

Table 23.1
Cancer of the Prostate (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three 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	2002-11	2007-11
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u>														
All Races	1975-88	2.6*	1988-92	16.5*	1992-95	-11.6*	1995-00	2.5	2000-11	-1.9*			-1.9*	-1.9*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.3*	1995-01	2.1	2001-11	-2.4*			-2.4*	-2.4*
Black	1975-89	2.1*	1989-92	19.3*	1992-11	-1.7*							-1.7*	-1.7*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u>														
All Races	1992-95	-11.2*	1995-00	2.3	2000-11	-2.1*							-2.1*	-2.1*
White	1992-95	-11.7*	1995-01	1.9	2001-11	-2.5*							-2.5*	-2.5*
Black	1992-11	-1.9*											-1.9*	-1.9*
<u>SEER 9 Observed Incidence^a, 1975-2011</u>														
All Races	1975-88	2.6*	1988-92	16.4*	1992-95	-11.3*	1995-01	1.8	2001-11	-2.4*			-2.4*	-2.4*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.4*	1995-01	2.2	2001-11	-2.7*			-2.7*	-2.7*
Black	1975-89	2.0*	1989-92	21.8*	1992-95	-4.7	1995-08	-1.3*	2008-11	-5.1*			-2.6*	-4.2*
<u>SEER 13 Observed Incidence^b, 1992-2011</u>														
All Races	1992-95	-10.9*	1995-01	1.6	2001-11	-2.5*							-2.5*	-2.5*
White	1992-95	-11.8*	1995-01	2.0	2001-11	-2.7*							-2.7*	-2.7*
White NH ^{ef}	1992-94	-17.3*	1994-01	1.1	2001-11	-2.5*							-2.5*	-2.5*
Black	1992-11	-2.0*											-2.0*	-2.0*
Black NH ^{ef}	1992-11	-2.0*											-2.0*	-2.0*
API ^e	1992-97	-6.3*	1997-00	5.5	2000-07	-1.9*	2007-11	-5.7*					-3.6*	-5.7*
AI/AN ^{eg}	1992-11	-1.9*											-1.9*	-1.9*
Hispanic ^f	1992-95	-5.0	1995-02	1.0	2002-11	-3.4*							-3.4*	-3.4*
<u>U.S. Cancer Mortality^c, 1975-2011</u>														
All Races	1975-87	0.9*	1987-91	3.0*	1991-94	-0.5	1994-99	-4.1*	1999-11	-3.4*			-3.4*	-3.4*
White	1975-87	0.8*	1987-91	3.1*	1991-94	-0.7	1994-99	-4.3*	1999-11	-3.3*			-3.3*	-3.3*
Black	1975-88	1.9*	1988-93	3.3*	1993-01	-2.6*	2001-11	-3.9*					-3.9*	-3.9*
<u>U.S. Cancer Mortality^c, 1992-2011</u>														
All Races	1992-94	-1.0	1994-04	-3.8*	2004-11	-3.2*							-3.3*	-3.2*
White	1992-94	-0.7	1994-99	-4.3*	1999-11	-3.3*							-3.3*	-3.3*
White NH ^{ef}	1992-94	-0.3	1994-99	-4.3*	1999-11	-3.3*							-3.3*	-3.3*
Black	1992-96	-0.6	1996-11	-3.6*									-3.6*	-3.6*
Black NH ^{ef}	1992-96	-0.5	1996-11	-3.5*									-3.5*	-3.5*
API ^e	1992-11	-3.4*											-3.4*	-3.4*
AI/AN ^{eg}	1992-11	-1.5*											-1.5*	-1.5*
Hispanic ^f	1992-94	4.0	1994-11	-2.6*									-2.6*	-2.6*

Joinpoint Regression Program Version 4.1.0, April 2014, 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).

a b c d e f g * -

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,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three 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	2002-11	2007-11								
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u>														
All Races	1975-88	3.1*	1988-92	23.1*	1992-01	3.5*	2001-11	-0.5					-0.5	-0.5
White	1975-88	3.5*	1988-92	23.1*	1992-02	3.1*	2002-11	-0.9					-0.9	-0.9
Black	1975-89	2.0*	1989-93	26.2*	1993-01	2.7*	2001-11	-0.7					-0.7	-0.7
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u>														
All Races	1992-01	3.5*	2001-11	-0.7									-0.7	-0.7
White	1992-01	3.5*	2001-11	-0.9									-0.9	-0.9
Black	1992-00	3.9*	2000-11	-0.8*									-0.8*	-0.8*
<u>SEER 9 Observed Incidence^a, 1975-2011</u>														
All Races	1975-88	3.1*	1988-92	23.5*	1992-02	3.2*	2002-11	-1.0*					-1.0*	-1.0*
White	1975-88	3.5*	1988-92	23.1*	1992-02	3.1*	2002-11	-1.2*					-1.2*	-1.2*
Black	1975-89	2.0*	1989-93	26.1*	1993-01	2.7*	2001-11	-1.0*					-1.0*	-1.0*
<u>SEER 13 Observed Incidence^b, 1992-2011</u>														
All Races	1992-01	3.5*	2001-11	-0.9*									-0.9*	-0.9*
White	1992-02	3.1*	2002-11	-1.5*									-1.5*	-1.5*
White NH ^{ef}	1992-01	3.5*	2001-11	-1.0									-1.0	-1.0
Black	1992-00	3.9*	2000-11	-1.0*									-1.0*	-1.0*
Black NH ^{ef}	1992-00	3.9*	2000-11	-0.9*									-0.9*	-0.9*
API ^e	1992-01	6.5*	2001-11	-0.4									-0.4	-0.4
AI/AN ^{eg}	1992-11	-1.5											-1.5	-1.5
Hispanic ^f	1992-02	4.6*	2002-11	-1.8*									-1.8*	-1.8*
<u>U.S. Cancer Mortality^c, 1975-2011</u>														
All Races	1975-87	0.5*	1987-90	3.1	1990-96	-3.2*	1996-00	-5.8*	2000-11	-1.4*			-1.4*	-1.4*
White	1975-87	0.7*	1987-90	3.0	1990-96	-3.6*	1996-00	-6.1*	2000-11	-1.2*			-1.2*	-1.2*
Black	1975-92	0.6*	1992-06	-3.2*	2006-11	-1.5							-2.2*	-1.5
<u>U.S. Cancer Mortality^c, 1992-2011</u>														
All Races	1992-01	-4.4*	2001-11	-1.3*									-1.3*	-1.3*
White	1992-01	-4.7*	2001-11	-1.2*									-1.2*	-1.2*
White NH ^{ef}	1992-01	-4.6*	2001-11	-1.2*									-1.2*	-1.2*
Black	1992-06	-3.4*	2006-11	-1.3									-2.2*	-1.3
Black NH ^{ef}	1992-06	-3.3*	2006-11	-1.2									-2.1*	-1.2
API ^e	1992-11	-0.3											-0.3	-0.3
AI/AN ^{eg}	1992-11	-3.5*											-3.5*	-3.5*
Hispanic ^f	1992-11	-2.5*											-2.5*	-2.5*

Joinpoint Regression Program Version 4.1.0, April 2014, 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).

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

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

Table 23.3
Cancer of the Prostate (Invasive)

