

Table 23.1
Cancer of the Prostate (Invasive)

Trends in SEER Incidence^{a,b} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2009 With up to Five Joinpoints, 1992-2009 With up to Three Joinpoints,
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	2000-09	2005-09
SEER 9 Delay-Adjusted Incidence^a, 1975-2009														
All Races	1975-88	2.6*	1988-92	16.5*	1992-95	-11.5*	1995-00	2.2	2000-09	-1.7*			-1.7*	-1.7*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.6*	1995-00	2.7	2000-09	-1.9*			-1.9*	-1.9*
Black	1975-89	2.0*	1989-92	21.8*	1992-95	-4.9	1995-09	-1.1*					-1.1*	-1.1*
SEER 13 Delay-Adjusted Incidence^b, 1992-2009														
All Races	1992-95	-11.1*	1995-00	2.0	2000-09	-1.9*							-1.9*	-1.9*
White	1992-95	-12.0*	1995-00	2.5	2000-09	-2.0*							-2.0*	-2.0*
Black	1992-09	-1.6*											-1.6*	-1.6*
SEER 9 Observed Incidence^a, 1975-2009														
All Races	1975-88	2.6*	1988-92	16.5*	1992-95	-11.6*	1995-00	2.2	2000-09	-1.9*			-1.9*	-1.9*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.6*	1995-00	2.7	2000-09	-2.2*			-2.2*	-2.2*
Black	1975-89	2.1*	1989-92	19.1*	1992-09	-1.7*							-1.7*	-1.7*
SEER 13 Observed Incidence^b, 1992-2009														
All Races	1992-95	-11.2*	1995-00	2.1	2000-09	-2.1*							-2.1*	-2.1*
White	1992-95	-12.1*	1995-00	2.5	2000-09	-2.3*							-2.3*	-2.3*
White NH ^{ef}	1992-94	-17.2*	1994-01	1.0	2001-09	-2.3*							-1.9*	-2.3*
Black	1992-09	-1.9*											-1.9*	-1.9*
Black NH ^{ef}	1992-09	-1.8*											-1.8*	-1.8*
API ^e	1992-97	-6.4*	1997-00	5.3	2000-07	-1.6*	2007-09	-7.9*					-3.1*	-4.8*
AI/AN ^{eg}	1992-09	-1.7*											-1.7*	-1.7*
Hispanic ^f	1992-95	-5.1	1995-01	1.0	2001-09	-3.0*							-2.6*	-3.0*
U.S. Cancer Mortality^c, 1975-2009														
All Races	1975-87	0.9*	1987-91	3.1*	1991-94	-0.7	1994-04	-3.9*	2004-09	-3.2*			-3.5*	-3.2*
White	1975-87	0.8*	1987-91	3.1*	1991-94	-0.7	1994-99	-4.3*	1999-09	-3.4*			-3.4*	-3.4*
Black	1975-88	1.9*	1988-93	3.3*	1993-01	-2.6*	2001-09	-3.8*					-3.7*	-3.8*
U.S. Cancer Mortality^c, 1992-2009														
All Races	1992-94	-1.3	1994-09	-3.7*									-3.7*	-3.7*
White	1992-94	-0.7	1994-99	-4.3*	1999-09	-3.4*							-3.4*	-3.4*
White NH ^{ef}	1992-94	-1.2	1994-04	-3.9*	2004-09	-2.9*							-3.4*	-2.9*
Black	1992-96	-0.7	1996-09	-3.5*									-3.5*	-3.5*
Black NH ^{ef}	1992-96	-0.7	1996-09	-3.3*									-3.3*	-3.3*
API ^e	1992-09	-3.9*											-3.9*	-3.9*
AI/AN ^{eg}	1992-09	-2.5*											-2.5*	-2.5*
Hispanic ^f	1992-94	4.3	1994-09	-3.6*									-3.6*	-3.6*

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

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

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

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.

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

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

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

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Table 23.2
Cancer of the Prostate (Invasive)

Trends in SEER Incidence^{a,b} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2009 With up to Five Joinpoints, 1992-2009 With up to Three Joinpoints,
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	2000-09	2005-09								
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2009</u>														
All Races	1975-88	3.1*	1988-92	23.3*	1992-01	3.4*	2001-09	0.1					0.4	0.1
White	1975-88	3.5*	1988-92	23.0*	1992-01	3.2*	2001-09	-0.1					0.3	-0.1
Black	1975-89	2.0*	1989-93	26.1*	1993-01	2.7*	2001-09	0.0					0.3	0.0
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2009</u>														
All Races	1992-01	3.4*	2001-09	-0.3									0.1	-0.3
White	1992-01	3.3*	2001-09	-0.4									0.0	-0.4
Black	1992-00	3.9*	2000-09	-0.2									-0.2	-0.2
<u>SEER 9 Observed Incidence^a, 1975-2009</u>														
All Races	1975-88	3.1*	1988-92	23.3*	1992-01	3.4*	2001-09	-0.1					0.3	-0.1
White	1975-88	3.5*	1988-92	22.9*	1992-01	3.2*	2001-09	-0.4					0.0	-0.4
Black	1975-89	2.0*	1989-93	26.1*	1993-01	2.7*	2001-09	-0.5					-0.1	-0.5
<u>SEER 13 Observed Incidence^b, 1992-2009</u>														
All Races	1992-01	3.4*	2001-09	-0.5									0.0	-0.5
White	1992-01	3.3*	2001-09	-0.8									-0.3	-0.8
White NH ^{ef}	1992-01	3.3*	2001-09	-0.6									-0.2	-0.6
Black	1992-00	3.9*	2000-09	-0.6									-0.6	-0.6
Black NH ^{ef}	1992-00	3.8*	2000-09	-0.4									-0.4	-0.4
API ^e	1992-01	6.3*	2001-09	0.7									1.3	0.7
AI/AN ^{eg}	1992-09	-0.2											-0.2	-0.2
Hispanic ^f	1992-02	4.5*	2002-09	-1.5*									-0.2	-1.5*
<u>U.S. Cancer Mortality^c, 1975-2009</u>														
All Races	1975-87	0.5*	1987-90	3.1	1990-96	-3.2*	1996-00	-5.7*	2000-09	-1.3*			-1.3*	-1.3*
White	1975-87	0.7*	1987-90	3.0	1990-96	-3.6*	1996-00	-6.0*	2000-09	-1.2*			-1.2*	-1.2*
Black	1975-92	0.5*	1992-09	-2.7*									-2.7*	-2.7*
<u>U.S. Cancer Mortality^c, 1992-2009</u>														
All Races	1992-96	-3.3*	1996-00	-5.6*	2000-09	-1.3*							-1.3*	-1.3*
White	1992-01	-4.6*	2001-09	-1.1*									-1.5*	-1.1*
White NH ^{ef}	1992-01	-4.7*	2001-09	-0.8									-1.2*	-0.8
Black	1992-01	-3.5*	2001-09	-1.9*									-2.1*	-1.9*
Black NH ^{ef}	1992-09	-2.8*											-2.8*	-2.8*
API ^e	1992-09	-0.6											-0.6	-0.6
AI/AN ^{eg}	1992-09	-3.1*											-3.1*	-3.1*
Hispanic ^f	1992-00	-5.0*	2000-09	-0.6									-0.6	-0.6

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

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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.

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Table 23.3
Cancer of the Prostate (Invasive)

Trends in SEER Incidence^{a,b} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2009 With up to Five Joinpoints, 1992-2009 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	2000-09	2005-09
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2009</u>														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.8*	1995-00	1.2	2000-09	-2.6*			-2.6*	-2.6*
White	1975-88	2.7*	1988-92	14.9*	1992-95	-15.8*	1995-00	1.8	2000-09	-2.7*			-2.7*	-2.7*
Black	1975-89	2.0*	1989-92	20.1*	1992-95	-9.1*	1995-09	-2.2*					-2.2*	-2.2*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2009</u>														
All Races	1992-95	-14.1*	1995-00	1.0	2000-09	-2.7*							-2.7*	-2.7*
White	1992-95	-15.1*	1995-00	1.5	2000-09	-2.8*							-2.8*	-2.8*
Black	1992-95	-8.2*	1995-09	-2.6*									-2.6*	-2.6*
<u>SEER 9 Observed Incidence^a, 1975-2009</u>														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.8*	1995-00	1.2	2000-09	-2.8*			-2.8*	-2.8*
White	1975-88	2.7*	1988-92	14.9*	1992-95	-15.9*	1995-00	1.8	2000-09	-3.1*			-3.1*	-3.1*
Black	1975-89	2.0*	1989-92	20.0*	1992-95	-8.8*	1995-09	-2.5*					-2.5*	-2.5*
<u>SEER 13 Observed Incidence^b, 1992-2009</u>														
All Races	1992-95	-14.2*	1995-00	1.0	2000-09	-2.9*							-2.9*	-2.9*
White	1992-95	-15.2*	1995-00	1.5	2000-09	-3.1*							-3.1*	-3.1*
White NH ^{e,f}	1992-95	-15.6*	1995-00	1.6	2000-09	-3.0*							-3.0*	-3.0*
Black	1992-95	-8.0*	1995-09	-2.9*									-2.9*	-2.9*
Black NH ^{e,f}	1992-95	-8.2*	1995-09	-2.8*									-2.8*	-2.8*
API ^e	1992-97	-7.8*	1997-00	4.2	2000-07	-2.4*	2007-09	-10.1*					-4.1*	-6.3*
AI/AN ^{eg}	1992-09	-2.2*											-2.2*	-2.2*
Hispanic ^f	1992-96	-6.0*	1996-99	3.0	1999-09	-3.4*							-3.4*	-3.4*
<u>U.S. Cancer Mortality^c, 1975-2009</u>														
All Races	1975-87	0.9*	1987-91	3.2*	1991-94	-0.7	1994-09	-3.8*					-3.8*	-3.8*
White	1975-87	0.8*	1987-91	3.2*	1991-94	-0.5	1994-98	-4.4*	1998-09	-3.6*			-3.6*	-3.6*
Black	1975-94	2.3*	1994-01	-2.8*	2001-09	-3.9*							-3.8*	-3.9*
<u>U.S. Cancer Mortality^c, 1992-2009</u>														
All Races	1992-94	-1.0	1994-09	-3.8*									-3.8*	-3.8*
White	1992-94	-1.4	1994-09	-3.7*									-3.7*	-3.7*
White NH ^{e,f}	1992-94	-1.0	1994-04	-3.9*	2004-09	-3.1*							-3.5*	-3.1*
Black	1992-96	-0.5	1996-09	-3.5*									-3.5*	-3.5*
Black NH ^{e,f}	1992-96	-0.4	1996-09	-3.4*									-3.4*	-3.4*
API ^e	1992-09	-4.0*											-4.0*	-4.0*
AI/AN ^{eg}	1992-09	-2.5*											-2.5*	-2.5*
Hispanic ^f	1992-95	1.8	1995-09	-3.8*									-3.8*	-3.8*

