



Cabarrus County

2018 State of the County Health Report

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Community assessment of health and human services is an ongoing process that engages diverse agencies, providers, and individuals in identifying community assets and strengths, as well as unmet needs. A formal assessment process is undertaken every four years. Leadership for this collaborative process is provided by the Public Health Authority of Cabarrus County and Healthy Cabarrus. This report, the 2018 State of the County Health (SOTCH), serves as an update to the 2016 Community Needs Assessment. Information provided within this report is specific to the identified priority health issues: substance use, mental health, and childhood obesity; mortality and morbidity data; as well as emerging issues and new initiatives.

Cabarrus County

Located in south central North Carolina, Cabarrus County spans an area of 364.39 square miles and is bordered by Stanly, Union, Mecklenburg, Iredell, and Rowan counties. Cabarrus is largely urban, but includes a significant number of rural pockets across the county. Municipalities in Cabarrus include Concord, Harrisburg, Kannapolis, Mount Pleasant, and Midland.

To review previous State of the County Health reports or Community Needs Assessments, visit www.healthycabarrus.org/data. If you would like additional information regarding materials or data referenced in this report, or to request a presentation call 704-920-1282.

Priority Health Issue Updates and Data

Substance Use and Misuse

The Substance Use Community Health Improvement Plan (action plan) outlined the focus to decrease the number of residents 12 to 17 years old who report illicit drug use. Changes within the Substance Abuse and Mental Health Services Administration (SAMHSA) - National Survey on Drug Use and Health (NSDUH) shifted data metrics and no longer include the following measures: illicit drug use in the past month, nonmedical use of pain reliever in the past year, illicit drug use disorder, and needing but not receiving treatment for illicit drugs. Since the term 'illicit drugs' encompasses multiple commonly used illegal drugs including marijuana, heroin, cocaine and methamphetamines, the data showed gaps due to respondent interpretation. Both CCS and KCS plan to administer the Cabarrus Youth Substance Use Survey in the spring of 2019.

SAMHSA- NSDUH, 12-17 years old who reported substance use within the past year.

	2012-2014	2014-2016
Marijuana	12.72%	11.49%
Heroin	*	*
Cocaine	*	*

*North Carolina Substate Region - Cardinal Innovations Healthcare Solutions 1)*small sample estimates were suppressed if less than 5.35%*

Cabarrus County EMS – Number of Patients Administered Narcan

	2016	2017	2018
Opioid Specific Calls	163	418	236

According to Cabarrus County EMS, there were 27 opioid related deaths in 2017 and only 10 deaths in 2018. This year, Cabarrus County EMS started providing Narcan/naloxone to patients who refused transport to the hospital following an opioid overdose. On average, six opioid overdose patients refused transport to the Emergency Department each month.



Substance Use Action Plan Progress

Reconnect for Resilience – Trauma Informed Training

LifeSkills Training (LST) and Seeking Safety were originally outlined within the community health improvement plan. After further investigation into necessary capacity building, it was identified that school staff desired a greater understanding of resilience and strategies to respond to Adverse Childhood Experiences (ACES). In 2018, 27 CCS and nine KCS teachers, support staff and administrators were trained in Reconnect for Resilience. The Reconnect for Resilience (RFR) curriculum is trauma-informed and resiliency-focused, offering practical strategies to promote balance and well-being in the face of stress or trauma.

STOP Act – Prescriber Training

Cabarrus Health Alliance and Carolinas HealthCare System-NorthEast co-sponsored Opioids: A Crisis in Cabarrus County

– Opioid Prescriber Training, hosted on Wednesday, May 9th at Hotel Concord. Approximately 50 physicians, pharmacists, and allied health professionals received training on the local effects of the opioid crisis, community response, and available resources to which patients can be referred.

According to the North Carolina Controlled Substance Reporting System (CSRS) there has been a 62% decrease in opioid pills dispensed in Cabarrus County from Q4 2014 to Q2 2018.

