

Table 23.1
Cancer of the Prostate (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2013 With up to Five Joinpoints, 1992-2013 With up to Four Joinpoints,
All Ages 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	2004-13	2009-13
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2013</u>														
All Races	1975-88	2.6*	1988-92	16.5*	1992-95	-11.5*	1995-00	2.3	2000-10	-1.7*	2010-13	-10.7*	-4.8*	-8.6*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.6*	1995-00	2.7	2000-10	-1.9*	2010-13	-11.0*	-5.0*	-8.8*
Black	1975-89	2.0*	1989-92	21.9*	1992-95	-4.8	1995-09	-1.1*	2009-13	-7.3*			-3.9*	-7.3*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2013</u>														
All Races	1992-95	-11.1*	1995-00	2.1	2000-10	-1.9*	2010-13	-10.7*					-4.9*	-8.6*
White	1992-95	-12.0*	1995-00	2.4	2000-10	-1.9*	2010-13	-11.2*					-5.1*	-8.9*
Black	1992-09	-1.6*	2009-13	-6.7*									-3.9*	-6.7*
<u>SEER 9 Observed Incidence^a, 1975-2013</u>														
All Races	1975-88	2.6*	1988-92	16.5*	1992-95	-11.6*	1995-00	2.3	2000-10	-1.8*	2010-13	-11.4*	-5.1*	-9.1*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.6*	1995-00	2.7	2000-10	-2.0*	2010-13	-11.9*	-5.4*	-9.5*
Black	1975-89	2.0*	1989-92	21.8*	1992-95	-4.6	1995-09	-1.2*	2009-13	-8.3*			-4.5*	-8.3*
<u>SEER 13 Observed Incidence^b, 1992-2013</u>														
All Races	1992-95	-11.1*	1995-00	2.1	2000-10	-2.0*	2010-13	-11.4*					-5.2*	-9.1*
White	1992-95	-12.0*	1995-00	2.5	2000-10	-2.1*	2010-13	-12.1*					-5.5*	-9.7*
White NH ^{ef}	1992-94	-17.2*	1994-01	0.9	2001-10	-2.0*	2010-13	-11.9*					-5.4*	-9.5*
Black	1992-09	-1.7*	2009-13	-7.9*									-4.5*	-7.9*
Black NH ^{ef}	1992-09	-1.7*	2009-13	-7.8*									-4.4*	-7.8*
API ^e	1992-97	-6.0*	1997-01	4.7	2001-11	-3.4*	2011-13	-16.6*					-6.5*	-10.3*
AI/AN ^{eg}	1992-13	-2.4*											-2.4*	-2.4*
Hispanic ^f	1992-95	-4.8	1995-02	0.8	2002-10	-2.8*	2010-13	-11.4*					-5.7*	-9.3*
<u>U.S. Cancer Mortality^c, 1975-2013</u>														
All Races	1975-87	0.9*	1987-91	3.0*	1991-94	-0.5	1994-98	-4.2*	1998-13	-3.5*			-3.5*	-3.5*
White	1975-87	0.8*	1987-91	3.1*	1991-94	-0.7	1994-99	-4.3*	1999-13	-3.3*			-3.3*	-3.3*
Black	1975-88	1.9*	1988-93	3.2*	1993-01	-2.5*	2001-13	-4.2*					-4.2*	-4.2*
<u>U.S. Cancer Mortality^c, 1992-2013</u>														
All Races	1992-94	-1.6	1994-13	-3.6*									-3.6*	-3.6*
White	1992-94	-0.7	1994-99	-4.3*	1999-13	-3.3*							-3.3*	-3.3*
White NH ^{ef}	1992-94	-0.3	1994-99	-4.3*	1999-13	-3.4*							-3.4*	-3.4*
Black	1992-01	-2.2*	2001-13	-4.2*									-4.2*	-4.2*
Black NH ^{ef}	1992-01	-2.1*	2001-13	-4.1*									-4.1*	-4.1*
API ^e	1992-13	-3.4*											-3.4*	-3.4*
AI/AN ^{eg}	1992-13	-1.8*											-1.8*	-1.8*
Hispanic ^f	1992-94	4.7	1994-13	-2.8*									-2.8*	-2.8*

Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

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

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

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

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

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

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

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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

Table 23.2
Cancer of the Prostate (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2013 With up to Five Joinpoints, 1992-2013 With up to Four Joinpoints,
Ages <65 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	2004-13	2009-13
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2013</u>														
All Races	1975-88	3.1*	1988-92	23.3*	1992-01	3.4*	2001-10	-0.2	2010-13	-10.8*			-3.9*	-8.3*
White	1975-88	3.5*	1988-92	22.9*	1992-01	3.2*	2001-10	-0.3	2010-13	-11.4*			-4.2*	-8.8*
Black	1975-89	2.0*	1989-93	26.2*	1993-01	2.7*	2001-11	-0.7	2011-13	-11.3*			-3.1*	-6.1*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2013</u>														
All Races	1992-01	3.4*	2001-10	-0.5	2010-13	-10.7*							-4.0*	-8.2*
White	1992-01	3.3*	2001-10	-0.6	2010-13	-11.4*							-4.3*	-8.8*
Black	1992-00	3.7*	2000-10	-0.4	2010-13	-8.2*							-3.1*	-6.3*
<u>SEER 9 Observed Incidence^a, 1975-2013</u>														
All Races	1975-88	3.1*	1988-92	23.3*	1992-01	3.4*	2001-10	-0.3	2010-13	-11.3*			-4.1*	-8.7*
White	1975-88	3.5*	1988-92	22.9*	1992-01	3.2*	2001-10	-0.4	2010-13	-12.2*			-4.5*	-9.4*
Black	1975-89	2.0*	1989-93	26.2*	1993-01	2.8*	2001-11	-0.9*	2011-13	-12.6*			-3.7*	-7.0*
<u>SEER 13 Observed Incidence^b, 1992-2013</u>														
All Races	1992-01	3.4*	2001-10	-0.5	2010-13	-11.2*							-4.2*	-8.7*
White	1992-01	3.3*	2001-10	-0.7	2010-13	-12.2*							-4.7*	-9.5*
White NH ^{ef}	1992-01	3.3*	2001-10	-0.5	2010-13	-12.2*							-4.6*	-9.4*
Black	1992-00	3.8*	2000-10	-0.7	2010-13	-9.3*							-3.7*	-7.2*
Black NH ^{ef}	1992-00	3.7*	2000-10	-0.6	2010-13	-9.3*							-3.6*	-7.2*
API ^e	1992-01	6.3*	2001-10	0.1	2010-13	-11.4*							-3.9*	-8.6*
AI/AN ^{eg}	1992-13	-2.4*											-2.4*	-2.4*
Hispanic ^f	1992-02	4.5*	2002-11	-1.7*	2011-13	-14.1*							-4.6*	-8.1*
<u>U.S. Cancer Mortality^c, 1975-2013</u>														
All Races	1975-87	0.5*	1987-90	3.1	1990-96	-3.2*	1996-00	-5.8*	2000-13	-1.3*			-1.3*	-1.3*
White	1975-87	0.7*	1987-90	3.0	1990-96	-3.6*	1996-00	-6.2*	2000-13	-1.1*			-1.1*	-1.1*
Black	1975-92	0.5*	1992-13	-2.9*									-2.9*	-2.9*
<u>U.S. Cancer Mortality^c, 1992-2013</u>														
All Races	1992-01	-4.4*	2001-13	-1.3*									-1.3*	-1.3*
White	1992-01	-4.7*	2001-13	-1.1*									-1.1*	-1.1*
White NH ^{ef}	1992-01	-4.7*	2001-13	-1.1*									-1.1*	-1.1*
Black	1992-13	-3.0*											-3.0*	-3.0*
Black NH ^{ef}	1992-01	-3.7*	2001-13	-2.4*									-2.4*	-2.4*
API ^e	1992-13	-0.9											-0.9	-0.9
AI/AN ^{eg}	1992-13	-2.4*											-2.4*	-2.4*
Hispanic ^f	1992-13	-2.1*											-2.1*	-2.1*

Joinpoint Regression Program Version 4.3.0.0, April 2016, 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.

