

Table XXII-1  
PROSTATE CANCER (Invasive)

TRENDS IN SEER INCIDENCE<sup>a</sup> AND U.S. MORTALITY<sup>b</sup> USING THE JOINPOINT REGRESSION PROGRAM, 1975-2000  
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
<u>SEER Cancer Incidence<sup>a</sup></u>									
All Races	All Ages	1975-1988	2.6 <sup>c</sup>	1988-1992	16.4 <sup>c</sup>	1992-1995	-11.6 <sup>c</sup>	1995-2000	1.6 <sup>c</sup>
All Races	Under 65	1975-1985	2.4 <sup>c</sup>	1985-1989	7.6 <sup>c</sup>	1989-1992	25.8 <sup>c</sup>	1992-2000	3.0 <sup>c</sup>
All Races	65 and Over	1975-1988	2.5 <sup>c</sup>	1988-1992	15.1 <sup>c</sup>	1992-1995	-14.9 <sup>c</sup>	1995-2000	0.6
White	All Ages	1975-1988	2.8 <sup>c</sup>	1988-1992	16.2 <sup>c</sup>	1992-1995	-12.6 <sup>c</sup>	1995-2000	1.7 <sup>c</sup>
White	Under 65	1975-1985	2.5 <sup>c</sup>	1985-1989	8.8 <sup>c</sup>	1989-1992	24.8 <sup>c</sup>	1992-2000	2.6 <sup>c</sup>
White	65 and Over	1975-1988	2.7 <sup>c</sup>	1988-1992	14.8 <sup>c</sup>	1992-1995	-15.8 <sup>c</sup>	1995-2000	0.8
Black	All Ages	1975-1989	2.0 <sup>c</sup>	1989-1992	21.5 <sup>c</sup>	1992-1996	-5.4 <sup>c</sup>	1996-2000	0.5
Black	Under 65	1975-1989	2.0 <sup>c</sup>	1989-1993	25.7 <sup>c</sup>	1993-2000	2.2 <sup>c</sup>		
Black	65 and Over	1975-1989	2.0 <sup>c</sup>	1989-1992	20.2 <sup>c</sup>	1992-1995	-10.3 <sup>c</sup>	1995-2000	-1.7
<u>SEER Delay-Adjusted Incidence<sup>a</sup></u>									
All Races	All Ages	1975-1988	2.6 <sup>c</sup>	1988-1992	16.6 <sup>c</sup>	1992-1995	-11.6 <sup>c</sup>	1995-2000	2.3 <sup>c</sup>
White	All Ages	1975-1988	2.8 <sup>c</sup>	1988-1992	16.5 <sup>c</sup>	1992-1995	-12.4 <sup>c</sup>	1995-2000	3.0 <sup>c</sup>
Black	All Ages	1975-1989	2.0 <sup>c</sup>	1989-1992	22.0 <sup>c</sup>	1992-1996	-5.0 <sup>c</sup>	1996-2000	2.3 <sup>c</sup>
<u>U.S. Cancer Mortality<sup>b</sup></u>									
All Races	All Ages	1975-1987	0.9 <sup>c</sup>	1987-1991	3.1 <sup>c</sup>	1991-1994	-0.6	1994-2000	-4.0 <sup>c</sup>
All Races	Under 65	1975-1987	0.5 <sup>c</sup>	1987-1990	3.1	1990-1996	-3.2 <sup>c</sup>	1996-2000	-5.6 <sup>c</sup>
All Races	65 and Over	1975-1987	0.9 <sup>c</sup>	1987-1991	3.2 <sup>c</sup>	1991-1994	-0.4	1994-2000	-4.0 <sup>c</sup>
White	All Ages	1975-1987	0.8 <sup>c</sup>	1987-1991	3.1 <sup>c</sup>	1991-1994	-0.8	1994-2000	-4.2 <sup>c</sup>
White	Under 65	1975-1987	0.7 <sup>c</sup>	1987-1990	3.7	1990-2000	-4.4 <sup>c</sup>		
White	65 and Over	1975-1987	0.8 <sup>c</sup>	1987-1991	3.2 <sup>c</sup>	1991-1994	-0.6	1994-2000	-4.1 <sup>c</sup>
Black	All Ages	1975-1988	1.9 <sup>c</sup>	1988-1993	3.2 <sup>c</sup>	1993-2000	-2.6 <sup>c</sup>		
Black	Under 65	1975-1992	0.6 <sup>c</sup>	1992-2000	-3.0 <sup>c</sup>				
Black	65 and Over	1975-1988	2.1 <sup>c</sup>	1988-1993	3.4 <sup>c</sup>	1993-2000	-2.5 <sup>c</sup>		

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 U.S. standard population by 5-year age groups using the Joinpoint Regression Program.

Trends are from the SEER 9 areas.

Trends are from the NCHS public use data file.

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

<sup>a</sup><sup>b</sup><sup>c</sup>

Table XXII-2  
PROSTATE CANCER (Invasive)

SEER INCIDENCE<sup>a</sup> AND U.S. DEATH<sup>b</sup> RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES, BY RACE

	Incidence <sup>a</sup>			US Death <sup>b</sup>		
	All Races, Males	White Males	Black Males	All Races, Males	White Males	Black Males
<u>AGE-SPECIFIC RATES, 1996-2000</u>						
AGE AT DIAGNOSIS/DEATH:						
<1	-	-	-	-	-	-
1-4	-	-	-	-	-	-
5-9	-	-	-	-	-	-
10-14	-	-	-	-	-	-
15-19	-	-	-	-	-	-
20-24	-	-	-	-	-	-
25-29	-	-	-	-	-	-
30-34	-	-	-	-	-	-
35-39	0.6	0.6	-	0.0	-	-
40-44	6.7	5.7	16.8	0.2	0.2	0.5
45-49	34.2	30.7	79.2	1.0	0.8	2.6
50-54	130.8	125.7	243.5	3.6	3.0	9.9
55-59	319.0	309.3	557.7	11.0	9.3	29.4
60-64	589.3	572.3	1,018.6	27.9	23.4	77.0
65-69	895.0	877.6	1,396.9	63.4	55.4	161.2
70-74	1,078.5	1,052.2	1,699.2	126.5	112.1	329.9
75-79	1,067.7	1,032.4	1,584.9	228.3	207.3	544.7
80-84	918.3	881.5	1,374.1	398.8	370.4	879.1
85+	841.0	813.1	1,202.7	743.1	701.4	1,373.0
<u>AGE-ADJUSTED RATES, 1996-2000</u>						
AGE AT DIAGNOSIS/DEATH:						
All ages	172.8	167.5	276.8	32.9	30.2	73.0
Under 65	56.8	54.7	101.9	2.2	1.9	6.0
65 and over	974.7	947.2	1,486.0	245.2	225.8	535.6
All ages (world std.) <sup>c</sup>	113.3	110.0	185.7	14.2	12.9	33.1

