

Table XXVI-1
URINARY BLADDER CANCER (Invasive)

TRENDS IN SEER INCIDENCE AND U.S. MORTALITY USING THE JOINPOINT REGRESSION PROGRAM, 1973-1997
WITH UP TO THREE JOINPOINTS BY RACE AND SEX

| | <u>All Races</u> | | <u>Whites</u> | | <u>Blacks</u> | |
|------------------------------|------------------|-------|---------------|-------|---------------|-------|
| | Year | APC | Year | APC | Year | APC |
| <u>SEER Cancer Incidence</u> | | | | | | |
| Sex - Male and Female | 1973-87 | 0.9★ | 1973-88 | 1.1★ | 1973-76 | 10.9★ |
| | 1987-97 | -0.4★ | 1988-97 | -0.5★ | 1976-97 | -0.1 |
| Sex - Male | 1973-87 | 1.1★ | 1973-88 | 1.2★ | 1973-77 | 10.3★ |
| | 1987-97 | -0.8★ | 1988-97 | -1.0★ | 1977-97 | -0.2 |
| Sex - Female | 1973-75 | 6.6 | 1973-97 | 0.6★ | 1973-97 | 0.5 |
| | 1975-97 | 0.2★ | | | | |
| <u>U.S. Cancer Mortality</u> | | | | | | |
| Sex - Male and Female | 1973-77 | -0.9★ | 1973-77 | -0.8★ | 1973-97 | -1.4★ |
| | 1977-87 | -2.3★ | 1977-87 | -2.2★ | | |
| | 1987-97 | 0.0 | 1987-97 | 0.1 | | |
| Sex - Male | 1973-76 | 0.1 | 1973-76 | 0.1 | 1973-97 | -1.4★ |
| | 1976-87 | -2.1★ | 1976-87 | -2.1★ | | |
| | 1987-97 | -0.4★ | 1987-97 | -0.3★ | | |
| Sex - Female | 1973-87 | -1.8★ | 1973-87 | -1.8★ | 1973-97 | -1.2★ |
| | 1987-97 | 0.1 | 1987-97 | 0.2 | | |

The APC is the Annual Percent Change based on rates age-adjusted to the 1970 U.S. standard population using the Joinpoint Regression Program.

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

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

SEER INCIDENCE 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>AGE-ADJUSTED RATES</u> | | | | | | | | | |
| <u>YEAR OF DIAGNOSIS:</u> | | | | | | | | | |
| 1973 | 14.6 | 25.6 | 6.3 | 15.4 | 27.3 | 6.5 | 7.0 | 10.6 | 4.0 |
| 1974 | 15.8 | 27.3 | 7.1 | 16.5 | 28.9 | 7.3 | 8.7 | 12.0 | 5.8 |
| 1975 | 15.5 | 27.1 | 7.1 | 16.3 | 28.8 | 7.3 | 8.7 | 13.5 | 5.0 |
| 1976 | 15.8 | 27.1 | 7.5 | 16.6 | 28.9 | 7.8 | 9.9 | 14.3 | 6.8 |
| 1977 | 15.3 | 26.5 | 7.0 | 16.1 | 28.2 | 7.3 | 10.6 | 17.8 | 5.3 |
| 1978 | 16.1 | 27.9 | 7.5 | 17.0 | 29.8 | 7.8 | 9.4 | 15.4 | 5.0 |
| 1979 | 16.1 | 27.9 | 7.5 | 17.1 | 30.1 | 7.8 | 8.7 | 13.0 | 5.4 |
| 1980 | 16.5 | 29.4 | 7.1 | 17.4 | 31.5 | 7.3 | 10.6 | 14.5 | 7.8 |
| 1981 | 16.7 | 29.0 | 7.7 | 17.7 | 30.9 | 8.1 | 9.7 | 16.5 | 4.9 |
| 1982 | 16.1 | 28.1 | 7.6 | 17.2 | 30.0 | 8.1 | 9.7 | 17.2 | 4.3 |
| 1983 | 16.3 | 28.7 | 7.2 | 17.3 | 30.8 | 7.5 | 10.1 | 15.4 | 6.2 |
| 1984 | 16.9 | 30.0 | 7.3 | 18.1 | 32.4 | 7.6 | 9.3 | 15.5 | 4.8 |
| 1985 | 16.8 | 28.9 | 8.0 | 18.0 | 31.2 | 8.3 | 10.6 | 16.4 | 6.5 |
| 1986 | 17.1 | 30.1 | 7.7 | 18.3 | 32.3 | 8.1 | 10.3 | 17.8 | 5.0 |
| 1987 | 17.5 | 31.4 | 7.3 | 18.8 | 33.9 | 7.6 | 10.7 | 17.3 | 6.2 |
| 1988 | 16.9 | 30.2 | 7.2 | 18.5 | 33.2 | 7.9 | 8.7 | 14.5 | 4.4 |
| 1989 | 17.0 | 29.7 | 7.7 | 18.4 | 32.5 | 8.1 | 9.1 | 13.9 | 5.8 |
| 1990 | 17.1 | 29.8 | 7.7 | 18.4 | 32.4 | 8.0 | 10.5 | 15.4 | 7.1 |
| 1991 | 16.9 | 29.6 | 7.5 | 18.4 | 32.5 | 8.0 | 10.1 | 15.2 | 6.5 |
| 1992 | 17.2 | 29.6 | 7.9 | 18.5 | 32.0 | 8.5 | 10.0 | 16.6 | 5.3 |
| 1993 | 17.2 | 29.8 | 7.8 | 18.5 | 32.1 | 8.4 | 10.9 | 18.1 | 6.2 |
| 1994 | 16.9 | 29.2 | 7.6 | 18.3 | 31.7 | 8.2 | 9.8 | 15.8 | 5.5 |
| 1995 | 16.6 | 28.4 | 7.7 | 18.1 | 30.9 | 8.3 | 9.4 | 14.4 | 5.5 |
| 1996 | 16.4 | 28.1 | 7.5 | 17.7 | 30.4 | 8.1 | 9.4 | 14.6 | 5.7 |
| 1997 | 16.5 | 28.2 | 7.5 | 17.7 | 30.6 | 7.9 | 9.2 | 14.0 | 6.0 |
| <u>AGE-ADJUSTED RATES, 1993-97</u> | | | | | | | | | |
| <u>AGE AT DIAGNOSIS:</u> | | | | | | | | | |
| All ages | 16.7 | 28.7 | 7.6 | 18.1 | 31.1 | 8.2 | 9.7 | 15.3 | 5.8 |
| Under 65 | 6.4 | 10.0 | 3.0 | 7.0 | 10.8 | 3.3 | 3.5 | 5.5 | 1.9 |
| 65 and over | 110.8 | 199.4 | 49.7 | 119.0 | 216.3 | 52.1 | 66.7 | 105.3 | 41.6 |
| All ages (world std.) [§] | 12.7 | 21.5 | 5.8 | 13.8 | 23.4 | 6.2 | 7.3 | 11.4 | 4.3 |
| <u>AGE-SPECIFIC RATES, 1993-97</u> | | | | | | | | | |
| <u>AGE AT DIAGNOSIS:</u> | | | | | | | | | |
| 0-4 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 |
| 5-9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10-14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15-19 | 0.2 | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | 0.4 |
| 20-24 | 0.2 | 0.4 | 0.1 | 0.3 | 0.5 | 0.1 | 0.2 | 0.2 | 0.2 |
| 25-29 | 0.6 | 0.8 | 0.4 | 0.6 | 0.9 | 0.4 | 0.1 | 0.2 | 0.0 |
| 30-34 | 1.0 | 1.5 | 0.5 | 1.0 | 1.5 | 0.5 | 1.1 | 1.7 | 0.6 |
| 35-39 | 2.0 | 3.0 | 1.1 | 2.2 | 3.2 | 1.2 | 0.9 | 1.5 | 0.4 |
| 40-44 | 4.0 | 5.9 | 2.0 | 4.3 | 6.3 | 2.2 | 2.5 | 4.7 | 0.5 |
| 45-49 | 8.9 | 13.8 | 4.1 | 9.9 | 15.1 | 4.7 | 5.4 | 8.3 | 2.9 |
| 50-54 | 17.9 | 27.1 | 9.0 | 19.6 | 29.1 | 10.2 | 10.3 | 16.4 | 5.1 |
| 55-59 | 31.7 | 49.9 | 14.7 | 34.6 | 53.7 | 16.3 | 18.1 | 30.1 | 8.5 |
| 60-64 | 52.7 | 84.6 | 23.9 | 57.6 | 91.9 | 25.8 | 25.2 | 37.0 | 16.1 |
| 65-69 | 82.6 | 141.5 | 33.2 | 91.2 | 155.9 | 36.0 | 39.4 | 64.4 | 20.0 |
| 70-74 | 111.1 | 188.8 | 50.7 | 118.9 | 204.0 | 52.6 | 70.7 | 108.8 | 43.9 |
| 75-79 | 129.3 | 231.9 | 57.7 | 138.4 | 251.0 | 60.2 | 79.6 | 118.8 | 54.3 |
| 80-84 | 147.4 | 283.9 | 68.5 | 155.3 | 303.0 | 71.5 | 97.8 | 172.7 | 57.4 |
| 85+ | 138.3 | 295.5 | 74.0 | 144.5 | 320.8 | 75.7 | 98.6 | 146.1 | 77.5 |

[§] SEER Program. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.