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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 23.3
Cancer of the Prostate (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2013 With up to Five Joinpoints, 1992-2013 With up to Four Joinpoints,
Ages 65+ 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	2004-13	2009-13
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2013</u>														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.8*	1995-00	1.3	2000-10	-2.5*	2010-13	-10.7*	-5.3*	-8.7*
White	1975-88	2.7*	1988-92	14.9*	1992-95	-15.8*	1995-00	1.7	2000-10	-2.7*	2010-13	-10.8*	-5.5*	-8.8*
Black	1975-89	2.0*	1989-92	20.2*	1992-95	-9.1*	1995-09	-2.1*	2009-13	-7.9*			-4.7*	-7.9*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2013</u>														
All Races	1992-95	-14.1*	1995-00	1.0	2000-10	-2.6*	2010-13	-10.7*					-5.4*	-8.7*
White	1992-95	-15.1*	1995-00	1.4	2000-10	-2.6*	2010-13	-11.0*					-5.5*	-9.0*
Black	1992-95	-8.3*	1995-09	-2.5*	2009-13	-7.3*							-4.6*	-7.3*
<u>SEER 9 Observed Incidence^a, 1975-2013</u>														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.8*	1995-00	1.3	2000-10	-2.6*	2010-13	-11.4*	-5.6*	-9.3*
White	1975-88	2.7*	1988-92	14.9*	1992-95	-15.8*	1995-00	1.8	2000-10	-2.8*	2010-13	-11.8*	-5.9*	-9.6*
Black	1975-89	2.0*	1989-92	20.1*	1992-95	-8.9*	1995-09	-2.3*	2009-13	-9.0*			-5.3*	-9.0*
<u>SEER 13 Observed Incidence^b, 1992-2013</u>														
All Races	1992-95	-14.2*	1995-00	1.0	2000-10	-2.7*	2010-13	-11.5*					-5.7*	-9.4*
White	1992-95	-15.1*	1995-00	1.5	2000-10	-2.8*	2010-13	-12.0*					-6.0*	-9.8*
White NH ^{ef}	1992-95	-15.6*	1995-00	1.6	2000-10	-2.7*	2010-13	-11.8*					-5.8*	-9.6*
Black	1992-95	-8.1*	1995-09	-2.6*	2009-13	-8.5*							-5.3*	-8.5*
Black NH ^{ef}	1992-95	-8.3*	1995-09	-2.6*	2009-13	-8.5*							-5.3*	-8.5*
API ^e	1992-97	-7.7*	1997-00	4.7	2000-07	-2.6*	2007-11	-6.5*	2011-13	-14.6*			-7.1*	-10.6*
AI/AN ^{eg}	1992-13	-2.5*											-2.5*	-2.5*
Hispanic ^f	1992-96	-6.0*	1996-99	3.1	1999-10	-2.9*	2010-13	-12.4*					-6.2*	-10.1*
<u>U.S. Cancer Mortality^c, 1975-2013</u>														
All Races	1975-85	0.9*	1985-93	2.0*	1993-13	-3.7*							-3.7*	-3.7*
White	1975-87	0.8*	1987-91	3.2*	1991-94	-0.5	1994-98	-4.3*	1998-13	-3.5*			-3.5*	-3.5*
Black	1975-88	2.1*	1988-93	3.5*	1993-01	-2.6*	2001-10	-3.9*	2010-13	-6.3*			-4.7*	-5.7*
<u>U.S. Cancer Mortality^c, 1992-2013</u>														
All Races	1992-94	-1.2	1994-13	-3.7*									-3.7*	-3.7*
White	1992-94	-0.6	1994-98	-4.3*	1998-13	-3.5*							-3.5*	-3.5*
White NH ^{ef}	1992-94	-0.2	1994-98	-4.4*	1998-13	-3.5*							-3.5*	-3.5*
Black	1992-01	-2.1*	2001-13	-4.4*									-4.4*	-4.4*
Black NH ^{ef}	1992-01	-2.0*	2001-13	-4.3*									-4.3*	-4.3*
API ^e	1992-13	-3.5*											-3.5*	-3.5*
AI/AN ^{eg}	1992-13	-1.8*											-1.8*	-1.8*
Hispanic ^f	1992-94	4.2	1994-10	-2.6*	2010-13	-5.3*							-3.5*	-4.6*

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

Table 23.4
Cancer of the Prostate (Invasive)

Delay-adjusted SEER Incidence^a Rates by Year, Race and Age

Year of Diagnosis:	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
1975	94.00	13.67	649.33	92.18	13.02	639.37	141.07	26.76	931.22
1976	97.96	14.60	674.23	97.35	13.92	674.07	140.92	29.54	910.86
1977	100.48	15.06	690.98	98.56	14.36	680.56	159.16	29.24	1,057.18
1978	99.40	15.21	681.33	97.73	14.79	671.05	148.11	26.83	986.42
1979	103.42	14.98	714.75	102.31	14.68	708.01	161.90	26.35	1,098.87
1980	106.05	15.53	731.77	105.01	14.70	729.23	161.14	33.79	1,041.42
1981	108.90	16.85	745.24	107.90	15.97	743.35	162.01	34.72	1,041.86
1982	108.24	16.36	743.38	107.33	15.81	739.96	167.75	31.46	1,109.83
1983	111.62	17.15	764.62	110.82	16.60	762.09	171.07	34.02	1,118.41
1984	111.69	17.26	764.40	110.10	16.20	759.14	178.89	37.22	1,158.14
1985	115.51	17.93	790.04	114.66	17.69	784.94	170.13	31.41	1,129.00
1986	119.10	18.55	814.14	119.04	18.30	815.38	168.59	34.08	1,098.34
1987	133.77	21.52	909.71	134.60	21.09	919.20	189.42	36.06	1,249.49
1988	137.63	22.18	935.70	138.73	22.27	943.75	190.20	34.88	1,263.80
1989	145.42	24.19	983.38	146.19	24.07	990.34	191.72	37.28	1,259.25
1990	171.10	28.88	1,154.16	172.86	28.94	1,167.63	222.53	44.83	1,450.91
1991	214.86	38.94	1,430.92	216.48	39.40	1,440.46	289.60	57.61	1,893.16
1992	237.49	49.49	1,536.97	238.41	49.45	1,544.63	330.02	78.77	2,066.75
1993	209.63	50.49	1,309.64	204.50	49.01	1,279.37	345.70	94.66	2,081.03
1994	180.37	48.66	1,090.80	174.27	46.87	1,054.85	314.89	95.93	1,828.41
1995	169.49	50.18	994.19	164.37	48.16	967.65	285.24	100.21	1,564.20
1996	169.53	53.52	971.46	165.15	52.01	947.20	284.98	101.10	1,556.01
1997	173.71	55.35	991.84	169.98	54.01	971.60	287.17	98.68	1,590.07
1998	171.19	55.06	973.95	167.35	53.11	957.01	290.90	104.87	1,576.79
1999	183.57	60.83	1,031.97	179.08	58.80	1,010.48	293.89	113.59	1,540.18
2000	183.24	61.85	1,022.35	179.49	59.83	1,006.61	294.30	115.78	1,528.26
2001	185.21	64.62	1,018.77	182.81	62.62	1,013.62	277.67	115.27	1,400.17
2002	182.46	65.56	990.53	179.73	63.91	980.32	291.17	118.14	1,487.24
2003	169.93	62.06	915.62	166.34	59.82	902.64	262.78	116.62	1,273.06
2004	166.08	62.04	885.25	162.46	60.48	867.41	259.79	106.90	1,316.64
2005	157.13	58.10	841.67	152.60	55.52	823.60	254.62	107.56	1,271.16
2006	172.81	64.89	918.79	169.05	62.73	903.93	258.60	110.63	1,281.41
2007	176.11	67.02	930.16	171.27	64.14	911.83	271.26	121.03	1,309.77
2008	159.24	62.96	824.74	154.79	60.37	807.44	257.55	112.90	1,257.48
2009	156.39	62.83	803.13	152.04	60.49	784.87	249.72	112.22	1,200.19
2010	149.31	59.47	770.36	144.76	56.73	753.26	236.36	107.94	1,124.09
2011	143.36	57.94	733.80	138.84	55.26	716.58	226.13	107.03	1,049.39
2012	117.31	47.18	602.02	111.89	43.78	582.65	195.35	93.76	897.62
2013	112.10	45.01	575.80	108.19	42.62	561.43	188.83	86.90	893.47

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

^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 23.5
Cancer of the Prostate (Invasive)

Age-adjusted SEER Incidence^a Rates by Year, Race and Age

	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
Year of Diagnosis:									
1975-2013	149.92	44.02	881.95	146.49	41.82	869.95	235.41	83.04	1,288.60
1975	94.00	13.67	649.33	92.18	13.02	639.37	141.07	26.76	931.22
1976	97.96	14.60	674.23	97.35	13.92	674.07	140.92	29.54	910.86
1977	100.48	15.06	690.98	98.56	14.36	680.56	159.16	29.24	1,057.18
1978	99.40	15.21	681.33	97.73	14.79	671.05	148.11	26.83	986.42
1979	103.42	14.98	714.75	102.31	14.68	708.01	161.90	26.35	1,098.87
1980	106.05	15.53	731.77	105.01	14.70	729.23	161.14	33.79	1,041.42
1981	108.90	16.85	745.24	107.90	15.97	743.35	162.01	34.72	1,041.86
1982	108.24	16.36	743.38	107.33	15.81	739.96	167.75	31.46	1,109.83
1983	111.62	17.15	764.62	110.82	16.60	762.09	171.07	34.02	1,118.41
1984	111.69	17.26	764.40	110.10	16.20	759.14	178.89	37.22	1,158.14
1985	115.51	17.93	790.04	114.66	17.69	784.94	170.13	31.41	1,129.00
1986	119.10	18.55	814.14	119.04	18.30	815.38	168.59	34.08	1,098.34
1987	133.77	21.52	909.71	134.60	21.09	919.20	189.42	36.06	1,249.49
1988	137.63	22.18	935.70	138.73	22.27	943.75	190.20	34.88	1,263.80
1989	145.42	24.19	983.38	146.19	24.07	990.34	191.72	37.28	1,259.25
1990	171.10	28.88	1,154.16	172.86	28.94	1,167.63	222.53	44.83	1,450.91
1991	214.86	38.94	1,430.92	216.48	39.40	1,440.46	289.60	57.61	1,893.16
1992	237.49	49.49	1,536.97	238.41	49.45	1,544.63	330.02	78.77	2,066.75
1993	209.63	50.49	1,309.64	204.50	49.01	1,279.37	345.70	94.66	2,081.03
1994	180.37	48.66	1,090.80	174.27	46.87	1,054.85	314.89	95.93	1,828.41
1995	169.49	50.18	994.19	164.37	48.16	967.65	285.24	100.21	1,564.20
1996	169.53	53.52	971.46	165.15	52.01	947.20	284.98	101.10	1,556.01
1997	173.71	55.35	991.84	169.98	54.01	971.60	287.17	98.68	1,590.07
1998	171.19	55.06	973.95	167.35	53.11	957.01	290.90	104.87	1,576.79
1999	183.57	60.83	1,031.97	179.08	58.80	1,010.48	293.89	113.59	1,540.18
2000	183.24	61.85	1,022.35	179.49	59.83	1,006.61	294.30	115.78	1,528.26
2001	185.21	64.62	1,018.77	182.81	62.62	1,013.62	277.67	115.27	1,400.17
2002	182.46	65.56	990.53	179.73	63.91	980.32	291.17	118.14	1,487.24
2003	169.93	62.06	915.62	166.34	59.82	902.64	262.78	116.62	1,273.06
2004	166.08	62.04	885.25	162.46	60.48	867.41	259.79	106.90	1,316.64
2005	156.87	58.04	840.05	152.26	55.44	821.54	253.52	107.17	1,265.15
2006	172.24	64.75	915.24	168.31	62.54	899.47	256.29	109.80	1,268.91
2007	175.24	66.80	924.82	170.17	63.84	905.16	267.63	119.65	1,290.51
2008	158.20	62.68	818.44	153.46	59.99	799.54	253.06	111.21	1,233.59
2009	155.12	62.49	795.44	150.40	60.01	775.22	244.31	110.15	1,171.73
2010	147.88	59.08	761.71	142.91	56.18	742.41	230.30	105.56	1,092.56
2011	141.49	57.42	722.62	136.33	54.50	701.98	219.25	104.23	1,014.29
2012	115.17	46.57	589.32	109.06	42.91	566.27	187.47	90.53	857.60
2013	108.59	43.92	555.64	103.56	41.10	535.29	177.24	82.19	834.26

