

II. All Cancer Sites Combined

Incidence (New Cases)

A total of 23,038 new cancer cases diagnosed in 2001 were reported to the Maryland Cancer Registry. The total age-adjusted cancer incidence rate for Maryland in 2001 was 444.4 per 100,000 population [438.6-450.2, 95% Confidence Interval (C.I.)]. The 2001 Maryland cancer incidence rate is statistically significantly lower than the 2001 U.S. rate of 468.8 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 24% of all deaths. A total of 10,179 Maryland residents died from cancer in 2001. The overall Maryland cancer mortality rate for 2001 is 202.2 per 100,000 population (198.3-206.2, 95% C.I.). This rate is statistically significantly higher than the 2001 U.S. cancer mortality rate of 195.6 per 100,000 population. Maryland is ranked 13th highest among all states and the District of Columbia in total cancer mortality for the period 1997-2001.

Table 1.
All Cancer Sites Incidence and Mortality Rates
by Gender and Race, Maryland and the United States, 2001

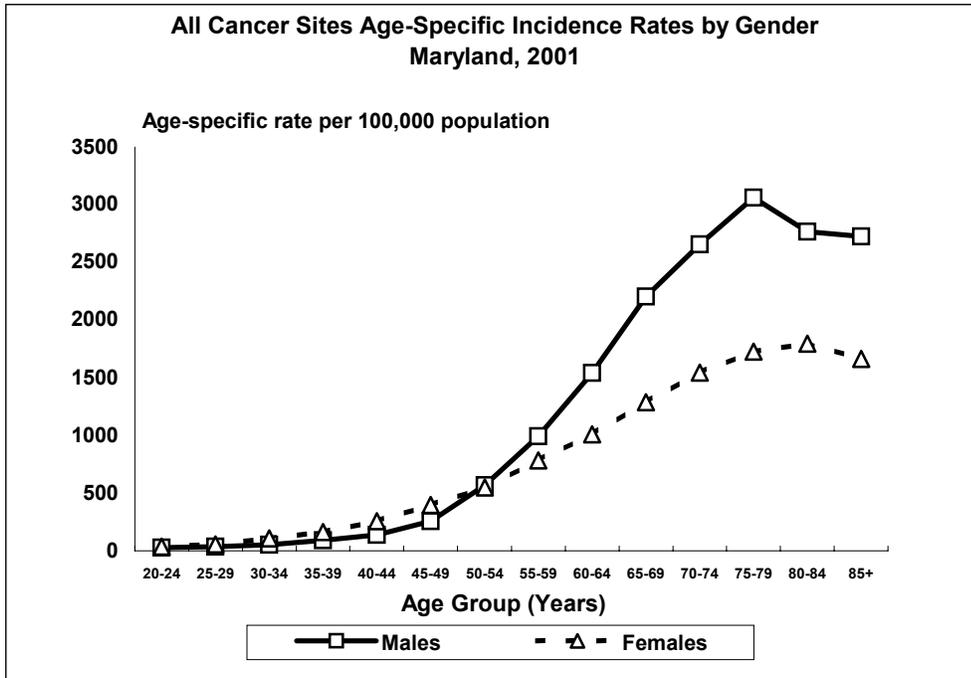
<i>Incidence 2001</i>	<i>Total</i>	<i>Males</i>	<i>Females</i>	<i>Whites</i>	<i>Blacks</i>	<i>Other</i>
New Cases (#)	23,038	11,748	11,286	17,026	4,833	697
Incidence Rate*	444.4	525.9	388.4	442.1	423.8	362.9
U.S. SEER Rate*	468.8	552.9	410.5	478.2	490.1	NA
<i>Mortality 2001</i>	<i>Total</i>	<i>Males</i>	<i>Females</i>	<i>Whites</i>	<i>Blacks</i>	<i>Other</i>
MD Deaths (#)	10,179	5,200	4,979	7,500	2,491	188
MD Mortality Rate*	202.2	251.3	170.5	194.9	241.7	120.4
U.S. Mortality Rate*	195.6	243.5	164.1	193.3	243.8	NA

Total includes cases with transsexual, hermaphrodite, and unknown gender and unknown race (see Appendix C)

