Charles County Community Health Needs Assessment

Commissioned by:

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Charles County Department of Health

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Index

Charles County Health Needs Assessment Executive Summary

In Fiscal Year 2012, Civista Health, Inc. and the Charles County Department of Health collaborated to complete a comprehensive assessment of the health needs of Charles County, Maryland.

To provide a comprehensive assessment of the health needs of the county, a four-method plan was developed which included four different sources of data: a long online survey of Charles County residents' perceptions of health and health behaviors, a short paper survey on health perceptions throughout the county, seven focus groups with community leaders, citizens and stakeholders, and a quantitative data analysis.

The use of the multiple data collection methods strengthened the validity of the assessment's findings as well as ensuring that Charles County residents had an opportunity to participate in the assessment process and to feel invested in its outcome.

Seven focus groups were performed throughout the county during the fiscal year. The focus group topics included: age-related health issues, chronic disease-specific health, special populations, countyleadership, substance abuse, youth through the school nurses, and the Partnerships for a Healthier Charles County (community leaders and stakeholders). Approximately 165 people participated in the county focus groups.

The major health concerns that were repeated throughout the community focus groups included:

- Physician Shortage
- Access to Care Within the County
- Health Insurance
- Transportation
- Diabetes
- Obesity/Overweight: Childhood Specifically
- Asthma in School-Age Population
- Health Issues of Elderly: Access, Dementia
- Mental Health: Lack of Psychiatrists, Especially Pediatric
- Cancer
- Substance Abuse

302 Charles County residents completed the 74-question online survey that was created using Survey Monkey. The link to the survey was available on the Civista Health, Inc. website. The first section of the survey asked participants about their perception of health and health services within the county. The second section asked them about their health behaviors, in order to determine their risk for the development of certain health conditions.

Most of the respondents are from Charles County (80.1%). The second largest percentage is from St. Mary's County (11.6%). Only 2% reported living outside of Southern Maryland (Charles, Calvert, St. Mary's, or PG). Over three-quarters of the respondents were between the ages 35-64 years. The highest percentage was in the 55-64 year age group. The overwhelming majority of the respondents were female (90.2%). The majority of the respondents were also Caucasian (80.1%). The second largest group was African Americans (15.9%). Very low response among other races, such as Asian/PI, Native American, or Hispanic (4% combined). More than half of the respondents are college educated: 63% have an undergraduate degree or more. 87.4% have at least some college. Most are employed full time (79%). 12.3% are employed part time. 4.3% are students. 10.6% are either a homemaker, retired, or disabled. Only 2% were unemployed. More than half have a household income greater than $75,000 (52.3%).

Almost all respondents reported having health insurance (96.7%). Most have a managed care or traditional private insurance (81.2%). Most reported having dental insurance (88.4%). Most reported having vision insurance (70.8%). 5.1% reported having Medicaid or Medicare. 3.7% had MCHIP. Only 3.3% reported having no form of insurance.

The biggest health problems that surfaced from the online survey included: obesity, affordable health care, drugs and tobacco use, cancer, and heart disease.

The protective health behaviors that Charles County residents were displaying included: always wearing a seat belt, washing hands after using bathroom or making food, wearing a helmet on an ATV, scooter, or motorcycle, practicing safe sex, getting a flu shot, and refraining from smoking and drinking alcoholic drinks.

Some risk factors that Charles County residents possessed that may lead to chronic disease included: not participating in physical activity each day, not eating enough fruits and vegetables, not performing self exams for cancer, not getting enough sleep at night, not using sunscreen regularly, not wearing a helmet while on a bike, not following all safety rules like the speed limit, and not taking a vitamin daily.

The online survey participants were also asked about access to health care. 81% have had a routine doctor's visit in the past 12 months. 93.4% receive their routine health care in a physician's office. 78.7% were able to see a doctor when needed. The number one reason for not being able to see a doctor when needed is that the doctor is too far away (46.8%).

81.5% travel outside of Charles County for medical care at some point. Only 14.5% reported that they always travel outside the county for care. The number one service they receive outside of county is medical/doctor appointments (56.3%). The number one reason for receiving those services outside of Charles County: quality of care is better elsewhere (34.8%). 15.4% reported that the services are not available in the county.

A short 3-question survey was distributed throughout the county regarding perceptions of health within the county. A total of 200 short surveys were completed. Surveys were located throughout the county including in Civista waiting rooms, CCDOH waiting rooms, libraries, senior centers, and community centers. 35 were completed in Spanish (17.5%).

The biggest health problems identified by the short community survey included: obesity, stroke, hypertension, diabetes, drug and tobacco use, cancer, heart disease, access to health care, health insurance, dental health, mental health, and motor vehicle traffic incidents.

The short survey also identified factors that prevent people from receiving the health care that they need. The most common reasons included: no health insurance, too expensive, no transportation, local doctor is not on insurance plan, couldn't get appointment, and lack of dental or vision insurance.

Quantitative data was analyzed for several health topics including: mortality, population and demographic data, natality, infant mortality, heart disease, stroke, hypertension, access to health care/health uninsurance, cancer, asthma, injuries, diabetes, obesity, osteoporosis, arthritis, dementia/Alzheimer's disease, communicable diseases, sexually transmitted diseases, HIV/AIDS, mental health, dental health, substance abuse, disabilities, and tobacco use.

Cumulative analysis of all quantitative and qualitative data identified the top 10 health needs of Charles County:

- **Obesity**
- Adult and Childhood Prevalence
- **Heart Disease Mortality**
- **Sexually Transmitted Diseases**
- **Cancer**
- Prostate Cancer Incidence
- Lung Cancer Mortality
- Colorectal Cancer Incidence and Mortality
- **Access to Healthcare**
- Physician shortage: Specialists, PCP's, OBGYN's

- Transportation
- Uninsured Population
- Limited Access for Those with Medical Assistance
- **Diabetes Mortality**
- **Substance Abuse**
- **Mental Health**
- Access to Pediatric Services
- No Psychiatric Services in County
- Lack of Transportation to Services
- **Dental Health**
- Pediatric Dentistry
- Dental Services for Pregnant Women
- **Accidents/Injuries**
- Falls Among Elderly
- Motor Vehicle Traffic Incidents

The health needs assessment also identified areas of health in which Charles County is in good standing. These health topics include:

- Diabetes Prevalence
- Adult Asthma Prevalence
- Stroke Mortality and Prevalence
- Hypertension Prevalence and Mortality
- Tobacco and Cigarette Use Among Youth and Pregnant Women, Decreased Initiation, Increased Cessation
- Reducing Animal Rabies Cases
- Low Incidence of Tuberculosis Cases
- HIV/AIDS Diagnosis and Prevalence Rates
- Infant Mortality Rates Now Below State Rates
- Low Prevalence of Limited Activity Levels Among Those with Arthritis

These assessment findings can serve as a baseline for future program development as well as provide benchmarks for program implementation.

Long Survey Results:

Introduction:

A 74 question online survey was developed in winter 2011. It was designed using Survey Monkey, and a link was provided on the Civista Health website and the Charles County Department of Health website. The first set of question gathered demographic information for all participants. The second set of questions asked participants about their perceptions of the state of health and health conditions within Charles County. A third set of questions asked people about their own health status and their access to needed health care. A fourth set of questions asked participants perceptions of improvements within the county to improve health. And finally, a fifth set of questions asked participants about their risk factors for health conditions (example, fruit and vegetable intake, physical activity level, alcohol/tobacco use) to determine if they are at risk for certain health conditions and chronic diseases.

There were a total of 303 participants who started the survey. Some questions were not completed by all survey participants. Not every question was applicable to every participant. Some questions were skipped. Data for each question was compiled and analyzed.

The results of the survey analysis are presented below by category.

Demographic Information:

The majority of the survey participants were from Charles County (80.1%). The second largest population was from neighboring St Mary's County.

County of Residence:	Response Count	Response Percent
Charles County	242	80.1
St Mary's County	35	11.6
Calvert County	13	4.3
Prince George's County	6	2.0
Other	8	2.0

Most of the survey participants were between the ages of 35-64 years (78%). The age group with the largest number of participants was 55-64 years.

Age Group	Response Count	Response Percent
18-24 years	10	3.3
25-34 years	36	12.0
35-44 years	76	25.2
45-54 years	77	25.6
55-64 years	82	27.2
65 and older	20	6.6

An overwhelming majority of the long survey participants were female (90.2%).

Gender	Response Count	Response Percent
Male	28	9.8
Female	258	90.2

Caucasians made up the largest racial group of the survey participants (80.1%). The second most represented racial group was African Americans (15.9%). There was a very low response rate among the other races: 4.7% combined for Asian/Pacific Islander, Native American, Hispanic, and Other.

Race/Ethnicity	Response Count	Response Percent
Asian or Pacific Islander	5	1.7
Black or African American	48	15.9
Native American	2	0.7
White or Caucasian	242	80.1
Hispanic	3	1.0
Other	4	1.3

The survey participants were a highly educated group with 87.4% reporting having had any amount of college education. Two-thirds of the group had completed an undergraduate degree or higher (63%).

Educational Attainment	Response Count	Response Percent
Some High School	4	1.4
High School Diploma	33	11.2
Some College	72	24.4
Undergraduate Degree	113	38.3
Postgraduate Degree	73	24.7
Unknown	0	0

The majority of the participants completing the long survey were employed and working full time (79%). 12.3% were employed part time. 4.3% were students. 10.6% were either homemakers, retired, or disabled. Only 2.0% of the participants labeled themselves as other or unemployed. Participants were asked to check all labels that were applicable. For example, they may be a full time student who is able employed part time. 12.3% are employed part time.

Employment Status	Response Count	Response Percent
Employed Full time	237	79.0
Employed Part time	37	12.3
Full time student	6	2.0
Part time student	7	2.3
Homemaker	10	3.3
Retired	19	6.3
Disabled	3	1.0
Other/Unemployed	6	2.0

The survey population was also an affluent population with over half reporting a household income of $75,000 or greater (52.3%). Only 5% of the participants reported a household income less than $25,000.

Household Income	Response Count	Response Percent
Less than $25,000	15	5.0
$25,000-$49,999	55	18.5
$50,000-$74,999	47	15.8
$75,000-$99,999	62	20.8
More than $100,000	94	31.5
Prefer not to answer	23	7.7
Don't Know	2	0.7

The participants were asked to report all types of health insurance that they current have. Nearly all of the survey participants (96.7%) reported having health insurance. The majority of the participants also reported having dental insurance (88.4%) though this percentage is smaller than those reporting health insurance. Many of the respondents also had vision insurance (70.8%). Only 3.3% of the survey population reported having no type of insurance.

Forms of Insurance	Response Count	Response Percent
Health	291	96.7
Dental	266	88.4
Vision	213	70.8
Don't Know	0	0
No insurance	10	3.3

Among those having health insurance, over half have a form of managed care health insurance plans such as HMO or PPO. 8.4% participated in a government run health care plan.

Current Type of Health Insurance	Response Count	Response Percent
Private-traditional	64	21.5
Management Care (HMO, PPO)	178	59.7
Medicare	10	3.4
Medicaid	6	1.7
Government (MCHIP)	11	3.7
Health Savings Account	4	1.3
Other	17	5.7
Don't Know	2	0.7
Do not have health insurance	7	2.3

Health Issues:

Participants were given a list of 26 different health issues and conditions that affect Charles County residents. They were asked their perceptions of health by rating what problem level these particular issues present to the community: not a problem, a moderate problem, a serious problem, or not sure.

It is a weakness of this survey that the option of a slight problem was not included in the survey choices. Therefore, the analysis was conducted using the percent that reported the issue as a problem at any level.

Health Issue/Condition:	Percent Reporting No Problem in county	Percent Reporting this as a problem at any level	Percent Reporting this as a serious problem
Substance Abuse/Tobacco Use	1.7	88.4	48.3
Allergies	3.7	84.2	38.6
Ambulance Service Use	29.8	34.4	10.0
Asthma/ Lung Disease	4.3	77.1	31.6
Cancer	0.7	85.2	54.1
Child Abuse and Neglect	3.7	74.6	33.8
Crime and Gang Related Activities	3.7	87.2	37.5
Domestic Violence	1.3	78.7	31.0
Diabetes	2.3	83.0	51.0
Affordable Health Care	2.7	89.8	61.8
Dental Health	4.7	83.3	52.5
Access to health care	13.3	78.6	43.3
Prenatal and infant health	16.7	59.9	21.1
Infectious disease	19.1	62.9	11.4
Mental Health	6.4	77.9	44.0
Overweight/Obesity	0.7	97.3	69.8
Services for the Disabled	10.5	70.1	28.9
After School Programs	19.4	55.8	21.4
Sexually transmitted diseases	4.7	60.7	25.7
Suicide	11.0	53.7	15.7
Heart Disease	0.7	82.6	50.8
High Blood Pressure/Stroke	1.0	84.6	55.3
Injuries	14.0	53.2	8.0
Highway Safety/Traffic Accidents	6.7	85.9	34.9
Transportation	10.0	80.0	50.0
Teen Pregnancy	3.7	77.3	38.5

The top 5 health issues seen as a problem at any level were: overweight/obesity, affordable health care, substance abuse/tobacco use, crime, and highway safety and traffic accidents.

The top 5 most seriously viewed health issues were: overweight/obesity, affordable health care, high blood pressure/stroke, cancer, and heart disease.

Overweight/obesity and affordable health care were seen as the biggest and most serious health issues in Charles County. Nearly every participants viewed overweight/obesity as a problem on some level (97.3%).

Health Status:

Participants were asked to rate their current health status as poor, fair, good, very good, or excellent. The most common answers were good (35.8%) and very good (38.5%). A small percentage reported that they were in fair to poor health (11.3%).

Health Status	Response Count	Response Percent
Poor	4	1.3
Fair	30	10.0
Good	107	35.8
Very Good	115	38.5
Excellent	43	14.4

People were also asked how many days in the past month were they too sick to work or do activities. Two-thirds of the respondents reported that there were no days in past month that prevented them from work or activities (66.2%). Among those reporting sick days, most reported having been prevented from work or activities 1-2 days in the past month.

Days to sick to work/do activities	Response Count	Response Percent
0	200	66.2
1-2	0	23.2
3-5	22	7.3
6-10	4	1.3
10 or more	6	2.0

Access to Care:

Most of the survey participants reported having a routine doctor's visit in the last 12 months (81%). Only 2 people reported that they have never had a routine doctor's visit.

Time since last doctor's visit	Response Count	Response Percent
Greater than 5 years	2	0.7
Within 12 months	243	81.0
Within 13-18 months	22	7.3
Within 19-24 months	12	4.0
Within 2-5 years	19	6.3
Never had a routine doctor visit	2	0.7

Most of the survey participants received their routine health care in a physician's office (93.4%). In addition to routine medical care, 13.9% went to eye doctor, 19.9% went to the dentist, and 3.6% went to the chiropractor. It is believed that the routine care by the listed specialists (ex. Dentist and eye doctor) was underreported. Participants were asked to check all locations that applied; however, it is theorized that they did not read all the responses and checked only physician's office even if they also routinely see the dentist.

Where they receive routine care	Response Count	Response Percent
Physician's Office	282	93.4
Hospital Emergency Department	4	1.3
Health Department Clinic	0	0
Urgent Care Center	13	4.3
Chiropractor	11	3.6
Medical/First Aid Center	2	0.7
Community Clinic	8	2.6
Eye Doctor	42	13.9
Dentist	60	19.9
Other	11	3.6

The majority of the survey participants were able to see the doctor when needed (78.7%). There were 10 people who reported that they were seldom or never able to see a doctor when needed. If they were unable to see the doctor when needed, the most common reasons were that it was too far away (46.8%) or that it was too expensive and they could not afford it (35.1%).

Able to see doctor when needed	Response Count	Response Percent
Always	237	78.7
Sometimes	54	17.9
Seldom	9	3.0
Never	1	0.3

Reasons for not seeing doctor	Response Count	Response Percent
No health insurance	13	16.9
Too expensive/Can't afford it	27	35.1
Lack of transportation	7	9.1
Doctor is too far away	36	46.8

Only 18.5% reported that they never receive medical care outside of Charles County. Nearly half of the respondents (49.8%) claimed that they sometimes receive medical care outside of the county.

Receive medical care outside of Charles County	Response Count	Response Percent
Always	43	14.5
Sometimes	148	49.8
Seldom	51	17.2
Never	55	18.5

Participants were asked what medical services that they receive outside of Charles County. They were asked to check all services that were applicable. The most common medical services that people receive outside of Charles County are medical doctor appointments (56.3%), surgery (32.7%), and hospitalizations (27.6%). Additionally, one-quarter of the participants reported that they travel outside of the county for dental visits (26.8%).

Services Received Outside of County	Response Count	Response Percent
Medical Doctor Appointments	153	56.3
Outpatient treatment	47	17.3
Hospitalizations	75	27.6
Dental Appointments	73	26.8
Laboratory or other tests	56	20.6
X-rays	40	14.7
Do not travel outside of Charles County	33	12.1
Surgery	89	32.7
Emergency Care	31	11.4
Prenatal care	15	5.5
Primary care	48	17.6
Other	38	14.0

The participants were also asked why they chose to receive those medical services outside of Charles County. The most common responses were that the services were not available in Charles County (15.4%) and the quality of care was better elsewhere (34.8%).

Why do you travel outside of Charles County for care?	Response Count	Response Percent
Services not available within county	43	15.5
Quality is better elsewhere	97	34.8
Recently moved to Charles County	12	4.3
Local doctors not on my	25	9.0

insurance plan		
Closer to my place of work	8	4.3
Too hard to get appointment for local doctors	25	9.0
No physician available for the type of care I need	24	8.6
Other	63	22.6
Not applicable	54	19.4

Doctors, nurses, pharmacists and the Internet are highly used means for obtaining needed health information. Employers and the health department were smaller yet significant sources of health information. This particular question stresses the importance of educating local health care providers and emphasizes the need for accurate medical information on the Internet and for employee wellness programming.

Where do you get health information?	**Response Count**	**Response Percent**
Churches	1	0.3
Doctors, nurses, pharmacists	213	71.0
Hospital	65	21.7
Health Department	70	23.3
Public Library	8	2.7
Employer	80	26.7
Internet/Websites	184	61.3
Other	38	12.7

Health Improvements in Charles County:

Only one-third of the survey participants reported that they have seen improvements in the health of Charles County residents. The most common response was that they didn't know.

Health Improvements being made in County?	**Response Count**	**Response Percent**
Yes	107	36.0
No	73	24.6
Don't Know	117	39.4

The top five health issues where participants have seen improvements include: access to health care, tobacco, drugs, and alcohol use, cancer, access to needed medications, and high blood pressure/stroke. Almost half of the respondents to this question (40.5%) have seen improvements to increase access to health care within the county.

Health Issues where improvements have been seen	Response Count	Response Percent
Heart Disease	20	16.5
Cancer	26	21.5
Diabetes	22	18.2
Asthma/Lung Diseases	13	10.7
Tobacco, Drug, and Alcohol Use	37	30.6
Mental Health	14	11.6
High Blood Pressure/Stroke	25	20.7
Traffic Accidents	16	13.2
Injuries	7	5.8
Overweight/Obesity	22	18.2
Access to health care	49	40.5
Access to needed medications	26	21.5
After school programs for kids	20	16.5
Other	28	23.1

Behavioral Risk Factors:

The Top Protective Factors (greatest percentage reporting that they consistently do these activities) include:

- Always wear seat belt (96.3%)
- Always wash hands after using bathroom or before making food (94.0%)
- Always wear a helmet when riding an ATV, scooter, or motorcycle (69.3%)
- Always practice safe sex (68.2%)
- Always get a flu shot each year (65.6%)
- Never drink 3 or more alcoholic drinks each day (87.7%)
- Never smoke (89.0%)
- Avoid exposure to second hand smoke at home or work (75.3%)

The Top Risk Factors that increase the chances of chronic/infectious disease or injury (lowest percentage reporting that they always do these activities) include:

- Participate in 1 hour of physical activity each day (17.9%)
- Eat 5 servings of fruit and vegetables a day (20.3%)
- Perform self exams for cancer (27.7%)

- Get 7-9 hours of sleep each night (31.9%)
- Use sunscreen regularly (33.7%)
- Wear a helmet while riding a bike (39.6%)
- Follow safety rules, like the speed limit (41.8%)
- Take a vitamin daily (46.8%)

Behavioral Risk Factor:	**Always**	**Sometimes**	**Never**
Wear seat belt	289 (96.3%)	10 (3.3%)	1 (0.3%)
Wear a helmet when riding a bike	101 (39.6%)	53 (20.8%)	101 (39.6%)
Wear a helmet while riding a scooter, ATV, motorcycle	142 (69.3%)	19 (9.3%)	44 (21.5%)
Eat 5 or more servings of fruits and vegetables each day	61 (20.3%)	211 (70.3%)	28 (9.3%)
Eat fast food more than once a week	31 (10.3%)	165 (55.0%)	104 (34.7%)
Drink 3+ alcoholic beverages per day	2 (0.7%)	35 (11.6%)	265 (87.7%)
Smoke cigarettes	18 (6.0%)	15 (5.0%)	266 (89.0%)
Chew tobacco/snuff	0	0	294 (100%)
Exposed to second hand smoke at work/home	19 (6.4%)	55 (18.4%)	225 (75.3%)
Use illegal drugs	0	6 (2.0%)	294 (98%)
Perform cancer self-exams	83 (27.7%)	176 (58.7%)	41 (13.7%)
Wash hands after using the bathroom or before making food	284 (94.0%)	18 (6.0%)	0
Use sunscreen regularly	100 (33.7%)	173 (58.2%)	24 (8.1%)
Get a flu shot each year	196 (65.6%)	51 (17.1%)	52 (17.4%)
Practice safe sex	178 (68.2%)	23 (8.8%)	60 (23.0%)
Take a vitamin or supplement daily	139 (46.8%)	97 (32.7%)	61 (20.5%)
Get 7-9 hours of sleep each night	96 (31.9%)	184 (61.1%)	21 (7.0%)
Feel stressed out	38 (12.7%)	242 (80.9%)	19 (6.4%)
Fell happy about life	129 (43.4%)	166 (55.9%)	2 (0.7%)
Follow road safety rules	125 (41.8%)	172 (57.5%)	2 (0.7%)
Participate in 1 hr of physical activity per day	54 (17.9%)	205 (68.1%)	42 (14.0%)

Short Survey Results:

Introduction:

A short 3 question survey was developed to distribute throughout the county for additional qualitative data. Surveys were placed in Civista Health waiting rooms, the Charles County Department of Health waiting rooms, the Charles County Senior Centers, and community centers.

A total of 200 surveys were completed throughout the community. Thirty-six of the surveys (18%) were completed in Spanish.

The results of all the surveys combined and the results for the Spanish-speaking participants only are presented below.

All accumulated surveys:

Question 1: What do you believe to be the biggest health problems in Charles County today?

More than half of the respondents (56%) felt that overweight and obesity are a big health issue in Charles County. It was the most commonly marked answer to Question 1.

Another issue that was frequently cited in the short survey as a big health problem within the county was high blood pressure and stroke. Other health conditions that ranked high as major health problems include: diabetes (52%), tobacco/drug/alcohol use (52%), and cancer (49%).

Issues that participants found to be less significant health problems included injuries, asthma, and traffic accidents and highway safety.

Biggest Health Problems:	Response Count	Response Percent
Access to care/no health insurance	73	37%
Asthma/ Lung Diseases	42	21%
Cancer	97	49%
Dental Health	55	28%
Diabetes	104	52%
High Blood Pressure/Stroke	106	53%
Heart Disease	81	41%
Injuries	15	8%
Mental Health	49	25%
Overweight/Obesity	112	56%
Tobacco/Drug/Alcohol Use	103	52%
Traffic Accidents/Highway Safety	48	24%
Other	8	4%

Other health issues considered to be the most important included health services in Spanish, birth control and unplanned pregnancy, the health needs of the homeless population, and dementia.

Question 2: What do you think are the problems that keep you or other Charles County residents from getting the health care they need?

The most commonly cited barriers to needed health care was lack of health insurance (68%) and care is too expensive/can't afford it (62%). Under "Other", several people explained that they do not have dental or vision insurance to cover those needed services.

Barriers to getting health care:	Response Count	Response Percent
Couldn't get an appointment with my doctor	33	17%
Doctor is too far away from my home	25	13%
Local doctors are not on insurance plan	65	33%
No health insurance	135	68%
No transportation	73	37%
Service is not available in my own county	27	14%
Too expensive/Can't afford it	124	62%
Other	9	5%

Some other barriers mentioned in the "Other" category included:

- Seniors do not have the money, time, or knowledge to navigate the health care system.
- Everything is a recording. There is never a live person on the line to help.
- Local doctors are inexperienced.
- A lack of dental and vision insurance.
- A lack of health insurance and employment
- Inability to pay co-pays and deductibles.

Question 3: Do you have any ideas or recommendations to help decrease the health problems in the county or to solve the problems with access to health service?

Ideas and recommendations for improving the status of health in Charles County included:

- Access to experienced doctors: faster access, recruitment to the county, particularly specialists
- Health insurance: availability and acceptance by local physicians
- Lower cost of health services
- Eating healthier
- Exercising more
- More free or low cost health education programs on managing and preventing chronic disease
- More advertisement of programs within county

The Hispanic population:

A total of 36 surveys were completed in Spanish. Their answers to the survey revealed differing views on the biggest health problems that may be specific to this population.

Question 1: What do you believe to be the biggest health problems in Charles County today?

Tobacco/drug/alcohol use was considered the biggest health problem among 61% of the Hispanic population in Charles County. Overweight/Obesity, Diabetes, and Dental health were also health issues of concern to this population.

Biggest Health Problems:	Response Count	Response Percent
Access to care/no health insurance	16	45%
Asthma/ Lung Diseases	12	33%
Cancer	12	33%
Dental Health	17	47%
Diabetes	17	47%
High Blood Pressure/Stroke	7	19%
Heart Disease	9	25%
Injuries	7	19%
Mental Health	7	19%
Overweight/Obesity	19	53%
Tobacco/Drug/Alcohol Use	22	61%
Traffic Accidents/Highway Safety	15	42%
Services in Spanish	2	6%

Question 2: What do you think are the problems that keep you or other Charles County residents from getting the health care they need?

The most common barriers preventing this population from getting the health services they need are lack of health insurance (69%) and services are too expensive/they can't afford it (50%).

Barriers to getting health care:	Response Count	Response Percent
Couldn't get an appointment with my doctor	12	33%
Doctor is too far away from my home	8	22%
Local doctors are not on insurance plan	11	31%
No health insurance	25	69%
No transportation	12	33%
Service is not available in my own county	8	22%
Too expensive/Can't afford it	18	50%

One person asked that more information be available on medical assistance and government assistance programs designed to help people get needed health services.

Question 3: Do you have any ideas or recommendations to help decrease the health problems in the county or to solve the problems with access to health service?

Only one Spanish-speaking person answered Question 3. They suggested that people need to eat healthy and exercise to improve health.

Focus Groups:

A critical part of the needs assessment process is to involve the community in order to understand their perceptions of health status. Qualitative data cumulated from this process was used in conjunction with the quantitative health data to determine the most important health issues within the county.

Seven focus groups were conducted throughout the county from December 2010 to March 2011. Each focus group was designed to target a specific population or health issue. The seven focus group topics included:

- Age-related: Individuals and agencies that support and provide services to the youth, elderly, and infants were encouraged to attend this meeting.

- Disease specific: There are many organizations and programs in Charles County that function to help prevent, treat, and support individuals with chronic disease. They represented the audience for the disease specific meeting.

- The Partnerships for a Healthier Charles County provides an excellent opportunity to get the opinions of individuals and organizations of all backgrounds who are interested in the health and wellbeing of Charles County citizens. The December quarterly meeting was used for one of the focus groups. This was the largest of the focus groups.

- A special populations group was scheduled to give the community a chance to speak about the health of and specific barriers and problems seen for minorities and medically underserved. Issues due to access to care were also discussed.

- The leadership focus group included many leaders from within all parts of the community. Civil servants as well as health leaders were in attendance to discuss their particular view points on the health of the county, its residents, and their employees.

- A focus group was conducted in March to discuss issues relating to substance abuse. This focus group specifically targeted youth substance abuse and underage drinking.

- The Charles County school nurses provided a unique glimpse at the health issues of the school aged population. Many emerging health and social issues, such as homelessness, were discussed at this meeting.

The seven focus groups were well attended with a total of 164 attendees. Attendance for those meetings ranged from 11 to 50 people. Participants represented all service organizations within the community. They provide services to all facets of community including women, infants, school aged children, those who are incarcerated, those with mental health problems, those with financial/housing/employment/health issues, the un- and underinsured, the hungry, those with chronic

health conditions, the homeless, the elderly, college students, medically underserved, and minorities, just to name a few.

Focus groups followed the same pattern of health-related questioning. The questions included:

Question 1: Describe the Charles County population that you serve or represent.

Question 2: What do you perceive to the biggest health problems/issues affecting the community?

Question 3: What are the strengths of the community?

Question 4: What are challenges and problems of the community?

Question 5: What are your suggestions and recommendations to improve health locally?

The biggest issues to emerge from the focus groups included:

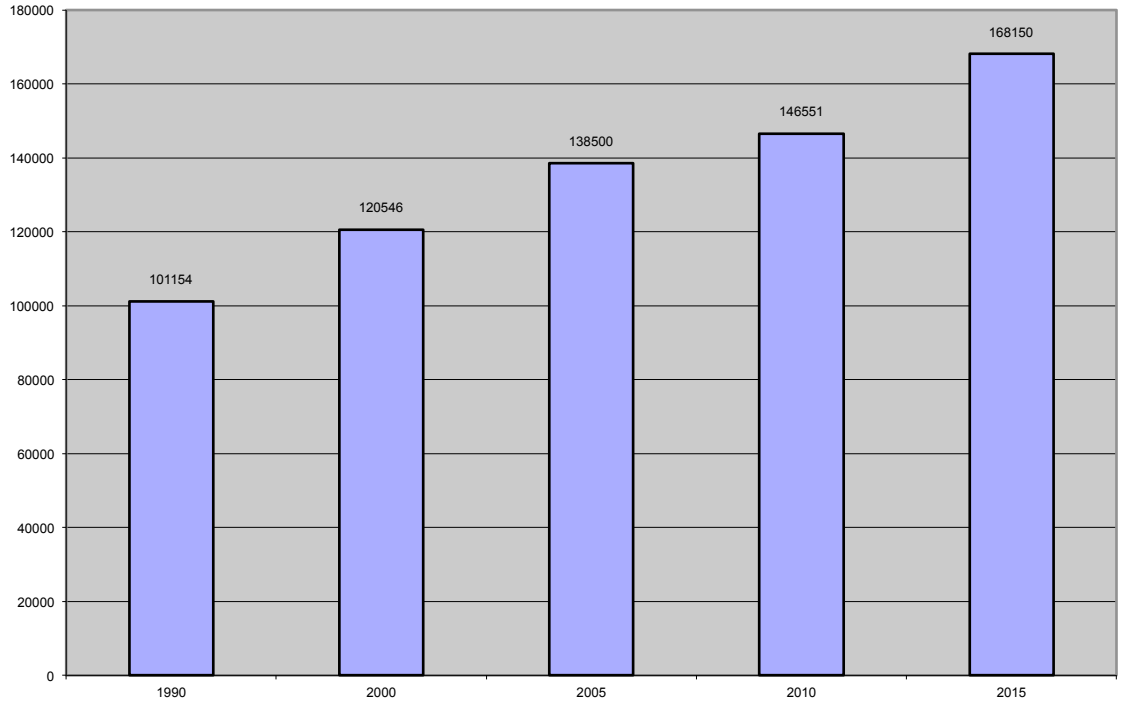
- Physician shortage
- Access to care within the county
- Health Insurance
- Transportation
- Diabetes
- Obesity/Overweight: childhood specifically
- Asthma in school age population
- Health issues of elderly: access, dementia
- Mental health: lack of psychiatrists, especially pediatric
- Cancer
- Substance Abuse

Qualitative data from the focus groups on specific health topics has been incorporated into those particular sections of the needs assessment report.

Charles County Geographic and Demographic Profile:

Charles County is a largely rural jurisdiction located approximately 18 miles south of Washington, D.C. It is one of five Maryland counties, which are part of the Washington, DC-MD-VA metropolitan area. At 461 square miles, Charles County is the eighth largest of Maryland's twenty-four counties and accounts for about 5 percent of Maryland's total landmass. The northern part of the county is the "development district" where commercial, residential, and business growth is focused. The major communities of Charles County are La Plata, the county seat; Port Tobacco, Indian Head, and St Charles; and the main commercial cluster of Hughesville-Waldorf-White Plains. Approximately 60 percent of county's residents live in the greater Waldorf-La Plata area. Charles County has experienced rapid growth since 1970, expanding its population from 47,678 to 120,546 in the 2000 census.

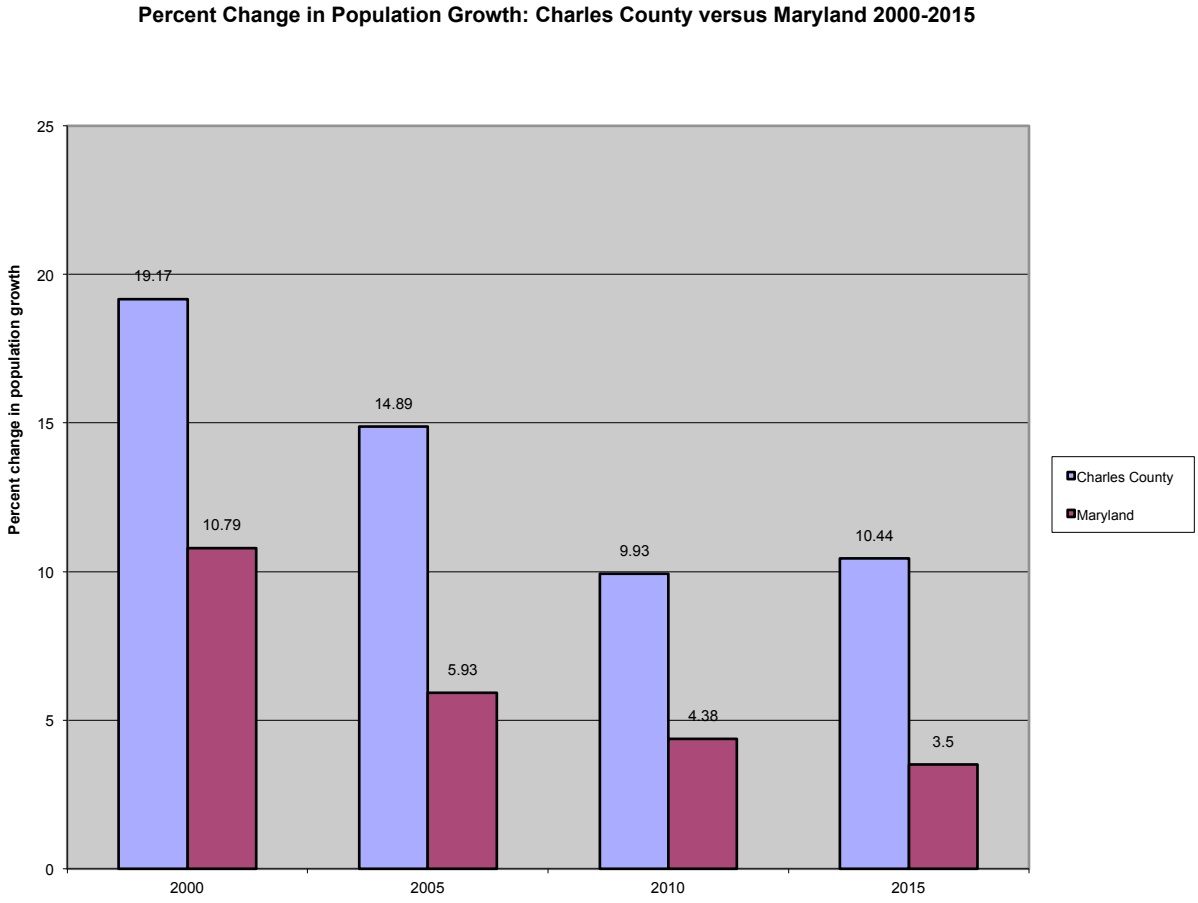
Charles County Census and Population Estimates 1990-2015



Source: US Census Bureau. Maryland and Charles County Fact Sheets.

Current US Census 2010 estimates are that the population now exceeds 146,551. This magnitude of growth can be seen in the changes in population density. The 1990 census showed that there were 219.4 individuals per square mile, and by 2000, there were 261.5 individuals per square mile- an increase of 19.2 percent. This percent change in population growth continued from 2000 to 2010 when Charles County experienced a 21.6% increase in population. The percent change in the population

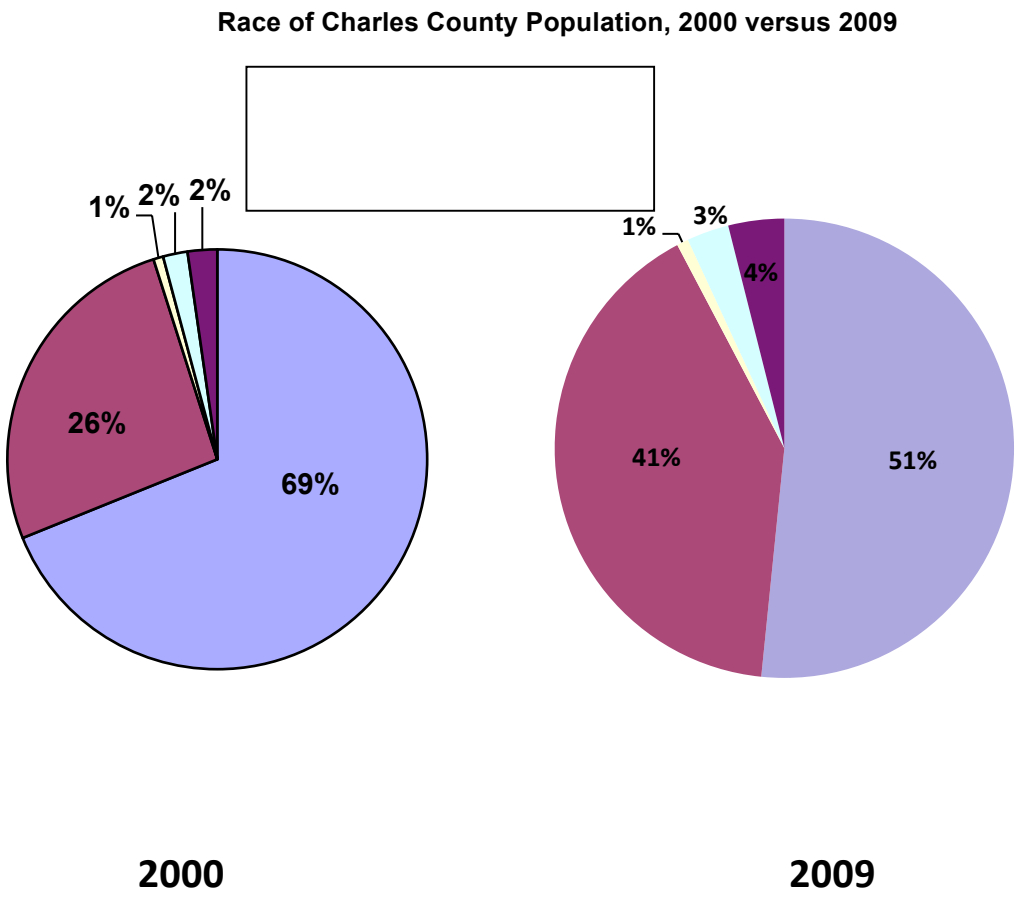
growth for Charles County has been greater than the change seen in the Maryland state population growth (9.0%).



Source: US Census Bureau. Maryland and Charles County Fact Sheets.

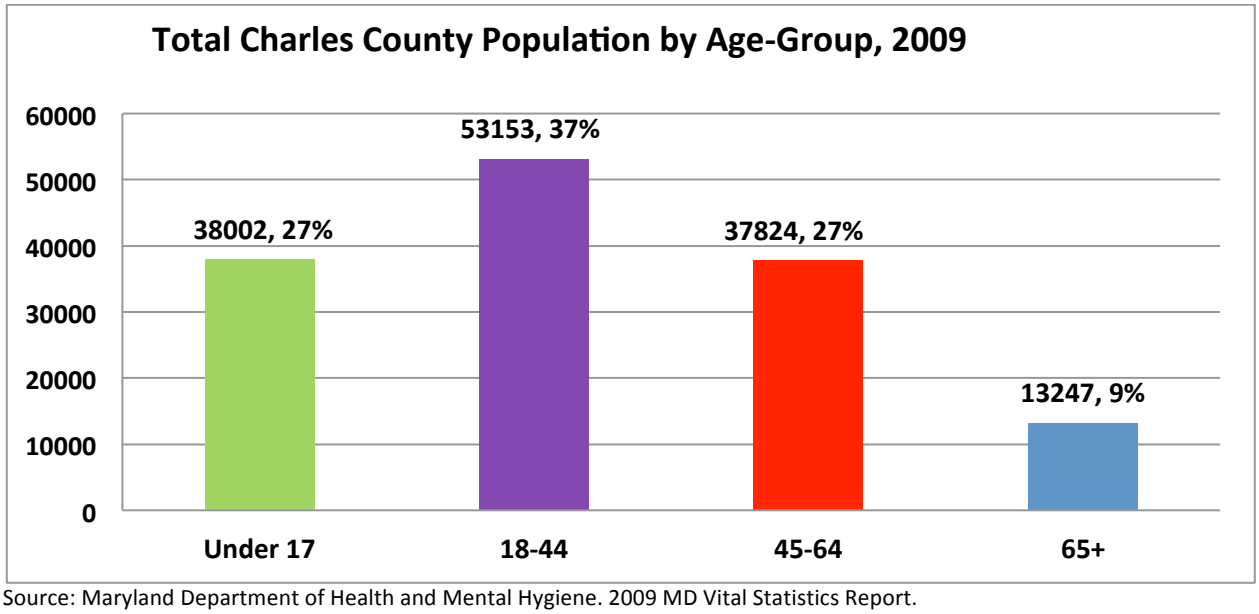
As the population of the county changes, the diversity of the county also increases. The African American population has experienced the greater increases in population. In 2000, African Americans made up 26% of the total Charles County population; by 2009, they now comprise 41% of the total county population. For 2009, minorities make up 49.7% of the Charles County population. The Hispanic community has also seen increases over the past few years. They now comprise 4.3% of the total county population. This is the one of the highest percentages among the 24 Maryland jurisdictions.

Purple(left) & red(right): African American
Yellow American Indian
Green: Asian/ Pacific Islander
Dk purple(left) and orange(right): Hispanic



Source: Maryland Department of Health and Mental Hygiene. 2000 and 2009 MD Vital Statistics Report.

The age breakdown of the Charles County population shows a young population between the ages of 18-44 years. The juvenile population (under 17 years) makes up 27% of the Charles County population.



Source: Maryland Department of Health and Mental Hygiene. 2009 MD Vital Statistics Report.

The 2009 Charles County gender breakdown is approximately 50/50. Males make up 48.7% of the population, and females make up 51.3% of the county population.

Employment and economic indicators for the county are fairly strong. The 2005-2009 US Census estimates for Charles County found that 73.8% of the population is currently in the labor work force. Approximately 6.4 percent of Charles County individuals are living below the poverty level, as compared to 9.2% of Maryland individuals. The Charles County median household income was $85,899, well above the Maryland median household income of $69,193.

Charles County has a larger percentage of high school graduates than Maryland (90.2% vs. 87.5%); however, Charles County has a smaller percentage of individuals with a bachelor's degree or higher than Maryland does (25.4% vs. 35.2%).

Charles County residents are a commuter population. They spend an average of 40.5 minutes of travel time to work each day.

There is a high level of home ownership in Charles County (81.9%). The median value of a housing unit in Charles County is higher than the Maryland average ($352,000 vs. $326,400). The average number of people in a Charles County household is 2.84 persons.

Social, Economic, and Housing Factors:	**Charles County**	**Maryland**
Living in same house 1 year ago, pct 1 yr old & over, 2005-2009	88.8%	85.5%
Foreign born persons, percent, 2005-2009	4.4%	12.3%
Language other than English spoken at home, pct age 5+, 2005-2009	5.8%	14.9%
High school graduates, percent of persons age 25+, 2005-2009	90.2%	87.5%
Bachelor's degree or higher, pct of persons age 25+, 2005-2009	25.4%	35.2%
Veterans, 2005-2009	16,083	461,622
Currently in labor force	73.8%	69.4%
Mean travel time to work (minutes), workers age 16+, 2005-2009	40.5	31.1
Housing units, 2009	53,971	2,341,194
Homeownership rate, 2005-2009	81.9%	69.6%
Housing units in multi-unit structures, percent, 2005-2009	9.7%	25.3%
Median value of owner-occupied housing units, 2005-2009	$352,000	$326,400
Households, 2005-2009	48,971	2,092,538
Persons per household, 2005-2009	2.84	2.63
Per capita money income in past 12 months (2009 dollars) 2005-2009	$34,786	$34,236
Median household income, 2009	$85,899	$69,193
Persons below poverty level, percent, 2009	6.4%	9.2%

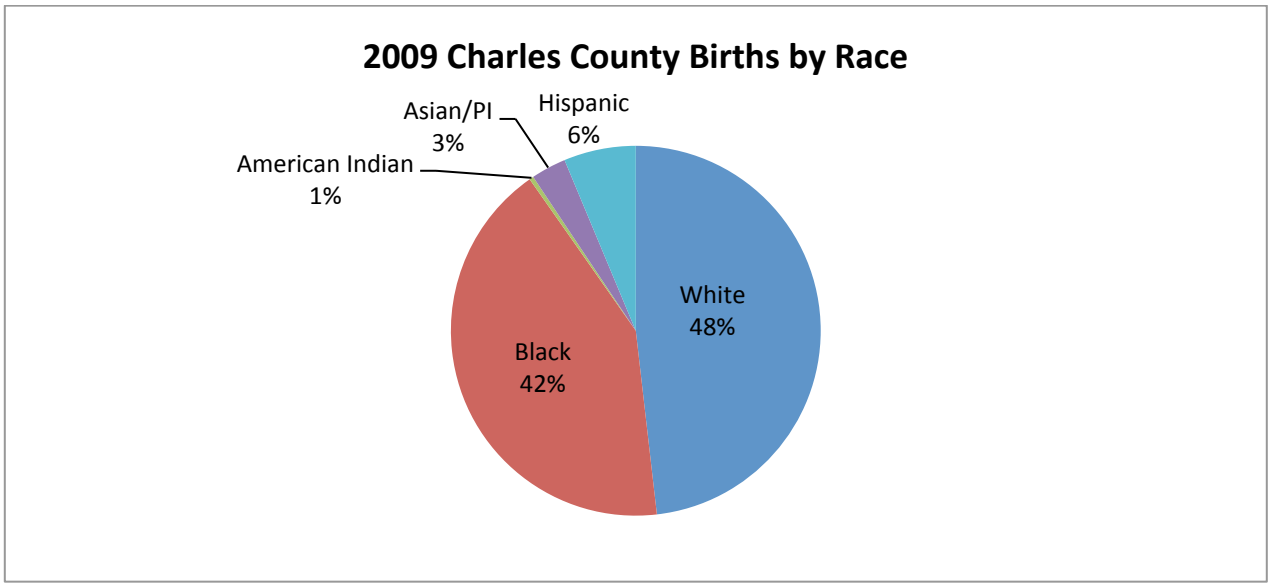
Source: 2005-2009 US Census Bureau, American Community Survey 5 year estimates, Charles County and Maryland

The life expectancy from birth for a Charles County resident as calculated for 2008-2009 was 78.1 years. This is similar to the state average life expectancy of 78.6 years.

Births:

There were 1,808 births in Charles County in 2009. Charles County represents 43% of the births in Southern Maryland and 2.4% of the total births in Maryland for 2009.

Minorities made up over half of the babies born in Charles County in 2009 (52%).



Source: 2009 Maryland Vital Statistics Report

In Charles County, birth rates were highest among the Hispanic population at 21.6 per 1000 county population, compared to 13.8 for Blacks and 12.7 for Whites.

For all Charles County births and for Charles County White births, the most common age group for the mother was between 25-29 years. For Charles County Blacks, the most common age of the mother was 20-24 years. In 2009, there were no mothers less than 15 years or greater than 49 years.

The birth rate for Charles County mothers aged 25-29 was 117.9. This is higher than the general fertility rate of 58.2 total births per 1000 Charles County women aged 15-44 years. It is also higher than any other age group in Charles County.

2009 Births: Age of Mother	Total	Under 15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45-49	50+	Not Stated
Charles County Total	1808	0	40	110	453	518	410	215	54	8	0	0
White	926	0	17	38	234	306	206	98	22	5	0	0
Black	809	0	22	69	213	187	181	106	28	3	0	0
Hispanic	121	0	1	8	35	35	25	14	3	0	0	0

Almost half of the babies born in Charles County in 2009 were the first birth order (40.3%). Only a small percentage was the fifth or greater (4.2%).

Birth Order	1st	2nd	3rd	4th	5 or more	Not stated	Total
Charles County	728 (40.3%)	531 (29.4%)	323 (17.9%)	145 (8.0%)	76 (4.2%)	5	1808

Births to unmarried mothers were highest among the Black population in Charles County, with 55.6% of the total births for that population to unwed mothers. The percentage of unmarried mothers was lowest among Asian or Pacific Islanders in Charles County (16.9%). The percentage was also high among the Charles County Hispanic population (45.5%).

Unmarried Mothers	All races	White	Black	Asian/PI	Hispanic
Charles County	790 (43.7%)	321 (34.7%)	450 (55.6%)	12 (16.9%)	55 (45.5%)

The percentage of women in Charles County receiving first trimester prenatal care was 74%, which is lower than the Maryland state average percentage of 83.9%. Charles County percentages for all races were below the Maryland state average percentages. The largest disparity was seen in the Asian or Pacific Islander population (67.8% for Charles County and 80.2% for Maryland).

In Charles County, the Hispanic mothers received the least amount of first trimester prenatal care (66.9%). The Asian/Pacific Islander population also reported that only 67.8% received first trimester prenatal care. The highest percentage of women receiving first trimester prenatal care was seen in the White population (78.3%).

Receiving 1st Trimester Prenatal Care	All races	White	Black	Asian/PI	Hispanic
Charles County	1338 (74%)	725 (78.3%)	564 (69.7%)	40 (67.8%)	81 (66.9%)
Maryland	60138 (80.2%)	36307 (83.9%)	18599 (73.7%)	4805 (80.2%)	6470 (68.1%)

In Charles County, Blacks reported the largest percentage of late or no prenatal care (8.7%). This is higher than the percentage reported by Maryland Blacks (7.0%). Charles County in general had a higher percentage of mothers with late or no prenatal care than Maryland mothers.

Receiving late or no Prenatal Care	All races	White	Black	Asian/PI	Hispanic
Charles County	122 (6.7%)	50 (5.4%)	70 (8.7%)	1	7 (5.8%)
Maryland	3507 (4.7%)	1438 (3.3%)	1755 (7.0%)	288 (4.8%)	669 (7%)

Low birth weight mean that a baby is born weighing less than 2400 grams. Low birth weights were most commonly seen among the Asian/Pacific Islander population in Charles County (15.3%). There is also a large disparity between the percentage of low birth weights among Charles County Asians and Maryland Asians (15.3% vs. 8.1%).

Low birth weights were also seen among the Hispanic population in Charles County (10.7%). This is higher than for Maryland Hispanics (6.6%).

The percentage of low birth weights among Blacks in Charles County (11.5%) was less than the percentage reported for Maryland Blacks (13.0%). Percentages were similar for Charles County and Maryland Whites.

Low Birth Weight	All races	White	Black	Asian/PI	Hispanic
Charles County	172 (9.5%)	70 (7.4%)	93 (11.5%)	9 (15.3%)	13 (10.7%)
Maryland	6865 (9.2%)	3043 (7.0%)	3286 (13.0%)	488 (8.1%)	629 (6.6%)

Very low birth weight is defined as a baby weighing less than 1499 grams at birth. For Charles County, the largest percentage of very low birth weight babies is among the Black population (2.6%). This is also true for Maryland Blacks; however, the percentage for Charles County is slightly less than Maryland (2.6% vs. 3.2%).

Very Low Birth Weight	All races	White	Black	Asian/PI	Hispanic
Charles County	38 (2.1%)	15 (1.6%)	21 (2.6%)	2	2
Maryland	1373 (1.8%)	497 (1.1%)	381 (3.2%)	68 (1.1%)	126 (1.3%)

The percentage of births leading in cesarean section in Charles County in 2009 was 36.0%. The largest percentage was seen among Charles County Blacks with 39.8% of babies delivered by c-section. All Charles County percentages, overall and by race, are similar to state percentages.

Cesarean Section Delivery	All races	White	Black	Hispanic
Charles County	650 (36%)	305 (32.9%)	322 (39.8%)	35 (28.9%)
Maryland	25525 (34%)	14084 (32.6%)	9351 (37.1%)	2778 (29.2%)

In 2009, 1637 out of 1808 Charles County babies were born in the state of Maryland (90.5%). However, only 626 of those babies were born in Charles County (35%). This is much lower than the percentage for other surrounding jurisdictions. 67% of Calvert County babies were born in Calvert County, and 74% of St. Mary's County babies are born in St. Mary's County.

Over half of Charles County babies (966 or 54%) were born in another Maryland county.

The percentage of Charles County babies born outside of Maryland (9.5%) is much higher than the percentages seen for Calvert County (1.3%) and for St. Mary's County (1.4%).

Place of Birth	All Births	State Total	MD Co. same as residence	MD Co other than residence	Baltimore City	DC	Other State
Charles County	1808	1637	626	966	45	97	74
Calvert County	924	912	621	259	32	5	7
St Mary's County	1479	1458	1096	315	47	8	13

Geographic and Demographic Profile References:

1. 2010 Charles County Current Population Survey Data. United States Census Bureau. Available at: www.census.gov.

2. 2000 and 2009 Maryland Vital Statistics Report. Charles County Demographic and Population Data. Maryland Department of Health and Mental Hygiene. Available at www.vsa.maryland.gov.

3. 2005-2009 US Census Bureau, American Community Survey 5 year estimates, Charles County and Maryland. Available at www.census.gov.

Qualitative Data Specific to the Geographic and Demographic Profile:

Charles County's changing racial composition was discussed at the focus groups. It was stressed that services must be tailored to the specific minorities. For example, providers must be culturally competent on how to deliver health information to increasing Hispanic population. Information must be provided in their language and at their literacy level. They must also take into account that people from different regions of a country may have different slang and word definitions.

The school nurses also expressed their concern over the growing Hispanic population in the schools. The parents do not speak English, and communication is difficult.

Many focus group participants spoke out about the many programs within the county that are aimed at providing services and supporting minorities within the county, including the Black Leadership Council for Excellence and centers within rural and medically underserved communities such as Greater Baden in Nanjemoy.

The Partnerships for a Healthier Charles County focus group discussed the commuter population in Charles County. Due to its proximity to Washington DC and Baltimore, many individuals who live in the county have long daily commutes for work. Many of the focus group participants expressed the need to get those commuting individuals involved in the community and make them aware of the health services that are available.

Homelessness was an important issue discussed at the School Nurse focus group. The schools are seeing many more homeless families. They must help those children get to school and received the necessary health services that they need. Most do not have dental care or immunizations. They also have challenges with their transportation and communication. It becomes very difficult to get them medical assistance.

Individuals over the age of 65 years make up 9% of the total Charles County population, and this percentage will continue to grow over the next decade as baby boomers aged 45-64 years (currently 27% of the county population) move into the older age category. Many focus group participants talked about the need for education regarding emerging health topics of the aging including dementia, Alzheimer's disease, arthritis, Diabetes, cancer, and diseases of the heart.

Charles County Vital Statistics Profile:

Marriage and Divorce:

A total of 683 marriage ceremonies were conducted in Charles County in 2009. Most of those marriages were to be Maryland residents (644). More than half of the marriages were civil ceremonies (53.8%).

	Total Marriages	Maryland Residents*	Non-MD Residents	% to non-MD residents	Religious Ceremony	Civil Ceremony	% Civil Ceremonies
Charles County	683	644	45	6.5%	318	371	53.8%

*One or both of the partners are residents of Maryland.

Data on the age of the bride and groom and previous marital status are not available on a county level.

In 2009, there were 202 divorces in Charles County. No additional data is available on a county level.

Mortality:

Death Rates:

There were a total of 871 deaths in Charles County in 2009.

The 2007-2009 Charles County all cause mortality rate was 845.2 per 100,000 population. This rate is higher than the Maryland state all-cause mortality rate of 768.4 per 100,000 population.

The number one cause of death for the time period 2009 and for the time period 2007-2009 was heart disease. The 2007-2009 Charles County heart disease death rate was 228.5 per 100,000. This is also higher than the Maryland state rate of 196.8 per 100,000.

Charles County had higher 2007-2009 mortality rates than Maryland for heart disease, cancer, chronic lower respiratory disease, accidents, and diabetes mellitus.

2007-2009 Ten Leading Causes of Death by Count and Rate, Charles County and Maryland

Cause of Death	Charles County Number, 2009	Charles County Rate, 2007-2009*	Maryland Number, 2009	Maryland Rate 2007-2009*
All Causes	871	845.2	43,759	768.4
Diseases of the Heart	239	228.5	11,143	196.8
Cancer	209	199.3	10,376	179.3
Chronic Lower Respiratory Disease	36	42.8	2049	35.6
Accidents	32	29.8	1392	25.3
Diabetes Mellitus	31	34.1	1198	21.8
Cerebrovascular	28	39.5	2281	40.0

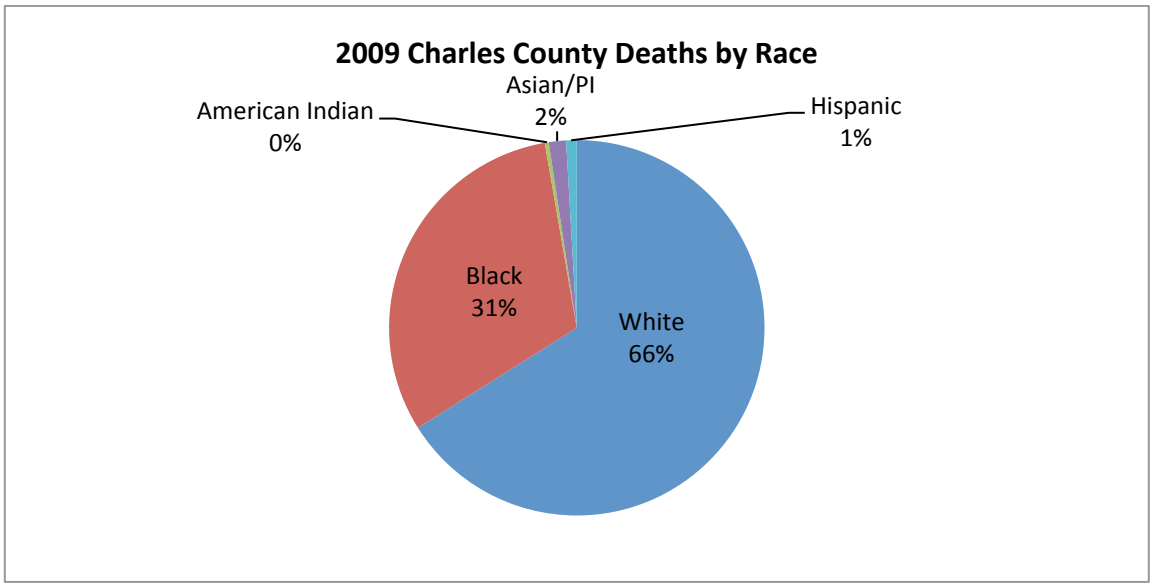
Diseases				
Influenza and Pneumonia	19	**	953	17.8
Intentional Self-Harm (Suicide)	16	**	545	8.9
Alzheimer's Disease	15	**	935	16.9
Septicemia	14	**	1051	17.4

*Per 100,000 population

** Age-adjusted death rates not calculated for jurisdictions with fewer than 20 deaths.

All Cause Deaths by Race:

Two-thirds of the deaths in Charles County in 2009 were among the White population. They make up approximately half of the total county population.



When comparing by 2009 calculated crude death rates, the rate is much higher in the White population. The 2009 Charles County White death rate was 739.9 per 100,000. This is much higher than the Charles County total 2009 crude death rate of 612.4 per 100,000 and higher than the death rates for Blacks (468.8), for Asians and Pacific Islanders (308.2), and for Hispanics (142.8).

2009 Crude Death Rates:	**All Races**	**White**	**Black**	**Asian/PI**	**Hispanic**
Charles County	612.4	739.9	468.8	308.2	142.8

All Cause Deaths by Age:

The number of reported deaths increased with age. The greatest numbers of deaths were seen in the 75-84 years age group. This age group accounted for one-quarter of the total county deaths for 2009.

Deaths by Age	All ages	<1 yr	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Charles County	871	12	2	1	14	29	29	90	131	168	207	188

In 2009, there were 7 deaths in Charles County for children and adolescents ages 1-19 years.

Child Deaths	1-19 yrs	1-4 yrs	5-9 yrs	10-14 yrs	15-17 yrs	18-19 yrs
Charles County	7	2	0	1	3	1

Adolescent Violent Deaths:

There were 3 violent deaths to adolescents in Charles County in 2009. There was one assault and 2 suicides.

Deaths from Selected Causes:

The number of deaths in Charles County for selected causes is presented below.

All Causes of Death	871
Tuberculosis	0
Septicemia	14
HIV Disease	6
Total Malignant Neoplasms	209
Malignant Neoplasms of Stomach	4
Malignant Neoplasms of Rectum, Colon, and Anus	18
Malignant Neoplasms of Pancreas	10
Malignant Neoplasms of Trachea, Bronchus, and Lung	64
Malignant Neoplasms of Breast	14
Malignant Neoplasms of Cervix, Uteri, Corpus Uteri, and Ovary	11
Malignant Neoplasms of Prostate	10
Malignant Neoplasms of Urinary Tract	4
Non-Hodgkin's Lymphoma	11
Leukemia	6
Other Malignant Neoplasms	57
Diabetes Mellitus	31
Alzheimer's Disease	15
Total Major Cardiovascular Diseases	287
Total Diseases of the Heart	239
Hypertensive Heart Disease	19
Ischemic Heart Disease	160
Other Diseases of the Heart	60

Essential Hypertension and Hypertensive Renal Disease	12
Cerebrovascular Diseases	28
Atherosclerosis	4
Other Diseases of the Circulatory System	4
Influenza and Pneumonia	23
Chronic Lower Respiratory Diseases	36
Peptic Ulcer	1
Chronic Liver Disease and Cirrhosis	10
Nephritis, Nephrotic Syndrome and Nephrosis	12
Pregnancy, Childbirth, and the Puerperium	0
Certain Conditions Originating in the Perinatal Period	9
Congenital Abnormalities	2
Sudden Infant Death Syndrome	1
Symptoms, Signs, and Abnormal Clinical and lab findings	16
All other Disease (residual)	126
Total Accidents	32
Motor Vehicle Accidents	19
All Other Accidents	13
Intentional Self Harm (Suicide)	16
Assault (Homicide)	10
All Other External Causes	15

Place of Death:

Most of the deaths in Charles County occurred in a hospital or nursing home, regardless of race.

Deaths in Institutions	Number of Deaths Occurring in Hospitals: All Races	Number of Deaths Occurring in Hospitals: White	Number of Deaths Occurring in Hospitals: Black	Number of Deaths Occurring in Nursing Homes: All Races	Number of Deaths Occurring in Nursing Homes: White	Number of Deaths Occurring in Nursing Homes: Black
Charles County	469	282	177	149	108	38

Deaths in Institutions	Percent of All Deaths Occurring in Hospitals and Nursing Homes: All Races	Percent of All Deaths Occurring in Hospitals and Nursing Homes: White	Percent of All Deaths Occurring in Hospitals and Nursing Homes: Black
Charles County	71.0%	67.2%	78.5%

Out of the 871 deaths to Charles County residents in 2009, 760 of those deaths occurred in Maryland (87%). In addition, 563 (65%) of the Charles County deaths occurred within Charles County.

Place of Death	All Deaths	Deaths within Maryland	Deaths within Charles County	Deaths within another Maryland county	Deaths within Baltimore City	Deaths with DC	Deaths in other states or countries
Charles County	871	760	563	175	22	99	12

Infant Mortality:

For 2009, Charles County infant and fetal mortality rates are lower than or comparable t Maryland state rates. When these rates are compared by race, the rates appear to be higher in the African American population.

2009 Data	Charles County Number	Charles County Rate	Maryland Number	Maryland Rate
Infant Mortality Rate (per 1000 live births)	12	6.6	541	7.2
Neonatal Mortality Rates (per 1,000 births)	9	5.0	386	5.1
Postneonatal Mortality Rates (per 1,000 births)	3	**	155	2.1
Fetal death rates (per 1,000 total deliveries: live births and fetal deaths)	10	5.5	566	7.5
Perinatal Mortality Rates (per 1,000 fetal deaths)	14	7.7	529	7.0

**Rates based on less than 5 events are not presented since such rates are not stable.

2009 Charles County Infant and Fetal Death Rates and Counts	Total	White	Black
Infant Mortality	12 (6.6)	5 (5.4)	7 (8.7)
Neonatal Mortality	9 (5.0)	4	5 (6.2)
Postneonatal Mortality	3	1	2
Fetal Mortality	10 (5.5)	3	7 (8.6)
Perinatal Mortality	14 (7.7)	6 (6.5)	8 (9.9)

Mortality Rates per 1000 live births are presented in parentheses when available. Rates could not be calculated for cells with fewer than 5 deaths.

Infant Mortality Definitions:
Infant death: Death occurring to a person under one year of age.
Neonatal death: Death occurring to an infant under 28 days of age.
Postneonatal death: Death occurring to an infant between 28 days and one year of age.
Fetal death: Death before the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy.
Perinatal death: Death of a fetus of 28 or more weeks of gestation or of an infant less than 7 days of age.

Vital Statistics References:

1. 2009 Charles County Marriage, Divorce, Mortality and Infant Mortality Statistics. 2009 Maryland Vital Statistics Report. Maryland Department of Health and Mental Hygiene. Available at www.vsa.maryland.gov.

Qualitative Data Relating to Vital Statistics:

Infant Mortality was listed as a major health concern at all focus groups within the county. Many improvements have been made to decrease the county's infant mortality rates through collaborative county programs.

The county's high mortality due to cancer, stroke, and heart disease were also mentioned as major health concerns at the county focus groups.

The Burden of Heart Disease, Stroke, and Their Risk Factors:

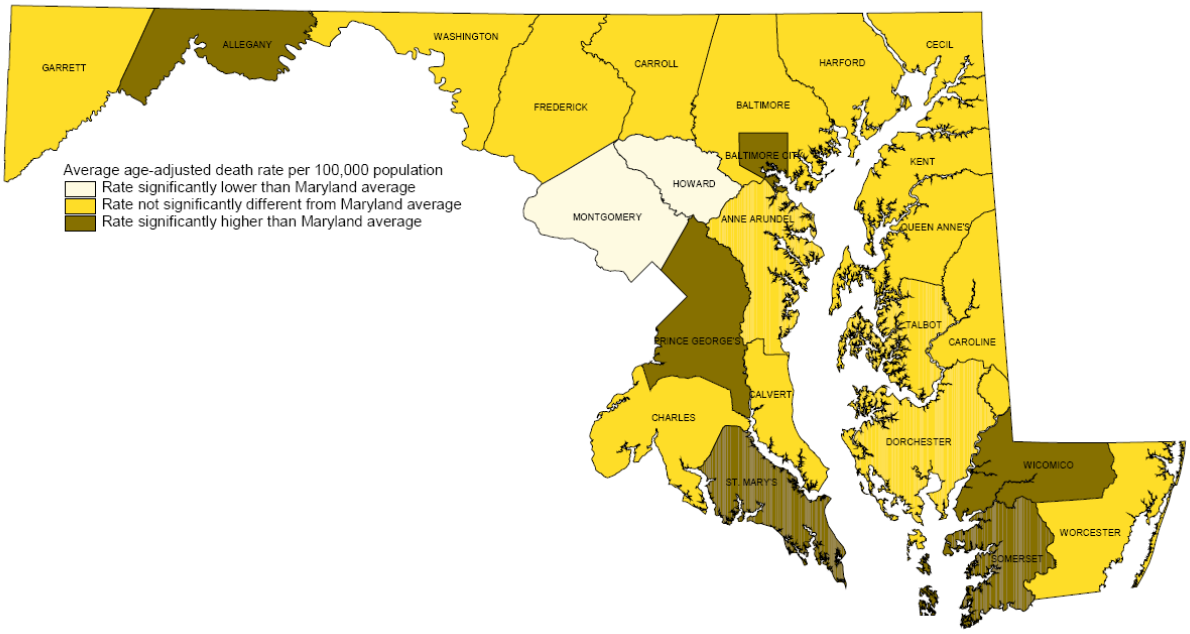
Heart Disease:

Mortality:

Heart disease is the leading cause of death in both Charles County and Maryland. In 2009, a total of 287 Charles County residents died from a major cardiovascular disease, and 239 of those deaths were from heart disease (83%). This constitutes a 2009 Charles County crude heart disease death rate of 168.0 per 100,000. Deaths due to heart disease made up 27.4% of the total Charles County deaths in 2009.

The 2007-2009 (3 year average) Charles County age-adjusted heart disease death rate was 228.5 per 100,000. This was the highest rate for any cause of death in Charles County. The Charles County heart disease death rate is also higher than the Maryland state average rate of 196.8 per 100,000. However, this difference is not statistically significant.

Comparison of County Age-adjusted Death Rates* for Heart Disease with the Maryland State Average, 2007-2009.



2009 deaths due to heart disease are divided evenly among males and females. The even gender breakdown is true for overall heart disease deaths, as well as for Caucasians and African Americans.

Heart Disease Deaths by Gender: 2009	*Males*	*Females*
Charles County	120	119

Caucasians make up 68% of Charles County heart disease deaths (2009). African Americans make up approximately one-quarter of the heart disease deaths (26%). Race and gender-specific death rates are not calculated on a county level yearly; numbers are not large enough to produce stable rates.

Charles County Heart Disease Deaths by Race and Gender: 2009	*Number of Heart Disease Deaths in Charles County*
White	163
Black	61
Other	15
White Male	81
White Female	82
Black Male	31
Black Female	30

Maryland state level indicates that African Americans and males are disproportionately affected by heart disease. The 2009 heart disease mortality rate for Maryland Caucasians was 184.3. The 2009 heart disease mortality rate for Maryland African Americans was much higher at 238.3 per 100,000.

African American males have the highest heart disease mortality rates in Maryland at 296.1 per 100,000. This is higher than the heart disease mortality for African American females of 201.6 per 100,000.

The 2009 heart disease mortality rate for White males in Maryland was 253.0 per 100,000. This is significantly higher than the heart disease mortality rate for White females of 147.1 per 100,000.

Maryland Heart Disease Death Rates by Race and Gender: 2009	*Heart Disease Death Rates per 100,000*
White	184.3
Black	238.3
White Male	253.0
White Female	147.1
Black Male	296.1
Black Female	201.6

Prevalence:

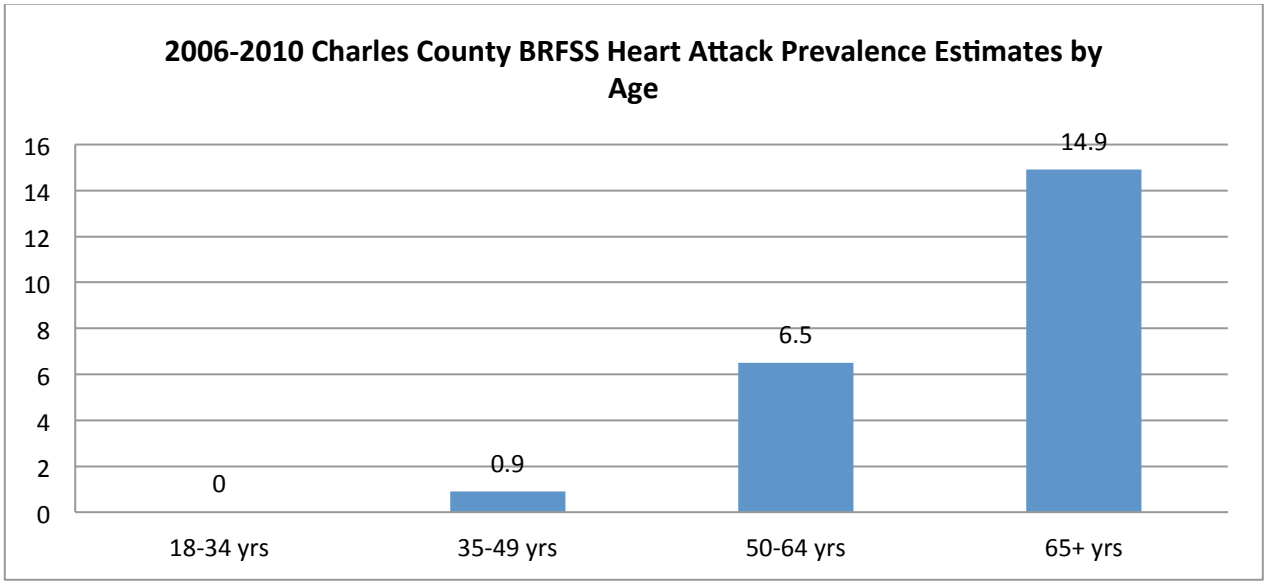
Estimates on the prevalence of coronary heart disease and angina in Charles County can be calculated using the Maryland Behavioral Risk Factor Surveillance System or BRFSS. The BRFSS also provides estimates on the number of Charles County residents who have suffered a heart attack. 2006-2010 cumulative BRFSS data was used to calculate 5 year averages that are weighted to reflect Maryland population estimates. Five years of data were combined because sample sizes less than 50 are statistically unstable. Data was aggregated to increase sample size.

