

## PERSPECTIVE

All tax-exempt, not-for-profit hospitals are required to conduct a community health needs assessment on a three-year cycle and make the results publicly available.

The Affordable Care Act of 2010 created an opportunity for hospitals and public health agencies to accelerate community health improvement by conducting triennial community health needs assessments and adopting related implementation plans, including strategies that address significant health needs.

Despite the United States spending more than any other nation on healthcare, life expectancy has been declining since 2014, as noted by data from years 2014 - 2017. Declining life expectancy has been fueled by a sharp increase in deaths among the working-age population. There has been a 6% increase in death rates among people 25-64 and a mortality increase nearing 25% among young adults 25-44. This is most pronounced in the "Rust Belt" states and in Appalachia.

If spending more money on healthcare is not getting the United States the gains it needs in population health, perhaps it's time to revisit what really creates health. Evidence demonstrates that the health of an individual and that of a community is 36% influenced by individual behavior, 24% social circumstances, 22% genetics and biology, 11% medical care and 7% physical environment. Without a broader view of health and what determines it, people in the United States are likely to continue to die at younger and younger average ages.

The value of periodic community needs assessments is that they provide an opportunity to bring together the broader public health community to look not only at the most significant health challenges, but to collectively appreciate the complexity of health. This is an important affirmation that health is much more than medical care. Although Fort Loudoun Medical Center serves patients from multiple counties, more than 50% of its inpatient and outpatient business comes from Loudon County. Thus, the assessment and its findings are limited to Loudon County.

# ASSESSMENT PARTNERS

The 2020 Community Health Needs Assessment was a collaborative effort between Fort Loudoun Medical Center, the Loudon County Health Department, the Loudon County Health Council and the Tennessee Department of Public Health. These partners and numerous representatives of public health agencies convened over a period of five months to complete the community health needs assessment. The process was interrupted for several months while the assessment partners focused on COVID-19 in their communities. The role of Fort Loudoun Medical Center in the assessment process was one of facilitation.

### **Steering Committee Participants**

The Steering Committee's purpose was to determine the scope of the assessment and research tools, assist in the design of the survey instrument, select focus group participants, gather primary and secondary health data, produce data notebooks and recruit data team members. The members of the Steering Committee consisted of representatives of the following organizations:

Fort Loudon Medical Center (2) Loudon County Health Council (8) Loudon County Health Department (2)

## Data Team Participants

The Data Team's purpose was to take to all the data compiled from the Steering Committee and identify local health priorities from the data. After multiple meetings, the Data Team members determined the most significant priority areas.

Align 9 (3) Loudon County Health Council Loudon County Schools (2) Prevention Alliance of Loudon County Fort Loudoun Medical Center Loudon County Health Department (2) Loudon County Senior Center

## **Research Partners**

The research partners' purpose was to provide expertise on survey design, focus group facilitation, data collection, data sources, and analysis.

University of Tennessee – Social Work Office of Research and Public Service (UT-SWORPS) Loudon County Health Department Tennessee Department of Public Health, Nashville, Tennessee

## **OUR PROCESS**

The 2020 community health needs assessment process began with the formation of a steering committee. Steering committee members represented agencies and organizations who were conducting their own needs assessments for Loudon County with varying frequency. This assessment provided an opportunity for all to work together to avoid duplication of efforts.

The Steering Committee was the decision-making body for the assessment and was instrumental in designing both primary research components, the community household survey and the focus group moderator's guide. Committee members were also involved in the dissemination of the community survey and focus group recruitment.

The primary research for the assessment centered on a household survey and focus groups. The survey template was provided by the research partner UT – SWORPS, but the questions were customized by the Steering Committee. For statistical significance, 353 surveys were collected through a variety of methodologies, including paper surveys, cell phone and landline calls, an on-line link to the survey and through Facebook. Once the data was analyzed by UT-SWORPS a report was provided to the Steering Committee. (See Appendix C)

The Steering Committee was very intentional about making sure the most vulnerable groups in Loudon County - the chronically ill, uninsured, seniors and minority populations - had a voice in the assessment process. The focus group design was to recruit community leaders who directly serve these populations and who are most familiar with the daily challenges these at-risk individuals face. Focus group participants were long-term residents of the county and represented the various cities within the county. Three focus groups were held using a Zoom format with 7-8 participants in each. UT – SWORPS conducted the focus groups and provided a written report once the responses were analyzed. (See Appendix D)

## **Organizations Participating in Focus Groups**

Align 9	Boys and Girls Club
Cherokee Health System	Community volunteer- Hispanic advocate
Community Volunteer - Senior Advocate	District Attorney's Office
Edward Jones Financial	Good Samaritan Center
Fort Loudoun Medical Center (2)	Loudon County Coordinated School Health
Loudon County Health Council	Loudon County Health Department (2)
Loudon County United Way	Loudon County Government
Loudon County Health Council	News Herald
Prevention Alliance of Loudon County (4)	Tate and Lyle
Tellico Recreation Center	UT Extension Service
Veterans Affairs	Victim Advocate YWCA

The Steering Committee identified a list of health indicators from which they wanted county, state and national data. When possible local, state and national data were provided for each indicator. Members of the Steering Committee were helpful in providing data because many represented agencies with access to public health data, social service data, and data related to demographics, substance abuse, mortality and mental health. The compiled data was put into notebooks.

The Steering Committee expanded its participation to involve other health-related agencies. This larger body became the Data Team. Each Data Team member was provided with a notebook of all the primary and secondary data and given a couple of weeks to review the data. A Data Team meeting followed where team members created a list of identified health concerns. Those concerns were grouped under broad headings and examined as to how strategic and feasible they would be to address. The primary findings from the assessment were chronic disease management, mental health, substance abuse, COVID-19, tobacco, homelessness and non-English speaking residents. After intense discussion, the Data Team developed a consensus around the most significant issues and narrowed the initial list of health concerns to a list of the top four.



