

State of the County Health Report

Cleveland County Public Health Center—Cleveland County, North Carolina

From the Director's Chair—

2018 was an eventful year for the Cleveland County Public Health Center as we worked toward living our mission “to assure, enhance and protect the health of Cleveland County citizens through education and prevention.” Among our accomplishments for the year was the successful implementation of a Virtual Care Clinic at Graham Elementary School to reduce barriers to accessing health care for the students enrolled in this year-round school. Pictured are Amber Payne, RN, BSN, NCSN, the school nurse assigned to Graham, and Martiza Caballero, CNA/Telepresenter from Shelby Children’s Clinic as they test the equipment provided at the Virtual Care Clinic. This project won the 2018 NC GlaxoSmithKline Foundation award for an innovative child health program. The project has been expanded in 2018-19 to three additional sites with further expansions planned for 2019-20.



Additional successes for 2018 include a well-attended Minority Health Conference with over 100 participants who learned more about cancer and the science of addiction at this event, the renewal of the Adolescent Pregnancy Prevention Program grant for an additional four years to teach reproductive health and safety in our middle and high schools, the award of additional Rural Health grant funds to support our maternal and child health programming, the launch of a mobile-friendly website to encourage residents to make healthy food choices and increase their physical activity levels, and continuing work to address the spread of sexually transmitted diseases in the county.

We look forward to continuing our work to improve the county health rankings and to address the emerging health needs challenging us on local, regional, state and national levels. Our pledge is to continue to deliver high quality, cost-effective services to the residents of Cleveland County to assure that Cleveland County is a healthy place for living, learning, working and playing!

Dorothea Wyant, Health Director



Substance Abuse

Substance abuse was identified as the top health priority in the 2015 Community Health Assessment and has continued to be a focus of work throughout 2018. Three Healthy North Carolina 2020 objectives that align with this focus area include (1) reduce the percentage of high school students who had alcohol on one or more of the past 30 days, (2) reduce the percentage of individuals aged 12 years and older reporting any illicit drug use in the past 30 days and (3) reduce the unintentional poisoning mortality rate per 100,000 population. Three primary strategies addressing these objectives were continued in 2018:

Strategy	Outcomes
Classroom-based Instruction–2017-18 academic year	874 7 th grade students completed the Too Good for Drugs program at three middle schools in the county; program consists of ten classes on substance abuse prevention education including one class focused on prescription medication misuse and abuse 1,023 8 th grade students at four middle schools completed a ten-lesson Too Good for Drugs evidence-based curriculum; students completed pre- and post-tests to measure changes in attitude, knowledge and beliefs with positive results
Student Options Begin with Intervention and Recover (SOBIR)	38 students referred to SOBIR program; 3 referred to more rigorous treatment programs Referral reasons: 8 for alcohol, 5 for medication abuse/misuse, 23 for marijuana, 2 for drug paraphernalia
Prescription Medication Take Back Initiative	Three medication take back events in the county at Cleveland County Public Health Center and Patrick Senior Center/King Mountain Police Department; 19 medication take back boxes distributed throughout county to collect unused/out of date medications; 2,552.96 pounds of medications collected in the county with an estimated street value of \$16,390,000 – estimate from Cleveland County Sheriff’s office

The Drug Free Communities Grant was in the fourth year of the grant cycle in 2018 and focused efforts on educating the community about vaping and marijuana. This grant also funds the PRIDE Student Drug Use Survey conducted every two years in the 6th, 9th and 12th grade classes in Cleveland County Schools and will conduct the survey again in 2019. An application for grant renewal for another five years will also be submitted in 2019. The Substance Abuse Prevention Coalition continues to work with a group of community stakeholders to support prevention activities and programming in the county. A 12-member youth council—Students Leading A Change (SLAC) also partners with the Coalition to develop and implement targeted activities for youth to enhance knowledge of substance abuse prevention.

