Maryland Department of Health and Mental Hygiene

2015 Cancer Data

Cigarette Restitution Fund Program

Cancer Prevention, Education, Screening and Treatment Program

May 2016

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I. Major Findings

A. Major findings for **all cancer sites**:

- In 2012, a total of 27,972 new cases of cancer were diagnosed in Maryland.
- From 2003 to 2012, the annual overall cancer incidence rates declined in Maryland at a pace comparable to the decline in the U.S. rates. In 2012, the Maryland all cancer incidence rate was lower than the U.S. rate (432.1 vs. 436.7 per 100,000 population).
- In 2012, the incidence rate for all cancer sites among blacks in Maryland remained below the incidence rate for whites, continuing the trend seen prior to 2010; rates decreased for both blacks and whites for the period 2008-2012.
- From 2003 to 2012, the annual overall cancer mortality rates decreased slightly more in Maryland than in the U.S (-1.9% vs. -1.4% per year). In 2012, the Maryland all cancer sites mortality rate was similar to the U.S. rate (165.7 vs. 166.4 per 100,000 population), which remained above the Healthy People 2020 target of 161.4.
- Blacks had higher all cancer sites mortality rates than whites from 2008 to 2012; the annual percent change decreased for both races.

B. Major findings for **lung and bronchus** cancer:

- Lung cancer is the leading cause of cancer death in both men and women in Maryland, accounting for 26.1% of all 10,525 cancer deaths in 2012.
- From 2008 to 2012, overall lung cancer incidence and mortality rates decreased in Maryland, and also declined for both whites and blacks, after stratification by race.

C. Major findings for **colon and rectum** cancer:

- Incidence and mortality rates for colorectal cancer declined in Maryland from 2008 to 2012. Over this time period, incidence rates had a greater decrease per year among Maryland blacks compared to whites, while mortality rates had a greater decrease among Maryland whites than blacks.

D. Major findings for **female breast** cancer:

- Breast cancer is the second leading cause of cancer death among women in Maryland after lung cancer.
- Incidence rates for female breast cancer decreased from 2008 to 2012, with the incidence rate in black females decreasing at a greater rate per year than in white females.
- From 2008 to 2012, mortality rates for female breast cancer declined for both white and black females; mortality rates for female breast cancer had a greater annual decrease in black than in white females (-4.8 vs. -0.3%).

E. Major findings for **prostate** cancer:

- Prostate cancer is the second leading cause of cancer death among men in Maryland after lung cancer.
- Incidence rates for prostate cancer decreased from 2008 to 2012, while mortality rates decreased from 2008 to 2011, but stayed relatively constant from 2011 to 2012.
- Racial disparities in prostate cancer incidence and mortality were present, with the rates for black males remaining higher than for white males in the years 2008 to 2012.
- From 2008 to 2012, mortality rates had a greater decrease for black men than white men (-8.8% vs. -5.2%). Decreases in incidence rates per year between black and white men were similar.

F. Major findings for **oral** cancer:

- From 2008 to 2012, Maryland oral cancer incidence rates increased overall; however, incidence rates per year decreased for blacks and increased for whites.
- From 2008 to 2012, oral cancer mortality rates decreased among both whites and blacks, with greater annual decreases observed among blacks than whites (-4.8% vs. -1.9%).

G. Major findings for **melanoma** skin cancer:

- Melanoma incidence rates in Maryland decreased slightly from 2008 to 2012. The annual incidence rate slightly decreased among both males and females. In 2012, males had incidence rates of melanoma that were 80% higher than females.
- From 2008 to 2012, overall melanoma mortality rates decreased among males, but increased among females.

H. Major findings for **cervical** cancer:

- Cervical cancer incidence rates among Maryland women decreased from 2008 to 2012.
- Cervical cancer incidence rates in black females decreased, compared to an increase in white females.
- Mortality rates for cervical cancer decreased from 2008 to 2012 and differed by race; mortality rates among black women remained higher than those among white women, but experienced greater declines during this time period.

II. All Cancer Sites

Incidence (New Cases)

A total of 27,962 new cases of cancer diagnosed in 2012 in Maryland residents were reported to the Maryland Cancer Registry. The total age-adjusted cancer incidence rate for Maryland was 432.1 per 100,000 population (427.0–437.3, 95% Confidence Interval [C.I.]) in 2012. The 2012 Maryland cancer incidence rate is similar to the 2012 United States (U.S.) Surveillance, Epidemiology, and End Results (SEER) rate of 436.7 per 100,000 population (435.4–438.1, 95% C.I.).

Mortality (Deaths)

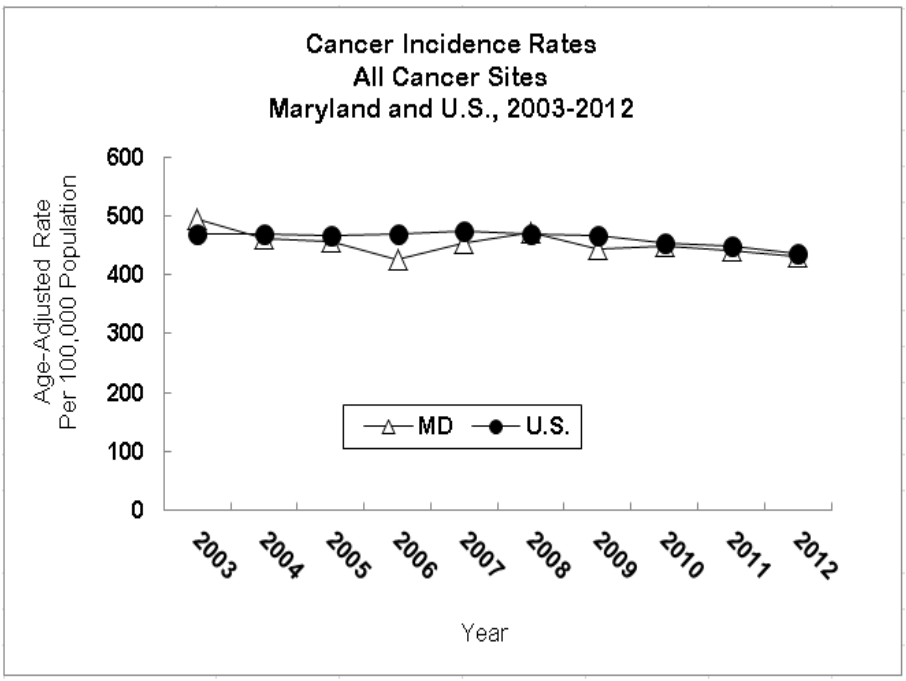
Cancer is the second leading cause of death in Maryland, accounting for 23.7% of all deaths in 2012. A total of 10,525 Maryland residents died from cancer in 2012. The Maryland mortality rate for all cancer sites was 165.7 per 100,000 population (162.5–168.9, 95% C.I.) for 2012. This rate is similar to the 2012 U.S. mortality rate for all cancer sites of 166.4 per 100,000 population (166.0–166.8, 95% C.I.). Maryland ranks 29th highest among all states and the District of Columbia in total cancer mortality for the period 2008-2012.

Table 1.
All Cancer Sites Incidence and Mortality Rates
by Gender and Race, Maryland and the United States, 2012

Incidence 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
New Cases (count)	27,962	13,628	14,297	19,508	7,132	902
MD Incidence Rate	432.1	469.4	407.2	440.4	425.9	248.1
U.S. SEER Rate	436.7	481.3	406.8	444.3	455.8	285.8
Mortality 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
Deaths (count)	10,525	5,328	5,197	7,391	2,837	297
MD Mortality Rate	165.7	197.3	144.4	164.4	183.0	90.9
U.S. Mortality Rate	166.5	200.3	142.1	166.6	193.8	N/A

Rates are per 100,000 population and are age-adjusted to 2000 U.S. standard population.
Total also includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.
N/A = Data were not available.

Source: Maryland Cancer Registry
U.S. SEER, SEER*Stat
NCHS Compressed Mortality File in CDC WONDER, 2012
U.S. SEER, Cancer Statistics Review

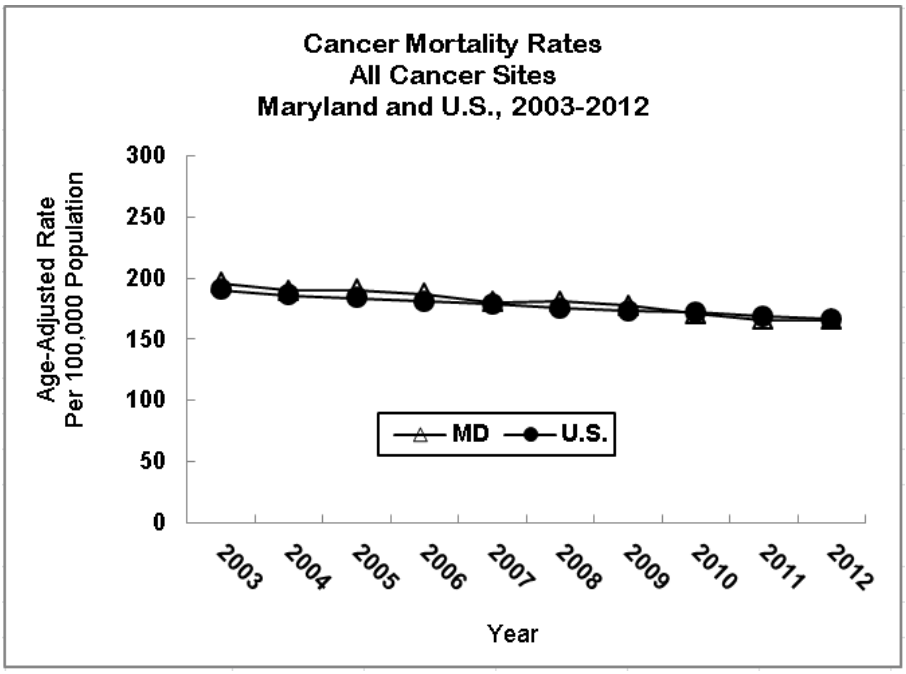


Maryland vs. U.S., All Cancer Sites Incidence Rates, All Age Groups

All cancer sites incidence rates in Maryland and the U.S. declined over the 10-year period from 2003 to 2012. Maryland incidence rates decreased at a rate of 0.9% per year; U.S. incidence rates decreased at a rate of 0.7% per year.

See Appendix I, Table 1.

Source: Maryland Cancer Registry
U.S. SEER, SEER*Stat

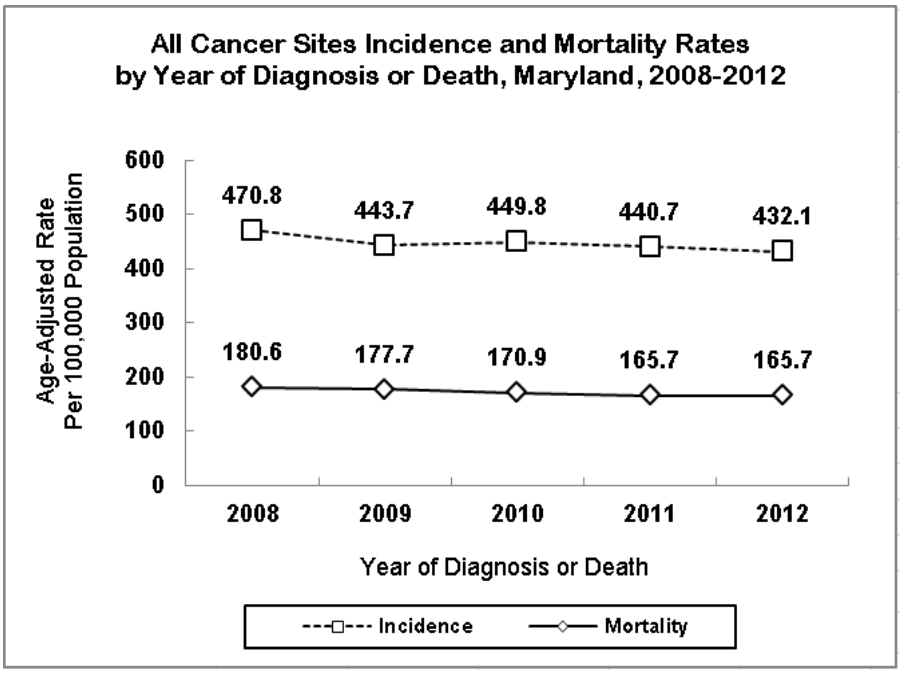


Maryland vs. U.S., All Cancer Sites Mortality Rates, All Age Groups

Maryland cancer mortality rates have declined since 2003. From 2003 to 2012, all cancer sites mortality rates in Maryland decreased at a rate of 1.9% per year, a greater decrease than the U.S. mortality rates which decreased at a rate of 1.4% for the same time period.

See Appendix I, Table 2.

Source: NCHS Compressed Mortality File in CDC WONDER, 2003-2007, 2012 (MD)
Maryland Vital Statistics Administration from MATCH, 2008-2010 (MD)
Maryland Vital Statistics Administration, 2011 (MD)
NCHS Compressed Mortality File in CDC WONDER, 2003-2008 (U.S.)
U.S. SEER, Cancer Statistics Review, 2009-2012 (U.S.)



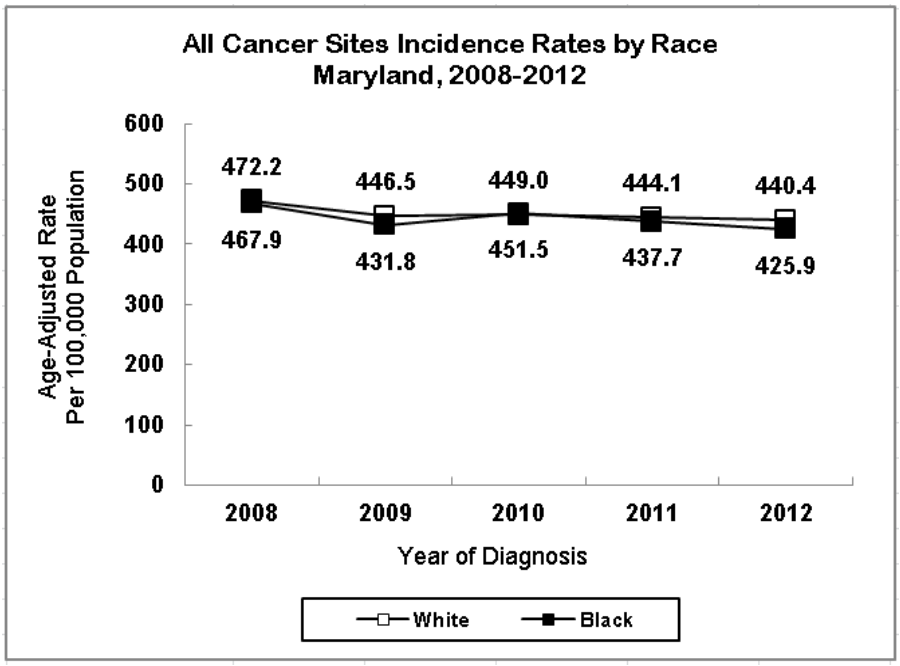
Source: Maryland Cancer Registry
NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Incidence and Mortality Trends

In Maryland, the incidence rate for all cancer sites decreased at a rate of 1.8% per year from 2008 to 2012.

Cancer mortality rates decreased at a rate of 2.4% per year from 2008 to 2012.

See Appendix G, Tables 1 and 2.

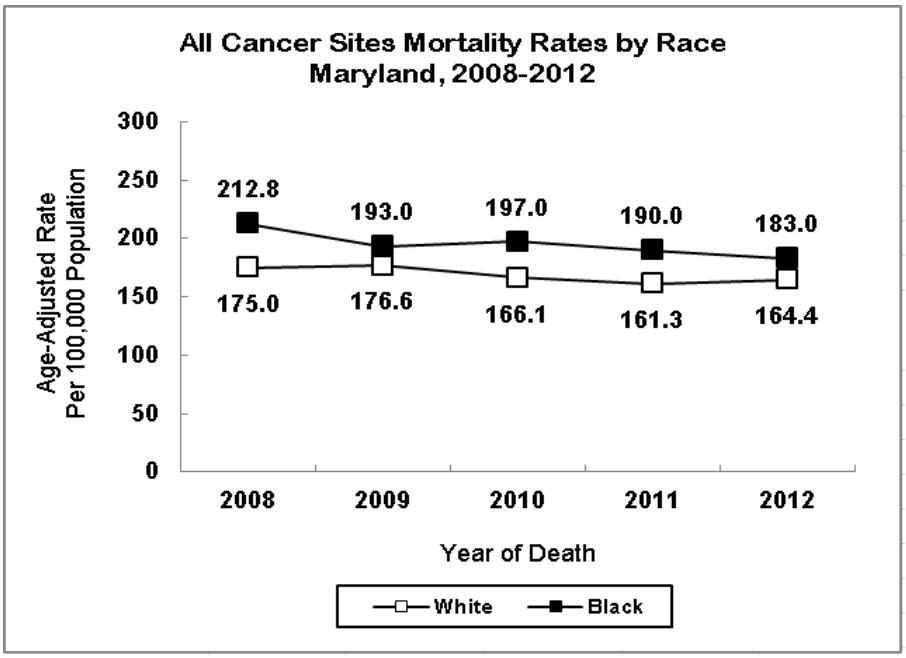


Source: Maryland Cancer Registry

Incidence Trends by Race

In 2012, the incidence rate for all cancer sites among blacks fell below the incidence rate for whites in Maryland, continuing the trend seen prior to 2010 and again in 2011. From 2008 to 2012, incidence rates for all cancer sites decreased at a rate of 1.4% among whites and 1.7% among blacks.

See Appendix G, Table 3.



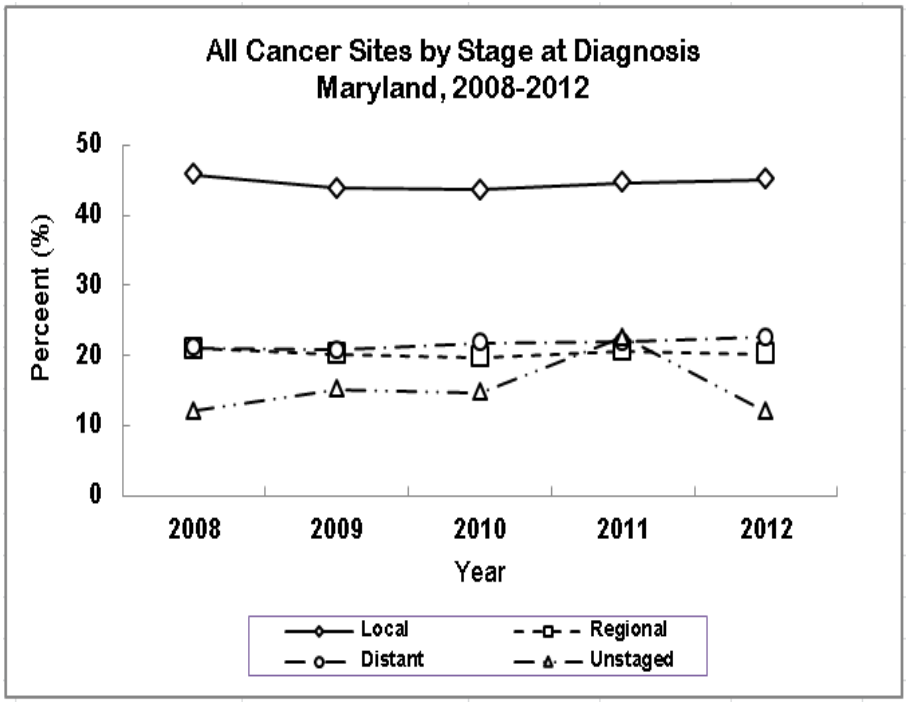
Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Mortality Trends by Race

Both blacks and whites showed declines in cancer mortality from 2008 to 2012, with a decrease of 3.1% per year for blacks and 2.1% per year for whites.

Blacks have higher mortality rates for all cancer sites than whites.

See Appendix G, Table 5.

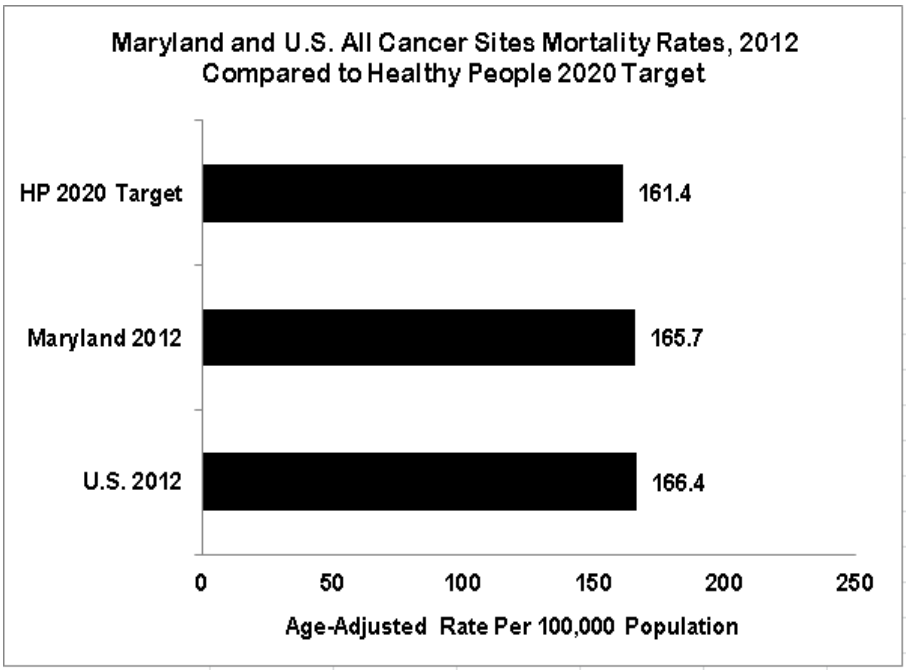


Source: Maryland Cancer Registry

Stage at Diagnosis

Of all cancers diagnosed in Maryland in 2012, 45.1% were found at the local (early) stage, 20.3% at the regional stage, and 22.7% at the distant (late) stage. The proportion of all cancers reported as unstaged slightly decreased in 2012.

See Appendix H, Table 1.



Source: Healthy People 2020, U.S. Department of Health and Human Services
NCHS Compressed Mortality File in CDC WONDER, 2012 (MD)
U.S. SEER, Cancer Statistics Review (U.S.)

Mortality Rates Compared to Healthy People 2020 Target

For the third time since 2000, Maryland's all cancer mortality rate has fallen below the U.S. rate. The mortality rate for all cancer sites in Maryland for 2012 was 165.7 per 100,000 population, and the U.S. rate was 166.4 per 100,000 population. The Healthy People 2020 target is to reduce cancer mortality to 161.4 per 100,000 population.

Table 2.
Number of Cancer Cases for All Cancer Sites by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	27,962	13,628	14,297	19,508	7,132	902
Allegany	465	248	217	442	s	<6
Anne Arundel	2,703	1,349	1,350	2,303	319	45
Baltimore City	3,091	1,495	1,593	1,038	1,996	34
Baltimore County	4,579	2,264	2,307	3,555	885	111
Calvert	415	206	207	357	51	<6
Caroline	193	102	91	166	s	<6
Carroll	936	474	462	891	30	10
Cecil	556	270	286	524	29	<6
Charles	587	304	282	382	183	15
Dorchester	225	130	95	176	s	<6
Frederick	1,090	510	578	987	68	22
Garrett	166	74	92	s	0	<6
Harford	1,325	694	630	1,188	109	18
Howard	1,216	552	662	875	209	119
Kent	145	71	74	116	25	0
Montgomery	4,055	1,896	2,157	2,901	621	387
Prince George's	3,202	1,438	1,752	911	2,106	106
Queen Anne's	242	130	112	220	21	0
Saint Mary's	457	236	221	377	62	8
Somerset	140	79	61	103	37	0
Talbot	280	146	134	249	27	0
Washington	832	391	441	778	44	9
Wicomico	527	275	252	399	124	<6
Worcester	380	209	171	325	52	<6

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 3.
All Cancer Sites Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	432.1	469.4	407.2	440.4	425.9	248.1
Allegany	457.0	530.9	412.9	456.3	825.4	**
Anne Arundel	451.6	491.1	425.4	460.4	420.8	198.5
Baltimore City	485.1	552.5	443.4	482.9	485.7	258.9
Baltimore County	467.9	522.3	429.9	478.9	459.7	274.9
Calvert	432.3	464.3	409.0	442.1	385.9	**
Caroline	498.8	585.7	446.6	505.7	489.6	**
Carroll	475.3	529.8	435.8	471.7	552.6	**
Cecil	492.2	508.6	486.4	493.8	551.5	**
Charles	400.9	443.4	362.2	417.3	365.7	**
Dorchester	506.8	609.9	428.7	523.5	459.4	**
Frederick	434.0	456.3	427.3	439.1	383.0	265.4
Garrett	411.9	387.4	431.7	411.6	0.0	**
Harford	468.7	545.2	416.0	480.2	414.6	247.6
Howard	394.1	388.1	402.6	399.3	443.0	300.4
Kent	479.9	490.0	479.0	464.2	559.5	0.0
Montgomery	363.4	380.4	353.9	367.1	385.7	242.3
Prince George's	376.7	389.7	368.6	380.0	369.7	229.2
Queen Anne's	380.6	434.4	338.1	377.4	464.6	0.0
Saint Mary's	412.8	434.4	394.4	408.0	405.3	**
Somerset	465.1	515.8	409.1	474.9	471.9	0.0
Talbot	444.2	489.3	408.6	443.0	395.3	0.0
Washington	471.8	477.2	479.3	474.2	444.6	**
Wicomico	480.7	555.6	425.0	476.8	530.3	**
Worcester	461.8	523.1	412.1	445.3	584.4	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 4.
All Cancer Sites and Age-Adjusted Incidence Rates*
Among Hispanics§ by Geographical Area in Maryland, 2012

Jurisdiction	Cases	Rate
Maryland	750	285.8
Allegany	0	0.0
Anne Arundel	57	381.5
Baltimore City	27	201.5
Baltimore County	57	302.1
Calvert	6	**
Caroline	0	0.0
Carroll	8	**
Cecil	9	**
Charles	8	**
Dorchester	<6	**
Frederick	36	327.8
Garrett	0	0.0
Harford	17	408.0
Howard	28	317.9
Kent	<6	**
Montgomery	314	282.2
Prince George's	148	254.0
Queen Anne's	<6	**
Saint Mary's	<6	**
Somerset	0	0.0
Talbot	<6	**
Washington	11	**
Wicomico	6	**
Worcester	<6	**
Region	**Cases**	**Rate**
Baltimore Metropolitan Area^	194	307.7
Eastern Shore Region	27	375.6
National Capital Area	462	271.6
Northwest Region	47	340.0
Southern Region	18	232.8

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

§ Case counts were prepared using MCR data and an algorithm to determine Hispanic ethnicity. (See Appendix A, Section D.6).

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy and Procedures.

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

^ Area rate includes Baltimore City (see Appendix B).

Source: Maryland Cancer Registry.

Table 5.
Number of Deaths for All Cancer Sites by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	10,525	5,328	5,197	7,391	2,837	297
Allegany	159	92	67	155	<10	<10
Anne Arundel	949	490	459	791	133	25
Baltimore City	1,383	703	680	470	900	13
Baltimore County	1,741	867	874	1,408	307	26
Calvert	166	85	81	137	s	<10
Caroline	80	43	37	71	<10	<10
Carroll	333	170	163	323	<10	<10
Cecil	209	109	100	199	<10	<10
Charles	259	139	120	168	s	<10
Dorchester	91	55	36	68	s	<10
Frederick	393	204	189	370	s	<10
Garrett	66	38	28	s	<10	<10
Harford	491	237	254	444	s	<10
Howard	362	172	190	278	52	32
Kent	56	25	31	48	<10	<10
Montgomery	1,348	638	710	1,017	191	140
Prince George's	1,313	651	662	406	875	32
Queen Anne's	102	63	39	95	<10	<10
Saint Mary's	185	101	84	154	s	<10
Somerset	63	35	28	s	16	<10
Talbot	108	56	52	92	s	<10
Washington	316	161	155	302	s	<10
Wicomico	183	104	79	135	s	<10
Worcester	169	90	79	147	s	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2012.

Table 6.
All Cancer Sites Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	165.7	197.3	144.4	164.4	183.0	90.9
Allegany	150.4	199.3	114.8	151.9	**	**
Anne Arundel	165.8	196.2	145.2	163.3	190.6	132.2
Baltimore City	217.2	272.2	183.1	212.1	222.6	**
Baltimore County	169.9	203.4	147.7	173.4	178.6	71.8
Calvert	180.3	209.9	158.8	176.1	221.8	**
Caroline	208.6	243.5	181.4	214.0	**	**
Carroll	168.3	197.1	147.5	169.9	**	**
Cecil	193.9	220.5	172.9	195.0	**	**
Charles	193.2	239.9	160.6	192.3	203.5	**
Dorchester	199.8	280.2	143.6	194.7	213.6	**
Frederick	162.8	200.9	138.2	169.1	121.0	**
Garrett	156.1	203.7	119.4	157.1	**	**
Harford	177.8	203.9	162.4	180.5	174.2	**
Howard	130.0	142.2	122.6	134.9	128.5	97.7
Kent	163.5	157.8	169.8	164.0	**	**
Montgomery	122.5	138.3	112.1	126.0	129.7	94.3
Prince George's	167.9	203.8	145.3	173.0	170.3	81.2
Queen Anne's	171.3	237.3	119.4	175.2	**	**
Saint Mary's	176.2	207.6	149.1	174.1	199.1	**
Somerset	210.0	254.3	182.6	210.5	**	**
Talbot	152.4	184.3	129.1	141.7	**	**
Washington	177.5	205.7	156.2	178.8	**	**
Wicomico	164.3	219.8	123.2	157.3	196.2	**
Worcester	181.5	208.6	160.5	176.5	243.2	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2012.

Table 7.
Number of Cancer Cases for All Cancer Sites by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	138,175	68,751	69,301	96,691	34,608	4,199
Allegany	2,533	1,322	1,210	2,399	119	7
Anne Arundel	13,374	6,866	6,497	11,409	1,563	223
Baltimore City	15,484	7,509	7,961	5,366	9,825	143
Baltimore County	22,214	10,704	11,492	17,441	4,042	454
Calvert	2,018	977	1,030	1,710	269	9
Caroline	856	437	418	738	111	<6
Carroll	4,217	2,147	2,066	4,009	124	30
Cecil	2,568	1,330	1,236	2,420	118	15
Charles	2,816	1,475	1,336	1,782	907	54
Dorchester	1,044	570	473	800	234	7
Frederick	5,185	2,546	2,635	4,660	359	92
Garrett	824	399	425	817	0	<6
Harford	6,516	3,307	3,208	5,757	590	83
Howard	5,877	2,853	3,017	4,365	914	474
Kent	692	376	316	583	103	<6
Montgomery	20,663	9,912	10,740	14,839	3,036	1,927
Prince George's	15,839	7,859	7,959	4,529	10,382	491
Queen Anne's	1,257	658	599	1,150	99	<6
Saint Mary's	2,156	1,098	1,056	1,824	276	27
Somerset	760	433	327	550	185	10
Talbot	1,395	752	643	1,241	139	<6
Washington	3,944	1,974	1,969	3,689	202	29
Wicomico	2,835	1,505	1,327	2,199	576	35
Worcester	2,061	1,161	898	1,748	224	41

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 8.
All Cancer Sites Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	447.0	500.9	409.7	450.2	442.1	259.9
Allegany	512.4	594.1	460.1	505.8	954.7	**
Anne Arundel	471.9	529.0	429.2	478.2	444.6	237.4
Baltimore City	485.3	558.5	437.8	488.7	482.4	235.1
Baltimore County	470.5	516.3	440.3	475.1	470.4	254.6
Calvert	441.7	473.0	421.3	445.0	418.3	**
Caroline	458.2	515.8	418.1	464.4	431.5	**
Carroll	443.2	497.2	405.1	440.6	449.2	238.9
Cecil	475.9	528.9	437.4	478.6	426.8	**
Charles	414.2	485.4	358.1	407.1	418.0	222.6
Dorchester	476.8	575.1	401.3	483.2	452.3	**
Frederick	440.3	482.5	412.9	440.5	449.3	263.5
Garrett	416.7	433.8	409.1	416.2	0.0	**
Harford	487.4	546.0	445.9	487.8	480.3	269.0
Howard	411.2	439.9	392.1	419.0	422.1	280.0
Kent	455.8	541.2	393.3	453.4	465.4	**
Montgomery	389.8	425.3	367.4	387.6	411.0	263.4
Prince George's	396.6	459.2	354.9	372.7	403.1	239.5
Queen Anne's	424.2	468.4	388.0	428.2	403.2	**
Saint Mary's	423.2	447.7	402.0	430.7	385.3	201.6
Somerset	514.9	611.0	451.4	530.5	466.8	**
Talbot	458.5	534.9	397.4	465.9	382.3	**
Washington	463.4	509.9	437.4	462.4	458.6	280.5
Wicomico	536.9	648.8	458.4	540.4	525.9	297.6
Worcester	507.9	594.5	439.6	486.6	495.2	1271.1

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 9.
Number of Deaths for All Cancer Sites by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	51,815	26,341	25,474	36,586	13,968	1,261
Allegany	904	460	444	890	s	<10
Anne Arundel	4,803	2,504	2,299	4,070	615	118
Baltimore City	6,970	3,503	3,467	2,324	4,594	52
Baltimore County	8,805	4,327	4,478	7,134	1,536	135
Calvert	756	382	374	642	s	<10
Caroline	349	186	163	293	s	<10
Carroll	1,632	898	734	1,583	s	<10
Cecil	1,033	586	447	990	s	<10
Charles	1,169	610	559	762	388	19
Dorchester	417	240	177	296	s	<10
Frederick	1,810	921	889	1,653	134	23
Garrett	330	183	147	s	<10	<10
Harford	2,234	1,132	1,102	2,009	202	23
Howard	1,728	832	896	1,340	259	129
Kent	312	171	141	254	s	<10
Montgomery	6,432	3,075	3,357	4,926	938	568
Prince George's	6,444	3,216	3,228	2,146	4,154	144
Queen Anne's	490	271	219	446	s	<10
Saint Mary's	855	479	376	731	113	11
Somerset	324	181	143	s	82	<10
Talbot	563	306	257	487	s	<10
Washington	1,542	827	715	1,482	50	10
Wicomico	1,096	584	512	861	s	<10
Worcester	817	467	350	697	s	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2008-2012.

Table 10.
All Cancer Sites Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

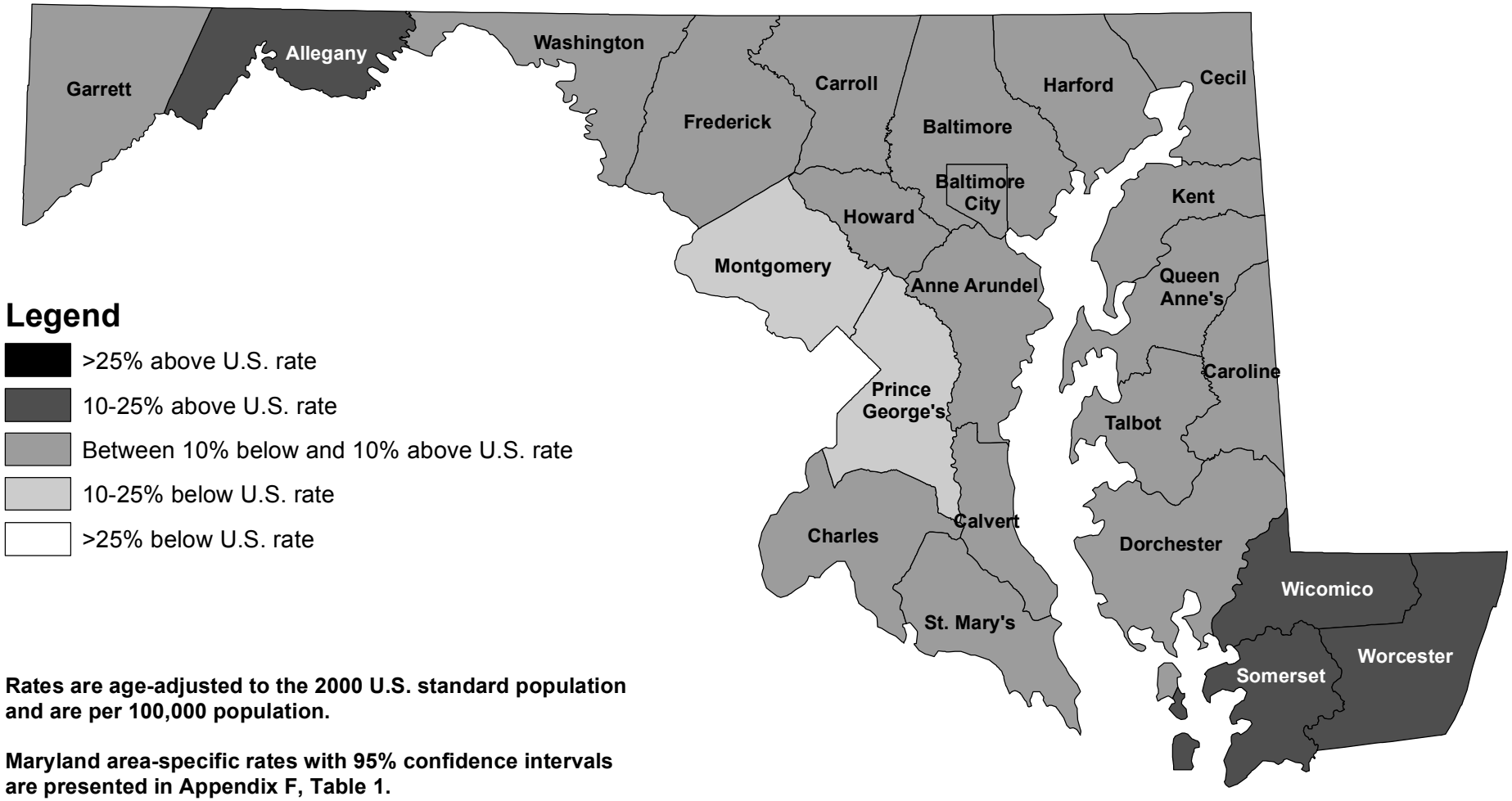
Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	171.8	207.1	148.2	168.9	194.3	89.4
Allegany	174.1	206.8	151.2	176.7	**	**
Anne Arundel	177.3	212.8	152.8	175.7	197.6	140.5
Baltimore City	224.2	277.2	190.7	210.5	235.0	88.1
Baltimore County	178.6	212.3	156.8	178.7	194.3	89.6
Calvert	175.8	210.1	154.4	176.5	183.4	**
Caroline	192.0	236.3	159.2	187.5	225.8	**
Carroll	175.3	225.8	139.2	176.5	185.2	**
Cecil	202.2	257.5	160.5	204.8	176.9	**
Charles	188.9	233.0	159.5	185.5	206.6	**
Dorchester	186.4	246.6	143.0	171.1	243.4	**
Frederick	158.6	191.0	136.4	158.7	194.7	74.3
Garrett	162.0	202.8	129.0	162.8	**	**
Harford	173.1	205.5	151.3	173.9	194.7	79.1
Howard	138.0	156.8	126.6	143.8	142.8	95.0
Kent	189.6	236.2	154.8	178.7	264.1	**
Montgomery	123.5	142.9	111.4	125.7	139.9	88.0
Prince George's	176.6	217.2	152.1	185.1	176.8	77.4
Queen Anne's	175.3	215.8	144.8	176.0	179.9	**
Saint Mary's	177.7	213.7	146.9	181.4	171.7	**
Somerset	220.0	273.8	181.2	221.4	227.1	**
Talbot	169.6	213.1	138.4	164.0	225.8	**
Washington	178.4	220.5	149.3	180.3	150.6	**
Wicomico	206.0	259.8	169.1	205.4	220.5	**
Worcester	187.7	237.7	147.0	180.0	263.8	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2008-2012.

