























## Horry County, South Carolina Community Health Needs Assessment 2013

Produced by McLeod Health and Approved by McLeod Loris Seacoast Advisory Board on Oct. 24, 2013.

McLeod Loris Seacoast

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### **EXECUTIVE SUMMARY**

In the contents of this report, you will learn about the health of Horry County. The key findings include:

	<u>Horry</u>	<u>State</u>
• County Population Estimate (2012)	282,285	4.7 million
• Median Household Income (2007-2011)	\$42,877	\$44,587
• Persons per household (2007-2011)	2.34	2.52
• Persons below the poverty level (2007-2011)	16.7%	17%
• Uninsured (2012)	26%	17-20%
• Unemployment (Aug 2013)	7.6%	8.1%
• % without High School Diploma (2006-2010)	34%	17%
• % Children Eligible for Free/Reduced Price Lunch	62%	55%
• % Population Receiving Medicaid (2008-2010)	20%	28%
• Ambulatory Care Sensitive Condition Rate (2010)	66 %	61%

#### TOP HEALTH CHALLENGES

Risk Behaviors and Disease	<u>Horry</u>	<u>State</u>
% Adult smoking	26%	21%
% Excessive drinking	17%	14%
Access to recreational facilities (2010)	12	9
Fast food restaurants (2010)	40%	49%
Percent Adults with Heart Disease (2006-2010)	5.4%	4.5%
% Adults without Regular Doctor (2006-2010)	23%	17%

#### TOP COMMUNITY HEALTH CONCERNS

- Heart Disease/Smoking
- Heart Disease/Obesity
- Access to Health Care Insurance, Affordability, Physician Specialty

#### TOP COMMUNITY LEADER CONCERNS

- Health care access for children, including Medicaid recipients
- Cardiac health, including smoking cessation assistance
- Obesity
- Mental health services

#### **OPPORTUNITIES & PLAN PRIORITIES**

McLeod Loris Seacoast Hospital will collaborate with community partners to provide community health initiatives that are focused on areas listed below and further described within the Implementation Plan.

• Expanding availability to quality primary care physicians.

- Expanding the presence of McLeod Health cardiologists in the hospital service area.
- Utilizing resources, such as the US Department of Health & Human Services "Healthy People 2020", which uses evidence-based, best practices for health promotion and disease promotion efforts.

#### HORRY COUNTY HEALTH RANKINGS

Horry, one of South Carolina's fastest growing counties, is located on the coast of northeastern South Carolina. The growth and much of the local economy is driven by the tourism and accommodations-related industries. The population is just over 82% Caucasian and 14% African-American. At the end of 2012, unemployment was just below 10%, but had shown improvement over the last year. Some 19.5% of the county's residents live in poverty, with nearly 36% of children under 5 living in poverty, higher than the national and state averages.

Many of the senior citizens are retirees from the North. As a result the senior poverty rate of 6.8% is considerably lower than both the state and national averages.

The percent of population in Poor and Fair Health is 16%, approximately the same as state and national levels.

Horry County is ranked 22<sup>nd</sup> out of 46 counties in terms of Health Behaviors, such as smoking, obesity, drinking and teen birth rate. More than 1 in 4 adults uses tobacco products, 20% above the state average and 2.5 times the national average.

The county ranks  $30^{\text{th}}$  out of 46 in Clinical Care, regarding access to primary care physicians, people without insurance and diabetic screening. On Social and Economic Factors – such as high school graduation rates, unemployment and children living in poverty – Horry County ranks  $22^{\text{nd}}$  out of 46.

Overall, Horry County is ranked 14<sup>th</sup> (out of 46 counties) according to the 2013 County Health Outcomes, compiled by the University of Wisconsin.

The top ten leading causes of death in Horry County include diseases that can be attributed to risk factors related to heart disease and stroke, cancer and diabetes. Although obesity continues as a challenge, the percent of adults considered "obese" is slightly lower than the South Carolina average and slightly higher than the national average. Cancer deaths in Horry County follow a similar pattern – somewhat higher than the national figures, but lower than the statewide average.

Teen birth rates (55 per 1,000 births) are higher than both the state (51.9) and national (41.2) averages. Nevertheless, low birth-weight babies are 9.91% of the births, two percentage points higher than the national level but approximately the same as the state average.

Although HIV prevalence is lower than both state and national levels, the more common

sexually transmitted disease Chlamydia (488.8 per 100,000) is about 20% higher than the national levels but 20% lower than the state average.

#### ABOUT MCLEOD LORIS SEACOAST HOSPITAL

McLeod Loris Seacoast Hospital, a member of the McLeod Health network, has been serving Horry County for 60 years. Horry County residents have looked to McLeod Loris Seacoast Hospital to meet their health care needs. During the past decades, McLeod Loris Seacoast Hospital has expanded its clinical services and added new members to the medical, clinical and non-clinical staff to meet the changing needs of the citizens we serve. In 2012, to further expand services, McLeod Seacoast opened.

McLeod Loris is a not-for-profit, 105-bed hospital serving northern Horry (SC) and southern Columbus (NC) counties. McLeod Seacoast is a not-for-profit, 50-bed hospital serving northern Horry (SC) and Brunswick (NC) counties. For this assessment, the study area is defined as Horry County, which represents the majority of patients served.

As a not-for-profit organization, McLeod Health invests in the facilities, equipment, services, as well as physician and staff training to continually improve the care we provide. McLeod Health is committed to providing you the highest quality care - it's what you and your families deserve and have come to expect from McLeod Health.

### MESSAGE TO THE COMMUNITY



Dick Tinsley Administrator McLeod Loris Seacoast

Health begins —long before illness—in our homes, schools and jobs. Through meaningful collaboration, we have the opportunity to make choices that can help us all to live a healthy life, regardless of income, education or ethnic background. The opportunity for health starts long before medical care is needed.

People whose circumstances have made them vulnerable to poor health need our help in working towards eliminating barriers that provide everyone with the chance to live a healthy life. This work can't happen without first making use of the facts that serve as the foundation. Health research provides indicators of health status, such as the prevalence of an issue and its effect in both economic and human terms. As health improvement initiatives are introduced, it can reflect the effectiveness of an approach or intervention. By using the *Community Health Needs Assessment*, we can evaluate relevant determinants of health that gives valuable insight in guiding decisions that create a pathway for improving the health of our community. As you read the *Community Health Needs Assessment*, it will change the way you think about health.

After reviewing the report, it is important to begin where health starts. Everyone in our community should have the opportunity to make good healthy choices (e.g., regarding smoking, diet, alcohol use, physical activity) since this has the largest impact on future health outcomes. Wherever possible, through programs, services, public policy or other means, emphasis needs to be placed on addressing health choices before the medical need. Research has shown that the health care system represent only 10-20% of determining health status, while behavioral choices account for 40% or more.

Through changes in public policy, it is possible that most people, regardless of income, could have the ability to see a doctor. Health insurance does not guarantee good health, but it does provide important access to preventative health services. It can reduce the risk of deferring needed care and the financial risk associated with receiving care. Those most vulnerable to poor health often have the weakest voice when it comes to health policy. Our efforts should prioritize our resources to address the most pressing needs, disparities, and inequalities where we may be impactful.

Our success should be linked to collaboration where our collective efforts can build a healthy community that nurtures its families and communities. We encourage partnerships with volunteers, business, government, civic and religious institutions to join us in this work. Although we may not be able to eradicate every illness, there is much we can accomplish by fostering good health and addressing gaps. Health begins with healthy relationships, healthy communities, and healthy jobs, which protect us from the stress of everyday life.

Best of Health,

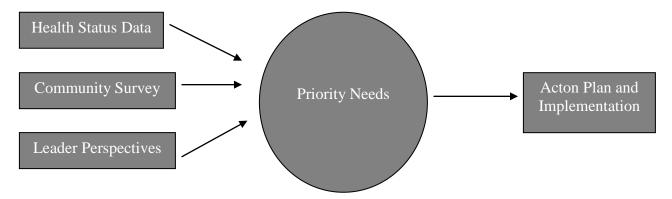
Dick Tinsley

#### **OVERVIEW**

This Community Health Needs Assessment serves as a tool to evaluate the overall health status, behaviors and needs of Horry County. The March 2010 passage of the Patient Protection and Affordable Care Act (PPACA) introduced new reporting requirements for private, not-for-profit hospitals. To meet these new federal requirements, the information gathered in this assessment is used to guide the strategic planning process in addressing health disparities.

A Community Health Needs Assessment gives information to health care providers to make decisions and commit resources to areas of greatest need, making the greatest impact on community health status.

This assessment incorporates data from within the community, such as individuals served and health organizations, as well as vital statistics and other existing health-related data.



McLeod Loris Seacoast Hospital Located in Loris, SC and North Myrtle Beach, SC (Horry County)

McLeod Loris Seacoast Hospital is a part of the McLeod Health system with five respected acute-care hospitals and a behavioral health facility in South Carolina.

# McLeod Health is a 501 (c) and 509 (c) Corporation. Founded in 1906, the mission of McLeod Health is to improve the overall health and well-being of the people living within the eastern regions of North & South Carolina by providing excellence in health care.

#### **McLeod Loris**

McLeod Loris, formally Loris Community Hospital, is a not-for-profit, 105-bed hospital serving the northern Horry (SC) and southern Columbus (NC) counties. Diagnostic services include a 64-slice CT scanner, digital mammography, stereotactic breast biopsy, and cardiac catheterization lab. McLeod Loris, established in 2012, specializes in general and orthopedic surgeries, women's services, emergency care, critical care, palliative care, cardiac/pulmonary rehabilitation, and physical/occupational/speech therapies. The hospital has more than 120 physicians on active and affiliate medical staff representing more than 32 specialties. McLeod Loris is accredited by The Joint Commission.

#### **McLeod Seacoast**

McLeod Seacoast, formally Seacoast Medical Center (initially a comprehensive outpatient facility) opened in 2001, is a not-for-profit, 50-bed hospital serving northern Horry (SC) and southern Brunswick (NC) counties. This facility provides advanced diagnostic imaging including MRI, digital mammography, and nuclear medicine. Additional diagnostic services include a sleep disorders lab and new endoscopy suite. McLeod Seacoast, established in 2012, specializes in general surgery, joint replacement surgery, emergency care, critical care, palliative care, cardiac/pulmonary rehabilitation, and physical/occupational/speech therapies. The hospital has more than 120 physicians on active and affiliate medical staff representing more than 32 specialties. McLeod Seacoast is accredited by The Joint Commission.

#### METHODS

An assessment team comprised of McLeod Health's Community Health and Communication and Public Information staff reviewed literature, data and publications from public sources. Members of the assessment team represented each of the five acute care hospital facilities within McLeod Health and were assigned to collect data that represented indicators of community health status or its socioeconomic determinants. Therefore, focus was placed on identifying locally-appropriate indicators, benchmarks, and pertinent health issues.

Pre-existing databases containing local, state and national health and behavior data were used for comparisons when possible. Sources of this data are listed at the end of this document.

Data collection was limited to the most recent publically available resources. As a result, this document portrays a partial picture of the health status of the community served.

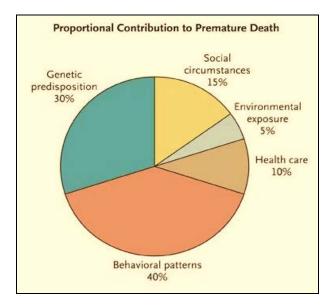
Data analysis included demographic, socioeconomic and health determinant measures. When possible, data also were analyzed according to age, gender and/or race to offer insight into health disparities that may affect specific subgroups in the community.

A summary of county data is reflected as a comparison to state and national data when available to indicate particular health concerns of the community. Relevant targets, such as U.S. Department of Health and Human Services, Healthy People 2020 (HP 2020), are also included as a benchmark for community health standards when applicable to this national health initiative.

#### **HEALTH DETERMINANTS AND DISPARITIES**

#### What are the determinants of health?

Health behaviors had the majority overall impact on future health outcomes (i.e., smoking, diet, drug & alcohol use, physical activity, other lifestyle behaviors) and account for 40% of causes for premature death. Genetic predisposition is responsible for 30%, Social circumstances 15%, and Health care for only 10% (i.e., access to physician and other health services) of health risk for premature death.



Source: Schroder, Steven A., *We Can Do Better — Improving the Health of the American People*, N Engl J Med; 357:1221-1228, September 20, 2007.

#### **Behavioral Determinants (40%)**

- Diet
- Physical activity
- Alcohol, cigarette, and other drug use
- Hand washing

#### **Genetic Determinants (30%)**

- Age
- Sex
- HIV status
- Inherited conditions, such as sickle-cell anemia, hemophilia, and cystic fibrosis
- Carrying the BRCA1 or BRCA2 gene, which increases risk for breast and ovarian cancer
- Family history of heart disease, cancer, etc.

#### Social Determinants (15%)

• Availability of resources to meet daily needs, such as educational and job opportunities, living wages, or healthful foods

- Social norms and attitudes, such as discrimination
- Exposure to crime, violence, and social disorder, such as the presence of trash
- Social support and social interactions
- Socioeconomic conditions, such as concentrated poverty
- Quality schools
- Transportation options
- Public safety

#### Health Care Determinants (10%)

- Quality, affordability, and availability of services
- Lack of insurance coverage
- Limited language access

#### **Environmental Determinants (5%)**

- Quality of food, water, and air
- Worksites, schools, and recreational settings
- Housing, homes, and neighborhoods
- Exposure to toxic substances and other physical hazards
- Physical barriers, especially for people with disabilities

#### What are health disparities?

"Health disparity" refers to a higher burden of illness, injury, disability, or mortality experienced by one population group relative to another group. Health disparities can involve the medical care differences between groups in health insurance coverage, access to care, and quality of care. While disparities are commonly viewed through the lens of race and ethnicity, they occur across many dimensions, including socioeconomic status, age, location, gender, and disability status. Poor health status is often linked with people without health insurance, those who have poor access of care (i.e., limited transportation), lower socioeconomic status, lower education obtainment, and those among racial minority groups. Beyond the provision of health care services, eliminating health disparities will necessitate behavioral, environmental, and social-level approaches to address issues such as insufficient education, inadequate housing, exposure to violence, and limited opportunities to earn a livable wage.

Health disparities have persisted across the nation and have been documented for many decades and, despite overall improvements in population health over time, many disparities have persisted and, in some cases, widened. Moreover, economic downturns contributed to a further widening of disparities.

The Community Health Needs Assessment attempts to identify and quantify the health disparities within a defined county population that are at disproportionately higher in incidence of disease, disability, or at risk of experiencing worse health outcomes. Within these identified disparities and availability of health resources, gaps can be identified and prioritized based on need so that health resources can be targeted. Planning initiatives to address community health needs take in consideration the existing initiatives, the available resources that we are aware of, and where future improvements can be anticipated to make meaningful impact on improving community health.

#### What are Key Initiatives to reduce disparities?

In 2010, the U.S. Department of Health and Human Services (HHS) established a vision of, "a nation free of disparities in health and health care," and set out a series of priorities, strategies, actions, and goals to achieve this vision. States, local communities, private organizations, and providers also are engaged in efforts to reduce health disparities.

Through the federal law, the Patient Protection and Affordable Care Act (ACA) of 2010 can advance efforts to reduce health disparities and to improve health and health care for vulnerable populations depending on the state's election to participate in Medicaid expansion, the ACA health coverage expansions can significantly increase health insurance coverage options for low- and moderate-income populations and particularly benefit those most vulnerable. The ACA includes provisions to strengthen the safety-net delivery system, improve access to providers, promote greater workforce diversity and increase cultural competence, strengthen data collection and research efforts, and implement an array of prevention and public health initiatives.

Federal, state, and local agencies and programs work along with local hospitals, often in cooperation, to provide access to needed health care services. Within constraints of limited resources, each of these entities generally target populations with specific services offered within the county. This study attempts to incorporate their input into determining the priorities among health disparities and look for opportunities for collaboration.

A complex and interrelated set of individual, provider, health system, societal, and environmental factors contribute to disparities in health and health care. Individual factors include a variety of health behaviors from maintaining a healthy weight to following medical advice such as taking prescription medication. Provider factors encompass issues such as how health care is organized, financed, and delivered also shapes disparities as do social and environmental factors, such as poverty, education, proximity to care, and neighborhood safety.

# COMMUNITY PROFILE AND DEMOGRAPHICS

**COMMUNITY DEFINED FOR THIS ASSESSMENT** 



The community was defined based on the geographic origins of McLeod Loris Seacoast Hospital inpatient and outpatient data, the study area for this assessment is defined as Horry County which represents the majority of patients served, to include the zip codes shown in table 1.