Medication Take-Back Events

On April 28, 2018, seven local pharmacies and community organizations participated in the National DEA Medication Take-Back event. The event collected a total of 157.5 pounds of medications. One site alone, Cannon Pharmacy – Concord, collected more than 80 pounds.

School Social Norms Campaign

Social Norms Marketing Campaign (SNMC) builds peer support for healthy decision-making skills by revealing the actual, healthy norms of the teen population. The SNMC is designed to support and reiterate lessons learned in health classes and form accurate positive youth norms among peers. High school mentors designed strategically placed messages in eight middle and high schools to discuss topics regarding: school climate, healthy relationships, drugs/alcohol, sexual health, self-esteem and a variety of other topics. These mentors also manage a social media platform that reaches over 500 students and has a positive impact.

CommUNITY Conversation

The 8th CommUNITY Conversation in Cabarrus County was hosted in Midland on March 8, 2018. Attendees learned about local trends and data, as well as the dangers of opioid misuse. Information regarding prevention strategies and local treatment resources were available.

Substance Use Disorder Screening Tool for Incarcerated Individuals

Former Cabarrus County Sheriff Brad Riley expanded the focus of the local Stepping Up Initiative to encompass more than just those with mental illness. Local plans include identifying mental illness and substance use disorder among the Cabarrus jail population, providing proper treatment and developing manageable strategies to help individuals post incarceration.

Electronic Medical Record – Inpatient Opioid/Narcan Education

Carolinas HealthCare System implemented a system-wide protocol within their electronic medical record (EMR) to address prescription medication misuse. If an opioid is prescribed at inpatient discharge, opioid and Narcan education will auto-populate within the patient's discharge instructions.

Mental Health

Over the last year, Carolinas HealthCare System (CHS) – NorthEast has seen decreases in overall psychiatric admissions to the emergency department. CHS NorthEast houses the regions only geriatric in-patient behavioral health ward, causing the increase in number of geriatric psychiatric patients. Due to this fact, many out-of-county patients are transported to this facility.

Total Number of Psychiatric ED Admissions at Carolinas HealthCare System - NorthEast

	2015	2016	2017	2018*
Total Psychiatric Patients	1,576	1,824	1,922	1,804
Total Pediatric Psych (0-17)	275	306	333	316
Total Adult Psych (18-65)	1,162	1,378	1,448	1,310
Total Geriatric Psych (66+)	139	140	143	167

*Carolinas HealthCare System- Emergency Department Electronic Medical Record *2018 Data is projected estimates, not finalized*



Mental Health Action Plan Progress

Jail Based Case Management

Daymark Recovery Services led the development of the jail-based mental health and substance use screening tool. The five-page screening is completed by the incarcerated individual and the Stepping Up Coordinator. In Quarter 4 of 2018, data showed that 94% of persons involved in the Stepping UP program had not been re-incarcerated in Cabarrus County. Nineteen-percent of program participants made their first scheduled treatment appointment and 19% remain involved in their treatment services.

Mental Health First Aid

Mental Health First Aid is a national program to teach the skills to respond to the signs of mental illness and substance use. Twelve Adult – Mental Health First Aid (MHFA) trainings were hosted in 2018, along with six Youth MHFA and one Veteran MHFA trainings. The Mental Health Task Force – MHFA Collaborative collectively trained 277 people in Cabarrus County, including elected officials, city and county government, teachers, school nurses, and lay community members.

Access Tools for Mental Health Services

The Cabarrus Network of Care provides community members, partner agencies and organizations access to a comprehensive directory of services. The Mental Health Task Force – Access to Care workgroup conducted an analysis of all services within the Mental Health service category. The workgroup collaborated with CHA staff to ensure that all providers and organizations were properly categorized. The monthly traffic report for the Network of Care shows an increase from 1,184 visits in January 2016 to 2,859 visits in January 2017. Other platforms and tools have been developed to serve Cabarrus residents seeking mental health services or information:

Community Resource Hub (Aunt Bertha), Cabarrus County Crisis Support Brochure, and Roadmaps to Behavioral Health.