^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 23.6
Cancer of the Prostate (Invasive)

Age-adjusted U.S. Death^a Rates by Year, Race and Age

Year of Death:	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
1975-2013	30.09	2.26	222.51	27.88	1.95	207.12	62.40	5.70	454.32
1975	30.97	2.54	227.48	29.06	2.18	214.88	55.52	6.56	393.98
1976	31.78	2.69	232.91	29.93	2.31	220.84	55.60	6.90	392.19
1977	31.83	2.69	233.28	29.90	2.31	220.57	56.44	6.93	398.67
1978	32.66	2.61	240.33	30.62	2.24	226.79	58.49	6.76	416.09
1979	32.84	2.56	242.13	30.77	2.21	228.17	59.24	6.63	422.90
1980	33.05	2.67	243.08	30.77	2.33	227.39	61.99	6.57	445.03
1981	33.17	2.68	243.95	30.76	2.30	227.52	63.61	7.06	454.45
1982	33.36	2.68	245.47	31.09	2.34	229.85	62.36	6.62	447.67
1983	33.92	2.76	249.30	31.57	2.40	233.18	64.55	6.99	462.46
1984	34.06	2.71	250.77	31.58	2.37	233.49	65.93	6.74	475.13
1985	33.91	2.73	249.43	31.28	2.34	231.34	67.26	7.16	482.68
1986	34.93	2.80	256.99	32.46	2.47	239.72	67.39	6.63	487.36
1987	35.11	2.71	259.06	32.57	2.38	241.27	68.88	6.66	499.03
1988	35.88	2.83	264.40	33.38	2.47	247.08	69.57	6.98	502.28
1989	37.10	2.97	273.01	34.54	2.62	255.20	71.71	7.06	518.54
1990	38.56	3.02	284.23	35.67	2.65	263.98	77.98	7.43	565.65
1991	39.31	2.89	291.08	36.50	2.52	271.39	78.24	7.06	570.21
1992	39.22	2.86	290.58	36.29	2.44	270.28	79.84	7.66	578.73
1993	39.34	2.72	292.48	36.26	2.33	270.82	81.86	7.04	599.08
1994	38.54	2.67	286.48	35.64	2.31	266.04	79.96	6.76	585.93
1995	37.29	2.58	277.23	34.41	2.22	256.93	78.20	6.70	572.47
1996	36.00	2.50	267.61	33.00	2.13	246.38	78.84	6.45	579.20
1997	34.15	2.31	254.26	31.35	1.94	234.58	74.30	6.32	544.22
1998	32.63	2.27	242.49	29.89	1.90	223.36	72.77	6.28	532.41
1999	31.56	2.06	235.48	28.91	1.72	216.88	70.13	5.80	514.78
2000	30.39	1.98	226.82	27.78	1.66	208.29	68.90	5.40	507.82
2001	29.52	1.94	220.14	26.97	1.63	202.08	67.82	5.33	499.72
2002	28.71	1.92	213.87	26.36	1.60	197.48	64.98	5.26	477.81
2003	27.19	1.90	201.97	25.02	1.59	186.95	60.37	5.30	441.02
2004	26.19	1.82	194.64	24.04	1.55	179.54	59.00	4.79	433.72
2005	25.40	1.80	188.57	23.33	1.51	174.20	57.02	4.83	417.76
2006	24.24	1.84	179.14	22.34	1.58	165.81	53.73	4.57	393.54
2007	24.23	1.75	179.68	22.23	1.49	165.58	54.88	4.51	403.03
2008	23.01	1.78	169.73	21.34	1.52	158.30	49.11	4.48	357.62
2009	22.12	1.70	163.30	20.34	1.43	151.06	49.35	4.45	359.70
2010	21.81	1.78	160.30	20.10	1.51	148.62	48.08	4.40	350.01
2011	20.78	1.66	152.98	19.25	1.39	142.74	43.97	4.25	318.50
2012	19.56	1.66	143.30	18.13	1.44	133.50	41.62	3.86	302.64
2013	19.22	1.66	140.61	17.96	1.44	132.21	39.05	3.94	281.76

^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 23.7
Cancer of the Prostate (Invasive)

SEER Incidence^a and U.S. Death^b Rates, Age-Adjusted and Age-Specific Rates, by Race

	SEER Incidence ^a			U.S. Mortality ^b		
	All Races Males	White Males	Black Males	All Races Males	White Males	Black Males
<u>Age-Adjusted Rates, 2009-2013</u>						
Age at Diagnosis/Death:						
All ages	129.4	121.9	203.5	20.7	19.1	44.2
Under 65	51.4	47.7	93.0	1.7	1.4	4.2
65 and over	668.5	635.3	967.5	151.7	141.3	320.9
All ages (IARC world std) ^c	90.2	84.9	145.8	9.0	8.2	20.1
<u>Age-Specific Rates, 2009-2013</u>						
Age at Diagnosis/Death:						
<1	-	-	-	-	-	-
1-4	-	-	-	-	-	-
5-9	-	-	-	-	-	-
10-14	-	-	-	-	-	-
15-19	-	-	-	-	-	-
20-24	-	-	-	-	-	-
25-29	-	-	-	-	-	-
30-34	0.1	-	-	-	-	-
35-39	1.0	0.8	2.9	0.0	-	-
40-44	9.8	8.5	23.2	0.2	0.1	0.4
45-49	42.5	35.9	102.5	0.9	0.8	2.0
50-54	132.4	121.2	250.5	3.2	2.7	8.0
55-59	285.0	264.9	506.3	8.7	7.4	21.6
60-64	486.3	459.8	810.7	19.7	17.0	49.2
65-69	746.8	710.9	1,153.1	39.3	34.4	99.7
70-74	782.8	746.2	1,113.4	74.9	66.9	182.2
75-79	686.3	648.8	942.1	133.5	122.5	295.7
80-84	504.7	478.2	684.2	234.0	219.2	501.7
85+	418.4	398.0	628.4	494.6	473.5	929.5

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

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

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

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

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

Table 23.8
Cancer of the Prostate (Invasive)

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

	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	50	-	-	35	-	-
1970-1973 ^a	-	-	-	63	-	-	55	-	-
1975-1977 ^b	67.8	73.4	66.1	68.5	75.2	66.6	60.7	62.0	60.1
1978-1980 ^b	70.1	75.2	68.6	71.2	76.7	69.6	62.1	65.0	60.6
1981-1983 ^b	72.0	76.0	70.9	73.1	77.6	71.9	62.8	65.0	61.9
1984-1986 ^b	75.2	77.3	74.6	76.4	79.0	75.7	65.6	67.2	64.9
1987-1989 ^b	82.8	83.2	82.7	84.4	84.7	84.3	71.1	72.8	70.6
1990-1992 ^b	92.9	93.0	92.9	94.1	94.0	94.1	84.4	86.8	83.5
1993-1995 ^b	95.2	95.9	94.9	95.9	96.6	95.6	91.7	93.3	90.8
1996-1998 ^b	97.4	98.5	96.7	97.4	98.9	97.2	94.9	96.7	93.4
1999-2001 ^b	99.3	99.1	99.3	99.7	99.5	99.6	97.3	98.0	96.2
2002-2005 ^b	99.6	99.4	99.7	99.8	99.6	99.7	97.7	98.8	96.3
2006-2012 ^b	99.3 ^f	99.5 ^f	99.2 ^f	99.7 ^f	99.8 ^f	99.4 ^f	97.3 ^f	98.1 ^f	96.1 ^f
5-Year Period Survival (Percent) ^{cd}									
2012	98.7	99.1	98.4	98.9	99.3	98.5	97.1	98.1	95.7
Stage Distribution (%) 2006-2012 ^{ce}									
All Stages									
Number of cases	368,301	163,823	204,478	282,870	122,545	160,325	54,632	30,066	24,566
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	80	80	80	80	79	81	82	81	82
Regional	12	16	9	13	16	10	10	13	7
Distant	4	3	6	4	3	5	5	4	7
Unstaged	4	2	5	3	1	4	3	2	4
5-Year Relative Survival (Percent), 2006-2012 ^c									
Age at Diagnosis:									
Ages <45	96.1	-	-	95.4	-	-	97.4	-	-
Ages 45-54	98.1	-	-	98.2	-	-	97.5	-	-
Ages 55-64	99.4	-	-	99.7	-	-	98.2	-	-
Ages 65-74	100.0	-	-	100.0	-	-	97.5	-	-
Ages 75+	95.1	-	-	95.0	-	-	90.5	-	-
Ages <65	99.1	-	-	99.3	-	-	98.0	-	-
Ages 65+	98.7	-	-	99.0	-	-	95.6	-	-
Stage ^e :									
All Stages	98.9	99.1	98.7	99.2	99.3	99.0	96.9	98.0	95.6
Localized	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Regional	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	98.7
Distant	29.3	32.5	27.9	28.7	31.6	27.6	29.0	32.4	26.3
Unstaged	79.4	89.7	76.3	74.4	87.4	70.8	68.0	82.2	61.8

^a Based on End Results data from a series of hospital registries and one population-based registry.^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2013.

^c SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Based on follow-up of patients into 2013.

