

# **A Community Health Assessment of The Harvest Foundation Service Area**

Summary Report with Supplemental Analysis  
September 15, 2010



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## Executive Summary

The Harvest Foundation is a charitable foundation dedicated to supporting health, education, and community vitality initiatives that serve Martinsville and Henry County, Virginia. The Foundation was established on May 15, 2002 from the sale of Memorial Hospital with the intention of guiding community revitalization and restoring hope for a brighter and healthier future.<sup>1</sup>

The Harvest Foundation commissioned Community Health Solutions to conduct this community health assessment in February of 2010. The study was designed to include two primary components: a 'community insight analysis' based on qualitative analysis of a survey of community professionals; and a 'community indicator analysis' based on quantitative analysis of community health status indicators. Major findings are outlined below and explained in more detail in the body of the report.

### Community Insight Analysis

The survey of 113 community leaders yielded 61 responses (a 54% response rate) from individuals representing more than 40 different organizations. The respondents provided a rich set of insights about community health in Martinsville and Henry County. To summarize:

- The respondents identified more than two dozen important health problems related to lifestyle, chronic disease, behavioral health, oral health, access to health services, social services, and more. They also identified income, education, and the economy as important influencing factors in community health.
- The respondents also identified more than two dozen specific community services in need of strengthening. Commonly identified services included health coverage, substance abuse services, oral health services, health education, primary health care, patient self-management services, family planning services, transportation, and aging services.
- Twenty-nine respondents offered additional, open-ended responses about particular problems or ideas for improving health and health services.

### Community Indicator Analysis

The community indicator analysis shows that the populations of Martinsville and Henry County face serious health challenges.

- *Demographic Profile.* Demographically, the Martinsville and Henry County area is significantly older, more diverse, less educated, and more economically stressed than the Commonwealth of Virginia as a whole. These underlying demographic factors influence community health in significant ways.
- *Mortality Profile.* The area has higher age-adjusted death rates than Virginia in terms of total deaths and cause-specific deaths such as heart disease, cancer, cerebrovascular disease, chronic lower respiratory disease, diabetes, and more.
- *Maternal and Infant Health Profile.* Compared to the state as a whole, the area has higher rates of late prenatal care, non-marital births, teen pregnancy, and infant mortality.
- *Preventable Hospitalization Profile.* The area has substantial numbers of hospitalizations for certain conditions which can often be prevented with proper outpatient care. Among these are selected cases of congestive heart failure, bacterial pneumonia, diabetes, urinary tract infection, dehydration, asthma, and chronic obstructive pulmonary disease.
- *Behavioral Health Hospitalization Profile.* The area also has substantial numbers of hospitalizations for behavioral health conditions such as affective psychoses and alcohol and drug abuse.

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<sup>1</sup> The Harvest Foundation website at [www.TheHarvestFoundation.org](http://www.TheHarvestFoundation.org)

- *Chronic Disease Profile.* Based on synthetic estimations,<sup>2</sup> more than 30,000 adults in the area may be overweight or obese; more than 17,700 may have high cholesterol; more than 17,000 may have arthritis; more than 16,900 may have high blood pressure; more than 12,000 may be smokers; more than 7,000 may have asthma; and more than 5,000 may have diabetes. Among children age 10-17, 28 percent are at risk for overweight or obesity, and large proportions are at risk for unhealthy diet and insufficient physical activity.
- *Access to Health Care Profile.* Based on synthetic estimations, 22 percent of nonelderly residents of the area may be uninsured. This includes more than 10,400 adults and more than 1,800 children. Martinsville and Henry County are also designated medically underserved areas<sup>3</sup>, meaning even some residents with health coverage may have difficulty acquiring needed health services.
- *Aging Population Profile.* The profile of the aging population in Appendix A shows that substantial numbers of seniors in the area have high rates of chronic disease and associated lifestyle factors. From a prevention viewpoint, many seniors could benefit from better nutrition, more frequent exercise, and access to key immunizations. From a chronic care perspective, many seniors with chronic disease need health care and support services to help them stay healthier, more active, and more independent.
- *County Health Rankings.* As shown in Appendix B, in 2010 the University of Wisconsin Population Health Institute, with funding from the Robert Wood Johnson Foundation, released a national set of city and county health rankings. The rankings for Martinsville and Henry County reflect the serious health concerns outlined in this and other reports commissioned by The Harvest Foundation. The primary advice for local stakeholders is to treat the county health rankings as just one of multiple sources of information, pay close attention to technical weaknesses in the data, and avoid using the county health rankings as definitive report cards on local health status.

## Organization of the Report

The next section of the report briefly describes the study approach. *Part I: Community Insight Analysis* describes the results of the survey of community stakeholders. *Part II: Community Indicator Analysis* describes the results of the quantitative analysis of community health indicators. Appendix A presents the aging profile data, Appendix B presents the county health ranking data, and Appendix C contains the survey tool used to gather insights from community leaders.

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<sup>2</sup> In synthetic estimation, national and state survey data are applied to local demographic data to produce local estimates. See Study Approach for more detail.

<sup>3</sup> As designated by the Commonwealth of Virginia and the U.S. Health Resources and Services Administration

## The Study Approach

The Harvest Foundation commissioned Community Health Solutions to conduct this community health assessment in February of 2010. As outlined in *Exhibit 1*, the first step was to define the scope and purpose of the study. Based upon consultation with representatives of The Harvest Foundation, the study was designed to examine a wide range of health issues affecting the population of Martinsville and Henry County. The study included two primary components: a 'community insight analysis' based on qualitative analysis of a survey of community leaders; and a 'community health indicator analysis' based on quantitative analysis of community health status indicators.

### 1. Community Insight Analysis

A survey approach was used to acquire the insights of community leaders with an interest in community health improvement. Community Health Solutions developed an electronic questionnaire using the Healthy People 2010 priority areas as a general framework. Several items were adjusted or added based on feedback from The Harvest Foundation. The final survey instrument would ask respondents to identify:

- Important community health problems;
- Community health services in need of strengthening;
- Top priority community health concerns; and
- Ideas or suggestions regarding health, education, and community vitality.

The survey was sent to a list of 113 prospective respondents by The Harvest Foundation. Sixty-one (54%) completed surveys were received (although not every respondent answered every question).

### 2. Community Indicator Analysis

To produce the quantitative health status indicators in this report, Community Health Solutions analyzed data from multiple sources. By design, the analysis does not include every possible indicator of community health. The analysis is focused on a set of indicators which provide broad insight into community health, and for which there were readily available data sources.