Trends in SEER Incidence^{a,b} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three 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	2002-11	2007-11
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u>														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.9*	1995-00	1.4	2000-11	-2.7*			-2.7*	-2.7*
White	1975-88	2.7*	1988-92	15.0*	1992-95	-15.9*	1995-00	2.0	2000-11	-2.9*			-2.9*	-2.9*
Black	1975-89	2.0*	1989-92	20.0*	1992-95	-8.5	1995-11	-2.5*					-2.5*	-2.5*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u>														
All Races	1992-95	-14.2*	1995-00	1.2	2000-11	-2.8*							-2.8*	-2.8*
White	1992-95	-15.2*	1995-00	1.7	2000-11	-2.9*							-2.9*	-2.9*
Black	1992-11	-3.3*											-3.3*	-3.3*
<u>SEER 9 Observed Incidence^a, 1975-2011</u>														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.9*	1995-00	1.5	2000-11	-2.9*			-2.9*	-2.9*
White	1975-88	2.7*	1988-92	14.9*	1992-95	-15.9*	1995-00	2.0	2000-11	-3.2*			-3.2*	-3.2*
Black	1975-89	2.0*	1989-92	19.9*	1992-95	-8.3	1995-11	-2.7*					-2.7*	-2.7*
<u>SEER 13 Observed Incidence^b, 1992-2011</u>														
All Races	1992-95	-13.9*	1995-01	0.6	2001-11	-3.2*							-3.2*	-3.2*
White	1992-95	-14.9*	1995-01	1.0	2001-11	-3.4*							-3.4*	-3.4*
White NH ^{e,f}	1992-95	-15.3*	1995-01	1.1	2001-11	-3.3*							-3.3*	-3.3*
Black	1992-95	-7.5*	1995-11	-3.0*									-3.0*	-3.0*
Black NH ^{e,f}	1992-95	-7.7*	1995-11	-3.0*									-3.0*	-3.0*
API ^e	1992-97	-7.8*	1997-00	4.5	2000-07	-2.6*	2007-11	-6.7*					-4.5*	-6.7*
AI/AN ^{eg}	1992-11	-2.1*											-2.1*	-2.1*
Hispanic ^f	1992-95	-6.2*	1995-04	-0.7	2004-11	-4.6*							-3.8*	-4.6*
<u>U.S. Cancer Mortality^c, 1975-2011</u>														
All Races	1975-87	0.9*	1987-90	3.3*	1990-93	1.2	1993-11	-3.6*					-3.6*	-3.6*
White	1975-87	0.8*	1987-91	3.2*	1991-94	-0.5	1994-98	-4.4*	1998-11	-3.4*			-3.4*	-3.4*
Black	1975-94	2.3*	1994-01	-2.7*	2001-11	-4.0*							-4.0*	-4.0*
<u>U.S. Cancer Mortality^c, 1992-2011</u>														
All Races	1992-94	-1.3	1994-11	-3.6*									-3.6*	-3.6*
White	1992-94	-0.5	1994-98	-4.4*	1998-11	-3.4*							-3.4*	-3.4*
White NH ^{e,f}	1992-94	-0.2	1994-98	-4.4*	1998-11	-3.5*							-3.5*	-3.5*
Black	1992-96	-0.3	1996-11	-3.7*									-3.7*	-3.7*
Black NH ^{e,f}	1992-96	-0.1	1996-11	-3.6*									-3.6*	-3.6*
API ^e	1992-11	-3.5*											-3.5*	-3.5*
AI/AN ^{eg}	1992-11	-1.4*											-1.4*	-1.4*
Hispanic ^f	1992-94	4.4	1994-11	-2.6*									-2.6*	-2.6*

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

a b c d e f g * -

Table 23.4
Cancer of the Prostate (Invasive)

Delay-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	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	106.04	15.52	731.69	104.99	14.69	729.14	161.14	33.79	1,041.42
1981	108.91	16.85	745.32	107.92	15.98	743.44	161.86	34.55	1,041.86
1982	108.23	16.34	743.40	107.36	15.80	740.22	167.64	31.32	1,109.93
1983	111.63	17.15	764.65	110.85	16.61	762.31	170.91	34.02	1,117.08
1984	111.71	17.26	764.57	110.14	16.22	759.33	178.81	37.09	1,158.46
1985	115.56	17.92	790.44	114.74	17.69	785.63	170.02	31.42	1,128.08
1986	119.12	18.55	814.28	119.10	18.31	815.78	168.67	34.10	1,098.88
1987	133.78	21.51	909.84	134.68	21.11	919.71	189.29	36.08	1,248.34
1988	137.69	22.18	936.12	138.87	22.31	944.60	190.34	34.91	1,264.72
1989	145.42	24.17	983.54	146.29	24.06	991.16	191.93	37.31	1,260.70
1990	171.14	28.85	1,154.73	173.02	28.94	1,168.95	222.65	44.74	1,452.42
1991	214.96	38.91	1,431.83	216.75	39.38	1,442.80	289.29	57.52	1,891.35
1992	237.55	49.44	1,537.83	238.74	49.48	1,546.95	329.08	78.17	2,063.50
1993	209.71	50.52	1,310.06	204.80	49.10	1,281.01	345.60	94.52	2,081.18
1994	180.45	48.65	1,091.51	174.50	46.90	1,056.56	315.11	96.21	1,828.21
1995	169.53	50.14	994.76	164.65	48.26	969.23	284.25	99.66	1,560.23
1996	169.73	53.52	973.01	165.54	52.10	949.69	284.34	100.78	1,553.13
1997	173.88	55.31	993.47	170.47	54.16	974.40	286.55	97.96	1,590.15
1998	171.33	55.09	974.83	167.92	53.29	960.27	289.51	104.15	1,570.78
1999	183.91	60.87	1,034.34	179.77	59.06	1,014.16	293.30	113.01	1,539.54
2000	183.64	61.93	1,024.92	180.30	60.20	1,010.47	293.63	114.96	1,528.68
2001	185.62	64.75	1,021.11	183.74	62.93	1,018.84	276.65	115.36	1,391.58
2002	183.03	65.71	994.05	180.79	64.30	986.08	290.15	118.11	1,479.40
2003	170.55	62.23	919.27	167.31	60.16	908.00	262.45	116.95	1,268.25
2004	166.91	62.25	890.42	163.47	60.80	873.14	260.19	107.11	1,318.35
2005	157.97	58.34	846.65	153.47	55.91	827.89	252.72	107.37	1,257.39
2006	173.47	65.13	922.40	169.63	63.17	905.56	255.00	109.71	1,259.30
2007	176.74	67.34	932.95	171.44	64.50	910.67	267.66	119.82	1,289.54
2008	159.78	63.36	826.28	154.91	60.86	804.99	253.73	111.77	1,235.03
2009	157.17	63.29	806.09	152.43	60.99	784.44	245.91	111.91	1,172.15
2010	149.97	59.92	772.40	144.99	57.31	751.06	232.58	106.82	1,101.87
2011	145.20	58.78	742.58	139.44	56.02	716.02	224.58	107.04	1,037.04

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

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). - Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 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:									
1975-2011	152.72	43.88	905.05	149.27	41.75	892.45	238.41	82.14	1,318.58
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	106.04	15.52	731.69	104.99	14.69	729.14	161.14	33.79	1,041.42
1981	108.91	16.85	745.32	107.92	15.98	743.44	161.86	34.55	1,041.86
1982	108.23	16.34	743.38	107.35	15.80	740.16	167.63	31.32	1,109.83
1983	111.62	17.15	764.59	110.83	16.60	762.17	170.88	34.02	1,116.88
1984	111.70	17.26	764.47	110.11	16.22	759.12	178.77	37.08	1,158.14
1985	115.54	17.92	790.29	114.70	17.68	785.34	169.96	31.41	1,127.65
1986	119.10	18.55	814.14	119.04	18.30	815.38	168.59	34.08	1,098.34
1987	133.75	21.51	909.63	134.60	21.10	919.16	189.18	36.06	1,247.58
1988	137.65	22.18	935.83	138.77	22.29	943.91	190.20	34.88	1,263.80
1989	145.37	24.17	983.16	146.16	24.04	990.30	191.76	37.28	1,259.61
1990	171.06	28.84	1,154.16	172.84	28.91	1,167.73	222.42	44.70	1,450.91
1991	214.87	38.90	1,431.18	216.51	39.33	1,441.21	288.97	57.45	1,889.26
1992	237.42	49.42	1,536.95	238.44	49.42	1,545.00	328.67	78.07	2,060.90
1993	209.57	50.50	1,309.12	204.50	49.03	1,279.17	345.11	94.38	2,078.20
1994	180.31	48.62	1,090.54	174.22	46.82	1,054.85	314.60	96.06	1,825.25
1995	169.36	50.11	993.67	164.36	48.17	967.49	283.74	99.48	1,557.43
1996	169.53	53.48	971.70	165.22	52.00	947.89	283.80	100.59	1,550.20
1997	173.62	55.26	991.82	170.02	54.02	971.85	285.80	97.70	1,585.99
1998	171.04	55.03	972.96	167.44	53.14	957.55	288.69	103.85	1,566.34
1999	183.47	60.78	1,031.61	179.10	58.84	1,010.40	292.21	112.59	1,533.83
2000	183.11	61.80	1,021.60	179.54	59.94	1,006.21	292.40	114.48	1,522.23
2001	184.97	64.59	1,017.06	182.86	62.63	1,013.95	275.32	114.80	1,384.90
2002	182.24	65.50	989.22	179.81	63.94	980.68	288.57	117.46	1,471.30
2003	169.65	61.99	913.81	166.27	59.78	902.33	260.81	116.21	1,260.33
2004	165.83	61.94	883.97	162.25	60.35	866.66	258.26	106.32	1,308.57
2005	156.71	57.99	839.15	152.10	55.41	820.50	250.46	106.42	1,246.16
2006	171.78	64.64	912.42	167.84	62.50	895.97	252.30	108.54	1,245.96
2007	174.64	66.71	920.63	169.23	63.67	898.93	264.20	118.28	1,272.91
2008	157.46	62.62	812.97	152.40	59.87	791.95	249.62	109.96	1,215.03
2009	154.36	62.37	790.24	149.29	59.74	768.31	240.86	109.61	1,148.06
2010	146.69	58.85	753.87	141.03	55.75	730.55	226.23	103.90	1,071.78
2011	139.89	56.96	713.09	133.39	53.59	684.95	214.83	102.39	992.05

