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## **Darlington County, South Carolina Community Health Needs Assessment** 2013

Produced by McLeod Health and Approved by McLeod Health Community Board on \_\_\_\_\_



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### **EXECUTIVE SUMMARY**

In the contents of this report, you will learn about the health of Darlington County. Some of the key county findings:

<ul> <li>County Population Estimate (2012)</li> <li>Median Household Income (2007-2011)</li> <li>Persons per household (2007-2011)</li> <li>Persons below the poverty level (2007-2011)</li> <li>Unemployment (Jul 2013)</li> <li>% without High School Diploma (2006-2010)</li> <li>% Children Eligible for Free/Reduced Price Lunch</li> <li>% Population Receiving Medicaid (2008-2010)</li> <li>Ambulatory Care Sensitive Condition Rate (2010)</li> <li>Population in Underserved Health Shortage Area, Rate per 1,000 enrollees (2010)</li> </ul>	Darlington 68,138 \$38,567 2.56 20.3% 9.8% 23% 71% 28% 97 60	State         4.7 million         \$44,587         2.52         17%         8.1%         17%         55%         17%         61         50
Top Health Challenges Risk Behaviors and Disease	Darlington	<u>1 State</u>
% Current Smoker, age 18+ (2008-2010)	27%	
% Physical Activity/Exercise, last 30 days (2008-2010)	65%	5 73%
% Adults Overweight or Obese (2010)	78%	67%
% Adults with Poor Dental Health	26%	<b>20%</b>
Colorectal Cancer Incidence Rate (per 100,000 Population)		
(2005-2009)	58	
HIV Incidence Rate	32	
Chlamydia Rate, per 100,000 population	876	
% Low Birth Weight	14%	
Cancer, Diabetes, and Heart Disease Combined (2012)	306	
Heart Disease (2012)	207	
Age-Adjusted Death Rate, Stroke (2006-2010)	65.4	
Age-Adjusted Death Rate, Cancer (2006-2010)	214.3	
Age-Adjusted Death Rate, Lung Disease (2006-2010)	57.6	
Infant Mortality Rate, per 1,000 births	12	
Neonatal Mortality Rate, per 1,000 births (2009-2011)		
Birth Rate to Teenagers, Age 15-19 (2010)	67	
Diabetic screening	78%	
Gonorrhea Rate, per 100,000 population	306	
Premature death Vegra of Potential Life Lost (rate per 100,000 population)	11,560	) 8,448
Years of Potential Life Lost (rate per 100,000 population) (2008-2010)	11,471	9,101

#### TOP COMMUNITY HEALTH CONCERNS

- Diabetes
- Obesity
- Insurance/Income
- Heart Disease
- Cost of Insurance and Cost of Care
- Hypertension

#### TOP COMMUNITY LEADER CONCERNS

- Transportation
- Personal Accountability for Health Care

#### **OPPORTUNITIES & PLAN**

McLeod Medical Center at Darlington will collaborate with community partners and nearby McLeod Regional Medical Center in Florence to provide community health initiatives that are focused on areas listed below and further described within the Implementation Plan.

- Health Care Cost
- Heart Disease
- Cancer
- Diabetes
- Teen Pregnancy
- Hypertension

#### ABOUT MCLEOD MEDICAL CENTER DARLINGTON

McLeod Medical Center Darlington is a member of the McLeod Health network, has served Darlington County for 50 years. Darlington County residents have looked to our hospital to meet their health care needs during this time. McLeod Darlington, A Joint Commission accredited community hospital brings the strength of the McLeod Health organization in providing the highest quality of care to the residents of Darlington and surrounding counties.

As a private, not-for-profit organization, McLeod Health provides medical, surgical, and behavioral health facilities, technology, services, and education to continually improve the health of the population served in the region.

### MESSAGE TO THE COMMUNITY



Patricia Godbold Administrator McLeod Medical Center Darlington

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 Heath 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% 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 crucial access to preventative health services, early detection of disease, and continuity of care over time with a primary care physician. Insurance 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 with community leaders and resources where our collective efforts can build a healthy community that nurtures its families and communities. We encourage partnerships with volunteers, business, government, and 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,

Patricia Sodlof &

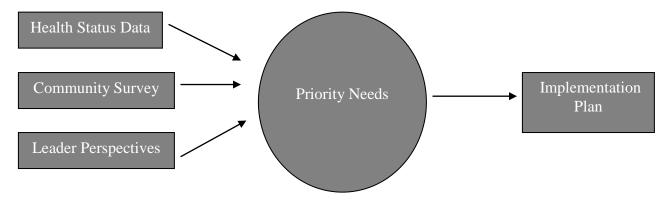
Patricia Godbold

#### **OVERVIEW**

This Community Health Needs Assessment serves as a tool to evaluate the overall health status, behaviors and needs of Darlington 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 Medical Center Darlington Located in Darlington, SC (Darlington County)

McLeod Medical Center Darlington is a part of the McLeod Health system which 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.

A Joint Commission accredited community hospital, McLeod Darlington, formally Wilson Medical Center, has been a vital part of Darlington County and the surrounding communities for more than 50 years. The hospital, established in 1994, offers a wide range of outpatient services from physical, occupational and speech therapy to digital mammography, laboratory, endoscopy, surgery, pain management and cardiopulmonary services. In addition, the facility provides acute care with 49 inpatient beds and a skilled care unit.

#### **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 the 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.

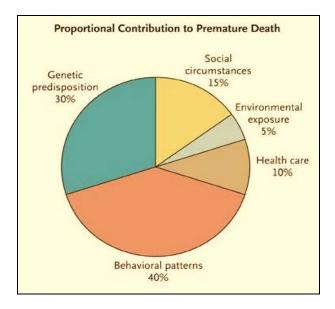
Data analysis included demographic, socioeconomic and health determinant measures. When possible, data also were analyzed according to age, gender and/or race to offer insight into health disparities that may affect specific subgroups in the community.

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 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, the recent economic downturn has likely 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 will be take in consideration existing initiatives, the available resources, and where future improvements can be anticipated to make meaningful impact on improving community health.

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

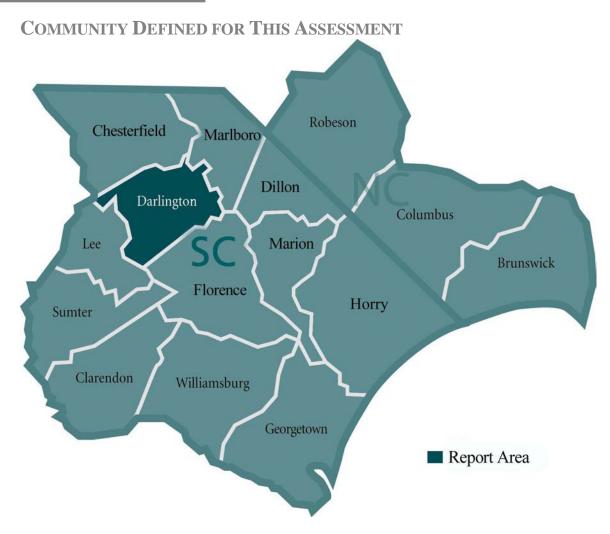
In 2010, the Department of Health and Human Services (HHS) established a vision of, "a nation free of disparities in health and health care," and set out a series of priorities, strategies, actions, and goals to achieve this vision. States, local communities, private organizations, and providers also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

Through the federal law, the Affordable Care Act (ACA) 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. In 2013, South Carolina failed to support Medicaid expansion which would have allowed strengthening of the safety-net health delivery system, improved access to providers, promoted greater workforce diversity and increase cultural competence, strengthened data collection and research efforts, and implemented 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 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



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

	Darlington County
Darlington	29532, 29540
Hartsville	29550, 29551
Lamar	29069
Lydia	29079
Society Hill	29593

#### **About Darlington County**

Darlington County is a low population, rural county located in the northeastern part of South Carolina. This community is a center for tobacco farming. Darlington County is 567 square miles. According to the U.S. Department of Commerce, the county is driven by the following top industries: manufacturing, health care and social assistance, and retail trade.

#### **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**

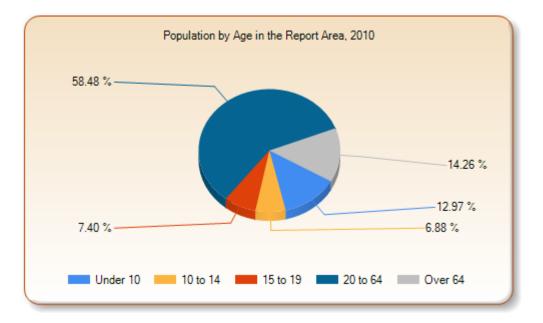
The population for Darlington County compared to state and national data from 2000-2010 is shown in table 2. Darlington County has shown below average growth of 1.9% over 10 years.

Geographic Area	Census 2000 Population	Census 2010 Population	Population Change	% Change
Darlington County, South Carolina	67,394	68,681	1,287	1.91
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

#### Age and Gender

The population for Darlington County by gender is shown in Table 3. According to the 2010 U.S. Census population counts, the female population made up 52.6% of the report area, while the male population represented 47.4%. The Darlington County population age 65 and older is 14% and equal to the state average.



