10.98	Washington	4.02	0.15	22(08,36)	2.55
Michigan	4.11	0.12	18(08,32)	4.97	West Virginia	4.64	0.29	07(01,29)	18.47 ^c
Minnesota	3.50	0.15	37(23,46)	-10.60	Wisconsin	3.76	0.15	32(14,42)	-4.08
Mississippi	5.59	0.27	01(01,07)	42.74 ^c	Wyoming	3.02	0.45	46(09,51)	-22.97 ^c
Missouri	4.15	0.16	15(07,33)	6.07					



^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 ($p \leq .0002$).

^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.

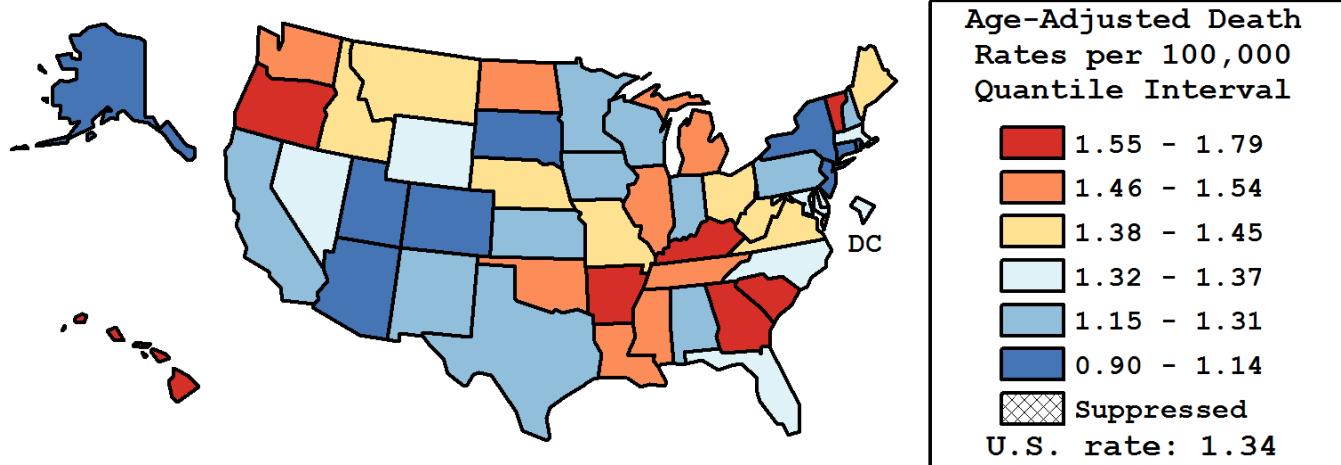
PD Percent difference between state rate and total U.S. rate.

