

Table XVII-1
MYELOMA (Invasive)

TRENDS IN SEER INCIDENCE^a AND U.S. MORTALITY^b USING THE JOINPOINT REGRESSION PROGRAM, 1975-2000
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^a</u> | | | | | | | | | |
| All Races | Male and Female | 1975-1997 | 0.9 ^c | 1997-2000 | -3.5 | | | | |
| All Races | Male | 1975-1992 | 1.2 ^c | 1992-2000 | -0.6 | | | | |
| All Races | Female | 1975-1997 | 0.9 ^c | 1997-2000 | -4.5 | | | | |
| White | Male and Female | 1975-2000 | 0.6 ^c | | | | | | |
| White | Male | 1975-1979 | -3.0 | 1979-1990 | 2.1 ^c | 1990-2000 | -0.4 | | |
| White | Female | 1975-2000 | 0.4 ^c | | | | | | |
| Black | Male and Female | 1975-1996 | 1.2 ^c | 1996-2000 | -5.3 | | | | |
| Black | Male | 1975-2000 | 0.3 | | | | | | |
| Black | Female | 1975-2000 | 1.0 ^c | | | | | | |
| <u>U.S. Cancer Mortality^b</u> | | | | | | | | | |
| All Races | Male and Female | 1975-1994 | 1.4 ^c | 1994-2000 | -0.8 ^c | | | | |
| All Races | Male | 1975-1994 | 1.5 ^c | 1994-2000 | -1.1 ^c | | | | |
| All Races | Female | 1975-1993 | 1.5 ^c | 1993-2000 | -0.3 | | | | |
| White | Male and Female | 1975-1994 | 1.4 ^c | 1994-2000 | -0.8 ^c | | | | |
| White | Male | 1975-1994 | 1.5 ^c | 1994-2000 | -0.9 ^c | | | | |
| White | Female | 1975-1993 | 1.4 ^c | 1993-2000 | -0.5 | | | | |
| Black | Male and Female | 1975-1982 | 3.4 ^c | 1982-1994 | 1.3 ^c | 1994-2000 | -0.6 | | |
| Black | Male | 1975-1991 | 2.2 ^c | 1991-2000 | -0.8 | | | | |
| Black | Female | 1975-1993 | 2.1 ^c | 1993-2000 | 0.0 | | | | |

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 ($p < .05$).

^a

^b

^c

Table XVII-2
MYELOMASEER INCIDENCE RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES^a, BY 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 | 4.9 | 6.4 | 3.9 | 4.6 | 6.2 | 3.6 | 9.7 | 10.9 | 8.6 |
| 1976 | 5.0 | 6.1 | 4.4 | 4.8 | 5.8 | 4.1 | 9.2 | 11.2 | 7.9 |
| 1977 | 5.1 | 6.4 | 4.1 | 4.8 | 6.2 | 3.9 | 9.1 | 11.0 | 7.7 |
| 1978 | 4.7 | 5.9 | 3.9 | 4.4 | 5.6 | 3.7 | 9.6 | 11.0 | 8.7 |
| 1979 | 4.9 | 6.0 | 4.1 | 4.5 | 5.4 | 3.8 | 11.0 | 15.2 | 8.2 |
| 1980 | 4.8 | 5.8 | 4.1 | 4.4 | 5.5 | 3.7 | 9.9 | 10.8 | 9.0 |
| 1981 | 5.0 | 6.0 | 4.3 | 4.6 | 5.5 | 4.0 | 11.0 | 15.2 | 8.2 |
| 1982 | 5.3 | 6.3 | 4.7 | 4.9 | 5.9 | 4.3 | 11.6 | 13.9 | 9.7 |
| 1983 | 5.3 | 6.9 | 4.2 | 4.7 | 6.3 | 3.7 | 13.7 | 16.1 | 11.9 |
| 1984 | 5.4 | 7.0 | 4.3 | 5.0 | 6.4 | 4.1 | 10.8 | 15.3 | 7.7 |
| 1985 | 5.2 | 6.3 | 4.3 | 4.9 | 5.9 | 4.2 | 9.4 | 12.6 | 7.1 |
| 1986 | 5.3 | 6.3 | 4.7 | 4.9 | 6.0 | 4.1 | 11.1 | 11.6 | 10.5 |
| 1987 | 5.9 | 7.4 | 5.0 | 5.7 | 7.2 | 4.7 | 11.1 | 13.5 | 9.6 |
| 1988 | 5.3 | 6.6 | 4.5 | 5.0 | 6.4 | 4.2 | 10.9 | 12.2 | 9.8 |
| 1989 | 5.4 | 6.7 | 4.5 | 5.1 | 6.3 | 4.2 | 10.6 | 13.3 | 8.8 |
| 1990 | 5.6 | 7.2 | 4.5 | 5.2 | 6.9 | 4.1 | 11.9 | 14.6 | 10.2 |
| 1991 | 6.0 | 7.6 | 4.8 | 5.5 | 7.1 | 4.4 | 12.8 | 15.8 | 10.7 |
| 1992 | 5.9 | 7.2 | 5.0 | 5.6 | 6.9 | 4.7 | 11.4 | 12.7 | 10.4 |
| 1993 | 5.6 | 7.4 | 4.3 | 5.1 | 6.8 | 3.9 | 12.5 | 15.6 | 10.3 |
| 1994 | 5.7 | 6.8 | 5.0 | 5.1 | 6.3 | 4.4 | 12.8 | 15.2 | 11.9 |
| 1995 | 5.6 | 7.1 | 4.6 | 5.2 | 6.7 | 4.2 | 11.9 | 15.0 | 9.9 |
| 1996 | 5.7 | 7.1 | 4.7 | 5.3 | 6.7 | 4.2 | 12.6 | 13.5 | 11.8 |
| 1997 | 6.0 | 7.3 | 5.1 | 5.6 | 6.9 | 4.6 | 12.4 | 14.2 | 11.6 |
| 1998 | 5.7 | 7.1 | 4.7 | 5.4 | 6.9 | 4.3 | 11.0 | 12.6 | 10.0 |
| 1999 | 5.3 | 6.8 | 4.2 | 4.9 | 6.3 | 3.8 | 11.3 | 14.5 | 9.2 |
| 2000 | 5.5 | 6.8 | 4.5 | 5.2 | 6.8 | 4.0 | 9.8 | 9.8 | 9.7 |
| <u>AGE-ADJUSTED RATES, 1996-2000</u> | | | | | | | | | |
| AGE AT DIAGNOSIS: | | | | | | | | | |
| All ages | 5.6 | 7.0 | 4.6 | 5.3 | 6.7 | 4.2 | 11.4 | 12.9 | 10.4 |
| Under 65 | 2.1 | 2.4 | 1.7 | 1.8 | 2.2 | 1.4 | 4.7 | 5.2 | 4.2 |
| 65 and over | 30.4 | 38.6 | 25.0 | 29.0 | 37.8 | 23.0 | 58.0 | 66.0 | 53.6 |
| All ages (world std.) ^b | 3.5 | 4.3 | 2.9 | 3.3 | 4.1 | 2.6 | 7.3 | 8.2 | 6.6 |
| <u>AGE-SPECIFIC RATES, 1996-2000</u> | | | | | | | | | |
| AGE AT DIAGNOSIS: | | | | | | | | | |
| <1 | - | - | - | - | - | - | - | - | - |
| 1-4 | - | - | - | - | - | - | - | - | - |
| 5-9 | - | - | - | - | - | - | - | - | - |
| 10-14 | - | - | - | - | - | - | - | - | - |
| 15-19 | - | - | - | - | - | - | - | - | - |
| 20-24 | - | - | - | - | - | - | - | - | - |
| 25-29 | - | - | - | - | - | - | - | - | - |
| 30-34 | 0.2 | - | - | - | - | - | - | - | - |
| 35-39 | 0.6 | 0.8 | - | 0.5 | 0.7 | - | - | - | - |
| 40-44 | 1.4 | 1.9 | 1.0 | 1.2 | 1.6 | 0.8 | 3.5 | - | - |
| 45-49 | 2.8 | 3.1 | 2.5 | 2.4 | 2.6 | 2.1 | 7.0 | 7.9 | 6.4 |
| 50-54 | 6.2 | 7.6 | 4.8 | 5.7 | 7.3 | 4.1 | 12.1 | 12.3 | 12.0 |
| 55-59 | 9.8 | 11.7 | 8.0 | 8.4 | 10.0 | 6.8 | 24.9 | 32.0 | 18.9 |
| 60-64 | 14.0 | 15.9 | 12.3 | 13.0 | 15.2 | 10.9 | 30.2 | 30.4 | 30.0 |
| 65-69 | 21.7 | 26.4 | 17.7 | 20.5 | 25.8 | 15.9 | 41.2 | 45.9 | 37.6 |
| 70-74 | 28.5 | 36.7 | 22.1 | 27.4 | 36.0 | 20.5 | 56.2 | 69.3 | 47.3 |
| 75-79 | 35.4 | 42.5 | 30.4 | 33.1 | 41.8 | 27.1 | 72.6 | 67.0 | 76.1 |
| 80-84 | 39.1 | 50.5 | 32.3 | 38.5 | 51.3 | 31.0 | 67.6 | 79.9 | 61.3 |
| 85+ | 34.5 | 48.5 | 28.8 | 32.8 | 45.8 | 27.7 | 62.4 | 85.7 | 53.6 |

^a 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.

