



Granville Vance Public Health

# State of the County Health Report 2017

Granville Vance Public Health (GVPH) promotes good health for all residents and recognizes that the health needs of the community change over time. This State of the County Health (SOTCH) report provides an update on the progress made addressing the health priorities identified through the 2015 Community Health Assessment, the changes to our counties that influence these priorities, and the new and emerging health issues in our county. GVPH produces a SOTCH Report annually in each of the years a Community Health Assessment is not reported.

## **i** Community Health Assessment

A community health assessment (CHA) is a systematic process to collect and analyze community health information and prioritize community health issues. GVPH, along with many partners across both counties, conducts a CHA every three years. In 2015, we convened a 35-member advisory committee

that met monthly for over a year to oversee the CHA process, gathered information directly from community residents through surveys and forums and reviewed state and national data. The 2015 CHA is available at: [www.gvph.org](http://www.gvph.org). The next CHA will be conducted in 2018.

## Health Priorities

The GVPH 2015 Community Health Assessment identified three health priorities based on information gathered from community residents, state and national data, and input from partners across both counties. The health priorities are: nutrition and physical activity, education, and mental health and substance use disorders. Poverty and health equity were identified as cross-cutting themes that should be addressed throughout these health priorities.

### Cross-cutting Themes: Poverty and Health Equity

Ensuring that all residents have access to resources and opportunities that support a healthy lifestyle.

### Priority: Nutrition and Physical Activity

Ensuring that all residents have access to healthy, affordable foods and safe, convenient places to be physically active.

### Priority: Education

Ensuring all residents have access to the education and information they need to lead healthy, productive lives.

### Priority: Mental Health and Substance Use Disorders

Ensuring that mental health and substance use disorder services are available, accessible, and coordinated to meet the needs of all residents.



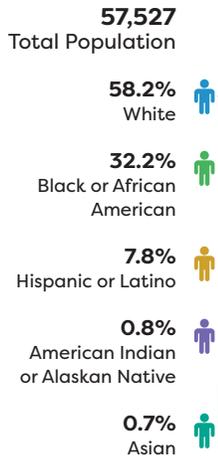
**GRANVILLE VANCE**  
public health  
*Your Environment. Your Community. Your Health.*

101 Hunt Drive  
Oxford, NC 27565  
Phone: (919) 693-2141

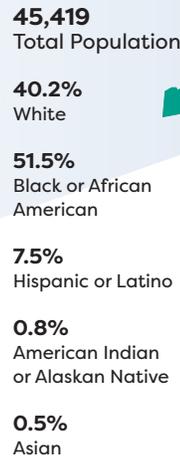
115 Charles Rollins Rd  
Henderson, NC 27536  
Phone: (252) 492-7915

# Population Characteristics<sup>1</sup>

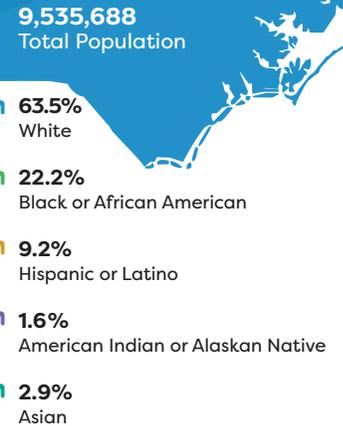
## Granville County Percent Population by Race & Hispanic Origin, 2016



