

Table XXVII-1  
URINARY BLADDER CANCER (Invasive and *In Situ*)

TRENDS IN SEER INCIDENCE<sup>a</sup> AND U.S. MORTALITY<sup>b</sup> USING THE JOINPOINT REGRESSION PROGRAM, 1975-2003  
WITH UP TO THREE JOINPOINTS BY RACE AND SEX

		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	Male and Female	1975-1987	0.8*	1987-1996	-0.2	1996-2000	1.2	2000-2003	-1.7
All Races	Male	1975-1987	1.0*	1987-1996	-0.5	1996-2000	1.5	2000-2003	-2.3*
All Races	Female	1975-2003	0.2*						
White	Male and Female	1975-1987	1.0*	1987-1996	-0.1	1996-2000	1.4	2000-2003	-1.6
White	Male	1975-1987	1.2*	1987-1995	-0.6	1995-2000	1.2	2000-2003	-2.1
White	Female	1975-2003	0.4*						
Black	Male and Female	1975-2003	0.2						
Black	Male	1975-2003	0.1						
Black	Female	1975-2003	0.4						
<u>SEER Delay-Adjusted Incidence<sup>a</sup></u>									
All Races	Male and Female	1975-1987	0.8*	1987-1996	-0.2	1996-1999	1.8	1999-2003	-0.7
All Races	Male	1975-1987	1.0*	1987-1995	-0.6	1995-2000	1.2	2000-2003	-1.5
All Races	Female	1975-2003	0.2*						
White	Male and Female	1975-1987	1.0*	1987-1996	0.0	1996-2000	1.6	2000-2003	-0.7
White	Male	1975-1987	1.2*	1987-1995	-0.5	1995-2000	1.4	2000-2003	-1.3
White	Female	1975-2003	0.5*						
Black	Male and Female	1975-2003	0.3						
Black	Male	1975-2003	0.3						
Black	Female	1975-2003	0.6						
<u>U.S. Cancer Mortality<sup>b</sup></u>									
All Races	Male and Female	1975-1977	0.0	1977-1987	-2.1*	1987-2003	-0.2*		
All Races	Male	1975-1983	-1.4*	1983-1987	-2.8*	1987-1993	0.1	1993-2003	-0.7*
All Races	Female	1975-1986	-1.7*	1986-2003	-0.4*				
White	Male and Female	1975-1977	0.0	1977-1987	-2.1*	1987-2003	-0.1		
White	Male	1975-1983	-1.4*	1983-1987	-2.7*	1987-1993	0.2	1993-2003	-0.5*
White	Female	1975-1987	-1.7*	1987-2003	-0.2				
Black	Male and Female	1975-2003	-1.1*						
Black	Male	1975-2003	-1.1*						
Black	Female	1975-2003	-0.8*						

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).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the NCHS public use data file for the total US.

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

a

b

\*

Table XXVII-2  
URINARY BLADDER CANCER (Invasive and *In Situ*)

AGE ADJUSTED SEER INCIDENCE<sup>a</sup> RATES BY YEAR, RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
YEAR OF DIAGNOSIS:									
1975	19.3	34.3	8.9	20.2	36.4	9.2	10.6	16.3	6.3
1976	19.7	34.4	9.4	20.7	36.7	9.7	12.5	18.2	8.6
1977	19.0	33.4	8.9	20.0	35.6	9.2	13.5	22.7	7.1
1978	20.0	35.4	9.4	21.1	37.8	9.7	11.7	19.4	6.4
1979	20.0	35.3	9.4	21.3	38.1	9.8	10.3	15.6	6.5
1980	20.4	37.1	8.9	21.5	39.8	9.1	13.3	18.2	10.0
1981	20.7	36.3	9.7	21.9	38.8	10.3	11.5	20.6	5.5
1982	20.1	35.8	9.5	21.4	38.3	10.1	12.2	21.8	5.6
1983	20.1	36.0	9.0	21.3	38.7	9.4	12.2	18.7	7.6
1984	20.8	37.7	9.2	22.3	40.9	9.6	11.4	18.6	6.2
1985	20.7	36.4	9.9	22.1	39.3	10.3	13.0	20.3	8.0
1986	21.0	37.9	9.4	22.4	40.8	9.9	12.9	22.2	6.6
1987	21.7	39.5	9.2	23.2	42.8	9.6	13.3	21.8	7.5
1988	20.9	38.1	9.0	22.7	41.9	9.7	11.3	18.0	6.4
1989	21.0	37.4	9.7	22.7	40.9	10.2	11.3	17.3	7.2
1990	21.1	37.5	9.6	22.6	40.7	10.0	12.7	18.6	8.7
1991	20.9	37.5	9.3	22.7	41.1	9.9	12.9	19.7	8.5
1992	21.2	37.5	9.8	22.9	40.7	10.5	12.5	20.8	6.9
1993	21.2	37.6	9.7	22.8	40.5	10.4	14.2	24.4	7.9
1994	20.8	36.8	9.4	22.5	40.1	10.2	12.3	20.2	6.9
1995	20.6	36.2	9.6	22.4	39.4	10.3	11.9	18.3	7.4
1996	20.7	36.5	9.5	22.6	39.9	10.3	12.2	19.6	7.3
1997	21.0	37.0	9.5	22.9	40.5	10.2	12.3	19.7	7.8
1998	21.5	38.4	9.4	23.5	42.0	10.1	11.7	19.9	6.4
1999	21.7	38.0	10.0	23.5	41.4	10.6	14.4	22.5	9.3
2000	21.7	38.6	9.5	23.8	42.2	10.2	13.1	20.0	8.7
2001	21.5	37.9	9.6	23.7	41.8	10.5	11.3	17.9	7.0
2002	21.0	36.6	9.6	23.0	39.9	10.5	12.4	17.6	8.7
2003	20.8	36.4	9.4	22.9	39.9	10.2	12.2	20.2	6.9
1975-2003	20.8	36.9	9.4	22.4	40.1	10.0	12.4	19.7	7.5

<sup>a</sup> 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 XXVII-3  
URINARY BLADDER CANCER (Invasive)

AGE-ADJUSTED U.S. DEATH<sup>a</sup> RATES BY YEAR, RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
YEAR OF DEATH:									
1975	5.5	9.8	2.8	5.6	10.1	2.7	5.0	6.9	3.6
1976	5.6	9.8	2.9	5.6	10.0	2.8	5.3	7.8	3.5
1977	5.5	9.7	2.9	5.6	9.9	2.8	5.2	7.6	3.6
1978	5.4	9.5	2.9	5.5	9.8	2.8	4.9	7.2	3.4
1979	5.2	9.3	2.7	5.3	9.6	2.7	5.0	7.6	3.3
1980	5.2	9.2	2.7	5.2	9.5	2.7	4.7	6.2	3.7
1981	5.1	9.0	2.7	5.1	9.3	2.6	4.9	7.2	3.4
1982	5.0	8.9	2.6	5.0	9.2	2.5	4.9	6.8	3.6
1983	4.9	8.8	2.5	4.9	9.0	2.5	4.7	7.2	3.2
1984	4.7	8.5	2.5	4.8	8.7	2.4	4.7	6.9	3.4
1985	4.7	8.4	2.4	4.7	8.7	2.4	4.5	6.9	3.0
1986	4.5	8.1	2.4	4.6	8.4	2.3	4.2	5.8	3.3
1987	4.4	7.9	2.3	4.5	8.1	2.3	4.4	6.5	3.1
1988	4.4	7.8	2.4	4.5	8.0	2.3	4.3	5.9	3.3
1989	4.5	8.0	2.4	4.5	8.2	2.3	4.6	7.0	3.2
1990	4.5	8.0	2.4	4.6	8.2	2.4	4.4	6.4	3.2
1991	4.4	7.9	2.3	4.5	8.1	2.3	4.4	6.6	3.1
1992	4.5	7.9	2.4	4.5	8.1	2.4	4.3	6.7	3.1
1993	4.5	8.1	2.3	4.5	8.3	2.3	4.2	6.4	2.9
1994	4.5	7.9	2.4	4.5	8.1	2.4	4.3	6.4	3.2
1995	4.4	7.8	2.3	4.4	8.1	2.2	4.0	5.8	3.1
1996	4.4	7.8	2.4	4.5	8.1	2.3	4.2	5.9	3.1
1997	4.4	7.6	2.4	4.5	7.9	2.4	4.0	5.9	3.0
1998	4.4	7.7	2.3	4.5	8.0	2.3	3.9	5.6	3.0
1999	4.4	7.7	2.3	4.5	7.9	2.2	4.0	5.8	3.0
2000	4.3	7.6	2.3	4.5	7.9	2.3	3.7	5.7	2.7
2001	4.3	7.6	2.3	4.5	7.9	2.2	3.7	5.1	2.9
2002	4.4	7.5	2.4	4.5	7.8	2.3	3.9	5.5	3.0
2003	4.3	7.4	2.2	4.4	7.7	2.2	3.7	5.4	2.7
1975-2003	4.6	8.2	2.4	4.7	8.5	2.4	4.4	6.4	3.2