Maryland All Cancer Sites Incidence Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate

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

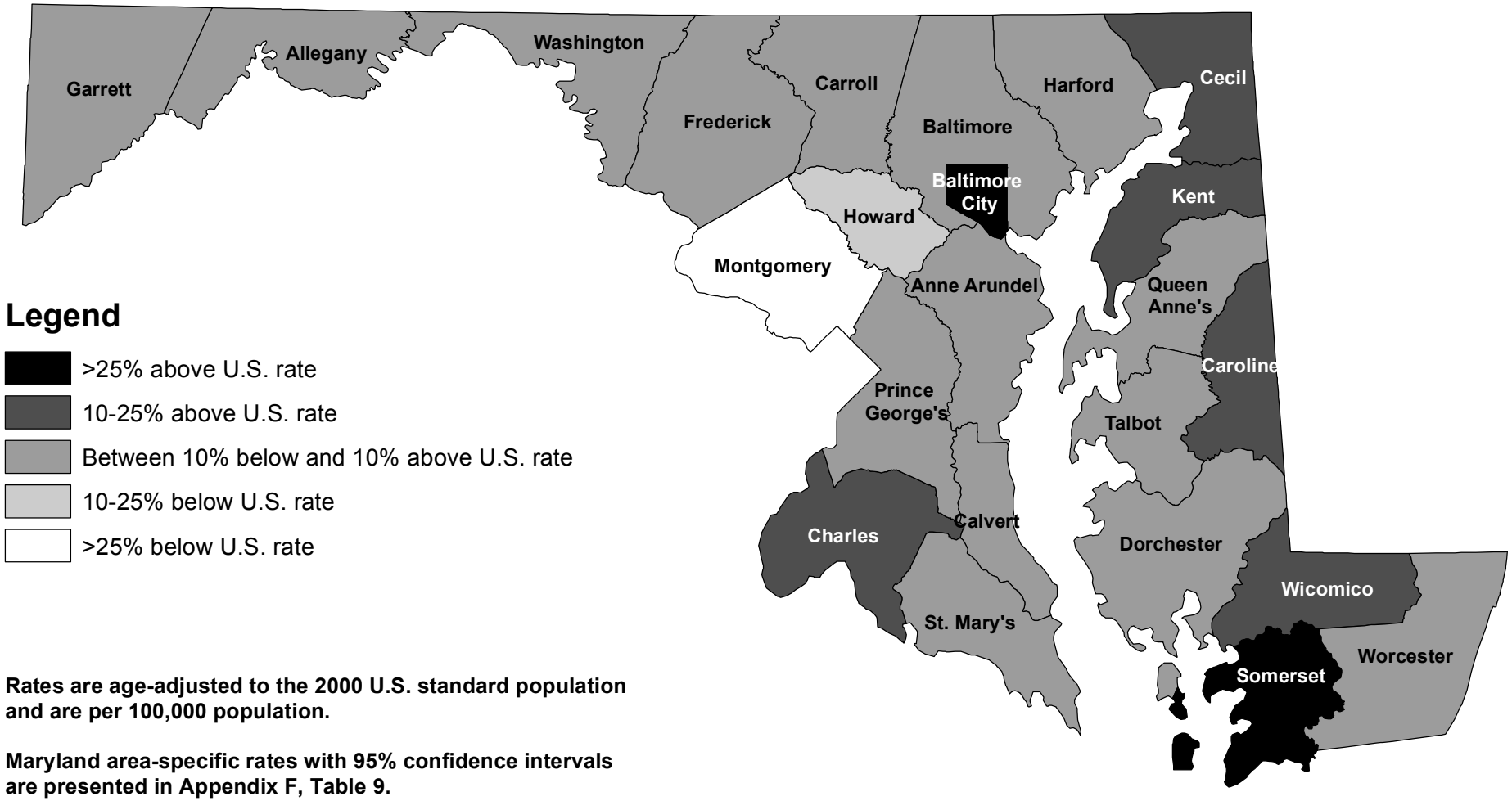
Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 1.

U.S. all cancer sites incidence rate, 2008-2012: 454.8 / 100,000

Maryland all cancer sites incidence rate, 2008-2012: 447.0 / 100,000

Sources: Maryland Cancer Registry
U.S. SEER, SEER*Stat Database

Maryland All Cancer Sites Mortality Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate

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

Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 9.

U.S. all cancer sites mortality rate, 2008-2012: 171.2 / 100,000

Maryland all cancer sites mortality rate, 2008-2012: 171.8 / 100,000

Source: NCHS Compressed Mortality File in CDC WONDER
U.S. SEER, Cancer Statistics Review

III. Targeted Cancers

A. Lung and Bronchus Cancer

Incidence (New Cases)

There were 3,584 new cases of lung and bronchus cancer (called lung cancer) reported among Maryland residents in 2012. The 2012 Maryland age-adjusted lung cancer incidence rate was 56.4 per 100,000 population (54.5–58.3, 95% C.I.), which is similar to the 2012 U.S. SEER lung cancer incidence rate of 55.1 per 100,000 population (54.7–55.6, 95% C.I.).

Mortality (Deaths)

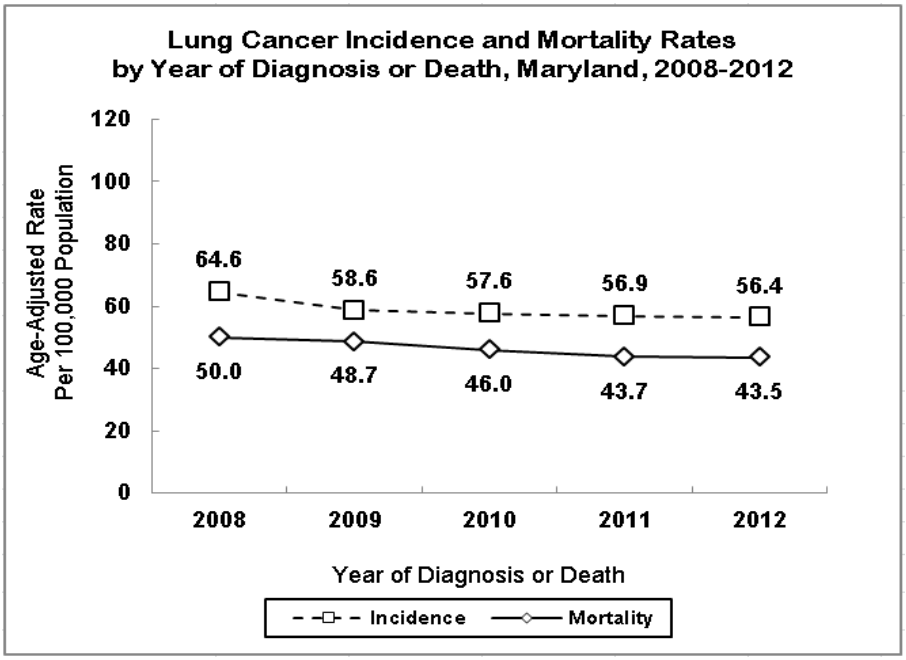
There were 2,744 lung cancer deaths among Maryland residents in 2012. In 2012, lung cancer accounted for 26.1% of all cancer deaths in Maryland and was the leading cause of cancer death in both men and women. The 2012 age-adjusted lung cancer mortality rate was 43.5 per 100,000 population (41.8–45.1, 95% C.I.) in Maryland. This rate is statistically significantly lower than the 2012 U.S. mortality rate for lung and bronchus cancer of 45.0 per 100,000 population (44.7–45.2, 95% C.I.). Maryland had the 31st highest lung cancer mortality rate among the states and the District of Columbia for the period 2008-2012.

Note: In the following graphs, Maryland 2008, 2009, and 2010 lung cancer mortality data include lung, bronchus, and trachea primary sites. Incidence data only includes lung and bronchus primary sites.

Table 11.
Lung Cancer Incidence and Mortality Rates
by Gender and Race, Maryland and the United States, 2012

Incidence 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
New Cases (count)	3,584	1,783	1,789	2,601	890	84
MD Incidence Rate	56.4	64.2	50.5	58.5	55.9	26.3
U.S. SEER Rate	55.1	65.0	47.7	56.5	62.9	34.9
Mortality 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
Deaths (count)	2,744	1,455	1,289	1,998	677	69
MD Mortality Rate	43.5	53.6	36.1	44.7	44.2	22.8
U.S. Mortality Rate	45.0	56.2	36.4	45.7	48.4	N/A

Rates are per 100,000 population and are age-adjusted to 2000 U.S. standard population.
Total also includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.
N/A = Data were not available.
Source: Maryland Cancer Registry
U.S. SEER, SEER*Stat
NCHS Compressed Mortality File in CDC WONDER, 2012
U.S. SEER, Cancer Statistics Review



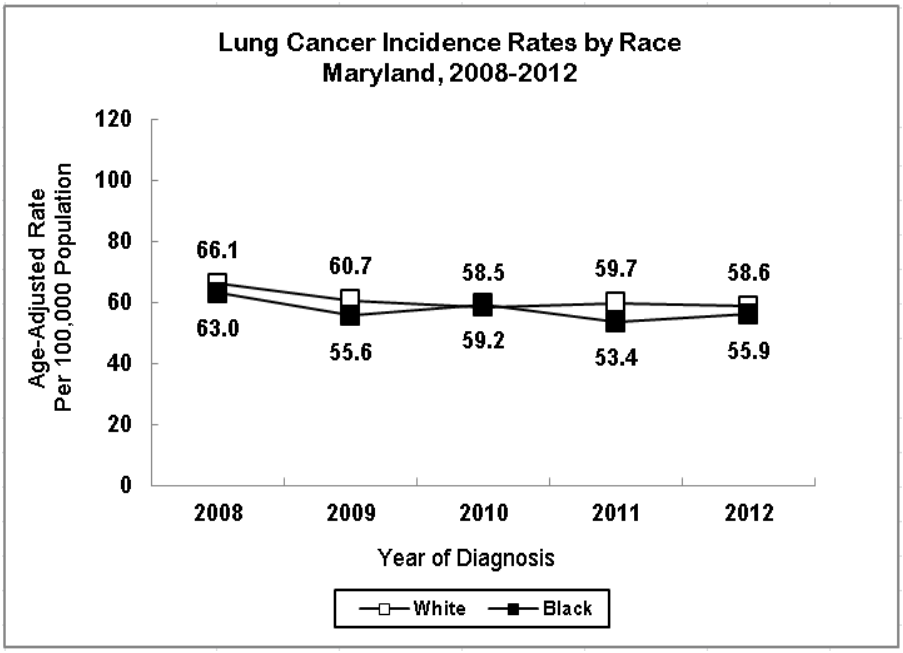
Incidence and Mortality Trends

Lung cancer incidence rates in Maryland decreased at a rate of 3.0% per year from 2008 to 2012.

Lung cancer mortality rates decreased at a rate of 3.8% per year from 2008 to 2012.

See Appendix G, Tables 1 and 2.

Source: Maryland Cancer Registry
NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

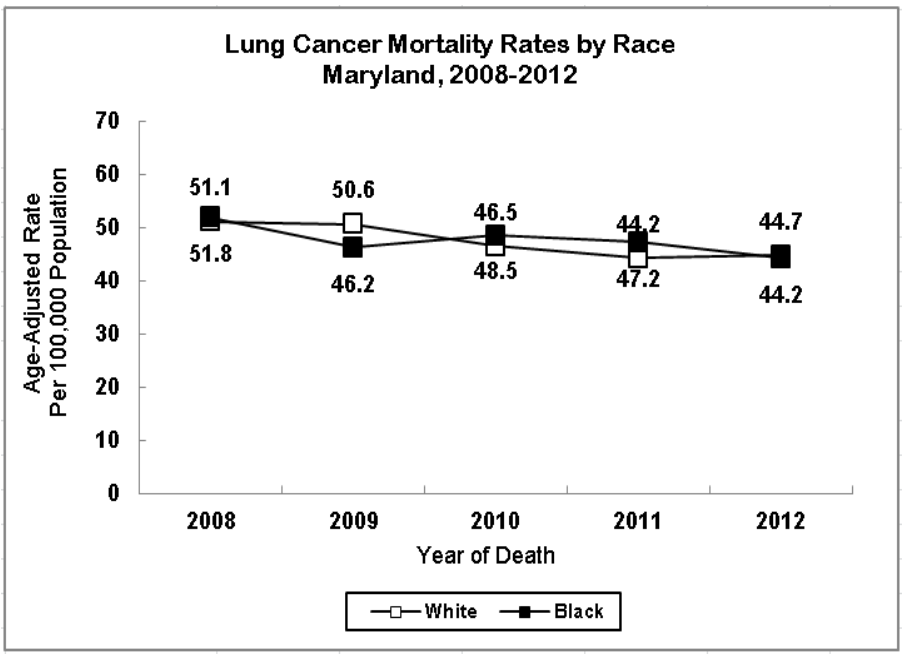


Incidence Trends by Race

From 2008 to 2012, lung cancer incidence rates for blacks decreased at a rate of 2.7% per year, compared to a decline of 2.5% per year among whites.

See Appendix G, Table 3.

Source: Maryland Cancer Registry

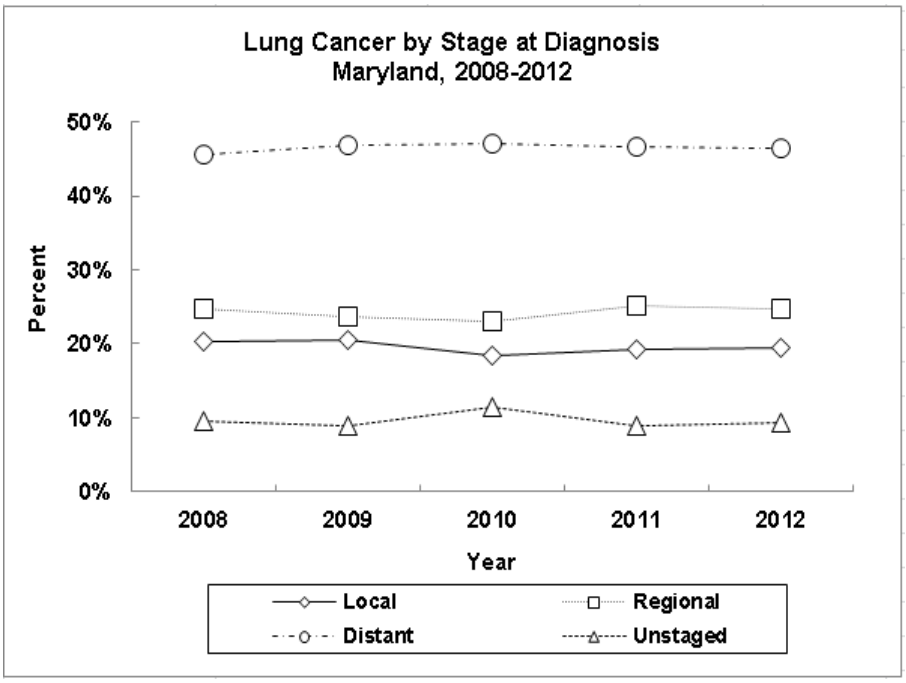


Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Mortality Trends by Race

Lung cancer mortality rates are declining for both blacks and whites. From 2008 to 2012, rates decreased at a rate of 2.9% per year for blacks, and 3.9% per year for whites.

See Appendix G, Table 5.



Source: Maryland Cancer Registry

Stage at Diagnosis

A higher proportion of lung cancer cases were diagnosed at the distant stage than at the local or regional stages of cancer. In 2012, 19.5% of lung cancer cases in Maryland were detected at the local stage, 24.8% were detected at the regional stage, and 46.5% were found at the distant stage. The proportion of lung cancers reported as unstaged rose slightly in 2012, after declining in 2011.

See Appendix H, Table 2.

Table 12.
Number of Lung and Bronchus Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	3,584	1,783	1,789	2,601	890	84
Allegany	74	41	33	s	<6	0
Anne Arundel	361	174	185	326	33	<6
Baltimore City	507	237	267	159	344	<6
Baltimore County	666	338	326	550	106	10
Calvert	52	25	26	49	<6	0
Caroline	39	24	15	32	7	0
Carroll	126	59	67	120	<6	0
Cecil	88	42	46	83	<6	0
Charles	73	40	32	53	17	<6
Dorchester	28	18	10	21	7	0
Frederick	122	58	64	115	<6	<6
Garrett	12	<6	9	12	0	0
Harford	187	96	91	170	s	<6
Howard	110	46	64	81	17	11
Kent	18	10	8	14	<6	0
Montgomery	343	176	166	245	52	41
Prince George's	345	163	180	126	210	8
Queen Anne's	34	18	16	30	<6	0
Saint Mary's	58	33	25	52	<6	0
Somerset	30	18	12	21	9	0
Talbot	33	12	21	s	<6	0
Washington	125	61	64	115	8	<6
Wicomico	85	49	36	67	18	0
Worcester	60	38	22	50	10	0

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registr

Table 13.
Lung and Bronchus Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	56.4	64.2	50.5	58.5	55.9	26.3
Allegany	69.9	86.1	59.2	71.4	**	0.0
Anne Arundel	62.1	66.9	58.0	66.0	49.1	**
Baltimore City	78.9	89.9	72.4	72.8	83.0	**
Baltimore County	67.3	80.0	58.0	71.2	61.2	**
Calvert	60.4	70.4	52.9	66.9	**	0.0
Caroline	102.4	141.6	**	98.7	**	0.0
Carroll	64.5	66.4	62.7	63.6	**	0.0
Cecil	78.9	79.8	78.0	78.9	**	0.0
Charles	50.3	59.0	41.3	56.4	40.9	**
Dorchester	59.7	83.8	**	58.7	**	0.0
Frederick	50.8	54.6	49.8	52.7	**	**
Garrett	**	**	**	**	0.0	0.0
Harford	69.5	82.1	61.3	71.6	59.0	**
Howard	39.5	37.0	42.6	39.4	43.2	**
Kent	57.3	**	**	**	**	0.0
Montgomery	32.1	37.1	27.8	31.5	38.0	29.1
Prince George's	43.1	49.6	38.7	52.7	39.1	**
Queen Anne's	56.1	64.5	48.5	54.2	**	0.0
Saint Mary's	53.0	60.7	46.1	57.1	**	0.0
Somerset	97.6	116.1	**	89.0	**	0.0
Talbot	47.6	**	53.9	51.6	**	0.0
Washington	69.7	76.1	66.2	68.6	**	**
Wicomico	75.4	100.8	56.6	77.6	74.1	0.0
Worcester	71.1	93.1	49.5	66.1	**	0.0

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 14.
Number of Deaths for Lung and Bronchus Cancer by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	2,744	1,455	1,289	1,998	677	69
Allegany	46	29	17	45	<10	<10
Anne Arundel	294	141	153	261	s	<10
Baltimore City	365	205	160	s	218	<10
Baltimore County	477	240	237	394	s	<10
Calvert	44	23	21	37	<10	<10
Caroline	23	s	<10	21	<10	<10
Carroll	93	52	41	91	<10	<10
Cecil	67	28	39	63	<10	<10
Charles	66	45	21	49	s	<10
Dorchester	30	19	11	20	s	<10
Frederick	95	43	52	88	<10	<10
Garrett	22	s	<10	s	<10	<10
Harford	136	67	69	124	s	<10
Howard	74	37	37	56	<10	s
Kent	10	<10	<10	<10	<10	<10
Montgomery	267	133	134	196	38	33
Prince George's	324	183	141	s	216	<10
Queen Anne's	26	16	10	25	<10	<10
Saint Mary's	55	35	20	49	<10	<10
Somerset	21	11	10	17	<10	<10
Talbot	27	12	15	24	<10	<10
Washington	92	49	43	86	<10	<10
Wicomico	44	25	19	37	<10	<10
Worcester	46	26	20	42	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2012.

Table 15.
Lung and Bronchus Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	43.5	53.6	36.1	44.7	44.2	22.8
Allegany	43.6	61.9	**	44.3	**	**
Anne Arundel	50.5	55.4	47.5	52.1	43.6	**
Baltimore City	57.5	78.2	43.7	67.1	53.6	**
Baltimore County	47.6	57.3	40.8	49.8	48.3	**
Calvert	47.9	52.9	42.3	47.4	**	**
Caroline	57.6	**	**	61.2	**	**
Carroll	48.0	62.6	37.1	48.9	**	**
Cecil	63.0	54.5	69.0	62.5	**	**
Charles	48.9	73.2	28.9	55.9	**	**
Dorchester	65.0	**	**	55.7	**	**
Frederick	39.8	42.5	39.0	40.8	**	**
Garrett	53.2	**	**	53.5	**	**
Harford	50.5	59.6	45.1	52.0	**	**
Howard	28.4	32.6	25.2	28.8	**	**
Kent	**	**	**	**	**	**
Montgomery	24.7	29.0	21.6	24.8	26.0	23.3
Prince George's	41.3	55.2	31.5	41.4	42.7	**
Queen Anne's	42.7	**	**	44.4	**	**
Saint Mary's	51.3	69.7	34.6	54.2	**	**
Somerset	71.1	**	**	**	**	**
Talbot	37.3	**	**	36.9	**	**
Washington	52.2	62.6	44.7	51.6	**	**
Wicomico	39.3	51.4	**	42.2	**	**
Worcester	47.9	60.4	36.8	48.9	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2012.

Table 16.
Number of Lung and Bronchus Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	17,763	8,922	8,820	13,039	4,226	408
Allegany	419	220	199	402	17	0
Anne Arundel	1,797	888	904	1,600	168	25
Baltimore City	2,484	1,250	1,230	862	1,600	19
Baltimore County	3,205	1,552	1,651	2,686	467	44
Calvert	238	108	128	210	25	<6
Caroline	140	79	61	117	23	0
Carroll	571	308	263	550	20	0
Cecil	411	206	205	390	16	<6
Charles	348	187	159	247	90	<6
Dorchester	150	88	62	108	40	<6
Frederick	607	310	297	563	37	6
Garrett	99	51	48	s	0	<6
Harford	868	439	429	790	64	12
Howard	550	267	283	435	69	42
Kent	100	50	50	83	17	0
Montgomery	1,814	826	987	1,350	261	182
Prince George's	1,715	900	811	620	1,041	43
Queen Anne's	180	99	81	164	16	0
Saint Mary's	323	187	136	273	43	<6
Somerset	150	81	69	112	30	<6
Talbot	161	65	96	143	18	0
Washington	609	314	294	572	33	<6
Wicomico	446	229	217	359	81	<6
Worcester	316	182	134	260	41	9

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 17.
Lung and Bronchus Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	58.7	67.9	52.0	60.7	57.3	28.5
Allegany	81.4	98.3	69.0	80.6	161.0	0.0
Anne Arundel	65.8	72.8	60.6	68.6	53.6	32.8
Baltimore City	78.3	95.4	66.9	79.2	78.6	35.7
Baltimore County	67.2	76.2	60.8	70.4	60.1	27.5
Calvert	56.1	59.5	53.5	59.0	39.5	**
Caroline	74.8	98.6	58.9	73.3	89.5	0.0
Carroll	60.8	73.5	51.6	61.0	69.5	0.0
Cecil	77.8	85.0	72.4	78.6	58.5	**
Charles	54.2	64.7	45.3	57.1	49.1	**
Dorchester	65.4	84.6	49.8	61.5	77.1	**
Frederick	54.0	62.3	48.4	55.1	58.0	**
Garrett	47.9	56.0	42.7	47.8	0.0	**
Harford	66.7	76.6	59.7	68.0	55.8	**
Howard	43.1	47.1	40.7	45.7	37.3	29.4
Kent	63.2	69.9	59.1	61.4	77.7	0.0
Montgomery	35.4	37.9	33.8	35.5	39.7	27.4
Prince George's	46.3	58.0	38.3	51.4	44.1	22.7
Queen Anne's	61.8	74.2	51.0	61.8	69.4	0.0
Saint Mary's	67.4	82.6	54.4	68.7	62.7	**
Somerset	99.3	115.8	87.2	101.4	78.1	**
Talbot	47.7	42.7	51.9	48.2	48.9	0.0
Washington	71.2	83.0	63.1	70.5	84.5	**
Wicomico	84.0	101.4	72.0	86.8	74.1	**
Worcester	72.8	90.3	57.7	67.9	84.9	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 18.
Number of Deaths for Lung and Bronchus Cancer by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	13,894	7,347	6,547	10,220	3,392	282
Allegany	255	140	115	251	<10	<10
Anne Arundel	1,446	759	687	1,271	143	32
Baltimore City	1,944	1,053	891	711	1,221	12
Baltimore County	2,451	1,247	1,204	2,052	374	25
Calvert	219	103	116	194	s	<10
Caroline	108	69	39	92	s	<10
Carroll	451	254	197	434	s	<10
Cecil	320	168	152	307	s	<10
Charles	307	176	131	226	s	<10
Dorchester	137	82	55	90	s	<10
Frederick	476	250	226	432	s	<10
Garrett	98	58	40	s	<10	<10
Harford	665	354	311	608	s	<10
Howard	382	191	191	300	47	35
Kent	92	48	44	s	22	<10
Montgomery	1,325	634	691	1,019	195	111
Prince George's	1,529	835	694	565	928	36
Queen Anne's	140	79	61	130	<10	<10
Saint Mary's	255	151	104	220	s	<10
Somerset	101	52	49	83	s	<10
Talbot	149	72	77	125	s	<10
Washington	459	246	213	442	s	<10
Wicomico	321	168	153	270	s	<10
Worcester	264	158	106	230	s	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2008-2012.

Table 19.
Lung and Bronchus Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

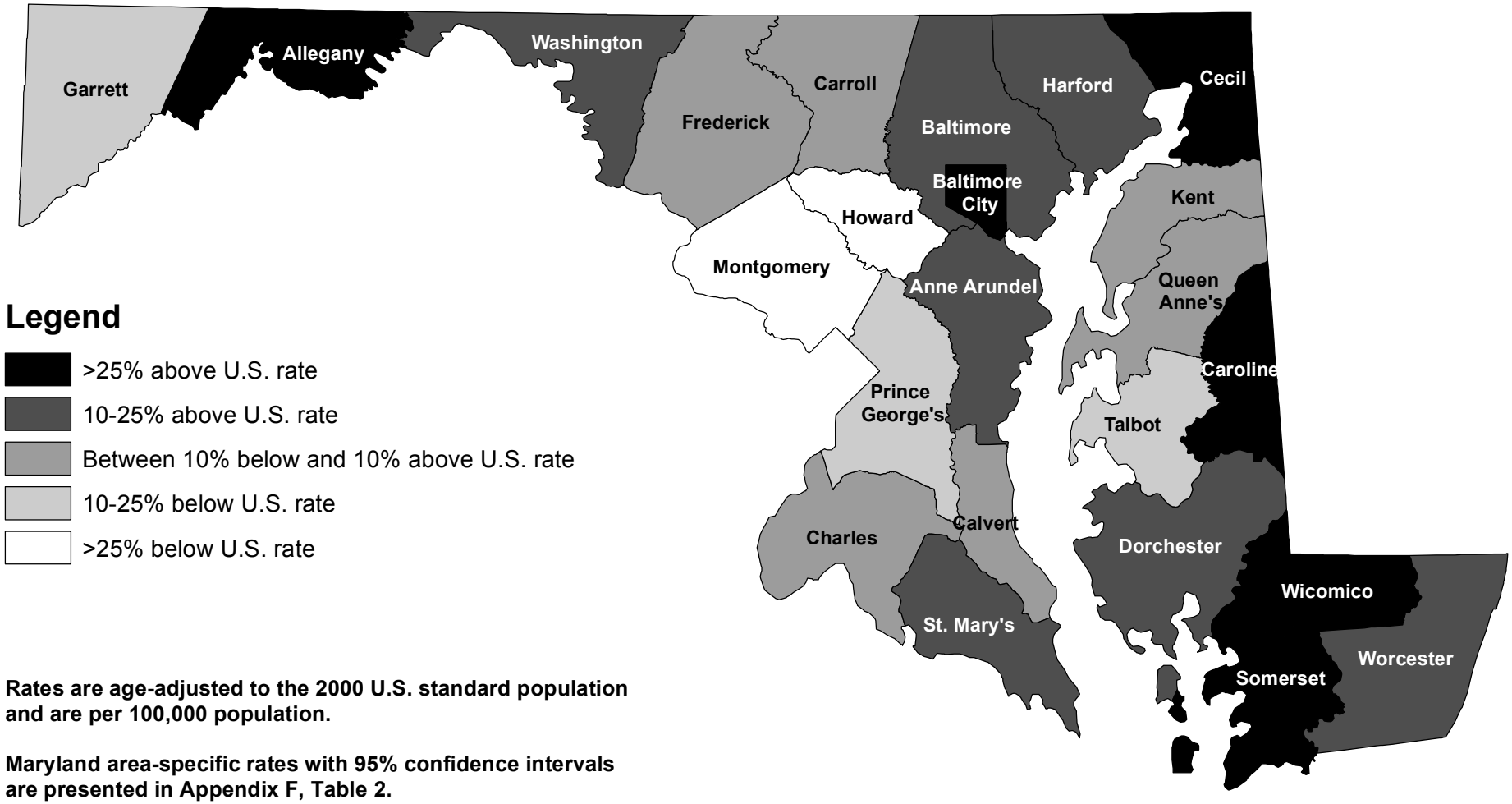
Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	46.3	56.9	38.5	47.5	47.3	20.7
Allegany	48.8	62.2	39.1	49.4	**	**
Anne Arundel	53.4	63.5	45.9	54.5	47.7	47.3
Baltimore City	62.4	81.7	49.2	65.4	61.7	**
Baltimore County	50.6	61.2	43.1	52.6	49.1	16.3
Calvert	50.1	53.3	47.9	52.2	39.4	**
Caroline	58.5	86.1	37.4	58.0	**	**
Carroll	48.3	62.7	37.8	48.3	**	**
Cecil	61.2	69.2	54.2	62.0	**	**
Charles	50.1	65.6	38.8	55.0	40.7	**
Dorchester	60.0	78.6	45.3	51.2	95.2	**
Frederick	42.2	51.0	35.5	41.9	57.4	**
Garrett	48.3	63.4	36.4	48.6	**	**
Harford	51.4	63.0	43.2	52.4	45.9	**
Howard	31.6	35.4	28.8	33.5	25.8	24.2
Kent	55.8	64.2	49.0	49.1	98.3	**
Montgomery	26.0	29.7	23.3	26.6	30.6	17.9
Prince George's	42.2	55.1	33.5	48.8	39.3	20.0
Queen Anne's	49.8	61.7	40.3	51.1	**	**
Saint Mary's	53.4	65.4	41.9	55.2	48.7	**
Somerset	69.2	81.1	61.3	76.4	**	**
Talbot	43.7	47.7	40.8	40.8	72.0	**
Washington	53.4	65.0	45.0	54.0	**	**
Wicomico	60.5	73.8	50.8	64.4	48.6	**
Worcester	59.1	77.7	43.9	57.6	73.8	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2008-2012.

Maryland Lung Cancer Incidence Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate

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

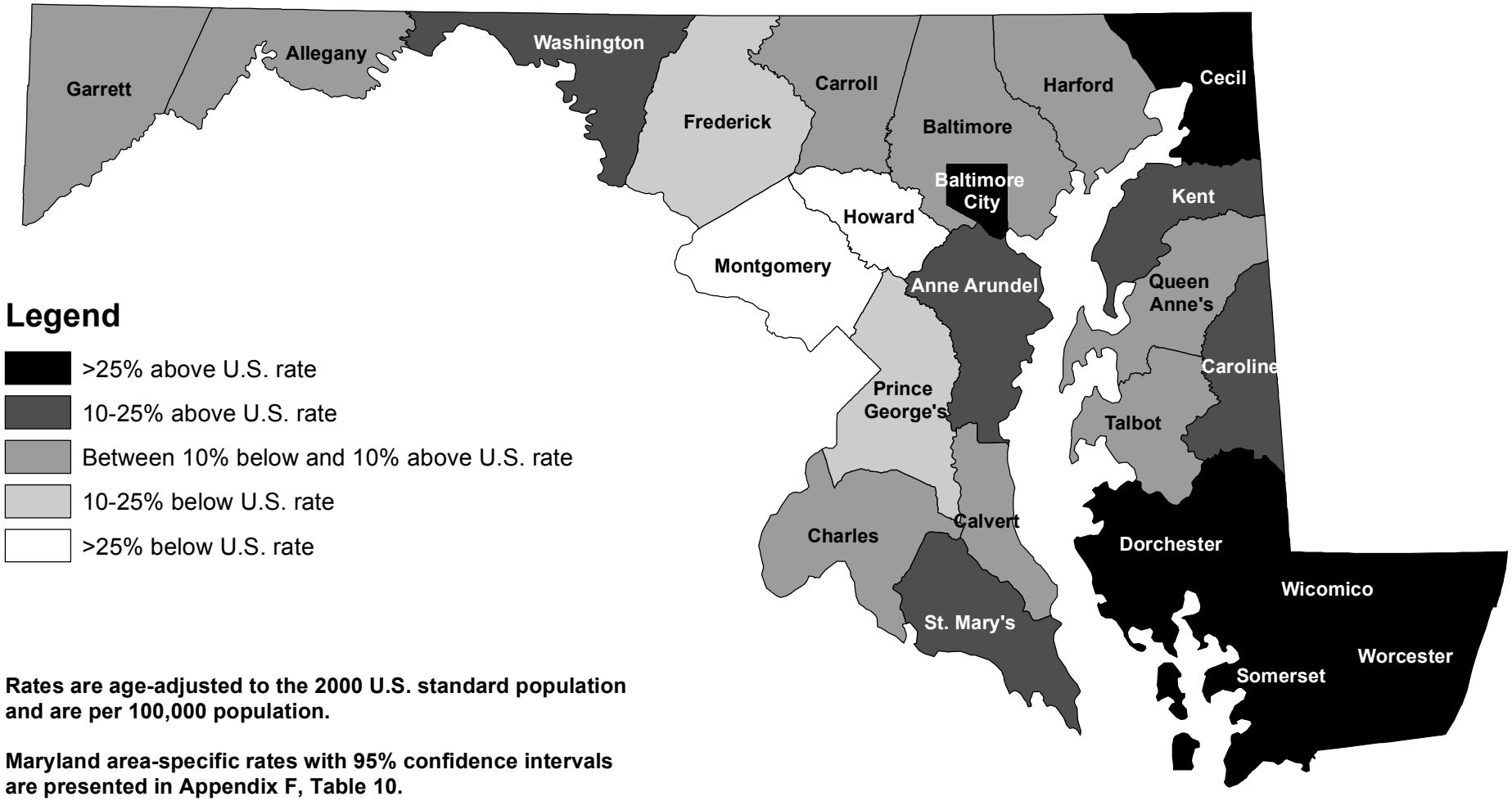
Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 2.

U.S. lung cancer incidence rate, 2008-2012: 58.7 / 100,000

Maryland lung cancer incidence rate, 2008-2012: 58.7 / 100,000

Sources: Maryland Cancer Registry
U.S. SEER, SEER*Stat Database

Maryland Lung Cancer Mortality Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



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

Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 10.

U.S. lung cancer mortality rate, 2008-2012: 47.2 / 100,000

Maryland lung cancer mortality rate, 2008-2012: 46.3 / 100,000

Source: NCHS Compressed Mortality File in CDC WONDER
U.S. SEER, Cancer Statistics Review

B. Colon and Rectum Cancer

Incidence (New Cases)

In 2012, there were 2,291 new cases of cancer of the colon or rectum (called colorectal cancer) reported among Maryland residents. The age-adjusted colorectal cancer incidence rate in Maryland for 2012 was 35.8 per 100,000 population (34.4–37.4, 95% C.I.), which is statistically significantly lower than the 2012 U.S. SEER age-adjusted colorectal cancer incidence rate of 39.7 per 100,000 population (39.3–40.1, 95% C.I.).

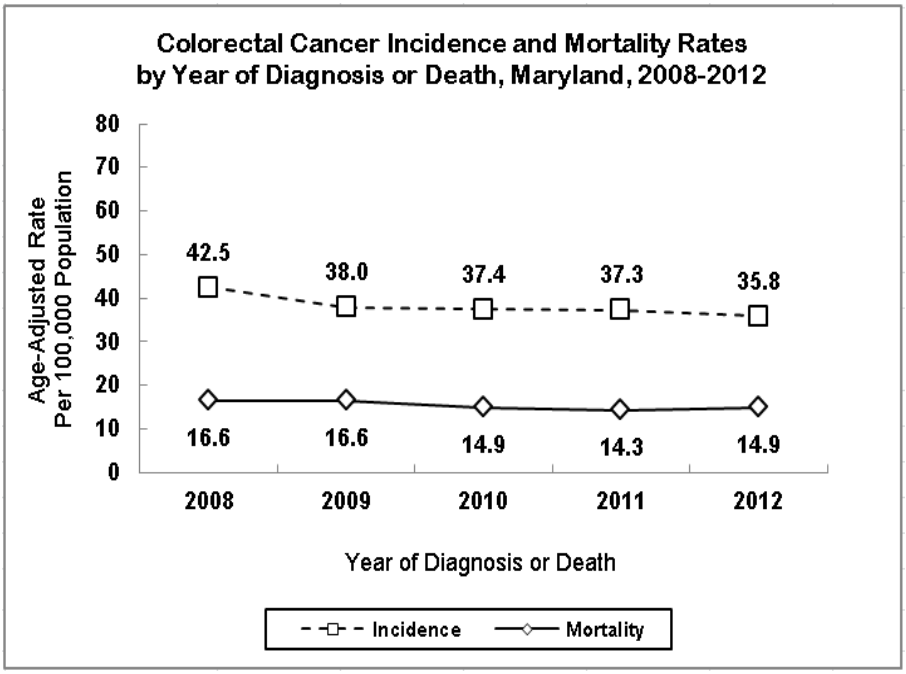
Mortality (Deaths)

A total of 943 persons died of colorectal cancer in 2012 in Maryland. In 2012, colorectal cancer accounted for 9.0% of all cancer deaths in Maryland and was the second leading cause of cancer death in both men and women. The age-adjusted colorectal cancer mortality rate in Maryland was 14.9 per 100,000 population (13.9–15.8, 95% C.I.). This rate is statistically significantly higher to the 2012 U.S. colorectal cancer mortality rate of 14.7 per 100,000 population (14.6–14.8, 95% C.I.). Maryland had the 27th highest colorectal cancer mortality rate among the states and the District of Columbia for the period 2008-2012.