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

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The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.

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

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

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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	97.95	14.61	674.00	97.33	13.93	673.83	140.92	29.54	910.86
1977	100.49	15.04	691.09	98.56	14.35	680.68	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	103.44	14.98	714.91	102.31	14.68	708.01	162.31	26.35	1,102.12
1980	106.04	15.52	731.69	104.99	14.69	729.14	161.14	33.79	1,041.42
1981	108.90	16.83	745.32	107.90	15.96	743.44	161.86	34.55	1,041.86
1982	108.23	16.33	743.50	107.36	15.79	740.32	167.65	31.32	1,109.99
1983	111.63	17.15	764.69	110.85	16.60	762.33	170.92	34.03	1,117.21
1984	111.72	17.26	764.66	110.15	16.22	759.41	178.84	37.09	1,158.68
1985	115.55	17.89	790.66	114.69	17.61	785.75	170.23	31.42	1,129.72
1986	119.10	18.54	814.23	119.07	18.29	815.71	168.72	34.10	1,099.27
1987	133.74	21.48	909.69	134.62	21.09	919.43	189.22	35.91	1,248.91
1988	137.67	22.18	935.93	138.85	22.30	944.42	190.22	34.74	1,264.95
1989	145.42	24.15	983.71	146.28	24.04	991.26	192.26	37.32	1,263.29
1990	171.06	28.80	1,154.46	172.88	28.87	1,168.38	222.84	44.63	1,454.68
1991	214.92	38.87	1,431.79	216.66	39.31	1,442.55	289.28	57.40	1,892.12
1992	237.52	49.39	1,537.92	238.64	49.40	1,546.72	329.34	78.08	2,066.10
1993	209.61	50.48	1,309.54	204.69	49.05	1,280.55	345.75	94.46	2,082.78
1994	180.37	48.60	1,091.21	174.44	46.83	1,056.51	315.05	95.78	1,830.68
1995	169.31	50.03	993.79	164.56	48.18	969.01	283.26	99.06	1,556.52
1996	169.47	53.44	971.46	165.24	51.98	948.10	284.53	100.91	1,553.73
1997	173.68	55.26	992.29	170.32	54.14	973.41	286.87	97.66	1,594.81
1998	171.04	54.96	973.43	167.80	53.22	959.81	289.18	103.39	1,573.39
1999	183.64	60.77	1,032.96	179.77	58.98	1,014.71	292.93	112.83	1,537.91
2000	183.15	61.87	1,021.51	180.12	60.17	1,009.26	294.57	115.34	1,533.50
2001	185.08	64.75	1,016.87	183.64	62.92	1,018.06	277.35	116.04	1,392.43
2002	182.64	65.80	990.23	180.88	64.33	986.46	292.60	119.91	1,486.29
2003	169.93	62.30	913.87	167.27	60.17	907.61	264.60	119.02	1,270.89
2004	166.07	62.31	883.32	163.30	60.73	872.31	260.96	108.87	1,312.27
2005	157.01	58.31	839.25	153.20	55.78	826.57	252.91	108.98	1,247.80
2006	171.70	65.06	908.84	168.54	62.96	898.37	257.40	112.33	1,260.16
2007	174.70	67.21	917.65	170.34	64.14	904.44	270.91	122.99	1,293.37
2008	157.55	63.15	810.05	153.48	60.45	796.50	258.07	115.12	1,246.18
2009	155.62	63.41	793.06	151.82	60.85	780.61	253.72	115.86	1,206.69

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:									
1975-2009	153.04	42.58	916.56	149.66	40.51	904.18	238.77	79.95	1,336.57
1975	94.00	13.67	649.33	92.18	13.02	639.37	141.07	26.76	931.22
1976	97.95	14.61	674.00	97.33	13.93	673.83	140.92	29.54	910.86
1977	100.49	15.04	691.09	98.56	14.35	680.68	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	103.44	14.98	714.91	102.31	14.68	708.01	162.31	26.35	1,102.12
1980	106.04	15.52	731.69	104.99	14.69	729.14	161.14	33.79	1,041.42
1981	108.90	16.83	745.32	107.90	15.96	743.44	161.86	34.55	1,041.86
1982	108.23	16.33	743.47	107.35	15.79	740.27	167.63	31.32	1,109.83
1983	111.62	17.15	764.63	110.84	16.60	762.21	170.88	34.02	1,116.88
1984	111.71	17.26	764.56	110.12	16.22	759.23	178.77	37.08	1,158.14
1985	115.53	17.88	790.52	114.66	17.61	785.50	170.13	31.41	1,129.00
1986	119.07	18.53	814.04	119.02	18.28	815.36	168.59	34.08	1,098.34
1987	133.70	21.48	909.43	134.55	21.08	918.93	189.02	35.88	1,247.58
1988	137.62	22.18	935.59	138.75	22.29	943.77	189.99	34.71	1,263.30
1989	145.36	24.14	983.29	146.17	24.03	990.43	191.98	37.28	1,261.29
1990	170.98	28.79	1,153.86	172.71	28.85	1,167.15	222.42	44.57	1,451.81
1991	214.79	38.86	1,430.91	216.42	39.28	1,440.90	288.70	57.32	1,888.08
1992	237.36	49.37	1,536.80	238.33	49.35	1,544.62	328.56	77.94	2,060.90
1993	209.44	50.46	1,308.42	204.38	48.99	1,278.49	344.80	94.26	2,076.63
1994	180.20	48.57	1,090.10	174.13	46.77	1,054.49	314.04	95.54	1,824.36
1995	169.13	49.99	992.60	164.22	48.10	966.82	282.21	98.76	1,550.24
1996	169.25	53.39	970.09	164.87	51.89	945.81	283.40	100.59	1,547.05
1997	173.42	55.20	990.62	169.76	54.00	969.96	285.25	97.20	1,585.10
1998	170.75	54.89	971.60	167.19	53.07	956.05	287.39	102.86	1,562.88
1999	183.23	60.67	1,030.38	178.87	58.74	1,009.24	290.51	112.03	1,524.20
2000	182.66	61.74	1,018.47	179.04	59.87	1,002.77	291.71	114.39	1,517.47
2001	184.48	64.59	1,013.24	182.33	62.55	1,010.26	274.19	114.89	1,375.34
2002	181.92	65.60	985.98	179.34	63.88	977.41	288.67	118.52	1,464.82
2003	169.13	62.07	909.14	165.55	59.65	897.62	260.43	117.38	1,249.25
2004	165.13	62.03	877.78	161.28	60.09	860.75	256.05	107.07	1,285.87
2005	155.91	57.98	832.83	150.90	55.06	813.36	247.27	106.82	1,218.05
2006	170.23	64.60	900.34	165.48	61.97	880.97	250.58	109.69	1,224.47
2007	172.85	66.63	907.11	166.57	62.91	883.15	262.32	119.48	1,249.73
2008	155.49	62.46	798.56	149.33	59.01	773.64	248.27	111.17	1,195.92
2009	151.92	62.10	772.76	145.26	58.49	745.05	238.99	109.66	1,132.93

