



# Community Health Needs Assessment

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Bon Secours Rappahannock  
General Hospital  
Bon Secours Richmond Health System



**Good Help to Those In Need®**

## Table of Contents

<u>Executive Summary</u> .....	4
<u>Facility and Service Area Description</u> .....	8
<u>Access to Health Care Profile</u> .....	9
I. Provider to Residents Ratios .....	9
II. Health Professional Shortage Area/Medically Underserved Area .....	10
<u>Demographics Data Profile</u> .....	11
I. Race and Ethnicity Demographics .....	12
II. Age Demographics and Projections.....	13
III. Income Demographics.....	16
IV. Education Demographics.....	18
V. Uninsured Population .....	20
VI. Violence and Crime .....	21
VII. Opportunity for Living a Healthy Lifestyle .....	22
VIII. Social Indicators of Health Related to Children.....	23
IX. Other Health Behaviors and Social Determinants of Health.....	24
<u>Health Conditions and Disease Data Profile</u> .....	25
I. Overall Mortality Data .....	26
II. Preventable Hospitalizations.....	29
III. Cancer.....	31
IV. Heart Disease and Stroke.....	35
V. Diabetes and Obesity .....	36
VI. Mental Health Disorders .....	37
VII. Oral Health .....	39
VIII. Maternal and Infant Health .....	40
IX. Environmental Health .....	41
<u>CHNA Key Findings</u> .....	42
<u>Community Insight Profile</u> .....	44
I. Results of the Community Survey and Town hall Meetings .....	44
II. Top 5 Health Priorities Identified by the Community.....	45
<u>Prioritization Process</u> .....	47
I. Methodology for Prioritization .....	47
II. Prioritization Results .....	48
III. Health Care Services and Resources Available to Meet Identified Needs .....	48
<u>Appendix</u> .....	49

### **Acknowledgement**

We are grateful for the significant contributions of Amina Shams, MPH in preparing and authoring this document, and of administrative resident Robert Tourek, MPH, MBA in assisting with the compilation of secondary data.

For further information or to obtain a hard copy of this Community Health Needs Assessment (CHNA), please contact:

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<http://www.bonsecours.com/about-us-community-health-needs-assessment.html>

### **2013 Community Health Needs Assessment**

A 2013 CHNA and corresponding Implementation Plan were prepared for Rappahannock General Hospital in 2013. Both documents were made available to the public and posted online. Solicitation for public comments appeared in the Rappahannock Record and the Southside Sentinel on January 7, 2016. No comments were received.



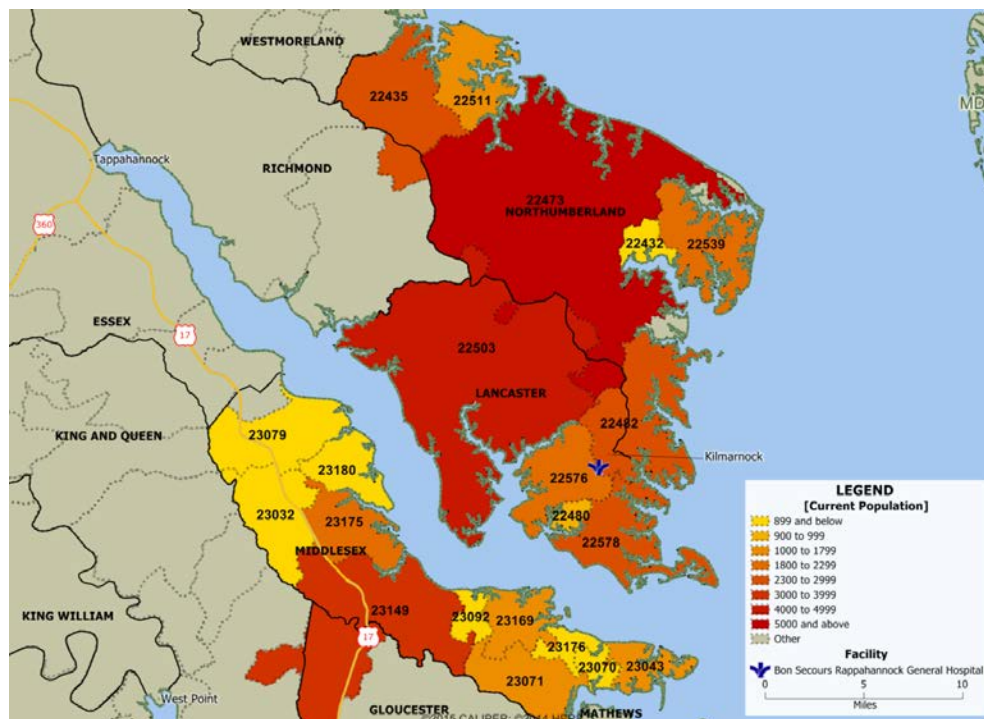
## Executive Summary

This Community Health Needs Assessment (CHNA) was prepared for Bon Secours Rappahannock General Hospital (RGH), an acute care facility licensed for 76 beds, located in Lancaster County, Virginia. A survey to gather information from the community was conducted between September 2015 and February 2016. This executive summary provides an overview of the initiative and the findings.

*The Mission of Bon Secours Health System is to bring compassion to health care and to be Good Help to Those in Need®, especially those who are poor and dying. As a system of caregivers, we commit ourselves to help bring people and communities to health and wholeness as part of the healing ministry of Jesus Christ and the Catholic Church.*

The service area is defined as the counties of Lancaster, Middlesex and Northumberland with an estimated population of 35,000 people.

### Rappahannock General Hospital Service Area & Population Density Map



The CHNA examines qualitative input provided by community members coupled with quantitative data on health conditions in the area. Together the information forms a snapshot of important areas of health concern.

In order to obtain input from the community, three initiatives were advanced. A Community Health Needs Assessment Advisory Board was convened, an online survey was conducted and two community conversations were held.

The purpose of the CHNA Advisory Board was to support the process by engaging community members and provide feedback on the findings. All members of the CHNA Advisory Board have special knowledge of public health and underserved populations in the service area.

The CHNA Advisory Board members are:

<b><u>Bon Secours Rappahannock General Hospital CHNA Advisory Board Members</u></b>		
<b>Member</b>	<b>Title</b>	<b>Organization</b>
<b>Charles R. Walsh, Jr., LCSW</b>	Executive Director	Middle Peninsula Northern Neck Community Services Board
<b>Mae P. Umphlett</b>	Mayor of Kilmarnock, VA	Chesapeake Medical Group Retired Practice Manager
<b>Lauren Hogge</b>	Kilmarnock/Lancaster Vol. Rescue Squad	Peninsulas EMS Council, Inc. Board of Directors
<b>Catherine Wilson</b>	Nurse	Lancaster High School
<b>Rosalyn Jean Nelson</b>	Executive Director	Northern Neck Free Health Clinic
<b>Kathy Vesley-Massey</b>	President and CEO	Bay Aging
<b>W. Ted Tweel, MD</b>	Director	Three Rivers Health Department

The online survey was taken by 215 individuals, 184 of those individuals completed the questionnaire. Individuals were asked to choose the top 5 health priorities they thought should be addressed in their community, and responded as follows:

CHNA Online Survey Results		
Number of Respondents	Category	Percentage
92	Jobs with fair wages	48.17%
71	Education	37.17%
49	Mental Health	25.65%
47	Adult Obesity	24.61%
47	Alcohol/Drug Abuse	24.61%
46	Senior Health	24.08%
42	Access to health services	21.99%
38	Transportation Services	19.90%
37	Childhood Obesity	19.37%
37	Diabetes	19.37%

Two community conversations were held in which 22 individuals participated. The purpose of the conversation was to elicit feedback from community members about publically available health data describing health conditions in the service area and to review the online survey results to further explore the findings. The two issues the attendees identified to be the greatest need for a healthy community were:

- Access to Care
- Health Education

Based on the quantitative data, compared to Virginia as a whole, the service area generally has:

- Less ethnic diversity
- Larger percentages of African Americans
- Larger percentages of older adults (> 65 years of age)
- Lower income
- Educational disparity
- Larger percentages of uninsured adults and children
- Lower ratios of primary care, dental care and mental health care providers
- Larger percentages of smokers
- Fewer opportunities for access to exercise
- Larger rates of teen births

The health issues and concerns identified in the study may be grouped into three major categories:



**CLINICAL CARE/  
ACCESS TO CARE**

**SOCIAL &  
ECONOMIC  
FACTORS**

**HEALTH  
BEHAVIORS**

The CHNA Advisory Board evaluated the qualitative and quantitative information using a strategy grid process. Health issues and concerns identified as “high need, high feasibility” were shared with RGH Administration. RGH Administration chose three needs to address: **health education, behavioral/mental health** and **uninsured access to care**. An Implementation Plan is being created by Bon Secours Rappahannock General Hospital leadership with input from community partners.



### Facility and Service Area Description

Rappahannock General Hospital was founded in 1977. The hospital is located in the eastern central section of Lancaster County. The Bon Secours Health System, a faith based, not-for-profit healthcare system acquired Rappahannock General Hospital in 2014.

For purposes of the CHNA, RGH defines the three counties of **Lancaster, Middlesex and Northumberland** as the community it serves as many secondary data sources are county specific and enable comparison to data for the state of Virginia and the United States.

Approximately 35,000 residents reside in Lancaster, Northumberland, and Middlesex Counties. For the purpose of this CHNA, the residents of these three counties will represent the primary service area for Rappahannock General Hospital. The population is relatively evenly distributed among the three counties. The actual population served by the hospital is closer to 40,000. Approximately 88% of RGH's patient population resides in one of these 3 counties.<sup>1</sup>



<sup>1</sup> Nielsen Demographics; 2015 population based on 2010 Census



## Access to Health Care Profile

This Access to Health Profile provides health service data (Provider to Residents Ratios, Medically Underserved Areas) gathered from multiple publicly available data sources. To summarize:

- Lancaster and Middlesex have lower numbers of Primary Care Providers and Dental Care providers per 1,000 residents than Virginia overall.
- Lancaster, Middlesex and Northumberland have lower numbers of Mental Health providers per 1,000 residents than Virginia overall.
- Lancaster, Middlesex and Northumberland had a Medically Underserved Area (MUA) designation for at least a subsection of the jurisdiction in 2014.

### **I. Provider to Residents Ratios**

Access to health care services is a key factor in the health of a community and has been identified as one of the three (3) Prioritized Health Needs of the RGH community. A major contributing factor in health care accessibility is the burden of care placed on a provider. The following table depicts the ratio of provider/residents in the three counties that make up the RGH primary service area. The ratios for the state of Virginia are also given for comparison. This data table highlights a disparity in provider to resident ratios between the three counties and across provider types.

<b>Ratio of Provider to Residents (2013)</b>				
	<b>Lancaster</b>	<b>Middlesex</b>	<b>Northumberland</b>	<b>Virginia</b>
<b>Primary Care</b>	1:1,605	1:2,706	1:686	1:1,344
<b>Dental Care</b>	1:11,148	1:2,152	1:938	1:1,611
<b>Mental Health</b>	1:1,013	1:3,587	1:12,200	1:724

In the state of Virginia there is 1 Primary Care Provider (PCP) for every 1,344 residents. Lancaster & Middlesex have lower numbers of PCPs per 1,000 residents. Northumberland's ratio reflects each PCP is expected to serve fewer than half the number of people at a ratio of 1 PCP per 686 residents in Northumberland County.

