Table XXIII-1
PROSTATE CANCER (Invasive)

TRENDS IN SEER INCIDENCE[a] AND U.S. MORTALITY[b] USING THE JOINPOINT REGRESSION PROGRAM, 1975-2003
WITH UP TO THREE JOINPOINTS BY RACE AND AGE

		Joinpoint Segment 1		Joinpoint Segment 2		Joinpoint Segment 3		Joinpoint Segment 4	
		Year	APC	Year	APC	Year	APC	Year	APC
SEER Cancer Incidence[a]									
All Races	All Ages	1975-1988	2.6*	1988-1992	16.3*	1992-1995	-10.7*	1995-2003	0.7
All Races	Under 65	1975-1985	2.4*	1985-1989	7.5	1989-1992	26.4*	1992-2003	2.7*
All Races	65 and Over	1975-1988	2.5*	1988-1992	14.9*	1992-1995	-14.0*	1995-2003	-0.3
White	All Ages	1975-1988	2.8*	1988-1992	16.1*	1992-1995	-11.6*	1995-2003	0.9
White	Under 65	1975-1988	3.5*	1988-1992	23.6*	1992-2003	2.6*		
White	65 and Over	1975-1988	2.7*	1988-1992	14.7*	1992-1995	-14.9*	1995-2003	0.0
Black	All Ages	1975-1989	2.0*	1989-1992	21.8*	1992-1995	-5.5	1995-2003	-1.1*
Black	Under 65	1975-1989	2.0*	1989-1993	26.1*	1993-2003	2.2*		
Black	65 and Over	1975-1989	2.0*	1989-1992	20.0*	1992-1995	-9.2	1995-2003	-2.7*
SEER Delay-Adjusted Incidence[a]									
All Races	All Ages	1975-1988	2.6*	1988-1992	16.4*	1992-1995	-10.8*	1995-2003	1.1*
All Races	Under 65	1975-1985	2.4*	1985-1989	7.6	1989-1992	26.2*	1992-2003	3.0*
All Races	65 and Over	1975-1988	2.5*	1988-1992	15.0*	1992-1995	-14.1*	1995-2003	0.1
White	All Ages	1975-1988	2.8*	1988-1992	16.2*	1992-1995	-11.7*	1995-2003	1.5*
White	Under 65	1975-1985	2.6*	1985-1989	8.8*	1989-1992	24.9*	1992-2003	3.0*
White	65 and Over	1975-1988	2.7*	1988-1992	14.9*	1992-1995	-15.0*	1995-2003	0.7
Black	All Ages	1975-1989	2.0*	1989-1992	22.1*	1992-1995	-5.5	1995-2003	-0.3
Black	Under 65	1975-1989	2.0*	1989-1993	26.0*	1993-2003	2.9*		
Black	65 and Over	1975-1989	2.0*	1989-1992	20.3*	1992-1995	-9.3	1995-2003	-1.9*
U.S. Cancer Mortality[b]									
All Races	All Ages	1975-1987	0.9*	1987-1991	3.1*	1991-1994	-0.6	1994-2003	-4.0*
All Races	Under 65	1975-1987	0.5*	1987-1990	3.5	1990-2003	-3.8*		
All Races	65 and Over	1975-1987	0.9*	1987-1991	3.1*	1991-1994	-0.4	1994-2003	-4.0*
White	All Ages	1975-1987	0.8*	1987-1991	3.1*	1991-1994	-0.9	1994-2003	-4.1*
White	Under 65	1975-1991	1.0*	1991-2003	-4.3*				
White	65 and Over	1975-1987	0.8*	1987-1991	3.2*	1991-1994	-0.7	1994-2003	-4.1*
Black	All Ages	1975-1988	1.9*	1988-1993	3.3*	1993-2001	-2.6*	2001-2003	-6.7*
Black	Under 65	1975-1992	0.5*	1992-2003	-2.9*				
Black	65 and Over	1975-1988	2.1*	1988-1993	3.5*	1993-2001	-2.5*	2001-2003	-7.3*

Joinpoint Regression Program Version 3.1, April 2006, 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 NCHS public use data file for the total US.
* The APC is significantly different from zero (p<.05).

Table XXIII-2
PROSTATE CANCER (Invasive)

AGE ADJUSTED SEER INCIDENCE[a] RATES BY YEAR, RACE AND AGE

	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
SEER INCIDENCE RATES									
YEAR OF DIAGNOSIS:									
1975	94.0	13.7	649.5	92.2	13.0	639.7	141.0	26.9	929.2
1976	97.9	14.6	674.0	97.3	13.9	673.8	140.8	29.4	910.9
1977	100.4	15.0	690.9	98.6	14.3	680.7	159.2	29.2	1,057.2
1978	99.4	15.2	681.0	97.7	14.8	671.0	148.0	26.8	985.3
1979	103.4	14.9	714.9	102.3	14.6	708.0	162.1	26.2	1,101.1
1980	105.9	15.4	731.4	104.9	14.6	728.6	161.0	33.6	1,041.4
1981	108.9	16.8	745.3	107.9	15.9	743.3	161.7	34.4	1,041.9
1982	108.2	16.3	743.1	107.3	15.8	739.9	167.6	31.3	1,109.8
1983	111.5	17.1	764.1	110.7	16.6	761.6	170.7	34.1	1,115.3
1984	111.6	17.3	763.9	110.0	16.2	758.4	178.8	37.1	1,158.1
1985	115.4	17.8	789.9	114.5	17.5	785.0	170.1	31.5	1,127.7
1986	119.0	18.5	813.4	118.9	18.2	815.0	167.8	33.9	1,093.3
1987	133.5	21.5	907.9	134.3	21.1	917.0	189.2	36.2	1,246.6
1988	137.4	22.2	934.4	138.5	22.3	942.2	190.0	34.6	1,264.4
1989	145.2	24.1	982.6	146.0	24.0	989.4	191.8	37.1	1,260.8
1990	170.7	28.7	1,152.1	172.4	28.8	1,165.5	221.4	44.3	1,445.4
1991	214.5	38.8	1,429.2	216.1	39.2	1,439.0	288.1	57.3	1,883.7
1992	237.0	49.3	1,534.1	237.6	49.3	1,539.2	327.3	77.0	2,057.4
1993	209.1	50.4	1,305.7	204.0	49.0	1,275.6	342.8	93.3	2,067.5
1994	179.8	48.5	1,087.9	173.8	46.7	1,051.9	311.0	94.4	1,807.6
1995	168.5	49.8	989.2	163.5	47.9	962.7	279.0	97.5	1,533.5
1996	168.4	53.1	964.9	163.7	51.6	938.7	280.8	100.0	1,530.7
1997	172.5	55.0	985.0	168.6	53.7	962.8	278.7	96.0	1,541.5
1998	169.6	54.6	964.2	165.6	52.7	946.3	280.2	101.1	1,518.3
1999	182.0	60.5	1,021.6	176.9	58.5	995.3	286.0	110.0	1,502.7
2000	180.9	61.4	1,006.6	176.9	59.4	988.7	285.8	112.2	1,485.4
2001	182.5	63.8	1,002.5	180.0	61.8	997.0	264.9	113.2	1,313.8
2002	179.1	64.5	971.0	175.7	62.6	957.4	280.5	115.3	1,422.6
2003	164.9	60.4	887.3	160.0	57.6	868.0	247.0	111.7	1,182.0
1975-2003	150.2	36.2	938.6	147.4	34.7	926.7	231.4	67.9	1,361.4

