2014 DUPLIN COUNTY SOTCH REPORT



Reported March 2015

State of the County Health Report



The State of the County Health Report provides a review of the current county health statistics and compares them to the health priorities that were developed as part of the 2012 Community Health Assessment. The data from the NC State Center for Health Statistics was the primary source of data. The report was prepared by Elizabeth Ricci, BSN, RN, Director of Nursing, Duplin County Health Department 340 Seminary Street Kenansville, NC 28349 email bethr@duplincountync.com and phone 910-296-2130.

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|---|-----------------|----------------|------------------|
| Socioeconomic Indicators | Duplin Co. 2014 | North Carolina | DEMOGRAP |
| Total population estimate | 60,084 | 9,943,964 | HIC DATA 2014 |
| Natural increase –births over deaths | 2013 | 2013 | |
| | 3.7% | 3.6% | |
| Median family income | 2009-2013 | 2009-2013 | |
| | \$34,433 | \$46,334 | |
| Unemployment rate | 2014 | 2014 | |
| | 6.0% | 5.5% | |
| Persons living below the federal poverty | 2009-2013 | 2009-2013 | |
| level | 26.3% | 17.5% | |
| Children living in poverty | 33% | 26% | |
| Adult Obesity | 36% | 29% | |
| Residents with no health insurance | 27% | 19% | |
| Number of primary care offices per 100,000 population | 1: 3969 | 1:1462 | |
| High School graduation rate | 2013-2014 | 2013-2014 | |
| | 78.1% | 83.9% | |
| | | | |
| | | | |

Source: US Census Bureau Quick Facts/ NC SCHS

Duplin County's population is slowly growing with the percent change at 3.7%, the state percent change is 3.6%. The poverty indicators have not changed significantly and all are higher that the state rates. One of the economic indicators, median family income has increased, but is still way below the state rate. The unemployment rate, number of people living below the federal poverty level, and uninsured rate is an indicator of the economic hardships facing county residents. These factors are linked to the number of residents without access to health care, have chronic disease, are obese and have poor

health outcomes. The Medicaid expansion was rejected by the NC Legislature as option for North Carolina residents 2013. The roll out of the Affordable Care Act has seen several problems and the plans have been difficult for the public to access. The county's uninsured rates have not shown any real decrease as compared to 2013. The 2013 number of medical providers per 100,000 population was 1:3645 and current numbers show an unfavorable trend of 1:3969.

Academic achievement and education are strongly linked to health outcomes. In general, children with less education have more chronic health problems and shorter life expectancies. The data for school performance was collected from NC Public Schools.org. The end of grade (EOG) performance levels for the Duplin School District 2013-2014 year did not show any improvement. The district EOG for grade level proficiency was 47.8 and the NC rate was 60.6. College and Career readiness scores for Duplin 32.5 and NC 48. The county high school graduation rate for the five year period 2009-2013, was less than the previous 5 year period and stays below the NC rate. The current 2013-2014 graduation rate was less than the previous year. The Duplin County School Board continues to address these scores and the challenges in transitioning to the new core standards. The Duplin Early College program at James Sprunt Community College continues to have the highest graduation rates for the district. 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.

Duplin County 2012-2013 Population

| Population Demographics | 2012 | 2013 |
|----------------------------|-------|-------|
| White | 52.4% | 53% |
| Black | 26.0% | 25% |
| Native American | 1.4% | 1.4% |
| Latino origin | 21.2% | 21% |
| Persons under 18 years | 25.4% | 25% |
| Persons 65 years and over | 14.9% | 15.4% |
| Births to county residents | 746 | 747 |

The county's population distribution by age, race and ethnicity has remained relatively stable. Out of the 747 live births in 2013; 39% were White; 22% were Black and 38% were Latino. These percentages when compared to last year show that the number of births to Latino women continue to be equal to the number of white births.

2012 CHA Health Priorities

The 2012 Community Health Assessment process identified four health indicators that stood out for Duplin County. These were health indicators that exceeded the State rates and/or were cited as "perceived" health problems in the community in the community health opinion survey. The "perceived" health problems cited from the community survey were supported by secondary data. The 2012 priority issues were reviewed and evaluated for progress, trends and outcomes and new or emerging issues are noted. The Duplin County Health Department, CHA Advisory group and community developed health priorities by using secondary state data, reviewing previous health trends, and the community health opinion survey. Currently, no significant changes have been reported to require reprioritization.

- 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

Emerging Issues

Issues effecting the first priority are the obesity rates. Obesity-related conditions include heart disease, stroke, type 2 diabetes and certain types of cancer. All these conditions are among of the leading causes of preventable death. The rates of adult and childhood obesity in Duplin County have not significantly improved. 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 though the numbers are showing an improvement both locally and state wide. This trend will need to be monitored to evaluate the sustainability and ultimate impact on overall health. The county numbers are a relatively small sample and may not be significant statistically. The table below compares the most current available data from NC- NPASS.

