

II. All Cancer Sites

Incidence (New Cases)

The Maryland all cancer sites incidence data for 2002 are not available. The 2002 U.S. rate is 471.4 per 100,000 population published by the National Cancer Institute, Surveillance Epidemiological End Results (SEER) Program.

Mortality (Deaths)

Cancer is the second leading cause of death in Maryland, accounting for 23.6% of all deaths in 2002. A total of 10,395 Maryland residents died from cancer in 2002. The overall Maryland cancer mortality rate for 2002 is 200.9 per 100,000 population (197.0-204.8, 95% Confidence Interval (C.I.)). This rate is statistically significantly higher than the 2002 U.S. SEER cancer mortality rate of 193.5 per 100,000 population. Maryland is ranked 15th highest among all states and the District of Columbia in total cancer mortality for the period 1998-2002.

Table 1.
All Cancer Sites Incidence and Mortality Rates
by Gender and Race, Maryland and the United States, 2002

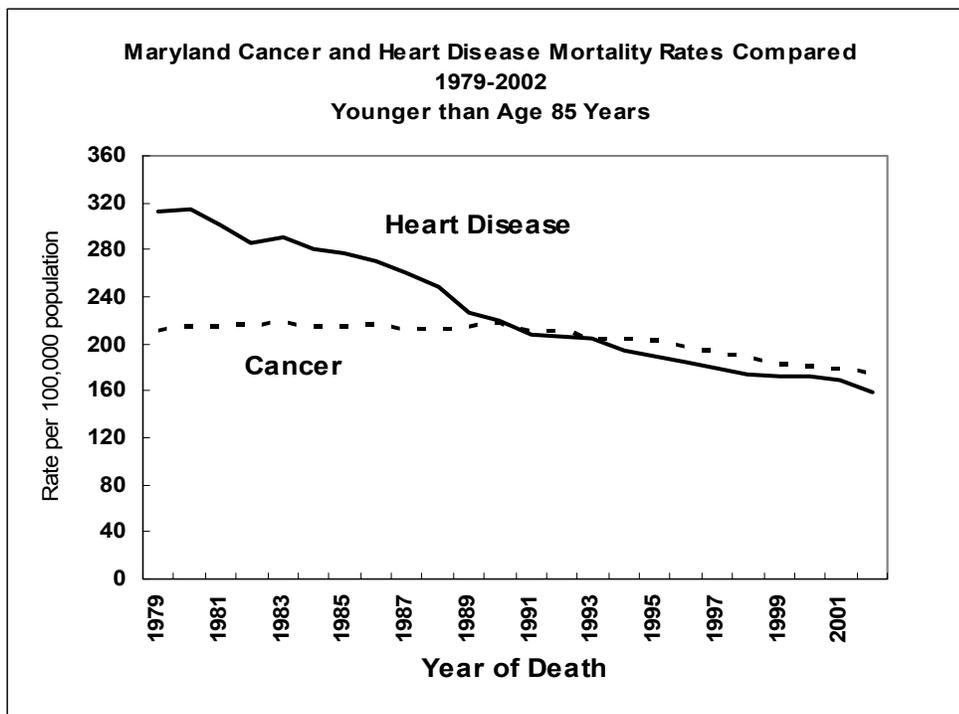
| <i>Incidence 2002</i> | <i>Total</i> | <i>Males</i> | <i>Females</i> | <i>Whites</i> | <i>Blacks</i> | <i>Other</i> |
|-----------------------|--------------|--------------|----------------|---------------|---------------|--------------|
| New Cases (#) | NA | NA | NA | NA | NA | NA |
| Incidence Rate* | NA | NA | NA | NA | NA | NA |
| U.S. SEER Rate* | 471.4 | 553.2 | 415.1 | 479.0 | 517.3 | NA |
| <i>Mortality 2002</i> | <i>Total</i> | <i>Males</i> | <i>Females</i> | <i>Whites</i> | <i>Blacks</i> | <i>Other</i> |
| Deaths (#) | 10,395 | 5,275 | 5,120 | 7,642 | 2,588 | 165 |
| Mortality Rate* | 200.9 | 246.3 | 171.3 | 194.1 | 241.9 | 91.3 |
| U.S. SEER Rate* | 193.5 | 239.9 | 162.7 | 191.6 | 240.2 | NA |

