Table 23.1
Cancer of the Prostate (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
All Ages by Race/Ethnicity

| | Joinpoint Trend 1 | | Joinpoint Trend 2 | | Joinpoint Trend 3 | | Joinpoint Trend 4 | | Joinpoint Trend 5 | | AAPC[d] | |
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1998-2007	2003-2007
SEER 9 Delay-Adjusted Incidence[a], 1975-2007												
All Races	1975-1988	2.6*	1988-1992	16.5*	1992-1995	-11.5*	1995-2000	2.1	2000-2007	-1.7*	-0.9	-1.7*
White	1975-1988	2.8*	1988-1992	16.3*	1992-1995	-12.6*	1995-2000	2.6	2000-2007	-1.8*	-0.9	-1.8*
Black	1975-1989	2.1*	1989-1992	19.2*	1992-2007	-1.7*					-1.7*	-1.7*
SEER 13 Delay-Adjusted Incidence[b], 1992-2007												
All Races	1992-1995	-11.1*	1995-2000	2.0	2000-2007	-2.1*					-1.2	-2.1*
White	1992-1995	-12.0*	1995-2000	2.4	2000-2007	-2.1*					-1.1	-2.1*
Black	1992-2007	-2.0*									-2.0*	-2.0*
SEER 9 Observed Incidence[a], 1975-2007												
All Races	1975-1988	2.6*	1988-1992	16.5*	1992-1995	-11.6*	1995-2000	2.1	2000-2007	-2.0*	-1.1*	-2.0*
White	1975-1988	2.8*	1988-1992	16.3*	1992-1995	-12.6*	1995-2000	2.6	2000-2007	-2.3*	-1.3*	-2.3*
Black	1975-1989	2.0*	1989-1992	21.6*	1992-1996	-4.9*	1996-2000	0.6	2000-2007	-2.9*	-2.1*	-2.9*
SEER 13 Observed Incidence[b], 1992-2007												
All Races	1992-1995	-11.1*	1995-2000	2.0	2000-2007	-2.3*					-1.4*	-2.3*
White	1992-1995	-12.0*	1995-2000	2.4	2000-2007	-2.6*					-1.5*	-2.6*
White NH[e][f]	1992-1994	-17.1*	1994-2001	0.9	2001-2007	-2.5*					-1.4*	-2.5*
Black	1992-1996	-4.9*	1996-2000	1.1	2000-2007	-3.7*					-2.6*	-3.7*
Black NH[e][f]	1992-2007	-2.2*									-2.2*	-2.2*
API[e]	1992-1997	-6.3*	1997-2000	5.2	2000-2007	-2.2*					-0.6	-2.2*
AI/AN[e][g]	1992-2007	-2.3*									-2.3*	-2.3*
Hispanic[f]	1992-1995	-4.8	1995-2002	0.2	2002-2007	-4.3*					-2.3*	-4.3*
U.S. Cancer Mortality[c], 1975-2007												
All Races	1975-1987	0.9*	1987-1991	3.0*	1991-1994	-0.5	1994-2005	-4.1*	2005-2007	-2.6*	-3.7*	-3.3*
White	1975-1987	0.8*	1987-1991	3.1*	1991-1994	-0.9	1994-2005	-4.1*	2005-2007	-2.4*	-3.7*	-3.3*
Black	1975-1988	1.9*	1988-1993	3.3*	1993-2001	-2.7*	2001-2004	-6.1*	2004-2007	-2.6*	-3.8*	-3.5*
U.S. Cancer Mortality[c], 1992-2007												
All Races	1992-1994	-0.9	1994-2007	-4.0*							-4.0*	-4.0*
White	1992-1994	-1.0	1994-2005	-4.1*	2005-2007	-2.4*					-3.7*	-3.3*
White NH[e][f]	1992-1994	-0.9	1994-2004	-4.1*	2004-2007	-2.8*					-3.7*	-3.1*
Black	1992-1996	-0.6	1996-2007	-4.0*							-4.0*	-4.0*
Black NH[e][f]	1992-1996	-0.6	1996-2007	-3.8*							-3.8*	-3.8*
API[e]	1992-2007	-4.1*									-4.1*	-4.1*
AI/AN[e][g]	1992-2007	-2.9*									-2.9*	-2.9*
Hispanic[f]	1992-1994	4.1	1994-2007	-3.6*							-3.6*	-3.6*

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (http://srab.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 CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[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,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Ages <65 by Race/Ethnicity

| | Joinpoint Trend 1 | | Joinpoint Trend 2 | | Joinpoint Trend 3 | | Joinpoint Trend 4 | | Joinpoint Trend 5 | | AAPC[d] | |
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1998-2007	2003-2007
SEER 9 Delay-Adjusted Incidence[a], 1975-2007												
All Races	1975-1988	3.1*	1988-1992	23.4*	1992-2002	3.3*	2002-2005	-3.9	2005-2007	6.2	1.4	1.0
White	1975-1988	3.5*	1988-1992	23.0*	1992-2002	3.2*	2002-2005	-4.0	2005-2007	6.0	1.3	0.9
Black	1975-1989	2.0*	1989-1993	25.9*	1993-2002	2.9*	2002-2005	-4.1	2005-2007	4.1	0.8	-0.1
SEER 13 Delay-Adjusted Incidence[b], 1992-2007												
All Races	1992-2002	3.3*	2002-2005	-4.4	2005-2007	5.1					1.0	0.2
White	1992-2001	3.3*	2001-2007	-1.0							0.4	-1.0
Black	1992-2000	4.1*	2000-2007	-1.1							0.0	-1.1
SEER 9 Observed Incidence[a], 1975-2007												
All Races	1975-1988	3.1*	1988-1992	23.4*	1992-2002	3.3*	2002-2005	-4.1	2005-2007	5.4	1.2	0.5
White	1975-1988	3.5*	1988-1992	23.1*	1992-2002	3.1*	2002-2005	-4.4	2005-2007	4.7	0.9	0.0
Black	1975-1989	2.0*	1989-1993	25.9*	1993-2002	2.7*	2002-2005	-4.6	2005-2007	2.5	0.2	-1.1
SEER 13 Observed Incidence[b], 1992-2007												
All Races	1992-2002	3.3*	2002-2005	-4.6	2005-2007	4.3					0.8	-0.2
White	1992-2001	3.2*	2001-2007	-1.5							0.0	-1.5
White NH[ef]	1992-2001	3.2*	2001-2007	-1.3							0.2	-1.3
Black	1992-2000	4.0*	2000-2007	-1.7*							-0.5	-1.7*
Black NH[ef]	1992-2000	4.0*	2000-2007	-1.5							-0.3	-1.5*
API[e]	1992-2001	6.3*	2001-2007	0.1							2.1*	0.1
AI/AN[eg]	1992-2007	-0.6									-0.6	-0.6
Hispanic[f]	1992-2002	4.4*	2002-2007	-3.3*							0.0	-3.3*
U.S. Cancer Mortality[c], 1975-2007												
All Races	1975-1987	0.5*	1987-1990	3.1	1990-1996	-3.2*	1996-2000	-5.6*	2000-2007	-1.4*	-2.4*	-1.4*
White	1975-1987	0.7*	1987-1990	3.0	1990-1996	-3.6*	1996-2000	-6.1*	2000-2007	-1.1*	-2.3*	-1.1*
Black	1975-1992	0.5*	1992-2007	-2.9*							-2.9*	-2.9*
U.S. Cancer Mortality[c], 1992-2007												
All Races	1992-1996	-3.3*	1996-2000	-5.6*	2000-2007	-1.4*					-2.4*	-1.4*
White	1992-1995	-2.7	1995-2000	-5.9*	2000-2007	-1.2*					-2.2*	-1.2*
White NH[ef]	1992-2001	-4.7*	2001-2007	-0.7							-2.1*	-0.7
Black	1992-2007	-3.0*									-3.0*	-3.0*
Black NH[ef]	1992-2007	-3.0*									-3.0*	-3.0*
API[e]	1992-2007	-0.9									-0.9	-0.9
AI/AN[eg]	1992-2007	-4.2*									-4.2*	-4.2*
Hispanic[f]	1992-2000	-5.4*	2000-2007	0.3							-1.0	0.3

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (http://srab.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 CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Ages 65+ by Race/Ethnicity

	Joinpoint Trend 1		Joinpoint Trend 2		Joinpoint Trend 3		Joinpoint Trend 4		Joinpoint Trend 5		AAPC[d]	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1998-2007	2003-2007
SEER 9 Delay-Adjusted Incidence[a], 1975-2007												
All Races	1975-1988	2.5*	1988-1992	15.1*	1992-1995	-14.8*	1995-2000	1.1	2000-2007	-2.4*	-1.7*	-2.4*
White	1975-1988	2.7*	1988-1992	14.9*	1992-1995	-15.8*	1995-2000	1.7	2000-2007	-2.5*	-1.6*	-2.5*
Black	1975-1989	2.0*	1989-1992	20.1*	1992-1995	-8.9	1995-2007	-2.4*			-2.4*	-2.4*
SEER 13 Delay-Adjusted Incidence[b], 1992-2007												
All Races	1992-1995	-14.1*	1995-2000	0.9	2000-2007	-2.7*					-1.9*	-2.7*
White	1992-1995	-15.1*	1995-2000	1.4	2000-2007	-2.7*					-1.8*	-2.7*
Black	1992-2007	-3.6*									-3.6*	-3.6*
SEER 9 Observed Incidence[a], 1975-2007												
All Races	1975-1988	2.5*	1988-1992	15.1*	1992-1995	-14.8*	1995-2000	1.1	2000-2007	-2.7*	-1.9*	-2.7*
White	1975-1988	2.7*	1988-1992	14.9*	1992-1995	-15.8*	1995-2000	1.6	2000-2007	-3.0*	-2.0*	-3.0*
Black	1975-1989	2.0*	1989-1992	19.9*	1992-1995	-8.6	1995-2007	-2.9*			-2.9*	-2.9*
SEER 13 Observed Incidence[b], 1992-2007												
All Races	1992-1995	-14.2*	1995-2000	0.9	2000-2007	-2.9*					-2.1*	-2.9*
White	1992-1995	-15.1*	1995-2000	1.4	2000-2007	-3.1*					-2.2*	-3.1*
White NH[e][f]	1992-1995	-15.6*	1995-2000	1.5	2000-2007	-3.0*					-2.0*	-3.0*
Black	1992-2007	-3.9*									-3.9*	-3.9*
Black NH[e][f]	1992-2007	-3.9*									-3.9*	-3.9*
API[e]	1992-1997	-7.8*	1997-2000	4.0	2000-2007	-2.9*					-1.4	-2.9*
AI/AN[e][g]	1992-2007	-2.9*									-2.9*	-2.9*
Hispanic[f]	1992-1995	-7.4*	1995-2000	0.2	2000-2007	-4.0*					-3.1*	-4.0*
U.S. Cancer Mortality[c], 1975-2007												
All Races	1975-1987	0.9*	1987-1991	3.2*	1991-1994	-0.4	1994-2007	-4.0*			-4.0*	-4.0*
White	1975-1987	0.8*	1987-1991	3.2*	1991-1994	-0.8	1994-2007	-4.0*			-4.0*	-4.0*
Black	1975-1988	2.1*	1988-1993	3.5*	1993-2001	-2.6*	2001-2004	-6.4*	2004-2007	-2.6*	-3.9*	-3.6*
U.S. Cancer Mortality[c], 1992-2007												
All Races	1992-1994	-0.6	1994-2007	-4.0*							-4.0*	-4.0*
White	1992-1994	-1.0	1994-2007	-4.0*							-4.0*	-4.0*
White NH[e][f]	1992-1994	-1.1	1994-2007	-4.0*							-4.0*	-4.0*
Black	1992-1996	-0.3	1996-2007	-4.1*							-4.1*	-4.1*
Black NH[e][f]	1992-1996	-0.2	1996-2007	-3.8*							-3.8*	-3.8*
API[e]	1992-2007	-4.2*									-4.2*	-4.2*
AI/AN[e][g]	1992-2007	-2.8*									-2.8*	-2.8*
Hispanic[f]	1992-1995	1.7	1995-2007	-3.8*							-3.8*	-3.8*

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (http://srab.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 CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[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.