Heart Attack Prevalence:

Charles County BRFSS participants were asked if they have ever had a heart attack. Once weighted, it is estimated that 3.5% of Charles County residents have ever suffered a heart attack. This is similar to the 3.7% reported for Maryland.

Ever had a heart attack:	*# (weighted percentage)*
Charles County	82 (3.5%)
Maryland	2404 (3.7%)

The percentage of Charles County residents experiencing a hear t attack increases with age. 14.9% of individuals over the age of 65 years reported that they had suffered a heart attack. This is 2.3 times greater than the percentage of people aged 50-64 years who have experienced a heart attack.

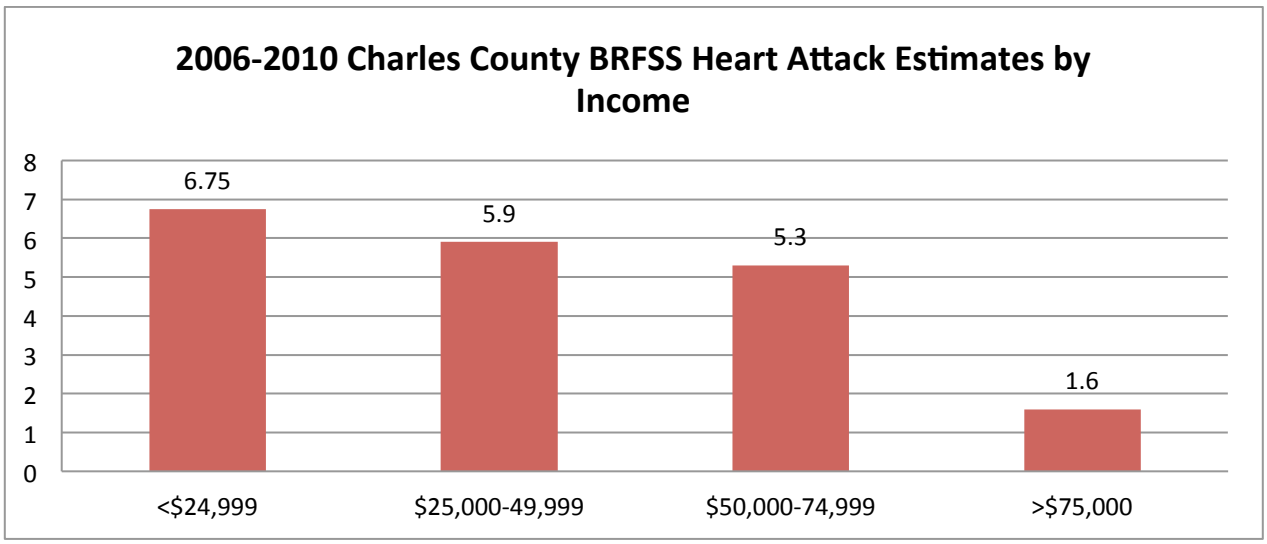


Source: 2006-2010 Maryland BRFSS, Maryland DHMH

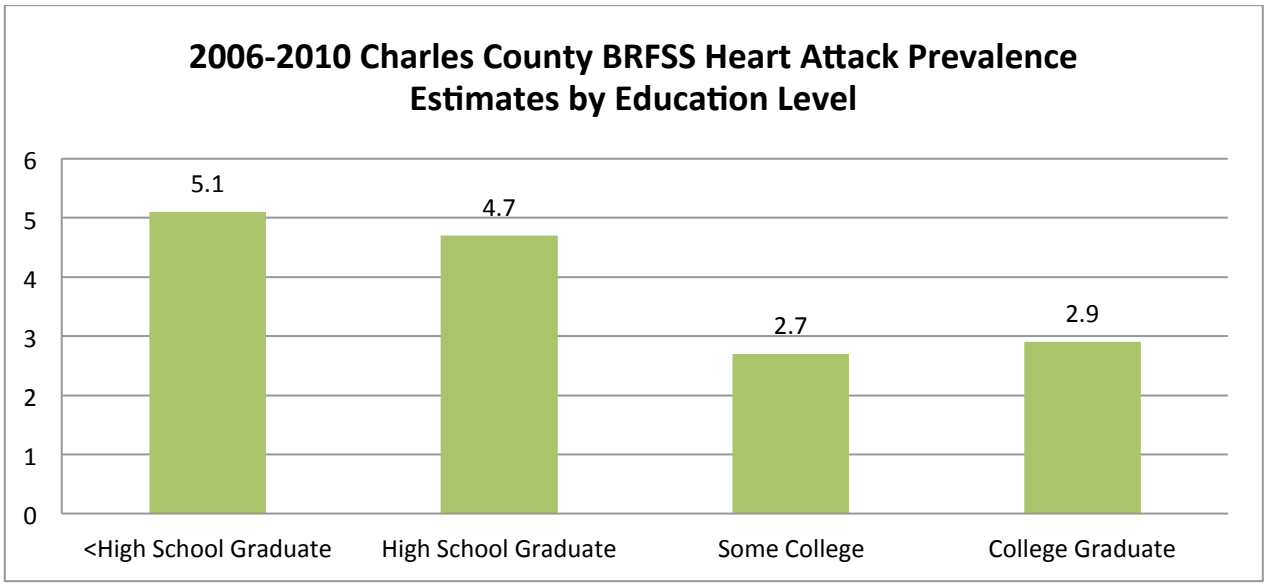
The majority of heart attack sufferers in Charles County are male (71.0%). 4.8% of all Charles County males report having ever had a heart attack. This is much higher than the 2.1% reported among Charles County females.

When examined by race, 4.6% of Charles County whites reported ever having a heart attack. This is significantly higher than the 2.3% reported by Charles County African Americans. Data on other races could not be determined due to low sample sizes.

Those with lower household incomes were more likely to report having had a heart attack than those with higher income levels. People with an income less than $24,999 were over four times more likely to report having a heart attack than people with an income over $75,000.



When examining heart attack prevalence by education level, people with less than a high school education reported slightly higher percentages of heart attacks than those who have had any amount of college.



An additional analysis was performed to determine if the presence of known risk factors increased the likelihood of suffering a heart attack. 2006-2010 BRFSS data was used to increase the sample size. The presence of a heart attack with the risk factor was examined against the presence of a heart attack without the risk factor. The risk factors include high cholesterol, diabetes, high blood pressure, physical inactivity, and overweight/obesity.

High Cholesterol:

Eight times as many Charles County residents reported having ever had a heart attack if they also reported having high cholesterol (9.6%) than Charles County residents who do not have high cholesterol (1.2%).

Diabetes:

Six times as many Charles County residents reported having ever had a heart attack if they also have a diabetic co-morbidity (15.2%) than Charles County residents without diabetes (2.4%).

High Blood Pressure:

Ten times as many Charles County residents reported having ever had a heart attack if they also reported having high blood pressure (10.0%) than county residents without high blood pressure (1.5%).

Physical Inactivity:

Two and a half times as many Charles County residents reported having ever had a heart attack if they also reported that they do not meet Healthy People objectives for moderate and vigorous physical activity (4.5%) than county residents who are getting healthy levels of physical activity (2%).

Overweight and Obesity:

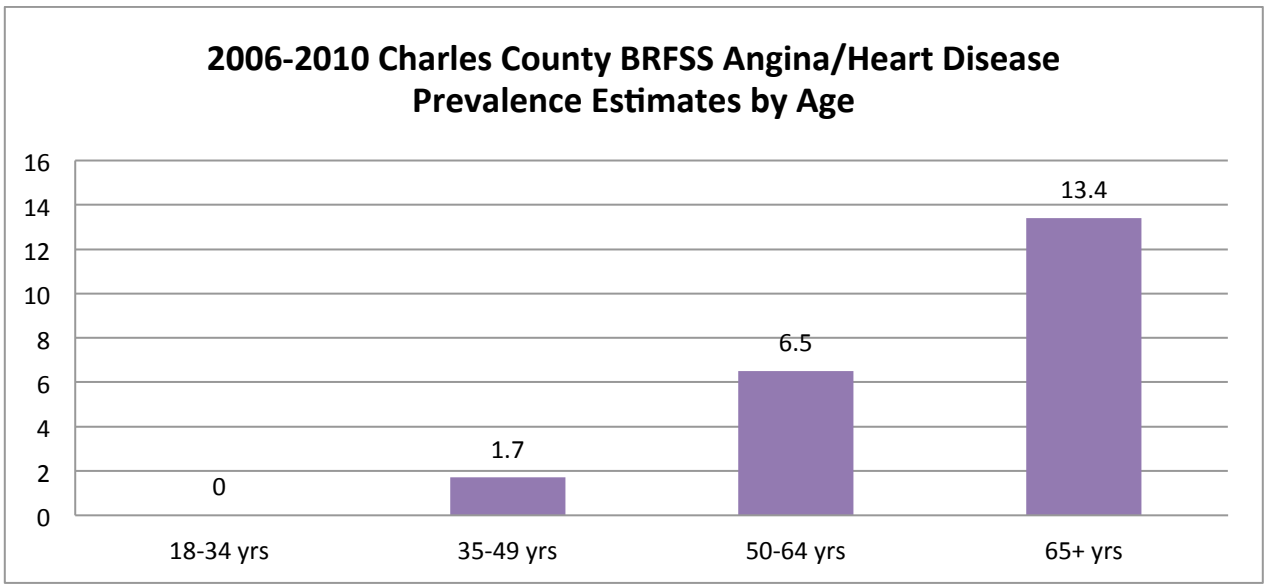
Overweight or obese Charles County residents reported 2.6 times as many heart attacks (4.3%) than Charles County residents who are at a healthy weight (1.8%).

Angina and Coronary Heart Disease Prevalence:

When asked if a doctor or health professional has ever told them that they have angina or coronary heart disease, 3.6% of Charles County residents reported having angina or coronary heart disease. This is again slightly lower than the 4.0% reported for Maryland.

Ever have angina or coronary heart disease:	*# (weighted percentage)*
Charles County	77 (3.6%)
Maryland	2542 (4.0%)

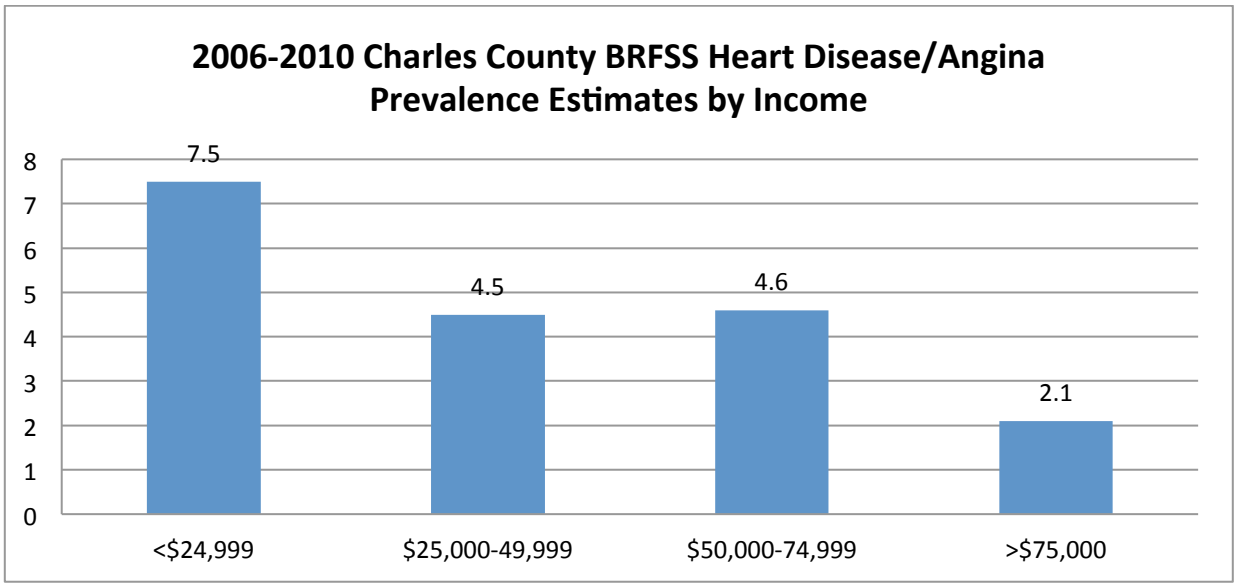
The presence of angina increases greatly with age. Those over the age of 65 years are much more likely to experience angina than those 35-49 and 50-64 years.



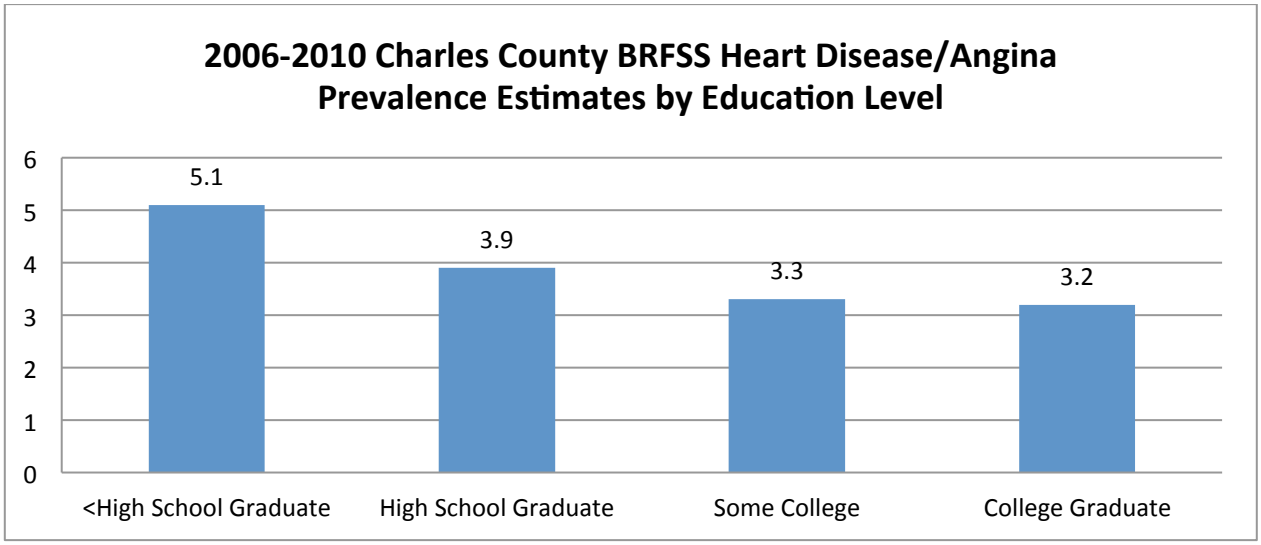
Over half of those with angina or coronary heart disease in Charles County are male (59%). 4.0% of all Charles County males report having ever had a heart disease or angina. This is slightly higher than the 3.1% reported among Charles County females.

When examined by race, 3.6% of Charles County whites reported ever having heart disease or angina. This is similar to the 3.2% reported by Charles County African Americans. The highest percentage of heart disease/angina was reported by Charles County residents who are of an "Other" racial category (4.7%). 3.1% of Charles County Hispanics reported having ever had angina or coronary disease.

Those with lower household incomes were more likely to report having heart disease/angina than those with higher income levels. People with an income less than $24,999 were over 3.5 times more likely to report having heart disease/angina than people with an income over $75,000.



When examining heart disease/angina prevalence by education level, the greatest percentage was seen in those with less than a high school diploma or GED. The group with the lowest reported percentage of heart disease/angina was those with a college degree.



An additional analysis was performed to determine if the presence of known risk factors increased the likelihood of having angina or coronary heart disease. 2006-2010 BRFSS data was used to increase the sample size. The presence of angina/heart disease with the risk factor was examined against the presence of angina/heart disease without the risk factor. The risk factors include high cholesterol, diabetes, high blood pressure, physical inactivity, and overweight/obesity.

High Cholesterol:

Nine times as many Charles County residents reported having angina or coronary heart disease if they also reported having high cholesterol (6.5%) than Charles County residents who do not have high cholesterol (0.7%).

Diabetes:

Five times as many Charles County residents reported having angina or coronary heart disease if they also have a diabetic co-morbidity (13%) than Charles County residents without diabetes (2.7%).

High Blood Pressure:

Three times as many Charles County residents reported having angina or coronary heart disease if they also reported having high blood pressure (5.7%) than county residents without high blood pressure (1.9%).

Physical Inactivity:

Two times as many Charles County residents reported having angina or heart disease if they also reported that they do not meet Healthy People objectives for moderate and vigorous physical activity (4.7%) than county residents who are getting healthy levels of physical activity (2.2%).

Overweight and Obesity:

Obese Charles County residents reported 1.5 times as many cases of angina/heart disease (4.6%) than Charles County residents who are at a healthy weight (3.1%). Overweight Charles County residents reported a similar number of angina/heart disease cases as residents of a healthy weight (2.9% vs. 3.1%).

Hospitalizations:

Charles County data regarding hospitalizations for hypertension and diseases of the cardiovascular system were obtained through the Maryland Assessment Tool for Community Health (MATCH).

The proportion of Maryland young adults, aged 20-39, being hospitalized with hypertension as a co-morbidity, has increased from 6.6% in 2000 to 10.5% in 2008.

Increasing Proportion of Maryland Young Adults (ages 20-39) presenting with hypertension co-morbidity

	Discharge Year																		Total	
	2000		2001		2002		2003		2004		2005		2006		2007		2008		Hospital Discharges	
HBP	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
No	121,694	93.4	122,812	92.9	125,062	92.1	124,755	91.7	122,450	90.7	124,534	90.0	126,031	89.4	124,596	89.3	125,971	89.5	1,117,905	91
Yes	8,610	6.6	9,347	7.1	10,794	7.9	11,363	8.3	12,512	9.3	13,824	10.0	14,881	10.6	14,855	10.7	14,850	10.5	111,036	9.0
Total	130,304	100	132,159	100	135,856	100	136,118	100	134,962	100	138,358	100	140,912	100	139,451	100	140,821	100	1,228,941	100

In 2009, a total of 831 operations were performed in Charles County on the cardiovascular system. These cardiovascular operations accounted for 1537 days in the hospital. The cost of those procedures and subsequent hospital stays cost $6,953,626. Costs for operations of the cardiovascular system have doubled since 2000. The length of hospital stays has remained the same; however, the number of people being hospitalized due to operations of the cardiovascular system has increased.

Charles County Hospitalization Data for Operations of the Cardiovascular System, 2000-2009

Operations of Cardiovascular System	Number of operations	Total charges	Length of stay
2000	567	3793075	1678
2001	553	4250583	1628
2002	610	4893143	1674
2003	645	4403438	1645
2004	726	5704115	1760
2005	660	5465547	1672
2006	675	5437434	1533
2007	668	5263968	1446
2008	750	7779851	1777
2009	831	6953626	1537

In 2009, a total of 181 people hospitalized in Charles County were diagnosed with a disease of the blood or blood forming organs. The number of people diagnosed with disease of this organ system has doubled since 2000 (94 diagnoses).

Charles County Hospitalization Data for Diagnoses of Diseases of the Blood and Blood Forming Organs, 2000-2009

Disease of the Blood and Blood forming organs	Number of Diagnoses
2000	94
2001	94
2002	121
2003	145
2004	169
2005	132
2006	161
2007	161
2008	169
2009	181

The number of diagnoses of diseases of the circulatory system has remained steady for the last decade in Charles County.

Charles County Hospitalization Data for Diagnoses of Diseases of the Circulatory System, 2000-2009

Diseases of the circulatory system	Number of Diagnoses
2000	2058
2001	2083
2002	2142
2003	2081
2004	2235
2005	2250
2006	2251
2007	2146
2008	2160
2009	2324

Stroke:

Mortality:

Stroke, or Cerebrovascular disease, is the 6th leading cause of death in Charles County. In 2009, a total of 28 Charles County residents died from a stroke. This constitutes a 2009 Charles County crude stroke death rate of 19.7 per 100,000. Deaths due to stroke made up 3% of the total Charles County deaths in 2009.

The 2007-2009 (3 year average) Charles County age-adjusted stroke death rate was 39.5 per 100,000. This was the 4th highest rate among causes of death in Charles County. The Charles County stroke death rate is comparable to the Maryland state average rate of 40.0 per 100,000.

2009 deaths due to stroke are divided evenly among males and females. The even gender breakdown is true for overall heart disease deaths, as well as for Caucasians and African Americans.

Stroke Deaths by Gender: 2009	*Males*	*Females*
Charles County	15	13

Caucasians make up 64% of Charles County stroke deaths (2009). African Americans make up the remaining third of the stroke deaths (26%). Race and gender-specific death rates are not calculated on a county level; numbers are not large enough to produce stable rates.

Stroke Deaths by Race and Gender: 2009	*Number of Stroke Deaths*
White	18
Black	10
Other	0
White Male	10
White Female	8
Black Male	5
Black Female	5

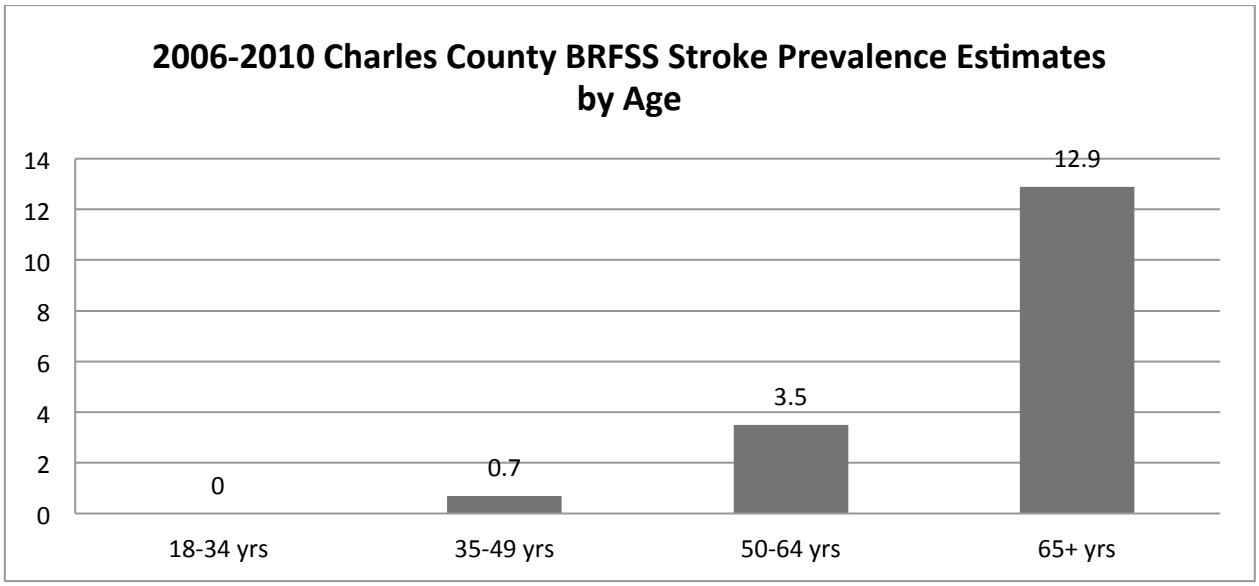
Prevalence:

Estimates on the prevalence of stroke in Charles County can be calculated using the Maryland Behavioral Risk Factor Surveillance System or BRFSS. 2006-2010 cumulative BRFSS data was used to calculate 5 year averages that are weighted to reflect Maryland population estimates. Five years of data were combined because sample sizes less than 50 are statistically unstable. Data was aggregated to increase sample size.

Charles County BRFSS participants were asked if they have ever had a stroke. It is estimated that 2.5% of Charles County residents have ever suffered a stroke. This is exactly the same as the 2.5% reported for Maryland for the same time period.

Ever had a stroke:	*# (weighted percentage)*
Charles County	67 (2.5%)
Maryland	1630 (2.5%)

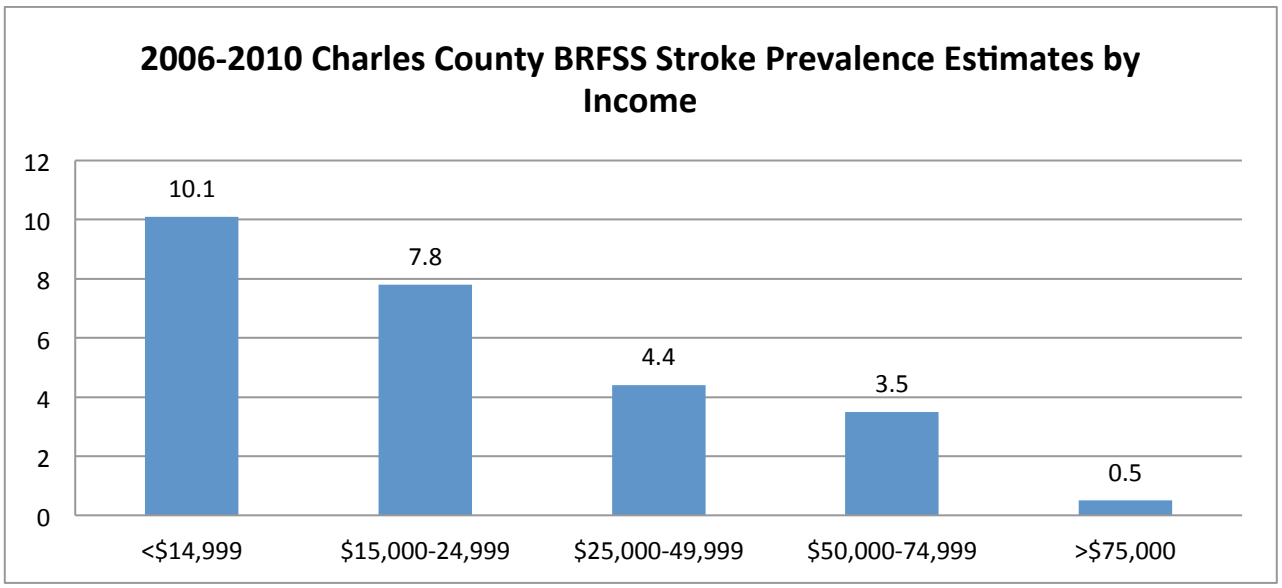
The percentage of Charles County residents experiencing a stroke increases with age. 12.9% of individuals over the age of 65 years reported that they had suffered a heart stroke. This is 18 times higher than the percentage of strokes reported in individuals aged 35-49 years and 4 times higher than the percentage of stroke reported in individuals aged 50-64 years.



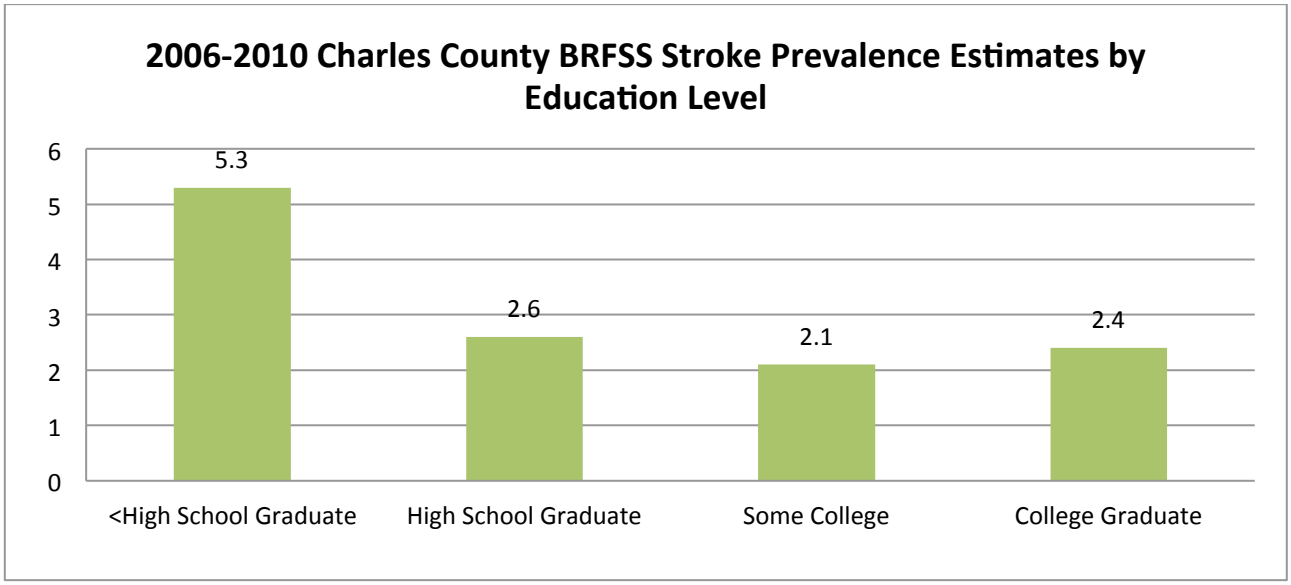
Approximately two-thirds of stroke victims in Charles County are female (66.2%). 3.5% of all Charles County females report having ever had a stroke. This is higher than the 1.6% reported among Charles County males.

When examined by race, stroke prevalence was similar regardless of race. 2.7% of Charles County whites reported ever having a stroke. This is exactly the same as the 2.7% reported by Charles County African Americans. 3.0% of Charles County residents of the "other" racial category reported ever having a stroke.

Those with lower household incomes were more likely to report having had a stroke than those with higher income levels. People with an income less than $15,000 were over 20 times more likely to report having a stroke than people with an income over $75,000.



When examining stroke prevalence by education level, people with less than a high school education reported higher percentages of heart attacks than those who completed a high school diploma or greater.



An additional analysis was performed to determine if the presence of known risk factors increased the likelihood of suffering a stroke. 2006-2010 BRFSS data was used to increase the sample size. The presence of a stroke with the risk factor was examined against the presence of a stroke without the risk factor. The risk factors include high cholesterol, diabetes, high blood pressure, physical inactivity, and overweight/obesity.

High Cholesterol:

3.5 times as many Charles County residents reported having ever had a stroke if they also reported having high cholesterol (5.3%) than Charles County residents who do not have high cholesterol (1.5%).

Diabetes:

Six times as many Charles County residents reported having ever had a stroke if they also have a diabetic co-morbidity (10.2%) than Charles County residents without diabetes (1.8%).

High Blood Pressure:

Eight times as many Charles County residents reported having ever had a stroke if they also reported having high blood pressure (7.5%) than county residents without high blood pressure (0.9%).

Physical Inactivity:

Three times as many Charles County residents reported having ever had a stroke if they also reported that they do not meet Healthy People objectives for moderate and vigorous physical activity (3.6%) than county residents who are getting healthy levels of physical activity (1.2%).

Overweight and Obesity:

Overweight or obese Charles County residents reported more heart attacks (2.5% for overweight and 3.3% for obese) than Charles County residents who are at a healthy weight (1.9%).

Hypertension or High Blood Pressure:

Mortality:

Hypertension, or high blood pressure, is the 11th leading cause of death in Charles County. In 2009, a total of 12 Charles County residents died from essential hypertension or hypertensive renal disease. Hypertension deaths make up 1.4% of the total deaths in Charles County (2009).

Ten out of the 12 hypertension deaths in Charles County were male (83.3%), and seven out of the 12 hypertension deaths were African American (58%).

Prevalence:

Maryland 2007-2009 BRFSS data was used to determine Charles County's hypertension prevalence estimates. All percentage estimates are weighted to reflect the county population.

The 2007-2009 BRFSS asks participants if they have ever been told by a health professional that they have high blood pressure. 29.0% of Charles County residents reported that they have been told by a health professional that they have high blood pressure. This is comparable to the Maryland percentage of 30.0%.

Among those who have been diagnosed with high blood pressure, the majority are taking medications to control it. In Charles County, 77.5% reported taking medication for high blood pressure. This is slightly below the 80.9% of Marylanders who reported taking medication for their hypertension.

The 2009 BRFSS also contained an additional module with questions regarding actions to control high blood pressure. Participants were asked if they had begun certain lifestyle changes in order to control their blood pressure including exercising, changing eating habits, cutting down on salt, and reducing alcohol use.

The lifestyle factor most commonly implemented among the Charles County residents was cutting down on salt. They were least likely to be reducing alcohol use.

Actions to Control High Blood Pressure: 2009 BRFSS	*Percentage of Hypertensive county residents changing these behaviors:*
Exercising	65.6%
Changing eating habits	65.1%
Cutting down on salt	78.8%
Reducing alcohol use	57.3%

Heart Disease/Stroke/Hypertension References:

1. 2007-2009 Charles County Heart Disease, Stroke, and Hypertension Mortality Rates, Overall and by gender and race. 2009 Maryland Vital Statistics Report. Maryland Department of Health and Mental Hygiene. Available at: http://vsa.maryland.gov.

2. 2006-2010 Charles County Heart Disease, Heart Attack, and Stroke Prevalence, overall and by demographic characteristics, and Occurrence as a Co-Morbidity. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at www.marylandbrfss.org.

3. 2000-2008 Charles County Hospitalizations among young adults with hypertension data and Hospitalizations for conditions of the cardiovascular add circulatory system and diseases of the blood and blood forming organs. Maryland Assessment Tool for Community Health. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/match.cfm.

4. 2007-2009 Charles County Hypertension Prevalence and Management. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at www.marylandbrfss.org.

Qualitative Data Relating to Heart Disease, Stroke, and High Blood Pressure:

On the long community health survey, 26 health issues were listed and participants were asked to rate the severity of those issues in Charles County. High blood pressure/stroke was listed as one health topic. The majority of the participants (84.6%) viewed high blood pressure/stroke as a health problem in the county. Over half of the participants (55.3%) listed high blood pressure/stroke as a "serious problem." On the same listing, heart disease was listed as a health problem by 82.6% of the survey participants. Approximately half of the participants (50.8%) felt that heart disease was a serious problem in the county.

Long survey participants were asked if they have seen improvements in the county on any of 13 listed health topics. 16.5% reported that they have seen improvements in the county regarding heart disease, and 20.7% reported that they have seen improvements in the county regarding high blood pressure/stroke.

Long survey participants were also asked a series of questions regarding risk factors that might increase their chances for chronic disease such as high blood pressure/stroke and heart disease. Some of the risk factors included physical activity, healthy eating, and stress levels. Only 20.3% reported that they always eat 5 or more servings of fruits and vegetables each day; 17.9% always get an hour of physical activity each day; 46.8% take a vitamin each day, and 6.4% never feel stressed out.

Short survey participants were asked what the biggest health problems are in Charles County. High blood pressure/stroke was the second most commonly answered health topics on the short survey with (53% listed it as a health problem). 41% felt that heart disease was a big health problem.

Heart disease, stroke, and high blood pressure were mentioned as perceived health problems within the county. The Partnerships for a Healthier Charles County's Chronic Disease Prevention Team has developed and executed many programs within the county to educate residents. Civista Health distributes their Healthy Today publication with many helpful tips on living healthy to prevent chronic disease.

Charles County Cancer Incidence and Mortality: A state and jurisdictional comparison

Introduction:

2009 Maryland Vital Statistics Report:

Cancer is the second leading cause of death in Charles County. In 2009, a total of 209 deaths occurred in Charles County from cancer. Males and females were equally affected by cancer, regardless of gender. A larger number of Caucasians died of cancer in 2009 than African Americans.

All Charles County cancer deaths	All race: males	All race: females	White: all	White: males	White: females	Black: all	Black: males	Black: females	Other
209	103	106	143	71	72	61	31	30	5

The 2009 Charles County all-cancer site death rate was 147.0 per 100,000 population. This rate is lower than the Maryland state average cancer death rate of 182.1.

The age-adjusted 2007-2009 Charles County cancer mortality rate was 199.3 per 100,000. This was slightly above the Maryland state average rate of 179.3, but this difference is not statistically significant. Three year periods are often combined to increase sample size and therefore increase the validity of the mortality rates.

The greatest number of cancer deaths was from cancer of the lung, trachea, or bronchus. This particular cancer site accounted for one-third of all 2009 cancer deaths. This cancer site was followed by other cancer sites and colon/rectum/anus.

Charles County Deaths by Cancer Site:	Number of Deaths
Stomach	4
Colon/Rectum/Anus	18
Pancreas	10
Trachea, Lung, Bronchus	64
Breast	14
Cervix, Uteri, Ovary	11
Prostate	10
Urinary Tract	4
Non-Hodgkin's Lymphoma	11
Leukemia	6
Other	57

2009 and 2010 Maryland DHMH Cigarette Restitution Fund Program's Cancer Reports:

Cancer incidence data for the time period 2003-2007 and for 2007 only are presented below. Data was extracted from the Cigarette Restitution Fund Program's 2010 Cancer Report. Charles County rates for overall cancer rates, as well as site specific rates, were compared to the United States and Maryland average rates as well as the rates for the neighboring jurisdictions of Calvert and St Mary's counties.

Cancer mortality data for 2007 was not yet available at the time of publication. Therefore, cancer mortality data for the time period 2002-2006 and for 2006 only are presented below. Data was extracted from the Cigarette Restitution Fund Program's 2009 Cancer Report.

All Cancer Sites Incidence:

2007 Results:

For the year 2007, Charles County had a total of 554 new cases of cancer overall; this corresponds to a 2007 all site incidence rate of 468.9 per 100,000 population. Charles County had the 9th lowest all cancer site incidence rate among the 24 Maryland jurisdictions. This rate is higher than the US and Maryland average rates; however, it is lower than the rates for Calvert County and St Mary's County.

When stratified demographically, the groups most affected by cancer in Charles County are males and African Americans. The white all site incidence rate was 453.0, which is lower than the black all site incidence rate of 499.4; however, the difference is not statistically significant (p=.12). A reversed disparity can be seen in other Southern Maryland counties and Maryland where Caucasians experienced higher all cancer incidence rates.

When compared with the Maryland state average rate for all cancer site incidences, Charles County males have a lower rate than Maryland males. Charles County African Americans have a higher incidence rate than the rate for Maryland males; however, this difference is not statistically significant. Individuals in Charles County of the "other" race category have a higher all cancer site incidence rate than the Maryland state average rate for this racial category. This difference was found to be statistically significant (p=.04).

Males were also disproportionately affected by cancer. The male all site incidence rate was 594.5 compared to only 381.0 for Charles County females. The difference between these rates is statistically significant (p<.005). A difference can be seen between the male and female rates for all comparative locations. The all cancer site incidence rate for Charles County males (594.5) is higher than the Maryland average incidence rate of 528.9. This difference is statistically significant (p=.04). For Charles County females, the all site incidence rate was less than the Maryland state average rate.

Number of New Cancer Cases for 2007: All Cancer Sites Combined

	Total	Male	Female	White	Black	Other	Unknown
Maryland	26377	13409	12952	18978	6251	948	200
Charles County	554	305	247	366	169	s	<6
Calvert County	424	228	195	374	47	<6	<6
St Mary's County	441	240	201	375	55	s	<6

S: Case counts were suppressed to prevent disclosure of data in other cells.

2007 All Cancer Site Incidence Rates (per 100,000 population)

	Total	Male	Female	White	Black	Other
Maryland	455.3	528.9	404.1	460.5	444.0	343.9
Charles County	468.9	594.5	381.0	453.0	499.4	398.1
Calvert County	515.0	625.2	432.2	540.5	397.0	**
St Mary's County	492.1	580.0	425.2	507.4	426.8	**

** Rates are not calculated for case counts less than 15.

All site cancer incidences rates were also examined for the Hispanic population in Maryland. A total of 565 Hispanic Marylanders were diagnosed with cancer in 2007; this corresponds to an all site incidence rate of 291.6 per 100,000 population. For the Southern Maryland region, there were 24 new cancer cases in the Hispanic population. The all site incidence rate for Hispanics was 589.8 per 100,000 population, much higher than the Maryland state average. This was also higher than any other region in the state of Maryland. Over half of the Southern Maryland cases (n=13) were from Charles County.

2003-2007 Combined Results:

The 03-07 Charles County all site incidence rate was 449.3 per 100,000. This rate is less than the Maryland state average rate of 458.9 and the US average rate of 461.6. The Charles County rate is lower than the other Southern Maryland counties, with a Calvert County rate of 479.6 and a St Mary's County rate of 459.2. For this time period, Charles County has the 5th lowest all cancer site incidence rate among the 24 Maryland jurisdictions for this time period.

Disparities between the White and Black populations in Charles County are not seen for the time period 2003-2007. The all site incidence rate for the white population was 454.1 which was not statistically different from the black all site incidence rate of 430.8. The other race all site incidence rate of 375.5 was significantly lower than the white and black rates in Charles County.

Cancer still continues to disproportionately affect the male population. From 2003-2007, the Charles County all site incidence rate for males was 552.0 compared to 377.7 for females. Charles County males

have a similar all site incidence rate to males in Calvert County, St Mary's County, and the state of Maryland.

Charles County females have all site incidence rates lower than Charles County males. They also have lower rates than females in Calvert County, St Mary's County, and the state of Maryland.

2003-2007 All Cancer Site Incidence Rates (per 100,000 population)

	Total	Male	Female	White	Black	Other
Maryland	458.9	530.0	410.0	463.9	441.9	357.2
Charles County	449.3	552.0	377.7	454.1	430.8	375.5
Calvert County	479.6	547.5	432.0	485.2	419.2	**
St Mary's County	459.2	544.1	394.7	463.4	415.7	392.7

** Rates are not calculated for case counts less than 15.

All Cancer Sites Mortality:

2006 Results:

In 2006, there were 203 deaths in Charles County attributed to cancer. This constitutes a mortality rate of 197.3 per 100,000. Charles County had the 11th lowest all sites mortality rate among the Maryland jurisdictions for 2006. This rate is higher than the Maryland state average rate of 186.9 but lower than Calvert and St Mary's counties' rates.

On a county level, the African American and White populations experienced similar all site mortality rates (197.8 for Whites and 204.9 for African Americans). A disparity is seen on a state level where African Americans have a higher all-site mortality rate than Whites and Other.

All site mortality rates by gender mirror the same trends as the incidence rates. Males experienced greater all site mortality rates than females. This was true for all jurisdictions. In Charles County, the 2006 all site mortality rate for males was 247.8 compared to 170.6 for females in the county.

Number of Deaths in 2006: All Cancer Site Combined

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	10350	5168	5182	7512	2627	189
Charles County	203	102	101	143	S	<6
Calvert County	157	81	76	136	S	<6
St Mary's County	176	105	71	146	S	<6

S= Case counts were suppressed to prevent disclosure of data in other cells.

2006 All Cancer Site Mortality Rates (per 100,000 population)

	Total	Male	Female	White	Black	Other
Maryland	186.9	225.2	161.8	183.8	211.6	93.6
Charles County	197.3	247.8	170.6	197.8	204.9	**
Calvert County	212.0	245.3	182.8	218.0	196.7	**
St Mary's County	217.1	298.7	161.0	215.1	246.6	**

** Rates are not calculated for case counts less than 15.

2002-2006 Results:

For the time period 2002-2006, the Charles County all cancer site mortality rate was 220.3 per 100,000. Calvert County had the highest rate among the 3 Southern Maryland jurisdictions. The Charles County rate is greater than the Maryland state average rate (193.0 per 100,000). Charles County's rate is the fifth highest all site mortality rate among the Maryland jurisdictions. The Charles County rate falls between 10-25% above the United States national rate (186.7 per 100,000).

The 2002-2006 White all cancer sites mortality rate was higher than the Black rate (226.0 vs. 209.3). The Charles County all site mortality rate for those classified as "other race" was significantly higher than the other race all site mortality rate for Maryland overall (163.9 vs. 96.7). The Charles County White all site mortality rate was the second highest among the Maryland jurisdictions and much higher than the Maryland White state average rate (226.0 vs. 188.7). However, the opposite is true for the Charles County African American all site mortality rate. The Charles County African American all site mortality rate was lower than the state average rate for African Americans (209.3 vs. 221.1), and it was the 4th lowest rate among the Maryland jurisdictions.

From 2002-2006, males were more likely to die from cancer than females. Charles County males had an all site mortality rate of 282.0 versus 182.5 for Charles County females. The Charles County rates for males and females were slightly higher than Maryland state average rates.

2002-2006 All Cancer Site Mortality Rates (per 100,000 population)

	Total	Male	Female	White	Black	Other
Maryland	193.0	235.6	165.3	188.7	221.1	96.7
Charles County	220.3	282.0	182.5	226.0	209.3	163.9
Calvert County	222.7	269.7	192.6	220.7	248.2	**
St Mary's County	216.5	280.4	169.5	215.8	240.0	**

** Rates are not calculated for case counts less than 15.

Lung/Bronchus Cancer Incidence:

2007 Results:

The 2007 Charles County lung cancer incidence rate was 50.4 per 100,000 population. This is the 3rd lowest lung cancer incidence rate in the state of Maryland. It is lower than the Maryland state average rate of 62.4 and is lowest among the 3 Southern Maryland jurisdictions.

A comparison of county rates by race cannot be done due to small sample sizes among the Black and Other races. Rates cannot be calculated for case counts less than 15. However, if you compare White lung cancer incidence rates, Charles County has a slightly lower rate than the Maryland state average rate (53.2 vs. 64.3). St Mary's county has a White lung cancer incidence rate comparable to the state average rate, while Calvert County's white lung cancer incidence rate is higher than the state rate.

The incidence of lung cancer was also higher among men than women. Charles County men have a lower rate (68.3) than the Maryland state average rate of 74.2 for men. The lung cancer incidence rate for men in Charles County was almost 2 times higher than the rate for women in Charles County.

Number of New Cases 2007: Lung Cancer

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	3522	1799	1720	2640	794	s
Charles County	56	34	22	41	S	<6
Calvert County	59	29	29	51	8	0
St Mary's County	53	26	27	46	7	0

S= Case counts were suppressed to prevent disclosure of data in other cells.

2007 Lung Cancer Incidence Rates

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	62.4	74.2	54.2	64.3	60.3	36.0
Charles County	50.4	68.3	36.7	53.2	**	**
Calvert County	76.9	86.6	67.9	78.7	**	0
St Mary's County	61.8	68.4	58.4	66.1	**	0

** Rates are not calculated for case counts less than 15.

2003-2007 Results:

Between 2003-2007, the Charles County lung cancer incidence rate was 64.5 per 100,000 population. This rate is slightly lower than the Maryland state average rate (66.6), though the difference is not

statistically significant. This rate is lower than the rates for the other Southern Maryland jurisdictions. It is also comparable to the United State average rate of 62.5 per 100,000 population.

The lung cancer incidence rate for this time period for African Americans in Charles County is less than the rate for the Charles County white population (51.1 vs. 70.6). The African American lung cancer incidence rate is lower than the Maryland state average rate (64.3). It is lower than Calvert County and St Mary's County rates. The Charles County white lung cancer incidence rate is slightly higher than the Maryland state average rate and is lower than the rates in the other Southern Maryland jurisdictions.

The rate of lung cancer incidence in Charles County was much higher for men than women (85.4 vs. 51.0). This difference is highly significant ($p<.005$). The rate among Charles County females was lower than the state; the rate among males was slightly higher than the state. The highest male lung cancer incidence rate in the Southern Maryland region was Calvert County; the highest female lung cancer incidence rate in the Southern Maryland region was also Calvert County.

2003-2007 Lung Cancer Incidence Rates

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	66.6	80.0	57.0	68.6	64.3	35.5
Charles County	64.5	85.4	51.0	70.6	51.1	**
Calvert County	76.1	87.2	67.9	77.6	69.4	**
St Mary's County	73.1	82.2	65.5	77.0	62.6	0

** Rates are not calculated for case counts less than 15.

Lung/Bronchus Cancer Mortality:

2006 Results:

In 2006, the lung cancer mortality rate in Charles County was 63.8 per 100,000, which exceeds the Maryland state average rate of 52.7 per 100,000. It was the ninth highest lung cancer mortality rate among the Maryland jurisdictions. The Charles County 2006 lung cancer mortality rate is lower than the other 2 Southern Maryland counties' rates (65.4 for Calvert and 68.8 for St Mary's); however, differences in the rates are not significantly different.

For all jurisdictions analyzed, the lung cancer mortality rate for men was greater than the rate for women. In Charles County, men were 1.7 times more likely to die from lung cancer in 2006 than women.

2006 lung cancer mortality rates for Whites and Blacks in Charles County were similar (64.3 vs. 62.3). The same is true for Maryland on a state level (53.7 for Whites and 53.3 for Blacks).

Number of Lung Cancer Deaths, 2006

	Total	Male	Female	White	Black	Other
Maryland	2902	1552	1350	2182	674	46
Charles County	64	33	31	45	s	<6
Calvert County	49	25	24	46	<6	<6
St Mary's County	54	34	20	46	s	<6

S= Case counts were suppressed to prevent disclosure of data in other cells.

Lung Cancer Mortality Rates, 2006

	Total	Male	Female	White	Black	Other
Maryland	52.7	66.6	42.6	53.7	53.3	20.9
Charles County	63.8	88.3	51.9	64.3	62.3	**
Calvert County	65.4	74.4	55.9	72.8	**	**
St Mary's County	68.8	98.9	46.8	70.2	**	**

** Rates are not calculated for case counts less than 15.

2002-2006 Results:

The Charles County 2002-2006 lung cancer mortality rate was 68.9 per 100,000. This rate is higher than the Maryland state average rate of 55.1, but the difference is not statistically significant. The Charles County rate is higher than the other 2 Southern Maryland counties: 64.6 in Calvert and 66.8 in St Mary's. The Charles County lung cancer mortality rate also falls 25% above the United State national rate.

The Charles County lung cancer mortality rates stratified by gender were higher than the state rates. Charles County men were 1.7 times more likely to die from lung cancer from 2002-2006 than women. Charles County's rate for men and was much higher than the state average rate (94.2 vs. 71.1).

When comparing rates by race, Whites in Charles County had a greater rate of lung cancer mortality than African Americans (72.5 vs. 60.6). This is a reverse from the Maryland state averages where African Americans had a higher lung cancer mortality rate than Whites (58.7 vs. 55.3). The lung cancer mortality rate among Charles County whites was higher than the Maryland state average rate, and the lung cancer mortality rate among Charles County African Americans was also higher than the Maryland state average rate.

Lung Cancer Mortality Rates, 2002-2006

	Total	Male	Female	White	Black	Other
Maryland	55.1	71.1	43.7	55.3	58.7	22.4
Charles County	68.9	94.2	54.3	72.5	60.6	**
Calvert County	64.6	83.8	52.9	65.5	64.4	**
St Mary's County	66.8	91.9	47.3	68.5	63.3	**

** Rates are not calculated for case counts less than 15.

Colon and Rectal Incidence:

2007 Results:

For 2007, Charles County had a colon and rectal cancer incidence rate of 48.7 per 100,000. This rate is higher than the Maryland state average rate of 41.6 per 100,000. Colon and rectal cancer incidence rates in the three Southern Maryland counties are higher than the state rate, and Charles County is the highest among the Southern Maryland counties.

Charles County men are disproportionately affected by colon and rectal cancer incidence. The Charles County male colon and rectal cancer incidence rate for 2007 was 72.9 per 100,000, which is much higher than the Maryland state average rate for males at 48.8. This difference is statistically significant (p=.03). The Charles County male rate is also much higher than the other Southern Maryland counties. However, for females, the Charles County rate is comparable to the state rate and lower than the other Southern Maryland counties.

The Charles County white colon and rectal cancer incidence rate was comparable to the Maryland state rate as well as the rates of the other Southern Maryland counties. Charles County African Americans were experiencing a much higher colon and rectal cancer incidence rate than the Maryland state average rate for African Americans (69.3 vs. 44.8). The Charles County African American colon and rectal cancer incidence rate was also much higher than the Charles County rate for this time period (69.3 vs. 41.3).

Number of New Colon and Rectal Cancer Cases, 2007

	Total	Male	Female	White	Black	Other	Unknown
Maryland	2382	1206	1175	1688	597	84	13
Charles County	52	31	21	32	S	<6	0
Calvert County	38	21	17	32	6	0	0
St Mary's County	40	21	19	33	<6	<6	0

S= Case counts were suppressed to prevent disclosure of data in other cells.

2007 Colon and Rectal Cancer Incidence Rates

	Total	Male	Female	White	Black	Other
Maryland	41.6	48.8	35.8	40.6	44.8	32.1
Charles County	48.7	72.9	33.9	41.3	69.3	**
Calvert County	47.8	57.5	39.2	49.2	**	0
St Mary's County	44.8	47.7	41.1	44.9	**	**

** Rates are not calculated for case counts less than 15.

2003-2007 Results:

For the time period 2003-2007, Charles County had a colon and rectal cancer incidence rate much higher than the Maryland state average rate and the other Southern Maryland counties. Charles County had a 03-07 Colon and Rectal Cancer incidence rate of 60.3 per 100,000. This rate is greater than 25% above the United States rate. Charles County was the only county in Maryland to be in this high bracket.

Rates were higher for Charles County men than Charles County women (77.7 vs. 48.3). This difference is statistically significant ($p<.005$). This gender trend was also seen for the state of Maryland and for St Mary's County.

Charles County African Americans had a higher colon and rectal cancer incidence rate than Charles County Whites (64.3 vs. 58.2). This difference was not statistically significant. Charles County Whites had a higher rate than Maryland Whites, and Charles County African Americans had a higher rate to Maryland African Americans. Charles County had the highest colon and rectal incidence rates among the Southern Maryland counties for all cases, males, Caucasians, and African Americans.

2003-2007 Colon and Rectal Cancer Incidence Rates

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	46.4	53.7	40.9	44.7	50.8	37.5
Charles County	60.3	77.7	48.3	58.2	64.3	**
Calvert County	54.3	54.1	53.3	53.5	63.1	**
St Mary's County	50.0	64.5	39.0	47.7	57.8	**

** Rates are not calculated for case counts less than 15.

Colon and Rectal Cancer Mortality:

2006 Results:

The Charles County colon and rectal cancer mortality rate for 2006 was 24.5, which is greater than the Maryland state average rate of 18.4. Rates could not be calculated for the other Southern Maryland jurisdictions due to low case counts.

Gender and race comparison cannot be done since case counts were too few to calculate mortality rates.

Number of Colon and Rectal Cancer Deaths, 2006

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	1015	495	520	719	274	22
Charles County	25	7	18	20	<6	<6
Calvert County	14	<6	s	12	<6	<6
St Mary's County	9	s	<6	s	<6	<6

S= Case counts were suppressed to prevent disclosure of data in other cells.

2006 Colon and Rectal Cancer Mortality Rates

	Total	Male	Female	White	Black	Other
Maryland	18.4	21.8	16.1	17.6	22.7	9.5
Charles County	24.5	**	31.3	27.6	**	**
Calvert County	**	**	**	**	**	**
St Mary's County	**	**	**	**	**	**

** Rates are not calculated for case counts less than 15.

2002-2006 Results:

The 2002-2006 Charles County colon and rectal cancer mortality rate of 29.4 per 100,000 is higher than the Maryland state average rate of 19.3 and the other Southern Maryland counties (25.4 for Calvert and 22.8 for St Mary's County).

Charles County males were more likely to die from colon and rectal cancer than Charles County females (38.6 vs. 22.5). This trend was also seen for Maryland and the other Southern Maryland counties.

2002-2006 Charles County colon and rectal cancer mortality rates for African Americans were higher than the rates for Charles County Whites (34.9 vs. 28.1). Rates for Maryland Whites and African Americans were also similar.

2002-2006 Colon and Rectal Cancer Mortality Rates

	Total	Male	Female	White	Black	Other
Maryland	19.3	23.2	16.4	18.2	25.0	8.6
Charles Co	29.4	38.6	22.5	28.1	34.9	**
Calvert Co	25.4	28.2	22.6	24.5	33.6	**
St Mary's Co	22.8	29.7	17.5	23.1	**	**

** Rates are not calculated for case counts less than 15.

Breast Cancer Incidence:

2007 Results:

The 2007 Charles County breast cancer incidence rate was 109.7, which was lower than the Maryland state average rate of 123.2 per 100,000. The Charles County rate was significantly lower than the rates in the other Southern Maryland counties, particularly Calvert, which had a rate of 142.4.

The Charles County White breast cancer incidence rate was 105.0 per 100,000, which was lower than the Maryland state average rate of 125.4. The Charles County white rate was less than the Calvert and St Mary's counties rates. The Charles County Black breast cancer incidence rate was 120.4 per 100,000, which was comparable to the Maryland state average rate of 117.2. The Charles County Black breast cancer incidence rate was slightly higher than the Charles County White rate; however, that difference was not statistically significant.

Number of New Breast Cancer Cases, 2007

	Total	White	Black	Other	Unknown
Maryland	3976	2781	1012	170	13
Charles County	76	47	S	<6	0
Calvert County	67	56	S	0	<6
St Mary's County	67	56	S	<6	0

S= Case counts were suppressed to prevent disclosure of data in other cells.

2007 Breast Cancer Incidence Rates

	Total	White	Black	Other
Maryland	123.2	125.4	117.2	102.3
Charles County	109.7	105.0	120.4	**
Calvert County	142.4	143.0	**	0
St Mary's County	138.0	140.9	**	**

** Rates are not calculated for case counts less than 15.

2003-2007 Results:

From 2003-2007, Charles County had a breast cancer incidence rate of 109.3. This rate was lower than the Maryland state average rate of 122.4 and the Calvert County rate of 119.8. It is also 10-25% below the US rate.

The Charles County White breast cancer incidence rate was 104.8, which was less than the Maryland state average rate and the other Southern Maryland counties' rates. The Charles County Black breast cancer incidence rate was comparable to the Maryland state average rate; however, it was the highest rate among the Southern Maryland counties.

Charles County black women had a higher incidence of breast cancer (118.1) than Charles County white women (104.8) from 2003-2007. This difference is not statistically significant.

2003-2007 Breast Cancer Incidence Rates

	Total	**White**	**Black**	**Other**
Maryland	122.4	125.0	113.6	95.7
Charles County	109.3	104.8	118.1	**
Calvert County	119.8	122.2	111.2	**
St Mary's County	105.9	110.9	77.3	**

** Rates are not calculated for case counts less than 15.

Breast Cancer Mortality:

2006 Results:

For 2006, Charles County experienced a breast cancer mortality rate of 24.4 per 100,000. This rate is comparable to the Maryland state average rate of 25.0. The Charles County rate is lower than the Calvert County rate of 41.2, and a St Mary's County rate could not be calculated due to small case counts.

Breast cancer mortality rates could not be calculated by race or gender for 2006 due to small case counts.

Number of Breast Cancer Deaths, 2006

	Total	**White**	**Black**	**Other**
Maryland	808	549	249	10
Charles County	16	10	S	<6
Calvert County	17	15	<6	<6
St Mary's County	6	<6	<6	<6

S= Case counts were suppressed to prevent disclosure of data in other cells.

2006 Breast Cancer Mortality Rates

	Total	White	Black	Other
Maryland	25.0	23.7	30.3	**
Charles County	24.4	**	**	**
Calvert County	41.2	**	**	**
St Mary's County	**	**	**	**

** Rates are not calculated for case counts less than 15.

2002-2006 Results:

From 2002-2006, Charles County experienced a breast cancer mortality rate of 29.2, which is higher than the 2006 Charles County breast cancer mortality rate of 24.4. The 02-06 Charles County rate is slightly higher than the Maryland state average rate of 26.8 for the same time period, though the difference is not statistically significant. The Charles County rate is higher than the rate for St Mary's County (20.0) but lower than the rate for Calvert County (34.1). The Charles County breast cancer mortality rate is 10-25% above the United States breast cancer mortality rate.

The 02-06 Charles County African American breast cancer mortality rate was 25.9, which was similar to the rate for Charles County Caucasians of 29.5 per 100,000. Rates by race could not be calculated for the other Southern Maryland counties due to small case counts.

2002-2006 Breast Cancer Mortality Rates

	Total	White	Black	Other
Maryland	26.8	25.3	32.4	10.5
Charles County	29.2	29.5	25.9	**
Calvert County	34.1	34.8	**	**
St Mary's County	20.0	20.3	**	**

** Rates are not calculated for case counts less than 15.

Prostate Cancer Incidence:

2007 Results:

The 2007 Charles County prostate cancer incidence rate was 205.4 per 100,000. This rate is higher than the Maryland state average rate of 162.5. This difference is statistically significant (p=.02). The Charles County incidence rate is higher than the rates in the other Southern Maryland counties (147.2 in Calvert and 190.8 in St Mary's counties).

Disparities are seen for African Americans in terms of prostate cancer incidence. The 2007 Charles County African American prostate cancer incidence rate was 249.0, which was significantly higher than the rate for Charles County Caucasians of 185.3 per 100,000. This disparity is also seen on the state level where Maryland African Americans had a rate of 209.0 and Maryland Whites had a rate of 146.5. 2007 prostate cancer incidence rates for African Americans could not be calculated for Calvert and St Mary's counties due to small case counts.

Number of New Prostate Cancer Cases, 2007

	Total	White	Black	Other	Unknown
Maryland	4274	2813	1230	175	56
Charles County	109	70	s	<6	0
Calvert County	55	46	9	0	0
St Mary's County	80	69	11	0	0

S= Case counts were suppressed to prevent disclosure of data in other cells.

2007 Prostate Cancer Incidence Rates

	Total	White	Black	Other
Maryland	162.5	146.5	209.0	143.3
Charles County	205.4	185.3	249.0	**
Calvert County	147.2	145.9	**	0
St Mary's County	190.8	194.6	**	0

** Rates are not calculated for case counts less than 15.

2003-2007 Results:

The Charles County prostate cancer incidence rate for 2003-2007 was 168.5 per 100,000 population. This rate is only slightly higher than the Maryland state average rate of 157.6; this rate difference is not statistically significant. The Charles County rate was also higher than the other Southern Maryland counties for this time period (124.1 for Calvert and 151.2 for St Mary's). The Charles County rate is between 10 % below and 10% above the United States rate.

Disparities are again visible for African Americans. The 2003-2007 Charles County African American prostate cancer incidence rate was 219.3, which was significantly higher than the rate for Charles County Caucasians of 146.9 per 100,000. This disparity is also seen on the state level where Maryland African Americans had a rate of 206.0 and Maryland Whites had a rate of 139.6. The same disparities were also seen for Calvert and St Mary's counties.

The 03-07 Charles County African American prostate cancer incidence rate was higher than the Maryland state average rate and the other Southern Maryland counties. This same trend is seen for Charles County Caucasians.

2003-2007 Prostate Cancer Incidence Rates

	Total	White	Black	Other
Maryland	157.6	139.6	206.0	145.3
Charles County	168.5	146.9	219.3	**
Calvert County	124.1	111.5	162.2	**
St Mary's County	151.2	137.0	192.0	**

** Rates are not calculated for case counts less than 15.

Prostate Cancer Mortality:

2006 Results:

For 2006, case counts for Charles and Calvert counties were too small to calculate prostate cancer mortality rates. St Mary's County had a 2006 prostate cancer mortality rate of 56.9, which was the highest rate among the Maryland jurisdictions and well above the Maryland state rate of 26.3.The number of case counts is presented in the table below.

Number of Prostate Cancer Deaths, 2006

	Total	**White**	**Black**	**Other**
Maryland	531	341	s	<6
Charles County	11	<6	6	<6
Calvert County	8	<6	<6	<6
St Mary's County	16	12	<6	<6

2002-2006 Results:

The 2002-2006 Charles County prostate cancer mortality rate was 31.3 per 100,000. This rate is slightly above the Maryland state average rate of 28.3. The Charles County rate is lower than the Calvert County rate of 41.0 and the St Mary's County rate of 34.9. The county prostate cancer mortality rate falls between 10-25% above the United States rate.

Disparities are seen for the African American population. Charles County African Americans have a higher prostate cancer mortality rate of 50.2 compared to 26.3 for Charles County Caucasians.

2002-2006 Prostate Cancer Mortality Rates

	Total	**White**	**Black**	**Other**
Maryland	28.3	23.1	55.3	11.6
Charles County	31.3	26.3	50.2	**
Calvert County	41.0	37.3	**	**
St Mary's County	34.9	30.5	**	**

** Rates are not calculated for case counts less than 15.

Note: For two of the remaining cancer sites: oral and cervical, only 2003-2007 incidence data will be presented. Case counts for 2007 alone were few, and rate calculations could not be performed.

Oral Cancer Incidence:

The Charles County oral cancer incidence rate for 2003-2007 was 10.5. This rate is comparable to the Maryland state average rate of 9.6, and it is also lower than the rates for the other Southern Maryland counties. The Charles County oral cancer incidence rate is between 10% below and 10% above the United States rate.

Racial comparisons can't be done due to small case counts for minorities. However, it should be noted that the Charles County white oral cancer incidence rate is comparable to the Maryland state average rate and lower than the other Southern Maryland counties.

Males are disproportionately affected by oral cancer compared to women. The 03-07 Charles County oral cancer incidence rate for males was 13.8, which is significantly higher than the oral cancer incidence rate for women (7.2).

2003-2007 Oral Cancer Incidence Rates

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	9.6	14.5	5.6	10.0	8.7	7.6
Charles County	10.5	13.8	7.2	10.8	**	0
Calvert County	11.9	16.1	8.5	13.7	**	0
St Mary's County	13.1	19.1	7.6	13.2	**	**

** Rates are not calculated for case counts less than 15.

Note: For the remaining three cancer sites: oral, melanoma of the skin, and cervical, only 2002-2006 data will be presented. Charles County case counts for 2006 alone were few, and rate calculations could not be performed.

Oral Cancer Mortality:

For 2002-2006, Charles County had an oral cancer mortality rate of 3.7, which is above the Maryland state average rate of 2.7 per 100,000. The 2002-2006 oral cancer mortality rate for the Southern Maryland region (Charles, Calvert, and St Mary's counties) was between 10-25% above the United States rate. An oral cancer mortality rate could not be calculated for Calvert and St Mary's counties due to small case counts.

Even for a combined time period of 2002-2006, deaths due to oral cancer are few, and rate calculations by race and gender were not possible.

2002-2006 Oral Cancer Mortality Rates

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	2.7	4.2	1.4	2.5	3.4	**
Charles County	3.7	**	**	**	**	**
Calvert County	**	**	**	**	**	**
St Mary's County	**	**	**	**	**	**

** Rates are not calculated for case counts less than 15.

Melanoma of the Skin Incidence:

2007 Results:

The 2007 Charles County melanoma of the skin incidence rate was 12.4 per 100,000. This rate is lower than the Maryland state average rate of 21.2, and it is much lower than the rates in the other Southern Maryland counties (47.3 in Calvert and 24.9 in St Mary's counties).

2007 melanoma of the skin cancer incidence rates for African Americans could not be calculated for Charles, Calvert, and St Mary's counties due to no cases. The Charles County Caucasian prostate melanoma of the skin incidence rate (18.0) was much lower than the Maryland state average rate and the other Southern Maryland county rates.

Number of New Melanoma of the Skin Cases, 2007

	Total	Male	Female	White	Black	Other	Unknown
Maryland	1232	697	534	1182	17	12	21
Charles County	17	9	8	s	0	0	<6
Calvert County	40	30	10	40	0	0	0
St Mary's County	23	14	9	23	0	0	0

S= Case counts were suppressed to prevent disclosure of data in other cells.

2007 Melanoma of the Skin Incidence Rates

	Total	White	Black
Maryland	21.2	29.5	1.2
Charles County	12.4	18.0	0
Calvert County	47.3	56.3	0
St Mary's County	24.9	30.1	0

** Rates are not calculated for case counts less than 15.

2003-2007 Results:

For 2003-2007, the Charles County melanoma cancer incidence rate was 12.7 per 100,000. This rate was less than the Maryland state average rate of 20.1 per 100,000, and it was less than the rates in the other Southern Maryland counties (Calvert 41.5 and St Mary's 25.4). The Charles County rate was greater than 25% below the United States rate.

The incidence rate for melanoma cancer is slightly higher for Charles County males than females (16.0 vs. 10.2). This rate difference is also seen on the state level for men and women (25.9 vs. 16.0). The rate difference is only statistically significant for Calvert County where males had a rate of 61.5 versus 25.7 for women.

A comparison of incidence rates by race can't be done due to small case counts for minorities. However, it should be noted that Charles County Whites had a somewhat lower melanoma cancer incidence rate (18.1) than Maryland Whites (27.4). On a state level, Maryland Whites were disproportionately affected by melanoma cancer incidence compared to Maryland African Americans or "Other" races.

2003-2007 Melanoma Incidence Rates

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	20.1	25.9	16.0	27.4	1.0	3.9
Charles County	12.7	16.0	10.2	18.1	0	0
Calvert County	41.5	61.5	25.7	45.5	**	0
St Mary's County	25.4	29.7	22.3	29.5	0	0

** Rates are not calculated for case counts less than 15.

Melanoma of the Skin Mortality:

Mortality rates on a county level are not available due to small case counts. For the state of Maryland, the 2002-2006 melanoma of the skin cancer mortality rate was 2.8 per 100,000. The rates were much higher for males than females (4.3 vs. 1.7), and the rates were much higher for Whites than Blacks (3.6 vs. 0.3).

The Southern Maryland region as a whole had a melanoma of the skin cancer mortality rate that was between 10-25% above the United States rate.

2002-2006 Melanoma of the Skin Mortality Rate

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	2.8	4.3	1.7	3.6	0.6	**
Charles County	**	**	**	**	**	**
Calvert County	**	**	**	**	**	**
St Mary's County	4.1	**	**	4.9	**	**

** Rates are not calculated for case counts less than 15.

Cervical Cancer Incidence:

The 2003-2007 Charles County cervical cancer incidence rate was 6.8 per 100,000, which is slightly below the Maryland state average rate of 7.6. Charles County had the lowest rate in Southern Maryland compared to a rate of 8.6 for Calvert County and a rate of 8.3 for St Mary's County. The Charles County had a cervical cancer incidence rate that was 10-25% below the United States rate.

A rate comparison by race is not included due to small case counts and the inability to calculate race-specific rates on a county level.

2003-2007 Cervical Cancer Incidence Rates

	Total	White	Black	Other
Maryland	7.6	7.0	8.8	8.4
Charles County	6.8	**	**	**
Calvert County	8.6	**	**	0
St Mary's County	8.3	**	**	0

** Rates are not calculated for case counts less than 15.

Cervical Cancer Mortality:

Mortality rates on a county level are not available due to small case counts. For the state of Maryland, the 2002-2006 cervical cancer mortality rate was 2.2 per 100,000. The rate was double for Maryland African Americans compared to Maryland Caucasians (3.8 vs. 1.7).

The Southern Maryland region as a whole had a cervical cancer mortality rate that was in the range of 10% below to 10% above the United States rate.

2002-2006 Cervical Cancer Mortality Rates

	Total	White	Black	Other
Maryland	2.2	1.7	3.8	**
Charles County	**	**	**	**
Calvert County	**	**	**	**
St Mary's County	**	**	**	**

** Rates are not calculated for case counts less than 15.

Cancer References:

1. 2007-2009 and 2009 Charles County and Maryland Cancer Mortality Statistics. 2009 Maryland Vital Statistics Report. Maryland Department of Health and Mental Hygiene. Available at: www.marylandbrfss.org.

2. 2002-2006 and 2006 Charles County and Maryland Cancer Mortality Rates by Site. 2009 Maryland DHMH Cigarette Restitution Fund Program's Cancer Reports. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/pdf/cancer/CRF_Cancer_Report_2010.pdf.

3. 2003-2007 and 2007 Charles County and Maryland Cancer Mortality Rates by Site. 2010 Maryland DHMH Cigarette Restitution Fund Program's Cancer Reports. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/pdf/cancer/CRF_Cancer_Report_2010.pdf.

Qualitative Data Relating to Cancer:

On the long survey, Cancer had the 4th highest percentage of people reporting it as a serious health problem. 85.2% felt that it was a health problem in Charles County on any level, and 54.1% reported it as a "serious problem."

21.5% of long survey participants reported that they have seen improvements in Charles County in terms of cancer. There are many long standing programs for early screening, detection, treatment, and support of cancer.

In regards to health behaviors and risk factors that could increase or decrease county residents' chances of developing cancer, 11% smoke, 24.8% are exposed to secondhand smoke at home, 20.3% eat 5 or more servings of fruit and vegetables each day, 27.7% always perform cancer self-exams, 33.7% report always using sunscreen, and 17.9% participate in physical activity each day.

Half of short survey participants (49%) felt that Cancer is a big health problem in Charles County.

Breast, prostate, and lung cancer were cited as big health problems in Charles County. Cancer in general was discussed at every focus group as a county health issue. Some people felt one of the biggest issues for cancer patients is transportation and proximity to services. The services they needed were in various parts of the county, which would be difficult for someone using the public transportation system.

Praise was given to the many programs within the county aimed at reducing the cancer burden. The Charles County Department of Health's breast and cervical cancer program reaches those 250% below the poverty level who are aged 40-64 years, and their Prostate Cancer Program has screened many men in the county for prostate cancer. The Sisters at Heart provide services to women over the age of 60 years, newly diagnosed or in Stages 3-4. The Pink Ladies are also very active within the community with exhibits each year. Civista Health Inc. has a long standing prostate cancer screening program and educational programs. The American Cancer Society (ACS) has raised money each year through the Relay for Life to help combat the high cancer mortality within the county and is also working in Charles County on the third ACS National Cancer Study to determine additional causes, risk factors, and determinants of cancer. Charles County has a strong and involved Tobacco and Cancer Coalition and a PHCC Cancer Team that meet regularly to develop new programs and collaborations on cancer prevention and treatment.

