

Table 26.1
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2015 With up to Five Joinpoints, 1992-2015 With up to Four 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	2006-15	2011-15
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2015</u>														
All Races	1975-77	6.3	1977-80	-6.5	1980-97	2.4*	1997-09	6.7*	2009-15	1.5*			3.2*	1.5*
White	1975-77	7.5	1977-80	-6.7	1980-97	2.7*	1997-09	7.0*	2009-15	1.4*			3.2*	1.4*
Black	1975-95	0.8	1995-12	6.3*	2012-15	-1.9							3.5*	0.1
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2015</u>														
All Races	1992-98	2.9*	1998-09	6.6*	2009-15	1.6*							3.3*	1.6*
White	1992-98	3.6*	1998-09	6.8*	2009-15	1.5*							3.2*	1.5*
Black	1992-95	-4.4	1995-11	6.8*	2011-15	-0.5							3.5*	-0.5
<u>SEER 9 Observed Incidence^a, 1975-2015</u>														
All Races	1975-77	6.3	1977-80	-6.5	1980-97	2.4*	1997-09	6.7*	2009-15	1.3*			3.1*	1.3*
White	1975-77	7.5	1977-80	-6.7	1980-97	2.7*	1997-09	7.0*	2009-15	1.2*			3.1*	1.2*
Black	1975-95	0.9	1995-12	6.2*	2012-15	-2.6							3.2*	-0.4
<u>SEER 13 Observed Incidence^b, 1992-2015</u>														
All Races	1992-98	2.9*	1998-09	6.6*	2009-15	1.5*							3.1*	1.5*
White	1992-98	3.6*	1998-09	6.8*	2009-15	1.3*							3.1*	1.3*
White NH ^{ef}	1992-98	4.4*	1998-09	7.0*	2009-15	1.1*							3.0*	1.1*
Black	1992-95	-4.2	1995-11	6.7*	2011-15	-1.0							3.2*	-1.0
Black NH ^{ef}	1992-95	-4.6	1995-11	6.9*	2011-15	-0.9							3.3*	-0.9
API ^e	1992-04	1.9*	2004-09	7.6*	2009-15	1.0							3.1*	1.0
AI/AN ^{eg}	1992-15	3.7*											3.7*	3.7*
Hispanic ^f	1992-95	-5.3	1995-13	5.0*	2013-15	-1.7							3.5*	1.6
<u>U.S. Cancer Mortality^c, 1975-2015</u>														
All Races	1975-88	-2.1*	1988-15	0.7*									0.7*	0.7*
White	1975-88	-2.2*	1988-15	0.7*									0.7*	0.7*
Black	1975-15	0.1											0.1	0.1
<u>U.S. Cancer Mortality^c, 1992-2015</u>														
All Races	1992-15	0.7*											0.7*	0.7*
White	1992-15	0.7*											0.7*	0.7*
White NH ^{ef}	1992-15	0.7*											0.7*	0.7*
Black	1992-15	0.9*											0.9*	0.9*
Black NH ^{ef}	1992-15	1.0*											1.0*	1.0*
API ^e	1992-15	-0.5											-0.5	-0.5
AI/AN ^{eg}	1992-15	0.8											0.8	0.8
Hispanic ^f	1992-15	0.1											0.1	0.1

Joinpoint Regression Program Version 4.6, February 2018, 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). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

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

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

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

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

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

^a ^b ^c ^d ^e ^f

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

Table 26.2
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2015 With up to Five Joinpoints, 1992-2015 With up to Four 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	2006-15	2011-15
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2015</u>														
All Races	1975-80	-4.6	1980-97	1.8*	1997-12	5.5*	2012-15	-1.1					3.2*	0.5
White	1975-77	10.4	1977-80	-9.1	1980-98	2.6*	1998-09	6.2*	2009-15	2.3*			3.6*	2.3*
Black	1975-15	3.0*											3.0*	3.0*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2015</u>														
All Races	1992-96	-1.4	1996-09	5.6*	2009-15	2.5*							3.6*	2.5*
White	1992-96	-0.3	1996-09	5.8*	2009-15	2.3*							3.5*	2.3*
Black	1992-15	3.8*											3.8*	3.8*
<u>SEER 9 Observed Incidence^a, 1975-2015</u>														
All Races	1975-80	-4.6	1980-97	1.8*	1997-12	5.4*	2012-15	-1.4					3.1*	0.3
White	1975-77	10.4	1977-80	-9.1	1980-98	2.6*	1998-09	6.2*	2009-15	2.1*			3.4*	2.1*
Black	1975-15	3.0*											3.0*	3.0*
<u>SEER 13 Observed Incidence^b, 1992-2015</u>														
All Races	1992-96	-1.3	1996-09	5.6*	2009-15	2.4*							3.4*	2.4*
White	1992-96	-0.3	1996-09	5.8*	2009-15	2.1*							3.3*	2.1*
White NH ^{ef}	1992-96	0.1	1996-09	6.2*	2009-15	2.1*							3.4*	2.1*
Black	1992-15	3.7*											3.7*	3.7*
Black NH ^{ef}	1992-15	3.7*											3.7*	3.7*
API ^e	1992-03	0.6	2003-15	5.5*									5.5*	5.5*
AI/AN ^{eg}	1992-15	2.5											2.5	2.5
Hispanic ^f	1992-15	3.9*											3.9*	3.9*
<u>U.S. Cancer Mortality^c, 1975-2015</u>														
All Races	1975-83	-3.1*	1983-15	1.2*									1.2*	1.2*
White	1975-84	-2.5*	1984-15	1.2*									1.2*	1.2*
Black	1975-15	0.4											0.4	0.4
<u>U.S. Cancer Mortality^c, 1992-2015</u>														
All Races	1992-15	1.3*											1.3*	1.3*
White	1992-15	1.4*											1.4*	1.4*
White NH ^{ef}	1992-15	1.4*											1.4*	1.4*
Black	1992-15	1.3*											1.3*	1.3*
Black NH ^{ef}	1992-15	1.4*											1.4*	1.4*
API ^e	1992-15	0.3											0.3	0.3
AI/AN ^{eg}	-	-											-	-
Hispanic ^f	1992-15	1.2*											1.2*	1.2*

Joinpoint Regression Program Version 4.6, February 2018, 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). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

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

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

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

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

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

^a ^b ^c ^d ^e ^f ^g ^{*} -

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

Table 26.3
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2015 With up to Five Joinpoints, 1992-2015 With up to Four 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	2006-15	2011-15
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2015</u>														
All Races	1975-77	6.5	1977-80	-5.2	1980-93	2.3*	1993-99	4.4*	1999-09	7.1*	2009-15	1.2*	3.1*	1.2*
White	1975-81	-1.1	1981-93	2.4*	1993-99	5.1*	1999-09	7.4*	2009-15	1.1*			3.2*	1.1*
Black	1975-89	-1.1	1989-15	5.5*									5.5*	5.5*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2015</u>														
All Races	1992-99	4.1*	1999-09	6.9*	2009-15	1.4*							3.2*	1.4*
White	1992-98	4.4*	1998-09	7.0*	2009-15	1.4*							3.2*	1.4*
Black	1992-98	2.9	1998-11	7.5*	2011-15	-0.6							3.8*	-0.6
<u>SEER 9 Observed Incidence^a, 1975-2015</u>														
All Races	1975-77	6.5	1977-80	-5.2	1980-93	2.3*	1993-99	4.5*	1999-09	7.1*	2009-15	1.0*	3.0*	1.0*
White	1975-81	-1.1	1981-93	2.4*	1993-99	5.2*	1999-09	7.4*	2009-15	0.9			3.0*	0.9
Black	1975-93	0.2	1993-12	6.3*	2012-15	-1.4							3.7*	0.5
<u>SEER 13 Observed Incidence^b, 1992-2015</u>														
All Races	1992-99	4.1*	1999-09	6.9*	2009-15	1.2*							3.1*	1.2*
White	1992-98	4.4*	1998-09	7.0*	2009-15	1.2*							3.1*	1.2*
White NH ^{ef}	1992-99	5.6*	1999-09	7.3*	2009-15	0.8							2.9*	0.8
Black	1992-98	3.0	1998-11	7.4*	2011-15	-1.1							3.5*	-1.1
Black NH ^{ef}	1992-98	2.8	1998-11	7.6*	2011-15	-1.1							3.6*	-1.1
API ^e	1992-99	0.3	1999-10	5.3*	2010-15	0.0							2.3*	0.0
AI/AN ^{eg}	1992-15	4.0*											4.0*	4.0*
Hispanic ^f	1992-95	-4.2	1995-13	5.1*	2013-15	-1.3							3.7*	1.9
<u>U.S. Cancer Mortality^c, 1975-2015</u>														
All Races	1975-88	-2.5*	1988-15	0.3*									0.3*	0.3*
White	1975-88	-2.8*	1988-15	0.3*									0.3*	0.3*
Black	1975-15	0.0											0.0	0.0
<u>U.S. Cancer Mortality^c, 1992-2015</u>														
All Races	1992-94	-4.9	1994-15	0.5*									0.5*	0.5*
White	1992-15	0.2											0.2	0.2
White NH ^{ef}	1992-15	0.2											0.2	0.2
Black	1992-15	0.8*											0.8*	0.8*
Black NH ^{ef}	1992-15	0.9*											0.9*	0.9*
API ^e	1992-15	-1.0											-1.0	-1.0
AI/AN ^{eg}	1992-15	-1.2											-1.2	-1.2
Hispanic ^f	1992-15	-0.5											-0.5	-0.5

Joinpoint Regression Program Version 4.6, February 2018, 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). 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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The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

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

^a ^b ^c ^d ^e ^f ^g * - 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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-1979	4.93	3.07	6.69	4.82	2.93	6.62	3.27	1.64	4.63
1980	4.33	2.39	6.15	4.29	2.28	6.20	2.37	1.11	3.43
1981	4.42	2.52	6.24	4.39	2.48	6.28	2.39	1.04	3.44
1982	4.63	3.00	6.15	4.53	2.87	6.09	3.29	2.02	4.34
1983	4.71	2.80	6.50	4.74	2.61	6.73	3.02	2.15	3.77
1984	4.85	2.65	6.93	4.73	2.58	6.81	3.02	1.73	4.08
1985	5.13	3.10	7.09	5.09	3.10	7.04	2.86	1.89	3.66
1986	5.33	3.07	7.50	5.25	3.10	7.37	3.35	1.19	5.09
1987	5.04	2.81	7.12	5.02	2.86	7.06	2.82	0.97	4.30
1988	4.93	2.94	6.88	4.89	3.00	6.78	2.53	1.80	3.21
1989	5.37	2.99	7.66	5.47	3.22	7.70	2.63	0.62	4.14
1990	5.49	2.93	7.95	5.55	2.99	8.07	3.76	2.28	4.91
1991	5.49	3.19	7.69	5.70	3.31	8.04	3.22	2.07	4.20
1992	5.88	3.52	8.13	5.88	3.52	8.17	4.23	3.09	5.18
1993	5.65	3.59	7.64	5.74	3.68	7.77	3.38	2.07	4.56
1994	6.09	3.39	8.75	6.24	3.44	9.03	3.75	1.78	5.35
1995	6.23	3.37	9.02	6.42	3.59	9.23	3.08	1.20	4.61
1996	6.52	3.47	9.51	6.72	3.61	9.83	3.89	1.79	5.80
1997	6.78	3.66	9.80	7.06	3.77	10.34	3.98	2.44	5.24
1998	6.99	3.72	10.12	7.20	3.95	10.41	4.03	1.50	6.11
1999	7.35	3.87	10.68	7.56	4.08	10.98	4.59	1.60	7.01
2000	7.62	4.04	11.10	8.05	4.38	11.77	4.57	2.18	6.55
2001	8.31	4.34	12.18	8.68	4.62	12.78	4.93	2.52	6.88
2002	9.24	4.95	13.43	9.76	5.27	14.29	5.52	2.85	7.68
2003	9.66	4.72	14.48	10.38	5.06	15.71	5.30	2.82	7.51
2004	10.15	5.24	14.94	10.82	5.55	16.13	6.37	3.33	8.90
2005	10.98	5.81	15.99	11.95	6.48	17.43	5.92	2.76	8.68
2006	11.33	5.86	16.63	12.17	6.37	18.00	6.64	3.15	9.47
2007	12.43	6.13	18.54	13.29	6.57	20.07	7.28	3.23	10.62
2008	13.25	6.59	19.72	14.25	7.07	21.48	7.10	4.50	9.53
2009	14.51	7.10	21.65	15.59	7.75	23.41	8.67	3.40	13.20
2010	14.00	6.67	21.10	14.82	7.29	22.41	8.73	3.44	13.11
2011	14.86	7.44	22.05	15.80	8.01	23.62	9.19	3.82	13.60
2012	15.06	8.08	21.90	15.92	8.70	23.27	9.73	4.37	14.25
2013	15.24	7.81	22.49	16.45	8.46	24.54	9.24	4.03	13.71
2014	15.26	7.77	22.57	16.35	8.33	24.49	9.84	4.36	14.53
2015	15.22	7.76	22.54	16.43	8.64	24.39	8.99	3.19	13.74