The Cleveland County Public Health Center was chosen as a recipient of the *Emergency Overdose: Local Mitigation to the Opioid Crisis for Local Health Departments and Districts* grant to implement strategies to prevent fatal and non-fatal opioid overdoses, increase access and linkages to care services for the most vulnerable populations and to build local capacity to respond to the opioid epidemic in North Carolina.

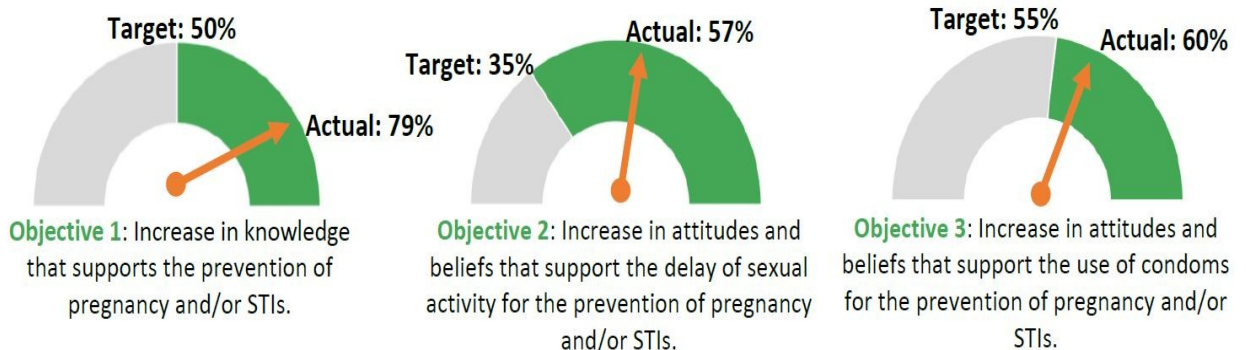
Unintended Pregnancy and Sexually Transmitted Diseases

Unintended pregnancy and sexually transmitted disease was identified as a priority health issue in the 2015 Community Health Assessment and continued to be a focus in 2018. The Healthy North Carolina 2020 objectives aligning with this focus area are (1) decrease the percentage of pregnancies that are unintended and (2) reduce the percentage of positive results among individuals ages 15-24 tested for Chlamydia. The target population for work to reduce unintended pregnancies has been the 15-19 year old age group in collaboration with Cleveland County Schools. Selected strategies include:

Strategy/Intervention	Outcomes
Classroom-based Instruction 2017-18 academic year	11 classes taught involving 330 9 th grade health students at request of faculty/staff
Wise Guys Male Accountability Program	Provided at four high schools to 9 th grade male students; 512 students enrolled; 91% or 470 students met attendance threshold attending 75% of classes
Smart Girls Life Skills Program	Provided at four middle schools to 8 th grade female students; 392 students enrolled; 90% or 353 students met attendance threshold attending 75% of classes
Puberty Education	38 classes taught to 955 5 th grade students

The Smart Girls and Wise Guys programs are funded by a grant from the North Carolina Teen Pregnancy Prevention Initiative (TPPI) and meet the standards for comprehensive reproductive health and safety instruction required by the Healthy Youth Act passed in 2009. All program participants complete pre- and post-tests to measure changes in knowledge, attitudes and behaviors. Participants in the Cleveland County programs met or exceeded the outcomes established by TPPI administrators for the program. 80% of youth surveyed reported being abstinent at pre- and post-test.

Cleveland County Health Department **met all target outcomes** for FY18.