^d Period survival provides a 2012 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).^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.^f The difference between 1975-1977 and 2006-2012 is statistically significant (p<.05).^g The standard error is between 5 and 10 percentage points.^h The standard error is greater than 10 percentage points.

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

Table 23.9
Cancer of the Prostate (Invasive)
SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Survival Time																						
1-year	91.4	93.5	95.6	98.8	98.7	99.1	99.3	99.5	99.6	99.7	99.9	99.8	99.7	99.8	99.8	99.8	99.8	99.7	99.6	99.6	99.6	99.3
2-year	84.5	87.4	91.0	97.3	97.6	98.0	98.8	98.9	99.6	99.5	99.9	99.8	99.6	99.7	99.6	99.7	99.8	99.5	99.3	99.5	99.3	
3-year	78.3	81.5	86.9	96.0	96.9	97.4	98.4	98.5	99.5	99.1	99.9	99.7	99.4	99.7	99.5	99.7	99.8	99.2	99.2	99.5		
4-year	73.2	76.4	83.5	94.9	96.3	96.8	97.9	98.2	99.2	98.8	99.8	99.7	99.3	99.7	99.4	99.6	99.7	99.1	99.2			
5-year	68.8	72.0	80.5	93.8	95.7	96.4	97.4	98.1	99.2	98.8	99.8	99.7	99.1	99.7	99.1	99.5	99.7	99.1				
6-year	65.3	68.5	77.9	92.7	95.4	96.0	97.1	97.9	99.2	98.5	99.8	99.7	99.1	99.7	99.1	99.5	99.7					
7-year	61.8	65.0	75.4	91.6	94.9	95.3	97.1	97.6	99.0	98.4	99.8	99.7	99.0	99.7	99.1	99.5						
8-year	58.5	61.9	73.3	90.6	94.6	94.9	96.9	97.6	98.7	98.1	99.8	99.7	98.9	99.7	99.1							
9-year	55.8	59.7	71.4	89.4	94.2	94.4	96.6	97.0	98.4	98.1	99.8	99.7	98.4	99.5								
10-year	53.2	57.7	69.6	88.4	93.5	94.2	96.5	96.5	98.0	98.1	99.8	99.7	98.3									
11-year	50.6	55.5	67.8	87.5	92.7	93.9	96.2	96.1	97.8	97.2	99.8	99.7										
12-year	48.4	53.5	66.0	86.5	91.8	93.4	95.9	95.4	97.3	97.1	99.8											
13-year	46.5	51.7	64.4	85.9	90.8	92.9	95.1	95.2	97.0	96.6												
14-year	44.8	50.1	63.0	85.0	89.9	92.6	94.5	94.8	96.5													
15-year	43.6	48.7	61.5	84.1	89.1	91.9	94.4	94.8														
16-year	41.9	46.9	60.0	83.2	88.6	90.9	93.9															
17-year	40.1	45.8	59.4	82.3	87.6	90.4																
18-year	38.8	44.4	58.3	81.6	87.4																	
19-year	38.0	43.0	57.7	80.6																		
20-year	37.0	41.6	56.8																			
21-year	35.4	40.8	56.0																			
22-year	34.0	39.4	54.6																			
23-year	33.1	38.2	53.4																			
24-year	32.4	37.3	52.3																			
25-year	30.9	35.8																				
26-year	30.3	34.6																				
27-year	29.7	34.3																				
28-year	28.9	33.8																				
29-year	28.2	33.2																				
30-year	26.9																					

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

Table 23.10
Cancer of the Prostate (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, 2011-2013 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.00	12.88	2.50	Asian/ Pacific Islander	0	0.00	0.00	0.00	8.63	2.10
	10	0.00	0.00	0.01	13.03	2.53		10	0.00	0.00	0.00	8.70	2.11
	20	0.00	0.01	0.29	13.08	2.54		20	0.00	0.00	0.09	8.71	2.12
	30	0.01	0.29	2.13	13.24	2.57		30	0.00	0.09	0.83	8.76	2.13
	40	0.29	2.15	6.89	13.44	2.62		40	0.09	0.84	3.45	8.82	2.14
	50	1.93	6.83	11.48	13.60	2.70		50	0.77	3.42	6.69	8.88	2.17
	60	5.37	10.47	12.38	12.80	2.85		60	2.78	6.19	7.89	8.49	2.23
	70	6.27	8.62	-	9.13	3.01		70	3.82	5.72	-	6.39	2.30
80	3.57	-	-	4.35	3.09	80	2.45	-	-	3.31	2.37		
White	0	0.00	0.00	0.00	12.10	2.33	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	6.65	2.06
	10	0.00	0.00	0.01	12.22	2.36		10	0.00	0.00	0.00	6.74	2.09
	20	0.00	0.01	0.24	12.27	2.37		20	0.00	0.00	0.10	6.78	2.11
	30	0.01	0.25	1.93	12.41	2.40		30	0.00	0.11	0.72	6.93	2.16
	40	0.24	1.95	6.43	12.60	2.44		40	0.11	0.74	2.96	7.13	2.24
	50	1.77	6.39	10.79	12.77	2.51		50	0.66	3.00	5.75	7.38	2.37
	60	5.05	9.86	11.66	12.03	2.65		60	2.57	5.59	7.02	7.38	2.55
	70	5.88	8.07	-	8.53	2.81		70	3.66	5.39	-	5.83	2.76
80	3.32	-	-	4.02	2.90	80	2.61	-	-	3.27	2.79		
Black	0	0.00	0.00	0.00	17.02	4.23	Hispanic ^b	0	0.00	0.00	0.00	11.95	2.91
	10	0.00	0.00	0.02	17.38	4.32		10	0.00	0.00	0.01	12.07	2.94
	20	0.00	0.02	0.64	17.50	4.35		20	0.00	0.01	0.16	12.11	2.95
	30	0.02	0.66	3.86	17.83	4.43		30	0.01	0.16	1.38	12.23	2.98
	40	0.65	3.94	10.77	18.26	4.54		40	0.16	1.39	5.28	12.37	3.02
	50	3.46	10.66	16.18	18.55	4.74		50	1.26	5.25	9.81	12.51	3.08
	60	8.34	14.73	16.85	17.48	5.14		60	4.27	9.15	11.43	12.04	3.21
	70	8.85	11.79	-	12.66	5.67		70	5.73	8.42	-	9.13	3.36
80	5.13	-	-	6.65	6.11	80	3.75	-	-	4.75	3.44		

Devcan 6.7.4, August 2016, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

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

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

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

- Statistic could not be calculated.

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

Table 23.11
Cancer of the Prostate (Invasive)
SEER Incidence and U.S. Mortality
Age-Adjusted Rates and Trends^a
By Race/Ethnicity

SEER Incidence	SEER 18 Areas ^b	SEER 13 Areas ^b	SEER 9 Areas ^b
	Rate 2009-2013	Trend 2004-2013 ^c	Trend 2004-2013 ^d
	Rate per 100,000 persons	AAPC (%)	AAPC (%)
RACE/ETHNICITY	Males	Males	Males
All Races	129.4	-5.2*	-5.1*
White	121.9	-5.5*	-5.4*
White Hispanic ^e	104.6	-6.2*	-
White Non-Hispanic ^e	125.1	-5.4*	-
Black	203.5	-4.5*	-4.5*
Asian/Pacific Islander	68.9	-6.5*	-
Amer Ind/Alaska Nat ^f	63.9	-2.4*	-
Hispanic ^e	106.9	-5.7*	-
<u>U.S. Mortality^g</u>			
	Rate 2009-2013	Trend 2004-2013 ^h	
	Rate per 100,000 persons	AAPC (%)	
RACE/ETHNICITY	Males	Males	
All Races	20.7	-3.6*	
White	19.1	-3.3*	
White Hispanic ^e	17.7	-2.5*	
White Non-Hispanic ^e	19.2	-3.4*	
Black	44.2	-4.2*	
Asian/Pacific Islander	9.1	-3.4*	
Amer Ind/Alaska Nat			
Total U.S.	15.0	-2.7*	
CHSDA Counties	19.1	-1.8*	
Non-CHSDA Counties	10.3	-3.7*	
Hispanic ^e	17.1	-2.8*	

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.3.0.0, April 2016, 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 2004-2013 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1992-2013.

d The 2004-2013 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2013.

e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2013 Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

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

h The 2004-2013 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2013.

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

Table 23.12
Cancer of the Prostate (Invasive)

Age-Adjusted SEER Incidence Rates^a
By Registry, Race and Age

	All Races			Whites			Blacks		
	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+
<u>SEER Incidence Rates^a, 2009-2013</u>									
California	118.74	44.71	630.48	114.32	43.19	606.05	179.93	88.54	811.65
Greater Bay Area	128.13	49.82	669.47	132.75	52.14	689.96	187.91	92.67	846.23
San Francisco-Oakland	124.63	48.98	647.54	126.71	50.02	656.82	189.77	93.07	858.20
San Jose-Monterey	134.91	51.42	712.00	143.26	55.80	747.82	173.17	89.61	750.72
Los Angeles	113.82	42.47	606.98	104.71	38.82	560.13	180.20	87.73	819.44
Greater California	117.63	43.87	627.48	112.68	42.25	599.53	175.64	87.17	787.22
Connecticut	130.25	56.46	640.37	121.93	51.66	607.71	196.07	91.22	920.79
Detroit	168.23	71.57	836.38	150.03	59.78	773.89	233.75	114.45	1058.33
Georgia	139.76	58.48	701.59	118.65	46.68	616.13	219.74	93.72	1090.83
Atlanta	153.88	64.74	770.06	131.23	52.19	677.60	219.83	95.07	1082.23
Rural Georgia	137.23	60.01	670.99	110.03	45.58	555.53	202.37	85.60	1009.53
Greater Georgia	133.88	55.27	677.26	114.68	44.52	599.63	219.93	92.90	1097.98
Hawaii	96.52	30.36	553.79	99.05	35.93	535.34	147.79	92.13	532.58
Iowa	119.18	47.22	616.56	116.30	46.05	601.95	165.48	71.66	814.04
Kentucky	118.10	48.41	599.83	109.53	42.82	570.66	166.42	80.33	761.49
Louisiana	154.36	64.90	772.74	136.12	54.94	697.27	213.11	92.93	1043.86
New Jersey	148.71	61.73	749.89	140.22	57.42	712.50	213.12	92.44	1047.26
New Mexico	100.76	38.23	532.93	101.09	39.44	527.25	123.26	49.45	633.46
Seattle-Puget Sound	133.42	51.42	700.23	134.17	51.52	705.44	184.49	91.34	828.39
Utah	144.42	55.44	759.42	143.08	55.80	746.41	200.90	77.20	1055.94
SEER 9 Areas ^b	132.89	53.72	680.19	127.75	50.79	659.72	210.31	98.13	985.74
SEER 13 Areas ^b	128.75	51.08	665.60	123.93	48.61	644.53	202.02	95.60	937.66
SEER 18 Areas ^b	129.43	51.45	668.45	121.93	47.67	635.28	203.52	92.99	967.48

