

Table 26.1
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence^{a,b} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2009 With up to Five Joinpoints, 1992-2009 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	2000-09	2005-09
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2009</u>														
All Races	1975-77	6.1	1977-80	-6.5	1980-97	2.4*	1997-09	6.7*					6.7*	6.7*
White	1975-77	7.3	1977-80	-6.6	1980-97	2.7*	1997-09	7.0*					7.0*	7.0*
Black	1975-95	0.9	1995-09	6.3*									6.3*	6.3*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2009</u>														
All Races	1992-98	2.9*	1998-09	6.6*									6.6*	6.6*
White	1992-98	3.6*	1998-09	6.7*									6.7*	6.7*
Black	1992-95	-4.3	1995-09	6.7*									6.7*	6.7*
<u>SEER 9 Observed Incidence^a, 1975-2009</u>														
All Races	1975-77	6.1	1977-80	-6.5	1980-97	2.4*	1997-09	6.6*					6.6*	6.6*
White	1975-77	7.3	1977-80	-6.6	1980-97	2.7*	1997-09	6.9*					6.9*	6.9*
Black	1975-95	0.8	1995-09	6.1*									6.1*	6.1*
<u>SEER 13 Observed Incidence^b, 1992-2009</u>														
All Races	1992-98	3.0*	1998-09	6.5*									6.5*	6.5*
White	1992-98	3.6*	1998-09	6.6*									6.6*	6.6*
White NH ^{e,f}	1992-98	4.3*	1998-09	6.8*									6.8*	6.8*
Black	1992-95	-4.2	1995-09	6.6*									6.6*	6.6*
Black NH ^{e,f}	1992-95	-4.6	1995-09	6.7*									6.7*	6.7*
API ^e	1992-00	0.5	2000-09	5.9*									5.9*	5.9*
AI/AN ^{eg}	1992-09	2.6*											2.6*	2.6*
Hispanic ^f	1992-95	-4.9	1995-09	5.2*									5.2*	5.2*
<u>U.S. Cancer Mortality^c, 1975-2009</u>														
All Races	1975-88	-2.2*	1988-09	0.8*									0.8*	0.8*
White	1975-88	-2.3*	1988-09	0.8*									0.8*	0.8*
Black	1975-09	0.0											0.0	0.0
<u>U.S. Cancer Mortality^c, 1992-2009</u>														
All Races	1992-09	0.9*											0.9*	0.9*
White	1992-09	0.8*											0.8*	0.8*
White NH ^{e,f}	1992-09	1.0*											1.0*	1.0*
Black	1992-09	1.4*											1.4*	1.4*
Black NH ^{e,f}	1992-09	1.6*											1.6*	1.6*
API ^e	1992-09	-0.3											-0.3	-0.3
AI/AN ^{eg}	1992-09	2.0											2.0	2.0
Hispanic ^f	1992-09	-0.4											-0.4	-0.4

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
 API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
 Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.
 Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
 * The APC/AAPC is significantly different from zero (p<.05).
 - Joinpoint regression line analysis could not be performed on data series.

Table 26.2
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence^{a,b} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2009 With up to Five Joinpoints, 1992-2009 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	2000-09	2005-09
SEER 9 Delay-Adjusted Incidence^a, 1975-2009														
All Races	1975-80	-4.7*	1980-98	1.9*	1998-09	6.1*							6.1*	6.1*
White	1975-77	10.0	1977-80	-9.0	1980-98	2.6*	1998-09	6.2*					6.2*	6.2*
Black	1975-09	2.9*											2.9*	2.9*
SEER 13 Delay-Adjusted Incidence^b, 1992-2009														
All Races	1992-96	-1.4	1996-09	5.6*									5.6*	5.6*
White	1992-98	1.8	1998-09	6.1*									6.1*	6.1*
Black	1992-95	-12.7	1995-09	5.8*									5.8*	5.8*
SEER 9 Observed Incidence^a, 1975-2009														
All Races	1975-80	-4.7*	1980-98	1.9*	1998-09	5.9*							5.9*	5.9*
White	1975-77	10.0	1977-80	-9.1	1980-98	2.6*	1998-09	6.0*					6.0*	6.0*
Black	1975-09	2.8*											2.8*	2.8*
SEER 13 Observed Incidence^b, 1992-2009														
All Races	1992-96	-1.4	1996-09	5.5*									5.5*	5.5*
White	1992-98	1.8	1998-09	6.0*									6.0*	6.0*
White NH ^{e,f}	1992-98	2.1	1998-09	6.4*									6.4*	6.4*
Black	1992-95	-12.6	1995-09	5.6*									5.6*	5.6*
Black NH ^{e,f}	1992-95	-12.2	1995-09	5.6*									5.6*	5.6*
API ^e	1992-04	0.7	2004-09	8.7*									5.0*	8.7*
AI/AN ^{eg}	1992-09	2.3											2.3	2.3
Hispanic ^f	1992-09	3.6*											3.6*	3.6*
U.S. Cancer Mortality^c, 1975-2009														
All Races	1975-83	-3.2*	1983-09	1.2*									1.2*	1.2*
White	1975-84	-2.6*	1984-09	1.3*									1.3*	1.3*
Black	1975-09	0.3											0.3	0.3
U.S. Cancer Mortality^c, 1992-2009														
All Races	1992-09	1.6*											1.6*	1.6*
White	1992-09	1.7*											1.7*	1.7*
White NH ^{e,f}	1992-09	1.7*											1.7*	1.7*
Black	1992-09	1.9*											1.9*	1.9*
Black NH ^{e,f}	1992-09	1.8*											1.8*	1.8*
API ^e	1992-09	0.0											0.0	0.0
AI/AN ^{eg}	-	-											-	-
Hispanic ^f	1992-09	1.7											1.7	1.7

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
 API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
 Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.
 Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
 * The APC/AAPC is significantly different from zero (p<.05).
 - Joinpoint regression line analysis could not be performed on data series.

Table 26.3
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence^{a,b} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2009 With up to Five Joinpoints, 1992-2009 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	2000-09	2005-09
SEER 9 Delay-Adjusted Incidence^a, 1975-2009														
All Races	1975-77	6.7	1977-80	-5.9	1980-97	2.6*	1997-09	7.1*					7.1*	7.1*
White	1975-81	-1.1	1981-93	2.4*	1993-99	5.1*	1999-09	7.5*					7.5*	7.5*
Black	1975-91	-0.4	1991-09	5.9*									5.9*	5.9*
SEER 13 Delay-Adjusted Incidence^b, 1992-2009														
All Races	1992-99	4.1*	1999-09	7.0*									7.0*	7.0*
White	1992-98	4.4*	1998-09	7.0*									7.0*	7.0*
Black	1992-09	6.5*											6.5*	6.5*
SEER 9 Observed Incidence^a, 1975-2009														
All Races	1975-77	6.7	1977-80	-5.9	1980-97	2.6*	1997-09	7.0*					7.0*	7.0*
White	1975-81	-1.1	1981-93	2.4*	1993-99	5.1*	1999-09	7.3*					7.3*	7.3*
Black	1975-89	-1.2	1989-09	5.5*									5.5*	5.5*
SEER 13 Observed Incidence^b, 1992-2009														
All Races	1992-99	4.1*	1999-09	6.9*									6.9*	6.9*
White	1992-98	4.4*	1998-09	6.9*									6.9*	6.9*
White NH ^{e,f}	1992-98	5.3*	1998-09	7.0*									7.0*	7.0*
Black	1992-09	6.3*											6.3*	6.3*
Black NH ^{e,f}	1992-09	6.4*											6.4*	6.4*
API ^e	1992-00	0.9	2000-09	6.1*									6.1*	6.1*
AI/AN ^{eg}	1992-09	2.8*											2.8*	2.8*
Hispanic ^f	1992-98	0.8	1998-09	6.1*									6.1*	6.1*
U.S. Cancer Mortality^c, 1975-2009														
All Races	1975-88	-2.6*	1988-09	0.4*									0.4*	0.4*
White	1975-88	-2.8*	1988-09	0.4*									0.4*	0.4*
Black	1975-09	-0.2											-0.2	-0.2
U.S. Cancer Mortality^c, 1992-2009														
All Races	1992-94	-6.4	1994-09	0.8*									0.8*	0.8*
White	1992-95	-3.4	1995-09	0.8*									0.8*	0.8*
White NH ^{e,f}	1992-94	-5.6	1994-09	0.9*									0.9*	0.9*
Black	1992-09	1.2*											1.2*	1.2*
Black NH ^{e,f}	1992-09	1.6*											1.6*	1.6*
API ^e	1992-09	-0.7											-0.7	-0.7
AI/AN ^{eg}	1992-09	-0.8											-0.8	-0.8
Hispanic ^f	1992-09	-1.4*											-1.4*	-1.4*

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
 API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
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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 26.4
Cancer of the Thyroid (Invasive)

Delay-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	4.85	3.14	6.45	4.66	2.79	6.37	2.97	-	4.21
1976	4.79	2.94	6.57	4.67	2.88	6.40	3.41	-	5.03
1977	5.44	3.49	7.32	5.34	3.43	7.21	3.74	-	5.40
1978	5.09	3.14	6.94	4.95	2.97	6.83	2.92	-	4.00
1979	4.48	2.67	6.17	4.44	2.58	6.20	3.24	-	4.30
1980	4.33	2.39	6.15	4.30	2.28	6.21	2.37	-	3.43
1981	4.41	2.51	6.23	4.38	2.47	6.26	2.38	-	3.41
1982	4.63	3.01	6.15	4.55	2.87	6.13	3.29	-	4.35
1983	4.71	2.80	6.50	4.74	2.61	6.73	3.02	2.15	3.77
1984	4.85	2.66	6.92	4.73	2.58	6.80	3.02	-	4.08
1985	5.13	3.08	7.09	5.08	3.09	7.05	2.85	-	3.64
1986	5.32	3.07	7.48	5.23	3.11	7.32	3.35	-	5.10
1987	5.05	2.81	7.14	5.04	2.88	7.08	2.82	-	4.30
1988	4.94	2.94	6.89	4.90	3.00	6.80	2.53	-	3.21
1989	5.36	2.98	7.65	5.48	3.21	7.74	2.51	-	3.93
1990	5.50	2.93	7.96	5.57	2.99	8.11	3.77	2.28	4.92
1991	5.49	3.19	7.69	5.69	3.30	8.01	3.23	2.08	4.21
1992	5.87	3.52	8.11	5.89	3.53	8.17	4.22	3.10	5.14
1993	5.65	3.59	7.65	5.77	3.69	7.82	3.39	2.08	4.57
1994	6.08	3.39	8.74	6.23	3.44	9.02	3.77	1.79	5.37
1995	6.23	3.37	9.00	6.42	3.61	9.23	3.10	-	4.57
1996	6.51	3.49	9.47	6.72	3.64	9.81	3.85	-	5.78
1997	6.79	3.66	9.81	7.06	3.78	10.33	4.00	2.46	5.27
1998	7.00	3.72	10.13	7.23	3.97	10.44	3.87	1.51	5.82
1999	7.35	3.88	10.68	7.57	4.09	11.01	4.64	1.61	7.11
2000	7.61	4.03	11.11	8.06	4.37	11.80	4.63	2.20	6.64
2001	8.29	4.32	12.16	8.68	4.62	12.79	4.90	2.55	6.80
2002	9.23	4.93	13.44	9.74	5.24	14.29	5.49	2.80	7.67
2003	9.63	4.70	14.44	10.32	5.04	15.64	5.33	2.87	7.54
2004	10.12	5.24	14.92	10.80	5.56	16.12	6.38	3.43	8.83
2005	10.95	5.83	15.95	11.88	6.46	17.33	5.84	2.78	8.51
2006	11.28	5.86	16.59	12.11	6.39	17.92	6.59	3.10	9.41
2007	12.35	6.05	18.54	13.14	6.46	19.94	7.39	3.33	10.73
2008	13.24	6.63	19.76	14.15	7.09	21.35	7.03	4.42	9.46
2009	14.51	7.08	21.77	15.38	7.67	23.16	8.62	3.20	13.27

