Mid-Shore Region Characteristics: Population Sociodemographics; Health Status; and Health and Health Care Facilities and Resources

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This is one of six Technical Reports prepared for the Maryland Health Care Commission by the University of Maryland School of Public Health and the Walsh Center for Rural Health Analysis at NORC at the University of Chicago as part of their study, entitled Health Matters: Navigating an Enhanced Rural Health Model for Maryland, Lessons Learned from the Mid-Shore Counties.
Introduction

Senate Bill 707 (SB707: Freestanding Medical Facilities—Certificate of Need, Rates, and Definition) established a Rural Health Care Delivery Workgroup to oversee a study of rural health care needs in Caroline, Dorchester, Kent, Queen Anne’s and Talbot counties. The study would examine challenges to the delivery of health care in the five-county region, such as the limited availability of health care providers and services; the special needs of vulnerable populations; transportation barriers; and the economic impact of the closure, partial closure, or conversion of a health care facility. The study would take into account the input gained by the workgroup and identify opportunities for restructuring the delivery of health care services. The study would develop policy options for addressing the health care needs of residents and improving the health care delivery system in the five-county region. The Maryland Health Care Commission (MHCC) contracted with the University of Maryland School of Public Health and the Walsh Center for Rural Health Analysis at NORC at the University of Chicago to conduct the study. The intent of this technical report is to introduce each of the counties and their populations, illustrate current health outcomes, and list public health resources located within each county.

Methods

This technical report was created using existing reports and other published materials. Sociodemographic information was pulled from the 2011-2015 American Community Survey. Health outcome data were pulled from various sources, but primarily the Robert Wood Johnson Foundation’s County Health Rankings, 2015 Behavioral Risk Factor Surveillance System, the Maryland State Health Improvement Plan online portal and the 2016 Primary Care Needs Assessment. The existing public health resources were collected through an exhaustive online search. Facilities and resources available in each county were identified and categorized according to population served, specialty area and level of care, with a focus on those that serve vulnerable populations and those that support prevention. The facilities and resources presented in this report are by no means comprehensive, but aim to provide a bird’s-eye view of the healthcare landscape in this region and provide a foundation upon which to examine areas to mobilize and areas of need.

County Backgrounds

Maryland was one of the original 13 colonies, which were divided into three geographic areas consisting of the New England, Middle and Southern colonies. The Maryland colony was classified as one of the Southern colonies. In late 1631, William Claiborne established a fur-trading post, which is regarded as the first permanent European settlement, on Kent Island. The primary First Nation people inhabiting Maryland were three Algonquian tribes—the Piscataway on the Western Shore, who left the area in 1697; and the Nanticoke and Pocomoke-Assateague on the Eastern Shore, who migrated westward in the 1740s. Susquehannock also inhabited the area, but in 1675 they were carried into captivity by the Iroquois Nations.
Maryland was the first of the former colonies to adopt a state constitution. The early years of statehood were spent developing the state’s resources. Shipping and trade expanded, and families abandoning the worn-out tobacco farms of the Eastern Shore and southern Maryland migrated westward into the Piedmont. At the outbreak of the Civil War, Maryland had almost equal numbers of slaves and free Blacks, and the state was sharply divided in its sympathies to North and South. Although Maryland was a slave state below the Mason-Dixon Line, the state did not join the Confederacy during the Civil War. Most of the counties on the Eastern Shore occupied an intermediate position, of slave and free, much like that of Maryland within the Union. The Eastern Shore was “neither as slave and Black as southern Maryland nor as free and White as northern Maryland.” Just more than 20 percent of its people were slaves and just under 40 percent were black.

The Eastern Shore has played a significant role in the development of English colonization in America and in the state of Maryland as well as in many of the civil and noncivil wars that forever altered the direction of independence, statehood and citizenship. The agricultural, industrial and civil movements of the 18th and 19th centuries, especially those that took place in the state of Maryland, contribute to population migration that created both urban and rural environments across the state. The Eastern Shore of Maryland has historically been known as a rural area of the state of Maryland, which is reflected in the rural health issues identified in this study.

**CAROLINE COUNTY**

Caroline County was created in 1773 from parts of Dorchester and Queen Anne’s counties. It is the only Eastern Shore county that does not have shorelines along the Chesapeake Bay or Atlantic Ocean, however many of its waterways lead to the Chesapeake. It is the only Maryland county that does not have an interstate or U.S. highway running through it, and it is the only county east of the Mississippi River that has no heavy industry other than agriculture. In fact, Caroline County is one of only a handful of counties in the country that existed for more than 300 years solely dependent on an agriculture-based economy. During the early-to-mid 19th century, many freedom seekers found shelter and assistance in Caroline County as they traveled along the Underground Railroad to Delaware.

**DORCHESTER COUNTY**

Dorchester County is the largest county in Maryland—when its water area is included; otherwise, it is the fourth largest county. The largest county on the Eastern Shore, Dorchester is known as “The Heart of Chesapeake Country” due to its heart shape and its location at the midpoint of the Chesapeake. Dorchester County was settled by whites, free blacks and enslaved Africans. Caroline County was created from parts of Dorchester and Queen Anne’s Counties. Araminta “Minty” Ross, later known as Harriet Tubman, was born enslaved in Dorchester County. At age 27, she escaped slavery and later helped others through the Underground Railroad. Caroline and Dorchester played key roles in the refuge of freedom seekers as the Underground Railroad passed through these areas into Delaware.
KEN T CO U NTY

Kent is Maryland’s second oldest county, dating back to the early 1640s. It was the first county established on the Eastern Shore and the site of the first lasting Eastern Shore settlement. Though much of the early settlers were of English descent, African Americans have played a significant role in the development of the county since the late 18th century—as businessmen, farmers, watermen, Civil War veterans and community leaders. Many of the county’s black settlements were pre-1860 free black settlements. In 1782, Chestertown, one of Maryland’s oldest seaports, became the home of Washington College. The college was named for George Washington, who was a member of the board of visitors and governors, and it was Maryland’s first institution of higher learning.

QUEEN ANNE’S CO U NTY

Queen Anne’s County was formally established in 1706 and downsized later as parts of Queen Anne's County formed from Kent and Talbot counties. The county was named for Queen Anne (1665-1714), who ruled Great Britain and Ireland from 1702 to 1714. Since 1990, the governing structure is home rule which allows for broad local legislative authority. Five commissioners are elected for four-year terms. Maryland’s first regional community college, Chesapeake College, was charted in 1965 and serves the Eastern Shore. It is also a major health care workforce training ground. Queen Anne’s County is partially considered rural by the federal government, but considered completely rural by the standards set by the Rural Maryland Council.

TALBOT CO U NTY

Talbot County is one of the oldest European settlements in the “New World” and had one of the highest percentages of “free blacks” in the years of slavery. Talbot County's history has long been linked to the water that surrounds it, with more than 600 miles of tidal shoreline, the most of any county in the United States. In the past, the maritime industries of shipbuilding, seafood harvesting and seafood processing dominated the economy. Today, industries include water-related tourism and sport fishing. Talbot’s largest industry is still agriculture, although health care is close behind.
Sociodemographic Information

Of the five-county region, Kent County has the smallest population and the smallest population of those below the age of 18, yet Kent is second to Talbot County with the largest population of those over 65. All five counties have more people over age 65 than the state average. With a larger percentage than the state average of residents reporting white only as their race, the percentage of minority groups in the Mid-Shore region is smaller than the state average. The populations in these counties have lower incomes and a higher percentage of residents living in poverty than the state average. Regional high school graduation rates are close to the state average (89%) in Caroline (83%) and Queen Anne’s (91%). However, rates of higher education are lower than the state average (38%) in Caroline (16%) and Queen Anne’s (35%). The number of residents with a disability and the number of residents who are uninsured in this region are slightly higher than the state average.

Exhibit 1: Key Sociodemographic Measures, 2016

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>YEAR(S)</th>
<th>CAROLINE</th>
<th>DORCHESTER</th>
<th>KENT</th>
<th>QUEEN ANNE’S</th>
<th>TALBOT</th>
<th>REGION</th>
<th>MARYLAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>2015</td>
<td>32,579</td>
<td>32,384</td>
<td>19,787</td>
<td>48,904</td>
<td>37,512</td>
<td>171,166</td>
<td>6,006,401</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 18 years</td>
<td>2015</td>
<td>24%</td>
<td>21%</td>
<td>17%</td>
<td>22%</td>
<td>19%</td>
<td>21%</td>
<td>22%</td>
</tr>
<tr>
<td>18-64 years</td>
<td>2015</td>
<td>61%</td>
<td>58%</td>
<td>56%</td>
<td>60%</td>
<td>54%</td>
<td>56%</td>
<td>63%</td>
</tr>
<tr>
<td>65 and older</td>
<td>2015</td>
<td>16%</td>
<td>20%</td>
<td>25%</td>
<td>18%</td>
<td>27%</td>
<td>21%</td>
<td>14%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>2015</td>
<td>14%</td>
<td>29%</td>
<td>15%</td>
<td>7%</td>
<td>13%</td>
<td>15%</td>
<td>31%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2015</td>
<td>7%</td>
<td>5%</td>
<td>4%</td>
<td>4%</td>
<td>6%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td>2015</td>
<td>51%</td>
<td>52%</td>
<td>52%</td>
<td>51%</td>
<td>53%</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People in poverty</td>
<td>2011-2015</td>
<td>16%</td>
<td>17%</td>
<td>11%</td>
<td>8%</td>
<td>11%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Children in poverty</td>
<td>2011-2015</td>
<td>25%</td>
<td>29%</td>
<td>17%</td>
<td>11%</td>
<td>16%</td>
<td>19%</td>
<td>13%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>2011-2015</td>
<td>17%</td>
<td>13%</td>
<td>13%</td>
<td>8%</td>
<td>12%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>People uninsured</td>
<td>2011-2015</td>
<td>11%</td>
<td>9%</td>
<td>8%</td>
<td>5%</td>
<td>10%</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Land area in square miles</td>
<td>2015</td>
<td>319.42</td>
<td>540.77</td>
<td>277.03</td>
<td>371.91</td>
<td>288.94</td>
<td>1,777.67</td>
<td>9,707.24</td>
</tr>
</tbody>
</table>

Health Status

This section describes some key health indicators for each county. Overall Talbot and Queen Anne’s counties outperform Kent, Caroline and Dorchester counties on most health outcome measures. This is evident not only though our own analysis of outcome measures, but through Robert Wood Johnson’s annual County Health Ranking, MHCC’s 2016 Primary Care Needs Assessment and the number of goals each county has achieved in the State Health Improvement Plan (SHIP).