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 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:									
1975-2015	8.70	4.66	12.59	8.90	4.84	12.93	5.50	2.59	7.93
1975-1979	4.93	3.07	6.69	4.82	2.93	6.62	3.27	1.64	4.63
1980	4.33	2.39	6.15	4.29	2.28	6.20	2.37	-	3.43
1981	4.42	2.52	6.24	4.39	2.48	6.28	2.39	-	3.44
1982	4.63	3.00	6.15	4.53	2.87	6.09	3.29	-	4.34
1983	4.71	2.80	6.50	4.74	2.61	6.73	3.02	2.15	3.77
1984	4.85	2.65	6.93	4.73	2.58	6.81	3.02	-	4.08
1985	5.13	3.10	7.09	5.09	3.10	7.04	2.86	-	3.66
1986	5.33	3.07	7.50	5.25	3.10	7.37	3.35	-	5.09
1987	5.04	2.81	7.12	5.02	2.86	7.06	2.82	-	4.30
1988	4.93	2.94	6.88	4.89	3.00	6.78	2.53	-	3.21
1989	5.37	2.99	7.66	5.47	3.22	7.70	2.63	-	4.14
1990	5.49	2.93	7.95	5.55	2.99	8.07	3.76	2.28	4.91
1991	5.49	3.19	7.69	5.70	3.31	8.04	3.22	2.07	4.20
1992	5.88	3.52	8.13	5.88	3.52	8.17	4.23	3.09	5.18
1993	5.65	3.59	7.64	5.74	3.68	7.77	3.38	2.07	4.56
1994	6.09	3.39	8.75	6.24	3.44	9.03	3.75	1.78	5.35
1995	6.23	3.37	9.02	6.42	3.59	9.23	3.08	-	4.61
1996	6.52	3.47	9.51	6.72	3.61	9.83	3.89	1.79	5.80
1997	6.78	3.66	9.80	7.06	3.77	10.34	3.98	2.44	5.24
1998	6.99	3.72	10.12	7.20	3.95	10.41	4.03	1.50	6.11
1999	7.35	3.87	10.68	7.56	4.08	10.98	4.59	1.60	7.01
2000	7.62	4.04	11.10	8.05	4.38	11.77	4.57	2.18	6.55
2001	8.31	4.34	12.18	8.68	4.62	12.78	4.93	2.52	6.88
2002	9.24	4.95	13.43	9.76	5.27	14.29	5.52	2.85	7.68
2003	9.66	4.72	14.48	10.38	5.06	15.71	5.30	2.82	7.51
2004	10.15	5.24	14.94	10.82	5.55	16.13	6.37	3.33	8.90
2005	10.98	5.81	15.99	11.95	6.48	17.43	5.92	2.76	8.68
2006	11.33	5.86	16.63	12.17	6.37	18.00	6.64	3.15	9.47
2007	12.41	6.12	18.53	13.28	6.56	20.05	7.26	3.22	10.60
2008	13.23	6.58	19.68	14.22	7.06	21.44	7.07	4.48	9.48
2009	14.48	7.08	21.59	15.54	7.73	23.34	8.61	3.38	13.11
2010	13.95	6.65	21.02	14.76	7.26	22.32	8.65	3.40	12.98
2011	14.80	7.41	21.96	15.72	7.97	23.50	9.08	3.78	13.44
2012	14.98	8.04	21.79	15.83	8.65	23.13	9.59	4.31	14.04
2013	15.14	7.76	22.33	16.31	8.39	24.34	9.10	3.97	13.51
2014	15.14	7.71	22.38	16.18	8.24	24.23	9.62	4.25	14.21
2015	15.03	7.66	22.26	16.14	8.49	23.97	8.74	3.10	13.36

^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 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:									
1975-2015	0.48	0.45	0.50	0.48	0.46	0.48	0.48	0.35	0.56
1975-1979	0.55	0.44	0.61	0.55	0.45	0.61	0.52	0.38	0.62
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	0.41	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	0.48	0.47	0.47	0.48	0.48	0.47	0.45	0.40	0.48
2005	0.48	0.48	0.49	0.48	0.50	0.46	0.51	0.30	0.64
2006	0.49	0.46	0.51	0.50	0.48	0.50	0.47	0.28	0.60
2007	0.50	0.51	0.48	0.48	0.51	0.46	0.50	0.40	0.56
2008	0.52	0.50	0.52	0.52	0.52	0.51	0.46	0.40	0.51
2009	0.52	0.51	0.52	0.51	0.52	0.50	0.57	0.41	0.66
2010	0.51	0.50	0.51	0.50	0.51	0.48	0.49	0.45	0.53
2011	0.51	0.52	0.49	0.51	0.54	0.48	0.44	0.32	0.51
2012	0.48	0.51	0.46	0.48	0.52	0.45	0.49	0.41	0.54
2013	0.52	0.53	0.50	0.51	0.54	0.48	0.52	0.39	0.61
2014	0.50	0.49	0.50	0.50	0.52	0.48	0.56	0.38	0.66
2015	0.51	0.54	0.48	0.50	0.55	0.46	0.49	0.41	0.53

^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 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, 2011-2015									
All ages	14.5	7.3	21.4	15.3	7.8	22.8	8.9	3.8	13.4
Under 65	13.2	5.8	20.5	14.1	6.3	22.0	7.6	2.7	12.0
65 and over	23.1	17.5	27.8	23.5	18.2	28.2	18.1	11.4	22.8
All ages (WHO world std) ^c	12.8	6.2	19.2	13.5	6.6	20.5	7.6	3.1	11.6
Age-Specific Rates, 2011-2015									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	0.2	-	0.2	0.2	-	0.3	-	-	-
10-14	0.9	0.5	1.4	1.1	0.5	1.6	-	-	-
15-19	3.1	0.9	5.3	3.4	1.0	6.0	1.1	-	1.8
20-24	6.2	2.0	10.7	7.1	2.3	12.4	1.7	-	3.2
25-29	10.5	3.5	17.9	11.7	4.0	20.0	4.2	1.1	7.2
30-34	16.0	5.7	26.4	17.5	6.3	29.1	6.7	1.6	11.3
35-39	20.1	7.4	32.8	21.4	7.8	35.4	11.1	3.2	18.2
40-44	22.0	9.1	34.7	23.0	9.7	36.7	14.6	4.8	23.3
45-49	23.6	10.9	36.2	24.9	11.7	38.2	14.4	4.7	23.1
50-54	25.6	12.3	38.5	27.0	13.3	40.7	15.2	5.9	23.4
55-59	26.2	14.4	37.3	27.5	15.4	39.3	17.2	8.9	24.3
60-64	26.0	16.3	34.8	26.7	17.4	35.5	20.3	9.1	29.5
65-69	29.0	19.9	37.0	29.4	20.7	37.3	22.5	12.7	30.0
70-74	25.9	19.5	31.3	26.8	20.4	32.3	19.5	13.1	24.1
75-79	23.1	17.7	27.2	23.7	18.4	28.0	17.9	11.8	22.0
80-84	17.4	15.7	18.6	17.5	16.1	18.6	12.9	10.6	14.1
85+	11.0	9.6	11.7	10.7	9.9	11.1	12.2	-	15.3
U.S. Mortality									
Age at Death									
Age-Adjusted Rates, 2011-2015									
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	3.0	3.0	2.9	2.9	3.0	2.8	2.9	2.1	3.3
All ages (WHO world std) ^c	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.4
Age-Specific Rates, 2011-2015									
<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	-	-	-	-	-
35-39	0.0	0.0	0.0	0.0	0.0	-	-	-	-
40-44	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-
45-49	0.2	0.3	0.2	0.2	0.3	0.1	0.3	0.3	0.3
50-54	0.4	0.4	0.3	0.4	0.5	0.3	0.4	0.3	0.5
55-59	0.6	0.7	0.6	0.6	0.7	0.5	0.5	0.4	0.6
60-64	1.1	1.2	1.0	1.1	1.2	0.9	1.2	0.9	1.4
65-69	1.6	1.7	1.5	1.6	1.7	1.4	1.6	1.4	1.8
70-74	2.2	2.2	2.1	2.1	2.2	2.1	2.5	2.0	2.8
75-79	3.1	3.2	3.1	3.1	3.3	3.0	3.0	2.8	3.1
80-84	4.3	4.2	4.3	4.2	4.3	4.1	3.7	2.3	4.5
85+	5.7	5.4	5.9	5.7	5.6	5.7	5.4	2.6	6.6

^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 world (WHO 2000-2025) standard million.

- 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	92.1	91.1	92.5	91.8	90.7	92.2	89.8	-	91.0
1978-1980 ^b	92.1	87.2	93.6	91.5	87.5	92.7	90.2	68.0 ^h	95.5
1981-1983 ^b	93.6	92.2	93.9	93.1	90.9	93.7	96.4	100.0	93.2
1984-1986 ^b	93.2	89.8	94.3	93.2	89.4	94.4	89.3	85.5 ^g	90.3
1987-1989 ^b	94.4	91.6	95.2	94.1	91.6	95.0	92.3	91.2 ^g	92.3
1990-1992 ^b	94.3	90.5	95.5	94.9	91.6	96.0	85.9	84.5 ^g	86.3
1993-1995 ^b	95.4	91.6	96.7	95.6	91.5	96.9	93.2	87.8 ^g	94.3
1996-1998 ^b	95.6	91.0	96.9	95.9	91.3	97.3	95.1	86.5 ^g	96.6
1999-2001 ^b	96.5	94.3	97.1	96.8	94.9	97.4	92.0	88.4 ^g	92.4
2002-2004 ^b	97.3	93.9	98.2	97.4	94.1	98.3	95.9	94.2	96.0
2005-2007 ^b	97.9	96.1	98.5	98.0	96.1	98.6	96.3	91.5	96.9
2008-2014 ^b	98.3 ^f	96.0 ^f	98.9 ^f	98.6 ^f	96.5 ^f	99.2 ^f	97.0 ^f	91.3	97.9 ^f
5-Year Period Survival (Percent)^{cd}									
2014	98.2	95.8	98.9	98.4	96.1	99.0	96.9	92.8	97.4
Stage Distribution (%) 2008-2014^{ce}									
All Stages									
Number of cases	74,280	17,072	57,208	59,623	14,147	45,476	5,139	909	4,230
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	67	58	70	67	58	70	80	72	81
Regional	27	33	25	27	34	25	14	18	13
Distant	4	7	3	4	6	3	4	8	4
Unstaged/Unknown	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2008-2014^c									
Age at Diagnosis:									
Ages <45	99.7	99.1	99.8	99.7	99.3	99.8	99.2	96.5	99.5
Ages 45-54	98.8	96.2	99.5	98.8	96.4	99.5	99.0	95.9	99.5
Ages 55-64	98.0	95.2	98.9	98.3	95.3	99.2	95.6	92.0	96.3
Ages 65-74	96.3	91.7	97.4	96.6	92.3	97.7	93.9	82.2 ^g	96.5
Ages 75+	86.3	84.7	86.7	88.4	86.3	88.8	75.4	72.8 ^g	73.9
Ages <65	99.1	97.1	99.6	99.1	97.2	99.6	98.3	95.2	99.0
Ages 65+	93.2	89.6	94.3	94.2	90.5	94.9	88.9	82.4 ^g	90.3
Stage^e:									
All Stages	98.1	95.6	98.8	98.3	95.8	99.0	97.2	92.9	97.7
Localized	99.9	99.8	100.0	99.9	99.8	100.0	99.8	98.9	99.9
Regional	98.0	96.4	98.7	98.2	96.6	98.9	94.4	89.6	95.8
Distant	55.5	50.9	58.3	55.8	50.7	59.2	47.0	42.4 ^g	48.7
Unstaged/Unknown	89.1	83.6	90.9	88.4	84.5	89.7	88.7	-	91.5

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 2015. [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 2015.