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

| | Overweight > = 85% to < 95 th percentile | North Carolina | Obese >= 95 th percentile | North Carolina |
|------|---|----------------|---|----------------|
| 2011 | 19.1% | 16.2% | 21.4% | 15.7% |

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| 2012 | ↓ 14.8% | ↓ 14.8% | ↓ 15.7% | ↓ 14.7% |
|------|---------|---------|---------|---------|
| | | | | |

Chronic Disease

The North Carolina State Center for Health Statistics (NC-SCHS) annual county level data book looks at the major morbidity and mortality data for the county. A review of the five year trend data from 2009-2013 indicates an increasing trend in deaths from diseases of the heart and from cancers. Deaths linked with diabetes are nephritis, cerebrovascular, pneumonia and influenza and all have increased. Looking at the five year trends, all causes of death have increased except motor vehicle injuries and septicemia which have decreased. Alzheimer's disease was on the 2013 top ten list but now has dropped from the current trend data. The percent of the population that is 65 years and older will continue to climb steadily as the population ages and the incidence of chronic disease will rise. The focus on the prevention of disease and the better control of early stages of chronic disease will ultimately improve outcomes.

Five Year 2008-2012 Ten Leading Causes of Death

| Rank | Leading Causes of Death | 2008-2012 | 2009-2013 | Change |
|------|-------------------------------|---------------|------------|------------|
| | All ages | Death rate | Death rate | |
| 1 | Diseases of the Heart | 189.5 | 192.8 | ↑ |
| 2 | Cancer-all sites | 178.5 | 186.7 | \uparrow |
| 3 | Chronic lower respiratory | 49.9 | 50.4 | ↑ |
| 4 | Cerebrovascular | 47.5 | 49.0 | \uparrow |
| 5 | Diabetes | 27.4 | 28.4 | \uparrow |
| 6 | Motor vehicle injuries | 27.4 | 25 | \ |
| 7 | Other unintentional injuries | 24.3 | 24.7 | ↑ |
| 8 | Nephritis, nephrotic syndrome | 22.4 | 24.7 | \uparrow |
| 9 | Pneumonia & Influenza | Not in top 10 | 19.3 | |
| 10 | Septicemia | 17.4 | 17.3 | \ |

Women's and Children's Health

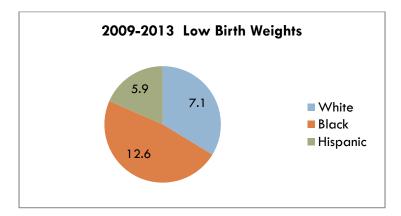
The leading causes of death for the five year period 2009-2013 for the birth to 19 year olds has changed very little. Motor vehicle injuries and conditions in the perinatal period are still number one and two. Looking at the child deaths in 2013 there were 9 child deaths between birth and 17 years of age. Six of those deaths were under one years of age. The Child Fatality Prevention Team reviews child deaths and has reviewed several deaths that were attributed to SIDS and infant suffocation due to sleeping with an adult. The team has adopted a crib distribution and safe sleep education initiative for 2015.

Leading Causes of Death: Birth to 19 years of Age

| | | 2009-2013 | 2013 |
|---|--|------------|--------|
| | Cause of Death | Death rate | Deaths |
| 1 | Motor Vehicle Injuries | 19.6 | 12 |
| 2 | Conditions originating in the perinatal period | 18.4 | 15 |
| 3 | Other Unintentional Injuries | 9.8 | 0 |

The low birth weight data for 2013 shows that Duplin had a rate of 9.1 for all races as compared to the rate of 9.4 for NC. The ethnic breakdown data shows the African American low birth weights are higher than both White and Latino. Although Duplin County is below the state rates the disparity in the minority population continues.

Five Year Low Birth weights (less than 2500 grams) By Ethnicity



The 2013 pregnancy rate for Duplin County teens ages 15-19 was 38.7 compared to State rate of 35.2. Repeat pregnancies represented 27% for the county compared to 24.3% for the State. Out of one hundred counties, Duplin County ranked 40th highest in the State for teen pregnancies for ages 15-19. Pregnancy rates were higher among Hispanics (57.9%) and African-Americans (42.6%) than whites (24.7%). Although the county's total pregnancy rate has decreased, the overall county pregnancy rate continues to exceed the state's rates for the past few years. The social and economic cost of teen pregnancy and birth often has a long-term impact on teen girls, their babies and the community. Reducing teen pregnancy will improve the health, education and social well-being of young women and benefit the social and economic costs for local communities. Duplin County Health Department offers comprehensive education, including information about abstinence, contraceptives and disease prevention. Case management is provided for Medicaid eligible pregnant woman and for at-risk children birth through 5 years of age through the Community Care Network (CCNC) OB and Care Coordination for Children staff. The Duplin County Partnership for Children Smart Start, has added an additional case worker to their Parent as Teachers program to address teen parents and their need for services. Data source is the appenc.org.