^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:									
1975-2009	31.73	2.37	234.65	29.35	2.04	218.16	65.83	6.13	478.53
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	30.37	1.98	226.62	27.75	1.66	208.11	68.93	5.41	508.01
2001	29.41	1.94	219.29	26.87	1.64	201.28	67.86	5.40	499.67
2002	28.55	1.93	212.56	26.20	1.61	196.24	65.04	5.36	477.58
2003	27.01	1.92	200.43	24.85	1.60	185.53	60.48	5.45	440.92
2004	25.99	1.83	192.96	23.86	1.56	178.01	59.20	4.96	434.11
2005	25.20	1.82	186.86	23.15	1.52	172.66	57.29	5.04	418.48
2006	24.06	1.86	177.51	22.17	1.60	164.36	54.01	4.79	394.23
2007	24.04	1.77	177.95	22.05	1.50	164.10	55.27	4.76	404.44
2008	22.82	1.81	168.07	21.17	1.54	156.89	49.49	4.75	358.74
2009	21.99	1.73	162.05	20.22	1.44	150.06	50.00	4.75	362.78

^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, 2005-2009</u>						
Age at Diagnosis/Death:						
All ages	154.8	146.9	236.0	23.6	21.7	53.1
Under 65	59.1	55.4	106.0	1.8	1.5	4.8
65 and over	816.4	779.7	1,134.1	174.2	161.4	386.9
All ages (IARC world std) ^c	106.1	100.7	168.3	10.2	9.3	24.0
<u>Age-Specific Rates, 2005-2009</u>						
Age at Diagnosis/Death:						
<1	-	-	-	-	-	-
1-4	-	-	-	-	-	-
5-9	-	-	-	-	-	-
10-14	-	-	-	-	-	-
15-19	-	-	-	-	-	-
20-24	-	-	-	-	-	-
25-29	-	-	-	-	-	-
30-34	-	-	-	-	-	-
35-39	1.1	0.9	2.7	0.0	-	-
40-44	10.6	8.8	26.5	0.2	0.2	0.6
45-49	45.5	40.0	99.4	0.8	0.7	2.1
50-54	144.1	132.9	270.2	3.2	2.7	8.7
55-59	330.8	312.7	573.7	9.1	7.6	24.4
60-64	575.6	546.4	987.4	21.8	18.7	58.3
65-69	859.1	822.7	1,329.5	44.8	38.9	116.5
70-74	930.0	895.6	1,275.5	86.5	76.1	218.0
75-79	860.5	821.5	1,066.9	153.9	141.2	340.3
80-84	682.6	640.0	864.9	274.2	256.6	581.5
85+	566.7	535.0	839.7	559.8	532.2	1,187.4

^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	68.3	73.7	66.6	69.0	75.4	67.2	61.0	62.3	60.5
1978-1980 ^b	70.6	75.5	69.1	71.7	77.1	70.1	62.1	65.2	60.8
1981-1983 ^b	72.5	76.3	71.4	73.5	77.9	72.3	63.2	65.4	62.3
1984-1986 ^b	75.6	77.6	75.0	76.8	79.3	76.2	65.8	67.5	65.2
1987-1989 ^b	83.2	83.4	83.2	84.8	84.9	84.8	71.5	72.9	71.1
1990-1992 ^b	93.3	93.1	93.3	94.4	94.1	94.5	84.7	86.8	83.8
1993-1995 ^b	95.4	95.9	95.2	96.1	96.6	96.0	91.8	93.2	90.9
1996-1998 ^b	97.6	98.5	97.1	98.1	99.0	97.6	95.0	96.7	93.6
1999-2001 ^b	99.6	99.2	99.7	99.9	99.5	99.8	97.4	98.3	96.4
2002-2008 ^b	99.9 ^f	99.6 ^f	99.8 ^f	99.9 ^f	99.7 ^f	99.9 ^f	97.7 ^f	98.9 ^f	96.1 ^f
5-Year Period Survival (Percent)^{cd}									
2008	99.3	99.1	99.4	99.6	99.2	99.6	96.6	98.1	94.8
Stage Distribution (%) 2002-2008^{ce}									
All Stages									
Number of cases	358,682	148,409	210,273	281,078	113,792	167,286	49,370	25,430	23,940
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	81	79	83	81	79	83	81	80	82
Regional	12	16	8	12	17	8	10	14	7
Distant	4	3	5	4	2	5	6	4	7
Unstaged	3	1	4	3	1	4	3	1	4
5-Year Relative Survival (Percent), 2002-2008^c									
Age at Diagnosis:									
Ages <45	96.7	-	-	96.3	-	-	96.9	-	-
Ages 45-54	98.3	-	-	98.2	-	-	97.9	-	-
Ages 55-64	99.3	-	-	99.6	-	-	97.9	-	-
Ages 65-74	100.0	-	-	100.0	-	-	97.7	-	-
Ages 75+	96.7	-	-	97.4	-	-	86.1	-	-
Ages <65	99.0	-	-	99.2	-	-	97.9	-	-
Ages 65+	99.3	-	-	99.6	-	-	94.2	-	-
Stage^e:									
All Stages	99.2	99.0	99.3	99.6	99.2	99.6	96.2	97.9	94.2
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	98.7
Distant	27.8	30.8	26.7	27.6	30.8	26.5	26.7	29.4	24.9
Unstaged	71.1	83.4	68.2	68.8	82.0	66.1	60.4	76.1	54.3

^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 2009.

^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 2009.

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

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

^f The difference between 1975-1977 and 2002-2008 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	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Survival Time																						
1-year	91.9	94.0	95.9	97.7	98.8	99.6	99.4	99.2	98.9	99.3	99.5	99.6	99.7	99.9	100.0	99.9	99.9	100.0	99.9	99.9	99.9	
2-year	85.1	87.9	91.5	94.8	97.4	98.4	98.2	98.1	97.8	98.2	98.9	99.1	99.7	99.7	100.0	99.9	99.8	99.9	99.8	99.9	99.9	
3-year	78.8	82.0	87.2	92.4	95.9	97.8	97.0	96.8	97.2	97.6	98.6	98.6	99.7	99.4	100.0	99.9	99.6	99.9	99.7	99.9	99.9	
4-year	73.6	76.8	83.8	90.4	94.4	97.2	96.5	95.7	96.5	97.1	98.1	98.4	99.4	99.1	100.0	99.9	99.6	99.9	99.7	99.9	99.7	
5-year	69.2	72.4	80.9	88.9	93.0	96.4	95.5	94.9	95.9	96.7	97.7	98.4	99.4	99.1	100.0	99.9	99.4	99.9	99.9	99.9	99.9	
6-year	65.6	68.8	78.2	87.4	91.6	95.3	94.7	94.1	95.5	96.3	97.5	98.3	99.4	98.9	100.0	99.9	99.4	99.4	99.9	99.9	99.9	
7-year	62.1	65.3	75.7	85.3	90.8	94.3	93.6	93.1	95.1	95.7	97.5	98.0	99.4	98.8	100.0	99.9						
8-year	58.9	62.3	73.7	83.8	89.6	93.0	93.0	92.5	94.9	95.2	97.4	98.0	99.1	98.7	100.0							
9-year	56.1	60.0	71.7	82.5	88.6	92.2	91.8	91.8	94.5	94.8	97.1	97.4	98.9	98.7								
10-year	53.5	58.1	69.9	80.8	87.6	91.2	90.9	91.3	93.9	94.6	96.9	97.1	98.6									
11-year	51.0	55.9	68.3	79.3	86.3	90.7	90.3	90.2	93.2	94.3	96.7	96.8										
12-year	48.7	53.9	66.4	78.4	85.6	89.9	89.0	89.4	92.4	93.9	96.6											
13-year	46.9	52.1	64.8	77.7	84.6	89.1	88.5	88.7	91.4	93.5												
14-year	45.2	50.5	63.3	76.6	84.2	88.5	87.8	87.5	90.6													
15-year	44.0	49.2	61.8	75.6	83.3	87.7	86.6	87.2														
16-year	42.2	47.3	60.2	73.9	82.1	86.7	85.8															
17-year	40.5	46.2	59.7	72.8	81.6	85.9																
18-year	39.1	44.8	58.6	72.1	81.2																	
19-year	38.3	43.4	58.0	71.6																		
20-year	37.4	42.0	57.1																			