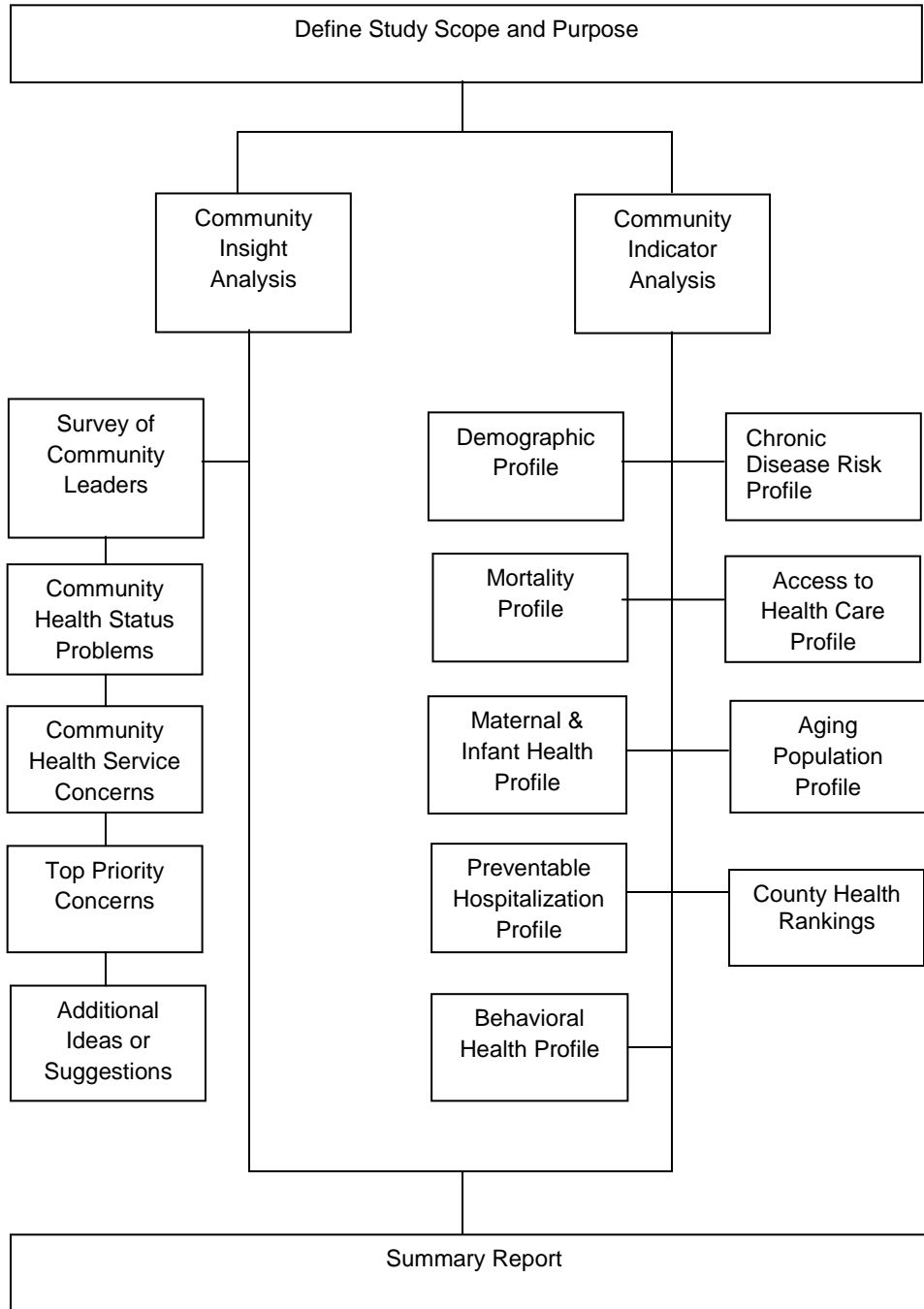
The Virginia Department of Health was the source for all of the birth and death data included in the report. Virginia Health Information, Inc. was the source of the hospital discharge data included in the report.<sup>4</sup> Demographic data used in the report were purchased from SRC, Inc., a commercial vendor of such data.

In addition, Community Health Solutions produced a number of indicators using '*synthetic estimation methods*.' Synthetic estimation methods can be used when there are no readily available sources of actual data to produce a community health indicator. Synthetic estimation begins with analysis of national and state survey data to develop estimates of the number of people with a particular health status (e.g. asthma, diabetes, uninsured) at the national or state level. The national and state data are then applied to *local* demographic data to produce estimates of health status in a local area. These kinds of synthetic estimates are subject to error. They are instructive for planning, but it is not possible for Community Health Solutions to guarantee their accuracy.

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<sup>4</sup> VHI requires the following statement to be included in all reports utilizing its data: *Virginia Health Information (VHI) has provided non-confidential patient level information used in this report which was compiled in accordance with Virginia law. VHI has no authority to independently verify this data. By accepting this report the requester agrees to assume all risks that may be associated with or arise from the use of inaccurately submitted data. VHI edits data received and is responsible for the accuracy of assembling this information, but does not represent that the subsequent use of this data was appropriate or endorse or support any conclusions or inferences that may be drawn from the use of this data.*

**Exhibit 1. Study Approach**



## Part I. Community Insight Analysis

This section presents the results of the survey of community leaders. The survey was sent to a list of 113 prospective respondents by The Harvest Foundation. Sixty-one responses were received, although not every respondent answered every question. The reported organization affiliation of the survey respondents is shown in *Exhibit 2*.

### Exhibit 2. Reported Organization Affiliation of Survey Respondents

- Activate Martinsville-Henry County (2)
- Bassett Family Practice (3)
- Boys & Girls Clubs of the Blue Ridge
- Carilion Clinic
- Children's Medical Center
- Citizens Against Family Violence
- City of Martinsville
- Dan River Basin Association
- Edwards Adult Day Care Center
- Focus On Youth
- Free Medical Clinic of MHC and MedAssist of MHC & Patrick County
- Harvest Foundation
- Henry County Public Schools (3)
- Henry Martinsville Department of Social Services
- Henry Martinsville Health Department
- Hooker Furniture Corp
- MARC Workshop, Inc. (2)
- Martinsville Area Community Foundation
- Martinsville Bulletin
- Martinsville City Schools (2)
- Martinsville Henry County Coalition for Health and Wellness (6)
- Martinsville Family Medicine
- Martinsville Henry County Economic Development Corporation (2)
- Martinsville Parks and Recreation
- Martinsville Police Department
- Martinsville-Henry County Chamber of Commerce
- Martinsville-Henry County Family YMCA
- Medi Home Care (2)
- Memorial Hospital of Martinsville (2)
- Martinsville-Henry County After 3
- New College Institute
- Piedmont Community Services (3)
- Piedmont Virginia Dental Health Foundation
- Pittsylvania County Department of Social Services
- Smart Beginnings of Martinsville/Henry County (2)
- Southern Area Agency on Aging
- Southern Virginia Recreation Facilities Authority
- Telamon Corporation
- The Community Fellowship
- Virginia Department of Health, West Piedmont Health District (2)
- West Piedmont AIDS Task Force
- West Window Corp.

*When interpreting the survey results, it is important to note that the primary purpose of the survey was to help The Harvest Foundation identify the full scope of health issues facing the Martinsville and Henry County area. The purpose was not to identify the priorities across those issues. The fact that only one or a few people identified a particular issue as important should not necessarily be construed to mean that the issue is less important than one identified by dozens of respondents. In this context, the results are instructive for planning, but not definitive by themselves.*

### Survey Item 1. Important Community Health Problems

The first survey item asked respondents to identify important health problems in the community. The responses (including open-ended comments) are summarized in *Exhibit 3*. Every item on the predefined list of 24 possible issues included in the survey was identified as an important health problem by at least five respondents. Several additional issues were identified in the open-ended comments. The full survey tool is located in Appendix C.



**Exhibit 3. Survey Responses: Important Community Health Problems**

<b>Answer Options</b>	<b>Response Percent</b>	<b>Response Count</b>
1. Childhood Obesity	88.1%	52
2. Adult Obesity	86.4%	51
3. Substance Abuse - Illegal Drugs	83.1%	49
4. Diabetes	72.9%	43
5. Teen Pregnancy	72.9%	43
6. Dental Care/Oral Health	67.8%	40
7. Substance Abuse - Prescription Drugs	64.4%	38
8. Heart Disease & Stroke	62.7%	37
9. Tobacco Use	57.6%	34
10. Alcohol Use	54.2%	32
11. Cancer	52.5%	31
12. Domestic Violence	49.2%	29
13. Mental Illness	49.2%	29
14. Alzheimer's Disease	42.4%	25
15. Prenatal & Pregnancy Care	42.4%	25
16. Sexually Transmitted Diseases	30.5%	18
17. Intellectual/Developmental Disabilities	28.8%	17
18. Arthritis	25.4%	15
19. Autism	25.4%	15
20. Asthma	22.0%	13
21. Respiratory Diseases (other than asthma)	16.9%	10
22. HIV/AIDS	15.3%	9
23. Other Health Problems (list in box below)	13.6%	8
24. Infectious Diseases	8.5%	5
<b>Open-Ended Responses</b>		
As a former teacher and currently an individual that spends large amounts of time in our public schools, I have observed an overwhelming amount of health needs in our community. Many of the health issues such as obesity, diabetes and teen pregnancy, as well as drug and alcohol abuse are keeping many of our community members from reaching their true potential.		
1. Depression/Suicide - increased number of pt's presenting w/ major depression and suicidal thoughts and attempts - based on social and economic issues vs. mental illness. 2. Poor diet & nutrition 3. Sedentary lifestyles - contributes to a lot of the problems and issues in the above list. Due to lack of employment, people are not getting any movement or exercise. They have no social interaction which is often found in the workplace. They tend to sit at home all day, watching TV and snacking or eating low cost, unhealthy foods. These factors contribute to depression, obesity, heart disease, substance abuse, tobacco and alcohol use.		
As a school nurse, I am seeing an increased number of children with Type 2 Diabetes. I teach classes for HCI and it is amazing the number of participants for diabetes classes that have no clue about their condition -- they don't know how to check their blood sugar, count carbohydrates, etc.		
Sedentary lifestyles, lack of exercise and overweight (not just obesity).		
I always include "Intellectual Poverty"		
These are the problems that hinder one's employability. All of these listed, however, are an issue in our community.		
<i>Others mentioned include:</i> 'Insufficient primary care provider capacity', 'MRSA infections', 'Apathy,' 'Brain injury' 'Homelessness' and 'Sleep Apnea'.		