Table 1	l <b>. Zip</b>	Codes,	Horry	County
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Horry	County
Aynor	29511
Conway	29526, 29527, 29528
Galivants Ferry	29544
Green Sea	29545
Little River	29566
Longs	29567
Loris	29569
Murrells Inlet	29576
Myrtle Beach	29572, 29575, 29577, 29578, 29579
Nichols	29581
North Myrtle Beach	29582, 29597, 29598

#### **About Horry County**

Horry County is a coastal county located in the northeastern part of South Carolina. It is one of South Carolina's fastest growing counties. Horry County is 1,255 square miles, 121 square miles of which is water. According to the U.S. Department of Commerce, the county is driven by the following top industries: accommodation and food services, retail trade, and health care.

#### **POPULATION**

Current population demographics and changes in demographic composition over time play a determining role in the types of health and social services needed by communities.

#### **Population Change**

The population for Horry County compared to state and national data from 2000-2010 is shown in Table 2. Horry County has shown above average growth of 36.93% over 10 years.

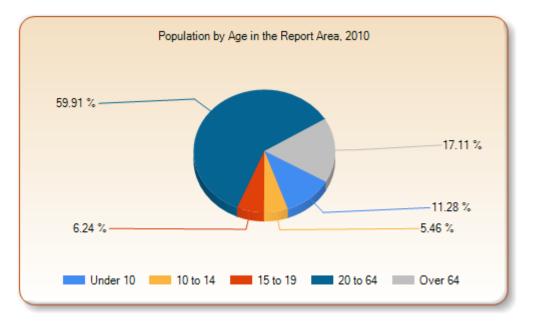
Geographic Area	Census 2000 Population	Census 2010 Population	Population Change	% Change
Horry County, South Carolina	196,660	269,291	72,631	36.93
South Carolina	4,011,832	4,625,364	613,532	15.29
United States	281,424,602	312,471,327	31,046,725	11.03

Table 2. Population Change, 2000 - 2010

Source: U.S. Census Bureau, Population Division, Census 2010. Release Date: February 2011

#### Age and Gender

The population for Horry County by gender is shown in Table 3. According to the 2010 U.S. Census population counts, the female population made up 51.1% of the report area, while the male population represented 48.9%. The Horry County population age 65 and over is 17.11% and above the state average.



Geographic	0 to 4		5 to 9		10 to 14		15 to 19		20 to 64		65 and Over	
Area	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F
Horry County, South Carolina	7,746	7,557	7,666	7,420	7,455	7,240	8,512	8,293	79,063	82,269	21,249	24,821
South Carolina	153,432	148,86 5	150,301	145,552	152,166	145,120	168,250	160,739	1,352,47 0	1,416,59 5	273,482	358,392
United States	10,434,6 00		10,512,8 66	10,075,7 95	10,717,1 51	10,228,6 14	11,448,5 19	10,876,0 83	92,853,9 80		17,599,3 81	23,210,6 01

 Table 3. Population By Gender, 2010

Source: U.S. Census Bureau, 2010 Census Summary File 1, Release Date August 25, 2011.

#### **Race Demographics**

Population by race and gender is shown in Table 4.

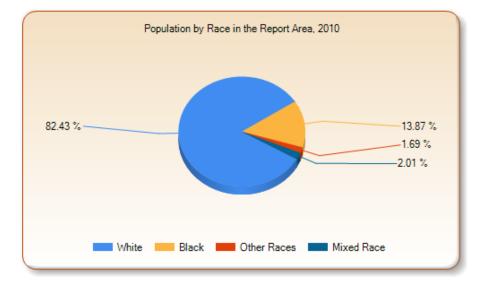


 Table 4. Population By Race, 2010

Geograph ic Area	~ <b>_</b>		Bla	ıck	Ame Ind		Asi	ian	Nat Hawa Pac Islar	iian / ific		Other ace
	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F
Horry County, South Carolina	104,883	110,188	17,080	19,122	649	630	1,276	1,540	180	125	2,639	2,613
South Carolina	1,501,146	1,558,854	605,351	685,333	9,944	9,580	27,504	31,547	1,462	1,244	39,080	40,855
United States	111,492,4 53	114,885,9 12	18,795,7 64	20,595,0 53	1,473,1 15	1,478,9 72	6,974,0 10	7,707,0 73	274,228	266,15 5	4,503,02 1	4,628,29 8

Source: U.S. Census Bureau, 2010 Census Summary File 1, Release Date August 25, 2011.

#### Disability

#### **Population with Any Disability**

This indicator reports the percentage of the total civilian non-institutionalized population with a disability. This indicator is relevant because disabled individuals comprise a vulnerable population that requires targeted services and outreach by providers.

Report Area	Population for Whom Disability Status Is Determined	Total Population with a Disability	Percent Population with a Disability (2009-2011)	Percent Population with a Disability
Horry County, South Carolina	270,875	36,547	13.56%	0 20%
South Carolina	4,635,405	622,136	13.42%	Horry County, South Carolina
United States	309,231,232	36,499,048	12%	South Carolina United States

Note: This indicator is compared with the state average.

Data Source: U.S. Census Bureau, 2008-2010 American Community Survey 3-Year Estimates. Source geography: PUMA.

#### SOCIAL AND ECONOMIC FACTORS

Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community.

#### **Employment and Income**

Unemployment in Horry County is consistently above the state rate. Horry County Percent Unemployment is trending downward between 2010 and 2013. According to The United States Department of Labor Bureau of Labor Statistics, Horry County's unemployment rate was 7.6% in August 2013 which is slightly above the state seasonally adjust rate at 8.1% and nationally at 7.3%.

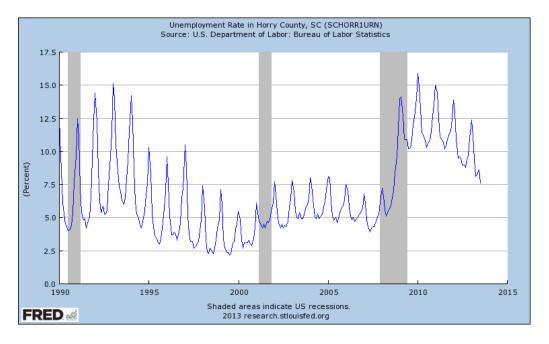


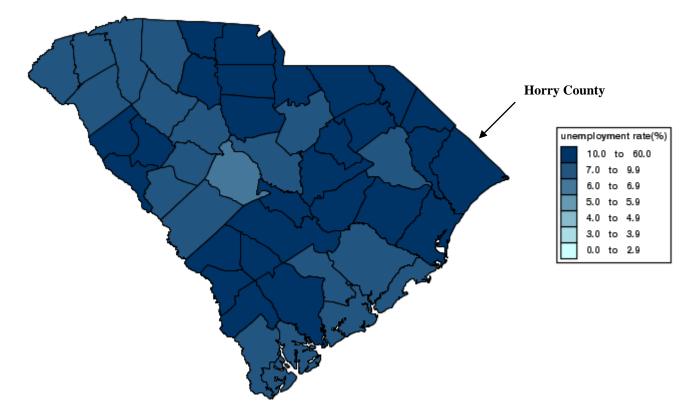
 Table 5. Change in Unemployment Rates, November 2011 - November 2012

Geographic Area	Nov 2011	Dec 2011	Jan 2012	Feb 2012	Mar 2012	Apr 2012	May 2012	June 2012	Jul 2012	Aug 2012	Sep 2012	Oct 2012	Nov 2012
Horry County, South Carolina	10.4	11.6	13.1	12.3	10.3	9.5	9.9	10.0	9.4	9.4	8.8	9.0	9.6
South Carolina	9.3	9.5	9.6	9.6	8.7	8.5	9.3	9.9	9.7	9.4	8.3	8.2	8.3
United States	8.3	8.3	8.9	8.8	8.4	7.8	8.0	8.5	8.6	8.2	7.6	7.6	7.4

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics, Jan 22, 2013.

According to The United States Department of Labor Bureau of Labor Statistics, Horry County was the 14th highest in unemployment in January 2013.

Unemployment rates by county, not seasonally adjusted, South Carolina January 2013



Source: <u>United States Department of Labor Bureau of Labor Statistics.</u>

Two common measures of income are Median Household Income, based on U.S. Census Bureau estimates, and Per Capita Income, based on U.S. Department of Commerce estimates. Both measures are shown for Horry County in Table 6. The average Per Capita income for the report area is \$24,531 as compared to a national average of \$23,854.

#### Table 6. Income Levels by County, 2007-2011

Geographic Area	Median Household Income, 2007-2011	Per Capita Income, 2007-2011
Horry County, South Carolina	\$42,877	\$24,531
South Carolina	\$44,587	\$23,854

Source: U.S. Census Bureau, State and County Quick Facts, 2012.

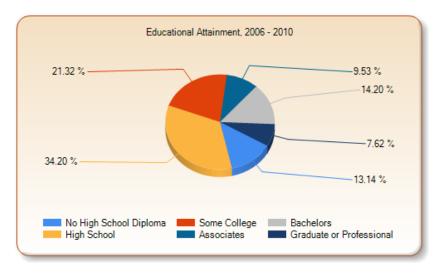
#### Education

Table 7 shows the distribution of educational attainment levels in Horry County. Educational attainment is calculated for persons over 25, and is an average for the period from 2006 to 2010.

Geographic Area	% No High School Diploma, 2006/2010	% High School Only, 2006/2010	% Some College, 2006/2010	% Associates, 2006/2010	% Bachelors, 2006/2010	% Graduate or Professional, 2006/2010
Horry County, South Carolina	13.14	34.2	21.32	9.53	14.2	7.62
South Carolina	16.99	31.25	19.51	8.30	15.5	8.44
United States	14.97	28.99	20.62	7.52	17.6	10.30

Table 7. Percent Attaining Educational Levels, 2006 - 2010

Source: U.S. Census Bureau, American Community Survey, 2010 Data Release, December 2012.



#### **High School Graduation Rate**

This indicator reports the average freshman graduate rate, which measures the percentage of students receiving their high school diploma within four years. This indicator is relevant because low levels of education are often linked to poverty and poor health.

Report Area	Average Freshman Base Enrollment	Estimated Number of Diplomas Issued	On-Time Graduation Rate
Horry County, South Carolina	2,967	2,035	68.60
South Carolina	59,274	39,114	66
United States	4,024,345	3,039,015	75.50
HP 2020 Target			>82.4

Note: This indicator is compared with the Healthy People 2020 Target. No breakout data available.

Data Source: The University of Wisconsin, Population Health Institute, County Health Rankings, 2012 and the U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data, Public School Universe Survey Data, 2005-06, 2006-07 and 2007-08. Source geography: County.

#### Children Eligible for Free/Reduced Price Lunch

This indicator reports the percentage of public school students eligible for free or reduced price lunches. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs. Additionally, when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

Report Area	Total Student Enrollment	Number Free/Reduced Price Lunch Eligible	Percent Free/Reduced Price Lunch Eligible	Percent Free/Reduced Price Lunch Eligible
Horry County, South Carolina	38,534	23,968	62.20%	
South Carolina	724,660	394,997	54.51%	Horry County, South Carolina South Carolina
United States	49,692,766	24,021,069	48.34%	United States

*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data, Public School Universe File, 2010-2011. Source geography: Address.

#### **Homelessness and Poverty**

According to the South Carolina HUD Homeless Count release January 27, 2011, Horry County has a rate of 20.20 per 10,000.

2010 poverty estimates show a total of 52,095 persons living below the poverty rate in Horry County.

Geographic Area	All Ages		Age	0-17	Age 5-17		
	Number of Persons	Poverty Rate	Number of Persons	Poverty Rate	Number of Persons	Poverty Rate	
Horry County, South Carolina	52,095	19.5	17,323	32.4	11,836	31.1	
South Carolina	813,939	18.1	276,637	26.0	180,286	23.6	
United States	46,215,956	15.3	15,749,129	21.6	10,484,513	19.8	

#### Table 8. Poverty Information, 2010

Source: U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE), 2010.

Table 9 shows the number of households in poverty by type in Horry County. The U.S. Census Bureau estimates that there were 2,028 households living in poverty.

Geographic Area	Total		Households	in Poverty	
	Households, 2006-2010	Total	Married Couples	Male Householder	Female Householder
Horry County, South Carolina	73,100	8,487	2,763	861	4,863
South Carolina	1,173,912	144,439	43,820	12,302	88,317
United States	76,254,320	7,685,345	2,773,694	760,085	4,151,566

 Table 9. Households in Poverty by Family Type, 2006 - 2010

Source: U.S. Census Bureau, American Community Survey, 2010 Data Release, December 2012.

The poverty rate change for children under five years of age in Horry County from 2000 to 2010 is shown in Table 10. According to the U.S. Census, the poverty rate increased by 11.0%, compared to a national increase of 6.0 percent.

#### Table 10. Poverty Rate Change for Children (under 5), 2000 - 2010

Geographic Area	Children 0-4 in Poverty, 2000	Poverty Rate, 2000	Children 0-4 in Poverty, 2010	Poverty Rate, 2010	Change in Poverty Rate, 2000 - 2010
Horry County, South Carolina	2,927	24.6	5,487	35.6	11.0
South Carolina	61,653	22.9	96,351	32.1	9.2
United States	4,050,543	20.3	5,264,616	26.4	6.0

Source: U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE), 2010.

Poverty rates for seniors (persons age 65 and over) are shown in Table 11. According to American Community Survey estimates, there were 3,078 seniors, or 6.8 percent, living in poverty within Horry County.

#### Table 11. Seniors in Poverty, 2006 - 2010

Geographic Area	Seniors	Seniors in Poverty	Senior Poverty Rate
Horry County, South Carolina	45,376	3,078	6.8
South Carolina	617,252	64,840	10.5
United States	38,221,316	3,554,291	9.3

Source: U.S. Census Bureau, American Community Survey, 2010 Data Release, December 2011.

The poverty rate change in Horry County from 2000 to 2010 is shown in Table 12. According to the U.S. Census, the poverty rate increased by 6.9 percent.

Geographic Area	Persons in Poverty, 2000	Poverty Rate, 2000	Persons in Poverty, 2010	Poverty Rate, 2010	Change in Poverty Rate, 2000 - 2010
Horry County, South Carolina	25,296	12.6	52,095	19.5	6.9
South Carolina	504,961	12.8	813,939	18.1	5.3
United States	31,581,086	11.3	46,215,956	15.3	4.0

#### Table 12. Change in Poverty Rate, 2000 - 2010

Source: U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE), 2010.

Table 13 shows the number and percentage of households in poverty in Horry County. In 2010, it is estimated that there were 16,609 households, or 14.8 percent, living in poverty.

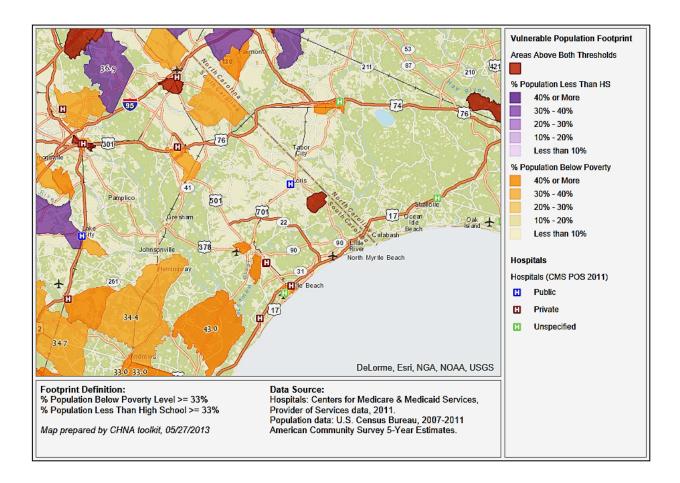
#### Table 13. Households in Poverty, 2006 - 2010

Geographic Area	Total Households, 2006/2010	Households in Poverty, 2006 2010	% Households in Poverty, 2006 2010
Horry County, South Carolina	112,057	16,609	14.8
South Carolina	1,741,994	274,201	15.7
United States	114,236,000	14,865,322	13.0

Source: U.S. Census Bureau, American Community Survey, 2010 Data Release, December 2012.

#### **Vulnerable Populations**

A map of vulnerable populations based on educational attainment and poverty is shown below. This indicator is relevant because low levels of education and high levels of poverty are often linked to poor health.



#### **PHYSICAL ENVIRONMENT**

A community's health also is affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health.