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                                        Table 23.4
                              Cancer of the Prostate (Invasive)


                     Delay-adjusted SEER Incidenceᵃ 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          94.02  13.66   649.53       92.20  13.01   639.63     140.97   26.76    930.45
   1976          97.93  14.58   674.08       97.33  13.91   673.91     140.79   29.38    910.86
   1977         100.45  15.03   690.95       98.53  14.33   680.54     159.16   29.24  1,057.18
   1978          99.41  15.23   681.22       97.73  14.81   670.92     148.11   26.83    986.42
   1979         103.45  14.95   715.26      102.33  14.65   708.40     162.31   26.35  1,102.12
   1980         106.01  15.49   731.69      104.95  14.65   729.14     161.14   33.79  1,041.42
   1981         108.91  16.82   745.49      107.91  15.95   743.54     161.86   34.55  1,041.86
   1982         108.22  16.32   743.42      107.34  15.78   740.25     167.65   31.32  1,110.00
   1983         111.63  17.13   764.80      110.85  16.58   762.50     170.89   34.06  1,116.74
   1984         111.72  17.26   764.63      110.15  16.22   759.39     178.85   37.10  1,158.75
   1985         115.52  17.86   790.64      114.68  17.58   785.90     170.17   31.43  1,129.25
   1986         119.06  18.52   814.07      119.04  18.26   815.65     168.75   34.11  1,099.44
   1987         133.71  21.49   909.42      134.58  21.06   919.30     189.41   36.09  1,249.19
   1988         137.64  22.20   935.59      138.83  22.34   944.03     190.28   34.75  1,265.35
   1989         145.37  24.11   983.59      146.23  23.99   991.19     192.34   37.33  1,263.84
   1990         171.05  28.80 1,154.30      172.95  28.90 1,168.66     222.52   44.50  1,453.09
   1991         214.93  38.87 1,431.96      216.71  39.28 1,443.20     289.32   57.43  1,892.19
   1992         237.46  49.41 1,537.30      238.66  49.48 1,546.33     328.84   77.73  2,064.57
   1993         209.57  50.49 1,309.21      204.82  49.10 1,281.22     345.86   94.42  2,083.91
   1994         180.35  48.64 1,090.78      174.57  46.93 1,056.85     314.87   95.49  1,831.27
   1995         169.16  49.98   992.98      164.55  48.18   968.98     282.96   98.71  1,556.57
   1996         169.38  53.50   970.41      165.22  52.09   947.27     284.49  100.83  1,554.04
   1997         173.64  55.23   992.12      170.51  54.19   974.58     285.26   97.68  1,581.89
   1998         170.77  54.92   971.55      167.73  53.25   959.05     288.03  103.13  1,566.17
   1999         183.66  60.85 1,032.57      180.03  59.16 1,015.51     292.66  112.92  1,535.08
   2000         183.06  61.84 1,020.97      180.38  60.19 1,011.14     294.69  115.43  1,533.85
   2001         184.70  64.43 1,016.08      183.75  62.72 1,020.31     276.83  115.93  1,389.07
   2002         181.93  65.27   988.35      180.69  63.91   987.90     292.54  119.22  1,490.53
   2003         169.20  61.59   913.03      167.27  59.65   911.18     263.02  118.09  1,264.86
   2004         164.87  61.27   880.97      163.06  59.98   875.61     258.06  107.32  1,300.00
   2005         155.19  56.89   834.68      152.20  54.67   826.36     251.05  107.09  1,246.19
   2006         168.40  62.85   898.00      165.98  60.97   891.89     253.00  108.35  1,252.82
   2007         170.88  64.57   905.69      168.19  62.25   900.49     259.31  115.16  1,255.76
```

ᵃ   Additional information on the model used to delay-adjust SEER Incidence rates can be found at (http://srab.cancer.gov/delay/).
     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	94.02	13.66	649.53	92.20	13.01	639.63	140.97	26.76	930.45
1976	97.93	14.58	674.08	97.33	13.91	673.91	140.79	29.38	910.86
1977	100.45	15.03	690.95	98.53	14.33	680.54	159.16	29.24	1,057.18
1978	99.41	15.23	681.22	97.73	14.81	670.92	148.11	26.83	986.42
1979	103.45	14.95	715.26	102.33	14.65	708.40	162.31	26.35	1,102.12
1980	106.01	15.49	731.69	104.95	14.65	729.14	161.14	33.79	1,041.42
1981	108.91	16.82	745.49	107.91	15.95	743.54	161.86	34.55	1,041.86
1982	108.21	16.32	743.39	107.33	15.78	740.19	167.63	31.32	1,109.83
1983	111.62	17.13	764.74	110.83	16.57	762.37	170.84	34.05	1,116.37
1984	111.70	17.26	764.53	110.12	16.22	759.18	178.77	37.08	1,158.14
1985	115.50	17.85	790.49	114.64	17.57	785.59	170.05	31.41	1,128.41
1986	119.03	18.51	813.86	118.98	18.26	815.22	168.59	34.08	1,098.34
1987	133.67	21.48	909.12	134.49	21.05	918.67	189.18	36.06	1,247.58
1988	137.58	22.19	935.20	138.72	22.33	943.22	189.99	34.71	1,263.30
1989	145.30	24.10	983.08	146.08	23.97	990.12	191.98	37.28	1,261.29
1990	170.94	28.79	1,153.56	172.72	28.87	1,167.01	221.97	44.41	1,449.35
1991	214.77	38.85	1,430.84	216.39	39.24	1,440.95	288.54	57.32	1,886.84
1992	237.25	49.38	1,535.83	238.23	49.41	1,543.38	327.78	77.54	2,057.53
1993	209.35	50.45	1,307.68	204.38	49.02	1,278.26	344.53	94.13	2,075.39
1994	180.12	48.60	1,089.24	174.11	46.83	1,053.88	313.43	95.14	1,822.33
1995	168.89	49.92	991.27	164.03	48.06	965.69	281.42	98.26	1,547.50
1996	169.06	53.42	968.38	164.66	51.94	943.75	282.82	100.34	1,544.21
1997	173.24	55.13	989.61	169.62	53.96	969.13	282.80	96.96	1,567.39
1998	170.31	54.81	968.75	166.75	53.00	953.03	285.28	102.29	1,550.19
1999	182.99	60.68	1,028.44	178.53	58.75	1,006.47	288.82	111.63	1,513.61
2000	182.24	61.62	1,015.97	178.55	59.68	1,000.23	290.09	113.86	1,508.29
2001	183.68	64.14	1,009.98	181.49	62.07	1,006.94	271.67	114.01	1,361.47
2002	180.69	64.91	981.06	177.99	63.10	972.15	286.01	116.87	1,455.19
2003	167.77	61.16	904.71	164.21	58.71	893.48	256.04	115.28	1,229.02
2004	163.15	60.74	871.03	159.42	58.81	854.87	249.78	104.22	1,255.93
2005	153.17	56.27	822.99	148.02	53.35	802.43	241.39	103.35	1,195.57
2006	165.66	61.98	882.32	160.39	59.14	860.26	241.30	103.80	1,191.75
2007	165.81	62.91	877.16	159.25	59.26	850.39	241.18	107.69	1,163.92
1975-2007	152.25	40.41	925.35	149.14	38.54	913.64	235.26	75.51	1,339.51

[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	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	30.31	1.98	226.14	27.70	1.66	207.70	68.66	5.41	505.81
2001	29.17	1.94	217.36	26.67	1.64	199.71	66.50	5.40	488.88
2002	28.18	1.93	209.65	25.90	1.61	193.85	62.97	5.36	461.19
2003	26.57	1.91	196.97	24.49	1.60	182.69	58.00	5.44	421.30
2004	25.51	1.83	189.16	23.47	1.56	174.96	56.19	4.96	410.34
2005	24.70	1.81	182.87	22.74	1.52	169.44	54.15	5.03	393.68
2006	23.56	1.86	173.59	21.76	1.59	161.17	51.07	4.79	370.97
2007	23.50	1.77	173.77	21.62	1.50	160.70	51.98	4.75	378.44
1975-2007	32.38	2.42	239.46	29.97	2.09	222.69	66.49	6.26	482.86

[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

	Incidence[a]			US Death[b]		
	All Races, Males	White Males	Black Males	All Races, Males	White Males	Black Males
Age-Adjusted Rates, 2003-2007						
Age at Diagnosis/Death:						
All ages	156.9	150.4	234.6	24.7	22.8	54.2