Table 20.
Colorectal Cancer Incidence and Mortality Rates
by Gender and Race, Maryland and the United States, 2012

Incidence 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
New Cases (count)	2,291	1,174	1,109	1,543	637	87
MD Incidence Rate	35.8	41.8	31.2	34.5	40.1	25.8
U.S. SEER Rate	39.7	45.3	35.0	38.9	49.0	32.3
Mortality 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
Deaths (count)	943	507	436	611	304	28
MD Mortality Rate	14.9	18.5	12.1	13.5	20.1	7.9
U.S. Mortality Rate	14.7	17.6	12.4	14.3	19.9	N/A

Rates are per 100,000 population and are age-adjusted to 2000 U.S. standard population.
Total also includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.
N/A = Data were not available.
Source: Maryland Cancer Registry
U.S. SEER, SEER*Stat
NCHS Compressed Mortality File in CDC WONDER, 2012
U.S. SEER, Cancer Statistics Review



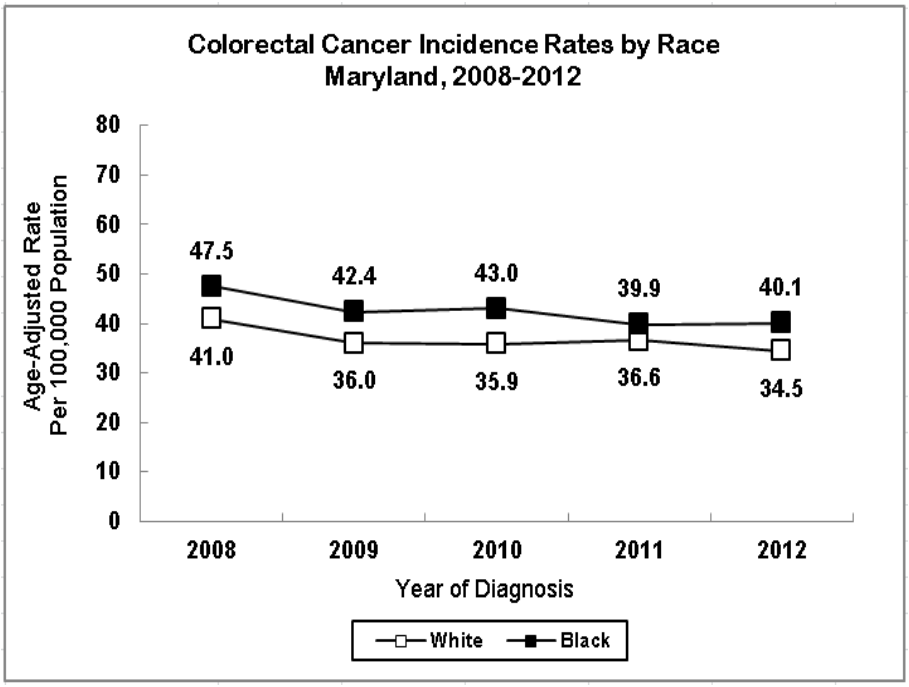
Source: Maryland Cancer Registry
NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Incidence and Mortality Trends

Incidence rates for colorectal cancer have been declining in Maryland. From 2008 to 2012, incidence rates declined at a rate of 3.5% per year.

Colorectal cancer mortality rates declined at a rate of 3.6% per year from 2008 to 2012.

See Appendix G, Tables 1 and 2.

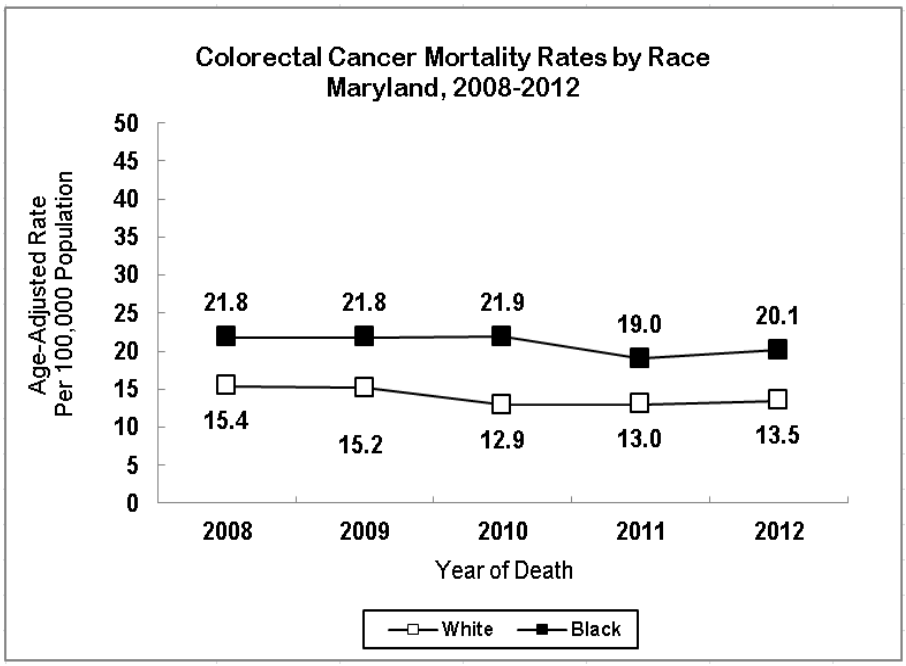


Source: Maryland Cancer Registry

Incidence Trends by Race

From 2008 to 2012, colorectal cancer incidence rates declined at a rate of 3.9% per year for blacks and 3.2% per year for whites. In 2012, the incidence rate for colorectal cancer was 34.5 for whites and 40.1 for blacks in Maryland.

See Appendix G, Table 3.

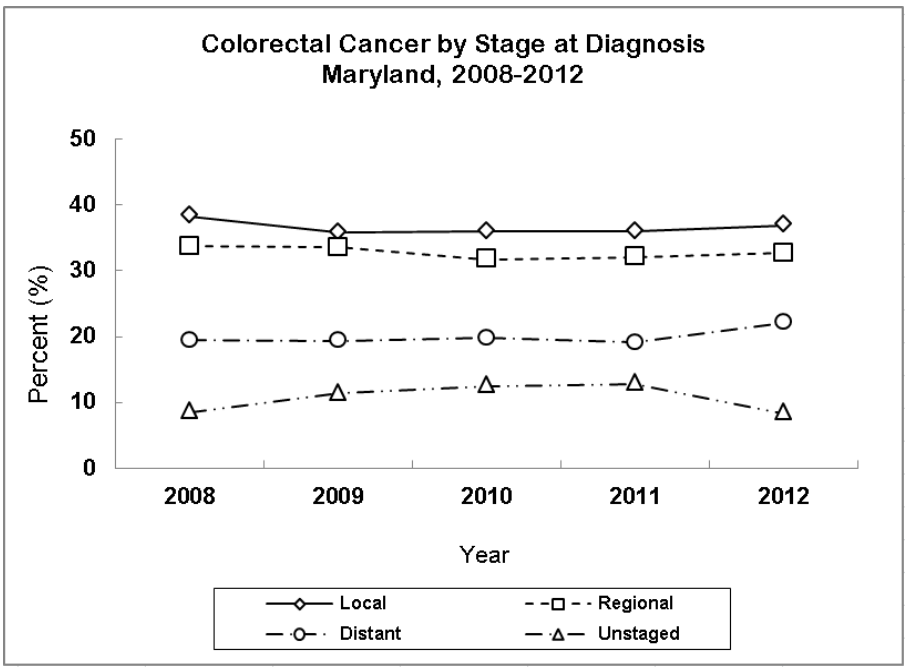


Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Mortality Trends by Race

From 2008 to 2012, colorectal cancer mortality rates declined for blacks and whites. Mortality rates in blacks decreased at a rate of 3.0% per year; whereas, among whites, the decline was 4.1% per year.

See Appendix G, Table 5.



Source: Maryland Cancer Registry

Stage at Diagnosis

In 2012, 36.9% of colorectal cancers diagnosed in Maryland were detected at the local stage, 32.7% were detected at the regional stage, and 22.1% were found at the distant stage. The proportion of colorectal cancers reported as unstaged decreased in 2012.

See Appendix H, Table 3.

Table 21.
Number of Colon and Rectum Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	2,291	1,174	1,109	1,543	637	87
Allegany	40	16	24	s	<6	0
Anne Arundel	189	96	92	159	26	<6
Baltimore City	314	155	159	103	206	<6
Baltimore County	359	169	187	269	79	8
Calvert	37	18	19	30	7	0
Caroline	15	9	6	13	<6	0
Carroll	73	44	29	71	<6	0
Cecil	34	16	18	s	<6	0
Charles	36	16	20	27	9	0
Dorchester	26	14	12	21	<6	<6
Frederick	100	60	39	89	7	<6
Garrett	19	9	10	19	0	0
Harford	113	63	50	96	14	0
Howard	88	51	37	54	23	10
Kent	9	<6	7	7	<6	0
Montgomery	326	174	151	227	50	45
Prince George's	271	140	129	83	172	9
Queen Anne's	19	8	11	17	<6	0
Saint Mary's	38	22	16	31	6	0
Somerset	18	8	10	12	6	0
Talbot	17	<6	12	s	<6	0
Washington	75	36	39	71	<6	<6
Wicomico	36	22	14	27	9	0
Worcester	28	16	12	s	<6	<6

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 22.
Colon and Rectum Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	35.8	41.8	31.2	34.5	40.1	25.8
Allegany	38.4	33.9	43.3	39.1	**	0.0
Anne Arundel	32.7	37.4	29.0	32.6	37.6	**
Baltimore City	50.2	60.7	43.7	46.7	51.7	**
Baltimore County	35.5	38.7	32.8	34.0	41.1	**
Calvert	40.2	43.6	36.8	39.4	**	0.0
Caroline	**	**	**	**	**	0.0
Carroll	37.0	48.7	29.0	37.6	**	0.0
Cecil	32.5	37.8	30.6	33.3	**	0.0
Charles	23.7	20.4	25.9	29.4	**	0.0
Dorchester	63.6	**	**	71.4	**	**
Frederick	40.3	55.0	28.6	39.6	**	**
Garrett	46.6	**	**	46.9	0.0	0.0
Harford	41.4	54.6	32.1	39.4	**	0.0
Howard	29.0	36.7	22.8	24.2	49.8	**
Kent	**	**	**	**	**	0.0
Montgomery	29.8	36.4	24.1	28.9	32.4	28.5
Prince George's	33.7	40.5	28.3	35.2	32.5	**
Queen Anne's	30.9	**	**	29.3	**	0.0
Saint Mary's	35.8	41.8	29.7	35.2	**	0.0
Somerset	60.2	**	**	**	**	0.0
Talbot	24.9	**	**	26.7	**	0.0
Washington	41.3	43.1	39.6	41.2	**	**
Wicomico	34.6	47.1	**	33.7	**	0.0
Worcester	31.5	38.6	**	33.2	**	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 23.
Number of Deaths for Colon and Rectum Cancer by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	943	507	436	611	304	28
Allegany	17	s	<10	s	<10	<10
Anne Arundel	88	49	39	64	s	<10
Baltimore City	133	61	72	s	98	<10
Baltimore County	146	83	63	111	s	<10
Calvert	18	s	<10	15	<10	<10
Caroline	<10	<10	<10	<10	<10	<10
Carroll	30	15	15	29	<10	<10
Cecil	17	s	<10	15	<10	<10
Charles	28	13	15	s	13	<10
Dorchester	<10	<10	<10	<10	<10	<10
Frederick	45	26	19	43	<10	<10
Garrett	<10	<10	<10	<10	<10	<10
Harford	54	21	33	45	<10	<10
Howard	20	<10	s	14	<10	<10
Kent	<10	<10	<10	<10	<10	<10
Montgomery	94	49	45	74	10	10
Prince George's	126	73	53	s	93	<10
Queen Anne's	<10	<10	<10	<10	<10	<10
Saint Mary's	17	s	<10	12	<10	<10
Somerset	<10	<10	<10	<10	<10	<10
Talbot	<10	<10	<10	<10	<10	<10
Washington	34	19	15	s	<10	<10
Wicomico	18	s	<10	13	<10	<10
Worcester	10	<10	<10	<10	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2012.

Table 24.
Colon and Rectum Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	14.9	18.5	12.1	13.5	20.1	7.9
Allegany	**	**	**	**	**	**
Anne Arundel	15.9	20.4	12.6	13.7	**	**
Baltimore City	21.2	24.1	19.0	15.0	25.2	**
Baltimore County	14.0	19.2	9.7	13.3	17.7	**
Calvert	**	**	**	**	**	**
Caroline	**	**	**	**	**	**
Carroll	14.8	**	**	14.9	**	**
Cecil	**	**	**	**	**	**
Charles	18.6	**	**	**	**	**
Dorchester	**	**	**	**	**	**
Frederick	18.7	25.3	**	19.7	**	**
Garrett	**	**	**	**	**	**
Harford	20.3	19.2	21.1	19.1	**	**
Howard	7.0	**	**	**	**	**
Kent	**	**	**	**	**	**
Montgomery	8.6	10.6	7.1	9.2	**	**
Prince George's	16.5	22.2	12.5	13.2	18.8	**
Queen Anne's	**	**	**	**	**	**
Saint Mary's	**	**	**	**	**	**
Somerset	**	**	**	**	**	**
Talbot	**	**	**	**	**	**
Washington	18.8	**	**	19.9	**	**
Wicomico	**	**	**	**	**	**
Worcester	**	**	**	**	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2012.

Table 25.
Number of Colon and Rectum Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	11,661	5,843	5,802	7,941	3,154	399
Allegany	254	132	122	243	11	0
Anne Arundel	954	490	463	791	131	23
Baltimore City	1,486	682	802	490	975	14
Baltimore County	1,933	927	1,003	1,476	391	44
Calvert	157	79	75	125	30	<6
Caroline	70	31	38	66	<6	0
Carroll	344	186	157	327	13	<6
Cecil	221	131	90	206	12	0
Charles	239	127	112	153	70	6
Dorchester	105	58	47	79	s	<6
Frederick	537	295	241	482	42	8
Garrett	79	44	35	78	0	0
Harford	595	306	289	523	62	<6
Howard	445	238	206	306	83	50
Kent	66	34	32	58	8	0
Montgomery	1,570	779	790	1,092	239	194
Prince George's	1,346	667	677	372	906	36
Queen Anne's	96	39	57	85	11	0
Saint Mary's	182	98	84	161	19	0
Somerset	77	41	36	57	20	0
Talbot	108	52	56	99	9	0
Washington	350	174	176	333	13	<6
Wicomico	243	116	127	186	49	<6
Worcester	155	91	64	126	16	6

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 26.
Colon and Rectum Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	38.1	43.6	33.8	36.7	42.4	26.8
Allegany	49.5	59.2	42.0	48.9	**	0.0
Anne Arundel	34.5	39.0	30.8	33.6	41.6	27.8
Baltimore City	46.9	52.8	43.3	44.4	48.7	**
Baltimore County	40.1	44.8	36.6	38.7	47.4	26.5
Calvert	35.7	39.0	31.7	33.9	48.7	**
Caroline	38.1	36.8	38.1	42.0	**	0.0
Carroll	37.1	44.7	30.8	36.7	**	**
Cecil	41.2	53.2	31.4	41.2	**	0.0
Charles	35.7	43.0	30.1	36.3	29.1	**
Dorchester	47.8	58.6	39.9	47.8	47.5	**
Frederick	47.1	57.9	38.6	47.0	49.6	**
Garrett	39.2	48.3	31.3	38.9	0.0	0.0
Harford	45.9	53.6	39.8	45.4	52.4	**
Howard	32.9	39.3	28.3	30.3	42.0	32.4
Kent	43.2	50.8	37.7	44.4	**	0.0
Montgomery	29.8	34.0	26.3	28.3	33.8	27.9
Prince George's	35.2	40.7	31.0	30.7	38.5	20.1
Queen Anne's	31.7	26.3	36.4	31.0	**	0.0
Saint Mary's	36.5	39.3	33.1	38.7	27.2	0.0
Somerset	52.7	62.2	48.2	55.0	51.3	0.0
Talbot	35.2	40.3	30.5	36.9	**	0.0
Washington	41.1	45.3	37.0	41.2	**	**
Wicomico	46.0	50.6	43.1	45.4	45.7	**
Worcester	36.6	47.0	27.7	33.6	36.3	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 27.
Number of Deaths for Colon and Rectum Cancer by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	4,671	2,432	2,239	3,066	1,469	136
Allegany	96	61	35	s	<10	<10
Anne Arundel	382	216	166	302	s	<10
Baltimore City	674	316	358	s	473	<10
Baltimore County	761	381	380	588	157	16
Calvert	69	34	35	56	s	<10
Caroline	36	19	17	31	<10	<10
Carroll	148	80	68	143	<10	<10
Cecil	88	59	29	83	<10	<10
Charles	111	63	48	58	s	<10
Dorchester	30	15	15	21	<10	<10
Frederick	191	106	85	180	<10	<10
Garrett	30	20	10	s	<10	<10
Harford	198	97	101	170	s	<10
Howard	150	59	91	102	36	12
Kent	23	13	10	19	<10	<10
Montgomery	527	257	270	374	92	61
Prince George's	642	343	299	169	455	18
Queen Anne's	34	20	14	30	<10	<10
Saint Mary's	72	42	30	65	<10	<10
Somerset	42	22	20	27	s	<10
Talbot	45	25	20	37	<10	<10
Washington	149	91	58	145	<10	<10
Wicomico	109	58	51	87	s	<10
Worcester	64	35	29	58	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2008-2012.

Table 28.
Colon and Rectum Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

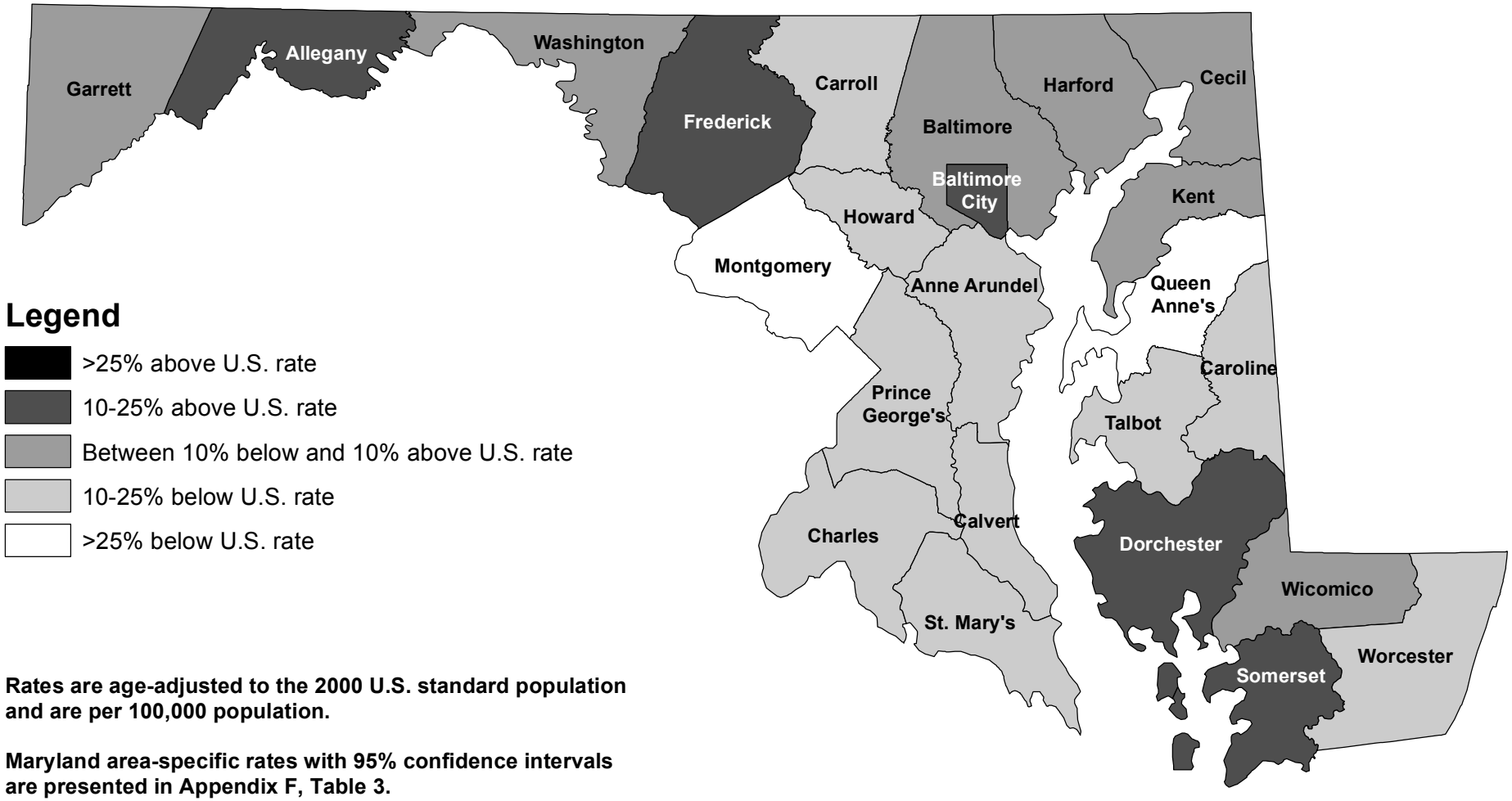
Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	15.4	18.9	12.8	14.0	20.8	9.8
Allegany	18.2	27.4	11.3	18.7	**	**
Anne Arundel	14.3	18.0	11.3	13.2	24.0	**
Baltimore City	21.9	25.7	19.4	17.2	24.8	**
Baltimore County	15.1	18.5	12.5	14.3	19.5	**
Calvert	16.7	19.4	15.2	16.4	**	**
Caroline	19.8	**	**	19.7	**	**
Carroll	16.1	20.6	13.1	16.1	**	**
Cecil	17.4	26.1	10.3	17.3	**	**
Charles	17.2	23.3	13.2	13.9	27.0	**
Dorchester	13.1	**	**	11.9	**	**
Frederick	16.8	22.5	12.6	17.3	**	**
Garrett	14.9	22.6	**	15.0	**	**
Harford	15.8	17.9	13.7	15.1	23.0	**
Howard	11.9	10.5	12.9	10.4	21.6	**
Kent	13.3	**	**	**	**	**
Montgomery	9.9	11.5	8.7	9.3	13.1	9.6
Prince George's	17.5	21.7	14.5	14.5	19.7	**
Queen Anne's	12.0	15.3	**	11.9	**	**
Saint Mary's	14.4	17.9	11.3	15.4	**	**
Somerset	28.4	33.7	24.7	24.9	**	**
Talbot	13.7	17.9	10.2	12.3	**	**
Washington	17.1	24.3	11.6	17.5	**	**
Wicomico	20.5	26.5	16.7	20.6	21.6	**
Worcester	14.6	17.9	11.3	14.7	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2008-2012.

Maryland Colorectal Cancer Incidence Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate

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

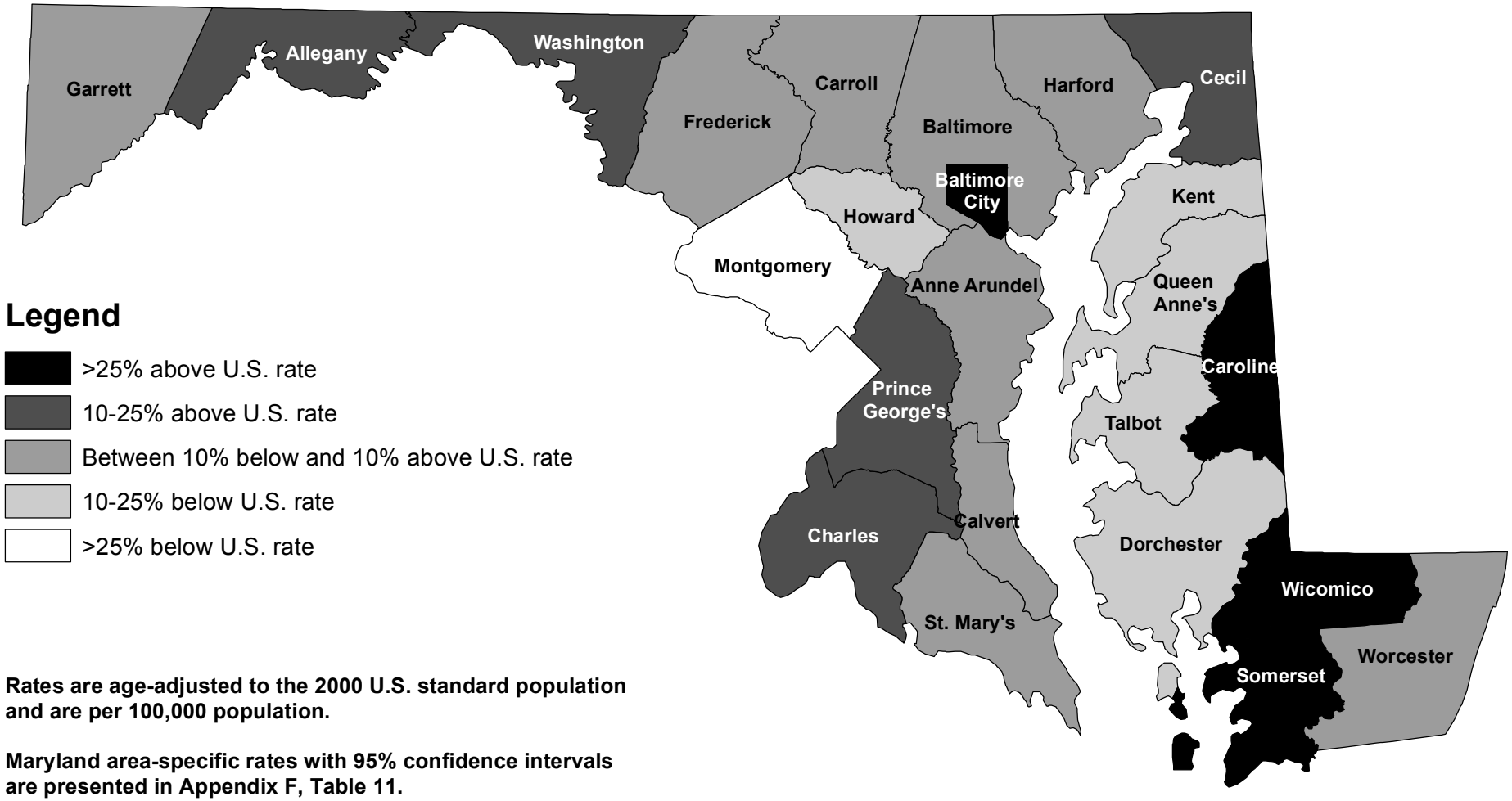
Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 3.

U.S. colorectal cancer incidence rate, 2008-2012: 42.4 / 100,000

Maryland colorectal cancer incidence rate, 2008-2012: 38.1 / 100,000

Sources: Maryland Cancer Registry
U.S. SEER, SEER*Stat Database

Maryland Colorectal Cancer Mortality Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



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

Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 11.

U.S. colorectal cancer mortality rate, 2008-2012: 15.5 / 100,000

Maryland colorectal cancer mortality rate, 2008-2012: 15.4 / 100,000

Source: NCHS Compressed Mortality File in CDC WONDER
U.S. SEER, Cancer Statistics Review

C. Female Breast Cancer

Incidence (New Cases)

In 2012, a total of 4,397 cases of breast cancer were reported among Maryland women. The 2012 age-adjusted incidence rate in Maryland was 125.0 per 100,000 women (121.1–128.8, 95% C.I.), which is similar to the 2012 U.S. SEER age-adjusted female breast cancer incidence rate of 124.7 per 100,000 population (123.7–125.7 , 95% C.I.).

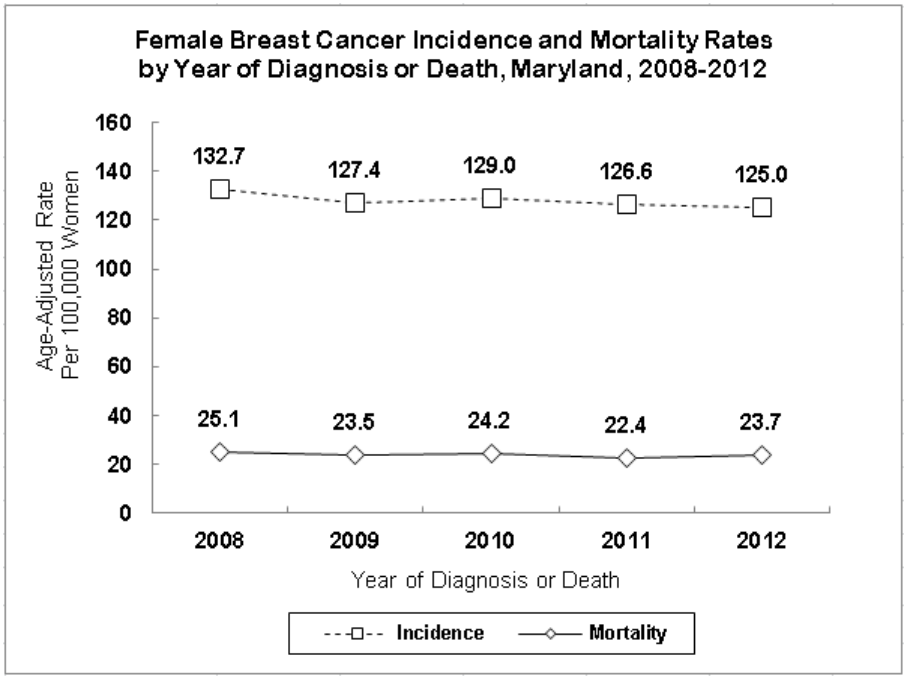
Mortality (Deaths)

In 2012, a total of 857 women died of breast cancer in Maryland. Female breast cancer accounted for 16.5% of cancer deaths among women and 8.1% of all cancer deaths in Maryland in 2012. Breast cancer is the second leading cause of cancer death among women in Maryland after lung cancer. The 2012 age-adjusted mortality rate for female breast cancer in Maryland was 23.7 per 100,000 women (22.1–25.3, 95% C.I.). This rate is statistically significantly higher than the U.S. female breast cancer mortality rate of 21.3 per 100,000 women (21.1-21.5, 95% C.I.). Maryland had the 6th highest female breast cancer mortality rate among the states and the District of Columbia for the period 2008-2012.

Table 29.
Female Breast Incidence and Mortality Rates
by Race, Maryland and the United States, 2012

Incidence 2012	*Total*	*Whites*	*Blacks*	*Other*
New Cases (count)	4,397	2,940	1,217	187
MD Incidence Rate	125.0	126.9	121.5	85.0
U.S. SEER Rate	124.7	127.3	125.8	93.3
Mortality 2012	*Total*	*Whites*	*Blacks*	*Other*
Deaths (count)	857	568	259	30
MD Mortality Rate	23.7	23.1	26.5	14.1
U.S. Mortality Rate	21.3	20.7	29.4	N/A

Rates are per 100,000 women and are age-adjusted to 2000 U.S. standard population.
Total also includes cases reported as unknown race.
N/A = Data were not available.
Source: Maryland Cancer Registry
U.S. SEER, SEER*Stat
NCHS Compressed Mortality File in CDC WONDER, 2012
U.S. SEER, Cancer Statistics Review



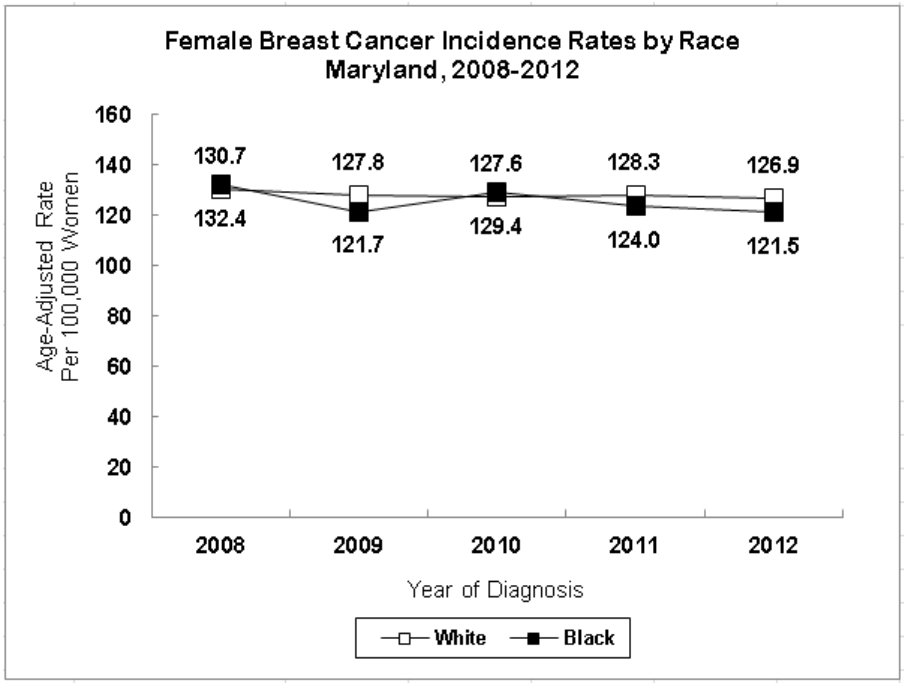
Source: Maryland Cancer Registry
NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Incidence and Mortality Trends

From 2008 to 2012, incidence rates for female breast cancer decreased in Maryland at a rate of 1.2% annually.

Breast cancer mortality rates for females decreased at a rate of 1.6% per year.

See Appendix G, Tables 1 and 2.

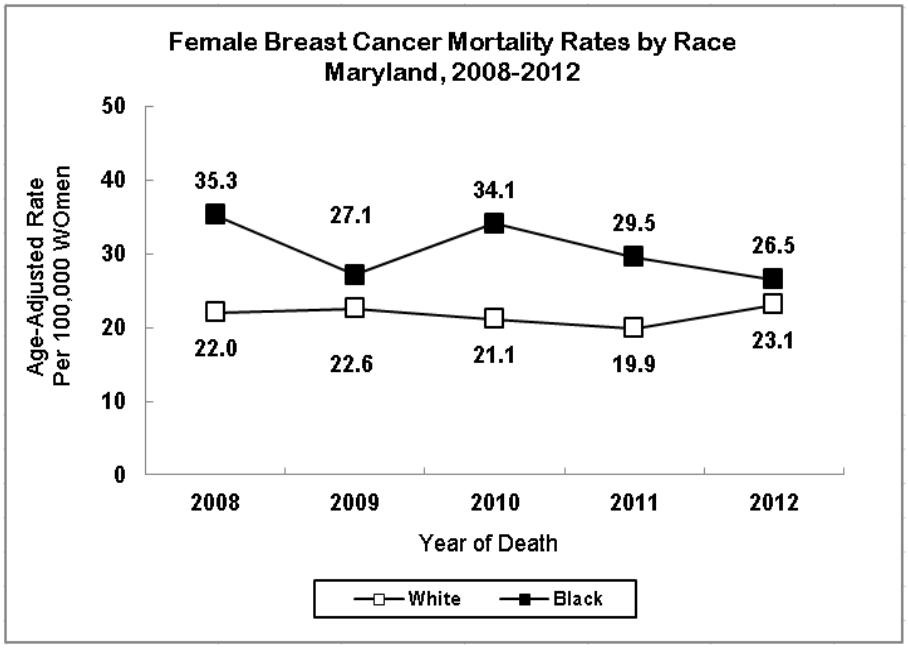


Source: Maryland Cancer Registry

Incidence Trends by Race

The decrease in female breast cancer incidence rates differed by race in Maryland from 2008 to 2012. Incidence rates decreased at a rate of 0.6% per year among white females and 1.5% among black females. In 2012, the breast cancer incidence rate for white females in Maryland was 126.9 per 100,000 women compared to 121.5 per 100,000 women for black females.

See Appendix G, Table 3.

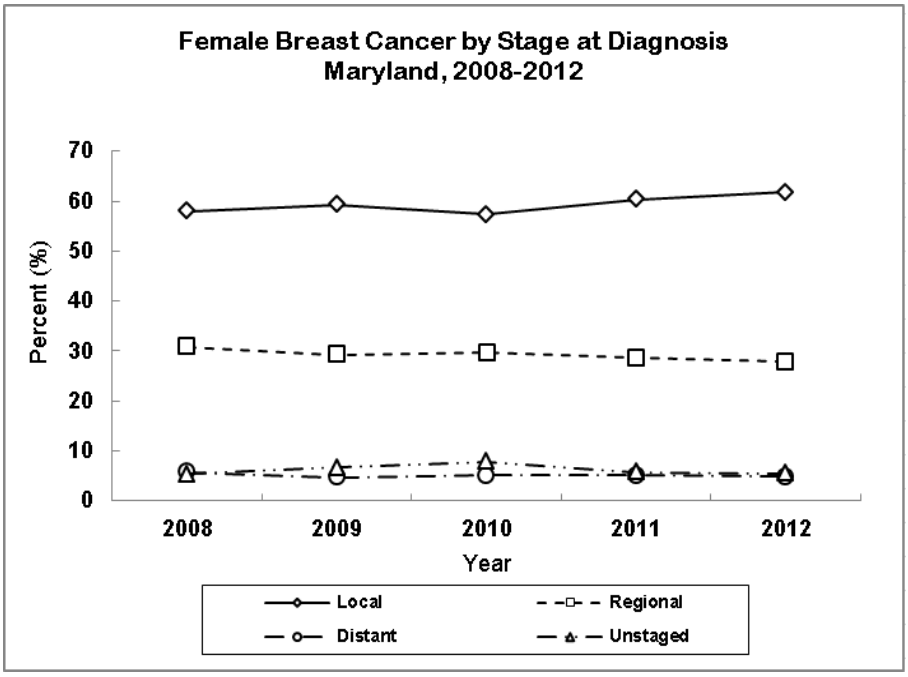


Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Mortality Trends by Race

Female breast cancer mortality trends differed by race from 2008 to 2012. Mortality rates in blacks declined in 2012, decreasing at a rate of 4.8% per year, compared to whites, who had a decrease of 0.3% per year between 2008-2012.

See Appendix G, Table 5.



Source: Maryland Cancer Registry

Stage at Diagnosis

In 2012, 61.8% of all female breast cancer cases in Maryland were diagnosed at the local stage, 27.8% were found at the regional stage, and 4.9% were diagnosed at the distant stage. The proportion of female breast cancers reported as unstaged remained low in 2012, at 5.6%.

See Appendix H, Table 4.

Table 30.
Number of Female Breast Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	4,397	2,940	1,217	187
Allegany	52	50	<6	0
Anne Arundel	412	356	43	11
Baltimore City	432	140	279	7
Baltimore County	693	507	159	24
Calvert	81	72	9	0
Caroline	27	27	0	0
Carroll	150	143	<6	<6
Cecil	76	72	<6	0
Charles	83	55	24	<6
Dorchester	21	18	<6	0
Frederick	168	154	8	6
Garrett	21	s	0	<6
Harford	193	163	20	8
Howard	220	148	46	25
Kent	20	13	7	0
Montgomery	749	523	125	73
Prince George's	589	133	428	20
Queen Anne's	30	28	<6	0
Saint Mary's	59	50	s	<6
Somerset	10	6	<6	0
Talbot	45	38	7	0
Washington	128	121	<6	<6
Wicomico	64	48	s	<6
Worcester	51	40	9	<6

Total includes cases reported as unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 31.
Female Breast Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	125.0	126.9	121.5	85.0
Allegany	101.1	100.8	**	0.0
Anne Arundel	127.8	135.9	94.9	**
Baltimore City	121.2	130.6	116.0	**
Baltimore County	134.2	133.9	130.6	95.9
Calvert	161.7	177.0	**	0.0
Caroline	129.4	153.2	0.0	0.0
Carroll	137.0	135.7	**	**
Cecil	129.9	131.1	**	0.0
Charles	105.2	116.6	68.9	**
Dorchester	83.5	93.8	**	0.0
Frederick	119.1	122.3	**	**
Garrett	100.1	93.5	0.0	**
Harford	125.8	123.3	131.9	**
Howard	128.6	124.6	156.6	112.9
Kent	132.4	**	**	0.0
Montgomery	122.6	124.4	125.0	76.7
Prince George's	120.3	107.1	126.1	71.1
Queen Anne's	87.8	90.7	**	0.0
Saint Mary's	104.8	108.0	**	**
Somerset	**	**	**	0.0
Talbot	144.6	147.8	**	0.0
Washington	142.6	144.7	**	**
Wicomico	111.6	109.8	**	**
Worcester	137.2	122.0	**	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 32.
Number of Deaths for Female Breast Cancer by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	857	568	259	30
Allegany	<10	<10	<10	<10
Anne Arundel	70	57	s	<10
Baltimore City	100	s	70	<10
Baltimore County	127	86	s	<10
Calvert	18	17	<10	<10
Caroline	<10	<10	<10	<10
Carroll	26	25	<10	<10
Cecil	13	s	<10	<10
Charles	20	15	<10	<10
Dorchester	<10	<10	<10	<10
Frederick	34	30	<10	<10
Garrett	<10	<10	<10	<10
Harford	41	34	<10	<10
Howard	34	29	<10	<10
Kent	<10	<10	<10	<10
Montgomery	120	89	20	11
Prince George's	127	s	90	<10
Queen Anne's	<10	<10	<10	<10
Saint Mary's	21	18	<10	<10
Somerset	<10	<10	<10	<10
Talbot	<10	<10	<10	<10
Washington	21	s	<10	<10
Wicomico	16	12	<10	<10
Worcester	22	19	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2012.