## **PRIORITIES FOR 2021 – 2023**

In rank order as determined by the Data Team:

- 1. Substance Abuse Disorder
- 2. Chronic Disease Management
- 3. Mental Health
- 4. Tobacco

## A REVIEW OF DATA

### **Claiborne County Data**

- Appendix A Loudon County Demographics
- Appendix B Loudon County Mortality Data 2008-2018
- Appendix C Household Survey Findings
- Appendix D Focus Group Findings
- Appendix E Select Secondary Health Statistics

# A SPECIAL THANK YOU TO OUR COMMUNITY Assessment Participants

The 2020 Loudon County Community Health Needs Assessment is the culmination of five months of work involving dozens of local community health agencies, community leaders and nearly 400 residents who participated in surveys, focus groups, and meetings. The significant findings of the assessment are all rooted in complex interrelationships of economics, education, behaviors, access, environment, and social circumstances. The solutions are just as complex. No institution or organization by itself can measurably change the trajectory of progress. These significant health challenges facing Loudon County will require a collaborative community approach of all public health organizations. We hope this information can be a catalyst for change as we seek to improve the health circumstances of all who live in and call Loudon County home.

## **APPENDIX A – Loudon County Demographics**

## Loudon County Demographics

Population Estimates July 2019

Population	
Populations estimates, July 2019	54,068
Population, Census 2010	48,556
Population, percent change	11.3%
Age and Sex	
Persons under 5 years, percent	5.2%
Persons under 18 years, percent	19.4%
Persons 65 years and over, percent	26.4%
Female persons	50.8%
Race and Hispanic Origin	
White alone, percent	95.5%
Black or African American, percent	1.5%
American Indian, and Alaska native	0.6%
Asian, percent	0.9%
Two or more races, percent	1.3%
Hispanic or Latino percent	9.0%
White alone, not Hispanic or Latino	87.4%

Source: www.census.gov/quickfacts/fact/table/loudoncountytennessee

# Top 15 Leading Causes of Death in Loudon County 2009-2018

## **Average Annual Population 50,453**

Cause of death	Number of	Rate of death (per
	deaths	100,000)
1. Cancers	1,388	275.1
2. Diseases of the heart	1,166	231.1
3. Respiratory Diseases	356	70.6
4. Accidents	346	68.6
5. Cerebrovascular disease	283	56.1
6. Alzheimer's disease	247	49.0
7. Diabetes	169	33.5
8. Flu and Pneumonia	129	25.6
9. Kidney diseases	120	23.8
10. Chronic Liver Disease	87	17.2
11. Suicide	69	13.7
12. Essential hypertension and	68	13.5
hypertensive renal disease		
13. Septicemia	64	12.7
14. Pneumonia	58	11.5
(due to solids and liquids)		
15. Parkinson's disease	57	11.3

## Appendix C

# Loudon County Community Health Assessment

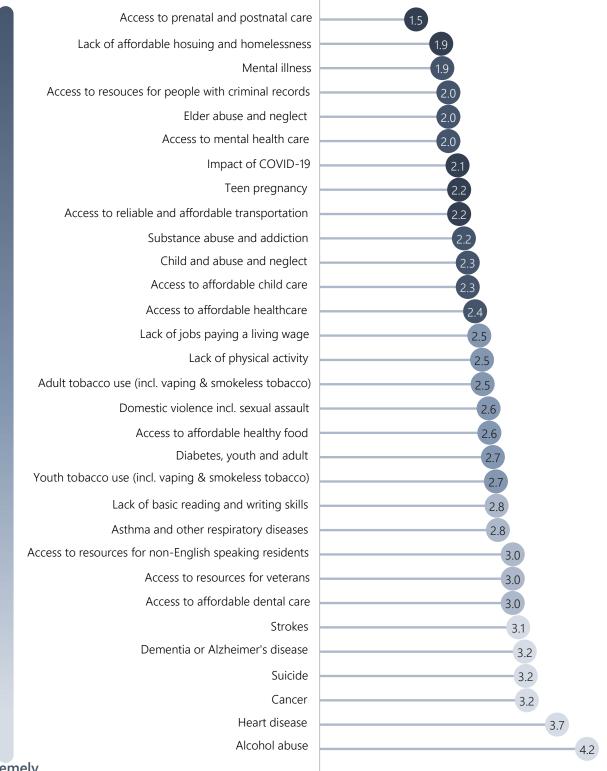
Community survey responses

	C	$\succ$		
	150	5	200	
	Telephone	Paper	Web	
Most Severe Problem	Substance abuse and		Identified as major problem 76.3%	Identified as top 3 problems 18.3%
	Youth tobacco use inc	luding vaping and smokeless tobacco	57.4%	6.9%
	Cancer		57.1%	6.9%
	Adult tobacco use inc	luding vaping and smokeless tobacco	56.6%	4.3%
	Heart disease		52.6%	4.6%
	Access to affordable h	nealth care	52.3%	8.9%
	Lack of physical activi	ty	51.7%	6.3%
	Access to mental heal	th care	50.9%	11.7%
	Impact of COVID-19		50.6%	14.0%
	Mental Illness		48.9%	6.0%
	Diabetes, youth and a	dult	48.3%	3.7%
	Lack of jobs paying a l	iving wage	48.0%	8.3%
	Alcohol abuse		46.9%	3.7%
	Child abuse and negle	ect	43.4%	6.0%
	Dementia or Alzheime	er's disease	42.6%	4.6%
	Access to affordable of	dental care	42.3%	3.4%
	Access to resources for	or veterans	40.3%	3.1%
	Access to affordable of	child care	37.7%	2.9%
	Asthma and other res	piratory diseases	35.4%	3.7%
	Access to reliable and	affordable transportation	34.6%	3.4%
	Domestic violence inc	luding sexual assault	32.9%	2.6%
	Access to affordable h	nealthy food	31.7%	3.1%
	Lack of affordable hou	using and homelessness	31.7%	2.9%
	Teen pregnancy		28.9%	2.0%
	Strokes		26.0%	0.3%
	Suicide		25.1%	1.7%
	Lack of basic reading	and writing skills	24.9%	2.6%
	Access to resources for	or people with criminal records	20.9%	0.3%
	Access to resources for	or non-English speaking residents	19.4%	2.9%
	Elder abuse and negle	ect	17.1%	0.3%
	Access to prenatal and	d postnatal care	16.6%	0.6%
Least Severe				