Crisis Intervention Team Training

Concord Police Department has 67% of its force (119 officers, five civilian staff) and Kannapolis Police Department has 69% of its force (54 of 78 officers) trained in Crisis Intervention Team training. CIT officers have undergone training through Cardinal Innovations Healthcare, to de-escalate without force, properly restrain individuals and make initial assessments on how to handle the situation.

Childhood Obesity

Childhood obesity is a serious problem in the United States and in Cabarrus County, with nearly one in three children in our community classified as overweight or obese. Even though local overweight and obesity rates remain stable over the last year, the long-term effects on children's physical, social, and emotional health are still of major concern. A child with obesity is more likely to have obesity as an adult. An adult with obesity has a higher risk of developing heart disease, type 2 diabetes, metabolic syndrome, and many types of cancer.

Percent of Children Identified as Overweight or Obese in Cabarrus County

	2013	2014	2015	2016	2017
2-4	27%	26%	28%	19%	20%
5-8	30%	29%	30%	26%	26%
9-13	37%	37%	38%	36%	36%
14-18	38%	37%	38%	38%	38%
Total	34%	33%	34%	31%	31%

**Overweight or Obese are classified by having a BMI in the 85 percentile and higher - Carolinas HealthCare System-Electronic Medical Record*



Childhood Obesity Action Plan Progress

Smarter Lunchroom Movement

In August 2018, a refresher Smarter Lunchrooms Movement (SLM) training was hosted by Carolinas HealthCare System - NorthEast for all Cabarrus County Schools (CCS) and Kannapolis City Schools (KCS) cafeteria managers. The training provided a recap of the principles associated with SLM and reviewed the 'bronze, silver and gold designation.'

SLM 2017-2018 School Year Designation

	CCS	KCS
Bronze	5	2
Silver	30	2
Gold		1

Lifestyle Triple P

Carolinas HealthCare System – NorthEast was awarded nearly \$12,000 to recruit and implement the Lifestyle Triple P program. CHS – NorthEast plans to contract with a local Triple P Lifestyles provider to facilitate the group class starting in January 2019. Local pediatric offices began making referrals to the program for parents with children ages 5 to 10 years old who are concerned about their child's weight and activity level.

Cabarrus Play and Grow Map

Through the Cabarrus Wellness Coalition, the Cabarrus Partnership for Children and CHA were able to develop and design the Cabarrus Play and Grow map design. The Cabarrus County Convention and Visitors Bureau purchased 35,000 copies of the map for distribution within the community.

Maps were included in both CCS and KCS elementary back-to-school packets for families. Other distribution locations included libraries, pediatric offices, businesses, parks and recreation departments, YMCAs and municipal offices.

Water Bottle Distribution

In an effort to increase water intake and limit consumption of sugar sweetened beverages among children, three pediatric offices provide water bottles to patients during well-child checks. Following a discussion about the importance of water through the use of the 5210 Pediatric Patient Questionnaire, the physician provides the child and siblings with a 5210 branded water bottle. The water bottle initiative is funded by the Children WIN Executive Steering Committee. To increase the reach of the initiative, four Healthy Together 5210 schools distributed water bottles to all students, totaling 4,200 bottles.

School Gardens

Through the CDC Racial and Ethnic Approaches to Community Health (REACH) Grant, CHA worked with four schools to create a new or revitalize an existing school garden. GW Carver, Odell Primary, Winecoff and WM Irvin Elementary Schools all participated in the REACH School Garden initiative. Each site hosted a STEM professional development training for teachers and school garden committee members which provided an overview of garden committee development, raised bed design and maintenance, in addition to effective strategies for teaching garden basics to elementary school aged youth.

Safe Routes to School and Let's Go NC!

