# 2019 Loudoun County Community Health Assessment







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

#### Acknowledgments

This Community Health Assessment reflects the work and contributions of many community stakeholders and governmental partners across the Loudoun 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**

Loudoun Health Council Alexandria Health Department Arlington County Health Department Fairfax County Health Department Prince William Health District All partner organizations that hosted events and shared surveys.

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loudoun.gov/health



### **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 residents 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 the Loudoun County Health Department facilitated a CHNA in Loudoun 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 Loudoun

While Loudoun 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 Loudoun, listed alphabetically, are: chronic conditions; economic stability; healthcare access; immunizations and infectious disease; injury and violence; mental health; neighborhood and built environment; oral health; and tobacco and substance use.

#### Next Steps

Using the information from this assessment, Inova Loudoun Hospital (ILH) and Loudoun County will develop a multi-year 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 and loudoun.gov/livehealthy 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 Assessment (CHA) measures the community's health status by looking at a broad spectrum of data examining strengths, weaknesses, challenges and opportunities.

A CHA/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 Loudoun County community.

### Background

#### Who is the Community?

Loudoun County was established in 1757. It is positioned between Washington, D.C. and the Shenandoah Valley and is home to Washington Dulles International Airport. Loudoun encompasses 520 square miles and has a population density of 606 persons per square mile. Known as one of the fastest growing counties of its size in the nation from the late 1990s to the present day, Loudoun County's population continues to increase.

Population changes will be spurred by the longterm strength of the region's economy, high rates of in-migration and international immigration. The region's population that is 65 years of age and older is expected to grow by 25% over the next 5 years, while the number of children will increase by about 4% in the same time period. (MWCOG 9.1 and ESRI)

The U.S. Census Bureau estimates that Loudoun County had a population of 398,080 people in 2018, more than doubling in size since 2000. By 2030, the population is forecasted to exceed 468,000. In 2018, Loudoun County's Asians, Hispanics, and African Americans represented 19.4%, 13.9% and 7.9% of the population, respectively (U.S. Census Bureau), with 24% of the current population born outside the United States. Northern Virginia's racial and ethnic diversity is more pronounced than in the rest of the state. With increasing diversity, economically disadvantaged populations and multiple languages, the need for access to culturally appropriate, flexible health care continues to grow. The Northern Virginia geographic region in 2018 was 41% minority, up from 28% in 1990, while the nation as a whole reflects a 39% minority population (U.S. Census Bureau).

The average Loudoun resident is just over 35 years old and has a median household income of \$135,842, with 2.4% of the population below the federal poverty level. It is estimated that 7.7% of the county's adult population is uninsured. Loudoun County is also a highly educated and skilled community, with 59% of residents holding at least a bachelor's degree, compared to 27% in the United States as a whole. George Washington University, Northern Virginia Community College, Shenandoah University, George Mason University, Strayer University and Patrick Henry College each offer degree or certificate programs on Loudoun campuses.

Inova Loudoun Hospital (ILH) is a 183-bed community hospital that serves Loudoun County, Virginia, and parts of Fauquier County. The hospital provides an array of medical and surgical services, including a dedicated maternity birthing inn, cardiac and vascular services, pediatrics, comprehensive cancer services, and others. Additional information on the hospital and its services is available at: inova.org/ilh.

The hospital is an operating unit of the Inova Health System (Inova), which includes four other hospitals (Inova Alexandria Hospital, Inova Fairfax Medical Campus, Inova Fair Oaks Hospital and Inova Mount Vernon Hospital) and that operates a number of other facilities and services across Northern Virginia. Learn more at inova.org. The map below shows the ILH community.



#### **FIGURE 1: ILH Community**

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

	ΤΟΤΑ		ON	N PERCENT CHANGE	
AGE COHORT -	2015	2020	2025	2015-2020	2020-2025
0-17	111,167	124,072	131,855	11.6%	6.3%
18-44	133,690	148,820	157,360	11.3%	5.7%
45-64	93,519	105,229	113,903	12.5%	8.2%
65+	29,769	39,875	48,929	33.9%	22.7%
TOTAL	368,145	417,996	452,047	13.5%	8.1%

#### TABLE 1: Loudoun County Percent Change in Population by Age/Sex Cohort, 2015-2025

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 assessment, 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 Community Health Needs Assessment (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 ILH and Loudoun County community 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 8.

#### 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.

#### 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-and-issues/health-equity

In Loudoun, 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.





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#### Community-Centered

While a regional approach guided the CHA, each jurisdiction used its own process for community outreach and engagement. As much as possible, the process centered on existing resources, partnerships, and local needs and values. This method ensures that any new initiatives accurately reflect community priorities. Inova and the Loudoun County Health Department planned and produced the Loudoun assessment together. Each member of the team contributed to the assessment in different ways, utilizing individual strengths. As a part of the collaborative process leading this assessment, the Loudoun County Health Director and the Loudoun Health Council provided valuable insight and knowledge, and input was received from diverse sources including the local health department, hospital staff, representatives of key community groups and individual community members. Inova and Loudoun County Health Department representatives conducted Forces of Change sessions with the Loudoun Health Council, Loudoun Human Services Network and the Loudoun County Chamber of Commerce, and gathered community input through a public survey.