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 26.5
Cancer of the Thyroid (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:									
1975-2009	7.29	3.96	10.50	7.44	4.08	10.75	4.44	2.22	6.30
1975	4.85	3.14	6.45	4.66	2.79	6.37	2.97	-	4.21
1976	4.79	2.94	6.57	4.67	2.88	6.40	3.41	-	5.03
1977	5.44	3.49	7.32	5.34	3.43	7.21	3.74	-	5.40
1978	5.09	3.14	6.94	4.95	2.97	6.83	2.92	-	4.00
1979	4.48	2.67	6.17	4.44	2.58	6.20	3.24	-	4.30
1980	4.33	2.39	6.15	4.30	2.28	6.21	2.37	-	3.43
1981	4.41	2.51	6.23	4.38	2.47	6.26	2.38	-	3.41
1982	4.63	3.00	6.15	4.55	2.87	6.13	3.29	-	4.34
1983	4.71	2.80	6.50	4.74	2.61	6.72	3.02	2.15	3.77
1984	4.85	2.65	6.92	4.73	2.58	6.80	3.02	-	4.08
1985	5.12	3.08	7.09	5.08	3.08	7.04	2.85	-	3.64
1986	5.32	3.07	7.48	5.23	3.10	7.32	3.35	-	5.09
1987	5.05	2.81	7.13	5.04	2.87	7.07	2.82	-	4.30
1988	4.94	2.94	6.89	4.90	3.00	6.79	2.53	-	3.21
1989	5.36	2.98	7.64	5.47	3.21	7.73	2.51	-	3.92
1990	5.49	2.93	7.95	5.56	2.99	8.10	3.76	2.28	4.91
1991	5.48	3.18	7.68	5.68	3.30	8.00	3.22	2.07	4.20
1992	5.86	3.51	8.10	5.87	3.52	8.16	4.20	3.09	5.13
1993	5.64	3.58	7.64	5.75	3.68	7.80	3.38	2.07	4.56
1994	6.07	3.38	8.73	6.22	3.43	9.00	3.75	1.78	5.35
1995	6.21	3.37	8.98	6.41	3.60	9.20	3.09	-	4.55
1996	6.50	3.48	9.45	6.70	3.62	9.78	3.83	-	5.75
1997	6.77	3.65	9.79	7.03	3.76	10.30	3.98	2.44	5.24
1998	6.98	3.71	10.11	7.20	3.95	10.41	3.85	1.50	5.79
1999	7.33	3.86	10.65	7.54	4.07	10.96	4.61	1.60	7.06
2000	7.59	4.01	11.07	8.02	4.35	11.74	4.60	2.18	6.60
2001	8.25	4.30	12.11	8.63	4.58	12.71	4.86	2.53	6.74
2002	9.18	4.90	13.38	9.67	5.20	14.20	5.43	2.76	7.59
2003	9.57	4.67	14.37	10.24	4.99	15.52	5.27	2.83	7.46
2004	10.06	5.20	14.83	10.70	5.50	15.98	6.30	3.38	8.72
2005	10.87	5.78	15.85	11.76	6.39	17.17	5.75	2.73	8.39
2006	11.19	5.80	16.47	11.97	6.31	17.72	6.48	3.04	9.27
2007	12.24	5.98	18.38	12.97	6.36	19.70	7.25	3.26	10.55
2008	13.11	6.55	19.57	13.94	6.97	21.05	6.89	4.32	9.28
2009	14.25	6.93	21.41	15.01	7.47	22.64	8.36	3.08	12.87

^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 26.6
Cancer of the Thyroid (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:									
1975-2009	0.47	0.43	0.50	0.47	0.44	0.48	0.47	0.34	0.55
1975	0.55	0.39	0.65	0.55	0.40	0.65	0.47	0.35	0.56
1976	0.56	0.49	0.61	0.56	0.49	0.60	0.52	0.42	0.60
1977	0.57	0.46	0.63	0.56	0.46	0.62	0.67	0.53	0.74
1978	0.55	0.44	0.61	0.55	0.45	0.61	0.48	0.33	0.60
1979	0.53	0.43	0.58	0.53	0.45	0.58	0.47	0.28	0.60
1980	0.48	0.38	0.53	0.49	0.40	0.54	0.42	0.29	0.51
1981	0.50	0.42	0.55	0.50	0.43	0.54	0.48	0.26	0.62
1982	0.48	0.37	0.53	0.47	0.37	0.53	0.48	0.38	0.54
1983	0.44	0.34	0.50	0.45	0.35	0.50	0.41	0.28	0.49
1984	0.47	0.38	0.52	0.47	0.39	0.51	0.47	-	0.64
1985	0.45	0.39	0.48	0.44	0.39	0.46	0.49	0.34	0.58
1986	0.46	0.39	0.49	0.45	0.39	0.49	0.48	0.34	0.57
1987	0.45	0.40	0.48	0.45	0.41	0.47	0.48	0.33	0.58
1988	0.44	0.41	0.45	0.44	0.42	0.44	0.44	0.33	0.50
1989	0.44	0.41	0.44	0.43	0.41	0.43	0.51	0.40	0.56
1990	0.44	0.37	0.48	0.44	0.38	0.47	0.45	0.30	0.54
1991	0.43	0.38	0.46	0.42	0.39	0.43	0.50	0.37	0.58
1992	0.46	0.38	0.50	0.46	0.39	0.48	0.41	0.30	0.48
1993	0.46	0.39	0.50	0.46	0.40	0.48	0.46	0.26	0.58
1994	0.42	0.38	0.44	0.42	0.38	0.44	0.37	0.30	0.40
1995	0.44	0.41	0.44	0.44	0.43	0.44	0.40	0.27	0.46
1996	0.45	0.42	0.47	0.45	0.43	0.46	0.44	0.33	0.49
1997	0.46	0.45	0.46	0.45	0.45	0.44	0.49	0.37	0.55
1998	0.44	0.38	0.47	0.43	0.39	0.45	0.43	0.27	0.53
1999	0.45	0.44	0.45	0.45	0.45	0.44	0.44	0.39	0.47
2000	0.48	0.47	0.48	0.47	0.48	0.45	0.51	0.34	0.59
2001	0.48	0.47	0.48	0.47	0.48	0.46	0.51	0.42	0.58
2002	0.48	0.45	0.48	0.48	0.46	0.48	0.48	0.39	0.52
2003	0.45	0.43	0.46	0.46	0.45	0.46	0.38	0.29	0.44
2004	0.47	0.47	0.47	0.47	0.48	0.46	0.45	0.41	0.48
2005	0.48	0.48	0.49	0.48	0.50	0.46	0.52	0.31	0.64
2006	0.49	0.47	0.51	0.49	0.48	0.49	0.48	0.28	0.60
2007	0.50	0.51	0.48	0.48	0.51	0.45	0.50	0.40	0.56
2008	0.51	0.50	0.52	0.51	0.52	0.51	0.47	0.41	0.52
2009	0.52	0.51	0.52	0.51	0.52	0.49	0.58	0.43	0.66

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

Table 26.7
Cancer of the Thyroid (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, 2005-2009									
All ages	11.6	5.9	17.3	12.2	6.2	18.3	6.9	3.3	10.1
Under 65	10.5	4.6	16.4	11.1	4.9	17.5	5.9	2.3	9.0
65 and over	19.4	14.5	23.4	19.6	15.0	23.5	14.5	10.6	17.2
All ages (IARC world std) ^c	9.4	4.5	14.3	9.9	4.8	15.1	5.5	2.4	8.1
Age-Specific Rates, 2005-2009									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	0.1	-	0.2	0.1	-	0.2	-	-	-
10-14	0.6	0.3	0.9	0.7	0.3	1.1	-	-	-
15-19	2.1	0.7	3.6	2.3	0.8	4.0	0.6	-	1.1
20-24	5.0	1.4	8.9	5.5	1.5	9.9	2.0	-	3.5
25-29	8.5	2.7	14.5	9.1	2.9	15.8	3.6	1.1	6.0
30-34	12.5	4.2	21.2	13.8	4.4	24.0	5.5	1.6	9.1
35-39	15.6	5.5	25.9	16.5	6.0	27.6	7.4	2.1	12.3
40-44	17.2	7.2	27.3	18.2	7.7	29.1	9.7	4.4	14.4
45-49	19.1	8.1	29.9	20.3	8.8	31.9	9.9	3.7	15.4
50-54	20.6	9.9	30.9	21.4	10.6	32.2	12.5	4.0	19.7
55-59	21.3	12.5	29.6	21.8	13.0	30.2	15.2	7.7	21.3
60-64	21.7	14.0	28.9	22.2	14.7	29.2	17.5	8.3	24.7
65-69	23.3	15.5	30.2	24.0	16.4	30.8	16.4	10.0	21.2
70-74	22.2	16.3	27.1	22.5	16.9	27.2	16.6	11.4	20.3
75-79	18.9	14.7	22.0	19.2	15.5	22.0	13.6	9.8	16.1
80-84	15.3	13.1	16.6	15.3	13.4	16.5	11.1	9.2	12.1
85+	10.3	9.5	10.7	10.0	8.8	10.5	11.0	-	10.2
U.S. Mortality									
Age at Death									
Age-Adjusted Rates, 2005-2009									
All ages	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.6
Under 65	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.2
65 and over	2.9	2.9	3.0	2.9	2.9	2.8	3.0	2.0	3.5
All ages (IARC world std) ^c	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Age-Specific Rates, 2005-2009									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	0.0	-	-	0.0	-	-	-	-	-
30-34	0.0	-	0.0	0.0	-	0.0	-	-	-
35-39	0.1	0.1	0.0	0.1	0.1	0.1	-	-	-
40-44	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-
45-49	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-	0.3
50-54	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
55-59	0.7	0.7	0.6	0.6	0.7	0.6	0.8	0.6	0.9
60-64	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.1
65-69	1.7	1.8	1.6	1.7	1.9	1.5	1.7	1.4	2.0
70-74	2.4	2.5	2.3	2.3	2.5	2.1	2.6	1.4	3.4
75-79	3.1	3.0	3.3	3.2	3.0	3.2	2.6	2.2	2.8
80-84	4.1	4.0	4.2	4.1	4.1	4.1	3.7	2.4	4.4
85+	5.2	4.6	5.5	5.1	4.7	5.2	6.3	4.1	7.2

^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 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 26.8
Cancer of the Thyroid (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	-	-	-	83	75	87	-	-	-
1970-1973 ^a	-	-	-	86	82	87	-	-	-
1975-1977 ^b	92.2	91.1	92.5	91.9	90.7	92.3	90.3	-	91.5
1978-1980 ^b	92.1	87.3	93.6	91.5	87.6	92.7	90.2	68.0 ^h	95.5
1981-1983 ^b	93.7	92.2	94.0	93.1	90.9	93.8	96.4	100.0	93.2
1984-1986 ^b	93.2	89.9	94.2	93.2	89.5	94.3	89.4	85.5 ^g	90.4
1987-1989 ^b	94.5	91.6	95.3	94.2	91.7	95.0	92.2	91.2 ^g	92.2
1990-1992 ^b	94.3	90.5	95.6	95.0	91.6	96.0	85.9	84.7 ^g	86.3
1993-1995 ^b	95.4	91.7	96.6	95.5	91.6	96.9	93.3	88.1 ^g	94.4
1996-1998 ^b	95.6	91.0	97.0	96.0	91.4	97.4	95.1	86.3 ^g	96.4
1999-2001 ^b	96.5	94.4	97.1	96.8	95.1	97.4	92.1	88.6 ^g	92.4
2002-2008 ^b	97.6 ^f	94.9 ^f	98.4 ^f	97.8 ^f	95.2 ^f	98.6 ^f	95.9 ^f	91.6	96.8
5-Year Period Survival (Percent)^{cd}									
2008	97.6	95.0	98.3	97.9	95.4	98.6	95.0	88.8	96.3
Stage Distribution (%) 2002-2008^{ce}									
All Stages									
Number of cases	51,692	11,831	39,861	42,543	10,081	32,462	3,306	602	2,704
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	68	59	71	69	59	72	76	67	78
Regional	25	31	23	25	31	23	15	19	14
Distant	5	8	4	4	8	3	7	11	5
Unstaged	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2002-2008^c									
Age at Diagnosis:									
Ages <45	99.6	98.4	99.8	99.6	98.5	99.8	98.3	93.7	98.9
Ages 45-54	98.9	97.2	99.4	99.1	97.4	99.5	97.6	92.2	98.3
Ages 55-64	96.5	93.6	97.7	96.8	93.9	98.0	94.0	90.8	94.7
Ages 65-74	93.3	88.1	95.4	93.9	88.8	95.8	88.6	82.8 ^g	90.2
Ages 75+	83.2	77.3	84.2	84.2	77.0	85.1	73.7 ^g	63.7 ^h	73.5
Ages <65	98.8	96.8	99.3	98.9	97.0	99.5	97.2	92.9	98.0
Ages 65+	89.8	84.8	91.3	90.5	85.3	91.9	84.1	77.2 ^g	86.1
Stage^e:									
All Stages	97.5	94.5	98.3	97.7	94.7	98.5	95.3	90.1	96.4
Localized	99.9	99.7	99.9	99.9	99.7	99.9	99.3	96.8	99.4
Regional	97.1	95.3	97.8	97.2	95.1	97.9	94.7	91.4	95.4
Distant	53.9	45.6	58.9	53.1	43.6	59.7	46.0	45.8 ^g	46.0 ^g
Unstaged	87.4	78.5	90.2	86.3	77.5	89.2	81.5 ^g	-	82.6 ^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).

