MAPP2Health

Virginia Planning District 10 | Thomas Jefferson Health District

The City of Charlottesville and Albemarle, Fluvanna, Greene, Louisa, and Nelson Counties

FALL/WINTER 2019

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Executive Summary

"Health equity means that everyone has a fair and just opportunity to be healthy and reach their full human potential. A person's identities, whatever they may be, should not predict how long or how well one will live."[1]

—Louisville Center for Health Equity

Photovoice Photo: Louisa Reentry Program

The National Association of County and City Health Officials' (NACCHO) *Mobilizing for Action through Planning and Partnerships* (MAPP) provides a framework for organizations, coalitions, and residents to work together for action and sustainable change toward improved health and well-being for all. Since 2007, organizations and residents of Planning District 10, also known as the Thomas Jefferson Health District, have used the MAPP framework to assess community health across the district in the City of Charlottesville and counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson. This process is known locally as MAPP2Health or MAPP.

The *2019 MAPP2Health Report* builds on the work of the 2016 MAPP process and focuses on health equity across the district-wide priorities identified in earlier MAPP reports to:

- Promote healthy eating and active living
- Address mental health and substance use
- Reduce health disparities and improve access to care
- Foster a healthy and connected community for all ages

1.1 | UNDERSTANDING HEALTH EQUITY: HEALTH AND THE SOCIAL DETERMINANTS OF HEALTH

Traditionally, health is viewed as the product of people's health behaviors and lifestyle, their family history and genes, and the care received from their doctor(s) and other health service providers. However, where we live, work, play, and pray (**social determinants of health**) have an equally important impact on our health and well-being.[2] The Centers for Disease Control and Prevention (CDC) estimates that while 50% of our overall health is due to individual health behaviors and the clinical care we receive, the other 50% is due to social, economic, and environmental factors,[3] such as racism, discrimination, education, and housing. That is, your housing, transportation, job, education, and the environment around you are just as important to your health as your choices, your genes, and the care you receive. Working together to change these factors and to recognize and address injustice in our systems and policies will make the largest impact on community health.

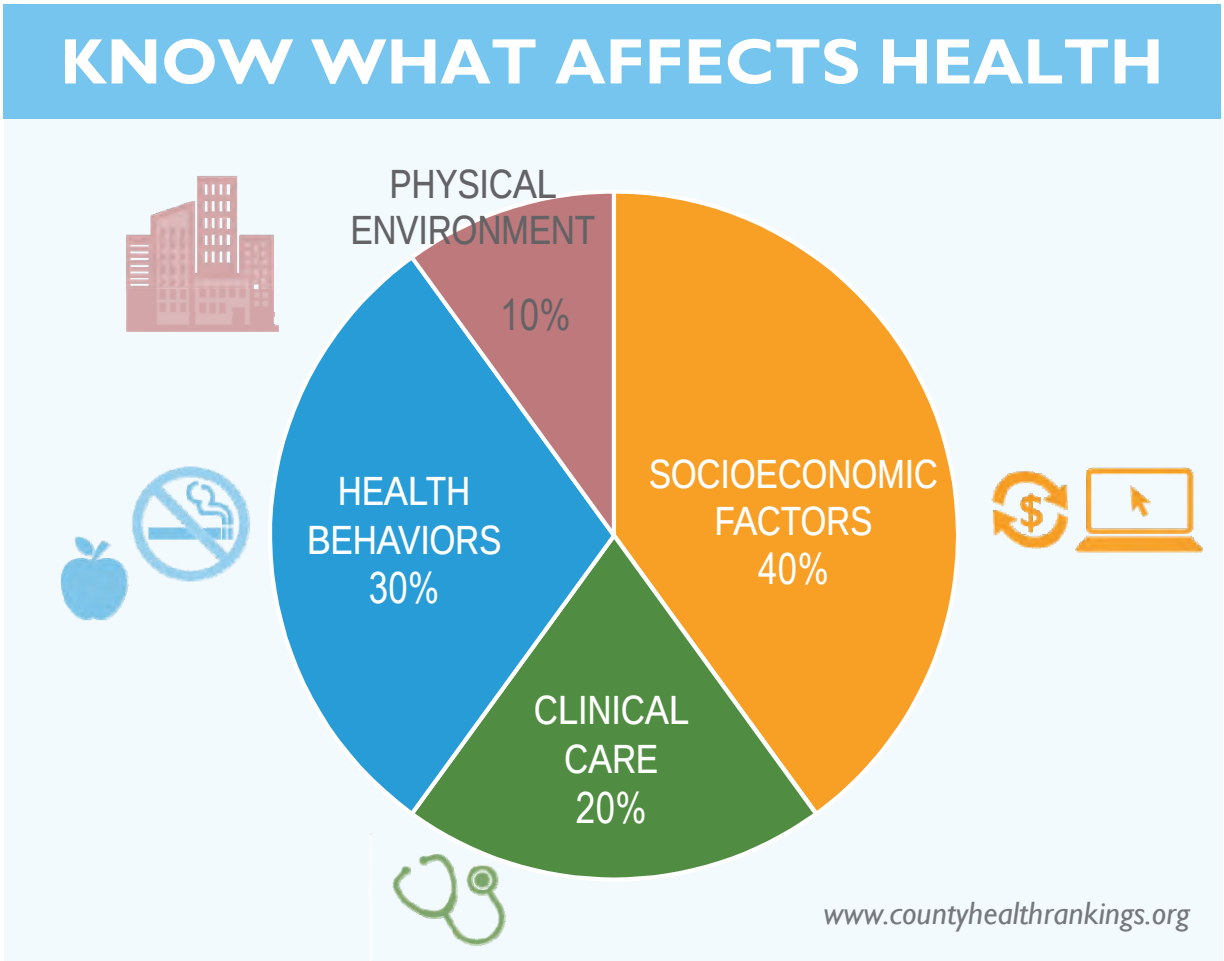

Figure 1 Know What Affects Health. Source: CDC Community Health Improvement Navigator. Available at https://www.cdc.gov/chinav/index.html. Accessed 2019.

1.2 | ADDRESSING HEALTH EQUITY: A NEW COMMUNITY ACTION PLAN

The MAPP2Health process involves engagement, partnership, and collective action. The *2019 MAPP2Health Report* contains an overview of the communities making up the planning district, cultural and community assets, best practice recommendations, and community health assessment data organized by MAPP2Health priority. This information, provided through community conversations across the district, comes together in the report's *Improving Health Equity: A Community Plan for Action and Accountability 2019–2022* (the Plan).The Plan lays out a roadmap for how organizations and residents can work together to make progress on the four MAPP priorities to achieve the MAPP vision of equitable access to resources for a healthy, safe community. It is also a call to action for organizations and systems to commit to the hard work of internal change and for community members to help hold us accountable.

1.2.1 Achieving Health Equity: Community-based Collaboration and Action

We are grateful to the residents, government agencies, nonprofits, clinics, businesses, philanthropic agencies, faith-based organizations, advocacy groups, and others who devoted significant expertise, time,

and energy to creating this plan for action, in addition to committing resources and capital to improve health equity in our community. The Plan's roadmap is rooted in the recognition that our current system of healthcare, and associated social determinants of health, are not equitable. The roadmap also acknowledges that achieving health equity will require policy changes, shifting power and shifting resources, and that this will not be fully accomplished in the three-year cycle of this report.

However, the Plan is designed to energize individuals, groups, and organizations to create change and improve systems so that every resident of our district has the opportunities, resources, and information necessary to live a healthy and happy life.

We look forward to continued collaboration with you and the communities we serve to take action that will move us closer to achieving health equity for all. Thank you for your dedication and partnership.

MAPP2HEALTH CORE GROUP MEMBERS:

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This report and other downloadable content are available online at www.tjhd.org.

Photovoice Photo: Scottsville and Esmont JABA

ENDNOTES

[1] Louisville Center for Health Equity, a Division of Public Health and Wellness. (2017). *Louisville metro health equity report*. Retrieved from https://louisvilleky.gov/government/center-health-equity/louisville-metro-health-equity-report-2017.

[2] Healthy People 2020. (n.d.) *Social determinants of health*. Retrieved from www.healthypeople2020.gov/2020/topics-objectives/topic/social-determinants-of-health.

[3] Centers for Disease Control and Prevention, Community Health Improvement Navigator. (2015, August 19). *Invest in your community: 4 considerations to improve health & well-being for all*. Retrieved from https://www.cdc.gov/chinav/index.html.

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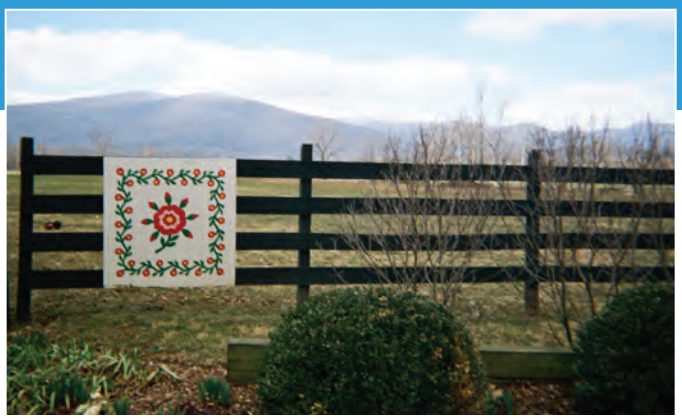
2019 MAPP2HEALTH Process Overview



Photovoice Photo: Greene Care Clinic

2.1 | COMMUNITY HEALTH ASSESSMENT AND HEALTH IMPROVEMENT PLANNING

The National Association of County and City Health Officials' (NACCHO) *Mobilizing for Action through Planning and Partnerships* (MAPP) provides a strategic framework for organizations, coalitions, and residents to work together for action and sustainable change towards improved health and well-being for all. For general information about MAPP, visit https://www.naccho.org/programs/public-health-infrastructure/performance-improvement/community-health-assessment/mapp.

The Centers for Disease Control and Prevention's (CDC) Community Health Improvement Navigator has a graphic that succinctly explains the who, what, where, and how of community health assessment and improvement planning; this graphic was used throughout the 2019 MAPP2Health process to broadly explain community health assessment and health improvement planning.

WHO: Collaboration with others is a critical element of the process. Just as individuals have varying experiences and backgrounds, different sectors from healthcare to business to the faith community bring different perspectives and resources to the process. Collaborating with diverse partners is key to maximizing impact.

WHAT: Traditionally, health is viewed as the product of people's health behaviors and lifestyle, their family history and genes, and the care that they receive from their doctor(s). However, where people live, work, play, and pray (**social determinants of health**) have an equally important impact on health and well-being.[1] The CDC estimates that while 50% of overall health is due to individual health behaviors and clinical care received, the other 50% is due to social, economic, and physical/ built environment factors.[2] That is, housing, transportation, jobs, education, and the environment around people are just as important to health as their choices, their genes, and the care they receive.

WHERE: With limited resources and capacity, implementation planning and strategies for action should focus on areas of greatest need first. Which geographic areas show greater need? Which populations and communities in the district have been historically discriminated against and/or are currently underserved?

HOW: Since health is affected by social and economic factors and the physical and built environment as well as personal health behaviors and clinical care, strategies to improve health and well-being must address all of these factors and not focus exclusively on health behaviors and clinical care. (Figure 1)

2.2 | LOCAL HISTORY OF MAPP2HEALTH

Since 2007, organizations and residents of Planning District 10 (PD10), also known as the

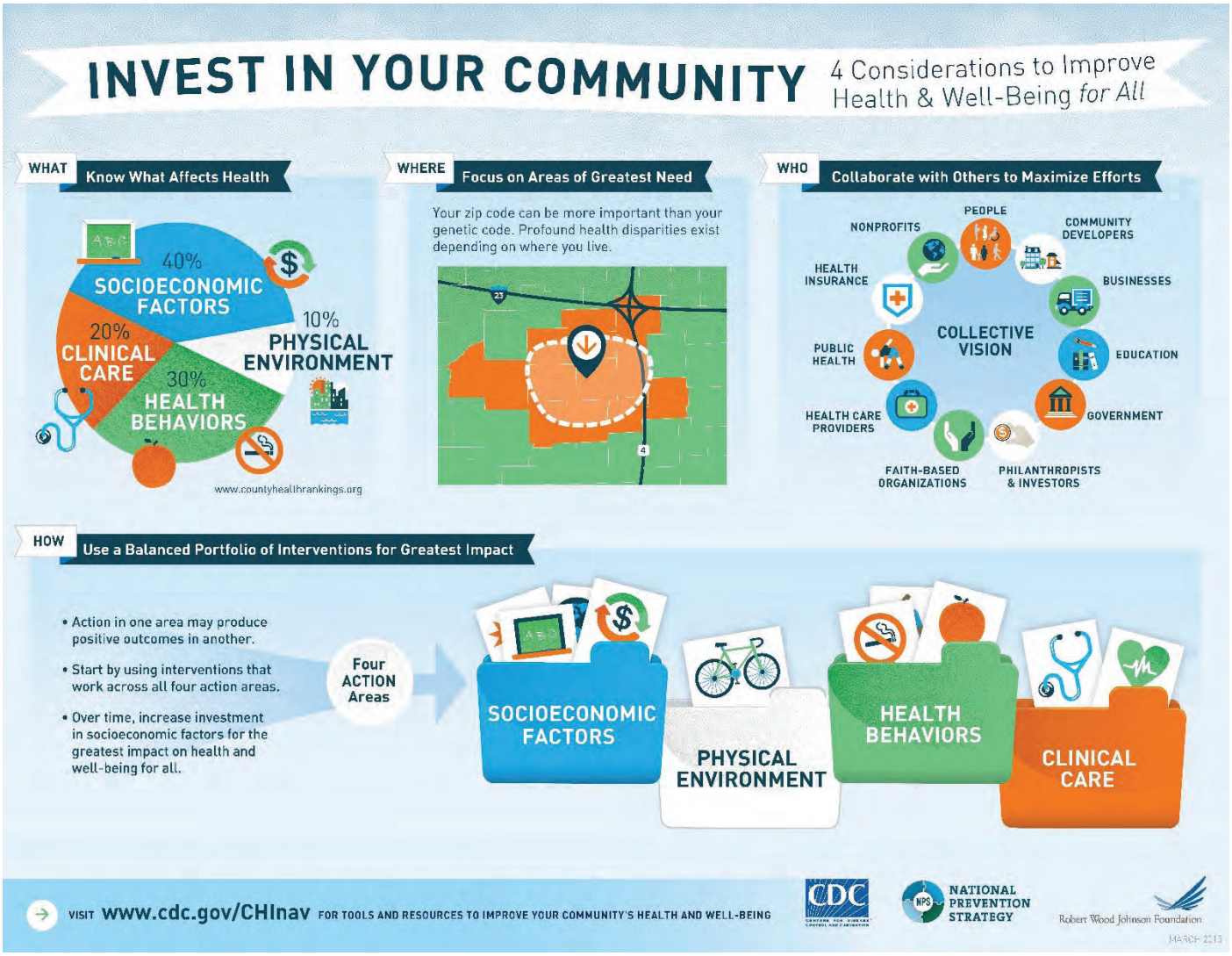


Figure 1 Invest in Your Community: 4 Considerations to Improve Health & Well-being for All.
Source: CDC Community Health Improvement Navigator. Available at https://www.cdc.gov/chinav/index.html. Accessed 2019.

Thomas Jefferson Health District (TJHD), have used the MAPP framework to assess community health across the district in the City of Charlottesville and counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson. This process is known locally as MAPP2Health or MAPP.

The MAPP process was first initiated in 2007 in the City of Charlottesville and Albemarle County. A steering committee of leaders from a wide array of organizations was established to plan and implement MAPP. The group published a *Community Health Status Assessment Technical Report* in 2008. In July 2011, MAPP2Health launched and expanded the MAPP process to all localities in PD10. Key planning partners included the Jefferson Area Board for Aging (JABA), Martha Jefferson Hospital (now Sentara Martha Jefferson Hospital), Region Ten Community Services Board, TJHD, and the UVA Department of Public Health Sciences (UVA DPHS). Other key partners included the MAPP Leadership Council and partnerships with existing Interagency Councils (IACs) in TJHD localities. The resulting *2012 MAPP2Health Report* included community health assessment data for all localities and a collaborative community health improvement plan.

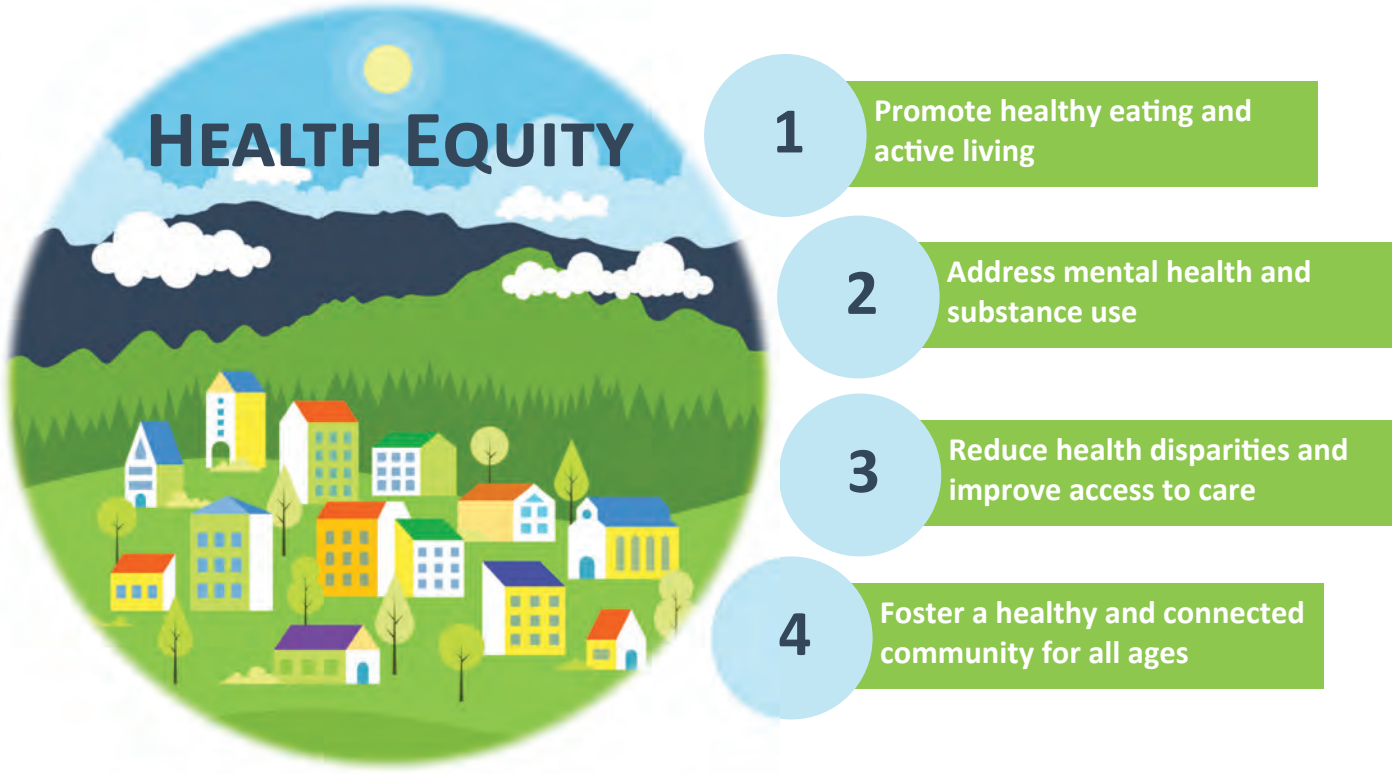


Figure 2 2019 MAPP2Health Process with Four MAPP Priorities, MAPP Vision, and Overarching Equity Focus.
Source: Thomas Jefferson Health District. Created 2019.

Beginning in September 2015, Sentara Martha Jefferson Hospital (SMJH), TJHD, UVA DPHS, and UVA Health—collectively, the MAPP Core Group—began collaborating to prepare for the launch of a third round of MAPP2Health in TJHD. The process resulted in selection of four district-wide community health priorities and publication of the *2016 MAPP2Health Report*.

2.3 | 2019 MAPP2HEALTH PROCESS

The 2019 MAPP process launched in the fall of 2018 and builds on the work and vision of the *2016 MAPP2Health Report*. There was a strong focus on health equity across each of the four district-wide priorities with an overall vision that "together we will achieve equitable access to resources for a healthy, safe community." (Figure 2)

Photovoice Photo: Fluvanna/Fork Union JABA

2.3.1 Health Equity as the Overarching Focus

"Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care."[3]

—Robert Wood Johnson Foundation

HEALTH EQUALITY means everyone has opportunities for the same thing in order to be healthy. According to the American Public Health Association, **HEALTH EQUITY** occurs when "everyone has the opportunity to attain their highest level of health." In other words, everyone has the basics of what they need to be as healthy as possible, despite different life experiences, while recognizing that these basics don't necessarily mean the same thing for everyone.

The Robert Wood Johnson Foundation explains these concepts through the illustration of three people riding standard adult bicycles. While the bicycles would be great for many people, they are useless for a small child, a very tall person, or someone who uses a wheelchair. Since health equity focuses on the idea of people having their best opportunity to be as healthy as possible, equity results when everyone has a bicycle that is appropriately sized and modified for their unique situation. The child has a child-sized bicycle, the tall man has an extra-large bicycle, and the person in a wheelchair has a bicycle adapted to their specific needs. MAPP participants looked at several depictions of health equity including the bicycle graphic. (Figure 3)

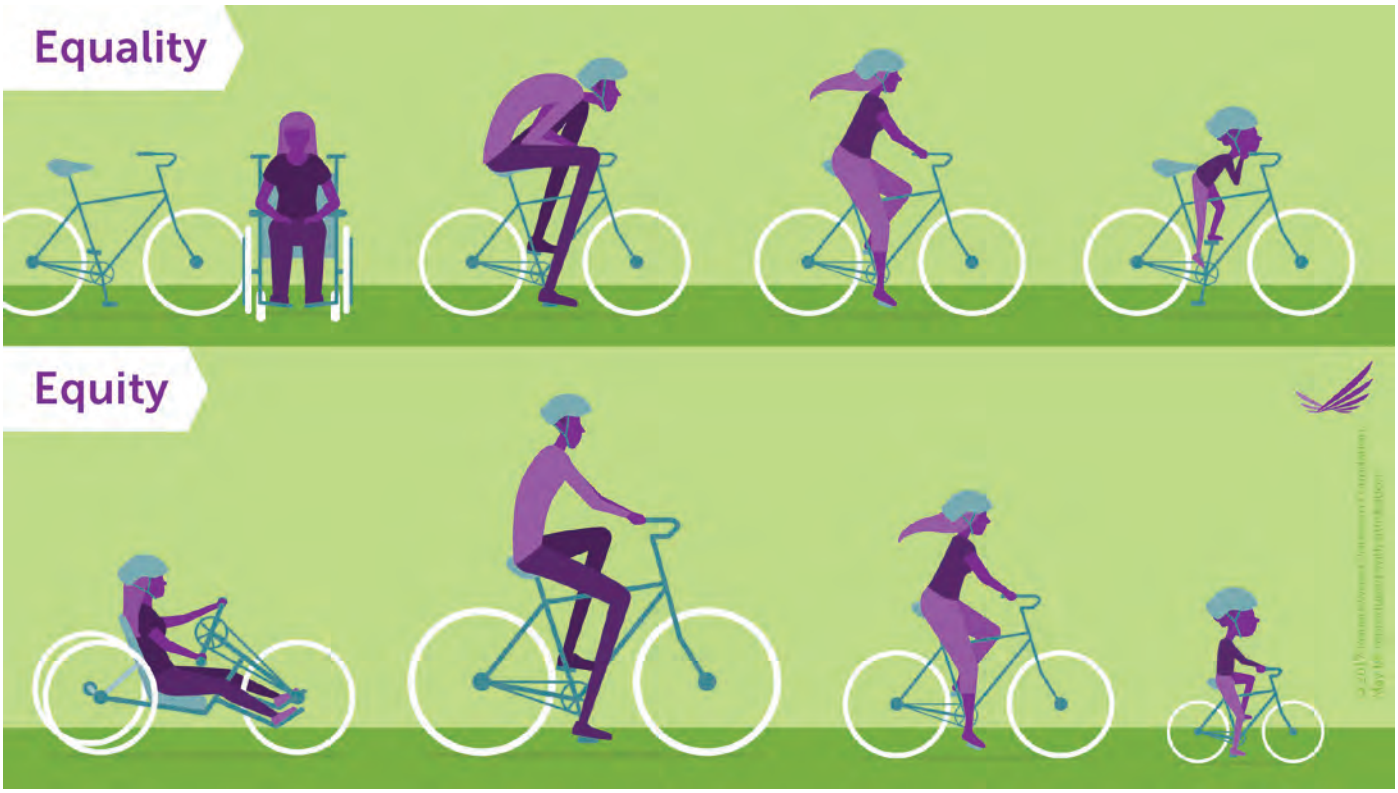


Figure 3 Health Equality versus Health Equity. Source: Robert Wood Johnson Foundation, 2017. Available at https://www.rwjf.org/en/library/infographics/visualizing-health-equity.html. Accessed 2018.

HEALTH DISPARITIES are "differences in health outcomes and their causes between groups of people as the result of social, demographic, environmental or geographic differences."[4] Imagine a neighborhood that has few sidewalks, no parks or green spaces, and no grocery stores, but many fast food restaurants and liquor stores. Now picture a neighborhood across town with wide sidewalks, a safe, well-lit park for neighborhood children, accessible walking and biking trails, two large grocery stores, and no fast food chain restaurants. If the first neighborhood has higher rates of obesity and chronic conditions, such as diabetes, because they have little or no access to safe places to be active or to stores that sell healthy, fresh, and affordable food, there are health disparities—different health outcomes—between these two neighborhoods due to the differences described above.

> ***"Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion."***[5]
>
> —Healthy People 2020

2.3.1.1 UNNATURAL CAUSES DOCUMENTARY

Unnatural Causes is a seven-part DVD series (four hours), produced in 2008 by California Newsreel and broadcast on the Public Broadcasting Service (PBS), that explores complicated questions of health, health equity, and health disparities. MAPP participants watched the trailer and several clips from the documentary that are available online and discussed the documentary's "10 Things to Know about Health" handout. Key messages from the series include:

- Health is more than healthcare
- Health is tied to the distribution of resources
- Racism imposes an added health burden
- The choices we make are shaped by the choices we have
- High demand + low control = chronic stress
- Chronic stress can be toxic
- Inequality – economic and political – is bad for our health
- Social policy *is* health policy
- Health inequalities are not natural
- We all pay the price for poor health[6]

Not every MAPP council or group saw the same clips, but each MAPP council or group saw and discussed at least several clips from the documentary. The following includes all clips shown throughout the 2019 MAPP process:

- Trailer
- Atomic Testing in the Marshall Islands
- Diabetes among Native Americans – Genes or Environment?
- Diabetes in the Marshall Islands
- Kim Anderson's Story
- Living in Disadvantaged Neighborhoods is Bad for Your Health
- Unemployment Affects Family

Participants were encouraged to share the video clips and visit the *Unnatural Causes* website to learn more about racial and socioeconomic inequities in health: https://www.unnaturalcauses.org. The website contains descriptions of each episode and discussion guides as well as other tools and handouts, resources, and an action center.

Figure 4 2019 MAPP Structure. Source: Thomas Jefferson Health District. Created 2018.

2.3.2 2019 MAPP Structure

The structure for the 2019 MAPP process was similar to that of the 2016 process, but included the formation of several new groups (Figure 4). The MAPP Core Group met monthly or biweekly to plan and coordinate the MAPP process and associated logistics.

2.3.3 Health Equity Meeting Series for MAPP Councils

The MAPP Core Group partnered with the Fluvanna Interagency Council (IAC), Greene Agencies Coming Together (ACT), Louisa IAC, and Nelson IAC and continued coordination of the MAPP-specific Charlottesville/Albemarle MAPP Council and MAPP2Health Leadership Council (for district-wide agencies and community coalitions). Attendees at council meetings typically included representatives from local governments, schools, community agencies, colleges, nonprofits, and healthcare organizations. For a complete listing of participants, see Appendix 8.1. For meeting notes, presentations, and supplemental materials, visit: http://www.vdh.virginia.gov/thomas-jefferson/council-information/. Each council participated in a series of three MAPP meetings:

- **MEETING #1:** 2019 MAPP2Health Overview + Photovoice Project Introduction + Discussion of Health Equity (with *Unnatural Causes* videos)
- **MEETING #2:** Selection of a Photovoice Project + MAPP Data + Discussion of Data & Health Equity (with *Unnatural Causes* videos)
- **MEETING #3:** Photovoice Project Results + Diabetes Steering Committee & MAPP Best Practices Work Group Recommendations + Overview of MAPP Implementation Funding + Brainstorming Action Strategies to Improve Health Equity

2.3.4 Photovoice Projects

A critical component of community input and engagement for the 2019 MAPP process was a series of photovoice projects completed across the district by the local Move2Health Coalition. Residents took pictures and participated in focus groups to identify community and cultural assets. For the complete report on the photovoice projects, please see Section 5 of this report. Photos from these projects are incorporated throughout this report.

2.3.5 Diabetes Steering Committee

Another key component of community input and engagement for the 2019 MAPP process was through the Diabetes Steering Committee. Under the *Reduce Health Disparities and Increase Access to Care* priority, one of the three 2016 objectives was to "identify up to three health conditions with marked disparities and reduce the disparities." Initial meetings planned by SMJH, TJHD, the United Way, and UVA Health, ultimately led to identification of type 2 diabetes as a health condition with marked disparities. SMJH led the formation of a Diabetes Steering Committee, comprised of African American and Latino community members, to review best practices and make recommendations on the best approaches for reducing disparities in diabetes outcomes. For the complete Diabetes Steering Committee Report, please see Section 6 of this report.

2.3.6 MAPP Best Practices Work Group

The MAPP Best Practices Work Group convened subject matter experts across the four MAPP priorities, and related social determinants of health, to review current strategies by priority, research evidence-based practices, and ultimately recommend a variety of best practices to address each MAPP priority. The Best Practices Work Group also participated in a series of three meetings:

- **MEETING #1:** 2019 MAPP2Health & Health Equity Overview (with *Unnatural Causes* videos) + Public Health Frameworks + Identification of Current Activities & Initiatives by Priority using the Health Impact Pyramid + Brainstorm of Potential Policy, Systems, and Environmental Changes by Priority
- **MEETING #2:** Prioritizing Current and Potential Best Practices from Meeting #1 + Health Equity Discussion + Review of County Health Ranking's "Intervention Planning Matrix" (with *Unnatural Causes* videos) + Best Practices Brainstorm by Priority
- **MEETING #3:** Discussion on Community Input + Recap of Common Themes from Meeting #2 + Finalizing Best Practices by Priority

Figure 5 MAPP Best Practices Work Group, Meeting #2, February 22, 2019.

Several public health frameworks for increasing impact, including the health impact pyramid and policy, systems, and environmental change were highlighted in work group sessions.[7]

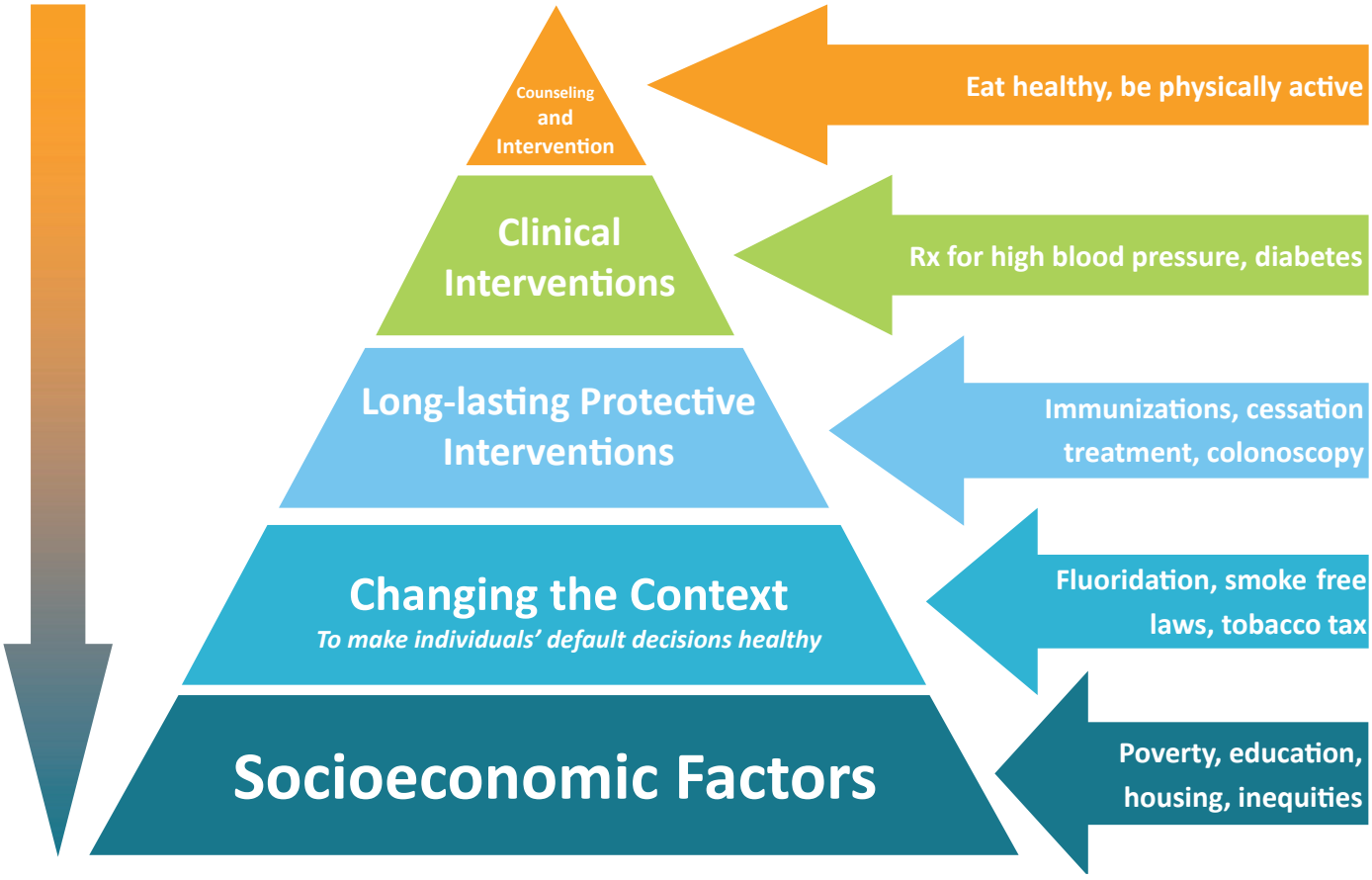
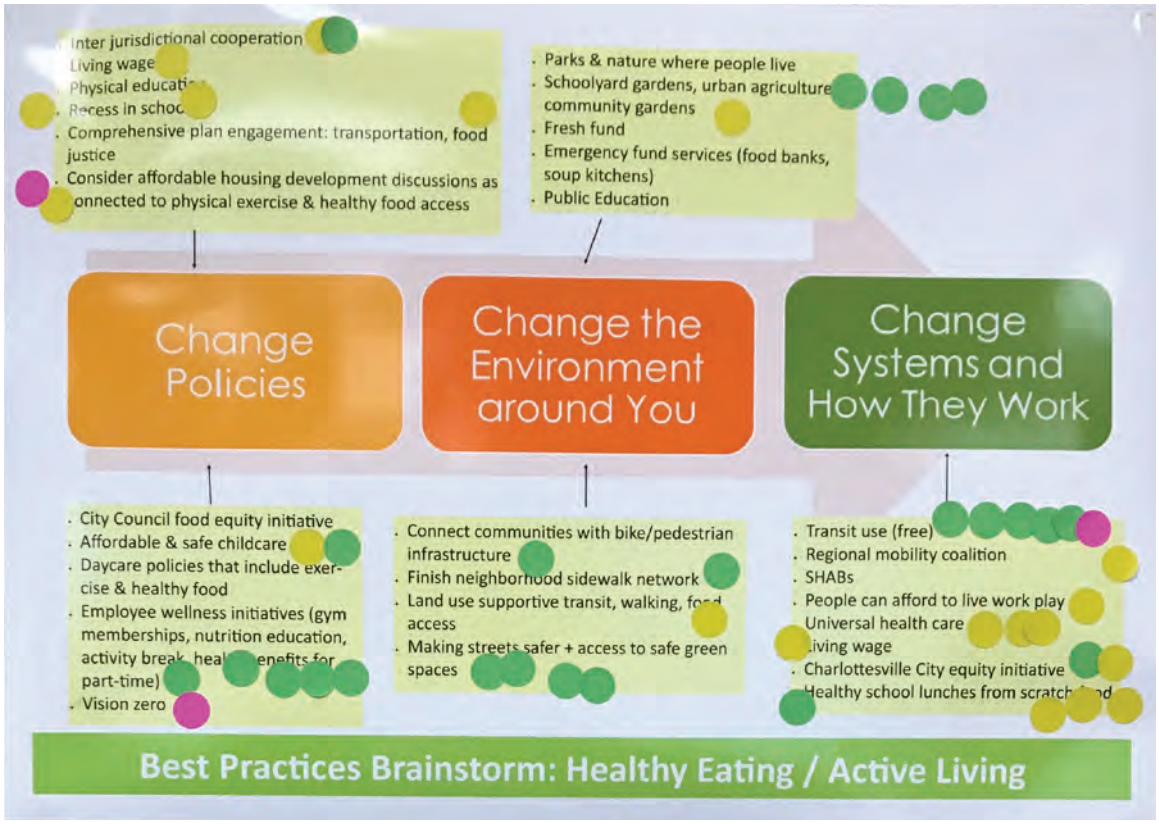


Figure 6 CDC Health Impact Pyramid. Source: Centers for Disease Control and Prevention.

In each meeting, participants separated into six groups:

- Healthy eating and active living
- Mental health and substance use
- Access to care
- Health disparities and health equity
- A healthy and connected community for all ages (children, youth, and their families + older adults)
- Social determinants of health*

** Best practices recommended by the social determinants of health group were ultimately added to one of the other five "menus" of best practices. All best practices were shared with locality IACs and the MAPP Leadership Council in the third meeting of the series to generate brainstorming around which strategies would be applicable within their locality (and throughout the district for Leadership Council). For the complete listing of recommended best practices, see Appendix 8.3.*



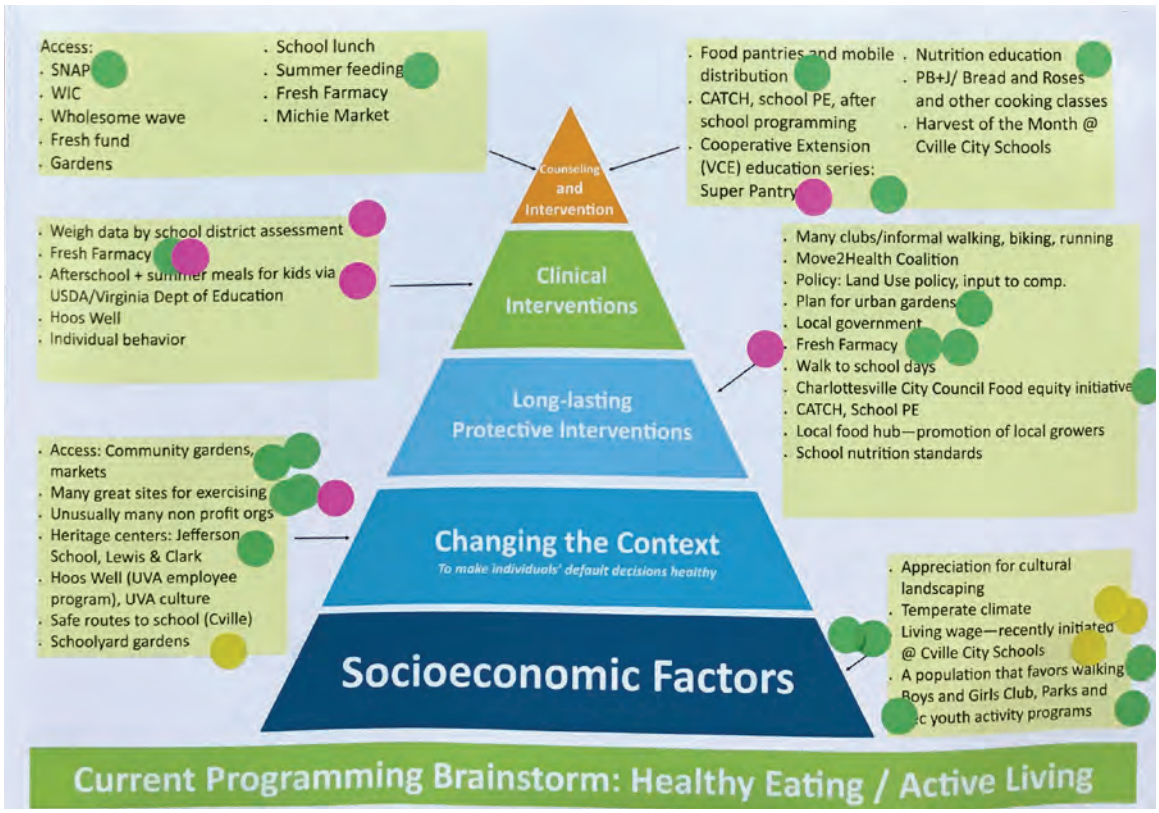


Figure 7 MAPP Best Practices Work Group, Meeting #2, February 22, 2019. Reviewing Work from Meeting #1: pink dots (would like to learn more about this), green dots (likely to have a greater impact on health equity), and yellow dots (top consideration for action/implementation).

2.3.7 MAPP Data and Evaluation Committee

The MAPP Data and Evaluation Committee convened data partners to review current MAPP community measures, strengthen local data partnerships, share local data and data projects, and brainstorm data strategies and projects. UVA DPHS provided meeting facilitation. Participants discussed data projects with the potential to improve health equity and committed to working together on several data-focused projects that are listed a strategy in the Plan (see Section 4).

2.3.8 MAPP Implementation Funding

One area for improvement noted after the 2012 and 2016 MAPP processes was the difficulty of executing identified strategies in the more rural localities of TJHD. While the City of Charlottesville and the County of Albemarle both have a large variety of organizations and community coalitions that are committed to working across the MAPP priorities and moving identified strategies forward, capacity and resources are more limited in the other localities.

To address this challenge in the 2019 MAPP process, the MAPP Core Group made MAPP implementation funding available to each locality through a brief grant application process to bolster capacity and provide monetary resources for implementing health equity strategies. SMJH, TJHD, and UVA Health each contributed funding to offer a $15,000 grant to each of the six localities in TJHD for one year of funding with SMJH and UVA Health pledging to fund selected projects (achieving impact with demonstrable outcomes) at 75% and 50%, respectively, in the second and third years. UVA DPHS pledged to provide pre-application technical assistance to applicants as well as ongoing technical assistance for partnerships selected for implementation funding.

MAPP locality councils brainstormed ways to combine the priority area best practices with community assets identified from photovoice projects to create strategies that may begin to improve health equity within their locality.

2.4 | CONCLUSION

In TJHD, MAPP2Health is a continuous process of assessment, action planning, implementation, and evaluation. The discussions and findings from the 2019 MAPP process culminated in the district's community health improvement plan—*Improving Health Equity: A Community Plan for Action and Accountability 2019–2022*. For the full plan, see Section 4.

ENDNOTES

[1] Healthy People 2020. (n.d.) *Social determinants of health*. Retrieved from www.healthypeople2020.gov/2020/topics-objectives/topic/social-determinants-of-health.

[2] Centers for Disease Control and Prevention, Community Health Improvement Navigator. (2015, August 19). *Invest in your community: 4 considerations to improve health & well-being for all*. Retrieved from https://www.cdc.gov/chinav/index.html.

[3] Braveman, P., Arkin, E., Orleans, T., Proctor, D. & Plough, A. Robert Wood Johnson Foundation. (2017, May). *What is health equity? And what difference does a definition make?* [PDF Report]. Princeton, NJ: Robert Wood Johnson Foundation. Retrieved from https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html.

[4] Voices for Healthy Kids, American Heart Association, and Robert Wood Johnson Foundation. (Fall 2017). *Health equity in public policy: Messaging guide for policy advocates* [PDF]. Retrieved from https://voicesforhealthykids.org/healthequity/.

[5] Healthy People 2020. (n.d.). *Health disparities*. Retrieved from https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities#5.

[6] Unnatural Causes. (2008). *10 things to know about health* [PDF]. Retrieved from https://www.unnaturalcauses.org/handouts.php.

[7] Frieden, T. (2010, April). A framework for public heath action: The health impact pyramid. *American Journal of Public Health*, 100(4), 590–595.

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Who Are We: Planning District 10/ Thomas Jefferson Health District

Photovoice Photo: Greene Care Clinic

3.1 | COMMUNITY OVERVIEW

3.1.1 District Geography

Located in Central Virginia, Virginia's Planning District 10 (PD10), also known as the Thomas Jefferson Health District (TJHD) or the Region Ten catchment area, is comprised of the City of Charlottesville and counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson (Figure 1). The district includes 252,588 individuals[1] living in urban, suburban, and rural environments. The urban ring of Charlottesville and Albemarle is the economic and cultural hub of TJHD, and many residents from the surrounding counties commute there for work, healthcare, shopping, and entertainment. The district is located several hours southwest of Washington, D.C., within an hour of Richmond, and within several hours of the Eastern Shore and Atlantic Ocean.

The region features rolling mountains, rivers, and plentiful outdoor spaces for activities, including the Blue Ridge Mountains, the Shenandoah National Park, scenic drives along the Blue Ridge Parkway and Skyline Drive, and a large variety of hiking trails. Major waterways include the James and Rivanna Rivers, Lakes Monticello (Fluvanna County) and Anna (Louisa County), and reservoirs. Well-known to locals and tourists alike for its plethora of wineries, breweries, and picturesque wedding locations, the

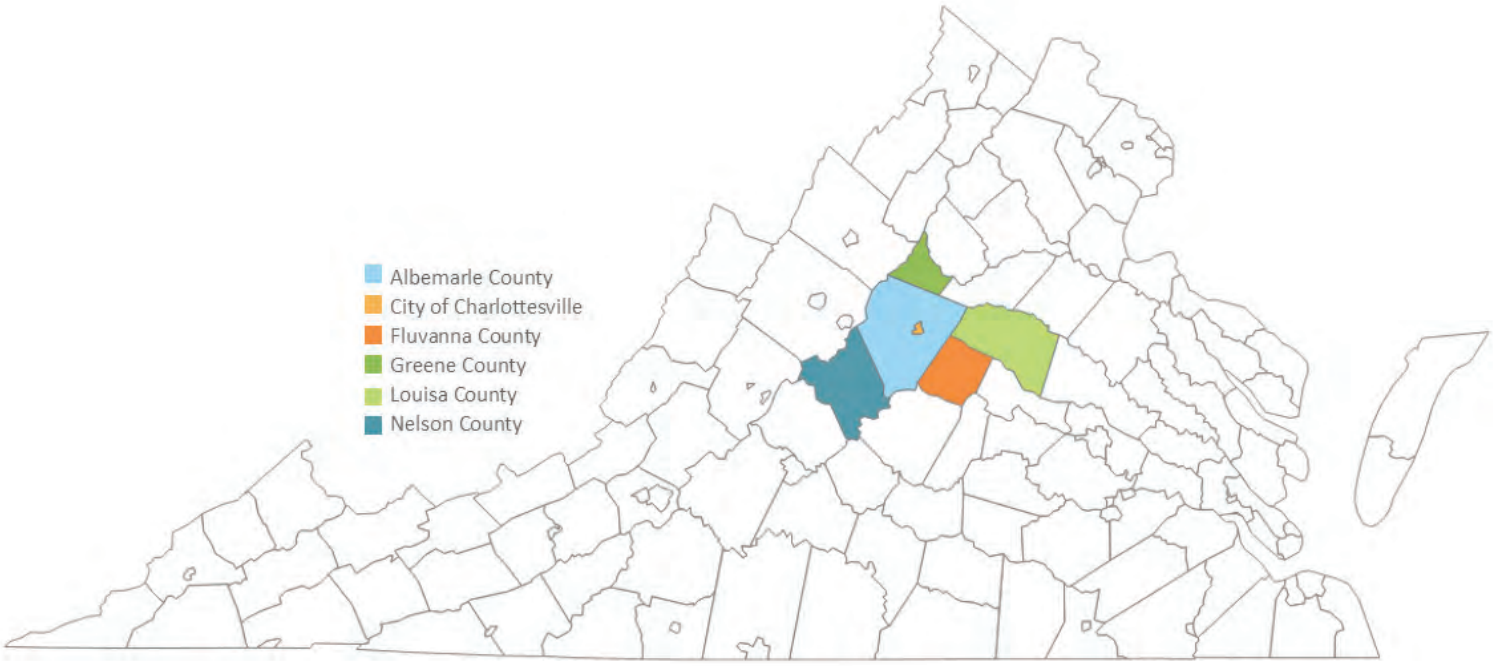

Figure 1 Thomas Jefferson Health District. Source: Thomas Jefferson Health District. Created 2018.

area is also home to several historical sites. American presidents Thomas Jefferson and James Monroe both lived in Albemarle County and Monticello, Jefferson's home, is a United Nations Educational Scientific and Cultural Organization (UNESCO) world heritage site. Jefferson also founded the University of Virginia (UVA), which is located in Charlottesville and Albemarle County.

3.1.2 District Transportation, Economy, and Healthcare

3.1.2.1 TRANSPORTATION

Much of the public transit in TJHD is concentrated in the areas that are more densely populated. Albemarle County is home to the Charlottesville-Albemarle Airport (CHO), and the City of Charlottesville has an Amtrak train station and a Greyhound bus station. Charlottesville Area Transit (CAT) operates 12 bus routes serving Charlottesville and parts of Albemarle that are adjacent to Charlottesville.[2] The UVA University Transit Service (UTS) operates nine bus routes in and around UVA and the parts of Charlottesville and Albemarle surrounding UVA.[3] JAUNT is a regional transportation system serving the City of Charlottesville and the counties of Albemarle, Fluvanna, Louisa, and Nelson as well as Buckingham and Amherst (outside of TJHD). Greene County Transit, Inc., serves Greene County. Cab companies, a publicly operated rideshare service operated by the Thomas Jefferson Planning District Commission, and private rideshare companies such as Uber and Lyft also provide transportation.

3.1.2.2 ECONOMY

In Albemarle County, top employers include UVA, the County of Albemarle, Sentara Martha Jefferson Hospital, State Farm Mutual Automobile Insurance, the U.S. Department of Defense, UVA Medical Center, Piedmont Virginia Community College, Atlantic Coast Athletic Club (ACAC), Crutchfield Corporation, and Walmart.

In the City of Charlottesville, top employers include UVA Medical Center, the City of Charlottesville, UVA Health Services Foundation, Charlottesville City School Board, and Capital IQ Inc. (also known as S&P Global Market Intelligence and formerly SNL Financial); of note, the County of Albemarle is also a top ten employer in Charlottesville.

In Fluvanna County, top employers include the Fluvanna County School Board, Fluvanna Correctional Center, the County of Fluvanna, Fork Union Military Academy, and the Lake Monticello Homeowners Association; other top ten employers include Domino's Pizza and Food Lion.

Top ten employers in Greene County include the Greene County School Board, Walmart, the County of Greene, Lowe's, the Blue Ridge School, and McDonald's.

Top ten employers in Louisa County include Walmart, Louisa County School Board, Klöckner Pentaplast America (a pharmaceutical and medical device manufacturing facility), the County of Louisa, Food Lion, and Lowe's.

In Nelson County, top employers include Wintergreen Resort, the Nelson County School Board, Craft USA Holdings LLC, the County of Nelson, Blue Ridge Medical Center, Wintergreen Property Owners Association, Bold Rock Partners LP (a brewery), Veritas Vineyard & Winery, Blue Mountain Brewery Inc., and Saunders Brothers (an orchard).[4]

3.1.2.3 HEALTHCARE

TJHD is home to two healthcare systems—Sentara Martha Jefferson Hospital and UVA Health. In addition to their two main hospital locations in Charlottesville/Albemarle, both healthcare systems

have outpatient sites in the urban ring. UVA Health also provides primary and specialty care at locations in Zion Crossroads (Fluvanna and Louisa Counties) as well as Nellysford (Nelson County) while Sentara has outpatient care sites in Afton (Nelson County), Crozet and Forest Lakes (Albemarle), Palmyra (Fluvanna County), Ruckersville (Greene County), and in several neighboring localities outside of PD10.

The district also has Federally-Qualified Health Centers (FQHCs) in four TJHD localities. FQHCs are community-based health centers that provide primary care in underserved areas and receive funding from the United States Health Resources and Services Administration (HRSA). To operate as an FQHC, centers must provide care using a sliding fee scale based on ability to pay as well as include patients on their board of directors.[5] Central Virginia Health Services, Inc. (CVHS), is an FQHC with multiple locations across Central Virginia including the Southern Albemarle Family Practice in Albemarle County, the Neighborhood Family Health Center in Charlottesville (as well as an additional site in Charlottesville co-located with Region Ten Community Service Board, the district mental and behavioral health provider), and the Health and Wellness Center of Louisa (Louisa County). Blue Ridge Medical Center is an independently operated FQHC located in Nelson County. Although services vary, district FQHCs typically provide integrated care including primary care, behavioral/mental health, dental care or referral to dental services, and pharmacy services.

In addition, the district includes the Charlottesville Free Clinic, which provides medical and dental care as well as pharmacy services to low-income underserved community members. In Greene County, the Greene Care Clinic provides primary care and pharmacy services and serves residents of the county who do not have health insurance and have a family income of less than 300% of the federal poverty level. Some patients formerly served by these two clinics now have health insurance due to the passage of Medicaid expansion in Virginia, and both clinics have reviewed their eligibility requirements and programming in response to Medicaid expansion.

Public health services are provided by the Thomas Jefferson Health District (TJHD), which includes health departments in Charlottesville/Albemarle (combined location), Fluvanna, Greene, Louisa, and Nelson. Typical services include environmental health, immunizations, family planning, sexual health, tuberculosis screening, infectious disease investigation, WIC (a supplemental nutrition program for Women, Infants, and Children), emergency preparedness, and vital records. Region Ten Community Services Board (Region Ten) provides mental health, intellectual disability, and substance use services to consumers across the Region Ten catchment area, which has the same footprint as TJHD.

3.1.3 District History

The following section is not meant to be a complete history of the district and was not written by historians. It is intended to give community members and local organizations an overview of some of the historical events, governmental policies, and movements that contributed to intentional inequalities and inequities among groups of people in the region due to racism, sexism, classism, xenophobia, transphobia, etc. While "history" implies a time that is in the past, many of these discriminatory and oppressive acts are ongoing and/or still affect people in the district today—through traumatic lived experiences of older members of the community, through stories passed down by older generations, through inter-generational trauma, and/or through social, educational, and economic factors that are still impacting where residents live, work, play, and pray. Some examples include white people's use of discriminatory housing policies to prevent people of color from building wealth and passing it to future generations, governmental institutions and people in power using forced sterilizations to prevent people

with mental health disorders (or a family history) from having children, and educational institutions run by men denying women in the region access to a full range of higher education opportunities at UVA until 1970.

3.1.3.1 INDIGENOUS LANDS

For the last 10,000+ years, indigenous peoples have occupied the land that is now known as the Commonwealth of Virginia. A confederation of Siouan Indians of the Monacan and Mannahoac tribes lived in the Piedmont region and mountains of Central Virginia. On the eastern coast of present-day Virginia, the Powhatan autocracy consisted of Indians that spoke Algonquian languages. Monacan ancestors lived in villages; cultivated crops such as corn, beans, squash, and other crops; and traded goods with Powhatans to the east and Iroquois to the north.[6]

In the 1500s, Spanish explorers carried diseases such as smallpox and influenza that decimated entire tribes in the Americas. English colonists arrived at Jamestown in 1607. Increasing numbers of colonists pushed Native Americans out of their ancestral lands, killed them, sold them into slavery, and used government policies to erase Native American identities. For example, in 1924, the Virginia legislature passed the "Racial Integrity Act" which was backed by Walter Ashby Plecker, Virginia's first Registrar for the Bureau of Vital Statistics (now part of the Virginia Department of Health, whose modern-day Office of Vital Statistics records birth, marriage, divorce, and death certificates). Plecker was a staunch advocate of eugenics and a leading member of the Anglo-Saxon Clubs of America, a white supremacist organization. The act required Virginians to submit a certificate of racial composition to the Bureau in order to get married, and classified people into two races—white or "colored" based on a one-drop rule. Anyone that had even one drop of "colored" blood was classified as non-white. The act effectively erased the identity of Native Americans in Virginia as they were lumped into a broad "colored" category.[7]

The Commonwealth of Virginia currently recognizes 11 American Indian tribes: the Mattaponi, Pamunkey, Chickahominy, Chickahominy-Eastern Division, Rappahannock, Upper Mattaponi, Nansemond, Monacan, Cheroenhaka (Nottoway), Nottoway, and Patawomeck.[8] The Pamunkey were the first tribe in Virginia to receive federal recognition.[9] Signed into law in 2018, the federal government of the United States of America recently recognized an additional six Virginia American Indian tribes: the Chickahominy, Chickahominy-Eastern Division, Upper Mattaponi, Rappahannock, Monacan, and Nansemond.[10] The Monacan Indian Nation, recognized by the state in 1989 and by the federal government in 2018, is headquartered on their ancestral lands of Bear Mountain in Amherst County, which is adjacent to the district's Nelson County.[11]

3.1.3.2 BUILDING THE COMMONWEALTH THROUGH ENSLAVED LABOR

Africans first arrived in Virginia in 1619 on European ships and were sold by the Europeans once the ships landed in the Colony of Virginia. The initial use of indentured servants by Virginia planters in tobacco fields and beyond dwindled in the Commonwealth as their labor force was replaced by increasing numbers of enslaved Africans.[12] Encyclopedia Virginia notes: "Indentured servants were men and women who signed a contract (also known as an indenture or a covenant) by which they agreed to work for a certain number of years in exchange for transportation to Virginia and, once they arrived, food, clothing, and shelter. Adults usually served for four to seven years and children sometimes for much longer, with most working in the colony's tobacco fields."[13]

Third president of the United States, author of the Declaration of Independence, champion of religious freedom, founder of the University of Virginia, and resident of Albemarle County on his Monticello plantation,[14] Thomas Jefferson enslaved 607 people

throughout his lifetime.[15] Fellow Founding Father, fifth president of the United States, namesake of the Monroe Doctrine, and fellow resident of Albemarle County on his Highland plantation, James Monroe enslaved approximately 250 people throughout his lifetime.[16]

When construction began on the future University of Virginia in 1817, Albemarle County was home to ten thousand enslaved people, which was approximately half of the county's population. Enslaved people were forced to work alongside free white and black laborers to build UVA. In order to secure the necessary labor, UVA rented enslaved people from Albemarle and surrounding counties; the President's Commission on Slavery and the University notes that "enslaved people rented to the school were separated from family and community in their home counties of Albemarle, Orange, Madison, Goochland, Fluvanna, Louisa, and even the Richmond area."[17]

3.1.3.3 LYNCHINGS AS A FORM OF STATE-SANCTIONED VIOLENCE

There are 104 known instances of white mobs lynching African Americans in Virginia between 1877 and 1927. While some of the victims across Virginia were white men, the large majority were African American men. Mob violence and lynching essentially functioned as state-sanctioned violence in the Jim Crow South. In accounts of Virginia lynchings, many victims were seized directly from jails or during transport by officers from one location to another, and because white people controlled the highest ranks of power (police, court, elected government, etc.), very few of the white participants in these lynch mobs were ever indicted or brought to trial.[18]

Within TJHD, at least six men were lynched between 1877 and 1927 (Figure 2). Jim Rhodes (white) was lynched in Albemarle County, close to Free Bridge in Charlottesville, in 1882. Then, in 1898, an unmasked mob seized John Henry James (black) from officers on a train en route to Charlottesville and lynched him in Albemarle County.[19] An article in the Daily Progress newspaper at the time noted that, while the paper was not in favor of mob violence and believed in the rule of law through a judge and jury, nevertheless "we have long since ceased to be amazed that good men, honest men, law-abiding men and aye, Christian men have been unable to record these violations of the most sacred matters of society with anything like patience."[20] William Young[1] (black) was lynched in Fluvanna County in 1892 when he was taken from the jail in Palmyra. In 1880, a masked mob lynched George Lowery (white) near a mill in Nelson County. In 1900, Pickney Murphy (black) was lynched near Arrington (the current-day location of the Blue Ridge Medical Center and Nelson County Health Department) in Nelson County. In 1904, a crowd of white men lynched a young boy named Andrew Dudley (black) near Afton in Nelson County.[21]

In March 2018, a gathering of approximately 15 people met for a memorial and soil collection

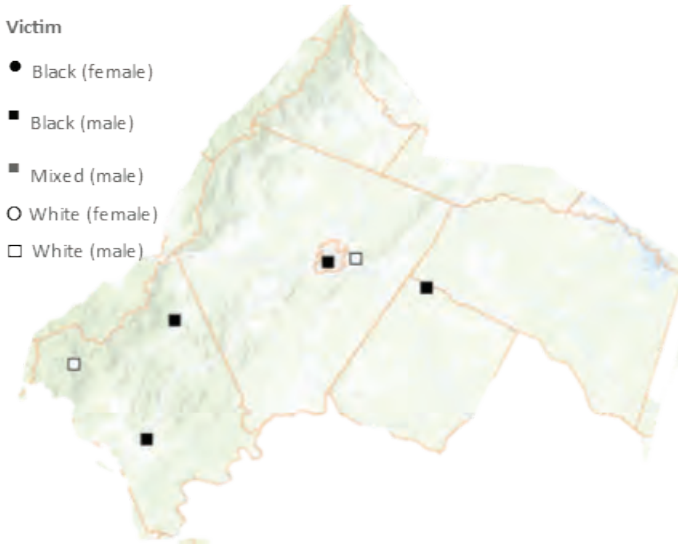

Figure 2 Lynchings Map, TJHD Localities, 1877–1927. Source: Racial Terror: Lynching in Virginia, 1877–1927, James Madison University. Available at https://sites.jmu.edu/valynchings/map-1/. Accessed 2019.

[1] Newspapers and records at the time had incorrectly noted that William Young's brother Phillip Young was lynched; Fluvanna County Historical Society volunteers found that, in fact, William was the brother who was lynched.

ceremony in Fluvanna County to remember William Young. The collected soil was sent to Montgomery, Alabama, to the Equal Justice Initiative's National Memorial for Peace and Justice, to join soil from lynching sites across the nation.[22] Later in 2018, a gathering of around 50 people from Albemarle and Charlottesville—local pastors, activists, community members, and government officials—met for a similar memorial and soil collection ceremony to remember John Henry James. The collected soil also went to Montgomery, Alabama, with around 100 people on a pilgrimage to civil rights landmarks of the South. This soil was also taken to the Equal Justice Initiative's National Memorial for Peace and Justice.[23]

3.1.3.4 OPPRESSION THROUGH MEDICINE

Similar to other universities across the Commonwealth and nation, in the 1820s and 1830s, white UVA professors and their students were responsible for securing their own cadavers for anatomical dissections. They robbed graves and secured transport of grave-robbed corpses from as far away as Richmond, Virginia. Students and professors often targeted African American cemeteries[24] and/or people who were poor, experiencing homelessness, alcohol addiction, or incarcerated, under the assumption that they would not be claimed or missed by their families.[25]

The UVA hospital opened in 1901. UVA's faculty chair at the time, Paul Barringer, was instrumental in developing the hospital as an intellectual hub of the eugenics movement—he later went on to serve as the president of Virginia Tech. Harvest Ernest Jordan, dean of the medical school in the 1940s, promoted sterilization laws and the restriction of intermarriage between white and black people.[26] From 1972–2016, Jordan had a medical research building named after him at UVA; however, in 2016 UVA changed the name to honor Vivian Pinn, the only woman and only African American in the UVA School of Medicine class of 1967. Dr. Pinn was the first full-time director of the Office of Research on Women's Health at the National Institutes of Health.[27, 28]

Overall, "healthcare in America, before the passage of Medicare in 1965, was characterized by prejudice and structural racism."[29] Hospitals and white physicians often denied services to African Americans, Native Americans, and immigrants. UVA's hospital segregated black patients into two "dark, crowded, and poorly ventilated" basement wards, while Martha Jefferson Hospital refused to admit black patients under any circumstances. The UVA hospital housed all black patients in the same wards, including patients with mental illness, and did not provide the option for private or semi-private rooms until a hospital expansion in 1960. In the 1930s and 1940s, black patients could not access outpatient services at UVA or surgical treatment for tuberculosis; in fact, there was only one sanatorium in the state that accepted black patients.[30]

As recently as 1980, residents were displaced in the name of progress and medical expansion. When UVA's Primary Care Center opened in 1980, the $11 million site displaced the predominantly black neighborhood of Gospel Hill.[31]

3.1.3.4.1 Eugenics in Virginia

In 1924, the same year as the passage of the Racial Integrity Act, lobbying from Virginia's Registrar for the Bureau of Vital Statistics Walter Plecker and other prominent eugenicists, including UVA faculty, resulted in passage of the Eugenical Sterilization Act in Virginia. The act allowed the Commonwealth to forcibly sterilize individuals "afflicted with hereditary forms of insanity that are recurrent, idiocy, imbecility, feeble-mindedness or epilepsy."[32] Carrie Buck, a Charlottesville native, was used as a test case for this new law. Her mother had been committed to the Virginia State Colony for Epileptics and Feeble-Minded in Lynchburg, VA. Carrie was committed due her family history of "feeblemindedness" and her "promiscuity" for getting pregnant; Carrie stated she had been raped by her foster father. In 1927, the

United States Supreme Court affirmed the legality of Virginia's law and Carrie Buck was the first person in Virginia involuntarily sterilized under the new eugenics law. Approximately 8,300 Virginians were sterilized under this law through 1972 (although the act was not repealed until 1974).[33] Virginia's Department of Behavioral Health and Development Services (DBHDS)—the agency that oversees the same state psychiatric hospitals where Virginians were committed and forcibly sterilized—currently oversees a "Victims of Eugenics Sterilization Compensation Program" that provides monetary compensation to sterilization victims and their authorized representatives.[34]

3.1.3.5 UNEQUAL ACCESS TO EDUCATION

In 1926, the City of Charlottesville opened its first African American high school, the Jefferson High School. For a more complete history of the Jefferson School, visit http://www.aahistoricsitesva.org/items/show/226. In the mid-1950s, the families of twelve African American children in Charlottesville sued the Charlottesville City School Board to demand school integration so that their children could have equal access to education. In 1956, the white school board appealed a court order for two white Charlottesville schools, Venable Elementary School and Lane High School, to accept these 12 black students (often called "the Charlottesville 12"). In response to a federal court order in 1958 to integrate specific Virginia schools, the Governor ordered that public schools in Charlottesville, Alexandria, and Norfolk close. Lane and Venable did not re-open until February 1959. On September 8, 1959, John Martin (14 years old), his brother Donald (13), and French Jackson (12), walked into Lane High School as the first three African American students at Lane. On the same day, Charles E. Alexander, Marvin Townsend, Maurice Henry, Raymond and Regina Dixon, twins Roland T. and Ronald E. Woodfolk, Sandra Wicks, and William Townsend were the first African American students to attend Venable Elementary School.[35, 36, 37]

3.1.3.5.1 Higher Education

In 1935, Alice Jackson, a black woman, applied to UVA for graduate school and was rejected.[38] In 1950, lawyer Gregory Swanson sued UVA when he was rejected from the Law School for being a "colored man." Swanson won the lawsuit and matriculated the same year; he participated in academic activities, but was largely barred from participating in more social activities and was prevented by white administrators from living on grounds. He rented a room off-grounds in the historically black neighborhood of Vinegar Hill and walked a mile to school each day.[39]

As early as 1880, UVA provided instruction for school teachers and several women took courses at UVA in the 1890s and onward. Starting in 1920 (the year American women won the right to vote), UVA began to admit women to its graduate and professional schools. In 1944, Mary Washington College, located in Fredericksburg, Virginia, became the women's liberal arts college associated with UVA. In 1969, Charlottesville resident Virginia Scott, along with Nancy Jaffe, Nancy L. Anderson, and Jo Anne Kirstein, successfully sued the university alleging discrimination against women in UVA's admissions policies. In the fall of 1970, 450 undergraduate women entered the College of Arts & Sciences.[40]

Established in 1969, Piedmont Virginia Community College (PVCC) opened its doors to 456 students in fall 1972.[41]

3.1.3.6 HOUSING: RACIAL SEGREGATION, REDLINING, AND RESIDENT DISPLACEMENT

3.1.3.6.1 Racial Covenants

In 1897, the white businessmen who ran the Locust Grove Investment Company became one of the first housing development businesses in Charlottesville to explicitly restrict the sale and ownership of its properties to white residents. In property records from that time, the company stipulated that for 140 properties it was selling several

blocks east of the city's center, "It is also agreed that this land is not at any time to be sold to or owned by negroes…"[42]

For the next 50 years, these racially restrictive covenants, or clauses, were routinely inserted into property records throughout the city, preventing African Americans from buying these properties. This period saw the largest continued construction of single-family homes in the history of Charlottesville, resulting in what today many call "legacy" neighborhoods. During this time, white-owned banks, realtors, developers, and private homeowners supported—and in many cases, required—the insertion of racially restrictive language into thousands of homes, stipulating "that said property or any part thereof shall not be sold to, nor occupied as owners or tenants, by any person not of the Caucasian race."[43]

In addition to cementing the geographic racial segregation of city residents, the vast majority of these homes significantly appreciated in value after their construction, allowing for white families to exclusively reap the benefits of that increased worth. This helped provide them with far better opportunities, from education and health, to employment and life expectancy, as made clear in the Opportunity Atlas.[44, 45] (See Section 7.5.2.1)

In 1948, the United States Supreme Court ruled that lower courts could not uphold the enforcement of racially restrictive covenants. However, they remained privately used and socially adhered to for many neighborhoods until the Fair Housing Act was enacted in 1968. The racially segregated lines and concentrations of affluence these covenants created continue to this day.[46]

3.1.3.6.2 Redlining

Redlining is when lending institutions decline to make loans for mortgages in specific areas or communities, often because of race or ethnicity.[47]

After the Great Depression, the United States government enacted reforms to prevent foreclosures and stabilize the housing market. In the late 1930s, the Home Owners Loan Corporation (HOLC), a New Deal federal agency, began a process of appraising properties in cities across the nation, creating a risk matrix that attempted to determine how likely a mortgage was to default. Risk characteristics included standard housing attributes such as age, quality, occupancy, and price. Other risk characteristics for neighborhoods included the "threat of infiltration of foreign-born, negro, or lower grade population [such as Jews and Catholics]." Based on these assessments, neighborhoods received grades:

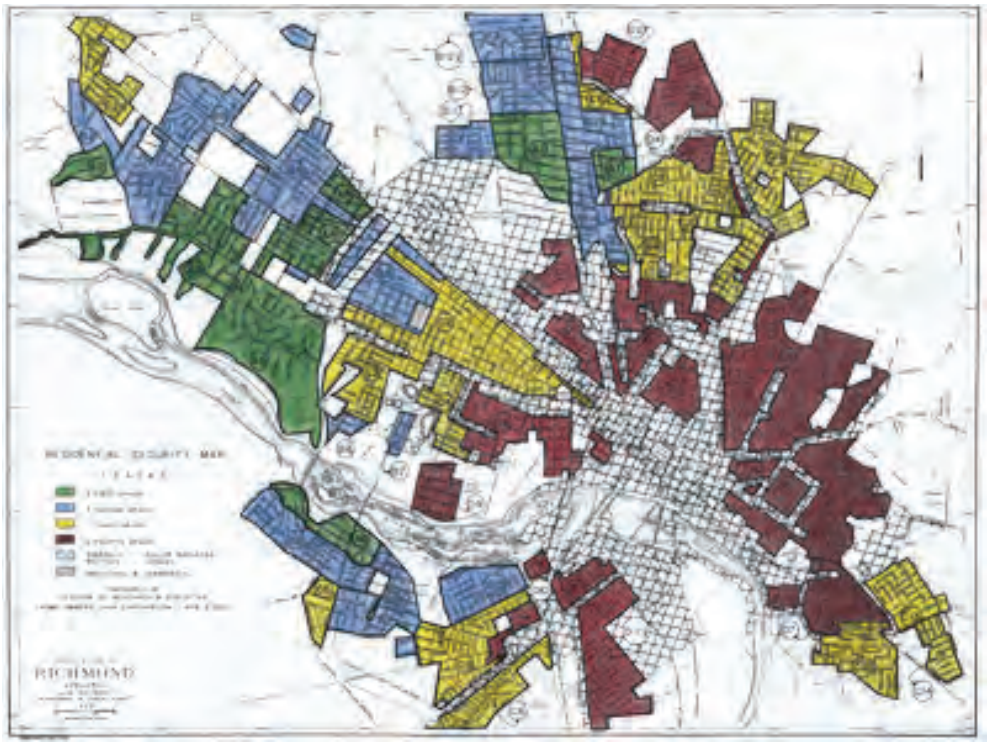

Figure 3 Residential Security or "Redline" Map, Richmond, VA, 1937. Source: Redlining Richmond. Available at https://dsl.richmond.edu/holc/pages/intro. Accessed 2019.

- A for hotspots (color-coded green)
- B for still good, but not the best neighborhoods (color-coded blue)
- C for neighborhoods or areas in a transition period (color-coded yellow)
- D for fully declined areas (color-coded red)

There were HOLC maps for several cities in Virginia, including Richmond. At the time, all African American neighborhoods in Richmond received a "D" grade; of the two non-African American neighborhoods that received a "D" grade, one was inaccessible and undeveloped (Figure 3).[48, 49]

Recent research has shown that HOLC boundaries drawn in the 1930s were a pivotal force in differences in racial segregation, homeownership rates, home values, and credit scores as recently as 2010. In fact, research estimates that 15–30% of the overall gaps in segregation and homeownership between "D" and "C" neighborhoods can be attributed to these maps. In addition to the impact on individuals' ability to secure home loans, neighborhoods with poor ratings also affected property prices and the willingness of investors to invest in these neighborhoods, as well as increasing the presence of predatory lending practices. In order to buy homes in "D" neighborhoods, individuals who were primarily black or other people of color, would only have had access to loans with steep interest rates; in addition, existing homeowners would have had difficulties in securing additional loans for home repairs or maintenance. Therefore, there were "long-term and invisible effects, too, on family wealth, as people who weren't able to buy a home never developed the equity that would allow their children (and grandchildren) to buy homes."[50]

The HOLC never created a map for Charlottesville, but property records show that white homebuyers received loans and mortgages through the HOLC to purchase homes in neighborhoods that were racially restricted to white families through clauses in their housing deeds.

3.1.3.6.3 Urban "Renewal"

"In 1937, the Federal Housing Administration (FHA) was authorized to create a mortgage insurance program that would revolutionize housing and lending markets throughout the nation. Small down payments and low monthly installments made mass home ownership possible and it became a cornerstone of wealth creation for the white middle class. […] Although little changed in urban America during the depression and war years, after the war the Veterans Administration (VA) established its own mortgage insurance program modeled on that of the FHA and bankers eagerly issued FHA- and VA-approved mortgages to create a surge in housing demand that developers were happy to satisfy by purchasing cheap land on the urban fringes and mass producing standardized homes. The resulting wave of suburbanization was for whites only, however. Building on a set of maps originally developed by the Home Owners Loan Corporation, the FHA and VA color-coded neighborhoods according to their creditworthiness, using red to indicate risky neighborhoods that were ineligible for federally-insured loans. Neighborhoods that were black or perceived to be in danger of becoming black were automatically colored red, thus cutting them off from credit and institutionalizing the practice of "redlining." The FHA and VA also took a dim view of lending to individual African Americans, with the 1939 FHA Underwriting Manual stating that 'if a neighborhood is to retain stability, it is necessary that properties shall continue to be occupied by the same social and racial classes,' and it recommended the use of racially restrictive covenants to ensure neighborhood stability."[51]

As white homeowners migrated to rapidly expanding suburbs, this freed up housing in cities and urban settings for black people. White investors grew scared that they would lose control of the urban real estate market to African Americans, and they turned to urban renewal and public housing programs to protect their investments.[52]

"Whenever black residential expansion threatened a favored district, a local urban renewal authority was established to gain control of the land using the power of eminent domain. Black neighborhoods were then razed for "redevelopment" as a middle class commercial or residential zone. Public housing was constructed in other black neighborhoods to house the displaced black residents, dramatically increasing the geographic concentration of black poverty."[53]

The Housing Act of 1949, a piece of President Truman's Fair Deal agenda, had a lofty goal of providing a "decent home and suitable living environment for every American family," according to the 1966 Congressional Quarterly volume on the act; however, the enacted legislation fell far short of its goals. The act authorized large loans to help cities procure "slums" and blighted areas for redevelopment; it also expanded existing public housing programs through loans with the goal of building 810,000 new low-rent public housing units.[54]

Not surprisingly, urban renewal programs disproportionately affected African Americans—in 1961 alone, "African-Americans were 10% of the US population, but 66% of residents of areas slated for urban renewal." Urban renewal directly impacted the health of affected individuals in several ways: by causing stress and trauma, including the development of trauma-related mental health disorders; by forcing people to live in substandard housing that exposed them to conditions with higher rates of illness; and by causing affected individuals to expend their economic, social, and political capital on resettling in new housing in a new environment, which placed them at a disadvantage for other opportunities. That is, they had to spend their money and energy on moving to a new place or re-growing a razed business or forging new social connections instead of pursuing higher education or continuing to build community capacity around social and political institutions.[55] Conversely, urban renewal contributed to white advantage and expanding white spaces.

3.1.3.6.4 Resident Displacement in TJHD

3.1.3.6.4.1 McKee Row

In 1914, the Albemarle County Board of Supervisors confiscated land in the McKee Row section—a majority black neighborhood near downtown—and gave it to the City of Charlottesville. McKee Row is now known as Court Square Park (formerly Justice Park or Jackson Park) and features a large statue of Stonewall Jackson on a horse that was unveiled in 1921. Historically, the area also housed auctions of enslaved persons, as marked by a small slave auction block plaque. It is currently part of the downtown hub of county and city court buildings and judicial proceedings.[56, 57]

3.1.3.6.4.2 The Shenandoah National Park

In 1935, the Commonwealth of Virginia acquired 14,619 acres of Greene County and gave it to the United States in order to form Shenandoah National Park. Approximately 179 Greene County families (285 individuals) were removed from their mountain homes in order to make way for the park.[58] In total, over 2,000 "mountain" people (465 families) from several localities were displaced in order to create the park. Many did not qualify for compensation, as they did not hold the formal deeds to their property although they had worked the land for generations. The United States Supreme Court affirmed the legality of these displacements and those that refused to leave were escorted off their lands by the local sheriffs.[59]

3.1.3.6.4.3 Vinegar Hill and Westhaven

"In 1954, Charlottesville was growing. Vinegar Hill's land was valuable. Comprising about 20 acres, the neighborhood fell between the downtown shopping district and the University of Virginia's campus—the city's crown jewels. The city council passed a measure that allowed "unsanitary and unsafe" houses to be taken over by a newly established housing authority. Newspaper articles ran arguing that demolishing Vinegar Hill would make way for better shops

and apartments, and wider streets. In 1964, it was announced that the entire neighborhood would be razed. Many of the Vinegar Hill residents were blocked from voting on their own homes destruction because of a hefty poll tax."[60]

In 1960, under the banner of urban renewal, the Charlottesville Redevelopment Housing Authority (CRHA) submitted a request to Charlottesville City Council to redevelop Vinegar Hill, which was a centrally located residential, business, and cultural hub for black Charlottesville.

Westhaven, a public housing project, was completed in 1964 and ultimately housed many of the residents displaced by the destruction of Vinegar Hill.[61] 1964 was only 52 years ago, and many Charlottesville residents in current-day Westhaven and beyond experienced this traumatic community destruction either personally or through stories from parents and family members.

The former Vinegar Hill neighborhood is now home to a Staples, a large parking lot, the Omni Hotel, and the federal courthouse.

3.1.3.6.4.4 Garrett Street and Friendship Court

"It was part of a larger, white-led, effort to push black families out of the city's central downtown areas by condemning their neighborhoods as "slums" or "blighted," while arguing that their presence was hurting the city's tax base. But, as evidenced in CRHA records, homes in the Garrett Street area were not "slums" or "blighted." In 1969, according to records, the CRHA assessed them as valuing a total of $2.1 million — adjusted for inflation, this would be $14.8 million today."[62]

In the early 1970s, CRHA assessed almost 200 area properties around Garrett Street, another majority African American residential neighborhood, and declared them "blighted." CRHA paid Garrett Street families the market rate for their properties, seized them through eminent domain, and razed the neighborhood.[63] The construction of the new Garrett Square property was completed in 1978; the property featured 150 apartments and townhomes that accepted Section 8 vouchers. As of 2019, the 12-acre property is called Friendship Court and is owned by nonprofit Piedmont Housing Alliance (PHA). Friendship Court residents have an average income of $14,000/year.[64] Across the street from present-day Friendship Court is Crescent Halls. Built in 1976 by CRHA, in 2019 Crescent Halls' 105 units house primarily low-income older adults and the property is managed by CRHA.[65, 66] These actions shifted many families from home ownership to renting, reducing the opportunity for building intergenerational wealth.

3.1.3.7 HURRICANE CAMILLE IN NELSON

In August 1969, Nelson County experienced a devastating category 5 hurricane, Camille. 124 people—representing 1% of Nelson's population—lost their lives in the resulting flooding. Over two feet of flood water destroyed many types of county infrastructure, including roads, 100 bridges, and over 900 buildings. Notably, Hurricane Camille resulted in the establishment of the Federal Emergency Management Agency (FEMA) in recognition of the need to coordinate federal disaster relief efforts.[67]

3.1.3.8 IDENTIFICATION BARRIERS FOR TRANSGENDER INDIVIDUALS

"§ 32.1-269. Amending vital records; change of name; acknowledgment of paternity; change of sex.

E. Upon receipt of a certified copy of an order of a court of competent jurisdiction indicating that the sex of an individual has been changed by medical procedure and upon request of such person, the State Registrar shall amend such person's certificate of birth to show the change of sex and, if a certified copy of a court order changing the person's name is submitted, to show a new name."

—The Code of Virginia[68]

In order to obtain a legal name change in Virginia, transgender (trans) individuals must submit a petition to the court. To obtain a new Virginia ID,

trans individuals must also have a request signed by a health provider. However, in order to obtain a new birth certificate with their correct gender from VDH's Office of Vital Records, per the Code of Virginia, they must also have a health provider sign off that they have had their sex "changed by medical procedure."[69]

A recent article draws parallels between modern-day use of birth certificates to enforce a gender binary on transgender and non-binary individuals and the initial use of vital records in Virginia to erase Native American identities and separate African Americans and people of color into a separate class from whites.[70]

3.1.3.9 2017 UNITE THE RIGHT RALLY

In May 1924, the City of Charlottesville unveiled a Robert E. Lee statue commissioned by Paul Goodloe McIntire.[71] 1924 was also the year of the passage of Virginia's Racial Integrity Act and the Eugenical Sterilization Act. The City erected the statue in Lee Park, which later became known as Emancipation Park, and is now named Market Street Park.

A local high school student and Charlottesville City Councilors called for the statue's removal in 2016. A "Unite the Right Rally" was scheduled by a local white nationalist and national white supremacist leaders for August 12, 2017, to protest the statue's removal; counter-protesters also organized to protest.

On the evening of Friday, August 11, 2017, hundreds of white supremacists in khaki pants and white polo shirts marched on UVA's Lawn in a torchlight rally shouting "Blood and soil!" "You will not replace us!" "Jews will not replace us!" and "White lives matter!" The following morning, protestors and counter-protesters faced off at Lee Park. Police declared an unlawful assembly at 11:22am. Almost two hours later, a rally participant drove his car into a crowd of counter-protestors, killing a local paralegal and injuring at least 19 more people. Later that evening, a state police helicopter monitoring the rally crashed and two state troopers died.[72] The events of these two days received national and international press.

3.1.3.10 ADDITIONAL INFORMATION

The information above is a brief overview of some of the historical institutional policies and structures as well as the physical environment that affected and continue to affect health in our community, particularly for people of color. For more in-depth information and/or resources, please contact a local historical society:

- Albemarle Charlottesville Historical Society
- Fluvanna County Historical Society
- Greene County Historical Society
- Jefferson School African American Heritage Center (Charlottesville)
- Louisa County Historical Society
- Nelson County Historical Society
- Scottsville Museum

3.1.4 District Government

What follows is a brief overview of the local government structure in TJHD and the powers of local and state government in Virginia.

