Table 23.1
Cancer of the Prostate (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2012 With up to Five Joinpoints, 1992-2012 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	2003-12	2008-12
SEER 9 Delay-Adjusted Incidence[a], 1975-2012														
All Races	1975-88	2.6*	1988-92	16.5*	1992-95	-11.5*	1995-00	2.3	2000-10	-1.7*	2010-12	-11.5*	-4.0*	-6.7*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.6*	1995-00	2.7	2000-10	-1.8*	2010-12	-11.9*	-4.2*	-7.0*
Black	1975-89	2.0*	1989-92	21.8*	1992-95	-4.7	1995-09	-1.1*	2009-12	-7.6*			-3.3*	-6.0*
SEER 13 Delay-Adjusted Incidence[b], 1992-2012														
All Races	1992-95	-11.1*	1995-00	2.1	2000-10	-1.8*	2010-12	-11.2*					-4.0*	-6.6*
White	1992-95	-12.0*	1995-00	2.5	2000-10	-1.9*	2010-12	-11.8*					-4.2*	-7.0*
Black	1992-09	-1.6*	2009-12	-6.8*									-3.4*	-5.6*
SEER 9 Observed Incidence[a], 1975-2012														
All Races	1975-88	2.6*	1988-92	16.5*	1992-95	-11.6*	1995-00	2.3	2000-10	-1.8*	2010-12	-12.5*	-4.3*	-7.3*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.6*	1995-00	2.7	2000-10	-2.0*	2010-12	-13.4*	-4.7*	-7.9*
Black	1975-89	2.1*	1989-92	19.3*	1992-10	-1.7*	2010-12	-11.5*					-4.0*	-6.7*
SEER 13 Observed Incidence[b], 1992-2012														
All Races	1992-95	-11.1*	1995-00	2.1	2000-10	-2.0*	2010-12	-12.4*					-4.4*	-7.3*
White	1992-95	-12.0*	1995-00	2.5	2000-10	-2.1*	2010-12	-13.5*					-4.7*	-7.9*
White NH[e][f]	1992-94	-17.2*	1994-01	0.9	2001-10	-2.0*	2010-12	-13.5*					-4.7*	-7.9*
Black	1992-09	-1.7*	2009-12	-8.1*									-3.9*	-6.6*
Black NH[e][f]	1992-09	-1.7*	2009-12	-8.1*									-3.9*	-6.5*
API[e]	1992-97	-6.2*	1997-00	5.5	2000-07	-1.7	2007-12	-6.9*					-4.6*	-6.9*
AI/AN[e][g]	1992-12	-2.1*											-2.1*	-2.1*
Hispanic[f]	1992-95	-4.8	1995-02	0.8	2002-10	-2.9*	2010-12	-10.9*					-4.7*	-7.0*
U.S. Cancer Mortality[c], 1975-2012														
All Races	1975-87	0.9*	1987-91	3.0*	1991-94	-0.5	1994-98	-4.2*	1998-12	-3.5*			-3.5*	-3.5*
White	1975-87	0.8*	1987-91	3.1*	1991-94	-0.7	1994-98	-4.5*	1998-12	-3.4*			-3.4*	-3.4*
Black	1975-88	1.9*	1988-93	3.2*	1993-01	-2.6*	2001-12	-4.0*					-4.0*	-4.0*
U.S. Cancer Mortality[c], 1992-2012														
All Races	1992-94	-1.5	1994-12	-3.6*									-3.6*	-3.6*
White	1992-94	-0.6	1994-98	-4.5*	1998-12	-3.4*							-3.4*	-3.4*
White NH[e][f]	1992-94	-0.4	1994-99	-4.3*	1999-12	-3.4*							-3.4*	-3.4*
Black	1992-00	-2.1*	2000-12	-4.0*									-4.0*	-4.0*
Black NH[e][f]	1992-96	-0.3	1996-12	-3.6*									-3.6*	-3.6*
API[e]	1992-12	-3.4*											-3.4*	-3.4*
AI/AN[e][g]	1992-12	-1.7*											-1.7*	-1.7*
Hispanic[f]	1992-94	4.3	1994-12	-2.7*									-2.7*	-2.7*

Joinpoint Regression Program Version 4.2.0, April 2015, 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).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   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.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-    Joinpoint regression line analysis could not be performed on data series.

Table 23.2
Cancer of the Prostate (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2012 With up to Five Joinpoints, 1992-2012 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	2003-12	2008-12
SEER 9 Delay-Adjusted Incidence[a], 1975-2012														
All Races	1975-88	3.1*	1988-92	23.3*	1992-01	3.4*	2001-10	-0.2	2010-12	-11.7*			-2.8*	-6.1*
White	1975-88	3.5*	1988-92	22.9*	1992-01	3.2*	2001-10	-0.2	2010-12	-12.7*			-3.1*	-6.7*
Black	1975-89	2.0*	1989-93	26.4*	1993-02	2.6*	2002-12	-1.4*					-1.4*	-1.4*
SEER 13 Delay-Adjusted Incidence[b], 1992-2012														
All Races	1992-01	3.4*	2001-10	-0.4	2010-12	-11.1*							-2.9*	-5.9*
White	1992-01	3.3*	2001-10	-0.5	2010-12	-12.0*							-3.2*	-6.4*
Black	1992-00	3.8*	2000-10	-0.6	2010-12	-8.0							-2.3	-4.4
SEER 9 Observed Incidence[a], 1975-2012														
All Races	1975-88	3.1*	1988-92	23.3*	1992-01	3.4*	2001-10	-0.2	2010-12	-12.4*			-3.1*	-6.5*
White	1975-88	3.5*	1988-92	22.9*	1992-01	3.2*	2001-10	-0.4	2010-12	-13.8*			-3.5*	-7.3*
Black	1975-89	2.0*	1989-93	26.3*	1993-01	2.6*	2001-10	-0.7	2010-12	-8.2			-2.4*	-4.5*
SEER 13 Observed Incidence[b], 1992-2012														
All Races	1992-01	3.4*	2001-10	-0.5	2010-12	-11.9*							-3.2*	-6.4*
White	1992-01	3.3*	2001-10	-0.7	2010-12	-13.2*							-3.6*	-7.2*
White NH[ef]	1992-01	3.3*	2001-10	-0.5	2010-12	-13.6*							-3.6*	-7.3*
Black	1992-00	3.8*	2000-10	-0.8	2010-12	-9.3							-2.7*	-5.1*
Black NH[ef]	1992-00	3.7*	2000-10	-0.6	2010-12	-9.3							-2.6*	-5.1*
API[e]	1992-01	6.1*	2001-09	0.5	2009-12	-7.7*							-2.3	-5.7*
AI/AN[eg]	1992-12	-2.0*											-2.0*	-2.0*
Hispanic[f]	1992-02	4.5*	2002-10	-1.4*	2010-12	-8.6*							-3.1*	-5.1*
U.S. Cancer Mortality[c], 1975-2012														
All Races	1975-87	0.5*	1987-90	3.1	1990-96	-3.2*	1996-00	-5.8*	2000-12	-1.4*			-1.4*	-1.4*
White	1975-87	0.7*	1987-90	3.7	1990-01	-4.5*	2001-12	-1.2*					-1.2*	-1.2*
Black	1975-92	0.5*	1992-12	-2.9*									-2.9*	-2.9*
U.S. Cancer Mortality[c], 1992-2012														
All Races	1992-01	-4.4*	2001-12	-1.3*									-1.3*	-1.3*
White	1992-01	-4.7*	2001-12	-1.2*									-1.2*	-1.2*
White NH[ef]	1992-01	-4.6*	2001-12	-1.2*									-1.2*	-1.2*
Black	1992-04	-3.4*	2004-12	-2.3*									-2.4*	-2.3*
Black NH[ef]	1992-01	-3.6*	2001-12	-2.4*									-2.4*	-2.4*
API[e]	1992-12	-0.6											-0.6	-0.6
AI/AN[eg]	1992-12	-2.8*											-2.8*	-2.8*
Hispanic[f]	1992-12	-2.2*											-2.2*	-2.2*