^c Based on follow-up of patients into 2009.

^d 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).

^e Based on follow-up of patients into 2009.

^f Period survival provides a 2008 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2006-2008: 0-1 year survival), (2005-2007: 1-2 year survival), (2004-2006: 2-3 year survival), (2003-2005: 3-4 year survival), (2002-2004: 4-5 years survival).

^g Stage at diagnosis is classified using SEER Summary Stage 2000.

^h The difference between 1975-1977 and 2002-2008 is statistically significant ($p<.05$).

ⁱ The standard error is between 5 and 10 percentage points.

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

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

Table 26.9
Cancer of the Thyroid (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	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Survival Time																						
1-year	95.0	95.2	96.0	96.6	96.6	95.6	95.2	97.5	96.7	96.9	96.5	97.8	97.4	97.7	97.6	97.2	98.0	98.4	97.8	98.5	98.6	98.3
2-year	93.6	94.5	95.3	96.2	95.9	94.8	94.7	97.0	96.2	96.5	96.2	97.1	97.1	97.1	97.4	97.1	97.9	97.9	97.3	98.4	98.2	
3-year	92.9	93.7	94.8	95.5	95.6	94.2	94.7	96.4	96.0	96.0	96.2	96.9	97.1	97.1	96.9	97.1	97.6	97.9	97.3	98.3		
4-year	92.5	93.4	94.3	95.5	95.1	93.8	94.3	96.0	95.9	95.4	95.7	96.4	97.0	97.0	96.9	97.1	97.4	97.8	97.3			
5-year	92.1	93.3	94.1	95.5	94.4	93.0	94.3	95.7	95.8	94.9	95.4	96.3	96.8	96.4	96.2	97.1	97.3	97.4				
6-year	91.7	93.2	93.8	95.0	94.1	92.8	94.1	95.3	95.8	94.9	95.2	95.9	96.3	96.4	96.1	96.8	96.9					
7-year	91.5	92.7	93.5	94.7	93.7	92.7	93.9	95.2	95.6	94.5	95.2	95.9	96.2	96.2	96.1	96.5						
8-year	91.1	92.6	93.3	94.7	93.7	92.7	93.9	94.5	95.5	94.3	95.2	95.9	96.0	96.0	95.9							
9-year	90.7	92.3	93.1	94.7	93.6	92.7	93.7	94.2	95.5	93.8	95.1	95.9	95.6	95.6	96.0							
10-year	90.6	92.0	92.9	94.0	93.3	92.7	93.1	94.0	95.1	93.6	95.1	95.9	95.3									
11-year	90.3	91.7	92.7	93.5	93.1	92.4	92.8	94.0	95.0	93.3	95.1	95.9										
12-year	90.3	91.5	92.6	93.4	92.7	92.1	92.7	93.6	95.0	93.0	95.1											
13-year	90.1	91.2	92.5	93.0	92.7	92.1	92.7	93.6	95.0	92.9												
14-year	90.0	91.1	92.4	92.5	92.4	92.1	92.3	93.6	95.0													
15-year	89.8	90.7	92.3	92.4	91.7	91.8	92.0	93.0														
16-year	89.7	90.6	92.3	92.2	91.2	91.8	91.9															
17-year	89.6	90.6	92.2	92.2	91.2	91.6																
18-year	89.3	90.4	92.2	92.2	91.2																	
19-year	89.2	90.4	91.9	92.2																		
20-year	89.2	90.4	91.9																			

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

Table 26.10
Cancer of the Thyroid (Invasive)

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

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Survival Time																						
1-year	94.6	92.5	95.0	93.9	95.3	93.9	93.3	96.7	93.4	93.8	92.4	97.3	97.0	96.4	96.2	95.2	96.2	96.7	97.0	96.4	97.4	96.9
2-year	92.6	92.0	93.8	92.5	92.5	92.9	92.5	95.5	91.9	93.5	91.0	95.4	96.2	95.0	95.5	94.9	95.5	95.1	95.5	96.2	96.6	
3-year	91.6	90.8	93.6	91.5	91.3	92.0	91.8	94.8	91.7	92.3	91.0	94.7	96.2	95.0	94.2	94.9	94.2	94.8	95.5	96.1		
4-year	90.5	90.4	92.2	91.5	91.1	91.3	90.2	94.2	91.4	91.7	89.4	93.7	96.2	95.0	93.6	94.6	93.6	94.4	95.5			
5-year	89.9	90.3	91.6	91.1	89.4	90.7	90.0	93.4	91.3	89.9	88.5	93.7	96.2	94.0	92.3	94.3	93.3	94.2				
6-year	89.6	89.9	91.3	90.4	88.4	90.7	89.8	93.0	90.4	89.9	88.0	93.5	95.8	94.0	92.0	93.9	91.7					
7-year	89.6	89.4	90.1	90.4	87.5	90.7	89.6	92.3	88.8	89.6	88.0	93.3	95.4	93.6	92.0	92.3						
8-year	89.3	89.3	89.7	90.4	87.1	90.7	89.2	91.3	88.8	88.9	88.0	93.3	95.3	93.5	90.9							
9-year	88.8	88.7	88.6	90.4	87.1	90.7	88.9	90.9	88.8	86.9	87.3	93.3	93.1	93.5								
10-year	88.6	87.9	88.5	90.3	87.1	90.7	87.3	90.9	87.5	86.6	87.3	93.3	92.8									
11-year	87.5	87.4	88.5	90.2	86.9	90.5	87.3	90.9	86.3	85.2	87.0	93.3										
12-year	87.5	86.5	88.5	89.0	86.8	89.1	87.3	89.8	86.1	84.3	87.0											
13-year	87.4	86.1	87.9	86.9	86.8	89.1	87.3	89.4	86.1	83.5												
14-year	87.3	86.1	87.8	86.7	86.5	89.0	86.7	89.4	86.1													
15-year	86.7	85.3	87.8	83.7	85.1	88.9	85.8	89.4														
16-year	86.5	85.3	87.8	83.4	85.1	88.4	85.5															
17-year	86.5	84.9	87.8	83.4	85.1	87.3																
18-year	86.5	84.4	87.8	83.4	84.4																	
19-year	86.5	84.4	87.8	83.4																		
20-year	86.5	84.4	87.8																			

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

Table 26.11
Cancer of the Thyroid (Invasive)

SEER^a Relative Survival (Percent)

By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Survival Time																						
1-year	95.1	96.0	96.4	97.4	97.1	96.3	95.8	97.8	97.8	97.9	97.7	97.9	97.5	98.0	98.0	97.7	98.5	98.9	98.0	99.0	98.9	98.7
2-year	93.9	95.4	95.7	97.3	96.9	95.4	95.6	97.4	97.4	97.5	97.7	97.6	97.3	97.7	98.0	97.7	98.5	98.7	97.9	99.0	98.6	
3-year	93.3	94.7	95.2	96.8	96.9	95.0	95.6	96.8	97.3	97.1	97.7	97.6	97.3	97.5	97.7	97.7	98.5	98.7	97.9	99.0		
4-year	93.2	94.5	95.0	96.8	96.3	94.7	95.6	96.6	97.3	96.5	97.5	97.2	97.1	97.5	97.7	97.7	98.5	98.7	97.9			
5-year	92.8	94.3	94.9	96.8	96.0	93.8	95.6	96.4	97.2	96.4	97.5	97.0	96.8	97.1	97.3	97.7	98.4	98.3				
6-year	92.4	94.2	94.7	96.4	95.9	93.6	95.6	95.9	97.2	96.3	97.3	96.5	96.5	97.0	97.3	97.6	98.3					
7-year	92.1	93.8	94.6	95.8	95.6	93.4	95.4	95.9	97.2	95.8	97.3	96.5	96.2	97.0	97.3	97.6						
8-year	91.7	93.7	94.5	95.8	95.6	93.4	95.4	95.5	97.2	95.8	97.3	96.5	96.1	96.6	97.3							
9-year	91.4	93.6	94.5	95.8	95.6	93.4	95.4	95.2	97.2	95.8	97.3	96.5	96.1	96.1	96.6							
10-year	91.2	93.4	94.3	95.1	95.2	93.4	95.3	94.8	97.2	95.7	97.3	96.5	95.9									
11-year	91.2	93.1	94.0	94.5	95.0	93.0	94.8	94.8	97.2	95.7	97.3	96.5										
12-year	91.2	93.1	94.0	94.5	94.5	93.0	94.7	94.8	97.2	95.6	97.3											
13-year	91.0	92.9	94.0	94.5	94.4	93.0	94.6	94.7	97.2	95.6												
14-year	90.8	92.8	93.8	94.2	94.2	93.0	94.4	94.7	97.2													
15-year	90.7	92.5	93.8	94.2	93.6	92.7	94.3	93.9														
16-year	90.7	92.3	93.6	94.2	93.0	92.7	94.1															
17-year	90.5	92.3	93.5	94.2	93.0	92.7																
18-year	89.9	92.3	93.4	94.2	93.0																	
19-year	89.7	92.3	93.2	94.2																		
20-year	89.7	92.3	93.2																			

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

Table 26.12
Cancer of the Thyroid (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, 2007-2009 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			
All Races	0	0.00	0.02	0.09	1.03	0.06		Asian/	0	0.00	0.02	0.08	1.17	0.13		0.00	0.02	0.08	1.17	0.13		
	10	0.02	0.09	0.23	1.04	0.06		Pacific	10	0.02	0.08	0.22	1.18	0.13		0.02	0.08	0.22	1.18	0.13		
	20	0.07	0.22	0.40	1.03	0.06		Islander	20	0.06	0.20	0.39	1.17	0.13		0.06	0.20	0.39	1.17	0.13		
	30	0.15	0.33	0.54	0.96	0.06			30	0.14	0.33	0.55	1.11	0.13		0.14	0.33	0.55	1.11	0.13		
	40	0.19	0.40	0.60	0.83	0.06			40	0.19	0.41	0.63	0.98	0.13		0.19	0.41	0.63	0.98	0.13		
	50	0.21	0.43	0.58	0.66	0.06			50	0.23	0.45	0.66	0.80	0.13		0.23	0.45	0.66	0.80	0.13		
	60	0.23	0.39	0.46	0.47	0.06			60	0.24	0.45	0.56	0.60	0.13		0.24	0.45	0.56	0.60	0.13		
	70	0.19	0.27	-	0.28	0.06			70	0.23	0.35	-	0.39	0.11		0.23	0.35	-	0.39	0.11		
	80	0.10	-	-	0.12	0.04			80	0.15	-	-	0.19	0.09		0.15	-	-	0.19	0.09		
White	0	0.00	0.02	0.10	1.07	0.06		American	0	0.00	0.02	0.07	0.64	0.08		0.00	0.02	0.07	0.64	0.08		
	10	0.02	0.10	0.25	1.08	0.06		Indian/	10	0.02	0.07	0.16	0.65	0.08		0.02	0.07	0.16	0.65	0.08		
	20	0.08	0.23	0.43	1.07	0.06		Alaska	20	0.05	0.14	0.24	0.63	0.08		0.05	0.14	0.24	0.63	0.08		
	30	0.16	0.36	0.57	1.00	0.06		Native ^a	30	0.09	0.20	0.30	0.59	0.08		0.09	0.20	0.30	0.59	0.08		
	40	0.20	0.42	0.63	0.85	0.06			40	0.11	0.22	0.33	0.52	0.08		0.11	0.22	0.33	0.52	0.08		
	50	0.22	0.44	0.60	0.67	0.06			50	0.12	0.23	0.31	0.43	0.09		0.12	0.23	0.31	0.43	0.09		
	60	0.23	0.40	0.47	0.48	0.06			60	0.13	0.21	0.25	0.34	0.09		0.13	0.21	0.25	0.34	0.09		
	70	0.20	0.27	-	0.28	0.06			70	0.10	0.14	-	0.25	0.10		0.10	0.14	-	0.25	0.10		
	80	0.10	-	-	0.12	0.04			80	0.06	-	-	0.20	0.10		0.06	-	-	0.20	0.10		
Black	0	0.00	0.01	0.03	0.57	0.05		Hispanic ^b	0	0.00	0.02	0.08	0.95	0.09		0.00	0.02	0.08	0.95	0.09		
	10	0.00	0.03	0.10	0.58	0.05			10	0.02	0.08	0.19	0.96	0.09		0.02	0.08	0.19	0.96	0.09		
	20	0.03	0.09	0.19	0.58	0.05			20	0.06	0.17	0.33	0.95	0.09		0.06	0.17	0.33	0.95	0.09		
	30	0.07	0.17	0.29	0.56	0.06			30	0.11	0.27	0.45	0.89	0.09		0.11	0.27	0.45	0.89	0.09		
	40	0.10	0.23	0.37	0.50	0.06			40	0.16	0.34	0.53	0.79	0.09		0.16	0.34	0.53	0.79	0.09		
	50	0.13	0.28	0.37	0.42	0.06			50	0.19	0.38	0.54	0.65	0.09		0.19	0.38	0.54	0.65	0.09		
	60	0.16	0.27	0.30	0.31	0.06			60	0.20	0.36	0.44	0.48	0.09		0.20	0.36	0.44	0.48	0.09		
	70	0.13	0.17	-	0.18	0.05			70	0.18	0.27	-	0.31	0.08		0.18	0.27	-	0.31	0.08		
	80	0.06	-	-	0.08	0.05			80	0.11	-	-	0.16	0.06		0.11	-	-	0.16	0.06		