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

NA: Data were not available

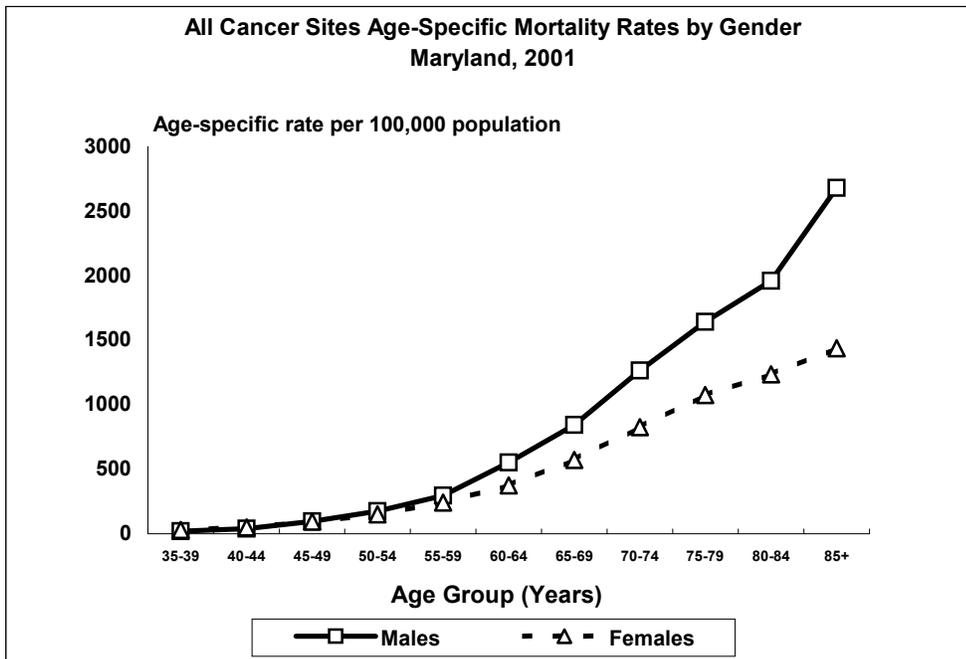
Source: Maryland Cancer Registry, 2001
Maryland Division of Health Statistics, 2001
SEER, National Cancer Institute, 2001



**Age-Specific
Incidence Rates by
Gender**

Over 94% of cancers occur in Marylanders over age 50. Females have a higher cancer incidence than males until 50-54 years. Afterward men have a higher incidence.

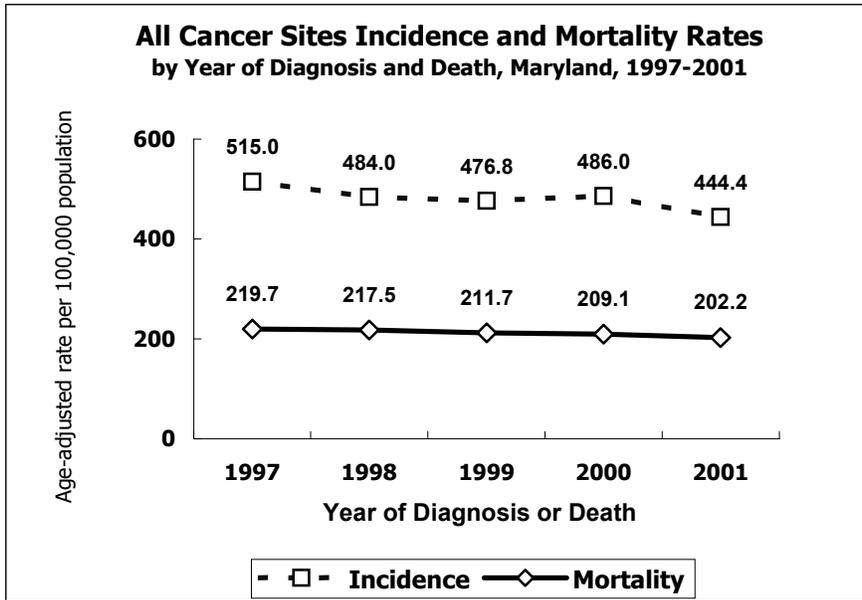
Maryland Cancer Registry, 2001



**Age-Specific
Mortality Rates by
Gender**

Cancer mortality rates increase with age. Males have a higher cancer mortality rate than females after age 45-49.

Maryland Division of Health Statistics, 2001

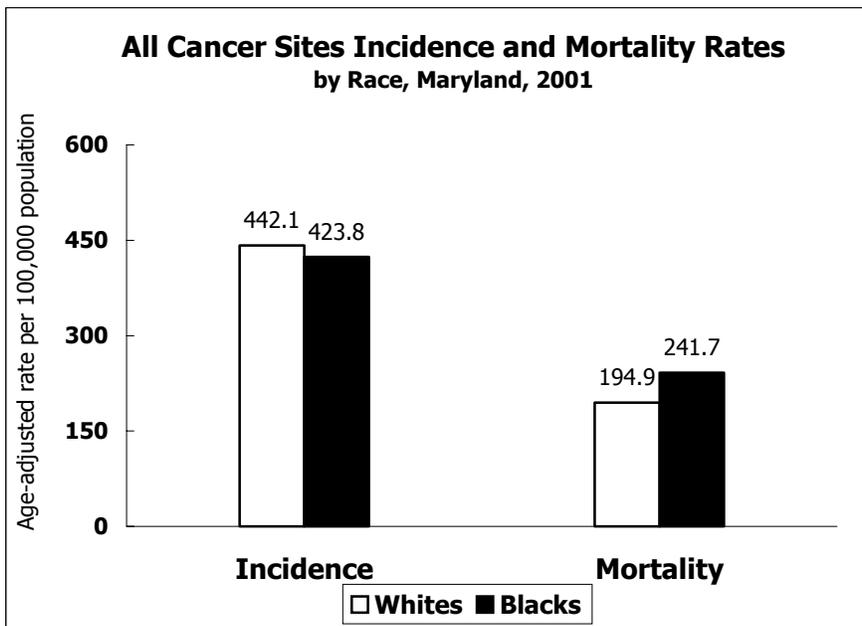


Rates are age-adjusted to 2000 U.S. standard population
 Maryland Cancer Registry, 1997-2001
 Maryland Division of Health Statistics, 1997-2001

Trend

Total cancer incidence (new cases) rates in Maryland decreased an average of 2.9% per year from 1997 to 2001.

