

Caswell County

State of the County Health Report 2016



Purpose

Caswell County's State of the County Health Report (SOTCH) provides information and updates related to health concerns identified by the community in the most recent Community Health Assessment (CHA). Both of these reports aim to include the entire community, from residents to other community agencies. The most recent CHA is the 2015 CHA which was submitted in March of 2016. The CHA identified the top three community health priorities based upon community feedback. These three priorities are **mental health**, **substance use**, and **obesity**.

In addition to updates on the priority areas, the SOTCH also provides updates on socioeconomic and demographic factors, major morbidity and mortality data, emerging issues, and new initiatives. **For more information and to become involved in community health assessment processes and/or initiatives, please contact the health department at 336-694-4129.** This report and other reports can be found online at <http://www.caswellinc.us/news-reports/>.

Socioeconomic and Demographic Information

Socioeconomic and demographic factors play a significant role in the health of any community. These factors can impact access to health services, healthy foods and environments, physical activity and recreation resources, as well as behaviors, attitudes, and policies related to health. For comparison purposes, Caswell County data is compared to North Carolina data. Due to the small population size and low population density of Caswell County, five year ranges of data are provided as often as available to improve statistical reliability. As noted in the table to the right, the population size of Caswell County is 23,357 or 54.97 persons per square mile and for North Carolina is 9,750,405 or 200.55 persons per square mile according to the 2010-14 American Community Survey (ACS) estimates produced by the U.S. Census Bureau.

Population Density		
	Caswell County	North Carolina
Total Population	23,357	9,750,405
Land Mass	424.92	48,617.91
Population per square mile	54.97	200.55
<i>Source: 2010-14 ACS, U.S. Census Bureau</i>		

Data regarding the racial and ethnic backgrounds, as well as age of Caswell County as compared to North Carolina as a whole can be observed in the tables below.

Race and Ethnicity	Caswell County	North Carolina
White	62.6%	69.6%
African-American	33.4%	21.5%
Hispanic	3.4%	8.7%
<i>Source: 2010-14 ACS, U.S. Census Bureau</i>		

These figures show a population that has a larger percentage of African-American residents and fewer Hispanic residents as compared to the state of North Carolina. Additionally, the county's population is older than that of the state, with fewer young children and more senior citizens.

Directly associated with economic status of the population, the average unemployment rate was 6.6% for both Caswell County and the state of North Carolina for the 2010-14 ACS period. During this same period, Caswell County reported 46% of residents were not in

Age of Residents	Caswell County	North Carolina
Median Age (in years)	44.5	37.8
Under 5 years	4.9%	6.3%
18 years and over	80.5%	76.6%
65 years and over	17.9%	13.8%
<i>Source: 2010-14 ACS, U.S. Census Bureau</i>		

Income	Caswell County	North Carolina
Per capita	\$19,057	\$25,608
Median household	\$38,318	\$46,693
Mean household	\$47,938	\$64,555
<i>Source: 2010-14 ACS, U.S. Census Bureau</i>		

the labor force, as compared to 36.8% of North Carolina residents. The U.S. Census Bureau defines those not in the labor force as persons who are institutionalized, retired, homemakers, students, or seasonal employees who are not looking for employment during the off season. As illustrated in the income table on the previous page, Caswell County residents have lower per capita, median, and mean household incomes as compared to the state.

Other economic factors include percentage of population at various ages who are below the federal poverty level. As demonstrated in the table to the right, Caswell County has a higher proportion of residents below the Federal Poverty Level at every age group. Related to income status, 19.8% of Caswell County residents received benefits through the Supplemental Nutrition Assistance Program (SNAP) as compared to 14.4% of North Carolina Residents (2010-14 ACS, U.S. Census Bureau). Additionally, 62.7% of Caswell County school children were eligible for free and reduced lunch as compared to 52.8% of North Carolina schoolchildren, for the 2014-15 school year (NC Department of Public Instruction).