<sup>a</sup> SEER 9 areas. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

<sup>b</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

<sup>c</sup> Rates are per 100,000 and are age-adjusted to the world standard population.

- Statistic not shown. Rate based on less than 25 cases for the time interval.

Table XXII-3  
PROSTATE CANCER (Invasive)

SEER INCIDENCE<sup>a</sup> AND U.S. DEATH<sup>b</sup> RATES, AGE-ADJUSTED RATES, BY RACE AND AGE

	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
<b>SEER INCIDENCE RATES</b>									
YEAR OF DIAGNOSIS:									
1975	94.0	13.7	649.4	92.2	13.0	639.3	141.3	27.1	930.5
1976	98.0	14.6	674.4	97.3	13.9	674.1	140.8	29.4	910.9
1977	100.5	15.0	691.1	98.6	14.4	680.9	159.0	29.1	1,057.2
1978	99.4	15.2	681.5	97.7	14.8	671.3	148.0	26.8	985.8
1979	103.4	14.9	715.0	102.3	14.6	708.3	162.1	26.4	1,100.6
1980	105.9	15.4	730.9	104.8	14.6	728.2	160.9	33.6	1,040.3
1981	108.8	16.8	745.0	107.8	15.9	743.0	161.1	33.8	1,040.6
1982	108.2	16.3	743.2	107.3	15.8	739.8	167.6	31.5	1,108.4
1983	111.5	17.1	764.2	110.7	16.6	761.5	170.7	33.9	1,116.3
1984	111.6	17.2	763.7	109.9	16.2	757.9	178.9	37.2	1,158.1
1985	115.4	17.8	789.8	114.4	17.5	783.8	169.9	31.5	1,126.4
1986	118.9	18.5	813.4	118.9	18.2	814.9	167.9	33.8	1,094.3
1987	133.5	21.5	908.0	134.2	21.0	916.4	188.5	35.9	1,243.5
1988	137.4	22.2	933.5	138.4	22.3	940.8	190.1	34.6	1,264.5
1989	145.1	24.1	981.8	145.8	24.0	988.3	191.4	37.1	1,257.6
1990	170.4	28.6	1,150.6	172.0	28.7	1,162.8	221.6	44.4	1,446.1
1991	214.4	38.7	1,428.3	215.8	39.2	1,436.8	287.1	56.5	1,881.5
1992	236.8	49.2	1,533.2	237.1	49.1	1,536.6	326.4	76.6	2,052.4
1993	208.8	50.4	1,303.4	203.2	48.8	1,270.3	340.6	93.2	2,050.7
1994	179.6	48.4	1,086.5	173.4	46.6	1,049.9	309.0	93.8	1,796.0
1995	168.1	49.7	986.3	162.7	47.7	957.8	276.8	96.6	1,522.3
1996	167.7	53.0	960.5	162.8	51.4	932.8	275.9	97.9	1,506.1
1997	171.5	54.8	978.4	167.1	53.5	952.3	275.4	94.1	1,528.8
1998	168.2	54.3	955.6	163.6	52.1	934.7	275.6	99.4	1,493.5
1999	179.4	60.1	1,003.7	173.4	58.0	971.1	278.4	106.2	1,469.2
2000	176.9	61.0	977.7	170.6	58.1	947.9	278.1	110.2	1,438.8
1996-2000	172.8	56.8	974.7	167.5	54.7	947.2	276.8	101.9	1,486.0
<b>U.S. DEATH RATES</b>									
YEAR OF DEATH:									
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	34.1	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	30.6	2.0	228.2	27.9	1.7	209.6	69.2	5.4	510.1
1996-2000	32.9	2.2	245.2	30.2	1.9	225.8	73.0	6.0	535.6

<sup>a</sup> SEER 9 areas. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

<sup>b</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the world standard population.

- Statistic not shown. Rate based on less than 25 cases for the time interval.

