# **Durham County**

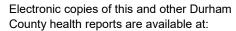
# **2016 State of the County Health Report**

This report provides an interim update from the 2014 Durham County Community Health Assessment (CHA) on health trends among county residents. It provides the most current data highlighting county demographics, leading causes of death, and the county's six health priorities. Its purpose is to provide the community with information on the health of its residents and to serve as a resource for grant writing, local policies, budgets and programs.

#### 2015-2018 Health Priorities

- Access to Healthcare
- Education
- HIV and STIs
- Mental Health and Substance Use
- Obesity and Chronic Illness
- Poverty



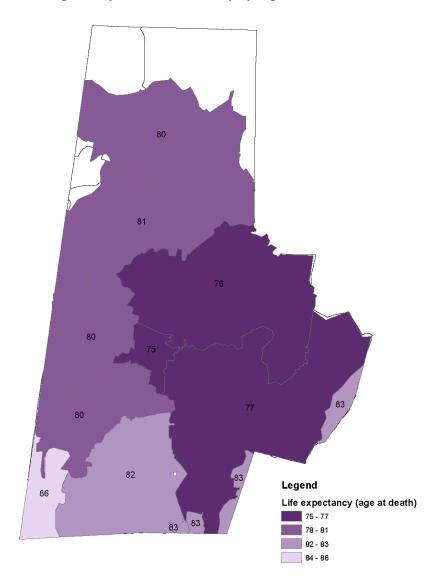






# **Major Morbidity and Mortality Data**

Life Expectancy in Durham County by Zip Code, 2015\*4

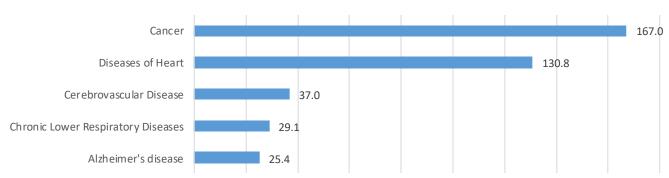


Life Expectancy in Durham County by Group <sup>11</sup>				
All	79.8			
Males	77.1			
Females	82.3			
White	82.0			
Black	76.7			

In Durham County, life expectancy was highest among Whites and females in 2015. Life expectancy also varied by zip code as seen in the map to the left, highlighting the effect of location on life expectancy. The correlation between life expectancy and zip code has been illustrated across the country.

During 2011-2015, the leading cause of death in Durham County was cancer at a rate of 167.0 per 100,000 population. Though homicide was not a leading cause of death, the rate continues to be monitored. The average homicide rate per 100,000 population slightly increased from 9.5 in 2014 to 10.2 in 2015.

Durham County Leading Causes of Death, 2011-2015<sup>10</sup>
Age-adjusted death rates per 100,000 population



<sup>\*\*</sup>Zip codes that shared a border with another county were not included in the analysis.

# **Demographics**

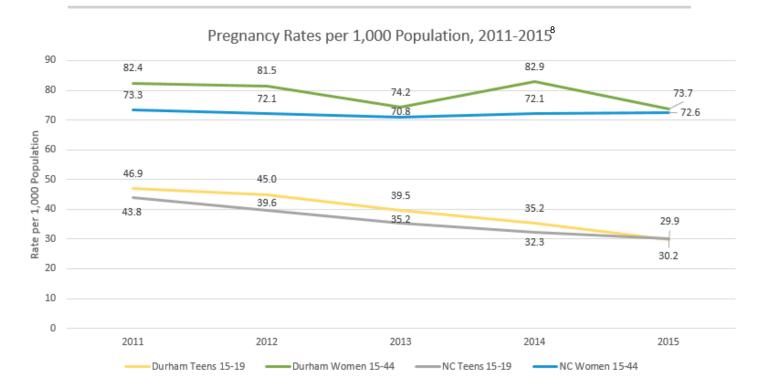
2011-2015 Durham County						
Demographic Estimates <sup>15</sup>						
Durham County Population Estimate: 288,817						
Sex	Estimate	Percent				
Male	138,537	48.0%				
Female	150,280	52.0%				
Age	Estimate	Percent				
Median Age	34.4					
Race and Ethnicity	Estimate	Percent				
American Indian and Alaskan Native	980	0.3%				
Asian	13,227	4.6%				
Black or African American	107,085	37.1%				
Hispanic /Latino	38,768	13.4%				
Native Hawaiian or Other Pacific Islander	116	0.0%				
White	121,493	42.1%				
Some Other Race	492	0.2%				
Two or More Races	6,656	2.3%				

