2015 DUPLIN COUNTY SOTCH REPORT
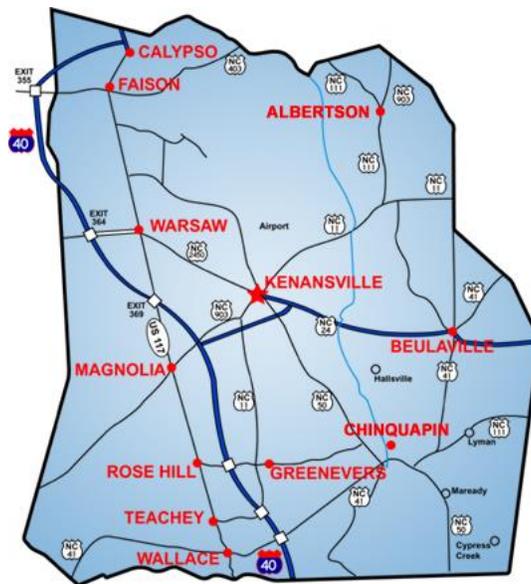
State of the County Health Report

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.

DUPLIN COUNTY DEMOGRAPHIC DATA

Socioeconomic Indicators	Duplin Co. 2015	North Carolina
Total population estimate	60,446	10,042,802
Natural increase –births over deaths	2013	2013
	2.4%	4.3%
Median family income	2010-2014	2010-2014
	$34,787	$46,693
Unemployment rate	2015	2015
	6.3%	6.1%
Persons living below the federal poverty level	2010-2014	2010-2014
	↑ 27.7%	17.2%
Children living in poverty	↑ 37%	25.1%
Adult Obesity	36%	29%
Residents with no health insurance	21.6%	18.9%
Number of primary care offices per 10,000 population	2012	2012
	3.7	7.6
Number of Dentists per 10,000 population	2012	2012
	1.8	4.5
High School graduation rate	2014-2015	2014-2015
	↑ 83.4%	85.6%

Source: US Census Bureau Quick Facts/ NC SCHS www.schs.state.nc.us

    Duplin County's population is slowly growing with the percent change at 2.4%, as compared to the state rate of 4.3%. One of the economic indicators, median family income has increased, but is still below the state rate. The number of people living in poverty has increased for both adults and children and is significantly higher than the NC rate. The percent of population who are uninsured is on the rise and reflects the population that do not qualify for Medicaid and cannot afford to enroll in or are not eligible to enroll in the ACA All these social-economic factors contribute to residents having chronic disease, obesity and poor health outcomes. The number of available primary care offices are still below

the state rate. This impacts residents access to health care and will increase the number of non-emergent emergency room visits. There is a barrier to accessing dental care as the ratio is even lower.

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 county high school graduation rate for the past few years has been less than the state rate. The current 2014-2015 graduation rate shows an improvement from 78.1% to 83.4% though still less than the state rate of 85.6%. 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 2014-2015 Population

Population Demographics	2014	2015
White	51.8%	57%
Black	26%	25%
Native American	1.4%	1.4%
Latino origin	21.6%	20%
Persons under 18 years	24.9%	24.9%
Persons 65 years and over	15.8%	15.8%
Births to county residents	772	836

The county's population distribution by age, race and ethnicity has remained relatively stable. In 2015 there were 826 births to county residents; 35 % White; 24% Black and 40% were Latino. These percentages when compared to last year show that the number of births to Latino women continue to exceed the number of non-Latino births. The percentage of women who gave birth out of county was 326 or 39% of all birth. The data was extracted from Health Department's vital records.

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 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, 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

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. The county statistics show the lack of medical providers in the community to be huge barrier in accessing care. The persistent health disparities and the difficulty in accessing health care services continues to have a major impact on the vulnerable residents of Duplin County. Approximately 20% of the population is non-English speaking. Health literacy is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. Health literacy affects people's ability to navigate the health care system, including locating providers and services and filling out complex forms. Duplin County residents continue to have challenges with transportation, language disparities and overall health literacy. Vidant Duplin Hospital and the Health Department collaborate in the Health Net Grant to expand services for the uninsured.