[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 XXIII-3
PROSTATE CANCER (Invasive)

AGE ADJUSTED U.S. DEATH[a] RATES BY YEAR, RACE AND AGE

	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+

U.S. DEATH RATES
YEAR OF DEATH:

	All	<65	65+	All	<65	65+	All	<65	65+
1975	31.0	2.5	227.5	29.1	2.2	214.9	55.5	6.6	394.0
1976	31.8	2.7	232.9	29.9	2.3	220.8	55.6	6.9	392.2
1977	31.8	2.7	233.3	29.9	2.3	220.6	56.4	6.9	398.7
1978	32.7	2.6	240.3	30.6	2.2	226.8	58.5	6.8	416.1
1979	32.8	2.6	242.1	30.8	2.2	228.2	59.2	6.6	422.9
1980	33.1	2.7	243.1	30.8	2.3	227.4	62.0	6.6	445.0
1981	33.2	2.7	244.0	30.8	2.3	227.5	63.6	7.1	454.4
1982	33.4	2.7	245.5	31.1	2.3	229.8	62.4	6.6	447.7
1983	33.9	2.8	249.3	31.6	2.4	233.2	64.6	7.0	462.5
1984	34.1	2.7	250.8	31.6	2.4	233.5	65.9	6.7	475.1
1985	33.9	2.7	249.4	31.3	2.3	231.3	67.3	7.2	482.7
1986	34.9	2.8	257.0	32.5	2.5	239.7	67.4	6.6	487.4
1987	35.1	2.7	259.1	32.6	2.4	241.3	68.9	6.7	499.0
1988	35.9	2.8	264.4	33.4	2.5	247.1	69.6	7.0	502.3
1989	37.1	3.0	273.0	34.5	2.6	255.2	71.7	7.1	518.5
1990	38.6	3.0	284.2	35.7	2.6	264.0	78.0	7.4	565.6
1991	39.3	2.9	291.1	36.5	2.5	271.4	78.2	7.1	570.2
1992	39.2	2.9	290.6	36.3	2.4	270.3	79.8	7.7	578.7
1993	39.3	2.7	292.5	36.3	2.3	270.8	81.9	7.0	599.1
1994	38.5	2.7	286.5	35.6	2.3	266.0	80.0	6.8	585.9
1995	37.3	2.6	277.2	34.4	2.2	256.9	78.2	6.7	572.5
1996	36.0	2.5	267.6	33.0	2.1	246.4	78.8	6.5	579.2
1997	34.2	2.3	254.3	31.3	1.9	234.6	74.3	6.3	544.2
1998	32.6	2.3	242.5	29.9	1.9	223.4	72.8	6.3	532.4
1999	31.6	2.1	235.5	28.9	1.7	216.9	70.1	5.8	514.8
2000	30.3	2.0	226.1	27.7	1.7	207.7	68.7	5.4	506.1
2001	29.2	1.9	217.4	26.7	1.6	199.7	66.6	5.4	489.3
2002	28.2	1.9	209.7	25.9	1.6	193.9	63.0	5.4	461.6
2003	26.6	1.9	196.9	24.5	1.6	182.7	58.0	5.4	421.4
1975-2003	34.0	2.5	251.3	31.4	2.2	233.7	69.0	6.5	500.6

[a] NCHS public use data file for the total US. 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 XXIII-4
PROSTATE CANCER (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, 2000-2003						
AGE AT DIAGNOSIS/DEATH:						
All ages	170.3	163.4	258.3	28.5	26.2	64.0
Under 65	59.2	56.6	104.5	1.9	1.6	5.4
65 and over	938.5	901.6	1,321.2	212.2	195.7	468.7
All ages(IARC world std)[c]	113.5	109.3	177.0	12.3	11.1	28.8
AGE-SPECIFIC RATES, 2000-2003						
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	1.7	0.0	-	-
40-44	8.2	7.2	20.1	0.2	0.2	0.6
45-49	39.2	35.4	86.9	0.9	0.7	2.6
50-54	138.7	131.4	265.5	3.3	2.7	9.3
55-59	338.4	323.4	605.9	9.3	7.8	26.8
60-64	593.4	576.4	959.0	24.4	20.6	66.9
65-69	914.6	892.1	1,356.0	53.2	46.1	138.5
70-74	1,035.6	1,005.8	1,445.0	104.8	92.5	275.3
75-79	1,032.3	985.1	1,405.6	195.1	176.9	473.6
80-84	852.4	792.3	1,171.5	345.0	318.8	790.7
85+	728.0	689.8	1,015.9	660.2	628.9	1,215.4

[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]   NCHS public use data file for the total US. 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 XXIII-5
PROSTATE CANCER (Invasive)

SURVIVAL RATES, BY RACE, DIAGNOSIS YEAR, STAGE AND AGE

	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
5-YR RELATIVE SURVIVAL RATES									
YEAR OF DIAGNOSIS:									
1960-1963[a]	–	–	–	50	–	–	35	–	–
1970-1973[a]	–	–	–	63	–	–	55	–	–
1975-1977[b]	68.8	73.4	67.1	69.6	75.2	67.7	61.3	62.0	60.9
1978-1980[b]	71.9	75.7	70.5	73.2	77.2	71.7	62.7	65.4	61.4
1981-1983[b]	73.7	76.3	72.8	75.0	78.0	73.9	63.7	65.4	62.9
1984-1986[b]	76.0	77.4	75.6	77.3	79.1	76.7	66.2	67.5	65.7
1987-1989[b]	83.8	83.3	83.9	85.4	84.8	85.6	72.2	72.8	71.9
1990-1992[b]	94.6	93.6	94.9	95.8	94.6	96.1	85.9	87.3	85.3
1993-1995[b]	97.4	96.8	97.6	98.3	97.4	98.6	93.7	94.6	93.1
1996-2002[b]	99.9[e]	100.0[e]	99.8[e]	99.9[e]	100.0[e]	99.8[e]	98.0[e]	99.2[e]	97.5[e]
5-YR PERIOD SURVIVAL RATES[cd]									
YEAR OF DIAGNOSIS:									
1996-2002	99.9	99.9	99.9	100.0	100.0	99.9	98.6	99.1	98.1
STAGE DISTRIBUTION (%) 1996-2002[c]									
All Stages									
Number of cases	225,416	80,018	145,398	184,678	63,876	120,802	28,856	13,051	15,805
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized/Regional	91	95	89	92	95	90	88	92	85
Distant	5	3	5	4	3	5	6	5	8
Unstaged	4	2	6	4	2	5	5	3	7
5-YR RELATIVE SURVIVAL RATES, 1996-2002[c]									
AGE AT DIAGNOSIS:									
<45	93.0	–	–	92.3	–	–	94.9	–	–
45-54	97.9	–	–	98.1	–	–	96.8	–	–
55-64	100.0	–	–	100.0	–	–	99.7	–	–
65-74	100.0	–	–	100.0	–	–	100.0	–	–
75+	98.2	–	–	99.0	–	–	88.9	–	–
Under 65	99.8	–	–	100.0	–	–	98.8	–	–
65 and over	99.8	–	–	99.8	–	–	97.0	–	–
STAGE:									
All Stages	99.9	99.8	99.8	99.9	100.0	99.8	97.6	98.8	97.0
Localized/Regional	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Distant	33.3	33.2	33.5	32.7	33.6	32.5	31.1	29.3	32.3
Unstaged	79.5	89.4	76.9	80.5	91.2	77.7	74.6	82.4	71.0