CHA's regional Safe Routes to School (SRTS) Coordinator and an active transportation consulting team worked with Forest Park Elementary School (FPES) administration to create a SRTS Action Plan. The goal of the plan was to increase safe walking/rolling to and from school (and at school) in order to improve the health of students, families and staff. The planning team recognized that the school did not have sufficient infrastructure for most students to walk/bike safely to and

from school. Through a local partnership, a walking track was installed to accommodate walk-at-school programming for all students. Additionally, the SRTS Coordinator received approval from the North Carolina Department of Transportation to partner with the KCS physical education curriculum development team to modify the *Let's Go Biking!* module of *Let's Go NC!* for implementation within the 3rd grade at FPES and throughout the district. Woodrow Wilson Elementary is also currently implementing the curriculum on an annual basis as part of their PE program.

Physical Activity Opportunities for Latino Children

Locally, Latino children are less likely to participate in physical activity programs. While most Latino children speak English and could participate in mainstream programs, their parents only speak Spanish, and programming and registration information is not translated, thus limiting the populations who are knowledgeable of local youth programs. To increase the activity of local Latino children, Cabarrus Health Alliance's REACH grant worked with park departments to promote their programming for children in Spanish. As a result, Concord and Kannapolis Parks and Recreation Departments translated flyers promoting youth activities and distributed them among the Latino population. In addition, physical activity and nutrition summer camp scholarships were awarded with 90% of the recipients were Latino children.

Reach Out and Read

Seven pediatric offices actively participate in the Reach Out and Read (ROR) program with the addition of Novant Health – Lakeside Primary Care - Speedway in 2018. The ROR program includes 10 books, including the Busy Body Book, which include a physical activity and/or nutrition foci. In total, 920 Busy Body Books were distributed through practices in Cabarrus County.

Building Healthy Lifestyles in All Directions

In 2018, the Cabarrus Partnership for Children and University of North Carolina Charlotte worked with 11 child care centers and part-day preschools to implement GO NAPSACC, Be Active Kids, Eat Play and Grow, Tooth Fairy 101, as well as assisted centers in receive their Breastfeeding Friendly designation.

Outcomes:

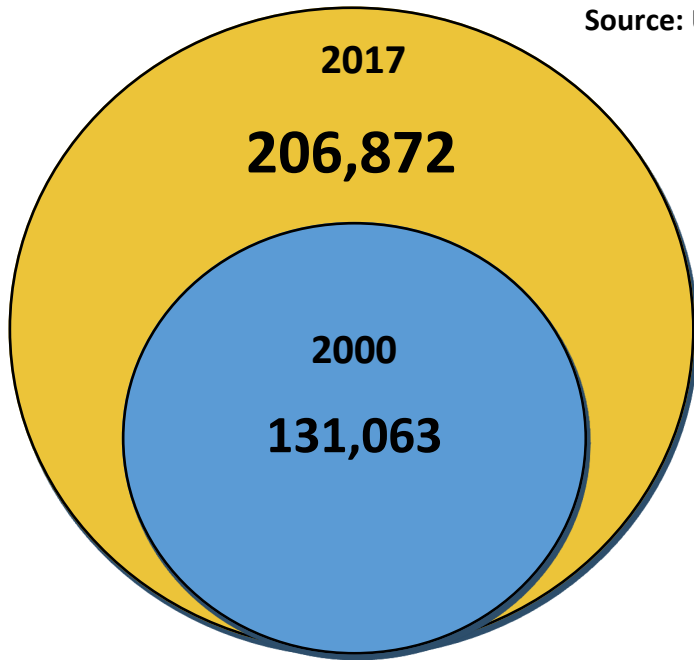
- Parents reported that their child received at least 60 minutes of physical activity a day: 23% before the program and 63% after the program.
- Parents improved in 10 out of 11 nutrition and physical activity knowledge areas as well as 4 out of 7 behaviors.
- Using pedometers in child care centers to increase awareness of physical activity, increased by half an hour per day.
- 643 children given a BMI screening in 2018; 1863 BMI screenings completed since FY15/16.