## Vance County Percent Population by Race & Hispanic Origin, 2016



## North Carolina Percent Population by Race & Hispanic Origin, 2016

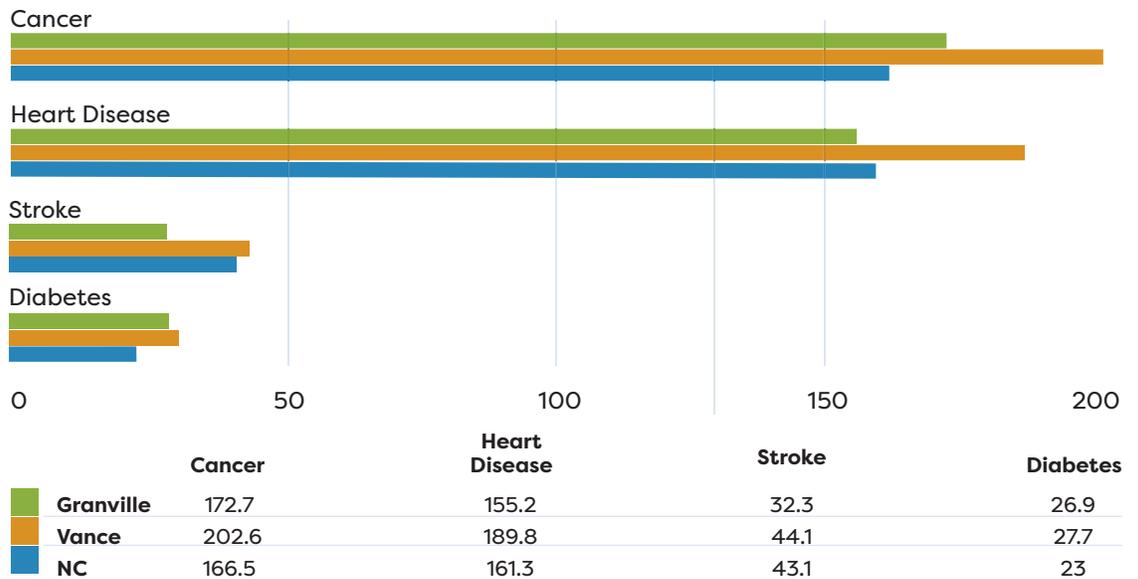


# Leading Causes of Death

### Morbidity & Mortality:

**Morbidity** refers to how many people are ill, while **mortality** refers to how many people have died from a health condition. Morbidity and mortality are important factors to consider when looking at the overall health of a community. Knowing the diseases that cause the most illness and death – and who is the most affected – is important in understanding how to prevent and treat these diseases and improve the health and prosperity of our communities.

### Age-adjusted Leading Causes of Death per 100,000 Population in Granville and Vance Compared to North Carolina, 2012–2016<sup>2</sup>



### Changes in Age-adjusted Mortality per 100,000 Population in Granville and Vance Counties between 2007–2011<sup>3</sup> and 2012–2016<sup>2</sup>

Cause of Mortality	Granville	Vance
Cancer	↓	↑
Heart Disease	↓	↓
Stroke	↓	↓
Diabetes	↓	↑

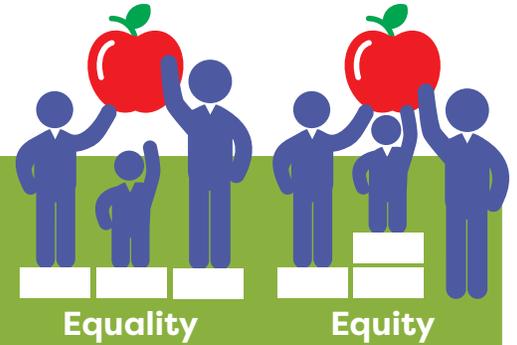
# Cross-cutting Themes: Poverty and Health Equity

## Addressing Health Equity

**Progress in the last year:** GVPH and partners address health equity and poverty by ensuring that all residents have access to the resources they need to for good health including early childhood development, education, quality healthcare, employment, food security, and a safe environment.

**“Pursuing health equity means striving for the highest possible standards of health for all people and giving special attention to the needs of those at the greatest risk of poor health, based on social conditions.”**

Source: Braveman P. (2014). What are health disparities and health equity? We need to be clear. Public Health Reports. 129 (Suppl 2) 5-8. Available at: [www.ncbi.nlm.nih.gov/pmc/articles/PMC3863701/#B3](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3863701/#B3).



## Health Equity:

When everyone has the opportunity to attain their highest level of health.

Source: American Public Health Association. Available at: [www.APHA.org](http://www.APHA.org)

## Poverty:

When a person or group lacks human needs because they cannot afford them. These needs include clean water, nutrition, health care, education, clothing, and shelter.

Source: Centers for Disease Control and Prevention. Available at: [www.cdc.gov/nchhstp/socialdeterminants/definitions.html](http://www.cdc.gov/nchhstp/socialdeterminants/definitions.html)