<sup>a</sup> 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 XXVII-4  
URINARY BLADDER CANCER (Invasive and *In Situ*)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE</u>									
<u>AGE AT DIAGNOSIS</u>									
AGE-ADJUSTED RATES, 2000-2003									
All ages	20.9	37.0	9.3	22.8	40.2	10.0	12.4	19.8	7.4
Under 65	6.2	9.8	2.9	6.9	10.8	3.2	3.8	5.9	2.0
65 and over	122.6	225.3	53.5	132.3	243.7	56.7	71.7	115.5	44.9
All ages(IARC world std) <sup>c</sup>	12.5	21.3	5.6	13.7	23.3	6.1	7.3	11.6	4.2
AGE-SPECIFIC RATES, 2000-2003									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	-	-	-	-	-	-	-
20-24	0.2	0.3	0.2	0.3	0.3	0.2	-	-	-
25-29	0.4	0.6	0.3	0.5	0.6	0.4	-	-	-
30-34	0.9	1.2	0.5	1.0	1.3	0.6	-	-	-
35-39	1.7	2.4	0.9	1.8	2.6	1.1	1.2	2.2	-
40-44	3.6	5.2	2.0	4.0	5.7	2.2	2.5	3.1	1.9
45-49	7.6	11.6	3.7	8.3	12.6	4.1	5.2	8.1	2.6
50-54	15.3	23.9	7.2	17.0	26.1	8.0	9.4	15.3	4.3
55-59	29.9	47.4	13.5	33.0	51.7	15.0	19.2	32.2	8.4
60-64	50.0	81.0	21.7	55.9	90.1	24.1	26.8	40.5	15.7
65-69	79.2	130.9	35.0	88.1	144.7	38.6	43.9	71.4	23.0
70-74	113.4	196.9	47.0	123.9	214.3	50.6	64.0	100.3	38.8
75-79	143.6	265.0	58.6	154.9	286.4	62.3	80.8	136.3	46.3
80-84	162.5	309.9	71.0	171.8	330.8	73.2	101.3	163.3	67.7
85+	155.1	325.7	78.8	162.2	347.9	80.4	98.8	152.9	77.5
<u>U.S. MORTALITY</u>									
<u>AGE AT DEATH</u>									
AGE-ADJUSTED RATES, 2000-2003									
All ages	4.3	7.5	2.3	4.5	7.8	2.3	3.8	5.4	2.8
Under 65	0.7	1.1	0.4	0.8	1.2	0.4	0.7	0.9	0.5
65 and over	29.1	51.6	15.4	30.0	53.8	15.3	25.0	36.7	18.8
All ages(IARC world std) <sup>c</sup>	2.2	3.7	1.1	2.3	3.9	1.1	1.9	2.7	1.4
AGE-SPECIFIC RATES, 2000-2003									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.0	0.0	-	0.0	-	-	-	-	-
35-39	0.1	0.2	0.1	0.2	0.2	0.1	-	-	-
40-44	0.4	0.4	0.3	0.4	0.4	0.3	0.5	0.6	0.4
45-49	0.8	1.2	0.4	0.8	1.3	0.4	0.9	1.1	0.7
50-54	1.7	2.5	0.9	1.8	2.7	0.9	1.7	2.3	1.2
55-59	3.6	5.6	1.7	3.7	5.9	1.7	3.4	4.5	2.6
60-64	6.8	10.8	3.2	7.2	11.5	3.1	5.6	7.5	4.1
65-69	11.9	19.2	5.6	12.4	20.2	5.6	10.5	14.4	7.6
70-74	19.3	31.4	9.7	20.1	33.0	9.7	15.8	21.1	12.3
75-79	30.0	51.7	14.8	30.9	53.7	14.7	26.6	39.4	18.9
80-84	44.8	79.9	23.6	45.8	82.6	23.4	40.9	62.2	29.9
85+	67.3	131.7	40.0	69.1	137.7	40.0	55.2	83.9	44.2

<sup>a</sup> 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.

<sup>b</sup> 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.

<sup>c</sup> 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 XXVII-5  
URINARY BLADDER CANCER (Invasive and *In Situ*)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>5-YR RELATIVE SURVIVAL RATES</u>									
<u>YEAR OF DIAGNOSIS:</u>									
1960-1963 <sup>a</sup>	-	-	-	53	53	53	24	24	24
1970-1973 <sup>a</sup>	-	-	-	61	61	60	36	38	27
1975-1977 <sup>b</sup>	73.3	74.8	69.3	74.3	75.5	71.2	50.4	56.4	38.8 <sup>f</sup>
1978-1980 <sup>b</sup>	75.7	77.0	72.3	76.7	77.4	74.5	55.3	64.0	40.5
1981-1983 <sup>b</sup>	78.4	79.7	74.8	79.2	80.3	76.2	60.2	65.5	48.4 <sup>f</sup>
1984-1986 <sup>b</sup>	78.1	79.4	74.6	78.7	79.9	75.6	60.8	63.7	54.2 <sup>f</sup>
1987-1989 <sup>b</sup>	80.6	82.8	74.2	81.4	83.5	75.5	63.4	68.0	54.6 <sup>f</sup>
1990-1992 <sup>b</sup>	81.0	83.5	73.9	82.0	84.4	75.2	64.8	67.9	59.8
1993-1995 <sup>b</sup>	82.6	84.7	76.7	83.4	85.2	78.6	62.7	70.4	47.2
1996-2002 <sup>b</sup>	81.8 <sup>e</sup>	83.3 <sup>e</sup>	77.8 <sup>e</sup>	82.9 <sup>e</sup>	84.2 <sup>e</sup>	79.2 <sup>e</sup>	64.5 <sup>e</sup>	68.9 <sup>e</sup>	55.7 <sup>e</sup>
<u>5-YR PERIOD SURVIVAL RATES<sup>cd</sup></u>									
<u>YEAR OF DIAGNOSIS:</u>									
1996-2002	80.4	82.3	75.3	81.4	83.0	76.9	63.8	69.4	53.6
<u>STAGE DISTRIBUTION (%) 1996-2002<sup>c</sup></u>									
All Stages									
Number of cases	53,946	40,172	13,774	49,219	36,911	12,308	2,533	1,601	932
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	74	76	70	75	77	72	59	64	52
Regional	19	18	21	18	18	20	28	25	33
Distant	4	3	5	3	3	5	6	5	9
Unstaged	3	3	4	3	3	4	6	6	5
<u>5-YR RELATIVE SURVIVAL RATES, 1996-2002<sup>c</sup></u>									
<u>AGE AT DIAGNOSIS:</u>									
<45	90.4	90.4	90.6	91.3	91.1	91.9	81.7	83.5 <sup>f</sup>	78.4 <sup>f</sup>
45-54	85.7	86.5	83.2	86.9	87.4	85.1	71.8	76.3	58.9 <sup>f</sup>
55-64	85.6	86.5	82.4	86.5	87.2	83.8	75.6	80.7	62.0 <sup>f</sup>
65-74	81.6	83.0	77.3	82.6	83.7	78.8	60.4	64.9	53.1
75+	72.8	75.9	66.1	74.0	76.9	67.3	48.6	51.3 <sup>f</sup>	44.1
Under 65	86.3	87.0	83.8	87.2	87.8	85.4	75.5	79.8	63.7
65 and over	77.6	80.1	71.2	78.6	81.0	72.5	54.6	59.0	48.5
<u>STAGE:</u>									
All Stages	80.8	82.8	75.4	81.8	83.6	76.8	63.7	68.9	53.9
Localized	93.7	94.5	91.3	94.2	95.0	91.8	84.0	86.4	77.1
Regional	46.0	48.1	40.7	46.8	48.8	41.5	38.0	42.2	32.0
Distant	6.2	6.0	6.1	5.9	6.0	5.2	7.7	2.1	14.1
Unstaged	60.4	65.1	47.0	61.6	65.7	48.8	42.6 <sup>f</sup>	48.8 <sup>f</sup>	30.9 <sup>f</sup>