Since 2010, the population in Durham County has grown by an estimated 30,239 people and the average age has slightly increased.<sup>15</sup>

The race and ethnicity proportions in Durham County have been relatively stable over the past five years, with no estimated changes of more than one percent in any one group.<sup>15</sup>

Despite the overall county population growth since 2010, birth rates among women 15-44 and among teens living in Durham have been decreasing. Durham's teen (15-19 years) pregnancy rate per 1,000 population dropped from 35.2 in 2014 to 29.9 in 2015. This downward trend can be seen in the figure below.

Birth outcomes are also improving in Durham County. The percent of infants born prematurely, that is those born before 37 weeks gestation, decreased from 11.9 during 2010-2014 to 10.1 during 2011-2015.<sup>12</sup>



# **Goals and Successes**

# **Durham County Government's Strategic Plan Health Goals**

- Decrease health disparities within the community.
- Strengthen the well-being of individuals and families through prevention and education.
- Partner with community resources to increase access to health and wellness services.

#### Successes

#### Robert Wood Johnson Foundation Culture of Health Prize Mini-Grant Results

The Partnership for a Healthy Durham awarded \$25,000 in Robert Wood Johnson Foundation (RWJF) Culture of Health Prize mini-grants to four Durham projects for implementation from July 2015 to June 2016. As a result, each project had an impact on Durham County residents and leveraged funding to become sustainable.

**HELP (Health Equipment Loan Program)**: Awarded \$10,000 to provide free durable medical equipment for loan to uninsured and underinsured Durham Country residents and reduce medical equipment waste. Funds were used for rental space at The Scrap Exchange, storage containers, parts and supplies and promotional materials. Twenty active volunteers donated nearly 1,200 volunteer hours. Approximately 467 pieces of equipment were donated and 205 loans were given in six months. HELP continues operations weekly at The Scrap Exchange, 2050 Chapel Hill Road.

**Durham Knows**: Awarded \$5,000 for an HIV testing public health campaign to reduce stigma and encourage Durham County residents to know their status. Funds were used for printing campaign materials, registration for community outreach events and incentives. As a result of the campaign working with Duke Health clinic leadership, HIV testing at Duke Health increased. Durham Knows is now funded through a grant from the Criminal Justice Institute at North Carolina Central University.

**Safe Routes to School**: Awarded \$5,000 to offer bicycle/pedestrian safety "Let's Go, NC!" curriculum and provide bicycles and equipment to fourth grade students at selected elementary schools. Funds were used to modify curriculum, transport, maintain and store materials, hire cycle class assistants and buy twelve bicycles to donate to Durham Public Schools. As a result of the project, three schools were piloted and bicycle safety knowledge increased 95-100% among students in post knowledge testing. Three more schools incorporated the curriculum in fall 2016. A follow up grant will be written to expand into more schools.

**Double Bucks for Seniors**: Awarded \$5,000 to Grocers on Wheels to provide vouchers to seniors to purchase fresh local fruits, vegetables, dairy, and meats at mobile markets. Senior Supplemental Nutrition Assistance Program (SNAP) beneficiaries received half off any EBT purchase. Approximately 1,429lbs of meats, dairy, and produce were sold to 232 participants. There were 20 site visits at four locations, serving 680 residents.