Total cancer mortality (death) rates decreased an average of 2.0% per year from 1997 to 2001.

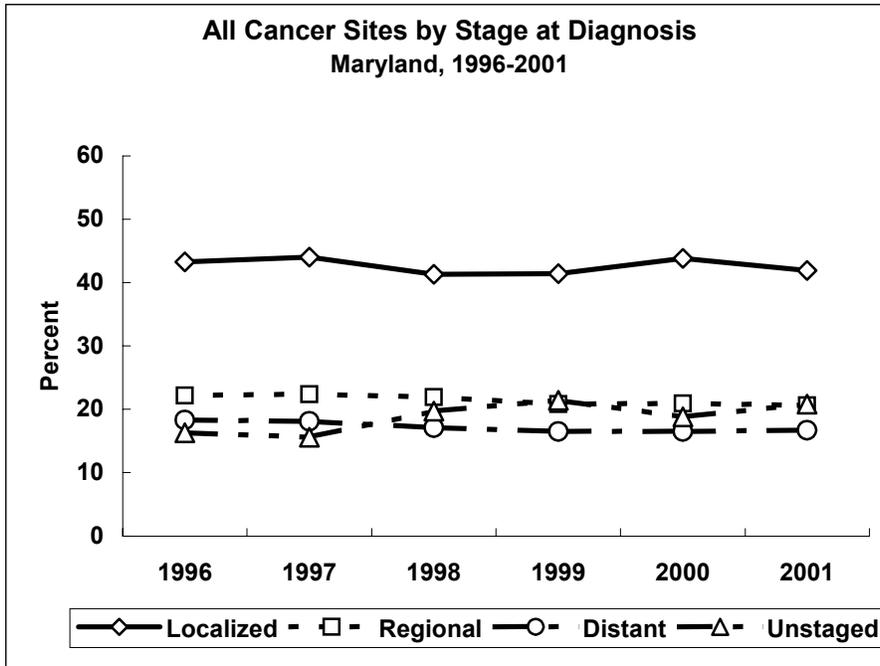


Rates are age-adjusted to 2000 U.S. standard population
 Maryland Cancer Registry, 2001
 Maryland Division of Health Statistics, 1997-2001

Race-Specific Rates

Overall cancer incidence rates are similar between blacks and whites.

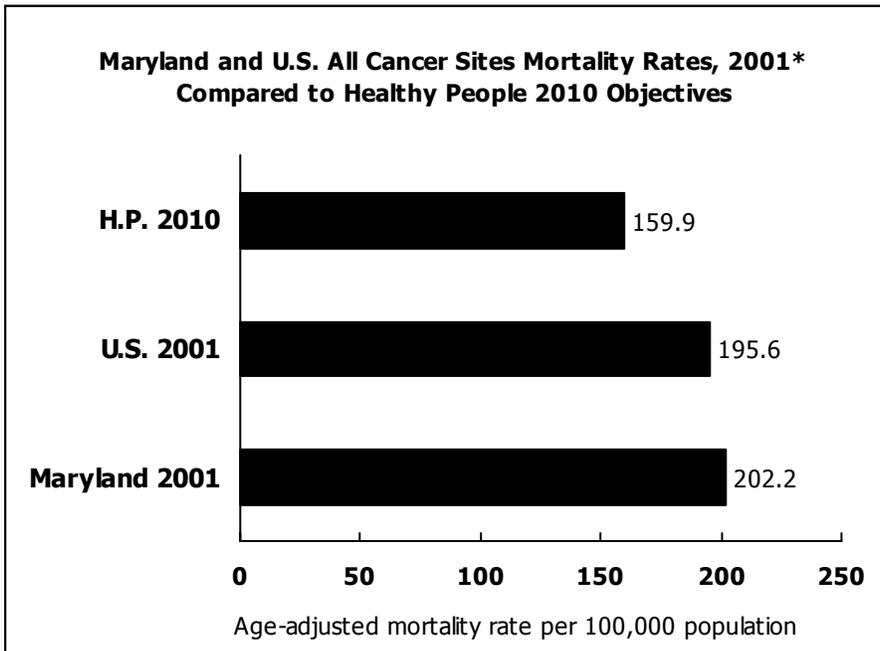
However, blacks have a statistically significantly higher cancer mortality rate than whites.



Maryland Cancer Registry, 1996-2001

Stage at Diagnosis

The stage of disease at diagnosis is an important predictor of cancer survival. Less than half (41.9%) of the new cancers in 2001 were diagnosed at the localized (early stage).