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

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
Darlington County, South Carolina	2,226	2,133	2,281	2,271	2,361	2,366	2,596	2,487	19,020	21,147	4,071	5,722
South Carolina	153,432	148,865	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	9,991,51 8	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	94,522,2 19	17,599,3 81	23,210,6 01

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.

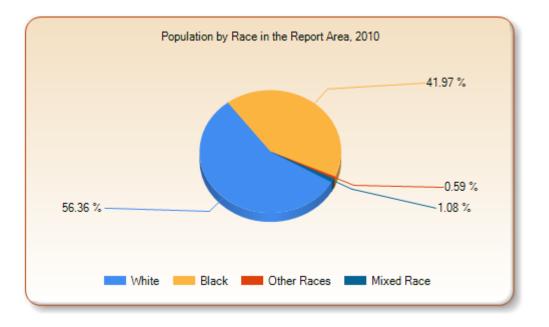


Table 4.	Population	Bv	Race.	2010

Geographic Area	: White		Black		American Indian		Asian		Native Hawaiian / Pacific Islander		Some Other Race	
	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F
Darlington County, South Carolina	18,586	19,780	13,068	15,505	102	92	86	117	4	4	344	390
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	111,492,453	114,885,912	18,795,764	20,595,053	1,473,115	1,478,972	6,974,010	7,707,073	274,228	266,155	4,503,021	4,628,298

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 noninstitutionalized 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
Darlington County, South Carolina	68,547	11,029	16.27%	0 20%
South Carolina	4,635,405	622,136	13.42%	Carolina South Carolina
United States	309,231,232	36,499,048	12%	United States

Note: This indicator is compared with the state average.

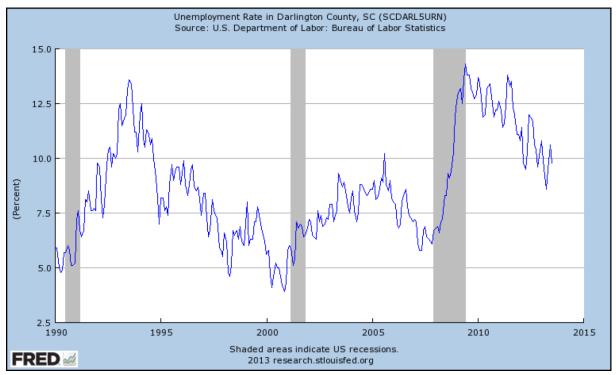
Data Source: U.S. Census Bureau, 2008-2010 American Community Survey 3-Year Estimates. Source geography: PUMA.

#### SOCIAL & 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**

Darlington County Percent Unemployment is trending downward between 2009 and 2013. According to The United States Department of Labor Bureau of Labor Statistics, Darlington County's unemployment rate was 9.5% in July 2013 which is slightly above the state seasonally adjust rate at 8.1%.



Unemployment in Darlington County is consistently run slightly above state and national averages. Comparison benchmarks in unemployment in Darlington County are from November 2011 to November 2012 is shown in the chart below.

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
Darlington County, South Carolina	10.4	10.7	10.3	10.9	9.3	9.1	10.4	12.1	11.7	11.4	10.1	9.7	9.4
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.

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 Darlington County in Table 6. The average Per Capita income for the report area is \$20,743 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
Darlington County, South Carolina	\$38,567	\$20,743
South Carolina	\$44,587	\$23,854

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

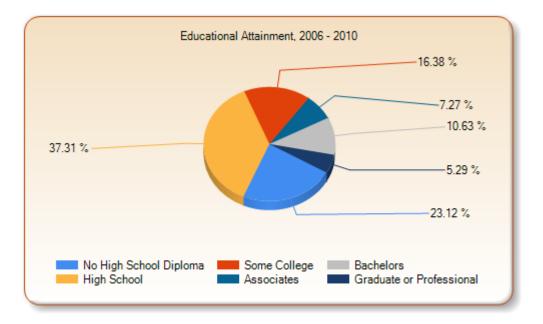
#### Education

Table 7 shows the distribution of educational attainment levels in Darlington 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
Darlington County, South Carolina	23.12	37.31	16.38	7.27	10.63	5.29
South Carolina	16.99	31.25	19.51	8.30	15.51	8.44
United States	14.97	28.99	20.62	7.52	17.60	10.30

#### Table 7. Percent Attaining Educational Levels, 2006 - 2010

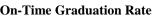
Source: U.S. Census Bureau, American Community Survey, 2010 Data Release, December 2012.



#### **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
Darlington County, South Carolina	1,011	885	87.50
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
Darlington County, South Carolina	10,661	7,609	71.37%
South Carolina	724,660	394,997	54.51%
United States	49,692,766	24,021,069	48.34%



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, Darlington County has a rate of 7.86 per 10,000.

2010 poverty estimates show a total of 15,571 persons living below the poverty rate in Darlington County.

Geographic Area	All A	Ages	Age	0-17	Age	5-17
	Number of Persons	Poverty Rate	Number of Persons	Poverty Rate	Number of Persons	Poverty Rate
Darlington County, South Carolina	15,571	23.2	5,871	35.8	3,854	31.9
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 Darlington County. The U.S. Census Bureau estimates that there were 2,535 households living in poverty.

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

Geographic Area	Total		Households	s in Poverty	
	Households, 2006-2010	Total	Married Couples	Male Householder	Female Householder
Darlington County, South Carolina	17,368	2,535	712	324	1,499
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

The poverty rate change for children under five years of age in Darlington County from 2000 to 2010 is shown in Table 10. According to the U.S. Census, the poverty rate increased by 15.8%, compared to a national increase of 6.0 percent.

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
Darlington County, South Carolina	1,431	31.0	2,017	46.7	15.8
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

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

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 1,358 seniors, or 14.2 percent, living in poverty within Darlington County.

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

Geographic Area	Seniors	Seniors in Poverty	Senior Poverty Rate
Darlington County, South Carolina	9,583	1,358	14.2
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 Darlington County from 2000 to 2010 is shown in Table 12. According to the U.S. Census, the poverty rate increased by 5.3 percent.

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

Geographic Area	Persons in Poverty, 2000	Poverty Rate, 2000	Persons in Poverty, 2010	Poverty Rate, 2010	Change in Poverty Rate, 2000 - 2010
Darlington County, South Carolina	11,985	17.9	15,571	23.2	5.3
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

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 Darlington County. In 2010, it is estimated that there were 4,921 households, or 19.1 percent, living in poverty.

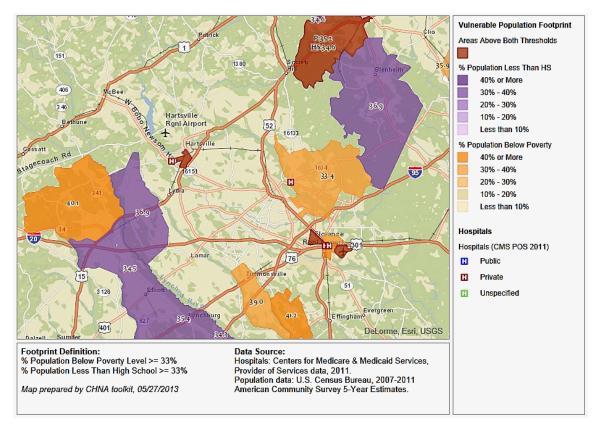
Geographic Area	Total Households, 2006/2010	Households in Poverty, 2006 2010	% Households in Poverty, 2006 2010
Darlington County, South Carolina	25,805	4,921	19.1
South Carolina	1,741,994	274,201	15.7
United States	114,236,000	14,865,322	13.0

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

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.



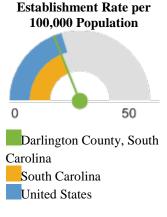
#### **PHYSICAL ENVIRONMENT**

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
Darlington County, South Carolina	68,681	13	18.93
South Carolina	4,625,364	873	18.87
United States	308,745,538	64,366	20.85



*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.