#### **Grocery Store Access**

This indicator reports the number of grocery stores per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

Report Area	Total Population	Number of Establishments	Establishment Rate per 100,000 Population	Establishment Rate per 100,000 Population
Horry County, South Carolina	269,291	55	20.42	0 50
South Carolina	4,625,364	873	18.87	Horry County, South Carolina South Carolina
United States	308,745,538	64,366	20.85	United States

*Note: This indicator is compared with the state average. No breakout data available.* 

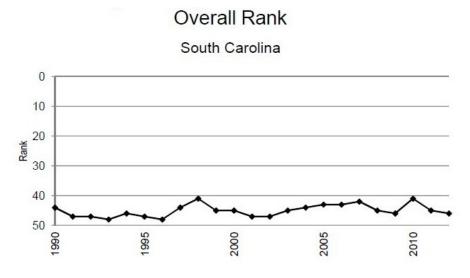
Data Source: U.S. Census Bureau, County Business Patterns, 2011. Source geography: County.

# DETERMINANTS OF HEALTH HEALTHY AND UNHEALTHY

# **BEHAVIORS**

#### **SOUTH CAROLINA PROFILE**

According to America's Health Rankings<sup>®</sup>, 2012 Edition South Carolina, South Carolina is ranked 46th in 2012 for overall health. The state has varied from its healthiest ranking of 41st to its poorest ranking of 48th. The overall health of the state has been gradually declining the last three years.



Health Indicators:

- 435,000 adults in South Carolina have diabetes almost one in eight. South Carolina has one of the highest rates of diabetes at 12.1 percent of the adult population.
- Since 2011, high school graduation increased from 62.2 percent to 66.0 percent of incoming ninth graders who graduated within four years.
- Children in poverty increased from 15.6 percent to 26.3 percent of persons under age 18 in the past five years.
- The rate of preventable hospitalizations decreased from 78.6 to 61.2 discharges per 1,000 Medicare enrollees in the past ten years.
- Binge drinking and preventable hospitalizations are the only measures in which South Carolina ranked about the median state.
- 831,000 adults smoke in South Carolina almost one in four. The prevalence of smoking continues to be above the national median.
- 1,108,000 adults are obese in South Carolina. Obesity in South Carolina is higher than most states.
- 979,000 adults are sedentary in South Carolina more than one in four. Sedentary lifestyles are a possible precursor to obesity and chronic health problems.

The statewide measures used in America's Health Rankings® reflect the condition of the "average" resident and can mask differences within the state. When the measures are examined by race, gender, geographic location and/or economic status, startling differences can exist within a state.

Source: University of Wisconsin, The County Health Rankings, South Carolina. (2012). Available at http://americashealthrankings.org/customreport

#### **HEALTH INDICATORS**

Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community.

#### **Poor/Fair General Health**

This indicator reports the percentage of adults age 18 and older who self-report having poor or fair health. This indicator is relevant because it is a measure of general poor health status. The source of this indicator is the Centers for Disease Control and Prevention, Behavioral Risk Factors Surveillance System (BRFSS) 2010.

Report Area	Total Population Age 18	Estimated Population with Poor or Fair Health	Percent Population with Poor or Fair Health	Percent Population with Poor or Fair Health
Horry County, South Carolina	205,535	32,886	16%	0 25%
South Carolina	3,442,167	557,631	16.20%	Horry County, South Carolina South Carolina
United States	229,932,154	36,429,871	15.84%	United States

Note: This indicator is compared with the state average. No breakout data available.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011. Source geography: County.

#### County Specific Health Indicators HORRY County

Category	Health Indicator	Frequency	Rate or Percentage	Rank	SC Rate or Percentage
Access to Health Services	Births paid by Medicaid (2011) <sup>1,5</sup>	1622	52.2	12	50.8
	Was there a time in the past 12 months when you needed to see a doctor but could not because of cost? (2008-2010) $^{25}$	106505	18.0	27	16.4
Clinical Preventive Services	Hep B Vaccine dose in facility (2011) <sup>1,6</sup>	3032	97.6	3	76.5
	Flu Vaccine (65+) (2008-2010) <sup>2,6</sup>	89699	68.9	19	68.6
	Pheumococcal Vaccine (65+) (2008-2010) <sup>2,6</sup>	86747	66.4	17	68.8
Chronic Disease	Diabetes (Have you ever been told by a doctor that you have diabetes? (2008-2010) <sup>2,5</sup>	62310	10.5	18	10.4
	Hypertension (Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?) (2008-2010)	196836	34.0	18	33.4
Nutrition, Physical Activity, and Obesity	Adults who are Obese (20+ years of age) (2008-2010) 2.5	156911	27.9	6	32.4
	Physical Activity (Adults that report doing physical activity or exercise during the past 30 days other than their regular job.) (2008-2010) $^{2,5}$	440368	74.0	11	73.0
Торассо	Current smokers (18+ years of age) (2008-2010) <sup>2,5</sup>	145586	24.7	39	20.5

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DHEC. PHSIS

Source: South Carolina Department of Health and Environmental Control, Public Health Statistics and Information Services, 2008-2011.

Category	Health Indicator	Frequency	Rate or Percentage	Rank	SC Rate or Percentage
Infectious Disease	HIV incidence (2011) <sup>4,5</sup>	33	11.9	19	16.2
	HIV prevalence (2011) <sup>4,5</sup>	735	266.0	23	317.6
	Chlamydia (2011) <sup>4,5</sup>	1267	458.5	9	606.3
	Gonorrhea (2011) <sup>4,5</sup>	271	98.1	3	174.8
	Syphilis (2011) <sup>4,5</sup>	22	8.0	12	13.7
Maternal, Infant, and Child Health	Infant mortality (2009-2011) 3.5	73	7.8	25	7.3
	Neonatal mortality (2009-2011) <sup>3,5</sup>	46	4.9	25	4.4
	Postneonatal mortality (2009-2011) <sup>3,5</sup>	27	2.9	29	2.9
	Low Birth Weight (2011) <sup>1,5</sup>	302	9.7	17	9.9
	Preterm births (2011) <sup>1,5</sup>	408	13.1	32	11.5
	Pregnant females receiving early and adequate prenatal care (Kotelchuck Adequate and Adequate+) (2011) <sup>1,6</sup>	2190	70.5	30	73.9

#### **County Specific Health Indicators** HORRY County

1 Percentage 2 Weighted Frequency and Percentage 3 Rate per 1,000 live births 4 Rate per 100,000 population 5 Rates ranked in ascending order. A rank of 1 signifies the lowest rate in the state. 6 Rates ranked in descending order. A rank of 1 signifies the highest rate in the state. Source: DHEC, PHSIS

Source: South Carolina Department of Health and Environmental Control, Public Health Statistics and Information Services, 2008-2011.

#### **County Specific Health Indicators** HORRY County

Category	Health Indicator	Frequency	Rate or Percentage	Rank	SC Rate or Percentage
	Breastfeeding initiation (2011) 1.6	2293	73.8	6	65.7
	Women who smoked during pregnancy (2011) <sup>1,5</sup>	333	10.7	17	11.5
	Teen live births (2011) <sup>1,5</sup>	270	8.7	6	10.6
	WIC enrollment need met(pregnant women) (2012) <sup>1</sup>	869	43.0		42.0
	WIC enrollment need met (infants) (2012) <sup>1</sup>	2027	126.0	-	121.0
	WIC enrollment need met (children) (2012) <sup>1</sup>	3827	57.0	-	52.0

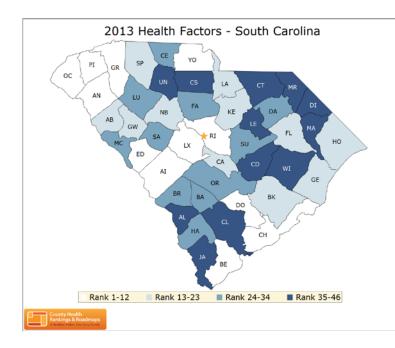
Source: South Carolina Department of Health and Environmental Control, Public Health Statistics and Information Services, 2008-2011.

. , eccentage 2 Weighted Frequency and Percentage 3 Rate per 1,000 live births 4 Rate per 100,000 population 5 Rates ranked in ascending order. A rank of 1 signifies the lowest rate in the state. 6 Rates ranked in descending order. A rank of 1 signifies the highest rate in the state. Source: DHEC, PHSIS

#### **HEALTH FACTORS AND BEHAVIORS**

Health behaviors such as poor diet, a lack of exercise, and substance abuse contribute to poor health status.

The County Health Rankings, published by the University of Wisconsin and the Robert Wood Johnson Foundation, are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play.



Source: University of Wisconsin, The County Health Rankings, South Carolina. 2012.

#### **Table 14. SC County Health Factor Rankings**

	Horry County	Error Margin	South Carolina	National Benchmark*
Health Behaviors		• • • • • • • •	• • • • •	
Adult smoking	26%	24-28%	21%	13%

Adult smoking prevalence is the estimated percent of the adult population that currently smokes every day or "most days" and has smoked at least 100 cigarettes in their lifetime.

**Reason for ranking:** Each year approximately 443,000 premature deaths can be attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birth weight and other adverse health outcomes. Measuring the prevalence of tobacco use in the population can alert communities to potential adverse health outcomes and can be valuable for assessing the need for cessation programs or the effectiveness of existing programs.

Adult obesity	29%	27-31%	31%	25%
<b>TD1 '</b> ( 1	f f	- 1141	- +: 0	0 l - l l ) 4

This measure represents the percent of the adult population (age 20 and older) that has a body mass index (BMI) greater than or equal to  $30 \text{ kg/m}^2$ .

**Reason for ranking:** Obesity is often the result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status.

Physical inactivity 25%	6 <b>23-27%</b>	28%	21%
Physical inactivity is the estimated perce	ent of adults	aged 20 and c	over

reporting no leisure time physical activity.

**Reason for ranking:** Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. In addition, physical inactivity at the county level is related to health care expenditures for circulatory system diseases.

**Excessive drinking** 17% 16-19% 14% 7% Excessive drinking reflects the percent of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average.

**Reason for ranking:** Excessive drinking is a risk factor for a number of adverse health outcomes such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. Approximately 80,000 deaths are attributed annually to excessive drinking. Excessive drinking is the third leading lifestyle-related cause of death in the United States.

## Motor vehicle crash death rate

#### 23 21-25 22 10

Motor vehicle crash deaths are measured as the crude mortality rate per 100,000 population due to traffic accidents involving a motor vehicle. Motor vehicle deaths include traffic accidents involving motorcycles; 3-wheel motor vehicles; cars; vans; trucks; buses; street cars; ATVs; industrial, agricultural, and construction vehicles; or bicyclists and pedestrians when colliding with any of the previously listed motor vehicles. Deaths due to boating accidents and airline crashes are not included in this measure. In prior years, non-traffic motor vehicle accidents were included in this definition. Our definition has changed to better align with Healthy People 2020.

*Reason for ranking:* Approximately 17,000 Americans are killed annually in alcohol-related motor vehicle crashes. Binge/heavy drinkers account for most episodes of alcohol-impaired driving.

#### Sexually transmitted infections 436 573 92

The sexually transmitted infection (STI) rate is measured as chlamydia incidence (number of new cases reported) per 100,000 population.

**Reason for ranking:** Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain. STIs are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, involuntary infertility, and premature death. STIs also have a high economic burden on society. The cost of managing chlamydia and its complications in the US, for example, was approximately 2 billion dollars in 1994.

Teen birth rate4846-504921This measure is reported as the number of births per 1,000 female population, ages15-19.

**Reason for ranking:** Evidence suggests teen pregnancy significantly increases the risk of repeat pregnancy and of contracting a sexually transmitted infection (STI), both of which can result in adverse health outcomes for mothers, children, families, and communities. A systematic review of the sexual risk among pregnant and mothering teens concludes that pregnancy is a marker for current and future sexual risk behavior and adverse outcomes. Pregnant teens are more likely than older women to receive late or no prenatal care, have gestational hypertension and anemia, and achieve poor maternal weight gain. Teens are also more likely than older women to have a pre-term delivery and low birth weight baby, increasing the risk of child developmental delay, illness, and mortality.

#### Clinical Care

Uninsured26%24-28%20%11%This measure represents the estimated percent of the population under age 65 that<br/>has no health insurance coverage.

*Reason for ranking:* Lack of health insurance coverage is a significant barrier to accessing needed health care.

The number of Americans who do not have health insurance continues to increase and there are disparities in access to care based on race/ethnicity, employment, gender, and income level. Ethnic minorities are more likely to be uninsured than non-Hispanic whites. Employer-based coverage is the largest source of health coverage in the US, and many unskilled, low paying, and part-time jobs do not offer benefits.

Uninsured individuals experience more adverse outcomes (physically, mentally, and financially) than insured individuals. Individuals without insurance are less likely to receive preventive and diagnostic health care services, are more often diagnosed at a later disease stage, and, on average, receive less treatment for their condition than insured individuals. The Institute of Medicine reports that the uninsured population has a 25% higher mortality rate than the insured population.

Primary care physicians\*\*1,650:11,545:11,067:1Primary care physicians include practicing physicians (M.D.'s and D.O.'s) under<br/>age 75 specializing in general practice medicine, family medicine, internal<br/>medicine, and pediatrics. The measure represents the population per physician.

**Reason for ranking:** Access to care requires not only financial coverage, but also, access to providers. While high rates of specialist physicians have been shown to be associated with higher, and perhaps unnecessary utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and when needed, referrals to appropriate specialty care.

Dentists\*\*2,764:12,229:11,516:1This measure represents the population per dentist in the county.

**Reason for ranking:** Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to accessing oral health care, much of the country suffers from shortages. According to the Health Resources and Services Administration, as of December 2012, there were 4,585 Dental Health Professional Shortage Areas (HPSAs) with 45 million people living in them.

Preventable hospital stays6664-696147Preventable hospital stays is measured as the hospital discharge rate for<br/>ambulatory care-sensitive conditions per 1,000 Medicare enrollees.47

**Reason for ranking:** Hospitalization for diagnoses treatable in outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care.

Diabetic screening87%85-90%85%90%Diabetic screening is calculated as the percent of diabetic Medicare patients whoseblood sugar control was screened in the past year using a test of their glycatedhemoglobin (HbA1c) levels.

**Reason for ranking:** Regular HbA1c screening among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented.

Mammography screening69%67-72%69%73%This measure represents the percent of female Medicare enrollees age 67-69 thathad at least one mammogram over a two-year period.

**Reason for ranking:** Evidence suggests that mammography screening reduces breast cancer mortality, especially among older women. A physician's recommendation or referral—and satisfaction with physicians—are major factors facilitating breast cancer screening. The percent of women ages 40-69 receiving a mammogram is a widely endorsed quality of care measure.

#### Social & Economic Factors

#### High school graduation\*\*75%74%

High school graduation is reported as the percent of a county's ninth-grade cohort in public schools that graduates from high school in four years.

**Reason for ranking:** Not only does one's education level affect his or her health; education can have multigenerational implications that make it an important measure for the health of future generations. Evidence links maternal education with the health of her offspring. Parents' level of education affects their children's health directly through resources available to the children, and also indirectly through the quality of schools that the children attend.

Further, education levels also positively influence a variety of social and psychological factors. For example, increased education improves an individual's self-perception of both his and her sense of personal control and social standing, which also have been shown to predict higher self-reported health status.

Some college55%53-58%58%70%This measure represents the percent of the population ages 25-44 withsome post-secondary education, such as enrollment at vocational/technicalschools, junior colleges, or four-year colleges. It includes individuals whopursued education following high school but did not receive a degree.

**Reason for ranking:** The relationship between higher education and improved health outcomes is well known, with years of formal education correlating strongly with improved work and economic opportunities, reduced psychosocial stress, and healthier lifestyles.

# Unemployment11.50%10.30%5.00%Unemployment is measured as the percent of the civilian labor force, age 16 and<br/>older, that is unemployed but seeking work.

**Reason for ranking:** The unemployed population experiences worse health and higher mortality rates than the employed population. Unemployment has been shown to lead to an increase in unhealthy behaviors related to alcohol and tobacco consumption, diet, exercise, and other health-related behaviors, which in turn can lead to increased risk for disease or mortality, especially suicide. Because employer-sponsored health insurance is the most common source of health insurance coverage, unemployment can also limit access to health care.

Children in poverty32%25-38%28%14%Children in poverty is the percent of children under age 18 living below theFederal Poverty Line (FPL).

**Reason for ranking:** Poverty can result in an increased risk of mortality, prevalence of medical conditions and disease incidence, depression, intimate partner violence, and poor health behaviors. A 1990 study found that if poverty were considered a cause of death in the US, it would rank among the top 10 causes. While negative health effects resulting from poverty are present at all ages, children in poverty experience greater morbidity and mortality than adults due to increased risk of accidental injury and lack of health care access. Children's risk of poor health and premature mortality may also be increased due to the poor educational achievement associated with poverty. The children in poverty measure

is highly correlated with overall poverty rates.