^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, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying from Cancer		Risk of Dying from Cancer		
		+10 yrs			+20 yrs			+30 yrs			Ever							
All Races	0	0.00	0.00	0.00	16.15	2.75		Asian/	0	0.00	0.00	0.00	11.14	2.22				
	10	0.00	0.00	0.01	16.36	2.79		Pacific	10	0.00	0.00	0.00	11.24	2.24				
	20	0.00	0.01	0.35	16.44	2.81		Islander	20	0.00	0.00	0.10	11.28	2.24				
	30	0.01	0.35	2.65	16.65	2.84			30	0.00	0.11	1.07	11.35	2.26				
	40	0.34	2.68	8.58	16.91	2.89			40	0.10	1.07	4.31	11.43	2.27				
	50	2.42	8.54	14.46	17.18	2.99			50	0.99	4.28	8.56	11.53	2.30				
	60	6.78	13.32	15.85	16.33	3.17			60	3.47	7.97	10.32	11.10	2.38				
	70	8.26	11.45	-	12.06	3.38			70	5.13	7.81	-	8.69	2.45				
	80	5.09	-	-	6.05	3.53			80	3.61	-	-	4.79	2.52				
White	0	0.00	0.00	0.00	15.39	2.58		American	0	0.00	0.00	0.00	7.59	2.20				
	10	0.00	0.00	0.01	15.56	2.61		Indian/	10	0.00	0.00	0.01	7.71	2.24				
	20	0.00	0.01	0.30	15.63	2.62		Alaska	20	0.00	0.01	0.13	7.79	2.27				
	30	0.01	0.31	2.46	15.82	2.66		Native ^a	30	0.01	0.14	0.93	7.98	2.33				
	40	0.30	2.48	8.14	16.06	2.70			40	0.13	0.96	3.49	8.28	2.42				
	50	2.26	8.12	13.80	16.32	2.79			50	0.88	3.55	6.56	8.61	2.59				
	60	6.45	12.70	15.04	15.47	2.94			60	2.97	6.30	8.18	8.58	2.82				
	70	7.83	10.75	-	11.29	3.14			70	4.09	6.40	-	6.90	3.09				
	80	4.65	-	-	5.51	3.31			80	3.48	-	-	4.23	3.41				
Black	0	0.00	0.00	0.00	19.74	4.52		Hispanic ^b	0	0.00	0.00	0.00	15.02	3.19				
	10	0.00	0.00	0.03	20.23	4.64			10	0.00	0.00	0.01	15.18	3.22				
	20	0.00	0.03	0.74	20.39	4.67			20	0.00	0.01	0.18	15.26	3.24				
	30	0.03	0.75	4.57	20.80	4.77			30	0.01	0.19	1.70	15.44	3.28				
	40	0.74	4.67	12.92	21.35	4.90			40	0.18	1.71	6.52	15.62	3.32				
	50	4.17	12.94	19.25	21.91	5.16			50	1.57	6.52	12.30	15.88	3.40				
	60	10.47	18.00	20.66	21.17	5.70			60	5.34	11.58	14.32	15.44	3.56				
	70	11.10	15.01	-	15.76	6.43			70	7.47	10.77	-	12.11	3.75				
	80	7.25	-	-	8.64	6.98			80	4.73	-	-	6.66	3.89				

Devcan Version 6.6.1, April 2012, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

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

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

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.

- Statistic could not be calculated.

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

Table 23.11
Cancer of the Prostate (Invasive)

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

<u>SEER Incidence</u>	SEER 18 Areas ^b Rate 2005-2009		SEER 13 Areas ^b Trend 2000-2009 ^c		SEER 9 Areas ^b Trend 2000-2009 ^d	
	Rate per 100,000 persons		AAPC (%)		AAPC (%)	
	Males	Males	Males	Males	Males	Males
RACE/ETHNICITY						
All Races	154.8		-2.1*		-1.9*	
White	146.9		-2.3*		-2.2*	
White Hispanic ^e	123.3		-3.0*		-	
White Non-Hispanic ^e	150.6		-1.9*		-	
Black	236.0		-1.9*		-1.7*	
Asian/Pacific Islander	85.4		-3.1*		-	
Amer Ind/Alaska Nat ^f	78.4		-1.7*		-	
Hispanic ^e	125.9		-2.6*		-	
U.S. Mortality^g						
	Rate 2005-2009 Rate per 100,000 persons		Trend 2000-2009 ^h AAPC (%)			
	Males	Males	Males	Males		
RACE/ETHNICITY						
All Races	23.6		-3.7*			
White	21.7		-3.4*			
White Hispanic ^e	18.2		-3.2*			
White Non-Hispanic ^e	21.9		-3.4*			
Black	53.1		-3.5*			
Asian/Pacific Islander	10.0		-3.9*			
Amer Ind/Alaska Nat						
Total U.S.	16.1		-3.3*			
CHSDA Counties	19.7		-2.5*			
Non-CHSDA Counties	11.8		-4.1*			
Hispanic ^e	17.8		-3.6*			

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

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

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

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

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

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

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

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

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

^e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2005-2009 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, North Dakota, and South Carolina. The 2000-2009 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, South Carolina and Vermont.

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

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

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

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

Table 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+
SEER Incidence Rates^a, 2005-2009									
California	143.00	51.91	772.60	138.53	50.91	744.23	212.11	100.60	982.87
Greater Bay Area	150.99	57.57	796.73	159.02	60.84	837.65	217.75	102.29	1015.90
San Francisco-Oakland	149.50	57.87	782.88	154.32	59.58	809.19	220.02	102.15	1034.79
San Jose-Monterey	153.99	57.00	824.48	167.35	63.04	888.37	197.30	102.29	854.06
Los Angeles	139.08	49.66	757.21	127.00	45.92	687.45	211.11	103.50	954.90
Greater California	141.89	50.85	771.21	136.90	49.80	738.98	211.06	96.96	999.78
Connecticut	165.24	67.94	837.82	158.14	63.60	811.66	236.00	108.66	1116.24
Detroit	186.51	74.23	962.60	161.54	61.13	855.54	258.56	114.89	1251.72
Georgia	167.83	68.91	851.61	143.47	56.09	747.48	260.64	112.04	1287.77
Atlanta	181.54	77.18	902.94	148.82	61.71	750.93	279.23	117.20	1399.27
Rural Georgia	191.43	78.16	974.40	171.61	65.78	903.15	227.08	101.35	1096.14
Greater Georgia	160.80	64.31	827.81	140.56	53.45	742.68	250.09	108.35	1229.84
Hawaii	128.35	40.59	734.99	142.88	51.04	777.75	196.06	125.50	683.80
Iowa	142.24	53.83	753.38	137.42	51.56	730.97	219.43	101.81	1032.46
Kentucky	138.96	53.93	726.66	133.02	48.61	716.51	203.18	102.31	900.41
Louisiana	173.88	68.19	904.39	155.92	58.57	828.83	240.38	99.48	1214.34
New Jersey	172.40	69.61	882.95	161.94	64.68	834.18	235.81	106.47	1129.80
New Mexico	141.65	53.44	751.36	144.61	55.27	762.21	108.13	68.56	381.62
Seattle-Puget Sound	163.46	60.02	878.45	164.16	59.91	884.75	237.05	106.10	1142.25
Utah	169.77	63.06	907.42	173.07	64.57	923.03	110.35	52.41	510.83
9 SEER Areas ^b	161.22	62.78	841.66	155.44	59.51	818.55	249.38	111.33	1203.63
11 SEER Areas ^b	156.02	59.61	822.41	150.41	56.97	796.35	238.19	109.42	1128.28
13 SEER Areas ^b	156.00	59.62	822.23	150.49	57.00	796.78	238.05	109.31	1127.97
18 SEER Areas ^b	154.83	59.12	816.42	146.92	55.38	779.65	235.98	106.04	1134.14

^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, 2005-2009									
California	23.19	1.70	171.70	23.46	1.62	174.38	53.93	5.49	388.81
Greater Bay Area	20.04	1.50	148.21	21.26	1.45	158.22	48.18	5.60	342.45
San Francisco-Oakland	20.82	1.53	154.16	21.52	1.32	161.12	49.45	6.15	348.76
San Jose-Monterey	18.46	1.44	136.08	20.79	1.69	152.85	36.90	-	276.05
Los Angeles	23.27	1.84	171.40	22.34	1.61	165.68	56.28	5.73	405.74
Greater California	24.28	1.72	180.26	24.53	1.68	182.46	55.05	5.24	399.40
Connecticut	24.79	1.62	184.97	23.94	1.35	180.05	43.48	5.64	305.04
Detroit	23.57	1.96	172.97	19.12	1.30	142.30	45.48	4.66	327.65
Georgia	27.45	2.28	201.49	20.65	1.43	153.49	60.31	5.38	440.07
Atlanta	25.95	2.23	189.88	18.51	1.33	137.27	56.60	4.60	416.08
Rural Georgia	38.95	-	281.07	22.59	-	156.19	77.56	-	571.46
Greater Georgia	27.75	2.25	203.96	21.40	1.44	159.35	61.44	5.94	445.12
Hawaii	16.23	1.62	117.28	22.78	2.76	161.15	-	-	-
Iowa	23.93	1.69	177.65	23.67	1.71	175.48	64.67	-	501.10
Kentucky	24.56	1.78	182.01	23.17	1.65	171.90	54.30	4.18	400.72
Louisiana	27.07	2.42	197.46	20.72	1.52	153.46	52.43	5.24	378.57
New Jersey	22.41	1.77	165.11	20.63	1.50	152.85	48.96	4.63	355.37
New Mexico	24.28	1.43	182.19	24.58	1.48	184.20	25.49	-	201.69
Seattle-Puget Sound	24.37	1.75	180.74	24.38	1.67	181.38	55.58	5.08	404.61
Utah	24.51	1.27	185.16	24.80	1.28	187.34	-	-	-
9 SEER Areas ^b	23.33	1.71	172.71	22.74	1.48	169.71	48.46	4.82	350.13
11 SEER Areas ^b	23.04	1.72	170.35	22.55	1.51	167.95	50.37	4.98	364.18
13 SEER Areas ^b	23.08	1.72	170.71	22.56	1.51	168.06	50.79	5.00	367.29
18 SEER Areas ^b	23.84	1.80	176.15	22.68	1.55	168.75	52.73	5.12	381.85
Total U.S.	23.58	1.79	174.18	21.72	1.52	161.36	53.10	4.81	386.88

^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.