Devcan Version 6.6.1, April 2012, 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. Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.

- Statistic could not be calculated.
A percent of 0.00 represents a value that is below 0.005.

Table 26.13
Cancer of the Thyroid (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, 2007-2009 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			
All Races	0	0.00	0.01	0.03	0.52	0.05		Asian/	0	0.00	0.01	0.03	0.55	0.08		0.00	0.01	0.03	0.55	0.08		
	10	0.01	0.03	0.08	0.53	0.05		Pacific	10	0.01	0.03	0.08	0.56	0.08		0.01	0.03	0.08	0.56	0.08		
	20	0.02	0.07	0.15	0.53	0.05		Islander	20	0.02	0.08	0.15	0.55	0.08		0.02	0.08	0.15	0.55	0.08		
	30	0.05	0.13	0.23	0.51	0.06			30	0.06	0.13	0.23	0.54	0.08		0.06	0.13	0.23	0.54	0.08		
	40	0.08	0.19	0.31	0.47	0.06			40	0.07	0.18	0.29	0.48	0.08		0.07	0.18	0.29	0.48	0.08		
	50	0.11	0.24	0.35	0.41	0.06			50	0.11	0.22	0.33	0.42	0.08		0.11	0.22	0.33	0.42	0.08		
	60	0.14	0.26	0.31	0.32	0.05			60	0.12	0.23	0.30	0.32	0.07		0.12	0.23	0.30	0.32	0.07		
	70	0.14	0.20	-	0.21	0.05			70	0.13	0.21	-	0.23	0.06		0.13	0.21	-	0.23	0.06		
	80	0.09	-	-	0.10	0.04			80	0.10	-	-	0.12	0.04		0.10	-	-	0.12	0.04		
White	0	0.00	0.01	0.03	0.56	0.06		American	0	0.00	0.01	0.03	0.23	0.06		0.00	0.01	0.03	0.23	0.06		
	10	0.01	0.03	0.08	0.56	0.06		Indian/	10	0.01	0.03	0.05	0.23	0.06		0.01	0.03	0.05	0.23	0.06		
	20	0.02	0.08	0.16	0.56	0.06		Alaska	20	0.02	0.04	0.07	0.23	0.06		0.02	0.04	0.07	0.23	0.06		
	30	0.05	0.14	0.25	0.54	0.06		Native ^a	30	0.02	0.05	0.11	0.22	0.06		0.02	0.05	0.11	0.22	0.06		
	40	0.08	0.20	0.33	0.50	0.06			40	0.03	0.09	0.18	0.20	0.06		0.03	0.09	0.18	0.20	0.06		
	50	0.12	0.26	0.37	0.43	0.06			50	0.07	0.16	0.18	0.18	0.07		0.07	0.16	0.18	0.18	0.07		
	60	0.15	0.27	0.32	0.33	0.06			60	0.10	0.12	0.12	0.12	0.07		0.10	0.12	0.12	0.12	0.07		
	70	0.15	0.21	-	0.21	0.05			70	0.03	0.03	-	0.03	0.03		0.03	0.03	-	0.03	0.08		
	80	0.09	-	-	0.10	0.04			80	0.00	-	-	0.00	-		0.00	-	-	0.00	0.04		
Black	0	0.00	0.00	0.01	0.25	0.04		Hispanic ^b	0	0.00	0.00	0.02	0.42	0.06		0.00	0.00	0.02	0.42	0.06		
	10	0.00	0.01	0.03	0.26	0.04			10	0.00	0.02	0.05	0.42	0.06		0.00	0.02	0.05	0.42	0.06		
	20	0.01	0.03	0.06	0.26	0.04			20	0.02	0.04	0.10	0.42	0.06		0.02	0.04	0.10	0.42	0.06		
	30	0.02	0.06	0.11	0.25	0.04			30	0.03	0.08	0.16	0.41	0.06		0.03	0.08	0.16	0.41	0.06		
	40	0.04	0.09	0.16	0.24	0.04			40	0.05	0.14	0.23	0.39	0.06		0.05	0.14	0.23	0.39	0.06		
	50	0.05	0.13	0.18	0.21	0.04			50	0.09	0.18	0.27	0.34	0.06		0.09	0.18	0.27	0.34	0.06		
	60	0.08	0.15	0.17	0.18	0.04			60	0.10	0.19	0.24	0.27	0.06		0.10	0.19	0.24	0.27	0.06		
	70	0.09	0.12	-	0.13	0.03			70	0.11	0.17	-	0.20	0.05		0.11	0.17	-	0.20	0.05		
	80	0.06	-	-	0.08	0.03			80	0.08	-	-	0.12	0.03		0.08	-	-	0.12	0.03		

Devcan Version 6.6.1, April 2012, 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. Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.

- Statistic could not be calculated.
A percent of 0.00 represents a value that is below 0.005.

Table 26.14
Cancer of the Thyroid (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, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.03	0.15	1.53	0.07	Asian/ Pacific Islander	0	0.00	0.03	0.13	1.74	0.17	
	10	0.03	0.15	0.40	1.55	0.07		10	0.03	0.13	0.36	1.75	0.17	
	20	0.12	0.37	0.66	1.53	0.07		20	0.10	0.33	0.62	1.72	0.17	
	30	0.25	0.54	0.85	1.41	0.07		30	0.22	0.51	0.84	1.63	0.17	
	40	0.30	0.61	0.89	1.18	0.07		40	0.29	0.62	0.94	1.41	0.18	
	50	0.31	0.60	0.81	0.90	0.07		50	0.33	0.66	0.95	1.13	0.18	
	60	0.30	0.52	0.60	0.61	0.07		60	0.34	0.63	0.78	0.82	0.17	
	70	0.24	0.33	-	0.34	0.06		70	0.31	0.47	-	0.51	0.16	
	80	0.12	-	-	0.14	0.05		80	0.19	-	-	0.24	0.13	
White	0	0.00	0.03	0.17	1.61	0.07	American Indian/ Alaska Native ^a	0	0.00	0.03	0.12	1.02	0.09	
	10	0.03	0.17	0.44	1.62	0.07		10	0.03	0.12	0.27	1.04	0.10	
	20	0.14	0.41	0.72	1.60	0.07		20	0.08	0.24	0.42	1.01	0.10	
	30	0.27	0.59	0.90	1.47	0.07		30	0.16	0.34	0.49	0.94	0.10	
	40	0.32	0.64	0.92	1.21	0.07		40	0.19	0.34	0.48	0.79	0.10	
	50	0.33	0.62	0.82	0.91	0.07		50	0.16	0.30	0.42	0.63	0.09	
	60	0.31	0.52	0.60	0.61	0.07		60	0.15	0.28	0.35	0.50	0.10	
	70	0.24	0.33	-	0.34	0.06		70	0.15	0.23	-	0.40	0.12	
	80	0.11	-	-	0.13	0.05		80	0.10	-	-	0.33	0.12	
Black	0	0.00	0.01	0.05	0.86	0.07	Hispanic ^b	0	0.00	0.03	0.15	1.51	0.11	
	10	0.01	0.05	0.16	0.87	0.07		10	0.03	0.15	0.36	1.52	0.11	
	20	0.05	0.16	0.31	0.87	0.07		20	0.12	0.33	0.59	1.50	0.11	
	30	0.11	0.27	0.46	0.83	0.07		30	0.21	0.48	0.76	1.39	0.11	
	40	0.16	0.36	0.56	0.73	0.07		40	0.27	0.56	0.83	1.18	0.11	
	50	0.20	0.42	0.54	0.59	0.07		50	0.29	0.57	0.79	0.93	0.11	
	60	0.23	0.36	0.40	0.42	0.07		60	0.29	0.51	0.61	0.66	0.11	
	70	0.16	0.20	-	0.22	0.07		70	0.24	0.35	-	0.40	0.10	
	80	0.06	-	-	0.09	0.05		80	0.13	-	-	0.20	0.08	

Devcan Version 6.6.1, April 2012, 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. Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.

- Statistic could not be calculated.

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

Table 26.15
Cancer of the Thyroid (Invasive)

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

<u>SEER Incidence</u>	SEER 18 Areas ^b Rate 2005-2009			SEER 13 Areas ^b Trend 2000-2009 ^c			SEER 9 Areas ^b Trend 2000-2009 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY									
All Races	11.6	5.9	17.3	6.5*	5.5*	6.9*	6.6*	5.9*	7.0*
White	12.2	6.2	18.3	6.6*	6.0*	6.9*	6.9*	6.0*	7.3*
White Hispanic ^e	10.2	4.3	16.4	5.1*	3.4*	6.1*	-	-	-
White Non-Hispanic ^e	12.9	6.7	18.9	6.8*	6.4*	7.0*	-	-	-
Black	6.9	3.3	10.1	6.6*	5.6*	6.3*	6.1*	2.8*	5.5*
Asian/Pacific Islander	11.8	5.3	17.7	5.9*	5.0*	6.1*	-	-	-
Amer Ind/Alaska Nat ^f	7.1	3.2	10.9	2.6*	-	-	-	-	-
Hispanic ^e	10.0	4.2	16.0	5.2*	3.6*	6.1*	-	-	-
U.S. Mortality^g									
	Rate 2005-2009 Rate per 100,000 persons			Trend 2000-2009 ^h AAPC (%)					
RACE/ETHNICITY									
All Races	0.5	0.5	0.5	0.9*	1.6*	0.8*			
White	0.5	0.5	0.5	0.8*	1.7*	0.8*			
White Hispanic ^e	0.6	0.6	0.7	-0.2	1.9	-1.3*			
White Non-Hispanic ^e	0.5	0.5	0.5	1.0*	1.7*	0.9*			
Black	0.5	0.4	0.6	1.4*	1.9*	1.2*			
Asian/Pacific Islander	0.7	0.5	0.8	-0.3	-	-0.7			
Amer Ind/Alaska Nat									
Total U.S.	0.3	0.3	-	-	-	-			
CHSDA Counties	0.5	-	-	-	-	-			
Non-CHSDA Counties	-	-	-	-	-	-			
Hispanic ^e	0.6	0.5	0.6	-0.4	1.7	-1.4*			

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

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

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

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

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

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

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

^c The 2000-2009 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2009.

^d The 2000-2009 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2009.

^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 2005-2009 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, North Dakota, and South Carolina. The 2000-2009 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, South Carolina and Vermont.