Inadequate social support20%18-22%22%14%The social and emotional support measure is based on responses to the question:"How often do you get the social and emotional support you need?" The CountyHealth Rankings reports the percent of the adult population that responds that they"never," "rarely," or "sometimes" get the support they need.

**Reason for ranking:** Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality. A 2001 study found that the magnitude of health risk associated with social isolation is similar to the risk of cigarette smoking. Furthermore, social support networks have been identified as powerful predictors of health behaviors, suggesting that individuals without a strong social network are less likely to make healthy lifestyle choices than individuals with a strong network. A study that compared Behavioral Risk Factor Surveillance System (BRFSS) data on health status to questions from the General Social Survey found that people living in areas with high levels of social trust are less likely to rate their health status as fair or poor than people living in areas with low levels of social trust.

#### Children in single-parent

households38%35-41%39%20%This measure is the percent of all children in family households that live in a<br/>household headed by a single parent (male or female head of household with no<br/>spouse present).

**Reason for ranking:** Adults and children in single-parent households are at risk for adverse health outcomes such as mental health problems (including substance abuse, depression, and suicide) and unhealthy behaviors such as smoking and excessive alcohol use. Self-reported health has been shown to be worse among lone parents (male and female) than for parents living as couples, even when socioeconomic characteristics are controlled for. Mortality risk is also higher among lone parents. Children in single-parent households are at greater risk of severe morbidity and all-cause mortality then their peers in two-parent households.

#### **Physical Environment**

	12.7-					
Daily fine particulate matter	12.8	12.9	12.9	8.8		
This measure represents the estimation	ated percer	ntage of th	e populatio	on aged 65 years		

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and older in a given county.

*Reason for ranking:* Demographic variables are included as additional measures since they provide background for understanding ranked measures while remaining relatively stable year to year.

#### Drinking water safety 0% 2% 0%

This measure represents the percentage of the population getting water from public water systems with at least one health-based violation during the reporting period. Health-based violations include Maximum Contaminant Level, Maximum Residual Disinfectant Level and Treatment Technique violations. **Reason for ranking:** Recent studies estimate that contaminants in drinking water sicken 1.1 million people each year. Ensuring the safety of drinking water is important to prevent illness, birth defects, and death for those with compromised immune systems. A number of other health problems have been associated with contaminated water, including nausea, lung and skin irritation, cancer, kidney, liver, and nervous system damage.

# Access to recreational facilities

# ilities 12 9 16

This measure represents the number of recreational facilities per 100,000 population in a given county. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities, featuring exercise and other active physical fitness conditioning or recreational sports activities such as swimming, skating, or racquet sports.

**Reason for ranking:** The availability of recreational facilities can influence individuals' and communities' choices to engage in physical activity. Proximity to places with recreational opportunities is associated with higher physical activity levels, which in turn is associated with lower rates of adverse health outcomes associated with poor diet, lack of physical activity, and obesity. The evidence for the effectiveness of improving access to recreational facilities is so strong that the Centers for Disease Control and Prevention (CDC) recommend it as one of the 24 environmental- and policy-level strategies to reduce obesity in its Common Community Measures for Obesity Prevention Project.

# Limited access to healthy

foods** 6% 8% 1%	ods**	6%	8%	1%	
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Limited access to healthy foods captures the proportion of the population who are low income and do not live close to a grocery store. Living close to a grocery store is defined differently in rural and non-rural areas; in rural areas, it means living less than 10 miles from a grocery store whereas in non-rural areas, it means less than 1 mile. Low income is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.

**Reason for ranking:** There is strong evidence that residing in a food desert is correlated with a high prevalence of overweight, obesity, and premature death. Supermarkets traditionally provide healthier options than convenience stores or smaller grocery stores. Additionally, lack of access to fresh fruits and vegetables is a substantial barrier to consumption and is related to premature mortality.

# Fast food restaurants40%49%27%Fast food restaurants examines the proportion of restaurants in a county that are fast food establishments.

**Reason for ranking:** Access to fast food restaurants is correlated with a high prevalence of overweight, obesity, and premature death. The average number of kilocalories consumed daily in the US has been on an increasing trend over the past several decades. Among most child age-groups, fast food restaurants are the second highest energy provider, second only to grocery stores.

\* 90th percentile, i.e., only 10% are better.
\*\* Data should not be compared with prior years due to changes in definition.
Note: Blank values reflect unreliable or missing data
Highlights potential challenges for the county.

Source: University of Wisconsin, The County Health Rankings, South Carolina. 2012.

#### **Alcohol Expenditures**

This indicator reports estimated expenditures for alcoholic beverages purchased at home, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

Report Area	Average Total Household Expenditures (USD)	Average Household Alcoholic Beverage Expenditures (USD)	Percent Alcoholic Beverage Expenditures	Alcoholic Beverage Expenditures, County Rank (In-State)	Alcoholic Beverage Expenditures, County Percentile
Horry County, South Carolina	no data	no data	no data	9	19.57%
South Carolina	45,543	855	1.88%	no data	no data
United States	50,932	910	1.79%	no data	no data

Note: This indicator is compared with the state average. No breakout data available. Data Source: Nielsen Claritas SiteReports, Consumer Buying Power, 2011. Source geography: Tract.

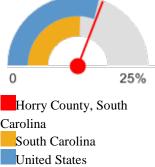
### **Heavy Alcohol Consumption**

This indicator reports the percentage of adults aged 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day for men and one drink per day for women). This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

Report Area	Total Population Age 18	Estimated Population Heavily Consuming Alcohol	Percent Population Heavily Consuming Alcohol
Horry County,	205,535	31,652	15.40%

#### Percent Population Heavily Consuming Alcohol

South Carolina				
South Carolina	209,514	27,027	12.90%	0
United States	89,135,163	13,385,866	15.02%	Horry C
Note: This indicato	Carolina			



available. Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011. Source geography: County.

# Fruit/Vegetable Expenditures

This indicator reports estimated expenditures for fruits and vegetables purchased for inhome consumption, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may illustrate a cause of significant health issues, such as obesity and diabetes.

Report Area	Average Total Household Expenditures (USD)	Average Household Fruit / Vegetable Expenditures (USD)	Percent Fruit / Vegetable Expenditures	Fruit / Vegetable Expenditures, County Rank (In-State)	Fruit / Vegetable Expenditures, County Percentile
Horry County, South Carolina	no data	no data	no data	7	15.22%
South Carolina	45,543	607	1.33%	no data	no data
United States	50,932	737	1.45%	no data	no data

Note: No breakout data available.

Data Source: Nielsen Claritas SiteReports, Consumer Buying Power, 2011. Source geography: Tract.

### Inadequate Fruit/Vegetable Consumption (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report consuming less than 5 servings of fruits and vegetables each day. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may illustrate a cause of significant health issues, such as obesity and diabetes.

Report Area	Total Population Age 18	Estimated Population with Inadequate Fruit / Vegetable Consumption	Percent Population with Inadequate Fruit / Vegetable Consumption	Percent Population with Inadequate Fruit / Vegetable Consumption
Horry County, South Carolina	196,873	158,286	80.40%	Horry County, South Carolina
South Carolina	3,355,523	2,714,618	80.90%	South Carolina United States
United States	116,676,632	88,508,989	75.86%	

*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2009. Source geography: County.

# **Physical Inactivity (Adult)**

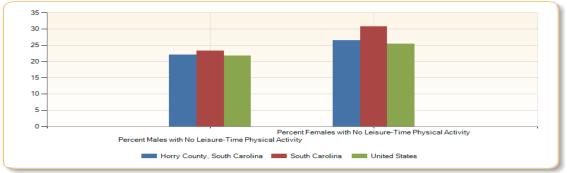
This indicator reports the percentage of adults aged 20 and older who self-report no leisure time for activity, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?". This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as obesity and poor cardiovascular health.

#### Adults with No Leisure-Time Physical Activity by Gender

Report Area	Total Males with No Leisure-Time Physical Activity	Percent Males with No Leisure- Time Physical Activity	Total Females with No Leisure- Time Physical Activity	Percent Females with No Leisure- Time Physical Activity
Horry County, South Carolina	22,093	22.10%	29,015	26.50%
South Carolina	375,417	23.34%	547,286	30.84%
United States	23,736,266	21.73%	29,817,193	25.41%

Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Diabetes Surveillance System, 2009. Source geography: County.



# Soft Drink Expenditures

This indicator reports soft drink consumption by census tract by estimating expenditures for carbonated beverages, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues such as diabetes and obesity.

Report Area	Average Total Household Expenditures (USD)	Average Household Soda Expenditures (USD)	Percent Soda Expenditures	Soda Expenditures, County Rank (In-State)	Soda Expenditures, County Percentile
Horry County, South Carolina	no data	no data	no data	31	67.39%
South Carolina	45,543	245	0.54%	no data	no data
United States	50,932	252	0.49%	no data	no data

Note: No breakout data available.

Data Source: Nielsen Claritas SiteReports, Consumer Buying Power, 2011. Source geography: Tract

#### **Tobacco Expenditures**

This indicator reports estimated expenditures for cigarettes, as a percentage of total household expenditures. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

Report Area	Average Total Household Expenditures (USD)	Average Household Cigarette Expenditures (USD)	Percent Cigarette Expenditures	Cigarette Expenditures, County Rank (In-State)	Cigarette Expenditures, County Percentile
Horry County, South Carolina	no data	no data	no data	33	71.74%
South Carolina	45,543	832	1.83%	no data	no data
United States	50,932	810	1.59%	no data	no data

Note: No breakout data available.

Data Source: Nielsen Claritas SiteReports, Consumer Buying Power, 2011. Source geography: Tract.

# Tobacco Usage (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report currently smoking cigarettes some days or every day. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

Report Area	Total Population Age 18 and older	Estimated Population Regularly Smoking Cigarettes	Percent Estimated Population Regularly Smoking Cigarettes	Percent Estimated Population Regularly Smoking Cigarettes
Horry County, South Carolina	205,535	52,822	25.70%	0 30%
South Carolina	209,514	43,788	20.90%	Carolina South Carolina United States
United States	207,962	20,796	10%	

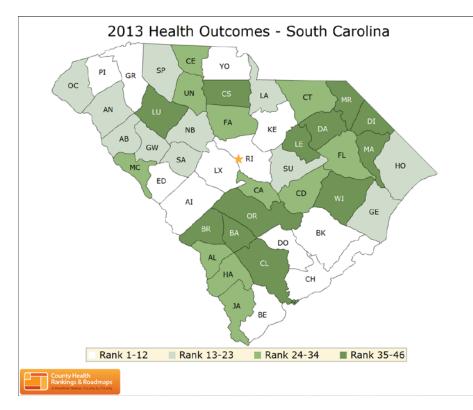
Note: This indicator is compared with the state average. No breakout data available.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011. Source geography: County.

# **HEALTH OUTCOMES**

Measuring morbidity and mortality rates allows assessing linkages between social determinants of health and outcomes. By comparing, for example, the prevalence of certain chronic diseases to indicators in other categories (e.g., poor diet and exercise) with outcomes (e.g., high rates of obesity and diabetes), various causal relationship may emerge, allowing a better understanding of how certain community health needs may be addressed.

The County Health Rankings 2013 Health Outcomes is shown below. Health Outcomes is used as the primary indicator to rank the overall health of counties. The county ranked number 1 is considered the healthiest county in the state. Horry County is ranked 14 out of 46 counties in South Carolina.



Source: University of Wisconsin, The County Health Rankings, South Carolina. 2012.

	Horry County	Error Margin	South Carolina	National Benchmark*	Rank (of 46)			
Health Outcomes					14			
<u>Mortality</u>					<u>14</u>			
		8,077-						
Premature death	8,485	8,892	8,448	5,317				
Premature death is represented by the years of potential life lost before age 75								
(YPLL-75). Every death occurring before the age of 75 contributes to the total								
number of years of potential life	number of years of potential life lost. For example, a person dying at age 25							

contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10

years of life lost to a county's YPLL. The YPLL measure is presented as a rate per 100,000 population and is age-adjusted to the 2000 US population.

**Reason for ranking:** Measuring premature mortality, rather than overall mortality, reflects the *County Health Rankings*' intent to focus attention on deaths that could have been prevented. Measuring YPLL allows communities to target resources to high-risk areas and further investigate the causes of premature death.

# <u>Morbidity</u>

		15-		
Poor or fair health	16%	18%	16%	10%

Self-reported health status is a general measure of health-related quality of life (HRQoL) in a population. This measure is based on survey responses to the question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the *County Health Rankings* is the percent of adult respondents who rate their health "fair" or "poor." The measure is age-adjusted to the 2000 US population.

**Reason for ranking:** Measuring HRQoL helps characterize the burden of disabilities and chronic diseases in a population. Self-reported health status is a widely used measure of people's health-related quality of life. In addition to measuring how long people live, it is important to also include measures that consider how healthy people are while alive.

Poor physical health days	3.7	3.4-4.0	3.6	2.6
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Poor physical health days are one of four measures of morbidity used in the *County Health Rankings*. This measure is based on survey responses to the question: "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?" The value reported in the *County Health Rankings* is the average number of days a county's adult respondents report that their physical health was not good. The measure is age-adjusted to the 2000 US population.

**Reason for ranking:** Measuring health-related quality of life (HRQoL) helps characterize the burden of disabilities and chronic diseases in a population. In addition to measuring how long people live, it is also important to include measures of how healthy people are while alive – people's reports of days when their physical health was not good are a reliable estimate of their recent health.

### Poor mental health days 3.9 3.5-4.3 3.6 2.3

Poor mental health days is a companion measure to the poor physical health days reported in the *County Health Rankings*. This measure is based on survey responses to the question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The value reported in the *County Health Rankings* is the average number of days a county's adult respondents report that their mental health was not good. The measure is age-adjusted to the 2000 US population.

Reason for ranking: Overall health depends on both physical and mental well-

15

being. Measuring the number of days when people report that their mental health was not good, i.e., poor mental health days, represents an important facet of health-related quality of life.

#### 9.7-Low birthweight 10.10% 10.5% 10.10% 6.00%

Low birthweight is the percent of live births for which the infant weighed less than 2,500 grams (approximately 5 lbs., 8 oz.).

**Reason for ranking:** Low birthweight (LBW) represents two factors: maternal exposure to health risks and an infant's current and future morbidity, as well as premature mortality risk. From the perspective of maternal health outcomes, LBW indicates maternal exposure to health risks in all categories of health factors, including her health behaviors, access to health care, the social and economic environment she inhabits, and environmental risks to which she is exposed. In terms of the infant's health outcomes, LBW serves as a predictor of premature mortality and/or morbidity over the life course and potential for cognitive development problems.

\* 90th percentile, i.e., only 10% are better.

Source: University of Wisconsin, The County Health Rankings, South Carolina. 2012.

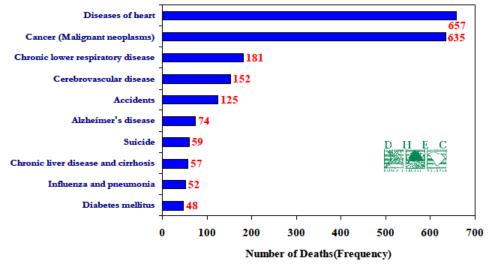
#### **Chronic Conditions**

Chronic conditions are making an impact on the health of many South Carolinians. Some common behavioral risk factors that contribute to an increased risk of developing a chronic condition and to the leading causes of death are smoking, sedentary lifestyle, obesity, high cholesterol, and low consumption of fruits and vegetables. These risk factors are related to the major causes of morbidity in the state.

Source: SC Department of Health and Environmental Services, Bureau of Community Health and Chronic Disease Prevention, County Chronic Disease Fact Sheet. January 2013.

#### Leading Causes of Death

The top ten leading causes of death in Horry County (2011) according to the South Carolina DHEC include diseases that can be attributed to risk factors present in the population - such as heart disease and stroke, cancer, and diabetes.