Table 33.
Female Breast Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	23.7	23.1	26.5	14.1
Allegany	**	**	**	**
Anne Arundel	22.7	21.8	**	**
Baltimore City	27.1	24.3	28.6	**
Baltimore County	22.3	20.2	33.6	**
Calvert	**	**	**	**
Caroline	**	**	**	**
Carroll	23.5	23.7	**	**
Cecil	**	**	**	**
Charles	23.8	**	**	**
Dorchester	**	**	**	**
Frederick	24.9	24.4	**	**
Garrett	**	**	**	**
Harford	25.6	24.6	**	**
Howard	20.0	23.5	**	**
Kent	**	**	**	**
Montgomery	18.6	19.7	19.7	**
Prince George's	26.7	24.3	26.7	**
Queen Anne's	**	**	**	**
Saint Mary's	37.3	**	**	**
Somerset	**	**	**	**
Talbot	**	**	**	**
Washington	19.8	20.8	**	**
Wicomico	**	**	**	**
Worcester	49.3	**	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2012.

Table 34.
Number of Female Breast Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	21,751	14,619	5,917	837
Allegany	285	278	7	0
Anne Arundel	2,015	1,711	235	47
Baltimore City	2,241	755	1,438	21
Baltimore County	3,437	2,570	735	90
Calvert	365	316	47	<6
Caroline	123	105	17	0
Carroll	676	648	17	9
Cecil	338	318	20	0
Charles	444	247	177	9
Dorchester	143	104	s	<6
Frederick	795	714	49	28
Garrett	108	105	0	<6
Harford	1,007	857	117	23
Howard	1,041	724	196	100
Kent	84	68	16	0
Montgomery	3,741	2,647	585	370
Prince George's	2,755	629	1,965	96
Queen Anne's	179	166	s	<6
Saint Mary's	294	247	41	6
Somerset	78	54	23	0
Talbot	216	193	22	0
Washington	559	534	18	6
Wicomico	360	272	73	11
Worcester	275	226	36	8

Total includes cases reported as unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 35.
Female Breast Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	128.1	128.2	125.7	86.8
Allegany	111.8	112.4	**	0.0
Anne Arundel	129.8	133.3	111.7	73.2
Baltimore City	124.4	131.8	120.7	57.7
Baltimore County	135.1	134.2	135.3	89.0
Calvert	145.5	151.8	125.9	**
Caroline	122.2	122.8	126.9	0.0
Carroll	130.0	130.4	116.6	**
Cecil	117.3	117.7	130.7	0.0
Charles	115.1	104.1	131.6	**
Dorchester	123.7	119.7	134.2	**
Frederick	121.1	121.9	102.3	125.9
Garrett	107.0	104.8	0.0	**
Harford	137.9	134.2	161.8	118.5
Howard	129.0	125.8	145.0	99.4
Kent	104.8	101.0	128.0	0.0
Montgomery	127.2	127.8	125.7	86.3
Prince George's	118.9	100.7	124.6	78.7
Queen Anne's	115.4	119.5	**	**
Saint Mary's	110.0	113.0	103.1	**
Somerset	107.6	104.6	117.3	0.0
Talbot	143.0	150.7	105.8	0.0
Washington	126.6	128.3	90.0	**
Wicomico	125.6	123.5	117.6	**
Worcester	141.4	135.1	149.8	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 36.
Number of Deaths for Female Breast Cancer by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	4,111	2,629	1,395	87
Allegany	55	54	<10	<10
Anne Arundel	358	286	62	10
Baltimore City	521	s	370	<10
Baltimore County	688	493	183	12
Calvert	60	51	<10	<10
Caroline	25	19	<10	<10
Carroll	119	116	<10	<10
Cecil	70	67	<10	<10
Charles	92	57	s	<10
Dorchester	27	20	<10	<10
Frederick	149	132	s	<10
Garrett	27	s	<10	<10
Harford	180	160	s	<10
Howard	166	128	s	<10
Kent	22	16	<10	<10
Montgomery	571	410	127	34
Prince George's	619	142	464	13
Queen Anne's	28	26	<10	<10
Saint Mary's	62	49	s	<10
Somerset	14	10	<10	<10
Talbot	37	33	<10	<10
Washington	92	90	<10	<10
Wicomico	63	44	s	<10
Worcester	66	52	s	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2008-2012.

Table 37.
Female Breast Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

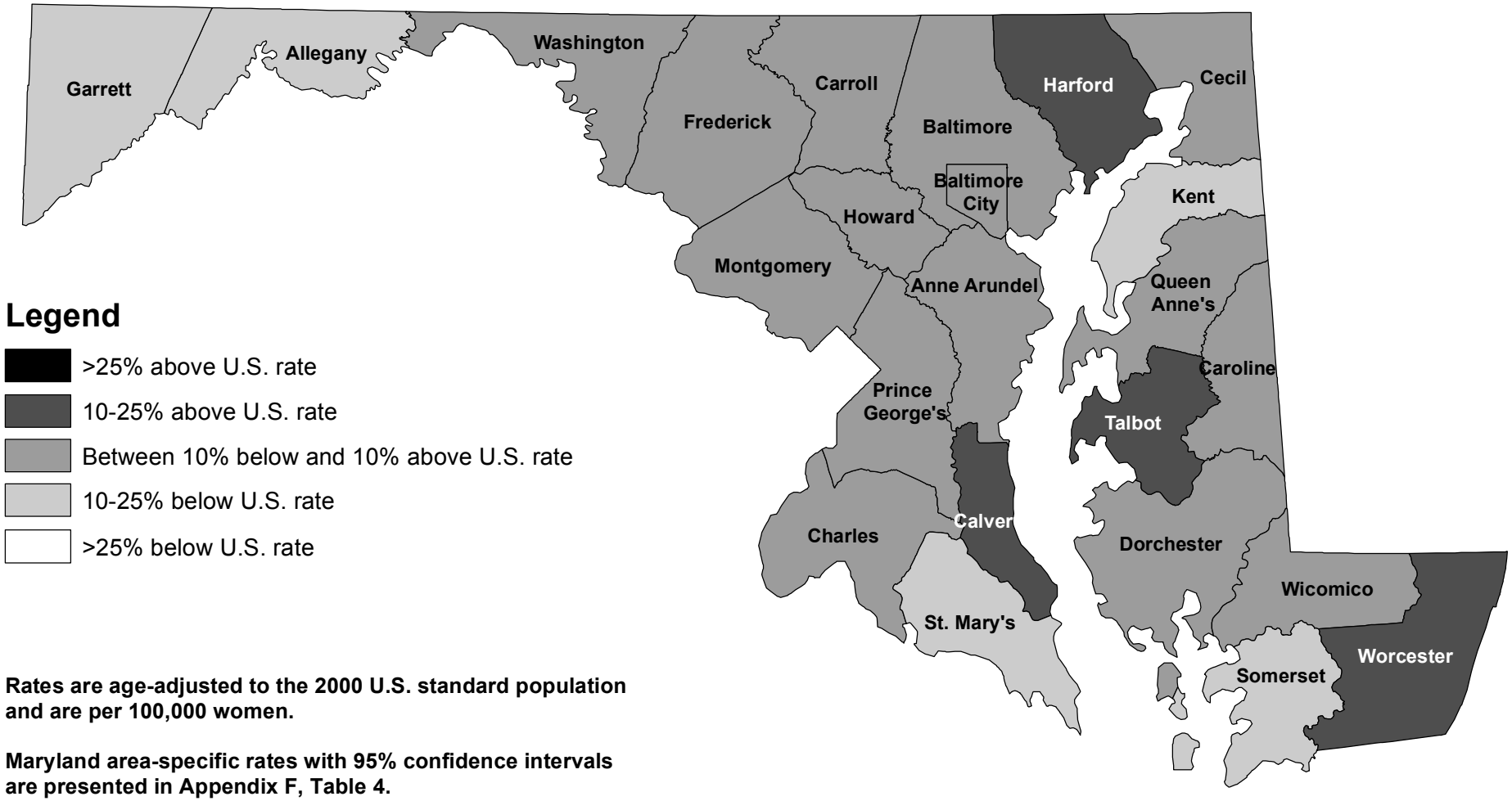
Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	23.8	21.8	30.4	9.2
Allegany	19.6	19.8	**	**
Anne Arundel	23.7	22.6	31.0	**
Baltimore City	29.0	23.8	31.7	**
Baltimore County	24.9	22.7	33.7	**
Calvert	24.6	25.2	**	**
Caroline	25.3	**	**	**
Carroll	22.2	22.5	**	**
Cecil	24.1	24.4	**	**
Charles	24.4	24.3	24.7	**
Dorchester	22.4	21.4	**	**
Frederick	22.5	22.0	**	**
Garrett	23.7	23.8	**	**
Harford	24.2	24.5	**	**
Howard	21.7	23.0	23.6	**
Kent	24.1	**	**	**
Montgomery	18.8	18.4	27.0	8.0
Prince George's	27.6	22.9	30.6	**
Queen Anne's	18.5	19.1	**	**
Saint Mary's	23.1	22.0	**	**
Somerset	**	**	**	**
Talbot	22.7	23.4	**	**
Washington	19.0	19.6	**	**
Wicomico	21.1	18.7	**	**
Worcester	28.9	25.8	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2008-2012.

Maryland Female Breast Cancer Incidence Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate

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

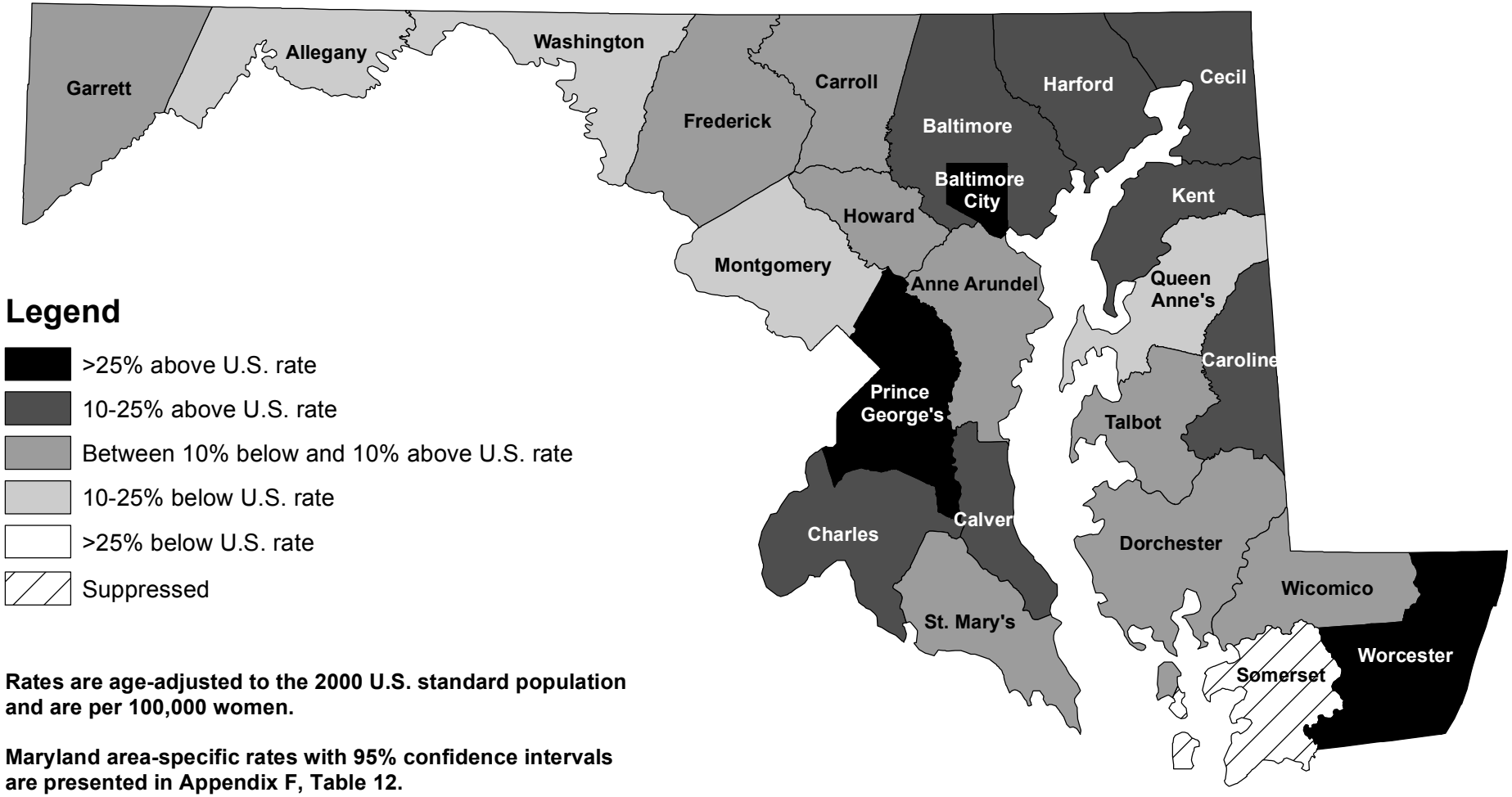
Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 4.

U.S. female breast cancer incidence rate, 2008-2012: 124.8 / 100,000

Maryland female breast cancer incidence rate, 2008-2012: 128.1/100,000

Sources: Maryland Cancer Registry
U.S. SEER, SEER*Stat Database

Maryland Female Breast Cancer Mortality Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



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

Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 12.

U.S. female breast cancer mortality rate, 2008-2012: 21.9 / 100,000

Maryland female breast cancer mortality rate, 2008-2012: 23.8 / 100,000

Source: NCHS Compressed Mortality File in CDC WONDER
U.S. SEER, Cancer Statistics Review

Note: Rates based on death counts of 0-19 are suppressed per DHMH / CCPC Mortality Data Suppression Policy.

D. Prostate Cancer

Incidence (New Cases)

In 2012, a total of 3,520 cases of prostate cancer were reported among men in Maryland. The age-adjusted prostate cancer incidence rate in Maryland for 2012 was 112.0 per 100,000 men (108.2–115.9, 95% C.I.), which is similar to the 2012 U.S. SEER age-adjusted prostate cancer incidence rate of 113.1 per 100,000 population (112.1–114.1, 95% C.I.).

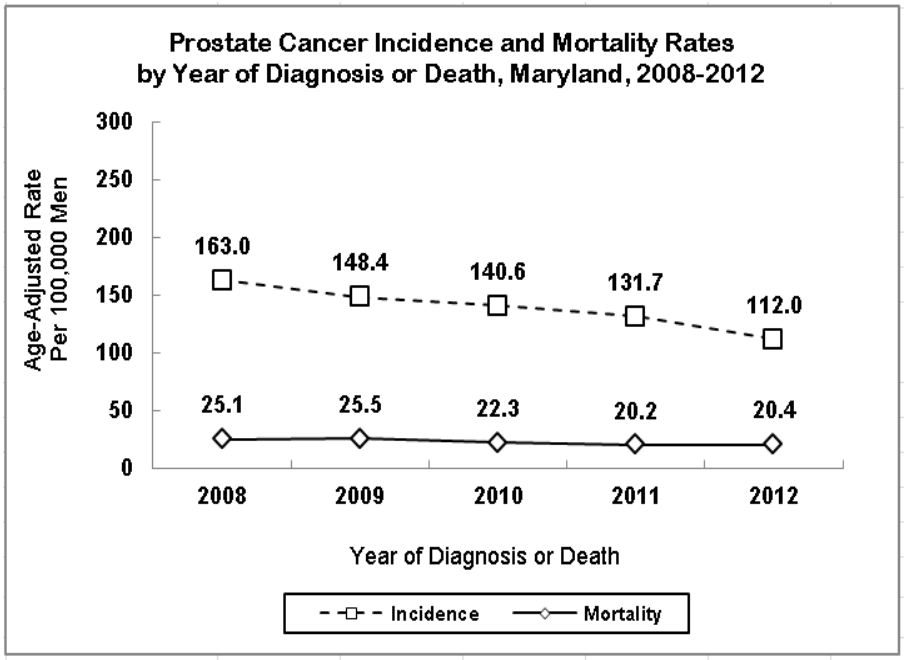
Mortality (Deaths)

Prostate cancer is the second leading cause of cancer death among men in Maryland after lung cancer. In 2012, 499 men died of prostate cancer in Maryland, accounting for 4.7% of all cancer deaths and 9.4% of cancer deaths among men in Maryland. The 2012 age-adjusted mortality rate for prostate cancer in Maryland was 20.4 per 100,000 men (18.6–22.2, 95% C.I.). This rate is statistically significantly higher than the 2012 U.S. prostate cancer mortality rate of 19.6 per 100,000 men (19.3–19.8, 95% C.I.). Maryland had the 19th highest prostate cancer mortality rate among the states and the District of Columbia for the period 2008-2012.

Table 38.
Prostate Cancer Incidence and Mortality Rates
by Race, Maryland and the United States, 2012

Incidence 2012	*Total*	*Whites*	*Blacks*	*Other*
New Cases (Count)	3,520	2,158	1,213	71
MD Incidence Rate	112.0	97.5	159.7	43.6
U.S. SEER Rate	113.1	104.2	179.3	58.0
Mortality 2012	*Total*	*Whites*	*Blacks*	*Other*
Deaths (Count)	499	317	s	s
MD Mortality Rate	20.4	17.4	35.4	**
U.S. Mortality Rate	19.6	18.1	41.8	N/A

Rates are per 100,000 men and are age-adjusted to 2000 U.S. standard population.
Total includes cases reported as unknown race.
s = Counts are suppressed to prevent disclosure of data in other cell(s) based on Table 41.
** MD mortality rates based on death counts of 0-19 are suppressed per DHMH / Center for Cancer Prevention and Control Mortality Data Suppression Policy
N/A = Data were not available.
Source: Maryland Cancer Registry
U.S. SEER, SEER*Stat
NCHS Compressed Mortality File in CDC WONDER, 2012
U.S. SEER, Cancer Statistics Review



Source: Maryland Cancer Registry
NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

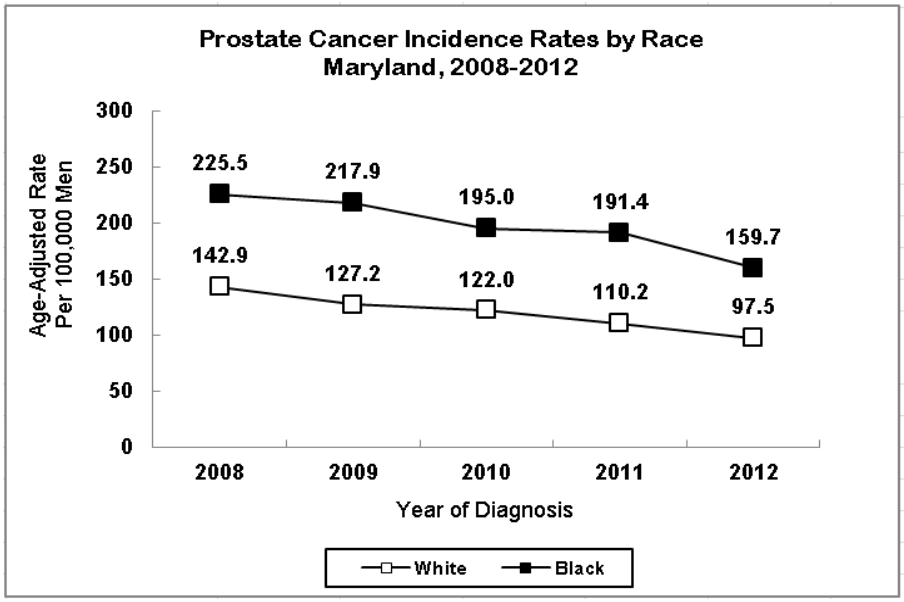
Incidence and Mortality Trends

The prostate cancer incidence rate in Maryland decreased at a rate of 8.3% per year from 2008 to 2012.

Prostate cancer mortality rates decreased from 2008 to 2012, with a yearly decline of 6.3%.

See Appendix G, Tables 1 and 2.

Incidence Trends by Race

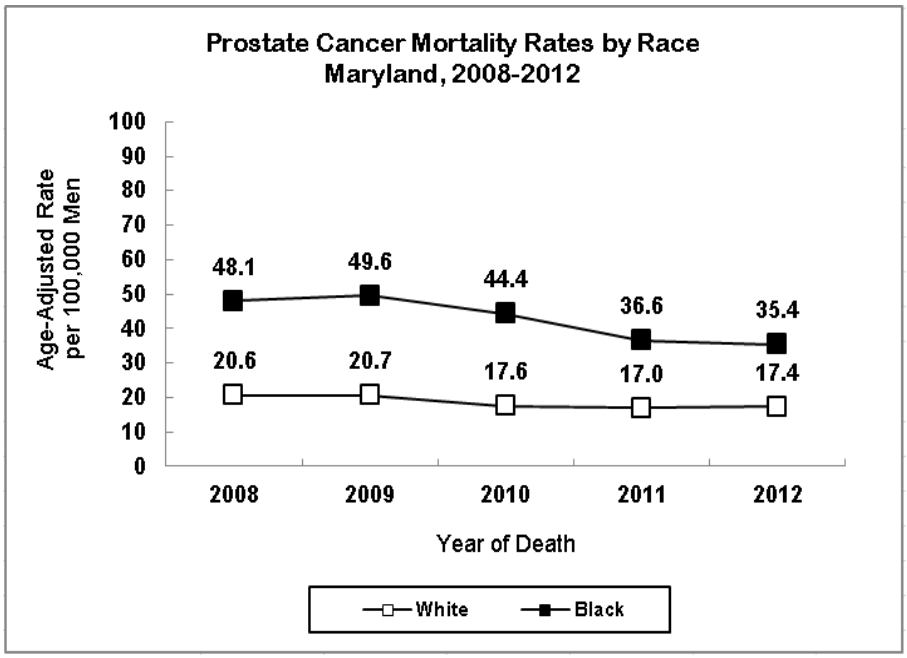


Source: Maryland Cancer Registry

From 2008 to 2012, black men had consistently higher prostate cancer incidence rates than white men.

During this 5-year period, incidence rates for black men decreased at a rate of 7.9% and decreased for white men at a rate of 8.7% per year, respectively.

See Appendix G, Table 3.



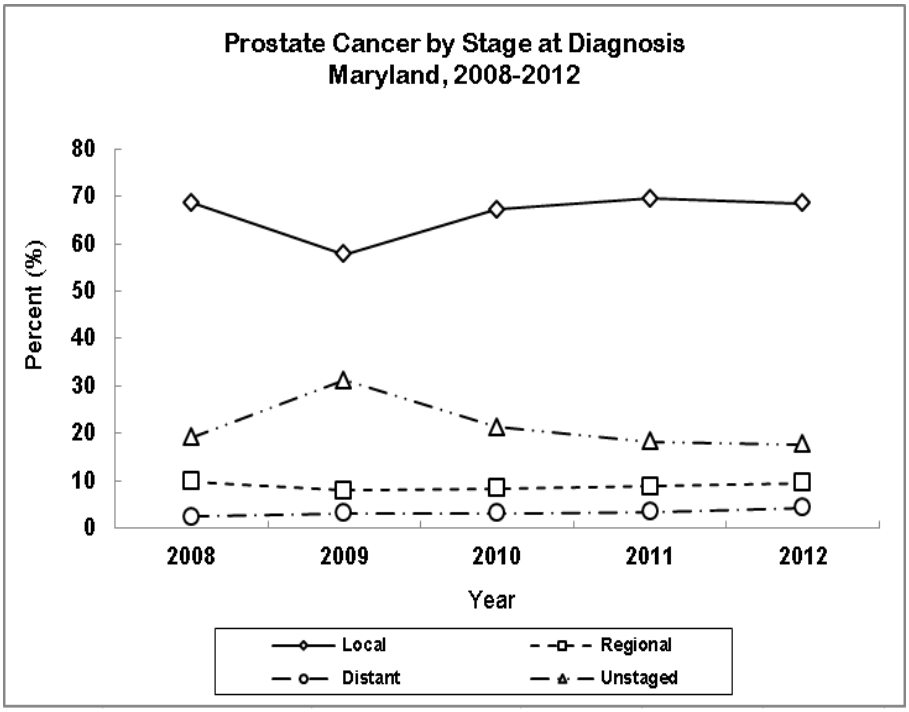
Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Mortality Trends by Race

From 2008 to 2012, black men had consistently higher prostate cancer mortality rates than white men.

During this 5-year period, mortality rates for black and white men declined at rates of 8.8% and 5.2%, respectively.

See Appendix G, Table 5.



Source: Maryland Cancer Registry

Stage at Diagnosis

Of prostate cancers diagnosed in Maryland in 2012, 68.5% were detected at the local stage, 9.5% were found at the regional stage, and 4.3% were diagnosed at the distant stage. The proportion of prostate cancers reported as unstaged decreased in 2012 to 17.7% of cases.

See Appendix H, Table 5.

Table 39.
Number of Prostate Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	3,520	2,158	1,213	71
Allegany	46	42	<6	0
Anne Arundel	346	271	66	<6
Baltimore City	378	85	286	<6
Baltimore County	542	376	150	11
Calvert	49	41	<6	<6
Caroline	27	19	8	0
Carroll	114	105	<6	<6
Cecil	62	58	<6	0
Charles	84	41	39	<6
Dorchester	36	27	9	0
Frederick	115	99	14	<6
Garrett	16	16	0	0
Harford	146	127	19	0
Howard	140	108	26	<6
Kent	24	19	<6	0
Montgomery	523	359	111	29
Prince George's	484	82	381	12
Queen Anne's	37	33	<6	0
Saint Mary's	50	35	10	<6
Somerset	18	11	7	0
Talbot	52	45	7	0
Washington	81	70	9	<6
Wicomico	69	46	23	0
Worcester	36	27	9	0

Total includes cases reported as unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 40.
Prostate Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	112.0	97.5	159.7	43.6
Allegany	92.6	88.7	**	0.0
Anne Arundel	117.1	107.8	182.0	**
Baltimore City	132.7	82.4	163.6	**
Baltimore County	116.0	103.6	176.9	**
Calvert	92.1	92.0	**	**
Caroline	134.8	111.1	**	0.0
Carroll	116.7	112.3	**	**
Cecil	110.3	110.0	**	0.0
Charles	111.7	83.1	167.9	**
Dorchester	160.7	153.1	**	0.0
Frederick	100.4	95.5	**	**
Garrett	78.7	79.3	0.0	0.0
Harford	98.6	97.6	130.2	0.0
Howard	87.5	91.1	130.0	**
Kent	152.7	140.2	**	0.0
Montgomery	98.0	92.7	161.1	39.7
Prince George's	118.5	70.3	140.4	**
Queen Anne's	110.7	108.2	**	0.0
Saint Mary's	88.2	71.1	**	**
Somerset	117.3	**	**	0.0
Talbot	156.9	152.0	**	0.0
Washington	90.4	84.4	**	**
Wicomico	131.1	113.5	208.2	0.0
Worcester	80.6	64.1	**	0.0

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 41.
Number of Deaths for Prostate Cancer by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	499	317	s	<10
Allegany	<10	<10	<10	<10
Anne Arundel	37	29	<10	<10
Baltimore City	77	s	62	<10
Baltimore County	70	56	s	<10
Calvert	10	<10	<10	<10
Caroline	<10	<10	<10	<10
Carroll	10	<10	<10	<10
Cecil	10	s	<10	<10
Charles	13	<10	<10	<10
Dorchester	<10	<10	<10	<10
Frederick	23	21	<10	<10
Garrett	<10	<10	<10	<10
Harford	16	15	<10	<10
Howard	18	11	<10	<10
Kent	<10	<10	<10	<10
Montgomery	75	62	s	<10
Prince George's	69	s	51	<10
Queen Anne's	<10	<10	<10	<10
Saint Mary's	<10	<10	<10	<10
Somerset	<10	<10	<10	<10
Talbot	<10	<10	<10	<10
Washington	15	s	<10	<10
Wicomico	<10	<10	<10	<10
Worcester	<10	<10	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2012.

Table 42.
Prostate Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	20.4	17.4	35.4	**
Allegany	**	**	**	**
Anne Arundel	16.4	14.7	**	**
Baltimore City	32.9	**	45.3	**
Baltimore County	16.7	15.5	**	**
Calvert	**	**	**	**
Caroline	**	**	**	**
Carroll	**	**	**	**
Cecil	**	**	**	**
Charles	**	**	**	**
Dorchester	**	**	**	**
Frederick	25.2	25.2	**	**
Garrett	**	**	**	**
Harford	**	**	**	**
Howard	**	**	**	**
Kent	**	**	**	**
Montgomery	17.4	18.4	**	**
Prince George's	25.7	**	32.5	**
Queen Anne's	**	**	**	**
Saint Mary's	**	**	**	**
Somerset	**	**	**	**
Talbot	**	**	**	**
Washington	**	**	**	**
Wicomico	**	**	**	**
Worcester	**	**	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2012.

Table 43.
Number of Prostate Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	20,238	12,478	6,645	428
Allegany	313	283	26	<6
Anne Arundel	2,067	1,660	358	16
Baltimore City	1,997	494	1,443	10
Baltimore County	2,683	1,865	703	32
Calvert	270	213	48	<6
Caroline	119	95	22	0
Carroll	510	456	30	<6
Cecil	319	301	16	0
Charles	461	245	194	8
Dorchester	155	113	42	0
Frederick	676	572	79	9
Garrett	87	86	0	0
Harford	895	741	124	9
Howard	877	621	182	31
Kent	117	90	26	0
Montgomery	3,321	2,253	621	221
Prince George's	3,027	574	2,293	68
Queen Anne's	201	183	18	0
Saint Mary's	268	205	51	<6
Somerset	108	68	36	<6
Talbot	248	217	28	0
Washington	450	401	41	<6
Wicomico	437	306	123	<6
Worcester	337	277	51	<6

Total includes cases reported as unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 44.
Prostate Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	138.3	119.3	196.2	58.4
Allegany	134.3	126.3	363.3	**
Anne Arundel	146.4	137.0	223.1	45.4
Baltimore City	143.9	95.8	171.1	**
Baltimore County	122.2	107.6	190.3	38.5
Calvert	120.0	110.7	170.5	**
Caroline	127.2	116.8	182.9	0.0
Carroll	107.3	100.3	195.1	**
Cecil	119.0	118.8	124.4	0.0
Charles	140.3	110.0	206.7	**
Dorchester	146.8	137.6	176.3	0.0
Frederick	122.0	113.8	226.6	**
Garrett	85.5	85.2	0.0	0.0
Harford	136.4	126.7	222.9	**
Howard	121.1	113.8	196.3	35.5
Kent	160.5	144.1	262.0	0.0
Montgomery	135.7	125.2	207.8	65.2
Prince George's	165.4	99.7	200.4	76.7
Queen Anne's	132.3	130.9	166.0	0.0
Saint Mary's	100.9	90.6	150.5	**
Somerset	145.2	122.6	203.5	**
Talbot	160.7	158.4	164.8	0.0
Washington	110.6	105.5	193.7	**
Wicomico	178.6	160.5	256.8	**
Worcester	158.7	143.5	260.9	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 45.
Number of Deaths for Prostate Cancer by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	2,565	1,596	944	25
Allegany	26	25	<10	<10
Anne Arundel	207	162	s	<10
Baltimore City	407	s	325	<10
Baltimore County	392	305	s	<10
Calvert	38	25	s	<10
Caroline	13	10	<10	<10
Carroll	64	62	<10	<10
Cecil	48	46	<10	<10
Charles	57	s	35	<10
Dorchester	21	12	<10	<10
Frederick	94	82	s	<10
Garrett	18	s	<10	<10
Harford	84	69	15	<10
Howard	77	51	s	<10
Kent	23	21	<10	<10
Montgomery	343	273	55	15
Prince George's	368	s	260	<10
Queen Anne's	28	26	<10	<10
Saint Mary's	42	26	s	<10
Somerset	13	<10	<10	<10
Talbot	41	34	<10	<10
Washington	64	62	<10	<10
Wicomico	52	40	s	<10
Worcester	45	30	s	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2008-2012.

Table 46.
Prostate Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

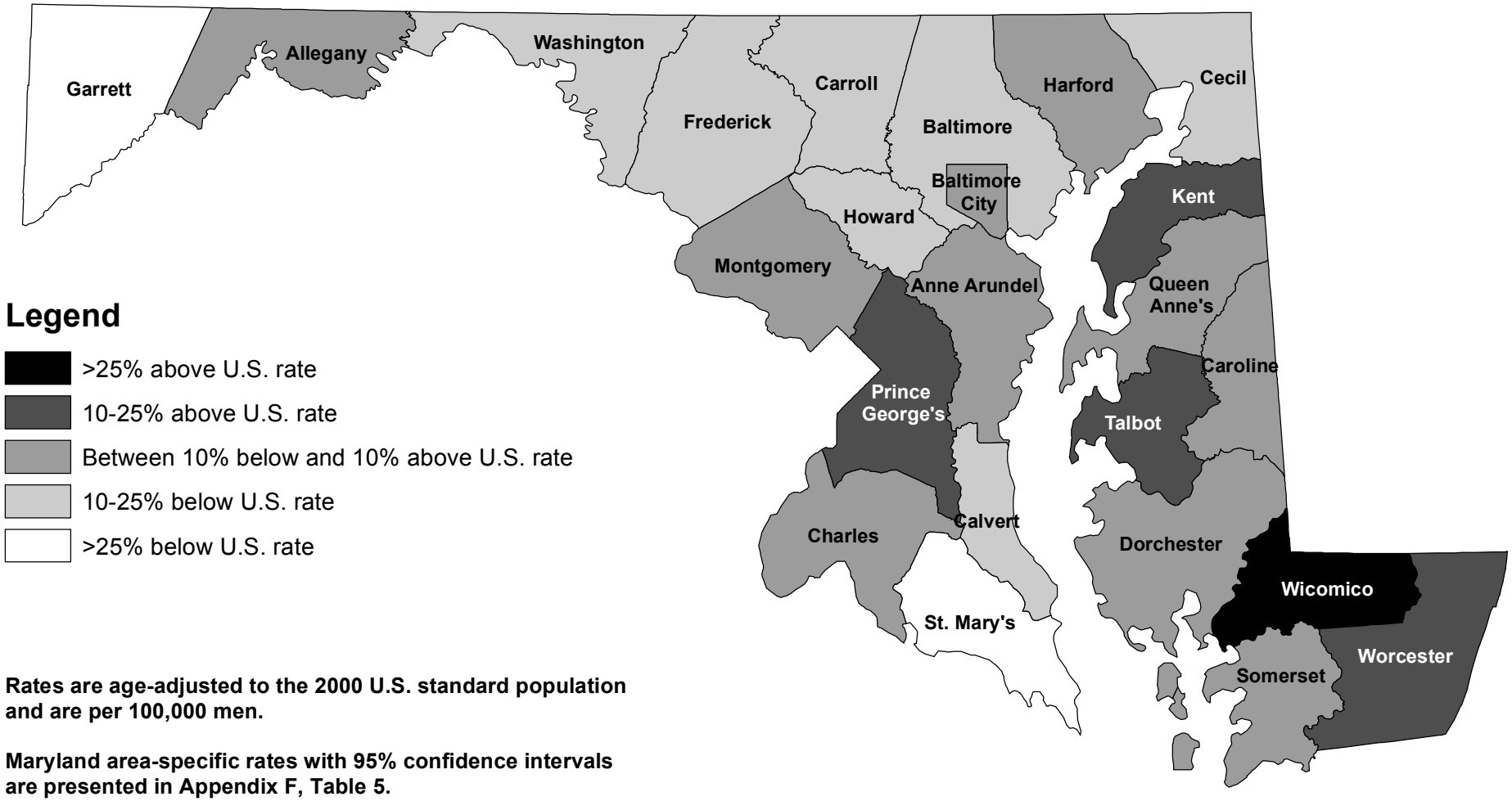
Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	22.5	18.4	42.3	5.2
Allegany	12.1	11.9	**	**
Anne Arundel	20.1	18.0	39.7	**
Baltimore City	36.0	17.3	50.1	**
Baltimore County	19.6	17.6	37.7	**
Calvert	24.5	18.7	**	**
Caroline	**	**	**	**
Carroll	18.5	18.6	**	**
Cecil	27.1	27.4	**	**
Charles	25.5	14.7	62.1	**
Dorchester	22.4	**	**	**
Frederick	21.9	20.9	**	**
Garrett	**	**	**	**
Harford	18.7	16.9	**	**
Howard	18.0	16.6	41.1	**
Kent	32.2	33.1	**	**
Montgomery	16.8	16.8	27.7	**
Prince George's	31.0	23.2	39.1	**
Queen Anne's	26.7	26.9	**	**
Saint Mary's	21.9	16.5	**	**
Somerset	**	**	**	**
Talbot	28.6	26.3	**	**
Washington	19.0	18.9	**	**
Wicomico	25.6	24.3	**	**
Worcester	22.9	16.4	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2008-2012.

Maryland Prostate Cancer Incidence Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate

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

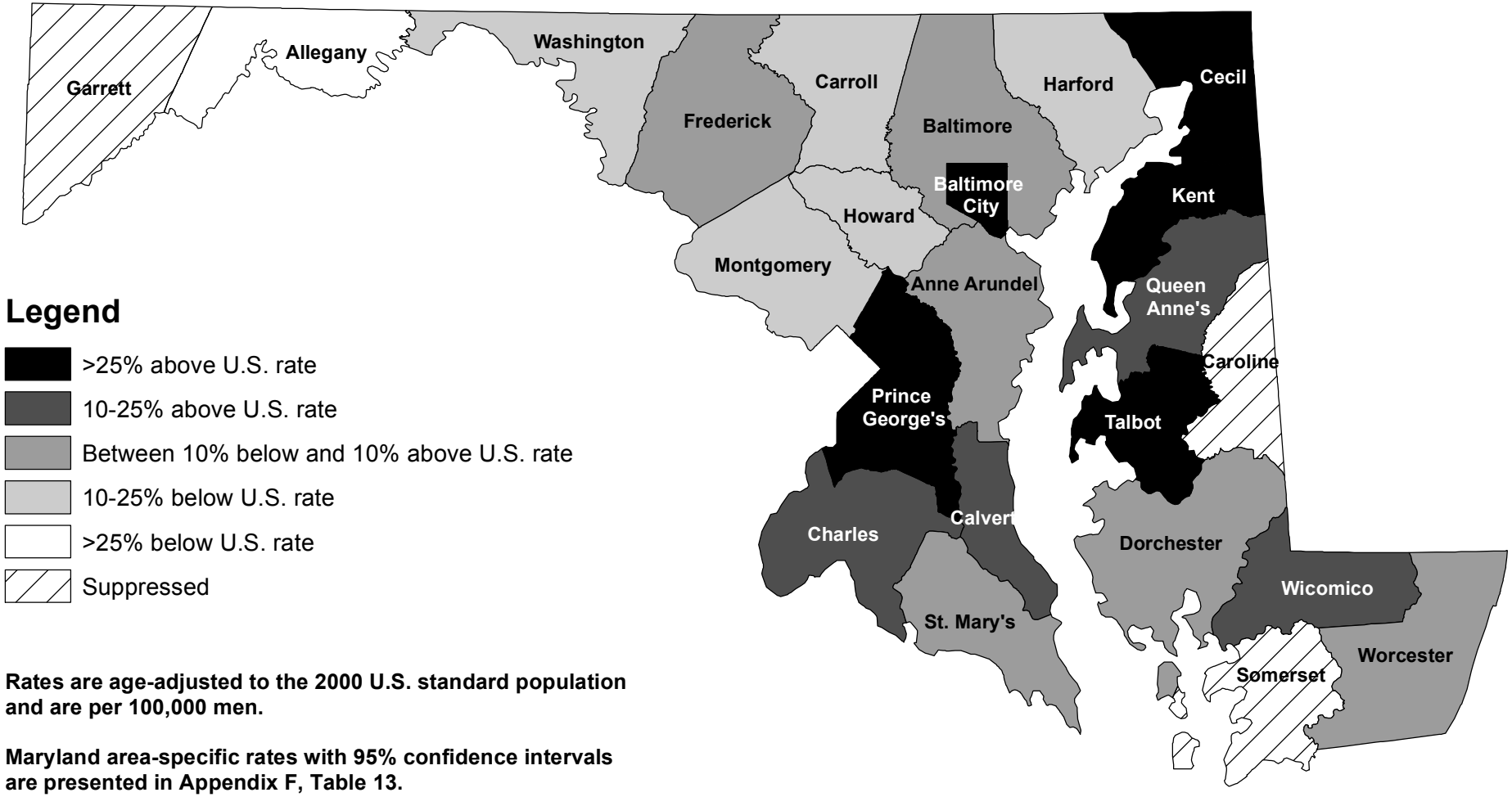
Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 5.

