CHAPTER 2

BACKGROUND

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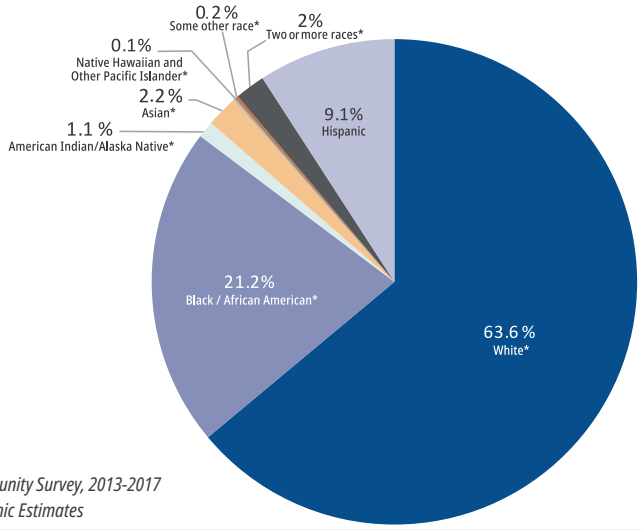
North Carolina Demographics

North Carolina is a diverse state in many ways, with a geography spanning coast to mountains. See below for basic demographic information about the state's residents.

North Carolina by Race/Ethnicity, 2013-2017 Estimate



*non-Hispanic

Source: American Community Survey, 2013-2017 Comparative Demographic Estimates

Other North Carolina Demographics

TOTAL POPULATION[1]	
10,052,564	
GEOGRAPHY[2]	
Urban	66%
Rural	34%
AGE GROUP[1]	
Under 18	22.8%
18-64	62.1%
65 and older	15.1%

[1]2013-2017 American Community Survey 5-Year Estimates: Age and Sex
22010 Census

Health Trends in North Carolina and the Drivers of Health

Over the past decade, North Carolina's overall health ranking has improved from a low of 37th in 2014 to a high of 31st in 2015 and is now 33rd as of 2018 (ranking of 1st as best and 50th as worst) according to America's Health Rankings. The improvement in ranking is a result of successes in several areas. However, there are some growing challenges in the state that have prevented North Carolina from rising higher. **See Figure 3** for examples of these successes and challenges.

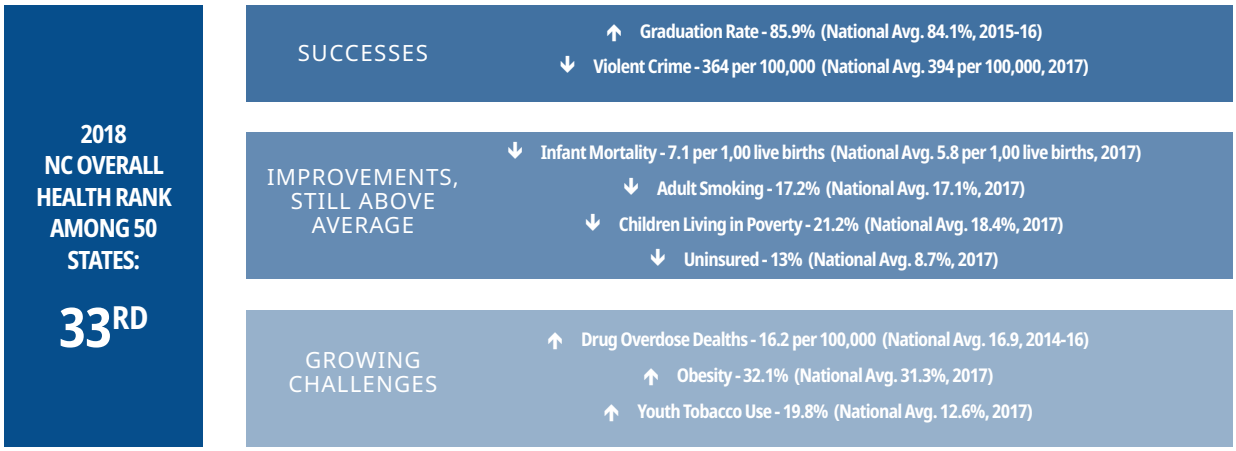
Included in **Figure 3** are some examples of non-clinical drivers of health that have not traditionally been considered, such as graduation rate, violent crime, poverty, and food insecurity. Many of these and other drivers of health have interrelated and compounding effects. For example, people with higher incomes have more opportunities to live in safe and healthy homes near schools with better funding. People with higher incomes generally have more opportunities to purchase healthy foods and more time and resources for leisure-time physical activity. Health insurance and health care also become more accessible with higher incomes.