^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

	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
Year of Death:									
1975-2011	30.98	2.31	229.20	28.68	1.99	213.15	64.26	5.88	467.78
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	160.31	20.10	1.51	148.62	48.09	4.40	350.11
2011	20.77	1.66	152.91	19.24	1.39	142.61	44.05	4.25	319.17

^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, 2007-2011</u>						
Age at Diagnosis/Death:						
All ages	147.8	139.9	223.9	22.3	20.6	48.9
Under 65	57.9	54.2	101.2	1.7	1.5	4.4
65 and over	769.1	732.2	1,071.9	164.9	153.0	356.7
All ages (IARC world std) ^c	102.3	97.0	159.4	9.7	8.8	22.0
<u>Age-Specific Rates, 2007-2011</u>						
Age at Diagnosis/Death:						
<1	-	-	-	-	-	-
1-4	-	-	-	-	-	-
5-9	-	-	-	-	-	-
10-14	-	-	-	-	-	-
15-19	-	-	-	-	-	-
20-24	-	-	-	-	-	-
25-29	-	-	-	-	-	-
30-34	0.1	-	-	-	-	-
35-39	1.2	1.0	2.9	0.0	-	-
40-44	10.5	8.9	25.7	0.2	0.1	0.4
45-49	47.3	41.0	106.5	0.9	0.7	2.3
50-54	145.9	134.7	269.1	3.2	2.7	8.1
55-59	321.6	303.5	547.3	8.9	7.5	22.7
60-64	552.9	527.2	900.8	20.5	17.7	52.6
65-69	835.2	800.8	1,246.4	41.8	36.6	104.5
70-74	895.0	859.0	1,215.1	80.2	71.1	198.8
75-79	806.4	763.2	1,060.6	144.6	132.1	329.4
80-84	603.9	564.3	804.7	257.0	239.8	567.3
85+	490.6	460.1	720.4	539.4	514.3	1,042.2

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

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

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

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

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

Table 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	75.9	70.9	73.1	77.6	71.9	62.7	64.9	61.9
1984-1986 ^b	75.2	77.3	74.6	76.4	79.1	75.7	65.6	67.1	64.8
1987-1989 ^b	82.8	83.2	82.7	84.4	84.7	84.3	71.1	72.7	70.6
1990-1992 ^b	92.9	93.0	92.9	94.1	94.0	94.1	84.3	86.7	83.4
1993-1995 ^b	95.2	95.8	94.9	95.9	96.5	95.6	91.6	93.2	90.7
1996-1998 ^b	97.4	98.5	96.8	97.9	98.9	97.3	94.8	96.7	93.3
1999-2003 ^b	99.6	99.3	99.6	99.8	99.5	99.6	97.5	98.6	96.1
2004-2010 ^b	99.6 ^f	99.6 ^f	99.5 ^f	99.8 ^e	99.8 ^e	99.6 ^f	97.9 ^e	98.7 ^e	97.0 ^e
5-Year Period Survival (Percent)^{cd}									
2010	98.8	99.1	98.6	99.1	99.3	98.9	97.1	98.3	95.6
Stage Distribution (%) 2004-2010^{ce}									
All Stages									
Number of cases	364,197	157,722	206,475	282,577	119,665	162,912	51,954	27,786	24,168
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	81	80	82	81	79	82	82	81	82
Regional	12	16	9	12	17	9	10	14	7
Distant	4	3	5	4	3	5	5	4	7
Unstaged	3	2	5	3	1	4	3	1	4
5-Year Relative Survival (Percent), 2004-2010^c									
Age at Diagnosis:									
Ages <45	96.2	-	-	95.7	-	-	96.9	-	-
Ages 45-54	98.3	-	-	98.4	-	-	97.5	-	-
Ages 55-64	99.3	-	-	99.6	-	-	98.1	-	-
Ages 65-74	100.0	-	-	100.0	-	-	98.0	-	-
Ages 75+	95.7	-	-	96.0	-	-	88.8	-	-
Ages <65	99.1	-	-	99.3	-	-	98.0	-	-
Ages 65+	98.8	-	-	99.2	-	-	95.3	-	-
Stage^e:									
All Stages	98.9	99.1	98.8	99.3	99.3	99.2	96.7	98.0	95.3
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	100.0	100.0	100.0	100.0	99.3
Distant	28.0	31.5	26.5	27.1	31.0	25.6	28.6	31.0	26.8
Unstaged	74.0	86.0	70.8	69.8	84.0	66.5	62.6	77.0	56.7

^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 2011.

^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 2011.

^d Period survival provides a 2010 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2007-2009: 0-1 year survival), (2006-2008: 1-2 year survival), (2005-2007: 2-3 year survival), (2004-2006: 3-4 year survival), (2003-2005: 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.

The difference between 1975-1977 and 2004-2010 is statistically significant ($p<.05$).

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

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

^h 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	
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	99.7	99.7	
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	99.7	99.8	99.7	99.8	99.8	99.8	99.5	99.3	
3-year	78.3	81.5	86.9	96.0	96.9	97.4	98.4	98.5	99.6	99.2	99.9	99.8	99.5	99.7	99.6	99.8	99.8	99.8	99.8	99.2	
4-year	73.2	76.4	83.5	94.9	96.3	96.8	97.9	98.2	99.3	99.0	99.9	99.8	99.5	99.7	99.6	99.6	99.7	99.7	99.7	99.7	
5-year	68.7	72.0	80.5	93.8	95.7	96.4	97.5	98.2	99.3	99.0	99.9	99.8	99.3	99.7	99.7	99.3	99.6	99.6	99.7	99.7	
6-year	65.2	68.5	77.9	92.7	95.4	96.0	97.3	98.1	99.3	98.7	99.9	99.8	99.3	99.7	99.7	99.3	99.3	99.7	99.7	99.7	
7-year	61.8	65.0	75.4	91.6	95.0	95.5	97.3	97.8	99.2	98.7	99.9	99.8	99.2	99.7	99.7	99.2	99.7	99.7	99.7	99.7	
8-year	58.5	61.9	73.3	90.6	94.7	95.1	97.2	97.8	99.0	98.5	99.9	99.8	99.2	99.7	99.7	99.2	99.7	99.7	99.7	99.7	
9-year	55.8	59.7	71.4	89.5	94.4	94.6	96.8	97.3	98.8	98.5	99.9	99.8	99.8	99.9	99.9	99.8	99.8	99.8	99.8	99.8	
10-year	53.2	57.8	69.6	88.5	93.7	94.5	96.8	96.9	98.4	98.5	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	99.9	
11-year	50.6	55.5	67.8	87.6	93.0	94.2	96.6	96.5	98.2	97.6											
12-year	48.4	53.5	66.0	86.7	92.1	93.8	96.3	95.8	97.7												
13-year	46.5	51.7	64.4	86.1	91.2	93.2	95.5	95.5													
14-year	44.8	50.1	63.0	85.2	90.2	92.9	94.9														
15-year	43.6	48.7	61.5	84.3	89.4	92.2															
16-year	41.9	46.9	60.0	83.4	88.9																
17-year	40.1	45.8	59.3	82.5																	
18-year	38.8	44.4	58.2																		
19-year	38.0	43.0	57.7																		
20-year	37.0	41.5	56.7																		
21-year	35.4	40.6	55.8																		
22-year	34.0	39.3	54.4																		
23-year	33.1	38.0																			
24-year	32.3	37.0																			
25-year	30.8	35.5																			
26-year	30.2	34.2																			
27-year	29.4	33.9																			
28-year	28.6																				
29-year	27.9																				
30-year	26.4																				

^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, 2009-2011 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.00	15.02	2.66	Asian/ Pacific Islander	0	0.00	0.00	0.00	10.10	2.20	
	10	0.00	0.00	0.01	15.21	2.70		10	0.00	0.00	0.00	10.18	2.21	
	20	0.00	0.01	0.33	15.27	2.71		20	0.00	0.00	0.10	10.21	2.22	
	30	0.01	0.34	2.49	15.46	2.75		30	0.00	0.10	0.94	10.26	2.23	
	40	0.33	2.52	8.04	15.69	2.80		40	0.10	0.95	3.92	10.33	2.24	
	50	2.26	7.98	13.47	15.91	2.88		50	0.87	3.89	7.84	10.41	2.27	
	60	6.29	12.34	14.57	15.02	3.05		60	3.17	7.31	9.36	10.00	2.33	
	70	7.52	10.30	-	10.86	3.23		70	4.67	6.98	-	7.70	2.41	
	80	4.31	-	-	5.18	3.35		80	3.03	-	-	3.97	2.51	
White	0	0.00	0.00	0.00	14.16	2.48	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	7.01	2.38	
	10	0.00	0.00	0.01	14.32	2.51		10	0.00	0.00	0.01	7.11	2.42	
	20	0.00	0.01	0.29	14.38	2.52		20	0.00	0.01	0.10	7.17	2.45	
	30	0.01	0.29	2.30	14.54	2.55		30	0.01	0.10	0.74	7.31	2.51	
	40	0.29	2.32	7.58	14.76	2.60		40	0.09	0.75	3.05	7.52	2.59	
	50	2.11	7.54	12.73	14.97	2.68		50	0.69	3.11	6.17	7.79	2.75	
	60	5.96	11.66	13.72	14.12	2.83		60	2.64	5.98	7.47	7.75	2.99	
	70	7.04	9.59	-	10.09	3.00		70	4.02	5.82	-	6.16	3.23	
	80	3.95	-	-	4.72	3.13		80	2.69	-	-	3.19	3.65	
Black	0	0.00	0.00	0.00	19.08	4.57	Hispanic ^b	0	0.00	0.00	0.00	14.03	3.08	
	10	0.00	0.00	0.03	19.51	4.68		10	0.00	0.00	0.01	14.17	3.11	
	20	0.00	0.03	0.72	19.65	4.72		20	0.00	0.01	0.18	14.23	3.13	
	30	0.03	0.74	4.36	20.03	4.81		30	0.01	0.18	1.62	14.36	3.16	
	40	0.73	4.44	12.13	20.52	4.93		40	0.18	1.63	6.23	14.53	3.19	
	50	3.92	12.05	18.28	20.90	5.15		50	1.49	6.20	11.60	14.72	3.27	
	60	9.51	16.81	19.25	19.87	5.62		60	5.06	10.86	13.48	14.21	3.41	
	70	10.30	13.75	-	14.63	6.23		70	6.89	10.01	-	10.87	3.59	
	80	6.20	-	-	7.78	6.73		80	4.45	-	-	5.68	3.69	

