

Caswell County

State of the County Health Report 2017

Caswell County



Public Health

Prevent. Promote. Protect.

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. The most recent CHA is the 2015 CHA which was submitted in March of 2016. 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, new initiatives, and emerging issues. **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/>. Limited paper copies are available at Gunn Memorial Public Library or at the health department. The SOTCH is also shared with partners via email and community meetings.

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 food, opportunities for physical activity, as well as behaviors, attitudes, and policies related to health. For comparison purposes, Caswell County is compared to North Carolina. Due to the low population size and density of Caswell County, five-year ranges of data are provided as often as available to improve statistical reliability. The table above shows the population size of Caswell County is 23,174ⁱ or 54.54 persons per square mile and for North Carolina is 9,845,333ⁱⁱ or 202.50 persons per square mile.

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 to the right. 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. The county's population is also 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 5.9%ⁱⁱⁱ for Caswell County and 5.8%^{iv} for the state of North Carolina for the 2011-15 period. During this same period, Caswell County reported 45.9% of residents were not in the labor forceⁱⁱⁱ, as compared to 37.2% of North Carolina residents^{iv}. 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 at the right, Caswell County residents have lower per capita, median, and mean household incomes when compared to the state.

Population Density	Caswell County	NC
Total Population	23,174	9,845,333
Land Mass	424.92	48,617.91
Population per sq. mi.	54.97	202.50

Source: 2011-15 ACS, U.S. Census Bureauⁱⁱ

Race and Ethnicity	Caswell County	NC
White	62.7%	69.5%
African-American	32.8%	21.5%
Hispanic	3.4%	8.8%

Source: 2011-15 ACS, U.S. Census Bureauⁱⁱ

Age of Residents	Caswell County	NC
Median Age (in years)	44.9	38.0
Under 5 years	4.8%	6.2%
18 years and over	80.8%	76.8%
65 years and over	18.8%	14.2%

Source: 2011-15 ACS, U.S. Census Bureauⁱⁱⁱ

Income	Caswell County	North Carolina
Per capita	\$19,698	\$25,902
Median household	\$37,869	\$46,868
Mean household	\$48,609	\$65,338

Source: 2011-15 ACS, U.S. Census Bureau^{iii,iv}

Other economic factors include percentage of population at various ages who live 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, 20.5% of Caswell County residents received benefits through the Supplemental Nutrition Assistance Program (SNAP)ⁱⁱⁱ as compared to 14.6% of North Carolina residents^{iv}. Additionally, 78.57% of Caswell County school children were eligible for free and reduced lunch as compared to 59.82% of North Carolina schoolchildren, for the 2016-17 school year^v.

Residents with income below Federal Poverty Level	Caswell County	NC
All ages	20.9%	17.4%
Under 18 years	34.6%	24.7%
18-64 years	18.2%	16.3%
65+ years	15.5%	9.8%

Source: 2011-15 ACS, U.S. Census Bureau^{iii,iv}

Educational attainment of residents also impacts health, since often education has a direct relationship with income status, opportunity, and personal skills, amongst other factors^{vi,vii}.

Educational Attainment	Caswell County	NC
Age 25+ HS grad or higher	79.0%	85.8%
Age 25+ bachelor's degree or higher	10.9%	28.4%

Source: 2011-15 ACS, U.S. Census Bureau^{vi,vii}

Crime is another factor relevant to health, since actual or perceived rates of 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 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 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 above^{viii}. 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.

2016 Crime Rates per 100,000					
Index Crime		Violent Crime		Property Crime	
Caswell County	NC	Caswell County	NC	Caswell County	NC
1,923.2	3,154.5	309.2	374.9	1,614.0	2,779.7

Source: NC Department of Public Safety^{viii}

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 higher for Caswell County residents^{ix}.

Average Life Expectancy (2013-15)		
Demographic Group	Caswell County	NC
Males	75.4	75.2
Females	79.0	80.2
Caucasians	76.7	78.5
African-Americans	78.7	75.4
Total Population	77.3	77.7

Source: NC State Center for Health Statistics

Mortality

Caswell County has higher rates of death for all leading causes as compared to the state rates^x. The table to the right highlights the top ten causes of death for Caswell County and North Carolina residents. As noted in this table, 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.