Diabetes Mellitus:

Diabetes Prevalence:

2006-2010 Maryland Behavioral Risk Factor Surveillance System (BRFSS) can be used to estimate diabetes prevalence within Charles County and Maryland. Diabetes prevalence percentages have been weighted to reflect the Maryland and Charles County populations.

The data from the question, "Have you ever been told by a doctor that you have diabetes?" was combined into a five-year period in order to increase the sample size and therefore increase the reliability of the statistics. The combined data for 2006-2010 for Charles County and the state of Maryland is listed below. The estimated prevalence of diabetes in Charles County is 8.1%, similar to the state diabetes prevalence of 8.7%. Among the Southern Maryland counties, the diabetes rate was highest in St Mary's County.

The prevalence of gestational diabetes in Charles County (0.7%) was also similar to the Maryland state gestational diabetes prevalence (0.9%). Among the Southern Maryland counties, the gestational diabetes rate was highest in St Mary's County.

Have you ever been told by a doctor that you have diabetes? 2006-2010, Southern Maryland and Maryland

Ever been told that you have diabetes?	*Diabetes prevalence (%)*	*Gestational Diabetes Prevalence (%)*
Charles County	8.1	0.7
Calvert County	7.4	0.8
St Mary's County	8.4	0.9
Maryland	8.7	0.9

The Center for Preventive Health Services at the Maryland Department of Health and Mental Hygiene combined five years of BRFSS data for diabetes and then weighted the responses to reflect the total Maryland and Charles County populations. The table below presents the five-year average prevalence of diagnosed diabetes for Charles County and Maryland defined by gender, race, and age from 2003-2007.

The average prevalence of diabetes in Charles County is lower than the state prevalence (5.6 vs. 7.7). The diabetic prevalence among males is lower for Charles County (5.6% of the total Charles County population) than the state average prevalence of 7.7% of the total MD population. Charles County females also have lower diabetes prevalence than the state average prevalence (5.7% vs. 7.6%). The prevalence of diabetes is nearly identical for Charles County males and Charles County females (5.6% vs. 5.7%).

When comparing the average diabetic prevalence by race, the percentage of diabetics within the total black population is higher than the percentage of diabetics in the total white population (7.3% vs. 5.4%). The prevalence of diabetes for Charles County Blacks is lower than the prevalence among Maryland Blacks. The same is true for Charles County Whites in comparison with Maryland Whites.

The number of African Americans in Charles County has increased in recent years. From 1998-2002, 854 African Americans were diagnosed with diabetes in Charles County; from 2000-2004, the number of African Americans with diagnosed diabetes increased to 1103 persons; from 2004-2008, the number of African Americans diagnosed with diabetes increased to 1871 persons.

When comparing the prevalence of diabetes among age groups, the highest diabetic prevalence falls within the elderly population over the age of 65 years. This is true for Charles County and for the state of Maryland, though the Charles County diabetic prevalence for this age group is below the state prevalence (18.0% vs. 19.7%). The prevalence of diagnosed diabetes within the 65+ age group has increased over the past few years. The 1998-2002 five-year diagnosed diabetes prevalence for Charles County was 12.1%, with 990 people affected. The 2000-2004 five-year prevalence has increased to 12.3%, with 1083 people affected, and the 2004-2008 five-year prevalence estimates has increased t 18.0%, with 1707 people affected. The prevalence estimates of diabetes within the other age groups (18-44 and 45-64) for Charles County are also below the state of Maryland.

2003-2007 Five-Year Average Prevalence of Diagnosed Diabetes in Charles County and MD

		Gender		Race			Age	
Region	Total	Male	Female	White	Black	18-44 yrs	45-64 yrs	65+ yrs
Charles County	5348 (5.6%)	2827 (5.6%)	2521 (5.7%)	3093 (5.4%)	1871 (7.3%)	898 (1.6%)	2712 (9.3%)	1707 (18.0%)
Maryland	316,081 (7.7%)	152,967 (7.7%)	163,114 (7.6%)	174,787 (7.0%)	106,223 (10.3%)	50321 (2.4)	139,800 (10.2)	121,117 (19.7)

Source: Maryland BRFSS, Compiled by the Center for Preventive Health Services, Maryland DHMH: Family Health Administration. Excludes gestational diabetes.

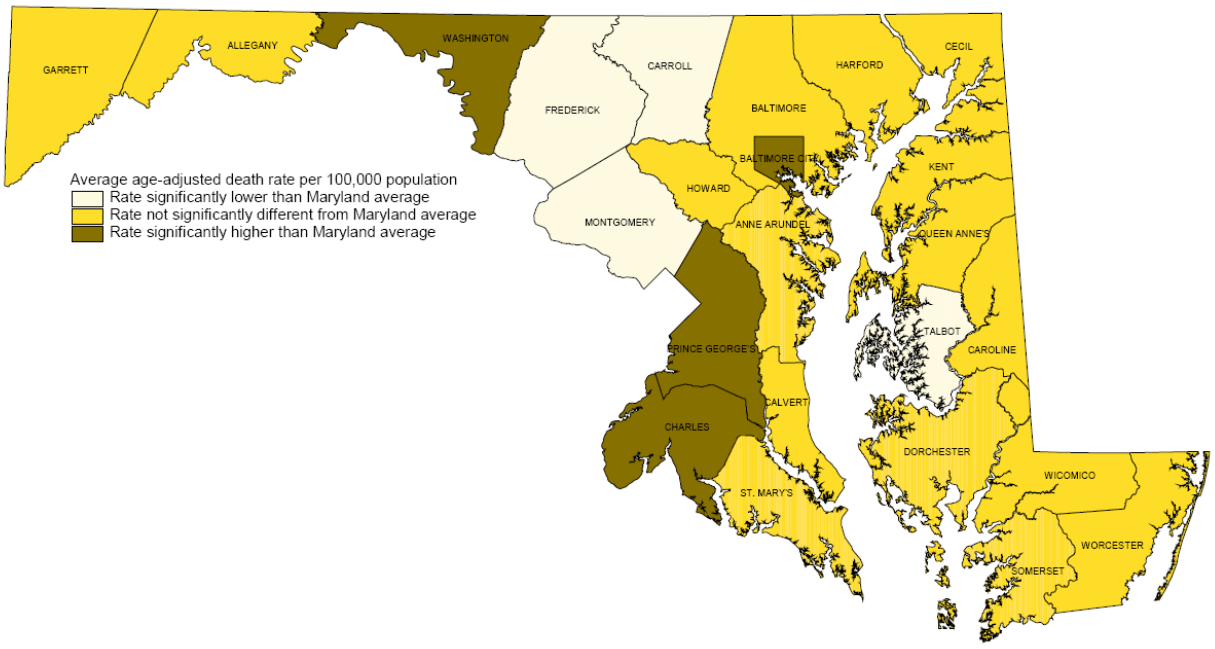
Diabetes Mellitus Death Rates

According to the 2009 Maryland Vital Statistics Report, deaths in Charles County from Diabetes Mellitus make up 2.6% of the total Maryland diabetes deaths. When comparing the 2009 crude diabetes death rates per 100,000 population, the Charles County rate of 21.8 per 100,000 was comparable to the state rate of 21.0 per 100,000.

Number of Diabetes Deaths and Crude Diabetes Death Rates, Charles County vs. Maryland, 2009		
Jurisdiction	Number of Deaths	Death Rate per 100,000
Charles County	31	21.8
Maryland	1198	21.0

The age-adjusted death rate for Diabetes mellitus for 2007-2009 in Charles County is 34.1 (per 100,000 populations). This rate is higher than the Diabetes Mellitus death rates for the Southern Maryland region for the same time period (26.4 per 100,000). It is also higher than the state diabetes death rate of 21.8 per 100,000. According to the map below from the 2009 Maryland Vital Statistics Report, the 2007-2009 Charles County diabetes mellitus death rate is significantly higher that the MD cumulative rate.

Comparison of County Age-adjusted Death Rates* for Diabetes Mellitus with the Maryland State Average, 2007-2009.



Source: Maryland 2009 Vital Statistics Report. Available at www.dhmh.state.md.us.

	Discharge Year																		Total	
	2000		2001		2002		2003		2004		2005		2006		2007		2008		Hospital Discharges	
Diabetes	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	Total #	Total %
No	504,343	83.7	520,189	83.2	528,378	82.3	535,743	81.8	532,326	81.4	553,334	80.6	559,935	80.0	557,779	78.9	564,117	78.4	4,856,144	81.0
Yes	97,967	16.3	105,380	16.8	113,431	17.7	119,026	18.2	121,564	18.6	132,982	19.4	140,137	20.0	149,318	21.1	155,731	21.6	1,135,536	19.0
Total	602,310	100.0	625,569	100.0	641,809	100.0	654,769	100.0	653,890	100.0	686,316	100.0	700,072	100.0	707,097	100.0	719,848	100.0	5,991,680	100.0

Total Maryland Hospitalization Discharges, 2000-2008, Stratified by Diabetes Co-Morbidity

Diabetes Morbidity:

The above graph demonstrates hospitalization discharge data for Maryland as obtained using the Maryland Assessment Tool of Community Health (MATCH). MATCH data from 2000-2008 shows an increasing proportion of total discharges with diabetes listed as a co-morbid condition.

Burden of Diabetes:

Annual age-adjusted hospital discharge rates for diabetics are continuously increasing in Maryland from 222 per 10,000 in 2004 to 268.3 in 2008. In 2008, the highest hospital discharge rates were among diabetics co-occurring with coronary heart disease (17.4%). Cost was highest among those with co-existing coronary disease ($165 million) and diabetic nephropathy ($130 million) (2008). The annual total hospital charges for diabetic Marylanders from 2004 to 2008 increased by $485 million (diabetes listed as any diagnosis).In 2008, the amount of hospital expenses on patients with diabetes as a co-morbidity was $1.7 billion, which represents almost a quarter of the total hospital charges ($7.9 billion). The total cost of diabetes in Maryland was estimated to be $378 million in 2006 (medical and indirect).

Primary Preventive Care Practices among People with Diabetes:

2006-2010 Maryland BRFSS cumulative data was used to examine primary preventive care practices.

Monitor blood glucose levels:

The majority of diabetic persons in Charles County check their blood glucose levels daily (69.5%). There is a small percentage of the Charles County diabetic population (8.8%) who never check their blood glucose levels.

Frequency of blood glucose testing: 06-10	*Daily or more*	*1-2 times/week*	*3-6 times/week*	*1-3 times/month*	*Never*
Number	56	8	7	4	7
Percentage	69.5	9.1	8.0	4.7	8.8

Annual eye exams:

72.3% of Charles County diabetics reported having had a dilated eye exam in the past year.

Annual eye exam: 06-10	*< 1 month*	*1-12 months*	*1-2 years*	*2 or more years*	*Never*
Number	21	39	10	9	3
Percentage	25.9	46.4	10.	13.8	3.8

Annual foot exams:

74.1% of Charles County diabetics reported that they have had a foot exam in the past year.

Annual foot exam: 06-10	*Once*	*Twice*	*3 times*	*4 times*	*5-9 times*	*10+ times*	*Never*
Number	18	15	6	15	4	3	20
Percentage	24.9	15.6	7.0	20.9	4.2	1.5	25.9

Frequent Hemoglobin A1c testing:

Approximately 75.2% of the Charles County diabetics reported that their health professional had checked their Hemoglobin A1c levels two or more times in the past year.

Hemo A1c tests: 06-10	*One*	*2 or more*	*None*	*Never heard of it*
Number	7	56	9	4
Percentage	9.6	75.2	11.0	4.2

Diabetes self-management course:

Two-thirds of Charles County diabetics reported taking a course or class in how to manage diabetes (62.0%).

Risk Factors for Diabetes:

2006-2010 Maryland BRFSS cumulative data for Charles County was used to see the presence of certain risk factors increased the prevalence of diabetes. The known risk factors include: overweight/obesity, physical inactivity, and smoking.

Overweight/Obesity:

Obese individuals were 7.8 times more likely to report having diabetes than those at a healthy weight and 2.5 times more likely to report having diabetes than those who were overweight. Overweight individuals were 3 times more likely to report having diabetes than those at a healthy weight.

CC BRFSS 2006-10: Weight Status/ BMI	Not Overweight/Obese	Overweight	Obese
	BMI<=24.9	BMI:25-29.9	BMI=>30
Diabetes Prevalence (%)	2.0	6.2	15.6

Physical Inactivity:

Individuals who were not physically active were nearly two times (1.6) more likely to report having diabetes than those who were meeting Healthy People objectives for moderate and vigorous physical activity.

CC BRFSS 2006-10: Physical Activity	Not at risk	Did not meet Moderate & Vigorous Level
Diabetes Prevalence (%)	5.9	9.5

Smoking:

Former smokers were 2.6 times more likely to report having diabetes than those who have never smoked. Diabetes prevalence for both current smokers and those who have never smoked were not significantly different.

CC BRFSS 2006-10: Smoking	Current Smoker	Former Smoker	Never Smoked
Diabetes Prevalence (%)	6.0	15.9	6.2

Diabetes as Co-Morbidity:

2006-2010 Maryland BRFSS cumulative data for Charles County was examined to determine if diabetes is co-morbidity for several chronic health conditions. Diabetes prevalence estimates were compared for individuals with heart disease, high blood pressure, and high cholesterol and those without the known co-morbidities.

Heart Disease:

Diabetes prevalence among people with heart disease was 4 times greater than the diabetes prevalence among people who do not heart disease.

CC BRFSS 2006-10: Heart Disease and Diabetes	Reported heart disease	No heart disease
Diabetes Prevalence (%)	29.2	7.2

High Blood Pressure:

Diabetes prevalence among people with high blood pressure was over 9.5 times greater than the diabetes prevalence among people who do not have high blood pressure.

CC BRFSS 2006-10: High Blood Pressure and Diabetes	Reported High Blood Pressure	No high blood pressure
Diabetes Prevalence (%)	24.8	2.6

High Cholesterol:

Diabetes prevalence among people with high cholesterol was 3 times greater than the diabetes prevalence among people who do not have high cholesterol.

CC BRFSS 2006-10: High Cholesterol and Diabetes	Reported High Cholesterol	No high cholesterol
Diabetes Prevalence (%)	17.4	5.8

Diabetes References:

1. 2006-2010 Charles County Diabetes Prevalence, Diabetes as a co-morbidity, and Diabetes Management Data. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at: www.marylandbrfss.org.

2. 2003-2007 Charles County Diabetes Prevalence, Overall and by Gender, Race, and Age. Center for Preventive Health Services. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/cdp/reports.cfm.

3. 2007-2009 Charles County Diabetes mellitus mortality rates. 2009 Maryland Vital Statistics Report. Maryland Department of Health and Mental Hygiene. Available at: http://vsa.maryland.gov.

4. 2000-2008 Charles County Diabetes Hospitalization Expenditures and Burden of Disease Data. Maryland Assessment Tool for Community Health. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/match.cfm.

Qualitative Data Relating to Diabetes:

83% of long survey participants felt that diabetes was a health problem in Charles County. Over half (51%) felt that diabetes is a "serious problem" in Charles County. 18.2% of long survey respondents reported that they have seen improvements in Charles County in terms of Diabetes.

Some health behaviors exhibited by Charles County survey respondents that might increase their chances of diabetes included: only 20.3% always eat 5 or more servings of fruits and vegetables each day, 10.3% always eat fast food at least once a week, 20.5% never take a vitamin, and 17.9% participate in physical activity each day.

Diabetes among children and adults were discussed at all community focus groups. School nurses talked about juvenile diabetes cases that must go to Children's in Washington DC to be seen. Sometimes those children must go without insulin for a month. There are no emergency site services for those patients.

The Chronic Disease Specific and Age-related focus groups talked about diabetes as co-morbidity for other health conditions such as heart disease and stroke. Many of their patients have no idea how to control their sugar levels. Several focus groups talked about the need for more diabetes education in the county for those newly diagnosed and for those currently living with the condition. Community doctors do not have time to educate their patients. Currently, Health Partners is the only organization in the county providing diabetes education.

Focus groups discussed many programs and organizations that are working in Charles County in regards to Diabetes including: Civista Health, the Charles County Department of Health, the Partnerships for a Healthier Charles County and its Chronic Disease Prevention Team. Participants suggested more educational messages and classes to the community on the prevention, treatment, and management of chronic diseases such as Diabetes.

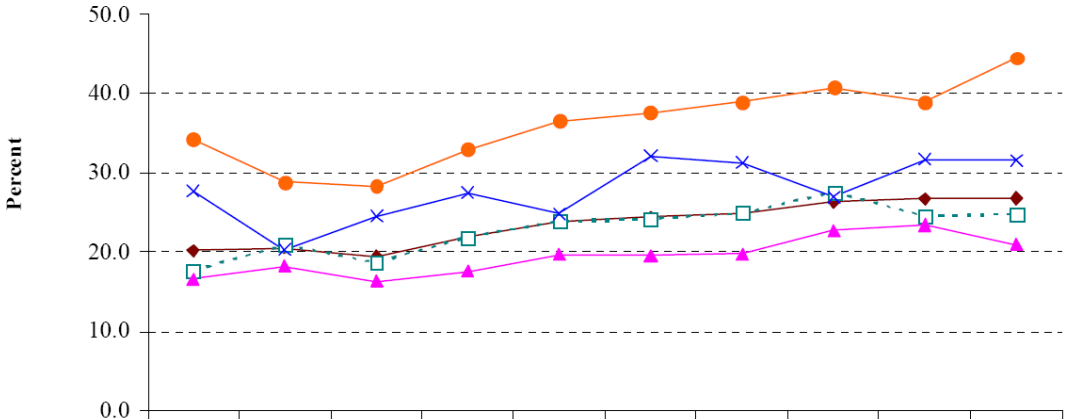
Charles County Obesity and Overweight Data:

Introduction and General Statistics:

Overweight and obesity has increased steadily in the United States and Maryland over recent years. Nationally, the prevalence of obesity has increased by 44.3% from 15.8% in 1995 to 22.8% in 2003. Maryland has also experienced the same increasing patterns of obesity. The prevalence of obesity in Maryland increased from 16.3% in 1995 to 21.9% in 2003. This marks a 34% increase. In 2003, approximately 2.3 million Maryland adults (59% of total population) were overweight or obese, and about 838,000 were obese. These statistics are far from the Healthy People 2020 objectives of reducing adult obesity rates (Burden of Overweight and Obesity in Maryland, DHMH).

In Maryland, the prevalence of obesity has climbed each year over the last decade. African Americans experience higher prevalence of obesity than Whites in Maryland. The greatest obesity prevalence is seen in Black females, and the lowest among White females.

Figure 1. Prevalence of Obesity among Maryland Adults by Race and Gender, 2000-2009



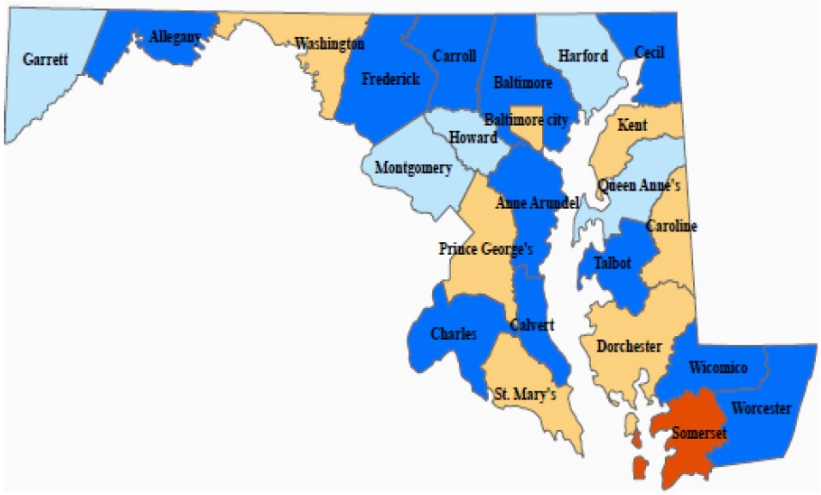
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Overall	20.2	20.5	19.4	21.9	23.9	24.4	24.9	26.3	26.7	26.8
White Male	17.7	20.9	18.7	21.9	23.9	24.2	24.9	27.6	24.5	24.8
White Female	16.6	18.2	16.3	17.6	19.7	19.5	19.8	22.7	23.4	20.9
Black Male	27.7	20.3	24.5	27.5	24.8	32.1	31.3	26.9	31.7	31.6
Black Female	34.2	28.8	28.3	33.0	36.6	37.6	39.0	40.8	39.0	44.5

Source: 2000-2009 Maryland Behavioral Risk Factor Surveillance System Cumulative Results

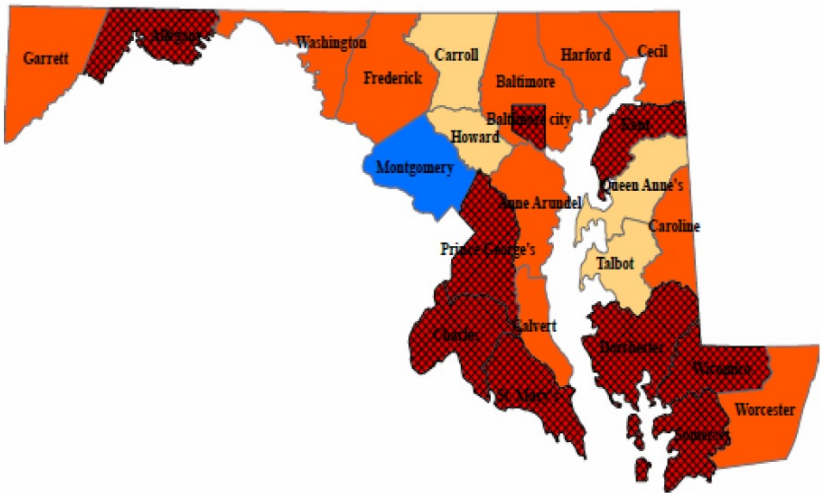
In 1995-1997, only one Maryland jurisdiction had obesity prevalence greater than 25%. By 2006-2008, there were 19 Maryland jurisdictions with obesity prevalence greater than 25%. In addition, 9 of those counties report that between 30-45% of their populations are obese. Charles County is one of those Maryland jurisdictions with obesity prevalence between 30-45%. No Maryland jurisdiction currently meets the national health goal of 60% of adults who are at a healthy weight, nor have any jurisdictions achieved the national goal of 15% of adults who are obese.

Map 1. Prevalence of Obesity among Maryland Adults by Jurisdiction*

1995-1997



2006-2008

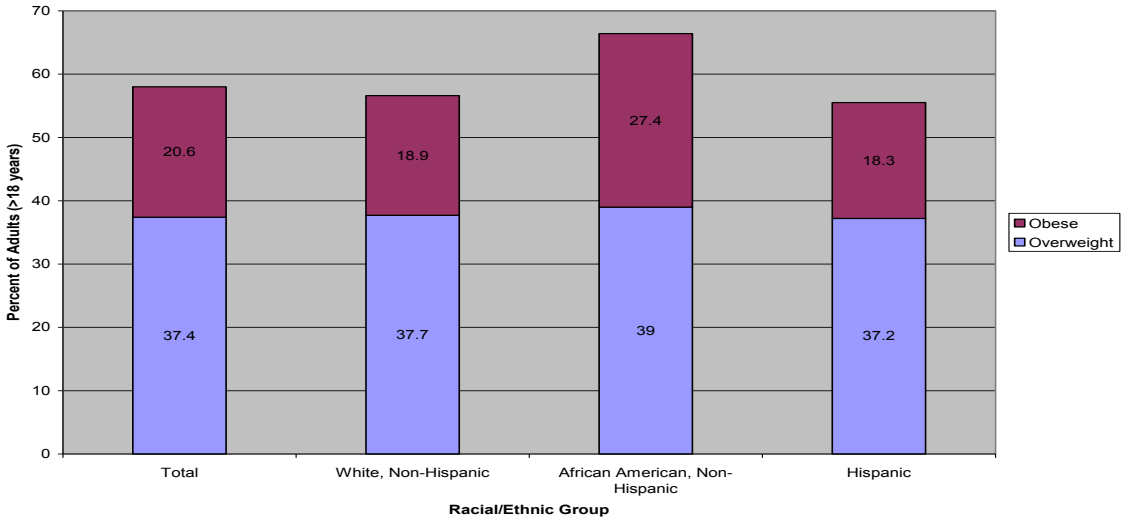


Percent (%) 10.0 - 14.9 15.0 - 19.9 20.0 - 24.9 25.0 - 29.9 30.0 - 45.0

Maryland Department of Health and Mental Hygiene, Maryland Behavioral Risk Factor Surveillance System, BRFSS-1995-2008 Cumulative Results, Retrieved from: www.marylandbrfss.org

When comparing among racial and ethnic groups, the prevalence of overweight and obesity was higher for African American Marylanders than for White or Hispanic Marylanders. African Americans experienced higher rates of obesity than Caucasians or Hispanics. The prevalence of overweight and obesity by race/ethnicity in Maryland for the time period 2001-2003 is presented below.

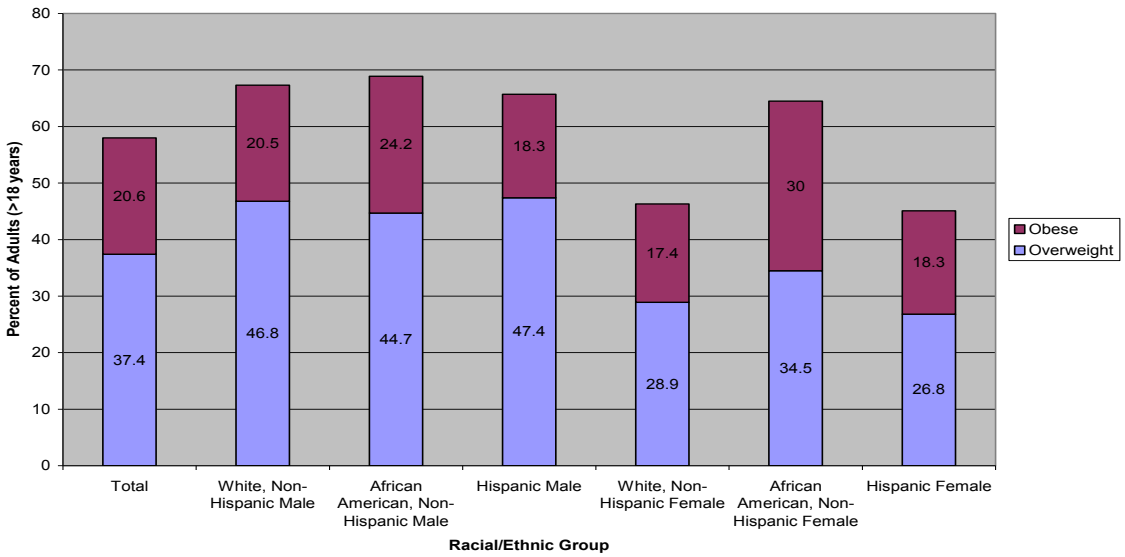
Figure 1: Prevalence of Overweight and Obesity by Race/Ethnicity in Maryland, 2001-2003



Source: Burden of Overweight and Obesity in Maryland 2005, Maryland DHMH

The prevalence of overweight and obesity in Maryland was higher among African American women compared to White or Hispanic women. Among males, the prevalence of overweight was comparable across racial groups; however, obesity prevalence rates were higher among African American males in Maryland than White or Hispanic males. African American women were more likely to be obese than African American men. However, white men were more likely to be obese than white women. For the Hispanic population, the obesity prevalence was the same for both men and women in Maryland.

Figure 2: Prevalence of Overweight and Obesity by Race/Ethnicity and Gender in Maryland, 2001-2003



Source: Burden of Overweight and Obesity in Maryland 2005, Maryland DHMH

Overweight and obesity rates increased with age in Maryland. The percentage of obese adults peaks in the 50-64 year old age group. Nearly 66% of Maryland adults between the ages of 50 to 64 years were overweight or obese.

Obesity was more prevalent in adults with less education. The proportion of overweight adults was similar along the education levels. As the median household income increased, the percentage of obese individuals decreased. However, the percentage of overweight individuals increased with increasing household income.

2010 Charles County adult obesity and overweight prevalence and 2006-2010 combined prevalence:

2010 Maryland BRFSS data estimates that over two-thirds of Charles County adults are either overweight or obese (70.6%). Obesity prevalence was determined by weighting Charles County BRFSS BMI responses to reflect the county population. 2010 results found that 32.7% of Charles County adults are obese; and 37.9% are overweight. The Charles County obesity prevalence is higher than the Maryland state average obesity prevalence (32.7% vs. 27.9%). Overweight prevalence for Maryland and Charles County are similar (37.9% vs. 38.2%).

2010 BMI Status: Charles County	Healthy Weight	Overweight	Obese
Count	85	130	116
Weighted Percentage	29.4%	37.9%	32.7%

2006-2010 Maryland BRFSS cumulative results for Charles County were also examined to increase the sample size and therefore, increase the stability of the statistics. The 2006-2010 cumulative results for Charles County reflect the same trends seen in the 2010 data. The Charles County obesity prevalence is higher than the Maryland state average obesity prevalence (33.2% vs. 26.5%). Overweight prevalence for Maryland and Charles County are similar (36.3% vs. 36.6%).

2006-2010 BMI Status: Charles County	Healthy Weight	Overweight	Obese
Count	440	564	512
Weighted Percentage	30.5%	36.3%	33.2%

Childhood Obesity:

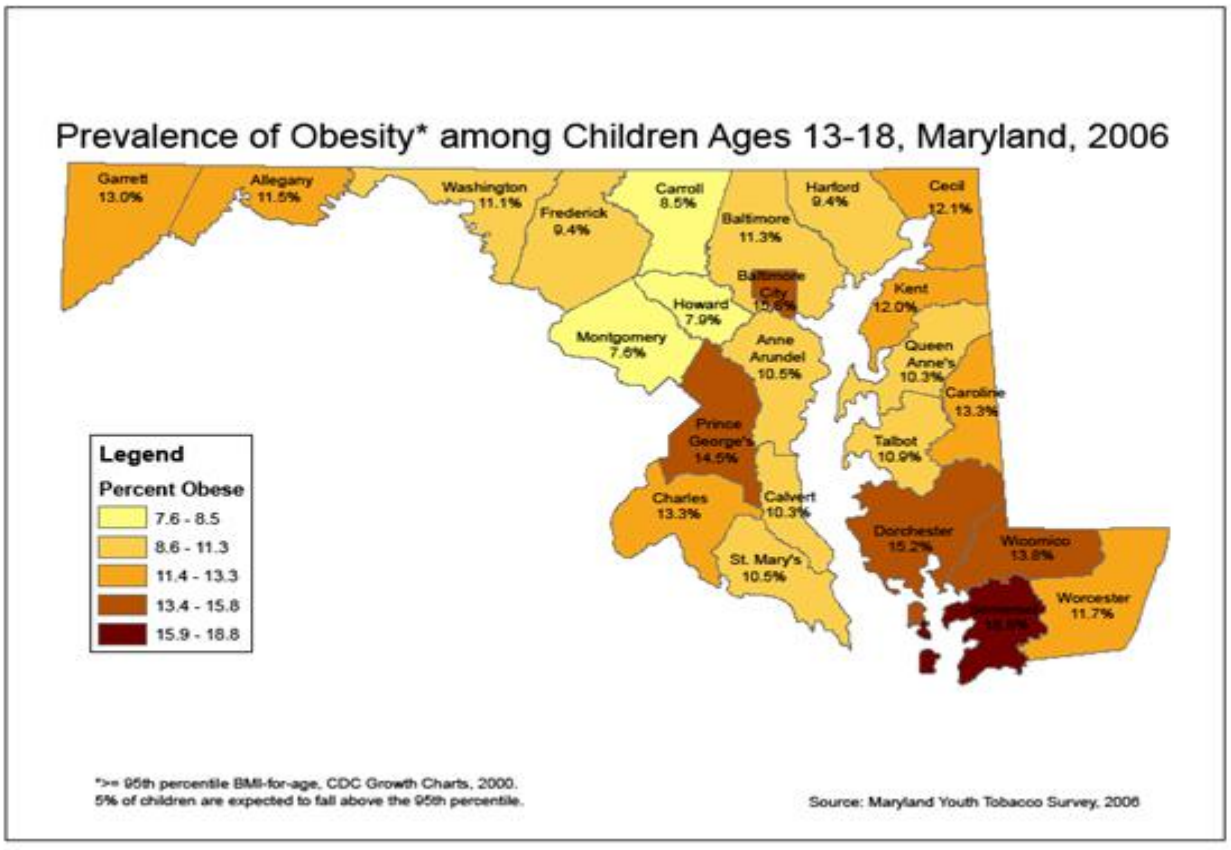
The prevalence of childhood obesity in the United States has increased over time. Obesity rates have tripled for all age groups in the US. The highest obesity rates are seen in the 6-11 year old age group; the lowest obesity rates are seen in the 2-5 year old age group. The obesity rate has tripled from 1980 to 2003-04 for both the 2-5 and 6-11 age groups. The obesity rate has increased nearly 4 times for the 12-19 year old age group (Burden of Overweight and Obesity in Maryland Report, DHMH).

US Obesity Rates by Age and Year

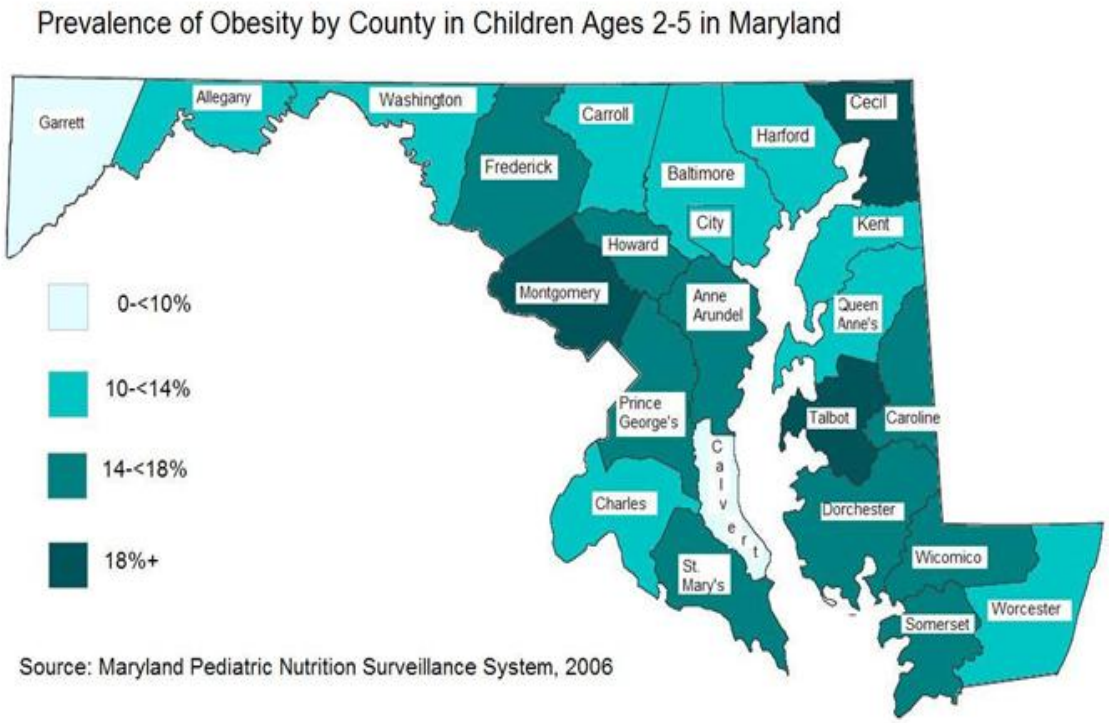
Age	1980 Obesity Rate	2003-04 Obesity Rate
2-5	5.0%	13.9%
6-11	6.5%	18.8%
12-19	5.0%	17.4%

Source: Burden of Overweight and Obesity in Maryland Report, 2005, Maryland DHMH

Childhood obesity statistics on a state and county level are limited. The 2006 Maryland Youth Tobacco survey found that Maryland adolescents, ages 13-18 years of age, have an 11% obesity rate and a 15% overweight rate. For Charles County, the obesity prevalence for children aged 13-18 years was 13.3%. This prevalence is higher than the Maryland state average and is also the highest among the Southern Maryland jurisdictions. It is the 6th highest rate among the Maryland jurisdictions.



Additionally, the 2006 Maryland Pediatric Nutrition Surveillance found that among children 2-5 years of age in the WIC Program, there is a 15% obesity rate and an 18% overweight rate. The 2006 Charles County obesity rate for children aged 2-5 years fell somewhere between 10-14%. No data is available for children aged 5-12 years.



Health Complications:

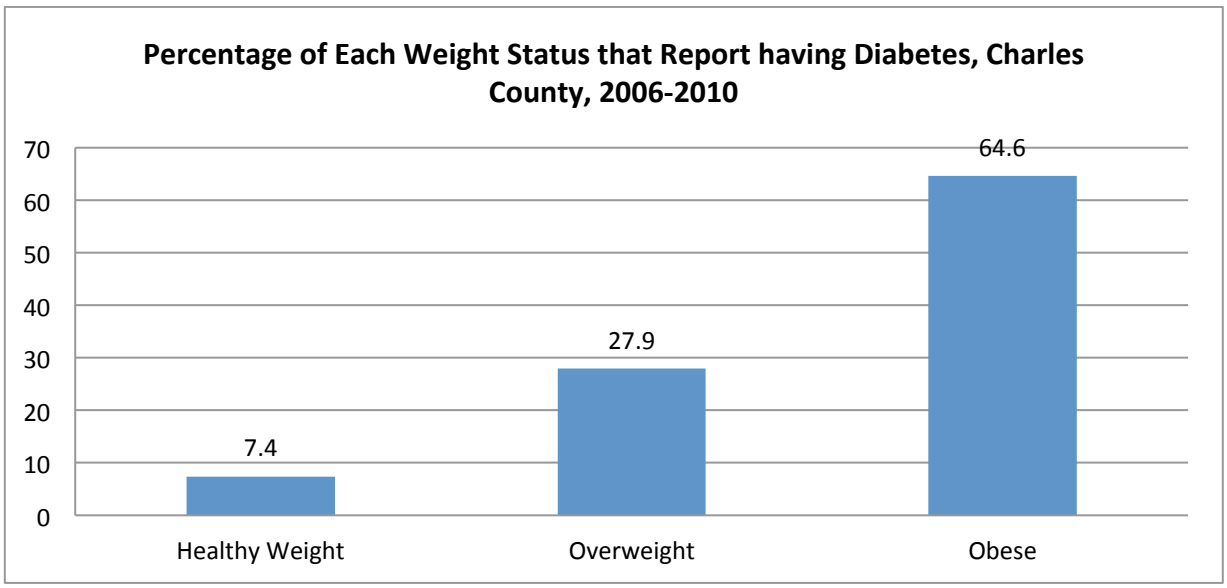
Obesity-related disease, such as heart disease, cancer, stroke, and diabetes, were among the leading causes of death in Maryland. Overweight and obesity is associated with self-reported health complications, including diabetes, asthma, hypertension, and high cholesterol in the general adult Maryland population.

Children and adolescents are also at risk for health consequences with increases in weight. There is growing concern for overweight children and adolescents that are at greater risk for various ailments later in life (CDC, 2004). One study found that almost 60% of overweight children have at least one cardiovascular risk factor. Some of the other health complications of overweight children and adolescents include asthma, diabetes, hypertension, and early maturation.

2006-2010 cumulative Maryland Behavioral Risk Factor Surveillance System (BRFSS) data was used to determine the increased prevalence of chronic disease among those who are obese and overweight.

The prevalence of diabetes is 9 times greater among Charles County adults who are obese than Charles County adults who are at a healthy weight. The prevalence of diabetes is 4 times greater among Charles County adults who are overweight than Charles County adults who are at a healthy weight.

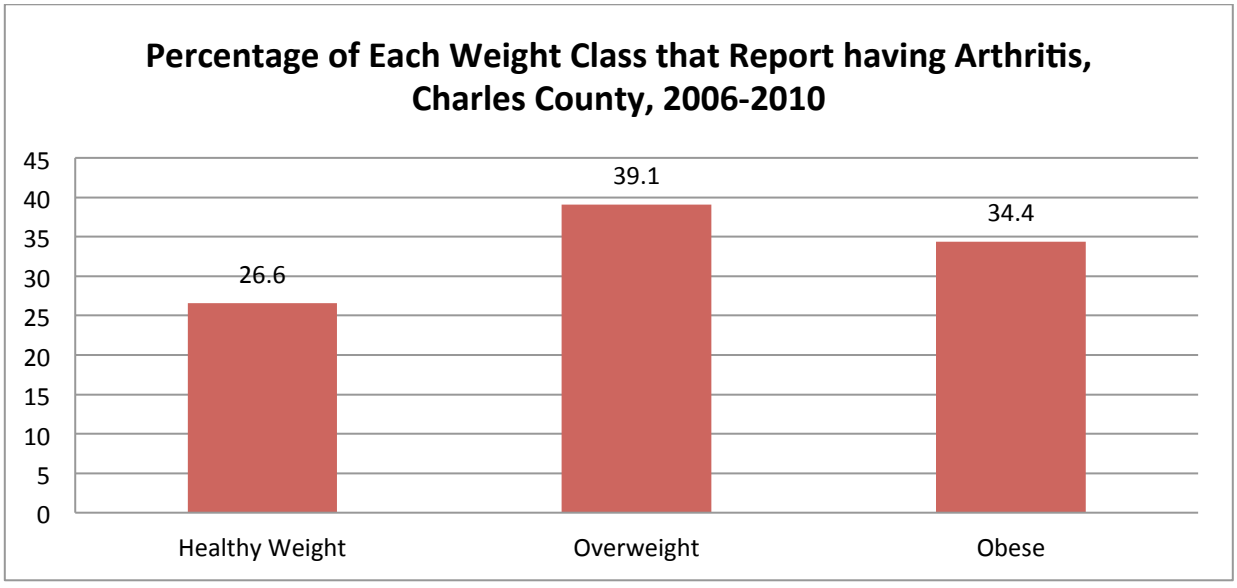
Among those who are obese in Charles County, 64.6% of those individuals have diabetes. Among those who are overweight in Charles County, 27.9% of those individuals have diabetes. These percentages are much higher than the 7.4% of Charles County healthy weight adults who report having diabetes.



Source: 2006-2010 Maryland BRFSS, Maryland DHMH

Arthritis and Disability:

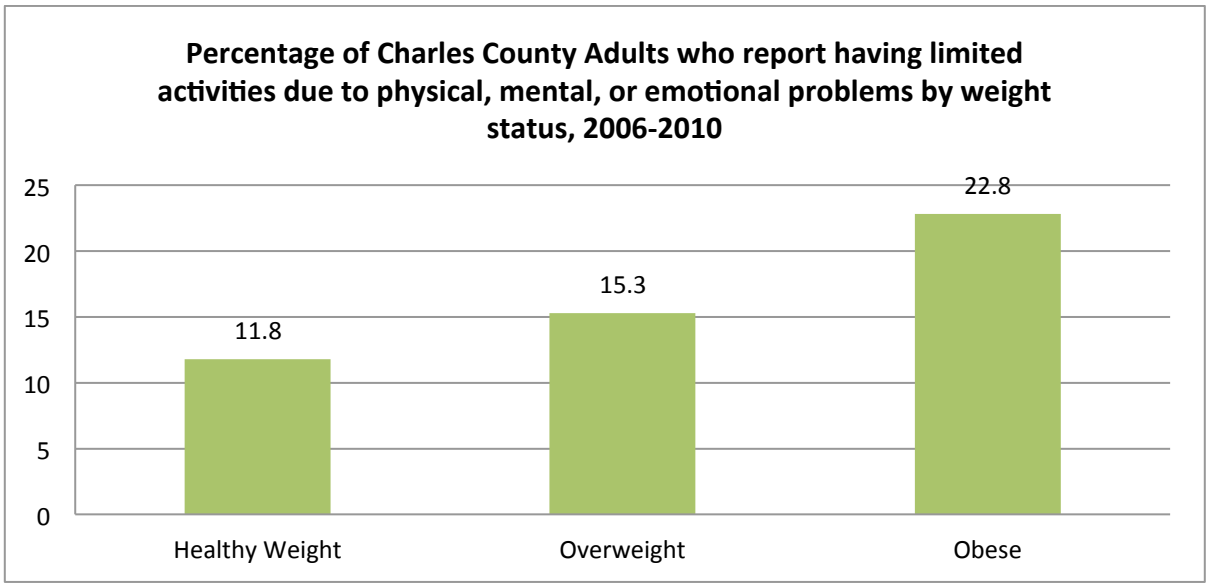
2006-2010 Maryland BRFSS data estimates that 26.8% of Maryland adults and 27.7% of Charles County adults had been diagnosed with arthritis (Maryland BRFSS). In Charles County, arthritis prevalence increased by BMI category. It ranged from 26.6% of normal weight adults to 39.1% of overweight adults.



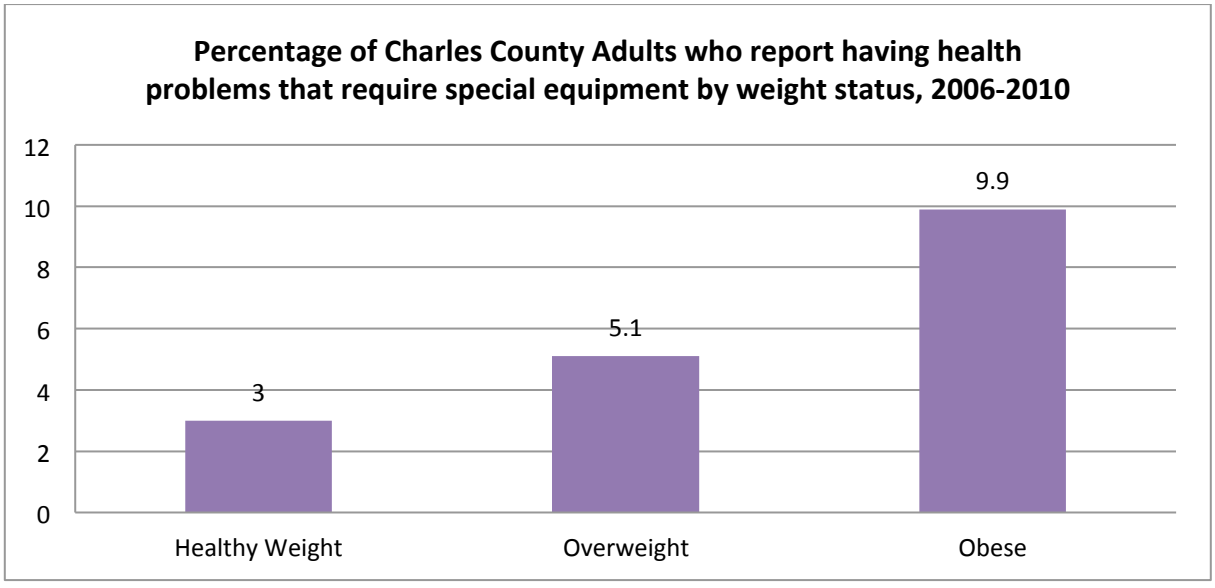
Source: 2006-2010 Maryland BRFSS, Maryland DHMH

The level of disability in Maryland residents increases with BMI category. According to the 2006-2010 Maryland BRFSS cumulative data, obese individuals were more likely to report that their activities are

limited due to physical, mental, or emotional problems. They are also more likely to report that they have health problems that require them to use special equipment.



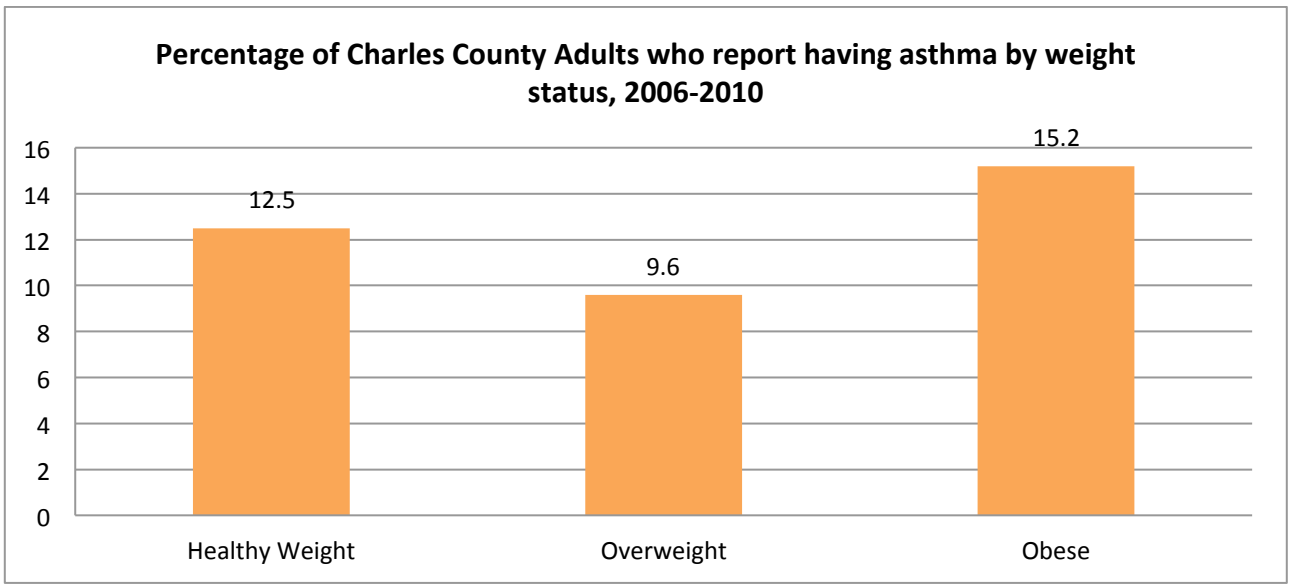
Source: 2006-2010 Maryland BRFSS, Maryland DHMH



Source: 2006-2010 Maryland BRFSS, Maryland DHMH

Asthma:

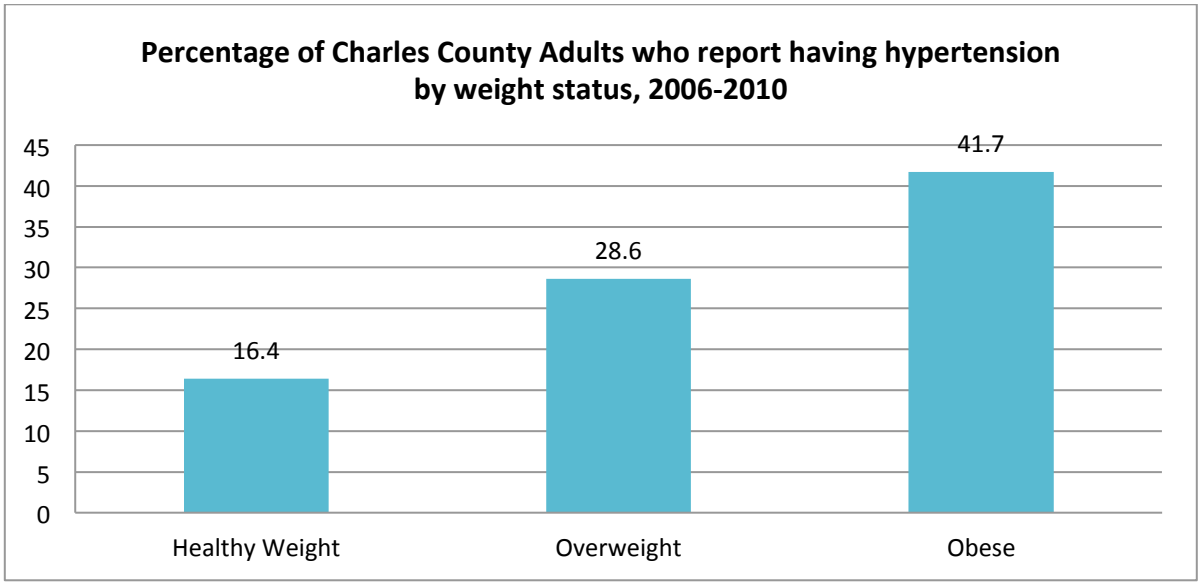
2006-2010 Maryland BRFSS data estimates that approximately 13.4% of adults in Maryland and 12.4% of adults in Charles County have been diagnosed with asthma. Asthma was most prevalent among obese adults.



Source: 2006-2010 Maryland BRFSS, Maryland DHMH

Hypertension:

Maryland BRFSS data for 2006-2010 estimates that 30.0% of Maryland adults and 29.0% of Charles County adults have been diagnosed with high blood pressure (Maryland BRFSS). Hypertension prevalence substantially increased by BMI category. Obese adults were 2.5 times more likely to be diagnosed with high blood pressure than normal weight adults.



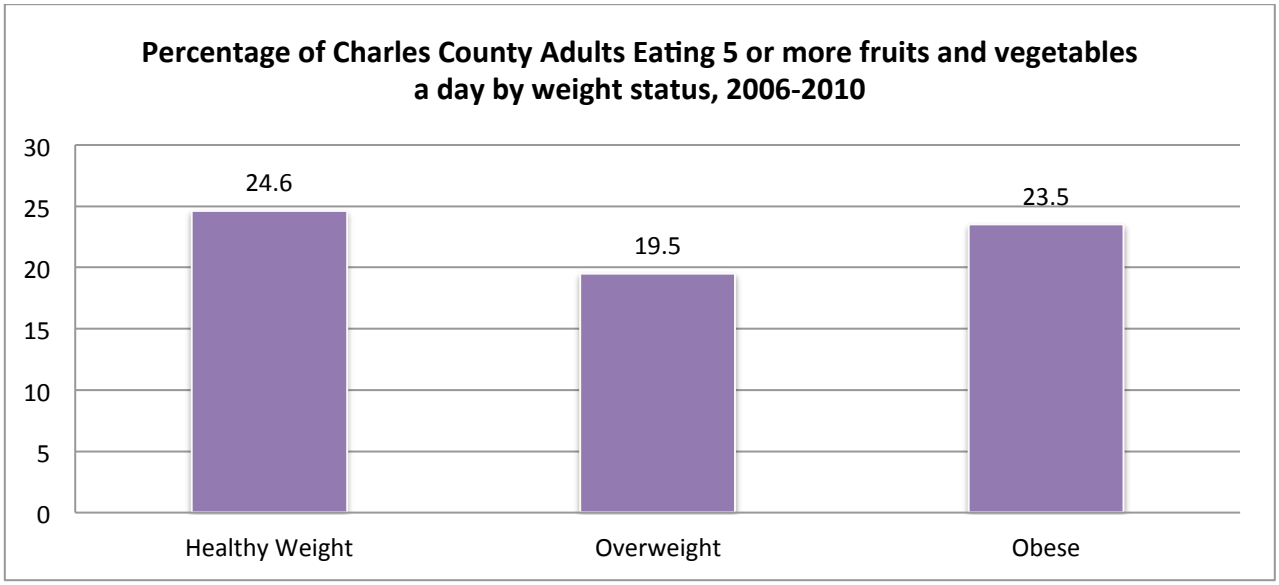
Source: 2006-2010 Maryland BRFSS, Maryland DHMH

Determinants of Health:

Nutrition:

Fruit and vegetable intake is an important determinant of health. Current scientific evidence suggests that dietary patterns with higher intake of fruits and vegetables are associated with reduced risk of diseases and conditions, such as heart disease, stroke, diabetes, and certain cancers.

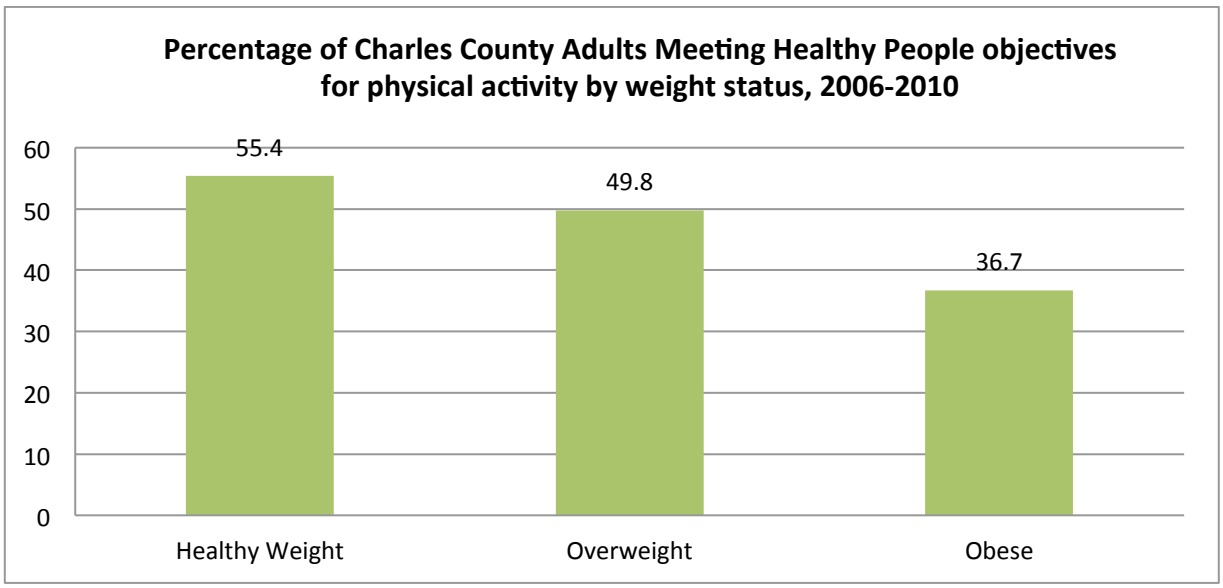
Data from the 2006-2010 Maryland BRFSS demonstrates that the percentage of individuals meeting the 5 a day recommendation decreases with BMI category. Approximately 24.6% of normal weight adults in Charles County met the national recommendation for fruit and vegetable daily intake, whereas, only 23.5% of obese adults and 19.5% of overweight adults meet the national recommendation.



Source: 2006-2010 Maryland BRFSS, Maryland DHMH

Physical Activity:

Sedentary lifestyle increases risk of obesity, heart disease, hypertension, diabetes, and other chronic diseases and conditions. The Healthy People 2020 objective recommends engaging in moderate physical activity for at least 30 minutes, five or more days a week or vigorous physical activity for at least 20 minutes, three or more days a week for health benefits. Despite the benefits of physical activity, 2006-2010 Maryland BRFSS data found that overweight and obese individuals were less likely to be meeting HP objectives for physical activity than those of a healthy weight.



Source: 2006-2010 Maryland BRFSS, Maryland DHMH

Costs associated with Overweight and Obesity:

The economic consequences of overweight and obesity and associated health complications are considerable. Nationwide, in 2003, an estimated $75 billion of adult medical expenditures were attributable to obesity, with $17.7 billion paid for by Medicare and $21.3 billion by Medicaid. In Maryland, an estimated $1.5 billion of adult medical expenditures were attributable to obesity, with $368 million paid for by Medicare and $391 million by Medicaid (Burden of Overweight and Obesity in Maryland Report, DHMH).

Costs to overweight children, adolescents, and adults go far past the financial burdens. They often face issues of social discrimination and poor body image. Overweight or obese children and adolescents may face parental neglect and behavioral and learning problems.

The percentage of hospital discharges with obesity as part of the reason for the hospital stay has increased in Maryland for children aged 5-19 years from 1.4% in 2000 to 6.2% in 2008.

Increasing Proportion of Hospital Discharges for children aged 5-19 years with Obesity as a Co-morbidity, Maryland, 2000-2008

	Discharge Year																		Total	
	2000		2001		2002		2003		2004		2005		2006		2007		2008		Hospital Discharges	
Obesity	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	%	%	#	%
No	26,568	98.6	27,382	98.1	26,898	97.5	26,418	97.0	25,746	96.3	25,950	95.5	25,704	94.7	25,721	94.0	25,192	93.8	235,579	96.2
Yes	373	1.4	527	1.9	699	2.5	810	3.0	980	3.7	1,234	4.5	1,450	5.3	1,645	6.0	1,658	6.	9,376	3.8
Total	26,941	100	27,909	100	27,597	100	27,228	100	26,726	100	27,184	100	27,154	100	27,366	100	26,850	100	244,955	100.

Obesity and Overweight References:

1.2003 United States and Maryland Obesity Estimates and Trends. Burden of Overweight and Obesity in Maryland Report, 2005. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/cdp/reports.cfm.

2. 2000-2009 Maryland Obesity Estimates and 95-2008 Cumulative Obesity Estimates for all Maryland Jurisdictions. Maryland Behavioral Risk Factor Surveillance System. Available at: http://fha.maryland.gov/pdf/cdp/Report-Obesity.pdf.

3. 2010 and 2006-2010 Charles County and Maryland Overweight and Obesity Estimates. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at www.marylandbrfss.org.

4.2006 13-18 year old Charles County and Maryland overweight/obesity Estimates. 2006 Maryland Youth Tobacco Survey. Maryland CRF Program. Maryland Department of Health and Mental Hygiene. Available at: http://crf.maryland.gov/pdf/2007_tobacco_use_2000_2006.pdf.

5. 2006 2-5 year old Charles County and Maryland Obesity Estimates. 2006 Maryland Pediatric Nutrition Surveillance (WIC data). Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/cdp/co_data.cfm.

6. 2006-2010 Charles County Obesity Health Complication and Risk Factor Data. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at www.marylandbrfss.org.

7. 2000-2008 Maryland Hospitalizations with Obesity as a Co-Morbidity among those 5-19 years. Maryland Assessment Tool for Community Health. Available at: http://fha.maryland.gov/match.cfm.

Qualitative Data Relating to Obesity:

Overweight/obesity was seen as the biggest and most serious health issue in Charles County on the long survey. Nearly every participants viewed overweight/obesity as a problem on some level (97.3%). It was also seen as a serious health problem by 69.8% of long survey participants.

18.2% of long survey participants felt that improvements have been made in the county towards combating obesity.

Risk factors reported by long survey participants increasing the rate of obesity include:

1. Only 20.3% always eat 5 or more servings of fruits and vegetables every day.

2. 10.3% always eat fast food at least once a week.

3. 55% sometimes eat fast food at least once a week.

4. Only 17.9% always participate in physical activity each day.

On the short survey, overweight and obesity was seen as the biggest health problems in Charles County. More than half of the respondents (56%) felt that overweight and obesity are a big health issue in Charles County.

When asked what they perceive to be the biggest health problems in Charles County, every focus group answered obesity, whether it is juvenile or adult. Obesity increases the likelihood of developing other chronic health conditions such as diabetes, arthritis, heart disease, cancer, asthma, injury, hypertension, and stroke.

The leadership focus group felt that the issue of childhood obesity would be most effectively targeted in the school system. It was discussed at soda machines are allowed in the schools and that candy is sold as a fundraiser. Participants felt that an overhaul of the school lunch program was in order. School nurse focus group participants felt that a school-based program should target the teachers as well as the students.

Participants of all focus groups agreed that parents must also be educated in order for a program to work. Children are learning the behavior from their parents and families.

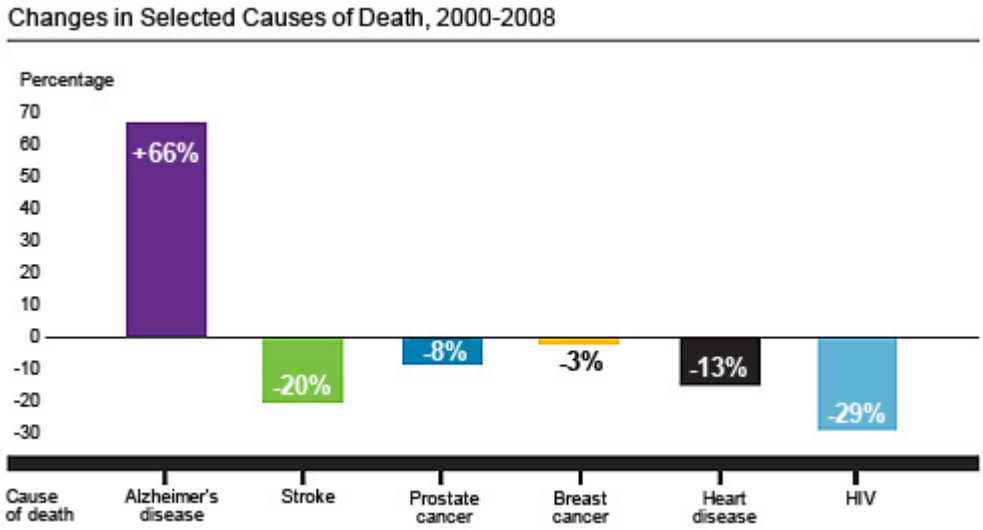
The We Can Program was cited as an effective program currently in place in the county for childhood obesity. They are doing more with less funding, and that funding is limited.

Participants also suggested that there be more recreational areas for exercise. More bike paths and walking access in the community. Bike paths on the old and new roads need to connect.

Health of the Aging Population:

Alzheimer's disease:

Alzheimer's is the sixth-leading cause of death nationally and the only cause of death among the top 10 in the United States that cannot be prevented cured or even slowed. Based on national mortality data from 2000-2008, death rates have declined for most major diseases while deaths from Alzheimer's disease have risen 66 percent during the same period.



Source: Alzheimer's Association *2011 Alzheimer's Disease Facts and Figures*.

It is estimated that up to 5.1 million Americans are living with Alzheimer's disease. In 2010, 14.9 million family members and friends provided 17 billion hours of unpaid care to those with Alzheimer's other forms of dementia. This care is valued at $202.6 billion. In Maryland, it is estimated that just fewer than 300,000 care givers provided over 300 million hours of unpaid care. The total value of this unpaid care is estimated to be close to $4 million.

Number of Alzheimer's and Dementia Caregivers, Hours of Unpaid Care, and Economic Value of Care

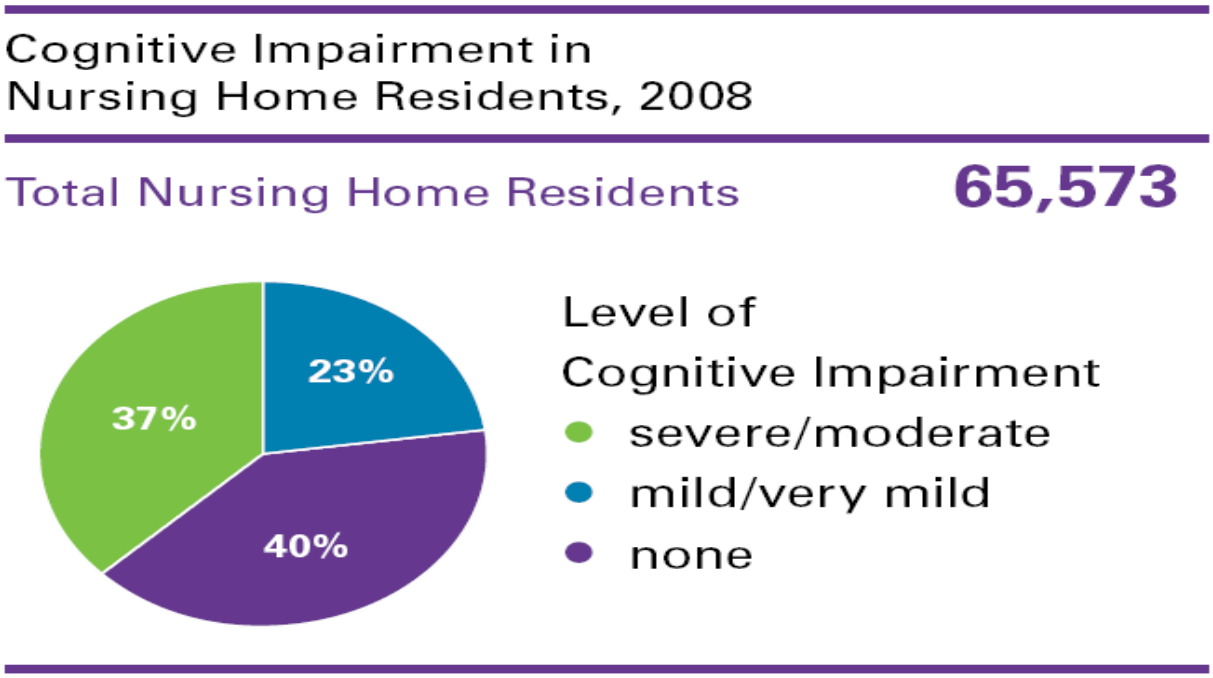
Year	Number of Caregivers	Total Hours of Unpaid Care	Total Value of Unpaid Care
2008	168,071	145,079,317	$1,610,380,420
2009	187,814	213,882,421	$2,459,647,842
2010	270,156	307,654,020	$3,670,312,453

In 2009, Marylanders and 15 Charles County residents died from Alzheimer's disease. Additionally, it is estimated that approximately 86,000 Marylanders over the age of 65 years are living with Alzheimer's disease. This is a 10% increase the 2000 prevalence. It is projected that the number of Marylanders with Alzheimer's disease will continue to increase over the next couple decades.

Number of People Aged 65 and Older with Alzheimer's by Age

Year	65–74	75–84	85+	Total	% change from 2000
2000	5,100	42,000	31,000	78,000	
2010	4,400	40,000	41,000	86,000	10%
2020	5,800	41,000	44,000	90,000	15%
2025	6,600	49,000	45,000	100,000	28%

Many studies have been and are currently trying to determine the cognitive impairment of individuals in nursing homes and assisted living centers in Maryland. In a 2008 study, 60% of the Marylanders living in nursing homes had some level of cognitive impairment. There were more individuals with moderate to severe levels of cognitive impairment then those with very mild to mild impairment.



The2004 Maryland Assisted Living Study conducted a dementia prevalence study among 22 assisted living facilities in Maryland (Adam Rosenblatt et al). Their study consisted of 198 participants with a mean age of 85.6 years. They found that 67.7% had dementia (excluding other cognitive disorders). They also found that 26.3% had an active psychiatric diagnosis. Additionally, 7% with dementia had clinically significant neuropsychiatric symptoms.

Osteoporosis:

According to the National Osteoporosis Foundation, approximately 10 million Americans currently have osteoporosis, and it is estimated that another 34 million people are at risk with low bone density. Of the 10 million Americans estimated to have osteoporosis, eight million are women and two million are men. Estimates suggest that about half of all women older than 50 will break a bone because of osteoporosis. Up to one in four men will too. 80% of those affected by osteoporosis are women. Women can lose up to 20 percent of their bone density in the five to seven years after menopause, making them more susceptible to osteoporosis.

Significant risk has been reported in people of all ethnic backgrounds. Twenty percent of non-Hispanic Caucasian and Asian women aged 50 and older are estimated to have osteoporosis, and 52 percent are estimated to have low bone density. Seven percent of non-Hispanic Caucasian and Asian men aged 50 and older are estimated to have osteoporosis, and 35 percent are estimated to have low bone density. Five percent of non-Hispanic black women over age 50 are estimated to have osteoporosis; an estimated additional 35 percent have low bone density that puts them at risk of developing osteoporosis. Four percent of non-Hispanic black men aged 50 and older are estimated to have osteoporosis, and 19 percent are estimated to have low bone density. Osteoporosis is under recognized and under-treated not only in Caucasian women, but in African-American women as well.
Ten percent of Hispanic women aged 50 and older are estimated to have osteoporosis, and 49 percent are estimated to have low bone density. Three percent of Hispanic men aged 50 and older are estimated to have osteoporosis, and 23 percent are estimated to have low bone density. When compared with other ethnic/racial groups, risk is increasing most rapidly among Hispanic women. Experts predict that costs related to osteoporotic fractures among Hispanics will increase from an estimated $754 million in 2005 to $2 billion per year in 2025.

In 2005, osteoporosis was responsible for an estimated two million fractures and $19 billion in costs. By 2025, experts predict that osteoporosis will be responsible for approximately three million fractures and $25.3 billion in costs each year.

2005-2007 Maryland Behavioral Risk Factor Surveillance System (BRFSS) data estimates that 2.6% of the Charles County population is currently living with osteoporosis. All cases of osteoporosis reported during the 2005-2007 BRFSS were female. All cases were over the age of 40 years.

Charles County BRFSS participants were also asked if they had ever had a bone density test. The weighted percentages estimate that 17.2% of Charles County residents have ever had a bone density test. Additionally, 36.4% reported that they have ever been told how to prevent osteoporosis, and 29.6% are currently taking calcium for bone health.

Arthritis:

According to the 2003-2005 National Health Interview Survey, an estimated 46 million adults in the United States reported being told by a doctor that they have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. One in five (21%) adults in the United States report having doctor-diagnosed arthritis (2003–2005 NHIS). By 2030, an estimated 67 million of Americans aged 18 years or older are projected to have doctor-diagnosed arthritis. Two-thirds of the people that have doctor-diagnosed arthritis are under the age of 65. In 2003, arthritis and rheumatic conditions cost the U.S. economy $128 billion (2003 Medical Expenditure Panel Survey).

Arthritis is the second most frequently reported chronic condition in the United States. In 2002, 51% of adults 75 years and over reported an arthritis diagnosis. Nearly 80 percent of adults either have or know someone with arthritis. Arthritis prevalence increases with age. Among adults over age 65, the prevalence of arthritis is 50 percent. Arthritis affects more than 34 million Caucasians, more than 4.6 million African-Americans and nearly 3.1 million Hispanics. The prevalence of arthritis is higher among women (28.3%) than men (18.2%). If prevalence rates remain stable, the number of affected persons ages 65 years and older will nearly double to 41.1 million by 2030.

Arthritis annually results in 36 million ambulatory care visits, 744,000 hospitalizations, 9,367 deaths, and 19 million people with activity limitations.