Severe Problem

## Satisfaction with current efforts to address problem (1 - 5)

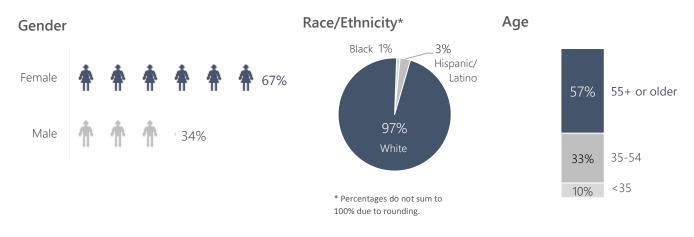
# Least satisfied



# Extremely satisfied

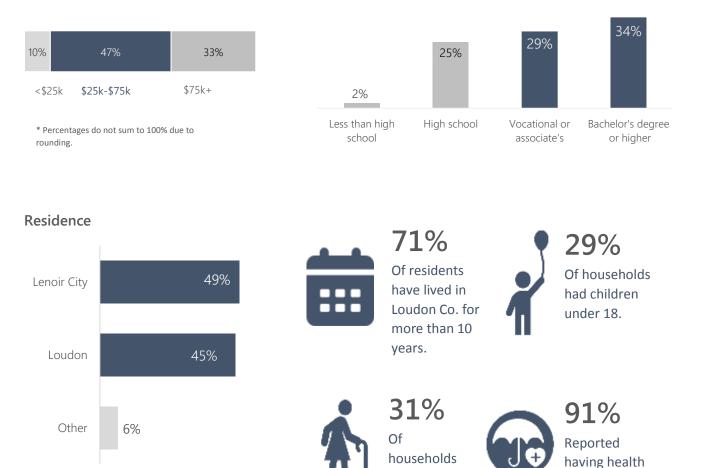
# 2020 Loudon County Community Health Assessment

Who responded to our community survey?



Household income\*

Education



had adults 65

or older.

insurance.

Three focus groups were conducted with Loudon County community leaders for the Loudon County Community Health Assessment. The purpose of the focus groups was to identify health issues facing residents of Loudon County, especially residents from vulnerable populations; to identify what resources are currently available to address these issues; and to identify what additional resources may be needed.

In response to the coronavirus disease (COVID-19) pandemic in Tennessee, Governor Bill Lee issued Executive Order #17 recommending that Tennesseans avoid gathering in groups of 10 or more people. In order to comply with this guidance, these focus groups were conducted online through Zoom. A total of 24 unique participants participated in these focus group discussions. This report summarizes and synthesizes the content of these discussions; findings are presented using the moderator guide questions as headings.

### How would you grade overall health in your county?

At the beginning of each focus group, participants were asked to mentally assign a letter grade from A to F for overall health in the county. Participants were then asked to consider how this grade had changed (positively, negatively, or no change) over the past six years. Not all participants shared their letter grade; of those who did, 60% assigned Loudon County a grade of "C."

Grade	#
В	2
С	6
D	2

## How has this grade changed over the past 6 years?

Varying views about the direction of change over the past 6 years were expressed.

#### Reasons for improvement:

- There are more healthcare options available in Loudon County now than in the past. Examples include new programs and quality improvement at Fort Loudon Medical Center, as well as more doctors and pediatricians practicing in Loudon County.
- Loudon County is participating in the Healthier Tennessee Communities program.
- Loudon County School-required immunizations and school health assessments have improved the health of enrolled children.
- The Align9 program was established to identify gaps in drug treatment services and apply for grants on behalf of community nonprofit organizations and churches to develop drug-related programs and services, including prevention, treatment, recovery, and rehabilitation.
- More federal and state funding is available for rural community health programs than in the past.
- Loudon County's teen pregnancy rate has declined.

#### Reasons for no change:

- Health disparities exist between the county's rural residents and residents who live in more densely populated areas.
- Sedentary behavior is common among Loudon County's children and youth.
- Lifestyle-related chronic diseases such as heart disease and lung cancer remain high.

• Available health services could be better communicated to the community at large.

#### Reasons for decline:

- Loudon County still suffers from shortages of behavioral health services including pediatric and community behavioral health services and substance abuse treatment services. There is a general perception that mental and behavioral health issues are not prioritized highly enough.
- Specialist care is still difficult to get in Loudon County.
- Lack of health insurance coverage is still a problem in Loudon County and the county's uninsured population is increasing.
- Language barriers inhibit the ability of Spanish-speaking residents to access care and health information.
- The county does not have enough placement options for residents who are homeless.
- COVID-19 has negatively impacted overall health in Loudon County in several ways: increasing unemployment, increasing stress levels and suicides, and preventing people from seeking other medical care due to fear of contacting the disease.

## Major health problems facing the community

Focus group participants were asked to identify the health problems currently facing their community. Each participant was asked to identify three of the problems discussed that they felt should be given priority. The problems discussed below are presented in the order of importance as reported during this exercise.

#### Mental health issues (5 votes)

Concerns were discussed about the prevalence of mental health problems and the lack of resources to address these problems. There was recognition that stigma continues to be associated with mental health and hinders people from seeking the help that is needed. Additionally, additional resources are needed for seniors suffering from dementia and Alzheimer's disease and for their caregivers.