- 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, 2013-2017

Females									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	1.34	0.01							
High Five States									
Hawaii	1.79	0.20	01(01,37)	33.79 ^c					
Vermont	1.72	0.28	02(01,49)	28.32 ^c					
Oregon	1.68	0.11	03(01,27)	25.80 ^c					
Kentucky	1.61	0.11	04(01,32)	20.45 ^c					
Georgia	1.58	0.07	05(01,27)	17.94 ^c					
Low Five States									
South Dakota	1.05	0.20	47(03,51)	-21.34 ^c					
New Jersey	1.05	0.06	48(37,51)	-21.82 ^c					
Utah	1.04	0.13	49(18,51)	-21.88 ^c					
Connecticut	0.97	0.09	50(37,51)	-27.75 ^c					
Rhode Island	0.90	0.15	51(26,51)	-32.67 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	1.31	0.09	34(07,47)	-2.28	Montana	1.38	0.20	23(01,51)	2.96
Alaska	1.14	0.28	44(01,51)	-14.76	Nebraska	1.39	0.15	21(01,49)	3.81
Arizona	1.05	0.07	46(34,51)	-21.33 ^c	Nevada	1.35	0.13	27(02,49)	1.22
Arkansas	1.56	0.13	07(01,40)	16.51 ^c	New Hampshire	1.23	0.17	41(02,51)	-8.05
California	1.31	0.03	33(19,41)	-2.20	New Jersey	1.05	0.06	48(37,51)	-21.82 ^c
Colorado	1.12	0.09	45(24,51)	-16.54 ^c	New Mexico	1.26	0.14	40(04,51)	-6.03
Connecticut	0.97	0.09	50(37,51)	-27.75 ^c	New York	1.14	0.04	43(33,49)	-14.51
Delaware	1.36	0.21	26(01,51)	1.75	North Carolina	1.35	0.07	28(09,43)	0.70
D.C.	1.35	0.27	29(01,51)	0.58	North Dakota	1.54	0.27	08(01,51)	15.38 ^c
Florida	1.37	0.04	24(12,39)	2.19	Ohio	1.43	0.06	18(05,37)	6.98
Georgia	1.58	0.07	05(01,27)	17.94 ^c	Oklahoma	1.49	0.11	13(01,42)	11.63
Hawaii	1.79	0.20	01(01,37)	33.79 ^c	Oregon	1.68	0.11	03(01,27)	25.80 ^c
Idaho	1.42	0.17	19(01,50)	5.86	Pennsylvania	1.19	0.05	42(27,48)	-11.35
Illinois	1.51	0.06	11(02,30)	13.21	Rhode Island	0.90	0.15	51(26,51)	-32.67 ^c
Indiana	1.29	0.08	37(10,47)	-3.52	South Carolina	1.57	0.10	06(01,35)	17.21 ^c
Iowa	1.31	0.11	35(04,49)	-2.33	South Dakota	1.05	0.20	47(03,51)	-21.34 ^c
Kansas	1.30	0.12	36(04,50)	-2.79	Tennessee	1.52	0.08	10(01,36)	13.29
Kentucky	1.61	0.11	04(01,32)	20.45 ^c	Texas	1.29	0.04	38(18,43)	-3.59
Louisiana	1.51	0.10	12(01,40)	12.60	Utah	1.04	0.13	49(18,51)	-21.88 ^c
Maine	1.41	0.16	20(01,49)	5.46	Vermont	1.72	0.28	02(01,49)	28.32 ^c
Maryland	1.36	0.09	25(05,45)	1.99	Virginia	1.38	0.07	22(06,43)	2.96
Massachusetts	1.33	0.08	30(08,45)	-0.84	Washington	1.52	0.08	09(02,35)	13.32
Michigan	1.47	0.07	15(03,36)	9.87	West Virginia	1.45	0.15	16(01,47)	8.22
Minnesota	1.27	0.09	39(11,48)	-4.84	Wisconsin	1.31	0.08	32(08,46)	-2.01
Mississippi	1.48	0.12	14(01,44)	10.36	Wyoming	1.32	0.29	31(01,51)	-1.20
Missouri	1.43	0.08	17(03,40)	7.03					



^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 ($p \leq .0002$).

^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, 2017
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 ^b	> 25 ^d	Complete ^e
Race	Sex								
All Races	Both Sexes	142,423	86,829	54,304	34,031	21,157	338,744	44,671	383,415
	Males	100,634	59,611	36,476	22,012	12,660	231,393	28,184	259,578
	Females	41,789	27,218	17,828	12,019	8,497	107,350	16,487	123,837
White	Both Sexes	123,336	75,584	47,130	29,262	18,188	293,500	37,477	330,977
	Males	88,047	52,661	32,186	19,319	11,021	203,234	23,696	226,930
	Females	35,290	22,923	14,945	9,943	7,167	90,266	13,781	104,048
Black	Both Sexes	10,449	6,031	3,684	2,563	1,566	24,293	2,221	26,514
	Males	7,180	3,746	2,172	1,407	827	15,332	1,165	16,497
	Females	3,270	2,285	1,512	1,155	739	8,961	1,055	10,017
Asian/ Pacific	Both Sexes	5,720	3,471	2,366	1,510	894	13,961	+	+
	Males	3,474	2,117	1,394	861	512	8,357	+	+
Islander	Females	2,246	1,355	973	649	382	5,604	+	+
Hispanic	Both Sexes	8,309	4,940	2,868	1,786	1,126	19,029	+	+
	Males	5,476	2,992	1,745	1,070	534	11,817	+	+
	Females	2,833	1,948	1,123	715	592	7,212	+	+

