Cabarrus County 2015 State of the County Health Report

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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. Cities and towns in Cabarrus include Concord, Harrisburg, Kannapolis, Mount Pleasant, and Midland.

Self-branded as the Center of American Motorsports, Cabarrus County is well known for its NASCAR industry which includes the Charlotte Motor Speedway and several major race shops. Cabarrus is also home to the NC Research Campus, and Concord Mills Mall, the largest tourist attraction in North Carolina.

Community Health Data Dashboard

Healthy Cabarrus has created a dashboard of 98 socio-economic indicators which provide an overview of the social health and well-being of Cabarrus County. By tracking the indicators over time, community leaders can identify areas where collective attention and action are needed.





Carolinas Medical Center NorthEast

The dashboard can be found under the Data tab at www.healthycabarrus.org.



Focus - Collaboration - Improvement

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REVIEW OF OUR PRIORITY HEALTH ISSUES

The County's most recent 2012 Community Health Assessment identified the following priority issues:

- Wellness & Obesity
- Education
- Housing
- **Mental Health**
- Under/Unemployment
- Access to Healthcare

LOCAL PROGRESS ON PRIORITIES SINCE 2014

Obesity & Diabetes

- Reorganized the Cabarrus Wellness Coalition to Child Maltreatment incorporate a family approach (adult and child) to reducing obesity rates and have engaged over 40 additional community partners to the coalition as a result.
- Hosted 2 mobile farmers markets, worked with 3 corner stores to implement healthy changes, and partnered with Kannapolis Intimidators baseball stadium to implement a new Healthy Concessions policy, resulting in easier access to healthy food and beverage options.
- Trained medical providers and clinical staff at five primary care clinics in the Exercise is Medicine model and referrals to new community resources.
- Partnered with 4 faith-based organizations and 2 schools to increase access to physical activity through joint-use agreements and Safe Routes to School plans.

Diabetes

- Provided clinical support and self-management counseling to 210 type 2 diabetes patients. Offered telephone health coaching to 30 participants.
- Provided evidence-based workshops addressing foot care, dental care, and general diabetes management to 230 participants.

- Accredited 205 providers representing a variety of community agencies in Triple P, an evidence-based program to reduce child abuse, out of home placements, and ER visits due to child maltreatment.
- Triple P providers reached over 4,686 caregivers (12.6% of the county's population) and over 6,374 children (12.6% of the county's population) in Cabarrus County since program delivery began in March 2013.
- The county's child maltreatment rate dropped two years in a row (SFY 2013-14 and 2014-15), which occurred after Triple P implementation. Data for the next two years may provide additional insight about the longer-term county-wide trends.

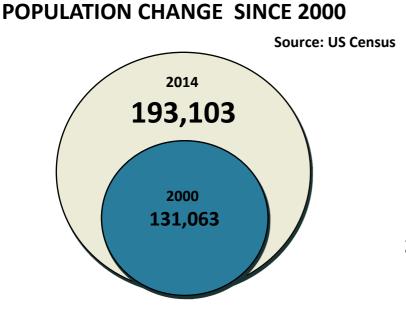
Substance Use

- Conducted the 2nd annual youth survey on behavior and attitudes towards substance use. Ten percent of all middle and high school students participated.
- Distributed 150 naloxone kits to primary care sites.
- Installed two new medication drop-boxes in partnership with the municipalities of Concord and Kannapolis.
- Obtained an AMA grant to provide stress-free zones within the school setting to decrease rates among students.

These priorities were selected for action planning: **Obesity Diabetes**

Child Maltreatment Substance Use

CHANGES IN OUR COUNTY: DYNAMIC GROWTH



Cabarrus County's population boom has shown a consistent increase over the past decade. Growth is occurring predominantly in the western part of the county. The area near the Mecklenburg County line and I-485 are experiencing higher growth rates due to transportation access and proximity to Charlotte.

In 2000, the town of Harrisburg's population was a third of what Census estimates are today (13,996 residents). The rural town of Midland has also seen a significant amount of growth since incorporating in 2000.