<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 (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

<sup>c</sup> Rates are based on follow-up of patients into 2003.

<sup>d</sup> 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.

<sup>e</sup> 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 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).

<sup>f</sup> The difference in rates between 1975-1977 and 1996-2002 is statistically significant ( $p < .05$ ).

The standard error of the survival rate is between 5 and 10 percentage points.

The standard error of the survival rate is greater than 10 percentage points.

<sup>-</sup> Statistic could not be calculated due to fewer than 16 cases during the time period.

Table XXVII-6  
URINARY BLADDER CANCER

SURVIVAL RATES (Invasive and *In Situ*)<sup>a</sup>

By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975-1979	1980-1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
<b>Relative Survival Rates (SEER<sup>b</sup>)</b>																				
1-year	87.4	89.4	89.2	90.3	90.3	90.9	91.4	90.1	90.2	90.4	91.0	91.2	91.2	90.4	91.9	91.6	90.9	91.8	91.8	90.7
2-year	81.2	84.4	84.3	85.6	85.8	85.8	86.8	86.2	85.6	85.5	86.5	86.8	87.5	86.6	87.2	87.3	86.2	87.7	87.7	87.6
3-year	78.3	81.6	81.2	82.6	83.2	83.9	84.1	83.4	83.5	83.0	84.3	85.3	85.3	84.9	84.4	84.7	83.9	85.2		
4-year	75.9	79.4	78.4	80.6	81.5	82.1	82.5	82.0	82.3	82.5	83.1	83.4	83.4	83.2	82.5	83.3	82.5			
5-year	74.3	77.9	77.2	79.0	80.4	80.3	81.0	81.2	80.9	80.8	81.9	82.4	83.2	82.2	80.9	81.6				
6-year	72.9	76.4	76.3	78.4	78.7	78.7	80.0	80.1	80.1	79.8	80.8	81.2	81.9	81.6	79.7					
7-year	71.3	75.3	75.2	77.7	77.6	77.5	78.6	79.4	78.1	78.2	79.6	80.0	80.0	80.5	81.3					
8-year	70.3	74.4	74.4	76.6	76.2	77.0	77.0	78.0	77.0	77.4	79.3	79.8	79.8	80.0						
9-year	69.1	73.1	74.0	75.9	74.7	76.5	76.8	76.4	76.4	77.2	78.5	79.3								
10-year	67.6	72.2	72.9	75.1	73.8	76.2	75.9	74.9	75.7	76.5	78.0									
11-year	66.2	71.5	72.9	73.8	73.8	75.3	75.1	73.9	75.5	76.1										
12-year	65.5	70.7	71.1	72.8	73.3	75.1	74.2	73.0	75.3											
13-year	65.0	70.3	70.6	72.1	73.1	73.4	74.2	73.0												
14-year	64.1	69.4	69.2	70.8	72.5	72.1	74.2													
15-year	63.6	68.7	68.5	70.6	71.9	71.0														
16-year	63.0	67.7	67.8	69.4	71.3															
17-year	62.7	67.4	67.1	69.4																
18-year	62.6	67.2	67.1																	
19-year	62.6	67.2																		
20-year	62.6																			

<sup>a</sup> Survival rates are relative rates expressed as percents.

<sup>b</sup> Rates are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table XXVII-7  
URINARY BLADDER CANCER

SURVIVAL RATES (Invasive and *In Situ*)<sup>a</sup>

By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975-	1980-																				
	1979	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002		
<b>Relative Survival Rates (SEER<sup>b</sup>)</b>																						
1-year	89.4	90.7	91.1	91.6	92.1	92.1	93.3	92.1	91.7	92.0	92.6	93.0	92.7	92.1	93.5	93.4	92.7	93.1	92.6	92.8		
2-year	83.2	86.0	86.0	87.0	87.9	86.9	89.3	88.4	87.7	87.7	88.9	88.6	89.2	88.3	89.3	89.2	88.1	89.4	88.4	88.4		
3-year	80.1	83.2	83.0	83.7	84.9	85.3	86.9	85.8	85.9	85.7	86.8	87.2	87.2	86.6	86.7	86.4	86.0	86.5				
4-year	77.6	80.9	80.0	81.5	83.4	83.8	85.2	84.3	84.8	85.3	85.3	85.2	85.2	84.7	84.7	84.9	84.3					
5-year	75.7	79.3	78.5	79.8	82.5	82.0	83.8	83.6	83.0	83.6	84.1	84.4	84.9	83.8	82.8	83.1						
6-year	74.2	77.8	77.7	79.2	80.9	80.6	82.2	82.4	82.1	83.0	83.5	83.0	84.1	83.1	81.4							
7-year	72.5	76.7	76.5	78.1	79.7	79.6	80.5	81.3	79.6	81.4	82.2	81.8	82.9	82.8								
8-year	71.2	75.8	75.5	77.3	78.0	78.9	78.6	80.0	78.4	80.3	82.2	81.5	82.3									
9-year	69.9	74.5	75.1	76.2	76.5	78.6	78.4	78.1	77.6	79.7	82.2	81.5										
10-year	68.2	73.7	74.1	75.7	75.8	78.5	77.4	77.2	76.8	79.2	81.8											
11-year	66.6	73.0	73.9	74.7	75.8	77.5	77.1	76.1	76.7	78.8												
12-year	65.8	72.2	71.7	74.1	74.8	77.5	75.7	75.2	76.7													
13-year	65.1	71.7	71.6	73.2	74.8	76.3	75.2	75.2														
14-year	64.3	70.8	70.2	72.3	74.8	75.2	74.8															
15-year	64.0	70.0	69.6	72.3	74.8	74.3																
16-year	63.0	68.9	68.8	70.4	74.6																	
17-year	62.7	68.7	68.0	70.4																		
18-year	62.6	68.7	68.0																			
19-year	62.6	68.7																				
20-year	62.6																					

<sup>a</sup> Survival rates are relative rates expressed as percents.