[§] SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

Table XXVI-3
URINARY BLADDER CANCER (Invasive)

U.S. MORTALITY 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>AGE-ADJUSTED RATES</u> | | | | | | | | | |
| <u>YEAR OF DEATH:</u> | | | | | | | | | |
| 1973 | 4.2 | 7.2 | 2.1 | 4.2 | 7.4 | 2.1 | 4.1 | 5.6 | 3.0 |
| 1974 | 4.2 | 7.2 | 2.1 | 4.2 | 7.4 | 2.0 | 4.1 | 5.7 | 3.0 |
| 1975 | 4.1 | 7.2 | 2.0 | 4.1 | 7.4 | 1.9 | 3.9 | 5.4 | 2.8 |
| 1976 | 4.1 | 7.2 | 2.1 | 4.2 | 7.4 | 2.0 | 4.1 | 6.1 | 2.7 |
| 1977 | 4.1 | 7.1 | 2.1 | 4.1 | 7.3 | 2.0 | 4.0 | 5.8 | 2.8 |
| 1978 | 4.0 | 6.9 | 2.0 | 4.0 | 7.1 | 2.0 | 3.9 | 5.6 | 2.7 |
| 1979 | 3.8 | 6.7 | 1.9 | 3.9 | 6.9 | 1.9 | 3.8 | 5.8 | 2.5 |
| 1980 | 3.8 | 6.6 | 2.0 | 3.8 | 6.8 | 1.9 | 3.6 | 4.8 | 2.8 |
| 1981 | 3.7 | 6.5 | 1.9 | 3.7 | 6.6 | 1.8 | 3.8 | 5.5 | 2.6 |
| 1982 | 3.7 | 6.4 | 1.8 | 3.7 | 6.6 | 1.8 | 3.8 | 5.3 | 2.7 |
| 1983 | 3.6 | 6.3 | 1.8 | 3.6 | 6.4 | 1.8 | 3.6 | 5.4 | 2.4 |
| 1984 | 3.4 | 6.1 | 1.8 | 3.5 | 6.2 | 1.7 | 3.6 | 5.2 | 2.5 |
| 1985 | 3.4 | 6.0 | 1.7 | 3.4 | 6.2 | 1.7 | 3.4 | 5.1 | 2.3 |
| 1986 | 3.3 | 5.8 | 1.7 | 3.3 | 6.0 | 1.7 | 3.2 | 4.3 | 2.5 |
| 1987 | 3.2 | 5.6 | 1.6 | 3.2 | 5.8 | 1.6 | 3.3 | 4.8 | 2.3 |
| 1988 | 3.2 | 5.6 | 1.7 | 3.3 | 5.7 | 1.6 | 3.2 | 4.4 | 2.4 |
| 1989 | 3.3 | 5.7 | 1.7 | 3.3 | 5.9 | 1.6 | 3.4 | 5.1 | 2.4 |
| 1990 | 3.3 | 5.7 | 1.7 | 3.3 | 5.8 | 1.7 | 3.3 | 4.8 | 2.4 |
| 1991 | 3.2 | 5.6 | 1.7 | 3.3 | 5.8 | 1.6 | 3.3 | 4.8 | 2.3 |
| 1992 | 3.2 | 5.6 | 1.7 | 3.3 | 5.7 | 1.7 | 3.2 | 4.7 | 2.3 |
| 1993 | 3.3 | 5.7 | 1.7 | 3.3 | 5.9 | 1.6 | 3.1 | 4.6 | 2.2 |
| 1994 | 3.3 | 5.6 | 1.7 | 3.3 | 5.8 | 1.7 | 3.2 | 4.6 | 2.3 |
| 1995 | 3.2 | 5.5 | 1.6 | 3.2 | 5.7 | 1.6 | 3.0 | 4.1 | 2.3 |
| 1996 | 3.2 | 5.5 | 1.7 | 3.3 | 5.7 | 1.7 | 3.1 | 4.3 | 2.3 |
| 1997 | 3.2 | 5.4 | 1.7 | 3.3 | 5.6 | 1.7 | 2.9 | 4.1 | 2.2 |
| <u>AGE-ADJUSTED RATES, 1993-97</u> | | | | | | | | | |
| <u>AGE AT DEATH:</u> | | | | | | | | | |
| All ages | 3.2 | 5.5 | 1.7 | 3.3 | 5.7 | 1.7 | 3.0 | 4.3 | 2.3 |
| Under 65 | 0.7 | 1.1 | 0.4 | 0.7 | 1.1 | 0.4 | 0.8 | 1.0 | 0.5 |
| 65 and over | 26.1 | 45.9 | 13.8 | 26.7 | 47.8 | 13.6 | 23.9 | 34.2 | 18.0 |
| All ages (world std.)N | 2.2 | 3.8 | 1.2 | 2.3 | 3.9 | 1.1 | 2.1 | 3.0 | 1.6 |
| <u>AGE-SPECIFIC RATES, 1993-97</u> | | | | | | | | | |
| <u>AGE AT DEATH:</u> | | | | | | | | | |
| 0-4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5-9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10-14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 15-19 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20-24 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 25-29 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30-34 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| 35-39 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 |
| 40-44 | 0.3 | 0.5 | 0.2 | 0.3 | 0.5 | 0.2 | 0.5 | 0.7 | 0.4 |
| 45-49 | 0.8 | 1.1 | 0.5 | 0.9 | 1.2 | 0.5 | 0.8 | 1.0 | 0.6 |
| 50-54 | 1.8 | 2.7 | 0.9 | 1.8 | 2.8 | 0.9 | 2.2 | 3.0 | 1.6 |
| 55-59 | 3.5 | 5.5 | 1.7 | 3.6 | 5.7 | 1.7 | 3.7 | 5.4 | 2.3 |
| 60-64 | 6.8 | 10.7 | 3.3 | 6.9 | 11.1 | 3.2 | 6.7 | 9.1 | 4.9 |
| 65-69 | 12.5 | 20.3 | 6.0 | 12.9 | 21.3 | 5.9 | 11.4 | 15.5 | 8.3 |
| 70-74 | 20.1 | 33.4 | 9.9 | 20.6 | 34.6 | 9.7 | 19.0 | 26.0 | 14.2 |
| 75-79 | 30.5 | 52.3 | 15.5 | 31.2 | 54.2 | 15.3 | 27.9 | 41.0 | 19.9 |
| 80-84 | 46.8 | 84.3 | 25.5 | 47.6 | 87.2 | 25.1 | 43.1 | 62.7 | 33.0 |
| 85+ | 68.4 | 135.6 | 41.8 | 69.8 | 141.8 | 41.6 | 60.8 | 90.5 | 48.5 |

* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.

N NCHS public use tape. Rates are per 100,000 and are age-adjusted to the world standard population.