Joinpoint Regression Program Version 4.2.0, April 2015, 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).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] 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.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 23.3
Cancer of the Prostate (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2012 With up to Five Joinpoints, 1992-2012 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	2003-12	2008-12
SEER 9 Delay-Adjusted Incidence[a], 1975-2012														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.8*	1995-00	1.3	2000-10	-2.5*	2010-12	-11.4*	-4.5*	-7.0*
White	1975-88	2.7*	1988-92	14.9*	1992-95	-15.8*	1995-00	1.8	2000-10	-2.6*	2010-12	-11.5*	-4.6*	-7.2*
Black	1975-89	2.0*	1989-92	20.1*	1992-95	-9.0*	1995-09	-2.1*	2009-12	-8.7*			-4.4*	-7.1*
SEER 13 Delay-Adjusted Incidence[b], 1992-2012														
All Races	1992-95	-14.1*	1995-00	1.0	2000-10	-2.5*	2010-12	-11.3*					-4.5*	-7.0*
White	1992-95	-15.1*	1995-00	1.5	2000-10	-2.5*	2010-12	-11.7*					-4.7*	-7.3*
Black	1992-95	-8.3*	1995-09	-2.5*	2009-12	-8.0*							-4.4*	-6.7*
SEER 9 Observed Incidence[a], 1975-2012														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.8*	1995-00	1.3	2000-10	-2.6*	2010-12	-12.6*	-4.9*	-7.8*
White	1975-88	2.7*	1988-92	14.9*	1992-95	-15.8*	1995-00	1.8	2000-10	-2.8*	2010-12	-13.2*	-5.2*	-8.2*
Black	1975-89	2.0*	1989-92	20.1*	1992-95	-8.9*	1995-09	-2.3*	2009-12	-10.0*			-4.9*	-8.1*
SEER 13 Observed Incidence[b], 1992-2012														
All Races	1992-95	-14.1*	1995-00	1.0	2000-10	-2.7*	2010-12	-12.7*					-5.0*	-7.8*
White	1992-95	-15.1*	1995-00	1.5	2000-10	-2.8*	2010-12	-13.6*					-5.3*	-8.3*
White NH[ef]	1992-95	-15.6*	1995-00	1.6	2000-10	-2.7*	2010-12	-13.6*					-5.2*	-8.3*
Black	1992-95	-8.1*	1995-09	-2.6*	2009-12	-9.4*							-4.9*	-7.8*
Black NH[ef]	1992-95	-8.3*	1995-09	-2.6*	2009-12	-9.5*							-4.9*	-7.8*
API[e]	1992-97	-7.7*	1997-00	4.6	2000-07	-2.5*	2007-12	-7.7*					-5.4*	-7.7*
AI/AN[eg]	1992-12	-2.3*											-2.3*	-2.3*
Hispanic[f]	1992-96	-6.0*	1996-99	3.2	1999-10	-2.9*	2010-12	-12.5*					-5.2*	-7.9*
U.S. Cancer Mortality[c], 1975-2012														
All Races	1975-87	0.9*	1987-90	3.3*	1990-93	1.3	1993-12	-3.6*					-3.6*	-3.6*
White	1975-87	0.8*	1987-91	3.2*	1991-94	-0.5	1994-98	-4.3*	1998-12	-3.5*			-3.5*	-3.5*
Black	1975-94	2.3*	1994-01	-2.7*	2001-12	-4.1*							-4.1*	-4.1*
U.S. Cancer Mortality[c], 1992-2012														
All Races	1992-94	-1.2	1994-12	-3.7*									-3.7*	-3.7*
White	1992-94	-0.6	1994-98	-4.3*	1998-12	-3.5*							-3.5*	-3.5*
White NH[ef]	1992-94	-0.2	1994-98	-4.4*	1998-12	-3.5*							-3.5*	-3.5*
Black	1992-00	-2.0*	2000-12	-4.1*									-4.1*	-4.1*
Black NH[ef]	1992-00	-1.9*	2000-12	-4.0*									-4.0*	-4.0*
API[e]	1992-12	-3.6*											-3.6*	-3.6*
AI/AN[eg]	1992-12	-1.6*											-1.6*	-1.6*
Hispanic[f]	1992-94	4.7	1994-12	-2.7*									-2.7*	-2.7*

Joinpoint Regression Program Version 4.2.0, April 2015, 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).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] 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.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 23.4
Cancer of the Prostate (Invasive)

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

Year of Diagnosis:	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
1975	94.00	13.67	649.33	92.18	13.02	639.37	141.07	26.76	931.22
1976	97.96	14.60	674.23	97.35	13.92	674.07	140.92	29.54	910.86
1977	100.48	15.06	690.98	98.56	14.36	680.56	159.16	29.24	1,057.18
1978	99.40	15.21	681.33	97.73	14.79	671.05	148.11	26.83	986.42
1979	103.42	14.98	714.75	102.31	14.68	708.01	161.90	26.35	1,098.87
1980	106.05	15.52	731.77	105.00	14.69	729.23	161.14	33.79	1,041.42
1981	108.91	16.85	745.32	107.91	15.97	743.44	162.01	34.72	1,041.86
1982	108.24	16.36	743.38	107.33	15.81	739.96	167.75	31.46	1,109.83
1983	111.62	17.15	764.62	110.82	16.60	762.09	171.07	34.02	1,118.41
1984	111.69	17.26	764.40	110.10	16.20	759.14	178.89	37.22	1,158.14
1985	115.51	17.93	790.04	114.66	17.69	784.94	170.13	31.41	1,129.00
1986	119.10	18.55	814.14	119.04	18.30	815.38	168.59	34.08	1,098.34
1987	133.75	21.51	909.63	134.58	21.08	919.10	189.42	36.06	1,249.49
1988	137.65	22.18	935.83	138.76	22.28	943.91	190.20	34.88	1,263.80
1989	145.39	24.18	983.24	146.15	24.04	990.18	191.72	37.28	1,259.25
1990	171.06	28.86	1,154.06	172.83	28.93	1,167.52	222.42	44.70	1,450.91
1991	214.87	38.93	1,431.06	216.46	39.37	1,440.54	289.46	57.45	1,893.16
1992	237.44	49.46	1,536.86	238.42	49.43	1,544.75	329.48	78.49	2,064.37
1993	209.60	50.50	1,309.36	204.46	49.01	1,279.04	345.83	94.80	2,081.03
1994	180.35	48.65	1,090.73	174.22	46.85	1,054.69	315.11	96.18	1,828.41
1995	169.48	50.18	994.11	164.38	48.17	967.63	284.75	100.11	1,561.04
1996	169.53	53.48	971.71	165.12	51.99	947.13	284.71	100.82	1,555.83
1997	173.68	55.29	992.07	169.95	53.97	971.62	286.95	98.30	1,590.97
1998	171.20	55.05	974.04	167.33	53.08	957.00	291.11	104.79	1,579.03
1999	183.70	60.84	1,032.95	179.27	58.84	1,011.76	294.16	113.62	1,542.09
2000	183.46	61.87	1,023.91	179.88	59.94	1,008.91	294.74	115.72	1,532.23
2001	185.48	64.68	1,020.46	183.37	62.74	1,017.20	278.74	115.65	1,406.10
2002	182.80	65.61	992.84	180.52	64.12	985.06	291.38	117.95	1,490.13
2003	170.38	62.15	918.55	167.24	60.05	908.22	263.58	117.00	1,276.82
2004	166.64	62.14	888.95	163.39	60.62	873.75	261.52	107.51	1,326.09
2005	157.57	58.19	844.52	153.44	55.67	829.28	254.81	107.92	1,270.23
2006	173.00	64.91	920.15	169.74	62.88	908.37	258.47	110.24	1,283.04
2007	176.22	67.05	930.78	171.83	64.22	915.64	270.18	120.46	1,305.08
2008	159.19	63.00	824.13	155.18	60.55	809.28	256.04	111.90	1,252.41
2009	156.49	62.85	803.77	152.58	60.62	788.24	248.16	111.81	1,190.60
2010	149.77	59.62	772.93	145.62	57.01	758.15	235.28	107.13	1,121.12
2011	144.22	58.17	739.01	140.13	55.71	723.69	225.31	106.33	1,047.71
2012	118.52	47.46	609.71	113.87	44.28	594.92	194.68	93.90	891.31

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

Year of Diagnosis:	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
1975-2012	151.40	44.00	893.74	147.87	41.80	881.00	237.40	82.90	1,305.36
1975	94.00	13.67	649.33	92.18	13.02	639.37	141.07	26.76	931.22
1976	97.96	14.60	674.23	97.35	13.92	674.07	140.92	29.54	910.86
1977	100.48	15.06	690.98	98.56	14.36	680.56	159.16	29.24	1,057.18
1978	99.40	15.21	681.33	97.73	14.79	671.05	148.11	26.83	986.42
1979	103.42	14.98	714.75	102.31	14.68	708.01	161.90	26.35	1,098.87
1980	106.05	15.52	731.77	105.00	14.69	729.23	161.14	33.79	1,041.42
1981	108.91	16.85	745.32	107.91	15.97	743.44	162.01	34.72	1,041.86
1982	108.24	16.36	743.38	107.33	15.81	739.96	167.75	31.46	1,109.83
1983	111.62	17.15	764.62	110.82	16.60	762.09	171.07	34.02	1,118.41
1984	111.69	17.26	764.40	110.10	16.20	759.14	178.89	37.22	1,158.14
1985	115.51	17.93	790.04	114.66	17.69	784.94	170.13	31.41	1,129.00
1986	119.10	18.55	814.14	119.04	18.30	815.38	168.59	34.08	1,098.34
1987	133.75	21.51	909.63	134.58	21.08	919.10	189.42	36.06	1,249.49
1988	137.65	22.18	935.83	138.76	22.28	943.91	190.20	34.88	1,263.80
1989	145.39	24.18	983.24	146.15	24.04	990.18	191.72	37.28	1,259.25
1990	171.06	28.86	1,154.06	172.83	28.93	1,167.52	222.42	44.70	1,450.91
1991	214.87	38.93	1,431.06	216.46	39.37	1,440.54	289.46	57.45	1,893.16
1992	237.44	49.46	1,536.86	238.42	49.43	1,544.75	329.48	78.49	2,064.37
1993	209.60	50.50	1,309.36	204.46	49.01	1,279.04	345.83	94.80	2,081.03
1994	180.35	48.65	1,090.73	174.22	46.85	1,054.69	315.11	96.18	1,828.41
1995	169.48	50.18	994.11	164.38	48.17	967.63	284.75	100.11	1,561.04
1996	169.53	53.48	971.71	165.12	51.99	947.13	284.71	100.82	1,555.83
1997	173.68	55.29	992.07	169.95	53.97	971.62	286.95	98.30	1,590.97
1998	171.13	55.04	973.56	167.19	53.06	956.10	290.89	104.73	1,577.69
1999	183.54	60.80	1,031.90	178.98	58.78	1,009.84	293.68	113.48	1,539.27
2000	183.20	61.82	1,022.19	179.39	59.84	1,005.77	294.01	115.49	1,527.96
2001	185.11	64.61	1,018.08	182.69	62.59	1,012.87	277.75	115.33	1,400.47
2002	182.33	65.51	989.78	179.67	63.93	979.70	290.05	117.54	1,482.46
2003	169.84	62.03	915.06	166.28	59.83	902.06	262.09	116.48	1,268.60
2004	165.99	62.00	884.81	162.26	60.36	866.62	259.57	106.92	1,314.76
2005	156.80	58.02	839.58	152.12	55.36	820.94	252.42	107.17	1,256.41
2006	171.96	64.68	913.53	167.93	62.45	897.04	255.48	109.30	1,265.93
2007	174.94	66.76	922.69	169.65	63.69	902.10	266.40	119.21	1,283.86
2008	157.79	62.65	815.41	152.83	59.93	795.00	251.86	110.51	1,228.93
2009	154.71	62.41	792.73	149.73	59.84	771.12	243.29	110.15	1,163.61
2010	147.37	59.00	758.17	141.96	56.00	736.15	229.27	104.99	1,088.34
2011	141.04	57.35	719.50	135.40	54.36	695.59	217.89	103.55	1,008.26
2012	114.14	46.27	583.28	107.62	42.47	557.98	184.16	89.78	836.54