#### Substance abuse issues (5 votes)

Substance abuse and mental illness are often intertwined. The impacts of substance abuse issues are pervasive and far reaching. The community is suffering from a rise in overdose fatalities, NAS births, and grandparents who are being required to raise their grandchildren. The challenges faced by grandparents raising grandchildren as a result of substance abuse is often exacerbated because many of these children have special needs.

#### Smoking and vaping (4 votes)

Smoking and vaping, especially among youth, is a continued concern because of the long-term impacts. Special concern was raised about vaping because of the users' exposure to untested chemicals.

#### Homelessness (3 votes)

Homelessness and lack of affordable housing was also a concern raised by focus group participants. It was reported that Loudon County currently does not have a shelter or other needed resources for homeless individuals or families and the need is increasing. Many of the homeless individuals are also veterans.

#### Lack of information and awareness of health topics (3 votes)

While there are gaps in services available to meet the needs of Loudon County residents, there is also a gap in awareness of resources that are available. Concurrently, there remains a lack of awareness about the importance of seeking help when needed. Concerted and focused efforts to increase this knowledge and awareness is needed.

#### Chronic disease and obesity (2 votes)

Lung disease, heart disease, and diabetes are prevalent among residents in Loudon County. The prevalence of these diseases can be attributed to lifestyle choices – smoking, dietary habits, and lack of physical activity. Additionally, obesity is also a concern because of its contribution to diabetes and high blood pressure.

#### Other problems

Problems that were discussed during the focus groups but were only identified as a top priority by one participant each included economic stress and food insecurity, lack of health insurance, language barriers causing difficulty in accessing health services, lack of affordable dental care for uninsured residents, lack of affordable geriatric care and support, and lack of public transportation. Issues discussed in the focus groups that were not chosen as a priority health issue by any participant included lack of specialist medical care and the cost of prescription drugs.

### How health problems are experienced differently

Participants were asked if some groups or areas of Loudon County experienced some of these problems to a greater degree than others. Several vulnerable populations were identified who particularly suffered from problems, including children and youth (sedentary behavior); elderly residents (lack of geriatric and mental health care, lack of support for aging in place, lack of transportation, social isolation); uninsured residents (lack of dental care, high cost of prescriptions); immigrant residents (language barriers preventing access to care), and veterans (homelessness).

### Current community resources to address health problems

Focus group participants were asked to brainstorm and discuss the resources that are currently being utilized to address the problems identified by the group. The discussion included the identification of agencies and the programs that are offered as well as community initiatives and local efforts to address community problems. Participants observed that many of these agencies and resources work well together collaboratively.

#### Align9

Align9 was established to serve the community through government agencies, non-government organizations and the faith-based community. Align9 identifies gaps in services and applies for grants to develop programs and services which empower non-profits and the faith-based community to build stronger communities in the areas of substance abuse prevention, treatment, recovery, rehabilitation and enforcement.

#### American Job Center

The U.S. Department of Labor's American Job Centers are designed to provide a full range of assistance to job seekers under one roof. Established under the Workforce Investment Act and reauthorized in the

Workforce Innovation and Opportunities Act of 2014, the centers offer training referrals, career counseling, job listings, and similar employment-related services.

#### Boys and Girls Clubs

Boys & Girls Clubs of America is a national organization of local chapters which provide voluntary afterschool programs for young people.

#### Celebrate Recovery of Loudon County

Celebrate Recovery is a faith-based 12-step recovery program modeled after Alcoholics Anonymous.

#### Centro Hispano de East Tennessee

Centro Hispano is a community center offering workforce development, youth and family engagement, community resources, and small business resources to the Latinx populations of Knoxville and the surrounding counties.

#### Cherokee Health Systems

Cherokee Health Systems is a non-profit provider of primary care, behavioral health, and addiction services to poor and uninsured Tennesseans.

#### Committee of 100 LC

The Lenoir City-based Committee of 100 is a community-based organization promoting economic and community development in Loudon County.

#### ETHRA TennCare CHOICES

CHOICES is a TennCare long-term care program for adults ages 21 and older with a physical disability and seniors ages 65 and older which provides home- and community-based services to those who are eligible for nursing home care.

#### Good Samaritan Center of Loudon County

The Good Samaritan Center of Loudon County is a private, non-profit, faith-based organization that provides emergency assistance to Loudon County residents including a food pantry, financial assistance with utilities, rent, pharmacy costs, and dental costs, and donated clothing, household items, and school supplies.

#### Habitat for Humanity

Habitat for Humanity is a nonprofit, faith-based organization that helps qualifying families construct, rehabilitate, or preserve homes using volunteer labor.

#### Helen Ross McNabb

The Helen Ross McNabb Center is a not-for-profit provider of behavioral health services in East Tennessee.

#### Lenoir City Schools and Loudon County School District

The Lenoir City and Loudon County School Districts have coordinated school health programs. The program, recommended by the Centers for Disease Control and Prevention, is a system designed to improve health and academic achievement. A CSH program is intended to improve students' health and their capacity to learn through the support of families, communities and schools working together.

#### Loudon County Senior Center

The Loudon County Senior Center provides social opportunities and activities to enhance the lifestyles of residents who are 60 and older.

#### Mid-Cumberland Workforce Services

The Mid-Cumberland Workforce Services program, operated by the Mid-Cumberland Human Resource Agency, provides workforce development services to 61 counties in Tennessee.

#### Mid-East Community Action Agency

Mid-East Community Action Agency is a private non-profit organization which focuses on the development and implementation of strategies to address poverty in Loudon and Roane counties, as well as providing direct financial assistance to vulnerable families to cover emergent basic needs such as food, rent, or utility payments.

#### Senior Citizens Home Assistance Service

The Loudon County Office on Aging is offering a service to do shopping for those who are elderly, are disabled, who cannot get out into the community at this time, either because of their health or no transportation.

#### Service Clubs

Nonprofit volunteer community service clubs operating in Loudon County include the Loudon Lions Club, the Pilot Club of Lenoir City, the Rotary Club of Lenoir City, and the Suburbia Women's Club.