In the state of Virginia there is 1 Dental Care Provider for every 1,611 residents. In Lancaster County there is 1 Dental Care Provider per every 11,148 residents. Northumberland has one Dental Care provider serving nearly half the number of residents at a ratio of 1 per 938 residents in Northumberland County. Middlesex County is consistent with the overall Virginia rate.

The ratio of Mental Health Providers to residents in Lancaster, Middlesex and Northumberland is lower when compared to the ratio for the state of Virginia. Northumberland has one provider per 12,200 residents compared to Virginia at 1 provider per 724 residents.

## **II. Health Professional Shortage Area/Medically Underserved Area**

The U.S. Health Resources and Services Administration (HRSA) defines a HPSA designation as one that identifies a geographic area, population group or facility as having a shortage of primary care physicians.

As of 2014, seven localities in the broader Northern Neck region contained a primary care Health Professional Shortage Area (HPSA):

- Caroline County
- Essex County
- King and Queen County
- King George County
- Northumberland County
- Richmond County
- Westmoreland County

HRSA designates geographic areas or defined populations as ‘medically underserved’ based on the presence of particular health and socioeconomic risks in addition to provider shortages. The criteria for designation include too few primary care providers, high infant mortality, high poverty and/or high elderly population rates. As of 2014, all three counties in the RGH Primary Service Area (Lancaster, Northumberland, and Middlesex) had a Medically Underserved Area (MUA) designation for at least a subsection of the jurisdiction.<sup>2</sup>

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<sup>2</sup> <http://bhpr.hrsa.gov/shortage/index.html>

## Demographics Data Profile

The health of a community is largely connected to the demographics and social aspects of its residents, which can be a useful indicator of health concerns. Demographic studies of a population are based on factors such as age, race, sex, economic status, education levels, and employment rates, among others. The physical environment in which individuals live, learn, work, play, and grow old also has a great impact on their health and quality of life. These cultural and environmental conditions are also known as ‘Social Determinants of Health’.

A detailed summary of the demographics data for the RGH community is found in this section of the CHNA. Some key findings in the RGH community’s demographics data include:

- The RGH community is predominantly White (73%), with a large African American population (24%). Compared to Virginia as a whole, RGH has a larger percentage of African Americans but has less ethnic diversity, due to a lower percentage of Hispanics, Asians, and Native Americans.
- The RGH community is comprised of approximately 20% more older adults (65+) than Virginia and the nation, and a comparatively lower percentage of children (age <18).
- Unemployment rates in the RGH community are higher than those in Virginia overall, but are aligned with the nation’s unemployment rates.<sup>3</sup>
- RGH service area has a lower median income than Virginia overall.
- RGH serves a higher percentage of uninsured adults and children.

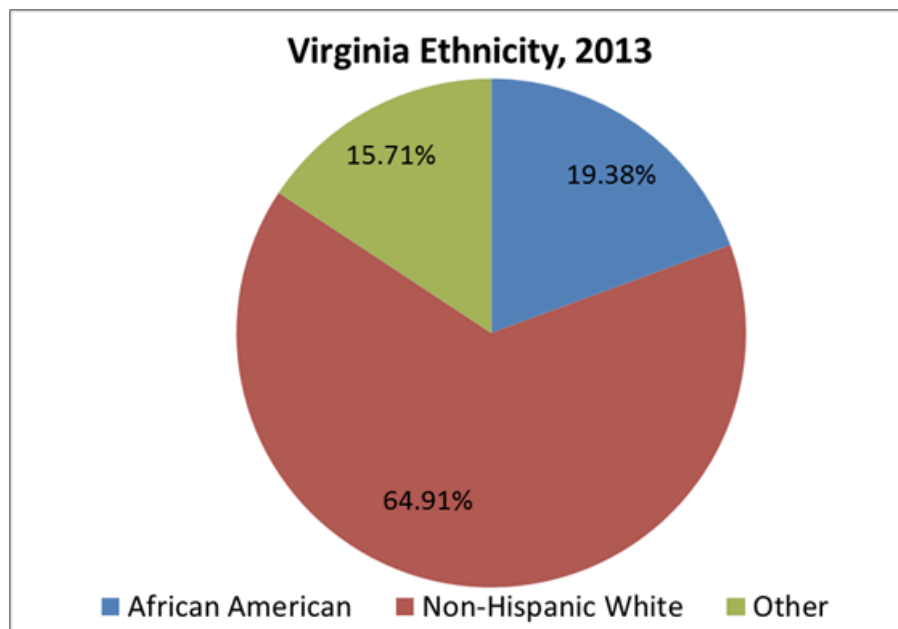
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<sup>3</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)

## I. Race and Ethnicity Demographics

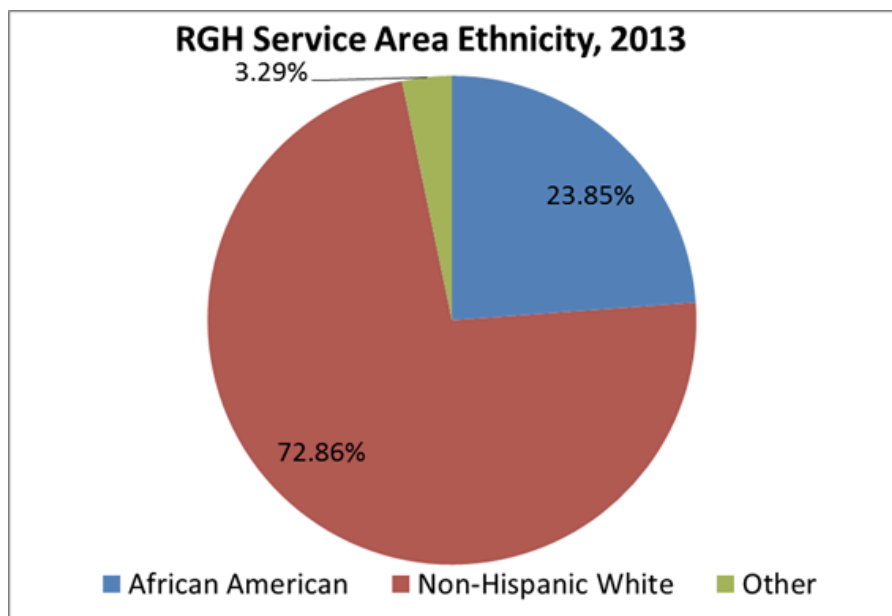
It has been well established that race and ethnicity are key “factors” in health disparities. For example, life expectancy, death rates and infant mortality rates are all less favorable among African American populations as compared to other ethnic populations. In 2009, African Americans in the United States had the highest mortality rates from heart disease and stroke as compared to any other ethnic group. Additionally, infants born to African Americans have the highest infant mortality rates, more than twice the rate for whites in 2008. While certain health indicators such as life expectancy and infant mortality have been slowly improving, many minority race groups still experience a disproportionately greater burden of preventable disease, death, and disability.<sup>4</sup>

In 2013, the population of African Americans in the United States was an estimated 45 million, or 15.2% of the total population, lower than the percentage in Virginia. Compared to the state of Virginia, which has gradually become more ethnically diverse, the RGH community is proportionately more White (+8%) and also proportionately more African American (+5%) as depicted in the table below.<sup>5</sup>



<sup>4</sup> [minorityhealth.hhs.gov](http://minorityhealth.hhs.gov), HHS Disparities Action Plan

<sup>5</sup> [www.CountyHealthRanking.org](http://www.CountyHealthRanking.org)



Graphs depicting the ethnic distributions for Lancaster, Middlesex, Northumberland, and the nation can be found in the Appendix of this document.

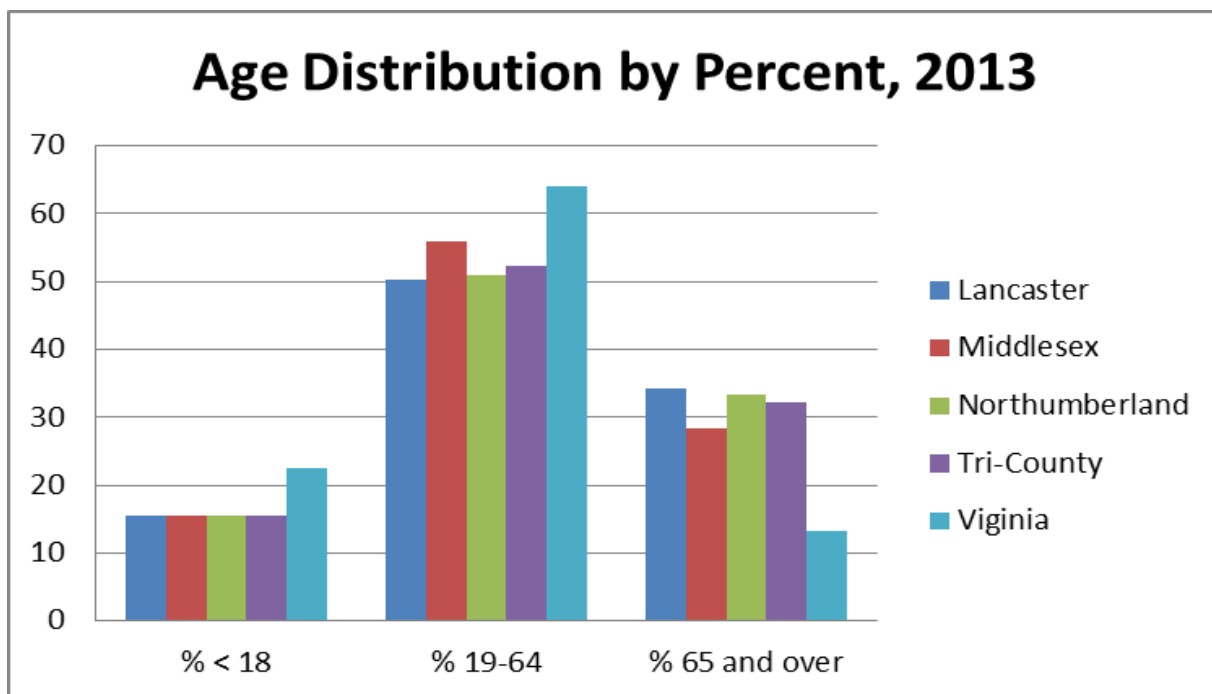
## II. Age Demographics and Projections

Older adults are at higher risk for developing chronic illnesses such as Diabetes Mellitus, Arthritis, Congestive Heart Failure and Dementia, and this proves to be a burden on the health care system. The first of the 'baby boomer generation' (adults born between 1946 and 1964) turned 65 in 2011 and this is resulting in an aging population nationwide. It is estimated that by the year 2030, 37 million older adults nationwide will be managing at least one chronic condition. Chronic conditions are the leading cause of death among older adults. Additionally, older adults experience higher rates of hospitalizations and low-quality care.<sup>6</sup>

The RGH service area has approximately 20% more older adults (65+) as compared to Virginia and the nation, and a significantly lower percentage of children (age <18). Middlesex has a greater percentage of adults (19-64) residing in the community and fewer older adults (65+)<sup>7</sup> compared to Lancaster and Northumberland.