[a]   Rates are based on End Results data from a series of hospital registries and one population-based registry.
[b]   Rates are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).
      Rates are based on follow-up of patients into 2003.
[c]   Rates 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). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2002. The remaining 13 SEER Areas contribute cases for the entire period 1996-2002. Rates are based on follow-up of patients into 2003.
[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 is computed here using three calendar year blocks (2000-2002: 0-1 year survival), (1999-2001: 1-2 year survival), (1998-2000: 2-3 year survival), (1997-1999: 3-4 year survival), (1996-1998: 4-5 years survival).
[e]   The difference in rates between 1975-1977 and 1996-2002 is statistically significant (p<.05).
[f]   The standard error of the survival rate is between 5 and 10 percentage points.
[g]   The standard error of the survival rate is greater than 10 percentage points.
–   Statistic could not be calculated due to fewer than 16 cases during the time period.

Table XXIII-6
PROSTATE CANCER (Invasive)

SURVIVAL RATES[a]

By Year of Diagnosis

All Races, Males

Year of Diagnosis

Relative Survival Rates (SEER[b])

	1975–1979	1980–1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1-year	91.9	94.2	94.9	95.0	95.6	96.4	97.0	97.7	99.0	99.6	99.6	99.5	99.2	99.7	99.8	99.9	99.8	100.0	100.0	100.0
2-year	85.1	88.5	88.6	89.4	91.6	92.8	93.9	94.9	97.7	98.8	98.7	98.6	98.5	99.0	99.7	99.9	99.8	100.0	100.0	
3-year	79.0	82.8	83.7	84.3	87.3	89.0	90.6	92.8	96.5	98.4	97.8	97.8	98.2	98.8	99.7	99.9	99.8	100.0		
4-year	74.1	77.9	79.2	80.6	84.0	86.3	88.2	91.0	95.5	98.2	97.7	97.2	98.0	98.7	99.7	99.9	99.8			
5-year	70.0	73.6	75.7	78.0	81.2	84.0	85.8	90.0	94.4	97.8	97.1	96.9	98.0	98.7	99.7	99.9				
6-year	66.8	70.2	73.0	75.0	79.0	81.9	83.9	88.8	93.4	97.1	96.9	96.9	98.0	98.7	99.7					
7-year	63.7	66.8	70.8	73.0	76.5	79.1	82.5	87.2	93.3	96.7	96.5	96.6	98.0	98.7						
8-year	60.8	64.0	68.5	71.6	74.7	77.6	81.3	86.1	92.7	96.1	96.5	96.6	98.0							
9-year	58.3	62.0	66.6	69.3	73.2	76.3	80.2	85.4	92.5	95.9	96.1	96.6								
10-year	55.9	60.3	64.6	67.5	71.9	75.2	79.7	84.3	92.3	95.7	95.9									
11-year	53.6	58.4	62.4	66.3	70.5	75.0	78.9	83.6	91.7	95.6										
12-year	51.6	56.7	60.4	64.7	69.8	73.4	78.1	83.5	91.7											
13-year	50.0	55.3	59.6	63.9	68.9	72.1	76.9	83.2												
14-year	48.5	54.1	57.5	63.1	68.2	72.1	76.2													
15-year	47.6	53.3	56.1	61.5	67.7	71.9														
16-year	46.1	51.9	54.2	60.6	67.2															
17-year	44.7	51.3	53.7	60.6																
18-year	43.7	50.5	53.3																	
19-year	43.3	49.6																		
20-year	42.6																			

[a]   Survival rates are relative rates expressed as percents.
[b]   Rates are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table XXIII-7
PROSTATE CANCER (Invasive)

Percent Diagnosed With Cancer In 10, 20 and 30 Years and In Remaining Lifetime,
Given Cancer Free At Current Age By Race

Lifetime Risk (Percent) of Being Diagnosed (17 SEER Areas) With Cancer and
Lifetime Risk (Percent) of Dying (Total U.S.) From Cancer

2001-2003

Race/Ethnicity	Current Age	+10 yrs	+20 yrs	+30 yrs	Eventually
All Races	0	0.00	0.00	0.00	17.12
	10	0.00	0.00	0.01	17.36
	20	0.00	0.01	0.30	17.46
	30	0.01	0.30	2.56	17.69
	40	0.30	2.59	8.70	17.99
	50	2.39	8.74	15.25	18.40
	60	7.03	14.25	17.21	17.74
White	0	0.00	0.00	0.00	16.58
	10	0.00	0.00	0.01	16.78
	20	0.00	0.01	0.27	16.87
	30	0.01	0.27	2.43	17.07
	40	0.27	2.47	8.45	17.35
	50	2.28	8.49	14.79	17.72
	60	6.84	13.79	16.54	17.02
Black	0	0.00	0.00	0.00	19.76
	10	0.00	0.00	0.02	20.30
	20	0.00	0.02	0.61	20.48
	30	0.02	0.62	4.37	20.99
	40	0.62	4.50	12.45	21.67
	50	4.17	12.73	19.69	22.64
	60	10.37	18.81	21.82	22.39
Asian/Pacific Islander	0	0.00	0.00	0.00	12.62
	10	0.00	0.00	0.00	12.75
	20	0.00	0.00	0.09	12.79
	30	0.00	0.09	0.97	12.87
	40	0.09	0.97	4.29	12.97
	50	0.90	4.28	9.43	13.14
	60	3.56	8.99	12.08	12.90
Hispanic[a]	0	0.00	0.00	0.00	16.29
	10	0.00	0.00	0.00	16.49
	20	0.00	0.00	0.17	16.59
	30	0.00	0.17	1.68	16.78
	40	0.17	1.70	6.81	17.01
	50	1.57	6.86	13.22	17.40
	60	5.73	12.63	16.02	17.15

Race/Ethnicity	Lifetime Risk of Developing	Lifetime Risk of Dying
All Races	17.12%	2.91%
White	16.58%	2.73%
Black	19.76%	4.59%
Asian/Pacific Islander	12.62%	2.18%
Hispanic[a]	16.29%	3.24%

Devcan Version 6.1.0, April 2006, 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]   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 Hawaii, Seattle, Alaska Native Registry and Kentucky. Underlying mortality data for Hispanics exclude deaths from Minnesota, New Hampshire and North Dakota.

```
                              Table XXIII-8
                       PROSTATE CANCER (Invasive)

                      SEER INCIDENCE AND U.S. MORTALITY
                      AGE-ADJUSTED RATES AND TRENDS[a]
                            By Race/Ethnicity
```

SEER Incidence

	Rate 2000-2003[b] Rate per 100,000 persons	Trend 1994-2003[c] APC (%)
	Males	Males
RACE/ETHNICITY		
All Races	170.3	0.0
White	163.4	0.1
White Hispanic[d]	139.2	-0.6
White Non-Hispanic[d]	167.9	0.0
Black	258.3	-1.3*
Asian/Pacific Islander	96.8	-0.4
Amer Ind/Alaska Nat[e]	70.7	-3.5
Hispanic[d]	141.1	-0.7

U.S. Mortality[f]

	Rate 2000-2003 Rate per 100,000 persons	Trend 1994-2003 APC (%)
	Males	Males
RACE/ETHNICITY		
All Races	28.5	-4.0*
White	26.2	-4.1*
White Hispanic[d]	22.3	-3.1*
White Non-Hispanic[d]	26.2	-4.1*
Black	64.0	-3.3*
Asian/Pacific Islander	11.3	-5.4*
Amer Ind/Alaska Nat	18.1	-4.2*
Hispanic[d]	21.8	-3.2*

     The APC is the Annual Percent Change over the time interval.