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

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

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

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

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

- Statistic could not be calculated.

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

Table 23.11
Cancer of the Prostate (Invasive)

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

RACE/ETHNICITY	SEER Incidence	SEER 18 Areas ^b Rate 2007-2011 Rate per 100,000 persons	SEER 13 Areas ^b Trend 2002-2011 ^c AAPC (%)	SEER 9 Areas ^b Trend 2002-2011 ^d AAPC (%)
		Males	Males	Males
	All Races	147.8	-2.5*	-2.4*
U.S. Mortality^g				
RACE/ETHNICITY		Rate 2007-2011 Rate per 100,000 persons	Trend 2002-2011 ^h AAPC (%)	
	All Races	22.3	-3.3*	
	White	20.6	-3.3*	
	White Hispanic ^e	19.1	-2.3*	
	White Non-Hispanic ^e	20.7	-3.3*	
	Black	48.9	-3.6*	
	Asian/Pacific Islander	10.0	-3.4*	
	Amer Ind/Alaska Nat ^f			
	Total U.S.	16.8	-2.5*	
	CHSDA Counties	21.2	-1.5*	
	Non-CHSDA Counties	11.5	-3.7*	
	Hispanic ^e	18.5	-2.6*	

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.1.0, April 2014, 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.

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 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2011.

^d The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2011.

^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 2002-2011 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 2002-2011 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2011.

* 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, 2007-2011</u>									
California	136.40	50.66	729.08	132.40	49.69	704.16	197.56	95.79	900.97
Greater Bay Area	147.16	56.58	773.23	155.35	60.24	812.77	203.83	97.72	937.27
San Francisco-Oakland	142.91	55.68	745.95	148.32	57.95	773.00	206.15	97.93	954.18
San Jose-Monterey	155.45	58.34	826.78	167.67	64.23	882.62	185.94	95.83	808.81
Los Angeles	130.63	48.30	699.74	121.29	44.81	649.90	199.42	98.90	894.20
Greater California	135.19	49.58	726.96	130.02	48.42	694.02	193.08	92.10	891.05
Connecticut	152.39	65.23	754.81	143.76	60.13	721.82	220.32	102.62	1033.88
Detroit	190.97	78.18	970.61	170.69	66.31	892.13	257.36	119.01	1213.69
Georgia	160.98	67.42	807.68	137.20	54.84	706.55	249.01	106.32	1235.28
Atlanta	183.28	77.79	912.48	156.07	63.83	793.66	261.86	112.36	1295.21
Rural Georgia	155.13	63.39	789.28	132.37	49.72	703.70	206.02	88.20	1020.46
Greater Georgia	152.00	62.49	770.73	131.13	51.52	681.46	242.19	102.45	1208.14
Hawaii	113.95	35.04	659.36	115.60	41.91	624.97	190.38	109.07	752.43
Iowa	133.32	52.06	695.02	129.42	50.43	675.43	177.85	73.13	901.76
Kentucky	128.80	51.29	664.60	121.49	46.14	642.38	179.04	86.74	817.04
Louisiana	168.89	68.46	863.09	151.50	59.03	790.73	230.69	97.14	1153.86
New Jersey	166.12	68.89	838.19	155.89	64.42	788.18	222.70	99.09	1077.11
New Mexico	124.38	46.85	660.29	124.95	47.93	657.37	133.15	63.06	617.67
Seattle-Puget Sound	154.59	58.62	817.96	154.61	58.55	818.64	207.22	99.39	952.54
Utah	170.60	64.35	905.09	170.72	65.11	900.75	181.24	77.86	895.90
9 SEER Areas ^b	154.18	61.34	795.89	148.67	58.37	772.83	238.23	108.46	1135.24
11 SEER Areas ^b	149.14	58.34	776.80	144.24	55.96	754.47	227.10	106.10	1063.53
13 SEER Areas ^b	149.00	58.28	776.09	144.19	55.94	754.23	226.83	105.87	1062.93
18 SEER Areas ^b	147.77	57.88	769.13	139.93	54.24	732.20	223.87	101.18	1071.93

^a Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)
^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.
The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.
The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.
The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 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+
SEER Death Rates^a, 2007-2011									
California	21.88	1.67	161.56	22.27	1.63	164.92	48.26	4.86	348.25
Greater Bay Area	19.57	1.58	143.93	21.12	1.56	156.35	45.48	5.79	319.80
San Francisco-Oakland	20.37	1.66	149.67	21.48	1.46	159.87	47.32	6.35	330.48
San Jose-Monterey	17.98	1.42	132.43	20.47	1.74	149.95	30.03	-	219.38
Los Angeles	22.16	1.70	163.56	21.65	1.54	160.70	52.08	4.76	379.22
Greater California	22.57	1.70	166.83	22.82	1.69	168.91	45.19	4.49	326.47
Connecticut	21.46	1.50	159.42	20.54	1.27	153.80	38.73	4.65	274.34
Detroit	22.55	1.99	164.69	18.71	1.43	138.14	41.11	4.23	296.00
Georgia	25.97	2.21	190.21	19.67	1.43	145.73	56.41	4.70	413.83
Atlanta	26.46	2.38	192.91	19.44	1.45	143.74	51.87	4.42	379.87
Rural Georgia	36.53	-	265.81	21.55	-	154.76	73.34	-	539.01
Greater Georgia	25.49	2.09	187.23	19.70	1.40	146.15	57.90	4.85	424.61
Hawaii	15.56	1.53	112.59	20.20	2.18	144.79	-	-	-
Iowa	21.66	1.48	161.11	21.32	1.48	158.46	64.52	-	491.95
Kentucky	22.33	1.68	165.09	21.26	1.52	157.70	45.09	4.19	327.79
Louisiana	25.06	2.38	181.82	19.60	1.54	144.40	46.81	4.83	336.96
New Jersey	21.20	1.76	155.59	19.33	1.43	143.02	47.70	4.99	342.97
New Mexico	22.95	1.32	172.48	23.13	1.36	173.60	26.46	-	-
Seattle-Puget Sound	22.86	1.66	169.37	22.81	1.64	169.15	50.39	3.97	371.23
Utah	24.62	1.45	184.74	24.86	1.51	186.32	-	-	-
9 SEER Areas ^b	22.02	1.69	162.55	21.43	1.48	159.35	44.68	4.49	322.50
11 SEER Areas ^b	21.82	1.68	161.04	21.42	1.50	159.08	46.48	4.51	336.54
13 SEER Areas ^b	21.87	1.68	161.45	21.44	1.50	159.28	46.89	4.53	339.71
18 SEER Areas ^b	22.36	1.76	164.73	21.32	1.54	158.11	48.18	4.66	349.01
Total U.S.	22.35	1.73	164.86	20.61	1.47	152.97	48.93	4.41	356.66