*Maryland and U.S. rates are age-adjusted to 2000 U.S. standard population
 Maryland Division of Health Statistics, 2001
 SEER, National Cancer Institute, 2001
 Healthy People 2010, U.S. Department of Health and Human Services, 2000

Healthy People 2010 Objectives

The overall cancer mortality rate in 2001 for Maryland is 202.2 per 100,000 population. The Healthy People 2010 goal is to reduce cancer mortality to 159.9 per 100,000 population.

Summary – Identification of Targeted Cancers

The cancers targeted under the Cigarette Restitution Fund in 2004 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 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
	• breast cancer	• oral cancer
	• prostate cancer	
➤	Protection of the skin from excessive sun exposure or exposure to ultraviolet light	

Table 2.
Number of Cancer Cases for All Cancer Sites
by Jurisdiction, Gender and Race, Maryland, 2001

Jurisdiction	Total	Gender		Race			
		Males	Females	Whites	Blacks	Other	Unknown
Maryland	23,038	11,748	11,286	17,026	4,833	697	482
Allegany	430	235	195	418	s	0	<6
Anne Arundel	2,103	1,113	990	1,807	212	42	42
Baltimore City	3,211	1,566	1,644	1,354	1,763	35	59
Baltimore County	4,129	2,129	2,000	3,462	528	69	70
Calvert	327	173	153	268	45	6	8
Caroline	148	85	63	125	s	<6	<6
Carroll	695	347	348	657	19	6	13
Cecil	340	180	160	325	7	<6	s
Charles	400	221	179	292	93	s	<6
Dorchester	194	92	102	153	41	0	0
Frederick	831	431	400	763	41	9	18
Garrett	164	92	72	164	0	0	0
Harford	977	499	478	868	81	8	20
Howard	834	426	408	639	126	50	19
Kent	106	s	s	88	s	0	<6
Montgomery	3,305	1,628	1,676	2,509	350	328	118
Prince George's	2,296	1,169	1,126	938	1,190	99	69
Queen Anne's	226	122	104	200	18	<6	s
Saint Mary's	309	145	164	253	43	<6	s
Somerset	147	76	71	104	s	<6	0
Talbot	277	147	130	241	33	<6	<6
Washington	740	380	360	705	25	s	<6
Wicomico	468	220	248	382	81	<6	<6
Worcester	371	205	166	305	49	s	<6
Unknown	10	s	<6	6	<6	0	<6

s=Number was suppressed to ensure confidentiality of cell in other column

Cells with 5 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

Source: Maryland Cancer Registry, 2001

Table 3.
All Cancer Sites Age-Adjusted Incidence Rates*
by Jurisdiction, Gender and Race, Maryland, 2001

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	444.4	525.9	388.4	442.1	423.8	362.9
Allegany	459.6	562.8	390.9	458.7	**	0.0
Anne Arundel	460.5	548.4	396.6	452.4	465.7	383.2
Baltimore City	491.9	587.9	430.4	512.6	463.4	345.7
Baltimore County	487.3	582.1	420.8	479.5	523.0	386.6
Calvert	498.8	618.8	425.1	480.3	524.5	**
Caroline	466.6	615.8	361.5	458.6	**	**
Carroll	473.9	549.6	430.2	462.2	**	**
Cecil	415.3	496.7	363.5	415.7	**	**
Charles	401.9	513.9	317.5	380.9	463.5	**
Dorchester	497.8	540.3	472.6	506.7	478.8	0.0
Frederick	474.2	571.9	409.6	463.9	505.9	**
Garrett	482.5	598.4	395.8	485.6	0.0	0.0
Harford	478.7	570.1	420.8	465.4	541.7	**
Howard	398.6	452.8	352.9	381.1	505.7	282.5
Kent	395.1	493.4	320.8	387.7	**	0.0
Montgomery	378.4	438.4	338.6	366.3	363.2	366.5
Prince George's	350.5	421.7	299.7	351.4	333.6	322.8
Queen Anne's	501.3	557.9	450.0	494.4	**	**
Saint Mary's	412.3	412.3	416.7	399.2	420.9	**
Somerset	554.0	610.8	524.7	550.1	549.8	**
Talbot	556.9	664.3	475.5	544.3	557.3	**
Washington	511.0	594.2	464.0	505.3	**	**
Wicomico	540.1	568.1	511.9	555.2	482.5	**
Worcester	544.8	653.7	468.6	518.6	582.3	**

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

** Rates based on cells with 25 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

Source: Maryland Cancer Registry, 2001

Table 4.
All Sites Cancer Cases and Age-Adjusted Incidence Rates*
Among Hispanics
Maryland and Jurisdictions, 2001