# **Innovation and Emerging Issues**

#### **New Initiatives**

Bull City United—Bull City United is a violence prevention program, housed in the Durham County Department of Public Health and funded by Durham County. This initiative uses the Cure Violence evidence-based model with a team of credible messengers who interrupt violence. The Cure Violence model recognizes violence as a public health issue. In this model, violence is preventable, can be stopped and everyone has a right to be free from violence. As with any public health issue, it requires that root causes are examined and systems are addressed to create change. The Cure Violence model has been shown to significantly reduce violent crimes.



Bull City United Team

Maternal and Child Health Grant- In 2016, the North Carolina Department of Health and Human Services, Women and Children's Health Section was allocated state funding to be distributed to local health departments to improve community outcomes for maternal and child health. Known as ICO4MCH, this initiative provides competitive funding to local health departments to implement evidence-based strategies that are proven to (1) improve birth outcomes; (2) reduce infant mortality; and (3) improve the overall health status of children ages zero to five. Durham County is one of five counties/multi-county regions in NC that received this funding and has picked four evidence-based strategies to work towards these goals:

- 1) Tobacco Cessation and Prevention
- 2) Long-Acting Reversible Contraception (LARCs)
- 3) Triple P (Positive Parenting Program)
- 4) Family Connects (Newborn Nurse Home Visiting Program)

This three-year grant will focus on the four evidence-based strategies above and puts a large emphasis on health equity and collective impact, or the commitment of a group of important partners from different sectors to a common agenda for solving a specific social problem.

#### **Emerging Issues**

**Increase in Syphilis Rate**– Since 2012, the syphilis rate in Durham County has increased by five times from 8.5 to 44.5 cases per 100,000 population. Most recently, in 2015, Durham County had the highest syphilis rate in the state. The upward spike in syphilis cases is particularly notable, given that syphilis is associated with an increased risk of acquiring HIV.

Affordable Care Act Repeal— The future of the Affordable Care Act is unsure as a new federal legislature vows to repeal the law. The act passed in 2010 and granted coverage to approximately 20 million Americans through Medicaid expansion and provisions for those who previously had difficulty obtaining health insurance such as those with pre-existing conditions and young adults. Changes will likely not got into effect until 2018 or later. Changes to the law will likely impact those currently covered under ACA as well as Americans with private health insurance.

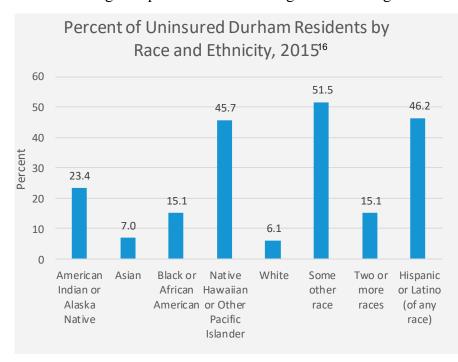
Racial Equity— The Partnership for a Healthy Durham has been incorporating racial equity into its work by holding Courageous Conversations around race and equity at committee meetings. In 2016, the Durham County Department of Public Health began sponsoring two-day racial equity trainings for individuals from different sectors such as public health, nonprofits, social services, faith-based, education, housing, government, criminal justice, the community and more. Approximately 150 individuals have gone through the training to perform an introductory analysis of racism and learn about cultural and historical roots or racism. Community agencies, organizations and the Partnership for a Healthy Durham will continue this work to examine current practices and work towards creating equitable systems.

# **Changes in Data: Access to Healthcare in 2015**

Healthy NC 2020 Goal: Reduce the percentage of non-elderly uninsured individuals from 22.6% to 8%.

## **Understanding Access to Care in North Carolina and Durham**

North Carolinians eligible for the Affordable Care Act (ACA) have benefited by gaining access to affordable health insurance with multiple choices in plans. However, since North Carolina has not expanded Medicaid through the ACA, thousands of residents have been affected by what is known as the coverage gap. The coverage gap includes individuals who do not qualify for Medicaid and are not eligible for ACA subsidies, an estimated 219,000 North Carolinians. Households with an income below 133% of the Federal Poverty Level, workers in low-wage jobs without benefits, people of color, and non-citizens are most likely to be in the coverage gap or uninsured. In 2016, 613,487 North Carolinians signed up for healthcare through HealthCare.gov.