#### Tellico Community Foundation

The Tellico Community Foundation is an affiliated fund of the East Tennessee Foundation which seeks to identify and evaluate community needs and provides grant funding to community organizations.

#### United Way of Loudon County

United Way of Loudon County is a not-for-profit organization providing support services and other assistance to public and private agencies and community organizations to meet the human service needs of the general public of Loudon County.

#### UT Extension

UT Extension offers education programs on agricultural and natural resources, family and consumer sciences, youth development, and community development in the 95 counties of Tennessee.

## Resources needed to better address these issues

Participants identified several ways in which the health issues facing Loudon County could be better addressed and barriers that need to be overcome. Substance abuse and mental health needs going unmet in the county was a particularly strong theme. Participants agreed that Loudon County's court system is overburdened with substance abuse and mental health-related cases and that the county badly needs funding for substance abuse awareness, recovery, and treatment programs, and a recovery court.

Participants also identified long-standing divisions between Lenoir City and more rural Loudon County communities as an obstacle to improving health, saying that most of the county's resources and healthcare providers are concentrated in Lenoir City and Tellico Village and that rural residents are reticent to go to these places for treatment.

Appendix E		Health Outcomes							Top US Performers
Focus Area	Measure	Description	Data Source	2017	2018	2019	2020	2020	2020
Length of life	Premature death	Years of potential life lost before age 75 per 100,000 population (age-adjusted)	National Center for Health Statistics - Mortality Files	8,200	9,000	9,900	9,500	9,300	5,500
Quality of life	Poor or fair health	Percentage of adults reporting fair or poor health (age-adjusted)	Behavioral Risk Factor Surveillance System	18%	18%	18%	18%	20%	12%
	Poor physical health days	Average number of physically unhealthy days reported in past 30 days (age-adjusted)	Behavioral Risk Factor Surveillance System	4.8	4.6	4.6	4.1	4.2	3.1
	Poor mental health days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	Behavioral Risk Factor Surveillance System	4.4	4.5	4.5	4.3	4.4	3.4
	Low birthweight	Percentage of live births with low birthweight (< 2500 grams)	National Center for Health Statistics - Natality Files	8%	8%	8%	8%	%6	6%
Length of Life	Life expectancy		National Center for Health Statistics - Mortality Files	NA	NA	76.6	17	76	81
	Premature age-adjusted mortality	ortality	National Center for Health Statistics - Mortality Files	410	420	430	420	450	270
	Infant mortality		National Center for Health Statistics - Mortality Files	NA	6	6	6	7	4
	Child mortality		National Center for Health Statistics - Mortality Files	50	70	60	60	60	40
Quality of Life	Frequent physical distress		Behavioral Risk Factor Surveillance System	14%	13%	13%	12%	13%	6%
	Frequent mental distress		Behavioral Risk Factor Surveillance System	13%	13%	13%	13%	14%	11%
	Diabetes prevalence		United States Diabetes Surveillance System	13%	13%	13%	17%	13%	7%
	HIV prevalence		National Center for HIV/AIDS, Viral Hepatitis, STD, and TB prevention	70	112	112	118	290	41

		Health Behaviors	viors					Tennessee	Top US Performers
Focus Area	Measure	Description	Data Source	2017	2018	2019	2020	2020	2020
	Adult smoking	Percentage of adults who are current smokers	Behavioral Risk Factor Surveillance System	19%	18%	18%	19%	23%	14%
Diet and exercise	Adult obesity	Percentage of adults that report a BMI of 30 or more	United States Diabetes Surveillance System	28%	30%	30%	29%	33%	26%
	Food environment index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	USDA Food Environment Atlas, Map the Meal Gap from Feeding America	7.4	7.7	8	7.9	6.4	8.6
	Physical inactivity	Percentage of adults aged 20 and over reporting no leisure-time physical activity	United States Diabetes Surveillance System	28%	28%	28%	29%	27%	20%
	Access to exercise opportunities	Percentage of population with adequate access to locations for physical activity	Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files	78%	64%	53%	52%	70%	91%
Alcohol and drug use	Excessive drinking	Percentage of adults reporting binge or heavy drinking	Behavioral Risk Factor Surveillance System	12%	13%	13%	13%	14%	13%
	Alcohol-impaired driving deaths	Percentage of driving deaths with alcohol involvement	Fatality Analysis Reporting System	37%	34%	30%	27%	25%	11%
Sexual activity	Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB prevention	245.8	275.7	262	293	522.4	161.4
	Teen births	Teen birth rate per 1,000 female population, ages 15-19	National Center for Health Statistics - Natality Files	43	36	35	33	31	13
Diet and exercise	Food insecurity		Map the Meal Gap	12%	12%	10%	10%	14%	9%6
	Limited access to healthy foods	oods	USDA Food Environment Atlas	10%	11%	11%	11%	8%	2%
Alcohol and drug use	Drug overdose deaths		National Center for Health Statistics - Mortality Files	22	25	30	32	26	10
	Motor vehicle crash deaths		National Center for Health Statistics - Mortality Files	14	15	15	15	15	6
Other Health Behaviors	Insufficient sleep		Behavioral Risk Factor Surveillance System	32%	33%	33%	33%	36%	27%