-    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]   Incidence data used in calculating the rates are from the 17 SEER 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).

[c]   Incidence data used in calculating the trends are from the 13 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).

[d]   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 Hawaii, Seattle, Alaska Native Registry and Kentucky. The 2000-2003 Hispanic and Non-Hispanic death rates exclude deaths from Minnesota, New Hampshire and North Dakota. The 1994-2003 Hispanic and Non-Hispanic mortality trends exclude deaths from Maine, Minnesota, New Hampshire, North Dakota, and Oklahoma.

[e]   Incidence data for American Indians/Alaska Natives include cases from Connecticut, Detroit, Iowa, New Mexico, Seattle, Utah, Atlanta, and the Alaska Native Registry. Incidence rates are for diagnosis years 1999-2002. Incidence trends are for diagnosis years 1994-2002.

[f]   Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS).

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

Table XXIII-9
PROSTATE CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE RATES[a]
By Registry, Race/Ethnicity and Age

	All Races			Whites	Blacks	Asian/Pacific Islanders	Hispanics[b]
	All Ages	Ages <65	Ages 65+	All Ages	All Ages	All Ages	All Ages

SEER INCIDENCE RATES[a], 2000-2003
REGISTRY

	All Ages	Ages <65	Ages 65+	Whites All Ages	Blacks All Ages	A/PI All Ages	Hispanics All Ages
17 SEER Areas[c]	170.3	59.2	938.5	163.4	258.3	96.8	141.1
13 SEER Areas[c]	172.0	60.1	945.8	167.7	262.5	100.7	138.5
11 SEER Areas[c]	172.2	60.2	946.9	167.8	262.9	100.6	138.5
9 SEER Areas[c]	176.7	62.5	966.2	173.0	269.3	106.5	135.3
San Francisco-Oakland	164.5	59.6	889.6	167.9	215.4	98.4	137.8
Connecticut	181.8	67.9	968.5	176.5	244.4	67.4	161.6
Metropolitan Detroit	223.7	81.5	1206.8	200.4	313.3	99.4	134.4
Hawaii	130.5	35.6	786.5	141.4	218.1	120.3	–
Iowa	152.9	49.3	869.2	149.2	173.2	53.5	90.0
New Mexico	149.9	50.8	835.1	155.4	175.1	–	129.9
Seattle-Puget Sound	177.2	60.1	986.6	180.4	258.3	94.4	–
Utah	186.1	61.5	1047.3	188.8	205.6	75.4	156.9
Metropolitan Atlanta	183.2	72.6	947.3	161.4	265.5	63.9	115.0
San Jose-Monterey	162.9	54.7	910.8	172.9	208.0	86.1	136.9
Los Angeles	160.1	54.1	892.8	147.6	250.4	92.9	141.3
Rural Georgia	169.2	64.0	896.9	140.5	225.5	–	–
California exclud. SF/SJM/LA	152.6	52.4	845.0	147.2	232.2	84.0	131.9
Kentucky	153.1	50.3	863.6	145.4	247.2	64.9	–
Louisiana	181.4	60.7	1015.5	163.8	235.3	76.0	140.0
New Jersey	200.8	72.0	1091.0	189.4	286.5	94.2	192.7

[a]   Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)
[b]   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 Hawaii, Seattle, Alaska Native Registry and Kentucky.
[c]   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 XXIII-10
PROSTATE CANCER (Invasive)

AGE-ADJUSTED SEER DEATH RATES[a]
By Registry, Race/Ethnicity and Age

	All Races			Whites	Blacks	Asian/Pacific Islanders	Hispanics[b]
	All Ages	Ages <65	Ages 65+	All Ages	All Ages	All Ages	All Ages
SEER DEATH RATES[a], 2000-2003							
REGISTRY							
17 SEER Areas[c]	27.4	1.9	204.1	26.3	59.1	12.2	21.6
13 SEER Areas[c]	26.9	1.8	200.5	26.3	57.0	12.5	21.6
11 SEER Areas[c]	26.9	1.8	200.2	26.3	56.6	12.5	21.6
9 SEER Areas[c]	27.7	1.7	207.5	27.0	56.9	13.6	24.0
San Francisco-Oakland	26.3	1.6	197.2	26.3	65.9	10.7	19.3
Connecticut	26.7	1.7	199.5	25.7	53.8	-	22.3
Metropolitan Detroit	30.4	2.0	227.2	25.7	52.8	-	18.0
Hawaii	19.8	1.3	147.5	31.5	-	16.1	52.7
Iowa	29.3	1.8	219.5	29.1	58.2	-	-
New Mexico	28.6	1.8	213.9	28.5	71.5	-	27.8
Seattle-Puget Sound	27.1	1.6	203.4	27.4	47.1	14.0	-
Utah	28.6	1.9	213.0	28.7	-	-	29.5
Metropolitan Atlanta	31.5	2.1	234.9	24.1	60.7	-	-
San Jose-Monterey	22.1	1.2	166.8	24.1	36.7	11.5	18.4
Los Angeles	25.0	2.0	184.3	24.3	56.9	10.2	20.2
Rural Georgia	40.0	-	295.9	19.1	81.3	-	-
California exclud. SF/SJM/LA	26.6	1.9	197.1	26.7	57.8	12.0	21.7
Kentucky	29.0	2.0	215.6	27.4	61.3	-	-
Louisiana	34.0	2.4	252.0	26.3	61.0	-	18.5
New Jersey	27.9	1.9	207.6	25.4	63.9	7.1	21.0
Total U.S.	28.5	1.9	212.2	26.2	64.0	11.3	21.8

[a] NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population
    (19 age groups - Census P25-1130).
[b] Hispanic is not mutually exclusive from Whites, Blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. The
    2000-2003 Hispanic death rates do not include deaths from Minnesota, New Hampshire and North Dakota.
[c] 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 XXIII-11
PROSTATE CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH[a] RATES BY STATE, ALL RACES, 2000-2003

Males

State	Rate	SE	Rank	PD
TOTAL U.S.	28.5	0.08		
High Five States				
District of Columbia	47.0[bc]	2.46	(01)	64.9
Mississippi	41.1[bc]	1.06	(02)	44.2
Alabama	36.3[bc]	0.77	(03)	27.4
South Carolina	35.0[bc]	0.83	(04)	22.8
Louisiana	34.0[bc]	0.78	(05)	19.3
Low Five States				
Nebraska	26.1	0.95	(47)	-8.4
California	25.9[c]	0.24	(48)	-9.1
Arizona	25.7[c]	0.56	(49)	-9.8
Florida	24.2[bc]	0.26	(50)	-15.1
Hawaii	19.8[bc]	0.94	(51)	-30.5