^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 23.13
Cancer of the Prostate (Invasive)

Age-Adjusted SEER Death Rates^a
By Registry, Race and Age

	All Races			Whites			Blacks		
	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+
<u>SEER Death Rates^a, 2009-2013</u>									
California	20.55	1.57	151.76	21.04	1.54	155.84	44.81	4.55	323.10
Greater Bay Area	18.64	1.44	137.54	20.10	1.39	149.45	42.55	5.84	296.32
San Francisco-Oakland	18.85	1.60	138.06	19.81	1.39	147.18	44.39	6.48	306.45
San Jose-Monterey	18.25	1.14	136.46	20.59	1.40	153.22	29.11	-	213.68
Los Angeles	20.00	1.57	147.42	19.70	1.41	146.15	47.23	4.65	341.54
Greater California	21.46	1.62	158.64	21.79	1.63	161.17	43.42	3.81	317.24
Connecticut	19.22	1.37	142.60	18.55	1.25	138.16	32.56	3.11	236.14
Detroit	21.24	1.95	154.54	17.82	1.48	130.76	37.72	3.88	271.66
Georgia	23.87	2.16	173.93	18.32	1.49	134.64	50.41	4.20	369.85
Atlanta	25.87	2.32	188.71	19.19	1.55	141.11	49.01	3.99	360.22
Rural Georgia	31.59	-	229.05	20.85	-	147.76	61.19	-	455.71
Greater Georgia	22.89	2.06	166.94	17.97	1.44	132.23	50.58	4.35	370.13
Hawaii	13.94	1.48	100.07	19.06	1.75	138.68	-	-	-
Iowa	19.82	1.47	146.66	19.70	1.47	145.71	35.71	-	270.00
Kentucky	20.52	1.52	151.82	19.63	1.37	145.87	40.34	3.93	292.00
Louisiana	23.14	2.38	166.65	18.37	1.62	134.15	41.86	4.44	300.53
New Jersey	19.47	1.50	143.64	17.69	1.20	131.72	44.35	4.30	321.23
New Mexico	21.42	1.63	158.23	21.44	1.67	158.09	38.82	-	292.07
Seattle-Puget Sound	21.16	1.62	156.27	21.27	1.61	157.19	42.86	4.02	311.29
Utah	22.32	1.50	166.24	22.49	1.54	167.33	-	-	-
SEER 9 Areas ^b	20.39	1.67	149.81	19.91	1.49	147.25	40.97	4.08	295.94
SEER 13 Areas ^b	20.22	1.62	148.79	19.92	1.47	147.43	42.68	4.18	308.85
SEER 18 Areas ^b	20.77	1.67	152.77	19.92	1.48	147.40	43.80	4.20	317.55
Total U.S.	20.65	1.69	151.73	19.12	1.44	141.34	44.20	4.17	320.89

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

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

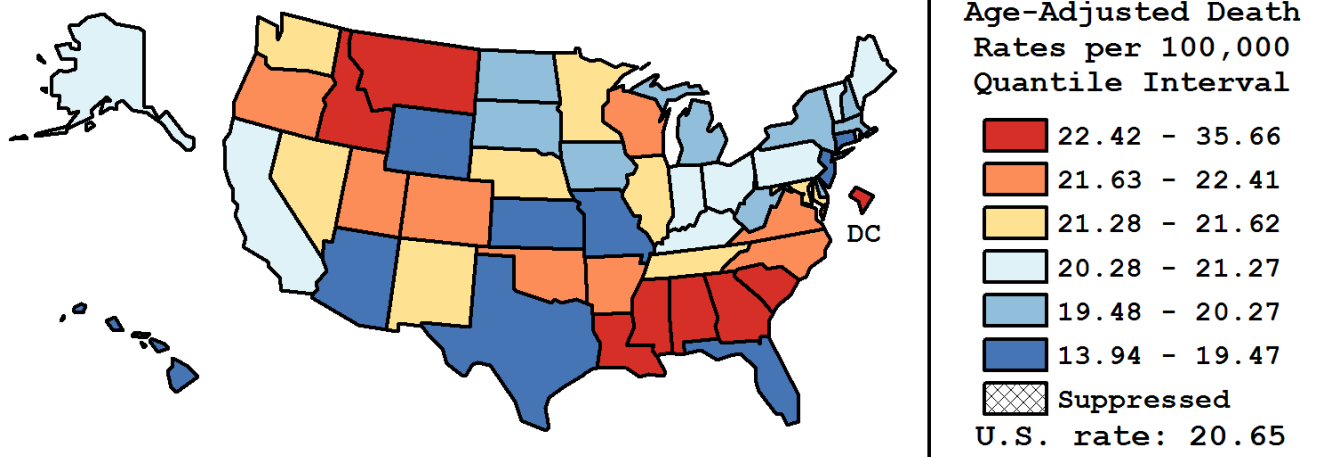
Table 23.14
Cancer of the Prostate (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2009-2013

Males

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	20.65	0.06		
High Five States				
D.C.	35.66	1.84	01(01,01)	72.66 ^c
Mississippi	27.37	0.70	02(02,03)	32.53 ^c
Alabama	25.17	0.51	03(02,06)	21.87 ^c
South Carolina	24.27	0.52	04(03,09)	17.53 ^c
Georgia	23.87	0.40	05(03,09)	15.58 ^c
Low Five States				
Kansas	18.92	0.54	47(31,50)	-8.40
Wyoming	18.91	1.27	48(09,50)	-8.42
Arizona	18.69	0.35	49(37,50)	-9.50
Florida	18.11	0.18	50(46,50)	-12.32 ^c
Hawaii	13.94	0.63	51(51,51)	-32.52 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	25.17	0.51	03(02,06)	21.87 ^c	Montana	22.51	0.94	08(03,38)	8.99
Alaska	20.48	1.62	32(03,50)	-0.84	Nebraska	21.62	0.71	17(06,41)	4.68
Arizona	18.69	0.35	49(37,50)	-9.50	Nevada	21.29	0.65	23(07,44)	3.11
Arkansas	21.80	0.58	15(06,36)	5.57	New Hampshire	20.05	0.83	36(09,50)	-2.94
California	20.55	0.17	29(24,37)	-0.48	New Jersey	19.47	0.32	43(32,49)	-5.74
Colorado	22.03	0.50	14(06,32)	6.68	New Mexico	21.42	0.69	21(06,42)	3.72
Connecticut	19.22	0.47	44(30,50)	-6.96	New York	19.93	0.22	38(30,44)	-3.50
Delaware	20.05	0.99	35(07,50)	-2.91	North Carolina	22.21	0.35	11(06,25)	7.53
D.C.	35.66	1.84	01(01,01)	72.66 ^c	North Dakota	19.97	1.08	37(07,50)	-3.30
Florida	18.11	0.18	50(46,50)	-12.32 ^c	Ohio	20.92	0.28	28(16,37)	1.30
Georgia	23.87	0.40	05(03,09)	15.58 ^c	Oklahoma	21.63	0.52	16(07,35)	4.72
Hawaii	13.94	0.63	51(51,51)	-32.52 ^c	Oregon	22.05	0.49	13(06,31)	6.75
Idaho	23.65	0.85	06(03,25)	14.49 ^c	Pennsylvania	20.38	0.25	33(23,41)	-1.29
Illinois	21.52	0.29	19(10,31)	4.19	Rhode Island	20.54	0.90	30(07,50)	-0.55
Indiana	21.18	0.40	26(10,37)	2.58	South Carolina	24.27	0.52	04(03,09)	17.53 ^c
Iowa	19.82	0.51	40(22,49)	-4.04	South Dakota	20.27	0.99	34(07,50)	-1.87
Kansas	18.92	0.54	47(31,50)	-8.40	Tennessee	21.47	0.41	20(08,35)	3.96
Kentucky	20.52	0.49	31(14,45)	-0.66	Texas	19.19	0.22	45(36,49)	-7.08
Louisiana	23.14	0.52	07(04,20)	12.07 ^c	Utah	22.32	0.72	10(04,35)	8.06
Maine	21.10	0.78	27(06,47)	2.17	Vermont	21.27	1.19	25(03,50)	3.01
Maryland	21.29	0.43	24(09,36)	3.07	Virginia	22.19	0.38	12(06,27)	7.46
Massachusetts	19.88	0.36	39(26,48)	-3.73	Washington	21.33	0.39	22(09,36)	3.28
Michigan	19.68	0.30	41(30,47)	-4.73	West Virginia	19.56	0.65	42(20,50)	-5.29
Minnesota	21.56	0.43	18(08,35)	4.40	Wisconsin	22.41	0.41	09(06,25)	8.51
Mississippi	27.37	0.70	02(02,03)	32.53 ^c	Wyoming	18.91	1.27	48(09,50)	-8.42
Missouri	18.97	0.38	46(35,50)	-8.12					



