# 2019 Fairfax Community Health Assessment







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This Community Health Assessment reflects the work and contributions of many community stakeholders and governmental partners across the Inova Fairfax Medical Campus (IFMC) and Inova McLean Ambulatory Surgery Center community. Sincere appreciation is extended to those who so graciously shared their expertise throughout the process. A special note of gratitude is owed to the following individuals and organizations for their time, commitment and insight in the development of this report.

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#### **Community Members and Partner Organizations**

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fairfaxcounty.gov/health

A Community Health Assessment helps communities and hospitals prioritize public health issues and identify resources to address them.



# **Executive Summary**

#### What Makes a Community Healthy?

Health and well-being are impacted by a combination of living conditions, social factors and behaviors. To build the healthiest community possible for all community members it is critical to understand all components and how they work together.

#### The Process

In 2018, Inova Health System (Inova) and the health departments of Alexandria, Arlington, Fairfax, Loudoun and Prince William came together to develop a common vision for assessing the region's health. Historically, both health departments and non-profit hospitals conduct periodic assessments of the health and health needs of their communities. For the purpose of this joint assessment, the terms Community Health Needs Assessment (CHNA) and Community Health Assessment (CHA) are used interchangeably.

The collaborative shared expertise, best practices and resources to produce the framework for a regional health assessment process. From spring 2018 to summer 2019, Inova and Fairfax County Health Department facilitated a CHNA in Fairfax County to develop a complete picture of health locally. This CHNA is a community-centered and data-driven approach to uncover the top health issues by using surveys, local statistics and public input.

# What We Learned About Health in Fairfax County

While Fairfax County is relatively healthy overall, community members have significant differences in health outcomes depending on race, gender, age, income, ZIP code and education. The top health issues identified in the Inova Fairfax Medical Campus (IFMC) and Inova McLean Ambulatory Surgery Center area, listed alphabetically, are: **chronic conditions; economic stability; healthcare access; injury and violence; mental health; neighborhood and built environment; obesity, nutrition, and physical activity; and tobacco and substance use.** 

#### Next Steps

Using the information from this assessment, along with community input, Inova will develop a multiyear Implementation Plan with input from the health department and community partners. This plan will feature measurable, actionable strategies to address the community's most pressing community health concerns. All community members are encouraged to provide input and craft solutions.

Visit inova.org to stay current on Implementation Plan efforts, and learn about opportunities to participate.



# Why is Community Health Important?

For a community to thrive, it must be healthy, resilient and equipped with opportunities for all residents to succeed. A Community Health Needs Assessment (CHNA) measures the community's health status by looking at a broad spectrum of data examining strengths, weaknesses, challenges and opportunities.

A CHNA explores:

- What are the biggest health challenges?
- Who is most affected?
- Where are the unmet needs for services?
- What are the health inequities?

This CHNA features a new approach to assess the most significant health concerns in Northern Virginia through a collaboration of health departments, hospitals, community coalitions, councils and steering committees and the residents who live, work and play in the region. This assessment was developed recognizing both health department accreditation requirements as well as the IRS 501(r) requirements for hospitals. Findings provide the basis for an actionable plan to address top health needs and create a more equitable, flourishing community.

# Background

## Who is the Community?

Northern Virginia is one of the fastest growing urban communities in the United States. With approximately 1,304 square miles, the region is the most densely populated in the Commonwealth of Virginia. Northern Virginia is comprised of several distinct communities, including the cities of Alexandria, Fairfax, Falls Church, Manassas and Manassas Park, and the counties of Arlington, Fairfax, Loudoun, and Prince William. The eastern sections are urbanized with attendant health problems of overcrowding and increasing demand for health services and public programs.

Fairfax County, with more than one million residents, is the largest jurisdiction in Northern Virginia and also has the largest minority population. In Fairfax County in 2017, Asians, Hispanics, and African Americans represented 18.9%, 16.2%, and 9.7% of the county's population, respectively. One-quarter of the state's Hispanic population resides in Fairfax County (U.S. Census Bureau).

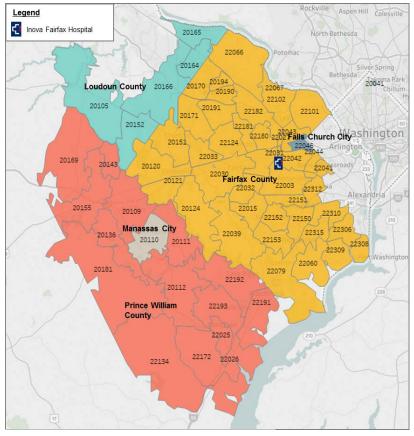
According to the U.S. Census Bureau Small Area Health Insurance Estimates (SAHIE), in 2015, approximately 8.8% of the total population under the age of 65 (about 101,000 people) in Fairfax County lacked healthcare insurance. Of the people living in Fairfax County whose family incomes are at or below 200% of the federal poverty level, SAHIE estimates that 32.9% (about 40,000 people) were uninsured in 2015.