**Table XXII-4**  
**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+
<b>5-YR RELATIVE SURVIVAL RATES</b>									
YEAR OF DIAGNOSIS:									
1960-1963 <sup>a</sup>	-	-	-	50	-	-	35	-	-
1970-1973 <sup>a</sup>	-	-	-	63	-	-	55	-	-
1974-1976 <sup>b</sup>	67.1	71.5	65.5	68.1	72.9	66.4	58.4	60.7	57.0
1977-1979 <sup>b</sup>	71.1	75.8	69.4	72.2	77.5	70.3	62.6	64.4	61.8
1980-1982 <sup>b</sup>	73.4	76.4	72.3	74.5	77.9	73.3	64.8	66.7	63.7
1983-1985 <sup>b</sup>	74.8	75.7	74.5	76.3	77.5	75.9	63.8	64.6	63.5
1986-1988 <sup>b</sup>	81.2	81.3	81.1	82.7	83.1	82.6	69.2	69.9	69.0
1989-1991 <sup>b</sup>	90.6	90.1	90.8	91.9	91.3	92.1	80.7	82.1	80.2
1992-1999 <sup>b</sup>	97.5 <sup>c</sup>	97.5	98.2	98.4 <sup>c</sup>	98.1	99.2	93.4 <sup>c</sup>	95.8 <sup>c</sup>	92.7 <sup>c</sup>
1992-1999 <sup>b</sup>									
ALL STAGES	97.5	97.5	98.2	98.4	98.1	99.2	93.4	95.8	92.7
LOCAL/REGIONAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DISTANT	34.0	31.1	35.0	33.3	30.3	34.3	30.4	32.0	29.8
UNSTAGED	88.1	92.4	87.2	89.0	92.6	88.4	85.5	91.5	82.7
<b>STAGE DISTRIBUTION (%) 1992-1999<sup>b</sup></b>									
ALL STAGES									
Number of cases	132,087	38,126	93,961	109,451	30,935	78,516	15,881	5,898	9,983
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCAL/REGIONAL	86	91	84	86	92	84	82	87	78
DISTANT	6	4	7	5	4	6	8	6	10
UNSTAGED	8	5	10	8	5	10	10	7	12
<b>5-YR RELATIVE SURVIVAL RATES, 1992-1999<sup>b</sup></b>									
AGE AT DIAGNOSIS:									
<45	91.2	-	-	90.3	-	-	96.0	-	-
45-54	95.8	-	-	96.0	-	-	95.6	-	-
55-64	98.2	-	-	98.8	-	-	96.2	-	-
65-74	100.0	-	-	100.0	-	-	96.1	-	-
75+	94.1	-	-	95.5	-	-	84.4	-	-
Under 65	97.5	-	-	98.1	-	-	95.8	-	-
65 and over	98.2	-	-	99.2	-	-	92.7	-	-

<sup>a</sup> Rates are based on End Results data from a series of hospital registries and one population-based registry.  
<sup>b</sup> Rates are from the SEER 9 areas. They are based on data from population-based registries in Connecticut, New Mexico, Utah, Iowa, Hawaii, Atlanta, Detroit, Seattle-Puget Sound and San Francisco-Oakland. Rates are based on follow-up of patients into 2000.  
<sup>c</sup> The difference in rates between 1974-1976 and 1992-1999 is statistically significant ( $p < .05$ ).  
<sup>d</sup> The standard error of the survival rate is between 5 and 10 percentage points.  
<sup>e</sup> The standard error of the survival rate is greater than 10 percentage points.  
<sup>-</sup> Statistic could not be calculated.

Table XXII-5  
PROSTATE CANCER (Invasive)

INCIDENCE, DEATH, AND SURVIVAL RATES<sup>c</sup>

By Year of Diagnosis/Death

All Races, Males

Year of Diagnosis/Death

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Incidence</b>																		
SEER <sup>a</sup>	99.1	109.2	115.4	118.9	133.5	137.4	145.1	170.4	214.4	236.8	208.8	179.6	168.1	167.7	171.5	168.2	179.4	176.9
<b>Mortality</b>																		
U.S. <sup>b</sup>	32.0	33.5	33.9	34.9	35.1	35.9	37.1	38.6	39.3	39.2	39.3	38.5	37.3	36.0	34.1	32.6	31.6	30.6
SEER <sup>a</sup>	32.9	33.8	34.2	35.1	35.7	35.3	36.8	36.9	38.9	39.1	38.0	37.8	35.8	35.2	32.1	31.7	31.0	29.0
<b>Relative Survival Rates (SEER<sup>a</sup>)</b>																		
1-year	91.9	94.2	95.2	95.0	95.5	96.4	97.0	97.7	99.0	99.8	99.6	99.4	99.2	99.6	99.8	100.0	100.0	
2-year	85.2	88.5	88.8	89.4	91.5	92.8	93.9	94.9	97.7	98.8	98.7	98.6	98.4	98.9	99.7	99.7		
3-year	79.1	82.9	83.9	84.3	87.2	89.0	90.5	92.8	96.5	98.4	97.7	97.7	98.1	98.7	99.7			
4-year	74.2	78.0	79.4	80.5	83.9	86.3	88.1	91.0	95.4	98.1	97.6	97.0	97.9	98.6				
5-year	70.0	73.7	75.9	77.9	81.0	84.0	85.7	89.8	94.3	97.7	97.0	96.8	97.8					
6-year	66.9	70.4	73.1	74.9	78.8	81.8	83.8	88.6	93.3	96.9	96.7	96.6						
7-year	63.8	67.0	71.0	72.9	76.3	79.0	82.4	87.0	93.1	96.5	96.2							
8-year	61.0	64.1	68.6	71.5	74.5	77.5	81.2	85.8	92.6	95.8								
9-year	58.5	62.1	66.7	69.2	72.9	76.3	80.0	85.1	92.2									
10-year	56.1	60.4	64.6	67.4	71.7	75.1	79.5	83.9										
11-year	53.8	58.4	62.3	66.2	70.4	74.8	78.9											
12-year	51.7	56.7	60.2	64.6	69.7	73.1												
13-year	50.1	55.3	59.4	63.7	68.7													
14-year	48.6	54.1	57.3	62.9														
15-year	47.7	53.3	55.8															
16-year	46.1	51.8																
17-year	44.8																	
18-year	43.6																	
19-year	43.2																	
20-year	42.5																	

<sup>a</sup> Rates are from the SEER 9 areas.

<sup>b</sup> Rates are from the NCHS public use data file.

<sup>c</sup> Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups. Survival rates are relative rates expressed as percents.