U.S. prostate cancer incidence rate, 2008-2012: 137.9 / 100,000

Maryland prostate cancer incidence rate, 2008-2012: 138.3 / 100,000

Sources: Maryland Cancer Registry
U.S. SEER, SEER*Stat Database

Maryland Prostate Cancer Mortality Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate
- Suppressed

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

Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 13.

U.S. prostate cancer mortality rate, 2008-2012: 21.4 / 100,000

Maryland prostate cancer mortality rate, 2008-2012: 22.5 / 100,000

Source: NCHS Compressed Mortality File in CDC WONDER
U.S. SEER, Cancer Statistics Review

Note: Rates based on death counts of 0-19 are suppressed per DHMH / CCPC Mortality Data Suppression Policy.

E. Oral Cancer

Incidence (New Cases)

In 2012, a total of 710 cases of cancer of the oral cavity and pharynx (called oral cancer) were reported in Maryland. The age-adjusted incidence rate for oral cancer in Maryland in 2012 was 10.5 per 100,000 population (9.7–11.3, 95% C.I.), which is statistically significantly less than the 2012 U.S. SEER age-adjusted oral cancer incidence rate of 10.9 per 100,000 population (10.7–11.1, 95% C.I.).

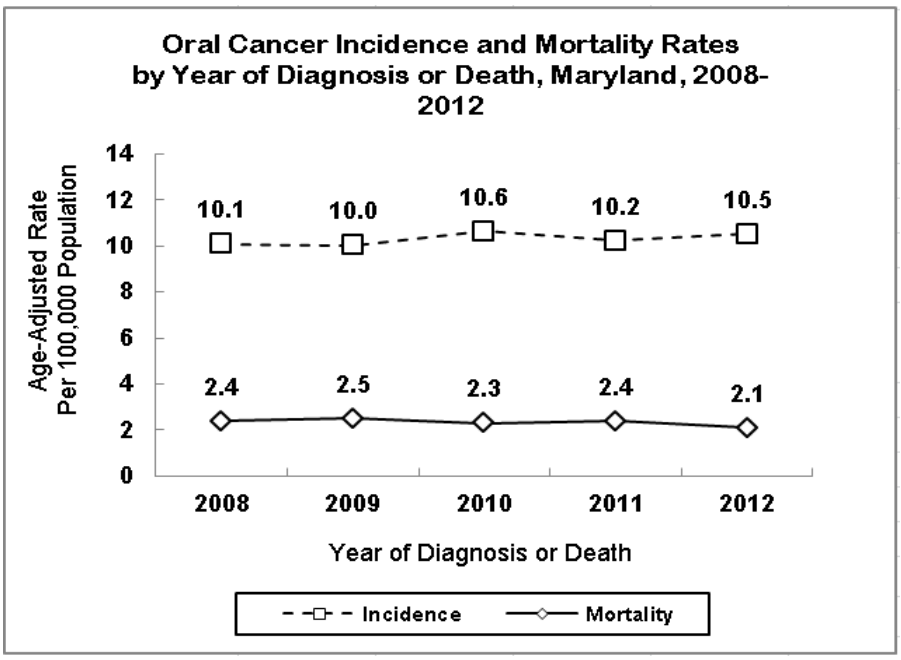
Mortality (Deaths)

In 2012, 138 persons in Maryland died of oral cancer. The 2012 age-adjusted mortality rate for oral cancer in Maryland was 2.1 per 100,000 population (1.7–2.5, 95% C.I.), which accounted for 1.3% of Maryland cancer deaths in 2012. This rate is lower than the U.S. oral cancer mortality rate of 2.5 per 100,000 population (2.4–2.5, 95% C.I.). Maryland had the 33rd highest oral cancer mortality among the states and the District of Columbia for the period 2008-2012.

Table 47.
Oral Cancer Incidence and Mortality Rates
by Gender and Race, Maryland and the United States, 2012

Incidence 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
New Cases (Count)	710	492	218	538	148	17
MD Incidence Rate	10.5	15.7	6.2	11.7	8.3	4.5
U.S. SEER Rate	10.9	16.3	6.2	11.4	9.1	7.4
Mortality 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
Deaths (Count)	138	97	41	93	s	s
MD Mortality Rate	2.1	3.2	1.1	2.0	2.6	**
U.S. Mortality Rate	2.5	3.9	1.4	2.5	2.9	N/A

Rates are per 100,000 population and are age-adjusted to 2000 U.S. standard population.
Total also includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.
s = Counts are suppressed to prevent disclosure of data in other cell(s) based on Table 50.
** MD mortality rates based on death counts of 0-19 are suppressed per DHMH / Center for Cancer Prevention and Control Mortality Data Suppression Policy
N/A = Data were not available.
Source: Maryland Cancer Registry
U.S. SEER, SEER*Stat
NCHS Compressed Mortality File in CDC WONDER, 2012
U.S. SEER, Cancer Statistics Review



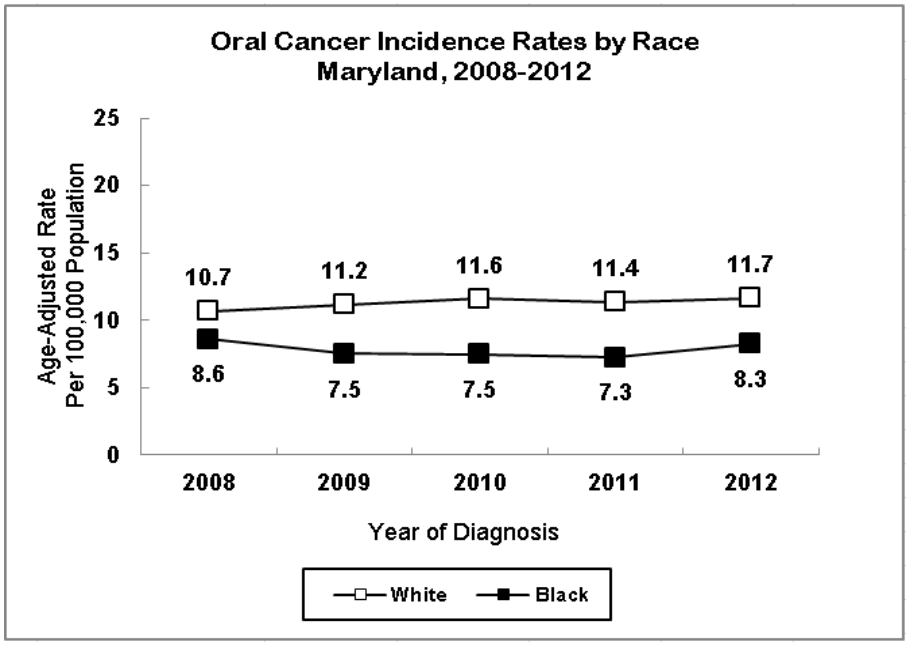
Source: Maryland Cancer Registry
NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Incidence and Mortality Trends

The incidence of oral cancer in Maryland increased at a rate of 1.0% per year from 2008 to 2012.

Oral cancer mortality rates have decreased from 2008 to 2012, with a rate decrease of 3.0% annually.

See Appendix G, Tables 1 and 2.

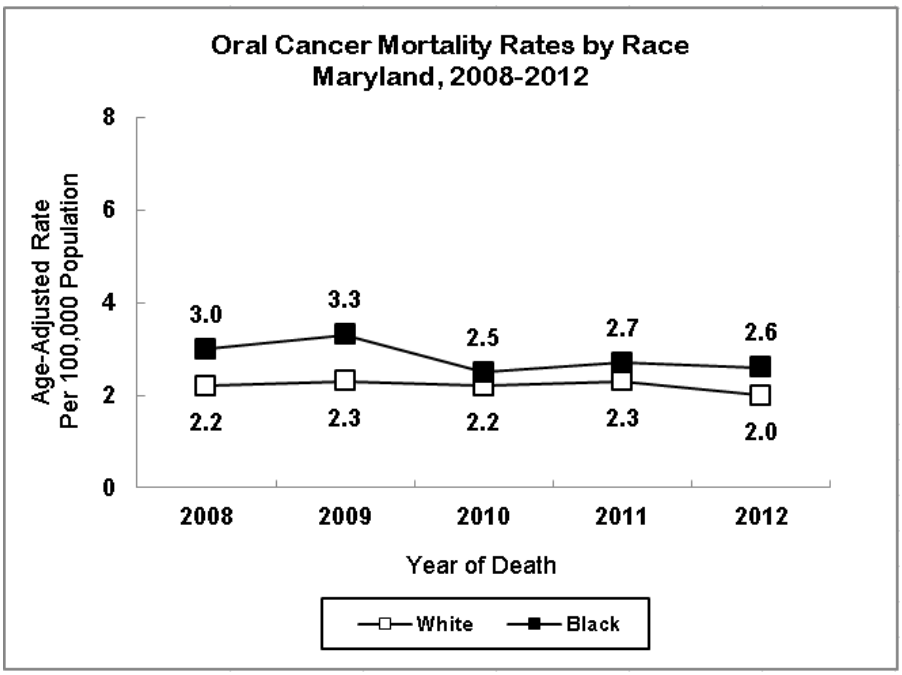


Source: Maryland Cancer Registry

Incidence Trends by Race

Over the 5-year period from 2008 to 2012, oral cancer incidence rates in Maryland decreased at a rate of 1.2% per year for blacks, and increased 2.0% per year for whites.

See Appendix G, Table 3.

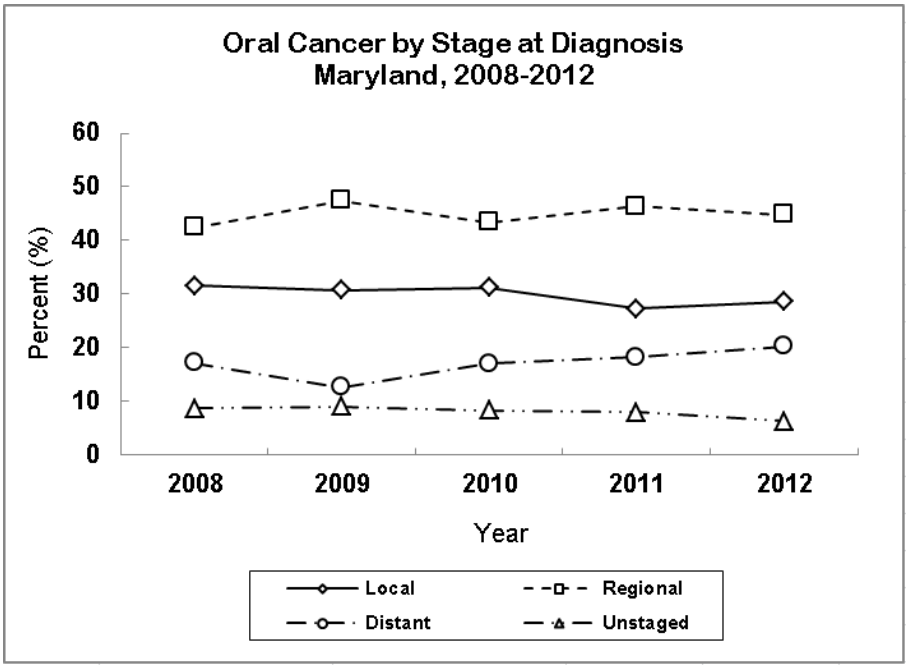


Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Mortality Trends by Race

Over the 5-year period from 2008 to 2012, oral cancer mortality rates decreased at a rate of 4.8% per year for blacks and 1.9% per year for whites.

See Appendix G, Table 5.



Source: Maryland Cancer Registry

Stage at Diagnosis

In 2012, 28.6% of oral cancers in Maryland were diagnosed at the local stage, 44.8% at the regional stage, and 20.3% at the distant stage. From 2008 to 2012, the proportion of oral cancers reported as unstaged gradually decreased.

See Appendix H, Table 6.

Table 48.
Number of Oral Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	710	492	218	538	148	17
Allegany	11	8	<6	11	0	0
Anne Arundel	84	62	22	75	8	0
Baltimore City	88	62	26	34	54	0
Baltimore County	112	76	36	99	12	0
Calvert	16	13	<6	15	0	0
Caroline	7	7	0	7	0	0
Carroll	21	17	<6	s	<6	0
Cecil	21	17	<6	19	<6	0
Charles	15	10	<6	9	<6	<6
Dorchester	7	<6	<6	7	0	0
Frederick	24	18	6	19	<6	<6
Garrett	7	<6	<6	7	0	0
Harford	31	20	11	s	<6	0
Howard	39	23	16	33	<6	<6
Kent	6	<6	<6	<6	<6	0
Montgomery	89	57	32	58	15	13
Prince George's	60	41	19	24	36	0
Queen Anne's	7	<6	<6	7	0	0
Saint Mary's	13	7	6	s	<6	0
Somerset	6	<6	<6	<6	<6	0
Talbot	6	<6	<6	6	0	0
Washington	17	12	<6	17	0	0
Wicomico	10	6	<6	7	<6	0
Worcester	10	s	<6	s	<6	0

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 49.
Oral Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	10.5	15.7	6.2	11.7	8.3	4.5
Allegany	**	**	**	**	0.0	0.0
Anne Arundel	13.6	21.5	7.0	14.5	**	0.0
Baltimore City	13.9	22.2	7.7	16.2	13.3	0.0
Baltimore County	11.0	16.7	6.2	12.8	**	0.0
Calvert	15.6	**	**	**	0.0	0.0
Caroline	**	**	0.0	**	0.0	0.0
Carroll	11.2	19.7	**	11.4	**	0.0
Cecil	16.6	26.1	**	16.1	**	0.0
Charles	**	**	**	**	**	**
Dorchester	**	**	**	**	0.0	0.0
Frederick	8.6	13.6	**	7.4	**	**
Garrett	**	**	**	**	0.0	0.0
Harford	10.2	13.8	**	11.6	**	0.0
Howard	11.4	13.6	9.4	14.0	**	**
Kent	**	**	**	**	**	0.0
Montgomery	7.8	10.7	5.6	7.0	**	**
Prince George's	6.4	9.9	3.6	9.8	5.4	0.0
Queen Anne's	**	**	**	**	0.0	0.0
Saint Mary's	**	**	**	**	**	0.0
Somerset	**	**	**	**	**	0.0
Talbot	**	**	**	**	0.0	0.0
Washington	9.1	**	**	9.7	0.0	0.0
Wicomico	**	**	**	**	**	0.0
Worcester	**	**	**	**	**	0.0

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 50.
Number of Deaths for Oral Cancer by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	138	97	41	93	s	<10
Allegany	<10	<10	<10	<10	<10	<10
Anne Arundel	14	s	<10	<10	<10	<10
Baltimore City	23	s	<10	<10	15	<10
Baltimore County	19	s	<10	16	<10	<10
Calvert	<10	<10	<10	<10	<10	<10
Caroline	<10	<10	<10	<10	<10	<10
Carroll	<10	<10	<10	<10	<10	<10
Cecil	<10	<10	<10	<10	<10	<10
Charles	<10	<10	<10	<10	<10	<10
Dorchester	<10	<10	<10	<10	<10	<10
Frederick	<10	<10	<10	<10	<10	<10
Garrett	<10	<10	<10	<10	<10	<10
Harford	<10	<10	<10	<10	<10	<10
Howard	<10	<10	<10	<10	<10	<10
Kent	<10	<10	<10	<10	<10	<10
Montgomery	<10	<10	<10	<10	<10	<10
Prince George's	16	s	<10	<10	12	<10
Queen Anne's	<10	<10	<10	<10	<10	<10
Saint Mary's	<10	<10	<10	<10	<10	<10
Somerset	<10	<10	<10	<10	<10	<10
Talbot	<10	<10	<10	<10	<10	<10
Washington	<10	<10	<10	<10	<10	<10
Wicomico	<10	<10	<10	<10	<10	<10
Worcester	<10	<10	<10	<10	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2012.

Table 51.
Oral Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	2.1	3.2	1.1	2.0	2.6	**
Allegany	**	**	**	**	**	**
Anne Arundel	**	**	**	**	**	**
Baltimore City	3.6	**	**	**	**	**
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	**	**	**	**	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2012.

Table 52.
Number of Oral Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	3,283	2,299	982	2,488	648	103
Allegany	59	41	18	s	<6	0
Anne Arundel	371	267	104	330	32	<6
Baltimore City	423	299	122	164	254	<6
Baltimore County	480	337	143	414	57	8
Calvert	67	46	21	60	6	0
Caroline	23	16	7	s	<6	0
Carroll	98	75	23	94	<6	0
Cecil	78	59	19	70	<6	<6
Charles	77	56	21	59	16	<6
Dorchester	29	22	7	24	<6	0
Frederick	124	89	35	112	9	<6
Garrett	21	12	9	21	0	0
Harford	148	112	36	138	8	<6
Howard	155	102	53	126	12	14
Kent	18	6	12	16	<6	0
Montgomery	419	274	145	304	46	52
Prince George's	313	220	93	139	158	9
Queen Anne's	34	24	10	s	<6	0
Saint Mary's	57	36	21	51	<6	0
Somerset	19	15	<6	14	<6	0
Talbot	32	20	12	27	<6	0
Washington	98	70	28	95	<6	0
Wicomico	56	39	17	48	8	0
Worcester	50	39	11	42	<6	<6

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 53.
Oral Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	10.3	15.7	5.8	11.3	7.8	5.8
Allegany	13.0	18.5	7.3	13.3	**	0.0
Anne Arundel	12.8	19.7	6.9	13.6	8.3	**
Baltimore City	13.0	21.1	6.7	14.9	12.0	**
Baltimore County	10.2	15.9	5.5	11.4	6.1	**
Calvert	13.6	19.5	8.2	14.3	**	0.0
Caroline	12.6	19.2	**	14.3	**	0.0
Carroll	9.9	15.8	4.4	9.9	**	0.0
Cecil	13.3	20.1	6.9	12.9	**	**
Charles	10.9	16.5	6.1	12.6	7.9	**
Dorchester	12.6	22.7	**	13.7	**	0.0
Frederick	9.8	15.1	5.3	9.9	**	**
Garrett	11.0	**	**	11.1	0.0	0.0
Harford	10.2	16.7	4.8	10.9	**	**
Howard	10.0	13.2	6.8	11.2	**	**
Kent	11.5	**	**	11.6	**	0.0
Montgomery	7.7	11.1	5.0	7.7	6.1	6.3
Prince George's	7.5	11.8	4.1	11.3	5.8	**
Queen Anne's	10.4	16.0	**	11.2	**	0.0
Saint Mary's	10.0	12.7	7.3	10.7	**	0.0
Somerset	11.8	**	**	**	**	0.0
Talbot	10.0	14.3	**	9.6	**	0.0
Washington	11.3	17.4	6.0	11.7	**	0.0
Wicomico	10.6	16.2	6.2	12.2	**	0.0
Worcester	13.8	22.9	**	12.5	**	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 54.
Number of Deaths for Oral Cancer by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	725	491	234	485	215	25
Allegany	15	<10	<10	s	<10	<10
Anne Arundel	87	56	31	68	s	<10
Baltimore City	118	77	41	s	81	<10
Baltimore County	98	55	43	75	s	<10
Calvert	15	s	<10	14	<10	<10
Caroline	<10	<10	<10	<10	<10	<10
Carroll	14	<10	<10	12	<10	<10
Cecil	13	s	<10	12	<10	<10
Charles	20	s	<10	16	<10	<10
Dorchester	<10	<10	<10	<10	<10	<10
Frederick	16	s	<10	12	<10	<10
Garrett	<10	<10	<10	<10	<10	<10
Harford	33	s	<10	30	<10	<10
Howard	20	s	<10	19	<10	<10
Kent	<10	<10	<10	<10	<10	<10
Montgomery	71	43	28	54	<10	s
Prince George's	100	72	28	s	65	<10
Queen Anne's	<10	<10	<10	<10	<10	<10
Saint Mary's	12	s	<10	s	<10	<10
Somerset	<10	<10	<10	<10	<10	<10
Talbot	13	<10	<10	10	<10	<10
Washington	22	s	<10	20	<10	<10
Wicomico	22	s	<10	18	<10	<10
Worcester	12	s	<10	10	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2008-2012.

Table 55.
Oral Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

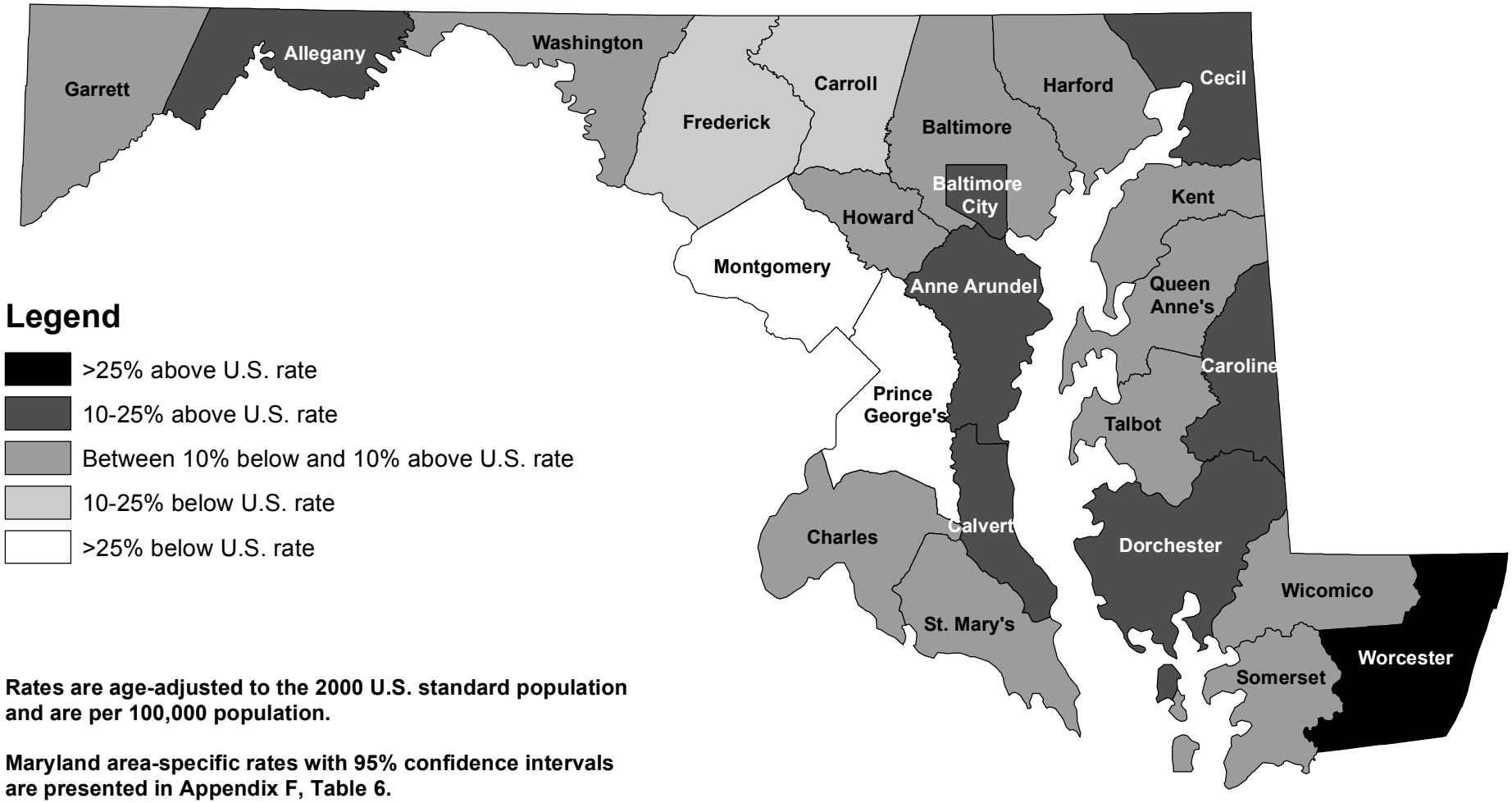
Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	2.3	3.6	1.3	2.2	2.8	1.5
Allegany	**	**	**	**	**	**
Anne Arundel	3.0	4.3	1.9	2.8	**	**
Baltimore City	3.7	5.7	2.2	3.3	3.9	**
Baltimore County	2.0	2.7	1.4	1.9	**	**
Calvert	**	**	**	**	**	**
Caroline	**	**	**	**	**	**
Carroll	**	**	**	**	**	**
Cecil	**	**	**	**	**	**
Charles	3.3	**	**	**	**	**
Dorchester	**	**	**	**	**	**
Frederick	**	**	**	**	**	**
Garrett	**	**	**	**	**	**
Harford	2.4	4.5	**	2.5	**	**
Howard	1.4	**	**	**	**	**
Kent	**	**	**	**	**	**
Montgomery	1.4	1.9	0.9	1.4	**	**
Prince George's	2.6	4.2	1.4	2.8	2.8	**
Queen Anne's	**	**	**	**	**	**
Saint Mary's	**	**	**	**	**	**
Somerset	**	**	**	**	**	**
Talbot	**	**	**	**	**	**
Washington	2.5	**	**	2.4	**	**
Wicomico	4.0	**	**	**	**	**
Worcester	**	**	**	**	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2008-2012.

Maryland Oral Cancer Incidence Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate

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

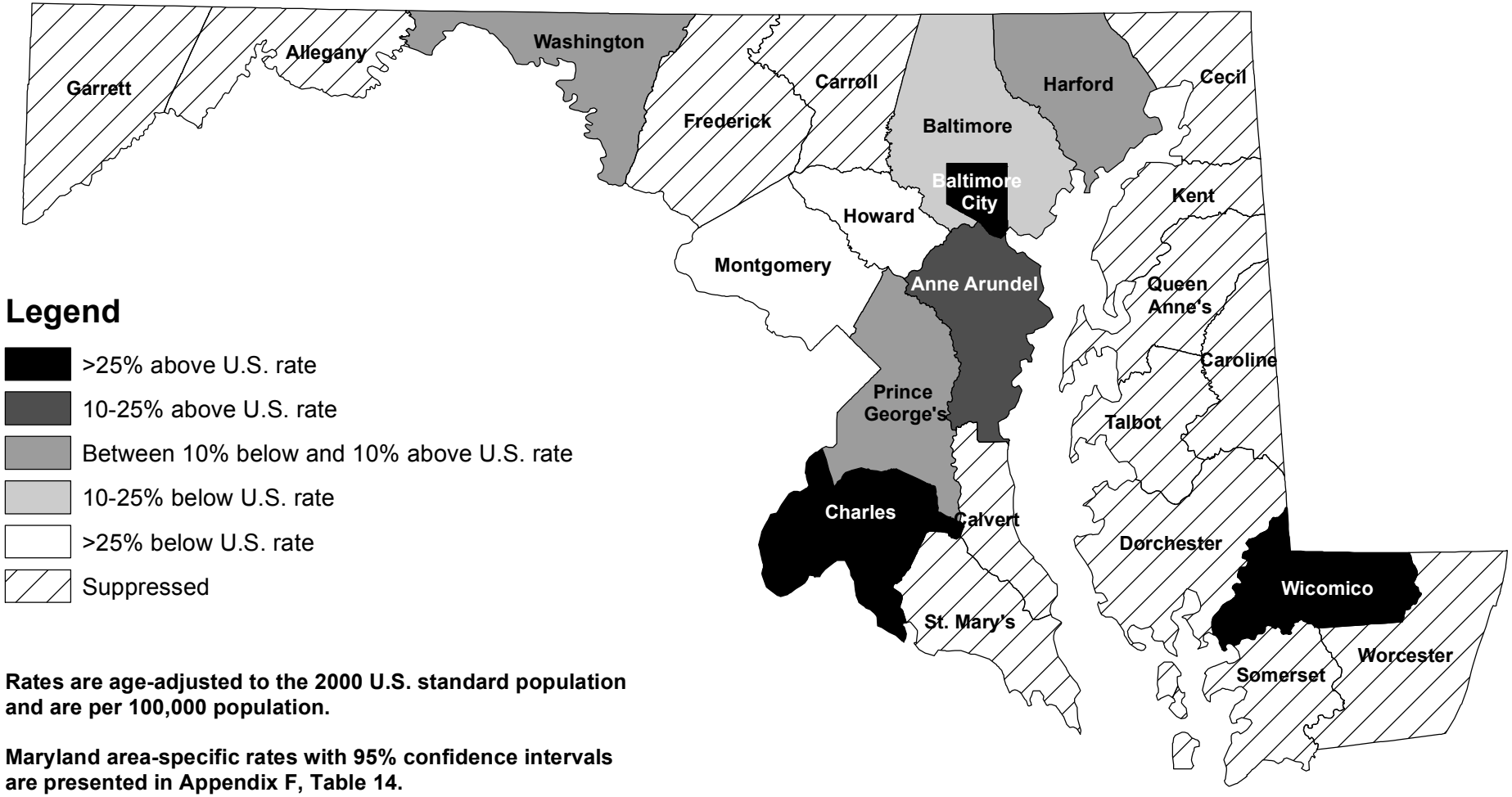
Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 6.

U.S. oral cancer incidence rate, 2008-2012: 11.0 / 100,000

Maryland oral cancer incidence rate, 2008-2012: 10.3 / 100,000

Sources: Maryland Cancer Registry
U.S. SEER, SEER*Stat Database

Maryland Oral Cancer Mortality Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate
- Suppressed

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

Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 14.

U.S. oral cancer mortality rate, 2008-2012: 2.5 / 100,000

Maryland oral cancer mortality rate, 2008-2012: 2.3 / 100,000

Source: NCHS Compressed Mortality File in CDC WONDER
U.S. SEER, Cancer Statistics Review

Note: Rates based on death counts of 0-19 are suppressed per DHMH / CCPC Mortality Data Suppression Policy.

F. Melanoma of the Skin

There are three major types of skin cancer: 1) basal cell carcinoma, 2) squamous cell carcinoma, and 3) melanoma. Basal cell and squamous cell carcinoma are the most common forms of skin cancer and are not reportable to the Maryland Cancer Registry (MCR). Melanoma is the least frequent, but the most serious type of skin cancer and is reportable to the MCR.

Incidence (New Cases)

In 2012, a total of 1,320 cases of melanoma of the skin were reported in Maryland. The age-adjusted incidence rate for melanoma for 2012 was 20.7 per 100,000 population (19.6–21.9, 95% C.I.), which is statistically significantly lower than the 2012 U.S. SEER age-adjusted melanoma incidence rate of 22.0 per 100,000 population (21.6–22.3, 95% C.I.).

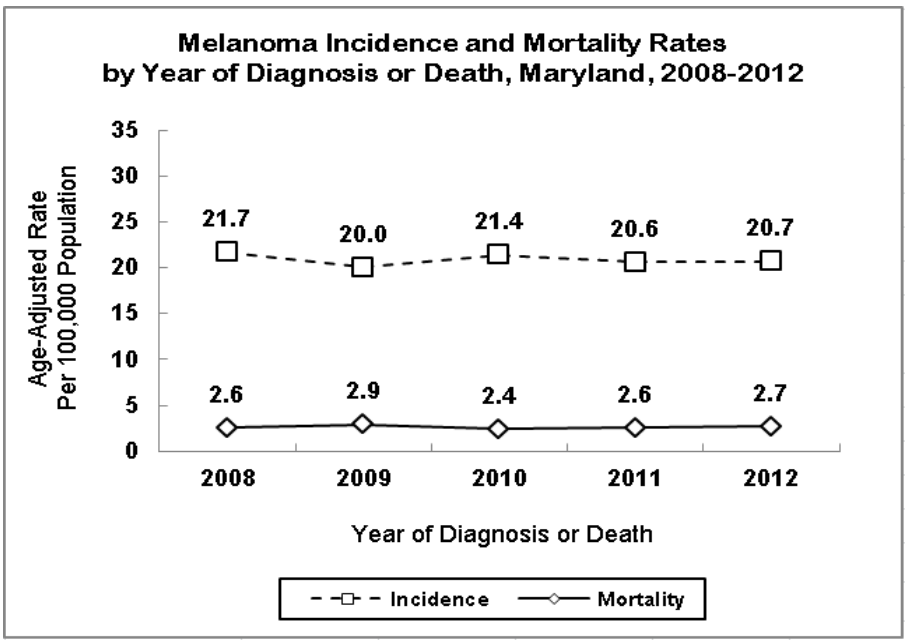
Mortality (Deaths)

In 2012, a total of 169 persons died of melanoma in Maryland. The 2012 age-adjusted mortality rate for melanoma in Maryland was 2.7 per 100,000 population (2.3–3.1, 95% C.I.). This rate is similar to the 2012 U.S. melanoma of the skin mortality rate of 2.7 per 100,000 population (2.6-2.7, 95% C.I.). Maryland had the 34th highest melanoma cancer mortality rate among the states and the District of Columbia for the period 2008-2012.

Table 56.
Melanoma Incidence and Mortality Rates
by Gender and Race, Maryland and the United States, 2012

Incidence 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
New Cases (Count)	1,320	794	524	1,288	13	<6
MD Incidence Rate	20.7	27.9	15.5	29.9	**	**
U.S. SEER Rate	22.0	28.7	17.0	26.1	1.2	1.5
Mortality 2012	*Total*	*Males*	*Females*	*Whites*	*Blacks*	*Other*
Deaths (Count)	169	111	58	160	s	s
MD Mortality Rate	2.7	4.2	1.6	3.6	**	**
U.S. Mortality Rate	2.7	4.0	1.7	3.1	0.4	N/A

Rates are per 100,000 population and are age-adjusted to 2000 U.S. standard population.
Total also includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.
s = Counts are suppressed to prevent disclosure of data in other cell(s) based on Table 59.
<6 = Case counts of 1-5 are suppressed per DHMH / MCR Data Use Policy.
** MD incidence rates based on case counts of 1-15 are suppressed per DHMH / MCR Data Use Policy and Procedures; MD mortality rates based on death counts of 0-19 are suppressed per DHMH / CCPC Mortality Data Suppression Policy.
N/A = Data were not available.
Source: Maryland Cancer Registry
U.S. SEER, SEER*Stat
NCHS Compressed Mortality File in CDC WONDER, 2012
U.S. SEER, Cancer Statistics Review



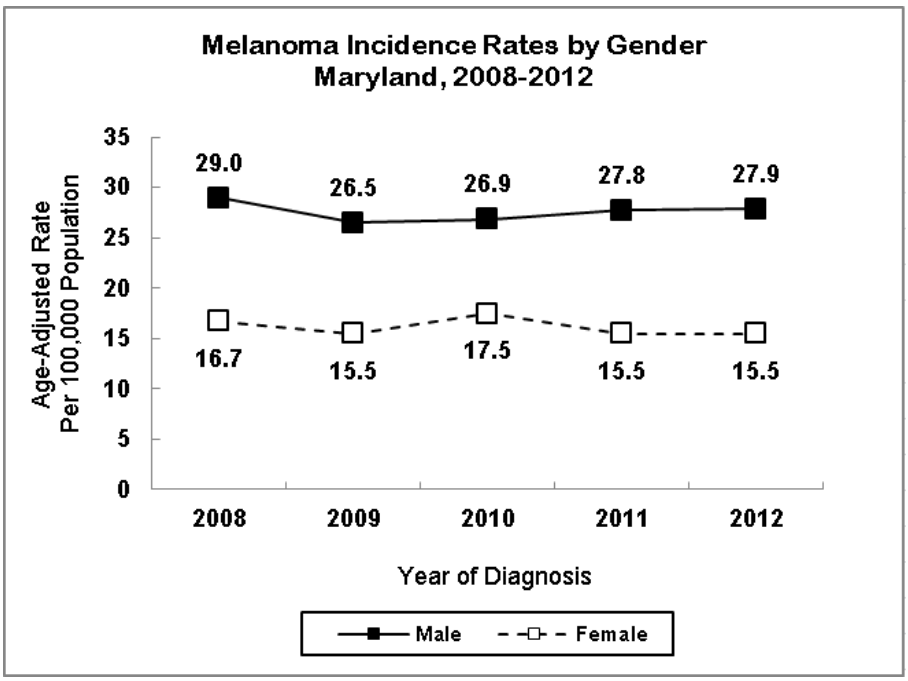
Source: Maryland Cancer Registry
NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Incidence and Mortality Trends

Melanoma incidence rates in Maryland decreased at a rate of 0.7% per year from 2008 to 2012.

Melanoma mortality rates decreased at a rate of 0.3% per year from 2008 to 2012.

See Appendix G, Tables 1 and 2.

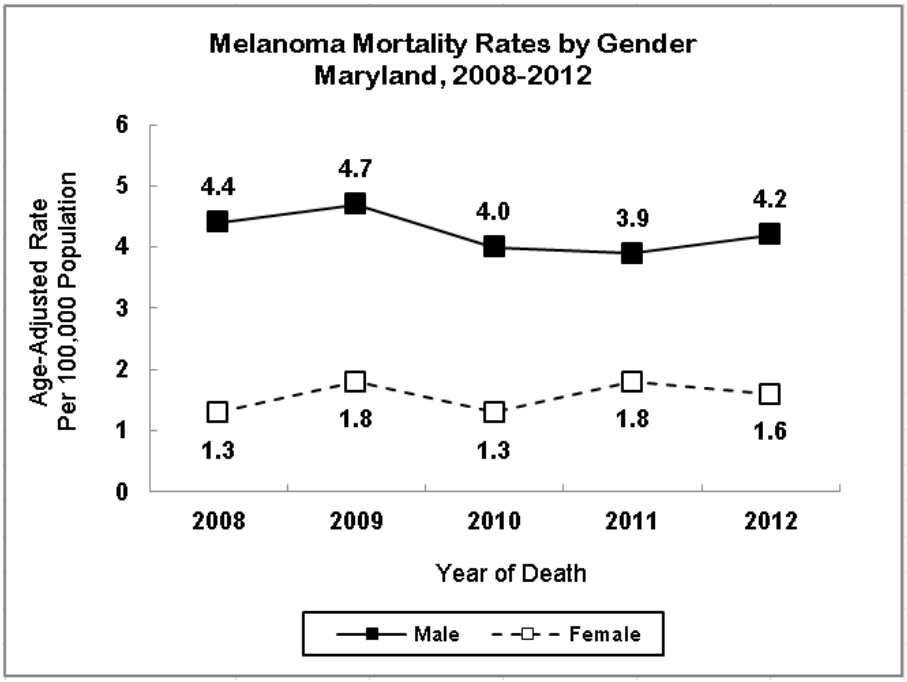


Source: Maryland Cancer Registry

Incidence Trends by Gender

Over the period 2008 to 2012, incidence rates for males decreased at a rate of 0.3% per year, and rates among females decreased at a rate of 1.5% per year. In 2012, melanoma incidence rates were 80% higher among males than females in Maryland.