* Rates are per 100,000 and are age-adjusted to 2000 U.S. standard population

NA: Data were not available

Source: CDC WONDER, 2002

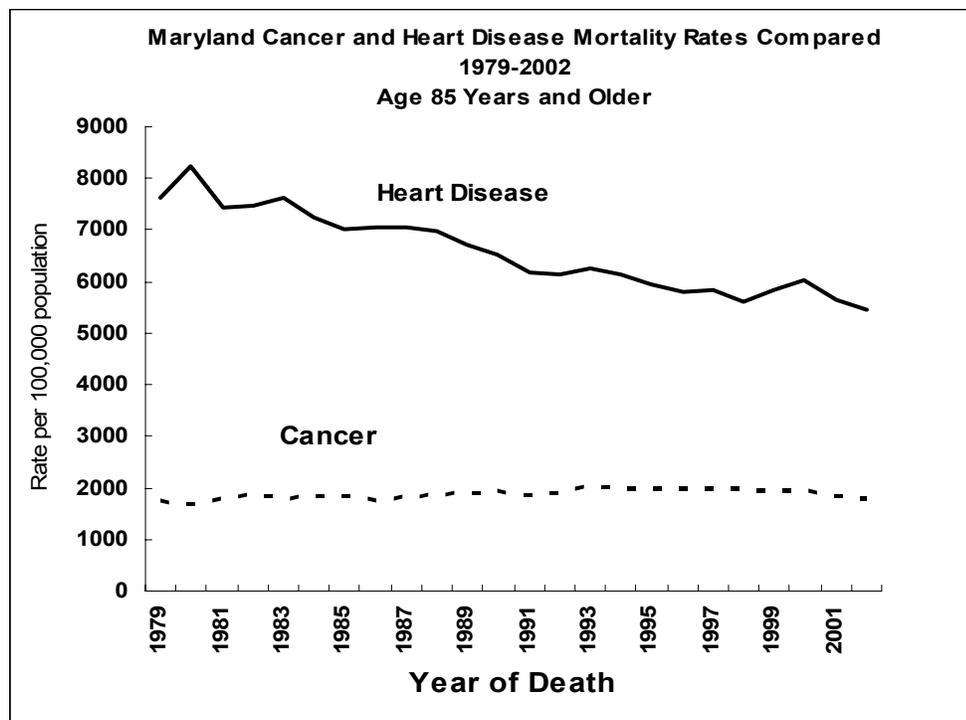
SEER, National Cancer Institute, 2002



Maryland Division of Health Statistics, 1979-2002

Cancer vs. Heart Disease Mortality Rates, Age Under 85 Years

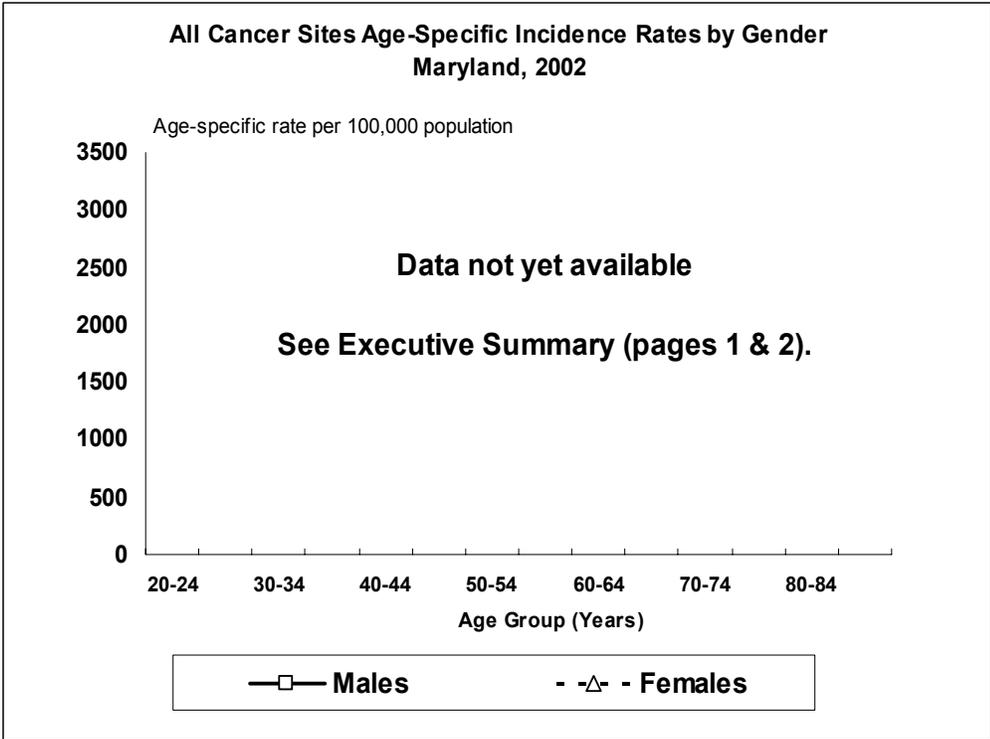
Beginning in 1991, cancer mortality rates began exceeding those from heart disease for Maryland residents under age 85 years.



Maryland Division of Health Statistics, 1979-2002

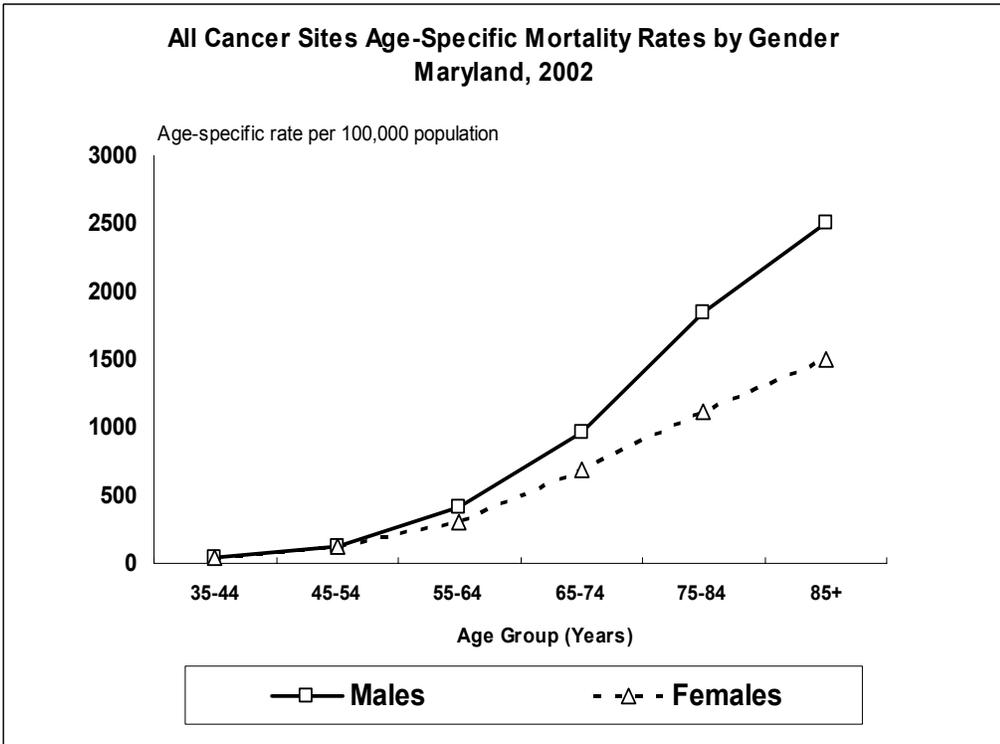
Cancer vs. Heart Disease Mortality Rates, Age Over 85 Years

For persons age 85 years and older in Maryland, mortality rates due to cancer have either leveled off or are increasing slightly; corresponding rates for heart disease continue to decline faster than those for cancer.