Table XXII-6  
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 (12 SEER Areas) With Cancer and  
Lifetime Risk (Percent) of Dying (Total U.S.) From Cancer

1998-2000

All Races

Current Age	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.00	17.28
10	0.00	0.00	0.01	17.58
20	0.00	0.01	0.22	17.68
30	0.01	0.22	2.25	17.89
40	0.22	2.28	8.17	18.17
50	2.13	8.24	15.06	18.61
60	6.71	14.20	17.53	18.11

Lifetime Risk of Being Diagnosed = 17.28%  
Lifetime Risk of Dying = 3.05%

Whites

Current Age	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.00	16.90
10	0.00	0.00	0.01	17.16
20	0.00	0.01	0.20	17.24
30	0.01	0.20	2.17	17.42
40	0.20	2.20	8.00	17.68
50	2.06	8.06	14.71	18.07
60	6.55	13.82	16.95	17.48

Lifetime Risk of Being Diagnosed = 16.90%  
Lifetime Risk of Dying = 2.86%

Blacks

Current Age	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.00	20.40
10	0.00	0.00	0.02	21.12
20	0.00	0.02	0.51	21.31
30	0.02	0.52	3.96	21.86
40	0.52	4.07	12.20	22.55
50	3.84	12.64	20.38	23.83
60	10.62	19.97	23.53	24.13

Lifetime Risk of Being Diagnosed = 20.40%  
Lifetime Risk of Dying = 4.72%

Table XXII-7  
PROSTATE CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE AND U.S. DEATH RATES

By Race/Ethnicity and Sex

Incidence<sup>a</sup>

	Rate 1996-2000 Rate per 100,000 persons	Trend 1992-2000 APC (%)
	Males	Males
<b>RACE/ETHNICITY</b>		
All Races	170.1	-3.1 <sup>d</sup>
White	164.3	-3.4 <sup>d</sup>
White Hispanic <sup>b</sup>	139.6	-1.6 <sup>d</sup>
White Non-Hispanic <sup>b</sup>	163.3	-3.4 <sup>d</sup>
Black	272.1	-2.3 <sup>d</sup>
Asian/Pacific Islander	100.0	-2.3
Amer Ind/Alaska Nat	53.6	-9.8 <sup>d</sup>
Hispanic <sup>b</sup>	137.2	-1.4 <sup>d</sup>

Mortality<sup>c</sup>

	Rate 1996-2000 Rate per 100,000 persons	Trend 1992-2000 APC (%)
	Males	Males
<b>RACE/ETHNICITY</b>		
All Races	32.9	-3.4 <sup>d</sup>
White	30.2	-3.5 <sup>d</sup>
White Hispanic <sup>b</sup>	24.3	-2.6 <sup>d</sup>
White Non-Hispanic <sup>b</sup>	30.5	-3.5 <sup>d</sup>
Black	73.0	-2.1 <sup>d</sup>
Asian/Pacific Islander	13.9	-4.3 <sup>d</sup>
Amer Ind/Alaska Nat	21.9	-3.8 <sup>d</sup>
Hispanic <sup>b</sup>	24.1	-2.5 <sup>d</sup>

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

- Statistic not shown. Rate based on less than 25 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.

<sup>a</sup> Incidence data are from the 12 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, and Alaska Native Registry).

<sup>b</sup> 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 do not include cases from Detroit, Hawaii and Alaska Native Registry. For mortality, information is included for all states except Connecticut, Oklahoma, New York, and New Hampshire.

<sup>c</sup> Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS).

<sup>d</sup> The APC is significantly different from zero ( $p < .05$ ).

Table XXII-8  
PROSTATE CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE RATES<sup>a</sup> AND SEER DEATH RATES<sup>b</sup>  
By Registry and Race

	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
<b>SEER INCIDENCE RATES<sup>a</sup>, 1996-2000</b>									
REGISTRY									
12 registries	170.1	55.7	961.2	164.3	53.9	927.4	272.1	102.3	1446.4
11 registries	170.3	55.7	962.0	164.3	53.9	927.4	272.1	102.3	1446.4
9 registries	172.8	56.8	974.7	167.5	54.7	947.2	276.8	101.9	1486.0
San Francisco-Oakland	165.2	53.2	939.0	163.7	54.7	917.0	237.6	89.3	1263.2
Connecticut	170.2	58.6	941.6	162.0	54.5	905.4	252.7	94.0	1349.5
Metropolitan Detroit	220.0	74.7	1223.8	195.6	64.5	1102.1	316.2	114.3	1712.1
Hawaii	129.8	31.8	806.6	161.6	44.8	968.8	170.9	-	-
Iowa	151.2	46.0	878.3	148.6	45.2	863.0	237.2	76.5	1348.1
New Mexico	143.2	45.3	819.2	147.1	46.9	839.3	195.4	78.5	1003.4
Seattle-Puget Sound	173.3	55.6	986.9	175.3	56.5	996.4	251.8	93.5	1346.3
Utah	176.4	54.5	1019.4	178.3	55.5	1027.1	234.4	-	-
Metropolitan Atlanta	183.2	69.7	968.3	161.9	59.6	868.8	261.0	102.7	1355.8
San Jose-Monterey	158.1	51.5	894.6	158.8	54.6	879.0	188.7	82.6	922.3
Los Angeles	165.0	53.5	936.1	154.0	50.8	867.3	264.6	104.6	1370.7
<b>SEER DEATH RATES<sup>b</sup>, 1996-2000</b>									
REGISTRY									
12 registries	30.6	2.0	228.5	29.8	1.8	223.5	65.4	6.0	475.9
11 registries	30.7	2.0	228.8	29.8	1.8	223.7	65.5	6.0	476.3
9 registries	31.7	2.0	237.3	30.6	1.7	230.0	67.6	5.5	496.8
San Francisco-Oakland	30.0	1.9	223.8	29.9	1.7	224.8	69.0	6.2	503.3
Connecticut	30.1	2.0	224.7	28.6	1.8	214.3	72.9	5.6	537.8
Metropolitan Detroit	36.3	2.5	269.7	30.2	1.8	226.2	64.6	5.6	472.5
Hawaii	21.9	1.4	163.4	30.8	-	228.9	-	-	-
Iowa	32.3	1.7	243.7	32.1	1.7	242.1	75.4	-	559.9
New Mexico	31.7	2.2	235.9	32.2	2.3	238.9	-	-	-
Seattle-Puget Sound	29.4	1.6	221.9	29.3	1.6	221.0	68.8	-	513.7
Utah	35.3	2.0	265.5	35.2	1.9	265.8	-	-	-
Metropolitan Atlanta	38.8	2.6	289.3	30.5	1.6	230.4	73.6	5.5	543.7
San Jose-Monterey	27.1	1.4	204.6	30.2	1.6	227.3	36.8	-	-
Los Angeles	28.0	2.2	205.7	26.9	1.9	199.6	61.2	7.3	433.8

Note: San Jose-Monterey and Los Angeles are new SEER areas as of 1992 and their data are only used in tables where indicated.