^b SEER 9 areas. 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 XVII-3
MYELOMAU.S. DEATH RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES^a, BY 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 | 2.9 | 3.7 | 2.4 | 2.7 | 3.5 | 2.2 | 5.3 | 6.4 | 4.4 |
| 1976 | 3.1 | 3.9 | 2.6 | 2.9 | 3.6 | 2.4 | 5.6 | 6.9 | 4.6 |
| 1977 | 3.1 | 3.9 | 2.6 | 2.9 | 3.6 | 2.4 | 5.6 | 7.2 | 4.4 |
| 1978 | 3.2 | 3.9 | 2.7 | 2.9 | 3.7 | 2.5 | 5.7 | 7.0 | 4.9 |
| 1979 | 3.3 | 4.1 | 2.7 | 3.0 | 3.9 | 2.5 | 5.9 | 7.4 | 4.9 |
| 1980 | 3.3 | 4.1 | 2.7 | 3.0 | 3.8 | 2.5 | 6.1 | 7.4 | 5.2 |
| 1981 | 3.3 | 4.1 | 2.8 | 3.0 | 3.7 | 2.5 | 6.6 | 8.2 | 5.5 |
| 1982 | 3.4 | 4.2 | 2.9 | 3.1 | 3.8 | 2.6 | 6.7 | 8.6 | 5.4 |
| 1983 | 3.4 | 4.3 | 2.9 | 3.1 | 4.0 | 2.6 | 6.8 | 8.7 | 5.6 |
| 1984 | 3.5 | 4.3 | 3.0 | 3.2 | 3.9 | 2.7 | 6.6 | 8.4 | 5.5 |
| 1985 | 3.6 | 4.5 | 3.0 | 3.3 | 4.1 | 2.8 | 6.9 | 8.6 | 5.8 |
| 1986 | 3.6 | 4.5 | 3.0 | 3.3 | 4.1 | 2.8 | 7.2 | 9.1 | 6.0 |
| 1987 | 3.6 | 4.6 | 3.0 | 3.3 | 4.2 | 2.7 | 7.1 | 9.2 | 5.7 |
| 1988 | 3.6 | 4.6 | 3.0 | 3.4 | 4.3 | 2.7 | 6.9 | 8.1 | 6.1 |
| 1989 | 3.7 | 4.6 | 3.1 | 3.4 | 4.3 | 2.8 | 7.1 | 8.9 | 5.9 |
| 1990 | 3.8 | 4.8 | 3.1 | 3.5 | 4.4 | 2.9 | 7.3 | 9.6 | 5.9 |
| 1991 | 3.9 | 4.8 | 3.3 | 3.5 | 4.5 | 2.9 | 7.8 | 9.6 | 6.6 |
| 1992 | 3.8 | 4.7 | 3.2 | 3.5 | 4.4 | 2.9 | 7.5 | 9.3 | 6.3 |
| 1993 | 4.0 | 4.9 | 3.4 | 3.6 | 4.6 | 3.0 | 7.8 | 9.3 | 6.9 |
| 1994 | 4.0 | 5.0 | 3.3 | 3.7 | 4.7 | 3.0 | 7.7 | 9.7 | 6.5 |
| 1995 | 4.0 | 4.9 | 3.4 | 3.7 | 4.6 | 3.0 | 7.8 | 9.4 | 6.9 |
| 1996 | 3.9 | 4.9 | 3.2 | 3.6 | 4.6 | 2.9 | 7.7 | 9.6 | 6.5 |
| 1997 | 3.9 | 4.9 | 3.2 | 3.6 | 4.6 | 2.9 | 7.5 | 9.2 | 6.5 |
| 1998 | 3.8 | 4.8 | 3.2 | 3.5 | 4.4 | 2.9 | 7.7 | 9.5 | 6.8 |
| 1999 | 3.8 | 4.7 | 3.2 | 3.5 | 4.4 | 2.9 | 7.5 | 8.8 | 6.6 |
| 2000 | 3.8 | 4.7 | 3.3 | 3.5 | 4.4 | 3.0 | 7.6 | 8.8 | 6.8 |
| <u>AGE-ADJUSTED RATES, 1996-2000</u> | | | | | | | | | |
| AGE AT DEATH: | | | | | | | | | |
| All ages | 3.9 | 4.8 | 3.2 | 3.5 | 4.5 | 2.9 | 7.6 | 9.2 | 6.6 |
| Under 65 | 1.0 | 1.2 | 0.9 | 0.9 | 1.1 | 0.7 | 2.4 | 2.7 | 2.2 |
| 65 and over | 23.4 | 29.7 | 19.6 | 21.9 | 28.1 | 18.1 | 43.5 | 54.2 | 37.6 |
| All ages (world std.) ^b | 2.2 | 2.7 | 1.9 | 2.0 | 2.5 | 1.7 | 4.5 | 5.4 | 4.0 |
| <u>AGE-SPECIFIC RATES, 1996-2000</u> | | | | | | | | | |
| AGE AT DEATH: | | | | | | | | | |
| <1 | - | - | - | - | - | - | - | - | - |
| 1-4 | - | - | - | - | - | - | - | - | - |
| 5-9 | - | - | - | - | - | - | - | - | - |
| 10-14 | - | - | - | - | - | - | - | - | - |
| 15-19 | - | - | - | - | - | - | - | - | - |
| 20-24 | - | - | - | - | - | - | - | - | - |
| 25-29 | - | - | - | - | - | - | - | - | - |
| 30-34 | 0.1 | 0.1 | - | 0.0 | 0.1 | - | - | - | - |
| 35-39 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 | 0.4 | 0.4 |
| 40-44 | 0.5 | 0.6 | 0.4 | 0.4 | 0.5 | 0.3 | 1.3 | 1.5 | 1.2 |
| 45-49 | 1.3 | 1.5 | 1.1 | 1.1 | 1.3 | 0.8 | 2.9 | 3.2 | 2.7 |
| 50-54 | 2.6 | 3.1 | 2.1 | 2.2 | 2.7 | 1.8 | 6.0 | 6.9 | 5.3 |
| 55-59 | 5.2 | 5.9 | 4.5 | 4.4 | 5.1 | 3.8 | 12.6 | 14.2 | 11.3 |
| 60-64 | 8.7 | 10.2 | 7.5 | 7.7 | 9.2 | 6.4 | 19.0 | 21.1 | 17.4 |
| 65-69 | 13.7 | 16.2 | 11.5 | 12.6 | 15.1 | 10.4 | 26.3 | 31.4 | 22.5 |
| 70-74 | 20.2 | 24.3 | 17.0 | 18.8 | 22.8 | 15.7 | 38.8 | 46.9 | 33.5 |
| 75-79 | 26.6 | 32.7 | 22.4 | 24.9 | 31.1 | 20.6 | 49.6 | 59.0 | 43.9 |
| 80-84 | 33.3 | 43.4 | 27.5 | 31.8 | 41.7 | 26.0 | 57.5 | 76.9 | 48.0 |
| 85+ | 34.5 | 49.5 | 28.6 | 32.3 | 47.1 | 26.4 | 64.5 | 85.0 | 56.8 |

^a 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.