Estimated prevalence percent^a on January 1, 2017, of the SEER population diagnosed in the previous 25 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	All Ages	Age Specific (Crude)								Age-Adjusted ^c All Ages		
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79			
Race	Sex											
All Races	Both Sexes	0.1045	0.0003	0.0025	0.0067	0.0169	0.0501	0.1537	0.3084	0.3952	0.3656	0.0859
	Males	0.1450	0.0004	0.0023	0.0063	0.0166	0.0615	0.2236	0.4756	0.6049	0.5471	0.1255
	Females	0.0653	0.0003	0.0027	0.0071	0.0171	0.0389	0.0868	0.1571	0.2197	0.2525	0.0522
White	Both Sexes	0.1160	0.0004	0.0024	0.0062	0.0163	0.0495	0.1599	0.3250	0.4171	0.3861	0.0895
	Males	0.1621	0.0004	0.0021	0.0056	0.0159	0.0612	0.2347	0.5020	0.6360	0.5754	0.1310
	Females	0.0707	0.0003	0.0026	0.0069	0.0167	0.0378	0.0868	0.1611	0.2299	0.2661	0.0532
Black	Both Sexes	0.0533	0.0003	0.0028	0.0080	0.0142	0.0383	0.1065	0.2014	0.2353	0.1727	0.0553
	Males	0.0701	0.0005	0.0026	0.0090	0.0142	0.0443	0.1487	0.3041	0.3754	0.2772	0.0800
	Females	0.0378	-	0.0029	0.0070	0.0142	0.0330	0.0698	0.1193	0.1373	0.1205	0.0370
Asian/ Pacific	Both Sexes	0.0669	-	0.0023	0.0064	0.0235	0.0632	0.1335	0.2133	0.2487	0.2397	0.0675
	Males	0.0836	-	0.0024	0.0071	0.0254	0.0775	0.1768	0.3021	0.3448	0.3145	0.0895
Islander	Females	0.0516	-	0.0022	0.0058	0.0217	0.0506	0.0960	0.1417	0.1717	0.1910	0.0496
Hispanic	Both Sexes	0.0327	0.0005	0.0020	0.0047	0.0104	0.0287	0.0735	0.1541	0.2109	0.2352	0.0469
	Males	0.0402	0.0007	0.0020	0.0044	0.0096	0.0326	0.0997	0.2200	0.2972	0.3345	0.0636
	Females	0.0251	0.0003	0.0020	0.0050	0.0112	0.0247	0.0475	0.0955	0.1443	0.1737	0.0332

^a US 2017 cancer prevalence counts are based on 2017 cancer prevalence proportions from the SEER 13 Areas (excluding the Alaska Native Registry) and 1/1/2017 US population estimates based on the average of 2016 and 2017 population estimates from the US Bureau of the Census.

^b Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 25 years.

^c Maximum limited-duration prevalence is 25 years for 1992-2017 data.

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

^e Cases diagnosed more than 25 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

- Complete prevalence is obtained by summing <=25 and > 25.

+ 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, 2013-2017
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)	65,066	85.7%	3,853	94.6%	23,258	97.8%	1,768	21.5%	3,023	95.6%
Squamous cell carcinoma (8070-8078,8083-8084)	63,615	83.7%	3,630	89.1%	22,916	96.4%	1,683	20.4%	2,981	94.3%
Adenocarcinoma ^c	7,410	9.8%	162	4.0%	272	1.1%	5,166	62.7%	114	3.6%
Other specific carcinomas ^d	700	0.9%	-	-	60	0.3%	431	5.2%	-	-
Unspecified, Carcinoma, NOS (8010-8011,8020-8022)	1,912	2.5%	-	-	102	0.4%	543	6.6%	-	-
Sarcoma and soft tissue ^e	222	0.3%	-	-	34	0.1%	46	0.6%	-	-
Other specific types ^f	395	0.5%	29	0.7%	-	-	204	2.5%	-	-
Unspecified (8000-8005)	256	0.3%	-	-	47	0.2%	75	0.9%	-	-
Total	75,961	100.0%	4,074	100.0%	23,784	100.0%	8,233	100.0%	3,161	100.0%
Other										
Histology ^a	Gum and Other Mouth		Nasopharynx		Oropharynx and Tonsil		Hypopharynx		Oral Cavity and Pharynx	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Epidermoid carcinoma ^b (8051-8131)	8,346	82.7%	2,652	68.1%	17,005	98.3%	3,674	97.1%	1,487	90.5%
Squamous cell carcinoma (8070-8078,8083-8084)	7,922	78.5%	2,511	64.5%	16,854	97.4%	3,642	96.2%	1,476	89.8%
Adenocarcinoma ^c	1,420	14.1%	127	3.3%	98	0.6%	25	0.7%	26	1.6%
Other specific carcinomas ^d	50	0.5%	45	1.2%	54	0.3%	31	0.8%	16	1.0%
Unspecified, Carcinoma, NOS (8010-8011,8020-8022)	79	0.8%	1,002	25.7%	82	0.5%	27	0.7%	60	3.6%
Sarcoma and soft tissue ^e	47	0.5%	42	1.1%	20	0.1%	16	0.4%	-	-
Other specific types ^f	118	1.2%	-	-	-	-	-	-	-	-
Unspecified (8000-8005)	26	0.3%	-	-	31	0.2%	-	-	41	2.5%
Total	10,086	100.0%	3,896	100.0%	17,298	100.0%	3,785	100.0%	1,644	100.0%