<sup>a</sup> SEER 9 areas. Incidence rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

<sup>b</sup> NCHS public use data file. Death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

- Statistic could not be calculated or populations are inadequate.

Table XXII-9  
PROSTATE CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, 1996-2000

All Races, Males

<u>State</u>	<u>Rate</u>	<u>SE</u>	<u>Rank</u>	<u>PD</u>	<u>State</u>	<u>Rate</u>	<u>SE</u>	<u>Rank</u>	<u>PD</u>
TOTAL U.S.	32.9	0.08							
High Five States									
District of Columbia	54.2 <sup>bc</sup>	2.43	(01)	64.7					
Mississippi	44.0 <sup>bc</sup>	0.99	(02)	33.7					
South Carolina	41.7 <sup>bc</sup>	0.87	(03)	26.7					
Alabama	41.0 <sup>bc</sup>	0.75	(04)	24.6					
Georgia	40.2 <sup>bc</sup>	0.66	(05)	22.2					
Low Five States									
Nebraska	28.6 <sup>bc</sup>	0.91	(47)	-13.1					
Florida	28.4 <sup>bc</sup>	0.26	(48)	-13.7					
Arizona	28.2 <sup>bc</sup>	0.56	(49)	-14.3					
Alaska	24.2 <sup>b</sup>	2.54	(50)	-26.4					
Hawaii	21.9 <sup>bc</sup>	0.94	(51)	-33.4					
State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	41.0 <sup>bc</sup>	0.75	(04)	24.6	Montana	34.8	1.40	(15)	5.8
Alaska	24.2 <sup>b</sup>	2.54	(50)	-26.4	Nebraska	28.6 <sup>bc</sup>	0.91	(47)	-13.1
Arizona	28.2 <sup>bc</sup>	0.56	(49)	-14.3	Nevada	30.2	1.10	(43)	-8.2
Arkansas	34.9	0.83	(14)	6.1	New Hampshire	31.2	1.27	(36)	-5.2
California	29.4 <sup>bc</sup>	0.24	(46)	-10.6	New Jersey	32.9	0.47	(29)	0.0
Colorado	30.5	0.75	(41)	-7.3	New Mexico	31.7	1.05	(34)	-3.6
Connecticut	30.1 <sup>c</sup>	0.68	(44)	-8.5	New York	31.6 <sup>c</sup>	0.31	(35)	-4.0
Delaware	35.2	1.70	(13)	7.0	North Carolina	38.9 <sup>bc</sup>	0.59	(07)	18.2
District of Columbia	54.2 <sup>bc</sup>	2.43	(01)	64.7	North Dakota	34.1	1.50	(22)	3.6
Florida	28.4 <sup>bc</sup>	0.26	(48)	-13.7	Ohio	33.9	0.42	(25)	3.0
Georgia	40.2 <sup>bc</sup>	0.66	(05)	22.2	Oklahoma	30.8	0.71	(39)	-6.4
Hawaii	21.9 <sup>bc</sup>	0.94	(51)	-33.4	Oregon	34.2	0.72	(21)	4.0
Idaho	34.0	1.25	(24)	3.3	Pennsylvania	33.6	0.36	(26)	2.1
Illinois	34.7 <sup>c</sup>	0.41	(16)	5.5	Rhode Island	33.0	1.27	(27)	0.3
Indiana	34.6	0.59	(17)	5.2	South Carolina	41.7 <sup>bc</sup>	0.87	(03)	26.7
Iowa	32.3	0.71	(32)	-1.8	South Dakota	32.3	1.40	(31)	-1.8
Kansas	30.5	0.77	(42)	-7.3	Tennessee	35.8 <sup>c</sup>	0.64	(11)	8.8
Kentucky	34.0	0.73	(23)	3.3	Texas	32.8	0.35	(30)	-0.3
Louisiana	39.7 <sup>bc</sup>	0.78	(06)	20.7	Utah	35.3	1.15	(12)	7.3
Maine	30.6	1.12	(40)	-7.0	Vermont	32.1	1.76	(33)	-2.4
Maryland	36.8 <sup>bc</sup>	0.70	(10)	11.9	Virginia	37.6 <sup>bc</sup>	0.63	(08)	14.3
Massachusetts	33.0	0.53	(28)	0.3	Washington	29.8 <sup>c</sup>	0.56	(45)	-9.4
Michigan	34.3	0.46	(20)	4.3	West Virginia	31.2	0.93	(37)	-5.2
Minnesota	34.4	0.63	(18)	4.6	Wisconsin	34.3	0.58	(19)	4.3
Mississippi	44.0 <sup>bc</sup>	0.99	(02)	33.7	Wyoming	37.4 <sup>b</sup>	2.17	(09)	13.7
Missouri	30.9 <sup>c</sup>	0.55	(38)	-6.1					

<sup>a</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 10% or more.

<sup>c</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

SE Standard error of the rate.

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

Table XXII-10  
PROSTATE CANCER (Invasive)

Estimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2000  
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis	0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	0 to <10	0 to <25	>=25 <sup>f</sup>	Complete <sup>g</sup>
<u>Race</u>									
All Races <sup>b</sup>	819,511	588,141	152,551	46,239	15,756	1,407,652	1,622,198	15,010	1,637,208
White <sup>b</sup>	685,949	513,474	138,206	41,698	14,155	1,199,423	1,393,482	15,919	1,409,401
Black <sup>b</sup>	104,419	60,678	12,057	3,995	1,431	165,097	182,580	1,326	183,906
Asian/Pacific Islander <sup>c</sup>	11,264	6,146	+	+	+	17,410	+	+	+
Hispanic <sup>d</sup>	32,992	17,951	+	+	+	50,943	+	+	+