<sup>6</sup> [www.healthypeople.gov](http://www.healthypeople.gov), Foundation Health Measures; General Health Status

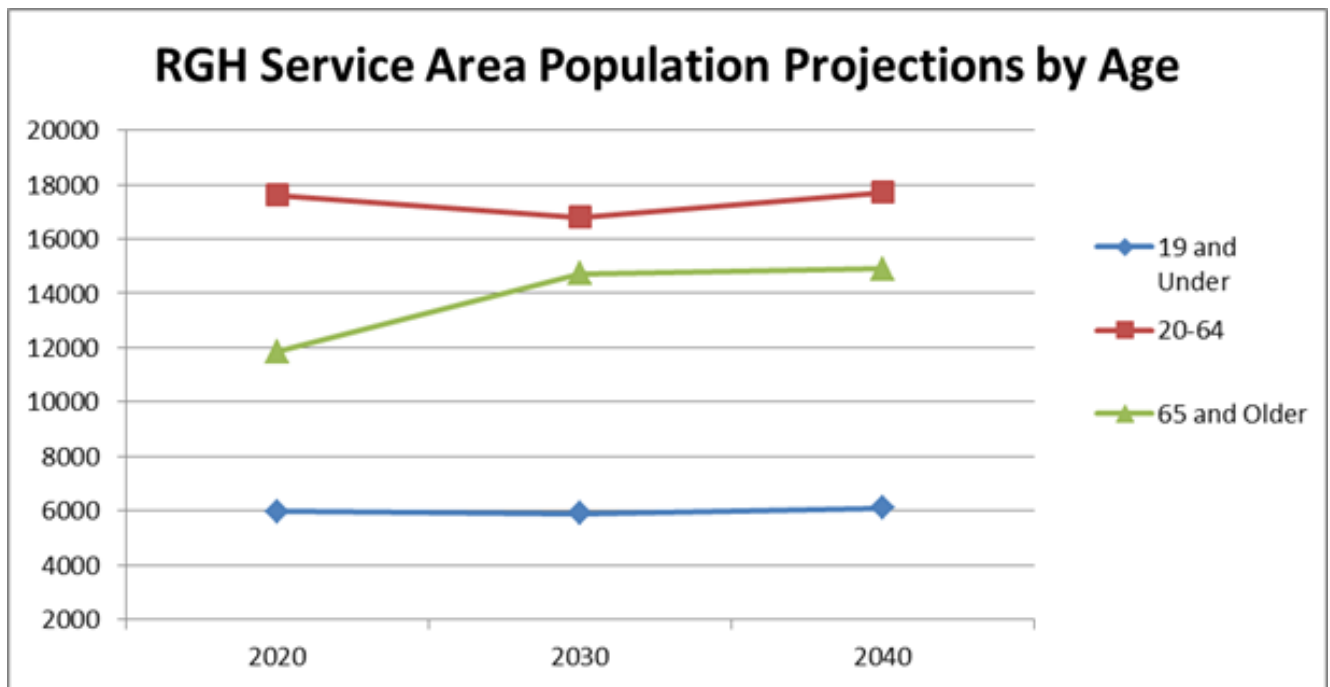
<sup>7</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)



RGH Age Distribution by # Totals in Population			
	# < 18 years old	# 19-64 years old	# > 65 years old
<b>Lancaster</b>	1,725	5,607	3,816
<b>Middlesex</b>	1,680	6,022	3,060
<b>Northumberland</b>	1,907	6,212	4,081
<b>TOTALS</b>	5,312	17,841	10,957



The graph below depicts the service area's projections by age. This graph indicates that the community's older adult population will continue to steadily increase until 2030 at which time it will stabilize. The population trend for ages 20-64 will be on a slight decline until 2030. This data is reflective of the 'baby boomer generation' moving into older adulthood nationwide.



### III. Income Demographics

It is well established that income level correlates with health status. An association exists between unemployment and mortality rates, especially for causes of deaths that are attributable to high stress (cardiovascular diseases, mental and behavioral disorders, suicide, and alcohol and tobacco consumption related illnesses).<sup>8</sup>

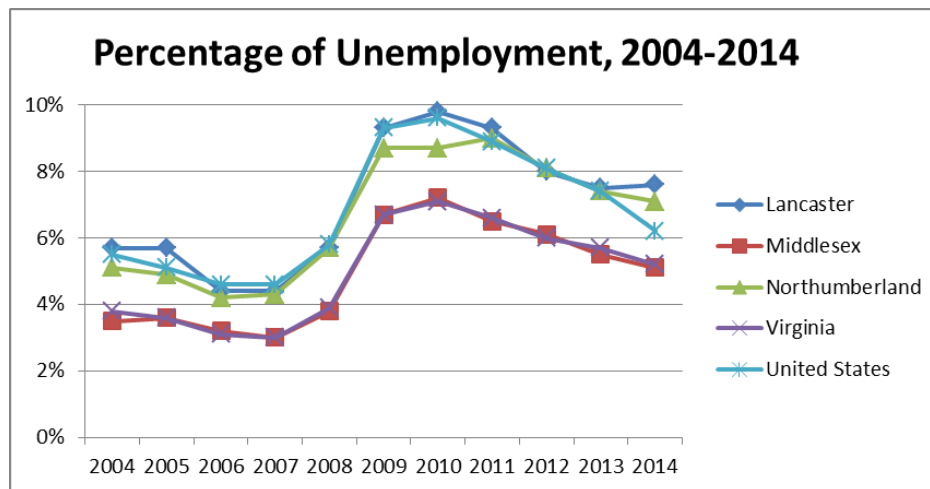
Unemployment rates for Middlesex County residents have mirrored unemployment rates in Virginia overall, while Lancaster and Northumberland County's unemployment rates have more closely reflected the national averages, which are consistently higher than Virginia.

The percentage of unemployment over the past ten years is depicted in the graphics below:<sup>9</sup>

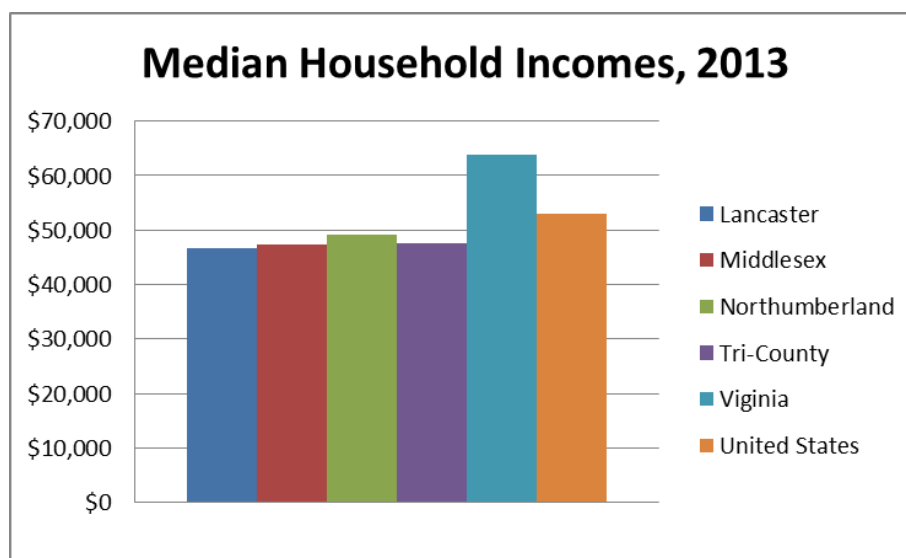
Unemployment Percentages Over 10 Years					
	Lancaster	Middlesex	Northumberland	Virginia	United States
2004	5.7%	3.5%	5.1%	3.8%	5.5%
2005	5.7%	3.6%	4.9%	3.6%	5.1%
2006	4.4%	3.2%	4.2%	3.1%	4.6%
2007	4.4%	3.0%	4.3%	3.0%	4.6%
2008	5.7%	3.8%	5.7%	3.9%	5.8%
2009	9.3%	6.7%	8.7%	6.7%	9.3%
2010	9.8%	7.2%	8.7%	7.1%	9.6%
2011	9.3%	6.5%	9.0%	6.6%	8.9%
2012	8.0%	6.1%	8.1%	6.0%	8.1%
2013	7.5%	5.5%	7.4%	5.7%	7.4%
2014	7.6%	5.1%	7.1%	5.2%	6.2%

<sup>8</sup> Backhans and Hemmingsson, 2011, Lundin et al., 2014, Garcy and Vagero, 2012, Browning and Heinesen, 2012, Montgomery et al., 2013, Davalos et al., 2012, Deb et al., 2011 and Strully, 2009

<sup>9</sup> Virginia Labor Market Information, [www.VirginiaLMI.com](http://www.VirginiaLMI.com)



The median household incomes for Lancaster, Middlesex and Northumberland are lower than the Virginia state average of \$62,745 and the national average of \$53,000. While Middlesex has lower rates of unemployment than Virginia, the median household income is lower than Virginia and consistent with Lancaster and Northumberland. The median household incomes for the three RGH counties are as follows: Lancaster County; \$46,578, Middlesex County; \$47,399 and Northumberland County; \$49,054 and are depicted in the graph below:<sup>10</sup>



<sup>10</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)

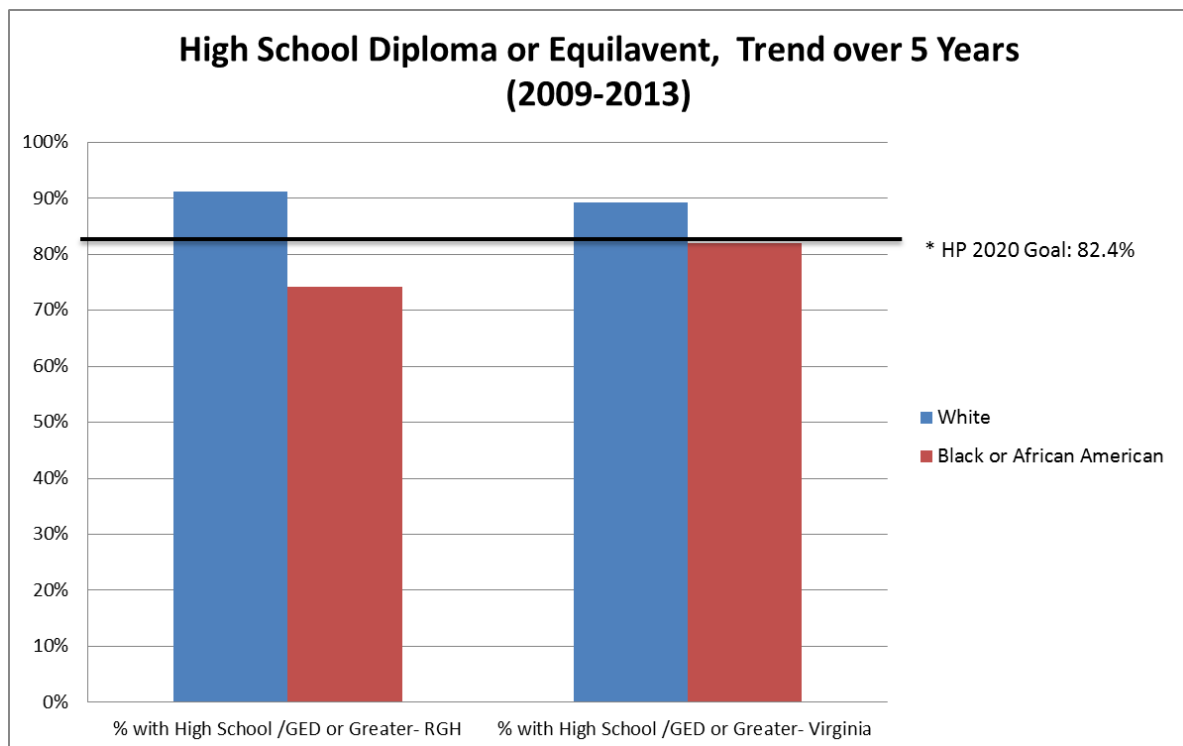
#### IV. Education Demographics

A direct correlation exists between low levels of education and high poverty rates. High poverty rates in turn have an adverse effect on a community's health outcomes.

