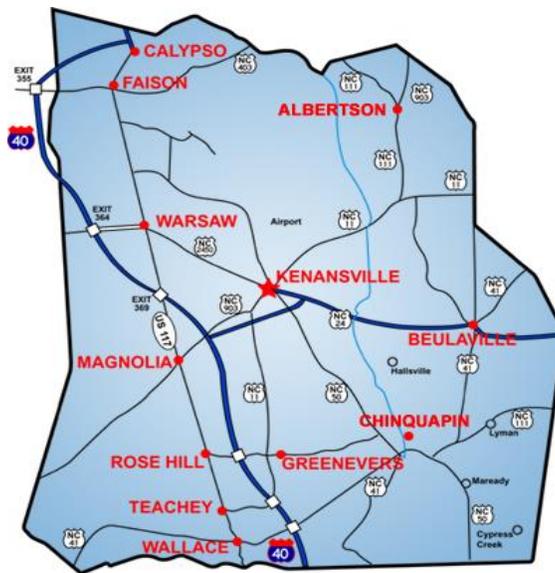


# 2013 DUPLIN COUNTY SOTCH REPORT



December 2013

State of the County Health Report



The State of the County Health Report (SOTCH) provides a snapshot of the health issues affecting the residents of Duplin County. The key health indicators related to illness, death and high risk behaviors are compiled and summarized. This data was compared to the 2012 Community Health Assessment and the Community Action Plans. The data reviewed was evaluated for trends and outcomes. The report was prepared by Elizabeth Ricci, BSN, RN, Director of Nursing Duplin County Health Department 910-296-2130  
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## DUPLIN COUNTY DEMOGRAPHIC DATA 2013

Socioeconomic Indicators	Duplin Co. 2011	Duplin Co. 2012	North Carolina
<b>Total population estimate</b>	59,542	60,033	9,656,401
<b>Population percent change April - July</b>	2010-2011 1.8%	2011-2012 2.6%	2007-2011 2.3%
<b>Median family income</b>	2006-2010 \$ 32,816	2007-2011 \$34,264	2007-2011 \$46,291
<b>Unemployment rate</b>	9.0%	9.8%	10.5%
<b>Persons living below the federal poverty level</b>	2006-2010 23.7%	2007-2011 22.7%	2007-2011 16.1%
<b>Children living in poverty</b>	33%	30%	25%
<b>Adult Obesity</b>	35%	35%	29%
<b>Residents with no health insurance</b>	26%	28%	19%
<b>Number of primary care offices per 100,000 population</b>	1:3,535	1:3455	1:1480
<b>High School graduate 2007-2011</b>	70%	81%	80%

Source: US Census Bureau Quick Facts

The demographic and socioeconomic data used in the 2012 CHA was collected from the US Census data and the NC Center for Health Statistics. The data available for comparison is usually the previous years or a five year average. If a five year average is used it will be noted. Though it is noteworthy to highlight the improvement in the high school graduation rate for the five year period 2007-2011, there were issues with the end of grade test scores. The 2012-2013 EOC/EOG test scores were released in November 2013 and showed a significant drop in test scores. The NC proficiency scores were 44.7% and Duplin's scores were 32.6%. The DC School Board addressed these scores and the challenges in transitioning to the new core standards. While the goal in the past for students was to perform at grade-level or better, the new goal is for students to reach grade level as well as career and college readiness.

The population continues to grow with the rate of growth at 2.6% which is higher than the state rate. The poverty indicators have not really changed significantly and all are higher than the state rate. The economic indicator such as the median family income has increased but is still way below the state rate. This indicator demonstrates the economic hardships facing county residents and is tied to the number of residents that lack health insurance, have chronic disease and are obese.

The County’s population distribution by age, race and ethnicity has remained relatively stable. The number of babies being delivered has significantly decreased, but the overall population has grown. Out of the 746 live births in 2012; 39% were White; 23% were Black and 38% were Latino. These percentages when compared to last year show the largest increase was in Latino births from 35% in 2011 to 38% in 2012.