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

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

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

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

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

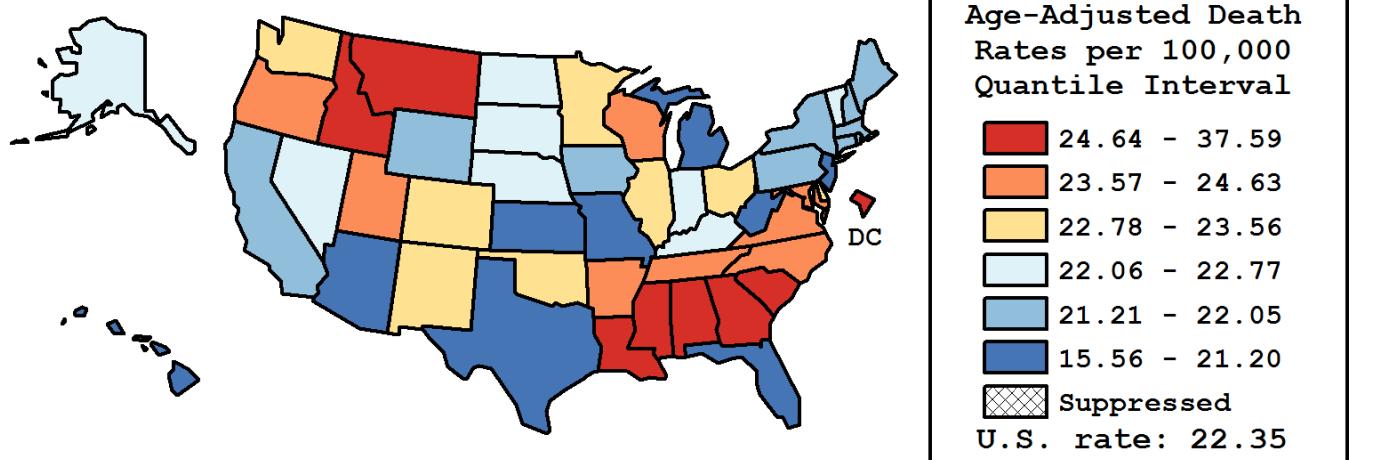
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 23.14
Cancer of the Prostate (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2007-2011

Males									
State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	22.35	0.06							
High Five States									
D.C.	37.59 ^b	1.93	(01)	68.21 ^c					
Mississippi	29.57 ^b	0.76	(02)	32.32 ^c					
Alabama	28.17 ^b	0.56	(03)	26.07 ^c					
South Carolina	26.29 ^b	0.56	(04)	17.66 ^c					
Georgia	25.97 ^b	0.44	(05)	16.20 ^c					
Low Five States									
Texas	20.43 ^b	0.23	(47)	-8.56					
Kansas	20.43	0.57	(48)	-8.58					
Arizona	20.07 ^b	0.38	(49)	-10.18 ^c					
Florida	19.52 ^b	0.19	(50)	-12.66 ^c					
Hawaii	15.56 ^b	0.68	(51)	-30.36 ^c					

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	28.17 ^b	0.56	(03)	26.07 ^c	Montana	24.78	1.02	(08)	10.89 ^c
Alaska	22.62	1.80	(29)	1.23	Nebraska	22.63	0.74	(28)	1.26
Arizona	20.07 ^b	0.38	(49)	-10.18 ^c	Nevada	22.77	0.71	(25)	1.89
Arkansas	24.31	0.63	(12)	8.78	New Hampshire	21.39	0.88	(40)	-4.30
California	21.88	0.18	(35)	-2.09	New Jersey	21.20	0.34	(43)	-5.12
Colorado	22.83	0.53	(24)	2.17	New Mexico	22.95	0.75	(23)	2.71
Connecticut	21.46	0.51	(37)	-3.97	New York	21.44 ^b	0.23	(38)	-4.07
Delaware	23.56	1.11	(17)	5.43	North Carolina	24.63 ^b	0.38	(09)	10.22 ^c
D.C.	37.59 ^b	1.93	(01)	68.21 ^c	North Dakota	22.65	1.16	(27)	1.35
Florida	19.52 ^b	0.19	(50)	-12.66 ^c	Ohio	23.23	0.30	(21)	3.97
Georgia	25.97 ^b	0.44	(05)	16.20 ^c	Oklahoma	23.11	0.55	(22)	3.41
Hawaii	15.56 ^b	0.68	(51)	-30.36 ^c	Oregon	23.94	0.53	(14)	7.14
Idaho	25.78 ^b	0.92	(06)	15.35 ^c	Pennsylvania	22.05	0.26	(34)	-1.34
Illinois	23.31	0.31	(20)	4.32	Rhode Island	21.32	0.93	(41)	-4.62
Indiana	22.71	0.42	(26)	1.64	South Carolina	26.29 ^b	0.56	(04)	17.66 ^c
Iowa	21.66	0.54	(36)	-3.08	South Dakota	22.06	1.05	(32)	-1.27
Kansas	20.43	0.57	(48)	-8.58	Tennessee	24.00 ^b	0.45	(13)	7.39
Kentucky	22.33	0.53	(31)	-0.08	Texas	20.43 ^b	0.23	(47)	-8.56
Louisiana	25.06 ^b	0.56	(07)	12.13 ^c	Utah	24.62	0.79	(10)	10.16 ^c
Maine	22.05	0.83	(33)	-1.32	Vermont	22.42	1.26	(30)	0.33
Maryland	23.74	0.47	(16)	6.23	Virginia	23.91 ^b	0.41	(15)	6.98
Massachusetts	21.40	0.38	(39)	-4.25	Washington	23.42	0.42	(19)	4.82
Michigan	21.11 ^b	0.32	(44)	-5.53	West Virginia	20.74	0.69	(45)	-7.21
Minnesota	23.44	0.46	(18)	4.89	Wisconsin	24.32 ^b	0.44	(11)	8.83
Mississippi	29.57 ^b	0.76	(02)	32.32 ^c	Wyoming	21.29	1.40	(42)	-4.72
Missouri	20.69 ^b	0.40	(46)	-7.43					



^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 10% or more.

SE Standard error of the rate.

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

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

Table 23.15
Cancer of the Prostate (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2011
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 <19 ^e	0 to <36 ^e	>=36 ^g	Complete ^h
<u>Race</u>										
All Races ^b	1,047,674	793,365	518,837	274,354	57,736	11,316	2,655,003	2,706,583	1,238	2,707,821
White ^b	842,834	661,840	439,478	239,979	52,556	10,463	2,203,073	2,250,165	1,432	2,251,597
Black ^b	147,861	103,144	63,749	28,209	4,112	753	344,435	348,058	120	348,178
Asian/Pacific Islander ^c	20,777	14,755	7,797	+	+	+	46,251	+	+	+
Hispanic ^d	58,787	42,509	23,815	+	+	+	134,478	+	+	+

Estimated prevalence percent^a on January 1, 2011, of the SEER^c population diagnosed in the previous 19 years
By Age at Prevalence and Race/Ethnicity

Age at Prevalence	Age Specific (Crude)									Age-Adjusted ^f All Ages
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	
<u>Race</u>										
All Races ^c	1.4779%	-	-	0.0003%	0.0012%	0.0848%	1.0293%	4.9999%	11.8211%	14.5189%
White ^c	1.5645%	-	-	0.0004%	0.0010%	0.0728%	0.9891%	4.9616%	11.9421%	14.3476%
Black ^c	1.6401%	-	-	-	0.0034%	0.2242%	1.9728%	8.4530%	17.5682%	20.0518%
Asian/Pacific Islander ^c	0.7034%	-	-	-	-	0.0224%	0.3432%	2.0078%	5.8919%	9.7833%
Hispanic ^d	0.5263%	-	-	-	0.0006%	0.0396%	0.6144%	3.3964%	9.4474%	12.7016%

^a US 2011 cancer prevalence counts are based on 2011 cancer prevalence proportions from the SEER registries and 1/1/2011 US population estimates based on the average of 2010 and 2011 population estimates from the US Bureau of the Census.

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

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

^e Maximum limited-duration prevalence: 36 years for 1975-2011 SEER 9 data; 19 years for 1992-2011 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