Jurisdiction	Number	Rate
Maryland	352	322.8
Allegany	<6	**
Anne Arundel	25	**
Baltimore City	24	**
Baltimore County	35	449.8
Calvert	<6	**
Caroline	<6	**
Carroll	<6	**
Cecil	0	0.0
Charles	<6	**
Dorchester	<6	**
Frederick	11	**
Garrett	0	0.0
Harford	8	**
Howard	6	**
Kent	0	0.0
Montgomery	157	295.4
Prince George's	52	253.7
Queen Anne's	<6	**
St. Mary's	<6	**
Somerset	0	0.0
Talbot	<6	**
Washington	<6	**
Wicomico	<6	**
Worcester	6	**
Region	Number	Rate
BALTIMORE METRO REGION [^]	100	386.6
EASTERN SHORE REGION	14	**
NATIONAL CAPITAL REGION	209	282.1
NORTHWEST REGION	18	**
SOUTHERN REGION	11	**

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

Cells with 5 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

[^] Includes Baltimore City

** Rates based on cells with 25 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

Case numbers were prepared using MCR data and an algorithm to determine Hispanic ethnicity (see Appendix C)

Source: Maryland Cancer Registry, 2001

Table 5.
Number of Cancer Deaths for All Cancer Sites
by Jurisdiction, Gender and Race, Maryland, 2001

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	10,179	5,200	4,979	7,500	2,491	188
Allegany	152	74	78	s	<6	0
Anne Arundel	895	465	430	782	100	13
Baltimore City	1,665	818	847	s	996	<6
Baltimore County	1,902	948	954	1,652	229	21
Calvert	129	70	59	108	s	<6
Caroline	76	44	32	65	11	0
Carroll	291	152	139	280	s	<6
Cecil	182	97	85	175	7	0
Charles	207	104	103	155	46	6
Dorchester	94	57	37	61	33	0
Frederick	308	161	147	279	29	0
Garrett	76	46	30	76	0	0
Harford	364	211	153	341	s	<6
Howard	328	170	158	252	61	15
Kent	68	37	31	57	11	0
Montgomery	1,266	605	661	1,029	142	95
Prince George's	1,164	596	568	492	647	25
Queen Anne's	78	37	41	59	s	<6
Saint Mary's	127	71	56	113	s	<6
Somerset	51	30	21	41	10	0
Talbot	101	53	48	95	6	0
Washington	298	171	127	s	<6	0
Wicomico	199	111	88	150	s	<6
Worcester	158	72	86	131	s	<6

s=Number was suppressed to ensure confidentiality of cell in other column

Cells with 5 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

Source: Maryland Division of Health Statistics, 2001

Table 6.
All Cancer Sites Age-Adjusted Mortality Rates*
by Jurisdiction, Gender and Race, Maryland, 2001

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	202.2	251.3	170.5	194.9	241.7	120.4
Allegany	151.3	190.0	134.3	151.2	**	0.0
Anne Arundel	212.6	263.1	179.9	210.3	245.3	**
Baltimore City	253.3	316.3	214.2	236.1	267.9	**
Baltimore County	219.3	268.2	188.5	217.6	265.2	**
Calvert	209.2	274.1	168.0	205.4	**	**
Caroline	238.7	325.8	176.6	237.3	**	0.0
Carroll	206.6	268.5	168.3	204.6	**	**
Cecil	235.9	301.7	198.5	236.0	**	0.0
Charles	238.0	288.8	202.9	231.8	253.5	**
Dorchester	230.4	333.9	157.0	191.4	372.4	0.0
Frederick	184.4	230.1	154.5	177.7	377.9	0.0
Garrett	214.3	303.6	144.7	215.6	0.0	0.0
Harford	190.5	271.0	139.8	193.2	**	**
Howard	183.7	228.0	156.2	174.6	278.1	**
Kent	232.3	295.5	185.1	226.4	**	0.0
Montgomery	149.5	174.4	132.8	150.1	172.1	133.9
Prince George's	200.5	256.1	167.1	185.6	227.6	85.7
Queen Anne's	181.2	186.1	179.0	152.9	**	**
Saint Mary's	183.8	216.9	152.1	193.6	**	**
Somerset	189.7	248.8	**	208.9	**	0.0
Talbot	193.2	230.6	168.7	207.8	**	0.0
Washington	203.2	281.9	151.7	206.1	**	0.0
Wicomico	231.4	308.3	173.7	217.3	310.9	**
Worcester	231.3	241.4	228.6	225.8	304.4	**