		Clinical Care	are					Tennessee	Top US Performers
Focus Area	Measure	Description	Data Source	2017	2018	2019	2020	2020	2020
Access to care	Uninsured	Percentage of population under age 65 without health insurance	Small Area Health Insurance Estimates	16%	13%	12%	13%	11%	6%
	Primary care physicians	Ratio of population to primary care physicians	Area Health Resource File/American Medical Association	1,950:1	2,050:1	1,980:1	1,930:1	1,400:1	1,030:1
	Dentists	Ratio of population to dentists	Area Health Resource File/National Provider Identification file	1,890:1	2,060:1	2,010:1	2,040:1	1,860:1	1,240:1
	Mental health providers	Ratio of population to mental health providers	CMS, National Provider Identification file	1,890:1	1,770:1	1,680:1	1,660:1	660:01	290:01
Quality of care				VIIV	V I V	1150	JU2C	6000	1920
	Preventable hospital stays	Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	Mapping Medicare Disparities Tool	N/A	N/A	4103	39/0	032U	10/7
	Mammography screening	Percentage of female Medicare enrollees ages 65- 74 that receive mammography screening	Mapping Medicare Disparities Tool	75%	75%	55%	55%	41%	50%
	Flu vaccinations	% of Medicare enrollees who receive an influenza vaccination	Mapping Medicare Disparities Tool	N/A	N/A	56%	57%	49%	53%
Access to care	Uninsured adults		Small Area Health Insurance Estimates	19%	16%	15%	15%	14%	7%
	Uninsured children		Small Area Health Insurance Estimates	7%	6%	5%	6%	4%	3%
	Other primary care providers		CMS, National Provider Identification file	1,549:1	1,559:1	1,449:1	1,179:1	717:01	665:01

		Social and Economic Environment	: Environment					Tennessee	Top US Performers
Focus Area	Measure	Description	Data Source	2017	2018	2019	2020	2020	2020
Education	High school graduation	Percentage of ninth-grade cohort that graduates in four years	ED Facts	88%	88%	91%	91%	%06	96%
	Some college	Percentage of adults ages 25-44 years with some post-secondary education	American Community Survey	48%	48%	48%	48%	61%	73%
Employment	Unemployment	Percentage of population ages 16 and older unemployed but seeking work	Bureau of Labor Statistics	5.7%	4.8%	3.6%	3.4%	3.5%	2.6%
Income	Children in poverty	Percentage of children under age 18 in poverty	Small Area Income and Poverty Estimates	22%	19%	19%	16%	22%	11%
	Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	American Community Survey, 5-year estimates	4:2	4:1	4	3.9	4.8	3.7
Family and social support	Children in single-parent households	Percentage of children that live in a household headed by single parent	American Community Survey, 5-year estimates	30%	29%	28%	26%	35%	20%
	Social associations	Number of membership associations per 10,000 population	County Business Patterns	13.4	12.9	13	12.1	11.3	18.4
Community safety	Violent crime	Number of reported violent crime offenses per 100,000 population	Uniform Crime Reporting - FBI	205	205	221	221	621	63
	Injury deaths	Number of deaths due to injury per 100,000 population	National Center for Health Statistics - Mortality Files	89	91	101	102	89	58
Income	Median household income		Small Area Income and Poverty Estimates	\$52,800	\$56,800	\$57,600	\$58,200	\$52,400	\$69,000
	Children eligible for free or reduced price lunch	reduced price lunch	National Center for Education Statistics	56%	56%	N/A	N/A	N/A	32%
Community safety	Homicides		National Center for Health Statistics-Mortality Files	N/A	N/A	N/A	N/A	7	2
	Firearm fatalities		National Center for Health Statistics-Mortality Files	9	6	12	12	17	8

		Physical Environment	onment					Tennessee	Top US Performers
Focus Area	Measure	Description	Data Source	2017	2018	2019	2020	2020	2020
Air and water quality	Air pollution - particulate matter1	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	Environmental Public Health Tracking Network	10.7	10.7	10.6	10.6	10	6.1
	Drinking water violations	Percentage of population potentially exposed to water exceeding a violation limit during the past year	Safe Drinking Water Information System	No	No	No	No	N/A	N/A
Housing and transit		Dementarie of households with at least 1 of 4							:
	Severe housing problems	housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	Comprehensive Housing Affordabilitey Strategy (CHAS) data	12%	11%	11%	12%	15%	9%
	Driving alone to work	Percentage of the workforce that drives alone to work	American Community Survey, 5-year Estimates	83%	84%	84%	84%	83%	72%
	Long commute - driving alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes	American Community Survey, 5-year estimates	38%	36%	34%	34%	35%	16%
Housing and transit	Homeownership		American Community Survey, 5-year estimates	N/A	N/A	76%	77%	66%	81%
	Severe housing cost burden		American Community Survey, 5-year estimates	N/A	N/A	%6	6%	12%	7%

		<u>ت</u>	Loudon County	ty		Teni	Tennessee	D	U.S.
	2014	2015	2016	2017	2018	Data	Year	Data	Year
Youth Obesity	42.1%	41.8%	43.4%	42.2%		39.2%	2016		
Physical Activity	72.0%	71.7%	74.1%			69.4%	2017	75.4%	2018
Youth Nicotine Use: Cigarettes						9.40%	2017	8.80%	2017
Youth Nicotine Use: Vaping						11.50%	2017	13.20%	2017
Drug Overdose: Fatal				22	14	1818	2018		
Opioid Overdose: Non-Fatal Discharges	32	39	46*	66		7,234	2017		
Infant Mortality					6.6	7.1	2014-2018	5.8	2017
Teen Births					29.9	28.6	2014-2018	18.8	2017
Community Water Fluoridation					100.0%	88.8%	2018	74.4%	2014
Frequent Mental Distress	13%	13%	13%			13.7%	2018	12.0%	2018
3rd Grade Reading Level				36.5%	35.7%	36.4%	2019		
Preventable Hospitalizations			1552.0	1577.9		1559.3	2017		
Per Capita Personal Income	\$42,023	\$43,736	\$45,159	\$46,183		\$46,895	2018	\$54,420	2018
Access to Parks and Greenways			64.0%		53.0%	71%	2019	83%	2016
Adult Obesity	30%	30%				34.1%	2018	30.1%	2017
Adult Smoking	20%	19%	18%			20.8%	2018	14.74%	2018
Neonatal Abstinence Syndrome	18.6	28.7	13.3	24.0	20.0	11.4	2018		
Suicide Rate					15.1	16.3	2014-2018	14.00	2017
Educational Attainment: Graduated High School	85.6%	86.0%	85.3%	85.4%		86.6%	2017	87.3%	2017
Educational Attainment: Some College	52.2%	51.7%	52.6%	51.6%		54.0%	2017	60.0%	2017
Rate of Opioid Prescriptions	1265.6	1232.5	1156.3	1047.3	907.6	901.14	2018	587	2017
Diabetes			13.5%			11.2%	2016	8.5%	2017
Flu Vaccine Rates: Elderly	63.7%	64.1%	64.9%	60.4%	60.0%	47.37%	2017-18	45.99%	2017-18
Flu Vaccine Rates: 24 month old	57.0%	50.4%	50.9%	40.2%	53.7%	49.0%	2018		
HPV Vaccine Rate						62.3%	2018	68.1%	2018
Adverse Childhood Experiences						23.7%	2017	19.3%	2017
Heart Disease Death Rate	199.0	226.9	211.8	272.3	224.3	242.5	2018	165.0	2017
Cancer Death Rate	309.3	283.6	307.0	258.8	243.1	208.8	2018	156	2016
Illninsured Rate	15.9%	13 5%	17 3%	17 8%		11 202	2017	2 5%	2010