Inova, the health department and the Loudoun Health Council 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.

#### FIGURE 3 **Qualitative and Quantitative Data**



### 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.

#### 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.



Every day, I have to decide
between feeding my two daughters
or keeping my MS at bay.



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

#### FIGURE 4





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

This assessment was based on information collected through a three-question survey available to all Loudoun County 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 Loudoun County. For full results and demographic information, see Appendix D.



Loudoun County attracts immigrants, because of its wealth and opportunities. But, it is expensive to live here, so hard-working families often struggle to make ends meet. - Bob

#### TABLE 3

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

RANK	RESPONSE	# OF RESPONSES	% OF TOTAL RESPONSES
1	Educational opportunities (schools, libraries, vocational programs, universities)	3,008	45.8%
2	A good place for children	2,743	41.8%
3	Safe place to live	2,612	39.8%
4	Diversity of the community (social, cultural, faith, economic)	2,137	32.5%
5	Jobs and a healthy economy	1,935	29.5%

#### TABLE 4

#### Top 5 Loudoun County 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)	3,475	52.9%
2	Alcohol, drug and/or opiate abuse	2,425	36.9%
3	Illnesses spread by insects and/or animals (Lyme disease, Zika, Rabies)	1,465	22.3%
4	Obesity	1,426	21.7%
5	Preventable injuries (car or bicycle crashes, falls)	1,195	18.2%

#### TABLE 5

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

RANK	RESPONSE	# OF RESPONSES	% OF TOTAL RESPONSES
1	Housing that is affordable	2,974	45.3%
2	Transportation options	1,758	26.8%
3	Mental health and substance abuse services	1,571	23.9%
4	Access to healthcare	1,359	20.7%
5	Welcoming of diversity (social, cultural, faith, economic)	1,275	19.4%



#### 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



Food is just such a basic human right. Most of us take the next meal for granted, but some of our neighbors are not so lucky.

– Jennifer 7

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.

Table 6 on the next page 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)	$\mathbf{X}$	$\checkmark$	$\checkmark$
<b>Economic stability</b> (income inequality, poverty, housing costs)	$\mathbf{X}$	$\checkmark$	$\checkmark$
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)	$\checkmark$	$\checkmark$	X
Immunizations and infectious disease (infectious disease incidence, immunization rates)	-	$\checkmark$	$\checkmark$
<b>Injury and violence</b> (accidental injury, motor vehicle collision, assault)	-	$\mathbf{X}$	$\checkmark$
Maternal, infant and child health (infant mortality, teen births, prenatal care)	X	$\checkmark$	$\checkmark$
Mental health (mental distress, suicide, depression)	-	X	
<b>Neighborhood and built environment</b> (food environment, commuting, green space)	-	$\checkmark$	$\mathbf{X}$
<b>Obesity, nutrition, and physical activity</b> (obesity, food insecurity, physical activity)	-	$\checkmark$	$\checkmark$
Oral health (tooth loss, received dental services)	X	$\checkmark$	
Sexual and reproductive health (teen sexual health and pregnancy, HIV and STI)	$\checkmark$	X	$\checkmark$
Tobacco and substance use and abuse (tobacco and e-cigarette use, alcohol and drug use)	X	$\checkmark$	$\checkmark$

Legend:

	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.	
X	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 (with input from jurisdictional steering committees), identified the health-related topics that could be considered themes across the board. (See Appendix F for full description of this methodology.) Following are descriptions for each of the significant health issues identified in Loudoun County.

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.



#### **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 healthcare 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,

#### **FIGURE 5**

#### **Strategic Priorities**



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 Loudoun County

- Hospitalizations for heart failure are almost four times higher among Asian residents than Hispanic residents.
- The rate of persons with a disability living in poverty is twice that of all persons with a disability. Those who are American Indian or Alaskan Native are three times higher than the population as a whole.
- Increasing obesity and diabetes was identified in Forces of Change discussions.
- CHA survey respondents over age 50 selected • aging-related health concerns as one of the community's top health issues. Forces of Change discussions highlighted an aging population, as well as difficulty accessing services for individuals with disabilities.



### **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 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 Loudoun County

- The percent of Hispanic children (9.5%) living below the federal poverty level is about three times the percent of White children (2.6%).
- Only 18% of all Loudoun County Public Schools (LCPS) students are eligible for free and reduced price meals. However there are five schools (out of 33) where more than 60% of students are eligible.
- While median household income in Loudoun is high overall (\$125,672 per year), median household income for White, non-Hispanic residents (\$132,267 per year) is more than one and a half times that of Hispanic residents (\$79,797 per year).
- Affordable housing was the number one response to what would improve health on the community survey.