## Survey Item 2. Community Health Services in Need of Strengthening

The next survey item asked respondents to identify community health services in need of strengthening. The responses are summarized in *Exhibit 4*. Every item on the predefined list of 25 services included in the survey was identified by at least four respondents. Several additional issues were identified in the open-ended comments.

**Exhibit 4. Survey Responses: Community Health Services in Need of Strengthening**

Answer Options	Response Percent	Response Count
1. Health Care Coverage	68.3%	41
2. Substance Abuse	58.3%	35
3. Dental Care/Oral Health	56.7%	34
4. Health Education	56.7%	34
5. Primary Health Care	53.3%	32
6. Patient Self Management (e.g. nutrition, exercise, taking medications)	50.0%	30
7. Family Planning	46.7%	28
8. Transportation	45.0%	27
9. Aging Services	43.3%	26
10. Social Services	41.7%	25
11. Early Detection & Screening	40.0%	24
12. Hospital Services	38.3%	23
13. Specialty Medical Care (e.g. cardiologists, oncologists, etc.)	36.7%	22
14. Maternal, Infant & Child Health	35.0%	21
15. Domestic Violence	33.3%	20
16. Public Health	30.0%	18
17. School Health	26.7%	16
18. Chronic Pain Management	23.3%	14
19. Developmental Disabilities	20.0%	12
20. Food Safety Net/Basic Needs	20.0%	12
21. Environmental Health	16.7%	10
22. Home Health	13.3%	8
23. Hospice	11.7%	7
24. Pharmacy Services	11.7%	7
25. Other Community Health Services (list in box below)	6.7%	4

### Additional Comments:

We need to step it up with more health education. We are doing better, but we need to offer more opportunities for healthy lifestyles. Our fitness centers are too small and we need to promote a more active lifestyle. The Health Coalition is doing good work, but we need more individuals to model this type of lifestyle. I commend the Harvest Foundation for the work they have done with the Sport complex, walking trails and the areas to launch kayaks. This is a step in the right direction to build a healthy and fit community.

Active lifestyle planning help. Food choices. How to make the most of the opportunities we have available for physical wellness (Rivers and Trails, etc)

Transitional and screening health services for newly released prison inmates. Programs to help them acclimate back into society w/ health, housing, education and employment opportunities. Perhaps the folks can be productive citizens, provide financial support to their children, and no longer be a burden on society.

*Additional mentions:* Homelessness (2); Mental health services and mental health care (2); How to get specialty services for the uninsured.

### Survey Item 3. Top Priority Community Health Concerns

In this item respondents were asked to identify the top priority health concerns in their own words. The results are summarized in *Exhibit 5*. A total of 24 distinctive concerns were identified by the respondents, with obesity and substance abuse identified most frequently.

**Exhibit 5. Survey Responses: Top Priority Community Health Concerns**

Priority Health Concern	Response Count	Response Percent
1. Obesity	45	76%
2. Substance Abuse	33	57%
3. Access to Quality Primary Medical Care	27	47%
4. Teen Pregnancy	20	34%
5. Mental Health	15	26%
6. Diabetes	14	24%
7. Dental Care	13	22%
8. Services for the Elderly	13	22%
9. Health Coverage	10	17%
10. Health Education	10	17%
11. Heart Disease	7	12%
12. Programs to Support Physical Activity	7	12%
13. Transportation	6	10%
14. Access to Nutritious Food	6	10%
15. Other Social Services for Low-Income Residents	6	10%
16. STDs	5	9%
17. Cancer	5	9%
18. Domestic Violence	5	9%
19. Early Detection Services	4	7%
20. Support to Residents with Developmental Delays	4	7%
21. Maternal Care	3	5%
22. Homelessness	3	5%
23. Pain Management	3	5%
24. Smoking	2	3%

### Survey Item 4. Additional Ideas or Suggestions

At the end of the survey each respondent was given an opportunity to offer additional ideas or suggestions in their own words, which would help the Harvest Foundation address local challenges in health, education and community vitality. Twenty-nine survey respondents offered replies, and these have been shared with the Foundation board and staff.

## Part II. Community Indicator Analysis

This section of the report provides a quantitative profile of community health status in Martinsville and Henry County. The analysis includes profiles of demographic trends, mortality, maternal and infant health, the uninsured, selected hospital discharges, and chronic disease risk. The analysis does not include every possible indicator of community health. The analysis is focused on a set of indicators which provide authentic insight into community health and for which there were readily available data sources. Sources and methods are explained in each section.

### 1. Demographic Profile

Community health is driven in large part by community demographics. The age, sex, race, ethnicity, income, and educational status of a population are strong predictors of community health status.

*Exhibit 6* presents a snapshot of key health-related demographics in Martinsville and Henry County. The shaded figures indicate marked differences in health-related demographics between the population of Martinsville and Henry County and the Commonwealth of Virginia as a whole. As indicated, the Martinsville and Henry County population is generally older, more African-American, poorer, and less educated than Virginia as a whole.

**Exhibit 6. Health Demographic Snapshot Profile, 2009**

Category	Indicator	Martinsville & Henry County (Count)	Martinsville & Henry County (Rate)	Virginia
Total	Population	69,413	--	7,850,505
Age	Children age 0-17	13,894	20%	23%
	Seniors age 65+	13,146	19%	13%
Sex	Male	33,668	49%	49%
	Female	35,745	51%	51%
Race / Ethnicity	Asian	486	1%	5%
	Black	18,196	26%	20%
	White	49,776	72%	70%
	Other or Multi-Race	425	1%	6%
	Hispanic	4,707	7%	7%
Income & Education	Per Capita Income	--	\$21,864	\$31,341
	Median Household Income	--	\$38,825	\$59,564
	Age 25+ Did Not Graduate HS	14,528	29%	13%

Source: Community Health Solutions analysis of data from SRC Corp.

As shown in *Exhibit 7*, the trend in Martinsville and Henry County is toward overall population decline, increasing diversity, and continued aging. The population trend is one of decline from more than 73,000 in 2000, to less than 70,000 in 2009, and to less than 68,000 in 2014. From a race and ethnicity viewpoint, the absolute numbers of White residents and Black residents are expected to decline by 2014, while the populations of other racial backgrounds are expected to grow. The Hispanic population is expected to continue growing from 2,360 in 2000, to more than 4,700 in 2009, to nearly 6,300 in 2014. Focusing on age, the population under 55 is expected to decline, while the population age 55 to 84 is expected to grow markedly by 2014.