	County Source	Tennessee Source	US Source
Youth Obesity	Coordinated School Health	Coordinated School Health	
Physical Activity	CHR*	BRFSS	BRFSS
Youth Nicotine Use: Cigarettes		YRBS	YRBS
Youth Nicotine Use: Vaping		YRBS	YRBS
Drug Overdose: Fatal	Informatics & Analytics	Informatics & Analytics	
<b>Opioid Overdose: Non-Fatal Discharges</b>	Informatics & Analytics	Informatics & Analytics	
Infant Mortality	Death Statistics: VRS	Death Statistics: VRS	CDC
Teen Births	Birth Statistics: VRS	Birth Statistics: VRS	CDC
Community Water Fluoridation		CDC Water Fluoridation Reporting	CDC Water Fluoridation
		System (WFRS)	Reporting System (WFRS)
Frequent Mental Distress	CHR	BRFSS	BRFSS
3rd Grade Reading Level	Tennessee Department of Education	Tennessee Department of Education	
Preventable Hospitalizations	Hospital Discharge Data System: PHA	Hospital Discharge Data System: PHA	
Per Capita Personal Income	US Bureau of Economic Analvsis	IS Bureau of Economic Analysis	US Bureau of Economic
Access to Parks and Greenways	CHR	County Health Rankings (CHR)	County Health Pankings (CUD)
Adult Obesity	CHR	BRFSS	POMILY FEARING AND BREAC
Adult Smoking	CHR	BRFSS	BRESS
Neonatal Abstinence Syndrome	NAS Surveillance Data	NAS Surveillance Data	
Suicide Rates	Death Statistics: VRS	Death Statistics: VRS	CDC (WISQARS)
Educational Attainment: Graduated High School	ACS	ACS	ACS
Educational Attainment: Some College	ACS	ACS	ACS
Rate of Opioid Prescriptions	Informatics & Analytics	Informatics & Analytics	CDC
Diabetes	CDC, USDSS**	CDC, USDSS**	CDC, USDSS**
Fruits and Vegetables		BRFSS	BRFSS
Flu Vaccine Rates: Elderly	US Department of Human Health Services	US Department of Human Health Services	US Department of Human Health Services
Flu Vaccine Rates: 24 month old	Immunization Status Survey of 24 Month Old Children	Immunization Status Survey of 24 Month Old Children	

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HPV Vaccine Rate			TeenVaxView		TeenVaxView*
Rate of Food Borne Disease Complaints	mplaints	CEDEP	CEDEP		
Adverse Childhood Experiences			National Survey on Children's Health	ren's Health	National Survey on Children's Health
Heart Disease Death Rate		Death Statistics: VRS	Death Statistics: VRS	VRS	CDC
Cancer Death Rate		Death Statistics: VRS	Death Statistics: VRS	VRS	CDC
Uninsured Rate		SAHIE	SAHIE		Census
		Data Definition			Notes
Youth Obesity	Percent of public schoo equal to the 85t	Percent of public school students with a body mass index (BMI) greater than or equal to the 85th percentile for children of the same age and sex	idex (BMI) greater than or e same age and sex	Measured	Measured by school year, not calendar year
Physical Activity	Percent of adults who past	Percent of adults who reported doing physical activity or exercise during the past 30 days other than their regular job	ty or exercise during the lar job	*CHR rec diabetes	*CHR receives this data from the CDC diabetes interactive atlas, which uses BRFSS data
Youth Nicotine Use: Cigarettes	Percent of high schoo one da	Percent of high school students who currently smoked cigarettes on at least one day during the 30 days before the survey	ed cigarettes on at least le survey		
Youth Nicotine Use: Vaping	Percent of high school (including e-cigarettes, and hookah pens) on	Percent of high school students who currently used electronic vapor products (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens) on at least one day during the 30 days before the survey	electronic vapor products vaping pens, e-hookahs, days before the survey		
Drug Overdose: Fatal	Number of drug over persons. This indicator unintentional, suicid include: (1) deaths relat long-term drug use), 2) occur under the influen car crash that occu	Number of drug overdose deaths caused by acute poisonings per 100,000 persons. This indicator includes all overdose deaths, regardless of intent (e.g. unintentional, suicide, assault, or undetermined). This indicator does not include: (1) deaths related to chronic use of drugs (e.g., damage to organs from long-term drug use), 2) deaths due to alcohol and tobacco, and 3) deaths that occur under the influence of drugs, but do not involve acute poisoning (e.g., a car crash that occurred because the driver was drowsy from taking a prescription drug).	ooisonings per 100,000 regardless of intent (e.g. This indicator does not , damage to organs from acco, and 3) deaths that e acute poisoning (e.g., a rowsy from taking a		*
Opioid Overdose: Non-Fatal Discharges	This indicator contains identified in the hospital and outpatient visits. Th and other opioid drugs	This indicator contains the counts for all opioid-related non-fatal overdoses identified in the hospital discharge data system (HDDS), including both inpatient and outpatient visits. The counts include non-fatal overdoses involving heroin and other opioid drugs as indicated by ICD-9/10-CM codes (depending on the year).	ed non-fatal overdoses , including both inpatient erdoses involving heroin odes (depending on the	*Only inc involve a ho that in Octo from ICD-5 trends obs should be	*Only includes overdose events that involve a hospital encounter. Please note that in October 2015, coding transitioned from ICD-9-CM to ICD-10-CM, and any trends observed across this time period should be interpreted with caution.