Health behaviors are actions that are either beneficial or detrimental to an individual's health. The drivers of health have direct effects on individual opportunities to make healthy choices and can either limit or facilitate opportunities to engage in healthy activities and behaviors. For example, people who do not receive comprehensive sex education may not know the necessary safe sexual practices to avoid unintended pregnancy and sexually transmitted diseases. Individuals who lack access to full-service grocery stores that sell fresh fruits and vegetables may not be able to prepare healthy meals and those who do not have safe spaces or spare leisure time to exercise may have low physical activity. Consequently, individuals living within these circumstances tend to have higher rates of obesity, diabetes, and heart disease.[8]

In addition to the slow improvement in overall health in the state, stark disparities exist, particularly between different racial and ethnic groups. Throughout this report, disparities are described within each indicator. **Figure 4** provides examples of health outcome disparities in the state.

FIGURE 3

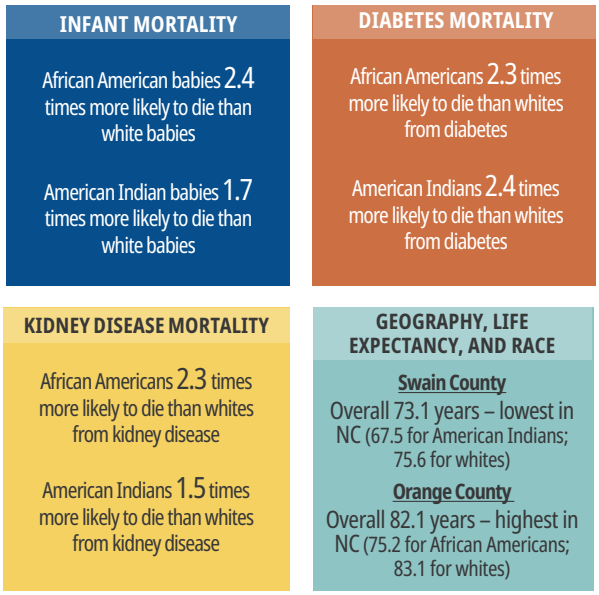
Health Status Successes and Challenges in North Carolina



Sources: America's Health Rankings (https://www.americashealthrankings.org/explore/annual); Kaiser Family Foundation State Health Facts (https://www.kff.org/other/state-indicator/nonelderly-0-)64/?currentTimeframe=0&selectedDistributions=uninsured&selectedRows=%7B%22wrapups%22:%7B%22united-states%22:%7B%7D%7D,%22states%22:-%7B%22all%22:%7B%7D%7D%7D%7D&sortModel=%7B%22colId%22:%22Uninsured%22,%22sort%22:%22asc%22%7D; NC DHHS NC Tobacco Prevention and Control Branch analysis of Youth Tobacco Survey Note: Data presented in this graphic are the most recent available to compare to national average.

FIGURE 4

Examples of Health Disparities in North Carolina



Sources: NC DHHS, Health Equity Report, 2018; NC DHHS, Life Expectancy, 2016-2018

Systems and Policies and the Drivers of Health

Often public policies are not included as a driver of health; however, public policies create the context within which the drivers of health exist. Federal, state, and local systems and policies shape the conditions in which individuals live, work, learn, and age.[9,10] Public policies are those policies, and the systems and programs they create, that result from government action. The results of some public policies are easier to see: traffic and public safety laws, tax policies, education financing, and public assistance programs. Others may be harder to see in our daily lives but shape them nonetheless: zoning and land use policies; food safety regulations; agriculture policies; regulations around banking, communications, air and water quality; and laws around health insurance access and coverage. As such, public policy can often provide an avenue for intervening in the drivers of health.

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ACCUMULATING CHALLENGES:

William and the Drivers of Health

William grew up in a working-class neighborhood. He graduated from high school and went to work in a local factory because his family could not afford to pay for college. He made enough to make ends meet and had health insurance through his job. William worked long hours and didn't have a lot of time to exercise or make healthy meals at home. He gained weight and was eventually diagnosed with diabetes. A few years ago, the factory closed, and William lost his job and health insurance benefits. He found odd jobs around town to make some money but had to move to a low-cost rental apartment that was not being properly maintained by the property owner. He had to sell his car and rely on a friend to help him get around. He stopped going to regular medical appointments for his diabetes and also had to stop buying the medications he needed. One day William tripped on the carpet in his home that was buckled because of water damage and broke his arm. He became more limited in the work he could do and feared he may be evicted from his apartment.

"Structural racism refers to the way public policies, institutional practices, cultural representations, and other social norms interact to generate and reinforce inequities among racial and ethnic groups."

