Nashville Community Health + Well-being Survey

Analytical Report

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Introduction

In 2018, the non-profit organization NashvilleHealth partnered with the Metro Public Health Department (MPHD) of Nashville, Davidson County and the University of Illinois at Chicago Survey Research Laboratory (SRL) to better understand the health and well-being of the county's 650,000 residents. Through the resulting foundational Nashville Health + Well-being Survey there is now opportunity for better understanding of how health-related behaviors, chronic health conditions, preventative health practices, and environments impact the well-being of our community. Survey results will help Nashville government, business, and community leaders set strategic priorities for health improvement in the city and implement projects and programs, as well as provide a baseline to track progress over time. Basic findings from the survey, conducted in late 2018 and early 2019, are presented in this report.

Survey findings include a broad range of health indicators that address the general health status of adults in Davidson County, along with their access to and utilization of health care resources, health behaviors, and related topics. For each, basic estimates—weighted to represent the adult population of Davidson County—are provided. Separate estimates are also presented for a number of relevant sociodemographic characteristics thought to be relevant for many health outcomes. These include gender, age, race/ethnicity, education, employment status, household income, health insurance coverage, sexual orientation, and geographic zones within Davidson County. Estimates for additional characteristics of special relevance are also provided where appropriate.

Overview of Survey Methods

The Nashville Health + Well-being Survey was administered to a random, representative sample of adults aged 18 and older residing in Davidson County between late-October 2018 and early-April 2019. A sequential, mixed mode design that provided respondents with opportunities to complete the survey first online, and then by mail, was developed. A sampling process was constructed that would permit sub-county level estimates of demographic groups. The geography was stratified by health zones which are a combination of Metro Council districts and practice-based processes for service delivery. The Nashville Promise Zone (NPZ) was the initial area identified. The NPZ is a 46-square mile federally designated area, where 10% of the population of the county live in extreme poverty and have limited educational attainment. There is significant census data to support this designation (e.g., income level, educational attainment, insurance status, family size, etc.), but health behavior data are lacking. A mix of public health zones and existing environmental landmarks (natural and man-made) were used to determine the remaining five zone boundaries, which are a combination of census tracts within the drawn areas as shown in the map found in Appendix A. Using the 2016 American Communities Survey 5-year estimates, we compared each of the six sampling zone populations by Gender, Race/Ethnicity, Age, Educational Attainment, Income, and Total Population. During the survey analysis, it was determined that two of the zones should be combined due to the response rate in those zones. Appendix B includes a map that shows the resulting five geographic zones of Davidson County that are examined in this report.

Using the United States Post Office Delivery Sequence File – which provides very high coverage of all households receiving mail in the county – a random sample of 12,283 households, based on racial-ethnic composition and geographic zone within the county, was selected to receive the survey.

Between late-October and early-December 2018, these households received mailed invitations with instructions to complete the Nashville Health + Well-being Survey online at www.healthynashville.org using a personalized passcode. Included with these mailed invitations was a $1 bill and the promise of an additional payment of $10 for completing the survey. All sampled households subsequently received a reminder postcard, and those not completing the questionnaire later received a second reminder postcard. Early in January 2019, all nonresponding households received a paper questionnaire and a pre-addressed postage-paid return envelope. They were also offered the same $10 payment for returning the questionnaire. To insure the sample was representative of the adult population of the county, instructions were included with all survey materials asking that the adult in the household who would next have a birthday be the person to complete the questionnaire.

During this time, NashvilleHealth and MPHD launched grassroots marketing and promotional activities to raise awareness of the survey in the city. This included the design of a special logo to be included on all survey materials and marketing pieces. Both MPHD and NashvilleHealth websites prominently featured information about the survey, and messaging was shared with more than 300 organizations in the city including non-profits, businesses, and local government. With their help, information about the survey reached nearly 60,000 Nashvillians via email and 600,000+ on the web.

In addition, more than 100 posters were displayed in retail and community centers, and librarians across the city were educated about the survey in order to help patrons who might want to use one of the branch library's computer labs to take the survey.

NashvilleHealth and MPHD also employed a number of traditional paid advertising methods to promote the survey, including purchasing ads on an electronic billboard at an intersection which sees more than 50,000 daily commuters, targeting paid Facebook ads to Spanish and English speaking populations in the survey zip codes, and geofencing which uses location-based technology to push messaging to mobile devices belonging to residents in Davidson County. In addition, the National Hockey League Nashville Predators aired a Public Service Announcement about the survey featuring NashvilleHealth Founder and Chairman Sen. Bill Frist and Nashville Mayor David Briley during 3 sold-out NHL games, reaching 60,000 fans. The Predators also tweeted the PSA on gameday to their audience of 586,000 followers.

The survey was closed in early-April 2019. A total of 1,805 questionnaires were obtained (1,284 online and 521 by mail). Twenty-six of the 116 Hispanic respondents answered using the Spanish language questionnaire (25 online and 1 by mail). Using the Response Rate 1 formula (AAPOR RR1) provided by the American Association for Public Opinion Research (2016), the overall response rate to the survey was calculated to be 15.8%. This response rate is essentially the number of completed questionnaires divided by the total number of households sampled (minus those addresses for which mail was returned as undeliverable). It is useful to note that respondents completing questionnaires online indicated doing so using a variety of technologies. Specifically, 35.1% reported using a laptop computer, 33.4% reported using a phone, 24.5% used a desktop computer, and 7.0% used a tablet. Table C-1 in the Appendix C provides a detailed profile of survey respondents.

A more detailed documentation of the Nashville Health + Well-being Survey's methodology and procedures, along with copies of all questionnaire versions and other study materials, can be found in a companion methodology report (Retzer and Johnson, 2019). Basic descriptive findings from the survey are presented in the remainder of this report.

Overview of Questionnaire Design

The questionnaire design was a collaborative process among MPHD, SRL and NashvilleHealth staff. The selection of questionnaire items for the survey used a multi-stage process that involved a review of questions included in standardized national population health surveys, group and one-on-one discussions with community partners, and identification of local data and data estimates routinely collected by the local or state health department. Discussions were held with community partners to identify health behavior themes that they felt would be important to be captured in the survey questionnaire. This information provided a framework for the selection or development of questionnaire items not currently being routinely collected.

Modules from the CDC Behavioral Risk Factor Surveillance Survey (BRFSS) national Core, Module (e.g., rotating) and State-added questions were reviewed. Based on this review, 110 modular topics and 2,500 items were identified as possibilities for inclusion. Other health surveillance systems such as the Pregnancy Risk Assessment Monitoring System (PRAMS), National Immunization Survey (NIS) and National Survey on Drug Use & Health (NSDUH) surveys were also evaluated for inclusion. Using this information and materials gathered, a comprehensive list of 300+ items was compiled as potential survey questions.

In April 2018, a facilitated meeting was held with community partners to prioritize the thematic modules and 300+ associated items based on each item's usefulness to the partner organizations. Partners were asked to add to the list of questionnaire theme topics not already listed. The themes are shown in the list directly below.

Stakeholder Identified Themes – *for Addition*

- Awareness/Use of Tennessee Tobacco Quitline
- Caregiver
- Cognitive Decline
- Driving & Cell Phone Use
- Firearms
- Food Insecurity
- Gender Identity & Sexual Orientation
- Gentrification/Displacement
- Health Literacy
- Housing Insecurity
- Interstate Speeding
- Maternal Health
- Money for Food
- Spontaneous Physical Activity

- Transportation
- Use of other Tobacco Products

The list of theme modules and their accompanying questions were fine-tuned based on the feedback received from community partners and input from MPHD, NashvilleHealth and SRL.

In May 2018, MPHD and NashvilleHealth provided a list of themes to SRL. Key topics included general health status, health care access and utilization, both positive and negative health behaviors, maternal and child health, discrimination, and health literacy. For several topics unique to Nashville, additional questions were developed. The final questionnaire was comprised of 133 questions. Of these 133 questions, 83 were asked of all respondents and 50 were asked to a subset depending on prior responses. For example, selected questions were asked only of people who indicated that they had diabetes, smoked, or had children.

Overview of Survey Analysis

Using information from the U.S. Census Bureau's 2017 5-year American Community Survey, the final sample was weighted to adjust the sample to represent the adult population of Davidson County. The sample weights incorporated information regarding selection probabilities and the gender, age, race/ethnic, education, and geographic distribution of the population.

Table 1 presents the distribution of the unweighted, or raw, sample (column 2) to the final weighted sample (column 3) and the distribution of Davidson County's population according to the 2017 5-year American Community Survey (column 4) for several variables that can be compared. Comparisons of columns 2 and 4 provide an assessment of which subpopulation groups responded to the survey above and below average. For example, females responded at a higher rate, as they represent 65.8% of all respondents, but only 52.4% of the population. In contrast, younger persons (aged 18-34) were less likely to participate in the survey, as they represented only 28.3% of all respondents, whereas they constitute 37.7% of the adult population in the county. Persons aged 55 and older participated in the survey at a much higher rate, as they represented 41.0% of all respondents, even though they account for only 29.2% of Davidson County's adults.

Similar comparisons indicate that persons with college degrees were over-represented among respondents (58.9%), relative to their proportion of the adult population (39.1%). Differences by race/ethnicity and Davidson County zone can also be observed, although they are not as large as the gender, age and education differences between respondents and nonrespondents.

Differences between the weighted Nashville Health + Community Well-being Survey (column 3) and the benchmark data obtained from the 2017 American Community Survey (column 4) confirm that the weighted sample, upon which all estimates provided in this report are based, closely parallels the basic demographic composition of the county.

Table 1: Comparisons of the Unweighted & Weighted Demographic Composition of the Nashville Health + Community Well-being Survey with the 2017 American Community Survey Findings for Davidson County

	Nashville Health + Community Well-being Survey			2017 American Community Survey %
	Unweighted sample size *(n)*	Unweighted %	Weighted %	
Gender				
Female	*(1188)*	65.8	52.5	52.4
Male	*(617)*	34.2	47.5	47.6
Age				
18-34	*(491)*	28.3	37.2	37.7
35-54	*(531)*	30.6	33.0	33.1
55 and older	*(711)*	41.0	29.8	29.2
Race/Ethnicity				
African American	*(407)*	23.3	27.0	27.3
Hispanic/Latino	*(116)*	6.7	9.9	10.1
White, non-Hispanic	*(1124)*	64.4	56.9	56.4
Mixed/other	*(98)*	6.6	6.2	6.3
Education				
High school graduate or less	*(333)*	19.1	34.6	34.9
Some college, no degree	*(384)*	22.0	26.0	26.0
College graduate or higher	*(1025)*	58.9	39.4	39.1
Davidson County Zone				
East	*(341)*	18.9	22.7	22.7
Nashville Promise Zone	*(361)*	20.0	18.7	18.7
North West	*(252)*	14.0	9.3	9.3
South East	*(480)*	26.6	28.6	28.6
South West	*(371)*	20.5	20.7	20.7

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019; and the American Community Survey 2017.

Overview of Survey Findings

The findings presented in this report are organized by topic into four broad categories: (1) general health status, (2) health care access and utilization, (3) health behaviors, and (4) other health-related topics. With a few exceptions, tables are only used to present information reported by most respondents. Information reported by smaller subsets of the population are generally reported in the text only. These tables provide the unweighted sample sizes that each estimate is based on *(n)*, along with weighted estimates (either a % or a mean value) and the standard error (se) for each. In most cases, an overall estimate representing adult residents of Davidson County is provided, followed by a series of separate estimates for demographic subgroups.

The estimates for subgroups generally have larger standard errors, as they are based on smaller numbers of respondents. Standard errors provide a measure of the variability, or accuracy, of survey estimates (Lohr, 2010). All sampling errors in this report take into account the effect of weighting. Sampling errors can be used to construct 95% confidence intervals around survey estimates.

To identify the confidence interval for an estimate, multiply the standard error by 1.96, and then both subtract the resulting value from and add it to, the survey estimate. For example, in Table 2, the

prevalence estimate of diabetes among adults in Davidson County is 11.6%, with a standard error of 1.3. The lower boundary for the confidence interval is thus: [11.6 - (1.96 * 1.3)] = 9.1%; and the upper boundary of the confidence interval for the estimate is: [11.6 + (1.96 * 1.3)] = 14.1%. Consequently, we can say that our point estimate for adult diabetes prevalence in Davidson County is 11.6%, and we have a good degree of confidence that, if we were to survey all adults in the county, we would find the actual prevalence to be someplace between 9.1% and 14.1%.

Each table also identifies statistical comparisons of estimates across population subgroups that are found to be sufficiently large to warrant acknowledgement that the differences are statistically significant. These are based on the Wald Test, which is a corrected χ^2 statistic, for comparisons of proportions, and oneway Analysis of Variance (ANOVA) for comparisons of mean values (Lohr, 2010). In this report, an exceptionally large number of statistical comparisons were calculated, which increases the probability that some may be the result of chance. To minimize this risk, only statistical tests found to be a conservative—as measured by a low *p*-value ($p<.001$)—are identified, using a '*', in the tables. For example, in Table 2, estimates of diabetes are found to vary significantly across age groups, as the statistical test applied to these differences indicated these differences were $p<.001$. In the report's narrative, only those subgroup differences identified as such are discussed. Each table also provides the exact question wording for the variable(s) used to produce each estimate.

It is also important to note that not all respondents answered all questions included in the survey. In some instances, this was by design, as, for example, persons who have never smoked cigarettes were not asked how often they smoke, and males were not asked about their pregnancy experiences. In other cases, respondents choose not to answer questions they were eligible to answer, or stopped answering questions before finishing the survey. Consequently, sample sizes across questions will vary, and it is for this reason that unweighted samples (or *n*'s) are reported throughout the report, so that readers will always know precisely how many respondents are contributing information to each estimate that is provided. No attempts were made to impute missing data, although this is something that might be considered for future analyses.

Overview of Survey Limitations

All surveys are vulnerable to multiple sources of error, including sampling, coverage, nonresponse, measurement, and processing errors. The Nashville Community Health + Well-being Survey was designed to minimize, as much as possible, each of these potential sources of error. Overall, we are confident that sampling and coverage errors have been adequately addressed, as samples were selected at random at each stage, and the address-based sample frame that was used insured that 96-98% of the households in Davidson County had known probabilities of selection.

Potential measurement errors were addressed through careful questionnaire design, the use of existing survey questions previously employed in national health surveys, and data collection using self-administration modes (web and mail) that are known to minimize social desirability pressures on respondents. Processing errors were also minimized via 100% double-keyed data entry of paper questionnaires, and careful construction and review of the sample weights applied to the final data.

Of greater concern are potential nonresponse errors associated with the survey's response rate of 15.8% and the possibility of important differences between respondents and non-respondents in terms of their health experiences. Based on the available research literature, we suspect that, if the Nashville Community Health + Well-being Survey does suffer from nonresponse error, it is likely to take the form of under-estimation of the prevalence of some health conditions and behaviors, although any such effects are unlikely to be great. For more information regarding these potential sources of survey error, see the study's Methodology Report (Retzer & Johnson, 2019).

General Health

Chronic Health Conditions

The questionnaire included several questions regarding common chronic health conditions, including diabetes, high blood pressure, heart conditions (including heart attack, also known as myocardial infarction, angina or coronary heart disease, and stroke) and respiratory conditions (including asthma, Chronic Obstructive Pulmonary Disease, or COPD, and emphysema or chronic bronchitis). Table 2 presents these findings.

Diabetes

As Table 2 indicates, the general prevalence of a diabetes diagnosis – from a doctor, nurse or other health professional – among adults in Davidson County was 11.6%. Diabetes was strongly associated with several sociodemographics, including age, race/ethnicity and employment status. Specifically, diabetes increased sharply with age, with small proportions of persons aged 18-29 (1.2%) and 30-49 (8.1%) reporting this condition, compared with 15.2% of persons aged 50-64 and 27.5% of those aged 65 and older. Important differences across race/ethnicity were also found, with the highest prevalence of diabetes observed among African American adults (22.1%), and lower levels found among Hispanic/Latino (7.1%), non-Hispanic white (8.3%), and adults of other race/ethnicities (6.4%). Unemployed persons also reported greater prevalence of diabetes (19.3%), relative to those currently employed (7.9%).

Among those adults reporting a diagnosis of diabetes, 6.8% (se = 2.9) indicated it was due to a pregnancy. Among adults reporting no diagnosis of diabetes, 9.9% (se = 1.3) had been told by a doctor or other health professional that they have pre-diabetes or borderline diabetes (data not included in tables).

Among all adults in Davidson County, 45.5% (se = 2.1) indicated they had been tested for high blood sugar or diabetes within the past three years. Of those tested who were also told they have diabetes, 44.0% (se = 4.8) indicated being told they have Type 2 diabetes, 8.7% (se = 2.3) reported being told they have Type 1 diabetes, and a plurality (47.3%, se = 4.8) said they were not told what type of diabetes they had tested positive for. On average, those with diabetes, pre-diabetes or gestational diabetes were first told they had this condition at 44.0 years of age (se = 1.0; Range = 0-88). They further reported having seen a doctor, nurse or other health professional for their diabetes or pre-diabetes an average of 1.7 times in the past 12 months (se = 0.1; Range = 0-15). Those diagnosed also reported checking their A1C an average of 0.7 times daily (se = 0.1; Range = 0-10) during the past 12 months (data not included in tables).

Table 2: Chronic Health Conditions in Davidson County by Demographic Characteristics (cont. next page)

	Diabetes			High blood pressure			Heart conditions: Angina/heart attack/ coronary heart disease			Respiratory conditions: COPD, emphysema, chronic bronchitis/Asthma		
	(n)	%	(se)	*(n)*	%	(se)	*(n)*	%	(se)	*(n)*	%	(se)
Total Sample	*(1805)*	11.6	(1.3)	(1805)	30.5	(1.8)	*(1746)*	7.4	(1.2)	*(1751)*	18.7	(1.6)
Gender												
Female	*(1188)*	12.5	(2.0)	*(1188)*	34.0	(2.4)	*(1140)*	7.0	(1.8)	*(1150)*	24.1	(2.5)
Male	*(617)*	10.7	(1.8)	*(617)*	26.7	(2.7)	*(606)*	7.8	(1.4)	*(601)*	12.8*	(1.9)
Age												
18-29	*(280)*	1.2	(0.8)	*(280)*	5.5	(2.0)	*(277)*	0.0	--	*(279)*	18.0	(3.9)
30-49	*(617)*	8.1	(1.7)	*(617)*	18.6	(2.5)	*(606)*	2.5	(0.9)	*(606)*	16.1	(2.3)
50-64	*(418)*	15.2	(4.0)	*(418)*	50.1	(4.2)	*(406)*	9.9	(3.9)	*(409)*	21.2	(4.2)
65 and older	*(418)*	27.5*	(3.5)	*(418)*	60.8*	(3.7)	*(389)*	22.4*	(3.4)	*(391)*	23.3	(3.4)
Race/Ethnicity												
African American	*(405)*	22.1	(3.8)	*(407)*	47.6	(4.3)	*(391)*	10.5	(3.5)	*(393)*	24.5	(4.3)
Hispanic/Latino	*(116)*	7.1	(2.7)	*(116)*	11.4	(3.5)	*(111)*	6.4	(3.1)	*(112)*	14.8	(4.3)
White, non-Hispanic	*(1124)*	8.3	(1.2)	*(1124)*	27.1	(2.1)	*(1094)*	6.4	(1.0)	*(1094)*	17.4	(1.8)
Mixed/other	*(98)*	6.4*	(4.4)	*(98)*	21.2*	(6.4)	*(95)*	5.8	(4.1)	*(96)*	14.8	(5.2)
Education												
Less than high school	*(100)*	15.3	(4.2)	*(100)*	39.6	(6.6)	*(90)*	18.0	(4.9)	*(90)*	39.0	(7.4)
High school graduate/GED	*(233)*	14.5	(3.8)	*(233)*	29.1	(5.1)	*(223)*	11.0	(3.7)	*(221)*	21.2	(4.7)
Some college, no degree	*(384)*	14.4	(2.7)	*(384)*	34.4	(3.6)	*(368)*	6.3	(1.7)	*(371)*	16.0	(2.5)
College graduate	*(597)*	6.5	(1.5)	*(597)*	17.7	(2.2)	*(583)*	4.3	(1.1)	*(587)*	16.4	(2.3)
Graduate/professional degree	*(428)*	7.6	(2.0)	*(428)*	23.4*	(2.9)	*(423)*	2.8	(1.0)	*(422)*	13.6	(2.6)
Employment Status												
Employed	*(1097)*	7.9	(1.6)	*(1097)*	23.0	(2.2)	*(1079)*	3.9	(1.4)	*(1087)*	15.9	(2.1)
Unemployed	*(619)*	19.3*	(2.5)	*(619)*	45.3*	(3.2)	*(587)*	13.8*	(2.3)	*(584)*	24.4	(2.8)
Annual Household Income												
Less than $25,000	*(372)*	14.9	(2.6)	*(372)*	37.6	(3.8)	*(350)*	11.2	(2.4)	*(353)*	25.2	(3.5)
$25,000 to less than $50,000	*(426)*	16.3	(4.2)	*(426)*	36.1	(4.8)	*(413)*	10.6	(4.1)	*(413)*	24.6	(4.5)
$50,000 to less than $75,000	*(321)*	13.0	(3.1)	*(321)*	25.1	(3.6)	*(313)*	4.0	(1.4)	*(316)*	10.7	(2.3)
$75,000 to less than $100,000	*(187)*	5.4	(1.9)	*(187)*	21.4	(4.0)	*(186)*	3.4	(1.5)	*(186)*	11.1	(2.9)
$100,000 and greater	*(349)*	5.2	(1.6)	*(349)*	22.0	(3.5)	*(343)*	3.7	(1.3)	*(343)*	15.3	(4.0)

Table 2: Chronic Health Conditions in Davidson County by Demographic Characteristics (cont.)