Source: SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

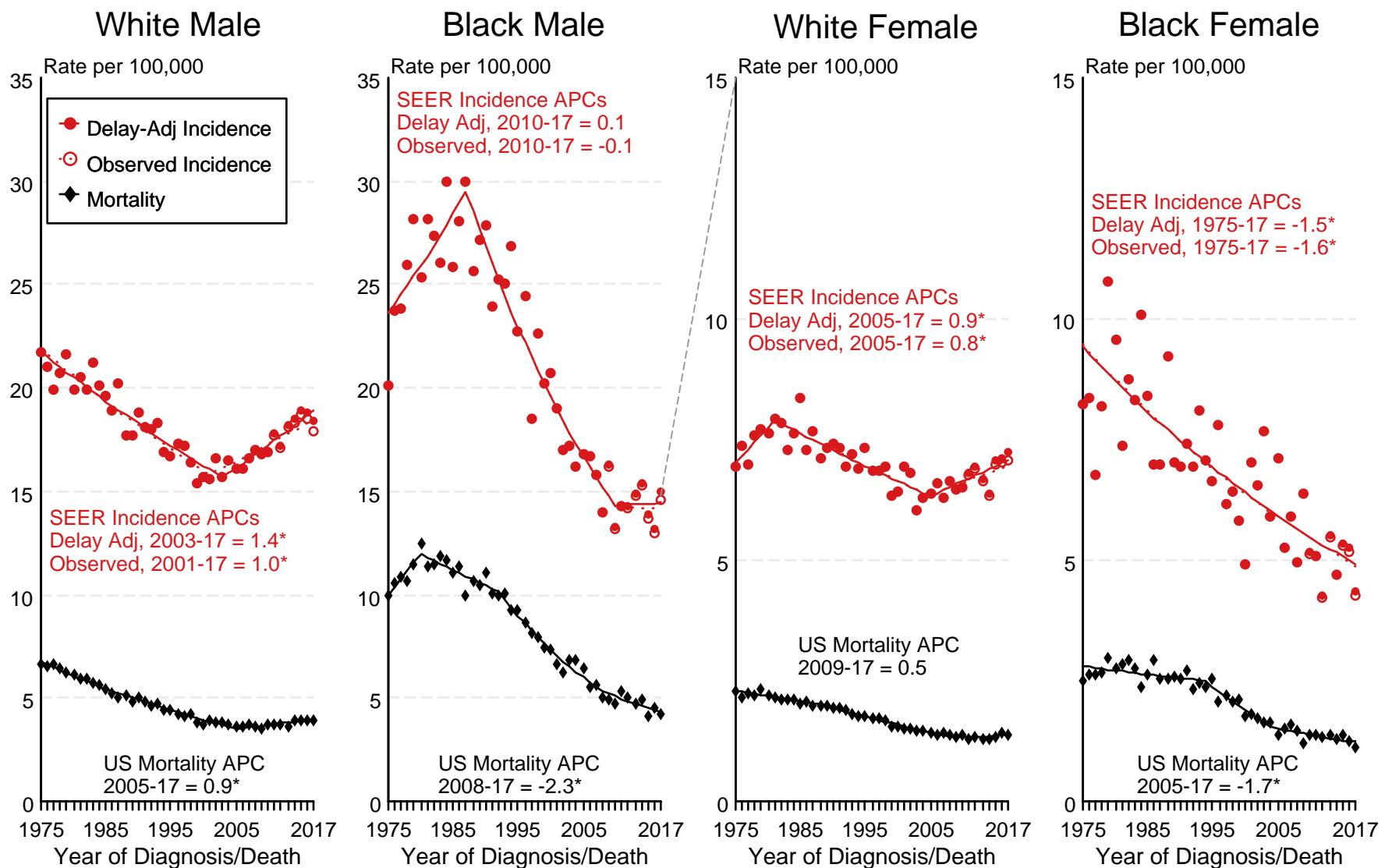
^e Sarcoma and soft tissue includes histologies 8680-8713, 8800-8921, 8990-8991, 9040-9044, 9120-9136, 9150-9252, 9370-9373, 9540-9582.