Under 65	57.3	54.6	101.2	1.8	1.6	5.0
65 and over	845.5	812.5	1,156.7	182.9	169.5	394.3
All ages (IARC world std)[c]	106.0	101.8	164.8	10.7	9.7	24.7
Age-Specific Rates, 2003-2007						
Age at Diagnosis/Death:						
<1	-	-	-	-	-	-
1-4	-	-	-	-	-	-
5-9	-	-	-	-	-	-
10-14	-	-	-	-	-	-
15-19	-	-	-	-	-	-
20-24	-	-	-	-	-	-
25-29	-	-	-	-	-	-
30-34	-	-	-	-	-	-
35-39	0.8	0.7	1.9	-	-	-
40-44	9.5	8.0	24.3	0.2	0.2	0.5
45-49	41.6	37.7	88.9	0.9	0.7	2.3
50-54	136.6	129.4	250.1	3.3	2.7	9.0
55-59	322.7	308.4	570.1	9.0	7.5	24.7
60-64	567.4	546.5	941.1	22.6	19.4	61.3
65-69	852.7	825.1	1,282.4	47.1	40.9	121.9
70-74	945.7	916.0	1,294.7	92.1	81.4	232.9
75-79	914.5	878.3	1,188.7	168.6	153.4	401.4
80-84	760.4	712.2	978.2	299.3	279.4	643.4
85+	601.8	573.1	746.0	560.1	535.6	1,027.6

[a]   SEER 17 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]	69.3	73.6	67.7	70.2	75.4	68.4	61.4	62.1	61.1
1978-1980[b]	71.7	75.5	70.3	72.9	77.1	71.4	62.8	65.2	61.6
1981-1983[b]	73.5	76.3	72.5	74.6	77.9	73.5	63.7	65.4	62.9
1984-1986[b]	76.3	77.6	75.9	77.6	79.3	77.1	66.3	67.5	65.8
1987-1989[b]	83.7	83.3	83.9	85.3	84.8	85.5	72.1	72.7	71.9
1990-1992[b]	93.7	93.1	93.9	94.8	94.1	95.0	85.2	86.6	84.5
1993-1995[b]	95.9	95.9	95.9	96.6	96.5	96.6	92.2	93.1	91.7
1996-1998[b]	98.1	98.5	97.9	98.6	98.9	98.4	95.2	96.7	93.8
1999-2006[b]	99.6[e]	99.3[e]	99.8[e]	99.9[e]	99.5[e]	99.8[e]	97.3[e]	98.6[e]	96.0[e]
5-Year Period Survival (Percent)[cd]									
Year of Diagnosis:									
1999-2006	99.4	99.1	99.5	99.7	99.2	99.7	96.5	98.4	94.2
Stage Distribution (%) 1999-2006[c]									
All Stages									
Number of cases	350,279	134,964	215,315	278,949	105,328	173,621	43,891	21,462	22,429
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	80	78	82	80	77	82	79	78	80
Regional	12	18	8	12	19	9	11	16	7
Distant	4	3	5	4	3	5	6	5	7
Unstaged	3	2	5	3	1	4	3	2	5
5-Year Relative Survival (Percent), 1999-2006[c]									
Age at Diagnosis:									
Ages <45	95.3	–	–	95.1	–	–	95.5	–	–
Ages 45-54	97.8	–	–	98.0	–	–	97.1	–	–
Ages 55-64	99.2	–	–	99.4	–	–	98.1	–	–
Ages 65-74	100.0	–	–	100.0	–	–	97.4	–	–
Ages 75+	97.7	–	–	98.4	–	–	86.5	–	–
Ages <65	98.8	–	–	99.0	–	–	97.7	–	–
Ages 65+	99.5	–	–	99.7	–	–	94.1	–	–
Stage:									
All Stages	99.1	98.8	99.5	99.6	99.0	99.7	95.9	97.7	94.1
Localized	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Regional	100.0	100.0	100.0	100.0	99.8	100.0	100.0	100.0	99.8
Distant	30.2	31.2	29.8	29.7	30.9	29.3	28.9	30.0	28.2
Unstaged	75.0	84.6	72.3	75.3	84.4	73.0	65.2	80.4	58.5

[a] Based on End Results data from a series of hospital registries and one population-based registry.
[b] Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).
     Based on follow-up of patients into 2007.
[c] Based on the SEER 17 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 and
     New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2006.
     The remaining 13 SEER Areas contribute cases for the entire period 1999-2006. Based on follow-up of patients into 2007.
[d] Period survival provides a more up-to-date estimate of survival by piecing together the most recent conditional survival estimates
     from several cohorts. It is computed here using three year calendar blocks (2004-2006: 0-1 year survival),
     (2003-2005: 1-2 year survival), (2002-2004: 2-3 year survival), (2001-2003: 3-4 year survival), (2000-2002: 4-5 years survival).
     The difference between 1975-1977 and 1999-2006 is statistically significant (p<.05).
[e] The standard error is between 5 and 10 percentage points.
[f] The standard error is greater than 10 percentage points.
[g]
–   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	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1-year	92.1	94.1	96.0	97.7	98.9	99.6	99.4	99.3	99.0	99.4	99.5	99.7	99.7	99.9	100.0	99.9	99.9	100.0	99.9	99.9
2-year	85.5	88.2	91.7	94.9	97.5	98.5	98.3	98.2	97.9	98.3	99.1	99.2	99.7	99.7	100.0	99.9	99.8	99.9	99.8	
3-year	79.4	82.5	87.5	92.6	96.1	98.0	97.2	97.1	97.4	97.8	98.8	98.8	99.7	99.4	100.0	99.9	99.7	99.9		
4-year	74.5	77.5	84.3	90.7	94.8	97.4	96.8	96.0	96.8	97.4	98.5	98.7	99.6	99.2	100.0	99.9	99.7			
5-year	70.3	73.3	81.5	89.4	93.4	96.7	95.8	95.4	96.4	97.1	98.2	98.7	99.6	99.2	100.0	99.9				
6-year	67.0	70.0	79.0	88.0	92.2	95.6	95.2	94.8	96.1	96.9	98.2	98.7	99.6	99.1	100.0					
7-year	63.8	66.8	76.7	86.0	91.6	94.7	94.2	94.0	95.9	96.5	98.2	98.7	99.6	99.1						
8-year	60.8	64.0	74.9	84.6	90.6	93.5	93.7	93.6	95.8	96.2	98.2	98.7	99.4							
9-year	58.3	61.9	73.1	83.5	89.8	92.8	92.6	93.0	95.6	95.9	98.1	98.3								
10-year	56.0	60.2	71.5	82.0	89.0	92.0	91.9	92.6	95.1	95.9	98.1									
11-year	53.7	58.3	70.1	80.6	87.8	91.6	91.5	91.6	94.5	95.9										
12-year	51.7	56.5	68.4	80.0	87.3	90.9	90.3	91.0	94.0											
13-year	50.1	54.9	67.0	79.6	86.5	90.2	89.9	90.6												
14-year	48.6	53.5	65.8	78.7	86.4	89.8	89.6													
15-year	47.7	52.6	64.5	77.9	85.8	89.2														
16-year	46.1	50.9	63.2	76.5	84.9															
17-year	44.6	50.1	62.9	75.7																
18-year	43.4	49.0	62.1																	
19-year	42.9	48.0																		
20-year	42.1	46.8																		

[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, 2005-2007 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	16.22	2.79	Asian/	0	0.00	0.00	0.00	11.58	2.27
	10	0.00	0.00	0.01	16.43	2.83	Pacific	10	0.00	0.00	0.00	11.69	2.29
	20	0.00	0.01	0.31	16.52	2.85	Islander	20	0.00	0.00	0.09	11.73	2.30
	30	0.01	0.32	2.49	16.75	2.89		30	0.00	0.09	0.96	11.81	2.31
	40	0.31	2.52	8.30	17.01	2.94		40	0.08	0.97	4.18	11.89	2.33
	50	2.30	8.30	14.40	17.34	3.04		50	0.90	4.17	8.72	12.02	2.36
	60	6.62	13.36	16.11	16.60	3.23		60	3.44	8.23	10.86	11.71	2.43
	70	8.50	11.97	–	12.60	3.46		70	5.48	8.48	–	9.45	2.51
	80	5.65	–	–	6.67	3.63		80	4.08	–	–	5.41	2.58
White	0	0.00	0.00	0.00	15.67	2.62	American	0	0.00	0.00	0.00	7.51	2.29
	10	0.00	0.00	0.01	15.85	2.65	Indian/	10	0.00	0.00	0.01	7.63	2.33
	20	0.00	0.01	0.28	15.93	2.66	Alaska	20	0.00	0.01	0.11	7.71	2.36
	30	0.01	0.29	2.37	16.14	2.70	Native[a]	30	0.01	0.11	0.94	7.91	2.42
	40	0.28	2.40	8.00	16.38	2.74		40	0.11	0.96	3.46	8.19	2.52
	50	2.19	8.00	13.93	16.68	2.83		50	0.90	3.54	6.48	8.55	2.69
	60	6.38	12.89	15.47	15.92	3.00		60	2.93	6.19	8.04	8.48	2.95
	70	8.17	11.40	–	11.97	3.21		70	4.02	6.30	–	6.84	3.30
	80	5.25	–	–	6.18	3.39		80	3.44	–	–	4.25	3.67
Black	0	0.00	0.00	0.00	18.52	4.45	Hispanic[b]	0	0.00	0.00	0.00	14.27	3.08
	10	0.00	0.00	0.03	19.01	4.58		10	0.00	0.00	0.00	14.43	3.12
	20	0.00	0.03	0.63	19.17	4.61		20	0.00	0.00	0.17	14.52	3.14
	30	0.03	0.65	4.14	19.64	4.72		30	0.00	0.17	1.59	14.70	3.18
	40	0.64	4.24	12.06	20.23	4.86		40	0.17	1.61	6.14	14.89	3.22
	50	3.85	12.19	18.47	20.92	5.15		50	1.49	6.15	11.71	15.18	3.30
	60	9.99	17.51	20.00	20.45	5.73		60	5.04	11.05	13.99	14.80	3.46
	70	11.05	14.70	–	15.36	6.48		70	7.24	10.78	–	11.75	3.63
	80	7.07	–	–	8.34	7.08		80	5.22	–	–	6.64	3.77

Devcan Version 6.5.0, June 2010, National Cancer Institute (http://srab.cancer.gov/devcan/).