IFMC, Inova's largest hospital facility, is a 923-bed community hospital that serves Fairfax County, Virginia and parts of Loudoun County, Prince William County and the Cities of Fairfax, Falls Church and Manassas. The hospital provides an array of medical and surgical services, including Northern Virginia's only Level I Trauma Center, Inova Women's Hospital, Inova Children's Hospital, Inova Heart and Vascular Institute, and others. Additional information about the hospital and its services is available at inova.org/IFMC.

The hospital is an operating unit of Inova Health System (Inova), which includes four other hospitals (Inova Alexandria Hospital, Inova Fair Oaks Hospital, Inova Loudoun Hospital and Inova Mount Vernon Hospital), five surgery centers (Inova McLean Ambulatory Surgery Center, Inova Northern Virginia Surgery Center, Inova Franconia-Springfield Surgery Center, Inova Loudoun Ambulatory Surgery Center, and Inova Ambulatory Surgery Center at Lorton), and a number of other facilities and services across Northern Virginia. Learn more about Inova at inova.org. The map below shows the IFMC/Inova McLean Ambulatory Surgery Center community.

#### FIGURE 1

IFMC/Inova McLean Ambulatory Surgery Center Community



Source: Tableau and Inova Health System, 2018

The following table shows the projected population growth in the service area by age.

#### TABLE 1

#### Percent Change in Population by Age/Sex Cohort, 2015-2025

Age Cohort	Total Population			Percent C	Change
	2015	2020	2025	2015-2020	2020-2025
0-17	441,388	455,673	468,413	3.2%	2.8%
18-44	644,693	675,495	699,733	4.8%	3.6%
45-64	476,305	489,781	504,349	2.8%	3.0%
65+	192,271	241,649	286,870	25.7%	18.7%
Total	1,754,657	1,862,598	1,959,364	6.2%	5.2%

Source: Metropolitan Washington Council of Governments, 2015

### **Regional Approach**

In 2018, Inova and the health departments of Alexandria, Arlington, Fairfax, Loudoun and Prince William collaborated to develop a framework for a regional CHA. The framework provides standardized methods that take into account each community's unique resources, needs and values. It reduces duplication of efforts among the partners and encourages cooperative solutions on joint priorities. Each community conducted a local CHA, personalizing the regional framework.

In Northern Virginia, both communities and their non-profit hospitals conduct periodic assessments of the health and health needs of their communities. A CHNA is defined in the Patient Protection and Affordable Care Act of 2010 and applies to non-profit hospitals. The communities and health departments have traditionally used the term Community Health Assessment (CHA) for this process, which comes from the National Association of County & City Health Officials (NACCHO) Mobilizing for Action through Planning and Partnerships (MAPP) process (naccho.org/ mapp). For the purpose of this joint assessment, the terms CHNA and CHA are used interchangeably.

This report provides an overview of the IFMC/ Inova McLean Ambulatory Surgery Center health assessment. There will also be a joint report assessing the health of the entire region.

### Comprehensive Review

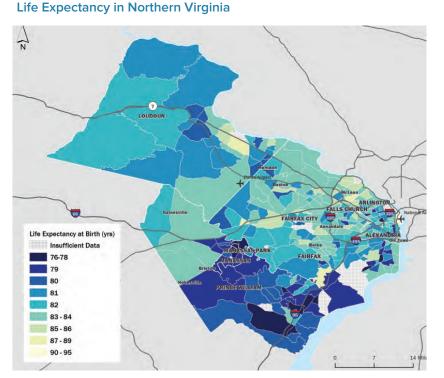
Health is more than the absence of disease. It is shaped by policies, neighborhoods and opportunities. In addition to reviewing health behaviors and outcomes, the collaborative looked at housing, education, transportation, employment status, and food availability to create a fuller picture. Qualitative and quantitative data were analyzed and top health issues identified. See details on page 10.