Estimated prevalence percent<sup>a</sup> on January 1, 2000, of the SEER 11 population diagnosed in the previous 10 years  
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	Age Specific (Crude)								Age-Adjusted <sup>e</sup> All Ages	
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	
<u>Race</u>										
All Races <sup>c</sup>	0.8761%	-	-	-	-	0.0427%	0.7034%	3.7619%	8.5564%	9.2620%
White <sup>c</sup>	0.9205%	-	-	-	-	0.0376%	0.6873%	3.7467%	8.5122%	9.0022%
Black <sup>c</sup>	0.9056%	-	-	-	-	0.1044%	1.3088%	6.1735%	12.5219%	12.0319%
Asian/Pacific Islander <sup>c</sup>	0.4170%	-	-	-	-	0.0135%	0.2073%	1.4279%	4.6443%	6.5568%
Hispanic <sup>d</sup>	0.2682%	-	-	-	-	0.0187%	0.3938%	2.4883%	6.9089%	7.5599%

<sup>a</sup> US 2000 cancer prevalence counts are based on 2000 cancer prevalence proportions from the SEER registries and 1/1/2000 US population estimates based on the average of 1999 and 2000 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.  
<sup>b c d</sup> Statistics based on b) SEER 9 Areas c) SEER 11 Areas d) SEER 11 Areas excluding Hawaii and Detroit.  
<sup>e f g</sup> Percentages are age-adjusted to the 2000 US standard population by 5-year age groups.  
<sup>f</sup> (f) Cases diagnosed 25 years or more ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (g) Complete prevalence is obtained by summing 0 to <25 with >=25.  
<sup>-</sup> Statistics not shown. Rate based on less than 25 cases estimated alive for the time interval.  
<sup>+</sup> Not available.

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

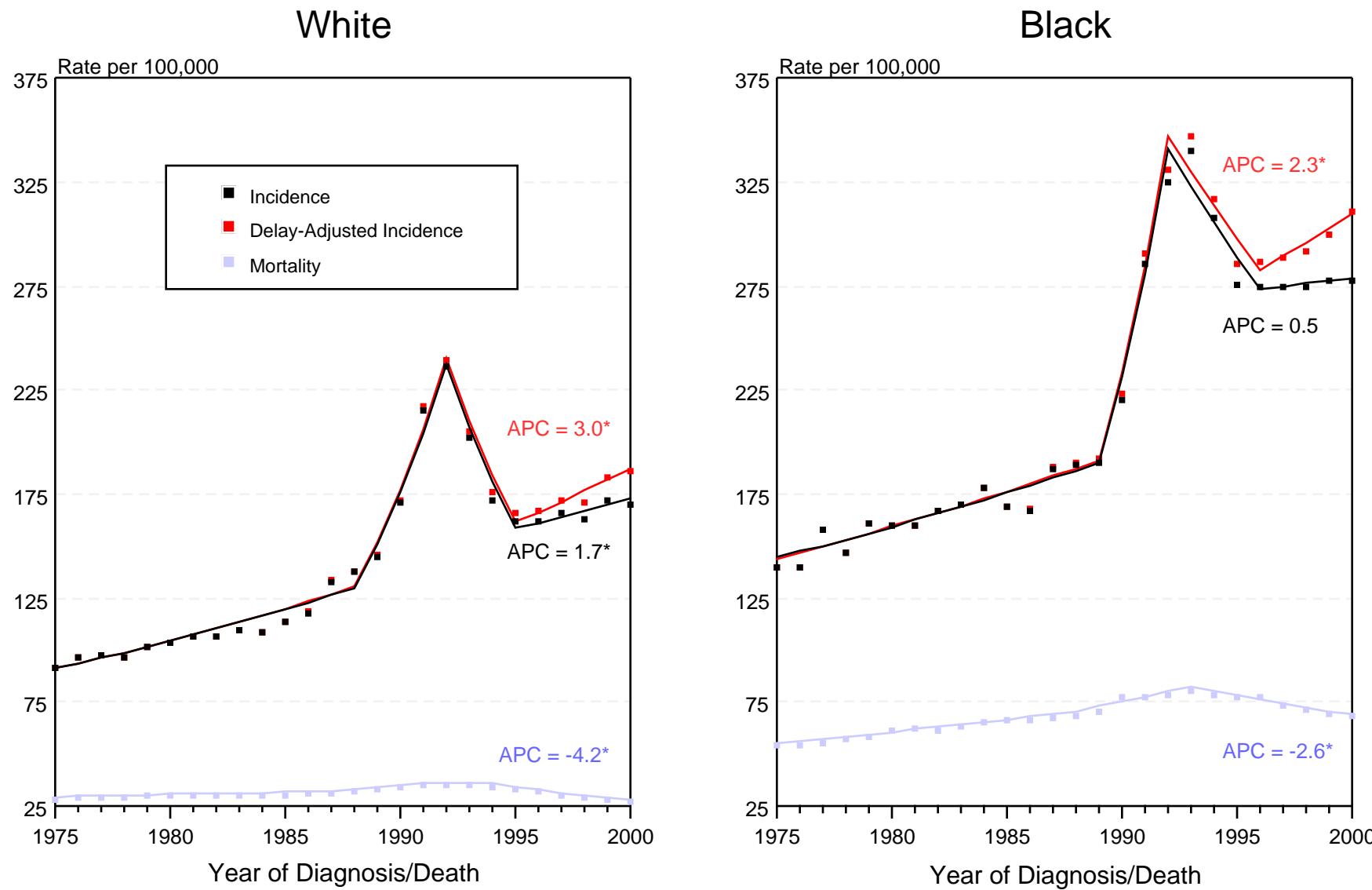
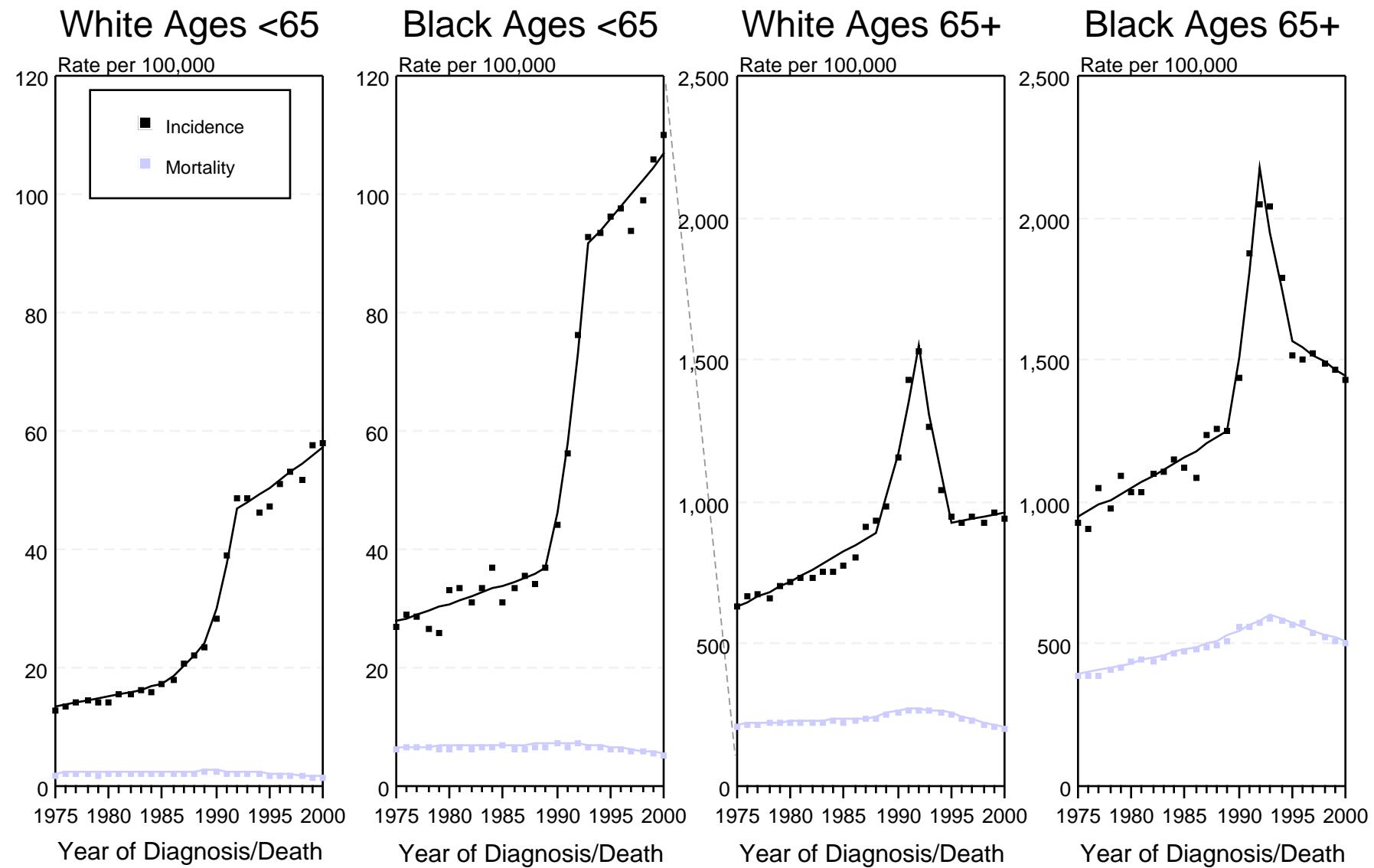