*Supplemental analysis: There are no readily available data on educational attainment by age for Martinsville and Henry County. Nationally, we know that the younger population is more educated than the older population. In 2003, high school attainment levels by age generally increased up to 45 to 49 years (89 percent) and then decreased successively for each older age group. The oldest age group, those 75 and over, had the lowest high school attainment at 68 percent.*

**Exhibit 7. Health Demographic Trend Profile, 2000-2014**

<b>Category</b>	<b>Martinsville &amp; Henry County</b>	<b>2000 Census</b>	<b>2009 Estimate</b>	<b>2014 Projection</b>	<b>2009 to 2014</b>
Total	Total Population	73,346	69,413	67,930	-2.1%
	Total Households	30,408	30,407	30,486	0.3%
Age	0 to 4	4,075	3,719	3,713	-0.2%
	5 to 14	9,487	7,652	7,304	-4.5%
	15 to 19	4,459	4,219	3,817	-9.5%
	20 to 24	3,804	4,045	4,128	2.1%
	25 to 34	9,453	7,934	7,798	-1.7%
	35 to 44	11,481	9,377	8,055	-14.1%
	45 to 54	10,272	10,318	9,999	-3.1%
	55 to 64	8,444	8,998	9,268	3.0%
	65 to 74	6,548	6,979	7,475	7.1%
	75 to 84	4,022	4,311	4,602	6.8%
	85+	1,301	1,856	1,763	-5.0%
Sex	Male	35,204	33,668	33,170	-1.5%
	Female	38,142	35,745	34,760	-2.8%
Race / Ethnicity	White	51,655	49,776	48,486	-2.6%
	Black	19,686	18,196	17,562	-3.5%
	American Indian or Alaska Native	109	186	215	15.6%
	Asian or Pacific Islander	327	503	669	33.0%
	Some Other Race	911	425	652	53.4%
	Two or More Races	658	327	346	5.8%
	Hispanic Ethnicity	2,360	4,707	6,274	33.3%
	Not Hispanic or Latino	70,986	64,706	61,656	-4.7%

Source: Community Health Solutions analysis of data from SRC Corp.

## 2. Mortality Profile

Mortality profiling is one of the most conventional ways to gain insight into community health. This section of the assessment examines leading causes of death for residents of Martinsville and Henry County during 2008.

As shown in *Exhibit 8*, in 2008 there were 941 resident deaths in Martinsville and Henry County. As in most communities, the leading causes of death were heart disease (n=267) and malignant neoplasm (n=193), together accounting for 49 percent of all deaths. The exhibit shows that the age-adjusted death rates were markedly higher than the state norm in Martinsville, Henry County, or both for all of the 12 leading causes of death except for two (Alzheimer's Disease and Septicemia). This means that even after adjusting for the fact that the populations of Martinsville and Henry County are generally older than the state as a whole, there is still a marked undesirable difference in death rates for the local population.

**Exhibit 8. Twelve Leading Causes of Death, 2008**

Leading Causes of Death	Martinsville	Henry County	Martinsville & Henry County
All Deaths	241	700	941
Heart Disease	66	201	267
Malignant Neoplasm	45	148	193
Cerebrovascular Disease	15	43	58
Chronic Lower Respiratory Disease	15	34	49
Unintentional Injury	10	40	50
Alzheimer's Disease	4	16	20
Nephritis & Nephrosis	5	17	22
Diabetes	6	24	30
Septicemia	4	8	12
Influenza & Pneumonia	3	23	26
Suicide	0	17	17
Chronic Liver Disease	2	9	11
Age-Adjusted Death Rate per 100,000 Population	Martinsville	Henry County	Virginia
All Deaths	964.5	1,000.90	758.0
Heart Disease	265.1	277.3	176.5
Malignant Neoplasm	192.3	199	176.2
Cerebrovascular Disease	52.7	60.3	42.0
Chronic Lower Respiratory Disease	66.2	46.5	39.7
Unintentional Injury	65.2	72.3	35.4
Alzheimer's Disease	10.1	23	23.5
Nephritis & Nephrosis	14.2	24.8	20.0
Diabetes	27.6	33.2	19.5
Septicemia	18.7	10.9	18.3
Influenza & Pneumonia	10.2	31.9	17.2
Suicide	0	27.7	11.8
Chronic Liver Disease	9.8	13.1	7.6

Source: Community Health Solutions analysis of data from the Virginia Department of Health.

*Supplemental analysis: The annual number of unintentional injury deaths varied markedly from 2004 to 2008, totaling 53 in 2004, 29 in 2005, 50 in 2006, 33 in 2007, and 50 in 2008. The annual number of suicide death also varied markedly, totaling 13 in 2004, 19 in 2005, 16 in 2006, 14 in 2007, and 17 in 2008.*

### 3. Maternal and Infant Health Profile

Alongside mortality, maternal and infant health indicators are commonly used to evaluate community health status. This component of the assessment examines key indicators of pregnancy, births, and infant mortality for Martinsville and Henry County.

As shown in *Exhibit 9*, there were 816 total live births in Martinsville and Henry County in 2008. Of these, 71 were born with low birth weight, 178 were born to mothers with no prenatal care in the first trimester, and 439 were born to an unmarried mother. There were 148 teen pregnancies, of which two thirds involved older teens age 18 or 19. There were also 82 induced terminations of pregnancy, 59 natural fetal deaths, and eight infant deaths during 2008.

Focusing on selected rates in the bottom part of the exhibit, Martinsville and Henry County had a lower birth rate than the state as a whole, and a comparable low weight birth rate. The local area had significantly higher rates of births without early prenatal care, births to unmarried mothers, and births to teens. Both Martinsville and Henry County also had five-year infant mortality rates above the statewide norm.

**Exhibit 9. Maternal and Infant Health Profile, 2008**

Indicators	Martinsville	Henry County	Martinsville & Henry County	Virginia
<b>Birth and Pregnancy Counts</b>				
Total Live Births	223	593	816	
Low Weight Births (under 2,500 grams / 5 lb. 8 oz.)	12	59	71	
Births with No Prenatal Care in First 13 Weeks	51	127	178	
Non-Marital Births	143	296	439	
Total Teenage Pregnancies Ages 10-19	45	103	148	
Pregnancies Ages <15 yrs	1	1	2	
Pregnancies Ages 15-17	12	32	44	
Pregnancies Ages 18-19	32	70	102	
Induced Terminations of Pregnancy	26	56	82	
Natural Fetal Deaths	31	28	59	
Total Infant Deaths	1	7	8	
<b>Birth and Pregnancy Rates</b>				
Birth Rate Per 1,000 Total Population	15.3	10.7	11.7	13.7
Low Weight Births	5.4%	9.9%	8.7%	8.4%
Births with No Prenatal Care in First 13 Weeks	22.9%	21.4%	21.8%	15.4%
Non-Marital Births	64.1%	49.9%	53.8%	35.8%
Pregnancy Rate Per 1,000 Females Ages 10-19	52.2	32.3	36.5	26.3
Five-Year Infant Mortality Rate 2004-2008	10.2	9.2	--	7.3

Source: Community Health Solutions analysis of birth data from the Virginia Department of Health

*Supplemental analysis: The percentage of births with no prenatal care in the first 13 weeks was markedly higher locally than for the state as a whole in every age group. In 2008 the local area rates by age of mother were: 47% for mothers under 18; 34% for mothers 18-19; 21% for mothers 20-29; 14% for mothers 30-39; and 18% for mothers 40+.*

#### 4. Preventable Hospitalization Profile

Preventable hospitalizations are another commonly used lens for examining community health status. In this report we examine hospitalizations for Prevention Quality Indicators (PQIs). PQIs are part of a set of Agency Healthcare Research and Quality (AHRQ) Quality Indicators (QIs) developed by investigators at Stanford University and the University of California under a contract with AHRQ. The PQIs are a set of measures that can be used with hospital inpatient discharge data to identify quality of care for "ambulatory care-sensitive conditions." These are conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.<sup>5</sup>

Even though the PQI indicators are based on hospital inpatient data, they provide insight into the community health care system or services outside the hospital setting. For instance, patients with diabetes may be hospitalized for diabetic complications if their conditions are not adequately monitored or if they do not receive the patient education needed for appropriate self-management. Or, patients may be hospitalized for asthma if primary care providers fail to adhere to practice guidelines or prescribe appropriate treatments. With high-quality, community-based primary care, hospitalization for these illnesses often can be avoided. Although other factors outside the direct control of the health care system, such as poor environmental conditions or lack of patient adherence to treatment recommendations, can result in hospitalization, the PQIs provide one important measure of access to health services in the community.<sup>8</sup>