^b 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 XVII-4
MYELOMASURVIVAL RATES, BY RACE, SEX, DIAGNOSIS YEAR AND AGE

| | All Races | | | Whites | | | Blacks | | |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| <u>5-YR RELATIVE SURVIVAL RATES</u> | | | | | | | | | |
| YEAR OF DIAGNOSIS: | | | | | | | | | |
| 1960-1963 ^a | - | - | - | 12 | 13 | 10 | - | - | - |
| 1970-1973 ^a | - | - | - | 19 | 20 | 17 | - | - | - |
| 1974-1976 ^b | 24.4 | 23.8 | 25.0 | 24.0 | 23.2 | 24.9 | 27.7 | 28.2 | 27.3 |
| 1977-1979 ^b | 26.4 | 25.9 | 26.8 | 24.8 | 25.2 | 24.3 | 34.4 | 30.0 | 38.8 |
| 1980-1982 ^b | 28.2 | 25.9 | 30.4 | 27.9 | 26.3 | 29.4 | 30.0 | 27.3 | 32.9 |
| 1983-1985 ^b | 28.0 | 28.2 | 27.9 | 27.3 | 27.2 | 27.4 | 31.2 | 33.9 | 28.2 |
| 1986-1988 ^b | 29.4 | 30.6 | 28.3 | 29.3 | 30.9 | 27.7 | 31.4 | 29.6 | 32.8 |
| 1989-1991 ^b | 29.9 | 31.1 | 28.5 | 29.1 | 29.9 | 28.2 | 33.8 | 38.2 | 29.6 |
| 1992-1999 ^b | 31.5 ^c | 33.5 ^c | 29.4 ^c | 30.9 ^c | 33.1 ^c | 28.5 ^c | 33.3 | 34.8 | 32.0 |
| <u>5-YR RELATIVE SURVIVAL RATES, 1992-1999^b</u> | | | | | | | | | |
| AGE AT DIAGNOSIS: | | | | | | | | | |
| <45 | 49.1 | 48.2 | 49.8 | 51.3 | 52.5 ^d | 49.1 ^d | 39.8 ^d | 35.8 ^d | 44.3 ^d |
| 45-54 | 47.4 | 47.4 | 47.5 | 46.0 | 46.5 | 45.5 | 48.0 | 45.6 ^d | 50.4 ^d |
| 55-64 | 36.2 | 38.1 | 33.7 | 35.1 | 37.5 | 31.9 | 42.3 | 42.9 | 41.7 |
| 65-74 | 28.5 | 29.0 | 28.0 | 29.3 | 29.4 | 29.2 | 24.8 | 27.4 | 22.9 |
| 75+ | 20.5 | 22.4 | 19.3 | 20.5 | 22.3 | 19.3 | 18.6 | 20.0 ^d | 17.4 |
| Under 65 | 41.4 | 42.3 | 40.2 | 40.5 | 42.1 | 38.3 | 43.8 | 42.5 | 45.0 |
| 65 and over | 24.9 | 26.4 | 23.7 | 25.2 | 26.6 | 24.1 | 22.3 | 24.9 | 20.6 |

^a Rates are based on End Results data from a series of hospital registries and one population-based registry.
^b Rates are from the SEER 9 areas. 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.
^c The difference in rates between 1974-1976 and 1992-1999 is statistically significant ($p < .05$).
^d The standard error of the survival rate is between 5 and 10 percentage points.
^e The standard error of the survival rate is greater than 10 percentage points.
⁻ Statistic could not be calculated.

Table XVII-5

MYELOMAINCIDENCE, DEATH, AND SURVIVAL RATES^c

By Year of Diagnosis/Death

All Races, Males and Females

Year of Diagnosis/Death

| | 1975-1979 | 1980-1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|-----------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Incidence | | | | | | | | | | | | | | | | | | |
| SEER ^a | 4.9 | 5.2 | 5.2 | 5.3 | 5.9 | 5.3 | 5.4 | 5.6 | 6.0 | 5.9 | 5.6 | 5.7 | 5.6 | 5.7 | 6.0 | 5.7 | 5.3 | 5.5 |
| Mortality | | | | | | | | | | | | | | | | | | |
| U.S. ^b | 3.1 | 3.4 | 3.6 | 3.6 | 3.6 | 3.6 | 3.7 | 3.8 | 3.9 | 3.8 | 4.0 | 4.0 | 4.0 | 3.9 | 3.9 | 3.8 | 3.8 | 3.8 |
| SEER ^a | 3.3 | 3.3 | 3.8 | 3.3 | 3.3 | 3.6 | 3.9 | 3.7 | 3.9 | 4.0 | 4.1 | 3.9 | 3.9 | 4.0 | 3.8 | 3.8 | 3.9 | 3.9 |
| Relative Survival Rates (SEER^a) | | | | | | | | | | | | | | | | | | |
| 1-year | 68.8 | 71.0 | 72.5 | 72.1 | 75.6 | 73.8 | 71.9 | 71.6 | 75.9 | 69.3 | 72.9 | 73.5 | 74.4 | 70.9 | 74.4 | 74.6 | 72.9 | |
| 2-year | 52.8 | 55.7 | 59.1 | 57.0 | 59.5 | 60.1 | 58.2 | 56.9 | 60.6 | 56.6 | 59.1 | 59.4 | 58.7 | 58.3 | 60.6 | 61.7 | | |
| 3-year | 40.7 | 44.1 | 47.0 | 44.7 | 48.0 | 47.4 | 44.6 | 44.7 | 48.6 | 45.7 | 47.0 | 48.6 | 47.5 | 45.6 | 48.3 | | | |
| 4-year | 32.4 | 35.5 | 36.8 | 35.4 | 37.7 | 38.9 | 35.9 | 38.7 | 38.8 | 35.0 | 38.2 | 37.8 | 40.0 | 37.7 | | | | |
| 5-year | 26.2 | 28.2 | 27.7 | 29.9 | 28.6 | 29.8 | 26.8 | 31.1 | 31.6 | 27.3 | 31.5 | 31.6 | 33.2 | | | | | |
| 6-year | 20.9 | 22.4 | 22.6 | 23.9 | 23.4 | 24.6 | 21.6 | 25.1 | 25.2 | 20.9 | 27.3 | 26.6 | | | | | | |
| 7-year | 17.2 | 18.0 | 19.1 | 19.3 | 19.5 | 18.5 | 16.8 | 19.7 | 21.6 | 18.3 | 22.7 | | | | | | | |
| 8-year | 14.5 | 14.5 | 16.9 | 17.8 | 16.7 | 15.7 | 13.6 | 18.1 | 17.8 | 15.2 | | | | | | | | |
| 9-year | 12.3 | 12.4 | 13.2 | 13.2 | 14.5 | 13.0 | 11.4 | 16.5 | 16.6 | | | | | | | | | |
| 10-year | 10.9 | 10.7 | 11.6 | 12.6 | 13.6 | 10.4 | 10.0 | 14.8 | | | | | | | | | | |
| 11-year | 9.6 | 9.8 | 10.3 | 11.0 | 11.6 | 9.8 | 8.8 | | | | | | | | | | | |
| 12-year | 8.8 | 8.8 | 9.9 | 10.5 | 9.6 | 9.6 | | | | | | | | | | | | |
| 13-year | 7.5 | 7.9 | 8.6 | 10.1 | 9.5 | | | | | | | | | | | | | |
| 14-year | 6.9 | 7.2 | 8.5 | 8.7 | | | | | | | | | | | | | | |
| 15-year | 6.1 | 7.0 | 6.5 | | | | | | | | | | | | | | | |
| 16-year | 5.7 | 6.5 | | | | | | | | | | | | | | | | |
| 17-year | 5.5 | | | | | | | | | | | | | | | | | |
| 18-year | 4.7 | | | | | | | | | | | | | | | | | |
| 19-year | 4.4 | | | | | | | | | | | | | | | | | |
| 20-year | 3.9 | | | | | | | | | | | | | | | | | |

^a Rates are from the SEER 9 areas.^b Rates are from the NCHS public use data file.^c 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 XVII-6