#### **Highlights and Concerns**

- ◆ An estimated 42,662 Durham residents (15.1%) of the adult population were uninsured in 2015. 16
- Approximately 4,716 (7.4%) of children in Durham County lacked health insurance in 2015.<sup>16</sup>
- ♦ In 2015, 57.3% of foreign born residents without citizenship were uninsured compared to 10.2% of native born residents and 13.4% of naturalized residents.<sup>16</sup>

## **Progress Made in the Last Year**

A transportation initiative that grew from the Access to Care committee received a Rides to Wellness Demonstration and Innovative Coordinated Access and Mobility grant to continue efforts.

The Research Triangle Regional Public Transportation Authority received \$65,600 Federal Transit Administration grant to increase access to care. The funds will be used to expand the GoTriangle Regional Call Center. This will help improve transit planning and application assistance for riders who are low-income, uninsured or have mental health needs. The project builds on a 2015 Healthcare Access Challenge grant that tested solutions for transportation for low income, uninsured, or Medicaid behavior healthcare consumers.

Partners include GoTriangle, GoDurham ACCESS, Durham County Cooperative Extension (Durham County ACCESS), Department of Social Services, Alliance Behavioral Healthcare, Carolina Outreach, Duke University Health System, Lincoln Community Health Center, and Project Access of Durham County.

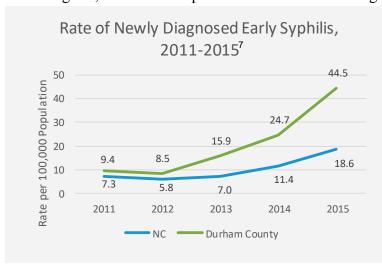
# Changes in Data: HIV and Syphilis in 2015

Healthy NC 2020 Goal: Reduce the rate of new HIV infection diagnoses to 22.2 per 100,000.

## Trends in HIV and Syphilis Rates in Durham

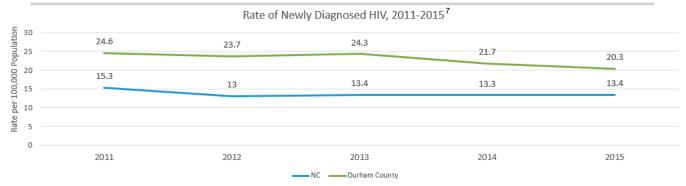
In 2015, there was a slight improvement in the HIV incidence rate in Durham County compared to 2014. Most recently, the HIV incidence rate was 22.1 per 100,000 population, the fifth highest rate in the state. The state average was significantly lower at 13.4 per 100,000.

Despite the small improvements seen in the HIV rate in Durham County, the syphilis incidence rate has increased. In 2015, Durham County had the highest syphilis rate in the state at 44.5 per 100,000 population. In contrast, the state rate was 18.6 per 100,000. The State of North Carolina held a syphilis summit to bring counties together to create action plans to address the rise in syphilis. Durham is working with partners to implement these ideas. Efforts to reduce HIV and STI rates also include the STD Testing Only program offered through Durham County Department of Public Health and the Gilead FOCUS grant, which offers quick and confidential testing to expanded populations.



#### **Highlights and Concerns**

- ◆ Syphilis rates in Durham County have quintupled since 2012, while HIV rates have slightly decreased.<sup>7</sup>
- ◆ Individuals aged 20 to 29 years had the highest incidence rates of early syphilis and HIV in Durham County in 2015.<sup>7</sup>
- ◆Black and African American males had the highest rates of HIV and early syphilis in Durham County in 2015.<sup>7</sup>



#### **Progress Made in the Last Year**

The HIV and STI committee continues to implement the Durham Knows campaign. In 2016, the campaign grew its Facebook and Twitter pages, received media coverage, created three videos related on testing, pre-exposure prophylaxis (PrEP) and condom use, carried out a month-long bus ad campaign performed outreach at more than ten community events. The campaign will continue outreach and media efforts and work towards HIV testing policy change.