Table XXVI-4
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 |
| 5-YR RELATIVE SURVIVAL RATES | | | | | | | | | |
| YEAR OF DIAGNOSIS: | | | | | | | | | |
| 1960-63 ^a | - | - | - | 53 | 53 | 53 | 24 | 24 | 24 |
| 1970-73 ^a | - | - | - | 61 | 61 | 60 | 36 | 38 | 27 |
| 1974-76 ^b | 72.8 | 74.0 | 69.6 | 74.1 | 74.9 | 71.9 | 47.9 | 54.6 | 36.5 [†] |
| 1977-79 ^b | 75.1 | 76.7 | 70.7 | 76.0 | 77.1 | 72.8 | 55.3 | 62.9 | 40.7 [†] |
| 1980-82 ^b | 78.2 | 79.3 | 75.0 | 79.1 | 80.0 | 76.3 | 58.9 | 63.5 | 49.8 [†] |
| 1983-85 ^b | 77.7 | 79.3 | 73.2 | 78.3 | 79.6 | 74.7 | 59.3 | 64.8 | 49.1 [†] |
| 1986-88 ^b | 79.8 | 81.5 | 74.8 | 80.6 | 82.2 | 76.0 | 62.0 | 67.5 | 49.7 [†] |
| 1989-96 ^b | 81.0 ^S | 83.3 ^S | 74.5 ^S | 81.9 ^S | 84.0 ^S | 75.7 ^S | 63.7 ^S | 67.3 ^S | 57.7 ^S |
| 1989-96 ^b | | | | | | | | | |
| ALL STAGES | 81.0 | 83.3 | 74.5 | 81.9 | 84.0 | 75.7 | 63.7 | 67.3 | 57.7 |
| LOCALIZED | 93.4 | 94.1 | 91.1 | 93.7 | 94.5 | 91.3 | 87.3 | 86.8 | 88.4 |
| REGIONAL | 49.0 | 51.6 | 42.5 | 49.2 | 51.8 | 42.4 | 40.9 | 40.2 | 39.6 [†] |
| DISTANT | 6.4 | 6.9 | 5.7 | 6.9 | 7.7 | 5.5 | 0.0 | 0.0 | 0.0 |
| UNSTAGED | 59.4 | 66.0 | 45.1 | 61.6 | 67.3 | 48.9 | 38.5 [†] | 53.4 [†] | 18.0 [†] |
| STAGE DISTRIBUTION (%) 1989-96^b | | | | | | | | | |
| ALL STAGES | | | | | | | | | |
| Number of cases | 30,053 | 22,313 | 7,740 | 27,725 | 20,721 | 7,004 | 1,303 | 831 | 472 |
| Percent | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| LOCALIZED | 74 | 75 | 69 | 75 | 76 | 70 | 56 | 61 | 49 |
| REGIONAL | 19 | 18 | 20 | 18 | 18 | 20 | 26 | 24 | 29 |
| DISTANT | 3 | 3 | 5 | 3 | 2 | 5 | 8 | 6 | 11 |
| UNSTAGED | 5 | 4 | 6 | 4 | 4 | 6 | 10 | 9 | 12 |
| 5-YR RELATIVE SURVIVAL RATES, 1989-96^b | | | | | | | | | |
| AGE AT DIAGNOSIS: | | | | | | | | | |
| <45 | 92.1 | 93.3 | 88.7 | 93.1 | 93.9 | 90.9 | 81.5 [†] | 84.9 [†] | - |
| 45-54 | 87.5 | 88.2 | 85.4 | 88.1 | 88.5 | 87.0 | 73.7 | 79.2 [†] | 57.2 [†] |
| 55-64 | 85.8 | 87.0 | 81.9 | 86.9 | 87.9 | 83.4 | 65.7 | 68.9 | 57.9 [†] |
| 65-74 | 81.6 | 83.7 | 75.2 | 82.3 | 84.4 | 75.8 | 63.8 | 65.0 | 61.7 [†] |
| 75+ | 71.3 | 74.9 | 64.1 | 72.5 | 75.9 | 65.8 | 51.4 | 52.3 [†] | 49.9 [†] |
| Under 65 | 87.0 | 88.0 | 83.8 | 88.0 | 88.7 | 85.4 | 70.4 | 74.3 | 60.1 |
| 65 and over | 77.4 | 80.4 | 69.7 | 78.3 | 81.2 | 70.8 | 59.0 | 60.5 | 56.4 |

^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 Program. 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 through 1997.
^S The difference in rates between 1974-76 and 1989-96 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.
⁻ Statistic could not be calculated.

Table XXVI-5
URINARY BLADDER CANCER

INCIDENCE (Invasive and In Situ), MORTALITY, AND SURVIVAL RATES (Invasive and In Situ)

By Year of Diagnosis/Death

All Races, Males and Females

Year of Diagnosis/Death

| | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Incidence | | | | | | | | | | | | | | | | | | | | | | |
| SEER | 15.8 | 15.3 | 16.1 | 16.1 | 16.5 | 16.7 | 16.1 | 16.3 | 16.9 | 16.8 | 17.1 | 17.5 | 16.9 | 17.0 | 17.1 | 16.9 | 17.2 | 17.2 | 16.9 | 16.6 | 16.4 | 16.5 |
| Mortality | | | | | | | | | | | | | | | | | | | | | | |
| U.S. | 4.1 | 4.1 | 4.0 | 3.8 | 3.8 | 3.7 | 3.7 | 3.6 | 3.4 | 3.4 | 3.3 | 3.2 | 3.2 | 3.3 | 3.3 | 3.2 | 3.2 | 3.3 | 3.3 | 3.2 | 3.2 | 3.2 |
| SEER | 4.2 | 4.0 | 4.0 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 | 3.6 | 3.3 | 3.2 | 2.9 | 3.2 | 3.0 | 3.2 | 3.2 | 3.1 | 3.2 | 3.0 | 3.0 | 3.0 | 3.0 |
| Relative Survival Rates (SEER) | | | | | | | | | | | | | | | | | | | | | | |
| 1-year | 86.8 | 87.6 | 87.9 | 88.1 | 89.0 | 89.7 | 88.9 | 89.5 | 89.7 | 89.4 | 90.2 | 90.3 | 91.0 | 91.5 | 90.1 | 90.3 | 90.4 | 90.7 | 91.1 | 91.2 | 90.0 | |
| 2-year | 80.4 | 81.6 | 82.6 | 81.8 | 83.8 | 85.7 | 83.6 | 84.4 | 84.8 | 84.4 | 85.5 | 85.8 | 85.9 | 86.9 | 86.2 | 85.7 | 85.4 | 86.1 | 86.6 | 87.3 | | |
| 3-year | 77.8 | 78.4 | 79.6 | 78.5 | 80.0 | 83.9 | 80.5 | 81.6 | 82.5 | 81.2 | 82.5 | 83.2 | 84.0 | 84.1 | 83.2 | 83.6 | 82.9 | 83.9 | 85.0 | | | |
| 4-year | 74.8 | 75.9 | 77.6 | 76.2 | 77.5 | 81.7 | 79.2 | 79.2 | 80.2 | 78.5 | 80.6 | 81.4 | 82.2 | 82.5 | 81.8 | 82.2 | 82.3 | 82.5 | | | | |
| 5-year | 73.4 | 73.7 | 76.2 | 75.3 | 76.2 | 80.8 | 77.5 | 77.6 | 78.4 | 77.2 | 78.9 | 80.1 | 80.2 | 81.0 | 81.2 | 80.7 | 80.4 | | | | | |
| 6-year | 71.9 | 72.6 | 74.6 | 74.1 | 75.0 | 79.2 | 75.8 | 75.8 | 77.4 | 76.3 | 78.2 | 78.2 | 78.6 | 79.9 | 79.8 | 79.8 | | | | | | |
| 7-year | 69.9 | 70.4 | 73.4 | 73.2 | 74.1 | 77.9 | 74.1 | 74.8 | 76.4 | 75.1 | 77.3 | 77.2 | 77.4 | 78.5 | 78.9 | | | | | | | |
| 8-year | 68.3 | 69.0 | 72.6 | 73.2 | 73.2 | 77.0 | 73.6 | 72.9 | 75.5 | 74.3 | 76.2 | 75.7 | 76.8 | 76.6 | | | | | | | | |
| 9-year | 67.3 | 68.3 | 70.5 | 71.9 | 72.3 | 75.2 | 72.4 | 70.9 | 74.8 | 73.9 | 75.6 | 74.2 | 76.1 | | | | | | | | | |
| 10-year | 65.9 | 66.6 | 68.2 | 70.9 | 71.7 | 73.7 | 72.2 | 69.8 | 74.0 | 72.7 | 74.7 | 73.1 | | | | | | | | | | |
| 11-year | 64.3 | 64.3 | 66.7 | 69.7 | 71.0 | 72.8 | 71.4 | 68.9 | 73.0 | 72.7 | 73.0 | | | | | | | | | | | |
| 12-year | 63.2 | 63.1 | 66.2 | 68.5 | 70.4 | 71.1 | 70.1 | 68.8 | 72.3 | 70.4 | | | | | | | | | | | | |
| 13-year | 63.2 | 62.1 | 65.7 | 66.6 | 70.0 | 70.7 | 69.2 | 67.9 | 72.3 | | | | | | | | | | | | | |
| 14-year | 63.2 | 61.0 | 64.6 | 65.3 | 69.0 | 69.1 | 67.8 | 67.5 | | | | | | | | | | | | | | |
| 15-year | 63.2 | 60.7 | 63.7 | 64.4 | 68.5 | 68.8 | 67.1 | | | | | | | | | | | | | | | |
| 16-year | 63.0 | 60.5 | 62.7 | 63.5 | 67.5 | 66.9 | | | | | | | | | | | | | | | | |
| 17-year | 62.0 | 60.5 | 62.7 | 63.5 | 67.2 | | | | | | | | | | | | | | | | | |
| 18-year | 62.0 | 60.5 | 62.6 | 62.9 | | | | | | | | | | | | | | | | | | |
| 19-year | 62.0 | 60.4 | 62.6 | | | | | | | | | | | | | | | | | | | |
| 20-year | 62.0 | 60.0 | | | | | | | | | | | | | | | | | | | | |
| 21-year | 62.0 | | | | | | | | | | | | | | | | | | | | | |

Note: Incidence and mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
Survival rates are relative rates expressed as percents.