Exhibit 2: Summary of Progress on Key Performance Measures

<table>
<thead>
<tr>
<th>County</th>
<th>County Health Rankings</th>
<th>Primary Care Needs Assessment</th>
<th>SHIP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health Outcomes</td>
<td>Health Factors</td>
<td>P Qi Rank</td>
</tr>
<tr>
<td>Caroline</td>
<td>21</td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td>Dorchester</td>
<td>23</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Kent</td>
<td>18</td>
<td>12</td>
<td>23</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>7</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Talbot</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: 2017 County Health Rankings, State Health Improvement Plan, 2016 Primary Care Needs Assessment

The Mid Shore Health Improvement Coalition was officially formed in 2012 and represents a wide segment of community partners from all five counties (Caroline, Dorchester, Kent, Queen Anne’s and Talbot), including: local health departments, hospitals, clinics, primary care providers, academic institutions, faith-based organizations and other community health resources. Together, they chose three priority areas that aligned with the SHIP:

1) Reduce the proportion of children and adolescents who are considered obese from 14% in 2008 to 11% by 2014.
2) Reduce adolescent smoking from 33.2% in 2010 to the state target of 22.3% by 2014.
3) Reduce emergency department (ED) visits for diabetes from 204.2 in 2010 to the state target of 186 in 2017.

OBESITY

Forty percent of heart disease, stroke and diabetes can be prevented through maintaining a healthy weight. It is known that children that maintain healthy weights through childhood are more likely to sustain healthy weights as adults. Caroline, Dorchester, Kent, and Queen Anne’s counties report higher percentages of obese adolescents than the state average (11.5%). Healthy People 2020 has a goal of 33.9% of adults reporting a healthy weight by 2020, and Maryland set a goal of 36.6% by 2017. The 2015
Behavioral Risk Factor Surveillance System (BRFSS) shows those same counties with percentages lower than both of those targets.

Increased physical activity and a healthy diet are the two most effective methods to achieve a healthy weight. Physical activity can also prevent heart disease and stroke, two of the leading causes of death in the United States. To improve overall cardiovascular health, the American Heart Association suggests at least 150 minutes per week of moderate exercise or 75 minutes per week of vigorous exercise. Queen Anne’s and Talbot counties have met and surpassed the Healthy People 2020 goal of 47.9% of the population engaging in physical activity with percentages at 49.7% and 49%, respectively, and they are just shy of hitting Maryland’s 50.4% goal. Caroline (39%), Dorchester (32%), and Kent (41.4%) have much lower percentages of residents engaging in physical activity. Additionally, only about half of the population in Dorchester and Kent counties, and three-quarters of Caroline, Queen Anne’s, and Talbot county residents report adequate access to locations for physical activity. Aside from physical activity, a healthy diet is also a key factor in maintaining a healthy weight and in Maryland about 13% of the population do not have access to a reliable source of food. Food insecurity in the five counties ranges from 6.8% of the population in Queen Anne’s County to 16% of the population in Dorchester County, with the other counties fell slightly below the state average.

Exhibit 3: Key Performance Indicators-- Obesity

<table>
<thead>
<tr>
<th></th>
<th>Adolescent Obesity</th>
<th>Adults at a Healthy Weight</th>
<th>Physical Activity</th>
<th>Access to exercise opportunities</th>
<th>Food Insecurity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>11.5</td>
<td>35.1</td>
<td>48</td>
<td>93.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Caroline</td>
<td>13.9</td>
<td>33.2</td>
<td>39</td>
<td>74.5</td>
<td>11.9</td>
</tr>
<tr>
<td>Dorchester</td>
<td>17.2</td>
<td>18</td>
<td>32</td>
<td>51.2</td>
<td>16.1</td>
</tr>
<tr>
<td>Kent</td>
<td>12.8</td>
<td>34.9</td>
<td>41.4</td>
<td>51.8</td>
<td>11.5</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>11.7</td>
<td>33.9</td>
<td>49.7</td>
<td>73.5</td>
<td>6.8</td>
</tr>
<tr>
<td>Talbot</td>
<td>10.3</td>
<td>33.8</td>
<td>49</td>
<td>75.9</td>
<td>10.6</td>
</tr>
</tbody>
</table>


SMOKING

Cigarette smoking is the cause of almost 6,800 Maryland deaths each year, and 150,000 people suffer from diseases/cancers caused by cigarette smoking. The percentage of adult smokers has been declining over recent years nationally and in the five counties of the Mid-Shore. Talbot has the lowest percentage of adult smokers (13%), closely followed by Queen Anne’s, Kent, Caroline. Dorchester reported the highest percentage of adult smokers (18%). The nation has seen elevated percentages of adolescents using tobacco products in recent years. Maryland set the bar high with a goal to decrease the percentage of adolescent smokers to 15.2% by 2017; Healthy People 2020 set a goal of 21%, and the Mid Shore Health Improvement Coalition set a goal of 22.3% by 2014. All five counties have seen declines in adolescent smokers; Talbot County was the only county to reach the Mid-Shore’s goal.
Exhibit 4: Key Performance Indicators-- Smoking

<table>
<thead>
<tr>
<th>Current Smokers</th>
<th>Adolescent Smokers (%)</th>
<th>Adult Smokers (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2014</td>
</tr>
<tr>
<td>Maryland</td>
<td>24.8</td>
<td>16.4</td>
</tr>
<tr>
<td>Caroline</td>
<td>32.8</td>
<td>26.1</td>
</tr>
<tr>
<td>Dorchester</td>
<td>31.1</td>
<td>24.9</td>
</tr>
<tr>
<td>Kent</td>
<td>37.7</td>
<td>22.9</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>32.9</td>
<td>24.3</td>
</tr>
<tr>
<td>Talbot</td>
<td>31.5</td>
<td>21.6</td>
</tr>
</tbody>
</table>


* County Health Rankings, 2015

DIABETES

In the Mid-Shore region, the age-adjusted incidence rate of diabetes is highest in Dorchester County at 11.8 per 1,000 people in 2013. Dorchester residents also have the largest prevalence of diabetes (16%). Kent County has the lowest incidence rate of diabetes at 6.1 per 1,000 people and a 7.5% prevalence. Additionally, Kent was the only Mid-Shore county with a decrease in the number of ED visits related to diabetes in 2014. Although Queen Anne’s has the lowest number of ED visits related to diabetes, the number has been increasing in recent years.

Exhibit 5: Emergency Department Visit Rate (per 100,000 people) Due to Diabetes

<table>
<thead>
<tr>
<th>Area</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>177</td>
<td>181</td>
<td>195</td>
<td>192</td>
<td>204</td>
</tr>
<tr>
<td>Caroline</td>
<td>196</td>
<td>211</td>
<td>287</td>
<td>211</td>
<td>244</td>
</tr>
<tr>
<td>Dorchester</td>
<td>374</td>
<td>390</td>
<td>513</td>
<td>369</td>
<td>455</td>
</tr>
<tr>
<td>Kent</td>
<td>161</td>
<td>115</td>
<td>239</td>
<td>350</td>
<td>209</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>87</td>
<td>170</td>
<td>147</td>
<td>126</td>
<td>154</td>
</tr>
<tr>
<td>Talbot</td>
<td>203</td>
<td>206</td>
<td>235</td>
<td>224</td>
<td>276</td>
</tr>
</tbody>
</table>

LIFE EXPECTANCY

The average length of life for a person in Maryland is 79.7 years old for those born in 2015. For the first time in history, a decline in life expectancy was observed. Each of the five counties had a drop in their respective life expectancies ranging from 0.3 to 0.5 years. Talbot County has the highest life expectancy, 80.8 years. Caroline and Dorchester Counties fall short of the state life expectancy by 3.5 and 2 years, respectively. However, Caroline has the smallest difference in life expectancy among white and black populations (one year). The largest disparity between white and black populations is reported in Kent (6 years) and Talbot (5 years) counties.

Exhibit 6: 2015 Maryland Life Expectancy by Race

<table>
<thead>
<tr>
<th>Life Expectancy (Years)</th>
<th>All Races</th>
<th>White</th>
<th>Black</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>79.7</td>
<td>80.3</td>
<td>77.3</td>
<td>3</td>
</tr>
<tr>
<td>Caroline County</td>
<td>76.1</td>
<td>76.3</td>
<td>75.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Dorchester County</td>
<td>77.6</td>
<td>78.2</td>
<td>75.7</td>
<td>2.5</td>
</tr>
<tr>
<td>Kent County</td>
<td>79.5</td>
<td>80.6</td>
<td>74.5</td>
<td>6.1</td>
</tr>
<tr>
<td>Queen Anne’s County</td>
<td>79.6</td>
<td>79.7</td>
<td>77.2</td>
<td>2.5</td>
</tr>
<tr>
<td>Talbot County</td>
<td>80.8</td>
<td>81.6</td>
<td>76.5</td>
<td>5.1</td>
</tr>
</tbody>
</table>


INFANT MORTALITY

Infant mortality has long been considered the most sensitive indicator of the overall health of a population. While there have been several decades of improvement in infant mortality, Maryland’s rate remains higher than the national average and higher for black infants. In 2015, Talbot had the highest infant mortality rate in the region at 18.6 per 1,000 live births, followed by Caroline (12.8). Dorchester, Kent and Queen Anne’s counties had less than five infant deaths each making a rate statistically unreliable.
Babies born with a low birth weight (< 5.5 pounds) are at increased risk for serious health consequences, including disabilities and death. Caroline, Dorchester and Kent counties have percentages of such babies higher than the national and state averages. Teen pregnancy is linked to a host of social problems such as poverty, lack of overall well-being for children, out-of-wedlock births, lack of responsible fatherhood, health issues, school failure, child abuse, and neglect and at-risk behaviors. The state has achieved its goal of 17.8 teen births per 1,000 births, but Caroline and Dorchester have rates higher than the state goal, at 22.4 and 42 per 1,000 births, respectively. However, all five counties have surpassed the state’s goal of getting 66.6% of women into prenatal care in their first trimester. Continued efforts to improve this measure can reduce infant mortality, low birth weight and preterm deliveries.