Figure XXII-1

+ Source: SEER 9 areas and NCHS public use data file. Rates are age-adjusted to the 2000 US standard million population by 5-year age groups. Regression lines and APCs are calculated using the Joinpoint Regression Program. 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<sup>+</sup> Prostate Cancer, by Age and Race



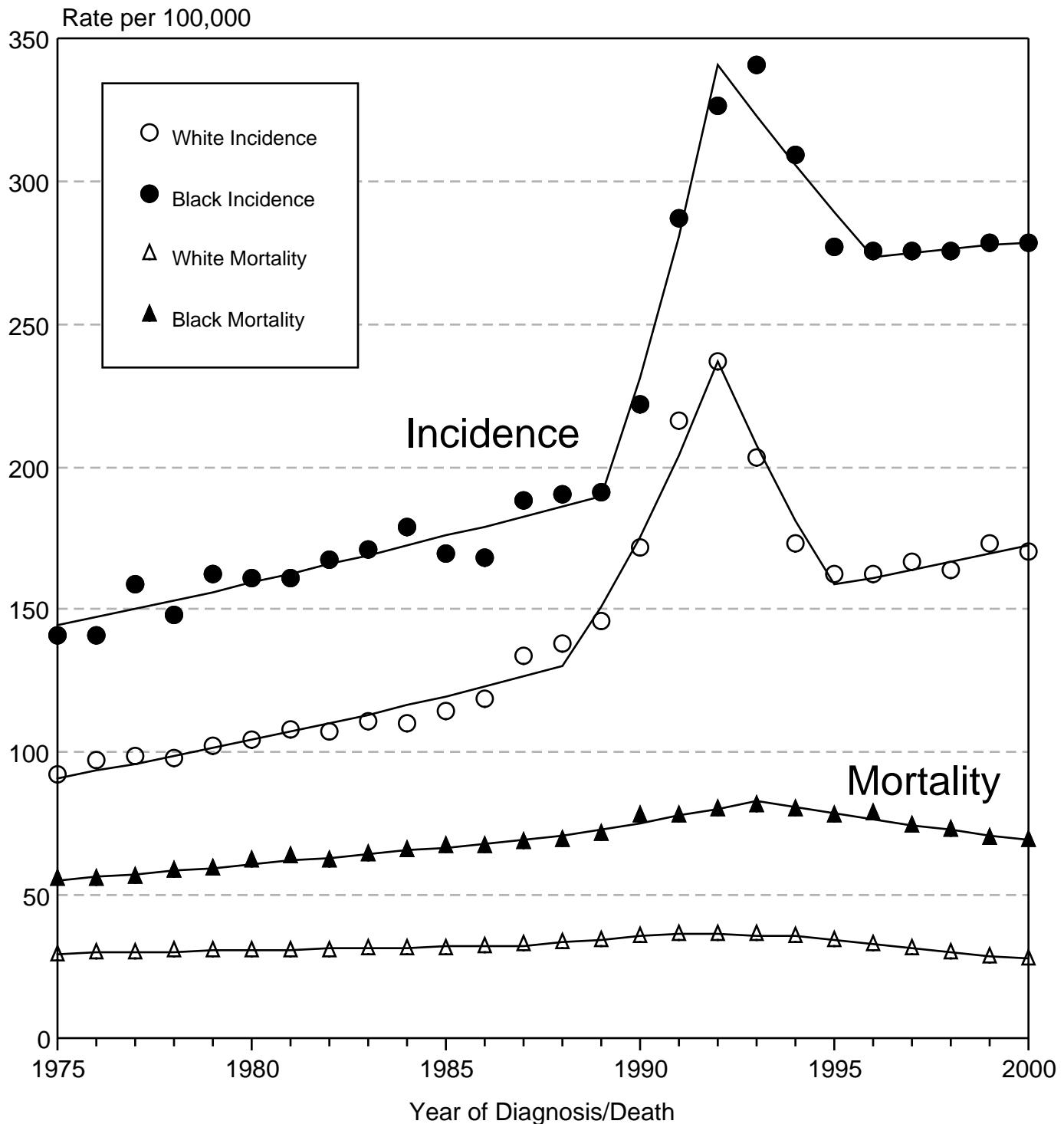
+ Source: SEER 9 areas and NCHS public use data file. Rates are age-adjusted to the 2000 US standard million population by 5-year age groups. Regression lines are calculated using the Joinpoint Regression Program.