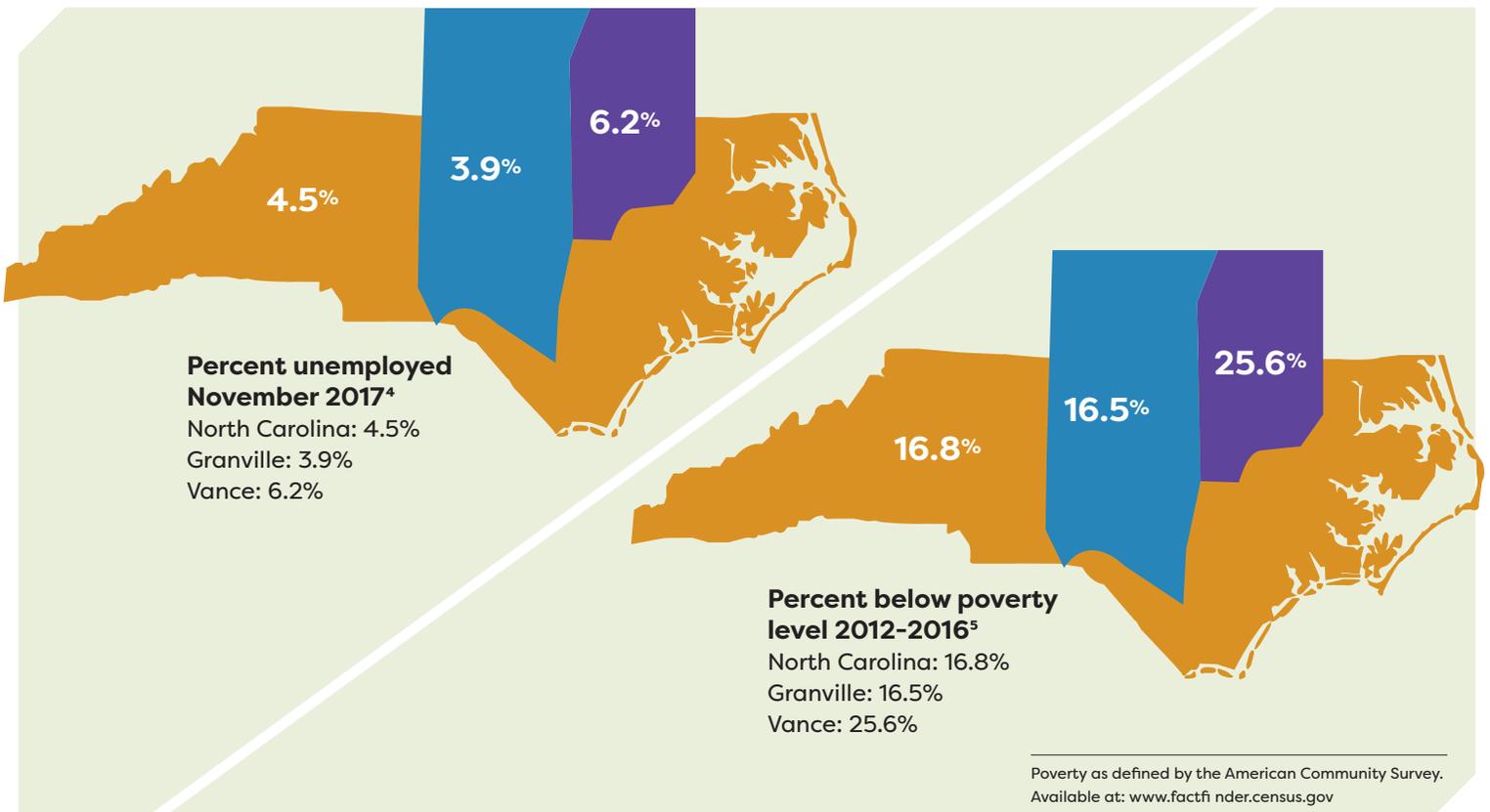
## Health Disparity:

A particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Social and economic disadvantage stem from characteristics historically linked to discrimination or exclusion such as race or ethnicity, religion, socioeconomic status, gender, mental health,

sexual orientation, geographic location, or cognitive, sensory, or physical disability.

Sources: Centers for Disease Control and Prevention. NCHHSTP Social Determinants of Health. Available at: [www.cdc.gov/nchhstp/socialdeterminants/definitions.html](http://www.cdc.gov/nchhstp/socialdeterminants/definitions.html)

Healthy People 2020, Disparities. Available at: [www.healthypeople.gov/2020/about/foundation-health-measures/Disparities#6](http://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities#6)



# Priority: Nutrition and Physical Activity

**Progress in the last year:** Healthy eating and physical activity are two key behaviors that help people of all ages achieve and maintain a healthy body weight and reduce their risk of chronic disease such as diabetes, heart disease, and some forms of cancer.

GVPH is committed to ensuring that all residents have access to healthy, affordable foods and safe, convenient opportunities for physical activity. The places where people spend time influence the options that are available to them and the choices they make. Therefore, we engage employers in worksite wellness, audit environments supporting healthy eating in local stores, and focus on healthy food and physical activity for our youngest residents through partnerships with the public schools and early childhood education and care centers. We also ensure that people have the information and support they need to make healthy lifestyle choices by offering programs such as the Minority Diabetes Prevention Program.

## Working on Wellness (WOW) Coalition



*A local Healthy People, Healthy Carolinas coalition working to improve community health*

### Healthy People Healthy Carolinas

Healthy People, Healthy Carolinas is a bold initiative of The Duke Endowment, which

aims to improve community health outcomes with a focus on nutrition, physical activity, and prevention of chronic disease. In Granville County, the Working on Wellness (WOW) Coalition is one of ten North Carolina coalitions funded through Healthy People, Healthy Carolinas to implement and evaluate the impact of evidence-based interventions.