Table XXVI-6
URINARY BLADDER CANCER

INCIDENCE (Invasive and In Situ), MORTALITY, AND SURVIVAL RATES (Invasive and In Situ)

By Year of Diagnosis/Death

All Races, Males

Year of Diagnosis/Death

| | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Incidence | | | | | | | | | | | | | | | | | | | | | | |
| SEER | 27.1 | 26.5 | 27.9 | 27.9 | 29.4 | 29.0 | 28.1 | 28.7 | 30.0 | 28.9 | 30.1 | 31.4 | 30.2 | 29.7 | 29.8 | 29.6 | 29.6 | 29.8 | 29.2 | 28.4 | 28.1 | 28.2 |
| Mortality | | | | | | | | | | | | | | | | | | | | | | |
| U.S. | 7.2 | 7.1 | 6.9 | 6.7 | 6.6 | 6.5 | 6.4 | 6.3 | 6.1 | 6.0 | 5.8 | 5.6 | 5.6 | 5.7 | 5.7 | 5.6 | 5.6 | 5.7 | 5.6 | 5.5 | 5.5 | 5.4 |
| SEER | 7.2 | 6.4 | 7.0 | 6.5 | 6.7 | 6.4 | 6.3 | 6.0 | 6.4 | 6.0 | 5.5 | 5.3 | 5.4 | 5.3 | 5.4 | 5.3 | 5.1 | 5.4 | 5.0 | 5.1 | 5.1 | 5.0 |
| Relative Survival Rates (SEER) | | | | | | | | | | | | | | | | | | | | | | |
| 1-year | 88.3 | 90.3 | 90.2 | 89.6 | 91.1 | 91.7 | 89.3 | 91.1 | 90.1 | 91.3 | 91.6 | 92.0 | 92.4 | 93.3 | 92.1 | 91.7 | 92.0 | 92.3 | 92.9 | 92.8 | 91.6 | |
| 2-year | 82.4 | 84.8 | 84.5 | 83.1 | 86.1 | 88.0 | 84.2 | 86.1 | 85.8 | 86.2 | 86.9 | 87.9 | 87.1 | 89.4 | 88.4 | 87.7 | 87.6 | 88.4 | 88.4 | 89.0 | | |
| 3-year | 79.8 | 81.8 | 80.9 | 79.9 | 82.1 | 86.4 | 81.0 | 83.3 | 83.6 | 83.2 | 83.6 | 84.9 | 85.6 | 86.9 | 85.7 | 85.9 | 85.6 | 86.3 | 86.9 | | | |
| 4-year | 76.9 | 79.1 | 78.8 | 77.3 | 78.9 | 84.0 | 79.7 | 81.3 | 81.5 | 80.0 | 81.5 | 83.3 | 84.0 | 85.1 | 84.3 | 84.6 | 85.2 | 84.6 | | | | |
| 5-year | 74.8 | 76.4 | 77.3 | 76.5 | 77.5 | 82.8 | 77.6 | 79.4 | 79.9 | 78.6 | 80.0 | 82.3 | 82.1 | 83.8 | 83.8 | 82.7 | 83.4 | | | | | |
| 6-year | 72.9 | 75.2 | 75.9 | 75.0 | 76.5 | 81.1 | 75.4 | 78.0 | 79.1 | 77.8 | 79.1 | 80.5 | 80.6 | 82.1 | 82.2 | 81.6 | | | | | | |
| 7-year | 70.5 | 73.2 | 74.4 | 74.1 | 75.1 | 79.9 | 73.8 | 76.8 | 78.8 | 76.5 | 77.8 | 79.5 | 79.6 | 80.3 | 81.1 | | | | | | | |
| 8-year | 68.8 | 71.2 | 73.2 | 73.9 | 74.0 | 78.6 | 73.4 | 75.3 | 77.9 | 75.5 | 76.9 | 77.6 | 79.1 | 78.2 | | | | | | | | |
| 9-year | 67.5 | 70.2 | 71.2 | 72.8 | 73.4 | 77.0 | 72.0 | 73.5 | 77.1 | 75.4 | 75.9 | 76.0 | 78.5 | | | | | | | | | |
| 10-year | 65.5 | 68.8 | 68.5 | 72.1 | 72.9 | 75.4 | 71.8 | 72.6 | 76.6 | 74.1 | 75.3 | 75.2 | | | | | | | | | | |
| 11-year | 64.0 | 65.8 | 66.7 | 70.3 | 72.3 | 74.0 | 71.2 | 71.6 | 76.1 | 74.0 | 73.9 | | | | | | | | | | | |
| 12-year | 63.0 | 64.8 | 65.8 | 69.2 | 71.7 | 71.8 | 69.8 | 71.6 | 75.1 | 71.5 | | | | | | | | | | | | |
| 13-year | 62.7 | 64.2 | 64.6 | 67.2 | 71.5 | 71.2 | 69.0 | 70.7 | 75.1 | | | | | | | | | | | | | |
| 14-year | 62.7 | 63.4 | 63.5 | 65.9 | 70.7 | 68.9 | 67.6 | 70.2 | | | | | | | | | | | | | | |
| 15-year | 62.7 | 63.2 | 62.4 | 65.5 | 70.1 | 68.4 | 67.1 | | | | | | | | | | | | | | | |
| 16-year | 62.3 | 62.5 | 60.9 | 64.0 | 69.1 | 66.5 | | | | | | | | | | | | | | | | |
| 17-year | 61.1 | 62.5 | 60.9 | 63.9 | 69.1 | | | | | | | | | | | | | | | | | |
| 18-year | 61.1 | 62.5 | 60.9 | 62.6 | | | | | | | | | | | | | | | | | | |
| 19-year | 61.1 | 62.1 | 60.9 | | | | | | | | | | | | | | | | | | | |
| 20-year | 61.1 | 61.9 | | | | | | | | | | | | | | | | | | | | |
| 21-year | 61.1 | | | | | | | | | | | | | | | | | | | | | |

Note: Incidence and mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population. Survival rates are relative rates expressed as percents.

Table XXVI-7
URINARY BLADDER CANCER

INCIDENCE (Invasive and In Situ), MORTALITY, AND SURVIVAL RATES (Invasive and In Situ)