As shown in *Exhibit 10*, there were 1,251 total PQI discharges for Martinsville and Henry County for the 12-month period from July 2008 and June 2009. The leading primary diagnoses for these discharges were congestive heart failure, bacterial pneumonia, diabetes, urinary tract infection, and dehydration.<sup>6</sup>

**Exhibit 10. Prevention Quality Indicator Hospital Discharges, 2008-2009**

Indicators	Martinsville	Henry County	Martinsville & Henry County	Virginia
Total PQI Discharges	675	576	1,251	
Discharges for Congestive Heart Failure	145	118	263	
Discharges for Bacterial Pneumonia	122	105	227	
Discharges for Diabetes	108	105	213	
Discharges for Urinary Tract Infection	85	85	170	
Discharges for Dehydration	72	62	134	
Discharges for Adult Asthma	59	37	96	
Discharges for Chronic Obstructive Pulmonary Disease	40	35	75	
Discharges for Hypertension	34	15	49	
Discharges for Perforated Appendix	6	7	13	
Discharges for Angina	4	7	11	
PQI Discharges per 10,000 Population	472	105	180	102

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc.

*Supplemental analysis: On a population basis, the number of PQI discharges per 10,000 population was markedly higher in the local area as compared to the state. This pattern held in every age group for adults. Compared to statewide norms, the local PQI discharge rate per 10,000 population was 13 percent higher for adults age 18-29, 119% higher for adults age 30-44, 63% higher for adults age 45-64, 22% higher for adults age 65+, and 78% higher overall.*

<sup>5</sup> AHRQ website at [http://www.qualityindicators.ahrq.gov/pqi\\_overview.htm](http://www.qualityindicators.ahrq.gov/pqi_overview.htm)

<sup>6</sup> The PQI definitions are highly specific in their specification of ICD-9 diagnosis codes and procedure codes. Not every case of congestive heart failure, bacterial pneumonia, etc. is included in the PQI definition.



## 5. Behavioral Health Hospitalization Profile

In addition to hospitalizations for Prevention Quality Indicator (PQI) diagnoses, hospitalizations for behavioral health conditions can provide valuable insight into community health. This section examines behavioral health hospitalizations for residents of Martinsville and Henry County for the 12-month period from July 2008 through June 2009. The analysis includes all discharges of local residents from Virginia community hospitals for which a behavioral health condition was identified as a *primary* or *secondary* diagnosis. The analysis does not include hospitalizations in state facilities or certain specialty psychiatric hospitals.

As shown in *Exhibit 11*, there were 1,550 behavioral health hospital discharges for residents of Martinsville and Henry County between July 2008 and June 2009. The leading diagnosis was affective psychoses, with 505 discharges. Three alcohol- and drug-related diagnoses combined for another 275 discharges. As was the case with the PQI indicators shown in the previous section, Martinsville had a markedly higher hospital discharge rate per 10,000 population (unadjusted for age) than the state as a whole.

**Exhibit 11. Behavioral Health Hospital Discharges, 2008-2009**

Indicators	Martinsville	Henry County	Martinsville & Henry County	Virginia
Total Behavioral Health Discharges*	749	801	1,550	
Affective Psychoses	231	274	505	
General Symptoms	72	81	153	
Nondependent Abuse of Drugs	60	89	149	
Specific Delays in Development	64	32	96	
Neurotic Disorders	35	34	69	
Drug Dependence	32	33	65	
Depressive Disorder Not Elsewhere Classified	33	30	63	
Alcohol Dependence Syndrome	27	34	61	
Adjustment Reaction	16	21	37	
Schizophrenic Disorders	11	13	24	
Behavioral Health Discharges per 10,000 Pop. (Unadjusted for Age)	524	145	223	168

Source: Community Health Solutions analysis of hospital discharge data from Virginia Health Information, Inc.

*Supplemental analysis: On a population basis, the number of behavioral health discharges per 10,000 population was markedly higher (44%) in the local area as compared to the state for each age group except the 65+ age group (the local area's behavioral health discharge rate for seniors was 4% lower than the state rate). Specifically, the overall behavioral health discharge rate was 18% higher for local residents under age 18, 74% higher for residents age 18-29, 73% higher for residents age 30-44 and 38% higher for residents age 45-64. By diagnosis, a higher prevalence of discharges was seen in the study area for all top ten conditions except schizophrenic disorders with the most notable difference in the frequency of affective disorders (33% versus 25%, local area vs. state, respectively).*

## 6. Chronic Disease Risk Profile

Chronic disease is an important focus of community health assessment because chronic diseases are major drivers of poor health, diminished quality of life, limited productivity, and high levels of health spending. Also, in many cases chronic disease can be prevented or controlled through healthy lifestyle choices and access to quality health care.

This section of the report examines chronic disease risk for adults and children using synthetic estimation methods. In synthetic estimation, national and state estimates for specific diseases and risk factors are applied to the particular demographic profile of the local area to produce an estimate of what the prevalence of the disease or risk factor *may* be. These estimates are useful for planning, but it is not possible to guarantee their statistical accuracy.

### Adult Risk Estimates

This section of the report examines chronic disease risk for adults based on synthetic estimates from the Centers for Disease Control's *Behavioral Risk Factor Surveillance System*. To produce the synthetic estimates shown in *Exhibit 12*, Community Health Solutions analyzed national and state data from the *Behavioral Risk Factor Surveillance Survey* to develop estimates of the number and percent of adults age 18 and over who have or are at risk for particular health issues. The local estimates indicate that:

- 77 percent of area adults (more than 42,600 individuals) might not meet guidelines for eating fruits and vegetables
- 59 percent (nearly 33,000) may be overweight or obese
- 32 percent (more than 17,700) may have high cholesterol
- 31 percent (more than 17,000) may have arthritis
- 31 percent (nearly 17,000) may have high blood pressure.
- 24 percent (more than 13,000) may not have exercised in the past 30 days
- 22 percent (more than 12,000) may be smokers
- 20 percent (more than 11,000) may have significant physical limitations
- 16 percent (more than 9,000) may be in only fair or poor health
- 14 percent (more than 7,600) may be binge drinkers
- 13 percent (more than 7,000) may have asthma
- 9 percent (more than 5,000) may have diabetes.

**Exhibit 12. Adult Chronic Disease Risk Profile (Synthetic Estimates) 2009**

Indicators	Martinsville (Count)	Henry County (Count)	Martinsville & Henry County (Count)	Martinsville & Henry County (Percent)
Estimated adults age 18+	11,396	44,118	55,514	100%
<b>Estimated adults age 18+ who may...</b>				
Be Eating Less Than Five Fruits & Vegetables	8,707	33,971	42,678	77%
Be Overweight or Obese	6,940	26,030	32,970	59%
Have High Cholesterol	3,647	14,118	17,764	32%
Have Arthritis	3,533	13,488	17,020	31%
Have High Blood Pressure	3,761	13,235	16,996	31%
Have No Exercise in Past 30 Days	2,940	10,147	13,087	24%
Smoke	2,427	9,706	12,133	22%
Have Physical Limitations	2,268	8,824	11,091	20%
Be in Fair or Poor Health	2,040	7,059	9,099	16%
Be at Risk for Binge Drinking	1,447	6,177	7,624	14%
Have Asthma	1,481	5,578	7,059	13%
Have Diabetes	1,140	3,882	5,022	9%

Source: Community Health Solutions synthetic estimates based on Behavioral Risk Factor Surveillance Survey data from the Centers for Disease Control and demographic data from SRC Corp.

## Child Risk Estimates

Children are subject to a wide range of physical, emotional, behavioral, and environmental health risks. This study is focused on one particular category of risk involving nutrition, physical activity, and overweight. These lifestyle-related risks have received increasing attention as the population of American children have become more sedentary, more prone to unhealthy eating, and more likely to develop unhealthy body weight. The long-term implications of these trends are serious, as these factors place children at higher risk for chronic disease both now and in adulthood.