**Exhibit 8: Key Performance Indicators—Infant Mortality**

<table>
<thead>
<tr>
<th>Data Year</th>
<th>Babies with low birth weight</th>
<th>Sudden unexpected infant death rate (SUIDs)</th>
<th>Teen birth rate</th>
<th>Early prenatal care</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>8.60</td>
<td>0.82</td>
<td>17.80</td>
<td>66.60</td>
</tr>
<tr>
<td>Caroline</td>
<td>9.10</td>
<td>3 (Count Only)</td>
<td>22.40</td>
<td>74.10</td>
</tr>
<tr>
<td>Dorchester</td>
<td>10.60</td>
<td>0 (Count Only)</td>
<td>42.00</td>
<td>73.40</td>
</tr>
<tr>
<td>Kent</td>
<td>12.10</td>
<td>1 (Count Only)</td>
<td>9.50</td>
<td>79.60</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>5.10</td>
<td>2 (Count Only)</td>
<td>15.10</td>
<td>79.90</td>
</tr>
<tr>
<td>Talbot</td>
<td>7.20</td>
<td>2 (Count Only)</td>
<td>15.30</td>
<td>73.60</td>
</tr>
</tbody>
</table>

SEXUAL HEALTH

Sexually transmitted infections (STIs) impact sexual and reproductive health through both physical and mental distress. Eight STIs are the most prevalent, and four of these are currently curable: chlamydia, gonorrhea, syphilis and trichomoniasis. The other four are incurable viral infections: hepatitis B, herpes simplex virus (HSV or herpes), HIV and human papillomavirus (HPV). Chlamydia and gonorrhea rates are unusually high in Dorchester County. While the other counties in the region have seen a decreasing trend in the rates from 2011-2015, Dorchester continues to experience higher rates and exceeded the state rate each year. Syphilis occurs infrequently in the region, but more often in Kent and less often in Caroline, in fact Caroline recorded their first case of syphilis in more than five years in 2015. Talbot also had one case and Kent had four cases. The HIV incidence rate in Maryland has decreased over the last 5 years from 30.1 per 100,000 in 2011 to 26.7 per 100,000 in 2015. However, the rate of HIV prevalence has increased from 606 per 100,000 in 2011 to 639 per 100,000 in 2014 (most recent year). Dorchester County has much higher HIV incidence and prevalence rates than the other counties in the region with an incidence rate of 37 per 100,000 in 2015 and prevalence rate of 466 per 100,000 people.

Exhibit 9: Key Performance Indicators—Sexual Health, 2015

<table>
<thead>
<tr>
<th>Location</th>
<th>Chlamydia Rate</th>
<th>Chlamydia Cases</th>
<th>Gonorrhea Rate</th>
<th>Gonorrhea Cases</th>
<th>Congenital Syphilis Rate</th>
<th>Congenital Syphilis Cases</th>
<th>Early Latent Syphilis Rate</th>
<th>Early Latent Syphilis Cases</th>
<th>Primary and Secondary Syphilis Rate</th>
<th>Primary and Secondary Syphilis Cases</th>
<th>HIV prevalence* Rate</th>
<th>HIV prevalence* Cases</th>
<th>HIV diagnoses Rate</th>
<th>HIV diagnoses Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>459</td>
<td>27,450</td>
<td>115</td>
<td>6,858</td>
<td>25</td>
<td>18</td>
<td>10</td>
<td>594</td>
<td>9</td>
<td>509</td>
<td>639*</td>
<td>32,002*</td>
<td>27</td>
<td>1,347</td>
</tr>
<tr>
<td>Caroline</td>
<td>292</td>
<td>95</td>
<td>135</td>
<td>44</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>1</td>
<td>222*</td>
<td>60*</td>
<td>##</td>
<td>##</td>
<td></td>
</tr>
<tr>
<td>Dorchester</td>
<td>635</td>
<td>207</td>
<td>381</td>
<td>124</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>466*</td>
<td>128*</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>Kent</td>
<td>177</td>
<td>35</td>
<td>51</td>
<td>10</td>
<td>538</td>
<td>1</td>
<td>15</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>224*</td>
<td>39*</td>
<td>##</td>
<td>##</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>203</td>
<td>99</td>
<td>57</td>
<td>28</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>107*</td>
<td>44*</td>
<td>##</td>
<td>##</td>
</tr>
<tr>
<td>Talbot</td>
<td>202</td>
<td>76</td>
<td>66</td>
<td>25</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>187*</td>
<td>61*</td>
<td>##</td>
<td>##</td>
</tr>
</tbody>
</table>

* = 2014 data
## = data suppressed
Rate = per 100,000 people


CHRONIC DISEASE

According to the Center for Disease Control and Prevention, chronic diseases are responsible for seven of 10 deaths each year, and treating people with chronic diseases accounts for most of our nation’s health care costs. The 10 leading causes of death in Maryland in 2015, in rank order, were: diseases of the heart, malignant neoplasms, cerebrovascular diseases, chronic lower respiratory diseases, diabetes mellitus, accidents, influenza and pneumonia, Alzheimer’s disease, septicemia, and nephritis, nephrotic
syndrome and nephrosis. Most of the leading causes of death are preventable through eating healthy, staying physically active, eliminating tobacco use and properly managing chronic conditions.

**Heart Disease:** Dorchester and Caroline counties have the highest death rate for cardiovascular disease, at 249.6 and 241.6 per 100,000 people, respectively. The state average is 221 per 100,000 people, and the remaining counties report below that rate. A good indicator of heart disease is blood pressure. Maryland has about 30% of its residents who have been diagnosed with hypertension at some point. In Dorchester County, 29% of residents reported ever being diagnosed with hypertension, but they have exceedingly high ED visits for hypertension at 465 per 100,000 people. Kent and Queen Anne’s residents reported the lowest percentage of hypertension diagnosis at 25%, but Kent County reported 335 per 100,000 ED visits for hypertension, while Queen Anne’s had the lowest number of ED visits for hypertension at 188 per 100,000 people. On average, the Mid-Shore region ED visit rate due to hypertension is about 252 per 100,000 people.

**Exhibit 10: Key Performance Indicators—Heart Disease**

<table>
<thead>
<tr>
<th>County</th>
<th>Diseases of the Heart, Age-Adjusted Death Rate (2013-2015 per 100,000)</th>
<th>Ever Hypertension (2006-2012)</th>
<th>ED Hypertension (2014, per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>169</td>
<td>29.9</td>
<td>252</td>
</tr>
<tr>
<td>Caroline</td>
<td>195.60</td>
<td>27</td>
<td>258</td>
</tr>
<tr>
<td>Dorchester</td>
<td>190.90</td>
<td>28.8</td>
<td>465</td>
</tr>
<tr>
<td>Kent</td>
<td>154.30</td>
<td>25.9</td>
<td>335</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>159.80</td>
<td>26.2</td>
<td>188</td>
</tr>
<tr>
<td>Talbot</td>
<td>143.00</td>
<td>30.3</td>
<td>265</td>
</tr>
</tbody>
</table>


**Chronic Obstructive Pulmonary Disease (COPD)** refers to a group of diseases that cause airflow blockage and breathing-related problems, including emphysema, chronic bronchitis and, in some cases, asthma. Caroline reported the highest COPD-related deaths per 100,000, while Dorchester and Kent had less than 20 deaths related to COPD. Dorchester reported the highest average lifetime prevalence of asthma in adults and the highest number of residents with an emergency department discharge related to COPD, while Kent reported the lowest for those two measures.

**Exhibit 11: Key Performance Indicators—Chronic Obstructive Pulmonary Disease**

<table>
<thead>
<tr>
<th>County</th>
<th>COPD, Age-Adjusted Death Rate (2013-2015 per 100,000)</th>
<th>Asthma, Average Lifetime Prevalence in Adults, Weighted (2008-2010)</th>
<th>Average Number of COPD ED Discharges (2006-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>30.8</td>
<td>13.5%</td>
<td>--</td>
</tr>
<tr>
<td>Caroline</td>
<td>56.4</td>
<td>15.4%</td>
<td>62.2</td>
</tr>
</tbody>
</table>
Cancer: The national average cancer death rate is 180.8 per 100,000 people. Maryland’s cancer death rate is a little less at 171.7 per 100,000 people. However, all five Mid-Shore counties have much higher rates: Caroline (204.9) Queen Anne’s (210.2), Kent (250.7), Dorchester (263.3) and Talbot (287.4). Many cancers can grow without detectable symptoms, but screenings, such as mammograms and colonoscopies, can help with early detection of some cancers. The U.S. Preventive Services Task Force recommends women, ages 50 to 74 years, get mammograms every two years; adults, age 50 to 75 years, should be screened for colorectal cancer yearly, although some methods vary in required frequency. Patient-specific recommendations for individuals under age 50 require a physician to determine the best screening schedule. About 83% of women over 50 years old living in Maryland have received a mammogram within two years. Caroline (78%) and Queen Anne’s (80%) counties report percentages of that population receiving mammograms lower than the state average, while Talbot (84%), Dorchester (85%) and Kent (85%) report rates slightly above the state average. Kent County reports only 63% of adults 50 and older ever receiving a sigmoidoscopy or colonoscopy; Caroline (66%) and Queen Anne’s (69%) also report percentages lower than the state average of 71%. Talbot (73%) and Dorchester (77%) report percentages above the state average.

**Exhibit 12: Maryland Cancer Death and Incidence Rates**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>171.7</td>
<td>451.5</td>
<td>23.6</td>
<td>129.9</td>
<td>15.7</td>
<td>38.8</td>
<td>141.1</td>
<td>46.4</td>
<td>60.7</td>
<td></td>
</tr>
<tr>
<td>Caroline</td>
<td>204.9</td>
<td>465.1</td>
<td>21.4</td>
<td>125.5</td>
<td>19.0</td>
<td>36.9</td>
<td>131</td>
<td>57.8</td>
<td>76.2</td>
<td></td>
</tr>
<tr>
<td>Dorchester</td>
<td>263.3</td>
<td>481.6</td>
<td>21.9</td>
<td>125.7</td>
<td>17.6</td>
<td>49.1</td>
<td>145.2</td>
<td>59.1</td>
<td>67.9</td>
<td></td>
</tr>
<tr>
<td>Kent</td>
<td>250.7</td>
<td>461.7</td>
<td>21.0</td>
<td>114.1</td>
<td>15.3</td>
<td>44.1</td>
<td>159.9</td>
<td>55.4</td>
<td>64.0</td>
<td></td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>210.2</td>
<td>429.6</td>
<td>22.9</td>
<td>117.8</td>
<td>13.6</td>
<td>32.3</td>
<td>134.2</td>
<td>49.9</td>
<td>64.1</td>
<td></td>
</tr>
<tr>
<td>Talbot</td>
<td>287.4</td>
<td>454.6</td>
<td>19.3</td>
<td>141.5</td>
<td>13.7</td>
<td>35.1</td>
<td>162</td>
<td>43.3</td>
<td>49.4</td>
<td></td>
</tr>
</tbody>
</table>


**ACCESS TO CARE**

Literature states that having a usual source of care, defined as “a doctor’s office, clinic, health center or other place one goes to if one is sick or needs advice about health,” is important in acquiring health care when needed, managing chronic conditions and managing out-of-pocket spending. In Maryland, 83% of residents reported a usual source of care in 2014. However, only 76% of residents in Caroline and
Dorchester and 82% in Kent reported having a usual source of care; Queen Anne’s and Talbot residents reported higher rates, 91% and 87%, respectively.