It is estimated that 27.6% of Marylanders and 27% of Charles County residents are currently living with arthritis (2004-2008 Maryland BRFSS). Additionally, approximately one-third of Charles County residents (36.7%) reported that they have had pain, aching, stiffness, and swelling around a joint in the past month (2005, 2007 Maryland BRFSS). The majorities of those with arthritis have been experiencing joint symptoms for 3 months or longer (83.5%) and have been seeing a health professional for their joint symptoms (81.1%).

Among Charles County residents who reported having arthritis, the majority are not hindered by their arthritis. Nearly 80% reported that they can do most things or everything, even with arthritis. 12.5% reported that they can do some things, and 7.6% reported that they can hardly do things. 29.7% reported having limited activities due to joint symptoms.

Charles County residents with arthritis were asked if they discussed ways to manage and improve their arthritis. Only 39.9% reported that their doctor has suggested the use of physical activity or exercise to help arthritis, and 27% reported that their doctor has suggested losing weight for arthritis. A very small proportion (7.6%) reported that they had ever taken a class in managing arthritis and symptoms.

Disability:

The 2010 Charles County BRFSS data estimates that approximately 15.5% of Charles County residents are limited in their activities due to physical, mental, or emotional problems. In addition, 5.6% of Charles County BRFSS respondents reported that they have health problems that require them to use special equipment.

Aging Data References:

1. 2011 United States and Maryland Alzheimer's Disease Facts And Figures. National Alzheimer's Association. Available at: www.alz.org.

2. 2009 Maryland Vital Statistics Report. Maryland and Charles County Alzheimer's Disease Mortality. Maryland Department of Health and Mental Hygiene. Available at: vsa.maryland.gov.

3. 2004 Maryland Assisted Living Study. Dementia Prevalence. Maryland Department of Health and Mental Hygiene. Available at: www.dhmh.maryland.gov/ohcq/download/alforum/MDALStudy.pdf.

4. 2005 Maryland Osteoporosis Facts and Figures. National Osteoporosis Foundation. Available at www.nof.org.

5. 2005-2007 Maryland Behavioral Risk Factor Surveillance System. Osteoporosis Data. Maryland Department of Health and Mental Hygiene. Available at www.marylandbrfss.org.

6. 2003-2005 Arthritis Prevalence. National Health Interview Survey. Centers for Disease Control and Prevention's National Center for Health Statistics. Available at: http://www.cdc.gov/nchs/nhis.htm.

7. 2003 US Arthritis Economic Burden. National Expenditure Panel Survey. US DHHS Agency for Healthcare Research and Quality. Available at: http://www.meps.ahrq.gov/mepsweb/.

8. 2004-2008 Maryland Behavioral Risk Factor Surveillance System. Arthritis Prevalence, Severity, and Management. Maryland Department of Health and Mental Hygiene. Available at: www.marylandbrfss.org.

9. 2010 Maryland Behavioral Risk Factor Surveillance System. Disability Statistics. Maryland Department of Health and Mental Hygiene. Available at: www.marylandbrfss.org.

Charles County Asthma Prevalence:

Asthma is an emerging health problem in the United States and in Maryland. The problems associated with asthma have been felt at the local level as well. In 2010, approximately 12.4% of adults in Maryland and 12.2% of adults in Charles County have ever been diagnosed with asthma (2010 Maryland BRFSS). An estimated 8.4% of Maryland adults and 6.3% of Charles County adults reported that they currently have asthma (2010 Maryland BRFSS). 2010 Charles County BRFSS participants also reported that an estimated 7.3% of their children have ever been diagnosed with asthma.

The 2008 Asthma in Maryland Report found that approximately 8196 people or 8.1% of Charles County residents currently have asthma. This county asthma prevalence is comparable to the state asthma prevalence of 8.5% of the total population. The Charles County asthma prevalence is slightly higher than the other neighboring jurisdictions within Southern Maryland: Calvert at 7.3% and St Mary's at 7.1%.

The report goes on to state that approximately 15,034 people in Charles County have suffered from asthma at some point in their life. That represents 14.8% of the total county population. Lifetime prevalence for asthma in Charles County is higher than the state prevalence as well as the neighboring Southern Maryland jurisdictions. As seen in the table below, the lifetime prevalence of asthma in Charles County (14.8%) is higher than the state average (13.1%) for the same time period.

However, the rate of mortality from asthma in Charles County is only slightly lower than the state asthma mortality rate. The Charles County 03-07 mortality rate was comparable to the St. Mary's County rate; however, the 2003-2007 asthma mortality rate for Calvert County was higher.

Asthma Lifetime and Current Prevalence, 2005-2007, Three year Average, Charles, Calvert, and St. Mary's Counties and Maryland

Jurisdiction	Lifetime Prevalence 2005-2007	Current Prevalence 2005-2007	2003-2007 Average Mortality Rate per 1,000,000
Charles County	14.8	8.1	11.9
Calvert County	10.7	7.3	15.4
St Mary's County	10.1	7.1	11.5
Maryland	13.1	8.5	13.8

In Maryland and Charles County, complications due to asthma account for a large number of emergency department visits and hospitalizations each year. The 2007 emergency visit rate in Charles County for asthma-associated problems was 51.7 per 10,000. This is significantly lower than the state rate of 78.7 ($p<0.05$). The 2007 hospitalization rate for asthma-associated problems in Charles County was 13.1 per 10,000. This rate is significantly lower than the hospitalization rate for Maryland of 18.5 ($p<0.05$) and also lower than the neighboring jurisdictions.

2007 Asthma Emergency Department Visit and Hospitalization Rates, Charles, Calvert, St Mary's Counties and Maryland

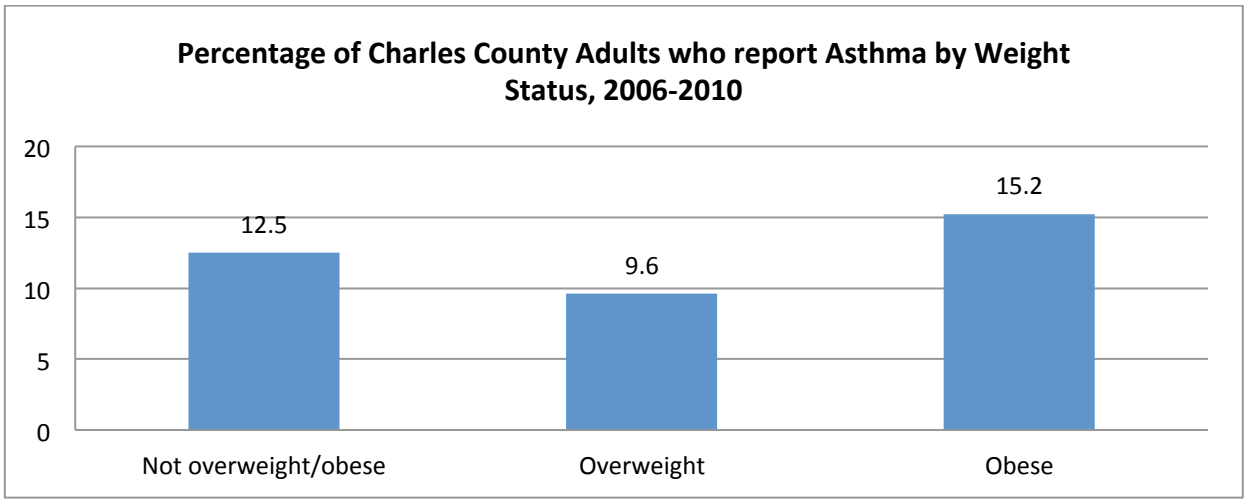
Jurisdiction	ED Visit Rate per 10,000	Hospitalization Rate per 10,000
Charles County	51.7	13.1
Calvert County	49.9	15.7
St. Mary's County	54.8	18.7
Maryland	78.7	18.5

Using the Maryland Assessment Tool for Community Health (MATCH) data to look for trends, the proportion of Marylanders hospitalized with asthma as a co-morbidity has increased from 2000-2008.

Increasing Proportion of Hospital Discharges with Asthma as a Co-morbid Condition 2000-2008

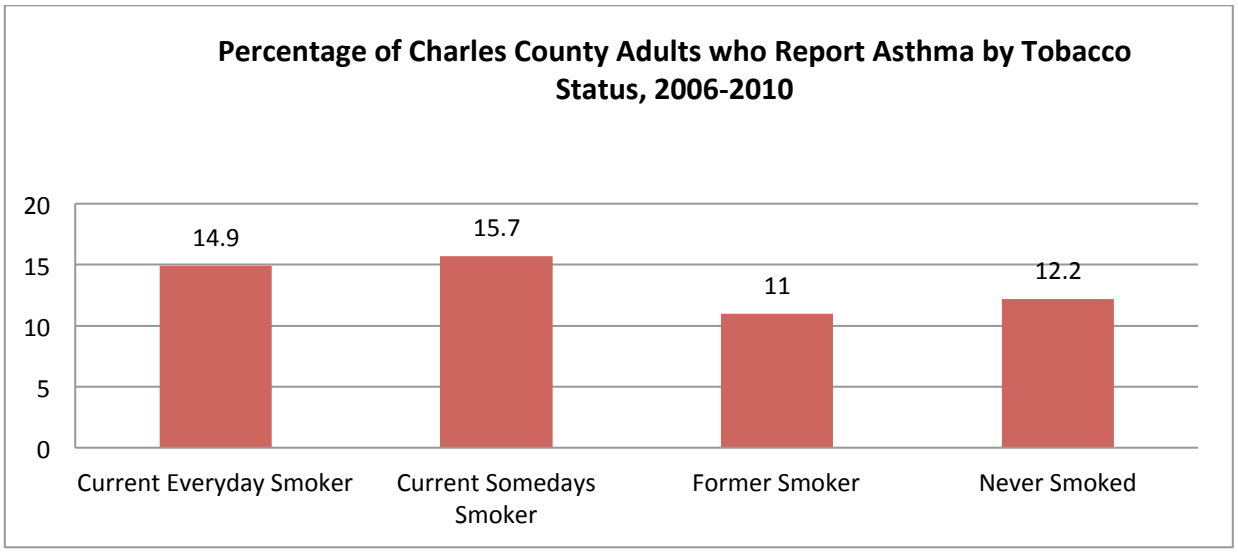
	Discharge Year												Total							
	2000		2001		2002		2003		2004		2005		2006		2007		2008		Hosp. Discharge	
Asthma	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	Total	Total %
No	572,048	95	590,717	94.4	602,977	93.9	611,027	93.3	606,879	92.8	630,641	91.9	640,858	91.5	645,695	91.3	656,750	91.2	5,557,592	92.8
Yes	30,262	5	34,852	5.6	38,832	6.1	43,742	6.7	47,011	7.2	55,675	8.1	59,214	8.5	61,402	8.7	63,098	8.8	434,088	7.2
Total	602,310	100	625,569	100	641,809	100	654,769	100	653,890	100	686,316	100	700,072	100	707,097	100	719,848	100	5,991,680	100

The prevalence of asthma has been found to be associated with various lifestyle factors. One of those factors is weight status. Asthma was most prevalent among obese adults.



Source: 2006-2010 Maryland BRFSS, Maryland DHMH

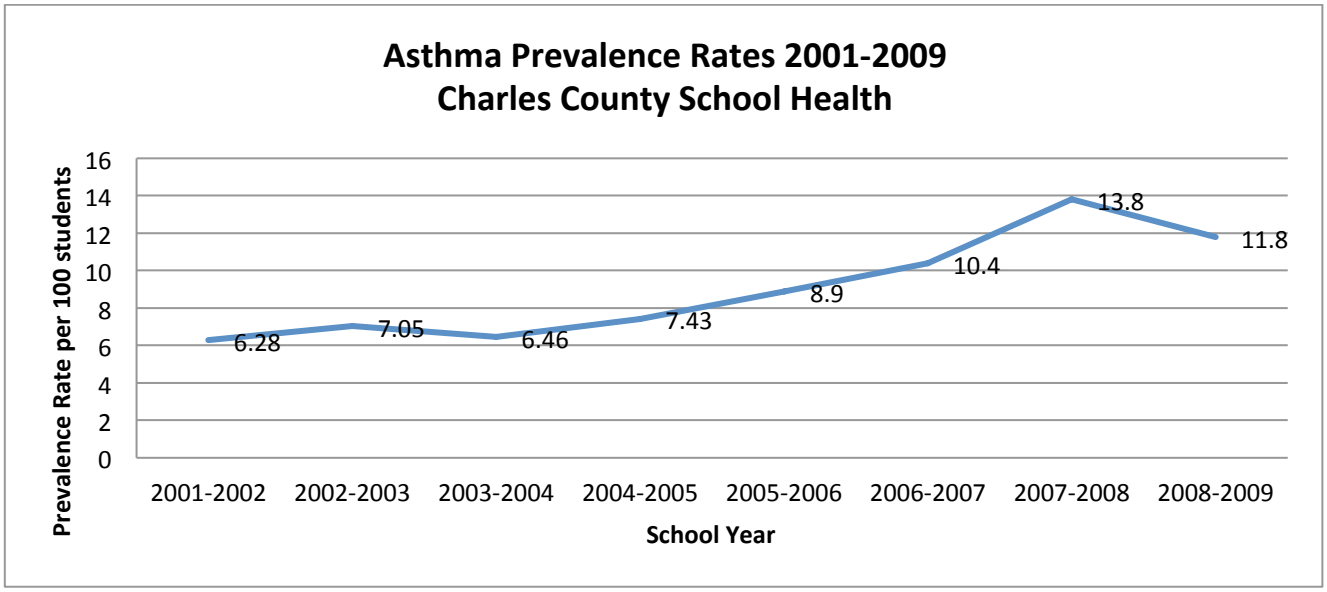
Another risk factor known to increase the prevalence of asthma is smoking. 2006-2010 Maryland BRFSS data for Charles County shows that the percentages of current everyday smokers and some day's smokers who report having been diagnosed with asthma is higher than the percentage of asthma reported by former smokers and those who have never smoked.



Source: 2006-2010 Maryland BRFSS, Maryland DHMH

Charles County Department of Health: School health Program: Juvenile Asthma:

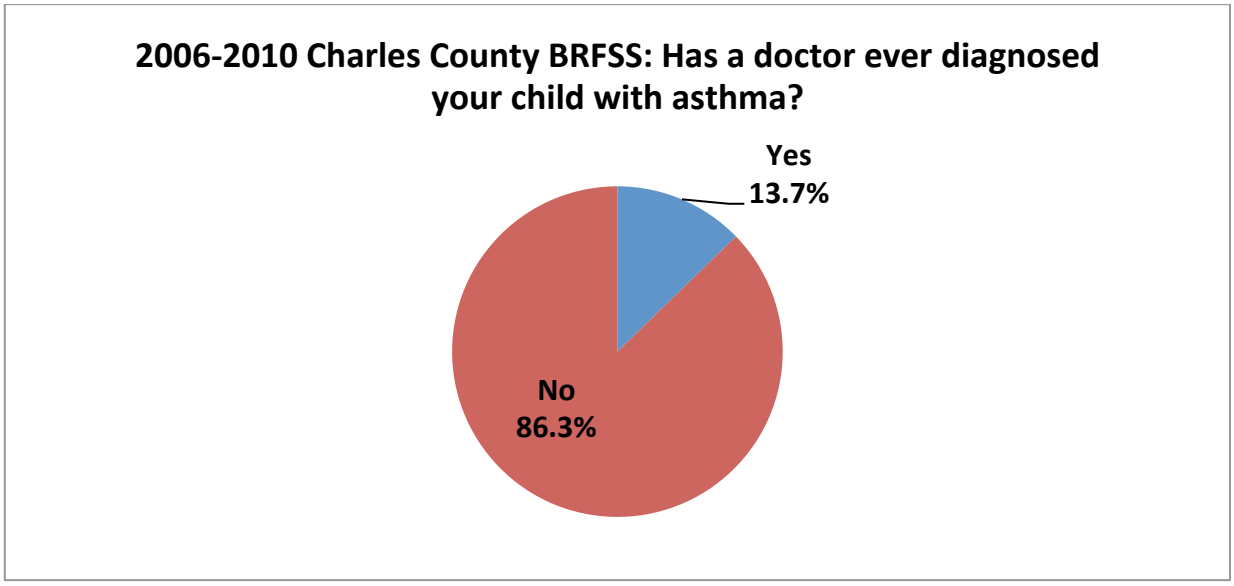
The rate of children presenting in the Charles County school system has continued to increase steadily though the last 8 years. The rate more than doubled between the 2001-2002 school year to the 2007-2008 school year (6.28 vs. 13.8).



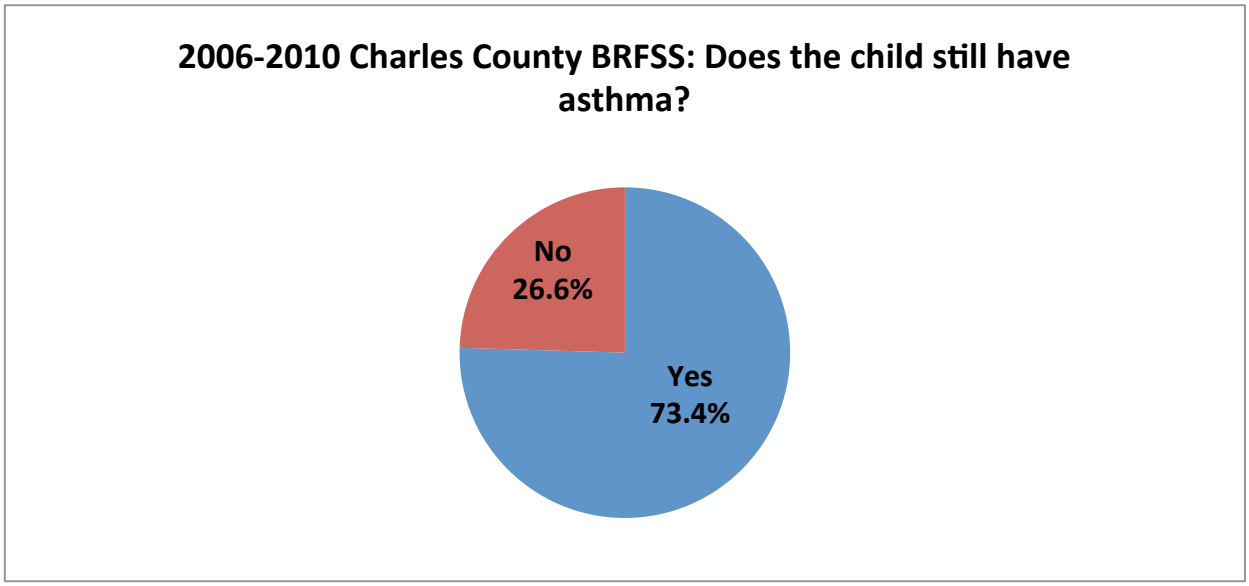
Source: 2001-2009 Charles County Department of Health: School Health Program

The 2006-2010 Maryland Behavioral Risk Factor Surveillance System (BRFSS) asks participants if they have any children under the age of 18 who have ever been diagnosed with asthma and if those children still have asthma. Charles County specific data for those questions is presented below.

One in every seven Charles County BRFSS participants (13.7%) reported that they have a child who has been diagnosed with asthma.



The majority of those children who were diagnosed with asthma are still currently living with the chronic condition (73.4%).



The Maryland Health Services Cost Review Commission (HSCRC) reviews all hospital data to determine the economic burden of chronic conditions on Maryland. The 2006 asthma emergency department (ED) visit rate for children 5 to 17 years was 90.7 per 10,000 population. The ED visit rate for asthma among

children (< 18 years) in Charles County was approximately 31% lower than the ED visit rate for children in Maryland as a whole (140.6 vs. 150.6).

The 2006 hospitalization rate due to asthma (per 10,000) for children aged 5 to 17 years was 11.5. The hospitalization rate for asthma in children less than 18 years in Charles County was approximately 38% lower than the Maryland state rate (15.0 vs. 24.1).

The 2006 average cost per asthma ED visit for children 0-17 years was $504 for Charles County and $588 for Maryland. The 2006 average cost of asthma hospitalization for children 0-17 years was $2659 for Charles County and $4625 for Maryland (2006 Maryland HSCRC).

Asthma References:

1. 2010 Asthma Prevalence. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at: www.marylandbrfss.org.

2. 2008 Maryland and Charles County Asthma Statistics. Asthma in Maryland Report. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/pdf/mch/asthma_control/AsthmaReport2008.pdf.

3. 2000-2008 Maryland and Charles County Asthma Expenditures. Maryland Assessment Tool for Community Health. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/match.cfm.

4. 2006-2010 Charles County Asthma Adult and Child Prevalence and Co-Morbidities. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at: www.marylandbrfss.org.

5. 2001-2009 Charles County Public School Asthma Prevalence Trends. Charles County School Health Program. Charles County Department of Health.

6. 2006 Charles County Asthma Hospitalization Expenditures. Maryland Health Services Cost Review Commission. Available at: http://www.hscrc.state.md.us/.

Injury Data Analysis: 2008 Injuries in Maryland and 2009 MD Vital Statistics Reports

Introduction:

Injury is a leading cause of death for Charles County residents and the leading cause of death for Maryland residents under the age of 24 years. Accidents were the fourth leading cause of death for Charles County residents in 2009. Fatal and non-fatal injuries contribute enormous costs to the individual, families, and society. Millions were spent in 2008 for hospitalization charges and emergency room visits.

Charles County had 12,778 injury-related emergency room visits in 2009. This makes up only 2.5% of the total Maryland emergency department visits for injuries for the year. The all-age average rate of injury-related ED visits in Charles County was 9,078 per 100,000 population. This rate is lower than the Maryland state average of 9135 is and one of the lowest rates in the state of Maryland (17th out of 24 jurisdictions).

When examining rates for injury-related ED visits, the highest rates for Charles County are seen for falls. The Charles County injury rate with the biggest disparity from the state rate is for motor vehicle traffic incidents (1486.2 vs. 1325.5).

Rate per 100,000 for the 5 Leading Causes of Injury-related ED Visits, 2008

ED Injury Rate	Cut/Pierce	Fall	Motor Vehicle Incidents	Overexertion	Struck by/against
Charles County	682.7	2088.6	1486.2	1091.9	1480.5
Maryland	700.6	2359.7	1325.5	964.3	1496.0

Charles County residents experienced 970 hospitalizations due to injuries in 2008. This makes up 1.6% of the total Maryland hospitalizations for injuries for the year. Charles County had one of the lowest injury-related hospitalization rates for the state of Maryland (21th out of 24 jurisdictions). The Charles County injury-related hospitalization rate (689.1 per 100,000 population) was lower than the Maryland state average rate (1067.5 per 100,000 population). Charles County injury-related hospitalization rates for the top 5 leading causes of injury are all below the Maryland state average rates. In Charles County, the injury with the highest injury hospitalization rate was a fall.

Rate per 100,000 for the 5 Leading Causes of Injury-related Hospitalizations, 2008

ED Injury Rate	Cut/Pierce	Fall	Motor Vehicle Incidents	Overexertion	Struck by/against
Charles County	19.2	289.1	99.5	89.5	26.3
Maryland	38.8	438.4	109.8	142.0	42.3

There were 98 injury-related deaths in Charles County for 2008. Those deaths account for 2.0% of the total Maryland injury-related deaths for the year. Charles County had one of the highest injury-related death rates for the state of Maryland (9th out of 24 jurisdictions).

Methodology:

Data on injury-related emergency department visits were derived from the Health Services Cost Review Commission (HSCRC) Ambulatory Care Database. Information on injury-related hospitalizations came from the HSCRC Hospital Discharge Database. Queries were performed for the specific International Classification of Disease, Version 10 (ICD-10) codes pertaining to injuries. Data on injury-related deaths were extracted from the Vital Statistics Mortality Database. Data on risk factors known to increase the risk of injury have been extracted from the Maryland Behavioral Risk Factor Surveillance System.

Leading Causes of Injury in Charles County:

During 2008, the top 5 leading causes of injury that:

- ***Resulted in a visit to the emergency room were***:

1. Fall
2. Motor Vehicle Traffic Incident
3. Being struck by or against a foreign object or person
4. Other/Unspecified
5. Overexertion

- ***Resulted in a hospital stay were***:

1. Fall
2. Other/Unspecified
3. Motor Vehicle traffic incident
4. Poisoning
5. Being struck by or against a foreign object or person.

- ***Resulted in death were***:

1. Motor Vehicle Traffic Incident
2. Firearm
3. Poisoning
4. Suffocation and Fall

Leading Causes of Injuries by Age:

The primary causes of injuries differ for individuals across the various age groups. Of injuries resulting in an emergency room visit, children ages 5-24 were more likely to be struck by or against a foreign object or person. Those aged 25-44 years were most likely to visit the emergency department due to a motor vehicle incident, and those 45 years and older and children under the age of 4 years were most likely due to a fall.

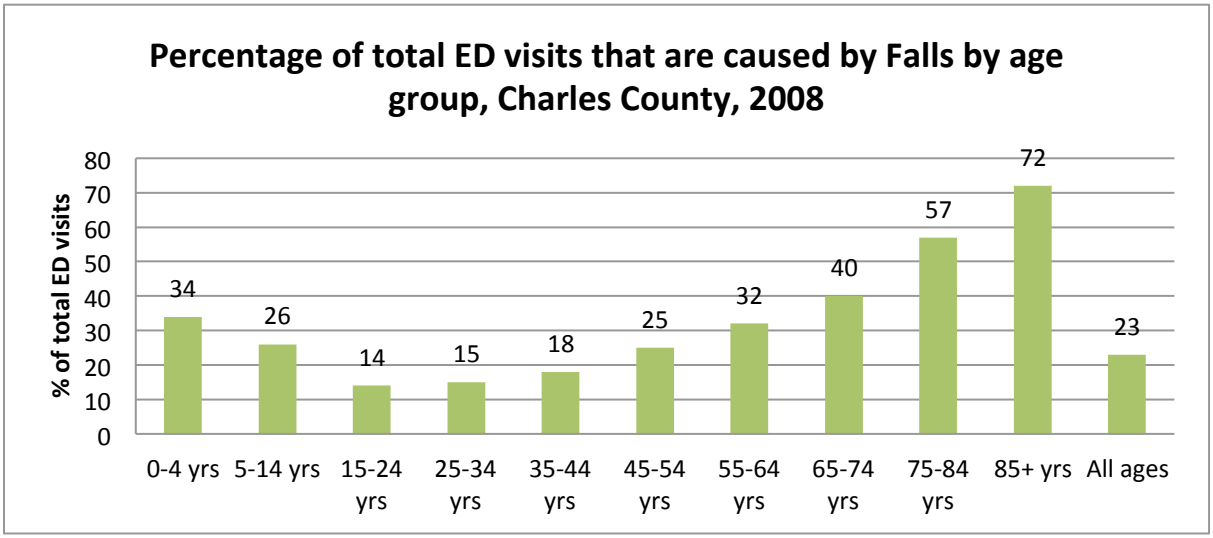
Top 5 leading cause of injury related emergency room visits by age, Charles County, Maryland, 2008

Rank	**1**	**2**	**3**	**4**	**5**
0-4 years	Fall	Struck by against	Other	Motor Vehicle Incident	Natural Environment
5-14 years	Struck by/against	Fall	Other	Overexertion	Motor Vehicle Incident
15-24 years	Struck by/against	Motor Vehicle Incident	Other	Fall	Overexertion
25-34 years	Motor Vehicle Incident	Other	Struck by/against	Overexertion	Fall
35-44 years	Motor Vehicle Incident	Fall	Other	Overexertion	Struck by/against
45-54 years	Fall	Motor Vehicle Incident	Overexertion	Other	Struck by/against
55-64 years	Fall	Motor Vehicle	Other	Overexertion	Struck by/against

		Incident			
65-74 years	Fall	Motor Vehicle Incident	Other	Cut/Pierce	Overexertion
75-84 years	Fall	Other	Motor Vehicle Incident	Cut/Pierce	Struck by/against
85 + years	Fall	Struck by/against	Other	Not available	Not available
All ages	Fall	Motor Vehicle Incident	Struck by/against	Other	Overexertion

Not available: To preserve patient confidentiality, case counts under 6 are not displayed.

When all ages are combined, falls are the number 1 cause of and account for 23% of the total injury-related ED visits in 2008. Individuals 15-24 years of age had the smallest percentage of fall-related ED visits, and individuals over the age of 85 years had the largest percentage of fall-related ED visits. The graph below depicts the changes in the percentage of fall-related ED visits by age group.



# of Injury-Related ED Visits by Cause of Injury and Age, Charles County, 2008

Cause of Injury- ED Visits	Total					Age (in years)					
		0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
All	12778	1004	1943	2383	2141	2052	1611	826	401	273	144
Cut/Pierce	961	40	112	204	186	168	137	61	35	18	0
Drowning	6	#	0	#	#	#	#	0	0	0	0
Fall	2940	340	497	327	321	366	402	266	162	155	104
Fire/burn	163	32	18	22	31	28	18	#	7	#	0
Firearm	6	0	0	#	#	#	0	#	0	0	0
Machinery	49	#	0	7	9	12	8	#	#	#	#
Motor Vehicle Traffic	2092	83	158	494	442	433	267	135	50	25	#
Natural Environment	576	70	86	84	73	105	82	36	27	9	#
Other/ Unspecified	1901	155	243	333	371	352	249	114	45	28	11
Overexertion	1537	38	194	290	325	287	252	102	33	12	#
Pedal cyclist	107	#	68	18	6	#	#	#	0	#	0
Pedestrian	10	0	#	#	0	#	#	0	#	0	0
Poisoning	239	34	26	56	31	34	26	16	6	7	#
Struck by/ against	2084	197	506	521	329	243	155	80	28	13	12
Suffocation	11	#	#	0	#	#	0	#	0	#	0
Transport	96	#	29	22	13	13	9	#	#	0	0

# denotes cell counts were less than 6 records and data was excluded to preserve confidentiality.

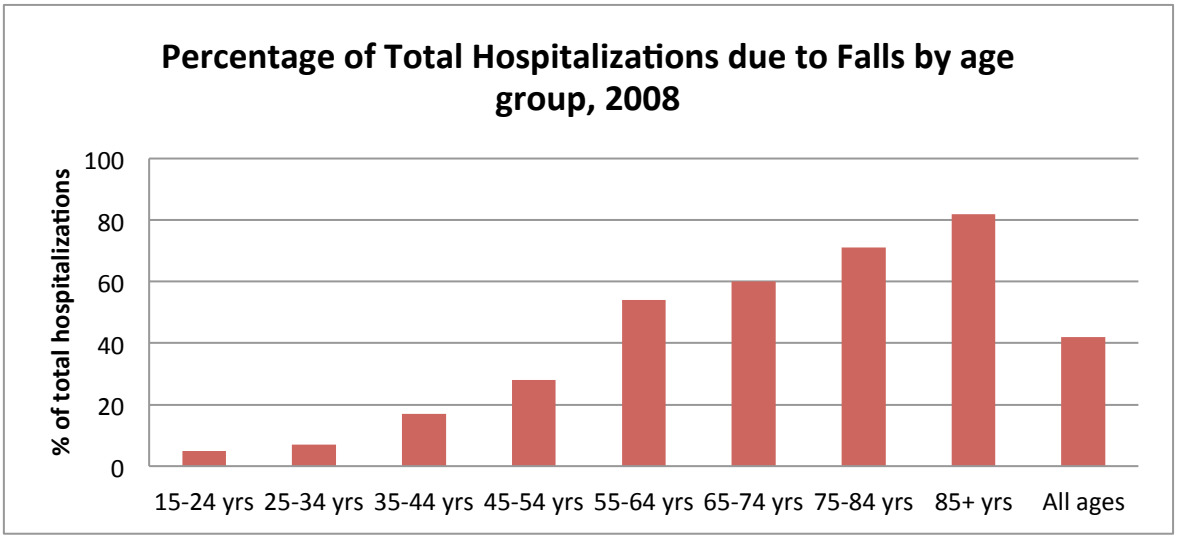
The age groups 45-54 years and 75-84 years experienced the largest number of injury-related hospitalizations. The main cause of injury-related hospitalization for the 45-54 and 75-84 age groups was a fall. The cause of injury leading to the greatest number of hospitalizations was a fall. For those being hospitalized due to injuries, adults 45 years and older were most likely suffering from a fall. Those aged 15-24, 25-34, and 35-44 years were hospitalized most for due motor vehicle incidents.

Top 5 leading causes of injury-related hospitalizations by age, Charles County, Maryland, 2008

Rank	**1**	**2**	**3**	**4**	**5**
0-4 years	NA	NA	NA	NA	NA
5-14 years	Other	NA	NA	NA	NA
15-24 years	Motor Vehicle Incident	Poisoning	Other	Struck by/against	Cut/Pierce
25-34 years	Motor Vehicle Incident	Poisoning	Other	Fall	NA
35-44 years	Motor Vehicle Incident	Other	Poisoning	Fall	Struck by/against
45-54 years	Fall	Other	Poisoning	Motor Vehicle Incident	Struck by/against
55-64 years	Fall	Other	Poisoning	Motor Vehicle Incident	NA
65-74 years	Fall	Poisoning	Motor Vehicle Incident	Other	NA
75-84 years	Fall	Other	Poisoning	NA	NA
85 + years	Fall	Other	NA	NA	NA
All ages	Fall	Other	Motor Vehicle Incident	Poisoning	Struck by/against

NA: Not Available because data could not be determined. Cell counts were less than 6 records and therefore data was excluded to preserve confidentiality.

Falls are the number one cause of injury for all ages combined. Falls also account for the majority of injury-related hospitalizations for all ages combined and for individuals over the age of 55 years. The smallest percentage of fall-related hospitalizations was seen in the 15-24 age group, and the greatest percentage of fall-related hospitalizations was seen in the 85+ population (data range 5.1%-82.1%).



Number of Injury-Related Hospitalizations by Cause of Injury and Age: Charles County, 2008

Cause of Injury-Hospitalization	Total	Age (in years)									
		0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
All	970	6	14	117	86	132	134	105	96	157	123
Cut/Pierce	27	#	#	7	#	7	#	#	#	#	0
Drowning	0	0	0	0	0	0	0	0	0	0	0
Fall	407	#	#	6	6	23	38	57	57	111	101
Fire/burn	#	0	0	0	0	0	#	#	#	#	0
Firearm	6	0	0	0	#	#	#	#	0	0	0
Machinery	#	0	0	0	0	0	#	#	0	0	0
Motor Vehicle	140	0	0	44	31	30	12	7	9	#	#

Traffic											
Natural Environment	29	#	0	6	#	6	6	#	#	#	0
Other/ Unspecified	162	#	6	15	12	28	37	17	7	27	12
Overexertion	9	0	0	#	0	#	#	#	#	#	#
Pedal cyclist	#	0	#	#	0	0	#	0	0	0	0
Pedestrian	0	0	0	0	0	0	0	0	0	0	0
Poisoning	126	0	0	23	23	25	21	11	12	8	#
Struck by/ against	37	0	0	12	#	8	7	#	#	#	#
Suffocation	7	0	0	#	0	#	#	0	#	0	#
Transport	10	0	#	#	#	#	#	#	0	#	0

# denotes cell counts were less than 6 records and data was excluded to preserve confidentiality.

The greatest number of injury-related deaths was seen in the 15-24 years age group. Half of those deaths were due to motor vehicle traffic incidents. Motor vehicle traffic incidents were the number cause of injury-related death for all ages combined, accounting for 29% of all injury-related deaths.

# of Injury-Related Deaths by Cause of Injury and Age: Charles County, 2008

Cause of Injury	Total	Ages (Years)									
Death		0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
All	**98**	**1**	**0**	**23**	**16**	**17**	**17**	**11**	**5**	**3**	**5**
Cut/Pierce	1	0	0	1	0	0	0	0	0	0	0
Drowning	4	0	0	0	1	1	1	0	1	0	0
Fall	7	0	0	0	0	1	0	2	1	2	1
Fire/flame	3	0	0	0	1	1	0	1	0	0	0
Firearm	22	0	0	6	1	6	5	3	0	0	1

Machinery	0	0	0	0	0	0	0	0	0	0	0
Motor Vehicle Traffic	28	1	0	11	4	2	4	2	3	0	1
Natural Environment	1	0	0	0	0	0	1	0	0	0	0
Other/Unspecified	5	0	0	0	2	0	1	0	0	1	1
Overexertion	0	0	0	0	0	0	0	0	0	0	0
Other pedal cyclist	0	0	0	0	0	0	0	0	0	0	0
Other pedestrian	0	0	0	0	0	0	0	0	0	0	0
Poisoning	17	0	0	1	7	4	4	1	0	0	0
Struck by/against	0	0	0	0	0	0	0	0	0	0	0
Suffocation	7	0	0	3	0	1	1	1	0	0	1
Transport, other	3	0	0	1	0	1	0	1	0	0	0

Leading Cause of Injury by Gender:

The top three injuries that lead to emergency room visits for men involved being struck by or against a foreign object or person, falls, and other/unspecified and for women involved falls, motor vehicle traffic incidents and other/unspecified.

Women were more likely to be suffering from a fall (1/4 of all female injury-related ED visits), and men were more likely to be struck by or against an object or person (1/5 of all male injury-related ED visits). Men had a slightly larger number of injury-related ED visits than women; however, the difference is not statistically significant (6593 for male and 6185 for female).

Male residents who were hospitalized for injuries in 2008 often suffered from a fall, motor vehicle traffic incident, or other/unspecified injury. Female residents were hospitalized for injuries such as falls, poisonings, and other/unspecified. Both men and women were hospitalized most often for falls. Men and women had fairly equal numbers of injury-related hospitalizations for 2008: 505 for men and 465 for women.

Fatal injuries had a similar pattern for men and women. Men and women both were most likely to die from a motor vehicle traffic incident injury. There were 2.4 times as many men who died from injuries sustained than women (69 vs. 29). The top three causes of injury-related death for men and women both were motor vehicle traffic incident, firearms, and poisonings.

Leading Causes of Injury by Race:

With injuries resulting in an emergency room visit, the most prevalent injuries for both White and African American residents were falls and being struck by or against a foreign object or person. White residents were more likely to visit the emergency room after sustaining a fall. African Americans were more likely to go for a motor vehicle traffic injury. Asian and Pacific Islanders and "other" race were most likely to visit an emergency department after a fall.

White, African American, and "Other" race residents were most likely to be hospitalized due to a fall. Falls constituted 47% of all injury-related hospitalizations for Whites, but only 32% of all injury-related hospitalizations for African Americans.

Both African Americans and Caucasians were most likely to die from a motor vehicle traffic injury. The second leading cause of injury-related death for Caucasians was poisoning and for African Americans were firearms.

Number of Injury-Related ED Visits by Cause of Injury, Gender, and Race, Charles County, 2008

Cause of Injury	Total	Gender		Race				
		Male	Female	White	African American	Asian	American Indian	Other
All	12778	6593	6185	6976	5251	93	10	401
Cut/Pierce	961	629	332	582	332	11	#	33
Drowning	6	#	#	#	0	0	0	#
Fall	2940	1279	1661	1871	938	23	#	92
Fire/Burn	163	87	76	82	72	0	0	8
Firearm	6	#	#	#	#	0	0	0
Machinery	49	46	#	37	9	0	0	#
Motor Vehicle Traffic	2092	916	1176	820	1174	18	#	73
Natural Environment	576	286	290	338	211	#	#	21
Other/Unspecified	1901	1006	895	969	848	16	#	60
Overexertion	1537	751	786	865	624	6	0	37

Pedal Cyclist	107	75	32	69	31	0	0	#
Pedestrian	10	#	6	#	#	0	0	0
Poisoning	239	104	135	137	91	#	0	6
Struck by/against	2084	1327	757	1118	885	15	0	58
Suffocation	11	#	6	6	#	0	0	0
Transport	96	69	27	69	23	0	0	#

# denotes cell counts were less than 6 records and data was excluded to preserve confidentiality.

Number of Injury-Related Hospitalizations by Cause of Injury, Gender, and Race, Charles County, 2008

Cause of Injury	Total	Gender		Race				
		Male	Female	White	African American	Asian	American Indian	Other
All	970	505	465	655	280	#	0	#
Cut/Pierce	27	18	9	18	9	0	0	0
Drowning	0	0	0	0	0	0	0	0
Fall	407	142	265	305	90	0	0	12
Fire/Burn	#	#	#	#	#	0	0	0
Firearm	6	#	#	#	0	#	0	0
Machinery	#	#	0	#	#	0	0	0
Motor Vehicle Traffic	140	98	42	73	63	0	0	#
Natural Environment	29	21	8	17	11	0	0	#
Other/Unspecified	162	108	54	102	52	#	0	7
Overexertion	9	7	#	#	#	0	0	0
Pedal Cyclist	#	#	0	#	#	0	0	0
Pedestrian	0	0	0	0	0	0	0	0

Poisoning	126	59	67	87	32	#	0	6
Struck by/against	37	26	11	23	12	0	0	#
Suffocation	7	#	#	6	#	0	0	0
Transport	10	9	#	10	0	0	0	0

#: To preserve patient confidentiality, cell sizes less than 6 are not displayed.

Table 8: Number of Injury-Related Deaths by Cause of Injury, Gender, and Race, Charles County, 2008

Cause of Injury	Total	Gender		Race				
		Male	Female	White	African American	Asian	American Indian	Other
All	98	69	29	61	36	0	1	0
Cut/Pierce	1	1	0	1	0	0	0	0
Drowning	4	2	2	3	1	0	0	0
Fall	7	4	3	5	2	0	0	0
Fire/Burn	3	3	0	1	2	0	0	0
Firearm	22	16	6	12	10	0	0	0
Machinery	0	0	0	0	0	0	0	0
Motor Vehicle Traffic	28	20	8	16	12	0	0	0
Natural Environment	1	1	0	0	0	0	1	0
Other/Unspecified	5	5	0	4	1	0	0	0
Overexertion	0	0	0	0	0	0	0	0
Pedal Cyclist	0	0	0	0	0	0	0	0
Pedestrian	0	0	0	0	0	0	0	0
Poisoning	17	11	6	16	1	0	0	0
Struck by/against	0	0	0	0	0	0	0	0

Suffocation	7	5	2	2	5	0	0	0
Transport	3	1	2	1	2	0	0	0

# denotes cell counts were less than 6 records and data was excluded to preserve confidentiality

Intent of Injuries:

More than 95% of the injury-related emergency department visits for 2008 were unintentional; 3% were assault; and 0.7% was self-inflicted. For those injuries that were classified as assault, the causes of injury were other/unspecified, cut/pierce, and being struck by or against a foreign object or person. Self-inflicted injuries were due to poisonings, cut/pierce, and other/unspecified causes.

Individuals in the 15-24 years age group were the most likely to sustain an assault injury as well as a self-inflicted injury that lead to an emergency room visit. Though the numbers are spread throughout all age groups for unintentional, the 15-24 age group also sustained the largest number of unintentional injuries requiring ED attention.

The numbers of unintentional injuries were similar for both males and females. Males were more likely to present at the emergency department with assault injuries; women were more likely to present at the emergency department with self inflicted injuries.

In terms of race, Caucasians displayed higher numbers of emergency room visits for unintentional injuries, but they also represent a large proportion of the Charles County population. African Americans experienced more injuries due to assault than any other race. White residents were much more likely to present to the emergency department with self inflicted injuries than any other race.

Number of Injury-Related Emergency Department Visits by Manner, Cause of Injury, Age, Gender, and Race, Charles County, 2008

CAUSE OF INJURY	TOTAL	MANNER				
		UNINTENTIONAL	ASSAULT	SELF-INFLICTED	LEGAL INT.	UNDETERMINE
ALL	**12,778**	**12,196**	**403**	**99**	**9**	**71**
CUT/PIERCE	961	927	12	19		#
DROWNING	6	6	0	0	0	0
FALL	2,940	2,938	0	#	0	#
FIRE/BURN	163	161	0	0	0	#
FIREARM	6	#	0	#	0	#
MACHINERY	49	49	0	0	0	0
MOTOR VEHICLE TRAFFIC	2,092	2,090	#	0	0	0
NATURAL ENVIRONMENT	576	576	0	0	0	0
OTHER/UNSPECIFIED	1,901	1,723	133	25	#	17
OVEREXERTION	1,537	1,537	0	0	0	0
OTHER PEDAL CYCLIST	107	107	0	0	0	0
OTHER PEDESTRIAN	10	10	0	0	0	0
POISONING	239	140	0	52	#	46
STRUCK BY/AGAINST	2,084	1,824	255	0	#	0
SUFFOCATION	11	8	#	#	0	#
OTHER TRANSPORT	96	96	0	0	0	0
AGE						
0-4 YRS	1,004	989	#	#		9
5-14 YRS	1,943	1,898	30	6	0	9
15-24 YRS	2,383	2,180	139	41	#	20
25-34 YRS	2,141	2,007	105	17	#	8
35-44 YRS	2,052	1,957	71	13	#	10
45-54 YRS	1,611	1,542	47	14	#	7
55-64 YRS	826	811	6	#	0	#
65-74 YRS	401	399	0	#	0	0
75-84 YRS	273	271	0	0	0	#
85+ YRS	144	142	0	0	0	#
SEX						
MALE	6,593	6,257	253	45	8	30
FEMALE	6,185	5,939	150	54	#	41
UNKNOWN	0	0	0	0	0	0
RACE						
WHITE	6,976	6,669	189	69		49
AFRICAN AMERICAN	5,251	4,996	203	22	9	21
ASIAN/PACIFIC ISLANDER	93	87	#	#	0	#
AMERICAN INDIAN/ ESKIMO/ ALEUT	10	10	0	0	0	0
OTHER	401	389	7	#	0	0
UNKNOWN	47	45	#	0	0	0

# denotes that cell counts were less than 6 and data has been excluded for patient confidentiality.

Almost 86% of injury-related hospitalizations were unintentional, and roughly 5% were assaults. Over 8% of injury-related hospitalizations were self-inflicted. Injuries associated with being poisoned or cut/pierced were more likely to be self-inflicted. On the contrary, all fall, natural environment, local transport, overexertion, and pedal cyclist related injuries occurred unintentionally. Injuries associated with being struck by or against a foreign object or person were mostly likely to be assault.

The greatest number of unintentional injury-related hospitalizations was in the age group 75-84 years. The 15-24 year old age group appeared to have the greatest number of self-inflicted injuries. The majority of the ED visits due to assault injuries were in the 35-44 years age group.

Hospitalizations due to unintentional injuries seem to affect both genders equally. However, males were more likely to be hospitalized due to an assault, whereas, females were more likely to be hospitalized due to a self-inflicted injury.

Caucasians were more likely to seek treatment for unintentional and self inflicted injuries at an emergency department than African Americans. African Americans and Caucasians went in equal amounts to the emergency department for assault injuries.

Number of Injury-Related Hospitalizations by Manner, Cause of Injury, Age, Gender, and Race, Charles County, 2008

CAUSE OF INJURY	TOTAL*	MANNER				
		UNINTENTIONAL	ASSAULT	SELF-INFLICTED	LEGAL INT.	UNDETERMINE
ALL	**970**	**835**	**48**	**78**	**0**	**9**
CUT/PIERCE	27	10	10	7	0	0
DROWNING	0	0	0	0	0	0
FALL	407	407	0	0	0	0
FIRE/BURN	#	#	0	0	0	0
FIREARM	6	#	#	0	0	0
MACHINERY	#	#	0	0	0	0
MOTOR VEHICLE TRAFFIC	140	138	#	0	0	#
NATURAL ENVIRONMENT	29	29	0	0	0	0
OTHER/UNSPECIFIED	162	142	17	#	0	#
OVEREXERTION	9	9	0	0	0	0
OTHER PEDAL CYCLIST	#	#	0	0	0	0
OTHER PEDESTRIAN	0	0	0	0	0	0
POISONING	126	51	0	69	0	6
STRUCK BY/AGAINST	37	21	16	0	0	0
SUFFOCATION	7	6	0	#	0	0
OTHER TRANSPORT	10	10	0	0	0	0
AGE						
0-4 YRS	6	6	0	0	0	0
5-14 YRS	14	12	#	0	0	0
15-24 YRS	117	84	11	20	0	#
25-34 YRS	86	56	11	18	0	#
35-44 YRS	132	98	13	18	0	#
45-54 YRS	134	113	9	11	0	#
55-64 YRS	105	97	#	#	0	#
65-74 YRS	96	94	0	#	0	0
75-84 YRS	157	153	0	#	0	0
85+ YRS	123	122	0	0	0	#
SEX						
MALE	505	425	42	34	0	#
FEMALE	465	410	6	44	0	#
UNKNOWN	0	0	0	0	0	0
RACE						
WHITE	655	571	22	55	0	7
AFRICAN AMERICAN	280	238	22	19	0	#
ASIAN/PACIFIC ISLANDER	#	#	#	#	0	0
AMERICAN INDIAN/ ESKIMO/ ALEUT	0	0	0	0	0	0
OTHER	32	25	#	#	0	#

# denotes cell counts were less than 6 records and data was excluded to preserve confidentiality.

Only 52% of injury-related deaths were unintentional. Deaths by firearms were all classified as a homicide or suicide. Deaths from falls, drowning, natural environment, and transport were all unintentional.

Deaths due to unintentional injuries affect all populations, regardless of age. All seem to be affected; however, those aged 15-24 years had the greatest number of unintentional injuries. Suicide also seemed to affect most age groups; however, the highest number of suicide deaths occurred in the 45-54 year old age group. Homicide deaths, on the other hand, occurred in those aged 15-54 years, with those 15-24 years experiencing the greatest number of homicide deaths.

Men were more likely to be affected by suicide, unintentional, and homicide than women. Whites were more likely to be killed by suicidal and unintentional injuries than African Americans, but African Americans were more likely to die from homicidal injuries.

Number of Injury-Related Deaths by Manner, Cause of Injury, Age, Gender, and Race, Charles County, 2008

CAUSE OF INJURY	TOTAL	MANNER				
		UNINTENTIONAL	SUICIDE	HOMICIDE	UNDETERMINED	LEGAL INT.
ALL	**98**	**51**	**20**	**13**	**14**	**0**
CUT/PIERCE	1	0	0	1	0	0
DROWNING	4	4	0	0	0	0
FALL	7	7	0	0	0	0
FIRE/HOT OBJECT	3	2	1	0	0	0
FIREARM	22	0	13	9	0	0
MACHINERY	0	0	0	0	0	0
MOTOR VEHICLE TRAFFIC	28	27	1	0	0	0
NATURAL ENVIRONMENT	1	1	0	0	0	0
OTHER/UNSPECIFIED	5	3	0	2	0	0
OVEREXERTION	0	0	0	0	0	0
OTHER PEDAL CYCLIST	0	0	0	0	0	0
OTHER PEDESTRIAN	0	0	0	0	0	0
POISONING	17	1	2	0	14	0
STRUCK BY/AGAINST	0	0	0	0	0	0
SUFFOCATION	7	3	3	1	0	0
OTHER TRANSPORT	3	3	0	0	0	0
AGE						
0-4 YRS	1	1	0	0	0	0
5-14 YRS	0	0	0	0	0	0
15-24 YRS	23	11	3	8	1	0
25-34 YRS	16	6	2	2	6	0
35-44 YRS	17	7	4	2	4	0
45-54 YRS	17	7	7	1	2	0
55-64 YRS	11	7	3	0	1	0
65-74 YRS	5	5	0	0	0	0
75-84 YRS	3	3	0	0	0	0
85+ YRS	5	4	1	0	0	0
SEX						
MALE	69	36	14	10	9	0
FEMALE	29	15	6	3	5	0
RACE						
WHITE	61	30	14	4	13	0
BLACK/AFRICAN AMERICAN	36	20	6	9	1	0
ASIAN/PACIFIC ISLANDER	0	0	0	0	0	0
NATIVE AMERICAN	1	1	0	0	0	0
OTHER	0	0	0	0	0	0
UNSPECIFIED	0	0	0	0	0	0

# denotes cell counts were less than 6 records and data was excluded to preserve confidentiality.

Injury References:

1. 2009 Charles County Injury/Accident Mortality Data. 2009 Maryland Vital Statistics Report. Maryland Department of Health and Mental Hygiene. Available at http://vsa.maryland.gov.

2. 2008 Charles County Injury-related ED Visits, Hospitalizations, and Deaths. 2008 Injuries in Maryland Report. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/pdf/ohpetup/2008_Injuries_in_Maryland.pdf.

Qualitative Data Relating to Aging, Disabilities, Asthma, and Injury:

On the long health survey, participants were asked the severity of several health issues in Charles County. Responses for several of the previously discussed health issues are presented below. These health topics received the highest percentages of people reporting no problem in Charles County and the lowest percentages of people reporting a serious problem. The community did not perceive injuries, asthma, and services for the disabled as serious problems in the county. Injury received the lowest percentage of people reporting a serious problem.

Health Issue/Condition:	Percent Reporting No Problem in county	Percent Reporting this as a problem at any level	Percent Reporting this as a serious problem
Allergies	3.7	84.2	38.6
Asthma/ Lung Disease	4.3	77.1	31.6
Services for the Disabled	10.5	70.1	28.9
Injuries	14.0	53.2	8.0
Highway Safety/Traffic Accidents	6.7	85.9	34.9

Few long survey participants reported improvements in these health topics. Injuries reported the lowest percentage of people reporting any improvements.

Health Issues where improvements have been seen	Response Count	Response Percent
Asthma/Lung Diseases	13	10.7
Traffic Accidents	16	13.2
Injuries	7	5.8

Long survey behavioral risk factor data related to Aging, Asthma, Disability, or Injury:

- 96.3% always wear a seat belt
- 39.6% always wear a helmet when riding a bike

- 69.3% always wear a helmet when riding an ATV, scooter, or motorcycle
- 11% smoke cigarettes ever
- 24.8% are exposed to secondhand smoke at home
- 46.8% always take a vitamin daily
- 17.9% always participate in daily physical activity

Asthma, Injuries, and Traffic Incidents also scored low on the short survey when participants were asked to choose the biggest health problems in Charles County. Only 8% felt that injuries were a big health problem. 21% felt that asthma was a big health problem, and 24% felt that traffic accidents and highway safety were a big health problem in Charles County.

Dementia and Alzheimer's disease were discussed in many of the focus groups, particularly the aging related and Partnerships for a Healthier Charles County focus groups. These conditions will continue to emerge as serious health concerns as the Charles County baby boomers. Concerns for those with these conditions include adequate respite care for full-time caregivers, adequate transportation to appointments, one on one communication regarding their care and questions.

Asthma was presented at as a growing health concerns, particularly in the school aged population. Parents must be taught about the condition as well as the children. The program for children with asthma in the school has been a successful one, and it is hoped that funding will continue for this program. Some of the other focus groups talked about how parents do not understand asthma issues. Asthma is a serious condition, and it is not always understood that it can be fatal.

Issues related to disabilities discussed at the focus groups included: the gaps in services for special needs children, relief for parents of handicapped children, long term care for handicapped children, and funding cuts for disability services. Focus groups also talked about transportation issues for those with disabilities, particularly the troubles on VanGo for those who are wheelchair bound.

Charles County Mental Health Data:

Maryland Behavioral Risk Factor Surveillance System:

The Maryland Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing telephone surveillance program designed to collect data on the behaviors and conditions that place Marylanders at risk for chronic diseases, injuries, and preventable infectious diseases.

The data collected are used to characterize health behaviors, ascertain the prevalence of risk factors, and target demographic groups with increased needs. Knowing the type and frequency of health issues and risky behaviors enables the public health professionals to devise and implement programs geared toward the prevention of chronic diseases, injury, and disability.

Charles County data has been extracted for 17 questions pertaining to mental health, quality of life, emotional and social support, and anxiety/depression. Charles County BRFSS data is available from 1995-2009, however, the mental health data is not available for every year queried since most modules are cycled. Approximately half of the questions examined are for the time period 2006-2007 when an extensive mental health module was asked. Several years of county level data have been combined to increase the sample size and therefore increase the validity of the conclusions. Conclusions from the Charles County BRFSS sample are used to reflect disease and risk factor trends on a county level.

Question 1: Has a doctor ever told you that you had an anxiety disorder (including acute stress, anxiety, obsessive compulsive, panic, phobia, PTSD, or social anxiety)?

From 2006-2009, approximately 12% of Charles County BRFSS respondents reported that they have been diagnosed with an anxiety disorder.

Question 1: Anxiety disorders	**Yes**	**No**	**Total**
2006-2009	86 (12%)	617 (88%)	703

Question 2: Has a doctor ever told you that you had a depressive disorder (including depression, major depression, dysthymia, or minor depression)?

From 2006-2009, approximately 14% of Charles County BRFSS respondents reported that they have been diagnosed with depression. More Charles County respondents reported having depressive disorders than anxiety disorders. The percentage reporting depressive disorders is similar to previous BRFSS surveys in 2001-2002 where 15% of the respondents reporting having a depressive disorder.

When examining a larger time period, 2001-2002 and 2006-2009, the percentage of Charles County individuals reporting depressive disorders remained the same at 14%.

Question 2: Depressive disorders	**Yes**	**No**	**Total**
2006-2009	101 (14%)	604 (86%)	705
2001-2002 & 2006-2009	150 (14%)	887 (86%)	1037
2001-2002	49 (15%)	283 (85%)	332

The 2001-2002 mental health modules went on to ask additional questions regarding depressive disorders.

Question 3: Have you ever received treatment for depression?

Approximately one-fifth of the total respondents (17%) had sought treatment for depression.

Question 3: Depression treatment	**Yes**	**No**	**Total**
2001-2002	56 (17%)	278 (83%)	334

Question 4: Who provided the treatment for your depression?

Approximately half of the individuals (45%) receiving treatment for depression went to their primary care physician for treatment, closely followed by a psychiatrist (43%). And a small percentage reported getting treatment from another mental health professional (12%).

Question 4: Provider for Depression treatment	**Primary Care Physician**	**A Psychiatrist**	**Another mental health professional**	**Total**
2001-2002	25 (45%)	24 (43%)	7 (12%)	56

During the 2006-2007 BRFSS, Charles County respondents were asked a series of 8 questions regarding their moods and emotions over the past 2 weeks that might be indicative of a mental health issue.

Question 5: Over the past two weeks, how many days have you felt bad about yourself or that you were a failure or had let yourself or your family down?

Approximately 16% of the surveyed population had felt bad about themselves at least once in the past 2 weeks. Most of those people reported feeling bad about themselves 1-2 days in the past 2 weeks.

Question 5: Feeling bad about yourself	**1-2 days**	**3-7 days**	**8-14 days**	**None**	**Total**
2006-2007	26 (9%)	13 (5%)	6 (2%)	236 (84%)	281

Question 6: Over the past 2 two weeks, how many days have you felt down, depressed, or hopeless?

Nearly one-quarter (22%) of the surveyed population reported feeling down, depressed or hopeless at least one day over the past 2 weeks.

Question 6: Feeling down, depressed, hopeless	**1-2 days**	**3-7 days**	**8-14 days**	**None**	**Total**
2006-2007	38 (14%)	18 (6%)	7 (2%)	220 (78%)	283

Question 7: Over the past two weeks, how many days have you felt tired or had little energy?

Close to two-thirds of the surveyed population (65%) reported that they felt tired or had little energy at least once during the last 2 weeks.

Question 7: Feeling tired or had little energy	**1-2 days**	**3-7 days**	**8-14 days**	**None**	**Total**
2006-2007	76 (27%)	61 (22%)	45 (16%)	99 (35%)	281

Question 8: Over the past two weeks, how many days have you had a poor appetite or eaten too much?

One third of the surveyed population reported that they have had a poor appetite or eaten too much at least once in past 2 weeks.

Question 8: Had a poor appetite/ ate too much	**1-2 days**	**3-7 days**	**8-14 days**	**None**	**Total**
2006-2007	36 (13%)	39 (14%)	18 (6%)	187 (67%)	280

Question 9: Over the past two weeks, how many days have you had little interest or pleasure doing things?

Nearly one third of the surveyed population reported that they have had little interest or please doing things at least once in the past 2 weeks.

Question 9: Had little interest or pleasure in things	**1-2 days**	**3-7 days**	**8-14 days**	**None**	**Total**
2006-2007	46 (17%)	28 (10%)	9 (3%)	196 (70%)	279

Question 10: Over the past two weeks, how many days have you had trouble concentrating on things, such as reading the newspaper or watching tv?

15% of the surveyed population reported that they have had trouble concentrating on things at least once in the past 2 weeks.

Question 10: Trouble concentrating	**1-2 days**	**3-7 days**	**8-14 days**	**None**	**Total**
2006-2007	18 (6%)	14 (5%)	11 (4%)	238 (85%)	281

Question 11: Over the past two weeks, how many days have you had trouble falling asleep or staying asleep or sleeping too much?

Nearly half of the surveyed population reported that they have had trouble falling asleep, staying asleep, or sleeping too much at least once in the past 2 weeks.

Question 11: Trouble sleeping	**1-2 days**	**3-7 days**	**8-14 days**	**None**	**Total**
2006-2007	45 (16%)	49 (17%)	41 (15%)	148 (52%)	283

Question 12: Over the past two weeks, how many days have you moved or spoken so slowly that other people could have noticed or the opposite, fidgety or restless?

Only 8% of the surveyed population reported that they have moved or spoken so slowly or been fidgety and restless at least once in the past 2 weeks.

Question 12: Moved too slow or too fast	**1-2 days**	**3-7 days**	**8-14 days**	**None**	**Total**
2006-2007	9 (3%)	7 (3%)	6 (2%)	254 (92%)	276

Question 13: Are your activities limited due to physical, emotional, or mental problems?

For the time period 2004-2009, 19% of Charles County BRFSS respondents reported that their activities are limited due to either physical, emotional, or mental problems.

Question 13: Limited activities	**Yes**	**No**	**Total**
2001-2009	377 (19%)	1629 (81%)	2006
2004-2009	326 (19%)	1352 (81%)	1678

Question 14: How often do you get the social and emotional support that you need?

Half of the respondents reported that they always get the social and emotional support that they need. A reported 8% reported that they rarely or never get the social and emotional support that they need.

Question 14: Social and emotional support	**Always**	**Usually**	**Sometimes**	**Rarely**	**Never**	**Total**
2005-2009	714 (49%)	443 (30%)	183 (13%)	50 (3%)	66 (5%)	1456

Question 15: In general, how satisfied are you with your life?

Most people reported that they are either very satisfied or satisfied with their life (96%).

Question 15: Satisfied with life	**Very satisfied**	**Satisfied**	**Dissatisfied**	**Very dissatisfied**	**Total**
2005-2009	716 (49%)	684 (47%)	52 (3%)	12 (1%)	1464

Question 16: Number of mental health days not good

Surveying nearly 3000 Charles County residents over a 15 year period, the BRFSS found that approximately one-third (31%) had experienced not good mental health days in the past month.

Question 16: Mental health days not good	**1-2 days**	**3-7 days**	**8-29 days**	**30 days**	**None**	**Total**
1995-1998	41	62	44	11	435 (74%)	593
1999-2003	69	78	55	33	425 (64%)	660
2004-2009	144	191	133	60	1160 (69%)	1688
1995-2009	254	331	232	104	2020 (69%)	2941

Question 17: How many days did poor physical or mental health problems keep you from your activities?

Surveying nearly 3000 Charles County residents over a 15 year period, the BRFSS found that approximately 19% had at least one day in the past month where physical or mental health problems kept them from their activities. This was also true for the most recent time period of 2004-2009.

Question 17: Mental/physical health keep you	1-2 days	3-7 days	8-29 days	30 days	None	Total
1995-1998	32	24	17	8	518 (86%)	599
1999-2003	45	55	28	20	520 (78%)	668
2004-2009	105	101	66	57	1363 (81%)	1692
1995-2009	182	180	111	85	2401 (81%)	2959

County vs. State Comparison for Select BRFSS Mental Health Modules:

Question 1: Has a doctor ever told you that you had an anxiety disorder (including acute stress, anxiety, obsessive compulsive, panic, phobia, PTSD, or social anxiety)?

From 2006-2009, approximately 12% of Charles County BRFSS respondents reported that they have been diagnosed with an anxiety disorder. This is similar to the 13% reported by all Maryland BRFSS respondents.

Question 1: Anxiety disorders (Charles Co)	Yes	No	Total
2006-2009	86 (12%)	617 (88%)	703
Question 1: Anxiety disorders (Maryland)	**Yes**	**No**	**Total**
2006-2009	2833 (13%)	18982 (87%)	21815

Question 2: Has a doctor ever told you that you had a depressive disorder (including depression, major depression, dysthymia, or minor depression)?

From 2006-2009, approximately 14% of Charles County BRFSS respondents reported that they have been diagnosed with depression. This is lower than the 18% reported by all Maryland BRFSS respondents for the same time period. When examining a larger time period, 2001-2002 and 2006-2009, the percentage of Charles County and Maryland individuals reporting depressive disorders remained the same (14% vs. 18%).

Question 2: Depressive disorders (Charles Co)	Yes	No	Total
2006-2009	101 (14%)	604 (86%)	705
2001-2002 & 2006-2009	150 (14%)	887 (86%)	1037
2001-2002	49 (15%)	283 (85%)	332
Question 2: Depressive disorders (Maryland)	**Yes**	**No**	**Total**
2006-2009	4024 (18%)	17793 (82%)	21817
2001-2002 & 2006-2009	5382 (18%)	24924 (82%)	30306
2001-2002	1358 (16%)	7131 (84%)	8489

Question 3: Have you ever received treatment for depression?

Approximately one-fifth of the total Charles County and Maryland respondents had sought treatment for depression.

Question 3: Depression treatment (Charles Co)	**Yes**	**No**	**Total**
2001-2002	56 (17%)	278 (83%)	334
Question 3: Depression treatment (Maryland)	**Yes**	**No**	**Total**
2001-2002	1393 (16%)	7111 (84%)	8504

Question 4: Who provided the treatment for your depression?

Charles County respondents were more likely to get treatment for their depression from their primary care physicians than Maryland respondents (45% vs. 41%). They were also less likely to see another type of mental health professional than Maryland respondents (12% vs. 18%).

Question 4: Provider for Depression treatment (Charles Co)	**Primary Care Physician**	**A Psychiatrist**	**Another mental health professional**	**Total**
2001-2002	25 (45%)	24 (43%)	7 (12%)	56
Question 4: Provider for Depression treatment (Maryland)	**Primary Care Physician**	**A Psychiatrist**	**Another mental health professional**	**Total**
2001-2002	556 (41%)	563 (41%)	252 (18%)	1371

Question 13: Are your activities limited due to physical, emotional, or mental problems?

For both time periods 2004-2009 and 2001-2009, Charles County respondents and Maryland respondents reported similar percentages of individuals (19% and 21%) who have limited activities due to physical, emotional, or mental problems.

Question 13: Limited activities (Charles Co)	**Yes**	**No**	**Total**
2001-2009	377 (19%)	1629 (81%)	2006
2004-2009	326 (19%)	1352 (81%)	1678
Question 13: Limited activities (Maryland)	**Yes**	**No**	**Total**
2001-2009	11817 (21%)	45219 (79%)	57036
2004-2009	10326 (21%)	37910 (79%)	48236

Question 14: How often do you get the social and emotional support that you need?

Half of the Charles County and Maryland BRFSS respondents reported that they always get the social and emotional support that they need. A reported 8% f Charles County respondents and 8% of Marylanders reported that they rarely or never get the social and emotional support that they need.

Question 14: Social and emotional support (Charles Co)	**Always**	**Usually**	**Sometimes**	**Rarely**	**Never**	**Total**
2005-2009	714 (49%)	443 (30%)	183 (13%)	50 (3%)	66 (5%)	1456
Question 14: Social and emotional support (Maryland)	**Always**	**Usually**	**Sometimes**	**Rarely**	**Never**	**Total**
2005-2009	20024 (48%)	13490 (32%)	5050 (12%)	1524 (4%)	1789 (4%)	41877

Question 15: In general, how satisfied are you with your life?

Most people reported that they are either very satisfied or satisfied with their life: 96% for Charles County and 5% for Maryland.

Question 15: Satisfied with life (Charles Co)	**Very satisfied**	**Satisfied**	**Dissatisfied**	**Very dissatisfied**	**Total**
2005-2009	716 (49%)	684 (47%)	52 (3%)	12 (1%)	1464
Question 15: Satisfied with life (Maryland)	**Very satisfied**	**Satisfied**	**Dissatisfied**	**Very dissatisfied**	**Total**
2005-2009	20067 (48%)	19852 (47%)	1801 (4%)	481 (1%)	42201

Question 16: Number of mental health days not good

Surveying nearly 3000 Charles County residents and nearly 83,000 Marylanders over a 15 year period, the BRFSS found that approximately one-third (31% and 32%) had experienced not good mental health days in the past month.

Question 16: Mental health days not good(Charles Co)	**1-2 days**	**3-7 days**	**8-29 days**	**30 days**	**None**	**Total**
1995-1998	41	62	44	11	435 (74%)	593
1999-2003	69	78	55	33	425 (64%)	660
2004-2009	144	191	133	60	1160 (69%)	1688
1995-2009	254	331	232	104	2020 (69%)	2941
Question 16: Mental health days not good (Maryland)	**1-2 days**	**3-7 days**	**8-29 days**	**30 days**	**None**	**Total**
1995-1998	1189	1461	1057	605	12978 (75%)	17290
1999-2003	1762	2055	1364	853	11169 (65%)	17203
2004-2009	4789	5229	3868	2389	31921 (66%)	48196
1995-2009	7740	8745	6289	3847	56068 (68%)	82689

Question 17: How many days did poor physical or mental health problems keep you from your activities?

Surveying nearly 3000 Charles County residents over a 15 year period, the BRFSS found that approximately 19% had at least one day in the past month where physical or mental health problems kept them from their activities. This was also true for the most recent time period of 2004-2009. The results were similar for Maryland for all time periods examined.

Question 17: Mental/physical health keep you (Charles Co)	**1-2 days**	**3-7 days**	**8-29 days**	**30 days**	**None**	**Total**
1995-1998	32	24	17	8	518 (86%)	599
1999-2003	45	55	28	20	520 (78%)	668
2004-2009	105	101	66	57	1363 (81%)	1692
1995-2009	182	180	111	85	2401 (81%)	2959
Question 17: Mental/physical health keep you (Maryland)	**1-2 days**	**3-7 days**	**8-29 days**	**30 days**	**None**	**Total**
1995-1998	922	806	646	398	14601 (84%)	17373
1999-2003	1228	1030	718	471	13916 (80%)	17363
2004-2009	3109	2939	2503	1672	38266 (79%)	48489
1995-2009	5259	4775	3867	2541	66783 (80%)	83225

Health Professional Shortage Areas (HPSA) for Mental Health Services in Charles County, Maryland

As of February 2011, Charles County is a federally designated health professional shortage area (HPSA) for mental health services. The whole county is designated as a HPSA, not just one population or location within the county. There are currently 16 full time equivalent non-Federal agency mental health providers serving the county (FTE). It is estimated that a total of 1 FTE provider is needed in the county to remove the designation.

The Charles County HPSA score for mental health is 14. The National Health Services Corps uses a scaling system from 1-25 to determine priorities for assignment of mental health clinicians. The higher the score is the greater the priority.

Information on HPSA designations can be found on the US Health Resources and Services Administration's HPSA website at: www.hpsafind.hrsa.gov/HPSASearch.aspx.

Maryland's Public Mental Health System: Consumer Perception of Care Survey 2010:

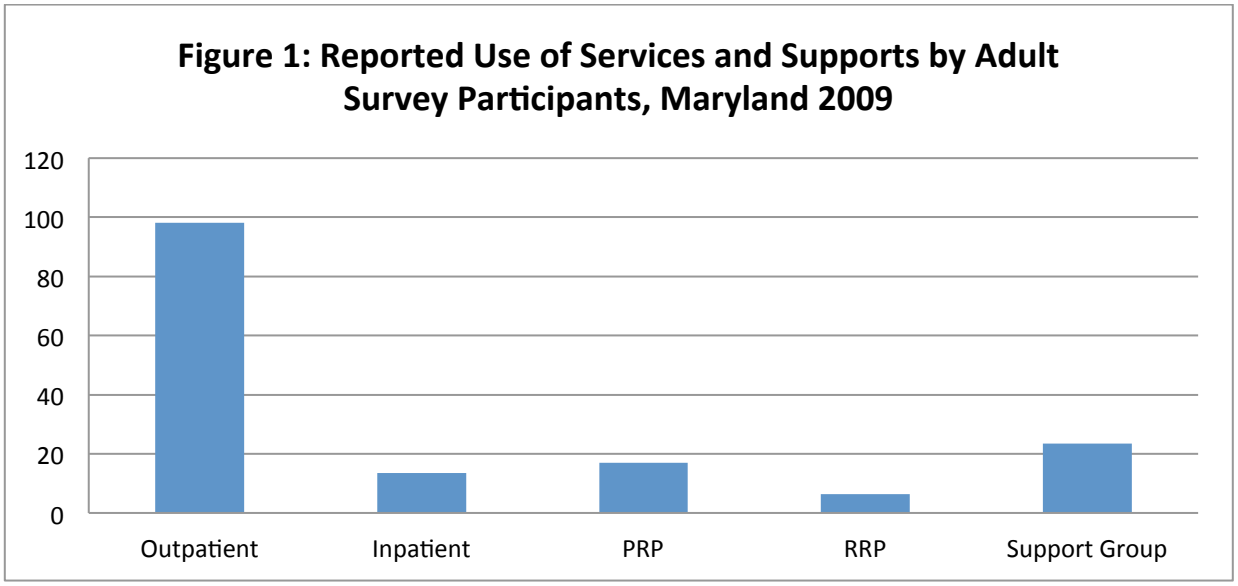
The Department of Health and Mental Hygiene's (DHMH) Mental Hygiene Administration (MHA) launched Maryland's Public Mental Health System (PMHS) in July 1997 as part of the state's Medicaid 1115 waiver reform initiative. Specialty mental health services are delivered through a "carve-out" arrangement that manages public mental health funds under a single payer system. The system serves Medicaid recipients and a subset of uninsured individuals eligible for public mental health services due

to severity of illness and financial need. Evaluation of consumer perception of care, including satisfaction with and outcomes of mental health services, is a requirement of the waiver and Code of Maryland Regulations. Findings provide MHA with valuable consumer input that may be used to improve the PMHS.