	Diabetes			High Blood Pressure			Heart conditions: Angina/heart attack/ Coronary Heart Disease			Respiratory conditions: COPD, emphysema, chronic bronchitis/Asthma		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage												
Yes	*(1612)*	11.7	(1.4)	*(1612)*	31.3	(1.9)	*(1597)*	7.4	(1.3)	*(1571)*	19.0	(1.8)
No	*(137)*	9.6	(4.2)	*(137)*	15.3	(4.7)	*(132)*	3.6	(2.3)	*(133)*	15.6	(5.2)
Sexual Orientation												
Heterosexual	*(1595)*	12.2	(1.5)	*(1595)*	30.9	(1.9)	*(1543)*	7.7	(1.3)	*(1549)*	18.7	(1.8)
Gay-lesbian-bisexual	*(105)*	8.8	(3.8)	*(105)*	26.2	(6.6)	*(105)*	6.0	(3.7)	*(104)*	21.1	(6.2)
Davidson County Zone												
East	*(341)*	12.9	(2.6)	*(341)*	29.9	(3.7)	*(333)*	5.9	(1.6)	*(337)*	26.0	(3.6)
Nashville Promise Zone	*(361)*	12.9	(3.0)	*(361)*	38.8	(4.3)	*(344)*	10.5	(3.0)	*(344)*	19.2	(3.3)
North West	*(252)*	21.1	(8.0)	*(252)*	46.7	(7.4)	*(241)*	18.1	(8.2)	*(246)*	18.5	(7.8)
South East	*(480)*	10.9	(2.0)	*(480)*	26.8	(3.2)	*(462)*	5.3	(1.3)	*(463)*	17.0	(3.2)
South West	*(371)*	6.0	(1.6)	*(371)*	21.7	(2.9)	*(366)*	4.6	(1.2)	*(361)*	12.7	(1.6)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Diabetes – "Has a doctor, nurse, or other health professional ever told you that you have diabetes?"
High blood pressure - "Have you ever been told by a doctor, nurse or other health professional that you have high blood pressure?"
Heart conditions - "Has a doctor, nurse, or other health professional ever told you that you had any of the following? (1) a heart attack, also called a myocardial infarction? (2) Angina or coronary heart disease? (3) a stroke?"
Respiratory conditions - "Has a doctor, nurse, or other health professional ever told you that you had any of the following? (1) Asthma? (2) Chronic Obstructive Pulmonary disease or COPD, emphysema or chronic bronchitis?"

High Blood Pressure

As Table 2 indicates, a diagnosis of hypertension, also known as high blood pressure, by a doctor, nurse or other health professional was reported by 30.5% of the adults in Davidson County (another 7.9%, se = 1.0, indicated they were told they were borderline high or pre-hypertensive). Several sociodemographics were also strongly associated with high blood pressure. Prevalence increased from 5.5% for adults aged 18-29, to 60.8% for those 65 and older. African Americans were most likely to report high blood pressure (47.6%), and Hispanic/Latino adults were least likely to indicate this condition (11.4%). Education was also associated with high blood pressure. The highest prevalence was among persons with less than a high school education (39.6%), and the lowest levels were among college graduates (17.7%) and those with graduate or professional degrees (23.4%). Unemployed persons also were more likely to report high blood pressure (45.3%), compared to currently employed adults (23.0%).

Among those adults reporting a diagnosis of high blood pressure, 19.4% (se = 4.6) indicated it was caused by a pregnancy. Also among those diagnosed with high blood pressure, 77.4% (se = 1.8) reported they were currently taking medicine for it. Half of those persons with high blood pressure (50.3%, se = 2.1) indicated they did not need to check their blood pressure at home, and 18.8% (se = 1.5) reported they did not have access to a device at home for checking their blood pressure. The remaining 30.9% (se = 1.8) indicated they had taken their blood pressure at home during the past 12 months. Most patients with high blood pressure had not been told to take their blood pressure at home (79.1%, se = 1.6; data not included in tables).

Heart Conditions

Among all Davidson County adults, the prevalence of heart conditions was 7.4% (see Table 2). Age and employment status were strongly associated with heart condition prevalence. No adults aged 18-29 reported a heart condition, whereas 22.4% of those aged 65 and older reported one or more of these conditions. Among the unemployed, the prevalence of heart conditions was 13.8%. Among those currently employed, the prevalence was 3.9%.

The adult prevalence of specific forms of heart conditions included 3.9% for angina (se = 0.7), 3.2% for heart attacks (se = 0.9), and 2.1% (se = 0.5) for strokes (data not included in tables).

Respiratory Conditions

The prevalence of respiratory conditions among adults was 18.7% (Table 2). Females were more likely than males to have reported a respiratory condition (24.1% vs. 12.8%, respectively).

The prevalence of specific types of respiratory conditions were 15.1% for asthma (se = 1.4), and 6.2% for Chronic Obstructive Pulmonary Disease (COPD), emphysema or chronic bronchitis (se = 1.2; data not included in tables).

Subjective Health Assessments

Two items that focus on subjective health assessments were included in the survey. Findings for those items, which assessed self-reported general health ratings and poor health days, are presented in Table 3.

General Health Ratings

One question asked respondents to rate their general health as being excellent, very good, good, fair or poor. This is a common health perceptions question that is known to be predictive of both objective health assessments and future mortality risk (Lee, 2015). In Davidson County, 13.2% of the adults surveyed reported their general health to be fair or poor. Several indicators of socio-economic status were found to have strong associations with this measure. One of these was education, with fair/poor health ratings decreasing from 25.9% among persons with less than a high school education to 4.4% among college graduates and 3.3% among those with graduate or professional degrees. A similar relationship between fair/poor health ratings and household income was observed. The prevalence of negative health ratings declined from 23.2% among those with household incomes less than $25,000 to 1.8% among those reporting incomes of $100,000 and above. In addition, unemployed persons were more likely to report fair/poor health (20.5%) compared to the currently employed (9.6%).

Table 3: Subjective Health Assessments and Overweight Population in Davidson County by Demographic Characteristics (cont. next page)

	General Health Rated as Fair/Poor			Number of days (in past 30) that physical health not good			Body Mass Index (BMI) classified as overweight			Body Mass Index (BMI) classified as obese		
	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1799)*	13.2	(1.5)	*(1776)*	4.4	(0.4)	*(1626)*	33.1	(2.1)	*(1626)*	30.5	(2.0)
Gender												
Female	*(1183)*	15.6	(2.2)	*(1165)*	5.0	(0.4)	*(1073)*	24.7	(2.0)	*(1073)*	35.9	(2.6)
Male	*(616)*	10.5	(2.1)	*(611)*	3.7*	(0.6)	*(553)*	42.6*	(3.6)	*(553)*	24.3*	(3.1)
Age												
18-29	*(279)*	6.5	(3.2)	*(276)*	4.1	(1.1)	*(259)*	26.2	(5.2)	*(259)*	21.3	(4.5)
30-49	*(617)*	10.1	(1.8)	*(611)*	3.5	(0.4)	*(568)*	31.8	(3.3)	*(568)*	31.3	(3.3)
50-64	*(417)*	17.7	(4.2)	*(415)*	5.4	(0.7)	*(381)*	35.7	(4.2)	*(391)*	41.0	(4.6)
65 and older	*(415)*	20.9	(3.4)	*(406)*	4.9*	(0.7)	*(392)*	41.3*	(3.9)	*(392)*	27.5*	(3.5)
Race/Ethnicity												
African American	*(404)*	20.9	(3.8)	*(394)*	4.7	(0.6)	*(371)*	30.7	(4.1)	*(371)*	47.8	(4.7)
Hispanic/Latino	*(116)*	14.6	(6.9)	*(116)*	6.8	(2.3)	*(98)*	42.0	(10.2)	*(98)*	31.8	(9.0)
White, non-Hispanic	*(1122)*	9.8	(1.4)	*(1110)*	3.9	(0.3)	*(1057)*	31.3	(2.3)	*(1057)*	24.1	(2.1)
Mixed/other	*(97)*	10.5	(5.3)	*(96)*	3.1	(1.1)	*(89)*	48.1*	(8.6)	*(89)*	12.7*	(5.2)
Education												
Less than high school	*(99)*	25.9	(5.6)	*(93)*	8.2	(1.5)	*(86)*	26.7	(7.6)	*(86)*	33.3	(6.8)
High school graduate/GED	*(231)*	22.4	(4.3)	*(225)*	5.6	(1.1)	*(209)*	32.9	(5.4)	*(209)*	39.9	(5.6)
Some college, no degree	*(383)*	14.5	(3.2)	*(379)*	4.6	(0.6)	*(352)*	30.8	(3.8)	*(352)*	34.6	(4.1)
College graduate	*(596)*	4.4	(1.1)	*(590)*	3.1	(0.4)	*(553)*	35.9	(3.3)	*(553)*	20.3	(2.5)
Graduate/professional degree	*(427)*	3.3*	(1.4)	*(426)*	2.2*	(0.3)	*(407)*	36.0	(3.6)	*(407)*	22.0	(3.1)
Employment Status												
Employed	*(1096)*	9.6	(1.9)	*(1087)*	3.2	(0.3)	*(1017)*	32.4	(2.7)	*(1017)*	30.9	(2.7)
Unemployed	*(614)*	20.5*	(2.6)	*(602)*	6.6*	(0.8)	*(579)*	34.5	(3.0)	*(579)*	29.9	(2.8)
Annual Household Income												
Less than $25,000	*(370)*	23.2	(3.3)	*(358)*	6.3	(0.8)	*(337)*	29.6	(3.9)	*(337)*	41.2	(4.4)
$25,000 to less than $50,000	*(425)*	17.4	(4.3)	*(422)*	5.5	(1.1)	*(398)*	27.9	(4.1)	*(398)*	37.1	(5.0)
$50,000 to less than $75,000	*(321)*	7.6	(2.3)	*(321)*	3.4	(0.6)	*(309)*	32.2	(4.5)	*(309)*	26.1	(4.0)
$75,000 to less than $100,000	*(187)*	9.7	(6.4)	*(185)*	3.3	(0.7)	*(177)*	33.9	(5.5)	*(177)*	29.0	(6.7)
$100,000 and greater	*(349)*	1.8*	(0.8)	*(347)*	2.2*	(0.4)	*(332)*	41.4	(4.3)	*(332)*	18.5	(2.9)

Table 3: Subjective Health Assessments and Overweight Population in Davidson County by Demographic Characteristics (cont.)

	General Health Rated as Fair/Poor			Number of days (in past 30) that physical health not good			Body Mass Index (BMI) classified as overweight			Body Mass Index (BMI) classified as obese		
	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage												
Yes	*(1606)*	12.5	(1.6)	*(1589)*	4.0	(0.3)	*(1467)*	32.3	(2.2)	*(1467)*	31.4	(2.2)
No	*(137)*	16.4	(4.8)	*(136)*	7.3*	(2.2)	*(111)*	36.0	(7.4)	*(111)*	20.8	(5.7)
Sexual Orientation												
Heterosexual	*(1590)*	13.7	(1.7)	*(1570)*	3.9	(0.3)	*(1487)*	34.4	(2.2)	*(1487)*	29.7	(2.1)
Gay-lesbian-bisexual	*(105)*	10.3	(4.0)	*(103)*	9.2*	(2.6)	*(100)*	16.1	(5.0)	*(100)*	37.0	(7.4)
Davidson County Zone												
East	*(341)*	17.2	(3.7)	*(333)*	4.0	(0.6)	*(309)*	37.7	(5.1)	*(309)*	33.9	(4.5)
Nashville Promise Zone	*(361)*	20.0	(3.6)	*(355)*	5.1	(0.7)	*(326)*	33.0	(4.6)	*(326)*	34.9	(4.3)
North West	*(248)*	20.5	(7.9)	*(242)*	5.5	(1.4)	*(233)*	34.0	(6.7)	*(233)*	38.5	(7.9)
South East	*(479)*	11.0	(2.2)	*(475)*	4.2	(0.9)	*(421)*	29.0	(3.7)	*(421)*	30.1	(3.7)
South West	*(370)*	2.5	(1.2)	*(371)*	3.9	(0.5)	*(337)*	33.3	(3.4)	*(337)*	18.7	(4.2)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*p<.001

Note: Question wordings include the following:
Subjective Health rated as Fair/Poor – "Would you say that in general your health is: excellent, very good, good, fair, poor."
Number of days (in past 30) that physical health not good – "Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"
Body Mass Index (BMI) classified as overweight – BMI constructed using the questions "About how much do you weigh without shoes?" & "About how tall are you without shoes?" and the formula: BMI = [(weight in pounds * 703) / (height in inches)^2]. BMI values of 25.0 to 29.9 are classified as being overweight; BMI values of 30.0 and above are classified as being obese.

Poor Health Days

Another commonly employed measure of health-related quality of life is concerned with self-reported number of unhealthy days (Centers for Disease Control and Prevention, 2000). In response to one such question, *"Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"*, adults in Davidson County reported an average of 4.4 days of poor health (Range = 0-30). The average number of poor health days varied across several sociodemographics. Females reported more poor health days on average (5.0 days), compared to males (3.7 days). Persons aged 50-64 years reported the most poor health days (5.4 days), and those aged 30-49 reported the fewest (3.5 days). Education was strongly associated with poor health days. Those with less than a high school education reported 8.2 poor health days on average, and those with graduate degrees reported the fewest average number of poor health days (2.2 days). A similar relationship with household income was observed, with those in the lowest income category – less than $25,000 – reporting an average of 6.3 poor health days, and those in the highest income category – $100,000 and above – reporting an average of 2.2 days of poor health. Unemployed persons also reported more poor health days (6.6 days) than did those who were currently employed (3.2 days). Persons with gay-lesbian-bisexual orientations reported an average of 9.2 days of poor health, compared to 3.9 poor health days for heterosexuals.

Body Mass Index

Survey respondents were also asked to report their weight and height. Using these two measures, a standardized indicator of body fat known as the body mass index (BMI) was estimated.[1] BMI standards have been established by the Centers for Disease Control and Prevention for identifying adults who are overweight (BMI values of 25.0-29.9) and obese (BMI values of 30.0 and above). Estimates for Davidson County are provided in Table 3. About a third (33.1%) of all adults were classified as overweight and an additional 30.5% were classified as being obese. The average BMI score for Davidson County adults was 27.9% (se = 0.3; Range = 10.1-62.7; data not included in tables).

Differences in risk for being overweight or obese varied by gender, age, and race/ethnicity. Compared to females (24.7%), males were more likely to be overweight (42.6%). Females, though, were more likely to be classified as obese (35.9%), compared to males (24.3%). When examined by age, persons 65 and older were most likely to be overweight (41.3%) and those aged 50-64 years were most likely to be obese (41.0%). Persons aged 18-29 years were least likely to be overweight (26.2%) or obese (21.3%). Adults of mixed or other race/ethnicities were most likely to be overweight (48.1%) and African Americans were most likely to be obese (47.8%). African Americans and non-Hispanic whites were least likely to be overweight (30.7% and 31.3%, respectively). Persons of mixed or other race/ethnicities were least likely to be obese (12.7%).

[1] https://www.cdc.gov/healthyweight/assessing/bmi/index.html

Oral Health

Two measures of oral health were also examined; results can be seen in Table 4.

Past Year Dental Care

The first of these was having visited a dentist or dental clinic within the past year. Overall, 57.4% of Davidson County adults reported having done so. Past year dental visits were associated with both education and household income, with dental care increasing with each. Specifically, 35.0% of those with less than a high school education reported a past year dental visit, compared to 73.0% of college graduates and 72.4% of persons with graduate degrees. Similarly, 41.8% of persons reporting household incomes less than $25,000 had received dental care, compared to 75.5% of those with household incomes of $100,000 or more.

Table 4: Oral Health in Davidson County by Demographic Characteristics (cont. next page)

	Visited dentist or dental clinic within past year			No permanent teeth removed due to tooth decay or gum disease		
	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1792)*	57.4	(2.1)	*(1797)*	59.1	(2.1)
Gender						
Female	*(1177)*	60.8	(2.4)	*(1182)*	54.8	(2.5)
Male	*(615)*	53.8	(3.5)	*(615)*	63.8	(3.3)
Age						
18-29	*(278)*	55.2	(5.7)	*(280)*	82.0	(5.0)
30-49	*(613)*	53.5	(3.4)	*(614)*	71.5	(3.0)
50-64	*(417)*	63.2	(4.0)	*(415)*	40.0	(3.9)
65 and older	*(413)*	63.2	(3.8)	*(417)*	28.8*	(3.4)
Race/Ethnicity						
African American	*(406)*	45.3	(4.4)	*(405)*	43.6	(4.5)
Hispanic/Latino	*(114)*	61.4	(8.2)	*(115)*	68.6	(7.0)
White, non-Hispanic	*(1119)*	62.4	(2.6)	*(1121)*	64.7	(2.5)
Mixed/other	*(94)*	56.1	(8.3)	*(97)*	57.4*	(8.2)
Education						
Less than high school	*(99)*	35.0	(7.1)	*(99)*	21.9	(5.7)
High school graduate/GED	*(232)*	49.8	(5.5)	*(232)*	46.6	(5.6)
Some college, no degree	*(380)*	47.9	(4.0)	*(383)*	55.8	(3.9)
College graduate	*(595)*	73.0	(2.8)	*(596)*	76.3	(2.5)
Graduate/professional degree	*(426)*	72.4*	(3.5)	*(426)*	78.0*	(3.0)
Employment Status						
Employed	*(1093)*	56.1	(2.8)	*(1093)*	70.0	(2.7)
Unemployed	*(612)*	60.0	(3.1)	*(617)*	38.7*	(3.3)
Annual Household Income						
Less than $25,000	*(366)*	41.8	(4.1)	*(371)*	43.4	(4.2)
$25,000 to less than $50,000	*(423)*	53.0	(5.1)	*(423)*	47.5	(5.0)
$50,000 to less than $75,000	*(321)*	60.4	(4.9)	*(321)*	63.3	(4.6)
$75,000 to less than $100,000	*(186)*	68.8	(6.5)	*(187)*	74.5	(4.8)
$100,000 and greater	*(348)*	75.5*	(3.9)	*(348)*	79.7*	(3.0)

Table 4: Oral Health in Davidson County by Demographic Characteristics (cont.)

	Visited dentist or dental clinic within past year			No permanent teeth removed due to tooth decay or gum disease		
	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage						
Yes	*(1605)*	58.7	(2.2)	*(1607)*	60.2	(2.2)
No	*(132)*	43.7	(7.9)	*(135)*	55.5	(7.4)
Sexual Orientation						
Heterosexual	*(1585)*	59.0	(2.3)	*(1588)*	58.3	(2.4)
Gay-lesbian-bisexual	*(104)*	43.0	(8.8)	*(105)*	72.5	(6.7)
Davidson County Zone						
East	*(340)*	50.2	(4.6)	*(341)*	55.9	(4.5)
Nashville Promise Zone	*(357)*	47.8	(4.4)	*(361)*	50.9	(4.4)
North West	*(250)*	64.4	(6.6)	*(250)*	45.2	(7.2)
South East	*(477)*	56.6	(4.4)	*(475)*	60.3	(4.2)
South West	*(368)*	71.8	(4.1)	*(370)*	74.3*	(3.2)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Visited dentist or dental clinic within the past year: "Including all types of dentists, such as orthodontists, oral surgeons, and all other dental specialists, as well as dental hygienists, how long has it been since you last visited a dentist or a dental clinical for any reason?"
No permanent teeth removed due to tooth decay or gum disease: "How many of your permanent teeth have been removed because of tooth decay or gum disease? Include teeth lost to infection, but do not include teeth lost for other reasons, such as injury or orthodontics."

Tooth Loss

A second useful indicator of oral health is whether or not any permanent teeth have been removed due to tooth decay or gum disease. Among adults in Davidson County, 59.1% indicated no loss of permanent teeth. This varied across multiple sociodemographic characteristics of the sample. Loss of one or more permanent teeth increased with age, with 82.0% of persons 18-29 years reporting no tooth loss, compared to 28.8% of persons aged 65 and older. Hispanic/Latinos were most likely (68.6%) and African Americans were least likely (43.6%) to report having no tooth loss. In addition, no loss of teeth increased with respondent education, increasing from 21.9% of persons with less than a high school education to 76.3% of those with a college degree and 78.0% of those with a graduate degree. A similar pattern was found for household income, with no loss of teeth increasing from 43.4% of those in the lowest income group (less than $25,000) to 79.7% in the highest income group ($100,000 and greater). Employed persons were also more likely to report no loss of teeth (70.0% vs. 38.7% of unemployed persons). Differences across Davidson County zones were also noted, with no loss of permanent teeth greatest in the South West (74.3%) and lowest in the North West (45.2%).

Mental Health

Several indicators of general mental health conditions and correlates are reported in Table 5. These include: (1) self-reports of number of days (in the past 30) that mental health was not good, (2) having ever been diagnosed with depression, (3) currently reporting being dissatisfied with life, and (4) rarely or never getting needed social support.

Poor Mental Health Days

Respondents were asked about unhealthy days due to mental health conditions: "*Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?*" Results for this question can be found in Table 5. Overall, the number of poor mental health days reported by adults in Davidson County was 5.3 days (Range = 0-30). Females reported more poor mental health days (6.2 days) than did males (4.3 days). Less educated respondents also reported more poor mental health days. Those with less than a high school education reported an average of 10.5 days of poor mental health, while those with a graduate or professional degree reported an average of 3.4 days. Unemployed adults also reported more poor mental health days (7.0 days) compared to those who were employed (4.4 days). Those with lower household incomes also experienced greater numbers of poor mental health days. Persons in the lowest income households (less than $25,000) indicated an average of 7.9 days of poor mental health, compared to 3.1 poor mental health days among those reporting household incomes of $100,000 or more. Those without health insurance additionally reported greater numbers of poor mental health days (7.9 days), compared to those with health insurance (5.0 days). Sexual minorities reported 10.2

poor mental health days, whereas heterosexual respondents reported 4.8 days. The average number of poor mental health days also varied across sections of Davidson County, with persons residing in the Nashville Promise Zone reporting a greater number of days (7.3 days), compared to other parts of the county.