Unintended Pregnancy and Sexually Transmitted Diseases (continued)

The teen pregnancy rate in the county has climbed again in 2016 and 2017 using data from the North Carolina State Center for Health Statistics as shown below:

	2015		2016		2017	
	Number	Rate/1000	Number	Rate/1000	Number	Rate/1000
Cleveland	105	32.5	117	36.1	116	36.1
North Carolina	9802	30.2	9255	28.1	8849	26.7

Repeat teen pregnancies have also increased in the same time period:

	2015		2016		2017	
	Number	Rate/1000	Number	Rate/1000	Number	Rate/1000
Cleveland	16/105	15.2	24/117	36.1	24/116	20.7
North Carolina	2223/9802	22.7	2044/9255	22.1	1963/8849	22.2

Of particular concern is the continuing increase in rates of sexually transmitted diseases especially in the younger population based on data from NC EDSS, June 4, 2018 presented to the Cleveland County Board of Health:

		2015		2016		2017	
		# Cases	Rate/100,000	# Cases	Rate/100,000	# Cases	Rate/100,000
Chlamydia							
Cleveland County	Ages 10-19	159	1248.8	179	1399.2	194	1509.6
	Total	488	503.8	508	523.2	567	582.5
North Carolina	Ages 10-19	15,216	1160.1	16,462	1244.8	18,516	1386.9
	Total	54,354	618.5	58,028	652.0	62,893	612.2
Gonorrhea							
Cleveland County	Ages 10-19	35	274.9	60	469.0	82	638.1
	Total	150	156.9	254	261.5	348	357.1
North Carolina	Ages 10-19	3,349	255.3	3,743	283.0	4,291	321.4
	Total	17,038	193.9	19,709	221.4	22,694	220.9

Comparable increases in the 20-29 year old age group may be due to several reasons: better reporting of data from private practices in the county, potentially more individuals coming for testing and more individuals in this age group using the Internet and club scene to meet potential partners. CCPHC staff initiated a comprehensive program in 2018 to address this issue with more outreach to private practices, a partnership with the Ollie Harris Behavioral Health Center to reach substance abuse and mental health clients and distribution of information to Housing Authority offices.

Physical Activity and Nutrition

Physical activity and nutrition were priorities identified in both the 2011 and 2015 Community Health Assessments. Data supporting this issue as a priority has been consistently reported in the County Health Rankings since 2010. The percentage of adults identifying as obese (a BMI of 30 or more) has risen from 30% in 2010 to 33% in 2018. During the same time period the percentage of adults reporting physical inactivity (no leisure time physical activity such as running, golf, gardening or walking for exercise) has remained consistent at 30% of adults over 20 years of age. Poor nutrition and physical inactivity are underlying factors in chronic diseases such as cardiovascular disease, stroke and diabetes, all appearing consistently in mortality data for the county.

The Healthy North Carolina 2020 objectives aligning with this priority area include (1) increase the percentage of high school students who are neither overweight nor obese, (2) increase the percentage of adults getting the recommended amount of physical activity and (3) increase the percentage of adults who consume five or more servings of fruits and vegetables per day. The primary strategy to address these objectives in 2018 has been the development and promotion of the Live Healthy Cleveland County website and print materials. This initiative, launched in April 2018, is a collaborative effort by the Eat Smart Move More Coalition, the Alliance for Health in Cleveland County, Inc., the Catalyst for Healthy Eating and Active Living and the Cleveland County Public Health Center. A comprehensive website located at www.LiveHealthyClevelandCounty.com offers county residents “one-stop shopping” to locate farmers’ markets, roadside stands and produce markets across the county with a link to locating additional sites across all of North Carolina. The site also offers a comprehensive map of the county based on school districts listing playgrounds and walking tracks including addresses, track surfaces, laps = miles and amenities such as bathrooms and benches as well as operating hours for the public. Additional information on three regional parks—Crowder’s Mountain State Park, South Mountain State Park and Kings Mountain State Park—is included. The site provides information on 5K and 10K races, community events and festivals and opportunities sponsored by multiple sports associations in the county. Over 1500 print brochures including the information on farmers’ market locations and parks, playgrounds and trails were distributed across the county and are updated by CCPHC health education staff members annually.