Source: Incidence data are from the SEER 17 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 and New Jersey). 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 and North Dakota.
– 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 17 Areas[b] Rate 2003-2007 Rate per 100,000 persons	SEER 13 Areas[b] Trend 1998-2007[c] AAPC (%)	SEER 9 Areas[b] Trend 1998-2007[d] AAPC (%)
	Males	Males	Males
RACE/ETHNICITY			
All Races	156.9	-1.4*	-1.1*
White	150.4	-1.5*	-1.3*
White Hispanic[e]	124.5	-2.8*	-
White Non-Hispanic[e]	154.4	-1.4*	-
Black	234.6	-2.6*	-2.1*
Asian/Pacific Islander	90.0	-0.6	-
Amer Ind/Alaska Nat[f]	77.7	-2.3*	-
Hispanic[e]	125.8	-2.3*	-

U.S. Mortality[g]	Rate 2003-2007 Rate per 100,000 persons	Trend 1998-2007[h] AAPC (%)
	Males	Males
RACE/ETHNICITY		
All Races	24.7	-4.0*
White	22.8	-3.7*
White Hispanic[e]	19.2	-3.2*
White Non-Hispanic[e]	22.9	-3.7*
Black	54.2	-4.0*
Asian/Pacific Islander	10.6	-4.1*
Amer Ind/Alaska Nat		
Total U.S.	16.3	-3.9*
CHSDA Counties	20.0	-2.9*
Non-CHSDA Counties	11.6	-5.0*
Hispanic[e]	18.8	-3.6*

    The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.4.3, April 2010, 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 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

[c]   The 1998-2007 AAPC estimates are based on a Joinpoint analysis with up to 2 Joinpoints over diagnosis years 1992-2007.

[d]   The 1998-2007 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1975-2007.

[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 2003-2007 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, New Hampshire, and North Dakota. The 1998-2007 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma 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 1998-2007 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2007.

*   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], 2003-2007

	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+
Atlanta & Rural Georgia	170.90	68.03	881.97	143.96	54.25	764.08	255.91	107.30	1283.16
Atlanta	169.65	67.39	876.51	142.25	53.64	754.77	258.08	107.22	1300.88
Rural Georgia	192.35	80.55	965.11	170.97	65.49	900.08	231.52	107.79	1086.74
California	147.05	52.17	802.86	143.51	51.67	778.29	210.14	97.08	991.68
Greater Bay Area	153.95	56.25	829.32	160.89	58.84	866.24	211.40	95.84	1010.24
San Francisco-Oakland	153.05	56.91	817.56	156.35	57.79	837.63	211.73	95.83	1012.82
San Jose-Monterey	156.08	54.95	855.13	169.27	60.66	920.07	212.97	95.54	1024.64
Los Angeles	143.37	48.85	796.73	132.84	46.12	732.25	205.00	96.56	954.56
Greater California	146.26	52.17	796.65	142.52	51.60	771.03	216.16	98.69	1028.11
Connecticut	163.48	63.73	852.98	158.78	60.77	836.21	225.79	103.36	1072.03
Detroit	191.92	73.91	1007.70	165.08	60.25	889.67	271.66	117.27	1338.87
Hawaii	131.62	39.78	766.49	153.01	52.15	850.25	159.51	96.45	595.39
Iowa	141.78	51.11	768.53	137.00	49.22	743.80	201.85	92.82	955.50
Kentucky	141.66	51.43	765.39	135.64	46.62	751.01	211.22	92.87	1029.34
Louisiana	174.65	63.43	943.44	155.88	54.78	854.69	239.78	90.74	1270.02
New Jersey	172.30	66.03	906.89	159.60	60.95	841.44	248.79	104.93	1243.22
New Mexico	144.39	52.47	779.74	149.71	55.03	804.16	92.68	54.76	354.79
Seattle-Puget Sound	169.28	59.30	929.53	171.90	60.22	943.90	240.85	101.15	1206.50
Utah	178.80	64.35	969.91	181.37	65.79	980.28	129.78	57.71	–
9 SEER Areas[b]	163.10	60.64	871.34	158.22	57.86	851.96	245.53	106.63	1205.66
11 SEER Areas[b]	158.36	57.74	853.90	153.67	55.63	831.32	233.84	104.08	1130.81
13 SEER Areas[b]	158.32	57.75	853.46	153.73	55.67	831.58	233.79	104.12	1130.10
17 SEER Areas[b]	156.94	57.33	845.46	150.39	54.61	812.46	234.60	101.21	1156.69

[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 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.
–   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], 2003-2007									
Atlanta & Rural Georgia	28.99	1.96	215.78	21.43	1.15	161.62	56.77	4.28	419.60
Atlanta	28.28	1.91	210.53	21.20	1.10	160.14	55.25	4.22	407.94
Rural Georgia	38.50	-	283.40	24.97	-	180.58	70.63	-	524.00
California	23.58	1.75	174.49	23.79	1.65	176.83	52.27	5.68	374.34
Greater Bay Area	21.53	1.49	160.06	22.46	1.44	167.74	49.29	5.08	354.82
San Francisco-Oakland	21.74	1.59	161.05	22.01	1.43	164.23	49.40	5.51	352.73
San Jose-Monterey	21.12	1.29	158.22	23.39	1.46	174.95	50.24	-	379.86
Los Angeles	23.14	1.90	169.98	22.36	1.63	165.65	52.93	6.20	375.91
Greater California	24.48	1.77	181.44	24.71	1.73	183.58	53.82	5.50	387.87
Connecticut	25.51	1.69	190.16	24.64	1.40	185.29	43.89	5.91	306.43
Detroit	24.67	2.11	180.60	19.97	1.47	147.81	46.74	4.76	336.90
Hawaii	17.09	1.25	126.59	24.70	2.21	180.14	-	-	-
Iowa	25.88	1.98	191.10	25.67	1.97	189.49	60.52	-	448.03
Kentucky	25.82	1.72	192.40	24.30	1.60	181.20	56.46	4.22	417.55
Louisiana	28.77	2.32	211.60	21.81	1.37	163.05	54.85	5.37	396.84
New Jersey	23.87	1.73	176.88	21.88	1.54	162.50	51.79	4.07	381.69
New Mexico	25.38	1.69	189.15	25.69	1.73	191.34	35.06	-	277.39
Seattle-Puget Sound	24.99	1.65	186.37	25.27	1.54	189.34	41.78	6.28	287.18
Utah	25.70	1.45	193.29	25.84	1.45	194.46	-	-	-
9 SEER Areas[b]	24.44	1.75	181.29	23.86	1.53	178.21	48.20	4.81	348.15
11 SEER Areas[b]	23.98	1.75	177.57	23.53	1.55	175.47	49.46	5.09	356.11
13 SEER Areas[b]	23.99	1.75	177.75	23.52	1.54	175.42	49.77	5.09	358.58
17 SEER Areas[b]	24.46	1.78	181.21	23.57	1.58	175.60	51.71	4.99	374.63
Total U.S.	24.72	1.83	182.93	22.78	1.55	169.49	54.18	4.98	394.27

[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 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.
-       Statistic not shown. Rate based on less than 16 cases for the time interval.