<sup>b</sup> Rates are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table XXVII-8  
URINARY BLADDER CANCER

SURVIVAL RATES (Invasive and *In Situ*)<sup>a</sup>

By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975-	1980-																				
	1979	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002		
<b>Relative Survival Rates (SEER<sup>b</sup>)</b>																						
1-year	81.7	85.8	84.0	86.4	84.7	87.1	85.9	84.3	85.7	85.8	86.2	86.0	86.9	85.9	87.1	86.3	86.0	87.6	89.5	84.5		
2-year	75.6	79.8	79.6	81.6	79.4	82.5	79.9	79.8	79.4	79.2	79.7	81.7	82.8	81.7	81.2	81.6	81.0	82.6	85.4			
3-year	73.2	77.0	76.1	79.6	77.9	79.4	76.2	76.4	76.4	75.4	77.4	80.0	80.1	80.1	78.2	79.9	78.2	81.1				
4-year	71.3	75.2	74.2	78.2	75.5	77.1	75.0	75.3	75.0	74.5	77.0	78.1	78.6	78.9	76.5	78.6	77.1					
5-year	70.6	74.1	73.0	76.2	74.0	75.4	73.3	74.2	74.8	72.7	75.8	76.8	77.4	78.0	75.6	77.4						
6-year	69.5	72.6	72.3	75.5	71.8	73.0	73.3	73.5	74.6	70.7	73.4	76.1	75.9	76.9	74.9							
7-year	68.2	71.2	71.7	75.5	71.1	71.6	73.2	73.5	73.7	69.5	72.8	75.1	74.3	76.9								
8-year	67.9	70.5	71.3	74.9	70.6	70.8	72.6	72.4	73.0	69.3	71.0	74.7	73.7									
9-year	67.2	69.2	70.5	74.9	69.6	70.0	72.2	71.7	72.8	69.3	68.6	73.1										
10-year	66.1	68.2	69.8	73.6	67.9	69.3	71.4	68.5	72.7	69.3	68.0											
11-year	65.3	67.4	69.6	71.3	67.4	69.0	69.8	67.5	71.9	68.6												
12-year	64.7	67.1	69.2	69.6	67.4	66.6	69.4	65.7	70.7													
13-year	64.7	66.2	68.0	69.3	66.5	65.4	69.4	65.3														
14-year	63.5	65.9	66.5	66.8	64.9	63.6	69.4															
15-year	62.6	65.3	65.2	66.5	63.1	62.5																
16-year	62.6	64.9	64.6	66.5	61.6																	
17-year	62.4	64.2	64.1	66.5																		
18-year	62.4	63.5	63.9																			
19-year	62.4	62.5																				
20-year	62.2																					

<sup>a</sup> Survival rates are relative rates expressed as percents.

<sup>b</sup> Rates are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table XXVII-9  
URINARY BLADDER CANCER (Invasive and In Situ)

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

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	Males				Females			
		+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
All Races	0	0.00	0.00	0.01	3.61	0.00	0.00	0.00	1.14
	10	0.00	0.00	0.02	3.66	0.00	0.00	0.01	1.16
	20	0.00	0.02	0.10	3.68	0.00	0.01	0.04	1.16
	30	0.02	0.10	0.43	3.73	0.01	0.04	0.13	1.16
	40	0.08	0.41	1.26	3.77	0.03	0.13	0.37	1.17
	50	0.34	1.22	2.63	3.83	0.10	0.35	0.74	1.16
	60	0.96	2.48	3.55	3.78	0.26	0.66	1.01	1.11
White	0	0.00	0.00	0.01	3.95	0.00	0.00	0.00	1.22
	10	0.00	0.01	0.02	4.00	0.00	0.00	0.01	1.23
	20	0.00	0.02	0.11	4.02	0.00	0.01	0.04	1.24
	30	0.02	0.11	0.47	4.07	0.01	0.04	0.15	1.24
	40	0.09	0.45	1.40	4.11	0.03	0.14	0.41	1.24
	50	0.38	1.36	2.89	4.17	0.11	0.39	0.80	1.23
	60	1.06	2.72	3.86	4.09	0.29	0.72	1.08	1.17
Black	0	0.00	0.00	0.00	1.40	0.00	0.00	0.00	0.78
	10	0.00	0.00	0.01	1.44	0.00	0.00	0.01	0.79
	20	0.00	0.01	0.07	1.45	0.00	0.01	0.03	0.80
	30	0.01	0.07	0.26	1.49	0.00	0.02	0.08	0.80
	40	0.06	0.26	0.63	1.52	0.02	0.08	0.24	0.81
	50	0.22	0.61	1.16	1.57	0.06	0.23	0.50	0.82
	60	0.46	1.10	1.49	1.57	0.18	0.48	0.74	0.83
Asian/ Pacific Islander	0	0.00	0.00	0.00	2.22	0.00	0.00	0.00	0.67
	10	0.00	0.00	0.01	2.24	0.00	0.00	0.00	0.67
	20	0.00	0.01	0.04	2.25	0.00	0.00	0.01	0.67
	30	0.01	0.04	0.16	2.26	0.00	0.01	0.04	0.67
	40	0.03	0.16	0.51	2.27	0.01	0.04	0.13	0.67
	50	0.13	0.49	1.22	2.28	0.03	0.12	0.31	0.67
	60	0.38	1.14	1.95	2.25	0.09	0.29	0.56	0.66
Hispanic <sup>a</sup>	0	0.00	0.00	0.00	2.34	0.00	0.00	0.00	0.84
	10	0.00	0.00	0.01	2.37	0.00	0.00	0.01	0.85
	20	0.00	0.01	0.05	2.39	0.00	0.01	0.02	0.85
	30	0.01	0.05	0.20	2.41	0.01	0.02	0.08	0.85
	40	0.04	0.20	0.64	2.44	0.02	0.07	0.20	0.85
	50	0.16	0.61	1.41	2.47	0.06	0.19	0.41	0.85
	60	0.48	1.33	2.14	2.47	0.14	0.37	0.64	0.82

Race/Ethnicity	Lifetime Risk of Developing		Lifetime Risk of Dying	
	Males	Females	Males	Females
All Races	3.61%	1.14%	0.76%	0.32%
White	3.95%	1.22%	0.81%	0.32%
Black	1.40%	0.78%	0.39%	0.33%
Asian/Pacific Islander	2.22%	0.67%	0.52%	0.25%
Hispanic <sup>a</sup>	2.34%	0.84%	0.59%	0.26%

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.

<sup>a</sup> 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 XXVII-10  
URINARY BLADDER CANCER

SEER INCIDENCE (Invasive and *In Situ*) AND U.S. MORTALITY  
AGE-ADJUSTED RATES AND TRENDS<sup>a</sup>  
 By Race/Ethnicity and Sex

SEER Incidence

RACE/ETHNICITY	Rate 2000-2003 <sup>b</sup> Rate per 100,000 persons			Trend 1994-2003 <sup>c</sup> APC (%)		
	Total	Males	Females	Total	Males	Females
	All Races	20.9	37.0	9.3	0.0	0.0
White	22.8	40.2	10.0	0.2	0.1	-0.1
White Hispanic <sup>d</sup>	11.7	20.2	5.6	-0.3	0.0	-1.0
White Non-Hispanic <sup>d</sup>	24.2	42.6	10.6	0.2	0.0	0.0
Black	12.4	19.8	7.4	0.7	0.7	0.8
Asian/Pacific Islander	9.3	16.4	3.9	0.6	1.5*	-0.5
Amer Ind/Alaska Nat <sup>e</sup>	7.2	12.5	-	-	-	-
Hispanic <sup>d</sup>	11.5	19.9	5.5	-0.2	0.0	-0.9

U.S. Mortality<sup>f</sup>

RACE/ETHNICITY	Rate 2000-2003 Rate per 100,000 persons			Trend 1994-2003 APC (%)		
	Total	Males	Females	Total	Males	Females
	All Races	4.3	7.5	2.3	-0.3*	-0.6*
White	4.5	7.8	2.3	-0.1	-0.5*	-0.4
White Hispanic <sup>d</sup>	2.5	4.2	1.4	0.4	-0.2	1.2
White Non-Hispanic <sup>d</sup>	4.6	8.0	2.3	-0.1	-0.4*	-0.4
Black	3.8	5.4	2.8	-1.4*	-1.5*	-1.4*
Asian/Pacific Islander	1.8	2.9	1.0	0.5	1.8	-1.7
Amer Ind/Alaska Nat	1.8	2.6	1.2	1.8	-	-
Hispanic <sup>d</sup>	2.4	4.1	1.4	0.3	-0.3	1.0

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.