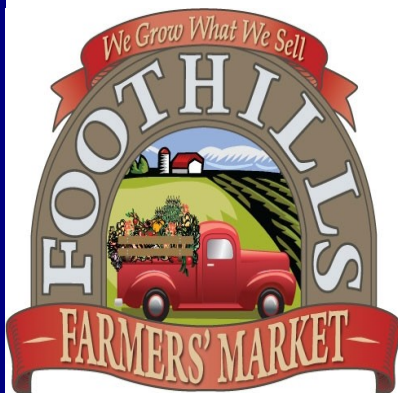


Access to healthy food continues to be an issue for many county residents. As CCPHC staff introduced a survey addressing the social determinants of health in August 2018, the two questions receiving the highest response rates concerned access to food. To assist in addressing this issue, health education staff members developed a one-page resource list available to all patients and family members listing the food pantries in the county and noting the locations, hours of operation, eligibility requirements and any limitations on visits. CCPHC also offers information on the WIC program and SNAP/EBT guidelines to patients who may be in need of food assistance.

Physical Activity and Nutrition (continued)

According to data provided by Child Nutrition Services in Cleveland County Schools, 58.3% of students enrolled in grades K-12 or 8,442 students participated in the free and reduced lunch programs in 2018. The Cleveland County Department of Social Services issued \$28,246,670 worth of food assistance to a monthly average of 18,281 families and children, elderly and disabled adults in the county. The Women, Infants, Children supplemental food program serves an average of 2,682 individuals each month. In fiscal year 2017-18, WIC vouchers were used to purchase \$1,980,958.55 worth of food for participants in Cleveland County.

In an effort to address food deserts in the county, the Eat Smart Move More Coalition and the Alliance for Health have implemented a network of school-community gardens across Cleveland County. Primarily found at elementary schools, the contract garden coordinator, Erin Rice, works with faculty and staff to identify appropriate sites and schedule planting times with students. Especially over the summer months, the garden coordinator establishes a point of contact at each site to harvest the produce and distribute it to agencies, feeding programs and the Farmers Foodshare program run by the Foothills Farmers' Market. There are now fifteen school-community gardens established in the county. These students are working at Fallston Elementary School and share their produce with churches in the community. First Baptist Church in Shelby also sponsors a garden and welcomes the community to pick the produce from that site. Another garden is planned in 2019 for North Shelby School which serves students with physical and cognitive limitations.



The Foothills Farmers' Market is located in uptown Shelby and operates on Wednesday and Saturday mornings April—October with special events planned for most weekends. A unique feature of the market is the Power of Produce Club for children—if they come to the market and participate in a short learning event, they receive a \$2.00 POP token that can be spent for fresh fruits or vegetables from the market. A satellite market operates on-site at the Cleveland County Public Health Center on Tuesday mornings from June through September and draws participants from county offices, local businesses and Cleveland Community College.

Children are offered the opportunity to participate in the POP Club at the site and also receive age-appropriate books on topics like cooking and gardening at this market. The book distribution is sponsored by the Alliance for Health.

Mortality Data for Cleveland County

A review of the leading causes of death in Cleveland County reported for four five-year periods indicates a rise in the total death rate per 100,000 population over this time frame: 1153.2 in 2010-14 to 1186.9 in 2011-15 to 1224.1 in 2012-16 to the most current rate 1230.2 in 2013-17. This data is reported from the NC State Center for Health Statistics from the County Health Data Books for 2016, 2017, 2018 and 2019. A partial explanation for this increase may be found in the increasing percentage of adults 65 years of age and older in the county: 15% in 2010 and 18.2% in 2018 according to the US Census Bureau. Other explanations for this rise in the death rate may include consistent reporting in the use of tobacco products ranging from 25% of the population over 20 in 2010 to 21% in 2018, the increase of adults who report BMIs over 30 which identify them as being obese (30% in 2010 and 33% in 2018), adults who report physical inactivity (consistently reported as 30%) and excessive drinking (9% in 2010 and 16% in 2018). All of this data is found in the County Health Rankings. Poverty in the county (20.8% of all individuals living at or below the federal poverty level—US Census Bureau) is also a factor in the increasing death rate as is the number of uninsured adults (14.9% in 2018—NC Institute of Medicine) who reside in Cleveland County.