Table 5: General Mental Health Status in Davidson County by Demographic Characteristics (cont. next page)

	Number of days (in past 30) that mental health not good			Ever diagnosed with Depression			Currently dissatisfied or very dissatisfied with life			Rarely or never get needed social support		
	(n)	Mean	(se)	*(n)*	%	(se)	*(n)*	%	(se)	*(n)*	%	(se)
Total Sample	*(1766)*	5.3	(0.3)	(1760)	22.1	(1.7)	*(1796)*	8.1	(1.0)	*(1798)*	11.6	(1.5)
Gender												
Female	*(1157)*	6.2	(0.4)	(1160)	26.8	(2.1)	*(1180)*	8.0	(1.3)	*(1182)*	10.6	(1.5)
Male	*(609)*	4.3*	(0.5)	(600)	16.9*	(2.8)	*(616)*	8.2	(1.6)	*(616)*	12.6	(2.7)
Age												
18-29	*(273)*	5.8	(0.7)	(278)	20.7	(5.0)	*(279)*	5.2	(1.7)	*(279)*	10.1	(3.8)
30-49	*(610)*	5.2	(0.5)	(606)	24.6	(2.7)	*(614)*	9.8	(2.1)	*(616)*	13.6	(2.8)
50-64	*(408)*	5.8	(0.7)	(410)	22.1	(3.2)	*(416)*	6.0	(1.4)	*(418)*	8.0	(1.7)
65 and older	*(408)*	4.3	(0.7)	(398)	19.5	(3.2)	*(418)*	11.7	(2.6)	*(416)*	13.7	(2.9)
Race/Ethnicity												
African American	*(390)*	5.6	(0.7)	(397)	17.1	(2.9)	*(406)*	9.8	(2.3)	*(406)*	15.0	(3.4)
Hispanic/Latino	*(115)*	6.0	(1.2)	(113)	17.6	(5.0)	*(116)*	3.7	(2.0)	*(115)*	23.1	(8.3)
White, non-Hispanic	*(1107)*	5.2	(0.4)	(1100)	26.3	(2.5)	*(1121)*	8.8	(1.4)	*(1122)*	7.8	(1.3)
Mixed/other	*(96)*	3.3	(1.1)	(94)	11.2*	(5.1)	*(97)*	3.5	(1.7)	*(98)*	14.4	(6.3)
Education												
Less than high school	*(97)*	10.5	(1.7)	(89)	36.0	(7.4)	*(100)*	7.9	(3.3)	*(100)*	26.2	(6.3)
High school graduate/GED	*(226)*	5.0	(0.8)	(225)	21.3	(4.8)	*(229)*	7.9	(2.1)	*(232)*	18.0	(4.5)
Some college, no degree	*(369)*	5.6	(0.7)	(373)	21.3	(3.0)	*(384)*	11.6	(2.6)	*(382)*	11.6	(2.4)
College graduate	*(591)*	4.8	(0.4)	(589)	22.9	(2.7)	*(595)*	8.5	(1.9)	*(596)*	5.7	(1.4)
Graduate/professional degree	*(423)*	3.4*	(0.4)	(425)	17.6	(2.7)	*(428)*	2.8	(0.9)	*(428)*	2.6*	(0.8)
Employment Status												
Employed	*(1078)*	4.4	(0.4)	(1083)	19.4	(2.2)	*(1094)*	5.9	(1.1)	*(1095)*	7.0	(1.5)
Unemployed	*(602)*	7.0*	(0.6)	(595)	27.1*	(2.9)	*(616)*	12.8	(2.1)	*(617)*	18.7*	(3.1)
Annual Household Income												
Less than $25,000	*(359)*	7.9	(0.9)	(359)	30.2	(3.8)	*(369)*	15.1	(2.7)	*(372)*	21.9	(3.8)
$25,000 to less than $50,000	*(412)*	5.6	(0.7)	(414)	25.3	(5.0)	*(424)*	10.8	(2.8)	*(425)*	11.7	(4.0)
$50,000 to less than $75,000	*(319)*	4.4	(0.6)	(318)	17.2	(3.2)	*(321)*	4.5	(1.7)	*(320)*	8.0	(2.1)
$75,000 to less than $100,000	*(184)*	4.4	(0.7)	(185)	19.6	(4.0)	*(187)*	6.0	(2.3)	*(187)*	8.5	(1.1)
$100,000 and greater	*(347)*	3.1*	(0.5)	(346)	15.8*	(2.8)	*(348)*	1.8*	(0.7)	*(349)*	2.2*	(1.5)

Table 5: General Mental Health Status in Davidson County by Demographic Characteristics (cont.)

	Number of days (in past 30) that mental health not good			Ever Diagnosed with Depression			Currently dissatisfied or very dissatisfied with life			Rarely or never get needed social support		
	(*n*)	Mean	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage												
Yes	*(1579)*	5.0	(0.3)	*(1576)*	21.6	(1.9)	*(1604)*	7.0	(1.0)	*(1607)*	9.8	(1.4)
No	*(134)*	7.9*	(1.3)	*(134)*	27.6	(6.3)	*(136)*	18.5	(5.6)	*(136)*	27.3	(7.9)
Sexual Orientation												
Heterosexual	*(1561)*	4.8	(0.3)	*(1557)*	20.6	(1.8)	*(1589)*	7.3	(1.0)	*(1591)*	9.9	(1.3)
Gay-lesbian-bisexual	*(102)*	10.2*	(1.3)	*(104)*	38.7*	(7.9)	*(105)*	18.0	(6.1)	*(105)*	22.3	(9.4)
Davidson County Zone												
East	*(334)*	5.0	(0.6)	*(335)*	22.3	(3.3)	*(341)*	9.6	(2.4)	*(339)*	13.2	(2.6)
Nashville Promise Zone	*(352)*	7.3	(0.9)	*(347)*	25.5	(3.9)	*(358)*	12.9	(3.0)	*(361)*	18.5	(3.5)
North West	*(245)*	4.7	(1.3)	*(244)*	14.9	(4.7)	*(249)*	5.1	(2.0)	*(250)*	5.0	(2.1)
South East	*(468)*	4.9	(0.6)	*(467)*	23.1	(4.1)	*(478)*	7.9	(2.0)	*(478)*	11.4	(3.3)
South West	*(367)*	4.5*	(0.6)	*(367)*	20.7	(2.9)	*(370)*	3.6	(1.1)	*(370)*	6.7	(3.6)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019

*$p<.001$

Note: Question wordings include the following:

Number of days (in past 30) that mental health not good – "Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"

Ever Diagnosed with Depression – "Has a doctor, nurse, or other health professional ever told you that you had any of the following? A depressive disorder, including depression, major depression, dysthymia, or minor depression?"

Currently dissatisfied with life: "In general, how satisfied or dissatisfied are you with your life?"

Rarely or never get needed social support: "How often do you get the social and emotional support you need?"

Depression

Another question asked if a doctor, nurse, or other health professional ever indicated that the respondent had "*a depressive disorder, including depression, major depression, dysthymia, or minor depression*." Overall, 22.1% of the adults in Davidson County reported having ever been diagnosed with any of these forms of depression. This diagnosis also varied across multiple sociodemographic measures, including gender, race/ethnicity, employment status, annual household income, and sexual orientation. Females reported higher prevalence of depression (26.8%) than did males (16.9%). Non-Hispanic whites were most likely to report a diagnosis of depression (26.3%), whereas persons of mixed or other race/ethnicities were least likely to report a depression diagnosis (11.2%). Unemployed persons also reported higher prevalence of depression (27.1%) than did persons currently employed (19.4%). Depression was also greater among persons within households with lower incomes. Those in households with incomes of less than $25,000 had a depression prevalence of 30.2%, and those with incomes of $100,000 and above had a prevalence of 15.8%. Sexual minorities also had a higher prevalence of depression (38.7%) compared to heterosexual respondents (20.6%).

Life Satisfaction

General dissatisfaction with life was assessed using a question that asked "*In general, how satisfied or dissatisfied are you with your life?*" In Davidson County, 8.1% of all adults indicated they were currently either dissatisfied or very dissatisfied. Household income was strongly associated with this measure, with 15.1% of those with household incomes below $25,000 reporting dissatisfaction with their life, compared to 1.8% of those in households with incomes of $100,000 and above.

Social Support

Respondents were also asked to indicate whether or not they received social support: "*How often do you get the social and emotional support you need?*" Among adults in Davidson County, 11.6% reported that they rarely or never receive the social support they need. The degree of social support varied across several socio-economic measures, including education, household income and employment status. Less educated persons were generally more likely to report an absence of needed social support (26.2%), relative to those with graduate degrees (2.6%). Similarly, those with less household income were more likely to report an absence of needed social support (21.9%), compared to persons with household incomes of $100,000 or more (2.2%).

Mental Health Treatment

The prevalence of current mental health treatment in Davidson County was 15.5% (see Table 6). There was little variability in prevalence of treatment across sociodemographic subgroups. Perhaps not

unexpectedly, there was a strong association between diagnoses of depression and current receipt of mental health treatment, as 52.6% of those adults with a diagnosis reported currently receiving mental health treatment, whereas only 5.3% without a diagnosis reporting treatment.

Table 6: Mental Health Treatment and Attitudes towards Mental Illness and Treatment in Davidson County by Demographic Characteristics (cont. next page)

	Currently receiving mental health treatment			Agree that treatment can help people with mental illness lead normal lives			Agree that people are generally caring and sympathetic to people with mental illness		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1797)*	15.5	(1.3)	(1781)	85.6	(1.6)	(1650)	40.2	(2.1)
Gender									
Female	*(1182)*	18.4	(1.8)	(1169)	85.3	(2.2)	(1072)	37.7	(2.5)
Male	*(615)*	12.3	(1.9)	(612)	85.8	(2.3)	(578)	42.8	(3.5)
Age									
18-29	*(279)*	12.9	(2.8)	(279)	89.1	(3.4)	(259)	32.7	(5.3)
30-49	*(615)*	16.2	(2.3)	(613)	85.1	(2.6)	(561)	39.2	(3.5)
50-64	*(418)*	15.7	(2.6)	(415)	82.3	(4.2)	(386)	40.0	(4.3)
65 and older	*(417)*	18.0	(3.1)	(410)	86.7	(2.7)	(392)	51.3	(3.9)
Race/Ethnicity									
African American	*(405)*	12.8	(2.5)	(400)	77.1	(4.3)	(357)	45.8	(4.9)
Hispanic/Latino	*(115)*	9.1	(3.2)	(113)	80.0	(5.7)	(94)	30.3	(7.4)
White, non-Hispanic	*(1123)*	19.1	(1.8)	(1116)	90.6	(1.4)	(1065)	37.4	(2.4)
Mixed/other	*(98)*	5.3	(3.1)	(97)	87.9	(5.2)	(89)	30.3	(7.4)
Education									
Less than high school	*(99)*	22.5	(5.5)	(97)	68.8	(6.7)	(71)	46.2	(8.6)
High school graduate/GED	*(233)*	15.1	(3.1)	(227)	80.4	(4.1)	(204)	39.6	(5.7)
Some college, no degree	*(384)*	13.2	(2.5)	(381)	83.8	(3.5)	(351)	44.0	(4.3)
College graduate	*(595)*	18.0	(2.4)	(595)	94.0	(1.7)	(568)	36.7	(3.0)
Graduate/professional degree	*(427)*	13.2	(2.2)	(425)	93.6*	(2.1)	(412)	36.8	(3.5)
Employment Status									
Employed	*(1096)*	12.7	(1.5)	(1087)	86.0	(2.2)	(1018)	39.4	(2.8)
Unemployed	*(616)*	21.0	(2.5)	(610)	86.1	(2.2)	(563)	40.4	(3.3)
Annual Household Income									
Less than $25,000	*(370)*	20.1	(3.1)	(367)	78.3	(3.5)	(310)	40.6	(4.6)
$25,000 to less than $50,000	*(426)*	10.5	(2.2)	(421)	85.2	(4.0)	(391)	34.7	(4.6)
$50,000 to less than $75,000	*(321)*	20.6	(3.7)	(320)	87.6	(3.9)	(307)	49.7	(4.7)
$75,000 to less than $100,000	*(187)*	11.3	(3.2)	(186)	88.3	(4.6)	(180)	38.0	(5.9)
$100,000 and greater	*(347)*	13.7	(2.4)	(347)	93.1	(2.0)	(334)	36.3	(4.3)

Table 6: Mental Health Treatment and Attitudes towards Mental Illness and Treatment in Davidson County by Demographic Characteristics (cont.)

	Currently receiving mental health treatment			Agree that treatment can help people with mental illness lead normal lives			Agree that people are generally caring and sympathetic to people with mental illness		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage									
Yes	*(1606)*	15.5	(1.4)	*(1597)*	85.8	(1.7)	*(1494)*	39.7	(2.2)
No	*(136)*	15.0	(5.1)	*(133)*	81.7	(5.1)	*(107)*	44.3	(8.6)
Sexual Orientation									
Heterosexual	*(1590)*	14.3	(1.3)	*(1579)*	86.3	(1.7)	*(1471)*	41.4	(2.3)
Gay-lesbian-bisexual	*(105)*	31.6	(7.5)	*(105)*	87.7	(5.5)	*(101)*	21.6	(6.6)
Davidson County Zone									
East	*(341)*	14.0	(2.6)	*(336)*	89.6	(2.3)	*(307)*	39.4	(4.5)
Nashville Promise Zone	*(359)*	19.5	(3.5)	*(359)*	75.9	(4.0)	*(327)*	37.7	(4.6)
North West	*(250)*	15.9	(4.9)	*(247)*	76.6	(8.1)	*(226)*	38.1	(7.1)
South East	*(478)*	13.4	(2.3)	*(473)*	85.4	(3.2)	*(436)*	42.4	(4.4)
South West	*(369)*	16.4	(2.5)	*(366)*	94.3	(1.5)	*(354)*	41.0	(4.0)
Ever Diagnosed with Depression									
Yes	*(425)*	52.6	(4.5)	*(423)*	89.2	(2.9)	*(392)*	23.7	(3.4)
No	*(1328)*	5.3*	(0.9)	*(1314)*	85.2	(1.9)	*(1228)*	49.1*	(2.5)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Currently receiving mental health treatment: "Are you now taking medicine or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem?"
Agree that treatment can help people with mental illness lead normal lives: "These next statements concern peoples' attitudes toward mental illness and its treatment. (a) Treatment can help people with mental illness lead normal lives."
Agree that people are generally caring and sympathetic to people with mental illness: "(b) People are generally caring and sympathetic to people with mental illness."
(agree strongly/agree slightly/neither agree nor disagree/disagree slightly/disagree strongly)

Attitudes Regarding Mental Health

Two items developed for use in the Behavioral Risk Factor Surveillance System (BRFSS) to assess public attitudes towards persons with mental illness (Centers for Disease Control and Prevention, 2012) were included in the survey and are reported in Table 6. Respondents were asked to agree or disagree with two statements. The first statement said "*Treatment can help people with mental illness lead normal lives*." In Davidson County, 85.6% of adults indicated they either agree strongly or agree slightly with this statement. The extent to which respondents agreed with this statement varied by education. Among those with less than a high school education, 68.8% agreed that treatment can help people with mental illness lead normal lives. Among those with college or graduate degrees, 93.9% and 93.6%, respectively, were in agreement.

A second statement said that "*People are generally caring and sympathetic to people with mental illness.*" In contrast to the first statement regarding treatment efficacy, less than half of all adults (40.2%) agreed either strongly or slightly that people are generally caring and sympathetic to those with mental illness. Persons having ever been diagnosed with depression were less likely to agree with this statement (23.7%) than those having never received such a diagnosis (49.1%).

Health Care Access & Utilization

Access to health care is essential to good health. Multiple dimensions of health care access were covered in the Nashville Community Health + Well-being Survey. Key findings are presented in this section.

Health Insurance Coverage

An important indicator of health care access is having health insurance coverage. Among Davidson County adults, 90.1% reported currently having health insurance (Table 7). Those with health insurance reported coverage through a variety of programs, including employer or union plans (48.4%, se=2.1), purchased plans (8.2%, se=1.5), Medicare (26.8%, se=1.7), Medicaid (6.5%, se=1.2), TRICARE, BA or military plans (2.1, se=0.5), and other sources (3.0, se=0.5); data not included in tables. Health insurance coverage varied by race/ethnicity, with Hispanic/Latinos reporting lower coverage (67.0%), compared to all other groups, each of which enjoyed insurance coverage rates above 90%. Health insurance coverage also increased with educational achievement, varying from 78.4% among adults with less than a high school degree, to 98.8% among persons with a graduate or professional degree. A large difference in health insurance coverage was also found by sexual orientation, with minority groups (70.3%) and heterosexuals (92.5%). Of those currently with health insurance, 6.7% (se = 1.2) reported that there had been a time in the past 12 months when they did not have health insurance coverage (data not included in tables).

Table 7: Health Care Access & Utilization in Davidson County by Demographic Characteristics (cont. next page)

	Health Insurance Coverage			Have personal doctor or health care provider			Visited doctor for routine checkup within past year		
	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	%	(se)
Total Sample	*(1749)*	90.1	(1.4)	*(1799)*	67.5	(2.1)	*(1798)*	64.7	(2.1)
Gender									
Female	*(1145)*	90.9	(1.5)	*(1183)*	72.0	(2.3)	*(1183)*	72.0	(2.2)
Male	*(604)*	89.4	(2.5)	*(616)*	62.5	(3.6)	*(615)*	56.7	(3.6)
Age									
18-29	*(280)*	88.6	(4.1)	*(280)*	38.0	(5.3)	*(280)*	40.6	(5.2)
30-49	*(611)*	86.4	(2.5)	*(616)*	64.3	(3.2)	*(617)*	63.8	(3.1)
50-64	*(415)*	90.5	(2.4)	*(417)*	82.0	(3.3)	*(416)*	72.8	(3.7)
65 and older	*(376)*	99.7	(0.3)	*(414)*	94.6*	(1.5)	*(415)*	86.2*	(2.7)
Race/Ethnicity									
African American	*(387)*	94.2	(1.8)	*(407)*	70.4	(4.5)	*(407)*	79.7	(3.5)
Hispanic/Latino	*(114)*	67.0	(5.5)	*(116)*	47.7	(8.9)	*(116)*	46.1	(8.5)
White, non-Hispanic	*(1096)*	92.1	(1.6)	*(1118)*	71.6	(2.5)	*(1118)*	61.6	(2.6)
Mixed/other	*(95)*	91.9*	(4.7)	*(98)*	49.6	(8.3)	*(98)*	56.7*	(8.1)
Education									
Less than high school	*(89)*	78.4	(5.7)	*(99)*	67.8	(6.5)	*(98)*	67.5	(6.5)
High school graduate/GED	*(219)*	86.3	(4.0)	*(229)*	68.1	(5.8)	*(232)*	67.3	(5.7)
Some college, no degree	*(375)*	86.2	(3.1)	*(383)*	65.8	(4.2)	*(382)*	59.2	(4.2)
College graduate	*(587)*	96.8	(0.9)	*(597)*	63.3	(3.2)	*(596)*	59.9	(3.1)
Graduate/professional degree	*(421)*	98.8*	(0.6)	*(428)*	76.4	(3.1)	*(428)*	74.5	(3.1)
Employment Status									
Employed	*(1092)*	91.0	(1.6)	*(1096)*	62.0	(2.8)	*(1096)*	59.7	(2.8)
Unemployed	*(578)*	88.4	(3.0)	*(615)*	79.1*	(3.1)	*(615)*	73.4	(3.2)
Annual Household Income									
Less than $25,000	*(353)*	81.7	(3.2)	*(371)*	67.8	(4.0)	*(371)*	68.4	(3.7)
$25,000 to less than $50,000	*(410)*	87.3	(4.3)	*(426)*	60.0	(5.3)	*(425)*	59.3	(5.3)
$50,000 to less than $75,000	*(317)*	93.2	(2.7)	*(320)*	67.1	(4.6)	*(319)*	59.7	(4.7)
$75,000 to less than $100,000	*(184)*	97.3	(1.3)	*(187)*	68.3	(6.4)	*(186)*	61.4	(6.3)
$100,000 and greater	*(346)*	96.3	(2.0)	*(349)*	74.6	(4.3)	*(349)*	73.9	(3.4)

Table 7: Health Care Access & Utilization in Davidson County by Demographic Characteristics (cont.)

	Health Insurance Coverage			Have personal doctor or health care provider			Visited doctor for routine checkup within past year		
	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	%	(se)
Sexual Orientation									
Heterosexual	*(1548)*	92.5	(1.1)	*(1590)*	69.1	(2.2)	*(1592)*	65.9	(2.2)
Gay-lesbian-bisexual	*(104)*	70.3*	(9.7)	*(105)*	60.4	(8.9)	*(103)*	45.6	(8.3)
Davidson County Zone									
East	*(323)*	*92.3*	(2.3)	*(339)*	70.5	(4.2)	*(371)*	65.0	(4.9)
Nashville Promise Zone	*(350)*	*83.7*	(3.7)	*(361)*	62.3	(4.2)	*(425)*	55.3	(4.4)
North West	*(242)*	*86.9*	(5.4)	*(250)*	79.5	(5.6)	*(319)*	75.9	(5.8)
South East	*(469)*	*90.1*	(3.1)	*(479)*	63.0	(4.7)	*(186)*	63.6	(4.6)
South West	*(365)*	*94.4*	(2.0)	*(370)*	69.7	(4.1)	*(349)*	69.5	(3.4)
Health Insurance Coverage									
Yes	--	--	--	*(1608)*	71.6	(2.2)	*(1592)*	68.9	(2.2)
No	--	--	--	*(137)*	24.0*	(6.1)	*(103)*	21.4*	(5.0)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*p<.001

Note: Question wordings include the following:
Health Insurance Coverage: "What it the primary source of your health care coverage? Is it … a plan purchased through an employer or union, a plan that you or another family member buys on your own, Medicare, Medicaid or other state program, TRICARE (formerly CHAMPUS), VA, or military, Alaska Native, Indian Health Service, Tribal Health Services, Some other source, none (no coverage)."
Have personal doctor or health care provider: "Do you have one person you think of as your personal doctor or health care provider?"
Visited doctor for routine checkup within past year: "About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition."