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

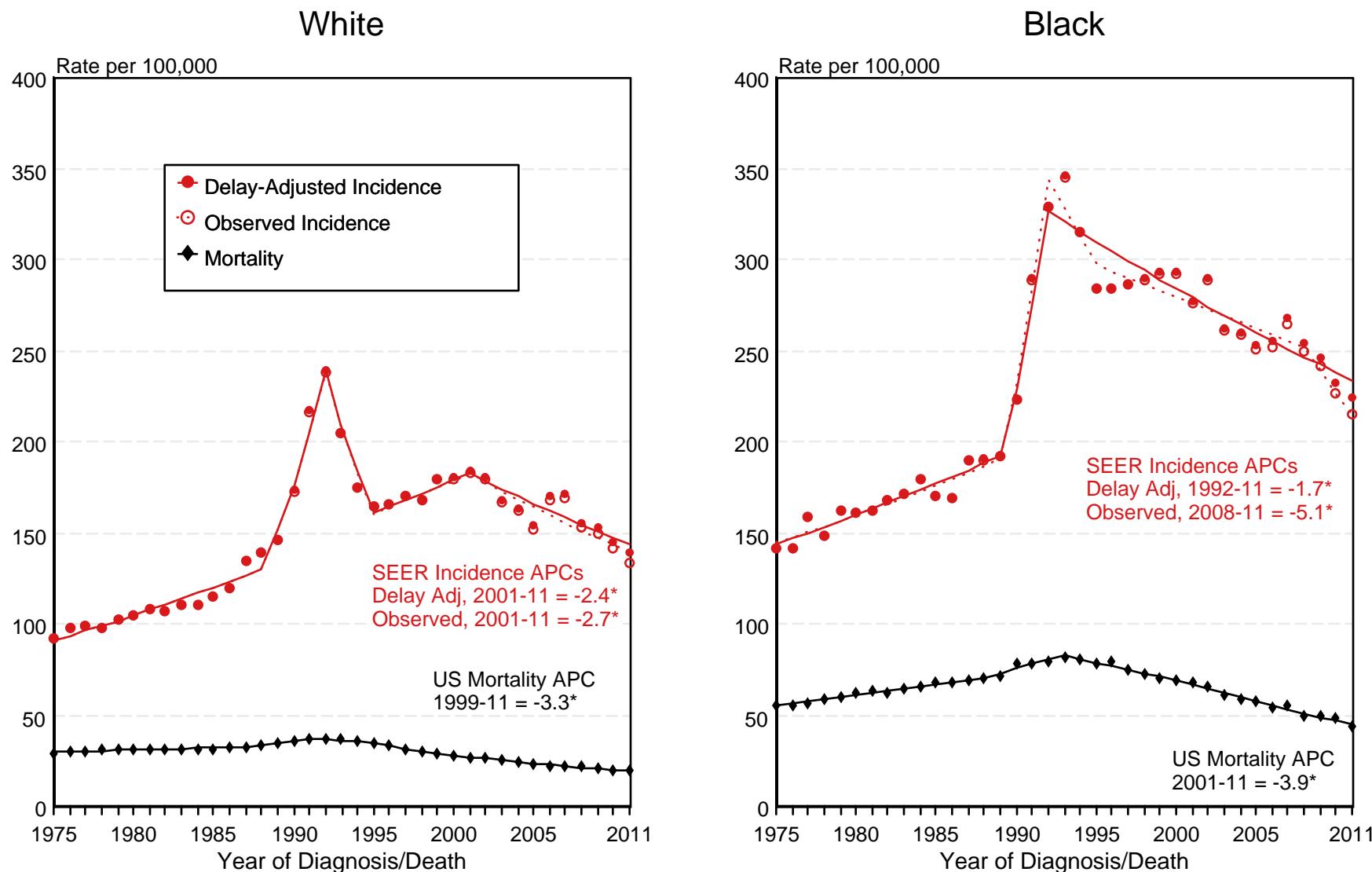
^{g h i} (g) Cases diagnosed more than 36 years ago were estimated using the completeness index method (Capocaccia et al. 1997, Merrill et al. 2000). (h) Complete prevalence is obtained by summing 0 to <36 and >=36. (i) Age-specific completeness index was approximated using empirical data from historical 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

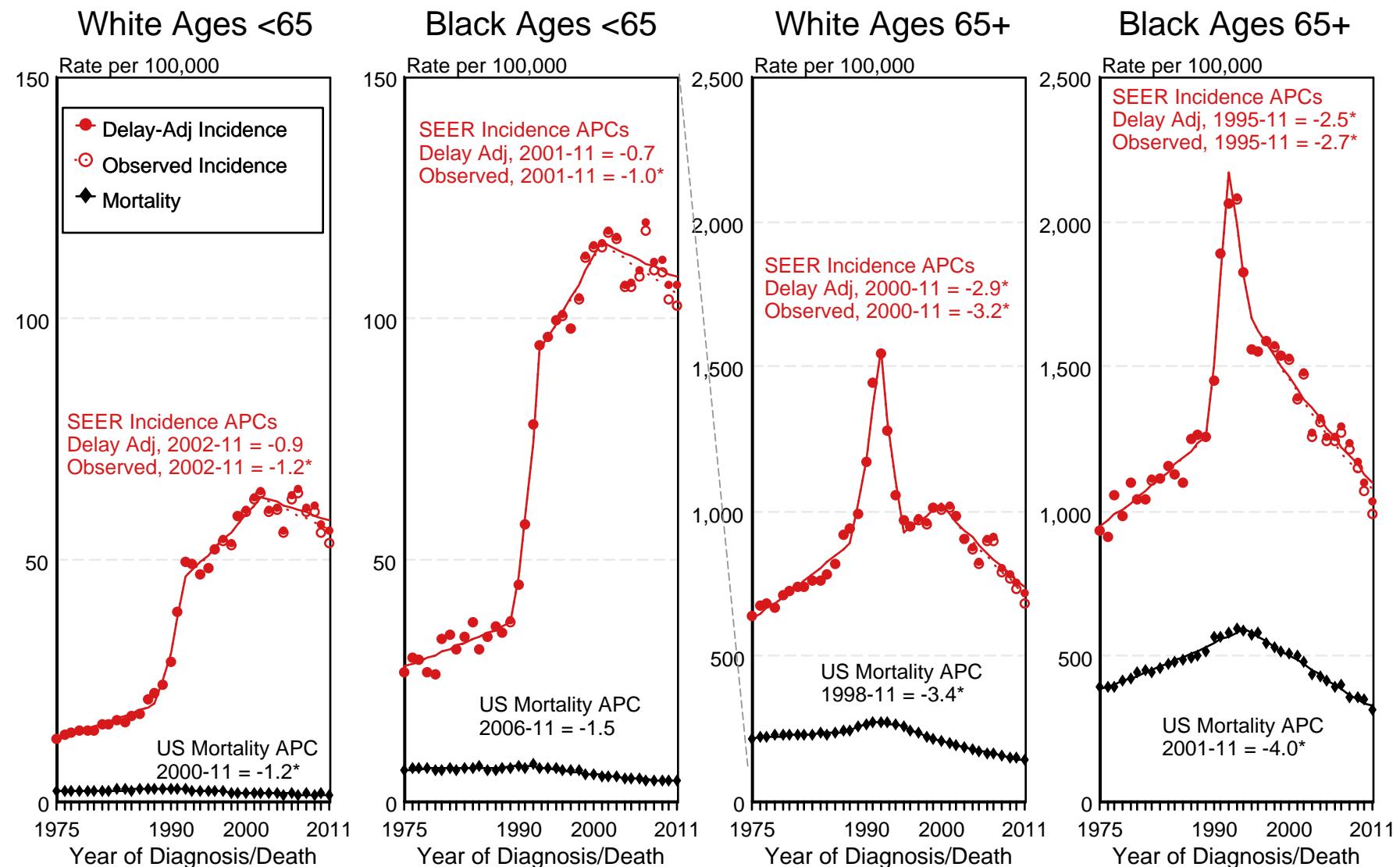
SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Prostate, by Race



- ^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 4.1.0, April 2014, 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



^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 4.1.0, April 2014, 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.

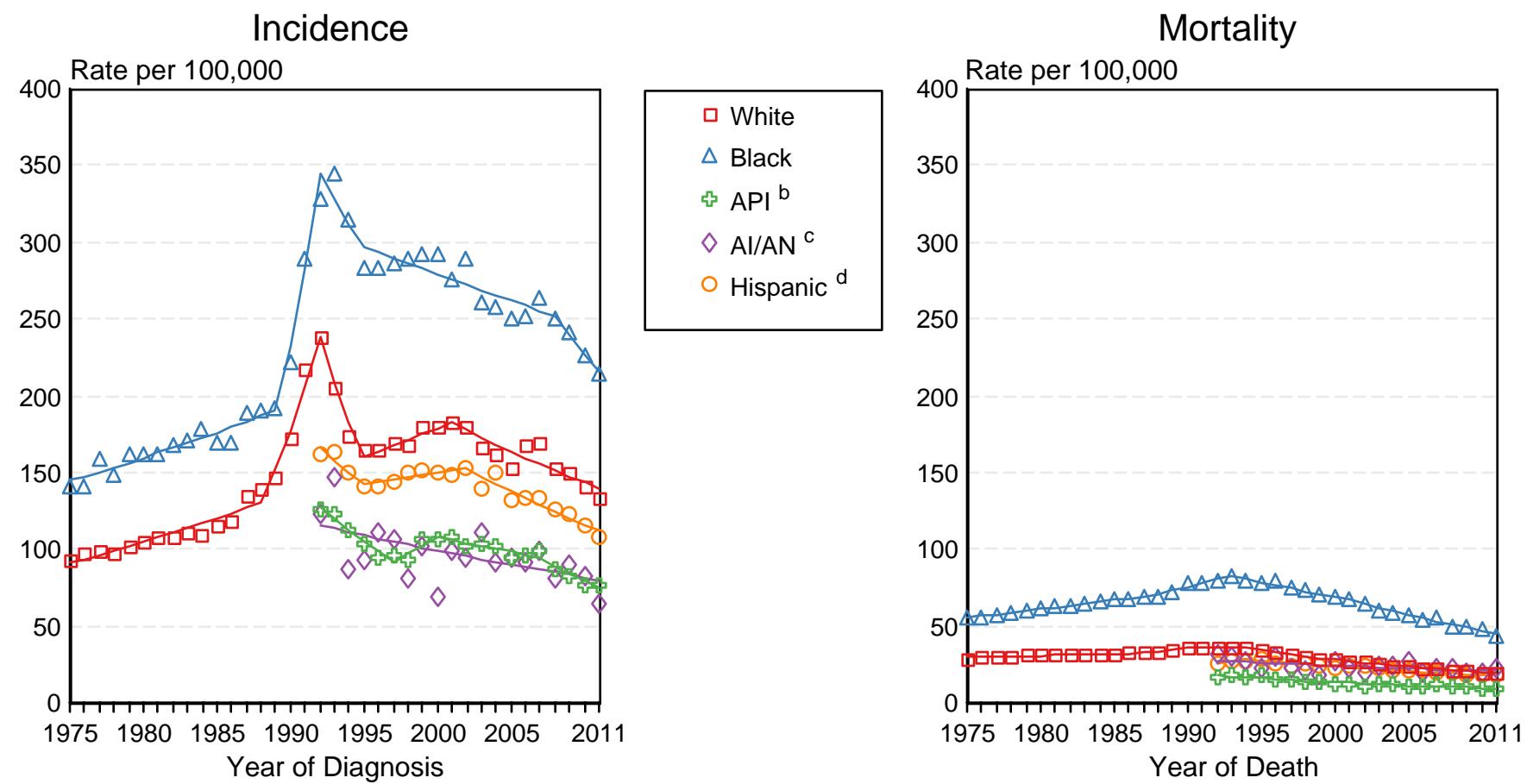
* The APC is significantly different from zero ($p < 0.05$).