Adult Survey Results:

Telephone interviews were conducted with adults to assess their perception of care, including satisfaction with and outcomes of services received through Maryland's PMHS. These adults had received outpatient mental health treatment and/or psychiatric rehabilitation services between January and December 2009. A total of 3,840 were successfully contacted to request participation in the survey; 701 completed the survey for a response rate of 18%.

Survey Use:



Service use was assessed by asking participants about their recent use of mental health services and supports. As seen in Figure 1, nearly all participants (98.1%) reported receiving some type of outpatient mental health treatment service. Inpatient mental health treatment was reported by 13.6% of participants. Seventeen percent (17%) of participants reported utilizing services from a psychiatric rehabilitation program (PRP), 6.4% reported utilizing a residential rehabilitation program (RRP), and 23.5% reported participating in a mental health self-help group for support (e.g., On Our Own, depression support group, family support group, etc.).

Outcome Measures:

Participants were asked how they had benefited from the mental health services received. Each question started with the statement, "As a direct result of the mental health services I received" and was followed by the specific outcome of service. Participants indicated the degree to which they agreed or disagreed with the statement using a five-point Likert scale of "strongly agree," "agree," "neutral,"

"disagree," and "strongly disagree." The percentage of agreement ranged from 61.5% to 84.3% across outcome measures, as seen in Figure 2. Employed survey participants reported a higher level of agreement than unemployed participants with 13 of 16 outcome statements. The 2008 and 2009 survey results are also included in the table for comparison purposes, although analyses for statistically significant differences were not conducted.

Figure 2. Outcome Measures

Statement	Strongly Agree/Agree			Neutral			Strongly Disagree/Disagree		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
I deal more effectively with daily problems.*	75.7	79.7	77.0	14.0	10.4	11.9	10.3	9.8	11.2
I am better able to control my life.*	75.2	76.3	75.6	14.3	13.6	12.6	10.6	10.1	11.8
I am better able to deal with crisis.*	69.9	72.0	70.8	16.8	14.6	12.9	13.3	13.4	16.2
I am getting along better with my family.	71.1	73.7	75.2	17.1	14.0	14.0	11.9	12.3	10.9
I do better in social situations.*	63.2	67.6	67.2	17.9	16.3	15.9	18.8	16.1	16.9
I do better in school and/or work.*	70.5	68.9	73.0	15.9	14.2	11.9	13.6	16.9	15.1
My housing situation has improved.*	61.5	62.3	63.0	20.2	17.6	17.4	18.2	20.0	19.6
My symptoms are not bothering me as much.*	62.0	62.7	60.3	15.7	13.9	12.7	22.2	23.4	27.0
I do things that are more meaningful to me.	76.8	73.6	77.3	11.1	13.5	10.7	12.0	13.0	12.0
I am better able to take care of my needs.*	78.5	75.5	77.0	12.1	13.3	11.7	9.4	11.2	11.3
I am better able to handle things when they go wrong.*	66.3	67.8	68.3	19.4	17.2	14.6	14.3	15.0	17.1
I am better able to do things that I want to do.*	69.4	66.9	69.0	15.6	16.3	14.6	15.0	16.8	16.3
I am happy with the friendships I have.*	77.0	81.1	76.0	9.8	7.9	10.8	13.2	11.1	13.2
I have people with whom I can do enjoyable things.	83.5	82.7	78.7	7.1	7.4	8.5	9.3	9.9	12.8
I feel I belong in my community.*	74.8	71.0	73.6	11.4	13.7	11.3	13.8	15.3	15.1
In a crisis, I would have the support I need from family or friends.*	84.3	84.1	83.5	6.2	7.1	6.7	9.5	8.8	9.8

Note: Due to rounding, totals may not equal exactly 100%.
**Employed survey participants reported a higher level of agreement than unemployed participants with 13 of the 16 outcome statements.*

Overall Satisfaction:

Overall satisfaction with mental health services received was assessed using the same Likert scale as was used for the outcome measures. A majority of the participants (86.8%) reported agreement or strong agreement with the statement, "Overall, I am satisfied with the mental health services I received." This suggests a relatively high degree of overall satisfaction with mental health services provided by the PMHS to these adults.

Satisfaction with Specific Services:

Participants were asked about their satisfaction with multiple aspects of the outpatient mental health treatment and psychiatric rehabilitation services they received, using the same Likert scale as was used for the outcome measures. Participants were generally satisfied with the services provided, as Figures 3 and 4 indicate. The percent of agreement for items addressing outpatient mental health treatment services satisfaction exceeded 83.5% for all items except, "I, not staff, decided my treatment/rehabilitation goals" (61.7%) and "I was encouraged to use consumer-run programs" (73.2%). The percent of agreement for all items addressing satisfaction with psychiatric rehabilitation services exceeded 80%. Similar to Figure 2, the 2008 and 2009 survey results are provided in Figures 3 and 4 for comparison purposes, although analyses for statistically significant differences were not conducted.

Referral and Access to Substance Abuse Services:

Only 10.4% of the survey participants reported that they attempted to get or had been referred for substance abuse services. Of those, 93.2% reported they were able to access substance abuse services.

Coordination of Care:

A majority of survey participants (92.2%) reported having a primary health care provider. Of those, 31.7% answered, "yes" to the question, "To your knowledge, have your primary care provider and your mental health provider spoken with each other about your health?" This response is similar to the response from the 2009 survey (31.3%).

Police Encounters and Arrests:

Most respondents (91.7%) reported that they had no police encounters, including arrests, since beginning to receive mental health services. For those respondents, however, who reported they had police encounters, 84.2% reported that those police encounters had either been reduced (63.1%) or stayed the same (21.1%) during the previous 12 months (or since beginning to receive mental health services, if they had been receiving mental health services for less than 12 months).

Figure 3. Satisfaction with Outpatient Mental Health Treatment Services

Statement	Strongly Agree/Agree			Neutral			Strongly Disagree/Disagree		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
I like the services that I received here.	89.4	85.8	84.6	4.5	6.6	7.4	6.1	7.6	8.0
If I had other choices, I would still get services from this provider.	83.5	82.0	80.7	3.9	4.8	6.5	12.6	13.1	12.8
I would recommend this provider to a friend or family member.	88.3	85.4	81.4	2.8	4.2	5.2	8.9	10.4	13.4
The location of services was convenient.	87.9	85.3	84.3	3.6	5.3	5.8	8.5	9.4	9.9
Staff were willing to see me as often as I felt it was necessary.	90.0	88.8	86.0	2.9	3.3	5.2	7.0	7.9	8.8
Staff returned my calls in 24 hours.	84.7	82.1	79.7	5.1	5.0	5.5	10.3	12.9	14.8
Services were available at times that were good for me.	92.1	89.1	87.4	2.3	4.6	5.2	5.6	6.3	7.4
I was able to get all the services I thought I needed.	83.6	81.1	80.9	4.8	4.8	5.2	11.5	14.1	13.9
I was able to see a psychiatrist when I wanted to.	83.7	81.1	78.2	4.1	4.2	5.9	12.2	14.6	15.9
Staff here believe that I can grow, change, and recover.	87.7	88.7	81.5	7.0	5.1	9.4	5.2	6.2	9.0
I felt comfortable asking questions about my treatment and medication.	93.8	89.6	87.3	2.5	3.6	5.2	3.6	6.7	7.5
I felt free to complain.	92.9	87.3	85.3	3.1	4.6	4.7	4.0	8.1	10.1
I was given information about my rights.	95.9	91.8	89.3	1.2	2.8	4.5	2.9	5.4	6.2
Staff encouraged me to take responsibility for how I live my life.	90.8	88.7	85.6	3.9	4.9	4.7	5.2	6.4	9.7
Staff told me what side effects to watch out for.	84.9	82.4	79.8	3.1	4.7	4.9	12.1	13.0	15.3
Staff respected my wishes about who is and is not to be given information about my treatment.	95.1	90.7	89.5	1.5	4.2	4.2	3.4	5.1	6.3
I, not staff, decided my treatment goals.	61.7	77.5	76.5	29.1	9.8	9.1	9.1	12.7	14.5
Staff helped me obtain the information I needed so that I could take charge of managing my illness.	89.2	84.4	81.1	4.5	6.6	8.9	6.3	8.9	10.0
I was encouraged to use consumer-run programs.	73.2	73.3	69.5	5.6	8.4	7.2	21.2	18.3	23.3
Staff were sensitive to my cultural/ethnic background.	92.6	85.3	86.6	3.4	8.4	7.1	3.9	6.3	6.3
Staff respected my family's religious/spiritual beliefs.	94.3	90.0	89.6	3.7	6.7	6.9	2.1	3.3	3.5
Staff treated me with respect.	97.1	92.7	92.8	1.3	4.1	3.9	1.6	3.3	3.3
Staff spoke with me in a way that I understood.	96.8	94.7	93.9	2.0	2.0	2.8	1.2	3.3	3.3

Note: Due to rounding, totals may not equal exactly 100%.

Figure 4. Satisfaction with Psychiatric Rehabilitation Program Services

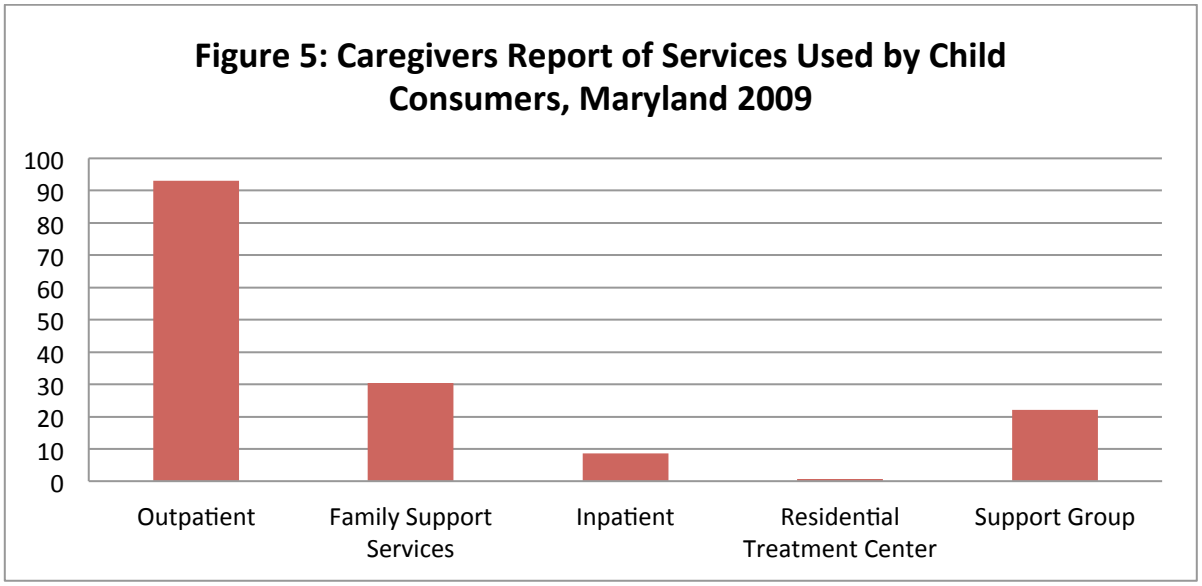
Statement	Strongly Agree/Agree			Neutral			Strongly Disagree/Disagree		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
I like the services that I received here.	89.5	89.2	84.1	4.4	3.3	5.7	6.2	7.5	10.2
If I had other choices, I would still get services from this provider.	86.0	81.7	83.8	1.8	6.2	5.7	12.2	12.1	10.6
I would recommend this provider to a friend or family member.	86.8	84.3	82.3	3.5	4.9	5.7	9.6	10.8	12.1
The location of services was convenient.	88.6	85.2	88.9	2.6	5.9	4.6	8.8	8.9	6.5
Staff were willing to see me as often as I felt it was necessary.	93.0	85.2	84.3	2.6	4.6	6.9	4.4	10.2	8.8
Staff returned my calls in 24 hours.	90.1	80.1	82.5	0.9	7.4	6.7	8.9	12.5	10.7
Services were available at times that were good for me.	91.3	89.2	87.1	1.8	4.3	6.8	7.0	6.6	6.1
I was able to get all the services I thought I needed.	85.0	84.0	83.0	4.4	5.2	6.1	10.6	10.8	11.0
Staff here believe that I can grow, change, and recover.	93.6	91.0	88.3	1.9	3.3	5.1	4.7	5.6	6.6
I felt comfortable asking questions about my rehabilitation.	93.0	88.9	89.4	3.5	3.6	4.2	3.6	7.5	6.5
I felt free to complain.	91.9	86.7	84.0	1.8	5.0	7.6	6.3	8.3	8.4
I was given information about my rights.	96.4	92.1	87.5	0.0	3.0	6.1	3.6	4.9	6.5
Staff encouraged me to take responsibility for how I live my life.	90.2	89.4	87.0	2.7	4.0	6.9	7.1	6.6	6.1
Staff respected my wishes about who is and is not to be given information about my rehabilitation.	92.9	92.6	88.2	6.2	2.3	5.7	0.9	5.0	6.1
I, not staff, decided my rehabilitation goals.	81.4	78.9	78.5	9.7	7.0	10.0	8.9	14.0	11.5
Staff helped me obtain the information I needed so that I could take charge of managing my illness.	90.1	88.7	81.1	2.7	4.3	10.2	7.2	7.0	8.7
I was encouraged to use consumer-run programs.	87.3	82.9	78.1	5.5	3.8	6.5	7.3	13.4	15.4
Staff were sensitive to my cultural/ethnic background.	92.8	89.1	86.1	3.4	2.8	7.1	3.9	8.1	6.7
Staff respected my family's religious/spiritual beliefs.	96.1	90.7	87.8	2.9	4.3	7.5	1.0	5.0	4.7
Staff treated me with respect.	92.1	92.2	91.4	4.4	4.6	4.1	3.5	3.3	4.5
Staff spoke with me in a way that I understood.	94.6	92.5	92.1	1.8	3.6	3.4	3.6	3.9	4.5

Note: Due to rounding, totals may not equal exactly 100%.

Child and Caregiver Survey Results:

Telephone interviews were conducted with the caregivers of children served by Maryland's PMHS to assess their perception of care, including satisfaction with and outcomes of services rendered. These children had received outpatient mental health treatment and/or family support services (i.e., psychiatric rehabilitation, mobile treatment, case management, and/or respite care) between January and December 2009. A total of 4,326 caregivers were successfully contacted to request participation in the survey. Of those contacted, 799 completed the survey for a response rate of 19%.

Service Use:



Caregiver participants were asked about their child's recent use of mental health services. As seen in Figure 5, nearly all of the caregiver participants (93.1%) indicated their child had received some type of outpatient service. In addition, 30.4% reported receiving family support services, 13.6% indicated their child had stayed overnight in a hospital for an emotional or behavioral problem, 0.7% had utilized residential treatment centers, and 22.0% reported that their child had participated in a mental health support group (e.g., peer counseling).

Outcome Measures:

Caregiver participants were asked how their child had benefited from the mental health services received. Each question started with the statement, "As a direct result of all of the mental health services my child received" and was followed by the specific outcome of services. Caregiver participants indicated the degree to which they agreed or disagreed with the statement using a five-point Likert scale of "strongly agree," "agree," "neutral," "disagree" and "strongly disagree." The percent of agreement ranged from 65.5% to 79.4% across child outcome measures, as seen in Figure 6. The 2008 and 2009 survey results are also included in the table for comparison purposes, although analyses for statistically significant differences were not conducted.

Four additional questions assess the "social connectedness" of caregivers of children. The range of agreement for these questions is 92.6% to 94.2%, which is slightly higher than the 2009 survey results (90.8% to 93.0%).

Figure 6. Outcome Measures

Statement	Strongly Agree/Agree			Neutral			Strongly Disagree/Disagree		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
My child is better at handling daily life.	77.9	69.3	69.0	10.8	15.3	17.1	11.3	15.4	13.9
My child gets along better with family members.	73.4	69.2	66.1	13.5	15.5	20.1	13.1	15.3	13.9
My child gets along better with friends and other people.	77.4	68.1	67.0	12.0	17.8	19.2	10.5	14.1	13.7
My child is doing better in school and/or work.	75.0	67.0	67.0	10.7	16.5	17.8	14.3	16.5	15.2
My child is better able to cope when things go wrong.	65.5	60.3	57.4	15.5	18.7	20.7	18.9	21.0	21.9
I am satisfied with our family life right now.	76.5	73.0	70.5	10.1	13.7	15.3	13.3	13.2	14.2
My child is better able to do things he or she wants to do.	79.4	73.0	71.4	8.7	13.3	15.6	11.9	13.6	13.0
My child is better able to control his or her behavior.	66.3	56.9	53.7	14.2	20.6	21.5	19.5	22.5	24.8
My child is less bothered by his or her symptoms.	70.1	63.3	60.0	14.1	20.0	18.8	15.8	16.7	21.2
My child has improved social skills	77.4	70.0	68.9	10.0	16.4	15.9	12.6	13.6	15.2
As a direct result of all the mental health services my child and family received:									
I know people who will listen and understand me when I need to talk.	92.8	90.8	88.8	2.1	4.2	5.4	5.0	4.9	5.7
I have people that I am comfortable talking with about my child's problems.	94.2	92.7	92.0	1.6	2.8	4.2	4.3	4.4	3.8
In a crisis, I would have the support I need from family or friends.	92.6	90.8	88.8	2.9	4.7	6.5	4.5	4.4	4.6
I have people with whom I can do enjoyable things.	93.6	93.0	92.2	2.9	4.1	5.2	3.6	2.9	2.6

Note: Due to rounding, totals may not equal exactly 100%.

Overall Satisfaction:

Overall satisfaction with mental health services received was assessed using the same Likert scale as was used for the outcome measures. A majority of the caregiver participants (86.6%) reported agreement or strong agreement with the statement, "Overall, I am satisfied with the mental health services my child received." This finding suggests a relatively high degree of overall caregiver participant satisfaction with mental health services provided by the PMHS to their children.

Satisfaction with Specific Services:

Caregiver participants were asked about their satisfaction with multiple aspects of the outpatient mental health treatment and family support services that their children received, using the same Likert scale as was used for the outcome measures. Caregiver participants were generally satisfied with the services provided, as Figures 7 and 8 indicate. The percent of agreement for items addressing outpatient mental health treatment services satisfaction exceeded 85.2% for all items except, "My family got as much help as we needed for my child" (79.9%). Likewise, the percent of agreement for items addressing family support services satisfaction exceeded 89.6%. Similar to Figure 6, the 2008 and 2009 survey results are provided in Figures 7 and 8 for comparison purposes, although analyses for statistically significant differences were not conducted.

Referral and Access to Substance Abuse Services:

Only 3.1% of the caregiver participants reported that their child had attempted to get or had been referred for substance abuse services. Of those children, caregiver participants reported that 88.0% were able to get access to substance abuse services.

Coordination of Care:

A majority of caregiver participants (96.5%) reported that their child has a primary health care provider. Likewise, a majority of caregiver participants (87.2%) reported that their child had seen their primary care provider in the previous year. More than one-third (36.3%) of caregiver participants responded "yes" to the question, "To your knowledge, have your child's primary care medical care provider and mental health provider spoken with each other about your child's health?" This represents a slight increase from the 2009 survey (34.2%).

Police Encounters and Arrests:

Most caregiver participants (89.5%) report that their child had no police encounters, including arrests, since beginning to receive mental health services. For those caregiver participants, however, who reported that their child had police encounters, 87.8% reported that those police encounters had either been reduced (41.9%) or stayed the same (45.9%) during the previous 12 months (or since beginning to receive mental health services, if the child had been receiving mental health services for less than 12 months).

Figure 7. Satisfaction with Outpatient Mental Health Treatment Services

Statement	Strongly Agree/Agree			Neutral			Strongly Disagree/Disagree		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
Overall, I am satisfied with the services my child received.	90.5	86.2	86.0	2.3	5.3	4.6	7.3	8.6	9.4
I helped choose my child's services.	89.6	87.7	86.3	2.3	4.0	4.9	8.0	8.4	8.8
I helped choose my child's treatment goals.	90.7	88.4	87.6	2.7	4.0	4.5	6.6	7.7	7.9
The people helping my child stuck with us no matter what.	89.7	83.9	84.9	2.2	5.4	4.9	8.1	10.7	10.2
I felt my child had someone to talk to when he/she was troubled.	91.2	88.6	85.8	2.2	4.1	5.3	6.5	7.2	8.9
I participated in my child's treatment.	96.9	95.9	96.7	1.4	1.1	1.9	1.8	3.0	1.4
The services my child and/or family received were right for us.	87.8	83.5	83.4	4.2	7.0	7.2	8.0	9.5	9.4
The location of services was convenient for us.	87.6	88.0	86.0	3.5	4.1	4.4	8.9	7.9	9.5
Services were available at times that were convenient for us.	87.8	86.2	83.5	4.0	6.2	5.7	8.1	7.5	10.8
My family got the help we wanted for my child.	85.2	80.6	80.4	5.0	8.2	7.6	9.9	11.2	12.0
My family got as much help as we needed for my child.	79.9	74.3	72.2	6.8	10.4	10.6	13.4	15.3	17.2
Staff treated me with respect.	96.6	95.2	93.4	1.5	2.4	3.6	1.9	2.4	3.0
Staff respected my family's religious/spiritual beliefs.	96.9	96.4	93.8	2.5	2.6	4.2	0.5	1.0	2.1
Staff spoke with me in a way that I understood.	97.8	97.2	96.1	1.1	1.2	1.9	1.1	1.6	1.9
Staff were sensitive to my cultural/racial background.	97.3	96.0	93.7	1.8	2.4	3.3	0.9	1.6	3.0
I felt free to complain.	94.8	93.1	91.9	1.6	3.0	3.4	3.5	3.9	4.7

Note: Due to rounding, totals may not equal exactly 100%.

Figure 8. Satisfaction with Family Support Services

Statement	Strongly Agree/Agree			Neutral			Strongly Disagree/Disagree		
	2010	2009	2008	2010	2009	2008	2010	2009	2008
Overall, I am satisfied with the services my child received.	93.5	86.8	82.6	3.0	5.6	5.8	3.4	7.6	11.6
I helped choose my child's services.	92.7	90.2	86.5	4.3	3.6	6.2	3.0	6.3	7.3
I helped choose my child's service goals.	94.3	91.7	87.3	2.2	3.0	7.3	3.5	5.3	5.5
The people helping my child stuck with us no matter what.	92.6	86.0	86.1	3.0	3.9	4.0	4.4	10.1	9.9
I felt my child had someone to talk to when he/she was troubled.	95.1	87.1	86.0	1.8	4.5	8.1	3.1	8.4	5.9
I participated in my child's services.	97.5	96.4	94.9	1.3	1.8	1.8	1.3	1.8	3.3
The services my child and/or family received were right for us.	93.9	83.2	84.7	3.5	8.0	6.5	2.6	8.8	8.7
The location of services was convenient for us.	93.5	88.2	86.9	2.6	2.9	3.6	3.9	8.8	9.5
Services were available at times that were convenient for us.	94.4	86.3	84.4	2.6	5.0	4.7	3.1	8.8	10.9
My family got the help we wanted for my child.	89.6	79.7	80.0	6.5	8.8	8.0	3.9	11.5	12.0
My family got as much help as we needed for my child.	89.6	76.1	74.7	6.5	9.4	9.5	3.9	14.5	15.8
Staff treated me with respect.	95.3	94.4	93.5	2.6	2.1	2.9	2.1	3.5	3.6
Staff respected my family's religious/spiritual beliefs.	96.5	94.9	93.1	2.2	2.8	4.6	1.3	2.2	2.3
Staff spoke with me in a way that I understood.	97.8	96.5	96.4	1.3	2.4	1.4	0.9	1.2	2.2
Staff were sensitive to my cultural/racial background.	96.9	96.5	92.6	2.6	2.9	3.5	0.4	0.6	3.9
I felt free to complain.	97.9	94.7	93.1	0.4	2.1	1.8	1.7	3.3	5.1

Note: Due to rounding, totals may not equal 100%.

Mental Health References:

1. 2001-2002 and 2006-2009 Charles County and Maryland Mental Health Module Data. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at www.marylandbrfss.org.

2. 2011 Mental Health Professional Shortage Area Designations. United States Department of Health and Human Services' Health Resources and Services Administration. Available at: http://bhpr.hrsa.gov/shortage/.

3. 2007 Charles County Perceptions of the Public Mental Health System. Maryland's Public Mental Health System: Consumer Perception of Care Survey 2010 Report. Maryland Department of Health and Mental Hygiene. Available at: http://dhmh.maryland.gov/mha/Miscellaneous/publicdocuments/2010%20CPOC%20Executive%20Summary.pdf.

Qualitative Data Relating to Mental Health:

77.9% of long survey participants reported that mental health is a health problem in Charles County. 44% felt that mental health is a "serious problem" in the county. 11.6% of those long survey participants also reported that they have seen improvements in the mental health services in Charles County.

Long Survey behavioral risk factors related to mental health include:

- 12.7% reported that they are always stressed out
- 43.4% reported that they always feel happy about life

One quarter of the short survey participants felt that mental health was one of the biggest health problems in Charles County.

Mental health was given as a health problem at all focus groups. The lack of psychiatry and mental health services was a heavily discussed topic at all focus groups. The current psychiatrists in the county are not taking new patients. For the school age population, the school counselors are involved, but they often have several schools to cover and are not always available. Pediatricians are treating ADHD issues but not the mental health diagnoses.

The stigma of mental health still remains an issue. Families are ashamed of their mental health status. They do not want to talk about it. There remains a stigma regarding mental health medications as well.

Many focus group participants talked about how mental health ties into other problems such as substance abuse. Depression and anxiety were listed as health problems within the county.

There is a lack of neurology in the county as well. It is worse for the elderly and the young.

Charles County Oral Health Statistics:

Children:

Survey of the Oral Health Status of Maryland's School Children 2005-2006:

The report describes the oral health status of school children in kindergarten and 3rd grade in Maryland during the 2005-2006 school year. County level data is not available for all data presented; in those cases, the Southern Maryland regional data is given.

The Southern Maryland region had the highest response rate for the oral health survey with 49% of the questionnaires completed and returned. Students were also screened for oral health conditions such as dental caries. The ratio of screening to questionnaire return in Southern Maryland was 49%. This was the lowest ratio among the Maryland regions.
The screening rate for kindergarten was the lowest in the state at 14% in Charles County. The ratio of screening to questionnaire return for kindergarten only for Charles County was 33%, which was also the lowest in the state.

Screening and Examination Rates for Charles County, Southern Maryland, and Maryland

Screening and Examination Data	RRE	RRQ	Ratio RRE vs. RRQ
Southern Maryland	24	49	49
Charles County	14	43	33
Maryland	25	46	55

RRE: Response Rate Exam: #examined/#enrolled x 100
RRQ: Response Rate Questionnaire: #returned questionnaires/#enrolled x 100
Ratio RRE/RRQ: # examined/#returned questionnaires x 100

Mean and Prevalence of Dental Caries (Kindergarten and 3rd grade)

	Prevalence %	Mean
Southern Maryland	25.5%	2.5
Maryland	31.1%	2.7

Mean and Prevalence of Dental Caries (Kindergarten)

	Prevalence %	Mean
Southern Maryland	23.3%	2.6
Maryland	32.6%	2.9

Mean and Prevalence of Dental Caries (3rd grade)

	Prevalence %	Mean
Southern Maryland	26.4%	2.4
Maryland	29.7%	2.5

Mean and Prevalence of Dental Sealants (Kindergarten and 3rd grade)

	Prevalence %	Mean
Southern Maryland	34.8%	3.0
Maryland	26.8%	3.0

Mean and Prevalence of Dental Sealants (Kindergarten)

	Prevalence %	Mean
Southern Maryland	0%	0
Maryland	7.5%	2.7

Mean and Prevalence of Dental Sealants (3rd grade)

	Prevalence %	Mean
Southern Maryland	49.4%	3.0
Maryland	42.4%	3.0

Mean and Prevalence of Dental Restorations (kindergarten and 3rd grade)

	Prevalence %	Mean
Southern Maryland	32.1%	2.9
Maryland	26.9%	2.8

Mean and Prevalence of Dental Restorations (Kindergarten)

	Prevalence %	Mean
Southern Maryland	24.7%	2.2
Maryland	22.3%	2.7

Mean and Prevalence of Dental Restorations (3rd grade)

	Prevalence %	Mean
Southern Maryland	35.2%	3.1
Maryland	30.7%	2.8

Prevalence of Children with No Caries, Sealants, or Restorations:

Grade	Region	Prevalence %
Kindergarten and 3rd grade	Southern Maryland	37.4%
	Maryland	39.0%
Kindergarten only	Southern Maryland	57.7%
	Maryland	49.6%
3rd Grade only	Southern Maryland	28.9%
	Maryland	30.6%

Adults:

<u>Routine Dental Care</u>:

The Maryland Behavioral Risk Factor Surveillance System asked three questions regarding oral health. Two of those questions ask about dentist visits for routine cleanings and for all other reasons. Five years of data have been combined in order to increase the sample size and therefore increase the validity of the data conclusion. The Charles County BRFSS data for 2006-2010 has been evaluated below.

How long since your last dental cleaning?

Approximately three quarters of the respondents (73.6%) reported that they had been to a dentist in the last year to have their teeth cleaned.

Charles County	**Amount of**	**Time Since**	**Last Dental**	**Cleaning**	**# (%)**	
BRFSS	Never	< 1 year	1-2 years	2-5 years	>5 years	Total
2006-2010	4 (0.3%)	851 (73.6%)	134 (11.8%)	85 (7.7%)	79 (6.6%)	1153

How long since you last visited a dentist for any reason?

Once again, the majority of the participants reported that they had seen a dentist in the last year (72.8%). A very small percentage (0.4%) reported that they have never seen a dentist.

Charles County	**Amount of**	**Time Since**	**Last Dentist**	**Visit for any**	**Reason**	**# (%)**
BRFSS	Never	< 1 year	1-2 years	2-5 years	>5 years	Total
2006-2010	5 (0.4%)	898 (72.8%)	134 (11.1%)	92 (8.2%)	97 (7.5%)	1226

Number of Permanent Teeth Removed:

Half of the Charles County BRFSS participants have not had any of their permanent teeth removed (58.8%). Approximately 4% of the participants have had all of their permanent teeth removed.

Charles County	**Number of**	**Permanent**	**Teeth**	**Removed**	**# (%)**
BRFSS	None	1-5 teeth	6 or more, but not all	All	Total
2004-2009	611 (58.8%)	378 (27.7%)	165 (9.8%)	67 (3.7%)	1221

<u>Oral Cancer Statistics</u>:

<u>Oral Cancer Incidence</u>:

The Charles County oral cancer incidence rate for 2003-2007 was 10.5. This rate is comparable to the Maryland state average rate of 9.6, and it is also lower than the rates for the other Southern Maryland counties. The Charles County oral cancer incidence rate is between 10% below and 10% above the United States rate.

Racial comparisons can't be done due to small case counts for minorities. However, it should be noted that the Charles County white oral cancer incidence rate is comparable to the Maryland state average rate and lower than the other Southern Maryland counties.

Males are disproportionately affected by oral cancer compared to women. The 03-07 Charles County oral cancer incidence rate for males was 13.8, which is significantly higher than the oral cancer incidence rate for women (7.2).

2003-2007 Oral Cancer Incidence Rates

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	9.6	14.5	5.6	10.0	8.7	7.6
Charles County	10.5	13.8	7.2	10.8	**	0
Calvert County	11.9	16.1	8.5	13.7	**	0
St Mary's County	13.1	19.1	7.6	13.2	**	**

** Rates are not calculated for case counts less than 15.

Oral Cancer Mortality:

For 2002-2006, Charles County had an oral cancer mortality rate of 3.7 per 100,000, which is higher than the Maryland state average rate of 2.7 per 100,000. The 2002-2006 oral cancer mortality rate for the Southern Maryland region (Charles, Calvert, and St Mary's counties) was 10-25% above the United States rate of 206 per 100,000. A 2002-2006 oral cancer mortality rate could not be calculated for Calvert and St Mary's counties due to small case counts.

Even for a combined time period of 2002-2006, deaths due to oral cancer are few, and rate calculations for minorities, men, and women were not possible.

2002-2006 Oral Cancer Mortality Rates

	Total	**Male**	**Female**	**White**	**Black**	**Other**
Maryland	2.7	4.2	1.4	2.5	3.4	**
Charles County	3.7	**	**	**	**	**
Calvert County	**	**	**	**	**	**
St Mary's County	**	**	**	**	**	**

** Rates are not calculated for case counts less than 15.

Source: Maryland Department of Health and Mental Hygiene: 2009 CRF Program's Cancer Report

Stage at Diagnosis

During 2002, 35.5% of oral cancer cases were diagnosed at the localized (early) stage in Maryland; 42.7% were diagnosed at the regional stage.

Oral Cancer by Percent of Stage at Diagnosis and Year, Maryland, 1998-2002

Stage	1998	1999	2000	2001	2002
	%	%	%	%	%
Local	36.4	34.7	37.0	34.6	35.5
Regional	41.0	44.7	44.5	43.9	42.7
Distant	5.9	5.0	6.1	4.8	6.1
Unstaged	16.8	15.6	12.4	16.7	15.7

Source: Maryland Cancer Registry, 1998-2002

Access to Dental Services for Medicaid Children in Maryland: A Report of the Maryland Dental Health Committee, September 2007

Percentage of Children Enrolled in HealthChoice (with any period of enrollment) who had at least one dental encounter, Calendar Year 2005 and 2006

CY 2005	Number of Eligible Beneficiaries	Number of Beneficiaries with at least one dental encounter	Percent of Beneficiaries with at least one dental encounter
Charles County	9865	1924	19.5%
Calvert County	5264	1409	26.8%
St Mary's County	7411	2297	31.0%
Maryland	483304	143114	29.6%

CY 2006	Number of Eligible Beneficiaries	Number of Beneficiaries with at least one dental encounter	Percent of Beneficiaries with at least one dental encounter
Charles County	9903	1978	20%
Calvert County	5302	1586	29.9%
St Mary's County	7564	2296	30.4%
Maryland	491646	144064	29.3%

Among the Maryland jurisdictions, Charles County had the lowest percentage of HealthChoice child beneficiaries who had least one dental encounter for both calendar year 2005 and 2006.

Percentage of Pregnant Women Enrolled in HealthChoice (with any period of enrollment) who had at least one dental encounter, Calendar Year 2005 and 2006

CY 2005	Number of Eligible Beneficiaries	Number of Beneficiaries with at least one dental encounter	Percent of Beneficiaries with at least one dental encounter
Charles County	1021	70	6.9%
Calvert County	555	63	11.4%
St Mary's County	824	135	16.5%
Maryland	37559	5010	13.3%

CY 2006	Number of Eligible Beneficiaries	Number of Beneficiaries with at least one dental encounter	Percent of Beneficiaries with at least one dental encounter
Charles County	1086	94	8.7%
Calvert County	574	31	5.4%
St Mary's County	896	183	20.4%
Maryland	38868	5268	13.6%

Among the Maryland jurisdictions, Charles County had the lowest percentage of pregnant HealthChoice beneficiaries who had at least one dental encounter in calendar year 2005. Charles County had the second lowest percentage of pregnant HealthChoice beneficiaries who had at least one dental encounter in calendar year 2006.

Percentage of Children in Foster Care (with any period of enrollment) who had at least one dental encounter, Calendar Year 2005 and 2006

CY 2005	Count of Eligible Beneficiaries	Number of Beneficiaries with at least one dental encounter	Percent of Beneficiaries with at least one dental encounter
Charles County	217	66	30.4%
Calvert County	88	45	51.1%
St Mary's County	137	59	43.1%
Maryland	13798	5871	42.5%

CY 2006	Number of Eligible Beneficiaries	Number of Beneficiaries with at least one dental encounter	Percent of Beneficiaries with at least one dental encounter
Charles County	226	68	30.1%
Calvert County	90	49	54.4%
St Mary's County	134	47	35.1%
Maryland	13815	5727	41.7%

Among the Maryland jurisdictions, Charles County had the third lowest percentage of children in foster care that had at least one dental encounter for both calendar year 2005 and 2006.

Estimated Dental Expenditures for Children in Foster Care, Charles County, Calendar Year 2005 and 2006

CY 2005	$14,140.43
CY 2006	$13,731.38

Percentage of Children Enrolled in REM who had at least one dental claim, Calendar Year 2005 and 2006

CY 2005	Count of Eligible Beneficiaries	Number of Beneficiaries with at least one dental claim	Percent of Beneficiaries with at least one dental claim
Charles County	52	5	9.6%
Calvert County	25	5	20.0%
St Mary's County	23	3	13.0%
Maryland	3225	768	23.8%

CY 2006	Number of Eligible Beneficiaries	Number of Beneficiaries with at least one dental claim	Percent of Beneficiaries with at least one dental claim
Charles County	51	8	15.7%
Calvert County	29	5	17.2%
St Mary's County	24	5	20.8%
Maryland	3244	756	23.3%

Among the Maryland jurisdictions, Charles County had the third lowest percentage of children enrolled in REM who had at least one dental claim in calendar year 2005 and the seventh lowest percentage of children enrolled in REM who had at least one dental claim in calendar year 2006.

FFS Dental Expenditures for Children in REM, Charles County, Calendar year 2005 and 2006

CY 2005	$579.96
CY 2006	$998.74

Visits by Safety Net Clinics, Charles County, Calendar Year 2005 and 2006

	Number of FFS Dental Claims	FFS Payments	Number of dental encounters
CY 2005	14	$2403.80	0
CY 2006	1	$176.51	36

In FY 2006, Charles County had one dentist who billed at least $10,000 to HealthChoice. Calvert County had 4 dentists, and St Mary's County had 9 dentists.

Supply of Dental Providers for the Southern Maryland Region, 2007

	Count	Percentage of total active dentists
Total Active Dentists	158	
Active General Dentists	129	81.6%
Active Pediatric Dentists	5	3.2%
Dentists listed in the HealthChoice Directory	39	24.7%
Dentists Billing one or more services to HealthChoice	28	17.7%
Dentists Billing $10,000 or more to HealthChoice	14	8.9%

Oral Health Guidelines and Recommendations:

2009 Recommendations of the Maryland Dental Action Committee:

1. Initiate a statewide single vendor dental Medicaid Administrative Services Only (ASO) provider for Maryland.

2. Increase dental reimbursement rates to the 50th percentile of the ADA's South Atlantic region charges for all dental codes.

3. Maintain and enhance the dental public health infrastructure through the Office of Oral Health
   by ensuring that each local jurisdiction has a local health department dental clinic or a community oral health safety net clinic and by providing funding to fulfill the requirements outlined in the Oral Health Safety Net legislation.

4. Establish a public health level dental hygienist to provide screening education and preventive dental services within their scope of practice in public health settings.

5. Develop a unified and culturally and linguistically appropriate oral health message for use throughout the state to educate parents and caregivers of young children about oral health and the prevention of oral disease.

6. Incorporate dental screenings with vision and hearing screenings for public school children or require dental exams prior to school entry.

7. Provide training to dental and medical providers to provide oral health risk assessments, educate parents/caregivers about oral health and to assist families in establishing a dental home for all children.

Source: Maryland Department of Health and Mental Hygiene: Office of Oral Health's 2009 Helping Maryland Smile Report.

Health Professional Shortage Areas (HPSA) for Dental Health in Charles County, Maryland

As of February 2011, Charles County is a federally designated health professional shortage area (HPSA) for dental health services. The whole county is designated as a HPSA, not just one population or location within the county. There are currently 16 full time equivalent non-Federal agency dental health providers serving the county (FTE). It is estimated that a total of 10 FTE providers are needed in the county to remove the designation.

The Charles County HPSA score for dental health is 9. The National Health Services Corps uses a scaling system from 1-26 to determine priorities for assignment of dental health clinicians. The higher the score is the greater the priority.

Dental Health References:

1. Charles County School Age Oral Health Status. Survey of the Oral Health Status of Maryland's School Children 2005-2006. Available at: http://fha.maryland.gov/pdf/oralhealth/Oral_Health_Survey_Report.pdf.

2. 2006-2010 Charles County Dental health data. Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at www.marylandbrfss.org.

3. 2003-2007 Charles County Oral Cancer Incidence and 2002-2006 Charles County Oral Cancer Mortality Rates. 2009 and 2010 Maryland Cigarette Restitution Fund Program's Cancer Reports. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/cancer/surv_data-reports.cfm.

4. 1998-2002 Charles County Oral Cancer Stage of Diagnosis Data. Maryland Cancer Registry. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/cancer/surv_data-reports.cfm.

5. 2005-2006 Charles County Medicaid Children's Access to Dental Health Services Data. Access to Dental Services for Medicaid Children in Maryland: A Report of the Maryland Dental Health Committee, September 2007. Available at: http://fha.maryland.gov/pdf/oralhealth/DAC_report.pdf.

6. 2009 Maryland Oral Health Guidelines and Recommendations. 2009 Helping Maryland Smile Report. Available at: http://www.msa.md.gov/megafile/msa/speccol/sc5300/sc5339/000113/013000/013609/unrestricted/20110439e.pdf.

7. 2011 Dental Health Professional Shortage Area and Medically Underserved Areas/Populations Designations. United States Department of Health and Human Services' Health Resources and Services Administration. Available at: http://bhpr.hrsa.gov/shortage/.

Qualitative Data Related to Dental Health:

83.3% of long survey participants reported that dental health is a health issue in Charles County. 52.5% felt that it was a "serious problem" in the county. On the short survey, 28% reported that dental health is a big health problem in the county.
The lack of dental services in the county came up at all focus groups. Many participants mentioned the lack of dental services for adults.

The Charles County Department of Health's new dental clinic and Health Partner's dental suite were praised as strengths for the community. Many feel these clinics have significantly reduced the gap in dental health services in Charles County.

2009-2010 Charles County Communicable Disease Data:

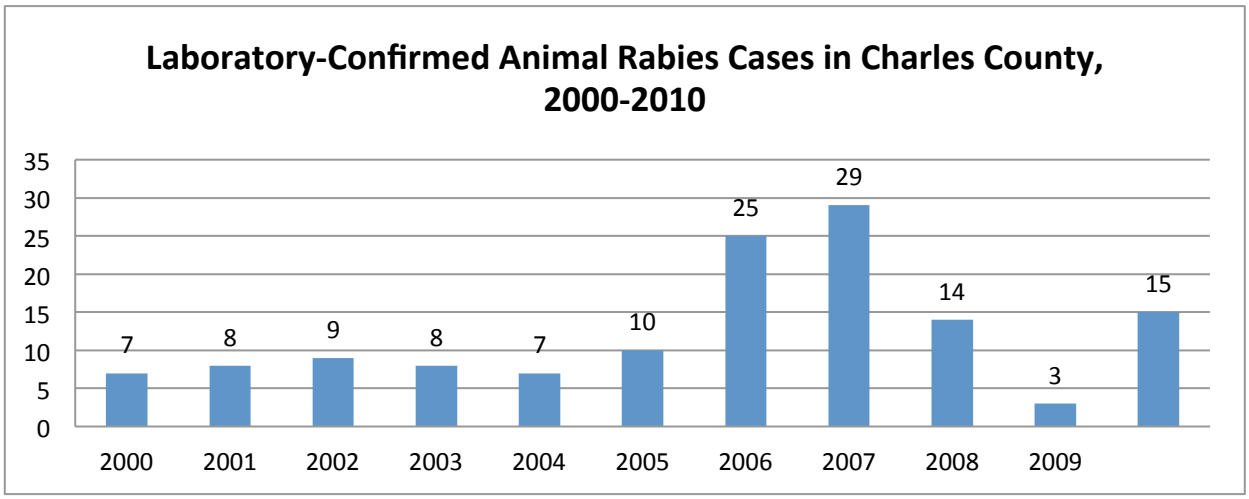
The table below shows the incidence rates for the fifteen most commonly reported communicable diseases in Charles County in 2009. The communicable disease with the highest 2009 incidence rate was Chlamydia.

Case Rates for Selected Notifiable Conditions Reported in Charles County, 2009

Selected Notifiable Conditions Reported in Charles County, 2009	**Case Rates per 100,000**
Chlamydia	397.3
Animal Bites	220.1
Gonorrhea	96.3
Lyme Disease	58.4
Invasive Strep pneumoniae	12.0
Mycobacteriosis, other than TB or leprosy	9.1
Salmonellosis, other than typhoid fever	6.3
Campylobacteriosis	5.8
Invasive Group B Strep	4.2
Syphilis- Primary and Secondary	4.2
Giardiasis	3.5
Shigellosis	2.8
Ehrlichiosis	2.8
Shiga-toxin producing E coli (STEC)	2.1
Vibriosis (non-cholera)	2.1

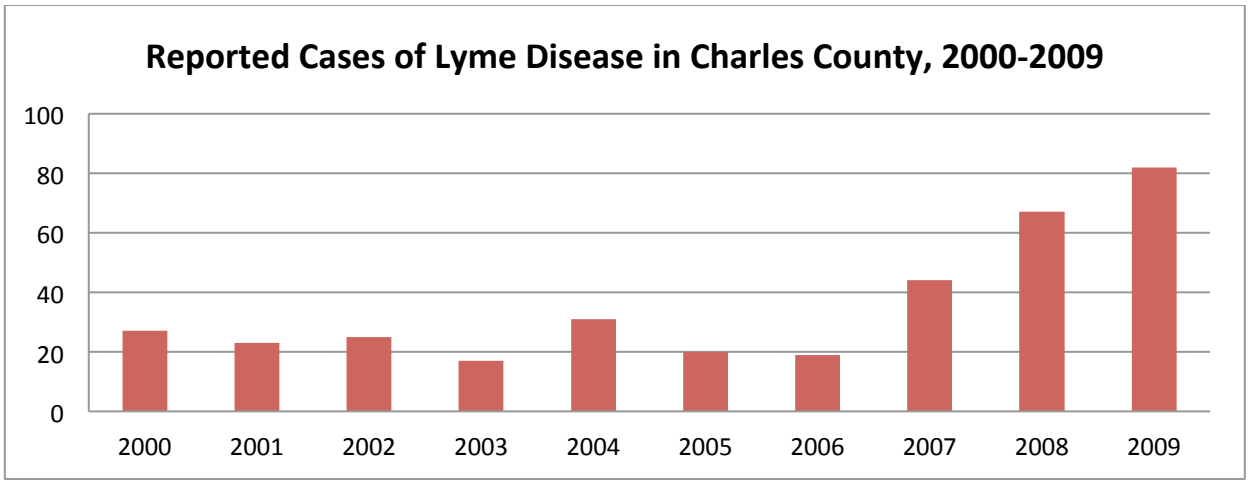
Rabies:

Animal rabies cases have fluctuated dramatically over the last decade, with the largest number of cases seen in 2006 and 2007. No human rabies cases were reported in Charles County from 2000-2010.



Lyme disease:

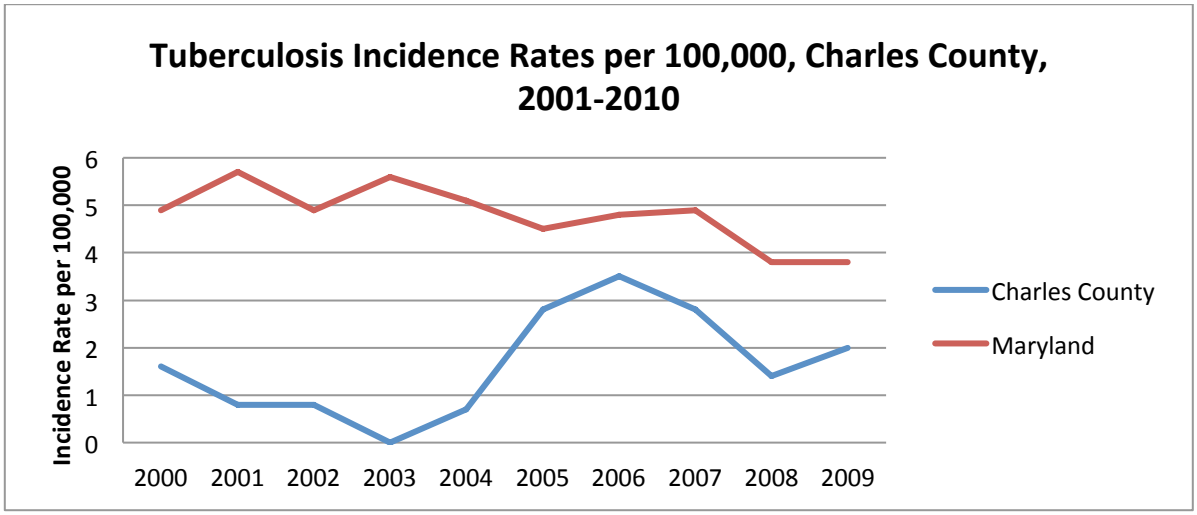
Reported cases of Lyme disease remained steady in Charles County before rising in 2007. The number of reported cases significantly increased in 2008 and 2009. This may be due to a change in the Lyme disease surveillance case definition to include confirmed and probable cases.



- 2008 and 2009 cases are classified using the new 2008 surveillance case definition, which includes criteria for confirmed, probable, and suspect cases. Only confirmed and probable cases are reported to the Centers for Disease Control and Prevention.

Tuberculosis:

Charles County sees only a handful of tuberculosis (TB) cases each year, and any additional cases can dramatically affect the yearly rate. The Charles County yearly TB incidence rate is consistently lower than the Maryland state TB rate.



Communicable Disease References:

1. 2009 Charles County Reportable Communicable Disease Data. Infectious Disease and Environmental Health Administration. Maryland Department of Health and Mental Hygiene. Available at: http://ideha.dhmh.maryland.gov/.

2. 2000-2010 Charles County and Maryland Rabies Data. Infectious Disease and Environmental Health Administration. Maryland Department of Health and Mental Hygiene. Available at: http://ideha.dhmh.maryland.gov/.

3. 2000-2009 Charles County and Maryland Lyme Disease Data. Infectious Disease and Environmental Health Administration. Maryland Department of Health and Mental Hygiene. Available at: http://ideha.dhmh.maryland.gov/.

4. 2000-2009 Charles County and Maryland Tuberculosis Data. Infectious Disease and Environmental Health Administration. Maryland Department of Health and Mental Hygiene. Available at: http://ideha.dhmh.maryland.gov/.

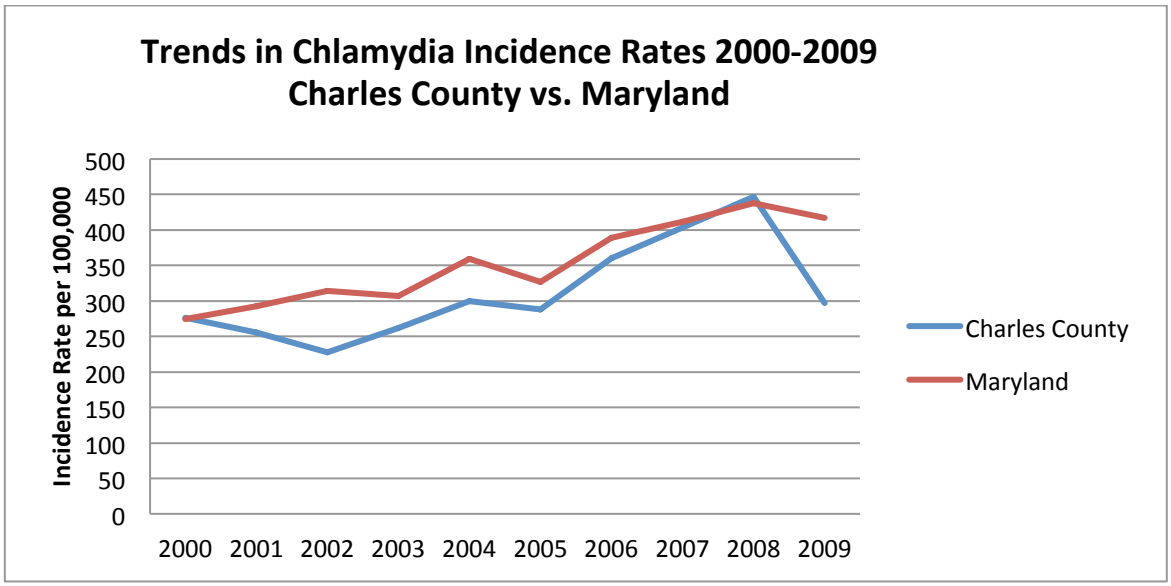
HIV/AIDS and STD's:

Sexually Transmitted Diseases:

Chlamydia:

The STI incidence rates for Chlamydia, Gonorrhea, and Syphilis have all seen increases on the national, state, and local level. Charles County Chlamydia rates are generally below the state average rates. The 2009 Charles County Chlamydia incidence rate was 396.7, which is lower than the 2009 Maryland Chlamydia incidence rate of 416.7 per 100,000. The 2009 Charles County Chlamydia incidence rate is the first big decrease seen in the county's Chlamydia rate since 2002.

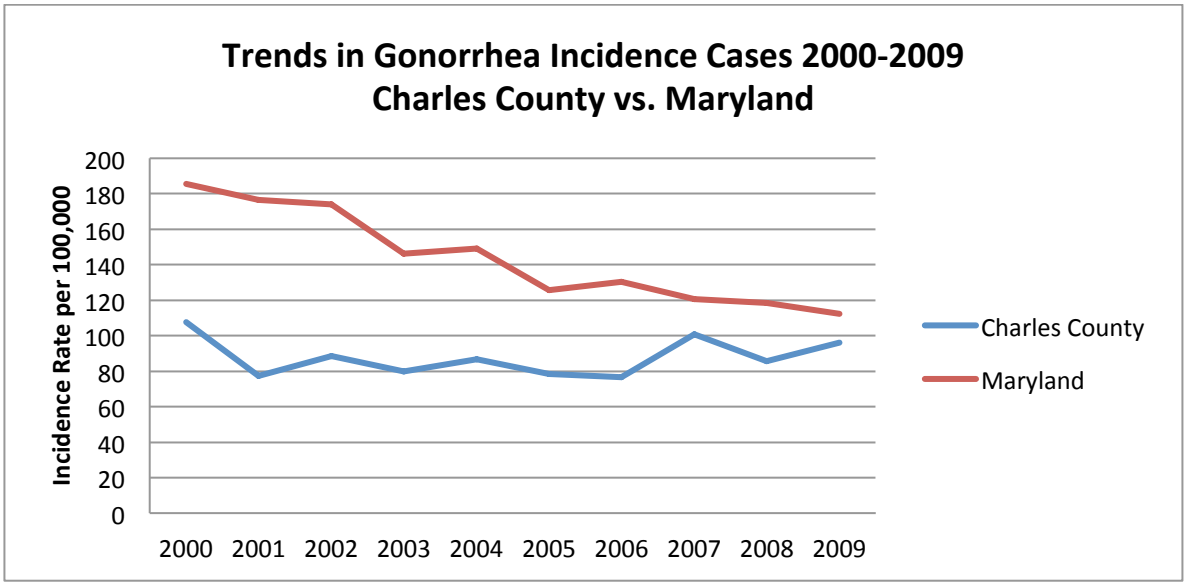
Adolescents are disproportionately affected by Chlamydia in Charles County. In 2009, the Charles County Chlamydia incidence rate for individuals aged 15-19 years was more than 800 per 100,000 population.



Source: Maryland Department of Health and Mental Hygiene. 2000-2009. Epidemiology and Disease Control Programs.

Gonorrhea:

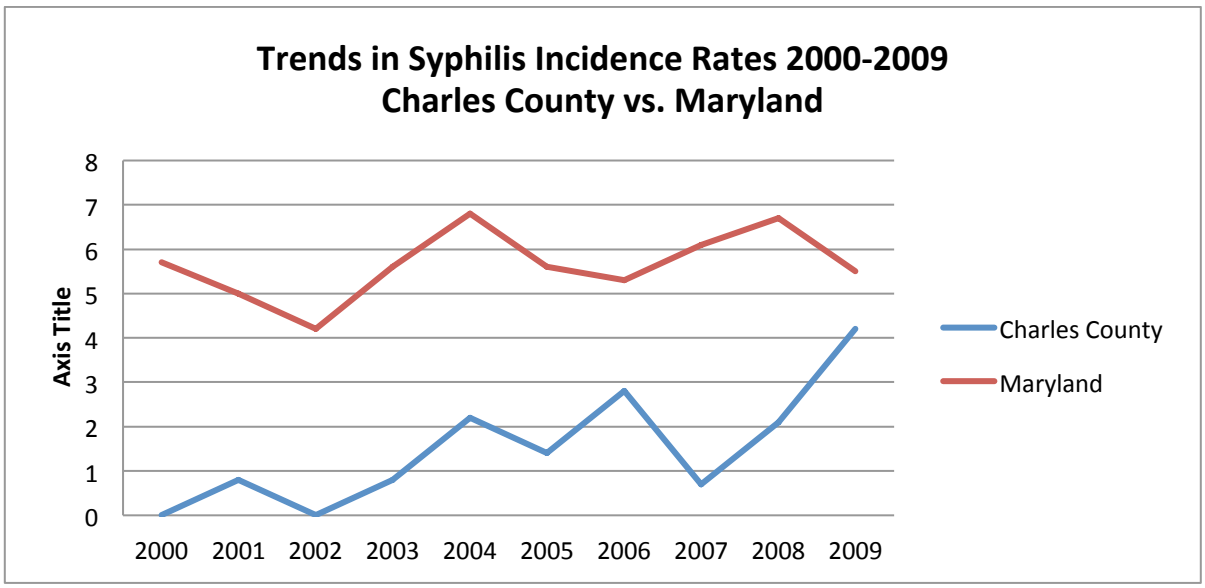
For Gonorrhea, Charles County rates have remained fairly stable, even as state average rates have seen a decline. The 2009 Charles County Gonorrhea incidence rate was 96.2, which was below the 2009 Maryland Gonorrhea incidence rate of 112.2 per 100,000.



Source: Maryland Department of Health and Mental Hygiene. 2000-2009 Epidemiology and Disease Control Programs.

Syphilis:

In terms of Syphilis, Charles County rates have been increasing. However, the number of cases each year is low, and rate can change dramatically with just a few additional cases. The 2009 Charles County syphilis incidence rate was 4.2; the 2009 Maryland state syphilis incidence rate was slightly more at 5.5 per 100,000.



Source: Maryland Department of Health and Mental Hygiene. 1999-2008. Epidemiology and Disease Control Programs.

Demographics of Charles County HIV/AIDS Prevalence Cases:

In 2008, 32 people were diagnosed with HIV in Charles County, representing an HIV diagnosis rate of 22.7 per 100,000 population. This is well below the Maryland state average rate of 45.9 per 100,000. Charles County HIV incidence cases made up 1.2% of the total Maryland HIV incidence cases for 2008.

An additional 15 people were diagnosed with AIDS in Charles County in 2008, representing an AIDS diagnosis rate of 10.7 per 100,000. Again, this rate is well below the Maryland state average rate of 18.4. Charles County AIDS incidence cases made up 1.4% of the total Maryland AIDS incidence cases for 2008.

As of 12/31/2008, a total of 283 Charles County residents were living with HIV. They make up 1.0% of the total HIV cases in Maryland. The 2008 Charles County HIV prevalence rate was 201.0 per 100,000. There is one HIV cases in Charles County for every 497 county residents. The Charles County prevalence rate is significantly below the Maryland HIV prevalence rate of 515.1.

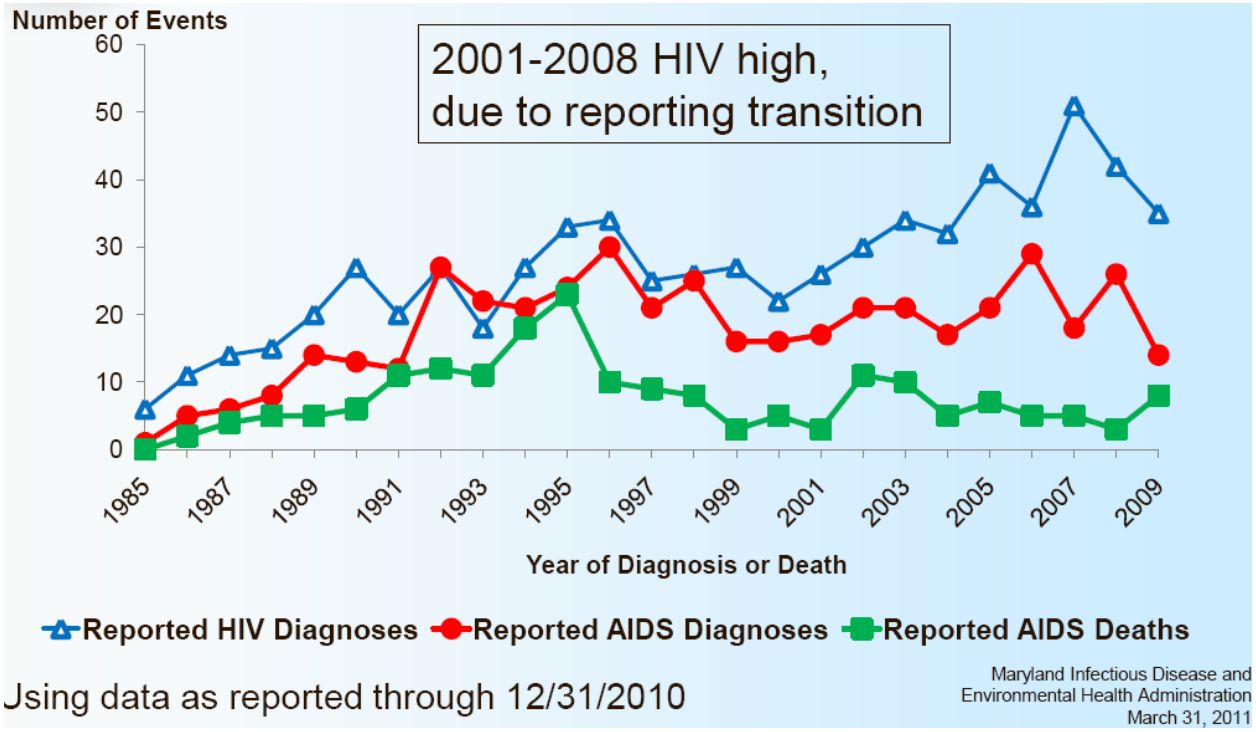
Approximately half of the HIV prevalence cases in Charles County are living with HIVS only (N=144) and the other half are living with HIV and an AIDS diagnosis (N=139). The 2008 Charles County HIV without

AIDS prevalence rate was 102.3 per 100,000; the 2008 Charles County HIV with AIDS prevalence rate was 98.7 per 100,000. These rates are much lower than the Maryland state average prevalence rates: 225.7 for HIV without AIDS and 289.4 for HIVS with an AIDS diagnosis.

The remaining data is presented for the Southern Maryland Region including Calvert, Charles, and St Mary's Counties.

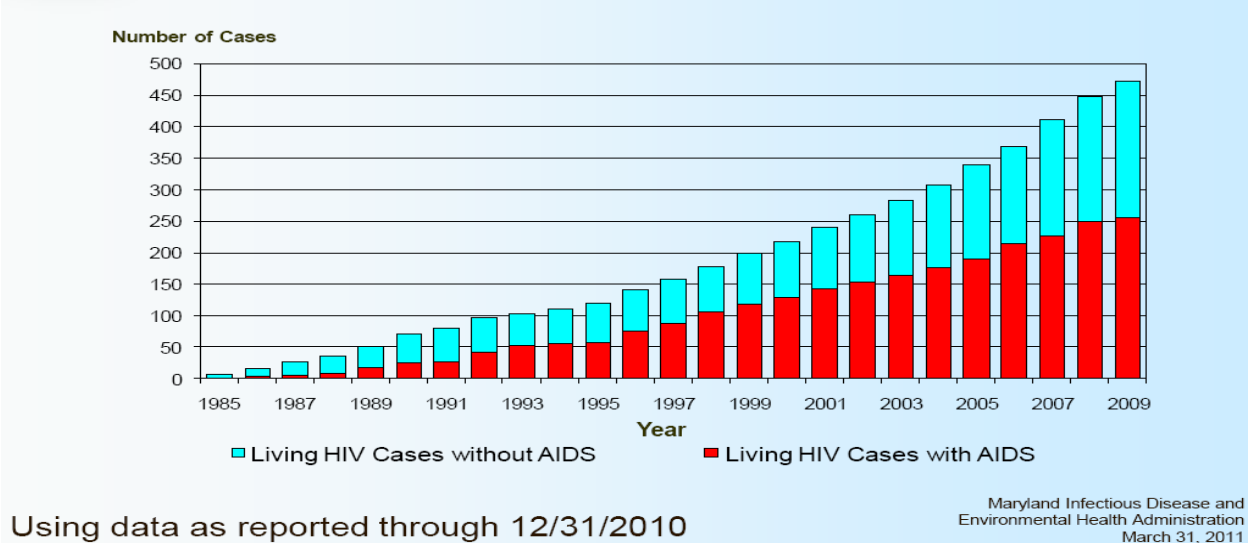
Trends in HIV/AIDS for the Southern Maryland Region:

Reported HIV diagnoses in Southern Maryland climbed each year from 1985 through 2007; however, decreases in the number of HIV diagnoses have been seen for the last 3 years. Reported AIDS diagnoses have remained stable since their rise in the late 1980's and early 1990's. Deaths from AIDS have seen dramatic decreases since their peak in the mid-90's.



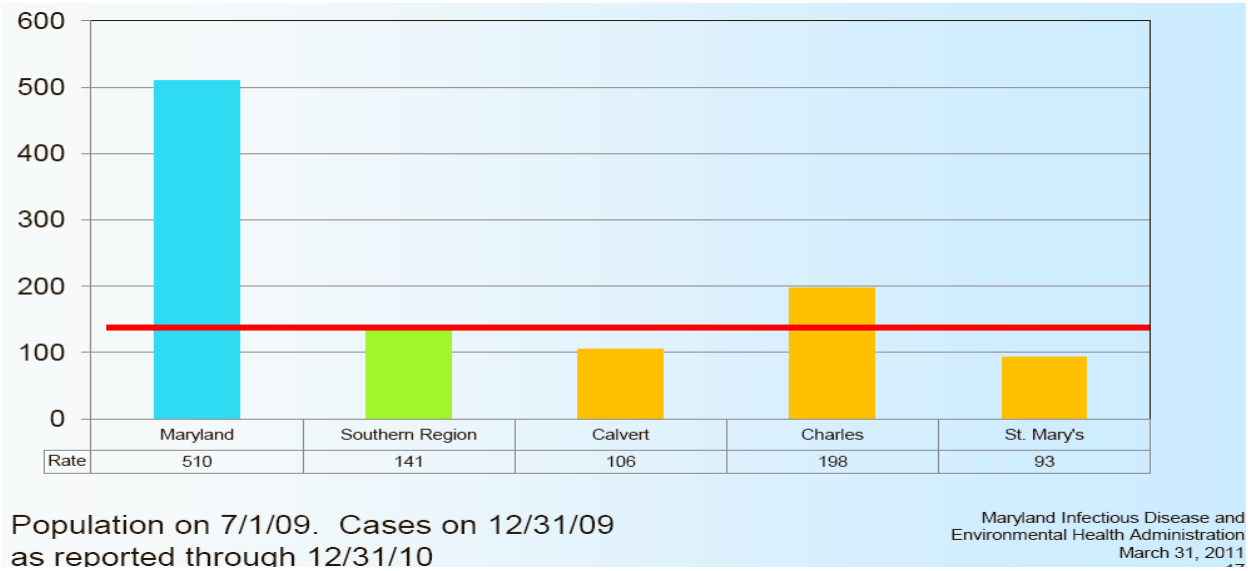
Living HIV Cases in Southern Maryland:

The total number of living HIV cases has increased steadily from 1985 to 2009. The number of living HIV cases with AIDS and the number of HIV cases without AIDS is approximately equal.



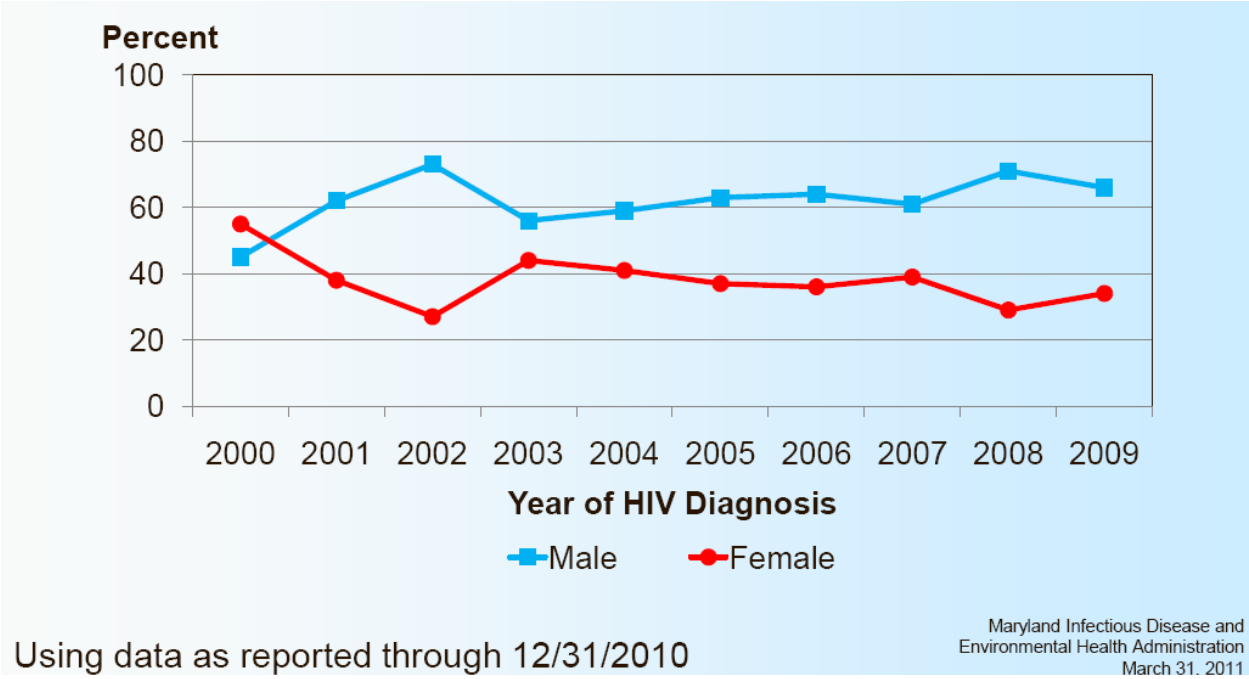
Living HIV Cases Rate per 100,000 population by County, Southern Maryland, 2009:

Charles County has the highest living HIV case rates among the Southern Maryland jurisdictions at 198 per 100,000. However, Charles County's rate is much lower than the Maryland state average rate of 510.



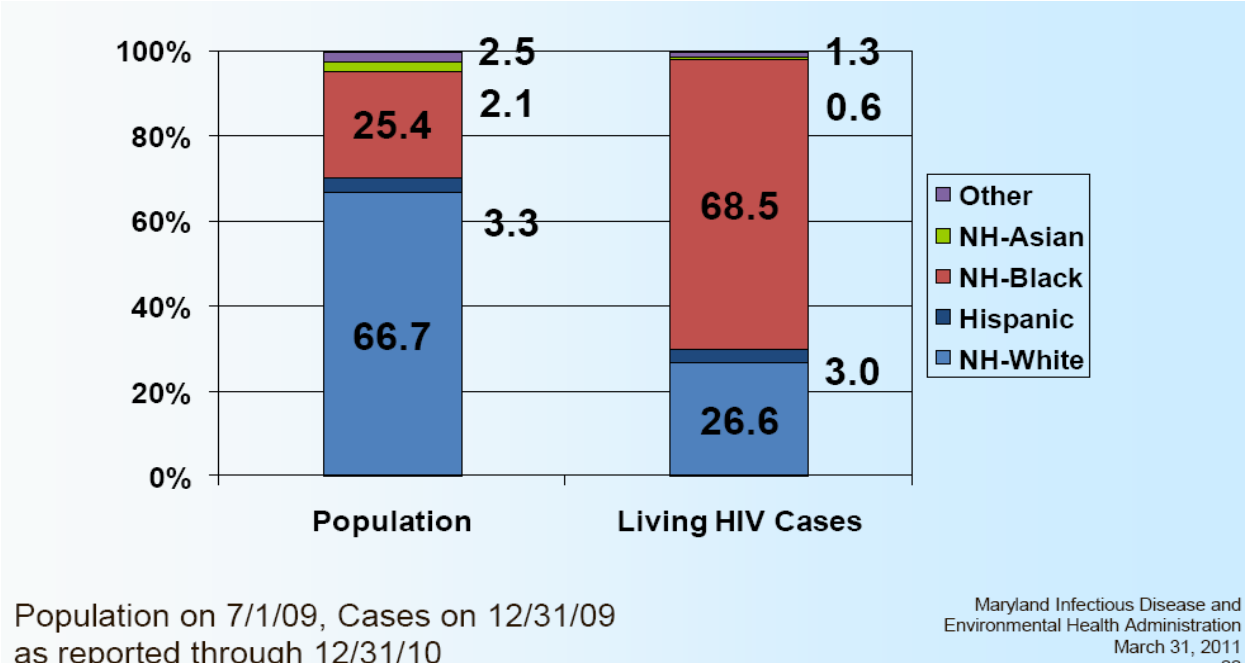
Reported HIV Diagnosis Trends by Sex, Southern Maryland Region:

For the last decade, more males have been diagnosed with HIV in Southern Maryland than females. Males have represented approximately two-thirds of the yearly HIV diagnoses for most of the last decade.