^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 10% 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 23.15
Cancer of the Prostate (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2013
By Race/Ethnicity 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 <21 ^e	0 to <38 ^e	>=38 ^g	Complete ^h
<u>Race</u>										
All Races ^b	996,735	835,034	588,312	302,931	105,849	16,054	2,810,743	2,849,303	836	2,850,139
White ^b	793,823	686,303	496,168	260,108	95,674	14,647	2,315,571	2,350,701	988	2,351,689
Black ^b	148,024	111,939	73,675	34,907	8,142	1,133	375,436	378,155	84	378,239
Asian/Pacific Islander ^c	21,381	16,882	10,000	+	+	+	52,881	+	+	+
Hispanic ^d	60,772	45,886	29,420	+	+	+	150,385	+	+	+

Estimated prevalence percent^a on January 1, 2013, of the SEER^c population diagnosed in the previous 21 years
By Age at Prevalence and Race/Ethnicity

Age at Prevalence	Age Specific (Crude)										Age-Adjusted ^f
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>											
All Races ^c	1.5451%	-	-	0.0003%	0.0014%	0.0774%	1.0088%	4.8974%	11.8301%	15.0969%	1.6948%
White ^c	1.6325%	-	-	0.0003%	0.0012%	0.0666%	0.9540%	4.8256%	11.9166%	15.0297%	1.6837%
Black ^c	1.7495%	-	-	-	0.0034%	0.2055%	2.0295%	8.4702%	17.8005%	20.8709%	2.6527%
Asian/Pacific Islander ^c	0.7380%	-	-	-	-	0.0193%	0.3384%	2.0299%	5.8994%	9.8450%	0.8715%
Hispanic ^d	0.5682%	-	-	-	-	0.0406%	0.6020%	3.3836%	9.3451%	12.9804%	1.3247%

^a US 2013 cancer prevalence counts are based on 2013 cancer prevalence proportions from the SEER registries and 1/1/2013 US population estimates based on the average of 2012 and 2013 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^{b c d} Statistics based on (b) SEER 9 Areas (c) SEER 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: 38 years for 1975-2013 SEER 9 data; 21 years for 1992-2013 SEER 13 data (excluding the Alaska Native Registry) 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.

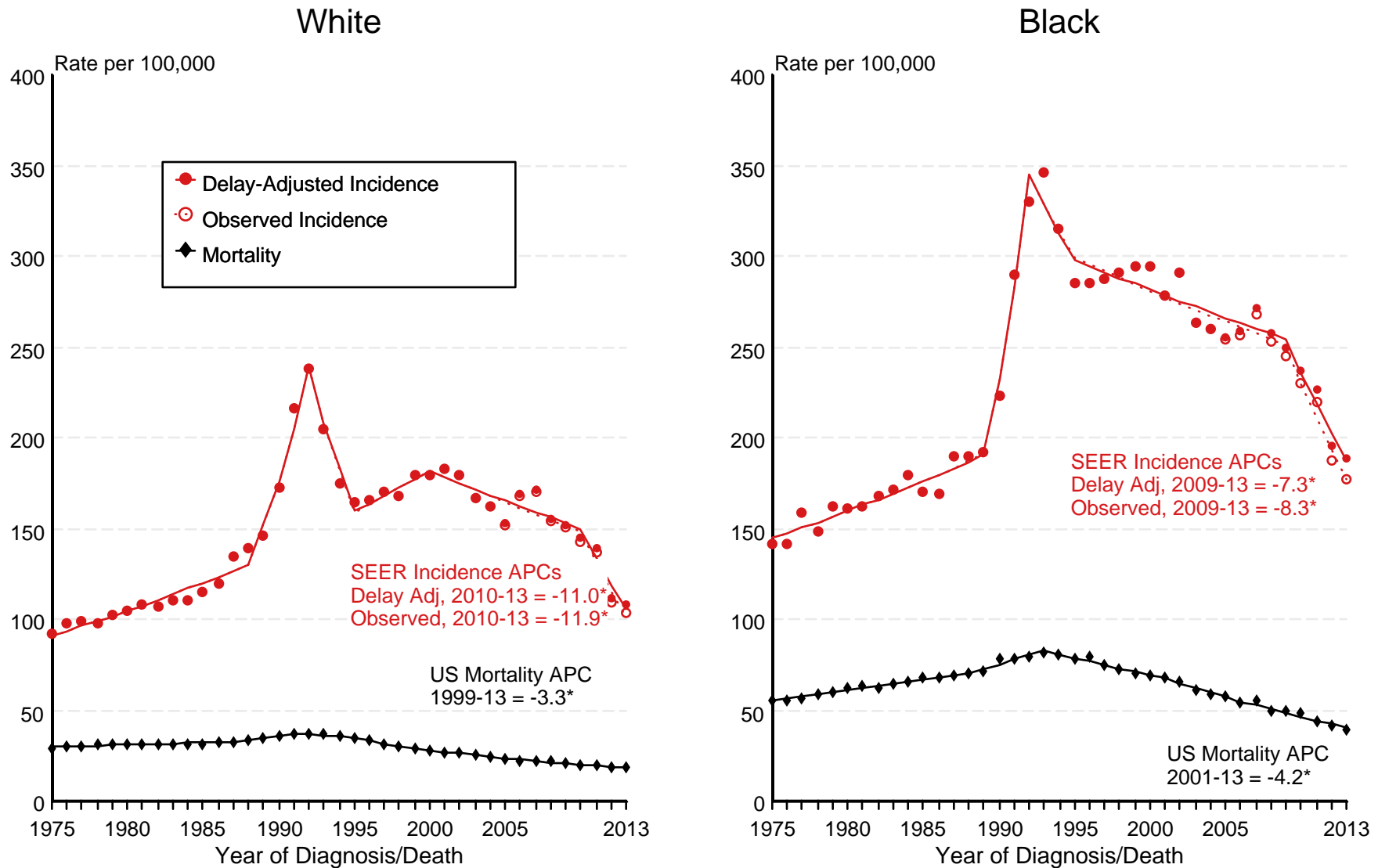
^{g h i} (g) Cases diagnosed more than 38 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <38 and >=38. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

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

+ Not available.

Figure 23.1

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



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

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

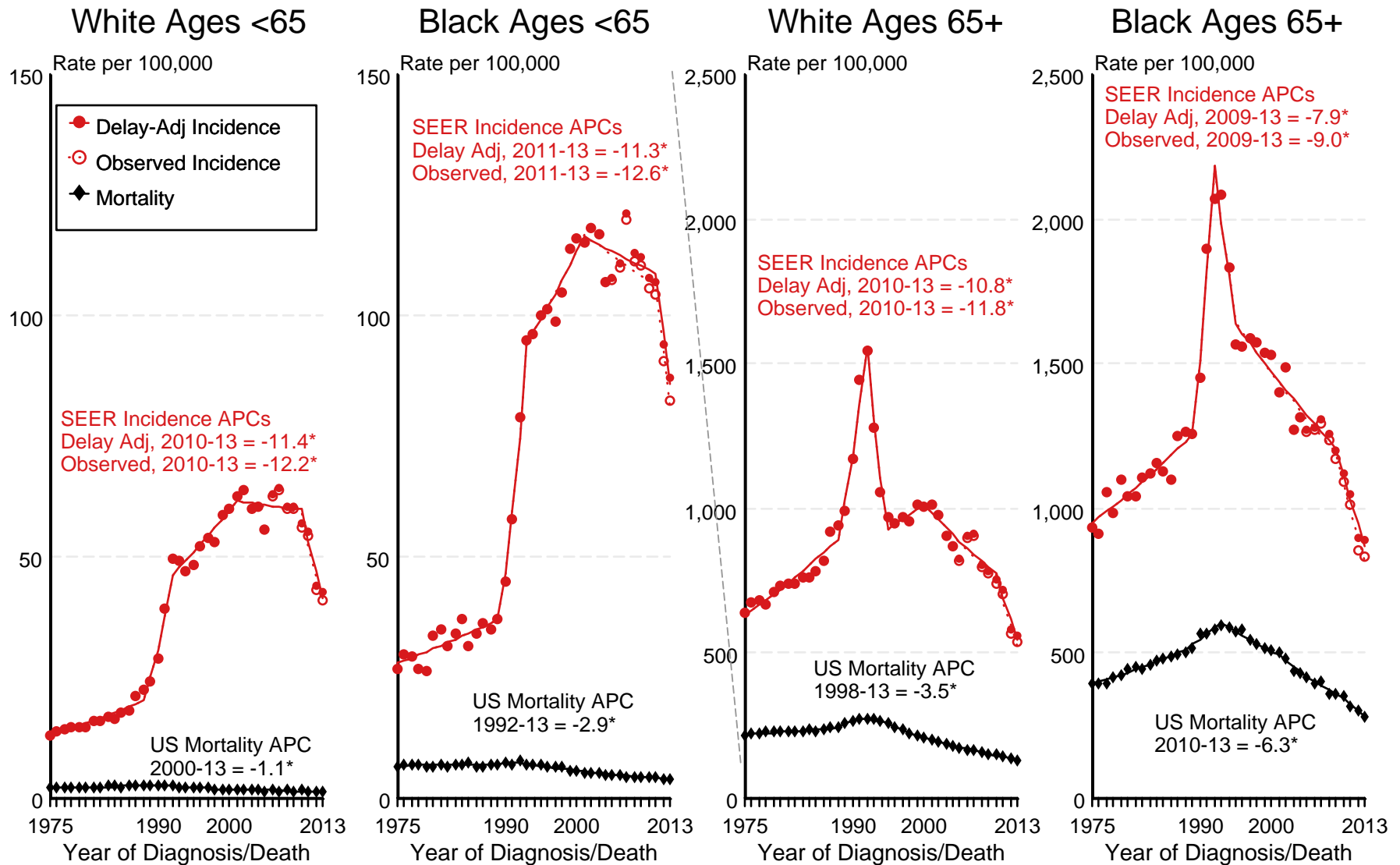
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute.

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 23.2

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



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

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute.