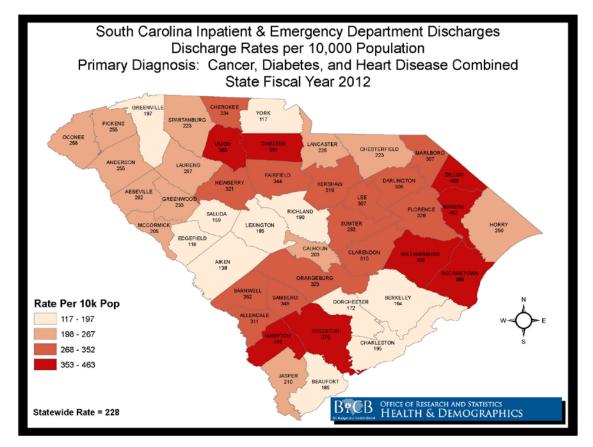


# Top Ten Leading Causes of Death in Horry County, 2011

 Data Source:
 SCDHEC SCAN
 http://scanzis.dhec.sc.gov/scan/; Generated by Chronic Disease Epidemiology and Evaluation
 January 2013

 For methodology of ranking, see Technical Document:
 http://www.scdhec.gov/health/epidata/docs/EpiTechNotes.pdf
 January 2013

Horry County discharge rates for heart disease and stroke, cancer, and diabetes are above the state rate.



Source: South Carolina Budget and Control Board, Office of Research and Statistics Health and Demographics. 2013.

# **Impact of Heart Disease and Stroke**

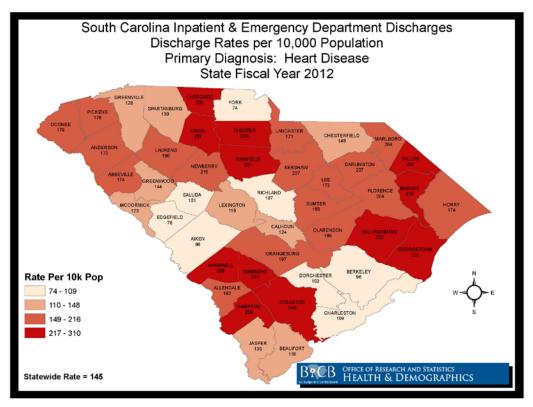
According to SC DHEC, Horry County is in the 'Buckle of the Stroke Belt" where rates of heart disease and stroke are among the highest in the nation. In Table 16, mortality rates are compared against state rates.

County Age-Adjusted Rates (per 100,000 population) 2007						
Heart Disease MortalityHeart Failure MortalityStroke Mortality						
Horry County	156.9	13.1	38.2			
South Carolina	185.7	19.1	49.8			

#### Table 16. 2007 Heart Disease and Stroke Mortality Rates

Source: SC Department of Health and Environmental Services, Heart Disease and Stroke Prevention Division, 2010 Edition.

Diseases of the heart are the top cause of death for Horry County according to SC DHEC.



Source: South Carolina Budget and Control Board, Office of Research and Statistics Health and Demographics. 2013.

#### **Heart Disease Mortality**

This indicator reports the rate of death due to coronary heart disease per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are summarized for report areas from county level data, only where data is available. This indicator is relevant because heart disease is a leading cause of death in the United States.

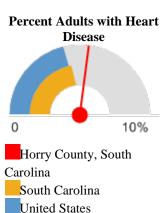
Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age- Adjusted Death Rate (Per 100,000 Pop.)
Horry County, South Carolina	258,040	360	139.44	122.16
South Carolina	4,509,238	5,692	126.22	121.71
United States	303,844,430	432,552	142.36	134.65
HP 2020 Target				<= 100.8

Note: This indicator is compared with the Healthy People 2020 Target. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed through CDC WONDER. Source geography: County.

### **Heart Disease Prevalence**

This indicator reports the percentage of adults aged 18 and older who have ever been told by a doctor that they have coronary heart disease or angina. This indicator is relevant because coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol, and heart attacks.

Report Area	Total Population (Age 18)	Number Adults with Heart Disease	Percent Adults with Heart Disease
Horry County, South Carolina	205,535	11,140	5.42%
South Carolina	3,442,167	155,242	4.51%
United States	232,747,222	9,911,760.85	4.26%



*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

### **Stroke Mortality**

This indicator reports the rate of death due to cerebrovascular disease (stroke) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are summarized for report areas from county level data, only where data is available. This indicator is relevant because stroke is a leading cause of death in the United States.

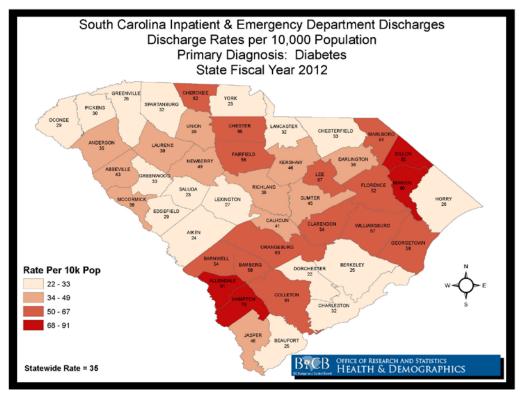
Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age- Adjusted Death Rate (Per 100,000 Pop.)
Horry County, South Carolina	258,040	139	53.87	49.46
South Carolina	4,509,238	2,369	52.53	52.19
United States	303,844,430	133,107	43.81	41.78
HP 2020 Target				<= 33.8

Note: This indicator is compared with the Healthy People 2020 Target. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed through CDC WONDER. Source geography: County.

# **Impact of Diabetes**

In 2010, there were 498 hospitalizations for diabetes in Horry County for all ages. There were an additional 5,835 hospital discharges with diabetes-related conditions in Horry County. In 2010, there were 644 emergency room visits for diabetes as the primary diagnosis, among which 233 (36%) were by African-American patients. There were 6,877 emergency room visits for diabetes as a related condition.

Diabetes is the seventh leading cause of death in Horry County. A total of 55 people in Horry County died from diabetes in 2009. Horry County ranks #44 in diabetes mortality in South Carolina (2007-2009).

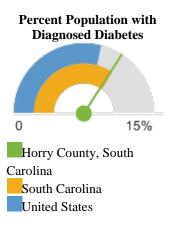


Source: South Carolina Budget and Control Board, Office of Research and Statistics Health and Demographics. 2013.

#### **Diabetes Prevalence**

This indicator reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

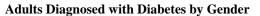
Report Area	Total Population Age 20	Population with Diagnosed Diabetes	Percent Population with Diagnosed Diabetes
Horry County, South Carolina	204,128	23,883	10.20%
South Carolina	3,339,972	377,662	10.46%
United States	223,653,607	20,615,282	8.72%

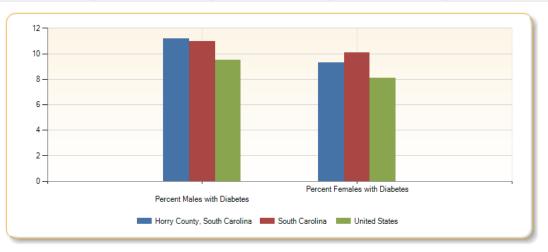


Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Diabetes Surveillance System, 2009. Source geography: County.

Huuns Diagnosea w	Adults Diagnosed with Diabetes by Gender							
Report Area	Total Males with Diabetes	Percent Males with Diabetes	Total Females with Diabetes	Percent Females with Diabetes				
Horry County, South Carolina	12,438	11.20%	11,445	9.30%				
South Carolina	182,320	10.96%	195,344	10.08%				
United States	10,488,129	9.49%	10,127,138	8.08%				





# **Impact of Obesity**

Horry County has a variety of community wellness centers, local preschools participate in Color Me Healthy promoting the adoption of nutrition policies, and is a partner with Eat Smart Move More. While rates of obesity were below the state and national percentages, the county was still above the *Healthy People 2020* goal. *Healthy People* provides science-based, 10-year national objectives for improving the health of all Americans. *Healthy People* has established benchmarks for these objectives and monitored progress over time.

Adults	Horry County	SC	US	Healthy People 2020
Obese (%)	23.6	30.3	27.7	15
Not meeting physical activity recommendation (%)	54.5	54.6	49.4	50
Not meeting fruit and vegetable recommendation (%)	87.3	82.6	76.6	N/A

Source: SC Department of Health and Environmental Services, Bureau of Community Health and Chronic Disease Prevention, 2010 Horry County Profile Nutrition, Physical Activity, and Obesity. April 2011.

According to the SC DHEC 2011 South Carolina Obesity Burden Report, in 2010 67.4% of all SC adults and 29.6% of all high school students were overweight or obese. In 2010, Horry County ranked 14th in the state with 65.9% of adults overweight or obese.

# **Obesity (Adult)**

This indicator reports the percentage of adults aged 20 and older who self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese). This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues.

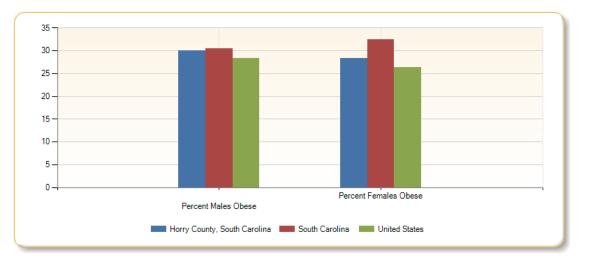
Report Area	Total Population Age 20	Population with BMI > 30.0 (Obese)	Percent Population with BMI > 30.0 (Obese)	Percent Population with BMI > 30.0 (Obese)
Horry County, South Carolina	203,976	58,541	29.10%	0 50%
South Carolina	3,344,854	1,051,209	31.49%	Horry County, South Carolina South Carolina
United States	223,576,989	61,460,308	27.35%	United States

Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Diabetes Surveillance System, 2009. Source geography: County.

#### Adult Obesity by Gender

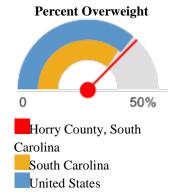
Report Area	Total Males Obese	Percent Males Obese	Total Females Obese	Percent Females Obese
Horry County, South Carolina	29,551	30%	28,990	28.30%
South Carolina	489,795	30.53%	561,412	32.39%
United States	31,008,901	28.30%	30,451,365	26.37%



### **Overweight** (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report that they have a Body Mass Index (BMI) between 25.0 and 30.0 (overweight). This indicator is relevant because excess weight is a prevalent problem in the U.S.; it indicates an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population (Age 18)	Number Overweight	Percent Overweight
Horry County, South Carolina	205,535	76,891	37.41%
South Carolina	3,442,167	1,230,230	35.74%
United States	232,747,222	84,521,271.09	36.31%



*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

# **Impact of Cancer**

Cancer indicators are relevant because cancer is a leading cause of death in the United States.

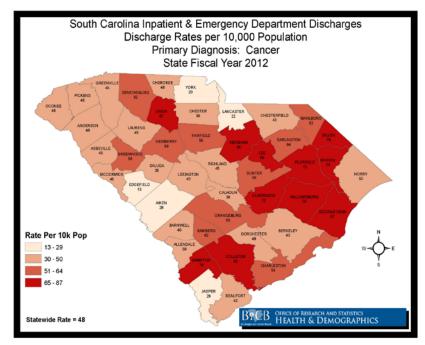
Major risk factors for cancer include tobacco use, unhealthy diet, lack of exercise and over exposure to sunlight (solar radiation) - all risk factors in Horry County and South Carolina as a whole. Genetic factors also appear to play a role in some types of cancer. However, the cause or origin of many cancer types is unknown and likely determined by the combined effects of multiple factors.

Cancer statistics are listed in the table below for the SC Department of Health and Environmental Control (DHEC) Health Region 4: Chesterfield, Clarendon, Darlington, Dillon, Florence, Kershaw, Lee, Marion, Marlboro, and Sumter Counties.

	SC DHEC Region 6					State
All Cancers	Total	Blacks	Whites	Males	Females	Total
Number of hospitalizations	950	100	826	464	486	15,242
Crude rate of hospitalizations (per 100,000)	344	252	358	344	344	326
Median age of hospitalized patients	66	57	66	66	65	64
Total cost of hospitalization (\$)	50,763,100	4,734,300	44,180,400	26,163,700	24,599,400	906,361,600
Average length of hospital stay (days)	6	6	6	6	6	7
Number of deaths	635	60	572	336	299	9,510
Age-Adjusted Death rate (per 100,000)	177.8	186.9	176.5	200.7	158.0	181.2

#### Table 18. Statistics on All Cancers

Source: SC Department of Health and Environmental Services, Bureau of Community Health and Chronic Disease Prevention, County Chronic Disease Fact Sheet. January 2013.



Source: South Carolina Budget and Control Board, Office of Research and Statistics Health and Demographics. 2013.

# **Cancer Mortality**

This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are summarized for report areas from county level data, only where data is available.

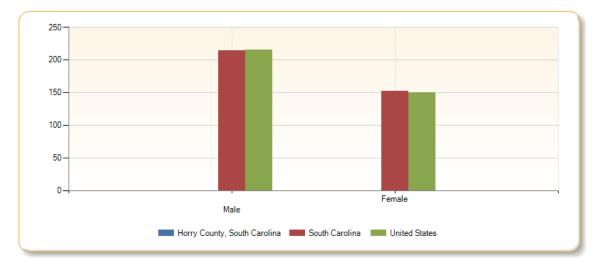
Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age- Adjusted Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Ra (Per 100,000 Pop.)
Horry County, South Carolina	258,040	587	227.48	185.30	Horry County, South Carolina HP 2020 Target
South Carolina	4,509,238	9,080	201.36	187.78	United States
United States	303,844,430	566,121	186.32	176.66	
HP 2020 Target				<= 160.6	

Note: This indicator is compared with the Healthy People 2020 Target. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed through CDC WONDER. Source geography: County.

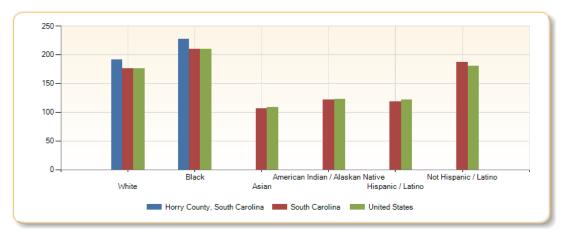
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Horry County, South Carolina	191.63	227.71	no data	no data	no data	no data
South Carolina	175.71	209.46	106.25	121.84	118.47	187.54
United States	176.12	209.70	108.72	122.20	121.09	180.92

Population by Gender, Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Horry County, South Carolina	no data	no data
South Carolina	214.81	152.09
United States	215.04	150.05



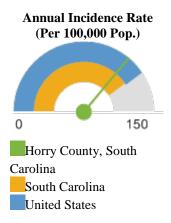
#### Population by Race / Ethnicity, Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.)



### **Breast Cancer Incidence**

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with breast cancer adjusted to 2000 U.S. standard population age groups (Under Age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2005- 2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Horry County, South Carolina	248,601	269	108.30
South Carolina	4,416,867	5,362	121.40
United States	301,461,536	367,783	122



*Note: This indicator is compared with the state average.* 

Data Source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2005-2009. Source geography: County.

#### Population by Race / Ethnicity, New Breast Cancer Incidence (Count)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Horry County, South Carolina	218	35	no data	no data	no data
South Carolina	3,632	1,470	no data	no data	no data
United States	276,098	43,972	11,261	1,655	280,661

#### Population by Race / Ethnicity, Breast Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Horry County, South Carolina	108.70	99.60	no data	no data	no data
South Carolina	122	118	no data	no data	no data
United	123	118	85.30	68.30	93.10

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
States					
140 120 100 80 60 40 20 0	White	Black	American India	an / Alaskan Native	
		rry County, South Carolin		Hispanic / Latino United States	

#### **Colon and Rectum Cancer Incidence**

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of colon and rectum cancer adjusted to 2000 U.S. standard population age groups. This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2005- 2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Horry County, South Carolina	248,601	113	45.40
South Carolina	4,416,867	1,974	44.70
United States	301,461,536	121,188	40.20
HP 2020 Target			<= 38.6

Note: This indicator is compared with the Healthy People 2020 Target. Data Source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2005-2009. Source geography: County.

### Lung Cancer Incidence

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of lung cancer adjusted to 2000 U.S. standard population age groups. This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

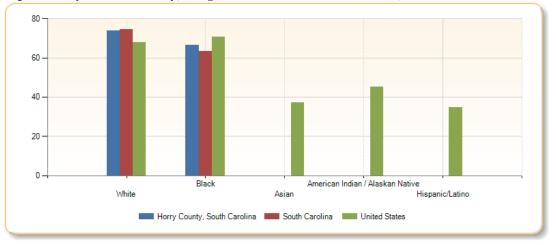
Report Area	Total Population, ACS 2005- 2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Horry County, South Carolina	248,601	182	73.20
South Carolina	4,416,867	3,180	72
United States	301,461,536	202,582	67.20

Annual Incidence Rate (Per 100,000 Pop.) (Per 100,0

*Note: This indicator is compared with the state average.* 

Data Source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2005-2009. Source geography: County.