*Exhibit 13* shows a list of selected child risk estimates for children age 10-17 in Martinsville and Henry County. These are synthetic estimates based on statewide and regional survey data from a recent household survey on childhood obesity commissioned by the Virginia Foundation for Healthy Youth. The results of the survey were published in May of 2010. The synthetic estimates were produced by applying the regional estimates for southwest Virginia to the Martinsville and Henry County population estimates for 2009. Assuming that the survey estimates for southwest Virginia reflect the behaviors of children in Martinsville and Henry County, it is estimated that:

- 28 percent of children age 10-17 (nearly 1,800 individuals) may be overweight or obese
- 88 percent of children age 10-17 (more than 5,600 individuals) may not be meeting the daily intake requirements for fruits and vegetables
- 56 percent of children age 10-17 (nearly 3,600 individuals) may be consuming chips, soda or candy three or more times a week
- 34 percent of children age 10-17 (over 2,000 individuals) may not be meeting recommended targets for physical activity
- 30 percent of children 10-17 (more than 1,900 individuals) may be watching three or more hours of television on a typical day
- 16 percent of children age 10-17 (more than 1,000 individuals) may be playing video/computer games on a typical day.

**Exhibit 13. Child Health Risk Profile (Synthetic Estimates) 2009**

Indicators	Martinsville (Count)	Henry County (Count)	Martinsville & Henry County (Count)	Martinsville & Henry County (Percent)
Estimated Children Age 10-17				
<b>Est. Children Age 10-17 who may...</b>				
Be overweight or obese <sup>7</sup>	380	1,418	1,798	28%
Not meet recommended intake of fruits and vegetables	1,193	4,458	5,651	88%
Be drinking soda or eating chips or candy three or more days per week	759	2,837	3,596	56%
Not be meeting recommended targets for physical activity	461	1,722	2,183	34%
Be watching television three or more hours per day	407	1,520	1,927	30%
Be playing video/computer games three or more hours per day	217	811	1,028	16%

Source: Community Health Solutions synthetic estimates based on Market Decisions' 2010 Obesity Survey commissioned by Virginia Foundation for Healthy Youth.

<sup>7</sup> For children and adolescents (aged 2–19 years), the BMI value is plotted on the CDC growth charts to determine the corresponding BMI-for-age percentile. Overweight is defined as a BMI at or above the 85th percentile and lower than the 95th percentile. Obesity is defined as a BMI at or above the 95th percentile for children of the same age and sex.

## 7. Health Coverage Profile

Decades of research show that health coverage matters when it comes to overall health status, access to health care, quality of life, school and work productivity, and even mortality. Lack of health coverage is a longstanding problem for large numbers of Virginians, and the problem has only worsened with the economic downturn. This section examines health coverage in the Martinsville and Henry County area.

*Exhibit 14* shows estimates of the number of uninsured individuals in Martinsville and Henry County as of 2009.<sup>8</sup> At any point in 2009, an estimated 12,298 nonelderly residents were uninsured.<sup>9</sup> This included an estimated 1,878 children age 0-18, plus an estimated 10,421 adults age 19-64. Reflecting the economic struggles of the community, the estimated uninsured rates for Martinsville and Henry County are well above the statewide estimates. Among both children and adults, the large majority of uninsured residents were expected to have incomes below 200 percent of the federal poverty level<sup>10</sup>.

**Exhibit 14. Uninsured (Synthetic Estimates) 2009**

Indicators	Martinsville	Henry County	Martinsville & Henry County	Virginia
<b>Nonelderly Population</b>				
Nonelderly Uninsured Rate	22.9%	21.6%	22%	16%
Nonelderly Uninsured Count	2,531	9,767	12,298	
<b>Children Age 0-18</b>				
Uninsured Children Percent	13.5%	12.5%	13%	9%
Uninsured Children Total	415	1,462	1,878	
Uninsured Children <100% Poverty	284	871	1,154	
Uninsured Children 101-200% Poverty	75	350	425	
Uninsured Children 201-300% Poverty	30	146	177	
Uninsured Children 301%+	27	95	121	
<b>Adults Age 19-64</b>				
Adult Uninsured Rate	26.6%	24.8%	25%	18%
Uninsured Adults Total	2,116	8,305	10,421	
Uninsured Adults <100% Poverty	1,020	3,174	4,194	
Uninsured Adults 101-200% Poverty	658	2,954	3,612	
Uninsured Adults 201-300% Poverty	264	1,450	1,714	
Uninsured Adults 301%+	173	727	901	

Source: Community Health Solutions synthetic estimates. See footnote.

Although health coverage is an essential asset for personal health, coverage alone does not guarantee access. Both Martinsville and Henry County are designated as medically underserved areas by the Commonwealth of Virginia and the U.S. Health Resources and Services Administration. The criteria for designation as a medically underserved area include having too few primary care providers, high infant mortality, high poverty and/or high elderly population. Within medically underserved areas, even individuals with Medicaid, Medicare, or private health coverage can have difficulty acquiring the services they need.

<sup>8</sup> These estimates were produced by Community Health Solutions using synthetic estimation methods, and are intended for planning purposes only. The estimates were produced by applying statewide estimates of income-specific uninsured rates as of 2008 to local demographic estimates for 2009. The statewide uninsured estimates were obtained from a report produced for the Virginia Health Care Foundation by Urban Institute. The local demographic estimates were obtained from SRC Corp. The estimates do not explicitly account for either undocumented populations or acute drops in income due to the recession.

<sup>9</sup> The analysis is focused on nonelderly residents (age 0-64) because the original survey data focused on this population. In most communities 98 percent or more of seniors are covered by Medicare or some other form of coverage.

<sup>10</sup> 200 Percent of the Federal Poverty Line is defined as an annual income of \$44,100 for a family of four. <https://www.cms.gov/MedicaidEligibility/downloads/POV10Combo.pdf>

## Appendix A. Aging Population Profile

The Harvest Foundation requested a focused analysis on the aging population to be conducted as part of this study. This Appendix presents relevant indicators of aging, income, chronic disease risk, mortality, and hospitalization. The results are not surprising: seniors have high rates of chronic disease which causes death and disability. The results also highlight the reality that large numbers of seniors, including many at lower income levels, have substantial service needs. From a prevention viewpoint, many seniors could benefit from better nutrition, more frequent exercise, and access to key immunizations. From a chronic care perspective, many seniors with chronic disease need health care and support services to help them stay healthier, more active, and more independent.

### 1. Demographic Trend

As shown in *Exhibit A1*, the senior population of Martinsville and Henry County is in a growth trend from an estimated 11,871 in 2000, to 13,146 in 2009, to an expected population of 13,840 in 2014.

**Exhibit A1. Martinsville and Henry County Projected Change in Senior Population (Age 65+)**

Age Group	2000 Census	2009 Estimate	2014 Projection	2009 to 2014
65 to 74	6,548	6,979	7,475	7.1%
75 to 84	4,022	4,311	4,602	6.8%
85+	1,301	1,856	1,763	-5.0%
Age 65+	11,871	13,146	13,840	5%

Source: Community Health Solutions analysis of data from SRC Corp.

### 2. Household Income

As shown in *Exhibit A2*, more than 30 percent of householders age 65-74 had household income less than \$20,000 in 2009. Also, more than 40 percent of householders age 75 plus had household income less than \$20,000.

**Exhibit A2. Martinsville and Henry County Household Income for Senior Householders, 2009**

Household Income	Age 65 - 74 Years (Count)	Age 65 - 74 Years (%)	Age 75 Plus Years (Count)	Age 75 Plus Years (%)
\$ 0 - \$19,999	1,432	31.30%	1,757	41.20%
\$ 20,000 - \$39,999	1,361	29.70%	1,080	25.30%
\$ 40,000 - \$59,999	761	16.60%	577	13.50%
\$ 60,000 - \$74,999	300	6.60%	272	6.40%
\$ 75,000 - \$99,999	418	9.10%	269	6.30%
\$100,000 - \$124,999	71	1.60%	130	3.10%
\$125,000 - \$149,999	92	2.00%	66	1.50%
\$150,000 +	142	3.10%	112	2.60%
Total	4,577		4,263	

Source: Community Health Solutions analysis of data from SRC Corp.