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

** Rates based on cells with 25 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

Source: Maryland Division of Health Statistics, 2001

**Table 7.
Number of Cancer Cases for All Cancer Sites
by Jurisdiction, Gender and Race, Maryland, 1997-2001**

Jurisdiction	Total	Gender		Race			
		Males	Females	Whites	Blacks	Others	Unknown
Maryland	118,419	60,356	58,046	87,427	24,774	3,207	3,011
Allegany	2,363	1,253	1,110	2,304	37	13	9
Anne Arundel	10,691	5,499	5,190	9,002	1,183	169	337
Baltimore City	17,075	8,634	8,440	7,544	9,077	158	296
Baltimore County	20,794	10,527	10,266	17,600	2,473	311	410
Calvert	1,492	798	693	1,215	209	21	47
Caroline	782	430	352	655	118	s	<6
Carroll	3,379	1,786	1,593	3,189	77	28	85
Cecil	1,836	976	860	1,715	54	19	48
Charles	2,126	1,137	989	1,581	434	58	53
Dorchester	1,024	528	496	788	229	<6	<6
Frederick	3,926	2,021	1,905	3,499	220	35	172
Garrett	736	404	332	725	6	<6	<6
Harford	4,727	2,481	2,246	4,249	338	34	106
Howard	4,034	1,966	2,068	3,174	547	198	115
Kent	582	310	272	485	83	<6	s
Montgomery	17,364	8,528	8,828	13,511	1,789	1,439	625
Prince George's	13,312	6,778	6,531	5,855	6,523	515	419
Queen Anne's	1,011	532	479	866	119	<6	s
Saint Mary's	1,636	838	798	1,367	207	31	31
Somerset	701	393	308	503	179	s	<6
Talbot	1,216	648	568	1,048	150	s	<6
Washington	3,431	1,709	1,722	3,289	91	25	26
Wicomico	2,103	1,027	1,075	1,675	385	28	15
Worcester	1,672	909	763	1,387	210	44	31
Unknown	404	242	162	199	36	36	133

s=Number was suppressed to ensure confidentiality of cell in other column

Cells with 5 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

Source: Maryland Cancer Registry, 1997-2001

Table 8.
All Cancer Sites Age-Adjusted Incidence Rates*
by Jurisdiction, Gender and Race, Maryland, 1997-2001

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Others
Maryland	475.3	567.7	413.9	466.5	467.1	388.7
Allegany	492.9	609.9	416.5	491.8	435.1	**
Anne Arundel	491.7	576.0	435.3	472.8	538.1	354.3
Baltimore City	517.1	645.0	437.0	541.3	485.3	355.0
Baltimore County	499.7	593.2	438.3	488.5	548.2	362.6
Calvert	490.8	605.6	414.4	467.3	512.1	**
Caroline	498.7	611.4	412.7	490.0	528.9	**
Carroll	488.5	607.3	411.1	475.2	519.4	762.9
Cecil	479.5	572.0	416.5	468.4	386.5	**
Charles	469.0	588.5	386.5	448.8	485.5	749.3
Dorchester	523.1	611.4	460.1	520.4	530.2	**
Frederick	476.9	574.9	413.7	452.4	561.5	329.0
Garrett	434.6	529.1	365.7	429.8	**	**
Harford	492.8	602.2	421.3	483.3	509.8	266.4
Howard	430.1	487.2	390.4	419.2	461.3	313.9
Kent	448.5	517.6	393.2	445.3	406.3	**
Montgomery	419.9	487.9	375.5	410.5	410.2	371.6
Prince George's	441.0	540.0	374.4	438.4	421.8	384.7
Queen Anne's	476.0	529.6	435.1	459.8	530.3	**
Saint Mary's	464.0	509.6	428.4	459.2	434.2	625.2
Somerset	532.3	654.9	455.0	530.6	504.7	**
Talbot	498.8	595.7	427.1	492.7	492.5	**
Washington	483.0	551.6	447.1	480.6	508.9	**
Wicomico	500.3	569.3	454.4	500.9	474.6	481.9
Worcester	521.0	606.8	457.4	502.3	501.1	5,840.9

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

** Rates based on cells with 25 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

Source: Maryland Cancer Registry, 1997-2001

**Table 9.
Number of Cancer Deaths for All Cancer Sites
by Jurisdiction, Gender and Race, Maryland, 1997-2001**

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	50,810	25,969	24,841	37,768	12,254	788
Allegany	1,000	528	472	982	s	<6
Anne Arundel	4,402	2,299	2,103	3,812	540	50
Baltimore City	8,959	4,567	4,392	3,739	5,183	37
Baltimore County	9,085	4,507	4,578	8,040	965	80
Calvert	611	349	262	491	s	<6
Caroline	359	190	169	292	67	0
Carroll	1,318	696	622	1,274	38	6
Cecil	883	478	405	842	s	<6
Charles	983	516	467	754	214	15
Dorchester	466	274	192	334	s	<6
Frederick	1,506	831	675	1,382	113	11
Garrett	318	181	137	318	0	0
Harford	1,842	977	865	1,694	141	7
Howard	1,561	779	782	1,270	235	56
Kent	257	150	107	212	45	0
Montgomery	6,341	3,020	3,321	5,261	709	371
Prince George's	5,887	2,987	2,900	2,763	2,995	129
Queen Anne's	421	216	205	349	s	<6
Saint Mary's	661	367	294	549	s	<6
Somerset	322	189	133	226	s	<6
Talbot	479	270	209	401	s	<6
Washington	1,479	739	740	1,452	s	<6
Wicomico	951	481	470	735	s	<6
Worcester	719	378	341	596	s	<6

s=Number was suppressed to ensure confidentiality of cell in other column

Cells with 5 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

Source: Maryland Division of Health Statistics, 1997-2001

Table 10.
All Cancer Sites Age-Adjusted Mortality Rates*
by Jurisdiction, Gender and Race, Maryland, 1997-2001