# **Equity Focus**

The collaborative chose to focus on health equity and disparities because thriving communities promote well-being for all residents. When compared to Virginia and the nation, Northern Virginia's health outcomes consistently rank high. However, the CHA looks beyond those numbers to review health differences by race, ethnicity, income, education, gender and ZIP code. The process encourages those most impacted by disparities to get involved and be part of the decision-making process. In Fairfax, there are stark contrasts in median income and educational attainment between neighboring census tracts (Appendix B), and average life expectancy at birth can vary by as much as eight years from one neighborhood to another (Figure 2). Where people live impacts their educational opportunities, economic stability, and ultimately their health and quality of life.

### FIGURE 2



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#### Health equity:

when everyone has the opportunity to attain their highest level of health and well-being.

#### **Health disparities:**

differences in health status among groups of people.

Adapted from the American Public Health Association (APHA), apha.org/topics-andissues/health-equity



### Community-Centered

The IFMC/Inova McLean Ambulatory Surgery Center CHNA adopts knowledge gained during the Fairfax County Health Department's CHA, as well as additional community input. As a part of the collaborative process leading this CHNA, the Fairfax County Health Director and Strategic Planner provided valuable insight and knowledge, and input was received from diverse sources including the local health departments, hospital staff, representatives of key community groups and individual community members.

The Fairfax CHA examined a variety of other community assessments to extrapolate significant health needs and themes. This process and the outcomes are detailed in the Fairfax County Community Health Assessment Report. Inova representatives conducted a focus group with the Fairfax Health Department's Multicultural Advisory Council and the Partnership for a Healthier Fairfax Steering Committee, and gathered community input through a public survey.

Inova and the health departments promoted the survey to partners and residents alike. The survey was available in print or online in nine languages (Amharic, Arabic, Chinese [Mandarin], English, Farsi, Korean, Spanish, Vietnamese and Urdu). Printed copies were provided to partners and local clinics, as well as health department facilities.



# Assessing Health in the Community

To evaluate health in each jurisdiction, the collaborative gathered qualitative and quantitative information through the following three tools:

- 1. Forces of Change Assessment (FOCA)
- 2. Community Themes and Strengths Assessment (CTSA)
- 3. Community Health Status Assessment (CHSA)

These assessments are part of the Mobilizing for Action through Planning and Partnerships (MAPP) framework. Table 2 provides a description of each assessment.

#### FIGURE 3 Qualitative and Quantitative Data

QUALITATIVE DATA

through observation

Examined for themes and patterns

Answers Why? How?

Collected & interpreted

#### QUANTITATIVE DATA

Measurement (#, %)

Analyzed using statistics

Answers What? When? Where? How often? How long?

#### TABLE 2

#### **Description of Health Assessments**

ASSESSMENT	DESCRIPTION	POSSIBLE FINDINGS
Forces of Change	Discussion of community conditions and health	What do participants identify as events, trends and factors that impact health?
Community Themes & Strengths	Survey of the community about health issues and opportunities	What do respondents identify as important health issues?
Community Health Status	Review of quantitative community health indicators	What are the differences in health outcomes among groups of people?



# Methods

#### Forces of Change Assessment (FOCA)

For this assessment, the focus groups discussed trends, events and forces that affect health in the community. Equity and disparities were a common theme in group discussions about threats to health in the community. For example, the groups noted that socioeconomic status, race and legal status impact a resident's awareness of and access to available resources. That may include assets like walkable and bike-able streets and low-cost healthcare options.

The discussions also noted opportunities and strengths that could support health. For example, the groups mentioned the high quantity of employment opportunities and improved access to public transportation.



COMMUNITY PERSPECTIVES

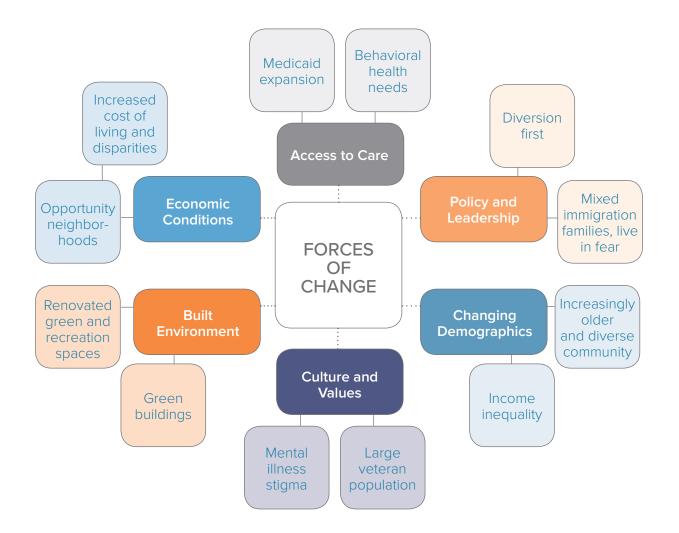
One challenge we face is the increase in the aging population with people living longer, and the decrease in direct care workers to care for them.