While the Tenth Amendment to the United States Constitution reserves any powers not delegated for the federal government to each individual state, it does not mention how states and their local authorities share power. As a result, states have adopted two different interpretations for state and local government relations—Dillon's Rule and "home rule." Dillon's Rule, named for Iowa judge John Dillon, is a judicial interpretation of the relationship between state- and local-level authority dating from the 1860s; under this view, local government entities, such as cities, towns, and counties, exist due to their creation or chartering by the state. Therefore, they only have the powers specifically granted by the state government. If any doubt exists whether a locality has

the power to take action, in Dillon's Rule states, the question is often decided in the courts. In response to the inability of local governments to respond to the specific needs and conditions of their residents, some states began to adopt "home rule" provisions in their constitutions in the 1900s. This interpretation of power relationships between the state and localities conferred greater autonomy to local governments for certain decisions and public functions, such as levying local taxes. (Some states have enacted legislation which authorizes a more limited scope of "home rule," either by granting it only to certain jurisdictions or by limiting the subject areas in which local governments have broader discretion.) Virginia has not adopted "home rule" constitutional language or legislation. Instead, the Commonwealth continues to follow the tradition of Dillon's Rule and local governments can act only in areas of local concern. This is relevant to public health and community health practice in TJHD as many proposed policies (e.g. a sugar-sweetened beverage tax or raising cigarette taxes in the counties) would require each locality's governing body to seek authorization from the state legislature.

3.1.4.1 ALBEMARLE COUNTY

Albemarle County was established in 1744 and is named after the second Earl of Albemarle who was a Governor of the Colony of Virginia. The county seat was originally located in the town of Scottsville. Albemarle is currently governed by a six-member elected Board of Supervisors and managed by the board-hired County Executive.[73] In Virginia, towns are a smaller administrative division and are generally part of the surrounding county. For example, the town of Scottsville is located within the counties of Albemarle and Fluvanna and has an elected town council and a town manager staff position.

3.1.4.2 CITY OF CHARLOTTESVILLE

Established as a town in 1762 by the Virginia General Assembly, the City of Charlottesville was incorporated as an independent city in 1888. Charlottesville is administratively autonomous from surrounding Albemarle County and is governed by an elected five-person City Council, including a Mayor and Vice Mayor. City Council appoints the City Manager who oversees Charlottesville's departments and agencies and implements the policies and directions of City Council.[74]

3.1.4.3 FLUVANNA COUNTY

The area that now comprises Fluvanna County was once part of various other Virginia counties including Henrico, Goochland, and Albemarle. Established in 1777, Fluvanna is named after the Fluvanna River (a former name for part of the James River).[75] Fluvanna is governed by a five-person elected Board of Supervisors and managed by a County Administrator. As noted previously, the town of Scottsville is partly in Fluvanna County.

3.1.4.4 GREENE COUNTY

Established in 1838 from part of Orange County, Greene County is named after Nathanael Greene of the Revolutionary War.[76] The Greene County Board of Supervisors includes five elected members with one member per magisterial district and one at-large member.[77] A County Administrator manages county affairs and is appointed by the Board. Greene County includes the town of Stanardsville.

3.1.4.5 LOUISA COUNTY

In 1742, Louisa County—named after Princess Louisa, daughter of England's King George II—was established from part of Hanover County.[78] Louisa County is governed by a seven-person elected Board of Supervisors and managed by a County Administrator.[79] The county includes the towns of Mineral and Louisa.

3.1.4.6 NELSON COUNTY

Nelson County was established in 1808 from neighboring Amherst County. It is named after Thomas Nelson, Jr., the third Governor of Virginia.[80] Nelson is governed by a five-person elected Board of Supervisors and managed by a County Administrator.[81] There are no cities or incorporated towns in Nelson.

3.1.5 Communities within the District

"Communities that receive low investment—often based on residents' race, socioeconomic status, gender identity, ability and other factors—are filled with structural problems that persistently limit opportunities for everyone to reach their best health and potential."[82]

—Voices for Healthy Kids, the American Heart Association, and the Robert Wood Johnson Foundation

As noted in the previous section, a variety of factors affect health including health behaviors, clinical care, social and economic factors, and the physical environment around people. As we seek to assess and improve health, well-being, and health equity in our community, one essential consideration is where to focus resources, efforts, and services. The Centers for Disease Control and Prevention's (CDC) Community Health Navigator website suggests focusing on areas of greatest need.[83] One approach is to focus on targeted universalism—focusing first on implementation where the needs are greatest, before implementing programs more broadly. Action and changes to policies and practices, institutional structures and systems, and to physical and built environments should focus first on "communities facing the greatest health disparities and living with the most inadequate social, physical, and economic resources" in order to be most effective.[84] In this way, everyone benefits by starting with those for whom the need is greatest and then expanding to support everyone.

"Health equity means that everyone has a fair and just opportunity to be healthier. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care. For the purposes of measurement, health equity means reducing and ultimately eliminating disparities in health and its determinants that adversely affect excluded or marginalized groups."[85]

—Robert Wood Johnson Foundation

In the preceding discussion of key moments in the district's history, we have attempted to share an overview of some of the intentional acts, structures, systems, policies, and practices that contributed to disinvestment in certain communities and continue to cause structural problems that limit opportunities for health in these same communities today. Below follows a brief description of some of the communities within the district that may currently experience health disparities. Throughout the data sections of the report, we will attempt to highlight health disparities and geographic areas and populations that have been denied adequate social, economic, and physical resources because of systemic actions and policies.

Many communities and identities exist within the geographic boundary of the Thomas Jefferson Health District. However, for some groups, such as Latinos or the LGBTQ+ community, there are no viable quantitative data available at a local level. With each iteration of the MAPP process, we have attempted to collect more local data—both quantitative and qualitative—to better understand health, well-being, health inequities, health disparities, and available resources and assets within the district. Below is a brief discussion of some groups, communities, and identities within TJHD as well as information on

the words and language we will use throughout the report. More quantitative data will follow throughout the report; however, survey language, data, and graphical figures do not always capture the complex, evolving ways in which people identify. The data presented in the report are helpful to see population trends, but do not necessarily capture the intangible reality of what it means to live, work, play, and pray in TJHD.

3.1.5.1 PERSON-CENTERED LANGUAGE

Throughout the report, we have attempted to use person-centered language that recognizes people as individuals first with a diverse array of experiences, perspectives and identities. For example, we include data on and discuss disparities for persons with chronic conditions, persons who smoke, persons who are disabled, persons experiencing homelessness, and persons who are currently or formerly incarcerated.

3.1.5.2 AGE

We have not internally defined any specific age ranges for this report; any specific age ranges are reported as per the original data sources.

Generally, if discussing community conversations or disparities among different age groups, we will use the terms children, youth or young adults, adults, and older adults; however, we do not have strictly defined age ranges for these types of discussions.

3.1.5.3 AFRICAN AMERICANS

Throughout the report, we will use the terms African American and black interchangeably. However, when reporting on data from external sources, we endeavor to use the designated term from the original data source (for example, if a survey distinguished between Africans, African Americans, and black Latinos, we would report their data as such). Overall, an estimated 12.4% of the TJHD population is black although the percentage is higher in some areas (City of Charlottesville) and lower in others (Greene County).

3.1.5.4 ASIANS AND ASIAN AMERICANS

Where data are available, we will use the terms Asian or Asian American throughout the report. We recognize that the terms Asian or Asian American for race is a broad umbrella and may include people from many different countries, including the United States, with different cultural backgrounds and religions who speak a variety of languages.

3.1.5.5 DISABILITY

According to the Census' American Community Survey (ACS) 2013–2017 5-year estimate, in TJHD, Louisa County (16.6%) had the largest percentage of the civilian (non-institutionalized) population with a disability, while Albemarle County and the City of Charlottesville (both 8.9%) had the smallest. The ACS asks about six disability types: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty. Respondents who report any one of the six disability types are considered to have a disability.[86] The ACS also collects data on veterans who have a service-related disability. This report also includes data on Social Security Disability (SSDI) and Supplemental Security Income (SSI), both of which have a very specific definition of disability.

3.1.5.6 GENDER

Throughout the report, we will typically use the terms man/men and woman/women when discussing gender. However, when reporting on data from external sources, we endeavor to use the designated term from the original data source for clarity and fidelity to questions that may have been asked in a survey (for example, the Census and other data sources typically refer to males and females).

We also recognize the presence of a variety of gender identities including transgender, non-binary,

genderqueer, genderfluid, agender, gender non-conforming, and gender-expansive. However, as there are no local (or perhaps even state data) available for this population, we typically do not use these terms throughout the report.

In addition to she and he, we also use the pronouns they, their, and them as singular pronouns in this report.

3.1.5.7 LATINOS

Throughout the report, we will use the term Latino to refer to people who are from Mexico, Central America, South America, other countries that speak Spanish, or who identify their ethnicity as Latino. However, when reporting on data from external sources, we endeavor to use the designated term from the original data source, so the term Hispanic will also be used frequently. Latinx—a non-gendered term for Latino—is also an increasingly common word to identify this population.

We recognize that the term Latino or Hispanic for ethnicity is a broad umbrella and may include people of a variety of races (white, black, indigenous, etc.) from many different countries, including the United States. In addition, many Latino immigrants to the United States come from countries with large indigenous populations and may not speak Spanish as their native language (or at all).

3.1.5.8 LGBTQ+

In this report, we use the umbrella term lesbian, gay, bisexual, transgender (trans), queer or questioning, plus others along the spectrum (LGBTQ+). We also acknowledge the presence of individuals who are intersex, asexual, non-binary, and beyond, which is sometimes represented by the longer acronym LGBTQIA.

Data on the LGBTQ+ community are scarce. Locally, UVA and VDH are currently collaborating on a survey that explores the health, wellness, and experience of transgender and gender non-conforming Virginians: https://med.virginia.edu/bht/2018/07/27/this-great-new-community-survey/. Nationally, the 2020 Census will count same-sex married couples for the first time as well as continuing to count unmarried same-sex partners; however, as the 2020 Census will not ask about sexual orientation or gender identity, it will not collect data on single LGBTQ+ persons, bisexuals, transgender, non-binary, or gender non-conforming Americans.

When reporting on data from external sources, we endeavor to use the designated term from the original data source for clarity and fidelity to questions that may have been asked in a survey (for example, the Census refers to same-sex and opposite-sex partners).

3.1.5.9 REFUGEES

Charlottesville is home to a branch of the International Rescue Committee (IRC), a refugee resettlement agency. Although an overall small percentage of the population, the district is nevertheless home to refugees from around the world. Country of origin for locally-settled refugees has varied over the years but has included people from Nepal, Bhutan, Burma, Iraq, Afghanistan, Iran, Syria, Congo, Ethiopia, Morocco, Colombia, and other countries.

Photovoice Photo: Fluvanna/Fork Union JABA

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Improving Health Equity: A Community Plan for Action and Accountability 2019–2022

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4.1 | PLAN OVERVIEW

The National Association of County and City Health Officials' (NACCHO) *Mobilizing for Action through Planning and Partnerships* (MAPP) provides a framework for organizations, coalitions, and residents to work together for action and sustainable change toward improved health and well-being for all. Since 2007, organizations and residents of Planning District 10, also known as the Thomas Jefferson Health District, have used the MAPP framework to assess community health and plan for improvement across the district in the City of Charlottesville and counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson. This process is known locally as MAPP2Health or MAPP.

The 2019 MAPP2Health process involved engagement, partnership, and planning for collective action. The overall *2019 MAPP2Health Report* contains an overview of the communities making up the planning district, cultural and community assets, best practice recommendations, and community health assessment data organized by MAPP2Health priority. This information, provided through community conversations across the district, comes together here in *Improving Health Equity: A Community Plan for Action and Accountability 2019–2022* (the MAPP Plan).

The MAPP Plan is a roadmap for improving health equity across the district over the next three years. It is rooted in the recognition that our current system of healthcare, and associated social determinants of health, are not equitable. This roadmap also acknowledges that achieving health equity will require policy changes, shifting power and shifting resources, and that this will not be fully accomplished in the three-year cycle of this report. The MAPP Plan is a call to action for organizations and systems to commit to the hard work of internal change and to hold each other accountable so that every resident of our district has the opportunities, resources, and information necessary to live a healthy and happy life.

We are grateful to the residents, government agencies, nonprofits, clinics, businesses, philanthropic agencies, faith-based organizations, advocacy groups, and others who devoted significant expertise, time, and energy to creating this plan for action, in addition to committing resources and capital to improve health equity in our community. The MAPP Plan builds on the work of the 2016 MAPP process and focuses on health equity across the district-wide priorities identified in earlier MAPP reports to:

- *Promote healthy eating and active living*
- *Address mental health and substance use*

- *Reduce health disparities and improve access to care*
- *Foster a healthy and connected community for all ages*

We look forward to continued collaboration with you and the communities we serve to implement action within the four community priorities that will move us closer to the MAPP vision of achieving equitable access to resources for a healthy, safe community. Through work within the four MAPP priorities, our goal is to change policies, systems, and environments to create and sustain equity.

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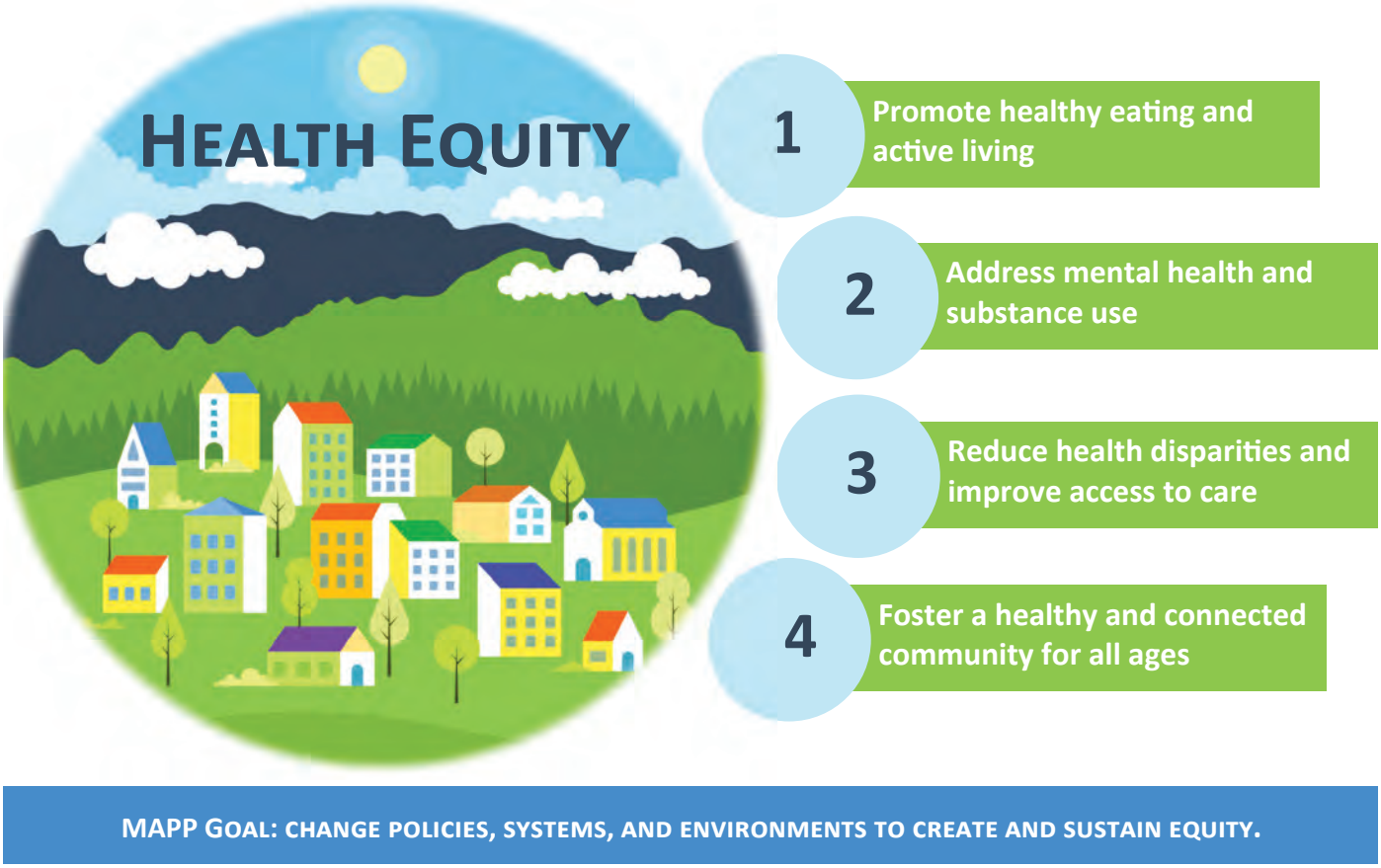

Figure 1 2019 MAPP2Health Process with Four MAPP Priorities, MAPP Goal, and Overarching Equity Focus.
Source: Thomas Jefferson Health District. Created 2019.

The following MAPP Plan includes selected strategies from members of the MAPP Core Group (Sentara Martha Jefferson Hospital, Thomas Jefferson Health District, UVA Department of Public Health Sciences, and UVA Health), community coalitions, and organizations selected for MAPP Core Group implementation funding. The submitting organization or coalition was listed as the lead partner; the lead partner supplied the committed and potential partner entries. Within a priority, strategies are listed alphabetically by lead partner and all community partners are also listed alphabetically. Overall, 146 agencies, organizations, and departments participated in the 2019 MAPP2Health process. While individual organizational strategies and initiatives are not included in the plan, many community partners are working toward improving health and health equity in our community.

4.2 | PRIORITY: PROMOTE HEALTHY EATING AND ACTIVE LIVING

	Strategy	Measures of Success	Community Partners
1	**Increase food security by strengthening the local food system through community-based urban agriculture and increased access to fresh fruits and vegetables for communities that currently experience health disparities, are low-income, and/or are living in neighborhoods that have not seen food infrastructure investment.**	• # of and square feet of community-based urban agriculture sites in the City of Charlottesville • # of new community market sites (corner store, mobile, or standard) offering produce in low-income neighborhoods • #/lbs. of fresh healthy food distributed • # of educational opportunities for nutrition, gardening, and healthy eating	• **LEAD:** Cultivate Charlottesville: Urban Agriculture Collective of Charlottesville • **COMMITTED PARTNERS:** Charlottesville Food Justice Network, Charlottesville City Schools, City Schoolyard Garden, International Rescue Committee New Roots, Local Food Hub, Trinity Episcopal Bread & Roses, PB&J Fund • **POTENTIAL PARTNERS:** Albemarle Office of Equity & Inclusion, Charlottesville Public Housing Association of Residents (PHAR), Charlottesville Redevelopment and Housing Authority (CRHA), City of Charlottesville Economic Development, City of Charlottesville Neighborhood Development Services, City of Charlottesville Parks and Recreation, faith-based organizations, food pantries, Piedmont Housing Alliance
2	**Increase food security and food equity for Charlottesville City Schools (CCS) students by offering more fresh fruits and vegetables, from scratch meal items, and healthy drinks and by reducing overly processed and high in sugar foods for breakfast, lunch, and snack programs.**	• # of new, healthier menu items offered (Local on the Line, from scratch, replaced sugary options with healthy options, etc.) • % increase in CCS meal consumption by students • # of students engaged in healthy school foods advocacy • # of capacity building opportunities for CCS nutrition staff to handle and prepare fresh foods	• **LEAD:** Cultivate Charlottesville: City Schoolyard Garden • **COMMITTED PARTNERS:** Charlottesville City Schools Nutrition Department, Charlottesville Food Justice Network Healthy Schools Group, Local Food Hub • **POTENTIAL PARTNERS:** Charlottesville City Schools Parent-Teacher Organizations, Charlottesville City Schools School Health Advisory Board (SHAB), Culinary Concepts, local foundations and donors

	Strategy	Measures of Success	Community Partners
3	**Invest in food equity leaders that have experienced food insecurity by providing leadership capacity building opportunities, amplifying recommendations, and providing decision-making roles through the Charlottesville Food Justice Network (CFJN) Community Advocates and City Schoolyard Garden (CSG) Youth Food Justice Interns.**	• # of CSG youth food justice interns • # of CFJN community advocates • % of community leaders (youth and adults) that increase leadership skills and opportunities • # of educational and professional development trainings for community leaders (youth and adults)	• **LEAD:** Cultivate Charlottesville: Charlottesville Food Justice Network and City Schoolyard Garden • **COMMITTED PARTNERS:** Charlottesville Area Youth Internship Program (CAYIP), International Rescue Committee New Roots • **POTENTIAL PARTNERS:** Charlottesville City Schools, City Council, local foundations and donors
4	**Utilize collaborative policy making to advance equitable and sustainable solutions in healthy food access, including solutions that increase food affordability and availability in food insecure neighborhoods and transportation avenues to food markets.**	• # of policies developed, approved, and implemented in the City of Charlottesville's Comprehensive Plan • # of recommendations City departments utilize that increase food access programming or change environments • % increase of affordable food access points in low-income neighborhoods • % increase of food justice policies and recommendations supporting this strategy	• **LEAD:** Cultivate Charlottesville: Charlottesville Food Justice Network • **COMMITTED PARTNERS:** Charlottesville City Council, City of Charlottesville Neighborhood Development Services, City of Charlottesville Parks and Recreation, Thomas Jefferson Health District • **POTENTIAL PARTNERS:** Charlottesville-Albemarle Transit, City of Charlottesville Planning Commission, City of Charlottesville Public Works

	Strategy	Measures of Success	Community Partners
5	**Create safe connections for people to walk or bike to jobs, schools, shopping, recreation, and other opportunities, particularly in neighborhoods with low-income, low-wealth, or low-car ownership.**	• # additional miles of sidewalks, bike lanes, and shared use paths • # physical barriers overcome between low-income neighborhoods and parks, jobs, and schools • Increasing # of cyclists, especially cyclists of color	• **LEAD:** Greenways/Active Mobility Coalition • **COMMITTED PARTNERS:** Albemarle County, City of Charlottesville, Piedmont Environmental Council, Rivanna Trails Foundation, Thomas Jefferson Planning District Commission • **POTENTIAL PARTNERS:** biking clubs, businesses, hospitals and healthcare providers, housing advocates, neighborhood and homeowners associations, public health groups, running clubs, UVA, VDOT, walking groups
6	**Assure that existing connective infrastructure (roads, sidewalks, and trails) and public spaces are truly accessible and welcoming to people of all abilities, ages, races, ethnicities, genders, and socioeconomic status.**	• # events (such as Open Streets) that explicitly emphasize inclusive active mobility • Installation of more wheelchair ramps and ADA-compliant crosswalks • Public art and historic markers that tell a diverse story about the community	• **LEAD**: Greenways/Active Mobility Coalition • **COMMITTED PARTNERS:** City of Charlottesville, Move2Health Coalition • **POTENTIAL PARTNERS:** Albemarle County, arts organizations, businesses, faith communities, heritage organizations, hospitals, neighborhood associations, outdoors/recreation clubs, Piedmont Environmental Council, social justice organizations, social service organizations and centers, UVA, youth organizations

	Strategy	Measures of Success	Community Partners
7	**Conduct outreach and share resources with area businesses in order to increase the number of breastfeeding friendly establishments.**	• # of businesses coached on breastfeeding friendly policies • % of TJHD localities reached	• **LEAD:** Improving Pregnancy Outcomes (IPO) Workgroup • **POTENTIAL PARTNERS:** area businesses and restaurants, Cultivate Charlottesville: Charlottesville Food Justice Network, Move2Health Coalition, Thomas Jefferson Health District WIC Program
8	**Promote health equity in district schools through wellness policy development, enhancement, and advocacy for policy enforcement.**	• # of school wellness policies developed or enhanced • # of district schools that enact wellness policy enforcement methods	• **LEAD:** Move2Health Coalition • **POTENTIAL PARTNERS:** local governments, parents, school district administrators, school wellness committees
9	**Promote health equity by increasing physical activity opportunities in early childhood and afterschool programs through best practice no-cost train-the-trainer programs.**	• # of sites trained • # of children participating in program • Program outcome measurements developed (Y/N)	• **LEAD:** Move2Health Coalition • **COMMITTED PARTNERS:** Virginia Foundation for Healthy Youth • **POTENTIAL PARTNERS:** Boys & Girls Clubs, Cultivate Charlottesville: City Schoolyard Garden, early childhood centers, schools
10	**Promote workplace wellness assessments and advocate for free fitness opportunities for employees and "Pay Feel Fine" programs offering credit for employee wellness as tools to improve health equity.**	• # of employers assessed through American Heart Association (AHA) Workplace Health Solutions • # of AHA Workplace Health Solution resources implemented in workplaces • # of advocacy efforts for free fitness and "Pay Feel Fine" • Program outcome measurements developed (Y/N)	• **LEAD:** Move2Health Coalition • **COMMITTED PARTNERS:** American Heart Association • **POTENTIAL PARTNERS**: area employers, fitness facilities

	Strategy	Measures of Success	Community Partners
11	**Build community relationships through opportunities for communities to contribute their expertise and knowledge, engage in social justice campaigns, and advocate for policy, systems, and environmental changes to improve health equity.**	• Development of community-led Open Streets Program (Y/N) • Implementation of Y Street Program in district schools (Y/N, #) • Establishment of community learning and advocacy circles (Y/N)	• **LEAD:** Move2Health Coalition • **POTENTIAL PARTNERS:** Cultivate Charlottesville: City Schoolyard Garden, Diabetes Steering Committee, faith communities, grassroots community-led organizations, MAPP2Health photovoice participants, schools, Virginia Foundation for Healthy Youth
12	**Engage in strategic planning to build the Move2Health Coalition's capacity to address health inequities through expanded focus on chronic disease prevention and management.**	• Development of strategic plan with call to action around chronic disease prevention and management (Y/N) • Establishment of shared measurement system to collect, analyze, evaluate, and report coalition data (Y/N)	• **LEAD:** Move2Health Coalition
13	**Launch a Healthy Cooking program at Piedmont Housing Alliance sites in Charlottesville, Albemarle, and Nelson that includes cooking demonstrations and fresh produce distribution.**	• # of sites where program launched • # and % of residents served • % attendees that report incorporating healthy eating practices into everyday lives	• **LEAD:** Piedmont Housing Alliance (PHA) • **COMMITTED PARTNERS:** Blue Ridge Area Food Bank, Charlottesville/ Albemarle Technical Education Center (CATEC), Local Food Hub • **POTENTIAL PARTNERS:** culinary instructors, food/produce providers, housing residents, resident ambassadors
14	**Increase access to physical activity opportunities for community members who have been disenfranchised and/or are currently under-resourced by promoting the C'ville Walks with Heart program at the Piedmont Family YMCA.**	• Execute MOA between UVA Health and Piedmont Family YMCA (Y/N) • Formalize a referral process from UVA Heart & Vascular Center clinics and the UVA Cancer Center to the C'Ville Walks with Heart walking program (Y/N)	• **LEAD:** UVA Health (Cancer Center, Heart & Vascular Center) • **COMMITTED PARTNERS:** Piedmont Family YMCA, Ragged Mountain Running & Walking Shop, The Women's Initiative, Thomas Jefferson Health District • **POTENTIAL PARTNERS:** Charlottesville Free Clinic, Move2Health Coalition, Sentara Martha Jefferson Hospital

4.3 | PRIORITY: ADDRESS MENTAL HEALTH AND SUBSTANCE USE

	Strategy	Measures of Success	Community Partners
15	**Increase mental health and substance use services in primary care through expanding integrated care facilities and coordinating training for healthcare providers to adopt screening, brief intervention, referral to treatment, psychiatric prescribing, and other practices.**	• # of primary care facilities that provide mental health treatment onsite or by paid referral • # of providers trained in integrated care practices • # of trainings, % change in knowledge, attitude, behavior • # of systems changes within primary care practices	• **LEAD:** Community Mental Health and Wellness Coalition • **COMMITTED PARTNERS:** Region Ten, UVA Health • **POTENTIAL PARTNERS:** Blue Ridge Medical Center, Central Virginia Health Services, Charlottesville Free Clinic, Greene Care Clinic, Sentara Martha Jefferson Hospital, Thomas Jefferson Health District
16	**Increase access to opioid and other substance use treatment services by supporting member organizations' efforts to expand medication assisted treatment (MAT) and other substance use services.**	• # of new services • # of primary care providers waivered as prescribers • # of Medicaid claims through ARTS/other service utilization metrics	• **LEAD:** Community Mental Health and Wellness Coalition • **COMMITTED PARTNERS:** Region Ten • **POTENTIAL PARTNERS:** ARS Pantops Clinic, emergency departments, federally qualified health centers (FQHCs), local jails, other office-based opioid treatment (OBOT) and opioid treatment program (OTP) providers, primary care providers, Sentara Martha Jefferson Hospital, UVA Health
17	**Increase access to rural behavioral health services.**	• # of new services	• **LEAD:** Community Mental Health and Wellness Coalition • **POTENTIAL PARTNERS:** Blue Ridge Medical Center, Central Virginia Health Services, Charlottesville Free Clinic, Greene Care Clinic, Region Ten, Sentara Martha Jefferson Hospital, Thomas Jefferson Health District, UVA Health

	Strategy	Measures of Success	Community Partners
18	**Increase access to affordable, effective, trauma-informed, racially and culturally-responsive services through training, promotion of available services, and identification of system needs and gaps, including through disaggregating data by race.**	• # of new services/providers • # of staff trained in racial awareness and sensitivity, intersectionality, anti-racism, and equity • # of trainings, % change in knowledge, attitude, and beliefs • *Help Happens Here* web analytics, media and social media reach	• **LEAD:** Community Mental Health and Wellness Coalition • **POTENTIAL PARTNERS:** all coalition member organizations
19	**Utilize media and community events to reduce stigma, promote mental health, and decrease substance use.**	• Web, media and social media reach • Event reach • % change in knowledge, attitude, and behavior of attendees	• **LEAD:** Community Mental Health and Wellness Coalition • **POTENTIAL PARTNERS:** health system public relations and communications groups, local media partnerships
20	**Develop and maintain a disaster mental health response corps and an All-Hazards Disaster Mental Health Plan to be integrated into local emergency plans for all localities.**	• # of trained volunteers retained • # of trainings, % change in knowledge related to disaster mental health • Deployment, if applicable • Plan completed and signed off by 6 localities (Y/N)	• **LEAD:** Community Mental Health and Wellness Coalition • **COMMITTED PARTNERS:** Region Ten, Thomas Jefferson Health District, Virginia Department of Behavioral Health and Developmental Services (DBHDS) • **POTENTIAL PARTNERS:** community volunteers, local emergency planning councils, offices of emergency management

	Strategy	Measures of Success	Community Partners
21	**Advocate for policy, systems, and environmental changes that impact mental health, substance use, and the social determinants of health (e.g. transportation planning, housing, racial disparities in the criminal justice system, substance use prevention and harm reduction strategies, billing and reimbursement issues).**	• Web, media, and social media reach related to policy, systems, and environmental changes • # of policy, systems, and environmental changes adopted • Pounds of unused prescription medication safely disposed • Increased breadth of partners supporting issues	• **LEAD:** Community Mental Health and Wellness Coalition • **POTENTIAL PARTNERS:** other local coalitions
22	**Bolster organizational commitment to racial awareness and sensitivity, intersectionality, anti-racism, and equity practices.**	• # of organizations making a formal commitment and completing assessments with areas for growth identified by all organizations • # of organizations/people trained in organizational assessment process • # of trainings • # of staff and senior leaders trained, % change in knowledge, attitude, and beliefs	• **LEAD:** Community Mental Health and Wellness Coalition • **POTENTIAL PARTNERS:** all coalition member organizations
23	**Improve provider practices to promote peer support through training, education on peer support, and workforce development.**	• # of organizations/people trained in peer practices and supervision, % change in knowledge, attitudes, and beliefs • # of new peer positions created • # of organizations using peers	• **LEAD:** Community Mental Health and Wellness Coalition • **POTENTIAL PARTNERS:** community health worker initiatives, Cultivate Charlottesville: Charlottesville Food Justice Network, On Our Own, Sentara Martha Jefferson Hospital, UVA Health, Substance Abuse and Addiction Recovery Alliance of Virginia (SAARA), Virginia Department for Aging and Rehabilitative Services (DARS), Virginia Department of Behavioral Health and Developmental Services (DBHDS), Virginia Department of Medical Assistance Services (DMAS / Virginia Medicaid), VOCAL
24	**Strengthen referral networks for screening and treating Perinatal Mood and Anxiety Disorders (PMADs) among perinatal and pediatric providers, with initial focus on providers that accept Medicaid or offer sliding scale services.**	• Work plan developed (Y/N) • # of providers trained	• **LEAD:** Improving Pregnancy Outcomes (IPO) Workgroup • **POTENTIAL PARTNERS:** OBGYNs, pediatricians

	Strategy	Measures of Success	Community Partners
25	**In order to improve access to care and build workforce capacity, develop a comprehensive Strategic Plan and a Workforce Development Plan that address the gaps in opioid use disorder (OUD) and substance use disorder (SUD) prevention, treatment, and recovery services.**	• Comprehensive Strategic Plan developed (Y/N) • Comprehensive Workforce Plan developed (Y/N) • # of local providers trained (Medication assisted treatment waiver or other SUD treatment training)	• **LEAD:** Nelson Wellness Alliance • **COMMITTED PARTNERS:** Blue Ridge Medical Center, Nelson County Commonwealth's Attorney, Nelson County Department of Social Services, Nelson County Schools, Nelson County Sheriff's Office, Nelson Interfaith Alliance
26	**Complete a Sustainability Plan for Family Treatment Court or for the most viable system for alternatives to detention.**	• Identification of quantifiable measures for tracking successful outcomes of the Family Treatment Court (Y/N)	• **LEAD:** Nelson Wellness Alliance • **COMMITTED PARTNERS:** Blue Ridge Medical Center, Nelson County Commonwealth's Attorney, Nelson County Department of Social Services, Nelson County Sheriff's Office
27	**Prevent fatal opioid overdoses by counseling community members on how to use Naloxone, providing Naloxone at no cost, and coordinating regular REVIVE trainings.**	• # of community members counseled on using Naloxone • # of Naloxone distributed • # of REVIVE trainings • # of people trained in REVIVE	• **LEADS:** Region Ten, Thomas Jefferson Health District • **COMMITTED PARTNERS:** Community Mental Health and Wellness Coalition • **POTENTIAL PARTNERS:** community members, community organizations, emergency responders, law enforcement, providers
28	**Increase access to and utilization of mental health and substance use disorder services by incorporating additional integrated care facilities at UVA Health.**	• At least one UVA Health primary care clinic site fully onboarded and providing integrated care (Y/N) • # of patients screened and referred for counseling support services	• **LEAD:** UVA Health • **COMMITTED PARTNERS:** Community Mental Health and Wellness Coalition
29	**Increase access to housing and behavioral health support services by connecting community members at risk/ currently experiencing homelessness with co-occurring serious mental illness and/or substance use disorders to expedited disability benefits.**	• Memorandum of Agreement (MOU) executed (Y/N) • # UVA Health Emergency Department patients connected to S.O.A.R. Outreach Specialist • # S.O.A.R. beneficiaries in permanent, supportive housing	• **LEADS:** Thomas Jefferson Area Coalition for the Homeless (TJACH), UVA Health

4.4 | REDUCE HEALTH DISPARITIES AND IMPROVE ACCESS TO CARE

	Strategy	Measures of Success	Community Partners
30	**Expand weekly service delivery of complimentary services (chair massage, acupuncture, etc.) to one or more Charlottesville Redevelopment and Housing Authority sites.**	• Weekly programming initiated at Crescent Halls or South First Street (Y/N) • Resident Wellness Coordinator employed on-site at a living wage to facilitate service delivery (Y/N) • % residents served • % people who return within month of first visit • Average relief rate of X (TBD) or higher	• **LEAD:** Common Ground Healing Arts • **COMMITTED PARTNERS:** Charlottesville Public Housing Association of Residents (PHAR), Sentara Martha Jefferson Hospital • **POTENTIAL PARTNERS:** Central Virginia Clinicians of Color Network, community members, Community Mental Health and Wellness Coalition, Region Ten, The Women's Initiative
31	**Increase access to primary care among the most vulnerable district residents who do not currently have a primary care medical home by creating a shared, accountable neighborhood-level primary care safety network.**	• Memorandum of Understanding (MOU) executed (Y/N) • Community health workers (CHWs) hired and trained (Y/N) • RN hired and trained (Y/N)	• **LEADS:** Charlottesville Free Clinic, Central Virginia Health Services, Inc., UVA Health • **POTENTIAL PARTNERS:** Piedmont Virginia Community College (PVCC), Piedmont Housing Alliance (PHA), Public Housing Association of Residents (PHAR), residents, Region Ten, Scottsville HEARR, Thomas Jefferson Health District
32	**Develop a Transportation Assistance Program (TAP) in Greene County to transport residents who experience transportation barriers in accessing essential health services.**	• # rides given • Online web portal and phone line for booking rides established (Y/N) • # of mediums for TAP media campaign (print, radio, web marketing)/ overall reach	• **LEADS:** Greene Care Clinic, Greene County Department of Social Services • **COMMITTED PARTNERS:** Feeding Greene, Inc., Greene County Transit, Region Ten—Greene • **POTENTIAL PARTNERS:** health and human service providers, residents

	Strategy	Measures of Success	Community Partners
33	**Implement the evidence-based Chronic Disease Self-Management (CDSME) program for adults who have chronic pain and/ or illness throughout the district, with a focus on adults with diabetes and individuals searching for non-opioid alternatives to cope with chronic pain.**	• # of CDSME workshops • # of participants • # of completers • # of peer leaders • % of survey responders who report confidence in managing their chronic condition • % of survey responders who report they are motivated to take care of health	• **LEAD:** Jefferson Area Board for Aging (JABA) • **COMMITTED PARTNERS:** Blue Ridge Medical Center, Region Ten, Sentara Martha Jefferson Hospital • **POTENTIAL PARTNERS:** community members
34	**Implement the Chronic Disease Prevention Program L.E.A.N. (Life-Long Exercise, Attitude, Nutrition) in the City of Charlottesville and Albemarle and Greene Counties to prevent chronic disease and improve disparities in chronic disease.**	• # L.E.A.N classes • # participants • Average # of sessions attended • Average pounds of participant weight loss • Average # of physical activity minutes	• **LEAD:** Piedmont Family YMCA • **COMMITTED PARTNERS:** Charlottesville Free Clinic, United Way–Thomas Jefferson Area, Sentara Martha Jefferson Hospital, UVA Health Clinical Cardiology Clinic • **POTENTIAL PARTNERS:** community members, community organizations
35	**Explore recommendations by the community-led Diabetes Steering Committee to develop a comprehensive, coordinated approach to prevention and management of diabetes and other chronic disease in communities of color.**	• Referral channels identified (Y/N) • Engagement and education plan developed to include faith communities, barbershops, hair salons, and others (Y/N) • Shared measurement system developed (Y/N) • "Health Mall" developed (Y/N)	• **LEAD:** Sentara Martha Jefferson Hospital • **COMMITTED PARTNERS:** Common Ground Healing Arts, Diabetes Steering Committee, Mount Zion First African Baptist Church, Move2Health Coalition, Pearl Island Catering, Sentara Starr Hill Health Center, The Women's Initiative • **POTENTIAL PARTNERS**: ACAC, Carver Recreation Center, faith communities, Fountain Fund, free clinics, JABA, Jefferson School African American Heritage Center, hair salons, Literacy Volunteers, other community organizations, Piedmont Family YMCA, UVA Health, Virginia Center for the Book, Vu Noodles

	Strategy	Measures of Success	Community Partners
36	**Create an integrated data system to identify areas to improve services and outcomes for frequent users of homelessness/ mental healthcare/ emergency services.**	• Data-sharing projects completed (Y/N) • Action steps identified based on findings from data-sharing projects (Y/N)	• **LEAD:** Thomas Jefferson Area Coalition for the Homeless (TJACH) • **COMMITTED/POTENTIAL PARTNERS:** Albemarle County Regional Jail, City of Charlottesville Department of Social Services, City of Charlottesville Fire and Emergency Medical Services (EMS), Partner for Mental Health, Region Ten, UVA Data Science Institute, UVA Department of Medicine, UVA Department of Public Health Sciences, UVA Health
37	**Work with housing and homeless service providers to support capacity building to bill Medicaid for supportive housing services**	• # of providers engaged in the capacity building process • # of providers that begin billing for supportive housing services	• **LEAD:** Thomas Jefferson Area Coalition for the Homeless (TJACH) • **COMMITTED/POTENTIAL PARTNERS:** Albemarle Housing Improvement Program, Charlottesville Redevelopment and Housing Authority, Habitat for Humanity of Greater Charlottesville, Piedmont Housing Alliance, On Our Own, Region Ten, The Haven, UVA Department of Medicine, UVA Health
38	**Target resources to rural communities that have historically been disenfranchised and/or are currently under-resourced to increase access to preventive health services.**	• # of new health service access points (e.g. rapid testing sites, health services/WIC clinics) • # of existing sites with expanded hours	• **LEAD:** Thomas Jefferson Health District • **COMMITTED PARTNERS:** Albemarle County • **POTENTIAL PARTNERS:** Blue Ridge Medical Center, Central Virginia Health Services, Greene Care Clinic, Fluvanna County, Louisa County, Nelson County, Region Ten
39	**Increase workforce equity through hiring and compensation practices.**	• % of classified staff making a living wage ($15/hour) • % of job listings sent to a diversity of workforce partners	• **LEAD:** Thomas Jefferson Health District • **POTENTIAL PARTNERS:** J. Sargeant Reynolds Community College, historically black colleges and universities (HBCUs), local Chambers of Commerce, local professional societies, Piedmont Virginia Community College
40	**Build staff capacity around health equity and cultural competency, especially for staff engaged in service delivery.**	• % of staff trained annually on health equity themes • Formal onboarding process in place that includes local history and is provided through a health equity lens (Y/N)	• **LEAD:** Thomas Jefferson Health District • P**OTENTIAL PARTNERS:** Jefferson School African American Heritage Center, Sentara Martha Jefferson Hospital, UVA Health

4.5 | FOSTER A HEALTHY AND CONNECTED COMMUNITY FOR ALL AGES

	Strategy	Measures of Success	Community Partners
41	**Provide education to the public on the importance of an age-friendly community for older adults by arranging media releases during May for Older American's Month, conducting radio interviews, and sharing CAA's vision and mission with a variety of community groups.**	• # of media article releases • # of completed radio interviews on age-related topics • # of completed community presentations	• Lead: Charlottesville Area Alliance (CAA) • Committed partners: CAA members • Potential Partners: community groups and organizations, media
42	**Create a strategic plan to guide the activities of the Alliance. Use the results from the 2019 Alliance survey of older adults as the plan's framework.**	• CAA strategic plan created (Y/N) • Date of completion of the strategic plan	• Lead: Charlottesville Area Alliance (CAA) • Committed partners: CAA members
43	**Educate the public and advocate for an age-friendly community by hosting a panel discussion on an older adult topic at the 2020 Tom Tom Festival.**	• CAA panel discussion application submitted to the Tom Tom Festival by the submission deadline (Y/N) • Application accepted (Y/N) • If yes, # of attendees at the panel discussion	• Lead: Charlottesville Area Alliance (CAA) • Committed partners: CAA members

	Strategy	Measures of Success	Community Partners
44	**Host community events and spaces that are centered on health equity and urban agriculture and that bring people together across differences to celebrate food.**	• # of community and school garden sites • # of community events held at community and school garden sites • # of volunteers working on community and school gardens and urban farms • # of educational classes focused on gardening • % increase in feelings of connection by participants	• **LEAD:** Cultivate Charlottesville • **COMMITTED PARTNERS:** Charlottesville City Schools, Charlottesville Food Justice Network, City Schoolyard Garden, International Rescue Committee New Roots, Local Food Hub, Urban Agriculture Collective of Charlottesville • **POTENTIAL PARTNERS:** Charlottesville Human Rights Commission, Charlottesville Public Housing Association of Residents (PHAR), Charlottesville Redevelopment and Housing Authority (CRHA), Piedmont Housing Alliance
45	**Create a Greater-Charlottesville Area Perinatal Professionals Facebook group—a private Facebook group for perinatal professionals to network and share information about local resources/services, emerging research, etc.**	• Facebook group created (Y/N) • # of approved members	• **LEAD:** Improving Pregnancy Outcomes (IPO) Workgroup • **POTENTIAL PARTNERS:** perinatal professionals
46	**Implement the Caring Connections program to provide volunteer visits to homebound older adults and disabled adults in Louisa County in order to decrease social isolation and loneliness.**	• Database of volunteer names developed (Y/N) • Marketing campaign to increase awareness of program and recruit volunteers conducted (Y/N) • # of volunteer training sessions held • # of volunteers recruited • # of homebound adults served • # of volunteer hours provided	• **LEAD:** Louisa County Resource Council • **COMMITTED PARTNERS:** clients, University of Virginia School of Nursing (interns), volunteers • **POTENTIAL PARTNERS:** churches, civic groups, community organizations, JABA, social services

	Strategy	Measures of Success	Community Partners
47	**Support MAPP2Health implementation through funding locality-specific health equity initiatives.**	• Fund MAPP proposals across the district (75% and 50% funding in years 2 and 3) annually (Y/N) • % of district localities covered by grant programming	• **LEAD:** MAPP Core Group • **COMMITTED PARTNERS:** Charlottesville Area Community Foundation (CACF) • **POTENTIAL PARTNERS:** community organizations
48	**Create a Trauma Informed Leadership Team (TILT) to incorporate trauma informed care into the child-welfare system.**	• # of attendees at TILT conference(s) • Family engagement program launched (Y/N) • Community forum held (Y/N) • # of partners that implement NCTSN/ SAMHSA domains of trauma-informed systems/ organizations	• **LEAD:** Piedmont Court Appointed Special Advocates (CASA), Inc. • **COMMITTED PARTNERS:** Albemarle, Charlottesville, Greene, and Louisa Departments of Social Services; Albemarle, Charlottesville, Greene, and Louisa Juvenile and Domestic Relations Courts • **POTENTIAL PARTNERS:** families
49	**Leverage Sentara grants and system-wide funding streams and align outcomes and metrics to advance health equity.**	• Sentara grants and funding streams leveraged and aligned with outcomes and metrics to advance health equity (Y/N)	• **LEAD:** Sentara Martha Jefferson Hospital • **COMMITTED PARTNERS:** Sentara Healthcare
50	**Improve the system of community referrals and service navigation through workforce development for staff and community partners.**	• Training curriculum developed for staff on services and referrals that includes primary care and social determinants of health (Y/N) • % staff trained • Community Health Worker (CHW) training held at PVCC (Y/N) • % PVCC students from rural areas	• **LEAD:** Thomas Jefferson Health District • **COMMITTED PARTNERS:** Network2Work, Piedmont Virginia Community College (PVCC) • **POTENTIAL PARTNERS:** community health workers (CHWs), community health clinics, health systems, housing and transportation agencies, nonprofits

	Strategy	Measures of Success	Community Partners
51	**Engage community members, decision-makers, neighborhoods, and partner organizations in health equity conversations through sharing data stories that are compelling and provide local context.**	• Develop MAPP data stories through LiveStories/ Tableau that are available online (Y/N) • MAPP community measures (data indicators) are updated at least annually (Y/N) • # of data presentations or engagement sessions with community-based groups	• **LEAD:** Thomas Jefferson Health District • **POTENTIAL PARTNERS:** advocacy groups, civic groups, community members, data organizations, faith-based organizations, local government, MAPP Core Group, MAPP Data and Evaluation Committee members, neighborhood associations, open data advocates, UVA Library
52	**Facilitate the continuing role of the MAPP Data and Evaluation Committee, providing technical assistance and support of the committee's work to identify MAPP data gaps and to develop collaborative partnerships to strengthen local data.**	• MAPP data gaps identified (Y/N) • # of committee data projects identified • # of new data sources/ indicators available to community partners	• **LEAD:** UVA Department of Public Health Sciences • **COMMITTED PARTNERS:** MAPP Data and Evaluation Committee members • **POTENTIAL PARTNERS:** community health clinics, community organizations, data stakeholders health systems
53	**Provide training to community organizations to support workforce development and to mobilize the use of data, evaluation, and research around community health and equity.**	• # of training sessions held • # of community partner staff trained (e.g. on software such as Tableau, Excel) • % of community organizations trained that use local and other data to tell the story of their organization's work aimed to improve community health and equity	• **LEAD:** UVA Department of Public Health Sciences • **POTENTIAL PARTNERS:** agencies, community organizations, and nonprofits
54	**Provide technical assistance and evaluation support to applicants and awardees of MAPP Core Group implementation funding.**	• # of applicants that receive technical assistance and application support • # of funding awardees that receive ongoing technical assistance, including support for development of evaluation metrics and tracking of evaluation metrics	• **LEAD:** UVA Department of Public Health Sciences • **POTENTIAL PARTNERS:** community partners applying for/awarded MAPP implementation funding

	Strategy	Measures of Success	Community Partners
55	**Increase well-being by utilizing technology to foster efficient and accurate referrals between patients and their identified health-related social need.**	• % of patients with health-related social need met (e.g., need identified, referral made, patient showed up to community resource that can support their identified need)	• **LEAD:** UVA Health • **CONFIRMED PARTNERS:** Center for Nonprofit Excellence, Loaves & Fishes Food Pantry, On Our Own, Partner for Mental Health, Region Ten, Thomas Jefferson Area for the Homeless (TJACH), Thomas Jefferson Health District, United Way–Thomas Jefferson Area • **POTENTIAL PARTNERS:** faith-based organizations, nonprofits, residents, state government agencies
56	**Invest in the creation and enhancement of programming, policies, systems and environmental changes to advance health equity.**	• Grants awarded within each MAPP2Health priority area, totaling $250,000 annually over the next five years.	• **LEAD**: UVA Health • **COMMITTED PARTNERS:** Charlottesville Area Community Foundation (CACF) • **POTENTIAL PARTNERS:** faith-based organizations, nonprofits, residents, state government agencies

4.6 | PLAN TRACKING AND EVALUATION

4.6.1 How Do We Define MAPP Success?

As noted previously, the MAPP Plan is a roadmap for improving health equity across the district over the next three years. Within the four MAPP priorities, each strategy includes measures of success to track and evaluate what has been done and what has changed as a result.

Annually, the MAPP Core Group will work with the listed community partners and community coalitions to compile updates and develop a progress report that will be shared widely.

4.6.2 How Healthy is Our Community?

In addition to the MAPP Plan metrics listed above, we also track long-term community measures for each MAPP priority to better understand trends and potential improvements in community health and well-being. Data sources often lag by several years so the focus is on understanding community health trends over time. Community measures were selected based on considerations such as *sample size*, *timeliness* (recent data, ongoing data collection, existence of a data release schedule), *geography* (data available at a county level or smaller), *fidelity to the priority* (how well it addresses the stated priority), and an *overall balance* between measures.

The MAPP Core Group, in conjunction with community partners and coalitions, will review these community measures annually to ensure that selected indicators continue to incorporate the best available local data, accurately represent the MAPP priorities, and include a balance of indicators. Data will be updated annually and shared publicly. To view current MAPP community measures, visit: http://www.vdh.virginia.gov/thomas-jefferson/data/.

Photovoice Photo: Scottsville and Esmont JABA

4.6.2.1 MAPP COMMUNITY MEASURES

	COMMUNITY MEASURE	DATA SOURCE	GEOGRAPHY
	Priority: Healthy Eating and Active Living		
1	% Adult/Child Food Insecurity	Feeding America, Map the Meal Gap	Locality
2	**NEW:** % of Population that Receives SNAP Benefits	County Health Rankings	Locality
3	% Eligible for Free or Reduced Lunch	Virginia Department of Education	Locality
4	% Physical Inactivity	County Health Rankings	Locality
5	% of Adult Obesity	County Health Rankings	Locality
	Priority: Mental Health and Substance Use		
6	Adult Behavioral Health Hospitalization Rate	Region Ten	District
7	Suicide Rate	Virginia Department of Health	Locality
8	% of Adults Who Smoke	County Health Rankings	Locality
9	**NEW:** % of Adults Reporting Binge or Excessive Drinking	County Health Rankings	Locality
10	**NEW:** Emergency Department Visits for All Drug Overdoses	Virginia Department of Health	Locality
	Priority: Health Disparities and Access to Care		
11	% Uninsured Adults/Children	U.S. Census Bureau	Locality
12	Life Expectancy Estimates	Thomas Jefferson Health District	Census Tract
13	Income Estimates (% Families below the Federal Poverty Level, % of Children in Poverty, ALICE Stability Budgets, ALICE Families by Race and Age, Median Household Income by Race)	U.S. Census Bureau, County Health Rankings, United Way ALICE Report	Locality
14	% Low Birthweight Births by Race	Virginia Department of Health	Locality
15	**NEW:** % Adults with Diagnosed Diabetes	County Health Rankings	Locality
	Priority: Healthy and Connected Community for All Ages		
16	% 3rd Grade SOL English Pass Rates	Virginia Department of Education	Locality
17	**NEW:** % Unemployment	County Health Rankings	Locality
18	**NEW:** % Severe Housing Cost Burden	County Health Rankings	Locality
19	**NEW:** % of Workers Who Commute Alone with Long Commute to Work	U.S. Census Bureau	Locality
20	**NEW:** % Older Adults Living Alone by Gender *(this indicator was selected to monitor trends over time and is not intended as an improvement measure)*	U.S. Census Bureau	Locality

ENDNOTES

[1] Charlottesville Area Alliance Members include: Albemarle County, Alzheimer's Association (Central and Western Virginia Chapter), Albemarle Housing Improvement Program (AHIP), Charlottesville Area Association of REALTORS® (CAAR), City of Charlottesville, Cville Village, Fluvanna County, Hospice of the Piedmont, Home Instead, JAUNT, JABA, Legal Aid Justice Center, Lindsay Institute, Martha Jefferson House, Meals on Wheels (Charlottesville), The Osher Lifelong Learning Institute at the University of Virginia (OLLI), Piedmont Housing Alliance (PHA), Region Ten, The Center, Senior Statesmen of Virginia, Sentara Martha Jefferson Hospital, Thomas Jefferson Health District, Thomas Jefferson Planning District Commission (TJPDC), THRIV, United Way–Thomas Jefferson Area, University of Virginia Health, Westminster-Canterbury of the Blue Ridge, and iTHRIVE (integrated Translational Health Research Institute of Virginia).

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What We Learned: Photovoice and Community Assets

Photovoice Photo: Friendship Court

5.1 | PHOTOVOICE PROJECTS

5.1.1 Photovoice Overview

Photovoice is a qualitative research method that was developed by Caroline Wang and Mary Burris for a study on women's reproductive health and development in Yumman, China in 1996.[1] The photovoice framework involves participants taking pictures to document community issues and realities, both positive and negative. The process includes time for the individual and group to reflect on the photos as well as opportunities to share their photos and their symbolism with policy makers. Ideally, the process includes reflection, collaboration, action, and change. Many photovoice projects are structured using the Feminist Theory. The Feminist Theory emphasizes the importance of including beliefs, ideas, and experiences of people, specifically women, who are not typically in power or involved in research. In practice, it is a way to promote participants' value in society while honoring their voices and experiences.[2] Research using the photovoice method has included a variety of populations, including but not limited to adolescents, persons experiencing homelessness, and people living with HIV.

5.1.2 Move2Health Coalition Pilot Photovoice Project

5.1.2.1 SISTERS OF NIA PROJECT OVERVIEW

The Move2Health Coalition (move2healthcentralva.org) commissioned research using the photovoice method with African American girls in the spring of 2018. The project design promoted the identification of their community assets for organizations to potentially build on to improve health equity. African American girls are not a group typically heard from in research, although like all community members, they have significant ideas and input for consideration. Community gatekeepers from the City of Promise and Jefferson Area Children's Health Improvement Program (CHiP) were tapped to recruit participants. *(See Appendix 8.5, Photovoice Flyers)*

City of Promise and CHiP work throughout the year with the girls in an empowerment group called Sisters of Nia. Sentara Martha Jefferson Hospital, a Move2Health Coalition member, sponsors an annual spring break camp for the girls. Therefore, an established relationship already existed between the program participants, facilitators, and sponsor. The photovoice project was held over spring break in 2018. The Community Cultural Wealth Framework was used to frame activities supportive of establishing an understanding of how important the girls' perspectives are and how much capital

they have. Yosso's framework was used for its asset-based approach to thinking.[3] Over the 2018 spring break, Sisters of Nia girls participated in workshops facilitated by community leaders to familiarize them with three key terms:

- Asset (something or someone of value)
- Well-Being (comfort, good health and happiness)
- Resilience (surviving and thriving)

5.1.2.2 COMMUNITY CULTURAL WEALTH FRAMEWORK

Below are some of the tenets of the Community Cultural Wealth Framework and how it was applied during this project:

1. Explored Aspirational and Resistance Capital by viewing the superhero film Black Panther, which was produced in 2018.

- Aspirational Capital—ability to maintain hopes and dreams for the future, even in the face of real and perceived barriers.
- Resistance Capital—knowledge and skills fostered through oppositional behavior that challenges inequality.

2. Explored Social and Familial Capital by participating in workshops led by community leaders who defined "community."

- Social Capital—networks of people and community resources.
- Familial Capital—cultural knowledge nurtured among kin that carries a sense of community history, memory, and cultural intuition. Includes a broad definition of kinship.

3. Explored Navigational and Linguistic Capital by visiting the National Museum of African American History and Culture and participating in a storytelling workshop with a community leader.

- Navigational Capital—skills for maneuvering through social institutions. Infers the ability to maneuver through institutions not created with communities of color in mind.
- Linguistic Capital—intellectual and social skills attained through communication experiences in more than one language and/or style. Includes storytelling tradition.

5.1.2.3 SISTERS OF NIA THEMES

Thirteen adolescent girls participated in the project. Their parents signed consent forms and the girls signed assent forms. The girls received disposable cameras and training on how to use them. They took pictures representative of the three key terms—assets, well-being, and resilience—in their own communities and on a trip to the National Museum of African American History and Culture. Two weeks later, nine of the girls came back together to see their photographs and discuss them in focus groups. *(See Appendix 8.4, Focus Group Flyers)*

The girls narrowed down the pictures to one or two photos representative of the key terms. The SHOWeD methodology was used by the focus groups, modified so the questions were asset-based. SHOWeD is a semi-structured technique using five questions to gather data. Mayfield-Johnson et al. (2017) cite Caroline Wang in identifying the five questions as:

1. What do you **S**ee in this picture?
2. What is **H**appening here (the problem)?
3. How does this problem relate to **O**ur lives?
4. **W**hy do these problems **E**xist?
5. What can we **D**o about it?

The asset-based modifications of these questions were as follows:

1. What do you **S**ee in this picture?
2. What is **H**appening in this photo?
3. How does this asset help **O**ur lives?
4. **W**ho or what helped make this asset **E**xist?
5. What can we **D**o to create more good things like this in our community?

Asset-based themes emerged from the pictures and focus group data. The themes led to the development of ideas to improve health equity. The Sisters of Nia photovoice project revealed the following themes and ideas for improving health equity:

1. **PROGRAMMING:** How can we expose more children to programming like the Spring Break Camp to build and encourage friendship and community?
2. **FAMILIES:** How can we strengthen families, specifically parents/guardians, through opportunities for stable housing, jobs and education?
3. **SAFE SPACES:** How can we create more safe spaces free from bullying, drugs, violence and racism?
4. **RICH HISTORY:** How can we make sure ALL kids have access to an inclusive history that includes and values the African American experience?
5. **COMMUNITY LEADERS:** How can we develop more role models and mentors in our communities and especially in schools where kids sometimes feel ignored?
6. **WILLINGNESS TO TRY NEW THINGS:** How can we give more people opportunities to develop a healthy lifestyle through exposure to new things?

The girls received a $25 gift card for participating in the entire process. A video was created to capture the project. The project was used as a pilot for other photovoice projects across the Thomas Jefferson Health District (TJHD) to gather community voices for the 2019 MAPP2Health process.

5.1.3 Move2Health Coalition Expanded Photovoice Projects

The Move2Health Coalition received Institutional Review Board (IRB) approval to conduct photovoice projects in each locality in TJHD including the City of Charlottesville and the counties of Albemarle, Fluvanna, Greene, Louisa and Nelson. Each locality identified an underserved population to participate in a photovoice project. All the localities except for Nelson County participated in a project. Nelson County identified a group, but project organizers were unable to complete the process. The following groups became part of the project:

Photovoice Photo: Fluvanna/Fork Union JABA

FLUVANNA/JEFFERSON AREA BOARD FOR AGING (JABA)—JABA's community senior centers offer a wide range of activities, healthful lunches, and meaningful connections with peers and other community members.[4]

FRIENDSHIP COURT—Friendship Court Apartments is a community of 150 apartments on 11.75 acres in the heart of Charlottesville's downtown and in the middle of the City's Strategic Investment Area (SIA). Formerly known as Garrett Square, the property was built in 1978 with project-based Section 8 assistance. In 2002, Piedmont Housing Alliance and the National Housing Trust/Enterprise Preservation Corporation partnered to acquire and renovate the property, preserving this important community of affordable housing then at risk of conversion to market-rate housing.[5]

GREENE CARE CLINIC—Greene Care Clinic's mission is to provide healthcare to uninsured residents of Greene County whose income is above 138% and below 300% of the federal poverty level.[6]

LOUISA REENTRY PROGRAM—the Virginia Community Reentry approach strengthens public

safety through community-based reentry programs that provide opportunities for adults and juveniles previously incarcerated, supporting them and their families with the goal of reducing recidivism.[7]

Photovoice Photo: Scottsville and Esmont JABA

SCOTTSVILLE/ESMONT JEFFERSON AREA BOARD FOR AGING—see Fluvanna/Fork Union JABA.

SOUTHWOOD BOYS & GIRLS CLUB—The Boys & Girls Clubs of Central Virginia offer a lineup of nationally recognized programs that address today's most pressing youth issues. For more than 20 years, the agency's core programs have engaged young people in activities with adults and peers, building self-esteem and helping their beneficiaries to reach their full potential. The Southwood Boys & Girls Club opened in 2000, and currently serves 200 members, with an average daily attendance of more than 100 members, ages 6–18 years.[8]

Each group participated in a modified version of the Sisters of Nia project. They attended three 1–1½ hour sessions. The same terms and definitions from the Sisters of Nia project were used. During the first meeting, each group received the definitions and key terms, as well as the cameras. In between the first and second session, project coordinators developed the film. The second session consisted of the participants narrowing down photos to the ones they felt best represented the key terms. The group participated in a focus group using the same format as the Sisters of Nia project. Participants received the results from the photos and focus group in the third meeting. Adult participants received a $50 gift card at the end of the project and children between the ages of 13–17 received a $25 gift card. Sentara Martha Jefferson Hospital sponsored the projects. The following themes emerged and questions were developed for consideration in using community assets to improve health equity.

5.1.3.1 FLUVANNA/FORK UNION JABA THEMES

OUTDOOR RECREATION: nature, including trail, field, and river photos coupled with conversations about dog parks, trails, fishing, and exercise yielded outdoor recreation as a theme. Pleasant Grove was highlighted as an asset that many participants used.

- How can we make sure everyone has access to safe outdoor recreation?

COMMUNITY-CENTERED AREAS: community-centered areas was a theme because of conversations about pulling together as a community, volunteer opportunities, and gathering spaces for socializing, receiving education, idea exchange, and recreation.

- How can we expand community-centered areas to better foster relationships within the community?

YOUTH: this was a theme in conversations and photos capturing intergenerational learning, respect for elders, educating youth on history, and protecting the environment.

- How can we support youth development and growth to prepare them as future leaders?

Photovoice Photo: Fluvanna/Fork Union JABA

COMMUNITY RESOURCES: conversations regarding access to medical care, opportunities to remain mentally and physically active, and the ability to connect with people through community places, programs, and events highlighted an overarching theme about community resources. Photos captured group activities, a clinical setting, a creative way to remain active at home, and unique ways neighborhoods came together.

- What programming can we provide to support current and future community resources that foster a healthy connected community and encourage intergenerational learning?

Photovoice Photo: Louisa Reentry Program

5.1.3.2 FRIENDSHIP COURT THEMES

YOUTH: youth was a theme because of photos of safe play areas; childcare; activities; and safe, open outdoor spaces. The group talked about activities for children and teaching them resiliency through honoring yourself.

- How can we create opportunities for children to flourish?

COMMUNITY RESOURCES: community resources were a theme because of conversation and photos regarding faith communities and their outreach (Portico); garden programs (City Schoolyard Garden and Urban Agriculture Collective of Charlottesville); the Jefferson School City Center (The YMCA Child Care Center, Carver Recreation Center, African American Heritage Center, Pearl Island, Vu Noodles), Ix Park, and the Charlottesville/ Albemarle Technical Education Center.

- How can we make sure community choices drive initiatives/programming?

ACCESS TO HEALTHY FOOD: pictures and conversations about improved mental and physical health from healthy food, access to healthy food through the garden program, the ability to try new foods, and increased health education resulted in access to healthy food as a theme.

- How can we support access to healthy food?

EDUCATIONAL OPPORTUNITIES: educational opportunities were a theme because of conversations and photos around the General Educational Development (GED) tests, educational choices instead of educational paths being assumed (e.g. option to become an RN, BSN, or LPN instead of CNA), and classes/sessions on topics that community members wanted instead of what others assumed they would want.

- How can we provide education opportunities and choices community members want?

SAFE SPACES: this was a theme because of the pictures and conversations around safe play areas, open spaces (where kids could be kids), and where adults felt at ease for themselves and their families.

- How do we create opportunities and spaces that foster positive community relations?

5.1.3.3 GREENE CARE CLINIC THEMES

TRANSPORTATION: transportation was identified as a theme because of photos of cars and talks around access to cars/public transportation as a

Photovoice Photo: Greene Care Clinic

way to have freedom and access to various locations.

- In what ways can we support and improve access to transportation so everyone has the freedom to travel to places they need/want to go?

HOUSING: housing was a theme because of the safety, security, and freedom that people felt when they had access to their own space.

- How can we provide more affordable housing options so everyone has the safety, security, and freedom of their own space?

ACCESS TO HEALTHCARE/MEDICATION: this was a theme when talking about affordability and access to care. Participants talked about places that support access and affordability.

- How can we increase knowledge about services providing affordable care?

COMMUNITY-CENTERED AREAS: community-centered areas were a theme because of the talks around getting to know your community and community members and finding ways to support other people through community programming (such as having a suggested donation to participate in a community event).

- How can we create spaces that support and further build community relationships?

Photovoice Photo: Louisa Reentry Program

5.1.3.4 LOUISA REENTRY THEMES

HOUSING: stable, affordable housing was a theme because of talks about the pride in ownership and taking care of a residence along with the responsibility of paying bills.

- How can we create systems that promote stable housing?

COMMUNITY RESOURCES: community resources was a theme because of photographs and conversations about the Department of Human Services (specifically the Louisa Reentry program), Louisa County Counseling Center, Medicaid expansion, the University of Virginia Health's financial assistance services, and churches. The group conversed about how having someone who supports, believes in, and pushes them to their goals was key for their own and their families' well-being and survival. They were able to feel a sense of belonging and community from these resources and the programs they provided.

- How can we expand education, knowledge, and capacity to better connect people to community resources?

COMMUNITY: community was a theme because of conversations and photos involving neighbors and community members helping each other and swapping services. They talked a lot about supporting and sharing skills with youth—specifically, car repair education, landscaping, and job training.

- How can we come together to better support community and families, especially our youth?

JOB OPPORTUNITIES: job opportunities was a theme because of the conversations and photos around independence through being able to work. The group talked about appreciating job opportunities available to them.

- How can we offer more employment and training, especially to those in need of these opportunities?

NATURE: nature was a theme because of photographs and conversation surrounding fishing, swimming, hunting, outdoor recreation, gardening, and generally experiencing nature.

- How can we increase access to nature, so it is truly available to all people?

Photovoice Photo: Scottsville and Esmont JABA

5.1.3.5 SCOTTSVILLE AND ESMONT JABA THEMES

COMMUNITY-CENTERED AREAS: community was identified as a theme because of photos of gathering spots and the many opportunities that people identified to give back by volunteering and connecting with others.

- How can we create gatherings and spaces that further build community relationships and help people connect?

COMMUNITY RESOURCES: community resources were a theme because of the senior centers, community building in churches, repurposed buildings, and community advisory boards.

- How can community voices and ideas be used to expand the capacity of and further develop our community's resources?

TRANSPORTATION: this was a theme when talking about freedom and independence and having access to affordable and accessible transportation.

- In what ways can we support and improve access to transportation so everyone has the freedom and independence to travel?

HISTORY: history was a theme because of the need to preserve African American history (Yancey Elementary School, Carter G. Woodson Complex), embrace the history of Scottsville, and pass on this history to the next generation.

- How can we preserve our community's rich and diverse history while supporting the current history we are creating?

ACCESS TO NATURE: this was a theme because many people talked about gardening and local trails.

- How can we help support access to and use of our outdoor areas?

5.1.3.6 SOUTHWOOD BOYS & GIRLS CLUB THEMES

FAMILY AND FRIENDS: family and friends were identified as a theme because of conversation and photographs about them. Participants specifically highlighted the unconditional love and support and always having someone to play with. Specifically mentioned were sisters, brothers, grandmothers, and cousins.

- How do we support parents/guardians so they can continue to support their children and friends?

MENTORS: mentors were a theme because of the support that the youth felt from leaders. Specifically, Boys & Girls Club leaders were mentioned because they helped them learn new things and supported them in a number of ways.

Photovoice Photo: Southwood Boys & Girls Club

- In what ways can we support existing organizations that focus on educating and helping youth?

ACTIVITIES: activities was pulled as a theme because of conversation and photos of various activities they participated in. They said it helped them make and sustain friendships while increasing

their physical activity. Soccer and dance were two of the main activities mentioned.

- How can we increase access to activities that get children moving and active in the community?

NATURE: nature was a theme because of the joy that they felt seeing nature, being in nature, and spending time in nature. They specifically mentioned trees, mountains, and gardens.

- How can we create more opportunities for children to experience nature?

Photovoice Photo: Southwood Boys & Girls Club

5.1.4 Overall Themes for Photovoice Projects

The photovoice themes identified by the groups were similar in some ways. Several groups talked about access to outdoor recreation and nature. Several groups identified gathering spots in their communities as an asset, providing a way to support and get to know neighbors. Some specifically talked about spaces being safe and making them accessible to all. Some participants in rural areas said transportation is critical to independence and access to services. Groups identified youth as valuable assets to help preserve history and build future community. Health was also a theme, whether directly or spoken about in themes about accessing food, housing, and nature. The Move2Health photovoice projects are meant to provide a guide for understanding what some underserved members of our communities value. Building on existing assets may help to improve health equity.

ENDNOTES

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[3] Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity, and Education, 8*(1), 69-91.

[4] Jefferson Area Board for Aging. (2019). Community centers. Retrieved from https://www.jabacares.org/community-senior-centers.

[5] Friendship Court Apartments. (2019). News and stories for downtown Charlottesville's affordable housing community. Retrieved from www.friendshipcourtapartments.com/about-friendship-court/.

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[7] County of Louisa Virginia. (2019). Louisa Reentry Council. Retrieved from https://louisacounty.com/249/Reentry-Council.

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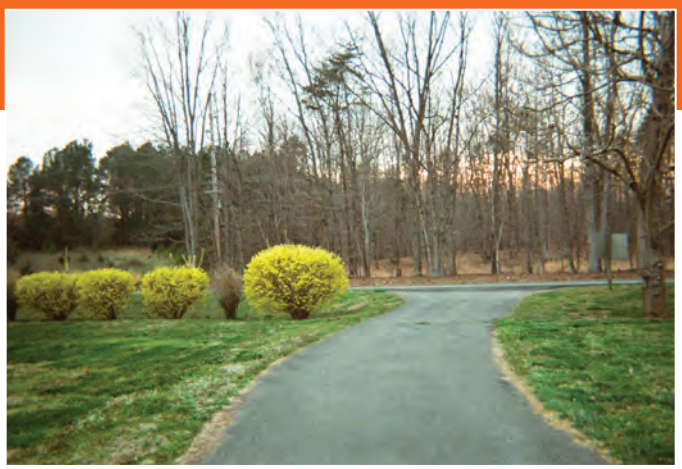
What We Learned: Diabetes Steering Committee Recommendations



Photovoice Photo: Scottsville and Esmont JABA

6.1 | THE DIABETES STEERING COMMITTEE

6.1.1 Diabetes in the United States and Virginia

Diabetes is a national epidemic affecting more than 30 million people in the United States. It is the most common chronic disease in the United States and is the seventh leading cause of death in the country. The estimated cost of diagnosed diabetes in 2017 was $327 billion, most of which was in direct medical cost. Type 2 diabetes is the most common type of diabetes.[1]

In Virginia, the *2016 Diabetes Burden Report*, compiled by the Virginia Department of Health, revealed that one out of every three Virginians tested positive in a pre-diabetes screening. This was slightly higher than the national average. Within the state, the average cost to manage and treat diabetes was $15,000 per person per year.[2]

National statistics reveal that African Americans and Latinos are almost twice as likely to be diagnosed with diabetes as their white counterparts. African Americans also have higher rates of complications because of this disease, such as loss of sight, end-stage renal disease, and lower limb amputation. African Americans are twice as likely to die from complications due to diabetes.[3] Similarly, Latinos are more likely to develop end-stage renal disease, and Latina women are more likely to die from the disease than non-Latina white women.[4]

6.1.2 Diabetes and MAPP2Health

The 2016 MAPP2Health process identified four priority areas, including reducing health disparities and increasing access to care. In January 2018, the MAPP Core Group—consisting of Sentara Martha Jefferson Hospital, the Thomas Jefferson Health District, University of Virginia Department of Public Health Sciences, and University of Virginia Health—along with the United Way–Thomas Jefferson Area convened a group of stakeholders to determine next steps for this priority. One question for the group was whether the community needed to form a new coalition to address the priority. As one of the objectives under the MAPP priority was to identify up to three health conditions with marked disparities and reduce the disparities, another question for the group was what health conditions should be chosen. After several meetings, the group consensus was there did not need to be a new coalition since there were already several organizations in the community doing work around health disparities and access to care.

Based on Virginia statistics showing higher mortality rates for people of color with diabetes,[5] the decision was to focus on preventing and managing diabetes in communities of color. Such outcome

disparities highlight several possible conclusions, including:

- Lack of access to preventive care
- Lack of health knowledge
- Insufficient provider outreach
- Social barriers preventing utilization of services

6.1.2.1 FORMATION OF THE DIABETES STEERING COMMITTEE

To help understand and address these disparities, a community-led group called the Diabetes Steering Committee was formed. The committee explored best practices in type 2 diabetes management and prevention and offered recommendations for addressing disparities and access in African American and Latino communities in the Thomas Jefferson Health District, including the City of Charlottesville and counties of Albemarle, Greene, Fluvanna, Louisa and Nelson. From the data, the overarching goal was and continues to be improving access to evidenced-based programming and developing strategies to narrow the gap for adverse health outcomes in African American and Latino communities.

The Diabetes Steering Committee recruitment included outreach involving newspaper advertising and word of mouth. Two information sessions occurred in October and November of 2018. These information sessions outlined the intent of the committee and resulted in 12 persons interested in becoming committee members. Ultimately, ten (nine women, one man) of the original 12 became members of the Diabetes Steering Committee. Their ages were between 25 and 66 years old. There were three Latino and seven African American members. The members were residents of Charlottesville, Albemarle, Greene, and Louisa. One of the group members became responsible for leading the effort.

In December 2018, the group held their first meet and greet session. The meet and greet was a place to restate the purpose, confirm committee members, and establish a timeframe to complete the work. The actual work began in January 2019 and monthly meetings occurred through May 2019. The group received a pre-established list of service providers who were involved in evidenced-based practices as relates to the treatment and the management of type 2 diabetes. Those service providers include the following:

Service Provider	Program
Atlantic Coast Athletic Club (ACAC)	Diabetes Prevention
Common Ground Healing Arts	Massage, Acupuncture, Meditation, Mindfulness, Yoga
Jefferson Area Board for Aging (JABA)	Chronic Disease Management
Jefferson Area Children's Health Improvement Program (CHiP)	Community Health Worker Model
Sisters Keeper Doula Collective	Community Health Worker Model
YMCA	Diabetes Prevention

Participants received dinner and a $25 gift card at each meeting. They also received a $100 gift card at the end of their work together. Sentara Martha Jefferson Hospital sponsored the program. Each month, the group met with two providers who gave an overview of their programs and how they believed their services could be beneficial in the prevention and management of type 2 diabetes. A Spanish-language interpreter was present for all informational sessions and Diabetes Steering Committee meetings. Following each presentation, members of the group were given vouchers to access, explore, and evaluate the services with the expectation of reporting back to the larger group using a survey created by the group leader. Barriers to experiencing services included weather conditions, lack of time slots for evening activity, childcare needs, and privacy of current program participants (to avoid any Health Insurance Portability and Accountability Act, or HIPAA, violations).

6.1.3 Barriers to Access

Barriers to access fell into four categories that the Committee chose to address. These categories were emotional response, cost, transportation and location, and language.

6.1.3.1 EMOTIONAL RESPONSE

EMOTIONAL RESPONSE was defined as a feeling of welcome. They explored questions such as:

- Did you feel welcomed?
- Did you see anyone who looked like you?
- Was there a simple integrated approach to receiving information?
- Did you see anyone conducting business who looked like you?
- Did you see anyone partaking of the services that looked like you?

6.1.3.2 COST

COST TO ACCESS was defined simply as how much would you have to pay to ACCESS these services?

- Could you afford it?

6.1.3.3 TRANSPORTATION AND LOCATION

TRANSPORTATION AND LOCATION addressed the location of the service and the ease of access for most people via public or private modes of transportation.

- How conveniently located are services?

6.1.3.4 LANGUAGE

Language was defined as the ability to give and receive information in the language that you are most comfortable.

- Are you offered resources in your preferred language?

Photovoice Photo: Fluvanna/Fork Union JABA

6.2 | DIABETES STEERING COMMITTEE FINDINGS

Overall, most of the Diabetes Steering Committee members were unaware that these services existed for the support and management of type 2 diabetes within the African American and Latino communities.

The committee felt all of the services they explored, as listed previously, would benefit and support African Americans and Latinos in the prevention and management of type 2 diabetes. Thoughts on each identified barrier follow:

6.2.1 Emotional Response

- Most of the group felt welcomed but would have felt more at ease if there had been more representation of minority groups and people of color (e.g., patients/clients, staff).
- All felt comfortable asking questions in English.
- A Spanish-speaking individual had limited understanding of information presented, but expressed that it was okay.
- Most committee members felt the response to specific questions regarding special programs such as diabetes prevention was limited to the existence of the program and that there was a failure of the organization to effectively promote these programs.

- Diabetes Prevention Program facilitators indicated there was no participation of African Americans and Latinos in their programs at the time of presentation.
- Representation of African Americans and Latinos was visibly absent in many group settings attended across the continuum of service providers.
- Visual evidence showed under representation of African American and Latino workers in most settings.

6.2.2 Cost

- Cost of long-term diabetes prevention programs was seen as a barrier to access.
- Availability of scholarship support was seen as a positive for reducing the cost barrier to access.
- The group supports income-based access or pay-what-you-can as a model to support access to these services.

6.2.3 Transportation and Location

- All the providers/services examined were located in Charlottesville or Albemarle County.
- Charlottesville Area Transit (CAT) services provide easy access to service for a nominal fee for individuals who live in Charlottesville or Albemarle County.
- Individuals from surrounding counties who do not have access to privately owned vehicles may pay as much as $5 one-way in transportation fees, with limitations in pick-up and drop-off services.

6.2.4 Language

- Verbal presentations from providers to the group were offered in English only.
- Most printed information was in English only and required translation.
- During site visits made by Spanish-speaking individuals, information was presented in English. Members did not request an interpreter, and none was offered.
- Spanish-speaker members indicated they would prefer to receive information from Spanish-speaking facilitators.

6.2.5 Additional Findings

To assist in evaluating behaviors related to individuals at risk for developing type 2 diabetes, the steering committee members administered the risk test from the American Diabetes Association (ADA)—and added questions related to diet and exercise—to 53 family members and friends in their communities. Thirty-one were at risk for developing type 2 diabetes.

Of these family members, fewer than 50 percent were referred to a nutritionist when their at-risk status was identified. In addition, a high number of individuals reported that they select unhealthy foods per choice. Although this is a statistically insignificant sample, based on the less than 50 percent referral rate and high number of self-reported unhealthy food choices, it is likely that the larger population of African Americans and Latinos in the area who are at risk for type 2 diabetes may not be accessing or receiving timely referrals for formal interventions.

6.3 | RECOMMENDATIONS AND OPPORTUNITIES

- Make a concerted effort to hire Latinos and African Americans in all positions in community programming.
- Improve culturally competent marketing outreach to Latino and African American communities regarding diabetes programming.
- Make information (printed and verbal) available in English and Spanish.
- Develop a community health worker model incorporating in-home service support and

Photovoice Photo: Louisa Reentry Program

community service linkage for persons with diabetes.

- Establish collaboration with local home care agencies to extend services provided under insurance benefits by linking services provided by community health workers.
- Utilize technology as a strategy to support glycemic control (e.g. blood glucose home tele-monitoring).
- Establish coalitions involving faith-based and secular organizations to improve access by increasing the number of sites where information regarding evidence-based practices for the prevention and management of type 2 diabetes may be implemented and facilitated.
- Use faith-based organizations, interagency councils, and other community outlets as a means of promoting these programs.
- Use transportation vouchers as a temporary solution to help individuals in rural settings access evidence-based services while a more permanent solution is explored.
- Collaborate with local gyms in surrounding communities for the purpose of offering diabetes education classes.
- Offset the cost for gym memberships in counties with limited gym resources.
- Evaluate availability of walking trails in low-income communities.
- Support communities as they form and maintain walking groups.
- Establish a standard for utilization of a uniform diabetes risk scale such as "Are You At Risk for Type 2 Diabetes," developed by the American Diabetes Association for use in determining when formal diabetes prevention interventions should begin.

6.3.1 Long-Term Consideration

- Reduce disparities and barriers to access in African American and Latino communities by limiting the cost to the consumer, providers, and healthcare systems as well as the appearance of fragmentation by moving toward the creation of an all-inclusive "Health Mall." The "Mall" will include services needed to prevent, delay, manage, and treat type 2 diabetes and other chronic diseases in one physical space. Individuals and families at risk for and living with type 2 diabetes and other chronic diseases will receive care from primary care providers and health educators. They will also have the opportunity to participate in complementary therapies (e.g. yoga, meditation, acupuncture, massage therapy). A healthy food mart will exist within the Mall. Demonstrations and opportunities to participate in selecting and preparing healthy foods will be available, along with a space to walk and engage in movement. A multipurpose room will exist and serve as a social hub for peer support. All of this needs to be conveniently located for community members.

6.3.2 Lessons Learned

- Both English and Spanish speakers were members of the Diabetes Steering Committee. An interpreter was present at all meetings; however, it was difficult for a facilitator who does not speak Spanish to follow the conversation and judge participants' emotional reactions through an

interpreter. At least one individual felt that even with an interpreter present, she often felt left out and did not fully capture the information.

- The Diabetes Steering Committee is a diverse group in many ways. However, the members were not diverse socioeconomically. More community engagement, outreach, and targeted recruitment efforts, plus the use of social media might be helpful in recruiting a more socioeconomically diverse group.

6.4 | CONCLUSION

The Diabetes Steering Committee is an example of a best practice for gathering community input to develop and modify programming to fit community wants and needs. The Committee's findings will serve as guidelines for organizations designing or implementing diabetes prevention and management programs in African American and Latino communities in the Thomas Jefferson Health District.

Photovoice Photo: Scottsville and Esmont JABA

ENDNOTES

[1] American Diabetes Association. (2019). *The cost of diabetes*. Retrieved from https://www.diabetes.org/advocacy/news-events/cost-of-diabetes.

[2] Virginia Department of Health. (2016). *Diabetes burden report*. Retrieved from http://www.vdh.virginia.gov/content/uploads/sites/75/2016/12/Diabetes-Burden-Report.pdf.

[3] Office of Minority Health. (2016). *Diabetes and African Americans*. Retrieved from https://minorityhealth.hhs.gov/omh/find.aspx.

[4] Office of Minority Health. (2016). *Diabetes and Hispanic Americans*. Retrieved from https://minorityhealth.hhs.gov/omh/find.aspx.

[5] Thomas Jefferson Health District. (2016). *2016 MAPP2Health Report*. Retrieved from http://www.vdh.virginia.gov/content/uploads/sites/91/2016/07/Mapp2HealthFinalSmall.pdf.

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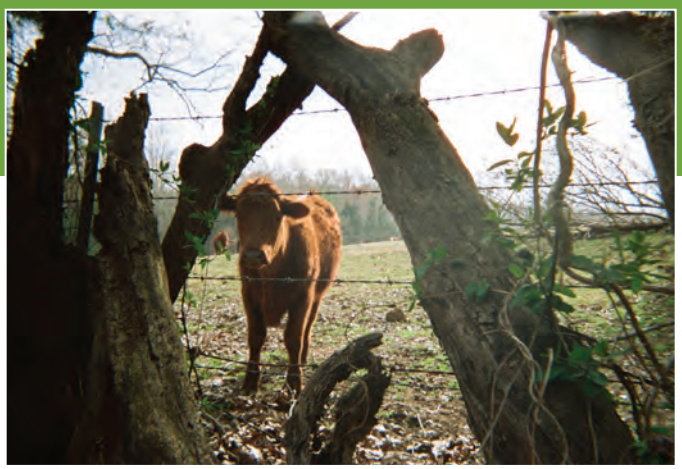
What We Learned: Community Health Assessment Data



Photovoice Photo: Scottsville and Esmont JABA

7.1 | COMMUNITY HEALTH ASSESSMENT OVERVIEW

The Community Health Assessment (CHA) is one of the four assessments in the *Mobilizing for Action through Planning and Partnerships* (MAPP) framework. By collecting and assessing comprehensive data, communities can better understand and analyze community health status, risk factors, quality of life, and root causes that affect community health.