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

Table 23.6
Cancer of the Prostate (Invasive)

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

Year of Death:	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
1975-2012	30.53	2.28	225.82	28.27	1.97	210.08	63.37	5.79	461.42
1975	30.97	2.54	227.48	29.06	2.18	214.88	55.52	6.56	393.98
1976	31.78	2.69	232.91	29.93	2.31	220.84	55.60	6.90	392.19
1977	31.83	2.69	233.28	29.90	2.31	220.57	56.44	6.93	398.67
1978	32.66	2.61	240.33	30.62	2.24	226.79	58.49	6.76	416.09
1979	32.84	2.56	242.13	30.77	2.21	228.17	59.24	6.63	422.90
1980	33.05	2.67	243.08	30.77	2.33	227.39	61.99	6.57	445.03
1981	33.17	2.68	243.95	30.76	2.30	227.52	63.61	7.06	454.45
1982	33.36	2.68	245.47	31.09	2.34	229.85	62.36	6.62	447.67
1983	33.92	2.76	249.30	31.57	2.40	233.18	64.55	6.99	462.46
1984	34.06	2.71	250.77	31.58	2.37	233.49	65.93	6.74	475.13
1985	33.91	2.73	249.43	31.28	2.34	231.34	67.26	7.16	482.68
1986	34.93	2.80	256.99	32.46	2.47	239.72	67.39	6.63	487.36
1987	35.11	2.71	259.06	32.57	2.38	241.27	68.88	6.66	499.03
1988	35.88	2.83	264.40	33.38	2.47	247.08	69.57	6.98	502.28
1989	37.10	2.97	273.01	34.54	2.62	255.20	71.71	7.06	518.54
1990	38.56	3.02	284.23	35.67	2.65	263.98	77.98	7.43	565.65
1991	39.31	2.89	291.08	36.50	2.52	271.39	78.24	7.06	570.21
1992	39.22	2.86	290.58	36.29	2.44	270.28	79.84	7.66	578.73
1993	39.34	2.72	292.48	36.26	2.33	270.82	81.86	7.04	599.08
1994	38.54	2.67	286.48	35.64	2.31	266.04	79.96	6.76	585.93
1995	37.29	2.58	277.23	34.41	2.22	256.93	78.20	6.70	572.47
1996	36.00	2.50	267.61	33.00	2.13	246.38	78.84	6.45	579.20
1997	34.15	2.31	254.26	31.35	1.94	234.58	74.30	6.32	544.22
1998	32.63	2.27	242.49	29.89	1.90	223.36	72.77	6.28	532.41
1999	31.56	2.06	235.48	28.91	1.72	216.88	70.13	5.80	514.78
2000	30.39	1.98	226.82	27.78	1.66	208.29	68.90	5.40	507.82
2001	29.52	1.94	220.14	26.97	1.63	202.08	67.82	5.33	499.72
2002	28.71	1.92	213.87	26.36	1.60	197.48	64.98	5.26	477.81
2003	27.19	1.90	201.97	25.02	1.59	186.95	60.37	5.30	441.02
2004	26.19	1.82	194.64	24.04	1.55	179.54	59.00	4.79	433.72
2005	25.40	1.80	188.57	23.33	1.51	174.20	57.02	4.83	417.76
2006	24.24	1.84	179.14	22.34	1.58	165.81	53.73	4.57	393.54
2007	24.23	1.75	179.68	22.23	1.49	165.58	54.88	4.51	403.03
2008	23.01	1.78	169.73	21.34	1.52	158.30	49.11	4.48	357.62
2009	22.12	1.70	163.30	20.34	1.43	151.06	49.35	4.45	359.70
2010	21.81	1.78	160.30	20.10	1.51	148.62	48.09	4.40	350.10
2011	20.77	1.66	152.90	19.24	1.39	142.62	44.02	4.25	318.93
2012	19.57	1.66	143.37	18.13	1.44	133.50	41.79	3.86	303.97

[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
Age-Adjusted Rates, 2008-2012						
Age at Diagnosis/Death:						
All ages	137.9	130.4	214.5	21.4	19.8	46.3
Under 65	54.7	51.0	97.6	1.7	1.5	4.3
65 and over	713.5	679.1	1,022.4	157.6	146.5	337.0
All ages (IARC world std)[c]	96.0	90.7	153.3	9.3	8.5	21.0
Age-Specific Rates, 2008-2012						
Age at Diagnosis/Death:						
<1	–	–	–	–	–	–
1-4	–	–	–	–	–	–
5-9	–	–	–	–	–	–
10-14	–	–	–	–	–	–
15-19	–	–	–	–	–	–
20-24	–	–	–	–	–	–
25-29	–	–	–	–	–	–
30-34	0.1	–	–	–	–	–
35-39	1.1	0.9	2.8	0.0	–	–
40-44	10.2	8.7	25.0	0.2	0.1	0.4
45-49	45.5	39.1	105.6	0.9	0.7	2.2
50-54	139.5	128.2	262.3	3.3	2.7	8.3
55-59	302.6	283.1	530.8	8.8	7.5	21.9
60-64	518.6	493.4	856.2	20.1	17.3	50.3
65-69	788.1	753.0	1,207.3	40.4	35.4	101.4
70-74	835.4	800.7	1,167.8	77.4	68.8	189.9
75-79	741.2	700.7	1,004.4	138.8	127.1	312.1
80-84	545.2	512.8	745.3	244.2	228.2	533.8
85+	444.2	420.5	666.4	513.5	491.0	975.7

[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.

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                                          Table 23.8
                                 Cancer of the Prostate (Invasive)

               5-Year Relative and Period Survival (Percent) by Race, Diagnosis Year, Stage and Age
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	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]	67.7	73.4	66.0	68.5	75.2	66.5	60.7	62.0	60.1
1978-1980[b]	70.1	75.1	68.6	71.2	76.7	69.6	62.1	65.0	60.6
1981-1983[b]	72.0	75.9	70.8	73.0	77.5	71.8	62.8	65.0	61.9
1984-1986[b]	75.1	77.3	74.6	76.3	79.0	75.7	65.6	67.2	64.9
1987-1989[b]	82.8	83.2	82.7	84.3	84.7	84.3	71.2	72.8	70.6
1990-1992[b]	92.9	93.0	92.9	94.1	94.0	94.1	84.4	86.7	83.5
1993-1995[b]	95.2	95.8	94.9	95.9	96.6	95.6	91.6	93.1	90.7
1996-1998[b]	97.3	98.5	96.7	97.8	98.9	97.2	94.9	96.7	93.5
1999-2001[b]	99.3	99.1	99.3	99.7	99.5	99.6	97.3	98.0	96.2
2002-2004[b]	99.6	99.5	99.7	99.8	99.6	99.7	97.7	99.1	95.9
2005-2011[b]	99.4[f]	99.4[f]	99.3[f]	99.7[f]	99.8[f]	99.6[f]	97.6[f]	98.0[f]	97.1[f]
5-Year Period Survival (Percent)[cd]									
2011	98.9	99.0	98.7	99.1	99.4	99.0	97.1	97.7	96.3
Stage Distribution (%) 2005-2011[ce]									
All Stages									
Number of cases	368,254	162,137	206,117	284,635	122,209	162,426	53,594	29,190	24,404
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	80	80	81	81	80	82	82	81	82
Regional	12	16	9	12	17	9	10	13	6
Distant	4	3	5	4	3	5	5	4	7
Unstaged	4	2	5	3	1	4	3	1	4
5-Year Relative Survival (Percent), 2005-2011[c]									
Age at Diagnosis:									
Ages <45	96.2	–	–	95.5	–	–	97.6	–	–
Ages 45-54	98.1	–	–	98.2	–	–	97.5	–	–
Ages 55-64	99.3	–	–	99.6	–	–	97.8	–	–
Ages 65-74	100.0	–	–	100.0	–	–	97.6	–	–
Ages 75+	95.6	–	–	95.7	–	–	91.4	–	–
Ages <65	99.0	–	–	99.3	–	–	97.8	–	–
Ages 65+	98.8	–	–	99.1	–	–	95.9	–	–
Stage[e]:									
All Stages	98.9	99.0	98.8	99.2	99.3	99.1	96.9	97.8	95.9
Localized	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Regional	100.0	99.8	100.0	100.0	99.8	100.0	100.0	100.0	99.5
Distant	28.2	31.7	26.7	27.4	31.0	26.0	28.3	31.7	25.8
Unstaged	77.3	88.4	74.2	73.0	87.3	69.4	66.7	79.3	61.3

[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 2012.
[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 2012.
[d] Period survival provides a 2011 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2009-2011: 0-1 year survival), (2008-2010: 1-2 year survival), (2007-2009: 2-3 year survival), (2006-2008: 3-4 year survival), (2005-2007: 4-5 years survival).
[e] Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.
[f] The difference between 1975-1977 and 2005-2011 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