The Healthy People 2020 goal for Education Level/Graduation Rates aims for at least 82.4% of students attending public schools graduate with a regular diploma 4 years after starting 9th grade. While African Americans in Virginia overall are reaching the Healthy People 2020 High School Graduation goal, the African American population in the RGH service area is falling below that goal.

In 2014-2015, graduation rates improved in almost every Virginia region and the statewide average rose to 90.5 percent.

The following graph measures how the RGH Tri-County area and Virginia overall are doing in meeting the Healthy People 2020 education goal:



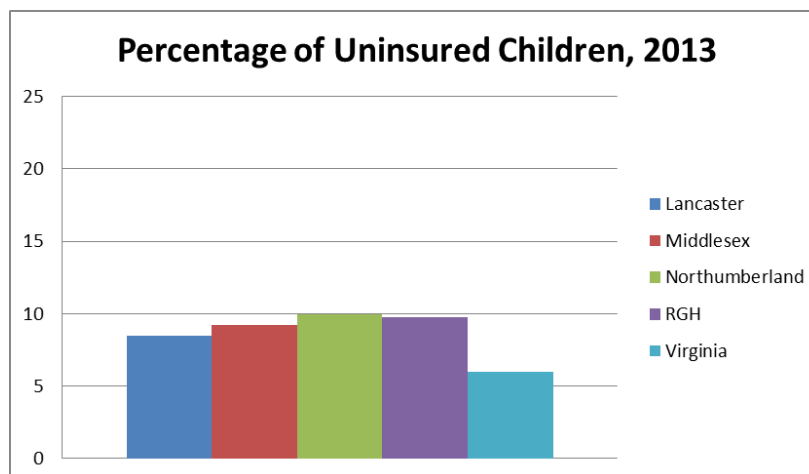
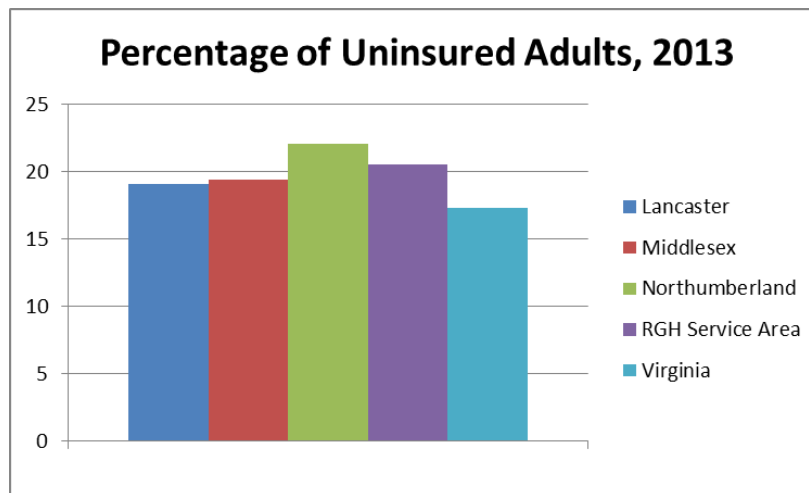
<b><u>Educational Attainment in Virginia and Tri-County RGH Area by Race</u></b>				
	<b>Less than High School</b>	<b>High School, GED, or Alternative</b>	<b>Some College or Associates Degree</b>	<b>Bachelor's Degree or Higher</b>
<b><u>Virginia</u></b>				
<b>White</b>	10.69%	24.97%	26.72%	37.61%
<b>Black</b>	17.98%	30.21%	31.39%	20.43%
<b><u>Tri-County RGH Service Area</u></b>				
<b>White</b>	8.74%	27.97%	32.45%	30.85%
<b>Black</b>	25.84%	38.97%	27.70%	7.49%

The percentage of African Americans graduating from High School, obtaining a GED or Alternative in Lancaster, Middlesex and Northumberland can be found by adding the percentages of all those with High School equivalent or greater degrees (38.97%, 27.70%, and 7.49%). Therefore, the percentage of African Americans graduating from High School in the Tri-County area is 74.16%. The percentage of African Americans graduating from High School in Virginia is greater, at 82.03%. The percentage of white residents residing in the RGH Tri-County area that have a High School graduation is also greater, at 91.27%. Additionally, of the 74.16% RGH Service Area African Americans that graduate High School, only 35.19% continue their education by attaining a Bachelor's Degree or more. 63.3% of white residents who graduate High School in the RGH area go on to obtain a higher degree.<sup>11</sup>

<sup>11</sup> Virginia Department of Labor and Industry, [www.doli.virginia.gov](http://www.doli.virginia.gov) (2014)

## V. Uninsured Population

Research shows that high rates of health insurance coverage positively impact a community's overall health status. Access to health care services improves quality of life, school and work productivity and overall mortality rates.<sup>12</sup> The Healthy People 2020 goal for Health Insurance aims for 100% of the population having some form of health insurance coverage. Compared to Virginia, the percentage of uninsured adults and children is higher in all three counties, with the highest percentage of uninsured residing in Northumberland County.<sup>13</sup>



<sup>12</sup> [www.healthypeople.gov](http://www.healthypeople.gov), Access to Health Services

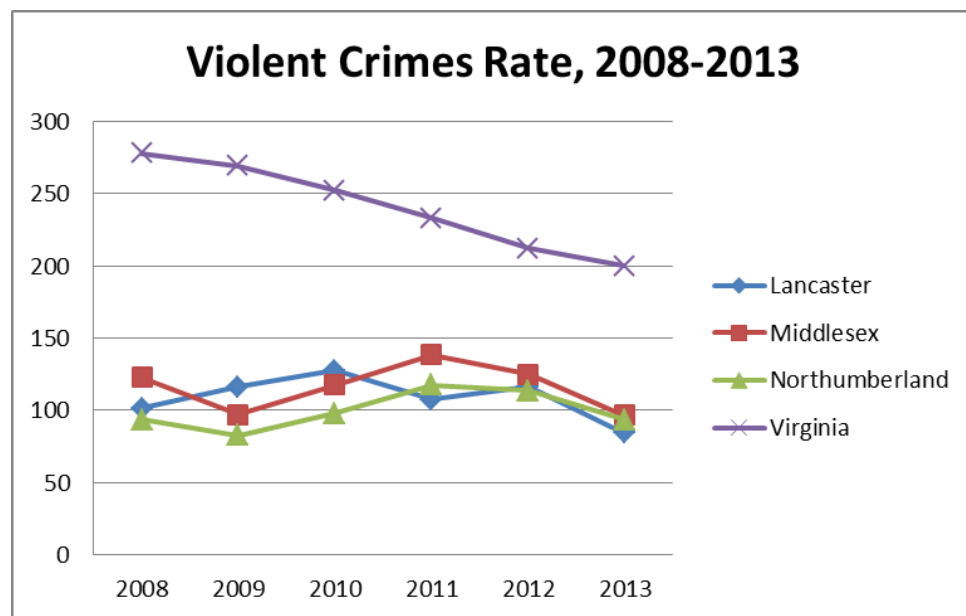
<sup>13</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)



## VI. Violence and Crime

Violent crimes are defined as physical offenses and confrontations between individuals, including homicide, forcible rape, robbery, and aggravated assault. High levels of violent crime result in feelings of being unsafe and may deter people from engaging in healthy behaviors such as exercising outdoors. A culture of high violence and crime has also demonstrated increased stress levels, and results in higher prevalence of hypertension and other stress-related disorders in the community. Chronic stress exposure caused by high levels of violence and crime in a community will likely increase prevalence of psychosocial stress related illnesses such as upper respiratory illness and asthma.<sup>14</sup> The violent crime rate for all three RGH counties remains consistently below Virginia overall. Violent crime in Virginia overall has been on the decline.

The following graph depicts the RGH community and Virginia's violent crime rate over a six-year period:<sup>15</sup>



<sup>14</sup> [www.healthypeople.gov](http://www.healthypeople.gov), Injury and Violence Prevention

<sup>15</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)

## VII. Opportunity for Living a Healthy Lifestyle

Consumption of unhealthy foods, lack of exercise opportunities and other negative health cultures, has an adverse impact on a community. The burden on the United States health-care system due to obesity-related health care costs ranges from \$147 billion to nearly \$210 billion annually. The loss in productivity due to job absenteeism costs an additional \$4 billion each year. Increased access to exercise opportunities and healthy foods is a critical prevention strategy to alleviate this economic burden.<sup>16</sup>

Low levels of physical activity are correlated with several disease conditions such as Obesity, Type 2 Diabetes, Cancer, Stroke, Hypertension, Cardiovascular Disease, and Premature Mortality. The physical activity goal set by Healthy People 2020 states that no more than 32.6% of the adult population (20+) will report that they engaged in no leisure-time physical activity.

The Food Environment Index, Physical inactivity and Food insecurity for the tri-county area is consistent with the data reported for Virginia. Access to exercise is lower in all three counties when compared to Virginia. The following table details the data findings:<sup>17</sup>

Measure and Definition of Measure	Virginia	Lancaster	Middlesex	Northumberland
<b>Food Environment Index</b> Factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	8.3	8.4	9.0	8.4
<b>Physical inactivity</b> Percentage of adults aged 20 and over reporting no leisure-time physical activity HP2020 Goal – 32.6%	22%	29%	23%	24%
<b>Access to exercise</b> Percentage of population with adequate access to locations for physical activity	81%	50%	38%	36%
<b>Food Insecurity</b> Percentage of population who lack adequate access to food	12%	13%	10%	12%

<sup>16</sup> [www.stateofobesity.org/healthcare-costs-obesity](http://www.stateofobesity.org/healthcare-costs-obesity)

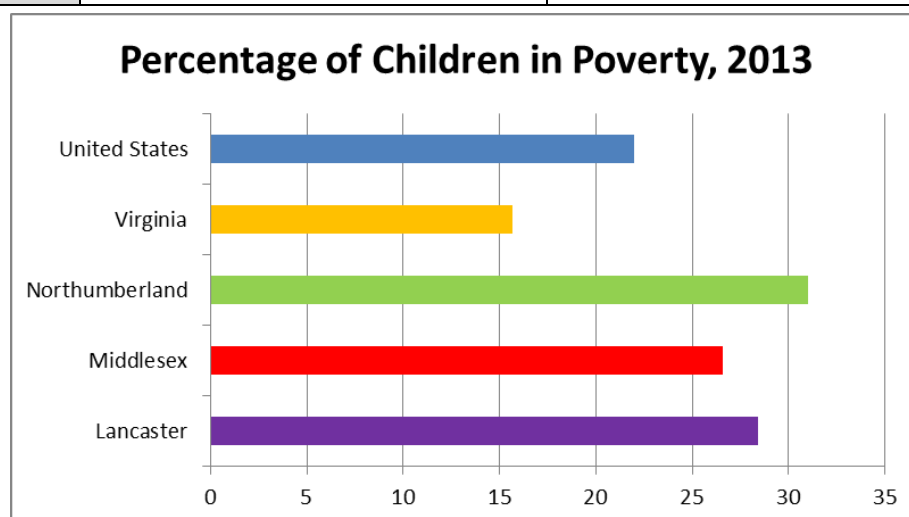
<sup>17</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)

## VIII. Social Indicators of Health Related to Children

To understand the health needs and attitudes towards health in a community it is imperative to study the social indicators of health related to children.