Influenza/pneumonia was the seventh leading cause of death in 2015. The age-adjusted mortality rate was 17.7 per 100,000 population in 2015. Deaths from influenza and pneumonia increased among whites and declined among blacks between 2014 and 2015. Caroline had the second lowest percentage of adults in the state who were vaccinated against seasonal influenza in 2014 at 33.6%. Talbot had the highest percentage in the state at 47.1% followed by Kent (42%), Queen Anne’s (43%) and Dorchester (38%).

MENTAL HEALTH

The number of ED visits for mental health conditions has steadily been increasing since 2008. In 2014, all five counties exceed the state’s rate of 3,443 per 100,000 people. Dorchester County had the highest rate of visits related to mental health conditions with 8,551 visits per 100,000 people in 2014, followed by Talbot (4,444), Caroline (4,370), Kent (3,590), and Queen Anne’s (3,436).

On the other hand, hospitalizations related to Alzheimer’s or other dementias have been decreasing. The state’s average is 194 per 100,000 population. Talbot, Queen Anne’s and Dorchester were below the state’s average, reporting 100, 133, and 153 visits per 100,000, respectively. Kent County reported 233 visits. No data was reported for Caroline County. In 2015, the ninth leading cause of death in Maryland was Alzheimer’s disease. The age-adjusted Alzheimer’s death rate in 2015 was 16.4% per 100,000, a 13.9% increase from the 2014. County-specific death rates from Alzheimer’s are not available due to low values.

Suicide is a serious public health problem with lasting effects on individuals, families and communities. Mental disorders and/or substance abuse have been found in the great majority of people who have died by suicide. In Maryland, approximately 500 lives are lost each year to this preventable cause of death. The age-adjusted mortality rate for suicide was 8.7 per 100,000 population in 2015, 9.4% lower than the rate in 2014. The suicide rate for white males in the state was nearly 12 times that of black females. Kent County had the lowest suicide rate of 10 per 100,000 population, and Queen Anne’s had the highest rate at 17 per 100,000 population.

Substance Abuse: The number of drug- and alcohol-related intoxication deaths occurring in Maryland increased in 2016 for the sixth year in a row, reaching an all-time high of 2,089 deaths. This represented a 66% increase over the number of such deaths (1,259) in 2015, and the largest single-year increase ever recorded. The number of intoxication deaths has more than tripled in Maryland since 2010.
The percentage of adults reporting binge or heavy drinking within the last 30 days ranges from 15% to 19%, with the state’s average at 16%. The median percentage of alcohol-impaired driving deaths in Maryland is 33% but there is a great deal of variation among counties. Dorchester (27%), Queen Anne’s (30%) and Talbot (30%) counties are below the state’s average, while Caroline (45%) and Kent (56%) exceed the average. In 2016, alcohol-related intoxication deaths rose above the 2007-2015 average in almost every county. The Mid-Shore region was not drastically impacted by the uptick in alcohol-related deaths: Talbot (0), Dorchester (1), Kent (1), Queen Anne’s (2), and Caroline (5).

The 2011-2015 age-adjusted total unintentional intoxication death rate is reported for 20 of the 24 counties in Maryland. Caroline County had the second highest rate in the state at 29.6 per 100,000 population and Queen Anne’s was close to the mean at 17.6 per 100,000. Dorchester, Kent and Talbot counties have too few such deaths to calculate reliable rates. For the five-county region, in 2016, the following drugs contributed to the corresponding number of deaths: fentanyl (20) heroin (18), prescription opioids (11), cocaine (9), oxycodone (8), methadone (4) and benzodiazepine (4). Fentanyl has a strong presence in Talbot County, while heroin, prescription opioids, cocaine and oxycodone are making a big impact in Caroline County.
## Exhibit 14: Key Performance Indicators—Substance Abuse

<table>
<thead>
<tr>
<th></th>
<th>Number of Fentanyl-Related Intoxication Deaths by Place of Occurrence</th>
<th>Number of Heroin-Related Intoxication Deaths by Place of Occurrence</th>
<th>Number of Prescription Opioid-Related Intoxication Deaths by Place of Occurrence</th>
<th>Number of Cocaine-Related Intoxication Deaths by Place of Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>1,119</td>
<td>1,875</td>
<td>1,212</td>
<td>4,927</td>
</tr>
<tr>
<td>Caroline</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Dorchester</td>
<td>3</td>
<td>8</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Kent</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>Talbot</td>
<td>7</td>
<td>15</td>
<td>4</td>
<td>19</td>
</tr>
<tr>
<td>Region Total</td>
<td>20</td>
<td>43</td>
<td>18</td>
<td>91</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Number of Oxycodone-Related Intoxication Deaths by Place of Occurrence</th>
<th>Number of Methadone-Related Intoxication Deaths by Place of Occurrence</th>
<th>Number of Benzodiazepine-Related Intoxication Deaths by County of Occurrence</th>
<th>Number of Alcohol-Related Intoxication Deaths by Place of Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>157</td>
<td>1,014</td>
<td>197</td>
<td>1,693</td>
</tr>
<tr>
<td>Caroline</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Dorchester</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Kent</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Talbot</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Region Total</td>
<td>8</td>
<td>31</td>
<td>4</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Department of Health and Mental Hygiene. Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2016. Vital Statistics Administration Community and Environmental Factors

**Violent Crimes**: Violent crimes include murder, forcible rape, robbery, and aggravated assault. Dorchester had the highest rate of violent crimes at 576 per 100,000 people in 2015, followed by Kent with a rate of 397 per 100,000 people. These rates had been trending down in both counties in 2013 and 2014, but increased by 33% and 72% respectively in one year. Caroline, Talbot and Queen Anne’s counties all had decreases in violent crime rates.

<table>
<thead>
<tr>
<th>County</th>
<th>2011 Violent Crime Rate Per 100,000 People</th>
<th>2012 Violent Crime Rate Per 100,000 People</th>
<th>% Change</th>
<th>2013 Violent Crime Rate Per 100,000 People</th>
<th>2014 Violent Crime Rate Per 100,000 People</th>
<th>% Change</th>
<th>2015 Violent Crime Rate Per 100,000 People</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caroline</td>
<td>335.5</td>
<td>345.3</td>
<td>-0.11</td>
<td>287.8</td>
<td>321.5</td>
<td>0.117</td>
<td>244.5</td>
<td>-0.239</td>
</tr>
<tr>
<td>Dorchester</td>
<td>431.3</td>
<td>500.7</td>
<td>-0.257</td>
<td>460.4</td>
<td>434</td>
<td>-0.057</td>
<td>576.2</td>
<td>0.328</td>
</tr>
<tr>
<td>Kent</td>
<td>318.8</td>
<td>416.7</td>
<td>0.255</td>
<td>316.3</td>
<td>231</td>
<td>-0.27</td>
<td>396.7</td>
<td>0.717</td>
</tr>
<tr>
<td>Queen Anne’s</td>
<td>308.8</td>
<td>190.5</td>
<td>-0.383</td>
<td>237.1</td>
<td>223.5</td>
<td>-0.057</td>
<td>196.4</td>
<td>-0.121</td>
</tr>
<tr>
<td>Talbot</td>
<td>222.9</td>
<td>231.8</td>
<td>0.01</td>
<td>190.8</td>
<td>265.6</td>
<td>0.392</td>
<td>232.2</td>
<td>-0.126</td>
</tr>
</tbody>
</table>


**Firearm Fatalities:** Over the last five years (2011-2015), Maryland has an average rate of 10 firearm fatalities per 100,000 population. Dorchester and Queen Anne’s have higher rates at 15 and 12 per 100,000, respectively, while Caroline and Talbot have a rate of 7 per 100,000. Kent County had no firearm fatalities to report.

**Motor Vehicle Crash Rate:** Caroline County reported a motor vehicle crash death rate of 27 per 100,000 population from 2009-2015, more than double the state’s median of nine deaths per 100,000 population. Dorchester, Kent and Queen Anne’s report 14 deaths and Talbot County reports 11 deaths per 100,000 population.

**Affordable Housing** means family resources can be used for other needs such as healthy food and health care. Affordable housing can improve health by providing greater stability and reducing stress. This measure defines affordability as housing units sold that are affordable for individuals with earnings comparable to the median salary of teachers in the region. The state has a goal of making 54% of properties affordable, but the rate is currently 48%. Caroline and Dorchester have surpassed the state goal, 77% and 66%, respectively, of affordable homes. Kent (51%), Talbot (40%) and Queen Anne’s (33%) are far below the state goal.
VULNERABLE POPULATIONS

*Maltreated Children*: Child abuse or neglect can result in physical harm, developmental delays, behavioral problems, or death. Abused and neglected children are at greater risk than other children for delinquency and mistreatment of their own children. The state and national goal is to lower abuse and neglect rates to eight per 1,000 population under the age of 18. Talbot (13), Caroline (16), Kent (16) and Dorchester (15) have higher than average rates. Queen Anne’s reported a child maltreatment rate of 5 per 1,000 population.

*Victims of Domestic Violence*: Domestic violence contributes greatly to the morbidity and mortality of Maryland citizens. Up to 40% of violent juvenile offenders witnessed domestic violence in the home, and 63% of homeless women and children have been victims of intimate partner violence as adults. Talbot has the lowest rate of domestic violence in the entire state at 181 per 100,000 population. Kent, Queen Anne’s, and Caroline follow at 227, 348, and 356, respectively. Unfortunately, Dorchester has a much higher rate of domestic violence at 626 per 100,000 population.

*Elderly*: The population in the five Mid-Shore counties is aging; the median age has increased by an average of two years since 2010. Every county has experienced a loss in younger population and growth in older population.

**Exhibit 16: Difference in the number of people per age group from 2010-2015**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Caroline</th>
<th>Dorchester</th>
<th>Kent</th>
<th>Queen Anne’s</th>
<th>Talbot</th>
<th>Avg. Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18 years</td>
<td>-640</td>
<td>-145</td>
<td>-229</td>
<td>-568</td>
<td>-407</td>
<td>-398</td>
</tr>
<tr>
<td>18 to 64 years</td>
<td>-535</td>
<td>-898</td>
<td>-778</td>
<td>123</td>
<td>-1141</td>
<td>-646</td>
</tr>
<tr>
<td>65 years and over</td>
<td>682</td>
<td>771</td>
<td>595</td>
<td>1525</td>
<td>1174</td>
<td>949</td>
</tr>
<tr>
<td>85 years and over</td>
<td>16</td>
<td>63</td>
<td>70</td>
<td>105</td>
<td>164</td>
<td>84</td>
</tr>
<tr>
<td>Median Age Change</td>
<td>1.3</td>
<td>0.8</td>
<td>1.8</td>
<td>1.8</td>
<td>2.1</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Behavioral Risk Factor Surveillance System (BRFSS), 2011-2015
**Individuals with Disabilities:** Some 11% of Maryland’s population has a disability. On the Eastern Shore, the percentage is slightly higher: Queen Anne’s County (11%); Kent and Talbot (12%); Caroline (15%); and Dorchester (16%). As the population ages, so does the percentage of disabled persons.