Survival Time	1975-1979	1980-1984	1985-1989	1990-1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1-year	91.4	93.5	95.5	98.8	98.8	99.1	99.2	99.5	99.6	99.7	99.8	99.8	99.7	99.8	99.8	99.8	99.8	99.7	99.6	99.6	99.6
2-year	84.5	87.4	91.0	97.3	97.6	98.0	98.8	98.9	99.6	99.4	99.8	99.8	99.6	99.7	99.6	99.7	99.8	99.5	99.3	99.5	
3-year	78.3	81.5	86.9	96.0	97.0	97.4	98.4	98.5	99.6	99.1	99.8	99.7	99.4	99.7	99.5	99.7	99.8	99.2	99.2		
4-year	73.2	76.5	83.5	94.9	96.3	96.8	97.9	98.2	99.2	98.8	99.8	99.7	99.4	99.7	99.4	99.5	99.7	99.1			
5-year	68.7	71.9	80.4	93.7	95.7	96.4	97.4	98.1	99.2	98.8	99.8	99.7	99.1	99.7	99.1	99.5	99.7				
6-year	65.3	68.5	77.8	92.7	95.4	96.0	97.1	97.9	99.2	98.5	99.8	99.7	99.1	99.7	99.1	99.5					
7-year	61.8	65.0	75.4	91.6	94.9	95.3	97.1	97.6	99.0	98.4	99.8	99.7	99.0	99.7	99.1						
8-year	58.6	62.0	73.4	90.6	94.6	94.9	97.0	97.6	98.7	98.1	99.8	99.7	98.9	99.7							
9-year	55.7	59.7	71.4	89.4	94.2	94.3	96.5	96.9	98.4	98.1	99.8	99.7	98.4								
10-year	53.2	57.7	69.6	88.4	93.5	94.2	96.4	96.5	98.0	98.0	99.8	99.7									
11-year	50.7	55.5	67.9	87.5	92.7	93.8	96.2	96.0	97.8	97.2	99.8										
12-year	48.5	53.5	66.1	86.5	91.7	93.4	96.0	95.4	97.3	97.1											
13-year	46.5	51.7	64.3	85.8	90.8	92.8	95.0	95.1	97.0												
14-year	44.8	50.1	62.9	85.0	89.8	92.5	94.5	94.8													
15-year	43.6	48.7	61.5	84.0	89.0	91.8	94.5														
16-year	41.9	46.9	60.0	83.1	88.5	90.9															
17-year	40.1	45.8	59.3	82.2	87.6																
18-year	38.8	44.4	58.3	81.6																	
19-year	38.0	43.0	57.7																		
20-year	37.0	41.6	56.9																		
21-year	35.4	40.7	55.9																		
22-year	34.0	39.4	54.6																		
23-year	33.1	38.2	53.4																		
24-year	32.4	37.2																			
25-year	31.0	35.7																			
26-year	30.3	34.4																			
27-year	29.7	34.3																			
28-year	28.9	33.8																			
29-year	28.3																				
30-year	26.9																				

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

Table 23.10
Cancer of the Prostate (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
Lifetime Risk of Dying from Cancer Given Alive at Current Age
Males, 2010-2012 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.00	13.97	2.58	Asian/	0	0.00	0.00	0.00	9.39	2.11
	10	0.00	0.00	0.01	14.13	2.62	Pacific	10	0.00	0.00	0.00	9.47	2.13
	20	0.00	0.01	0.31	14.19	2.63	Islander	20	0.00	0.00	0.09	9.49	2.13
	30	0.01	0.32	2.31	14.36	2.66		30	0.00	0.09	0.89	9.54	2.14
	40	0.31	2.33	7.47	14.58	2.71		40	0.09	0.90	3.75	9.61	2.16
	50	2.09	7.41	12.50	14.76	2.79		50	0.82	3.72	7.35	9.67	2.18
	60	5.84	11.43	13.50	13.92	2.95		60	3.03	6.84	8.71	9.27	2.24
	70	6.91	9.46	–	9.98	3.12		70	4.27	6.37	–	7.00	2.31
	80	3.92	–	–	4.72	3.21		80	2.74	–	–	3.55	2.38
White	0	0.00	0.00	0.00	13.15	2.41	American	0	0.00	0.00	0.00	6.53	2.30
	10	0.00	0.00	0.01	13.29	2.44	Indian/	10	0.00	0.00	0.01	6.61	2.34
	20	0.00	0.01	0.27	13.34	2.45	Alaska	20	0.00	0.01	0.07	6.67	2.36
	30	0.01	0.27	2.11	13.50	2.48	Native[a]	30	0.01	0.07	0.64	6.81	2.41
	40	0.27	2.13	7.01	13.70	2.52		40	0.06	0.66	2.87	7.00	2.50
	50	1.93	6.97	11.78	13.89	2.59		50	0.62	2.95	5.71	7.29	2.65
	60	5.52	10.79	12.71	13.09	2.74		60	2.55	5.57	7.04	7.31	2.88
	70	6.48	8.85	–	9.32	2.90		70	3.65	5.41	–	5.74	3.08
	80	3.63	–	–	4.35	3.01		80	2.65	–	–	3.14	3.38
Black	0	0.00	0.00	0.00	18.15	4.43	Hispanic[b]	0	0.00	0.00	0.00	12.96	2.98
	10	0.00	0.00	0.03	18.54	4.53		10	0.00	0.00	0.01	13.08	3.01
	20	0.00	0.03	0.70	18.66	4.56		20	0.00	0.01	0.18	13.13	3.02
	30	0.03	0.71	4.14	19.02	4.65		30	0.01	0.18	1.50	13.25	3.05
	40	0.70	4.22	11.51	19.48	4.76		40	0.17	1.51	5.76	13.40	3.08
	50	3.70	11.39	17.32	19.78	4.97		50	1.37	5.72	10.71	13.56	3.15
	60	8.94	15.85	18.12	18.71	5.40		60	4.66	10.00	12.48	13.06	3.28
	70	9.64	12.81	–	13.64	5.97		70	6.31	9.24	–	9.92	3.45
	80	5.59	–	–	7.07	6.42		80	4.14	–	–	5.11	3.51

[a] Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
[b] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
- Statistic could not be calculated.
A percent of 0.00 represents a value that is below 0.005.

Table 23.11
Cancer of the Prostate (Invasive)

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

SEER Incidence	SEER 18 Areas[b] Rate 2008-2012 Rate per 100,000 persons	SEER 13 Areas[b] Trend 2003-2012[c] AAPC (%)	SEER 9 Areas[b] Trend 2003-2012[d] AAPC (%)
	Males	Males	Males
RACE/ETHNICITY			
All Races	137.9	-4.4*	-4.3*
White	130.4	-4.7*	-4.7*
White Hispanic[e]	113.1	-5.1*	–
White Non-Hispanic[e]	133.4	-4.7*	–
Black	214.5	-3.9*	-4.0*
Asian/Pacific Islander	74.0	-4.6*	–
Amer Ind/Alaska Nat[f]	67.1	-2.1*	–
Hispanic[e]	114.7	-4.7*	–

U.S. Mortality[g]	Rate 2008-2012 Rate per 100,000 persons	Trend 2003-2012[h] AAPC (%)
	Males	Males
RACE/ETHNICITY		
All Races	21.4	-3.6*
White	19.8	-3.4*
White Hispanic[e]	18.4	-2.4*
White Non-Hispanic[e]	19.9	-3.4*
Black	46.3	-4.0*
Asian/Pacific Islander	9.4	-3.4*
Amer Ind/Alaska Nat		
Total U.S.	16.1	-2.6*
CHSDA Counties	20.2	-1.7*
Non-CHSDA Counties	11.3	-3.8*
Hispanic[e]	17.8	-2.7*

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.2.0, April 2015, 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 2003-2012 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2012.
[d]   The 2003-2012 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2012.
[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 2003-2012 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 2003-2012 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2012.
*   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], 2008-2012

	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+
California	126.90	47.68	674.52	122.44	46.39	648.18	189.62	92.54	860.61
Greater Bay Area	137.07	53.04	717.91	143.10	55.81	746.50	195.82	95.59	888.67
San Francisco-Oakland	132.24	51.80	688.28	135.03	53.11	701.31	197.57	95.47	903.37
San Jose-Monterey	146.43	55.40	775.66	157.22	60.51	825.70	180.99	94.80	776.77
Los Angeles	121.98	45.46	650.92	112.62	42.09	600.12	189.70	92.50	861.60
Greater California	125.53	46.75	670.10	120.24	45.27	638.49	186.64	91.09	847.08
Connecticut	139.87	61.02	684.92	131.13	55.91	651.07	207.74	97.64	968.76
Detroit	178.92	74.67	899.59	159.21	62.85	825.25	246.56	116.73	1143.98
Georgia	150.05	63.21	750.35	128.42	51.00	663.57	233.79	100.47	1155.41
Atlanta	168.00	71.16	837.42	144.13	57.94	739.93	239.81	103.35	1183.06
Rural Georgia	144.04	58.08	738.20	119.08	43.12	644.16	202.51	85.61	1010.57
Greater Georgia	142.74	59.40	718.77	123.42	48.49	641.33	230.93	98.77	1144.45
Hawaii	104.96	33.11	601.62	107.14	39.16	577.05	173.17	107.62	626.30
Iowa	126.18	49.80	654.16	122.81	48.34	637.53	161.93	71.99	783.59
Kentucky	122.64	49.55	627.91	113.35	44.02	592.59	169.43	83.53	763.20
Louisiana	161.08	66.75	813.11	143.25	57.23	737.81	222.25	94.68	1104.03
New Jersey	157.35	65.41	792.82	150.33	61.50	764.39	223.34	98.20	1088.41
New Mexico	110.38	42.29	581.02	110.88	43.55	576.32	128.72	60.44	600.67
Seattle-Puget Sound	142.26	54.63	747.95	142.65	54.64	750.96	192.70	94.72	869.91
Utah	156.78	59.47	829.36	156.49	60.27	821.57	191.98	75.65	996.08
9 SEER Areas[b]	142.41	57.35	730.43	136.95	54.35	707.91	223.99	103.41	1057.47
11 SEER Areas[b]	138.21	54.64	715.81	133.19	52.20	693.04	214.39	100.85	999.18
13 SEER Areas[b]	138.08	54.58	715.26	133.14	52.17	692.81	214.25	100.67	999.34
18 SEER Areas[b]	137.92	54.66	713.49	130.36	50.97	679.12	214.52	97.64	1022.42