Period survival provides a 2014 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 2008-2014 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.

a

b

c

d

e

f

g

h

-

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-	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	
Survival Time																													
1-year	94.9	95.1	95.9	96.2	96.7	96.8	96.4	97.7	97.2	97.6	97.6	97.1	97.9	98.3	97.7	98.5	98.5	98.3	98.8	98.8	98.9	98.7	98.8	98.3	98.7				
2-year	93.5	94.5	95.2	95.7	96.1	96.6	96.2	97.1	97.1	97.0	97.4	97.1	97.9	97.9	97.3	98.4	98.1	98.2	98.7	98.6	98.6	98.4	98.2						
3-year	92.9	93.7	94.8	95.3	96.0	96.0	96.2	96.9	97.1	96.9	97.0	97.1	97.7	97.9	97.3	98.3	98.0	98.2	98.7	98.5	98.6	98.6	98.4						
4-year	92.5	93.4	94.3	95.0	95.9	95.4	95.6	96.3	97.0	96.9	97.0	97.1	97.4	97.7	97.3	98.3	97.9	98.0	98.7	98.4	98.6								
5-year	92.1	93.3	94.1	94.7	95.8	94.9	95.3	96.2	96.9	96.3	96.2	97.1	97.3	97.3	97.3	98.2	97.9	97.8	98.7	98.1									
6-year	91.6	93.1	93.8	94.3	95.8	94.8	95.2	95.8	96.4	96.3	96.2	96.7	97.0	97.2	97.3	98.2	97.9	97.8	98.7										
7-year	91.4	92.7	93.4	94.2	95.6	94.5	95.2	95.8	96.2	96.1	96.1	96.5	96.5	96.8	96.9	97.3	98.1	97.9	97.8										
8-year	91.1	92.6	93.3	94.1	95.5	94.2	95.1	95.8	96.0	95.9	95.9	96.3	96.7	96.8	96.8	97.3	98.0	97.9											
9-year	90.7	92.3	93.1	93.9	95.5	93.7	94.9	95.8	95.6	95.9	95.4	96.3	96.7	96.8	97.3	98.0													
10-year	90.5	92.0	92.8	93.6	95.1	93.6	94.9	95.8	95.4	95.8	95.4	96.3	96.7	96.7	97.3														
11-year	90.3	91.7	92.7	93.3	95.0	93.3	94.9	95.8	95.0	95.8	95.4	96.1	96.7	96.5															
12-year	90.3	91.4	92.6	93.0	95.0	93.0	94.9	95.8	94.8	95.8	95.4	95.9	96.7																
13-year	90.0	91.2	92.5	93.0	95.0	92.8	94.9	95.0	94.7	95.8	95.4	95.9																	
14-year	89.9	91.2	92.4	92.7	95.0	92.6	94.9	94.6	94.6	94.6	95.8																		
15-year	89.7	90.7	92.3	92.3	94.3	92.4	94.9	94.1	94.5	95.8																			
16-year	89.6	90.6	92.3	92.2	93.8	92.4	94.9	93.8	94.5																				
17-year	89.5	90.6	92.2	92.2	93.8	92.3	94.9	93.7																					
18-year	89.3	90.5	92.2	92.1	93.8	92.3	94.3																						
19-year	89.2	90.5	91.9	92.1	93.8	92.3																							
20-year	89.2	90.5	91.9	92.1	93.8																								

^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 26.10
Cancer of the Thyroid (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
Survival Time																												
1-year	94.6	92.5	94.8	94.6	93.4	93.7	91.8	97.2	96.5	96.3	96.1	95.1	95.6	96.7	97.1	96.4	97.3	96.8	98.3	97.8	97.3	97.9	96.7	97.1				
2-year	92.5	92.0	93.7	93.2	91.9	93.4	90.9	95.4	96.2	94.9	95.5	94.9	95.3	95.1	95.6	96.1	96.5	96.1	98.2	96.3	96.9	97.2	96.4					
3-year	91.5	90.8	93.5	92.4	91.7	92.1	90.9	94.7	96.2	94.9	94.2	94.9	94.2	94.8	95.6	96.1	96.5	96.1	98.2	96.1	96.7	96.8						
4-year	90.5	90.4	92.1	91.9	91.4	91.7	89.5	93.7	96.2	94.9	93.6	94.6	93.5	94.3	95.6	96.1	96.5	95.7	98.2	95.6	96.7							
5-year	89.9	90.2	91.6	91.0	91.2	89.8	88.2	93.7	96.2	93.8	92.4	94.3	93.2	94.0	95.6	95.7	96.3	95.1	98.0	94.3								
6-year	89.6	89.8	91.1	90.6	90.3	89.8	88.0	93.5	95.8	93.8	92.0	93.8	91.7	94.0	95.6	95.7	96.3	95.1	97.8									
7-year	89.4	89.3	90.0	90.4	88.7	89.5	88.0	93.3	95.4	93.4	91.9	92.4	91.7	92.8	95.6	95.3	96.3	94.9										
8-year	89.3	89.3	89.6	90.1	88.7	88.5	87.8	93.3	95.2	93.4	91.1	91.5	91.7	92.5	95.3	95.3	96.3											
9-year	88.8	88.6	88.5	89.9	88.7	86.7	86.9	93.3	93.0	93.4	89.8	91.0	91.7	92.1	95.3	95.3	95.3											
10-year	88.3	87.9	88.5	89.7	87.4	86.4	86.9	93.3	92.6	93.4	89.6	91.0	91.7	91.5	94.9													
11-year	87.5	87.2	88.4	89.5	86.2	84.8	86.5	93.3	92.6	93.4	89.6	90.2	91.7	91.5														
12-year	87.5	86.4	88.3	88.7	86.0	84.1	86.5	93.1	92.6	93.4	89.3	89.9	91.7															
13-year	87.3	86.2	87.8	88.2	86.0	83.1	86.5	93.1	92.6	92.7	89.3	89.9																
14-year	87.3	86.2	87.7	87.8	85.8	82.7	86.5	93.1	92.6	92.7	89.3																	
15-year	86.7	85.4	87.7	87.2	85.8	82.7	86.5	93.1	92.6	92.7	89.3																	
16-year	86.6	85.3	87.7	86.8	85.8	82.7	86.5	93.1	92.6	92.7	89.3																	
17-year	86.6	84.9	87.7	86.8	85.8	82.7	86.5	91.8																				
18-year	86.6	84.6	87.7	86.5	85.8	82.7	86.0																					
19-year	86.6	84.6	87.7	86.4	85.8	82.2																						
20-year	86.6	84.6	87.7	86.4	85.8																							

^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 26.11
Cancer of the Thyroid (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
Survival Time																												
1-year	95.0	96.0	96.3	96.8	97.8	97.7	97.7	97.9	97.4	98.0	98.0	97.7	98.6	98.8	97.9	99.0	98.9	98.7	98.9	99.1	99.1	99.1	99.1	98.8	99.1			
2-year	93.9	95.3	95.7	96.6	97.4	97.5	97.7	97.6	97.4	97.7	98.0	97.7	98.5	98.7	97.9	99.0	98.5	98.7	98.8	99.1	99.1	99.1	98.8	98.7				
3-year	93.3	94.7	95.2	96.3	97.3	97.1	97.7	97.5	97.4	97.5	97.7	97.7	98.5	98.7	97.9	98.9	98.5	98.7	98.8	99.1	99.1	99.1	98.8					
4-year	93.1	94.4	95.0	96.1	97.3	96.5	97.5	97.1	97.2	97.5	97.7	97.7	98.5	98.7	97.9	98.9	98.3	98.6	98.7	99.1	99.0							
5-year	92.7	94.3	94.9	95.9	97.2	96.4	97.4	96.9	96.9	97.0	97.3	97.7	98.4	98.3	97.9	98.9	98.3	98.6	98.7	99.0								
6-year	92.3	94.2	94.7	95.5	97.2	96.1	97.3	96.5	96.5	97.0	97.3	97.6	98.3	98.1	97.9	98.9	98.3	98.6	98.7									
7-year	92.1	93.8	94.5	95.4	97.2	95.9	97.3	96.5	96.3	97.0	97.3	97.6	98.1	98.0	97.9	98.9	98.3	98.5										
8-year	91.7	93.7	94.5	95.4	97.2	95.9	97.3	96.5	96.2	96.6	97.3	97.6	98.0	98.0	97.9	98.7	98.7	98.3										
9-year	91.3	93.6	94.5	95.3	97.2	95.8	97.3	96.5	96.2	96.6	97.0	97.6	97.9	98.0	97.9	98.7												
10-year	91.2	93.4	94.2	94.9	97.2	95.7	97.3	96.5	96.0	96.4	97.0	97.6	97.7	98.0	97.9													
11-year	91.2	93.2	94.0	94.6	97.2	95.7	97.3	96.5	95.8	96.4	97.0	97.6	97.7	97.9														
12-year	91.1	93.1	94.0	94.5	97.2	95.5	97.3	96.5	95.2	96.4	97.0	97.6	97.7															
13-year	90.9	92.9	94.0	94.4	97.2	95.5	97.3	95.5	94.9	96.4	97.0	97.6																
14-year	90.8	92.8	93.9	94.3	97.2	95.5	97.3	94.9	94.6	96.4	97.0																	
15-year	90.7	92.4	93.8	94.0	96.7	95.0	97.3	94.3	94.4	96.4																		
16-year	90.6	92.3	93.7	93.9	95.8	95.0	97.3	94.2	94.4																			
17-year	90.4	92.3	93.6	93.9	95.8	95.0	97.1	94.1																				
18-year	89.9	92.3	93.5	93.8	95.8	95.0	96.7																					
19-year	89.8	92.3	93.2	93.8	95.8	95.0																						
20-year	89.8	92.3	93.2	93.8	95.8																							

^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 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, 2013-2015 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		Risk of Dying from Cancer	
		+10 yrs			+20 yrs			+30 yrs			Ever					+10 yrs			
All Races	0	0.00	0.02	0.11	1.22	0.06		Asian/	0	0.00	0.02	0.10	1.28	0.11					
	10	0.02	0.11	0.29	1.23	0.06		Pacific	10	0.02	0.10	0.27	1.29	0.11					
	20	0.09	0.27	0.49	1.21	0.06		Islander	20	0.08	0.24	0.47	1.27	0.11					
	30	0.18	0.40	0.65	1.14	0.07			30	0.17	0.39	0.63	1.20	0.11					
	40	0.23	0.47	0.72	0.97	0.07			40	0.22	0.46	0.72	1.04	0.11					
	50	0.25	0.50	0.68	0.77	0.07			50	0.24	0.51	0.70	0.83	0.11					
	60	0.26	0.46	0.53	0.54	0.06			60	0.27	0.47	0.58	0.60	0.11					
	70	0.22	0.30	-	0.32	0.06			70	0.21	0.32	-	0.35	0.10					
	80	0.11	-	-	0.13	0.05			80	0.13	-	-	0.17	0.08					
White	0	0.00	0.03	0.12	1.28	0.06		American	0	0.00	0.02	0.07	0.83	0.07					
	10	0.03	0.12	0.31	1.29	0.06		Indian/	10	0.02	0.07	0.18	0.84	0.07					
	20	0.10	0.29	0.52	1.27	0.06		Alaska	20	0.05	0.16	0.26	0.83	0.07					
	30	0.19	0.43	0.69	1.18	0.06		Native ^a	30	0.11	0.21	0.36	0.79	0.07					
	40	0.24	0.50	0.74	1.00	0.06			40	0.10	0.26	0.43	0.70	0.07					
	50	0.27	0.52	0.71	0.79	0.06			50	0.16	0.34	0.48	0.63	0.08					
	60	0.27	0.47	0.54	0.55	0.06			60	0.19	0.34	0.47	0.50	0.07					
	70	0.22	0.31	-	0.32	0.06			70	0.17	0.32	-	0.35	0.07					
	80	0.11	-	-	0.13	0.05			80	0.20	-	-	0.24	0.09					
Black	0	0.00	0.01	0.04	0.74	0.06		Hispanic ^b	0	0.00	0.02	0.09	1.14	0.09					
	10	0.01	0.04	0.12	0.76	0.06			10	0.02	0.09	0.23	1.15	0.09					
	20	0.03	0.12	0.26	0.75	0.06			20	0.07	0.21	0.40	1.13	0.09					
	30	0.09	0.23	0.38	0.73	0.06			30	0.14	0.33	0.55	1.07	0.09					
	40	0.15	0.30	0.48	0.66	0.06			40	0.19	0.42	0.65	0.94	0.10					
	50	0.16	0.34	0.46	0.53	0.06			50	0.23	0.47	0.67	0.77	0.10					
	60	0.20	0.33	0.39	0.40	0.06			60	0.25	0.45	0.53	0.56	0.09					
	70	0.16	0.23	-	0.25	0.06			70	0.22	0.31	-	0.34	0.09					
	80	0.10	-	-	0.13	0.05			80	0.11	-	-	0.14	0.07					

Devcan 6.7.6, April 2018, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

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

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

- Statistic could not be calculated.