**Exhibit 17: Age and Disability Status, 2011-2015**

<table>
<thead>
<tr>
<th>Disability Status</th>
<th>Maryland</th>
<th>Caroline</th>
<th>Dorchester</th>
<th>Kent</th>
<th>Queen Anne’s</th>
<th>Talbot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>5,836,734</td>
<td>32,269</td>
<td>32,095</td>
<td>19,572</td>
<td>48,015</td>
<td>37,409</td>
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<td>With a disability</td>
<td>10.5%</td>
<td>14.4%</td>
<td>15.8%</td>
<td>13.9%</td>
<td>10.5%</td>
<td>13.6%</td>
</tr>
<tr>
<td>Under 18 years</td>
<td>1,346,655</td>
<td>7,841</td>
<td>6,871</td>
<td>3,335</td>
<td>10,986</td>
<td>7,099</td>
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<tr>
<td>With a disability</td>
<td>3.7%</td>
<td>5.1%</td>
<td>6.1%</td>
<td>4.5%</td>
<td>3.7%</td>
<td>4.2%</td>
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<tr>
<td>18 to 64 years</td>
<td>3,722,909</td>
<td>19,764</td>
<td>19,191</td>
<td>11,763</td>
<td>28,958</td>
<td>20,841</td>
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<tr>
<td>With a disability</td>
<td>8.4%</td>
<td>12.7%</td>
<td>11.0%</td>
<td>9.4%</td>
<td>8.4%</td>
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<td>65 years and over</td>
<td>767,170</td>
<td>4,664</td>
<td>6,033</td>
<td>4,474</td>
<td>8,071</td>
<td>9,469</td>
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<tr>
<td>With a disability</td>
<td>32.4%</td>
<td>37.5%</td>
<td>42.1%</td>
<td>32.8%</td>
<td>27.5%</td>
<td>30.0%</td>
</tr>
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</table>

Source: Behavioral Risk Factor Surveillance System (BRFSS), 2011-2015

**Migrant Populations:** Much of the migrant population is undocumented. Resources for this population are discussed in the next section.

**Populations with Low Health Literacy:** As research continues to show poorer health outcomes are related to lower health literacy rates, it is important to include patient education and open communication in changes to health care resources. The [Centers for Disease Control and Prevention](https://www.cdc.gov) recommendations include: using pictures; making orally delivered information available in other accessible forms; associating information with action; using headings to health reader location topics; communicating at the level of the target audience in a narrative form; explaining risks and numbers; and anticipating emotional reactions, among others.
Public Health Resources

The five counties in this study form the service area of the University of Maryland (UM) Shore Regional Health System. Shore Health is the only provider of acute care and the major provider of home health services in the region. Nursing home capacity appears sufficient, except for a small gap in Queen Anne’s. Ambulatory surgery options, outside of hospital outpatient departments, are very limited. Hospice services are heavily used in Kent and Queen Anne’s, but underutilized elsewhere, especially among African-American populations. Urgent care is quite limited and is not a defined licensure category in Maryland. Typically, an urgent care facility offers extended and weekend hours. Larger urgent care centers offer x-ray and lab services. Shore Health operates two urgent care facilities in collaboration with ChoiceOne. Other major urgent care providers, such as Patient First and MedStar PromptCare, have no offices on the Eastern Shore. In some instances, a primary care practice with open access scheduling and extended hours may offer equivalent or even better access. The table below lists the number of key health care facilities by county.

Exhibit 18: Summary Assessment of Public Health Resources

<table>
<thead>
<tr>
<th></th>
<th>Caroline</th>
<th>Dorchester</th>
<th>Kent</th>
<th>Queen Anne’s</th>
<th>Talbot</th>
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<tr>
<td>Acute Care General Hospitals / Freestanding Medical Facilities</td>
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<td>1</td>
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<tr>
<td>Ambulatory Care Surgery Facilities</td>
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<td>Urgent Care Centers</td>
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<td>1</td>
<td>1</td>
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<td>Home Health Agencies</td>
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<td>8</td>
<td>4</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Nursing Homes / Skilled Nursing Facilities</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Assisted Living Facilities</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>4</td>
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EXISTING ACUTE CARE AND AMBULATORY SURGERY SERVICES

Acute Care Facilities

The Mid-Shore region has three acute care hospitals and one freestanding emergency department, all operated by the UM Shore Regional Health System. According to the Fiscal Year 2016 Annual Report on Selected Maryland General and Special Hospital Services, each hospital has varying levels of capacity. UM Shore Medical Center at Dorchester in Dorchester County has 23 licensed acute care medical/surgical/gynecological/addictions (MSGA) beds, while UM Shore Medical Center at Chestertown in Kent County has 29 licensed acute care MSGA beds, and the UM Shore Medical Center at Easton in Talbot County has 87 licensed acute care MSGA beds. With its 17 licensed obstetric care beds, UM Shore Medical Center at Easton is the only hospital in the Mid-Shore with obstetric capacity, and UM Shore Medical Center at Dorchester is the only Mid-Shore hospital with licensed acute psychiatric care beds (24). There are total of nine acute care pediatric licensed beds in the Mid-Shore region: one in Kent
County at the UM Shore Medical Center at Chestertown and eight in Talbot County at the UM Shore Medical Center at Easton.

Queen Anne’s Emergency Center is one of three freestanding medical facilities in Maryland and has 14 treatment spaces. It has four ambulance bays, a helipad and a range of services, including diagnostic imaging and a full-service clinical testing laboratory. Caroline County is the only Mid-Shore county that does not have either an acute care hospital or a freestanding medical facility.

Kent County
UM Shore Medical Center at Chestertown
100 Brown St.
Chestertown, MD 21620

Dorchester County
UM Shore Medical Center at Dorchester
300 Byrn St.
Cambridge, MD 21613

Queen Anne’s County
Queen Anne’s Emergency Center
115 Shoreway Dr.
Queenstown, MD 21658

Talbot County
UM Shore Medical Center at Easton
219 South Washington St.
Easton, MD 21601

Ambulatory Surgery Centers

Ambulatory surgery centers (ASC) provide surgery, pain management and certain diagnostic procedures, which do not require overnight hospitalization. Three of the ASCs in the Mid-Shore region (in Dorchester, Kent, and Talbot counties) are affiliated with University of Maryland Shore Medical Centers. The Shore Health ASC in Dorchester County has four operating rooms and two procedure rooms and is equipped with the following practicing specialties: gastroenterology/colon/rectal, general surgery, OB/GYN/infertility, oral surgery, orthopedics, otolaryngology, plastic surgery, podiatry, urology and vascular surgery. The Shore Health ASC in Kent County has three operating rooms and one procedure room and is equipped with the following practicing specialties: dermatology, gastroenterology/colon/rectal, general surgery, OB/GYN/infertility, oral surgery, orthopedics, pain management, plastic surgery, podiatry and vascular surgery. The Shore Health ASC in Talbot County has one operating room and two procedure rooms, and is equipped with the following practicing specialties: general surgery, ophthalmology, otolaryngology, pain management, plastic surgery, podiatry, urology and neurosurgery.

In Queen Anne’s County, the UM Shore Regional Health System operates an ASC with one operating room and three procedure rooms, equipped with the following practicing specialties: gastroenterology/colon/rectal, general surgery, orthopedics, pain management, plastic surgery and urology.
A number of other ASCs in the Mid-Shore region (in Talbot and Queen Anne’s counties) provide specialized services such as endoscopy, ophthalmology and pain management. Caroline County has no ASCs.

**Queen Anne’s County**  
Bay Surgery Centers - Kent Island  
120 Sallitt Drive, Suite D  
Stevensville, MD 21666

Kent Island Surgery Center, LLC  
1630 Main Street, 215A  
Chester, MD 21619

UM Shore Surgery Ctr. at Queenstown  
125 Shoreway Drive, Third Floor  
Queenstown, MD 21658

**Talbot County**  
Eastern Shore Endoscopy, LLC  
511 Idlewild Avenue  
Easton, MD 21601

Midshore Surgical Eye Center  
8420 Ocean Gateway  
Easton, MD 21601

The Surgery Center of Easton  
510 Idlewild Avenue, Suite 110  
Easton, MD 21601

UM Shore Medical Center at Easton  
219 South Washington Street  
Easton, MD 21601

**Kent County**  
UM Medical System Shore Surgery Ctr at Easton  
6 Caulk Lane  
Easton, MD 21601

**Dorchester County**  
UM Shore Medical Center at Dorchester  
300 Byrn Street  
Cambridge, MD 21613
EXISTING SKILLED NURSING, ASSISTED LIVING, ADULT DAY CARE, HOME HEALTH, HOSPICE AND DISABILITY/AGING SERVICES

Skilled Nursing Facilities/Nursing Homes

Nursing homes, commonly known as skilled nursing facilities, are licensed health care residences for people who require a higher level of medical care than that provided in assisted living facilities. Skilled nursing staff members are registered nurses (RNs), licensed practical nurses (LPNs), and certified nurses’ aides (CNAs) who provide 24-hour medical care to patients with Alzheimer’s/ dementia as well as patients who need tracheostomy care, rehab, respite care, or dialysis. There are 10 nursing homes in the Mid-Shore region: Kent (3); Talbot (2); Caroline (2); Dorchester (2); Queen Anne’s (1). The number of licensed beds in each facility ranges from 38 to 170.

Caroline County
Caroline Nursing and Rehabilitation Center
520 Kerr Avenue
Denton, MD 21629

Envoy of Denton
420 Colonial Drive
Denton, MD 21629

Dorchester County
Genesis Chesapeake Woods Center
525 Glenburn Avenue
Cambridge, MD 21613

Signature Healthcare at Mallard Bay

Kent County
Autumn Lake Healthcare at Chestertown
415 Morgnec Road
Chestertown, MD 21620

Heron Point of Chestertown
501 East Campus Avenue
Chestertown, MD 21620

UM - Shore Nursing and Rehabilitation Center
200 Morgnec Road
Chestertown, MD 21620

Queen Anne’s County
Genesis Corsica Hills Center
205 Armstrong Ave. PO Box 50
Centreville, MD 21617

Talbot County
Bayleigh Chase, Inc.
501 Dutchmans Lane
Easton, MD 21601

Genesis The Pines Center
610 Dutchmans Lane
Easton, MD 21601

Assisted Living Facilities

Assisted living facilities are residential facilities that provide assistance with activities of daily living such as bathing, dressing, grooming, medications, housekeeping, transportation and meal preparation. These facilities provide services to individuals who want to maintain some level of independence, but require more support and assistance than can be provided in their homes. There are a total of 16 assisted living facilities in the Mid-Shore region that are licensed for 10 or more beds: Caroline, Dorchester counties (2); Kent, Queen Anne’s, Talbot (4). They range in capacity from 10 beds to 88 beds.