Leading Causes of Death in Cleveland County Unadjusted Death Rates Per 100,000 Population

2012-2016				2013-2017			
Rank	Cause of Death	Number of Deaths	Rate per 100,000	Rank	Cause of Death	Number of Deaths	Rate per 100,000
1	Diseases of the heart	1,237	254.8	1	Diseases of the heart	1,236	254.7
2	Cancer – all sites	1,221	251.5	2	Cancer – all sites	1,224	252.3
3	Chronic lower respiratory diseases	377	77.6	3	Chronic lower respiratory diseases	399	82.2
4	Cerebrovascular disease	334	68.8	4	Cerebrovascular disease	323	66.6
5	Alzheimer’s disease	268	55.2	5	Alzheimer’s disease	267	55.0
6	Other unintentional injuries	234	48.2	6	Other unintentional injuries	239	49.3
7	Diabetes mellitus	208	42.8	7	Diabetes mellitus	230	47.4
8	Septicemia	186	38.3	8	Septicemia	172	35.5
9	Pneumonia & influenza	168	34.6	9	Pneumonia & influenza	143	29.5
10	Nephritis, nephrotic syndrome, & nephrosis	122	25.1	10	Nephritis, nephrotic syndrome, & nephrosis	127	26.2
	Total all deaths	5,944	1224.1		Total all deaths	5,969	1230.2

Source: NC State Center for Health Statistics, County Health Data Book 2018 and 2019

Two points to note: first, in 2011-2015, the leading cause of death in the county was cancer—all sites. Since that time the Levine Cancer Institute at Atrium Health-Cleveland has offered extensive screening opportunities for breast cancer, lung cancer, prostate cancer and skin cancer. These screenings have led to earlier diagnosis of cancer and potentially added years of life to residents. Second, opioid and other drug overdoses have led to increases in the unintentional injuries death rate.

County Demographics

This snapshot of current county demographics was produced by the North Carolina Institute of Medicine in December, 2018.

- Population: 97,334
73.1% Caucasian
20.8% African-American
3.6% Hispanic-Latino
1.7% Two or more races
- Tier 1 County designation by the NC Department of Commerce
- 16.5% age 25+ years with a Bachelor's degree or higher
- 22.1% < 18 years
- 14.9% of adults age 18-64 without health insurance
- 18.2% 65+ years
- 30.8% of population enrolled in Medicaid or CHIP
- 21% of adults who are current smokers
- 115.4 per 100 persons rate of retail opioid prescriptions dispensed in Cleveland County
- 89.7% high school students who graduate on time
- 10.6% of adults with diagnosed diabetes
- 4.3% of children age 18 and under without health insurance
- 2102.4/100,000 rate of substance abuse and mental health-related visits to emergency departments
- 10.5% of babies born with birthweight <2,500 grams
- Infant mortality rate is 10.3/1000 live births
- 17.3% of population is food insecure
- 16.7% of population has low access to a grocery store
- Violent crime rate is 158.7/100,000 population
- Life expectancy is 74.5 years

Additional data provided by the 2017-18 Annual Report of the Cleveland County Department of Social Services reveals that there were 1,402 child protective services reports involving 3,190 children in the county. DSS took custody of 98 children and provided foster care services to a monthly average of 8 children. Permanent homes were achieved for 14 children through adoption. \$2,635,821 in day care subsidies were provided for a monthly average of 562 children so that parents/guardians could be trained for work or go to work. \$10,011,763 was collected in child support payments for children and 28,488 individuals were certified or recertified for Medicaid services.

Median household income in the county is \$39,134 compared to \$48,256 in North Carolina while per capita income in the county is \$20,677 compared to \$26,779 in the state as a whole according to Quick Facts published by the US Census Bureau. Unemployment in the county now stands at 4.7%. However, many of the jobs in the county do not have health benefits or individuals are reluctant to leave work for health-related appointments—both of these factors affect the overall health and well-being of the work force in the county.