The WOW Coalition focuses on promoting healthy eating and physical activity among children. The coalition is establishing baseline body mass index (BMI) data on children in Granville County and implementing the CATCH (Coordinated Approach To Child Health) program in Granville County Public Schools.

**The WOW Coalition, with the support of Granville County Public Schools (GCPS), has collected BMI data on over 2,400 students.**

### Body Mass Index (BMI) Baseline

The WOW Coalition has collected height and weight data on local children in elementary schools and early childhood education and care centers as a first step to determine a baseline BMI. Despite national concerns about obesity in America, there is a major gap in data available on school-aged children – especially in rural areas. The baseline shows the percentage of students who are at a healthy weight, underweight, overweight, or obese. The BMI data is used to evaluate the success of programmatic efforts and is shared with Granville County Public School leadership and principals. GVPH will replicate this work in Vance County in 2018.

## Healthy NC 2020 Objective



**Increase the percentage of adults who are neither overweight nor obese to 38.1% or better.**

Granville: 34%, Vance: 29%, North Carolina: 33.1%

Sources: Granville and Vance: The 2015 Granville Vance Community Health Opinion Survey, North Carolina State Center for Health Statistics. Body Mass Index Grouping-Underweight, Recommended Range, Overweight and Obese. 2016.  
Available at: [www.schs.state.nc.us/data/brfss/2016/nc/all/rf1.html](http://www.schs.state.nc.us/data/brfss/2016/nc/all/rf1.html)



WOW  
in 2016:

9

&

4

INDIVIDUALS

ORGANIZATIONS



WOW  
in 2017:

38

&

19

INDIVIDUALS

ORGANIZATIONS

## CATCH in Granville County

CATCH provides a proven and easy-to-implement action plan for teaching children to make healthy choices and creating a school environment that encourages healthy eating and physical activity.

GVPH and the WOW Coalition are currently working with all GCPS elementary principals to identify CATCH champions, establish wellness teams that will implement CATCH in the 2018-19 school year, and select other evidence-based strategies to support healthy eating, active learning, and increased activity levels during the school day.

**In September 2017, the Granville County Board of Education unanimously endorsed implementing CATCH in all nine Granville County public elementary schools. Several new schools will adopt CATCH each year until all nine schools are using the program.**

**Get Involved:** We invite individuals serving youth in Granville County to participate in the WOW Coalition.

**Contact:** Lindsey Bickers Bock, MPH, Health Education Supervisor and Coalition Coordinator  
LBickersBock@gvdhd.org, 919-693-2141, x148

# Priority: Nutrition and Physical Activity

## Minority Diabetes Prevention Program

Addressing disparities in type 2 diabetes among racial and ethnic minority populations

The Minority Diabetes Prevention Program (MDPP), funded by the North Carolina Office of Minority Health and Health Disparities, aims to increase minority populations' access to – and participation in – diabetes prevention programs in



Region Seven MDPP Class at the Cooperative Extension in Louisburg

North Carolina. MDPP uses a curriculum recognized by the Centers for Disease Control and Prevention (CDC) to help people reduce their risk of developing diabetes by making realistic and achievable lifestyle changes.

In 2017, GVPH began three MDPP classes – two in English

and one in Spanish. Individuals of all demographic backgrounds participate in MDPP groups to learn from one another, try new things and build new habits – all while lowering their risk of type 2 diabetes and improving their health.

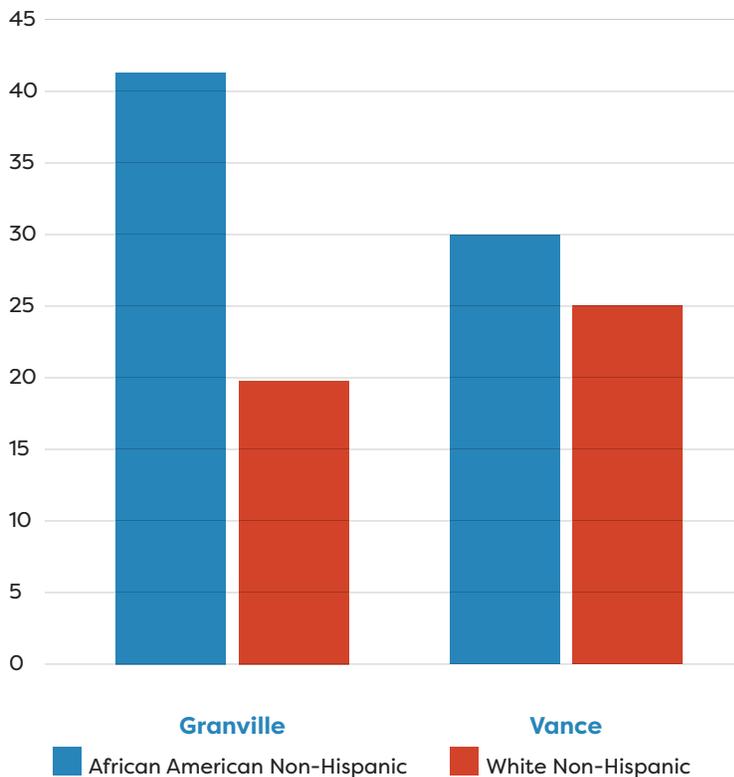
**Get Involved:** Learn more about type 2 diabetes or an MDPP class