**Age-Specific
Incidence Rates by
Gender**

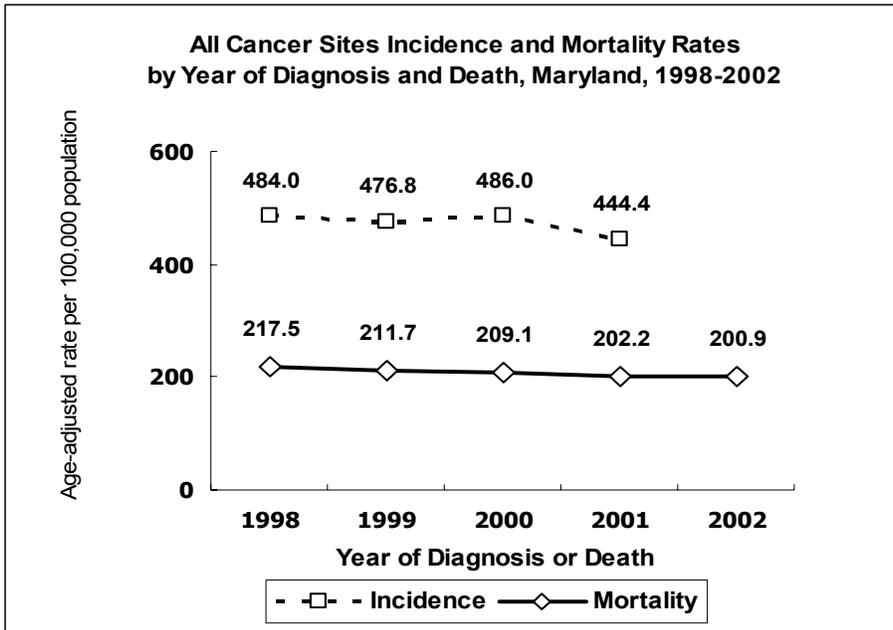
Age-specific incidence rate data for all cancer sites is not available for 2002.



**Age-Specific
Mortality Rates by
Gender**

Cancer mortality rates increase with age. Males have a higher cancer mortality rate than females after age 54 years.

CDC WONDER, 2002
CDC WONDER age categories are in 10-year intervals.



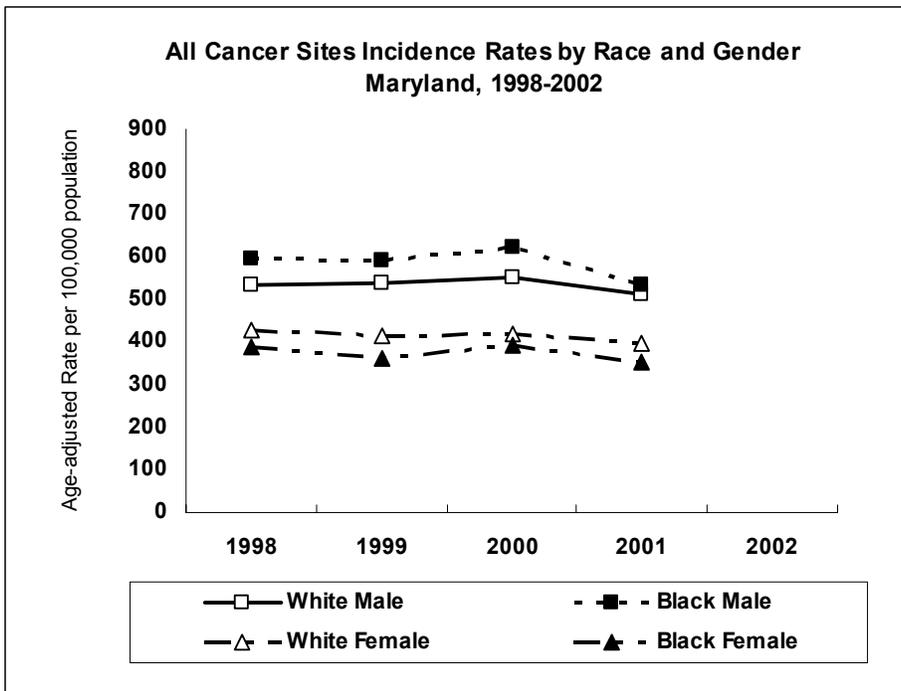
Rates are age-adjusted to 2000 U.S. standard population
 Maryland Cancer Registry, 1998-2001
 Maryland Division of Health Statistics, 1998-2001
 CDC WONDER, 2002

Incidence and Mortality Trends

All cancer site mortality rates decreased an average of 2.0% per year from 1998 to 2002.

The all cancer sites incidence data for 2002 were not available.