MYELOMAINCIDENCE, DEATH, AND SURVIVAL RATES^c

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 |
|---|-----------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Incidence | | | | | | | | | | | | | | | | | | |
| SEER ^a | 6.2 | 6.4 | 6.3 | 6.3 | 7.4 | 6.6 | 6.7 | 7.2 | 7.6 | 7.2 | 7.4 | 6.8 | 7.1 | 7.1 | 7.3 | 7.1 | 6.8 | 6.8 |
| Mortality | | | | | | | | | | | | | | | | | | |
| U.S. ^b | 3.9 | 4.2 | 4.5 | 4.5 | 4.6 | 4.6 | 4.6 | 4.8 | 4.8 | 4.7 | 4.9 | 5.0 | 4.9 | 4.9 | 4.9 | 4.8 | 4.7 | 4.7 |
| SEER ^a | 4.1 | 4.0 | 4.6 | 4.3 | 4.1 | 4.5 | 4.6 | 4.5 | 5.1 | 4.9 | 5.3 | 5.3 | 4.7 | 5.1 | 4.7 | 4.6 | 4.6 | 4.5 |
| Relative Survival Rates (SEER^a) | | | | | | | | | | | | | | | | | | |
| 1-year | 68.8 | 71.1 | 73.9 | 70.9 | 77.0 | 75.1 | 72.4 | 71.4 | 77.3 | 73.0 | 70.8 | 74.8 | 75.2 | 72.0 | 74.7 | 75.6 | 75.5 | |
| 2-year | 53.2 | 56.3 | 58.8 | 56.1 | 61.6 | 62.4 | 61.3 | 57.3 | 62.7 | 60.1 | 58.2 | 60.4 | 60.1 | 60.1 | 61.7 | 63.3 | | |
| 3-year | 40.2 | 44.3 | 45.6 | 43.3 | 47.8 | 50.1 | 47.4 | 45.5 | 50.3 | 48.8 | 45.3 | 48.4 | 49.8 | 45.7 | 51.4 | | | |
| 4-year | 32.0 | 35.3 | 35.3 | 34.6 | 37.8 | 41.5 | 39.4 | 38.0 | 40.8 | 36.2 | 36.7 | 38.3 | 42.2 | 39.3 | | | | |
| 5-year | 25.6 | 27.1 | 27.1 | 29.5 | 30.6 | 31.5 | 27.5 | 31.3 | 34.1 | 28.6 | 30.7 | 31.9 | 37.1 | | | | | |
| 6-year | 20.4 | 22.2 | 22.7 | 23.9 | 26.1 | 26.5 | 23.1 | 23.7 | 28.1 | 21.7 | 27.9 | 29.6 | | | | | | |
| 7-year | 16.7 | 18.1 | 20.3 | 19.0 | 21.4 | 21.0 | 19.5 | 19.4 | 23.9 | 18.8 | 23.3 | | | | | | | |
| 8-year | 14.2 | 14.9 | 17.2 | 18.3 | 18.6 | 17.1 | 15.7 | 18.6 | 21.0 | 16.9 | | | | | | | | |
| 9-year | 12.1 | 12.9 | 12.6 | 14.1 | 16.4 | 14.7 | 12.7 | 17.2 | 19.7 | | | | | | | | | |
| 10-year | 10.5 | 10.9 | 10.8 | 13.9 | 14.8 | 11.9 | 11.5 | 15.7 | | | | | | | | | | |
| 11-year | 8.6 | 10.0 | 8.8 | 12.1 | 13.0 | 11.6 | 10.5 | | | | | | | | | | | |
| 12-year | 8.0 | 8.7 | 8.8 | 11.7 | 12.4 | 11.2 | | | | | | | | | | | | |
| 13-year | 6.9 | 8.0 | 7.8 | 11.7 | 12.4 | | | | | | | | | | | | | |
| 14-year | 6.3 | 7.2 | 7.4 | 10.5 | | | | | | | | | | | | | | |
| 15-year | 5.5 | 6.9 | 5.8 | | | | | | | | | | | | | | | |
| 16-year | 5.3 | 6.5 | | | | | | | | | | | | | | | | |
| 17-year | 4.9 | | | | | | | | | | | | | | | | | |
| 18-year | 4.3 | | | | | | | | | | | | | | | | | |
| 19-year | 4.1 | | | | | | | | | | | | | | | | | |
| 20-year | 3.4 | | | | | | | | | | | | | | | | | |

^a Rates are from the SEER 9 areas.^b Rates are from the NCHS public use data file.^c 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 XVII-7

MYELOMAINCIDENCE, DEATH, AND SURVIVAL RATES^c

By Year of Diagnosis/Death

All Races, Females

Year of Diagnosis/Death

| | 1975-1979 | 1980-1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|-----------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Incidence | | | | | | | | | | | | | | | | | | |
| SEER ^a | 4.1 | 4.3 | 4.3 | 4.7 | 5.0 | 4.5 | 4.5 | 4.5 | 4.8 | 5.0 | 4.3 | 5.0 | 4.6 | 4.7 | 5.1 | 4.7 | 4.2 | 4.5 |
| Mortality | | | | | | | | | | | | | | | | | | |
| U.S. ^b | 2.6 | 2.8 | 3.0 | 3.0 | 3.0 | 3.0 | 3.1 | 3.1 | 3.3 | 3.2 | 3.4 | 3.3 | 3.4 | 3.2 | 3.2 | 3.2 | 3.2 | 3.3 |
| SEER ^a | 2.8 | 2.8 | 3.2 | 2.7 | 2.8 | 3.0 | 3.4 | 3.2 | 3.2 | 3.4 | 3.3 | 3.0 | 3.4 | 3.2 | 3.2 | 3.2 | 3.4 | 3.5 |
| Relative Survival Rates (SEER^a) | | | | | | | | | | | | | | | | | | |
| 1-year | 68.8 | 70.8 | 71.0 | 73.2 | 74.2 | 72.5 | 71.4 | 72.0 | 74.3 | 65.5 | 75.6 | 72.3 | 73.5 | 69.7 | 74.0 | 73.4 | 69.8 | |
| 2-year | 52.4 | 55.1 | 59.5 | 57.9 | 57.4 | 57.7 | 54.9 | 56.4 | 58.0 | 53.0 | 60.3 | 58.5 | 57.1 | 56.4 | 59.5 | 59.5 | 59.9 | |
| 3-year | 41.3 | 44.0 | 48.5 | 46.1 | 48.2 | 44.6 | 41.6 | 43.8 | 46.6 | 42.6 | 49.1 | 48.7 | 45.0 | 45.4 | 45.0 | | | |
| 4-year | 32.7 | 35.8 | 38.4 | 36.2 | 37.7 | 36.3 | 32.2 | 39.4 | 36.6 | 33.8 | 40.0 | 37.3 | 37.6 | 36.1 | | | | |
| 5-year | 26.8 | 29.3 | 28.2 | 30.2 | 26.7 | 28.1 | 26.0 | 30.8 | 28.7 | 26.0 | 32.4 | 31.3 | 29.0 | | | | | |
| 6-year | 21.5 | 22.5 | 22.6 | 23.9 | 21.0 | 22.6 | 20.0 | 26.7 | 21.9 | 20.1 | 26.6 | 23.8 | | | | | | |
| 7-year | 17.8 | 17.8 | 17.9 | 19.6 | 17.9 | 16.2 | 14.0 | 20.1 | 18.9 | 17.8 | 22.1 | | | | | | | |
| 8-year | 14.8 | 14.2 | 16.6 | 17.3 | 15.1 | 14.3 | 11.4 | 17.4 | 14.2 | 13.5 | | | | | | | | |
| 9-year | 12.6 | 12.0 | 13.7 | 12.4 | 12.8 | 11.3 | 10.1 | 15.7 | 13.2 | | | | | | | | | |
| 10-year | 11.4 | 10.6 | 12.3 | 11.4 | 12.6 | 8.9 | 8.3 | 13.7 | | | | | | | | | | |
| 11-year | 10.6 | 9.7 | 11.8 | 9.9 | 10.5 | 8.0 | 7.0 | | | | | | | | | | | |
| 12-year | 9.5 | 8.9 | 10.9 | 9.3 | 7.2 | 8.0 | | | | | | | | | | | | |
| 13-year | 8.2 | 7.9 | 9.4 | 8.7 | 7.0 | | | | | | | | | | | | | |
| 14-year | 7.6 | 7.3 | 9.4 | 7.1 | | | | | | | | | | | | | | |
| 15-year | 6.7 | 7.1 | 7.1 | | | | | | | | | | | | | | | |
| 16-year | 6.1 | 6.4 | | | | | | | | | | | | | | | | |
| 17-year | 6.1 | | | | | | | | | | | | | | | | | |
| 18-year | 5.2 | | | | | | | | | | | | | | | | | |
| 19-year | 4.7 | | | | | | | | | | | | | | | | | |
| 20-year | 4.2 | | | | | | | | | | | | | | | | | |

^a Rates are from the SEER 9 areas.^b Rates are from the NCHS public use data file.^c 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 XVII-8
MULTIPLE MYELOMA

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

1998-2000

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 | 0.00 | 0.66 | 0.00 | 0.00 | 0.00 | 0.54 |
| 10 | 0.00 | 0.00 | 0.01 | 0.67 | 0.00 | 0.00 | 0.00 | 0.55 |
| 20 | 0.00 | 0.01 | 0.03 | 0.68 | 0.00 | 0.00 | 0.02 | 0.55 |
| 30 | 0.01 | 0.03 | 0.11 | 0.68 | 0.00 | 0.02 | 0.08 | 0.55 |
| 40 | 0.03 | 0.11 | 0.28 | 0.69 | 0.02 | 0.07 | 0.20 | 0.55 |
| 50 | 0.08 | 0.26 | 0.50 | 0.69 | 0.06 | 0.19 | 0.37 | 0.54 |
| 60 | 0.19 | 0.45 | 0.62 | 0.65 | 0.13 | 0.32 | 0.48 | 0.51 |