Residents with income below Federal Poverty Level	Caswell County	North Carolina
All ages	21.7%	17.6%
Under 18 years	34.7%	25.0%
18-64 years	19.1%	16.4%
65+ years	15.8%	9.9%

Source: 2010-14 ACS, U.S. Census Bureau

Educational Attainment	Caswell County	North Carolina
Age 25+ HS grad or higher	76.1%	85.8%
Age 25+ bachelor's degree or higher	11.6%	28.4%

Source: 2010-14 ACS, U.S. Census Bureau

Educational attainment of residents also impact health, since often education has a direct relationship with income status, opportunity, and personal skills, amongst other factors.

Crime is another factor relevant to health, since rates of high crime or perceived high crime can lead to feelings of stress and anxiety. In addition to the negative health impact of fear and anxiety itself, the fear and anxiety can cause residents to avoid outdoor activity, particularly recreational activity, which is sometimes correlated with weight management troubles and other chronic conditions.

Caswell County is fortunate to experience lower reported crime rates than that of the state. Crime rates are reported per 100,000 residents and are collected by the North Carolina State Bureau of Investigation and based upon Uniform Crime Reporting Data. These rates can be viewed in the table to the right. Index crime refers to the total of both violent and property crimes. Violent crime includes murder, forcible rape, robbery, and aggravated assault. Property crime includes burglary, larceny, and motor vehicle theft. Arson is considered an index crime, but is not included in the crime index tables.

Year	Index Crime		Violent Crime		Property Crime	
	Caswell County	North Carolina	Caswell County	North Carolina	Caswell County	North Carolina
2011	2,432.8	3,919.8	236.5	354.6	2,196.3	3,565.2
2012	2,477.4	3,767.2	262.1	358.6	2,215.3	3,408.6
2013	2,122.5	3,506.2	191.0	339.5	1,931.5	3,166.6
2014	2,172.5	3,287.2	184.5	333.0	1,987.9	2,954.1
2015	2,059.1	3,169.3	250.0	355.8	1,809.2	2,813.5

Source: NC Department of Public Safety

Major Mortality and Morbidity Information

In simplified terms, mortality is another term for death and morbidity is another term for disease or illness. Due to the small population size of the county, this report utilizes five-year rates whenever available to increase statistical reliability.

Life Expectancy

Caswell County has slightly lower life expectancy as compared to the state for several demographic groups, with the exception of African-Americans, where the average life expectancy is slightly higher for Caswell County residents.

Average Life Expectancy (2012-14)		
Demographic Group	Caswell County	NC
Males	74.4	75.8
Females	78.6	80.7
Caucasians	76.3	79.1
African-Americans	77.1	75.9
Total Population	76.5	78.3

Source: NC State Center for Health Statistics

Mortality

Unadjusted Death Rates per 100,000 (2010-2014)		
Cause of Death	Caswell County	NC
Cancer	263.7	189.9
Heart Disease	238.0	177.9
Chronic Lower Respiratory Disease	62.5	49.3
Stroke	49.7	45.4
Alzheimer's Disease	44.5	30.0
Diabetes	38.5	24.2
Unintentional Injuries	36.8	30.4
Kidney Disease	29.1	18.1
Motor Vehicle Injuries	26.5	**
Pneumonia and Influenza	24.0	18.5
Total Deaths All Causes	1150.6	838.6

***indicates not a leading cause of death*
Source: NC State Center for Health Statistics

associated with advanced age. Even when controlling for age, Caswell County still has higher death rates than the state of North Carolina for most causes of death, with the exception of stroke related deaths.