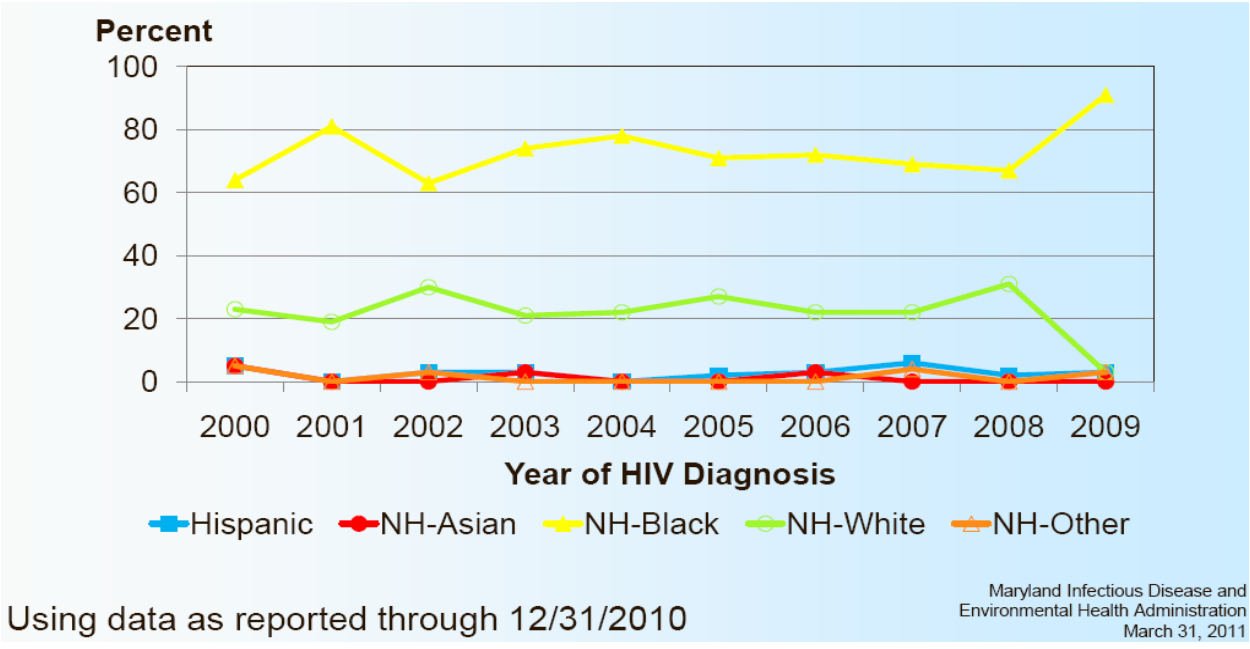
Population and Living HIV Cases by Race/Ethnicity, Southern Maryland Region:

African Americans in Southern Maryland are disproportionately affected by HIV. African Americans make up 25.4% of the total regional population; however, they represent 68.5% of the living HIV cases in Southern Maryland.



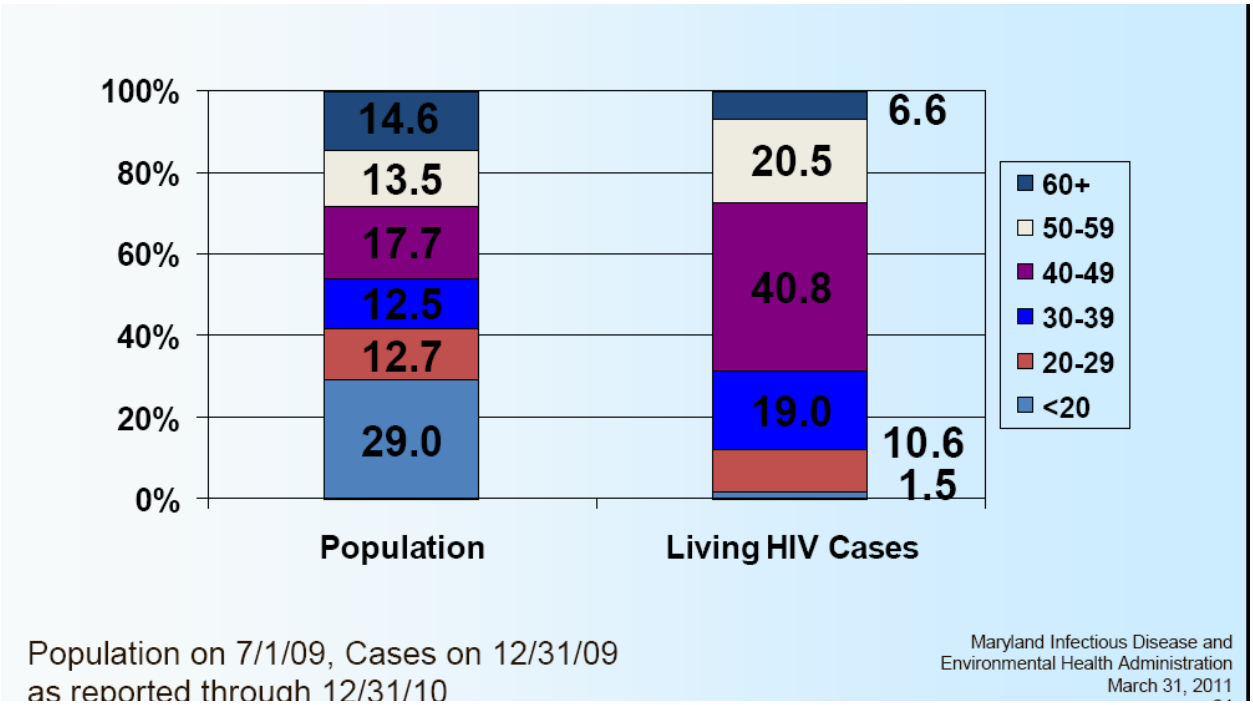
Reported HIV Diagnosis Trends by Race/Ethnicity, Southern Maryland Region:

HIV diagnoses for African Americans are well above all other races in Southern Maryland and are currently rising. There is a downward trend in HIV diagnoses for Caucasians, and HIV diagnoses for all other races appear steady.



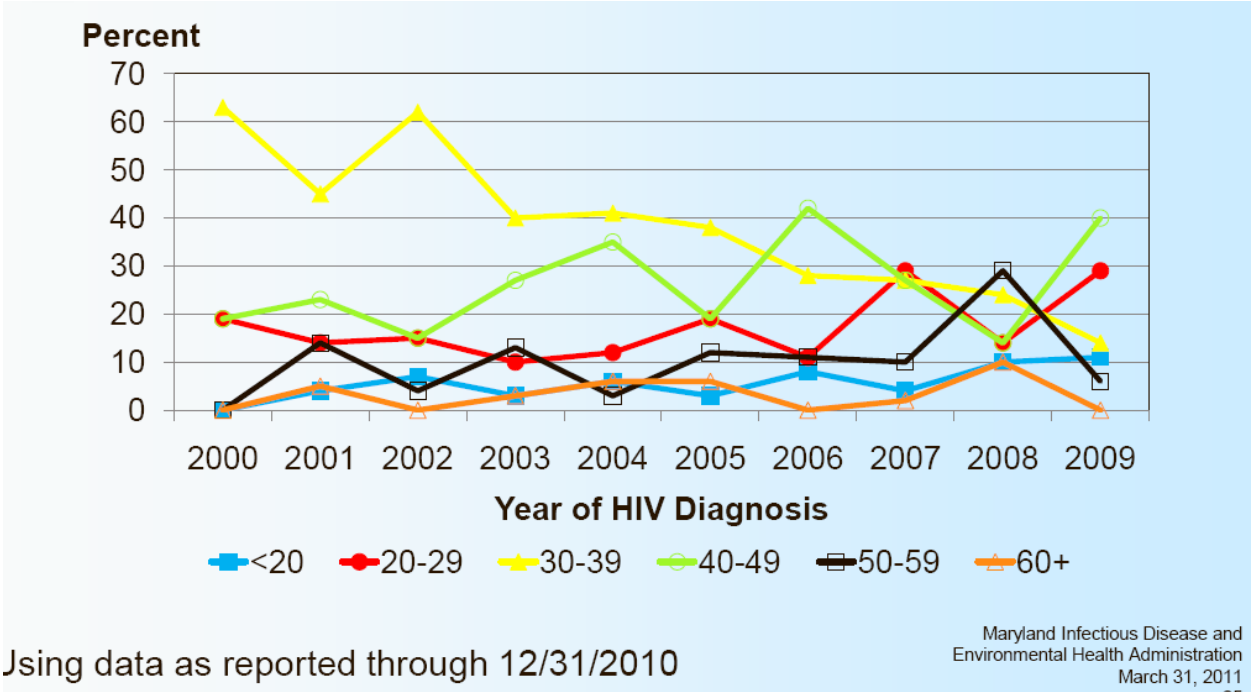
Population and Living HIV Cases by Age, Southern Maryland Region:

Persons aged 30-59 in Southern Maryland are disproportionately affected by HIV. The age group with the largest discrepancy is the 40-49 year old group. They represent 17.7% of the total regional population; however, they are 40.8% of the total living HIV cases in Southern Maryland.



Reported HIV Diagnosis Trends by Age of Diagnosis:

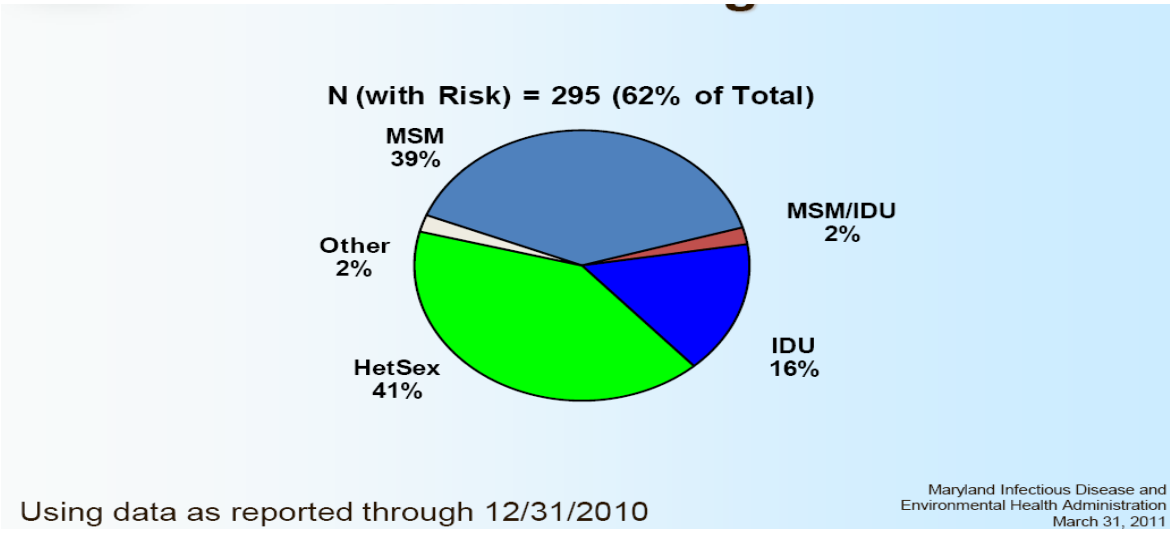
Recent increases in HIV diagnoses have been seen for the 20-29 and 40-49 year old populations. Large declines have been seen in the number f HIV diagnoses among those aged 30-39 years. HIV diagnoses have remained fairly steady for those less than 20 years and those greater than 60 years.



Living HIV Cases 12/31/2009 by Exposure Category, Southern Maryland region:

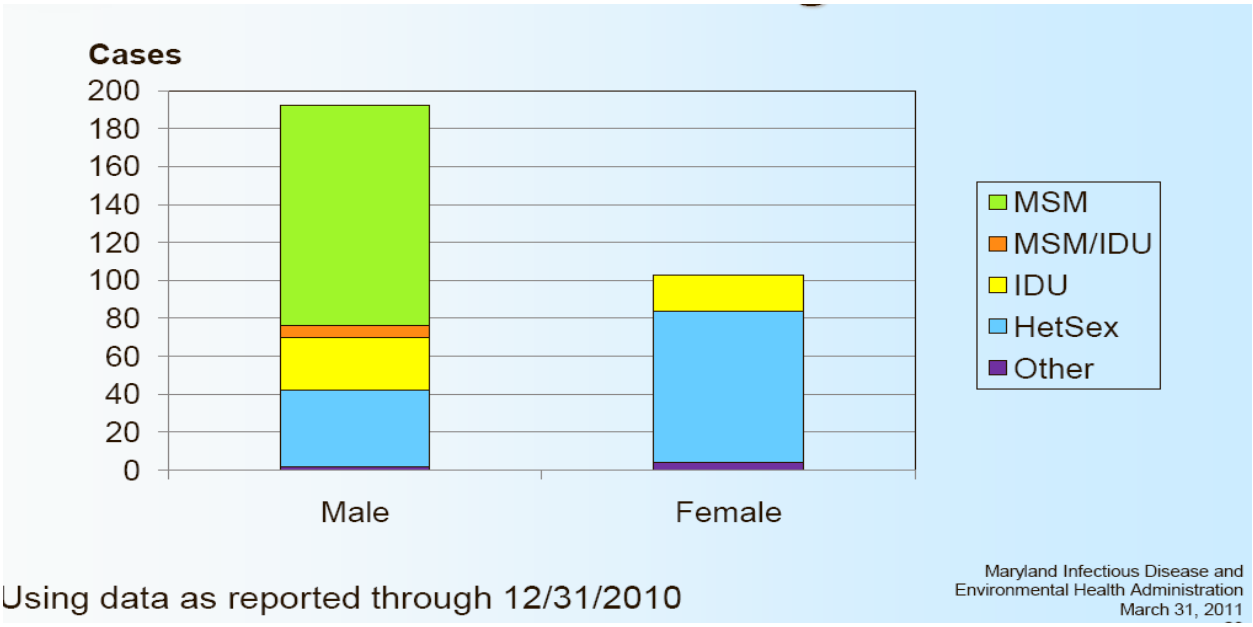
62% of the living HIV cases in Charles County have a known HIV/AIDS risk factor. The most common risk factors seen among HIV prevalence cases in Southern Maryland include heterosexual contact with a person who has or is at risk for HIV infection and men who have sex with men.

MSM: Men who have sex with men
IDU: Injection drug use
MSM/IDU: Men who have sex with men and inject drugs
HetSex: Heterosexual Contact with a person who has or is at risk for HIV infection



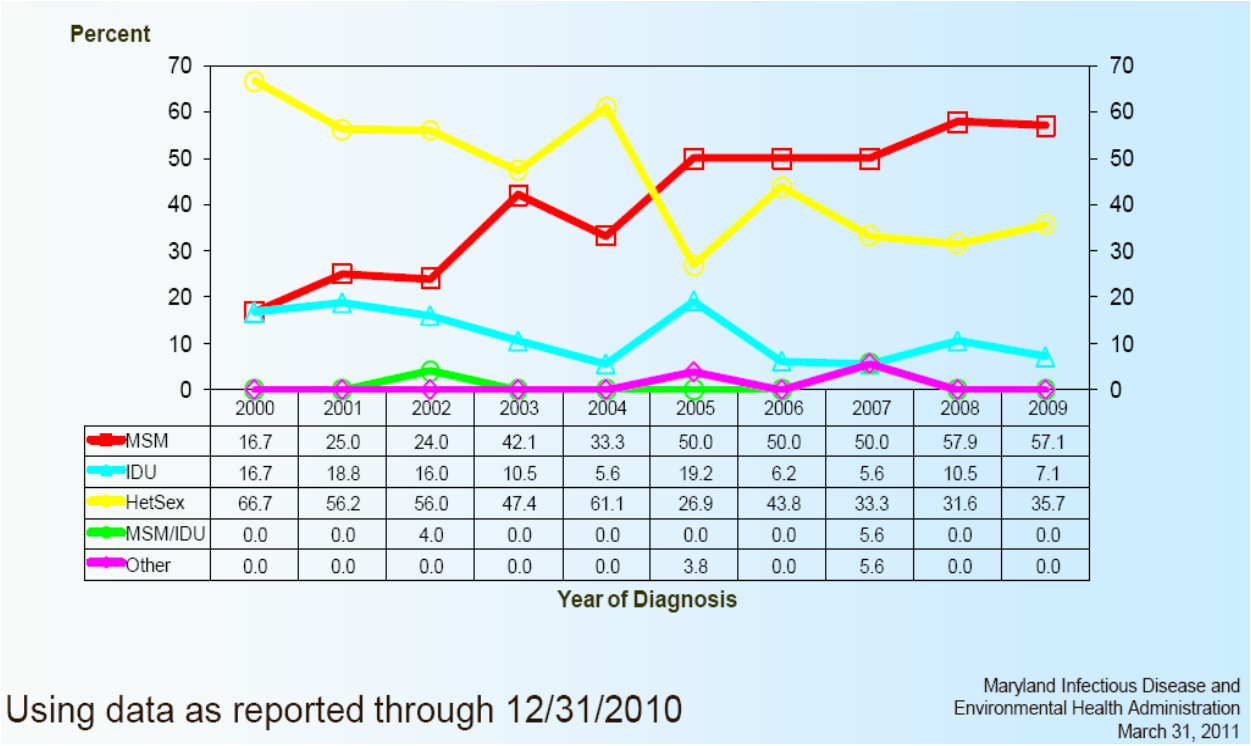
Living HIV Cases 12/31/2009 by Risk and Sex at Birth, Southern Maryland Region:

The most common risk factor among male HIV prevalence cases in Southern Maryland is men who have sex with men.
The most common risk factor among female HIV prevalence cases in Southern Maryland is having heterosexual contact with someone who has or is at risk for HIV infection.



Reported HIV Diagnoses Exposure Category Trends, Southern Maryland Region:

HIV diagnoses for heterosexual contact have seen decreases in the last decade. However, MSM is becoming an increasingly more prevalent risk factor for exposure.



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
MSM	16.7	25.0	24.0	42.1	33.3	50.0	50.0	50.0	57.9	57.1
IDU	16.7	18.8	16.0	10.5	5.6	19.2	6.2	5.6	10.5	7.1
HetSex	66.7	56.2	56.0	47.4	61.1	26.9	43.8	33.3	31.6	35.7
MSM/IDU	0.0	0.0	4.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	3.8	0.0	5.6	0.0	0.0

2009 Reported Adult/Adolescent HIV Diagnoses (N=35), Southern Maryland Region:

- Linkage to Care: 49% had a CD4 or VL test within 3 months of HIV diagnosis
- CD4 at Diagnosis: 54% had a CD4 test within 12 months of HIV diagnosis, and the median value was 258 cells/microliter
- Late HIV Diagnosis: 23% had an AIDS diagnosis within 12 months of their HIV diagnosis.
- Progression: The average time from HIV diagnosis to AIDS diagnosis was 2.6 years
- Late HIV diagnosis: 64% were diagnosed with AIDS within 12 months of their HIV diagnosis
- There were 473 living HIV cases at the end of 2009 and 35 reported HIV diagnoses during 2009
- Charles County had the greatest share of living cases (60%)
- Rates of living cases were 2 times higher in Charles County than the other counties.
- HIV was being diagnosed late (23% late, median CD4 258), contributing to many AIDS diagnoses (64% had late HIV diagnosis)

- Males were disproportionately affected (60% of cases vs. 49% of population) and the proportion male was increasing.
- Non-Hispanic blacks were disproportionately affected (68% vs. 25%), the proportion was stable.
- Persons 30-59 years old were disproportionately affected (80% vs. 44%), but the proportions were decreasing among 30-39 year olds while increasing 20-29 and 40-49 year olds.
- Sexual transmission predominates (>80%)
  -Homosexual and heterosexual transmission among men
  -Heterosexual transmission among women
  -Male homosexual transmission proportion was increasing
  -Heterosexual transmission was decreasing
- Injection drug use is an important route of transmission (>16%), but the proportion IDU was decreasing.

HIV/AIDS/STD References:

1. Maryland DHMH. AIDS Administration. 2005 Maryland HIV/AIDS Annual Report. Available at:

http://dhmh.state.md.us/AIDS/Data&Statistics/Statistics/2005AnnualReport.htm.

2. Maryland DHMH. Infectious Disease and Environmental Health Administration. Southern Maryland Regional HIV/AIDS data. March 31, 2011.

3. Maryland DHMH. Infectious Disease and Environmental Health Administration. Maryland HIV/AIDS Epidemiological Profile. April 2011.

Qualitative Data Relating to Communicable Disease, Sexually Transmitted Diseases, HIV/AIDS:

Just over half of the long survey participants reported that infectious diseases (62.9%) and sexually transmitted diseases (60.7%) are a problem in Charles County on some level. Only 11.4% felt that infectious diseases are a "serious problem." 25.7% reported that sexually transmitted diseases are a "serious problem" in the county.

Health Issue/Condition:	Percent Reporting No Problem in county	% Reporting this as a problem at any level	Percent Reporting this as a serious problem
Infectious disease	19.1	62.9	11.4
Sexually transmitted diseases	4.7	60.7	25.7

Behavioral risk factor data relating to communicable disease, STD's, HIV/AIDS included:

- 94% reported that they always wash their hands before they prepare food and after they use the bathroom;
- 65.5% always get a flu shot each year;
- 68.2% always practice safe sex;
- 98% never use illegal drugs.

Communicable diseases were not a topic of discussion at many of the focus groups. The Partnerships for a Healthier Charles County focus group did discuss sexually transmitted diseases and AIDS and an increase in the Men having Sex with Men (MSM) population.

Immunizations were also discussed at the focus groups. According to discussion at the Disease-specific group, there is a lack of immunizations services and a lack of flu vaccinations within the county. The Charles County Department of Health's Immunization Program was cited as a strength within the community.

Access to Care:

Screening Practices:

The availability and access to recommended screenings are crucial to early treatment and recovery of many chronic diseases. The 2006-2010 Maryland Behavioral Risk Factor Surveillance System (BRFSS) was queried to determine if Charles County residents have access to and are receiving health screenings in the appropriate time frames. 2006-2010 BRFSS data was used in order to increase the sample size and validity of the statistics. The percentages reported in this report are county-level estimates that have been weighted to reflect the current Charles County population.

Recommended Screenings for Women:

From 2006-2010, Charles County female BRFSS participants over the age of 40 years were asked if they have ever had a mammogram. The majority of those participants (93.1%) reported that they have had a mammogram in their life. This percentage is similar to the Maryland state average percentage of 92.5%.

Ever had a mammogram:	**Didn't have exam**	**Had exam**	**Total**
Charles County	29 (6.9%)	393 (93.1%)	422
Maryland	796 (7.5%)	12384 (92.5%)	13180

Women over 50 years were also asked if they have had a breast exam and mammogram in the past 2 years. 70.7% of Charles County female BRFSS participants over the age of 50 years reported that they have had a mammogram and breast exam in the past 2 years; this percentage is less than the Maryland state average percentage of 75.5%. This percentage is also much smaller than the percentage of women over 40 years who have ever had a mammogram (70.7% vs. 93.1%). A small percentage (9.8%) admitted that they have never had a mammogram and breast exam.

Had a mammogram and breast exam in past 2 years:	**Didn't have exam and mammogram**	**Had exam and mammogram**	**Never had an exam and mammogram**	**Total**
Charles County	55 (20.1%)	199 (70.7%)	28 (9.8%)	282
Maryland	1483 (14.9%)	7319 (75.5%)	899 (9.6%)	9701

The majority of Charles County females over the age of 18 years with an intact cervix are getting Pap smears. From 2006-2010, an overwhelming 92.6% reported that they have ever had a Pap smear.

Ever had a Pap smear:	**Didn't have exam**	**Had exam**	**Total**
Charles County	20 (7.4%)	395 (92.6%)	415
Maryland	485 (6.4%)	11881 (93.6%)	12366

Those same women were also asked if they have ever had a Pap smear in the last 3 years. The majority of those women reported that they have indeed had a Pap smear in the last 3 years (88.3%). This Charles County percentage is slightly above the Maryland state average percentage of 86.1%.

Had a Pap smear in the past 3 years:	**No**	**Yes**	**Never Had**	**Total**
Charles County	28 (4.3%)	364 (88.3%)	20 (7.5%)	412
Maryland	1229 (7.4%)	10559 (86.1%)	485 (6.5%)	12273

Recommended Screenings for Men:

From 2006-2010, Charles County male BRFSS participants over the age of 40 years were asked if they have ever had a prostate-specific antigen test (PSA) for the diagnosis of prostate cancer. Nearly three-quarters of the men (72.9%) reported that they have had a PSA.

Ever had a PSA:	**Yes**	**No**	**Total**
Charles County	196 (72.9%)	67 (27.1%)	263
Maryland	5386 (66.9%)	2176 (33.1%)	7562

Those males were also asked if they have had a PSA in the past 2 years. The percentage reporting that they have had the PSA test in the past 2 years decreased slightly to 63.6%. There were a greater percentage of Charles County men over 40 years who reported never having had a PSA (27.1%) than men who have had a PSA but not in the past 2 years (9.2%).

Had a PSA in the past 2 years:	**No**	**Yes**	**Never Checked**	**Total**
Charles County	22 (9.2%)	173 (63.6%)	67 (27.1%)	412
Maryland	1229 (7.4%)	10559 (86.1%)	485 (6.5%)	12273

From 2006-2010, Charles County male BRFSS participants over the age of 40 years were asked if they have ever had a digital rectal exam (DRE) for the diagnosis of prostate cancer. Slightly more Charles County men (79.3%) reported having ever had a DRE than Charles County men who reported having ever had a PSA (72.9%).

Ever had a DRE:	**Yes**	**No**	**Total**
Charles County	222 (79.3%)	52 (20.7%)	274
Maryland	6434 (79.4%)	1375 (20.6%)	7809

Those males were also asked if they have had a DRE in the past 2 years. The percentage reporting that they have had the DRE test in the past 2 years decreased slightly to 63.2%.

Had a DRE in the past 2 years:	No	Yes	Never Checked	Total
Charles County	46 (15.9%)	172 (63.2%)	52 (20.9%)	270
Maryland	1561 (20%)	4808 (59.2%)	1375 (20.7%)	7744

Recommended Screenings for both Genders:

Charles County 2006-2010 BRFSS participants over the age of 50 years were asked if they have ever had a sigmoidoscopy or colonoscopy in the last 2 years. One-third of Charles County adults over 50 years reported having had a sigmoidoscopy or colonoscopy in the last 2 years (37.8%). One-third of the respondents reported that they have never had either a sigmoidoscopy or colonoscopy (31.5%).

Had a Sigmoidoscopy or Colonoscopy in the past 2 years:	No	Yes	Never Checked	Total
Charles County	160 (30.7%)	164 (37.8%)	133 (31.5%)	457
Maryland	5474 (34.2%)	5224 (35.2%)	4516 (30.5%)	15214

From 2007-2009, Charles County BRFSS participants were asked if they have ever had their cholesterol checked. Most Charles County adults have had their cholesterol checked at some time.

Ever had Cholesterol Checked:	Yes	No	Total
Charles County	556 (85.1%)	51 (14.9%)	607
Maryland	15669 (85.3%)	1527 (14.7%)	17196

Those Charles County participants were also asked if they have had their cholesterol checked in the past 2 years. Most had their cholesterol checked in the last 2 years (77.4%). 15% reported that they had never had their cholesterol checked.

Had cholesterol checked in the past 2 years:	No	Yes	Never Checked	Total
Charles County	43 (7.6%)	507 (77.4%)	51 (15%)	601
Maryland	1504 (9.4%)	14006 (75.7%)	1527 (14.9%)	17037

Access to Routine Exams:

From 2006-2010, 73.1% of Charles County BRFSS respondents reported that they had been to a doctor for a routine checkup in the last year. Rates in Charles County are nearly identical to the Maryland state average rates.

Time since last routine checkup	Never went	< 1 year	1-2 years	2-5 years	5+ years	Total
Charles County	11 (0.7%)	1195 (73.1%)	180 (13.7%)	95 (7.8%)	78 (4.6%)	1559
Maryland	270 (0.7%)	34262 (73.4%)	5070 (12.9%)	2786 (7.6%)	2178 (5.4%)	44566

In 2008 and 2009, Charles County BRFSS respondents were asked when they last had their eyes examined by a doctor. Nearly two-thirds (65.1%) had an eye exam in the past year, and 82.8% reported having an eye exam in the past 2 years. Charles County rates were similar to Maryland state average rates.

Time since last routine eye exam	Within past month	< 1 year	1-2 years	2+ years	Never went	Total
Charles County	24 (13.3%)	93 (51.8%)	33 (17.7%)	27 (16.6%)	2 (0.7%)	179
Maryland	91 (13.2%)	2908 (51.4%)	1000 (18.2%)	853 (15.6%)	61 (1.6%)	5613

Health Status:

2006-2010 Charles County BRFSS data indicates that the health status of most county residents is positive. Over half of county residents report themselves in Very Good to Excellent health (60.7%). Only a small portion considers themselves in Fair to Poor health (11.2%).

Health Status:	Excellent	Very Good	Good	Fair	Poor	Total
Charles County	338 (23.2%)	570 (37.5%)	438 (28.1%)	151 (7.8%)	73 (3.4%)	1570
Maryland	9265 (23.1%)	15525 (35.4%)	12752 (28.4%)	5048 (9.9%)	1955 (3.1%)	44545

Health Insurance:

2009 Charles County health uninsurance estimate as determined by the US Census Bureau's Current Population Survey is 9.4%. This is higher than the 2008 Charles County health uninsurance rate of 6.4% estimated by the US Census Bureau's American Community Survey. The increase in the health uninsurance rate from 2008 to 2009 is statistically significant to a 90% confidence level. It is however lower than the Maryland state health uninsurance rate of 14% for 2009.

The 2008 US Census Bureau's American Community Survey reported health uninsurance rates by age. The age group most affected by lack of health insurance in Charles County is the 18-64 year-olds. Rates in Charles County are lower than the Maryland state rates for all age groups.

- Under 18 years: 2.2% for CC, 5% for MD
- 18-64 years: 8.8% for CC, 14.7% for MD
- 65+ years: 0% for CC, 1.2% for MD
- All ages: 6.4% for CC, 10.8% for MD

The 2006-2010 Charles County BRFSS estimates that 8.0% of county residents do not have health insurance coverage of any kind. This is lower than the 11.5% estimated for the state of Maryland.

Health Insurance Coverage:	**No**	**Yes**	**Total**
Charles County	90 (8%)	1484 (92%)	1574
Maryland	3525 (11.5%)	41355 (88.5%)	44880

In 2008-2009, Charles County BRFSS respondents were also asked if they have health insurance for their eye care. A smaller percentage reported having vision insurance than health insurance (72.2% vs. 92%). The Charles County vision insurance rate is slightly higher than the Maryland rate (72.2% vs. 70.6%).

Vision Insurance Coverage:	**Yes**	**No**	**Total**
Charles County	121 (72.2%)	54 (27.8%)	175
Maryland	3641 (70.6%)	1874 (29.4%)	5515

From 2006-2010, Charles County BRFSS participants were asked if there was a time in the past year when they could not afford to see a doctor. 9.5% reported that they did indeed have a time in the last year when they couldn't afford to see a doctor. This is higher than the percentage who reported that they do not have health insurance. So there are residents who have health insurance of some kind who still can't afford to see a doctor, whether it be due to co-pay or deductible costs, prescription costs, or transportation costs. There are multiple barriers to their needed health care.

Time when you couldn't afford to see doctor:	**Yes**	**No**	**Total**
Charles County	135 (9.5%)	1442 (90.5%)	1577
Maryland	4035 (11.3%)	40898 (88.7%)	44933

Transportation:

VanGo public transit provides transportation opportunities within Charles County and serves several desired primary destinations including the College of Southern Maryland, St. Charles Towne Center Mall, employment locations and medical facilities, as well as numerous shopping centers.

Most routes operate Monday through Saturday from 7:00am-10:00pm on hourly schedules. Some secondary routes operate Monday through Friday with fewer loops throughout the day.

VanGo has stops at the Charles County Health Department, Charles County Department of Social Services, Civista Medical Center, College of Southern Maryland, and the Pembrooke Medical Center.

VanGo comes to Civista Medical Center at the 12th of every hour from 7:12 AM to 9:12 PM. VanGo comes to the Charles County Department of Health every 30 minutes from 7:07 AM to 5:07 PM. Additional buses to La Plata and Waldorf come every 30 minutes from 6:07 until 9:40 PM. VanGo comes to the College of Southern Maryland every 30 minutes from 7:17 AM to 5:17 PM. Additional buses to La Plata and Waldorf come every 30 minutes from 6:17-9:17 PM.

A general all day ticket is $2, or $ 1 for a one-way ticket. Fees are half-price for seniors, and children under 6 are free.

Specialized transportation services:

VanGo offers specialized transportation services targeted at under-served populations who are most in need of their services including seniors and those with disabilities. Special arrangements and transportation have been set up to accommodate those needs.

Some of the special services available include:

- *Indian Head Senior Center Route*
- *Americans with Disabilities Paratransit Service*: The VanGo ADA Transportation Service is a door-to-door service that provides passenger assistance from the customer's door and the vehicle.
- *Demand-Response Transportation*: VanGo provides door-to-door, shared ride, general purpose demand-response service for people 60 and older and people with disabilities who are not located on the VanGo public transit route or unable to use the route due to a disability.
- *Dialysis/Senior Center Subscription*: For customers needing transportation to dialysis and local senior centers, VanGo operates a guaranteed subscription service providing transportation based on where customers live.
- *Department of Social Services Demand-Response*: VanGo provides demand response transportation for DSS clients to work, work enrichment and training activities, and child care centers when VanGo public transit routes cannot meet the customer's needs.

- *Medical Assistance Transportation*: Medical Assistance transportation provides service to medical appointments for individuals participating in the Maryland Health Choice/Medical Assistance Program. When these appointments are in the Baltimore or Washington area, VanGo coordinates with the St. Mary's County Health Department to share rides when possible.

VanGo 2010 Transportation Plan:

In 2010, VanGo published a report that contained their transportation plan for the next 5 years. The plan included many new additions and modifications aimed at improving transportation and access to needed services for Charles County residents. They also aim to reduce waiting times and bus changes.

Some modifications to be implemented over the next 5 years include:

- Modifying existing routes
- Split routes from 60 minute loops to 2- 30 minute segments
- Interline routes
- Reconfigure Business A and B to serve common trunk
- Modify Nanjemoy Service
- Implement Sunday Service on Existing Routes
- Expand morning services
- Expand evening hours
- Reconfigure St Charles East Routes
- Expand service frequency on selected routes and implement 30 minute headways, including 301 Connector, La Plata, Pinefield, St Charles routes, Berry Rd, Charlotte Hall, Indian Head, Business A and B routes.

Health Professional Shortage Areas/ Medically Underserved Populations and Areas:

Health Professional Shortage Areas (HPSA):

As of September 2011, there are no federally designated health professional shortage areas in Charles County for primary medical care or dental health. This designation is assigned by the United States Department of Health and Human Services' Health Resources and Services Administration (HRSA).

There is a federally designated mental health professional shortage area for the entire county. It is reported that there are 16 full-time equivalent mental health professionals in Charles County, and there is need for one more mental health professional in order to fulfill the shortage. Charles County received a score of 14 out of 25. HPSA Scores are developed for use by the National Health Service Corps in

determining priorities for assignment of clinicians. Scores range from 1 to 25 for primary care and mental health, 1 to 26 for dental. The higher the score is the greater the priority.

Medically Underserved Populations and Areas:

Medically Underserved Areas/Populations (MUA/MUP) are areas or populations designated by HRSA as having: too few primary care providers, high infant mortality, high poverty and/or high elderly population.

There are 6 population/areas in Charles County with MUA/MUP designation.

There is one medically underserved population (MUP) in Charles County. An MUP is a group of people who face economic, cultural, or linguistic barriers to health care. In Charles County, the MUP is located in the Brandywine Service Area. This population is a government MUP, which means it was designated at the request of a State Governor based to documented unusual local conditions and barriers to accessing personal health services.

The Index of Medical Underservice (IMU) score. The lowest score (highest need) is 0; and the highest score (lowest need) is 100. The Brandywine MUP received a 0 IMU score. That means the need for medical services in this region is of the highest priority.

In addition to the MUP, there are 5 medically underserved areas (MUA) in Charles County. Medically Underserved Areas may be a whole county or a group of contiguous counties, groups of county or civil divisions or a group of urban census tracts in which residents have a shortage of personal health services. Those areas include:

- **Medically Underserved Area (MUA)**: Score 51.97
- District 4, Allens Fresh
- District 5, Thompkinsville
- District 9, Hughesville
- **Medically Underserved Area**: Score 61.25
- District 10, Marbury
- District 3, Nanjemoy

The IMU scale for Medically Underserved Areas is from 0 to 100, where 0 represents completely underserved and 100 represents best served or least underserved. Under the established criteria, each service area found to have an IMU of 62.0 or less qualifies for designation as an MUA.

The IMU involves four variables - ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of

the population age 65 or over. The value of each of these variables for the service area is converted to a weighted value, according to established criteria. The four values are summed to obtain the area's IMU score.

The Allens Fresh/Thompkinsville/Hughesville areas received an IMU score of 51.97. The Marbury/Nanjemoy areas received an IMU score of 61.25, which is close to the 62 cut off for MUA designation.

2007 Maryland Physician Workforce Study:

In 2007, the Maryland Physician Workforce Study was initiated to document current and future shortages by region and specialty, to determine the impact on access, to document key physician environment issues and potential impact on supply, and to engage physicians and hospitals in the discussion, and to develop a consensus for solutions. The study will run from 2007-2015. 2007 data will serve as the baseline for the study.

County level data is not available for this study; however, data for the Southern Maryland region (Charles, Calvert, and St Mary's counties) is presented below.

According to the 2007 Maryland Physician workforce study, the Southern Maryland region has a physician shortage for primary care physicians. Southern Maryland had the regional low for primary care physicians per 100,000 residents of 56.5. The Maryland state average rate was 58.2 per 100,000 residents.

Under medical specialties, the Southern Maryland region had a shortage for cardiology, dermatology, endocrinology, gastroenterology, hematology, oncology, infectious disease, nephrology, psychiatry, pulmonary medicine, and rheumatology. The only medical specialties with adequate physician supplies were allergy and neurology.

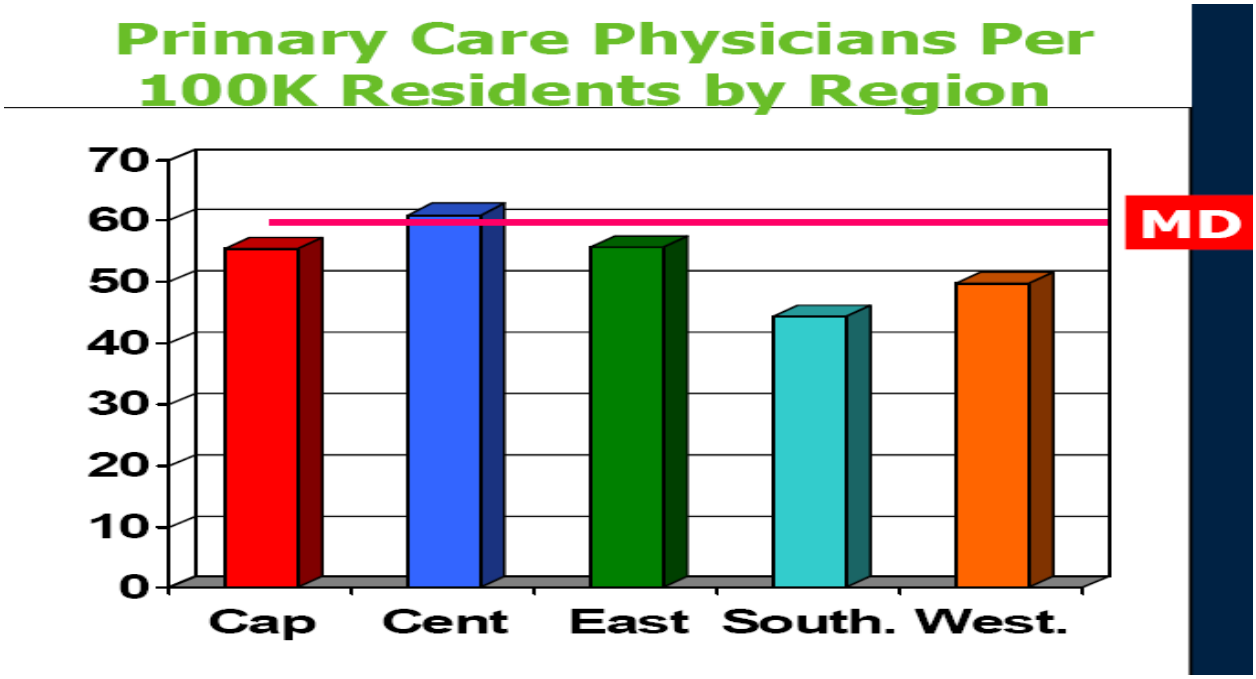
Under hospital-based physicians, the Southern Maryland region had a shortage for anesthesiology, diagnostic radiology, emergency medicine, pathology, physical medicine, and radiation oncology.

Under surgical specialties, the Southern Maryland region had a shortage of general surgery, neurosurgery, obstetrics, gynecology, orthopedic surgery, otolaryngology, plastic surgery, and thoracic and vascular surgery.

Southern Maryland also has a borderline physician shortage for ophthalmology surgery and urology surgery. Southern Maryland had the highest percentage of physician shortages than any other regions of Maryland (89.9%).

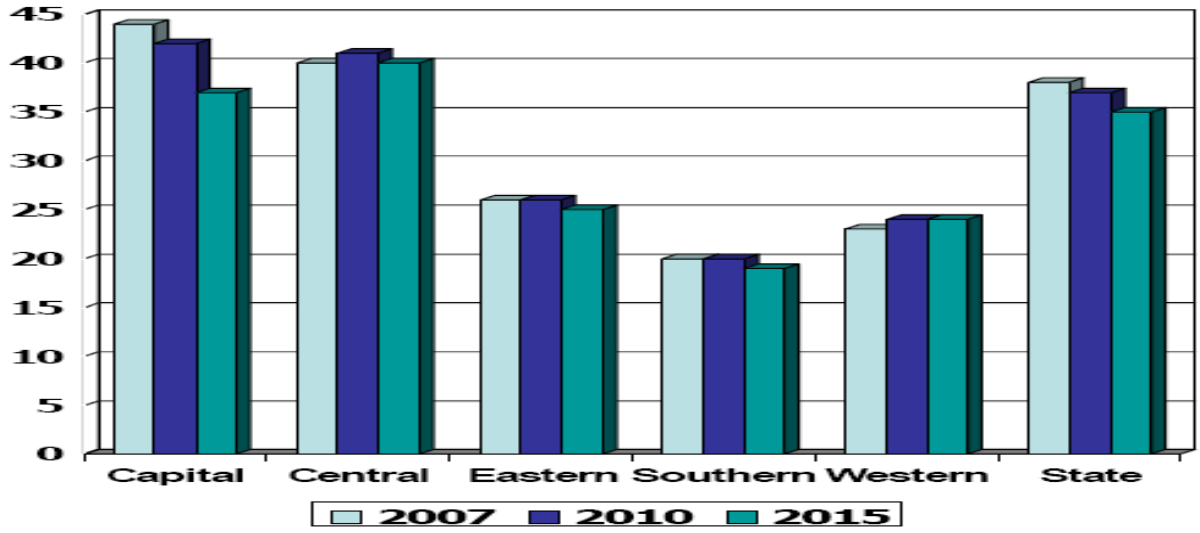
According to the study, Southern Maryland has the smallest portion of resident in training. There is only a handful in the region. Most of Maryland residents in training are located in the Central Region of the state.

When comparing all the Maryland regions, the Southern Maryland region had the lowest rate of primary care physicians per 100,000 residents at 44.4 physicians/100K residents. This is lower than the Maryland state average of 57 physicians/100K residents.



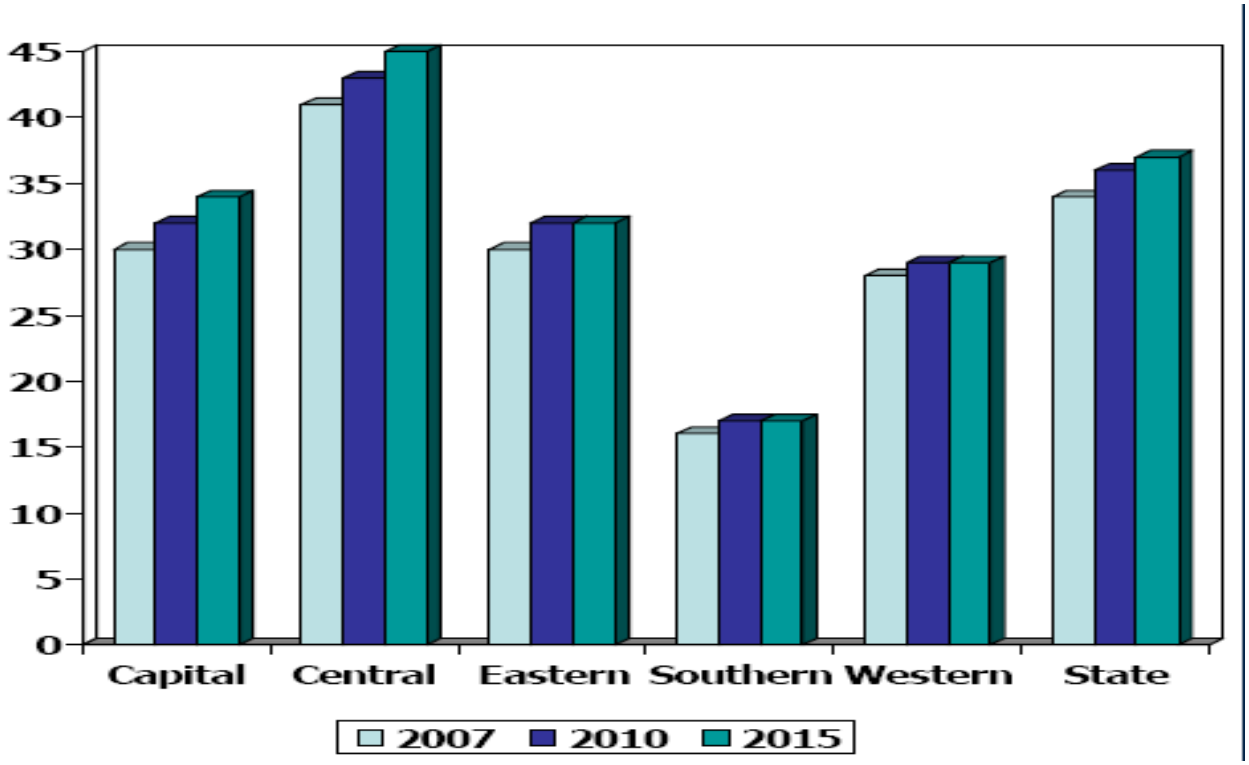
The Southern Maryland region also has the lowest rate of medical specialty physicians per 100,000 residents (20 per 100K residents). This is approximately half the rate of the Maryland state average for medical specialty physicians (38 per 100K residents). It is anticipated that the supply of medical specialists in the Southern Maryland region will decrease over the next decade due to retirements and in-migration into the county.

Medical Specialty Physicians per 100,000 Residents, 2007-2015 by Region

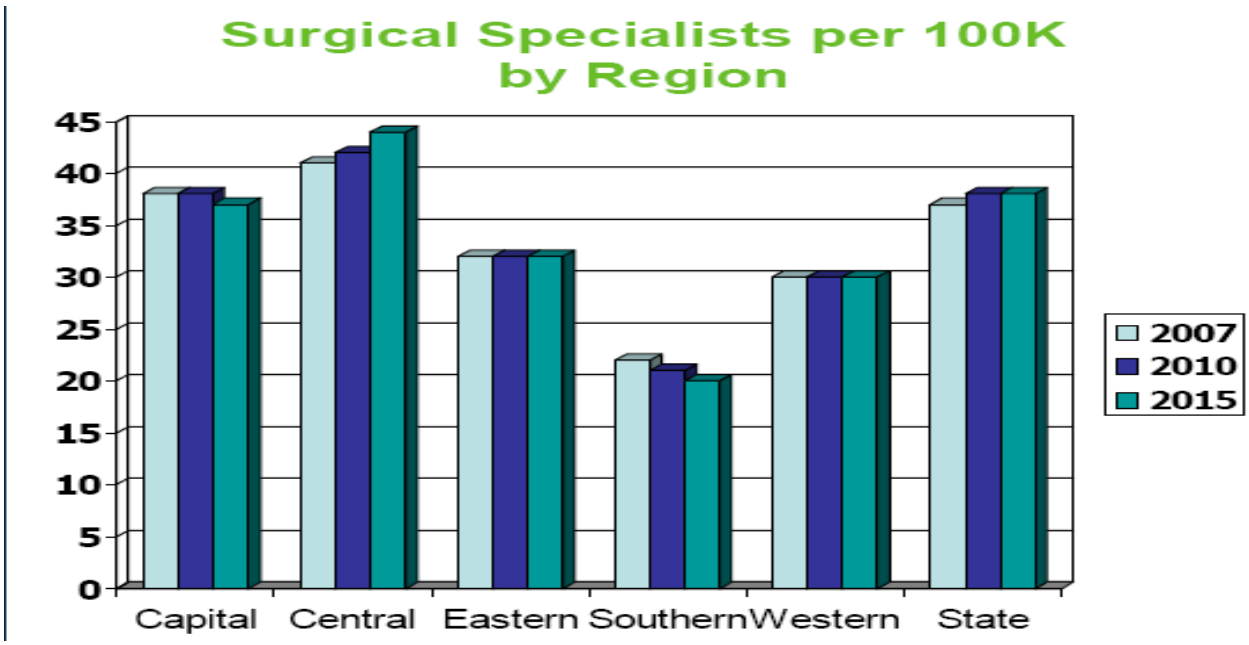


The Southern Maryland region also has the lowest rate of hospital specialty physicians per 100,000 residents (16 per 100K residents). This is more than half the rate of the Maryland state average for hospital specialty physicians (36 per 100K residents). The Southern Maryland region is expected to have flat growth from 2010-2015.

Hospital Specialist Physicians per 100,000 Residents, 2007-2015 by Region



The Southern Maryland region also has the lowest rate of surgical specialty physicians per 100,000 residents (22 per 100K residents). This is more than half the rate of the Maryland state average for hospital specialty physicians (37 per 100K residents). The Southern Maryland region is expected to have a decline in supply by 2015.



Homeless Data:

Services provided by Lifestyles of Maryland, Inc.

Lifestyles of Maryland, Inc. provide many programs in the community to assist those who are homeless. Between April 1, 2010 and April 1, 2011, 1796 individuals contacted them for housing because they had become homeless. This includes 587 school-aged children. 177 individuals were assessed for the Safe Nights Program for emergency shelter. 109 individuals were provided with showers, food, clothing, and/or outdoor camping equipment. 417 individuals who were living in motels or temporary double-up situations were provided additional services.

Point in time Data by the Charles County Core Services Agency:

Veterans:

"Point in Time" surveys were submitted for **33** homeless veterans, which accounted for **5%** of the total number of surveys received. Although measures were taken to eliminate duplication as much as possible, the chance for replication still exists. A few of the submissions had items that seem contradictory. For example there were 0 veterans in shelters under the "Current Living Status" category, but 2 in emergency shelters under the "Services Currently Being Received" category. Interpretation of terms and subjectivity may come into play with the "Services Being Received" and "Other Services Needed" categories.

The gender breakdown was approximately half male and half female. Two-thirds of the participants were African American (64%). The overwhelming majority was non-Hispanic. Over half of the survey

respondents were between the ages of 31-50 years. More than half of the veterans surveyed reported having children (61%).

More than half of the homeless veterans reported that they are staying with friends or family (52%). The most common services rendered included education, food, and clothing.

Homeless Veteran Demographics:	**Count (#)**	**% of total surveyed population**
Gender		
Male	15	45%
Female	17	52%
Missing	1	3%
Race		
White	11	33%
African American/Black	21	64%
Missing	1	3%
Ethnicity		
Non-Hispanic	32	97%
Hispanic	0	0
Missing	1	3%
Chronically Homeless	9	27%
Age		
18-30	2	6%
31-50	19	58%
51-61	10	30%
62 and older	2	6%

Homeless Veteran Behavioral Health Issues:	**Count (#)**	**% of total surveyed populations**
Chronic Substance Abuse	3	9%
Seriously Mentally Ill	6	18%
Dually Diagnosed	2	6%
Physical Disability	5	15%
Victims of Domestic Violence	2	6%

Household Composition:	**Count (#)**	**% of total surveying population**
Single with Children	7	21%
Number of Children with a single parent:	9	27%
Single Veterans with one child	4	12%
Single Veterans with 2 children	1	3%
Single Veterans with 3 children	1	3%
Single without children	11	33%
Two or more adults with children	12	36%
Number of children with two	23	

parent households with a parent who is a veteran		
Two-parent households with one child	4	12%
Two-parent households with 2 children	4	12%
Two-parent households with 3 children	1	3%
Two-parent households with 4 children	3	9%
Two or more adults without children	2	6%
Missing household data	1	3%
Total Number of Children with Veteran Parent (s)	32	

Current Living Situation:	**Count (#)**	**% of total surveying population**
Eviction	6	18%
Staying with Friends or Family	17	52%
On the Streets	2	6%
Residential Substance Abuse	3	9%
Shelter Plus Care	1	3%
Motel	2	6%
Other	1	3%
Missing	1	3%

Services Currently Received:	**Count (#)**	**% of total surveying population**
Emergency Shelter	2	6%
Transition Housing	2	6%
Permanent Housing (S+C)	1	3%
Case Management	5	15%
Substance Abuse Treatment	3	9%
Mental Health Care	3	9%
Housing Placement	1	3%
Life Skills Training	1	3%
Education (may be veterans' children, forms completed by CCPS)	16	48%
Transportation	4	12%
Food and Clothing	19	58%

Other Services Needed	**Count (#)**	**% of total surveying population**
Transition Housing	3	9%
Permanent Housing	17	52%

Job Training	3	9%
Case Management	13	39%
Child Care	3	9%
Mental Health Care	2	6%
Housing Placement	10	30%
Life Skills Training	1	3%
Transportation	2	6%

Agencies Servicing Veterans:	**Count (#)**
Maryland's Commitment to Veterans	11
Lifestyles of Maryland, Inc.	2
Jude House	1
Charles County Core Services Agency	1
Dept. of Labor, Licensing and Regulation (DLLR)	1
Charles County Dept of Social Services	1
Charles County Public Schools	16
Catholic Charities Angels Watch PATH	1

Maryland's Commitment to Veterans and LifeStyles of Maryland, Inc. were working with the same vet, so total vets being served is still 33.

Households with Children:

Charles County agencies submitted 691 Point in Time surveys. These surveys were developed to establish a baseline estimate for the number of homeless families in Charles County. The results of those surveyed are presented below.

The majority of the homeless people surveyed were sheltered in some form or another (84%). The most common forms of shelter were staying with friends or family (48%) and living in a homeless shelter (22%). Only 15% reported that they are chronically homeless.

Type of Living Situation	**Count**	**% of total surveyed population**
Unsheltered		
Eviction	32	5%
On the Streets	39	6%
Total Unsheltered	71	10%
Sheltered		
Staying with Friends or Family	323	48%
Shelter (Includes Fuller House)	151	22%
Hospital	1	0.1%
Residential Substance Abuse	27	4%
Residential Rehabilitation Program (Mental Health Group Home)	8	1%

Project Home	2	0.3%
Shelter Plus Care	40	6%
Safe Haven	4	0.6%
Detention Center (Will be homeless upon release)	4	0.6%
CSA Rental Assistance Program	14	2%
Motel	12	2%
Other Living Situations (Unknown whether sheltered or unsheltered)	41	6%
Chronically Homeless	104	15%

There were a total of 1,250 children reported through this study. A total of 905 of those children were with a single parent; 329 children were with two or more adults; and 16 children were unaccompanied.

Household Demographic:	**Count**	**% of total surveyed population**
Single Persons with Children	278	41%
Single Persons without Children	231	34%
Two or more adults with Children	106	15%
Two or more adults without Children	17	2%
Second Adult in Two or more adults with children	37	5%

Two-thirds of the surveyed homeless were female (65%) and African American (65%). The majority were non-Hispanic (94%). Veterans made a small percentage of the population (5%). Over half were between the ages of 31-50 years (57%).

Demographics:	**Count**	**% of total surveyed population**
Gender		
Male	238	35%
Female	444	65%
Race		
White	205	31%
African American/Black	432	65%
All other races	Unknown	<1%
Ethnicity		
Hispanic	13	2%
Non-Hispanic	649	94%
Missing	29	4%
Veterans	37	5%
Age		
18-30	184	27%
31-50	393	57%

51-61	98	14%
62 and older	12	2%

There are many subpopulations within the general homeless population. Many of those people are receiving services for those conditions such as a disability or behavioral health issue. One-fifth of the homeless population surveyed reported mental illness (21%).

Subpopulations:	**Count**	**% of total surveyed population**
Chronic Substance Abuse	71	10%
Seriously Mentally Ill	148	21%
Dually Diagnosed (both substance abusers and seriously mentally ill)	48	7%
Physical Disability	50	7%
Developmental Disability	16	2%
Persons with HIV/AIDS	5	0.7%
Victims of Domestic Violence	29	4%

Access to Care References:

1. 2006-2010 Maryland Behavioral Risk Factor Surveillance System. Risk Factor and Health Behavior Data. Maryland Department of Health and Mental Hygiene. Available at: www.marylandbrfss.org.

2. 2008-2009 Maryland Behavioral Risk Factor Surveillance System. Risk Factor and Health Behavior Data. Maryland Department of Health and Mental Hygiene. Available at: www.marylandbrfss.org.

3. 2009 Current Population Survey and 2008 American Community Survey. Health Uninsurance Rates: Overall and by Age. US Census Bureau. Available at www.census.gov.

4. 2010 Charles County Transportation Development Plan. VanGo specifics and future plans. Maryland Office of Planning. Available at: http://www.charlescounty.org/cs/vango/documents/TDP_Text.pdf.

5. 2011 Primary Care, Mental Health and Dental Health Professional Shortage Area and Medically Underserved Areas/Populations Designations. United States Department of Health and Human Services' Health Resources and Services Administration. Available at: http://bhpr.hrsa.gov/shortage/.

6. 2007 Maryland Physicians Workforce Study. Physician Shortage Areas by Specialty for the Southern Maryland Region. Maryland Hospital Association and the Maryland State Medical Society. Available at: http://www.mhaonline.org/File%20Library/Workforce/Workforce%20Overview/Maryland_Physician_Workforce_Report_Final_May___2008.pdf.

7. 2010-2011 Data on the services received to the homeless population. Lifestyles of Maryland Inc.

8. 2010 Point in Time Profile on the Charles County Homeless Population. Charles County Core Services Agency.

Qualitative Data Relating to Access to Care:

78.6% of long survey participants reported that access to healthcare was a health problem in Charles County. 43.3% felt that access to health care is a "serious problem" in the county.

89.8% of long survey participants reported that access to affordable healthcare was a health problem in Charles County. This was second most common answer.

61.8% reported that access to affordable healthcare was a "serious problem" in Charles County. This was again the second most common answer.

Most of the long survey participants reported having a routine doctor's visit in the last 12 months (81%). Only 2 people reported that they have never had a routine doctor's visit.

Time since last doctor's visit	Response Count	Response Percent
Greater than 5 years	2	0.7
Within 12 months	243	81.0
Within 13-18 months	22	7.3
Within 19-24 months	12	4.0
Within 2-5 years	19	6.3
Never had a routine doctor visit	2	0.7

Most of the long survey participants received their routine health care in a physician's office (93.4%). In addition to routine medical care, 13.9% went to eye doctor, 19.9% went to the dentist, and 3.6% went to the chiropractor. It is believed that the routine care by the listed specialists (ex. Dentist and eye doctor) was underreported. Participants were asked to check all locations that applied; however, it is theorized that they did not read all the responses and checked only physician's office even if they also routinely see the dentist.

Where they receive routine care	Response Count	Response Percent
Physician's Office	282	93.4
Hospital Emergency Department	4	1.3
Health Department Clinic	0	0
Urgent Care Center	13	4.3
Chiropractor	11	3.6
Medical/First Aid Center	2	0.7
Community Clinic	8	2.6
Eye Doctor	42	13.9
Dentist	60	19.9
Other	11	3.6

The majority of the long survey participants were able to see the doctor when needed (78.7%). There were 10 people who reported that they were seldom or never able to see a doctor when needed. If they

were unable to see the doctor when needed, the most common reasons were that it was too far away (46.8%) or that it was too expensive and they could not afford it (35.1%).

Able to see doctor when needed	Response Count	Response Percent
Always	237	78.7
Sometimes	54	17.9
Seldom	9	3.0
Never	1	0.3

Reasons for not seeing doctor	Response Count	Response Percent
No health insurance	13	16.9
Too expensive/Can't afford it	27	35.1
Lack of transportation	7	9.1
Doctor is too far away	36	46.8

Only 18.5% reported that they never receive medical care outside of Charles County. Nearly half of the respondents (49.8%) claimed that they sometimes receive medical care outside of the county.

Receive medical care outside of Charles County	Response Count	Response Percent
Always	43	14.5
Sometimes	148	49.8
Seldom	51	17.2
Never	55	18.5

Long survey participants were asked what medical services that they receive outside of Charles County. They were asked to check all services that were applicable. The most common medical services that people receive outside of Charles County are medical doctor appointments (56.3%), surgery (32.7%), and hospitalizations (27.6%). Additionally, one-quarter of the participants reported that they travel outside of the county for dental visits (26.8%).

Services Received Outside of County	Response Count	Response Percent
Medical Doctor Appointments	153	56.3
Outpatient treatment	47	17.3
Hospitalizations	75	27.6
Dental Appointments	73	26.8
Laboratory or other tests	56	20.6
X-rays	40	14.7
Do not travel outside of Charles County	33	12.1
Surgery	89	32.7
Emergency Care	31	11.4

Prenatal care	15	5.5
Primary care	48	17.6
Other	38	14.0

The long survey participants were also asked why they chose to receive those medical services outside of Charles County. The most common responses were that the services were not available in Charles County (15.4%) and the quality of care was better elsewhere (34.8%).

Why do you travel outside of Charles County for care?	**Response Count**	**Response Percent**
Services not available within county	43	15.5
Quality is better elsewhere	97	34.8
Recently moved to Charles County	12	4.3
Local doctors not on my insurance plan	25	9.0
Closer to my place of work	8	4.3
Too hard to get appointment for local doctors	25	9.0
No physician available for the type of care I need	24	8.6
Other	63	22.6
Not applicable	54	19.4

Doctors, nurses, pharmacists and the Internet are highly used means for obtaining needed health information. Employers and the health department were smaller yet significant sources of health information. This particular question stresses the importance of educating local health care providers and emphasizes the need for accurate medical information on the Internet and for employee wellness programming.

Where do you get health information?	**Response Count**	**Response Percent**
Churches	1	0.3
Doctors, nurses, pharmacists	213	71.0
Hospital	65	21.7
Health Department	70	23.3
Public Library	8	2.7
Employer	80	26.7
Internet/Websites	184	61.3
Other	38	12.7

The top five health issue where participants have seen improvements was access to health care. Almost half of the long survey respondents (40.5%) reported that they have seen improvements to increase access to health care within the county. 21.5% reported that they have seen improvement in access to needed medications.

37% of the short survey participants reported that access to healthcare and no health insurance is a big health problem in Charles County.

The most commonly cited barriers to needed health care was lack of health insurance (68%) and care is too expensive/can't afford it (62%). Under "Other", several people explained that they do not have dental or vision insurance to cover those needed services.

Barriers to getting health care:	**Response Count**	**Response Percent**
Couldn't get an appointment with my doctor	33	17%
Doctor is too far away from my home	25	13%
Local doctors are not on insurance plan	65	33%
No health insurance	135	68%
No transportation	73	37%
Service is not available in my own county	27	14%
Too expensive/Can't afford it	124	62%
Other	9	5%

Some other barriers mentioned in the "Other" category included:

- Seniors do not have the money, time, or knowledge to navigate the health care system.
- Everything is a recording. There is never a live person on the line to help.
- Local doctors are inexperienced.
- A lack of dental and vision insurance.
- A lack of health insurance and employment
- Inability to pay co-pays and deductibles.

Many of the issues discussed at each and every focus group boiled down to issues of access to care. The most discussed topic at the community focus groups was the lack of health care providers within the county. There is a lack of primary care providers and specialists. Those in the county are overwhelmed, are not accepting no patients, are not accepting medical assistance patients, are not spending time educating their patients on the their health conditions, and are not dealing with all of their problems. Many county physicians do not accept medical assistance due to low reimbursement rates. The county is considered a "rural" community and reimbursed at a lower rate than those near DC and Baltimore.

Transportation within the county and outside of the county for health care was a frequent topic at focus groups. Health services are not centrally located within the county, making it difficult for those using public transportation to get to their appointments on time and without long wait times. Doctors have many no-shows due to transportation issues. The county public transit system, VanGo, is making a number of changes over the next five years to improve their services. Their new changes were discussed at the focus groups. It was also suggested that the growing retired population may be able to assist with transportation to medical visits for the elderly and disabled. The local churches may be an avenue to explore this option.

With all of these issues and all of these resources available, it was suggested that there is a need for patient resource guides and advocates to help navigate people through the system. Other suggestions to improve access to healthcare and to improve the health of the county in general include more health education in the community, more advertising of community health programs already in place, more soup kitchens and food pantries to feed those who are hungry, more services for the working poor, and more services and shelters for the growing homeless population.

Many of the focus groups talked about the overuse of the hospital emergency department (ED). People do not get preventive care and only go when necessary. They may not have health insurance or a primary care provider so they go to the ED for care. Transportation is also an issue that leads to overuse of the ED. Many residents do not have transportation to the hospital, especially on an evening or weekend when VanGo is not running. They use the county ambulance service to get to the hospital. The ED is also crowded because the homeless use it as a refuge from the cold. It was suggested that more urgent care centers that take patients without health insurance, more physicians willing to do a sliding scale for self pay, and an urgent care center attached to the hospital could reduce the burden on the ED.

People also do not know where to find the health services that they need. Many health organizations within the county do not know about all of the other services available within the county. Many of the focus groups suggested a one-time stop shop for all health programs in the county. A comprehensive community resource guide and website that can be updated when needed and can be accessed by everyone in the community.

Charles County Substance Abuse Data:

Maryland State Epidemiological Outcomes Workgroup: Maryland Compendium of Cross County Indicators on Underage Drinking, 2008 and 2011 Reports:

The Maryland State Epidemiological Outcomes Workgroup (MD SEOW) was created in March 2006 with funding from the Substance Abuse and Mental Health Services Administration Center for Substance Abuse Prevention (CSAP) to the Maryland Alcohol and Drug Abuse Administration (MD ADAA).

The MD SEOW compiled county data on the consequences and consumption of drugs and alcohol among Maryland youth. The report is a compilation of recent available county level data on crashes, arrests, suspensions from public schools, consumption, and treatment admissions.

National Survey on Drug Use and Health (NSDUH):

NSDUH is the primary source of information on the prevalence, patterns, and consequences of alcohol, tobacco and illegal drug use and abuse in the general civilian non-institutionalized population, aged 12 and older.

In the combined surveys for 2006 through 2008, data were collected from 204,408 respondents with a design intended to obtain representative samples from all 50 states and the District of Columbia.

Data from this survey is presented regionally. The Southern Maryland region consists of Charles, Calvert, St Mary's, Dorchester, Somerset, Wicomico, and Worcester counties.

Approximately 50.99% of Southern Marylanders admitted to alcohol use in the past month. This is lower than the Maryland state average of 54.72% and is comparable to the US average of 51.23%. This is the 3rd lowest reported percentage among the 9 Maryland regions.

A reported 20.35% of Southern Marylanders admitted to binge drinking in the past month. This is lower than the Maryland state average of 21.67% and the US average of 23.26%. This is the 2nd lowest reported percentage among the 9 Maryland regions. Nearly half (41.18%) of the Southern Marylanders questioned felt that there was a great risk in binge drinking once or twice a week. 7.26% of Southern Marylander participants admitted to a dependence on or abuse of alcohol, and 8.23% reported a dependence on or abuse of alcohol and illicit drugs.

Among the Southern Maryland participants under legal drinking age (12-20 years), 27.08% reported that they had used alcohol in the past month. This is comparable to the Maryland state average of 27.28% and the US average of 27.53%. The Southern Maryland percentage is the 4th lowest among the 9 Maryland regions.

Binge drinking in the past month was reported by 16.91% of Southern Maryland teens aged 12-20 years. This is comparable to the Maryland average of 16.92% and slightly below the US average of 18.31%.

Region	Alcohol Use Past Month		Binge Alcohol Use Past Month		Perception of Great Risk of Binge Alcohol Use Once or Twice a Week		Age 12 to 20 Alcohol Use Past Month		Age 12 to 20 Binge Alcohol Use Past Month	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
United States	51.23	(50.76-51.71)	23.26	(22.92-23.61)	41.95	(41.51-42.38)	27.53	(27.01-28.05)	18.31	(17.88-18.75)
Maryland	54.72	(52.30-57.11)	21.67	(19.81-23.65)	43.19	(40.67-45.75)	27.28	(25.22-29.44)	16.92	(15.16-18.85)
Anne Arundel	58.98	(53.07-64.63)	23.80	(20.06-27.98)	39.73	(35.22-44.41)	29.96	(25.34-35.03)	20.49	(16.40-25.28)
Baltimore City	43.29	(37.92-48.83)	21.67	(18.28-25.49)	49.09	(44.49-53.72)	23.80	(19.81-28.32)	14.78	(11.60-18.65)
Baltimore County	59.56	(53.85-65.02)	23.55	(20.00-27.51)	41.21	(37.11-45.43)	30.35	(26.35-34.68)	19.30	(15.92-23.19)
Montgomery	58.68	(53.31-63.86)	20.92	(17.71-24.54)	44.50	(40.14-48.94)	26.58	(22.50-31.10)	16.38	(13.02-20.39)
North Central	61.50	(55.53-67.14)	22.73	(18.98-26.97)	40.10	(35.45-44.94)	29.36	(24.91-34.23)	19.07	(15.17-23.70)
Northeast	58.65	(52.51-64.53)	23.20	(19.30-27.63)	38.79	(34.51-43.26)	29.98	(24.95-35.55)	19.30	(15.21-24.19)
Prince George's	47.26	(41.94-52.65)	18.08	(15.01-21.61)	49.57	(45.30-53.86)	22.88	(19.16-27.08)	12.15	(9.35-15.64)
South	50.99	(44.90-57.06)	20.35	(16.92-24.29)	41.18	(36.63-45.88)	27.08	(22.77-31.88)	16.91	(13.32-21.23)
West	56.66	(50.35-62.76)	22.91	(19.19-27.09)	38.21	(33.73-42.90)	30.56	(25.88-35.69)	18.81	(14.83-23.58)

Region	Dependence on or Abuse of Alcohol		Dependence on or Abuse of Alcohol and/or Illicit Drugs	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
United States	7.53	(7.34-7.73)	9.07	(8.86-9.29)
Maryland	7.30	(6.34-8.40)	8.72	(7.66-9.92)
Anne Arundel	7.71	(6.00-9.87)	9.83	(7.64-12.57)
Baltimore City	7.64	(5.96-9.75)	9.74	(7.59-12.42)
Baltimore County	7.90	(6.23-9.97)	9.45	(7.44-11.93)
Montgomery	6.20	(4.84-7.92)	7.31	(5.66-9.40)
North Central	7.58	(5.82-9.80)	8.69	(6.70-11.19)
Northeast	7.95	(6.09-10.30)	9.61	(7.41-12.39)
Prince George's	6.93	(5.34-8.94)	8.17	(6.30-10.52)
South	7.26	(5.60-9.37)	8.23	(6.25-10.75)
West	7.28	(5.59-9.43)	8.31	(6.40-10.74)

North Central - Carroll and Howard counties.
Northeast - Caroline, Cecil, Harford, Kent, Queen Anne's and Talbot counties.
South - Calvert, Charles, Dorchester, St. Mary's, Somerset, Wicomico and Worcester counties.
West - Allegany, Frederick, Garrett and Washington counties.

Adapted by ADAA from the Substance Abuse and Mental Health Services Administration (SAMHSA) National Survey on Drug Use and Health (NSDUH), 2006 - 2008.

Looking at illicit drug use in the past month, 5.88% of Southern Marylanders reported using illicit drugs in the past month. This is well below the Maryland state average percentage of 6.74% and the United States national percentage of 8.14%. 3.04% reported using an illicit drug other than marijuana.

Marijuana use for the Southern Maryland region was 4.24%. This is below the Maryland percentage of 4.93% and the United States percentage of 5.99%. Southern Maryland usage percentages for cocaine and nonmedical use of pain relievers are below state and national usage estimates.