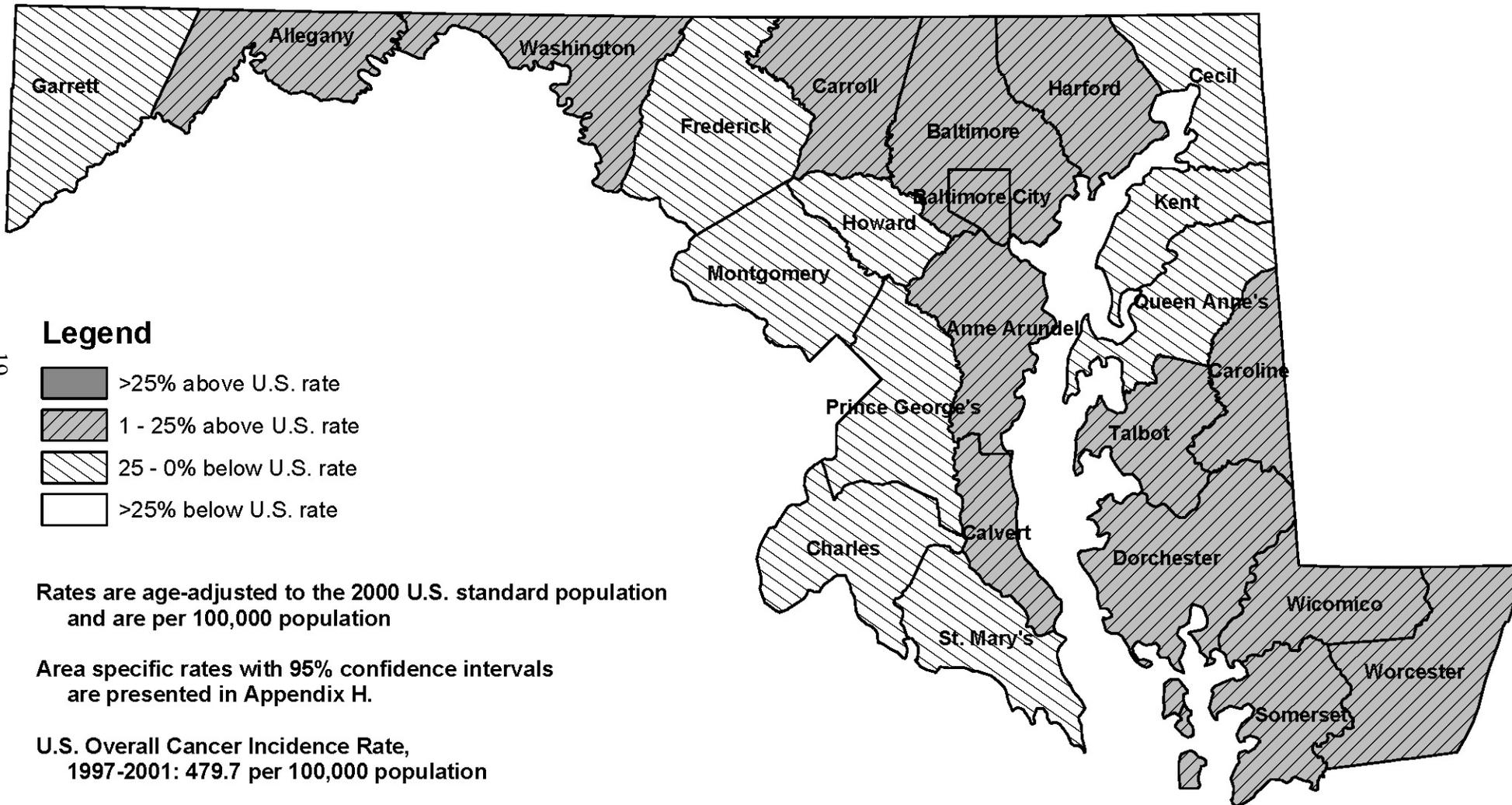
Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	209.9	263.9	176.2	202.0	253.2	112.8
Allegany	198.0	265.3	157.2	198.2	**	**
Anne Arundel	218.1	273.0	183.2	214.1	270.1	127.9
Baltimore City	270.0	354.0	219.3	251.4	285.1	92.6
Baltimore County	214.4	264.4	184.1	213.8	245.8	119.5
Calvert	215.3	293.1	165.1	203.0	292.7	**
Caroline	227.8	280.7	187.7	216.8	303.8	0.0
Carroll	196.9	260.1	158.6	195.6	273.6	**
Cecil	244.7	320.1	201.2	243.2	304.9	**
Charles	239.6	301.7	199.5	233.8	267.1	**
Dorchester	230.4	325.2	164.7	211.2	302.9	**
Frederick	192.2	254.9	149.9	187.0	316.6	**
Garrett	184.7	246.3	142.1	185.3	0.0	0.0
Harford	206.3	268.2	168.6	206.1	237.9	**
Howard	190.1	234.9	164.3	188.2	239.3	108.6
Kent	187.2	252.6	141.6	181.4	229.2	0.0
Montgomery	157.3	185.7	140.2	158.7	183.7	112.8
Prince George's	215.3	273.0	180.5	209.3	232.6	107.2
Queen Anne's	205.3	232.4	185.8	192.8	302.1	**
Saint Mary's	201.3	247.3	165.3	198.1	231.4	**
Somerset	243.5	340.3	183.2	229.7	281.8	**
Talbot	187.0	251.0	144.9	179.6	237.2	**
Washington	205.9	251.7	178.6	208.1	**	**
Wicomico	227.7	281.4	192.6	219.2	272.0	**
Worcester	220.3	257.4	192.4	211.7	285.0	**