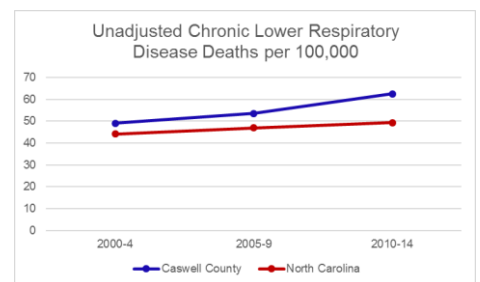
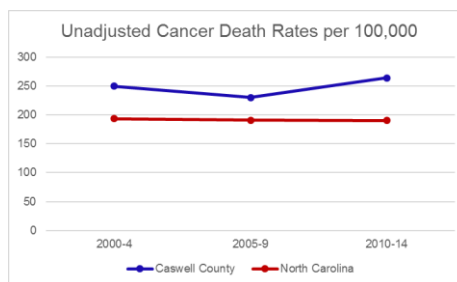
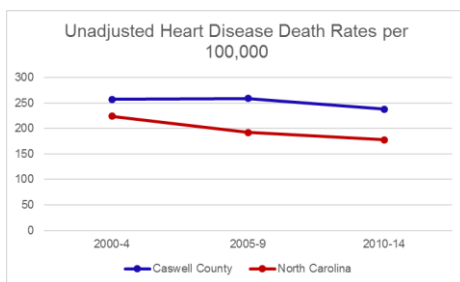
Some factors that may contribute to these higher death rates include a greater percentage of minorities, lower income, less formally educated, and older populations combined with decreased access to health care. In addition to limited outpatient health care providers within the county, there is no hospital within the county. Since both health care and transportation are limited within the county, the most challenged populations may delay care, which may lead to uncontrolled chronic conditions, more complications, and even death.

Trends in Mortality Rates

Mortality rates can also be viewed in comparison to prior years. This information can help identify any changes in rates to see if things are improving, getting worse, or staying the same. This data is collected and reported by the NC State Center for Health Statistics.

Trends in Unadjusted Death Rates

The below charts show unadjusted death rates for the county as compared to the state.

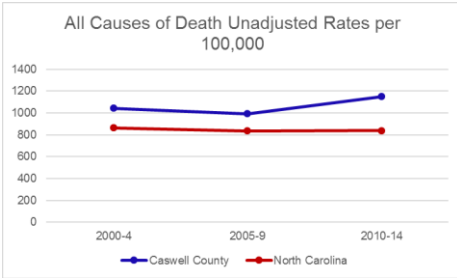
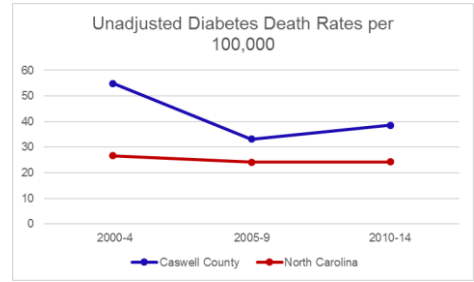
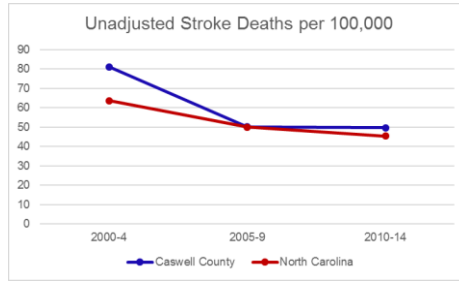
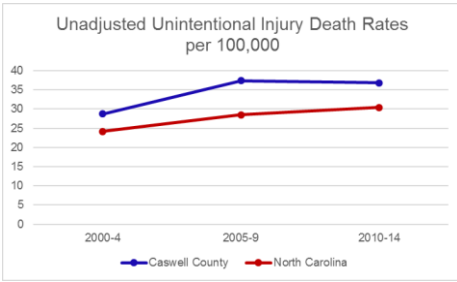


Caswell County has higher rates of death for all leading causes as compared to the state rates. The table to the left reflects the top ten causes of death for Caswell County residents. As noted in this chart, Caswell County has higher death rates for each of the top ten causes of death, and a higher death rate overall when compared to the state. Motor vehicle injuries are not one of the top ten causes of death for the state.