Top 10 Causes of Death for Caswell County Unadjusted Death Rates per 100,000 (2011-2015)		
Cause of Death	Caswell County	NC
Cancer	283.9	190.6
Heart Disease	227.8	178.9
Chronic Lower Respiratory Disease	67.3	50.3
Stroke	50.9	46.4
Alzheimer's Disease	48.3	31.7
Diabetes	37.1	25.4
Unintentional Injuries	37.1	31.5
Kidney Disease	32.8	17.8
Pneumonia & Influenza	28.5	19.2
Motor Vehicle Injuries	24.2	**
Total Deaths All Causes	1158.2	851.4

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

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 is especially helpful for an older population, like Caswell County, since this controls for differences 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^{xi}. Unintentional deaths comprise deaths due to accidents or other causes, for example, falls, unintentional firearm discharge, and drug overdoses.

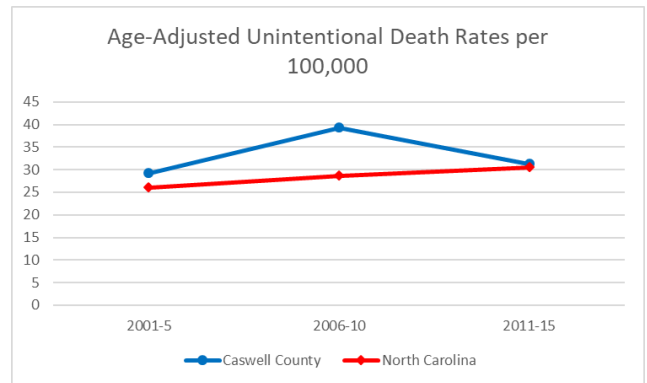
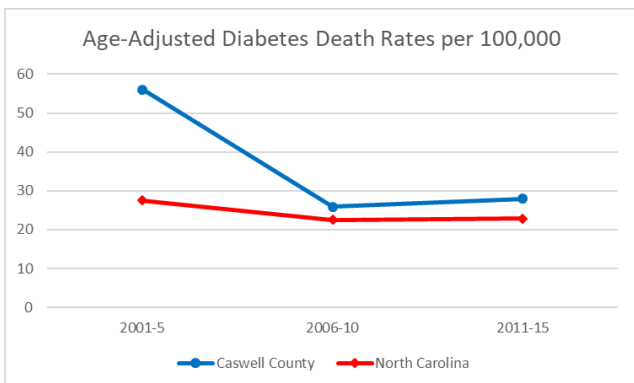
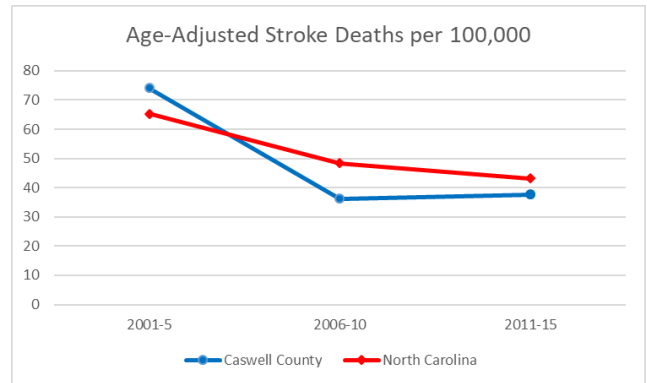
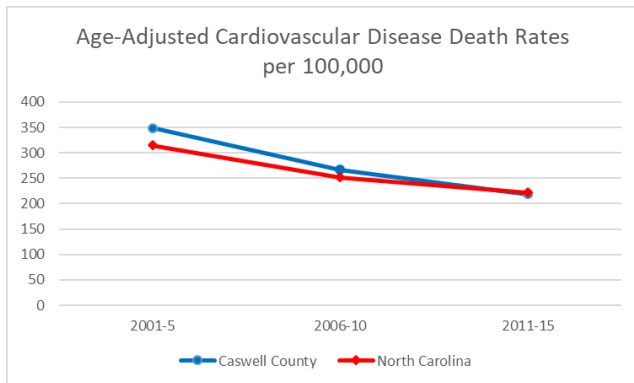
Age-Adjusted Death Rates per 100,000 (2011-2015)		
Cause of Death	Caswell County	NC
Cancer	198.7	169.1
Heart Disease	169.6	163.7
Chronic Lower Respiratory Disease	49.6	45.9
Stroke	37.6	43.1
Alzheimer's Disease	38.1	30.2
Unintentional Injuries	31.3	30.5
Diabetes	27.9	22.8
Kidney Disease	24.3	16.3
Pneumonia & Influenza	21.2	17.8
Motor Vehicle Injuries	20.7	13.6
Total Deaths All Causes	868.3	783.1

Source: NC State Center for Health Statistics^{xi}

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^{xii}. The below graphs show the trends in age-adjusted death rates for the county as compared to the state^{xii}.