[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], 2008-2012									
California	21.12	1.60	156.08	21.55	1.57	159.61	46.67	4.49	338.26
Greater Bay Area	19.09	1.49	140.74	20.70	1.53	153.19	44.71	5.34	316.86
San Francisco-Oakland	19.67	1.61	144.56	20.86	1.53	154.49	46.64	5.76	329.26
San Jose-Monterey	17.94	1.28	133.16	20.39	1.54	150.69	29.74	-	214.14
Los Angeles	21.12	1.63	155.87	20.81	1.51	154.25	49.02	4.39	357.56
Greater California	21.83	1.62	161.56	22.06	1.61	163.42	45.08	4.14	328.06
Connecticut	20.20	1.40	150.13	19.33	1.29	144.01	38.26	3.11	281.26
Detroit	22.09	1.88	161.84	18.44	1.36	136.50	39.63	4.01	285.85
Georgia	24.57	2.26	178.80	18.78	1.52	138.14	52.37	4.56	382.80
Atlanta	25.98	2.48	188.47	18.82	1.52	138.39	50.84	4.57	370.66
Rural Georgia	29.81	-	213.64	19.73	-	136.97	56.93	-	420.90
Greater Georgia	23.89	2.13	174.36	18.76	1.49	138.14	52.81	4.57	386.27
Hawaii	14.84	1.55	106.71	19.76	2.04	142.26	-	-	-
Iowa	20.73	1.47	153.83	20.49	1.46	152.06	47.80	-	360.79
Kentucky	21.52	1.63	158.97	20.69	1.48	153.46	40.33	3.98	291.58
Louisiana	24.21	2.50	174.24	18.96	1.70	138.23	44.98	4.74	323.09
New Jersey	20.32	1.66	149.31	18.43	1.31	136.84	46.76	4.90	336.14
New Mexico	21.86	1.50	162.65	21.84	1.50	162.47	38.23	-	287.01
Seattle-Puget Sound	21.93	1.59	162.56	21.80	1.58	161.60	50.95	3.62	378.09
Utah	23.31	1.47	174.30	23.56	1.52	175.87	-	-	-
9 SEER Areas[b]	21.17	1.66	155.99	20.56	1.48	152.47	43.81	4.22	317.48
11 SEER Areas[b]	20.97	1.63	154.64	20.60	1.49	152.72	45.01	4.23	326.92
13 SEER Areas[b]	21.01	1.64	154.90	20.62	1.49	152.86	45.17	4.23	328.15
18 SEER Areas[b]	21.49	1.72	158.19	20.53	1.51	152.04	46.14	4.41	334.54
Total U.S.	21.41	1.71	157.57	19.79	1.46	146.52	46.32	4.28	336.97

[a]   US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
       Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[b]   The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.
       The SEER 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.
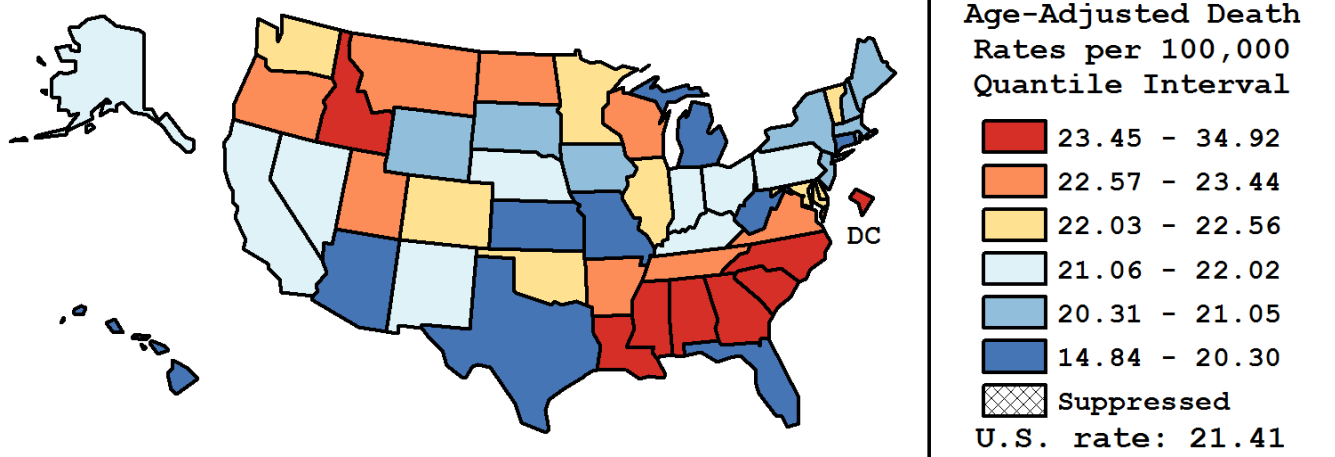-   Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 23.14
Cancer of the Prostate (Invasive)

Age-Adjusted Cancer Death[a] Rates By State, All Races, 2008-2012

Males

State	Rate	SE	Rank(CI)[d]	PD
TOTAL U.S.	21.41	0.06		
High Five States				
D.C.	34.92[b]	1.84	01(01,01)	63.11[c]
Mississippi	28.44[b]	0.73	02(02,03)	32.84[c]
Alabama	26.37[b]	0.53	03(02,06)	23.19[c]
South Carolina	25.46[b]	0.54	04(03,09)	18.91[c]
Idaho	24.67[b]	0.88	05(03,27)	15.23[c]
Low Five States				
Texas	19.59[b]	0.22	47(40,49)	-8.49
Arizona	19.44[b]	0.37	48(37,50)	-9.19
Kansas	19.23[b]	0.55	49(35,50)	-10.17[c]
Florida	18.70[b]	0.18	50(47,50)	-12.64[c]
Hawaii	14.84[b]	0.66	51(51,51)	-30.70[c]

State	Rate	SE	Rank(CI)[d]	PD	State	Rate	SE	Rank(CI)[d]	PD
Alabama	26.37[b]	0.53	03(02,06)	23.19[c]	Montana	23.44	0.97	09(03,38)	9.50
Alaska	21.89	1.72	28(03,50)	2.23	Nebraska	21.99	0.73	26(07,45)	2.72
Arizona	19.44[b]	0.37	48(37,50)	-9.19	Nevada	21.45	0.67	31(10,47)	0.21
Arkansas	22.75	0.60	13(06,35)	6.26	New Hampshire	20.81	0.85	35(10,50)	-2.81
California	21.12	0.17	32(27,40)	-1.34	New Jersey	20.32	0.33	42(30,48)	-5.10
Colorado	22.56	0.51	17(07,34)	5.37	New Mexico	21.86	0.71	29(07,46)	2.13
Connecticut	20.20	0.49	44(27,50)	-5.65	New York	20.60[b]	0.22	39(31,45)	-3.79
Delaware	22.55	1.07	18(04,47)	5.34	North Carolina	23.49[b]	0.37	08(05,21)	9.70
D.C.	34.92[b]	1.84	01(01,01)	63.11[c]	North Dakota	22.57	1.15	16(03,48)	5.42
Florida	18.70[b]	0.18	50(47,50)	-12.64[c]	Ohio	22.02	0.29	25(13,34)	2.86
Georgia	24.57[b]	0.42	06(04,12)	14.76[c]	Oklahoma	22.39	0.54	22(08,36)	4.56
Hawaii	14.84[b]	0.66	51(51,51)	-30.70[c]	Oregon	23.21[b]	0.51	11(05,29)	8.40
Idaho	24.67[b]	0.88	05(03,27)	15.23[c]	Pennsylvania	21.08	0.26	33(26,42)	-1.53
Illinois	22.39	0.30	21(10,31)	4.57	Rhode Island	20.80	0.91	36(09,50)	-2.83
Indiana	21.98	0.41	27(11,38)	2.65	South Carolina	25.46[b]	0.54	04(03,09)	18.91[c]
Iowa	20.73	0.52	38(20,49)	-3.20	South Dakota	20.75	1.01	37(08,50)	-3.08
Kansas	19.23[b]	0.55	49(35,50)	-10.17[c]	Tennessee	22.58	0.43	15(08,32)	5.48
Kentucky	21.52	0.51	30(12,44)	0.49	Texas	19.59[b]	0.22	47(40,49)	-8.49
Louisiana	24.21[b]	0.54	07(04,18)	13.08[c]	Utah	23.31	0.75	10(04,34)	8.88
Maine	21.05	0.79	34(10,50)	-1.66	Vermont	22.35	1.24	23(03,49)	4.41
Maryland	22.51	0.45	19(08,33)	5.12	Virginia	22.65	0.40	14(08,31)	5.79
Massachusetts	20.48	0.37	40(28,48)	-4.33	Washington	22.20	0.40	24(09,35)	3.69
Michigan	20.30[b]	0.31	43(31,48)	-5.16	West Virginia	20.13	0.67	45(23,50)	-5.97
Minnesota	22.50	0.44	20(08,33)	5.11	Wisconsin	23.13[b]	0.42	12(06,27)	8.02
Mississippi	28.44[b]	0.73	02(02,03)	32.84[c]	Wyoming	20.34	1.34	41(06,50)	-4.99
Missouri	19.89[b]	0.39	46(32,50)	-7.10					