Lifetime Risk of Being Diagnosed = 0.66% Lifetime Risk of Being Diagnosed = 0.54%
Lifetime Risk of Dying = 0.44% Lifetime Risk of Dying = 0.40%

Whites

| Current Age | Males | | | | Females | | | |
|----------------|---------|---------|---------|------------|---------|---------|---------|------------|
| | +10 yrs | +20 yrs | +30 yrs | Eventually | +10 yrs | +20 yrs | +30 yrs | Eventually |
| 0 | 0.00 | 0.00 | 0.00 | 0.65 | 0.00 | 0.00 | 0.00 | 0.49 |
| 10 | 0.00 | 0.00 | 0.01 | 0.66 | 0.00 | 0.00 | 0.00 | 0.50 |
| 20 | 0.00 | 0.01 | 0.03 | 0.66 | 0.00 | 0.00 | 0.02 | 0.50 |
| 30 | 0.01 | 0.03 | 0.10 | 0.67 | 0.00 | 0.02 | 0.06 | 0.50 |
| 40 | 0.02 | 0.10 | 0.26 | 0.67 | 0.01 | 0.06 | 0.18 | 0.50 |
| 50 | 0.08 | 0.25 | 0.48 | 0.67 | 0.05 | 0.16 | 0.33 | 0.50 |
| 60 | 0.18 | 0.43 | 0.60 | 0.63 | 0.12 | 0.29 | 0.44 | 0.47 |

Lifetime Risk of Being Diagnosed = 0.65% Lifetime Risk of Being Diagnosed = 0.49%
Lifetime Risk of Dying = 0.43% Lifetime Risk of Dying = 0.37%

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 | 0.89 | 0.00 | 0.00 | 0.00 | 0.93 |
| 10 | 0.00 | 0.00 | 0.01 | 0.92 | 0.00 | 0.00 | 0.01 | 0.95 |
| 20 | 0.00 | 0.01 | 0.06 | 0.93 | 0.00 | 0.01 | 0.05 | 0.96 |
| 30 | 0.01 | 0.06 | 0.23 | 0.95 | 0.01 | 0.05 | 0.19 | 0.96 |
| 40 | 0.05 | 0.23 | 0.52 | 0.98 | 0.04 | 0.19 | 0.42 | 0.97 |
| 50 | 0.19 | 0.50 | 0.81 | 0.99 | 0.15 | 0.39 | 0.72 | 0.97 |
| 60 | 0.36 | 0.72 | 0.90 | 0.93 | 0.26 | 0.62 | 0.86 | 0.89 |

Lifetime Risk of Being Diagnosed = 0.89% Lifetime Risk of Being Diagnosed = 0.93%
Lifetime Risk of Dying = 0.63% Lifetime Risk of Dying = 0.69%

Table XVII-9
MYELOMA (Invasive)

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

By Race/Ethnicity and Sex

Incidence^a

| | Rate 1996-2000 Rate per 100,000 persons | | | Trend 1992-2000 APC (%) | | |
|---------------------------------|--|-------|---------|----------------------------|-------|------------------|
| | Total | Males | Females | Total | Males | Females |
| RACE/ETHNICITY | | | | | | |
| All Races | 5.6 | 7.0 | 4.6 | -0.7 | -0.8 | -0.9 |
| White | 5.2 | 6.7 | 4.1 | -0.6 | -0.4 | -1.2 |
| White Hispanic ^b | 5.2 | 6.6 | 4.2 | -1.4 | -1.7 | -1.1 |
| White Non-Hispanic ^b | 5.2 | 6.7 | 4.0 | -0.4 | -0.2 | -1.1 |
| Black | 11.2 | 12.9 | 10.2 | -1.8 | -2.1 | -1.6 |
| Asian/Pacific Islander | 3.6 | 4.3 | 3.1 | 1.0 | -1.6 | 4.5 ^d |
| Amer Ind/Alaska Nat | 3.1 | - | 3.1 | - | - | - |
| Hispanic ^b | 5.1 | 6.4 | 4.2 | -1.2 | -1.4 | -1.2 |

Mortality^c

| | Rate 1996-2000 Rate per 100,000 persons | | | Trend 1992-2000 APC (%) | | |
|---------------------------------|--|-------|---------|----------------------------|-------|---------|
| | Total | Males | Females | Total | Males | Females |
| RACE/ETHNICITY | | | | | | |
| All Races | 3.9 | 4.8 | 3.2 | -0.3 | -0.5 | -0.1 |
| White | 3.5 | 4.5 | 2.9 | -0.3 | -0.3 | -0.3 |
| White Hispanic ^b | 3.3 | 3.8 | 2.9 | 1.0 | -1.0 | 2.6 |
| White Non-Hispanic ^b | 3.6 | 4.5 | 2.9 | -0.2 | -0.2 | -0.3 |
| Black | 7.6 | 9.2 | 6.6 | -0.2 | -0.8 | 0.3 |
| Asian/Pacific Islander | 1.9 | 2.2 | 1.6 | 0.6 | -0.9 | 2.3 |
| Amer Ind/Alaska Nat | 3.2 | 3.6 | 2.9 | 1.3 | - | - |
| Hispanic ^b | 3.2 | 3.7 | 2.9 | 1.2 | -0.8 | 2.7 |

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.

^a 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).

^b 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.

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

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

Table XVII-10
MYELOMA

AGE-ADJUSTED SEER INCIDENCE RATES^a AND SEER DEATH RATES^b
By Registry, Race and Sex

| | All Races | | | Whites | | | Blacks | | |
|--|-----------|-------|---------|--------|-------|---------|--------|-------|---------|
| | Total | Males | Females | Total | Males | Females | Total | Males | Females |
| SEER INCIDENCE RATES^a, 1996-2000 | | | | | | | | | |
| REGISTRY | | | | | | | | | |
| 12 registries | 5.6 | 7.0 | 4.6 | 5.2 | 6.7 | 4.1 | 11.2 | 12.9 | 10.2 |
| 11 registries | 5.6 | 7.0 | 4.6 | 5.2 | 6.7 | 4.1 | 11.2 | 12.9 | 10.2 |
| 9 registries | 5.6 | 7.0 | 4.6 | 5.3 | 6.7 | 4.2 | 11.4 | 12.9 | 10.4 |
| San Francisco-Oakland | 5.5 | 6.8 | 4.5 | 5.0 | 6.3 | 4.1 | 12.3 | 13.8 | 11.0 |
| Connecticut | 5.4 | 6.8 | 4.4 | 5.2 | 6.6 | 4.1 | 9.6 | 10.1 | 9.5 |
| Metropolitan Detroit | 6.8 | 8.1 | 6.1 | 5.4 | 6.8 | 4.6 | 12.6 | 14.2 | 11.7 |
| Hawaii | 4.0 | 4.7 | 3.3 | 5.4 | 6.5 | 4.1 | - | - | - |
| Iowa | 5.2 | 6.3 | 4.4 | 5.2 | 6.2 | 4.3 | - | - | - |
| New Mexico | 4.7 | 5.8 | 3.7 | 4.7 | 5.8 | 3.7 | - | - | - |
| Seattle-Puget Sound | 6.1 | 8.1 | 4.7 | 6.1 | 8.0 | 4.6 | 11.7 | 13.4 | 10.8 |
| Utah | 5.3 | 7.5 | 3.5 | 5.2 | 7.5 | 3.5 | - | - | - |
| Metropolitan Atlanta | 5.8 | 7.1 | 4.7 | 4.5 | 6.1 | 3.4 | 9.6 | 10.7 | 8.6 |
| San Jose-Monterey | 5.3 | 6.3 | 4.4 | 5.4 | 6.4 | 4.5 | - | - | - |
| Los Angeles | 5.6 | 7.1 | 4.5 | 5.1 | 6.8 | 3.9 | 11.0 | 12.9 | 9.7 |
| SEER DEATH RATES^b, 1996-2000 | | | | | | | | | |
| REGISTRY | | | | | | | | | |
| 12 registries | 3.8 | 4.6 | 3.2 | 3.6 | 4.5 | 3.0 | 7.7 | 8.2 | 7.4 |
| 11 registries | 3.8 | 4.6 | 3.2 | 3.6 | 4.5 | 3.0 | 7.7 | 8.2 | 7.4 |
| 9 registries | 3.9 | 4.7 | 3.3 | 3.7 | 4.6 | 3.0 | 8.0 | 8.9 | 7.5 |
| San Francisco-Oakland | 3.5 | 4.3 | 2.9 | 3.3 | 4.2 | 2.6 | 8.7 | 9.4 | 8.4 |
| Connecticut | 3.5 | 4.1 | 3.1 | 3.3 | 3.9 | 2.9 | 6.6 | 8.8 | 5.5 |
| Metropolitan Detroit | 4.6 | 5.6 | 3.9 | 3.7 | 5.0 | 2.9 | 8.2 | 8.7 | 8.0 |
| Hawaii | 2.6 | 3.2 | 2.0 | 3.5 | 4.2 | - | - | - | - |
| Iowa | 3.7 | 4.5 | 3.1 | 3.7 | 4.5 | 3.1 | - | - | - |
| New Mexico | 3.7 | 4.1 | 3.4 | 3.7 | 4.1 | 3.4 | - | - | - |
| Seattle-Puget Sound | 4.1 | 5.1 | 3.4 | 4.1 | 5.2 | 3.5 | 7.0 | - | - |
| Utah | 4.2 | 5.2 | 3.4 | 4.1 | 5.1 | 3.4 | - | - | - |
| Metropolitan Atlanta | 4.5 | 5.6 | 3.8 | 3.5 | 4.7 | 2.7 | 7.9 | 9.2 | 7.2 |
| San Jose-Monterey | 3.5 | 4.2 | 3.0 | 3.6 | 4.5 | 3.0 | - | - | - |
| Los Angeles | 3.6 | 4.3 | 3.1 | 3.5 | 4.5 | 2.7 | 6.9 | 6.7 | 7.2 |