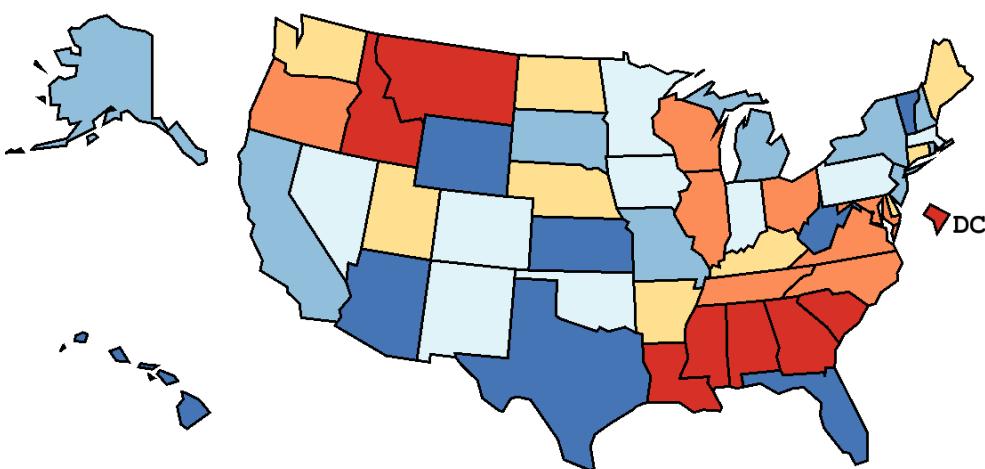
The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.

- 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, 2005-2009

Males									
State	Rate	SE	Rank	PD					
TOTAL U.S.	23.58	0.06							
High Five States									
D.C.	41.33 ^b	2.08	(01)	75.28 ^c					
Mississippi	30.95 ^b	0.77	(02)	31.26 ^c					
Alabama	28.72 ^b	0.57	(03)	21.81 ^c					
Georgia	27.45 ^b	0.47	(04)	16.42 ^c					
Montana	27.22	1.10	(05)	15.43 ^c					
Low Five States									
Kansas	21.38 ^b	0.60	(47)	-9.35					
Wyoming	20.90	1.42	(48)	-11.38 ^c					
Arizona	19.72 ^b	0.38	(49)	-16.38 ^c					
Florida	19.64 ^b	0.19	(50)	-16.69 ^c					
Hawaii	16.23 ^b	0.71	(51)	-31.16 ^c					
State	Rate	SE	Rank	PD	State				
Alabama	28.72 ^b	0.57	(03)	21.81 ^c	Montana	27.22	1.10	(05)	15.43 ^c
Alaska	22.07	1.83	(43)	-6.40	Nebraska	24.68	0.80	(22)	4.67
Arizona	19.72 ^b	0.38	(49)	-16.38 ^c	Nevada	23.40	0.72	(34)	-0.75
Arkansas	25.26	0.64	(17)	7.12	New Hampshire	23.23	0.95	(35)	-1.51
California	23.19	0.19	(36)	-1.67	New Jersey	22.41	0.36	(41)	-4.95
Colorado	23.81	0.56	(29)	0.99	New Mexico	24.28	0.78	(27)	2.96
Connecticut	24.79	0.57	(21)	5.14	New York	22.18 ^b	0.24	(42)	-5.95
Delaware	24.85	1.17	(20)	5.40	North Carolina	25.86 ^b	0.40	(11)	9.66
D.C.	41.33 ^b	2.08	(01)	75.28 ^c	North Dakota	25.16	1.24	(18)	6.67
Florida	19.64 ^b	0.19	(50)	-16.69 ^c	Ohio	25.41 ^b	0.33	(15)	7.74
Georgia	27.45 ^b	0.47	(04)	16.42 ^c	Oklahoma	23.57	0.57	(32)	-0.03
Hawaii	16.23 ^b	0.71	(51)	-31.16 ^c	Oregon	25.70 ^b	0.56	(12)	8.98
Idaho	26.74	0.96	(08)	13.39 ^c	Pennsylvania	23.74	0.28	(31)	0.67
Illinois	25.47 ^b	0.33	(14)	8.01	Rhode Island	22.51	0.98	(40)	-4.55
Indiana	23.75	0.45	(30)	0.72	South Carolina	26.92 ^b	0.57	(07)	14.16 ^c
Iowa	23.93	0.58	(28)	1.48	South Dakota	22.94	1.08	(37)	-2.71
Kansas	21.38 ^b	0.60	(47)	-9.35	Tennessee	25.30 ^b	0.47	(16)	7.30
Kentucky	24.56	0.56	(23)	4.15	Texas	21.45 ^b	0.24	(46)	-9.05
Louisiana	27.07 ^b	0.59	(06)	14.79 ^c	Utah	24.51	0.80	(24)	3.93
Maine	24.44	0.90	(25)	3.64	Vermont	21.98	1.30	(44)	-6.78
Maryland	26.67 ^b	0.53	(09)	13.10 ^c	Virginia	25.99 ^b	0.45	(10)	10.23 ^c
Massachusetts	23.44	0.42	(33)	-0.61	Washington	24.89	0.45	(19)	5.53
Michigan	22.62	0.34	(39)	-4.07	West Virginia	21.74	0.72	(45)	-7.83
Minnesota	24.34	0.48	(26)	3.20	Wisconsin	25.60 ^b	0.47	(13)	8.54
Mississippi	30.95 ^b	0.77	(02)	31.26 ^c	Wyoming	20.90	1.42	(48)	-11.38 ^c
Missouri	22.75	0.43	(38)	-3.54					



Age-Adjusted Death
Rates per 100,000
Quantile Interval

- 26.68 - 41.33
- 25.27 - 26.67
- 24.35 - 25.26
- 23.24 - 24.34
- 21.99 - 23.23
- 16.23 - 21.98

U.S. Rate: 23.58

^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, 2009
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 <34 ^e	>=34 ^g	Complete ^h
<u>Race</u>										
All Races ^b	991,610	772,659	454,494	225,090	39,253	9,569	2,426,184	2,494,988	1,796	2,496,784
White ^b	805,947	649,042	387,249	200,794	35,855	8,795	2,026,925	2,089,734	2,032	2,091,766
Black ^b	135,003	97,839	54,635	19,776	2,784	661	306,001	310,925	168	311,093
Asian/Pacific Islander ^c	19,903	13,544	6,303	+	+	+	41,987	+	+	+
Hispanic ^d	55,469	37,852	20,199	+	+	+	120,434	+	+	+

Estimated prevalence percent^a on January 1, 2009, of the SEER 11 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	1.2781%	-	0.0002%	0.0002%	0.0010%	0.0801%	1.0020%	4.9316%	10.8539%	11.8049%
White ^c	1.3283%	-	0.0002%	-	0.0008%	0.0700%	0.9509%	4.8456%	10.8782%	11.5288%
Black ^c	1.4257%	-	-	-	-	0.1951%	1.9940%	8.6540%	15.7798%	16.4060%
Asian/Pacific Islander ^c	0.6582%	-	-	-	0.0014%	0.0239%	0.3441%	2.0771%	5.8657%	8.3851%
Hispanic ^d	0.4559%	-	-	-	0.0007%	0.0362%	0.5915%	3.4192%	8.6859%	9.4350%

^a US 2009 cancer prevalence counts are based on 2009 cancer prevalence proportions from the SEER registries and 1/1/2009 US population estimates based on the average of 2008 and 2009 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

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

^e Maximum limited-duration prevalence: 34 years for 1975-2009 SEER 9 data; 19 years for 1990-2009 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