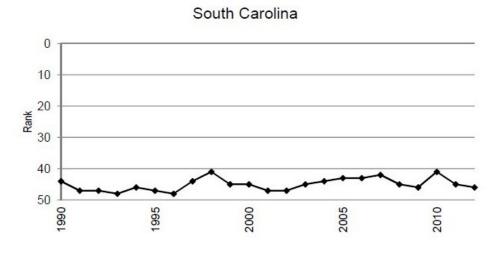
# DETERMINANTS OF HEALTH HEALTHY AND UNHEALTHY

# Behaviors

Revision 11/3/13

#### 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.



#### **Overall Rank**

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, available at http://americashealthrankings.org/CustomReport

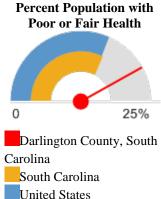
#### **HEALTH INDICATORS**

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
Darlington County, South Carolina	51,524	10,820	21%
South Carolina	3,442,167	557,631	16.20%
United States	229,932,154	36,429,871	15.84%



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 DARLINGTON 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>	551	69.7	33	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) $^{2,5}$	34908	25.5	44	16.4
Clinical Preventive Services	Hep B Vaccine dose in facility (2011) <sup>1,6</sup>	775	98.1	2	76.5
	Flu Vaccine (65+) (2008-2010) 2,6	14038	64.3	32	68.6
	Pheumococcal Vaccine (65+) (2008-2010) 2,6	13424	62.5	30	68.8
Chronic Disease	Diabetes (Have you ever been told by a doctor that you have diabetes? (2008-2010)	18332	13.3	38	10.4
	Hypertension (Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?) (2008-2010) <sup>2,5</sup>	45985	34.4	19	33.4
Nutrition, Physical Activity, and Obesity	Adults who are Obese (20+ years of age) (2008-2010) 2.5	46211	35.4	26	32.4
	Physical Activity (Adults that report doing physical activity or exercise during the past 30 days other than their regular job.) (2008-2010) $^{2,5}$	89161	64.8	39	73.0
Торассо	Current smokers (18+ years of age) (2008-2010) 2,5	36439	26.9	43	20.5

v and Percenta hirth

signifies the highest rate in the s

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

County Specific Health Indicators	
DARLINGTON County	

Category	Health Indicator	Frequency	Rate or Percentage	Rank	SC Rate or Percentage
Infectious Disease	HIV incidence (2011) <sup>4,5</sup>	22	32.2	44	16.2
	HIV prevalence (2011) <sup>4,5</sup>	226	330.9	25	317.6
	Chlamydia (2011) <sup>4,5</sup>	598	875.6	38	606.3
	Gonorrhea (2011) <sup>4,5</sup>	209	306.0	41	174.8
	Syphilis (2011) <sup>4,5</sup>	8	11.7	27	13.7
Maternal, Infant, and Child Health	Infant mortality (2009-2011) <sup>3,5</sup>	30	12.4	40	7.3
	Neonatal mortality (2009-2011) 3,5	17	7.0	36	4.4
	Postneonatal mortality (2009-2011) <sup>3,5</sup>	13	5.4	45	2.9
	Low Birth Weight (2011) <sup>1,5</sup>	108	13.7	44	9.9
	Preterm births (2011) <sup>1,5</sup>	100	12.7	28	11.5
	Pregnant females receiving early and adequate prenatal care (Kotelchuck Adequate and Adequate+) (2011) <sup>1,6</sup>	640	81.0	5	73.9

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** DARLINGTON County

Category	Health Indicator	Frequency	Rate or Percentage	Rank	SC Rate or Percentage
	Breastfeeding initiation (2011) <sup>1,6</sup>	368	46.6	29	65.7
	Women who smoked during pregnancy (2011) <sup>1,5</sup>	114	14.4	31	11.5
	Teen live births (2011) <sup>1,5</sup>	129	16.3	38	10.6
	WIC enrollment need met(pregnant women) (2012) <sup>1</sup>	285	58.0		42.0
	WIC enrollment need met (infants) (2012) <sup>1</sup>	633	160.0	-	121.0
	WIC enrollment need met (children) (2012) <sup>1</sup>	1033	59.0		52.0

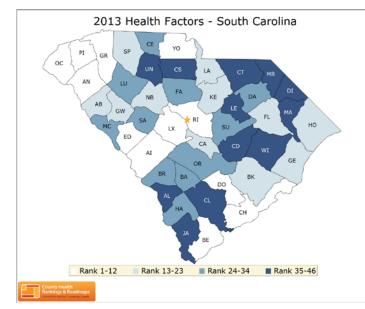
1 Percentage 2 Weighted Frequency and Percentage 3 Rate per 1,000 live births 4 Rate per 100,000 population 5 Rates ranked in ascending order. A rank of 1 signifies the lowest rate in the state. 6 Rates ranked in descending order. A rank of 1 signifies the highest rate in the state. Source: DHEC, PHSIS

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

#### 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**

	Darlington County	Error Margin	South Carolina	National Benchmark*	Rank (of 46)
Health Factors					29
<u>Health Behaviors</u>					<u>40</u>
Adult smoking	25%	21-29%	21%	13%	
Adult smoking prevalence is the e	estimated percent	of the adult po	opulation that	t currently smoke	es every

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.

25%

#### Adult obesity 36% 31-40% 31%

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	34%	30-39%	28%	21%
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Physical inactivity is the estimated percent of adults aged 20 and 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	10%	8-14%	14%	7%		
Excessive drinking reflects the percent of	adults that	report either bi	nge 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	s 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	31	26-36	22	10
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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	779	573	92
The sexually transmitted infection (STI) rat	e is measured as chlam	nydia incidence (nur	nber 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 rate	59	55-62	49	21
	C1 1 1	000 0 1	1	15 10

This measure is reported as the number of births per 1,000 female population, ages 15-19.

**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 Care33Uninsured20%18-22%20%11%This measure represents the estimated percent of the population under age 65 that has no health<br/>insurance coverage.33

*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 include practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal 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\*\* 4,666:1 2,229:1 1,516:1

This 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 stays	97	90-104	61	47
Preventable hospital stays is measu	ired as the hosp	ital discharge r	ate for ambulato	ry care-sensitive

conditions per 1,000 Medicare enrollees. *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 screening is calculated as the percent of diabetic Medicare petients where blood and

Diabetic screening is calculated as the percent of diabetic Medicare patients whose blood sugar control was screened in the past year using a test of their glycated hemoglobin (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 screening 64% 59-70% 69% 73%

This measure represents the percent of female Medicare enrollees age 67-69 that had 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			<u>27</u>
High school graduation**	89%	74%	
High school graduation is reported as	the percent of a cou	nty's ninth-grade cohort in public schoo	ls

High school graduation is reported as the percent of a county's ninth-grade cohort in public school 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 either his or her sense of personal control and social standing, which also have been shown to predict higher self-reported health status.

Some college46%42-51%58%70%This measure represents the percent of the population ages 25-44 with some post-secondary<br/>education, such as enrollment at vocational/technical schools, junior colleges, or four-year<br/>colleges. It includes individuals who pursued education following high school but did not<br/>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.

Unempl	loyment		12.10%	10.30%	5.00%

Unemployment is measured as the percent of the civilian labor force, age 16 and 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 poverty35%28-42%28%14%Children in poverty are the percent of children under age 18 living below the Federal 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 support	29%	25-33%	22%	14%
The social and emotional support measure	e is based	on responses to	the question:	"How often do you
get the social and emotional support you r	need?" Th	e County Health	a Rankings re	ports the percent of
the adult population that responds that the	y "never,	" "rarely," or "so	ometimes" ge	t 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 **Revision 11/3/13 30** 

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.

41-51%

39%

#### **Children in single-parent** households

20% This measure is the percent of all children in family households that live in a household headed by a single parent (male or female head of household with no spouse present).

46%

**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.

929 667 Violent crime rate 66 Violent crime is represented as an annual rate per 100,000 population. Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery, and aggravated assault.

**Reason for ranking:** High levels of violent crime compromise physical safety and psychological well-being. High crime rates can also deter residents from pursuing healthy behaviors such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders and may contribute to obesity prevalence. Exposure to chronic stress also contributes to the increased prevalence of certain illnesses such as upper respiratory illness and asthma in neighborhoods with high levels of violence.

Physical Environment				<u>24</u>
Daily fine particulate matter	13.4	13.3-13.6	12.9	8.8
This measure represents the estima	ted percentage	of the population	aged 65 years	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	9	9	16
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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 policylevel strategies to reduce obesity in its Common Community Measures for Obesity Prevention Project.

Limited access to healthy			
foods**	6%	8%	1%
Limited access to healthy foods ca	ptures the proportion of the	population who are low	W
income and do not live close to a g	rocery store. Living close to	o a grocery store is def	ined
differently in rural and nonrural ar	eas; in rural areas, it means	living less than 10 mile	es from
a grocery store whereas in nonrura	l areas, it means less than 1	mile. Low income is d	lefined
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 restaurants57%49%27%Fast food restaurants examine the proportion of restaurants in a county that are fast foodestablishments.

**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
Darlington County, South Carolina	no data	no data	no data	14	30.43%
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. Revision 11/3/13 32

#### **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
Darlington County, South Carolina	no data	no data	no data	20	43.48%
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.

#### **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	Percent Population Heavily Consuming Alcohol
Darlington County, South Carolina	51,524	4,637	9%	0 25%
South Carolina	209,514	27,027	12.90%	Carolina South Carolina United States
United States	89,135,163	13,385,866	15.02%	

*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.

#### 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
Darlington County, South Carolina	50,162	41,935	83.60%	Darlington 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)**

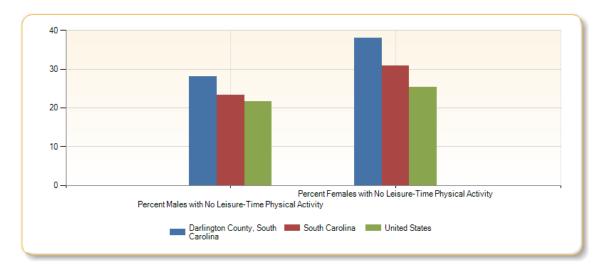
This indicator reports the percentage of adults aged 20 and older who self-report no leisure time for activity, based on the question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking 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.