Figure 23.3

SEER Incidence and US Death Rates^a

Cancer of the Prostate

Joinpoint Analyses for Whites and Blacks from 1975-2011
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2011



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,

^a Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from 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 4.1.0, April 2014, National Cancer Institute. Joinpoint analyses for Whites and

^b Blacks during the 1975-2011 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2011 allow a maximum of 3 joinpoints.

^c API = Asian/Pacific Islander.

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

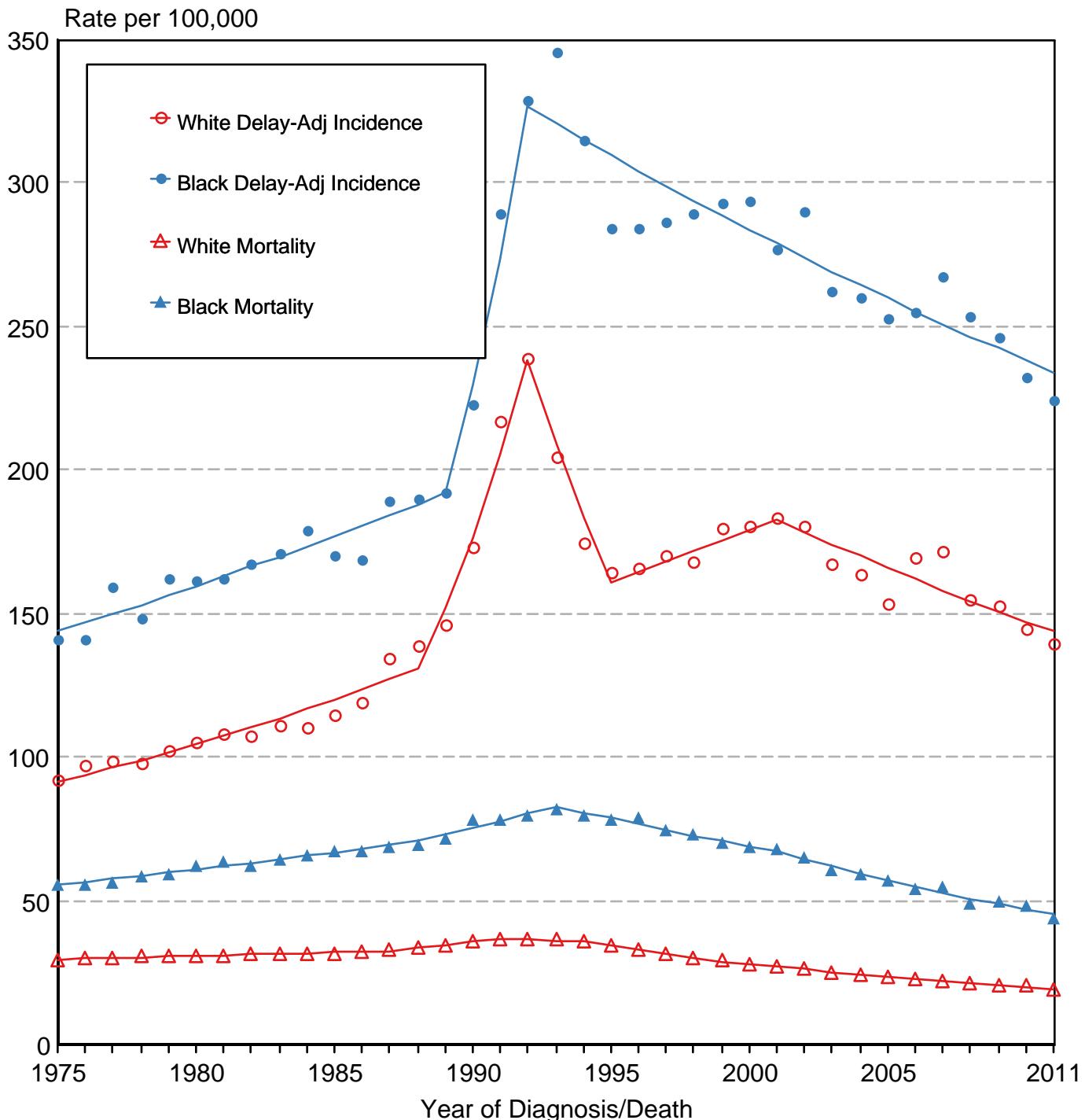
Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from New Hampshire and Oklahoma.

Figure 23.4

Cancer of the Prostate

Delay-Adjusted SEER Incidence & US Mortality

1975-2011



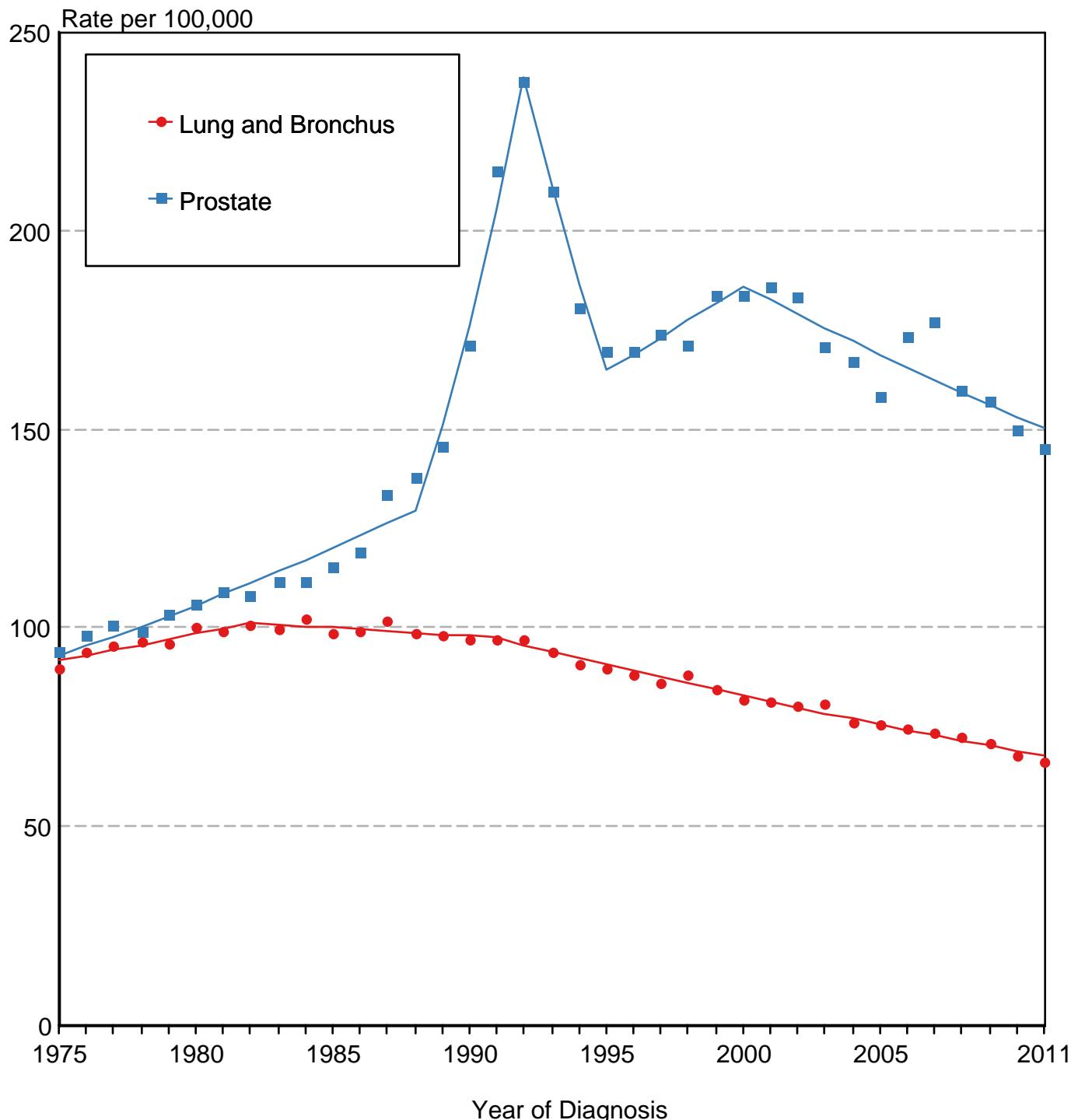
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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 4.1.0, April 2014, 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 1975-2011