**Contact:** Mary Constantino, MSW, LCSW, Region 7 Minority Diabetes Prevention Program Coordinator  
MConstantino@gvdhd.org, 919-690-2114

Making achievable, sustainable lifestyle choices to improve healthy eating and increase physical activity helps Granville and Vance county residents reduce their risk of developing diabetes, heart disease, and some forms of cancer.



## Diabetes Mortality for African American Non-Hispanics Compared to White Non-Hispanics in Granville and Vance Counties 2012-2016<sup>2</sup>



# Priority: Education

**Progress in the last year:** Poor health can put educational opportunities at risk, and some social policies and systems can underlie conditions that affect both education and health. GVPH works with Granville County Public Schools, Vance County Schools, and other local and regional partners to ensure that all residents have access to general education and health information that allows them to lead healthy, productive lives.

**People with more years of education tend to have:**

- Higher incomes
- Healthier environments where they live and work
- More opportunity to engage in healthy behaviors
- Longer life spans

**“Education should be recognized as an essential requirement for the disruption of the cycle of poverty and inequities in health.”**

Source: Hahn R.A. and Truman B.I. (2015). Education Improves Public Health and Promotes Equity. In J. Health Serv. 45 (4): 657-678.  
Available at: [www.ncbi.nlm.nih.gov/pmc/articles/PMC4691207/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4691207/)

**Healthy NC 2020 Objective**



**Increase the four-year high school graduation rate to 94.6% or better.**

Granville: 84.3%, Vance: 81.9%, North Carolina: 86.5%

Source: North Carolina Department of Public Instruction. 4-year cohort Graduation Rate Report. 2013-2014 Entering 9th Graders Graduating in 2016-2017 or Earlier.  
Available at: <http://accrpt.ncpublicschools.org/app/2017/cgr/>

**Residents living in both counties who do not have a high school diploma are much more likely to be living in poverty than those who obtained an educational degree.**

**In Granville County one in three people living in poverty have less than a high school education compared to 4% that have bachelors degree or higher.<sup>5</sup>**

**In Vance County slightly more than one in three people living in poverty have a less than a high school education compared to 8% that have a bachelors degree or higher.<sup>5</sup>**

Note: For adults ages 25 years and over. Poverty as defined by the American Community Survey available at: [www.factfinder.census.gov](http://www.factfinder.census.gov).

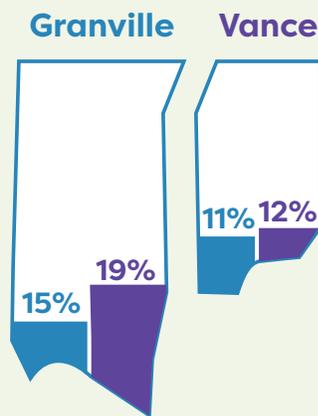
## Learn the Signs, Act Early

GVPH partnered with the H. Leslie Perry Memorial Library and local childcare centers to distribute free “Learn the Signs, Act Early” materials. Learn the Signs, Act Early (LTSAE) is a program of the Centers for Disease Control and Prevention (CDC) that encourages parents and providers to learn the signs of healthy development, monitor every child’s early development, and take action when there is a concern. The books *Where is Bear?* and *Amazing Me* teach parents about key milestones and aid in the identification of children with developmental delays and disabilities. Free “Learn the Signs, Act Early,” materials were distributed to families through partnering childcare centers and the H. Leslie Perry Memorial Library.

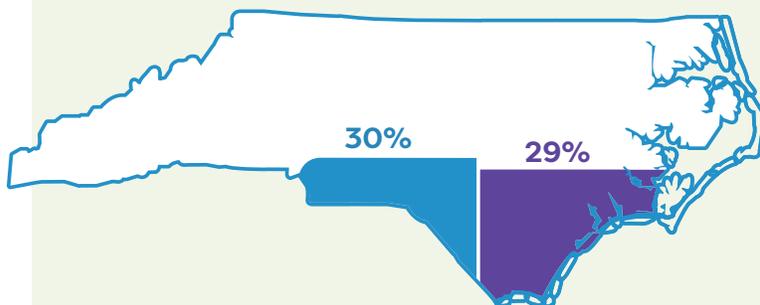


### Residents with a Bachelor’s Degree or Higher<sup>5</sup>

- 2011 (based on 2007–2011)
- 2016 (based on 2012–2016)



### North Carolina



# Priority: Education

## Innovative Approaches

*Building and improving community systems for children and youth with special health care needs*

GVPH is one of five local health departments funded by the North Carolina Division of Public Health, Children and Youth Branch, to examine and improve community-wide systems of care for families of children and youth with special health care needs. Innovative Approaches focuses on children and youth, ages birth to 21, who have or are at risk for chronic physical, developmental, behavioral, or emotional conditions. These children and youth are often diagnosed with more than one condition and require services beyond those required for children generally.