The HIV and STI committee held a World AIDS Day event on December 1, 2016. A vigil with performances was held at Durham Central Park. Participants then led a candlelit march to the LGBTQ Center of Durham for the photography exhibit, I Still Remember and reception. The committee also created a Quilt of Life to recognize those living with the disease.

# **Changes in Data: Obesity and Chronic Illness in 2015**

Healthy NC 2020 Goals: Increase the percentage of high school students who are neither overweight nor obese to 79.2%. Decrease the percentage of adults with diabetes to 8.6%.

## The Link Between Obesity and Chronic Illness

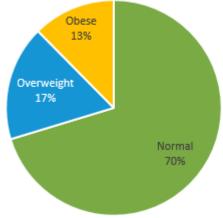
Overweight and obesity are associated with multiple long-term, costly, and serious conditions including heart disease, cancer and diabetes. Adults most at risk for overweight or obesity are males, people of color and those with less than a high school education. In 2015, 65.9% of adults in North Carolina were overweight or obese and only 32.7% were at an ideal weight. In contrast, the majority of Durham Public School (DPS) high school students (70.4%) were neither overweight nor obese. Height and weight measurements among high school students were self-reported.

Despite the majority of DPS high school students falling into a normal weight range, the physical activity, screen time, and sleep behaviors of many students put them at higher risk for becoming overweight and developing chronic illnesses in the future. In 2015, only 37.1% of high school students were physically active for 60 minutes or more at least 5 days a week and 30.6% reported watching three or more hours of TV on an average school day. Additionally, only 18.7% of high school students reported getting eight or more hours of sleep on school nights, which has been shown to decrease the risk of becoming overweight as well as many other chronic health conditions.<sup>3</sup>



37.1% of DPS high school students were physically active for 60 minutes or more at least 5 days a week.<sup>3</sup>

# BMI among Durham County High School Students, 2015 <sup>3</sup>



#### **Progress Made in the Last Year**

The Obesity and Chronic Illness committee created a fourth Healthy Mile Trail in the Old North Durham Park neighborhood. This is the fourth Healthy Mile Trail established in Durham. The purpose of the Healthy Mile trails are to encourage physical activity. Future plans for the Healthy Mile Trails include holding walks and clean-up events, conducting evaluations, and working with communities to identify additional routes.

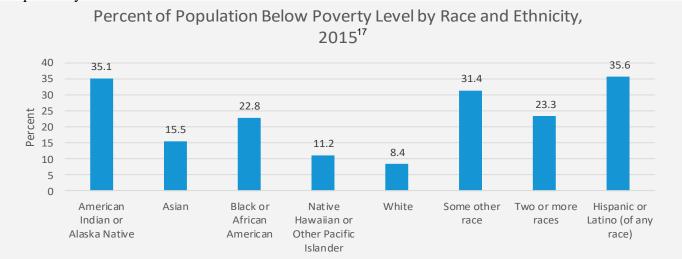
The Partnership for a Healthy Durham served on the City of Durham Bike + Walk steering committee. The Durham Bike + Walk Plan is an update of the original bike and pedestrian plans created in 2006. The steering committee looked at variables for selecting projects such as proximity to businesses and neighborhoods, connectivity, etc. Based on this, the City chose a list of 25 sidewalk gap projects, 25 intersections and 25 bike/pedestrian projects. The committee will provide input on the priorities. The plan is expected to be adopted by City Council in May 2017. Work on the projects is slated to begin in fiscal year 2018.

# **Changes in Data: Poverty in 2015**

Healthy NC 2020 Goal: Decrease the percentage of individuals living in poverty to 12.5%. Decrease the percentage of people spending more than 30% of their income on rental housing to 36.1%.