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	36.3[bc]	0.77	(03)	27.4	Montana	28.4	1.35	(32)	-0.4
Alaska	28.8	2.92	(25)	1.1	Nebraska	26.1	0.95	(47)	-8.4
Arizona	25.7[c]	0.56	(49)	-9.8	Nevada	28.1	1.06	(33)	-1.4
Arkansas	31.0	0.86	(11)	8.8	New Hampshire	29.4	1.29	(19)	3.2
California	25.9[c]	0.24	(48)	-9.1	New Jersey	27.9	0.46	(36)	-2.1
Colorado	28.0	0.75	(34)	-1.8	New Mexico	28.6	1.05	(27)	0.4
Connecticut	26.7	0.67	(44)	-6.3	New York	27.9	0.31	(37)	-2.1
Delaware	27.2	1.52	(41)	-4.6	North Carolina	33.3[bc]	0.57	(07)	16.8
District of Columbia	47.0[bc]	2.46	(01)	64.9	North Dakota	29.6	1.54	(18)	3.9
Florida	24.2[bc]	0.26	(50)	-15.1	Ohio	28.7	0.41	(26)	0.7
Georgia	33.7[bc]	0.64	(06)	18.2	Oklahoma	27.0	0.72	(42)	-5.3
Hawaii	19.8[bc]	0.94	(51)	-30.5	Oregon	29.0	0.71	(22)	1.8
Idaho	30.4	1.26	(15)	6.7	Pennsylvania	28.6	0.36	(29)	0.4
Illinois	30.0	0.41	(16)	5.3	Rhode Island	26.7	1.20	(45)	-6.3
Indiana	29.3	0.58	(20)	2.8	South Carolina	35.0[bc]	0.83	(04)	22.8
Iowa	29.3	0.73	(21)	2.8	South Dakota	30.8	1.49	(12)	8.1
Kansas	26.7	0.78	(43)	-6.3	Tennessee	31.9[bc]	0.65	(09)	11.9
Kentucky	29.0	0.74	(23)	1.8	Texas	27.6	0.34	(39)	-3.2
Louisiana	34.0[bc]	0.78	(05)	19.3	Utah	28.6	1.09	(28)	0.4
Maine	29.0	1.16	(24)	1.8	Vermont	27.9	1.73	(35)	-2.1
Maryland	30.5	0.66	(14)	7.0	Virginia	32.6[bc]	0.61	(08)	14.4
Massachusetts	28.5	0.53	(31)	0.0	Washington	27.5	0.56	(40)	-3.5
Michigan	28.6	0.45	(30)	0.4	West Virginia	27.6	0.95	(38)	-3.2
Minnesota	30.8	0.64	(13)	8.1	Wisconsin	29.8	0.59	(17)	4.6
Mississippi	41.1[bc]	1.06	(02)	44.2	Wyoming	31.5[b]	2.14	(10)	10.5
Missouri	26.2[c]	0.55	(46)	-8.1					

[a]   NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[b]   Absolute percent difference between state rate and total U.S. rate is 10% or more.
[c]   Difference between state rate and total U.S. rate is statistically significant (p<=.0002).
SE   Standard error of the rate.
PD   Percent difference between state rate and total U.S. rate.

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                                        Table XXIII-12
                                    PROSTATE CANCER (Invasive)


                    Estimated United States Cancer Prevalence Counts^a on January 1, 2003
                                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	0 to <13[e]	0 to <28[e]	>=28[g]	Complete[h]
Race									
All Races[b]	925,708	614,965	304,857	63,391	19,845	1,783,905	1,932,939	4,859	1,937,798
White[b]	773,341	523,009	274,055	57,530	18,039	1,514,464	1,649,702	5,179	1,654,881
Black[b]	118,253	73,974	24,993	5,010	1,583	212,481	224,210	424	224,634
Asian/Pacific Islander[c]	14,421	7,767	+	+	+	24,469	+	+	+
Hispanic[d]	41,897	24,137	+	+	+	72,885	+	+	+

```
        Estimated prevalence percent^a on January 1, 2003, of the SEER 11 population diagnosed in the previous 10 years
                                By Age at Prevalence and Race/Ethnicity
```

Age at Prevalence	All Ages	Age Specific (Crude) 0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	Age-Adjusted[f] All Ages
Race											
All Races[c]	0.9265%	–	–	0.0002%	0.0010%	0.0586%	0.8540%	4.1092%	8.7367%	8.0887%	1.1914%
White[c]	0.9647%	–	–	0.0003%	0.0008%	0.0517%	0.8272%	4.0939%	8.6806%	7.7780%	1.1720%
Black[c]	1.0228%	–	–	–	0.0023%	0.1489%	1.6709%	6.9826%	13.1509%	10.6339%	1.8581%
Asian/Pacific Islander[c]	0.4580%	–	–	–	–	0.0140%	0.2568%	1.5617%	4.9060%	6.0488%	0.6383%
Hispanic[d]	0.3175%	–	–	–	–	0.0286%	0.4839%	2.8681%	7.1871%	7.0898%	0.9377%

[a]   US 2003 cancer prevalence counts are based on 2003 cancer prevalence proportions from the SEER registries and 1/1/2003 US population estimates based on the average of 2002 and 2003 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 excluding Hawaii and Seattle.