Another way to look at death rates is to use age-adjusted death rates. Age-adjusted death rates control for differences due to age distribution. Utilizing this type of data may be especially helpful for an older population, like Caswell County, since this controls for differences

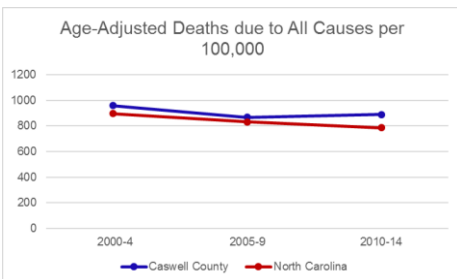
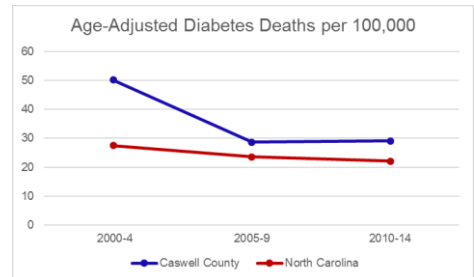
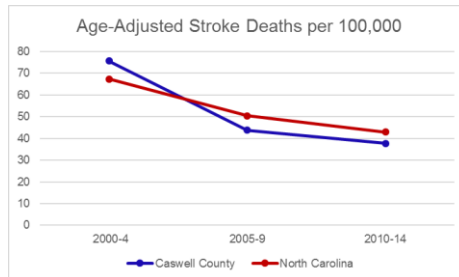
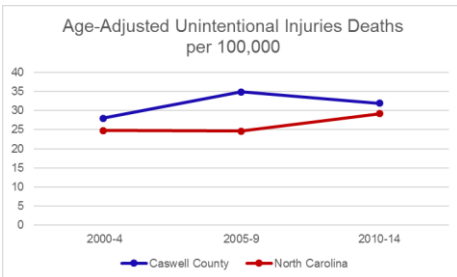
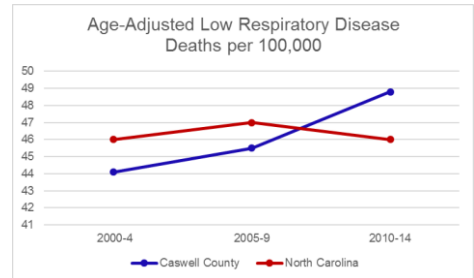
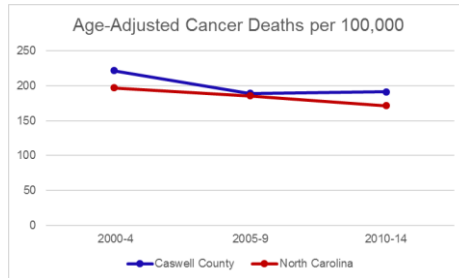
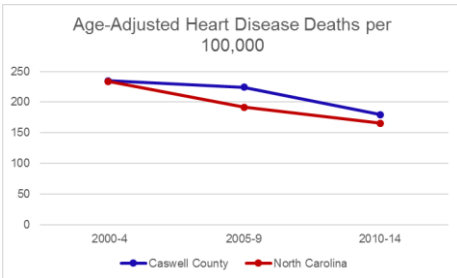
Age-Adjusted Death Rates per 100,000 (2010-2014)		
Cause of Death	Caswell County	North Carolina
Cancer	191.5	171.8
Heart Disease	179.9	165.9
Chronic Lower Respiratory Disease	48.8	46.0
Stroke	37.8	43.0
Alzheimer's Disease	35.8	29.2
Unintentional Injuries	31.9	29.6
Diabetes	29.1	22.1
Motor Vehicle Injuries	24.1	13.5
Kidney Disease	21.6	17.0
Pneumonia/Influenza	17.58	17.6
Total Deaths All Causes	888.5	785.2

Source: NC State Center for Health Statistics



Trends in Age-Adjusted Death Rates

The below charts show the trends in age-adjusted death rates for the county as compared to the state.