2014 Population by Age

| 0—14 years old | 41,311 (22.1%) |
|-----------------|----------------|
| 15—24 years old | 23,818 (12.7%) |
| 25—39 years old | 35,283 (18.8%) |
| 40—59 years old | 54,302 (29.0%) |
| 60—79 years old | 27,130 (14.5%) |
| 80+ years old | 5,382 (2.9%) |

2014 Population by Race and Ethnicity

| White | 132,750 (70.9%) |
|--------------------|-----------------|
| African American | 30,521 (16.3%) |
| Hispanic | 18,322 (9.8%) |
| Other Non-Hispanic | 5,633 (3.0%) |

2014 Population by Sex

| N | /lale | 91,353 (48.8%) |
|---|-------|----------------|
| F | emale | 95,873 (51.2%) |



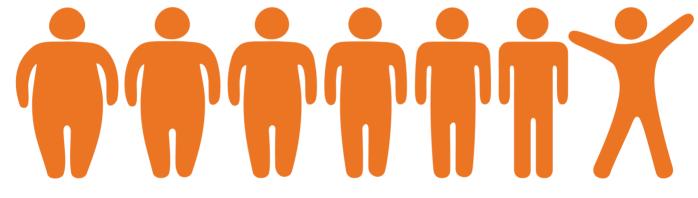
CHANGES IN OBESITY DATA

Overweight and obesity pose significant health issues for both children and adults. Excess weight is not only a risk factor for several serious conditions, but also exacerbates existing conditions. Obesity and overweight

| % of Adults with BMI greater than 25.00 (overweight or obese) | | | | | | | |
|---|------|------|--|--|--|--|--|
| Charlotte AHEC Region North Carolina | | | | | | | |
| 2011 | 62.2 | 65.1 | | | | | |
| 2012 | 64.2 | 65.8 | | | | | |
| 2013 | 62.6 | 66.1 | | | | | |
| 2014 | 61.5 | 65.6 | | | | | |

Source: NC Behavioral Risk Factor Surveillance System

define weight ranges greater than what is generally considered health for a given height. This can be determined by using weight and height to calculate a measure called the "body mass index" (BMI). An adult who has a BMI between 25 and 29.9 is considered overweight. An adult who has a BMI of 30 or higher is considered obese.



CHANGES IN DIABETES DATA

| Diagnosed Diabetes Incidence Age-Adjusted Rate per 1,000 | | | | | | | | | | |
|--|---|------|------|------|------|-----|-----|--|--|--|
| 2006 2007 2008 2009 2010 2011 2012 | | | | | | | | | | |
| Cabarrus | 11.5 | 11.8 | 11.8 | 10.8 | 10.4 | 8.8 | 7.7 | | | |
| North Carolina | North Carolina 9.8 10.3 10.3 9.9 9.5 8.0 9.5 | | | | | | | | | |

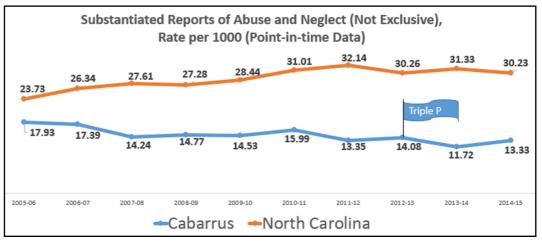
In 2011, Cabarrus County's rate of diagnosed diabetes dropped below the state average for the first time since the CDC began tracking county-level data. However, the county's age-adjusted death rate due to complications from diabetes mellitus has increased while the state average has remained relatively steady.

| Age Adjusted Death Rate of Diabetes Mellitus | | | | | | | | |
|--|------|------|------|------|--|--|--|--|
| 2007-2008-2009-2010-2011201220132014 | | | | | | | | |
| Cabarrus | 18.4 | 19.7 | 20.0 | 21.4 | | | | |
| North Carolina | 22.0 | 21.8 | 21.7 | 22.1 | | | | |

Source: CDC Diabetes Atlas

CHANGES IN CHILD MALTREATMENT DATA

Over a 10 year period, the rate of substantiated reports of abuse and neglect continues to declines while the state average steadily The Child increase. Coalition Maltreatment began implementing Triple P (Positive Parenting Program) 2012-13. which in has furthered impacted this rate. The next few years may Coalition's efforts.