[e]   Maximum limited-duration prevalence: 28 years for 1975-2003 SEER 9 data; 13 years for 1990-2003 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).
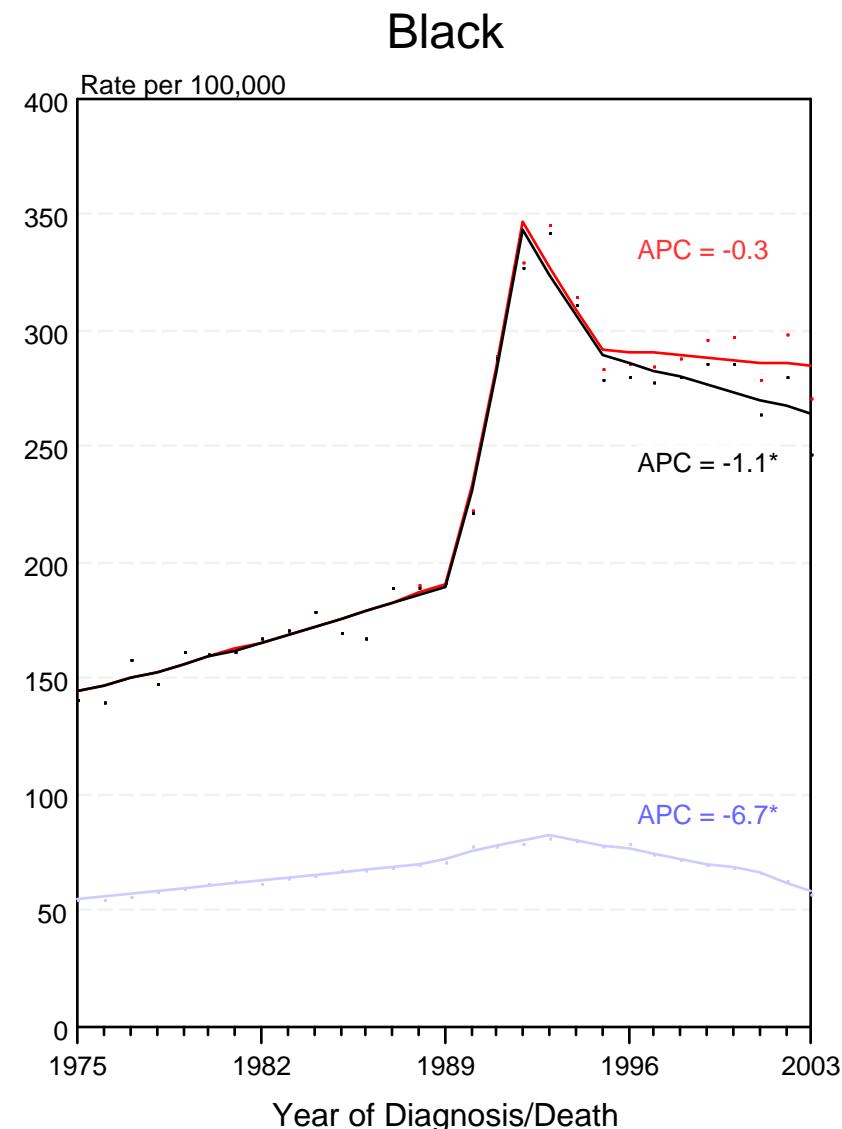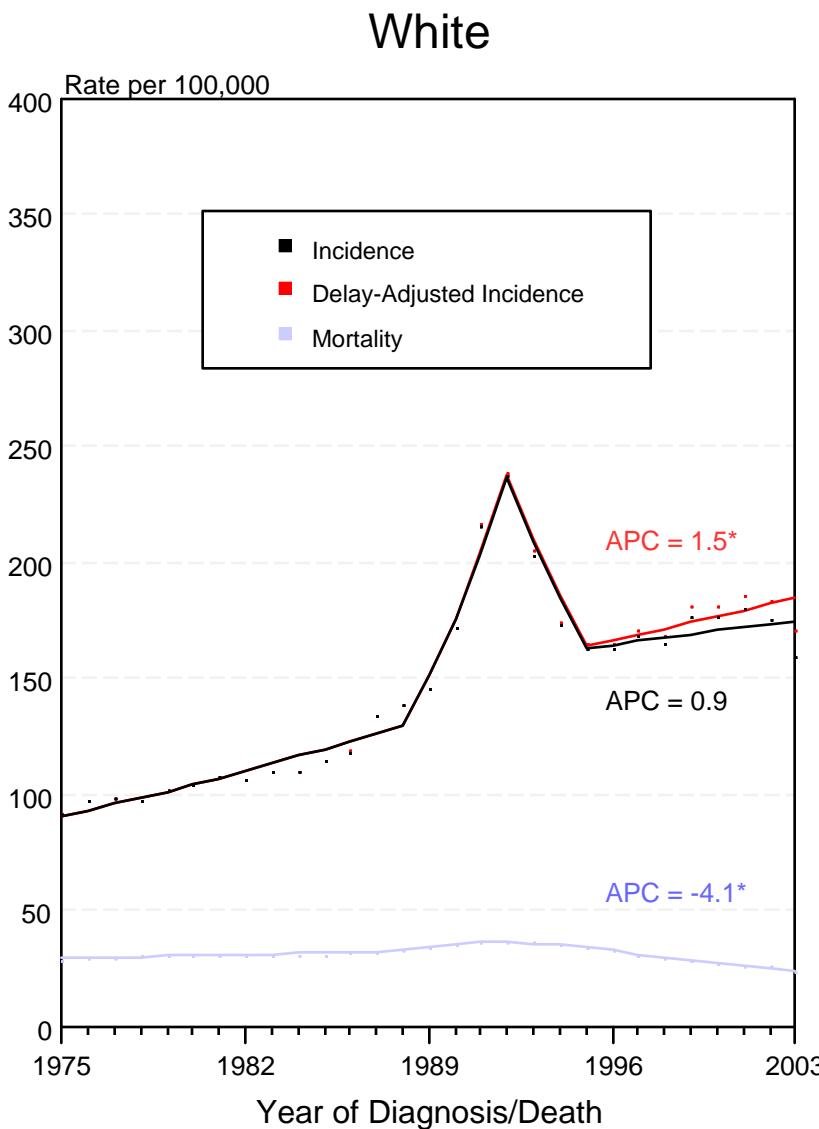
[f]   Percentages are age-adjusted to the 2000 US standard population by 5-year age groups.

[g h]   (g) Cases diagnosed more than 28 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 <28 and >=28.

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

+   Not available.