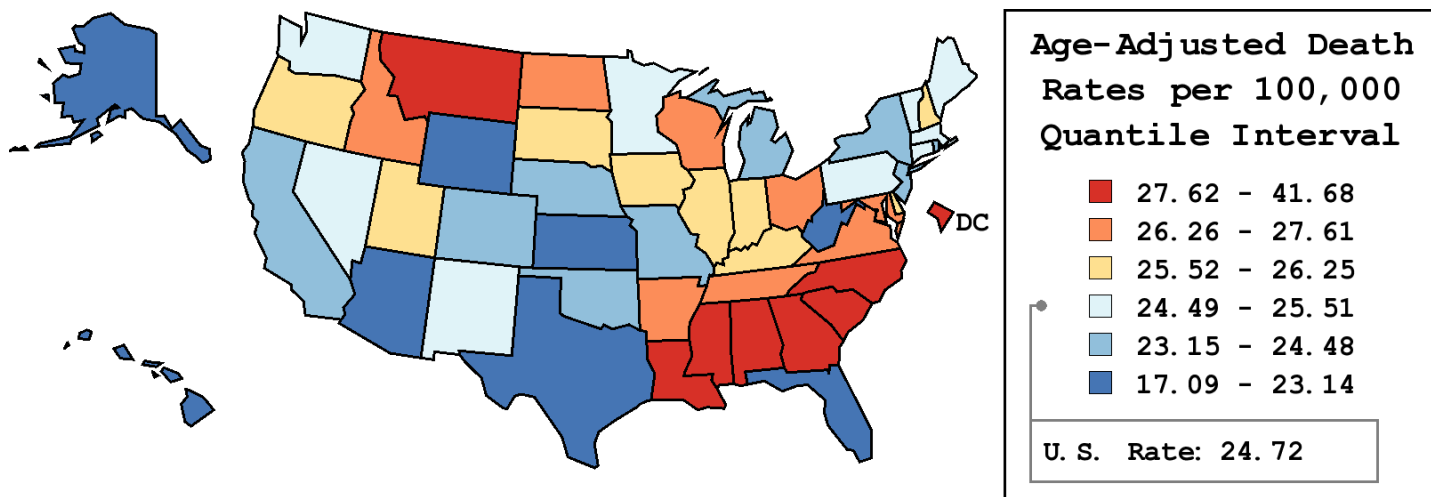
Table 23.14
Cancer of the Prostate (Invasive)

Age-Adjusted Cancer Death[a] Rates By State, All Races, 2003-2007

Males

State	Rate	SE	Rank	PD
TOTAL U.S.	24.72	0.07		
High Five States				
D.C.	41.68[b]	2.03	(01)	68.59[c]
Mississippi	32.14[b]	0.79	(02)	30.02[c]
Alabama	30.11[b]	0.59	(03)	21.81[c]
South Carolina	28.89[b]	0.61	(04)	16.85[c]
Georgia	28.88[b]	0.49	(05)	16.83[c]
Low Five States				
Wyoming	21.82	1.47	(47)	-11.72[c]
Arizona	20.99[b]	0.40	(48)	-15.09[c]
Alaska	20.60	1.84	(49)	-16.68[c]
Florida	20.52[b]	0.20	(50)	-16.99[c]
Hawaii	17.09[b]	0.74	(51)	-30.86[c]

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	30.11[b]	0.59	(03)	21.81[c]	Montana	27.85	1.13	(07)	12.65[c]
Alaska	20.60	1.84	(49)	-16.68[c]	Nebraska	24.48	0.80	(35)	-0.99
Arizona	20.99[b]	0.40	(48)	-15.09[c]	Nevada	24.53	0.77	(34)	-0.78
Arkansas	27.06	0.67	(14)	9.46	New Hampshire	26.25	1.04	(17)	6.17
California	23.58[b]	0.19	(42)	-4.63	New Jersey	23.87	0.37	(39)	-3.46
Colorado	24.46	0.59	(36)	-1.07	New Mexico	25.38	0.81	(29)	2.68
Connecticut	25.51	0.58	(26)	3.19	New York	23.46[b]	0.25	(43)	-5.10
Delaware	26.07	1.24	(19)	5.47	North Carolina	27.74[b]	0.43	(08)	12.19[c]
D.C.	41.68[b]	2.03	(01)	68.59[c]	North Dakota	26.40	1.28	(15)	6.77
Florida	20.52[b]	0.20	(50)	-16.99[c]	Ohio	26.27[b]	0.34	(16)	6.28
Georgia	28.88[b]	0.49	(05)	16.83[c]	Oklahoma	23.65	0.57	(40)	-4.36
Hawaii	17.09[b]	0.74	(51)	-30.86[c]	Oregon	25.99	0.57	(21)	5.13
Idaho	27.47	1.00	(11)	11.13[c]	Pennsylvania	25.03	0.29	(32)	1.23
Illinois	26.22[b]	0.34	(18)	6.07	Rhode Island	24.16	1.01	(37)	-2.29
Indiana	25.55	0.47	(25)	3.36	South Carolina	28.89[b]	0.61	(04)	16.85[c]
Iowa	25.88	0.60	(22)	4.70	South Dakota	26.04	1.16	(20)	5.33
Kansas	22.57	0.62	(45)	-8.69	Tennessee	27.61[b]	0.51	(09)	11.70[c]
Kentucky	25.82	0.59	(23)	4.45	Texas	23.14[b]	0.26	(44)	-6.41
Louisiana	28.77[b]	0.61	(06)	16.39[c]	Utah	25.70	0.85	(24)	3.96
Maine	25.44	0.93	(27)	2.88	Vermont	25.25	1.41	(31)	2.13
Maryland	27.49[b]	0.54	(10)	11.18[c]	Virginia	27.30[b]	0.47	(12)	10.41[c]
Massachusetts	24.63	0.43	(33)	-0.39	Washington	25.40	0.46	(28)	2.75
Michigan	23.89	0.35	(38)	-3.35	West Virginia	22.29	0.74	(46)	-9.86
Minnesota	25.32	0.50	(30)	2.42	Wisconsin	27.08[b]	0.48	(13)	9.56
Mississippi	32.14[b]	0.79	(02)	30.02[c]	Wyoming	21.82	1.47	(47)	-11.72[c]
Missouri	23.62	0.45	(41)	-4.46					

Age-Adjusted Death
Rates per 100,000
Quantile Interval

- 27.62 - 41.68
- 26.26 - 27.61
- 25.52 - 26.25
- 24.49 - 25.51
- 23.15 - 24.48
- 17.09 - 23.14

U.S. Rate: 24.72

[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.
SE   Standard error of the rate.
PD   Percent difference between state rate and total U.S. rate.

Table 23.15
Cancer of the Prostate (Invasive)

Estimated United States Cancer Prevalence Counts[a] on January 1, 2007
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 <17[e]	0 to <32[e]	>=32[g]	Complete[h]
Race										
All Races[b]	938,613	715,069	438,415	143,491	27,982	8,819	2,182,244	2,273,570	2,542	2,276,112
White[b]	772,875	604,521	378,613	130,377	25,520	8,083	1,837,937	1,921,072	2,819	1,923,891
Black[b]	123,952	87,191	48,959	10,618	2,158	632	266,714	273,584	229	273,813