The following graph and tables provide risk factor data specific to children (persons under 18 years old) in the RGH community:<sup>18</sup> The percentage of children in a single parent households in Lancaster County is almost double the percentage in Virginia. The percentage of children eligible for a free lunch in Lancaster County is double the percentage in Virginia. The data indicates that the children in the RGH counties are a more vulnerable population and at a higher risk for development of future health problems than the children in Virginia overall.

<b>Social Indicators of Health Related to Children</b>		
	<b>% Single Parent Households – % children that live in a household headed by a single parent (2015)</b>	<b>% Students Eligible for Free Lunch – % children enrolled in public school that are eligible for free lunch program (2014)</b>
<b>Virginia</b>	30%	32%
<b>Lancaster</b>	57%	64%
<b>Middlesex</b>	28%	41%
<b>Northumberland</b>	36%	44%



<sup>18</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)

## IX. Other Health Behaviors and Social Determinants of Health

Additional health behaviors and social determinants of health have been identified and well established as key contributors to the overall health of a community. Adult Smoking, Adult Obesity and Excessive Drinking are indicators with national goals from the Center of Disease Control's (CDC) Healthy People 2020 initiative as indicated in the following table.

Data regarding Health Behaviors and Social Determinants in the RGH community is provided in the following table: <sup>19</sup>

<b>Health Behaviors/Social Determinants in the RGH community</b>				
<b>Measure and Definition</b>	<b>Lancaster</b>	<b>Middlesex</b>	<b>Northumberland</b>	<b>Virginia</b>
<b><u>Adult smoking</u></b> Percentage of adults who are smokers (HP 2020 Goal 12%)	--	34%	19%	18%
<b><u>Adult obesity</u></b> Percentage of adults that report a BMI of 30 or more (HP 2020 Goal 30.5%)	30%	26%	27%	28%
<b><u>Excessive drinking</u></b> Percentage of adults reporting binge or heavy drinking (HP 2020 Goal 24.4%)	19%	29%	--	16%
<b><u>Alcohol-impaired driving deaths</u></b> Percentage of driving deaths with alcohol involvement	67%	20%	22%	31%
<b><u>Sexually transmitted infections</u></b> Number of newly diagnosed chlamydia cases per 100,000 population	409	370	486	427
<b><u>Teen births</u></b> Number of births per 1,000 female population ages 15-19	35	28	48	29

-- Data unavailable on County Health Rankings

<sup>19</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)

## Health Conditions and Disease Data Profile

The Health Conditions and Disease Data Profile for the RGH community is found in this section of the CHNA. This data provides a quantitative profile of the community based on a wide array of community health indicators, compiling and analyzing data from multiple sources. This CHNA focuses on health indicators for which data sources were readily available and whenever possible provides comparison to the state of Virginia overall, the nation, and the Healthy People 2020 goals.

The results of this data profile are helpful in determining the percentages and number of people affected by specific health concerns, specifically looking at prevalence and mortality rates for various diseases. In addition, the results can be used alongside the Community Insight results and the zip code level maps to help inform program plans for community health improvement. A detailed summary of the health conditions and disease data for the RGH community is found in this section of the CHNA.

## I. Overall Mortality Data

Healthy People 2020 objectives define mortality rate goals per 100,000 populations for a number of health problems. Due to the relatively small population in the three counties that make up the RGH community, it is difficult to develop meaningful mortality rates per 100,000 for comparison to the Healthy People 2020 targets. Mortality rates may vary year-to-year more significantly than across the state as a whole.

A selection of the Healthy People 2020 mortality targets is as follows:

<b>Healthy People 2020 Mortality Targets</b>	
<b>Overall Cancer</b>	161.4 deaths per 100,000 population
<b>Breast (female) Cancer</b>	20.7 deaths per 100,000 females
<b>Lung Cancer</b>	45.5 deaths per 100,000 population
<b>Prostate Cancer</b>	21.8 deaths per 100,000 males
<b>Colon (colorectal) Cancer</b>	14.5 deaths per 100,000 population
<b>Heart Disease</b>	103.4 deaths per 100,000 population
<b>Stroke</b>	34.8 deaths per 100,000 population
<b>Diabetes</b>	66.6 deaths per 100,000 population
<b>Infant</b>	6.0 infant deaths per 1000 live births
<b>Neonatal Deaths (28 days)</b>	4.1 neonatal deaths per 1000 live births
<b>Drug Related</b>	11.3 drug-induced deaths per 100,000; 13.2 poisoning deaths per 100,000
<b>Violence</b>	5.5 homicides per 100,000 population
<b>Injuries</b>	Unintentional Injuries: 36.4 deaths per 100,000



In 2013, the RGH study region had a total of 364 deaths attributable to the leading 8 causes of mortality in the region as listed in the following table. The 3 leading causes of death in the RGH community are 1) Cancer, 2) Heart Disease and 3) Stroke.

The following table provides the number of deaths attributable to each of the top 8 causes of death for each county:

<b><u>Leading 8 causes of Mortality by Total Number of Deaths (2013)</u></b>			
	<b><u>Lancaster</u></b>	<b><u>Middlesex</u></b>	<b><u>Northumberland</u></b>
<b>1. Cancer</b>	50	38	43
<b>2. Diseases of the Heart</b>	44	34	41
<b>3. Stroke</b>	23	8	19
<b>4. Chronic Lower Respiratory Disease</b>	6	10	10
<b>5. Unintentional Injury</b>	5	4	6
<b>6. Alzheimer's Disease</b>	5	5	5
<b>7. Diabetes</b>	1	2	0
<b>8. Suicide</b>	2	3	0
<b><i>Total # of Deaths from Top 8 Causes</i></b>	136	104	124

When the numbers are translated to percentages and compared to Virginia overall, the percentage of death by Stroke is more than two times greater in Lancaster and Northumberland. The mortality percentages for the remaining 7 causes of death are in line with the statewide mortality rates.<sup>20</sup>

<sup>20</sup> VDH Annual Report Chapter 7-35, [www.vdh.virginia.gov/healthstats/stats.htm](http://www.vdh.virginia.gov/healthstats/stats.htm)

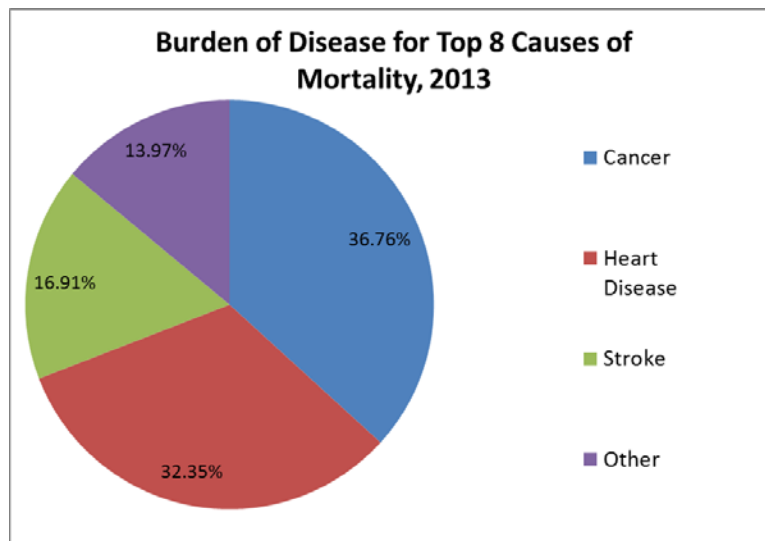
The following table provides the percentage of deaths attributable to each of the leading causes of death:

<b>Burden of Disease – Percentages of Death Attributed to Top 8 Causes (2013)</b>				
	<u><b>Lancaster</b></u>	<u><b>Middlesex</b></u>	<u><b>Northumberland</b></u>	<u><b>Virginia</b></u>
<b>Cancer</b>	36.76%	36.54%	34.68%	34.63%
<b>Heart Disease</b>	32.35%	32.69%	33.06%	32.69%
<b>Stroke</b>	16.91%	7.69%	15.32%	7.91%
<b>Chronic Lower Respiratory Disease</b>	4.41%	9.62%	8.06%	7.65%
<b>Unintentional Injury</b>	3.68%	3.85%	4.84%	6.74%
<b>Alzheimer's Disease</b>	3.68%	4.81%	4.03%	3.94%
<b>Diabetes</b>	0.74%	1.92%	--	3.91%
<b>Suicide</b>	1.47%	2.88%	--	2.53%

--Number is too small to report

Cancer, Heart Disease and Stroke are the leading causes of death in the RGH community. Even when compared to all five of the remaining top 8 causes of death grouped together, each of the top 3 causes individually results in a higher percentage of deaths in the community

The following graph provides a depiction of the 'Burden of Disease for the Top 8 Causes of Mortality':



## II. Preventable Hospitalizations

Preventable hospitalizations are hospitalizations that could have been avoided had appropriate outpatient care been available and/or provided. The Agency for Healthcare Research and Quality (AHRQ) identifies a defined set of conditions called Prevention Quality Indicators (PQIs) for which hospitalization should be avoidable with proper outpatient health care. High rates of hospitalization for these conditions indicate potential gaps in access to quality outpatient services for community residents.

Furthermore, communities have a limited capacity to adequately capture prevalence for chronic conditions such as Coronary Heart Disease, Diabetes, Asthma, etc. The PQI data helps serve as a proxy to estimate the prevalence of these chronic conditions in a population.

Compared to Virginia, higher PQI rates for Pneumonia are found in Lancaster and Middlesex Counties. Compared to Virginia, higher PQI rates for Diabetes are found in Northumberland County.

The following table displays the top PQI Hospital Indicators in the study region:<sup>21</sup>

PQI Hospitalization # Discharges & Rates per 1,000 for Selected (Principal) Diagnoses, 2013				
	Lancaster	Middlesex	Northumberland	Virginia
<b>Heart Failure Discharges</b>	33 discharges 2.9 per 1,000	38 discharges 3.3 per 1,000	40 discharges 3.2 per 1,000	21,512 discharges 2.6 per 1,000
<b>Diabetes</b>	23 discharges	21 discharges	40 discharges	12,972 discharges

<sup>21</sup> Virginia Health Information, [vhi.org/MONAHQR](http://vhi.org/MONAHQR)

<b>Discharges</b>	2.0 per 1,000	1.8 per 1,000	3.2 per 1,000	1.6 per 1,000
<b>Pneumonia</b>	48 discharges 4.2 per 1,000	44 discharges 3.9 per 1,000	36 discharges 2.9 per 1,000	19,433 discharges 2.4 per 1,000
<b>Urinary Infection</b>	21 discharges 1.8 per 1,000	19 discharges 1.7 per 1,000	19 discharges 1.5 per 1,000	11,986 discharges 1.5 per 1,000

### III. Cancer

Cancer is the leading cause of death in the RGH community. Lung/Bronchus cancer causes the greatest number of deaths in the RGH community followed by breast cancer. Cancer has been identified as the second greatest cause of death nationwide, with Heart Disease being the number one killer. Yet in the RGH community, cancer is the number one killer followed by Heart Disease and Stroke.