# SEER Incidence, Delay Adjusted Incidence and US Death Rates+
Prostate Cancer, by Race

White

Rate per 100,000

- ■ Incidence
- ■ Delay-Adjusted Incidence
- ■ Mortality

APC = 1.5*

APC = 0.9

APC = -4.1*

Year of Diagnosis/Death

Black

Rate per 100,000

APC = -0.3

APC = -1.1*

APC = -6.7*

Year of Diagnosis/Death

Figure XXIII-1

+   Source: SEER 9 areas and NCHS public use data file for the total US. 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 3.1, April 2006, 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, Delay Adjusted Incidence and US Death Rates+
Prostate Cancer, by Age and Race
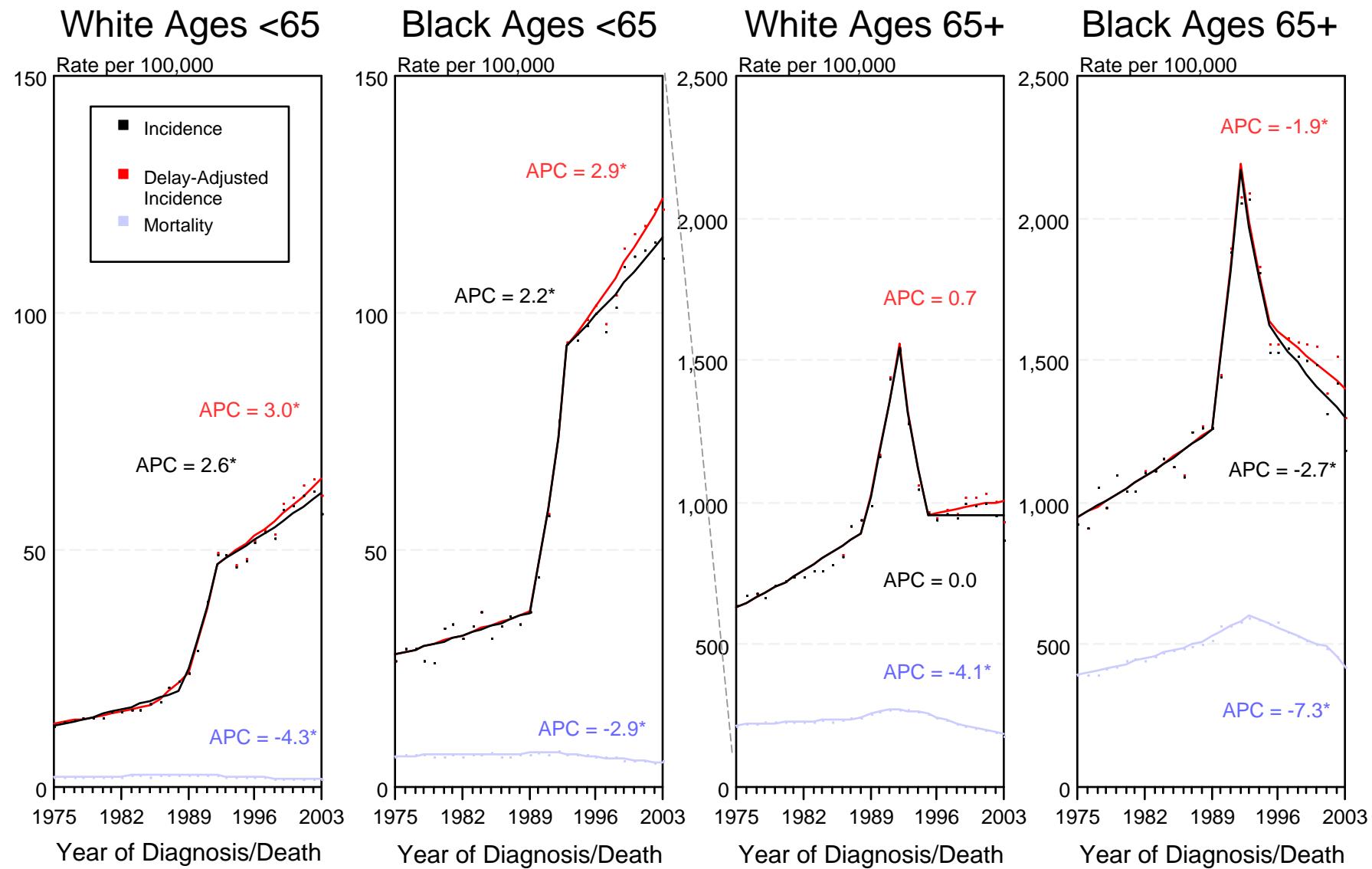
Figure XXIII-2
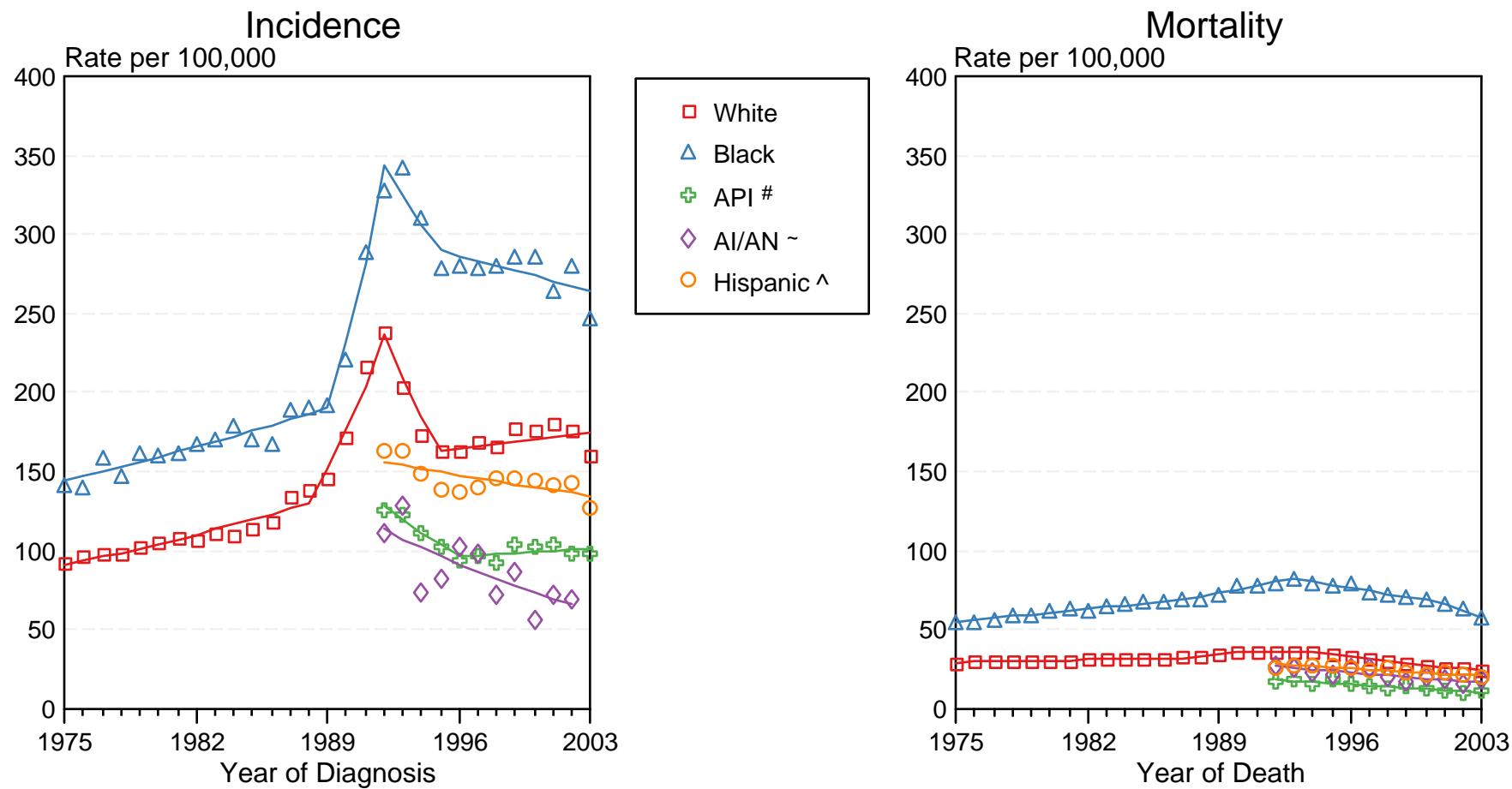
+ Source: SEER 9 areas and NCHS public use data file for the total US. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.1, April 2006, National Cancer Institute.
   The 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*
Prostate Cancer
Joinpoint Analyses for Whites and Blacks from 1975-2003
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2003

Incidence — Rate per 100,000 — Year of Diagnosis

Mortality — Rate per 100,000 — Year of Death

Legend: □ White, △ Black, ✚ API #, ◇ AI/AN ~, ○ Hispanic ^

Figure XXIII-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 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 NCHS public use data file for the total US.

* 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 3.1, April 2006, National Cancer Institute.

\# API = Asian/Pacific Islander.

~ AI/AN = American Indian/Alaska Native. Incidence data for AI/AN include cases from Connecticut, Detroit, Iowa, New Mexico, Seattle, Utah, Atlanta and the Alaska Native Registry for the time period 1992-2002. Mortality data are from the entire US for the time period 1992-2003.