Asian/Pacific Islander[c]	17,867	11,359	5,396	+	+	+	35,457	+	+	+
Hispanic[d]	48,964	32,063	16,287	+	+	+	99,902	+	+	+

Estimated prevalence percent[a] on January 1, 2007, of the SEER 11 population diagnosed in the previous 17 years
By Age at Prevalence and Race/Ethnicity

Age at Prevalence	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	Age-Adjusted[f] All Ages
				Age Specific (Crude)							
Race											
All Races[c]	1.2331%	0.0002%	0.0002%	–	0.0014%	0.0699%	0.9490%	4.6574%	10.9096%	12.3145%	1.5176%
White[c]	1.2897%	–	0.0002%	–	0.0011%	0.0631%	0.9102%	4.6011%	10.9849%	12.1470%	1.5067%
Black[c]	1.3375%	–	–	–	0.0031%	0.1660%	1.8572%	8.0866%	16.2151%	15.7412%	2.3194%
Asian/Pacific Islander[c]	0.6262%	–	–	–	–	0.0166%	0.3086%	1.9409%	5.6545%	8.5061%	0.8001%
Hispanic[d]	0.4163%	–	–	–	0.0006%	0.0355%	0.5303%	3.1651%	8.3342%	9.5099%	1.1150%

[a]   US 2007 cancer prevalence counts are based on 2007 cancer prevalence proportions from the SEER registries and 1/1/2007 US population estimates based on the average of 2006 and 2007 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: 32 years for 1975-2007 SEER 9 data; 17 years for 1990-2007 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 32 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 <32 and >=32. (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]
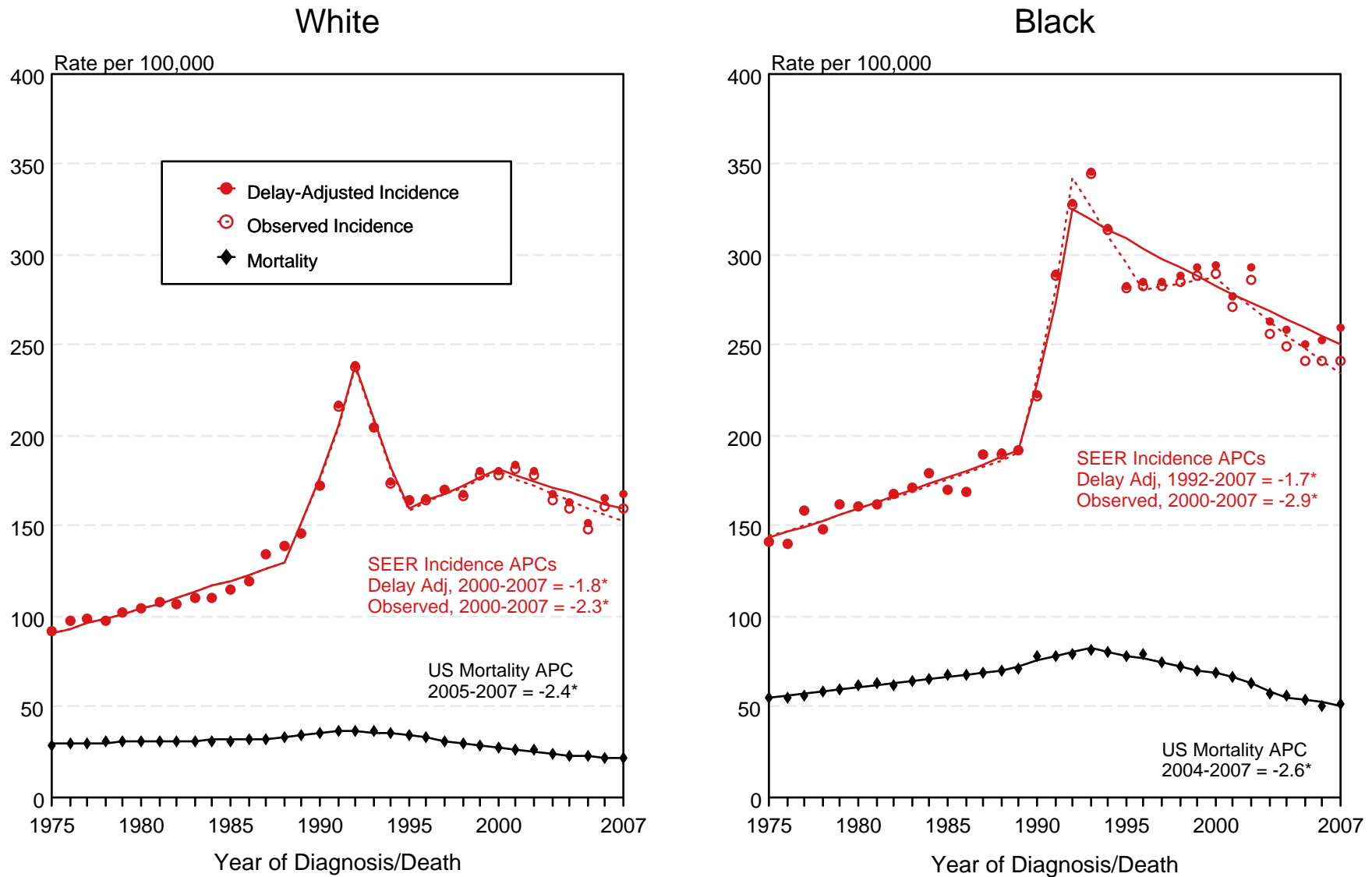Cancer of the Prostate, by Race

Figure 23.1

White

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 2000-2007 = -1.8*
Observed, 2000-2007 = -2.3*

US Mortality APC
2005-2007 = -2.4*

Year of Diagnosis/Death

Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1992-2007 = -1.7*
Observed, 2000-2007 = -2.9*

US Mortality APC
2004-2007 = -2.6*

Year of Diagnosis/Death
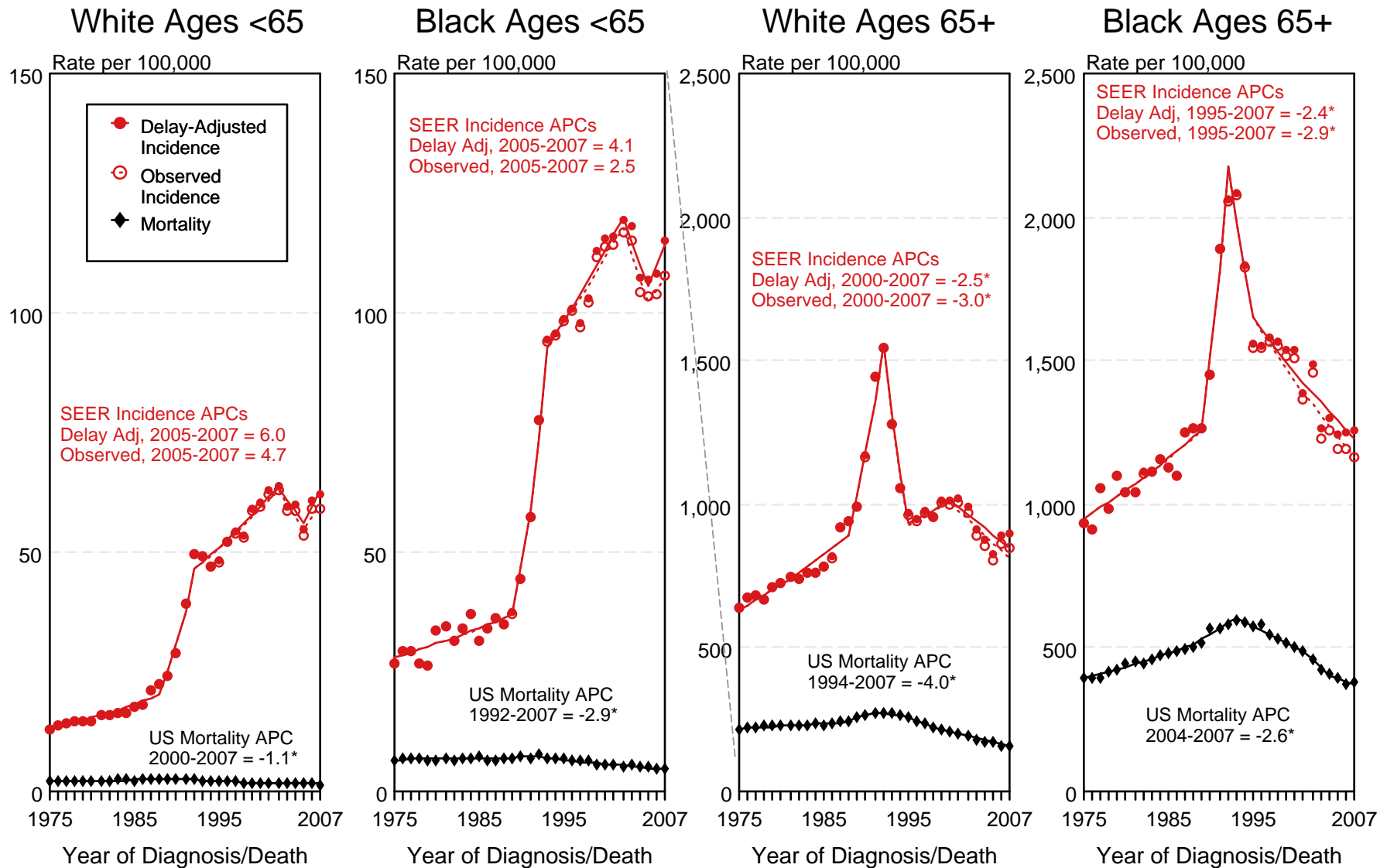
a   Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National 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 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-Adjusted Incidence
- ○ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 2005-2007 = 6.0
Observed, 2005-2007 = 4.7

US Mortality APC
2000-2007 = -1.1*

Year of Diagnosis/Death

Black Ages <65

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2005-2007 = 4.1
Observed, 2005-2007 = 2.5

US Mortality APC
1992-2007 = -2.9*

Year of Diagnosis/Death

White Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2000-2007 = -2.5*
Observed, 2000-2007 = -3.0*

US Mortality APC
1994-2007 = -4.0*

Year of Diagnosis/Death

Black Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1995-2007 = -2.4*
Observed, 1995-2007 = -2.9*

US Mortality APC
2004-2007 = -2.6*

Year of Diagnosis/Death

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 3.4.3, April 2010, 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 1975-2007
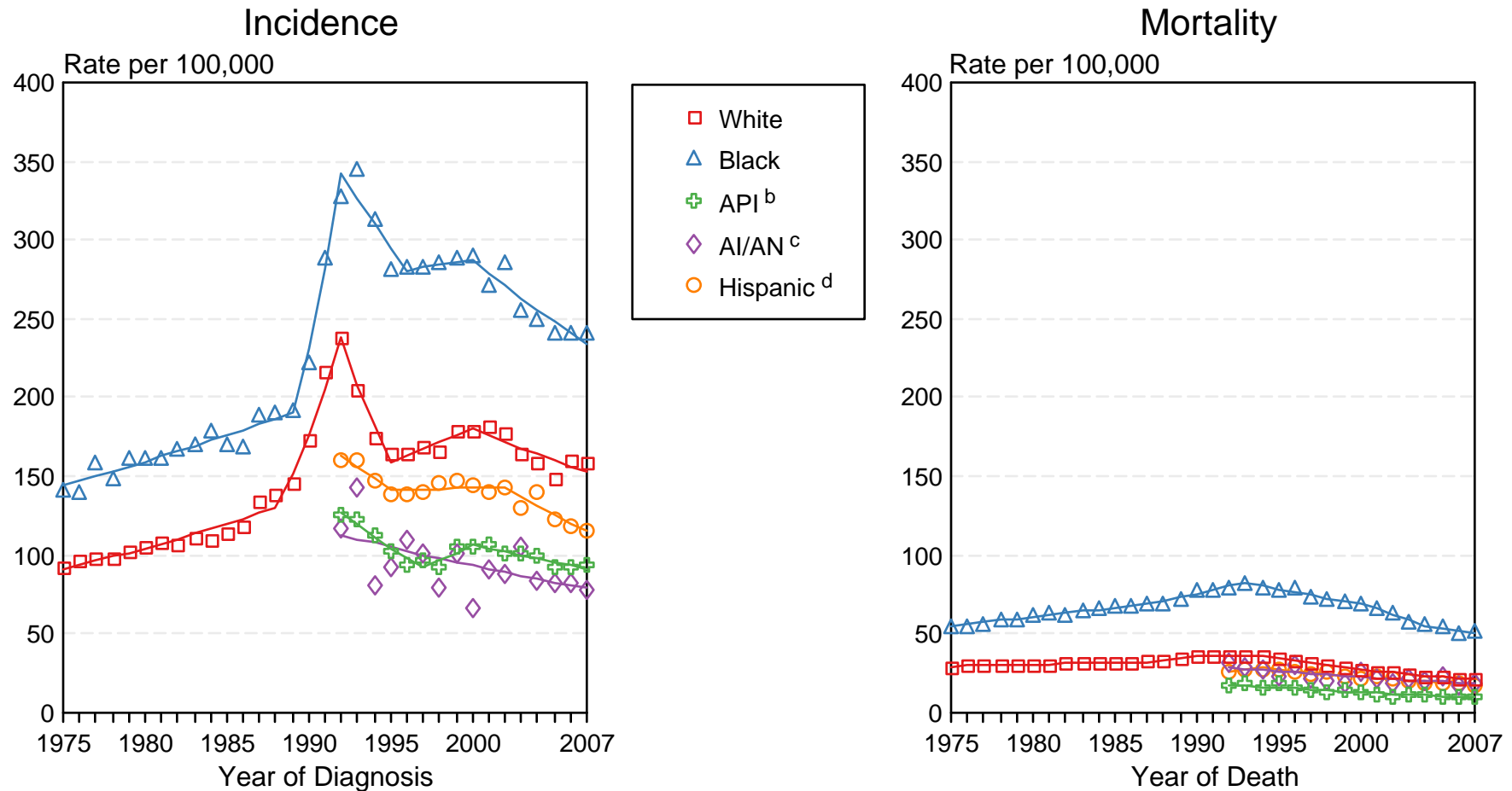## and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2007

Figure 23.3

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 3.4.3, April 2010, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2007 period allow a maximum of 4 joinpoints. Analyses for other ethnic groups during the period 1992-2007 allow a maximum of 2 joinpoints.