Figure 4 summarizes the frequently cited themes from the discussion. A full compilation of responses is in Appendix C.

#### FIGURE 4

#### **Events, Trends and Factors that Affect Health**



#### **Community Themes and Strengths Assessment (CTSA)**

This assessment was based on information collected through a three-question survey available to all community members.

- What are the greatest strengths of our community?
- What are the most important health issues for our community?
- What would most improve the quality of life for our community?

Respondents could select up to three choices for each question and leave open feedback in a free-form field. The survey was available online and in paper format, and was translated into multiple languages. It captured demographic information to compare responses among different groups.

Tables 3, 4, and 5 show the top five answers for each question among survey respondents in the IFMC/Inova McLean Ambulatory Surgery Center community. For full results and demographic information, see Appendix D.



COMMUNITY PERSPECTIVES

I want my son to be able to live a healthy lifestyle for years to come and to feel safe to have a child of his own because it's a healthy place to live.

#### TABLE 3

#### Top 5 Responses to "What are the greatest strengths of our community?"

RANK	RESPONSE	# OF RESPONSES	% OF TOTAL RESPONSES
1	Diversity (social, cultural, faith, economic)	2,999	40%
2	Educational opportunities (schools, libraries, vocational programs, universities)	2,888	38%
3	Safe place to live	2,508	33%
4	A good place for children	2,377	32%
5	Jobs and a healthy economy	1,824	24%

### TABLE 4

#### Top 5 Responses to "What are the most important health issues of our community?"

RANK	RESPONSE	# OF RESPONSES	% OF TOTAL RESPONSES
1	Mental health problems (depression, anxiety, stress, suicide)	3,556 47%	
2	Alcohol, drug and/or opiate abuse	2,569	34%
3	Obesity	1,705	23%
4	Other chronic health conditions (asthma, cancers, diabetes, heart disease, stroke)	1,471	20%
5	Different health outcomes for different groups of people	1,325	18%

#### TABLE 5

#### Top 5 Responses to "What would most improve the quality of life for our community?"

RANK	RESPONSE	# OF RESPONSES	% OF TOTAL RESPONSES
1	Affordable housing	3,548	47%
2	Access to healthcare	1,891	25%
3	Transportation options	1,799	24%
4	Mental health and substance abuse services	1,716	23%
5	Educational opportunities (schools, libraries, vocational programs, universities)	1,532	20%



#### **Community Health Status Assessment (CHSA)**

The regional collaborative identified a core set of health indicators to examine across all jurisdictions. Some jurisdictions also examined additional metrics that are important to the community.

Indicators were selected based on best practices, data availability and local health department knowledge of emerging health issues. The data include rates and percentages of mortality, morbidity, and incidence and prevalence (death, chronic illness, and new and existing disease). Data were compiled from published secondary sources and surveys. Exploring data by age, race, sex, gender and geography allowed for consideration of health across the lifespan and supported a focus on equity.

Indicators reflect the most recent data as of November 2018. County or city-level data for all health-related issues, as well as breakdowns by population characteristics, were not consistently available, which means the amount of information within each health topic may be limited and varied.



COMMUNITY PERSPECTIVES

This is a great place to live for families who make over \$100K. However, those in lower income brackets have a very different experience and need support.



Table 6 shows a summary of indicator categories and how they were assessed relative to disparities, benchmarks and progress. For a comprehensive overview of data, see Appendix E.

#### TABLE 6

#### CHSA: Summary of Disparities, Progress, and Benchmarks by Indicator Category

Indicator Category	Disparities	Progress	Benchmarks
<b>Chronic health conditions</b> (heart disease, diabetes, Alzheimer's, cancer)	X	$\checkmark$	$\checkmark$
<b>Economic stability</b> (income inequality, poverty, housing costs)	X	$\checkmark$	$\checkmark$
Educational opportunities (school climate, graduation rates, college)		$\checkmark$	$\checkmark$
Health-related quality of life and well-being (life expectancy, quality of life rankings)		$\checkmark$	$\checkmark$
Healthcare access (insurance coverage, healthcare disparities)	X	$\checkmark$	$\checkmark$
Immunizations and infectious disease (infectious disease incidence, immunization rates)	_	$\checkmark$	$\checkmark$
Injury and violence (accidental injury, motor vehicle collision, assault)	-	X	$\checkmark$
Maternal, infant and child health (infant mortality, teen births, prenatal care)	X		$\checkmark$
Mental health (mental distress, suicide, depression)	-	X	
<b>Neighborhood and built environment</b> (food environment, commuting, green space)	-	$\checkmark$	X
<b>Obesity, nutrition, and physical activity</b> (obesity, food insecurity, physical activity)	_		
Oral health (tooth loss, received dental services)	$\times$	$\checkmark$	$\checkmark$
Sexual and reproductive health (teen sexual health and pregnancy, HIV and STI)	×	X	$\checkmark$
<b>Tobacco and substance use and abuse</b> (tobacco and e-cigarette use, alcohol and drug use)	×	X	$\checkmark$