For the purposes of this report, the community is defined as residents of Virginia's Planning District 10 (PD10), also referred to as the Thomas Jefferson Health District (TJHD), which includes the City of Charlottesville and counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson.

The community health assessment is divided into four sections of data based on the four MAPP priorities as well as an initial section on demographic data and an additional section with supplemental data. Each section highlights health disparities using national research and state or local data as well as discussing social determinants of health wherever appropriate.

CHA SECTION 7.2: Data on District Demographics including Population and Population Change, Race/Ethnicity, Disability, and Household Make-up

CHA SECTION 7.3: Data on Healthy Eating, Active Living, and Obesity

CHA SECTION 7.4: Data on Mental Health and Substance Use

CHA SECTION 7.5: Data on Access to Care and Health Disparities (Insurance, Primary and Dental Care, Life Expectancy, Premature Mortality, Maternal and Child Health, Diabetes, and HIV)

CHA SECTION 7.6: Data on a Healthy and Connected Community for All Ages (Childcare, Education, Employment, Poverty, Socioeconomics, Housing, Transportation, Community Safety, and Social Connectedness)

CHA SECTION 7.7: Supplemental Data on Leading Causes of Death, Cancer, Unintentional and Intentional Injuries, and Prevention Quality Indicators

Selected data were presented to the MAPP Leadership Council (focused on district-wide data), the Charlottesville/Albemarle MAPP Council, Fluvanna Interagency Council, Greene Agencies Coming Together, Louisa Interagency Council, and Nelson Interagency Council. Each council also received a "working draft" data profile handout specific to their locality (or district) with additional indictors. Presentations, data profiles, and additional handouts were uploaded to TJHD's public website at http://www.vdh.virginia.gov/thomas-jefferson/council-information/ and made available to participants after each meeting. In addition, data for core MAPP indicators (~five per priority) were uploaded to TJHD's Tableau Public site in advance

of the MAPP data meetings for participants to access and review further at https://public.tableau.com/profile/thomas.jefferson.health.district#!/.

Along with the qualitative community perspective gained through photovoice projects across the district and best practice recommendations from the MAPP Best Practices Work Group and Diabetes Steering Committee, the CHA is meant to establish a strong data-driven foundation for the district's community health improvement plan—*Improving Health Equity: A Community Plan for Action and Accountability 2019–2022*.

7.1.1 Data Collection Methods

7.1.1.1 GENERAL DATA SOURCES

Data collection builds on the previous CHA data published in the 2008, 2012, and *2016 MAPP2Health Reports*. The current assessment features updated indicator data included in previous reports as well as new equity-focused indicators when available for inclusion. Data were sourced from a variety of local, state, and national agencies, organizations, and health systems.

Data from the United States Census Bureau, often from the American Community Survey (ACS), supply information on demographics, household relationships, employment and income, housing, insurance status, educational attainment, language, disability, vehicles and commuting, and several other factors. ACS data are typically presented through one, three, or five-year estimates for a given time period. Five-year estimates are typically more reliable for localities with smaller populations.

Data from the Virginia Department of Health (VDH) are typically presented by counts, percentages, or rates. Data on maternal and child health, causes of death, and life expectancy estimates are examples of data derived from VDH vital statistics through birth and death records. Injury and violence data are typically from the Office of the Chief Medical Examiner (OCME) and the Virginia Online Injury Reporting System (VOIRS). Other VDH data include opioid addictions and sexual health. For a general overview, technical notes, and select data reports, visit http://www.vdh.virginia.gov/data/.

VDH also coordinates the Behavioral Risk Factor Surveillance Survey (BRFSS) in the state of Virginia. Standard questions, as well as optional modules, are produced by the Centers for Disease Control and Prevention (CDC), and used by state health departments across the nation to conduct the largest continual telephone health surveillance system in the world. BRFSS collects data through cell phone and landline telephone interviews throughout the year. Survey respondents are adults 18 years or older who live in a private residence or college housing unit; only one adult per household is interviewed. Information collected includes demographics, health behaviors, chronic conditions, health insurance coverage, health status, and utilization of healthcare services.[1] Data are typically available for the state of Virginia and by local health district (i.e., TJHD), but not at the county level. For additional information, visit http://www.vdh.virginia.gov/brfss/.

In conjunction with partner agencies, VDH also conducted a Virginia Youth Survey (VYS) in 2011, 2013, 2015, and 2017. The survey gathers self-reported health risk behaviors in randomly selected Virginia public schools and is reported at the Virginia level; no data are available specifically for TJHD or TJHD localities. For additional information and data, visit http://www.vdh.virginia.gov/virginia-youth-survey/. The Centers for Disease Control and Prevention (CDC) analyzes similar nationwide Youth Risk Behavior Surveillance System (YRBSS) data, which are available at https://www.cdc.gov/healthyyouth/data/yrbs/index.htm.

County Health Rankings and Roadmaps (CHR) is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin's Population Health Institute. CHR

provides annual data on more than 30 measures that "help communities understand how healthy their residents are today (health outcomes) and what will impact their health in the future (health factors)."[2] Compiling data from national and state data sources, CHR releases annual data for nearly all counties in the United States and ranks them within states. For each measure, CHR includes a state map, data table, data description (including methods and limitations), and overview of the data source. For additional information, visit http://www.countyhealthrankings.org/app/virginia/2019/measure/outcomes/1/description and select a measure to view specific methods, limitations, and whether or not the measure can be used to track progress and compare across years and/or localities. (Figure 1)

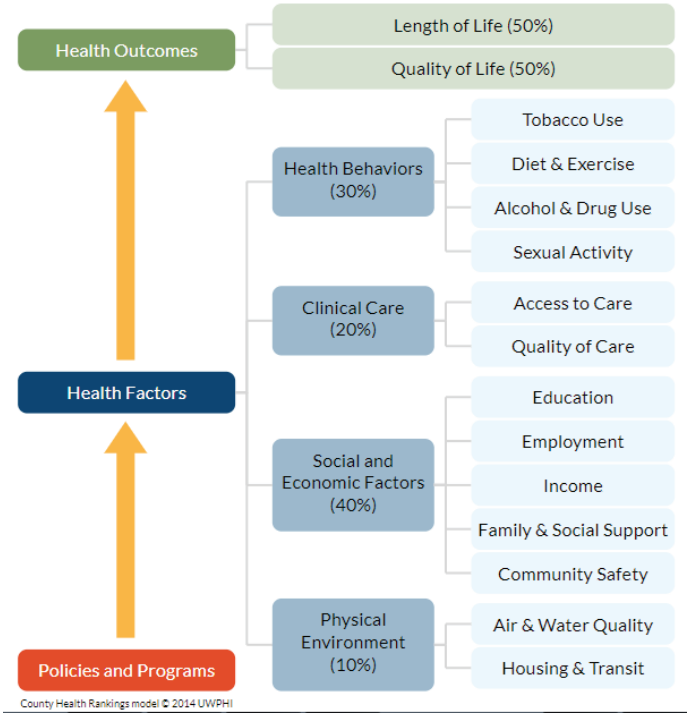


Figure 1 County Health Rankings Model. Source: County Health Rankings and Roadmaps. Available at http://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model. Accessed 2019.

The Virginia Department of Education (VDOE) reports a variety of data including enrollment, demographics, student achievement, finances, safety, school report cards, graduation rates, teacher qualifications, and more. VDOE data are collected from schools and represent complete counts—not estimates—for each given school or school district. To review data or learn more about data collection methodology, visit http://www.doe.virginia.gov/statistics_reports/index.shtml.

7.1.1.2 LOCAL DATA COLLECTION

7.1.1.2.1 Thomas Jefferson Health District Community Health Survey

In 2018, the Thomas Jefferson Health District conducted a community health survey to better understand the general health of residents within TJHD by specific geographic groupings. Data collection began in June 2018 and ended in July 2018. The survey targeted adults (age 18 and older) who were TJHD residents. Households included in the study were randomly selected from a purchased, address-based sampling frame of TJHD households. The sample was stratified to target ZIP codes (ZCTAs) that have similar demographic characteristics, as identified by a prior cluster analysis of ZCTAs based on United States Census data. Recruitment for participation was done through postal mail. Mailed materials included one advance letter, two questionnaire packets (the initial questionnaire included a $2 as a small token of appreciation to survey participants), and one thank you/reminder postcard. Respondents mailed back the survey in a pre-paid postage envelope, and used a separate post card to communicate that they had completed the questionnaire. The questionnaire was developed by TJHD and modified and formatted by the University of Virginia Center for Survey Research. The survey was also available in Spanish, but no respondents completed the survey in Spanish; across localities, 1.5% or less of respondents indicated

that someone in their household didn't understand English.

The survey generated 934 responses; once weighted for the sampling design, the weighted frequency was also 934 respondents. Due to lower response rates in Fluvanna, Greene, Louisa, and Nelson Counties, results from Greene and Nelson Counties were combined and Fluvanna and Louisa Counties were combined based on similarities in demographics to increase statistical reliability (Figure 2). The majority of respondents were aged 50 years or older (Figure 3). Throughout the district, respondents were 58.2% female, 35.5% male, and 6.3% did not select a gender or preferred not to answer.

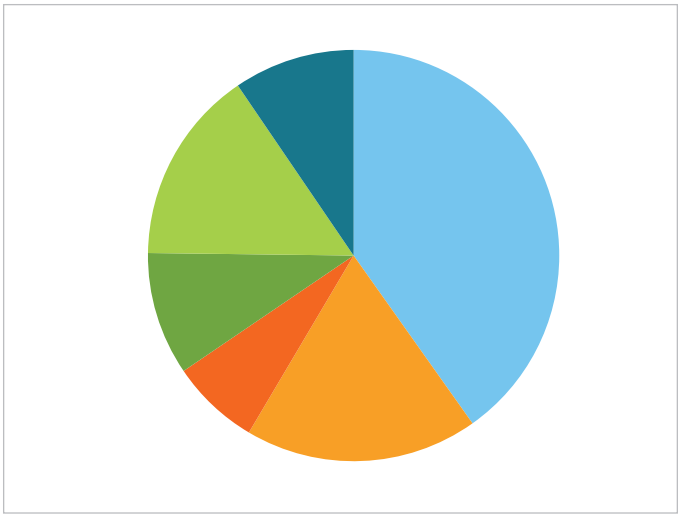


Figure 2 Weighted Percentages of Community Health Survey Respondents, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey, 2018. Accessed 2019.

Photovoice Photo: Fluvanna/Fork Union JABA

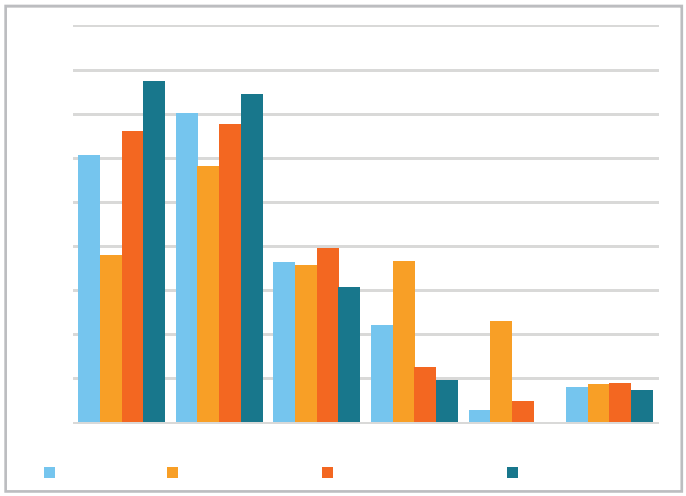


Figure 3 Weighted Percentages of Community Health Survey Respondents by Age, TJHD Localities (some combined), 2018. Source: Thomas Jefferson Health District Community Health Survey, 2018. Accessed 2019.

Survey respondents were primarily white (from 70.6% in Charlottesville to 81.3% in Albemarle), followed by black or African American (15.1% in Charlottesville to 4.0% in Greene & Nelson) (Figure 4). Although not represented in Figure 4, for the TJHD Community Health Survey, the percentage of Hispanic/Latino/Spanish origin respondents was largest in Charlottesville (4.4%) and Albemarle (4.2%), followed by Greene & Nelson (2.8%), and smallest in Fluvanna & Louisa (1.9%).

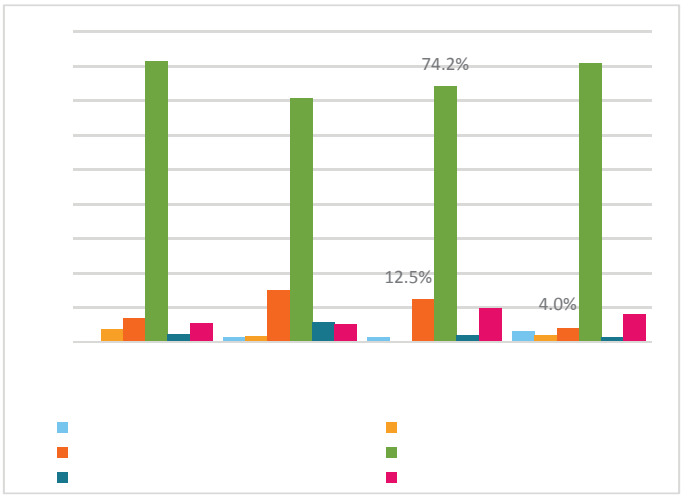


Figure 4 Weighted Percentages of Community Health Survey Respondents by Race, TJHD Localities (some combined), 2018. Source: Thomas Jefferson Health District Community Health Survey, 2018. Accessed 2019.

The survey report and responses in PDF format are available at http://www.vdh.virginia.gov/thomas-jefferson/data/. To request the complete data files for further analysis and review, contact the TJHD Data Analyst at 434-422-3214. The complete survey report includes a 95% confidence interval (CI) for each response; the CI is a range of values around the estimate, within which the true value can be expected to fall. The smaller the confidence interval is for a particular estimate, the more precise the estimate is. Throughout the current report, all responses from the TJHD community health survey include a +/- margin of error (instead of the 95% CI).

7.1.1.2.2 Data from Community Partners

Wherever possible, data from community partners are included throughout the report. Data collection and analysis methods vary, but all local data from community partners represent actual counts (of clients, patients, etc.) and are not estimates or population samples. Examples include mapping of obesity data from University of Virginia (UVA) Health outpatient settings, collected and analyzed by the integrated Translational Health Research Institute of Virginia at UVA (iTHRIV), data on persons experiencing homelessness collected by the Thomas Jefferson Area Coalition for the Homeless (TJACH), and behavioral health data from Region Ten Community Services Board.

7.1.1.3 BENCHMARKS

Where possible, data from TJHD localities are compared to state (Commonwealth of Virginia) or national (United States) data and/or a national benchmark. Common benchmarks include Healthy People 2020 (HP2020) and County Health Rankings Top United States Performers (CHR). Healthy People 2020 is a set of objectives for the nation's health that was developed by the U.S. Department of Health and Human Services through a broad national consultative process. The HP2020 targets were developed to assist with public health program evaluation over time, with the ultimate goal of assisting local, state, and federal agencies in improving the health of the nation. An HP2020 target is included for comparison with MAPP data whenever available.[3] For many measures, CHR includes a "Top Performers" value for which only 10% of counties in the United States are doing better—either the 90th percentile or 10th percentile depending on whether the measure is positive or negative. CHR Top Performers values are included for comparison whenever available for a specific CHR measure.[4]

7.1.1.4 LIMITATIONS

Data are generally reported at the district and county or city level. For some indicators, the number of events is too small to reliably report at the locality level. When local data are not available, state data are provided. Where possible, data are stratified by age or race.

State- and national-level data typically allow for analyses to incorporate some granularity. However, in smaller-level analyses at the county or city level, precision is often lost due to a smaller sample size. For example, the Virginia smoking prevalence (n = 6,700) in 2013 was 19.0% with a 95% confidence interval of 17.9%–20.2%. The 2013 smoking prevalence for TJHD (n = 214) was 18.9% with a 95% confidence interval of 12.2%–25.6%.[5] While both estimates are practically identical, the confidence interval for the TJHD estimate is much wider than that for the state, indicating a lack of precision. A lack of precision not only reduces the usefulness of an estimate for any given year, but also obscures the ability to detect true differences in estimates across years due to overlapping confidence intervals. If health institutions cannot measure differences in health estimates across years, then it also becomes difficult to assess whether health interventions and associated resources effectively and meaningfully impact the community's health.

Several of the data sources utilize self-response surveys to gather information on the population, potentially introducing biases into the data. Survey respondents may incorrectly recall events that occurred some time ago or may offer more socially desirable answers to questions that involve morally subjective behaviors (e.g. level of physical activity, smoking status, etc.). Moreover, certain individuals may respond to surveys more frequently than others may. For example, individuals who often engage in physical activities may respond to surveys dealing with physical activity at higher rates than individuals who do not exercise, which would give the health district artificially high rates of physical activity.[6] While the type and extent of bias impact the accuracy and interpretability of health estimates, it is not suggested that the following data suffer extensively from bias—only that all data retain some bias and that a discussion of bias should accompany the analysis.

TJHD's composition also presents several limitations to the data and their interpretation. Relatively low populations in the individual localities can render the measures used in the CHA difficult to interpret. For example, Nelson County had 17 cases of gonorrhea in 2014; however, due to the locality's population of ~15,000, the incidence rate equals 47.3/100,000 people. When the area measured contains fewer people than the actual unit of measurement (e.g. rate per 100,000), it may also be helpful to review the number of cases and year-to-year variation to better understand the full data picture (e.g. how many cases of gonorrhea did Nelson have in 2013 and 2015? How much did the case counts vary from year to year? Did the rate spike up and down over a period of years?).[7] Finally, and in a general sense, the available data may not necessarily reflect or capture the health phenomena most pertinent to TJHD. As this assessment largely relies on how state- and national-level agencies and organizations decide to define, collect, organize, and disseminate data, these data may at times fail to reflect the health priorities of TJHD, which is why other methods of data collection, such as photovoice, are so critical to a robust community health assessment.

ENDNOTES

[1] Virginia Department of Health. (2019). Behavioral risk factor surveillance survey. Retrieved from http://www.vdh.virginia.gov/brfss/.

[2] County Health Rankings and Roadmaps. (n.d.). County Health Rankings model. Retrieved from http://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model.

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Photovoice Photo: Scottsville and Esmont JABA

7.2 | DISTRICT DEMOGRAPHICS

7.2.1 Population Estimates and Growth

The Thomas Jefferson Health District (TJHD) is comprised of six localities—the City of Charlottesville and the counties of Albemarle, Fluvanna, Greene, Louisa, and Nelson. Across TJHD, locality populations have been increasing since 1990. In 2017, the estimated total population of TJHD was 252,588. Among TJHD localities, Albemarle County had the largest population (107,702) and Nelson County had the smallest (14,943). (Figure 1, Table 1) The percentage change in population from 2013 to 2017 was largest in the City of Charlottesville (6.5%) and smallest in Nelson County (0.9%) (Figure 2).

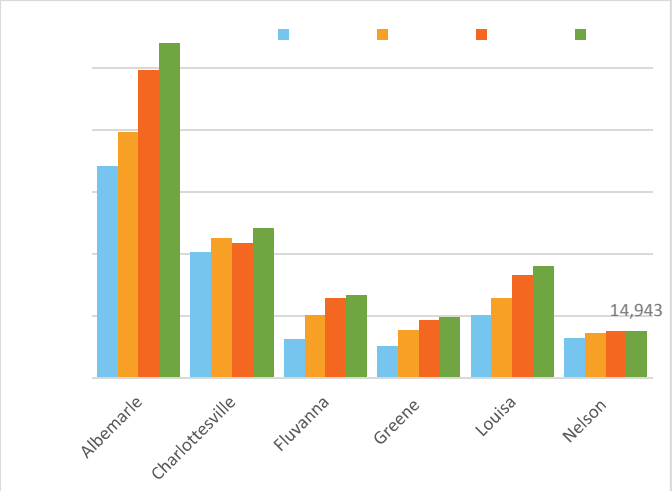

Figure 1 Change in Population, TJHD Localities, 1990–2017. Source: U.S. Census Bureau, Population Division. Accessed 2019.

Locality	1990	2000	2010	2017
Albemarle	68,172	79,236	98,970	107,702
Charlottesville	40,475	45,049	43,475	48,019
Fluvanna	12,429	20,047	25,691	26,452
Greene	10,297	15,244	18,403	19,612
Louisa	20,235	25,627	33,153	35,860
Nelson	12,778	14,445	15,020	14,943
TJHD	164,476	199,648	234,712	252,588
Virginia	6,189,317	7,078,515	8,001,024	8,470,020

Table 1 Change in Population, TJHD Localities, TJHD and VA, 1990–2017. Source: U.S. Census Bureau, Population Division. Accessed 2019.

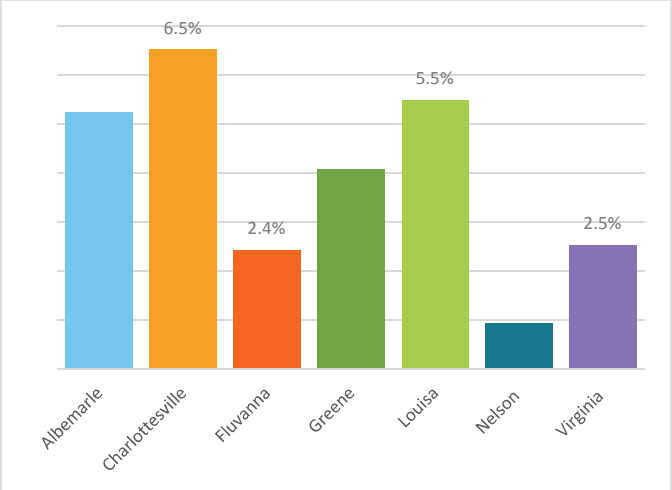

Figure 2 Percentage Change in Population, TJHD Localities and VA, from 2013 to 2017. Source: U.S. Census Bureau, Population Division. Accessed 2019.

7.2.2 Students Enrolled in Public College or Graduate School

In the Census, college students are counted as residents of the locality in which they reside while attending college, rather than at their permanent residence. Overall, the University of Virginia (UVA) has approximately 16,000 undergraduate students and around 6,770 graduate and professional students, for a total of almost 23,000 students.[1] Students attending UVA are counted as Albemarle County residents if they live in dormitories. If they live off-campus, they are counted as a resident of that locality. From 2013–2017, students that attended public college or graduate school were 20.9% of the population in Charlottesville and 10.9% of the population in Albemarle. While more students overall lived in Albemarle (11,435) than Charlottesville (9,721), they were a smaller percentage of the population in Albemarle because Albemarle has a much larger population than Charlottesville. These numbers largely reflect UVA students although they also include all students enrolled in a public college or graduate school, which could include students enrolled at Piedmont Virginia Community College (PVCC) or enrolled in public online programs or commuting to public undergraduate and graduate programs outside of the district; these numbers do not include students enrolled in private colleges or graduate programs. Students enrolled in public college or graduate school as a percentage of the overall population were lowest in Nelson (2.3%) and Greene (2.7%) (Figure 3).

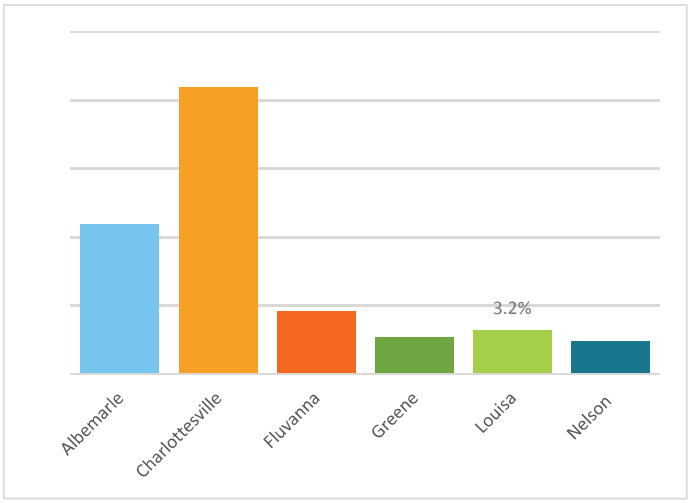

Figure 3 Percentage of Population Enrolled in Public College or Graduate School, TJHD Localities, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

7.2.3 Age and Sex Distribution

Figure 4 shows the population age group and sex distribution in TJHD using a 2013–2017 5-year estimate. In addition to the decennial Census, which is a survey of all United States households conducted every ten years, the Census Bureau also conducts continuous sampling. The Census Bureau collects data and produces estimates for different periods of time, such as 1-year, 3-year, and 5-year estimates. The multiyear estimates are collected over time in order to increase the statistical reliability of data for less-populated areas, such as most of the localities in TJHD. As discussed in the previous section, UVA undergraduate and graduate students number almost 23,000 and are a noticeable percentage of the population in Albemarle and Charlottesville. This effect is most apparent in the number of 20–24-year-olds, which is the largest total demographic for both males and females in TJHD. The second largest age demographic among females and males combined is 15–19-year-olds.

For the percentage change in population from 2013 to 2017 by age group and gender in TJHD, the male population group between 70 to 74 years old had the largest population increase (26.1%) and the female population group between 40 to 44 years old had the largest population decrease (down by 8.01%). The population groups aged 65 to 69 years old and 75 to 79 years old each experienced a large increase from 2013 to 2017. This may be due to multiple factors, including the considerable growth of the older population in the United States as a direct result of the aging baby boomer population and/or the increased number of retirees that choose to move to TJHD from other areas. (Figure 5)

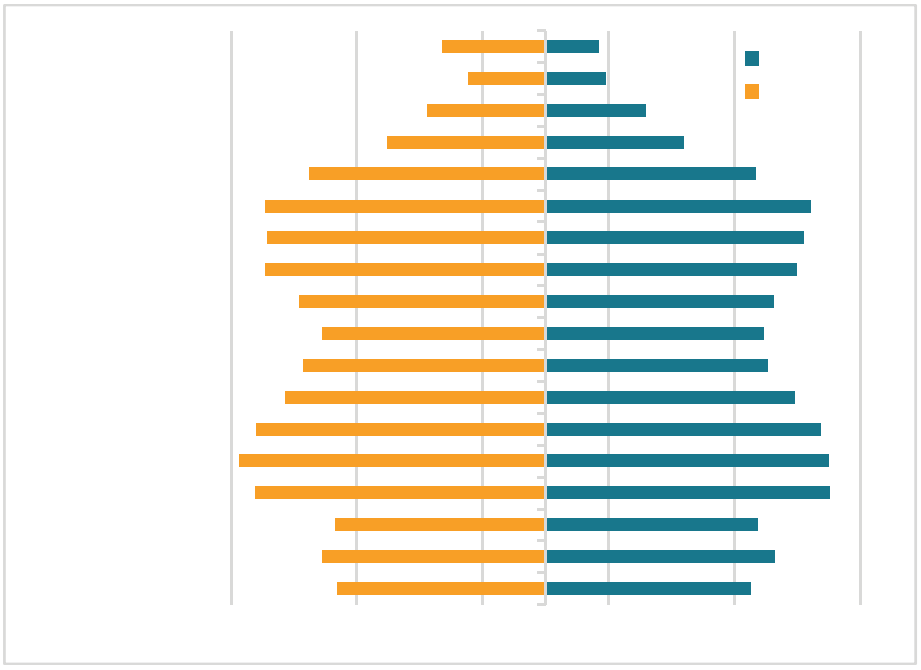

Figure 4 Population by Age Group and Gender, TJHD, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, Population Division. Accessed 2019.

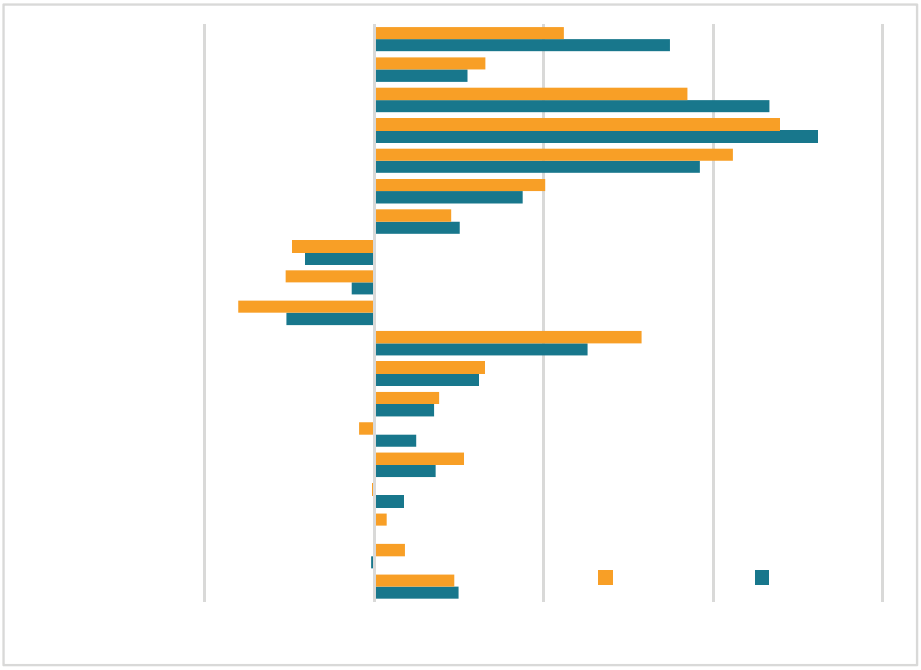

Figure 5 Percentage Change in Population by Age Group and Gender, TJHD, from 2013 to 2017. Source: U.S. Census Bureau, Population Division. Accessed 2019.

7.2.4 Race and Ethnicity

The Census Bureau collects racial data in accordance with guidelines provided by the United States Office of Management and Budget (OMB). Race data are self-reported. Respondents have been able to select more than one race since the 2000 Census; people who self-identify as of Hispanic, Latino, or Spanish origin may be of any race. These racial categories reflect the social definition of race in the United States and are not an attempt to define race biologically or genetically. The Census asks about five racial categories using the following definitions:

- "*White*—a person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- *Black or African American*—a person having origins in any of the Black racial groups of Africa.
- *American Indian or Alaska Native*—a person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.
- *Asian*—a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- *Native Hawaiian or Other Pacific Islander*—a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands."[2]

7.2.4.1 RACE AND ETHNICITY BY TOTAL POPULATION

A 2013–2017 5-year estimate shows the racial and ethnic composition of TJHD is as follows: 76.0% white, 12.4% black, 4.8% Hispanic, 3.7% Asian, 2.6% two or more races, and less than 1% American Indian, Alaska Native, Native Hawaiian, or other Pacific Islander—grouped as "Other." (Figure 6)

The Weldon Cooper Center for Public Service at the University of Virginia produced a Racial Dot Map to provide a visualization of population density and racial diversity by mapping one dot for each person in the United States using 2010 Census data. Figure 7 shows the distribution of white, black, Asian, Hispanic (may be of any race; not included in other categories), and other persons for Charlottesville and the areas just outside of Charlottesville.

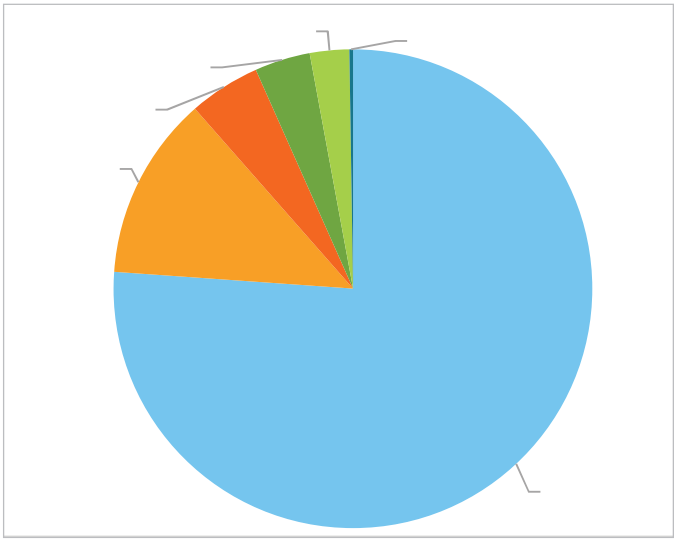

Figure 6 Racial Composition, TJHD, 2017. Source: U.S. Census Bureau, Population Division. Accessed 2019.

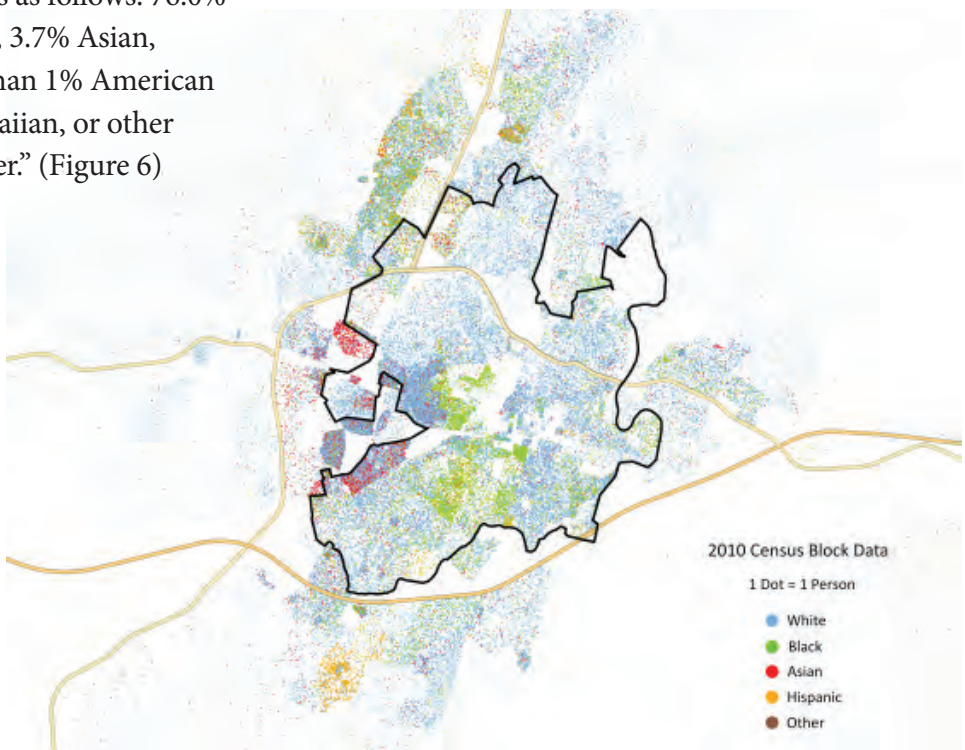

Figure 7 Racial Dot Map, Charlottesville and Surrounding Geography, 2010. Source: Weldon Cooper Center for Public Service at the University of Virginia. Available at https://demographics.coopercenter.org/racial-dot-map/. Accessed 2019.

7.2.4.2 RACE AND ETHNICITY BY SCHOOL ENROLLMENT

From 2018–2019 school year school membership fall enrollment data, within TJHD school districts, 64.1% of students identified as white, 14.7% black, 10.4% Hispanic, 3.6% Asian, 7.0% two or more races, and less than 1.0% as other. (Figure 8) Although not shown in Figure 8, in comparison Virginia as a whole had a larger percentage of students of color, with 48.4% of students identifying as white, 22.2% black, 16.2% Hispanic, 7.1% Asian, 5.7% two or more races, and less than 1% as other races or ethnicities.

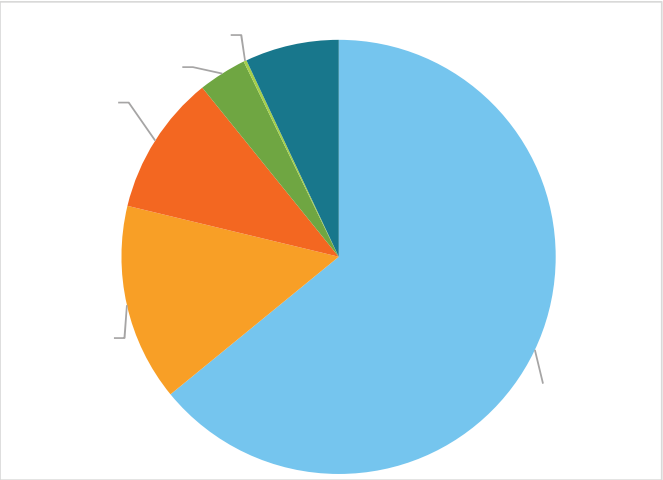

Figure 8 Student Enrollment by Race, TJHD School Districts, 2018–2019 School Year. Source: Virginia Department of Education, Fall Membership Reports—Division Totals by Race. Accessed 2019.

7.2.5 Population Projections by Age and Race

The population of persons aged 65 and older in the United States is projected to double by 2050—at which point baby boomers will be over the age of 85. In TJHD and Virginia, the population group between ages 75 and 85[3] is estimated to experience the greatest increase by 2040. Although the population group between ages 65 and 74 is expected to grow from 2020 to 2030, by 2040, this group will begin to experience a small decrease (refer to Appendix 8.2 for data tables).

In the United States, the white population has been increasing since the first census was conducted in 1790. However, Census Bureau population estimates indicate that there will be a decrease in the white population.[4] Population projections conducted by the Weldon Cooper Center estimate a decrease in the white and black population in TJHD by 2040, with increases in Hispanic and Asian populations (refer to Appendix 8.2 for data tables).

7.2.6 District Languages Spoken

7.2.6.1 LANGUAGES OTHER THAN ENGLISH

The percentage of the population speaking a language other than English varied between an estimated 3.5% and 15.5% in TJHD localities in a 2013–2017 estimate. The City of Charlottesville had the highest percentage (15.5%) of the population who spoke a language other than English while Fluvanna County had the lowest (3.5%). (Figure 9) The higher rates in Albemarle and Charlottesville may be due, in part, to UVA professors, staff, and students that speak languages in addition to English. The International Rescue Committee (IRC), a refugee resettlement organization, has an office in Charlottesville, which may also contribute to the higher percentage of the population speaking a language other than English.

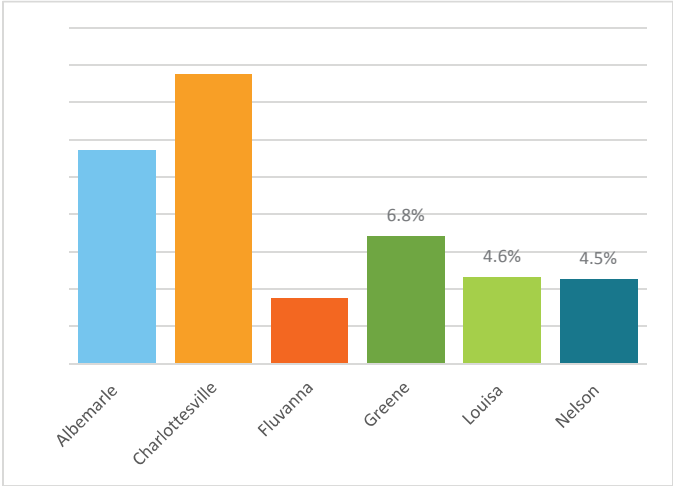

Figure 9 Percentage of Population Speaking a Language Other than English, TJHD Localities, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

In the same period in TJHD, a greater percentage of the population (3.8%) spoke languages in the Spanish language family than languages in other language families (Figure 10).

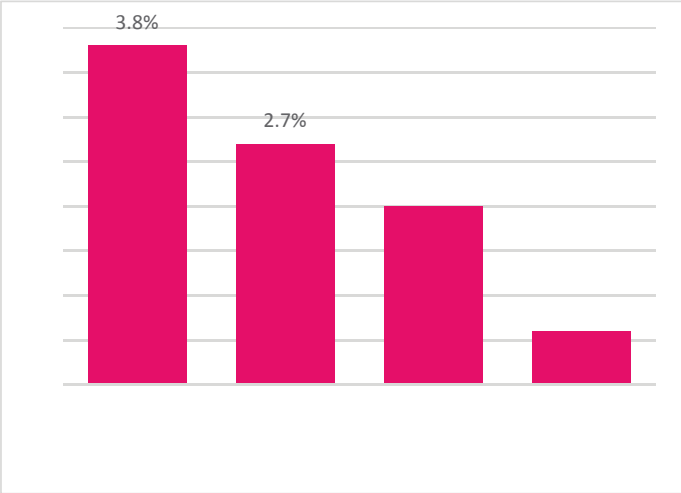

Figure 10 Percentage of Population Speaking Each Language by Language Family (for Languages Other than English), TJHD, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

Photovoice Photo: Friendship Court

Figure 11 maps the estimated predominant language, not including English, spoken in homes across Albemarle County by Zip Code Tabulation Area (ZCTAs cross county boundaries, so the map also includes the City of Charlottesville). Predominant languages include Spanish or Spanish Creole, other Indic languages, German, Gujarati, French including Patois and Cajun, and Chinese.

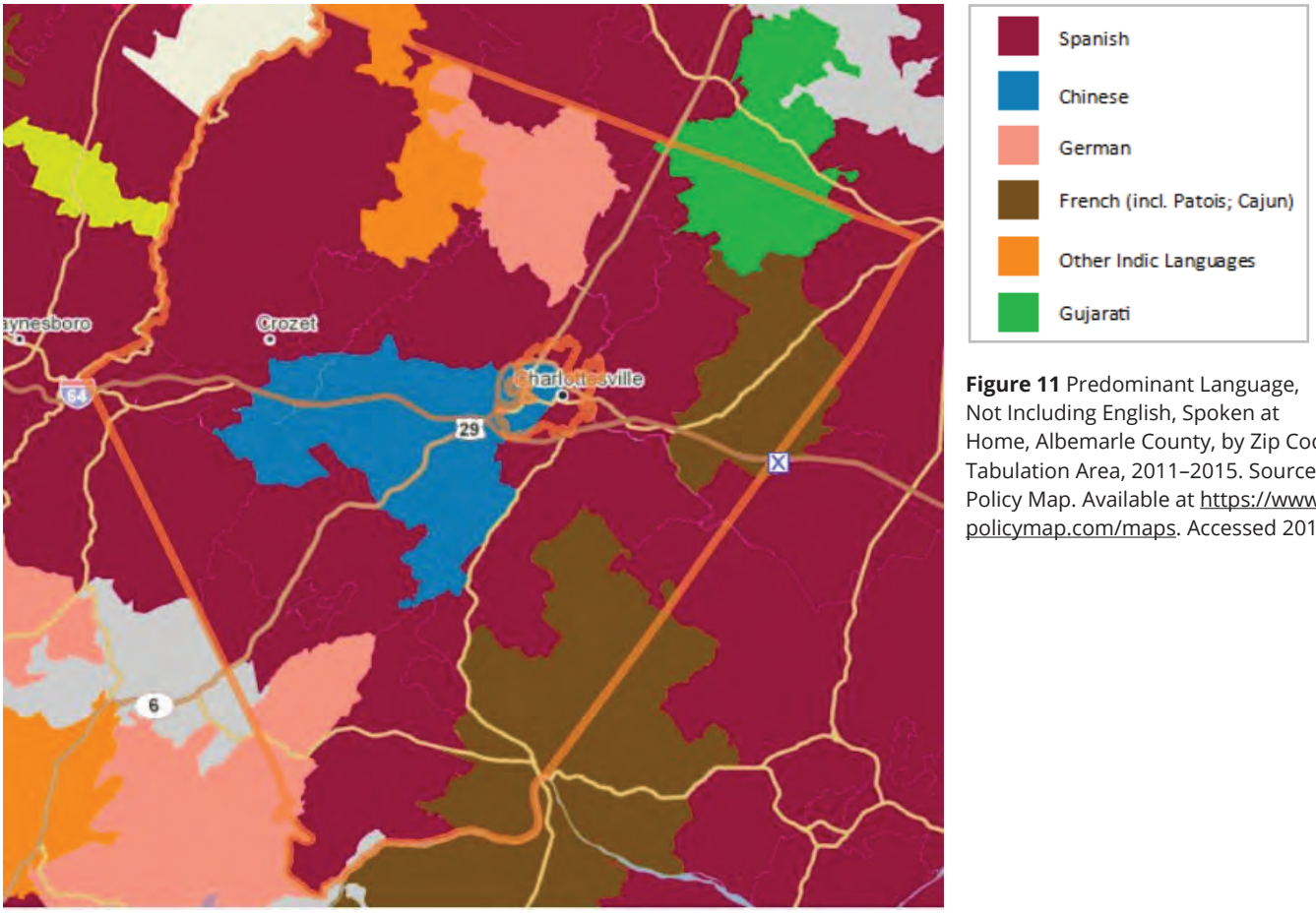

Figure 11 Predominant Language, Not Including English, Spoken at Home, Albemarle County, by Zip Code Tabulation Area, 2011–2015. Source: Policy Map. Available at https://www.policymap.com/maps. Accessed 2019.

Figure 12 maps the estimated predominant language, not including English, spoken in homes across the City of Charlottesville by 2010 census tracts (census tracts do not cross county boundaries). Predominant languages include Spanish or Spanish Creole, Chinese, Arabic, Thai, and German.

7.2.6.2 LIMITED ENGLISH PROFICIENT STUDENTS

The percentage of public school students in TJHD with Limited English Proficiency (LEP) has increased since the 2009–2010 school year. As of the 2018–2019 school year, Charlottesville (13.5%) and Albemarle (9.6%) had the highest LEP student enrollment rates. Fluvanna (2.4%) had the lowest LEP enrollment, followed by Nelson (3.2%) and Louisa (3.4%). (Figure 13)

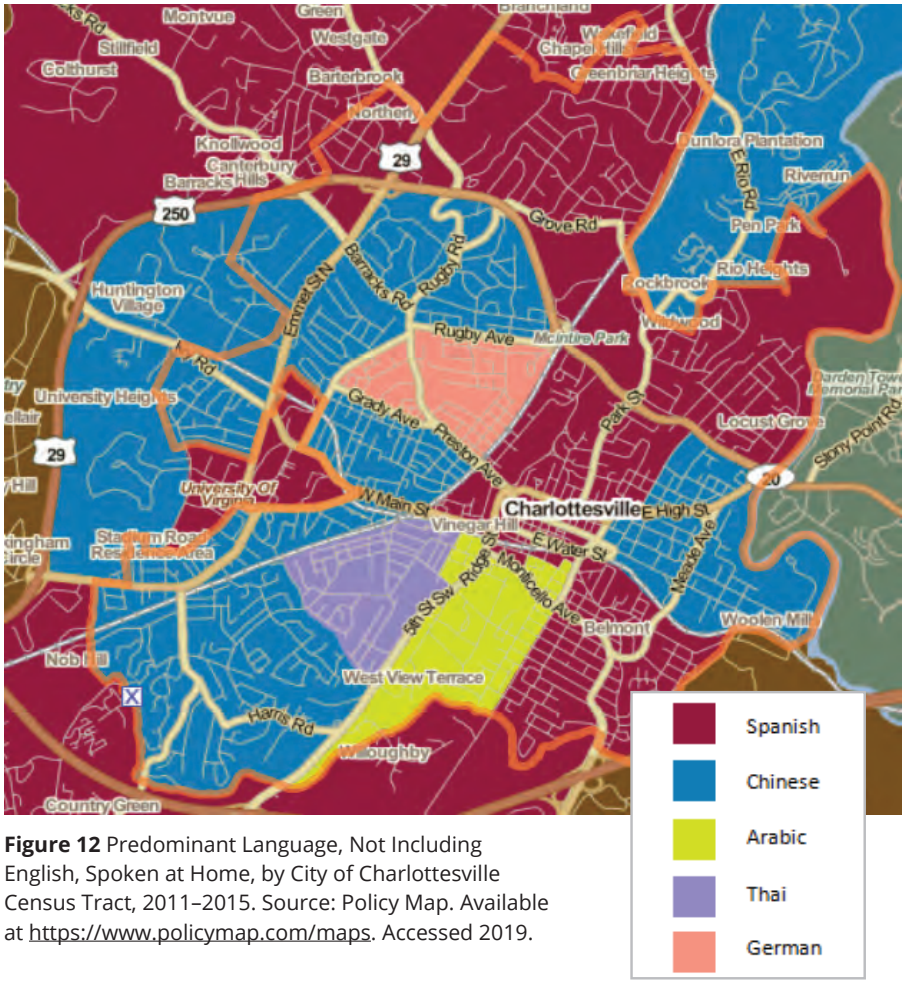

Figure 12 Predominant Language, Not Including English, Spoken at Home, by City of Charlottesville Census Tract, 2011–2015. Source: Policy Map. Available at https://www.policymap.com/maps. Accessed 2019.

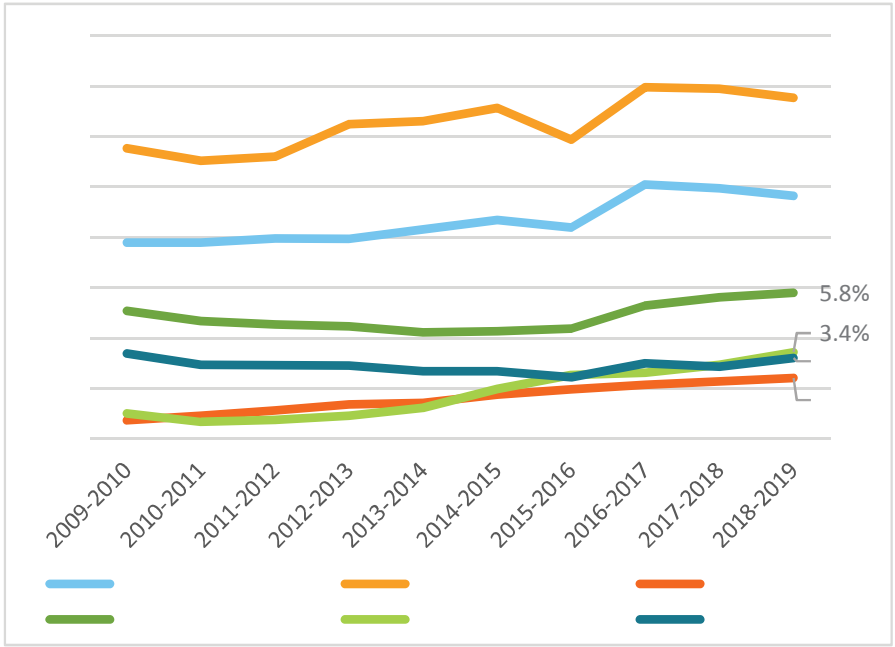

Figure 13 Limited English Proficient Student Enrollment, TJHD Localities, 2009–2019, by School Year. Source: Virginia Department of Education, Fall Membership Reports—Division Totals by Grade. Accessed 2019.

7.2.7 Disability

The Census defines disability as "a long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business."[5] Based on a standardized definition of disability for public health surveys adopted by the U.S. Department of Health and Human Services in 2011,[6] the American Community Survey asks

about six disability types: hearing difficulty, vision difficulty, cognitive difficulty, ambulatory difficulty, self-care difficulty, and independent living difficulty. Respondents who report any one of the six disability types are considered to have a disability.[7]

Disability is a broad category and can include people in any age group, those born with a disability as well as those who experience a disability later in life, short-term as well as long-term disability, and a diverse array of conditions and experiences. People with disabilities may have lower education levels, lower incomes, and higher unemployment than people without disabilities. People with disabilities are also more likely to report being in fair or poor health, higher use of tobacco, less physical activity, and higher rates of obesity than people without disabilities. People with disabilities have a higher risk of experiencing non-fatal violent crimes than non-disabled people, are twice as likely to report rape or sexual assault, and both men and women with disabilities have a significantly increased risk for intimate partner violence. People with disabilities also report lower screening rates and more difficulty accessing services. In addition, data show that the prevalence of disability is higher among black, American Indian, and Alaska Native populations.[8, 9]

As with other inequities, these negative outcomes are strongly connected to the policies, systems, and environments that have been designed by and for people without disabilities. Community social and environmental factors often disadvantage people with disabilities—through failure to provide sufficient accessible housing units, a built environment and infrastructure that is not adequately accessible to persons with a variety of disabilities, and social attitudes that stigmatize disability. Healthcare and other critical systems are rarely designed to serve people with disabilities. There are obvious physical barriers such as inaccessible equipment and facilities, as well as invisible barriers such as a lack of training for providers in caring for the diverse range of disabilities (e.g. providing insufficient sexual health education and contraceptive options to people with disabilities under the erroneous assumption that they are not sexually active). Critically, inadequate communication continues to pose a barrier (e.g., no large-print or Braille materials for people who are low-vision or blind and/or no trained sign language interpreters for the deaf or hard of hearing).[10, 11]

Photovoice Photo: Scottsville and Esmont JABA

7.2.7.1 TOTAL DISABILITY AND DISABILITY BY SEX

From 2013–2017 in TJHD, Louisa County (16.6%) had the highest percentage of the civilian (non-institutionalized) population with a disability followed by Greene (15.1%). Albemarle County and the City of Charlottesville (both 8.9%) were the only localities below the state level of 11.5%. (Figure 14) For disability by sex, the largest difference was in Louisa County (17.7% of females, 15.4% of males) followed by Greene County (14.1% of females, 16.3% of males) and the City of Charlottesville (10.0% of females, 7.8% of males) (Figure 15).

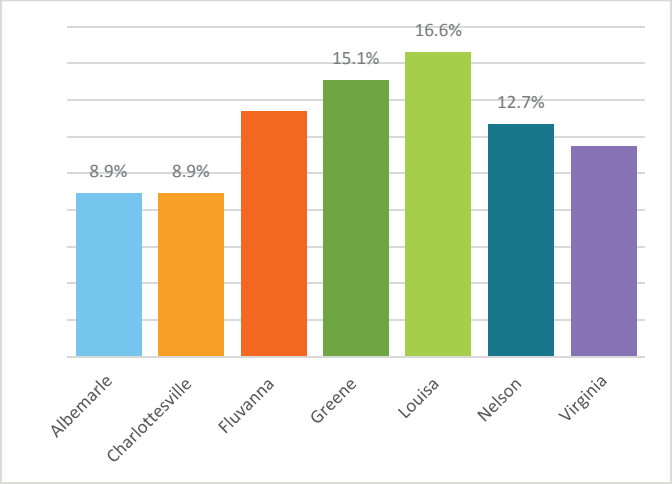

Figure 14 Percentage of Civilian Non-Institutionalized Population with a Disability, TJHD Localities and VA, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

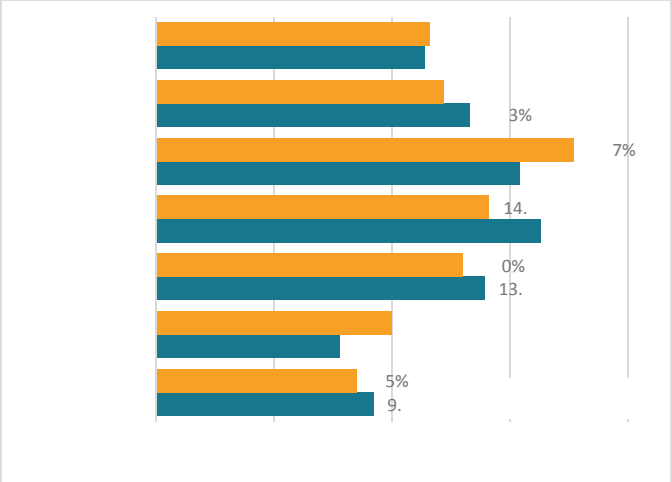

Figure 15 Percentage of Civilian Non-Institutionalized Population with a Disability by Sex, TJHD Localities, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

7.2.7.2 DISABILITY IN VIRGINIA BY RACE & AGE

From 2013–2017 in Virginia, there were differences in the percentage of the population with a disability by race/ethnicity and by age. American Indians and Alaska Natives had the highest percentage (17.3%) followed by African Americans (13.3%), while Asians (5.8%) and Hispanic/Latinos (any race) (5.7%) had lower percentages. (Figure 16) Within Virginia from 2013–2017, the percentage of the population with a disability also increased steadily by age—while 11.5% of persons aged 35–64 had a disability, the percentage increased to 23.1% for persons aged 65–74 and was almost half (48.2%) of the population of persons aged 75 and older (Figure 17).

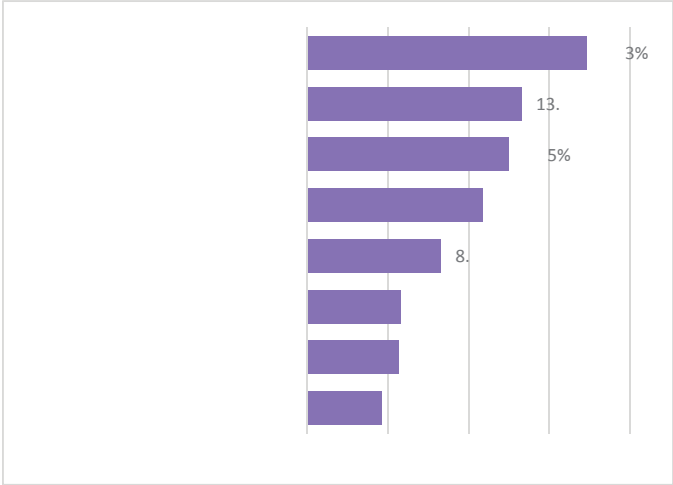

Figure 16 Percentage of Civilian Non-Institutionalized Population with a Disability by Race/Ethnicity, VA, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

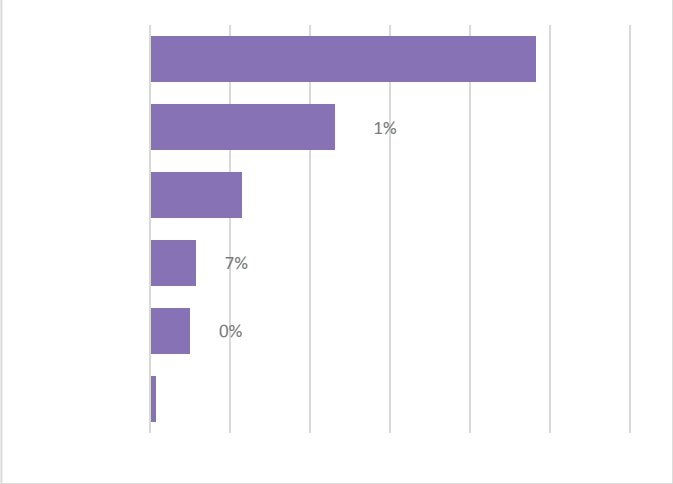

Figure 17 Percentage of Civilian Non-Institutionalized Population with a Disability by Age, VA, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

7.2.7.3 DISABILITY BENEFITS

Old-Age, Survivors, and Disability Insurance (OASDI) pays benefits to persons who are disabled, and certain family members, if they have worked long enough and paid Social Security taxes.[12] Supplemental Security Income (SSI) is a federal income supplement program, funded by general tax revenues, that is designed to assist people who are aged, blind, or disabled and who have little or no income; the program provides assistance to meet basic needs for food, clothing, and shelter.[13] In 2017, Nelson had the highest percentage of the population receiving disability benefits (5.8%), while Albemarle had the lowest (2.4%). The overall state rate was 4.2%. (Figure 18)

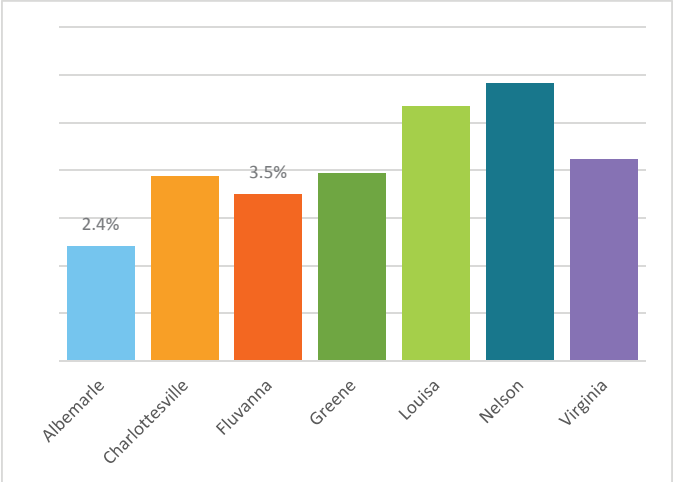

Figure 18 Percentage of Population Receiving Disability Benefits (SSI Recipients and OASDI Beneficiaries), TJHD Localities and VA, 2017. Source: Social Security Administration. Accessed 2019.

7.2.7.4 STUDENTS RECEIVING SPECIAL EDUCATION

During the 2018–2019 school year, Louisa County had the highest percentage of students receiving special education in the district (17.3%), followed by Nelson County (15.1%). Fluvanna County had the lowest percentage, with only 11.5% of students receiving special education. (Figure 19)

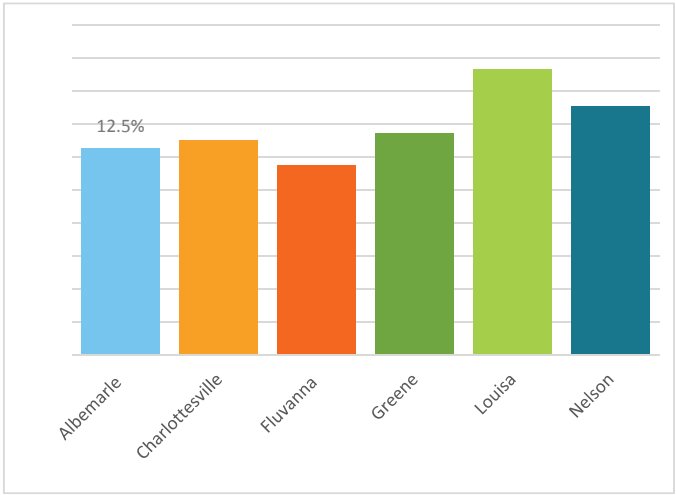

Figure 19 Percentage of Students Receiving Special Education, TJHD Localities, 2018–2019 School Year. Source: Virginia Department of Education, Special Education Child Counts Reports. Accessed 2019.

7.2.7.5 VETERANS WITH SERVICE-CONNECTED DISABILITIES

Service-connected disabilities are injuries or illnesses that happened as a result of active military service. From 2013–2017, Nelson County had the smallest overall population of veterans (n=1,110), but the highest percentage of veterans with service-connected disabilities (18.0%) followed by Greene County (n=1,538 veterans; 17.6% with a service-connected disability). While Charlottesville (n=1,766) had a comparable population of veterans to Nelson and Greene County, it had the lowest percentage of veterans with service-connected disabilities in TJHD (11.9%). (Figure 20)

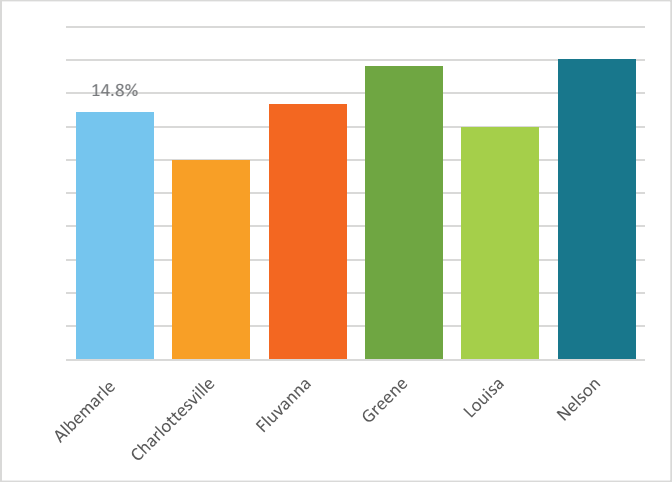

Figure 20 Percentage of Veterans with Service-Connected Disability, TJHD Localities, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

7.2.8 Household Make-up

7.2.8.1 NATIONAL TRENDS FOR FAMILY HOUSEHOLDS

The percentage of unmarried parents living with their children has increased since the 1960s and the profile of unmarried parents has changed markedly. In the 1960s, only 7% of parents living with their children were unmarried; in 2017, that figure had grown to 25%. In the 1960s, solo mothers were 88% of unmarried parents living with their children and solo fathers were the other 12%; in 2017, the percentage of solo mothers decreased to 53% and cohabiting parents made up 35% of the unmarried parent demographic. However, disparities still exist as 81% of solo parents—parents who are not cohabiting with a partner—are mothers and among black solo parents, 89% are mothers. Among solo parents, solo mothers are twice as likely (30%) to be living in poverty as solo fathers (17%). Poverty rates vary greatly between married parents (8%), unmarried parents living with a partner (16%), and solo parents (27%). However, solo (72%) and cohabiting parents (73%) are almost equally as likely to be employed so the disparity in poverty level is likely accounted for by dual-earners in cohabiting households.[14]

The Census Bureau currently defines a householder as "the person, or persons, in whose name a house is owned, being bought, or rented." Households are further broken down into family and non-family householders. Nonfamily householders either live alone or with nonrelatives. Family householders live with one or more persons related by birth, marriage, or adoption. Within family households, designations include married couple households, male householders with no wife present, and female householders with no husband present.[15] While some of these households may include adult children and their parents living together, the majority are unmarried parents living with their children.

Photovoice Photo: Scottsville and Esmont JABA

7.2.8.2 FEMALE-HEADED FAMILY HOUSEHOLDS

Among family households across the district, from 2013–2017, Nelson County had a disproportionately high percentage of female-headed family households with no husband present (35.6%), in comparison to TJHD (20.4%) and VA (23.1%). Charlottesville (28.2%) had the second highest percentage of female-headed households with no husband present and Fluvanna (16.1%) had the lowest percentage in the district, even lower than the state. (Figure 21)

7.2.8.3 MALE-HEADED FAMILY HOUSEHOLDS

Across all TJHD localities, female-headed family households with no husband present are a much higher percentage of total family households than male-headed family households with no wife present. However, from 2013–2017, Nelson County also had the highest percentage of male-headed family households with no wife present (9.8%), in comparison to TJHD (6.3%) and VA (6.5%). Greene County had by far the lowest percentage (2.5%). (Figure 22)

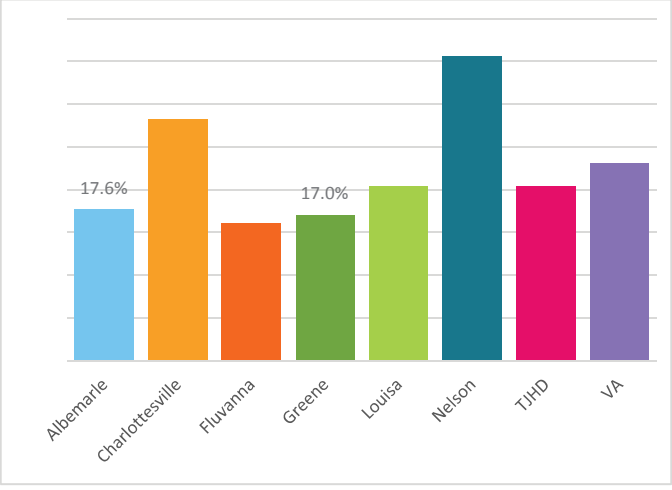

Figure 21 Percentage of Female-Headed Family Households, TJHD Localities, TJHD, and VA, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

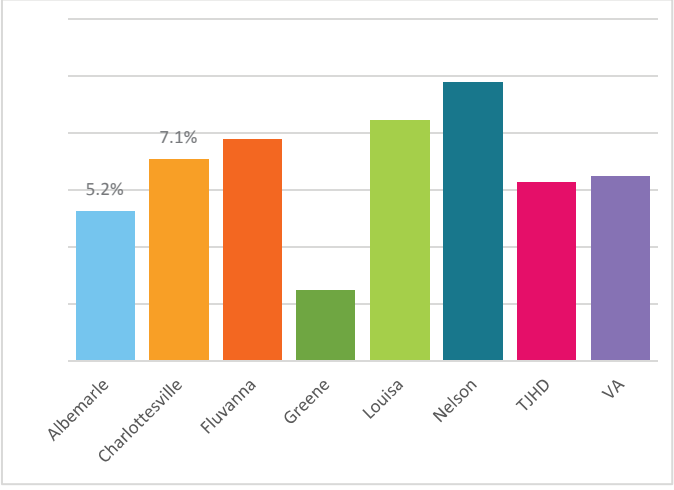

Figure 22 Percentage of Male-Headed Family Households, TJHD Localities, TJHD, and VA, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

7.2.8.4 SAME-SEX PARTNER HOUSEHOLDS

The Census Bureau collects information on the relationship of each member of the household to the named householder. In 1990, the Census bureau added an "unmarried partner" option to the relationship to householder category. This category includes information on same-sex and opposite sex partners that live together and have an intimate relationship. Although same-sex marriage was legalized in the United States in June 2015, the most recent ACS five-year estimates are from 2013–2017, which includes survey responses from both before and after the U.S. Supreme Court decided *Obergefell v. Hodges*. Thus, it is important to note that the Census Bureau currently categorizes same-sex spouses as "unmarried" in the American Community Survey (ACS).[16] However, for the first time, the 2020 Census will include a new question that allows same-sex couples living in a household together to identify themselves as "unmarried" or "spouse."[17]

From 2013–2017, the percentage of "unmarried"—which includes unmarried and legally married—same-sex partners that lived together ranged from 0% in Fluvanna and Greene to 0.5% in Charlottesville and Nelson (Figure 23). Depending on the household make-up, some same-sex partners with children in the household could also be included in the female-headed and male-headed family household data reported above.

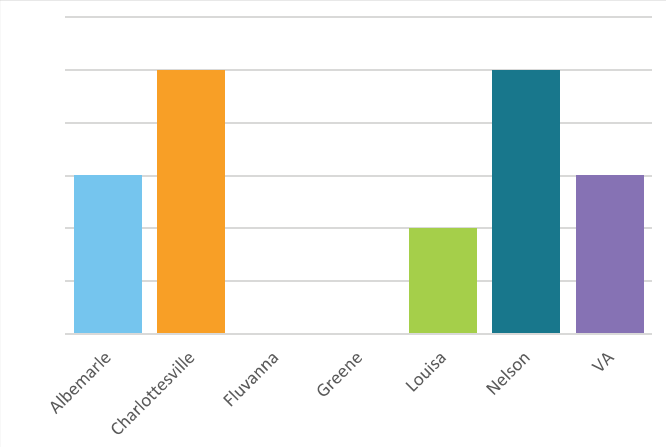

Figure 23 Percentage of "Unmarried" Partner Same-Sex Households, TJHD Localities and VA, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

7.2.8.5 ADULTS 65+ LIVING ALONE

Loneliness and social isolation can affect health behaviors as well as mental and physical health outcomes.[18] Social isolation, loneliness, and living alone are associated with an increased risk of early mortality.[19] LGBTQ+ individuals may face increased risk of social isolation, a lack of services, social stigma, and lack of culturally competent providers as they age.[20] From 2013–2017, around 25% of adults aged 65 years and older lived alone in TJHD. Charlottesville had the highest percentage of adults 65+ living alone (34.9%), followed by Albemarle County (27.5%). Greene County had the lowest percentage of adults 65+ living alone (14.6%). (Figure 24)

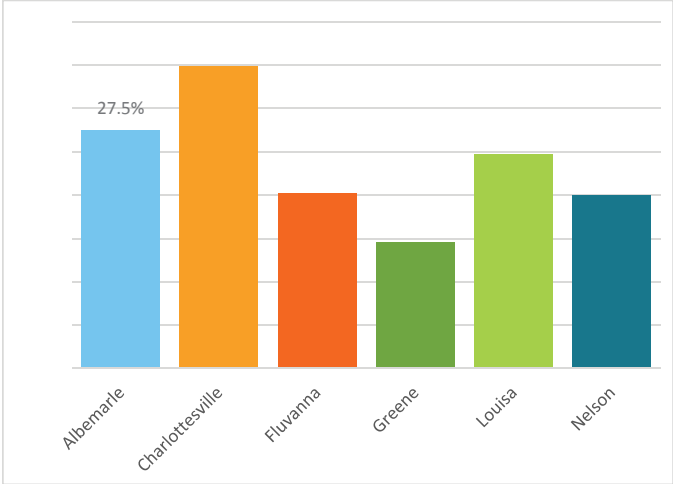

Figure 24 Percentage of Adults Aged 65+ Years Living Alone, TJHD Localities, 2013–2017, 5-year Estimate. Source U.S. Census Bureau, American Community Survey. Accessed 2019.

Photovoice Photo: Friendship Court

7.2.8.5.1 Adults 65+ Living Alone by Sex

Throughout TJHD, females made up a disproportionately large percentage of adults 65+ living alone from 2013–2017. In Albemarle County, 59.5% of females age 65+ lived alone compared to only 26.0% of males who were 65+. Similarly, even though the percentage of 65+ females living alone was lowest in Greene County (40.3%), the percentage of males 65+ living alone was still less than half that of females (15.3%). (Figure 25) This may be a result of wives outliving their male spouses, increased divorce rates, and because males are more likely than females to get remarried—particularly to females in younger age groups. Females are at higher risk than males for the development of Alzheimer's and dementia and also experience higher rates of disability in old age because they are more likely to live longer and thus, are more likely to face these challenges alone. Females also make up the majority of older adults that pay for professional long-term care because they often not resourced with informal care provided by a (male) spouse.[21]

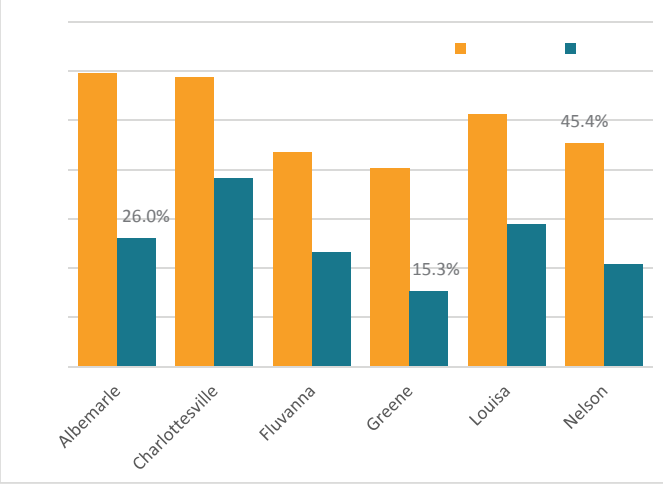

Figure 25 Percentage of Adults Aged 65+ Years Living Alone by Sex, TJHD Localities, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

Photovoice Photo: Louisa Reentry Program

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Photovoice Photo: Scottsville and Esmont JABA

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What We Learned: Community Health Assessment Data

Photovoice Photo: Friendship Court

7.3 | MAPP PRIORITY: PROMOTE HEALTHY EATING AND ACTIVE LIVING

7.3.1 Healthy Eating

7.3.1.1 ACCESS TO HEALTHY FOODS

Traditional approaches to diet and obesity have focused on interventions targeted at individual knowledge, attitudes, and behaviors that affect behavioral change and thereby improve diets and related health outcomes. There is increasing recognition that approaches must focus on larger systemic and social changes in community food systems in order to affect change and improve existing racial, ethnic, and socioeconomic disparities related to diet, obesity, and diet-related disease. Neighborhood environments can either detract from or promote healthy eating. For example, low-income neighborhoods, as well as neighborhoods with racial and ethnic minorities, may have more access to fast-food outlets and convenience stores that offer relatively limited healthy food options than to grocery stores that offer a full range of food options.[1] Or, for more rural populations, eating out frequently, especially at buffets, cafeterias, and fast-food restaurants is associated with higher rates of obesity.[2]

Research has shown that consumers across the United States are shopping more frequently at non-traditional stores (supercenters, dollar stores, etc.) for their groceries. While there is no set benchmark for the target mix of store types in a locality, household purchases at supermarkets and club stores are healthier overall than household purchases at drug stores, convenience stores, and dollar stores. This association between type of food store and healthiness of food purchase is stronger for low-income households than high-income households, which has important implications for addressing disparities in healthy eating and related health outcomes.[3]

7.3.1.1.1 Low-Income Access to Grocery Stores

County Health Rankings measures the percentage of the population that is low-income (equal to or less than 200% of the federal poverty level based on family size) and does not live close to a grocery store (more than 10 miles in rural areas, more than one mile in non-rural areas). In 2015, Albemarle County had the greatest percentage of persons experiencing limited access to healthy foods (3.7%), while Greene County had the least (0%) followed by Louisa (0.7%). Overall, the statewide percentage (4.3%) of the population with limited access to healthy foods was higher than the percentage in any TJHD locality. (Figure 1)

7.3.1.1.2 Food Stores and Restaurants by Type

The number and type of food stores and restaurants varied greatly across the TJHD localities. In 2016, in Albemarle County, full-service restaurants (63), fast-food restaurants (58), and convenience stores (56) made up the majority of food stores and restaurants (Figure 2). In Charlottesville, full-service

restaurants (132) made up more than half of all food stores and restaurants, followed by fast-food restaurants (66). (Figure 3) Fluvanna had noticeably fewer food stores and restaurants overall with 10 full-service restaurants, 7 convenience stores, 5 fast-food restaurants, and 3 grocery stores. (Figure 4) Greene County followed this trend with 10 full-service restaurants, 7 convenience stores, 7 fast-food restaurants, and 2 grocery stores, but also had a supercenter/club store and 1 specialized food store. (Figure 5) Roughly half of the food stores and restaurants in Louisa and Nelson Counties were convenience stores (22 in Louisa, 17 in Nelson) followed by full-service and fast-food restaurants. (Figures 6 and 7)

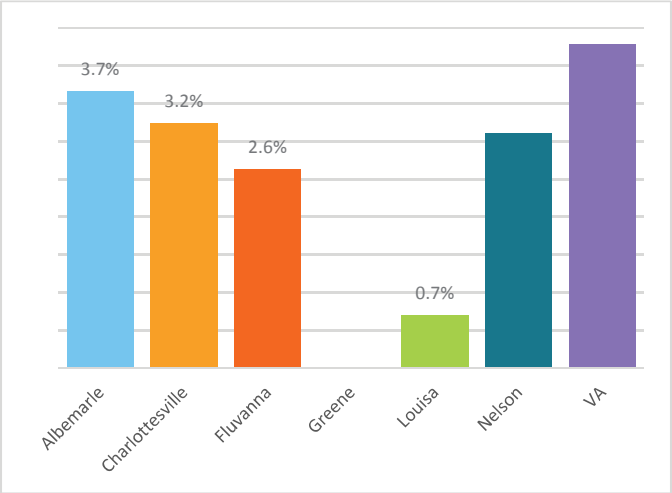

Figure 1 Percentage of Population with Limited Access to Healthy Foods, TJHD Localities and VA, 2015. Source: County Health Rankings, 2019 Report. Accessed 2019.

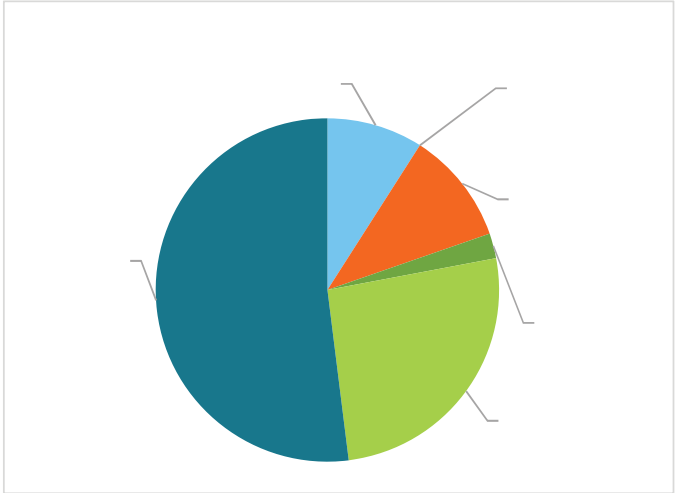

Figure 3 Number of Food Stores and Restaurants by Type, City of Charlottesville, 2014. Source: U.S. Department of Agriculture (USDA) Food Environment Atlas, 2016 Report. Accessed 2019.

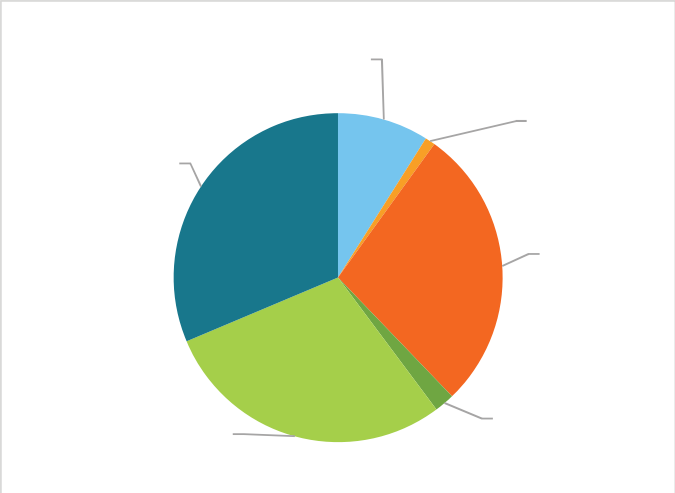

Figure 2 Number of Food Stores and Restaurants by Type, Albemarle County, 2014. Source: Economic Research Service, U.S. Department of Agriculture (USDA) Food Environment Atlas, 2016 Report. Accessed 2019.

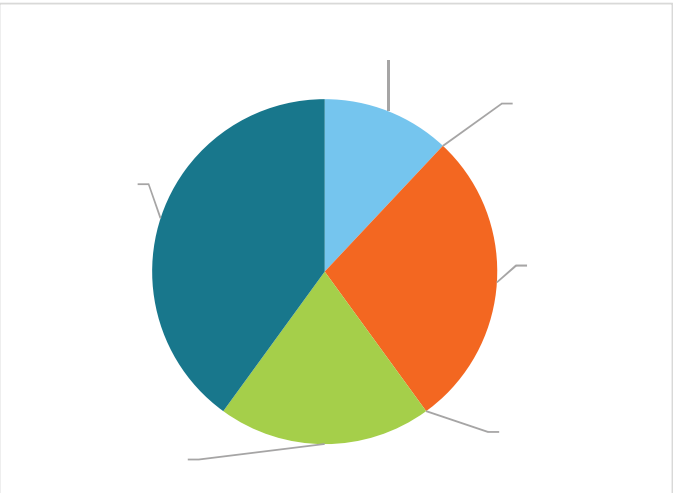

Figure 4 Number of Food Stores and Restaurants by Type, Fluvanna County, 2014. Source: U.S. Department of Agriculture (USDA) Food Environment Atlas, 2016 Report. Accessed 2019.

7.3.1.1.3 SNAP and WIC-Authorized Stores

In TJHD, there are more stores that accepted SNAP benefits than those that accepted WIC benefits likely due to more stringent registration requirements for WIC vendors. Food assistance programs, such as the Supplemental

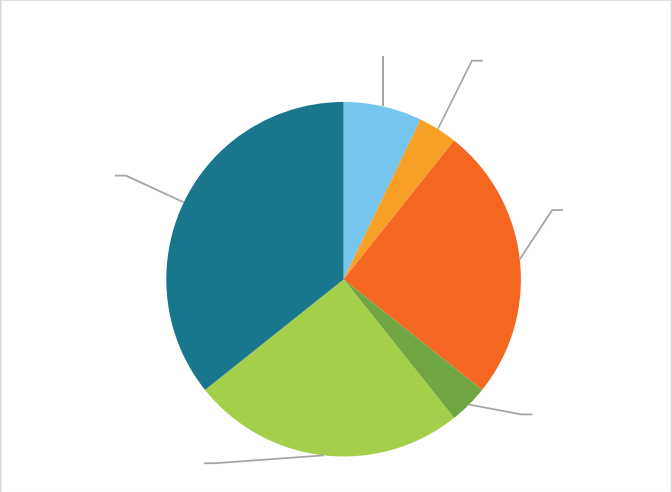

Figure 5 Number of Food Stores and Restaurants by Type, Greene County, 2014. Source: U.S. Department of Agriculture (USDA) Food Environment Atlas, 2016 Report. Accessed 2019.

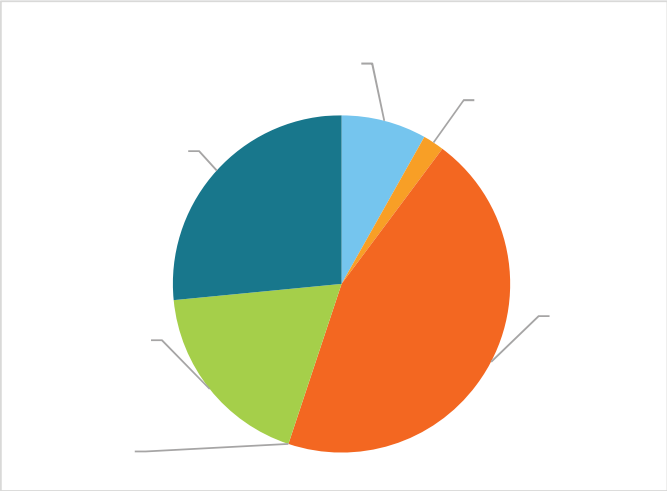

Figure 6 Number of Food Stores and Restaurants by Type, Louisa County, 2014. Source: U.S. Department of Agriculture (USDA) Food Environment Atlas, 2016 Report. Accessed 2019.