The GVPH Innovative Approaches (IA) initiative currently has three active subcommittees that reflect community identified needs. One of the subcommittees is focused on education.

The goals of the GVPH Innovative Approaches initiative are based on the national Maternal and Child Health Bureau outcome measures focused on the percentage of children with special health care needs receiving care in a well-functioning system.

## Goals of the GVPH Innovative Approaches Initiative



**Ensure all children are screened early and regularly for special health care needs.**



**Provide children with special health care needs with adequate health insurance, ongoing coordinated care within a medical home and services to support necessary transitions.**



**Increase family satisfaction with services received, encouraging families to be partners in decision making at all levels.**



## Individualized Education Program Clinic

GVPH partnered with the Exceptional Children's Assistance Center and Vance County Schools to hold an Individualized Education Program (IEP) Clinic. The clinic helped families, educational professionals, family supports, and health professionals better understand how an IEP addresses, develops, and strengthens children's specific

needs. A key concept was that an IEP team should be a cohesive entity and that all parties are equally important in the process. Each participant was given free materials to increase their understanding of the IEP process and to connect them to community resources.

**An Individualized Education Program (IEP) is education that is individually developed to address a child's specific needs that result from his or her disability.**

Source: Exceptional Children's Assistance Center. Special Education and IEPs. Available at: [www.ecac-parentcenter.org/parent-training-info-center/special-education-and-ieps/](http://www.ecac-parentcenter.org/parent-training-info-center/special-education-and-ieps/)

## Get Involved

GVPH encourages families with children and youth with special health care needs, family supports, and professionals to engage with the IA initiative through our Steering Committee, subcommittees (Education, Screening & Medical Home), and/or our Parent Advisory Council.

### Contact:

La'Shanda M. Daniels, BSW, MS,  
Innovative Approaches Coordinator  
[LDaniels@gvdhd.org](mailto:LDaniels@gvdhd.org), 252-492-7915 ext 248



# Priority: Mental Health and Substance Use Disorders

**Progress in the last year:** People with mental health disorders are more likely to experience an alcohol or substance use disorder compared to those without mental health disorders.<sup>6</sup>

GVPH is building strong partnerships and taking a collaborative approach to addressing substance abuse and mental health disorders in our community. We are bringing together partners, facilitating discussions, and implementing effective strategies to address opioid overdoses in our community. In addition, we are leading an innovative regional approach to addressing mental health issues in jail.

## Healthy NC 2020 Objective



Reduce the suicide rate per 100,000 population to 8.3 or lower.

Granville: 14.9, Vance: 16.7, North Carolina: 12.9

Source: North Carolina State Center for Health Statistics. 2012-2016 North Carolina Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates. Available at: [www.schs.state.nc.us/data/databook/](http://www.schs.state.nc.us/data/databook/)

## Medication or Drug Overdoses in Residents Reporting to the Emergency Department, January – September 2017

Granville

**124**  
OVERDOSES



**20**

were opioid related, and of those,

**18**

were heroin related.



Vance

**126**  
OVERDOSES



**38**

were opioid related, and of those,

**35**

were heroin related.



**Higher Risk:**  
Males and Adults Aged 20–39

In comparison to overall overdoses, there were a higher number of male overdoses. In Granville County, adults ages 20–29 had a higher number of overdoses compared to other age ranges. In Vance County, adults ages 20–39 had the highest number of overdoses compared to other age ranges.

Source: North Carolina Division of Public Health, Carolina and the University of North Carolina at Chapel Hill Department of Emergency Management. North Carolina Disease Event Training and Epidemiologic Collection Tool (NC DETECT). 2017. Note: NC DETECT Medication or Drug Overdose case definition used based on ICD 9/10 CMS codes or keyword.



## Mental health

includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle

stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood.

Source: U.S. Department of Health and Human Services. What is Mental Health? Available at: <http://www.mentalhealth.gov/basics/what-is-mental-health/>

## Substance use disorders

occur when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failing to meet major responsibilities at work, school, or home.



Source: Substance Abuse and Mental Health Services Administration. Available at: [www.samhsa.gov/disorders](http://www.samhsa.gov/disorders).