Morbidity

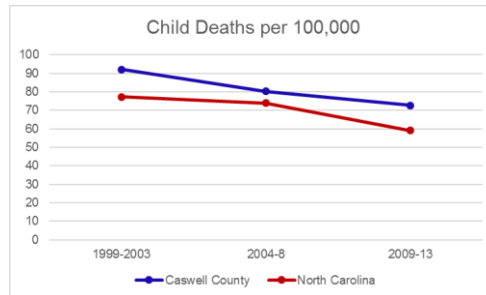
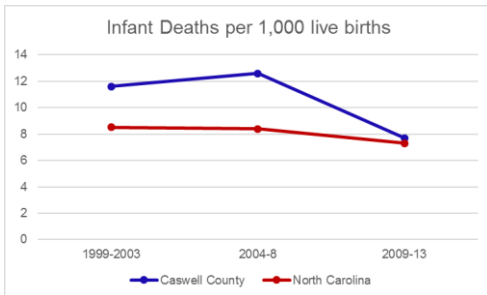
As mentioned previously, morbidity refers to disease or illness. This section reviews cancer incidence rates and communicable disease data. Pregnancy and birth data is also included in this section. Due to the small population size, limited data is available on various chronic conditions for Caswell County. Additionally, the lack of a hospital and the fact that the closest hospital is in Virginia create additional challenges in assessing

full burden of health conditions. Much of the data used by the state and other counties is limited to data collected in North Carolina hospitals.

Cancer incidence rates include persons who are living with or are in remission from cancer. Previous sections of this report discussed *death* rates of cancer. For the 2008-12 time period, Caswell County had a cancer incidence rate of 518.7 as compared to the state rate of 488.9. These rates are per 100,000 and this information is available through the NC State Center for Health Statistics.

Pregnancy and Birth Data

Caswell County has a pregnancy rate of 53.9 per 1,000 as compared to 58.4 per 1,000 for the state for the year period of 2010-14. During this time, there were a total of 977 pregnancies in Caswell County residents. Due to small population size, a lot of infant mortality related data is unavailable. For example, low birthweight data is not available. Information regarding infant deaths and child deaths can be viewed in the graphs below. Infant deaths include the deaths of liveborn children before their first birthday. Child deaths include all children from 0-17.



Communicable Disease

2016 Caswell Communicable Disease Incidences	
Disease/Condition	Confirmed Case Counts
Chlamydia	84
Gonorrhea	32
New HIV cases	2*
New AIDS cases	0*
Primary and Secondary Syphilis	2*
Early and Latent Syphilis	0*
Non-gonococcal urethritis	3
Chronic Hepatitis B	1
Tuberculosis	0
Pertussis (Whooping Cough)	0
Salmonella	4
Campylobacter	4
Rocky Mountain Spotted Fever	0
Ehrlichiosis	0
Lyme's Disease	0
Acute Hepatitis C	0
Hepatitis A	0
Strep Group A	0
Legionellosis	1
Shigellosis	0
E. coli	1
Creutzfeldt-Jakob Disease	0
Rabies in animals	0
Animal bites	23
*indicates data is for January-September 2016	
Data source: Caswell County Health Department	

Communicable disease statistics provide some insight into the health of a population. Caswell County Health Department (CCHD) records and reports necessary data regarding communicable disease findings. The communicable disease incidence data reported in the table is for January 1 to December 31, 2016, unless otherwise specified. This is the most current available data.