By Year of Diagnosis/Death

All Races, Females

Year of Diagnosis/Death

| | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Incidence | | | | | | | | | | | | | | | | | | | | | | |
| SEER | 7.5 | 7.0 | 7.5 | 7.5 | 7.1 | 7.7 | 7.6 | 7.2 | 7.3 | 8.0 | 7.7 | 7.3 | 7.2 | 7.7 | 7.7 | 7.5 | 7.9 | 7.8 | 7.6 | 7.7 | 7.5 | 7.5 |
| Mortality | | | | | | | | | | | | | | | | | | | | | | |
| U.S. | 2.1 | 2.1 | 2.0 | 1.9 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 | 1.6 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.6 | 1.7 | 1.7 |
| SEER | 2.1 | 2.4 | 2.0 | 2.0 | 1.8 | 1.9 | 1.7 | 1.8 | 1.8 | 1.6 | 1.7 | 1.4 | 1.7 | 1.5 | 1.8 | 1.7 | 1.8 | 1.7 | 1.8 | 1.5 | 1.6 | 1.6 |
| Relative Survival Rates (SEER) | | | | | | | | | | | | | | | | | | | | | | |
| 1-year | 82.8 | 80.1 | 81.4 | 83.8 | 82.9 | 84.1 | 88.0 | 84.8 | 88.6 | 84.1 | 86.3 | 84.9 | 87.0 | 86.2 | 84.1 | 86.3 | 85.7 | 86.2 | 85.9 | 86.8 | 85.5 | |
| 2-year | 75.3 | 72.5 | 77.3 | 78.0 | 76.6 | 79.3 | 82.2 | 79.3 | 81.5 | 79.5 | 81.6 | 79.3 | 82.3 | 79.9 | 79.6 | 79.8 | 79.1 | 79.6 | 81.5 | 82.6 | | |
| 3-year | 72.6 | 68.9 | 75.9 | 74.7 | 73.9 | 76.8 | 79.1 | 76.4 | 79.3 | 76.0 | 79.5 | 77.9 | 79.1 | 76.4 | 75.8 | 76.9 | 75.2 | 77.2 | 79.6 | | | |
| 4-year | 69.4 | 67.1 | 74.1 | 73.1 | 73.2 | 75.2 | 78.1 | 73.1 | 76.5 | 74.2 | 77.9 | 75.6 | 77.0 | 75.2 | 74.7 | 75.5 | 74.1 | 76.7 | | | | |
| 5-year | 69.4 | 66.5 | 73.2 | 72.0 | 72.6 | 75.0 | 77.2 | 72.3 | 73.9 | 73.2 | 75.8 | 73.6 | 74.9 | 73.4 | 73.5 | 75.0 | 72.2 | | | | | |
| 6-year | 69.3 | 65.5 | 71.2 | 71.7 | 70.5 | 73.7 | 76.7 | 69.6 | 72.6 | 72.1 | 75.5 | 71.2 | 72.6 | 73.4 | 72.8 | 75.0 | | | | | | |
| 7-year | 68.3 | 63.1 | 70.6 | 70.8 | 70.5 | 72.3 | 75.0 | 68.8 | 69.3 | 71.4 | 75.5 | 70.5 | 71.1 | 73.4 | 72.6 | | | | | | | |
| 8-year | 66.9 | 63.1 | 70.6 | 70.8 | 70.5 | 72.3 | 74.1 | 65.9 | 68.7 | 71.2 | 74.3 | 69.9 | 70.2 | 72.4 | | | | | | | | |
| 9-year | 66.8 | 63.1 | 68.7 | 69.5 | 69.3 | 70.2 | 73.4 | 63.2 | 68.4 | 70.0 | 74.3 | 68.8 | 69.3 | | | | | | | | | |
| 10-year | 66.6 | 61.1 | 67.6 | 68.0 | 68.6 | 68.9 | 73.4 | 61.8 | 66.4 | 69.0 | 73.3 | 67.0 | | | | | | | | | | |
| 11-year | 65.0 | 60.4 | 66.6 | 68.0 | 67.5 | 68.9 | 71.8 | 61.1 | 64.1 | 69.0 | 70.7 | | | | | | | | | | | |
| 12-year | 63.5 | 58.6 | 66.6 | 66.9 | 66.9 | 68.9 | 70.7 | 60.8 | 64.1 | 67.7 | | | | | | | | | | | | |
| 13-year | 63.5 | 56.7 | 66.6 | 65.2 | 66.1 | 68.9 | 69.6 | 60.0 | 63.6 | | | | | | | | | | | | | |
| 14-year | 63.5 | 55.1 | 66.6 | 63.8 | 64.6 | 68.9 | 68.3 | 60.0 | | | | | | | | | | | | | | |
| 15-year | 63.5 | 54.3 | 66.6 | 61.9 | 64.5 | 68.9 | 67.3 | | | | | | | | | | | | | | | |
| 16-year | 63.5 | 54.3 | 66.6 | 61.9 | 63.2 | 68.3 | | | | | | | | | | | | | | | | |
| 17-year | 63.5 | 54.3 | 66.0 | 61.9 | 61.1 | | | | | | | | | | | | | | | | | |
| 18-year | 62.8 | 54.3 | 65.2 | 61.9 | | | | | | | | | | | | | | | | | | |
| 19-year | 62.8 | 54.3 | 65.2 | | | | | | | | | | | | | | | | | | | |
| 20-year | 62.0 | 54.3 | | | | | | | | | | | | | | | | | | | | |
| 21-year | 58.8 | | | | | | | | | | | | | | | | | | | | | |

Note: Incidence and mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
Survival rates are relative rates expressed as percents.

Table XXVI-8
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 With Cancer and
 Lifetime Risk (Percent) of Dying From Cancer

9 SEER Areas, 1995-97

All Races

| Current Age | Males | | | | Females | | | | |
|------------------------------------|---------|---------|---------|------------|------------------------------------|---------|---------|------------|-------|
| | +10 yrs | +20 yrs | +30 yrs | Eventually | +10 yrs | +20 yrs | +30 yrs | Eventually | |
| 0 | 0.00 | 0.00 | 0.01 | 3.40 | 0.00 | 0.00 | 0.00 | 1.18 | |
| 10 | 0.00 | 0.01 | 0.03 | 3.43 | 0.00 | 0.00 | 0.01 | 1.19 | |
| 20 | 0.01 | 0.03 | 0.12 | 3.46 | 0.00 | 0.01 | 0.04 | 1.19 | |
| 30 | 0.02 | 0.12 | 0.46 | 3.50 | 0.01 | 0.04 | 0.15 | 1.19 | |
| 40 | 0.10 | 0.44 | 1.32 | 3.56 | 0.03 | 0.14 | 0.39 | 1.20 | |
| 50 | 0.36 | 1.27 | 2.56 | 3.61 | 0.11 | 0.37 | 0.77 | 1.19 | |
| 60 | 0.99 | 2.39 | 3.32 | 3.53 | 0.27 | 0.68 | 1.03 | 1.13 | |
| Lifetime Risk of Being Diagnosed = | | | | 3.40% | Lifetime Risk of Being Diagnosed = | | | | 1.18% |
| Lifetime Risk of Dying = | | | | 0.72% | Lifetime Risk of Dying = | | | | 0.32% |

Whites

| Current Age | Males | | | | Females | | | | |
|------------------------------------|---------|---------|---------|------------|------------------------------------|---------|---------|------------|-------|
| | +10 yrs | +20 yrs | +30 yrs | Eventually | +10 yrs | +20 yrs | +30 yrs | Eventually | |
| 0 | 0.00 | 0.00 | 0.01 | 3.76 | 0.00 | 0.00 | 0.00 | 1.26 | |
| 10 | 0.00 | 0.01 | 0.03 | 3.79 | 0.00 | 0.00 | 0.01 | 1.26 | |
| 20 | 0.01 | 0.03 | 0.13 | 3.81 | 0.00 | 0.01 | 0.04 | 1.27 | |
| 30 | 0.02 | 0.13 | 0.49 | 3.85 | 0.01 | 0.04 | 0.17 | 1.27 | |
| 40 | 0.10 | 0.48 | 1.45 | 3.91 | 0.03 | 0.16 | 0.43 | 1.27 | |
| 50 | 0.39 | 1.39 | 2.81 | 3.94 | 0.13 | 0.40 | 0.82 | 1.26 | |
| 60 | 1.08 | 2.62 | 3.62 | 3.84 | 0.29 | 0.72 | 1.09 | 1.19 | |
| Lifetime Risk of Being Diagnosed = | | | | 3.76% | Lifetime Risk of Being Diagnosed = | | | | 1.26% |
| Lifetime Risk of Dying = | | | | 0.80% | Lifetime Risk of Dying = | | | | 0.33% |

Blacks

| Current Age | Males | | | | Females | | | | |
|------------------------------------|---------|---------|---------|------------|------------------------------------|---------|---------|------------|-------|
| | +10 yrs | +20 yrs | +30 yrs | Eventually | +10 yrs | +20 yrs | +30 yrs | Eventually | |
| 0 | 0.00 | 0.00 | 0.00 | 1.20 | 0.00 | 0.00 | 0.00 | 0.77 | |
| 10 | 0.00 | 0.00 | 0.02 | 1.22 | 0.00 | 0.00 | 0.01 | 0.79 | |
| 20 | 0.00 | 0.01 | 0.07 | 1.24 | 0.00 | 0.01 | 0.02 | 0.79 | |
| 30 | 0.02 | 0.08 | 0.26 | 1.28 | 0.01 | 0.02 | 0.08 | 0.80 | |
| 40 | 0.06 | 0.26 | 0.57 | 1.33 | 0.02 | 0.08 | 0.21 | 0.81 | |
| 50 | 0.21 | 0.56 | 1.00 | 1.39 | 0.07 | 0.21 | 0.51 | 0.83 | |
| 60 | 0.41 | 0.94 | 1.32 | 1.40 | 0.15 | 0.49 | 0.73 | 0.84 | |
| Lifetime Risk of Being Diagnosed = | | | | 1.20% | Lifetime Risk of Being Diagnosed = | | | | 0.77% |
| Lifetime Risk of Dying = | | | | 0.33% | Lifetime Risk of Dying = | | | | 0.31% |

Table XXVI-9
URINARY BLADDER CANCER

AGE-ADJUSTED SEER INCIDENCE (Invasive and In Situ) AND U.S. MORTALITY RATES

By Race/Ethnicity and Sex

Incidenceⁱ

| RACE/ETHNICITY | Rate 1990-1997 Rate per 100,000 persons | | | Trend 1990-1997 EAPC (%) | | |
|------------------------|--------------------------------------------|-------|---------|-----------------------------|-------|---------|
| | Total | Males | Females | Total | Males | Females |
| All Races | 16.4 | 28.4 | 7.4 | -1.0★ | -1.3★ | -0.8★ |
| White | 17.8 | 31.0 | 7.9 | -0.9★ | -1.3★ | -0.7 |
| White Hispanic | 8.5 | 14.7 | 3.9 | -3.8★ | -4.0★ | -4.7★ |
| White Non-Hispanic | 18.8 | 32.6 | 8.3 | -0.6★ | -1.1★ | -0.3 |
| Black | 9.9 | 15.5 | 6.0 | -1.8 | -1.9 | -1.9 |
| Asian/Pacific Islander | 7.5 | 12.4 | 3.5 | 0.4 | 1.3 | -1.0 |
| American Indian | 2.6 | 4.7 | 1.0 | - | - | - |
| Hispanic [⊙] | 8.0 | 13.9 | 3.7 | -3.8★ | -3.9★ | -4.6★ |