**North Carolina's drug, alcohol, and suicide death rate could increase**

**41%**

**in the next decade**  
according to a report by the Trust for America's Health and the Well Being Trust.

Source: Trust for America's Health and Well Being Trust. Pain in the nation: The drug, alcohol and suicide crises and the need for a national resiliency strategy. November 2017. Available at: [www.healthyamericans.org/assets/files/TFAH-2017-PainNationRpt-FINAL.pdf](http://www.healthyamericans.org/assets/files/TFAH-2017-PainNationRpt-FINAL.pdf)

# Priority: Mental Health and Substance Use Disorders

## County Leadership Forum on Opioid Abuse

GVPH is working with the North Carolina Department of Health and Human Services, North Carolina Harm Reduction Coalition and local substance use treatment facilities to connect people with preventive healthcare, substance use disorder treatment, access to naloxone (a non-addictive opioid overdose reversal drug), and community-based support.

In October 2017, GVPH co-sponsored a County Leadership Forum on Opioid Abuse with many partners, including Cardinal Innovations and the Triangle North Healthcare Foundation. The event was successful in bringing residents and county leadership together to learn the full effect of the opioid crisis on our communities, discover resources to help families and identify collaborative strategies for effective education, prevention, and treatment.

GVPH is committed to addressing opioid use by continuing existing partnerships to:

- Increase community awareness of the issue
- Maintain needle exchange programs
- Make naloxone widely available, which can reduce harm and save lives



Dan Brummitt, Vance County Commissioner; Stacey Carter-Coley, Vance-Granville Community College Vice President; Lisa Macon Harrison, Granville Vance Public Health Director, attend the Opioid Leadership Forum held at Vance-Granville Community College in Henderson, North Carolina.

**Opioids – Natural or synthetic chemicals that interact with opioid receptors on nerve cells in the body and brain and reduce the intensity of pain signals and feelings of pain.** This class of drugs includes the illegal drug heroin, as well as synthetic opioids such as fentanyl and pain medications available legally by prescription, such as oxycodone, hydrocodone, codeine, morphine, and many others. Opioid pain medications are generally safe when taken for a short time and as prescribed by a doctor, but because they produce euphoria in addition to pain relief, they can be misused. Every brain responds differently to opioids.

Source: [www.cdc.gov/drugoverdose/opioids/terms.html](http://www.cdc.gov/drugoverdose/opioids/terms.html)

## Stepping Up Initiative

*The only multi-county effort in North Carolina to reduce the number of people with mental illness in jails*

In counties across North Carolina, and nationwide, jails have more adults with mental illness than psychiatric hospitals.<sup>7</sup> Almost three quarters of adults with serious mental illnesses admitted to jails also have drug and alcohol use problems.<sup>8</sup> Once incarcerated, individuals with mental illnesses tend to stay longer in jail and upon release are at a higher risk of returning to incarceration than those without these illnesses.

Granville, Vance, Halifax, Warren, and Franklin counties have formed a regional Stepping Up team composed of county commissioners, local health directors, mental health and substance use prevention providers, and jail administrators. Led by GVPH, the regional team is using the national Stepping Up toolkit to develop a systems-level, data-driven plan to measurably reduce the number of people with mental illnesses in local jails.

Ten regional Stepping Up meetings were held in 2017 to compare county systems, examine available data and review

existing evidence-based practices, such as jail-based tele-psychiatry

Dan Brummitt, Vance County Commissioner, presenting at the Regional Stepping Up Meeting.



and community mental health court. The following data were collected:

- Number of jail facilities
- Jail intake forms and processes
- Mental health screening practices
- Confinement data
- The number of individuals with identified mental health and/or substance abuse needs

Establishing standard data will help counties:

- Understand the additional costs associated with inmates with mental health and/or substance abuse needs
- Project cost savings of diversion programs and facilitate coordination between counties as changes to policies, practices, processes, and services are proposed
- Allow the group to track the progress of interventions over time

The regional Stepping Up team is now focused on standardizing a screening tool to be used by all participating counties, creating a training tool and implementing a system to collect data on the number of inmates identified to have mental health and/or substance abuse needs.