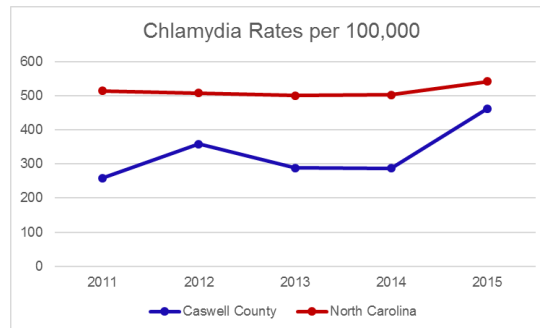
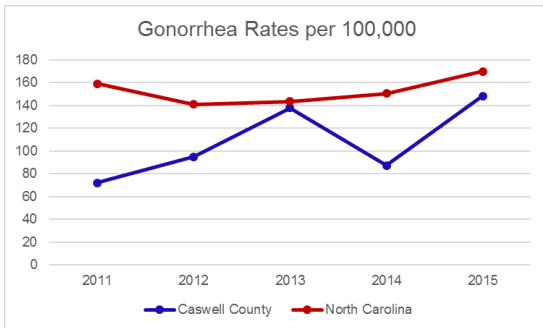
In addition to the data CCHD collects, the state collects data on sexually transmitted infections. These infections include HIV, AIDS, syphilis, gonorrhea, and chlamydia. The rates of these infections is lower in Caswell County as compared to the state. This may be due to a more closed population that does not mingle with outside groups and no major highways or other transportation barriers that reinforce the closed nature of the community. Another factor may be that exposed and/or infected persons may not seek care or diagnosis, so the cases are not recorded. As mentioned in other areas of this report, the small population size reduces the statistical reliability of numbers for Caswell County.

The STI rates table on the next page provides average rates for the 2013-15 period for HIV, AIDS, and early syphilis. Caswell County shows lower rates

of these illnesses as compared to the state. The graphs below show the average yearly rates of gonorrhea and chlamydia for 2011, 2012, 2013, 2014, and 2015. Caswell County generally has rates lower than the state, but the rates seem to be increasing in Caswell County.

Average STI Rates per 100,000 for 2013-15		
Infection	Caswell County	NC
HIV	7.2	13.4
AIDS	2.9	7.7
Early Syphilis	8.7	12.3

Source: NC Communicable Disease Branch



Environmental Health Information

The Environmental Health Division of the Caswell County Health Department is responsible for the local water quality program, including well inspections for chemical and bacteriological contamination. Additionally, Environmental Health staff are responsible for inspecting restaurants and other facilities.

Water Quality Program

During 2016, Environmental Health staff tested 86 water samples for chemical contaminants, which are naturally occurring inorganic compounds. Of these samples, 51 met NC minimum quality standards and 35 (or 41%) did not meet these standards. The most common outliers were iron and manganese. Even at slightly elevated levels, these metals do not normally pose a substantial health risk. Environmental Health staff also tested several homes with copper piping for the presence of copper in the water supply and three tested high. Some copper is necessary for health, but in excess, can cause stomach problems, like nausea and vomiting.

Also during 2016, Environmental Health staff tested 147 water samples for bacteriological contaminants. Of these samples, 117 had no contamination and 30 (20%) tested positive for coliform contamination, and one of those included fecal coliform contamination.

Restaurants and Facilities

For 2016, 200 facilities were inspected, of these 197 received grade A and 3 received grade B scores. Examples of facilities include day cares, camps, lodging establishments, residential care homes, and swimming pools. Facilities are inspected at least once per year.

Childhood Lead Investigations

There were no lead investigations conducted in 2016.

Progress on Priority Health Concerns

The 2015 Community Health Assessment (CHA) is the most recent CHA for Caswell County. Through the collaborative process, which involved the general public and community stakeholders, three priority areas were identified by the community. These three priority areas are **obesity, mental health, and substance use**. Due to the lack of full-time health education staff, much of the work focused around these priorities focuses on environmental and policy level work, and collaborating with other community agencies and organizations as much as possible. As a reminder, if you would like to be more involved in any of these health concerns, please contact the health department at 336-694-4129.

Obesity

In the area of obesity, the primary areas of focus for the health department are related to adult obesity. The two evidence based strategies identified by the health department are worksite wellness for county employees and increased access to fresh produce within the county.