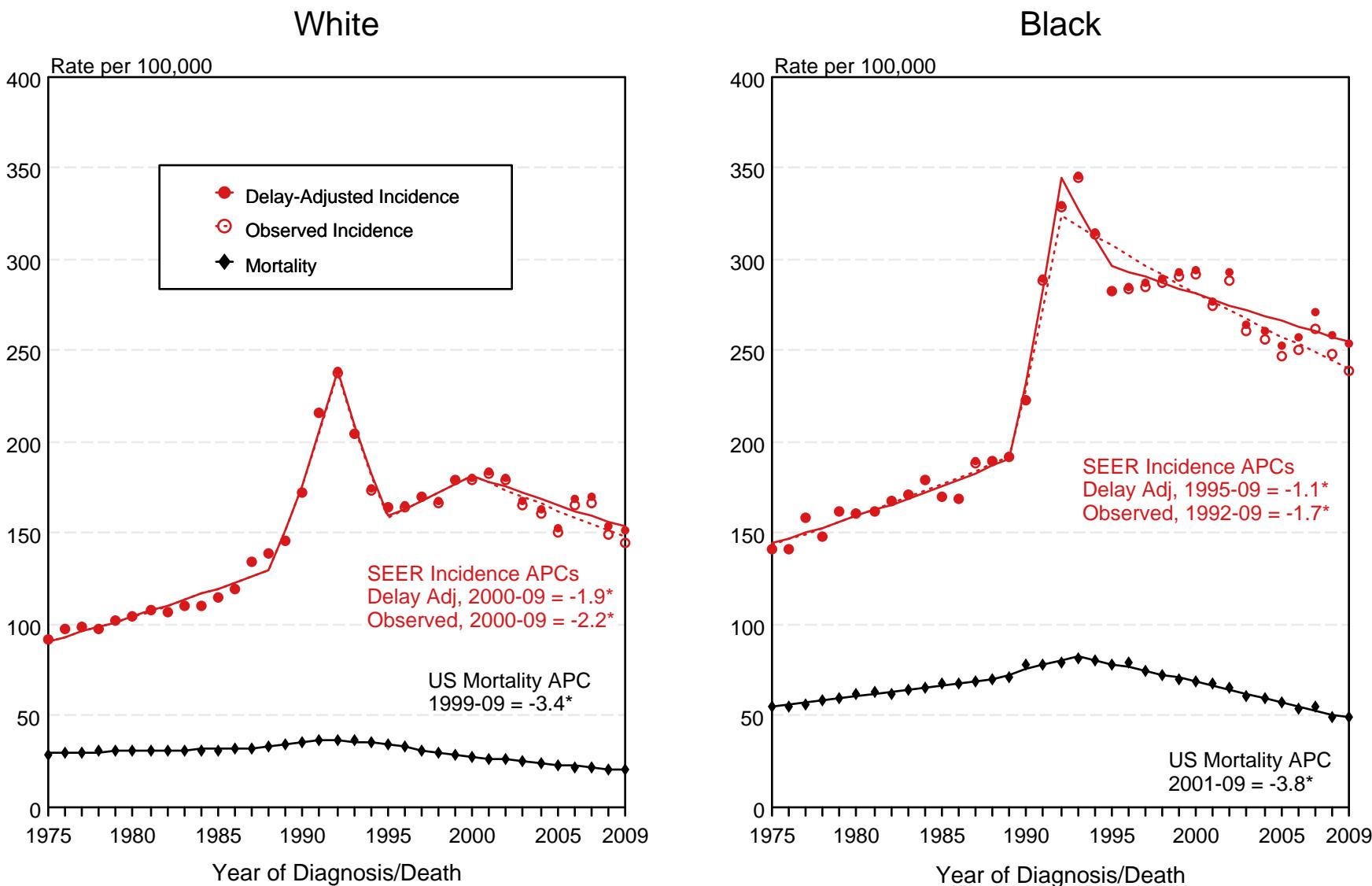
^{f g h i} Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

(g) Cases diagnosed more than 34 years ago were estimated using the completeness index method (Capocaccia et al. 1997, Merrill et al. 2000). (h) Complete prevalence is obtained by summing 0 to <34 and >=34. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

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

+ Not available.

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

Figure 23.1

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

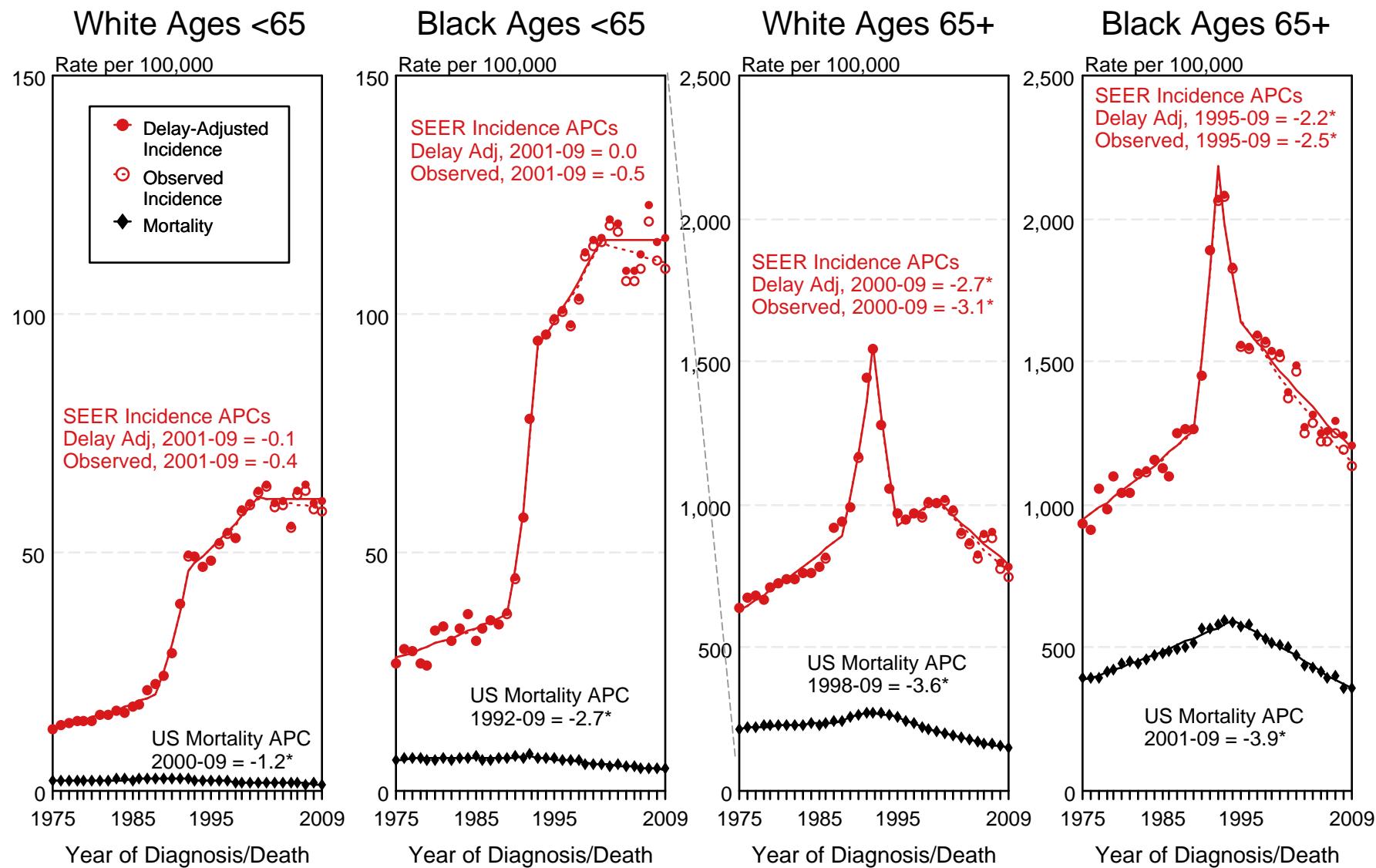


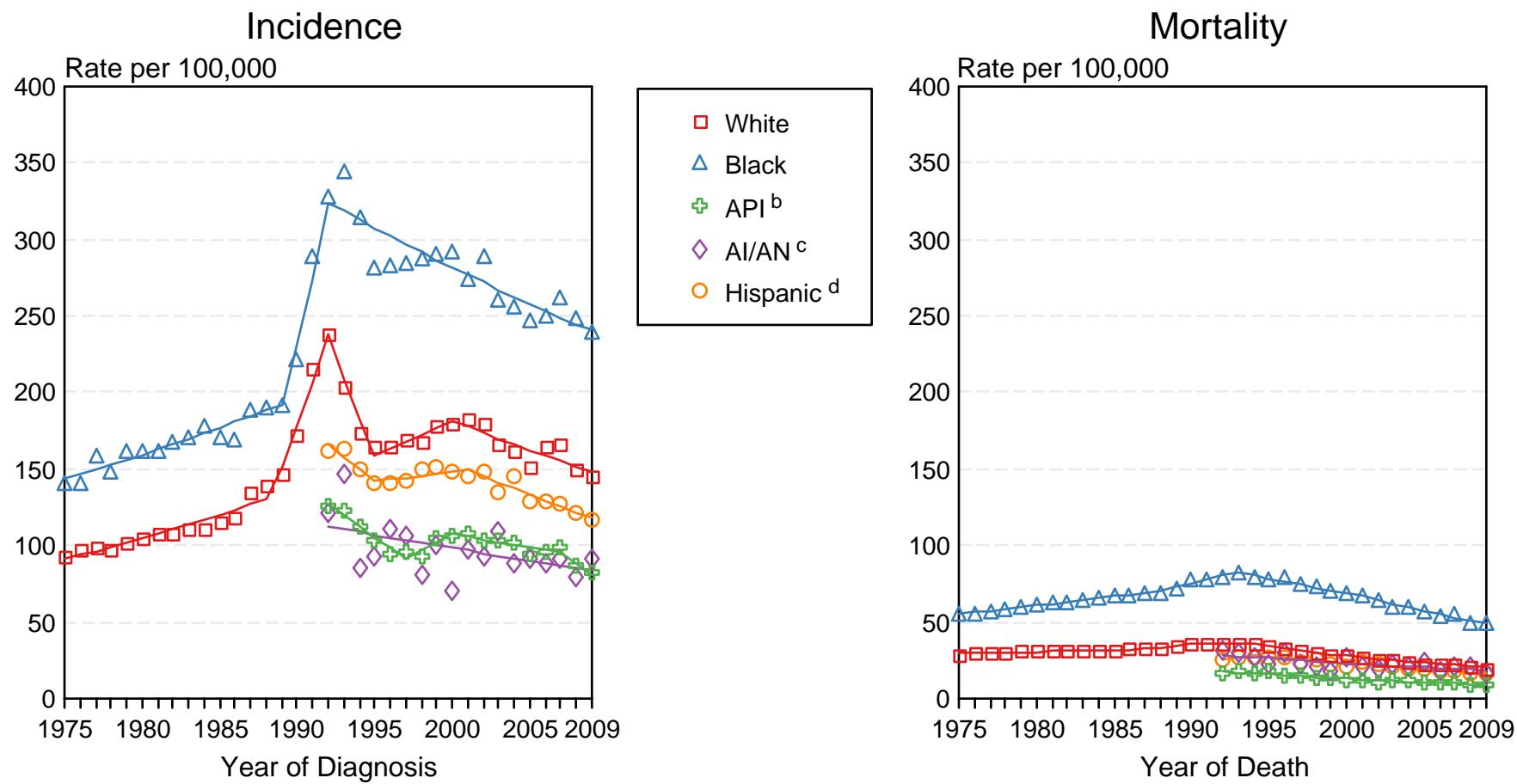
Figure 23.2

- ^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
- * The APC is significantly different from zero ($p < 0.05$).