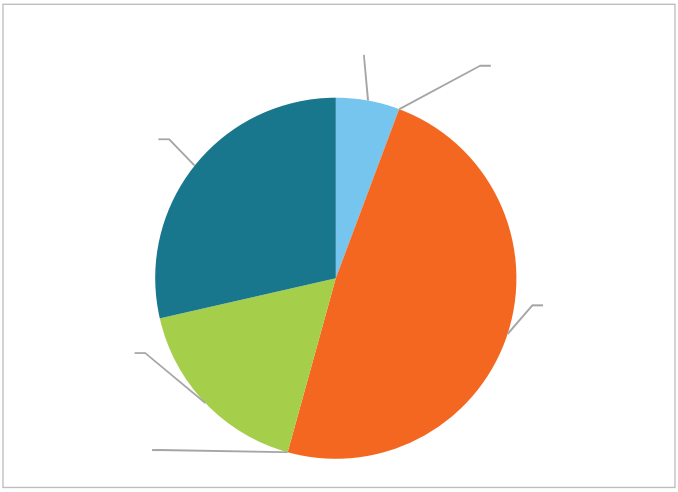

Figure 7 Number of Food Stores and Restaurants by Type, Nelson County, 2014. Source: U.S. Department of Agriculture (USDA) Food Environment Atlas, 2016 Report. Accessed 2019.

Nutrition Assistance Program (SNAP) and Women, Infants, and Children (WIC) Program, provide nutritional assistance to households that meet income and eligibility requirements. In 2019, Albemarle had the highest number of WIC-authorized stores (9), followed by Charlottesville (8). Fluvanna and Nelson Counties (1) had the lowest number of WIC-authorized stores. (Figure 8) Similarly, in 2016, Albemarle County had the highest number of SNAP-authorized stores (51) followed by Charlottesville (49). Greene County had the fewest (9) SNAP-authorized stores in TJHD. (Figure 9)

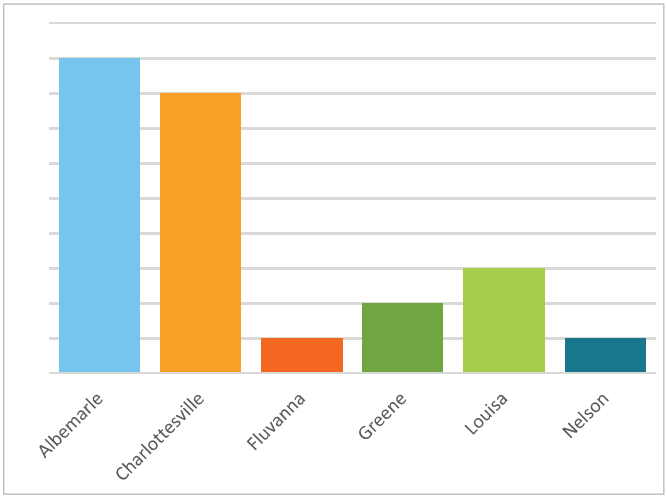

Figure 8 Number of WIC-Authorized Stores, TJHD Localities, March 2019. Source: TJHD WIC Program. Accessed 2019.

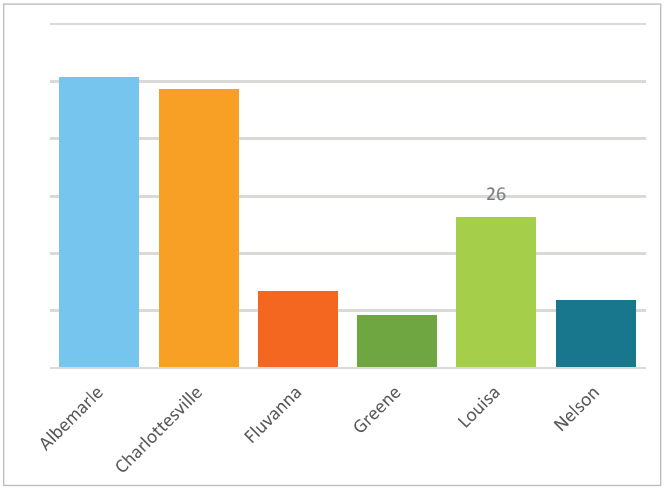

Figure 9 Number of SNAP-Authorized Stores, TJHD Localities, 2016. Source: U.S. Department of Agriculture (USDA) Food Environment Atlas, 2016 Report. Accessed 2019.

7.3.1.1.4 SNAP Benefits

SNAP is the largest federal nutrition assistance program; almost one in seven Americans (over 40 million individuals) receives SNAP benefits. SNAP provides recipients with a monthly benefit allotment to purchase foods for preparation at home. The ultimate goal of the program is to improve food security and access to nutritious foods for low-income individuals and families.[4] According to Feeding America, only 41% of households enrolled in their network reported receiving SNAP benefits; however, they estimated that 88% of households in their network would be income-eligible.[5] From 2013–2017 in TJHD, the percentage of the population receiving SNAP benefits within the last 12 months was greatest in Louisa County (11.8%) followed by Nelson County (9.9%) and Charlottesville (9.2%), which is similar to the state percent of 9.1%. Fluvanna County had the smallest percentage of the population receiving SNAP benefits (2.7%). (Figure 10)

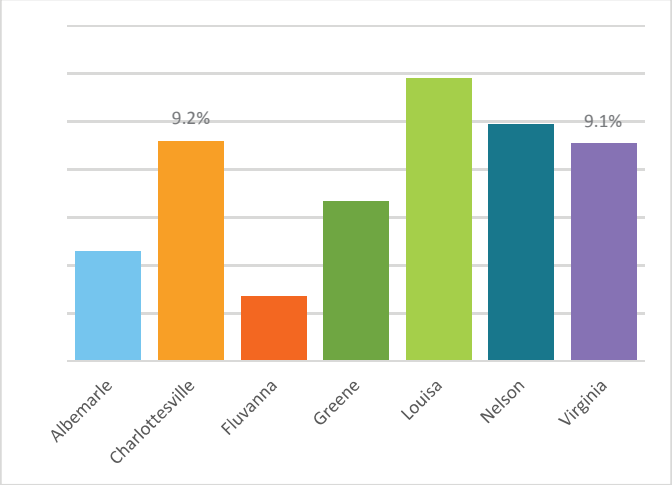

Figure 10 Percentage of Population that Receives SNAP Benefits, TJHD Localities and VA, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

7.3.1.1.5 Farmers' Markets that Accept SNAP

There is some evidence that farmers' markets may increase access to healthy foods and increase fruit and vegetable consumption among low-income populations. Ensuring adequate transportation, conducting outreach and awareness, increasing hours of operation, and accepting Electronic Benefit Transfer (EBT) payment for SNAP benefits are likely to decrease barriers for residents to visit farmers' markets.[6] According to 2016 USDA data for TJHD, Albemarle (5) had the largest number of farmers' markets, none of which accepted SNAP. Nelson (3), Louisa (2), and Charlottesville (2) all had more than one farmers' market, and all had at least one market that accepted SNAP benefits. Fluvanna and Greene each had one farmers' market, but neither market accepted SNAP benefits. (Figure 11) However, a Virginia Cooperative Extension map of farmers' markets that accept SNAP/EBT shows that Charlottesville (3), Mineral in Louisa County (1), Nelson County (1), and Scottsville in Albemarle County (1) all had farmers' markets that accept SNAP benefits; the map is available at https://blogs.ext.vt.edu/eatsmart-movemore/virginia-farmers-markets-accepting-snap/.

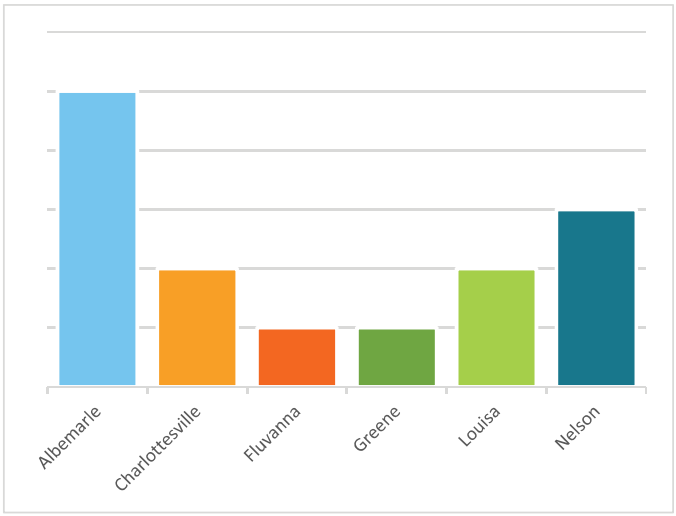

Figure 11 Number of Farmers' Markets, TJHD Localities, 2016. Source: U.S. Department of Agriculture (USDA) Food Environment Atlas, 2016 Report. Accessed 2019.

7.3.1.2 FOOD INSECURITY

The U.S. Department of Agriculture (USDA) defines food insecurity as "the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways."[7] Low-income, black non-Hispanic, and Hispanic households have a higher prevalence of food insecurity nationally. Disabled adults may also be at higher risk of food insecurity due to limited employment opportunities and healthcare-related costs that take up a larger portion of their budget. Other risk factors for food insecurity include limited transportation options, neighborhood conditions that limit access to food, longer travel distance, and fewer supermarkets.[8] There is some evidence that living in an area with little to no access to affordable and healthy foods through a grocery store or other outlet may correlate with overweight and obesity status.[9, 10]

7.3.1.2.1 Overall Food Insecurity

Map the Meal Gap uses a model, comprised of a variety of variables correlated with food insecurity, to estimate food insecurity at the county level for both the general population (adults and children) and children specifically. In 2016, Charlottesville had the largest estimate of food insecurity at 16.7%, followed by Nelson (10.6%) and Louisa (10.2%) while Greene County (7.9%) had the smallest estimated percentage of persons experiencing food insecurity. The Healthy People 2020 (HP2020) target, or benchmark, is to reduce household food insecurity to 6.0%; in 2016, none of the TJHD localities met this benchmark. (Figure 12)

7.3.1.2.2 Child Food Insecurity

Childhood food insecurity is a health concern for several key reasons. Children who are food insecure are more likely to be sick and/or hospitalized. Children with insufficient nutrition may suffer growth impairments physically, intellectually, and emotionally.[11] Child food insecurity is influenced by several factors, but is primarily attributed to poverty.[12, 13]

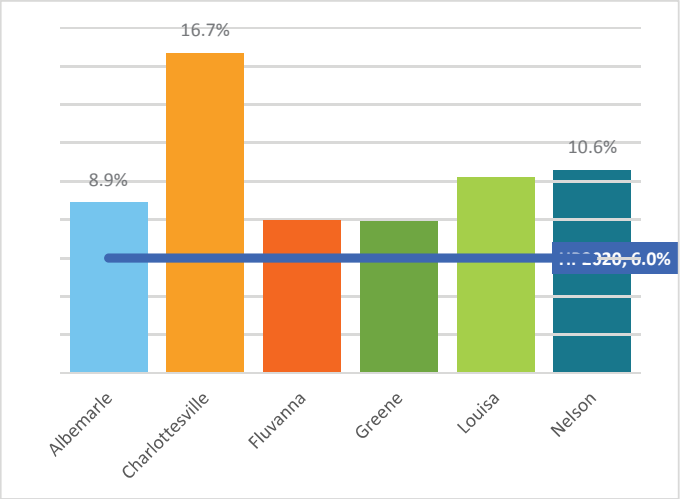

Figure 12 Percentage of Population with Food Insecurity, TJHD Localities, 2016. Source: Map the Meal Gap, Feeding America, 2018 Report. Accessed 2019.

In 2016, Charlottesville (14.9%) had the largest percentage of children experiencing food insecurity, followed closely by Nelson (14.8%) and Louisa (14.5%) Counties. Albemarle (11.6%) and Fluvanna (11.3%) Counties had the smallest percentage of child food insecurity. (Figure 13)

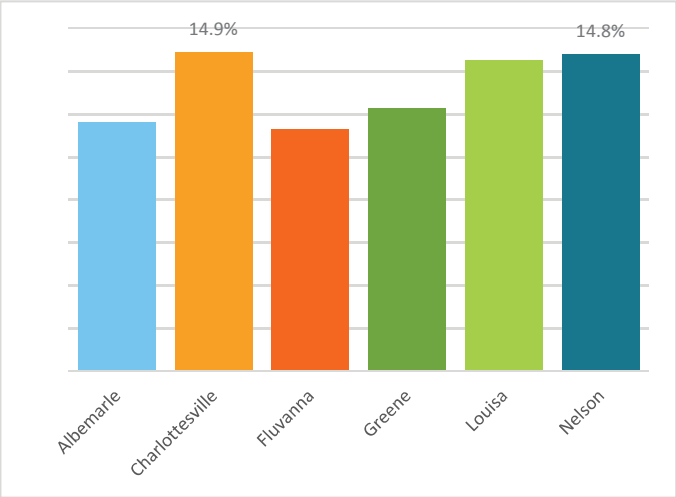

Figure 13 Percentage of Children with Food Insecurity, TJHD Localities, 2016. Source: Map the Meal Gap, Feeding America, 2018 Report. Accessed 2019.

7.3.1.2.3 Hunger Due to No Money for Food

The 2018 Thomas Jefferson Health District (TJHD) Community Health Survey asked several questions about food access in TJHD in relation to household budget. Section 7.1 contains a detailed

overview of the survey methodology and results. One survey question asked, "In the last 12 months, was anyone in your household ever hungry but didn't eat because there wasn't enough money for food?" Based on survey response rates, responses for Albemarle and Charlottesville were reported individually while responses were combined for Fluvanna & Louisa and Greene & Nelson. In 2018, the percentage of respondents indicating they had ever been hungry due to no money for food was largest in Greene & Nelson (7.2%), followed by Albemarle (5%) and Charlottesville (4.2%). The percentage was smallest in Fluvanna & Louisa (2.6%) (Figure 14). The survey also assessed the percentage of people that reported eating less than they felt they should have because of monetary limitations. This percentage was largest in Albemarle County (8.3%), followed by Greene & Nelson (6.2%) and then Charlottesville (5.8%). Fluvanna & Louisa had the smallest percentage of people reporting eating less than they should have due to monetary limitations (5.2%). (Figure 15) For both survey questions and corresponding figures, the margins of error are fairly wide for most localities, signifying that the estimates depicted by the colored bars may actually vary up or down as depicted by the thin lines with caps. For example, in Figure 14, the estimate for Greene & Nelson is 7.2%, but has a +/-7.6 margin of error, so the true value could be anywhere between 0% and 14.8%.

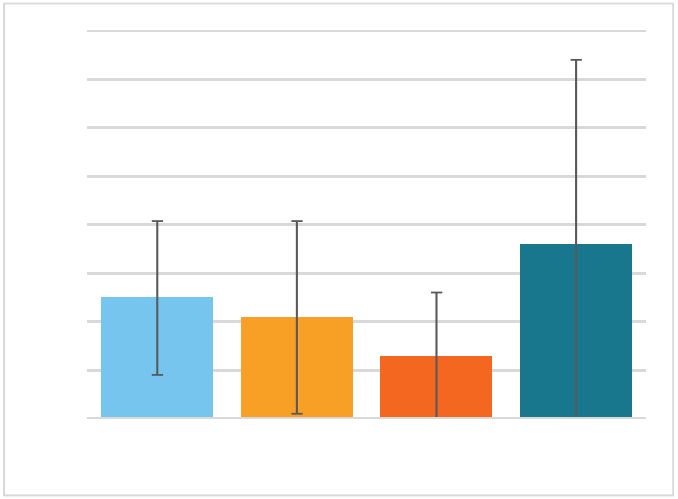

Figure 14 Percentage of People in Household Ever Hungry Because No Money for Food, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

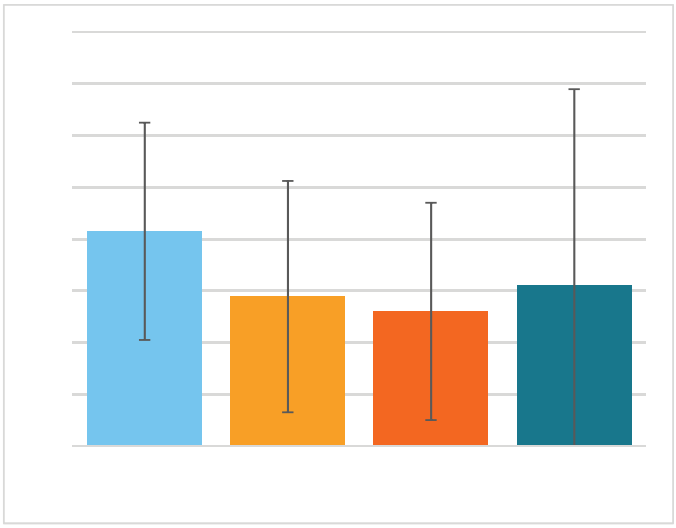

Figure 15 Percentage of People Eating Less Due to Monetary Restrictions, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.3.1.2.4 Lack of Balanced Meals Due to Budget

The TJHD Community Health Survey also looked at the percentage of the population that cannot afford to eat balanced meals. In 2018, Greene & Nelson combined had the largest percentage (7.3%) while Albemarle had the second-largest percentage of people that could not afford to eat balanced meals (3.9%). However, the margin of error—depicted by the thin error lines with caps on both ends—is quite wide for all localities so the true percentage of people unable to eat balanced meals could be anywhere in the range depicted by the error lines. (Figure 16)

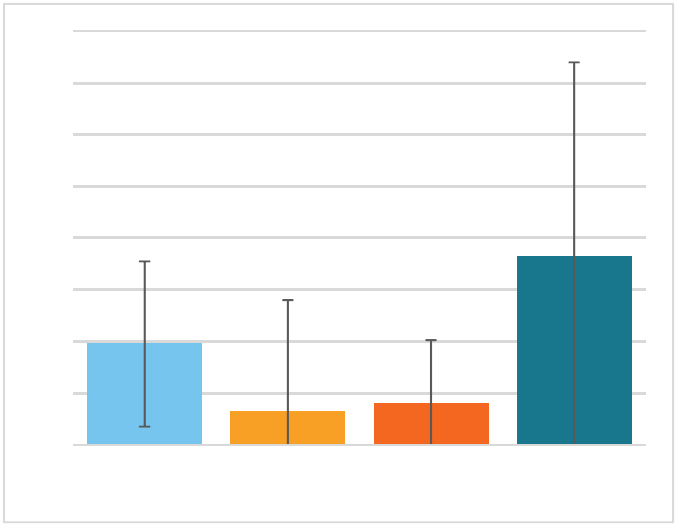

Figure 16 Percentage of Population that Cannot Afford to Eat Balanced Meals, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.3.1.3 EATING HABITS

The food that individuals consume can affect health and contribute to elevated risk for certain diseases, particularly chronic diseases;[14] for example, individuals who do not have healthy eating habits are at a higher risk for obesity and diabetes.[15] Low-income individuals, individuals who live in a food desert, and individuals in rural areas are more likely to lack adequate access to foods to support healthy eating habits. African American, Hispanic, American Indian, and Alaska Native populations typically experience diet-related disparities, higher rates of diet-related chronic diseases and conditions (e.g. diabetes, high blood pressure), and higher incidences of related morbidity and mortality than white populations. However, even within the category of one particular racial and ethnic grouping, individuals and sub-populations are not monolithic and it is important to note that there is substantial variety and diversity within each of these populations. In addition to racial and ethnic background, a variety of other demographic and socioeconomic (e.g., age, education, income), environmental (e.g., access to healthy foods, availability of transportation and/or infrastructure), lifestyle, cultural and social, and societal (e.g., racism, language barriers, disability status, immigrant status) factors and attributes influence the complete picture of food preferences and dietary behaviors.[16]

The TJHD Community Health Survey asked several questions about the eating habits of respondents. Respondents reported eating fruit (not including juice), eating colorful vegetables (not fried), and having someone in the household cooking dinner roughly five days out of the previous seven days. During those seven days, TJHD respondents also reported drinking a sugary drink two days and shopping at a convenience store to purchase a snack, food, or drink less than once. For these questions, the margin of error is very small for most answers, indicating a more precise estimate. However, for shopping at a convenience store, the estimate is 0.7% but has a margin of error of +/-3.65%. (Figure 17)

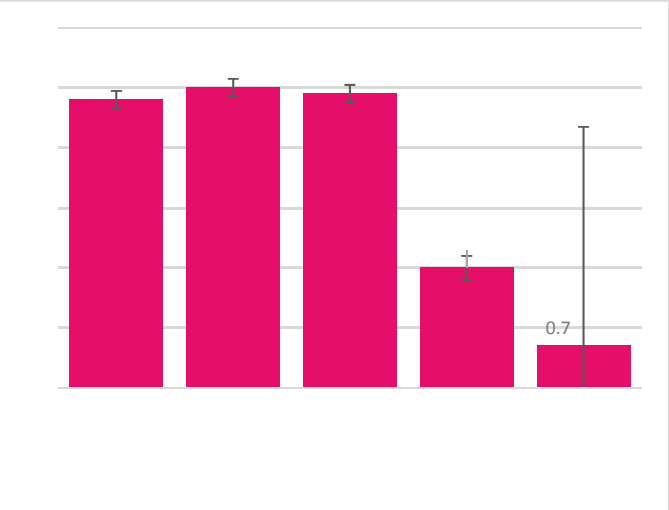

Figure 17 Eating Habit Trends by Number of Days, TJHD, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.3.2 Active Living and Physical Activity

Physical activity has protective effects for health and can help prevent, delay, and manage chronic disease.[17] Inversely, roughly 300,000 deaths in the United States each year can be attributed to physical inactivity or poor eating habits. Physical activity is positively associated with general well-being and lower levels of anxiety and depression across socioeconomic status, physical health, sex, gender, and age. The positive association between physical activity and mental health is particularly notable for women and persons age 40 and over.[18]

Physical activity generally declines with age, starting with youth: only half of individuals between the ages of 12 and 21 engage in vigorous physical activity, and only a third of adults meet the recommended amounts of regular moderate physical activity.[19] According to Healthy People 2020, in 2017, racial and ethnic minorities were less likely to report meeting federal guidelines for physical activity and the proportion of adults aged 25 and older that met

physical activity guidelines increased as education level increased.[20]

The built environment also affects physical activity—rural communities, individuals with low socioeconomic status, and neighborhoods with a greater number of people of color tend to have less access to resources for physical activity including sidewalks, parks, and/or recreational facilities.[21]

7.3.2.1 ADULT PHYSICAL ACTIVITY LEVELS

7.3.2.1.1 Adult Physical Inactivity

One measure of physical inactivity is the population of adults aged 20 years and older that report not getting any leisure-time physical activity. Healthy People 2020 (HP2020) established a target of no more than 32.6% of adults reporting physical inactivity; from 2011–2016, all TJHD localities met this benchmark. In 2016, the locality with the largest percentage of adult physical inactivity was Louisa County (27.7%) followed by Nelson County (24.1%). Albemarle (16.7%) had the smallest percentage of adult physical inactivity, followed by Charlottesville (20.1%) and Fluvanna (20.4%). (Figure 18)

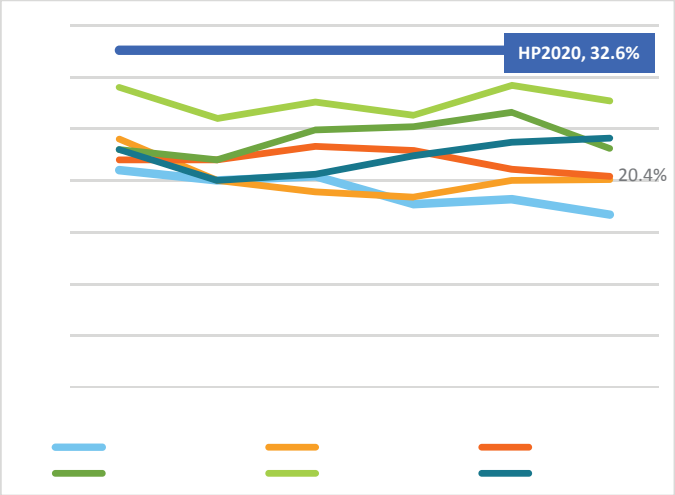

Figure 18 Percentage of Adult Physical Inactivity, TJHD Localities, 2011–2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

Photovoice Photo: Friendship Court

7.3.2.1.2 Adult Physical Activity

The U.S. Department of Health and Human Services updated their guidelines in 2018 to recommend 2.5–5.0 hours of moderate-intensity or 1.25 hours of vigorous-intensity physical activity a week for adults. Adults receive additional health benefits from at least two days of muscle-strengthening activities a week. Additional guidelines exist for children, older adults, and pregnant/post-partum women.[22] Through the TJHD Community Health Survey, in TJHD in 2018, 31.6% of people reported engaging in physical activity every day, followed by 44.5% reporting several times a week. Fewer than 10% of people reported engaging in physical activity less than once a week. For this question, the margins of error are fairly small, indicating a more precise estimate. (Figure 19)

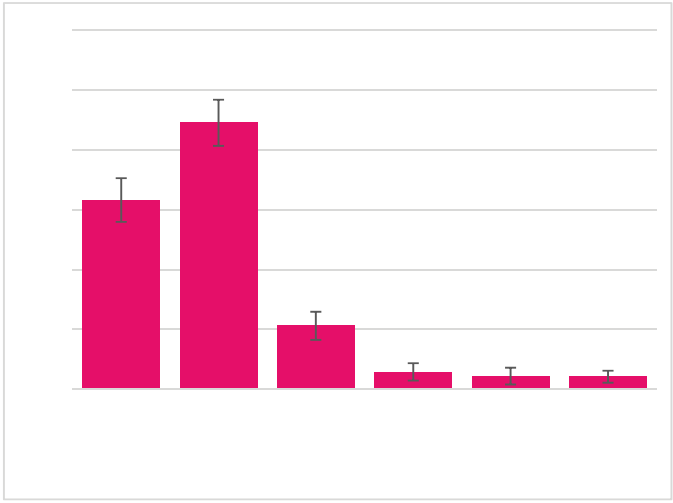

Figure 19 Percentage of Persons Engaging in Physical Activity, TJHD, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.3.2.1.3 Barriers to Physical Activity

The TJHD Community Health Survey looked at several factors that might prevent people from exercising. Greene & Nelson (12.6%) had the largest percentage of respondents who reported that safety concerns prevented them from exercising while Albemarle (4.7%) had the smallest percentage. Fluvanna & Louisa (9.9%) had the largest percentage of people who reported costs prevented them from exercising, followed by Charlottesville (6.5%) and Greene & Nelson (5.8%); the smallest percentage of people reporting concerns with cost was also in Albemarle County (4.7%). Respondents reported transportation as a reason for not being able to exercise mainly in Fluvanna & Louisa (4.2%) and Greene & Nelson (3.2%). No sidewalks or parks was also reported as a barrier to exercising for Fluvanna & Louisa (17.7%) followed by Greene & Nelson (12.4%) and Albemarle (8.8%). Between 16–19% of respondents in all localities answered that health reasons prevented them from exercising. (Figure 20)

Although not shown in Figure 20, according to the TJHD Community Health Survey, across TJHD, "No time" was the highest barrier to exercise; other reasons that prevented people from exercising included "Don't want to" (15.9%), and an unspecified "Other" category (12.1%). Overall, only two percent of TJHD respondents selected "Don't know how" to exercise. While not asked as part of the above TJHD survey, other barriers to physical activity could include a lack of programming that is culturally appropriate or relevant and/or physical activity opportunities that are not welcoming or accessible to all members of the community (e.g. people with disabilities, people who speak languages other than English).

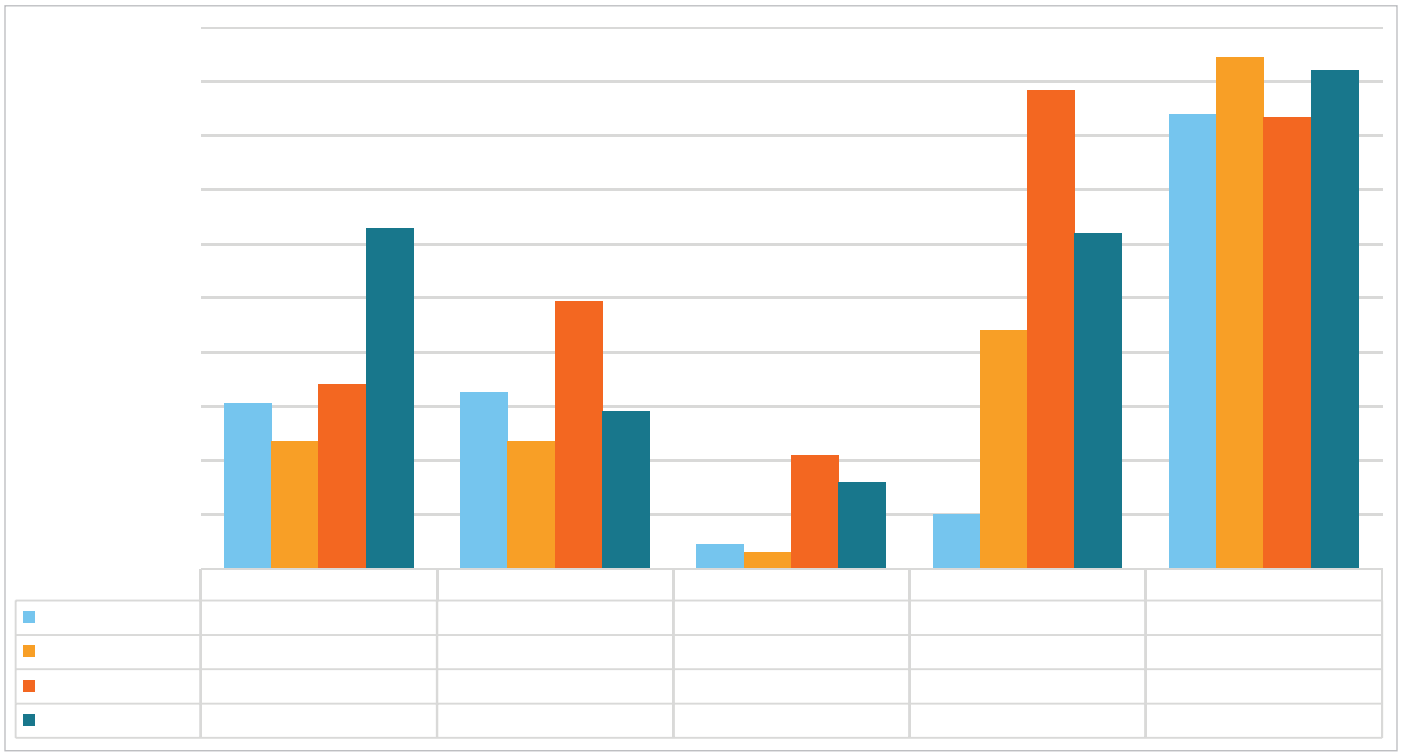

Figure 20 What Prevents People from Exercising, TJHD Localities, 2018. Thomas Jefferson Health District Community Health Survey. Accessed 2019.

Photovoice Photo: Louisa Reentry Program

7.3.2.1.4 Ability to Carry Out Everyday Activities

TJHD's Community Health Survey also asked respondents about their ability to carry out everyday activities such as walking, climbing stairs, carrying groceries, or moving a chair. 73.1% of people in TJHD reported being able to completely carry out everyday activities, 11.0% reported they were mostly able, 8.5% were moderately able, and 5.8% were only a little able. Thin gray lines in the center of each bar represent margins of error for each estimated percentage. (Figure 21)

7.3.2.2 ACCESS TO EXERCISE OPPORTUNITIES

County Health Rankings (CHR) includes a measure on access to exercise opportunities, as individuals who live in closer proximity to parks, gyms, and sidewalks are more likely to exercise. Increased physical activity is associated with lower risks for a variety of health conditions including cancer, stroke, high blood pressure, type 2 diabetes, heart disease, and premature mortality. CHR identifies top United States performers for access to exercise opportunities as those in the 90th percentile, or above 91%. In looking at the percentage of individuals who live within a reasonable distance of a location (parks or recreational facilities) for physical activity, CHR defines access as residing in a census block within one-half mile of a park or within one mile (urban) / three miles (rural) of a recreational facility.[23] From 2014–2016, Charlottesville (100%) was the only locality in the district that exceeded this CHR benchmark. Albemarle residents (76.7%) had the second-best access to exercise opportunities. Opportunities were more limited for the less populated, more rural localities in TJHD as all other localities experienced less than 60% access to exercise opportunities. Louisa County residents (31.1%) had the least access to exercise opportunities, followed by Greene County (38.6%), Nelson County (52.1%), and Fluvanna County (59.1%). (Figure 22)

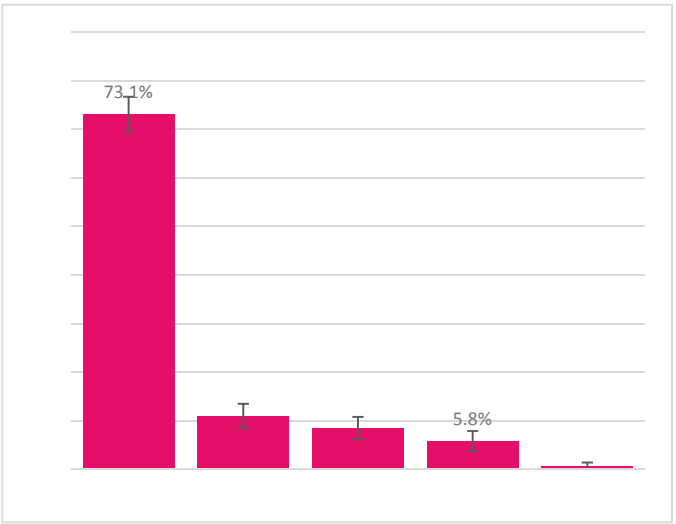

Figure 21 Ability to Carry out Everyday Activities, TJHD, 2018. Source: Thomas Jefferson Health District Community Health Survey 2018. Accessed 2019.

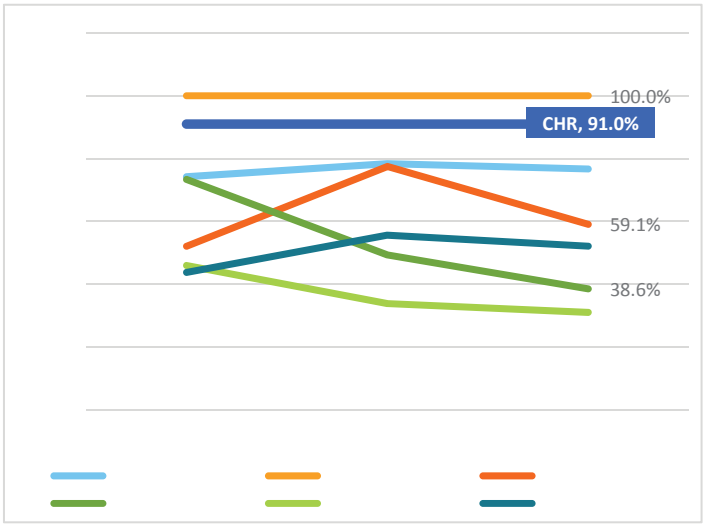

Figure 22 Percentage of Persons with Access to Exercise Opportunities, TJHD Localities, 2014–2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.3.3 Obesity

Poor diet and physical inactivity are among the leading contributors to actual causes of death in the United States.[24] Poor diet and lack of physical activity can lead to obesity, which is a major risk factor for chronic disease. In addition to health education and regulatory initiatives, such as a sugar-sweetened beverage tax, creating opportunities to access nutritious foods and to engage in physical activity at work, in school, and in the community can be effective approaches to addressing this public health issue.[25]

7.3.3.1 ADULT OBESITY

Adult obesity (age 20 and older) is defined by County Health Rankings as a body mass index (BMI) greater than or equal to 30.[26] BMI is a person's weight in kilograms divided by height in meters squared (kg/m2). Obesity increases the risk for type 2 diabetes, high blood pressure, coronary heart disease, cancer, sleep apnea, osteoarthritis, and other health conditions.[27] Obesity is associated with leading causes of death in the United States and worldwide including diabetes, heart disease, stroke, and some types of cancer.[28] Factors that affect weight include eating and physical activity habits, genetics, age, sex, race/ethnicity, and social determinants of health (where people live, where they learn or work, where they play, where they worship, etc.).[29] Obesity disproportionately affects some racial/ethnic groups—African Americans and Latinos have higher rates of obesity compared to white and Asian populations. Other groups that are at higher risk include women, individuals with lower education levels, and individuals living in poverty.[30]

From 2010–2015, the average percentage of obese TJHD adults aged at least 20 years decreased. The percent of adults reporting obesity across TJHD decreased from 29.1% in 2010 to 27.4% in 2015. This was slightly lower than the percentage of obese Virginians in 2015 (28.8%). Both Virginia and TJHD have remained below the Healthy People 2020 goal (30.5%) since 2010. (Figure 23)

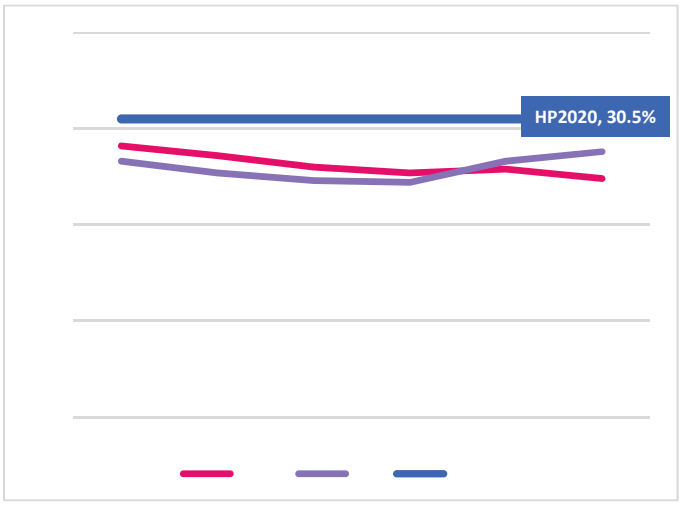

Figure 23 Percentage of Obese Adults, TJHD and VA, 2010–2015. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.3.3.1.1 Adult Obesity Mapped by Zip Code Tabulation Area

The integrated Translational Health Research Institute of Virginia (iTHRIV) at the University of Virginia (UVA) partnered with TJHD on an obesity mapping project in order to further a 2016 MAPP objective to compile more robust local obesity data. Data were pulled from all outpatient visits to UVA-affiliated facilities in 2014, 2015, and 2016. After cleaning, the data included 203,044 visits from 117,001 unique individuals (57% female, 43% male). The 57 zip codes for the district were mapped to 51 zip code tabulation areas—United States Postal Service (USPS) zip codes are a collection of mail delivery routes and include post office (P.O. boxes) as well as physical household addresses. The United States Census Bureau has created Zip Code Tabulation Areas (ZCTAs), which are generalized geographic representations of USPS zip code service areas. Obesity was defined using Centers for Disease Control and Prevention (CDC) criteria. Since all data are from the UVA Clinical Data Repository, they are

not a statistically representative sample of the overall population of each ZCTA, especially as UVA patients are likely to be sicker than the general population. Overall, from 2014–2016 in TJHD, approximately 31% of adults (age 20 and older) were overweight and 35–36% were obese, which is greater than the percentage of obese adults calculated by County Health Rankings in the previous section.

The prevalence of obesity throughout the district varies by geographic location. In 2016, there was less prevalence of obesity (less than 15% and 15–25%) in ZCTAs in Albemarle and Charlottesville, as indicated by the peach and light orange colors on the map. The ZCTAs with the greatest prevalence of obesity (greater than or equal to 45%), as indicated by the dark red color on the map, were in Fluvanna, Greene, Louisa, southern Albemarle, and Nelson. (Figure 24)

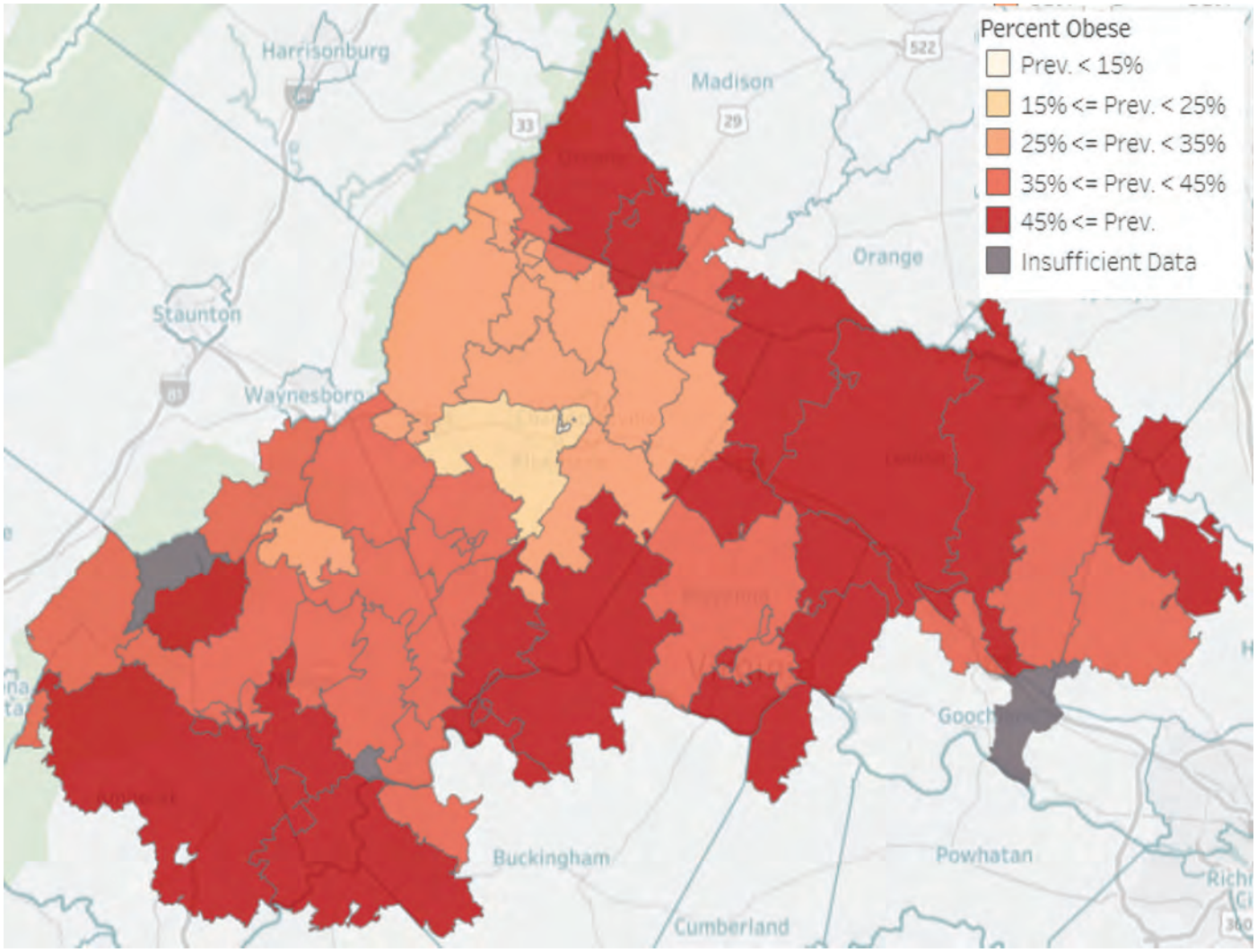

Figure 24 Percentage of Obese Adults by TJHD Zip Code Tabulation Area, 2016. Source: integrated Translational Health Research Institute of Virginia (UVA Clinical Data Repository). Accessed 2019.

7.3.3.2 CHILD OBESITY

Children who are obese are at increased risk for high blood pressure, type 2 diabetes, breathing problems, and joint and musculoskeletal problems.[31] Children may also experience socio-emotional consequences, as obesity has been described as "one of the most stigmatizing and least socially acceptable conditions in childhood."[32] Children who are obese are also more likely to be obese in adulthood and have increased risk for chronic diseases. Childhood obesity disproportionately affects children of color in the United States.[33] The built environment also impacts children's risk for obesity as children who live in areas with limited access to healthy food options and limited access to exercise opportunities are at an increased risk for obesity.[34] As noted in previous sections, the built environment was often explicitly designed through racist and classist policies to benefit white and/or more affluent communities.

7.3.3.2.1 Child Obesity Mapped by Zip Code Tabulation Area

The UVA iTHRIV and TJHD obesity mapping project also mapped the prevalence of child obesity across TJHD Zip Code Tabulation Areas (ZCTAs). The Centers for Disease Control and Prevention (CDC) defines childhood obesity as "a BMI at or above the 95th percentile for children and teens of the same age and sex." Children are classified as individuals who are two years of age or older, but less than 20 years of age. Among children seen in UVA outpatient settings, the percent overweight (slightly under 15%) and obese (18%) held steady from 2014–2016. Data from any ZCTA in gray were suppressed due to insufficient data (defined in the study as less than 30 data points available). Obesity in children was less prevalent than among adults in TJHD.

The prevalence of childhood obesity throughout the district also varies by geographic location. In 2016, there was less prevalence of child obesity (less than 15% and 15–25%) in ZCTAs in Albemarle and Charlottesville, as indicated by the yellowish-white and yellow areas on the map. The ZCTAs with a 25–35% prevalence of obesity, as indicated by the orange color on the map, were in Greene, southern Albemarle, Fluvanna, and Nelson. The only ZCTA with a 35–45% prevalence of child obesity was in Nelson County. (Figure 25)

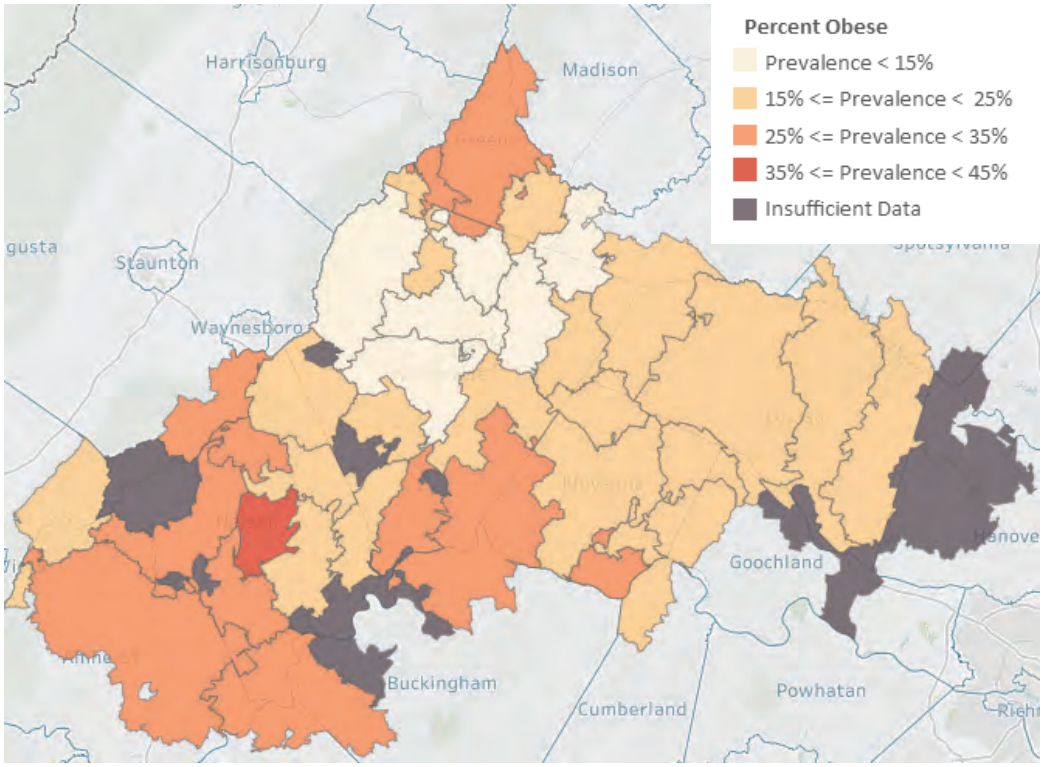

Figure 25 Percentage of Obese Children, by TJHD Zip Code Tabulation Area, 2016. Source: integrated Translational Health Research Institute of Virginia (UVA Clinical Data Repository). Accessed 2019.

7.3.3.2.2 Child Overweight and Obesity in Nelson County

During the 2017–2018 school year, height and weight screenings in Nelson County Public Schools showed overweight and obese fluctuations between kindergarten and first, second, third, fourth, fifth, seventh, and tenth grades. The smallest percentages of overweight children were in second (10.3%) and fifth grades (10.6%) and the largest were in kindergarten (25.0%) and seventh grade (23.1%). The overall overweight average between all grades was 17.9%. A larger percentage of students was obese than overweight, although the obesity percentages varied from 17.9% percent in first grade to 29.3% in fourth grade. The overall average for obesity for all grades was 26.0%. (Figure 26)

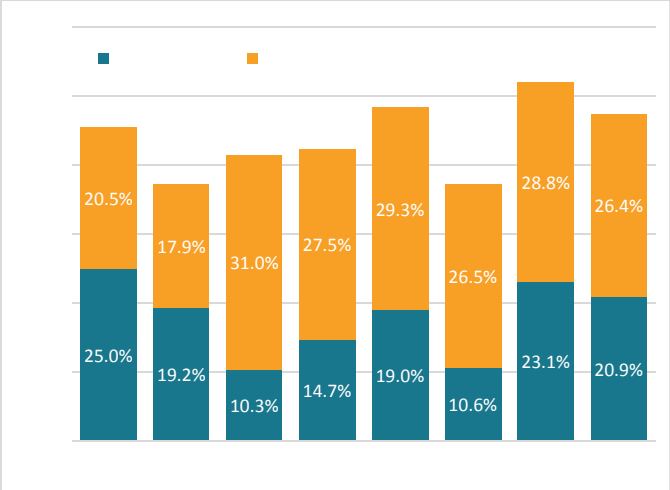

Figure 26 Percentage of Children Who Are Overweight or Obese by Grade, Nelson County Public Schools, 2017–2018 School Year. Source: Blue Ridge Medical Center, 2019. Accessed 2019.

Anonymous BMI data are often collected annually by school systems to identify trends over time, monitor child health outcomes, and/or evaluate school policies and practices intended to improve student health. BMI surveillance programs are conducted in several TJHD school districts, including the City of Charlottesville and Nelson County. Charlottesville data were still under analysis during the compilation of this report but will be shared once available.

Photovoice Photo: Scottsville and Esmont JABA

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Table of Contents

What We Learned: Community Health Assessment Data

Photovoice Photo: Fluvanna/Fork Union JABA

7.4 | MAPP PRIORITY: ADDRESS MENTAL HEALTH AND SUBSTANCE USE

7.4.1 Mental Health

Mental health disorders involve "changes in thinking, mood, and/or behavior." They can affect the way people relate to others and make choices.[1] Approximately one in five adults in the United States experiences mental illness every year[2] and mental health disorders are one of the most costly health conditions for adults aged 18 to 64 in the United States.[3] Mental health disparities affect many different populations including women, older adults, children, people who are unemployed, individuals who are incarcerated, people experiencing homelessness, rural populations and racial/ethnic groups including, but not limited to, African Americans, Asian Americans, and Hispanic Americans.[4] In addition, depression and/or anxiety are common concerns for people with disabilities who are also less likely to report receiving adequate social and emotional support.[5]

Racial and ethnic mental health disparities exist. While research has shown that black and Hispanic populations have a lower lifetime risk of psychiatric disorders compared to white populations, when black and Hispanic populations become ill, they tend to have more persistent disorders. Conversely, black and Hispanic populations have higher rates of psychological symptoms, which may impair everyday life tasks. They also have less access to care, are less likely to seek treatment for their disorders, and terminate treatment early.[6] There is also an association between black, Latino, Asian, Pacific Islander, American Indian, and other individuals who self-report discrimination—experiences of being treated unfairly due to one's race or ethnicity—and poor mental health status. That is, discrimination negatively affects mental health status. Reasons may include stress, trauma, internalized oppression, barriers to access to care, and other socioeconomic and structural disadvantages.[7]

People who are LGBTQ+ may face mental and substance use health disparities due to stigma, discrimination, and inequitable cultural and legal recognition of their civil and human rights. This discrimination has been associated with higher rates of psychiatric disorders, substance use, and suicide. In addition, personal, family, and social acceptance of an individual's sexual orientation and gender identity can either positively or negatively affect their mental health and personal safety.[8] In a study of black, lesbian, gay, bisexual, Hispanic, and female persons, study participants who reported experiences of discrimination within the past 12 months had an association between the experience of discrimination and mood, anxiety, and substance use disorders.[9] Again, discrimination negatively affects mental health.

7.4.1.1 POOR MENTAL HEALTH DAYS

In the Behavioral Risk Factor Surveillance Survey (BRFSS), poor mental health days were defined by responses to the question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"[10] In 2016, adults in TJHD reported an average of 3.6 mentally unhealthy days in the past 30 days. TJHD localities all had relatively the same number of poor mental health days although Albemarle (3.3) was the lowest in the district and Charlottesville was the highest, with people reporting almost four mentally unhealthy days in the past 30 days. (Figure 1)

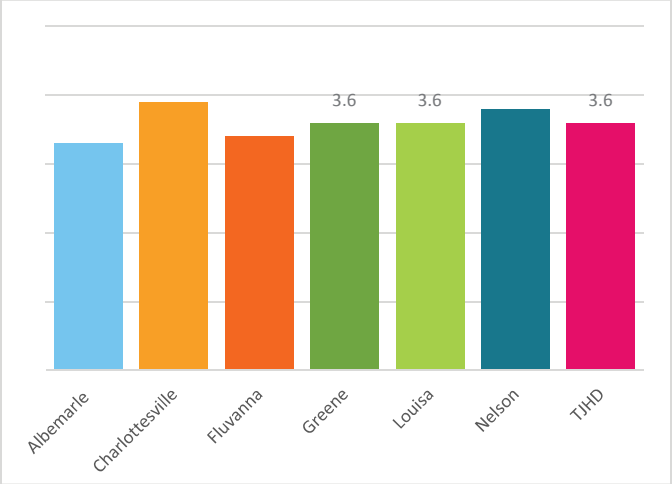


Figure 1 Average Number of Mentally Unhealthy Days Reported in the Past 30 Days (age-adjusted), TJHD Localities and TJHD, 2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.4.1.1.1 Sadness and Hopelessness among Youth in Virginia

In 2017, the Virginia Youth Risk Behavior Survey (YRBS) asked high school students if they had "felt sad or hopeless almost every day for two or more weeks so that they stopped doing some usual activities within the last 12 months." Data for the YRBS is not available for TJHD, or for individual TJHD localities, but the Virginia percentage of high school students that reported feeling sad or hopeless was 29.5%. Broken down by race and ethnicity, the percentage of students that responded "yes" ranged anywhere from 22% to almost 37%. Students that identified as multiple races experienced the greatest percentage (36.8%) of feelings of sadness or hopelessness to the point of stopping usual activities within the last year, followed by Hispanic/Latino students (32.4%). Students that identified as Asian reported the least feelings of sadness and hopelessness (22.1%). (Figure 2)

Nationally in 2017, the percentage of high school students who felt sad or hopeless was 31.5%; the rate among female students (41.1%) was almost double that of male students (21.4%). Similar to the Virginia data, national prevalence of having felt sad or hopeless in 2017 was higher among Hispanic (33.7%) students than white (30.2%) and black (29.2%) students. The prevalence of having felt sad or hopeless also differed by sexual orientation—it was highest among gay, lesbian, and bisexual students (63.0%) followed by "not sure" students (46.4%) and lowest among heterosexual students (27.5%).[11]

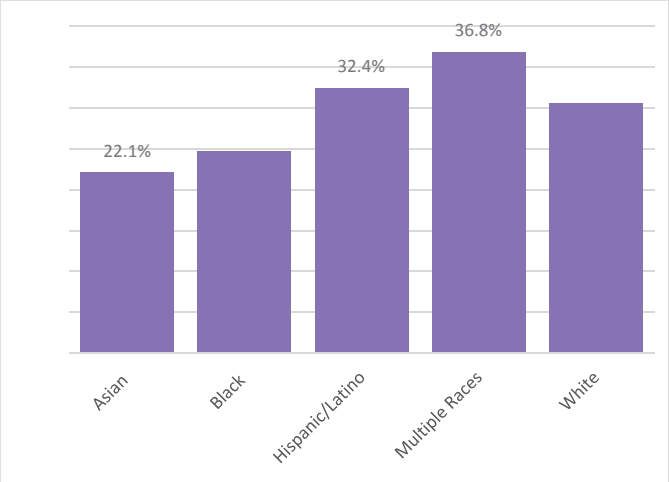


Figure 2 Percentage of Virginia High School Students Who Felt Sad or Hopeless (with last 12 months) by Race and Ethnicity, VA, 2017. Source: Virginia Youth Risk Behavior Survey. Accessed 2019.

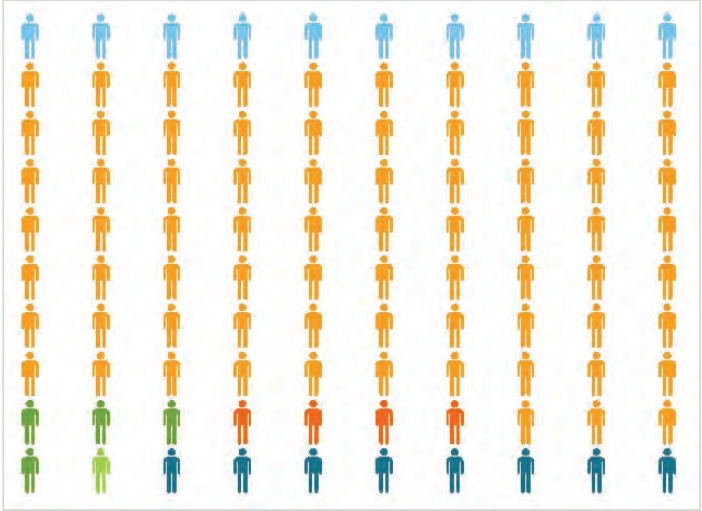
7.4.1.2 ACCESS TO MENTAL HEALTH SERVICES

People with mental health conditions continue to experience barriers to finding affordable and accessible mental healthcare.[12] Mental Health America created a ranking for access to mental healthcare by state using nine indicators including access to insurance, treatment, special education, quality and cost of insurance, and workforce availability. Virginia ranked 40th out of 51 (50 states and Washington, D.C.).[13]

Disparities in access to appropriate mental health providers still exist. Different populations have difficulty accessing the proper care, including young adults, people with disabilities, people experiencing homelessness, individuals facing poverty, and LGBTQ+ persons.[14] People of color (racial and ethnic minorities) have less access to mental health services and are more likely to delay or not seek mental health treatment than white individuals in the United States.[15] This may be, in part, because providers do not reflect the diversity of the community served (e.g. lack of clinicians of color) and/or because mental healthcare providers offer limited linguistic access for people who speak languages other than English (e.g. limited or no Spanish-speaking mental health counselors).

7.4.1.2.1 Mental Health Provider Availability

When reviewing the ratio of mental health providers available to the population, there are differences between TJHD localities. Figure 3 takes the ratio of providers available by locality in comparison to the total population within each locality and converts this into a graphic of the proportion of mental health providers available in each locality per every 100 providers. In 2018, Charlottesville had the vast majority of mental health providers in TJHD; for every 100 providers in the district, 73 out of 100 served Charlottesville. Albemarle had the second highest access to mental health providers with 10 out of every 100 providers serving Albemarle County. Although Nelson County is the smallest locality in the district, it had the third highest access to mental health providers, with 8 out of every 100 providers serving Nelson County. Fluvanna, Greene, and Louisa Counties had the lowest access to mental health providers, with Louisa County being served by only 1 out of every 100 mental providers.



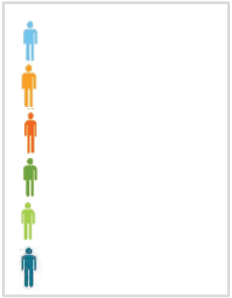


Figure 3 Distribution of Mental Health Providers by Locality for Every 100 Mental Health Providers Available, TJHD Localities, 2018. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.4.1.3 MENTAL HEALTH DISORDERS AMONG REGION TEN CONSUMERS

7.4.1.3.1 Top Diagnoses for Adults

Region Ten Community Services Board (Region Ten) provides mental health, intellectual disability, and substance abuse treatment services to residents in TJHD. In Fiscal Year 2018, the top mental health diagnosis—calculated by the number of primary diagnoses by mental health type as a percentage of total adult consumers served—among adult consumers utilizing Region Ten services was for depressive disorders (19.7%), followed by anxiety disorders (13.2%). Other top mental health diagnoses included schizophrenia and other psychotic disorders (10.4%); bipolar and mood disorders (9.8%); adjustment disorder (8.1%); autism spectrum disorder

(1.6%); and attention-deficit and disruptive behavior disorders (1.5%). Adjustment disorder includes stress, feeling sad or hopeless, and having a hard time coping with stressful life events. These percentages only include consumers served who reside in a TJHD locality and not those whose residence is categorized as "missing," "other VA," or "outside VA." Thus, the percentages may vary slightly from those calculated using all clients. This figure also does not include mental health diagnoses for consumers who seek services from private or non-Region Ten mental health providers. (Figure 4)

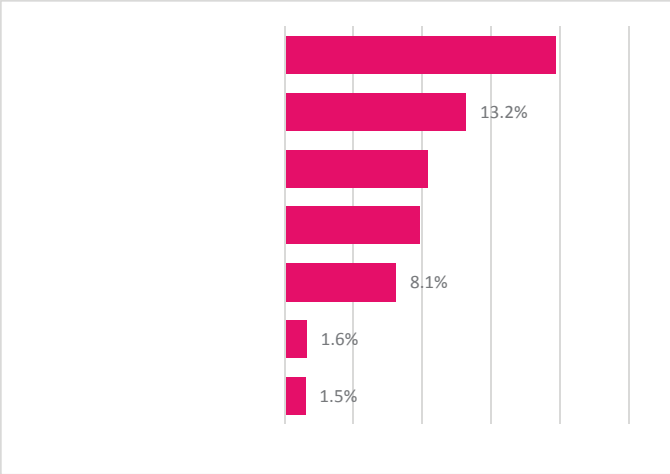


Figure 4 Primary Mental Health Diagnoses as a Percentage of Total Adult TJHD Consumers Served by Region Ten, TJHD, Fiscal Year 2018. Source: Region Ten Community Services Board, FY 2018 Consumer Report. Accessed 2019.

7.4.1.3.2 Top Diagnoses for Juveniles

In Fiscal Year 2018, the top mental health diagnosis—calculated by the number of primary diagnoses by mental health type as a percent of total juvenile consumers served—among juvenile consumers utilizing Region Ten services was for attention-deficit and disruptive behavior disorders (18.0%), followed by depressive disorders (11.7%). Other top mental health diagnoses among juveniles included adjustment disorder (10.6%); anxiety disorders (10.0%); disruptive, impulse control, and conduct disorders (7.0%); autism spectrum disorder (3.4%); and other disorders of infancy, childhood, or adolescence (1.0%). As noted above, these percentages only include consumers served who reside in a TJHD locality and not those whose residence is categorized as "missing," "other VA," or "outside VA." Thus, the percentages may vary slightly from those calculated using all clients. This figure also does not include mental health diagnoses for juvenile consumers who seek services from private or non-Region Ten mental health providers. (Figure 5)

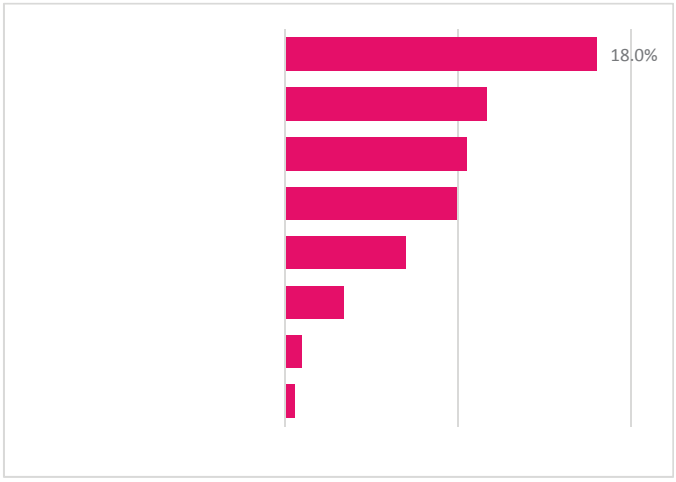


Figure 5 Primary Mental Health Diagnoses as a Percentage of Total Juvenile TJHD Consumers Served by Region Ten, TJHD, Fiscal Year 2018. Source: Region Ten Community Services Board, FY 2018 Consumer Report. Accessed 2019.

Photovoice Photo: Friendship Court

7.4.1.4 SERIOUS MENTAL ILLNESS AND EMOTIONAL DISTURBANCE

7.4.1.4.1 Serious Mental Illness (Adults)

Adults aged 18 years or older with a serious mental illness (SMI) have a diagnosable mental, behavioral, or emotional disorder "that causes serious functional impairment that substantially interferes with or limits one or more major life activities."[16] From 2013 to 2018, the percentage of adult consumers served by Region Ten with a SMI increased in every TJHD locality. In 2018, among the localities, Charlottesville (53.5%) had the largest percentage and Fluvanna (32.4%) had the smallest percentage. (Figure 6)

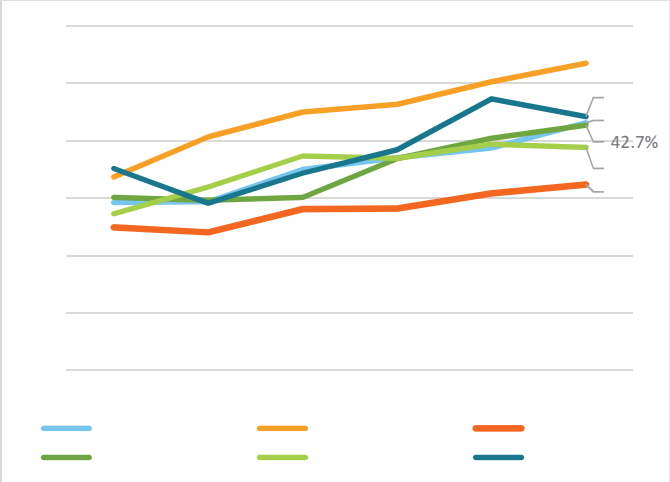


Figure 6 Percentage of Adult Consumers Served by Region Ten with Serious Mental Illness (SMI), TJHD Localities, Fiscal Years 2013–2018. Source: Region Ten Community Services Board, FY Consumer Reports. Accessed 2019.

7.4.1.4.2 Serious Emotional Disturbance (Children)

A serious emotional disturbance (SED) is similar to an SMI except that the diagnosis is used for people under 18 years of age and refers to "a diagnosable mental, behavioral, or emotional disorder in the past year, which resulted in functional impairment that substantially interferes with or limits the child's role or functioning in family, school, or community activities."[17]Among juvenile Region Ten consumers, from fiscal years 2012–2017, Nelson County had the largest percentage of juveniles diagnosed with SED. However, Fluvanna County (53.1%) had the largest percentage in 2018 while Charlottesville (32.4%) and Albemarle (32.9%) had the smallest. (Figure 7)

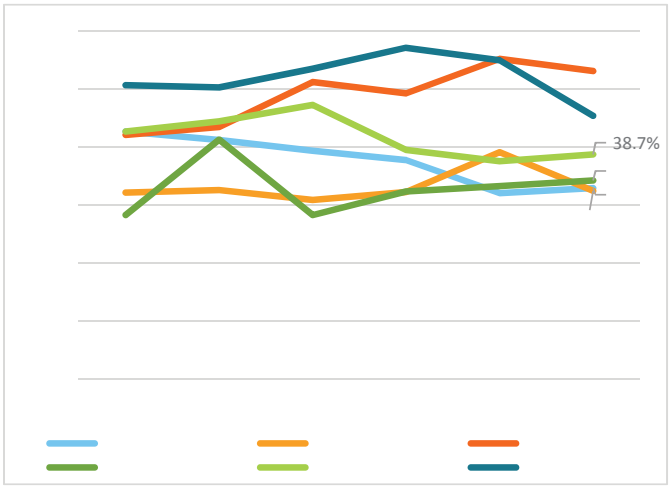


Figure 7 Percentage of Juvenile Consumers Served by Region Ten with Serious Emotional Disturbance (SED), TJHD Localities, Fiscal Years 2013–2018. Source: Region Ten Community Services Board, FY Consumer Reports. Accessed 2019.

Photovoice Photo: Fluvanna/Fork Union JABA

7.4.1.5 MENTAL HEALTH HOSPITALIZATIONS

Hospitalizations for mental health conditions may occur if an individual needs to be closely monitored for an accurate diagnosis or for medication adjustments, for monitoring during an acute episode, or if it is in their best interest.[18] In 2016, in TJHD (38.0%) and Virginia (49.2%), the most common diagnosis among persons hospitalized for behavioral health treatment was affective psychoses, which includes disorders such as bipolar disorder, major depressive episode (recurring and single event), persistent mood disorders, and anxiety disorder. Residents of TJHD (14.1%) had higher rates of hospitalization for adjustment reaction than the state percentage of 4.3%. (Figure 8) For behavioral health hospitalizations by age in 2016, TJHD followed the same overall trend as Virginia, but had lower rates than the state. The rate per 100,000 persons in TJHD was highest among persons aged 30–44 (932.2) followed by persons aged 18–29 (863.9). (Figure 9)

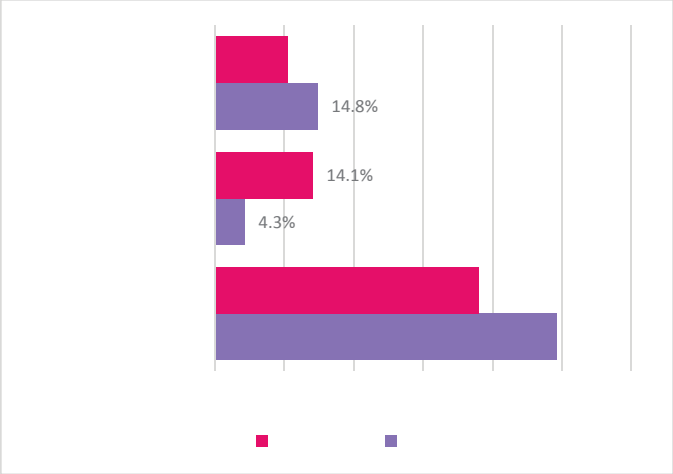


Figure 8 Most Common Diagnoses for Behavioral Health Hospitalizations, TJHD and VA, 2016. Source: Community Health Solutions, 2018 Behavioral Health Atlas. Accessed 2019.

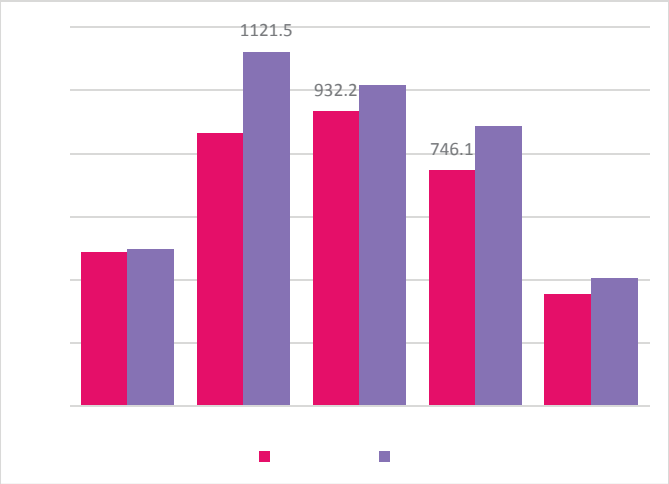


Figure 9 Rate (per 100,000 persons) of Behavioral Health Hospitalizations by Age, TJHD and VA, 2016. Source: Community Health Solutions, 2018 Behavioral Health Atlas. Accessed 2019.

7.4.1.6 SUICIDE

In the United States, the suicide rate increased from 11.3 to 13.5 per 100,000 population (age-adjusted) between 2007 and 2016. In 2016, non-Hispanic black Americans (6.3) had the lowest suicide rate while non-Hispanic white Americans (17.0) had the highest rate. The rate for males was 3.5 times higher than the rate for females.[19] In 2017, suicide was the second leading cause of death in 10–34-year-olds in the United States and the fourth leading cause of death for individuals aged 35–54.[20] Suicide rates are consistently higher in rural areas than in urban areas—this geographic disparity might reflect more limited access to mental healthcare in rural areas, social isolation, the influence of the opioid overdose epidemic (as opioid misuse is associated with an increased risk for suicide), and the disproportionate effect of the 2008 economic recession, among other factors.[21]

Nelson County had the highest rate of suicide among TJHD localities for 2017 (26.8 suicides per 100,000 population). The counties of Louisa (22.3), Greene (20.4), Fluvanna (18.9), and Albemarle (12.1) also exceeded the Healthy People 2020 target of no more than 10.2 suicides per 100,000 people. Charlottesville (8.3) had the lowest suicide rate

among TJHD localities and was the only locality to meet the Healthy People 2020 target.* However, rates calculated from small case counts (n<5) are considered unreliable and should be interpreted with caution*—in 2017, Charlottesville, Greene, and Nelson each had four suicides so these rates should be interpreted with caution. (Figure 10)

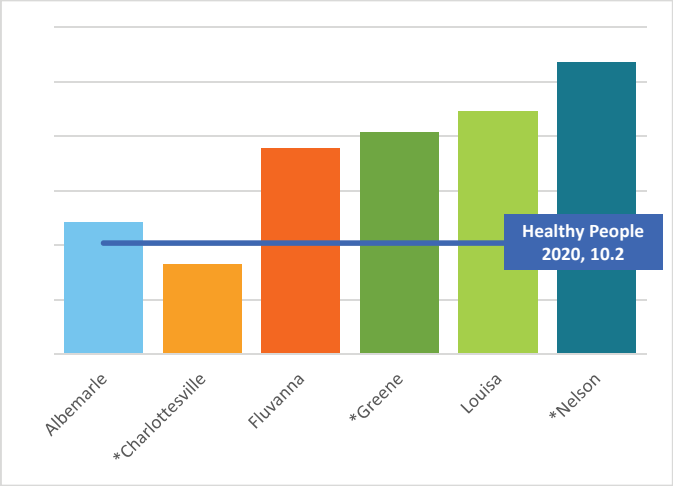


Figure 10 Suicide Rates (per 100,000 population), TJHD Localities, 2017. Source: Virginia Department of Health, Office of the Chief Medical Examiner, 2017 Annual Report. Accessed 2019.

7.4.1.6.1 Suicide and Attempted Suicide among Youth in Virginia

While adults have higher rates of suicide than youth, suicide was the second leading cause of death for 10–34 year-olds in the United States in 2017.[22] Similar to adults, male youth have higher rates of suicide than female youth; however, female youth were more likely to report attempting suicide.[23] Risk factors for youth suicide include the presence of one or more mental disorders; personality disorders, eating disorders, and/or schizophrenia; alcohol and substance misuse; previous suicide attempts or a history of self-harm; family factors such as a family history of mental disorders; life events such as interpersonal losses (a break-up, the death of a friend) or stressors such as bullying and abuse; and the availability of a means to commit suicide.[24] One area of disparity in youth suicide attempts is around gender identity. Transgender (trans) individuals are people whose gender identity does not align with their sex assigned at birth, whereas cisgender youth are those whose gender identity does align with their sex assigned at birth. A higher percentage of transgender youth report attempting suicide than their cisgender peers. In one study, trans male youth reported the highest rate of attempted suicide (50.8%) followed by youth who did not identify as exclusively male or female, i.e. non-binary (41.%), and trans female youth (29.9%).[25]

In 2017, the suicide rate for persons aged 17 and younger in Virginia was 2.1 per 100,000 persons, a decrease of 11.1% when compared to 2016. Youth suicides follow the same trend as adult suicides, with the highest rates among male youth and white youth.[26]

The 2017 Virginia Youth Risk Behavior Survey reported that 7.2% of Virginia high school students had attempted suicide one or more times during the 12 months before the survey (9.0% female, 5.4% male). Students that identified with multiple races had the largest percentage of attempted suicide (10.8%) followed closely by Hispanic/Latino students (9.4%) and then black students (7.7%). Asian students (4.0%) had the smallest percentage of attempted suicide followed by white students (6.4%). (Figure 11)

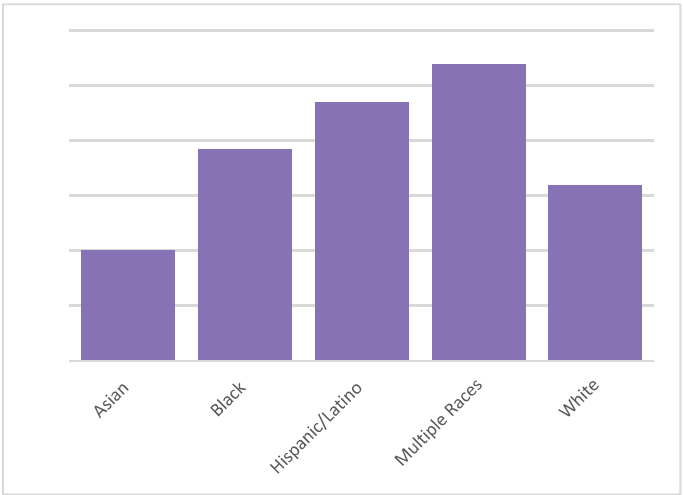


Figure 11 Percentage of Virginia High School Students Who Attempted Suicide (one or more times during the 12 months before survey) by Race and Ethnicity, VA, 2017. Source: Virginia Youth Risk Behavior Survey, 2017 Report. Accessed 2019.

National data from the 2017 Youth Risk Behavior Survey found that 7.4% of high school students nationwide had attempted suicide in the past year, which is similar to Virginia students. Nationally in 2017, the prevalence of having attempted suicide was higher among female students (9.3%) than male students (5.1%) and higher among Hispanic students (8.2%) and black students (9.8%) than white students (6.1%). The prevalence of having attempted suicide was much higher among gay, lesbian, and bisexual students (23.0%) followed by "not sure" students (14.3%) and heterosexual students (5.4%).[27]

7.4.1.6.2 Veteran Suicide in Virginia

In 2016, the veteran suicide rate (per 100,000 population, not age-adjusted) in Virginia (26.9) was lower than the national Veteran suicide rate (30.1), but higher than the overall national suicide rate (17.5). Nationally (45.0) and in Virginia (38.8), the veteran suicide rate was highest in veterans aged 18–34. For age categories 35–54, 55–74, and 75+, the veteran suicide rate was higher than the general population suicide rates in Virginia and the United States. (Figure 12)

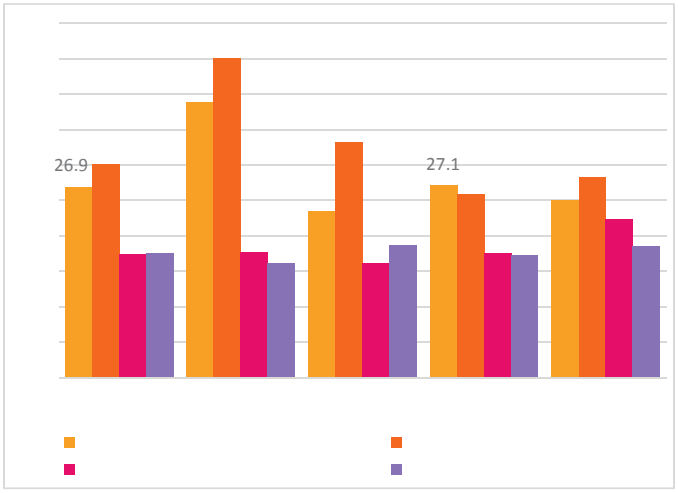


Figure 12 Veteran and Overall Suicide Rates (per 100,000 Population, unadjusted) by Age, VA Veteran, U.S. Veteran, VA, and U.S., 2016. Source: U.S. Department of Veterans Affairs, 2016 Virginia State Report. Accessed 2019.

7.4.2 Substance Use

Substance abuse is the "harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs that can lead to dependence."[28] Individuals with substance use disorders tend to have more health issues including lung and heart disease, stroke, cancer, and/or mental health conditions.[29]

7.4.2.1 SUBSTANCE USE AMONG REGION TEN CONSUMERS

In Fiscal Year 2018, among Region Ten consumers using substances within TJHD, the primary substance abuse problem for slightly over half was alcohol. The second most common primary form of substance abuse was marijuana or hashish (26.1%). No other substance type accounted for more than 10%, with the next highest prevalence being cocaine or crack cocaine (7.5%) followed by heroin (5.3%). Primary substance abuse problems that accounted for less than 1% of overall primary substance abuse problems among Region Ten consumers are not included. These percentages only include consumers served who reside in a TJHD locality and not those whose residence is categorized as "missing," "other VA," or "outside VA." Thus, the percentages may vary slightly from those calculated using all clients. This figure also does not include substance abuse among consumers who seek services from private or non-Region Ten behavioral and substance abuse providers. (Figure 13)

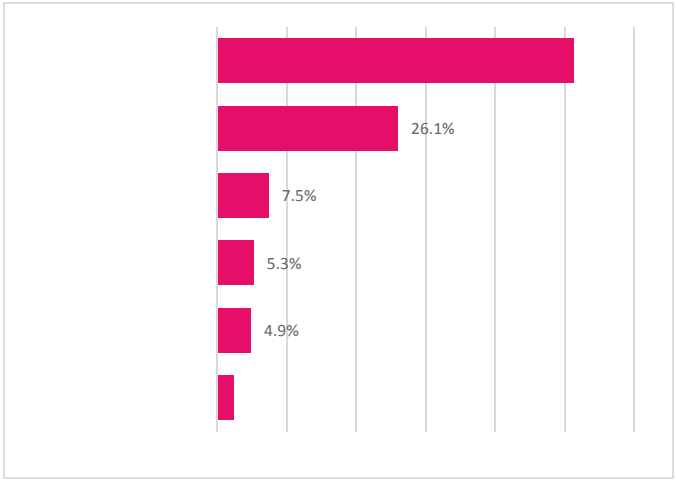


Figure 13 Primary Type of Substance Abuse in Region Ten Consumers with a Substance Abuse Problem, TJHD, Fiscal Year 2018. Source: Region Ten Community Services Board, FY 2018 Consumer Report. Accessed 2019.