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

Table 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, 2013-2015 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	Risk of Dying from Cancer	Race/ Ethnicity	Current Age	+10 yrs	+20 yrs	+30 yrs	Ever			
All Races	0	0.00	0.01	0.04	0.64	0.06	Asian/ Pacific Islander	0	0.00	0.01	0.04	0.67	0.08		
	10	0.01	0.04	0.10	0.65	0.06		10	0.01	0.04	0.10	0.67	0.08		
	20	0.03	0.09	0.19	0.64	0.06		20	0.03	0.09	0.20	0.66	0.08		
	30	0.07	0.16	0.29	0.62	0.06		30	0.07	0.17	0.28	0.64	0.08		
	40	0.10	0.22	0.38	0.56	0.06		40	0.10	0.21	0.36	0.58	0.08		
	50	0.13	0.29	0.42	0.48	0.06		50	0.11	0.26	0.39	0.48	0.08		
	60	0.17	0.31	0.37	0.38	0.06		60	0.16	0.29	0.38	0.38	0.08		
	70	0.16	0.23	-	0.24	0.05		70	0.15	0.24	-	0.25	0.07		
	80	0.10	-	-	0.11	0.04		80	0.11	-	-	0.12	0.06		
White	0	0.00	0.01	0.04	0.68	0.06	American Indian/ Alaska Native ^a	0	0.00	0.01	0.03	0.34	0.06		
	10	0.01	0.04	0.11	0.69	0.06		10	0.01	0.03	0.06	0.35	0.06		
	20	0.03	0.10	0.20	0.68	0.06		20	0.02	0.05	0.08	0.34	0.06		
	30	0.07	0.17	0.31	0.66	0.06		30	0.03	0.06	0.10	0.33	0.06		
	40	0.10	0.24	0.40	0.60	0.06		40	0.02	0.07	0.15	0.30	0.06		
	50	0.14	0.31	0.45	0.51	0.06		50	0.05	0.13	0.22	0.30	0.07		
	60	0.18	0.33	0.39	0.39	0.06		60	0.09	0.19	0.27	0.27	0.07		
	70	0.17	0.24	-	0.25	0.05		70	0.11	0.20	-	0.21	0.07		
	80	0.10	-	-	0.11	0.04		80	0.13	-	-	0.14	0.08		
Black	0	0.00	0.00	0.01	0.31	0.03	Hispanic ^b	0	0.00	0.01	0.03	0.50	0.07		
	10	0.00	0.01	0.04	0.31	0.04		10	0.01	0.03	0.07	0.50	0.07		
	20	0.01	0.03	0.08	0.31	0.04		20	0.02	0.06	0.12	0.50	0.07		
	30	0.03	0.07	0.14	0.31	0.04		30	0.04	0.11	0.20	0.48	0.07		
	40	0.04	0.12	0.20	0.29	0.04		40	0.06	0.16	0.28	0.45	0.07		
	50	0.08	0.16	0.23	0.26	0.04		50	0.10	0.22	0.33	0.39	0.07		
	60	0.10	0.17	0.21	0.21	0.04		60	0.13	0.25	0.30	0.31	0.07		
	70	0.10	0.14	-	0.14	0.03		70	0.13	0.19	-	0.20	0.06		
	80	0.07	-	-	0.07	0.02		80	0.08	-	-	0.10	0.05		

Devcan 6.7.6, April 2018, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

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

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

- Statistic could not be calculated.

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

Table 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, 2013-2015 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 Dying from Cancer		
		+10 yrs			+20 yrs			+30 yrs			Ever							
All Races	0	0.00	0.04	0.19	1.81	0.07		Asian/	0	0.00	0.03	0.16	1.83	0.13				
	10	0.04	0.18	0.48	1.82	0.07		Pacific	10	0.03	0.16	0.42	1.84	0.13				
	20	0.15	0.44	0.79	1.79	0.07		Islander	20	0.13	0.39	0.72	1.81	0.13				
	30	0.30	0.65	1.01	1.65	0.07			30	0.26	0.59	0.94	1.69	0.13				
	40	0.36	0.72	1.05	1.37	0.07			40	0.33	0.68	1.04	1.44	0.13				
	50	0.37	0.71	0.94	1.04	0.07			50	0.35	0.71	0.96	1.12	0.13				
	60	0.35	0.59	0.68	0.70	0.07			60	0.37	0.62	0.74	0.79	0.13				
	70	0.27	0.36	-	0.38	0.06			70	0.27	0.39	-	0.44	0.12				
	80	0.12	-	-	0.15	0.05			80	0.15	-	-	0.20	0.09				
White	0	0.00	0.04	0.21	1.90	0.07		American	0	0.00	0.03	0.11	1.32	0.08				
	10	0.04	0.21	0.53	1.92	0.07		Indian/	10	0.02	0.11	0.30	1.33	0.08				
	20	0.17	0.49	0.86	1.88	0.07		Alaska	20	0.09	0.27	0.44	1.31	0.08				
	30	0.32	0.70	1.08	1.72	0.07		Native ^a	30	0.19	0.36	0.62	1.24	0.08				
	40	0.38	0.76	1.09	1.41	0.07			40	0.17	0.44	0.69	1.07	0.08				
	50	0.39	0.73	0.97	1.06	0.07			50	0.27	0.54	0.73	0.93	0.08				
	60	0.35	0.60	0.69	0.70	0.07			60	0.28	0.48	0.65	0.69	0.07				
	70	0.27	0.37	-	0.38	0.06			70	0.22	0.41	-	0.46	0.07				
	80	0.12	-	-	0.14	0.05			80	0.24	-	-	0.30	0.08				
Black	0	0.00	0.01	0.07	1.14	0.08		Hispanic ^b	0	0.00	0.04	0.17	1.79	0.11				
	10	0.01	0.07	0.21	1.16	0.08			10	0.04	0.17	0.41	1.80	0.11				
	20	0.06	0.20	0.43	1.16	0.08			20	0.13	0.38	0.69	1.77	0.11				
	30	0.15	0.38	0.61	1.11	0.08			30	0.25	0.56	0.92	1.65	0.11				
	40	0.24	0.47	0.72	0.98	0.08			40	0.31	0.68	1.02	1.41	0.11				
	50	0.24	0.50	0.67	0.76	0.08			50	0.37	0.72	0.98	1.11	0.11				
	60	0.28	0.46	0.54	0.56	0.08			60	0.36	0.63	0.74	0.77	0.11				
	70	0.21	0.30	-	0.33	0.08			70	0.30	0.41	-	0.44	0.10				
	80	0.12	-	-	0.16	0.06			80	0.14	-	-	0.17	0.08				

Devcan 6.7.6, April 2018, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

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

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

- Statistic could not be calculated.

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

Table 26.15
Cancer of the Thyroid (Invasive)

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

SEER Incidence	SEER 18 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2011-2015			Trend 2006-2015 ^c			Trend 2006-2015 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	14.5	7.3	21.4	3.1*	3.4*	3.1*	3.1*	3.1*	3.0*
White	15.3	7.8	22.8	3.1*	3.3*	3.1*	3.1*	3.4*	3.0*
White Hispanic ^e	13.0	5.5	20.4	3.5*	3.9*	3.9*	-	-	-
White Non-Hispanic ^e	16.2	8.5	23.9	3.0*	3.4*	2.9*	-	-	-
Black	8.9	3.8	13.4	3.2*	3.7*	3.5*	3.2*	3.0*	3.7*
Asian/Pacific Islander	14.0	7.0	20.2	3.1*	5.5*	2.3*	-	-	-
Amer Ind/Alaska Nat ^f	9.3	4.0	14.3	3.7*	2.5	4.0*	-	-	-
Hispanic ^e	12.5	5.3	19.6	3.5*	3.9*	3.7*	-	-	-
U.S. Mortality ^g	Rate 2011-2015			Trend 2006-2015 ^h			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	0.5	0.5	0.5	0.7*	1.3*	0.5*			
White	0.5	0.5	0.5	0.7*	1.4*	0.2			
White Hispanic ^e	0.6	0.6	0.7	0.3	1.3*	-0.3			
White Non-Hispanic ^e	0.5	0.5	0.4	0.7*	1.4*	0.2			
Black	0.5	0.4	0.6	0.9*	1.3*	0.8*			
Asian/Pacific Islander	0.6	0.5	0.7	-0.5	0.3	-1.0			
Amer Ind/Alaska Nat									
Total U.S.	0.4	0.4	0.3	1.3	-	-0.8			
CHSDA Counties	0.5	-	0.5	0.8	-	-1.2			
Non-CHSDA Counties	0.3	-	-	-	-	-			
Hispanic ^e	0.6	0.5	0.7	0.1	1.2*	-0.5			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.6, February 2018, 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 The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta.

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

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

f The 2006-2015 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1992-2015.

g The 2006-2015 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2015.

h 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 2006-2015 Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

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

k The 2006-2015 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2015.

* 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, 2011-2015									
California	12.94	6.44	19.34	13.21	6.58	19.95	7.70	3.80	11.30
Greater Bay Area	11.65	6.12	17.19	12.01	6.45	17.85	5.14	2.58	7.53
San Francisco-Oakland	11.49	6.31	16.60	12.06	6.91	17.49	5.05	2.71	7.09
San Jose-Monterey	11.99	5.79	18.31	11.98	5.68	18.58	5.57	-	9.78
Los Angeles	13.66	6.80	20.25	13.95	6.91	21.04	9.26	4.47	13.24
Greater California	13.06	6.38	19.68	13.25	6.47	20.10	7.37	3.68	11.09
Connecticut	19.64	9.84	28.98	20.06	10.18	29.64	11.65	5.07	17.18
Detroit	16.51	8.21	24.24	18.57	9.24	27.81	11.20	5.02	16.03
Georgia	11.99	5.98	17.66	13.75	7.07	20.49	8.03	3.08	12.05
Atlanta	12.16	6.24	17.59	14.40	7.89	21.09	8.58	3.17	12.75
Rural Georgia	11.66	4.04	19.10	14.59	-	23.65	7.35	-	12.48
Greater Georgia	11.95	5.89	17.76	13.51	6.77	20.24	7.61	3.02	11.49
Hawaii	15.32	8.18	22.67	14.32	8.65	21.23	-	-	-
Iowa	14.01	7.41	20.70	14.23	7.51	21.01	7.90	-	11.82
Kentucky	15.12	7.78	22.30	15.55	8.12	22.82	10.35	3.09	16.98
Louisiana	13.77	6.91	20.33	15.63	8.13	23.16	9.58	3.60	14.63
New Jersey	19.24	10.06	28.01	20.76	10.99	30.35	10.04	4.75	14.39
New Mexico	15.67	7.59	23.60	16.47	7.94	24.90	-	-	-
Seattle-Puget Sound	14.04	7.42	20.68	14.06	7.68	20.59	9.03	2.49	16.29
Utah	19.26	9.43	29.22	19.70	9.60	29.91	-	-	-
SEER 9 Areas ^b	15.01	7.71	22.14	16.03	8.35	23.83	9.21	3.86	13.69
SEER 13 Areas ^b	14.48	7.37	21.43	15.28	7.85	22.83	9.17	3.98	13.55
SEER 18 Areas ^b	14.46	7.31	21.43	15.25	7.79	22.77	8.95	3.83	13.35

^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 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.