See Appendix G, Table 4.

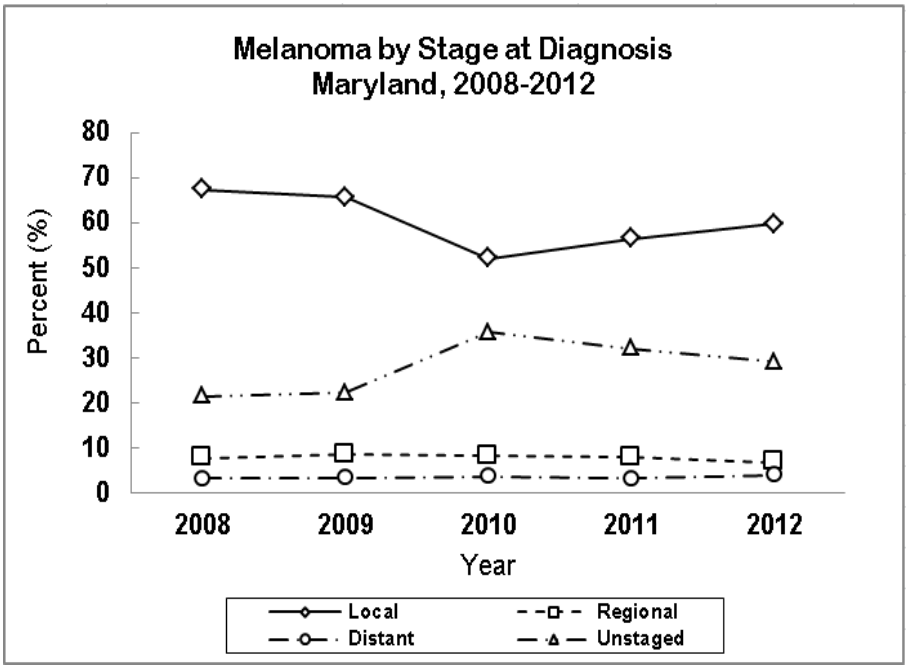


Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Mortality Trends by Gender

Melanoma mortality rates in males decreased at a rate of 2.8% per year from 2008 to 2012. Female melanoma mortality rates increased at a rate of 4.2% per year.

See Appendix G, Table 6.



Source: Maryland Cancer Registry

Stage at Diagnosis

In 2012, 59.8% of all melanoma was diagnosed at the local stage, 6.9% at the regional stage, and 4.1% at the distant stage. The proportion of melanoma reported as unstaged decreased in 2012.

See Appendix H, Table 7.

Table 57.
Number of Melanoma Cases by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	1,320	794	524	1,288	13	<6
Allegany	20	16	<6	20	0	0
Anne Arundel	172	97	75	169	<6	<6
Baltimore City	64	34	30	61	<6	0
Baltimore County	258	166	92	254	<6	0
Calvert	24	13	11	24	0	0
Caroline	6	<6	<6	6	0	0
Carroll	57	31	26	s	<6	0
Cecil	36	17	19	36	0	0
Charles	39	25	14	37	<6	0
Dorchester	7	<6	<6	7	0	0
Frederick	51	30	21	51	0	0
Garrett	7	<6	<6	7	0	0
Harford	87	61	25	87	0	0
Howard	79	44	34	76	<6	<6
Kent	8	<6	<6	8	0	0
Montgomery	190	124	66	185	<6	<6
Prince George's	52	30	22	45	<6	<6
Queen Anne's	21	11	10	21	0	0
Saint Mary's	27	16	11	27	0	0
Somerset	6	<6	<6	6	0	0
Talbot	10	7	<6	9	0	0
Washington	34	22	12	s	<6	0
Wicomico	29	11	18	29	0	0
Worcester	28	20	8	28	0	0

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 58.
Melanoma Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	20.7	27.9	15.5	29.9	**	**
Allegany	19.6	35.2	**	20.4	0.0	0.0
Anne Arundel	29.0	35.1	25.4	34.6	**	**
Baltimore City	9.7	12.4	8.0	26.0	**	0.0
Baltimore County	26.6	38.9	17.6	35.6	**	0.0
Calvert	23.6	**	**	27.8	0.0	0.0
Caroline	**	**	**	**	0.0	0.0
Carroll	30.8	37.1	25.0	31.5	**	0.0
Cecil	31.3	30.8	33.1	33.7	0.0	0.0
Charles	27.8	40.9	**	42.9	**	0.0
Dorchester	**	**	**	**	0.0	0.0
Frederick	21.1	25.9	16.9	23.8	0.0	0.0
Garrett	**	**	**	**	0.0	0.0
Harford	30.8	46.3	18.1	35.6	0.0	0.0
Howard	26.1	31.9	20.7	36.0	**	**
Kent	**	**	**	**	0.0	0.0
Montgomery	16.9	24.8	11.2	23.6	**	**
Prince George's	7.0	9.9	4.8	19.0	**	**
Queen Anne's	36.3	**	**	39.8	0.0	0.0
Saint Mary's	24.5	28.4	**	29.6	0.0	0.0
Somerset	**	**	**	**	0.0	0.0
Talbot	**	**	**	**	0.0	0.0
Washington	20.4	28.1	**	21.7	**	0.0
Wicomico	25.2	**	28.5	33.1	0.0	0.0
Worcester	34.9	52.6	**	40.3	0.0	0.0

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 59.
Number of Deaths for Melanoma by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	169	111	58	160	<10	<10
Allegany	<10	<10	<10	<10	<10	<10
Anne Arundel	14	<10	<10	13	<10	<10
Baltimore City	12	<10	<10	10	<10	<10
Baltimore County	36	23	13	s	<10	<10
Calvert	<10	<10	<10	<10	<10	<10
Caroline	<10	<10	<10	<10	<10	<10
Carroll	<10	<10	<10	<10	<10	<10
Cecil	<10	<10	<10	<10	<10	<10
Charles	<10	<10	<10	<10	<10	<10
Dorchester	<10	<10	<10	<10	<10	<10
Frederick	<10	<10	<10	<10	<10	<10
Garrett	<10	<10	<10	<10	<10	<10
Harford	<10	<10	<10	<10	<10	<10
Howard	<10	<10	<10	<10	<10	<10
Kent	<10	<10	<10	<10	<10	<10
Montgomery	30	20	10	29	<10	<10
Prince George's	16	s	<10	12	<10	<10
Queen Anne's	<10	<10	<10	<10	<10	<10
Saint Mary's	<10	<10	<10	<10	<10	<10
Somerset	<10	<10	<10	<10	<10	<10
Talbot	<10	<10	<10	<10	<10	<10
Washington	<10	<10	<10	<10	<10	<10
Wicomico	<10	<10	<10	<10	<10	<10
Worcester	<10	<10	<10	<10	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2012.

Table 60.
Melanoma Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	2.7	4.2	1.6	3.6	**	**
Allegany	**	**	**	**	**	**
Anne Arundel	**	**	**	**	**	**
Baltimore City	**	**	**	**	**	**
Baltimore County	3.8	5.5	**	5.1	**	**
Calvert	**	**	**	**	**	**
Caroline	**	**	**	**	**	**
Carroll	**	**	**	**	**	**
Cecil	**	**	**	**	**	**
Charles	**	**	**	**	**	**
Dorchester	**	**	**	**	**	**
Frederick	**	**	**	**	**	**
Garrett	**	**	**	**	**	**
Harford	**	**	**	**	**	**
Howard	**	**	**	**	**	**
Kent	**	**	**	**	**	**
Montgomery	2.7	4.5	**	3.6	**	**
Prince George's	**	**	**	**	**	**
Queen Anne's	**	**	**	**	**	**
Saint Mary's	**	**	**	**	**	**
Somerset	**	**	**	**	**	**
Talbot	**	**	**	**	**	**
Washington	**	**	**	**	**	**
Wicomico	**	**	**	**	**	**
Worcester	**	**	**	**	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2012.

Table 61.
Number of Melanoma Cases by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	6,390	3,723	2,661	6,106	74	18
Allegany	84	56	28	83	0	0
Anne Arundel	895	533	362	861	<6	<6
Baltimore City	335	186	149	315	13	0
Baltimore County	1,185	681	504	1,135	13	0
Calvert	134	72	61	131	0	0
Caroline	45	26	19	s	<6	0
Carroll	298	165	133	289	<6	0
Cecil	131	74	57	127	0	0
Charles	101	70	31	92	<6	0
Dorchester	51	32	19	s	0	<6
Frederick	260	159	101	254	0	0
Garrett	30	17	13	30	0	0
Harford	404	243	160	392	0	0
Howard	383	214	166	372	<6	<6
Kent	25	18	7	25	0	0
Montgomery	929	550	379	872	11	<6
Prince George's	257	152	105	224	20	<6
Queen Anne's	80	46	34	78	0	0
Saint Mary's	128	56	72	126	0	0
Somerset	38	21	17	38	0	0
Talbot	73	46	27	71	0	0
Washington	167	97	70	163	<6	0
Wicomico	176	89	86	170	<6	<6
Worcester	139	92	47	129	0	<6

Total includes cases reported as transexual, hermaphrodite, unknown gender, and unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 62.
Melanoma Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	20.9	27.6	16.1	29.2	1.0	0.9
Allegany	18.1	26.6	12.1	19.1	0.0	0.0
Anne Arundel	31.4	40.8	24.5	36.3	**	**
Baltimore City	10.4	14.0	8.2	28.2	**	0.0
Baltimore County	25.8	33.7	20.3	32.9	**	0.0
Calvert	29.5	36.4	24.9	34.3	0.0	0.0
Caroline	24.5	30.9	19.5	28.4	**	0.0
Carroll	32.8	40.4	27.6	33.4	**	0.0
Cecil	24.2	29.9	20.6	25.2	0.0	0.0
Charles	14.9	23.1	8.5	21.2	**	0.0
Dorchester	23.8	31.9	17.7	30.2	0.0	**
Frederick	21.9	29.2	16.1	24.0	0.0	0.0
Garrett	16.9	19.5	**	17.1	0.0	0.0
Harford	30.4	40.6	22.8	33.7	0.0	0.0
Howard	25.9	32.2	20.5	35.1	**	**
Kent	19.5	29.1	**	23.1	0.0	0.0
Montgomery	17.5	23.6	13.2	23.1	**	**
Prince George's	7.1	10.8	4.8	18.7	1.1	**
Queen Anne's	27.7	34.1	22.6	29.8	0.0	0.0
Saint Mary's	24.6	22.1	27.3	29.3	0.0	0.0
Somerset	27.6	28.0	29.8	42.4	0.0	0.0
Talbot	27.1	38.7	17.1	30.0	0.0	0.0
Washington	20.3	25.5	16.6	21.4	**	0.0
Wicomico	34.2	40.2	31.4	43.5	**	**
Worcester	37.5	50.4	27.4	38.9	0.0	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 63.
Number of Deaths for Melanoma by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	801	529	272	762	s	<10
Allegany	15	s	<10	s	<10	<10
Anne Arundel	93	67	26	89	<10	<10
Baltimore City	46	26	20	38	<10	<10
Baltimore County	155	100	55	151	<10	<10
Calvert	<10	<10	<10	<10	<10	<10
Caroline	<10	<10	<10	<10	<10	<10
Carroll	35	22	13	34	<10	<10
Cecil	21	s	<10	s	<10	<10
Charles	17	s	<10	15	<10	<10
Dorchester	<10	<10	<10	<10	<10	<10
Frederick	36	17	19	s	<10	<10
Garrett	<10	<10	<10	<10	<10	<10
Harford	42	28	14	41	<10	<10
Howard	26	s	<10	25	<10	<10
Kent	<10	<10	<10	<10	<10	<10
Montgomery	121	79	42	114	<10	<10
Prince George's	56	35	21	47	<10	<10
Queen Anne's	18	s	<10	s	<10	<10
Saint Mary's	16	s	<10	s	<10	<10
Somerset	<10	<10	<10	<10	<10	<10
Talbot	<10	<10	<10	<10	<10	<10
Washington	26	16	10	s	<10	<10
Wicomico	17	<10	<10	15	<10	<10
Worcester	17	s	<10	s	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2008-2012.

Table 64.
Melanoma Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

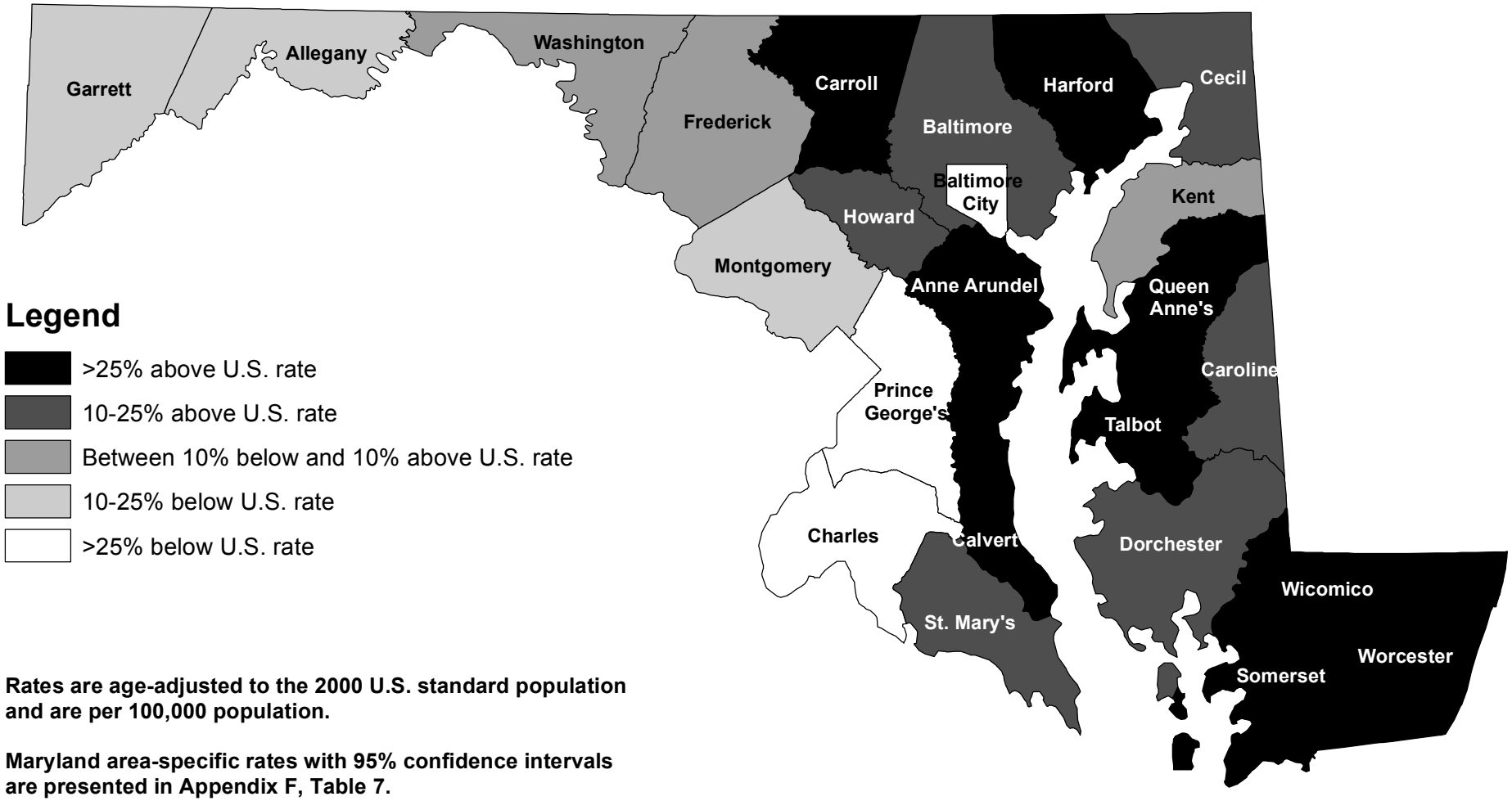
Jurisdiction	Total	Gender		Race		
		Males	Females	Whites	Blacks	Other
Maryland	2.7	4.2	1.6	3.6	0.5	**
Allegany	**	**	**	**	**	**
Anne Arundel	3.4	5.8	1.6	3.8	**	**
Baltimore City	1.5	2.0	1.1	3.5	**	**
Baltimore County	3.2	4.9	2.0	4.1	**	**
Calvert	**	**	**	**	**	**
Caroline	**	**	**	**	**	**
Carroll	3.8	5.2	**	3.8	**	**
Cecil	4.1	**	**	4.3	**	**
Charles	**	**	**	**	**	**
Dorchester	**	**	**	**	**	**
Frederick	3.2	**	**	3.5	**	**
Garrett	**	**	**	**	**	**
Harford	3.2	5.2	**	3.5	**	**
Howard	2.2	**	**	2.9	**	**
Kent	**	**	**	**	**	**
Montgomery	2.3	3.8	1.4	2.9	**	**
Prince George's	1.5	2.4	0.9	4.1	**	**
Queen Anne's	**	**	**	**	**	**
Saint Mary's	**	**	**	**	**	**
Somerset	**	**	**	**	**	**
Talbot	**	**	**	**	**	**
Washington	3.1	**	**	3.3	**	**
Wicomico	**	**	**	**	**	**
Worcester	**	**	**	**	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2008-2012.

Maryland Melanoma Incidence Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate

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

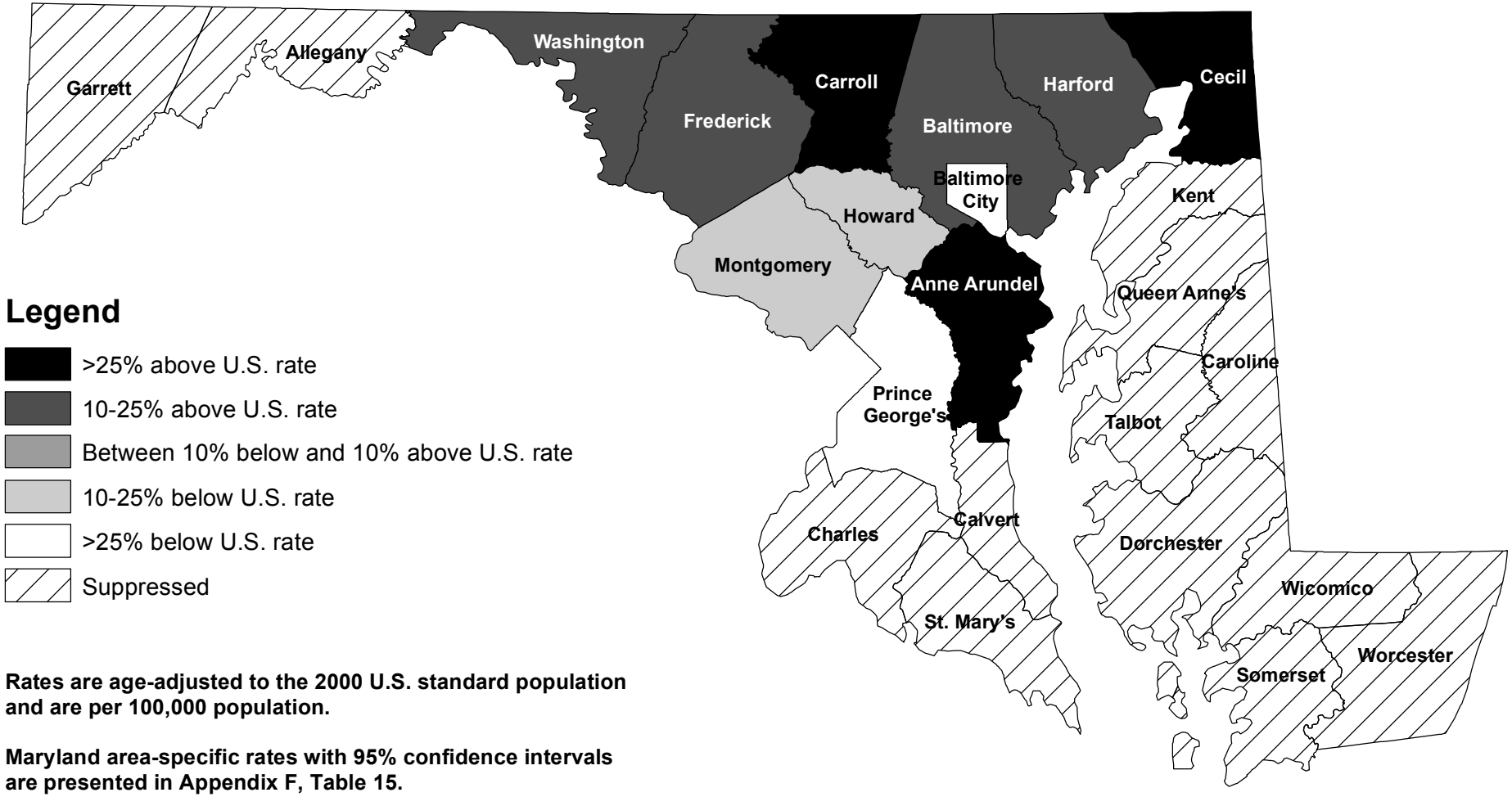
Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 7.

U.S. melanoma incidence rate, 2008-2012: 21.6 / 100,000

Maryland melanoma incidence rate, 2008-2012: 20.9 / 100,000

Sources: Maryland Cancer Registry
U.S. SEER, SEER*Stat Database

Maryland Melanoma Mortality Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate
- Suppressed

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

Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 15.

U.S. melanoma mortality rate, 2008-2012: 2.7 / 100,000

Maryland melanoma mortality rate, 2008-2012: 2.7 / 100,000

Source: NCHS Compressed Mortality File in CDC WONDER
U.S. SEER, Cancer Statistics Review

Note: Rates based on death counts of 0-19 are suppressed per DHMH / CCPC Mortality Data Suppression Policy.

G. Cervical Cancer

Incidence (New Cases)

A total of 209 cases of cervical cancer among women in Maryland were reported in 2012. The age-adjusted incidence rate for cervical cancer in Maryland in 2012 was 6.3 per 100,000 population of women (5.5–7.3, 95% C.I.), which is statistically significantly lower than the 2012 U.S. SEER age-adjusted cervical cancer incidence rate of 7.4 per 100,000 population (7.1–7.7, 95% C.I.).

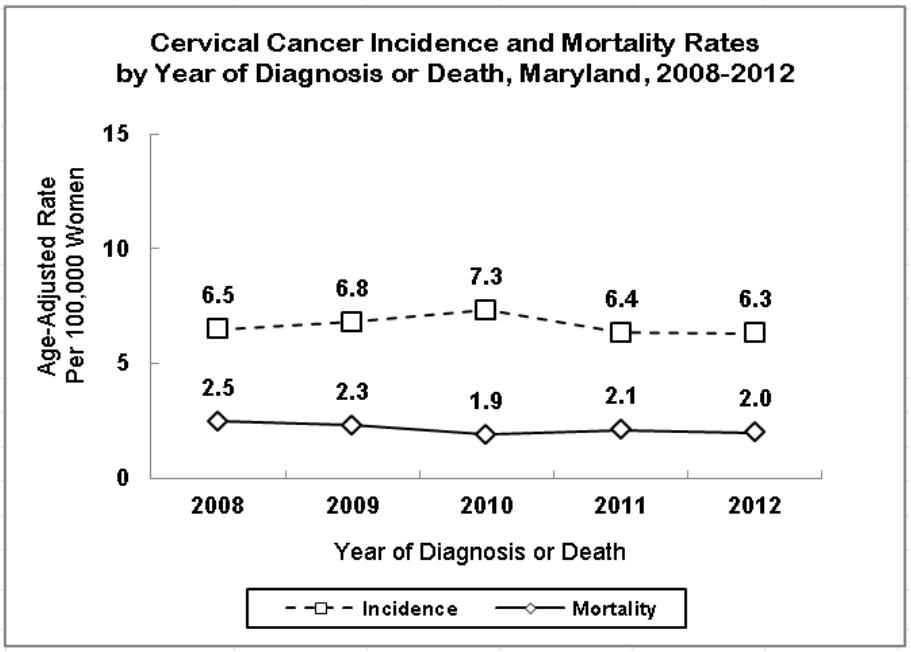
Mortality (Deaths)

In 2012, a total of 73 women died of cervical cancer in Maryland. The age-adjusted cervical cancer mortality rate in Maryland in 2012 was 2.0 per 100,000 women (1.6–2.6, 95% C.I.). This rate is statistically significantly lower than the 2012 U.S. cervical cancer mortality rate of 2.3 per 100,000 women (2.2–2.4, 95% C.I.). Maryland had the 24th highest cervical cancer mortality rate among the states and the District of Columbia for the period 2008-2012.

Table 65.
Cervical Cancer Incidence and Mortality Rates
by Race, Maryland and the United States, 2012

Incidence 2012	*Total*	*Whites*	*Blacks*	*Other*
New Cases (Count)	209	119	74	11
MD Incidence Rate	6.3	5.9	7.6	**
U.S. SEER Rate	7.4	7.3	8.7	6.0
Mortality 2012	*Total*	*Whites*	*Blacks*	*Other*
Deaths (Count)	73	38	s	s
MD Mortality Rate	2.0	1.6	3.0	**
U.S. Mortality Rate	2.3	2.2	3.7	N/A

Rates are per 100,000 women and are age-adjusted to 2000 U.S. standard population.
Total includes unknown race.
s = Counts are suppressed to prevent disclosure of data in other cell(s) based on Table 68.
** MD incidence rates based on case counts of 1-5 are suppressed per DHMH / Maryland Cancer Registry Data Use Policy and Procedures; MD mortality rates based on death counts of 0-19 are suppressed per DHMH / CCPC Mortality Data Suppression Policy.
N/A = Data were not available.
Source: Maryland Cancer Registry
U.S. SEER, SEER*Stat
NCHS Compressed Mortality File in CDC WONDER, 2012
U.S. SEER, Cancer Statistics Review



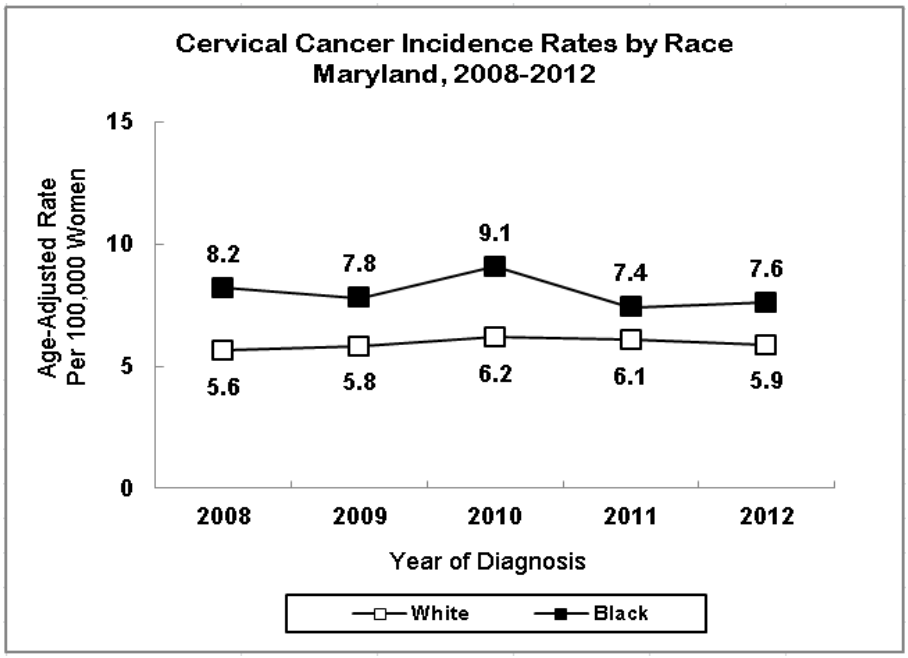
Source: Maryland Cancer Registry
NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Incidence and Mortality Trends

Cervical cancer incidence rates among Maryland women decreased at a rate of 1.2% per year from 2008 to 2012.

Cervical cancer mortality rates decreased at a rate of 5.2% per year from 2008 to 2012.

See Appendix G, Tables 1 and 2.

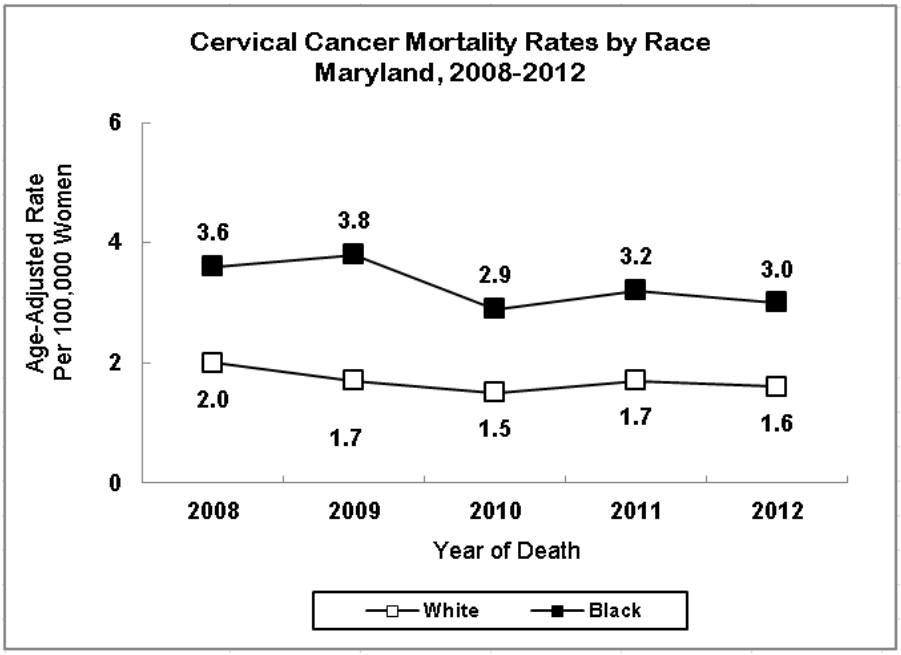


Source: Maryland Cancer Registry

Incidence Trends by Race

From 2008 to 2012, cervical cancer incidence rates among black females decreased at a rate of 2.0% per year, compared to an increase of 1.2% per year among white females.

See Appendix G, Table 3.

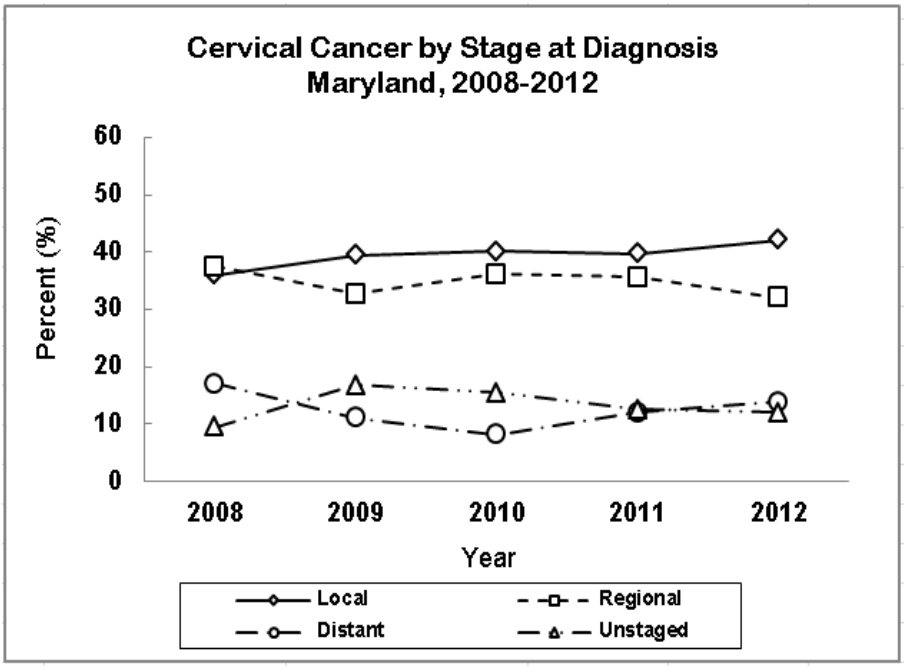


Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2011

Mortality Trends by Race

From 2008 to 2012, mortality rates for black females decreased at a rate of 5.2% per year, while mortality rates for white females decreased at a rate of 4.4% per year.

See Appendix G, Table 5.



Source: Maryland Cancer Registry

Stage at Diagnosis

In 2012, 42.1% of all cervical cancer cases in Maryland were diagnosed at the local stage, 32.1% at the regional stage, and 13.9% at the distant stage. The proportion of cervical cancer cases reported as unstaged continued to decrease in 2012 from a high in 2009.

See Appendix H, Table 8.

Table 66.
Number of Cervical Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	209	119	74	11
Allegany	<6	<6	0	0
Anne Arundel	22	18	<6	0
Baltimore City	38	10	25	<6
Baltimore County	32	17	s	<6
Calvert	<6	<6	<6	0
Caroline	0	0	0	0
Carroll	<6	<6	0	0
Cecil	<6	<6	0	0
Charles	6	<6	<6	0
Dorchester	<6	<6	0	0
Frederick	7	7	0	0
Garrett	<6	<6	0	0
Harford	<6	<6	0	0
Howard	9	6	<6	<6
Kent	<6	<6	0	0
Montgomery	24	13	<6	<6
Prince George's	35	10	23	0
Queen Anne's	0	0	0	0
Saint Mary's	<6	<6	<6	0
Somerset	0	0	0	0
Talbot	0	0	0	0
Washington	<6	<6	0	0
Wicomico	<6	<6	<6	0
Worcester	<6	<6	0	0

Total includes cases reported as unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 67.
Cervical Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	6.3	5.9	7.6	**
Allegany	**	**	0.0	0.0
Anne Arundel	7.5	7.7	**	0.0
Baltimore City	11.2	**	11.1	**
Baltimore County	6.7	5.4	**	**
Calvert	**	**	**	0.0
Caroline	0.0	0.0	0.0	0.0
Carroll	**	**	0.0	0.0
Cecil	**	**	0.0	0.0
Charles	**	**	**	0.0
Dorchester	**	**	0.0	0.0
Frederick	**	**	0.0	0.0
Garrett	**	**	0.0	0.0
Harford	**	**	0.0	0.0
Howard	**	**	**	**
Kent	**	**	0.0	0.0
Montgomery	3.8	**	**	**
Prince George's	7.6	**	7.3	0.0
Queen Anne's	0.0	0.0	0.0	0.0
Saint Mary's	**	**	**	0.0
Somerset	0.0	0.0	0.0	0.0
Talbot	0.0	0.0	0.0	0.0
Washington	**	**	0.0	0.0
Wicomico	**	**	**	0.0
Worcester	**	**	0.0	0.0

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 68.
Number of Deaths for Cervical Cancer by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	73	38	s	<10
Allegany	<10	<10	<10	<10
Anne Arundel	<10	<10	<10	<10
Baltimore City	18	<10	16	<10
Baltimore County	12	10	<10	<10
Calvert	<10	<10	<10	<10
Caroline	<10	<10	<10	<10
Carroll	<10	<10	<10	<10
Cecil	<10	<10	<10	<10
Charles	<10	<10	<10	<10
Dorchester	<10	<10	<10	<10
Frederick	<10	<10	<10	<10
Garrett	<10	<10	<10	<10
Harford	<10	<10	<10	<10
Howard	<10	<10	<10	<10
Kent	<10	<10	<10	<10
Montgomery	<10	<10	<10	<10
Prince George's	10	<10	<10	<10
Queen Anne's	<10	<10	<10	<10
Saint Mary's	<10	<10	<10	<10
Somerset	<10	<10	<10	<10
Talbot	<10	<10	<10	<10
Washington	<10	<10	<10	<10
Wicomico	<10	<10	<10	<10
Worcester	<10	<10	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2012.

Table 69.
Cervical Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	2.0	1.6	3.0	**
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	**	**	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2012.

Table 70.
Number of Cervical Cancer Cases by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	1,048	577	375	59
Allegany	14	12	<6	0
Anne Arundel	93	74	17	0
Baltimore City	168	46	111	6
Baltimore County	152	81	51	15
Calvert	12	s	<6	0
Caroline	<6	<6	0	0
Carroll	21	s	<6	0
Cecil	23	20	<6	<6
Charles	20	11	<6	<6
Dorchester	<6	<6	<6	0
Frederick	35	s	<6	<6
Garrett	<6	<6	0	0
Harford	43	35	7	0
Howard	40	27	6	<6
Kent	<6	<6	0	0
Montgomery	140	78	32	21
Prince George's	174	43	116	6
Queen Anne's	6	6	0	0
Saint Mary's	16	11	<6	0
Somerset	6	<6	<6	0
Talbot	<6	<6	0	0
Washington	31	29	<6	0
Wicomico	17	9	8	0
Worcester	11	8	<6	<6

Total includes cases reported as unknown race.

<6 = Case counts of 1-5 are suppressed per DHMH/MCR Data Use Policy.

s = Case counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: Maryland Cancer Registry.

Table 71.
Cervical Cancer Age-Adjusted Incidence Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	6.7	5.9	8.0	5.8
Allegany	**	**	**	0.0
Anne Arundel	6.6	6.6	8.2	0.0
Baltimore City	9.8	9.0	9.9	**
Baltimore County	6.8	5.3	9.5	**
Calvert	**	**	**	0.0
Caroline	**	**	0.0	0.0
Carroll	4.1	4.1	**	0.0
Cecil	8.5	7.9	**	**
Charles	4.7	**	**	**
Dorchester	**	**	**	0.0
Frederick	5.6	6.1	**	**
Garrett	**	**	0.0	0.0
Harford	6.6	6.5	**	0.0
Howard	4.9	5.0	**	**
Kent	**	**	0.0	0.0
Montgomery	5.1	4.5	6.6	4.7
Prince George's	7.7	7.9	7.5	**
Queen Anne's	**	**	0.0	0.0
Saint Mary's	6.1	**	**	0.0
Somerset	**	**	**	0.0
Talbot	**	**	0.0	0.0
Washington	8.8	9.0	**	0.0
Wicomico	7.2	**	**	0.0
Worcester	**	**	**	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Source: Maryland Cancer Registry.

Table 72.
Number of Deaths for Cervical Cancer by Jurisdiction, Gender, and Race, Maryland, 2008-2012

Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	362	189	152	21
Allegany	<10	<10	<10	<10
Anne Arundel	32	21	<10	<10
Baltimore City	82	s	60	<10
Baltimore County	48	32	s	<10
Calvert	<10	<10	<10	<10
Caroline	<10	<10	<10	<10
Carroll	<10	<10	<10	<10
Cecil	<10	<10	<10	<10
Charles	<10	<10	<10	<10
Dorchester	<10	<10	<10	<10
Frederick	15	14	<10	<10
Garrett	<10	<10	<10	<10
Harford	13	10	<10	<10
Howard	10	<10	<10	<10
Kent	<10	<10	<10	<10
Montgomery	32	18	<10	<10
Prince George's	63	s	39	<10
Queen Anne's	<10	<10	<10	<10
Saint Mary's	<10	<10	<10	<10
Somerset	<10	<10	<10	<10
Talbot	<10	<10	<10	<10
Washington	<10	<10	<10	<10
Wicomico	13	<10	<10	<10
Worcester	<10	<10	<10	<10

<10 = Death counts of 0-9 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

s = Death counts are suppressed to prevent disclosure of data in other cell(s). (See Appendix A for methods.)

Source: CDC Wonder, 2008-2012.