- There is one farmers' market in Semora and it is a seasonal market during the warmer spring, summer, and fall months. Caswell County Local Foods Council (CCLFC) also offers pop up markets on occasion CCLFC's Facebook page.
- CCHD has worked with CCLFC and the Second Harvest Foodbank of Northwest North Carolina increase access to produce. These groups have been able to offer double bucks to SNAP recipients at the farmers' market in Semora.
- Another program is the "2 Bite Club" where children in the market can sample two bites of a produce item and receive 5 market dollars.
- These groups worked with local farmers to increase fresh produce in area food pantries.
- Another project was to offer "Cooking Matters" cooking classes to local residents. These classes help participants learn how to prepare inexpensive and healthy meals at home.
- All four elementary schools participated in a "Walk at School" event in May of 2016. This event coincided with International Bike to School Day.
- The Health Collaborative, a health-oriented collaborative group across the Dan River Region, was selected to participate in the Healthy Cities and Counties Challenge as a HealthyCommunity50 member. The four main approaches of the Health Collaborative are healthy eating, active living, access to healthcare, and healthy spaces.

Mental Health and Substance Use

These are two priority areas that often interrelate. To maximize efficiency, these two issues are combined in both this report and in many community efforts. CCHD has formed a joint mental health and substance use coalition with a wide range of community partners in order to better address these issues.

- There is now a drug disposal dropbox housed in the Sheriff's Office. The box is available 24 hours a day, 7 days a week, and is open to the public for the disposal of any unwanted medications, no questions asked.
- **As a reminder for anyone experiencing a mental health crisis, the crisis line is 800-939-5911.**
- The coalition will continue to work together to come up with creative ideas to better address mental health and substance use challenges.

Emerging Concerns and New Initiatives

New Leadership

Dr. Fred Moore retired from Caswell County in 2016. He had been the Health and Medical Director for CCHD since 1999. CCHD staff will miss Dr. Moore and remember him as a leader who truly cared about people and his community.

Following Dr. Moore's retirement, Dolly Huffman Clayton assumed the Health Director position in October of 2016. She is a social worker with over 15 years of county public health experience, previously working in Chatham and Cumberland Counties in North Carolina. We look forward to working with her in the years to come.

In December of 2016, CCHD welcomed Mike Godard, OD, as Medical Director. He is Board Certified in Family Medicine with 18 years of diverse patient care experience. We anticipate that he will be a great asset to CCHD.

Along with new leadership, CCHD hired two new nurse practitioners in the summer of 2016. These two providers are accepting new patients and treat children and adults for any primary care needs. The health department clinic accepts Medicaid and private insurance (for example, Blue Cross Blue Shield, United Healthcare, and Cigna). In addition to those insurance providers, home health accepts Medicare for patients with home care needs. To schedule an appointment, please call 336-694-4129.

Emerging Concerns

Zika

Zika is a virus carried by the *Aedes* species of mosquitoes. These mosquitoes bite during the day and in multiple small bites from many people. This type of mosquito prefers urban areas and likes to be around people. Aside from mosquito bites, people can also acquire Zika through sexual contact with a Zika infected person. Pregnant women can pass the virus to the fetus, which can result in severe brain defects and other developmental disorders. At this time, there is no medication or vaccine for Zika. Caswell County has not had any incidences of Zika within county borders. Along with the nuisance factor of mosquitoes, reducing exposure to mosquitoes is a good idea to limit exposures to other illnesses transported by mosquitoes.

The following are ways to limit exposure to mosquitoes:

- Reduce sources of standing water (including buckets, old tires, etc. that may collect water)
- Wear long-sleeved shirts and long pants
- Use EPA-registered insect repellents on exposed skin and clothing, as directed on the product labels
- Repair any cracks or gaps in septic tanks and cover any open vent or plumbing pipes

New Initiatives

- Caswell County Health Department is now a trained provider of the Triple P Positive Parenting program. This program will be offered to the community starting in 2017 and is for parents of children aged 0-12.
- CCHD works with Alamance Cares to encourage residents to get tested for HIV, hepatitis C, and syphilis.