- 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
SEER Death Rates^a, 2011-2015									
California	0.62	0.58	0.65	0.61	0.58	0.64	0.50	0.40	0.53
Greater Bay Area	0.54	0.47	0.60	0.52	0.41	0.61	-	-	-
San Francisco-Oakland	0.57	0.50	0.62	0.54	0.44	0.62	-	-	-
San Jose-Monterey	0.50	0.43	0.54	0.48	0.34	0.58	-	-	-
Los Angeles	0.70	0.66	0.71	0.71	0.67	0.73	0.65	-	0.62
Greater California	0.61	0.57	0.64	0.60	0.59	0.61	0.41	-	-
Connecticut	0.44	0.40	0.45	0.43	0.39	0.43	-	-	-
Detroit	0.53	0.59	0.49	0.50	0.62	0.43	0.60	-	0.70
Georgia	0.41	0.42	0.39	0.40	0.44	0.36	0.45	0.32	0.50
Atlanta	0.43	0.42	0.43	0.42	0.46	0.37	0.40	-	-
Rural Georgia	-	-	-	-	-	-	-	-	-
Greater Georgia	0.40	0.43	0.36	0.39	0.44	0.34	0.51	-	0.52
Hawaii	0.60	0.64	0.57	-	-	-	-	-	-
Iowa	0.54	0.54	0.54	0.52	0.54	0.51	-	-	-
Kentucky	0.50	0.53	0.47	0.50	0.54	0.47	-	-	-
Louisiana	0.43	0.36	0.48	0.41	0.37	0.44	0.42	-	0.54
New Jersey	0.49	0.54	0.45	0.49	0.54	0.46	0.47	-	-
New Mexico	0.52	0.49	0.54	0.57	0.54	0.59	-	-	-
Seattle-Puget Sound	0.54	0.49	0.58	0.52	0.52	0.52	-	-	-
Utah	0.57	0.71	0.47	0.59	0.72	0.48	-	-	-
SEER 9 Areas ^b	0.52	0.51	0.52	0.50	0.52	0.49	0.46	0.34	0.54
SEER 13 Areas ^b	0.56	0.54	0.57	0.54	0.54	0.54	0.50	0.40	0.55
SEER 18 Areas ^b	0.54	0.53	0.55	0.53	0.54	0.52	0.48	0.37	0.54
Total U.S.	0.50	0.52	0.49	0.50	0.53	0.47	0.50	0.38	0.57

^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.

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

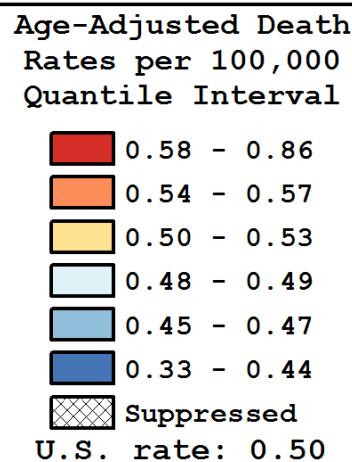
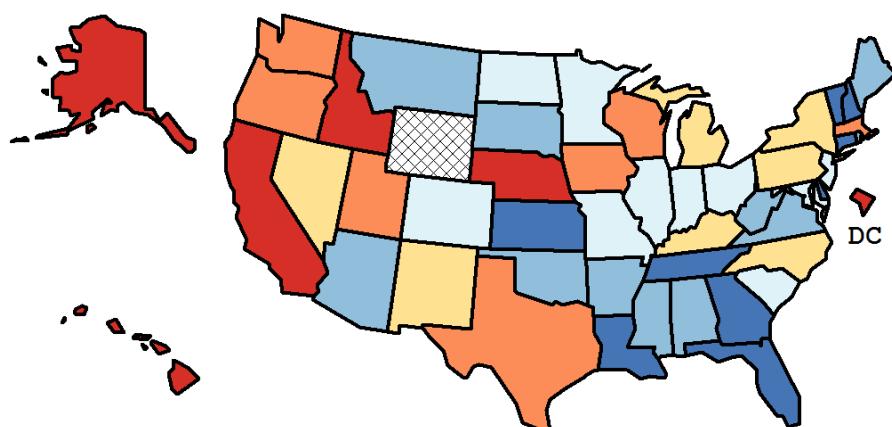
Table 26.18
Cancer of the Thyroid (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2011-2015

Males and Females

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	0.50	0.01							
High Five States									
D.C.	0.86	0.17	01(01,47)	70.50 ^c					
California	0.62	0.02	02(02,15)	23.46 ^c					
Alaska	0.62	0.16	03(01,50)	22.52 ^c					
Hawaii	0.60	0.08	04(01,43)	19.49 ^c					
Idaho	0.60	0.08	05(01,47)	18.72 ^c					
Low Five States									
Georgia	0.41	0.03	46(28,50)	-19.18 ^c					
Kansas	0.39	0.05	47(05,50)	-21.76 ^c					
New Hampshire	0.37	0.07	48(15,50)	-26.41 ^c					
Tennessee	0.37	0.03	49(22,50)	-26.82 ^c					
Delaware	0.33	0.08	50(01,50)	-33.73 ^c					

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	0.45	0.04	38(09,50)	-9.92	Montana	0.46	0.09	36(01,50)	-7.60
Alaska	0.62	0.16	03(01,50)	22.52 ^c	Nebraska	0.59	0.07	06(01,45)	17.86 ^c
Arizona	0.45	0.03	39(07,48)	-9.99	Nevada	0.52	0.06	15(02,49)	3.69
Arkansas	0.47	0.05	32(06,50)	-6.65	New Hampshire	0.37	0.07	48(15,50)	-26.41 ^c
California	0.62	0.02	02(02,15)	23.46 ^c	New Jersey	0.49	0.03	23(07,46)	-2.54
Colorado	0.49	0.04	25(06,50)	-3.44	New Mexico	0.52	0.07	16(01,49)	3.09
Connecticut	0.44	0.05	42(07,50)	-12.76	New York	0.53	0.02	14(05,35)	6.05
Delaware	0.33	0.08	50(01,50)	-33.73 ^c	North Carolina	0.50	0.03	19(05,41)	-0.85
D.C.	0.86	0.17	01(01,47)	70.50 ^c	North Dakota	0.48	0.10	28(02,50)	-4.10
Florida	0.42	0.02	44(29,49)	-15.58 ^c	Ohio	0.49	0.03	24(08,45)	-3.11
Georgia	0.41	0.03	46(28,50)	-19.18 ^c	Oklahoma	0.47	0.05	33(03,49)	-7.01
Hawaii	0.60	0.08	04(01,43)	19.49 ^c	Oregon	0.57	0.05	08(02,47)	13.60
Idaho	0.60	0.08	05(01,47)	18.72 ^c	Pennsylvania	0.50	0.02	20(06,39)	-1.01
Illinois	0.48	0.03	29(10,46)	-4.52	Rhode Island	0.45	0.08	40(01,50)	-10.32
Indiana	0.48	0.04	26(08,49)	-3.96	South Carolina	0.48	0.04	30(07,50)	-4.56
Iowa	0.54	0.05	13(02,48)	7.24	South Dakota	0.45	0.10	41(01,50)	-10.77
Kansas	0.39	0.05	47(05,50)	-21.76 ^c	Tennessee	0.37	0.03	49(22,50)	-26.82 ^c
Kentucky	0.50	0.05	17(03,47)	-0.69	Texas	0.55	0.02	09(05,33)	9.49
Louisiana	0.43	0.04	43(08,50)	-13.80	Utah	0.57	0.07	07(01,49)	13.89
Maine	0.47	0.07	35(04,50)	-7.34	Vermont	0.41	0.10	45(01,50)	-17.63 ^c
Maryland	0.48	0.04	27(09,50)	-4.01	Virginia	0.47	0.03	31(07,48)	-5.84
Massachusetts	0.54	0.04	11(03,40)	7.88	Washington	0.54	0.04	12(04,46)	7.76
Michigan	0.50	0.03	18(06,45)	-0.78	West Virginia	0.45	0.06	37(02,50)	-9.66
Minnesota	0.49	0.04	22(06,49)	-1.94	Wisconsin	0.55	0.04	10(02,41)	8.99
Mississippi	0.47	0.06	34(03,50)	-7.15	Wyoming	-	-	-(-,-)	-
Missouri	0.49	0.04	21(05,47)	-1.83					



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

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

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

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

SE Standard error of the rate.

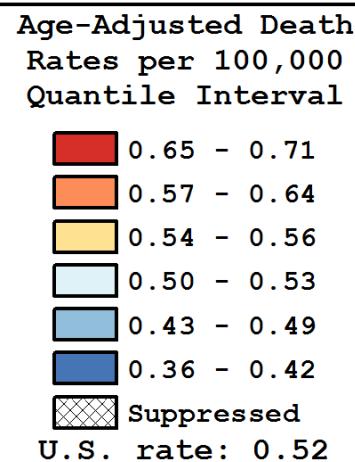
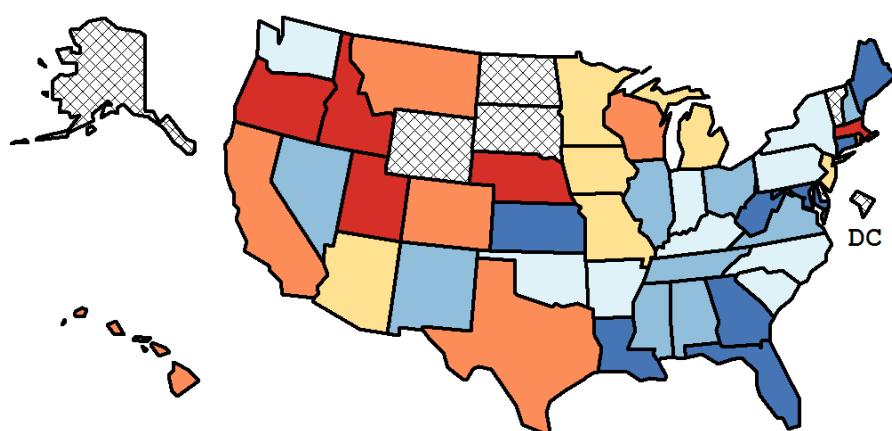
PD Percent difference between state rate and total U.S. rate.