**Duplin County 2011-2012 Population**

<b>Population Demographics</b>	<b>2011</b>	<b>2012</b>
<b>White</b>	52.4%	52.4%
<b>Black</b>	26.2%	26.0%
<b>Native American</b>	1%	1.4%
<b>Latino origin</b>	21%	21.2%
<b>Persons under 18 years</b>	25.3%	25.4%
<b>Persons 65 years and over</b>	14.3%	14.9%
<b>Births to county residents</b>	803	746

Source: NC-SCHS

The availability of health care practitioners impact residents access to care. This indicator for health has not been moving in the right direction. In the 2012 CHA document, the total primary care physicians (Sheps Center 2010 data) was 33 and remains at 33 in 2011. The data is always a year or two behind the current year. Not evident in the available data is the fact that Duplin County has lost an OB/GYN physician in April 2012. Vidant Duplin Hospital has been actively recruiting a physician since April but has not been able to secure an OB/GYN physician. This has created a gap in prenatal care services. The roll out of the Affordable Care Act has meet with some challenges and has not been available to the public as originally planned. The lack of access to medical insurance and the complexity of the process has added another barrier to the residents and will impact the health of the county.

**Five Year 2008-2012 Ten Leading Causes of Death**

<b>Rank</b>	<b>Leading Causes of Death All ages</b>	<b>2007- 2011Rate</b>	<b>2008- 2012Rate</b>	<b>Change</b>
<b>1</b>	Diseases of the Heart	204.6	189.5	↓
<b>2</b>	Cancer-all sites	181.4	178.5	↓
<b>3</b>	<b>Chronic lower respiratory</b>	<b>42.3</b>	<b>49.9</b>	↑ <b>Moved up to third</b>
<b>4</b>	Cerebrovascular	58.4	47.5	↓
<b>5</b>	Motor vehicle injuries	32.2	27.4	↓ Tied
<b>5</b>	Diabetes	29.2	27.4	↓ Tied
<b>7</b>	Other unintentional injuries	26	24.3	↓
<b>8</b>	Nephritis, nephrotic syndrome	22.7	22.4	↓
<b>9</b>	Alzheimer's	21.9	19.5	↓
<b>10</b>	Septicemia	18.3	17.4	↓

Source: NC-SCHS

The overall five year leading causes of death shows a decreasing trend in deaths from diseases of the heart and cancers. There is a significant decrease in cerebrovascular disease. The third leading cause of death has changed from cerebrovascular to chronic lower respiratory. Diabetes is now tied with motor vehicle injuries at fifth. Diabetes was ranked as the sixth leading cause of death in 2006-2010. Looking at the five year trends all causes of death have decreased except the chronic respiratory disease.

The leading causes of death for the birth to 19 years have changed little from the 2006-2010 five year data. The number one cause of death is still conditions originating in the perinatal period followed by motor vehicles injuries. At third place there is a three way tie: birth defects, homicide and other unintentional injuries all having seven deaths. The gap in prenatal care services identified in 2012 is not reflected in these numbers. Continued monitoring of infant deaths and access to prenatal care may be reflected in future data.

**2008-2012 Rates for Duplin Resident Causes of Death by Race and Gender**

Rank	White Male	Black Male	White Female	Black Female
1	Heart 264.3	Cancer 274.7	Heart 146.3	Cancer 103.5
2	Cancer 193.2	Heart 229.3	Cancer 141.1	Heart 98.8
3	Chronic Lower Respiratory 80.2	Cancer of the tracheas, bronchus and lung: 63.5 prostate: 63.9	Cerebrovascular Disease 54.5	Cerebrovascular Disease 39.2

Source: NC-SCHS

White male and female residents continue to have a higher death rate for heart disease than African Americans. The number one leading cause of death for African American males and females is cancer. It is interesting to note that the data on specific types of cancers; trachea, bronchus, lung and prostate cancer, were highest for African American males. The rates based on fewer than 20 cases are unstable and statistically unreliable. There was no cause of death that ranked as number three for Black males as these numbers were less than 20. The increase in deaths due to chronic respiratory disease has increased but as the population ages it is likely that the death rates from respiratory disease will increase.

**Obesity**

Obesity-related conditions which include heart disease, stroke, type 2 diabetes and certain types of cancer, are among of the leading causes of preventable death. The rates of adult and childhood obesity in Duplin County have not moved. The data from the NC-PASS which covers children seen in WIC shows that children age 2-4 years continue to be overweight and obese. The table below compares the 2010 and 2011 data.