### 3. Chronic Disease Risk

As would be expected, area seniors are at high risk for chronic disease. Some chronic disease is inevitable with age, although some can be avoided or better managed with healthy lifestyle changes and quality health care. The synthetic estimates in Exhibit A3 indicate that substantial numbers of area seniors are at risk for chronic disease and could practice healthier lifestyles.

**Exhibit A3. Senior Chronic Disease Risk Indicators  
(Synthetic Estimates) 2009**

Indicator	Martinsville (Count)	Henry County (Count)	Martinsville and Henry County (Count)	Estimated Percent
Senior Population Age 65+	3,245	9,901	13,146	100%
<b>Senior Pop. Age 65+ who may...</b>				
Not Be Consuming Five Fruits and Vegetables per Day	2,262	6,901	9,163	70%
Be Classified as Overweight or Obese	1,973	6,020	7,993	61%
Have High Blood Pressure	1,921	5,861	7,782	59%
Have Arthritis	1,765	5,386	7,151	54%
Have High Cholesterol	1,762	5,376	7,138	54%
Have No Participation in Physical Activity in the Past Month	1,045	3,188	4,233	32%
Have Limitations Due to a Physical, Mental, or Emotional Problem	905	2,762	3,668	28%
Be Without a Flu Shot in the Past Year	899	2,743	3,641	28%
Be in Self-Reported Fair or Poor Health	811	2,475	3,287	25%
Be Without a Pneumonia Vaccination	737	2,248	2,984	23%
Have Diabetes	623	1,901	2,524	19%
Have Health Problems Requiring Use of Special Equipment	591	1,802	2,393	18%
Have Angina or Coronary Heart Disease	386	1,178	1,564	12%
Smoke	315	960	1,275	10%
Have Asthma	282	861	1,144	9%
Engage in Binge Drinking	78	238	316	2%

*Source: Community Health Solutions synthetic estimates based on Virginia Behavioral Risk Factor Surveillance Survey results for seniors, applied to local demographics.*

The risk of chronic conditions is further reflected in the leading causes of deaths and hospitalization for seniors. As shown in Exhibit A4, most of the leading causes of death for seniors are chronic conditions. Likewise, as shown in Exhibit A5, several chronic conditions are among the leading Prevention Quality Indicator discharges for seniors.

**Exhibit A4. Top Ten Causes of Death for Seniors, 2008**

<b>Indicator</b>	<b>Martinsville</b>	<b>Henry County</b>	<b>Martinsville &amp; Henry County</b>
<b>Senior Population</b>	<b>3,245</b>	<b>9901</b>	<b>13,146</b>
Total Deaths	333	339	672
Heart Disease	95	113	208
Malignant Neoplasm	53	79	132
Cerebrovascular Disease	26	29	55
Chronic Lower Respiratory Disease	15	19	34
Pneumonia and Influenza	15	10	25
Alzheimer's Disease	11	9	20
Nephritis and Nephrosis	12	6	18
Diabetes	11	6	17
Septicemia	7	3	10
Pneumonitis	5	5	10

*Source: Community Health Solutions analysis of data from the Virginia Department of Health*

**Exhibit A5. Prevention Quality Indicator Hospital Discharges for Seniors (2008-2009)**

<b>Indicator</b>	<b>Martinsville</b>	<b>Henry County</b>	<b>Martinsville &amp; Henry County</b>
<b>Senior Population</b>	<b>3,245</b>	<b>9,901</b>	<b>13,146</b>
Total PQI Discharges	1,118	736	1,854
Discharges for Congestive Heart Failure	92	93	185
Discharges for Bacterial Pneumonia	84	76	160
Discharges for Urinary Tract Infection	64	58	122
Discharges for Dehydration	53	46	99
Discharges for Diabetes	31	28	59
Discharges for Chronic Obstructive Pulmonary Disease	25	21	46
Discharges for Adult Asthma	19	17	36
Discharges for Hypertension	10	7	17
Discharges for Perforated Appendix	4	2	6
Discharges for Angina	-	6	6

*Source: Community Health Solutions analysis of data from Virginia Health Information, Inc.*

## Appendix B. County Health Rankings Profile

In 2010, the University of Wisconsin Population Health Institute, with funding from the Robert Wood Johnson Foundation, released a national set of city and county health rankings. The *Rankings* are intended to be a “call to action for state and local health departments to develop broad-based solutions with others in their community so all residents can be healthy.”

The project web site provides access to 50 state reports, ranking each county within the 50 states according to its health outcomes and the multiple health factors that determine a county’s health. Each county receives a summary rank for its health outcomes and health factors and also for four different types of health factors: health behaviors, clinical care, social and economic factors, and the physical environment. Each county can also drill down to see specific county-level data (as well as state benchmarks) for the measures upon which the rankings are based.

The ranking data for Martinsville and Henry County are presented in *Exhibit B1*.

- Compared to Virginia’s 132 cities and counties included in the analysis, Martinsville ranks in the first (best) quartile on the summary measure of clinical care, the second quartile on the summary measure of physical environment, and in the bottom quartile on summary measures of health outcomes, health factors, and social & economic factors.
- Henry County ranks in the first (best) quartile on the summary measure of physical environment, but in the bottom quartile on measures of health outcomes, health factors, clinical care, and social & economic factors.

Care should be taken when interpreting these measures for two basic reasons:

- *Some estimates may be highly inaccurate.* Most of the measures included in the rankings are estimates based on national or state survey data. It is a technical challenge to produce a comprehensive set of estimates which is accurate in all cases. For instance, the rankings estimate Martinsville’s adult uninsured rate at between 8 and 11 percent – a rate significantly below the Virginia statewide rate of 15 percent. Given the level of economic stress in Martinsville, it is highly unlikely that the adult uninsured rate is below the statewide estimate.
- *Margins of error matter.* In some cases, the local point estimate may indicate health deficits compared to the target value or the state-level value, but the state-level target falls within the margin of error for the local point estimate. For instance, this is the case for the estimate of ‘poor physical health days’ for Martinsville. The Martinsville point estimate of 3.4 days is above the target value of 2.4 and the Virginia value of 3.2. However, both the target value and the state value fall within the estimated margin of error for the Martinsville point estimate (1.9-4.9).
- *The indicators are not structured to support evaluation of local programs.* Given the two qualifiers outlined above, the County Health Rankings are generally neither timely enough nor precise enough to support evaluations of the impact of specific local programs.

None of the above is to imply that the county rankings have no value. To the extent they shine light on authentic community health problems and stimulate action for community health improvement, the county rankings bring value to the field. The primary advice for local stakeholders is to treat the county health rankings as just one of multiple sources of information, pay close attention to technical weaknesses in the data, and avoid using the county health rankings as definitive report cards on local health status.