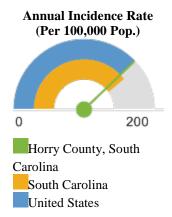
Population by Race / Ethnicity, Lung Cancer Incidence Rate (Per 100,000)



### **Prostate Cancer Incidence**

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of males with prostate cancer adjusted to 2000 U.S. standard population age groups. This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2005- 2009	Annual Incidence, 2005-2009 Average	Annual Incidence Rate (Per 100,000 Pop.)
Horry County, South Carolina	248,601	376	151.30
South Carolina	4,416,867	7,022	159
United States	301,461,536	456,412	151.40



*Note: This indicator is compared with the state average.* 

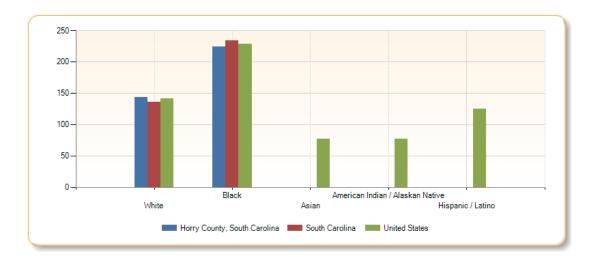
Data Source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2005-2009. Source geography: County.

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Horry County, South Carolina	287	79	no data	no data	no data
South Carolina	4,040	2,912	no data	no data	no data
United States	316,053	85,187	10,151	1,861	375,018

#### Population by Race / Ethnicity, New Prostate Cancer Incidence (Count)

#### Population by Race / Ethnicity, Prostate Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Horry County, South Carolina	143.80	223.90	no data	no data	no data
South Carolina	135.70	233.80	no data	no data	no data
United States	140.80	228.60	76.90	76.80	124.40



# **Impact of Asthma**

# **Asthma Prevalence**

This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma. This indicator is relevant because asthma is a prevalent problem in the U.S. that is often exacerbated by poor environmental conditions.

Report Area	Total Population (Age 18)	Number Adults with Asthma	Percent Adults with Asthma	Percent Adults with Asthma
Horry County, South Carolina	205,535	30,995	15.08%	
South Carolina	3,442,167	441,630	12.83%	0 25%
United States	232,747,222	30,473,296.44	13.09%	Horry County, South Carolina
Note: This indicator	is compared with th	e state average. No l	preakout data	South Carolina

available.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

In 2010, approximately 10.9% of adults in Horry County suffer annually from asthma. In that year, there were 315 hospitalizations for asthma in Horry County for all ages.

United States

# **Impact of Lung Disease**

### Lung Disease Mortality

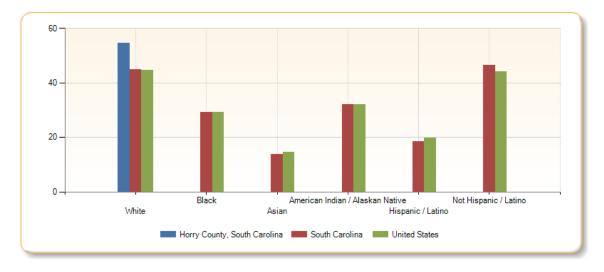
This indicator reports the rate of death due to chronic lower respiratory disease per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are summarized for report areas from county level data, only where data is available. This indicator is relevant because lung disease is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age- Adjusted Death Rate (Per 100,000 Pop.)
Horry County, South Carolina	258,040	143	55.26	47.15
South Carolina	4,509,238	2,164	47.98	46.42
United States	303,844,430	133,806	44.04	42.40

Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. . Accessed through CDC WONDER. Source geography: County.

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Horry County, South Carolina	54.67	no data	no data	no data	no data	no data
South Carolina	44.89	29.20	13.80	31.99	18.51	46.59
United States	44.71	29.15	14.61	32.07	19.64	44



# **Impact of Birth Outcomes**

Poor birth outcomes for Horry County are typically above South Carolina percentages and rates. Birth outcomes are an indicator of health of an individual throughout life.

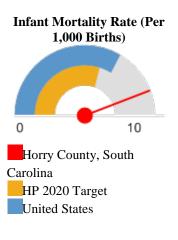
The following maps from the March of Dimes illustrate the percent of preterm births and infant mortality throughout South Carolina. Horry County consistently has higher mortality rates than the state average.



#### **Infant Mortality**

This indicator reports the rate of deaths to infants less than one year of age per 1,000 births. This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

Report Area	Total Births	Total Infant Deaths	Infant Mortality Rate (Per 1,000 Births)
Horry County, South Carolina	21,610	191	8.84
South Carolina	418,687	3,529	8.43
United States	58,600,996	393,074	6.71
HP 2020 Target			<= 6.0



Note: This indicator is compared with the Healthy People 2020 Target. Data Source: Centers for Disease Control and Prevention, National Vital Statistics System, 2003-2009. Source geography: County.

	Percent of	Babies Bor	n with Low	Birthweigh	t (Percent)		
	2006	2007	2008	2009	2010		
Horry	9.7%	10.0%	8.7%	10.8%	10.3%		
South Carolina	10.10%	10.20%	9.90%	10.00%	9.90%		
	Percent	of Babies B	orn to Mot	hers with Le	ess Than		
		Adequate <b>F</b>	Prenatal Ca	re (Percent)			
	2006	2007	2008	2009	2010		
Horry	43.2%	40.5%	42.2%	36.1%	36.1%		
South Carolina	37.80%	36.20%	35.40%	33.60%	31.90%		
	Birt	hs to Teens	15 to 19 Ye	ars of Age (1	rate)		
	2006	2007	2008	2009	2010		
Horry	58.6	59.7	53.5	50.2	39.7		
South Carolina	53	53.6	53	49	42.6		
	Infant Mortality Rate (Per 1,000 Live Births) (rate)						
	2006	2007	2008	2009	2010		
Horry	8.4	9.8	9.1	8.9	7.5		
South Carolina	8.4	8.5	8	7.1	7.4		

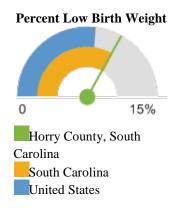
#### Table 19. Birth Outcomes for Horry County

Source: The Anne E. Casey Foundation. Data Center Kids Count. 2013.

### Low Birth Weight

This indicator reports the percentage of total births that were low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

Report Area	Total Births	Number Low Birth Weight (< 2500g)	Percent Low Birth Weight
Horry County, South Carolina	21,001	2,082	9.91%
South Carolina	412,400	41,575	10.08%
United States	29,126,451	2,359,843	8.10%



Note: This indicator is compared with the state average. No breakout data available.

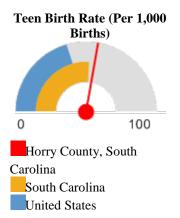
Data Source: Centers for Disease Control and Prevention, National Vital Statistics Systems, 2003-2009. Accessed through the Health Indicators Warehouse. Source geography: County.

### **Teen Births**

The teen births indicator reports the rate of total births to women under the age of 15 - 19 per 1,000 female population age 15 - 19. This indicator is relevant because in many cases,

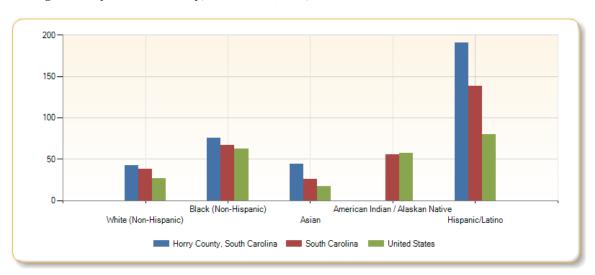
teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

Report Area	Female Population Age 15 - 19	Births to Mothers Age 15 - 19	Teen Birth Rate (Per 1,000 Births)
Horry County, South Carolina	45,271	2,508	55.40
South Carolina	1,053,545	54,679	51.90
United States	72,071,117	2,969,330	41.20



Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Vital Statistics Systems, 2003-2009. Accessed through the Health Indicators Warehouse. Source geography: County.



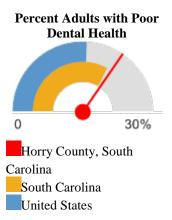
Teenage Girls by Race / Ethnicity, Birth Rate (Per 1,000 Births)

# **Impact of Dental Health**

### **Poor Dental Health**

This indicator reports the percentage of adults age 18 and older who self-report that six or more of their permanent teeth have been removed due to tooth decay, gum disease, or infection. This indicator is relevant because it indicates lack of access to dental care and/or social barriers to utilization of dental services.

Report Area	Total Population (Age 18)	Number Adults with Poor Dental Health	Percent Adults with Poor Dental Health
Horry County, South Carolina	205,535	42,710	20.78%
South Carolina	3,442,167	686,024	19.93%
United States	232,747,222	36,229,520	15.57%



United States

*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

# **Impact of HIV and STDs**

#### **HIV Prevalence**

This indicator reports prevalence rate of HIV per 100,000 population. This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

Report Area	Population Age 18	Population with HIV	HIV Prevalence Rate	HIV Prevalence Rate
Horry County, South Carolina	215,049	634	294.80	0 500
South Carolina	3,544,890	12,786	360.70	Horry County, South
United States	234,564,075	724,515	308.88	Carolina South Carolina

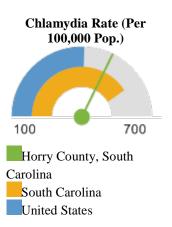
*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Centers for Disease Control and Prevention and the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2009. Source geography: County.

### **Chlamydia Incidence**

This indicator reports incidence rate of Chlamydia cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices. Chlamydia is also linked to cervical cancer.

Report Area	Total Population, 2010 Census	Reported Cases of Chlamydia	Chlamydia Rate (Per 100,000 Pop.)
Horry County, South Carolina	269,291	1,257	488.40
South Carolina	4,625,364	26,647	594.83
United States	308,730,677	1,236,680	406.89



Note: This indicator is compared with the state average. No breakout data available.

Data Source: Centers for Disease Control and Prevention and the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2009. Source geography: County.

# **Impact of Premature Death**

#### **Premature Death**

This indicator reports Years of Potential Life Lost (YPLL) before age 75 per 100,000 population for all causes of death, age-adjusted to the 2000 standard. YPLL measures premature death is calculated by subtracting the age of death from the 75 year benchmark. This indicator is relevant because a measure of premature death can provide a unique and comprehensive look at overall health status.

Report Area	Total Population, 2006-2008 Average	Annual Premature Deaths, 2006-2008 Average	Years of Potential Life Lost (Rate per 100,000 Pop.)	Years of Potential Life Lost (Rate per 100,000 Pop.)
Horry County, South Carolina	236,209	1,169	9,181	5000 12000
South Carolina	4,195,347	20,034	9,101	Horry County, South
United States	283,115,015	1,058,493	7,131	Carolina

*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Centers for Disease Control and Prevention, National Vital Statistics System, 2008-2010 (As Reported in the 2012 County Health Rankings). Source geography: County.

#### Homicide

This indicator reports the rate of death due to assault (homicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are summarized for report areas from county level data, only where data is available. This

United States

indicator is relevant because homicide rate is a measure of poor community safety and is a leading cause of premature death.

Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age- Adjusted Death Rate (Per 100,000 Pop.)
Horry County, South Carolina	258,040	17	6.67	7.13
South Carolina	4,509,238	359	7.97	8.04
United States	303,844,430	17,564	5.78	5.81
HP 2020 Target				<= 5.5

Note: This indicator is compared with the Healthy People 2020 Target. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed through CDC WONDER. Source geography: County.

### **Motor Vehicle Crash Death**

This indicator reports the rate of death due to motor vehicle crashes per 100,000 population, which include collisions with another motor vehicle, a non-motorist, a fixed object, and a non-fixed object, an overturn, and any other non-collision. This indicator is relevant because motor vehicle crash deaths are preventable and they are a cause of premature death.

Report Area	Total Population	Annual Deaths, 2006-2010 Average	Crude Death Rate (Per 100,000 Pop.)	Age- Adjusted Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Horry County, South Carolina	258,040	58	22.48	23.01	0 50 Horry County, South Carolina South Carolina
South Carolina	4,509,238	956	21.21	21.15	United States
United States	303,844,430	40,120	13.20	13.04	

Note: This indicator is compared with the state average. No breakout data available. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed through CDC WONDER. Source geography: County.

#### **Pedestrian Motor Vehicle Death**

This indicator reports the rate of pedestrians killed by motor vehicles per 100,000 population. This indicator is relevant because pedestrian-motor vehicle crash deaths are preventable and they are a cause of premature death.

Report Area	Total Deaths, 2008-2010	Average Annual Deaths, 2008-2010	Average Annual Death Rate (Per 100,000 Pop.)	Average Annual Death Rate (Per 100,000 Pop.)
Horry County, South Carolina	21	7	2.60	0 5.0
South Carolina	280	93	2	Horry County, South Carolina HP 2020 Target
United States	12,750	4,250	1.38	United States
HP 2020 Target			<= 1.3	

Note: This indicator is compared with the Healthy People 2020 Target. No breakout data available.

Data Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2008-2010. Source geography: County.

#### Suicide

This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are summarized for report areas from county level data, only where data is available. This indicator is relevant because suicide is an indicator of poor mental health.

Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age- Adjusted Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Horry County, South Carolina	258,040	37	14.34	13.51	0 50 Horry County, South Carolina HP 2020 Target United States

South Carolina	4,509,238	575	12.75	12.40
United States	303,844,430	35,841	11.80	11.57
HP 2020 Target				<= 10.2

Note: This indicator is compared with the Healthy People 2020 Target. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed through CDC WONDER. Source geography: County.

# HEALTH CARE DELIVERY AND INTERVENTION

# HOSPITAL UTILIZATION STATISTICS

#### **Emergency Department Utilization**

The rate of Horry County ED visits per 1,000 uninsured ages 0-64 in CY2012 is reported in the moderate range (657.8-814.6).

Rate of ED Visits per 1,000 Uninsured			
Without Admission	Resulting in Hospital		
	Admission		
678.9	724.8		

Source: University of South Carolina, Institute for Families in Society, Division of Policy and Research on Medicaid and Medicare (July 2013).

In FY2012, the chief complaints for McLeod Loris Seacoast Hospital Emergency Departments (ED) are listed in Tables 20 and 21.

Table 20. McLeod	l Loris - ED	<b>Chief Com</b>	plaints, 2012
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ED Chief	Complaints	
487.1	FLU W RESP MANIFES	429
799.9	UNKN CAUSE MORB/MO	409
466.0	ACUTE BRONCHITIS	375
465.9	ACUTE URI NOS	314
599.0	URIN TRACT INFECTI	288
789.00	ABDOMINAL PAIN, U	256
729.1	MYALGIA AND MYOSIT	242
724.5	BACKACHE NOS	237
784.0	HEADACHE	226
382.9	OTITIS MEDIA NOS	220

#### Table 21. McLeod Seacoast - ED Chief Complaints, 2012

ED Chie	f Complaints	
799.9	UNKN CAUSE MORB/MO	311
466.0	ACUTE BRONCHITIS	259
729.1	MYALGIA AND MYOSIT	245
724.5	BACKACHE NOS	234
599.0	URIN TRACT INFECTI	223
789.00	ABDOMINAL PAIN, U	212
465.9	ACUTE URI NOS	207
079.99	VIRAL INFECTION N	172
558.9	NONINF GASTROENTER	156
382.9	OTITIS MEDIA NOS	154

#### **Inpatient Hospital Utilization**

According to the SC Office of Research and Statistics, McLeod Loris had 3,602 discharges in 2011. During that same year, there were 30,653 hospital discharges of people in Horry County. This total equates to a rate of 11,092.49 per 100,000. The highest diagnosis category of hospitalization was Diseases of the Circulatory System, which includes heart disease. There were 5,443 in this category which is a rate of 1,969.68 per 100,000. The top 25 reasons for inpatient hospitalization for residents of Horry County are shown in Table.