New Initiatives

The Cleveland County Public Health Center has been fortunate to implement several new initiatives in 2018 to benefit the health and quality of life of Cleveland County residents.

First, the Cleveland County Public Health Center, Cleveland County Schools, Shelby Children's Clinic and Atrium Health System developed a Virtual Care Clinic for students inside Graham Elementary School, a year-round school in a high risk area of the county. There were multiple barriers to health care in that community including a lack of transportation, difficulty navigating the health care system and parental job commitments conflicting with routine office hours for physician practices. With this partnership, using telemedicine technology, local pediatricians from Shelby Children's Clinic provide medical care to students with services ranging from skin infections and rashes to pink eye, asthma flares, stomach viruses, upper respiratory infections and the flu. The clinic resulted in decreased emergency room use, increased school attendance and increased access to a primary medical home. Because of these successes the Virtual Care Clinic was recognized by the NC GlaxoSmithKline Foundation as a innovative child health program that has produced measureable, sustainable outcomes. The award was based on work performed during the 2017-18 academic year and the program has since been expanded to include three additional schools in 2018-19. Plans are to continue expansion in 2019-20 with five additional sites under development.

Second, CCPHC was chosen to receive one of the *Emergency Overdose: Local Mitigation to the Opioid Crisis for Local Health Departments and Districts* grants to implement strategies to prevent fatal and non-fatal opioid overdoses, increase access and linkages to care services for the most vulnerable populations and build local capacity to respond to the opioid epidemic in North Carolina. CCPHC chose to apply for two of the five potential strategies for implementation in Cleveland County - to establish or expand a syringe exchange program and to connect justice-involved persons to harm reduction, treatment and recovery services. This funding will support a collaboration with a new partner, Olive Branch Ministry, to provide two new services: first, to facilitate harm reduction training to justice-involved persons in the Cleveland County Detention Center and second, to run a Point of HOPE (Halting Overdose through Education and Prevention) staffed by a peer support specialist who will offer free harm reduction and prevention supplies, educational materials and linkage to substance use, mental health and social services and community resources.

Third, CCPHC staff implemented a patient-directed survey in August 2018 to develop baseline data about four social determinants of health affecting individuals in the county: food access, housing, transportation and personal safety. Using a 10-question survey developed by the NC Department of Health and Human Services, each new patient completed the survey and reviewed the results with a staff member. The responses were tabulated monthly by health educators. 2,544 surveys were completed from August 2018 through December 2018 with the most responses to the questions concerning food access. "Within the past 12 months, did you worry that your food would run out before you got money to buy more food?" with a 13% positive response and "Within the past 12 months, did the food you bought just not last and you didn't have money to buy more food?" again with a 13% positive response. Staff members use a resource sheet listing food pantries, sites for hot meals, housing resources, information about transportation and personal safety with patients who have positive responses to any of the questions. Data from the survey will be used to support program

New Initiatives (continued)

development and grant applications and will be included in the 2019 Community Health Assessment. CCPHC staff members intend to collect this data throughout 2019 in order to gain perspective on the degree to which these four determinants affect the health of Cleveland County residents.

Finally a focused outreach program to educate the community about sexually transmitted diseases was developed and implemented by staff members from the STD Clinic and Health Education Unit. Educational presentations and materials and condoms were provided to physician practices across the county, to individuals accessing substance abuse and mental health treatment at the Ollie Harris Behavioral Health Center and at Housing Authority offices in Shelby in an effort to reach the high-risk 20-29 year old age group. Members of the Minority Health Council developed and distributed over 1000 rack cards to churches, barber shops, hairdressers and community sites to highlight the short and long-term effects of sexually transmitted diseases specifically in the African American population. This effort will be maintained and enhanced in 2019 with the addition of messages developed for social media, a campaign to “normalize” testing for STDs with new print materials and the creation of a series of posters to encourage both testing and condom use for individuals who choose to be sexually active.

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Cleveland County Board of Health

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www.clevelandcounty.com/cchd.

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