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

Table 26.19
Cancer of the Thyroid (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2011-2015

Males									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	0.52	0.01							
High Five States									
Oregon	0.71	0.08	01(01,37)	37.85 ^c					
Utah	0.71	0.12	02(01,39)	37.24 ^c					
Massachusetts	0.67	0.06	03(01,33)	29.68 ^c					
Idaho	0.66	0.13	04(01,41)	26.83 ^c					
Nebraska	0.65	0.12	05(01,41)	25.46 ^c					
Low Five States									
West Virginia	0.39	0.09	40(02,42)	-23.70 ^c					
Maryland	0.39	0.05	41(13,42)	-25.24 ^c					
Maine	0.38	0.10	42(-,-)	-26.28 ^c					
Kansas	0.38	0.07	43(03,42)	-26.48 ^c					
Louisiana	0.36	0.06	44(08,42)	-30.12 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	0.48	0.06	34(06,42)	-7.38	Montana	0.62	0.15	08(01,42)	18.88 ^c
Alaska	-	-	-(-,-)	-	Nebraska	0.65	0.12	05(01,41)	25.46 ^c
Arizona	0.56	0.06	13(02,38)	8.10	Nevada	0.48	0.08	31(02,42)	-6.58
Arkansas	0.51	0.08	25(09,42)	-1.83	New Hampshire	0.48	0.12	32(-,-)	-6.58
California	0.58	0.03	11(05,31)	11.23	New Jersey	0.54	0.05	18(04,40)	3.98
Colorado	0.60	0.08	09(01,41)	15.57 ^c	New Mexico	0.49	0.10	29(02,42)	-4.95
Connecticut	0.40	0.06	39(05,42)	-23.15 ^c	New York	0.52	0.03	23(05,35)	-0.03
Delaware	-	-	-(-,-)	-	North Carolina	0.50	0.05	26(02,36)	-3.55
D.C.	-	-	-(-,-)	-	North Dakota	-	-	-(-,-)	-
Florida	0.42	0.03	37(24,42)	-19.63 ^c	Ohio	0.49	0.04	28(05,39)	-4.70
Georgia	0.42	0.05	38(21,42)	-19.76 ^c	Oklahoma	0.50	0.07	27(02,42)	-4.20
Hawaii	0.64	0.13	06(01,42)	23.76 ^c	Oregon	0.71	0.08	01(01,37)	37.85 ^c
Idaho	0.66	0.13	04(01,41)	26.83 ^c	Pennsylvania	0.53	0.04	22(04,36)	1.58
Illinois	0.49	0.04	30(08,41)	-5.37	Rhode Island	0.64	0.15	07(01,42)	23.76 ^c
Indiana	0.53	0.06	19(05,42)	3.30	South Carolina	0.52	0.07	24(02,41)	-0.20
Iowa	0.54	0.08	17(01,42)	4.09	South Dakota	-	-	-(-,-)	-
Kansas	0.38	0.07	43(03,42)	-26.48 ^c	Tennessee	0.44	0.05	36(09,42)	-15.94 ^c
Kentucky	0.53	0.07	21(02,42)	2.12	Texas	0.58	0.03	10(02,28)	12.26
Louisiana	0.36	0.06	44(08,42)	-30.12 ^c	Utah	0.71	0.12	02(01,39)	37.24 ^c
Maine	0.38	0.10	42(-,-)	-26.28 ^c	Vermont	-	-	-(-,-)	-
Maryland	0.39	0.05	41(13,42)	-25.24 ^c	Virginia	0.48	0.05	33(02,38)	-6.97
Massachusetts	0.67	0.06	03(01,33)	29.68 ^c	Washington	0.53	0.06	20(03,40)	2.69
Michigan	0.55	0.05	15(04,39)	6.53	West Virginia	0.39	0.09	40(02,42)	-23.70 ^c
Minnesota	0.55	0.07	14(02,41)	6.91	Wisconsin	0.57	0.06	12(02,39)	9.46
Mississippi	0.44	0.08	35(04,42)	-15.47 ^c	Wyoming	-	-	-(-,-)	-
Missouri	0.54	0.06	16(03,40)	4.38					



^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.

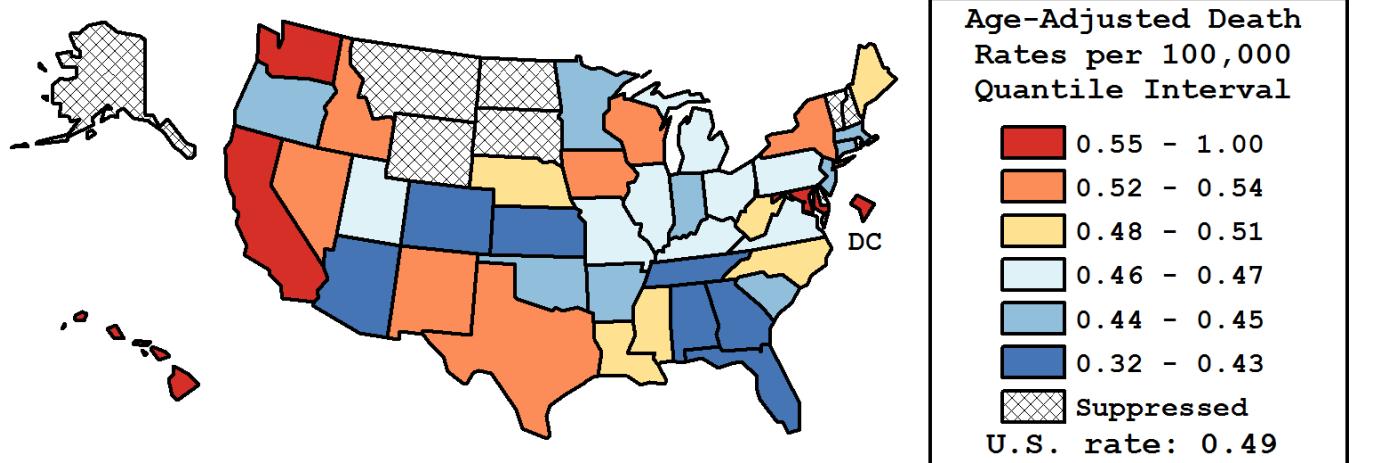
PD Percent difference between state rate and total U.S. rate.

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

Table 26.20
Cancer of the Thyroid (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2011-2015

Females									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	0.49	0.01							
High Five States									
D.C.	1.00	0.24	01(01,44)	105.52 ^c	Kansas	0.41	0.07	38(04,44)	-16.71 ^c
California	0.65	0.02	02(01,10)	33.81 ^c	Colorado	0.41	0.05	39(07,44)	-16.77 ^c
Hawaii	0.57	0.11	03(01,37)	17.48 ^c	Georgia	0.39	0.04	40(15,44)	-21.00 ^c
Maryland	0.56	0.06	04(03,43)	14.02	Arizona	0.36	0.04	41(10,44)	-25.81 ^c
Washington	0.55	0.05	05(03,42)	12.34	Tennessee	0.32	0.04	42(18,44)	-33.66 ^c
Low Five States									
Kansas	0.41	0.07	38(04,44)	-16.71 ^c					
Colorado	0.41	0.05	39(07,44)	-16.77 ^c					
Georgia	0.39	0.04	40(15,44)	-21.00 ^c					
Arizona	0.36	0.04	41(10,44)	-25.81 ^c					
Tennessee	0.32	0.04	42(18,44)	-33.66 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	0.43	0.05	37(05,44)	-11.98	Montana	-	-	-(-,-)	-
Alaska	-	-	-(-,-)	-	Nebraska	0.50	0.09	14(01,44)	2.97
Arizona	0.36	0.04	41(10,44)	-25.81 ^c	Nevada	0.54	0.08	09(02,44)	9.93
Arkansas	0.44	0.07	35(02,44)	-10.41	New Hampshire	-	-	-(-,-)	-
California	0.65	0.02	02(01,10)	33.81 ^c	New Jersey	0.45	0.04	27(05,42)	-6.79
Colorado	0.41	0.05	39(07,44)	-16.77 ^c	New Mexico	0.54	0.09	07(01,43)	10.93
Connecticut	0.45	0.06	30(05,44)	-8.38	New York	0.54	0.03	08(04,30)	10.82
Delaware	-	-	-(-,44)	-	North Carolina	0.50	0.04	15(04,41)	2.09
D.C.	1.00	0.24	01(01,44)	105.52 ^c	North Dakota	-	-	-(-,-)	-
Florida	0.43	0.02	36(18,43)	-11.49	Ohio	0.47	0.03	20(07,41)	-2.78
Georgia	0.39	0.04	40(15,44)	-21.00 ^c	Oklahoma	0.44	0.06	34(04,44)	-10.34
Hawaii	0.57	0.11	03(01,37)	17.48 ^c	Oregon	0.45	0.06	28(05,44)	-6.90
Idaho	0.53	0.11	10(01,44)	8.73	Pennsylvania	0.47	0.03	19(05,37)	-2.71
Illinois	0.46	0.03	24(07,42)	-5.59	Rhode Island	-	-	-(-,-)	-
Indiana	0.44	0.05	31(06,44)	-9.77	South Carolina	0.44	0.05	33(08,44)	-10.20
Iowa	0.54	0.07	06(03,44)	11.23	South Dakota	-	-	-(-,44)	-
Kansas	0.41	0.07	38(04,44)	-16.71 ^c	Tennessee	0.32	0.04	42(18,44)	-33.66 ^c
Kentucky	0.47	0.06	21(02,42)	-2.79	Texas	0.52	0.03	11(06,36)	7.66
Louisiana	0.48	0.06	18(04,44)	-1.17	Utah	0.47	0.09	23(03,44)	-4.53
Maine	0.51	0.10	13(01,44)	4.45	Vermont	-	-	-(-,-)	-
Maryland	0.56	0.06	04(03,43)	14.02	Virginia	0.47	0.04	22(08,44)	-2.87
Massachusetts	0.44	0.04	32(04,43)	-10.14	Washington	0.55	0.05	05(03,42)	12.34
Michigan	0.46	0.04	26(06,42)	-6.55	West Virginia	0.49	0.08	16(02,44)	-0.19
Minnesota	0.45	0.05	29(06,44)	-7.64	Wisconsin	0.52	0.05	12(02,40)	5.64
Mississippi	0.48	0.07	17(02,44)	-0.61	Wyoming	-	-	-(-,-)	-
Missouri	0.46	0.05	25(06,44)	-6.32					



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

^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 26.21
Cancer of the Thyroid (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2015
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 <23 ^e	0 to <40 ^e	>=40 ^g	Complete ^h
Race	Sex										
All Races ^b	Both Sexes	231,485	174,502	110,198	71,321	50,391	37,800	637,896	726,654	38,893	765,547
	Males	55,337	39,329	23,314	14,799	11,003	7,542	143,780	161,902	9,217	171,119
	Females	176,148	135,173	86,884	56,522	39,388	30,258	494,116	564,752	29,676	594,428
White ^b	Both Sexes	196,650	152,120	96,832	62,899	45,124	33,977	553,621	633,780	35,166	668,946
	Males	48,585	35,345	20,975	13,438	10,074	6,966	128,415	145,025	7,691	152,716
	Females	148,065	116,775	75,857	49,461	35,050	27,011	425,206	488,755	27,475	516,230
Black ^b	Both Sexes	16,910	10,745	6,583	3,687	2,492	1,644	40,417	44,359	1,682	46,041
	Males	2,959	1,765	1,201	558	499	270	6,982	7,622	197	7,819
	Females	13,951	8,980	5,382	3,129	1,993	1,374	33,435	36,737	1,485	38,222
Asian/ Pacific	Both Sexes	12,085	8,242	5,106	+	+	+	30,146	+	+	+
	Males	2,520	1,508	881	+	+	+	5,670	+	+	+
Islander ^c	Females	9,565	6,734	4,225	+	+	+	24,476	+	+	+
Hispanic ^d	Both Sexes	25,101	16,241	10,145	+	+	+	60,459	+	+	+
	Males	4,784	2,740	1,723	+	+	+	10,744	+	+	+
	Females	20,317	13,501	8,422	+	+	+	49,715	+	+	+

Estimated prevalence percent^a on January 1, 2015, of the SEER^c population diagnosed in the previous 23 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			
Race	Sex											
All Races ^c	Both Sexes	0.1822%	0.0002%	0.0066%	0.0461%	0.1515%	0.2773%	0.3504%	0.3801%	0.3886%	0.2711%	0.1715%
	Males	0.0812%	-	0.0027%	0.0159%	0.0494%	0.1068%	0.1483%	0.2035%	0.2471%	0.1898%	0.0786%
	Females	0.2806%	0.0003%	0.0105%	0.0779%	0.2546%	0.4461%	0.5448%	0.5396%	0.5049%	0.3204%	0.2599%
White ^c	Both Sexes	0.2006%	0.0002%	0.0075%	0.0532%	0.1692%	0.3049%	0.3820%	0.3996%	0.4009%	0.2784%	0.1854%
	Males	0.0920%	-	0.0030%	0.0187%	0.0542%	0.1195%	0.1645%	0.2215%	0.2637%	0.1986%	0.0861%
	Females	0.3088%	-	0.0121%	0.0901%	0.2905%	0.4968%	0.5985%	0.5665%	0.5167%	0.3277%	0.2840%
Black ^c	Both Sexes	0.0908%	-	0.0018%	0.0146%	0.0670%	0.1446%	0.1862%	0.2490%	0.2922%	0.1833%	0.0970%
	Males	0.0326%	-	-	0.0037%	0.0180%	0.0445%	0.0675%	0.1019%	0.1612%	0.1348%	0.0391%
	Females	0.1438%	-	0.0030%	0.0254%	0.1104%	0.2319%	0.2900%	0.3644%	0.3836%	0.2075%	0.1450%
Asian/ Pacific	Both Sexes	0.1633%	-	0.0059%	0.0375%	0.1270%	0.2444%	0.3069%	0.3526%	0.3701%	0.2674%	0.1535%
	Males	0.0647%	-	0.0035%	0.0112%	0.0450%	0.0899%	0.1173%	0.1608%	0.1966%	0.1586%	0.0644%
Islander ^c	Females	0.2539%	-	0.0084%	0.0644%	0.2019%	0.3810%	0.4705%	0.5090%	0.5060%	0.3346%	0.2298%
Hispanic ^d	Both Sexes	0.1120%	-	0.0066%	0.0365%	0.1169%	0.1998%	0.2803%	0.3210%	0.3519%	0.2554%	0.1383%
	Males	0.0393%	-	0.0031%	0.0114%	0.0308%	0.0655%	0.0939%	0.1428%	0.1951%	0.1506%	0.0543%
	Females	0.1858%	-	0.0103%	0.0636%	0.2087%	0.3391%	0.4618%	0.4761%	0.4696%	0.3188%	0.2183%

^a US 2015 cancer prevalence counts are based on 2015 cancer prevalence proportions from the SEER registries and 1/1/2015 US population estimates based on the average of 2014 and 2015 population estimates from the US Bureau of the Census.