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

^a 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.

^b 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 XVII-11
MYELOMAAVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH^a RATES BY STATE, 1996-2000

All Races, 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. | 3.9 | 0.02 | | | | | | | |
| High Five States | | | | | | | | | |
| District of Columbia | 6.3 ^{bc} | 0.48 | (01) | 61.5 | | | | | |
| South Carolina | 5.0 ^{bc} | 0.17 | (02) | 28.2 | | | | | |
| Virginia | 4.7 ^{bc} | 0.12 | (03) | 20.5 | | | | | |
| Tennessee | 4.6 ^{bc} | 0.13 | (04) | 17.9 | | | | | |
| Louisiana | 4.5 ^{bc} | 0.15 | (05) | 15.4 | | | | | |
| Low Five States | | | | | | | | | |
| New Hampshire | 3.3 ^b | 0.24 | (47) | -15.4 | | | | | |
| Arizona | 3.1 ^{bc} | 0.11 | (48) | -20.5 | | | | | |
| Rhode Island | 3.0 ^{bc} | 0.23 | (49) | -23.1 | | | | | |
| Nevada | 2.9 ^{bc} | 0.19 | (50) | -25.6 | | | | | |
| Hawaii | 2.6 ^{bc} | 0.21 | (51) | -33.3 | | | | | |
| State | Rate | SE | Rank | PD | State | Rate | SE | Rank | PD |
| Alabama | 4.2 | 0.14 | (10) | 7.7 | Montana | 4.0 | 0.29 | (18) | 2.6 |
| Alaska | 4.0 | 0.58 | (23) | 2.6 | Nebraska | 3.6 | 0.20 | (39) | -7.7 |
| Arizona | 3.1 ^{bc} | 0.11 | (48) | -20.5 | Nevada | 2.9 ^{bc} | 0.19 | (50) | -25.6 |
| Arkansas | 4.0 | 0.17 | (19) | 2.6 | New Hampshire | 3.3 ^b | 0.24 | (47) | -15.4 |
| California | 3.5 ^c | 0.05 | (41) | -10.3 | New Jersey | 3.9 | 0.09 | (31) | 0.0 |
| Colorado | 3.9 | 0.16 | (28) | 0.0 | New Mexico | 3.7 | 0.22 | (36) | -5.1 |
| Connecticut | 3.5 | 0.14 | (43) | -10.3 | New York | 3.5 ^c | 0.06 | (40) | -10.3 |
| Delaware | 4.0 | 0.33 | (24) | 2.6 | North Carolina | 4.4 ^c | 0.11 | (06) | 12.8 |
| District of Columbia | 6.3 ^{bc} | 0.48 | (01) | 61.5 | North Dakota | 3.9 | 0.33 | (29) | 0.0 |
| Florida | 3.4 ^c | 0.06 | (44) | -12.8 | Ohio | 4.1 | 0.08 | (16) | 5.1 |
| Georgia | 4.3 | 0.12 | (08) | 10.3 | Oklahoma | 3.4 | 0.14 | (45) | -12.8 |
| Hawaii | 2.6 ^{bc} | 0.21 | (51) | -33.3 | Oregon | 4.0 | 0.15 | (25) | 2.6 |
| Idaho | 3.7 | 0.26 | (38) | -5.1 | Pennsylvania | 3.9 | 0.07 | (26) | 0.0 |
| Illinois | 4.0 | 0.08 | (21) | 2.6 | Rhode Island | 3.0 ^{bc} | 0.23 | (49) | -23.1 |
| Indiana | 4.0 | 0.12 | (22) | 2.6 | South Carolina | 5.0 ^{bc} | 0.17 | (02) | 28.2 |
| Iowa | 3.7 | 0.15 | (35) | -5.1 | South Dakota | 4.0 | 0.31 | (20) | 2.6 |
| Kansas | 3.7 | 0.16 | (33) | -5.1 | Tennessee | 4.6 ^{bc} | 0.13 | (04) | 17.9 |
| Kentucky | 4.0 | 0.14 | (17) | 2.6 | Texas | 4.1 | 0.07 | (14) | 5.1 |
| Louisiana | 4.5 ^{bc} | 0.15 | (05) | 15.4 | Utah | 4.2 | 0.24 | (11) | 7.7 |
| Maine | 4.1 | 0.24 | (15) | 5.1 | Vermont | 3.4 | 0.34 | (46) | -12.8 |
| Maryland | 4.3 | 0.14 | (07) | 10.3 | Virginia | 4.7 ^{bc} | 0.12 | (03) | 20.5 |
| Massachusetts | 3.5 ^c | 0.10 | (42) | -10.3 | Washington | 4.1 | 0.13 | (13) | 5.1 |
| Michigan | 4.2 ^c | 0.09 | (09) | 7.7 | West Virginia | 3.9 | 0.19 | (30) | 0.0 |
| Minnesota | 3.9 | 0.13 | (27) | 0.0 | Wisconsin | 3.8 | 0.12 | (32) | -2.6 |
| Mississippi | 4.1 | 0.18 | (12) | 5.1 | Wyoming | 3.7 | 0.41 | (37) | -5.1 |
| Missouri | 3.7 | 0.11 | (34) | -5.1 | | | | | |