	Disparities	Progress	Benchmarks	
X	>100% difference for most indicators	More indicators in category worsened.	More indicators in category have not met benchmarks.	
	10-99% difference for most indicators	Same number of indicators are getting better or worse, or staying the same.	Same number of indicators in category have met or not met benchmarks.	
$\checkmark$	<10% difference for most indicators	More indicators in category improved.	More indicators in category have met benchmarks.	
×	Meets disparity criteria on state or national level, but local data not available.			
-	Data not available to assess.			

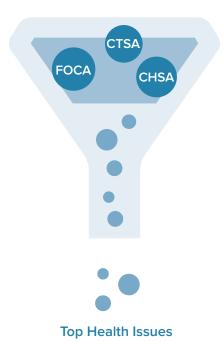
# Top Health Issues

As described in each section above, themes were identified in each of the individual assessments. Upon completion of all assessments, the collaborative identified the health-related topics that could be considered themes across the board. (See Appendix F for a full description of this methodology.) Following are descriptions for each of the significant health issues identified in the IFMC/Inova McLean Ambulatory Surgery Center community.

All data below are from the various CHA components unless otherwise cited. Quantitative data are from the Community Health Status Assessment (CHSA), and a full list of those sources is available in Appendix E. All rates are per 100,000 people unless specified.



#### **Strategic Priorities**





### **Chronic Conditions**

A chronic condition is a health condition or disease that is long-term and affects a person's quality of life over time. This category contains hospitalization and death rates related to chronic conditions, such as asthma, heart disease, stroke, Alzheimer's disease and diabetes.

In the United States, six in 10 adults have a chronic disease, and these diseases are the leading causes of death and disability.<sup>1</sup> Chronic conditions can affect an individual's lifestyle and may require ongoing medical care. About 66% of the total health care spending in the United States is associated with costs for the 25% of people living with more than one chronic condition.<sup>2</sup> Chronic conditions can be connected to genetics and environmental factors as well as behaviors, such as tobacco use, poor eating habits, lack of or limited physical activity and alcohol use. The risk of chronic

conditions increases with age – about 85% of older adults are living with at least one chronic condition, and 60% are living with at least two.<sup>3</sup> Chronic conditions disproportionately affect persons of color, especially Black or African Americans, and studies support a link between experiences of racism and risk of chronic illness.<sup>4</sup>

#### Why This Matters in the Community

- Hospitalization rates due to diabetes and adult asthma among Black or African American residents are four and six times the rate of Whites respectively in Fairfax.
- The percent of persons living with a disability is twice as high for individuals living in poverty.
- Chronic conditions rated as one of the top health issues among survey respondents, and aging related concerns ranked highly particularly for respondents over age 50 and those who took the survey in a language other than English or Spanish.



### **Economic Stability**

Economic stability considers an individual or family's ability to afford basic necessities. This category measures local poverty rates, income inequality and unemployment.

Financial resources are a large factor in a person's ability to achieve or improve optimal health. For example, health insurance is crucial for access to many healthcare services, but can be expensive, especially for those without health coverage through an employer. Individuals may decide to postpone care because of these costs, which could lead to worse health outcomes for conditions, such as cancer and diabetes.<sup>5</sup> Outside of direct healthcare, behavior and lifestyle changes, such as eating healthier meals and living in neighborhoods with access to parks, healthy foods and transit can be out of reach. Finally, poverty, struggling to pay bills, and long and hard work hours can take a significant toll on mental health. The constant stress of living in unstable conditions can exacerbate existing mental illness and affect child brain development.<sup>6</sup>

#### Why This Matters in the Community

• The percent of children living below the poverty level who are Hispanic or Black, is four times that of Whites. Meanwhile, the percent of Asian adults 65+ living below the poverty level is three times that of White older adults. Overall, there are at least two or three times the number of individuals living in poverty who are Asian, Black, Hispanic or any other race/ethnicity compared to Whites.