Source: UNC at Chapel Hill Jordan Institute

provide additional insight about the longer-term county-wide trends on the sustainable impact of the Child Maltreatment

CHANGES IN SUBSTANCE USE DATA

Naloxone is a medication that is used to reverse the effects of opioids, especially in overdose. The chart to the right shows the number of calls EMS responded to an overdose and administered Naloxone. While using Naloxone has been protocol for years, the

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--|------|------|------|------|------|------|------|------|
| # of EMS calls responding to an overdose | 305 | 383 | 333 | 584 | 383 | 373 | 369 | 444 |
| # of times EMS used Naloxone | 117 | 166 | 175 | 170 | 187 | 240 | 231 | 234 |

Source: Cabarrus County Emergency Medical Services, 2015

Substance Use Coalition has locally advocated for health providers to prescribe naloxone as a way to prevent additional deaths from overdoses.

Prescription drugs can be misused or abused in several ways, with diversion being one way for acquiring such drugs. Local Medicaid billing data from Community Care of Southern Piedmont can help shed light on this growing issue in Cabarrus County. In 2015, there were 7,233 adult patients with Medicaid. Of this, 4328 had received <u>either</u> a prescription fill of a controlled substance (narcotic or benzodiazepines) in the last year. **975** of those patients (or 23%) received <u>both</u> a narcotic and a benzo. And among those 975 patients, 293 (or 30%) of those patients had visited <u>multiple</u> (4+) pharmacies to fill prescriptions. This is concerning, as this can place a person at potential risk for both intentional or unintentional drug-related problems.

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MORTALITY & LIFE EXPECTANCY

Source: NC State Center for Health Statistics, 2009-2013

| | CABARRUS | NORTH CAROLINA |
|--|----------|----------------|
| Life Expectancy at Birth County 2012-2014 & State 2014 | 78.2 | 78.3 |
| Fetal Death Rate per 1,000 Deliveries | 6.5 | 6.6 |
| Neonatal (<28 days) Death Rate per 1,000 Live Births | 3.2 | 5.0 |
| Post-neonatal (28 Days—1 year) Death Rate per 1,000 Live Births | * | 2.3 |
| Infant Death Rate per 1,000 Live Births | 4.8 | 7.3 |
| Unadjusted Child (0-17) Death Rate per 100,000 pop | 37.9 | 59.1 |
| Unadjusted Death Rate per 100,000 population | 770.2 | 830.0 |
| Unintentional Poisoning Mortality Rate per 100,000 pop | 10.9 | 11.7 |

* Rate based on small numbers. Fewer than 20 cases are unstable and not reported.

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.

| LEADING CAUSES OF DEATH Unadjusted Death Rates per 100,000 Population | CABARRUS | NORTH CAROLINA |
|--|----------|----------------|
| TOTAL DEATHS—ALL CAUSES—ALL AGES | 770.2 | 830.0 |
| Cancer (All Sites) | 166.5 | 188.1 |
| Heart Disease | 154.5 | 178.9 |
| Chronic Lower Respiratory Diseases | 51.2 | 48.4 |
| Cerebrovascular Disease | 44.0 | 45.2 |
| Alzheimer's Disease | 34.4 | 29.0 |
| Unintentional Injuries (Excluding Motor Vehicle Injuries) | 33.4 | 29.9 |
| Pneumonia and Influenza | 20.2 | 18.4 |
| Diabetes Mellitus | 19.5 | 23.3 |
| Nephritis, Nephrotic Syndrome, and Nephrosis | 15.0 | 18.3 |
| Suicide | 14.5 | |

Source: NC State Center for Health Statistics, , 2009-2013

The overall death rate of a population reflects the average life expectancy of individuals in that population. The lower the death rate, the higher the life expectancy. Rate is determined by the total number of deaths coded based on ICD-10 codes and the total resident population.

MORBIDITY

Source: NC State Center for Health Statistics, 2013

| INPATIENT HOSPITAL UTILIZATION & CHARGES* | TOTAL CASES | DISCHARGE RATE (PER 1,000 POP) | AVG DAYS STAY | TOTAL CHARGES | AVG CHARGE PER DAY | AVG CHARGE PER CASE |
|--|----------------|--------------------------------------|---------------------|------------------|--------------------------|---------------------------|
| ALL CONDITIONS—CABARRUS | 17,519 | 93.6 | 4.7 | \$612,985,070 | \$7,494 | \$35,006 |
| ALL CONDITIONS—NORTH CAROLINA | 941,242 | 95.6 | 5.0 | \$34,583,331,135 | \$7,405 | \$36,752 |

*Determined by patient's county of residence. Excluding newborns & discharges from out of state hospitals.