Rank Me	edicare Severity Diagnosis Related Group (MS-DRG)	Discharges	Percent of Total
1.	775 - VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	1,480	4.8 %
2.	470 - MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	1,078	3.5 %
3.	766 - CESAREAN SECTION W/O CC/MCC	749	2.4 %
4.	392 - ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC	653	2.1 %
5.	945 - REHABILITATION W CC/MCC	552	1.8 %
6.	871 - SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W MCC	549	1.8 %
7.	690 - KIDNEY & URINARY TRACT INFECTIONS W/O MCC	465	1.5 %
8.	292 - HEART FAILURE & SHOCK W CC	439	1.4 %
9.	603 - CELLULITIS W/O MCC	430	1.4 %
10.	765 - CESAREAN SECTION W CC/MCC	407	1.3 %
11.	641 - NUTRITIONAL & MISC METABOLIC DISORDERS W/O MCC	403	1.3 %
12.	743 - UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC/MCC	397	1.3 %
13.	194 - SIMPLE PNEUMONIA & PLEURISY W CC	389	1.2 %
14.	313 - CHEST PAIN	386	1.2 %
15.	287 - CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC	373	1.2 %
16.	190 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	345	1.1 %
17.	310 - CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC/MCC	326	1 %
18.	192 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE W/O CC/MCC	320	1 %
19.	460 - SPINAL FUSION EXCEPT CERVICAL W/O MCC	316	1 %
20.	885 - PSYCHOSES	314	1 %
21.	683 - RENAL FAILURE W CC	313	1 %
22.	247 - PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC	305	1 %
23.	918 - POISONING & TOXIC EFFECTS OF DRUGS W/O MCC	300	1 %
24.	191 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE W CC	298	1 %
25.	378 - G.I. HEMORRHAGE W CC	292	0.9 %

# Table 22. Horry County Top 25 Inpatient Hospitalizations, 2011

Source: South Carolina Budget and Control Board, Office of Research and Statistics Health and Demographics. 2011.

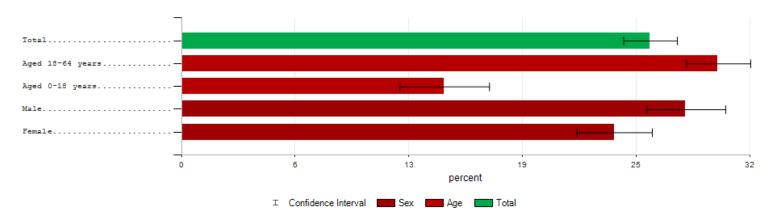
# **HEALTH INSURANCE DEMOGRAPHICS**

# **Insured Population**

The lack of health insurance is considered a key driver of health status.

This indicator is relevant because lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contributes to poor health status.

In 2010, a total of 26.2% of Horry Country residents under 65 years of age were without health insurance according to Health Indicators Warehouse. Of those aged 18-64, 30.0% were without health insurance.



In comparison, in that same year there were a total of 20.3% residents under 65 years of age were without health insurance in South Carolina. Of those aged 18-64, 24.4% were without health insurance.

# Health Programs to Cover the Uninsured

# Medicaid

In addition to meeting minimum federal Medicaid standards, Healthy Connections covers pregnant women and infants under age 1 up to 185 percent of federal poverty guidelines. Partners for Healthy Children covers all other children up to 150 percent of federal poverty guidelines.

# CHIP

Healthy Connections Kids covers children up to 200 percent of federal poverty guidelines.

# State-Only Programs

High-Risk Pool: The South Carolina Health Insurance Pool covers those who have been refused insurance for health reasons, are offered only reduced coverage, are offered coverage at more than 50 percent higher than the pool rate, or have federal eligibility under HIPAA or TAA. The program is funded by premiums and insurance carrier assessments.

# American Health Benefit Exchange

The Patient Protection and Affordable Care Act of 2010 requires the creation of an American Benefit Exchanges. The exchanges are created as a marketplace for health insurance purchasers and provide choices to consumers in picking their health coverage that begins January 1, 2014. They will also provide coverage options for people who do not qualify for Medicaid or have employer sponsored insurance.

Premium assistance, in the form of a credit, will be provided through the exchange to individuals between 133 and 400 percent of the federal poverty guidelines to ensure affordable options. The premiums for individuals and/or families will be limited based on income; the maximum premium cost will be limited to 2 percent of income for those with incomes at or below 133 percent of the federal poverty guidelines and up to 9.5 percent of income for those between 300 to 400 percent of FPL.

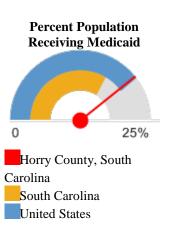
### Health Disparities Law in South Carolina

S.C. Code Ann. § 11-11-170- Establishes the South Carolina Healthcare Tobacco Settlement Trust Fund from tobacco manufacturers settlement agreement. Funds are kept separate from other state funds. Seventy-three (73%) percent of available funds must be used for healthcare programs and specifies that only interest earnings may be appropriated and used for, but not limited to disease prevention and elimination of health disparities: diabetes, HIV/AIDS, hypertension, and stroke, particularly in minority populations.

# **Population Receiving Medicaid**

This indicator reports the percentage of the population that is enrolled in Medicaid. This indicator is relevant because it assesses vulnerable populations which are more likely to have multiple health access, health status, and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment.

Report Area	Population (for Whom Insurance Status is Determined)	Population Receiving Medicaid	Percent Population Receiving Medicaid
Horry County, South Carolina	270,875	40,427	19.62%
South Carolina	4,635,405	780,459	16.84%
United States	309,231,232	51,335,184	19.91%

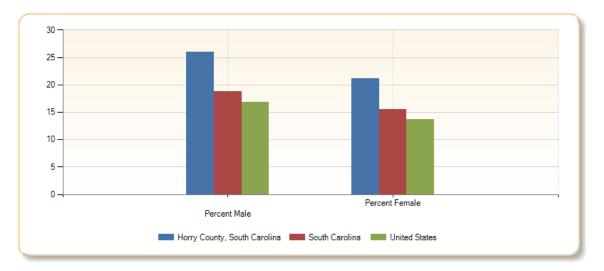


*Note: This indicator is compared with the state average.* 

Data Source: U.S. Census Bureau, 2008-2010 American Community Survey 3-Year Estimates. Source geography: PUMA.

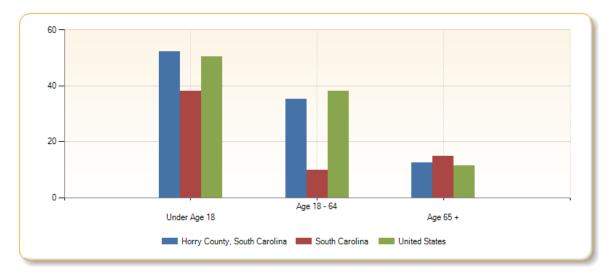
ropulation Receiving Medicald by Gender							
Report Area	Total Male	Total Female	Percent Male	Percent Female			
Horry County, South Carolina	34,290	29,167	26.02%	21.18%			
South Carolina	408,626	366,612	18.78%	15.55%			
United States	24,979,664	21,302,552	16.84%	13.68%			

# **Population Receiving Medicaid by Gender**



# Population Receiving Medicaid by Age Group, Percent

Report Area	Under Age 18	Age 18 - 64	Age 65
Horry County, South Carolina	52.32%	35.30%	12.38%
South Carolina	38.03%	9.87%	14.71%
United States	50.46%	38.20%	11.34%



# HEALTH PROFESSIONAL INVENTORY AND NEEDS ANALYSIS

# **CLINICAL CARE**

A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsurance, financial hardship, transportation barriers, cultural competency, and coverage limitations affect access.

Rates of morbidity, mortality, and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests, and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

# Major Health Resources (partial listing of available information)

Acute Care Hospitals:

- McLeod Loris, Loris, SC
- McLeod Seacoast, North Myrtle Beach, SC
- Conway Medical Center, Conway, SC
- Grand Strand Regional Medical Center, Myrtle Beach, SC
- Waccamaw Community Hospital, Murrells Inlet, SC

# **Other Major Health Resources:**

# • AccessHealth Horry

Serving the uninsured, the AccessHealth SC network have the time and knowledge it takes to successfully connect an uninsured patient to other medical and social services - generally beyond what one doctor or clinic can do alone. The resources to solve complex problems of uninsured patients exist within community-based networks of care. AccessHealth SC networks include hospitals, Federally Qualified Health Centers, free medical clinics, behavioral health providers, DHEC offices, social service agencies, and many other providers of public health services working together to deliver individualized, coordinated solutions to improve health outcomes and change utilization. There are ten AccessHealth SC networks serving 18 counties, including Horry County.

# • Public Health Departments

The Public Health Departments offer a wide variety of health care services at a low cost or for free. The Myrtle Beach Health Department also has a Spanish speaker on staff.

Locations:

Myrtle Beach Health Department, Myrtle Beach, SC Stephen's Crossroads Public Health Department, Little River, SC Conway Public Health Department, Conway, SC Loris Public Health Department, Loris, SC Surfside Public Health Department, Surfside, SC

# • Friendship House Clinic, Inc, Conway, SC

The Friendship House Clinic is a Free Medical Clinic that provides medical services to indigent patients and is staffed by volunteer physicians. General medical exams are provided, but they do not do pediatrics or gynecological exams. Welvista, a nonprofit organization, that has developed a successful model committed to improving health and wellness for the uninsured and underinsured by providing access to prescription medications and pediatric dental services is offered through the office. To schedule an appointment or request medication refills, call (843) 347-7178 between 10:00 am and 1:00 pm, Monday through Thursday.

• *Health Care Partners of South Carolina - Pediatrics – Conway, Conway, SC* Health Care Partners is a federally supported medical center open Monday, Tuesday, and Thursday from 8:00 am to 5:00 pm, Wednesday from 10:00 am to 5:00 pm, and on Fridays from 8:00 am to 2:00 pm. The clinic offers low-cost medical care on a sliding fee basis and accepts Medicaid.

# • Little River Medical Center

Little River Medical Center is a federally supported medical center providing primary and preventative health care. They accept both Medicare and Medicaid. They can also provide services on a sliding fee basis for low income individuals without health insurance. Little River will treat individuals regardless of their ability to pay.

Locations: Main Center, Little River, SC

Medical and Dental Center, Myrtle Beach, SC North Myrtle Beach, North Myrtle Beach, SC Loris, Loris, SC

# • Doctors Care

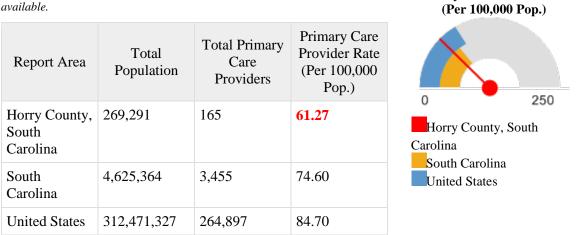
Doctors Care is a state wide medical provider with 50 office locations. Doctors Care accepts Medicaid and Medicare as well as offers a 25% reduction in fees to uninsured patients.

Locations: Carolina Forest, Myrtle Beach, SC Conway 501, Conway, SC Georgetown, Georgetown, SC North Myrtle Beach, N. Myrtle Beach, SC Strand Medical, Myrtle Beach, SC Surfside, Surfside Beach, SC

# **Access to Primary Care**

The access to primary care indicator reports the number of primary care physicians per 100,000 population. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

**Primary Care Provider Rate** 



Data Source: U.S. Health Resources and Services Administration Area Resource File, 2011 . Source geography: County.

*Note: This indicator is compared with the state average. No breakout data* 

An inventory of health professionals in Horry County compared to South Carolina is displayed in tables 23-26.

#### Table 23. Physicians in Horry and South Carolina, 2012

Source: South Carolina Area Health Education Consortium, Office of Workforce Analysis and Planning. 2012.

Physicians	Horry	South Carolina
Total Physicians Whose Primary Practice is in This Area	446	10,163
Family Practice	74	1,650
Internal Medicine	61	1,166
Obstetrics / Gynecology	25	552
Pediatrics	24	727
General Surgery	15	441
All other Physicians (Specialists)	244	5,368
Physicians Per 10,000 Population	16.9	22.3
Primary Care Physicians Per 10,000 Population	7.0	9.0
Federal Physicians	3	259

#### Table 24. Nurses in Horry and South Carolina, 2012

Source: South Carolina Area Health Education Consortium, Office of Workforce Analysis and Planning. 2012.

Nurses	Horry	South Carolina
Registered Nurses	1,589	36,213
Certified Nurse Midwife	2	84
Nurse Practitioners	59	1,525
Certified Nurse Anesthetists	38	923
Clinical Nurse Specialists	0	60
Licensed Practical Nurses	488	9,089

#### Table 25. Dentists and Hygienists in Horry and South Carolina, 2012

Source: South Carolina Area Health Education Consortium, Office of Workforce Analysis and Planning. 2012.

Dentists and Hygienists	Horry	South Carolina
Dentists	98	2,069
Dental Hygienists	147	2,381
Dental Technicians	7	138

#### Table 26. Other Health Professionals in Horry and South Carolina, 2012

Source: South Carolina Area Health Education Consortium, Office of Workforce Analysis and Planning. 2012.

Other Health Professions	Horry	South Carolina
Pharmacists	214	4,111
Pharmacy Technicians	364	5,962
Physical Therapists	105	2,181
Physical Therapy Assistants	65	1,194
Occupational Therapists	35	1,128
Occupational Therapy Assistants	25	465
Physician Assistants	43	679
Respiratory Care Practitioners	68	2,188
Optometrists	33	452

# **PREVENTATIVE SCREENINGS**

### **Breast Cancer Screening (Mammogram)**

This indicator reports the percentage of female Medicare enrollees, age 67-69 or older, who have received one or more mammograms in the past two years. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Medicare Enrollees	Female Medicare Enrollees Age 67-69	Female Medicare Enrollees with Mammogram in Past 2 Years	Percent Female Medicare Enrollees with Mammogram in Past 2 Years	Percent Female Medicare Enrollees with Mammogram in Past 2 Years 0 100%
Horry County, South Carolina	40,235	4,055	2,810	69.32%	Horry County, South Carolina South Carolina
South Carolina	483,003	45,940	31,648	68.89%	United States
United States	51,875,184	4,218,820	2,757,677	65.37%	

*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2010. Source geography: County.

# **Dental Care Utilization (Adult)**

This indicator reports the percentage of adults aged 18 and older who self-report that they have not visited a dentist, dental hygienist or dental clinic within the past year. This indicator is relevant because engaging in preventive behaviors decreases the likelihood of developing future health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Population (Age 18)	Number Adults with No Dental Exam	Percent Adults with No Dental Exam
Horry County, South Carolina	205,535	78,617	38.25%
South Carolina	3,442,167	1,178,598	34.24%
United States	232,747,222	70,151,188.94	30.14%

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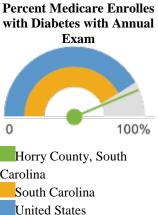
Note: This indicator is compared with the state average. No breakout data available.

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

# **Diabetes Management (Hemoglobin A1c Test)**

This indicator reports the percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test, a blood test which measures blood sugar levels, administered by a health care professional in the past year. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Medicare Enrollees	Medicare Enrollees with Diabetes	Medicare Enrollees with Diabetes with Annual Exam	Percent Medicare Enrollees with Diabetes with Annual Exam	Percent Medi with Diabetes Exa
Horry County, South Carolina	40,235	5,692	4,960	87.16%	Horry Coun Carolina South Carol United State
South Carolina	483,003	67,918	57,415	84.54%	
United States	51,875,184	6,218,804	5,212,097	83.81%	



Note: This indicator is compared with the state average. No breakout data available.

Data Source: Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2010. Source geography: County.

## **High Blood Pressure Management**

This indicator reports the percentage of adults aged 18 and older who self-report that they are not taking medication for their high blood pressure. This indicator is relevant because engaging in preventive behaviors decreases the likelihood of developing future health problems. When considered with other indicators of poor health, this indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Population (Age 18)	Number Adults Not Taking Blood Pressure Medication (When Needed)	Percent Adults Not Taking Medication	Percent Adults Not Taking Medication 0 50%
Horry County, South Carolina	205,535	36,359	17.69%	Horry County, South Carolina
South Carolina	3,442,167	627,163	18.22%	South Carolina United States
United States	232,747,222	50,606,335.52	21.74%	

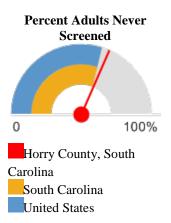
*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

# **HIV Screenings**

This indicator reports the percentage of teens and adults age 12-70 who self-report that they have never been screened for HIV. This indicator is relevant because engaging in preventive behaviors allows for early detection and treatment of health problems. This indicator can also highlight a lack of access to preventive care, a lack of health knowledge, insufficient provider outreach, and/or social barriers preventing utilization of services.

Report Area	Total Population (Age 18)	Number Adults Never Screened	Percent Adults Never Screened
Horry County, South Carolina	205,535	130,063	63.28%
South Carolina	3,442,167	2,099,378	60.99%
United States	232,747,222	139,253,113.51	59.83%



*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

# Lack of a Consistent Source of Primary Care

This indicator reports the percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or health care provider. This indicator is relevant because access to regular primary care is important to preventing major health issues and emergency department visits.