Cancer mortality rates advanced by Healthy People 2020 include the following:

<b>Healthy People 2020 Cancer Mortality Rate Goals</b>	
<b>Overall Cancer</b>	161.4 deaths per 100,000
<b>Breast Cancer</b>	20.7 deaths per 100,000 females
<b>Lung Cancer</b>	45.5 deaths per 100,000
<b>Prostate Cancer</b>	21.8 deaths per 100,000 males
<b>Colon (Colorectal) Cancer</b>	14.5 deaths per 100,000

The counties of Lancaster, Middlesex and Northumberland are in the Three Rivers Health District. The overall cancer incidence and mortality rate for Three Rivers Health District is higher than Virginia and is higher than the Healthy People 2020 goal. The following table illustrates Cancer Incidence (2007-2011)<sup>22</sup> and Cancer Mortality (2008-2012)<sup>23</sup> for the Three Rivers Health District compared to Virginia:

<b>Cancer Data by Health District – Incidence and Mortality</b>				
<b>Health District</b>	<b>Incidence</b>		<b>Mortality</b>	
	<b>Count</b>	<b>Age-Adjusted Rate per 100,000</b>	<b>Count</b>	<b>Age-Adjusted Rate per 100,000</b>
<b>Three Rivers</b>	4,792	463.2	2,037	190.6
<b>Virginia</b>	183,855	443.9	70,400	171.2

<sup>22</sup> Virginia Cancer Registry, <http://seer.cancer.gov/tools/ssm/intro.pdf>

<sup>23</sup> Virginia Department of Health Division of Health Statistics, <http://www.vdh.virginia.gov/HealthStats/stats.htm>

The following table provides the five-year total incidence rates by cancer type for the Three Rivers Health District compared to Virginia:

Cancer Type	Three Rivers		Virginia	
	Total#	Rate	Total#	Rate
Lung/Bronchus	769	71.4	26,136	64.5
Breast (Female)	651	121.7	28,193	125
Prostate	784	147.7	28,096	143.2
Colorectal	413	39.8	16,129	39.5
Ovarian	64	12.5	2,658	11.9
Melanoma	253	25.9	8,063	19.7
Oral Cavity	133	12.7	4,514	10.6
Cervical	20	5	1,317	6.3

The following table provides the five-year total mortality/rates by cancer type for each of the counties and Virginia as a whole.<sup>24</sup> Healthy People 2020 Cancer Mortality Goals are mostly unmet. Some noteworthy mortality rate deviations include: All cancers in Middlesex, lung cancer in Middlesex, colorectal cancer in Northumberland, and ovarian cancer in Lancaster.

<b>Five Year Total Mortality by Cancer Type</b>								
<b># Of Deaths, Rate per 100,000 Five Year Totals (2008-2012)</b>								
Cancer Type	Lancaster		Middlesex		Northumberland		Virginia	
	Total#	Rate	Total#	Rate	Total#	Rate	Total#	Rate
All Cancers	239	188.7	213	212.7	228	177	70,400	171.2
Lung/Bronchus	62	48.4	63	59.7	67	49.4	19,844	48.2
Breast (Female)	14	22	11	23.4	9	11.4	5,275	22.7
Prostate	16	26.6	7	15.5	14	23.1	3,399	22.4
Colorectal	23	18.1	17	16.8	23	20.9	6,116	14.9
Ovarian	9	17.4	5	8.9	5	6.4	1,842	7.9
Melanoma	6	4.4	--	--	6	4.5	1,189	2.9
Oral Cavity	5	3.4	5	5.5	--	--	964	2.3
Cervical	--	--	--	--	--	--	415	1.9

--Number is too small to report

<sup>24</sup> Cancer in Virginia (2014 Report)

[http://cancercoalitionofvirginia.org/PDFs/About/Cancer%20in%20Virginia%202014\\_Final.pdf](http://cancercoalitionofvirginia.org/PDFs/About/Cancer%20in%20Virginia%202014_Final.pdf)



**Summary of Cancer Data Findings:**

- Lancaster County mortality rates for all cancer types are higher than the HP 2020 goals and higher than state of Virginia overall for most cancer types. The rate of ovarian cancer in Lancaster (17.4) is higher than the rate in Middlesex (8.9), Northumberland (6.3) and Virginia (7.9). There is no HP 2020 goal available for ovarian cancer.
- Middlesex County mortality rates for all cancer types are also higher than the state of Virginia overall, with the exception being prostate cancer. With a prostate cancer mortality rate of 15.5 per 100,000, Middlesex was below the HP 2020 target of 21.8 per 100,000.
- Northumberland mortality rates for all cancer types are also higher than the state of Virginia overall, with the exception of breast and ovarian cancer mortality rates. With a breast cancer mortality rate of 11.4 per 100,000, Northumberland was below the HP 2020 target of 20.7 per 100,000.

**Lung/Bronchus Cancer Data Findings**

- Of all cancer types, lung/bronchus cancer causes the greatest number of deaths in the RGH community.
- Lung cancer has a five-year relative survival rate of 54.0 percent if diagnosed in its earliest (localized) stage. In Virginia (2007-2011), only 19.1 percent of lung cancers were diagnosed at the localized stage.
- In Virginia (2007-2011), 19% of adults were smokers. This is higher than the U.S. (17%). Smoking is a significant contributor to developing lung cancer. In Virginia (2007-2011), prevalence of current smoking was higher among those who were less educated (31.5% for less than high school compared to 8% for college graduates), lower income (32.2% among those earning \$15,000 or less compared to 13.3% for \$50,000 and above), and uninsured (36.5% for uninsured compared to 15.9% for insured).

**Breast Cancer Data Findings**

- Of all cancer types, breast cancer causes the second greatest number of deaths in the RGH community.
- In Virginia (2007-2011), breast cancer incidence rates did not differ substantially between African American and White women. However, African American women in Virginia had a mortality rate that was 39% higher than that of White women. A higher percentage of White

women (64.3%) had their breast cancer diagnosed at the localized stage in comparison to African American women (55%).

- In Virginia (2007-2011), mammography-screening rates were lower among less educated women (65.6% for less than high school compared to 83.3% for a college graduate), lower income women (67.9% for \$15,000 or less compared to 82.7% for \$50,000 and above), and uninsured women (55.0% for uninsured compared to 80.7% for insured).

#### IV. Heart Disease and Stroke

Heart Disease is the leading cause of death in the United States and globally. In 2013, nearly 801,000 deaths in the United States resulted from heart disease, stroke and other cardiovascular diseases. In other words, one out of every three deaths in the United States in 2013 could be attributed to these causes.<sup>25</sup> Stroke is the second leading cause of death globally, and the third leading cause of death in the United States. In 2010 alone, the United States incurred more than \$500 billion in health care expenditures and related expenses as a result of heart disease and stroke. Stroke is also a leading cause of disability in the United States.

Healthy People 2020 mortality goals for Heart Disease and Stroke include the following:

<b>Healthy People 2020 Heart Disease &amp; Stroke Mortality Goals</b>	
<b>Heart Disease</b>	103.4 deaths per 100,000 population
<b>Stroke</b>	34.8 deaths per 100,000 population

The leading modifiable (controllable) risk factors for heart disease and stroke are:

- High blood pressure
- High cholesterol
- Cigarette smoking
- Diabetes
- Poor diet and physical inactivity
- Overweight and obesity<sup>26</sup>

Due to the relatively small population in the RGH community it is difficult to develop a meaningful rate per 100,000 for comparison to the Healthy People 2020 goals. Compared to Virginia overall (32.69%), Lancaster (32.35%), Middlesex (32.69%) and Northumberland (33.06%) are all in line with the percentages of deaths attributable to Diseases of the Heart. Compared to Virginia (7.91%), the percentage of deaths caused by stroke is two times greater in Lancaster (16.91%) and Northumberland (15.32%).

<sup>25</sup> [http://www.heart.org/idc/groups/ahamamah-public/@wcm/@sop/@smd/documents/downloadable/ucm\\_480086.pdf](http://www.heart.org/idc/groups/ahamamah-public/@wcm/@sop/@smd/documents/downloadable/ucm_480086.pdf)

<sup>26</sup> <http://www.healthypeople.gov/2020/topics-objectives/topic/heart-disease-and-stroke>

## V. Diabetes and Obesity

Obesity is a measure defined as the percentage of adults aged 20 and older who have a body mass index (BMI) equal to or greater than 30. The obesity target set by Healthy People 2020 is that no more than 25% of the population is obese.

<b>Healthy People 2020 Obesity &amp; Diabetes Goals</b>	
<b>Adult Obesity</b>	Less than 25% of population
<b>New Diabetes Diagnosis</b>	Fewer than 7.2 new cases per 1,000

30% of Lancaster County, 27% of Northumberland County, and 26% of Middlesex County residents are obese. Similarly, 28% of Virginia residents are considered obese. While the Virginia state average is stable for this measure, Lancaster is steadily getting worse for this health measure.

14% of Lancaster County residents, 14% of Northumberland residents, and 13% of Middlesex residents over the age of 18 have diabetes. In Virginia the rate is 10%.

Healthy People 2020 identified a goal to reduce new cases of diagnosed diabetes to 7.2 new cases per 1,000. There is currently no available data source to accurately capture the new diagnosis at the county level for comparison.

## VI. Mental Health Disorders

Mental health disorders are health conditions characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning. Mental health disorders contribute to a number of health problems, including disability, pain and death. Mental health and physical health are closely connected. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors.

The following table provides data that helps determine the burden of Mental Health disorders in the study region. Respondents were asked: "Have you ever been told that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?" and "During the past 30 days, how many days was your mental health not good?" The percentage given is those that responded 8-30 days. The counties of Lancaster, Northumberland and Middlesex are part of the Three Rivers Health District.<sup>27</sup>

<b>Mental Health by Health District (2013)</b>		
	<b>% Respondents who have a depressive disorder</b>	<b>% Respondents who reported poor mental health</b>
<b>Three Rivers</b>	14.3%	10.5%
<b>Virginia</b>	16.5%	13.5%

According to the National Institute of Mental Health (NIMH), an estimated 13 million American adults (approximately 1 in 17) have a seriously debilitating mental illness. Mental health disorders are the leading cause of disability in the United States, accounting for 25 percent of all years of life lost to disability and premature mortality. Additionally, suicide is the 11th leading cause of death in the United States, with approximately 30,000 deaths each year. Healthy People 2020 developed a goal to reduce suicide rates nationwide. According to Healthy People 2020, the baseline suicide rate nationwide is 11.3 per 100,000. Healthy People 2020's goal is to reduce this by 10% to a rate of 10.2 per 100,000.

<sup>27</sup> Virginia Department of Health, Virginia Behavioral Risk Factor Surveillance System (BRFSS), [www.vdh.virginia.gov/ofhs/brfss/tables.htm](http://www.vdh.virginia.gov/ofhs/brfss/tables.htm)

As seen in the following table, the suicide rate in Virginia has been stable over the ten-year period while all three RGH counties demonstrate fluctuating rates. This may be due to the small tri-county population. The following table provides the suicide rates for each county from 2003-2013.

<b>Suicide Rate by Locality by Year, All Localities, 2003-2013 per 100,000</b> <b>HP2020 Goal is no more than 10.2 per 100,000</b>											
	2003	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13
Lancaster	0.00	0.00	25.9	0.00	27.2	24.5	0.00	8.8	17.7	10.5	23.4
Middlesex	19.6	19.1	28.6	0.00	9.2	5.8	35.7	17.1	12.4	24.1	34.7
Northumb- erland	15.7	7.8	23.3	7.6	11.6	27.7	0.00	46.4	10.7	3.6	0.00
Virginia	10.8	10.8	11.4	11.4	11.1	11.8	11.8	11.9	12.5	12.5	12.2

## VII. Oral Health

The RGH community demonstrates similar access to dental care and oral health status for both adults and children. The RGH community performs at the same level as Virginia overall for this health measure.