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
Darlington County, South Carolina	6,377	28.10%	10,126	38%
South Carolina	375,417	23.34%	547,286	30.84%
United States	23,736,266	21.73%	29,817,193	25.41%

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

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
Darlington County, South Carolina	no data	no data	no data	16	34.78%
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: <u>Nielsen Claritas SiteReports, Consumer Buying Power, 2011</u>. 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
Darlington County, South Carolina	no data	no data	no data	23	50%

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
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	
Darlington County, South Carolina	51,524	12,933	25.10%	0 30% Darlington County, South Carolina South Carolina United States	
South Carolina	209,514	43,788	20.90%		
United States	207,962	20,796	10%		

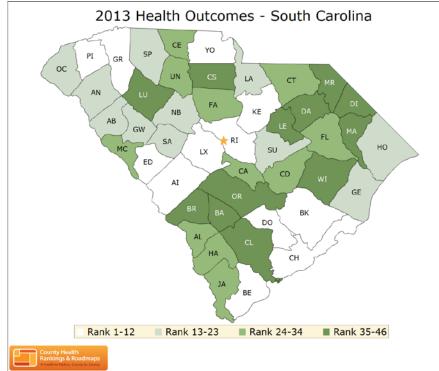
Note: This indicator is compared with the state average. No breakout data available.

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. **Darlington County is ranked 38 out of 46 counties in South Carolina.** 



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

#### **Table 15. SC County Health Outcomes Rankings**

	Darlington	Error Margin	South Carolina	National Benchmark	Rank (of 46)
Health Outcomes					38
<b>Mortality</b>					<u>41</u>
Premature death	11,560	10,618-12,502	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 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>					<u>39</u>
Poor or fair health	21%	18-25%	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	4.6	3.8-5.4	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.

Low birth weight 12.70% 11.9-13.6% 10.10% 6.00	0%
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Low birth weight 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 birth weight (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.

# DISEASE AND INTERVENTION

#### **Chronic Conditions**

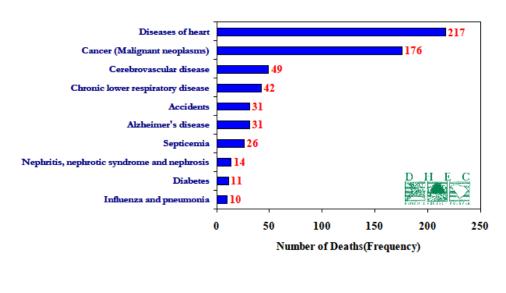
Chronic conditions are making an impact on the health of many South Carolinians. Some common behavioral risk factors that contribute to an increased risk of developing a chronic condition and to the leading causes of death are smoking, sedentary lifestyle, obesity, high cholesterol, and low consumption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

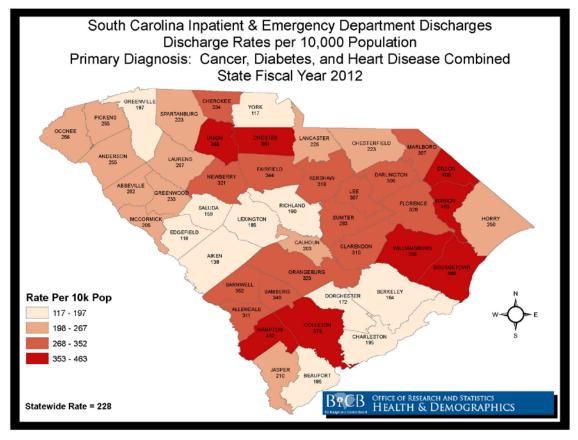
# Top Ten Leading Causes of Death in Darlington County, 2011



 Data Source: SCDHEC SCAN
 http://scangis.dbec.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

Darlington County discharge rates for heart disease and stroke, cancer, and diabetes are significantly elevated above the state.



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

# **Impact of Heart Disease and Stroke**

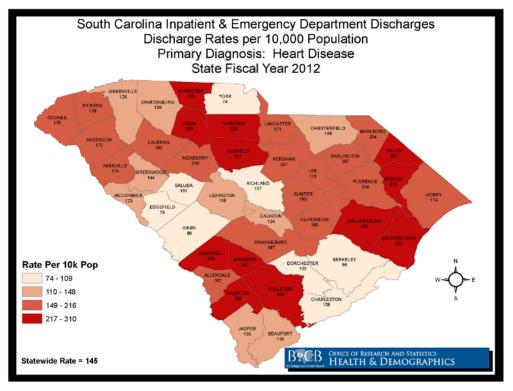
According to SC DHEC, Darlington County is in the 'Buckle of the Stoke Belt" where rates of heart disease and stroke are among the highest in the nation. In table 16, mortality rates are compared against state rates.

County Age-Adjusted Rates (per 100,000 population) 2007						
	Heart Disease Mortality	Heart Failure Mortality	Stroke Mortality			
Darlington County	264.2	86.4	70.1			
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 Darlington County according to SC DHEC.

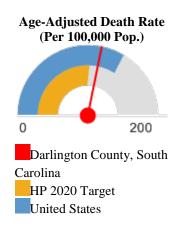


Source: South Carolina Budget and Control Board, Office of Research and Statistics Health and Demographics. 2013.

# **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.)
Darlington County, South Carolina	68,614	83	121.26	112.70
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	Percent Adults with Heart Disease
Darlington County, South Carolina	51,524	2,957	5.74%	0 10%
South Carolina	3,442,167	155,242	4.51%	Darlington County, South Carolina
United States	232,747,222	9,911,760.85	4.26%	South Carolina 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.

# **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.)
Darlington County, South Carolina	68,614	47	68.79	65.36
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

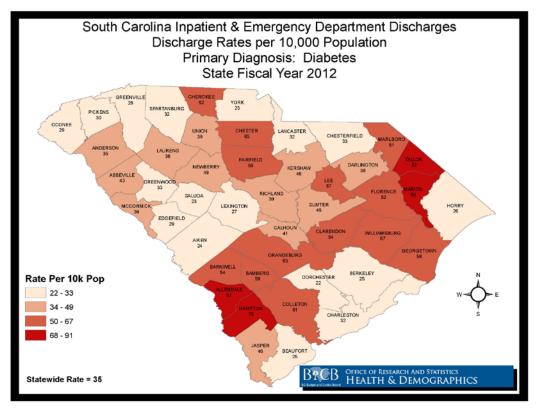


Note: This indicator is compared with the Healthy People 2020 Target. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed through CDC WONDER. Source geography: County.

# **Impact of Diabetes**

In 2010, there were 218 hospitalizations for diabetes in Darlington County for all ages. There were an additional 2,388 hospital discharges with diabetes-related conditions in Darlington County. In 2010, there were 255 emergency room visits for diabetes as the primary diagnosis, among which 165 (65%) were by African-American patients. There were 1,060 emergency room visits for diabetes as a related condition.

Diabetes is the eighth leading cause of death in Darlington County. A total of 14 people in Darlington County died from diabetes in 2009. Darlington County ranks #22 in diabetes mortality in South Carolina (2007-2009).

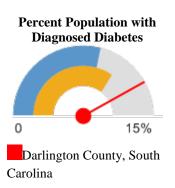


Source: South Carolina Budget and Control Board, Office of Research and Statistics Health and Demographics. 2013.

# **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
Darlington County, South Carolina	48,359	6,867	12.60%

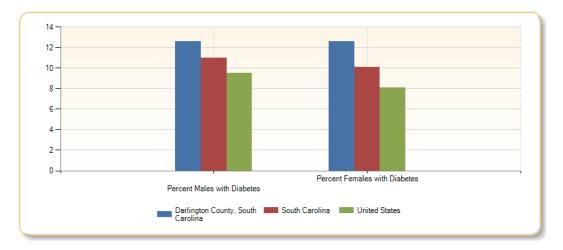


South Carolina	3,339,972	377,662	10.46%	South Carolina United States
United States	223,653,607	20,615,282	8.72%	

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.

#### Adults Diagnosed with Diabetes by Gender

Report Area	Total Males with Diabetes	Percent Males with Diabetes	Total Females with Diabetes	Percent Females with Diabetes
Darlington County, South Carolina	3,059	12.60%	3,808	12.60%
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**

Pioneering Healthier Communities works on policy, environmental, and systems changes (including trail development) in Darlington County. Rates of obesity were above the state and national percentages, as well as 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.

#### Table 17. 2010 Darlington County Profile on Nutrition, Physical Activity, and Obesity

Adults	Darlington County	SC	US	Healthy People 2020
Obese (%)	40.2	30.3	27.7	15
Not meeting physical activity recommendation (%)	75.7	54.6	49.4	50
Not meeting fruit and vegetable recommendation (%)	85.8	82.6	76.6	N/A

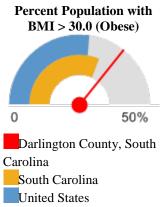
Source: SC Department of Health and Environmental Services, Bureau of Community Health and Chronic Disease Prevention, 2010 Darlington County Profile Nutrition, Physical Activity, and Obesity. April 2011.