^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



^a 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 4.8, April 2020, 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.

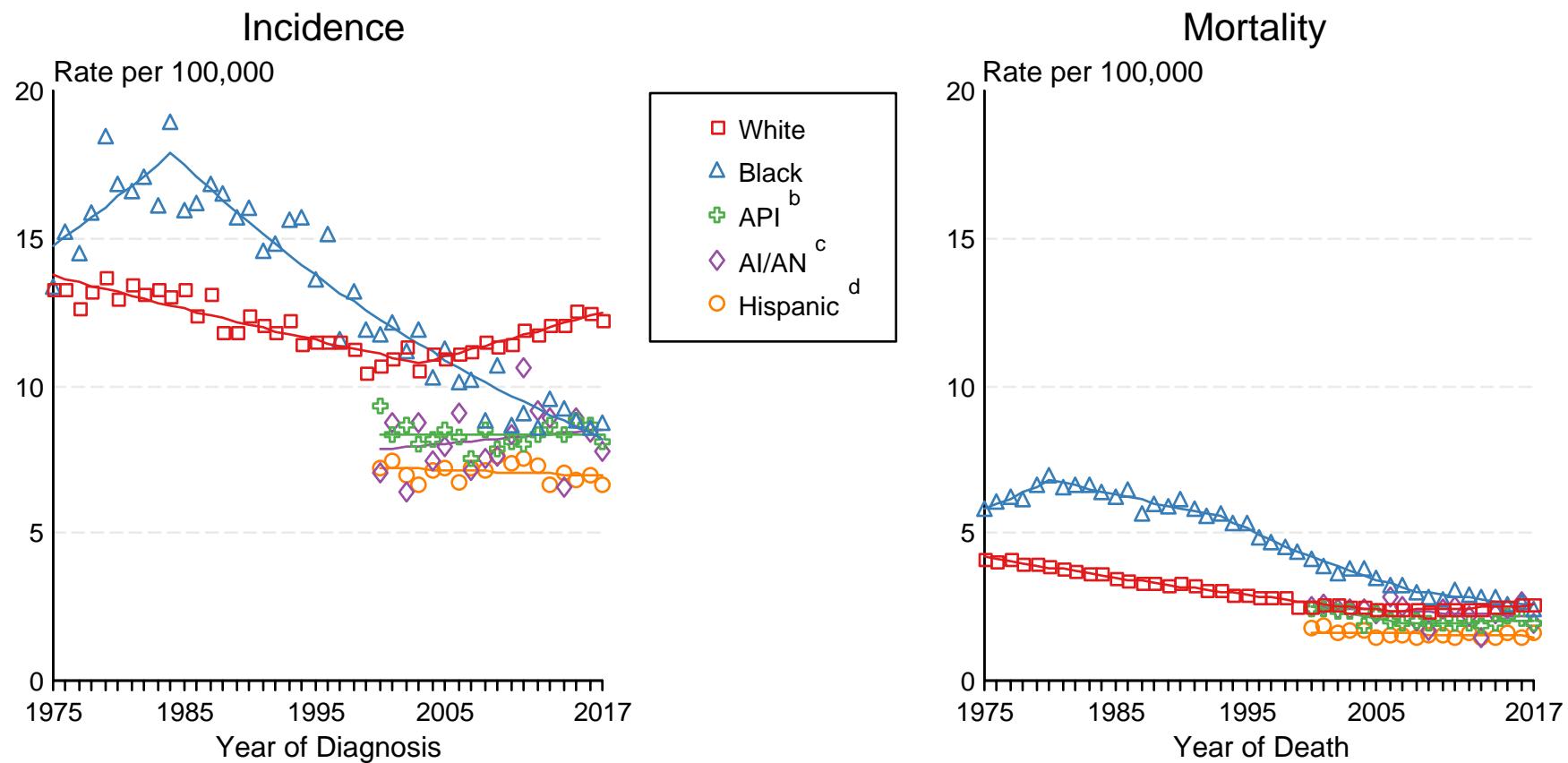
* The APC is significantly different from zero ($p < 0.05$).