**Duplin County Prevalence of Obesity, Overweigh Children 2 through 4 years of Age**

	Overweight > = 85% to < 95 <sup>th</sup> percentile	Rank Order	Obese >= 95 <sup>th</sup> percentile	Rank Order
2010	14.7%	26	21.8%	98
2011	19.1%	93	21.4%	94

The Pediatric Healthy Weight clinic has brought both hope and resources to families who need help dealing with issues surrounding obesity. Each discipline on the team is critical to the process. Children and families are seen at each clinic visit by a Pediatrician, Nutritionist and a Behavioral Health specialist. It is not enough to identify medical issues or provide nutritional education without addressing the emotional impacts of obesity. Changing behavior and making a difference in childhood obesity is a slow process. There is no quick fix and this process requires work and commitment from the family. Twenty-one clinics were held from October 1, 2012-September 31, 2013. Thirty-two of the children out of forty-six experienced weight loss or decrease of BMI at their return visits. The largest weight loss was 24.6 pounds.

Implementation of the WIC Breastfeeding Peer Counselor Program assists in reducing infant and childhood obesity. Breastfed infants are more likely to gain the right amount of weight as they grow rather than become overweight children. Duplin County Partnership for Children (DCPFC) continued to implement Shape NC to address early childhood health and wellness. This ensures that children attending child care programs are served nutritious foods, engage in physical activity, and have teachers modeling healthy behaviors.

## **Maternal Health**

The health of the mother prior to and during pregnancy is directly related to infant health and a positive birth outcome. The WIC Peer Breastfeeding Educator has seen a dramatic rise in women choosing to breastfeed their infants and an increase in the exclusivity of breastfeeding. This increase is primary due to the success of implementing a WIC Breastfeeding Peer Counselor (BFPC) Program. Outreach and education is provided by the WIC breastfeeding counselor and other staff. WIC provides breastfeeding aids such as manual and electric breast pumps to assist women to return to work or school. From January to November 2013, over 150 women have chosen to breastfeed their infants. There also has been a dramatic increase the percentage of women who breastfeed their infants more than 6 weeks with 40% continuing for 6 months. Vidant Duplin Hospital is in the initial stages of applying to meet the NC Maternity Center Breastfeeding-Friendly Designation (NC MCBFD). This initiative has been developed to recognize those maternity centers that have taken steps to promote protect and support breastfeeding in their organization. The WIC staff is serving as a resource for the hospital staff as they go forward with this initiative.