Morbidity

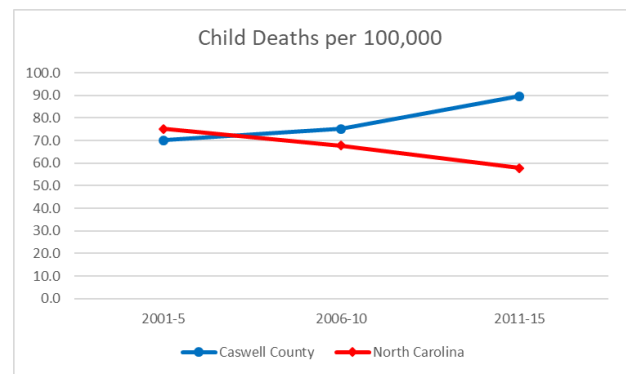
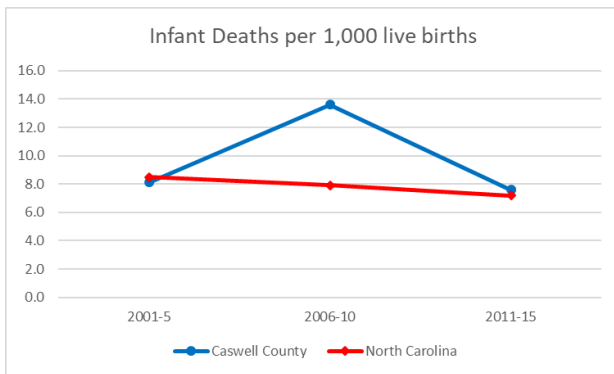
As mentioned previously, morbidity refers to disease or illness. This section reviews cancer incidence rates and communicable disease data. Pregnancy and birth data is also included in this section. Due to the small

population size, limited data is available for Caswell County. Additionally, the lack of a hospital and the fact that the closest hospital for many residents is in Virginia create additional challenges in assessing full burden of health conditions. Some of the data used by the state 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 2009-13 time period, Caswell County had a cancer incidence rate of 485.6 as compared to the state rate of 483.4^{xiii}. 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 68.8 per 1,000 as compared to 72.2 for the state for the year period of 2011-15 for women ages 15-44^{xiv}. There were a total of 1,217 pregnancies in Caswell County for 2011-15^{xiv}. Due to small population size, most infant mortality related data is unavailable, such as low birthweight data. Information regarding infant and child deaths can be viewed in the graphs below. Infant deaths are deaths of liveborn children before their first birthday^{xii}. Child deaths include all children from 0-17 years of age^{xii}.



Communicable Disease

Communicable disease statistics provide some insight into the health of a population. Caswell County Health Department (CCHD) records communicable disease data. The communicable disease incidence data reported in the table is for January 1 to December 31, 2017, which 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 are lower in Caswell County as compared to the state, as can be viewed in the table on the next page. This may be due to a closed population that mingles less with outside groups and 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.

2016 Caswell Communicable Disease Incidences	
Disease/Condition	Confirmed Case Counts
Chlamydia	112
Gonorrhea	35
Non-gonococcal urethritis	2
Chronic Hepatitis B	0
Tuberculosis	0
Pertussis (Whooping Cough)	0
Salmonella	2
Campylobacter	2
Rocky Mountain Spotted Fever	7
Ehrlichiosis	0
Lyme's Disease	0
Acute Hepatitis C	0
Hepatitis A	0
Strep Group A	0
Legionellosis	1
Shigellosis	1
E. coli	0
Creutzfeldt-Jakob Disease	0
Rabies in animals	0
Animal bites	29