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

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

^h The 2000-2009 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2009.

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

Table 26.16
Cancer of the Thyroid (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
SEER Incidence Rates^a, 2005-2009									
California	10.26	5.20	15.32	10.37	5.34	15.56	6.35	3.24	9.14
Greater Bay Area	9.43	4.65	14.27	9.52	4.86	14.52	4.08	2.27	5.70
San Francisco-Oakland	8.59	4.32	12.86	8.69	4.49	13.19	3.82	2.03	5.36
San Jose-Monterey	10.97	5.24	16.93	10.93	5.45	16.85	5.72	-	-
Los Angeles	10.96	5.49	16.24	11.12	5.73	16.59	7.46	3.15	10.90
Greater California	10.23	5.27	15.27	10.33	5.34	15.47	6.28	3.80	8.86
Connecticut	16.92	8.47	24.97	17.75	8.95	26.22	8.36	4.78	11.57
Detroit	12.03	6.34	17.38	13.29	7.08	19.47	7.78	3.52	11.13
Georgia	9.64	4.72	14.32	10.95	5.46	16.51	6.37	2.71	9.34
Atlanta	10.31	5.15	15.15	12.65	6.48	19.11	6.32	2.79	9.20
Rural Georgia	9.63	4.73	13.91	9.88	-	14.60	8.78	-	11.82
Greater Georgia	9.31	4.50	13.92	10.22	5.04	15.40	6.30	2.57	9.38
Hawaii	14.09	6.51	21.91	11.78	6.19	18.64	12.84	-	-
Iowa	11.90	6.66	17.20	11.95	6.63	17.32	9.69	-	13.61
Kentucky	12.12	6.26	17.76	12.34	6.34	18.14	9.13	5.07	12.51
Louisiana	9.35	4.77	13.63	10.82	5.58	15.97	6.07	2.67	8.84
New Jersey	15.61	7.68	23.26	16.70	8.25	25.03	7.84	3.94	11.23
New Mexico	12.86	5.75	19.79	13.49	6.02	20.83	-	-	-
Seattle-Puget Sound	12.55	6.31	18.79	12.59	6.59	18.67	7.53	-	13.23
Utah	15.11	7.22	23.01	15.42	7.31	23.56	-	-	-
9 SEER Areas ^b	12.35	6.22	18.37	13.14	6.71	19.67	6.97	3.29	10.13
11 SEER Areas ^b	11.92	5.98	17.75	12.52	6.40	18.76	7.09	3.26	10.33
13 SEER Areas ^b	11.91	5.98	17.73	12.52	6.40	18.75	7.11	3.29	10.34
18 SEER Areas ^b	11.63	5.85	17.31	12.20	6.21	18.26	6.94	3.31	10.06

^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 26.17
Cancer of the Thyroid (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, 2005-2009</u>									
California	0.60	0.56	0.64	0.57	0.55	0.58	0.56	0.46	0.63
Greater Bay Area	0.67	0.56	0.76	0.63	0.60	0.66	-	-	-
San Francisco-Oakland	0.60	0.48	0.70	0.55	0.50	0.59	-	-	-
San Jose-Monterey	0.81	0.70	0.89	0.79	0.78	0.79	-	-	-
Los Angeles	0.67	0.62	0.70	0.65	0.61	0.67	0.54	-	0.66
Greater California	0.55	0.52	0.57	0.52	0.51	0.52	0.64	-	-
Connecticut	0.47	0.49	0.46	0.47	0.53	0.42	-	-	-
Detroit	0.44	0.45	0.42	0.47	0.50	0.44	-	-	-
Georgia	0.39	0.42	0.37	0.38	0.45	0.32	0.45	-	0.53
Atlanta	0.38	0.45	0.34	0.39	0.45	0.35	-	-	-
Rural Georgia	-	-	-	-	-	-	-	-	-
Greater Georgia	0.40	0.42	0.37	0.38	0.46	0.30	0.51	-	0.65
Hawaii	0.60	-	0.79	-	-	-	-	-	-
Iowa	0.47	0.54	0.42	0.47	0.55	0.42	-	-	-
Kentucky	0.51	0.49	0.51	0.53	0.53	0.51	-	-	-
Louisiana	0.46	0.42	0.49	0.46	0.49	0.45	0.45	-	0.61
New Jersey	0.49	0.49	0.50	0.50	0.50	0.50	0.39	-	-
New Mexico	0.55	0.55	0.54	0.56	0.56	0.54	-	-	-
Seattle-Puget Sound	0.54	0.52	0.54	0.52	0.50	0.52	-	-	-
Utah	0.52	0.62	0.43	0.52	0.64	0.43	-	-	-
9 SEER Areas ^b	0.50	0.50	0.51	0.50	0.52	0.47	0.37	-	0.40
11 SEER Areas ^b	0.56	0.53	0.57	0.54	0.55	0.53	0.42	0.33	0.48
13 SEER Areas ^b	0.56	0.53	0.57	0.54	0.55	0.53	0.42	0.33	0.48
18 SEER Areas ^b	0.53	0.51	0.54	0.52	0.53	0.50	0.45	0.31	0.54
Total U.S.	0.50	0.49	0.50	0.49	0.51	0.48	0.51	0.37	0.59

^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 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.

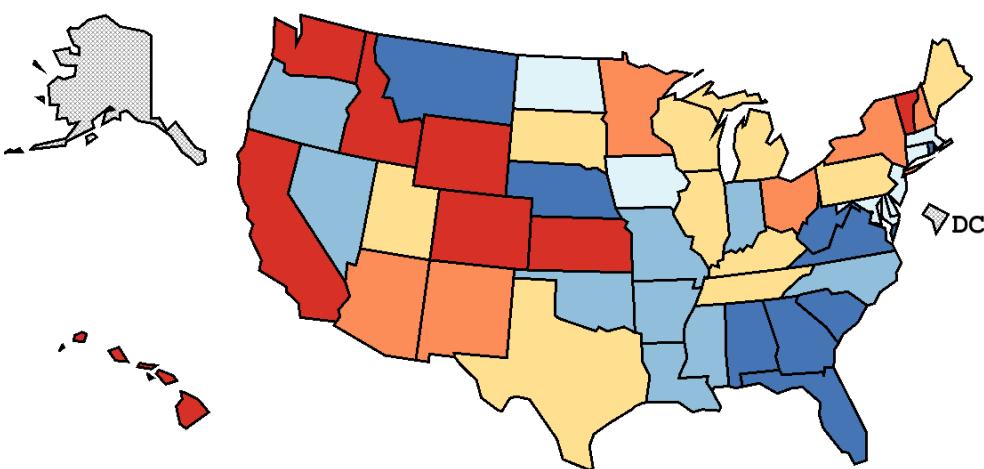
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 26.18
Cancer of the Thyroid (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2005-2009

Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	0.50	0.01							
High Five States									
Vermont	0.72	0.14	(01)	43.36 ^c					
Idaho	0.67	0.10	(02)	34.09 ^c					
Colorado	0.63	0.06	(03)	26.40 ^c					
Wyoming	0.63	0.15	(04)	25.10 ^c					
California	0.60 ^b	0.02	(05)	20.11 ^c					
Low Five States									
Florida	0.42 ^b	0.02	(45)	-15.99 ^c					
Nebraska	0.40	0.06	(46)	-21.21 ^c					
Georgia	0.39	0.03	(47)	-21.84 ^c					
South Carolina	0.36	0.04	(48)	-27.39 ^c					
Montana	0.33	0.08	(49)	-35.14 ^c					
State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	0.43	0.04	(43)	-13.49	Montana	0.33	0.08	(49)	-35.14 ^c
Alaska	-	-	(-)	-	Nebraska	0.40	0.06	(46)	-21.21 ^c
Arizona	0.55	0.04	(10)	9.07	Nevada	0.45	0.06	(37)	-10.53
Arkansas	0.45	0.05	(38)	-10.71	New Hampshire	0.54	0.09	(12)	6.69
California	0.60 ^b	0.02	(05)	20.11 ^c	New Jersey	0.49	0.03	(26)	-1.89
Colorado	0.63	0.06	(03)	26.40 ^c	New Mexico	0.55	0.07	(09)	10.28
Connecticut	0.47	0.05	(30)	-5.60	New York	0.53	0.02	(14)	5.26
Delaware	0.49	0.10	(28)	-3.06	North Carolina	0.45	0.03	(39)	-10.78
D.C.	-	-	(-)	-	North Dakota	0.49	0.11	(25)	-1.61
Florida	0.42 ^b	0.02	(45)	-15.99 ^c	Ohio	0.53	0.03	(13)	5.62
Georgia	0.39	0.03	(47)	-21.84 ^c	Oklahoma	0.46	0.05	(34)	-7.65
Hawaii	0.60	0.09	(06)	20.10 ^c	Oregon	0.46	0.05	(33)	-7.59
Idaho	0.67	0.10	(02)	34.09 ^c	Pennsylvania	0.51	0.03	(18)	2.31
Illinois	0.50	0.03	(23)	-0.17	Rhode Island	0.43	0.08	(44)	-13.77
Indiana	0.46	0.04	(35)	-8.48	South Carolina	0.36	0.04	(48)	-27.39 ^c
Iowa	0.47	0.05	(31)	-6.21	South Dakota	0.50	0.11	(22)	0.06
Kansas	0.58	0.06	(07)	16.18 ^c	Tennessee	0.50	0.04	(24)	-0.23
Kentucky	0.51	0.05	(19)	1.81	Texas	0.52	0.02	(16)	3.25
Louisiana	0.46	0.05	(32)	-7.58	Utah	0.52	0.07	(17)	2.98
Maine	0.51	0.08	(20)	1.75	Vermont	0.72	0.14	(01)	43.36 ^c
Maryland	0.49	0.04	(27)	-2.57	Virginia	0.44	0.03	(41)	-11.39
Massachusetts	0.48	0.04	(29)	-4.91	Washington	0.56	0.04	(08)	12.33
Michigan	0.50	0.03	(21)	0.39	West Virginia	0.44	0.06	(42)	-13.14
Minnesota	0.54	0.04	(11)	7.00	Wisconsin	0.52	0.04	(15)	3.40
Mississippi	0.45	0.05	(40)	-10.80	Wyoming	0.63	0.15	(04)	25.10 ^c
Missouri	0.46	0.04	(36)	-8.78					



Age-Adjusted Death
Rates per 100,000
Quantile Interval

■	0.56 - 0.72
■	0.53 - 0.55
■	0.50 - 0.52
■	0.47 - 0.49
■	0.45 - 0.46
■	0.33 - 0.44

U.S. Rate: 0.50

■ Suppressed

^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.

SE Standard error of the rate.

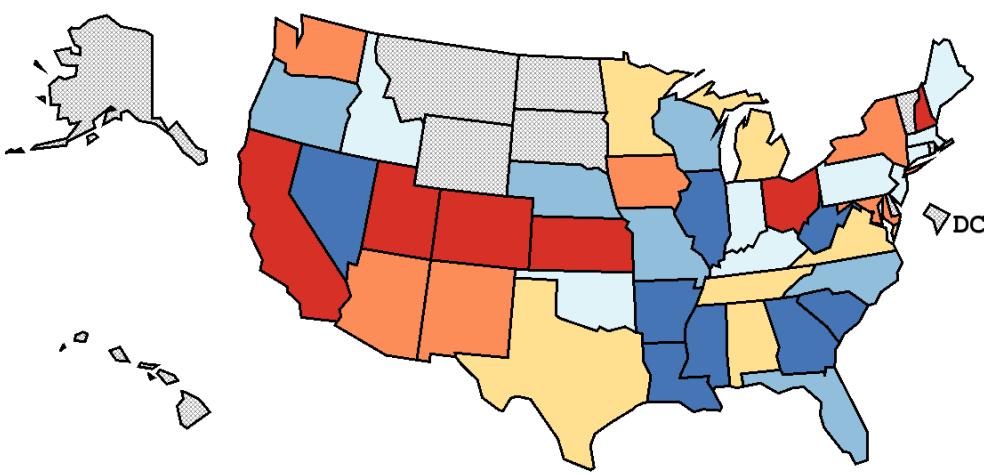
PD Percent difference between state rate and total U.S. rate.