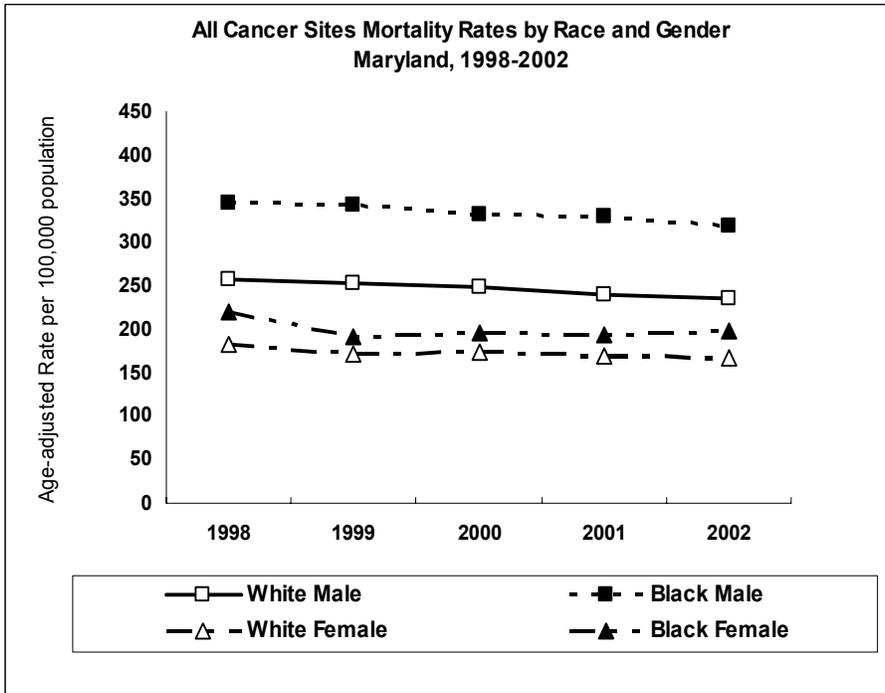
See Appendix I, Tables 1 and 2.



Rates are age-adjusted to 2000 U.S. standard population
 Maryland Cancer Registry, 1998-2001

Race and Gender Incidence Trends

Males have higher incidence rates than females. Black males have the highest rates; black females the lowest. From 1998 to 2001, there was a downward trend in incidence rates for black males and black females. Incidence rates for white males decreased an average of 1.0%, while those for black males declined 3.0%. The all cancer sites incidence rate by race and gender for 2002 were not available. See Appendix I, Table 3.



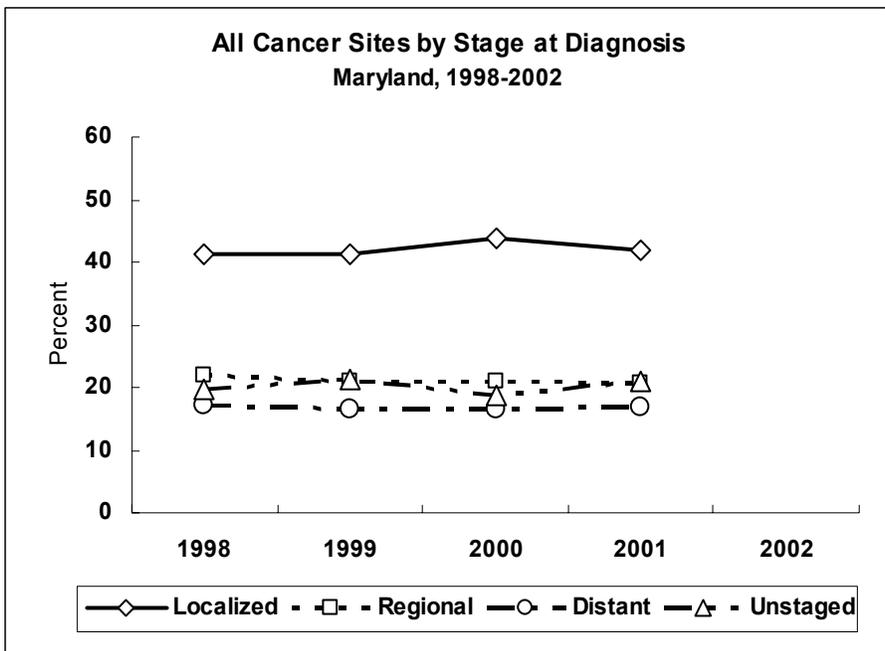
Rates are age-adjusted to 2000 U.S. standard population
 Maryland Division of Health Statistics, 1998-2001
 CDC WONDER, 2002

Race and Gender Mortality Trends

Males have higher mortality rates than females. Black males have the highest rates; white females the lowest.

All gender and race categories showed a downward trend with the largest decrease occurring for white males with an average annual decrease of 2.3% per year from 1998 to 2002.

See Appendix I, Table 4.



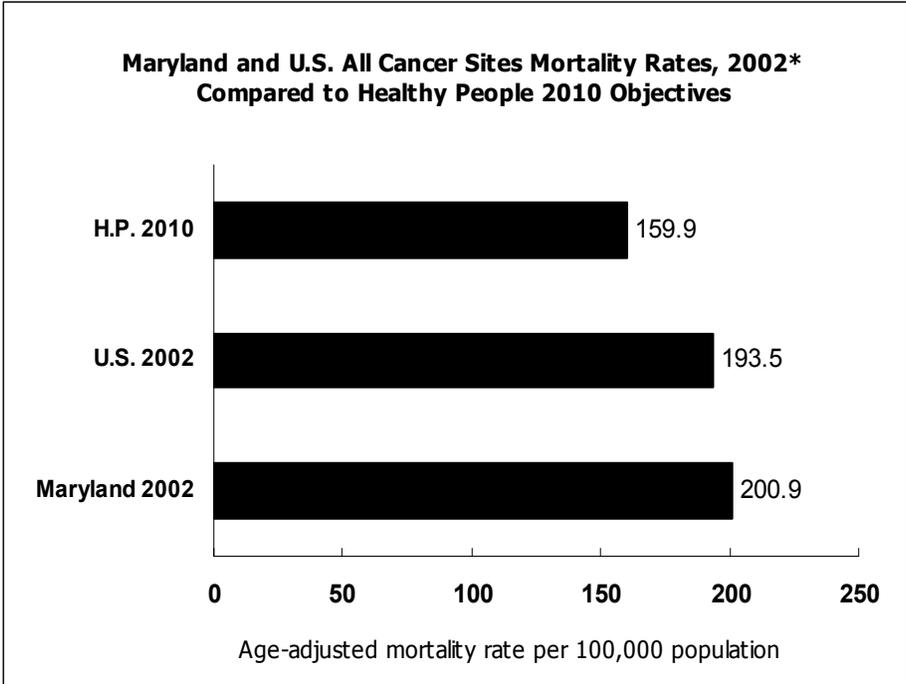
Maryland Cancer Registry, 1998-2001

Stage at Diagnosis

Approximately 42% of all cancers are diagnosed at the local stage.