The chart above compares the inpatient hospital utilization, discharge rates, and average charges per 1,000 population in Cabarrus County and North Carolina. The chart to the right compares the hospitalization rate due to asthma in Cabarrus County and North Carolina.

| HOSPITALIZATION RATE DUE TO ASTHMA | CABARRUS | NC |
|---------------------------------------|----------|-------|
| ALL AGES per 100,000 pop | 90.8 | 91.6 |
| AGES 0—14 per 100,000 pop | 116.2 | 148.9 |

Cancer in Cabarrus County

Cancer is a frequently occurring disease in North Carolina from 2007 to 2012. Cancer incidence rate is defined by all cases of malignant cancer diagnosed and the total number of residents in the population. The Central

Cancer Registry (CCR) collects and analyzes data on all cancer cases diagnosed among North Carolina residents to inform the planning and evaluation of cancer control efforts. All healthcare providers are required to report cases to the CCR, and the primary data source is the hospitals of the state. CCR projects the number of new cancer cases and deaths expected each year in order to estimate the contemporary cancer burden, since data lag three to four years behind the current year.

| CANCER INCIDENCE | CABARRUS | NC |
|--|----------|-------|
| RATES 2007-2012, Age Adjusted to the 2000 Census | | |
| ALL CANCERS | 554.3 | 496.1 |
| Colon/Rectum | 41.9 | 41.5 |
| Lung/Bronchus | 82.0 | 73.3 |
| Female Breast | 167.1 | 157.2 |
| Prostate | 168.5 | 150.4 |

| PROJECTED NEW CANCER CASES & DEATHS Projections estimated using 2007-2011 invasive cancer incidence and 2008-2012 mortality rates and 2014 population estimates. | NEW CASES CABARRUS | DEATHS CABARRUS | NEW CASES NORTH CAROLINA | DEATHS NORTH CAROLINA |
|---|-----------------------|---------------------------|--------------------------------|------------------------------------|
| ALL CANCERS | 995 | 340 | 57,298 | 20,155 |
| Colon/Rectum | 82 | 28 | 4,746 | 1,665 |
| Lung/Bronchus | 146 | 104 | 8,624 | 6,180 |
| Female Breast | 172 | 24 | 9,610 | 1,398 |
| Prostate | 143 | 16 | 8,399 | 1,009 |

Source: NC State Center for Health Statistics



An Emerging Issue that Affects Health Status: Adverse Childhood Experiences

Adverse childhood experiences (ACEs) are potentially traumatic events that can have negative, lasting effects on health and wellbeing. These experiences range from physical, emotional, or sexual abuse to parental divorce or the incarceration of a parent or guardian.

Traditionally, the healthcare system has asked question to patients focusing on "What's wrong with you?" rather than "What happened to you?" A 1998 study from the Centers for Disease Control and Prevention of more than 17,000 middle-class Americans documents that ACEs can contribute significantly to negative adult physical and mental health outcomes.

Community agencies in Cabarrus County have joined together to make patients, clients, and individuals more aware of their ACE score, to connect them with resources, and to help them build resilience.

• A free community film screening of Paper Tigers and panel discussion was held at the GEM Theatre in Kannapolis on December 7, 2015 in partnership with Cabarrus Health Alliance, TRAIL Teen Task Force, STARS Program, Triple P, and both school districts. The movie examined the recent research on how ACEs alter the life course of individuals and how communities can work towards building resilience through trauma-informed care.

- The online resource, Cabarrus County Network of Care, was developed in 2015 through a community partnership to ease referrals from agency to agency and to highlight resources that are available to the community.
- Members of the Child Maltreatment coalition, the STARS Minority Youth Violence initiative, and the Innovative Approaches initiative have sought to bring awareness around ACEs to create traumainformed communities and to create system-wide change on how to build resilience within the community.

How can I get involved in Healthy Cabarrus?

To get involved in any of the Healthy Cabarrus coalitions or initiatives, visit www.HealthyCabarrus.org or call (704) 920-1303.

For the complete community assessment report and supporting documentation, visit www.HealthyCabarrus.org.