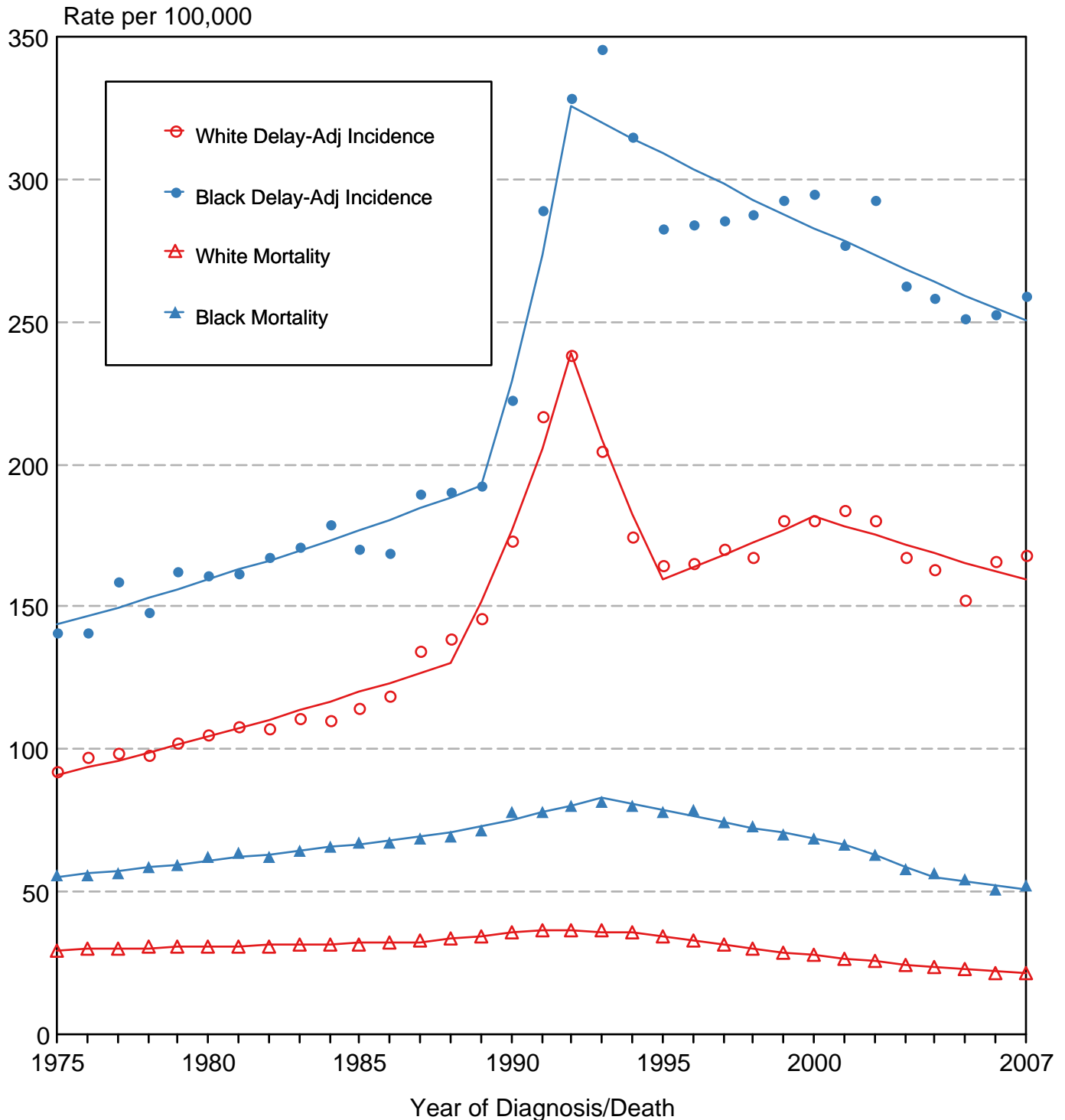[b] API = Asian/Pacific Islander.
[c] AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
[d] Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska 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, Oklahoma, and Vermont.
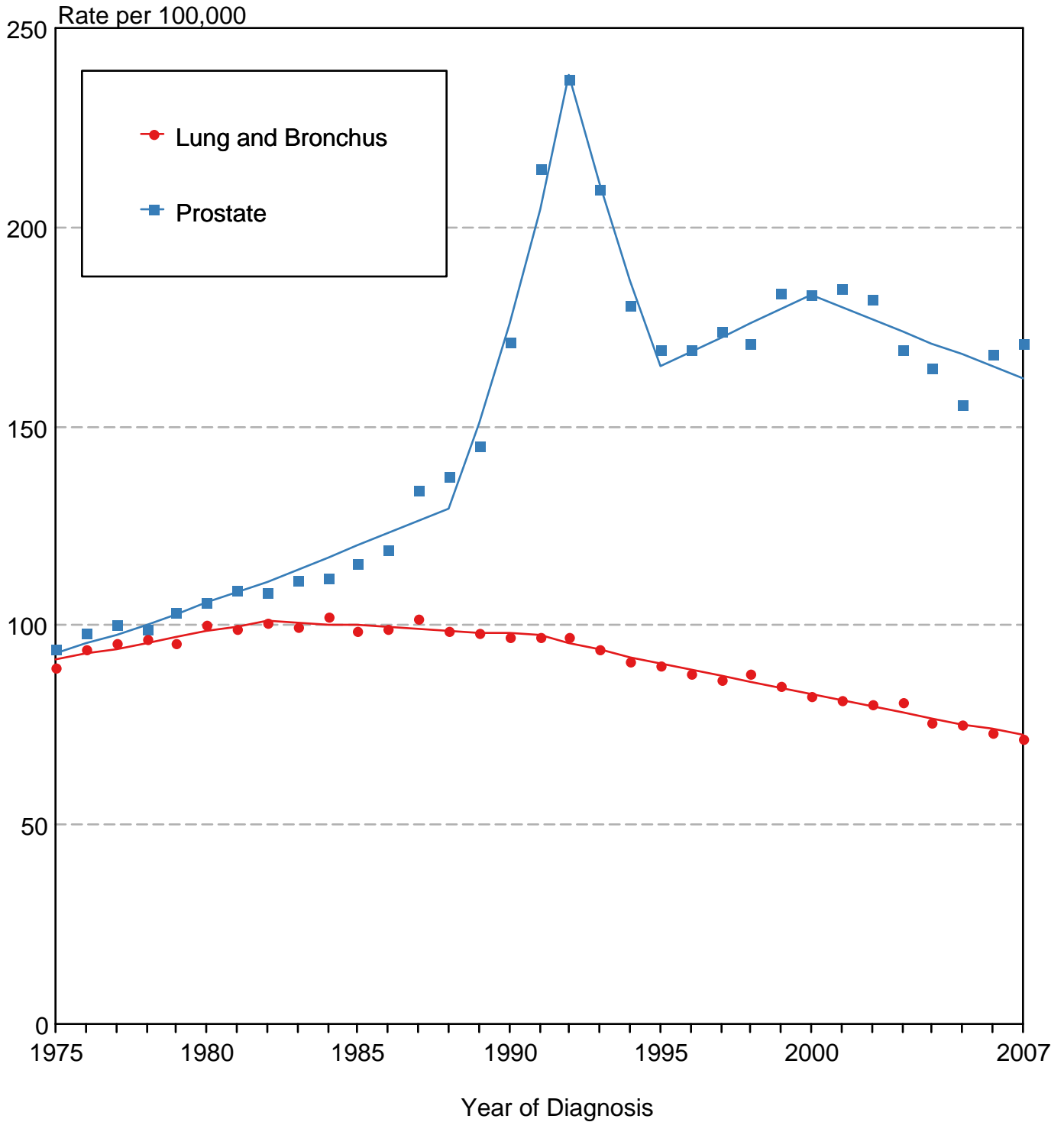
Figure 23.4

Cancer of the Prostate
Delay-Adjusted SEER Incidence & US Mortality
1975-2007

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 3.4.3, April 2010, 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
1975-2007

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 3.4.3, April 2010, 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

Figure 23.6

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2000-2007 = -1.7*
Observed, 2000-2007 = -2.0*

SEER 13 APCs
Delay Adj, 2000-2007 = -2.1*
Observed, 2000-2007 = -2.3*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2000-2007 = -1.8*
Observed, 2000-2007 = -2.3*

SEER 13 APCs
Delay Adj, 2000-2007 = -2.1*