#### **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-toprovider 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 health 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 Loudoun County

- Mammograms for women over 40 were lower in Loudoun than in the region, state and Healthy People 2020 goals. Pap screenings were better than the state, but lower than Healthy People 2020 goals.
- Overall resident insurance rates were favorable to benchmarks, but individuals below 138% of the federal poverty level with no insurance were almost 1.5 times the state level.
- "Access to healthcare" ranked consistently in the top five quality of life concerns across all demographic groups for community survey respondents. Access to care was also a major theme in the Forces of Change discussion, with a focus on the culturally underserved populations.



#### Infectious Disease and Immunization

Also known as communicable diseases that can be spread directly or indirectly from one person to another, infectious disease can be caused by bacteria, viruses, parasites or fungi. This category includes measures such as rates of tuberculosis, hepatitis, chickenpox and whooping cough as well as influenza and childhood immunizations. To prevent the spread of infection and maintain good health, people need access to health interventions for infectious diseases such as malaria, TB and HIV. Additionally, immunizations are one of the most cost-effective interventions that help to prevent millions of deaths every year.

#### Why This Matters in Loudoun County

- Barriers to vaccination and increasing flu infection rates were noted in Forces of Change discussions.
- Lyme disease incidence in Loudoun County is almost three times the rates of disease in Northern Virginia and across the state.
- Hepatitis C infections increased slightly year over year.
- Illnesses spread by insects and/or animals (e.g., Lyme disease, Zika, and rabies) was the number three biggest health concern on the community survey.
- Loudoun County is a diverse community, and is home to Dulles International Airport.
  International travel and the many visitors and residents coming from other countries can also increase exposure to new and different infectious diseases.'



#### **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. 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. 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>

#### Why This Matters in Loudoun County

- Preventable injuries was a top concern among community survey respondents. Additionally, younger respondents (<25) ranked violence and abuse in the top five.
- All-cause injury and violent death rates (243%), hospitalizations related to unintentional falls (141.7%), and the violent crime rate (100.4%) all increased from the prior year.
- Abuse, neglect, violence and crime were all raised as concerns in the Loudoun County 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



No one in Loudoun should lose their future to a few seconds of desperation. – Brianna

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 Loudoun County

- One in five adults (21%) report poor mental health lasting more than five days and 14% of people enrolled in Medicare have depression.
- Males (all ages) have three times the suicide rate as females.
- Community survey respondents selected mental health problems as the number one health concern in Loudoun, with more than half of all respondents selecting this option. Additionally, mental health services ranked third as an opportunity to improve health in the county.
- Forces of Change discussion participants noted social isolation, stress and access to behavioral health services as a key issue. In particular, one specific note was that too many individuals are in jail instead of receiving proper treatment.



### 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 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 or families are forced to make difficult decisions about lifestyle choices and medical care.

#### Why This Matters in Loudoun County

- Forty-five percent of workers with a long commute report driving alone to work, while only 22% of workers commute via public transit and 4% walk.
- Affordable housing was the number one quality of life concern for survey respondents across all demographics.
- The CHA Forces of Change discussions identified affordable housing and the need for renovated green space as major themes.
- 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.

#### Oral Health Oral health includes the health of teeth, gums and the mouth. This category measures access to oral healthcare and the rate of people with oral health conditions, such as dental cavities and tooth loss.

Oral health can have an impact on overall health and morbidity, but it is often overlooked. Dental cavities are the most common chronic disease in childhood, and children and teens living in poverty are twice as likely to have untreated dental cavities compared to their higher income peers.<sup>13, 14</sup> For pregnant women, poor oral health is associated with premature birth and low birth weight.<sup>15</sup> There are also a number of other chronic conditions, including diabetes and heart disease that have been linked to poor oral health.<sup>16</sup>

#### Why This Matters in Loudoun County

- Dental problems ranked highest as a health issue among survey respondents who completed the survey in Spanish, and in the top five for respondents with less than a high school degree, and income less than \$50,000.
- The rate of dentists available in Loudoun County is worse than that of the state.
- Forces of Change participants described a growing need for oral health care.



#### **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 (e.g., Juuling or vaping) among teens is on the rise.<sup>17, 18</sup> These products often deliver higher doses of nicotine, which can cause structural and chemical changes to developing brains.<sup>19, 20</sup> Adults who smoke or vape are at a greater risk for lung cancer, heart disease and early death.<sup>21</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 Loudoun County

- Emergency department visits due to heroin/ fentanyl and prescription opioid overdoses have declined, but mortality rates have remained the same or increased. Teens and young adults (15–24) experience prescription opioid overdoses at 2.5 times the rate of the overall population (171.7 and 63.7 respectively).
- More than a third (37%) of community survey respondents overall selected alcohol, drug, and/or opiate abuse as a major health issue facing the community. Additionally, tobacco use ranked in the top five for younger respondents and people of color.
- Alcohol, opioids and other drug use was a health issue raised in Forces of Change discussions, particularly easy access and increased Juuling in schools.



Last year, 44 children in Loudoun and Fauquier Counties died from addiction. This scourge is indiscriminate, taking people from all walks of life. But, too often the response is, 'There isn't a problem here.' As a society, we are in complete denial.

### 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 longterm, 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 communitycentered. With buy-in and collaboration from community members, stakeholders and partners, the plan allows all those involved to set common priorities and align activities.

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