Table 73.
Cervical Cancer Age-Adjusted Mortality Rates* by Jurisdiction, Gender, and Race, Maryland, 2008-2012

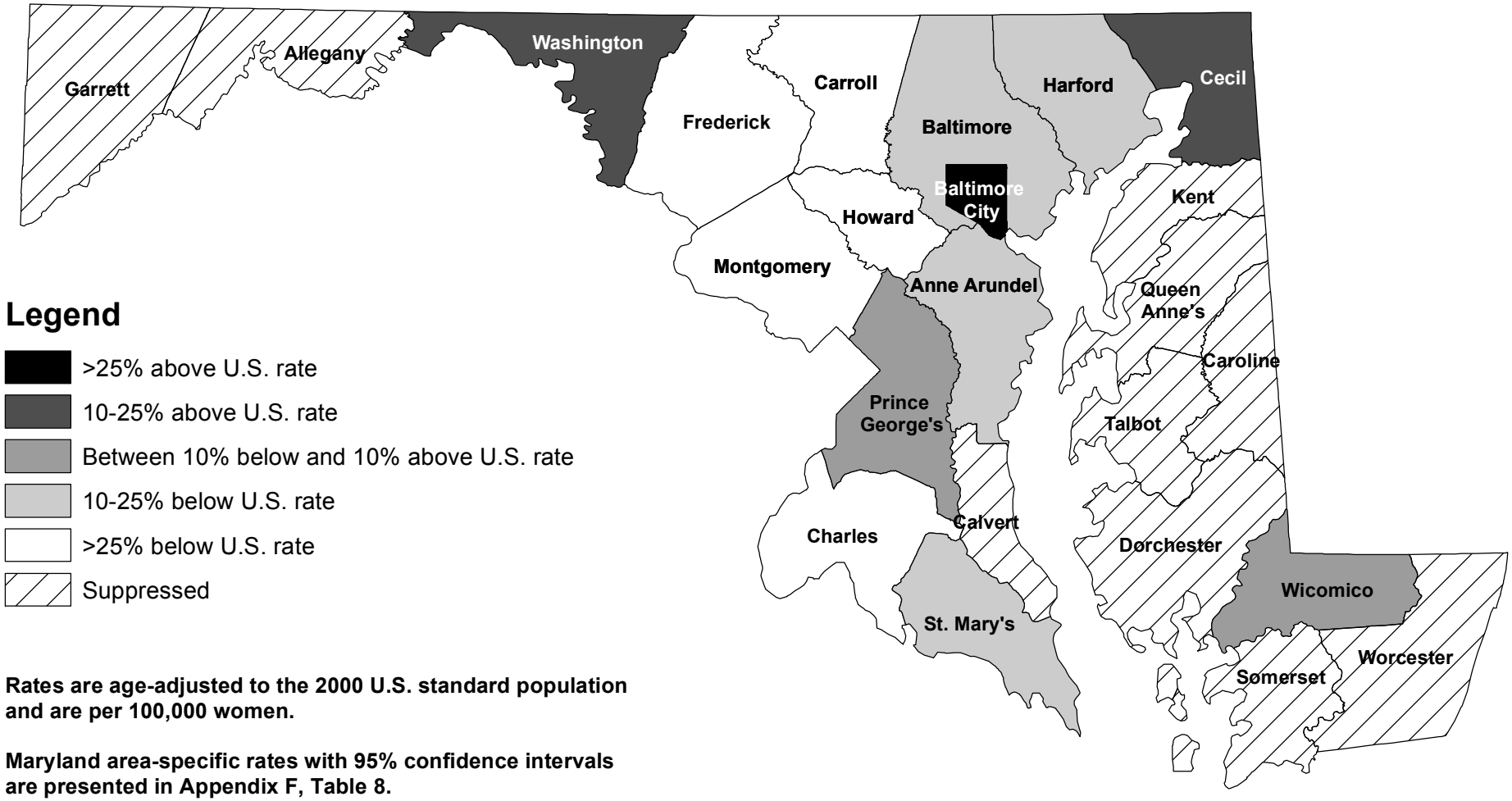
Jurisdiction	Total	Race		
		Whites	Blacks	Other
Maryland	2.2	1.7	3.3	2.3
Allegany	**	**	**	**
Anne Arundel	2.2	1.8	**	**
Baltimore City	4.8	4.1	5.3	**
Baltimore County	1.9	1.8	**	**
Calvert	**	**	**	**
Caroline	**	**	**	**
Carroll	**	**	**	**
Cecil	**	**	**	**
Charles	**	**	**	**
Dorchester	**	**	**	**
Frederick	**	**	**	**
Garrett	**	**	**	**
Harford	**	**	**	**
Howard	**	**	**	**
Kent	**	**	**	**
Montgomery	1.1	**	**	**
Prince George's	2.7	3.8	2.5	**
Queen Anne's	**	**	**	**
Saint Mary's	**	**	**	**
Somerset	**	**	**	**
Talbot	**	**	**	**
Washington	**	**	**	**
Wicomico	**	**	**	**
Worcester	**	**	**	**

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

** Rates based on death counts of 0-19 are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

Source: CDC Wonder, 2008-2012.

Maryland Cervical Cancer Incidence Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate
- Suppressed

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

Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 8.

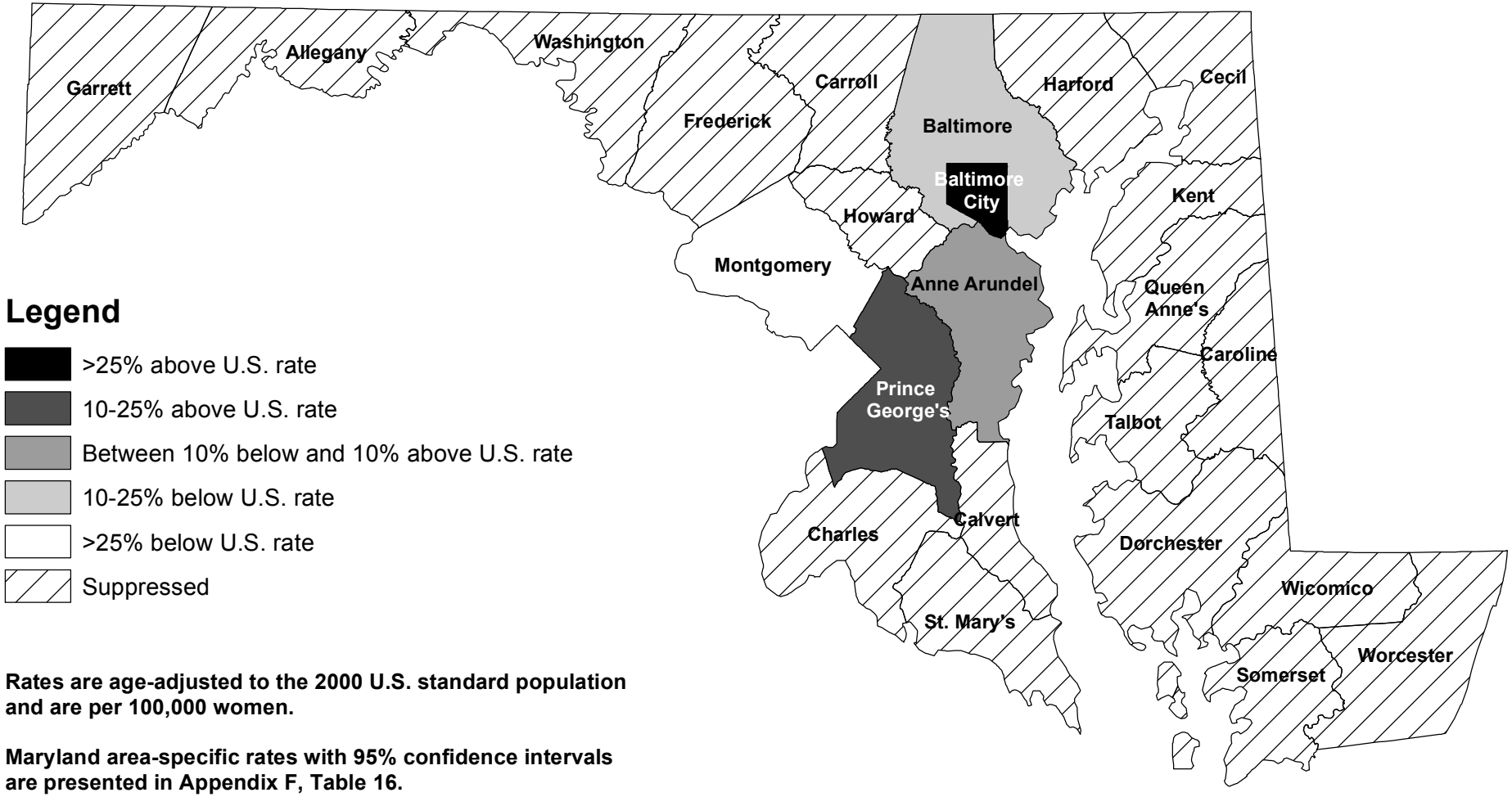
U.S. cervical cancer incidence rate, 2008-2012: 7.7 / 100,000

Maryland cervical cancer incidence rate, 2008-2012: 6.7 / 100,000

Sources: Maryland Cancer Registry
U.S. SEER, SEER*Stat Database

Note: Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy and Procedures.

Maryland Cervical Cancer Mortality Rates by Geographical Area: Comparison to U.S. Rate, 2008-2012



Legend

- >25% above U.S. rate
- 10-25% above U.S. rate
- Between 10% below and 10% above U.S. rate
- 10-25% below U.S. rate
- >25% below U.S. rate
- Suppressed

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

Maryland area-specific rates with 95% confidence intervals are presented in Appendix F, Table 16.

U.S. cervical cancer mortality rate, 2008-2012: 2.3 / 100,000

Maryland cervical cancer mortality rate, 2008-2012: 2.2 / 100,000

Source: NCHS Compressed Mortality File in CDC WONDER
U.S. SEER, Cancer Statistics Review

Note: Rates based on death counts of 0-19 are suppressed per DHMH / CCPC Mortality Data Suppression Policy.

Appendix A

Cancer Data Sources, References, and Data Considerations

2015 Cigarette Restitution Fund (CRF) Cancer Report
Data Sources, References, and Data Considerations

I. DATA SOURCES

Data and information presented in the 2015 Cigarette Restitution Fund (CRF) Cancer Report were obtained from a variety of agencies and centers, including:

- Maryland Department of Health and Mental Hygiene (DHMH)
  - Center for Cancer Prevention and Control (CCPC)
  - Center for Chronic Disease Prevention and Control
  - Center of Tobacco Prevention and Control
  - Vital Statistics Administration
  - Maryland Assessment Tool for Community Health (MATCH)
- National Cancer Institute (NCI, part of the National Institutes of Health)
- Centers for Disease Control and Prevention (CDC)
- Office of Disease Prevention and Health Promotion at the U.S. Department of Health and Human Services

These agencies and the sources of information they provided for the 2015 CRF Cancer Report are described in the following sections.

A. Cancer Incidence and Stage Data

1. Maryland Cancer Registry

The Maryland Cancer Registry (MCR), CCPC, DHMH, is the source for all Maryland-specific cancer incidence and cancer stage data used in this report. The MCR is a computerized data system that collects and consolidates reports of all new cases of reportable cancers (excluding non-genital squamous cell or basal cell skin cancer) that are diagnosed and/or treated in Maryland and reported to the MCR. Incidence rates used in this report were calculated using cases reported to the MCR as of February 13, 2015, for the diagnosis year 2012.

The Maryland cancer reporting law and regulations mandate the collection of cancer information from Maryland-licensed hospitals, radiation therapy centers, diagnostic pathology laboratories, freestanding ambulatory care facilities, surgical centers, and physicians whose non-hospitalized cancer patients are not otherwise reported. MCR also participates in data exchange agreements with 13 other states / jurisdictions, including Delaware, Pennsylvania, Virginia, West Virginia, and the District of Columbia. Information on Maryland residents diagnosed and/or treated for cancer in these jurisdictions is included in this report.

Note: The 2006 case counts for Montgomery and Prince George's counties are underreported by approximately 8% and 6%, respectively, for all cancer sites combined due to delay in case reporting. Cancers reported to the MCR after the annual cutoff date

are not included in the MCR's official Maryland case counts and rates. The case undercounts resulted in slightly lower than actual age-adjusted incidence rates for Montgomery and Prince George's counties.

2. *Surveillance, Epidemiology, and End Results Program (SEER)*

The Surveillance, Epidemiology, and End Results (SEER) Program, managed by the NCI, is an authoritative source of information on cancer incidence, stage, and survival in the U.S.

The SEER Program, which began in 1973 and provides incidence rates representative of the U.S., collects, analyzes, and publishes cancer incidence and survival data from population-based cancer registries participating in the program. Since 2000, SEER incidence data has been collected from 18 SEER registries throughout the U.S. (SEER 18 registry database) and covers approximately 28% of the U.S. population. The SEER Program includes select geographic areas based on their ability to operate and maintain a high quality population-based cancer reporting system and for their epidemiologically significant population subgroups. The population covered by SEER is comparable to the general U.S. population with regards to measures of poverty and education; however, it is also selectively more urban and has a higher proportion of foreign-born persons than the general U.S. population.

SEER 18 incidence data are used in this report to compare national data with the most recent Maryland incidence data (2008-2012), as they provide the broadest population coverage currently available. All SEER incidence rates were obtained by the MCR from SEER*Stat (version 8.2.1), a statistical software tool for the analysis of SEER and other cancer-related databases. Additional information about SEER can be found at http://www.seer.cancer.gov.

The Maryland population estimates for 2012 presented in Appendix C were also obtained from SEER*Stat.

B. Cancer Mortality Data

Maryland mortality data for 2012 and the 5-year aggregate data (2008-2012) were acquired from CDC Wide-ranging Online Data for Epidemiologic Research (CDC WONDER), an interactive online public health database developed by the CDC, which features statistics for U.S. and Maryland resident health events. CDC WONDER is an easy-to-use, web-based system that makes information from CDC available to public health professionals and the public at large. Public-use data sets about mortality (deaths), cancer incidence, HIV and AIDS, tuberculosis, natality (births), census data, and many other topics are available for query, and the requested data are readily summarized and analyzed. CDC WONDER can be accessed at http://wonder.cdc.gov/.

Maryland mortality single year data for 2003 to 2007 and 2012 and the 5-year aggregate data (2008-2012), as well as single year U.S. mortality data through 2008, presented in this report

were obtained from the National Center for Health Statistics (NCHS) Compressed Mortality Files (CMF) accessed using CDC WONDER. The NCHS CMF is a county-level national mortality and population database spanning the years 1979-2012. The number of deaths, crude death rates, and age-adjusted death rates can be obtained by place of residence (total U.S., state, and county), age group, race, gender, year of death, and underlying cause of death (based on International Classification of Diseases [ICD] code or group of codes). Mortality data for the individual years 2003 to 2007 and 2012 for Maryland and 2003 to 2008 for the U.S. were obtained from the 1999-2014 CMF using ICD Tenth Revision (ICD-10) codes. The U.S. mortality rates for single year 2012 and 5-year aggregate data (2008-2012) were obtained from SEER, Cancer Statistics Review (CSR), which are provided by NCHS.

Maryland mortality data for 2011 were obtained from the Maryland Vital Statistics Administration. Maryland mortality single year data for 2008 through 2010, with the exception of colorectal cancer (CRC), are from MATCH; whereas, CRC mortality data were obtained directly from the Maryland Vital Statistics Administration due to the different definition of CRC in MATCH, which includes anal cancer. No longer accessible or in use, MATCH was an interactive online database sponsored by the DHMH Cancer and Chronic Disease Bureau, Center for Chronic Disease Prevention and Control, which features statistics for Maryland resident health events. County level births, deaths, population estimates and hospitalizations can be obtained through a query of the MATCH online database. . The official annual reports from the Maryland Vital Statistics Administration can be obtained online at http://dhmh.maryland.gov/vsa/Pages/reports.aspx. Note: The definition of lung and bronchus cancer in MATCH includes trachea. Comparisons can still be made between the different data sources for lung and bronchus cancer mortality due to the small number of deaths due to cancer of the trachea.

C. Behavioral and Risk Factor Data

The data on the prevalence of cancer screening and prevalence of various risk factors for cancer (e.g., smoking) in Maryland are obtained from several different sources, as described below.

1. *Maryland Behavioral Risk Factor Surveillance System (BRFSS)*

   The Maryland Behavioral Risk Factor Surveillance System (BRFSS) is used as a source of data on the prevalence of cancer screening (e.g., mammograms) and cancer risk behaviors (e.g., tobacco use) in Maryland. The BRFSS is an annual telephone survey conducted on a random sample of Maryland adult residents and is managed by the Center for Chronic Disease Prevention, Prevention and Health Promotion Administration at DHMH. This survey provided risk behavior and cancer screening information for this report. Maryland data results can be accessed at http://www.marylandbrfss.org, and Maryland and state-aggregated national data on health risk behavior can also be obtained from the CDC BRFSS website at http://www.cdc.gov/brfss.

2. *Maryland Youth Tobacco Survey (MYTS)*

Data from the Maryland Youth Tobacco Survey (MYTS) are used to monitor trends in tobacco use (as a risk factor for lung cancer) by Maryland youth. The MYTS, managed by the Center for Health Promotion, Education, and Tobacco Use Prevention and Control (CHP), Cancer and Chronic Disease Bureau at DHMH, is administered to gather information regarding attitudes, usage, and exposure to tobacco products among public middle and high school students statewide and within each of Maryland's 23 counties and Baltimore City. Survey results are also used in apportioning Local Tobacco Use Prevention and Cessation grants among Maryland's 24 major political subdivisions. To date, the MYTS has been conducted in 2000, 2002, 2006, 2008, and 2010. In 2013, the MYTS combined with the Youth Behavior Risk Survey and is now entitled the Maryland Youth Risk Behavior Survey. Additional information can be obtained by contacting CHP at 410-767-1362.

3. *Maryland Youth Risk Behavior Survey (YRBS), 2013*

The Maryland YRBS is part of the CDC's Youth Risk Behavior Surveillance System (YRBSS) developed in 1990 to monitor behaviors affecting morbidity (disease) and mortality (death) among high school youth. The YRBSS tracks several priority health risk behaviors among youth, as well as behaviors that support health. The 2013 Maryland YRBS was administered in the spring of 2013 to students in a representative sample of Maryland public high school classrooms. A total of 53,785 students in 184 public high schools in Maryland completed the survey. The results are representative of all students in grades 9–12. To date, the Maryland YRBS has been conducted in 2007, 2009, 2011, and 2013. Maryland data results for 2013 can be accessed at http://phpa.dhmh.maryland.gov/ccdpc/Reports/Pages/yrbs.aspx.

4. *Healthy People (HP) 2020*

Healthy People (HP) 2020 is a collaboration of local and national governmental agencies and private organizations that have developed prevention-oriented national objectives to improve the health of Americans. The HP initiative is under the Office of Disease Prevention and Health Promotion at the U.S. Department of Health and Human Services (DHHS). The overarching HP 2020 goal for cancer prevention is to "reduce the number of new cases as well as the illness, disability, and death caused by cancer." To achieve this goal, measurable objectives related to cancer screening and cancer risk behaviors were established, each with a specific quantitative target, and several of these targets are used as benchmarks by which Maryland's progress can be measured. The HP 2020 objectives were released in late 2010 and additional information can be found at http://www.healthypeople.gov.

5. *Maryland Comprehensive Cancer Control Plan (MCCCP)*

The MCCCP is the coordinated effort of 14 committees consisting of nearly 250 individuals across the state of Maryland with the aim to develop a cancer resource for individuals, health care providers, and organizations. The MCCCP contains goals and set targets to be met by the year 2015, which serve as a guide for health professionals who

are involved in planning, directing, implementing, evaluating, or performing research on cancer control in Maryland. The MCCCP is directed by CCPC, DHMH, with broad input from a partnership of public and private stakeholders. This target was used for oral cancer as a benchmark by which Maryland progress can be measured because HP 2020 objectives were not available. Additional information can be found at http://phpa.dhmh.maryland.gov/cancer/cancerplan/Pages/publications.aspx.

II. DATA CONSIDERATIONS

A. Data Confidentiality

DHMH regards all individual data reported to, and received and processed by, the MCR as confidential. Data are secured from unauthorized access and disclosure. The MCR manages and releases cancer information in accordance with the laws and regulations established by the State of Maryland, as set forth in the Annotated Code of Maryland, Health-General Article, §§18-203 – 204 and §4-101 et seq., and Code of Maryland Regulations, COMAR 10.14.01 (Cancer Registry).

Because incidence data and mortality data come from different sources, separate suppression procedures were employed for release of non-confidential data. For the number of cancer cases collected by MCR and for incidence rates calculated using case and population data, the following protocols apply: To ensure patient confidentiality and to comply with the *MCR Data Use Manual and Procedures* (October 2012; http://phpa.dhmh.maryland.gov/cancer/Pages/mcr_data.aspx), cells with counts of 1-5 cases are suppressed and presented as "<6." Complementary suppression of case counts in additional cell(s) is used, denoted by "s," to prevent back-calculation of numbers in those cells with primary suppression. Age-adjusted incidence rates based on counts of 15 or fewer (non-zero) are presented with asterisks (**) because the rates are unstable and do not provide reliable information.

Mortality data for this report were from CDC WONDER. ICD-10 codes listed in Appendix E of this report were used for identifying type of cancer for extraction. Data obtained from CDC WONDER are subject to CDC data use restrictions, which differ slightly from those of the *DHMH / MCR Data Use Policy* used for incidence data. To ensure that individual identity is protected in the use and re-release of mortality data from WONDER, and that reliable mortality rates are presented in this and other CCPC publications, the CCPC developed the *Mortality Data Suppression Policy* (October 2012). In accordance with this policy, the following protocols are applied to mortality data in this report: Death counts of 1-4 are suppressed, and denoted by "<5." Complementary suppression of death counts in additional cell(s) is used, as denoted by the letter "s," to prevent back-calculation of numbers in cells with primary suppression. Age-adjusted mortality rates based on counts less than 20 (i.e., 0-19 deaths) are presented with asterisks (denoted by ** symbol) because the rates are unstable and do not provide reliable information. This threshold is more stringent than the criteria used in the *DHMH / MCR Data Use Policy* for incidence rate suppression.

B. Gender

Gender is reported to the MCR as: a) male; b) female; c) hermaphrodite; d) transsexual; and e) unknown (not stated), but numbers and rates for only males and females are provided in this report. As a result, the totals shown in the count for number of cancer cases may not equal the sum of males and females because of cases in the other gender categories.

C. Rate Analysis

Individual year incidence rates for 2012 were calculated using Maryland resident cancer cases diagnosed from January 1 through December 31 of that year, and reported to the MCR as of February 13, 2015. The individual year mortality data (2012) consist of deaths that occurred between January 1 and December 31 of that year. Multiple year incidence rates presented were calculated for 5-year rates using MCR 2008-2012 data. Corresponding mortality rates were extracted from CDC WONDER, as 5-year combined data from 2008-2012.

Age-adjustment, also called age-standardization, is a tool used to control for different and changing age distributions of populations in the U.S., states, regions, and counties, and to enable meaningful comparisons of rates over time and across these populations. Age-adjusted rates do not include cancer cases for which age has not been reported. Incidence and mortality rates in this report were calculated and age-adjusted using the 2000 U.S. standard population. Additional information on age-adjustment can be found at http://www.cdc.gov/nchs/data/statnt/statnt20.pdf.

The annual percent change (APC) is calculated for incidence and mortality trends and for tracking incidence and mortality rates by race and gender over time. See Appendix B, Glossary, for the definition of APC.

D. Confidence Intervals and Statistical Significance

Age-adjusted rates for specific geographic areas (e.g., U.S., states, regions, counties) can be compared to determine whether differences in incidence or mortality exist between these areas. It is important to note however, that incidence and mortality rates, particularly those based on small numbers of events (cases or deaths) or small population sizes, can be highly variable from year to year. In these instances, two unadjusted rates cannot simply be compared side-by-side to determine whether they are statistically significantly different.

A confidence interval is used to describe the range of uncertainty around a point estimate (e.g., an incidence or mortality rate) and serves as an indicator of the precision or stability of a rate. Confidence intervals are useful in defining a range within which the typical rate for a geographic area can be expected to lie. Most confidence intervals are, by convention, calculated at the 95% level, which means that 95% of hypothetically observed confidence intervals generated will contain the true value of interest. The smaller the number of events upon which a rate is based, the wider the confidence interval will be.

Confidence intervals for incidence and mortality rates are included in this report to facilitate comparisons between rates, such as the comparison of Maryland rates to U.S. rates. Confidence

intervals for Maryland and SEER 18 incidence rates, provided by the MCR, are calculated from the SEER*Stat software. Confidence intervals for Maryland mortality rates were generated using CDC WONDER, and confidence intervals for U.S. mortality rates were queried using SEER's Cancer Query System. The following formula can be used to approximate the 95% confidence interval for age-adjusted rates:

Lower limit = $R - [1.96 (R / \sqrt{n})]$

Upper limit = $R + [1.96 (R / \sqrt{n})]$

where R = age-adjusted cancer incidence or mortality rate and n = number of events (cancer cases or deaths).

When the confidence intervals around two rates (e.g., state and U.S. rates) do not overlap, it can be stated that there is a statistically significant difference between the rates For example, Maryland's 2012 colorectal cancer incidence rate was 35.8 per 100,000, with a 95% confidence interval of 34.4-37.4. The 2012 U.S. SEER age-adjusted colorectal cancer incidence rate was 39.7 per 100,000 population, with a 95% confidence interval of 39.3-40.1. Since these confidence intervals do not overlap, the two rates are considered to be statistically significantly different (i.e., the difference between these rates is more than that expected by chance).

If the two confidence intervals overlap and if the rate for one area is included in the confidence interval of the other rate, then there is not a statistically significant difference between the rates. However, when there is overlap in the confidence intervals for two rates, and the rate for the comparison area is not included in the interval for the rate of interest, the two rates may or may not be statistically significantly different. In this situation, statistical testing methods described by the North American Association of Central Cancer Registries (NAACCR), Cancer in North America (May 2010) are used in this report to determine whether the differences between the two rates are statistically significant. An approximate confidence interval for the rate ratio of two age-adjusted rates can be calculated using the following formula:

$(R_1 / R_2)^{1 \pm z / x}$

where R_1 and R_2 are the age-adjusted rates being compared;
SE_1 and SE_2 are the standard errors for the respective rates;
z = 1.96 for 95% confidence intervals; and
$x = (R_1 - R_2) / \sqrt{(SE_1^2 + SE_2^2)}$

If the confidence interval for the rate ratio includes the value of one, then the two rates are not statistically significantly different (i.e., p-value greater than 0.05).

In this report, when two rates are not statistically significantly different, they are described as being "similar."

E. National Comparison Data

Maryland (statewide) and county incidence and mortality rates are compared to U.S. SEER 18 incidence rates and U.S. mortality rates from NCHS (see Sections I.A and I.B).

Data used for Maryland cancer mortality ranking by site are from SEER, CSR, which are based on NCHS mortality data. Maryland's mortality ranking among the 50 states and the District of Columbia for all cancer sites combined and for specific targeted cancers is based on a 5-year average (2008-2012) of age-adjusted rates. Because mortality rates describe the cancer burden better than incidence rates, only Maryland rankings for mortality are presented for each targeted cancer.

Maps included with this data display comparisons of Maryland incidence and mortality rates by geographical area to U.S. rates. For both incidence and mortality rate maps, the 5-year (2008-2012) U.S. rate was used as a basis for comparison with rates for Maryland jurisdictions (counties and regions). A ramp is used for grouping Maryland data into categories in reference to U.S. rates. The ramp groups data into five divisions: >25% above U.S. rate; 10-25% above U.S. rate; between 10% below and 10% above U.S. rate; 10-25% below U.S. rate; and >25% below U.S. rate. Note that 10-25% includes 10% and 25%, but less than 10% and more than 25% do not include the endpoints of the range.

F. Race and Hispanic Ethnicity

The MCR began requiring submission of more detailed data on race and ethnicity in August 1998. Incidence data provided by the MCR include the following race categories: White, Black, Other, and Unknown (not stated), regardless of Hispanic ethnicity. The "Other" race category includes cases reported as American Indian or Alaskan Native, Asian or Pacific Islander, and any other race category, except those cases with unknown or missing race. However, only White, Black, and Other races are included in the Cancer Report, with the "Other" race category only including American Indian or Alaska Native and Asian or Pacific Islander cases. This change is to match with how CDC WONDER reports race for mortality data (see below). The MCR uses the NCI's SEER*Stat software to compile incidence data.

Hispanic ethnicity is captured in a separate data field. Data presented in Table 4 are derived using the NAACCR Hispanic Identification Algorithm. This algorithm uses a combination of NAACCR variables to classify cases as Hispanic. In Table 4, "Hispanic" includes people reported to the MCR as Spanish / Hispanic origin plus those with "derived" Hispanic origin. The derivation is an algorithm based on the person having a Hispanic surname (last or maiden name) and their country of birth, race, and sex.

Mortality data (death counts and rates) in this report were obtained from the NCHS CMF in CDC WONDER, SEER CSR, and the Maryland Vital Statistics Administration. Race data in the CMF are based on information collected on death certificates. CDC WONDER reports race in four categories (White, Black, Asian or Pacific Islander, and Native American or Alaska Native). NCHS, in collaboration with the Census Bureau, developed a race-bridging methodology for

assigning multiple-race groups to single-race categories. The category of "Other" races in this report includes the American Indian or Alaska Native race category and the Asian or Pacific Islander race category. The Maryland Vital Statistics Administration reports race in the same four categories as CDC WONDER, along with an additional category "All Other Races." To keep rates comparable between incidence and mortality, death counts and mortality rates are only shown for white, black, and "Other" (i.e., Asian or Pacific Islander and Native American or Alaskan Native). "All Other Races" are not shown due to the small number of deaths in these categories, but they are included in the total death counts and mortality rates. U.S. mortality data from SEER CSR are reported with only two race categories (white and black). As a result, single year 2012 and 5-year aggregate data (2008-2012) obtained from SEER CSR only report U.S. mortality for whites and blacks.

G. Healthy People 2020 Targets

In the CRF Cancer Report, quantitative HP 2020 targets are compared to Maryland data related to cancer risk behaviors and adherence to cancer screening recommendations (see Section I.C.4). Specifically, HP 2020 targets are compared to data from the Maryland BRFSS. The data from these Maryland surveys are weighted to the age, race, and gender of the Maryland population and unlike the national data that serve as the basis for HP 2020 targets, Maryland BRFSS data are not age-adjusted to the 2000 U.S. standard population.

The target-setting method used for the HP 2020 objective for sun exposure protection was a 10% improvement from the national baseline in 2008 using data from the National Health Interview Survey (NHIS). The questions used to define sun exposure protective measures used by NHIS slightly differed from the questions used by the Maryland BRFSS, although the information gathered by both surveys are similar. Therefore, one could use the sun exposure protection data from the Maryland BRFSS as a form of comparison to the HP 2020, however, interpretations should remain cautious due to the different measures used for data gathering.

H. Appendices

Refer to additional appendices in this report for the following information:

- Glossary (technical terms and definitions) (Appendix B)
- Maryland Population Estimates, 2012 (Appendix C)
- U.S. Standard Population, 2000 (Appendix D)
- Definitions of International Classification of Diseases (ICD) Codes Used for Cancer Incidence and Mortality (Appendix E)
- Maryland Cancer Incidence and Mortality Rates by Geographical Area, 2008-2012 (Appendix F)

- Trends in Cancer Incidence and Mortality Rates in Maryland by Cancer Site, Race or Gender, and Year, 2008-2012 (Appendix G)

- Trends in Cancer Stage of Disease at Diagnosis in Maryland by Cancer Site and Year, 2008-2012 (Appendix H)

- Appendix I: Trends in All Cancer Sites Incidence and Mortality Rates in Maryland and U.S. by Year, 2003-2012 (Appendix I)

Appendix B

Glossary

Glossary

- **Age-adjustment:** Age is the most important risk factor for the incidence of most cancers. However, cancer rates derived from populations that differ in underlying age structure are not comparable. Age-adjustment is a statistical technique that allows for the comparison of rates among populations with different age distributions, by weighting the age-specific rates in each population to one standard population. Additional information on age-adjustment can be found on the following web sites:

  http://seer.cancer.gov/seerstat/tutorials/aarates/definition.html

  http://www.cdc.gov/nchs/data/statnt/statnt20.pdf

- **Annual percent change (APC):** A measure of the annual percent increase or decrease in cancer rates over time, used for analyzing trends. This measure assumes that cancer rates change at a constant percentage of the rate of the previous year. Rates that change at a constant percentage every year change linearly on a log scale. A more detailed description of the method can be found at:
  http://surveillance.cancer.gov/joinpoint/webhelp/Executing_the_Joinpoint_Parameters/Statistical_Notes/Statistics_Related_to_the_k-joinpoint_Model/Average_Annual_Percent_Change.htm

  http://surveillance.cancer.gov/joinpoint/webhelp/Executing_the_Joinpoint_Parameters/Statistical_Notes/Statistics_Related_to_the_k-joinpoint_Model/Average_Annual_Percent_Change.htm

- **Ascertainment:** Refers to the quality assurance procedures that Maryland Cancer Registry staff use to ensure completeness of cancer cases in the Registry database. These activities include: a review of disease indices from all reporting hospitals to identify possible missed cases; an evaluation of random samples of records from reporting facilities; and a review of death certificate data to identify cancer cases not previously reported.

- **Cancer:** A disease characterized by the uncontrolled, abnormal growth of cells in different parts of the body that can spread to other parts of the body.

- **Chemoprevention:** The use of drugs, vitamins, or other agents to try to reduce the risk of cancer or delay the development or recurrence of cancer.

- **Confidence interval (CI):** The range of values for a calculated estimate that will include the true value a given percentage of the time. A 95% CI for a rate includes the true rate 95% of the time.

- **Incidence:** The number of new cases of a given cancer or other event during a defined time period, usually one year. For the purposes of this report, cancer incidence refers to the number of new cases diagnosed during the individual calendar year 2012. Cancer incidence

data are also presented in aggregated form, as the average annual incidence for the 5-year period from 2008 through 2012.

- **International Classification of Diseases (ICD):** The ICD is the international standard diagnostic classification for all general epidemiological, health management, and clinical use. It is used to classify diseases and other health problems recorded on many types of health and vital records, including death certificates and health records.

- **International Classification of Diseases for Oncology (ICD-O):** The ICD-O is the classification system used by tumor or cancer registries to code the site and the histology of the cancer, usually from a pathology report.

- **Invasive cancer:** Cancer that has spread beyond the layer of cells where it first began and has grown into nearby tissues. It may still be considered local stage if it has not spread to other parts of the body. Stage data presented in this report involve a diagnosis of invasive cancer: local, regional, or distant. A diagnosis of *in situ* is non-invasive and is not included in the staging data, except for *in situ* bladder cancer for all sites cancer data.

- **Mortality:** The number of deaths during a defined time period, usually one year. For the purposes of this report, cancer mortality refers to the number of new cancer deaths during the individual calendar year 2012. Cancer mortality data are also presented in an aggregated form, as the average annual mortality for the 5-year period from 2008 through 2012.

- **Primary prevention:** Measures that can be taken that aim to prevent cancer before it has developed. Examples include the avoidance of carcinogens (e.g., cigarettes, tobacco), promoting a healthy lifestyle through exercise and diet, preventing the harmful effects of carcinogens (e.g., using sunscreen), and detecting and removing precancerous lesions (e.g., removing polyps in the colon).

- **Race bridging:** Refers to the process of making data collected using one set of race categories consistent with data collected using a different set of race categories. This consistency allows estimation and comparison of race-specific statistics at a given point in time or over a period of time. More specifically, race bridging is a method used to make systems sufficiently comparable to permit estimation and analysis of race-specific statistics. Race-bridging algorithms are generally applied to population data, which are used in this report for calculating rates and for describing race categories of Maryland population estimates (see Appendix C).

- **Rate:** An estimate of the burden of a given disease on a defined population at risk over a specified period of time. A crude rate is calculated by dividing the number of cases or deaths (events) by the population at risk during a given time period. Cancer incidence and mortality rates are usually presented per 100,000 population during a given time period. An incidence rate is the number of new cases during a specific period (usually one year) divided by the population at risk per 100,000 population. A mortality rate is the number of deaths for a given period divided by the population at risk per 100,000 population. All rates presented in this report are age-adjusted to the 2000 U.S. standard population.

- **Region:** The following are the five regional categories in Maryland.

  Baltimore Metropolitan Area
  Anne Arundel, Baltimore City, Baltimore County, Carroll, Harford, and Howard Counties

  Note: The Baltimore Metropolitan Area does not include Baltimore City when used in Appendix F and for the incidence and mortality maps.

  Eastern Shore Region
  Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties

  National Capital Area
  Montgomery and Prince George's Counties

  Northwest Region
  Allegany, Frederick, Garrett, and Washington Counties

  Southern Region
  Calvert, Charles, and Saint Mary's Counties

- **Screening:** Checking for disease when there are no symptoms, resulting in detection of pre-cancer, cancer *in situ*, or cancer at an early stage.

- **Stage at diagnosis:** Cancer stage is the extent to which the cancer has spread from the organ of origin at the time of diagnosis. The stage information used in this report is based on the SEER Summary Stage Guidelines:

  1. ***In situ*:** The cancerous cells have not invaded the tissue basement membrane and no stromal invasion. *In situ* cancers are not considered malignant (with the exception of bladder cancers) and are not included in incidence rate calculations.
  2. **Local:** The tumor is confined to the organ of origin.
  3. **Regional:** The tumor has spread to adjacent organs or tissue. Regional lymph nodes may also be involved.
  4. **Distant:** The tumor has spread beyond the adjacent organs or tissues. Distant lymph nodes, organs, and/or tissues may also be involved.
  5. **Unstaged:** The stage of disease at diagnosis was unable to be classified (often due to insufficient information) or was not reported to the cancer registry.

Appendix C

Maryland Population Estimates, 2012

Maryland Population Estimates by Jurisdiction, 2012

Jurisdiction	Total All Genders	Total Males	Total Females	Total Whites	White Males	White Females	Total Blacks	Black Males	Black Females
Maryland	**5,884,563**	**2,850,403**	**3,034,160**	**3,643,570**	**1,798,963**	**1,844,607**	**1,822,097**	**850,625**	**971,472**
Baltimore Metropolitan Area^	**2,704,554**	**1,303,231**	**1,401,323**	**1,722,612**	**846,069**	**876,543**	**820,257**	**378,993**	**441,264**
Anne Arundel County	550,488	272,378	278,110	431,441	214,892	216,549	92,971	45,286	47,685
Baltimore City	621,342	292,794	328,548	197,730	98,398	99,332	402,702	184,156	218,546
Baltimore County	817,455	386,748	430,707	538,953	258,945	280,008	226,803	102,519	124,284
Carroll County	167,217	82,529	84,688	157,556	77,568	79,988	6,098	3,357	2,741
Harford County	248,622	121,751	126,871	205,559	101,097	104,462	34,089	16,482	17,607
Howard County	299,430	147,031	152,399	191,373	95,169	96,204	57,594	27,193	30,401
Eastern Shore Region	**452,327**	**221,243**	**231,084**	**364,344**	**178,362**	**185,982**	**78,218**	**38,170**	**40,048**
Caroline County	32,718	15,875	16,843	27,148	13,268	13,880	4,905	2,244	2,661
Cecil County	101,696	50,452	51,244	92,754	45,984	46,770	7,094	3,600	3,494
Dorchester County	32,551	15,621	16,930	22,630	11,017	11,613	9,407	4,385	5,022
Kent County	20,191	9,657	10,534	16,700	8,015	8,685	3,190	1,502	1,688
Queen Anne's County	48,595	24,146	24,449	44,137	21,937	22,200	3,562	1,787	1,775
Somerset County	26,253	14,173	12,080	14,502	7,510	6,992	11,374	6,466	4,908
Talbot County	38,098	18,122	19,976	32,120	15,352	16,768	5,269	2,463	2,806
Wicomico County	100,647	48,168	52,479	71,103	34,155	36,948	25,965	12,235	13,730
Worcester County	51,578	25,029	26,549	43,250	21,124	22,126	7,452	3,488	3,964
National Capital Area	**1,885,847**	**907,249**	**978,598**	**886,503**	**442,286**	**444,217**	**781,732**	**360,814**	**420,918**
Montgomery County	1,004,709	483,887	520,822	648,591	317,254	331,337	192,126	88,914	103,212
Prince George's County	881,138	423,362	457,776	237,912	125,032	112,880	589,606	271,900	317,706
Northwest Region	**492,628**	**247,562**	**245,066**	**429,249**	**212,065**	**217,184**	**46,861**	**27,579**	**19,282**
Allegany County	74,012	38,481	35,531	66,653	33,087	33,566	6,510	4,972	1,538
Frederick County	239,582	118,086	121,496	204,002	100,608	103,394	23,242	11,566	11,676
Garrett County	29,854	14,800	15,054	29,299	14,513	14,786	385	229	156
Washington County	149,180	76,195	72,985	129,295	63,857	65,438	16,724	10,812	5,912
Southern Region	**349,207**	**171,118**	**178,089**	**240,862**	**120,181**	**120,681**	**95,029**	**45,069**	**49,960**
Calvert County	89,628	44,140	45,488	74,831	37,151	37,680	12,566	6,048	6,518
Charles County	150,592	72,632	77,960	77,600	38,534	39,066	65,860	30,911	34,949
St Mary's County	108,987	54,346	54,641	88,431	44,496	43,935	16,603	8,110	8,493

Source: SEER*Stat static data as of 02/13/2015.