## Get Involved

Meredith Wester, BSW, MSW, Social Worker  
MWester@gvdhd.org, 919-690-2115

# Emerging Issues and New Initiatives

TIER  
3

## Granville County Ranked as a Tier Three County

The North Carolina Department of Commerce annually evaluates the state's 100 counties based on economic well-being and ranks each county from most distressed (Tier One) to least distressed (Tier Three). This Tier system is incorporated into various state programs to encourage economic activity in the less prosperous areas of the state. County Tiers are calculated using four factors:<sup>9</sup>

- Average unemployment rate
- Median household income
- Adjusted property tax base per capita
- Percentage growth in population

Granville County, classified as Tier Two since 2007, was reclassified to Tier Three in November 2017.<sup>9</sup> Economic metrics for Granville County have not shifted significantly from 2016 to 2017. However, the county has experienced growth on the southern edge of the county. The differences in economic resources between southern Granville County, which is closer to urban opportunities in the Research Triangle area, and more rural northern Granville County can lead to disparities in economic and health outcomes. This growth, coupled with a reduction in property tax-base ranking and adjustments for other North Carolina counties with small populations, led to the reclassification.<sup>9</sup> Vance County remains a Tier One county indicating its status as a poor, rural county in North Carolina with a lower tax base than other counties.

## Addressing Adverse Childhood Experiences as Underlying Health Risk Factors

Stressful or traumatic early childhood experiences can have an impact on risky health behaviors, chronic health conditions, quality of life, and early death. The wide-ranging health and social consequences of adverse childhood experiences (ACEs)

underscore the importance of preventing them before they happen. GVPH seeks ways to translate research about ACEs to enhance local systems and community networks to provide trauma-informed services and resiliency-building practices.



## Building Local Capacity to Create Tobacco-Free Spaces

In the last year, North Carolina legislation and regulatory guidance has limited the use of tobacco products in childcare centers and multi-unit public housing. These policies reduce tobacco use, change attitudes toward tobacco use, eliminate secondhand smoke exposure,

and make it easier for tobacco users to quit. In 2018, GVPH will support local entities to develop tobacco-free policies that include emerging products like e-cigarettes to support compassionate, effective enforcement of these policies and to provide educational materials on evidence-based tobacco cessation systems for affected employees and residents.



GRANVILLE VANCE  
public health

## Thank You to Our Partners

We thank all of our partners for their dedication and commitment to working with us to address our counties' health priorities. We work with many of the same partners on different projects. Partners across our rural communities are connected by a common goal of providing the highest quality of life to all of our residents.

## Get involved!

Join us as we work together to address Granville and Vance counties' leading health issues.

For more information about how you can get involved in addressing these health priorities, or to learn more about the information provided in this report contact: Lindsey Bickers Bock at (919) 693-2141 ext. 148 or [LBickersBock@gvdhd.org](mailto:LBickersBock@gvdhd.org) or visit [www.gvph.org](http://www.gvph.org).

## Sources:

1. United States Census Bureau. Quick Facts. North Carolina. Population Characteristics by Race and Hispanic Origin. Available at: [www.census.gov/quickfacts/fact/table/NC,granvillecountynorthcarolina,vancecountynorthcarolina,US/PST040216](http://www.census.gov/quickfacts/fact/table/NC,granvillecountynorthcarolina,vancecountynorthcarolina,US/PST040216).
2. North Carolina State Center for Health Statistics. 2012-2016 North Carolina Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates. Available at: [www.schs.state.nc.us/data/databook/](http://www.schs.state.nc.us/data/databook/)
3. North Carolina State Center for Health Statistics. 2007-2011 North Carolina Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates. Available at: [www.schs.state.nc.us/data/databook2013/](http://www.schs.state.nc.us/data/databook2013/)
4. North Carolina Office of State and Budget Management. Log into North Carolina (LINC). Monthly Labor Force Employment November 2017. Available at: [www.osbm.nc.gov/facts-figures/linc](http://www.osbm.nc.gov/facts-figures/linc)
5. United States Census Bureau. American Fact Finder. Available at: [https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_16\\_5YR\\_S1701&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_S1701&prodType=table)
6. Substance Abuse and Mental Health Services Administration. Co-occurring Disorders. March 2016. Available at: [www.samhsa.gov/disorders/co-occurring](http://www.samhsa.gov/disorders/co-occurring)
7. More Mentally Ill Persons are in Jails and Prisons Than in Hospitals: A Survey of the States. Available at [www.treatmentadvocacycenter.org/storage/documents/final\\_jails\\_v\\_hospitals\\_study.pdf](http://www.treatmentadvocacycenter.org/storage/documents/final_jails_v_hospitals_study.pdf)
8. The Stepping Up Initiative. The Problem. Available at: <https://stepuptogether.org/the-problem>.
9. North Carolina Department of Commerce. Labor & Economic Analysis. 2018 North Carolina Development Tier Designations. Available at: [www.nccommerce.com/Portals/0/Incentives/CountyTier/2018-Tiers-memo.pdf](http://www.nccommerce.com/Portals/0/Incentives/CountyTier/2018-Tiers-memo.pdf)

Icons sourced from The Noun Project. Credits to: Alex Tai, Ahmed Elzahra, Pravin Unagar, Gregor Cresnar, MRFA, Kwesi Phillips, and Sahuad.