See Appendix J, Table 1.

Data for all cancer sites incidence stage at diagnosis were not available for 2002.



Healthy People 2010 Objectives

The overall cancer mortality rate in 2002 for Maryland is 200.9 per 100,000 population. The Healthy People 2010 goal is to reduce cancer mortality to 159.9 per 100,000 population.

*Maryland and U.S. rates are age-adjusted to 2000 U.S. standard population
 CDC WONDER, 2002
 SEER, National Cancer Institute, 2002
 Healthy People 2010, U.S. Department of Health and Human Services, 2000

Summary – Identification of Targeted Cancers

The cancers targeted under the Cigarette Restitution Fund in 2006 include: lung and bronchus, colon and rectum, prostate, breast, cervical, oral, and melanoma of the skin. These cancers were chosen due to the ability to prevent, detect early, and effectively treat these cancers, and due to their impact on incidence and mortality. The remaining sections of this report address these targeted cancers. The public health interventions to reduce the impact of these cancers among Marylanders are listed in the chart below.

| The public health interventions to reduce the impact of the targeted cancers are: | | |
|--|-------------------|---------------|
| ➤ Prevention and cessation of tobacco use | | |
| ➤ Early detection and treatment of: | | |
| • colon/rectum cancer | • cervical cancer | • oral cancer |
| • breast cancer | • prostate cancer | |
| ➤ Protection of the skin from excessive sun exposure or exposure to UV light | | |

**Table 2.
Number of Cancer Cases for All Cancer Sites
by Jurisdiction, Gender and Race, Maryland, 2002**

| Jurisdiction | Total | Gender | | Race | | |
|------------------|-------|--------|---------|--------|--------|-------|
| | | Males | Females | Whites | Blacks | Other |
| Maryland | | | | | | |
| Allegany | | | | | | |
| Anne Arundel | | | | | | |
| Baltimore City | | | | | | |
| Baltimore County | | | | | | |
| Calvert | | | | | | |
| Caroline | | | | | | |
| Carroll | | | | | | |
| Cecil | | | | | | |
| Charles | | | | | | |
| Dorchester | | | | | | |
| Frederick | | | | | | |
| Garrett | | | | | | |
| Harford | | | | | | |
| Howard | | | | | | |
| Kent | | | | | | |
| Montgomery | | | | | | |
| Prince George's | | | | | | |
| Queen Anne's | | | | | | |
| Saint Mary's | | | | | | |
| Somerset | | | | | | |
| Talbot | | | | | | |
| Washington | | | | | | |
| Wicomico | | | | | | |
| Worcester | | | | | | |
| Unknown | | | | | | |

**Data not yet available
See Executive Summary (pages 1 & 2).**

Table 3.
All Cancer Sites Age-Adjusted Incidence Rates
by Jurisdiction, Gender and Race, Maryland, 2002

| Jurisdiction | Total | Gender | | Race | | |
|------------------|-------|--------|---------|--------|--------|-------|
| | | Males | Females | Whites | Blacks | Other |
| Maryland | | | | | | |
| Allegany | | | | | | |
| Anne Arundel | | | | | | |
| Baltimore City | | | | | | |
| Baltimore County | | | | | | |
| Calvert | | | | | | |
| Caroline | | | | | | |
| Carroll | | | | | | |
| Cecil | | | | | | |
| Charles | | | | | | |
| Dorchester | | | | | | |
| Frederick | | | | | | |
| Garrett | | | | | | |
| Harford | | | | | | |
| Howard | | | | | | |
| Kent | | | | | | |
| Montgomery | | | | | | |
| Prince George's | | | | | | |
| Queen Anne's | | | | | | |
| Saint Mary's | | | | | | |
| Somerset | | | | | | |
| Talbot | | | | | | |
| Washington | | | | | | |
| Wicomico | | | | | | |
| Worcester | | | | | | |

Data not yet available
See Executive Summary (pages 1 & 2).

Table 4.
All Sites Cancer Cases and Age-Adjusted Incidence Rates
Among Marylanders of Hispanic Ethnicity Regardless of Race
Maryland and Jurisdictions, 2002

| Jurisdiction | Number | Rate |
|-------------------------|---------------|-------------|
| Maryland | | |
| Allegany | | |
| Anne Arundel | | |
| Baltimore City | | |
| Baltimore County | | |
| Calvert | | |
| Caroline | | |
| Carroll | | |
| Cecil | | |
| Charles | | |
| Dorchester | | |
| Frederick | | |
| Garrett | | |
| Harford | | |
| Howard | | |
| Kent | | |
| Montgomery | | |
| Prince George's | | |
| Queen Anne's | | |
| St. Mary's | | |
| Somerset | | |
| Talbot | | |
| Washington | | |
| Wicomico | | |
| Worcester | | |
| | | |
| | | |
| Region | Number | Rate |
| BALTIMORE METRO REGION | | |
| EASTERN SHORE REGION | | |
| NATIONAL CAPITAL REGION | | |
| NORTHWEST REGION | | |
| SOUTHERN REGION | | |

Data not yet available
See Executive Summary
(pages 1 & 2).