Report Area	Total Population (Age 18)	Number Adults Without Any Regular Doctor	Percent Adults Without Any Regular Doctor	Percent Adults Without Any Regular Doctor
Horry County, South Carolina	205,535	46,615	22.68%	0 30%
South Carolina	3,442,167	587,922	17.08%	Carolina South Carolina United States
United States	232,747,222	44,961,851.44	19.32%	

*Note: This indicator is compared with the state average. No breakout data available.* 

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

# Population Living in a Health Professional Shortage Area

This indicator reports the percentage of the population that is living in a geographic area designated as a "Health Professional Shortage Area" (HPSA), defined as having a shortage of primary medical care, dental or mental health professionals. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Report Area	Total Population	HPSA Designation Population	Underserved Population	Percent of Total Population Underserved	Percent of Designated Population Underserved	Percent of Designated Population Underserved
Horry County, South Carolina	269,291	0	0	0%	no data	0 80%
South Carolina	4,625,364	1,010,480	509,959	11.03%	50.47%	United States
United States	312,471,327	63,421,548	38,748,460	12.40%	61.10%	

Note: This indicator is compared with the state average. No breakout data available. Data Source: U.S. Health Resources and Services Administration Data Warehouse, Health Professional Shortage Area (Components), May 2013. Source geography: HPSA.

# **Preventable Hospital Events**

This indicator reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes, and other conditions which could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges allows demonstrating a possible "return on investment" from interventions that reduce admissions (for example, for uninsured or Medicaid patients) through better access to primary care resources.

Report Area	Total Medicare Part A Enrollees	Ambulatory Care Sensitive Condition Hospital Discharges	Ambulatory Care Sensitive Condition Discharge Rate	Ambulatory Care Sensitive Condition Discharge Rate
Horry County, South Carolina	41,362	2,738	66.22	0 150 Horry County, South
South Carolina	501,376	30,684	61.20	Carolina South Carolina United States
United States	56,167,590	3,737,659	66.54	

Note: This indicator is compared with the state average. No breakout data available.

Data Source: Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2010. Source geography: County.

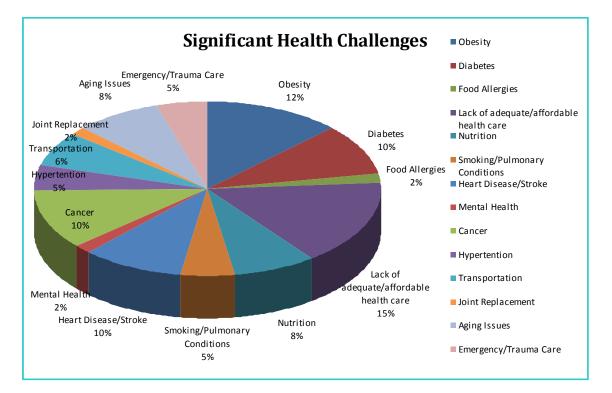
# **COMMUNITY FEEDBACK**

# **COMMUNITY SURVEY**

# Significant Health Challenges and Key Health Needs

A written survey was distributed to community members in Horry County. A top concern noted by responders pertained to the aging population in the area and if health care providers had the necessary services for the geriatric population. With the aging population in mind, many reported such issues as diabetes, declining cardiac health, and the development of cancer.

The largest response from survey participants regarding health challenges was the cost of health care. Sub-specialty care was also a common theme, citing trauma, heart, and cancer services as an opportunity. Some responders were concerned about not being able to receive treatment in close proximity to their homes, which can lead to transportation issues.



# Significant Health Challenges Identified:

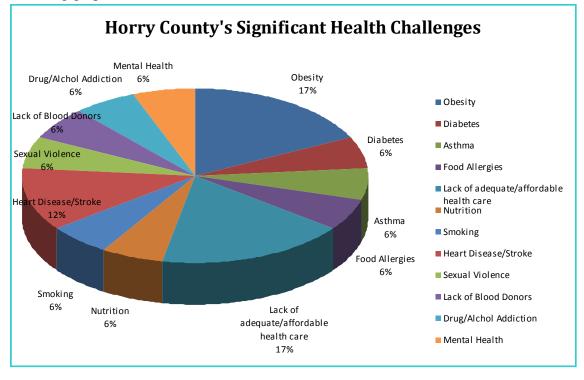
- Health services and specialties available
- Expense of health care
- Mental health services
- Cardiac health, including smoking cessation

# **COMMUNITY AGENCY AND HEALTH PROFESSIONAL SURVEY**

# **Top Priorities and Key Health Needs**

*Community leaders and service organizations* that serve Horry County with special knowledge and expertise of public health were interviewed to obtain various perspectives of the county's health needs. Information was solicited from 20 local agencies and service providers (Appendix A). Residents learn about the services provided by these agencies by word of mouth, news/local media, advertising, community leaders, and public education and a majority serve a wide variety of ages and races.

Top priorities and key health needs cited by those interviewed are displayed in the following graph:



The majority of responders noted lack of adequate or affordable health care was a significant health challenge in the county. This goes hand in hand with Horry County's high unemployment rates and uninsured population.

The second most prevalent health challenge identified was obesity, in which many responders cited the domino effect that occurs with obesity that begins with poor nutrition and leads to heart disease and stroke. The American Heart Association pointed out that our area is "infamously referred to as the Stroke Belt." Micheal Bargagliotti, Vice president of Development at the AHA, stated that preventive health is not impacting our community fast enough to reverse the trend of poor nutrition.

Respiratory diseases were cited as another top health issue. Horry County Schools report that 10% of students have asthma. Another community health care provider reported that COPD is one of the top patient diagnoses at their facility.

# Key Health Needs Identified:

- Health care access for children, including special needs and Medicaid recipients
- Affordable medications
- Smoking cessation courses and education
- More mental health services, including those aiding in addiction and sexual and domestic violence victims
- Address the hunger issue.
- More preventive health programs

*Physicians* that provide care in Horry County and have special knowledge and health care expertise was also interviewed about the county's health needs. Four physicians representing family medicine, internal medicine, surgery and emergency medicine were interviewed (Appendix B).

These health care providers identified the greatest health challenges for patients as: diabetes, hypertension, and cancer.

The greatest and chronic health needs in Horry were identified as: health education, the under and uninsured, preventative health, need for nutrition counseling, and substance addictions.

All physicians agreed that health education and preventive measures, such as health screenings, would be beneficial to the communities served by McLeod Health. Health screenings could aid in the prevention of possible health issues.

It was noted that diabetes and hypertension were the most prevalent problems treated by these physicians. Diabetes and hypertension are commonly brought on by the lack of health education, nutrition counseling and obesity. Poor nutrition can also lead to cancer, disease, and heart failure. Often, when a person falls ill, they need acute care. The physicians interviewed see this as a domino effect and prefer to go straight to the source of the problem.

# Health Needs Not Addressed

There were some areas of health needs that are important to improving community, but not addressed in this assessment. These were deemed to have a lower priority and less immediate impact, services already being provided by other initiatives, services outside the scope of resources, or will be addressed in a future plan or when the opportunity arises.

The most notable health needs not addressed is in dental care and behavioral health care. Preventive education of teenage pregnancy, sexually transmitted disease, low birth weight, and infant mortality were not addressed in the implementation plan. These services are being provided by other community providers and on a limited basis by McLeod Health.

# PRIORITY ISSUES AND PLAN

**PRIORITY ISSUES AND IMPLEMENTATION PLAN** 

McLeod Health utilizes resources such as the U.S. Department of Health and Human Services Healthy People 2020 program which serves to guide national health promotion and disease prevention efforts. This program identifies evidence-based, best practices to help advance targeted approaches that align with national objectives for improving the health of all Americans. Attention is focused on the "upstream" determinants that affect the public's health that contribute to health disparities by addressing identified needs through education, prevention, targeted initiatives validated through research, and the delivery of health services. Through collaboration with public health agencies, health care organizations and providers, community leaders, and input from across business sectors and others in our community, McLeod Health can more effectively satisfy its long standing mission dedicated to improving the health and well-being of our neighbors. Cross-sector collaboration is now widely considered as essential for having a meaningful impact on building healthier communities.

# Significant Health Needs for McLeod Loris Seacoast Community:

Concept mapping input was deployed across McLeod Loris Seacoast defined communities and yielded three overarching themes to contextualize the health care needs of the community:

- Heart Disease/Smoking
- Heart Disease/Obesity
- Access to Health Care

Programs/Events	Heart Disease/Smoking	Heart Disease/Obesity	Access to Health Care
Nutrition Education		Х	Х
Smoking Cessation	Х		Х
Physical Therapy Screenings			Х
Speech Screenings			Х
Health Fair	Х	Х	Х
Support Groups	Х	Х	Х
Cancer Screenings			Х
Diabetes Prevention and Management		X	X
Lymphedema Screenings			Х
Stroke and Heart Disease Seminars	Х	x	
Sports Injury Clinics			Х
PAD Screenings	Х	Х	
Discounted Blood Panels			Х
Hypertension Screenings	Х	Х	Х
Bone Density Screenings			Х
Flu Shots			Х
Various Health Seminars	Х	Х	Х
Lung Capacity Screenings	Х		

# Overview of McLeod Loris Seacoast Implementation Plan

Program	Activities	<u>Outcomes</u> Goal - Year 3	Target Population	Partners
January	Senior Health/Preventive Health & Wellness: Geriatric Preventive Care Balance Screenings Back Screenings Lectures: Dementia, Pre-Diabetes	Offer program and increase number of participants.	Seniors General Population	McLeod Physician Associates, McLeod Loris Seacoast Rehabilitation Services
February	Preventive Health & Wellness/Preventive Screenings: Cardiovascular Disease PAD Screenings Lectures: Hypertension, Heart Health Managing Nutrition Risk Factors for Heart Disease	Offer heart health lectures/vascular screening and increase number of participants. Utilize Healthy People 2020 educational materials in outreach efforts.	General Population	McLeod Heart and Vascular Institute, American Heart Association, McLeod Nutrition Services, McLeod Physician Associates
March	Preventive Health & Wellness/Preventive Screenings: Access to Medical Care Thyroid Cancer Screenings Skin Cancer Screenings Diabetic Foot Screenings	Offer various health screening and increase number of participants and community members seeking physicians. Utilize Healthy People 2020 educational materials in outreach efforts.	Seniors General Population	Internal Medicine and Family Medicine physicians, American Cancer Society, Podiatrists, McLeod Loris/Seacoast Diabetes Management
April	Preventive Health & Wellness: Obesity/Nutrition Education Lectures: The Truth about FAD Diets, 5K Training	Offer educational programs on nutrition and increase number of participants. Direct participants to services offered by McLeod Loris/Seacoast outpatient diabetes education, sports medicine, nutrition services, and physicians.	Obese Population General Population	North Myrtle Beach Aquatic and Fitness Center, McLeod Nutrition Services
Мау	Preventive Health & Wellness: Stroke Awareness Lectures: Signs and Symptoms of a Stroke	Offer stroke awareness program and increase number of participants.	General Population	McLeod Physician Associates, American Heart Association
June	Preventive Health & Wellness: Obesity/Nutrition Education: Guided Groceries Program Lifestyle Changes to a Healthier You- Nutrition Program How to Combat Picky Eaters	Offer educational programs on nutrition and increase number of participants. Direct participants to services offered by McLeod Loris/Seacoast outpatient diabetes education, nutrition services and physicians.	Obese Patients General Population Parents	McLeod Loris/Seacoast Diabetes Management and Nutrition Services
July	Pediatric Therapy Services: Speech Screenings Occupational and Physical Therapy Screenings	Offer pediatric screenings for early detection for developmental delays and connect patients to services offered by McLeod Seacoast pediatric rehab. Decrease amount of children in the community that are undetected for developmental delays therefore giving them a head start.	Adolescents Families	McLeod Seacoast Pediatric Rehabilitation, SCDHEC BabyNET

August	Preventive Health & Wellness:Sports Injury Prevention and SafeKids Injury PreventionConcussion awareness lecture atlocal High Schools: concussionprevention and signs and symptomsof concussion and links toemergency medicine.McLeod Safe Kids Pee Dee/Coastalto provide programs, such as car seatsafety checks, Safe Sitter classes, andinjury initiatives to teach safetyhabits when swimming, biking,staying at daycare, during play, andliving at home.	Offer program and increase number of attendees. Offer program at additional school locations.	Adolescents Families	McLeod Sports Medicine
September	Preventive Health & Awareness: Smoking Cessation and Pulmonary Health Lectures: Smoking Cessation, Lung Cancer and COPD	Offer program and increase number of attendees. Decrease the number of tobacco users in local community by using health education tactics. Direct participants to services offered by McLeod Loris/Seacoast to pulmonologist and respiratory therapy. Utilize Healthy People 2020 educational materials in outreach efforts.	General Population	McLeod Loris/Seacoast Respiratory Therapy
October	Preventive Health & Awareness: Heart and Breast Cancer Awareness Events: Heart Walk and Walk a Mile in Her Heels Lecture: No Tricks in Your Treats	Offer heart disease and breast cancer awareness among service area and educate the public on hospital services including preventive programs. Direct participants to services offered by cardiologists, OB/GYN physicians, and to McLeod Loris/Seacoast Nutrition Services. Increase attendance to nutrition seminars and programs. Utilize Healthy People 2020 educational materials in outreach efforts.	General Population Seniors Obese Population Families	American Heart Association, Myrtle Beach Mall, Belk's, McLeod Mobile Mammography Unit, Susan B. Komen, Nutrition Services
November	Preventive Health & Wellness/PreventiveScreenings/Health Education: Access to Health CareHealth Fair- Discounted Blood Panels, Cancer Screenings, Nutrition Education, Physician Referrals, Discounted Flu Shots, Prenatal and Post-Partum Care Education, Respiratory Therapy Education, CPR Education, Car Seat Safety Checks, Sports Injury Screenings, Pulse Oximeter, Orthopedic Education, Balance Screenings, Peripheral Arterial Disease Screenings	Offer various low cost and no cost health screening and increase number of participants and community members seeking physicians.	General Public	McLeod Health
December	Preventive Health & Wellness: Diabetes Diabetes Support Group- Diabetic Holiday Cooking	Connect participants to services offered by McLeod Loris/Seacoast Diabetes Management and Nutrition Services and increase attendance to programs and support group.	General Public Diabetic or Pre- Diabetic persons	McLeod Loris/Seacoast Diabetes Management and Nutrition Services

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# Community Leaders & Representatives Involved

- 1. American Heart Association Michael Bargagliotti, Vice President of Development, Coastal Region Michael Bargagliotti serves as a representative of community members with heart disease, one of the top leaders of death in the county.
- 2. American Red Cross Meggin Health, Donor Recruiter Serving Horry County, Meggin Heath serves as a representative of the families served in the county.
- 3. Horry County Schools

Pam Allsbrook, RN, Lead Float Nurse Through her role in the school system, Pam Allsbrook has special knowledge of the pediatric health needs of the county.

4. Mercy Care

Jennifer Beverly, Volunteer Program Manager Mercy Care is not-for-profit hospice agency. Jennifer Beverly has special knowledge of end of life diseases and care of residents of Horry County.

### 5. Rape Crisis Center

Bevelyn Mitchell, Sexual Assault Services Coordinator Representing those in crisis situations, Bevelyn Mitchell has expertise with the sexual assault health needs of Horry County residents.

#### 6. Salvation Army

Michelle Borbely, Social Worker Michelle Borbely has special health knowledge of the needs of the low-income and underserved residents of the county.

#### 7. Dillon County DHEC

Suzette McClellan, MPH, MCHES - Community Systems Director Suzette McClellan has expertise with the public health needs of Dillon residents, including low-income and underserved patients.

8. SOS Health Care

Monique Clement, Executive Assistant

SOS Health Care is a nonprofit organization funded by grants, fundraisers, and private donations. The agency's outreach efforts seek to serve the health, urgent dental care, autism, and Alzheimer's needs of clients with un-met needs. Through her work, Monique Clement has special health knowledge of the needs of the lowincome and underserved residents of the county.

# Community Physicians Involved

Serving patients in Horry County gives each medical expert interviewed has special knowledge of the medical and public health needs of residents in Horry. Emergency Department physicians also have special health knowledge of the public health needs of low-income and underserved patients.

- 1. Internal Medicine
- 2. Family Medicine
- 3. General Surgery
- 4. Emergency Medicine

The 2013 McLeod Loris Seacoast Community Health Needs Assessment is located on the website of McLeod Health at *www.McLeodHealth.org*. A copy can also be obtained by contacting the hospital administration office.