- Housing that is affordable was the number one response to the question "What would most improve the quality of life for our community?"
- On the same survey question, jobs and a healthier economy ranked in the top five for respondents who were younger than 25, earn less than \$50,000, Hispanic, or have less than a high school degree.

#### **Healthcare Access**

The ability to use high quality and affordable health services in a timely manner is critical to maintaining good health and well-being. Measures include the percentage of adults and children with insurance, patient-to-provider ratios and rates of preventive screenings.

Access to healthcare can have an impact across a person's lifespan, and can affect quality of life, life expectancy, disease prevention and preventable death.



The high cost of healthcare and inadequate or no health insurance can prevent an individual from seeking care. In addition to cost, many other barriers contribute to access issues and unmet healthcare needs, such as transportation, health literacy, discrimination, mistrust, cultural sensitivity and difficulty navigating the healthcare system.<sup>7</sup> As a result, access to healthcare often varies based on demographics and location.

#### Why This Matters in the Community

- "Access to healthcare" was the number two quality of life concern for survey respondents and ranked consistently high across demographic groups. Access to care was also a major theme in the Forces of Change discussions, with a focus on the rising costs of healthcare and transportation issues.
- There is a high percentage of linguistically isolated individuals in Fairfax County (7.3%). These individuals face more challenges in terms of finding providers who are culturally and linguistically accessible. Related concerns were raised in focus group discussions.
- In Fairfax County, almost one third of individuals living below 138% of the federal poverty line were uninsured, compared to one in five people in the United States as a whole.



#### Injuries and Violence

Injuries and violence are concerns across the lifespan. This category

includes behaviors and events, such as falls, motor vehicle accidents, domestic and sexual abuse, seatbelt use while driving and alcohol use prior to sexual encounters.

Injury and violence are a leading cause of death and disability across the U.S. For example, injuries from car accidents are the leading cause of death in children under 19 nationally.<sup>8</sup> Most of these incidents are preventable with awareness and education, and the right policies and systems in place. Additionally, in the U.S., one in three women and one in six men experience some form of sexual violence in their lifetime.<sup>9</sup> Beyond physical concerns, injuries and violence can also affect mental health, and in some circumstances lead to conditions, such as traumatic brain injury and post traumatic stress disorder.

#### Why This Matters in the Community

- The rate of hospitalizations related to unintentional falls in Fairfax County (170%) was better than Virginia overall (212%), but worse than the Northern Virginia region (148%), and is increasing.
- Violence and abuse ranked high among survey respondents who are Hispanic or Latino, earning less than \$50,000 or have less than a high school degree.
- The vulnerability of at-risk groups and an increased demand for domestic violence and abuse resources was noted in Forces of Change discussions.

#### Mental Health

Mental health is important at every stage of life and includes conditions and illnesses that affect emotional, psychological and social well-being. This category includes depression and suicide rates, self-reported poor mental health days and frequency of mental distress.

Although the terms are often used interchangeably, poor mental health and mental illness are not the same. An individual can experience poor mental health at different periods of their life and not be diagnosed with a mental illness. Similarly, a person living with a mental illness can experience periods of physical, mental and social well-being. Mental health conditions and illnesses can be long-term, short-term and/or recurring. Examples of mental illness include depression, anxiety, bipolar disorder, post traumatic stress disorder and schizophrenia. Mental health and physical health are closely related – mental illness increases the risk of physical health problems and living with a chronic condition can increase the risk of mental illness.<sup>10</sup> Mental illness also increases the risk of suicide. About 60% of people who die by suicide have had a mental illness.<sup>11</sup>

#### Why This Matters in the Community

- A need for more behavioral healthcare providers was noted in the Forces of Change discussions and focus groups. Additionally, participants noted high levels of isolation, stress, stigma and fear especially in communities of color.
- According to County Health Rankings data, individuals experiencing frequent mental distress is increasing.
- Survey respondents selected mental health problems as the number one health concern in the community. Additionally, a need for more mental health services was ranked highly.



## Neighborhood and Built Environment

This category describes the conditions where community members live, work, learn, and play. Measures include rates of racial segregation, access to grocery stores, availability of public transit and cost and quality of housing.