^{b c d} Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 40/23 years. Statistics based on (b) SEER 9 Areas (c) SEER 13 Areas excluding the Alaska Native Registry

(d) NHIA for Hispanic for SEER 13 Areas excluding the Alaska Native Registry.

^e Maximum limited-duration prevalence: 40 years for 1975-2015 SEER 9 data; 23 years for 1992-2015 SEER 13 data (excluding the Alaska Native Registry) used to calculate prevalence for Hispanics and Asian Pacific Islanders.

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

(g) Cases diagnosed more than 40 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 <40 and >=40. (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, 2011-2015
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	65,324	99.7%	52,285	99.7%	4,627	99.7%	6,858	99.7%	314	100.0%	10,507	99.7%
Epidermoid carcinoma ^d (8051-8131)	69	0.1%	56	0.1%	-	-	-	-	-	-	-	-
Adenocarcinoma ^e	63,330	96.6%	50,684	96.7%	4,448	95.8%	6,675	97.0%	305	97.1%	10,208	96.9%
Papillary adenocarcinoma (8050, 8260, 8340-8344, 8350, 8450)	58,812	89.8%	47,185	90.0%	3,912	84.3%	6,286	91.4%	283	90.1%	9,606	91.2%
Follicular carcinoma (8330-8332, 8335)	2,966	4.5%	2,258	4.3%	382	8.2%	268	3.9%	-	-	424	4.0%
Oxyphilic (8290)	1,205	1.8%	968	1.8%	120	2.6%	86	1.3%	-	-	139	1.3%
Other specific carcinomas ^f	1,100	1.7%	921	1.8%	84	1.8%	78	1.1%	-	-	172	1.6%
Medullary carcinoma (8510)	1,057	1.6%	886	1.7%	81	1.7%	74	1.1%	-	-	165	1.6%
Carcinoma, NOS (8004, 8010-8012, 8020-8022, 8030-8032)	825	1.3%	624	1.2%	91	2.0%	97	1.4%	-	-	120	1.1%
Anaplastic carcinoma (8004, 8012, 8020-8021, 8030-8032)	524	0.8%	408	0.8%	49	1.1%	62	0.9%	-	-	78	0.7%
Sarcoma and other soft tissue tumors ^g	17	0.0%	-	-	-	-	-	-	-	-	-	-
Other specific types ^h	-	-	-	-	-	-	-	-	-	-	-	-
Unspecified (8000-8003, 8005)	180	0.3%	130	0.2%	-	-	20	0.3%	-	-	23	0.2%
Total	65,528	100.0%	52,436	100.0%	4,642	100.0%	6,878	100.0%	314	100.0%	10,536	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.

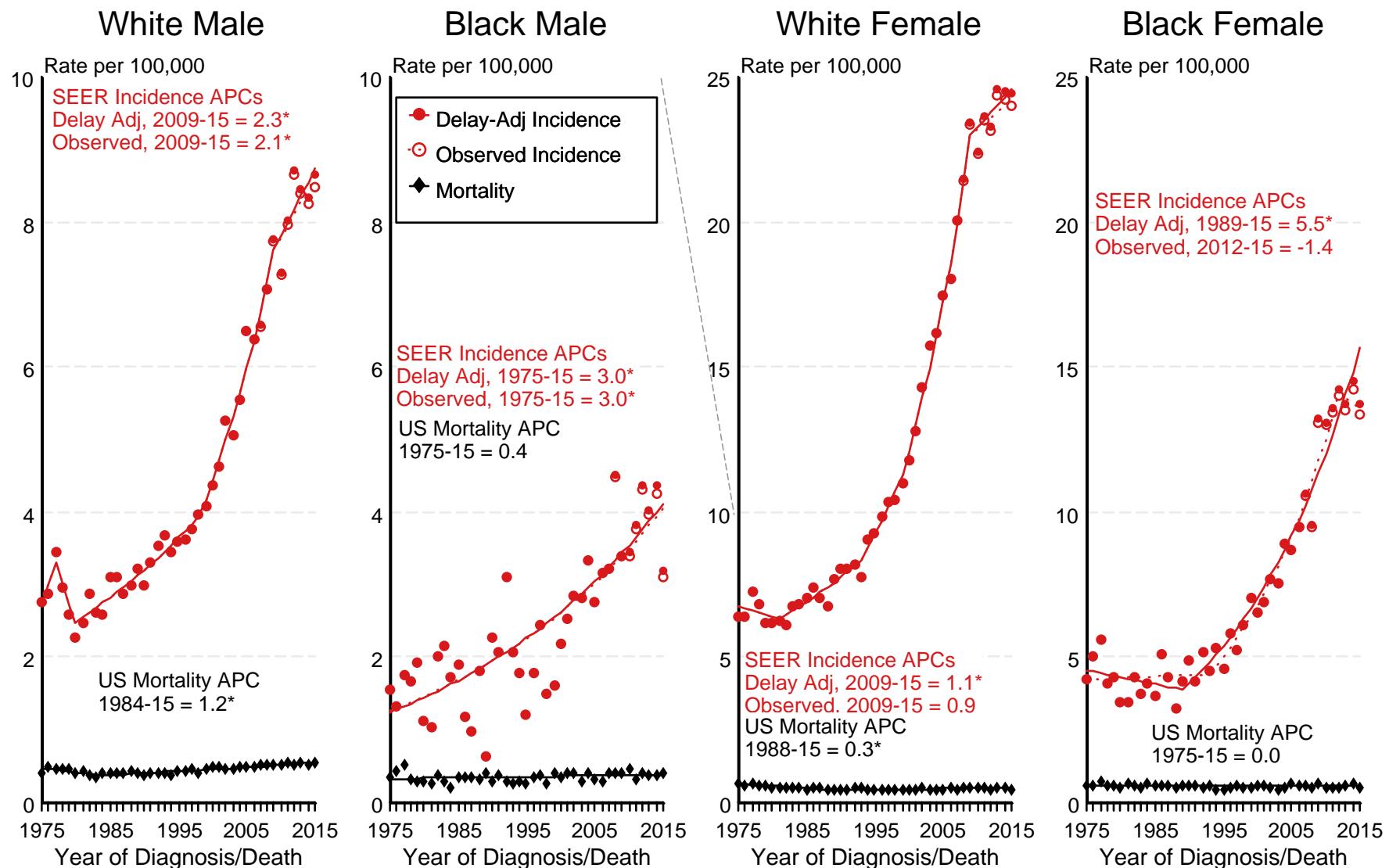
^h Sarcoma and other soft tissue tumors include histologies 8680-8713, 8800-8921, 8990-8991, 9040-9044, 9120-9136, 9150-9252, 9370-9373, 9540-9582.

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.

Figure 26.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Thyroid, 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 4.6, February 2018, 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.

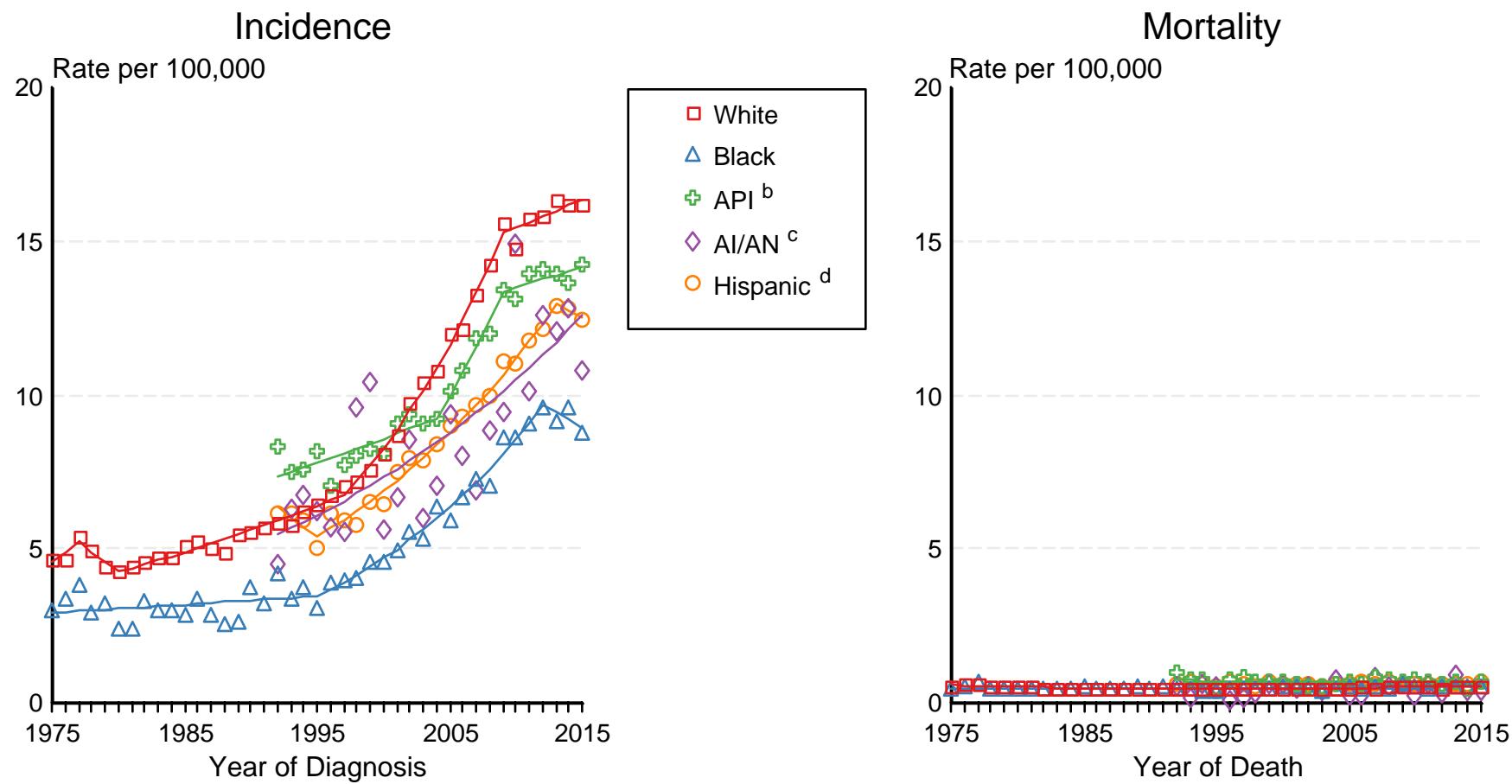
* The APC is significantly different from zero ($p < 0.05$).