The following table provides data regarding the Oral Health status of the RGH community:<sup>28</sup>

<b>Oral Health by Locality, Youth and Adult, 2013</b>				
	<b>Lancaster</b>	<b>Middlesex</b>	<b>Northumberland</b>	<b>Virginia</b>
<b>% adults who lack access to dental care*</b>	18%	17%	20%	22%
<b>% youth (0-17) who lack access to dental care*</b>	19%	20%	20%	21%
<b>% youth (0-17) who have one or more cavities in permanent teeth</b>	20%	18%	19%	18%
<b>% youth with teeth in fair or poor condition</b>	6%	5%	6%	6%

<sup>28</sup> Virginia Atlas of Community Health (2013)

### VIII. Maternal and Infant Health

Low Birth Weight is defined as a live birth in which the infant weighs less than 2500 grams. The RGH community does not meet the Healthy People 2020 objective for this health indicator and also consistently performs below Virginia overall.

The following table provides the Low Birth Weight data for the RGH community in 2013:<sup>29</sup>

Low Birth Weight - % of live births with Low Birth Weight (<2500 grams)	
Lancaster	11.8%
Middlesex	10.0%
Northumberland	11.5%
Virginia	8.3%
HP 2020 Goal	7.8%

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<sup>29</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)



## IX. Environmental Health

The Environmental Health status of a community impacts quality of life, length of life and health disparities. A negative Environmental health status in a community could adversely impact the control and prevention of disease, injury, and disability related to the interactions between people and their environment.

The following table provides Environmental health data for the RGH community. The water violation information in Lancaster and Middlesex counties merit further investigation.<sup>30</sup>

County Health Data Environmental Health by Locality, Data from Various Years				
	Lancaster	Middlesex	Northumberland	Virginia
Average daily density of fine particulate matter in micrograms/cubic meter (PM2.5) (2011)	12.2	12.2	12.2	12.7
Percentage of population potentially exposed to water exceeding a violation limit during past year (2013-2014)	6%	8%	1%	2%
Percentage of households facing severe housing problems* (2007-2011)	16%	11%	13%	15%

<sup>30</sup> [www.CountyHealthRankings.org](http://www.CountyHealthRankings.org)

## CHNA Key Findings

Data previously presented reflects how the area served by RGH compares to Virginia overall and/or the nation. Some health issues and conditions that were identified by the community and are deviating from the state and/or national findings are:

### Health Care Access

#### **What the data shows:**

- Compared to Virginia, Lancaster and Middlesex counties have lower ratios of Primary Care Physicians and Dental Providers per 1,000 residents.
- Compared to Virginia, the percentage of uninsured adults and children is higher in all three counties.

### Behavioral/Mental Health

#### **What the data shows:**

- Compared to Virginia, all three RGH counties have lower ratios of Mental Health Care Providers per 1,000 residents.
- Compared to Virginia, the Three Rivers Health District (which encompasses the RGH study region) is found to have a positive finding in that it has a lower percentage of individuals reporting depressive disorders.
- Compared to Virginia, Lancaster and Middlesex counties have a higher suicide rate.
- Compared to Virginia, Middlesex has a higher percentage reporting excessive drinking.

### Adult smoking

#### **What the data shows:**

- Compared to Virginia there is a higher percentage of adult smokers in Middlesex County. Lancaster's data was unavailable for this measure and Northumberland County was in line with Virginia.
- Lung cancer incidence and mortality rates are higher in Middlesex County compared to Virginia, Lancaster and Northumberland County.
- The Healthy People 2020 goal for smoking is less than 12% of the population identifying as a smoker. The percentage of smokers is higher in all three counties.

### Teen Births

#### **What the data shows:**

- Compared to Virginia teen births are higher in Northumberland and Lancaster County.

- Compared to Virginia, there are a higher percentage of single parent households in Lancaster and Middlesex County.
- Compared to Virginia, there are a higher percentage of uninsured children in all three counties.

### **Adult obesity**

#### **What the data shows:**

- Physical inactivity levels for the tri-county are in line with Virginia.
- Compared to Virginia, Access to Exercise Opportunities for the tri-county area are lower.
- Food environment indexes, which demonstrate a healthy food environment, are in line with Virginia for the tri-county area.
- Adult obesity levels for all three counties are in line with Virginia but are higher than the Healthy People 2020 goal of 25%.
- Preventable Hospitalizations Rates (PQIs) for Diabetes are higher in all three RGH counties compared to Virginia.

## Community Insight Profile

### **I. Results of the Community Survey and Town hall Meetings**

Community input was gathered for the purpose of this CHNA. Insight regarding health concerns and gaps in health services was gathered through town hall meetings and an online survey. When seeking to improve health conditions, it is imperative to consider a community's own perceptions regarding their community. This participation and involvement not only provides an opportunity for community engagement early on, but also leads to improved buy-in from the community when programs are developed to address the health needs found. The collection of data through direct response from surveys and town hall meetings allows for an analysis of how the publicly available quantitative data, aligns with the community's own perceptions of their health status.

Survey respondents were asked to review a list of common community health issues. The list of issues draws from the topics of Healthy People 2020, with some variations and refinements. The survey asked respondents to identify from a list of important health concerns in the community to identify the five areas of greatest concern. Respondents were also asked to identify any additional health concerns not found on the list. A copy of the survey may be found in the Appendix of this CHNA.

215 individuals completed the survey, with 184 providing complete responses. Below is a list of the top 10 identified important health problems.

## II. Top 5 Health Priorities Identified by the Community

Survey respondents were asked to prioritize a list of concerns that are particularly detrimental to the health of the community. Respondents were asked to identify the top 5 health priorities from the list and were invited to identify additional health concerns not defined on the list. To summarize, the following issues were identified by the survey respondents as the most important health priorities for the community:

<b><u>HEALTH PRIORITIES IDENTIFIED BY COMMUNITY SURVEY RESPONDENTS</u></b>		
<b>Survey responses to question: “Choose the TOP 5 priorities you think should be addressed in your community?”</b>		
<b><u>Issue Identified</u></b>	<b><u># respondents who selected this</u></b>	<b><u>% respondents who selected this</u></b>
<b>Jobs with fair wages</b>	92	48.2%
<b>Education</b>	71	37.2%
<b>Mental Health</b>	49	25.7%
<b>Adult Obesity</b>	47	24.6%
<b>Alcohol/Drug Use</b>	47	24.6%
<b>Senior Health</b>	46	24.1%
<b>Access to Services</b>	42	22.0%
<b>Transportation</b>	38	19.9%
<b>Childhood Obesity</b>	37	19.4%
<b>Diabetes</b>	37	19.4%

### **Identified Needs**

Town Hall meetings were held on November 5, 2015 at Northumberland Public Library and on November 19, 2015 at the Bon Secours Rappahannock General Hospital Rehabilitation Center. Based on the collective secondary data analysis, the community survey findings, and the input from the community dialogues, the identified needs of the RGH area can be grouped into three broad categories:

#### **CLINICAL CARE/ ACCESS TO CARE**

- Providers
- Access evenings and weekends
- Mental Health
- Senior Health
- Un- and Underinsured
- Chronic Disease
- Dental

#### **SOCIAL & ECONOMIC FACTORS**

- Jobs with fair wages
- Families living in poverty
- Educational Disparity
- Transportation

#### **HEALTH BEHAVIORS**

- Health Education
- Exercise options
- Smoking
- Alcohol/Drug use
- Teen births
- Adult & Child Obesity

## Prioritization Process

### **I. Methodology for Prioritization**

The Community Health Needs Advisory Board met on October 30, 2015, November 11, 2015, and December 18, 2015. The Community Health Needs Advisory Board held a facilitated prioritization meeting on December 22, 2015.

The RGH CHNA Advisory Board used the “Strategy Grid” process to delineate greatest needs. The results of the strategy grid are as follows:

#### **High Need, High Feasibility**

- Mental Health\*
- Uninsured and Under-Insured\*
- Health Education \*,\*\*
- Transportation
- Providers (MD’s/ NP’s)
- Urgent Care/ Extended Hours/ Fragmented
- Seniors (aging in place)
- Alcohol/Opioid Abuse \*

#### **Lower Need, High Feasibility**

- Exercise Options\*

#### **High Need, Low Feasibility**

- Families Living in Poverty
- Teen Births
- Jobs with Fair Wages \*,\*\*
- Educational Disparity
- Dental

\*An area that RGH could impact

\*\*An area that has some existing momentum. Perhaps more achievable in the short term

## II. Prioritization Results

The Strategy Grid assessment, input from the community, data evaluation and discussion among internal leaders about which priorities were feasible for implementation led to a finalized list of 3 actionable priorities – 1) **Health Education**, 2) **Behavioral/Mental Health** and 3) **Uninsured Access**. An Implementation Plan specific to Rappahannock General Hospital will follow this CHNA Document and detail the actions that will be taken to address the 3 prioritized needs.

## III. Health Care Services and Resources Available to Meet Identified Needs

The list below provides names of currently existing resources in the area that can help meet the identified needs of the community:

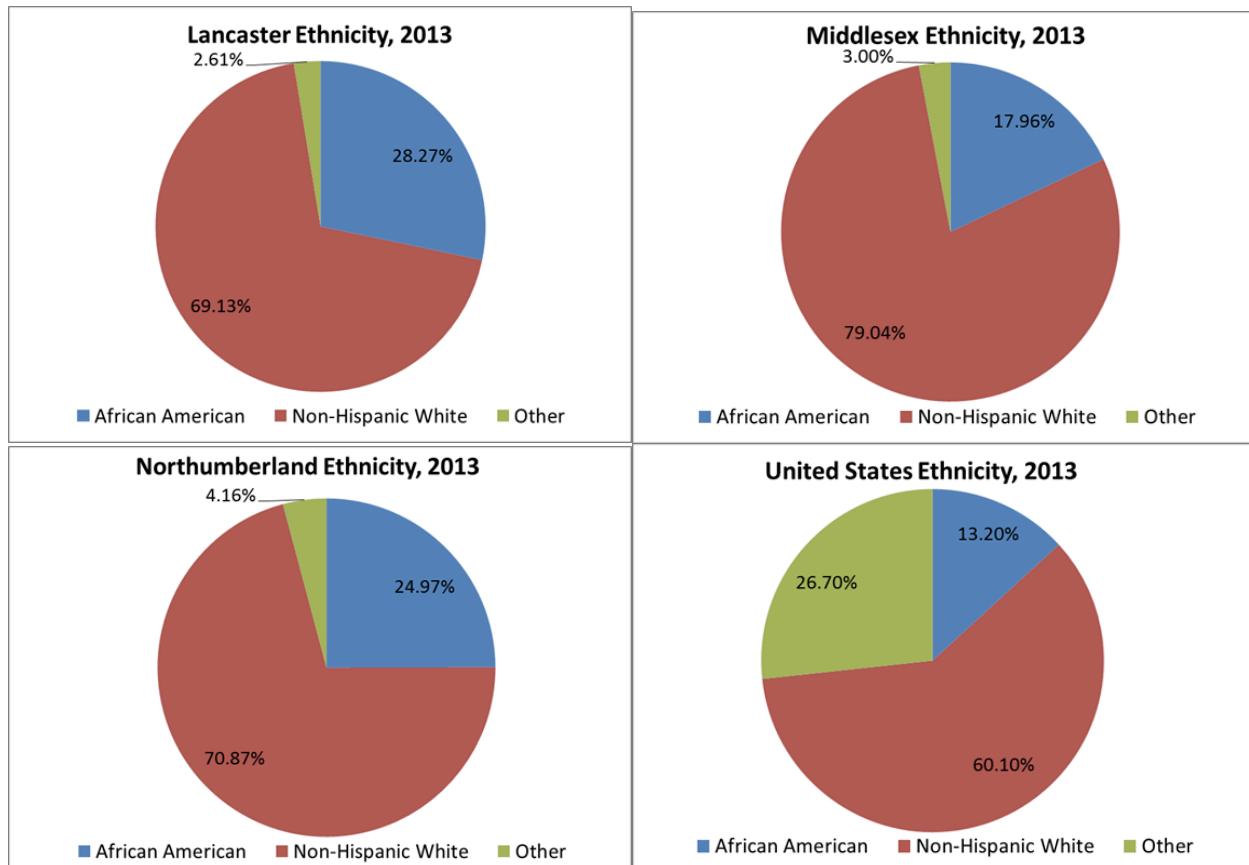
- 1) Three Rivers Health Department
- 2) Northern Neck Family YMCA
- 3) Northern Neck Free Health Clinic
- 4) American Cancer Society
- 5) Bay Aging
- 6) American Heart Association
- 7) Middle Peninsula/Northern Neck Community Services Board
- 8) Bay Transit
- 9) Virginia Women's Center
- 10) Eastern Virginia Care Transitions Partnerships
- 11) Lancaster County High School
- 12) Northumberland High School
- 13) Middlesex High School