Observed, 2000-2007 = -2.6*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1992-2007 = -1.7*
Observed, 2000-2007 = -2.9*

SEER 13 APCs
Delay Adj, 1992-2007 = -2.0*
Observed, 2000-2007 = -3.7*

Year of Diagnosis

● SEER 9 Delay-Adjusted Incidence   ◉ SEER 9 Observed Incidence   ■ SEER 13 Delay-Adjusted Incidence   ▫ SEER 13 Observed Incidence
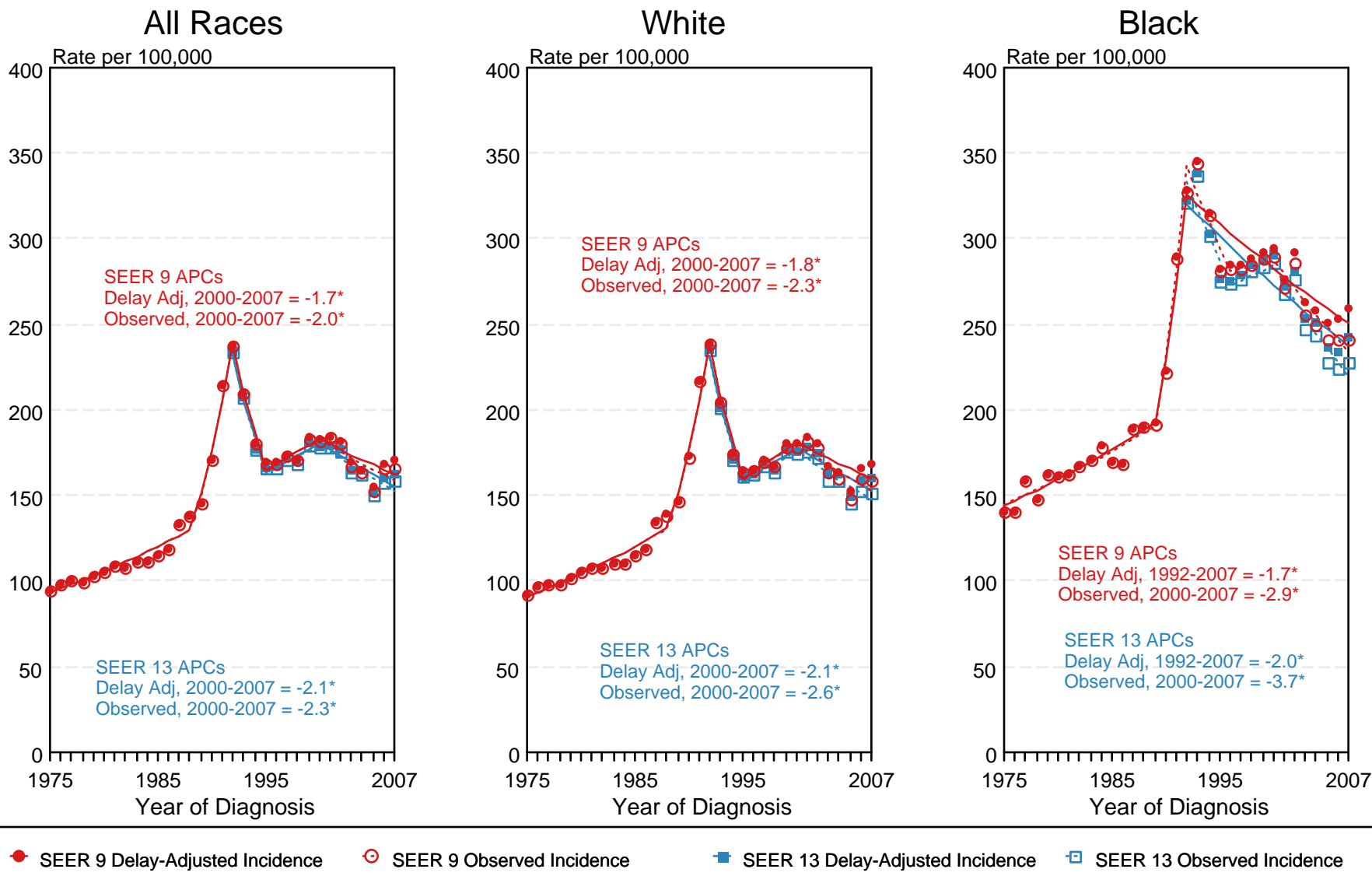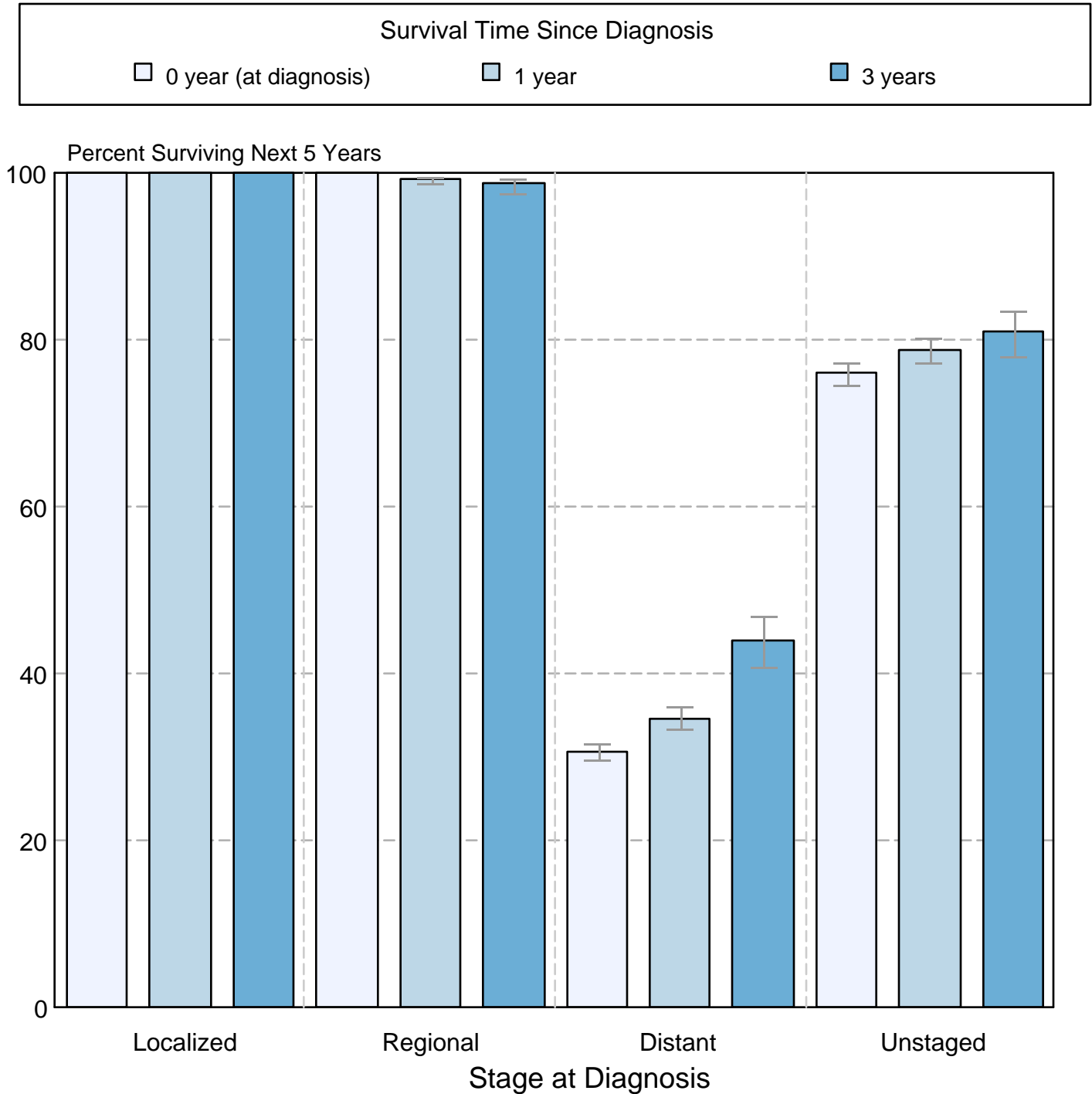
[a] Source: SEER 9 areas and SEER 13 areas.
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute.
    The APC is the Annual Percent 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
1998-2006 by stage at diagnosis

Survival Time Since Diagnosis

☐ 0 year (at diagnosis)   ☐ 1 year   ■ 3 years

Percent Surviving Next 5 Years

Stage at Diagnosis

Localized   Regional   Distant   Unstaged

Source: SEER 17 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, and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2006. The remaining 13 SEER Areas contribute cases for the entire period 1998-2006.
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.