^ 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 Hawaii, Seattle, and the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.
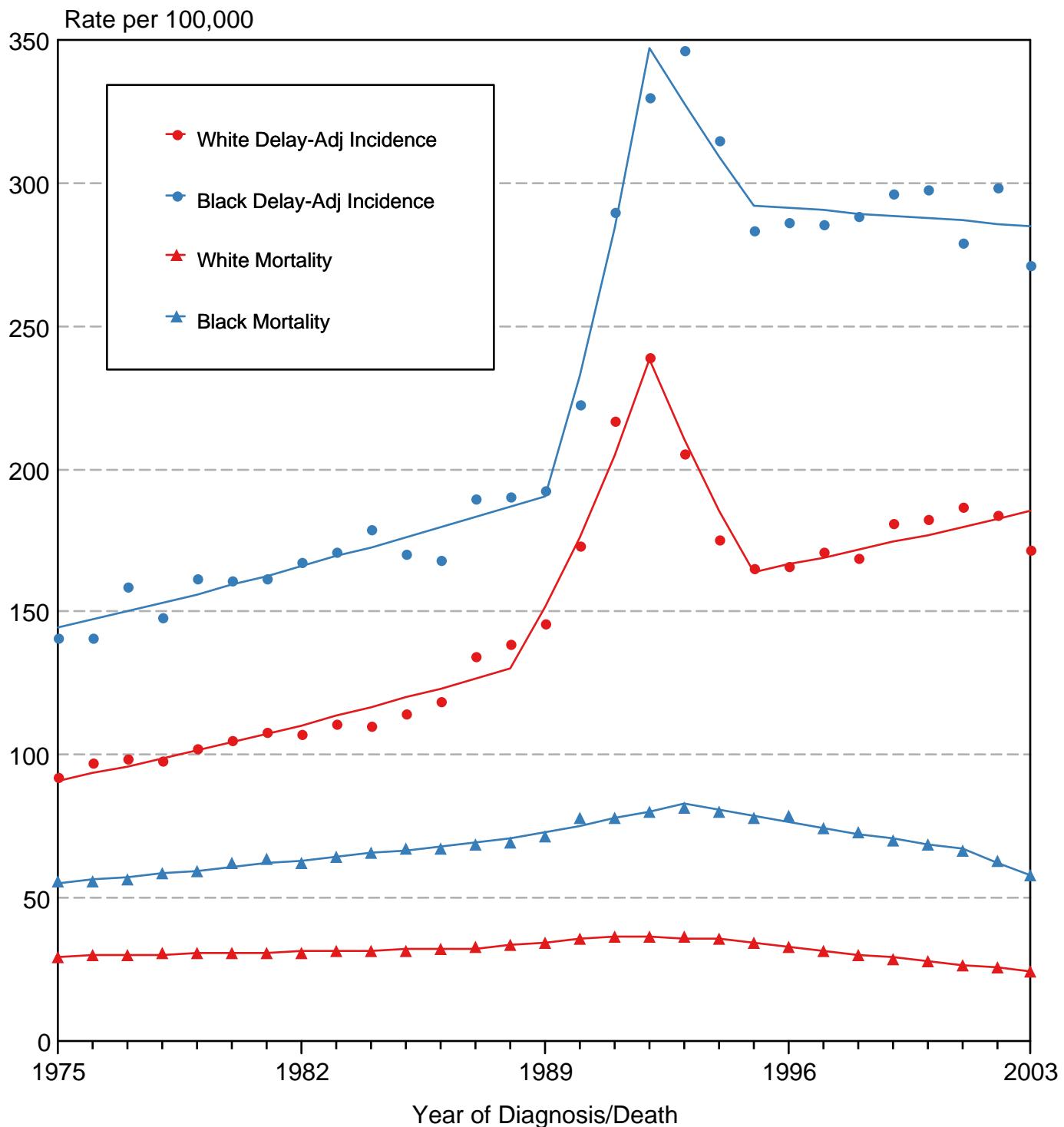
Figure XXIII-4

Prostate Cancer
Delay-Adjusted SEER Incidence & US Mortality
1975-2003
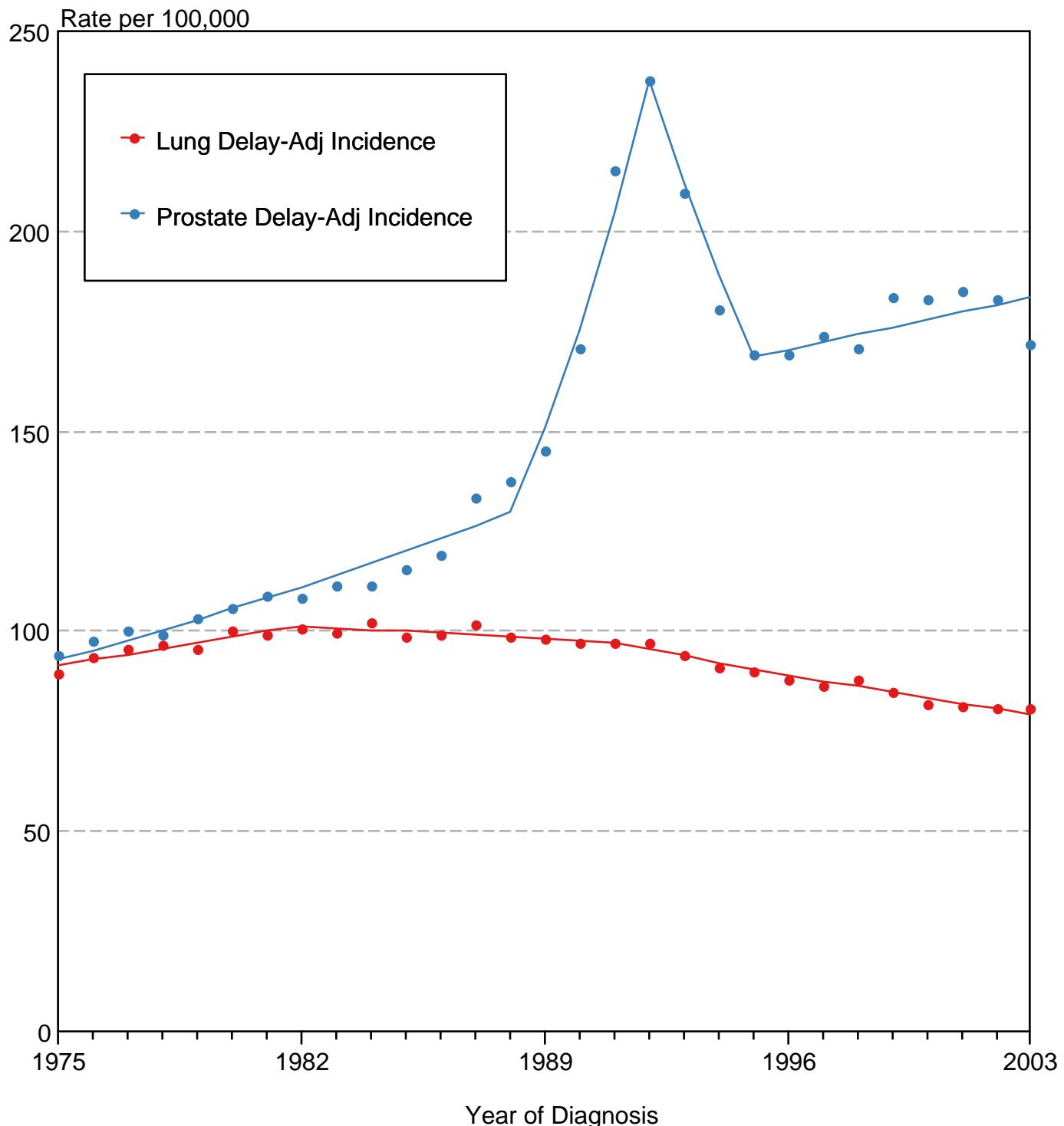
Source: SEER 9 areas and NCHS public use data file for the total US.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines are calculated using the Joinpoint Regression Program Version 3.1, April 2006, National Cancer Institute.

Figure XXIII-5

Prostate vs Lung Cancer Delay-Adjusted Incidence
All Races, Males
1975-2003

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 3.1, April 2006, National Cancer Institute.