<sup>a</sup> 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).

<sup>b</sup> 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).

<sup>c</sup> 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).

<sup>d</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 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.

<sup>e</sup> 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.

<sup>f</sup> 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 XXVII-11  
URINARY BLADDER CANCER

AGE-ADJUSTED SEER INCIDENCE RATES<sup>a</sup>  
By Registry, Race/Ethnicity and Sex

	All Races			Whites		Blacks		Asian/Pacific Islanders		Hispanics <sup>b</sup>	
	Total	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
<u>SEER INCIDENCE RATES<sup>a</sup>, 2000-2003</u>											
REGISTRY											
17 SEER Areas <sup>c</sup>	20.9	37.0	9.3	40.2	10.0	19.8	7.4	16.4	3.9	19.9	5.5
13 SEER Areas <sup>c</sup>	20.3	35.9	9.0	39.7	9.8	20.2	7.5	17.1	4.1	19.2	5.1
11 SEER Areas <sup>c</sup>	20.3	36.0	9.0	39.7	9.8	20.2	7.7	17.1	4.1	19.2	5.1
9 SEER Areas <sup>c</sup>	21.2	37.3	9.5	40.9	10.4	18.9	7.8	17.3	3.8	19.9	6.2
San Francisco-Oakland	18.5	32.1	8.6	37.7	10.3	16.6	6.9	16.5	3.4	19.4	7.5
Connecticut	25.6	44.6	12.1	46.2	12.5	18.0	7.8	-	-	29.5	7.6
Metropolitan Detroit	24.4	44.1	10.8	50.3	11.7	20.5	8.2	-	-	23.9	-
Hawaii	13.4	23.9	5.2	40.1	9.5	-	-	17.7	3.8	-	-
Iowa	22.3	38.8	10.1	38.2	9.9	-	-	-	-	-	-
New Mexico	16.3	28.6	6.8	30.4	7.2	-	-	-	-	18.1	4.2
Seattle-Puget Sound	24.6	43.1	10.7	45.2	11.2	20.1	9.3	22.0	6.3	-	-
Utah	16.9	30.0	6.6	30.4	6.8	-	-	-	-	16.0	-
Metropolitan Atlanta	17.7	31.4	8.6	35.9	9.1	18.2	8.1	15.4	-	19.8	-
San Jose-Monterey	18.5	32.7	8.2	36.5	9.3	39.3	-	15.5	3.6	20.3	5.6
Los Angeles	18.0	32.4	7.6	36.3	8.2	22.6	7.4	17.3	4.7	18.5	4.4
Rural Georgia	13.8	30.7	-	36.9	-	-	-	-	-	-	-
California exclud. SF/SJM/LA	20.3	35.8	8.6	37.7	9.0	20.1	6.7	13.6	3.3	18.3	5.3
Kentucky	21.2	37.7	9.6	38.5	9.7	22.6	8.5	-	-	-	-
Louisiana	18.9	34.3	8.3	39.2	9.0	18.8	6.3	-	-	15.8	-
New Jersey	25.6	44.8	12.1	48.2	12.9	18.7	8.5	16.0	3.9	32.0	8.7

- <sup>a</sup> Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)  
<sup>b</sup> Hispanic is not mutually exclusive from Whites, Blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  
<sup>c</sup> Incidence data for Hispanics are based on NHIA and exclude cases from Hawaii, Seattle, Alaska Native Registry and Kentucky.  
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 XXVII-12  
URINARY BLADDER CANCER

AGE-ADJUSTED SEER DEATH RATES<sup>a</sup>  
By Registry, Race/Ethnicity and Sex

	All Races			Whites		Blacks		Asian/Pacific Islanders		Hispanics <sup>b</sup>	
	Total	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
<u>SEER DEATH RATES<sup>a</sup>, 2000-2003</u>											
REGISTRY											
17 SEER Areas <sup>c</sup>	4.1	7.1	2.2	7.6	2.3	5.7	2.9	3.1	1.0	3.9	1.5
13 SEER Areas <sup>c</sup>	3.9	6.7	2.1	7.3	2.1	5.8	2.9	3.1	1.0	4.1	1.4
11 SEER Areas <sup>c</sup>	3.9	6.7	2.1	7.3	2.1	5.9	2.9	3.1	1.0	4.1	1.4
9 SEER Areas <sup>c</sup>	4.1	6.9	2.2	7.4	2.2	5.8	3.2	3.4	1.1	4.6	1.8
San Francisco-Oakland	3.9	6.5	2.2	7.4	2.4	5.7	3.3	3.2	0.9	4.9	2.3
Connecticut	4.6	8.2	2.2	8.4	2.3	6.8	-	-	-	-	-
Metropolitan Detroit	4.3	7.7	2.1	8.2	2.0	5.8	2.8	-	-	-	-
Hawaii	2.6	3.9	1.5	5.3	2.3	-	-	3.6	1.3	-	-
Iowa	3.9	6.6	2.2	6.7	2.2	-	-	-	-	-	-
New Mexico	3.8	6.2	2.1	6.4	2.2	-	-	-	-	4.3	2.1
Seattle-Puget Sound	4.4	7.6	2.3	7.8	2.3	-	-	4.3	-	-	-
Utah	3.2	5.9	1.4	5.9	1.4	-	-	-	-	-	-
Metropolitan Atlanta	4.3	7.1	2.8	7.3	2.3	7.4	4.2	-	-	-	-
San Jose-Monterey	3.1	5.9	1.3	6.7	1.5	-	-	-	-	-	-
Los Angeles	3.6	6.2	2.0	6.9	2.1	6.0	2.4	2.7	1.0	3.9	1.2
Rural Georgia	-	-	-	-	-	-	-	-	-	-	-
California exclud. SF/SJM/LA	4.3	7.3	2.2	7.7	2.3	5.5	3.0	3.2	1.3	3.5	1.5
Kentucky	4.6	8.0	2.4	8.0	2.4	8.6	3.4	-	-	-	-
Louisiana	3.7	6.4	2.1	6.8	2.0	5.5	2.4	-	-	-	-
New Jersey	4.8	8.2	2.7	8.7	2.7	4.6	3.2	-	-	4.8	1.2
Total U.S.	4.3	7.5	2.3	7.8	2.3	5.4	2.8	2.9	1.0	4.1	1.4

<sup>a</sup> 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).

<sup>b</sup> 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.

<sup>c</sup> 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 XXVII-13  
URINARY BLADDER CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, ALL RACES, 2000-2003