SEER Incidence and US Death Rates^a

Cancer of the Prostate

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



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

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

Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2009 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2009 allow a maximum of 3 joinpoints.

^b API = Asian/Pacific Islander.

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

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, South Carolina, Oklahoma, and Vermont.

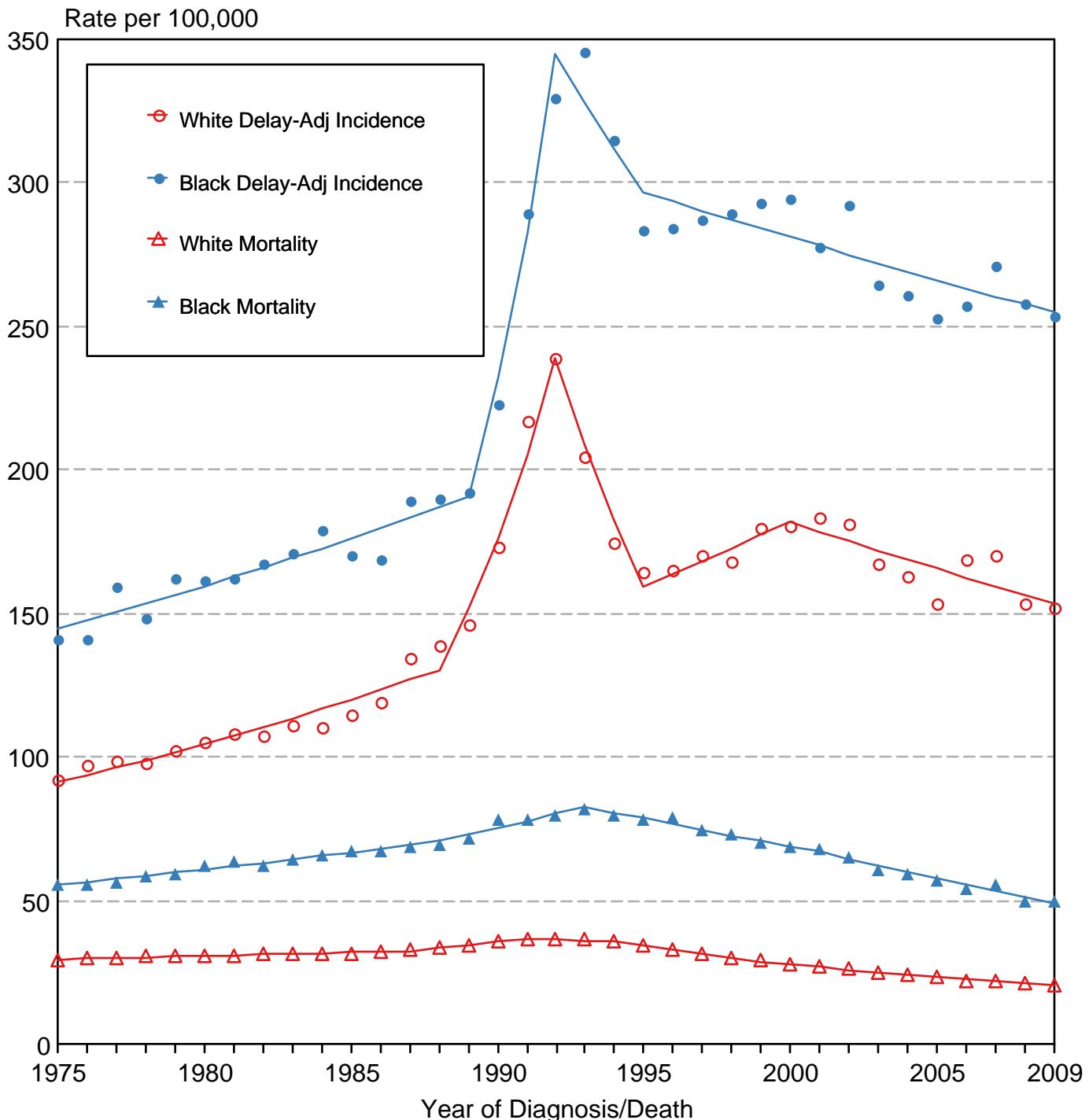
Figure 23.3

Figure 23.4

Cancer of the Prostate

Delay-Adjusted SEER Incidence & US Mortality

1975-2008



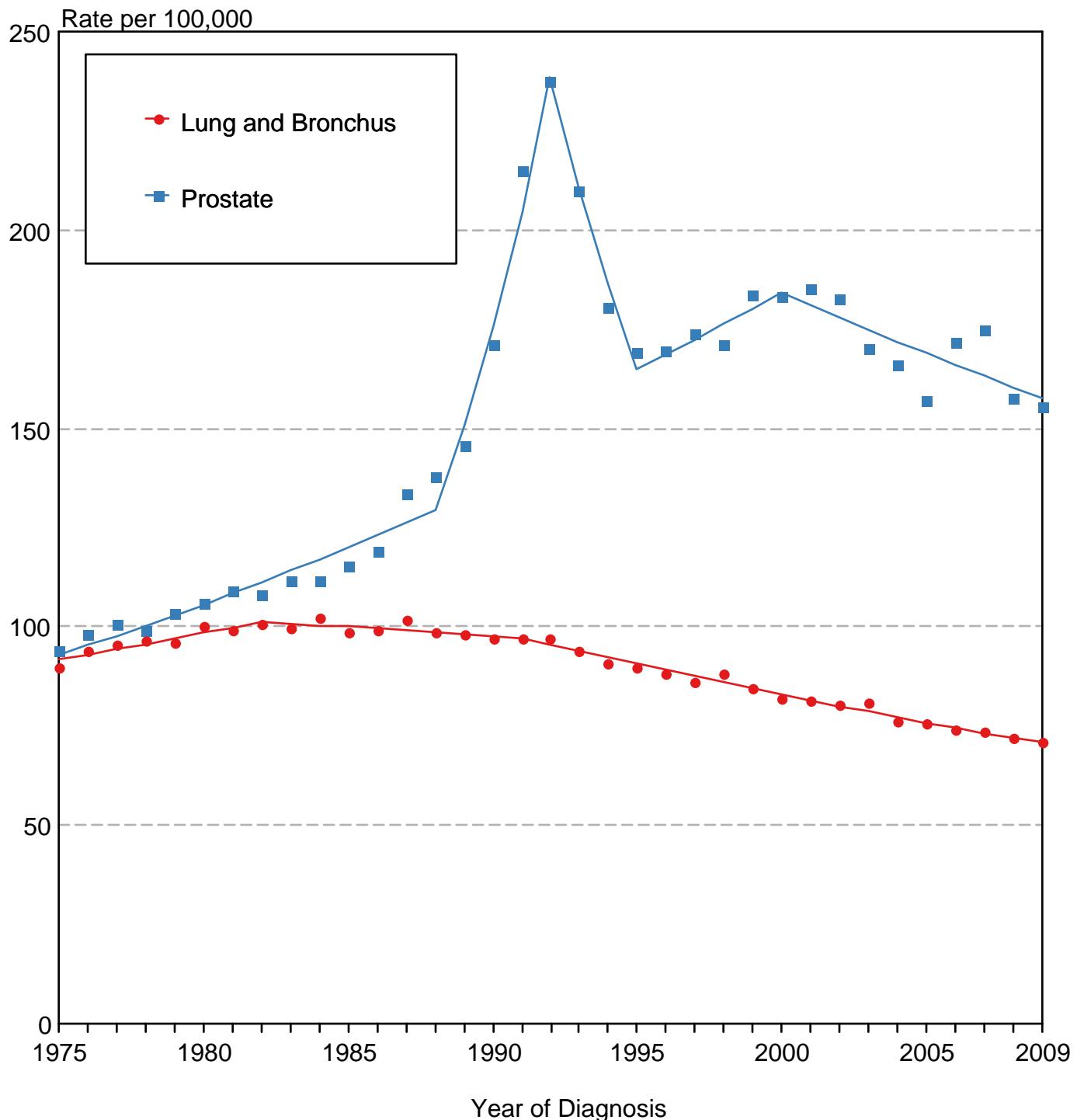
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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 3.5, April 2011, 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 1975-2008