## Exhibit B1. County Health Rankings for Martinsville and Henry County

County Health Rankings	Martinsville	Error Margin	Rank (of 132)	Henry County	Error Margin	Rank (of 132)	Target Value*	Virginia
<b>Health Outcomes</b>			<b>110</b>			<b>115</b>		
Mortality			119			104		
Premature death	11,324	9,288-13,360		10,003	9,046-10,961		5,932	6,872
Morbidity			79			124		
Poor or fair health				22%	18-26%		9%	13%
Poor physical health days	3.4	1.9-4.9		4.4	3.5-5.3		2.4	3.2
Poor mental health days	3.9	1.8-5.9		5.4	4.2-6.6		2.4	3.2
Low birth weight	9.20%	7.6-10.9%		10.00%	9.2-10.9%		6.60%	8.10%
<b>Health Factors</b>			<b>122</b>			<b>125</b>		
Health Behaviors			98			96		
Adult smoking				30%	25-36%		15%	20%
Adult obesity	29%	24-35%		28%	23-33%		21%	25%
Binge drinking	15%	8-26%		10%	7-14%		7%	14%
Motor vehicle crash death rate	19	27-Nov		24	19-29		9	13
Chlamydia rate	428			219			83	322
Teen birth rate	71	62-80		56	52-60		21	37
<b>Clinical Care</b>			<b>20</b>			<b>126</b>		
Uninsured adults	9%	8-11%		17%	14-19%		11%	15%
Primary care provider rate	274			21			219	124
Preventable hospital stays	89	83-94		99	94-105		51	68
Diabetic screening	78%	75-82%		81%	78-84%		87%	82%
Hospice use	15%	11-21%		12%	8-17%		37%	26%
<b>Social &amp; Economic Factors</b>			<b>129</b>			<b>127</b>		
High school graduation	68%			67%			84%	75%
College degrees	18%	17-20%		10%	8-11%		37%	33%
Unemployment	12%	11-13%		8%	8-8%		3%	4%
Children in poverty	31%	25-37%		27%	23-31%		7%	13%
Income inequality	47			40			37	45
Inadequate social support				28%	21-35%		12%	19%
Single-parent households	12%	12-13%		12%	9-14%		6%	9%
Violent crime rate	352			301			79	278
<b>Physical Environment</b>			<b>71</b>			<b>9</b>		
Air pollution-particulate matter days	0			0			0	1
Air pollution-ozone days	1			1			0	2
Access to healthy foods	50%			71%			89%	35%
Liquor store density	1.4			0.2				0.5

\* 90th percentile, i.e., only 10% are better. Blank values reflect unreliable or missing data.

Source: University of Wisconsin Population Health Institute, [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

## Introduction

Dear Community Leader:

The Harvest Foundation researches and responsibly invests in programs and initiatives to address local challenges in health, education, and community vitality.

The Harvest Foundation is conducting a community health assessment to help us identify the most pressing health and healthcare needs in our community. As part of this assessment, we are collecting information from a variety of different sources, including community leaders like you. We will use the insights gained from this survey alongside a set of community health statistics to paint a broad portrait of health needs in our community.

Among our most important sources are the professionals who work to improve the health of our community. We are asking you, in your capacity as a local professional, to give us your views on the significant health and healthcare issues facing our community. Your responses will be combined with those of other community leaders, and your name will not be used in any public reports of the data.

On behalf of The Harvest Foundation, thank you for your contribution to this important effort. Please click NEXT to begin!

Sincerely,

Allyson Rothrock - Executive Director  
Paul B. Toms, Jr. - President of the Board of Directors  
The Harvest Foundation

Note: This survey is being administered on behalf of The Harvest Foundation by Community Health Solutions, Inc. If you have any technical questions or problems, please contact Community Health Solutions at 804.673.0166 or [chs@communityhealthinfo.com](mailto:chs@communityhealthinfo.com).

## Your Contact Information

**We are asking for your contact information only to assure completeness of your survey response. Your name will not be used in any publication or public presentation of the survey results.**

Your name:

Your organization:

Your position title:

Your telephone number:

Your email address:

## Survey Item 1. Important Community Health Problems

**Item 1. What are the important health problems in your community?**

**Below is an alphabetical list of typical community health problems which may or may not be important concerns in your community. Based on your experience in the community, please check each community health problem which you think is an IMPORTANT HEALTH PROBLEM for your community.**

**If you are not sure about a particular item, just skip it and move on to the next one. Also use the space at the end to tell us about any additional health problems not on the list.**

- |  |   |
|--|---|
| <input type="checkbox"/> 1 - Adult Obesity           | <input type="checkbox"/> 13 - HIV/AIDS                                  |
| <input type="checkbox"/> 2 - Alcohol Use             | <input type="checkbox"/> 14 - Infectious Diseases                       |
| <input type="checkbox"/> 3 - Alzheimer's Disease     | <input type="checkbox"/> 15 - Intellectual/Developmental Disabilities   |
| <input type="checkbox"/> 4 - Asthma                  | <input type="checkbox"/> 16 - Mental Illness                            |
| <input type="checkbox"/> 5 - Arthritis               | <input type="checkbox"/> 17 - Prenatal & Pregnancy Care                 |
| <input type="checkbox"/> 6 - Autism                  | <input type="checkbox"/> 18 - Respiratory Diseases (other than asthma)  |
| <input type="checkbox"/> 7 - Cancer                  | <input type="checkbox"/> 19 - Sexually Transmitted Diseases             |
| <input type="checkbox"/> 8 - Childhood Obesity       | <input type="checkbox"/> 20 - Substance Abuse - Illegal Drugs           |
| <input type="checkbox"/> 9 - Dental Care/Oral Health | <input type="checkbox"/> 21 - Substance Abuse - Prescription Drugs      |
| <input type="checkbox"/> 10 - Diabetes               | <input type="checkbox"/> 22 - Teen Pregnancy                            |
| <input type="checkbox"/> 11 - Domestic Violence      | <input type="checkbox"/> 23 - Tobacco Use                               |
| <input type="checkbox"/> 12 - Heart Disease & Stroke | <input type="checkbox"/> 24 - Other Health Problems (list in box below) |

Please use this space to add any additional health problems you did not see on the list. Also use this space to elaborate on any of your answers above.

**Survey Item 2. Community Health Services in Need of Strengthening**

Item 2. Which community health services need strengthening?

The following is an alphabetical list of health services typical of most communities. Please check each service which you think needs strengthening in terms of AVAILABILITY, ACCESS, or QUALITY. If you are not sure about an item, just skip it and move on to the next one. Also use the space at the end to tell us about any additional services in need of strengthening which are not on the list.

- |  |  |
|--|--|
| <input type="checkbox"/> 1 - Aging Services              | <input type="checkbox"/> 14 - Hospital Services  |
| <input type="checkbox"/> 2 - Chronic Pain Management     | <input type="checkbox"/> 15 - Maternal, Infant & Child Health  |
| <input type="checkbox"/> 3 - Dental Care/Oral Health     | <input type="checkbox"/> 16 - Patient Self Management (e.g. nutrition, exercise, taking medications) |
| <input type="checkbox"/> 4 - Developmental Disabilities  | <input type="checkbox"/> 17 - Pharmacy Services  |
| <input type="checkbox"/> 5 - Domestic Violence           | <input type="checkbox"/> 18 - Primary Health Care  |
| <input type="checkbox"/> 6 - Early Detection & Screening | <input type="checkbox"/> 19 - Public Health  |
| <input type="checkbox"/> 7 - Environmental Health        | <input type="checkbox"/> 20 - School Health  |
| <input type="checkbox"/> 8 - Family Planning             | <input type="checkbox"/> 21 - Social Services  |
| <input type="checkbox"/> 9 - Food Safety Net/Basic Needs | <input type="checkbox"/> 22 - Specialty Medical Care (e.g. cardiologists, oncologists, etc.)         |
| <input type="checkbox"/> 10 - Health Care Coverage       | <input type="checkbox"/> 23 - Substance Abuse  |
| <input type="checkbox"/> 11 - Health Education           | <input type="checkbox"/> 24 - Transportation   |
| <input type="checkbox"/> 12 - Home Health                | <input type="checkbox"/> 25 - Other Community Health Services (list in box below)                    |
| <input type="checkbox"/> 13 - Hospice                    |  |

Please use this space to add any additional health services you did not see on the list. Also use this space to elaborate on any of your answers above.

**Survey Item 3. Top Priority Community Health Concerns**

Item 3. What are the top priority community health concerns?

Reflecting upon your answers to Item 1 and Item 2, please tell us what you think are the TOP PRIORITY health concerns facing your community. Please list up to five.

Concern 1	<input type="text"/>
Concern 2	<input type="text"/>
Concern 3	<input type="text"/>
Concern 4	<input type="text"/>
Concern 5	<input type="text"/>

**Additional Ideas or Suggestions**

At your option, please use the space below to share any additional ideas or suggestions which could help The Harvest Foundation achieve its mission to research and responsibly invest in programs and initiatives to address local challenges in health, education, and community vitality