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 2010-2014 indicates an increasing trend in deaths from diseases of the heart, cancer and diabetes. Deaths linked with diabetes are nephritis, cerebrovascular, pneumonia and influenza. There was a positive downward trend in the rates of death related to cerebrovascular disease. Looking at the five year trends, motor vehicle injuries and septicemia have decreased. The percent of the population that is 65 years and older will continue to climb steadily as the population ages so 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 2010-2014 Ten Leading Causes of Death

Rank	Leading Causes of Death All ages	2009-2013 Death rate	2010-2014 Death rate	Change
1	Diseases of the Heart	192.8	196.2	↑
2	Cancer-all sites	186.7	190.5	↑
3	Chronic lower respiratory	50.4	53.5	↑
4	Cerebrovascular	49	47.8	↓
5	Diabetes	28.4	31.0	↑
6	Nephritis, nephrotic syndrome	24.7	25.2	↑
7	Other unintentional injuries	24.7	24.6	↓
8	Motor vehicle injuries	25	22.6	↓
9	Pneumonia & Influenza	19.3	18.9	↓
10	Septicemia	17.3	17.2	↓

The leading causes of death for the five year period 2010-2014 for birth to 19 year olds has seen positive trend. There was a decrease in motor vehicle injuries and conditions originating in the perinatal period. Looking at the infant and child deaths in 2014 there were a total of 6 child deaths between birth and 17 years of age. This is an improvement in the number of deaths; 9 in 2013 and 6 in 2014. The 2014 child death data for under one year of age shows no motor vehicle injuries, one birth defect, and one illness. Last year the Child Fatality Prevention Team reviewed several child deaths that were attributed to SIDS and infant suffocation due to sleeping with an adult. The team adopted a crib distribution and safe sleep education initiative in 2015. There was one SIDS death reported this year.

The resource data on the current obesity rates for the county is limited. The previously used data sources from the NC Nutrition Branch and the Eat Smart Move More site have not been updated since 2012. The Pediatric Healthy Weight clinic at the Health Department continues to provide interventions for overweight/obese children and their families.

Leading Causes of Death: Birth to 19 years of Age

	Cause of Death	2009-2013 Death rate	2010-2014 Death rate
1	Motor Vehicle Injuries	19.6	↓ 13.5
2	Conditions originating in the perinatal period	18.4	↓ 14.7
3	Other Unintentional Injuries	9.8	9.8

Women's and Children's Health

The low birth weight data for 2014 shows that Duplin had a rate of 7.8 for all races and indicates a decrease from the 2013 data. The NC rate dropped to 9.0. The ethnic breakdown data shows the African American low birth weights are higher than both White and Latino though there is a decrease as compared to last year's data. Duplin County is below the state in low birth rates, though the disparity in the population continues.

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

2010-2014 Low Birth Weights: White 7.0, Black 11.9, Hispanic 6.1
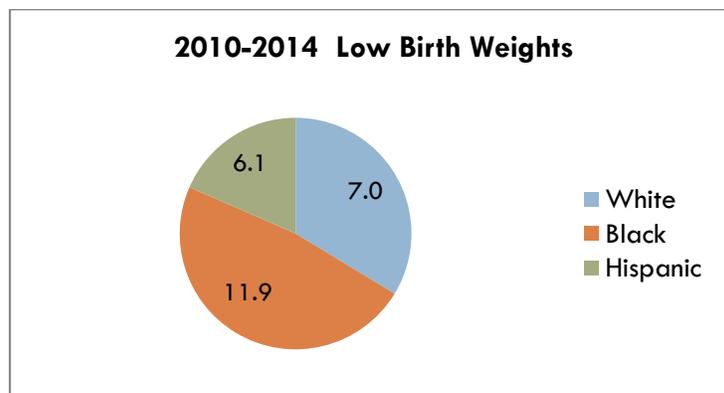
The 2014 pregnancy rate for Duplin County teens ages 15-19 years was 42.2 compared to State rate of 32.3 which is an increase for the county. The repeat pregnancies rate showed a decrease from 27% to 15.9% as compared to the NC rate of 22.4%. Out of one hundred counties, Duplin County ranked 26th highest in the State for teen pregnancies for ages 15-19. This is a negative trend. Pregnancy rates were higher among Hispanics (52.3%) than Non-Hispanic (37.5%). The majority of the teen pregnancies were in the 18-19 year olds. 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) OBCM and Care Coordination for Children staff. The Duplin County Partnership for Children Smart Start continues to fund the Parent as Teachers program to address teen parents and their need for services. Data source: www.shiftnc.org