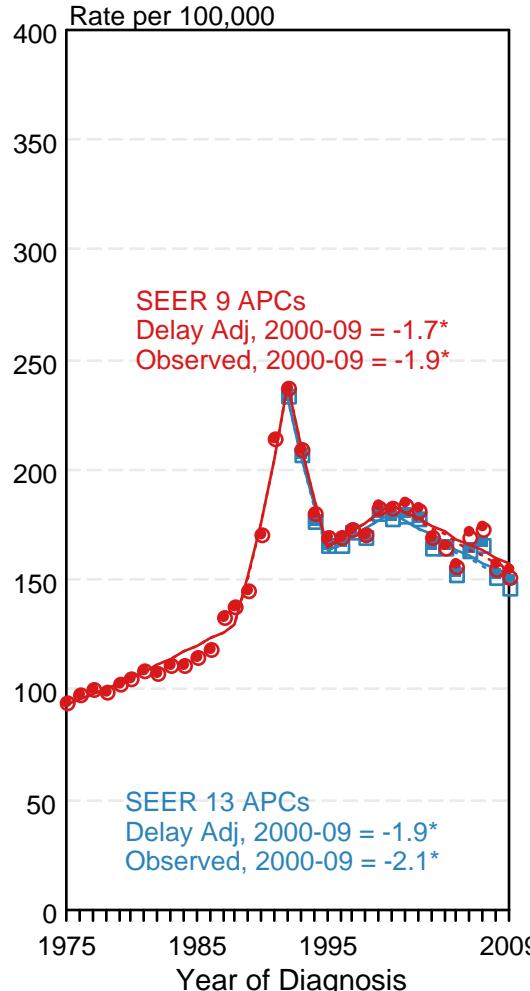
Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

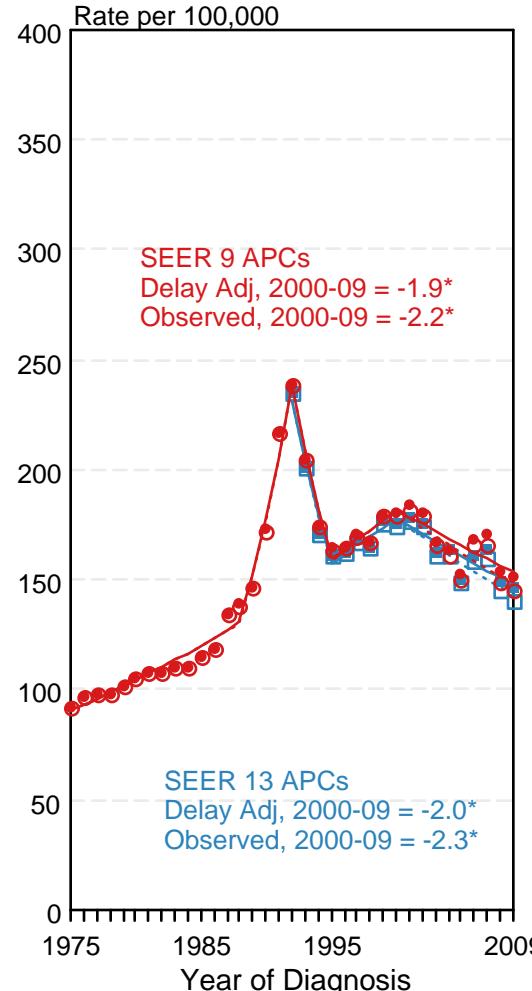
SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Prostate, by Race

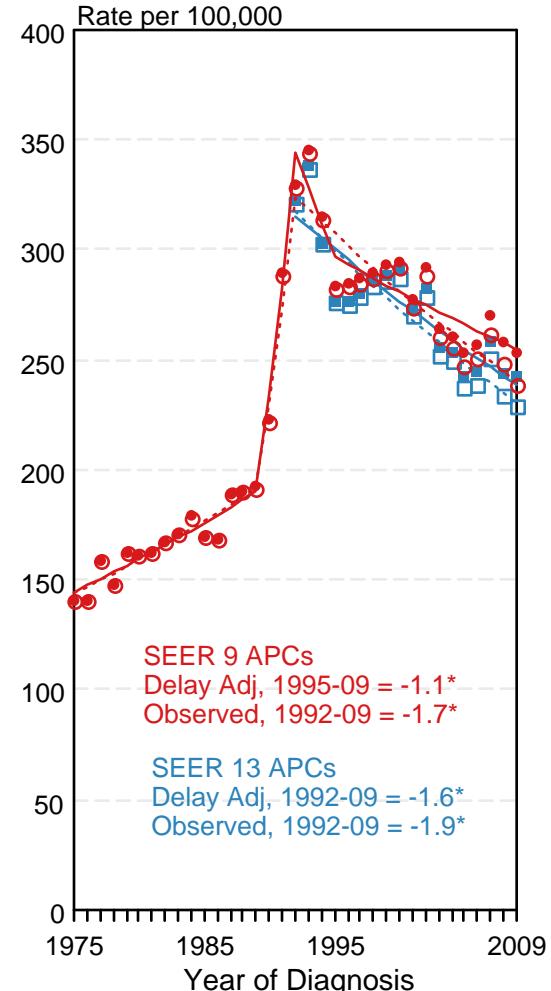
All Races



White



Black



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

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

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

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

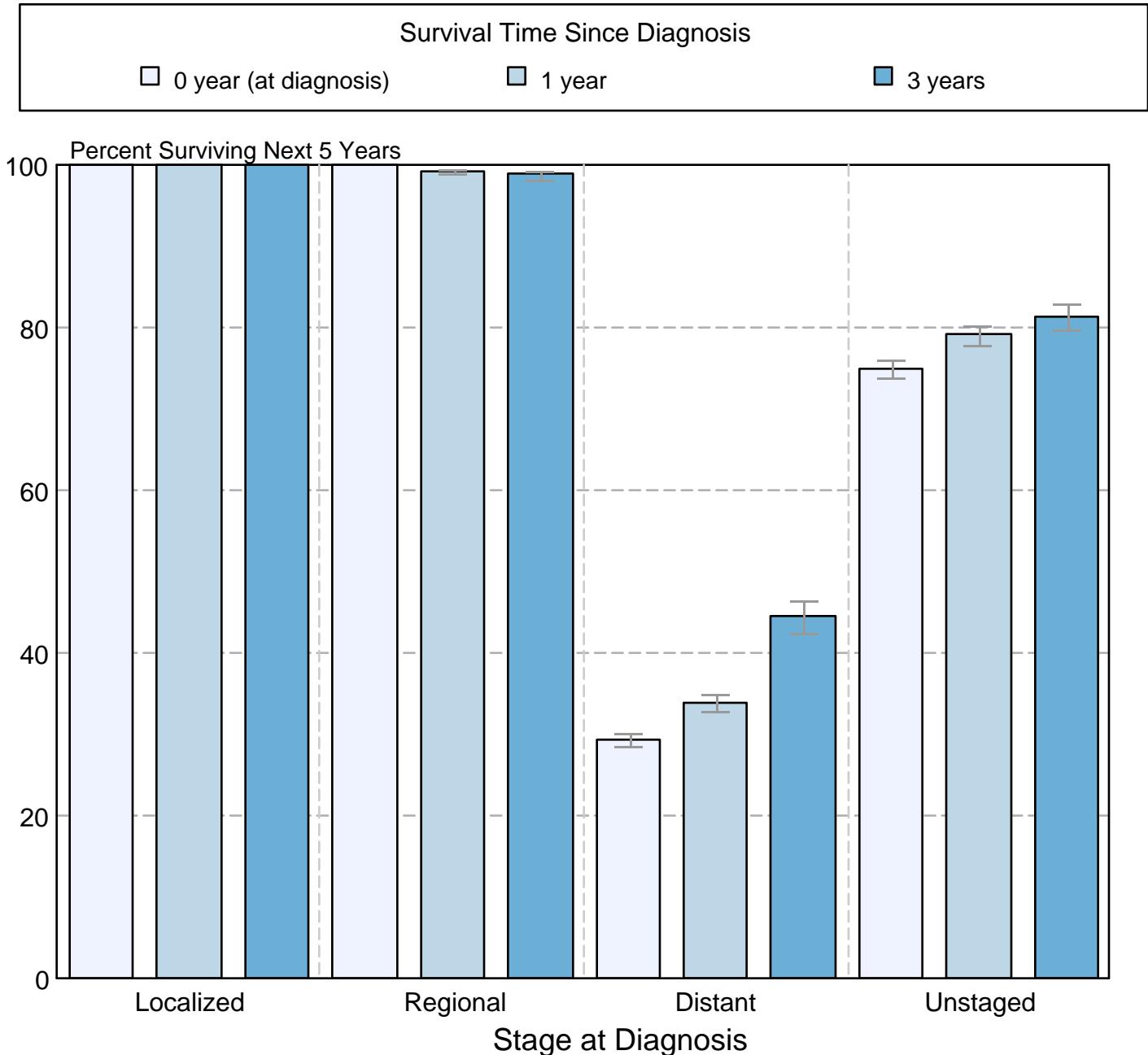
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 23.6

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
1998-2008 by stage at diagnosis



Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000-2008. The remaining 13 SEER Areas contribute cases for the entire period 1998-2008.

Stage at diagnosis is classified using SEER Summary Stage 2000.

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

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