Age-Adjusted Death Rates per 100,000 Quantile Interval

- 23.45 - 34.92
- 22.57 - 23.44
- 22.03 - 22.56
- 21.06 - 22.02
- 20.31 - 21.05
- 14.84 - 20.30
- Suppressed

U.S. rate: 21.41

[a]   US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[b]   Difference between state rate and total U.S. rate is statistically significant (p<=.0002).
[c]   Absolute percent difference between state rate and total U.S. rate is 10% or more.
[d]   Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.
SE   Standard error of the rate.
PD   Percent difference between state rate and total U.S. rate.
-     Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 23.15
Cancer of the Prostate (Invasive)

Estimated United States Cancer Prevalence Counts[a] on January 1, 2012
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 <20[e]	0 to <37[e]	>=37[g]	Complete[h]
Race										
All Races[b]	1,044,262	809,960	554,045	290,151	79,382	12,743	2,749,706	2,794,570	1,022	2,795,592
White[b]	836,144	669,947	468,474	250,656	72,322	11,765	2,272,023	2,312,969	1,192	2,314,161
Black[b]	151,342	107,605	68,225	32,343	5,501	857	363,061	366,166	102	366,268
Asian/Pacific Islander[c]	21,838	15,684	9,110	+	+	+	50,334	+	+	+
Hispanic[d]	60,598	44,337	26,562	+	+	+	143,146	+	+	+

Estimated prevalence percent[a] on January 1, 2012, of the SEER[c] population diagnosed in the previous 20 years
By Age at Prevalence and Race/Ethnicity

| Age at Prevalence | All Ages | Age Specific (Crude) | | | | | | | | | Age-Adjusted[f] All Ages |
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	
Race											
All Races[c]	1.5229%	–	–	0.0003%	0.0011%	0.0846%	1.0365%	5.0125%	11.9057%	14.8461%	1.7054%
White[c]	1.6077%	–	–	0.0003%	0.0009%	0.0717%	0.9901%	4.9572%	11.9866%	14.6943%	1.6925%
Black[c]	1.7122%	–	–	–	0.0032%	0.2305%	2.0081%	8.5683%	17.8128%	20.6319%	2.6571%
Asian/Pacific Islander[c]	0.7345%	–	–	–	–	0.0227%	0.3551%	2.0303%	6.0832%	9.9317%	0.8893%
Hispanic[d]	0.5504%	–	–	–	–	0.0410%	0.6150%	3.4399%	9.5140%	12.8163%	1.3359%

[a]   US 2012 cancer prevalence counts are based on 2012 cancer prevalence proportions from the SEER registries and 1/1/2012
       US population estimates based on the average of 2011 and 2012 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: 37 years for 1975-2012 SEER 9 data; 20 years for 1992-2012 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.
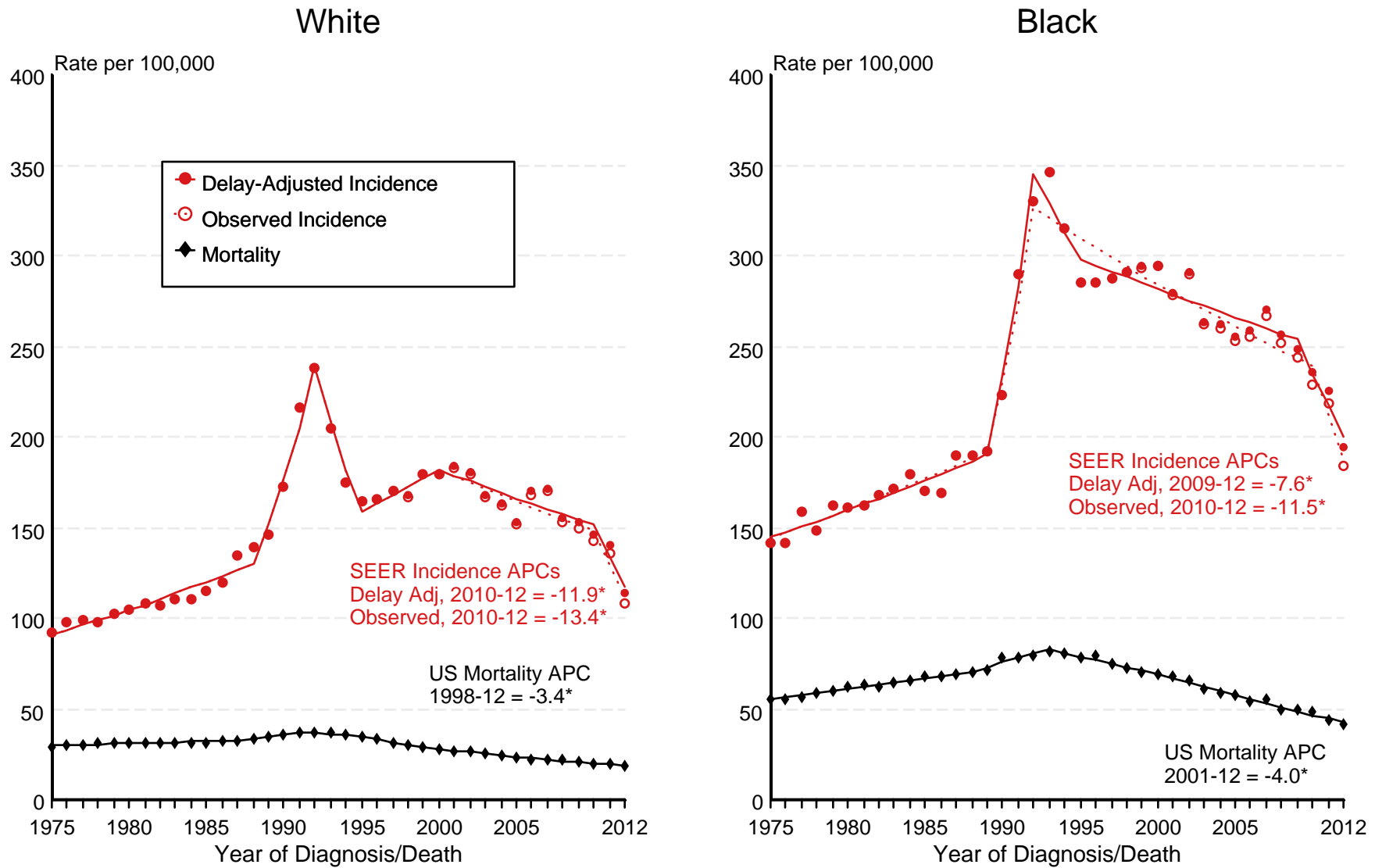[g h i] (g) Cases diagnosed more than 37 years ago were estimated using the completeness index method (Capocaccia et. al. 1997,
       Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <37 and >=37. (i) Age-specific completeness index
       was approximated using empirical data 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

White

Rate per 100,000

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 2010-12 = -11.9*
Observed, 2010-12 = -13.4*

US Mortality APC
1998-12 = -3.4*

Year of Diagnosis/Death

Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2009-12 = -7.6*
Observed, 2010-12 = -11.5*

US Mortality APC
2001-12 = -4.0*

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.2.0, April 2015, National Cancer Institute.
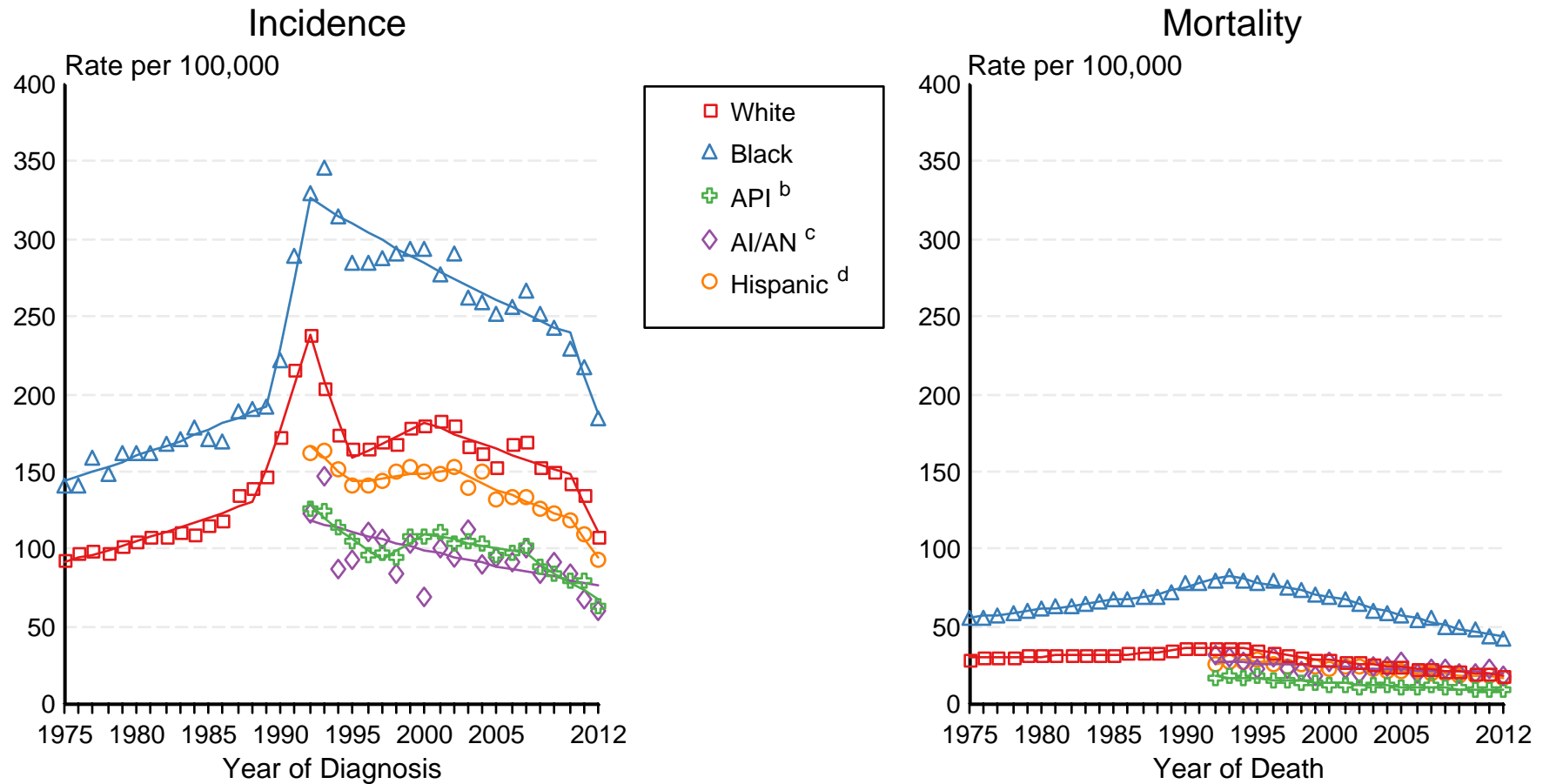The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 23.2