Figure 26.2

SEER Incidence and US Death Rates^a

Cancer of the Thyroid, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2015
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2015



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

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

Regression lines are calculated using the Joinpoint Regression Program Version 4.6, February 2018, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2015 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2015 allow a maximum of 4 joinpoints.

^b API = Asian/Pacific Islander.

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

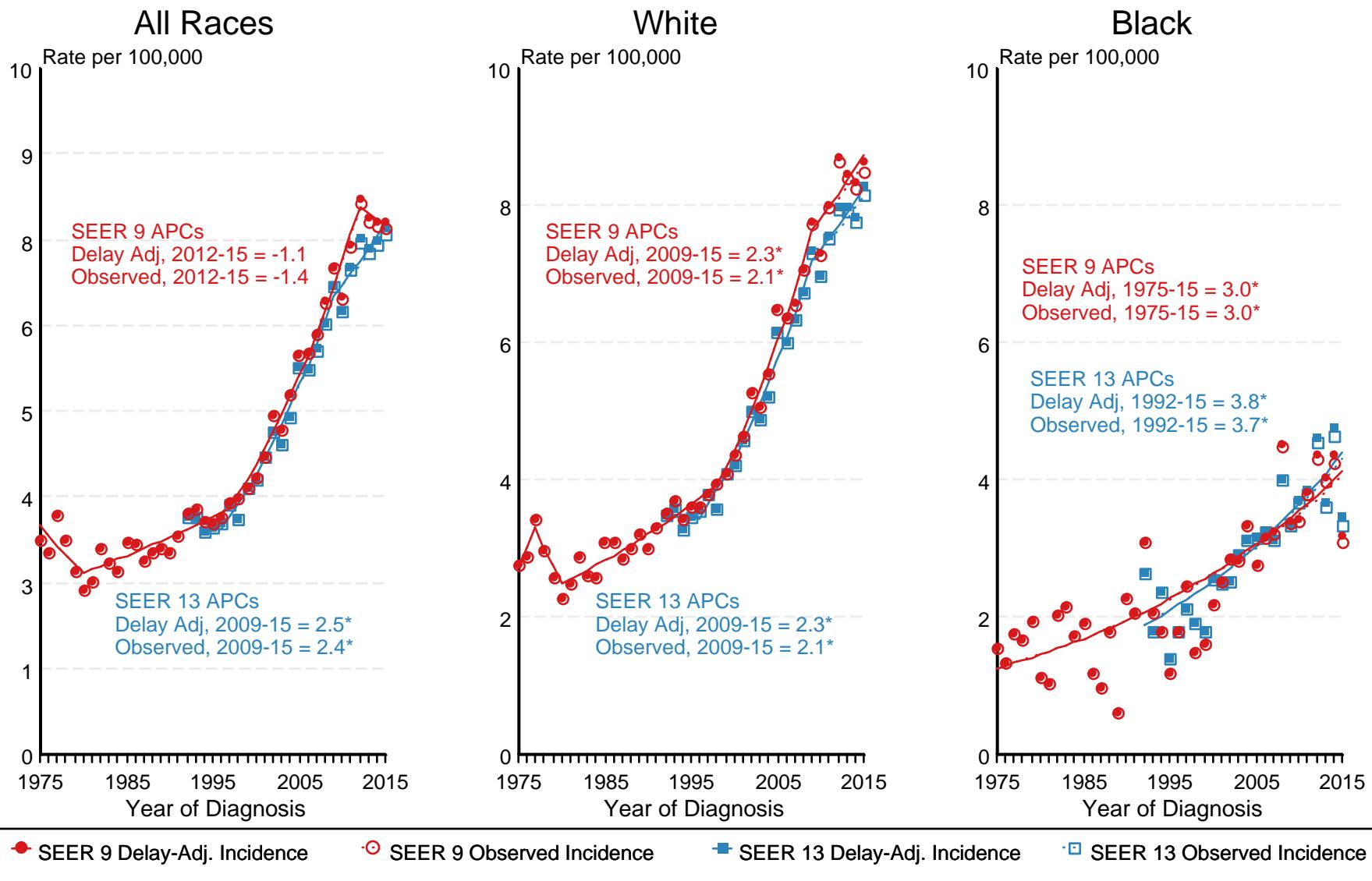
^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from New Hampshire and Oklahoma.

Figure 26.3

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



Source: SEER 9 areas and SEER 13 areas.

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.6, February 2018, 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.

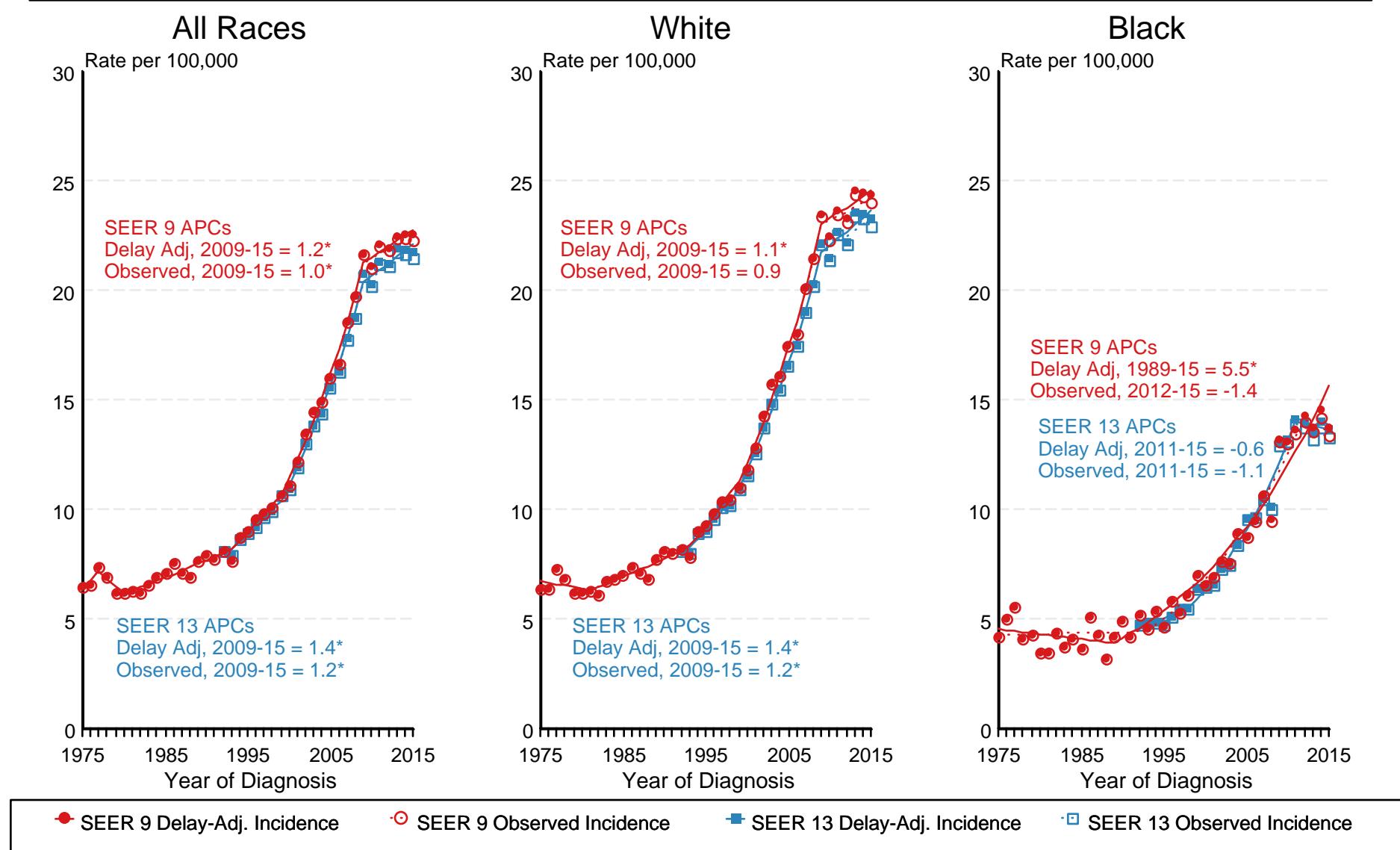
* The APC is significantly different from zero ($p < 0.05$).

Figure 26.4

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



Source: SEER 9 areas and SEER 13 areas.

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

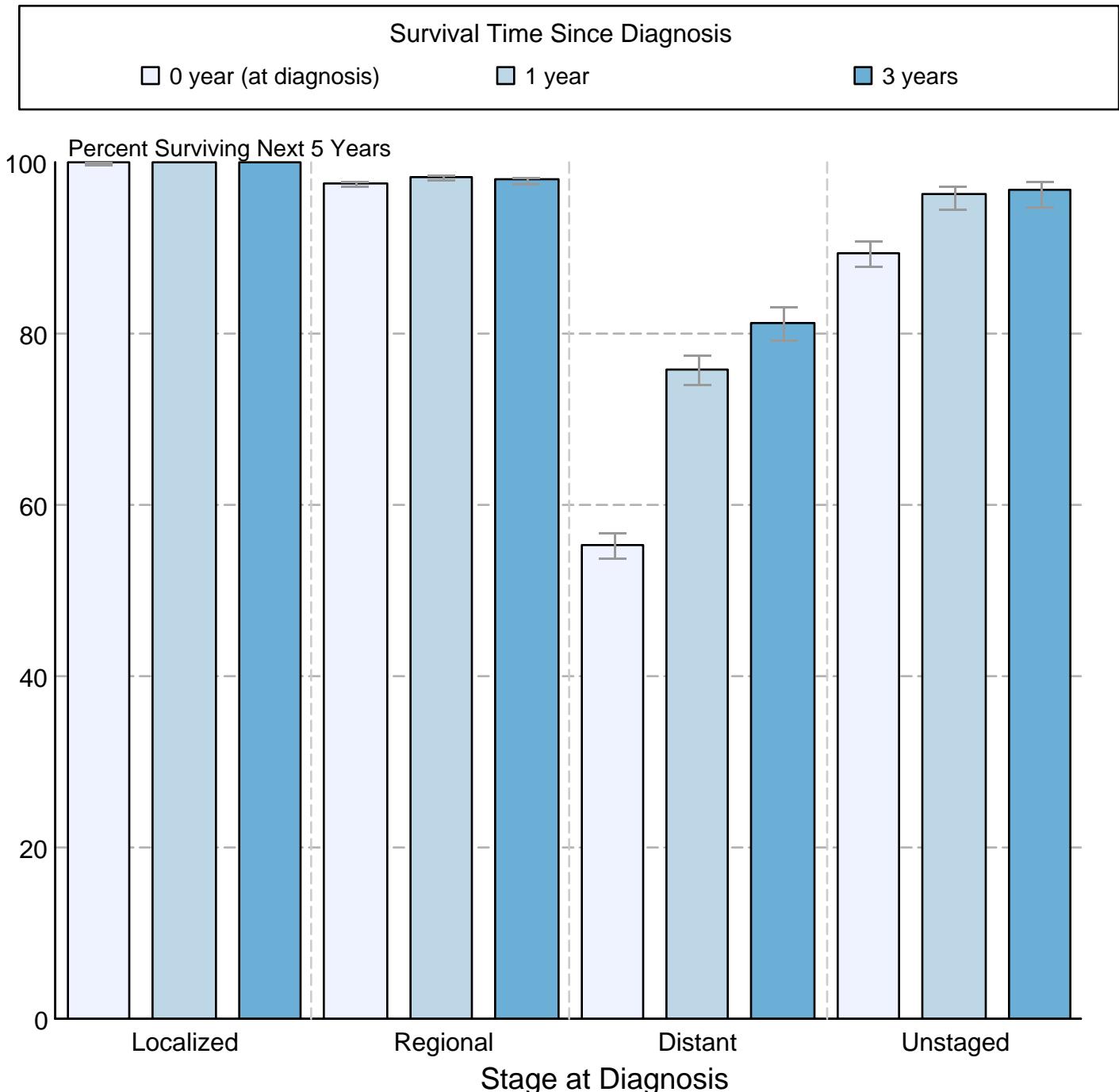
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.6, February 2018, National Cancer Institute.

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
1998-2014 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 and later. The remaining 13 SEER Areas contribute cases for the entire time period.

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.