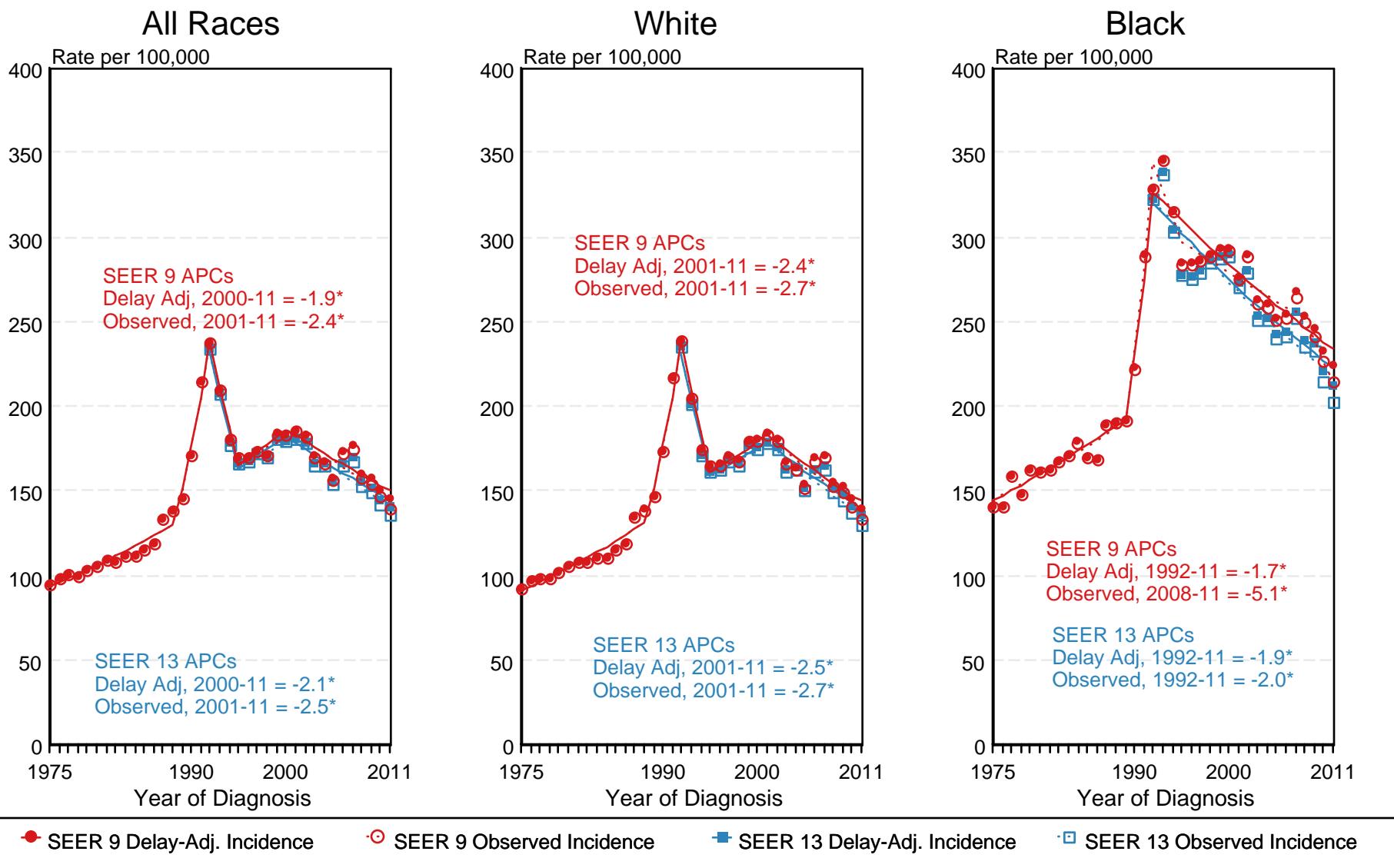
Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

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



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

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

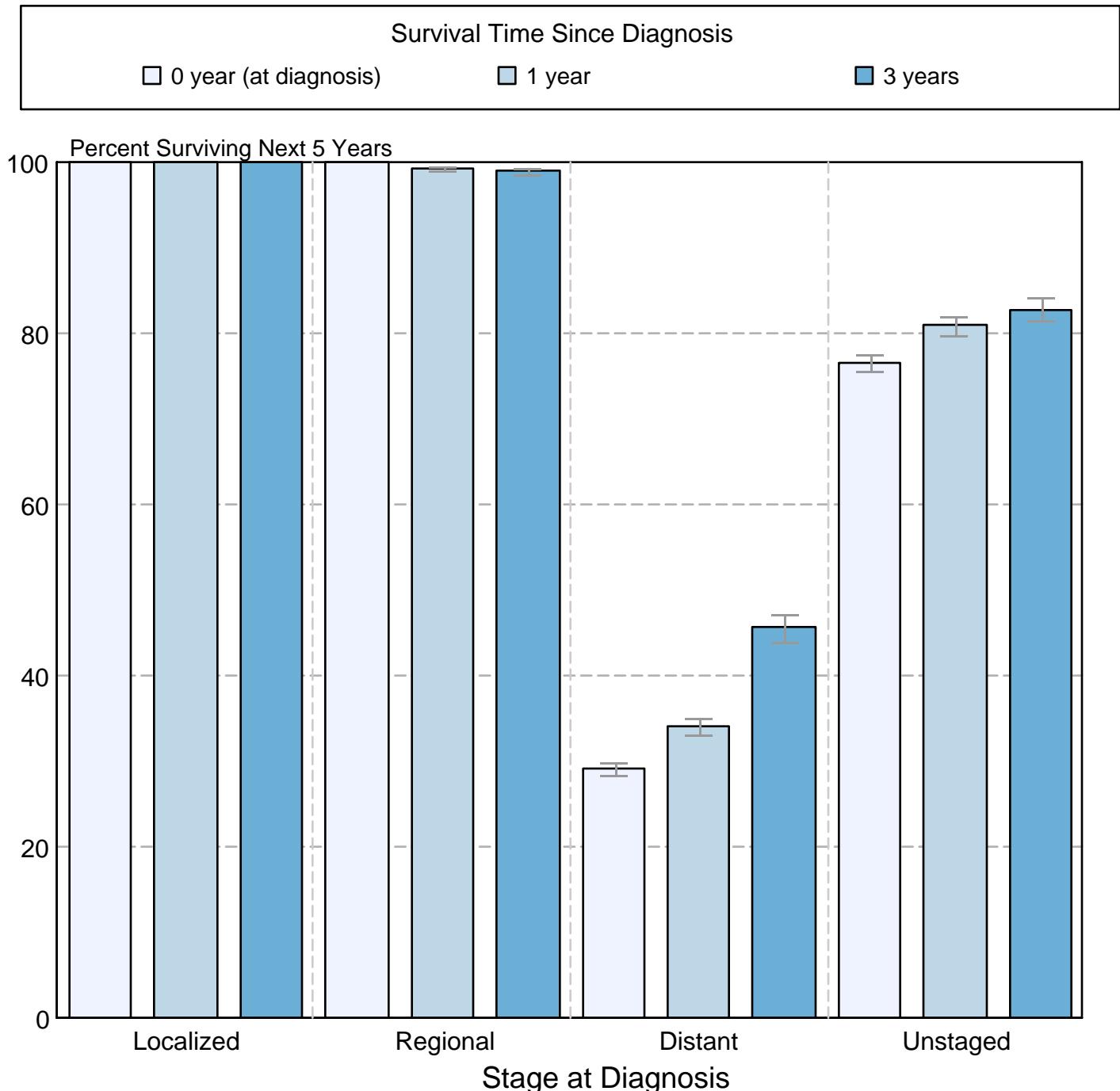
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

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
1998-2010 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 2000-2009. The remaining 13 SEER Areas contribute cases for the entire period 1998-2010. 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.