Personal Physician

Among adults in Davidson County, 67.5% indicating having a personal doctor or health care provider (Table 7). Having a personal provider increased with age, from 38.0% among adults aged 18-29 years, to 94.6% among those aged 65 and older. Unexpectedly, unemployed adults were more likely to report having a personal doctor or health care provider (79.1%) than were employed persons (62.0%). The relationship between health insurance coverage and having a personal doctor or other health care provider was also examined in Table 7. Those with insurance coverage were much more likely to report having a personal health care provider (71.6%), in contrast to those not covered by health insurance (24.0%).

Past Year Routine Check-Up

Just under two-thirds of Davidson County adults (64.7%) reported having visited a physician for a routine check-up within the past year. Routine check-ups increased with age, ranging from 40.6% of adults aged 18-29 years, to 86.2% of those aged 65 and older. Routine check-ups varied also by race/ethnicity. African Americans were most likely to have had a routine check-up in the past year (79.7%) and Hispanic/Latinos were least likely to have had a routine check-up in the past year (46.1%). Health insurance coverage was again strongly associated with this measure, as 68.9% of those with insurance reported a past year routine check-up, compared to only 21.4% of those adults who did not enjoy health insurance coverage.

Barriers to Health Care

Several common barriers to receipt of health care were explored. These included cost, and obtaining appointments and transportation. Findings are provided in Table 8.

Cost Barriers to Medical Care

Respondents were asked "*Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?*" In Davidson County, 16.4% of adults indicated that cost kept them from seeing a doctor during the past 12 months. Cost barriers were primarily concentrated among persons without health insurance. About sixty-one percent of adults without current health coverage reported not seeing a doctor due to cost (60.9%). Almost twelve percent of those with health insurance also reported not seeing a doctor during the past 12 months due to cost (11.8%). Additional questions concerning cost and financial barriers can be found in Table 9.

Table 8: Barriers to Seeing a Physician during Past 12 Months in Davidson County by Demographic Characteristics (cont. next page)

	Cost			Appointment Problems			Transportation Problems		
	(*n*)	Mean	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1788)*	16.4	(1.5)	*(1760)*	13.3	(1.3)	*(1760)*	2.9	(0.7)
Gender									
Female	*(1177)*	17.3	(1.9)	*(1152)*	17.1	(2.1)	*(1152)*	3.6	(0.9)
Male	*(611)*	15.4	(2.5)	*(608)*	9.2	(1.5)	*(608)*	2.2	(1.0)
Age									
18-29	*(280)*	19.3	(4.1)	*(278)*	16.8	(3.1)	*(278)*	3.1	(1.3)
30-49	*(614)*	21.1	(2.7)	*(608)*	14.9	(2.0)	*(608)*	2.5	(1.3)
50-64	*(414)*	16.6	(3.1)	*(403)*	14.8	(4.1)	*(403)*	0.7	(0.3)
65 and older	*(410)*	4.5	(1.5)	*(401)*	4.9	(1.5)	*(401)*	4.7	(1.8)
Race/Ethnicity									
African American	*(400)*	15.8	(2.7)	*(391)*	14.6	(3.6)	*(391)*	4.7	(1.3)
Hispanic/Latino	*(116)*	27.4	(7.6)	*(114)*	19.3	(5.0)	*(114)*	6.0	(4.1)
White, non-Hispanic	*(1118)*	14.7	(1.9)	*(1100)*	11.3	(1.3)	*(1100)*	1.9	(0.7)
Mixed/other	*(96)*	18.1	(6.2)	*(97)*	18.1	(5.6)	*(97)*	0.4	(0.4)
Education									
Less than high school	*(100)*	20.2	(6.0)	*(93)*	16.3	(4.6)	*(93)*	11.7	(5.5)
High school graduate/GED	*(228)*	13.9	(3.1)	*(225)*	10.3	(3.5)	*(225)*	4.6	(1.6)
Some college, no degree	*(380)*	25.7	(3.9)	*(373)*	11.9	(2.4)	*(373)*	2.0	(0.7)
College graduate	*(594)*	13.2	(2.1)	*(586)*	15.3	(2.2)	*(586)*	0.8	(0.6)
Graduate/professional degree	*(424)*	8.8	(2.1)	*(423)*	16.4	(2.9)	*(423)*	0.5*	(0.4)
Employment Status									
Employed	*(1090)*	18.6	(2.1)	*(1077)*	14.9	(1.9)	*(1077)*	0.9	(0.4)
Unemployed	*(613)*	11.8	(2.1)	*(600)*	11.0	(1.8)	*(600)*	6.0*	(1.6)
Annual Household Income									
Less than $25,000	*(370)*	23.2	(3.4)	*(356)*	19.2	(3.0)	*(356)*	8.4	(2.3)
$25,000 to less than $50,000	*(418)*	22.1	(3.7)	*(416)*	13.3	(3.9)	*(416)*	1.3	(0.7)
$50,000 to less than $75,000	*(319)*	16.8	(3.7)	*(316)*	10.7	(2.3)	*(316)*	0.0	--
$75,000 to less than $100,000	*(186)*	15.7	(6.4)	*(185)*	13.7	(3.9)	*(185)*	0.5	(0.5)
$100,000 and greater	*(348)*	4.0	(1.4)	*(345)*	11.4	(2.4)	*(345)*	0.3*	(0.3)
Health Insurance Coverage									
Yes	*(1600)*	11.8	(1.4)	*(1579)*	13.1	(1.4)	*(1579)*	3.2	(0.8)
No	*(135)*	60.9*	(7.8)	*(135)*	14.3	(4.4)	*(135)*	0.8	(0.5)

Table 8: Barriers to Seeing a Physician during Past 12 Months in Davidson County by Demographic Characteristics (cont.)

	Cost			Appointment Problems			Transportation Problems		
	(*n*)	Mean	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Sexual Orientation									
Heterosexual	*(1580)*	14.8	(1.6)	*(1561)*	13.1	(1.5)	*(1561)*	2.5	(0.6)
Gay-lesbian-bisexual	*(105)*	28.5	(7.4)	*(101)*	17.8	(5.4)	*(101*	3.3	(2.8)
Davidson County Zone									
East	*(337)*	18.2	(3.9)	*(331)*	90.8	(2.0)	*(331)*	2.8	(1.2)
Nashville Promise Zone	*(358)*	25.4	(4.1)	*(348)*	84.3	(2.9)	*(348)*	8.0	(2.8)
North West	*(251)*	14.2	(4.9)	*(248)*	83.4	(7.8)	*(248)*	2.0	(0.9)
South East	*(475)*	13.9	(2.4)	*(467)*	87.5	(2.2)	*(467)*	2.1	(0.0)
South West	*(367)*	10.6	(2.1)	*(366)*	84.9	(2.6)	*(366)*	0.2*	(0.2)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*p<.001

Note: Question wordings include the following:
Cost – "Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?"
Appointment Problems – "(Other than cost), have you delayed getting needed medical care for any of the following reasons in the past 12 months? (1) you couldn't get through on the telephone, (2) You couldn't get an appointment soon enough, (3) once you got there, you had to wait too long to see the doctor, (4) the (clinic/doctor's) office wasn't open when you go there."
Transportation Difficulties – "(5) you didn't have transportation."

Appointment Problems

Among all adults, 13.3% also reported having some form of difficulty obtaining an appointment as a reason for not seeing a doctor (other than cost). These included not being able to "*get through on the telephone,*" not being able to "*get an appointment soon enough,*" "*having to wait too long to see the doctor,*" and the clinic or doctor's office "*wasn't open*" when they arrived.

Transportation Problems

A smaller proportion of adults in Davidson County (2.9%) reported lack of transportation as a reason (other than cost) for not seeing a doctor when needed during the past 12 months. Transportation problems were concentrated in several population subgroups. Those with less education were more likely to report this problem: 11.7% of those without a high school diplomas, compared to 0.8% and 0.5%, respectively, of adults with college or graduate degrees. Transportation problems were also greater among the unemployed (6.0%), compared to those who were employed (0.9%). Persons with low household income were also more likely to report difficulty with transportation, as 8.4% of those with incomes below $25,000 reported this problem, compared to less than 1.0% of those with household incomes of $50,000 and above. Persons residing in the Nashville Promise Zone were more likely to report transportation problems (8.0%), compared to adults living elsewhere. Additional transportation questions are provided in Table 10.

Cost Barriers to Prescription Medications

Access to needed prescription medicines is an essential element to health maintenance. Cost-related barriers to obtaining needed medications were assessed with a question that asked: "*Not including over the counter (OTC) medications, was there a time in the past 12 months when you did not take your medication as prescribed because of cost?*" As shown on Table 9, within Davidson County, 11.9% of all adults indicated that costs were a reason they had not taken prescription medications at some point during the past year. Younger persons were more likely to report this problem (20.3%), with persons 65 and older least likely (4.4%) to have seen cost as a barrier to needed medications. Persons without health insurance were also much more likely to report cost barriers to obtaining medications (54.6%), relative to those with health insurance (8.9%). Persons residing in the Nashville Promise Zone were also at greater risk of encountering cost barriers to prescription medications (24.2%), compared to persons living in other parts of Davidson County.

Table 9: Cost Barriers to Health Care in Davidson County by Demographic Characteristics (cont. next page)

	Did not take prescription medications because of cost during past 12 months (among those with prescriptions)			Currently have health care bills being paid off over time			Always/usually worried or stressed about money for rent/mortgage during past 12 months			Always/usually worried or stressed about money for nutritious meals during past 12 months		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1454)*	11.9	(1.4)	*(1798)*	22.0	(1.9)	*(1795)*	18.0	(1.7)	*(1792)*	13.9	(1.7)
Gender												
Female	*(999)*	13.2	(1.8)	*(1182)*	23.4	(2.3)	*(1191)*	18.1	(2.0)	*(1179)*	14.4	(1.8)
Male	*(455)*	10.3	(2.2)	*(616)*	20.5	(3.0)	*(614)*	17.9	(2.9)	*(613)*	13.4	(3.1)
Age												
18-29	*(191)*	20.3	(4.4)	*(280)*	17.5	(4.3)	*(280)*	20.3	(4.4)	*(279)*	17.2	(5.3)
30-49	*(465)*	15.0	(2.7)	*(614)*	24.9	(3.0)	*(614)*	21.1	(3.0)	*(616)*	17.5	(2.8)
50-64	*(353)*	7.3	(2.4)	*(417)*	28.8	(4.4)	*(417)*	15.6	(2.9)	*(414)*	10.8	(3.2)
65 and older	*(387)*	4.4*	(1.3)	*(415)*	14.5	(2.8)	*(415)*	12.8	(3.0)	*(414)*	6.6	(2.0)
Race/Ethnicity												
African American	*(341)*	11.5	(2.5)	*(405)*	28.9	(4.3)	*(403)*	22.6	(3.6)	*(402)*	14.2	(2.6)
Hispanic/Latino	*(80)*	20.5	(6.8)	*(115)*	19.0	(5.4)	*(115)*	20.4	(7.3)	*(100)*	20.6	(7.4)
White, non-Hispanic	*(919)*	10.4	(1.8)	*(1120)*	19.8	(2.2)	*(1121)*	16.6	(2.1)	*(1121)*	13.0	(2.5)
Mixed/other	*(65)*	19.6	(8.7)	*(98)*	19.2	(6.7)	*(98)*	8.6	(3.6)	*(96)*	11.0	(4.8)
Education												
Less than high school	*(83)*	14.8	(5.5)	*(99)*	22.5	(6.7)	*(99)*	40.6	(7.8)	*(99)*	30.3	(8.0)
High school graduate/GED	*(193)*	11.9	(3.1)	*(231)*	24.3	(4.6)	*(230)*	16.4	(3.5)	*(231)*	14.6	(4.5)
Some college, no degree	*(307)*	16.3	(3.4)	*(382)*	28.7	(4.1)	*(382)*	25.0	(4.0)	*(380)*	18.6	(3.5)
College graduate	*(462)*	11.7	(2.3)	*(596)*	18.6	(2.5)	*(597)*	12.6	(2.0)	*(594)*	10.3	(2.1)
Graduate/professional degree	*(357)*	4.3	(1.2)	*(428)*	13.2	(2.4)	*(427)*	6.7*	(1.5)	*(428)*	3.2*	(1.0)
Employment Status												
Employed	*(844)*	13.2	(2.0)	*(1096)*	23.7	(2.6)	*(1092)*	17.4	(2.2)	*(1094)*	15.0	(2.4)
Unemployed	*(541)*	10.1	(1.9)	*(614)*	19.7	(2.6)	*(616)*	19.0	(2.7)	*(612)*	11.4	(2.2)

Table 9: Cost Barriers to Health Care in Davidson County by Demographic Characteristics (cont.)

	Did not take prescription medications because of cost during past 12 months (among those with prescriptions)			Currently have health care bills being paid off over time			Always/usually worried or stressed about money for rent/mortgage during past 12 months			Always/usually worried or stressed about money for nutritious meals during past 12 months		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Annual Household Income												
Less than $25,000	*(294)*	18.5	(3.2)	*(368)*	21.8	(3.2)	*(369)*	29.3	(3.8)	*(370)*	19.6	(3.2)
$25,000 to less than $50,000	*(359)*	18.2	(3.8)	*(425)*	27.5	(4.6)	*(424)*	23.1	(3.8)	*(422)*	26.2	(5.2)
$50,000 to less than $75,000	*(234)*	12.4	(3.9)	*(321)*	29.9	(4.9)	*(321)*	16.3	(4.5)	*(321)*	9.7	(3.4)
$75,000 to less than $100,000	*(156)*	2.8	(1.0)	*(187)*	23.2	(6.5)	*(187)*	12.9	(6.4)	*(187)*	11.0	(6.4)
$100,000 and greater	*(287)*	1.9*	(0.7)	*(349)*	12.6	(3.1)	*(348)*	4.0*	(2.5)	*(347)*	0.9*	(0.5)
Health Insurance Coverage												
Yes	*(1319)*	8.9	(1.2)	*(1609)*	21.6	(2.0)	*(1605)*	17.2	(1.8)	*(1601)*	13.3	(1.9)
No	*(80)*	54.6*	(9.3)	*(136)*	27.9	(6.8)	*(134)*	27.6	(6.5)	*(136)*	20.5	(5.8)
Sexual Orientation												
Heterosexual	*(1283)*	10.9	(1.4)	*(1591)*	21.8	(2.0)	*(1582)*	17.6	(1.8)	*(1585)*	13.2	(1.9)
Gay-lesbian-bisexual	*(84)*	23.7	(7.4)	*(105)*	29.4	(7.4)	*(105)*	22.7	(6.5)	*(105)*	20.6	(6.3)
Davidson County Zone												
East	*(257)*	11.5	(3.0)	*(339)*	27.1	(4.4)	*(338)*	21.1	(4.3)	*(341)*	17.1	(4.1)
Nashville Promise Zone	*(287)*	24.2	(4.4)	*(358)*	29.7	(4.4)	*(360)*	27.3	(4.2)	*(358)*	18.3	(3.6)
North West	*(216)*	9.4	(4.0)	*(251)*	19.8	(7.6)	*(251)*	15.7	(5.1)	*(250)*	15.7	(6.2)
South East	*(394)*	10.3	(2.4)	*(479)*	22.0	(3.4)	*(475)*	15.8	(3.1)	*(473)*	13.6	(4.0)
South West	*(300)*	4.8*	(1.6)	*(371)*	10.8*	(2.1)	*(371)*	10.3	(2.1)	*(370)*	6.1	(1.7)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Did not take prescription medications because of cost during past 12 months: "Not including over the counter (OTC) medications, was there a time in the past 12 months when you did not take your medication as prescribed because of cost?" [among persons with prescriptions only]
Currently have health care bills being paid off over time: "Do you currently have any health care bills that are being paid off over time?"
Always/usually worried or stressed about money for rent/mortgage during past 12 months: "How often in the past 12 months would you say you were worried or stressed about having enough money to pay your rent/mortgage? Would you say you were worried or stress always, usually, sometimes, rarely or never?"

Always/usually worried or stressed about money for nutritious meals during past 12 months: "How often in the past 2 months would you say you were worried or stressed about having enough money to buy nutritious meals? Would you say you were worried or stress always, usually, sometimes, rarely or never?"

Unpaid Health Bills

More than one-in-five adults in Davidson County (22.0%) indicated that they currently have "*health care bills that are being paid off over time.*" This varied by zone within the county, with more than one-quarter of Nashville Promise Zone (29.7%) and East Zone (27.1%) residents reporting currently having unpaid medical bills. In South West Davidson County, the proportion of adults having unpaid bills was much lower (10.8%).

Financial Stress

Several questions asked about important aspects of economic stress (Table 9). The first asked "*How often in the past 12 months would you say you were worried or stressed about having enough money to pay your rent/mortgage? Would you say you were worried or stressed always, usually, sometimes, rarely, never?"* Within Davidson County, 18.0% reported being always or usually worried or stressed about their mortgage or rent. The degree of stress varied across education and income groups, as might be expected. Persons with less than a high school degree were most likely to report considerable worry or stress (40.6%), with persons with graduate or professional degrees least likely (6.7%). Similarly, those in the lowest household income group (under $25,000) were most likely to report always or usually worrying or stressed regarding mortgage or rent (29.3%), compared to persons in the highest income category ($100,000 and above), few of whom indicated high levels of stress/worry (4.0%).

A similar question asked about stress associated with having sufficient financial resources to insure a healthy diet: "*How often in the past 12 months would you say you were worried or stressed about having enough money to buy nutritious meals?"* Among adults in Davidson County, 13.9% indicated being always or usually worried or stressed about this. Similar to the previous question about rent/mortgage-related financial stress, the stress related to having the finances to support a healthy diet was greater among persons with lower incomes and less education. The least educated (less than high school) were most likely to be stressed or worried (30.3%), compared to persons with a graduate/professional degree (3.2%). Persons with household incomes below $50,000 were also likely to be stressed or worried about money for nutritious meals (19.6% of those with incomes below $25,000 and 26.2% of those with incomes from $25,000 to less than $50,000). In contrast, very few persons with household incomes of $100,000 or greater reported always or usually being worried or stressed over this (0.9%).

Another question (not shown in tables) asked respondents "*Have you moved in with someone, or has someone moved in with you in the last 12 months to share household expenses?"* Among adults in Davidson County, 14.4% (se = 1.6, *n* = 1,758) did report having to alter their living arrangements in order to reduce/share household expenses. Young adults were most likely to report having to move to share household expenses (29.6%) and persons 65 and above were least likely (3.9%). The unemployed were also more likely to report having to share household expenses (17.5%), compared to persons currently employed (7.8%). Though there is not a consensus on the issue (Schuetz 2019), home ownership has also been associated with more financial security. This study shows that 53.8% of respondents own their

home (se = 2.2), 43.3% rent (se = 2.2), and 3.0% (se = 0.6) report having other living arrangements. Finally, 19.1% of the adults in Davidson County reported having moved at least once during the past 12 months (se=1.6).

Health Care and Transportation

Additional questions regarding transportation are presented in Table 10. A small proportion of adults in Davidson County (2.3%) reported that they found it extremely or very difficult to get transportation for health care. These difficulties were most commonly reported by persons within the lowest education group (13.1% of persons without a high school diploma) and those living in households with income of less than $25,000 (7.9%).

Respondents were also asked "*Does lack of money for transportation expenses, such as parking, cab or bus fare, make it difficult to get to the doctor or dentist?*" Among all Davidson County adults, 8.6% indicated this to be a problem. Persons in the lowest education group (less than high school) were again most likely to report this problem (30.3%). Similarly, persons in the lowest household income group (less than $25,000) also were most likely to report lack of money for health care-related transportation (21.6%). Unemployed persons additionally reported higher risk of having insufficient money for health care transportation (15.0% vs. 4.5% of employed persons). Persons residing in the Nashville Promise Zone were also more likely to report lack of transportation money for this purpose (21.2%), compared to those living in other parts of Davidson County.

A related question asked respondents if they ever "*put off or neglect going to the doctor or dentist because of distance or transportation.*" Among all Davidson County adults, 6.6% indicated they did neglect receiving health care due to distance or transportation. This was again found to be a problem primarily concentrated among persons with less education (14.4% of those with less than a high school degree vs. 1.3% of those with a graduate or professional degree), less household income (14.2% of those earning less than $25,000 vs. 0.5% of those earning $100,000 or more), and the unemployed (11.4% vs. 3.5% of those who were employed).

A final question asked "*Do you put off or neglect going to the pharmacy or doctor to pick up your medication because of distance or transportation?*" Approximately five percent of the sample (4.8%) reported having avoiding accessing needed medications due to distance or transportation concerns. This problem was found to be greatest among persons in households reporting income of less than $25,000 (12.1%).