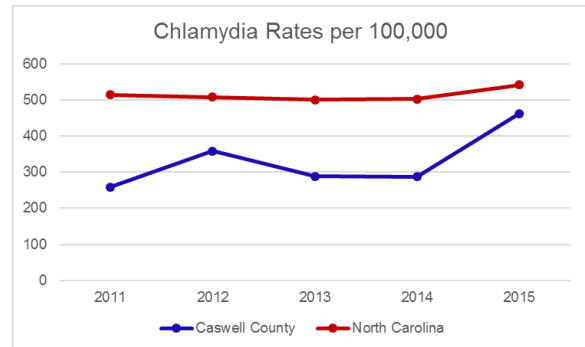
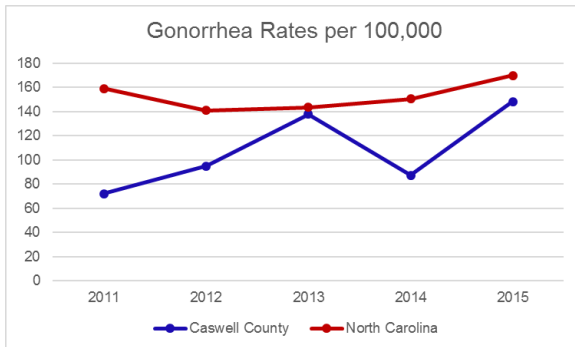
Data source: Caswell County Health Department

The STI rates table provides average rates for the 2013-15 period for HIV, AIDS, and early syphilis^{xv}. Caswell County shows lower rates of these illnesses as compared to the state. The graphs on page 5 show average yearly rates of gonorrhea and chlamydia for 2011, 2012, 2013, 2014, and 2015^{xv}. Caswell County generally has rates lower than the state for these two conditions, but the rates seem to be increasing in Caswell County.

According to the NC Communicable Disease Branch data, there are 70 adults and adolescents who have been diagnosed with HIV and 30 diagnosed with AIDS in Caswell County^{xv}. For the state, there are 34,187 residents diagnosed with HIV and 15,628 diagnosed with AIDS^{xv}. These numbers are as of December 31, 2016, which is the most current available data^{xv}.

Average STI Rates per 100,000 for 2014-16		
Infection	Caswell County	NC
HIV	8.4	16.1
AIDS	1.7	8.1
Early Syphilis	8.7	16.2

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 and inspecting restaurants and other facilities. **Environmental Health may be reached at 336-694-9731.**

Water Quality Program

From January 1 to December 31, 2017, Environmental Health staff tested 68 water samples for chemical contaminants, which are naturally occurring inorganic compounds. Of these samples, 38 met NC minimum quality standards and 35 (or 51%) 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 also staff tested 138 water samples for bacteriological contaminants. Of these samples, 104 had no contamination and 34 (24.6%) tested positive for coliform contamination. None of those included fecal coliform contamination.

Restaurants and Facilities

For 2016, 209 facilities were inspected, of these 202 received grade A and 7 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 2017.

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.

- New in 2017, the Caswell County Local Foods Council (CCLFC) has added a farmers market in Yanceyville to increase access to local fresh produce to county residents. This market builds upon the success of the Semora Farmers market. Both of these markets are expected to continue in the warmer months of 2018. Additional information about the markets can be found on the CCLFC 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 both farmers markets.
- Another program is the “2 Bite Club” where children attending the market can sample two bites of a produce item and receive \$5 in 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.
- 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.
- Caswell County Government began worksite wellness initiative. This initiative and wellness committee are led by Paula Seamster, clerk to the Board of Commissioners.

Mental Health and Substance Use

These two priority areas 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 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.
- Naloxone is a drug that can reverse the effects of an opioid overdose, such as those found in commonly prescribed pain medications. Naloxone is available to the public in limited quantities free of charge at the health department.
- The mental health and substance use coalition partnered with Cardinal Innovations Healthcare to offer Mental Health First Aid; Youth Mental Health First Aid; Question, Persuade, Refer (QPR); and Stigma trainings. These trainings were available to the public free of charge.
- **As a reminder for anyone experiencing a mental health crisis, the crisis line is 800-939-5911.**
- The coalition continues to work together to come up with creative ideas to better address mental health and substance use challenges. **Please contact the health department at (336) 694-4129 if you would like to participate in this coalition.**

New Initiatives and Emerging Concerns

New Leadership

Jennifer Eastwood became Health Director as of August 1, 2017. She has worked at the health department for 15 years in various capacities. She is excited to be in this new leadership role.