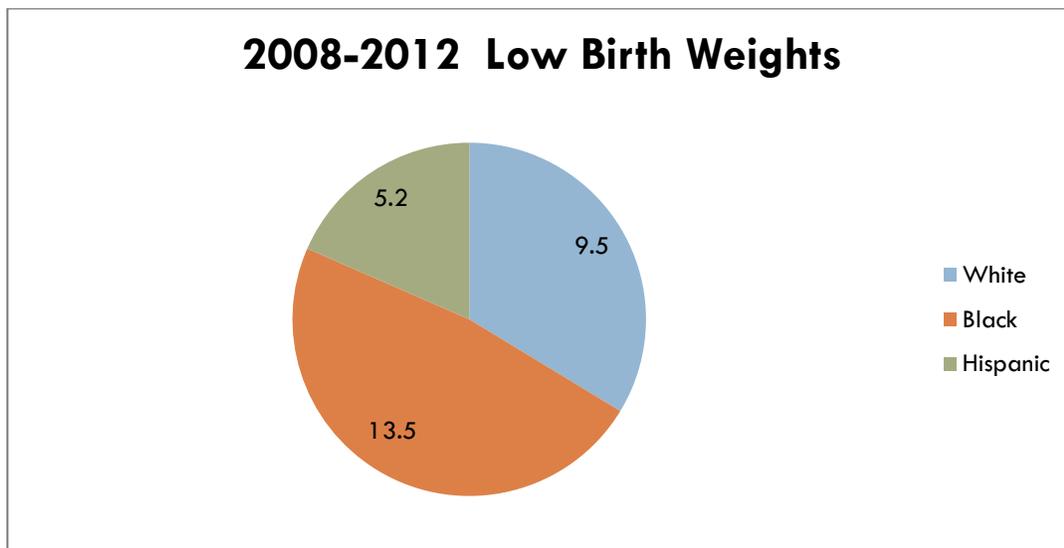
## **Teen Pregnancy**

The 2012 NC-SCHS data on teen (15-17 years) pregnancy rates have decreased from the last assessment. The 2012 rates for NC were 26% and Duplin were 32.5%. The 2011 rates cited in the Duplin County Community Health Assessment were NC 31.7% and Duplin 41.9%. All rates are per 1,000 populations. Overall the rates fell, but Hispanic teens were the highest at 51.1% down from 2011 rate of 84.4%; African American at 38.3% down from 40.4% and White at 16% down from 23.5%. The repeat pregnancies for the 15-19 year olds needs continued attention. The data shows there were 94 pregnancies with 23 or 24.5% repeat pregnancies.

## Infant Mortality

The infant mortality rate is the death of infants within the first year of life. In 2012 the Duplin infant mortality rate was 8.0 per 1,000 live births as compared to the state rate of 7.4. There were 6 deaths under the age of one. The NC-SCHS five year 2008-2012 infant mortality racial disparities data shows a rate for Whites at 7.9%, for African Americans 19.4% as compared to the state rate for White 5.6% and the African American at 14%. Though the overall rates are on the decline there is still disparity.

The five year average of the percent of live births that are less than 2500 grams has decreased as compared to the 2006-2010 data. The percent of low birth weight infants in the 2012 CHA was 8.2 % and current data shows the rate at 7.8%. The NC rate for 2008-2012 was 9.0%. Consistently there is a disparity between white and minority women. The chart below highlights the racial disparity.



## Health Priorities

A comprehensive Community Health Assessment was conducted in Duplin County in 2012. This assessment was a collaboration between Duplin County Health Department, Vidant Duplin Hospital, community agencies, and the residents of the county. The information was collected through a combination of state statistics, and community self-reported surveys distributed throughout the community. The data was evaluated with the assistance of ECU Department of Family Medicine Research Division and their partner organizations. Health issues identified as having a higher incidence in Duplin County than the state of North Carolina were selected by a community committee and organized into one of four priorities:

1. Promote Healthy Weights through Healthy Living-Reducing Obesity
2. Promote Prevention of chronic Disease and Improve Outcomes
3. Improve Women’s Health during the Childbearing Years
4. Connect County residents with a Primary Care Medical Home-Access to Care

Local Priority	Progress
<p>ISSUE #1 Promote Healthy Weights through Healthy Living- Reducing Obesity</p>	<ul style="list-style-type: none"> <li>✓ Peer Breastfeeding counselor has increased caseload to 150 women from Jan.-Nov. 2013; provides counseling to all WIC women on breastfeeding and follow-up for breastfeeding issues.</li> <li>✓ Provided outreach during World Breastfeeding Week.</li> <li>✓ Collaborating with Vidant Duplin Hospital as they move forward to meet requirements for NC MCBFD.</li> <li>✓ Pediatric Healthy Weight Clinic held twenty-one clinics from October 1, 2012-September 31, 2013. Due to the intensity of the visits, the clinic schedules 4 new patients in the morning and 4-6 follow up visits in the afternoon. Forty-six new children were seen in the clinic with 76 return visits. Of the 76 return visits, 40 had an increase in their BMI. Thirty-two of the children experienced weight loss or decrease of BMI at their return visits. Four children had no change in their BMI. The largest weight loss was 24.6 pounds.</li> <li>✓ Duplin County Health Department provided outreach to faith organizations with talks on nutrition and exercise in November 2013; participated in World Diabetes Day November 22, 2013 with Goshen Medical Center, Sanofi, Piggly Wiggly and Faison Pharmacy in the town of Faison. Promoted reading of food labels, eating healthy carbs and nutrition. Population served 50% Latino, 25% Black, 25% White.</li> <li>✓ November 2013- Met with Kenansville Baptist Church, to discuss faith based health programs and outreach.</li> <li>✓ Diabetes awareness with Faison Presbyterian Church</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Health educator provided weekly e-mail newsletter and healthy eating tips to 500+ county employees.</li> <li>✓ Promotion of Weight Watchers classes in the community, held open classes for the community at the Health Department and in Wallace.</li> <li>✓ Community Transformation Grant- Nutrition presentation Dept. of Aging; Health Fair New Christian Chapel Baptist Church; Health education to county employees on the Mediterranean diet.</li> </ul>
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<b>Local Priority</b>	<b>Progress</b>
<p>ISSUE #2 Promote prevention of chronic disease and improve outcomes</p>	<ul style="list-style-type: none"> <li>✓ Monthly community Diabetic education classes provided at Health Department.</li> <li>✓ January- March 2013 Community smoking cessation classes offered at Health Department</li> <li>✓ February and March 2013-Senior center exercise group</li> <li>✓ Heart Healthy awareness DSS</li> <li>✓ June 2013- Charity Middle School Tobacco 101 Training</li> <li>✓ August 2013-Telemedicine initiative Vidant Duplin marketed to county providers, started to expand program to new clients.</li> <li>✓ October 2013- Outreach to Warsaw Middle School tobacco education and awareness to 6<sup>th</sup> graders.</li> <li>✓ May and November 2013-Meeting with Vidant Duplin Community Outreach Staff to discuss community efforts.</li> </ul>