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, Darlington County ranked 42nd in the state with 78.3% 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)
Darlington County, South Carolina	48,316	17,297	35.70%
South Carolina	3,344,854	1,051,209	31.49%
United States	223,576,989	61,460,308	27.35%

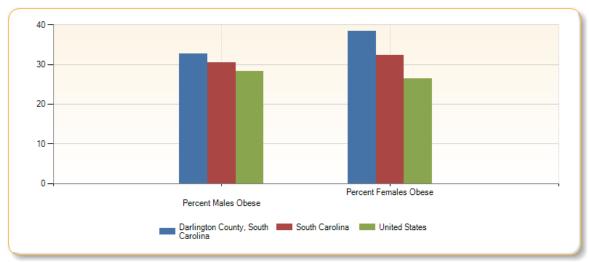


Note: This indicator is compared with the state average.

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
Darlington County, South Carolina	7,315	32.60%	9,982	38.40%
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	Percent Overweight
Darlington County, South Carolina	51,524	18,904	36.69%	0 50%
South Carolina	3,442,167	1,230,230	35.74%	Darlington County, South Carolina
United States	232,747,222	84,521,271.09	36.31%	South Carolina 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 Cancer**

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

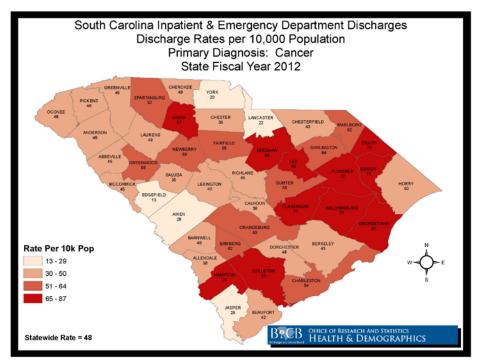
Major risk factors for cancer include tobacco use, unhealthy diet, lack of exercise, and over exposure to sunlight (solar radiation) - all risk factors in Darlington County and South Carolina as a whole. Genetic factors also appear to play a role in some types of cancer. However, the cause or origin 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 Regio	on 4		State
All Cancers	Total	Blacks	Whites	Males	Females	Total
Number of hospitalizations	162	68	86	85	77	15,242
Crude rate of hospitalizations (per 100,000)	510	453	548	567	459	326
Median age of hospitalized patients	61	62	61	63	57	64
Total cost of hospitalization (\$)	7,218,000	3,000,700	3,910,300	3,963,200	3,254,800	906,361,600
Average length of hospital stay (days)	6	6	5	6	5	7
Number of deaths	77	30	45	49	28	9,510
Age-Adjusted Death rate (per 100,000)	219.9	237.2	210.1	352.4	134.1	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**

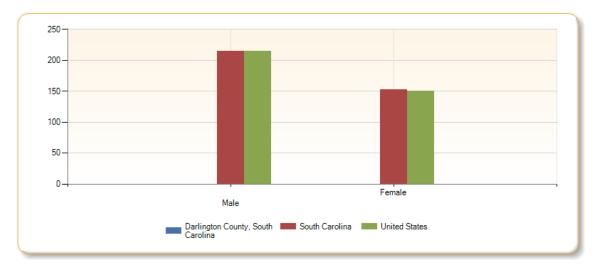
This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are summarized for report areas from county level data, only where data is available.

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 Rat (Per 100,000 Pop.)
Darlington County, South Carolina	68,614	165	239.89	214.26	Darlington County, Sou 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.

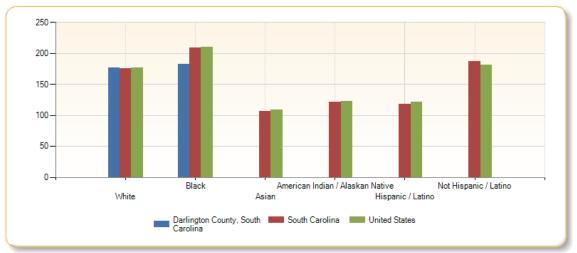
#### Population by Gender, Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Darlington 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.)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Darlington County, South Carolina	176.93	182.03	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

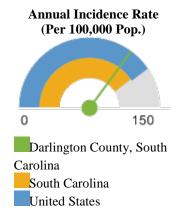


#### **Breast Cancer Incidence**

Revision 11/3/13

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.)
Darlington County, South Carolina	66,771	70	105.30
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.

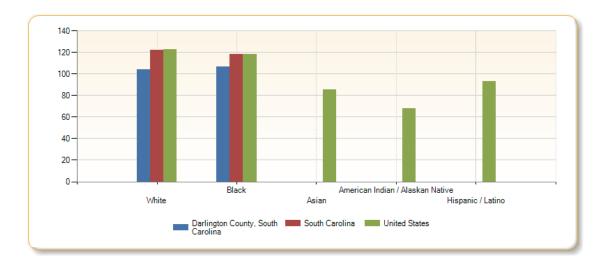
Data Source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2005-2009. Source geography: County.

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

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Darlington County, South Carolina	39	29	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
Darlington County, South Carolina	104.10	106.40	no data	no data	no data
South Carolina	122	118	no data	no data	no data
United States	123	118	85.30	68.30	93.10



# **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.)	Annual Incidence Rate (Per 100,000 Pop.)
Darlington County, South Carolina	66,771	39	58.20	
South Carolina	4,416,867	1,974	44.70	Darlington County, South Carolina HP 2020 Target
United States	301,461,536	121,188	40.20	United States
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.

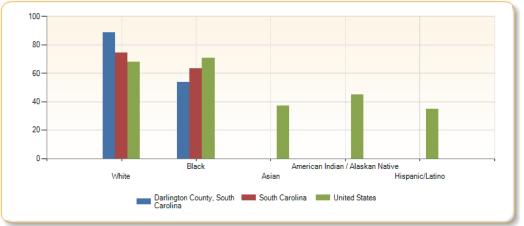
# Lung Cancer Incidence

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 groupings. 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.)
Darlington County, South Carolina	66,771	51	76.50
South Carolina	4,416,867	3,180	72
United States	301,461,536	202,582	67.20

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.

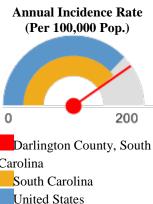


Population by Race / Ethnicity, Lung Cancer Incidence Rate (Per 100,000)

#### **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.)	Annu (Pe
Darlington County, South Carolina	66,771	107	161.20	0
South Carolina	4,416,867	7,022	159	Darlir Carolina South
United States	301,461,536	456,412	151.40	United



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

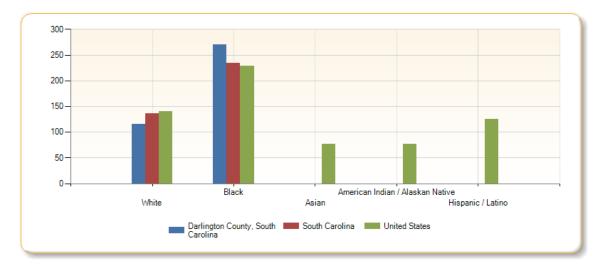
Data Source: The Centers for Disease Control and Prevention, and the National Cancer Institute: State Cancer Profiles, 2005-2009. Source geography: County.

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

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Darlington County, South Carolina	43	74	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, Prostate Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Darlington County, South Carolina	115.40	269.40	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

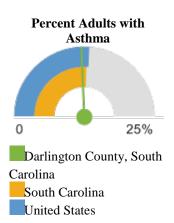


# **Impact of Asthma**

# 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. Revision 11/3/13 54

Report Area	Total Population (Age 18)	Number Adults with Asthma	Percent Adults with Asthma
Darlington County, South Carolina	51,524	6,245	12.12%
South Carolina	3,442,167	441,630	12.83%
United States	232,747,222	30,473,296.44	13.09%



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.

In 2010, approximately 10.1% of adults in Darlington County suffer annually from asthma. In that year, there were 223 hospitalizations for asthma in Darlington County for all ages.

# **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.

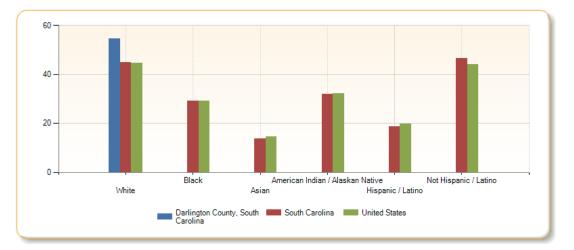
Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age- Adjusted Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Ra (Per 100,000 Pop.)
Darlington County, South Carolina	68,614	44	63.54	57.63	Darlington County, Sou Carolina South Carolina
South Carolina	4,509,238	2,164	47.98	46.42	United States
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.

I opulation by I	Topulation by Kace / Etimicity, Europ Disease Wortanty, Age-Aujusted Kate (Ter 100,000 Top.)					
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Darlington 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

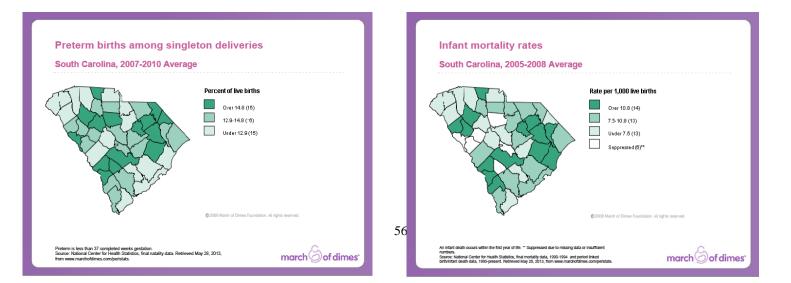




# **Impact of Birth Outcomes**

Darlington County has poor birth outcomes. 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. Darlington County infant mortality rates have risen above state averages.