Table 5.
Number of Deaths for All Cancer Sites
by Jurisdiction, Gender and Race, Maryland, 2002

| Jurisdiction | Total | Gender | | Race | | |
|------------------|--------|--------|---------|--------|--------|-------|
| | | Males | Females | Whites | Blacks | Other |
| Maryland | 10,395 | 5,275 | 5,120 | 7,642 | 2,588 | 165 |
| Allegany | 210 | 124 | 86 | 208 | <6 | 0 |
| Anne Arundel | 925 | 478 | 447 | 795 | 119 | 11 |
| Baltimore City | 1,733 | 859 | 874 | 667 | 1,057 | 9 |
| Baltimore County | 1,877 | 940 | 937 | 1,639 | 217 | 21 |
| Calvert | 151 | 76 | 75 | 133 | 18 | 0 |
| Caroline | 75 | 33 | 42 | 61 | 13 | <6 |
| Carroll | 303 | 159 | 144 | 296 | 7 | 0 |
| Cecil | 167 | 96 | 71 | 158 | 7 | <6 |
| Charles | 183 | 102 | 81 | 146 | 31 | 6 |
| Dorchester | 97 | 58 | 39 | 74 | 23 | 0 |
| Frederick | 337 | 180 | 157 | 311 | 25 | 1 |
| Garrett | 60 | 36 | 24 | 60 | 0 | 0 |
| Harford | 392 | 208 | 184 | 354 | 35 | 3 |
| Howard | 289 | 146 | 143 | 238 | 40 | 11 |
| Kent | 49 | 29 | 20 | 38 | 11 | 0 |
| Montgomery | 1,229 | 579 | 650 | 1,008 | 153 | 68 |
| Prince George's | 1,285 | 626 | 659 | 555 | 703 | 27 |
| Queen Anne's | 94 | 44 | 50 | 83 | 11 | 0 |
| Saint Mary's | 144 | 83 | 61 | 115 | 27 | <6 |
| Somerset | 69 | 38 | 31 | 52 | 17 | 0 |
| Talbot | 100 | 47 | 53 | 84 | 16 | 0 |
| Washington | 294 | 144 | 150 | 289 | 4 | 1 |
| Wicomico | 194 | 104 | 90 | 158 | 34 | <6 |
| Worcester | 138 | 86 | 52 | 120 | 18 | 0 |

Cells with 5 or fewer non-zero cases where county population is less than 100,000
are not presented per CDC WONDER Data Use Restrictions

Source: CDC WONDER, 2002

**Table 6.
All Cancer Sites Age-Adjusted Mortality Rates*
by Jurisdiction, Gender and Race, Maryland, 2002**

| Jurisdiction | Total | Gender | | Race | | |
|------------------|-------|--------|---------|--------|--------|-------|
| | | Males | Females | Whites | Blacks | Other |
| Maryland | 200.9 | 246.3 | 171.3 | 194.1 | 241.9 | 91.3 |
| Allegany | 211.8 | 311.5 | 152.9 | 214.2 | ** | 0.0 |
| Anne Arundel | 209.1 | 250.7 | 181.0 | 203.9 | 273.6 | 112.7 |
| Baltimore City | 267.9 | 336.6 | 224.5 | 249.3 | 286.9 | 102.8 |
| Baltimore County | 212.1 | 258.8 | 182.0 | 212.1 | 223.8 | 108.5 |
| Calvert | 236.1 | 292.8 | 204.6 | 240.7 | 216.6 | 0.0 |
| Caroline | 230.1 | 242.0 | 229.5 | 219.9 | 283.3 | ** |
| Carroll | 205.0 | 267.4 | 170.7 | 206.5 | 179.3 | 0.0 |
| Cecil | 205.0 | 267.2 | 159.9 | 202.4 | 273.7 | ** |
| Charles | 200.6 | 269.1 | 155.1 | 209.1 | 160.2 | 266.8 |
| Dorchester | 237.9 | 339.8 | 174.5 | 230.1 | 259.1 | 0.0 |
| Frederick | 190.4 | 238.8 | 155.4 | 187.2 | 304.6 | 36.1 |
| Garrett | 169.4 | 234.9 | 120.4 | 170.4 | 0.0 | 0.0 |
| Harford | 196.7 | 242.5 | 163.0 | 193.0 | 264.4 | 62.5 |
| Howard | 155.5 | 191.9 | 135.1 | 159.3 | 165.3 | 95.8 |
| Kent | 173.2 | 231.3 | 130.0 | 158.2 | 270.8 | 0.0 |
| Montgomery | 140.0 | 160.7 | 126.5 | 142.0 | 178.3 | 77.4 |
| Prince George's | 211.2 | 252.9 | 184.3 | 206.5 | 226.9 | 100.7 |
| Queen Anne's | 212.8 | 212.9 | 206.7 | 212.2 | 235.0 | 0.0 |
| Saint Mary's | 200.7 | 256.3 | 158.4 | 190.2 | 267.9 | ** |
| Somerset | 259.1 | 333.8 | 210.6 | 261.1 | 244.3 | 0.0 |
| Talbot | 186.3 | 207.1 | 175.0 | 176.7 | 252.7 | 0.0 |
| Washington | 196.1 | 232.4 | 177.0 | 199.9 | 142.3 | 93.0 |
| Wicomico | 218.7 | 277.4 | 173.6 | 222.7 | 207.1 | ** |
| Worcester | 196.3 | 276.6 | 136.0 | 195.2 | 219.1 | 0.0 |

* Rates are per 100,000 and age-adjusted to 2000 U.S. standard population

** Rates based on cells with 5 or fewer non-zero cases where county population is less than 100,000 are not presented per CDC WONDER Data Use Restrictions

Source: CDC WONDER, 2002

**Table 7.
 Number of Cancer Cases for All Cancer Sites
 by Jurisdiction, Gender and Race, Maryland, 1998-2002**

| Jurisdiction | Total | Gender | | Race | | | |
|------------------|-------|--------|---------|--------|--------|-------|---------|
| | | Males | Females | Whites | Blacks | Other | Unknown |
| Maryland | | | | | | | |
| Allegany | | | | | | | |
| Anne Arundel | | | | | | | |
| Baltimore City | | | | | | | |
| Baltimore County | | | | | | | |
| Calvert | | | | | | | |
| Caroline | | | | | | | |
| Carroll | | | | | | | |
| Cecil | | | | | | | |
| Charles | | | | | | | |
| Dorchester | | | | | | | |
| Frederick | | | | | | | |
| Garrett | | | | | | | |
| Harford | | | | | | | |
| Howard | | | | | | | |
| Kent | | | | | | | |
| Montgomery | | | | | | | |
| Prince George's | | | | | | | |
| Queen Anne's | | | | | | | |
| Saint Mary's | | | | | | | |
| Somerset | | | | | | | |
| Talbot | | | | | | | |
| Washington | | | | | | | |
| Wicomico | | | | | | | |
| Worcester | | | | | | | |
| Unknown | | | | | | | |