7.4.2.2 TOBACCO USE

Tobacco is an addictive substance. Tobacco use includes products like cigarettes, dip, snuff, e-cigarettes, and hookahs. Tobacco use is unhealthy for individual users as well as for those around them due to secondhand exposure. Tobacco use has declined since 1964 in the United States. There are currently 34 million adult tobacco users nationwide[30] and roughly one in five deaths in the United States can be attributed to tobacco use.[31] Tobacco use can lead to cancer, heart disease, stroke, lung diseases, oral health problems, and other health conditions for individual users as well as causing harmful effects to nonsmokers through secondhand exposure, including asthma attacks and respiratory infections among children and adolescents.[32]

Although prevalence can vary greatly by sub-group and nationality, among different racial and ethnic groups in the United States in 2016, cigarette smoking was the least prevalent among Asian Americans and Pacific Islanders (8.9%) followed by Hispanics/Latinos (16.6%). However, prevalence was higher among Latinos born in the United States than those who were foreign-born, with Puerto Ricans having the highest prevalence (28.5%). While African Americans (21.4%) usually smoke fewer cigarettes and start smoking at an older age, they are more likely to die from smoking-related diseases than white Americans; African American children and adults are also the most likely among all racial and ethnic groups to have secondhand smoke exposure.[33]

There are also smoking disparities by income, education level, geographic region, and sexual orientation. People living below the poverty level, having lower levels of education, and living in the Southern region (22.7%) of the United States all have higher smoking rates than the general population. Adults living in rural areas (28.5%) also have a higher smoking prevalence than those living in urban, small metropolitan, and large metropolitan areas. Cigarette smoking is also higher among lesbian, gay, and bisexual individuals than heterosexual or straight individuals; prevalence is also reported to be higher among transgender people although data are limited.[34]

7.4.2.2.1 Adult Smoking

In 2016, Charlottesville (19.0%) had the largest percentage of adults who smoke. Greene, Louisa, and Nelson Counties all had 17.0% of adults who smoke followed by Fluvanna County (14.0%). Albemarle County (12.0%) had the smallest percentage of adults who smoke in TJHD, but this was still more than the state percentage of 10.2% (not shown). Albemarle was the only TJHD locality to meet the Healthy People 2020 target of 12.0% or less. (Figure 14)

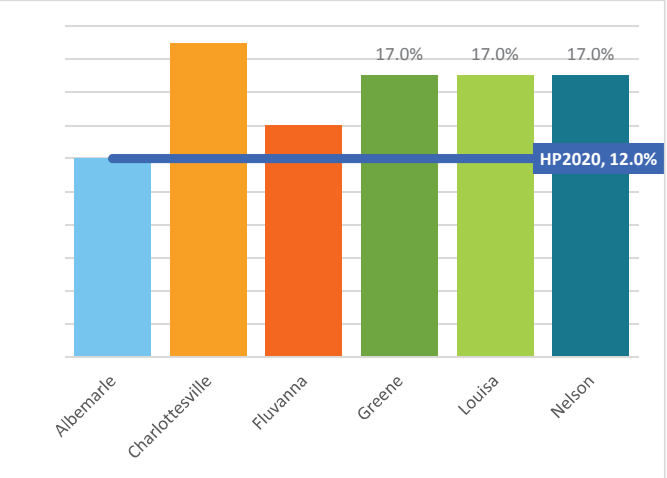


Figure 14 Percentage of Adult Smokers, TJHD Localities, 2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.4.2.2.2 Youth Smoking

Overall in 2017, 6.5% of Virginia high school students reported currently smoking cigarettes (at least one in the past 30 days), which was less than high school students nationwide (8.8%). Nationally, the prevalence of current cigarette use was greater among white (11.1%) and Hispanic (7.0%) students than black students (4.4%). The prevalence of current cigarette use was also greater among gay, lesbian, and bisexual students (16.2%) than "not sure" students (10.1%) and heterosexual students (8.1%).[35]

The 2017 Virginia Youth Risk Behavior Survey (YRBS) found that for high school students that had

smoked at least once in the past 30 days, the largest percentage was white students (8.2%) followed by Hispanic/Latino students (6.4%). Asian (2.4%) and black (3.6%) students had the smallest percentage of students that currently smoke cigarettes. Students of all races and ethnicities were well below the Healthy People 2020 target of 16.0%. Data for students who identified as a race not in the categories above are not included due to a small sample size of less than 100 students across the state. (Figure 15)

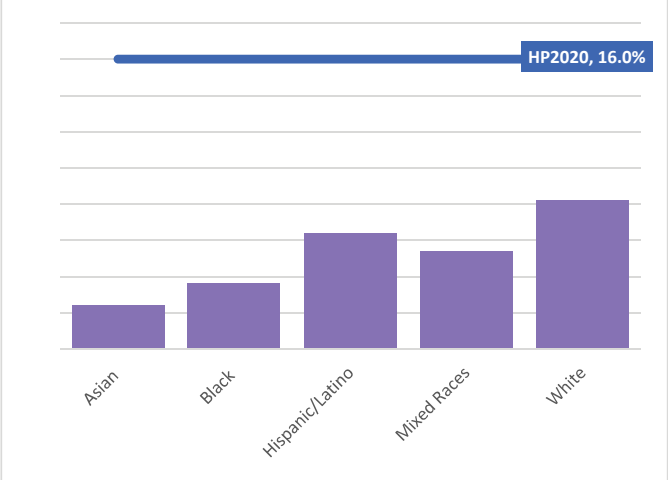


Figure 15 Percentage of Virginia High School Students Who Currently Smoke Cigarettes (on at least 1 day during the 30 days before survey) by Race and Ethnicity, VA, 2017. Source: Virginia Youth Risk Behavior Survey, 2017 Report. Accessed 2019.

7.4.2.2.3 Youth Vaping

Data from the National Youth Tobacco Survey shows that the number of United States high school students who report current e-cigarette use has increased 78% between 2017 and 2018. Among middle school students, the number of current e-cigarette users rose 45%. While most youth are aware of the dangers of traditional combustible tobacco, they perceive vaping or juuling as a much less harmful or an even harmless activity. Many youth do not know that e-cigarettes almost always contain the highly addictive drug nicotine.[36, 37]

Nationally in 2017, 13.2% of high school students reported using electronic vapor products such as e-cigarettes or vape pens on at least one day during the 30 days before the survey, which was larger than the high school student percentage in Virginia (11.8%). The prevalence of current usage was greater among male students (15.9%) than female students (10.5%) nationwide and usage was also greater among white (15.6%) and Hispanic students (11.4%) than black students (8.5%) across the nation.[38]

In Virginia in 2017, across all races and ethnicities, the percentage of high school students that currently used e-vape products was larger than the percentage of students that currently smoked cigarettes. Students that identified as multiple races (15.0%) and white (14.8%) had the largest percentage of current e-vape use followed by Hispanic/Latino students (10.7%) in Virginia. Similar to cigarettes use, black (6.6%) and Asian (6.3%) youth had the smallest percentage of electronic vape use. (Figure 16)

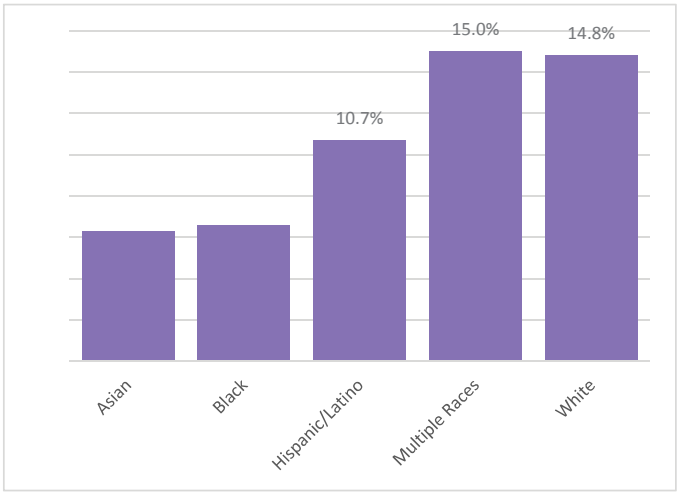


Figure 16 Percentage of Virginia High School Students Who Currently Use Electronic Vapor Products (on at least 1 day during the 30 days before the survey) by Race and Ethnicity, VA, 2017. Source: Virginia Youth Risk Behavior Survey, 2017 Report. Accessed 2019.

7.4.2.3 ALCOHOL

Alcohol use disorder is a chronic relapsing brain disease characterized by compulsive alcohol use, loss of control over alcohol intake, and negative emotional state when not using. Approximately 16 million people in the United States have an alcohol use disorder.[39] Alcohol dependence affects the body

physically by causing liver cirrhosis and inflammation of the digestive system, increasing the risk of cancer, and affecting the brain by causing dementia-like symptoms.[40]

According to the National Institute on Alcohol Abuse and Alcoholism, alcohol consumption and alcohol use patterns vary by race and ethnicity in the United States. Native American and Hispanic populations report higher rates of high-risk drinking, while white and Native American populations are at higher risk for alcohol use disorders. However, once dependent on alcohol, black and Hispanic populations experience higher rates of persistent dependence on alcohol. Hispanic persons also experience disparities in use of alcohol treatment services—likely due to a variety of factors such as immigration experience, discrimination, and other economic and social factors.[41] Lesbian, gay, and bisexual persons have reported higher amounts of drinking, binge drinking, and heavy alcohol use than the general population.[42] Similarly, veterans have reported higher use of alcohol, binge drinking, and heavy alcohol use than the general population; military personnel with combat exposure have a greater risk for binge drinking and heavy drinking. Studies with veterans have also shown that increased alcohol use increases the risk for interpersonal violence, poorer health, and mortality.[43]

7.4.2.3.1 Excessive Drinking among Adults

In 2016 in TJHD, the percent of adults that reported binge or heavy drinking at least once in the past 30 days ranged from 15–19% of adults. County Health Rankings defines binge drinking as more than four drinks on a single occasion for women or more than five alcoholic drinks for men. They define heavy drinking as more than one drink on average per day for women or more than two drinks on average per day for men.[44] Charlottesville (19.0%) and Albemarle (19.0%) had the largest percentages of adults reporting binge or heavy drinking, which may be influenced, in part, by the UVA student population. Fluvanna and Greene Counties (17.0%) and Louisa County (16.0%) had the next largest percentages while Nelson County had the smallest percentage (15.0%). No TJHD counties met the County Health Rankings "Top Performers" metric of 13.0%, which benchmarks United States localities in the 10th percentile for excessive drinking. (Figure 17)

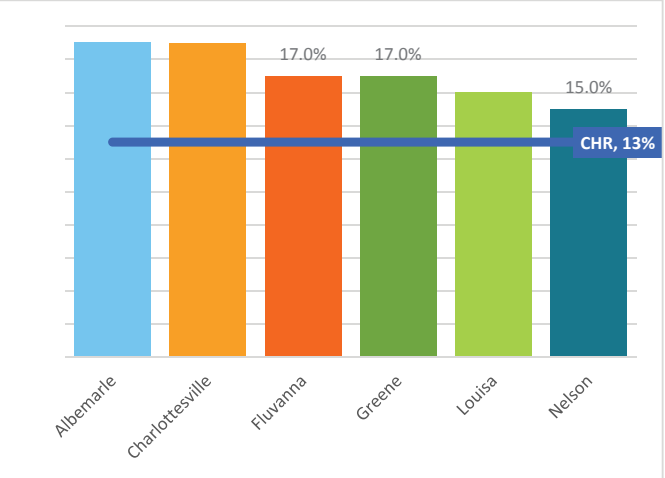


Figure 17 Percentage of Adults that Report Binge or Heavy Drinking (in past 30 days), TJHD Localities, 2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.4.2.3.2 Youth Alcohol Use in Virginia

Nationwide in 2017, the percentage of high school students who currently drank alcohol—defined as at least one drink during the 30 days before the survey—was 29.8%. The prevalence of current alcohol use was higher among female students (31.8%) than male students (27.6%) and higher among white (32.4%) and Hispanic students (31.3%) than black students (20.8%). By sexual orientation, gay, lesbian, and bisexual students reported the greatest current alcohol use (37.4%) followed by heterosexual students (29.7%); students who were "not sure" about their sexual orientation reported the least current alcohol use (21.5%).[45]

In Virginia in 2017, the percentage of high school students who currently drank alcohol was 24.5%, which was lower than in the United States. By race and ethnicity, current alcohol usage was most common among students that identified as white

(29.3%), multiple races (27.1%), and Hispanic/Latino (23.2%). Black (17.8%) and Asian (9.3%) students had the lowest percentage of students who currently drank alcohol. (Figure 18)

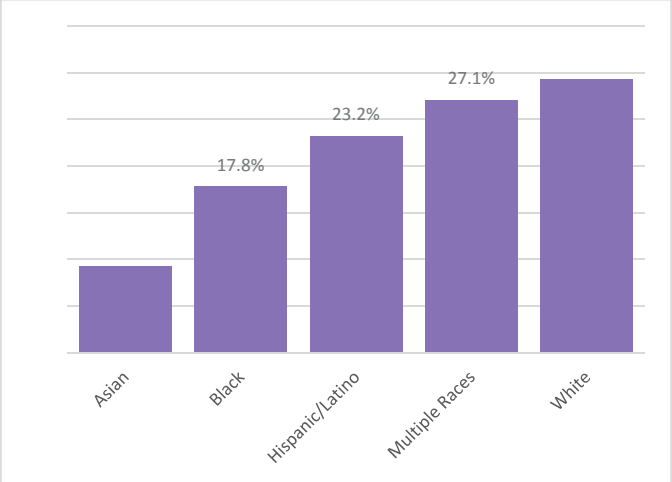


Figure 18 Percentage of Virginia High School Students Who Currently Drink Alcohol (at least 1 day during the 30 days before survey) by Race and Ethnicity, VA, 2017. Source: Virginia Youth Risk Behavior Survey, 2017 Report. Accessed 2019.

7.4.2.4 YOUTH MARIJUANA USE IN VIRGINIA

Nationwide in 2017, 19.8% of high school students had used marijuana one or more times during the 30 days before the survey. The prevalence of current marijuana use was higher among black (25.3%) and Hispanic students (23.4%) than white students (17.7%) and higher among gay, lesbian, and bisexual students (30.6%) than heterosexual students (19.1%) and "not sure" students (18.9%).[46]

Photovoice Photo: Scottsville and Esmont JABA

In Virginia in 2017, current marijuana use among high school students was 16.5%, which was lower than in the United States. By race and ethnicity, current use was highest among students that identified as multiple races (20.5%), Hispanic/Latino (18.7%), and black (18%). For marijuana, no race or ethnicity met the Healthy People 2020 target of 6.0% or less of youth use of marijuana within the past 30 days, although Asian students were close to meeting the target at 6.4%. Data for students who identified as a race not in the categories above are not included in the results due to a small sample size of less than 100 students across the state. (Figure 19)

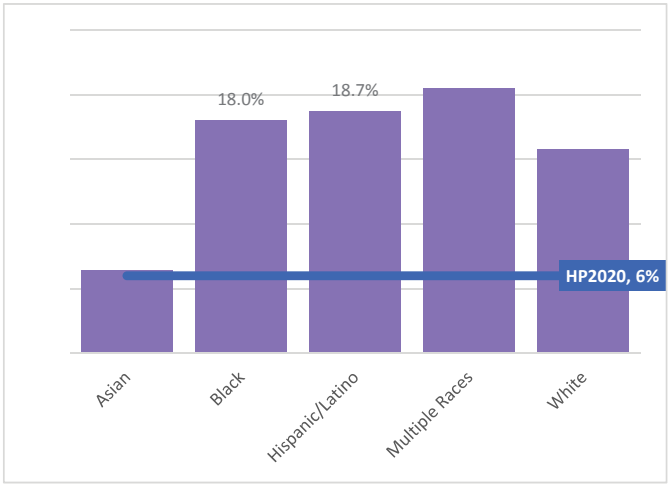


Figure 19 Percentage of Virginia High School Students Who Currently Use Marijuana (1 or more times during the past 30 days before the survey) by Race and Ethnicity, VA, 2017. Source: Virginia Youth Risk Behavior Survey, 2017 Report. Accessed 2019.

7.4.2.5 OPIOIDS, PRESCRIPTION DRUG ABUSE, AND DRUG OVERDOSES

In November 2016, Virginia's State Health Commissioner declared opioid addiction a public health emergency in the Commonwealth.[47] In 2017, the U.S. Department of Health and Human Services declared opioid addiction a national epidemic following 42,000 deaths in 2016.[48] Several different populations experience opioid overdoses at higher rates, including individuals experiencing poverty, individuals living in rural areas, and certain age demographics.[49]

In the 1980s, when the United States experienced a crack epidemic, the response was a "War on Drugs" that focused on increased law enforcement presence and incarceration of drug users. This approach disproportionately affected black communities—and resulted in higher levels of incarceration for black people on drug-related offenses and subsequent re-entry into society categorized as ex-offenders or felons.[50] The Anti-Drug Abuse Act of 1986 that differentiated between crack and powder cocaine led the United States to the world's highest incarceration rates with black (6x) and Hispanic men (3x) much more likely to be incarcerated than white men. In contrast, the relatively recent surge in opioid use and overdose has been categorized as a similar epidemic, but with a public health approach.[51] Economists have shown decreased life expectancy for white people in the United States, largely because of opioid drug overdoses; this is likely due, in part, to the greater access that white people have had to prescription opioids. Response to the opioid epidemic has included an emphasis on harm reduction (such as prescription drug monitoring programs for prescribers, drug take back programs, and dissemination of the overdose reversal medication naloxone), rehabilitation, and treatment rather than incarceration for opioid users.[52]

7.4.2.5.1 Prescriber Rates

Prescriber rates refer to the number of prescriptions for opioids that are dispensed per 100 persons.[53] Prescription opioids are used to treat chronic and acute pain; however, there can be serious unintended consequences including prescription misuse, opioid addiction, opioid overdose, and death. In the United States, there has been a decline in the number of prescriptions written since 2012. In 2017, 58 opioid prescriptions were written for every 100 Americans.[54]

Although local or Virginia data for opioid prescriptions are not available by race or ethnicity, studies have demonstrated racial bias in pain management—black people are less likely to be prescribed pain medications and are prescribed lower quantities than white patients, even in situations where black and white patients have similar self-reported pain levels. This disparity exists even for patients who are children. This disparity may reflect over prescription for white patients, under prescription for black patients, or some combination thereof. A 2016 study in Virginia revealed that "a substantial number of white laypeople and medical students and residents hold false beliefs about biological differences between blacks and whites and demonstrates that these beliefs predict racial bias in pain perception and treatment recommendation accuracy."[55]

The Centers for Disease Control and Prevention (CDC) tracks retail opioid prescriptions dispensed per 100 persons. Overall in TJHD localities, prescriber rates decreased steadily across the district from 2008–2017 with the exception of Greene County. Greene County may not have had a prescriber prior to 2010 as Greene reported no data in 2008–2009. Greene County had a sharp rate increase from 16.6 in 2010 to a high of 88.8 in 2014, and had decreased to 66.0 by 2017. After Greene County, in 2017, Albemarle County had the second highest prescriber rate (49.1) while Nelson County had the lowest (17.9). (Figure 20)

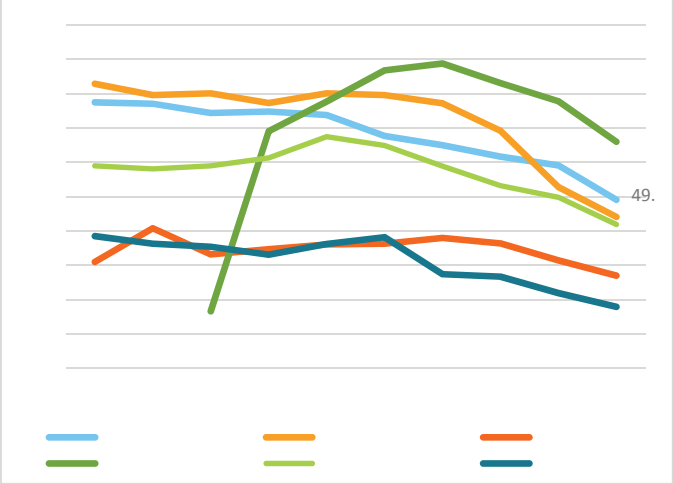


Figure 20 Opioid Prescriber Rates (per 100 persons), TJHD Localities, 2008–2017. Source: Centers for Disease Control and Prevention. Accessed 2019.

7.4.2.5.2 Emergency Department Visits for Drug Overdose

In TJHD in 2018, there were 608 emergency department visits for drug overdoses with an average of around 51 visits per month; 263 of these visits were opioid overdoses with an average of 22 visits per month. Rates per 10,000 emergency department (ED) visits are shown for all drugs, opioids, and heroin; this rate provides a consistent rate calculation across time when reporting by EDs change (increases or decreases).[56]

7.4.2.5.2.1 All Drug Overdoses

From 2015–2018, TJHD rates for ED visits for all drug overdoses were higher than Virginia rates. From 2017–2018, both the TJHD (65.2) and Virginia (46.4) rates decreased (Figure 21). Within TJHD, Albemarle/Charlottesville had the highest rate of all drug overdoses with a rate of 69.1 in 2018 followed by Louisa County (65.0), while Nelson County had the lowest rate (33.1). Albemarle County and the City of Charlottesville are combined because overdose geographic locations are assigned by patients' residential zip codes. As the zip codes covering Albemarle and Charlottesville span both localities, the exact locality of residence cannot be determined. (Figure 22) To download additional data by TJHD locality, by month (2015 onward), rate per 100,000 population, or to review the most up-to-date data, visit http://www.vdh.virginia.gov/surveillance-and-investigation/syndromic-surveillance/drug-overdose-surveillance/.

Figure 21 Monthly Average Rate of Emergency Department Visits for Unintentional Drug Overdose for All Drugs (per 10,000 ED Visits), TJHD and VA, 2015–2018. Source: Virginia Department of Health, Syndromic Surveillance, 2019. Accessed 2019.

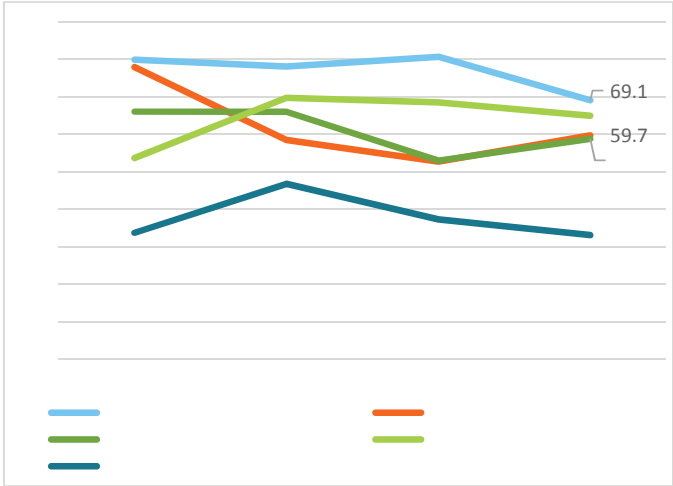


Figure 22 Monthly Average Rate of Emergency Department Visits for Unintentional Drug Overdose for All Drugs (per 10,000 ED Visits), TJHD Localities, 2015–2018. Source: Virginia Department of Health, Syndromic Surveillance, 2019. Accessed 2019.

7.4.2.5.2.2 Opioid and Heroin Overdoses

From 2015–2018, TJHD rates for ED visits (per 10,000 visits) for opioid overdoses were higher than Virginia rates but decreased each year in the time span. In 2018, the TJHD rate (28.1) was still higher than the Virginia rates (23.0) (Figure 23). From 2015–2017, TJHD rates for ED visits (per 10,000 visits) for heroin overdoses were also higher than Virginia rates, but the TJHD rate (3.2) dropped below Virginia (4.1) in 2018. (Figure 24)

Figure 23 Monthly Average Rate of Emergency Department Visits for Unintentional Drug Overdose for Opioids (per 10,000 ED Visits), TJHD and VA, 2015–2018. Source: Virginia Department of Health, Syndromic Surveillance, 2019. Accessed 2019.

Figure 24 Monthly Average Rate of Emergency Department Visits for Unintentional Drug Overdose for Heroin (per 10,000 ED Visits), TJHD and VA, 2015–2018. Source: Virginia Department of Health, Syndromic Surveillance, 2019. Accessed 2019.

7.4.2.5.3 Use of Non-Prescribed Pain Medicine by Youth

Factors that may contribute to youth abuse of prescription drugs (drugs that are not prescribed to them) include relative availability through the family medicine cabinet and the internet as well as a belief that prescription drugs are safer than street drugs.[57] Nationwide in 2017, 14.0% of students had taken prescription pain medicine (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet) without a doctor's prescription or differently than how a doctor told them to use it one or more times during their life. By race and ethnicity, prevalence was higher among Hispanic students (15.1%) than white (13.5%) and black (12.3%) students. By sexual orientation, the prevalence was higher among gay, lesbian, and bisexual (24.3%) and "not sure" students (17.7%) than heterosexual students (12.9%).[58]

In Virginia in 2017, the percentage of students who had used prescription pain medicine without a prescription or used it differently than instructed by a doctor was 12.6%. By race and ethnicity, prescription pain medicine use was highest in students of multiple races (16.5%), followed by black (13%), Hispanic/Latino (12.9%), and white students (12.7%). Asian students (5.3%) had the lowest percentage. Data for students who identified as a race not in the categories above are not included in the results due to a small sample size of less than 100 students across the state. (Figure 25)

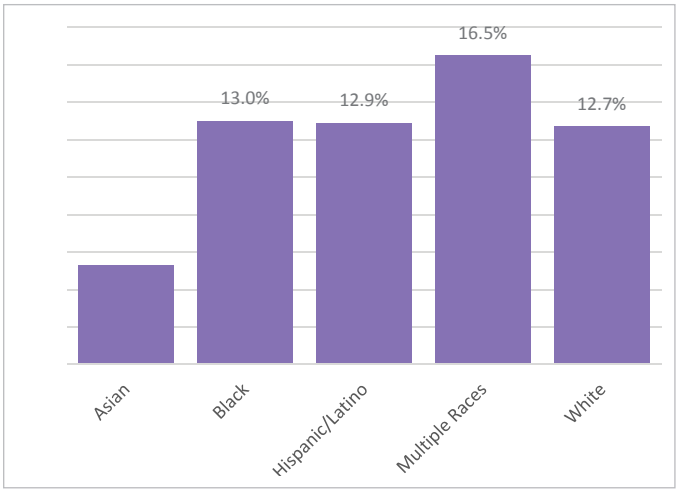


Figure 25 Percentage of Virginia Students that Have Ever Abused Prescription Pain Medicine (without a doctor's prescription or differently than how a doctor told them to use it) by Race and Ethnicity, VA, 2017. Source: Virginia Youth Risk Behavior Survey 2017 report. Accessed 2019.

7.4.2.5.4 Fatal Drug Overdoses

For 2007–2018, the total rate (per 100,000 population) of fatal overdoses due to drugs was highest in the City of Charlottesville (11.9) followed by Louisa County (11.1) and Nelson County (9.4) and lowest in Fluvanna County (4.2). Locality rates by individual year are not shown as most localities have low annual case counts, especially when viewed by type of drug; rates calculated from annual low case counts (<5) are considered unreliable and should be interpreted with caution. However, full data sets are available for download from http://www.vdh.virginia.gov/medical-examiner/forensic-epidemiology/. Throughout TJHD, mortality rates due to drug overdoses are typically lowest for benzodiazepines and highest for prescription opioids (excluding fentanyl). For 2007–2018, prescription opioid

overdose mortality rates (excluding fentanyl) were highest in Greene County (4.0) and Louisa and Nelson Counties (3.9). Fentanyl overdose mortality rates were highest in Louisa County (3.4), Charlottesville (3.0), and Nelson County (2.8). Cocaine overdose mortality rates were highest in the City of Charlottesville (2.4) and heroin overdose mortality rates were highest in Charlottesville (2.4) and Louisa County (2.5). (Figure 26)

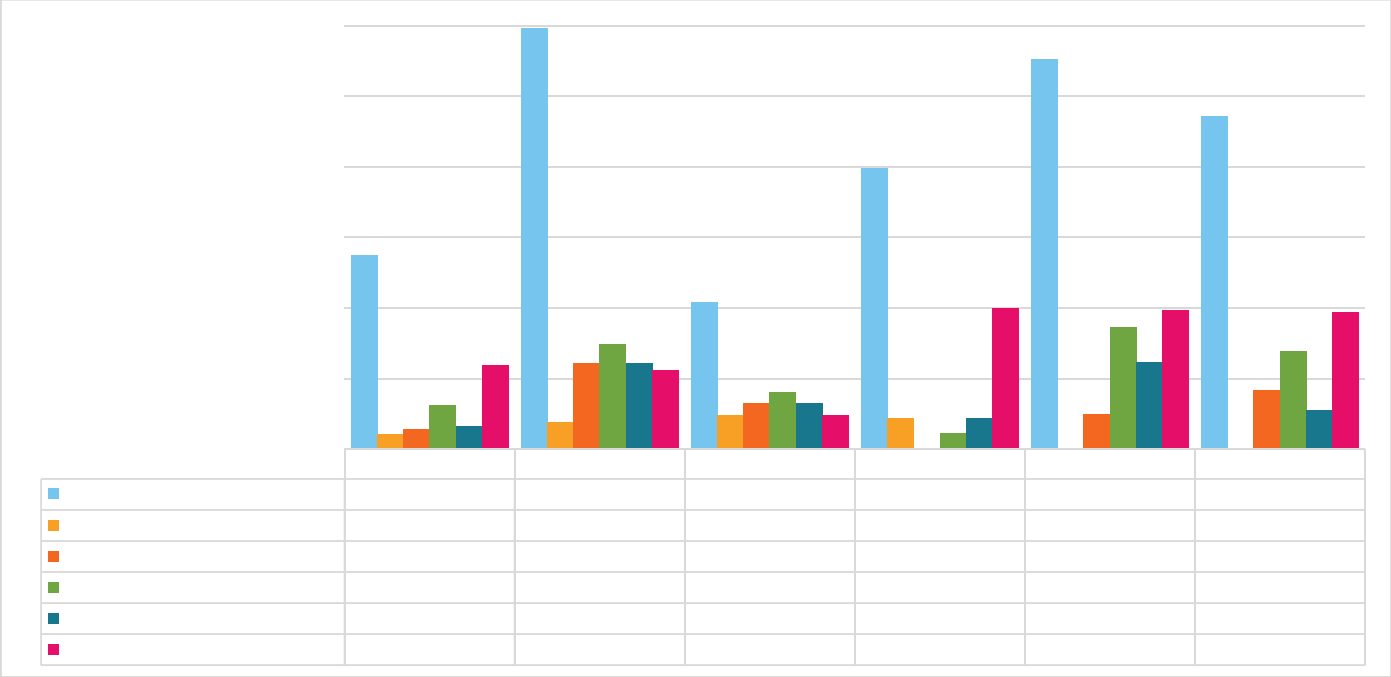


Figure 26 Drug Overdose Mortality Rates (per 100,000 persons) by All Drugs and Drug Type, TJHD Localities, 2007–2018, Total Rate. Source: Virginia Department of Health, Forensic Epidemiology. Accessed 2019.

Photovoice Photo: Louisa Reentry Program

On average, 130 people die every day in the United States from an opioid overdose. In 2017, nationwide, around 68% of drug overdose deaths involved an opioid. The number of drug overdose deaths involving opioids—which includes prescription opioids and illegal opioids such as heroin and fentanyl—was six times higher in 2017 than in 1999.[59] In TJHD, the overdose mortality rate for fentanyl/heroin has been increasing since 2011. In 2017 in TJHD, the overdose mortality rate per 100,000 for fentanyl/heroin was 6.1 compared to 2.1 for prescription opioid overdoses. (Figure 27) In 2017, rates (per 100,000 population) of overdose deaths and emergency room (ER) visits for overdose varied by age (Table 1).

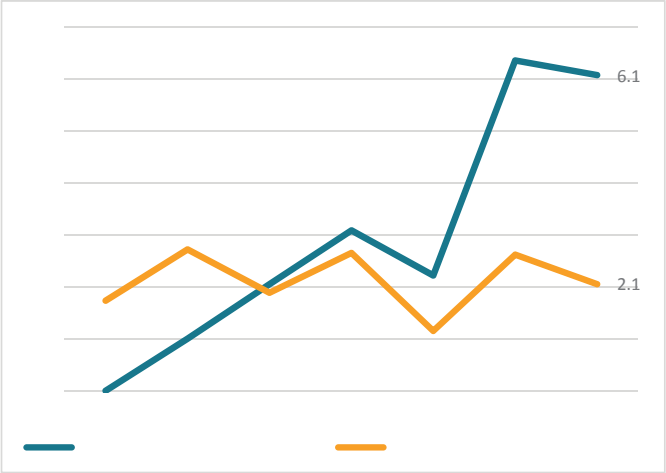


Figure 27 Fentanyl and/or Heroin and Prescription Opioid Overdose Mortality Rates (per 100,000 population), TJHD, 2011–2017. Source: Virginia Department of Health, Opioid Addiction Dashboard. Accessed 2019 at www.vdh.virginia.gov/data/opioid-overdose.

	Overdose Deaths		ED Visits for Overdose	
Age Group	Fentanyl and/or Heroin Overdose	Prescription Opioid	ED Heroin Overdose	ED Opioid Overdose
0–14	0.0	0.0	0.0	51.5
15–24	2.7	2.7	21.3	159.9
25–34	17.7	8.8	67.7	161.9
35–44	17.3	0.0	44.9	148.4
45–54	3.1	0.0	21.7	121.1
55–64	3.0	3.0	5.9	82.7
65+	0.0	2.4	4.7	42.7
All Ages	5.6	2.4	22.0	105.8

Table 1 Overdose Deaths and ED Visits for Overdose Rates by Age Groups (per 100,000 population), TJHD, 2017. Source: Virginia Department of Health, Opioid Addiction Dashboard, 2018. Accessed 2019 at http://www.vdh.virginia.gov/data/opioid-overdose.

7.4.2.6 SUBSTANCE USE HOSPITALIZATIONS

In 2016, TJHD (131.5) experienced higher rates of hospitalizations per 100,000 population for alcohol-related disorders than the state (98.0). For opioid-related disorders, TJHD (13.5) had lower rates of hospitalizations than Virginia (22.1). A TJHD rate was not available for other psychoactive substance-related disorders but the state rate was 9.4. (Figure 28)

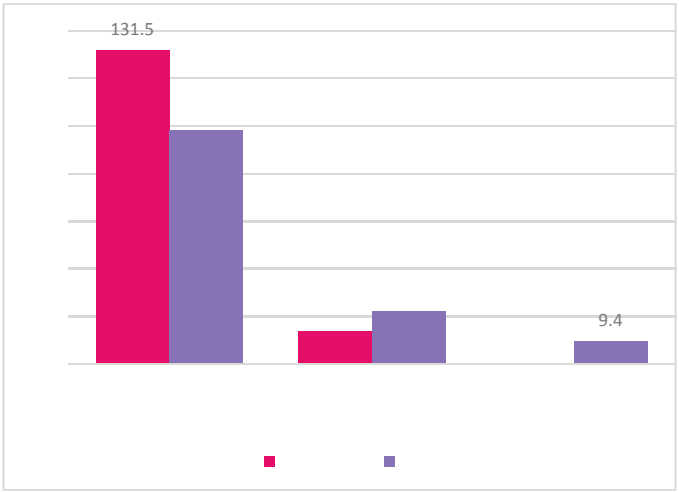


Figure 28 Substance Use Hospitalizations, TJHD and VA, 2016. Source: Source: Community Health Solutions, 2018 Behavioral Health Atlas. Accessed 2019.

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7.5 | MAPP PRIORITY: REDUCE HEALTH DISPARITIES AND IMPROVE ACCESS TO CARE

7.5.1 Access to Care

Access to care refers to "the ease with which an individual can obtain needed medical services."[1] There are three components to access to care: coverage, services, and workforce. Coverage refers to gaining entry into the health care system, usually achieved through health insurance. Services refers to having access to the appropriate recommended screening and prevention services, while workforce refers to the number of providers available.[2] There are many barriers to accessing healthcare such as systems that are difficult to navigate and include services segmented between various providers and practices; lack of health insurance; the cost of services and treatment (with or without insurance); availability of providers either due to high demand or geographic location; and the ability to find a trusted provider who is easy to communicate with.

Having health insurance is one important way to gain better access to the healthcare system. With or without insurance, having a primary care provider (PCP) or medical home is the first step in addressing health problems before they start. A relationship with a medical home is associated with better health, lowered healthcare costs, and a reduction in health disparities.[3, 4]

Several groups are at disproportionate risk for being uninsured, lacking access to care, and therefore experiencing worse health outcomes including people who are low-income, black, and/or Hispanic.[5, 6]

7.5.1.1 GENERAL HEALTH

Self-rated health is a widely accepted measure of good health among people without cognitive impairments. This measure is used to gauge and investigate the potential effects of health constructs, physical health, sociodemographic, and psychosocial variables on overall well-being. Studies have found that self-rated health is moderately associated with physicians' assessments of health. Since self-rated health is a subjective measure that relies on internal perceptions and priorities, it should only be interpreted within a larger health context.[7]

The TJHD Community Health Survey asked respondents to gauge their general health by asking the common question, "In general, would you say your health is…" Roughly 22–41% of respondents in all localities reported their health to be "very good." Charlottesville (33.7%) had the highest percentage of people reporting excellent health. Less than 10% of people reported their health to be "poor" among all localities. For all bars in the figure, the thin gray lines with caps on the top and bottom represent the +/- margins of error. (Figure 1)

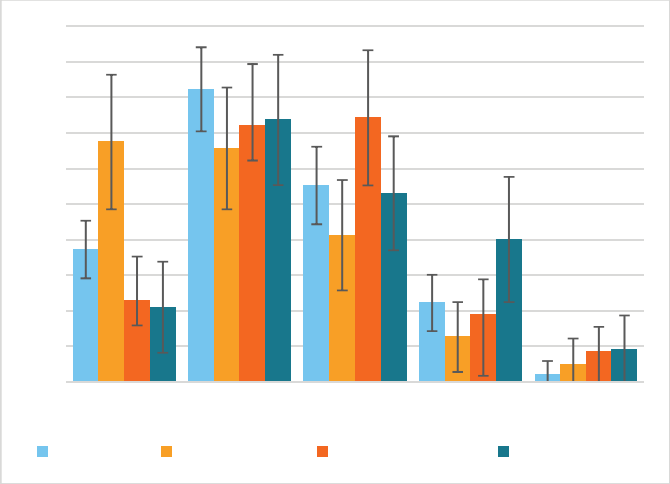

Figure 1 General Health, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.5.1.2 HEALTH INSURANCE IN VIRGINIA AND THE UNITED STATES

Health insurance coverage greatly impacts access to healthcare. Sources of health insurance include employer-based private coverage, private policies purchased directly by individuals, and government-provided or subsidized coverage through programs such as Medicaid and Medicare.

There are various health insurance programs available for children and adults in Virginia who do not have employer-based private coverage or private policies. Eligibility is typically based on a scale built around the Federal Poverty Level (FPL), which is set annually by the United States Department of Health and Human Services. FPL varies based on family size. Figure 2 provides general income eligibility based on a percentage of the FPL for the different types of coverage available.[8]

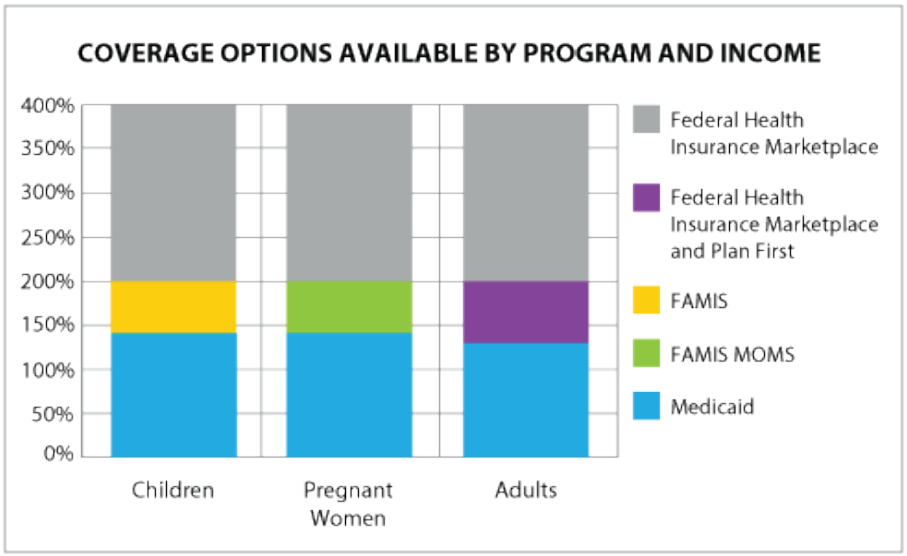

Figure 2 Virginia Health Insurance Coverage Options Available by Program and Income. Source: Virginia Department of Medical Assistance Services. Available at https://www.coverva.org/eligibility/. Accessed 2019.

7.5.1.2.1 Virginia Health Insurance for Children

Virginia has two state health insurance programs available for qualifying children. FAMIS is the name of Virginia's health insurance program for uninsured children while FAMIS Plus is Virginia's name for children's Medicaid. Qualifying children are enrolled in either FAMIS or FAMIS Plus, depending on eligibility. For additional information and eligibility criteria in a variety of languages, visit www.coverva.org. To apply online, log on to www.commonhelp.virginia.gov. Applicants can also apply in-person at their local department of social services.[9]

7.5.1.2.1.1 Virginia Coverage for Former Foster Care Youth

In Virginia, Medicaid coverage is available for qualifying former foster care youth who are under age 26 and were receiving Medicaid and foster care services as of their 18th birthday. For additional information and eligibility, visit www.coverva.org. To apply online, log on to www.commonhelp.virginia.gov. Applicants can also apply in-person at their local department of social services or by calling the Cover Virginia call center at 1-855-242-8282.[10]

7.5.1.2.2 Virginia Coverage for Pregnant Women

Virginia also has two state health insurance programs for qualifying pregnant women. Both programs provide full coverage benefits while a woman is pregnant

and for two months following the birth of her baby. FAMIS Moms provides comprehensive healthcare including dental benefits and breastfeeding support. Medicaid is also available for low-income pregnant women in Virginia. To review eligibility criteria for these programs, visit https://www.coverva.org/eligibility/.[11]

7.5.1.2.3 Medicaid Expansion in Virginia

As of January 1, 2019, thousands of Virginians ages 19–64 gained access to health coverage through Medicaid expansion in Virginia. Prior to 2019, Medicaid was primarily available to adults 65+, individuals with disabilities, pregnant women, and some parents and caregivers meeting specific income thresholds. Medicaid is now available to qualifying adults that are at or below 138% of the FPL. In addition, men and women may be eligible for the limited benefit program Plan First, which is Virginia's family planning program for men and women. Plan First offers services such as yearly family planning exams, contraceptives, lab testing, and family planning education.[12]

7.5.1.2.4 Virginia Hospital Presumptive Eligibility

Virginia also has a temporary short-term Medicaid coverage program, called Hospital Presumptive Eligibility (HPE), where hospitals may be able to enroll qualifying individuals based on income and non-financial eligibility for the following coverage groups:

- An individual aged 19–64, not on Medicare with income at or below 138% of poverty
- A parent or caretaker relative of a child or children in the home under age 18 or 19 if the child remains in school
- A pregnant woman
- A child under age 19
- An individual under 26 who was a former foster care child
- A person who has been diagnosed with breast or cervical cancer
- A person eligible for limited Medicaid benefit for family planning coverage only

For longer-term coverage or to apply for HPE, visit https://www.coverva.org/apply/.[13]

7.5.1.2.5 Coverage for Veterans

Many veterans are eligible for healthcare through the United States Department of Veterans Affairs. To learn more and explore eligibility, visit https://www.va.gov/health-care/. To apply, visit https://www.va.gov/health-care/how-to-apply/.

Virginia also has a Virginia Veteran and Family Support Program through the Virginia Department of Veterans Services that can provide assistance with navigating Veterans Affairs services and other resources. For free assistance, call 1-877-285-1299 or 804-371-4675 or visit https://www.dvs.virginia.gov/virginia-veteran-and-family-support-2.[14]

7.5.1.2.6 Medicare

Medicare is a federal health insurance program for people who are 65 years or older, certain younger individuals with disabilities, and people with end-stage renal disease. Medicare Part A provides hospital insurance, Part B provides medical insurance, and Part D provides prescription drug coverage. Medicare Advantage, or Part C, is a "bundled" plan that usually includes Parts, A, B, and D. For more information, visit https://www.medicare.gov/.[15]

7.5.1.3 SOURCES OF HEALTH INSURANCE

For the American Community Survey, the Census Bureau collects data about different types of health insurance coverage and broadly classifies insurance as private or public. Private health insurance includes employer-based (or union) health insurance, direct-purchase health insurance, and TRICARE or other military health coverage. Public coverage includes federal programs such as Medicaid and Medicare

as well as the Children's Health Insurance Program (CHIP), coverage through Veterans Affairs, and any state-specific health insurance plans.[16]

In the United States in 2017, private health insurance coverage (67.2%) was more prevalent than government coverage (37.7%). By type, employer-based insurance was the most common (56.0%), followed by Medicaid (19.3%), Medicare (17.2%), direct-purchase coverage (16.0%), and military coverage (4.8%).[17]

In TJHD from 2013–2017, among those with insurance, employer-based health insurance was the most common among children under 19 years (55.9%) and adults ages 19 to 64 years (61.5%). The majority of adults who were 65+ had two or more types of insurance (71.5%) or had Medicare coverage only (23.9%) with less than 4% having employer-based health insurance. Adults 19 to 64 years old had the highest percentage of persons uninsured in the district (12.8% with no insurance) followed by children under 19 years (5.8% with no insurance). Persons covered by TRICARE or other types of military health coverage, or by healthcare through Veterans Affairs, are not included in Figure 3, but fall below 2.5% for all three age categories. (Figure 3)

7.5.1.4 UNINSURED

In the United States in 2017, 28.5 million people, or 8.8% of the population, did not have health insurance. Neither the number of people who were uninsured nor the overall percentage of the population who were uninsured saw a statistically significant change between 2016 and 2017.[18] By age, most uninsured people (84.6%) were 19-64 years old and only a very small percentage were 65+ (1.4%). By gender, 54.6% of uninsured people were male, although the total population has more women than men. By race and ethnicity, non-Hispanic white people had the lowest rates of uninsured individuals. By educational attainment, people who did not complete high school made up a larger part of the uninsured population (26.9%) than the overall population (11.8%). By income, people in poverty made up a disproportionate percentage of the uninsured population. Geographically, the uninsured population was disproportionately concentrated in the South.[19] Without insurance, people face barriers to accessing adequate care, including expensive care.[20] Individuals without insurance are less likely to seek preventative care or be able to afford care for major health concerns such as chronic conditions. Without

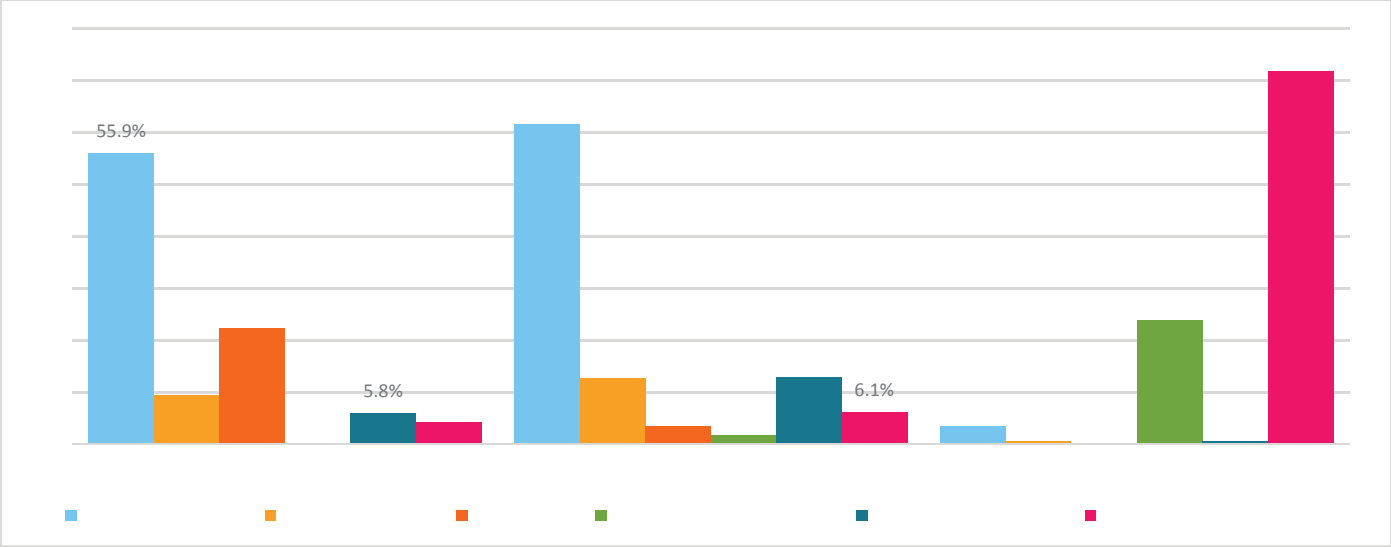

Figure 3 Source of Insurance by Age Group, TJHD, 2013–2017, 5-year Estimate. Source: Census Bureau, American Community Survey. Accessed 2019.

insurance, these conditions can lead to more serious consequences that may affect daily life (e.g. the ability to work).[21]

7.5.1.4.1 Uninsured Adults

The percentage of uninsured adults in TJHD has been decreasing since 2012. In 2016, Greene County (15.4%) had the largest percentage of adults that were uninsured followed closely by Nelson (14.9%) and Louisa (14.6%) Counties. Albemarle County (12.2%) consistently had the smallest percentage of uninsured adults in the district. However, all TJHD localities had a greater percentage of uninsured than in Virginia overall (11.8%) and no TJHD localities qualified for the County Health Ranking's "Top United States Performers"—localities across the nation in the 10th percentile for uninsured (6.0%). (Figure 4)

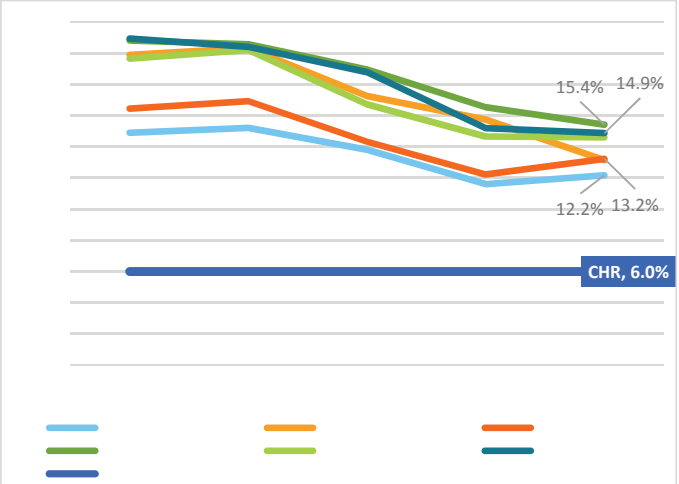

Figure 4 Percentage of Uninsured Adults, TJHD Localities, 2012–2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.5.1.4.1.1 Uninsured Adults by Race

Black and Hispanic individuals consistently have lower rates of health insurance coverage as compared to non-Hispanic white individuals.[22] By race and ethnicity, in 2017 in the United States, non-Hispanic white persons had the lowest uninsured rate (6.3%), followed by Asians (7.3%), and black persons (10.6%). Hispanics had the highest uninsured rate (16.1%).[23]

From 2013–2017 in TJHD, persons that identified as Hispanic (27.7%) had the largest percentage of uninsured persons. Persons that identified in other racial categories (17.5%)—including Native Hawaiian/Other Pacific and American Indian/Alaska Native—and as black (16.0%) had the next largest percentage of uninsured persons. White individuals (9.4%) had the smallest percentage of uninsured persons in the district. (Figure 5)

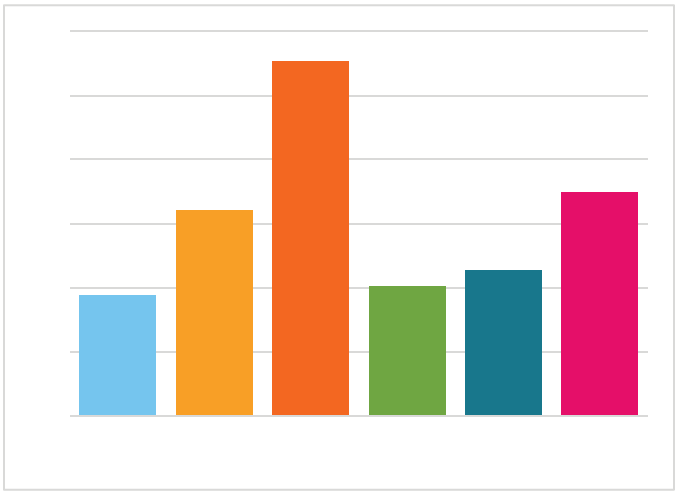

Figure 5 Percentage of Uninsured Persons by Race, TJHD, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

Photovoice Photo: Louisa Reentry Program

7.5.1.4.2 Uninsured Children

In the United States in 2016, the percentage of uninsured children under age 19 was 5.4%, which was not statistically different from the percentage in 2015. The uninsured rate was higher for children in poverty than for children not in poverty.[24]

In 2016, Fluvanna County (5.5%) had the smallest percentage of uninsured children in the district followed by Charlottesville (5.8%). Nelson County (8.0%) had the largest percentage of uninsured children. Similar to uninsured adults, all TJHD localities had a greater percentage of uninsured children than in Virginia overall (4.9%). (Figure 6)

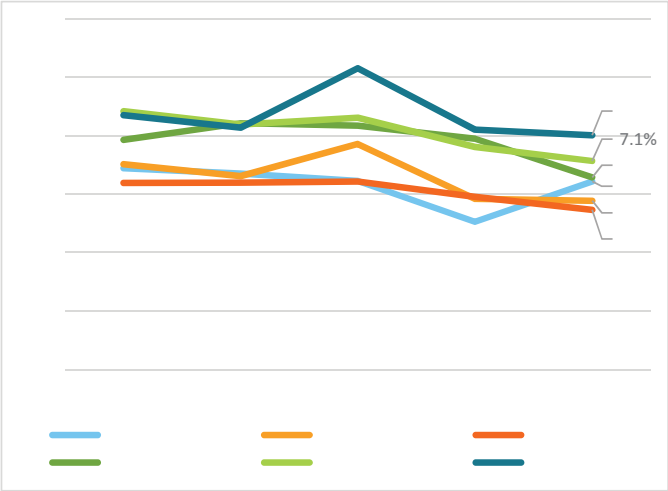

Figure 6 Percentage of Uninsured Children, TJHD Localities, 2012–2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.5.1.5 VIRGINIA MEDICAID EXPANSION

As of January 1, 2019, thousands of Virginians ages 19–64 were newly eligible to access health coverage through Medicaid expansion in Virginia. In Virginia, 45% of new Medicaid enrollees are 19 to 34 years old, followed by 39% being 35–54 years of age.[25] As of April 19, 2019, in TJHD, 6,821 new adults were enrolled in Medicaid. This will most likely decrease the number of uninsured adults in TJHD (and Virginia) when uninsured data are updated to include 2019 numbers. (Table 1)

7.5.1.6 PRIMARY CARE PROVIDER AVAILABILITY

Primary care physicians are the first line of comprehensive contact and continuation of care that a person with undiagnosed signs, symptoms, or health concerns sees. Primary care physicians oversee preventive, chronic, and acute care in both inpatient and outpatient settings.[26] There is an uneven distribution of primary care physicians in the United States. In rural areas, there is a shortage of primary care physicians, with only 39.8 physicians per 100,000 compared to 53.3 physicians per 100,000 in urban areas.[27]

When reviewing the ratio of primary care providers (PCP) available to patients, there are differences between TJHD localities. In TJHD in 2018, only Charlottesville and Albemarle had a primary care provider-to-population ratio that fell within the "Top United States Performers" according to County Health Rankings (localities in the 90th percentile across all counties and cities). In 2018, Charlottesville had the vast majority of primary care providers in TJHD; for every 100 providers in the district, 48 served Charlottesville. Albemarle had the second highest access to PCPs with 26 out of 100 providers serving Albemarle County. Although Nelson County has the smallest population in the district, it had the third highest access to PCPs,

Locality	# of New Adult Enrollees
Albemarle	2,084
Charlottesville	1,473
Fluvanna	668
Greene	659
Louisa	1,341
Nelson	596
TJHD	6,821

Table 1 Number of New Adult Medicaid Enrollees, TJHD Localities and TJHD, 2019. Source: Department of Medical Assistance Service, Expansion Dashboard. Accessed 2019.

with 15 out of every 100 providers serving Nelson County. Fluvanna, Greene, and Louisa Counties had the lowest access to primary care providers, with Louisa County being served by only 2 out of every 100 providers. (Figure 7)

Figure 7 Distribution of Primary Care Providers by Locality for Every 100 Primary Care Providers Available, TJHD Localities, 2018. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.5.1.7 PRIMARY CARE UTILIZATION AND BARRIERS

7.5.1.7.1 Having a Personal Doctor

In 2018 throughout TJHD, over 47% of people in every locality reported having at least one personal doctor. Greene & Nelson Counties had the smallest percentage of people reporting having a PCP (47.9%), but the largest percent of people reporting having more than one PCP (32.7%). When combining all respondents who indicated they had a personal doctor, Albemarle County and Fluvanna & Louisa Counties both met the Healthy People 2020 target of 83.9% of people having a usual primary care provider. (Figure 8)

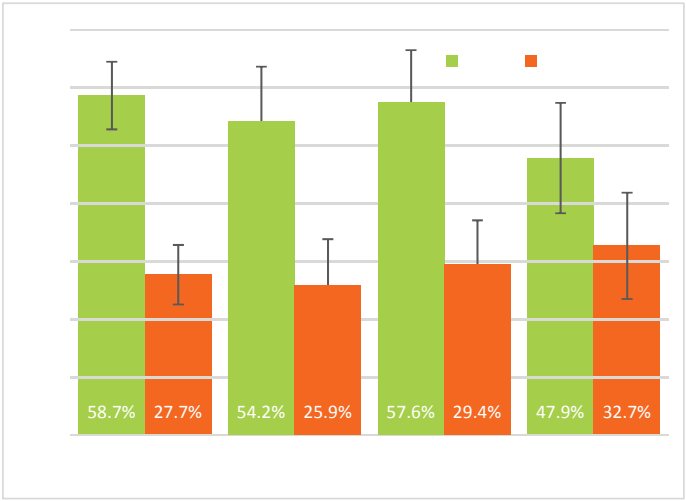

Figure 8 One or More Personal Doctors or Healthcare Providers, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

7.5.1.7.2 Where People Turned When Sick or Needing Health Advice

In 2018, the majority of people in TJHD (74.2%) sought assistance from a doctor's office or a health maintenance organization (HMO) when they were sick or needed advice about health. Roughly 20% of people in TJHD reported usually going to a clinic or health center and less than 6% of the population reported going to a hospital emergency room. (Figure 9)

7.5.1.7.3 Unable to Get Necessary Medical Care

In 2018, Fluvanna & Louisa Counties (15.5%) had the greatest percentage of people unable to get necessary medical care such as tests or treatments. Charlottesville (8.4%) had the smallest percentage of people unable to get necessary medical care followed by Albemarle County (10.4%). However, no TJHD localities came close to the Healthy People 2020 target of 4.2% or fewer of people unable to get necessary medical care or experiencing a delay in care. (Figure 10) Across the district, the most common reason people reported being unable to receive necessary medical care was cost (54.2%) followed by limited availability of appointments (28.8%). (Figure 11)

7.5.1.8 DENTAL CARE

Oral health is a good predictor of health. Oral hygiene is important for overall health as well as for teeth, gums, and mouth health. The mouth serves as a defense mechanism against bacteria and viruses that can harm the body, and many systemic conditions like AIDS and diabetes can be detected first in the mouth.[28] Accessing oral healthcare is dependent on factors such as insurance, treatment costs, availability of providers, and individual attitudes towards dental care (e.g. fear of dentists).[29] In the United States, there are disparities in dental health outcomes, especially for non-Hispanic black, Hispanic, and American Indian populations. Disparities include high rates of dental disease and less frequent preventive dental care. Potential policies to address these disparities include expanded access to dental insurance, improved Medicaid financing

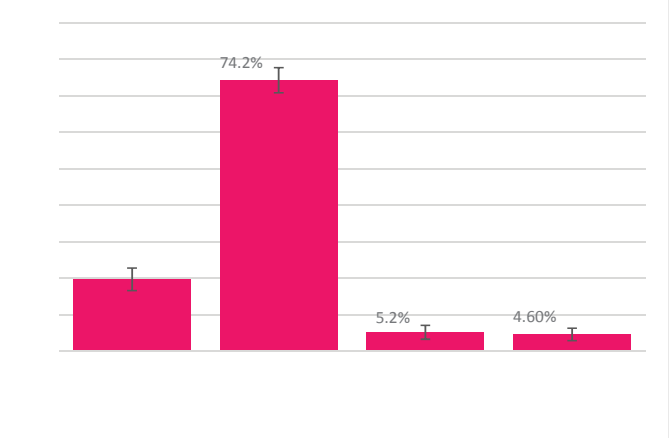

Figure 9 Most Common Place to Go When Sick, TJHD, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

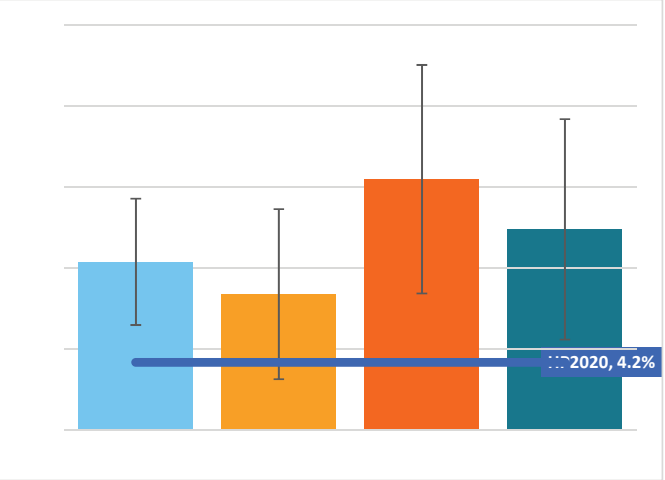

Figure 10 Percentage Unable to Get Necessary Medical Care, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

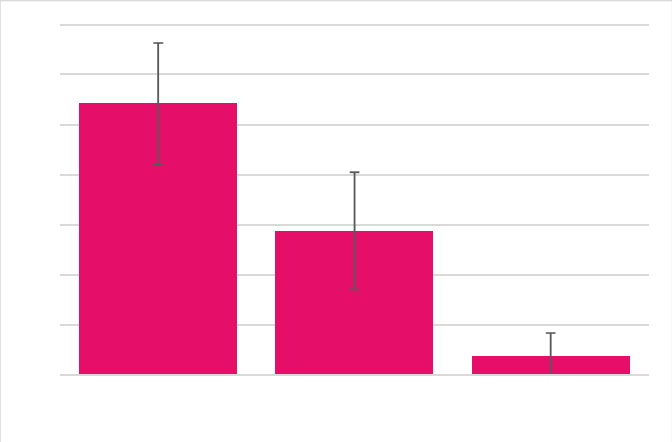

Figure 11 Most Common Reasons Unable to Receive Necessary Medical Care, TJHD, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

so that more dental providers accept Medicaid, training for dental professionals around providing services to patients of diverse backgrounds, a more culturally and linguistically diverse dental workforce, and expanded public health programming (e.g. water fluoridation).[30, 31]

7.5.1.8.1 Dental Provider Availability

When reviewing the ratio of dentists available to patients, some localities have less access to dentists than others. In TJHD in 2018, only Charlottesville and Albemarle had a dentist-to-population ratio that fell within the "Top United States Performers" according to County Health Rankings (localities in the 90th percentile across all counties and cities). When reviewing the ratio of dentists available to patients, some localities had less access than others. In 2018, although Charlottesville had the vast majority of primary care providers and mental health providers in the district, Albemarle County had the most access to dentists; for every 100 dental providers in the district, 36 served Albemarle County while 30 out of 100 providers served Charlottesville. Although Nelson County has the smallest population in the district, it had the third highest access to dentists, with 17 out of 100 providers serving Nelson County. Greene and Fluvanna had the lowest access to dentists with only 4 out of 100 providers serving Greene and Fluvanna (respectively). (Figure 12)

Figure 12 Distribution of Dental Providers by Locality for Every 100 Dental Providers Available, TJHD Localities, 2018. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.5.1.8.2 Unable to Receive Necessary Dental Care

In TJHD in 2018, roughly 10–15% of people were unable to receive necessary dental care. Charlottesville (14.4%) had the largest percentage of people unable to receive necessary dental care, followed closely by Fluvanna & Louisa Counties (13.7%) and Albemarle County (13.2%). Greene & Nelson Counties (10.0%) had the smallest percentage. The margins of error for this data range from +/-2.9% to +/-7.2%. However, no TJHD localities came close to the Healthy People 2020 target of 5.0% or fewer of people unable to get necessary dental care or experiencing a delay in care. (Figure 13) Of those in TJHD unable to receive the necessary dental care, the vast majority reported cost reasons (81.1%) (Figure 14).

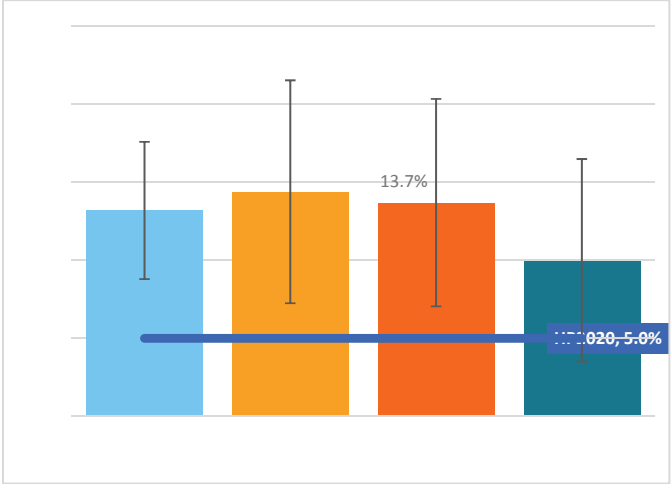

Figure 13 Percentage Unable to Get Necessary Dental Care, TJHD Localities, 2018. Source: Thomas Jefferson District Community Health Survey. Accessed 2019.

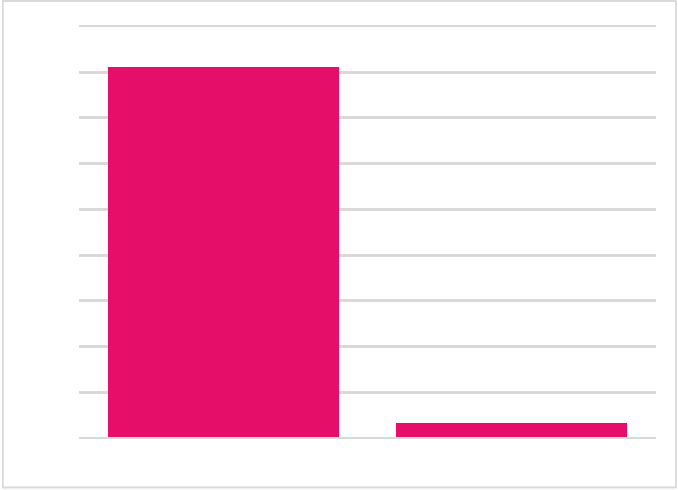

Figure 14 Most Common Reason Unable to Receive Dental Care, TJHD, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.5.1.8.3 Utilization of Dental Care

7.5.1.8.3.1 Youth Dental Care Utilization in Virginia

In 2017 in the United States, the majority of high school students (75.7%) had seen a dentist for a check-up, exam, teeth cleaning, or other dental work during the 12 months before the survey. By race and ethnicity, 64.5% of black students, 71.6% of Hispanic students, and 80.8% of white students had seen a dentist.[32]

The 2017 Virginia Youth Risk Behavior Survey found that 76.1% of high school students in Virginia had seen a dentist in the 12 months before the survey. By race and ethnicity, students that identified as black (66.6%) had the smallest percentage of students receiving dental care in the past 12 months followed closely by Hispanic/Latino students (68.0%). (Figure 15)

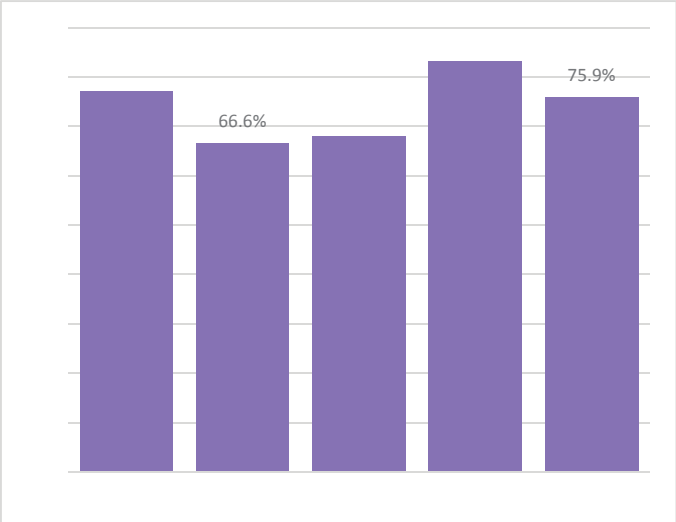

Figure 15 Percentage of Virginia High School Students Who Saw a Dentist in Last 12 Months by Race, VA, 2017. Source: Virginia Youth Risk Behavior Survey. Accessed 2019.

7.5.1.8.3.2 Adult Dental Care Utilization

In 2018, Fluvanna & Louisa Counties (61.3%) reported the smallest percentage of people having received a dental cleaning in the past 12 months, followed by Greene & Nelson Counties (66.4%) and Charlottesville (70.8%). Albemarle County (77.7%) had the largest percentage of people having received a dental cleaning in the past year. (Figure 16)

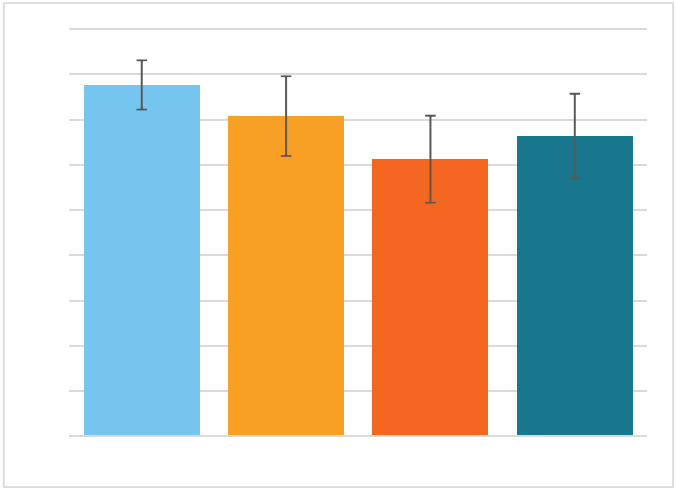

Figure 16 Percentage of Adults Having a Dental Cleaning in Last 12 Months, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.5.2 Health Disparities

Health disparities are "differences in health outcomes and their causes between groups of people as the result of social, demographic, environmental or geographic differences."[33] More specifically, "health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion."[34]

While information on health disparities is included throughout this report, the following section highlights several data indicators with specific disparities.

"When it comes to health, your zip code matters more than your genetic code." [35]

—Dr. Tony Iton

7.5.2.1 OPPORTUNITY ATLAS

The Opportunity Atlas measures the economic opportunity of children who grow up in America at a neighborhood level. The Atlas maps average outcomes (e.g. income, employment, educational attainment, teen births, incarceration, etc.) based on the neighborhood where children grew up, not where they live as adults. To map outcomes and neighborhood characteristics for a particular neighborhood or locality overall, or by demographic sub-groups such as race, gender, and parental income, visit https://www.opportunityatlas.org/. (Figure 17)

7.5.2.2 LIFE EXPECTANCY

Where you live (zip code) can have a bigger impact on life expectancy and state of health than your genetic code. People living only a neighborhood apart may have substantially different opportunities to live a long, healthy life.[36]

Life expectancy at birth is a key population health measure used to gauge health and longevity. Over the 20th century and continuing through the present, there has been an increase in overall life expectancy due to factors such as vaccinations, improved motor-vehicle safety, and safer workplaces, etc. However, Americans are living shorter lives compared to people in other developed countries because of local geographic disparities.[37] Studies suggest these local place-based disparities may be driven by factors such as healthcare access; socioeconomic factors; and environmental, behavioral, and physiological

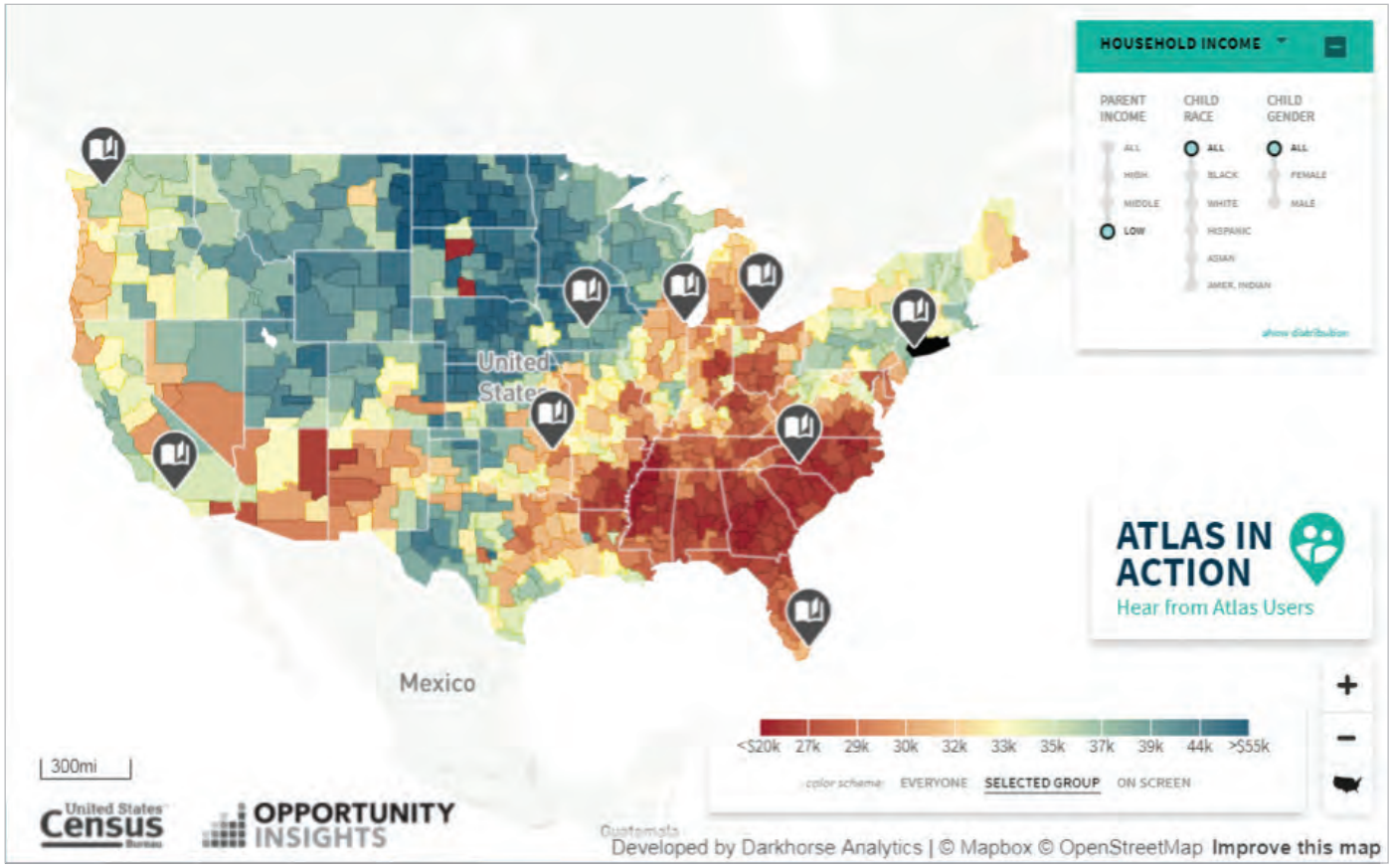

Figure 17 Household Income of Children in Adulthood by Neighborhood Where They Grew Up, for Children with Low-Income Parents, U.S., 2014–2015. Source: Opportunity Atlas. Available at https://www.opportunityatlas.org/. Accessed 2019.

risk factors.[38] Research has found that disparities in life expectancy can also be attributed to financial factors. Income distribution affects life expectancy; specifically, low-income individuals have lower life expectancy than high-income individuals.[39]

7.5.2.2.1 Mapping Life Expectancy

From 2008–2012, the estimated life expectancy at birth for TJHD was 80.6 years old. Disparities existed by both gender and race. The estimated life expectancy for TJHD's non-Hispanic white population was 81.2 years of age while the estimated life expectancy for TJHD's black population was 74.7 years of age. By gender, the life expectancy estimate for TJHD's female population was 82.8 years old, while the estimate for TJHD's male population was 78.3 years old. (Table 2)

From 2008–2012, the estimated life expectancy at birth varied across TJHD by census tracts. Census tracts shaded dark red had the lowest estimated life expectancy moving through orange, yellow, and light green to dark green, which indicates the highest estimated life expectancy. In TJHD, census tracts in Albemarle County had the highest life expectancy (84.4 years old) as indicated by the dark green tracts; Albemarle overall had high life expectancy with almost exclusively light green and dark green tracts. A census tract in Charlottesville had the lowest life expectancy (73.6 years old; red shading) while several tracts in southern Nelson and Fluvanna as well as Charlottesville had lower life expectancies (orange shading). (Figure 18) Charlottesville census tracts

Grouping	Life Expectancy (Age in Years)	Standard Error	95% Confidence Interval (Lower)	95% Confidence Interval (Upper)
TJHD (all)	80.6	0.1	80.3	80.9
White alone, Non-Hispanic	81.2	0.2	80.9	81.6
Black alone	74.7	0.4	73.9	75.6
Female	82.8	0.2	82.4	83.1
Male	78.3	0.2	77.9	78.7

Table 2 Life Expectancy Estimates at Birth by Race and Gender, TJHD, 2008–2012. Source: Thomas Jefferson Health District, 2018. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

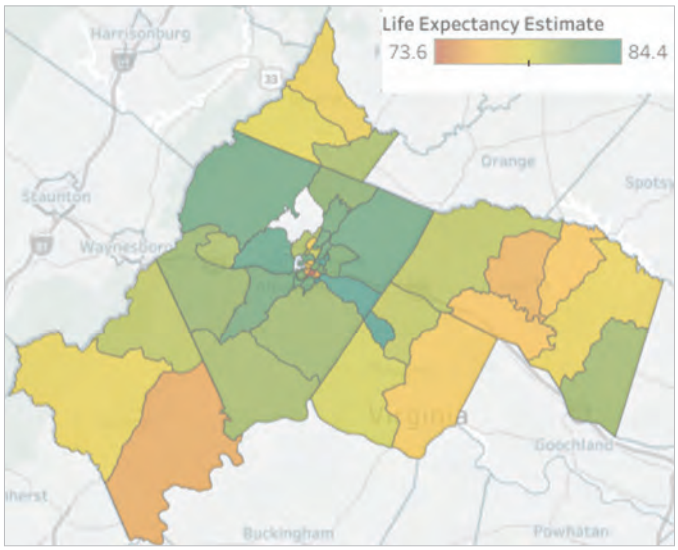

Figure 18 Life Expectancy Estimates at Birth, TJHD Census Tracts, 2008–2012. Source: Thomas Jefferson Health District, 2018. Accessed 2019

are also shown with neighborhood names overlaid to assist with geo-location. The area labeled as Ridge Street includes the Friendship Court Apartments and had the lowest estimated life expectancy in the district (73.6 years old; red shading), while neighboring Fifeville and Belmont tracts also had lower life expectancy (orange shading). The Rose Hill and 10th & Page tracts were combined in order to produce an estimate and also had a relatively low life expectancy, as indicated by the yellow shading; these tracts include Westhaven, a public housing community as well as a relatively high proportion of UVA students. (Figure 19)

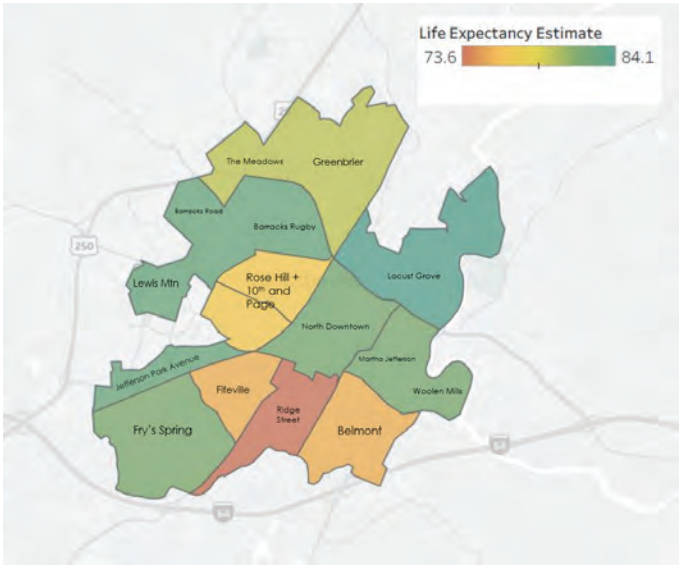

Figure 19 Life Expectancy Estimates at Birth, Charlottesville Census Tracts, 2008–2012. Source: Thomas Jefferson Health District, 2018. Accessed 2019.

7.5.2.2.1.1 Mapping Life Expectancy Methodology

In 2018, TJHD's Data Analyst completed a life expectancy mapping project for TJHD by census tract. TJHD used death certificates from the Virginia Department of Heath's Division of Vital Statistics.

Due to the need to have exact population counts for the life expectancy calculations to be reliable, the project used 2008–2012 death certificate data to cover a 5-year span around the 2010 Census. There were 10,447 death certificates for this period and each year had complete address information. Of the 10,447 death certificates for 2008–2012, 8,541 were in TJHD boundaries, 1,832 were not within TJHD, and 74 were not able to be matched to a census tract.

TJHD consulted a variety of life expectancy methodologies[40, 41, 42, 43, 44, 45, 46, 47] and ultimately followed the CDC's SCALE methodology, including participating in several SCALE conference calls. For more information, visit https://www.cste.org/page/SCALE. TJHD also consulted Dr. Derek Chapman at Virginia Commonwealth University's Center on Society and Health. For more information on life expectancy maps for cities across the United States, visit https://societyhealth.vcu.edu/work/the-projects/mapping-life-expectancy.html.

TJHD consulted with CDC SCALE participants and Dr. Chapman regarding appropriate censoring criteria for certain census tracts and used the following criteria to either censor or combine tracts:

- Fewer than 5,000 person years at risk
- Fewer than 60 deaths over the time period
- Standard error over 2
- 10 or more age categories with zero deaths
- 30% or more of the population lives in group quarters, or skewed age distribution

Based on these criteria, the following census tracts were censored completely:

- 102.02 in Albemarle County (10 age categories with zero deaths)
- 109.01, 109.02, & 109.03 (Census tracts comprising UVA grounds; had 12–18 age categories with zero deaths and heavily skewed age distributions)

The following census tracts were combined and the estimate shown for each is a combined estimate:

- 106.01 and 106.02 in Albemarle County (106.02 had fewer than 60 deaths)
- 113.02 and 113.03 in Albemarle County (both had fewer than 60 deaths)

- 2.01 and 2.02 in Charlottesville (2.01 had fewer than 60 deaths, both had heavily skewed population distributions)
- 6 and 7 in Charlottesville (6 had fewer than 60 deaths, both had heavily skewed population distributions)

7.5.2.3 PREMATURE MORTALITY

As opposed to overall mortality, premature mortality focuses on deaths that could have been prevented. Calculations for overall mortality are dominated by deaths in older age while calculations such as years of potential life lost (YPLL) weighs death in younger ages more heavily.[48] County Health Rankings uses YPLL to calculate a premature age-adjusted mortality rate, which shows that from 2015–2017, Nelson County (416 premature deaths per 100,000 persons) had the highest premature mortality rate in TJHD. Albemarle County had the lowest premature mortality rate with only 210 premature deaths per 100,000 persons. (Figure 20)

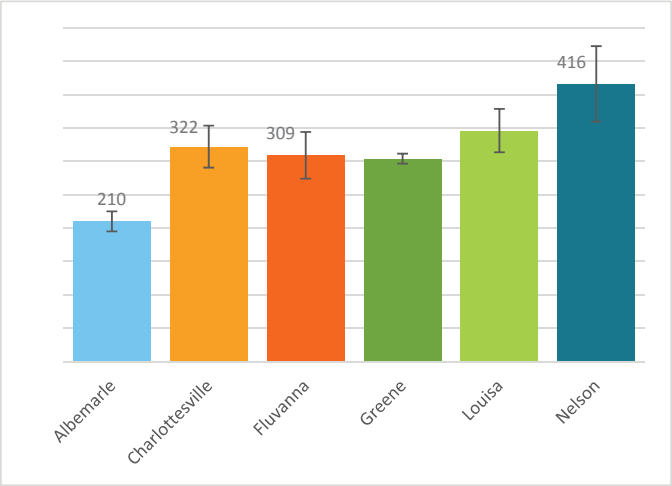

Figure 20 Premature Age-Adjusted Mortality Rate (per 100,000 persons), TJHD Localities, 2015–2017. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.5.2.3.1 Premature Mortality by Race

When looking at premature mortality in TJHD by race, from 2015–2017, with the exception of Nelson County, black residents had higher premature mortality rates than white residents. Charlottesville had the largest difference in premature mortality rates between black (516 premature deaths per 100,000 persons) and white residents (278 premature deaths per 100,000 persons), a difference of 238 deaths per 100,000 people. Data are not available for Greene County; per County Health Rankings, rates are not reported for counties with fewer than 20 deaths in the three-year period. (Figure 21)

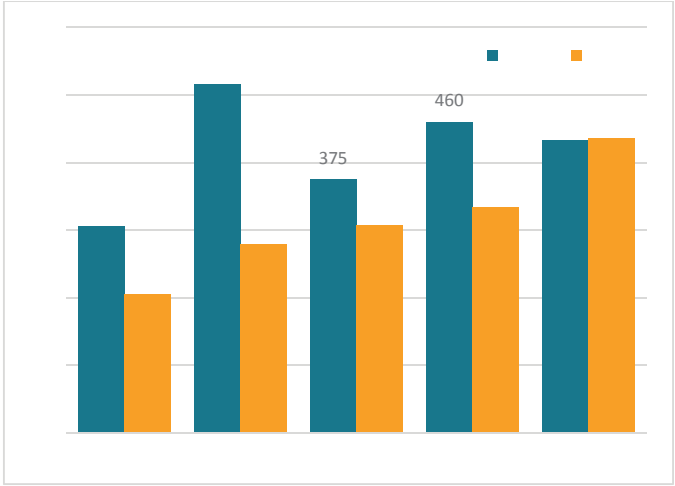

Figure 21 Premature Age-Adjusted Mortality Rate (per 100,000 persons) by Race, TJHD Localities, 2015–2017. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.5.2.4 MATERNAL AND INFANT HEALTH

The well-being of pregnant women and their children influences the health of the next generation and can predict future public health challenges for families, communities, and the healthcare system.