# **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)	Infant Mortality Rate (Per 1,000 Births)
Darlington County, South Carolina	5,990	69	11.52	
South Carolina	418,687	3,529	8.43	Darlington County, South Carolina HP 2020 Target
United States	58,600,996	393,074	6.71	United States
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 Born with Low Birth weight				
	(Percent)				
	2006	2007	2008	2009	2010
Darlington	11.50%	13.30%	12.00%	13.20%	13.20%
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>	renatal Ca	re (Percent)	
	2006	2007	2008	2009	2010
Darlington	32.20%	29.70%	28.30%	29.40%	27.40%
South Carolina	37.80%	36.20%	35.40%	33.60%	31.90%
	Birtl	hs to Teens	15 to 19 Ye	ars of Age (1	rate)
	2006	2007	2008	2009	2010
Darlington	65.8	55.2	63.1	58.7	67.1
South Carolina	53	53.6	53	49	42.6
	Infant Mortality Rate (Per 1,000 Live Births) (rate)				
	2006	2007	2008	2009	2010
Darlington	8	8.1	10.6	12.2	14.9
South Carolina	8.4	8.5	8	7.1	7.4

#### Table 19. Birth Outcomes for Darlington 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.

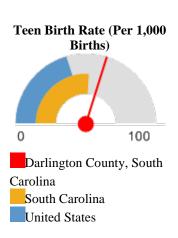
Report Area	Total Births	Number Low Birth Weight (< 2500g)	Percent Low Birth Weight	Percent Low Birth Weight
Darlington County, South Carolina	6,058	747	12.33%	0 15%
South Carolina	412,400	41,575	10.08%	Darlington County, South Carolina South Carolina
United States	29,126,451	2,359,843	8.10%	United States

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

# **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.

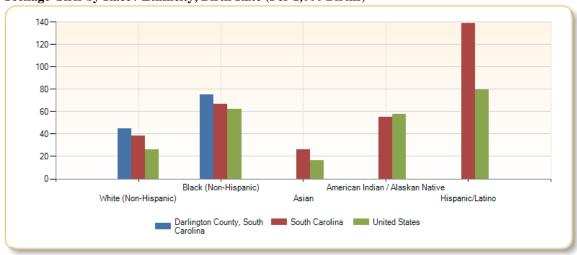
Report Area	Female Population Age 15 - 19	Births to Mothers Age 15 - 19	Teen Birth Rate (Per 1,000 Births)
Darlington County, South Carolina	15,997	955	59.70
South Carolina	1,053,545	54,679	51.90
United States	72,071,117	2,969,330	41.20



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.

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	Percent Adults with Poor Dental Health
Darlington County, South Carolina	51,524	13,422	26.05%	0 30%
South Carolina	3,442,167	686,024	19.93%	Darlington County, South Carolina South Carolina
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.

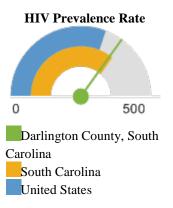
Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2006-2010. Source geography: County.

# **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
Darlington County, South Carolina	52,023	181	348.50
South Carolina	3,544,890	12,786	360.70
United States	234,564,075	724,515	308.88



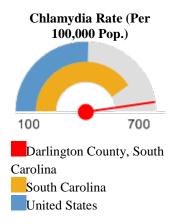
Note: This indicator is compared with the state average. No breakout data available.

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.)
Darlington County, South Carolina	68,681	488	728
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.* 

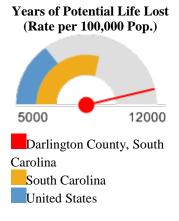
Data Source: Centers for Disease Control and Prevention and the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2009. Source geography: County.

# **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 ad 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.)
Darlington County, South Carolina	64,662	393	11,471
South Carolina	4,195,347	20,034	9,101
United States	283,115,015	1,058,493	7,131



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 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.)	Age-Adjusted Death Rat (Per 100,000 Pop.)
Darlington County, South Carolina	68,614	9	12.83	14.02	Darlington County, Sour Carolina HP 2020 Target
South Carolina	4,509,238	359	7.97	8.04	United States
United States	303,844,430	17,564	5.78	5.81	
HP 2020 Target				<= 5.5	

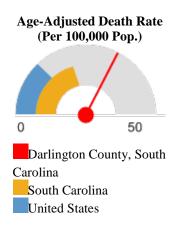
Note: This indicator is compared with the Healthy People 2020 Target. Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. . Accessed through CDC WONDER. Source geography: County.

# **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 Revision 11/3/13 61

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.)
Darlington County, South Carolina	68,614	21	31.19	32.54
South Carolina	4,509,238	956	21.21	21.15
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.)
Darlington County, South Carolina	7	2	3.40	0 5.0 Darlington County, South
South Carolina	280	93	2	Carolina HP 2020 Target United States
United States	12,750	4,250	1.38	
HP 2020 Target			<= 1.3	

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

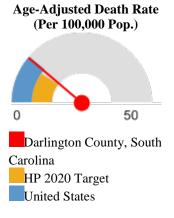
Data Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System, 2008-2010. Source geography: County.

# 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 Revision 11/3/13 62

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.)
Darlington County, South Carolina	68,614	8	11.66	11.22
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.

# HOSPITAL UTILIZATION STATISTICS

#### **Emergency Department Utilization**

McLeod Medical Center Darlington does not have an Emergency Department (ED).

## **Inpatient Hospital Utilization**

According to the SC Office of Research and Statistics, McLeod Medical Center Darlington had 1,145 discharges in 2011 that is focused on behavioral health and postacute care. During that same year, the two hospitals in the county represented 9,906 hospital discharges of people in Darlington County. This total equates to a hospitalization rate of 14,503.87 per 100,000. The highest diagnosis category of hospitalization was Diseases of the Circulatory System, which includes heart disease. There were 1,722 in this category which is a rate of 2,521.27 per 100,000. The top 25 reasons for inpatient hospitalization for residents of Darlington County are shown in table.

Rank M	edicare Severity Diagnosis Related Group (MS-DRG)	Discharges	Percent of Total
1.	775 - VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	326	3.2 %
2.	392 - ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC	277	2.8 %
3.	951 - OTHER FACTORS INFLUENCING HEALTH STATUS	234	2.3 %
4.	871 - SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W MCC	218	2.2 %
5.	470 - MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	199	2 %
6.	766 - CESAREAN SECTION W/O CC/MCC	173	1.7 %
7.	765 - CESAREAN SECTION W CC/MCC	168	1.7 %
8.	194 - SIMPLE PNEUMONIA & PLEURISY W CC	163	1.6 %
9.	641 - NUTRITIONAL & MISC METABOLIC DISORDERS W/O MCC	163	1.6 %
10.	292 - HEART FAILURE & SHOCK W CC	162	1.6 %
11.	313 - CHEST PAIN	149	1.5 %
12.	690 - KIDNEY & URINARY TRACT INFECTIONS W/O MCC	143	1.4 %
13.	291 - HEART FAILURE & SHOCK W MCC	140	1.4 %
14.	195 - SIMPLE PNEUMONIA & PLEURISY W/O CC/MCC	138	1.4 %
15.	603 - CELLULITIS W/O MCC	129	1.3 %
16.	683 - RENAL FAILURE W CC	121	1.2 %

#### Table 20. Darlington County Top 25 Inpatient Hospitalizations, 2011

17.	872 - SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W/O MCC	112	1.1 %
18.	287 - CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC	111	1.1 %
19.	203 - BRONCHITIS & ASTHMA W/O CC/MCC	110	1.1 %
20.	192 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE W/O CC/MCC	109	1.1 %
21.	812 - RED BLOOD CELL DISORDERS W/O MCC	107	1.1 %
22.	885 - PSYCHOSES	106	1.1 %
23.	190 - CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	105	1 %
24.	312 - SYNCOPE & COLLAPSE	101	1 %
25.	743 - UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC/MCC	100	1 %

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

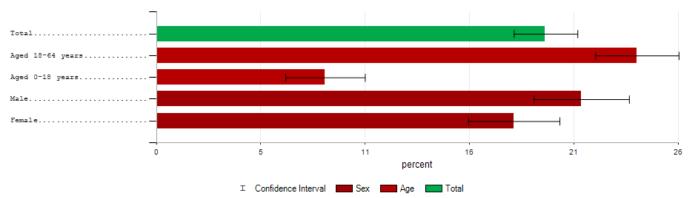
# **HEALTH INSURANCE DEMOGRAPHICS**

# **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 19.6% of Darlington Country residents under 65 years of age were without health insurance according to Health Indicators Warehouse. Of those aged 18-64, 24.2% 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 cover 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.

# Health Insurance Exchanges (Marketplaces)

The Affordable Care Act requires the creation of Health Insurance Exchanges, or Marketplaces, that will function to create a marketplace for health insurance purchasers by providing consumers with choices 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.