Figure XXII-2

Figure XXII-3

# Prostate Cancer

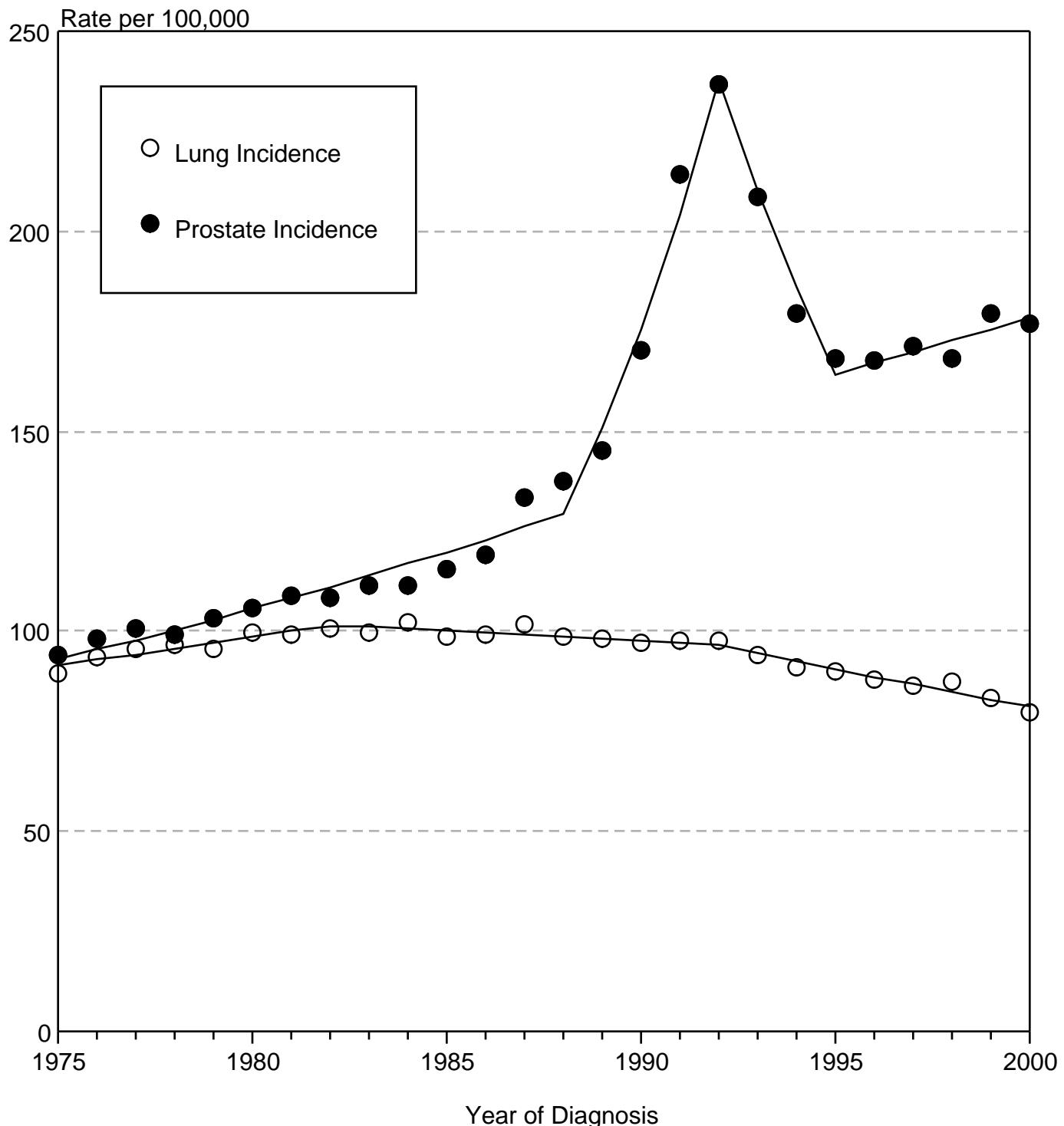
## SEER Incidence & US Mortality, 1975-2000



Source: SEER 9 areas and NCHS public use data file. Rates are age-adjusted to the 2000 US standard million population by 5-year age groups. Regression lines are calculated using the Joinpoint Regression Program.

Figure XXII-4

# Prostate vs Lung Cancer Incidence All Races, Males 1975-2000



Source: SEER 9 areas. Rates are age-adjusted to the 2000 US standard million population by 5-year age groups. Regression lines are calculated using the Joinpoint Regression Program.