New Initiatives

In addition to the programs mentioned earlier in this report, the health department has started a few other new projects.

- Beginning in 2017, the health department offers a Diabetes Prevention Program for individuals at risk for developing diabetes, but who have not yet been diagnosed with diabetes.
- The health department offers the Reach Out and Read program, which provides books to child patients 0-5 years of age.

- All health department staff and some other county employees were trained in the Darkness to Light program, which is a childhood sexual assault prevention program.
- A free flu clinic was offered in November of 2017 to test out a drive-through clinic model for vaccinating the public. This is one model that could be utilized in the event of a public health emergency. The event included staff from Caswell County Health Department and partners from the region and state.

Emerging Concerns

Zika

Zika is a virus carried by the *Aedes* species of mosquitoes. Along with mosquito bites, Zika can be transmitted through sexual contact with an infected person. Pregnant women can pass the virus to the fetus, which can result in severe brain defects and other developmental disorders. Caswell County has not had any incidences of Zika. Reducing exposure to mosquitoes is a good idea to limit exposure to other illnesses they can transmit.

Below 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

Opioid and Other Drug Use

Across the U.S., rural communities have experienced skyrocketing rates of opioid use. This may be related to social factors and/or higher rates opioid prescribing due to higher rates of disability and chronic conditions, advanced age, or other factors. Reliable data is not available for Caswell County to demonstrate the true burden of this issue. To the right is the Injury Iceberg which illustrates that deaths, hospital visits, and emergency calls comprise a *small* percentage of the true burden.

As mentioned earlier in this report, unintentional deaths were the sixth leading cause of death with a total of 43 deaths for Caswell County residents for the 2011-15 period. For this same period, there were 9 (or 21%) unintentional poisoning deaths^{xvi}.

Caswell County newborns experience a higher rate of hospitalization due to drug withdrawal syndrome than Region 5 and the state^{xvii}. The rates are per 1,000 and are shown in the table to the right. Region 5 includes Rockingham, Caswell, Person, Durham, Orange, Alamance, Chatham, and Guilford counties.

Emergency Department visits also demonstrate some of the burden of substance use. Unfortunately, data collected by the state does not include North Carolina residents seen in Virginia hospitals, which especially impacts border counties like Caswell County. Some substance use related Emergency Department data is shown in the tables below^{xviii,xix}. This is the most current available data.



Newborn hospitalization rates associated with drug withdrawal syndrome 2012-16 (per 1,000)	
Caswell County	11.2
Region 5	6.4
North Carolina	9.0
<i>Source NC Injury and Violence Prevention Branch^{xvii}</i>	

Emergency Department visits associated with Substance Abuse Diagnosis				
Year	Caswell County		North Carolina	
	Number	%	Number	%
2008	138	2.10	114,339	2.83
2009	241	2.25	117,157	2.75
2010	185	2.63	126,656	2.96
2011	186	1.49	136,012	3.04
2012	195	2.51	138,657	2.95
2013	208	2.77	137,240	2.93
2014	174	2.54	150,916	3.18

Source: NC Detect^{xviii}

Emergency Department visits associated with Medication or Drug Overdose				
Year	Caswell County		North Carolina	
	Number	%	Number	%
2008	21	0.32	21,359	0.53
2009	22	0.21	21,124	0.50
2010	34	0.48	21,200	0.49
2011	36	0.29	22,005	0.49
2012	39	0.50	21,072	0.45
2013	31	0.41	20,633	0.44
2014	29	0.42	21,876	0.46

Source: NC Detect^{xix}

For Your Information

Did you know you can receive routine health care services at the health department? The health department clinic accepts Medicaid and private insurance (for example, Blue Cross Blue Shield, United Healthcare, and Cigna). The health department accepts children and adults for well and sick visits. New in 2017, the clinic stays open until 7pm on Tuesdays. **To schedule an appointment with the clinic, please call 336-694-4129.**

In addition to Medicaid and private insurance, Home Health also accepts Medicare for patients with home care needs. The Home Health section of the health department offers home care services to residents of Alamance, Orange, Rockingham, Guilford, and Person Counties, in addition to those here in Caswell County. **Home Health can be reached at 336-694-9592.**

The health department also offers WIC services. **WIC may be reached at 336-694-7141.**

Environmental Health may be reached at 336-694-9731.

References

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