Region	Illicit Drug Use in Past Month		Illicit Drug Use Other than Marijuana in Past Month		Marijuana Use Past Month		Avg. Annual Rate of First Use of Marijuana		Perception of Great Risk of Smoking Marijuana Once a Month	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
United States	8.14	(7.93-8.35)	3.71	(3.58-3.86)	5.99	(5.82-6.17)	1.64	(1.59-1.69)	38.31	(37.86-38.75)
Maryland	6.74	(5.80-7.82)	3.13	(2.50-3.92)	4.93	(4.18-5.81)	1.72	(1.53-1.95)	38.71	(36.19-41.28)
Anne Arundel	6.43	(4.80-8.56)	3.24	(2.26-4.64)	4.50	(3.19-6.32)	1.85	(1.41-2.44)	34.81	(29.69-40.30)
Baltimore City	9.79	(7.56-12.59)	3.44	(2.42-4.87)	7.43	(5.55-9.88)	1.81	(1.41-2.32)	43.19	(38.12-48.41)
Baltimore County	7.30	(5.57-9.51)	3.15	(2.23-4.43)	5.26	(3.89-7.08)	2.35	(1.85-2.98)	38.06	(33.04-43.36)
Montgomery	6.01	(4.47-8.03)	2.87	(1.99-4.12)	4.57	(3.30-6.29)	1.44	(1.13-1.84)	37.59	(32.79-42.65)
North Central	5.98	(4.40-8.08)	3.01	(2.09-4.31)	4.45	(3.13-6.30)	1.60	(1.20-2.12)	33.98	(28.63-39.78)
Northeast	7.10	(5.23-9.57)	3.74	(2.62-5.32)	4.65	(3.24-6.63)	1.79	(1.33-2.40)	34.38	(29.06-40.13)
Prince George's	6.01	(4.50-7.97)	2.81	(1.96-4.01)	4.52	(3.22-6.31)	1.79	(1.41-2.28)	43.46	(38.58-48.48)
South	5.88	(4.34-7.91)	3.04	(2.14-4.30)	4.24	(2.98-5.98)	1.44	(1.10-1.88)	39.72	(34.41-45.28)
West	6.08	(4.48-8.20)	3.26	(2.30-4.60)	4.44	(3.14-6.23)	1.39	(1.06-1.81)	39.37	(33.92-45.09)

Region	Cocaine Use Past Year		Nonmedical Use of Pain Relievers Past Year		Dependence on or Abuse of Illicit Drugs		Dependence on or Abuse of Alcohol and/or Illicit Drugs	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
Total United States	2.32	(2.21-2.43)	5.00	(4.85-5.15)	2.82	(2.72-2.93)	9.07	(8.86-9.29)
Maryland	2.03	(1.55-2.67)	3.93	(3.23-4.77)	2.71	(2.20-3.34)	8.72	(7.66-9.92)
Anne Arundel	1.99	(1.31-3.02)	4.38	(3.22-5.93)	3.28	(2.19-4.88)	9.83	(7.64-12.57)
Baltimore City	2.72	(1.70-4.33)	3.74	(2.74-5.09)	3.75	(2.53-5.52)	9.74	(7.59-12.42)
Baltimore County	2.14	(1.42-3.22)	4.27	(3.21-5.67)	2.48	(1.69-3.63)	9.45	(7.44-11.93)
Montgomery	1.65	(1.09-2.50)	3.39	(2.48-4.63)	2.37	(1.58-3.53)	7.31	(5.66-9.40)
North Central	1.85	(1.21-2.80)	4.17	(3.06-5.68)	2.49	(1.66-3.72)	8.69	(6.70-11.19)
Northeast	2.19	(1.45-3.28)	4.89	(3.58-6.65)	3.21	(2.11-4.88)	9.61	(7.41-12.39)
Prince George's	1.93	(1.23-3.02)	3.14	(2.26-4.36)	2.36	(1.55-3.56)	8.17	(6.30-10.52)
South	2.03	(1.37-3.00)	4.05	(2.99-5.47)	2.32	(1.54-3.48)	8.23	(6.25-10.75)
West	1.88	(1.24-2.85)	4.14	(3.02-5.65)	2.52	(1.67-3.79)	8.31	(6.40-10.74)

Southern Maryland tobacco usage rates in the past month are similar to national estimates, yet higher than Maryland state average estimates.

Region	Cigarette Use in Past Month		Tobacco Product Use in Past Month		Perception of Great Risk of One or More Packs of Cigarettes per Day	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
United States	24.55	(24.16-24.95)	29.03	(28.62-29.45)	73.65	(73.28-74.03)
Maryland	21.77	(20.00-23.64)	25.25	(23.27-27.34)	73.87	(71.67-75.96)
Anne Arundel	22.27	(18.87-26.08)	26.28	(22.51-30.43)	73.63	(69.72-77.21)
Baltimore City	27.83	(24.06-31.94)	32.11	(28.02-36.50)	72.45	(68.63-75.96)
Baltimore County	23.24	(19.63-27.28)	27.10	(23.20-31.38)	72.84	(68.97-76.39)
Montgomery	15.53	(12.84-18.67)	17.51	(14.63-20.81)	77.72	(74.41-80.72)
North Central	18.81	(15.57-22.53)	22.01	(18.64-25.79)	74.49	(70.71-77.94)
Northeast	25.57	(21.46-30.16)	29.28	(24.96-34.01)	71.42	(67.24-75.26)
Prince George's	18.84	(15.90-22.19)	22.07	(18.75-25.80)	76.33	(73.10-79.28)
South	24.35	(20.46-28.71)	28.14	(24.04-32.65)	71.00	(66.97-74.72)
West	23.76	(19.92-28.08)	28.01	(23.95-32.48)	71.16	(67.01-74.99)

*Low Precision; no estimate.

Cigarette Use in the Past Month by Age Group

Region	12 to 17		18 to 25		26 and Older		18 and Older	
	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval	Estimate	95% Confidence Interval
United States	9.77	(9.47 -10.08)	37.02	(36.46 -37.58)	24.36	(23.88 -24.85)	26.22	(25.79 -26.66)
Northeast U.S.	9.25	(8.72 -9.80)	36.10	(34.84 -37.38)	22.29	(21.43 -23.18)	24.26	(23.52 -25.02)
Maryland	8.18	(7.01 -9.53)	32.82	(29.82 -35.98)	21.73	(19.62 -23.99)	23.31	(21.37 -25.37)
Anne Arundel	8.77	(6.34 -12.02)	*	(* -*)	21.79	(18.06 -26.05)	23.76	(20.10 -27.84)
Baltimore City	7.59	(5.42 -10.52)	31.76	(26.10 -38.02)	29.78	(25.37 -34.61)	30.11	(26.01 -34.55)
Baltimore County	9.31	(6.70 -12.80)	33.81	(28.35 -39.73)	23.26	(19.19 -27.89)	24.71	(20.85 -29.03)
Montgomery	7.64	(5.56 -10.43)	30.39	(24.81 -36.62)	14.51	(11.62 -17.97)	16.41	(13.53 -19.77)
North Central	8.66	(6.10 -12.17)	*	(* -*)	17.74	(14.36 -21.72)	20.06	(16.58 -24.06)
Northeast	10.77	(7.58 -15.08)	*	(* -*)	24.86	(20.41 -29.90)	27.26	(22.85 -32.18)
Prince George's	5.18	(3.66 -7.30)	24.36	(19.53 -29.94)	19.77	(16.37 -23.68)	20.52	(17.29 -24.18)
South	8.95	(6.58 -12.06)	*	(* -*)	24.63	(20.35 -29.47)	26.11	(21.90 -30.80)
West	9.27	(6.56 -12.93)	*	(* -*)	23.49	(19.35 -28.20)	25.32	(21.21 -29.92)

Maryland Adolescent Survey 2007:

The Maryland State Department of Education (MSDE) administered the Maryland Adolescent Survey (MAS) to assess information and attitudes on the nature, extent, and trends in alcohol, tobacco, marijuana, and other drug use among students in grades 6, 8, 10, and 12 throughout Maryland. The survey is conducted biennially and has been designed to parallel the National Institute on Drug Abuse's annual national survey, "Monitoring the Future." Survey results assist in policy and planning and help target prevention and education messages and programs.

In 2007, the sample included 333 schools in all 24 Maryland local school systems. The overall Maryland response rate was 84%; in Charles County, the response rate was 89%. The survey provides statistically generalizable results and comparability with previous and future MAS administrations. The sample ensured equal probability of selection for every student at each grade level in each local school system.

By grade level:

The substance of choice among Charles County 6th graders is alcohol. 12.1% of Charles County 6th graders reported that they have used some form of alcohol ever. This is higher than the 8.8% reported for Maryland as a whole. The percentage of Charles County 6th graders using beer/ wine/wine coolers was 11.6%, greater than the 8.0% reported for Maryland. Usage rates for cigarettes and marijuana were lower in Charles County than Maryland. Charles County 6th grade usage rates for all other substances were comparable to Maryland 6th grade usage rates, expect for amphetamines where 3.2% of Charles County 6th graders reported using amphetamines ever compared to 0.9% for Maryland 6th graders.

Percent of 6th graders reporting Tobacco/Drug/Alcohol Use by Time Period: Charles County vs. Maryland, 2007

Substance: 6th Grade	Jurisdiction	Ever Used	Last 30 days	Last 12 months
Beer, wine, or wine coolers	Charles County	11.6	4.0	7.5
	Maryland	8.0	3.3	5.4
Liquor	Charles County	5.6	2.7	4.8
	Maryland	3.3	1.3	2.5
Any form of alcohol	Charles County	12.1	5.1	8.9
	Maryland	8.8	3.8	6.1
Five or more servings of alcohol on the same occasion	Charles County	4.6	1.6	3.0
	Maryland	2.0	0.9	1.4
Cigarettes	Charles County	2.7	0.5	1.1
	Maryland	3.4	1.0	1.7
Smokeless tobacco	Charles County	1.1	0.3	0.3
	Maryland	0.9	0.3	0.5
Marijuana	Charles County	0.5	0	0
	Maryland	1.3	0.8	1.0
Inhalants	Charles County	4.0	1.3	2.4
	Maryland	3.5	1.8	2.6
Amyl or butyl nitrates	Charles County	0.5	0.3	0.3
	Maryland	0.8	0.4	0.6
Crack (rock)	Charles County	0.5	0	0
	Maryland	0.6	0.4	0.4
Other forms of cocaine	Charles County	0.5	0	0
	Maryland	0.4	0.3	0.3
LSD	Charles County	0.5	0	0
	Maryland	0.6	0.4	0.5
PCP	Charles County	0.8	0.5	0.5
	Maryland	0.6	0.3	0.4
Other hallucinogens	Charles County	0.3	0	0
	Maryland	0.2	0.1	0.2
Steroids for body building	Charles County	0.3	0	0
	Maryland	0.7	0.3	0.4
Methamphetamines (meth, speed, crank, ice)	Charles County	0.5	0	0
	Maryland	0.8	0.5	0.6

Designer drugs (MDMA, ecstasy)	Charles County	0.5	0.3	0.3
	Maryland	0.4	0.3	0.3
Heroin	Charles County	0.3	0	0
	Maryland	0.6	0.4	0.5
Needle to inject cocaine, heroin, or other illegal drugs	Charles County	0.3	0	0
	Maryland	0.3	0.2	0.2
Amphetamines	Charles County	3.2	1.3	2.4
	Maryland	0.9	0.5	0.7
Barbiturates and/or tranquilizers (downers, reds, Valium)	Charles County	0.5	0	0
	Maryland	0.2	0.1	0.1
Narcotics (Codeine, Morphine, Methadone, Percodan)	Charles County	0.3	0	0
	Maryland	0.3	0.2	0.2
Ritalin	Charles County	0.5	0.3	0.3
	Maryland	0.6	0.3	0.4
Any drug other than alcohol or tobacco	Charles County	8.1	3.2	5.4
	Maryland	6.7	3.6	5.0

The most commonly used substance by Charles County 8th graders is alcohol, which 30.2% admit to having ever used. Beer, wine, and wine coolers are the most commonly consumed forms of alcohol (27.5% of 8th graders have tried them). Charles County 8th grade alcohol usage rates are higher than Maryland usage rates (30.6% vs. 25.7%).

The Charles County 8th grade marijuana rate is lower than the Maryland rate (5.5% vs. 8%). Charles County usage rates for inhalants and amphetamines were slightly higher than the state.

Percent of 8th graders reporting Tobacco/Drug/Alcohol Use by Time Period: Charles County vs. Maryland, 2007

Substance: 8th Grade	**Jurisdiction**	**Ever Used**	**Last 30 days**	**Last 12 months**
Beer, wine, or wine coolers	Charles County	27.5	13.3	21.8
	Maryland	22.3	10.3	17.8
Liquor	Charles County	17.5	7.8	15.4
	Maryland	16.3	8.0	14.0
Any form of alcohol	Charles County	30.6	14.7	24.9

	Maryland	25.7	12.7	21.3
Five or more servings of alcohol on the same occasion	Charles County	10.7	4.3	7.6
	Maryland	9.0	4.7	7.3
Cigarettes	Charles County	10.7	4.7	6.4
	Maryland	10.6	4.2	6.7
Smokeless tobacco	Charles County	1.4	0.7	0.9
	Maryland	1.8	1.0	1.5
Marijuana	Charles County	5.5	2.6	5.0
	Maryland	8.0	4.6	7.0
Inhalants	Charles County	6.2	3.3	4.5
	Maryland	5.4	2.9	4.2
Amyl or butyl nitrates	Charles County	0	0	0
	Maryland	1.0	0.7	0.8
Crack (rock)	Charles County	0.9	0.7	0.7
	Maryland	1.5	1.1	1.3
Other forms of cocaine	Charles County	0.9	0.5	0.5
	Maryland	1.1	0.9	1.0
LSD	Charles County	0.2	0	0
	Maryland	1.0	0.6	0.8
PCP	Charles County	0.9	0.7	0.7
	Maryland	1.6	1.0	1.3
Other hallucinogens	Charles County	0.2	0.2	0.2
	Maryland	1.3	0.8	1.2
Steroids for body building	Charles County	1.4	0.7	0.7
	Maryland	0.9	0.5	0.7
Methamphetamines (meth, speed, crank, ice)	Charles County	0.2	0	0
	Maryland	1.0	0.6	0.9
Designer drugs (MDMA, ecstasy)	Charles County	0.7	0	0.2
	Maryland	1.3	0.8	1.2
Heroin	Charles County	0.2	0	0.2
	Maryland	1.0	0.6	0.8
Needle to inject cocaine, heroin, or other illegal drugs	Charles County	0	0	0
	Maryland	0.7	0.6	0.7
Amphetamines	Charles County	3.1	1.7	2.4
	Maryland	2.4	1.3	2.1

Barbiturates and/or tranquilizers (downers, reds, Valium)	Charles County	0.2	0	0
	Maryland	0.7	0.4	0.6
Narcotics (Codeine, Morphine, Methadone, Percodan)	Charles County	0.5	0.5	0.5
	Maryland	1.2	0.8	1.2
Ritalin	Charles County	0.5	0.2	0.2
	Maryland	1.3	0.7	0.9
Any drug other than alcohol or tobacco	Charles County	15.2	7.8	11.6
	Maryland	15.0	8.6	12.4

The most commonly used substance by Charles County 10th graders is alcohol, which 60% admit to having ever used. Beer, wine, and wine coolers are the most commonly consumed forms of alcohol (53.2% of 10th graders have tried them). Charles County 10th grade alcohol usage rates are higher than Maryland usage rates (60.0% vs. 48.7%).

The Charles County 10th grade cigarette rate is higher than the Maryland rate (26.4% vs. 20.1%). Charles County usage rates for inhalants, PCP, designer drugs, and amphetamines were slightly higher than the state rates.

Percent of 10th graders reporting Tobacco/Drug/Alcohol Use by Time Period: Charles County vs. Maryland, 2007

Substance: 10th Grade	**Jurisdiction**	**Ever Used**	**Last 30 days**	**Last 12 months**
Beer, wine, or wine coolers	Charles County	53.2	24.9	47.8
	Maryland	43.0	22.5	37.2
Liquor	Charles County	51.2	27.9	47.3
	Maryland	40.7	22.1	36.0
Any form of alcohol	Charles County	60.0	34.3	55.5
	Maryland	48.7	27.8	43.5
Five or more servings of alcohol on the same occasion	Charles County	31.1	17.2	28.9
	Maryland	27.4	15.3	24.0
Cigarettes	Charles County	26.4	10.0	19.2
	Maryland	20.1	9.1	13.7
Smokeless tobacco	Charles County	4.2	2.5	3.7

	Maryland	4.5	2.2	3.4
Marijuana	Charles County	24.1	13.2	19.4
	Maryland	24.0	13.9	20.6
Inhalants	Charles County	8.2	4.7	7.0
	Maryland	4.8	2.4	3.8
Amyl or butyl nitrates	Charles County	0.2	0.2	0.2
	Maryland	1.2	1.0	1.1
Crack (rock)	Charles County	2.7	1.7	2.7
	Maryland	2.3	1.6	2.1
Other forms of cocaine	Charles County	3.2	2.0	2.2
	Maryland	3.4	2.0	3.0
LSD	Charles County	3.2	1.7	3.0
	Maryland	2.9	1.9	2.6
PCP	Charles County	3.7	2.5	3.0
	Maryland	2.7	1.5	2.2
Other hallucinogens	Charles County	3.7	2.0	3.5
	Maryland	4.3	2.2	3.8
Steroids for body building	Charles County	1.7	1.2	1.2
	Maryland	1.5	1.0	1.2
Methamphetamines (meth, speed, crank, ice)	Charles County	2.2	1.7	2.0
	Maryland	2.1	1.4	1.8
Designer drugs (MDMA, ecstasy)	Charles County	6.0	3.0	5.5
	Maryland	3.4	1.8	3.1
Heroin	Charles County	1.2	1.0	1.0
	Maryland	1.4	1.1	1.3
Needle to inject cocaine, heroin, or other illegal drugs	Charles County	1.2	1.0	1.2
	Maryland	1.3	0.9	1.1
Amphetamines	Charles County	6.7	4.0	5.7
	Maryland	4.6	2.6	3.9
Barbiturates and/or tranquilizers (downers, reds, Valium)	Charles County	2.5	1.2	2.2
	Maryland	2.2	1.4	2.1
Narcotics (Codeine, Morphine, Methadone, Percodan)	Charles County	4.7	2.7	4.5

	Maryland	4.4	2.6	4.0
Ritalin	Charles County	3.0	2.2	2.5
	Maryland	2.9	1.6	2.2
Any drug other than alcohol or tobacco	Charles County	31.1	17.2	25.9
	Maryland	28.8	17.1	24.8

The most commonly used substance by Charles County 12th graders is alcohol, which 69.1% admit to having ever used. Liquor is the most commonly consumed form of alcohol (64.1% of 12th graders have tried them). Charles County 12th grade alcohol usage rates are similar to the Maryland usage rates (69.1% vs. 66.6%).

The Charles County 12th grade cigarette rate is higher than the Maryland rate (35.4% vs. 30.8%). Charles County usage rate for designer drugs was slightly higher than the state rates.

The percentage of Charles County 12th graders who have tried a drug other than tobacco or alcohol is 37.7%. This is similar to the Maryland percentage of 42.2%.

Percent of 12th graders reporting Tobacco/Drug/Alcohol Use by Time Period: Charles County vs. Maryland, 2007

Substance: 12th Grade	**Jurisdiction**	**Ever Used**	**Last 30 days**	**Last 12 months**
Beer, wine, or wine coolers	Charles County	61.7	35.9	53.8
	Maryland	59.7	36.3	52.4
Liquor	Charles County	64.1	35.9	57.8
	Maryland	60.1	36.0	53.9
Any form of alcohol	Charles County	69.1	42.0	63.1
	Maryland	66.6	42.2	60.6
Five or more servings of alcohol on the same occasion	Charles County	48.0	29.6	41.4
	Maryland	46.9	28.6	41.6
Cigarettes	Charles County	35.4	18.7	24.3
	Maryland	30.8	16.3	22.3
Smokeless tobacco	Charles County	7.7	3.7	5.8
	Maryland	8.9	3.9	6.5
Marijuana	Charles County	35.6	19.8	28.8
	Maryland	38.7	20.7	31.8
Inhalants	Charles County	2.6	1.6	2.4
	Maryland	4.5	1.9	3.0
Amyl or butyl nitrates	Charles County	1.1	0.8	1.1

	Maryland	1.2	0.8	1.0
Crack (rock)	Charles County	2.9	1.6	2.6
	Maryland	2.7	1.7	2.2
Other forms of cocaine	Charles County	5.8	2.6	4.7
	Maryland	5.5	2.5	4.2
LSD	Charles County	3.2	1.6	2.4
	Maryland	4.6	2.2	3.9
PCP	Charles County	3.7	1.8	2.6
	Maryland	2.9	1.4	2.2
Other hallucinogens	Charles County	6.3	2.9	4.7
	Maryland	7.4	2.7	6.0
Steroids for body building	Charles County	1.3	1.3	1.3
	Maryland	1.7	1.1	1.5
Methamphetamines (meth, speed, crank, ice)	Charles County	1.8	1.8	1.8
	Maryland	2.8	1.6	2.3
Designer drugs (MDMA, ecstasy)	Charles County	7.7	3.2	6.3
	Maryland	6.0	2.6	4.9
Heroin	Charles County	1.6	1.3	1.3
	Maryland	1.8	1.3	1.5
Needle to inject cocaine, heroin, or other illegal drugs	Charles County	0.8	0.5	0.5
	Maryland	1.4	1.0	1.2
Amphetamines	Charles County	5.3	3.4	4.7
	Maryland	6.8	3.4	5.4
Barbiturates and/or tranquilizers (downers, reds, Valium)	Charles County	3.7	2.4	2.9
	Maryland	5.0	2.5	4.2
Narcotics (Codeine, Morphine, Methadone, Percodan)	Charles County	8.7	7.4	8.7
	Maryland	8.2	4.5	6.9
Ritalin	Charles County	4.2	2.6	3.4
	Maryland	4.4	1.7	3.1
Any drug other than alcohol or tobacco	Charles County	37.7	23.5	32.5
	Maryland	42.2	24.0	35.8

Maryland Core Drug and Alcohol Survey:

The CORE Alcohol and Drug Survey was developed to measure alcohol and other drug usage, attitudes, and perceptions among college students at 2-year and 4-year institutions. Development of this survey was funded by the US Department of Education. The survey includes several types of items about drugs and alcohol. One type deals with the students' attitudes, perceptions, and opinions about alcohol and other drugs, and the other deals with the student's own use and consequences of use. For the Southern Maryland Region, the College of Southern Maryland (CSM) administered this survey.

The College of Southern Maryland Safe Communities Center (SAF) administered the CORE long form survey to 699 students enrolled in the La Plata, Prince Frederick, and Leonardtown campuses, as well as the Waldorf Center in spring 2010. SAF administered the survey to students enrolled in General Psychology PSY-1010 and Introduction to Sociology SOC-1010 classes during the spring 2010.

A survey sample size of 227 was achieved at the La Plata campus, and a survey sample size of 58 was achieved at the Waldorf Center. These two campuses are located in Charles County.

For comparison purposes, some figures are included from a reference group of 4787 students from 18 community colleges who completed the CORE Alcohol and Drug Survey (long form) in 2006.

Key findings of the CSM Core Drug and Alcohol Survey include:

In general, negative behaviors associated with alcohol and drug use among CSM students is showing a decline. Threats of physical violence and actual physical violence that are alcohol and drug related have declined significantly.

Fewer CSM students than those in the reference group report some form of public misconduct as a result of drug use.

Fewer CSM students than those in the reference group report problematic consequences of alcohol or drug use such as DWI/DUI, trouble with police or fighting. However, more CSM students than the reference group have damaged property, tried to commit suicide, or have been hurt or injured as a result of alcohol or drug use.

Nearly one-third of the users report some form of public misconduct (such as trouble with the police, fighting/arguing, DWI/DUI, vandalism) at least once during the past year as a result of drinking or drug use.

At CSM, 20.9% of students report DUI or driving a car while under the influence of alcohol. While this is an alarming number, this represents a decrease of 13 percentage points since 2005.

About half of CSM students report consuming alcohol in the past 30 days compared to 62% of the reference group.

26% of CSM students report using tobacco in the last 30 days which is lower than the reference group (39.6%) administered the same survey.

The most frequently reported illegal substance used by CSM students as well as the reference group in the past 30 days was marijuana (14% CSM, 15% reference group). This represents a decline of 5 percentage points since 2005.

Trends indicate a CSM decline of substance abuse/use for the college as a whole. 75% of CSM students say they did not use an illegal drug in the last 12 months.

50.3% of the underage CSM respondents (fewer than 21 years of age) have consumed alcohol in the past 30 days. This represents a decrease of 11 percentage points from 2005.

Binge drinking (5 or more drinks/sitting) is showing a slight decline. Students who report not binging weekly has increased since 2005 by 9 percentage points. However, one out of every three students who report drinking are binge drinking.

There is a misperception of students actual alcohol use by other students at CSM. 84% of students at CSM believe the average student on campus uses alcohol at least once a week or more, when in fact 60% of students did not drink in the last week.

Percentage with Problematic Consequences of Alcohol and Drug Use Experience (2010):

Consequences of Alcohol/Drug Use:	**CSM (%)**	**Reference Group (%)**
Been arrested for DWI/DUI	1.7	2.5
Been in trouble with police, residence hall, college authorities	9.1	12.2
Damaged property, pulled firearms	7.5	6.4
Driven a car while under the influence	20.9	34.3
Got into an argument or fight	28.0	31.6
Tried to commit suicide	2.9	2.2
Seriously thought about suicide	6.4	6.0
Been hurt or injured	15.7	14.0
Been taken advantage of sexually	9.5	10.2
Taken advantage of another sexually	2.5	3.1
Tried unsuccessfully to stop using	5.1	7.0
Thought I might have a drinking or other drug problem	8.8	10.3
Performed poorly on a test or important project	18.8	22.6
Done something I regret later	27.7	33.6
Missed a class	19.2	23.8
Been criticized by someone I	26.0	27.6

know		
Had a memory loss	26.0	26.1
Got nauseated or vomited	44.3	48.1
Had a hangover	51.4	58.4

Percentage Reporting Substance Use in the Last 30 Days, 2010

Substance Use in last 30 days:	**CSM (%)**	**Reference Group (%)**
Tobacco	25.7	39.6
Alcohol	52.4	61.7
Marijuana	14.4	15.0
Amphetamines	2.3	2.5
Designer Drugs	1.2	3.7

Percentage Reporting Substance Use in the Last Year, 2010

Substance Use in last year:	**CSM (%)**	**Reference Group (%)**
Tobacco	35.5	48.1
Alcohol	74	80.3
Marijuana	26.6	25.1
Amphetamines	4.5	7.1
Designer Drugs	2.4	3.2

The average number of drinks per week reported was 2.6 drinks. 31.2% reported binge drinking in the past week. 60% reported that they had not drunk in the past week.

Trends in Average Drinks/Binges per Week

CSM Alcohol Use Percentages:	**2005**	**2007**	**2010**
Drinks	3.4	3.2	2.6
Binges	36.7	37.6	31.2
None	51.0	54.0	60.0

Trends in the Most Frequently Used Drugs in the Last Year

CSM Substance Use Percentages:	**2005**	**2007**	**2010**
Alcohol	81.5	74.8	74.0
Tobacco	43.0	38.7	36.0
Marijuana	33.3	29.0	27.0
Amphetamines	8.4	4.4	4.6
Designer Drugs	6.2	4.6	2.4

Trends in Students Perceptions: Frequency of Alcohol Use

CSM Alcohol Use Frequencies (%):	2005	2007	2010
Never	4.0	6.0	5.0
Once a week	32.0	32.0	32.0
3 times/week	29.0	28.0	30.0
5 times/ week	13.0	10.0	11.0
Every day	11.0	11.0	11.0

Trends in Students Perceptions: Frequency of Marijuana Use

CSM Marijuana Use Frequencies (%):	2005	2007	2010
Never	8.0	12.0	9.0
Once a week	24.0	24.0	24.0
3 times/week	15.0	13.0	17.0
5 times/ week	8.0	7.0	7.0
Every day	12.0	12.0	14.0

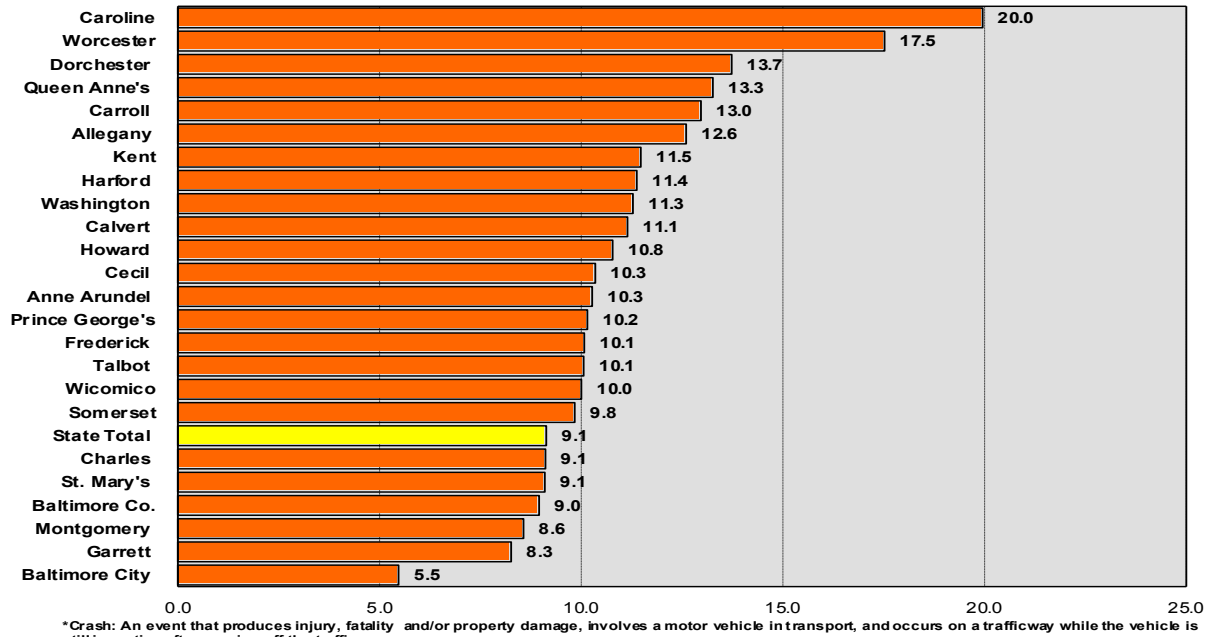
Crash Data from the Maryland Automated Accident Reporting System (MAARS):

This data is provided by the Traffic Safety Analysis Division in the Office of Traffic and Safety for the Maryland State Highway Administration (SHA).

All crashes resulting in a vehicle being towed away, personal injury, or fatality are reported. The state, county, or local law enforcement officer who first arrives at the scene of a reportable accident records the crash data. Typically within 10 days the accident report is submitted to the Maryland State Police Central Records Division for transfer into the Maryland Automated Accident Reporting System (MAARS) database files; within 30 days, the data is uploaded to the Maryland State Highway Administration's database and the Maryland State Police database.

The percentage of alcohol and/or drug-related crashed in Charles County was 9.1% in 2009. This percentage is exactly the same as the Maryland state average percentage.

Percentage of Subdivision Crashes* that were Alcohol and/or Other Drug (AOD)-Related, 2009**

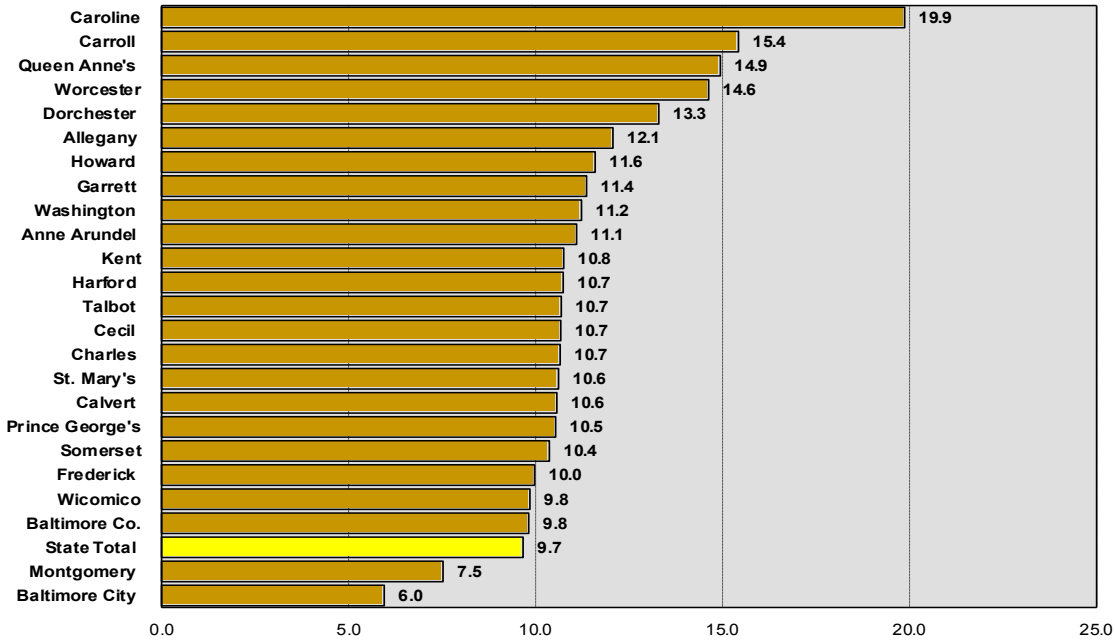


*Crash: An event that produces injury, fatality and/or property damage, involves a motor vehicle in transport, and occurs on a trafficway while the vehicle is still in motion after running off the trafficway.
**AOD-Related Crash: A crash that involves an alcohol and/or drug-impaired driver.

Source: Adapted by ADAA from data provided by the University of Maryland School of Medicine from the Maryland Automated Accident Reporting System (MAARS), Traffic Safety Analysis Division, Offic State Highway Administration (SHA).

A reported 10.7% of crashes in Charles County resulting in injury or death were alcohol and/or drug-related in 2009. This is slightly above the Maryland total of 9.7%.

Percentage of Subdivision Injury and Fatal Crashes* that were Alcohol and/or Other Drug (AOD)-Related, 2009**



*Crash: An event that produces injury and/or fatality, involves a motor vehicle in transport, and occurs on a trafficway while the vehicle is still in motion after running off the trafficway.
**AOD-Related Crash: A crash that involves an alcohol and/or drug-impaired driver.

Source: Adapted by ADAA from data provided by the University of Maryland School of Medicine from the Maryland Automated Accident Reporting System (MAARS), Traffic Safety Analysis Division, Offic State Highway Administration (SHA).

In the MD SEOW 2008 report, the percentage of county crashes among drivers aged 16-20 years that were alcohol and/or other drug related was presented for 2006. The percentage of Charles County alcohol or drug-related crashes for 16-20 year olds was 4.2%. Charles County was one of only 5 jurisdictions that were below the Maryland total of 5.0%. Additionally, 33.3% of the fatal crashes for this age group were alcohol and/or drug related.

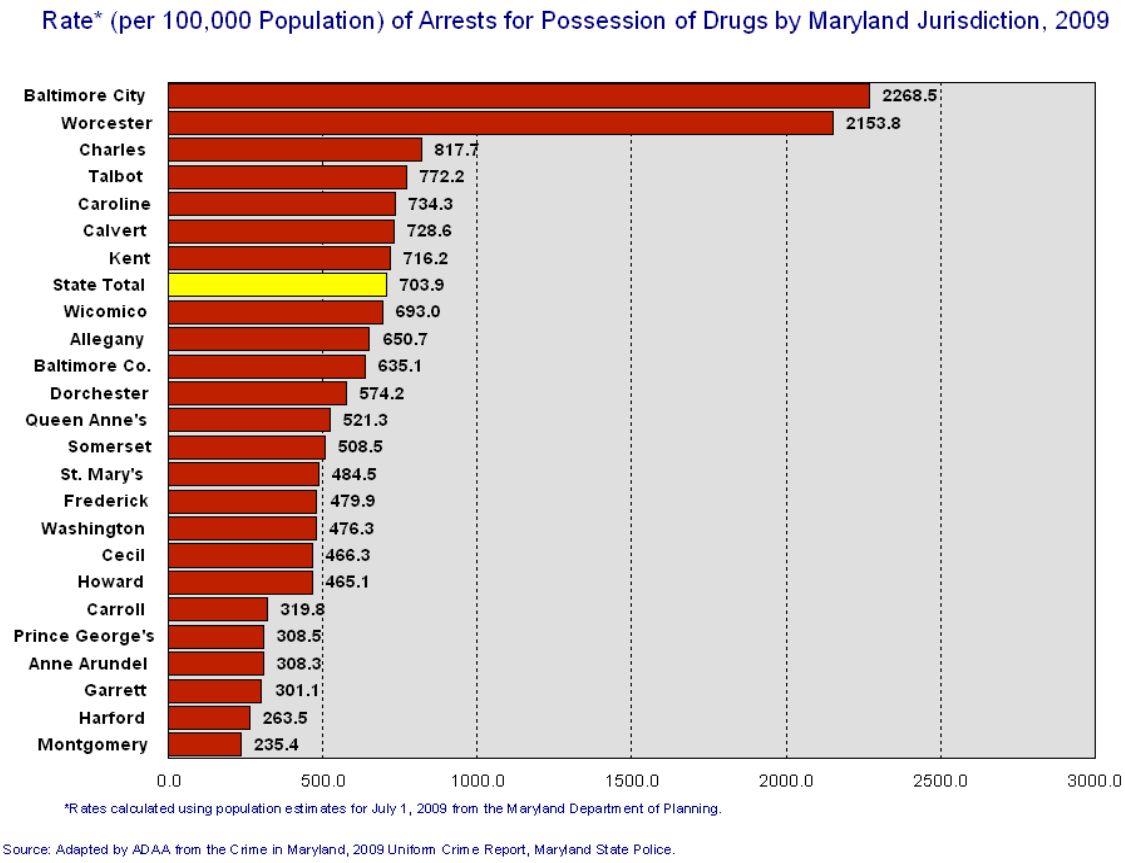
***Uniform Crime Report: Maryland State Police*:**

The Maryland Uniform Crime Reporting (UCR) Program establishes a method to collect, evaluate and process uniform statistical data on crime statewide. There were 215,921 total crime incidents reported in 2009 compared to 233,566 in 2008. Violent crime decreased five percent and property crime decreased eight percent in 2009.

According to the report, The Economic Costs of Alcohol and Drug Abuse in the United States – 1992, about 30 percent of murders and aggravated assaults, 23 percent of rapes and 3 percent of robberies are alcohol-related. About 30 percent of breaking and entering and larceny/theft, and 7 percent of motor-vehicle thefts are drug-related. The 2009 Charles County violent crime rate was 492.9 per 100,000, which is below the Maryland state violent crime rate of 590 per 100,000.

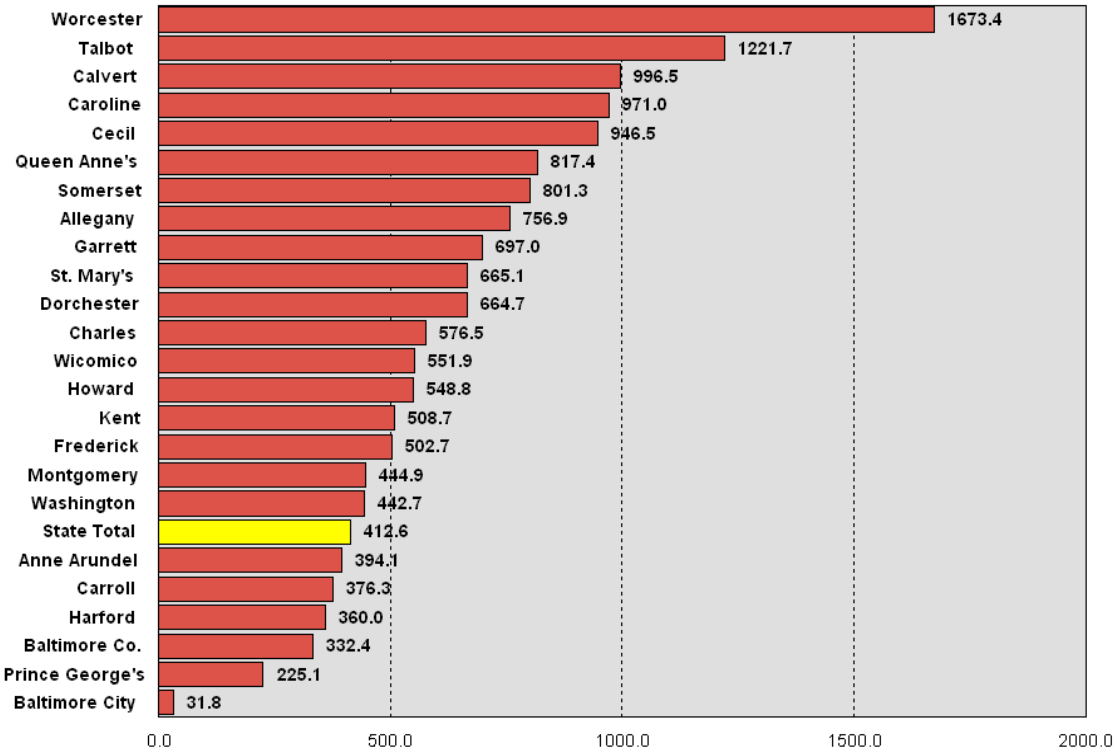
Arrests for drug offenses totaled 51,898 in 2009, a ten percent decrease from 2008. In 2009, 23,518 persons were arrested for driving while intoxicated, a two percent decline from 2008. Maryland juvenile arrests for DWI and liquor law violations totaled 1,436 during 2009, declining by less than one percent from 2008.

The 2009 Charles County arrest rate for the possession of drugs was 817.7 per 100,000. This is the third highest in the state of Maryland and is greater than the Maryland rate of 703.9 per 100,000.



The Charles County arrest rate for driving while intoxicated was also higher than the Maryland state rate (576.5 vs. 412.6).

Rate* (per 100,000 Population) of Arrests for Driving While Intoxicated by Maryland Jurisdiction, 2009



*Rates calculated using population estimates for July 1, 2009 from the Maryland Department of Planning.

Source: Adapted by ADAA from the Crime in Maryland, 2009 Uniform Crime Report, Maryland State Police.

Juvenile Drug and Alcohol-Related Arrests in Maryland by Maryland Jurisdiction, 2008 and 2009

Jurisdiction	Population Under Age 18	% in Juris.	Drug-Related										Alcohol-Related									
			Sales/Manufacture					Possession					DWI					Liquor Law Violations				
			2008	2009	Δ	2009 % in Juris.	2009 Rate*	2008	2009	Δ	2009 % in Juris.	2009 Rate*	2008	2009	Δ	2009 % in Juris.	2009 Rate*	2008	2009	Δ	2009 % in Juris.	2009 Rate*
Allegany	13,201	1.0	12	3	-75.0	0.2	22.7	44	32	-27.3	0.7	242.4	10	6	-40.0	3.0	45.5	74	46	-37.8	3.7	348.5
Anne Arundel	120,920	9.0	77	78	1.3	3.9	64.5	425	351	-17.4	7.7	290.3	26	23	-11.5	11.4	19.0	145	86	-40.7	7.0	71.1
Baltimore City	142,782	12.8	1827	1420	-22.3	71.8	821.0	1366	945	-30.8	20.7	546.3	0	0	—	0.0	0.0	10	11	10.0	0.9	7.7
Baltimore Co.	172,969	10.6	98	113	15.3	5.7	79.1	801	812	1.4	17.8	568.7	19	21	10.5	10.4	14.7	123	61	-50.4	4.9	35.3
Calvert	22,927	1.7	8	11	37.5	0.6	48.0	95	85	-10.5	1.9	370.7	7	5	-28.6	2.5	21.8	39	63	61.5	5.1	274.8
Caroline	8,242	0.6	2	1	-50.0	0.1	12.1	50	31	-38.0	0.7	376.1	8	4	-50.0	2.0	48.5	9	17	88.9	1.4	206.3
Carroll	41,842	3.1	19	14	-26.3	0.7	33.5	161	134	-16.8	2.9	320.3	10	14	40.0	6.9	33.5	85	84	-1.2	6.8	200.8
Cecil	24,897	1.8	9	9	0.0	0.5	36.1	108	74	-31.5	1.6	297.2	11	7	-36.4	3.5	28.1	18	14	-22.2	1.1	56.2
Charles	37,974	2.8	20	18	-10.0	0.9	47.4	203	145	-28.6	3.2	381.8	5	2	-60.0	1.0	5.3	0	0	—	0.0	0.0
Dorchester	6,793	0.5	4	1	-75.0	0.1	14.7	50	21	-58.0	0.5	309.1	8	2	-75.0	1.0	29.4	9	29	222.2	2.4	426.9
Frederick	58,135	4.3	11	27	145.5	1.4	46.4	136	194	42.6	4.3	333.7	10	7	-30.0	3.5	12.0	11	21	90.9	1.7	36.1
Garrett	6,354	0.5	2	2	0.0	0.1	31.5	3	8	166.7	0.2	125.9	3	2	-33.3	1.0	31.5	0	0	—	0.0	0.0
Harford	59,658	4.4	20	18	-10.0	0.9	30.2	179	131	-26.8	2.9	219.6	16	9	-43.8	4.5	15.1	39	19	-51.3	1.5	31.8
Howard	72,726	5.4	2	2	0.0	0.1	2.8	243	233	-4.1	5.1	320.4	12	20	66.7	9.9	27.5	229	378	65.1	30.6	519.8
Kent	4,090	0.3	2	1	-50.0	0.1	24.5	44	9	-79.5	0.2	220.1	2	3	50.0	1.5	73.4	11	3	-72.7	0.2	73.4
Montgomery	238,042	17.6	50	83	66.0	4.2	34.9	448	431	-3.8	9.4	181.1	28	30	7.1	14.9	12.6	283	211	-25.4	17.1	88.6
Prince George's	206,971	15.3	109	103	-5.5	5.2	49.8	374	367	-1.9	8.0	177.3	2	5	150.0	2.5	2.4	16	33	106.3	2.7	15.9
Queen Anne's	11,270	0.8	3	5	66.7	0.3	44.4	49	38	-22.4	0.8	337.2	3	7	133.3	3.5	62.1	2	0	-100.0	0.0	0.0
St. Mary's	26,265	1.9	4	1	-75.0	0.1	3.8	68	60	-11.8	1.3	228.4	2	4	100.0	2.0	15.2	53	29	-45.3	2.4	110.4
Somerset	4,673	0.3	6	2	-66.7	0.1	42.8	25	11	-56.0	0.2	235.4	2	4	100.0	2.0	85.6	10	0	-100.0	0.0	0.0
Talbot	7,144	0.5	6	4	-33.3	0.2	56.0	31	28	-9.7	0.6	392.0	6	10	66.7	5.0	140.0	15	34	126.7	2.8	475.9
Washington	33,413	2.5	25	24	-4.0	1.2	71.8	106	61	-42.5	1.3	182.6	9	1	-88.9	0.5	3.0	85	18	-78.8	1.5	53.9
Wicomico	21,954	1.6	25	12	-52.0	0.6	54.7	83	84	1.2	1.8	382.6	5	1	-80.0	0.5	4.6	35	12	-65.7	1.0	54.7
Worcester	9,235	0.7	10	14	40.0	0.7	151.6	205	203	-1.0	4.4	2198.2	9	13	44.4	6.4	140.8	27	37	37.0	3.0	400.7
Statewide**	—	—	20	12	-40.0	0.6	—	46	75	63.0	1.6	—	3	2	-33.3	1.0	—	2	28	1300.0	2.3	—
State Total	1,350,776	100.0	2371	1978	-16.6	100.0	146.4	5343	4563	-14.6	100.0	337.8	216	202	-6.5	100.0	15.0	1230	1234	0.3	100.0	91.4

*Rates per 100,000 population, based on population estimates for 2009 from the United States Census Bureau.
**Statewide agencies report offenses but do not report jurisdiction of occurrence.
SOURCE: Adapted by ADAA from Uniform Crime Report, Maryland State Police.

Maryland juvenile arrests for DWI and liquor law violations totaled 1,436 during 2009, declining by less than one percent from 2008.

Rates of juvenile DWI arrests per 100,000 population under 18 years were calculated for 2009. The Charles County rate of juvenile DWI arrests was 5.9 per 100,000. This is the 4th lowest rate among the Maryland state jurisdictions, and it is below the Maryland state average rate of 15.0 per 100,000.

There were no reported juvenile arrests for liquor law violations in Charles County for 2009.

The MD SEOW 2008 report presented driving under the influence (DUI) arrest rates among those aged under 21 years for 2006. The 2006 Charles County underage DUI arrest rate was 153.4 per 100,000. This rate is slightly above the Maryland state average rate of 139.3 per 100,000. The Charles County rate is also the 8th lowest among the 24 Maryland jurisdictions.

The MD SEOW 2008 report also presented liquor law violation arrest rates among those aged under 21 years for 2006. The Charles County liquor law violation arrest rate was 9.6 per 100,000. This is significantly below the Maryland average rate of 224.0 per 100,000. The Charles County rate is the 2nd lowest rate among the 24 Maryland jurisdictions.

Charles County Alcohol Enforcement Activities:

The Charles County Sheriff's Office's Community Services performs alcohol compliance checks throughout the county each year. Compliance checks are an undercover operation to test a licensed alcohol establishment to see if they are complying with Maryland laws regarding the sales of alcohol. There has been a steady or sustained reduction in the occurrences of non-compliance by alcohol establishments over the past several years.

From the period of October 2009 through September 2010, compliance checks were performed on 185 licensed liquor establishments in Charles County for a total of 211 checks. Of the 211 compliance checks performed, 167 establishments passed the check. This represents a pass rate of 79%.

Month	Number of checks	Passed	Failed	% Passed	% Failed
Oct-Dec 2009	69	54	15	78%	22%
Jan-Mar 2010	52	42	10	81%	19%
Apr-Jun 2010	50	39	11	78%	22%
Jul-Sept 2010	40	32	8	80%	20%
Total	211	167	44	79%	21%

A fail rate of 21% is a drastic reduction in comparison to the 53% fail rate reported in 2005 when the program was initiated. However, the percentage has increased by one percentage point each year since 2008 when a low of 18% failing was achieved.

Year	# of businesses checked	# of businesses who failed	Fail rate
2005	64	34	53%
2006	99	30	30%
2007	160	45	28%
2008	135	24	18%
2009	177	33	19%
2010	142	29	21%
05-10 Total	777	195	25%

***Maryland Public School Suspensions*:**

This data is provided by the Maryland State Department of Education: Division of Accountability and Assessment.

Data reflect the number of combined in-school and out-of-school suspension incidents in each local school system during the 2009-10 school year, which are categorized in eight major groupings including Dangerous Substance-Related.

The 2009-2010 school year rate for alcohol-related suspensions and expulsions in Charles County was 108.3 per 100,000. This rate is well above the Maryland state average rate of 73.4 per 100,000. The 09-10 Charles County tobacco-related suspension and expulsion rate was 59.7 per 100,000. This rate is below the Maryland state average rate of 113.1.

The 09-10 Charles County other-drug related suspension and expulsion rate was 440.6 per 100,000. This rate is well above the Maryland state average rate of 252.9 per 100,000.

Dangerous Substance-Related In-School and Out-of-School Suspensions and Expulsions from Maryland Public Schools, 2007-2008, 2008-2009 and 2009-2010

Local Unit	2009-2010 Enrollment	% in Local Unit	All Sus-pensions	% in Local Unit	Suspensions and Expulsions																	
					Alcohol-Related						Tobacco-Related						Other Drug-Related‡					
					2007-2008	2008-2009	2009-2010	2008/2009 - 2009/2010 Δ	2009-2010 % in Unit	2009-2010 Rate*	2007-2008	2008-2009	2009-2010	2008/2009 - 2009/2010 Δ	2009-2010 % in Unit	2009-2010 Rate*	2007-2008	2008-2009	2009-2010	2008/2009 - 2009/2010 Δ	2009-2010 % in Unit	20 20 Rat
Allegany	9152	1.1	2595	1.9	7	11	7	-36.4	1.6	76.5	55	44	46	4.5	3.9	502.6	29	25	22	-12.0	1.2	24
Anne Arundel	74776	8.8	13798	9.9	79	66	63	-4.5	9.4	84.3	231	305	251	-17.7	27.2	335.7	156	155	184	18.7	7.6	24
Baltimore City	82866	12.2	10267	7.4	20	29	11	-62.1	4.1	13.3	36	25	9	-64.0	2.2	10.9	222	198	185	-6.6	9.7	22
Baltimore Co.	103324	9.8	20148	14.5	63	68	67	-1.5	9.7	64.8	130	136	144	5.9	12.1	139.4	352	337	337	0.0	16.6	32
Calvert	17006	2.0	4975	3.6	22	20	35	75.0	2.9	205.8	35	37	47	27.0	3.3	276.4	45	68	82	20.6	3.3	48
Caroline	5551	0.7	1828	1.3	8	3	5	66.7	0.4	90.1	47	51	24	-52.9	4.5	432.4	12	29	7	-75.9	1.4	12
Carroll	27721	3.3	2574	1.9	37	37	24	-35.1	5.3	86.6	10	8	7	-12.5	0.7	25.3	80	78	65	-16.7	3.8	23
Cecil	16205	1.9	5254	3.8	22	31	16	-48.4	4.4	98.7	132	111	93	-16.2	9.9	573.9	58	96	68	-29.2	4.7	41
Charles	26779	3.2	7467	5.4	35	33	29	-12.1	4.7	108.3	11	11	16	45.5	1.0	59.7	71	76	118	55.3	3.7	44
Dorchester	4628	0.5	2677	1.9	5	0	2	—	0.0	43.2	7	4	11	175.0	0.4	237.7	17	7	3	-57.1	0.3	6
Frederick	40159	4.7	5661	4.1	50	47	29	-38.3	6.7	72.2	33	18	8	-55.6	1.6	19.9	78	103	146	41.7	5.1	36
Garrett	4311	0.5	354	0.3	16	7	7	0.0	1.0	162.4	14	10	8	-20.0	0.9	185.6	40	29	21	-27.6	1.4	48
Harford	38636	4.6	5558	4.0	29	40	20	-50.0	5.7	51.8	91	106	94	-11.3	9.4	243.3	106	91	142	56.0	4.5	36
Howard	50641	6.0	3445	2.5	53	48	52	8.3	6.9	102.7	29	33	11	-66.7	2.9	21.7	100	88	90	2.3	4.3	17
Kent	2184	0.3	729	0.5	3	0	5	—	0.0	228.9	9	3	15	400.0	0.3	686.8	13	14	8	-42.9	0.7	36
Montgomery	141722	16.7	5361	3.9	197	148	153	3.4	21.2	108.0	70	50	37	-26.0	4.5	26.1	247	257	292	13.6	12.6	20
Prince George's	127039	15.0	21852	15.7	64	42	29	-31.0	6.0	22.8	78	46	40	-13.0	4.1	31.5	268	108	125	15.7	5.3	9
Queen Anne's	7793	0.9	890	0.6	9	5	2	-60.0	0.7	25.7	40	48	55	14.6	4.3	705.8	14	16	25	56.3	0.8	32
St. Mary's	17186	2.0	6009	4.3	16	18	17	-5.6	2.6	98.9	91	0	0	—	0.0	0.0	50	106	91	-14.2	5.2	52
Somerset	2898	0.3	1835	1.3	1	0	2	—	0.0	69.0	10	5	5	0.0	0.4	172.5	16	12	6	-50.0	0.6	20
Talbot	4495	0.5	647	0.5	10	2	3	50.0	0.3	66.7	18	13	3	-76.9	1.2	66.7	9	4	8	100.0	0.2	17
Washington	21902	2.6	4103	3.0	17	15	31	106.7	2.1	141.5	30	38	22	-42.1	3.4	100.4	76	53	68	28.3	2.6	31
Wicomico	14619	1.7	9431	6.8	23	19	5	-73.7	2.7	34.2	11	12	5	-58.3	1.1	34.2	37	57	34	-40.4	2.8	23
Worcester	6659	0.8	1335	1.0	2	10	9	-10.0	1.4	135.2	11	9	8	-11.1	0.8	120.1	17	29	18	-37.9	1.4	27
State Total	848252	100.0	138793	100.0	788	699	623	-10.9	100.0	73.4	1229	1123	959	-14.6	100.0	113.1	2113	2036	2142	5.4	100.0	25

*Rates per 100,000 student enrollment based on Maryland State Department of Education (MSDE) public school enrollment figures as of September 30, 2009.
‡Other drug-related suspensions include the categories of drugs, inhalants, sells or solicits sale of controlled substance, or possesses or uses illegal drugs.
SOURCE: Adapted by ADAA from the 2007-2008, 2008-2009 and 2009-2010 reports on Suspensions, Expulsions and Health-Related Exclusions, Maryland Public Schools, Division of Accountability and Assessment, Maryland State Department of Education (MSDE).

***Maryland Youth Risk Behavior Survey (YRBS)*:**

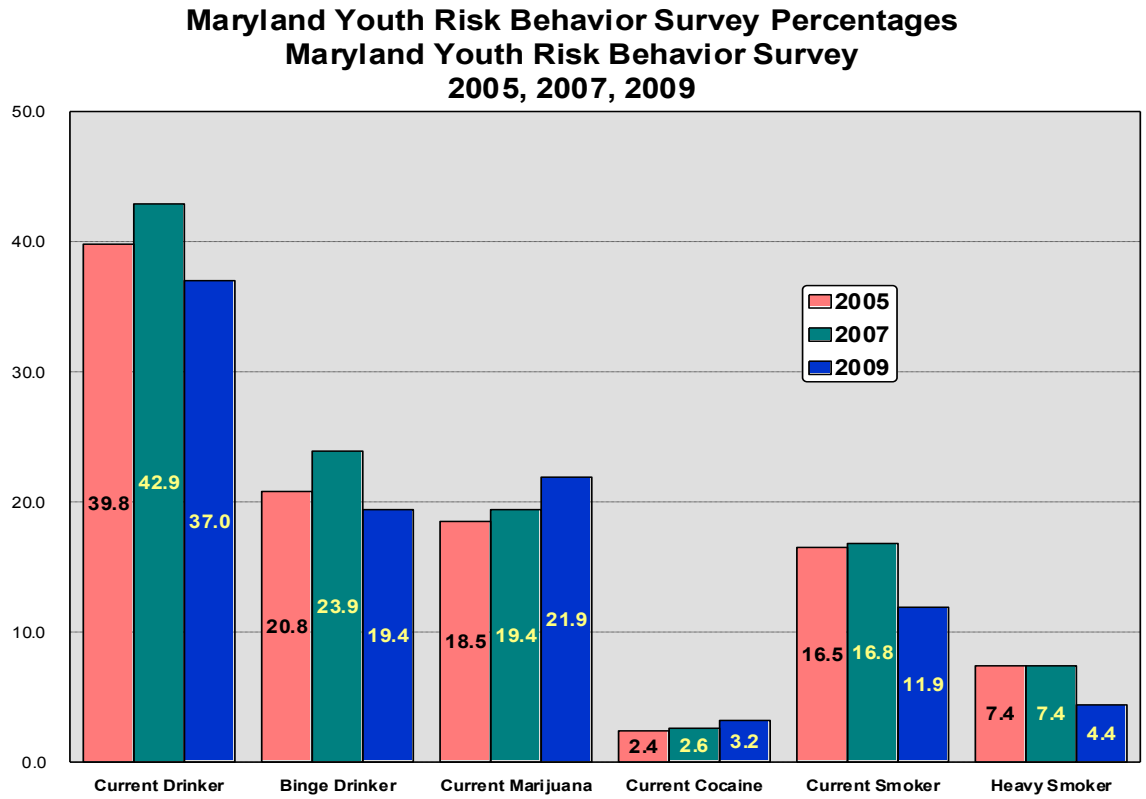
The Maryland YRBS is administered by the Maryland State Department of Education (MSDE) and the U.S. Centers for Disease Control and Prevention (CDC).

The Maryland YRBS is part of the Youth Risk Behavior Surveillance System (YRBSS) developed in 1990 by the U.S. Centers for Disease Control and Prevention (CDC) to monitor behaviors that affect morbidity and mortality among high-school-age youth.

In the spring of 2009, the Maryland YRBS was administered to students in a representative sample of Maryland public-high-school classrooms. The law requires the survey to be administered every two years.

A total of 1,644 students in 30 Maryland public high schools completed the survey, resulting in a 78% response rate. The 2009 Maryland YRBS results are representative of all Maryland's public-school students in grades 9 through 12.

In 2009, 37% of Maryland YRBS participants reported that they were current drinkers. This is a decrease from the percentage reported in the previous 2 years. Additionally, 19.4% of Maryland YRBS participants reported that they were binge drinkers. This is also a small reduction from the percentages reporting binge drinking in 2005 and 2007. There was an increase in the percentage of Maryland YBRS participants reporting that they currently use marijuana and cocaine. Smoking rates decreased from 2005 to 2009.



Maryland Behavioral Risk Factor Surveillance System Data:

The Maryland Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing telephone surveillance program designed to collect data on the behaviors and conditions that place Marylanders at risk for chronic diseases, injuries, and preventable infectious diseases. These data collected through the BRFSS provide valuable support and services to many statewide and local programs. The BRFSS is an important data component in targeting areas of need, developing programs, and measuring the effectiveness of initiatives. County level BRFSS data is often combined for several years in order to increase the sample size and therefore the validity of the data.

From 2006-2010, 13.1% of Charles County adults reported binge drinking in the last month. Binge drinking was defined as males having more than 5 drinks and females having more than 4 drinks on one occasion. Charles County binge drinking rates were comparable to Maryland rates for this time period.

2006-2010 Binge Drinking (Males having more than 5 drinks and females having more than 4 drinks in one occasion in the last month), Charles County and MD

Binge Drinking 06-10	Yes	No	Total	Percentage of report binge drinking
Charles County	172	4729	4901	13.1%
Maryland	1385	39229	40614	183.5

4.7% of Charles County BRFSS respondents reported that they are chronic drinkers. This is comparable to Maryland rates. Chronic drinking was defined as males having two or more drinks and females having one or more drinks every day.

2006-2010 Chronic Drinking (Males having two or more drinks and females having one or more drinks every day), Charles County and MD

Chronic Drinking 06-10	Yes	No	Total	Percentage of who chronically drink
Charles County	68	2050	2108	4.7%
Maryland	1478	41693	43171	4.5%

A small percentage of Charles County BRFSS respondents reported that they have been drinking and driving in the past month (2.6%). The Charles County drinking and driving percentage is greater than the Maryland percentage (2.6% vs. 1.8%). Drinking and driving was defined as having driven on one or more occasions in the past month after having too much to drink. Caution should be taken when making conclusions about this data since sample sizes are very small, and any changes can drastically alter the percentages.

2006-2010 Drinking and Driving (Drove one or more times in past month after having too much to drink), Charles County and MD

Drinking and Driving 06-10	Yes	No	Total	Percentage who drink and drive
Charles County	18	380	398	2.6%
Maryland	944	27112	28056	1.8%

Alcohol and Drug Induced Death:

Alcohol and drug induced death data is collected by the Maryland Vital Statistics Administration at the Maryland Department of Health and Mental Hygiene. The Vital Statistics Administration releases an annual report of Maryland mortality data. Alcohol-induced deaths include the following International Classification of Disease, Tenth Revision (ICD-10) category codes: F10, G31.2, G62.1, I42.6, K29.2, K70, R78.0, X45, and Y15.

The 2009 Charles County alcohol-induced death rate was 0.7 per 100,000. This is significantly lower than the Maryland state average rate of 5.0 per 100,000. This is the second lowest rate among the 24 Maryland jurisdictions.

The 2009 Charles County drug-induced death rate was 10.5 per 100,000. This rate is below the Maryland state average rate of 13.4 per 100,000.

Alcohol and Drug-Induced Deaths by Maryland Jurisdiction, 2008 and 2009

Jurisdiction	Population	% in Juris.	Deaths Due to All Causes			Alcohol and Drug -Induced Deaths									
						Alcohol-Induced**					Drug-Induced**				
			2008	2009	2009 % in Juris.	2008	2009	Δ	2009 % in Juris.	2009 Rate*	2008	2009	Δ	2009 % in Juris.	2009 Rate*
Allegany	72,532	1.3	856	877	2.0	5	7	40.0	2.5	9.7	11	7	-36.4	0.9	9.7
Anne Arundel	521,209	9.1	3830	3695	8.4	21	31	47.6	10.9	5.9	78	73	-6.4	9.6	14.0
Baltimore City	637,418	13.9	6509	6503	14.9	58	61	5.2	21.5	7.7	166	208	25.3	27.3	26.3
Baltimore Co.	789,814	11.2	7692	7829	17.9	40	38	-5.0	13.4	6.0	140	134	-4.3	17.6	21.0
Calvert	89,212	1.6	609	586	1.3	3	5	66.7	1.8	5.6	8	13	62.5	1.7	14.6
Caroline	33,367	0.6	315	328	0.7	3	3	0.0	1.1	9.0	5	0	-100.0	0.0	0.0
Carroll	170,089	3.0	1329	1337	3.1	8	7	-12.5	2.5	4.1	19	24	26.3	3.2	14.1
Cecil	100,796	1.8	812	857	2.0	3	8	166.7	2.8	7.9	16	21	31.3	2.8	20.8
Charles	142,226	2.5	878	871	2.0	4	1	-75.0	0.4	0.7	17	15	-11.8	2.0	10.5
Dorchester	32,043	0.6	356	370	0.8	5	5	0.0	1.8	15.6	5	3	-40.0	0.4	9.4
Frederick	227,980	4.0	1477	1472	3.4	12	10	-16.7	3.5	4.4	16	23	43.8	3.0	10.1
Garrett	29,555	0.5	321	325	0.7	2	2	0.0	0.7	6.8	3	3	0.0	0.4	10.2
Harford	242,514	4.3	1811	1797	4.1	13	8	-38.5	2.8	3.3	39	35	-10.3	4.6	14.4
Howard	281,884	4.9	1474	1404	3.2	7	6	-14.3	2.1	2.1	17	24	41.2	3.2	8.5
Kent	20,247	0.4	254	265	0.6	0	0	—	0.0	0.0	4	2	-50.0	0.3	9.9
Montgomery	971,600	17.0	5560	5493	12.6	21	24	14.3	8.5	2.5	58	57	-1.7	7.5	5.9
Prince George's	834,560	14.6	5268	5133	11.7	40	37	-7.5	13.0	4.4	47	59	25.5	7.8	7.1
Queen Anne's	47,958	0.8	356	343	0.8	0	3	—	1.1	6.3	7	6	-14.3	0.8	12.5
St. Mary's	102,999	1.8	653	703	1.6	4	6	50.0	2.1	5.8	13	9	-30.8	1.2	8.7
Somerset	25,959	0.5	225	271	0.6	1	3	200.0	1.1	11.6	3	5	66.7	0.7	19.3
Talbot	36,262	0.6	455	440	1.0	1	2	100.0	0.7	5.5	3	2	-33.3	0.3	5.5
Washington	145,910	2.6	1334	1351	3.1	7	4	-42.9	1.4	2.7	21	16	-23.8	2.1	11.0
Wicomico	94,222	1.7	885	923	2.1	1	7	600.0	2.5	7.4	12	16	33.3	2.1	17.0
Worcester	49,122	0.9	590	590	1.3	5	6	20.0	2.1	12.2	11	6	-45.5	0.8	12.2
State Total	5,699,478	100.0	43849	43763	100.0	264	284	7.6	100.0	5.0	719	761	5.8	100.0	13.4

*Rates per 100,000 population, based on population estimates for July 1, 2009, from the Maryland Department of Planning

Intoxication Deaths:

Intoxication deaths are determined and reported by the Maryland Office of the Chief Medical Examiner (OCME). The OCME is responsible for investigating all deaths in Maryland caused by violence, suicide, or injury; sudden deaths in apparently healthy individuals; and deaths that are suspicious or unusual. Intoxication deaths are those in which the OCME-determined cause of death included the word "intoxication". In 90 percent of the intoxication deaths from 2006 to 2010 the manner of death (accident/suicide/homicide) was reported as undetermined, and multiple substances were involved in 40 percent or more of intoxication deaths.

Among the 2009-2010 intoxication deaths reported by the OCME, the largest numbers of Charles County intoxication deaths were due to oxycodone (8 deaths), alcohol (6), and other Rx drugs (6).

Intoxication Deaths by Maryland Jurisdiction, 2009 and 2010

Jurisdiction	Substance Mentions*																										
	Alcohol			Cocaine			Heroin			Methadone			Oxycodone			Other Rx Opiates			Unspecified Narcotics			Benzodiazepines			Other Rx Drugs		
	2009	2010	Δ	2009	2010	Δ	2009	2010	Δ	2009	2010	Δ	2009	2010	Δ	2009	2010	Δ	2009	2010	Δ	2009	2010	Δ	2009	2010	Δ
Allegany	3	4	33.3	1	1	0.0	0	1	—	1	3	200.0	1	3	200.0	3	8	166.7	0	1	—	0	3	—	0	5	—
Anne Arundel	11	11	0.0	13	13	0.0	16	8	-50.0	11	18	63.6	4	6	50.0	11	15	36.4	3	3	0.0	4	5	25.0	11	11	0.0
Baltimore City	55	40	-27.3	76	47	-38.2	69	43	-37.7	53	58	9.4	11	8	-27.3	46	34	-26.1	54	25	-53.7	13	14	7.7	20	16	-20.0
Baltimore Co.	19	27	42.1	20	19	-5.0	25	19	-24.0	14	31	121.4	16	18	12.5	23	20	-13.0	10	9	-10.0	7	15	114.3	25	18	-28.0
Calvert	5	0	-100.0	1	3	200.0	3	0	-100.0	2	1	-50.0	3	2	-33.3	5	2	-60.0	1	0	-100.0	1	0	-100.0	3	2	-33.3
Caroline	1	0	-100.0	1	0	-100.0	0	0	—	0	1	—	1	1	0.0	0	1	—	0	0	—	0	0	—	0	0	—
Carroll	6	3	-50.0	3	6	100.0	3	2	-33.3	4	2	-50.0	4	5	25.0	5	3	-40.0	1	1	0.0	2	1	-50.0	6	2	-66.7
Cecil	6	5	-16.7	4	3	-25.0	2	1	-50.0	7	7	0.0	3	13	333.3	6	7	16.7	6	0	-100.0	3	2	-33.3	1	3	200.0
Charles	1	5	400.0	2	2	0.0	2	3	50.0	2	0	-100.0	5	3	-40.0	3	1	-66.7	0	2	—	0	0	—	4	2	-50.0
Dorchester	0	1	—	0	1	—	0	1	—	0	0	—	0	3	—	1	3	200.0	0	1	—	0	1	—	1	2	100.0
Frederick	8	5	-37.5	3	3	0.0	3	1	-66.7	4	1	-75.0	5	3	-40.0	4	5	25.0	4	2	-50.0	2	1	-50.0	4	1	-75.0
Garrett	1	0	-100.0	1	0	—	1	0	-100.0	1	1	0.0	0	0	—	3	0	-100.0	1	0	-100.0	1	0	-100.0	0	0	—
Harford	6	11	83.3	5	4	-20.0	7	2	-71.4	8	17	112.5	3	12	300.0	8	9	12.5	6	2	-66.7	2	2	0.0	5	3	-40.0
Howard	5	3	-40.0	3	1	-66.7	3	3	0.0	4	1	-75.0	0	4	—	3	0	-100.0	1	0	-100.0	2	1	-50.0	4	1	-75.0
Kent	0	1	—	0	1	—	0	0	—	2	2	0.0	1	2	100.0	0	0	—	0	0	—	0	0	—	0	2	—
Montgomery	10	13	30.0	7	4	-42.9	6	7	16.7	7	5	-28.6	10	9	-10.0	12	9	-25.0	3	1	-66.7	4	3	-25.0	21	15	-28.6
Prince George's	13	19	46.2	13	11	-15.4	13	6	-53.8	5	8	60.0	2	8	300.0	15	12	-20.0	9	2	-77.8	1	1	0.0	7	9	28.6
Queen Anne's	0	1	—	2	0	—	1	0	-100.0	1	2	100.0	1	1	0.0	0	2	—	1	1	0.0	0	1	—	0	2	—
St. Mary's	3	5	66.7	1	2	100.0	0	0	—	3	5	66.7	5	4	-20.0	1	5	400.0	0	0	—	0	0	—	1	4	300.0
Somerset	1	0	-100.0	1	1	—	0	0	—	0	0	—	1	1	0.0	1	1	0.0	0	0	—	0	0	—	0	0	—
Talbot	0	0	—	1	0	—	0	0	—	2	1	-50.0	0	1	—	0	1	—	0	0	—	0	0	—	0	1	—
Washington	4	4	0.0	0	2	—	5	3	-40.0	0	3	—	3	2	-33.3	2	5	150.0	6	1	-83.3	1	2	100.0	3	6	100.0
Wicomico	3	4	33.3	2	3	50.0	1	1	0.0	2	3	50.0	4	2	-50.0	6	2	-66.7	1	2	100.0	2	0	-100.0	3	2	-33.3
Worcester	3	6	100.0	0	2	—	0	0	—	1	1	0.0	4	2	-50.0	3	2	-33.3	2	1	-50.0	1	0	-100.0	3	1	-66.7
Unspecified	0	1	—	0	0	—	0	0	—	0	0	—	0	0	—	0	0	—	0	0	—	0	0	—	0	0	—
State Total	164	169	3.0	160	129	-19.4	160	101	-36.9	134	171	27.6	87	113	29.9	161	147	-8.7	109	54	-50.5	46	52	13.0	122	108	-11.5

*Each reported death may involve multiple substances.
SOURCE: Adapted by ADAA from data provided by the Office of the Chief Medical Examiner (OCME).