Progress Made on Health Priorities in 2015

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. A breastfeeding support group meets at the Health Department monthly. Breastfeeding classes meet monthly. Pediatric Healthy Weight Clinic held 24 clinics in 2015 serving 37 new clients. 100% of clients made a least one change between appointments in eating and physical activity. Grant funds 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. The county gym and exercise program for county employees has been expanded and more staff have joined the lunch and learn classes, weight reduction classes and taken advantage of screening services.
Health Priority #2 Promote prevention of chronic disease and improve outcomes	Case management of 150 diabetic patients by the Health Department. Continue to receive funding from Vidant Duplin Hospital Foundation. The community diabetic

	education class participation had fallen in 2014. In 2015 changes were made to the day and time of classes and this resulted in a marked improvement in attendance. Performance measures tracked showed a marked improvement in blood pressure control and lowering of A1C of participants. 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. 2014 gym membership was 190, in 2015 225. Daily exercise classes offered by health educator during the lunch hour and after 5pm. Vidant Duplin Hospital sponsors a breast cancer support group.
Health Priority #3 Improve women's health during the childbearing years	Vidant Duplin Hospital is working toward becoming a Breastfeeding Friendly Hospital. Vidant physicians continue to rotate to the prenatal clinic held at the DCHD. CFPT members have distributed 10 cribs for safe sleep and have purchased 8 more for 2016. Continue to advocate for 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.

| 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. Vidant Duplin Hospital and Duplin County Health Department continue Health Net, a case management program for the uninsured population. Electronic data reporting for this grant started in October 2015. For the Oct-Dec reporting period total # unduplicated patients served was176, 111 of these were uninsured clients at or below the 200% FPL; the # of diabetics identified and connect to services was 24.

Addition of a Nurse Practitioner in October 2015 to expand the Health Departments capacity to serve residents.

In 2015 the County EMS staff in collaboration with the Health Department, hospital and community agencies have been working on the development a Community Paramedic Program. The program will provide EMS case managers who will contact people at risk for development of poor health outcomes. This may be people who are frequent users of the ER non-emergency services, those with chronic disease, recent hospital discharges or referrals from a medical provider to monitor a patient who needs education, reinforcement of discharge plans, or medication monitoring. |

New Initiatives

Tobacco Free Campus:

In 2015 James Sprunt Community College has been working with the DCHD Health Educator to establish a tobacco free campus. The implementation date is set for March 5, 2016. The Health Department will provide free tobacco cessation classes for students and faculty on campus.

Vidant Duplin Hospital Telestroke Program:

  Vidant's focus is to reduce death and disability caused by strokes, one of the top leading causes of death in Duplin County. The 2015 task force's work in collaboration with Wake Forest Baptist Telestroke Network will enable Duplin County to provide the stroke telehealth services in 2016. OSCAR (ongoing stroke consultation for assessment and recommendations) will be in place in January 2016 in the Emergency Room. This tool will assess the patients and determine if the treatment calls for Activase, which is the only treatment for stroke. The team at Wake Forest Telestroke Center can interact with patients and physicians at the hospital and provide informed consultation and expert recommendations in real time. This will improve access to care and patient outcomes.

Patient Portal:

  Duplin County Health Department's electronic health records have been in place for 19 months. In 2015 a patient portal was implemented which enables patients to access parts of their medical record. Over the past year 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.