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

Table 26.19
Cancer of the Thyroid (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2005-2009

Males									
State	Rate	SE	Rank	PD					
TOTAL U.S.	0.49	0.01							
High Five States									
Kansas	0.71	0.11	(01)	43.42 ^c					
Colorado	0.70	0.09	(02)	42.12 ^c					
New Hampshire	0.67	0.15	(03)	36.44 ^c					
Utah	0.62	0.12	(04)	24.70 ^c					
Ohio	0.58	0.05	(05)	17.70 ^c					
Low Five States									
South Carolina	0.41	0.07	(37)	-17.70 ^c					
Mississippi	0.41	0.08	(38)	-17.75 ^c					
Arkansas	0.39	0.07	(39)	-21.18 ^c					
Nevada	0.36	0.08	(40)	-26.20 ^c					
West Virginia	0.33	0.08	(41)	-32.89 ^c					
State	Rate	SE	Rank	PD	State				
Alabama	0.50	0.07	(17)	1.22	Montana	-	-	(-)	-
Alaska	-	-	(-)	-	Nebraska	0.43	0.10	(32)	-13.26
Arizona	0.53	0.06	(12)	6.30	Nevada	0.36	0.08	(40)	-26.20 ^c
Arkansas	0.39	0.07	(39)	-21.18 ^c	New Hampshire	0.67	0.15	(03)	36.44 ^c
California	0.56	0.03	(06)	12.27	New Jersey	0.49	0.05	(24)	-1.38
Colorado	0.70	0.09	(02)	42.12 ^c	New Mexico	0.55	0.11	(07)	11.62
Connecticut	0.49	0.08	(22)	-1.27	New York	0.54	0.04	(09)	8.39
Delaware	-	-	(-)	-	North Carolina	0.45	0.05	(28)	-8.35
D.C.	-	-	(-)	-	North Dakota	-	-	(-)	-
Florida	0.43	0.03	(33)	-13.99	Ohio	0.58	0.05	(05)	17.70 ^c
Georgia	0.42	0.05	(35)	-15.01 ^c	Oklahoma	0.46	0.08	(27)	-6.36
Hawaii	-	-	(-)	-	Oregon	0.44	0.07	(30)	-10.00
Idaho	0.49	0.12	(23)	-1.29	Pennsylvania	0.47	0.04	(26)	-5.20
Illinois	0.41	0.04	(36)	-16.71 ^c	Rhode Island	-	-	(-)	-
Indiana	0.49	0.06	(21)	-0.36	South Carolina	0.41	0.07	(37)	-17.70 ^c
Iowa	0.54	0.08	(10)	8.23	South Dakota	-	-	(-)	-
Kansas	0.71	0.11	(01)	43.42 ^c	Tennessee	0.50	0.06	(18)	0.19
Kentucky	0.49	0.07	(20)	0.03	Texas	0.50	0.03	(16)	1.27
Louisiana	0.42	0.07	(34)	-14.12	Utah	0.62	0.12	(04)	24.70 ^c
Maine	0.49	0.12	(25)	-1.64	Vermont	-	-	(-)	-
Maryland	0.53	0.07	(11)	7.97	Virginia	0.51	0.06	(13)	3.13
Massachusetts	0.49	0.06	(19)	0.04	Washington	0.55	0.06	(08)	10.64
Michigan	0.51	0.05	(15)	2.70	West Virginia	0.33	0.08	(41)	-32.89 ^c
Minnesota	0.51	0.06	(14)	3.11	Wisconsin	0.43	0.06	(31)	-12.96
Mississippi	0.41	0.08	(38)	-17.75 ^c	Wyoming	-	-	(-)	-
Missouri	0.45	0.06	(29)	-8.36					



Age-Adjusted Death Rates per 100,000 Quantile Interval

- 0.56 - 0.71
- 0.52 - 0.55
- 0.50 - 0.51
- 0.46 - 0.49
- 0.43 - 0.45
- 0.33 - 0.42

U.S. Rate: 0.49

■ Suppressed

^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.

SE Standard error of the rate.

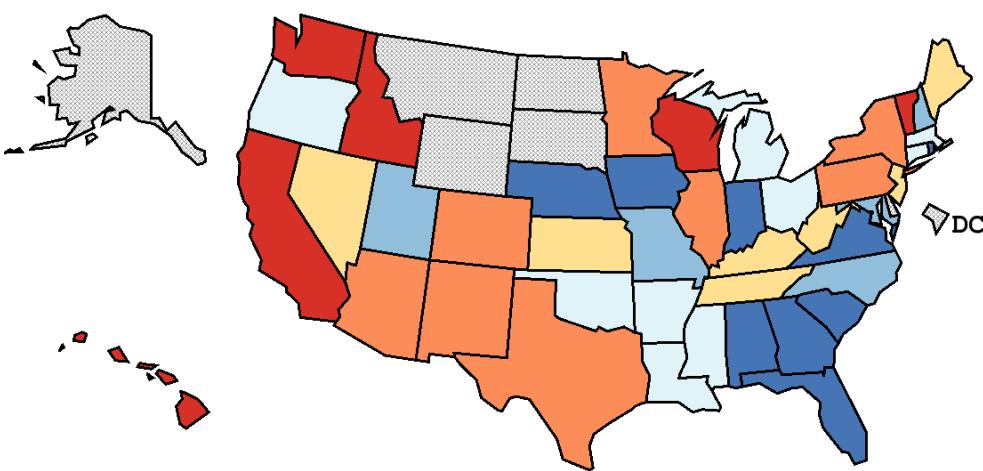
PD Percent difference between state rate and total U.S. rate.

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

Table 26.20
Cancer of the Thyroid (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2005-2009

Females				
State	Rate	SE	Rank	PD
TOTAL U.S.	0.50	0.01		
High Five States				
Vermont	0.99	0.23	(01)	96.34 ^c
Idaho	0.80	0.14	(02)	58.62 ^c
Hawaii	0.79	0.14	(03)	57.51 ^c
California	0.64 ^b	0.03	(04)	26.94 ^c
Wisconsin	0.58	0.06	(05)	16.29 ^c
Low Five States				
Virginia	0.41	0.04	(40)	-19.26 ^c
Alabama	0.38	0.05	(41)	-24.29 ^c
Georgia	0.37	0.04	(42)	-27.00 ^c
Nebraska	0.33	0.08	(43)	-33.84 ^c
South Carolina	0.33	0.05	(44)	-34.44 ^c
State	Rate	SE	Rank	PD
Alabama	0.38	0.05	(41)	-24.29 ^c
Alaska	-	-	(-)	-
Arizona	0.56	0.06	(08)	11.05
Arkansas	0.49	0.07	(23)	-2.53
California	0.64 ^b	0.03	(04)	26.94 ^c
Colorado	0.55	0.07	(09)	10.03
Connecticut	0.46	0.06	(30)	-8.75
Delaware	-	-	(-)	-
D.C.	-	-	(-)	-
Florida	0.42 ^b	0.03	(38)	-17.44 ^c
Georgia	0.37	0.04	(42)	-27.00 ^c
Hawaii	0.79	0.14	(03)	57.51 ^c
Idaho	0.80	0.14	(02)	58.62 ^c
Illinois	0.56	0.04	(07)	12.36
Indiana	0.41	0.05	(39)	-17.52 ^c
Iowa	0.42	0.06	(37)	-16.51 ^c
Kansas	0.51	0.08	(18)	1.15
Kentucky	0.51	0.06	(17)	1.53
Louisiana	0.49	0.06	(22)	-2.49
Maine	0.51	0.11	(16)	2.37
Maryland	0.45	0.05	(32)	-11.09
Massachusetts	0.47	0.05	(29)	-7.41
Michigan	0.48	0.04	(24)	-3.66
Minnesota	0.53	0.06	(12)	5.68
Mississippi	0.47	0.07	(27)	-5.70
Missouri	0.45	0.05	(31)	-10.23
Montana	-	-	(-)	-
Nebraska	0.33	0.08	(43)	-33.84 ^c
Nevada	0.52	0.09	(15)	3.00
New Hampshire	0.44	0.11	(33)	-12.62
New Jersey	0.50	0.04	(20)	-1.10
New Mexico	0.54	0.10	(11)	6.56
New York	0.53	0.03	(13)	4.83
North Carolina	0.44	0.04	(34)	-13.04
North Dakota	-	-	(-)	-
Ohio	0.48	0.04	(25)	-3.82
Oklahoma	0.48	0.07	(26)	-5.40
Oregon	0.47	0.06	(28)	-6.36
Pennsylvania	0.54	0.04	(10)	8.20
Rhode Island	0.42	0.10	(36)	-16.12 ^c
South Carolina	0.33	0.05	(44)	-34.44 ^c
South Dakota	-	-	(-)	-
Tennessee	0.50	0.05	(21)	-1.17
Texas	0.53	0.03	(14)	4.68
Utah	0.43	0.09	(35)	-14.20
Vermont	0.99	0.23	(01)	96.34 ^c
Virginia	0.41	0.04	(40)	-19.26 ^c
Washington	0.57	0.06	(06)	12.95
West Virginia	0.50	0.09	(19)	-0.63
Wisconsin	0.58	0.06	(05)	16.29 ^c
Wyoming	-	-	(-)	-



Age-Adjusted Death Rates per 100,000 Quantile Interval

■	0.57 - 0.99
■	0.53 - 0.56
■	0.50 - 0.52
■	0.46 - 0.49
■	0.43 - 0.45
■	0.33 - 0.42

U.S. Rate: 0.50

■ Suppressed

^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.

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 26.21
Cancer of the Thyroid (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2009
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 <19 ^e	0 to <34 ^e	>=34 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	150,696	99,270	68,603	49,444	37,734	28,415	359,113	456,180	40,721	496,901
	Males	33,895	21,428	14,497	11,046	7,911	5,907	78,991	99,597	9,323	108,920
	Females	116,801	77,842	54,106	38,398	29,823	22,508	280,122	356,583	31,398	387,981
White ^b	Both Sexes	131,211	87,013	60,604	44,265	33,836	25,840	315,040	402,611	36,877	439,488
	Males	30,240	19,306	13,177	10,107	7,225	5,348	71,088	89,957	7,849	97,806
	Females	100,971	67,707	47,427	34,158	26,611	20,492	243,952	312,654	29,028	341,682
Black ^b	Both Sexes	9,269	5,798	3,617	2,529	1,657	1,294	20,839	25,217	1,711	26,928
	Males	1,672	1,019	565	531	302	243	3,710	4,428	192	4,620
	Females	7,597	4,779	3,052	1,998	1,355	1,051	17,129	20,789	1,519	22,308
Asian/ Pacific	Both Sexes	6,845	4,582	3,026	+	+	+	16,148	+	+	+
	Males	1,255	839	495	+	+	+	2,881	+	+	+
Islander ^c	Females	5,590	3,743	2,531	+	+	+	13,267	+	+	+
Hispanic ^d	Both Sexes	14,617	9,084	5,853	+	+	+	32,831	+	+	+
	Males	2,507	1,597	953	+	+	+	5,599	+	+	+
	Females	12,110	7,487	4,900	+	+	+	27,232	+	+	+

Estimated prevalence percent^a on January 1, 2009, of the SEER 11 population diagnosed in the previous 19 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	All Ages	Age Specific (Crude)								Age-Adjusted ^f All Ages		
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79			
<u>Race</u>	<u>Sex</u>											
All Races ^c	Both Sexes	0.0991%	0.0001%	0.0047%	0.0347%	0.1085%	0.1689%	0.1949%	0.1989%	0.1695%	0.1118%	0.0976%
	Males	0.0430%	-	0.0020%	0.0096%	0.0347%	0.0645%	0.0882%	0.1124%	0.1109%	0.0777%	0.0438%
	Females	0.1544%	-	0.0076%	0.0615%	0.1847%	0.2739%	0.2973%	0.2774%	0.2161%	0.1308%	0.1497%
White ^c	Both Sexes	0.1069%	0.0001%	0.0052%	0.0382%	0.1205%	0.1840%	0.2054%	0.2043%	0.1719%	0.1099%	0.1039%
	Males	0.0477%	-	0.0022%	0.0106%	0.0382%	0.0713%	0.0964%	0.1191%	0.1177%	0.0766%	0.0473%
	Females	0.1663%	-	0.0084%	0.0683%	0.2091%	0.3018%	0.3136%	0.2838%	0.2161%	0.1285%	0.1610%
Black ^c	Both Sexes	0.0462%	-	0.0014%	0.0116%	0.0436%	0.0805%	0.1039%	0.1294%	0.1209%	0.0837%	0.0516%
	Males	0.0170%	-	0.0013%	0.0027%	0.0103%	0.0304%	0.0367%	0.0605%	0.0686%	0.0685%	0.0214%
	Females	0.0729%	-	0.0015%	0.0204%	0.0729%	0.1244%	0.1601%	0.1821%	0.1569%	0.0909%	0.0764%
Asian/ Pacific	Both Sexes	0.0987%	-	0.0045%	0.0327%	0.0973%	0.1532%	0.1990%	0.2086%	0.1819%	0.1351%	0.0958%
	Males	0.0368%	-	-	0.0079%	0.0343%	0.0505%	0.0737%	0.0994%	0.0915%	0.0834%	0.0379%
Islander ^c	Females	0.1567%	-	0.0083%	0.0577%	0.1570%	0.2473%	0.3081%	0.3013%	0.2505%	0.1671%	0.1470%
Hispanic ^d	Both Sexes	0.0635%	-	0.0043%	0.0280%	0.0789%	0.1291%	0.1769%	0.1823%	0.1633%	0.1110%	0.0825%
	Males	0.0207%	-	0.0018%	0.0054%	0.0209%	0.0359%	0.0663%	0.0847%	0.0967%	0.0582%	0.0308%
	Females	0.1089%	-	0.0069%	0.0543%	0.1473%	0.2314%	0.2843%	0.2667%	0.2133%	0.1419%	0.1345%

^a US 2009 cancer prevalence counts are based on 2009 cancer prevalence proportions from the SEER registries and 1/1/2009 US population estimates based on the average of 2008 and 2009 population estimates from the US Bureau of the Census.