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

** Rates based on cells with 25 or fewer non-zero cases are not presented per DHMH/MCR Data Use Policy

Source: Maryland Division of Health Statistics, 1997-2001

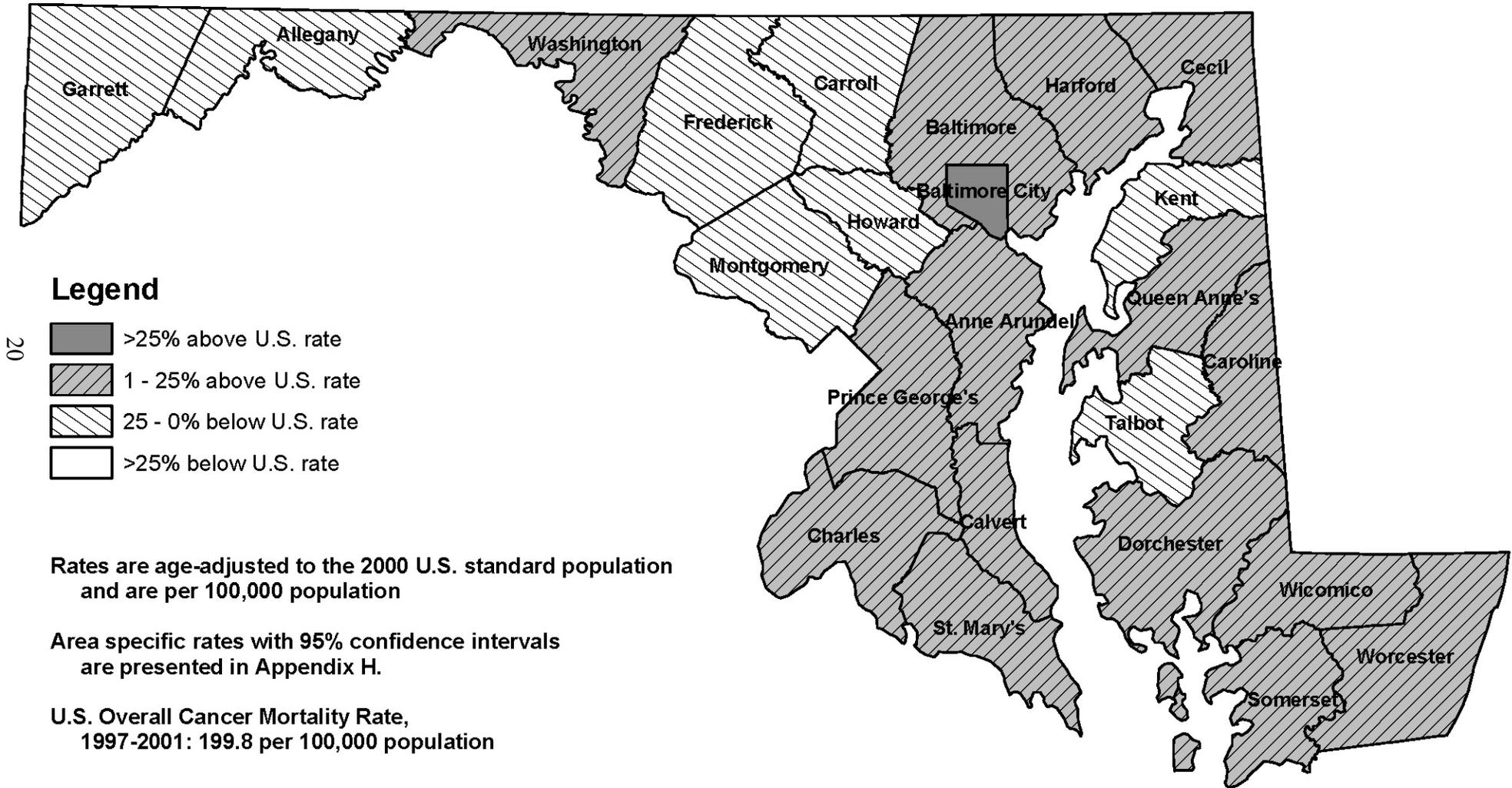
Maryland Overall Cancer Incidence Rates by Geographical Area: Comparison to U.S. Rates, 1997-2001



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Source: Maryland Division of Health Statistics, 1997-2001

Maryland Overall Cancer Mortality Rates by Geographical Area: Comparison to U.S. Rates, 1997-2001



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Source: Maryland Division of Health Statistics, 1997-2001