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

White Ages <65

Rate per 100,000

- ● Delay-Adj Incidence
- ○ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 2010-12 = -12.7*
Observed, 2010-12 = -13.8*

US Mortality APC
2001-12 = -1.2*

Year of Diagnosis/Death

Black Ages <65

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2002-12 = -1.4*
Observed, 2010-12 = -8.2

US Mortality APC
1992-12 = -2.9*

Year of Diagnosis/Death

White Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2010-12 = -11.5*
Observed, 2010-12 = -13.2*

US Mortality APC
1998-12 = -3.5*

Year of Diagnosis/Death

Black Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2009-12 = -8.7*
Observed, 2009-12 = -10.0*

US Mortality APC
2001-12 = -4.1*

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.2.0, April 2015, 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 1975-2012
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2012

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

[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines are calculated using the Joinpoint Regression Program Version 4.2.0, April 2015, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2012 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2012 allow a maximum of 3 joinpoints.
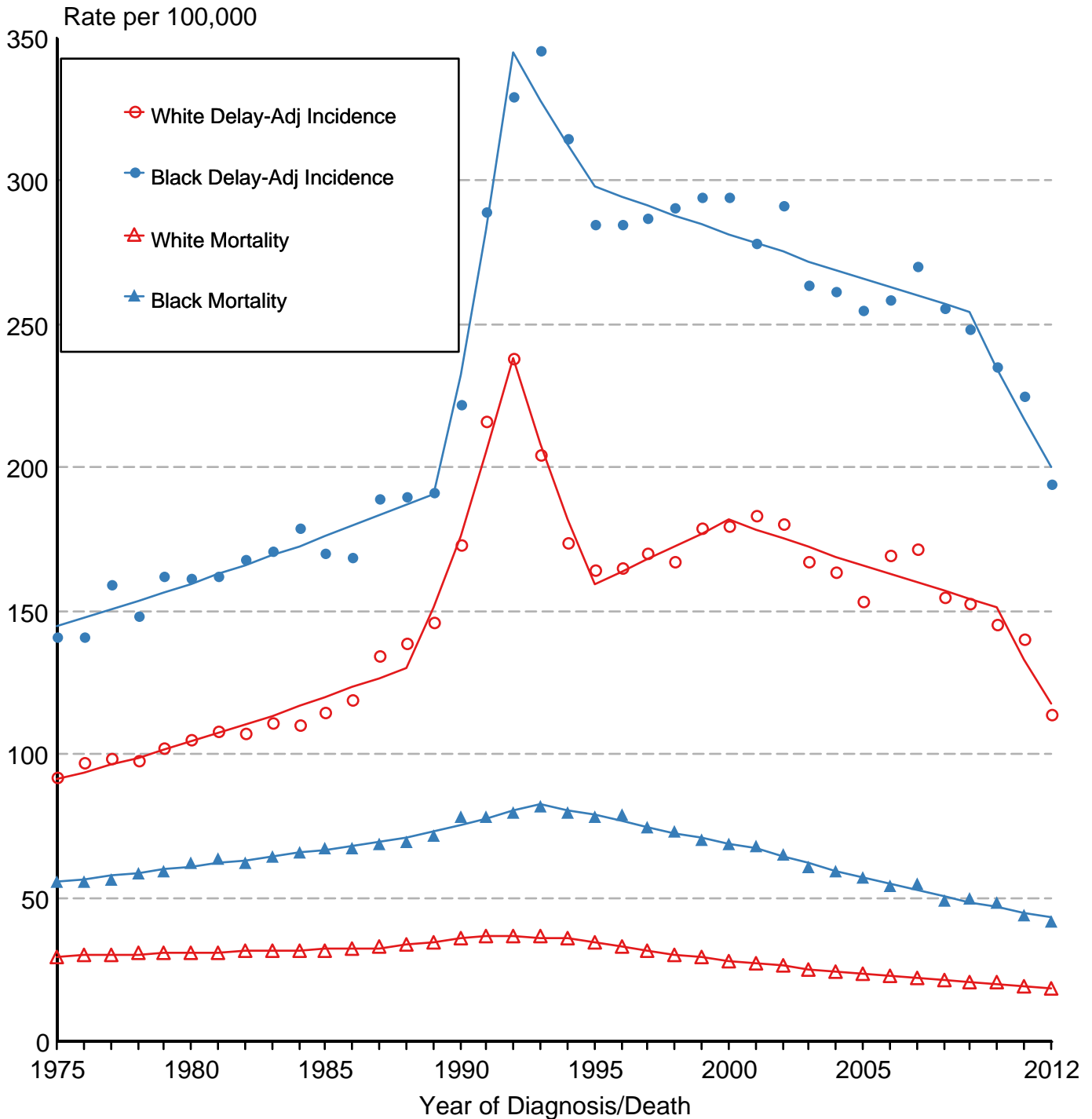
[b] API = Asian/Pacific Islander.

[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 New Hampshire and Oklahoma.
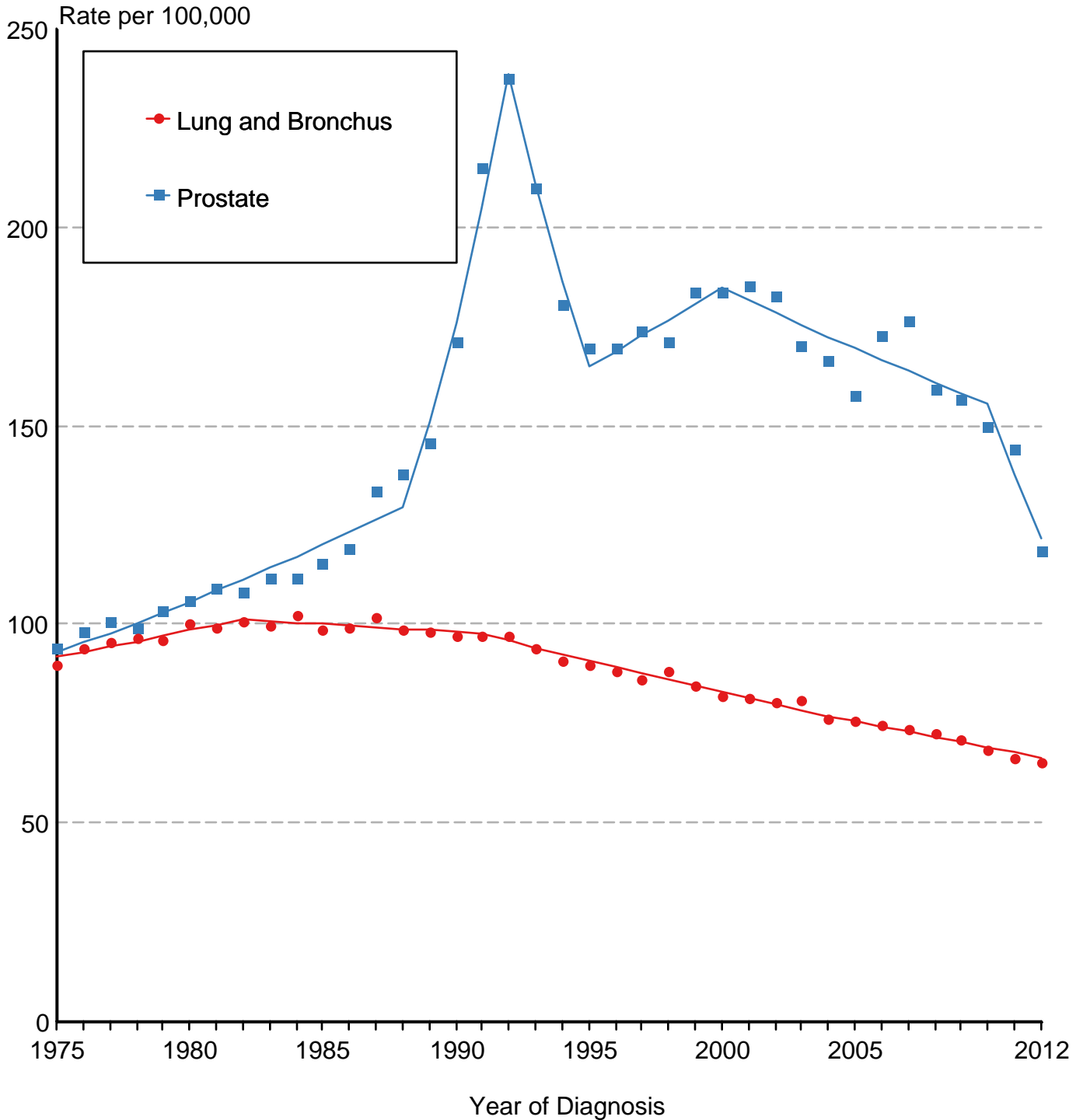
Figure 23.4