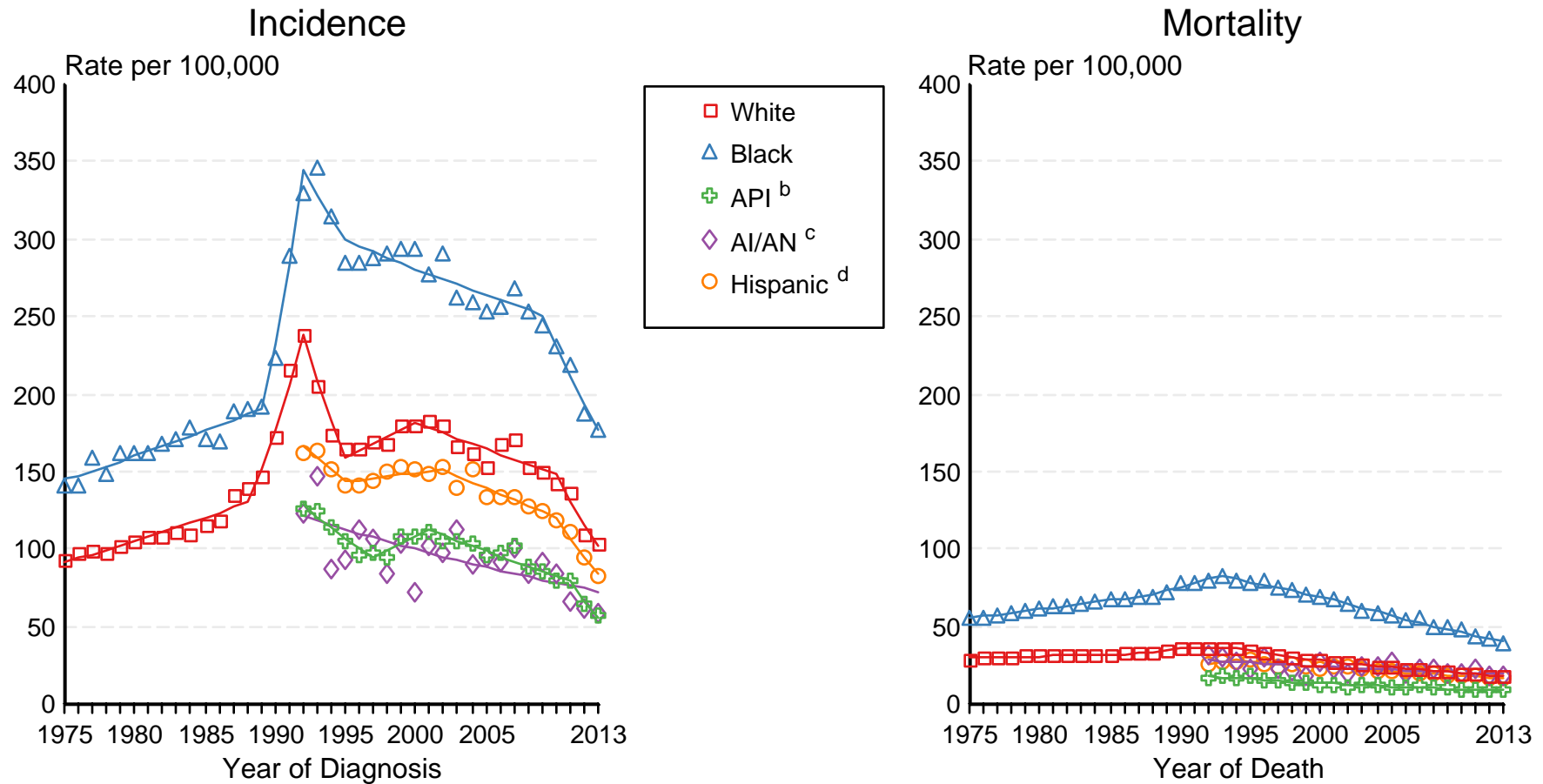
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 23.3

SEER Incidence and US Death Rates^a Cancer of the Prostate

Joinpoint Analyses for Whites and Blacks from 1975-2013
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2013



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 4.3.0.0, April 2016, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2013 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2013 allow a maximum of 4 joinpoints.

^b API = Asian/Pacific Islander.

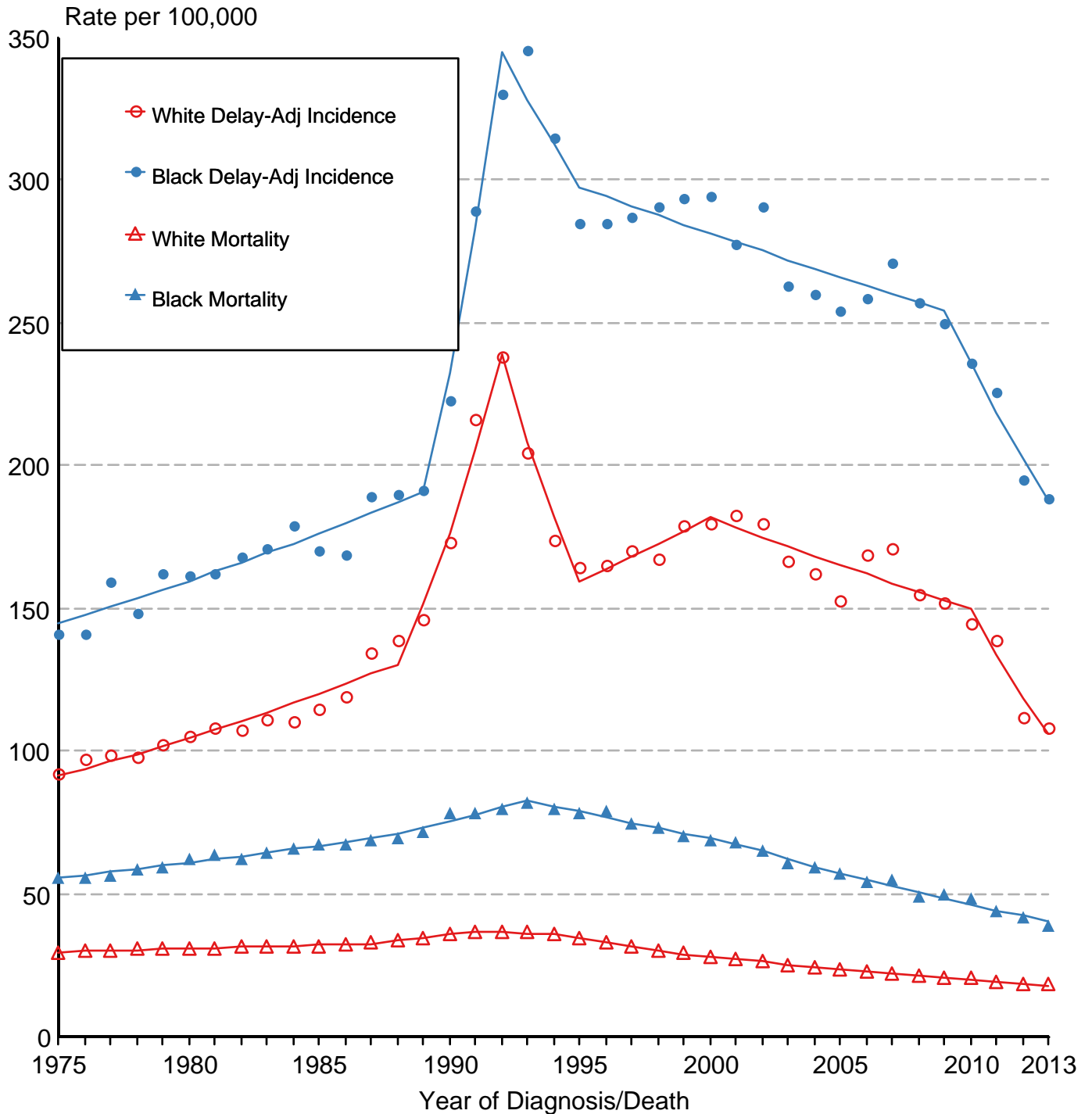
^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^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 23.4

Cancer of the Prostate

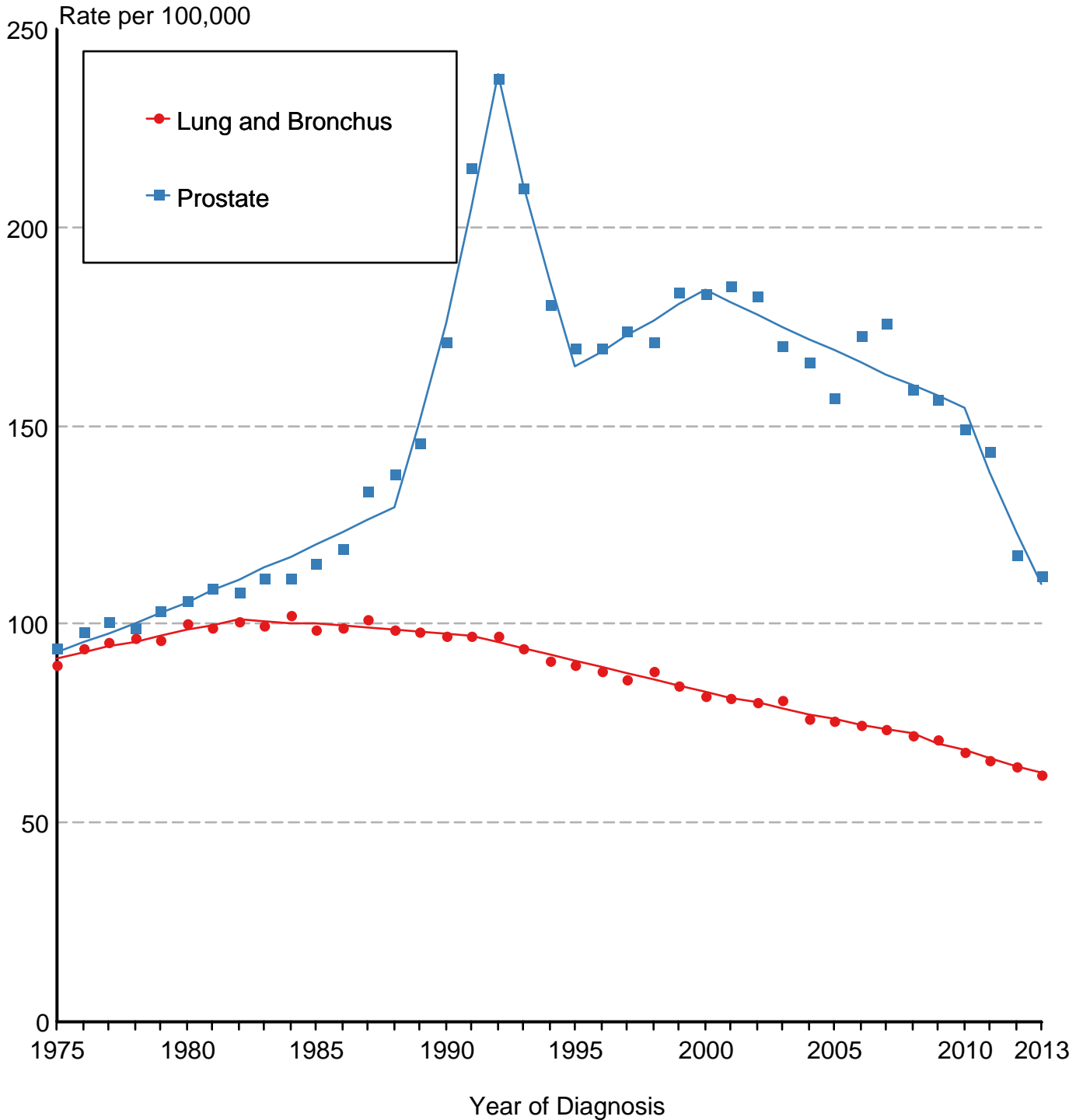
Delay-Adjusted SEER Incidence & US Mortality 1975-2013