## Appendix

Additional information regarding the CHNA process and data findings is available in this Appendix.

The ethnicity profile for the RGH Tri-county area is provided in the document. The ethnicity breakdown for each county and the country is listed below:



The education profile for the RGH Tri-county area is provided in the document. The education breakdown for each county is listed below:

<b><u>Virginia State</u></b>				
	<b>Less than High School</b>	<b>High School, GED, or Alternative</b>	<b>Some College or Associates Degree</b>	<b>Bachelors Degree or Higher</b>
<b>White</b>	10.69%	24.97%	26.72%	37.61%
<b>Black</b>	17.98%	30.21%	31.39%	20.43%
<b><u>Lancaster</u></b>				
<b>White</b>	7.89%	24.95%	33.30%	33.89%
<b>Black</b>	25.37%	47.88%	18.03%	8.73%
<b><u>Middlesex</u></b>				
<b>White</b>	8.45%	28.63%	30.91%	32.01%
<b>Black</b>	21.93%	34.85%	36.19%	7.03%
<b><u>Northumberland</u></b>				
<b>White</b>	9.79%	30.07%	33.09%	27.06%
<b>Black</b>	28.88%	33.80%	30.62%	6.70

Following is a copy of the online survey provided:

Dear Community Partner,

Bon Secours Rappahannock General Hospital, in collaboration with our community partners, is conducting a Community Health Needs Assessment. As part of the study, we are collecting information from a variety of people, including community leaders, residents, and policy makers. This information will be used to determine the greatest health related needs in our community.

We are asking you to provide your opinions on issues facing our community. This survey will be shared with the public, but no information collected from this survey will be used to identify you.

On behalf of Bon Secours Rappahannock General Hospital and our community partners, we thank you in advance for assisting with this effort.

James M. Holmes, CEO  
Bon Secours Rappahannock General Hospital  
101 Harris Road  
Kilmarnock, VA 22482  
Fax 804-435-8543

Please click NEXT to begin!

**Defining Community**

Think of "community" as the place where you spend the most time living, working, playing, and/or worshiping.

**My Community**

\* 1. How would you rate your overall health?

Excellent	Very Good	Fair	Poor	Very Poor
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 2. How would you rate the overall health of your community?

Very healthy	Healthy	Neutral	Unhealthy	Very unhealthy
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 3. How would you rate the overall quality of life in your community?

Very good	Good	Somewhat good	Bad	Very bad
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 4. I can help make my community a better place to live.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 5. My community is a **HEALTHY** place to live because

	Strongly agree	Agree	Neutral	Disagree	Strongly Disagree
It is a clean <u>environment</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can get <u>healthy foods</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are good <u>places to play</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is a good place to <u>walk and bike</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are good places to get <u>health care</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are good places to get <u>dental care</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are good <u>health programs</u> offered.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can get affordable <u>health insurance</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 6. My community is **STRONG** in providing

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
good <u>housing</u> options.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
good <u>education</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>transportation</u> services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>child care</u> options.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<u>jobs</u> with fair wages.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Community Support and Services

\* 7. My community has good support and services for the following groups of people

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Aging adults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Children and families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teens	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Racial and ethnic minorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Veterans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People whose primary language is not English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LGBTQ individuals (Lesbian, Gay, Bisexual, Transgender, and Questioning)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with disabilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People who are homeless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with mental illness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with chronic disease*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People with drug/alcohol addiction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Victims of domestic abuse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Victims of violent crime (ex. assault, rape, robbery, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\*Chronic disease is defined as sickness lasting 3 months or more. Chronic diseases cannot be cured by medication, nor do they just disappear. (Ex: Asthma, Chronic Obstructive Pulmonary Disease "COPD," Diabetes, etc).

\* 8. I get the social and emotional support I need

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
from my family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from my friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
at my church.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
from my community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 9. The following HEALTH PROGRAMS are meeting the needs of my community;

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Alcohol/Drug Abuse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asthma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
COPD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dental Health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diabetes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heart Disease & Stroke	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hypertension	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Infant Care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mental Health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overweight/Obesity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prenatal Care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sexually Transmitted Infections (STIs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tobacco Use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Violence/Abuse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)



**Defining Safe and Safety**

Refer to "safe" and "safety" as being protected from, or not exposed to, danger or risk.

### Community Safety

\* 11. My community is a safe place to live.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 12. My community is a safe place to live because

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
there is safe <u>housing</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are safe places to <u>play</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are safe places to <u>work</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are safe <u>schools</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there is good <u>street lighting</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are safe <u>roads</u> and <u>sidewalks</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are safe ways to get to where I need to go ( <u>transportation</u> ).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
there are good <u>fire/safety/emergency services</u> .	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Community Priorities

\* 13. Please choose the TOP 5 priorities you think should be addressed in your community.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Access to social services (i.e. SNAP, WIC, etc.)     | <input type="checkbox"/> Diabetes   | <input type="checkbox"/> Mental health                                      |
| <input type="checkbox"/> Access to health services                            | <input type="checkbox"/> Domestic abuse   | <input type="checkbox"/> People whose primary language is not English       |
| <input type="checkbox"/> Adult obesity  | <input type="checkbox"/> Education  | <input type="checkbox"/> People with disabilities                           |
| <input type="checkbox"/> Alcohol/Drug Abuse                                   | <input type="checkbox"/> The environment  | <input type="checkbox"/> Places to play                                     |
| <input type="checkbox"/> Asthma   | <input type="checkbox"/> Health programs/screenings   | <input type="checkbox"/> Race/ethnic relations                              |
| <input type="checkbox"/> Cancer   | <input type="checkbox"/> Heart Disease & Stroke   | <input type="checkbox"/> Teen pregnancy                                     |
| <input type="checkbox"/> Child abuse/neglect                                  | <input type="checkbox"/> Homelessness   | <input type="checkbox"/> Tobacco use  |
| <input type="checkbox"/> Childhood obesity                                    | <input type="checkbox"/> Housing  | <input type="checkbox"/> Transportation services                            |
| <input type="checkbox"/> Community violence (ex: assault, rape, robbery, etc) | <input type="checkbox"/> Infant Health  | <input type="checkbox"/> Safety   |
| <input type="checkbox"/> Crime (ex. drugs, prostitution, theft, etc.)         | <input type="checkbox"/> Jobs with fair wages   | <input type="checkbox"/> Senior health                                      |
| <input type="checkbox"/> Dental Health  | <input type="checkbox"/> LGBTQ individuals (Lesbian, Gay, Bi-sexual, Transgender & Questioning) | <input type="checkbox"/> Sexually transmitted infections including HIV/AIDS |
| <input type="checkbox"/> Other (please specify)                               |   |   |

## Technology and Health

14. Where do you access the internet (ex. email, web, Facebook, etc.) most often? Check one.

- ☐ I do not have access to the internet
- ☐ Friend's home
- ☐ Home computer/tablet
- ☐ Library
- ☐ Mobile Phone
- ☐ School
- ☐ Work
- ☐ Other (please specify)

## Demographics

\* 15. Please choose your gender.

- ☐ Male  
☐ Female

\* 16. Please choose your age group.

- ☐ 18-24 years  
☐ 25-39 years  
☐ 40-54 years  
☐ 55-64 years  
☐ 65-79 years  
☐ 80+ years

\* 17. Please choose the group(s) below that best represents you.

- |  |   |
|--|---|
| <input type="radio"/> White, Non Hispanic                        | <input type="radio"/> East Asian or Asian American              |
| <input type="radio"/> Black, Afro-Caribbean, or African-American | <input type="radio"/> South Asian or Indian American            |
| <input type="radio"/> Latino or Hispanic American                | <input type="radio"/> Native Hawaiian or other Pacific Islander |
| <input type="radio"/> Native American or Alaskan Native          | <input type="radio"/> From multiple races                       |
| <input type="radio"/> Middle Eastern or Arab American            |   |

Some other race (please specify)

\* 18. What is your living situation?

- ☐ I own my home  
☐ I rent my home  
☐ I live with family and/or friends  
☐ I live in temporary housing (hotel, motel, shelter, transitional housing)  
☐ Other (please specify)

\* 19. Including you, how many people live in your home?

- ☐ 1  
☐ 2  
☐ 3  
☐ 4  
☐ 5 or more

\* 20. I am:

- ☐ Married  
☐ Partner relationship  
☐ Divorced/Separated  
☐ Widowed  
☐ Single

\* 21. I pay for health services through:

- |   |  |
|---|--|
| <input type="radio"/> Private Insurance (e.g. Individual, exchange plan, or through employer) | <input type="radio"/> Indian Health Services |
| <input type="radio"/> Medicare  | <input type="radio"/> Uninsured              |
| <input type="radio"/> Medicaid  | <input type="radio"/> Pay Cash               |
| <input type="radio"/> VA Benefits   |  |

\* 22. I am

- ☐ Working, full-time  
☐ Working, part-time  
☐ Not working, looking for work  
☐ Not working, NOT looking for work  
☐ Retired  
☐ Disabled, not able to work  
☐ A student, working  
☐ A student, not working


\* 23. What is the highest grade or year of school you completed?

- ☐ Less than High School Graduate
- ☐ High School Diploma or GED
- ☐ Some College
- ☐ Two-year degree
- ☐ Four-year degree or higher

24. What is your average household income?

- ☐ \$0 - \$24,999
- ☐ \$25,000 - \$49,999
- ☐ \$50,000 - \$74,999
- ☐ \$75,000 - \$99,999
- ☐ \$100,000 and up

\* 25. Please provide the following information. It will be used for research purposes only. (Keep in mind you will NOT be identified in any way with your answers.)

Neighborhood:   
City:   
State: -- select state --   
ZIP:

26. Please use the space below to share any ideas to help Bon Secours Rappahannock General Hospital achieve its mission "to bring compassion to health care and to be good help to those in need, especially those who are poor and dying."

THANK YOU!