Table 10: Transportation Barriers to Health Care in Davidson County by Demographic Characteristics (cont. next page)

	Extremely/very difficult to get transportation for any health care			Lack of transportation money makes physician/dentist visit difficult			Neglect physician/dentist visit because of distance or transportation			Neglect getting medication because of distance or transportation		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1766)*	2.3	(0.6)	*(1765)*	8.6	(1.1)	*(1760)*	6.6	(1.0)	*(1764)*	4.8	(0.9)
Gender												
Female	*(1160)*	2.5	(0.8)	*(1159)*	11.1	(1.5)	*(1154)*	7.4	(1.2)	*(1159)*	6.0	(1.2)
Male	*(606)*	2.1	(1.0)	*(606)*	5.8	(1.5)	*(606)*	5.8	(1.5)	*(605)*	3.6	(1.3)
Age												
18-29	*(280)*	2.2	(1.1)	*(280)*	10.3	(2.7)	*(278)*	8.5	(2.4)	*(279)*	9.5	(2.6)
30-49	*(616)*	2.2	(1.2)	*(617)*	9.0	(1.9)	*(613)*	6.4	(1.6)	*(616)*	4.3	(1.4)
50-64	*(417)*	1.4	(1.0)	*(416)*	6.1	(1.7)	*(416)*	4.7	(1.5)	*(417)*	1.4	(0.7)
65 and older	*(415)*	2.6	(1.2)	*(415)*	8.5	(2.4)	*(415)*	7.5	(2.4)	*(414)*	4.4	(1.7)
Race/Ethnicity												
African American	*(403)*	3.9	(1.4)	*(402)*	13.8	(2.6)	*(403)*	9.4	(2.1)	*(403)*	6.2	(1.7)
Hispanic/Latino	*(116)*	5.5	(3.8)	*(116)*	11.3	(4.6)	*(116)*	5.9	(3.7)	*(116)*	6.6	(3.9)
White, non-Hispanic	*(1121)*	0.5	(0.3)	*(1122)*	6.0	(1.2)	*(1119)*	5.4	(1.2)	*(1121)*	4.0	(1.1)
Mixed/other	*(98)*	7.3	(3.9)	*(98)*	4.3	(2.2)	*(98)*	7.8	(3.9)	*(98)*	3.3	(2.1)
Education												
Less than high school	*(99)*	13.1	(5.7)	*(99)*	30.3	(6.8)	*(99)*	14.4	(5.4)	*(99)*	11.3	(5.2)
High school graduate/GED	*(229)*	2.5	(1.1)	*(230)*	10.7	(2.5)	*(229)*	7.3	(2.0)	*(231)*	6.4	(1.9)
Some college, no degree	*(384)*	2.1	(0.9)	*(383)*	8.8	(2.2)	*(382)*	8.7	(2.2)	*(383)*	4.6	(1.8)
College graduate	*(597)*	0.1	(0.1)	*(597)*	2.9	(0.9)	*(595)*	4.8	(1.4)	*(595)*	3.9	(1.2)
Graduate/professional degree	*(427)*	0.4*	(0.3)	*(428)*	2.4*	(0.9)	*(427)*	1.3*	(0.5)	*(428)*	1.0	(0.6)
Employment Status												
Employed	*(1094)*	1.4	(0.6)	*(1095)*	4.5	(1.0)	*(1092)*	3.5	(0.9)	*(1095)*	2.6	(0.8)
Unemployed	*(615)*	3.3	(1.0)	*(616)*	15.0*	(2.3)	*(613)*	11.4*	(2.1)	*(614)*	8.4	(1.8)
Annual Household Income												
Less than $25,000	*(369)*	7.9	(2.3)	*(370)*	21.6	(3.2)	*(367)*	14.2	(2.7)	*(369)*	12.1	(2.6)
$25,000 to less than $50,000	*(424)*	1.1	(0.9)	*(424)*	8.2	(2.5)	*(422)*	8.4	(2.5)	*(424)*	4.7	(1.9)
$50,000 to less than $75,000	*(320)*	0.0	--	*(321)*	1.0	(0.6)	*(321)*	1.1	(0.6)	*(321)*	2.5	(1.3)
$75,000 to less than $100,000	*(187)*	0.4	(0.4)	*(187)*	1.1	(0.6)	*(187)*	0.7	(0.5)	*(187)*	0.1	(0.1)
$100,000 and greater	*(349)*	0.0*	--	*(349)*	0.3*	(0.3)	*(348)*	0.5*	(0.4)	*(349)*	0.3*	(0.3)

Table 10: Transportation Barriers to Health Care in Davidson County by Demographic Characteristics (cont.)

	Extremely/very difficult to get transportation for any health care			Lack of transportation money makes physician/dentist visit difficult			Neglect physician/dentist visit because of distance or transportation			Neglect getting medication because of distance or transportation		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage												
Yes	*(1579)*	2.1	(0.6)	*(1578)*	6.8	(1.0)	*(1574)*	6.1	(1.0)	*(1578)*	4.4	(0.9)
No	*(131)*	4.1	(2.9)	*(131)*	21.2	(5.8)	*(130)*	8.3	(3.8)	*(131)*	8.5	(3.9)
Sexual Orientation												
Heterosexual	*(1588)*	1.9	(0.5)	*(1589)*	8.1	(1.1)	*(1585)*	5.7	(0.9)	*(1589)*	4.5	(0.8)
Gay-lesbian-bisexual	*(105)*	0.1	(0.1)	*(105)*	9.6	(4.7)	*(105)*	10.0	(5.0)	*(105)*	6.0	(4.1)
Davidson County Zone												
East	*(334)*	1.2	(0.7)	*(335)*	7.6	(2.0)	*(332)*	4.9	(1.6)	*(335)*	4.4	(1.4)
Nashville Promise Zone	*(353)*	10.4	(3.0)	*(353)*	21.2	(3.7)	*(350)*	15.3	(3.4)	*(353)*	11.8	(3.0)
North West	*(246)*	0.4	(0.4)	*(245)*	8.2	(4.5)	*(246)*	5.2	(3.5)	*(245)*	4.7	(3.5)
South East	*(468)*	0.3	(0.2)	*(467)*	5.3	(1.4)	*(468)*	5.8	(1.5)	*(467)*	2.7	(1.1)
South West	*(365)*	0.0	--	*(365)*	3.0*	(1.5)	*(364)*	2.6	(1.4)	*(364)*	2.1	(1.3)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019.
*$p<.001$

Note: Question wordings include the following:
Extremely/very difficult to get transportation for any health care: "How difficult is it for you to get transportation to your medical care, including doctor, dentist, or pharmacy?" (extremely difficult, very difficult, somewhat difficult, not very difficult, not at all difficult)
Lack of transportation money makes physician/dentist visit difficult: "Does lack of money for transportation expenses, such as parking, cab or bus fair, make it difficult to get to the doctor or dentist?"
Neglect physician/dentist visit because of distance or transportation: "Do you put off or neglect going to the doctor or dentist because of distance or transportation?"
Neglect getting medication because of distance or transportation: "Do you put off or neglect going to the pharmacy or doctor to pick up your medication because of distance or transportation?"

Health Behaviors

The Nashville Community Health + Well-being Survey also carefully examined a number of important personal behaviors that are known to be strongly associated with various health outcomes. These included personal nutrition, the use of tobacco products, alcohol, prescription pain relievers/tranquilizers, alcohol and drug use treatment, HIV testing and risk factors, firearm ownership, and physical exercise.

Personal Nutrition

Respondents were asked to estimate their weekly consumption of fruit, canned beans, and dark green vegetables. These estimates are provided in Table 11. On average, Davidson County adults reported consuming fresh, frozen or canned fruit 4.7 times per week. Fruit consumption varied across several sociodemographic measures, including race/ethnicity. Overall, non-Hispanic whites reported the highest weekly average fruit consumption (5.3 times per week) and Hispanic/Latinos reported the lowest average consumption levels (3.5 times per week). Fruit consumption also varied by education and household income levels. Consumption was greatest among persons with graduate/professional degrees (6.4 times per week); and it was lowest among those with a high school education or with some college, but no degree who reported fruit consumption an average of 4.0 and 4.1 times per week, respectively. Persons in high income households (earning $100,000 or greater) reported consuming fruit 5.5 times per week, while those in households earning less than $25,000 reported fruit consumption 4.0 times per week. In addition, fruit consumption was higher among residents in South West Davidson County (6.3 times per week) and lowest in the East zone (3.7 times per week).

Table 11: Consumption of Healthy Foods in Davidson County by Demographic Characteristics (cont. next page)

	Number of times consumed fresh, frozen or canned fruit during the past week			Number of times consumed cooked or canned beans during the past week			Number of times consumed dark green vegetables during the past week		
	(*n*)	Mean	(se)	(*n*)	Mean	(se)	(*n*)	Mean	(se)
Total Sample	*(1784)*	4.7	(0.2)	*(1775)*	2.5	(0.1)	*(1782)*	3.7	(0.1)
Gender									
Female	*(1172)*	5.0	(0.2)	*(1167)*	2.5	(0.2)	*(1171)*	3.9	(0.2)
Male	*(612)*	4.4	(0.2)	*(608)*	2.5	(0.2)	*(611)*	3.4	(0.2)
Age									
18-29	*(279)*	4.4	(0.3)	*(277)*	2.1	(0.2)	*(278)*	3.6	(0.3)
30-49	*(616)*	4.8	(0.3)	*(610)*	2.6	(0.3)	*(611)*	4.1	(0.3)
50-64	*(414)*	4.6	(0.3)	*(414)*	2.6	(0.2)	*(414)*	3.4	(0.2)
65 and older	*(408)*	5.0	(0.3)	*(408)*	2.6	(0.2)	*(413)*	3.2*	(0.2)
Race/Ethnicity									
African American	*(402)*	3.9	(0.4)	*(396)*	2.2	(0.3)	*(402)*	3.5	(0.3)
Hispanic/Latino	*(116)*	3.5	(0.4)	*(114)*	2.4	(0.3)	*(113)*	2.7	(0.3)
White, non-Hispanic	*(1112)*	5.3	(0.2)	*(111)*	2.7	(0.1)	*(1115)*	4.0	(0.2)
Mixed/other	*(98)*	4.9*	(0.4)	*(95)*	2.6	(0.3)	*(97)*	3.3*	(0.4)
Education									
Less than high school	*(97)*	4.5	(1.0)	*(93)*	3.4	(1.0)	*(95)*	3.4	(1.0)
High school graduate/GED	*(226)*	4.0	(0.3)	*(227)*	2.4	(0.2)	*(226)*	3.0	(0.2)
Some college, no degree	*(379)*	4.1	(0.3)	*(380)*	2.4	(0.2)	*(381)*	3.3	(0.2)
College graduate	*(596)*	5.0	(0.3)	*(593)*	2.2	(0.2)	*(594)*	4.3	(0.2)
Graduate/professional degree	*(426)*	6.4*	(0.3)	*(424)*	2.8*	(0.2)	*(428)*	4.8*	(0.2)
Employment Status									
Employed	*(1091)*	4.8	(0.2)	*(1091)*	2.5	(0.2)	*(1091)*	3.9	(0.2)
Unemployed	*(607)*	4.5	(0.2)	*(602)*	2.5	(0.1)	*(607)*	3.2*	(0.2)
Annual Household Income									
Less than $25,000	*(368)*	4.0	(0.4)	*(364)*	2.9	(0.4)	*(363)*	3.4	(0.4)
$25,000 to less than $50,000	*(420)*	4.5	(0.2)	*(422)*	2.1	(0.1)	*(423)*	3.1	(0.2)
$50,000 to less than $75,000	*(319)*	5.0	(0.4)	*(318)*	2.5	(0.2)	*(321)*	4.1	(0.3)
$75,000 to less than $100,000	*(186)*	5.1	(0.5)	*(186)*	2.2	(0.2)	*(186)*	3.9	(0.4)
$100,000 and greater	*(347)*	5.5*	(0.3)	*(345)*	2.8*	(0.1)	*(346)*	4.4*	(0.2)

Table 11: Consumption of Healthy Foods in Davidson County by Demographic Characteristics (cont.)

	Number of times consumed fresh, frozen or canned fruit during the past week			Number of times consumed cooked or canned beans during the past week			Number of times consumed dark green vegetables during the past week		
	(*n*)	Mean	(se)	(*n*)	Mean	(se)	(*n*)	mean	(se)
Health Insurance Coverage									
Yes	*(1595)*	4.8	(0.1)	*(1588)*	2.4	(0.9)	*(1595)*	3.7	(0.1)
No	*(135)*	4.8	(0.8)	*(135)*	3.8*	(0.8)	*(133)*	3.5	(0.9)
Sexual Orientation									
Heterosexual	*(1578)*	4.8	(0.2)	*(1576)*	2.5	(0.1)	*(1578)*	3.8	(0.2)
Gay-lesbian-bisexual	*(105)*	3.8	(0.3)	*(105)*	2.6	(0.4)	*(105)*	3.3	(0.5)
Davidson County Zone									
East	*(337)*	3.7	(0.2)	*(339)*	2.4	(0.2)	*(338)*	3.2	(0.2)
Nashville Promise Zone	*(359)*	4.4	(0.4)	*(352)*	3.0	(0.5)	*(359)*	3.9	(0.4)
North West	*(246)*	4.7	(0.5)	*(249)*	2.4	(0.3)	*(247)*	3.5	(0.3)
South East	*(475)*	4.6	(0.3)	*(470)*	2.2	(0.2)	*(471)*	3.3	(0.2)
South West	*(367)*	6.3*	(0.3)	*(365)*	2.8*	(0.2)	*(367)*	4.6*	(0.3)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Number of times consumed fresh, frozen or canned fruit during the past week – "During the past week, how many times did you eat fruit? Count fresh, frozen or canned."
Number of times consumed cooked or canned beans during the past week – "During the past week, how many times did you eat cooked or canned beans, such as refried, baked, black, garbanzo beans, beans in soup, soybeans, edamame, tofu or lentils?"
Number of times consumed dark green vegetables during the past week – "During the past week, how many times did you eat dark green vegetables for example broccoli or dark leafy greens including romaine, chard, collard greens or spinach?"

Davidson County adult residents reported consumption of cooked or canned beans an average of 2.5 times per week (Table 11). Consumption was greater among the least educated (less than high school) residents (3.4 times per week) and lowest among persons with a college degree (2.2 times per week). In terms of household income, those in the lowest and highest income groups reported the most bean consumption (2.9 and 2.8 times per week among those with household incomes below $25,000 and $100,000 and above, respectively). Persons lacking health insurance also reported greater average consumption of cooked or canned beans (3.8 times per week), compared to those with health insurance (2.4 times per week). Those residing in the Nashville Promise Zone reported a higher average weekly consumption of beans (3.0 times per week) than did those living elsewhere in the county.

When asked about weekly consumption of dark green vegetables, Davidson County adults reported consuming them an average of 3.7 times per week (Table 11). Those most likely to consume these types of vegetables included persons aged 30-49 years (4.1 times per week), non-Hispanic whites (4.0 times), persons with graduate or professional degrees (4.8 times), those currently employed (3.9 times), persons with household incomes exceeding $100,000 per year (4.4 times), and persons living in the South West zone of Davidson County (4.6 times per week).

Forty-four percent of adult residents in Davidson County indicated they were currently watching or reducing their intake of sodium or salt (Table 12). African Americans were most likely to report watching/reducing their salt intake (63.8%), and non-Hispanic whites were least likely (35.3%). Concern with salt/sodium intake was greater among persons with less education. Of those without a high school degree, 61.1% reported watching/reducing their salt intake, whereas only 35.6% of those with graduate or professional training indicated doing so. Unemployed persons were also more likely (55.6%) than those employed (37.6%) to be currently watching or reducing their salt/sodium intake. Those with less household income were additionally more likely (56.8%) than those with high income levels (30.7%) to express concern with their salt consumption.

Table 12: Other Nutrition Behaviors in Davidson County by Demographic Characteristics (cont. next page)

	Currently watching or reducing sodium or salt intake			Extremely/very difficult to get transportation to store that sells healthy food			Number of times drank regular soda or pop that contains sugar during the past week		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	Mean	(se)
Total Sample	*(1798)*	44.0	(2.1)	*(1792)*	2.5	(0.6)	*(1779)*	1.9	(0.2)
Gender									
Female	*(1184)*	44.1	(2.5)	*(1180)*	2.8	(0.8)	*(1169)*	1.8	(0.1)
Male	*(614)*	43.9	(3.4)	*(612)*	2.3	(0.8)	*(610)*	2.0	(0.3)
Age									
18-29	*(279)*	25.5	(4.7)	*(280)*	1.1	(0.7)	*(279)*	2.5	(0.6)
30-49	*(616)*	37.1	(3.3)	*(613)*	2.0	(0.8)	*(615)*	1.8	(0.2)
50-64	*(418)*	56.3	(4.1)	*(417)*	2.6	(1.2)	*(416)*	1.9	(0.2)
65 and older	*(416)*	65.5	(3.6)	*(418)*	4.6	(1.7)	*(407)*	1.4*	(0.2)
Race/Ethnicity									
African American	*(407)*	63.8	(4.3)	*(406)*	2.5	(0.9)	*(400)*	2.0	(0.2)
Hispanic/Latino	*(115)*	43.0	(8.7)	*(111)*	2.1	(1.8)	*(115)*	2.6	(0.7)
White, non-Hispanic	*(1123)*	35.3	(2.3)	*(1123)*	2.3	(0.7)	*(1115)*	1.8	(0.2)
Mixed/other	*(98)*	41.0*	(8.2)	*(98)*	5.8	(3.7)	*(97)*	1.1*	(0.3)
Education									
Less than high school	*(100)*	61.1	(7.3)	*(97)*	9.7	(3.6)	*(97)*	3.0	(0.3)
High school graduate/GED	*(233)*	49.2	(5.5)	*(231)*	4.4	(1.6)	*(227)*	3.1	(0.5)
Some college, no degree	*(384)*	48.3	(4.0)	*(384)*	1.5	(0.9)	*(379)*	1.7	(0.2)
College graduate	*(596)*	32.7	(2.9)	*(596)*	0.6	(0.3)	*(593)*	1.1	(0.1)
Graduate/professional degree	*(426)*	35.6*	(3.5)	*(427)*	0.7*	(0.5)	*(427)*	1.1*	(0.2)
Employment Status									
Employed	*(1095)*	37.6	(2.6)	*(1092)*	0.9	(0.5)	*(1093)*	1.9	(0.2)
Unemployed	*(617)*	55.6*	(3.2)	*(618)*	4.9	(1.2)	*(605)*	1.9	(0.3)
Annual Household Income									
Less than $25,000	*(371)*	56.8	(4.0)	*(369)*	7.6	(1.9)	*(363)*	2.7	(0.3)
$25,000 to less than $50,000	*(426)*	50.3	(5.1)	*(422)*	2.1	(1.1)	*(424)*	2.5	(0.6)
$50,000 to less than $75,000	*(320)*	40.0	(4.3)	*(321)*	0.0	--	*(320)*	1.5	(0.2)
$75,000 to less than $100,000	*(187)*	35.6	(5.4)	*(187)*	0.0	--	*(186)*	0.9	(0.2)
$100,000 and greater	*(187)*	30.7*	(3.8)	*(349)*	0.3*	(0.3)	*(348)*	1.0*	(0.2)

Table 12: Other Nutrition Behaviors in Davidson County by Demographic Characteristics (cont.)

	Currently watching or reducing sodium or salt intake			Extremely/very difficult to get transportation to store that sells healthy food			Number of times drank regular soda or pop that contains sugar during the past week		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	mean	(se)
Health Insurance Coverage									
Yes	*(1607)*	42.9	(2.2)	*(1604)*	2.5	(0.6)	*(1593)*	1.8	(0.2)
No	*(135)*	47.5	(7.7)	*(134)*	2.4	(1.3)	*(134)*	3.3*	(0.7)
Sexual Orientation									
Heterosexual	*(1591)*	45.1	(2.2)	*(1591)*	2.3	(0.5)	*(1578)*	1.8	(0.2)
Gay-lesbian-bisexual	*(105)*	27.6	(9.0)	*(105)*	0.5*	(0.1)	*(105)*	3.2*	(0.8)
Davidson County Zone									
East	*(341)*	36.8	(4.1)	*(338)*	1.0	(0.6)	*(334)*	2.5	(0.3)
Nashville Promise Zone	*(361)*	47.6	(4.4)	*(360)*	9.2	(2.6)	*(354)*	2.1	(0.2)
North West	*(250)*	65.9	(6.3)	*(251)*	1.3	(0.7)	*(249)*	1.6	(0.2)
South East	*(478)*	43.9	(4.2)	*(474)*	1.3	(0.6)	*(474)*	2.2	(0.5)
South West	*(368)*	39.1	(3.9)	*(369)*	0.5	(0.4)	*(368)*	0.8*	(0.1)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Currently watching or reducing sodium or salt intake – "Are you currently watching or reducing your sodium or salt intake?"
Extremely/very difficult to get transportation to store that sells healthy food – "How difficult is it for you to get transportation to a store that sells healthy food, such as fresh fruits and vegetables?" (Extremely difficult, very difficult, somewhat difficult, not very difficult, not at all difficult)
Number of times drank regular soda or pop that contains sugar during the past week – "During the past week, how many times did you drink regular soda or pop that contains sugar? Do not include diet soda or diet pop."

Adults in Davidson County reported consuming regular soda or pop that contains sugar, on average, 1.9 times during the past week. Several population subgroups reported drinking greater amounts of sugar-containing soft drinks. These included persons aged 18-29 (2.5 times), Hispanic/Latino (2.6 times), those with no more than a high school education (3.0-3.1 times), those with household incomes below $50,000 (2.5-2.7 times), those without health insurance coverage (3.3 times), sexual minority groups (3.2 times), and persons living in the East zone of Davidson County (2.5 times).

When asked how difficult it is to get transportation to a store that sells healthy food, such as fresh fruits and vegetables, a small proportion of the adults in Davidson County (2.5%) indicated that it was extremely or very difficult to do so. Low education and low household income were both associated with increased likelihood of having difficulty getting transportation to stores that sell healthy food. Specifically, 9.7% of those with less than a high school degree (compared to 0.7% of those with graduate/professional degrees) and 7.6% of those in households with incomes below $25,000 (compared to 0.3% of those in households with incomes exceeding $100,000) were more likely to report such difficulties. Persons belonging to sexual minority groups were less likely (0.5%) than heterosexuals (2.3%) to report high levels of difficulty obtaining transportation for the purchase of healthy food.

Tobacco Use

In Davidson County, 66.5% (se = 2.0) of adults reported lifetime cigarette use (of at least 100 cigarettes; data not shown in tables). Current (every day) cigarette smokers represented 7.8% of all adults in the county (Table 13). Current smoking varied by level of education, as 23.6% of persons not completing high school reported every day cigarette use. The prevalence dropped with increasing education, with only 1.5% of persons with graduate/professional degrees currently smoking. Current cigarette use also varied across areas of Davidson County, ranging from 17.3% in the East zone to 2.9% in the South West.