**Data not yet available
 See Executive Summary (pages 1 & 2).**

**Table 8.
All Cancer Sites Age-Adjusted Incidence Rates
by Jurisdiction, Gender and Race, Maryland, 1998-2002**

| Jurisdiction | Total | Gender | | Race | | | | | | |
|------------------|-------|--|---------|--------|--------|-------|--|--|--|--|
| | | Males | Females | Whites | Blacks | Other | | | | |
| Maryland | | | | | | | | | | |
| | | | | | | | | | | |
| Allegany | | | | | | | | | | |
| Anne Arundel | | | | | | | | | | |
| Baltimore City | | | | | | | | | | |
| Baltimore County | | Data not yet available See Executive Summary (pages 1 & 2). | | | | | | | | |
| Calvert | | | | | | | | | | |
| Caroline | | | | | | | | | | |
| Carroll | | | | | | | | | | |
| Cecil | | | | | | | | | | |
| Charles | | | | | | | | | | |
| Dorchester | | | | | | | | | | |
| Frederick | | | | | | | | | | |
| Garrett | | | | | | | | | | |
| Harford | | | | | | | | | | |
| Howard | | | | | | | | | | |
| Kent | | | | | | | | | | |
| Montgomery | | | | | | | | | | |
| Prince George's | | | | | | | | | | |
| Queen Anne's | | | | | | | | | | |
| Saint Mary's | | | | | | | | | | |
| Somerset | | | | | | | | | | |
| Talbot | | | | | | | | | | |
| Washington | | | | | | | | | | |
| Wicomico | | | | | | | | | | |
| Worcester | | | | | | | | | | |

Table 9.
Number of Cancer Deaths for All Cancer Sites
by Jurisdiction, Gender and Race, Maryland, 1999-2002

| Jurisdiction | Total | Gender | | Race | | |
|------------------|--------|--------|---------|--------|--------|-------|
| | | Males | Females | Whites | Blacks | Other |
| Maryland | 41,149 | 20,999 | 20,150 | 30,474 | 9,995 | 680 |
| Allegany | 795 | 436 | 359 | 783 | 11 | 1 |
| Anne Arundel | 3,609 | 1,841 | 1,768 | 3,111 | 449 | 49 |
| Baltimore City | 7,022 | 3,548 | 3,474 | 2,909 | 4,080 | 33 |
| Baltimore County | 7,429 | 3,710 | 3,719 | 6,490 | 864 | 75 |
| Calvert | 544 | 307 | 237 | 458 | 83 | 3 |
| Caroline | 309 | 158 | 151 | 255 | 53 | 1 |
| Carroll | 1,130 | 597 | 533 | 1,090 | 36 | 4 |
| Cecil | 699 | 393 | 306 | 667 | 30 | 2 |
| Charles | 797 | 415 | 382 | 608 | 173 | 16 |
| Dorchester | 389 | 232 | 157 | 286 | 103 | 0 |
| Frederick | 1,282 | 684 | 598 | 1,174 | 100 | 8 |
| Garrett | 259 | 149 | 110 | 259 | 0 | 0 |
| Harford | 1,486 | 800 | 686 | 1,362 | 116 | 8 |
| Howard | 1,174 | 583 | 591 | 956 | 175 | 43 |
| Kent | 214 | 130 | 84 | 174 | 40 | 0 |
| Montgomery | 4,867 | 2,311 | 2,556 | 4,008 | 551 | 308 |
| Prince George's | 4,987 | 2,520 | 2,467 | 2,276 | 2,599 | 112 |
| Queen Anne's | 357 | 176 | 181 | 303 | 53 | 1 |
| Saint Mary's | 562 | 317 | 245 | 467 | 90 | 5 |
| Somerset | 252 | 152 | 100 | 191 | 60 | 1 |
| Talbot | 405 | 214 | 191 | 345 | 59 | 1 |
| Washington | 1,210 | 603 | 607 | 1,191 | 17 | 2 |
| Wicomico | 788 | 405 | 383 | 616 | 166 | 6 |
| Worcester | 583 | 318 | 265 | 495 | 87 | 1 |