7.5.2.4.1 Preterm Births

Preterm births occur when babies are born before the 37th week of pregnancy. In 2016, one out of every 10 infants in the United States was born preterm. However, the rate of preterm birth among African American women (14%) was much higher than among white women (9%). Additionally, the rate of infant mortality related to preterm birth was highest in black infants.[49] Preterm birth infants, especially those born prior to 32 weeks, have higher rates of death and disability including breathing problems, feeding difficulties, cerebral palsy, developmental delay, and vision and hearing problems.[50, 51] Some

factors associated with greater risk for preterm birth include pregnant women who are teens, over the age of 35, or who are low-income. Other risk factors include prior preterm birth, carrying more than one baby (e.g. twins, triplets), stress, tobacco use, and substance use.[52]

From 2012 to 2017, the percentage of preterm births in TJHD remained consistently lower than the state percentage. TJHD also remained consistently lower than the Healthy People 2020 (HP2020) target of total preterm births at or less than 9.4%; Virginia hovered around the HP2020 target from 2012 to 2017. In 2017, preterm births as a percentage of total births was 8.3% compared to the Virginia percentage of 9.5%. (Figure 22)

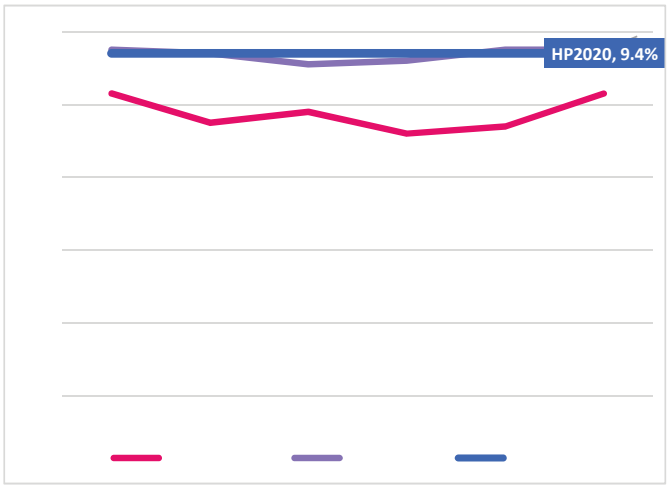

Figure 22 Preterm Births as Percentage of Total Births, TJHD and VA, 2012–2017. Source: Virginia Department of Health, Division of Health Statistics. Accessed 2019.

7.5.2.4.2 Low Birthweight

Birthweight is a predictor of future health.[53] Low birthweight is defined as a baby born weighing less than five pounds, eight ounces. Some babies who are born with low birthweight are healthy, but low birthweight can cause serious health conditions in some babies. Roughly 8% of babies in the United States are born with low birthweight.[54] Risk factors for low birthweight include maternal health, maternal health behaviors, and maternal socioeconomic status.[55] In the United States, black women are twice as likely to have low birthweight babies as white and Hispanic women.[56] These disparities in birth outcomes can only partially be explained by factors such as socioeconomic status (education, income), health behaviors (smoking, drinking), and prenatal care. Thus, researchers, policy makers and advocates have called for more research into how other factors that impact black women, such as experiences of discrimination, may impact birth outcomes.[57]

7.5.2.4.2.1 Low Birthweight by Race

In TJHD, the percentage of low birthweight for black births remained consistently higher than white low birthweights from 2012 to 2017; white low birthweight stayed below the Healthy People 2020 target of 7.8% or less of total births while the black low birthweight exceeded the target in the same period. In 2017, there were 7.0% white low birthweight births and 10.5% black low birthweight births. (Figure 23)

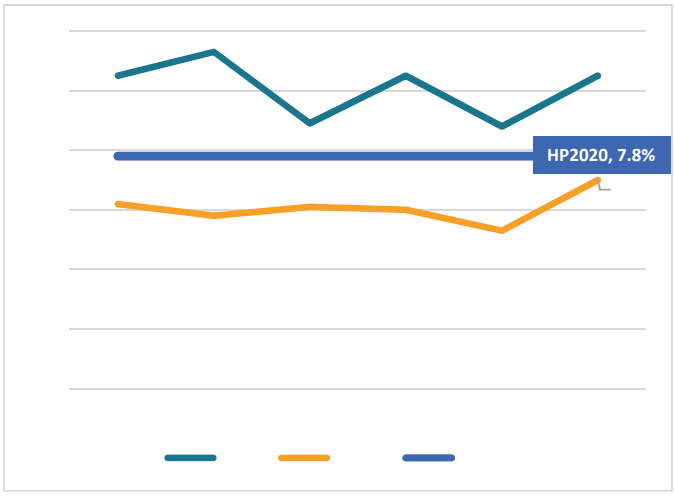

Figure 23 Low Birthweight Births as Percentage of Total Births, TJHD, 2012–2017. Source: Virginia Department of Health, Division of Health Statistics. Accessed 2019.

When looking at low birthweight by race, in 2017, the percentage of black low-birthweight births was higher than white low-birthweight births in four out of six TJHD localities. In Greene and Louisa Counties,

the percentage of white low-birthweight births was roughly 2% greater than black low-birthweight births in 2017. Charlottesville (11.7%) and Albemarle County (11.5%) had the largest percentages of black low birthweight—there was around a 6% difference in black and white low-birthweight births, with white low-birthweight births being a smaller percentage of total births. In 2017, Nelson County had the smallest difference in percentage of low birthweight between black and white births (0.1% difference). (Figure 24)

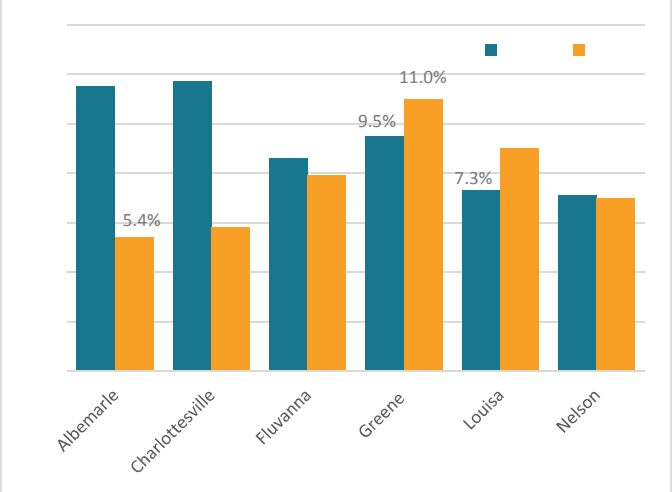

Figure 24 Low Birthweight Births as a Percentage of Total Births by Race, TJHD Localities, 2017. Source: Virginia Department of Health, Division of Health Statistics. Accessed 2019.

7.5.2.4.3 Infant Mortality

Infant mortality is the death of a child before their first birthday. Infant mortality is often used as an indicator of the level of health in a country. The United States has one of the highest infant mortality rates among industrialized countries; in 2017, the Central Intelligence Agency ranked the United States 170th out of the 225 countries included in the study (ranking first indicates the highest infant mortality rate in the world).[58] In the United States in 2017, over 22,000 infants died. The leading causes of death for infants were birth defects, preterm birth and low birthweight, maternal pregnancy complications, sudden infant death syndrome, and injuries.[59]

In 2016 in the United States, by race and ethnicity, the rate of infant mortality (per 1,000 live births) was greatest among non-Hispanic black infants (11.4%), followed by American Indian and Alaska Native (9.4%), Native Hawaiian and other Pacific Islander (7.4%), and Hispanic infants (5.0%). The rate of infant mortality was smallest among Asian (3.6%) and non-Hispanic white infants (4.9%). (Figure 25)

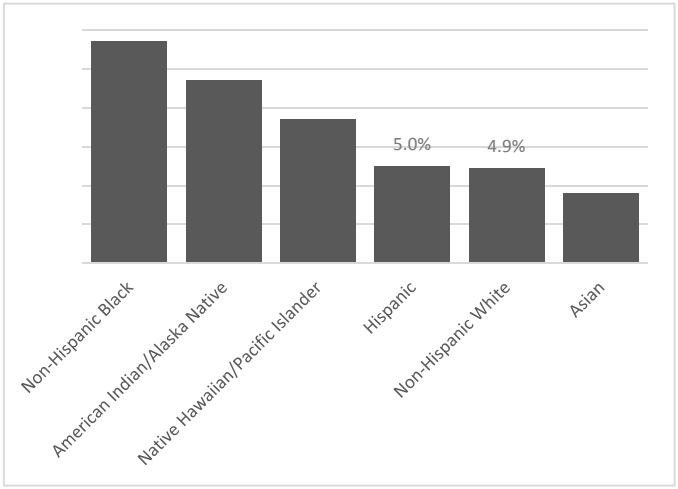

Figure 25 Infant Mortality Rate (per 1,000 Live Births), U.S., 2016. Source: Centers for Disease Control and Prevention. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

Among white women, higher levels of income and education are associated with lower rates of infant mortality. However, these "protective" socioeconomic factors do not provide black women the same benefits. For example, black women who have a doctorate or professional degree have higher infant mortality rates than white women who have never finished high school.[60]

In Virginia in 2017, the overall infant mortality rate was 5.3 per 1,000 live births. However, there were disparities by race as the rate for white infant mortality was 4.4 while the rate for black infant mortality was 9.6.[61] The infant mortality rate per 1,000 live births in TJHD in 2017 was 4.9 infant deaths per 1,000 births. Since 2014, Virginia and TJHD have had a lower infant mortality rate than the Healthy People 2020 target of 6.0 per 1,000 live births. (Figure 26)

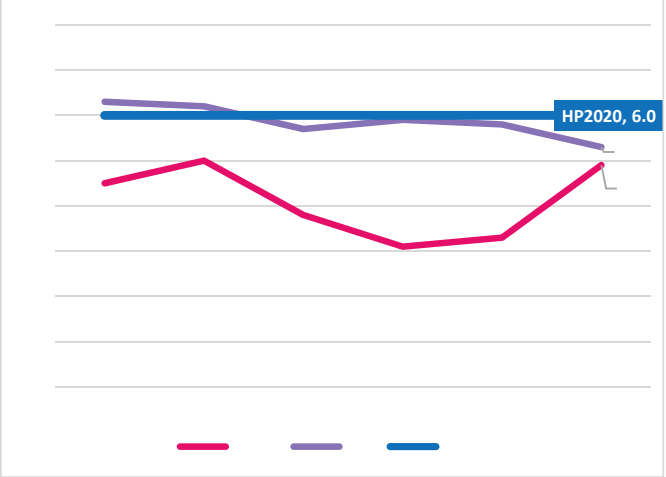

Figure 26 Infant Mortality Rate (per 1,000 Live Births), TJHD and VA, 2012–2017. Source: Virginia Department of Health, Division of Health Statistics, 2017 Report. Accessed 2019.

7.5.2.4.4 Teen Births

Teen pregnancy affects the health and socioeconomic future of mothers and their children.[62] Teens who are pregnant generally have fewer resources available to them while pregnant and for their children after giving birth, which can lead to poor pregnancy outcomes. Babies born to teen mothers are more likely to be born preterm and at a low birthweight. Children born to teens are at greater risk of living in poverty, having lower cognitive attainment, and experiencing behavioral problems. Girls born to teen mothers are themselves more likely to become teen mothers and boys born to teen mothers are more likely to be incarcerated. Teen mothers are less likely to graduate from high school or attain a GED, and earn an average of $3,500 less per year as compared to those who delay childbearing until their 20s.[63, 64] Teen fatherhood is also associated with lower educational attainment and lower income.[65]

A seven-year average from 2011–2017 showed that the birth rate per 1,000 females ages 15–19 years old in TJHD was highest in Louisa County (24 births per 1,000 females) followed closely by Greene County (23 births). Albemarle (6), Charlottesville (15), Fluvanna (14), and Nelson (19) were lower than or equal to the Virginia rate of 19 births per 1,000 females ages 15–19 years. However, only Fluvanna and Albemarle met the County Health Rankings "Top United States Performers," which calculates the tenth percentile of teen births in all localities across the United States as a rate of 14 or fewer births. (Figure 27)

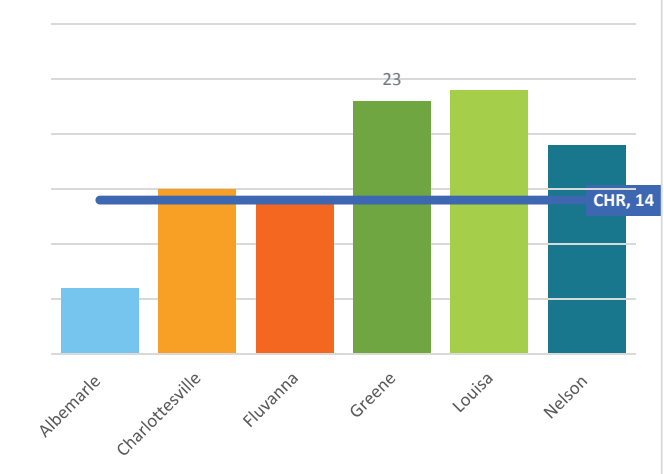

Figure 27 Rate of Teen Births (per 1,000 Females Ages 15–19), TJHD Localities, 2011–2017, 7-year Average. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.5.2.4.4.1 Teen Births by Race

Overall, in the United States, teen birth rates continue to decline and have declined significantly over the past 20 years, especially for black and Hispanic youth. In 1990, the birth rate for black females ages 15–19 was 116.2 but had dropped to 29.3 as of 2016; similarly, for Hispanic females ages 15–19, the rate had dropped from 100.3 in 1990 to 31.9 as of 2016. Although the rates have dropped substantially, there are still disparities as the total teen birth rate was 20.3 nationwide in 2016 and 14.3 for white teen females.[66]

A seven-year average from 2011–2017 generally showed a higher rate of black teen births in the district than white teen births. In Charlottesville, the rate was 29 births per 1,000 black females ages 15–19 and only 9 births per 1,000 white females ages 15–19 with a similar disparity in Albemarle and Fluvanna Counties. Louisa County is the exception to this trend with a rate of 25 for white teens and 16 for black teens. County Health Rankings suppresses rates for counties with fewer than 10 teen births in the seven-year period; consequently, data are not available for Greene and Nelson Counties. (Figure 28)

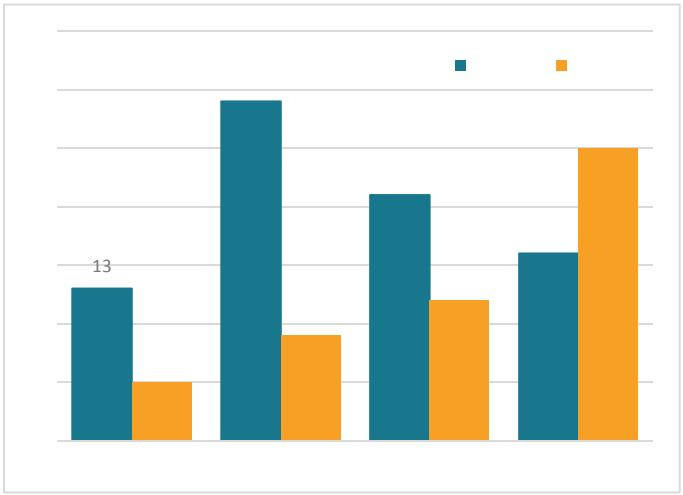

Figure 28 Rate of Teen Births (per 1,000 Females Ages 15–19), by Race, TJHD Localities, 2011–2017, 7-year Average. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.5.2.4.5 Breastfeeding

Breastfeeding provides women with health benefits such as reduced risk for certain types of cancer (ovarian, uterine, and breast), osteoporosis, and high blood pressure. In infants, breastfeeding is protective against infections, Sudden Unexplained Infant Death Syndrome (SUIDS), diabetes, and obesity. Current guidelines recommend exclusive breastfeeding of infants for the first six months after birth with continued breastfeeding for an additional six months or up to two years of age.[67]

Populations with lower rates of breastfeeding include women who are young, low-income, black, unmarried, have lower educational attainment, and/or participate in the Supplemental Nutrition Program for Women, Infants, and Children (WIC). Some barriers to breastfeeding reported by low-income women of color include lack of social, work, and cultural acceptance or support, literacy barriers, and/or lack of access to informational resources.[68]

In Fiscal Year 2018, for infants in the TJHD WIC program, 13.3% of babies were fully breastfed, 11.8% were partially breastfed, and 74.9% were fully formula-fed. (Figure 29)

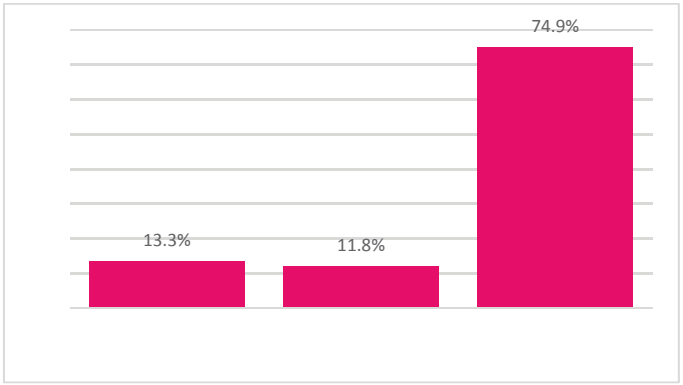

Figure 29 Percentage of TJHD WIC Infant Breastfeeding, TJHD, Fiscal Year 2018 (October 2017–September 2018). Source: TJHD WIC Program. Accessed 2019.

7.5.2.5 Diabetes

Prediabetes is a condition where blood sugar levels are higher than normal, but are not high enough to be diagnosed as type 2 diabetes. Approximately one in three American adults has prediabetes. There are several risk factors that increase the likelihood of prediabetes including being overweight, being 45 years old or older, having an immediate family member (parent or sibling) with type 2 diabetes, and being inactive. Black, Hispanic, American Indian, and some Asian American populations are at higher risk for prediabetes.[69]

Diabetes is a chronic condition in which blood glucose (i.e., blood sugar) levels are too high. Glucose comes from the foods that people eat. There are two main kinds of diabetes—type 1 diabetes where the body doesn't make enough insulin (usually diagnosed in children and young adults) and type 2 diabetes where the body does not make or use insulin well. Type 2 diabetes can develop at any age, but is most likely to occur during adulthood.[70]

7.5.2.5.1 DIABETES DISPARITIES IN THE UNITED STATES

Nationally, there are disparities in the percentage of diagnosed diabetes among racial and ethnic groups. Among adults aged 18 and older, American Indians and Alaska Natives have the largest percentage of diagnosed diabetes (15.1%), followed by Hispanic adults (12.7%) and black non-Hispanic adults (12.1%). White non-Hispanic (7.4%) and Asian adults (8.0%) have the smallest percentage of diagnosed diabetes.[71] (Figure 30)

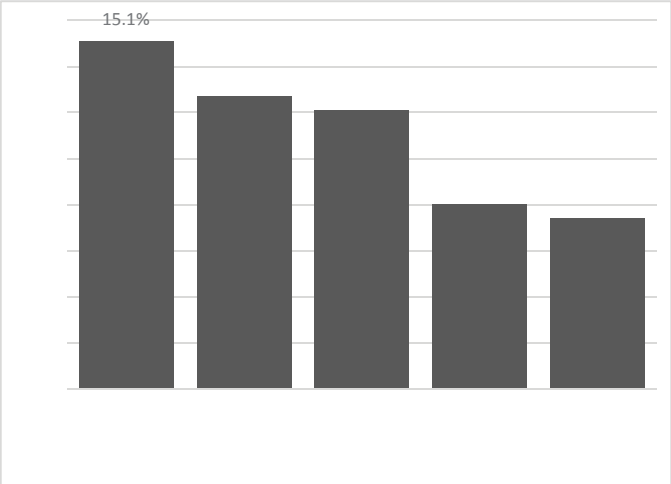

Figure 30 Percentage of U.S. Adults Aged 18 or Older with Diagnosed Diabetes (Age-Adjusted) by Race and Ethnicity, U.S., 2013–2015. Source: Centers for Disease Control and Prevention, 2017 Diabetes Report Card. Accessed 2019.

Photovoice Photo: Louisa Reentry Program

Photovoice Photo: Scottsville and Esmont JABA

Nationally, disparities in percentage of diabetes also exist by education level. Among adults aged 18 and older, persons with less than a high school degree have the largest percentage of diagnosed diabetes (12.6%), followed by persons with a high school degree (9.5%); persons with more than a high school degree have the smallest percentage of diagnosed diabetes (7.2%). (Figure 31)

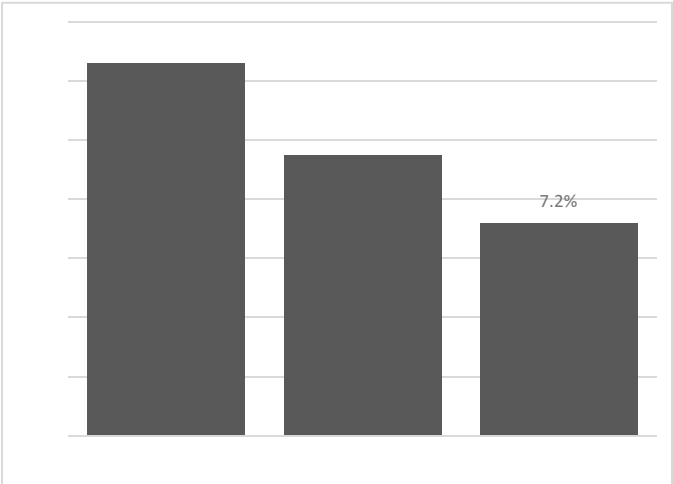

Figure 31 Percentage of U.S. Adults Aged 18 or Older with Diagnosed Diabetes (Age-Adjusted) by Education Level, U.S., 2013–2015. Source: Centers for Disease Control and Prevention, 2017 Diabetes Report Card. Accessed 2019.

7.5.2.5.2 Diabetes Prevalence

In 2015 in TJHD, Louisa County had the highest prevalence of diabetes with 13% of the adult population over 20 years old having diagnosed diabetes. Albemarle County (7.0%) and Charlottesville (8.0%) had the lowest prevalence of diabetes in the district, followed by Greene County (10.0%). Only Albemarle and Charlottesville were below the state rate of 10.0%. (Figure 32)

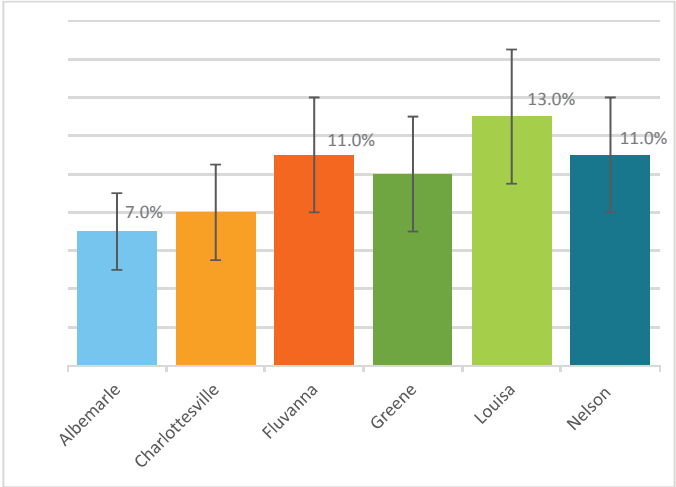

Figure 32 Percentage of Adults with Diagnosed Diabetes, TJHD Localities, 2015. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.5.2.6 HIV

HIV, which stands for human immunodeficiency virus, is a virus that attacks the body's immune system. The damage to the immune system makes it hard to fight off infections. HIV is spread through certain bodily fluids. While there is currently no cure for HIV, HIV can be controlled with proper medical treatment.[72] In addition, a study published in 2019 demonstrated that successful treatment of HIV prevents sexual transmission of the virus.[73]

7.5.2.6.1 HIV Disparities in the United States

There are disparities in rates of HIV among people aged 13 years and older with a diagnosis of HIV infection. In the United States, there are an estimated 1.1 million people living with HIV and

roughly 40,000 new cases are diagnosed each year.[74] In 2017, 66% of these diagnoses were among gay and bisexual men, while 24% were through heterosexual contact. African Americans were disproportionately affected by new HIV diagnoses (43% of all new diagnoses) as were Hispanics/Latinos (26% of all new diagnoses). Black men who have sex with men (MSM) account for the largest numbers of new infections in the United States. However, research does not suggest differences in risk behavior between white MSM and black MSM; rather, black MSM have lower access to HIV-related medical care.[75, 76]

In 2017, black men who had male-to-male sexual contact had the highest prevalence, followed by Hispanic/Latino men with male-to-male sexual contact, white males with male-to-male contact, and black women with female-to-male contact. White women with female-to-male contact had the lowest number of new HIV diagnoses in 2017. (Figure 33)

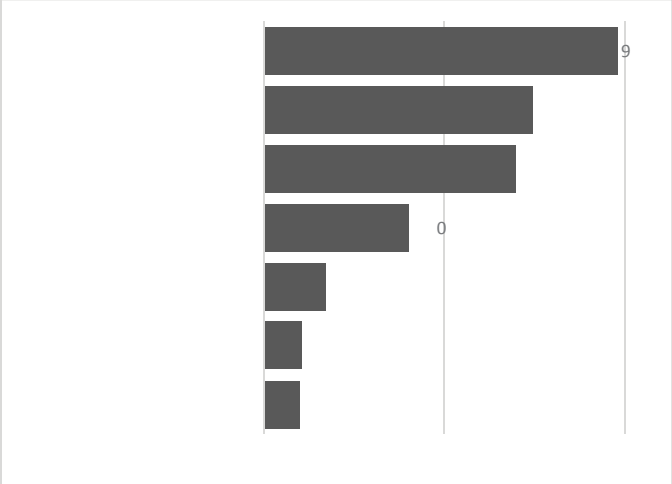

Figure 33 New HIV Diagnoses by Race, Gender, and Type of Sexual Contact (Male-to-Male or Heterosexual/Female-to-Male), U.S., 2017. Source: Centers for Disease Control and Prevention. Accessed 2019.

7.5.3.2.2 HIV Prevalence

In 2015, Charlottesville (357 cases of HIV per 100,000 persons aged 13 or older) had by far the highest rate of HIV in TJHD. Albemarle (151 cases per 100,000 persons) and Nelson Counties (148) had the next highest rates in the district, followed by Fluvanna County (134). Greene County had the lowest rate of HIV with only 69 cases per 100,000 persons. (Figure 34)

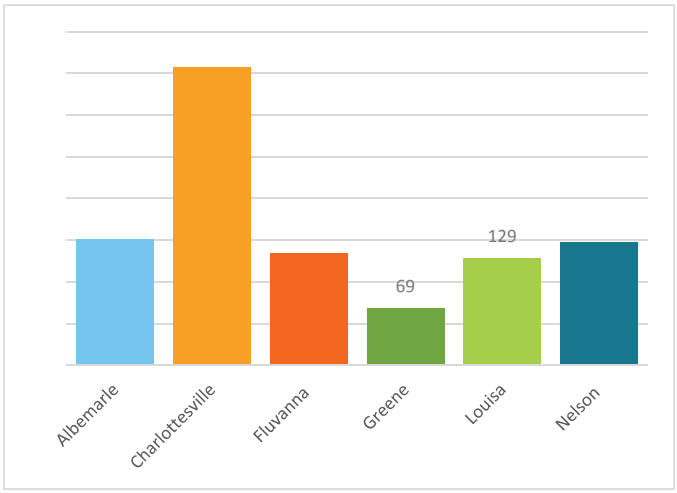

Figure 34 Rate (per 100,000 persons) of HIV in People Aged 13 Years or Older, TJHD Localities, 2015. Source: County Health Rankings, 2019 Report. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

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What We Learned: Community Health Assessment Data

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7.6 | MAPP PRIORITY: FOSTER A HEALTHY AND CONNECTED COMMUNITY FOR ALL AGES

7.6.1 Childcare

Childcare is a vital part of creating a livable community.[1] Finding affordable high-quality childcare can be difficult in many parts of the country; parents of young children report that lack of access to childcare affects their careers as well as their ability to provide a safe and nurturing environment for their young children not yet in school.[2]

In 2018, estimated annual childcare costs for center-based infant care was $13,728 in Virginia, slightly less than public university tuition. For a two-parent household, this would be an estimated 13.4% of the family income. However, for a single parent, it would be 47.5% of their income and for a two-parent household living at the poverty line, it would be 98.9% of their income. For families with two or more children needing childcare, the annual cost and overall percentage of income spent on childcare only increases.[3]

7.6.1.1 CHILDCARE DESERTS

The Center for American Progress created a definition of "childcare deserts," based on the well-established concept of food deserts. An area has a childcare desert when there is a ratio of more than three young children under the age of five for every licensed (childcare centers, family childcare providers, Head Start, public and private preschools) childcare slot in the area. This is based on a United States Census Bureau finding that as many as one-third of children are typically in the care of someone who is not a relative; thus, if the number of licensed childcare slots in an area is less than one-third of the number of young children under the age of five in the area, it is likely that parents will have difficulties in securing childcare.[4]

In a 2018 report, the Center for American Progress found that 51% of all residents in the United States live in a childcare desert. In addition, 58% of Latino families, 60% of rural families, and 55% of low-income families live in childcare deserts. High-income suburban neighborhoods are least likely to experience childcare shortages. 69% of mothers of young children participate in the workforce; however, the report found a correlation between childcare deserts and fewer working mothers.[5]

Figure 1 shows the physical locations of childcare providers (blue dots) by TJHD census tract in 2018. The scoring methodology measures how many children live in a given census tract relative to licensed childcare slots—census tracts that are shaded white did not meet the criteria for a childcare desert. The lighter shading represents more childcare supply while the darker orange shading represents

less childcare supply. Charlottesville as well as parts of Albemarle, Greene, and Louisa counties had the lowest supply of childcare. (Figure 1)

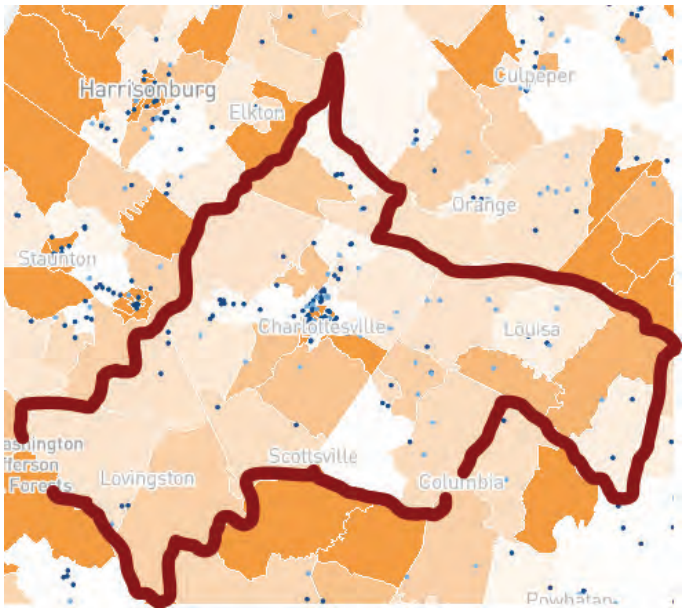

Figure 1 Childcare Deserts, TJHD Census Tracts, 2018. Source: Center for American Progress, 2018 Report. Available at https://www.americanprogress.org/issues/early-childhood/reports/2018/12/06/461643/americas-child-care-deserts-2018/. Accessed 2019.

7.6.2 Education

According to the American Psychological Association, pervasive disparities in education follow a pattern in which students of color including black, American Indian, Hispanic, and southeast Asian students have lower academic outcomes, when compared to white and other Asian American students. These disparities are evident throughout a student's academic career and can be seen as early as kindergarten. The disparities in students' achievement affect their reading and math skills, graduation and dropout rates, rate of enrollment in higher education, and rates of discipline, suspension, and expulsion from school.[6] The reasons for these disparities are complex and no single factor can explain them.[7]

In Virginia, students in high-poverty schools—defined as schools where three-quarters or more of the students qualify for free or reduced lunch—have fewer resources and worse classroom outcomes. High-poverty schools have less experienced teachers, are less likely to have advanced coursework, and spend less per student on instructors and instructional material when compared to low-poverty schools—defined as schools where one-quarter or less of the students qualify for free or reduced lunch. Only one-third of high-poverty schools in Virginia are accredited, compared to almost 100% of low-poverty schools.[8]

7.6.2.1 STUDENTS ELIGIBLE FOR FREE AND REDUCED LUNCH

The National School Lunch Program (NSLP) is a federally assisted meal program that operates in public and nonprofit private schools to provide nutritionally balanced, low-cost, or free meals to children each school day. During the 2016–2017 school year, roughly 21.5 million children throughout the United States participated in the program on a typical day. Children from households with incomes equal to or less than 130% of the Federal Poverty Level are eligible for free meals, while children from households with income between 130% and 185% of the FPL are eligible for reduced price meals.[9]

In the 2018–2019 school year, Charlottesville City Schools (55.0%) had the largest percentage of students eligible for free or reduced lunches in TJHD followed closely by Nelson County Public Schools (52.5%). Fluvanna County (32.2%) and

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Albemarle County (30.2%) Schools had the smallest percentages of students eligible for free and reduced lunches. (Figure 2) Within a given school district, eligibility for free and reduced lunches can vary greatly from school-to-school and/or by geographic location within a school district. To view percentages by school type and individual schools, visit TJHD's Public Tableau site under the "MAPP2Health - Foster a Healthy and Connected Community" dashboard: https://public.tableau.com/profile/thomas.jefferson.health.district#!/.

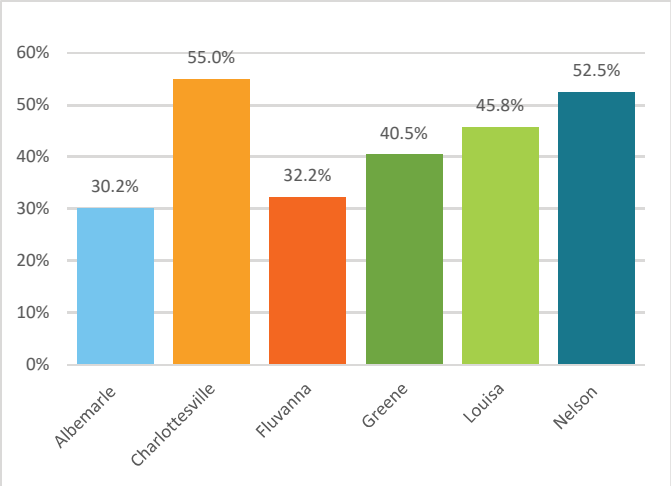

Figure 2 Percentage of Students Eligible for Free or Reduced Lunch, TJHD Localities, 2018–2019 School Year. Source: Virginia Department of Education, Office of School Nutrition Programs, 2018–2019 Free and Reduced Eligibility Report. Accessed 2019.

7.6.2.2 THIRD GRADE ENGLISH READING SOL PASS RATES

Academic achievement in the third grade is a strong predictor of future academic success and attainment. Reading below grade level in third grade leads to a chain of events that create barriers to further academic success in the future (Figure 3).[10] There is an achievement gap between black and white students, with white students consistently performing better at all education levels. A study found that of 4th and 8th graders that scored above the 75th percentile in math and reading, 70% were white and fewer than 8% were black.[11]Although scholars have extensively studied this achievement gap, the underlying mechanisms and factors that cause it are complex and not fully understood. Racial segregation between schools and disparities in school poverty rates are both correlated with school outcomes and achievement gaps; one study found that racial differences in exposure to poverty accounts for around one-fifth of the racial achievement gap.[11.1] Another study found that student suspension rates account for approximately one-fifth of black-white differences in academic achievement. School punishment and suspension—which disproportionately affect black students and other students of color—take students out of the classroom and negatively affects their academic growth.[11.2]

During the 2017–2018 school year in TJHD, black students (45.9%) had the lowest pass rate for the 3rd grade reading SOL. Black students were followed by Hispanic students (54.7%) with the second lowest pass rate. Over 75% of white and Asian students passed the reading SOL. (Figure 4)

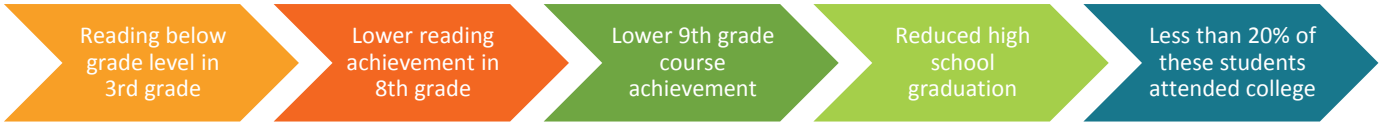

Figure 3 Progression of Academic Achievement Starting in 3rd Grade. Source: Lesnick, J., Goerge, R., Smithgall, C., & Gwynne, J. (2010). Reading on grade level in third grade: How is it related to high school performance and college enrollment? Retrieved from Chapin Hall at the University of Chicago website: https://www.chapinhall.org/wp-content/uploads/Reading_on_Grade_Level_111710.pdf. Accessed 2019.

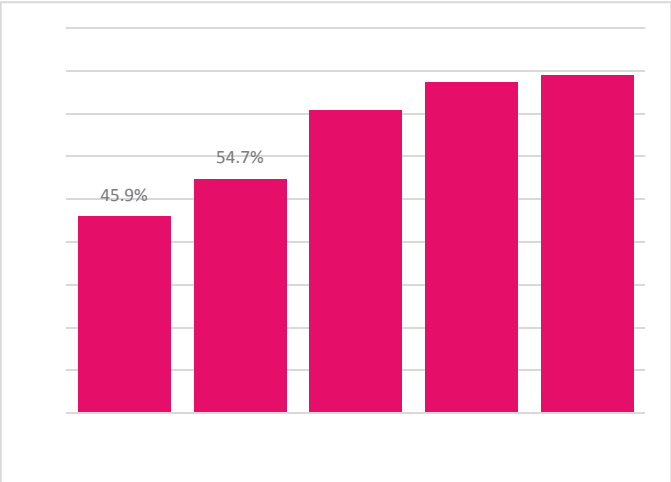

Figure 4 Percentage of Students that Passed 3rd Grade Reading SOL by Race, TJHD, 2017–2018 School Year. Source: Virginia Department of Education, Assessment Program. Accessed 2019.

7.6.2.3 BULLYING IN VIRGINIA

Nationally in 2017, the percentage of high school students who had been bullied on school property in the last 12 months was 19.0% (larger than in Virginia). The prevalence of having been bullied was higher among female (22.3%) than male (15.6%) students; by year, it was highest in 9th grade (22.%) and lowest in 12th grade (14.0%). By race, the prevalence of having been bullied on school property was highest among white students (21.5%) and lowest among black students (13.2%) and higher for gay, lesbian, and bisexual students (33.0%) than for "not sure" students (24.3%) and heterosexual students (17.1%).[12]

In 2017, the Virginia Youth Risk Behavior Survey (YRBS) asked high school students if they had been bullied on school property during the 12 months before the survey. Overall, 15.7% of students reported being bullied; the percentage was greater among female students (17.9%) than male students (13.5%) and greater among 9th and 10th graders than 11th and 12th graders. By gender and grade, with the exception of 9th graders, Virginia high school students met or exceeded the Healthy People 2020 target of 17.9% or less of students experiencing bullying. (Figure 5) By race and ethnicity, students that identified as multiple races (21.3%) reported the largest percentage of bullying on school property, followed by white students (18.7%), and Hispanic/Latino students (12.0%). The percentage of students reporting being bullied was smallest among black students (10.9%). Students of multiple races and white students did not meet the Healthy People 2020 target of 17.9% or less of students experiencing bullying. (Figure 6)

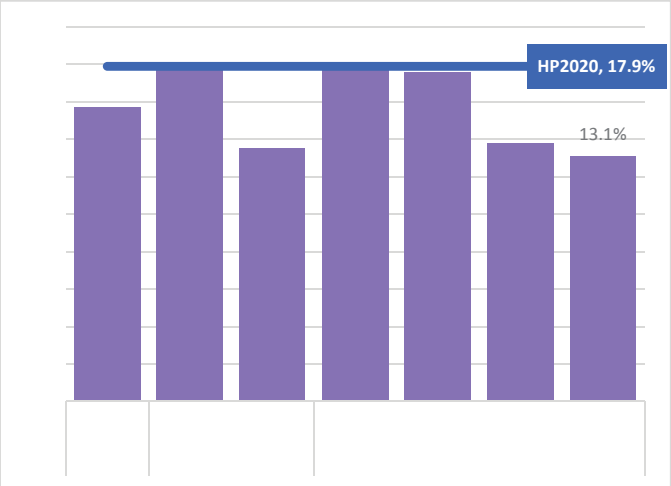

Figure 5 Percentage of Virginia High School Students Bullied on School Property (within last 12 months) by Total, Gender, and Grade, VA, 2017. Virginia Youth Risk Behavior Survey, 2017 Report. Accessed 2019.

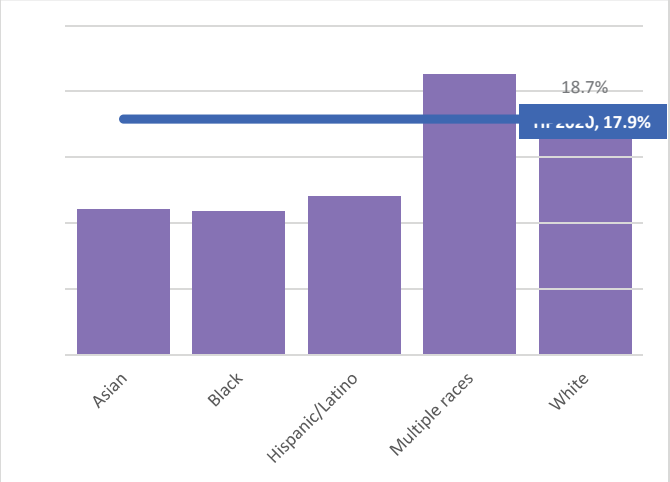

Figure 6 Percentage of Virginia High School Students Bullied on School Property (within last 12 months) by Race, VA, 2017. Virginia Youth Risk Behavior Survey, 2017 Report. Accessed 2019.

7.6.2.4 SUSPENSION RATES

Across the United States, there are clear disparities in who is being suspended in school. According to the United States Government Accountability Office (GAO), black students, boys, and students with disabilities are disproportionately disciplined (suspension and/or expulsion) over other students.[13] Early childhood suspension leads to gaps in access to

Photovoice Photo: Scottsville and Esmont JABA

resources, which can affect achievement and well-being later in life. Children of color are at highest risk from being suspended or expelled from early care and education programs.[14] Both in-school and out-of-school suspension have been linked to lower school achievement and increased rate of dropout.[15] Studies have shown that teachers may disproportionately discipline students based on their race and that implicit biases and racial stereotypes held by teachers can lead them to escalate negative responses, such as harsher punishment, to black students over multiple encounters.[15.1]

This national trend is reflected locally in many district schools. For example, in 2017–2018 at Albemarle High School, students were 8% Asian, 15% non-Hispanic black, 13% Hispanic, 6% two or more races (non-Hispanic), and 59% white. Figure 7 shows the count of "individual offenders" at Albemarle High School by race and ethnicity from school years 2012–2013 to 2017–2018. Data for individual suspension types (in-school, long-term, short-term, and modified expulsion to suspension) were combined to create "all suspension" counts and rates. During the 2017–2018 school year, 62 black, 47 white, 17 Hispanic, and 14

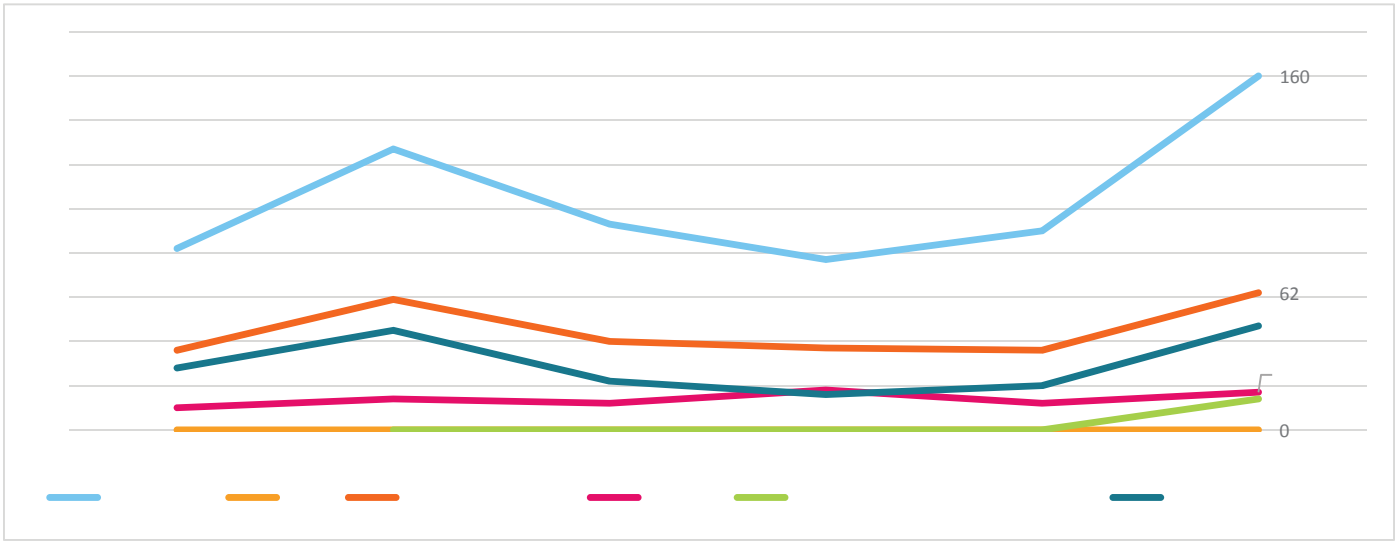

Figure 7 Individual Student Offenders (Count) by Race and Ethnicity, Albemarle High School, 2012–2018 School Years. Source: Virginia Department of Education, Safe Schools Information Resource. Accessed 2019.

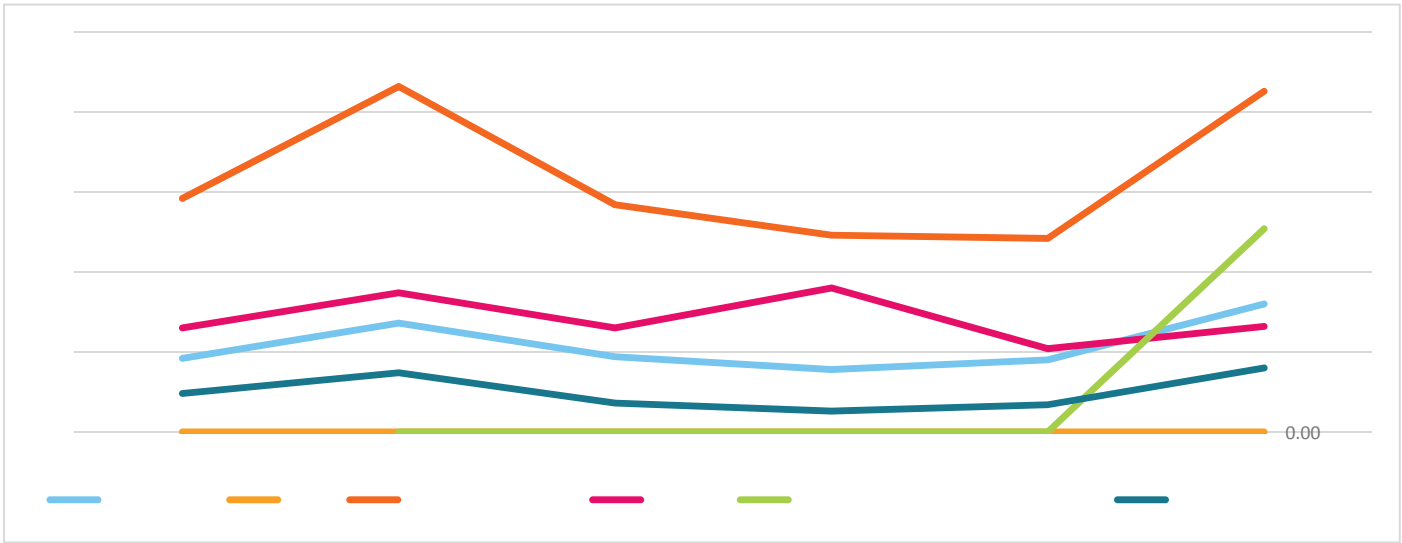

Figure 8 Rate (per 10 Students) of Student Suspensions by Race and Ethnicity, Albemarle High School, 2012–2018 School Years. Source: Virginia Department of Education, Safe Schools Information Resource. Accessed 2019.

"two or more races" students received some type of suspension. There were 0 suspensions of Asian students during the six-year time period. (Figure 7)

Figure 8 shows Albemarle High School's rate per 10 students of suspension by race and ethnicity from school years 2012–2013 to 2017–2018. Overall and in 2017–2018, the rate is disproportionately high for black students (2.13 per every 10 black students). The rate for students who identified as two or more races (non-Hispanic) rose from 0 in the 2016–2017 school year to 1.27 per every 10 students in 2017–2018. The third highest rate was for Hispanic students (0.66 per every ten Hispanic students) followed by non-Hispanic white students (0.40 per every 10 white students).

Visit TJHD's Tableau Public page at https://public.tableau.com/profile/thomas.jefferson.health.district#! for more dashboards and data on school discipline. Look under "Thomas Jefferson Health District – School Discipline Data" to view student suspension rates by school division, school type, individual school, discipline type, school year, and student race/ethnicity.

7.6.2.5 ON-TIME GRADUATION RATES

On-time graduation measures the number of public school students who graduate on time.[16] Research has shown that there are pervasive gaps in achievement between white and black students. The achievement gap perpetuates racial differences in socioeconomic status, because it affects the professions that individuals can go into and therefore the wages that they can earn.[17, 18] In the United States, for the 2016–2017 school year, there were disparities in on-time graduation rates by race and ethnicity. 91.2% of Asian/Pacific Islander students graduated on time compared to 88.6% of non-Hispanic white students, 80.0% of Hispanic students, 77.8% of black students, and 72.4% of American Indian and Alaskan Native students. 78.3% of economically disadvantaged students, 66.4% of limited English proficient students, and 67.1% of students with disabilities graduated on time in the same year nationwide.[19]

In 2018, students at an economic disadvantage graduated on time at lower rates than all students in every locality across TJHD. This disparity was most evident in Albemarle County, with 84.2% of economically disadvantaged students graduating on time compared to 92.7% of students overall. Healthy People 2020 has a target of 87% of students graduating with a regular diploma four years after starting 9th grade; all students in TJHD localities met this target with the exception of students with economic disadvantage in Charlottesville (85.5%) and Albemarle County (84.2%). (Figure 9)

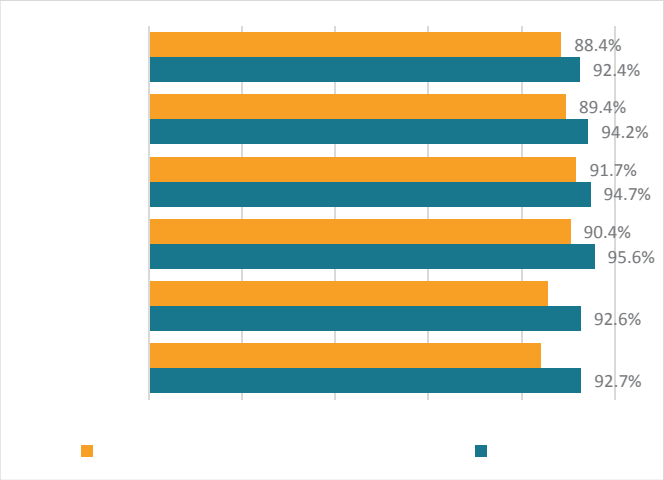

Figure 9 Percentage of On-time Graduation, All Students and Economically Disadvantaged Students, TJHD Localities, 2018. Source: Virginia Department of Education, Virginia Cohort Reports. Accessed 2019.

7.6.2.6 EDUCATIONAL ATTAINMENT

From 2013–2017, a little more than 50% of adults in Albemarle County and Charlottesville had a bachelor's degree or higher. These percentages were likely higher than other localities due to the presence of the University of Virginia (students and faculty). Louisa County (23.2%) had the smallest percentage of residents with their bachelor's degree or higher, followed by Greene County (26.7%) and Nelson County (30.8%). Greene County and Louisa County (15.4%) had the largest percentages of residents

with less than a high school education, followed by Nelson County (14.3%) and Charlottesville (9.5%). (Figure 10)

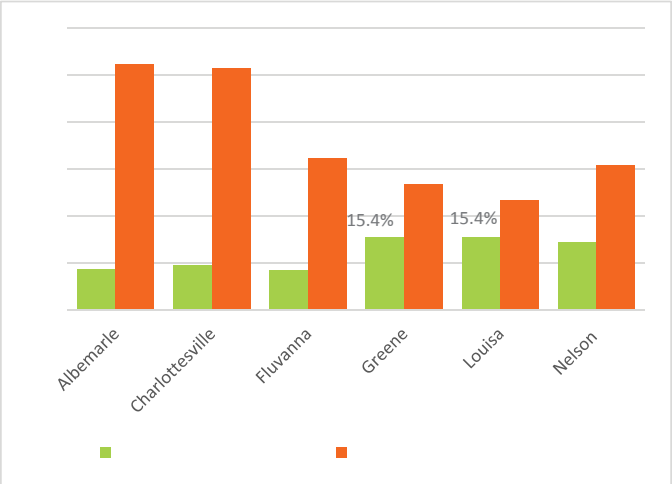

Figure 10 Educational Attainment by Percentage of Total Population, TJHD Localities, 2013–2017, 5-year Estimate. Source. U.S. Census Bureau, American Community Survey. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

7.6.3 Economic Factors

7.6.3.1 MEDIAN HOUSEHOLD INCOME

Income is an important indicator of health, and is strongly associated with morbidity and mortality. Income is also linked to life expectancy—individuals with lower incomes live for fewer years and are more likely to die from disease. Individuals living in poverty face greater barriers when trying to access healthcare; they are less likely to receive benefits from their employer, less likely to be insured, and less likely to seek preventive care.[20] Median household income divides income distribution into two equal parts, with one-half falling below median income and one-half above the median.[21]

From 2012–2017, median household income in TJHD ($63,915) grew slowly, but remained lower than Virginia's average median household income ($71,518) and higher than the United States' ($60,336) (Figure 11).

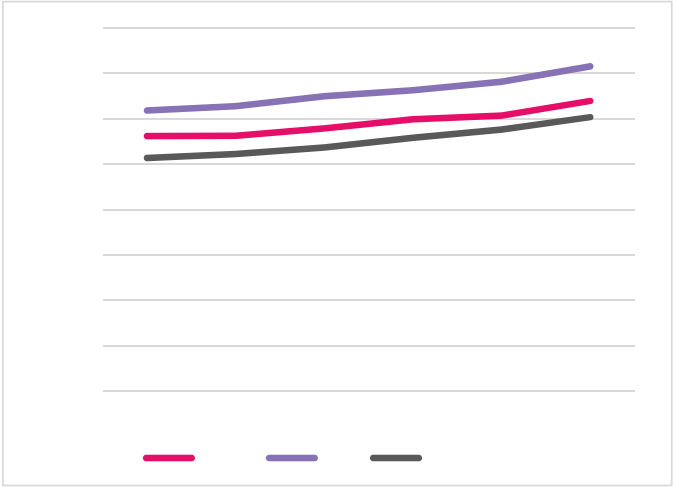

Figure 11 Median Household Income, TJHD, VA, and U.S., 2012–2017. Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, SAIPE Interactive Data Tool. Accessed 2019.

7.6.3.1.1 Median Household Income by Race

From 2013–2017 in TJHD, there were disparities in median household income by race and ethnicity. Households that identified as Asian had the highest median household income in Louisa County ($158,365) and Greene County ($128,654) and the highest median household incomes throughout the

district by far. Households identifying as black had the lowest median household income in Greene County ($45,603), Albemarle County ($43,944), Nelson County ($37,875), and Charlottesville ($27,746), and the lowest overall median household income in the district. As a note: data in Fluvanna County and Nelson County were suppressed for households that identified as Asian; the data were also suppressed for households that identified as two or more races in Nelson County. Data were suppressed due to no or too few responses collected. (Figure 12)

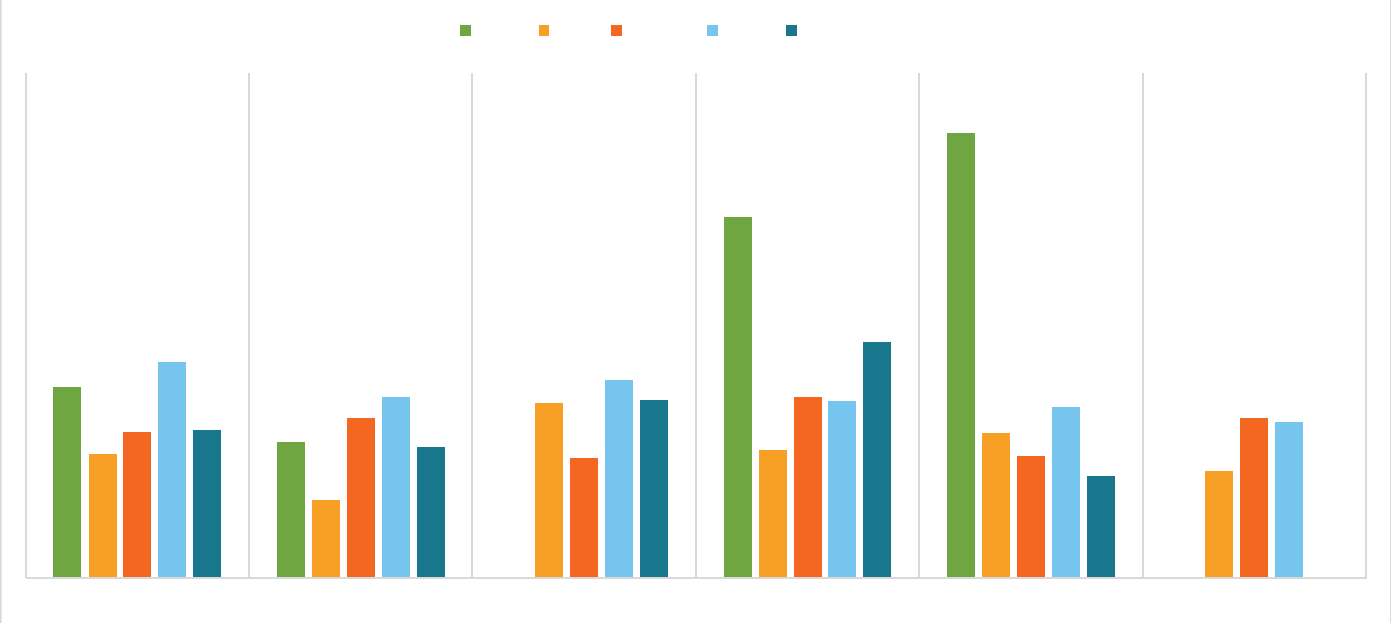

Figure 12 Median Household Income by Race, TJHD Localities, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

7.6.3.2 POVERTY STATUS OF FAMILIES

The U.S. Department of Health and Human Services sets poverty guidelines; for administrative purposes, such as determining eligibility for public programs, these guidelines are referred to as the Federal Poverty Level (FPL). The FPL for a household is determined by the number of persons in the household. For instance, as of 2019, for a household of two the FPL is $16,910, while for a household of four persons the FPL is $25,750.[22] The FPL can also be used as a way to examine poverty in a community by looking at the percentage of persons with household incomes below the FPL.

Photovoice Photo: Scottsville and Esmont JABA

7.6.3.2.1 Households below the Federal Poverty Level by Race

In TJHD from 2013–2017, Hispanic households had the largest overall percentage of households that lived below the FPL (17.4%), followed closely by households that identified as some other race (16.4%), and black households (15.5%). The small total number of Hawaiian/Other Pacific Islanders in TJHD (0.0%) had the smallest percentage of households living below the FPL, followed by households that identified as of two or more races (5.5%), and white households (5.6%). (Figure 13) Although not shown in Figure 13, in Virginia, households of "some other race" (16.7%) followed by black households (15.5%) had the largest percentages of households living below the FPL while Native Hawaiian/Other Pacific Islander (4.3%), Asian (5.2%), and white (5.8%) households had the smallest percentages of households living below the FPL.

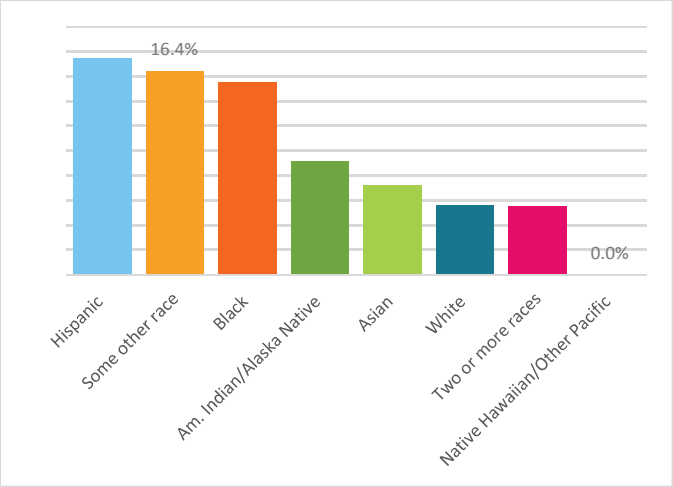

Figure 13 Percentage of Households below the Federal Poverty Level by Race and Ethnicity, TJHD, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

7.6.3.2.2 Children in Households below the Federal Poverty Level by Race

In 2017, the percentage of black and Hispanic children in households living below the FPL was also greater within the TJHD localities. In Charlottesville, 44% of children in poverty were black, 17% were Hispanic, and only 11% were white. Similarly, in Nelson County (35%) and Greene County (21%), the percentage of black children living in poverty was largest. However, in Nelson County, white children (21%) had the second largest percentage living under FPL followed by Hispanic children (5%). In Albemarle County and Louisa County, Hispanic children had the largest percentage living below the FPL, followed by black children, and then white children. The County Health Rankings "Top United States Performers" in the 10th percentile was at 11% or lower. White children in Albemarle, Charlottesville, Fluvanna, and Greene, as well as black children in Fluvanna, and Hispanic children in Nelson were in the 10th percentile of lowest child poverty in cities and counties across the United States. County Health Rankings only reports this measure for white, black, and Hispanic children so percentages do not necessarily add up to 100%. (Figure 14)

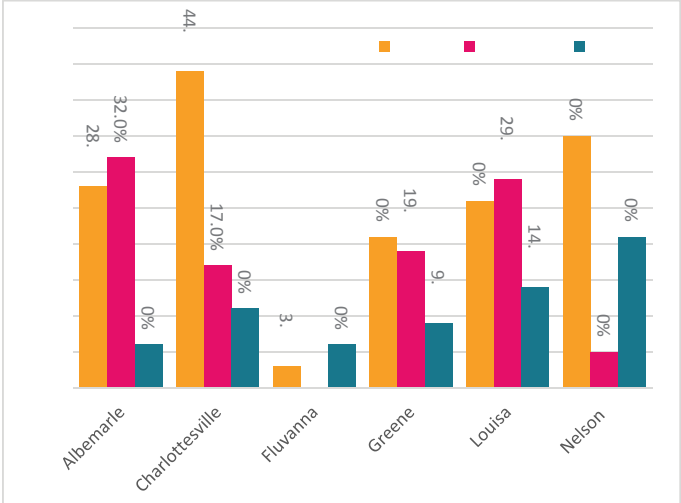

Figure 14 Percentage of Children in Poverty by Race, TJHD Localities, 2017. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.6.3.3 ALICE COST OF LIVING

ALICE is an acronym for Asset-Limited, Income-Constrained, Employed. It is a way to define and understand the struggles of households that earn above the FPL, but that do not make enough to cover all the expenses of their household budget.[23] Research funded by the United Way highlights a segment of the community that is struggling to afford

basic necessities. Roughly four in 10 households in the United States stretch their income to meet their household needs.[24] In 2017, 11% of Virginia households were below the Federal Poverty Level and an additional 28% qualified as ALICE households (above the FPL but not making enough to cover all their expenses). Some contributing factors include low-wage jobs, the basic cost of living outpacing wages, and public and private assistance providing insufficient financial stability for ALICE households.[25]

Table 1 shows the survival budget for households, which are the actual costs of basic necessities (childcare, housing, food, transportation, and healthcare) adjusted based on county information and household type. In TJHD in 2016, the survival budget for a single adult was highest in Albemarle, Fluvanna, Greene, and Nelson counties ($23,712). The survival budget for two adults, one infant, and one preschooler was also highest in Albemarle County ($95,232).

Table 2 shows household stability budgets for TJHD localities. A stability budget outlines the cost for household necessities at a modest but sustainable level; it also incorporates costs such as owning a cell phone and savings. The stability budget is adjusted based on counties and household types.[26] In TJHD in 2016, the stability budget for a single adult was highest in Albemarle, Fluvanna, Greene, and Nelson counties ($42,504). For two adults, one infant, and one preschooler, the stability budget was highest in Albemarle County ($140,868).

Locality	Single Adult	1 Adult, 1 School-Age Child	2 Adults, 1 Infant, 1 Preschooler
Albemarle	$23,712	$39,516	$95,232
Charlottesville	$18,624	$32,832	$84,492
Fluvanna	$23,712	$38,592	$73,332
Greene	$23,712	$38,412	$72,840
Louisa	$22,908	$32,628	$66,468
Nelson	$23,712	$38,412	$72,840

Table 1 ALICE Cost of Living Estimates, Survival Budget Annual Income, 2016. Source: United Way, 2018 ALICE Report. Available online at https://www.unitedwayalice.org/home. Accessed 2019.

Locality	Single Adult	1 Adult, 1 School-Age Child	2 Adults, 1 Infant, 1 Preschooler
Albemarle	$42,504	$77,184	$140,868
Charlottesville	$38,988	$71,508	$126,300
Fluvanna	$42,504	$71,904	$115,992
Greene	$42,504	$71,904	$114,216
Louisa	$34,764	$63,696	$113,148
Nelson	$42,504	$71,904	$109,632

Table 2 ALICE Cost of Living Estimates, Stability Budget Annual Income, 2016. Source: United Way, 2018 ALICE Report. Available online at https://www.unitedwayalice.org/home. Accessed 2019.

7.6.3.3.1 ALICE Households by Race

Figure 15 shows the number of households by race classified as living in poverty (at or below FPL), ALICE households (above FPL, having an ALICE survival budget), and above ALICE (that is, having at least a stability budget), in Charlottesville. In Charlottesville, the largest percentage of ALICE households identified as two or more races (50.5%), followed by black households (41.0%). 55.0% of white households are above the ALICE threshold, with incomes that allow them to have a stable budget.

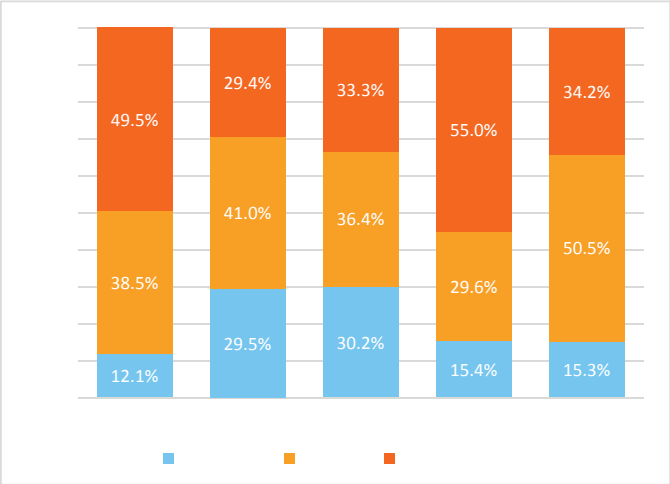

Figure 15 ALICE Cost of Living Estimates, Charlottesville Households by Race & Ethnicity, 2016. Source: United Way, 2018 ALICE Report. Accessed 2019.

Figure 16 shows the number of households by race classified as living in poverty (at or below FPL), ALICE households (above FPL, having an ALICE survival budget), and above ALICE (that is, having at least a stability budget), in Fluvanna County. In Fluvanna County, the largest percentage of ALICE households are Hispanic households (62.6%), followed by white households (29.6%). However, 64.9% of white households are above the ALICE threshold, with incomes that allow them to have a stable budget.

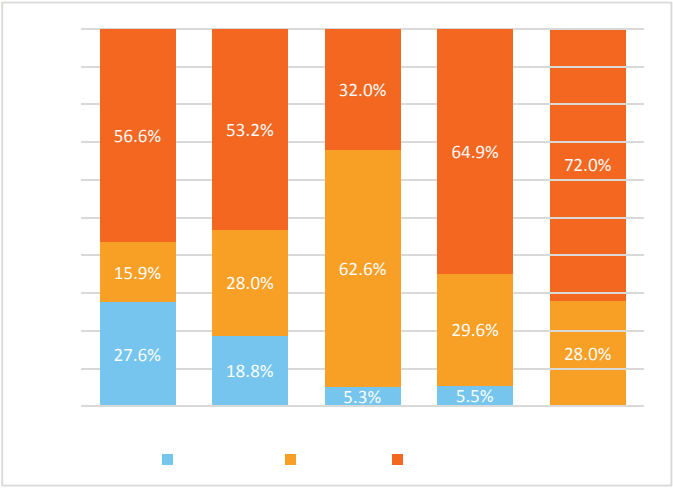

Figure 16 ALICE Cost of Living Estimates, Fluvanna Households by Race and Ethnicity, 2016. Source: United Way, 2018 ALICE Report. Accessed 2019.

For additional information by race and ethnicity for each TJHD locality, visit https://www.unitedforalice.org/virginia (the "County Pages" PDF has updated data by locality).

7.6.3.4 ORANGE DOT REPORT

According to the Orange Dot Report 3.0, 10,775 families in TJHD do not make enough to afford the essentials (e.g. food, housing, clothing, utilities, childcare, and transportation).[27] For more information, including maps by locality, visit https://www.pvcc.edu/community-self-sufficiency-programs/cwi-history.

7.6.3.5 UNEMPLOYMENT

The unemployment rate is the percentage of the population ages 16 and older that is unemployed but seeking work.[28] Unemployment affects health and wellbeing—unemployed individuals experience worse health and have higher mortality when compared to employed individuals.[29] Unemployment can also lead to an increase in unhealthy behaviors such as poor diet and exercise and/or excess consumption of alcohol and tobacco products, which can lead to increased risk of morbidity and mortality.[30]

In October 2018, individuals in the United States without a high school degree were more likely to be unemployed (6.0%) as compared to individuals with a bachelor's degree or higher (2.0%). Nationwide unemployment in October 2018 by race and ethnicity was greatest for the black population (6.2%) and less for white (3.3%), Hispanic (3.2%), and Asian populations (3.2%).[31] There was also significant variation across the United States by county (Figure 17).

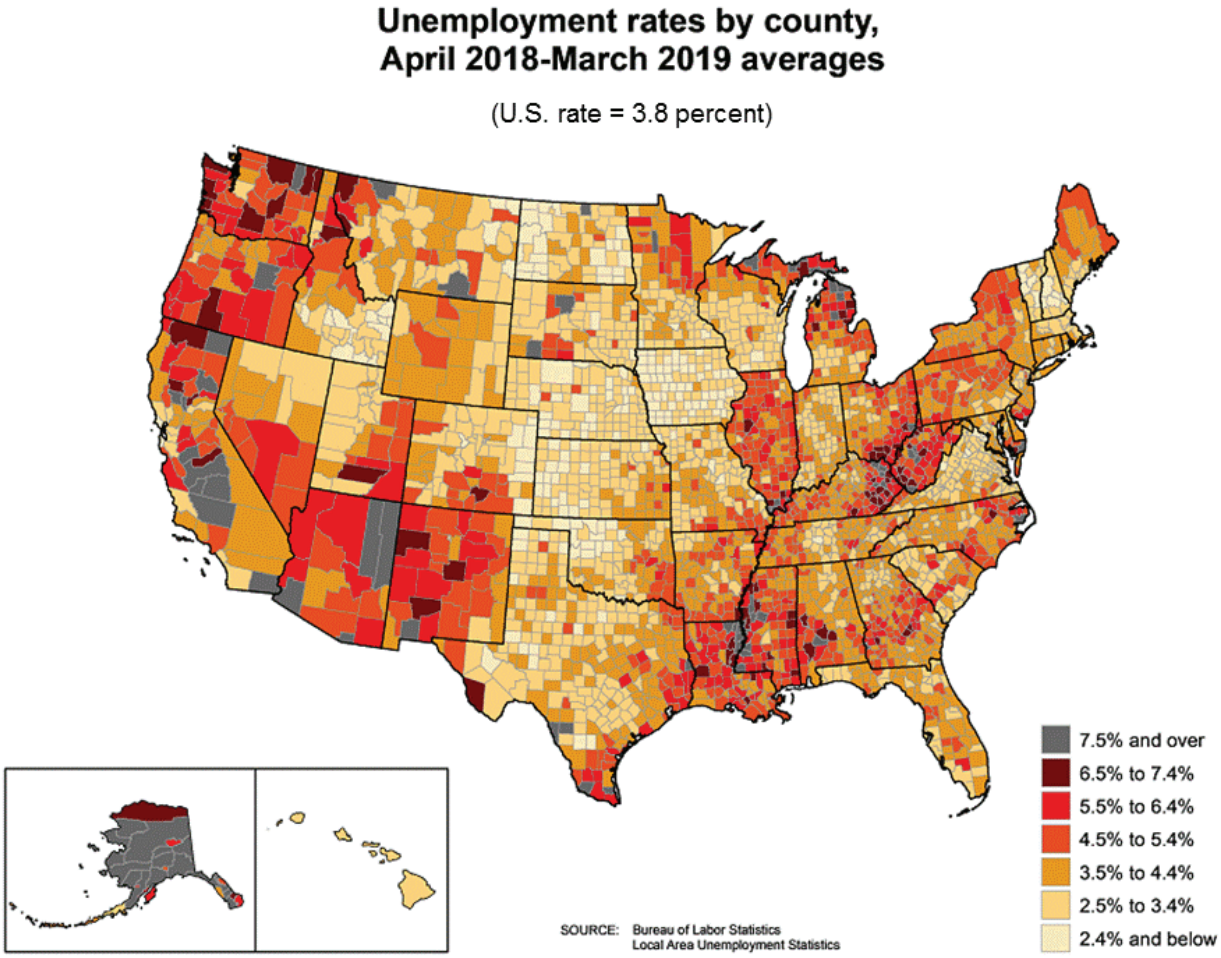

Figure 17 Percentage Unemployed by County, U.S., April 2018–March 2019 Averages. Source: Bureau of Labor Statistics, Local Area Unemployment Statistics. Available at https://www.bls.gov/lau/#cntyaa. Accessed 2019.

In 2017, TJHD (3.3%) had a slightly lower unemployment rate than that of Virginia (3.8%). While the unemployment rates in TJHD localities were similar, the highest rate was in Louisa County and Nelson County (3.5%) and the lowest rate was in Greene County (3.0%). The County Health Rankings "Top United States Performers" in the 10th percentile for unemployment were at 2.9% or below; no TJHD localities met this benchmark. (Table 3)

Locality	# Unemployed	Labor Force	% Unemployed
Albemarle	1,843	55,748	3.3%
Charlottesville	791	25,558	3.1%
Fluvanna	413	13,519	3.1%
Greene	310	10,170	3.0%
Louisa	667	19,087	3.5%
Nelson	257	7,354	3.5%
TJHD	4,281	131,436	3.3%
VA	161,623	4,307,758	3.8%

Table 3 Unemployment Statistics, TJHD Localities, TJHD and VA, 2017. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.6.4 Housing

Housing is a key social determinant of health. The safety and quality of homes is directly correlated to health. As one example, exposure to lead in paint or pipes can be detrimental to brain development and the nervous system.[32] In addition, the cost of housing can be a substantial burden on families and individuals. Households that spend more than 30% of their income on housing are considered "cost burdened," while households spending more than 50% are "severely cost burdened." Households that are cost burdened or severely cost burdened may struggle to pay other bills such as health insurance, utilities, and/or food. Thus, not being able to afford safe and reliable housing affects both physical and mental health.[33]

Many disparities exist in housing. For example, black families are 1.7 times more likely than the rest of the population to live in homes with severe physical problems. See Section 3.1.3.6 for an historical overview of how these disparities developed due to inequitable practices and structural racism. They are also more likely to live in neighborhoods that do not have easy access to resources. As noted in previous sections, lack of access to or limited availability of resources such as grocery stores, public transportation, and safe spaces for physical activity negatively affects health.[34]

For more information on housing in Planning District 10, read the Thomas Jefferson Planning District Commission's Regional Housing Study and Needs Assessment, available at http://tjpdc.org/housing/regional-housing-study-and-needs-assessment-is-available/.

7.6.4.1 SEVERE HOUSING COST BURDEN

From 2013–2017, the estimated percentage of households that spent 50% or more of their household income on housing was largest in Charlottesville, with 19% of residents experiencing severe housing cost burden, followed by Fluvanna (14%), Albemarle (13%), and Nelson Counties (13%). Greene County and Louisa County (11%) had the smallest percentages of residents experiencing severe housing cost burden. (Figure 18)

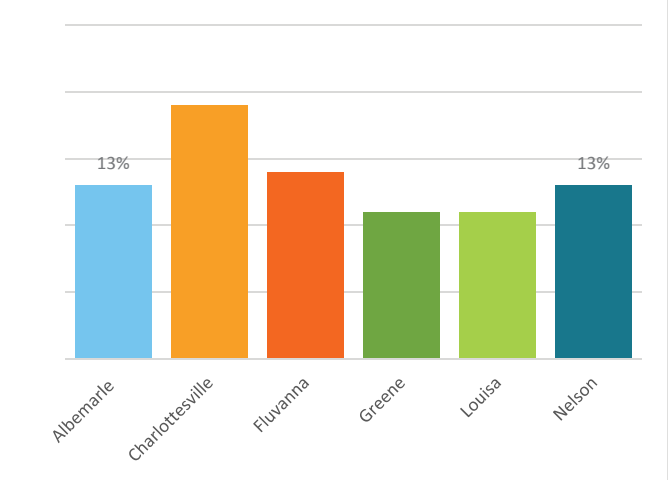

Figure 18 Percentage of Severe Housing Cost Burden, TJHD Localities, 2013–2017 Estimate. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.6.4.2 HOUSING CHARACTERISTICS

7.6.4.2.1 Type of Home

According to the Community Health Survey conducted by TJHD, in 2018, the majority of respondents in all localities lived in single-family homes, ranging from 48.7% in Charlottesville to 84.5% in Greene & Nelson Counties. The second most prevalent type of home was an apartment as seen in Charlottesville (33.5%) and Albemarle County (15.7%). Town homes were also common in Albemarle County (11.7%) and Charlottesville (13.9%). Mobile homes were most prevalent in Greene & Nelson Counties (11.4%) followed by Fluvanna & Louisa Counties (10.5%), and Albemarle County (3.5%). (Figure 19)

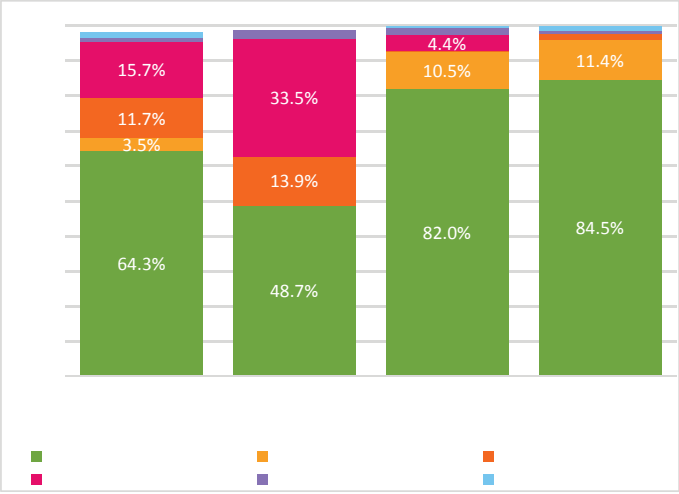

Figure 19 Type of Primary Home, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.6.4.2.2 Home Ownership

From 2013–2017 in TJHD, Charlottesville residents had the smallest percentage of homeownership, with only 44% of people owning their home, followed by Albemarle County (64%). Greene County (81%), Fluvanna County (81%), Louisa County (80%), and Nelson County (72%) all had larger percentages of home ownership than Virginia (66%). (Figure 20)

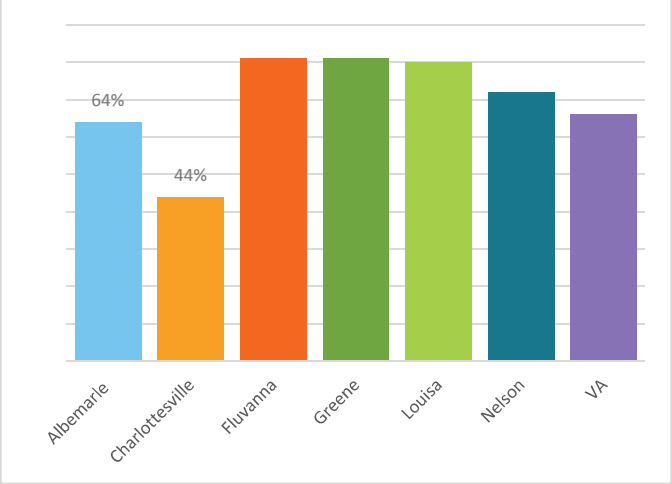

Figure 20 Percentage of Homeowners, TJHD Localities and VA, 2013–2017 Estimate. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.6.4.2.3 Status of Primary Home

In TJHD in 2018, the most common status for people's primary home in Albemarle County (41.0%), Fluvanna & Louisa Counties (51.9%), and Greene & Nelson Counties (43.3%) was homes owned with a mortgage. In Charlottesville, the most common status was a rented home for 57.7% of homes. In Greene & Nelson (31.3%), Fluvanna & Louisa (25.0%), and Albemarle (24.7%), over 20% of primary homes were owned free and clear. (Figure 21)

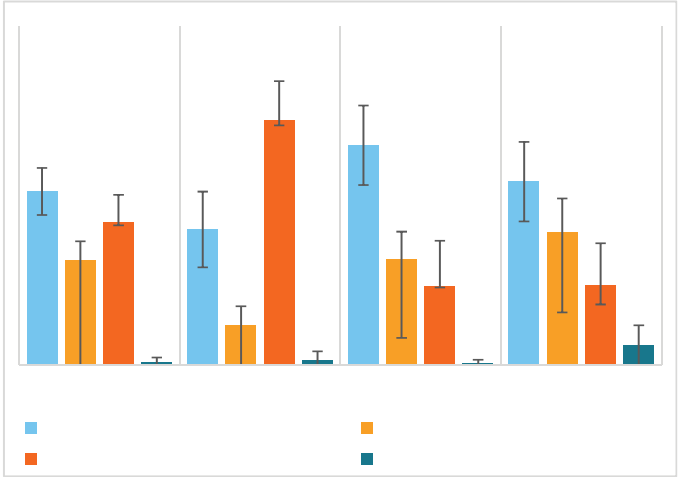

Figure 21 Status of Primary Home, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

Photovoice Photo: Southwood Boys & Girls Club

7.6.4.2.4 Type of Home Internet

In 2018, in Charlottesville (81.1%) and Albemarle County (78.2%), a majority of households had high-speed internet. People also indicated the presence of internet through their cell phones from 58.0% (Greene & Nelson Counties) to 68.5% (Albemarle County) across the district. In Fluvanna & Louisa Counties (16.2%) and Greene & Nelson Counties (22.6%), satellite internet was also common. Fluvanna & Louisa Counties (6.9%) also indicated some other type of internet; otherwise, the percentage of dial-up or other types of internet across the district all fell at or below 3.0%. (Figure 22)

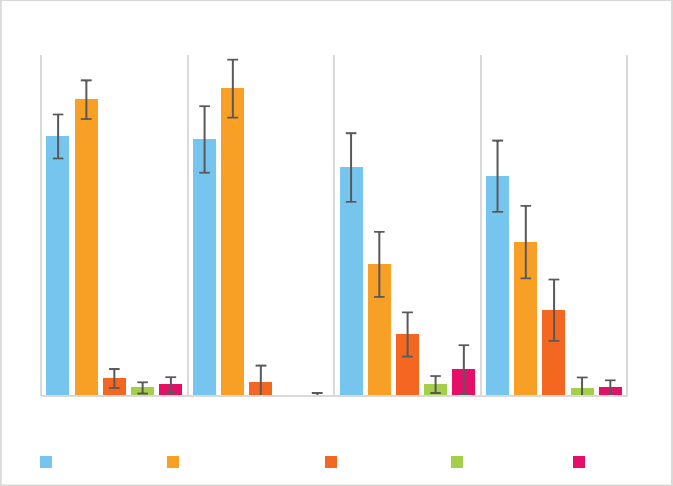

Figure 22 Type of Home Internet, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

7.6.4.3 RACIAL SEGREGATION IN HOUSING

"Although most overtly discriminatory policies and practices promoting segregation, such as separate schools or seating on public transportation or in restaurants based on race, have been illegal for decades, segregation caused by structural, institutional, and individual racism still exists in many parts of the country. The removal of discriminatory policies and practices has impacted acts of racism, but has had little effect on structural racism, like residential segregation, resulting in lingering structural inequalities. Although this area of research is gaining interest, structural forms of racism and their relationship to health inequities remain under-studied.