Community conditions can create either opportunities or barriers for a healthy life. Clean, safe neighborhoods with ample green space, complete sidewalks and low-crime rates support physical activity. Alternately, a high density of fast food



I am most concerned about the opioid crisis and mental health treatment for those who lack the access and resources.

restaurants, easy access to alcohol and tobacco products, and a lack of public transportation can encourage unhealthy habits. In addition, housing quality, cost, stability, and safety can significantly influence health. For example, poor quality housing with issues, such as lead paint, mold and pests can trigger asthma flare-ups, particularly in children.<sup>12</sup> The high cost of housing is also a major issue in Northern Virginia, and individuals and families are forced to make difficult decisions about lifestyle choices and medical care.

#### Why This Matters in the Community

- While workers who commute by public transportation is higher in Fairfax County compared to Virginia, mean travel time to work and workers who walk to work was worse. Traffic congestion was also noted in focus groups.
- Average daily particulate matter is high in the region.
- The Forces of Change discussions identified the growing urbanization of Fairfax County as a concern due to related needs – lack of adequate services, infrastructure and parks. Additionally, the highly transient community results in a lack of community connectedness.
- The County Health Rankings measures

residential segregation in communities because of the important factor it plays in personal and community well-being, economic stability and health disparities. Compared to top performing counties, jurisdictions in Northern Virginia perform worse both when comparing White-Black segregation as well as White-Non-White segregation.

# Obesity, Nutrition and Physical Activity

Good nutrition, regular physical activity and a healthy body weight decrease the risk of developing chronic conditions, such as diabetes, heart disease, stroke, cancer and depression. Measures in this category include the percent of adults and kids who are overweight or obese, food insecurity rates and level of physical activity.

Adopting healthy habits help those with chronic conditions improve health and/or maintain wellbeing. Since the 1980's, the U.S. has experienced a dramatic increase in obesity – four in ten adults and about one in six children and adolescents are obese.<sup>13</sup> Obesity and related unhealthy behaviors can increase the risk of chronic conditions, such as heart disease, stroke and type 2 diabetes.

Thoughtful community planning that includes grocery stores with fresh produce, parks, public transportation and recreation opportunities encourage healthier behaviors. Beyond these environmental factors, community members must be able to afford healthy foods and know how to prepare them. Healthy habits are much easier to maintain with the right access, knowledge and affordability.

#### Why This Matters in the Community

- The Forces of Change discussions noted concerns about the high costs of nutritious food and the difficulty following nutritional guidelines.
- Adults who are overweight or obese is increasing.
- Obesity was the third most highly rank response on the community survey, and was ranked highly among almost every demographic breakdown.
- Access to healthy food was ranked in the top five opportunities to impact health among respondents who were younger than 25, Hispanic, have less than a high school degree, or completed the survey in a language other than English.

#### **Tobacco and Substance Use**

The use and abuse of chemical substances, such as tobacco, drugs and alcohol can interfere with health, work or social relationships. This category includes measures, such as smoking, binge drinking and opioid use.

These substances can have serious consequences for physical and mental health, as well as impacts on economic stability and social well-being. Teens who smoke are more likely to drink alcohol or use drugs, and use of e-cigarette products (i.e. Juuling or vaping) among teens is on the rise.<sup>14,15</sup> These products often deliver higher doses of nicotine, which can cause structural and chemical changes to developing brains.<sup>16,17</sup> Adults who smoke or vape are at a greater risk for lung cancer, heart disease and early death.<sup>18</sup> As a highly addictive substance, nicotine has a strong association with drug and alcohol use. Health risks associated with substance use include overdose, hepatitis infection, impaired cognitive ability and death.

#### Why This Matters in the Community

- Alcohol, drug and/or opiate abuse was the number one or two response to greatest health issue in the community survey overall and across all demographic breakdowns. Tobacco use specifically was also in the top five concerns for younger and Hispanic survey respondents.
- Emergency department visits and death due to heroin/fentanyl and prescription opioid overdoses have increased. Teens and young adults (ages 15 – 34) disproportionately experience heroin/fentanyl and prescription opioid overdoses.
- A need for more outpatient and residential treatment services was noted in the Fairfax
   Forces of Change discussions. Additionally, one comment marked a failure to recognize and address the root causes of opioid abuse.



COMMUNITY PERSPECTIVES

All residents should have equal access and be able to afford the basic needs of life.

# Next Steps

Ultimately, results of this CHNA will lead to an Implementation Plan. The CHNA analyzes the health of the community to identify the most significant health concerns. The Implementation Plan takes that information to prioritize the health issues for community action. Development of the Implementation Plan is a collaborative long-term, systematic effort to apply strategies toward community needs and public health concerns. To truly improve health within a community, evaluation, planning and implementation must be community-centered. With buy-in and collaboration from community members, stakeholders and partners, the plan allows all those involved to set common priorities and align activities.