Access to Care

Research shows that people living in rural areas are less likely to access health services, are likely to engage in risky behaviors and have a higher mortality rate then urban areas. Duplin County is a large, rural county with many of the same barriers experienced by other rural areas. Approximately 20% of the population is non-English speaking and have less than a high school education. The literacy level of the clients who use services at the Health Department is at or below a 6th grade reading level. The persistent health disparities and accessing health care services continues to have a major impact on the vulnerable residents of Duplin County. Duplin County residents continue to have a challenge with transportation, language disparities and overall health literacy. Although budgetary constraints and depleting resources offer challenges for the county, through collaborative efforts with partners and local agencies the county continues to adapt and provide a quality service to the community.

Progress Made on Health Priorities in 2014

2014

| Local Priority | Progress |
|---|--|
| Health Priority #1 Promote Healthy Weights through Healthy Living- Reducing Obesity | Peer Breastfeeding counselor had an average caseload of 70 pregnant and breastfeeding women. |
| | Pediatric Healthy Weight Clinic held 24 clinics in 2014 serving 34 new clients and 48 returnees. Continuation of the grant through the Vidant Duplin Hospital Community Foundation enables this service to be provided to all patients at no cost. |
| | Health educator continues to e-mail newsletter and healthy eating tips to 500+ county employees on a weekly basis. |
| | Weight Watchers classes for the community at the Health Department once a week. |
| | Town of Wallace completed low income apartment complex with green space, playground and walking trail. |
| Health Priority #2 Promote prevention of chronic disease and improve outcomes | Case management of 170 diabetic patients by the Health Department. Continue to receive funding from Vidant Duplin Hospital Foundation for case management. |
| | Community diabetic education classes and medical nutrition therapy appointments at no cost pare provided by the Health Department. |
| | Monthly Community smoking cessation classes offered to the community at Health Department by health educator |
| | Increased participation in the county employee wellness initiative and gym. Several |

| | exercise classes offered by health educator during the lunch hour and after 5pm. |
|--|---|
| Health Priroity #3 Improve women's health during the childbearing years | Addition of two new OB/GYN providers to Vidant Duplin Hospital. Practitioners participate in a weekly prenatal clinic at the Health Department. |
| | CFPT to start initiative on safe sleep with education on safe sleep environments and crib distribution to at risk families. |
| | Community Care Network (CCNC) case managers continue outreach to vulnerable children and their families to educate and connect them to a medical home, to decrease use of the local emergency room for non-emergency. They provide education and follow-up to both Medicaid and Non-Medicaid eligible pregnant women to assist with early entry into care and improve birth outcomes. |
| | Duplin County's Partnership for Children's Parents as Teachers program has added an additional case manager to work with young pregnant women and their families. |
| Health Priority #4 Connect County residents with a primary care medical home- access to care | Vidant Duplin Hospital continues to actively recruit physicians and other health care practitioners. The hospital has added specialists in orthopedics and general surgery. |
| | Vidant Duplin Hospital and Duplin County Health Department have implemented Health Net, a case management program for the uninsured population. |
| | Addition of a physician assistant, at the Health Department to expand the capacity to serve more patients. |

New Initiatives

Electronic Medical Records:

Duplin County Health Department implemented an electronic medical record (EMR) in March 2104. Over the past 10 months the EMR has been valuable in improving communicating with patients and providers. The systems has improved the prescribing of medication and tracking of prescription use by the pharmacy.

Health Net:

Medicaid expansion was not approved by the state legislators in 2013. The roll out of the Affordable Care Act has seen problems and has been difficult for the public to access. The addition of a Health Net case manager for the county's uninsured population is an initiative to address this issue. The program coordinator assists patients in accessing available insurance plans and the Affordable Care Act, participate in the prescription assistance program to receive free or low cost mediations and gain access to needed referral services.

Work-Place Wellness:

To maintain a healthy workforce and to reduce health care costs, the Health Department manages the county employee wellness program. The program includes offering employee and their dependents primary care, physicals, employee pharmacy, gym and wellness program. There is a monetary incentive program for employee who have the recommend age appropriate screenings, demonstrate healthy lifestyles and make the commit to improve their over health. The employee wellness program is designed to improve the health of the employees, increase access to physical exercise and to reduce the cost paid out-of-pocket by employees for medical care.