Local Priority	Progress
<p>ISSUE #3            Improve women’s health during the childbearing years</p>	<ul style="list-style-type: none"> <li>✓ Continue to provide maternal case management through the OBCM CCNC program.</li> <li>✓ Gap in OB/GYN providers, Vidant Duplin Hospital continues to recruit physicians.</li> <li>✓ WIC peer breastfeeding program continues outreach, breast pump loan program expanded to include non-WIC clients to assist women to return to work and/or school.</li> <li>✓ November-December; Discussion with Board of Health and Duplin County Schools on the possible adoption of a teen pregnancy prevention program targeting Latinos.</li> <li>✓ February 2013- WIC staff meeting with Vidant Duplin Hospital staff about the NC MCBFD. Breastfeeding nutritionists provided letter of support for this initiative.</li> </ul>

Local Priority	Progress
<p>ISSUE #4            Connect County residents with a primary care medical home- access to care</p>	<ul style="list-style-type: none"> <li>✓ Vidant Duplin Hospital continues to actively recruit physicians and other health care practitioners.</li> <li>✓ 2013 there has been a gap in services for maternal health, Vidant’s OB/GYN left in April 2013, there has been no replacement secured as of December 2013. This left only two physicians who can deliver babies at Vidant Duplin Hospital.</li> <li>✓ Vidant Duplin Hospital and Duplin County Health Department continue to develop case management program for the uninsured; in the hiring phase, funding provided through the CCNC.</li> </ul>

## **Emerging Issues**

### **Electronic Medical Records:**

EMRs are one of the best ways to boost patient safety, manage chronic illnesses, and improve the efficiency of a practice. They also offer an excellent way to prescribe medication. Additionally, the use of EMRs is now being required by the federal government through the release of its 2010 “Meaningful Use” standards. These standards outline a set of EMR use requirements for practices who wish to be eligible for payments through Medicare and Medicaid. In the future, medical practices and hospitals not in line with the requirements of Meaningful Use will be penalized. Vidant Duplin Hospital has been on an EMR for some time. Recently the Health Department has been able to access the hospital’s electronic record to provide consistent care for clients who had a recent hospital visit. The Health Department will be moving to an EMR and implementation process in January 2014.

### **Public Health Funding:**

State and federal budget shortfalls have directly impacted the delivery of local public health services. With an uncertain economy, funding for public health programs and services may decrease at the same time community needs for services increase.

### **Affordable Care Act:**

Medicaid expansion was not an option that the state legislators approved in 2013. The roll out of the Affordable Care Act has seen problems and has been difficult for the public to access. There will be many important factors to consider for state legislators such as the economic impact of increasing the number of persons that cannot get health insurance and the costs associated with uninsured care and the impact on the safety net system of providers. As a safety net provider, public health must be prepared to respond to the needs of our residents.