#### References

- Chronic Disease. CDC National Center for Chronic Disease Prevention and Health Promotion. https://www.cdc.gov/chronicdisease/index.htm. Accessed June 4, 2019.
- 2 Anderson G. Chronic Care: Making the Case for Ongoing Care. Princeton, NJ: Robert Woods Johnson Foundation; 2010. https:// www.rwjf.org/en/library/research/2010/01/chronic-care.html. Accessed June 4, 2019.
- 3 Supporting Older Patients with Chronic Conditions. NIH National Institute on Aging. https://www.nia.nih.gov/health/supporting-older-patients-chronic-conditions. Accessed June 4, 2019.
- 4 Mays VM, Cochran SD, Barnes NW. Race, race-based discrimination, and health outcomes among African Americans. *Annu Rev Psychol.* 2007 Jan;58:201–225. https://doi.org/10.1146/annurev. psych.57.102904.190212.
- 5 Factors That Contribute to Health Disparities in Cancer. CDC. https://www.cdc.gov/cancer/healthdisparities/basic\_info/challenges.htm. Accessed June 4, 2019.
- 6 Jordan R. Poverty's Toll on Mental Health. Urban Institute Blog. https://www.urban.org/urban-wire/povertys-toll-mental-health. Accessed June 4, 2019.
- 7 Kullgren JT, McLaughlin CG, Mitra N, Armstrong K. Nonfinancial barriers and access to care for U.S. adults. *Health Serv Res.* 2012 Feb;47(1 Pt 2):462–485. https://doi.org/10.1111/j.1475-6773.2011.01308.x.
- 8 Injury and Violence Prevention. HealthyPeople.gov. https://www. healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention. Accessed June 4, 2019.
- 9 Smith SG, Chen J, Basile KC, et al. The National Intimate Partner and Sexual Violence Survey (NISVS): 2010-2012 State Report. Atlanta, GA: National Center for Injury Prevention and Control, CDC; 2017. https://www.cdc.gov/violenceprevention/pdf/NIS-VS-StateReportBook.pdf. Accessed June 4, 2019.
- 10 Ohrnberger J, Fichera E, Sutton M. The relationship between physical and mental health: A mediation analysis. Soc Sci Med. 2017 Dec;195: 42-49. https://doi.org/10.1016/j. socscimed.2017.11.008.

- 11 Does Depression Increase the Risk for Suicide? HHS.gov. https:// www.hhs.gov/answers/mental-health-and-substance-abuse/ does-depression-increase-risk-of-suicide/index.html. Accessed June 4, 2019.
- 12 Beck AF, Huang B, Chundur R, Kahn RS. Housing code violation density associated with emergency department and hospital use by children with asthma. *Health Aff.* 2014 Nov;33(11): 1993-2002. https://doi.org/10.1377/hlthaff.2014.0496
- 13 Obesity and Overweight. CDC National Center for Health Statistics. https://www.cdc.gov/nchs/fastats/obesity-overweight.htm. Accessed June 4, 2019.
- 14 McCabe SE, West BT, McCabe VV. Associations between early onset of e-cigarette use and cigarette smoking and other substance use among US adolescents: a national study. Nicotine Tob Res. 2018 Aug;20(8):923–930. https://doi.org/10.1093/ntr/ ntx231.
- 15 Kann L, McManus T, Harris WA, et al. Youth Risk Behavior Surveillance United States, 2017. *MMWR Surveill Summ*. 2018 Jun 15;67(No. SS-8):1–114. http://dx.doi.org/10.15585/mmwr.ss6708a1. Accessed June 4, 2019
- 16 Vaping Pods Produce High Nicotine Levels in Young Users. NIH National Cancer Institute. https://www.cancer.gov/news-events/ cancer-currents-blog/2018/youth-vaping-high-nicotine-levels. Accessed June 4, 2019.
- 17 Goriounova NA, Mansvelder HD. Short- and long-term consequences of nicotine exposure during adolescence for prefrontal cortex neuronal network function. *Cold Spring Harb Perspect Med.* 2012 Sep 13;2(12):a012120. https://doi.org/10.1101/cshperspect.a012120.
- 18 Glantz SA. Evidence on how e-cigs cause lung and heart disease and, now, cancer, presented at SRNT meeting. University of California San Francisco Center for Tobacco Control Research and Education Blog. https://tobacco.ucsf.edu/evidence-how-ecigs-cause-lung-and-heart-disease-and-now-cancer-presentedsrnt-meeting. Accessed June 4, 2019.







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