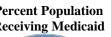
## Health Disparities Law in South Carolina

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
Darlington County, South Carolina	68,547	15,520	27.84%
South Carolina	4,635,405	780,459	16.84%
United States	309,231,232	51,335,184	19.91%



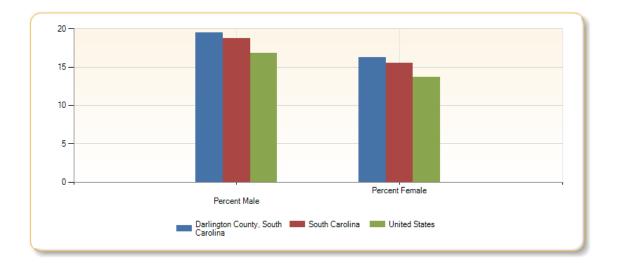
25%

County, South

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.

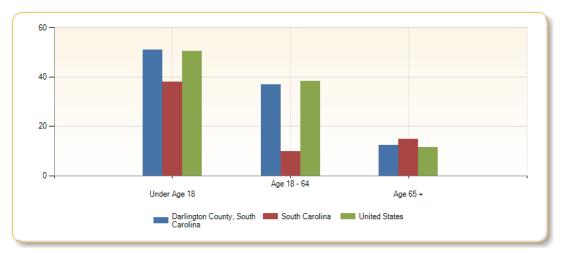
#### Population Receiving Medicaid by Gender

Report Area	Total Male	Total Female	Percent Male	Percent Female
Darlington County, South Carolina	6,253	5,794	19.48%	16.24%
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 Age Group, Percent

Report Area	Under Age 18	Age 18 - 64	Age 65
Darlington County, South Carolina	50.97%	36.82%	12.22%
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 Medical Center Darlington, Darlington, SC
- Carolina Pines Regional Medical Center, Hartsville, SC

# **Urgent Care Center:**

• McLeod Urgent Care, Darlington, SC

# **Other Major Health Resources:**

• Darlington Public Health Department, Darlington, SC

The Darlington County Health Department offers a wide variety of health care services for the medically underserved that are discounted or free of charge based on income.

- Hartsville Public Health Department, Hartsville, SC
- The Hartsville County Health Department offers a wide variety of health care services for the medically underserved that are discounted or free of charge based on income.
  - Free Medical Clinic of Darlington County

# Darlington, SC Branch

The Free Medical Clinic of Darlington offers free primary medical attention to low income individuals in Darlington County who do not qualify for Medicaid. Clinic hours are Tuesday and Thursday evenings from 4:00pm– 8:00pm. Patient screening is Monday and Wednesday 9am – 12:30pm and 2pm – 5pm.

Hartsville, SC Branch

Clinic hours are Tuesday and Thursday evenings from 4:00pm – 8:00pm. Patient screening is Monday and Wednesday 9am – 12:30pm and 2pm – 5pm.

• CareSouth Carolina, Hartsville, SC, Center

This is a federally-supported Community Health Center, providing comprehensive primary and preventive health care services in areas of high need. CareSouth Carolina is a private, non-profit community-owned business. Services provided: family practice, OB-GYN, pediatrics, geriatrics, nutrition, social services, clinical counseling, pharmaceutical services, laboratory and X-Ray.

• CareSouth Carolina - Rosa Lee Gerald Center, Society Hill, SC

This is a federally-supported Community Health Center, providing comprehensive primary and preventive health care services in areas of high need. CareSouth Carolina is a private, non-profit community-owned business. Services provided: family practice, OB-GYN, pediatrics, geriatrics, nutrition, social services, clinical counseling, pharmaceutical services, laboratory and X-Ray.

#### 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.

Report Area	Total Population	Total Primary Care Providers	Primary Care Provider Rate (Per 100,000 Pop.)	Primary Care Provider Rate (Per 100,000 Pop.)
Darlington County, South Carolina	68,681	37	53.87	0 250
South Carolina	4,625,364	3,455	74.60	Darlington County, South Carolina South Carolina
United States	312,471,327	264,897	84.70	United States

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

Data Source: U.S. Health Resources and Services Administration Area Resource File, 2011. Source geography: County. An inventory of health professionals in Darlington County compared to South Carolina is displayed in tables 21-24.

,			
Physicians	Darlington	South Carolina	
Total Physicians Whose Primary Practice is in This Area	73	10,163	
Family Practice	31	1,650	
Internal Medicine	7	1,166	
Obstetrics / Gynecology	5	552	
Pediatrics	7	727	
General Surgery	5	441	
All other Physicians (Specialists)	18	5,368	
Physicians Per 10,000 Population	11.0	22.3	
Primary Care Physicians Per 10,000 Population	7.5	9.0	
Federal Physicians	0	259	
	0.000 0.000 1.0		

#### Table 21. Physicians in Darlington and South Carolina, 2012

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

#### Table 22. Nurses in Darlington and South Carolina, 2012

Nurses	Darlington	South Carolina
Registered Nurses	352	36,213
Certified Nurse Midwife	0	84
Nurse Practitioners	20	1,525
Certified Nurse Anesthetists	8	923
Clinical Nurse Specialists	1	60
Licensed Practical Nurses	227	9,089

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

#### Table 23. Dentists and Hygienists in Darlington and South Carolina, 2012

Darlington	South Carolina
14	2,069
29	2,381
2	138
	14

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

#### Table 24. Other Health Professionals in Darlington and South Carolina, 2012

Other Health Professions	Darlington	South Carolina
Pharmacists	55	4,111
Pharmacy Technicians	105	5,962
Physical Therapists	10	2,181
Physical Therapy Assistants	14	1,194
Occupational Therapists	7	1,128
Occupational Therapy Assistants	4	465
Physician Assistants	1	679
Respiratory Care Practitioners	24	2,188
Optometrists	6	452

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

# **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
Darlington County, South Carolina	7,656	780	501	64.36%
South Carolina	483,003	45,940	31,648	68.89%
United States	51,875,184	4,218,820	2,757,677	65.37%

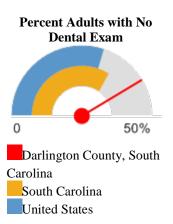
*Note: This indicator is compared with the state average. No breakout data available.* 

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
Darlington County, South Carolina	51,524	21,274	41.29%
South Carolina	3,442,167	1,178,598	34.24%
United States	232,747,222	70,151,188.94	30.14%



*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 Medicare Enrollees with Diabetes with Annual Exam
Darlington County, South Carolina	7,656	1,320	1,035	78.48%	Darlington County, South Carolina South Carolina United States
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%	
Darlington County, South Carolina	51,524	4,627	8.98%	Darlington County, Sout Carolina South Carolina	
South Carolina	3,442,167	627,163	18.22%	United States	
United States	232,747,222	50,606,335.52	21.74%		

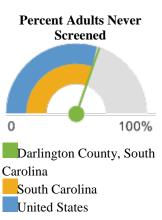
Note: This indicator is compared with the state average. No breakout data available.

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
Darlington County, South Carolina	51,524	31,136	60.43%
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
Darlington County, South Carolina	51,524	7,646	14.84%	0 30% Darlington County, Sou Carolina South Carolina United States
South Carolina	3,442,167	587,922	17.08%	
United States	232,747,222	44,961,851.44	19.32%	

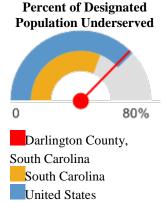
Note: This indicator is compared with the state average. No breakout data available.

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
Darlington County, South Carolina	68,681	68,681	41,139	59.90%	<b>59.90%</b>
South Carolina	4,625,364	1,010,480	509,959	11.03%	50.47%
United States	312,471,327	63,421,548	38,748,460	12.40%	61.10%

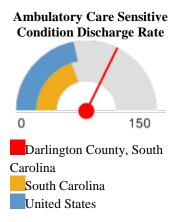


Note: This indicator is compared with the state average. No breakout data available. Data Source: U.S. Health Resources and Services Administration Data Warehouse, Health Professional Shortage Area (Components), May 2013. Source geography: HPSA.

### **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
Darlington County, South Carolina	7,741	748	96.65
South Carolina	501,376	30,684	61.20
United States	56,167,590	3,737,659	66.54



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

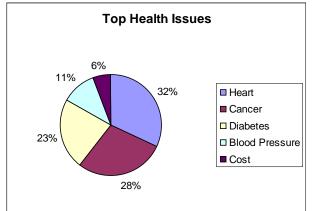
Data Source: Dartmouth Atlas of Healthcare, Selected Measures of Primary Care Access and Quality, 2010. Source geography: County.

# **COMMUNITY FEEDBACK**

## **COMMUNITY SURVEY**

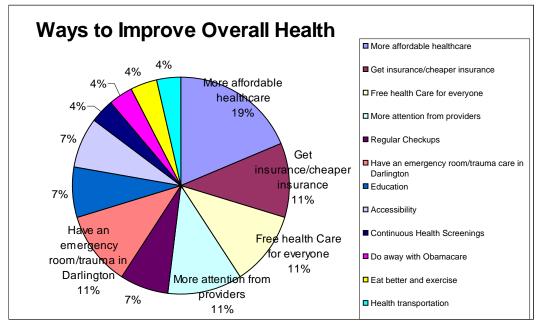
## Significant Health Challenges and Key Health Needs

A written survey was distributed to community members in Darlington County. The top health issues according to the residents of the county are heart, cancer, diabetes, and high blood pressure. As indicated in the below graph, cost was also a top health concern.