Caroline County
Gables at Caroline
701 South Fifth St
Denton, MD 21629

Wesleyan Home Care, Inc. - Homestead Manor
410 Colonial Drive
Denton, MD 21629

Dorchester County
Special Home
210 Henry Street
Cambridge, MD 21613
Stepping Stone at Manokin Assisted Living Program
5262 Woods Road, PO Box 800
Cambridge, MD 21613

Kent County
D's Place
25000 Lambs Meadow Road
Worton, MD 21678

Heron Point of Chestertown
(Acts Retirement-Life Communities)
501 East Campus Ave.
Chestertown, MD 21620

My Abode LLC
25551 Still Pond Neck Road
Worton, MD 21678

Our Home in the Country 2, LLC
25667 West Hill Rd
Worton, MD 21678

Queen Anne’s County
Arcadia Assisted Living LLC
402 Castle Marina Drive
Chester, MD 21619

Safe Haven Manor (The Heartland House’s sister facility)
104 Charles Street
Sudlersville, MD 21668

The Heartland House, Inc.
113 Perry’s Corner Road
Grasonville, MD 21638

Whitewood Assisted Living
112 Collier Road
Grasonville, MD 21638

Candle Light Cove – Peachblossom
106 West Earle Avenue
Easton, MD 21601

Heartfields Retirement Community at Easton (Five Star Senior Living)
700 Port Street
Easton, MD 21601

The Dixon House
108 N. Higgins St
Easton, MD 21601

Adult Day Care Facilities

Adult day care facilities are non-residential facilities that provide care and companionship to those who need assistance or supervision during the day. The services and activities promote socialization and allow home caregivers some relief. In the Mid-Shore region, there are a total of four adult day care facilities located in Caroline, Kent, and Dorchester counties. Talbot and Queen Anne’s counties do not have adult day care facilities. The facilities range in capacity with services for 28 to 100 participants. The range of services includes laboratory services, medication administration, physical therapy, speech therapy and transport services.

Caroline County
Caroline County Medical Adult Day Care Program
403 South 7th Street
Denton, MD 21629

Dorchester County
Delmarva Daybreak – Hurlock
6210 Shiloh Church Road
Hurlock, MD 21643

Pleasant Day Medical Adult Day Care

2474 Cambridge Beltway
Cambridge, MD 21613

Kent County
Kent County Medical Adult Day Care Center
125 South Lynchburg St
Chestertown, MD 21620
Home Health Services

Home health services refer to a range of supportive care provided in the home by licensed health care professionals or by professional caregivers. Adults, seniors and pediatric clients recovering from a hospital stay or who need additional support to remain safely at home benefit from home care that can include short-term nursing care, rehabilitative care, therapeutic care and assistance with activities of daily living. There are a variety of home health service providers in all five counties of the Mid-Shore region, and although many of the facilities listed below are headquartered out of the Mid-Shore region, they still serve Mid-Shore residents.

Caroline County
HomeCall – Easton
29509 Canvasback Drive, Suite 204
Easton, MD 21601

UM Shore Home Care
121 Federal Street Suite 3
Easton, MD 21601

Home Instead Senior Care
8628 Brooks Dr. Unit 202
Easton, MD 21601

Johns Hopkins Home Health Services
5901 Holabird Ave. Suite A
Baltimore, MD 21224

Johns Hopkins Pediatrics at Home
5901 Holabird Ave. Suite A
Baltimore, MD 21224

MedStar Health VNA – Baltimore
9601 Pulaski Park Drive Suite 417
Baltimore, MD 21220

MedStar Health VNA – Calverton
4061 Power Mill Road Suite 500
Calverton, MD 20705

Stella Maris Inc.
2300 Dulaney Valley Road
Timonium, MD 21093

HomeCall – Talbot
101 Marlboro Ave Suite 47
Easton, MD 21601

Dorchester County
Amedisys Home Health
204 Cedar Street Suite 101
Cambridge, MD 21613

HomeCall – Talbot
101 Marlboro Ave Suite 47
Easton, MD 21601

Johns Hopkins Home Health Services
5901 Hollard Ave. Suite A
Baltimore, MD 21224

Johns Hopkins Pediatrics at Home
5901 Holabird Ave. Suite A
Baltimore, MD 21224

MedStar Health VNA – Baltimore
9601 Pulaski Park Drive Suite 417
Baltimore, MD 21220

MedStar Health VNA – Calverton
4061 Power Mill Road Suite 500
Calverton, MD 20705

500
Calverton, MD 20705

UM Shore Home Care
121 Federal Street Suite 3
Easton, MD 21601

Stella Maris Inc.
2300 Dulaney Valley Road
Timonium, MD 21093

Home Instead Senior Care
8628 Brooks Dr. Unit 202
Easton, MD 21601

Kent County
UM Chester River Home Care & Hospice
6602 Church Hill Road, Suite 300
Chestertown, MD 21620

Johns Hopkins Home Health Services
5901 Holabird Ave. Suite A
Baltimore, MD 21224

Johns Hopkins Pediatrics at Home
5901 Holabird Ave. Suite A
Baltimore, MD 21224

MedStar Health VNA – Baltimore
9601 Pulaski Park Drive Suite 417
Baltimore, MD 21220

MedStar Health VNA – Calverton
4061 Power Mill Road Suite 500
Calverton, MD 20705

MedStar Health VNA – Baltimore
9601 Pulaski Park Drive Suite 417
Baltimore, MD 21220
Hospice Services

Hospice care is guided by a philosophy of care that is focused on providing comfort and the greatest quality of life for those who are in the final stages of a serious illness. Hospice programs can be provided in the home, in a hospice center, nursing home, long-term care facility or hospital. A combination of medical, emotional and spiritual care is provided to both the patient and his/her family. In the Mid-Shore region, six agencies provide hospice services across all five counties. Talbot, Caroline, and Kent each have two hospice service agencies; Dorchester and Queen Anne’s have one hospice service agency each.

Caroline County
Caroline Hospice Foundation, Inc.
613 S. 5th Avenue, PO Box 362
Denton, MD 21629
Compass Regional Hospice
255 Comet Drive
Centreville, MD 21617

Dorchester County
Coastal Hospice, Inc.
2604 Old Ocean City Road
Salisbury, MD 21804

Kent County
UM Chester River Home Care & Hospice
6602 Church Hill Road, Suite 300
Chestertown, MD 21620

Queen Anne’s County
Compass Regional Hospice
255 Comet Drive
Centreville, MD 21617

Talbot County
UM Shore Home Care Home Health and Hospice
121 Federal Street Suite 3
Easton, MD 21601

Disability/Aging Services

In the Mid-Shore region, a plethora of service providers provide care to individuals of all ages with disabilities. Disability services can be provided at home or at a facility in a group setting. Services include day habilitation, supported employment, individual and family support services, respite care and behavioral support services. Certain service providers focus on those with specific disabilities, while others focus on age-specific groups.

Caroline County
Caroline County Coordination of Community Services Program
Arc of the Central Chesapeake
Bay Shore Services
Benedictine Adult Services
Caroline Center
Chesapeake Center
Chesapeake Developmental Unit
Chesapeake Group Homes
Eastern Shore Resource Coordination Partnership
Crossroads Community Deaf Independent Living Association
Delmarva Community Services
Dove Pointe, Inc.
Maxim Health Care National Multiple Sclerosis Society
REM - Maryland Shura
Shorehaven, Inc
Somerset Community Services
United Needs and Abilities, Inc
Caroline County Adult Evaluation & Review Services (AERS)
Caroline County Community Personal Assistance Services (CPAS)
Deer’s Head Hospital Center Nursing Home

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DORS - Division of Rehabilitation Services (Maryland State Dept of Education)

Dorchester County
Arc of the Central Chesapeake
Bay Shore Services
Benedictine Adult Services
Caroline Center
Changing People's Lives
Chesapeake Center
Chesapeake Developmental Unit
Chesapeake Group Homes
Eastern Shore Resource Coordination Partnership
Crossroads Community
Delmarva Community Services
Dorchester County Department of Health
Dove Pointe, Inc.
Easter Seals Camp Fairlee
Lower Shore Enterprises
Maxim Health Care
National Multiple Sclerosis Society
REM - Maryland
Shura
Shorehaven, Inc
Somerset Community Services
United Needs and Abilities, Inc
Kent Center, Inc
Maxim Health Care
National Multiple Sclerosis Society
REM - Maryland
Shura
Shorehaven, Inc
Somerset Community Services
United Needs and Abilities, Inc

Kent County
Arc of Northern Chesapeake Region

Bay Shore Services
Benedictine Adult Services
Caroline Center
Eastern Shore Resource Coordination Partnership
Crossroads Community
Deaf Independent Living Association
Delmarva Community Services
Easter Seals Camp Fairlee
Kent Center, Inc
Maxim Health Care
National Multiple Sclerosis Society
REM - Maryland
Shura
Shorehaven, Inc
Somerset Community Services
United Needs and Abilities, Inc

Talbot County
Arc of the Central Chesapeake
Bay Shore Services
Benedictine Adult Services
Caroline Center
Changing People's Lives
Chesapeake Center
Chesapeake Developmental Unit
Chesapeake Group Homes
Eastern Shore Resource Coordination Partnership
Crossroads Community
Delmarva Community Services
Easter Seals Camp Fairlee
Easter Seals Camp Fairlee
Maxim Health Care
National Multiple Sclerosis Society
REM - Maryland
Shura
Shorehaven, Inc
United Needs and Abilities, Inc
disAbility Coalition Partners

Queen Anne’s County
Arc of the Central Chesapeake
Bay Shore Services
Benedictine Adult Services
Caroline Center
Chesapeake Group Homes
Chesterwye Center
Eastern Shore Resource Coordination Partnership
Crossroads Community
Deaf Independent Living Association
Easter Seals Camp Fairlee

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EXISTING PUBLIC HEALTH SERVICES

County Health Departments

Each county operates a health department within its jurisdiction. The services provided at each county health department (CHD) vary slightly, but they generally protect residents from the spread of disease, prevent illness, and improve the health of families and communities by promoting healthy lifestyles. The table below outlines services provided by each CHD. If the CHD does not provide a service, it does not mean that service is not offered in that county as the service may be contracted out, provided by a different entity, or not listed on the CHD website. Public health dental services are inconsistently provided by CHDs.