Cancer of the Prostate
Delay-Adjusted SEER Incidence & US Mortality
1975-2012

Rate per 100,000

Legend:
- White Delay-Adj Incidence
- Black Delay-Adj Incidence
- White Mortality
- Black Mortality

Year of Diagnosis/Death

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 4.2.0, April 2015,
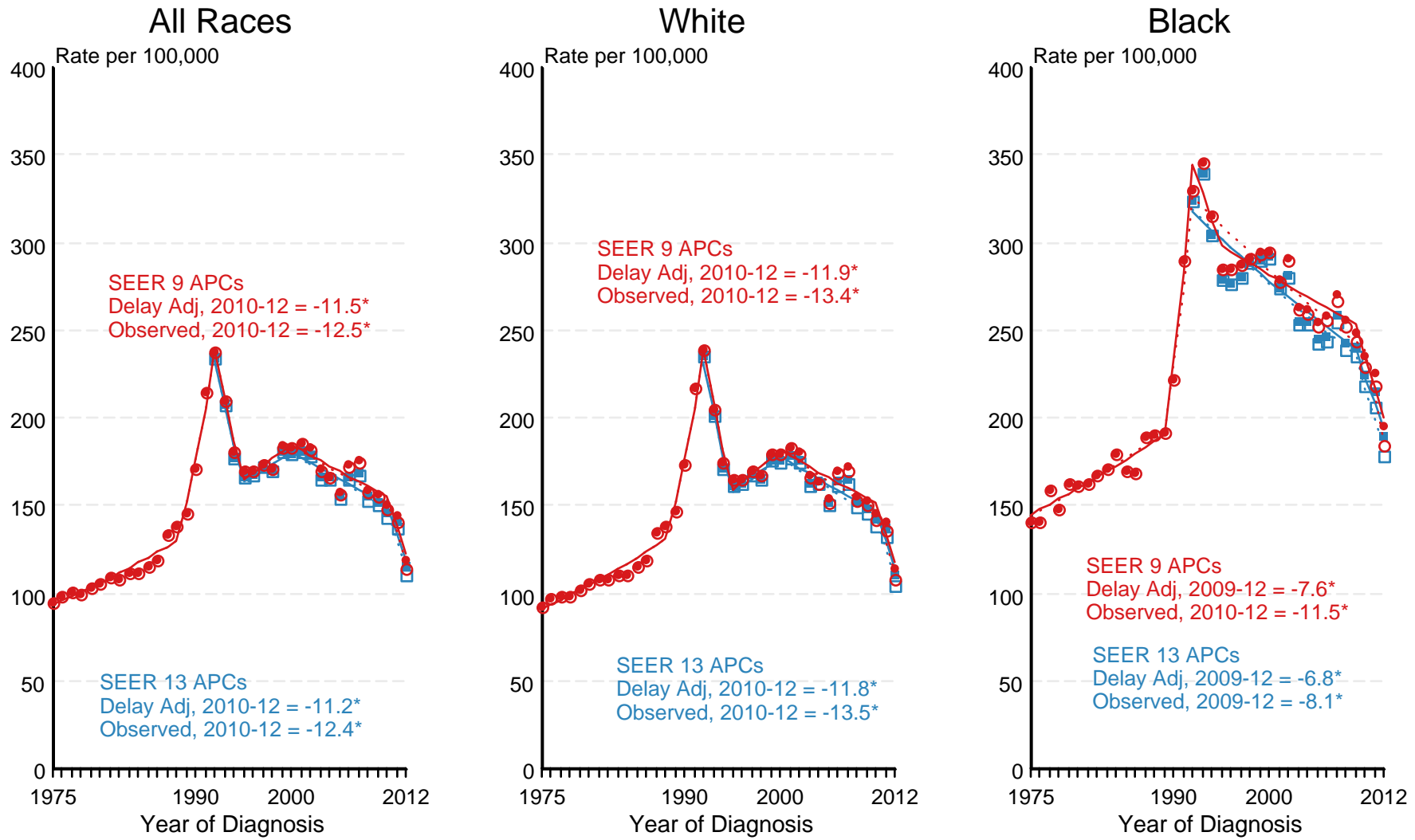National Cancer Institute.

Figure 23.5

Delay-Adjusted Incidence Rates for Cancer of the Prostate and Cancer of the Lung and Bronchus
All Races, Males
1975-2012

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2010-12 = -11.5*
Observed, 2010-12 = -12.5*

SEER 13 APCs
Delay Adj, 2010-12 = -11.2*
Observed, 2010-12 = -12.4*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2010-12 = -11.9*
Observed, 2010-12 = -13.4*

SEER 13 APCs
Delay Adj, 2010-12 = -11.8*
Observed, 2010-12 = -13.5*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 2009-12 = -7.6*
Observed, 2010-12 = -11.5*

SEER 13 APCs
Delay Adj, 2009-12 = -6.8*
Observed, 2009-12 = -8.1*

Year of Diagnosis

- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
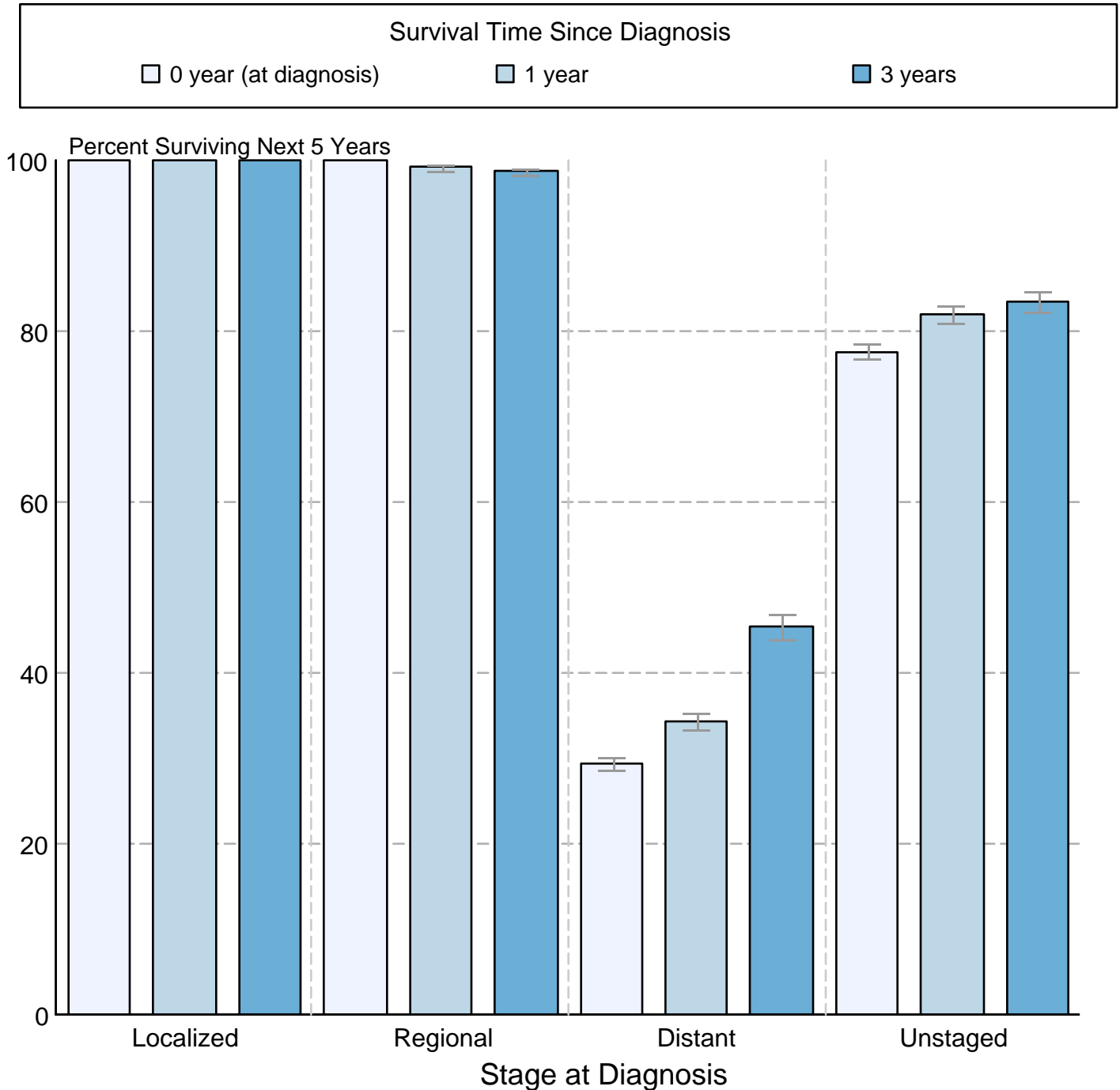- SEER 13 Observed Incidence

Source: SEER 9 areas and SEER 13 areas.
[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.2.0, April 2015, 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
Probabilty of surviving the next 5 years given the cohort
has already survived 0, 1, or 3 years
1998-2011 by stage at diagnosis

Survival Time Since Diagnosis
☐ 0 year (at diagnosis)   ☐ 1 year   ■ 3 years

Percent Surviving Next 5 Years

Stage at Diagnosis

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000 and later. The remaining 13 SEER Areas contribute cases for the entire time period.
Percent surviving is not shown if based on less than 25 cases.
Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.