^{b c d} Prevalence was calculated using the First Malignant Primary Only for a person.

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: 34 years for 1975-2009 SEER 9 data; 19 years for 1990-2009 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 34 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 <34 and >=34. (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 26.22

Cancer of the Thyroid (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2005-2009
Both Sexes by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	48,423	99.7%	39,766	99.7%	3,098	99.4%	4,592	99.8%	188	99.5%	6,828	99.8%
Epidermoid carcinoma ^d (8051-8131)	58	0.1%	50	0.1%	-	-	-	-	-	-	-	-
Adenocarcinoma ^e	46,764	96.3%	38,406	96.3%	2,953	94.8%	4,477	97.3%	178	94.2%	6,609	96.6%
Papillary adenocarcinoma (8050, 8260, 8340-8344, 8350, 8450)	42,074	86.6%	34,665	86.9%	2,460	78.9%	4,116	89.4%	160	84.7%	6,114	89.4%
Follicular carcinoma (8330-8332, 8335)	2,991	6.2%	2,305	5.8%	356	11.4%	259	5.6%	17	9.0%	328	4.8%
Oxyphilic (8290)	1,349	2.8%	1,153	2.9%	105	3.4%	77	1.7%	-	-	128	1.9%
Other specific carcinomas ^f	869	1.8%	727	1.8%	83	2.7%	36	0.8%	-	-	126	1.8%
Medullary carcinoma (8510)	831	1.7%	695	1.7%	79	2.5%	35	0.8%	-	-	122	1.8%
Carcinoma, NOS (8004, 8010-8012, 8020-8022, 8030-8032)	732	1.5%	583	1.5%	59	1.9%	76	1.7%	-	-	85	1.2%
Anaplastic carcinoma (8004, 8012, 8020-8021, 8030-8032)	445	0.9%	356	0.9%	35	1.1%	48	1.0%	-	-	49	0.7%
Sarcoma and other soft tissue tumors ^g	-	-	-	-	-	-	-	-	-	-	-	-
Other specific types ^h	-	-	-	-	-	-	-	-	-	-	-	-
Unspecified (8000-8003, 8005)	131	0.3%	100	0.3%	-	-	-	-	-	-	-	-
Total	48,567	100.0%	39,874	100.0%	3,116	100.0%	4,602	100.0%	189	100.0%	6,841	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 Estimates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

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

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

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

^g Other specific carcinomas include histologies 8013-8015, 8033-8046, 8150-8155, 8170-8171, 8230-8249, 8510, 8512, 8561-8562, 8575, 8580-8671.

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

ⁱ Other specific types include histologies 8720-8790, 8930-8936, 8950-8983, 9000-9030, 9060-9110, 9260-9365, 9380-9539.

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

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

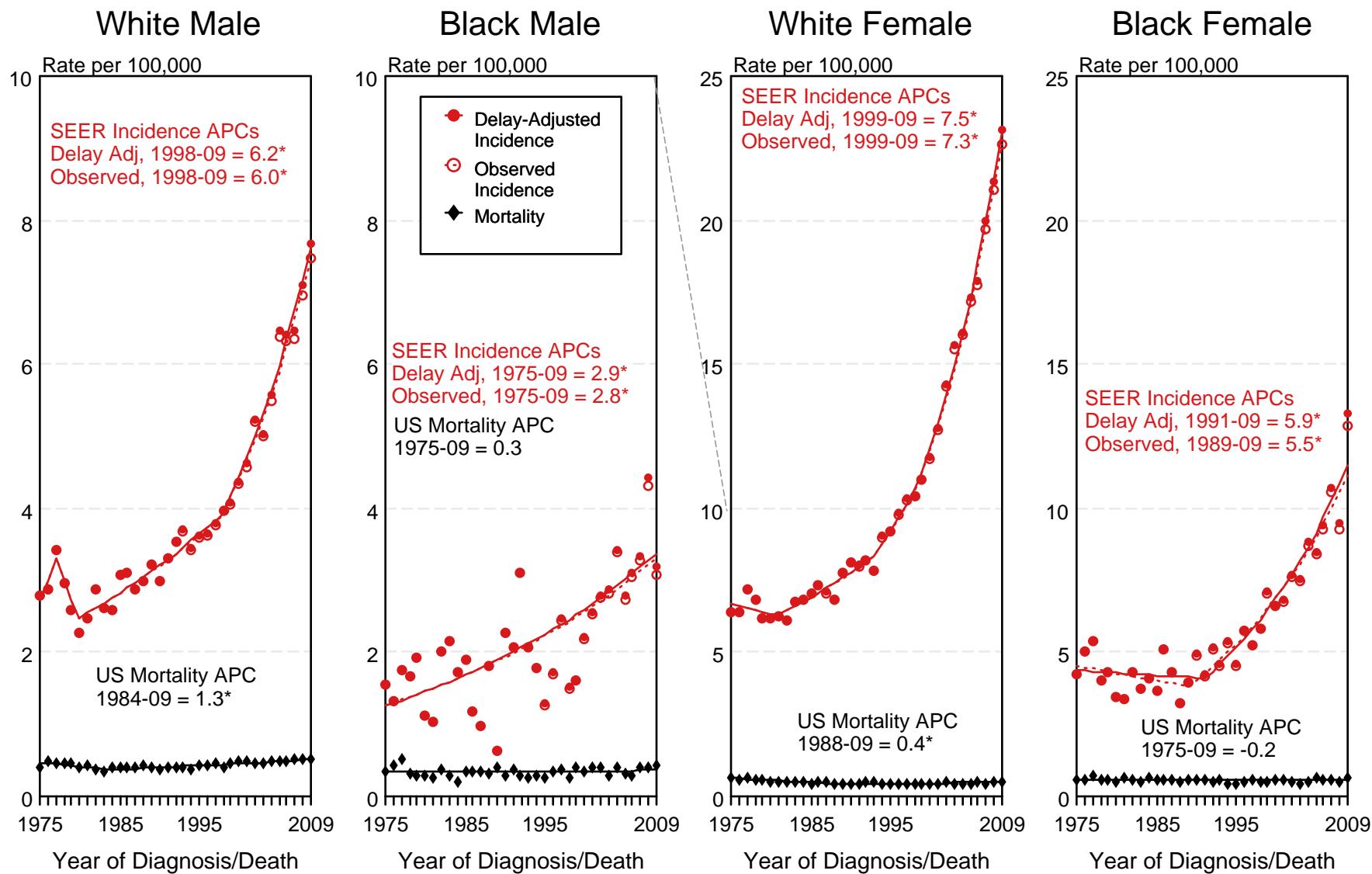


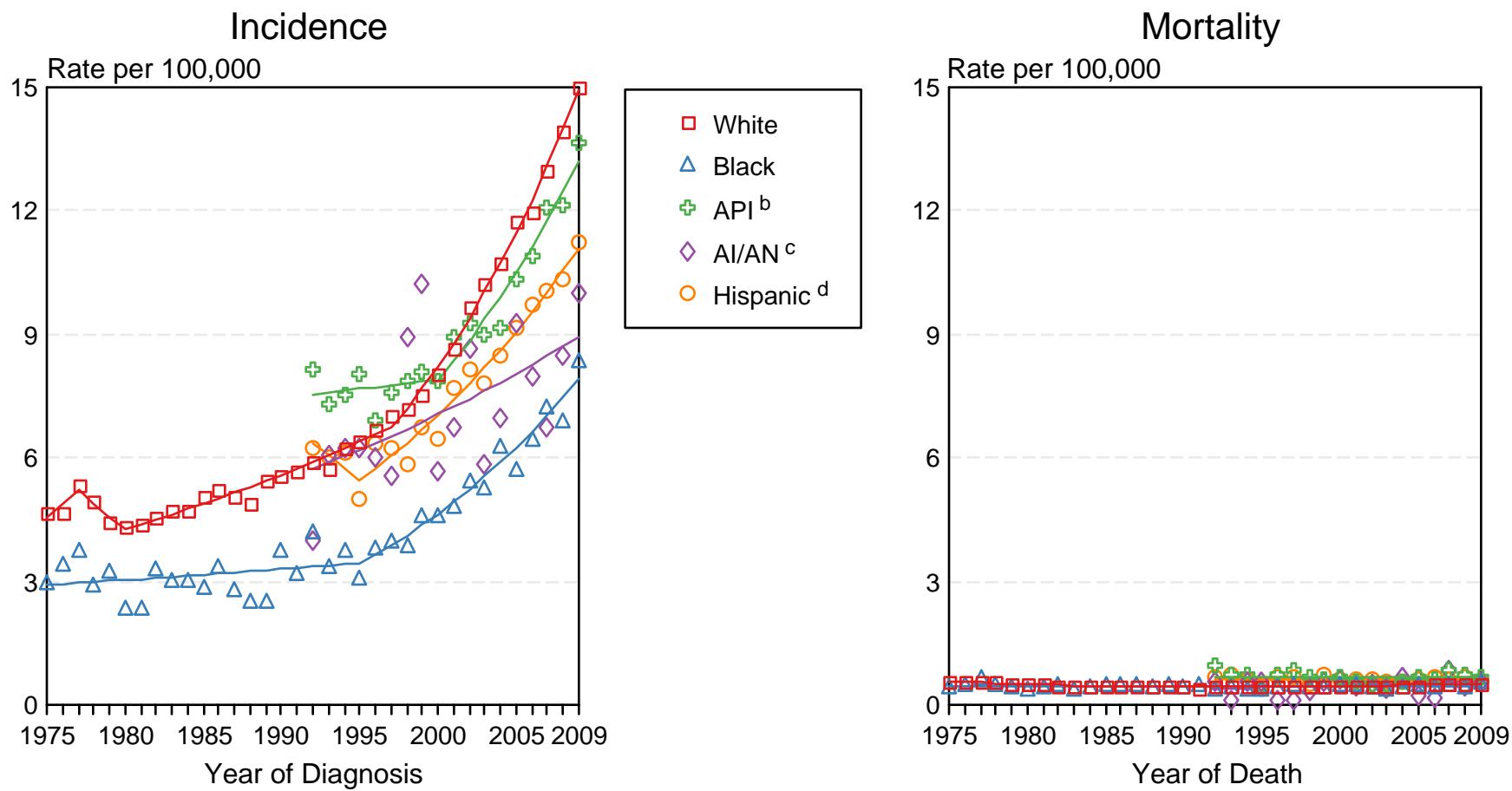
Figure 26.1

- ^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 3.5, April 2011, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
- * The APC is significantly different from zero ($p < 0.05$).

SEER Incidence and US Death Rates^a

Cancer of the Thyroid, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2009
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2009



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 3.5, April 2011, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2009 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2009 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 Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, South Carolina, Oklahoma, and Vermont.