^a 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.^b Absolute percent difference between state rate and total U.S. rate is 15% or more.^c 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 XVII-12
MYELOMAAVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH^a 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. | 4.8 | 0.03 | | | | | | | |
| High Five States | | | | | | | | | |
| District of Columbia | 6.7 ^b | 0.80 | (01) | 39.6 | | | | | |
| Virginia | 6.0 ^{bc} | 0.23 | (02) | 25.0 | | | | | |
| South Carolina | 5.9 ^{bc} | 0.30 | (03) | 22.9 | | | | | |
| Tennessee | 5.7 ^{bc} | 0.24 | (04) | 18.8 | | | | | |
| North Carolina | 5.6 ^{bc} | 0.21 | (05) | 16.7 | | | | | |
| Low Five States | | | | | | | | | |
| Vermont | 3.8 ^b | 0.56 | (47) | -20.8 | | | | | |
| Arizona | 3.8 ^{bc} | 0.19 | (48) | -20.8 | | | | | |
| Nevada | 3.7 ^b | 0.34 | (49) | -22.9 | | | | | |
| Rhode Island | 3.5 ^b | 0.40 | (50) | -27.1 | | | | | |
| Hawaii | 3.2 ^{bc} | 0.35 | (51) | -33.3 | | | | | |
| State | Rate | SE | Rank | PD | State | Rate | SE | Rank | PD |
| Alabama | 5.3 | 0.25 | (11) | 10.4 | Montana | 4.9 | 0.49 | (30) | 2.1 |
| Alaska | 5.1 | 1.14 | (19) | 6.3 | Nebraska | 4.6 | 0.35 | (37) | -4.2 |
| Arizona | 3.8 ^{bc} | 0.19 | (48) | -20.8 | Nevada | 3.7 ^b | 0.34 | (49) | -22.9 |
| Arkansas | 5.0 | 0.30 | (22) | 4.2 | New Hampshire | 4.2 | 0.43 | (43) | -12.5 |
| California | 4.3 ^c | 0.09 | (41) | -10.4 | New Jersey | 4.6 | 0.17 | (36) | -4.2 |
| Colorado | 5.2 | 0.29 | (16) | 8.3 | New Mexico | 4.1 | 0.35 | (45) | -14.6 |
| Connecticut | 4.1 | 0.24 | (46) | -14.6 | New York | 4.3 ^c | 0.11 | (42) | -10.4 |
| Delaware | 4.9 | 0.59 | (28) | 2.1 | North Carolina | 5.6 ^{bc} | 0.21 | (05) | 16.7 |
| District of Columbia | 6.7 ^b | 0.80 | (01) | 39.6 | North Dakota | 4.8 | 0.56 | (32) | 0.0 |
| Florida | 4.2 ^c | 0.10 | (44) | -12.5 | Ohio | 5.2 | 0.15 | (15) | 8.3 |
| Georgia | 5.4 | 0.22 | (09) | 12.5 | Oklahoma | 4.3 | 0.25 | (40) | -10.4 |
| Hawaii | 3.2 ^{bc} | 0.35 | (51) | -33.3 | Oregon | 5.2 | 0.27 | (14) | 8.3 |
| Idaho | 4.9 | 0.46 | (29) | 2.1 | Pennsylvania | 5.1 | 0.13 | (21) | 6.3 |
| Illinois | 4.9 | 0.15 | (31) | 2.1 | Rhode Island | 3.5 ^b | 0.40 | (50) | -27.1 |
| Indiana | 5.0 | 0.21 | (25) | 4.2 | South Carolina | 5.9 ^{bc} | 0.30 | (03) | 22.9 |
| Iowa | 4.5 | 0.26 | (38) | -6.3 | South Dakota | 5.6 ^b | 0.57 | (08) | 16.7 |
| Kansas | 4.7 | 0.29 | (35) | -2.1 | Tennessee | 5.7 ^{bc} | 0.24 | (04) | 18.8 |
| Kentucky | 5.0 | 0.26 | (27) | 4.2 | Texas | 5.0 | 0.13 | (26) | 4.2 |
| Louisiana | 5.6 ^b | 0.27 | (06) | 16.7 | Utah | 5.2 | 0.42 | (13) | 8.3 |
| Maine | 5.6 ^b | 0.46 | (07) | 16.7 | Vermont | 3.8 ^b | 0.56 | (47) | -20.8 |
| Maryland | 5.1 | 0.24 | (17) | 6.3 | Virginia | 6.0 ^{bc} | 0.23 | (02) | 25.0 |
| Massachusetts | 4.3 | 0.18 | (39) | -10.4 | Washington | 5.3 | 0.22 | (10) | 10.4 |
| Michigan | 5.2 | 0.17 | (12) | 8.3 | West Virginia | 5.1 | 0.35 | (20) | 6.3 |
| Minnesota | 5.0 | 0.23 | (24) | 4.2 | Wisconsin | 5.0 | 0.22 | (23) | 4.2 |
| Mississippi | 5.1 | 0.31 | (18) | 6.3 | Wyoming | 4.8 | 0.74 | (33) | 0.0 |
| Missouri | 4.7 | 0.20 | (34) | -2.1 | | | | | |

^a 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.^b Absolute percent difference between state rate and total U.S. rate is 15% or more.^c 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 XVII-13
MYELOMAAVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH^a RATES BY STATE, 1996-2000

All Races, 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. | 3.2 | 0.02 | | | | | | | |
| High Five States | | | | | | | | | |
| District of Columbia | 6.0 ^{bc} | 0.60 | (01) | 87.5 | | | | | |
| South Carolina | 4.5 ^{bc} | 0.20 | (02) | 40.6 | | | | | |
| Tennessee | 3.9 ^{bc} | 0.16 | (03) | 21.9 | | | | | |
| Louisiana | 3.8 ^b | 0.18 | (04) | 18.8 | | | | | |
| Virginia | 3.8 ^{bc} | 0.15 | (05) | 18.8 | | | | | |
| Low Five States | | | | | | | | | |
| Idaho | 2.7 ^b | 0.29 | (47) | -15.6 | | | | | |
| New Hampshire | 2.6 ^b | 0.28 | (48) | -18.8 | | | | | |
| Arizona | 2.6 ^{bc} | 0.14 | (49) | -18.8 | | | | | |
| Nevada | 2.2 ^{bc} | 0.23 | (50) | -31.3 | | | | | |
| Hawaii | 2.0 ^{bc} | 0.25 | (51) | -37.5 | | | | | |
| State | Rate | SE | Rank | PD | State | Rate | SE | Rank | PD |
| Alabama | 3.5 | 0.16 | (13) | 9.4 | Montana | 3.3 | 0.35 | (24) | 3.1 |
| Alaska | 3.6 | 0.70 | (08) | 12.5 | Nebraska | 2.9 | 0.24 | (42) | -9.4 |
| Arizona | 2.6 ^{bc} | 0.14 | (49) | -18.8 | Nevada | 2.2 ^{bc} | 0.23 | (50) | -31.3 |
| Arkansas | 3.3 | 0.20 | (23) | 3.1 | New Hampshire | 2.6 ^b | 0.28 | (48) | -18.8 |
| California | 2.9 ^c | 0.06 | (41) | -9.4 | New Jersey | 3.4 | 0.12 | (17) | 6.3 |
| Colorado | 3.1 | 0.18 | (36) | -3.1 | New Mexico | 3.4 | 0.27 | (18) | 6.3 |
| Connecticut | 3.1 | 0.17 | (34) | -3.1 | New York | 3.1 | 0.07 | (33) | -3.1 |
| Delaware | 3.3 | 0.39 | (22) | 3.1 | North Carolina | 3.6 | 0.13 | (07) | 12.5 |
| District of Columbia | 6.0 ^{bc} | 0.60 | (01) | 87.5 | North Dakota | 3.2 | 0.40 | (27) | 0.0 |
| Florida | 2.8 ^c | 0.07 | (45) | -12.5 | Ohio | 3.3 | 0.10 | (20) | 3.1 |
| Georgia | 3.5 | 0.14 | (10) | 9.4 | Oklahoma | 2.8 | 0.17 | (44) | -12.5 |
| Hawaii | 2.0 ^{bc} | 0.25 | (51) | -37.5 | Oregon | 3.1 | 0.18 | (35) | -3.1 |
| Idaho | 2.7 ^b | 0.29 | (47) | -15.6 | Pennsylvania | 3.2 | 0.09 | (28) | 0.0 |
| Illinois | 3.4 | 0.10 | (14) | 6.3 | Rhode Island | 2.8 | 0.29 | (46) | -12.5 |
| Indiana | 3.4 | 0.14 | (19) | 6.3 | South Carolina | 4.5 ^{bc} | 0.20 | (02) | 40.6 |
| Iowa | 3.1 | 0.18 | (30) | -3.1 | South Dakota | 2.9 | 0.35 | (43) | -9.4 |
| Kansas | 3.1 | 0.20 | (29) | -3.1 | Tennessee | 3.9 ^{bc} | 0.16 | (03) | 21.9 |
| Kentucky | 3.4 | 0.17 | (16) | 6.3 | Texas | 3.5 | 0.09 | (11) | 9.4 |
| Louisiana | 3.8 ^b | 0.18 | (04) | 18.8 | Utah | 3.4 | 0.29 | (15) | 6.3 |
| Maine | 3.2 | 0.28 | (25) | 0.0 | Vermont | 2.9 | 0.41 | (39) | -9.4 |
| Maryland | 3.8 ^b | 0.17 | (06) | 18.8 | Virginia | 3.8 ^{bc} | 0.15 | (05) | 18.8 |
| Massachusetts | 3.0 | 0.12 | (38) | -6.3 | Washington | 3.3 | 0.15 | (21) | 3.1 |
| Michigan | 3.5 | 0.11 | (09) | 9.4 | West Virginia | 3.1 | 0.22 | (32) | -3.1 |
| Minnesota | 3.2 | 0.16 | (26) | 0.0 | Wisconsin | 2.9 | 0.14 | (40) | -9.4 |
| Mississippi | 3.5 | 0.21 | (12) | 9.4 | Wyoming | 3.0 | 0.50 | (37) | -6.3 |
| Missouri | 3.1 | 0.14 | (31) | -3.1 | | | | | |