Source: CDC WONDER, 1999-2002

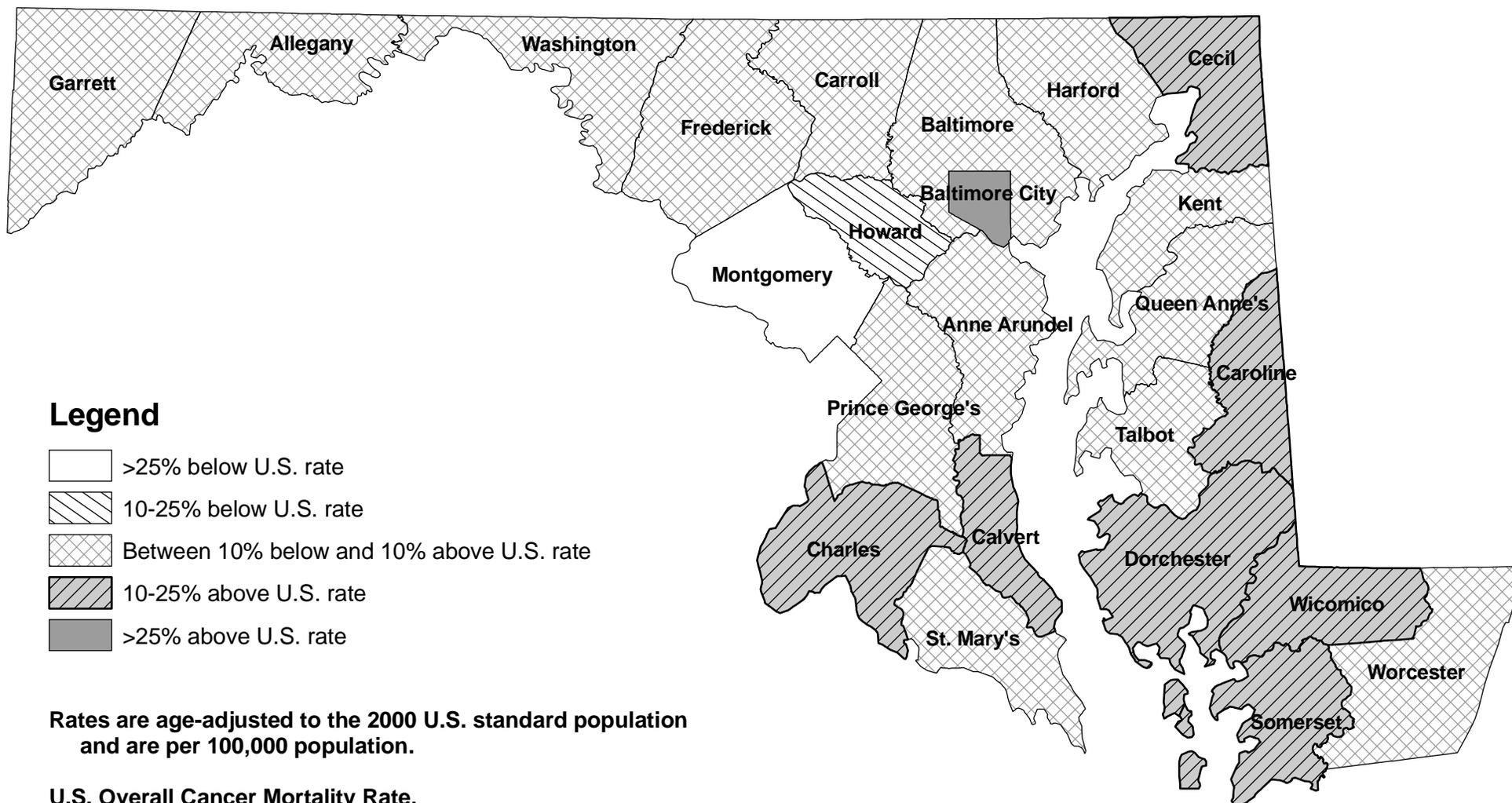
Table 10.
All Cancer Sites Age-Adjusted Mortality Rates*
by Jurisdiction, Gender and Race, Maryland, 1999-2002

| Jurisdiction | Total | Gender | | Race | | |
|------------------|-------|--------|---------|--------|--------|---------|
| | | Males | Females | Whites | Blacks | Other |
| Maryland | 206.0 | 256.2 | 173.9 | 199.2 | 244.4 | 109.6 |
| Allegany | 198.5 | 273.1 | 151.8 | 199.6 | 193.2 | 67.4 |
| Anne Arundel | 213.5 | 256.5 | 185.6 | 208.8 | 269.8 | 150.0 |
| Baltimore City | 267.3 | 344.7 | 219.8 | 256.2 | 277.9 | 92.1 |
| Baltimore County | 215.4 | 264.7 | 184.5 | 214.2 | 248.5 | 119.8 |
| Calvert | 227.6 | 312.9 | 174.9 | 223.8 | 256.7 | 120.4 |
| Caroline | 241.8 | 289.0 | 207.1 | 234.1 | 295.2 | 172.3 |
| Carroll | 202.1 | 266.6 | 164.9 | 200.6 | 291.3 | 78.9 |
| Cecil | 228.9 | 304.7 | 181.2 | 227.8 | 283.3 | 62.7 |
| Charles | 226.2 | 278.5 | 190.1 | 223.4 | 237.4 | 197.0 |
| Dorchester | 239.2 | 341.4 | 169.0 | 225.8 | 291.8 | 0.0 |
| Frederick | 193.1 | 243.7 | 158.4 | 187.9 | 329.2 | 92.9 |
| Garrett | 185.6 | 250.7 | 139.4 | 186.4 | 0.0 | 0.0 |
| Harford | 197.1 | 255.3 | 159.3 | 196.2 | 236.2 | 46.9 |
| Howard | 167.6 | 201.9 | 147.2 | 167.5 | 206.1 | 99.1 |
| Kent | 189.0 | 264.3 | 133.4 | 179.0 | 250.7 | 0.0 |
| Montgomery | 145.3 | 169.9 | 129.8 | 146.6 | 166.6 | 106.5 |
| Prince George's | 215.9 | 270.9 | 182.2 | 215.1 | 226.4 | 108.0 |
| Queen Anne's | 209.2 | 222.6 | 197.5 | 200.4 | 283.3 | 1,550.8 |
| Saint Mary's | 205.4 | 255.3 | 166.2 | 202.5 | 232.6 | 299.6 |
| Somerset | 237.0 | 332.3 | 171.7 | 241.5 | 219.3 | 387.7 |
| Talbot | 193.3 | 240.4 | 162.6 | 187.9 | 230.9 | 129.5 |
| Washington | 206.9 | 251.4 | 180.7 | 210.2 | 115.5 | 43.8 |
| Wicomico | 229.8 | 286.5 | 191.0 | 223.9 | 263.5 | 125.8 |
| Worcester | 213.5 | 265.1 | 176.7 | 209.0 | 256.8 | 82.5 |

* Rates are per 100,000 and are age-adjusted to 2000 U.S. standard population

Source: CDC WONDER, 1999-2002

Maryland All Cancer Sites Mortality Rates (1999-2002) by Geographical Area: Comparison to U.S. Rate (1998-2002)



Source: CDC WONDER, 1999-2002