Males and Females

<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.	4.3	0.02							
High Five States									
Maine	5.5 <sup>bc</sup>	0.30	(01)	27.9					
Nevada	5.5 <sup>bc</sup>	0.28	(02)	27.9					
New Hampshire	5.4 <sup>b</sup>	0.33	(03)	25.6					
District of Columbia	5.4 <sup>b</sup>	0.49	(04)	25.6					
Vermont	5.4 <sup>b</sup>	0.46	(05)	25.6					
Low Five States									
Nebraska	3.7	0.22	(47)	-14.0					
Alabama	3.5 <sup>bc</sup>	0.14	(48)	-18.6					
Mississippi	3.5 <sup>bc</sup>	0.18	(49)	-18.6					
Utah	3.2 <sup>bc</sup>	0.23	(50)	-25.6					
Hawaii	2.6 <sup>bc</sup>	0.22	(51)	-39.5					
State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	3.5 <sup>bc</sup>	0.14	(48)	-18.6	Montana	4.9	0.35	(12)	14.0
Alaska	5.4 <sup>b</sup>	0.73	(06)	25.6	Nebraska	3.7	0.22	(47)	-14.0
Arizona	4.2	0.14	(31)	-2.3	Nevada	5.5 <sup>bc</sup>	0.28	(02)	27.9
Arkansas	3.9	0.18	(38)	-9.3	New Hampshire	5.4 <sup>b</sup>	0.33	(03)	25.6
California	4.0 <sup>c</sup>	0.06	(36)	-7.0	New Jersey	4.8 <sup>c</sup>	0.12	(13)	11.6
Colorado	3.9	0.17	(41)	-9.3	New Mexico	3.8	0.24	(43)	-11.6
Connecticut	4.6	0.17	(18)	7.0	New York	4.5	0.07	(22)	4.7
Delaware	5.0 <sup>b</sup>	0.39	(09)	16.3	North Carolina	3.9 <sup>c</sup>	0.11	(39)	-9.3
District of Columbia	5.4 <sup>b</sup>	0.49	(04)	25.6	North Dakota	4.2	0.37	(33)	-2.3
Florida	4.4	0.07	(25)	2.3	Ohio	4.9 <sup>c</sup>	0.10	(10)	14.0
Georgia	4.2	0.13	(32)	-2.3	Oklahoma	4.2	0.17	(30)	-2.3
Hawaii	2.6 <sup>bc</sup>	0.22	(51)	-39.5	Oregon	4.9	0.18	(11)	14.0
Idaho	4.6	0.31	(17)	7.0	Pennsylvania	4.7 <sup>c</sup>	0.09	(15)	9.3
Illinois	4.3	0.09	(28)	0.0	Rhode Island	5.2 <sup>b</sup>	0.32	(07)	20.9
Indiana	4.4	0.13	(26)	2.3	South Carolina	4.1	0.16	(34)	-4.7
Iowa	3.9	0.17	(40)	-9.3	South Dakota	3.8	0.33	(42)	-11.6
Kansas	4.1	0.19	(35)	-4.7	Tennessee	4.4	0.14	(24)	2.3
Kentucky	4.6	0.17	(19)	7.0	Texas	3.7 <sup>c</sup>	0.07	(45)	-14.0
Louisiana	3.7 <sup>c</sup>	0.15	(46)	-14.0	Utah	3.2 <sup>bc</sup>	0.23	(50)	-25.6
Maine	5.5 <sup>bc</sup>	0.30	(01)	27.9	Vermont	5.4 <sup>b</sup>	0.46	(05)	25.6
Maryland	4.5	0.15	(20)	4.7	Virginia	4.3	0.13	(29)	0.0
Massachusetts	5.0 <sup>bc</sup>	0.13	(08)	16.3	Washington	4.5	0.14	(23)	4.7
Michigan	4.7	0.11	(14)	9.3	West Virginia	4.7	0.23	(16)	9.3
Minnesota	4.4	0.15	(27)	2.3	Wisconsin	4.5	0.14	(21)	4.7
Mississippi	3.5 <sup>bc</sup>	0.18	(49)	-18.6	Wyoming	3.7	0.45	(44)	-14.0
Missouri	3.9	0.13	(37)	-9.3					

<sup>a</sup> 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).

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 15% 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 XXVII-14  
URINARY BLADDER CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, ALL RACES, 2000-2003

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.	7.5	0.04							
High Five States									
New Hampshire	10.2 <sup>bc</sup>	0.74	(01)	36.0					
Rhode Island	9.5 <sup>b</sup>	0.72	(02)	26.7					
Alaska	9.4 <sup>b</sup>	1.52	(03)	25.3					
Nevada	9.3 <sup>b</sup>	0.59	(04)	24.0					
Maine	9.1 <sup>b</sup>	0.62	(05)	21.3					
Low Five States									
Alabama	6.4 <sup>c</sup>	0.31	(47)	-14.7					
New Mexico	6.2 <sup>b</sup>	0.47	(48)	-17.3					
Mississippi	6.0 <sup>bc</sup>	0.39	(49)	-20.0					
Utah	5.9 <sup>b</sup>	0.48	(50)	-21.3					
Hawaii	3.9 <sup>bc</sup>	0.42	(51)	-48.0					
State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	6.4 <sup>c</sup>	0.31	(47)	-14.7	Montana	8.4	0.72	(11)	12.0
Alaska	9.4 <sup>b</sup>	1.52	(03)	25.3	Nebraska	6.5	0.47	(44)	-13.3
Arizona	7.2	0.29	(35)	-4.0	Nevada	9.3 <sup>b</sup>	0.59	(04)	24.0
Arkansas	7.2	0.40	(34)	-4.0	New Hampshire	10.2 <sup>bc</sup>	0.74	(01)	36.0
California	6.8 <sup>c</sup>	0.12	(40)	-9.3	New Jersey	8.2	0.25	(16)	9.3
Colorado	6.8	0.36	(41)	-9.3	New Mexico	6.2 <sup>b</sup>	0.47	(48)	-17.3
Connecticut	8.2	0.37	(14)	9.3	New York	7.9	0.16	(18)	5.3
Delaware	8.6	0.81	(08)	14.7	North Carolina	6.9	0.25	(39)	-8.0
District of Columbia	7.8	0.97	(20)	4.0	North Dakota	8.2	0.81	(15)	9.3
Florida	7.4	0.14	(32)	-1.3	Ohio	8.8 <sup>bc</sup>	0.22	(06)	17.3
Georgia	7.1	0.28	(37)	-5.3	Oklahoma	7.5	0.37	(29)	0.0
Hawaii	3.9 <sup>bc</sup>	0.42	(51)	-48.0	Oregon	8.5	0.38	(10)	13.3
Idaho	7.8	0.62	(21)	4.0	Pennsylvania	8.3 <sup>c</sup>	0.19	(13)	10.7
Illinois	7.6	0.20	(26)	1.3	Rhode Island	9.5 <sup>b</sup>	0.72	(02)	26.7
Indiana	7.6	0.29	(24)	1.3	South Carolina	7.4	0.36	(31)	-1.3
Iowa	6.6	0.35	(43)	-12.0	South Dakota	7.1	0.71	(36)	-5.3
Kansas	7.4	0.41	(30)	-1.3	Tennessee	7.5	0.30	(28)	0.0
Kentucky	8.0	0.37	(17)	6.7	Texas	6.4 <sup>c</sup>	0.16	(46)	-14.7
Louisiana	6.4	0.33	(45)	-14.7	Utah	5.9 <sup>b</sup>	0.48	(50)	-21.3
Maine	9.1 <sup>b</sup>	0.62	(05)	21.3	Vermont	8.5	0.92	(09)	13.3
Maryland	7.5	0.32	(27)	0.0	Virginia	7.6	0.28	(25)	1.3
Massachusetts	8.6 <sup>c</sup>	0.29	(07)	14.7	Washington	7.6	0.29	(23)	1.3
Michigan	8.4 <sup>c</sup>	0.23	(12)	12.0	West Virginia	7.4	0.48	(33)	-1.3
Minnesota	7.7	0.31	(22)	2.7	Wisconsin	7.9	0.30	(19)	5.3
Mississippi	6.0 <sup>bc</sup>	0.39	(49)	-20.0	Wyoming	6.7	0.96	(42)	-10.7
Missouri	7.0	0.28	(38)	-6.7					

<sup>a</sup> 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).