Figure 26.2

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Thyroid, Male, by Race

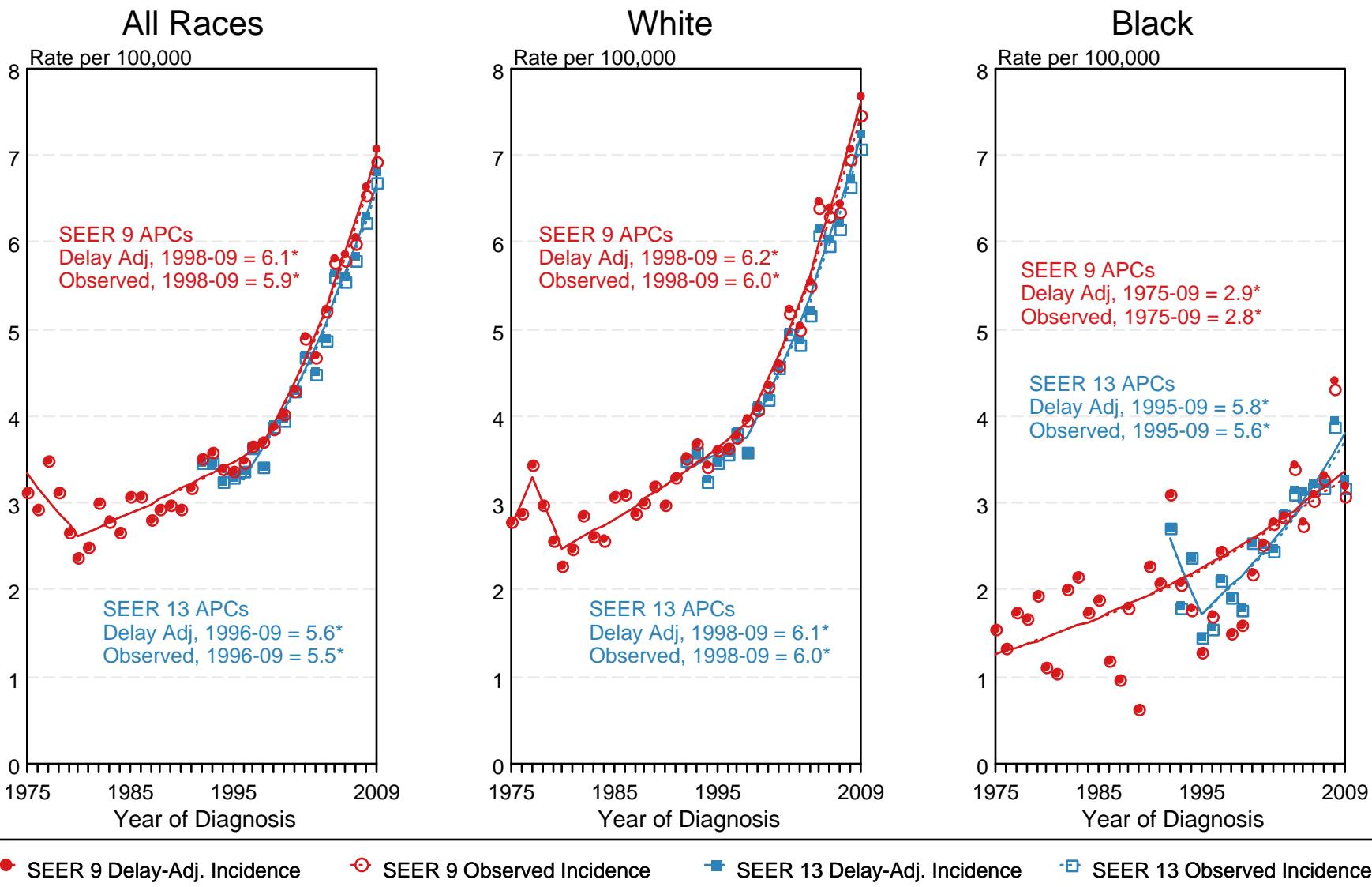


Figure 26.3

^a Source: SEER 9 areas and SEER 13 areas.

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

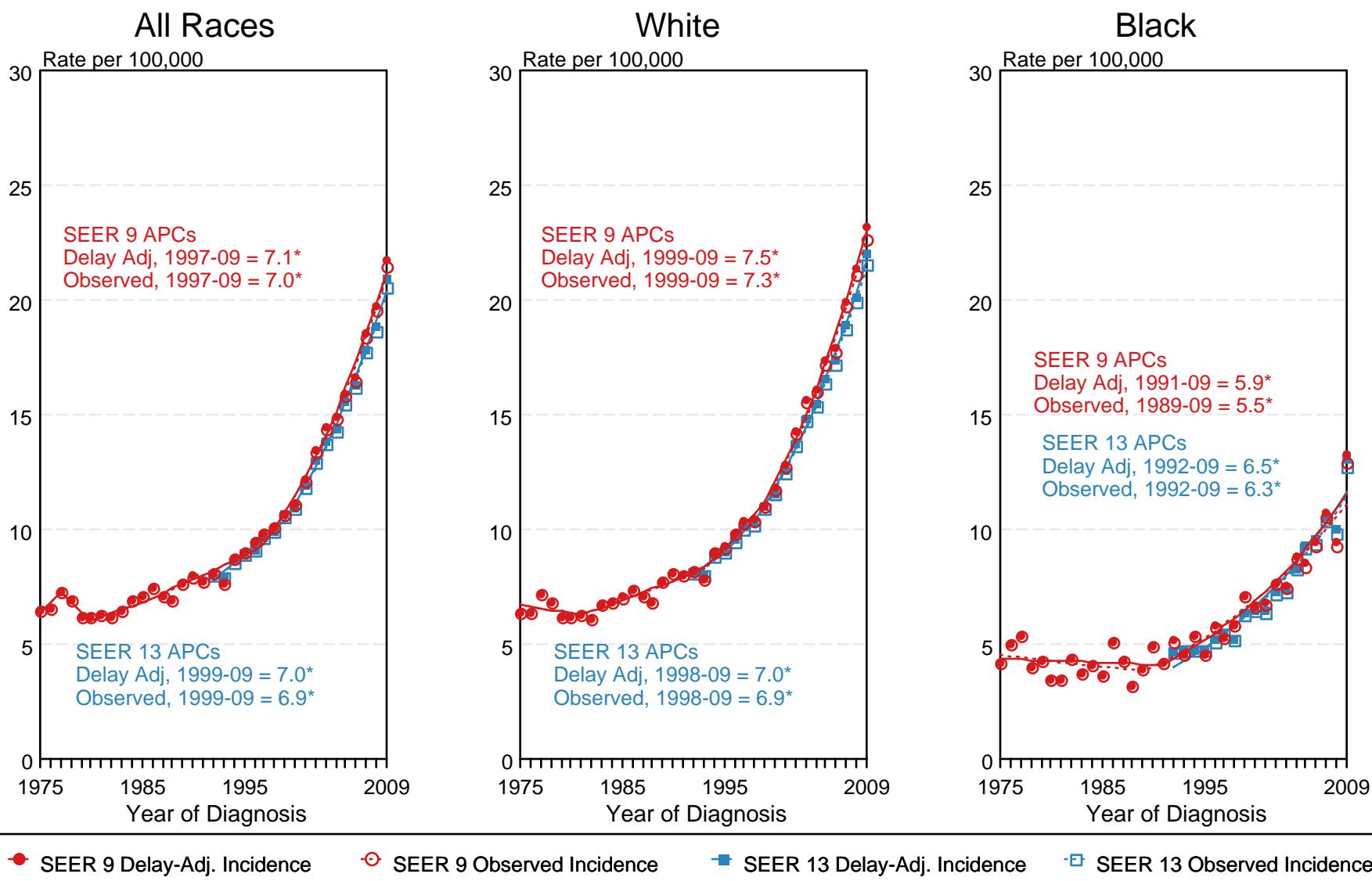
* The APC is significantly different from zero ($p < 0.05$).

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Thyroid, Female, by Race

Figure 26.4



^a Source: SEER 9 areas and SEER 13 areas.

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

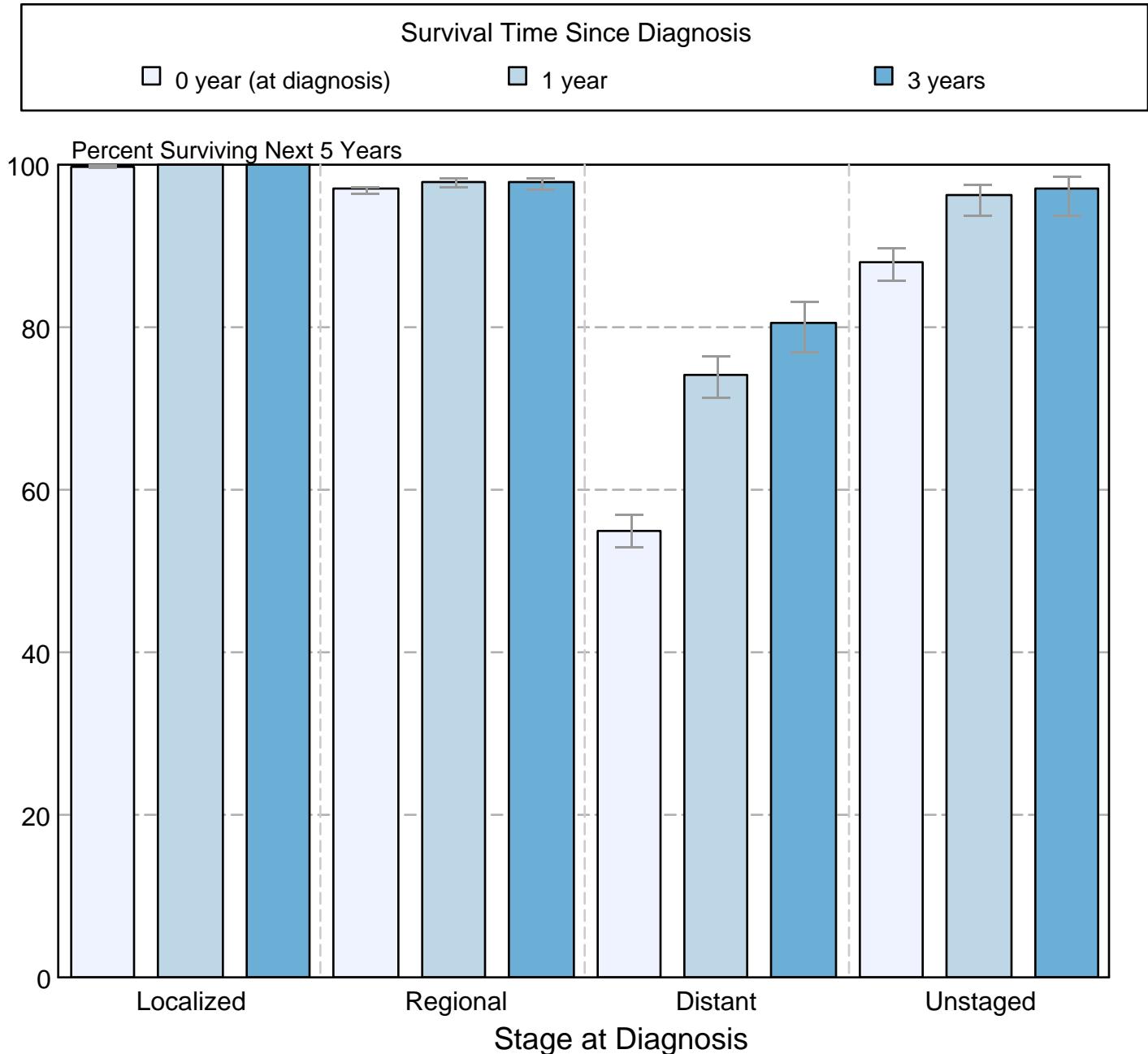
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 26.5

Cancer of the Thyroid
5-Year SEER Conditional Relative Survival and
95% Confidence Intervals
Probability of surviving the next 5 years given the cohort
has already survived 0, 1, or 3 years
1998-2008 by stage at diagnosis



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). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000-2008. The remaining 13 SEER Areas contribute cases for the entire period 1998-2008.

Stage at diagnosis is classified using SEER Summary Stage 2000.

Percent surviving is not shown if based on less than 25 cases.

Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.