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 are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute.

Figure 23.5

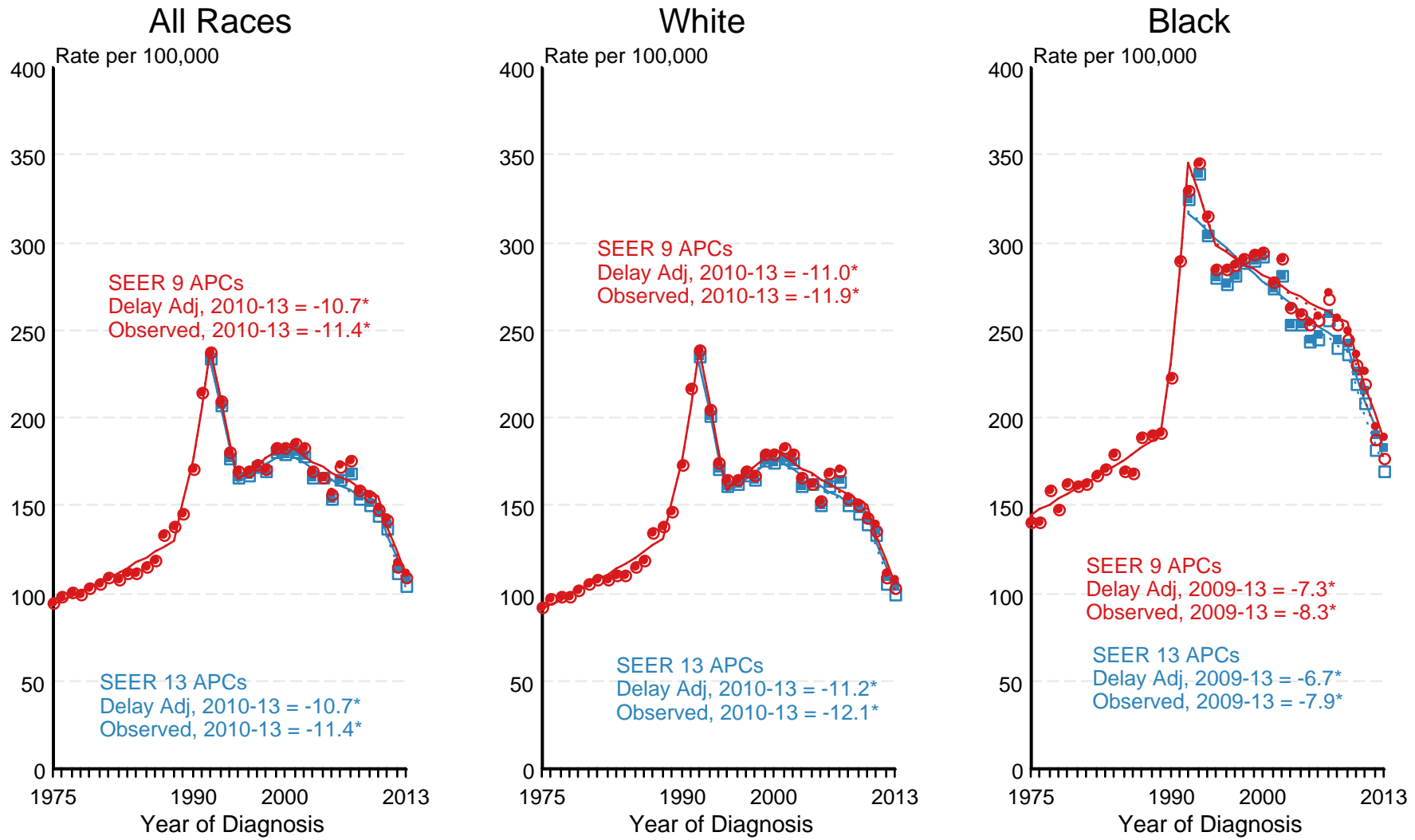
Delay-Adjusted Incidence Rates for Cancer of the Prostate and Cancer of the Lung and Bronchus All Races, Males 1975-2013



Source: SEER 9 areas. 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 4.3.0.0, April 2016, National Cancer Institute.

Figure 23.6

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



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

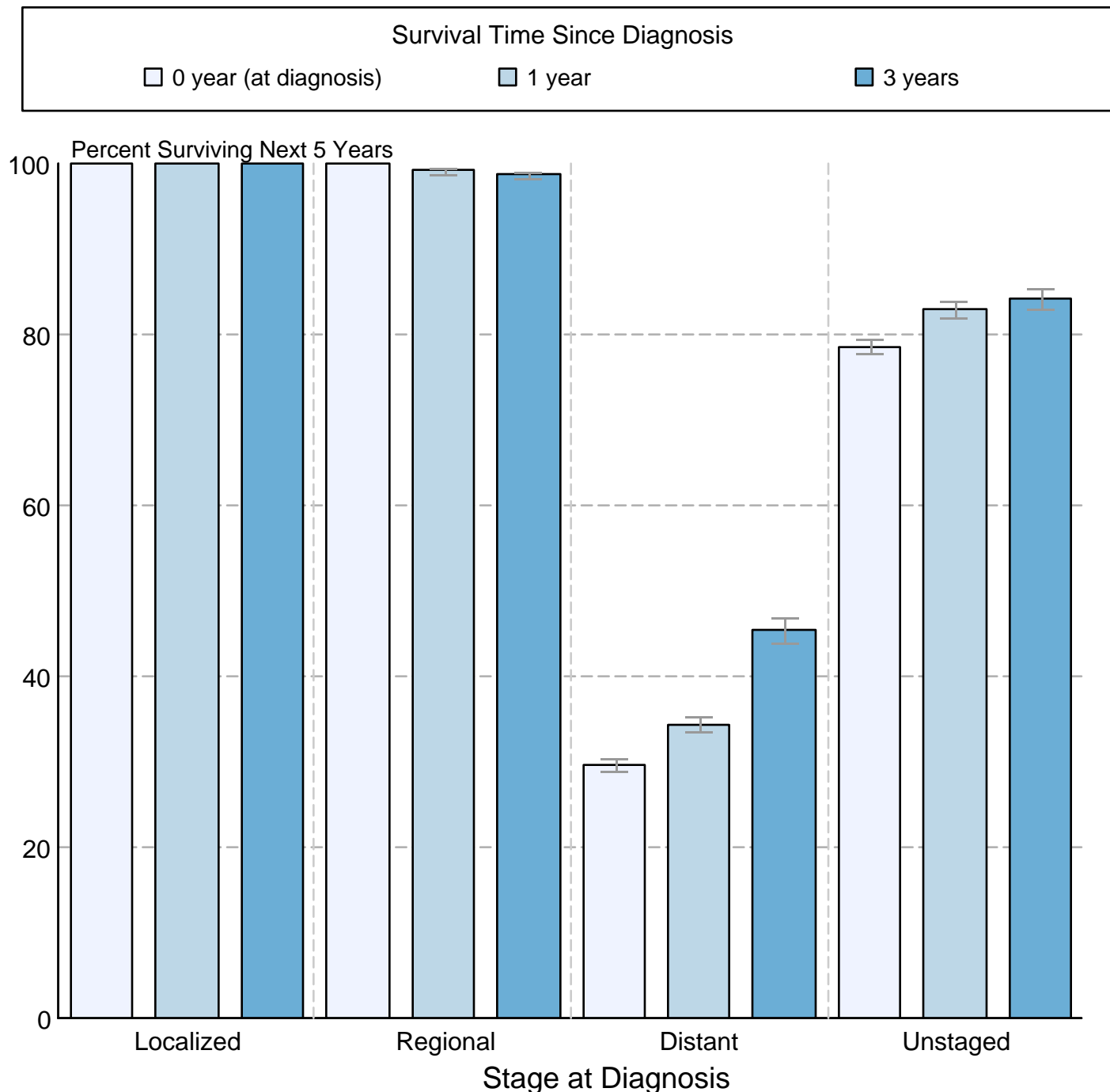
Source: SEER 9 areas and SEER 13 areas.
^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute.
 The APC is the Annual Percent Change 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 23.7

Cancer of the Prostate

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
1998-2012 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.