### The Relationship between Poverty and Health

Poverty is a social determinant of health and is strongly correlated with individual health. Generally, people with higher incomes, more years of education, and a healthy and safe living environment have better health outcomes and longer life expectancies. In 2015, 18.0% of Durham County residents and 17.4% of North Carolinians had incomes below the poverty line. Notably, female single-parent families were nearly six times as likely to live in poverty (30.4%) compared to married couple families (5.1%). American Indians, Alaska natives (35.1%), Hispanic and Latinos (35.6%) and other races (31.4%) also experienced higher rates of poverty compared to people in other race and ethnicity groups. However, improvements continue to be made in the unemployment rates in North Carolina and in Durham. In 2015, the unadjusted unemployment rate in North Carolina was 5.7 compared to 5.0 in Durham County. These rates are down from 10.3 and 8.1 in 2011 in North Carolina and Durham, respectively.



#### **Highlights and Concerns**

- ♦ 12.7% of all families were below the poverty level in 2015. 18
- ♦ Only 47.6% of families below the poverty level received food stamps/SNAP benefits in 2015. 18
- ♦ 59.7% of female single-parent families with children under 5 and 5-17 years old were under the poverty level in 2015.<sup>18</sup>

#### **Progress Made in the Last Year**

In October 2016, Durham County Government passed a policy that provides 12 weeks of paid parental leave after the birth, adoption or placement of an employee's child. Durham County also raised the minimum wage it will pay employees to \$15 an hour beginning January 2, 2017. Approximately 832 staff members will be affected by the living wage policy. Staff will also be able to donate sick leave hours to fellow employees. County leadership cites reasons for enacting the policies such as recruiting the best talent possible, better morale and employee retention.

The U.S. is the only high or middle-income country in the world that does not mandate paid maternity leave. Research shows that giving birth is the top cause for temporary poverty in the United States. Studies have shown that establishing a livable wage leads to increased morale, worker health, allows employees to better meet their economic needs and can lift families out of poverty.

# **Changes in Data: Education in 2015**

Healthy NC 2020 Goal: Increase the four-year high school graduation rate to 94.6%.

# **Disparities in Education**

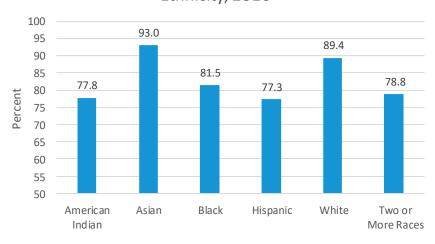
Education and poverty have a strong correlation, as individuals who do not graduate from high school make considerably less money than those who graduate. In Durham County, 34.9% of residents over the age of 25 without a high school degree fell below the poverty line in 2015, compared with 19.4% of those with a high school degree and 5.2% of those with a bachelor's degree or higher. The estimated average income for someone without a high school diploma or GED is \$25,636 compared to \$35,256 for a high school graduate. This link accentuates the importance of graduating from high school. While graduation rates in Durham County continue to improve, rising from 63% in 2008 to 82.3% in 2016, nearly one in five students entering high school does not graduate.

Certain groups have particularly low graduation rates. Though the graduation rate among males (77.8%) is close to the average rate (82.3%), it is much lower compared to females (86.7%). There are also notable differences in graduation rates by race and ethnicity, shown below. Students with limited English proficiency (55.2%), students coming from low-income families (78.2%), and students with disabilities (57.6%) also had lower graduation rates compared to their peers. <sup>13</sup>

# Increased Risk for Not Graduating High School<sup>13</sup>

- ♦ Males
- African-American and Hispanic Students
- Economically Disadvantaged
- ◆ Limited English Proficiency
- ♦ Students with Disabilities

High School Graduation Rates by Race and Ethnicity, 2016<sup>13</sup>



#### **Progress Made in the Last Year**

The Durham County Department of Public Health, Durham Public Schools and Duke Community Health have partnered to create the Healthy Futures Durham Schools program which serves newborns, children and teenagers up to age 18 living in Durham County.