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 15% 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 XXVII-15  
URINARY BLADDER CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, ALL RACES, 2000-2003

Females

<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.	2.3	0.02							
High Five States									
District of Columbia	3.7 <sup>b</sup>	0.51	(01)	60.9					
Vermont	3.1 <sup>b</sup>	0.45	(02)	34.8					
West Virginia	3.0 <sup>b</sup>	0.24	(03)	30.4					
Maine	3.0 <sup>b</sup>	0.29	(04)	30.4					
Rhode Island	2.9 <sup>b</sup>	0.32	(05)	26.1					
Low Five States									
Alabama	1.7 <sup>bc</sup>	0.12	(47)	-26.1					
South Dakota	1.7 <sup>b</sup>	0.29	(48)	-26.1					
Hawaii	1.5 <sup>b</sup>	0.23	(49)	-34.8					
North Dakota	1.5 <sup>b</sup>	0.30	(50)	-34.8					
Utah	1.4 <sup>bc</sup>	0.20	(51)	-39.1					
State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	1.7 <sup>bc</sup>	0.12	(47)	-26.1	Montana	2.4	0.33	(17)	4.3
Alaska	2.3	0.63	(27)	0.0	Nebraska	1.9 <sup>b</sup>	0.20	(44)	-17.4
Arizona	2.0	0.13	(41)	-13.0	Nevada	2.7 <sup>b</sup>	0.26	(08)	17.4
Arkansas	1.9 <sup>b</sup>	0.16	(45)	-17.4	New Hampshire	2.3	0.28	(22)	0.0
California	2.1	0.05	(35)	-8.7	New Jersey	2.7 <sup>bc</sup>	0.11	(07)	17.4
Colorado	2.0	0.16	(37)	-13.0	New Mexico	2.1	0.23	(36)	-8.7
Connecticut	2.2	0.15	(28)	-4.3	New York	2.4	0.07	(18)	4.3
Delaware	2.5	0.36	(12)	8.7	North Carolina	2.1	0.11	(33)	-8.7
District of Columbia	3.7 <sup>b</sup>	0.51	(01)	60.9	North Dakota	1.5 <sup>b</sup>	0.30	(50)	-34.8
Florida	2.2	0.07	(30)	-4.3	Ohio	2.5	0.09	(10)	8.7
Georgia	2.4	0.12	(16)	4.3	Oklahoma	2.1	0.16	(32)	-8.7
Hawaii	1.5 <sup>b</sup>	0.23	(49)	-34.8	Oregon	2.5	0.17	(13)	8.7
Idaho	2.3	0.29	(19)	0.0	Pennsylvania	2.5	0.08	(11)	8.7
Illinois	2.3	0.09	(21)	0.0	Rhode Island	2.9 <sup>b</sup>	0.32	(05)	26.1
Indiana	2.3	0.13	(20)	0.0	South Carolina	2.0	0.15	(39)	-13.0
Iowa	2.2	0.16	(29)	-4.3	South Dakota	1.7 <sup>b</sup>	0.29	(48)	-26.1
Kansas	1.9 <sup>b</sup>	0.17	(43)	-17.4	Tennessee	2.4	0.13	(15)	4.3
Kentucky	2.4	0.16	(14)	4.3	Texas	2.0	0.07	(40)	-13.0
Louisiana	2.1	0.14	(34)	-8.7	Utah	1.4 <sup>bc</sup>	0.20	(51)	-39.1
Maine	3.0 <sup>b</sup>	0.29	(04)	30.4	Vermont	3.1 <sup>b</sup>	0.45	(02)	34.8
Maryland	2.6	0.15	(09)	13.0	Virginia	2.3	0.12	(26)	0.0
Massachusetts	2.8 <sup>bc</sup>	0.13	(06)	21.7	Washington	2.3	0.13	(25)	0.0
Michigan	2.3	0.10	(24)	0.0	West Virginia	3.0 <sup>b</sup>	0.24	(03)	30.4
Minnesota	2.2	0.14	(31)	-4.3	Wisconsin	2.3	0.13	(23)	0.0
Mississippi	2.0	0.17	(38)	-13.0	Wyoming	1.8 <sup>b</sup>	0.42	(46)	-21.7
Missouri	1.9 <sup>b</sup>	0.12	(42)	-17.4					

<sup>a</sup> 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).

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 15% 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 XXVII-16  
URINARY BLADDER CANCER (Invasive)

Estimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2003  
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 <13 <sup>e</sup>	0 to <28 <sup>e</sup>	>=28 <sup>g</sup>	Complete <sup>h</sup>
<u>Race/Sex</u>									
All Races <sup>b</sup>	184,975	124,284	80,177	50,903	29,858	361,817	480,880	24,885	505,765
Males	138,238	92,488	59,440	37,669	20,884	269,757	356,081	16,232	372,313
Females	46,737	31,796	20,737	13,234	8,974	92,060	124,799	8,653	133,452
White <sup>b</sup>	172,663	117,170	76,414	48,335	28,633	339,580	453,270	19,661	472,931
Males	129,801	87,297	56,633	35,785	20,035	254,025	336,538	12,587	349,125
Females	42,862	29,873	19,781	12,550	8,598	85,555	116,732	7,074	123,806
Black <sup>b</sup>	7,532	4,159	2,470	1,651	751	13,538	16,891	398	17,289
Males	4,704	2,922	1,791	1,217	500	8,976	11,348	317	11,665
Females	2,828	1,237	679	434	251	4,562	5,543	81	5,624
Asian/Pacific Islander <sup>c</sup>	2,252	1,389	+	+	+	4,175	+	+	+
Males	1,717	1,032	+	+	+	3,147	+	+	+
Females	535	357	+	+	+	1,028	+	+	+
Hispanic <sup>d</sup>	5,161	3,100	+	+	+	9,573	+	+	+
Males	3,864	2,337	+	+	+	7,155	+	+	+
Females	1,297	763	+	+	+	2,418	+	+	+

Estimated prevalence percent<sup>a</sup> on January 1, 2003, 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>f</sup> All Ages		
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79		
<u>Race/Sex</u>											
All Races <sup>c</sup>	0.0895%	0.0001%	0.0002%	0.0016%	0.0062%	0.0253%	0.0982%	0.3007%	0.6083%	0.7164%	0.0978%
Males	0.1360%	0.0002%	0.0002%	0.0021%	0.0082%	0.0389%	0.1558%	0.4977%	1.0834%	1.4232%	0.1731%
Females	0.0440%	-	-	0.0011%	0.0041%	0.0119%	0.0435%	0.1249%	0.2506%	0.3323%	0.0424%
White <sup>c</sup>	0.1067%	0.0001%	0.0001%	0.0020%	0.0071%	0.0286%	0.1126%	0.3483%	0.6866%	0.7747%	0.1101%
Males	0.1613%	-	-	0.0026%	0.0091%	0.0432%	0.1755%	0.5702%	1.2179%	1.5610%	0.1939%
Females	0.0524%	-	-	0.0013%	0.0051%	0.0138%	0.0512%	0.1453%	0.2793%	0.3535%	0.0475%
Black <sup>c</sup>	0.0303%	-	-	0.0008%	0.0034%	0.0147%	0.0575%	0.1323%	0.2543%	0.3347%	0.0454%
Males	0.0432%	-	-	-	0.0058%	0.0252%	0.0984%	0.2093%	0.4230%	0.5678%	0.0757%
Females	0.0186%	-	-	-	0.0013%	0.0055%	0.0236%	0.0719%	0.1434%	0.2238%	0.0251%
Asian/Pacific Islander <sup>c</sup>	0.0357%	-	-	-	0.0025%	0.0101%	0.0315%	0.1011%	0.2665%	0.4219%	0.0428%
Males	0.0553%	-	-	-	0.0040%	0.0165%	0.0529%	0.1783%	0.4621%	0.7563%	0.0751%
Females	0.0173%	-	-	-	-	0.0042%	0.0127%	0.0368%	0.1248%	0.1964%	0.0188%
Hispanic <sup>d</sup>	0.0208%	-	-	0.0009%	0.0033%	0.0110%	0.0430%	0.1333%	0.2852%	0.3809%	0.0469%
Males	0.0302%	-	-	0.0010%	0.0030%	0.0163%	0.0668%	0.2339%	0.5195%	0.7357%	0.0843%
Females	0.0110%	-	-	0.0008%	0.0036%	0.0056%	0.0210%	0.0503%	0.1180%	0.1814%	0.0207%

<sup>a</sup> 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.

<sup>b c d</sup> 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.

<sup>e</sup> 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).

<sup>f h</sup> Percentages are age-adjusted to the 2000 US standard population by 5-year age groups.