Mortality[❖]

| RACE/ETHNICITY | Rate 1990-1997 Rate per 100,000 persons | | | Trend 1990-1997 EAPC (%) | | |
|------------------------|--------------------------------------------|-------|---------|-----------------------------|-------|---------|
| | Total | Males | Females | Total | Males | Females |
| All Races | 3.2 | 5.6 | 1.7 | -0.3 | -0.7★ | 0.0 |
| White | 3.3 | 5.8 | 1.7 | -0.1 | -0.5★ | 0.2 |
| White Hispanic | 1.7 | 2.8 | 0.9 | -2.0 | -2.6 | -1.0 |
| White Non-Hispanic | 3.4 | 5.9 | 1.7 | 0.1 | -0.3 | 0.4 |
| Black | 3.1 | 4.5 | 2.3 | -1.7★ | -2.5★ | -0.7 |
| Asian/Pacific Islander | 1.2 | 1.8 | 0.8 | 0.2 | 0.9 | -0.5 |
| American Indian | - | - | - | - | - | - |
| Hispanic [⊙] | 1.6 | 2.7 | 0.8 | -2.1 | -2.7 | -1.4 |

- The EAPC is the Estimated 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.
 i Incidence data are from the 11 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, and Los Angeles). Unless specified, other tables use data from 9 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
 ⊙ Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians. For incidence, all 11 SEER areas are included. For mortality, information is included for all states except Connecticut, Oklahoma, Louisiana, and New Hampshire.
 ❖ Mortality data are analyzed from a public-use file provided by the National Center for Health Statistics (NCHS).
 ★ The EAPC is significantly different from zero (p<.05).

Table XXVI-10
URINARY BLADDER CANCER

AGE-ADJUSTED SEER INCIDENCE (Invasive and In Situ) RATES§ AND SEER MORTALITY RATES*
By Registry, Race and Sex

| | All Races | | | Whites | | | Blacks | | |
|---------------------------------------|-----------|-------|---------|--------|-------|---------|--------|-------|---------|
| | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| <u>SEER INCIDENCE RATES§, 1993-97</u> | | | | | | | | | |
| REGISTRY | | | | | | | | | |
| 11 registries | 16.1 | 27.9 | 7.3 | 17.6 | 30.4 | 7.8 | 9.8 | 15.3 | 5.8 |
| 9 registries | 16.7 | 28.7 | 7.6 | 18.1 | 31.1 | 8.2 | 9.7 | 15.3 | 5.8 |
| San Francisco-Oakland | 15.0 | 25.5 | 7.2 | 17.5 | 29.8 | 8.2 | 9.0 | 12.8 | 6.0 |
| Connecticut | 21.0 | 35.6 | 10.0 | 21.6 | 36.6 | 10.3 | 11.0 | 17.6 | 6.4 |
| Metropolitan Detroit | 18.5 | 32.3 | 8.5 | 20.4 | 36.0 | 9.2 | 10.4 | 16.6 | 6.0 |
| Hawaii | 10.7 | 17.5 | 4.7 | 19.6 | 32.4 | 7.8 | - | - | - |
| Iowa | 16.5 | 29.7 | 6.6 | 16.4 | 29.5 | 6.6 | - | - | - |
| New Mexico | 12.6 | 20.7 | 6.1 | 13.3 | 21.7 | 6.5 | - | - | - |
| Seattle-Puget Sound | 18.4 | 31.4 | 8.3 | 18.9 | 32.0 | 8.5 | 9.4 | 15.0 | 4.3 |
| Utah | 13.1 | 22.6 | 5.4 | 13.2 | 22.8 | 5.5 | - | - | - |
| Metropolitan Atlanta | 15.7 | 27.8 | 7.6 | 17.2 | 30.3 | 8.0 | 9.5 | 15.7 | 6.0 |
| San Jose-Monterey | 16.1 | 27.8 | 7.1 | 17.2 | 29.7 | 7.8 | 14.2 | 18.5 | 8.5 |
| Los Angeles | 14.3 | 25.2 | 6.3 | 15.9 | 28.1 | 6.7 | 9.6 | 15.1 | 5.8 |
| <u>SEER MORTALITY RATES*, 1993-97</u> | | | | | | | | | |
| REGISTRY | | | | | | | | | |
| 11 registries | 3.0 | 5.0 | 1.6 | 3.1 | 5.4 | 1.6 | 2.9 | 4.1 | 2.2 |
| 9 registries | 3.0 | 5.1 | 1.6 | 3.2 | 5.5 | 1.7 | 2.9 | 4.0 | 2.1 |
| San Francisco-Oakland | 2.7 | 4.4 | 1.7 | 2.9 | 5.0 | 1.7 | 3.2 | 3.8 | 2.8 |
| Connecticut | 3.6 | 6.2 | 2.0 | 3.7 | 6.4 | 2.0 | 3.2 | 4.2 | 2.4 |
| Metropolitan Detroit | 3.5 | 5.8 | 1.9 | 3.7 | 6.3 | 1.9 | 2.7 | 3.8 | 1.9 |
| Hawaii | 1.9 | 2.8 | 1.0 | 3.6 | 5.9 | 1.5 | - | - | - |
| Iowa | 2.9 | 5.4 | 1.4 | 2.9 | 5.4 | 1.4 | - | - | - |
| New Mexico | 2.4 | 4.2 | 1.1 | 2.5 | 4.3 | 1.2 | - | - | - |
| Seattle-Puget Sound | 3.2 | 5.3 | 1.6 | 3.4 | 5.6 | 1.7 | 1.6 | 2.8 | 0.8 |
| Utah | 2.5 | 4.2 | 1.2 | 2.5 | 4.2 | 1.2 | - | - | - |
| Metropolitan Atlanta | 3.0 | 5.1 | 1.9 | 3.0 | 5.1 | 1.8 | 3.3 | 5.1 | 2.4 |
| San Jose-Monterey | 2.8 | 4.3 | 1.7 | 3.0 | 4.8 | 1.9 | 5.2 | 9.4 | 1.9 |
| Los Angeles | 2.8 | 4.7 | 1.6 | 3.0 | 5.1 | 1.6 | 3.0 | 4.1 | 2.3 |

Note: San Jose-Monterey and Los Angeles are new SEER areas as of 1992 and their data are only used in tables where indicated.
§ SEER Program. Incidence rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
* NCHS public use tape. Mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
- Statistic could not be calculated or populations are inadequate.

Table XXVI-11
URINARY BLADDER CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY* RATES BY STATE, 1993-97

All Races, Males and Females

| State | Rate | SE | Rank | PD |
|------------------|-------|------|------|-------|
| TOTAL U.S. | 3.2 | 0.01 | | |
| High Five States | | | | |
| Maine | 4.3* | 0.23 | (01) | 34.4 |
| Delaware | 4.3* | 0.31 | (02) | 34.4 |
| Nevada | 4.1* | 0.22 | (03) | 28.1 |
| New Hampshire | 4.0* | 0.24 | (04) | 25.0 |
| New Jersey | 3.9⊕* | 0.09 | (05) | 21.9 |
| Low Five States | | | | |
| Mississippi | 2.5⊕* | 0.13 | (47) | -21.9 |
| Utah | 2.5* | 0.17 | (48) | -21.9 |
| Wyoming | 2.4* | 0.30 | (49) | -25.0 |
| New Mexico | 2.4⊕* | 0.16 | (50) | -25.0 |
| Hawaii | 1.9⊕* | 0.16 | (51) | -40.6 |