Table 13 additionally provides estimates of persons who currently smoke, but not every day. These “some days” smokers represent 5.4% of the adults in Davidson County. When combined with “every day” smokers, it can be estimated that 13.2% of all adults in the County currently smoke every day or some days.

Table 13: Current Tobacco Use Behaviors in Davidson County by Demographic Characteristics (cont. next page)

	Current (every day) cigarette smoker			Current (some days) cigarette smoker			Current user (every day or some days) of chewing tobacco, snuff or snus		
	(*n*)	%	(se)				(*n*)	%	(se)
Total Sample	*(1791)*	7.8	(1.1)	*(1790)*	5.4	(1.4)	*(1786)*	2.3	(0.6)
Gender									
Female	*(1177)*	7.3	(1.3)	*(1177)*	2.5	(0.6)	*(1175)*	0.1	(0.1)
Male	*(614)*	8.3	(1.8)	*(613)*	8.6	(2.8)	*(611)*	4.7*	(1.3)
Age									
18-29	*(280)*	3.1	(1.3)	*(280)*	9.1	(5.3)	*(280)*	0.8	(0.7)
30-49	*(615)*	8.2	(2.1)	*(615)*	4.9	(1.4)	*(616)*	3.8	(1.3)
50-64	*(417)*	13.4	(2.7)	*(416)*	4.5	(1.9)	*(415)*	2.4	(1.8)
65 and older	*(414)*	7.2	(2.3)	*(414)*	3.6	(1.4)	*(412)*	1.5	(1.0)
Race/Ethnicity									
African American	*(405)*	7.4	(2.0)	*(404)*	4.4	(1.6)	*(403)*	0.5	(0.5)
Hispanic/Latino	*(114)*	4.3	(4.3)	*(114)*	7.7	(6.5)	*(113)*	3.6	(3.5)
White, non-Hispanic	*(1121)*	8.9	(1.6)	*(1121)*	5.8	(2.1)	*(1120)*	2.9	(0.9)
Mixed/other	*(98)*	4.3	(3.0)	*(98)*	3.9	(2.8)	*(98)*	1.7	(1.7)
Education									
Less than high school	*(98)*	23.6	(7.7)	*(98)*	9.0	(3.4)	*(96)*	6.3	(4.6)
High school graduate/GED	*(231)*	11.2	(2.7)	*(230)*	5.4	(4.0)	*(231)*	2.2	(1.6)
Some college, no degree	*(384)*	8.2	(1.9)	*(384)*	7.9	(3.2)	*(382)*	0.7	(0.7)
College graduate	*(594)*	2.3	(0.7)	*(594)*	3.5	(1.1)	*(596)*	3.4	(1.2)
Graduate/professional degree	*(428)*	1.5*	(0.7)	*(428)*	2.8	(1.2)	*(426)*	1.5	(0.8)
Employment Status									
Employed	*(1095)*	6.8	(1.1)	*(1095)*	6.8	(2.1)	*(1094)*	2.6	(0.8)
Unemployed	*(614)*	9.3	(1.9)	*(613)*	3.3	(0.9)	*(612)*	0.7	(0.6)
Annual Household Income									
Less than $25,000	*(368)*	15.3	(3.0)	*(368)*	4.9	(1.4)	*(366)*	2.4	(1.6)
$25,000 to less than $50,000	*(425)*	6.2	(2.0)	*(424)*	8.0	(4.8)	*(423)*	1.7	(0.9)
$50,000 to less than $75,000	*(321)*	8.5	(3.2)	*(321)*	4.1	(2.1)	*(321)*	2.8	(2.1)
$75,000 to less than $100,000	*(187)*	4.1	(1.9)	*(187)*	6.9	(6.4)	*(187)*	1.5	(1.0)
$100,000 and greater	*(349)*	1.1*	(0.6)	*(349)*	4.8	(2.2)	*(349)*	2.9	(1.2)

Table 13: Current Tobacco Use Behaviors in Davidson County by Demographic Characteristics (cont.)

	Current (every day) cigarette smoker			Current (some days) cigarette smoker			Current user (every day or some days) of chewing tobacco, snuff or snus		
	(*n*)	%	(se)				(*n*)	%	(se)
Health Insurance Coverage									
Yes	*(1602)*	6.7	(1.1)	*(1601)*	5.3	(1.5)	*(1596)*	2.5	(0.7)
No	*(134)*	16.4	(5.1)	*(134)*	7.6	(4.0)	*(135)*	0.4	(0.3)
Sexual Orientation									
Heterosexual	*(1588)*	7.7	(1.2)	*(1587)*	5.5	(1.6)	*(1585)*	2.2	(0.6)
Gay-lesbian-bisexual	*(105)*	8.0	(3.5)	*(105)*	7.8	(4.7)	*(105)*	0.0	--
Davidson County Zone									
East	*(338)*	17.3	(3.6)	*(338)*	9.0	(3.4)	*(338)*	1.8	(0.9)
Nashville Promise Zone	*(359)*	8.3	(2.6)	*(358)*	5.1	(2.2)	*(359)*	3.7	(2.1)
North West	*(250)*	6.1	(3.2)	*(250)*	3.0	(1.6)	*(248)*	1.8	(1.3)
South East	*(475)*	4.0	(1.2)	*(475)*	4.9	(3.7)	*(474)*	1.6	(1.3)
South West	*(369)*	2.9*	(1.1)	*(369)*	3.6	(1.2)	*(367)*	2.7	(1.1)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
**p<.001*

Note: Question wordings include the following:
Current cigarette smoker – "Do you now smoke cigarettes every day, some days, or not at all?"
Current user of chewing tobacco, snuff or snus – "Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all?"

Current use of chewing tobacco, snuff, or snus (Swedish for snuff, a moist smokeless tobacco that is usually sold in small pouches that are placed under the lip or against the gum), either every day or some days, was reported by 2.3% of the adults in Davidson County. Males were more likely to use these products (4.7%) than were females (0.1%).

Vaping

Electronic cigarettes, also known as e-cigarettes, and other electronic vaping products have increased in popularity in recent years (Kuehn, 2019). In Davidson County, 25.3% (se = 2.0) of all adults reported lifetime use, defined as even once, of vaping product (data not shown in tables). The every day prevalence of current e-cigarette and other vaping product use was 1.9% (Table 14). Although use of these products was not strongly associated with any sociodemographic measures, we nonetheless note that young adults aged 18-29 were found to report higher levels (9.5%) of current use, as were those currently without health insurance (17.0%) and persons considered to be sexual minorities (13.8%).

Most current users of these products do not use them every day. As Table 14 also demonstrates, a majority of e-cigarette (and related products) users indicate using them some days, rather than on a daily basis.

Table 14: Current E-Cigarette or Vaping Use Behaviors in Davidson County by Demographic Characteristics (cont. next page)

	Current (every day) user of e-cigarettes or electronic vaping products			Current (some days) user of e-cigarettes or electronic vaping products		
	(*n*)	%	(se)			
Total Sample	*(1792)*	1.9	(0.5)	*(1792)*	4.7	(1.3)
Gender						
Female	*(1180)*	0.6	(0.4)	*(1180)*	3.9	(1.0)
Male	*(612)*	3.4	(1.0)	*(612)*	5.6	(2.5)
Age						
18-29	*(279)*	4.2	(1.8)	*(279)*	9.5	(4.9)
30-49	*(616)*	0.8	(0.4)	*(616)*	5.2	(1.5)
50-64	*(418)*	1.9	(0.8)	*(418)*	1.6	(1.0)
65 and older	*(416)*	1.7	(1.7)	*(416)*	1.7	(1.3)
Race/Ethnicity						
African American	*(406)*	2.0	(0.6)	*(406)*	2.5	(1.1)
Hispanic/Latino	*(115)*	2.3	(2.3)	*(115)*	0.7	(0.6)
White, non-Hispanic	*(1121)*	2.0	(0.6)	*(1121)*	6.8	(2.2)
Mixed/other	*(98)*	2.0	(1.9)	*(98)*	2.1	(2.0)
Education						
Less than high school	*(99)*	0.0	--	*(99)*	2.6	(1.5)
High school graduate/GED	*(232)*	0.4	(0.4)	*(232)*	7.5	(4.2)
Some college, no degree	*(383)*	3.8	(1.6)	*(383)*	7.6	(2.5)
College graduate	*(595)*	3.4	(1.4)	*(595)*	1.4	(0.5)
Graduate/professional degree	*(428)*	0.2	(0.2)	*(428)*	1.4	(0.8)
Employment Status						
Employed	*(1094)*	2.1	(0.7)	*(1094)*	5.1	(1.9)
Unemployed	*(617)*	1.8	(1.0)	*(617)*	4.3	(1.5)
Annual Household Income						
Less than $25,000	*(370)*	0.7	(0.5)	*(370)*	4.4	(1.5)
$25,000 to less than $50,000	*(423)*	2.1	(1.1)	*(423)*	11.2	(5.0)
$50,000 to less than $75,000	*(321)*	4.2	(2.0)	*(321)*	3.9	(2.2)
$75,000 to less than $100,000	*(187)*	3.4	(2.5)	*(187)*	1.9	(1.1)
$100,000 and greater	*(349)*	0.9	(0.7)	*(349)*	1.2	(0.8)

Table 14: Current E-Cigarette or Vaping Use Behaviors in Davidson County by Demographic Characteristics (cont.)

	Current (every day) user of e-cigarettes or electronic vaping products			Current (some days) user of e-cigarettes or electronic vaping products		
	(*n*)	%	(se)			
Health Insurance Coverage						
Yes	*(1601)*	2.1	(0.6)	*(1601)*	3.5	(1.3)
No	*(135)*	0.8	(0.6)	*(135)*	17.0	(6.0)
Sexual Orientation						
Heterosexual	*(1590)*	2.1	(0.6)	*(1590)*	4.1	(1.4)
Gay-lesbian-bisexual	*(105)*	0.7	(0.5)	*(105)*	13.8	(6.1)
Davidson County Zone						
East	*(338)*	2.1	(1.0)	*(338)*	5.0	(1.8)
Nashville Promise Zone	*(361)*	2.3	(1.3)	*(361)*	6.6	(2.6)
North West	*(250)*	3.2	(3.1)	*(250)*	4.0	(3.4)
South East	*(476)*	0.7	(0.4)	*(476)*	5.8	(3.7)
South West	*(367)*	2.5	(1.3)	*(367)*	1.4	(0.8)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
**p<.001*

Note: Question wording includes the following:
Current user of e-cigarettes of electronic vaping products – "Have you ever used an e-cigarettes or other electronic vaping products every day, some days, or not at all?"

Tennessee Quitline

The Tennessee Quitline[2], is a toll-free telephone service that provides personalized support for Tennesseans who want to quit smoking or chewing tobacco. In Davidson County, 15.4% of the adults surveyed indicates awareness of it (Table 15). Persons with household incomes below $25,000 were most likely to have heard of the Quitline (23.7%), while those with incomes $75,000 to less than $100,000 had the lowest rate of awareness (5.8%). Among persons aware of the Tennessee Quitline (*n* = 280), 6.2% reported ever having used it for help with smoking cessation for themselves or for someone else. Of persons aware of the Tennessee Quitline but having never used it (*n* = 263), 16.7% reported having considered using it to assist with smoking cessation for themselves or someone else.

[2] https://www.tnquitline.org/

Table 15: Awareness and Use of Tennessee Quitline in Davidson County by Demographic Characteristics (cont. next page)

	Aware of Tennessee Quitline			Have used Tennessee Quitline (among those aware of it)			Have considered using Tennessee Quitline (among those aware but having not used)		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1769)*	15.4	(1.5)	*(280)*	6.2	(2.4)	*(263)*	16.7	(3.8)
Gender									
Female	*(1164)*	20.4	(2.2)	*(204)*	6.7	(3.1)	*(192)*	15.1	(4.4)
Male	*(605)*	10.0*	(1.6)	*(76)*	5.2	(3.7)	*(71)*	19.9	(7.0)
Age									
18-29	*(280)*	15.0	(3.0)	*(48)*	13.7	(8.3)	*(45)*	9.2	(5.9)
30-49	*(616)*	14.7	(2.1)	*(97)*	4.3	(2.6)	*(93)*	23.9	(7.4)
50-64	*(414)*	18.1	(4.1)	*(65)*	1.7	(1.3)	*(61)*	23.6	(8.8)
65 and older	*(399)*	12.1	(2.7)	*(59)*	8.6	(7.4)	*(53)*	5.1	(3.3)
Race/Ethnicity									
African American	*(399)*	21.9	(3.8)	*(79)*	0.6	(0.4)	*(100)*	23.4	(7.1)
Hispanic/Latino	*(112)*	8.8	(3.3)	*(16)*	0.0	--	*(15)*	10.0	(6.5)
White, non-Hispanic	*(1113)*	13.9	(1.6)	*(165)*	10.7	(4.5)	*(153)*	13.8	(5.0)
Mixed/other	*(96)*	12.2	(4.5)	*(13)*	13.0	(12.2)	*(12)*	0.0	--
Education									
Less than high school	*(92)*	19.4	(5.4)	*(18)*	0.0	--	*(17)*	5.2	(5.2)
High school graduate/GED	*(227)*	18.9	(4.1)	*(50)*	3.7	(3.4)	*(47)*	26.6	(8.8)
Some college, no degree	*(378)*	15.4	(2.6)	*(70)*	11.1	(7.4)	*(65)*	18.2	(7.4)
College graduate	*(594)*	9.6	(1.5)	*(74)*	6.7	(4.1)	*(70)*	6.9	(4.2)
Graduate/professional degree	*(426)*	17.3	(2.9)	*(63)*	7.5	(4.3)	*(59)*	13.6	(8.5)
Employment Status									
Employed	*(1089)*	14.4	(1.9)	*(164)*	7.4	(3.6)	*(154)*	19.0	(5.3)
Unemployed	*(601)*	17.9	(2.5)	*(105)*	4.8	(3.1)	*(98)*	12.0	(5.3)
Annual Household Income									
Less than $25,000	*(360)*	23.7	(3.4)	*(87)*	11.9	(5.8)	*(80)*	22.1	(7.4)
$25,000 to less than $50,000	*(421)*	14.9	(3.9)	*(63)*	0.0	--	*(62)*	11.5	(5.3)
$50,000 to less than $75,000	*(319)*	14.6	(2.9)	*(57)*	3.6	(2.5)	*(52)*	16.4	(8.6)
$75,000 to less than $100,000	*(187)*	5.8	(2.1)	*(14)*	0.0	--	*(14)*	0.0	--
$100,000 and greater	*(349)*	10.6*	(2.3)	*(39)*	8.6	(5.3)	*(36)*	12.5	(10.0)

Table 15: Awareness and use of Tennessee Quitline in Davidson County by Demographic Characteristics (cont.)

	Aware of Tennessee Quitline			Have used Tennessee Quitline (among those aware of it)			Have considered using Tennessee Quitline (among those aware but having not used)		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage									
Yes	*(1587)*	15.5	(1.5)	*(248)*	3.9	(0.7)	*(248)*	3.9	(1.7)
No	*(132)*	15.5	(4.8)	*(23)*	26.0	(15.8)	*(23)*	26.0	(15.8)
Sexual Orientation									
Heterosexual	*(1573)*	15.9	(1.6)	*(246)*	6.9	(2.7)	*(229)*	17.8	(4.3)
Gay-lesbian-bisexual	*(105)*	10.1	(3.8)	*(15)*	0.0	--	*(15)*	11.0	(10.1)
Davidson County Zone									
East	*(331)*	16.2	(2.9)	*(60)*	0.6	(0.6)	*(58)*	27.2	(8.8)
Nashville Promise Zone	*(359)*	22.0	(3.5)	*(70)*	11.4	(7.3)	*(66)*	16.7	(7.2)
North West	*(244)*	22.5	(8.1)	*(37)*	7.3	(5.9)	*(32)*	2.4	(2.5)
South East	*(471)*	10.8	(2.0)	*(67)*	1.3	(1.0)	*(65)*	11.4	(6.4)
South West	*(364)*	11.9	(2.2)	*(46)*	11.2	(6.1)	*(42)*	14.8	(8.6)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Aware of Tennessee Quitline – "Are you aware of the Tennessee Quitline?"
Have used Tennessee Quitline (among those aware of it) – "Have you used the Tennessee Quitline to assist with smoking cessation for yourself or someone else?"
Have considered using Tennessee Quitline (among those aware but having not used) – "Have you considered using the Tennessee Quitline to assist with smoking cessation for yourself or someone else?"

Alcohol Use

Current alcohol use (defined as having consumed alcohol in the past 30 days) in Davidson County was reported by 63.4% of all adults (Table 16). Persons aged 30-49 were most likely to have drunk alcohol in the past 30 days (72.9%), with those 65 and older least likely, although a slim majority nonetheless reported current alcohol use (51.1%). Current use of alcohol was most common among college graduates (77.3%) and least common among high school grads (43.6%) and those with less than a high school education (44.3%). Employed persons were more likely than those not working to have consumed alcohol in the past 30 days (69.8% vs. 49.2%, respectively). Household income was also associated with current alcohol use. Approximately three-quarters of those in households with incomes above $75,000 reported past 30 day alcohol use (77.4% within households with incomes between $75-$100,000 and 74.5% within households with incomes of $100,000 and greater). Slightly less than half of those residing in households with incomes below $25,000 reported current alcohol use (48.6%). Persons residing in the South West zone of Davidson County were most likely to indicate current alcohol consumption (78.2%); current use was lowest (54.9%) in South East Davidson County.

Table 16: Current Alcohol Use Behaviors in Davidson County by Demographic Characteristics (cont. next page)

	Drank alcohol in past 30 days			Average number of alcohol drinks on days drank during past 30 days (among past 30 day drinkers)			Largest number of alcohol drinks on one occasion during past 30 days (among past 30 day drinkers)			Any binge drinking days during past 30 days (among past 30 day drinkers)		
	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	Mean	(se)	(*n*)	%	(se)
Total Sample	*(1767)*	63.4	(2.0)	*(1148)*	2.7	(0.3)	*(1140)*	3.9	(0.2)	*(1143)*	41.9	(2.6)
Gender												
Female	*(1159)*	58.1	(2.5)	*(718)*	2.0	(0.6)	*(708)*	3.1	(0.1)	*(714)*	34.5	(2.9)
Male	*(608)*	69.2	(3.3)	*(430)*	3.4*	(0.1)	*(432)*	4.6*	(0.4)	*(429)*	48.7	(4.1)
Age												
18-29	*(280)*	63.4	(5.8)	*(204)*	3.8	(1.3)	*(204)*	5.0	(0.5)	*(205)*	61.6	(6.0)
30-49	*(614)*	72.9	(2.8)	*(448)*	2.8	(0.3)	*(447)*	4.1	(0.4)	*(443)*	42.9	(3.9)
50-64	*(414)*	59.0	(4.2)	*(255)*	2.2	(0.2)	*(254)*	3.3	(0.3)	*(256)*	29.8	(4.9)
65 and older	*(400)*	51.1*	(3.9)	*(205)*	1.9*	(0.1)	*(202)*	2.6*	(0.3)	*(205)*	24.4*	(4.8)
Race/Ethnicity												
African American	*(400)*	62.7	(4.1)	*(233)*	1.9	(0.1)	*(229)*	2.9	(0.3)	*(234)*	33.3	(5.2)
Hispanic/Latino	*(115)*	52.3	(9.1)	*(64)*	1.9	(0.5)	*(64)*	4.6	(0.6)	*(65)*	58.7	(9.2)
White, non-Hispanic	*(1108)*	66.5	(2.3)	*(767)*	2.9	(0.5)	*(765)*	4.3	(0.3)	*(763)*	43.4	(3.2)
Mixed/other	*(97)*	52.3	(8.4)	*(51)*	3.4*	(1.8)	*(51)*	3.8*	(0.7)	*(50)*	45.0	(10.6)
Education												
Less than high school	*(95)*	44.3	(7.6)	*(34)*	2.5	(0.5)	*(35)*	3.3	(0.4)	*(34)*	43.1	(12.6)
High school graduate/GED	*(226)*	43.6	(5.5)	*(102)*	4.5	(1.6)	*(100)*	3.6	(0.7)	*(104)*	54.9	(8.6)
Some college, no degree	*(377)*	70.5	(3.5)	*(235)*	2.5	(0.3)	*(230)*	4.0	(0.6)	*(232)*	63.1	(5.2)
College graduate	*(594)*	77.3	(2.6)	*(439)*	2.2	(0.1)	*(438)*	4.2	(0.2)	*(435)*	54.9	(3.6)
Graduate/professional degree	*(424)*	72.8*	(3.4)	*(307)*	2.3*	(0.2)	*(308)*	3.6	(0.2)	*(308)*	62.9	(4.0)
Employment Status												
Employed	*(1090)*	69.8	(2.5)	*(786)*	2.9	(0.5)	*(784)*	4.2	(0.3)	*(783)*	46.7	(3.3)
Unemployed	*(602)*	49.2*	(3.3)	*(309)*	2.0*	(0.1)	*(305)*	3.0*	(0.2)	*(309)*	29.1*	(4.0)
Annual Household Income												
Less than $25,000	*(362)*	48.6	(4.0)	*(168)*	2.4	(0.2)	*(167)*	3.0	(0.2)	*(170)*	41.2	(6.0)
$25,000 to less than $50,000	*(420)*	62.9	(4.8)	*(256)*	3.8	(1.4)	*(256)*	4.2	(0.6)	*(257)*	43.5	(6.9)
$50,000 to less than $75,000	*(320)*	68.6	(4.3)	*(224)*	2.3	(0.2)	*(222)*	4.1	(0.4)	*(222)*	43.4	(5.5)
$75,000 to less than $100,000	*(184)*	77.4	(4.6)	*(143)*	3.2	(0.7)	*(144)*	5.1	(1.1)	*(141)*	48.0	(7.5)
$100,000 and greater	*(347)*	74.5*	(4.3)	*(278)*	2.0*	(0.1)	*(275)*	3.8*	(0.2)	*(277)*	41.9	(4.5)

Table 16: Current Alcohol Use Behaviors in Davidson County by Demographic Characteristics (cont.)