Some of the variation in services may be explained by the population each CHD serves. For example, Caroline and Dorchester counties have the highest prevalence of diabetes; they are the only two counties that offer diabetes prevention programs. Caroline and Kent counties have the highest percentage of adults 65 and older; they are the only two counties that offer adult day care. As each county experiences an increase in this age group, more adult day care may be needed. Furthermore, Queen Anne’s County developed the Mobile Integrated Community Health (MICH) program to address limited access to medical care and the high volume of preventable 911 calls for transport services. The MICH program is a partnership through various county agencies, private corporations and county commissioners. Substantial utilizers of the emergency medical services (EMS) system and those with a high number of ED visits are identified, and a field team conducts home visits with each participant to ensure home safety and provide care management services. A primary care provider is selected for each participant, and referrals are made to community resources to better address some of their needs. This program has reduced transports to the ED through 911 calls by 35% (136 emergency room admissions) among this population.
## Exhibit 19: Local Health Department Services in the Mid-Shore Region

<table>
<thead>
<tr>
<th>Population</th>
<th>Program</th>
<th>Caroline</th>
<th>Dorchester</th>
<th>Kent</th>
<th>Queen Anne's</th>
<th>Talbot</th>
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* - Contracted services
Local Health Departments
Caroline County
P.O. Box 10, 403 South 7th Street
Denton, MD 21629
410-479-8030

Kent County
125 South Lynchburg Street, Box 359
Chestertown, MD 21620
410-778-1350

Talbot County
100 South Hanson Street
Easton, MD 21601
410-819-5600

Dorchester County
3 Cedar Street
Cambridge, MD 21613
410-228-3223

Queen Anne’s County
206 North Commerce Street
Centreville, MD 21617
410-758-0720

Federally Qualified Health Centers and Other Primary Care Providers
Due to the scare nature of health services in the five-county rural region of this study, Federally Qualified Health Centers (FQHCs) are important safety net providers. The FQHCs improve access to care for residents regardless of their insurance status or ability to pay. Historically, FQHC patients are minorities, disproportionately low income, and uninsured or publicly insured. For 35 years, Choptank Community Health System has provided residents of Caroline, Dorchester and Talbot counties with affordable access to high-quality primary care medical, dental and behavioral health services. Six medical centers offer primary care, prenatal and pediatric services; one offers gynecological services only; and four comprehensive family dental sites offer dental services. Kent and Queen Anne’s counties have no comprehensive public health dental clinic. Those residents may be eligible for services at facilities in Caroline or Cecil counties. Choptank Community Health System also provides medical services to three seasonal migrant camps and provides assistance to the Caroline, Dorchester and Talbot County school systems to establish school-based health clinics.

Choptank Community Health System Locations
Caroline County
Denton Medical Center
609 Daffin Lane, P.O. 660
Denton, MD 21629
410-479-2650

Federalsburg Medical & Dental Center
215 Bloomingdale Ave.
Federalsburg, MD 21632
410-754-9021

Goldsboro Medical & Dental Center
215 Oldtown Road, PO Box 122
Goldsboro, MD 21636
410-634-2380

Dorchester County
Fassett Magee Health Center
503 A Muir Street
Cambridge, MD 21613
410-228-4045

Community Women’s Health System
2 Aurora Street
Cambridge, MD 21613
410-228-4023
(Gynecological services only)

Talbot County
Bay Hundred Health & Dental Center
1013 South Talbot Street
St. Michael’s MD 21663
410-745-0200

Cambridge Dental Center
503 A Muir Street
Cambridge, MD – 21613
410-228-9381
Migrant Health Services Locations

Caroline, Dorchester, Kent, Queen Anne and Talbot Counties
1-888-731-7004

Caroline County
Migrant Workers Program
301 Randolph St
Denton, MD 21629
410-754-6061

Kent County
Angelica Nursery Migrant Camp
11365 Locust Grove Rd
Kennedyville, MD - 21645
410-479-4306

Queen Anne’s County
Sew Friels Migrant Camp
Grange Hall Rd
Queenstown, MD 21658
410-479-4306

Another FQHC that serves residents of the Mid-Shore counties is Chase Brexton Health Care, which was founded in Baltimore City’s Mt. Vernon neighborhood in 1978. It began as a volunteer-run gay men’s health clinic and was one of the first clinics on the front lines of the HIV/AIDS epidemic. Chase Brexton became an FQHC in 1999 and opened its Easton location shortly thereafter. Located in Talbot County, it provides adult primary care services, HIV/infectious disease care, free HIV testing, case management and other services.

Chase Brexton Health Care Easton Location
8221 Teal Dr.
Suite 202Denton
Easton, MD 21601
866-260-0412

Other providers of primary care in the Mid-Shore region are affiliated with larger hospital systems, specifically the UM Shore Regional Health and Anne Arundel Medical Group. These providers of primary care services accept a variety of insurances including Medicare and Medicaid. They provide a range of services including disease prevention and screening, health maintenance and counseling, patient education, and diagnosis and treatment of acute and chronic illnesses.

University of Maryland Community Medical Group Locations

Queen Anne’s County
2540 Centreville Road
Centreville, MD 21617
410-758-4432

Kent County
126 Philosophers Terrace
Chestertown, MD 21620
410-778-1878

Caroline County
836 S. 5th Avenue
Denton, MD 21629
410-479-5900

Talbot County
500 Cadmus Lane
Suite 211
Easton, MD 21601
410-820-4880

32
Anne Arundel Medical Group Primary Care Locations

Queen Anne’s County
202 Coursevall Drive
Suite 101
Centreville, MD 21617
410-758-3303

1630 Main Street
Chester, MD 21619
410-643-4524

Queen Anne’s County

Talbot County
8579 Commerce Drive
Suite 106
Easton, MD 21601
410-819-0404

1630 Main Street
Chester, MD 21619
410-643-4524

555 Cynwood Drive
Easton, MD 21601
410-820-7270

1630 Main Street
Chester, MD 21619
410-643-4524

Talbot County
8579 Commerce Drive
Suite 106
Easton, MD 21601
410-819-0404

1630 Main Street
Chester, MD 21619
410-643-4524

555 Cynwood Drive
Easton, MD 21601
410-820-7270

Talbot County
8579 Commerce Drive
Suite 106
Easton, MD 21601
410-819-0404

555 Cynwood Drive
Easton, MD 21601
410-820-7270

Urgent Care and Population-Specific Services

Urgent care facilities offer extended access to care for minor illnesses and injuries that do not require inpatient hospital care. In the Mid-Shore region, UM Shore Regional Health operates two urgent care centers in partnership with ChoiceOne, one located in Caroline and one in Kent County. These facilities are open 8 a.m. to 8 p.m. except on holidays. Occupational health, X-ray, lab services, on-site medications, walk-in care and referrals to UM Shore Health primary and specialty care are provided to residents of all ages. In Queen Anne’s County, a CVS Minute Clinic provides seven-day access to treatment for minor illnesses, injuries, skin conditions, screenings, vaccinations, physicals and other services. Your Doc’s In has urgent care facilities in Talbot County and Dorchester County, providing similar services seven days a week. Kent and Dorchester counties are the only Mid-Shore counties that each have two urgent care facilities. In Kent County, in addition to the ChoiceOne facility, Anne Arundel Medical Group provides urgent care at Kent Island Urgent Care, which is open seven days a week and has limited X-ray access. The Cambridge Urgent Care and Wellness Center in Dorchester County is open Tuesdays and Thursdays only, while a primary care physician is available on Mondays and Wednesdays.

Population-specific services often provide important access to care for special populations. In the Mid-Shore region, Cambridge Outpatient Clinic in Dorchester County is the only Veterans Affairs (VA) health care facility. Open Mondays through Fridays except holidays, it provides comprehensive services exclusively to veterans, including primary care, social services, counseling/mental health care, women’s health, vision and hearing. The only Planned Parenthood facility in the Mid-Shore region is in Talbot County. Planned Parenthood–Easton Health Center provides care from English and Spanish-speaking providers on a sliding scale to uninsured, underinsured, Medicaid and private insurance patients in the region. Specifically, it provides family planning, pregnancy and sexually transmitted disease care to women and men as well as HIV/AIDS counseling, testing and other medical services.

Caroline County
ChoiceOne Urgent Care
(partner with UM Shore Regional Health)
8 Denton Plaza
Denton, MD 21629

Kent County
ChoiceOne Urgent Care
(partner with UM Shore Regional Health)
28622-C Marlboro Avenue
Easton, MD 21601

Kent Island Urgent Care
(partner with Anne Arundel Medical Group)
1630 Main Street, Suite 101
Chester, MD 21619
Public Health Dental Services

The scarcity of oral health resources is common in rural settings\(^1\). In the Mid-Shore region, public dental services are provided through three dental centers affiliated with Choptank Community Health System—two in Caroline and one in Dorchester. These dental centers provide comprehensive dental services for families and meet the acute dental needs of adults on a first-come, first-served basis. In addition, school-based dental programs are available at participating public schools in Caroline, Dorchester and Talbot counties. Kent and Queen Anne’s counties do not have public health dental clinics; residents in those counties may be eligible for dental services in Caroline or services provided by the University of Maryland School of Dentistry in Perryville, Maryland, enlisting community dentists to provide comprehensive dental services and senior care for those who meet poverty guidelines.

School-Based Health Services and Centers

School health services are vital tools for schools to meet their educational missions through evidence-based contributions to academic success. Evidence suggests that healthy students are better learners, and those with academic success tend to become healthier adults. Through local partnerships, school health services are provided in all Maryland public schools. School nurses provide acute care for injuries and illnesses, provide care for chronic health conditions under the supervision of a physician, conduct screening for health problems and maintain up-to-date health and immunization records. School nurses do not diagnose or treat illness; they refer children for appropriate medical care.

School-based health centers (SBHC) expand upon that model to provide onsite comprehensive preventive and primary health services on school property directly to students. Services may also include mental health, oral health, ancillary and supportive services. Of the 80 SBHCs in Maryland, 17 are located in Caroline, Dorchester and Talbot counties. In Kent and Queen Anne’s counties, staffing for health services in public schools is provided through the county’s local health department.

**Caroline County**
Services: Somatic health services are provided by Choptank Community Health Systems. Mental health services are provided by the Caroline County Health Department. Oral health services are provided at all public schools in Caroline County including Head Start and Judy Centers by Choptank Community Health Systems.

Colonel Richardson High School
25390 Richardson Road
Federalsburg, MD 21632

Colonel Richardson Middle School
25320 Richardson Road
Federalsburg, MD 21632

Denton Elementary School
303 Sharpe Road
Denton, MD 21629

Greensboro Elementary School
625 North Main Street
Greensboro, MD 21639

Lockerman Middle School
410 Lockerman Street
Denton, MD 21629

North Caroline High School
10990 River Road
Ridgely, MD 21660

Preston Elementary School
225 Main Street
Preston, MD 21655

Ridgely Elementary School
118 North Central Avenue
Ridgely, MD 21660

**Dorchester County**
Services: Somatic health and mental health services are provided by the Dorchester County Health Department. Oral health services are provided by the Choptank Community Health System.