Residential segregation remains prevalent in many areas of the country and may influence both personal and community well-being. Residential segregation of Blacks and Whites is considered to be a fundamental cause of health disparities in the US and has been linked to poor health outcomes, including mortality, a wide variety of reproductive, infectious, and chronic diseases, and other adverse conditions. Structural racism is also linked to poor-quality housing and disproportionate exposure to environmental toxins. Individuals living in segregated neighborhoods often experience increased violence, reduced educational and employment opportunities, limited access to quality health care and restrictions to upward mobility."[35]

—Robert Wood Johnson Foundation, County Health Rankings and Roadmaps

County Health Rankings uses an index from 0 (complete integration) to 100 (complete segregation) to measure racial segregation. The measure looks at whether black and white residents and white and non-white residents live separately (segregated) from each other within a particular county or city by measuring how residents are distributed across census tracts within localities. People identifying as Hispanic may be included in the black, white, or non-white population so the measure does not capture ethnic discrimination in housing. From 2013–2017, all localities in TJHD were below the Virginia score of 50 for black/white racial segregation. In TJHD, black/white racial segregation in housing was highest in Albemarle County (40) followed closely by Charlottesville (39) and was lowest in Fluvanna County (16) and Louisa County (17). Although not shown in Figure 23, in Virginia, six localities scored either 3 or 4—almost complete black/white integration. Similarly, all TJHD localities were below Virginia's score of 41 for non-white/white housing segregation. Racial segregation was highest in Albemarle County and Charlottesville (32 for both), followed by Greene County (29); Fluvanna and Louisa Counties (14 for both) had the lowest non-white/white housing segregation. The non-white group includes residents that identify as Asian, American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, or some other race. (Figure 23)

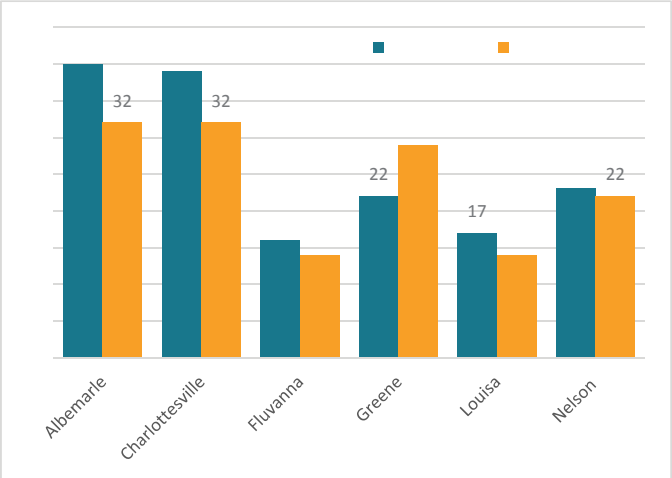

Figure 23 Residential Segregation by Race, TJHD Localities, 2013–2017 Estimate. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.6.4.4 HOMELESSNESS

As noted above, housing is a key social determinant of health and should be a fundamental human right. Being homeless affects health and well-being. People experiencing homelessness are at higher risk for shorter life expectancy, higher rates of health conditions, and greater usage of emergency department services. They are less likely to access primary care and other preventative health services and thus have a higher risk for later diagnosis of health conditions, difficulties managing chronic conditions such as high blood pressure, and hospitalization for preventative conditions.[36] Other health disparities among people experiencing homelessness include severe mental illness, substance use, and depression, which in turn, may exacerbate other chronic health conditions.[37] However, experts note that instead of first focusing on health, communities should focus on the root cause of homelessness—the lack of safe, stable, and affordable housing—in order to make homelessness a rare and brief occurrence.[38, 39]

The Thomas Jefferson Area Coalition for the Homeless (TJACH), a coalition of individuals and organizations working to end homelessness in TJHD, conducts a Point-in-Time (PIT) survey each year to assess the numbers and select characteristics of persons experiencing homelessness in TJHD. The number of persons experiencing homelessness has decreased 28% since 2010. In 2019, there were 165 persons experiencing homelessness counted by the survey,

Photovoice Photo: Friendship Court

which was a decrease from 2010 (228 persons experiencing homelessness). (Figure 24)

In 2019, 65% of persons counted were male and 35% were female (Figure 25). 37.0% of persons counted were black, 53.6% were white, and 9.4% identified as other (Figure 26). The 2019 survey found that families made up 16.1% of the population (Figure 27). Representing the largest single age group in 2019, 29.9% of people experiencing homelessness on the night of the survey were age 55 or older, 24.8% were ages 45–54, and 11.7% were under age 18. (Figure 28)

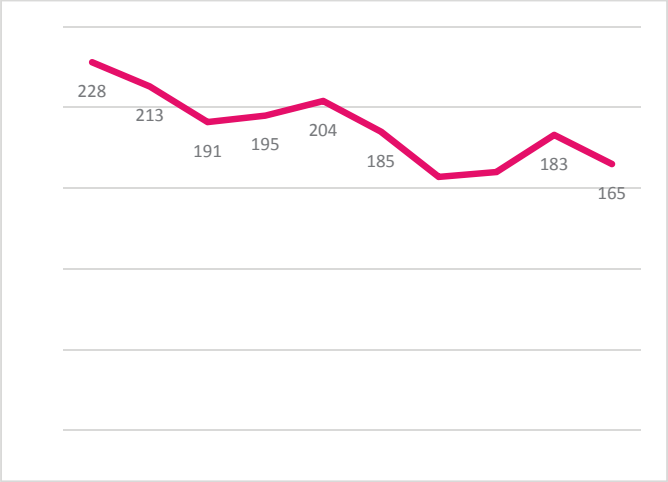

Figure 24 Point-in-Time Count of Persons Experiencing Homeless, TJHD, 2010–2019. Source: Thomas Jefferson Area Coalition for the Homeless, 2019. Accessed 2019.

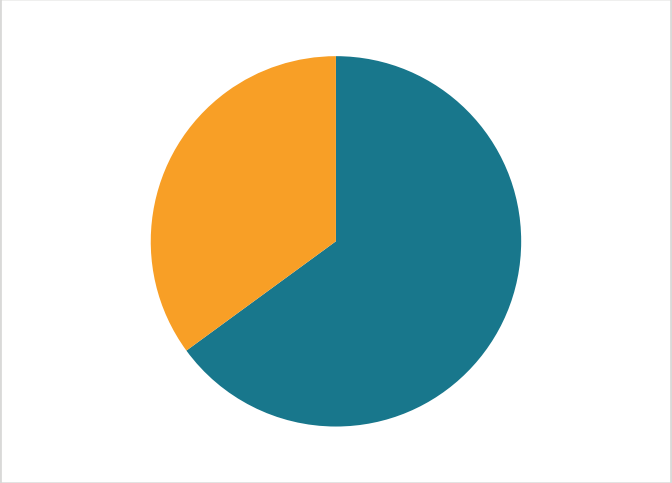

Figure 25 Point-in-Time Count of Persons Experiencing Homeless by Gender, TJHD, 2019. Source: Thomas Jefferson Area Coalition for the Homeless. Accessed 2019.

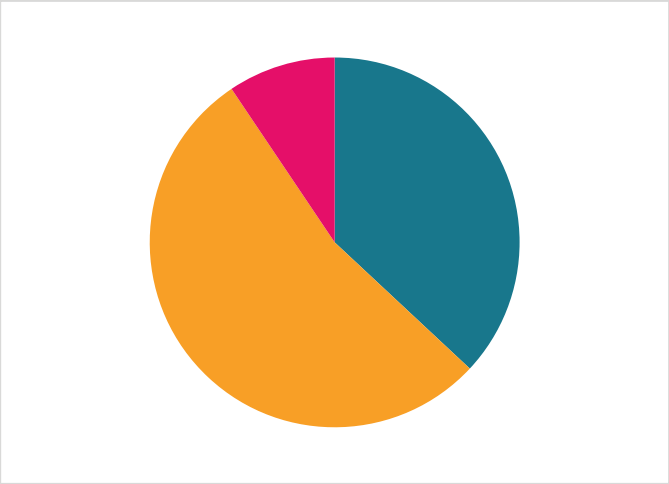

Figure 26 Point-in-Time Count of Persons Experiencing Homeless by Race, TJHD, 2019. Source: Thomas Jefferson Area Coalition for the Homeless. Accessed 2019.

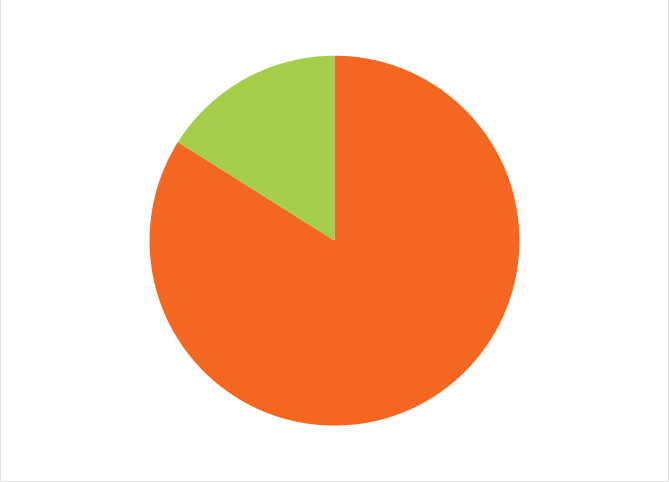

Figure 27 Point-in-Time Count of Persons Experiencing Homeless by Household Type, TJHD, 2019. Source: Thomas Jefferson Area Coalition for the Homeless. Accessed 2019.

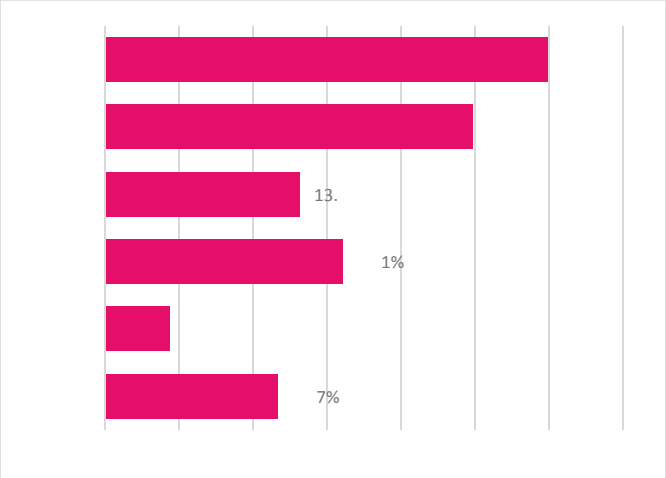

Figure 28 Point-in-Time Count of Persons Experiencing Homeless by Age, TJHD, 2019. Source: Thomas Jefferson Area Coalition for the Homeless. Accessed 2019.

7.6.5 Transportation

Transportation is vital for getting people where they need to go. Areas with robust systems of transportation can provide residents with access to services and resources that promote health, education, job opportunities, and housing. The availability of adequate and accessible transportation determines where individuals are able to eat, work, learn, play, and pray.[40]

In addition to moving people between points, the transportation choices that communities and individuals make have important impacts on health through active living, air quality, and traffic crashes. There is an association between commuting to work alone and health—the farther people commute by vehicle, the higher their blood pressure and body mass index, and the less physically active they are. In fact, each additional hour spent in a car per day is associated with a 6% increase in the likelihood of obesity.[41, 42]

As noted in Section 3, much of the public transit in TJHD is concentrated in the areas that are more densely populated. Without a robust public and private transportation system and infrastructure that supports other transportation options such as walking, biking, and/or carpooling, often the only option for individuals with cars is to commute alone. For individuals without cars, it can be costly and/or time-consuming to utilize public and/or private (e.g. taxis, Uber, Lyft) transportation options.

7.6.5.1 MAIN MODES OF TRANSPORTATION

In TJHD in 2018, the large majority of households (86.7%) indicated that their main mode of transportation was their own car. Other main modes of transportation included a friend's car (3.0%), other (2.2%), walking (1.6%), a city bus (1.4%), and using Jaunt (0.4%). Some respondents did not answer this question on the survey; however, the percentage of missing answers is not included in the figure so the percentages do not add up to 100%. (Figure 29)

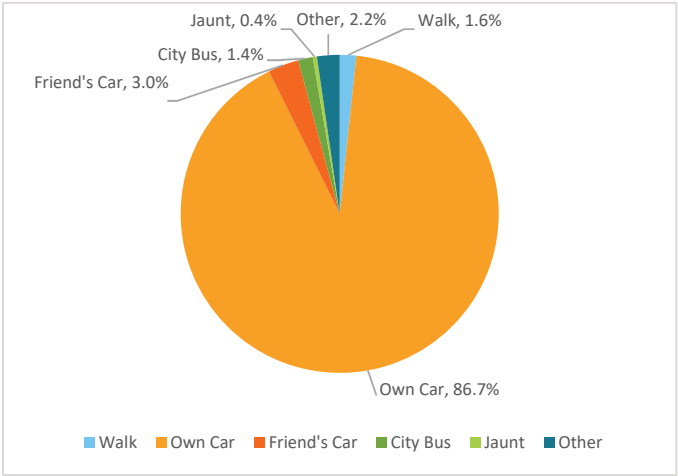

Figure 29 Household Main Mode of Transportation, TJHD, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

Photovoice Photo: Greene Care Clinic

7.6.5.2 RELIABLE TRANSPORTATION

In 2018, 93.3% of TJHD residents had transportation that they could rely on such as a personal vehicle or the bus. Reliable access to transportation was highest in Albemarle County (95.1%) and lowest in Charlottesville (91.8%). (Figure 30)

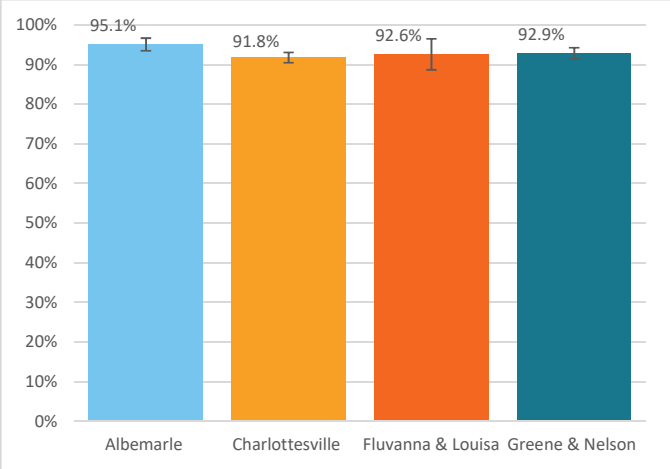

Figure 30 Percentage of Households Reporting There is Transportation to Rely On, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.6.5.3 WORKERS WITH NO VEHICLES AVAILABLE

From 2012–2016, the number of workers with no vehicle available in TJHD was highest in Charlottesville (1,593) and Albemarle County (946) and lowest in Fluvanna County (92) and Nelson County (108). (Figure 31)

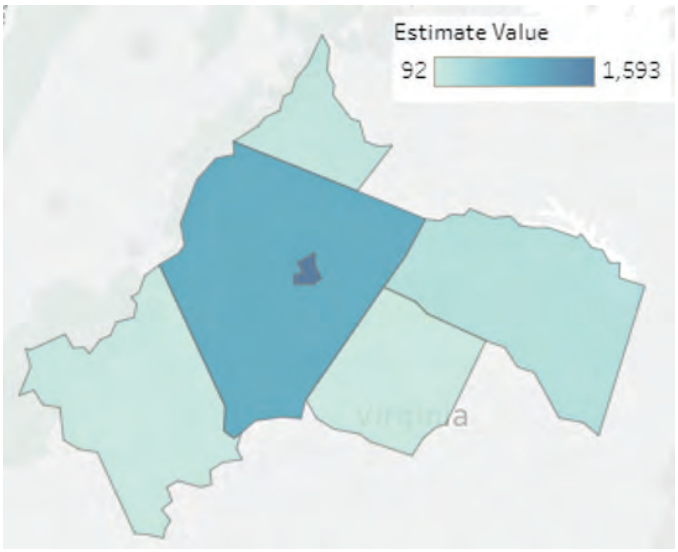

Figure 31 Workers with No Vehicle Available, TJHD Localities, 2012–2016, 5-year Estimate. Source: U.S. Census Bureau, American Community. Accessed 2019.

7.6.5.4 WORKERS COMMUTING ALONE

From 2013–2017, most workers commuted alone to work in both TJHD (66.8%) and VA (73.9%). The County Health Rankings "Top United States Performers" in the 10th percentile was 72% or below. (Figure 32)

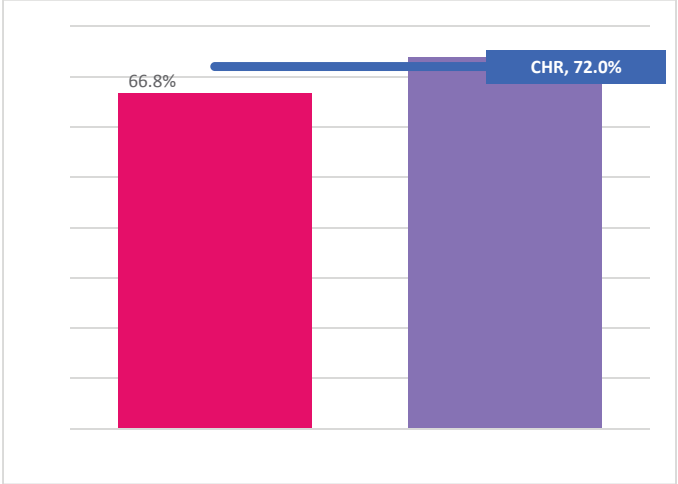

Figure 32 Percentage of Residents that Drive Alone to Work, TJHD and VA, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

7.6.5.5 LONG COMMUTE TO WORK

From 2013–2017, the percentage of workers who drove to work alone who had a long commute to work, defined as more than 30 miles, was 35.1% in TJHD, which was lower than the Virginia average of 39.0%; however, neither TJHD nor Virginia were close to being in the County Health Rankings "Top United States Performers" 10th percentile (15.0%). (Figure 33)

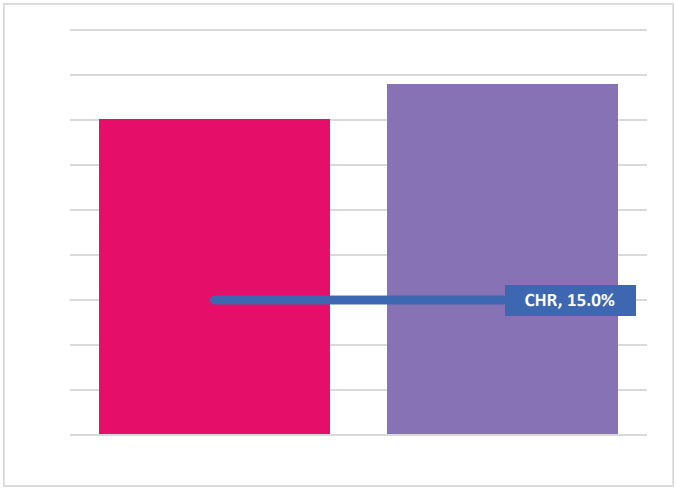

Figure 33 Percentage of Residents that Drive Alone to Work, TJHD and VA, 2013–2017, 5-year Estimate. Source: U.S. Census Bureau, American Community Survey. Accessed 2019.

7.6.5.6 DRIVERS' LICENSES

"Martin Kumer, superintendent of the Albemarle County Regional Jail in Charlottesville, wondered what charges were driving up the jail population years ago after it became overcrowded. Driving on a suspended license was one of the top charges inmates faced. 'We couldn't believe it,' he said. 'We thought there must be some mistake. It was right up there with drugs and breaking and entering.'"[43]

—The Washington Post

Photovoice Photo: Fluvanna/Fork Union JABA

Across the United States, an estimated seven million people have had their driver's licenses suspended or revoked due to a failure to pay court or administrative debts. Figure 34 shows that Virginia has one of the highest percentages in the United States of suspended licenses due to unpaid fines and court costs. According to the Virginia Department of Motor Vehicles, 647,517 drivers had their licenses suspended as of late 2016 for failure to pay fines and costs. In 2017, the Legal Aid Justice Center filed a class-action lawsuit against these types of driver's license suspensions.[44] In April 2019, the Virginia General Assembly passed a budget amendment re-instating driver's licenses suspended due to unpaid courts fines and fees.[45]

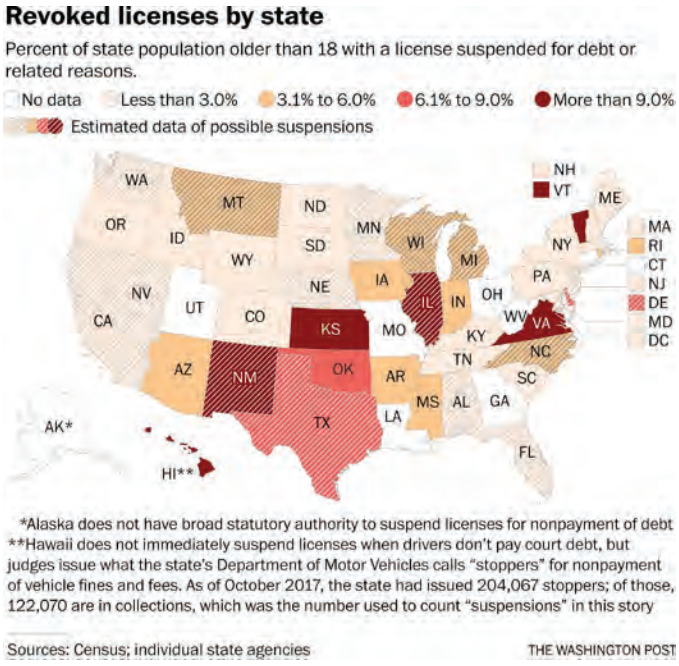

Figure 34 Percentage of State Population Older than 18 with a License Suspended for Debt or Related Reasons. Source: The Washington Post, 2018. Available at https://www.washingtonpost.com/local/public-safety/more-than-7-million-people-may-have-lost-drivers-licenses-because-of-traffic-debt/2018/05/19/97678c08-5785-11e8-b656-a5f8c2a9295d_story.html. Accessed 2019.

7.6.6 Community Safety and Well-being

7.6.6.1 ADVERSE CHILDHOOD EXPERIENCES

Childhood experiences, both positive and negative, have a tremendous impact on lifelong health and opportunity. Adverse Childhood Experiences (ACEs) are forms of abuse, neglect, and household challenges which may disrupt a child's neurological development and impair social, emotional, and cognitive development. ACEs have been linked to increased health risks for alcoholism, drug abuse, depression, suicide attempts, smoking, poor self-rated health, high numbers of sexual partners, sexually transmitted infections, physical inactivity, and obesity. ACEs have also been linked to health conditions such as heart disease, cancer, chronic lung disease, and liver disease. The higher the number of ACEs experienced, the higher the risk of developing these negative health behaviors, conditions, or outcomes.[46, 47, 48]

In Virginia in 2017, an estimated 23.6% of children had experienced one ACE and 20.5% had experienced two or more ACEs, which was similar to nationwide data (Figure 35).

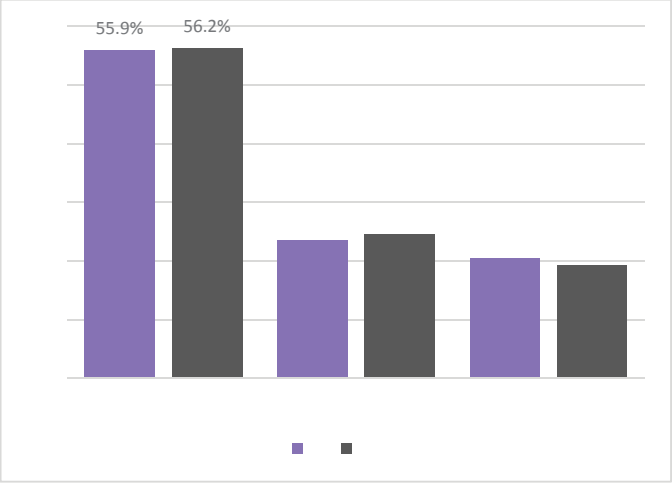

Figure 35 Percentage of Children Ages 0–17 Who Experienced Adverse Childhood Experiences, VA and U.S., 2017. Source: Child and Adolescent Health Measurement Initiative, 2017 National Survey of Children's Health. Accessed 2019.

7.6.6.2 CHILD ABUSE AND NEGLECT

Child abuse and neglect is the intentional abuse or neglect of a child under the age of 18 by a parent, caregiver, guardian, or another person in a custodial role (such as clergy, coach, or a teacher). There are four common types of child abuse or neglect: physical abuse, sexual abuse, emotional abuse, and neglect. According to the Centers for Disease Control and Prevention, at least one in seven children has experienced child abuse and/or neglect in the past year, although this is likely an underestimate. Children who live in poverty are five times more likely to experience child abuse and/or neglect.[49] There are many consequences to child abuse and neglect including immediate consequences like physical injuries (bruises, broken bones, cuts), as well as emotional and psychological consequences that may result in anxiety, depression, and impaired socio-emotional skills.[50]

The statewide four-year rolling average for the rate of founded child abuse and neglect cases has continued to decrease since 2004–2008, with 0.7 cases per 1,000 children from 2013–2017. However, the rate of child abuse and neglect cases has increased significantly in TJHD since 2009–2013. As of 2013–2017, the rate in TJHD was 5.3 founded cases per 1,000 children. (Figure 36)

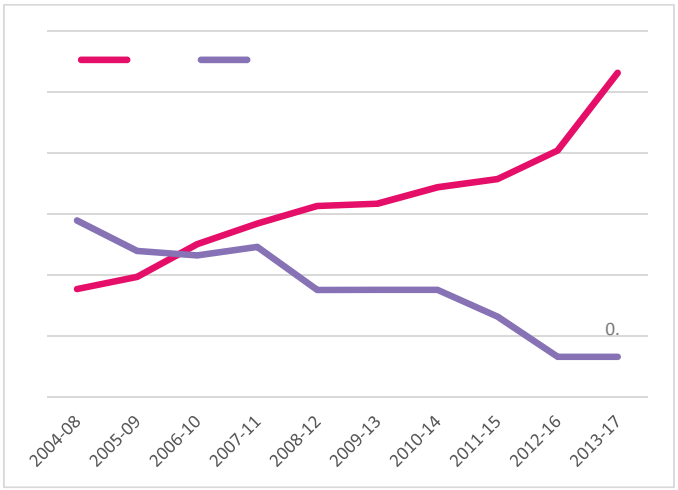

Figure 36 Founded Child Abuse and Neglect Report Rate (per 1,000 Children Aged 0–17), TJHD and VA, 2004–2017. Source: Virginia Department of Social Services Report, Completed Founded Investigations. Accessed 2019.

From 2013–2017, every locality in TJHD had higher rates per 1,000 children than the state rate of 0.7. Greene County (1.1) had the lowest rate, followed by Albemarle County (3.1). Charlottesville (10.8), followed by Nelson County (8.6) had the highest rates. (Figure 37)

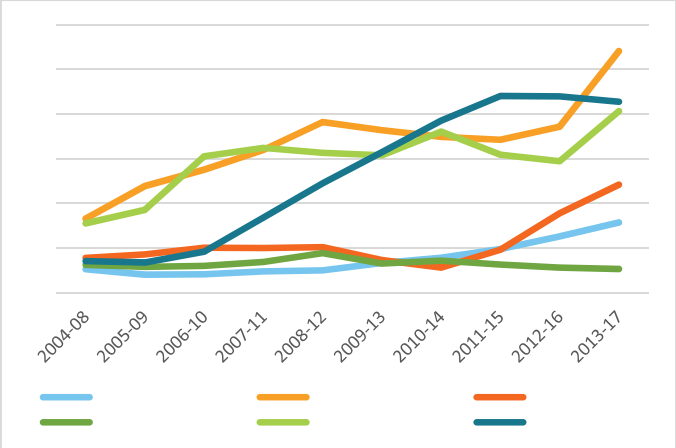

Figure 37 Founded Child Abuse and Neglect Report Rate (per 1,000 Children Aged 0–17), TJHD Localities, 2004–2017. Source: Virginia Department of Social Services Report, Completed Founded Investigations. Accessed 2019.

(54.1%) wherein an adult lacked the ability or will to take care of themselves. The second leading form of adult abuse was neglect by a caretaker (18.5%), followed by financial exploitation (13.2%). (Figure 38)

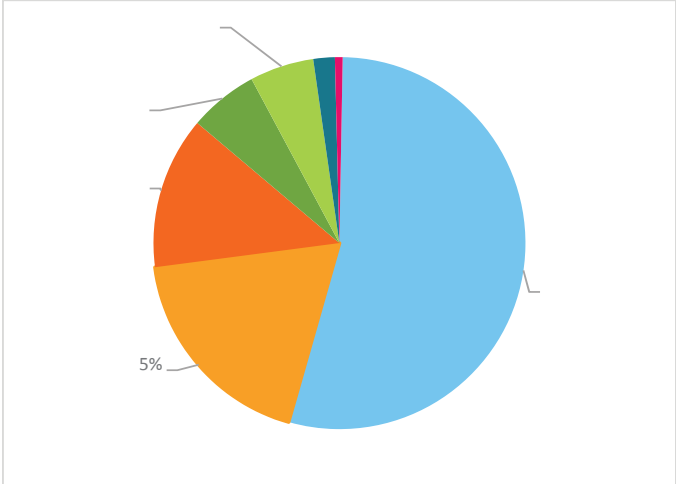

Figure 38 Percentage of Adult Abuse by Forms of Abuse, VA, Fiscal Year 2018. Source: Virginia Department of Aging and Rehabilitative Services, Adult Protective Services Division, FY 2018 Annual Report. Accessed 2019.

7.6.6.3 ADULT ABUSE AND NEGLECT

According to the CDC, elder abuse is "the intentional act, or failure to act, by a caregiver or other person in a relationship involving expectation of trust that causes or creates a risk of harm to an older adult (someone age 60 or older)."[51] Elder abuse can be in the form of physical, sexual, emotional, psychological, or financial abuse, and/or neglect. Elder abuse can cause problems for older adults including physical injuries (cuts, scratches, bruises, broken bones), emotional injuries (anxiety and depression), disabilities, and even death.[52]

The Virginia Department of Aging and Rehabilitative Services tracks adult abuse reports and provides data at a regional level. As TJHD localities fall within several regions, the statewide percentages are reported as most regions had similar findings. In Virginia in fiscal year 2018, the majority of substantiated adult abuse cases were self-neglect

Photovoice Photo: Scottsville and Esmont JABA

7.6.6.4 UNINTENTIONAL INJURIES

7.6.6.4.1 Hospitalizations Due to Falls

Since 2009–2012, the hospitalization rate for falls has remained at least five times greater for adults older than 65 than for adults of all ages. The rate of accidental falls for both adults over 65 and those of all ages has slightly decreased since 2009–2012 in TJHD and statewide. In 2013–2016, the hospitalization rate for falls was 1,092.3 per 100,000 population for Virginia adults 65+ years, higher than the rate for TJHD adults 65+ (1,024.7). The rate for TJHD adults of all ages was 176.3; for Virginia adults of all ages, it was 193.6. (Figure 39)

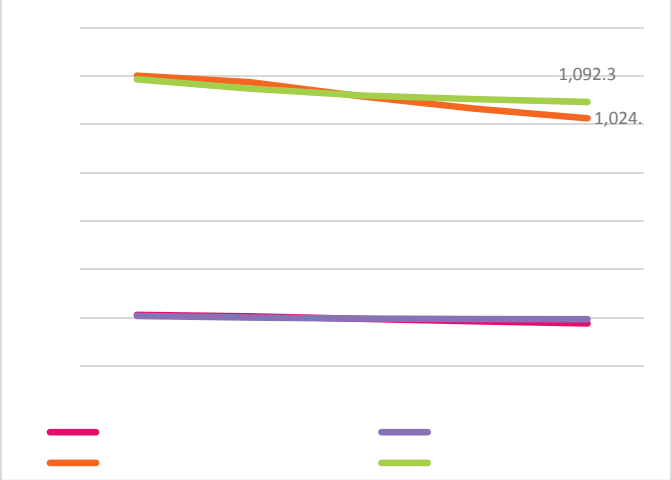

Figure 39 Rate of Unintentional Injury Hospitalizations Due to Falls (per 100,000 persons, age-adjusted) by Age, 2009–2016, 3-year Rolling Averages. Source: Virginia Department of Health, Online Injury Reporting System. Accessed 2019.

Photovoice Photo: Louisa Reentry Program

7.6.6.4.2 Hospital Stay Duration Due to Falls

In 2014–2016 in TJHD and Virginia, hospital stays on average were the same for TJHD and Virginia residents of all ages as for TJHD and Virginia adults 65 years or older. Hospitalizations due to falls lasted longer (5.1 days on average) across Virginia than in TJHD (4.5 days on average). (Figure 40)

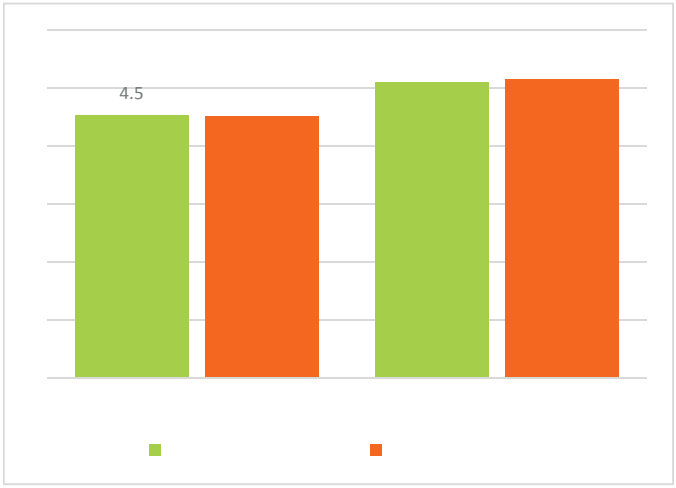

Figure 40 Average Length of Hospital Stay in Days for Unintentional Injury Hospitalizations Due to Falls, TJHD and VA, 2014–2016 Combined. Source: Virginia Department of Health, Online Injury Reporting System. Accessed 2019.

7.6.6.4.3 Motor Vehicle Crashes

From 2011–2017 in TJHD, Louisa County (24 deaths per 100,000 persons) had the highest rate of mortality for motor vehicle crashes, followed closely by Nelson County (23). Charlottesville (4) had the lowest rate of mortality followed by Albemarle (9), Greene (13), and Fluvanna Counties (18). (Figure 41)

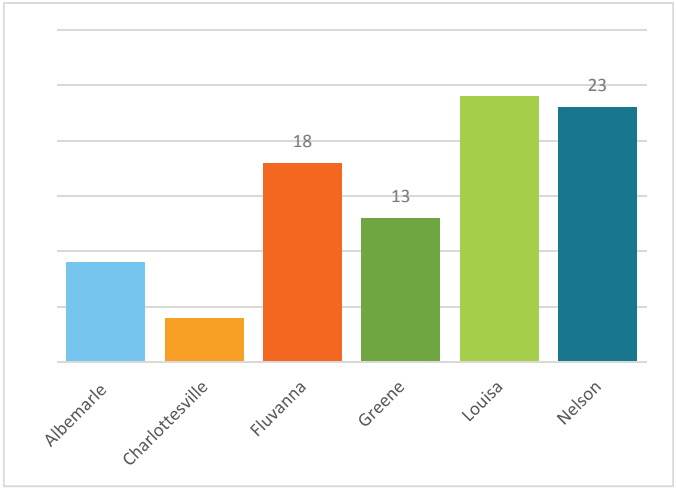

Figure 41 Rate of Motor Vehicle Crash Deaths (per 100,000 persons), TJHD Localities, 2011–2017 Average. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.6.6.5 VIOLENCE

Violence affects health by causing injury, disability, and premature death. Some groups are disproportionately affected by violence including African Americans, American Indians and Alaska natives, and people living in low-income areas. Individuals who report exposure to violence as children are more likely to suffer from chronic health conditions in adulthood.[53]

7.6.6.5.1 Violent Crime

Data from 2014 and 2016 show the violent crime rate per 100,000 population. In TJHD, the violent crime rate was by far the highest in Charlottesville (480). All other TJHD localities were below the Virginia violent crime rate of 207. However, no TJHD localities met the County Health Rankings "Top United States Performers," that is, localities that fell in the top tenth percentile (rate of 63 per 100,000 population or below). County Health Rankings defines violent crime as offenses that involve face-to-face contact such as homicide, rape, robbery, and aggravated assault. Data come from the FBI's Uniform Crime Reporting system. (Figure 42)

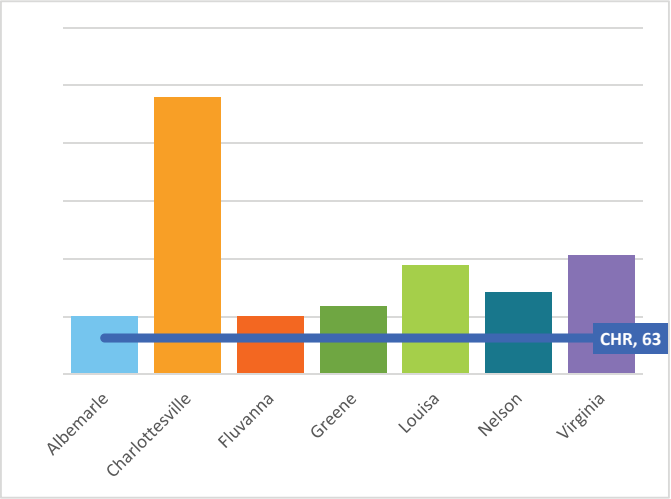

Figure 42 Violent Crime Rate (per 100,00 Population), TJHD Localities and VA, 2014 & 2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

7.6.6.5.2 Firearm Fatalities

From 2013–2017, the firearm fatality rate per 100,000 population was by far the highest in Nelson County (23). Louisa County (14) was the only other TJHD locality above the Virginia rate of 11. County Health Rankings notes that suicides (63%) are the leading cause of firearm fatalities in the United States, followed by homicides (33%).[54] (Figure 43)

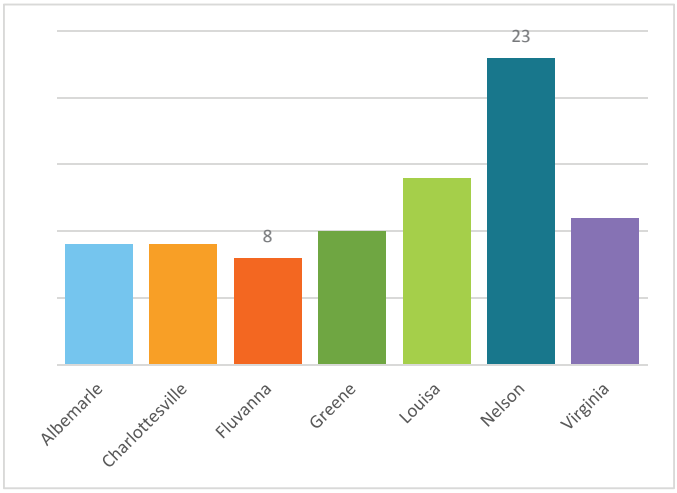

Figure 43 Firearm Fatalities Rate (per 100,00 Population), TJHD Localities and VA, 2013–2017 Estimate. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.6.6.5.3 Youth in a Physical Fight in Virginia

In 2017, the Virginia Youth Risk Behavior Survey (YRBS) asked high school students if they had been in a physical fight one or more times during the 12 months before the survey. Overall, 19.8% of students reported a physical fight; the percentage was greater among male students (24.8%) than female students (14.3%) and greater among 9th and 10th graders than 11th and 12th graders. By race and ethnicity, students that identified as black (27.4%) reported the largest

percentage of physical fights, followed by students of multiple races (23.8%), and Hispanic/Latino students (22.3%). (Figure 44)

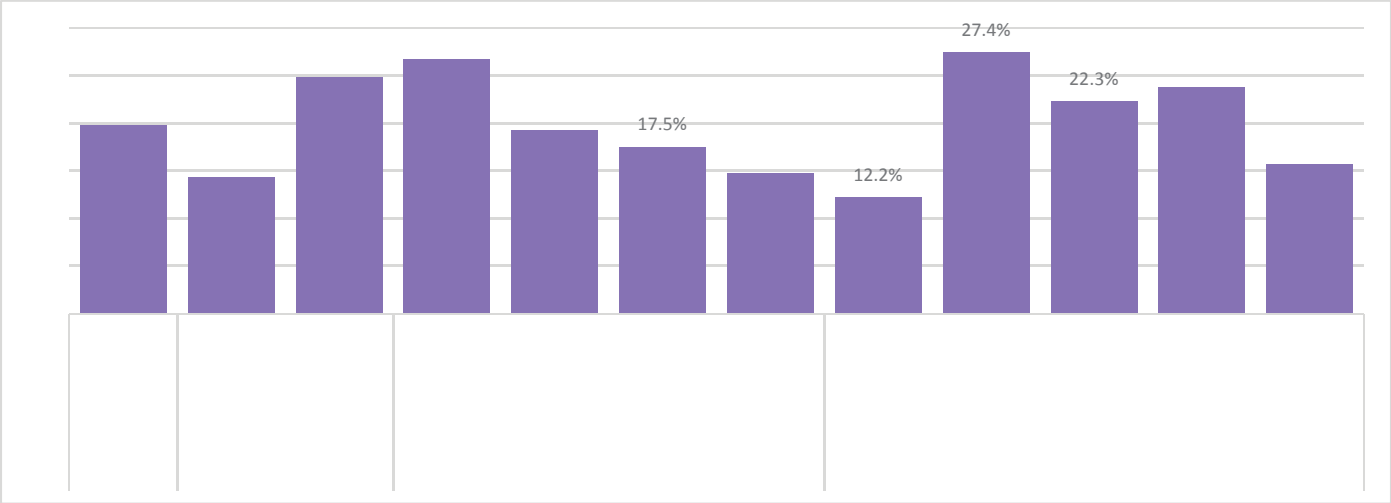

Figure 44 Percentage of Virginia High School Students in a Physical Fight (within last 12 months) by Total, Gender, Grade, and Race, VA, 2017. Virginia Youth Risk Behavior Survey, 2017 Report. Accessed 2019.

Nationally in 2017, the percentage of high school students who had been in at least one physical fight during the 12 months before the survey was 23.6% (larger than in Virginia). The prevalence of having been in a physical fight was higher among male students (30.0%) than female students (17.2%) and highest in 9th grade (28.3%). By race and ethnicity, the prevalence of physical fights was higher among black students (33.2%) and Hispanic students (25.7%) than white students (20.8%). 27.9% of gay, lesbian, and bisexual students reported being in a physical fight, compared to 23.2% of heterosexual students and 19.8% of "not sure" students.[55]

Photovoice Photo: Louisa Reentry Program

7.6.6.5.4 Youth Experiencing Dating Violence in Virginia

In 2017, the Virginia Youth Risk Behavior Survey (YRBS) asked high school students if they had experienced physical dating violence one or more times during the 12 months before the survey, if they had dated in that time period. Physical dating violence was defined as being physically hurt on purpose by someone they were dating (e.g., hit, slammed into something, injured with an object or weapon). Overall, 10.6% of students reported physical dating violence; the percentage was somewhat greater among female students (11.7%) than male students (9.2%) and greatest among 9th graders (11.9%). By race and ethnicity, students that identified as Hispanic/Latino (14.3%) reported the largest percentage of physical dating violence, followed by black students (11.3%). (Figure 45)

Nationally in 2017, the percentage of students that had experienced physical dating violence, if they had been dating someone during the 12 months before the survey, was 8.0%. The prevalence of having experienced physical dating violence was higher among female students (9.1%) than male students (6.5%) and higher among black students (10.2%) than

Hispanic students (7.6%) and white students (7.0%). The prevalence was highest among 12th grade students (9.2%). 6.4% of heterosexual students, compared to 17.2% of gay, lesbian, and bisexual students, and 14.1% of "not sure" students reported experiencing physical dating violence.[56]

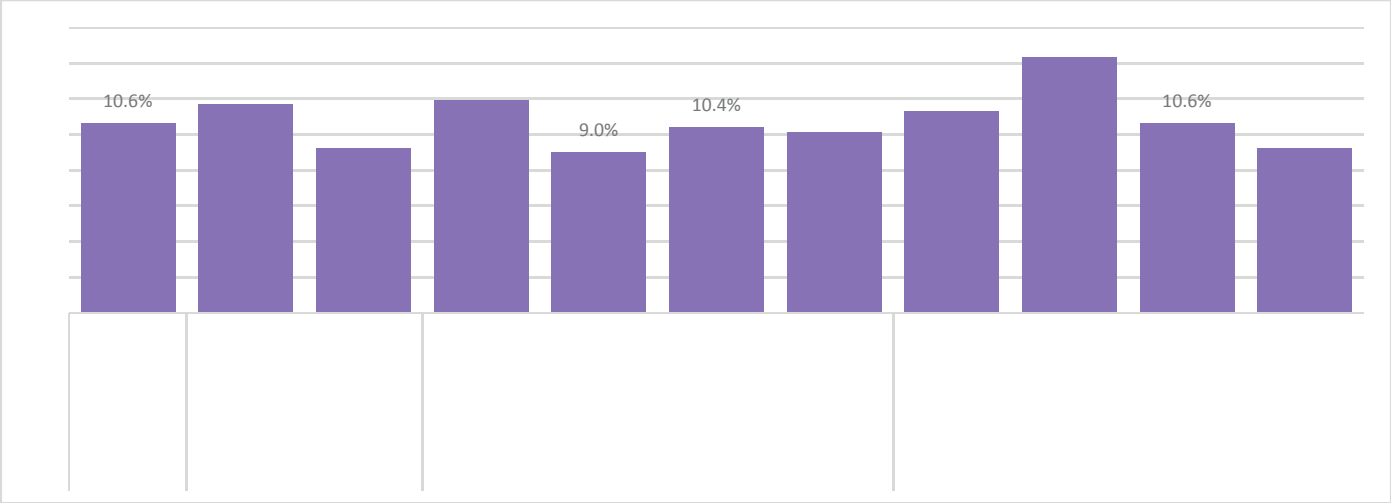

Figure 45 Percentage of Virginia High School Students Who Experienced Dating Violence (within last 12 months) by Total, Gender, Grade, and Race, VA, 2017. Virginia Youth Risk Behavior Survey, 2017 Report. Accessed 2019.

7.6.7 Incarceration

"With approximately 2.2 million American adults and youths behind bars, the United States incarcerates many more persons—both in absolute numbers and as a percentage of the population—than any other nation in the world."[57]

—Robert Wood Johnson Foundation

Even though black individuals only account for 19% of the residents in Charlottesville, they were five times more likely to be arrested. According to Charlottesville Police Department data, black residents accounted for 54.3% of all arrests, dating back to 2014.[58] Nationally, black individuals are more likely to be stopped and searched by the police than white individuals. Black individuals are also more likely than white individuals to be arrested, sentenced to jail time, and to receive longer sentences for the same offense.[59, 60]

Incarceration negatively affects individual, family, and community health. In the United States, the incarceration rate has increased fivefold since 1975.[61] Incarceration particularly affects people of color, who are disproportionately incarcerated, especially black Americans and American Indians. Estimates indicate that one in three black men will be incarcerated at some point during their lifetime. Persons with disabilities are three to four times more likely to be incarcerated than non-disabled people. Low-income persons and persons with lower educational attainment, especially people without a high school diploma or GED, are also disproportionately represented behind bars.[62, 63]

In studies controlling for prior health conditions, results showed that incarceration was associated with more chronic health problems, lower self-reported health, more infectious disease (e.g. HIV, hepatitis, tuberculosis, and sexually transmitted infections), and more stress-related illness. At a social level, having a family member incarcerated is a risk factor for women (but not men) for having a heart attack, stroke, obesity, or fair to poor health. Incarceration of family members contributes to overall racial disparities in health. Incarceration is also associated with acute stress as well as chronic stress, and

stress is negatively associated with health.[64] In addition, incarceration affects a wide array of social determinants of health. When individuals are released from incarceration, they face social stigma and higher barriers to employment, economic stability, affordable housing, and education.[65]

Incarceration also negatively affects childhood health and well-being. More than 45,000 American youth are incarcerated in juvenile detention facilities, adult prisons, and jails. Having an incarcerated parent is considered an adverse childhood experience (ACE). Approximately 10 million children in the United States have had one or more parents incarcerated at some point in their lives. Parental incarceration increases children's risk for drug abuse, criminality, delinquency, health problems (HIV/AIDS, asthma, depression, high cholesterol, migraines), and anxiety.[66] And because parental incarceration is much higher for black children than for white children, this contributes to racial disparities in childhood health and well-being.[67]

Within TJHD, there is a state prison and a regional jail. The Fluvanna Correctional Facility is a high-security women's prison that includes the women's death row for the Commonwealth of Virginia; the prison housed 1,204 women, as of January 2019.[68] The Albemarle-Charlottesville Regional Jail (ACRJ) serves Albemarle County, Charlottesville, and Nelson County [69] and has an average daily population of 430 male and female inmates.[70] The counties of Fluvanna, Greene, and Louisa are served by the Central Virginia Regional Jail (CVRJ), which is situated in Orange, Virginia (outside the boundary of TJHD).[71] CVRJ has an average daily population of 387 but housed 4,760 inmates over a one-year period from September 2016 to September 2017.[72]

7.6.8 An Age-Friendly Community

According to the World Health Organization (WHO) an age-friendly community "enables people of all ages to actively participate in community activities and treats everyone with respect, regardless of their age."[73] Age-friendly communities have been found to foster a healthy community by providing older adults with resources to lead healthy and active lives. However, there are differences in the ability to create an age-friendly community based on geographic location and size of the community. For example, rural communities tend to be able to implement smaller programs that foster age-friendly community attributes; however, they lack the infrastructure to tackle larger projects that urban areas can implement.[74]

The TJHD Community Health survey asked respondents, "How would you rate your community as a place for people to live as they age?" Over 50% of respondents in Albemarle County, Charlottesville, and Greene & Nelson Counties indicated that their community was an excellent or very good place to age. Under 5% of respondents in every locality indicated that their community was a poor place to age. 15.8% of respondents in Fluvanna & Louisa Counties indicated that their community was only a "fair" place to age, followed by 10.5% in Charlottesville, and 9.5% in Albemarle County. (Figure 46)

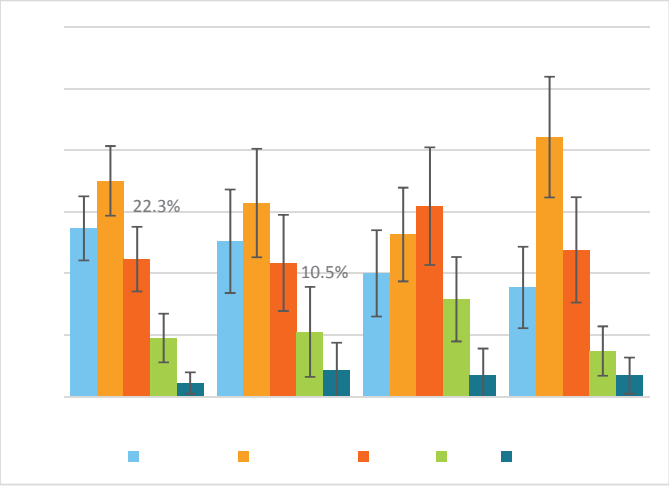

Figure 46 Rating for Current Community as a Place to Live While Aging, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.6.9 Social Connectedness

7.6.9.1 FREQUENCY OF SOCIAL INTERACTIONS

"Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality. A 2001 study found that the magnitude of health risk associated with social isolation is similar to the risk of cigarette smoking. Furthermore, social support networks have been identified as powerful predictors of health behaviors, suggesting that individuals without a strong social network are less likely to make healthy lifestyle choices than individuals with a strong network. A study found that people living in areas with high levels of social trust are less likely to rate their health status as fair or poor than people living in areas with low levels of social trust."[75]

—County Health Rankings

Loneliness and social isolation can affect health behaviors as well as mental and physical health outcomes.[76] The TJHD Community Health Survey asked respondents, "How frequently do you interact with your friends, family, or neighbors?" The majority of respondents interacted with friends, family, and/or neighbors about once a day with the largest percentage in Charlottesville (68.7%) and the smallest percentage of daily interaction in Greene & Nelson Counties (56.1%). The next most common response was several times a week, with the largest percentage in Greene & Nelson Counties (34.2%) and the smallest percentage in Charlottesville (20.9%).

The percentage of respondents that interacted with friends, family, and/or neighbors once a week or once every two or three weeks was less than 5% across all localities. Some answer choices were not graphed—across all localities, less than 1% of respondents interacted once a month and 2% or less never interacted with friends, family, or neighbors. However, 3.5% of Charlottesville respondents indicated that they interacted with friends, family, and/or neighbors less than once a month, whereas all other TJHD localities had less than 1% of respondents who selected less than once a month. (Figure 47)

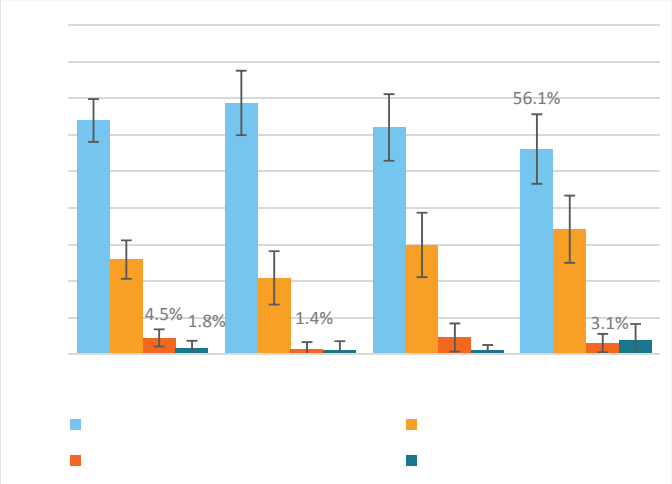

Figure 47 Percentage of Frequency of Interaction with Friends, Family, and Neighbors, TJHD Localities, 2018. Source: Thomas Jefferson Health District Community Health Survey. Accessed 2019.

7.6.9.2 SOCIAL ASSOCIATIONS

County Health Rankings measures the rate of participation in social associations in cities and counties across the United States. Membership in social associations may decrease loneliness and social isolation and/or enhance social trust, and functions as one measure of social and community support. Data are pulled from primary business codes by locality civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations.[77]

In TJHD in 2016, Charlottesville (21.7) had by far the highest rate of membership in social associations per 10,000 population while Greene County (6.2) had

the lowest rate of social associations. However, no TJHD localities were in the County Health Rankings top 90th percentile (21.9 per 10,000 population) of "Top United States Performers," although Charlottesville was extremely close. (Figure 48)

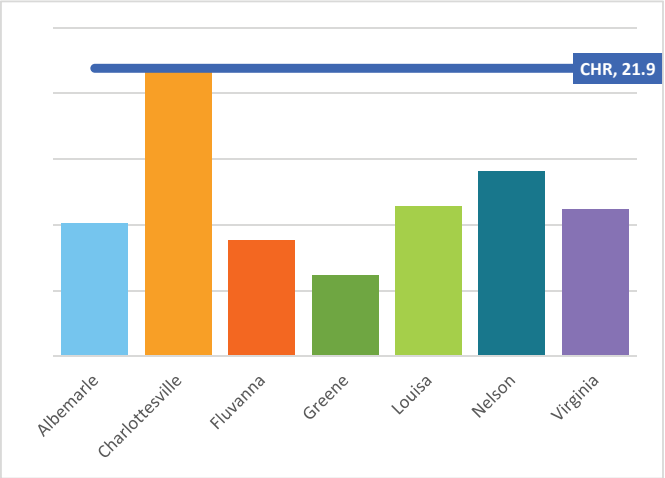

Figure 48 Participation in Social (Membership) Associations (per 10,000 Population), TJHD Localities and VA, 2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

Photovoice Photo: Fluvanna/Fork Union JABA

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Photovoice Photo: Southwood Boys & Girls Club

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Photovoice Photo: Scottsville and Esmont JABA

7.7 | SUPPLEMENTAL DATA

7.7.1 Leading Causes of Death

7.7.1.1 LEADING CAUSES OF DEATH IN THE UNITED STATES

In 2017, the age-adjusted mortality rate per 100,000 standard population was 731.9 in the United States. By race and ethnicity, the mortality rate was highest among non-Hispanic black males (1,083.3), followed by non-Hispanic white males (885.1) and non-Hispanic black females (728.0). The United States mortality rate in 2017 was lowest for Hispanic females (434.2), Hispanic males (631.8), and non-Hispanic white females (642.8).[1]

The top 10 leading causes of death (ranked according to number of deaths, not by rate) in the United States in 2017 were the same as in 2016—heart disease, cancer, unintentional injuries, chronic lower respiratory diseases, stroke, Alzheimer's disease, diabetes, influenza and pneumonia, kidney disease, and suicide—and accounted for 74.0% of all deaths in the United States in 2017.[2]

7.7.1.2 LEADING CAUSES OF DEATH IN VIRGINIA

Similarly, in Virginia in 2017, the top 10 leading causes of death (ranked according to number of deaths, not by rate) were cancer, heart disease, accidents, stroke, chronic lower respiratory diseases, Alzheimer's disease, diabetes, kidney disease, septicemia, and flu/pneumonia (Figure 1).[3]

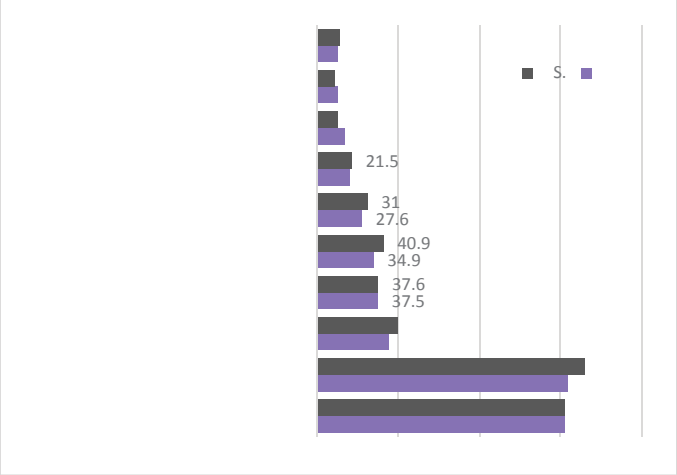

Figure 1 Top 10 Leading Causes of Death in Virginia, Rate per 100,000 Population (age-adjusted), VA and U.S., 2017. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Accessed 2019.

7.7.2 Cancer

Cancer is not one disease, but a number of different diseases that have some commonalities. In general, the major risk factors for cancer include a person's age, sex, and family medical history. Different kinds of cancers have specific risk factors.[4] For example:

- Tobacco use causes cancers of the lung, esophagus, larynx, mouth, throat, kidney, bladder, liver, pancreas, stomach, cervix, colon, and rectum, and leukemia.[5]

- Unprotected exposure to sunlight is related to skin cancer.[6]
- Age, family history, taking hormones, drinking alcohol, overweight or obesity after menopause, and physical inactivity are all risk factors for breast cancer.[7]

7.7.2.1 CANCER INCIDENCE

In TJHD in 2016, the cancers with the top 10 incidence rates per 100,000 population (age-adjusted) were breast, prostate, lung, colorectal, uterine, skin (melanoma), non-Hodgkin lymphoma (NHL), kidney, bladder, and thyroid cancers (Figure 2).

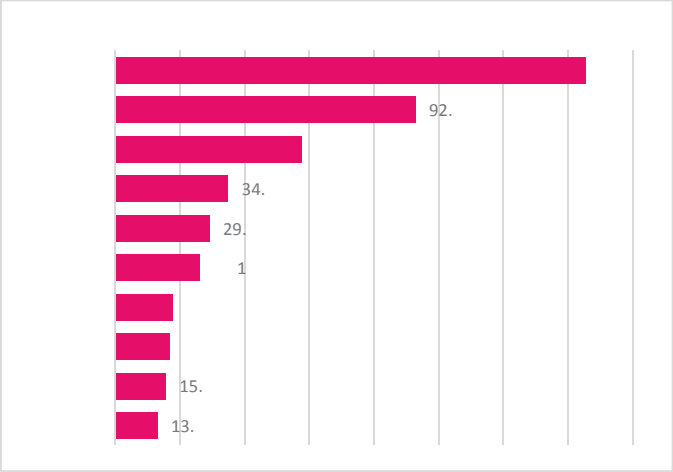

Figure 2 Top 10 Cancer Incidence Rates (per 100,000, age-adjusted), TJHD, 2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.1.1 Cancer Incidence by Race

From 2011 to 2016, for all cancer incidence rates per 100,000 persons (not just the top 10 cancers), the TJHD black population had the highest incidence rate (458.5 in 2016) and the Virginia white population had the lowest (406.8 in 2016). From 2011 to 2015, the TJHD white population had a slightly lower all cancer incidence rate than the Virginia black population, but the incidence rate for the TJHD white population (453.1) rose in 2016. (Figure 3)

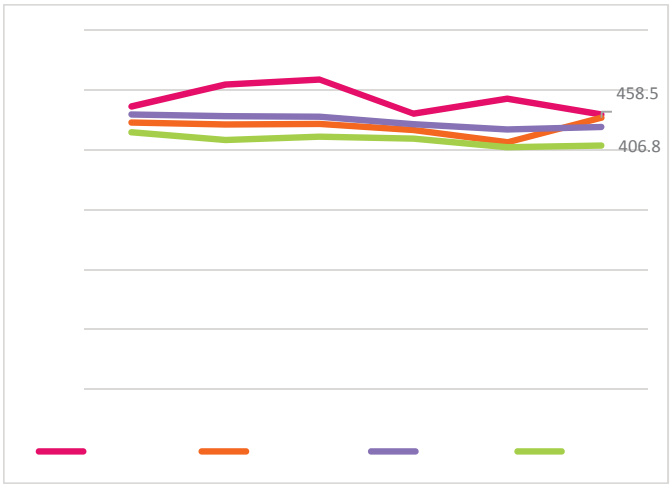

Figure 3 All Cancer Incidence Rates (per 100,000, age-adjusted) by Race, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.2 CANCER MORTALITY

In 2016, cancer mortality rates (per 100,000, age-adjusted) were higher in all TJHD localities than in Virginia (160.8) with the exception of Albemarle County (134.3) (Figure 4).

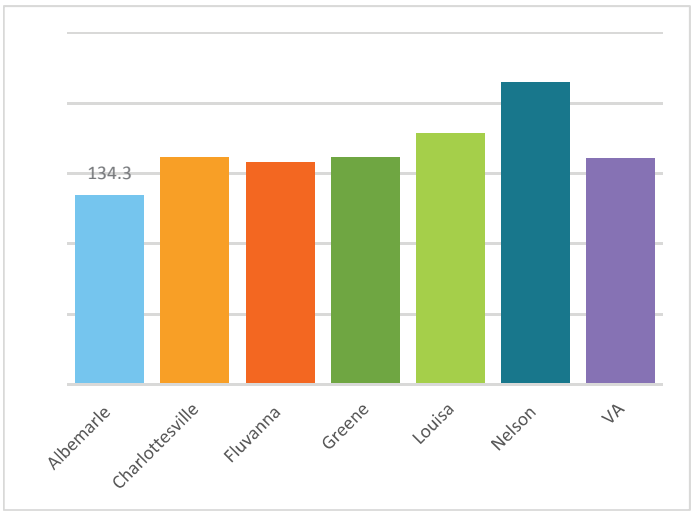

Figure 4 Cancer Mortality for All Malignant Cancers (per 100,000, age-adjusted), TJHD Localities and VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.2.1 Cancer Mortality by Race

From 2012–2016, the cancer mortality rate per 100,000 persons for all malignant cancers was higher for the black population in each TJHD locality than for the white population. The cancer mortality rate for black persons was highest in Louisa County (322.9) followed by Fluvanna County (279.2) while the cancer mortality rate for white persons was highest in Nelson County (199.7) followed by Louisa County (179.3). (Figure 5) Although not shown in Figure 5, in Virginia, the cancer mortality rate was also higher for the black population (189.6) than the white population (159.2).

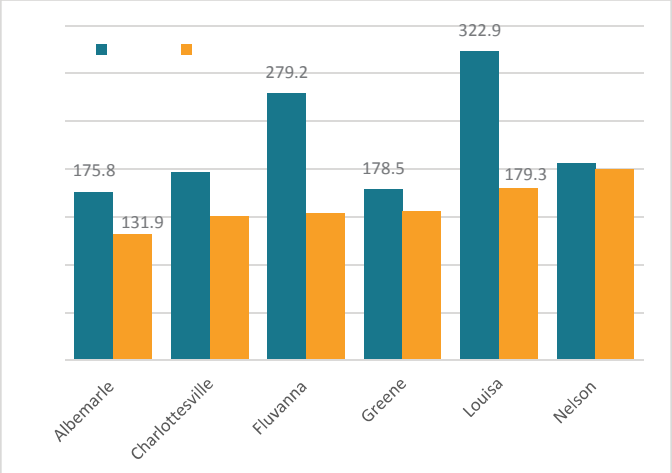

Figure 5 Cancer Mortality for All Malignant Cancers (per 100,000, age-adjusted) by Race, TJHD Localities, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.2.2 Cancer Mortality by Gender

From 2012–2016, the cancer mortality rate per 100,000 persons for all malignant cancers was higher for the male population in each TJHD locality than for the female population. Similar to race, the cancer mortality rate for males was highest in Louisa County (285.0) followed by Fluvanna County (206.6), while the cancer mortality rate for females was also highest in Louisa County (165.9) followed by Greene County (159.0). (Figure 6) Although not shown in Figure 6, in Virginia, the cancer mortality rate was also higher for the male population (193.8) than the female population (137.3).

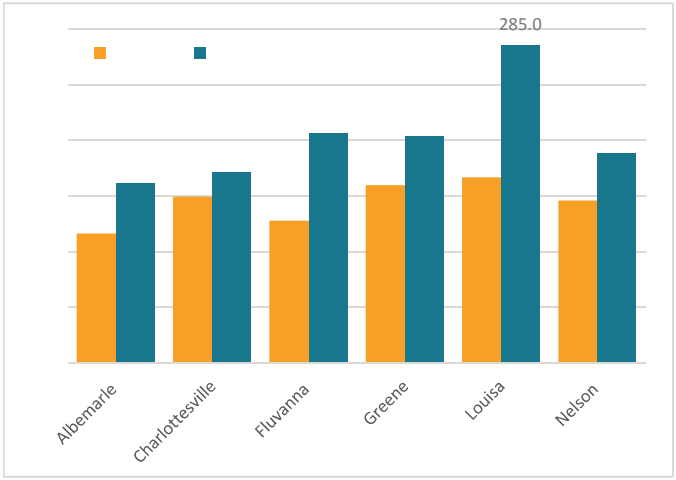

Figure 6 Cancer Mortality for All Malignant Cancers (per 100,000, age-adjusted) by Gender, TJHD Localities, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.3 BREAST CANCER

Except for skin cancers, breast cancer is the most common cancer among women in the United States and the second leading cause of cancer death among women, after lung cancer. However, mortality rates for breast cancer have dropped 40% among women since 1989—most likely due to early screening, prevention, increased awareness, and better treatments.[8]

Photovoice Photo: Friendship Court

7.7.2.3.1 Breast Cancer Incidence

Of all cancers, breast cancer had the highest incidence in TJHD in 2016. The rate per 100,000 persons was higher in TJHD (145.4) than in Virginia (126.6) in 2016. (Figure 7)

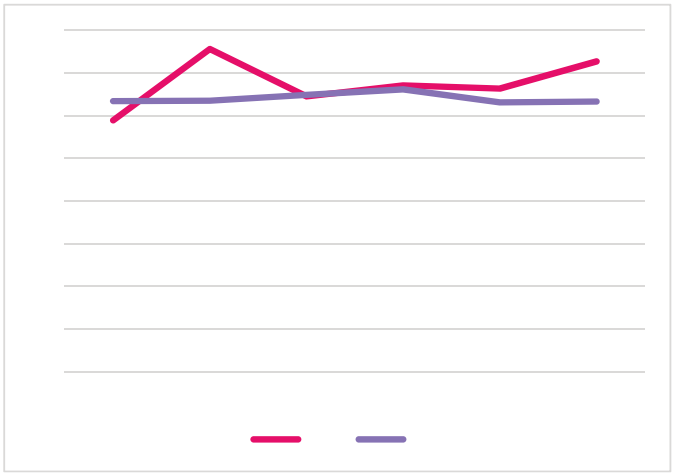

Figure 7 Breast Cancer Incidence Rate (per 100,000, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.3.2 Breast Cancer Incidence by Race

With the exception of 2012 and 2016, breast cancer rates by race in TJHD and Virginia were fairly similar. However, rates diverged in 2016 with TJHD white females (153.9) having the highest incidence per 100,000 persons followed by Virginia black females (130.0), and Virginia white females (126.3). In 2016, TJHD black females (96.2) had the lowest incidence of breast cancer. (Figure 8)

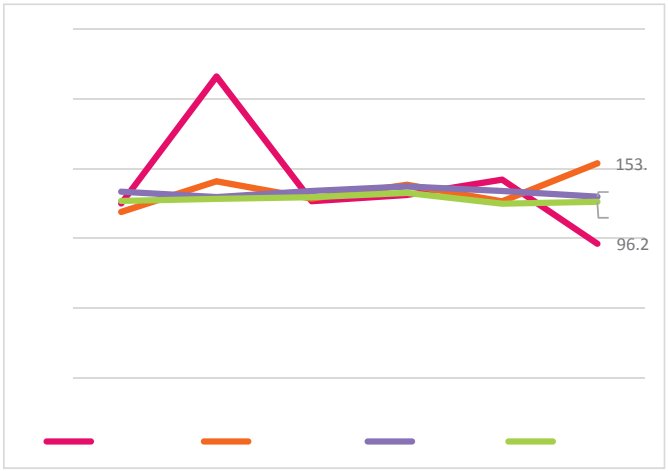

Figure 8 Breast Cancer Incidence Rate (per 100,000, age-adjusted) by Race, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.3.3 Breast Cancer Mortality

From 2012–2016, breast cancer mortality was highest among Virginia black females (28.8 per 100,000 persons) followed by Virginia white females (20.4), and lowest among Virginia Asian and Pacific Islander females (9.7) (Figure 9).

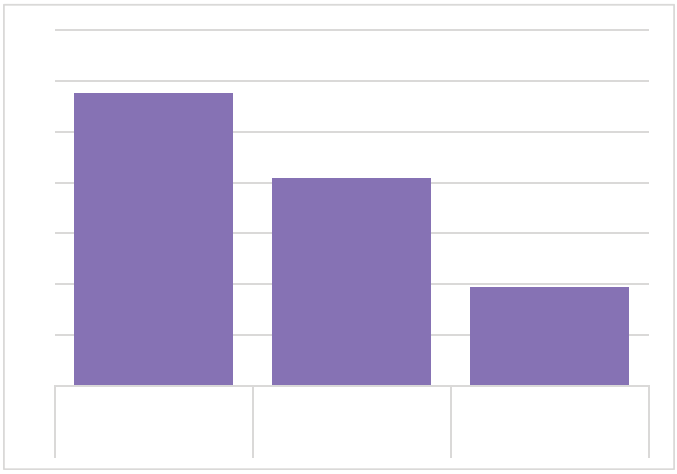

Figure 9 Breast Cancer Mortality Rate (per 100,000, age-adjusted) by Race, VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

7.7.2.4 PROSTATE CANCER

Except for skin cancers, prostate cancer is the most common cancer among men in the United States. Prostate cancer is most common in older men—the average age of diagnosis is 66—and among African American men. Among men, prostate cancer is the second leading type of cancer mortality after lung cancer.[9]

7.7.2.4.1 Prostate Cancer Incidence

Of all cancers, prostate cancer had the second highest incidence in TJHD in 2016. From 2011–2016, the incidence rate per 100,000 persons for prostate cancer was higher in Virginia than TJHD; the rate was 98.2 in Virginia and 92.8 in TJHD in 2016. (Figure 10)

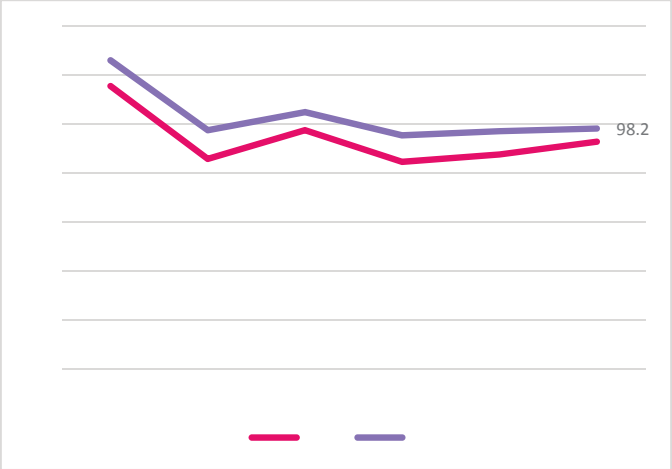

Figure 10 Prostate Cancer Incidence Rate (per 100,000, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.4.2 Prostate Cancer Incidence by Race

From 2011–2016, with the exception of 2015, prostate cancer rates were highest among Virginia black males followed by TJHD black males; in 2016, the prostate cancer incidence rates was highest among Virginia black males (171.3), followed by TJHD black males (144.5), and lowest among Virginia white males (78.9) (Figure 11).

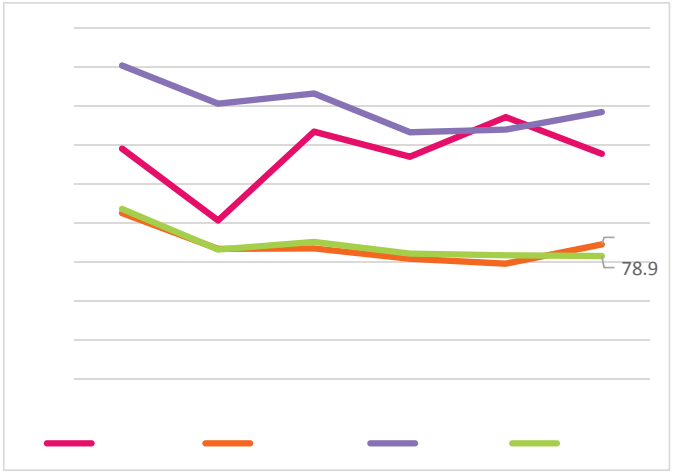

Figure 11 Prostate Cancer Incidence Rate (per 100,000, age-adjusted) by Race, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.4.3 Prostate Cancer Mortality

From 2012–2016, prostate cancer mortality among Virginia black males (39.7 per 100,000 persons) was more than double the mortality rate by race among Virginia white males (17.1); the lowest rate was among Virginia Asian and Pacific Islander males (8.0) (Figure 12).

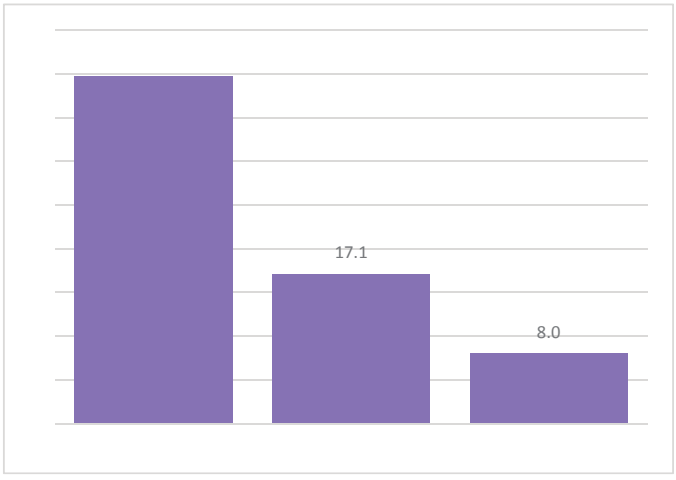

Figure 12 Prostate Cancer Mortality Rate (per 100,000, age-adjusted) by Race, VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.5 LUNG CANCER

Not including skin cancers, lung cancer is the second most common cancer in the United States (after breast cancer for women and prostate cancer for men). However, lung cancer is the leading cause of cancer mortality among men and women. Lung cancer is most prevalent among people 65 and older—the average age of diagnosis is 70. The risk of developing lung cancer is somewhat higher in men than women and 20% higher among black men than white men; however, black women are less likely than white women to develop lung cancer.[10] Smoking is the strongest risk factor for developing lung cancer; other risk factors include exposures to secondhand smoke, radon, and asbestos. However, people can develop lung cancer without any known risk factors.[11]

7.7.2.5.1 Lung Cancer Incidence

Of all cancers, lung cancer had the third highest incidence in TJHD in 2016. The rate per 100,000 persons was slightly higher in TJHD (57.7) than in Virginia (56.7) in 2016 (Figure 13).

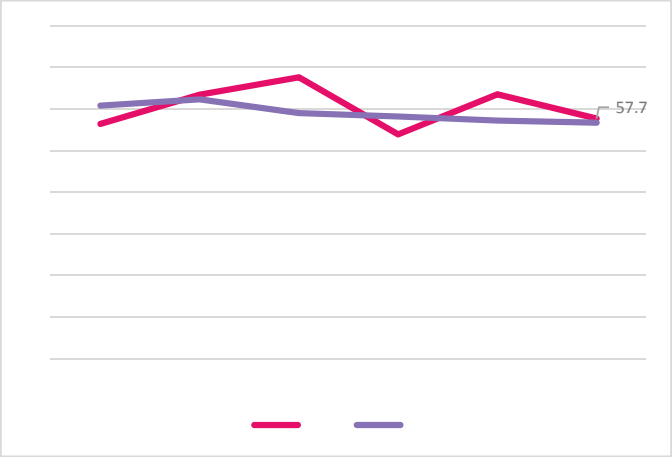

Figure 13 Lung Cancer Incidence Rate (per 100,000, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.5.2 Lung Cancer Incidence by Race

In 2016 by race, the lung cancer incidence rate was highest for the TJHD black population (66.8) followed by the Virginia black population (60.0), and was lowest in the TJHD white population (56.3) (Figure 14).

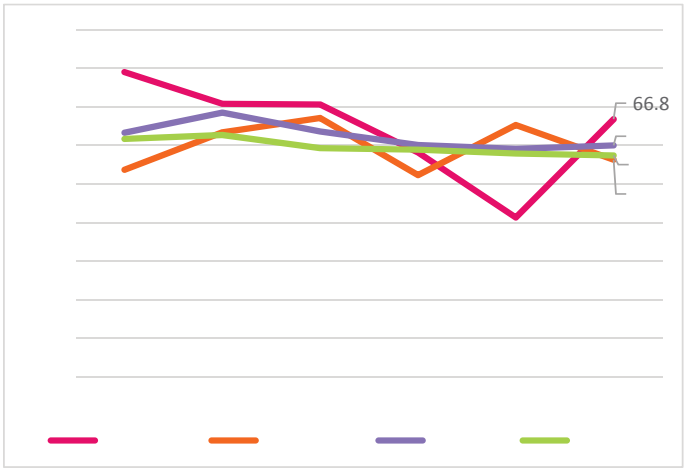

Figure 14 Lung Cancer Incidence Rate (per 100,000, age-adjusted) by Race, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.5.3 Lung Cancer Incidence by Gender

From 2011–2016, the lung cancer incidence rate was higher among males than females in TJHD and Virginia. In 2016, the incidence rate for males (65.9) was the same in TJHD and Virginia and slightly higher for TJHD females (51.4) than Virginia females (49.5). (Figure 15)

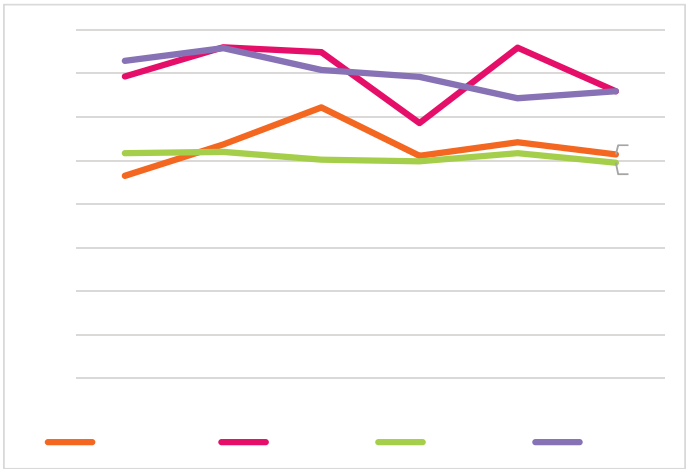

Figure 15 Lung Cancer Incidence Rate (per 100,000, age-adjusted) by Gender, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.5.4 Lung Cancer Mortality

From 2012–2016 in Virginia, the lung cancer mortality rate was higher for males (53.0) than females (34.0), and slightly higher for the black population (45.4) than the white population (42.9); the mortality rate by race was lowest among the Asian and Pacific Islander population (20.5). (Figure 16)

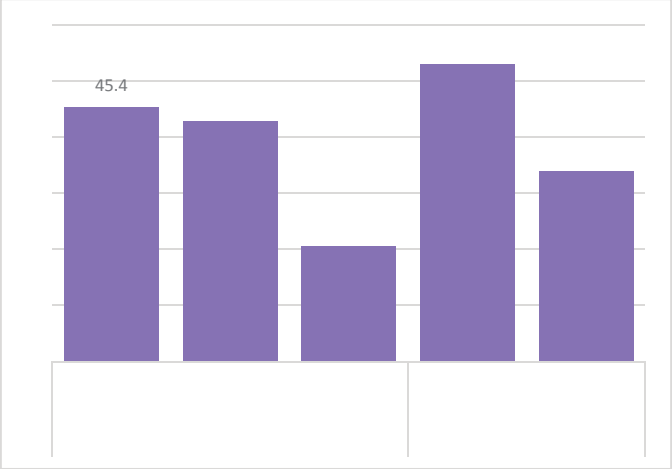

Figure 16 Lung Cancer Mortality Rate (per 100,000, age-adjusted) by Race and Gender, VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.6 COLORECTAL CANCER

Factors that increase the risk of developing colorectal cancer include overweight and obesity, especially among men and for those with a larger waistline; physical inactivity; diets high in red meats and processed meats; smoking; heavy alcohol use; being over the age of 50; and/or a personal or family history of colorectal cancer or polyps. In the United States, African Americans have the highest incidence and mortality rates for colorectal cancer. Jewish people of Eastern European descent (Ashkenazi) are also at higher risk.[12]

7.7.2.6.1 Colorectal Cancer Incidence

Of all cancers, colorectal cancer had the fourth highest incidence in TJHD in 2016. The rate per 100,000 persons was the same in TJHD as in Virginia (34.9) in 2016 (Figure 17).