Services offered include immunizations, well child health assessments, kindergarten health assessments, vision, hearing, and developmental screenings, dental fluoride treatment, iron levels, and lead testing. Child Health Enhanced Role Registered nurses refer clients and families to other agencies for medical, mental and dental health concerns when necessary.

The program is currently located at five elementary schools—E.K. Powe, George Watts, Glenn, Merrick Moore and Oak Grove.

Research has shown a link between students' health and academic performance.

# Changes in Data: Substance Use & Mental Health in 2015

Healthy NC 2020 Goal: Reduce the percentage of high school students who consumed alcohol within the past 30 days to 35%. Reduce the number of opioid prescriptions written to 5%. Reduce the suicide rate to 7.03 per 100,000.

## Trends in Prescription Drug Misuse and Opioid Overdoses

Due to the amount of painkillers being prescribed and sold in the U.S., the misuse of prescription opiates has lead to an epidemic of overdoses across the country. In Durham County, naloxone, a life saving drug that reverses an opioid overdose, was distributed during 232 opioid related encounters by EMS in 2016.

Medication misuse occurs when a drug is not taken as prescribed or a person takes a medication that is not prescribed to him or her. Individuals who take high daily doses of prescription drugs are among those most at risk for medication misuse and overdose. Individuals with mental illness, a history of alcohol or other substance use, people living in rural areas, and individuals with low income are also at a higher risk for medication misuse and overdose. Solutions for addressing the epidemic include use of safe prescribing practices, adoption of policies such as prescription drug monitoring programs, and use of naloxone distribution programs.

# Percent of DPS High School Students who Have Taken Prescription Drugs Without a Doctor's Prescription by Race and Ethnicity, 2015<sup>3</sup>

	Black	Hispanic/Latino	Other	White
Yes	14.1	14.4	19.0	16.8

#### **Mental Health**

#### **Highlights and Concerns**

- During 2015, 9% of North Carolinians reported having poor mental health for 8-29 days out of the last month, and 6% reported poor mental health for all 30 days.<sup>9</sup>
- ◆ People with a disability (31.1%) and those making less than \$15,000 a year (27.1%) were most likely to report poor mental health for eight days or more in the past month during 2015.9

#### **Durham Public Schools**

- ♦ 25.7% of middle school and 27.6% of high school students reported feeling sad or helpless in the past 12 months during 2015.<sup>3</sup>
- ♦ 17.8% of middle school and 13.8% of high school students made a plan to commit suicide during 2015.<sup>3</sup>
- ♦ 19.4% of middle school and 13.1% of high school students have been electronically bullied during 2015.<sup>3</sup>

### **Progress Made in the Last Year**

In June 2016, North Carolina implemented a pharmacy standing order to make naloxone available without a prescription. This helps make the medication more accessible to North Carolina residents. Naloxone helps reverse opioid overdoses and has saved thousands of lives across the state.

The Substance Use/Mental Health committee conducted a survey with county behavioral health providers to understand more about behavioral health resources in Durham for patients who identify as LGBTQ+ (lesbian, gay, bisexual, transgender, questioning/queer). LGBTQ+ youth are at a higher risk for suicidal thoughts and behaviors, suicide attempts and suicide. The survey helped the committee understand gaps and needs in serving these communities and provide resources to interested providers.

Next steps include following up with providers with resources, materials and training.

This report was prepared by the Durham County Department of Public Health with assistance from the Partnership for a Healthy Durham. The Partnership for a Healthy Durham is a coalition of agencies and community members focused on improving the physical, mental, and social health and wellbeing of Durham County residents. The printing of this report was sponsored by the Durham County Department of Public.

For more detailed information about this report or how the Partnership for a Healthy Durham is addressing these health priorities, visit **http://www.healthydurham.org** or call (919) 560-7833.

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