Continued Growth in Cabarrus County

POPULATION CHANGE SINCE 2000

Source: US Census



Cabarrus County's population has seen consistent growth over two decades. Between 2000 and 2017, Cabarrus County's population increase by 57.8% percent. In comparison, North Carolina's population increased by only 29% .

This extreme growth impacts many agencies and organizations providing services to residents, but most notable is the county's school systems. Cabarrus County Schools 10-year plan estimates more than \$220 million for projects within the next six to 10 years to keep up with the growing population.

2017 POPULATION BY AGE

0—14 years old	44,684 (21.6%)
15—24 years old	26,066 (12.6)
25—39 years old	38,478 (18.6%)
40—59 years old	60,407 (29.2%)
60—79 years old	31,858 (15.4%)
80+ years old	5,585 (2.7%)

2017 POPULATION BY RACE & ETHNICITY

White	136,329 (65.9%)
African American	35,440 (18.5%)
Hispanic	21,515 (10.4%)
Two or More Races	4,758 (2.3%)

2017 POPULATION BY SEX

Male	100,747 (48.7%)
Female	106,125 (51.3%)

RACE AND ETHNIC DIVERSITY

	2010	2017
White	79%	68.2%
African American	15%	17.5%
Hispanic	10%	10%



Mortality and Morbidity Data

Rates of morbidity, mortality, and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests, and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

	Cabarrus	North Carolina
Fetal Death Rate per 1,000 Deliveries	7.8	6.8
Neonatal (<28 days) Death Rate per 1,00 Live Births	3.9	4.9
Post-neonatal (28 days – 1 year) Death Rate per 1,000 Live Births	1.7	2.3
Infant Death Rate per 1,000 Live Births	5.6	7.1
Unadjusted Child (0-17) Death Rate per 100,000 population	44.3	57.8
Unintentional Poisoning Mortality Rate per 100,000	19.6	16

State Center for Health Statistics - 2019 County Health Data Book

Leading Causes of Death <i>*Unadjusted Death Rates per 100,000 Population</i>	Cabarrus	North Carolina
Total Deaths – All Causes	781.1	878.1
Cancer	162.2	191.4
Disease of Heart	153.0	180.9
Chronic Lower Respiratory Diseases	47.5	51.9
Alzheimer's Disease	45.8	36.5
Unintentional Injuries <i>*Excluding Motor Vehicle</i>	42.4	35.9
Cerebrovascular Disease	41.7	48.2
Pneumonia and Influenza	22.1	19.7
Diabetes Mellitus	21.0	27.0
Nephritis, Nephrotic Syndrome and Nephrosis	15.3	18.8
Suicide	12.5	-

It should be noted that **unintentional injuries **excluding motor vehicles**** reported the largest rate increase is due to increasing rates of opioid overdose.

A significant increase in the rate of death associated with Alzheimer's disease was noted in the 2017 State of the County Health Report. Rate of death per 100,000 population increased from 36.2 in 2016, to 45.6. Besides a rapidly growing aging population, no specific conclusion can be drawn or correlated to the increase. The increased rate of death slowed drastically with only a 0.2 increase.

2017 State of North Carolina and 2015-2017 County Life Expectancy at Birth

Life Expectancy	2016	2017
North Carolina	77.4	77
Cabarrus	78.5	78
Rowan	75.3	75.1
Stanly	76.3	75.8
Union	79.5	79.6
Iredell	77.6	77.3
Mecklenburg	80.2	80.3

Life expectancy is often used to gauge the overall health of a community. Shifts in life expectancy are often used to describe trends in mortality. Life expectancy represents the average number of additional years that someone at a given age would be expected to live if he/she were to experience throughout life the age-specific risk of death observed in a specified period of time.

An Emerging Issue that Affects Health Status: Student Vaping and Synthetic Cannabinoids

Within the first five weeks of 2018, 18 high school students in Cabarrus County were transported by ambulance to nearby hospitals after vaping synthetic substances. Symptoms reported included fast heart rate, seizures, severe vomiting and headaches.