	Drank alcohol in past 30 days			Number of alcohol drinks on average on days drank during past 30 days (among past 30 day drinkers)			Largest number of alcohol drinks on one occasion during past 30 days (among past 30 day drinkers)			Any binge drinking days during past 30 days (among past 30 day drinkers)		
	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	Mean	(se)	(*n*)	%	(se)
Health Insurance Coverage												
Yes	*(1580)*	64.5	(2.1)	*(1054)*	2.8	(0.4)	*(1011)*	3.9	(0.2)	*(1049)*	39.5	(2.7)
No	*(135)*	59.0	(7.9)	*(75)*	2.8	(0.2)	*(96)*	4.4	(0.4)	*(75)*	69.1	(7.6)
Sexual Orientation												
Heterosexual	*(1573)*	62.9	(2.1)	*(1010)*	2.7	(0.4)	*(985)*	4.0	(0.2)	*(1006)*	42.3	(2.8)
Gay-lesbian-bisexual	*(104)*	68.6	(9.2)	*(82)*	2.4	(0.3)	*(97)*	3.8	(0.4)	*(82)*	43.9	(8.7)
Davidson County Zone												
East	*(330)*	63.9	(4.7)	*(208)*	2.4	(0.2)	*(209)*	4.1	(0.3)	*(204)*	48.4	(5.6)
Nashville Promise Zone	*(356)*	62.0	(4.3)	*(227)*	2.6	(0.2)	*(222)*	4.4	(0.3)	*(227)*	60.8	(5.1)
North West	*(249)*	59.2	(6.9)	*(157)*	1.9	(0.2)	*(156)*	3.0	(0.7)	*(157)*	23.7	(7.4)
South East	*(470)*	54.9	(4.3)	*(258)*	4.2	(1.2)	*(254)*	3.9	(0.7)	*(257)*	34.9	(6.3)
South West	*(362)*	78.2*	(3.2)	*(298)*	2.1*	(0.1)	*(299)*	3.7	(0.2)	*(298)*	35.9*	(3.8)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Drank alcohol in past 30 days – "During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?"
Number of alcohol drinks on average on days drank (during past 30 days) – "During the past 30 days, on the days when you drank, about how many drinks did you drink on average?"
Any binge drinking days (during past 30 days) – [FOR MALES]:"Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks at one time?" / [FOR FEMALES]:"Considering all types of alcoholic beverages, how many times during the past 30 days did you have 4 or more drinks at one time?"
Largest number of alcohol drinks on one occasion (during past 30 days) – "During the past 30 days, what is the largest number of drinks you had on any occasion?"

Among those currently consuming alcohol, an average of 2.7 drinks per day (on days consuming alcohol) were reported (range=1-30 days). Males consumed more alcohol per drinking day (3.4 drinks vs. 2.0 drinks for females). Younger persons (those aged 18-29 years) also drank more on average (3.8 drinks vs. 1.9 drinks for persons aged 65 and older). Persons of mixed or other races reported on average consuming 3.4 drinks, and African American and Hispanic/Latino respondents indicated on average having 1.9 drinks per day. Consumption also varied by education, with high school graduates reporting the highest average levels of daily alcohol use (4.5 drinks), and all other education groups similar to one another in consuming between 2.2-2.5 drinks of alcohol per day. Employed persons drank more than those unemployed (2.9 drinks vs. 2.0 drinks, respectively). Persons earning between $25-$50,000 reported more alcohol consumption (3.8 drinks) compared to those in other households. Persons residing in South East Davidson County consumed an average of 4.2 drinks on the days when they did drink. The lowest average number of drinks was reported by residents in the North West zone of Davidson County.

Respondents who were current drinkers were also asked to estimate the largest number of alcohol drinks they had consumed on one occasion during the past 30 days. Overall, they estimated 3.9 drinks on a single occasion (range=1-30 days). Similar to the pattern found regarding average number of drinks on one occasion, the largest number of drinks reported was found to be associated in a similar manner with several sociodemographic measures. Specifically, males, persons aged 18-29, and those currently employed reported the largest average number of drinks consumed on one occasion (4.6, 5.0, and 4.2 drinks, respectively). Among race/ethnic groups, Hispanic/Latino respondents reported the largest number (4.6 drinks) and African Americans the lowest number (2.9 drinks).

Binge drinking was also examined. This behavior is commonly defined as consumption of four or more drinks by females and five or more drinks by makes on a single occasion (Kanny et al., 2018). Using these criteria, 41.9% of adults in Davidson County (who drank in the previous 30 days) indicated having had at least one binge drinking episode during the past 30 days. Younger persons were more likely to report recent binge drinking (61.6%) in comparison to older persons. Among those aged 65 and older, 24.4% indicated at least one recent binge drinking episode. Currently employed persons were more likely to report a recent binge drinking episode (46.7%) than were those not employed (29.1%). Binge drinking was reported among a majority of those residents of the Nashville Promise Zone (60.8%) and less frequently among persons living elsewhere in the county. It was least common among residents of the North West zone of Davidson County (23.7%).

Non-Medical Use of Prescription Drugs

The use of prescription drugs for non-medical purposes is examined in Table 17. Specifically, respondents were asked "*In the last 12 months, have you taken any prescription pain relievers or tranquilizers (including Codeine, morphine, Lortab, Vicodin, Tylenol #3, Percocet, OxyContin) when it was not prescribed to you by a doctor, dentist, nurse practitioner, or other healthcare provider? We only want to know about prescription medication not medication that is available over the counter.*" Overall, 5.6% of adults in Davidson County reported they had used one or more of these prescription drugs for non-medical purposes during the past 12 months. Use of these medications was strongly associated with education, as 11.8% and 10.7% of persons with less than a high school degree and those completing

high school, respectively, had used prescription drugs for non-medical purposes. In contrast, less than one percent (0.6%) of persons with a graduate or professional degree reported such use. Non-medical use of these medications was also more common in the Nashville Promise Zone (9.6%) and in East Davidson County (8.5%), with less use reported elsewhere (0.1% reported non-medical prescription drug use in South West Davidson County).

Table 17: Non-Medical Prescription Drug Use and Substance Use Treatment in Davidson County by Demographic Characteristics (cont. next page)

	Past 12 month non-medical use of prescription pain relievers or tranquilizers			Past 12 month family member receipt of treatment/counseling for alcohol or any drug			Past 12 month unmet need for treatment/counseling for alcohol or drug use		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1780)*	5.6	(1.0)	*(1779)*	2.5	(0.5)	*(1777)*	4.0	(1.0)
Gender									
Female	*(1171)*	6.3	(1.4)	*(1172)*	3.0	(0.8)	*(1170)*	4.8	(1.0)
Male	*(609)*	4.8	(1.4)	*(607)*	1.8	(0.7)	*(607)*	3.1	(1.7)
Age									
18-29	*(280)*	2.1	(1.4)	*(280)*	4.1	(1.8)	*(279)*	7.5	(3.8)
30-49	*(617)*	6.1	(1.8)	*(617)*	2.4	(0.8)	*(615)*	2.5	(0.8)
50-64	*(414)*	9.1	(2.7)	*(415)*	2.0	(0.9)	*(416)*	3.8	(1.2)
65 and older	*(413)*	5.0	(1.7)	*(413)*	1.3	(0.6)	*(413)*	3.4	(1.3)
Race/Ethnicity									
African American	*(406)*	7.9	(2.1)	*(407)*	0.5	(0.2)	*(405)*	3.0	(1.0)
Hispanic/Latino	*(115)*	8.0	(3.7)	*(116)*	2.5	(1.8)	*(115)*	12.2	(7.9)
White, non-Hispanic	*(1117)*	4.2	(1.3)	*(1117)*	3.5	(0.9)	*(1117)*	3.4	(0.8)
Mixed/other	*(97)*	4.9	(3.4)	*(97)*	2.5	(1.8)	*(97)*	0.7	(0.5)
Education									
Less than high school	*(96)*	11.8	(5.3)	*(99)*	1.4	(1.4)	*(98)*	3.4	(2.4)
High school graduate/GED	*(232)*	10.7	(2.8)	*(232)*	1.7	(1.0)	*(232)*	6.2	(3.2)
Some college, no degree	*(382)*	4.7	(1.7)	*(381)*	3.3	(1.3)	*(382)*	4.1	(1.4)
College graduate	*(597)*	2.2	(1.1)	*(596)*	2.1	(0.8)	*(595)*	2.3	(0.8)
Graduate/professional degree	*(425)*	0.6*	(0.3)	*(426)*	3.5	(1.4)	*(424)*	3.3	(1.1)
Employment Status									
Employed	*(1094)*	4.4	(1.1)	*(1095)*	3.2	(0.8)	*(1093)*	2.8	(0.7)
Unemployed	*(612)*	8.2	(2.1)	*(614)*	1.3	(0.6)	*(612)*	6.7	(2.7)
Annual Household Income									
Less than $25,000	*(368)*	12.4	(2.9)	*(370)*	4.2	(1.6)	*(367)*	5.5	(1.8)
$25,000 to less than $50,000	*(424)*	4.5	(2.1)	*(425)*	1.9	(0.8)	*(424)*	5.8	(3.3)
$50,000 to less than $75,000	*(320)*	3.4	(1.6)	*(321)*	1.6	(0.8)	*(320)*	3.8	(1.4)
$75,000 to less than $100,000	*(187)*	5.6	(2.7)	*(187)*	1.2	(0.8)	*(187)*	2.2	(1.1)
$100,000 and greater	*(348)*	1.1	(0.7)	*(346)*	3.2	(1.3)	*(346)*	1.9	(0.8)

Table 17: Non-Medical Prescription Drug Use and Substance Use Treatment in Davidson County by Demographic Characteristics (cont.)

	Past 12 month non-medical use of prescription pain relievers or tranquilizers			Past 12 month family member receipt of treatment/counseling for alcohol or any drug			Past 12 month unmet need for treatment/counseling for alcohol or drug use		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage									
Yes	*(1592)*	3.8	(0.8)	*(1590)*	2.1	(0.5)	*(1587)*	2.6	(0.5)
No	*(135)*	18.3	(6.1)	*(134)*	5.9	(3.3)	*(134)*	17.0	(8.0)
Sexual Orientation									
Heterosexual	*(1586)*	5.5	(1.0)	*(1588)*	2.7	(0.6)	*(1586)*	3.5	(0.7)
Gay-lesbian-bisexual	*(105)*	9.2	(5.1)	*(105)*	1.4	(1.3)	*(104)*	12.4	(9.4)
Davidson County Zone									
East	*(336)*	8.5	(2.8)	*(336)*	1.6	(0.8)	*(335)*	1.5	(0.6)
Nashville Promise Zone	*(357)*	9.6	(9.6)	*(359)*	4.1	(2.0)	*(355)*	7.1	(2.3)
North West	*(249)*	4.1	(4.1)	*(249)*	1.1	(0.6)	*(250)*	1.6	(0.9)
South East	*(473)*	5.1	(5.1)	*(472)*	1.9	(0.8)	*(474)*	4.2	(4.2)
South West	*(365)*	0.1*	(0.1)	*(363)*	3.4	(1.1)	*(363)*	4.7	(4.7)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Past 12 month non-medical use of prescription pain relievers or tranquilizers – "In the last 12 months, have you taken any prescription pain relievers or tranquilizers (including Codeine, morphine, Lortab, Vicodin, Tylenol #3, Percocet, OxyContin) when it was not prescribed by a doctor, dentist, nurse practitioner, or other healthcare provider? We only want to know about prescription medication not medication that is available over the counter."
Past 12 month family member receipt of treatment/counseling for alcohol or any drug – "During the past 12 months, have you or a member of your immediate family (parent, child, spouse, sibling) received treatment or counseling for use of alcohol or any drug, not counting cigarettes?"
Past 12 month need for treatment/counseling for alcohol or drug use – "During the past 12 months, did you or your family member need treatment or counseling for alcohol or drug use that was not received?"

Persons reporting non-medical use of prescription pain medications indicated obtaining them from a variety of sources, including friends or relatives (25.8%, se = 7.4), other acquaintances (1.3%, se = 0.9), street dealers (0.8%, se = 0.8), and from other–undefined–sources (56.1%, se = 7.9; data not included in tables). No one reported obtaining prescription pain medications online. Approximately eleven percent indicated having "*traveled either locally or out of state, to more than one health care provider for the primary reason of obtaining prescription pain medications or tranquilizers such as Codeine, morphine, Lortab, Vicodin, Tylenol #3, Percocet, or OxyContin"* within the previous 12 months (10.8%, se = 6.4).

Substance Use Treatment

Receipt of substance use treatment was assessed using a question that asked "*During the past 12 months, have you or a member of your immediate family (parent, child, spouse, sibling) received treatment or counseling for use of alcohol or any drug, not counting cigarettes?"* In Davidson County, 2.5% of respondents indicated they or an immediate family member had received some form of treatment. This estimate did not vary across any of the sociodemographics examined in Table 17. Of those reporting receipt of treatment, 30.9% (se = 9.4) indicated it was for alcohol use only; 55.8% (se = 1.5%) received treatment for drug use only; and 13.3% (se = 6.0) received treatment for both alcohol and drug use (data not included in tables). About a third had received treatment in a residential rehabilitation facility where they stayed overnight (35.5%, se = 10.2), and 38.7% (se = 10.8) had received treatment in a drug or alcohol rehabilitation facility as an outpatient.

Respondents were also asked if, during the past 12 months, they or a family member had needed treatment or counseling for alcohol or drug use that was not received. Four percent of all adults reported a past year unmet treatment need. This estimate also did not vary across any sociodemographics. A variety of reasons were expressed for not receiving needed treatment. The most common reasons were that the person in need of treatment was not ready to stop using (63.1%, se = 11.0; data not included in tables), did not have health care coverage and could not afford the cost (33.8%, se = 10.5), and concern that getting treatment or counseling might cause neighbors or the community to have a negative opinion (25.7%, se = 15.9). All reasons for not receiving treatment, beginning with the most common reason, include the following:

- Not ready to stop using [alcohol, drug use, or both] (63.1%, se = 11.0)
- No health care coverage, and couldn't afford the cost (33.8%, se = 10.5)
- Concerned that getting treatment or counseling might cause neighbors or community to have a negative opinion (25.7%, se = 15.90
- No transportation to a program, or the programs were too far away, or the hours were not convenient (19.4%, se = 8.6)
- No openings in the programs (12.9%. se = 7.9)
- Did not know where to go to get treatment (12.2%, se = 5.1)
- Didn't find a program that offered the type of treatment or counseling wanted (7.9%. se = 4.3)
- Had health care coverage, but it didn't cover treatment for [alcohol, drug use, or both], or didn't cover the full cost (2.7%, se = 2.3)

HIV Risk

Risk for HIV and HIV testing are examined in Table 18. Many HIV risk behaviors are considered to be stigmatizing by the general public, and concerns that survey respondents might not be candid in reporting these behaviors are thus not uncommon (Tourangeau, Rips and Rasinski, 2000). To address this concern, a general question regarding these behaviors was asked, rather than specific questions that might have been more difficult for respondents to answer honestly. The general question asked "*Do any of these situations apply to you?"* followed by a list of four statements: *"You have used intravenous drugs in the past year. You have been treated for a sexually transmitted or venereal disease in the past year. You have given or received money or drugs in exchange for sex in the past year. You had anal sex without a condom in the past year.*" In Davidson County, 5.8% of adults reported having one or more of these risk factors. Persons aged 30-49 were most likely to indicate having one of these risks during the past 12 months (9.1%) and, perhaps not surprisingly, those aged 65 and older were least likely (0.4%). Sexual minority respondents were at greater risk, as 30.1% indicated at least one of these behaviors, compared to 3.5% of heterosexual respondents.

Table 18: HIV Testing and Risks in Davidson County by Demographic Characteristics (cont. next page)

	Ever tested for HIV			Reports any past year HIV risk factors		
	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1773)*	40.7	(2.1)	*(1774)*	5.8	(1.0)
Gender						
Female	*(1169)*	45.5	(2.5)	*(1165)*	5.1	(1.2)
Male	*(604)*	35.3	(3.2)	*(609)*	6.6	(1.6)
Age						
18-29	*(280)*	28.7	(5.4)	*(279)*	6.8	(2.2)
30-49	*(615)*	50.7	(3.3)	*(614)*	9.1	(2.1)
50-64	*(413)*	46.2	(4.4)	*(417)*	4.1	(1.7)
65 and older	*(411)*	19.4*	(3.2)	*(413)*	0.4*	(0.2)
Race/Ethnicity						
African American	*(404)*	55.2	(4.4)	*(402)*	7.4	(2.0)
Hispanic/Latino	*(116)*	37.3	(8.1)	*(113)*	9.6	(4.8)
White, non-Hispanic	*(1113)*	36.4	(2.3)	*(1120)*	5.0	(1.2)
Mixed/other	*(97)*	23.4*	(6.1)	*(98)*	0.9	(0.9)
Education						
Less than high school	*(99)*	34.0	(6.5)	*(98)*	4.8	(4.2)
High school graduate/GED	*(227)*	33.8	(5.1)	*(228)*	5.0	(2.0)
Some college, no degree	*(381)*	49.6	(4.1)	*(382)*	7.9	(2.4)
College graduate	*(595)*	38.5	(3.0)	*(596)*	5.6	(1.3)
Graduate/professional degree	*(425)*	45.1	(3.6)	*(428)*	4.7	(1.6)
Employment Status						
Employed	*(1090)*	44.0	(2.7)	*(1093)*	6.6	(1.3)
Unemployed	*(611)*	35.5	(3.1)	*(612)*	3.7	(1.4)
Annual Household Income						
Less than $25,000	*(366)*	45.9	(4.1)	*(366)*	9.6	(2.8)
$25,000 to less than $50,000	*(422)*	36.6	(4.7)	*(423)*	5.9	(1.9)
$50,000 to less than $75,000	*(320)*	38.6	(4.6)	*(320)*	5.4	(2.2)
$75,000 to less than $100,000	*(187)*	46.5	(6.2)	*(187)*	2.8	(1.4)
$100,000 and greater	*(346)*	44.5	(4.3)	*(348)*	4.5	(1.6)

Table 18: HIV Testing and Risks in Davidson County by Demographic Characteristics (cont.)

	Ever tested for HIV			Reports any past year HIV risk factors		
	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage						
Yes	*(1589)*	39.5	(2.1)	*(1591)*	4.9	(0.9)
No	*(133)*	52.2	(7.8)	*(130)*	15.7	(6.1)
Sexual Orientation						
Heterosexual	*(1584)*	38.9	(2.2)	*(1586)*	3.5	(0.7)
Gay-lesbian-bisexual	*(104)*	62.7	(7.8)	*(105)*	30.1*	(7.6)
Davidson County Zone						
East	*(335)*	42.3	(4.5)	*(336)*	5.2	(1.8)
Nashville Promise Zone	*(357)*	55.9	(4.4)	*(355)*	11.9	(3.4)
North West	*(248)*	38.7	(7.6)	*(248)*	6.0	(6.0)
South East	*(470)*	36.6	(4.7)	*(471)*	3.7	(3.7)
South West	*(363)*	31.6*	(3.2)	*(364)*	3.8	(1.5)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*p<.001

Note: Question wordings include the following:
Ever tested for HIV – "Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth."
Reports any HIV risk factors – "Do any of these situations apply to you?

- You have used intravenous drugs in the past year.
- You have been treated for a sexually transmitted or venereal disease in the past year.
- You have given or received money or drugs in exchange for sex in the past year.
- You had anal sex without a condom in the past year."

When asked if they had ever been tested for HIV, not including tests done as part of a blood donation, but including testing mouth fluid, 40.7% of all adults indicated they had ever been tested. Persons aged 30-49 were most likely to have been tested (50.7%), and those 65 and older least likely (19.4%). African Americans were also more likely to have been tested (55.2%), and those of mixed or other race groups least likely (23.4%). Those residing in the Nashville Promise Zone were more likely to have ever been tested for HIV (55.9%), and those in South West Davidson County were least likely to have been tested (31.6%).

Firearms

A set of questions were also included to learn about firearm ownership and safety. These questions were preceded by a statement designed to introduce the topic, which reads: "*The next questions are about safety and firearms. Some people keep guns for recreational purposes such as hunting or sport shooting. People also keep guns in the home for protection. Please include firearms such as pistols, revolvers, shotguns, and rifles; but do not include BB guns or guns that cannot fire. Include those also kept in a garage or outdoor storage area."* Respondents were first asked if they currently kept any firearms in or around their home. Across Davidson County, 30.5% reported current firearms in or around their homes (Table 19). Males were more likely (38.5%) than females (23.3%) to indicate that they now had firearms. Non-Hispanic white respondents were also more likely (38.4%) than persons of other race/ethnicities to have firearms. Firearm ownership was also most common among persons in the highest household income group of $100,000 and greater (42.0%), and least common among those with household incomes of less than $25,000 (11.4%). The distribution of home firearms also varied considerably across Davidson County. They were most commonly reported in the North West zone of the county (50.8%) and least common in the Nashville Promise Zone (15.7%).