<sup>g</sup> Cases diagnosed more than 28 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). <sup>(h)</sup>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+ Urinary Bladder Cancer, by Race and Sex

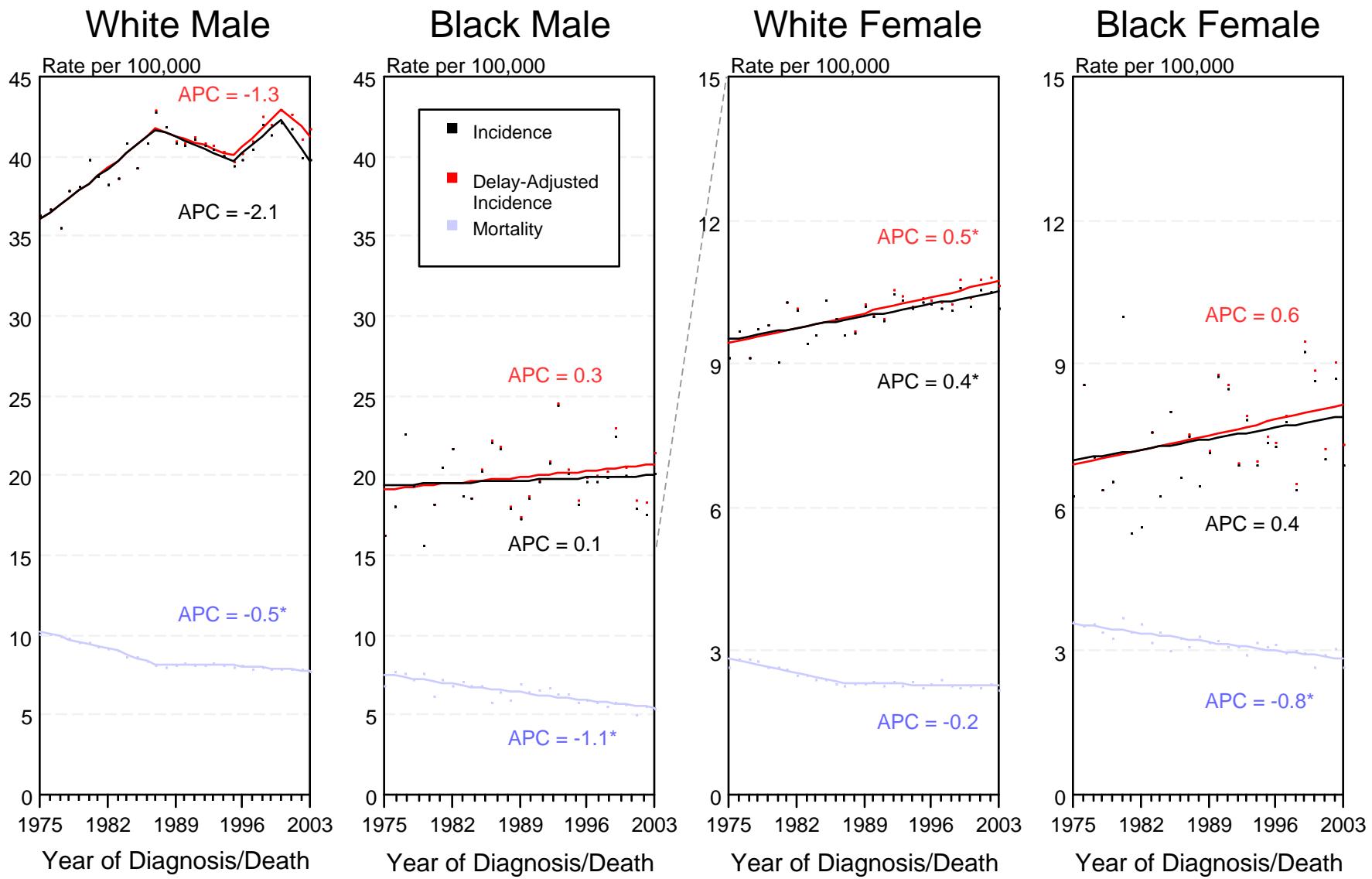


Figure XXVII-1

+ 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.

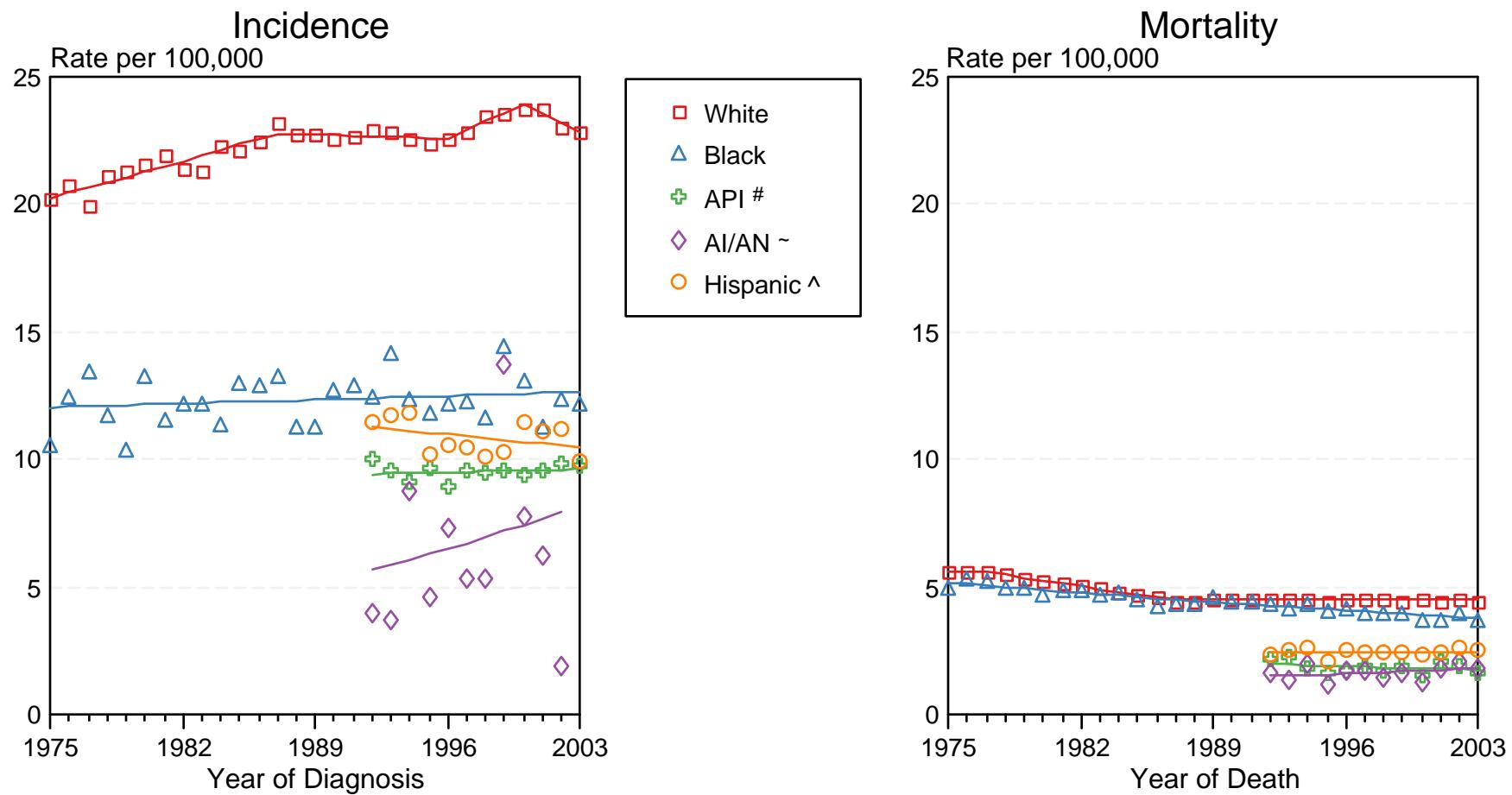
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

# SEER Incidence and US Death Rates\*

## Urinary Bladder Cancer, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2003  
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2003



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 XXVII-2