A vast majority of those surveyed indicated they have a primary care/family physician.

As shown in the graph below, a majority of survey responders indicated that more healthcare cost is a barrier to health improvement.



Most health care services are provided in Florence County, which is less than 15 miles away from Darlington County. Darlington County does not have an Emergency Department or a trauma care center; however there is one in Florence.

Significant Health Challenges Identified:

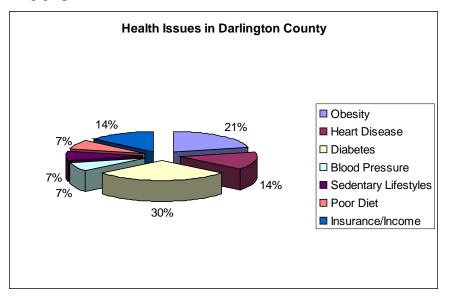
- Cardiac Health
- Diabetes
- Cancer Prevention and Treatment
- Healthcare Cost
- Specialist Care

## COMMUNITY AGENCY AND HEALTH PROFESSIONAL SURVEY

## **Top Priorities and Key Health Needs**

Community leaders, elected officials and service organizations that serve Darlington 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 9 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:



When the organizations were asked what the most significant health challenge is for Darlington County, the overwhelming response was that it was the lack of knowledge about proper diet and exercise, which exacerbates numerous co-morbidities. Obesity, Heart Disease, High Blood Pressure, and Diabetes were the main health concerns of Darlington County.

Barriers to accessing services were lack of transportation, lack of insurance, lack of knowledge, and cost. Even the people who can afford insurance might not be able to afford the insurance premiums. Darlington Free Medical Clinic opened another clinic in Hartsville to remedy the transportation issue.

When asked if the main challenges of Darlington County were being addressed, the answer was "yes, but we can only do so much." Responders felt there is a major issue of people taking responsibility for their own health.

Key Health Needs

- Obesity, Heart Disease, High Blood Pressure, and Diabetes
- Transportation
- Personal Accountability for Health Care

# 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. Cross-sector collaboration is now widely considered as essential for having a meaningful impact on building healthier community. 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 serve its mission.

## McLeod Darlington Implementation Plan

Priority issues were determined from the community input gathered for the CHNA. The priority issues, or "recognized needs", are listed with a 3-fold action plan which covers Awareness of the issue, Education of the issue, and Accessibility to health care and information. Although other needs exist, the focus has been placed on identified health priorities and resources in our community.

Through successful partnerships and collaborations 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 in our region through excellence in health care.

As reflected in the implementation plan, McLeod Darlington relies on the support and services from the larger tertiary care center, McLeod Regional Medical Center, which is located in Florence, SC and 8 miles in proximity of McLeod Darlington.

Recognized Need	Awareness	Education	Accessibility
Cost	Provide public education in the community through speaking		
	engagements, literature, internet, and other outreach activities.		
	Utilize Healthy People 2020 educational materials and other tools in outreach disease prevention efforts.		
	Sponsor community health related activities free of charge to promote health improvement.		
	Provide low cost and no disease detection, and/o	o cost health screenings for r health promotion.	or risk assessment,
	targeted uninsured with Outcomes Plan Initiativ	tion and primary medical chronic conditions that a es that focuses on behavi nditions, diabetes, and hea	re eligible for Healthy oral health,

Heart Disease	Sponsor the American Heart Association and support fundraising	Provide education to the community through materials,	Actively engage patients in their own
	<ul> <li>and educational efforts - such as the heart walk and Go Red for Women month.</li> <li>Partner with community leaders to gain momentum for the heart walks.</li> <li>Healthy Outcomes Initiatives Plan Participation that focuses on heart disease and case management</li> </ul>	education, speakers, internet, and other outreach activities. Diabetes is an important role in heart disease and obesity because diabetes is a risk factor for heart disease. Implement low cost and no cost screenings, counseling and education at the annual health fair. Implement regional heart events hosted by McLeod Health. Distribute Stroke and Heart Attack Warning signs distributed at various events and conferences, including Healthy People 2020 educational materials. Distribute Smoking & Heart Disease information distributed at various events and conferences, including Healthy People 2020 educational materials.	care by providing them with education about hypertension medication, adherence support (for medication and other treatments), and tools and resources for self- management (including health behavior change). Submit grant funding applications to offer scholarships to those in need of Cardiac Rehab that are under or uninsured. Promote McLeod Air Reach air transport and McLeod Heart Reach air transport and McLeod Heart Reach air transport and Scheer and hospitals to expedite care to interventional procedures. Utilize Lifenet, a radio system for evaluation of the heart (Telestoke), and participates in the MUSC REACH program (Remote Evaluation of Acute Ischmic Stroke) at McLeod Darlington.
		Distribute Smoking & Heart Disease information distributed at various events and conferences, including Healthy People 2020	Utilize Lifenet, a radio system for evaluation of the heart (Telestoke), and participates in the MUSC REACH program (Remote Evaluation of Acute Ischmic Stroke) at
			C C

		Offer smoking cessation classes and information.	
Cancer	Participation by the McLeod Cancer Center health fairs.	Open the McLeod Cancer Center (Florence in 2014)	
	Utilize the McLeod Cancer Center team members for speaking engagements/events offered to the community.	with expanded services to improve cancer care in the region.	
	Distribute information and provide education to the community from the American Cancer Society about cancer prevention and living with/overcoming cancer.	Continue to offer the "Color Me Pink" Boutique to the community that offers	
	Offer patient and family support groups through McLeod Health free of charge.	items such as prosthetic garments, wigs, and scarfs to	
	Offer smoking cessation classes and information.	patients at no cost.	
Diabetes	Provide low cost and no cost blood sugar screen education.	ngs, counseling and	
	Participation by the McLeod Diabetes Center to fairs and speaking engagements.	participate in health	
	<ul> <li>Offer community support groups for those dealing with diabetes as we as classes.</li> <li>Offer one-on-one counseling with dieticians for nutrition, coping, and lifestyle changes.</li> <li>Participation in Healthy Outcomes Plan initiatives that focus on diabe and case management</li> </ul>		
Teen Pregnancy	Partner with March of Dimes National 39+ Weeks Initiative; utilize OB/GYNs to educate patients and caregivers of children on the importance of abstinence and safe sex.		
	Support the Chrysalis Pregnancy Center, Carolina Family Planning Center, and a Choice to M8k Pregnancy Crisis Center, which serve the Florence and Darlington areas.		
Blood Pressure	Promote correlation of blood pressure to heart di efforts, events, and health fairs/community gathe	-	
	Collaborate with cardiac physicians and primary together to monitor patients' blood pressure.	care physicians to work	
	Provide low cost and no cost screenings and cou	nseling.	
	Offer smoking cessation classes and information.		

	Participation in Healthy Outcomes Plan Initiatives that focuses on hypertension and case management. Utilize Healthy People 2020 educational materials in outreach efforts.
General Issues/Needs	Offer Health Fairs & Community Screenings/Offerings in Florence & surrounding areas.
	Emphasize self-management of health (individual is responsible for making the right choices daily) in outreach efforts.
	Distribute a monthly calendar of classes and support groups offered by McLeod Health utilizing an email marketing service.
	Publish educational articles in local publications/media to raise public awareness of potential health concerns and risk factors.
	Provide funding for McLeod Safe Kids Pee Dee/Coastal to provide programs, such as car seat safety checks, Safe Sitter classes, and injury prevention initiatives to teach safety habits when swimming, biking, staying at daycare, during play, and living at home.
	Offer the McLeod Resource Center as a service to expecting moms in the community for birth preparation, pregnancy, breastfeeding classes and supplies, one-on-one breastfeeding consult, CPR classes, postpartum, and more.

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## Community Leaders & Representatives Involved

## 1. Darlington Free Medical Clinic

Kathy Baxley- Executive Director, Deborah Reed- Assistant Director Through their roles, Kathy Baxley and Deborah Reed have special knowledge of the public health needs of low-income and underserved patients.

### 2. Darlington County DHEC

Kathy Smith- Director & Supervisor Kathy Smith has expertise with the public health needs of Darlington residents, including low-income and underserved patients.

### 3. Darlington County Chamber of Commerce

Danny Dubose- Executive Director An executive representing Darlington County, Danny Dubose has knowledge of the population he represents.

#### 4. American Red Cross Disaster Relief Services

Linda Boone-Smith, Executive Director Serving Darlington County, Linda Boone-Smith serves as a representative of the families served in the county.

### 5. Florence Darlington Technical College

Jill Heiden Lewis- VP of Institutional Advancement & Business Development Serving in the field of education, Jill Heiden Lewis has special knowledge of the educational status and needs of the county.

### 6. American Heart Association

Sherryl Love- Senior Director of Development Sherryl Love serves as a representative of community members with heart disease, one of the top leaders of death in the county.

Note: Three other local agencies were contacted without a response prior to publication deadliness.

The 2013 McLeod Medical Center Darlington 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.