Substance Abuse Treatment Admissions:

All publicly-funded Maryland alcohol and drug-abuse-treatment providers are required to report information on admissions to and discharges from treatment via the Web-based Statewide Maryland Automated Record Tracking (SMART) system.

During 2010 35,246 individuals accounted for 43,431 recorded admissions to State-funded treatment, a 2.6 percent increase from the previous year. From CY 2007 to 2010 Oxycodone-related admissions increased 130 percent and total prescription-opiate-related admissions doubled. Benzodiazepine-related treatment admissions increased by 94 percent, PCP by 35 percent and marijuana by 7 percent. During 2010 heroin-related admissions increased 8 percent from the previous year; alcohol-related admissions were level. Cocaine-related admissions fell by 26 percent over the four years.

Between 2008-2010, admissions for treatment of substance abuse for individuals under 18 saw increases for alcohol, marijuana, and prescription opiate. Most individuals under 18 years received treatment for alcohol abuse.

Under Age 18 Substance-Problem Admissions to Maryland State-Funded Alcohol and Drug Abuse Treatment by Subdivision of Residence, 2008 to 2010

Residence	Alcohol-Related				Marijuana-Related				Cocaine-Related				Heroin-Related				Prescription-Opiate-Related				Benzodiazepine-Related				Total with Substance Problem(s)			
	Calendar Year of Admission			2009 - 2010	Calendar Year of Admission			2009 - 2010	Calendar Year of Admission			2009 - 2010	Calendar Year of Admission			2009 - 2010 Δ	Calendar Year of Admission			2009 - 2010	Calendar Year of Admission			2009 - 2010 Δ	Calendar Year of Admission			2009 - 2010
	2008	2009	2010	Δ	2008	2009	2010	Δ	2008	2009	2010	Δ	2008	2009	2010		2008	2009	2010	Δ	2008	2009	2010		2008	2009	2010	Δ
Allegany	65	29	49	69.0	103	49	81	65.3	7	5	5	0.0	0	2	0	-100.0	9	8	11	37.5	6	0	5	–	115	53	85	60.4
Anne Arundel	96	50	75	50.0	141	87	127	46.0	14	6	5	-16.7	8	4	10	150.0	15	19	24	26.3	0	4	4	0.0	155	98	145	48.0
Baltimore City	164	199	244	22.6	531	702	800	14.0	3	1	2	100.0	0	1	1	0.0	7	3	12	300.0	1	1	3	200.0	566	731	822	12.4
Baltimore. Co.	206	204	309	51.5	363	393	607	54.5	11	5	17	240.0	8	11	11	0.0	29	33	41	24.2	12	10	19	90.0	378	408	672	64.7
Calvert	74	58	60	3.4	94	79	95	20.3	5	2	3	50.0	3	0	0	–	13	13	21	61.5	0	2	1	-50.0	108	88	100	13.6
Caroline	62	63	45	-28.6	79	81	61	-24.7	1	3	2	-33.3	5	1	0	-100.0	14	9	7	-22.2	2	4	0	-100.0	97	94	73	-22.3
Carroll	91	68	87	27.9	128	126	126	0.0	5	3	9	200.0	4	3	10	233.3	16	19	29	52.6	2	4	1	-75.0	145	134	136	1.5
Cecil	37	39	33	-15.4	57	59	52	-11.9	7	1	1	0.0	3	4	5	25.0	16	15	16	6.7	3	4	2	-50.0	69	73	68	-6.8
Charles	48	72	62	-13.9	78	114	101	-11.4	2	6	5	-16.7	1	1	0	-100.0	8	24	22	-8.3	1	2	3	50.0	88	127	112	-11.8
Dorchester	32	35	29	-17.1	78	52	51	-1.9	2	4	0	-100.0	0	0	0	–	1	4	3	-25.0	0	0	0	–	85	59	63	6.8
Frederick	78	61	53	-13.1	152	177	152	-14.1	14	6	2	-66.7	1	6	6	0.0	9	25	21	-16.0	2	3	4	33.3	158	187	162	-13.4
Garrett	21	35	10	-71.4	13	29	10	-65.5	1	0	0	–	0	1	0	-100.0	4	5	5	0.0	0	0	1	–	29	46	19	-58.7
Harford	139	74	72	-2.7	161	117	126	7.7	5	2	3	50.0	2	1	4	300.0	16	16	21	31.3	1	2	2	0.0	186	131	140	6.9
Howard	51	59	53	-10.2	90	98	119	21.4	2	2	4	100.0	3	8	6	-25.0	3	6	12	100.0	0	2	3	50.0	100	116	131	12.9
Kent	30	24	28	16.7	50	37	36	-2.7	2	0	0	–	1	2	2	0.0	2	3	4	33.3	2	0	1	–	56	38	48	26.3
Montgomery	123	122	140	14.8	190	184	206	12.0	14	12	6	-50.0	3	5	4	-20.0	16	14	11	-21.4	2	2	7	250.0	196	190	211	11.1
Prince George's	123	117	93	-20.5	275	286	306	7.0	7	4	1	-75.0	2	0	0	–	2	2	3	50.0	0	1	3	–	304	301	324	7.6
Queen Anne's	47	43	30	-30.2	55	64	49	-23.4	5	3	0	-100.0	1	2	1	-50.0	12	18	9	-50.0	1	2	2	0.0	64	75	50	-33.3
St. Mary's	20	44	46	4.5	45	55	72	30.9	3	2	0	-100.0	0	1	0	-100.0	9	10	9	-10.0	1	0	1	–	49	60	80	33.3
Somerset	34	30	19	-36.7	56	44	29	-34.1	3	9	2	-77.8	0	0	0	–	0	3	3	0.0	0	1	2	100.0	61	48	32	-33.3
Talbot	83	64	48	-25.0	86	51	41	-19.6	12	2	2	0.0	0	0	1	–	10	10	5	-50.0	0	2	0	-100.0	106	73	52	-28.8
Washington	69	75	44	-41.3	135	116	95	-18.1	7	6	1	-83.3	0	1	0	-100.0	3	16	10	-37.5	0	0	1	–	142	130	99	-23.8
Wicomico	75	128	147	14.8	125	187	211	12.8	9	9	5	-44.4	0	0	0	–	15	24	10	-58.3	4	2	3	50.0	132	189	214	13.2
Worcester	38	30	38	26.7	58	60	58	-3.3	8	4	7	75.0	1	2	1	-50.0	6	5	4	-20.0	2	0	3	–	64	63	65	3.2
Out-of-State	25	23	31	34.8	37	31	62	100.0	5	3	5	66.7	5	3	6	100.0	11	14	16	14.3	4	2	12	500.0	45	37	68	83.8
Total	1831	1746	1845	5.7	3180	3278	3673	12.1	154	100	87	-13.0	51	59	68	15.3	246	318	329	3.5	46	50	83	66.0	3498	3549	3971	11.9

Source: Alcohol and Drug Abuse Administration (ADAA)

2008-2010 admissions for substance abuse treatment among persons 18-20 show a decrease in alcohol and cocaine and an increase in marijuana, heroin, prescription opiates, and benzodiazepine. The most common drug reported at the time of treatment was marijuana.

Age 18 to 20 Substance-Problem Admissions to Maryland State-Funded Alcohol and Drug Abuse Treatment by Subdivision of Residence, 2008 to 2010

Residence	Alcohol-Related				Marijuana-Related				Cocaine-Related				Heroin-Related				Prescription-Opiate-Related				Benzodiazepine-Related				Total with Substance Problem(s)			
	Calendar Year of Admission			2009-2010	Calendar Year of Admission			2009-2010	Calendar Year of Admission			2009-2010	Calendar Year of Admission			2009-2010 Δ	Calendar Year of Admission			2009-2010 Δ	Calendar Year of Admission			2009-2010 Δ	Calendar Year of Admission			2009-2010
	2008	2009	2010	Δ	2008	2009	2010	Δ	2008	2009	2010	Δ	2008	2009	2010		2008	2009	2010	Δ	2008	2009	2010		2008	2009	2010	Δ
Allegany	56	40	38	-5.0	65	52	53	1.9	15	12	8	-33.3	6	3	13	333.3	28	16	22	37.5	5	1	2	100.0	82	65	65	0.0
Anne Arundel	189	181	181	0.0	281	241	272	12.9	51	49	61	24.5	98	100	106	6.0	57	89	108	21.3	11	18	25	38.9	402	366	418	14.2
Baltimore City	95	112	118	5.4	240	241	314	30.3	35	23	27	17.4	40	46	43	-6.5	17	30	30	0.0	10	10	6	-40.0	292	289	365	26.3
Baltimore. Co.	171	175	197	12.6	256	323	364	12.7	36	41	30	-26.8	50	80	85	6.3	31	81	67	-17.3	5	20	29	45.0	341	426	467	9.6
Calvert	112	134	105	-21.6	140	168	150	-10.7	26	23	16	-30.4	25	36	11	-69.4	40	68	113	66.2	1	11	8	-27.3	184	227	196	-13.7
Caroline	26	21	22	4.8	24	32	23	-28.1	5	2	6	200.0	9	3	5	66.7	8	11	14	27.3	1	1	1	0.0	41	43	43	0.0
Carroll	69	70	73	4.3	95	85	100	17.6	13	18	26	44.4	10	25	38	52.0	18	26	20	-23.1	5	4	12	200.0	115	120	133	10.8
Cecil	39	21	32	52.4	58	32	48	50.0	18	4	8	100.0	16	12	14	16.7	25	35	59	68.6	2	5	8	60.0	79	63	88	39.7
Charles	86	78	68	-12.8	88	104	101	-2.9	15	13	10	-23.1	9	15	13	-13.3	16	38	53	39.5	0	6	2	-66.7	122	147	134	-8.8
Dorchester	31	39	37	-5.1	46	53	49	-7.5	17	14	12	-14.3	5	11	6	-45.5	3	6	12	100.0	2	4	3	-25.0	61	74	65	-12.2
Frederick	52	49	74	51.0	80	97	118	21.6	19	19	23	21.1	11	24	31	29.2	6	33	58	75.8	4	3	6	100.0	94	125	157	25.6
Garrett	13	23	25	8.7	22	17	23	35.3	1	3	3	—	2	2	5	150.0	8	12	9	-25.0	0	2	2	—	26	32	37	15.6
Harford	40	43	37	-14.0	80	72	50	-30.6	19	17	10	-41.2	24	33	18	-45.5	19	20	30	50.0	1	8	5	-37.5	97	104	83	-20.2
Howard	40	47	64	36.2	55	75	89	18.7	9	6	13	116.7	16	15	18	20.0	6	10	20	100.0	1	2	5	150.0	77	103	124	20.4
Kent	35	35	25	-28.6	45	34	26	-23.5	6	5	4	-20.0	5	3	3	0.0	13	4	4	0.0	8	0	2	—	56	50	34	-32.0
Montgomery	140	121	82	-32.2	193	154	116	-24.7	35	34	33	-2.9	22	57	49	-14.0	29	43	48	11.6	10	15	16	6.7	228	231	180	-22.1
Prince George's	77	85	83	-2.4	155	182	142	-22.0	8	11	11	0.0	11	11	18	63.6	14	15	11	-26.7	2	2	2	0.0	176	205	175	-14.6
Queen Anne's	77	80	51	-36.3	72	95	69	-27.4	14	15	9	-40.0	10	22	16	-27.3	15	27	27	0.0	0	6	2	-66.7	94	121	88	-27.3
St. Mary's	53	46	54	17.4	73	64	74	15.6	20	11	8	-27.3	6	6	4	-33.3	22	26	35	34.6	2	1	2	100.0	96	92	104	13.0
Somerset	13	16	9	-43.8	25	30	25	-16.7	2	5	1	-80.0	0	1	0	-100.0	3	3	5	66.7	0	0	1	—	28	35	26	-25.7
Talbot	36	38	44	15.8	37	35	46	31.4	8	5	7	40.0	1	1	0	-100.0	2	5	8	60.0	0	2	0	-100.0	45	49	67	36.7
Washington	104	99	57	-42.4	109	130	101	-22.3	21	25	7	-72.0	12	18	12	-33.3	12	25	28	12.0	1	1	2	100.0	158	158	119	-24.7
Wicomico	57	65	66	1.5	84	105	106	1.0	27	30	17	-43.3	7	15	17	13.3	18	45	38	-15.6	4	8	8	0.0	111	131	139	6.1
Worcester	48	45	31	-31.1	53	44	54	22.7	15	14	14	0.0	4	7	11	57.1	15	14	16	14.3	1	4	9	125.0	69	65	72	10.8
Out-of-State	31	43	38	-11.6	42	63	56	-11.1	12	13	8	-38.5	9	19	19	0.0	14	42	52	23.8	7	12	15	25.0	62	104	96	-7.7
Total	1690	1706	1611	-5.6	2418	2528	2569	1.6	447	412	372	-9.7	408	565	555	-1.8	439	724	887	22.5	83	146	173	18.5	3136	3425	3475	1.5

Source: Alcohol and Drug Abuse Administration (ADAA)

For individuals over the age of 21 years, 2008-2010 substance abuse treatment admissions for alcohol, marijuana, and cocaine decreased and increased for heroin, prescription opiate, and benzodiazepine.

Age 21 and Older Substance-Problem Admissions to Maryland State-Funded Alcohol and Drug Abuse Treatment by Subdivision of Residence, 2008 to 2010

Residence	Alcohol-Related				Marijuana-Related				Cocaine-Related				Heroin-Related				Prescription-Opiate-Related				Benzodiazepine-Related				Total with Substance Problem(s)			
	Calendar Year of Admission			2009-2010	Calendar Year of Admission			2009-2010	Calendar Year of Admission			2009-2010	Calendar Year of Admission			2009-2010 Δ	Calendar Year of Admission			2009-2010	Calendar Year of Admission			2009-2010 Δ	Calendar Year of Admission			2009-2010
	2008	2009	2010	Δ	2008	2009	2010	Δ	2008	2009	2010	Δ	2008	2009	2010		2008	2009	2010	Δ	2008	2009	2010		2008	2009	2010	Δ
Allegany	484	490	451	-8.0	289	305	325	6.6	208	177	177	0.0	88	85	113	32.9	177	180	221	22.8	49	56	60	7.1	691	686	701	2.2
Anne Arundel	1595	1541	1723	11.8	701	773	829	7.2	911	769	723	-6.0	711	712	792	11.2	339	445	551	23.8	96	109	204	87.2	2569	2535	2933	15.7
Baltimore City	4125	4385	4645	5.9	2014	2074	2350	13.3	6485	5801	5684	-2.0	7858	7456	7404	-0.7	476	671	836	24.6	235	312	356	14.1	11374	11151	11445	2.6
Baltimore. Co.	1642	1631	1478	-9.4	785	925	828	-10.5	1270	1060	936	-11.7	1096	1241	1127	-9.2	497	662	666	0.6	221	282	317	12.4	3041	3189	3000	-5.9
Calvert	625	749	794	6.0	339	442	449	1.6	257	304	290	-4.6	71	154	112	-27.3	173	260	331	27.3	27	46	57	23.9	819	1055	1136	7.7
Caroline	204	227	238	4.8	118	116	128	10.3	95	72	74	2.8	29	35	43	22.9	28	47	77	63.8	6	11	16	45.5	282	313	353	12.8
Carroll	396	456	560	22.8	171	216	281	30.1	285	268	317	18.3	235	244	309	26.6	84	106	173	63.2	37	49	82	67.3	616	750	931	24.1
Cecil	439	374	424	13.4	212	175	224	28.0	251	178	192	7.9	145	123	111	-9.8	117	142	300	111.3	39	41	61	48.8	663	595	730	22.7
Charles	768	711	622	-12.5	373	363	308	-15.2	307	292	212	-27.4	42	78	79	1.3	106	145	195	34.5	13	21	28	33.3	921	967	847	-12.4
Dorchester	318	353	388	9.9	202	255	258	1.2	205	233	258	10.7	51	78	68	-12.8	29	48	48	0.0	8	18	20	11.1	432	504	560	11.1
Frederick	706	679	714	5.2	338	358	421	17.6	411	369	351	-4.9	135	183	229	25.1	119	220	263	19.5	44	55	89	61.8	972	1006	1103	9.6
Garrett	214	231	247	6.9	81	93	98	5.4	45	38	30	-21.1	21	46	43	-6.5	40	57	62	8.8	15	26	22	-15.4	257	294	304	3.4
Harford	334	421	432	2.6	230	250	266	6.4	239	202	221	9.4	199	141	202	43.3	102	131	239	82.4	18	50	52	4.0	630	700	857	22.4
Howard	283	382	470	23.0	110	148	239	61.5	140	135	155	14.8	91	124	137	10.5	33	63	88	39.7	14	19	35	84.2	426	563	694	23.3
Kent	224	196	216	10.2	126	120	105	-12.5	117	96	95	-1.0	27	22	30	36.4	44	48	58	20.8	11	13	21	61.5	312	278	289	4.0
Montgomery	1640	1432	1175	-17.9	777	698	538	-22.9	945	873	616	-29.4	249	331	318	-3.9	203	256	332	29.7	58	101	110	8.9	2297	2194	1822	-17.0
Prince George's	1269	1334	1270	-4.8	840	905	746	-17.6	884	780	621	-20.4	179	166	165	-0.6	71	93	99	6.5	17	26	25	-3.8	1983	2076	1922	-7.4
Queen Anne's	319	466	375	-19.5	156	222	207	-6.8	141	199	141	-29.1	72	122	92	-24.6	74	99	105	6.1	22	23	25	8.7	435	609	543	-10.8
St. Mary's	640	628	674	7.3	265	259	296	14.3	330	326	320	-1.8	46	54	53	-1.9	136	182	240	31.9	19	15	39	160.0	843	901	995	10.4
Somerset	202	214	174	-18.7	110	121	115	-5.0	103	119	75	-37.0	26	37	30	-18.9	32	52	58	11.5	2	7	26	271.4	280	316	276	-12.7
Talbot	232	317	279	-12.0	132	120	144	20.0	117	114	114	0.0	44	31	46	48.4	20	26	37	42.3	13	16	13	-18.8	320	390	376	-3.6
Washington	633	690	623	-9.7	367	451	401	-11.1	333	352	267	-24.1	125	151	121	-19.9	105	160	170	6.3	20	32	28	-12.5	888	1042	932	-10.6
Wicomico	626	615	722	17.4	356	396	501	26.5	440	391	443	13.3	129	154	184	19.5	119	168	219	30.4	43	60	70	16.7	923	960	1130	17.7
Worcester	592	500	457	-8.6	235	232	204	-12.1	281	212	167	-21.2	53	79	74	-6.3	76	106	83	-21.7	22	20	27	35.0	731	655	614	-6.3
Out-of-State	679	649	667	2.8	324	379	341	-10.0	479	387	371	-4.1	227	229	221	-3.5	181	252	339	34.5	75	122	136	11.5	1167	1188	1191	0.3
Total	19189	19671	19818	0.7	9651	10396	10602	2.0	15279	13747	12850	-6.5	11949	12076	12103	0.2	3381	4619	5790	25.4	1124	1530	1919	25.4	33872	34917	35684	2.2

Source: Alcohol and Drug Abuse Administration (ADAA)

Charles County FY 2010 substance abuse treatment admissions rates for alcohol, marijuana, and prescription opiate were above the Maryland state average admissions rates for those substances. The biggest disparity from the state rate was for alcohol where the Charles County admission rate was 717.2 compared with 487.0 for Maryland.

FY 2010 Treatment Admission Rates per 100,000 by Substance	**Charles County**	**Maryland**
Alcohol	717.2	487.0
Marijuana	493.0	349.8
Cocaine	253.7	294.5
Heroin	90.5	281.5
Prescription Opiate	225.0	131.5
Benzodiazepine	22.4	39.0
Total Admissions for all substances	1051.5	908.4

Charles County Local Management Board Needs Assessment for Families and Children*:*

The Charles County Local Management Board conducted a community needs assessment in 2009 to identify needs for families and children in Charles County. One of the components of their needs assessment project included a telephone survey. The first part of the telephone survey listed 20 questions concerning problems facing Charles County families and children. The area that ranked most highly as a "problem" or "serious problem" on the telephone survey was underage drinking. 81.1% of all telephone respondents felt that underage drinking was a problem, whether small or serious.

68.3% of the telephone respondents felt that underage drinking was a "problem" or "serious problem." In fact, underage drinking and adolescent drug use were the 2 greatest concerns for telephone respondents. Underage drinking was ranked first.

	Frequency	Percentage
Not a Problem	22	6.4
Small Problem	87	25.3
Problem	165	48.0
Serious Problem	70	20.3
Total	344	100.0

Don't know or no opinion=53

In addition to the telephone interviews, several community focus groups were conducted. A number of issues relevant to youth substance abuse were discussed during the focus groups. Youth participants agreed that youth begin to experiment with tobacco, drugs, and alcohol in middle school; however, participants described drug and alcohol use as being more prevalent among high school students. Alcohol was said to be popular among youth and very easy to access.

Among the students who are known to use drugs and alcohol, frequency of use varied by individual student. Some students were known to have daily habits while some used drugs or alcohol only on the

weekends or special occasions. Group participants said that the main reason for which teenagers used drugs or alcohol were boredom and peer pressure to be cool.

Substance Abuse References:

1. Maryland State Epidemiological Outcomes Workgroup: Maryland Compendium of Cross County Indicators on Underage Drinking, 2008 and 2011 Reports.

2. National Institutes of Health. National Survey on Drug Use and Health. 2009.

3. Maryland State Department of Education. 2002, 2004, and 2007 Maryland Adolescent Surveys.

4. College of Southern Maryland Safe Communities Center. 2004, 2007, and 2010 CORE Drug and Alcohol Surveys.

5. 2009 Maryland Automated Accident Reporting System. 2009 Maryland Crash Data.

6. Maryland State Police. 2009 Uniform Crime Report.

7. Charles County Sheriff's Office: Community Services. Judith Harman, Coordinator. 2009-2010 Charles County Alcohol Enforcement Activities.

8. Maryland State Department of Education: Division of Accountability and Assessment. 2009-2010 School Year Maryland Public School Suspension.

9. Maryland State Department of Education and the Centers for Disease Control and Prevention. 2009 Maryland Youth Risk Behavioral Survey.

10. Maryland Department of Health and Mental Hygiene. 2006-2010 Maryland Behavioral Risk Factor Surveillance System. Charles County level data. Available at www.marylandbrfss.org.

11. Maryland Office of the Chief Medical Examiner. 2006-2010 Maryland Intoxication Deaths.

12. Maryland Department of Health and Mental Hygiene. Alcohol and Drug Abuse Administration. Statewide Maryland Automated Record Tracking System. 2010 Substance Abuse Treatment Admissions.

13. Charles County Local Management Board. Charles County Needs Assessment of Families and Children. April 2009.

14. Maryland Department of Health and Mental Hygiene. Alcohol and Drug Abuse Administration. 2010 Maryland Alcohol and Drug Abuse Administration's Prevention Program Activity Report.

Charles County Specific Morbidity and Mortality Tobacco Use Data:

Heart diseases and cancer remain the leading causes of death in Charles County. The age-adjusted death rate for "diseases of the heart" in Charles County from 2007-2009 was 228.5 per 100,000. This is higher than the Maryland heart disease death rate of 196.8 per 100,000. The age-adjusted death rate for overall cancer from 2007-2009 in Charles County was 199.3 per 100,000 (Maryland Vital Statistics Annual Report, 2009). This rate exceeds the state overall cancer death rate of 179.3 per 100,000. For 2003-2007, lung and bronchus cancer incidence in Charles County was 64.5 per 100,000 and 2002-2006 mortality was 68.9 per 100,000. For 2007, the county incidence rate for lung/ bronchus cancer (50.4) has dropped below the State incidence (62.4); however, the 2006 county mortality rate (63.8) has remained slightly higher than the state mortality (52.7) rate for lung/bronchus cancer (DHMH Cancer Reports 2009 and 2010, Cigarette Restitution Fund Program).

According to the published report, *Monitoring Changing Tobacco Use Behaviors in Maryland* (DHMH 2008), the following charts and discussion provide data on tobacco use in Charles County as compared to the State.

Prevalence of Tobacco Use among Under-age Youth, Adults, and Pregnant Women, Statewide and Charles County, 2000 vs. 2008[1]

Year	Youth	Adults	Pregnant Women
State - 2000	21.4%	21.5%	9.2%
State – 2008	16.2%	16.1%	6.6%
Charles - 2000	24.6%	25.7%	13.3%
Charles - 2008	16.9%	21.1%	7.0%

In Charles County, there was reduction in tobacco use from 2000 to 2008.

[1]State changes (2008 data) from 2000 were statistically significant for youth and adults. However, Charles County changes (2008 data) from 2000 were only statistically significant for youth.

Youth: Decreased by 45.6%.

Adults: Decreased by 21.8%.

Pregnant Women: Decreased by 90%.

Additionally, according to the 2009 Maryland Behavioral Risk Factor Surveillance System, 14% of Charles County adults (18+) reported that they are current smokers with a lifetime usage greater than 100 cigarettes. An estimated 11.8% of the Charles County population is an everyday current smoker and 2.2% is a some day's smoker. Approximately 24.5% of the county population is classified as a former smoker, and 61.6% have never smoked.

Prevalence of Tobacco Use by Minority Under-age Youth and Minority Adults, Statewide and Charles County, 2000 vs. 2006[2]

Year	Youth	Adults
State – 2000	18.9%	19.7%
State – 2006	14.4%	15.8%
Charles – 2000	21.9%	17.8%
Charles – 2006	13.8%	13.4%

Among all 24 Maryland jurisdictions:

In 2000, Charles County ranked 6th for lowest rates of tobacco use by minority youth and in 2006, dropped to the 4th lowest rate in the state.

Charles County ranked 13th in 2000 and dropped to 18th for highest rates of tobacco use by minority adults.

[2] State minority youth changes (2006 data) from 2000 were statistically significant. State minority adult changes (2006 data) from 2000 were not statistically significant. Changes from 2000 among Charles County minority youth and adults were *not* statistically significant.

Current Cigarette Smoking by Under-age Youth, Statewide and Charles County, 2000 vs. 2008[3]

Year	Youth
State – 2000	15.7%
State – 2008	10.2%
Charles – 2000	19.7%
Charles – 2008	11.2%

Current Cigarette Smoking by Under-age Youth in Middle School and High School, Statewide and Charles County, 2000 vs. 2008[4]

Year	Middle School	High School
State – 2000	7.2%	23%
State – 2008	3.5%	15.3%
Charles – 2000	9.3%	28%
Charles – 2008	3.1%	16.8%

Charles County saw statistically significant reductions in smoking among minority high school youth from 2000 to 2008 (22.5% to 14.6%). The percentage of high school females (14.2%) who smoke cigarettes has remained less than the percentage of high school males (19.4%).

[3] State changes from 2000 were statistically significant.

[4] State middle and high school changes (2008 data), as well as Charles County middle and high school changes, were statistically significant.

Current Cigarette Smoking by Adults, Statewide and Charles County, 2000 vs. 2008

Year	All	Male	Female	Minority
State – 2000	16.9%	18.8%	15.7%	18.5%
State – 2008	12.4%	14.3%	13.6%	16.6%
Charles – 2000	18.9%	22.3%	18.1%	17.1%
Charles – 2008	16.1%	§	§	§

§ Data on a county level is not available.

Cigar Use

Cigar smoking by under-age youth in Charles County rose from 10.4% in 2000 to 11.7% in 2008. Cigar smoking also rose on a state level as well from 8.8% to 10.6%. The difference on state level is statistically significant.

Cigar smoking by adults in Charles County remained the same from 2000 to 2008 at 7.0%. The Charles County adult cigar use percentage was much higher than the state percentage of 4.0%.

Smokeless Tobacco Use

Smokeless tobacco use by under-age youth in Charles County remained fairly stable at 3.9% in 2000 and 3.4% in 2008. On a state level, smokeless tobacco usage increased from 3.5% in 2000 to 3.7% in 2008. Smokeless tobacco use by adults in Maryland slightly increased from 1.1% in 2000 to 1.3% in 2008. For Charles County, a slight increase in smokeless tobacco use was also seen for adults, going from 0.7% in 2000 to 1.9% in 2008. By 2008, the Charles County adult smokeless tobacco usage surpassed the state level.

Tobacco Initiation:

Tobacco Use Initiation in the Past Year among Under-age Youth and Adults, Statewide and Charles County, 2000 vs. 2008

Year	All	Minority
State Youth – 2000	19.5%	16.7%
State Youth – 2008	14.8%	13.2%
Charles Youth – 2000	21.6%	19.5%
Charles Youth – 2008	16.0%	14.8%

Changes from the 2000 data were statistically significant for Charles and State all youth and State minority youth.

Year	All
State Adults – 2000	6.2%
State Adults – 2008	7.0%
Charles Adults – 2000	8.8%
Charles Adults – 2008	§

§ Not available. No changes were statistically significant.

Major reductions were seen in the percentages of youth who begin smoking between the years 2000 and 2008 from 21.6% to 16%. There was also a reduction in the percentage of Charles County minority youth who began using tobacco from 19.5% in 2000 to 14.8% in 2008.

Tobacco Cessation:

Under-age Youth and Adults who have Stopped Smoking in the Past Year, Statewide and Charles County, 2000 vs. 2008

Year	All	Minority
State Youth – 2000	35.1%	44.5%
State Youth – 2008	38.0%	44.9%
Charles Youth – 2000	33.1%	43.9%
Charles Youth – 2008	38.0%	40.4%

*No changes were statistically significant.

Year	All
State Adults – 2000	23.4%
State Adults – 2008	29.7%
Charles Adults – 2000	12.3%
Charles Adults – 2008	25.4%

No changes were statistically significant.

While there were decreases in tobacco use initiation among Charles County under-age youth and increases in the percentages of the same in quitting tobacco use, there is an interesting finding in the data. The percentage of under-age youth stopping smoking (40.4%) exceeds the percentage starting (16.0%), which has helped to reduce the cigarette smoking percentages.

Cigarette smoking among women of childbearing age is a concern because it increases the risk of infant mortality and low birth weight. In 2009, Charles County had an infant mortality rate of 6.6 deaths per 1,000 live births. The 2009 Charles County infant mortality rate is lower than state rate of 7.2 per 1,000 live births; however, it is higher than the other Southern Maryland jurisdictions. The 2009 Charles County black infant mortality rate (8.7 per 1,000 live births) is 1.6 times higher than the rate for whites (5.4 per 1,000 live births). Of pregnant women enrolled in MCHIP in Charles County, 29.8 percent reported smoking during pregnancy, compared to 25.0 percent for the State (MD Prenatal Risk Assessment, FY01). Additionally, 11.1% reported smoking during the last 3 months of pregnancy (MD Prenatal Risk Assessment, 2003). Secondhand smoke is also a known factor for increased risk of bronchitis, chronic ear infections, asthmas, pneumonia and other health problems in infants**.** Among Charles County children in 2008, 30.5% of Charles County households with minor children are exposed to secondhand smoke. This is a slight decrease from 31.3% of county households in 2006.

Tobacco References:

1. 2009 Charles County Heart Disease and Cancer Mortality Rates. 2009 Maryland Vital Statistics Report. Maryland Department of Health and Mental Hygiene. Available at: www.marylandbrfss.org.

2. 2006 and 2007 Charles County Cancer Incidence and Mortality Rates. 2009 and 2010 Cigarette Restitution Fund Program's Cancer Reports. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/pdf/cancer/CRF_Cancer_Report_2010.pdf.

3. 2000-2008 Charles County and Maryland Youth, Adult, and Minority Tobacco Use Statistics. 2000-2008 Monitoring Changing Tobacco Use Behaviors. Maryland Department of Health and Mental Hygiene. Cigarette Restitution Fund Program. Available at: http://crf.maryland.gov/tobacco_behaviors.cfm.

4. 2009 Charles County Smoking Status. 2009 Maryland Behavioral Risk Factor Surveillance System. Maryland Department of Health and Mental Hygiene. Available at www.marylandbrfss.org.

5. Charles County Pregnant Tobacco Use Statistics. Maryland Pregnancy Risk Assessment Monitoring System. Maryland Department of Health and Mental Hygiene. Available at: http://fha.maryland.gov/mch/prams_report.cfm.

Qualitative Data for Substance Abuse and Tobacco:

On the long survey, 88.4% of respondents felt that substance abuse and tobacco use were a problem in Charles County. This was the third highest rated health problem on the survey. In addition, 48.3% felt that substance abuse/tobacco use was a serious problem in Charles County.

When asked if they have seen improvements among many health issues, substance/tobacco/alcohol use was the second most common answer, with 30.6% reporting they have seen improvements.

When looking at behavioral risk factors applicable to substance abuse, Charles County residents are refraining from drug and alcohol use that may harm their health. These include:

- Only 0.7% reported that they always drink three or more alcoholic beverages per day and 11.6% reported that they sometimes drink three or more alcoholic beverages per day.
- 6% reported that they always smoke cigarettes and 5% reported that they sometimes smoke cigarettes (11% total).
- None of the respondents reported using smokeless tobacco.
- 6.4% reported that they are always exposed to secondhand smoke at home. 18.4% reported that they are sometimes exposed to secondhand smoke at home.
- 2% reported that they sometimes use illegal drugs.

On the short survey, 52% of total short survey respondents felt that tobacco/drug/alcohol use is one of the biggest health problems in Charles County. This was the third most common health issue reported.

Among the Hispanic short survey respondents, tobacco/drug/alcohol use was seen as the biggest health concern in Charles County. 61% felt it is a big health problem in the county.

At the county focus groups, the Charles County Department of Health's Smoking Cessation Program was highlighted as strength in the community. It was noted that the health department has continued to provide Chantix medication for free even with budgetary cuts. Many insurance companies will not cover the medication. The Drug and Alcohol Council, the Drug free Communities Program, and the Tobacco and Cancer Coalition were also mentioned as strong collaborative efforts within Charles County.

Focus group participants expressed a need for additional smoking cessation classes and anti-smoking aids. It is hoped that this will lead to a decrease in lung cancer and COPD.

Many of the countywide focus groups reflected on the inadequate resources for substance abuse and mental health within the county.

An additional focus group was conducted in March 2011 to discuss the issues of substance abuse among youth. The focus was primarily on underage drinking. The results of that focus group are presented below. Participants were asked to help shed light on the reasons why teens drink, what populations are more susceptible, and what programs might be effective in combating underage drinking.

1. What are the underlying factors that lead to underage drinking among teens?

- Availability
- Peer Pressure
- It feels good
- Stress
- Idle hands
- Teens feel that parents don't mind.
- Sibling encouragement
- Part of sporting/athletic culture.etc. football, baseball
- Media influence
- Don't think it will hurt. Invincible
- Family influence: Mom and Dad do it. Dad drinks beer from frig in garage.
- Social networking/ YouTube antics
- Attention/ Acceptance
- Bored/ What else is there to do
- Southern Maryland culture (rural, tobacco country)
- Presence of drive thru liquor stores (easy access)
- Because they aren't supposed to. If they can get it.
- Access in garage frig
- Local law allows parents to give to their own kids.
- Cultural acceptance
- Moderation vs. Indulgence (parents teaching and willing access to small amounts as a young person to avoid indulging later)
- Make it fun (drinking games, beer pong)

2. What particular population, age groups, or communities in Charles County are in the most need of an underage drinking prevention program?

- Children of alcoholic parents
- Low income
- Unsupervised
- 8th and 9th graders who are coming out and getting charged.
- Most are getting charged at parties and gatherings that are busted by police
- Coming into middle school before they really start drinking
- 6th graders who still take these things seriously

- Those who are able to get the alcohol from home
- Access is minor hurdle.
- Parents who deny a problem. “It is just alcohol” or “They aren’t driving.”

3. What do you suggest to make it the most ideal and beneficial underage drinking prevention program?

- Accurate testing
- Educating parents
- Educate population that alcohol affects brain and its development (up to 23 years)
- Start early with education to children
- Earlier the better (10-12 years)
- Encourage parental disapproval for all ages (Don’t just accept or expect it)
- Provide more alternatives to parties. Get community to buy in, not just government.
- Need to change mentality that you need drinking to celebrate.
- Increase the population who don’t drink. This population isn’t known to publicize it.
- Changing social norms
- Get media to publicize the good and not the bad news (they will report the percentage that do drink and not the percentage that don’t)
- Get kids to pick other things to do. Many just don’t WANT to do other things. There are activities available to them.
- Positively engage kids and make sure that they are encouraged to keep it up.
- Some may not be able to get to things or don’t have money to be a part of organized sports or clubs. Some activities are expensive. Also issues of transportation. No longer have after school activities/sports bus to take them home. Mom and Dad might commute to work and can’t get there. Some parents may not have transportation at all.
- Need countywide recreational programs with volunteer commitment. Must be in every community.
- Affected group must be involved. Need their opinions on what would keep them from drinking (Project Graduation, etc.)
- Prevention programs need to be in the communities and community centers.
- National Night Out: 150 neighborhoods participate. Have something to give out. One significant thing to say about underage drinking. Let the kids pick it out. Have a competition among schools. Show that message at schools, on YouTube.
- Possibly develop some program where students pledge not to do alcohol and drugs until legal. Reward them at the end.
- Bring in people who have been affected by alcohol.
- Have to stop them early before they take that 1 sip.
- Make public acknowledgements of the accomplishments of the county to prevent the problem and to the students who are abstaining.

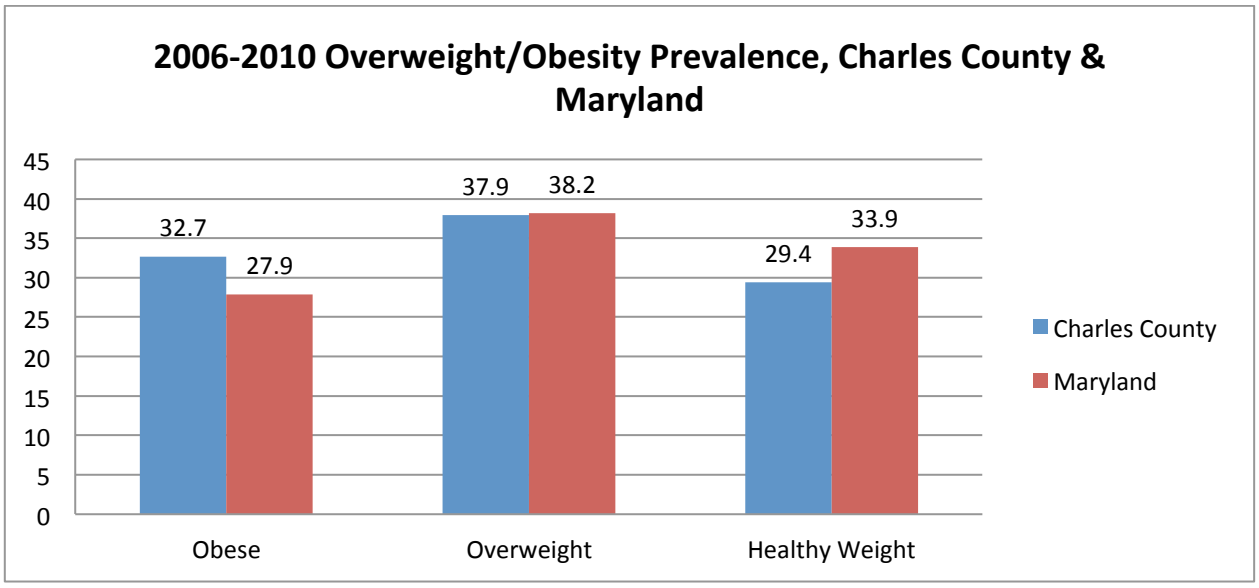
Conclusions:

After a thorough analysis of all quantitative data on the health of Charles County and of the qualitative data gathered from the community, a list of ten health issues has been developed to help guide future endeavors to improve the health of Charles County.

The top ten health issues include:

1. Obesity:

Over two-thirds of the Charles County population is either overweight or obese. Percentages of overweight and obesity in Charles County are greater than those seen on a state level.

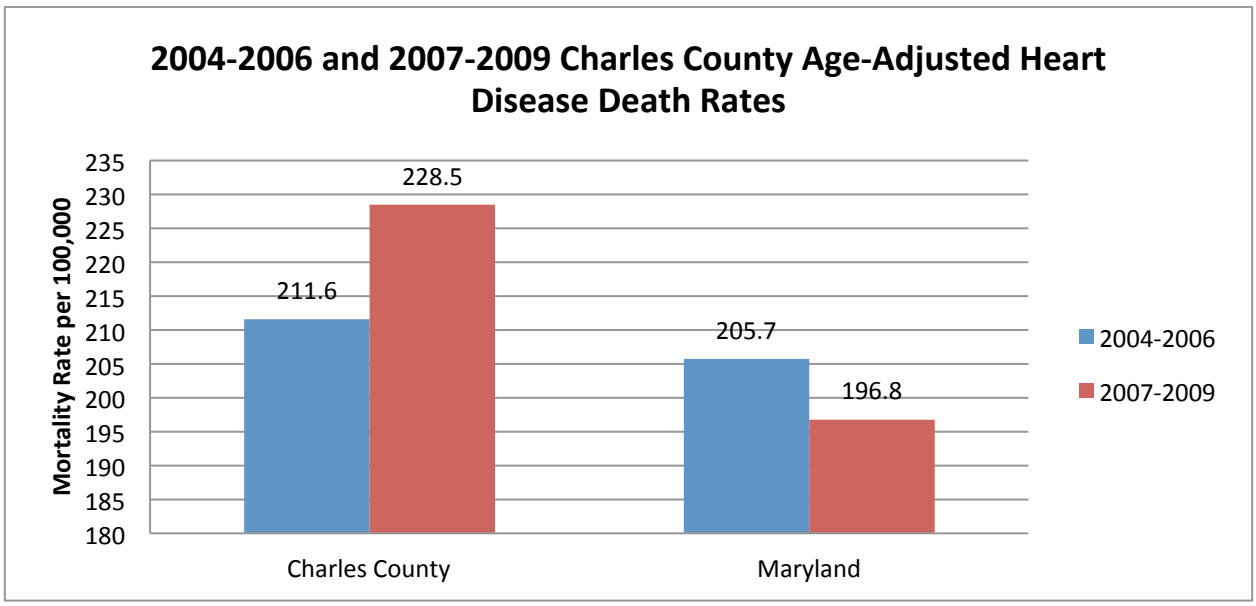


Source: 2006-2010 Maryland BRFSS, Maryland DHMH

The 2006 Maryland Youth Tobacco survey found that 13.3% of Charles County adolescents and 11% of Maryland adolescents, ages 13-18 years, are obese. The 2006 Maryland Pediatric Nutrition Surveillance found that among children 2-5 years of age in the WIC Program, there is a 15% obesity rate and an 18% overweight rate. The 2006 Charles County obesity rate for children aged 2-5 years fell somewhere between 10-14%.

2. Heart Disease Mortality:

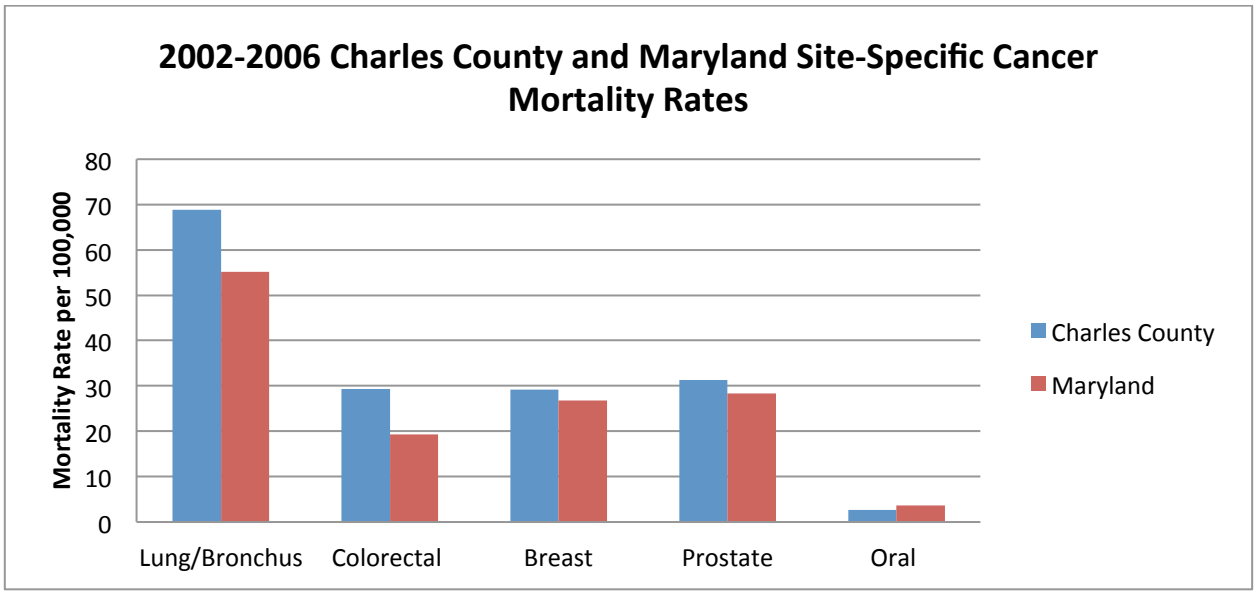
Heart Disease is the leading cause of death in Charles County. The 2007-2009 Charles County heart disease mortality rate of 228.5 per 100,000 is higher than the rate seen on a state level. In addition, it is greater than the rate seen in Charles County for the time period 2004-2006. This increase in the heart disease mortality is contrary to the trend seen on a state level.



Source: 2009 Maryland Vital Statistics Report, Maryland DHMH

3. Cancer:

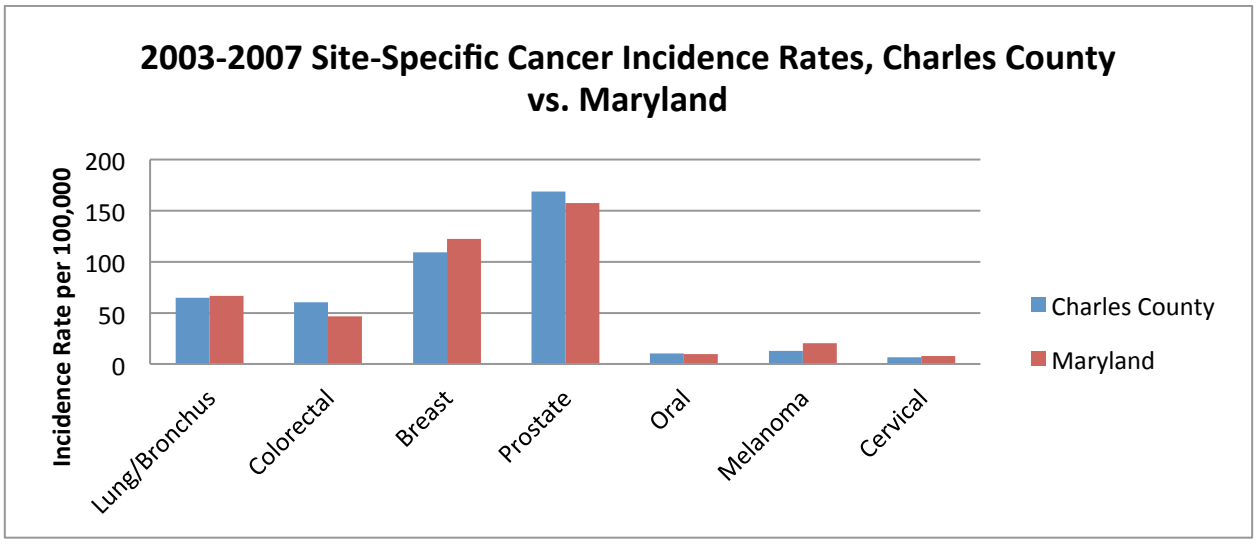
Cancer is the second leading cause of death in Charles County (2009 MD Vital Statistics Report). Lung cancer has the highest mortality of any cancer site for Charles County. The Charles County lung cancer mortality rate is also higher than the state average rate.



Source: 2009 CRF Cancer Reports, 2002-2006 data

Prostate cancer has the highest incidence rate for any cancer site in Charles County. The Charles County prostate cancer incidence rate is also higher than the Maryland state average rate.

Colorectal cancer incidence and mortality rates show the biggest disparities from Maryland state average rates.



Source: 2010 CRF Cancer Reports, 2003-2007 data

4. Sexually Transmitted Diseases:

Chlamydia is the leading cause of communicable disease in Charles County. The 2009 Chlamydia incidence rate was 397.3 per 100,000. This is much higher than any other reportable communicable disease in the county. The Chlamydia incidence rate more than double to over 800 per 100,000 for adolescents aged 15-19 years (Maryland DHMH, STD Program Data).

In addition, the Charles County Chlamydia incidence rate has been climbing over the last decade. The rate has nearly doubled from 275 per 100,000 in 2000, to 397.3 in 2009 (Maryland DHMH, STD Program Data).

Charles County Gonorrhea incidence rates are also higher than many of the other communicable diseases within the county. The 2009 Gonorrhea incidence rate was 96.3 per 100,000. The incidence rate in Charles County has remained fairly stable over the last decade (Maryland DHMH, STD Program Data).

5. Access to Healthcare:

Several factors lead to limited access to healthcare in Charles County. Some of those factors include:

- *Physician shortage*:

According to the 2007 Maryland Physician workforce study, the Southern Maryland region has a physician shortage for: primary care, cardiology, dermatology, endocrinology, gastroenterology, hematology, oncology, infectious disease, nephrology, psychiatry, pulmonary medicine, rheumatology, anesthesiology, diagnostic radiology, emergency medicine, pathology, physical medicine, radiation

oncology, general surgery, neurosurgery, obstetrics, gynecology, orthopedic surgery, otolaryngology, plastic surgery, thoracic and vascular surgery. Southern Maryland has a borderline physician shortage for ophthalmology surgery and urology surgery. Southern Maryland had the highest percentage of physician shortages than any other regions of Maryland (89.9%).

- *Lack of health insurance for all residents*:

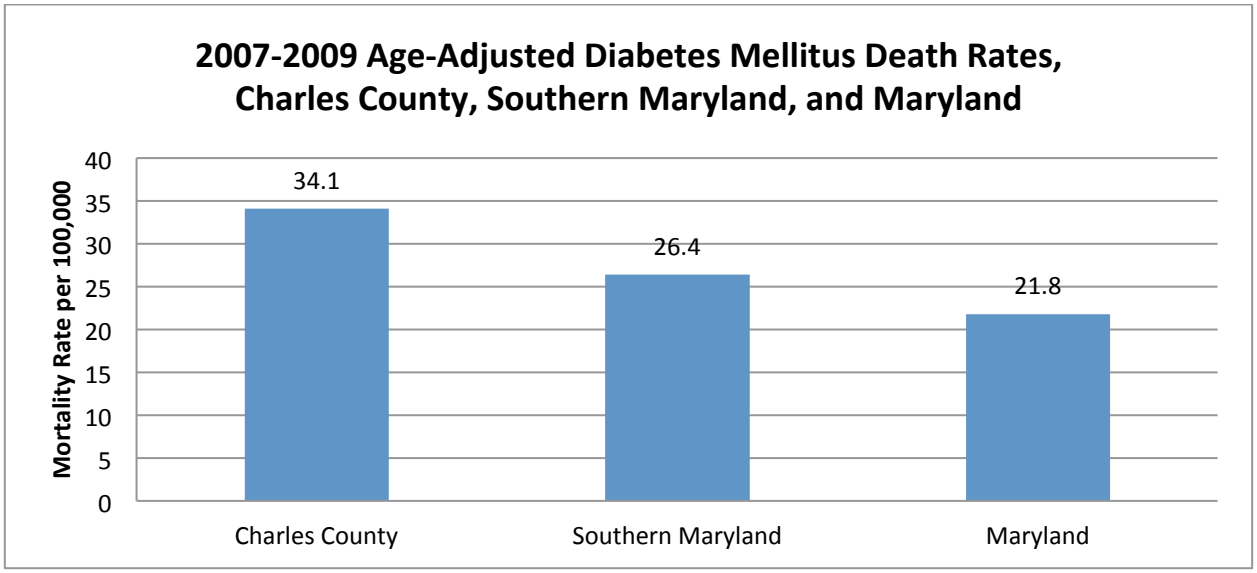
2009 US Census Bureau's Current Population Survey Charles County health uninsurance estimate is 9.4%. This is higher than the 2008 health uninsurance rate of 6.4% (2009 US Census Bureau). The increase in the health uninsurance rate from 2008 to 2009 is statistically significant to a 90% confidence level (2009 US Census Bureau).
2010 MD BRFSS estimates that 7.7% of CC residents and 10.9% of MD residents do not have any health insurance coverage.

- *Transportation:*

According to the Maryland BRFSS, 81.5% of Charles County residents report that they travel outside of Charles County for medical care at some point (2010 MD BRFSS). In addition, 56% of medical services received by Charles county residents were received outside of the county (2010 MD BRFSS).

6. Diabetes Mortality:

Diabetes mortality rates in Charles County are higher than those for Maryland and for Southern Maryland.



Source: 2009 Maryland Vital Statistics Report, Maryland DHMH

7. Substance Abuse:

There are several issues, substances, and specific populations of concern in terms of substance abuse.

Admission Rates into State Programs for Treatment of Drugs and Alcohol:

Admissions rates for alcohol, marijuana, and prescription opiate use in Charles County are higher than the Maryland state average rates of admission. Charles County reported 493.0 per 100,000 cases of marijuana funded treatment admissions (2010 Maryland DHMH, Alcohol and Drug Abuse Administration). 253.7 per 100,000 cocaine related state funded treatment admissions (2010 Maryland DHMH, Alcohol and Drug Abuse Administration).

Underage drinking and drug/marijuana use among adolescents and college age kids:

2007 Maryland Adolescent Survey found that 12.1% of 6th graders, 30.6% of 8th graders, 60% of 10th graders, and 69.1% of 12th graders had consumed any form of alcohol in their life. It also found that by 12th grade, 35.6% had tried marijuana, 35.4% had tried cigarettes, and 37.7% had tried other drugs besides alcohol and tobacco. 26.6% of those 12th graders also reported binge drinking in the past month.

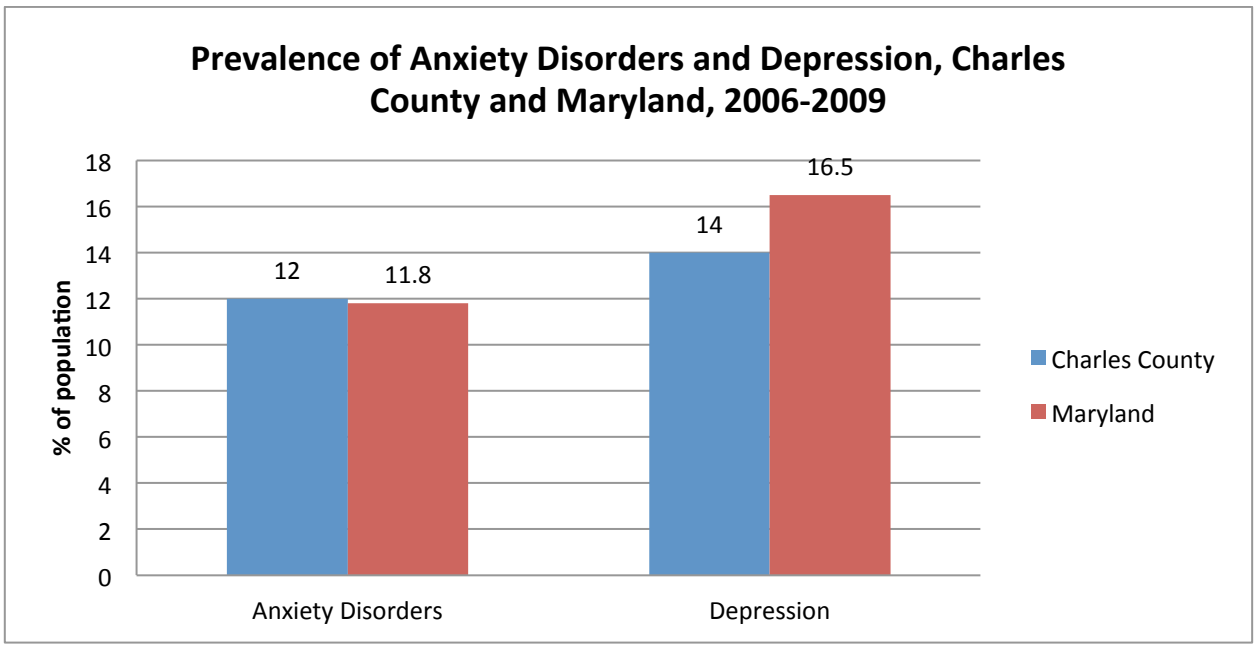
The 2010 CORE Alcohol and Drug Survey completed at all CSM locations found that half of the students reported consuming alcohol in the past 30 days. 31.2% of the CSM students reported having binge drank in the past month. 50.3% of underage students reported consuming alcohol in the past 30 days. 26% reported using tobacco in the last 30 days. The most frequently reported illegal substance used by CSM was marijuana (14%). 25% of CSM students reported using an illegal drug in the past 12 months.

According to the 2006-2008 National Survey on Drug Use and Health, 51% of Southern Maryland adults admitted to using alcohol in the past month, 5.88% had used illicit drugs in the past month, 8.35% had been dependent upon or abused illicit drugs or alcohol in the past year, 4.14% had used marijuana in the past month, 2.13% had used cocaine in the past year, and 24.35% had used cigarettes in the past month.

Qualitative data found that tobacco/drug/alcohol use is a major health concern among the Hispanic population with 61% reporting it as the biggest health problem in the county.

8. Mental Health:

A substantial percentage of the Charles County population has been diagnosed with mental health conditions, including anxiety disorders and/or depression.



Source: 2006-2009 Maryland BRFSS, Maryland DHMH

According to the 2007 Physician Workforce Study, a lack of physicians is available in the Southern Maryland region for psychiatry.

Additionally, Charles County is a federally designated health professional shortage area (HPSA) for mental health services. The whole county is designated as a HPSA, not just one population or location within the county (2011 US Department of Health and Human Services, HPSA designations). There are currently 16 full time equivalent non-Federal agency mental health providers serving the county (FTE). It is estimated that a total of 1 FTE provider is needed in the county to remove the designation. The Charles County HPSA score for mental health is 14. The National Health Services Corps uses a scaling system from 1-25 to determine priorities for assignment of mental health clinicians. The higher the score is the greater the priority.

9. Dental Health:

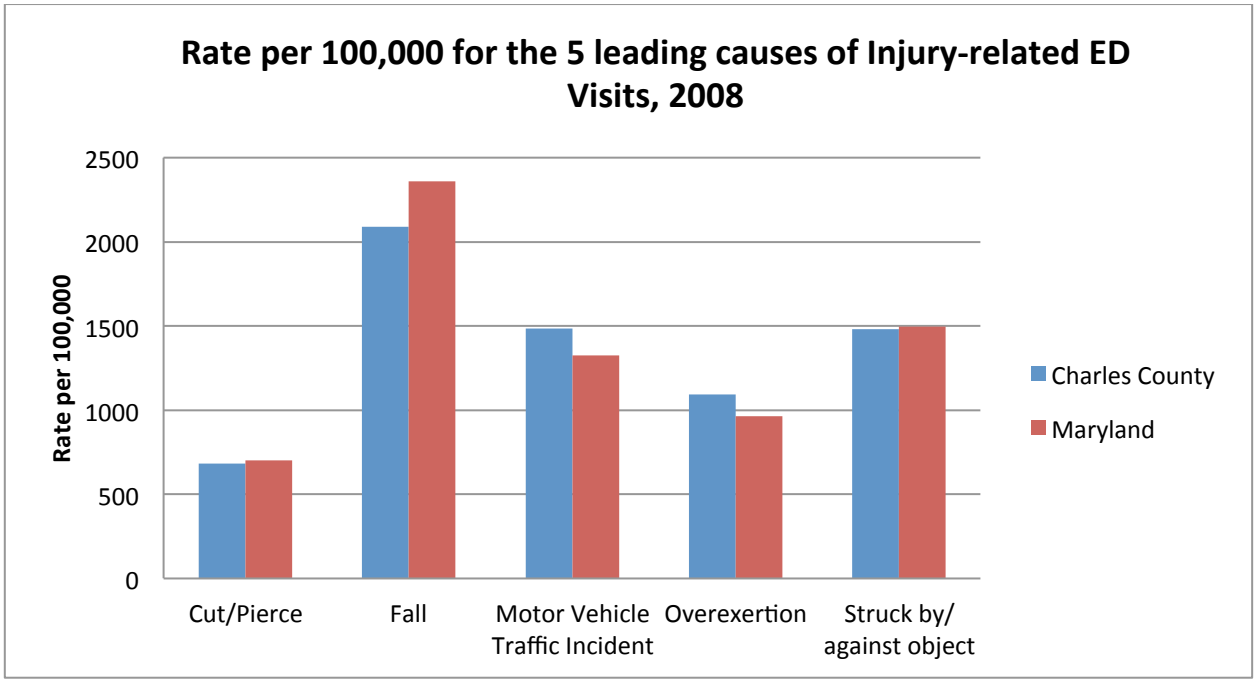
According to the US Department of Health and Human Services, there is a federally designated dental health shortage for the entire county (2011 HPSA). There are currently 16 full time equivalent non-Federal agency dental health providers serving the county (FTE). It is estimated that a total of 10 FTE providers are needed in the county to remove the designation. The Charles County HPSA score for dental health is 9. The National Health Services Corps uses a scaling system from 1-26 to determine priorities for assignment of dental health clinicians. The higher the score is the greater the priority.

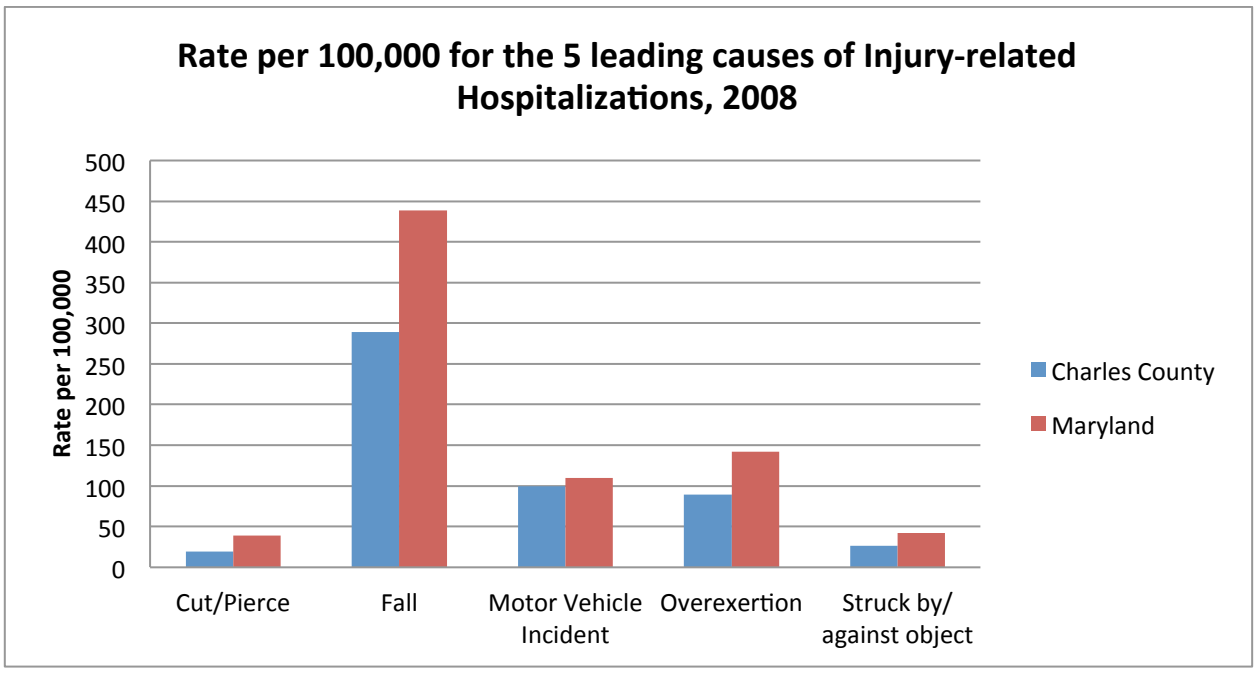
According to the 2005-2006 report on the access to Dental health services for Medicaid children, Charles County had the lowest percentage of HealthChoice child beneficiaries who had least one dental encounter for both calendar year 2005 and 2006. Among the Maryland jurisdictions, Charles County had the lowest percentage of pregnant HealthChoice beneficiaries who had at least one dental encounter in

calendar year 2005. Charles County had the second lowest percentage of pregnant HealthChoice beneficiaries who had at least one dental encounter in calendar year 2006. Among the Maryland jurisdictions, Charles County had the third lowest percentage of children in foster care that had at least one dental encounter for both calendar year 2005 and 2006. Charles County had the third lowest percentage of children enrolled in REM who had at least one dental claim in calendar year 2005 and the seventh lowest percentage of children enrolled in REM who had at least one dental claim in calendar year 2006. In FY 2006, Charles County had one dentist who billed at least $10,000 to HealthChoice. Calvert County had 4 dentists, and St Mary's County had 9 dentists.

10. Accidents/Injuries:

As evidenced by the following two graphs, falls account for a large percentage of all injury-related ED visits and hospitalizations in Charles County. The incidence of falls increased with age and is seen most often in those over the age of 65 years (2008 Injuries in Maryland Report).





Source: 2008 Injuries in Maryland Report, Maryland DHMH

The greatest number of injury-related deaths was seen in the 15-24 years age group. Half of those deaths were due to motor vehicle traffic incidents. Motor vehicle traffic incidents were the number cause of injury-related death for all ages combined, accounting for 29% of all injury-related deaths (2008 Injuries in Maryland Report).

Health topics where the data shows improvement and/or county rates that are below state average rates and for which the community reported seeing improvements:

- Diabetes prevalence
- Adult asthma prevalence
- Stroke mortality and prevalence
- Hypertension prevalence and mortality
- Tobacco and cigarette use among youth and pregnant women, decreased initiation, increased cessation
- Reducing animal rabies cases
- Low incidence of Tuberculosis cases
- HIV/AIDS diagnosis and prevalence rates
- Infant Mortality rates now below state rates
- Low prevalence of limited activity levels among those with arthritis

University of Maryland Charles Regional Medical Center
FY 12 Community Health Needs Assessment Focus Groups
Focus Group Representatives

Population Represented	Organization	Representative Name	Title
Public Health		Amber Starn	Epidemiologist
	CC Dept of Health	Faye Grillo	Deputy Health Officer
Minority Specific and Underserved Populations	Bel Alton Community Development Center	Judy Rudolf	
	Dept. of Community Services	Brenda Walcott	
	Van Go	Jeff Barnett Donna Harris	
	Tri County Council for So MD	Elaine Lancaster	
	First Gospel Church of Bryans Road	Rev. James Briscoe	Pastor
	Department of Social Services	Juan Thompson	Ombudsman
		Danielle Green	
		Terry Sullivan	
	Lifestyles, Inc. (Homeless)	Sandy Washington	Ex. Director
		Marie Robinson	
		Renee Curry	
	Health Partners Clinic	Dr Howard Haft	Medical Director
		Chrissie Mulcahey	Ex. Director
	Hispanic Community Representative	Maria	Community member
Age-Related Issues	CC Nursing and Rehab.	Bud Zimmerman	Ex. Director
		Bill Holman Denise McCann	
	Alzheimer's Association	Linda Gottfried	Director
	Center for Children	Colleen Wilburn	
	UM CRMC	Maureen Jenkins	Manger, Labor and Delivery
	Chesapeake Potomac Home Health	Kelly Winters	
	College of Southern MD	Linda Smith	
	CC Dept. Of Aging	Bonnie Hampton	
	CC Dept. of Health	Linda Blake	Dir. Of Disability Services
	Priority Partners	Angela Deale	Outreach worker
	Big Brothers Big Sisters	Cynthia Graham	
	Black leadership Council for Excellence	Bonita Adeeb Rose Haft	
	Young Researchers CP	Anthony Quick	Community member
	Pinnacle Counseling Center	Jackie Burson	Lic. Counselor
	Health Partners	Chrissie	Ex. Director

		Mulcahey	
	Hospice	Colleen Wilson	
	CC Dept. of Health	Mary Beth Klick	Tobacco Cessation Counselor
	UM CRMC	Betsy Wolford	CDE
	CCDOH	Dawn Cox	Breast and Cervical Cancer Program
	College of Southern MD	Linda Smith	
	UM CRMC	Dr Rich Ferraro	Med. Dir. Emergency Dept.
	Sisters at Heart	Roberta Kieliger	Community member
	Cambridge Pediatrics	Diana Abney, MD	Pediatrician
	UM CRMC	Angie Booker	Respiratory Therapist
	UM CRMC	Teresa Brannigan	Director of Nursing
School Health	School Nurses	Sheila Brockman	
		Cheryl Smith	
		Peggy Bird	
		Tammy Dilling	
		Carolyn Engleson	
		Tammy Crozier	
		Jennifer Ledford	
		Lisa Bazzare	
		Kathleen DeBolt	
		Patricia Horner	
		Karl J.Muehlfeld	
		Lucy Wathen	
		Charlene Falken	
		Joanne Collins	
		Marge Charron	
School Health	School Nurses	Elizabeth Gallacher	
		Erica Hadley	
		Jan Siewertsen	
		Lenure Petty	
		Natasha Williams	
		Kofo Williams	
		Nadja De Los Santos	
		Phyliss Renard	
		Karen Grace	
		Deborah Heim	
		Constance Larsen	
		Diane Gardiner	
		Shelley Presnell	
		Laurie Mulert	
		Betsy Keesler	
		Edith Patten	

		Barbara Balazek	
		Carole Noyes	
		Katie Popp	
		Dorothy Reeves	
		Kim Jameson	
		Stephanie Kiesel	
		Carol A. Dawn	
Special Populations	Charles County Dept. of Aging	Kathy Cooke	
	CC Dept. of Health	Linda Thomas	Director of Disabilities
	CC Dept. of Health	Linda Fenlon	HIV and Prevention
	CC Dept. of Social Services	Delia Meadows	Disabled adults/elderly
	CC Dept. of Social Services	Jeronda Montgomery	Disability Services
Infant and Reproductive Health	CC Dept. of Social Services	Wanda Collins	Case Worker
	CC Dept. of Health	Lois Beverage	Director of Infant and Toddlers Program
	Judy Center of Charles County	Theresa Osborne	Outreach Worker for Title 1 Schools
Disease Specific	CC Dept. of Health	Celeste Camerino	Outreach Worker
	CC Dept. of Health	Linda Thomas	Co-Chair Chronic Disease Prevention
	CC Dept. of Health	Angela Deal	Outreach Worker
	CC Hospice	Dixie Poe	Director
	Sisters at Heart	Roberta Kieliger	Founder
	CC Dept. of Health	Dawn Cox	Director
	American Cancer Society	Stephanie Hubbard	Manager
	UM CRMC	Dr Richard Ferraro	ED Physician
	College of Southern Maryland	Linda Smith	Student Services
	UM Charles Regional	Teresa Brannigan	Director of Nursing
	UM CRMC	Brian Loux	Manager Cardiac Rehabilitation
	UM CRMC	Amy Copeland	Health Promotions and Outreach
Prevention and Safety	Maryland Highway Safety	Jackie Norris	Director Potomac Region
	CC Dept. of Health	Angela Deal	Outreach Worker
	CC Dept. of Social Services	Nikki D'Angelo	In Home Services
	Anti-Tobacco Advocate	Anthony Murrill	
Access to Care	Health Partners, Inc.	Kit Wright	Board of Directors
	Health Partners, Inc.	Chrisie	Director

University of Maryland Charles Regional Medical Center
FY 12 Community Health Needs Assessment Focus Groups
Focus Group Representatives

		Mulchahey	
	CC Dept. of Social Services	Pat Osborne	Medicaid Division
	Greater Bayden Medical	Melanie Griffith	VP Community Affairs
Leadership	UM CRMC	Noel Cervino	CEO
	CC Dept. of Emergency Services	Bill Stevens	Director
	Charles County Sheriff's Office	Buddy Gibson	Lieutenant
	UM CRMC Board of Directors	Richard Winkler	Board President
	State Senator	Mac Middleton	Senator
	UM CRMC	Dr. Mark Dumais	CMO
	CC Community Foundation	Gretchen Heinze	Executive Director
	Maryland Delegate	Julie Vanderslice	Rep for Peter Murphy
	Congressman	Heather Asata	Rep for Steny Hoyer
	College of Southern MD	Laura Polk	Rep for President Brad Gottfried
	Datcher and Associates	Delores Datcher	CEO
	UM CRMC	Joyce Riggs	Director, Community Development and Planning
	CC Dept. of Health	Bill Leeble	PIO
	Charles County Commissioner	Debra Davis	Commissioner
	UM CRMC	Amy Copeland	Health Promotions
	CC Dept. of Health	Amber Starn	Epidemiologist
	Charles County Volunteer Services	Jack Conlon	Volunteer President
Medically Underserved	Ministers Alliance	Rev. James Briscoe	President
	CC Dept. of Health	Shirley Hancock	Director, Cancer Programs
	UM CRMC	Robin Benton	Director, Case Management
	Lifestyles of Maryland	Corae Young	Support Director
	Government/Transportation	Jeff Barnett	Chief, Charles County Transportation
	Bel Alton CDC	Judy Rudolf	Representative
	CC Dept of Social Services	Juan Thompson	Ombudsman
Partnerships for a Healthier Charles County	Member Representation	60 member organizations represented	LHIC

Civista.org

CharlesCountyHealth.org