| State | Rate | SE | Rank | PD | State | Rate | SE | Rank | PD |
|----------------------|-------|------|------|-------|----------------|-------|------|------|-------|
| Alabama | 2.6⊕* | 0.10 | (46) | -18.8 | Montana | 3.2 | 0.24 | (22) | 0.0 |
| Alaska | 3.1 | 0.46 | (26) | -3.1 | Nebraska | 2.6* | 0.15 | (45) | -18.8 |
| Arizona | 3.2 | 0.11 | (23) | 0.0 | Nevada | 4.1* | 0.22 | (03) | 28.1 |
| Arkansas | 3.0 | 0.13 | (29) | -6.3 | New Hampshire | 4.0* | 0.24 | (04) | 25.0 |
| California | 3.0 | 0.04 | (31) | -6.3 | New Jersey | 3.9⊕* | 0.09 | (05) | 21.9 |
| Colorado | 3.0 | 0.12 | (35) | -6.3 | New Mexico | 2.4⊕* | 0.16 | (50) | -25.0 |
| Connecticut | 3.6 | 0.13 | (10) | 12.5 | New York | 3.6⊕ | 0.06 | (11) | 12.5 |
| Delaware | 4.3* | 0.31 | (02) | 34.4 | North Carolina | 3.0 | 0.08 | (36) | -6.3 |
| District of Columbia | 3.2 | 0.30 | (19) | 0.0 | North Dakota | 2.6* | 0.24 | (44) | -18.8 |
| Florida | 3.4 | 0.05 | (16) | 6.3 | Ohio | 3.5 | 0.07 | (13) | 9.4 |
| Georgia | 2.9 | 0.09 | (40) | -9.4 | Oklahoma | 2.8 | 0.11 | (41) | -12.5 |
| Hawaii | 1.9⊕* | 0.16 | (51) | -40.6 | Oregon | 3.1 | 0.12 | (25) | -3.1 |
| Idaho | 3.1 | 0.21 | (28) | -3.1 | Pennsylvania | 3.5 | 0.06 | (14) | 9.4 |
| Illinois | 3.2 | 0.07 | (20) | 0.0 | Rhode Island | 3.7* | 0.23 | (06) | 15.6 |
| Indiana | 3.4 | 0.10 | (15) | 6.3 | South Carolina | 3.3 | 0.12 | (18) | 3.1 |
| Iowa | 2.9 | 0.12 | (37) | -9.4 | South Dakota | 2.8 | 0.23 | (42) | -12.5 |
| Kansas | 2.9 | 0.13 | (39) | -9.4 | Tennessee | 3.0 | 0.09 | (32) | -6.3 |
| Kentucky | 3.0 | 0.11 | (30) | -6.3 | Texas | 2.8⊕ | 0.05 | (43) | -12.5 |
| Louisiana | 3.0 | 0.11 | (34) | -6.3 | Utah | 2.5* | 0.17 | (48) | -21.9 |
| Maine | 4.3* | 0.23 | (01) | 34.4 | Vermont | 3.7* | 0.32 | (08) | 15.6 |
| Maryland | 3.7* | 0.11 | (09) | 15.6 | Virginia | 3.1 | 0.09 | (27) | -3.1 |
| Massachusetts | 3.7* | 0.10 | (07) | 15.6 | Washington | 3.1 | 0.10 | (24) | -3.1 |
| Michigan | 3.5 | 0.08 | (12) | 9.4 | West Virginia | 3.2 | 0.15 | (21) | 0.0 |
| Minnesota | 3.0 | 0.10 | (33) | -6.3 | Wisconsin | 3.4 | 0.10 | (17) | 6.3 |
| Mississippi | 2.5⊕* | 0.13 | (47) | -21.9 | Wyoming | 2.4* | 0.30 | (49) | -25.0 |
| Missouri | 2.9 | 0.09 | (38) | -9.4 | | | | | |

* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
SE Standard error of the rate.
PD Percent difference between state rate and total U.S. rate.
* Absolute difference between state rate and total U.S. rate is 15% or more.
⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).

Table XXVI-12
URINARY BLADDER CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY* RATES BY STATE, 1993-97

All Races, Males

| State | Rate | SE | Rank | PD |
|------------------|-------|------|------|-------|
| TOTAL U.S. | 5.5 | 0.03 | | |
| High Five States | | | | |
| Maine | 7.9⊕* | 0.48 | (01) | 43.6 |
| Delaware | 7.4* | 0.65 | (02) | 34.5 |
| Nevada | 7.0* | 0.44 | (03) | 27.3 |
| New Hampshire | 6.9* | 0.50 | (04) | 25.5 |
| New Jersey | 6.7⊕* | 0.18 | (05) | 21.8 |
| Low Five States | | | | |
| Mississippi | 4.5* | 0.26 | (47) | -18.2 |
| Utah | 4.2* | 0.33 | (48) | -23.6 |
| New Mexico | 4.2* | 0.32 | (49) | -23.6 |
| Wyoming | 4.2* | 0.60 | (50) | -23.6 |
| Hawaii | 2.8⊕* | 0.29 | (51) | -49.1 |

| State | Rate | SE | Rank | PD | State | Rate | SE | Rank | PD |
|----------------------|-------|------|------|-------|----------------|-------|------|------|-------|
| Alabama | 4.6* | 0.21 | (46) | -16.4 | Montana | 5.8 | 0.48 | (16) | 5.5 |
| Alaska | 5.0 | 0.87 | (39) | -9.1 | Nebraska | 4.6* | 0.31 | (45) | -16.4 |
| Arizona | 5.1 | 0.21 | (30) | -7.3 | Nevada | 7.0* | 0.44 | (03) | 27.3 |
| Arkansas | 5.1 | 0.26 | (36) | -7.3 | New Hampshire | 6.9* | 0.50 | (04) | 25.5 |
| California | 5.1⊕ | 0.08 | (35) | -7.3 | New Jersey | 6.7⊕* | 0.18 | (05) | 21.8 |
| Colorado | 5.2 | 0.25 | (29) | -5.5 | New Mexico | 4.2* | 0.32 | (49) | -23.6 |
| Connecticut | 6.2 | 0.26 | (08) | 12.7 | New York | 6.2⊕ | 0.11 | (09) | 12.7 |
| Delaware | 7.4* | 0.65 | (02) | 34.5 | North Carolina | 5.1 | 0.17 | (34) | -7.3 |
| District of Columbia | 5.3 | 0.62 | (24) | -3.6 | North Dakota | 5.0 | 0.50 | (40) | -9.1 |
| Florida | 5.7 | 0.11 | (18) | 3.6 | Ohio | 6.2 | 0.15 | (10) | 12.7 |
| Georgia | 4.8 | 0.19 | (41) | -12.7 | Oklahoma | 4.8 | 0.23 | (43) | -12.7 |
| Hawaii | 2.8⊕* | 0.29 | (51) | -49.1 | Oregon | 5.5 | 0.25 | (21) | 0.0 |
| Idaho | 5.1 | 0.41 | (31) | -7.3 | Pennsylvania | 6.1 | 0.13 | (11) | 10.9 |
| Illinois | 5.7 | 0.14 | (17) | 3.6 | Rhode Island | 6.4* | 0.47 | (07) | 16.4 |
| Indiana | 5.9 | 0.20 | (12) | 7.3 | South Carolina | 5.3 | 0.25 | (25) | -3.6 |
| Iowa | 5.4 | 0.24 | (22) | -1.8 | South Dakota | 4.8 | 0.46 | (42) | -12.7 |
| Kansas | 5.0 | 0.26 | (37) | -9.1 | Tennessee | 5.1 | 0.20 | (33) | -7.3 |
| Kentucky | 5.4 | 0.23 | (23) | -1.8 | Texas | 4.7⊕ | 0.11 | (44) | -14.5 |
| Louisiana | 5.0 | 0.23 | (38) | -9.1 | Utah | 4.2* | 0.33 | (48) | -23.6 |
| Maine | 7.9⊕* | 0.48 | (01) | 43.6 | Vermont | 5.6 | 0.62 | (19) | 1.8 |
| Maryland | 5.9 | 0.23 | (13) | 7.3 | Virginia | 5.2 | 0.19 | (28) | -5.5 |
| Massachusetts | 6.5* | 0.20 | (06) | 18.2 | Washington | 5.3 | 0.20 | (26) | -3.6 |
| Michigan | 5.8 | 0.16 | (15) | 5.5 | West Virginia | 5.5 | 0.32 | (20) | 0.0 |
| Minnesota | 5.3 | 0.21 | (27) | -3.6 | Wisconsin | 5.9 | 0.20 | (14) | 7.3 |
| Mississippi | 4.5* | 0.26 | (47) | -18.2 | Wyoming | 4.2* | 0.60 | (50) | -23.6 |
| Missouri | 5.1 | 0.19 | (32) | -7.3 | | | | | |

* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
SE Standard error of the rate.
PD Percent difference between state rate and total U.S. rate.
* Absolute difference between state rate and total U.S. rate is 15% or more.
⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).