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 1975-2017
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 2000-2017



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 21 areas (SEER 9 areas, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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 4.8, April 2020, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2017 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 2000-2017 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 Purchased/Referred Care Delivery Area (PRCDA) counties.

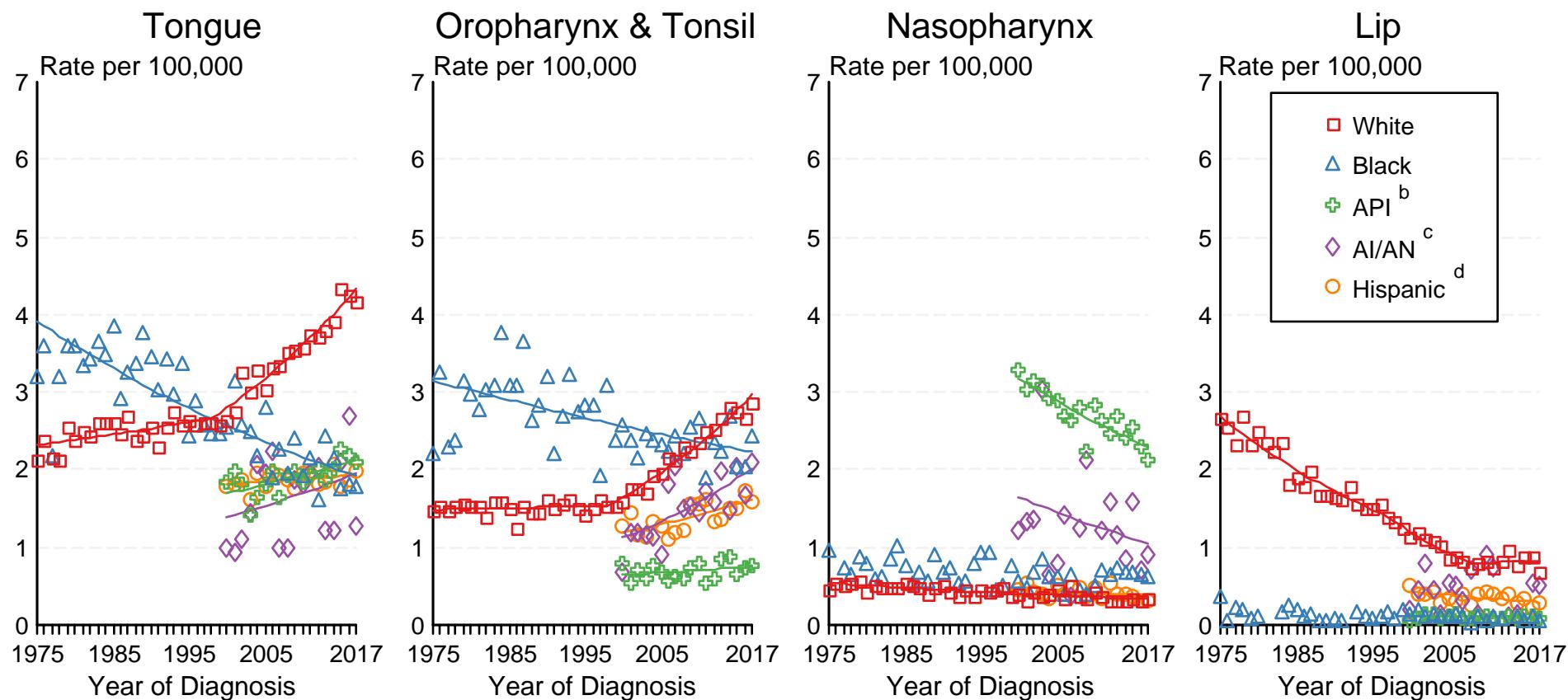
^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Figure 20.3

SEER Incidence Rates^a

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

Joinpoint Analyses for Whites and Blacks from 1975-2017
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 2000-2017



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 21 areas (SEER 9 areas, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^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 4.8, April 2020, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2017 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 2000-2017 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 Purchased/Referred Care Delivery Area (PRCDA) 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.