Structural Racism and Health

The root cause for the health disparities we see in populations of color is the historical and continued structural racism that has resulted in inequitable opportunities for healthy lives. Structural racism refers to the way public policies, institutional practices, cultural representations, and other social norms interact to generate and reinforce inequities among racial and ethnic groups.[11,12] This includes health care, housing, education, transportation and other policies that have either explicitly or implicitly resulted in discriminatory practices. Policies which are an example of structural racism include:

- Redlining – Exclusionary zoning laws across the country in the early- to mid-1900's prevented African Americans from buying property in certain neighborhoods. In 1933, the Home Owners' Loan Corporation introduced a color-coded system showing the "risk" of neighborhoods for mortgage lending. Red zones were those almost entirely populated by African American residents and considered high risk for mortgages. In 1934, the Federal Housing Administration continued the policies. These policies helped to produce the racially segregated, and often under-resourced, neighborhoods that are still found in many cities. This form of housing segregation was supported by lending policies into the 1970's, when new laws were enacted with the intention of ending explicit redlining.
- Segregated schools – Until the Supreme Court ruled in Brown v. Board of Education in 1954 that school segregation was unconstitutional, children of different races often went to separate schools by law. Despite the change in law, desegregation of schools took many years. Even today, due to historically segregated neighborhoods and other local policies, children do not always attend schools where the student population is racially or ethnically diverse. Schools that are racially isolated often are older and in poorer condition, have fewer resources, struggle to attract high-performing teachers, and offer fewer advanced courses and extra-curricular activities.[13]
- High-interest loans – African Americans and Hispanics are more likely to have high-interest home loans, even when controlling for credit score and other risk factors. This is largely due to the concentration of high-risk lenders who target people of color. These high-risk lenders are more likely to offer high-interest loans. These lenders charge higher rates to clients of color with the same credit score and risk factors as white clients. [14]

These structural policies pose challenges to achieving optimal health. Other examples of institutional racism reside within the health care system itself. The historical injustices of segregated hospitals, unethical research practices (e.g., Tuskegee Syphilis Study), and eugenics (e.g., forced sterilization) have resulted in a lack of trust in health care institutions for many people of color. Today, we see an underrepresentation of many racial/ethnic minority groups in the health professions[15] and lower quality of care for people of color (e.g., receiving less information from health care providers, higher morbidity and mortality in coronary artery disease care, and more challenges getting appointments and care quickly).[15,16,17]

"These impacts are numerous, including unemployment, fewer educational resources, harsher punishments in schools and the judicial system, intergenerational poverty, and the accumulated physiologic stress of discrimination regardless of socioeconomic status (i.e., "weathering")."

These examples begin to illustrate the widespread social, economic, and health impacts of structural racism on people of color. These impacts are numerous, including unemployment, fewer educational resources, harsher punishments in schools and the judicial system, intergenerational poverty, and the accumulated physiologic stress of discrimination regardless of socioeconomic status (i.e., "weathering").[18] These issues encompass some of the upstream causes of the poor health outcomes that are seen for people of color. Correcting these injustices will require acknowledgement and understanding of the issues and intentional work to change them. Even with intentional efforts to eliminate these structural barriers to health equity, the work and the potential positive effects will take decades to accumulate. Structural racism, health equity, and health disparities were a part of discussions and the indicator selection process for HNC 2030. In several cases, indicators were chosen precisely because they are closely connected to structural racism in our society. For example, children of color are more likely to experience suspension from school and adults of color face harsher punishments than their white peers for the same infractions. Lower educational attainment and incarceration both have long-term negative impacts on health and well-being by decreasing employment opportunities and income potential.[19,20] Therefore, school suspension and incarceration rate were selected as indicators for HNC 2030.

Structural Racism and Health Outcomes – An Example

Looking to infant mortality, we see that African American women are more likely to live in communities that have fewer educational resources and employment opportunities due to historical segregation through housing and education policies. These socioeconomic factors are linked to birth outcomes and infant mortality. In addition, even for African American women who attain a higher socioeconomic status, pregnancy-related outcomes are worse than those of white women at lower socioeconomic levels (Harper et al., 2004). On top of the "weathering" that African American women's bodies experience through the stress of discrimination, research is now showing that African Americans who increase their socioeconomic status may face added negative health effects through increased experiences of acute discrimination as they work and live in predominately white environments (Colen et al., 2018). Inside the medical system, disparate treatment of African American mothers may also play a role. Studies show that implicit bias in health care delivery may prevent African American women from receiving sufficient patient education in the prenatal period about risks to maternal and fetal health (Lu, et al., 2010), and may also contribute to African American women's increased risk of life-threatening conditions such as preeclampsia and postpartum hemorrhage (ACOG Postpartum Toolkit, 2018; Howell et al., 2018; Gyamfi-Bannerman et al., 2018). Thus, stress-related impacts on the body, coupled with the implicit bias in health care, contribute to the disparate birth outcomes we continue to see for African American women and their babies (Lu et al., 2010).