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infant Mortality	5 Year Average, 2014-2018 Number of infant deaths per 1,000 live births. Infants are those less than one year old.	Health data with regards to births and deaths was analyzed from January 1st, 2014 to December 31st, 2018. This data was collected from the Tennessee Department of Health's Birth Statistical System and Death Statistical System.
Teen Births	5 Year Average, 2014-2018. Number of births per 1,000 women aged 15-19 years	The number of births to women of ages 15-19 was compiled from the2014-2018 Birth Data Systems produced and maintained by the Tennessee Department of Health, Division of Vital Records and Statistics. The population estimates for women aged 15-19 for 2014-2018 by county were compiled from interpolated data from the U.S. Census, Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018, made accessible and maintained by the Tennessee Department of Health, Division of Population Health Assessment.
Community Water Fluoridation	Percent of population served by community water systems that are receiving optimally fluoridated water (Access to fluoridated water/population on community water systems)	
Frequent Mental Distress	Percent of adults who reported their mental health was 'not good' 14 or more days during the past 30	
3rd Grade Reading Level	Percent of public school students in grade 3 that test "on track" and "mastered" (i.e. "on mastered") for ELA in the state base accountability file ("data_2017_state_base.csv")	
Preventable Hospitalizations	The Prevention Quality Overall Composite is an aggregate measure of Prevention Quality Indicators (PQIs) described by the Agency for Healthcare Research and Quality (AHRQ). The composite score (rate) is used to identify quality of care for "ambulatory care-sensitive conditions." These are conditions for which early intervention and good outpatient care can potentially prevent complications and severity of disease resulting in hospitalizations. For example,	

TN Department of Health County Data Package	a Package		
	patients with diabetes may be hospitalized for diabetic complications if their conditions are not adequately monitored or if they do not receive the patient education needed for appropriate self-management. Rates are calculated per 100,000 adult population of residence. For more information, see Prevention Quality indicators Technical Specifications, Version v2018.		[
Per Capita Personal Income	Annual, not seasonally adjusted, per capita personal income in dollars		
Access to Parks and Greenways	Percent of population with adequate access to locations for physical activity. Individuals are considered to have access to exercise opportunities if they: reside in a census block that is within a half mile of a park, or reside in an urban census block that is within one mile of a recreational facility, or reside in a rural census block that is within three miles of a recreational facility.	*2010 & 2018	1
Adult Obesity	Percent of adults who reported a body mass index (BMI) that is considered obese (≥30)		-
Adult Smoking	Percent of adults who are current smokers		
Neonatal Abstinence Syndrome	Number of reported Neonatal Abstinence Syndrome (NAS) cases per 1,000 live births	Fields with a * indicate data was suppressed due to too few births to generate a reliable rate estimate (per TDH data release policy)	
		TN ICD-10 codes: X60-X84, Y87.0. US ICD- 10 codes: U03, X60-X84, Y87.0	
Suicide Rates	5 Year Average, 2014-2018. Number of deaths from suicide per 100,000 total population. We are reporting a crude rate for all statistics	Health data with regards to births and deaths was analyzed from January 1st, 2014 to December 31st, 2018. This data was collected from the Tennessee Department of Health's Birth Statistical System and Death Statistical System	
Educational Attainment: Graduated High School	Percent of population aged 25 years and older who are high school graduates (includes equivalency)or higher	2013-2017 ACS 5-year estimates	
Educational Attainment: Some College	Percent of population aged 25 years and older with some post-secondary education (Some college, no degree; Associate's degree; Bachelor's degree; Graduate or professional degree)	2013-2017 ACS 5-year estimates	
Rate of Opioid Prescriptions	Number of opioid prescriptions for pain per 1,000 persons	Opioid – a class of drugs that include the illegal drug heroin as well as powerful pain	

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		relievers available legally by prescription.
Diabetes	Percent of adults aged 20+ who reported ever being told by a health professional that they had diabetes.	County level estimates for 2016 diabetes prevalence. percentages are age-adjusted.
Flu Vaccine Rates: Elderly	Percent of Medicare Fee-for-Service beneficiaries (includes two-thirds of Americans aged 65+, as well as disabled Americans under age 65) who reported a claim to Medicare for receipt of a flu vaccine	*2016-2017 season **2015-2016 ***2014-2015
Flu Vaccine Rates: 24 month old	Percent of 24-month-old children with 2 doses of influenza vaccine	*At a regional level, not county. Percentage of 24 month olds with at least two lifetime doses of influenza vaccine
HPV Vaccine Rate	Percent of adolescents aged 13-17 with human papillomavirus (HPV) vaccination coverage (>1 dose)	*Data source is NIS-Teen
Adverse Childhood Experiences	Percent of children aged 0-17 years who have experienced 2 or more adverse childhood experiences (ACEs)	
Heart Disease Death Rate	Number of deaths from diseases of the heart per 100,000 population (100-109, 111, 113, 120-151)	
Cancer Death Rate	Number of deaths from malignant neoplasms per 100,000 population (C00-C97)	
Uninsured Rate	Percent of population aged 65 years and younger who report NOT CURRENTLY being covered by any health insurance or health coverage plans	