Table XXVI-13
URINARY BLADDER CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY* RATES BY STATE, 1993-97

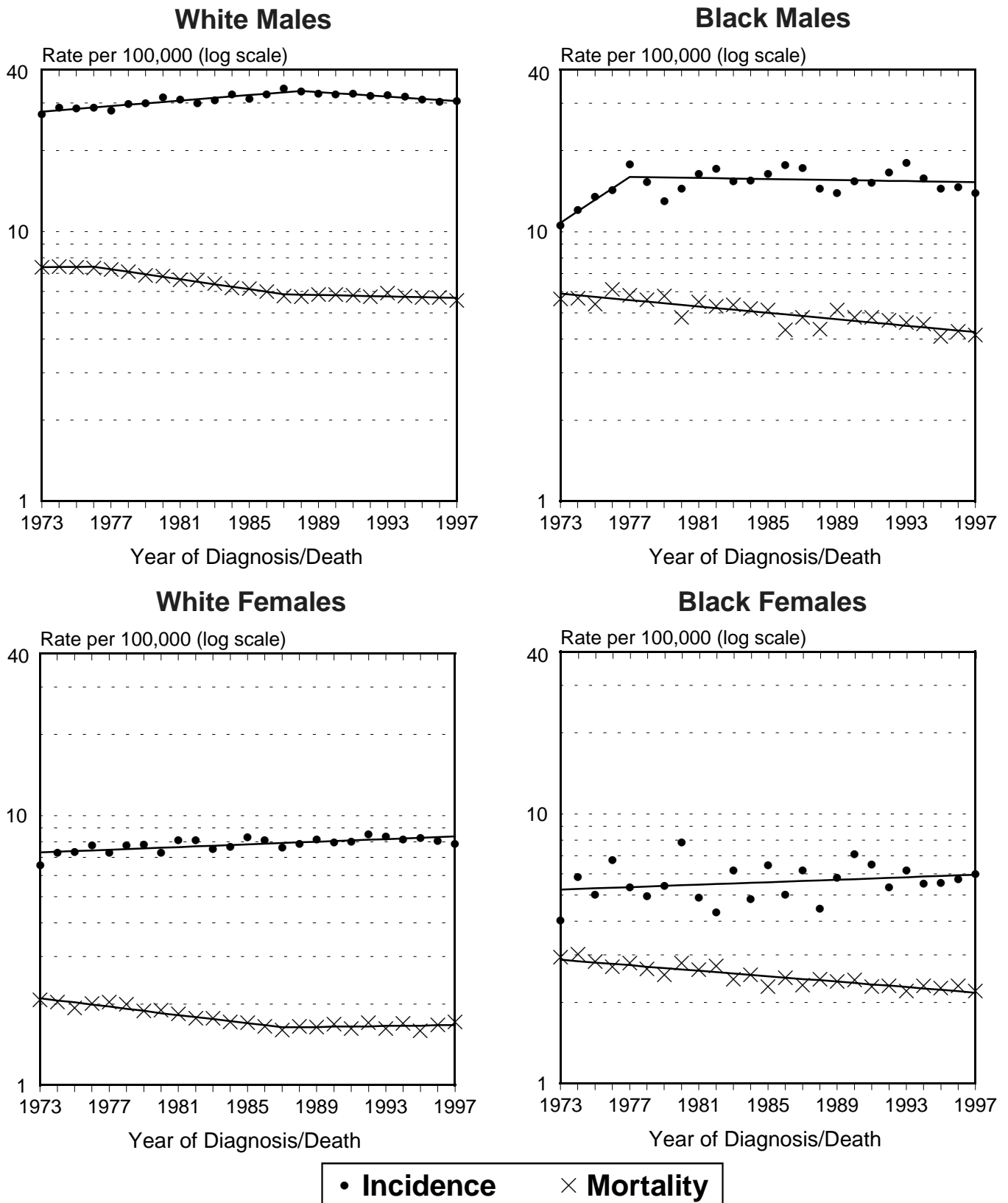
All Races, Females

| State | Rate | SE | Rank | PD |
|------------------|-------|------|------|-------|
| TOTAL U.S. | 1.7 | 0.01 | | |
| High Five States | | | | |
| Delaware | 2.4* | 0.31 | (01) | 41.2 |
| Vermont | 2.4* | 0.34 | (02) | 41.2 |
| Maryland | 2.3* | 0.11 | (03) | 35.3 |
| New Jersey | 2.1⊕* | 0.08 | (04) | 23.5 |
| Rhode Island | 2.1* | 0.23 | (05) | 23.5 |
| Low Five States | | | | |
| Mississippi | 1.2* | 0.11 | (47) | -29.4 |
| Utah | 1.2* | 0.16 | (48) | -29.4 |
| New Mexico | 1.1* | 0.14 | (49) | -35.3 |
| Hawaii | 1.0* | 0.16 | (50) | -41.2 |
| North Dakota | 0.9* | 0.19 | (51) | -47.1 |

| State | Rate | SE | Rank | PD | State | Rate | SE | Rank | PD |
|----------------------|------|------|------|-------|----------------|-------|------|------|-------|
| Alabama | 1.3* | 0.09 | (43) | -23.5 | Montana | 1.3* | 0.20 | (44) | -23.5 |
| Alaska | 1.5 | 0.43 | (33) | -11.8 | Nebraska | 1.3* | 0.14 | (46) | -23.5 |
| Arizona | 1.7 | 0.10 | (24) | 0.0 | Nevada | 1.8 | 0.20 | (14) | 5.9 |
| Arkansas | 1.7 | 0.13 | (21) | 0.0 | New Hampshire | 1.9 | 0.21 | (12) | 11.8 |
| California | 1.6 | 0.04 | (30) | -5.9 | New Jersey | 2.1⊕* | 0.08 | (04) | 23.5 |
| Colorado | 1.4* | 0.11 | (42) | -17.6 | New Mexico | 1.1* | 0.14 | (49) | -35.3 |
| Connecticut | 2.0* | 0.12 | (09) | 17.6 | New York | 2.0⊕* | 0.05 | (06) | 17.6 |
| Delaware | 2.4* | 0.31 | (01) | 41.2 | North Carolina | 1.6 | 0.08 | (28) | -5.9 |
| District of Columbia | 1.9 | 0.30 | (10) | 11.8 | North Dakota | 0.9* | 0.19 | (51) | -47.1 |
| Florida | 1.7 | 0.05 | (20) | 0.0 | Ohio | 1.8 | 0.06 | (17) | 5.9 |
| Georgia | 1.7 | 0.09 | (25) | 0.0 | Oklahoma | 1.5 | 0.11 | (32) | -11.8 |
| Hawaii | 1.0* | 0.16 | (50) | -41.2 | Oregon | 1.4* | 0.11 | (38) | -17.6 |
| Idaho | 1.5 | 0.20 | (31) | -11.8 | Pennsylvania | 1.8 | 0.06 | (15) | 5.9 |
| Illinois | 1.6 | 0.06 | (27) | -5.9 | Rhode Island | 2.1* | 0.23 | (05) | 23.5 |
| Indiana | 1.8 | 0.09 | (16) | 5.9 | South Carolina | 1.9 | 0.12 | (13) | 11.8 |
| Iowa | 1.4* | 0.11 | (39) | -17.6 | South Dakota | 1.4* | 0.22 | (41) | -17.6 |
| Kansas | 1.4* | 0.11 | (40) | -17.6 | Tennessee | 1.7 | 0.09 | (23) | 0.0 |
| Kentucky | 1.5 | 0.10 | (36) | -11.8 | Texas | 1.5 | 0.05 | (34) | -11.8 |
| Louisiana | 1.7 | 0.11 | (26) | 0.0 | Utah | 1.2* | 0.16 | (48) | -29.4 |
| Maine | 2.0* | 0.20 | (07) | 17.6 | Vermont | 2.4* | 0.34 | (02) | 41.2 |
| Maryland | 2.3* | 0.11 | (03) | 35.3 | Virginia | 1.7 | 0.09 | (18) | 0.0 |
| Massachusetts | 2.0* | 0.09 | (08) | 17.6 | Washington | 1.6 | 0.09 | (29) | -5.9 |
| Michigan | 1.9 | 0.08 | (11) | 11.8 | West Virginia | 1.7 | 0.14 | (19) | 0.0 |
| Minnesota | 1.5 | 0.09 | (35) | -11.8 | Wisconsin | 1.7 | 0.09 | (22) | 0.0 |
| Mississippi | 1.2* | 0.11 | (47) | -29.4 | Wyoming | 1.3* | 0.29 | (45) | -23.5 |
| Missouri | 1.5 | 0.08 | (37) | -11.8 | | | | | |

* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
 SE Standard error of the rate.
 PD Percent difference between state rate and total U.S. rate.
 * Absolute difference between state rate and total U.S. rate is 15% or more.
 ⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).

SEER Incidence and U.S. Mortality Rates[†] Urinary Bladder



[†] Rates are age-adjusted to the 1970 U.S. standard million population. Regression lines are calculated using the Joinpoint Regression Program.