Appendix D

U.S. Standard Population, 2000

2000 U.S. Standard Population

Age Group	2000 Population
Less than 01 years	3,794,901
01-04 years	15,191,619
05-09 years	19,919,840
10-14 years	20,056,779
15-19 years	19,819,518
20-24 years	18,257,225
25-29 years	17,722,067
30-34 years	19,511,370
35-39 years	22,179,956
40-44 years	22,479,229
45-49 years	19,805,793
50-54 years	17,224,359
55-59 years	13,307,234
60-64 years	10,654,272
65-69 years	9,409,940
70-74 years	8,725,574
75-79 years	7,414,559
80-84 years	4,900,234
85+ years	4,259,173
Total	274,633,642

Source: National Cancer Institute, SEER, 2000

Appendix E

Definitions of International Classification of Diseases (ICD) Codes Used for Cancer Incidence and Mortality

International Classification of Diseases for Oncology, 3rd Edition (ICD-O-3) Codes Used for Cancer Incidence and International Classification of Diseases, 10th Revision (ICD-10) Codes Used for Cancer Mortality

Cancer Site	Incidence (ICD-O-3)		Mortality (ICD-10)
	Topography (Site)	**Histology**	
All Cancer Sites	C00.0 – C80.9	Includes all invasive cancers of all sites, except basal and squamous cell skin cancers, and includes *in situ* cancer of the urinary bladder	C00 – C97, D09.0
Lung and Bronchus	C34.0 – C34.9	Excludes codes 9050-9055, 9140, and 9590-9989	C34 (WONDER)
Colon and Rectum	C18.0 – C20.9, C26.0	Excludes codes 9050-9055, 9140, and 9590-9989	C18 – C20, C26.0
Female Breast	C50.0 – C50.9 (female only)	Excludes codes 9050-9055, 9140, and 9590-9989	C50 (female only)
Prostate	C61.9	Excludes codes 9050-9055, 9140, and 9590-9990	C61
Oral Cavity and Pharynx	C00.0 – C14.8	Excludes codes 9050-9055, 9140, and 9590-9989	C00 – C14
Melanoma of the Skin	C44.0 – C44.9	Includes only codes 8720-8790	C43
Cervix	C53.0 – C53.9	Excludes codes 9050-9055, 9140, and 9590-9989	C53

Note: Most cancer mortality (ICD-10) codes are similar to cancer incidence (ICD-O-3) topography (site) codes.

Appendix F

Maryland Cancer Incidence and Mortality Rates by Geographical Area, 2008-2012

Appendix F

Table 1: All Cancer Sites Incidence
Age-Adjusted Incidence Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Incidence Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	447.0	444.6	449.4
Northwest Region	458.7	450.6	467.0
Allegany	512.4	492.1	533.2
Frederick	440.3	428.0	452.7
Garrett	416.7	388.0	447.1
Washington	463.4	448.9	478.2
Baltimore Metropolitan Area ^	462.8	458.8	466.9
Anne Arundel	471.9	463.7	480.1
Baltimore City	485.3	477.5	493.1
Baltimore County	470.5	464.2	476.8
Carroll	443.2	429.6	457.1
Harford	487.4	475.4	499.7
Howard	411.2	400.3	422.3
National Capital Area	392.5	388.4	396.7
Montgomery	389.8	384.3	395.2
Prince George's	396.6	390.2	403.1
Southern Region	424.2	414.0	434.7
Calvert	441.7	421.9	462.2
Charles	414.2	398.4	430.5
Saint Mary's	423.2	405.0	441.9
Eastern Shore Region	484.0	475.7	492.5
Caroline	458.2	427.5	490.6
Cecil	475.9	457.3	495.1
Dorchester	476.8	447.6	507.7
Kent	455.8	420.6	493.5
Queen Anne's	424.2	400.5	449.0
Somerset	514.9	478.4	553.6
Talbot	458.5	433.1	485.2
Wicomico	536.9	517.0	557.4
Worcester	507.9	484.8	531.8

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

^ Area rate does not include Baltimore City.

Source: Maryland Cancer Registry.

Appendix F

Table 2: Lung and Bronchus Cancer Incidence
Age-Adjusted Incidence Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Incidence Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	58.7	57.8	59.6
Northwest Region	63.9	60.9	67.0
Allegany	81.4	73.7	89.8
Frederick	54.0	49.7	58.6
Garrett	47.9	38.8	58.7
Washington	71.2	65.6	77.1
Baltimore Metropolitan Area ^	63.1	61.6	64.7
Anne Arundel	65.8	62.8	69.0
Baltimore City	78.3	75.2	81.5
Baltimore County	67.2	64.9	69.6
Carroll	60.8	55.8	66.1
Harford	66.7	62.2	71.3
Howard	43.1	39.4	47.0
National Capital Area	40.0	38.7	41.4
Montgomery	35.4	33.8	37.2
Prince George's	46.3	44.0	48.6
Southern Region	59.0	55.1	63.1
Calvert	56.1	48.9	63.9
Charles	54.2	48.4	60.5
Saint Mary's	67.4	60.1	75.4
Eastern Shore Region	72.2	69.0	75.4
Caroline	74.8	62.8	88.6
Cecil	77.8	70.3	85.9
Dorchester	65.4	55.3	77.1
Kent	63.2	51.0	77.9
Queen Anne's	61.8	52.9	71.8
Somerset	99.3	83.9	116.9
Talbot	47.7	40.6	56.2
Wicomico	84.0	76.3	92.3
Worcester	72.8	64.8	81.7

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

^ Area rate does not include Baltimore City.

Source: Maryland Cancer Registry.

Appendix F

Table 3: Colorectal Cancer Incidence
Age-Adjusted Incidence Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Incidence Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	38.1	37.4	38.8
Northwest Region	44.9	42.4	47.5
Allegany	49.5	43.5	56.2
Frederick	47.1	43.1	51.3
Garrett	39.2	30.9	49.3
Washington	41.1	36.9	45.7
Baltimore Metropolitan Area ^	38.1	36.9	39.2
Anne Arundel	34.5	32.3	36.8
Baltimore City	46.9	44.5	49.4
Baltimore County	40.1	38.3	42.0
Carroll	37.1	33.2	41.3
Harford	45.9	42.2	49.8
Howard	32.9	29.8	36.3
National Capital Area	32.1	30.9	33.3
Montgomery	29.8	28.3	31.3
Prince George's	35.2	33.2	37.2
Southern Region	35.9	32.9	39.1
Calvert	35.7	30.2	42.0
Charles	35.7	31.2	40.8
Saint Mary's	36.5	31.3	42.3
Eastern Shore Region	40.8	38.4	43.3
Caroline	38.1	29.6	48.4
Cecil	41.2	35.8	47.1
Dorchester	47.8	38.9	58.2
Kent	43.2	32.8	56.3
Queen Anne's	31.7	25.6	39.0
Somerset	52.7	41.5	66.2
Talbot	35.2	28.4	43.4
Wicomico	46.0	40.4	52.3
Worcester	36.6	30.9	43.4

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

^ Area rate does not include Baltimore City.

Source: Maryland Cancer Registry.

Appendix F

Table 4: Female Breast Cancer Incidence
Age-Adjusted Incidence Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Incidence Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	128.1	126.3	129.8
Northwest Region	121.0	115.3	126.9
Allegany	111.8	98.5	126.4
Frederick	121.1	112.7	130.0
Garrett	107.0	87.1	130.4
Washington	126.6	116.2	137.8
Baltimore Metropolitan Area ^	133.1	130.1	136.0
Anne Arundel	129.8	124.1	135.7
Baltimore City	124.4	119.3	129.8
Baltimore County	135.1	130.5	139.9
Carroll	130.0	120.2	140.4
Harford	137.9	129.4	146.8
Howard	129.0	121.1	137.4
National Capital Area	123.6	120.5	126.7
Montgomery	127.2	123.1	131.4
Prince George's	118.9	114.4	123.5
Southern Region	121.8	114.5	129.4
Calvert	145.5	130.5	161.7
Charles	115.1	104.4	126.7
Saint Mary's	110.0	97.6	123.5
Eastern Shore Region	124.1	118.2	130.1
Caroline	122.2	101.2	146.6
Cecil	117.3	105.0	130.8
Dorchester	123.7	103.6	147.0
Kent	104.8	82.2	132.6
Queen Anne's	115.4	98.8	134.3
Somerset	107.6	84.3	135.6
Talbot	143.0	122.8	166.0
Wicomico	125.6	112.7	139.7
Worcester	141.4	123.8	161.0

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

^ Area rate does not include Baltimore City.

Source: Maryland Cancer Registry.

Appendix F

Table 5: Prostate Cancer Incidence
Age-Adjusted Incidence Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Incidence Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	138.3	136.4	140.3
Northwest Region	117.5	111.5	123.7
Allegany	134.3	119.7	150.3
Frederick	122.0	112.5	132.0
Garrett	85.5	68.2	106.5
Washington	110.6	100.5	121.5
Baltimore Metropolitan Area ^	128.6	125.5	131.7
Anne Arundel	146.4	139.9	153.2
Baltimore City	143.9	137.5	150.6
Baltimore County	122.2	117.5	127.0
Carroll	107.3	97.9	117.5
Harford	136.4	127.2	146.0
Howard	121.1	112.7	129.9
National Capital Area	147.8	144.0	151.6
Montgomery	135.7	131.0	140.6
Prince George's	165.4	159.1	171.8
Southern Region	121.8	114.0	130.1
Calvert	120.0	105.2	136.3
Charles	140.3	127.0	154.6
Saint Mary's	100.9	88.8	114.3
Eastern Shore Region	148.9	142.4	155.6
Caroline	127.2	104.8	153.2
Cecil	119.0	105.7	133.4
Dorchester	146.8	124.2	172.6
Kent	160.5	132.2	194.1
Queen Anne's	132.3	114.2	152.7
Somerset	145.2	118.4	176.5
Talbot	160.7	140.9	183.1
Wicomico	178.6	161.9	196.7
Worcester	158.7	142.0	177.4

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

^ Area rate does not include Baltimore City.

Source: Maryland Cancer Registry.

Appendix F

Table 6: Oral Cancer Incidence
Age-Adjusted Incidence Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Incidence Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	10.3	9.9	10.7
Northwest Region	10.8	9.6	12.1
Allegany	13.0	9.8	16.9
Frederick	9.8	8.1	11.8
Garrett	11.0	6.7	17.3
Washington	11.3	9.2	13.8
Baltimore Metropolitan Area ^	10.8	10.2	11.4
Anne Arundel	12.8	11.5	14.2
Baltimore City	13.0	11.7	14.3
Baltimore County	10.2	9.2	11.1
Carroll	9.9	8.0	12.1
Harford	10.2	8.6	12.0
Howard	10.0	8.4	11.7
National Capital Area	7.7	7.1	8.3
Montgomery	7.7	7.0	8.5
Prince George's	7.5	6.7	8.4
Southern Region	11.3	9.8	13.1
Calvert	13.6	10.4	17.4
Charles	10.9	8.5	13.8
Saint Mary's	10.0	7.5	13.0
Eastern Shore Region	12.0	10.7	13.4
Caroline	12.6	7.9	19.1
Cecil	13.3	10.5	16.7
Dorchester	12.6	8.4	18.4
Kent	11.5	6.6	19.1
Queen Anne's	10.4	7.2	14.9
Somerset	11.8	7.0	18.7
Talbot	10.0	6.7	14.6
Wicomico	10.6	8.0	13.9
Worcester	13.8	10.0	18.7

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

^ Area rate does not include Baltimore City.

Source: Maryland Cancer Registry.

Appendix F

Table 7: Melanoma Incidence
Age-Adjusted Incidence Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Incidence Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	20.9	20.4	21.4
Northwest Region	20.4	18.6	22.2
Allegany	18.1	14.3	22.6
Frederick	21.9	19.2	24.8
Garrett	16.9	11.2	24.6
Washington	20.3	17.3	23.7
Baltimore Metropolitan Area ^	28.4	27.4	29.4
Anne Arundel	31.4	29.3	33.6
Baltimore City	10.4	9.3	11.6
Baltimore County	25.8	24.3	27.3
Carroll	32.8	29.1	36.9
Harford	30.4	27.4	33.6
Howard	25.9	23.3	28.7
National Capital Area	12.9	12.2	13.7
Montgomery	17.5	16.4	18.7
Prince George's	7.1	6.2	8.1
Southern Region	21.8	19.5	24.2
Calvert	29.5	24.5	35.1
Charles	14.9	12.0	18.2
Saint Mary's	24.6	20.4	29.3
Eastern Shore Region	28.4	26.4	30.6
Caroline	24.5	17.8	33.1
Cecil	24.2	20.2	28.9
Dorchester	23.8	17.5	31.7
Kent	19.5	11.9	30.2
Queen Anne's	27.7	21.8	34.7
Somerset	27.6	19.3	38.2
Talbot	27.1	20.7	35.0
Wicomico	34.2	29.3	39.8
Worcester	37.5	31.0	45.1

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

^ Area rate does not include Baltimore City.

Source: Maryland Cancer Registry.

Appendix F

Table 8: Cervical Cancer Incidence
Age-Adjusted Incidence Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Incidence Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	6.7	6.3	7.1
Northwest Region	6.8	5.4	8.4
Allegany	**	**	**
Frederick	5.6	3.9	7.9
Garrett	**	**	**
Washington	8.8	5.9	12.5
Baltimore Metropolitan Area ^	6.2	5.6	6.9
Anne Arundel	6.6	5.3	8.1
Baltimore City	9.8	8.4	11.5
Baltimore County	6.8	5.7	8.0
Carroll	4.1	2.5	6.4
Harford	6.6	4.8	9.0
Howard	4.9	3.5	6.8
National Capital Area	6.3	5.6	7.0
Montgomery	5.1	4.3	6.1
Prince George's	7.7	6.6	9.0
Southern Region	5.2	3.8	6.9
Calvert	**	**	**
Charles	4.7	2.9	7.4
Saint Mary's	6.1	3.5	9.9
Eastern Shore Region	6.7	5.2	8.4
Caroline	**	**	**
Cecil	8.5	5.4	12.9
Dorchester	**	**	**
Kent	**	**	**
Queen Anne's	**	**	**
Somerset	**	**	**
Talbot	**	**	**
Wicomico	7.2	4.2	11.6
Worcester	**	**	**

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

** Rates based on case counts of 1-15 are suppressed per DHMH/MCR Data Use Policy.

^ Area rate does not include Baltimore City.

Source: Maryland Cancer Registry.

Appendix F

Table 9: All Cancer Sites Mortality
Age-Adjusted Mortality Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Mortality Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	171.8	170.3	173.3
Northwest Region	167.9	163.0	172.8
Allegany	174.1	162.6	185.5
Frederick	158.6	151.2	166.1
Garrett	162.0	144.3	179.6
Washington	178.4	169.4	187.3
Baltimore Metropolitan Area ^	172.2	169.8	174.7
Anne Arundel	177.3	172.2	182.4
Baltimore City	224.2	218.9	229.5
Baltimore County	178.6	174.8	182.4
Carroll	175.3	166.7	183.9
Harford	173.1	165.9	180.4
Howard	138.0	131.2	144.7
National Capital Area	146.0	143.4	148.5
Montgomery	123.5	120.5	126.6
Prince George's	176.6	172.1	181.1
Southern Region	181.6	174.7	188.6
Calvert	175.8	162.9	188.7
Charles	188.9	177.7	200.2
Saint Mary's	177.7	165.5	189.9
Eastern Shore Region	192.7	187.5	197.8
Caroline	192.0	171.6	212.4
Cecil	202.2	189.6	214.8
Dorchester	186.4	168.2	204.5
Kent	189.6	168.0	211.3
Queen Anne's	175.3	159.5	191.1
Somerset	220.0	195.8	244.2
Talbot	169.6	155.1	184.0
Wicomico	206.0	193.7	218.3
Worcester	187.7	174.5	200.9

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

^ Area rate does not include Baltimore City.

Source: CDC Wonder.

Appendix F

Table 10: Lung and Bronchus Cancer Mortality
Age-Adjusted Mortality Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Mortality Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	46.3	45.5	47.1
Northwest Region	47.3	44.7	49.9
Allegany	48.8	42.8	54.8
Frederick	42.2	38.3	46.0
Garrett	48.3	39.1	59.0
Washington	53.4	48.5	58.3
Baltimore Metropolitan Area ^	48.8	47.4	50.1
Anne Arundel	53.4	50.6	56.2
Baltimore City	62.4	59.6	65.3
Baltimore County	50.6	48.5	52.6
Carroll	48.3	43.8	52.9
Harford	51.4	47.4	55.3
Howard	31.6	28.3	34.9
National Capital Area	32.8	31.5	34.0
Montgomery	26.0	24.6	27.4
Prince George's	42.2	40.0	44.4
Southern Region	51.1	47.4	54.8
Calvert	50.1	43.3	57.0
Charles	50.1	44.2	55.9
Saint Mary's	53.4	46.7	60.1
Eastern Shore Region	57.5	54.7	60.3
Caroline	58.5	47.3	69.6
Cecil	61.2	54.3	68.0
Dorchester	60.0	49.9	70.2
Kent	55.8	44.8	68.8
Queen Anne's	49.8	41.5	58.2
Somerset	69.2	55.6	82.9
Talbot	43.7	36.6	50.8
Wicomico	60.5	53.9	67.2
Worcester	59.1	51.8	66.3

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

^ Area rate does not include Baltimore City.

Source: CDC Wonder.

Appendix F

Table 11: Colorectal Cancer Mortality
Age-Adjusted Mortality Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Mortality Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	15.4	15.0	15.9
Northwest Region	17.0	15.5	18.6
Allegany	18.2	14.7	22.2
Frederick	16.8	14.4	19.2
Garrett	14.9	10.0	21.4
Washington	17.1	14.3	19.9
Baltimore Metropolitan Area ^	14.6	13.9	15.3
Anne Arundel	14.3	12.8	15.7
Baltimore City	21.9	20.2	23.5
Baltimore County	15.1	14.0	16.2
Carroll	16.1	13.4	18.7
Harford	15.8	13.5	18.0
Howard	11.9	9.9	13.9
National Capital Area	13.1	12.3	13.9
Montgomery	9.9	9.0	10.7
Prince George's	17.5	16.1	18.9
Southern Region	16.2	14.1	18.3
Calvert	16.7	12.9	21.3
Charles	17.2	13.9	20.6
Saint Mary's	14.4	11.2	18.2
Eastern Shore Region	16.8	15.3	18.3
Caroline	19.8	13.8	27.6
Cecil	17.4	13.9	21.5
Dorchester	13.1	8.9	18.7
Kent	13.3	8.4	20.2
Queen Anne's	12.0	8.3	16.9
Somerset	28.4	20.5	38.4
Talbot	13.7	9.9	18.5
Wicomico	20.5	16.6	24.4
Worcester	14.6	11.2	18.6

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

^ Area rate does not include Baltimore City.

Source: CDC Wonder.

Appendix F

Table 12: Female Breast Cancer Mortality
Age-Adjusted Mortality Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Mortality Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	23.8	23.1	24.5
Northwest Region	21.1	18.7	23.4
Allegany	19.6	14.6	25.9
Frederick	22.5	18.9	26.2
Garrett	23.7	15.5	34.7
Washington	19.0	15.3	23.4
Baltimore Metropolitan Area ^	23.9	22.7	25.1
Anne Arundel	23.7	21.2	26.2
Baltimore City	29.0	26.5	31.6
Baltimore County	24.9	23.0	26.9
Carroll	22.2	18.1	26.3
Harford	24.2	20.6	27.8
Howard	21.7	18.4	25.1
National Capital Area	22.7	21.4	24.0
Montgomery	18.8	17.3	20.4
Prince George's	27.6	25.4	29.9
Southern Region	24.1	20.8	27.4
Calvert	24.6	18.7	31.8
Charles	24.4	19.6	30.1
Saint Mary's	23.1	17.6	29.7
Eastern Shore Region	23.4	20.9	25.9
Caroline	25.3	16.2	37.7
Cecil	24.1	18.7	30.5
Dorchester	22.4	14.5	33.1
Kent	24.1	14.9	36.8
Queen Anne's	18.5	12.2	26.9
Somerset	**	**	**
Talbot	22.7	15.5	32.1
Wicomico	21.1	16.1	27.1
Worcester	28.9	22.1	37.3

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

** Rates based on death counts of 0-19 deaths are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

^ Area rate does not include Baltimore City.

Source: CDC Wonder.

Appendix F

Table 13: Prostate Cancer Mortality
Age-Adjusted Mortality Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Mortality Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	22.5	21.6	23.4
Northwest Region	19.1	16.4	21.8
Allegany	12.1	7.9	17.8
Frederick	21.9	17.6	27.0
Garrett	**	**	**
Washington	19.0	14.6	24.3
Baltimore Metropolitan Area ^	19.3	17.9	20.6
Anne Arundel	20.1	17.3	23.0
Baltimore City	36.0	32.4	39.6
Baltimore County	19.6	17.6	21.5
Carroll	18.5	14.1	23.7
Harford	18.7	14.8	23.3
Howard	18.0	14.1	22.6
National Capital Area	21.9	20.3	23.6
Montgomery	16.8	15.0	18.6
Prince George's	31.0	27.6	34.4
Southern Region	24.2	20.0	28.5
Calvert	24.5	17.0	34.0
Charles	25.5	18.8	33.8
Saint Mary's	21.9	15.7	29.8
Eastern Shore Region	25.5	22.5	28.5
Caroline	**	**	**
Cecil	27.1	19.9	36.2
Dorchester	22.4	13.7	34.5
Kent	32.2	20.4	48.3
Queen Anne's	26.7	17.6	38.8
Somerset	**	**	**
Talbot	28.6	20.5	39.0
Wicomico	25.6	19.0	33.6
Worcester	22.9	16.6	30.8

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

** Rates based on death counts of 0-19 deaths are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

^ Area rate does not include Baltimore City.

Source: CDC Wonder.

Appendix F

Table 14: Oral Cancer Mortality
Age-Adjusted Mortality Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Mortality Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	2.3	2.2	2.5
Northwest Region	2.0	1.5	2.6
Allegany	**	**	**
Frederick	**	**	**
Garrett	**	**	**
Washington	2.5	1.5	3.7
Baltimore Metropolitan Area ^	2.2	1.9	2.5
Anne Arundel	3.0	2.4	3.7
Baltimore City	3.7	3.0	4.4
Baltimore County	2.0	1.6	2.4
Carroll	**	**	**
Harford	2.4	1.6	3.4
Howard	1.4	0.9	2.2
National Capital Area	1.9	1.6	2.2
Montgomery	1.4	1.1	1.8
Prince George's	2.6	2.1	3.2
Southern Region	3.1	2.3	4.2
Calvert	**	**	**
Charles	3.3	2.0	5.2
Saint Mary's	**	**	**
Eastern Shore Region	2.8	2.3	3.5
Caroline	**	**	**
Cecil	**	**	**
Dorchester	**	**	**
Kent	**	**	**
Queen Anne's	**	**	**
Somerset	**	**	**
Talbot	**	**	**
Wicomico	4.0	2.5	6.0
Worcester	**	**	**

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

** Rates based on death counts of 0-19 deaths are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

^ Area rate does not include Baltimore City.

Source: CDC Wonder.

Appendix F

Table 15: Melanoma Mortality
Age-Adjusted Mortality Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Mortality Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	2.7	2.5	2.9
Northwest Region	3.0	2.4	3.8
Allegany	**	**	**
Frederick	3.2	2.2	4.4
Garrett	**	**	**
Washington	3.1	2.0	4.5
Baltimore Metropolitan Area ^	3.2	2.8	3.5
Anne Arundel	3.4	2.8	4.2
Baltimore City	1.5	1.1	2.0
Baltimore County	3.2	2.7	3.8
Carroll	3.8	2.6	5.3
Harford	3.2	2.3	4.3
Howard	2.2	1.4	3.2
National Capital Area	2.0	1.7	2.3
Montgomery	2.3	1.9	2.7
Prince George's	1.5	1.2	2.0
Southern Region	2.6	1.8	3.5
Calvert	**	**	**
Charles	**	**	**
Saint Mary's	**	**	**
Eastern Shore Region	3.8	3.1	4.6
Caroline	**	**	**
Cecil	4.1	2.5	6.3
Dorchester	**	**	**
Kent	**	**	**
Queen Anne's	**	**	**
Somerset	**	**	**
Talbot	**	**	**
Wicomico	**	**	**
Worcester	**	**	**

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

** Rates based on death counts of 0-19 deaths are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

^ Area rate does not include Baltimore City.

Source: CDC Wonder.

Appendix F

Table 16: Cervical Cancer Mortality
Age-Adjusted Mortality Rates
by Geographical Area, Maryland, 2008-2012

Geographical Area	Mortality Rates*	95% Confidence Interval	
		Lower CI	Upper CI
Maryland	2.2	1.9	2.4
Northwest Region	2.2	1.5	3.2
Allegany	**	**	**
Frederick	**	**	**
Garrett	**	**	**
Washington	**	**	**
Baltimore Metropolitan Area ^	1.8	1.4	2.1
Anne Arundel	2.2	1.5	3.1
Baltimore City	4.8	3.8	6.0
Baltimore County	1.9	1.4	2.5
Carroll	**	**	**
Harford	**	**	**
Howard	**	**	**
National Capital Area	1.8	1.5	2.2
Montgomery	1.1	0.7	1.5
Prince George's	2.7	2.1	3.5
Southern Region	**	**	**
Calvert	**	**	**
Charles	**	**	**
Saint Mary's	**	**	**
Eastern Shore Region	1.9	1.2	2.8
Caroline	**	**	**
Cecil	**	**	**
Dorchester	**	**	**
Kent	**	**	**
Queen Anne's	**	**	**
Somerset	**	**	**
Talbot	**	**	**
Wicomico	**	**	**
Worcester	**	**	**

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

** Rates based on death counts of 0-19 deaths are suppressed per DHMH/CCPC Mortality Data Suppression Policy.

^ Area rate does not include Baltimore City.

Source: CDC Wonder.

Appendix G

Trends in Cancer Incidence and Mortality Rates in Maryland by Cancer Site, Race or Gender, and Year, 2008-2012

Appendix G. Trends in Cancer Incidence and Mortality Rates in Maryland by Cancer Site, Race or Gender, and Year, 2008-2012

Table 1: Cancer Incidence Rates by Cancer Site and Year Maryland, 2008-2012

Cancer Site	2008	2009	2010	2011	2012	APC 2008-2012	MD Trend
All Cancer Sites	470.8	443.7	449.8	440.7	432.1	-1.8%	↓
Lung	64.6	58.6	57.6	56.8	56.4	-3.0%	↓
Colorectal	42.5	38.0	37.4	37.3	35.8	-3.5%	↓
Female Breast	132.7	127.4	129.0	126.6	125.0	-1.2%	↓
Prostate	163.0	148.4	140.6	131.7	112.0	-8.3%	↓
Oral	10.1	10.0	10.6	10.2	10.5	1.0%	↑
Melanoma	21.7	20.0	21.4	20.6	20.7	-0.7%	↓
Cervical	6.5	6.8	7.3	6.4	6.3	-1.2%	↓

Rates are age-adjusted to 2000 U.S. standard population.
APC = Annual Percent Change (%).
Source: Maryland Cancer Registry

Table 2: Cancer Mortality Rates by Cancer Site and Year Maryland, 2008-2012

Cancer Site	2008	2009	2010	2011	2012	APC 2008-2012	MD Trend
All Cancer Sites	180.6	177.7	170.9	165.7	165.7	-2.4%	↓
Lung	50.0	48.7	46.0	43.7	43.5	-3.8%	↓
Colorectal	16.6	16.6	14.9	14.3	14.9	-3.6%	↓
Female Breast	25.1	23.5	24.2	22.4	23.7	-1.6%	↓
Prostate	25.1	25.5	22.3	20.2	20.4	-6.3%	↓
Oral	2.4	2.5	2.3	2.4	2.1	-3.0%	↓
Melanoma	2.6	2.9	2.4	2.6	2.7	-0.3%	↓
Cervical	2.5	2.3	1.9	2.1	2.0	-5.2%	↓

Rates are age-adjusted to 2000 U.S. standard population.
APC = Annual Percent Change (%).
Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2008-2010 (Colorectal); 2011

Appendix G. Trends in Cancer Incidence and Mortality Rates in Maryland by Cancer Site, Race or Gender, and Year, 2008-2012

Table 3: Cancer Incidence Rates by Race and Year Maryland, 2008-2012

Cancer Site	Race	2008	2009	2010	2011	2012	APC 2008-2012
All Cancer Sites	White	472.2	446.5	449.0	444.1	440.4	-1.4%
	Black	467.9	431.8	451.5	437.7	425.9	-1.7%
Lung	White	66.1	60.7	58.5	59.7	58.6	-2.5%
	Black	63.0	55.6	59.2	53.4	55.9	-2.7%
Colorectal	White	41.0	36.0	35.9	36.6	34.5	-3.2%
	Black	47.5	42.4	43.0	39.9	40.1	-3.9%
Female Breast	White	130.7	127.8	127.6	128.3	126.9	-0.6%
	Black	132.4	121.7	129.4	124.0	121.5	-1.5%
Prostate	White	142.9	127.2	122.0	110.2	97.5	-8.7%
	Black	225.5	217.9	195.0	191.4	159.7	-7.9%
Oral	White	10.7	11.2	11.6	11.4	11.7	2.0%
	Black	8.6	7.5	7.5	7.3	8.3	-1.2%
Cervix	White	5.6	5.8	6.2	6.1	5.9	1.2%
	Black	8.2	7.8	9.1	7.4	7.6	-2.0%

Rates are age-adjusted to 2000 U.S. standard population.

APC = Annual Percent Change (%).

Source: Maryland Cancer Registry

Table 4: Melanoma Incidence Rates by Gender and Year Maryland, 2008-2012

Cancer Site	Gender	2008	2009	2010	2011	2012	APC 2008-2012
Melanoma	Male	29.0	26.5	26.9	27.8	27.9	-0.3%
	Female	16.7	15.5	17.5	15.5	15.5	-1.5%

Rates are age-adjusted to 2000 U.S. standard population.

APC = Annual Percent Change (%).

Source: Maryland Cancer Registry

Appendix G. Trends in Cancer Incidence and Mortality Rates in Maryland by Cancer Site, Race or Gender, and Year, 2008-2012

Table 5: Mortality Rates by Race and Year Maryland, 2008-2012

Cancer Site	Race	2008	2009	2010	2011	2012	APC 2008-2012
All Cancer Sites	White	175.0	176.6	166.1	161.3	164.4	-2.1%
	Black	212.8	193.0	197.0	190.0	183.0	-3.1%
Lung	White	51.1	50.6	46.5	44.2	44.7	-3.9%
	Black	51.8	46.2	48.5	47.2	44.2	-2.9%
Colorectal	White	15.4	15.2	12.9	13.0	13.5	-4.1%
	Black	21.8	21.8	21.9	19.0	20.1	-3.0%
Female Breast	White	22.0	22.6	21.1	19.9	23.1	-0.3%
	Black	35.3	27.1	34.1	29.5	26.5	-4.8%
Prostate	White	20.6	20.7	17.6	17.0	17.4	-5.2%
	Black	48.1	49.6	44.4	36.6	35.4	-8.8%
Oral	White	2.2	2.3	2.2	2.3	2.0	-1.9%
	Black	3.0	3.3	2.5	2.7	2.6	-4.8%
Cervix	White	2.0	1.7	1.5	1.7	1.6	-4.4%
	Black	3.6	3.8	2.9	3.2	3.0	-5.2%

Rates are age-adjusted to 2000 U.S. standard population.

APC = Annual Percent Change (%).

Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2008-2010 (Colorectal); 2011

Table 6: Melanoma Mortality Rates by Gender and Year Maryland, 2008-2012

Cancer Site	Gender	2008	2009	2010	2011	2012	APC 2008-2012
Melanoma	Male	4.4	4.7	4.0	3.9	4.2	-2.8%
	Female	1.3	1.8	1.3	1.8	1.6	4.2%

Rates are age-adjusted to 2000 U.S. standard population.

APC = Annual Percent Change (%).

Source: NCHS Compressed Mortality File in CDC WONDER, 2012
Maryland Vital Statistics Administration from MATCH, 2008-2010
Maryland Vital Statistics Administration, 2008-2010 (Colorectal); 2011

Appendix H

Trends in Cancer Stage of Disease at Diagnosis in Maryland by Cancer Site and Year, 2008-2012

Appendix H

Table 1: All Cancer Sites
Distribution of Cancer Stage at Diagnosis by Year
Maryland, 2008-2012

Stage	2008	2009	2010	2011	2012
	%	%	%	%	%
Local	45.8%	43.8%	43.6%	44.6%	45.1%
Regional	21.0%	20.2%	19.8%	20.6%	20.3%
Distant	21.1%	20.7%	21.9%	22.0%	22.7%
Unstaged	12.1%	15.2%	14.8%	12.8%	12.0%

Source: Maryland Cancer Registry.

Table 2: Lung Cancer
Distribution of Cancer Stage at Diagnosis by Year
Maryland, 2008-2012

Stage	2008	2009	2010	2011	2012
	%	%	%	%	%
Local	20.2%	20.5%	18.3%	19.3%	19.5%
Regional	24.8%	23.8%	23.1%	25.2%	24.8%
Distant	45.6%	46.9%	47.0%	46.7%	46.5%
Unstaged	9.4%	8.8%	11.5%	8.8%	9.3%

Source: Maryland Cancer Registry.

Table 3: Colorectal Cancer
Distribution of Cancer Stage at Diagnosis by Year
Maryland, 2008-2012

Stage	2008	2009	2010	2011	2012
	%	%	%	%	%
Local	38.3%	35.8%	36.0%	36.0%	36.9%
Regional	33.7%	33.5%	31.7%	32.1%	32.7%
Distant	19.5%	19.4%	19.8%	19.1%	22.1%
Unstaged	8.5%	11.3%	12.5%	12.8%	8.3%

Source: Maryland Cancer Registry.

Table 4: Female Breast Cancer
Distribution of Cancer Stage at Diagnosis by Year
Maryland, 2008-2012

Stage	2008	2009	2010	2011	2012
	%	%	%	%	%
Local	58.0%	59.4%	57.4%	60.4%	61.8%
Regional	30.8%	29.3%	29.7%	28.7%	27.8%
Distant	5.8%	4.8%	5.1%	5.1%	4.9%
Unstaged	5.4%	6.6%	7.8%	5.8%	5.6%

Source: Maryland Cancer Registry.

Appendix H

Table 5: Prostate Cancer
Distribution of Cancer Stage at Diagnosis by Year
Maryland, 2008-2012

Stage	2008	2009	2010	2011	2012
	%	%	%	%	%
Local	68.6%	57.7%	67.3%	69.5%	68.5%
Regional	9.8%	8.0%	8.3%	8.8%	9.5%
Distant	2.4%	3.1%	3.2%	3.5%	4.3%
Unstaged	19.1%	31.2%	21.2%	18.3%	17.7%

Source: Maryland Cancer Registry.

Table 6: Oral Cancer
Distribution of Cancer Stage at Diagnosis by Year
Maryland, 2008-2012

Stage	2008	2009	2010	2011	2012
	%	%	%	%	%
Local	31.6%	30.8%	31.2%	27.3%	28.6%
Regional	42.5%	47.4%	43.4%	46.4%	44.8%
Distant	17.2%	12.7%	17.0%	18.2%	20.3%
Unstaged	8.7%	9.1%	8.4%	8.1%	6.3%

Source: Maryland Cancer Registry.

Table 7: Melanoma
Distribution of Cancer Stage at Diagnosis by Year
Maryland, 2008-2012

Stage	2008	2009	2010	2011	2012
	%	%	%	%	%
Local	67.3%	65.6%	52.1%	56.4%	59.8%
Regional	7.8%	8.6%	8.4%	8.1%	6.9%
Distant	3.4%	3.4%	3.8%	3.3%	4.1%
Unstaged	21.5%	22.4%	35.7%	32.2%	29.2%

Source: Maryland Cancer Registry.

Table 8: Cervical Cancer
Distribution of Cancer Stage at Diagnosis by Year
Maryland, 2008-2012

Stage	2008	2009	2010	2011	2012
	%	%	%	%	%
Local	36.0%	39.4%	40.1%	39.7%	42.1%
Regional	37.5%	32.7%	36.2%	35.7%	32.1%
Distant	17.0%	11.1%	8.2%	12.1%	13.9%
Unstaged	9.5%	16.8%	15.5%	12.6%	12.0%

Source: Maryland Cancer Registry.

Appendix I

Trends in All Cancer Sites Incidence and Mortality Rates in Maryland and U.S. by Year, 2003-2012

Appendix I. Trends in All Cancer Sites Incidence and Mortality Rates in Maryland and U.S. by Year, 2003-2012

Table 1: All Cancer Sites Incidence Rates by Year
Maryland and U.S., 2003-2012

	2003	2004	2005	2006†	2007	2008	2009	2010	2011	2012	APC 2003-2012	Trend
Maryland	494.5	462.6	457.4	426.3	455.3	470.8	443.7	449.8	440.7	432.1	-0.9%	↓
U.S.	468.3	470.0	465.9	468.2	474.6	468.5	464.8	451.9	443.7	436.7	-0.7%	↓

† 2006 Maryland incidence rates are lower than actual due to case underreporting for Montgomery and Prince George's counties. (See Appendix A, Section I.A.1.).

Rates are age-adjusted to 2000 U.S. standard population.

APC = Annual Percent Change (%).

Sources: Maryland Cancer Registry
U.S. SEER, SEER*Stat Database

Table 2: All Cancer Sites Mortality Rates by Year
Maryland and U.S., 2003-2012

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	APC 2003-2012	Trend
Maryland	195.7	189.9	190.2	186.7	180.4	180.6	177.7	170.9	165.7	165.7	-1.9%	↓
U.S.	190.1	185.8	183.8	180.7	178.4	175.3	173.1	171.8	168.7	166.4	-1.4%	↓

Rates are age-adjusted to 2000 U.S. standard population.

APC = Annual Percent Change (%).

Sources: NCHS Compressed Mortality File in CDC WONDER, 2003-2007, 2012 (MD)
Maryland Vital Statistics Administration from MATCH, 2008-2010 (MD)
Maryland Vital Statistics Administration, 2011 (MD)
NCHS Compressed Mortality File in CDC WONDER, 2003-2008 (U.S.)

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