^a 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.^b Absolute percent difference between state rate and total U.S. rate is 15% or more.^c 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 XVII-14
MYELOMA (Invasive)

Estimated United States Cancer Prevalence Counts^a 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 ^f | Complete ^g |
|-------------------------------------|---------|----------|-----------|-----------|-----------|----------|----------|-------------------|-----------------------|
| All Races ^b | 33,366 | 9,302 | 2,686 | 1,127 | 384 | 42,668 | 46,865 | + | + |
| Males | 17,836 | 5,051 | 1,494 | 557 | - | 22,887 | 25,088 | + | + |
| Females | 15,530 | 4,251 | 1,192 | 570 | - | 19,781 | 21,777 | + | + |
| White ^b | 26,249 | 7,026 | 2,048 | 765 | - | 33,275 | 36,329 | + | + |
| Males | 14,426 | 3,835 | 1,142 | 347 | - | 18,261 | 19,844 | + | + |
| Females | 11,823 | 3,191 | 906 | 418 | - | 15,014 | 16,485 | + | + |
| Black ^b | 6,144 | 1,976 | 536 | 340 | - | 8,120 | 9,124 | + | + |
| Males | 2,881 | 1,041 | 321 | - | - | 3,922 | 4,495 | + | + |
| Females | 3,263 | 935 | - | - | - | 4,198 | 4,629 | + | + |
| Asian/Pacific Islander ^c | 537 | 161 | + | + | + | 698 | + | + | + |
| Males | 303 | 88 | + | + | + | 391 | + | + | + |
| Females | 234 | 73 | + | + | + | 307 | + | + | + |
| Hispanic ^d | 1,833 | 437 | + | + | + | 2,270 | + | + | + |
| Males | 981 | 251 | + | + | + | 1,232 | + | + | + |
| Females | 852 | 186 | + | + | + | 1,038 | + | + | + |

Estimated prevalence percent^a 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 ^e 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 ^c | 0.0134% | - | - | - | 0.0013% | 0.0065% | 0.0239% | 0.0526% | 0.0773% | 0.0780% |
| Males | 0.0146% | - | - | - | 0.0018% | 0.0082% | 0.0287% | 0.0643% | 0.0933% | 0.0978% |
| Females | 0.0122% | - | - | - | 0.0009% | 0.0049% | 0.0194% | 0.0424% | 0.0653% | 0.0677% |
| White ^c | 0.0131% | - | - | - | 0.0014% | 0.0056% | 0.0217% | 0.0491% | 0.0728% | 0.0719% |
| Males | 0.0144% | - | - | - | 0.0019% | 0.0072% | 0.0272% | 0.0594% | 0.0892% | 0.0907% |
| Females | 0.0118% | - | - | - | - | 0.0039% | 0.0163% | 0.0398% | 0.0605% | 0.0623% |
| Black ^c | 0.0210% | - | - | - | - | 0.0164% | 0.0528% | 0.1138% | 0.1566% | 0.1553% |
| Males | 0.0219% | - | - | - | - | 0.0205% | 0.0568% | 0.1405% | 0.1771% | 0.2057% |
| Females | 0.0202% | - | - | - | - | 0.0127% | 0.0494% | 0.0928% | 0.1430% | 0.1327% |
| Asian/Pacific Islander ^c | 0.0073% | - | - | - | - | 0.0042% | 0.0149% | 0.0225% | 0.0486% | 0.0598% |
| Males | 0.0084% | - | - | - | - | - | 0.0162% | 0.0333% | 0.0593% | 0.0754% |
| Females | 0.0063% | - | - | - | - | - | 0.0138% | - | 0.0404% | - |
| Hispanic ^d | 0.0063% | - | - | - | 0.0022% | 0.0054% | 0.0217% | 0.0441% | 0.0736% | 0.0829% |
| Males | 0.0066% | - | - | - | - | 0.0065% | 0.0248% | 0.0489% | 0.0794% | 0.1451% |
| Females | 0.0060% | - | - | - | - | - | 0.0189% | 0.0401% | 0.0695% | 0.0116% |

^a 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.

^{b c d} Statistics based on SEER 9 Areas ^c SEER 11 Areas ^d SEER 11 Areas excluding Hawaii and Detroit.

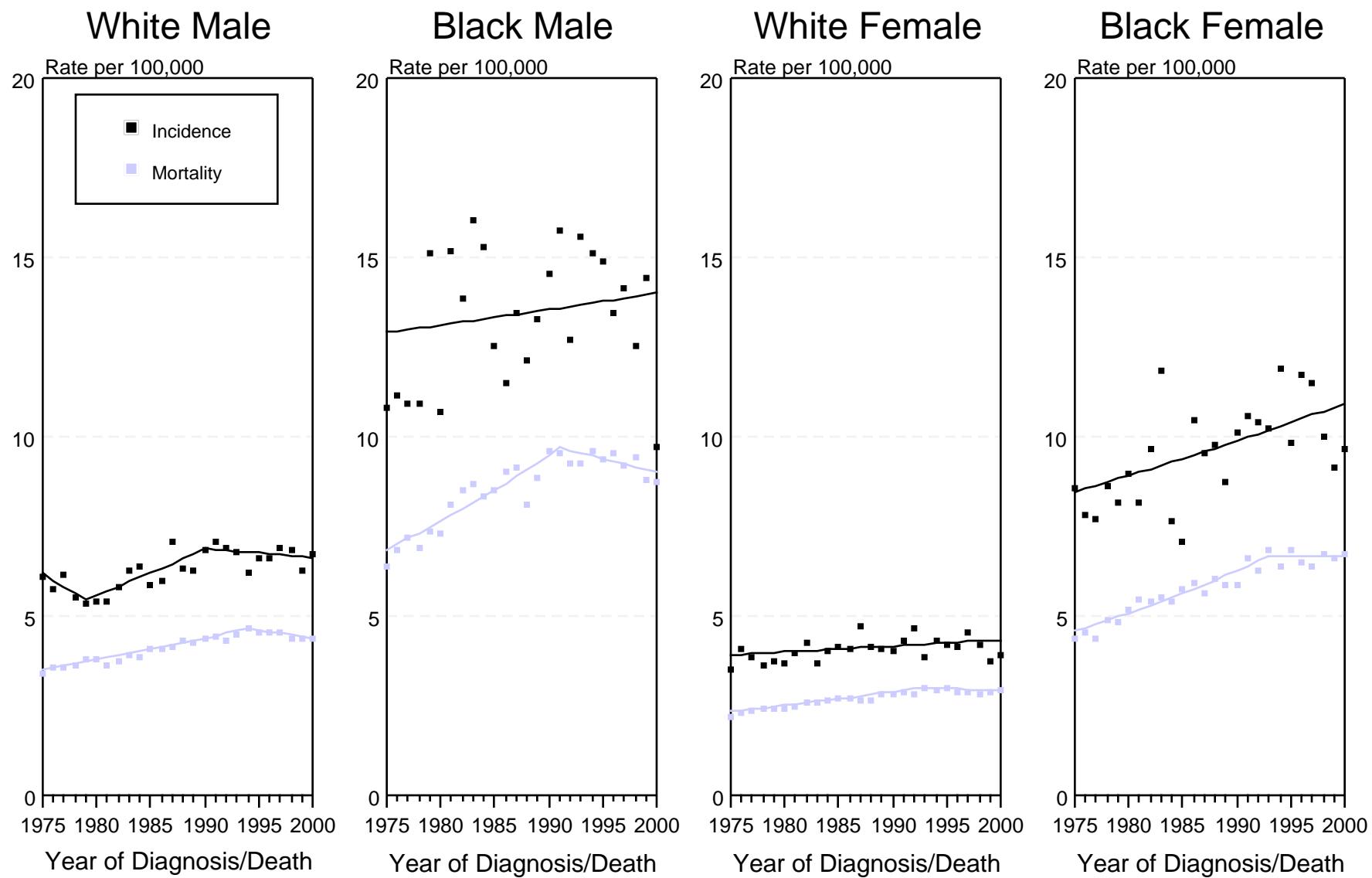
^{e f g} Percentages are age-adjusted to the 2000 US standard population by 5-year age groups.

^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.

- Statistics not shown. Rate based on less than 25 cases estimated alive for the time interval.

+ Not available.

SEER Incidence and US Death Rates⁺ Myeloma, by Race and Sex



+ 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 XVII-1