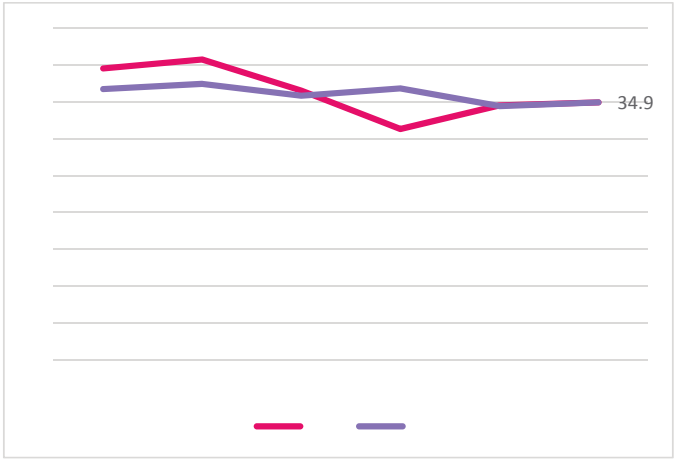

Figure 17 Colorectal Cancer Incidence Rate (per 100,000, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.6.2 Colorectal Cancer Incidence by Race

From 2011–2016, colorectal cancer incidence rates were higher in Virginia among the black population. In 2016, the rate was 40.0 among the Virginia black population and 33.8 among the Virginia white population. (Figure 18)

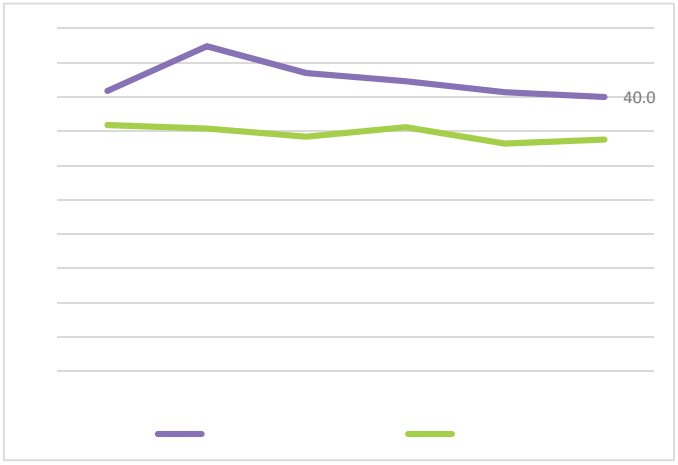

Figure 18 Colorectal Cancer Incidence Rate (per 100,000, age-adjusted) by Race, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.6.3 Colorectal Cancer Incidence by Gender

From 2011–2016, colorectal cancer incidence rates were typically higher in TJHD and Virginia males than females. In 2016, the rate was highest among TJHD males (41.1), followed by Virginia males (39.2); the rate was lowest among TJHD females (28.9). (Figure 19)

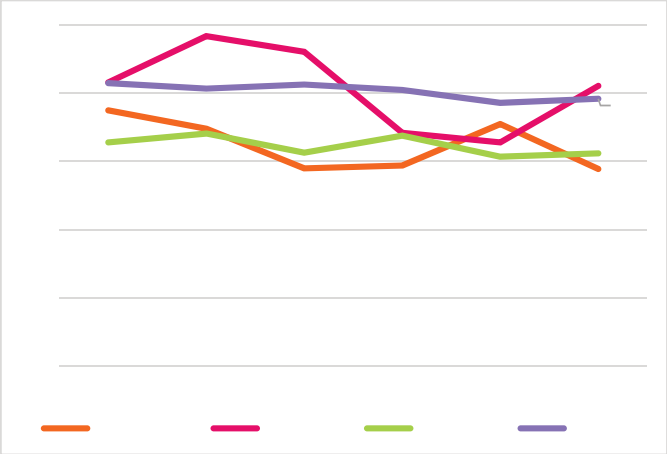

Figure 19 Colorectal Cancer Incidence Rate (per 100,000, age-adjusted) by Gender, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.6.4 Colorectal Cancer Mortality

From 2012–2016 in Virginia, colorectal cancer mortality was highest among black persons (19.6) followed by white persons (13.1), and lowest among Asian and Pacific Islander persons (8.8). Colorectal cancer mortality was higher among males (16.8) than females (11.5) in Virginia in 2016. (Figure 20)

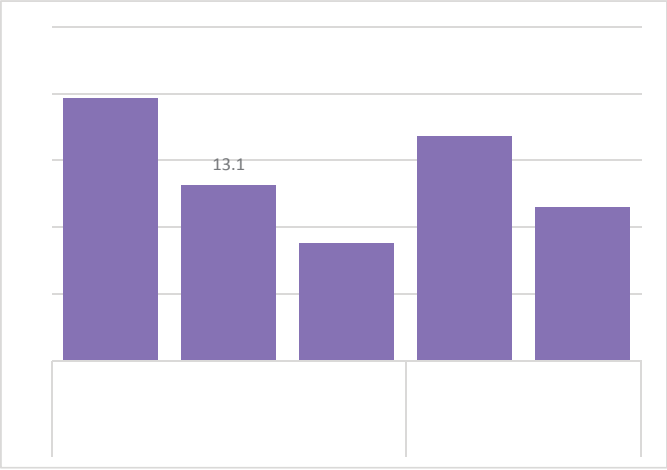

Figure 20 Colorectal Cancer Mortality Rate (per 100,000, age-adjusted) by Race and Gender, VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.7 UTERINE CANCER

Uterine cancer is cancer that starts in the uterus. The risk for uterine cancer in women increases with age—uterine cancer is most common in women who are going through or who have gone through menopause. Factors that can reduce the risk of developing uterine cancer include using birth control pills, maintaining a healthy weight, being physically active, and taking progesterone if taking estrogen to replace hormones during menopause.[13]

7.7.2.7.1 Uterine Cancer Incidence

Of all cancers, uterine cancer had the fifth highest incidence in TJHD in 2016. The incidence rate per 100,000 persons was higher in TJHD (29.1) than in Virginia (25.2) in 2016 (Figure 21).

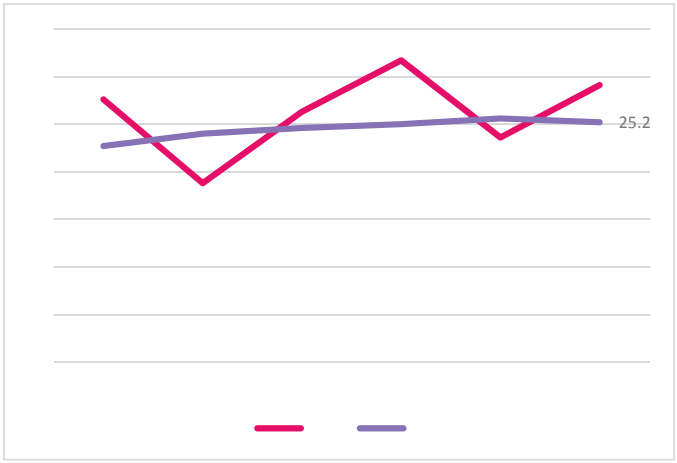

Figure 21 Uterine Cancer Incidence Rate (per 100,000, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

Photovoice Photo: Southwood Boys & Girls Club

7.7.2.7.2 Uterine Cancer Incidence by Race

From 2011–2014, the uterine cancer incidence rate was higher among Virginia white females than Virginia black females. However, as of 2016, the rate among Virginia black females (27.0) was higher than among Virginia white females (25.0). (Figure 22)

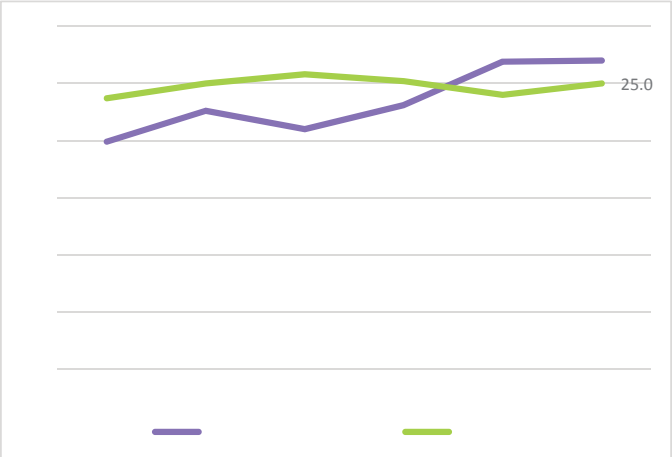

Figure 22 Uterine Cancer Incidence Rate (per 100,000, age-adjusted) by Race, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.7.3 Uterine Cancer Mortality

From 2012–2016, uterine cancer mortality was highest among Virginia black females (7.8) followed by Virginia white females (4.1), and lowest among Virginia Asian and Pacific Islander females (2.6). (Figure 23)

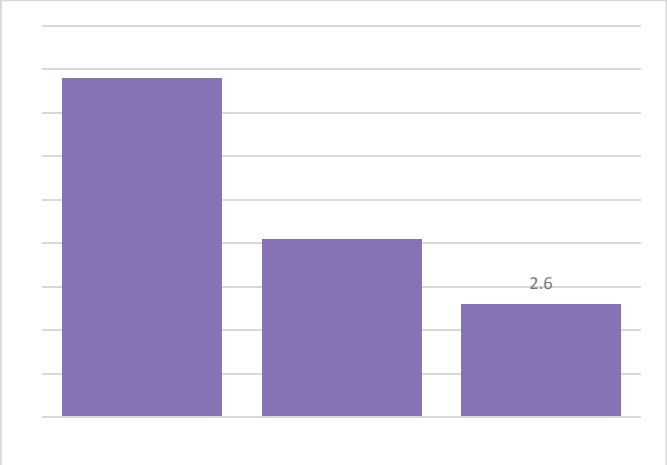

Figure 23 Uterine Cancer Mortality Rate (per 100,000, age-adjusted) by Race, VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.8 MELANOMA (SKIN CANCER)

Skin cancer is the most common cancer in the United States. Melanoma is a type of skin cancer and is the third most common type of skin cancer in the United States. Melanoma and other common types of skin cancer are most often caused by overexposure to ultraviolet (UV) light through exposure to the sun or through indoor tanning. Other risk factors include naturally light-colored skin; skin that burns, freckles, or reddens easily; blue or green eyes; blond or red hair; a personal or family history of skin cancer; and/or a lot of moles.[14, 15]

7.7.2.8.1 Melanoma Incidence

Of all cancers, melanoma had the sixth highest incidence in TJHD in 2016. With the exception of 2014, from 2011–2016, the melanoma incidence rate per 100,000 persons was higher in TJHD than in Virginia; in 2016, the rate was 26.1 in TJHD and 19.4 in Virginia. (Figure 24)

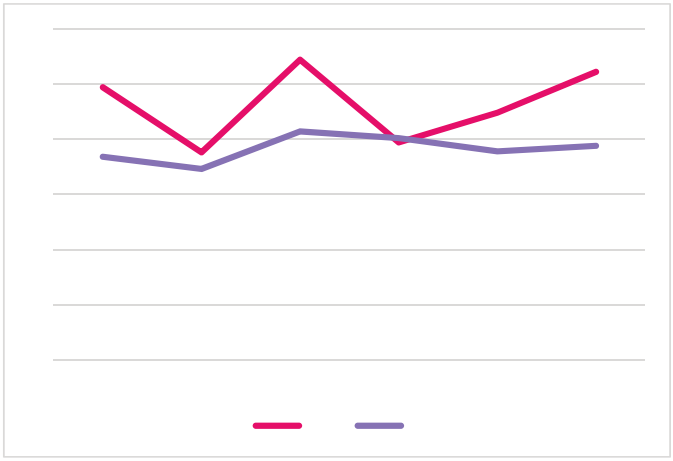

Figure 24 Melanoma of the Skin Cancer Incidence Rate (per 100,000, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.8.2 Melanoma Incidence by Race

Rates by race (black, white) for Virginia from 2011–2016 are not displayed as the rate for black Virginians was unavailable for most years—the Virginia Department of Health does not display a statistic when there were fewer than 16 cases in a given year. However, in Virginia in 2016, the

melanoma incidence rate per 100,000 population was 25.2 for the Virginia white population and only 1.1. for the Virginia black population. (Figure 25)

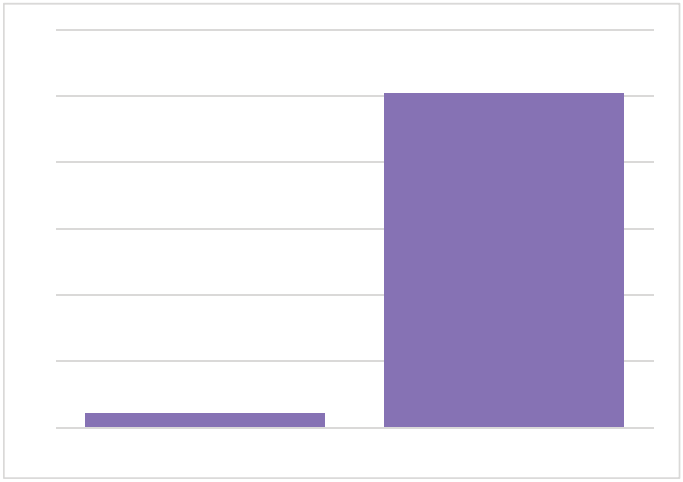

Figure 25 Melanoma of the Skin Cancer Incidence Rate (per 100,000, age-adjusted) by Race, VA, 2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.8.3 Melanoma Incidence by Gender

From 2011–2016, skin cancer incidence per 100,000 persons was higher among TJHD and Virginia males than females; in 2016, the rate was highest for TJHD males (29.2), followed by Virginia males (26.1) and TJHD females (24.3), and was lowest for Virginia females (14.4). (Figure 26)

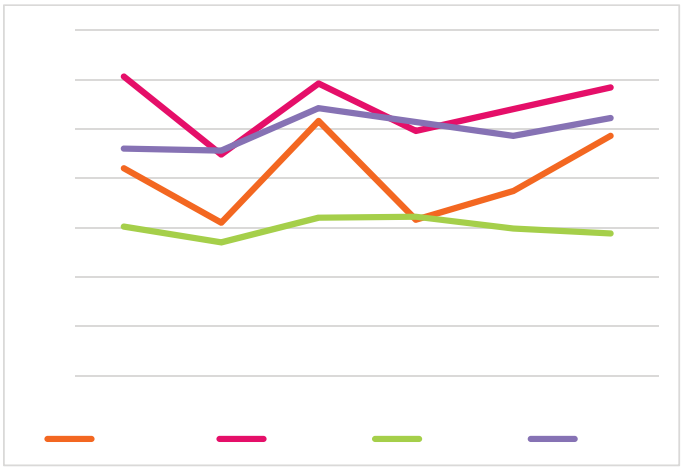

Figure 26 Melanoma of the Skin Cancer Incidence Rate (per 100,000, age-adjusted) by Gender, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.8.4 Melanoma Mortality

Melanoma mortality was highest among Virginia white males (4.8), followed by Virginia white females (1.9) and lowest among black females (0.4). (Figure 27)

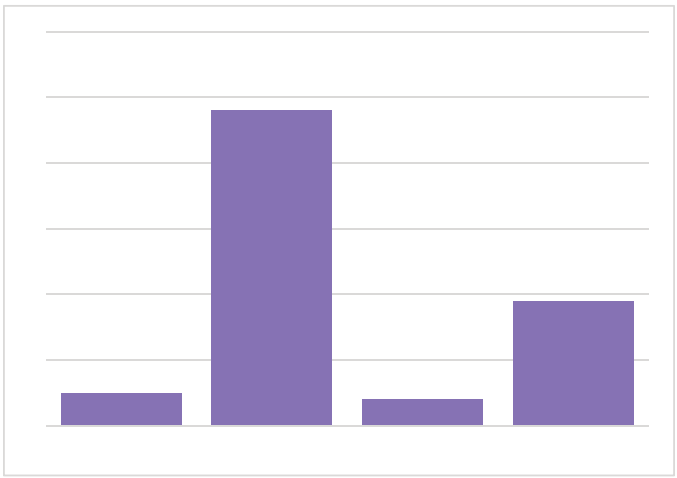

Figure 27 Melanoma of the Skin Cancer Mortality Rate (per 100,000, age-adjusted) by Race and Gender, VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.9 NON-HODGKIN LYMPHOMA (NHL)

Lymphomas are cancers that start in the lymph system—the tissues and organs that produce, store, and carry white blood cells that fight infections. Hodgkin lymphoma spreads in an orderly manner from one group of lymph nodes to another; non-Hodgkin lymphoma (NHL) does not spread in an orderly fashion. In the United States in 2015, rates of diagnoses for NHL and NHL mortality rates were both higher for men than women and higher for white persons than black persons.[16]

Photovoice Photo: Greene Care Clinic

7.7.2.9.1 NHL Incidence

In 2016, NHL had the seventh highest incidence in TJHD. The rate per 100,000 persons was higher in TJHD (17.9) than in Virginia (16.6) in 2016. (Figure 28)

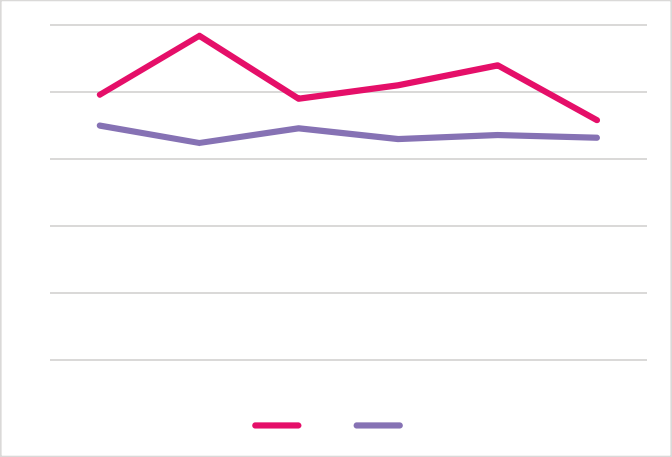

Figure 28 Non-Hodgkin Lymphoma Cancer Incidence Rate (per 100,000 persons, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.9.2 NHL Incidence by Race

In Virginia in 2016, the NHL incidence rate per 100,000 persons was higher for the Virginia white population (17.3) than the Virginia black (12.4) population (Figure 29).

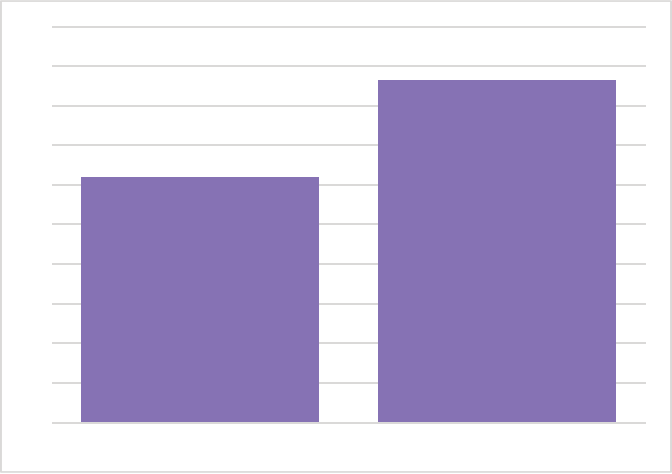

Figure 29 Non-Hodgkin Lymphoma Cancer Incidence Rate (per 100,000 persons, age-adjusted) by Race, VA, 2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.9.3 NHL Mortality

From 2012–2016 in Virginia, white Virginia residents (5.8 deaths per 100,000 persons) had a higher NHL mortality rate than black Virginia residents (4.2), followed closely by Asian/Pacific Islander Virginia residents (4.0). Virginia males (6.9) had a higher NHL mortality rate than Virginia females (4.3). (Figure 30)

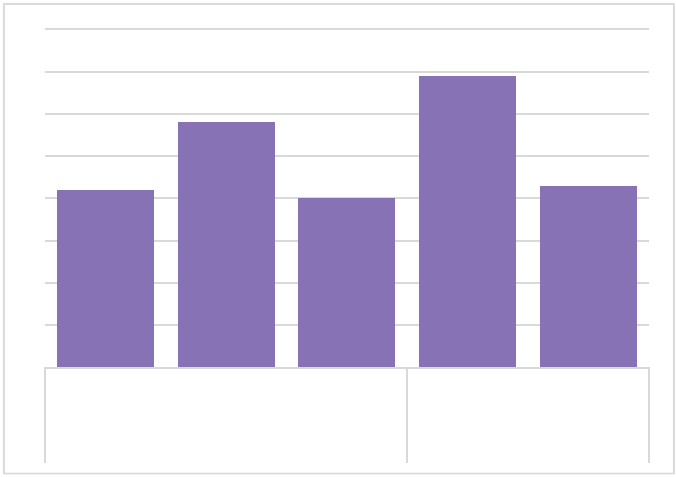

Figure 30 Non-Hodgkin Lymphoma Cancer Mortality Rate (per 100,000, age-adjusted) by Race and Gender, TJHD and VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.10 KIDNEY CANCER

Kidney and renal pelvis cancer are cancers that start in the kidneys. The largest risk factor is smoking. Other risk factors include obesity, genes, taking certain pain medicines for a long time, high blood pressure, and exposure to trichloroethylene (a chemical used to remove grease from metal). In the United States in 2015, the rate of new diagnoses and

Photovoice Photo: Fluvanna/Fork Union JABA

mortality rate for men were almost double the rates for women.[17]

7.7.2.10.1 Kidney Cancer Incidence

Kidney cancer had the eighth highest incidence in TJHD in 2016. The rate per 100,000 persons was slightly higher in TJHD (16.8) than in VA (16.0) in 2016. (Figure 31)

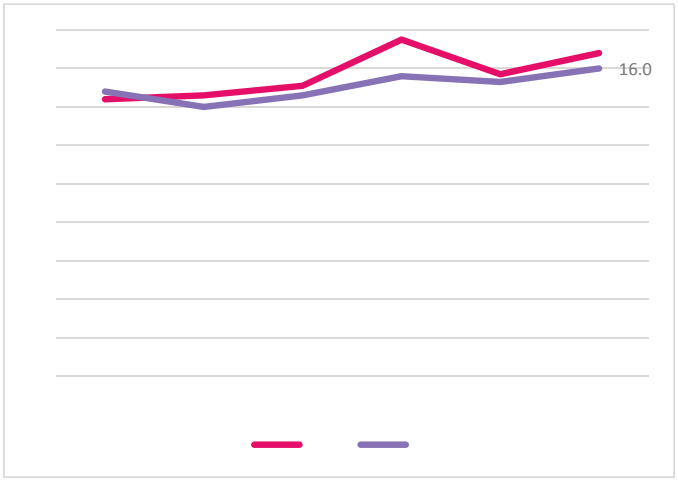

Figure 31 Kidney Cancer Incidence Rate (per 100,000, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.10.2 Kidney Cancer Incidence by Race

From 2011 to 2016, the kidney cancer incidence rate for white residents was consistently lower than for black residents in Virginia. In 2016, white residents had an incidence rate of 15.0 cases per 100,000 persons, compared to black residents with 21.9 cases per 100,000 persons. (Figure 32)

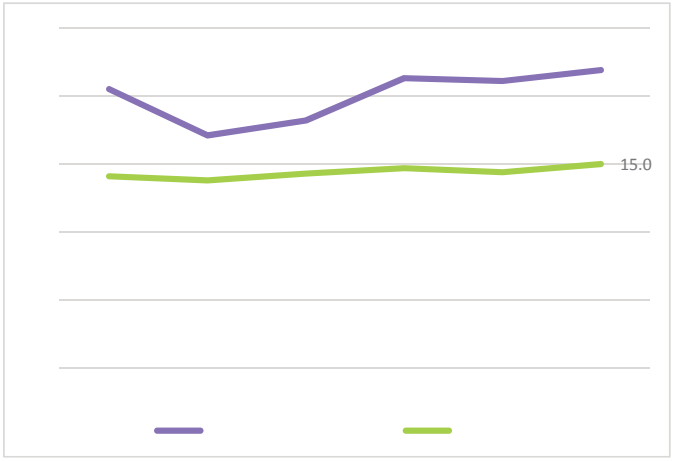

Figure 32 Kidney Cancer Incidence Rate (per 100,000, age-adjusted) by Race, VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.10.3 Kidney Cancer Incidence by Gender

In Virginia, males had a consistently higher incidence rate of kidney cancer than females from 2011 to 2016. In 2016, the incidence rate for males was 21.5 cases per 100,000 persons, compared to the incidence for females of only 11.3 cases per 100,000 persons. (Figure 33)

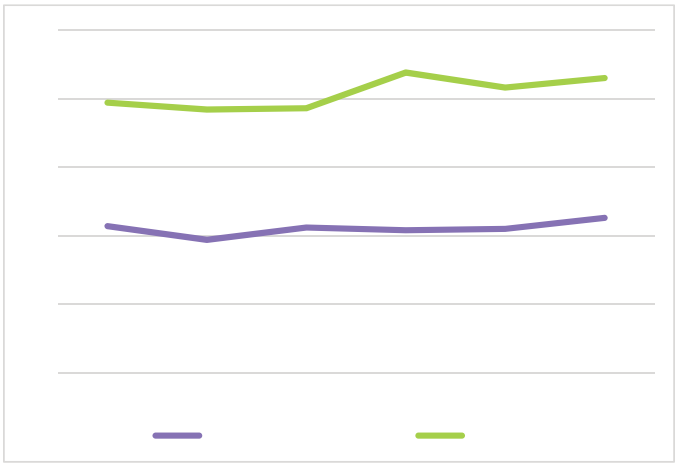

Figure 33 Kidney Cancer Incidence Rate (per 100,000, age-adjusted) by Gender, VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.10.4 Kidney Cancer Mortality

From 2012–2016, by race, kidney cancer mortality was highest among Virginia black residents (4.0 deaths per 100,000 persons), followed by Virginia white residents (3.6), and lowest among Virginia Asian and Pacific Islander residents (1.3). By gender, males (5.1) had a higher mortality rate for kidney cancer than females (2.2) in Virginia. (Figure 34)

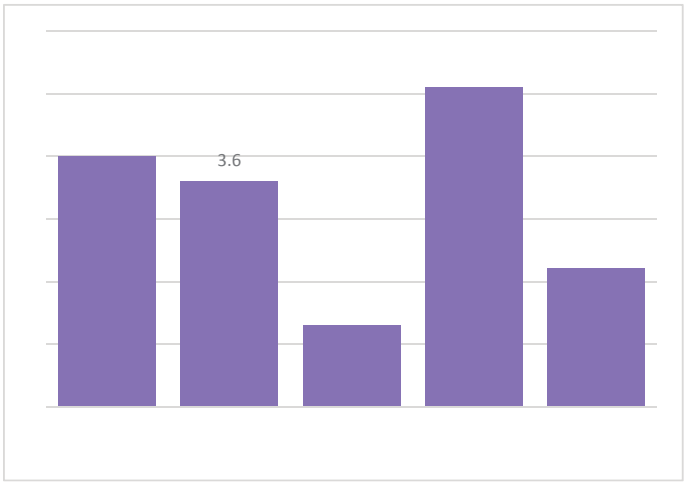

Figure 34 Kidney Cancer Mortality Rate (per 100,000, age-adjusted) by Race and Gender, VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.11 BLADDER CANCER

Bladder cancer is cancer that starts in the bladder, or urinary bladder. The biggest risk factor for bladder cancer is smoking. Other risk factors include a family history, genes, exposure to workplace chemicals (used in processing paint, dye, metal, and petroleum products), certain chemotherapy drugs, drinking well water contaminated with arsenic, chronic urinary tract infections, and/or taking the Chinese herb Aristolochia fangchi. In the United States in 2015, the rate of new diagnoses and the mortality rate were much higher for men than for women, and higher for white persons than black persons.[18]

7.7.2.11.1 Bladder Cancer Incidence

Bladder cancer had the ninth highest incidence of cancer in TJHD in 2016. In 2016, the incidence rate per 100,000 persons was higher in Virginia (17.1) than in TJHD (15.6). TJHD experienced a decrease in incidence rates from 2012 to 2015. (Figure 35)

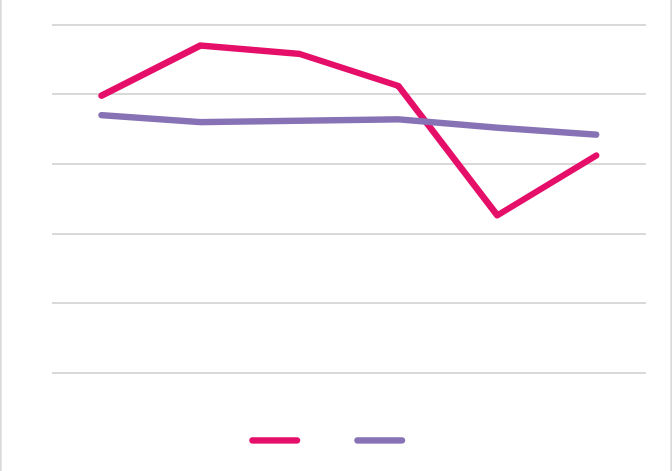

Figure 35 Bladder Cancer Incidence Rate (per 100,000, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.11.2 Bladder Cancer Incidence by Race and Gender

From 2011–2016 in Virginia, males had an overall higher incidence rate per 100,000 persons for bladder cancer than females, and white males had a consistently higher incidence rate than black males. In 2016, white males (31.5 cases per 100,000 persons) had the highest incidence rate in Virginia, followed by black males (20.8), black females (8.0), and finally white females (5.7). (Figure 36)

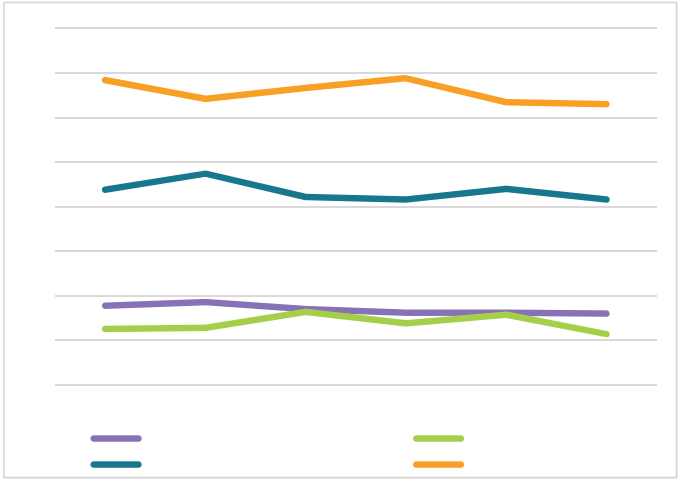

Figure 36 Bladder Cancer Incidence Rate (per 100,000, age-adjusted) by Race and Gender, VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.11.3 Bladder Cancer Mortality

From 2012–2016, by race, bladder cancer mortality was highest among Virginia white residents (4.6 deaths per 100,000 persons), followed by Virginia black residents (3.9), and lowest among Virginia Asian and Pacific Islander residents (1.6). Males (7.7) had a higher mortality rate for bladder cancer than females (2.1). (Figure 37)

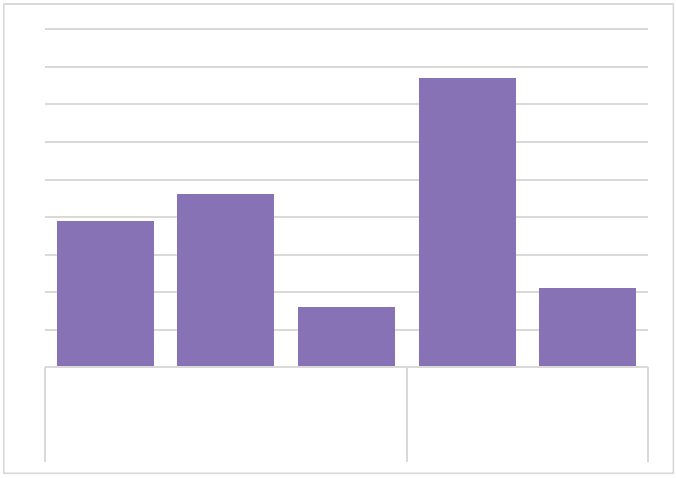

Figure 37 Bladder Cancer Mortality Rate (per 100,000, age-adjusted) by Race and Gender, VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.12 THYROID CANCER

Thyroid cancer is cancer that starts in the thyroid gland (located toward the front of the neck). Risk factors are not entirely clear, but may include radiation around the neck, especially when young, and genes. In 2015 in the United States, the mortality rate for thyroid cancer (0.5 per 100,000 persons) was the same for men and women as well as for black and white persons. However, new diagnoses were much higher for women than men, and higher for white persons than black persons.[19]

7.7.2.12.1 Thyroid Cancer Incidence

Thyroid cancer had the tenth highest incidence rate in TJHD in 2016. The rate per 100,000 persons was slightly higher in Virginia (13.4) than in TJHD (13.0) in 2016. (Figure 38)

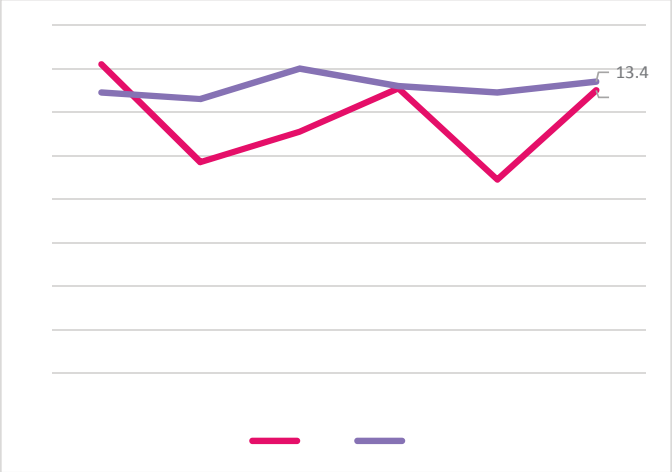

Figure 38 Thyroid Cancer Incidence Rate (per 100,000, age-adjusted), TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.12.2 Thyroid Cancer Incidence by Race and Gender

From 2011–2016 in Virginia, thyroid cancer rates were consistently highest in Virginia females, with white females having a higher incidence rate than black females. The overall incidence rate of males is lower than females, with white males having higher incidence rates than black males. In 2016, white females (19.4 cases per 100,000 persons) had the highest incidence rate in Virginia followed by black females (11.6) and white males (7.5); the incidence rate was lowest for black males (3.9). (Figure 39)

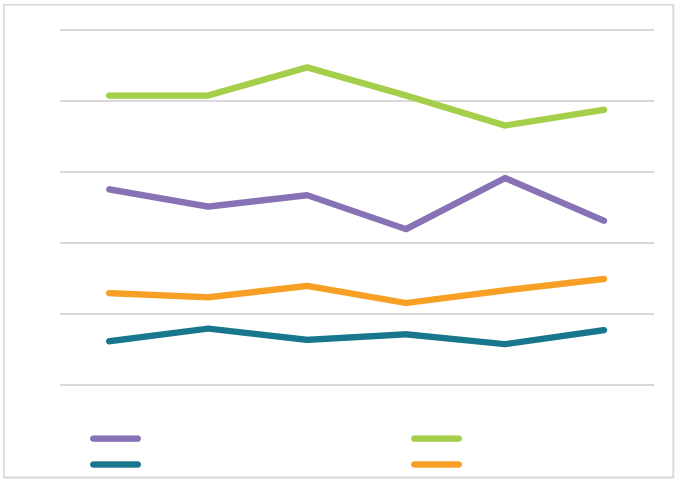

Figure 39 Thyroid Cancer Incidence Rate (per 100,000, age-adjusted) by Race and Gender, TJHD and VA, 2011–2016. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.2.12.3 Thyroid Cancer Mortality

Mortality for thyroid cancer is very low. In 2016 in Virginia, thyroid cancer mortality was the same between black and white residents (0.5 deaths for every 100,000 persons). The mortality rate for males (0.5 deaths per 100,000 persons) and females (0.4) were similar as well. (Figure 40)

Figure 40 Thyroid Cancer Mortality Rate (per 100,000, age-adjusted) by Race and Gender, VA, 2012–2016 Combined. Source: Virginia Department of Health, Virginia Cancer Registry. Accessed 2019.

7.7.3 Preventable Hospitalizations

Preventable hospital stays looks at hospitalizations for "ambulatory-care sensitive conditions," which are diagnoses treatable in outpatient settings. This measure looks at the quality of care provided in the outpatient setting and potential overuse of hospitals as a predominant source for care, making it a quality and access measure. Hospitalizations for the following discharges are considered in this measure: diabetes with short- or long-term complications, uncontrolled diabetes without complications, and diabetes with lower-extremity amputation; chronic obstructive pulmonary disease (COPD); asthma; hypertension; heart failure; dehydration; bacterial pneumonia; and urinary tract infection.[20]

Rates are the number of cases per 100,000 Medicare enrollees. In TJHD in 2016, all localities were below the Virginia rate of 4,454 cases of preventable hospitalizations per 100,000 Medicare enrollees. Nelson County (4,291) had the highest rate of preventable hospital stays, followed closely by Louisa County (4,108). Albemarle County (2,837) had the lowest rate in the district, followed by Greene County (3,249) and Charlottesville (3,251). However, no TJHD localities met the County Health Rankings "Top United States Performers" rate (2,765), which included counties and cities across the country in the tenth percentile for this indicator. (Figure 41)

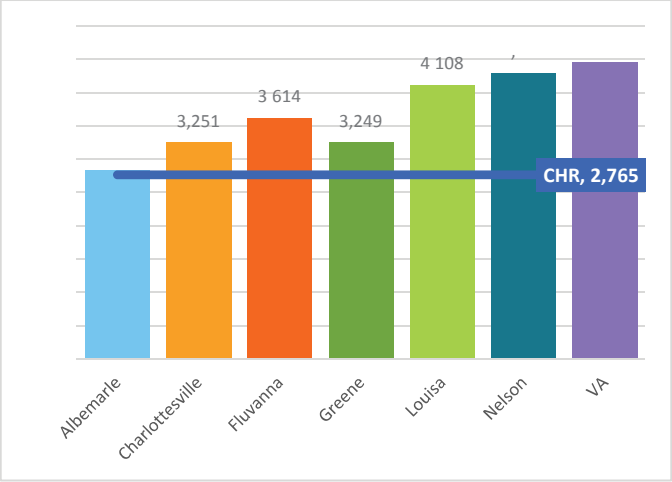

Figure 41 Preventable Hospitalization Rate (per 100,000 Medicare Enrollees), TJHD Localities, 2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.7.3.1 PREVENTABLE HOSPITALIZATIONS BY RACE

When looking at preventable hospitalization rates by race, black residents had higher rates of hospitalization per 100,000 Medicare enrollees throughout TJHD than white residents in 2016. This is most evident in Nelson County, where the disparity between the black preventable hospitalization rate (8,816) and white preventable hospitalization rate (3,847) was greatest. The black preventable hospitalization rate (3,862) in Fluvanna County was only slightly higher than the white preventable hospitalization rate (3,502) in 2016. (Figure 42)

An important limitation to this data is that this measure only includes Medicare recipients, which limits the population examined largely to adults aged 65 years and older. This data does not examine or take into consideration trends and disparities among younger age groups.

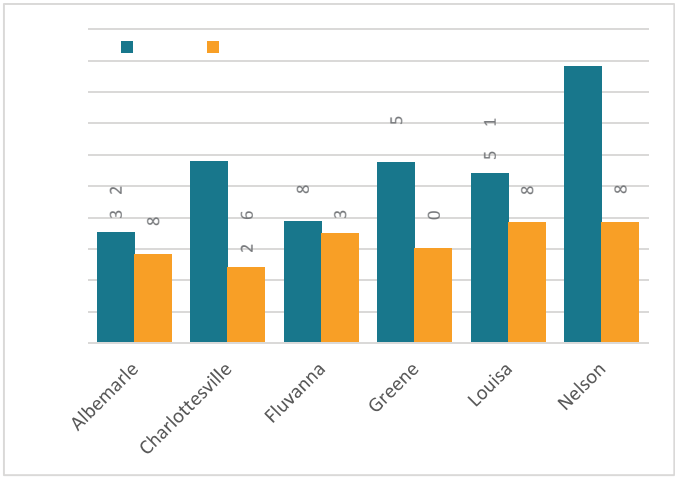

Figure 42 Preventable Hospitalization Rate (per 100,000 Medicare Enrollees) by Race, TJHD Localities, 2016. Source: County Health Rankings, 2019 Report. Accessed 2019.

7.7.4 Prevention Quality Indicators (PQIs)

The Prevention Quality Indicators (PQIs) are a set of indicators that look at hospital inpatient discharge data (that is, hospitalizations) for "ambulatory care sensitive conditions" (that is, health conditions that can normally be treated and managed in outpatient settings). Potential factors contributing to hospitalization could include a lack of access to primary care and/or outpatient care, a lack of early intervention

to prevent complications or increased severity, lack of adequate patient monitoring and/or patient education, lack of patient adherence to treatment recommendations, and/or poor environmental conditions.[21]

7.7.4.1 PQI CHRONIC COMPOSITE SCORE

The prevention quality chronic composite score looks at hospitalizations for patients age 18 years and older for a variety of PQIs. The majority of PQIs included in the composite score are admission rates for:

- Diabetes short-term complications
- Diabetes long-term complications
- Chronic Obstructive Pulmonary Disease (COPD) or asthma in older adults
- Hypertension
- Heart failure
- Uncontrolled diabetes
- Asthma in younger adults

Lower-extremity amputation among patients with diabetes rate discharges that meet the inclusion and exclusion for any of the above indicators are only counted once in the composite calculations.

In TJHD from 2015–2017, Nelson County (1,622.8) had the highest rate per 100,000 persons of chronic disease hospitalizations, followed by Greene County (1,252.4) and Louisa County (1,138.0). Albemarle County (615.8) had the lowest rate in the district, followed by Fluvanna County (899.8) and then Charlottesville City (938.8). (Figure 43)

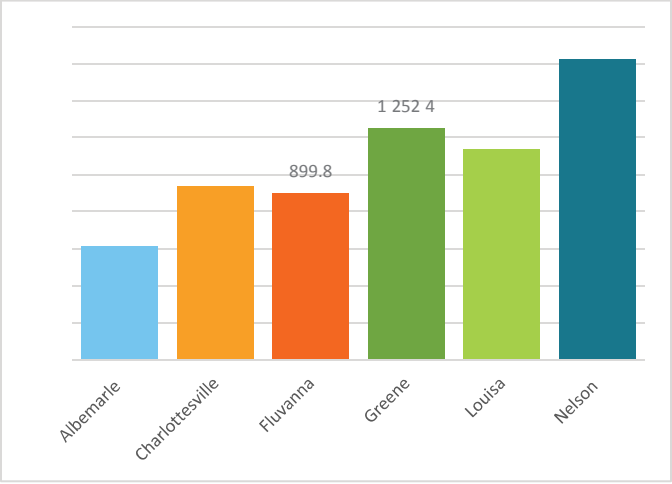

Figure 43 Prevention Quality Indicator Chronic Composite Score (per 100,000 persons), TJHD Localities, 2015–2017. Source: Virginia Department of Health, Office of Health Equity. Accessed 2019.

7.7.4.2 ASTHMA HOSPITALIZATIONS

For asthma-related hospitalizations from 2015–2017, there were clear disparities in the rates of hospitalization between white and black residents. This was most evident in Greene County, where black residents had a rate of 273.2 asthma-related hospitalizations per 100,000 persons, while white residents had a rate of only 38.6. In every locality in TJHD black residents had higher rates of asthma hospitalizations, with Charlottesville (127.2) and Nelson County (125.5) having the second and third highest rates of hospitalizations for black residents in TJHD. (Figure 44)

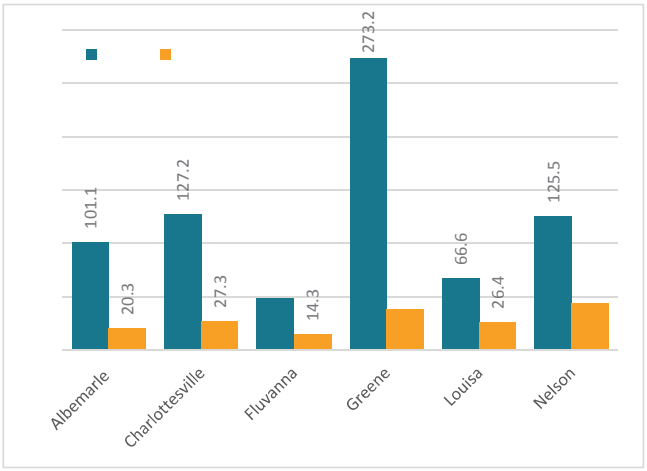

Figure 44 Asthma Hospitalization Rates (per 100,000 persons) by Race, TJHD Localities, 2015–2017. Source: Virginia Department of Health, Office of Health Equity. Accessed 2019.

Photovoice Photo: Friendship Court

7.7.4.3 HEART FAILURE HOSPITALIZATIONS

Echoing its disparate rates for asthma hospitalizations, from 2015–2017 Nelson County had the largest disparity between black (824.4 per 100,000 persons) and white residents (345.8) for hospitalizations related to heart failure. Louisa County (455.2) and Charlottesville (436.1) had the second and third highest rates of heart failure hospitalizations in black residents, followed by Fluvanna County (322.7). (Figure 45)

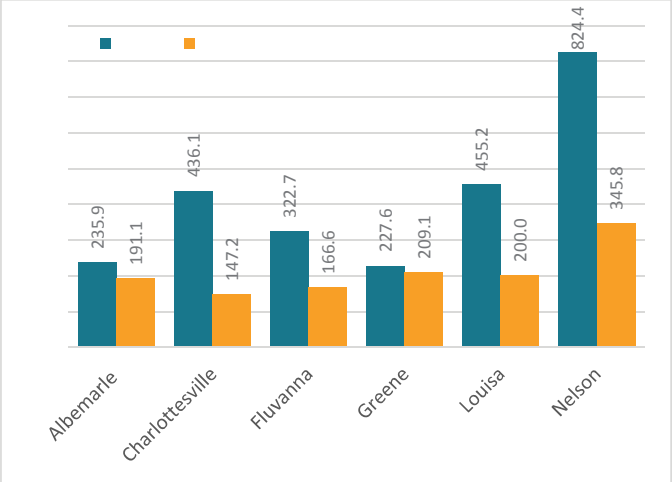

Figure 45 Heart Failure Hospitalization Rates (per 100,000 persons) by Race, TJHD Localities, 2015–2017. Source: Virginia Department of Health, Office of Health Equity. Accessed 2019.

7.7.4.4 STROKE HOSPITALIZATIONS

For stroke hospitalizations per 100,000 persons from 2015–2017, rates for black residents were only slightly higher than for white residents, with the exception of Greene County, where white residents had a slightly higher rate than black residents. Nelson County again had the highest overall rates of hospitalization for stroke, with black residents (519.7) having a higher rate than white residents (465.6). Charlottesville had the largest difference between the rates of hospitalization for black residents (363.4) and white residents (226.1). (Figure 46)

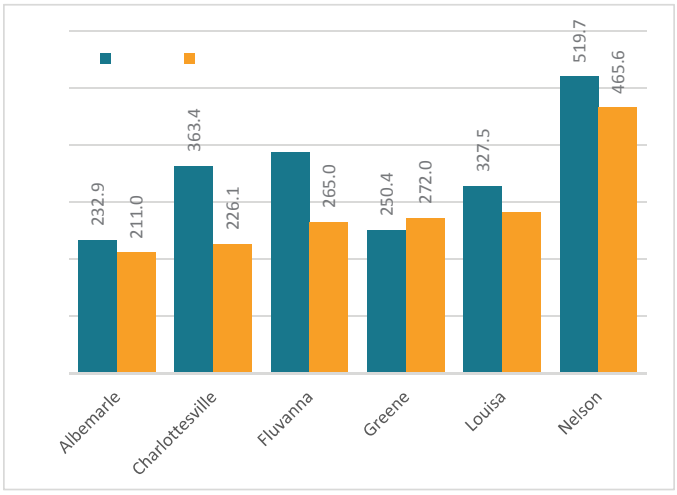

Figure 46 Stroke Hospitalization Rates (per 100,000 persons) by Race, TJHD Localities, 2015–2017. Source: Virginia Department of Health, Office of Health Equity. Accessed 2019.

7.7.4.5 ALZHEIMER'S HOSPITALIZATIONS

From 2015–2017 in TJHD, overall hospitalizations for Alzheimer's were highest in Nelson County, with a rate of 17.9 hospitalizations per 100,000 persons. Greene County (12.0) and Fluvanna County (11.4) had the second and third highest rates of Alzheimer's hospitalizations while Albemarle County (8.1) and Charlottesville (5.0) had the lowest rates in the district. Hospitalizations for Louisa County were suppressed due to low counts. (Figure 47)

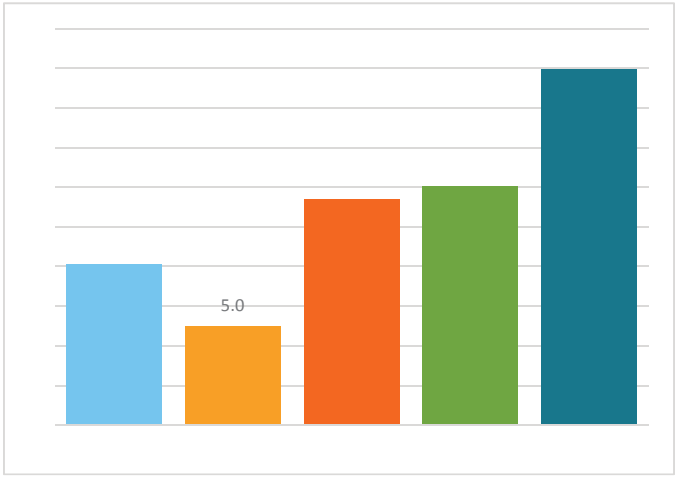

Figure 47 Alzheimer's Hospitalization Rates (per 100,000 persons), TJHD Localities, 2015–2017. Source: Virginia Department of Health, Office of Health Equity. Accessed 2019.

7.7.4.6 DIABETES HOSPITALIZATIONS

From 2015–2017, black residents (591.4 per 100,000 persons) in Nelson County had the highest rate of hospitalizations with a primary diagnosis of diabetes in the district compared to white residents (220.6). In Greene County, the diabetes hospitalization rates for white and black residents were relatively the same with white residents (160.4) being slightly higher than black residents (159.3). Charlottesville (black residents: 407.0 and white residents: 87.3) had the second highest rate of hospitalization followed by Fluvanna County (black residents: 250.1 and white residents: 96.8). (Figure 48)

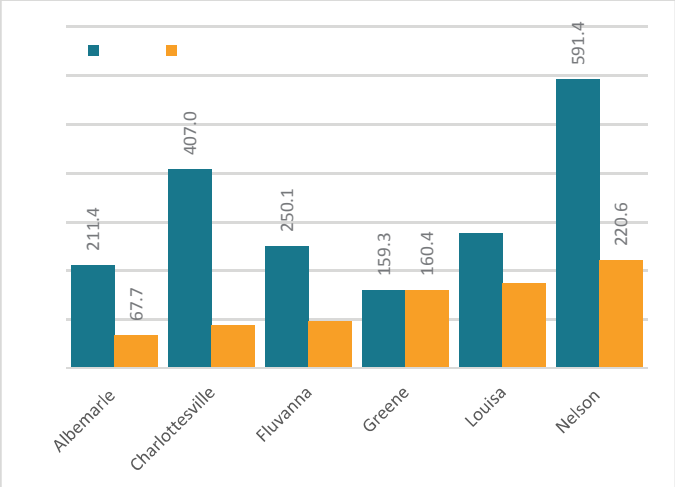

Figure 48 Diabetes Hospitalization Rates (per 100,000 persons) by Race, TJHD Localities, 2015–2017. Source: Virginia Department of Health, Office of Health Equity. Accessed 2019.

Photovoice Photo: Scottsville and Esmont JABA

ENDNOTES

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Photovoice Photo: Scottsville and Esmont JABA

Table of Contents

Appendices

8.1 | 2019 MAPP2Health Community Partners

The following agencies, organizations, and community members participated in one or more meetings of the following 2019 MAPP2Health councils and work groups:

8.1.1 CHARLOTTESVILLE/ ALBEMARLE MAPP COUNCIL

Abundant Life Ministries

Albemarle County Department of Social Services

Albemarle County Executive's Office

Albemarle County Fire & Rescue

Albemarle County Public Schools

Albemarle Housing Improvement Program (AHIP)

Boys & Girls Club of Central Virginia

Charlottesville Area Transit (CAT)

Charlottesville City Council

Charlottesville City Manager's Office

Charlottesville Department of Social Services

Charlottesville Fire Department

Charlottesville Free Clinic

Charlottesville/Albemarle Health Department

City Schoolyard Garden

Civic Access

Common Ground Healing Arts

Cville Pride

Habitat for Humanity of Greater Charlottesville

International Rescue Committee

Mt. Zion First African Baptist Church

Piedmont Environmental Council

Piedmont Family YMCA

Scottsville Health Equity and Access Rural Region (HEARR)

Scottsville Town Council

Sentara Martha Jefferson Hospital

Sentara Martha Jefferson Internal Medicine

Thomas Jefferson Health District

University of Virginia Department of Public Health Sciences

University of Virginia Health

University of Virginia School of Medicine

Virginia Cooperative Extension—Albemarle County/Charlottesville

Virginia Department of Housing and Community Development

8.1.2 DIABETES STEERING COMMITTEE

A special thank you to the ten community members who participated on the Diabetes Steering Committee!

8.1.3 FLUVANNA INTERAGENCY COUNCIL

Blue Ridge Area Food Bank

Fluvanna County Board of Supervisors

Fluvanna County Children's Services Act

Fluvanna County Health Department

Fluvanna County Public Schools

Fluvanna County Public Schools Adult Education

Fluvanna Department of Social Services

Fluvanna Partnership on Aging

Fluvanna Volunteers

Fluvanna/Louisa Housing Foundation

InnovAge Virginia PACE—Blue Ridge

JAUNT

Jefferson Area Board for Aging (JABA)—Fluvanna

Meals on Wheels—Fluvanna

Monticello Area Community Action Agency (MACAA)—Fluvanna

Region Ten Community Services Board—Fluvanna

Sentara Martha Jefferson Hospital

Sexual Assault Resource Agency (SARA)

Shelter for Help in Emergency (SHE)

Thomas Jefferson Health District

University of Virginia Department of Public Health Sciences

University of Virginia Health

Virginia National Guard Family Programs

8.1.4 GREENE AGENCIES COMING TOGETHER

Central Virginia Regional Jail

Greene Care Clinic

Greene County Commonwealth's Attorney

Greene County Department of Social Services

Greene County Health Department

Greene County Public Schools

Nortonsville Church of God

OAR—Jefferson Area

Community Corrections Board

OAR—Jefferson Area Community Corrections Board (Greene)

Region Ten Community Services Board—Greene

Sentara Martha Jefferson Hospital

Shelter for Help in Emergency (SHE)

Thomas Jefferson Health District

University of Virgina Fitness Clinic

University of Virginia Health

8.1.5 LOUISA INTERAGENCY COUNCIL

Adult Community Education (ACE) of Louisa

Anthem Health Keepers

Career Support Systems

Diabetes Steering Committee

Giving Words

Health and Wellness Center of Louisa

JAUNT

Jefferson Area Board for Aging (JABA)—Louisa

Jefferson Area CHiP

Louisa Community Animal Response Team (CART)

Louisa County Board of Supervisors

Louisa County Children's Services Act

Louisa County Department of Human Services

Louisa County Emergency Fund

Louisa County Health Department

Louisa Presbyterian Church / Veterans of Foreign Wars (VFW) Post 8947

Louisa Reentry Council

Louisa Resource Council

Monticello Area Community Action Agency (MACAA)—Louisa

Sentara Martha Jefferson Hospital

Shelter for Help in Emergency (SHE)

The Journey Home

TheEncumbered.com

Thomas Jefferson Adult Career Education @Piedmont Virginia Community College

Thomas Jefferson Health District

University of Virginia Department of Public Health Sciences

University of Virginia Health

University of Virginia School of Nursing

Virginia Cooperative Extension—Louisa

Virginia Department for Aging and Rehabilitative Services

Virginia National Guard Family Programs

Virginia Department of Housing and Community Development

8.1.6 NELSON INTERAGENCY COUNCIL

American Red Cross

Anthem Health Keepers

Blue Ridge Medical Center

Community Member

InnovAge Virginia PACE - Blue Ridge

JAUNT

Jefferson Area Board for Aging (JABA)—Nelson

Ministers' Alliance

Monticello Area Community Action Agency (MACAA)—Nelson

Nelson County Department of Social Services

Nelson County Health Department

Nelson County Public Schools

Region Ten Community Services Board—Nelson

Sentara Martha Jefferson Hospital

The Well of Nelson

Thomas Jefferson Adult and Career Education @ Piedmont Virginia Community College

Thomas Jefferson Health District

University of Virginia Health

Virginia Cooperative Extension—Nelson

8.1.7 MAPP CORE GROUP

Sentara Martha Jefferson Hospital

Thomas Jefferson Health District

University of Virginia Health

University of Virginia Department of Public Health Sciences

8.1.8 MAPP LEADERSHIP COUNCIL

Alzheimer's Association

Blue Ridge Area Food Bank

Center for Nonprofit Excellence

Central Virginia Health Services, Inc.

Community Mental Health and Wellness Coalition

Diabetes Steering Committee

Improving Pregnancy Outcomes Workgroup

JAUNT

Jefferson Area Board for Aging

Jefferson Area CHiP

Local Food Hub

Monticello Area Community Action Agency (MACAA)

Piedmont Housing Alliance

Piedmont Virginia Community College (PVCC) Community Self-Sufficiency Programs

Piedmont Virginia Community College (PVCC) Health & Life Sciences

Ready Kids

Region Ten Community Services Board

Sentara Martha Jefferson Hospital

Sentara Martha Jefferson Hospital Foundation

Shelter for Help in Emergency (SHE)

The Center

The Women's Initiative

Thomas Jefferson Area Coalition for the Homeless (TJACH)

Thomas Jefferson Health District

University of Virginia Cancer Center

University of Virginia Department of Public Health Sciences

University of Virginia Health

University of Virginia Health Trauma Program

Westhaven Nursing Clinic

8.1.9 MAPP BEST PRACTICES WORK GROUP

African American Teaching Fellows

Albemarle Housing Improvement Program

American Heart Association

Blue Ridge Area Food Bank

Blue Ridge Medical Center

Charlottesville Department of Social Services

Charlottesville Free Clinic

City of Promise

City Schoolyard Garden

Fluvanna County Board of Supervisors

Fluvanna County Health Department

Fluvanna Partnership on Aging

Habitat for Humanity of Greater Charlottesville

Improving Pregnancy Outcomes Workgroup

International Rescue Committee

JAUNT

Jefferson Area Board for Aging (JABA)

Jefferson Area CHiP

Partner for Mental Health

Piedmont Court Appointed Special Advocates (CASA) / Trauma Informed Community Network

Piedmont Environmental Council

Piedmont Housing Alliance

Piedmont Regional Education Program (PREP)

Piedmont Virginia Community College

ReadyKids

Region Ten Community Services Board / Community Mental Health and Wellness Coalition

Sentara Martha Jefferson Hospital

Sentara Martha Jefferson Hospital, Senior Services Navigation

The Center

The Women's Initiative

Thomas Jefferson Health District

University of Virginia Curry School of Education

University of Virginia Department of Politics

University of Virginia Department of Public Health Sciences

University of Virginia Health

University of Virginia Institute for Environmental Negotiation

University of Virginia School of Law

University of Virginia School of Nursing

Virginia Department for Aging and Rehabilitative Services

Westhaven Nursing Clinic

8.1.10 MAPP DATA AND EVALUATION COMMITTEE

Albemarle County Executive's Office

Albemarle County Fire & Rescue

Blue Ridge Medical Center

Center for Nonprofit Excellence

Charlottesville City Manager's Office

Charlottesville Department of Social Services

Charlottesville Fire Department

Charlottesville Information Technology Department

Community Mental Health and Wellness Coalition

Health Quality Innovators

integrated Translational Health Research Institute of Virginia (iTHRIV)

JAUNT

Monticello Area Community Action Agency (MACAA)

OAR—Jefferson Area Community Corrections Board

Region Ten Community Services Board

Sentara Martha Jefferson Hospital

SmartCville

Thomas Jefferson Health District

Thomas Jefferson Planning District Commission

United Way—Thomas Jefferson Area

University of Virginia Cancer Center

University of Virginia Data Sciences Institute

University of Virginia Department of Public Health Sciences

University of Virginia Frank Batten School of Leadership and Public Policy

University of Virginia Health

University of Virginia Health Trauma Program

University of Virginia Library Research Data Services + Science

University of Virginia School of Engineering and Applied Science

8.1.11 PHOTOVOICE PROJECTS

A special thank you to the community members from the following programs, organizations, and/or locations who participated in photovoice projects!

Boys & Girls Club of Central Virginia—Southwood

Friendship Court Apartments

Greene Care Clinic

Jefferson Area Board for Aging (JABA)—Esmont & Scottsville Community Centers

Jefferson Area Board for Aging (JABA)—Fluvanna Community Center

Louisa Reentry Program

Sisters of Nia

8.1.12 SPECIAL THANKS

We would like to thank the following individuals for their contributions to this report:

- Community member Gertie Sanders for chairing the Diabetes Steering Committee and writing *Section 6 – Diabetes Steering Committee Recommendations.*
- Journalist Jordy Yager for providing feedback on *Section 3 – Who We Are* and contributing his original research on racial covenants in the Charlottesville area.
- University of Virginia Department of Public Health Sciences Professors Aaron Pannone, Genevieve Lyons, and Sarah Ratcliffe for providing data subject matter expertise and consultation for *Section 7 – Community Health Assessment Data*.
- Thanks also to the Kresge Foundation for their support through the Emerging Leaders in Public Health Fellowship.

Appendices

8.2 | Population Projections Data Tables

8.2.1 Population Projections by Age for Adults 65+

8.2.1.1 2020 POPULATION PROJECTIONS BY AGE			
% of Population	**65 to 74**	**75 to 84**	**85+**
Albemarle	11.1	5.8	3.0
Charlottesville	5.8	2.4	0.9
Fluvanna	13.8	6.6	2.1
Greene	11.4	5.6	1.6
Louisa	15.1	6.1	1.7
Nelson	18.3	7.9	2.2
TJHD	11.3	5.3	2.2
VA	9.6	4.7	1.7

Table 1 Percentage of Population by Age, TJHD Localities, TJHD, and VA, 2020 Population Projections. Source: Weldon Cooper Center for Public Service, Demographics Research Group, 2017. Accessed 2019.

8.2.1.2 2030 POPULATION PROJECTIONS BY AGE			
% of Population	**65 to 74**	**75 to 84**	**85+**
Albemarle	10.2	8.4	3.7
Charlottesville	8.2	3.4	0.8
Fluvanna	13.7	8.7	2.6
Greene	13.7	8.2	2.3
Louisa	15.2	9.1	2.1
Nelson	17.0	11.4	2.7
TJHD	11.5	7.7	2.6
VA	10.4	6.5	2.0

Table 2 Percentage of Population by Age, TJHD Localities, TJHD, and VA, 2030 Population Projections. Source: Weldon Cooper Center for Public Service, Demographics Research Group, 2017. Accessed 2019.

8.2.1.3 2040 POPULATION PROJECTIONS BY AGE			
% of Population	**65 to 74**	**75 to 84**	**85+**
Albemarle	7.6	7.9	5.0
Charlottesville	7.4	4.7	1.0
Fluvanna	12.5	8.7	3.3
Greene	11.6	10.0	3.4
Louisa	12.3	9.3	3.1
Nelson	13.9	10.6	3.7
TJHD	9.4	7.9	3.7
VA	8.9	7.1	2.8

Table 3 Percentage of Population by Age, TJHD Localities, TJHD, and VA, 2040 Population Projections. Source: Weldon Cooper Center for Public Service, Demographics Research Group, 2017. Accessed 2019.

8.2.2 Population Projections by Race

8.2.2.1 2020 POPULATION PROJECTIONS BY RACE					
% of Population	**White**	**Black**	**Hispanic**	**Asian**	**Other**
Albemarle	70.1	8.7	10.9	7.4	3.0
Charlottesville	55.5	20.8	11.1	8.0	4.7
Fluvanna	75.6	14.8	6.0	0.8	2.7
Greene	80.8	5.9	8.5	2.0	2.8
Louisa	75.1	16.5	4.6	0.7	3.1
Nelson	78.9	11.9	6.4	0.7	2.2
TJHD	69.8	12.8	9.1	5.1	3.2
VA	5.9	18.4	12.5	7.6	3.0

Table 4 Percentage of Population by Race, TJHD Localities, TJHD, and VA, 2020 Population Projections. Source: Weldon Cooper Center for Public Service, Demographics Research Group, 2017. Accessed 2019.

8.2.2.2 2030 POPULATION PROJECTIONS BY RACE					
% of Population	**White**	**Black**	**Hispanic**	**Asian**	**Other**
Albemarle	61.3	7.2	18.5	10.0	2.9
Charlottesville	47.0	16.8	20.5	11.2	4.5
Fluvanna	71.3	13.3	11.3	1.1	2.9
Greene	74.3	5.1	14.9	2.9	2.8
Louisa	71.9	15.0	8.7	1.0	3.5
Nelson	74.4	10.6	11.8	0.9	2.3
TJHD	62.9	10.7	16.1	7.0	3.3
VA	53.5	16.4	17.2	10.0	2.9

Table 5 Percentage of Population by Race, TJHD Localities, TJHD, and VA, 2030 Population Projections. Source: Weldon Cooper Center for Public Service, Demographics Research Group, 2017. Accessed 2019.

8.2.2.3 2040 POPULATION PROJECTIONS BY RACE					
% of Population	**White**	**Black**	**Hispanic**	**Asian**	**Other**
Albemarle	51.1	5.7	27.9	12.6	2.6
Charlottesville	39.8	13.1	29.6	14.0	3.5
Fluvanna	64.2	11.5	19.7	1.6	3.0
Greene	65.5	4.3	23.7	3.8	2.7
Louisa	65.9	13.3	15.7	1.3	3.7
Nelson	67.0	9.3	20.1	1.3	4.3
TJHD	54.6	8.7	24.9	8.8	3.1
VA	47.4	14.4	22.9	12.7	2.6

Table 6 Percentage of Population by Race, TJHD Localities, TJHD, and VA, 2040 Population Projections. Source: Weldon Cooper Center for Public Service, Demographics Research Group, 2017. Accessed 2019.

Appendices

8.3 | MAPP Best Practices by Priority

Promote Healthy Eating and Active Living			
SPHERES OF INFLUENCE / APPROACHES	**INDIVIDUALS**	**ORGANIZATIONS & INSTITUTIONS**	**COMMUNITY** (neighborhoods, municipalities, counties or state)
PROGRAMS Activities focused on increasing knowledge about health issues.			
POLICY CHANGES Policies, rules, ordinances & laws that support healthy practices.		Safe Routes to Schools	joint use agreements
SYSTEMS CHANGES Change that impacts social norms of an organization, institution, or system.			
ENVIRONMENTAL CHANGE Physical aspects of the environment that support healthy or discourage unhealthy behaviors.			Complete Streets complete parks

Address Mental Health and Substance Use

SPHERES OF INFLUENCE / APPROACHES	INDIVIDUALS	ORGANIZATIONS & INSTITUTIONS	COMMUNITY (neighborhoods, municipalities, counties or state)
PROGRAMS Activities focused on increasing knowledge about health issues.			
POLICY CHANGES Policies, rules, ordinances & laws that support healthy practices.			
SYSTEMS CHANGES Change that impacts social norms of an organization, institution, or system.			
ENVIRONMENTAL CHANGE Physical aspects of the environment that support healthy or discourage unhealthy behaviors.			

Improve Access to Care

SPHERES OF	INDIVIDUALS	ORGANIZATIONS & INSTITUTIONS	COMMUNITY (neighborhoods, municipalities, counties or state)
PROGRAMS Activities focused on increasing knowledge about health issues.			
POLICY CHANGES Policies, rules, ordinances & laws that support healthy practices.			
SYSTEMS CHANGES Change that impacts social norms of an organization, institution, or system.			
ENVIRONMENTAL CHANGE Physical aspects of the environment that support healthy or discourage unhealthy behaviors.			

Reduce Health Disparities & Create Health Equity

SPHERES OF INFLUENCE / APPROACHES	INDIVIDUALS	ORGANIZATIONS & INSTITUTIONS	COMMUNITY (neighborhoods, municipalities, counties or state)
PROGRAMS Activities focused on increasing knowledge about health issues.			
POLICY CHANGES Policies, rules, ordinances & laws that support healthy practices.			
SYSTEMS CHANGES Change that impacts social norms of an organization, institution, or system.		Assess open and equitable schedules that work	Section 3 policy Equitable contracting voter registration
ENVIRONMENTAL CHANGE Physical aspects of the environment that support healthy or discourage unhealthy behaviors.			

Foster a Healthy & Connected Community for All Ages

(also includes recommendations from Social Determinants of Health)

SPHERES OF INFLUENCE / APPROACHES	INDIVIDUALS	ORGANIZATIONS & INSTITUTIONS	COMMUNITY (neighborhoods, municipalities, counties or state)
PROGRAMS Activities focused on increasing knowledge about health issues.		Youth development and advocacy programs Parent engagement and advocacy programs	Car ownership program Responsible Rides
POLICY CHANGES Policies, rules, ordinances & laws that support healthy practices.		Employer-assisted housing	
SYSTEMS CHANGES Change that impacts social norms of an organization, institution, or system.	virginianavigator.org		Car share Universal, affordable preschool
ENVIRONMENTAL CHANGE Physical aspects of the environment that support healthy or discourage unhealthy behaviors.			

Appendices

8.4 | Photovoice Flyers

Appendices

8.5 | Diabetes Steering Committee Recommendations in Spanish

Tabla de contenido

8.5 | LO QUE APRENDIMOS: RECOMENDACIONES DEL COMITÉ DIRECTIVO PARA LA DIABETES

Para leer el informe en inglés, vea sección 6.

8.5.1 El Comité Directivo para la Diabetes

8.5.1.1 DIABETES EN LOS ESTADOS UNIDOS Y VIRGINIA

La diabetes es una epidemia nacional que afecta a más de 30 millones de personas en los Estados Unidos. Es la enfermedad crónica más común en los Estados Unidos y es la séptima causa principal de muerte en el país. El costo estimado de la diabetes diagnosticada en 2017 fue de 327,000 billones de dólares, y la mayor parte se destinó a pagar el costo médico directo. La diabetes tipo II es el tipo más común de diabetes.[1]

En Virginia, el *2016 Diabetes Burden Report* (un informe sobre la diabetes), compilado por el Departamento de Salud, reveló que uno de cada tres virginianos dio positivo en una prueba de prediabetes. Esto es un poco más alto que el promedio nacional. Dentro del estado, el costo promedio para administrar y tratar la diabetes es de $15,000 por persona por año.[2]

Las estadísticas nacionales revelan que los afroamericanos y latinos tienen casi el doble de probabilidades de ser diagnosticados con diabetes que sus contrapartes blancas. Los afroamericanos también tienen mayores tasas de complicaciones como resultado de esta enfermedad, como la pérdida de la vista, la enfermedad renal terminal y la amputación de las extremidades inferiores. Los afroamericanos tienen el doble de probabilidades de morir por complicaciones de la diabetes.[3] Del mismo modo, los miembros de las comunidades latinas tienen más probabilidades de desarrollar enfermedad renal terminal, y las mujeres de estas comunidades tienen más probabilidades de morir de la enfermedad que las mujeres blancas no hispanas.[4]

8.5.1.2 DIABETES Y MAPP2HEALTH

El proceso de MAPP2Health de 2016—una evaluación de las necesidades sanitarias previas de la comunidad—identificó cuatro esferas prioritarias, entre ellas, la reducción de las disparidades sanitarias y el acceso a la atención médica. En enero de 2018, el grupo central de MAPP compuesto por el Hospital Sentara Martha Jefferson, el Distrito de Salud Thomas Jefferson, el Departamento de Ciencias de la Salud Pública de la Universidad de Virginia y el Sistema de Salud de la Universidad de Virginia, junto con el Thomas Jefferson Area United Way, convocaron a un grupo de interesados para determinar los siguientes pasos a seguir en pos de esta prioridad. Una pregunta para el grupo era si la comunidad necesitaba formar una nueva coalición para abordar la prioridad. Un objetivo de la prioridad es identificar hasta tres problemas de salud con marcadas disparidades y reducir las disparidades, por lo que otra pregunta para el grupo es qué problema de salud se debe elegir. Después de varias reuniones, el grupo decidió por consenso que no se necesitaba una nueva coalición debido a que ya hay varias organizaciones en la comunidad que trabajan en torno a las disparidades de salud y al acceso a la atención médica.

En función de las estadísticas de Virginia, que muestran tasas de mortalidad más altas para las personas de color con diabetes,[5] la decisión fue centrarse en la prevención y el manejo de la diabetes en las comunidades de color. Estas disparidades de resultados destacan varias posibles conclusiones, entre ellas:

- La falta de acceso a la atención preventiva
- La falta de conocimientos sobre la salud
- El alcance insuficiente del proveedor
- Las barreras sociales que impiden la utilización de los servicios

8.5.1.2.1 Fundación del comité directivo de la diabetes

Para ayudar a comprender y abordar estas disparidades, se formó un grupo liderado por la comunidad llamado Comité Directivo para la Diabetes. El comité exploró las mejores prácticas en la gestión y prevención de la diabetes tipo II y ofreció recomendaciones para abordar las disparidades y el acceso en las comunidades afroamericanas y latinas en el distrito de salud de Thomas Jefferson, incluida la ciudad de Charlottesville y los condados de Albemarle, Greene, Fluvanna, Louisa, y Nelson. A partir de los datos, el objetivo general es mejorar el acceso a la programación basada en evidencias y desarrollar estrategias para reducir la brecha de resultados médicos adversos en las comunidades afroamericanas y latinas.

El reclutamiento del Comité Directivo para la Diabetes incluyó divulgaciones que incluían publicidades periodísticas y el boca en boca. Dos sesiones de información se celebraron en octubre y noviembre de 2018. Esas sesiones de información delinearon las metas del comité y como resultado hubo 12 personas interesadas en convertirse en miembros del comité. Finalmente, diez de los 12 originales se convirtieron en miembros del grupo de comité inicial constituido por nueve mujeres y un hombre. Dichos miembros tenían entre 25 y 66 años. Había tres latinos y siete miembros afroamericanos. Los miembros eran residentes de Charlottesville, Albemarle, Greene, y Louisa. Un miembro del grupo se hizo responsable de encabezar la iniciativa.

En diciembre de 2018, el grupo celebró su primera reunión para conocerse y saludarse. El evento de presentación fue una ocasión para reafirmar el propósito, confirmar a los miembros del comité y establecer el plazo para completar la obra. El trabajo real comenzó en enero de 2019, y las reuniones mensuales ocurrieron a lo largo de mayo de 2019. El grupo recibió una lista predefinida de proveedores de servicios que en ese momento participaban en prácticas basadas en evidencias en relación con el tratamiento y la gestión de la diabetes de tipo II. Entre dichos proveedores de servicios se encuentran los siguientes:

Proveedor de servicio	Programa
Atlantic Coast Athletic Club (ACAC)	Prevención de la diabetes
Artes de curación de Common Ground	Masaje, acupuntura, meditación, concienciación, yoga
Junta para Personas Mayores del área de Jefferson (JABA)	Gestión de enfermedades crónicas
Programa de mejoramiento de salud infantil del área de Jefferson (CHiP)	Modelo de trabajador de la salud comunitaria
Sisters Keeper Doula Collective	Modelo de trabajador de la salud comunitaria
YMCA	Prevención de la diabetes

Los participantes recibieron una cena y una tarjeta regalo de $25 en cada reunión. Recibieron una tarjeta regalo de $100 al final de su trabajo en conjunto. El Hospital Sentara Martha Jefferson patrocinó el programa. Cada mes, el grupo se reunió con dos proveedores que brindaron una descripción general de sus programas y de cómo creían que podrían ser un beneficio para la prevención y el manejo de la diabetes de tipo II. Un intérprete de español estuvo presente en todas las reuniones de información y del Comité Directivo para la diabetes. Después de la presentación, los miembros del grupo recibieron cupones para acceder, explorar y evaluar los servicios con la expectativa de informar al grupo más grande utilizando una encuesta creada por el líder del grupo. Los obstáculos para experimentar los servicios incluyen condiciones climáticas, falta de franjas horarias para la actividad nocturna, necesidades de cuidado de niños y la privacidad de los participantes del programa actual (una violación de la Ley de Responsabilidad y Movilidad del Seguro de Salud).

8.5.1.3 OBSTÁCULOS AL ACCESO

Los obstáculos al acceso se dividen en cuatro categorías que el Comité decidió abordar. Estas categorías son la respuesta emocional, el costo, el transporte y la ubicación, y el idioma:

8.5.1.3.1 La respuesta emocional

La respuesta emocional fue definida como un sentimiento de bienvenida. Exploraron preguntas tales como:

- ¿Se sintió bienvenido?
- ¿Vio a alguien que se parecía a usted?
- ¿Había un enfoque simple integrado para recibir información?
- ¿Vio a alguien del mundo de los negocios que se parecía a usted?
- ¿Vio a alguien participando de los servicios que se parecía a usted?

8.5.1.3.2 El costo

El costo de acceso se definió simplemente como ¿Cuánto tendría que pagar para ACCEDER a estos servicios?

- ¿Podría pagarlo?

8.5.1.3.3 El transporte y la ubicación

Transporte y ubicación abordó la ubicación del servicio y la facilidad de acceso para la mayoría de las personas a través de medios de transporte públicos o privados.

- ¿Cuán convenientemente ubicados están los servicios?

8.5.1.3.4 El idioma

El idioma se definió como la capacidad de brindar y recibir información en el idioma con el que se siente más cómodo.

- ¿Se le ofrecen recursos en su idioma preferido?

8.5.2 Conclusiones del comité

La mayoría de los miembros del Comité para la Diabetes no sabían que estos servicios existían para el apoyo y la gestión de la diabetes de tipo II dentro de las comunidades afroamericanas y latinas.

El comité consideró que todos los servicios explorados que se detallaron anteriormente, beneficiarían y apoyarán a los afroamericanos y latinos en la prevención y gestión de la diabetes de tipo II.

8.5.2.1 OPINIONES SOBRE LOS OBSTÁCULOS AL ACCESO

Las opiniones sobre cada obstáculo identificado se mencionan a continuación:

8.5.2.1.1 La respuesta emocional

- La mayoría del grupo se sintió bienvenido, pero se sentiría más a gusto si hubiera una mejor representación de los grupos minoritarios.
- Todos se sintieron cómodos en cuanto a hacer preguntas en inglés.
- El individuo de habla hispana tuvo una comprensión limitada de la información presentada, pero expresó que estaba bien.
- La mayoría de los miembros del comité consideraron que la respuesta a preguntas específicas sobre programas especiales, como la prevención de la diabetes, se limitaba a la existencia del programa y que había un fracaso de la organización para promover eficazmente estos programas.
- Los facilitadores del Programa de Prevención de la Diabetes indicaron que no había participación de afroamericanos y latinos en sus programas al momento de la presentación.
- La representación de afroamericanos y latinos estaba visiblemente ausente en la configuración

de muchos grupos que asistieron a lo largo del seguimiento de los proveedores de servicios.

- La evidencia visual mostró una baja representación de los trabajadores afroamericanos y latinos en la mayoría de los entornos.

8.5.2.1.2 El costo

- El costo de los programas de prevención de la diabetes a largo plazo se vio como un obstáculo para el acceso.
- La disponibilidad del apoyo a las becas se vio como algo positivo para reducir el obstáculo al acceso con relación al costo.
- El grupo apoya el acceso basado en los ingresos o el pago de lo que se pueda como modelo para admitir el acceso a estos servicios.

8.5.2.1.3 El transporte/ubicación

- Todos los proveedores/servicios examinados se encontraban en Charlottesville o en el condado de Albemarle.
- Los servicios del área de tránsito de Charlottesville (CAT por sus siglas en inglés) ofrecen fácil acceso al servicio por una tarifa nominal para las personas que viven en Charlottesville o en el condado de Albemarle.
- Los individuos de los condados circundantes que no tienen acceso a vehículos de propiedad privada pueden pagar $5 de ida en las tarifas de transporte con limitaciones en los servicios de recogida y entrega.

8.5.2.1.4 El idioma

- Las presentaciones verbales de los proveedores al grupo se realizaron solo en inglés.
- La mayoría de la información impresa fue solo en inglés y requirió traducción.
- Durante las visitas al sitio realizadas por personas de habla hispana, la información se presentó en inglés. Los miembros no solicitaron un intérprete y no se ofreció ninguno.
- Prefirieron recibir información de facilitadores de habla hispana.

8.5.2.2 RESULTADOS ADICIONALES

Para ayudar a evaluar los comportamientos relacionados con individuos en riesgo de desarrollar diabetes de tipo II, el grupo administró la prueba de riesgo de la Asociación Americana de la Diabetes (American Diabetes Association, ADA) y agregó preguntas relacionadas con la alimentación y el ejercicio a 53 miembros de la familia y amigos dentro de sus comunidades. Treinta y uno estaban en riesgo de desarrollar diabetes de tipo II.

De estos miembros de la familia y amigos, menos del 50 por ciento fueron referidos a un nutricionista cuando se identificó el estado de riesgo. Un alto número de individuos informaron que eligen alimentos poco saludables según su preferencia. Aunque estadísticamente insignificante, la encuesta reveló que hay potencial para un retraso en las intervenciones formales en individuos latinos y afroamericanos en riesgo de desarrollar diabetes de tipo II.

8.5.2.3 RECOMENDACIONES Y OPORTUNIDADES

- Realizar un esfuerzo concertado para contratar a latinos y afroamericanos en todas las posiciones de programación comunitaria.
- Mejorar el alcance del marketing culturalmente competente a las comunidades latinas y afroamericanas con respecto a la programación de la diabetes.
- Hacer que la información (impresa y oral) esté disponible en inglés y español.
- Desarrollar un modelo de promotores de salud que incorpore el apoyo del servicio en el hogar y una vinculación del servicio comunitario para los clientes con diabetes.

- Establecer una colaboración con las agencias locales de atención domiciliaria para ampliar los servicios prestados en virtud de los beneficios del seguro, vinculando los servicios prestados por las promotoras de salud.
- Utilizar la tecnología como una estrategia para apoyar el control glucémico (telemonitoreo de la glucosa en sangre en el hogar).
- Establecer coaliciones que involucren organizaciones religiosas y seglar para mejorar el acceso mediante el aumento del número de sitios donde se pueda implementar y facilitar información sobre prácticas basadas en evidencias para la prevención y la gestión de la diabetes de tipo II.
- Utilizar organizaciones religiosas, consejos interinstitucionales y otros medios comunitarios como recursos para promover estos programas.
- Considerar los cupones de transporte como una solución temporal para ayudar a las personas en entornos rurales a acceder a servicios basados en evidencias mientras se explora una solución más permanente.
- Considerar la asociación con gimnasios locales en las comunidades circundantes con el propósito de ofrecer clases de educación para la diabetes.
- Considerar el costo fuera de configuración para membresías de gimnasio en condados con recursos limitados de gimnasios.
- Evaluar la disponibilidad de senderos en comunidades de bajos ingresos.
- Apoyar a las comunidades a medida que forman y mantienen grupos de senderismo.
- Establecer el estándar para la utilización de la escala de riesgo de diabetes uniforme como, "está en riesgo de sufrir diabetes de tipo II" desarrollado por la Asociación Americana de la Diabetes para determinar cuándo deben comenzar las intervenciones formales de prevención de la diabetes.

8.5.2.4 CONSIDERACIÓN A LARGO PLAZO

- Reducir las disparidades y barreras de acceso en las comunidades afroamericanas y latinas limitando el costo para el consumidor, los proveedores y el sistema de atención sanitaria y la aparición de la fragmentación al avanzar hacia la creación de un "Centro comercial de salud" todo incluido. El "Centro comercial" incluirá los servicios necesarios para prevenir y retrasar, gestionar y tratar la diabetes de tipo II y otras enfermedades crónicas en un único espacio físico. Los individuos y las familias en riesgo de sufrir diabetes de tipo II y otras enfermedades crónicas, y los que ya padecen alguna de ellas, recibirán atención de los proveedores de atención primaria y los educadores de salud. Tendrán la oportunidad de participar en terapias complementarias (yoga, meditación, acupuntura, terapia de masaje). Dentro del "Centro comercial" habrá un mercado de comida saludable. Estarán disponibles las demostraciones y oportunidades para participar en la selección y preparación de alimentos saludables, junto con un espacio para caminar y moverse. Habrá una sala de usos múltiples y servirá como centro social para el apoyo de pares. Todo esto debe estar convenientemente ubicado en las cercanías.

8.5.2.5 LECCIONES APRENDIDAS

- Tanto los hablantes de inglés como los de español eran miembros del Comité Directivo para la Diabetes. Un intérprete estuvo presente en todas las reuniones. Sin embargo, fue difícil para un facilitador que no hablaba español seguir la conversación y juzgar las reacciones emocionales del participante a través de un intérprete. Al menos un individuo sintió que incluso con un intérprete presente, a menudo se sentía excluido y no capturaba completamente la información.
- El Comité Directivo para la Diabetes es un grupo diverso en muchas maneras. Sin embargo, esa

diversidad no era de índole socioeconómica. Más participación de la comunidad, esfuerzos de divulgación y reclutamiento específico, además del uso de las redes sociales, podrían ser útiles para reclutar a un grupo más diverso a nivel socioeconómico.

8.5.3 Conclusión

El Comité Directivo para la Diabetes es un ejemplo de una posible mejor práctica para reunir insumos comunitarios a fin de desarrollar y modificar la programación para adaptarse a los deseos y necesidades de la comunidad. Las conclusiones del Comité servirán de guía para las organizaciones al diseñar o aplicar programas de prevención y gestión de la diabetes en las comunidades afroamericanas y latinas del distrito de salud de Thomas Jefferson.

Photovoice Photo: Scottsville and Esmont JABA

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