Local school systems, law enforcement, and emergency/medical services urged the community to be aware of this emerging problem and urged them to talk with children about the harms. Increased monitoring of e-cigarette, vaping or JUUL use is necessary, as some products are legally available to adults 18 and older. Both school systems, along with CHA and Healthy

Cabarrus have worked together to adjust questions outlined within the Cabarrus Youth Substance Use Survey to increase monitoring of local data related to vape use.



New Initiatives

Lifestyle Medicine

Lifestyle Medicine is use of evidence-based therapeutic approaches to prevent, treat, and reverse chronic diseases like diabetes, hypertension, and obesity. It employs evidence-based principles and prescribes

interventions focusing on individual behaviors in the areas of sleep, exercise, stress, relationships, substance use, and nutrition. Knowing that more than 80% of chronic conditions such as diabetes, heart disease, and stroke, could be avoided through the adoption of healthy lifestyle recommendations, CHA has initiated



steps to begin the integration of LM into their clinical operations as well as those of the local Community Free Clinic (CFC). In order to build capacity for this

integration, 17 healthcare providers from CHA and CFC of Concord will be trained in the Lifestyle Medicine Core Competencies Program through the American College of Lifestyle Medicine and American College of Preventive Medicine.

Coursework covers 30 American Medical Association hours and the core competencies are defined by a blue ribbon panel of representatives from the American Academy of Family Physicians, American Medical Association, American College of Physicians, and others. Both clinics anticipate the integration of LM concepts into their clinics as of summer 2019. In addition, both clinics will refer patients to community education programs such as cooking classes, support groups, and the evidence based Stanford Model Chronic Disease Self-Management Program. Patients will be assessed on various lifestyle areas, receive prescriptions and referrals when needed as part of a larger continuum of care.

eWIC Implementation

CHA's Women, Infant and Children's (WIC) Program moved from a paper-based method of WIC benefit issuance to an electronic benefit transfer system (eWIC).

Instead of paper food instruments, WIC food benefits are issued into an electronic benefit account at the local WIC clinic. Families use their eWIC card and PIN to access their food benefits at grocery stores and other approved WIC vendors. The new electronic system addresses challenges and barriers previously faced by the participant, as well as the vendor at point of sale.

Peer Support Specialists

To better serve active substance using clients and patients, Cabarrus Health Alliance and Carolina's HealthCare System hired Certified Peer-Support Specialists (CPSS). CPSS will work directly with those in active addiction to link them to the most appropriate level of care. Peer supports enhance CHA and the Emergency Department's response to the opioid crisis and create a sense of active participation by those in recovery, creating a more authentic partnership, and bridging the public health and harm reduction gap to promote safety and wellbeing.

El Puente Hispano

The Hispanic population in the United States faces many challenges that include disparities in health, education and housing, and language and transportation barriers exacerbate their many

obstacles. Cabarrus County has a 10.1 percent Hispanic population, who in general, face these same problems which stunts their ability to assimilate and grow. Aware of the many challenges faced by this community, a group of Latino professionals from the area created "El Puente Hispano" (The Hispanic Bridge). The goal of this local nonprofit is to develop programs that promote equity and improve the lives of the individuals and their families. El Puente Hispano firmly believes that with the necessary resources and support, the Latino Community can excel and become self-sufficient. Their programs include tutoring and after-school programs for children, ESL classes for adults, parental education sessions and mental health awareness workshops for women among others. They also link families to existing services and resources such as food, housing aid and others.



Community Awareness

Communication with key stakeholders and community members regarding the identified community health priorities is vital to community health improvement. Following review by the Board of Health and Healthy Cabarrus Executive Committee, copies of the 2018 State of the County Health Report will be disseminated to the Healthy Cabarrus Advisory Board, as well as target community locations. Targeted locations include local libraries, community centers, park and recreation departments, federally qualified health centers, in addition to other sites with high community member presence. The Healthy Cabarrus Executive Director will present the report to local municipal leaders and the Cabarrus County Board of Commissioners.