Cambridge South Dorchester High School
2475 Cambridge Beltway
Cambridge, MD 21613
Maces Lane Middle School
1101 Maces Lane
Cambridge, MD 21613

North Dorchester Middle School
5745 Cloverdale Road
Hurlock, MD 21643

North Dorchester High School
5875 Cloverdale Road
Hurlock, MD 21643

Easton Elementary School (also providing services to Dobson Elementary School)
307 Glenwood Avenue
Easton, MD 21601

Easton Middle School
201 Peachblossom Road
Easton, MD 21601

Easton High School
723 Mecklenberg Avenue
Easton, MD 21601

St. Michaels Schools Wellness Center
100 Seymour Avenue
St. Michaels, MD 21663

Talbot County
Services: Somatic health and oral health services are provided by Choptank Community Health System. Mental health services are provided by Talbot County Public Schools.

Early Child Care and Education Enhancement Centers (Judy Centers)

Maryland state law developed the Judith P. Hoyer Early Child Care and Education Enhancement Program in 2000 to foster children’s readiness for kindergarten. The program is for at-risk children from birth through age five and their families. The Judy Centers are affiliated with an elementary school, provide year-round services and track participant progress toward “school readiness” using Maryland’s Early Childhood Comprehensive Assessment System. Every county across Maryland participates. Of the five-county Mid-Shore region, Dorchester has the lowest rate of participant “school readiness” at 37% and Kent County has the highest rate at 63%.

Mental Health and Substance Abuse Services

Services provided for individuals with mental health and/or substance abuse concerns range from acute inpatient psychiatric treatment, to individual or group outpatient therapy, to peer support services to medication-assisted opioid treatment, to crisis hotlines, to educational and advocacy programs. A wide range of services exist in the Mid-Shore region, though their capacity is difficult to ascertain due to the stigma around seeking treatment. The only inpatient psychiatric treatment facilities in the region are located in Dorchester County.
Caroline County
Caroline Counseling Center
Alcoholics Anonymous Midshore Intergroup
Office
Narcotic Anonymous Bay Area Help Line
Mid-Shore Council for Family Violence
Alanon/Alateen Meeting Information
Maryland Youth Crisis Hotline
Co-dependents Anonymous
Chemical Dependence Anonymous
Caroline County Mental Health Clinic - Nuttle
Building
Caroline County Mental Health Clinic -
Federalsburg
For All Seasons, Inc. Behavioral Health and Rape
Crisis Center
Channel Marker, Inc.
Drug-Free Caroline Coalition
Sante Eastern Shore Mobile Crisis Team Hotline
Maryland Coalition of Families
Mid-Shore Mental Health Systems, Inc.
Caroline County Addictions Program
Crossroads Community, Inc. - Queen Anne's /
Caroline
The Ross Center
Latino Counseling Services
South County Addiction Services

Corsica River Mental Health Services -
Cambridge
Adventist Healthcare Behavioral Health &
Wellness Services
Mid-Shore Mental Health Systems, Inc.
Chesapeake Voyagers
Marshy Hope Family Services, LLC
Drug & Alcohol Recovery Training (D.A.R.T.)
Crossroads Community, Inc. - Dorchester /
Talbot
Eastern Shore Hospital Center (ESHC)
J. David Collins & Associates

Kent County
Alcoholics Anonymous Midshore Intergroup
Office
Kent County Behavioral Health / A.F. Whitsitt
Center
Chester River Behavioral Health, LLC
For All Seasons, Inc. Behavioral Health and Rape
Crisis Center
Sante Eastern Shore Mobile Crisis Team Hotline
Maryland Coalition of Families
Mid-Shore Mental Health Systems, Inc.
Recovery in Motion
Chesapeake Voyagers
Crossroads Community, Inc. – Kent

Dorchester County
Alcoholics Anonymous Midshore Intergroup
Office
Dorchester County Addictions Program
Dri-Dock Recovery & Wellness Center
Community Behavioral Health - Cambridge
Warwick Manor Behavioral Health, Inc.
For All Seasons, Inc. Behavioral Health and Rape
Crisis Center
Channel Marker, Inc.
Sante Eastern Shore Mobile Crisis Team Hotline
Maryland Coalition of Families
Shore Behavioral Health Outpatient Services
(Dorchester General Hospital; Shore Behavioral
Health providers)

Queen Anne’s County
Alcoholics Anonymous Midshore Intergroup
Office
Queen Anne's County Addictions Program
Community Behavioral Health - Centreville
For All Seasons, Inc. Behavioral Health and Rape
Crisis Center
Sante Eastern Shore Mobile Crisis Team Hotline
Maryland Coalition of Families
Corsica River Mental Health Services -
Centreville
Mid-Shore Mental Health Systems, Inc.
Bridges Behavioral Health and Wellness
Crossroads Community, Inc. - Queen Anne's /
Caroline
SPJ Consultants, Inc.
An analysis of the five-county EMS data from 2014-2016 showed that women are about 6% more likely to utilize EMS than men, and the odds of a person needing EMS services increases with age. The average age of the EMS patient population was 57 years. Talbot EMS responded to more calls for service for an older population—46% of their responses were for those 65 and older. Talbot also had the least amount of responses for those younger than 19 at 5% of the volume while 10% of Caroline County’s responses were for those under 19. Dorchester County EMS reported the most incidents and served the most patients (23% of the 2014-2016 total), followed by Talbot (23%), Queen Anne’s (21%), Caroline (21%), and Kent (11%) counties. The top 10 reasons for requesting EMS are: pain, traumatic injury, chest pain/discomfort, abdominal pain, respiratory distress, weakness, altered level of consciousness, seizure general malaise and fainting. This does not change much when examining primary symptoms across age categories.

Talbot County EMS transported 74% of their patients, followed by Dorchester/Kent (72%), Caroline (70%) and Queen Anne’s (68%). Patients were transported to a total of 35 locations, but the top 10 locations accounted for 99% of all transports. About 84% of all transports went to UM Shore Regional Health facilities, 10% went outside the five-county region but within the state and 6% went out of state. Anne Arundel Medical Center, Nanticoke Memorial Hospital, Kent General Hospital in Delaware, Peninsula Regional Medical Center, R. Adams Cowley Shock Trauma Center and Union Hospital of Cecil County round out the top 10 facilities for transport. The remaining 25 transport locations account for less than 1% of all transports. The results do not change drastically, when limiting the transportation calls to incidents that occurred within the five-county region. When residents of the five-county region were transported, they were often taken to a hospital in their county or one within the five-county region. Residents of Caroline County are, however, much more likely to be transported out of state; 20% of Caroline County patients were transported out of state, while the other county residents averaged 2%.
Additionally, non-emergent medical transportation services play an important role in enabling access to health care services in rural communities. Delmarva Community Transit provides Americans with Disabilities Act (ADA)-compliant transportation to residents of all five Mid-Shore counties. The Medical Assistance Transportation Program in Caroline and Kent counties provides transportation to medically necessary appointments to residents of those counties who have an eligible medical assistance card. Transportation is limited to certain hours Mondays through Fridays and must be scheduled 48 hours in advance of the appointment. In Dorchester, the Dorchester County Commission on the Aging, Inc. Pleasant Day Medical Adult Day Care Center provides transportation to and from medical adult day care programs, shopping, doctors’ appointments, rehabilitation facilities, banking, social services, special activities and other appointments throughout the county.

EXISTING PROGRAMS TO LEVERAGE

Queen Anne’s County’s Mobile Integrated Community Health: a referral-based system to reduce the number of 911 calls and ensure that participants have primary care providers and are connected with community resources. The field team is made up of a nurse from the health department, a county paramedic and a behavioral health professional. The team makes home visits to conduct physical examinations, assess home safety, modify safety hazards, discuss health status, conduct a prescription inventory, educate patients and refer to appropriate health and community services.

The Garrett Regional Medical Center’s peer navigation Well Patient Program: a paramedicine program that utilizes nurses, home health and social workers to help patients manage their chronic diseases. Services are taken to the patient—for example, a patient can receive a home visit for wound care management to prevent the risk of infection and eliminate transport to and from a wound care center. Referral to the program is made by the hospital discharge planning group.

In lieu of a state mandated/regulated certification process, the Eastern Shore Area Health Education Center (ES&AHEC), Maryland AHEC Program, AHEC West and Baltimore AHEC, offer a comprehensive 160-hour curriculum designed to equip community health workers (CHW) with the practical skills, knowledge and tools to access health information; conduct health education and promotion; assist with disease prevention and chronic disease management; make referrals; coordinate services; and navigate the health care system for their clients and communities in a culturally responsive manner. The statewide CHW Training Program is based on the recommendations of the Maryland Workgroup for Workforce Development of Community Health Workers as well as the competencies identified in the national C3 Project.

Maryland’s response to the opioid epidemic is an item to continuously monitor because opportunities for new partnership could emerge; state dollars could be allocated for targeted interventions; and the Mid-Shore health system workforce needs to stay abreast of new street-level drugs on the market so they are ready to respond quickly and effectively. https://health.maryland.gov/newsroom/Pages/2016-Maryland-overdose-death-data-report-released-.aspx
Shore Wellness Partners: This innovative, community-based, chronic disease management program targets patients at high risk for hospital readmission. Through referrals by hospital care coordinators, physicians, nurses, community agencies, family members and others, an advance practice nurse or medical social worker conducts an in-home assessment and initiates an individualized plan of care. The program also provides medication management, education on chronic disease self-management and coordination of community resources and provider appointments to meet clients’ needs.

The Maryland Cooperative Extension Service: This partnership is among the U.S. Department of Agriculture, land-grant universities and local governments in each state. The University of Maryland Extension (UME) provides a wide range of educational programs and problem-solving assistance throughout all five counties related to agricultural production, natural resources, food safety, nutrition and healthy lifestyles, youth development, volunteer development and agricultural nutrient management. UME programs aim to strengthen the social, economic and environmental well-being of families and communities.

The Health Enterprise Zone (HEZ): In Dorchester and Caroline, the HEZs are part of a four-year pilot program jointly administered by the Community Health Resources Commission and Maryland Department of Health and Mental Hygiene. Coordinated by the Dorchester County Health Department, this HEZ focused on seven zip codes to strengthen primary care and community health workforce, improve outcomes related to chronic illness and addiction, reduce avoidable ED visits and hospitalizations, and reduce health care costs related to preventable diseases. Preliminary data have shown an expansion of primary care workforce full-time employees, case management services, community health workers and mobile crisis team capacity. Outpatient behavioral health services for adolescents were also expanded through school-based wellness centers.