Table 19: Firearm Ownership in Davidson County by Demographic Characteristics (cont. next page)

	Firearms now kept in or around home			Firearms now kept in car, van, or truck usually drive			Firearms kept in or around home OR in car, van, or truck usually drive			Firearms are loaded and unlocked		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1750)*	30.5	(2.1)	*(1754)*	5.0	(0.9)	*(1744)*	30.9	(2.12)	*(1736)*	6.0	(1.0)
Gender												
Female	*(1151)*	23.3	(2.2)	*(1153)*	3.0	(0.9)	*(1145)*	24.0	(2.3)	*(1142)*	3.7	(0.9)
Male	*(599)*	38.5*	(3.5)	*(601)*	7.1	(1.6)	*(599)*	38.5*	(3.5)	*(594)*	8.5	(1.8)
Age												
18-29	*(279)*	27.3	(5.8)	*(279)*	5.3	(2.2)	*(279)*	27.3	(5.8)	*(279)*	5.4	(2.3)
30-49	*(605)*	27.5	(2.9)	*(605)*	4.3	(1.2)	*(603)*	27.7	(3.0)	*(602)*	5.9	(1.7)
50-64	*(414)*	35.0	(4.4)	*(414)*	4.4	(1.6)	*(413)*	36.1	(4.4)	*(411)*	5.1	(1.5)
65 and older	*(405)*	36.5	(3.7)	*(410)*	6.0	(2.2)	*(405)*	36.5	(3.7)	*(399)*	8.6	(2.0)
Race/Ethnicity												
African American	*(398)*	23.0	(4.4)	*(399)*	3.9	(1.4)	*(395)*	24.1	(4.4)	*(394)*	2.8	(1.1)
Hispanic/Latino	*(114)*	16.1	(7.0)	*(113)*	3.8	(2.8)	*(113)*	16.4	(7.1)	*(113)*	3.8	(2.8)
White, non-Hispanic	*(1104)*	38.4	(2.6)	*(1107)*	6.3	(1.3)	*(1102)*	38.6	(2.6)	*(1095)*	8.4	(1.5)
Mixed/other	*(97)*	17.0*	(5.9)	*(97)*	0.3	(0.2)	*(97)*	17.0*	(5.9)	*(97)*	2.3	(2.1)
Education												
Less than high school	*(94)*	17.6	(6.7)	*(96)*	0.0	--	*(93)*	18.0	(6.8)	*(94)*	2.9	(1.9)
High school graduate/GED	*(230)*	28.1	(6.2)	*(227)*	4.7	(1.8)	*(227)*	28.4	(5.3)	*(226)*	4.6	(1.6)
Some college, no degree	*(378)*	34.0	(3.6)	*(381)*	6.6	(2.2)	*(378)*	34.9	(4.3)	*(376)*	7.9	(2.5)
College graduate	*(585)*	35.5	(3.1)	*(587)*	6.1	(1.8)	*(585)*	35.5	(3.1)	*(580)*	7.9	(2.0)
Graduate/professional degree	*(424)*	28.5	(3.2)	*(424)*	3.7*	(1.3)	*(423)*	28.6	(3.2)	*(423)*	4.3	(1.4)
Employment Status												
Employed	*(1082)*	33.2	(2.8)	*(1081)*	5.4	(1.2)	*(1079)*	33.7	(2.8)	*(1078)*	6.1	(1.3)
Unemployed	*(602)*	26.7	(2.8)	*(607)*	4.4	(1.5)	*(600)*	27.0	(2.8)	*(594)*	6.1	(1.4)
Annual Household Income												
Less than $25,000	*(366)*	11.4	(2.6)	*(365)*	2.8	(1.5)	*(364)*	12.4	(2.7)	*(364)*	2.1	(1.2)
$25,000 to less than $50,000	*(420)*	34.4	(5.5)	*(420)*	6.6	(2.4)	*(420)*	34.4	(5.5)	*(417)*	7.0	(2.3)
$50,000 to less than $75,000	*(318)*	39.4	(4.8)	*(318)*	4.8	(1.7)	*(317)*	39.5	(4.8)	*(313)*	6.2	(1.8)
$75,000 to less than $100,000	*(185)*	37.3	(6.6)	*(186)*	9.0	(3.3)	*(185)*	37.3	(6.6)	*(185)*	10.7	(4.7)
$100,000 and greater	*(344)*	42.0*	(4.0)	*(344)*	4.2	(1.7)	*(343)*	42.1*	(4.0)	*(343)*	8.4	(2.4)

Table 19: Firearm Ownership in Davidson County by Demographic Characteristics (cont.)

	Firearms now kept in or around home			Firearms now kept in car, van, or truck usually drive			Firearms kept in or around home OR in car, van, or truck usually drive			Firearms are loaded and unlocked		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage												
Yes	*(1569)*	31.3	(2.2)	*(1573)*	4.6	(0.9)	*(1565)*	31.7	(2.2)	*(1557)*	5.6	(0.9)
No	*(130)*	22.3	(6.3)	*(131)*	7.2	(4.3)	*(130)*	22.3	(6.3)	*(130)*	10.9	(4.7)
Sexual Orientation												
Heterosexual	*(1569)*	33.2	(2.2)	*(1570)*	5.7	(1.0)	*(1565)*	33.6	(2.2)	*(1556)*	6.4	(1.1)
Gay-lesbian-bisexual	*(105)*	15.1	(4.8)	*(105)*	0.0*	--	*(105)*	15.1	(4.8)	*(105)*	3.2	(2.5)
Davidson County Zone												
East	*(333)*	37.5	(4.6)	*(333)*	6.1	(2.1)	*(332)*	38.8	(4.6)	*(330)*	6.3	(2.0)
Nashville Promise Zone	*(350)*	15.7	(3.0)	*(350)*	3.3	(1.5)	*(348)*	15.8	(3.1)	*(349)*	5.6	(2.2)
North West	*(238)*	50.8	(7.4)	*(242)*	15.4	(5.3)	*(237)*	51.1	(7.4)	*(235)*	9.1	(4.1)
South East	*(469)*	30.1	(4.4)	*(469)*	2.9	(1.1)	*(467)*	30.2	(4.5)	*(466)*	6.1	(1.9)
South West	*(360)*	27.7*	(3.1)	*(360)*	3.2	(1.4)	*(360)*	27.7*	(3.1)	*(356)*	4.5	(1.3)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Firearms now kept in or around home – The next questions are about safety and firearms. Some people keep guns for recreational purposes such as hunting or sport shooting. People also keep guns in the home for protection. Please include firearms such as pistols, revolvers, shotguns, and rifles; but do not include BB guns or guns that cannot fire. Include those also kept in a garage or outdoor storage area. Are any firearms now kept in or around your home?"
Firearms now kept in car, can, or truck usually drive – "Are any firearms now kept in the car, van, or truck that you usually drive?"
Firearms kept in or around home OR in car, van, or truck usually drive – RESPONDED 'YES' TO EITHER: "Are any firearms now kept in or around your home?" OR Are any firearms now kept in or around your home?"
Firearms are loaded and unlocked – RESPONDED 'YES' TO EITHER: "Are any of these firearms now loaded?" AND "Are any of these loaded firearms also unlocked?"

Firearms now kept in motor vehicles, including cars, vans, or trucks, were reported by 5.0% of all adults. This was most common among persons with some college education (6.6%), and least common among those with less than a high school education (0.0%). Heterosexuals (5.7%), but not sexual minorities, indicated keeping firearms in their motor vehicles. Overall, 30.9% of adults reported having firearms in their home or motor vehicle. Patterns were similar to what was observed for firearms currently kept in or around the home, with males, non-Hispanic whites, those with higher incomes, and those residing in North West Davidson County most likely to report having firearms in either their homes or motor vehicles.

Additional questions asked those with firearms if they were now loaded. A total of 40.2% (se = 4.0) indicated their firearms were loaded (data not included in tables). Of these, 48.7% (se = 6.1) reported the loaded firearms to be unlocked. Overall, 6.0% of the adults in Davidson County reported having loaded/unlocked firearms in their homes or vehicles (Table 19). This estimate did not vary across any of the sociodemographic measures examined. When asked "*Do you feel safer or less safe when there are firearms in your home or vehicle (car, van or truck)?"*, most with firearms reported feeling safer (63.5%, se = 4.4), 1.8% (se = 0.9) reported feeling less safe, and 34.7% (se = 4.4) reported feeling neither (data not included in tables). Persons not owning firearms were not asked about safety perceptions.

Physical Activity

Several aspects of physical activity were also evaluated. Respondents were asked if they ever wear a fitness device, such as a Fitbit, Nike Sports watch, Apple Watch, etc., to measure their level of physical activity. As indicated in Table 20, 18.5% of the adults in Davidson County reported wearing a fitness device on a nearly daily basis. Three-quarters of the adults surveyed (75.3%, se = 1.7) reported not ever wearing a fitness device, 3.9% (se = 1.0) indicated wearing one 2-3 days per week, and 2.3% (se = 0.4) wear one only when exercising (data not included in tables). Young adults were most likely to report daily use of a fitness device (22.3%), and persons 65 and older were least likely (8.2%). Persons with graduate or professional degrees were also most likely to use a fitness device (34.1%), and persons with less than a high school degree were least likely (1.0%). In addition, employed persons were twice as likely as the unemployed to use such a device (22.7% vs. 11.0%, respectively), and persons in the highest household income category ($100,000 and greater) were most likely (28.8%) and persons in the lowest income category were least likely (5.6%) to report use of a fitness device. Persons who currently had health insurance were also more likely (20.4%) than those without insurance (4.4%) to report daily use.

Table 20: Physical Exercise in Davidson County by Demographic Characteristics (cont. next page)

	Wear fitness device daily			Non-job physical activity during past month			Number days physically exercise in typical week			Number of minutes typically exercise per day		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	Mean	(se)
Total Sample	*(1765)*	18.5	(1.4)	*(1774)*	67.9	(2.0)	*(1738)*	2.7	(0.1)	*(1685)*	46.6	(2.4)
Gender												
Female	*(1158)*	19.9	(1.7)	*(1166)*	63.8	(2.4)	*(1141)*	2.7	(0.1)	*(875)*	45.8	(3.6)
Male	*(607)*	16.9	(2.4)	*(608)*	72.5	(3.4)	*(597)*	2.8	(0.1)	*(820)*	47.5	(3.1)
Age												
18-29	*(279)*	22.3	(4.1)	*(280)*	79.2	(5.6)	*(404)*	2.8	(0.2)	*(272)*	60.6	(8.3)
30-49	*(612)*	20.7	(2.2)	*(615)*	72.2	(3.0)	*(648)*	2.8	(0.2)	*(601)*	46.5	(2.6)
50-64	*(416)*	19.7	(3.0)	*(418)*	66.8	(4.0)	*(369)*	2.7	(0.2)	*(394)*	44.0	(4.3)
65 and older	*(410)*	8.2*	(2.3)	*(412)*	60.6	(3.7)	*(299)*	2.6	(0.2)	*(379)*	33.0*	(2.7)
Race/Ethnicity												
African American	*(400)*	13.9	(3.1)	*(404)*	62.3	(4.0)	*(389)*	2.3	(0.2)	*(369)*	46.9	(5.2)
Hispanic/Latino	*(114)*	9.0	(2.8)	*(115)*	53.4	(8.9)	*(115)*	2.6	(0.3)	*(110)*	52.3	(14.0)
White, non-Hispanic	*(1114)*	22.2	(1.8)	*(1119)*	73.0	(2.5)	*(1101)*	3.0	(0.1)	*(1078)*	46.1	(2.3)
Mixed/other	*(98)*	19.2	(7.0)	*(98)*	67.7	(8.2)	*(96)*	2.9*	(0.3)	*(92)*	44.2	(7.7)
Education												
Less than high school	*(96)*	1.0	(0.7)	*(98)*	43.0	(7.3)	*(87)*	2.6	(0.3)	*(82)*	37.3	(7.0)
High school graduate/GED	*(227)*	9.1	(2.7)	*(230)*	47.5	(5.6)	*(223)*	2.0	(0.2)	*(212)*	41.1	(7.4)
Some college, no degree	*(380)*	16.0	(3.1)	*(383)*	72.2	(3.4)	*(380)*	2.8	(0.2)	*(365)*	50.5	(4.2)
College graduate	*(594)*	26.8	(2.7)	*(595)*	82.2	(2.3)	*(589)*	3.1	(0.1)	*(577)*	49.4	(2.1)
Graduate/professional degree	*(428)*	34.1*	(3.4)	*(428)*	86.6	(2.5)	*(423)*	3.3*	(0.2)	*(414)*	49.8	(3.0)
Employment Status												
Employed	*(1090)*	22.7	(2.0)	*(1096)*	74.8	(2.5)	*(1079)*	2.8	(0.1)	*(1055)*	50.4	(3.2)
Unemployed	*(608)*	11.0*	(2.0)	*(611)*	56.0*	(3.3)	*(597)*	2.5	(0.1)	*(571)*	39.0*	(3.1)
Annual Household Income												
Less than $25,000	*(365)*	5.6	(2.0)	*(368)*	48.2	(4.2)	*(358)*	2.3	(0.2)	*(336)*	46.8	(7.4)
$25,000 to less than $50,000	*(416)*	16.7	(3.1)	*(424)*	60.7	(5.3)	*(412)*	2.3	(0.2)	*(401)*	39.6	(4.1)
$50,000 to less than $75,000	*(320)*	24.2	(4.1)	*(320)*	75.3	(3.9)	*(319)*	2.8	(0.2)	*(310)*	48.4	(4.3)
$75,000 to less than $100,000	*(187)*	30.1	(4.8)	*(187)*	84.9	(3.9)	*(183)*	3.0	(0.2)	*(184)*	45.8	(4.0)
$100,000 and greater	*(349)*	28.8*	(3.4)	*(349)*	88.5*	(2.5)	*(347)*	3.5*	(0.1)	*(340)*	51.5	(2.9)

Table 20: Physical Exercise in Davidson County by Demographic Characteristics (cont.)

	Wear fitness device daily			Non-job physical activity during past month			Number days physically exercise in typical week			Number of minutes typically exercise per day		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	Mean	(se)
Health Insurance Coverage												
Yes	*(1581)*	20.4	(1.6)	*(1590)*	70.4	(2.1)	*(1562)*	2.8	(0.1)	*(1521)*	48.0	(2.6)
No	*(132)*	4.4*	(1.8)	*(132)*	50.8	(7.7)	*(130)*	2.1*	(0.3)	*(122)*	37.8	(5.9)
Sexual Orientation												
Heterosexual	*(1580)*	19.3	(1.6)	*(1586)*	70.5	(2.0)	*(1554)*	2.8	(0.1)	*(1510)*	47.6	(2.6)
Gay-lesbian-bisexual	*(104)*	18.8	(5.4)	*(105)*	50.7	(8.6)	*(105)*	2.3	(0.3)	*(102)*	37.6	(6.3)
Davidson County Zone												
East	*(334)*	14.9	(2.5)	*(337)*	62.2	(4.3)	*(327)*	2.7	(0.1)	*(315)*	52.3	(5.0)
Nashville Promise Zone	*(351)*	12.7	(2.5)	*(357)*	60.5	(4.4)	*(344)*	2.7	(0.2)	*(332)*	36.0	(3.4)
North West	*(248)*	13.1	(3.8)	*(246)*	66.6	(6.3)	*(242)*	2.4	(0.3)	*(231)*	43.4	(6.1)
South East	*(470)*	22.0	(3.4)	*(470)*	62.4	(4.5)	*(463)*	2.4	(0.2)	*(452)*	44.8	(6.2)
South West	*(362)*	25.2	(3.0)	*(364)*	89.2*	(2.3)	*(362)*	3.4*	(0.2)	*(355)*	53.6*	(3.1)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Wear fitness device daily – "Do you ever wear a fitness device (e.g., Fitbit, Nike Sports watch, Apple watch, etc.) to measure your daily physical activity level?"
[IF YES]: "How often do you wear a fitness device?"
Non-job physical activity during past month – "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"
Number days physically exercise in typical week – "In a typical week, how many days do you physically exercise?"
Number of minutes typically exercise – "On the days you exercise, how many minutes or hours do you physically exercise?"

Physical activity was also measured with the question "*During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"* Overall, two-thirds of the adults in Davidson County (67.9%) reported non-job related physical activity in the past month. Employed persons were more likely to report physical activity that was not work-related (74.8%), compared to those unemployed (56.0%). Annual household income was also strongly associated with physical activity, with a large majority of persons having incomes in excess of $100,000 reporting high levels (88.5%), compared to less than half of all persons in households with less than $25,000 in annual income (48.2%). Non-work related physical activity was also found to be exceptionally above average in the South West portion of Davidson County (89.2%), with little variation noted across the remainder of the county (ranging from 60.5% in the Nashville Promise Zone to 66.6% in North West Davidson County).

The mean number of days adults report physically exercising in a typical week in Davidson County was 2.7 days (range=0-7 days). Non-Hispanic whites and persons of mixed and other race/ethnicities reported the highest mean days exercising (3.0 days and 2.9 days, respectively), and African Americans reported the lowest average number of exercise days (2.3 days). Those with a graduate or professional degree reported the highest average number of exercise days (3.3 days), and persons with a high school degree reported the lowest average (2.0 days). Days of exercise also increased with household income, with persons with household incomes of $100,000 and above reporting an average of 3.5 exercise days per week, and those with incomes below $50,000 reporting 2.3 days of exercise. Exercise days were highest in South West Davidson County (average=3.4 days), compared to other areas in the county.

Respondents were also asked to estimate the number of minutes they typically exercise on the days they do exercise. For all adults in Davidson County, including those reporting no exercise, the average was 46.6 minutes per day (range=0-480 minutes per day). The amount of time exercising declined with age, with persons aged 18-29 averaging 60.6 minutes of exercise, and those 65 and older reporting 33.0 minutes of time exercising. Employed persons reported more time exercising (50.4 minutes) compared to those unemployed (39.0 minutes). Average time exercising was highest in South West (53.6 minutes) and East (52.3 minutes) Davidson County.

Additional questions concerned with physical activity are presented in Table 21. One question asked respondents if they sit, stand or walk most of the day. Just over half (52.2%) indicated they sit during most of the day. About one-third reported they walk around most of the day (36.2, se = 2.1), and 11.6% reported they stand during most of the day (se = 1.6, data not reported in tables). Only one sociodemographic measure, education, was associated with sitting most of the day. Specifically, sitting most of the day increased with education. Two-thirds of those with a graduate or professional degree reported sitting most of the day (67.9%), while about one-third of those with less than a high school education (32.9%) reported doing so.

Table 21: Walking in Davidson County by Demographic Characteristics (cont. next page)

	Sit most of the day			Days in last week walk at least 10 minutes to get someplace			Days in last week walk at least 10 minutes for fun or relaxation			Use community trails and other paths at least weekly		
	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	Mean	(se)	(*n*)	%	(se)
Total Sample	*(1579)*	52.2	(2.1)	*(1756)*	3.0	(0.1)	*(1745)*	3.0	(0.1)	*(1763)*	23.2	(1.9)
Gender												
Female	*(1143)*	50.4	(2.5)	*(1154)*	2.8	(0.1)	*(1146)*	2.8	(0.1)	*(1158)*	21.0	(2.2)
Male	*(596)*	54.2	(3.5)	*(602)*	3.3*	(0.2)	*(599)*	3.2*	(0.2)	*(605)*	25.5	(3.1)
Age												
18-29	*(274)*	42.9	(5.3)	*(277)*	3.5	(0.3)	*(273)*	2.8	(0.2)	*(278)*	21.8	(4.7)
30-49	*(608)*	53.8	(3.3)	*(611)*	3.1	(0.2)	*(611)*	3.1	(0.2)	*(613)*	26.2	(3.1)
50-64	*(410)*	58.0	(4.4)	*(414)*	3.2	(0.2)	*(415)*	3.0	(0.2)	*(418)*	25.1	(4.2)
65 and older	*(402)*	55.0	(3.9)	*(408)*	2.2*	(0.2)	*(405)*	2.8	(0.2)	*(408)*	18.5	(3.1)
Race/Ethnicity												
African American	*(395)*	43.4	(4.5)	*(399)*	3.0	(0.2)	*(394)*	2.8	(0.2)	*(403)*	19.1	(4.3)
Hispanic/Latino	*(113)*	44.7	(8.8)	*(114)*	3.0	(0.2)	*(114)*	2.7	(0.4)	*(114)*	22.5	(9.2)
White, non-Hispanic	*(1102)*	54.5	(2.6)	*(1111)*	2.9	(0.1)	*(1108)*	3.1	(0.1)	*(1114)*	24.7	(2.0)
Mixed/other	*(94)*	61.6	(8.5)	*(96)*	3.6	(0.4)	*(96)*	3.1	(0.4)	*(97)*	26.6	(7.0)
Education												
Less than high school	*(94)*	32.9	(6.3)	*(92)*	2.4	(0.4)	*(96)*	2.9	(0.4)	*(96)*	15.7	(5.4)
High school graduate/GED	*(221)*	44.8	(5.6)	*(226)*	3.3	(0.2)	*(224)*	2.5	(0.3)	*(230)*	21.3	(5.4)
Some college, no degree	*(379)*	45.6	(3.9)	*(382)*	3.1	(0.2)	*(378)*	3.1	(0.2)	*(379)*	22.1	(3.2)
College graduate	*(590)*	63.4	(3.0)	*(592)*	3.0	(0.2)	*(589)*	3.2	(0.2)	*(596)*	21.9	(2.5)
Graduate/professional degree	*(421)*	67.9*	(3.3)	*(428)*	2.9	(0.2)	*(427)*	3.3*	(0.2)	*(426)*	33.4	(3.5)
Employment Status												
Employed	*(1084)*	51.5	(2.8)	*(1090)*	3.3	(0.1)	*(1084)*	3.1	(0.1)	*(1091)*	25.2	(2.6)
Unemployed	*(598)*	56.3	(3.3)	*(605)*	2.6*	(0.2)	*(604)*	2.7*	(0.2)	*(609)*	20.2	(2.6)
Annual Household Income												
Less than $25,000	*(357)*	46.6	(4.2)	*(361)*	3.3	(0.2)	*(359)*	2.9	(0.2)	*(366)*	20.7	(3.9)
$25,000 to less than $50,000	*(414)*	49.5	(5.2)	*(419)*	3.0	(0.2)	*(421)*	2.5	(0.2)	*(419)*	20.8	(4.2)
$50,000 to less than $75,000	*(318)*	52.4	(4.7)	*(320)*	3.1	(0.3)	*(318)*	3.1	(0.3)	*(320)*	21.0	(3.6)
$75,000 to less than $100,000	*(183)*	66.1	(5.6)	*(185)*	2.2	(0.3)	*(183)*	3.1	(0.3)	*(186)*	19.2	(3.7)
$100,000 and greater	*(344)*	63.4	(4.3)	*(348)*	3.2*	(0.2)	*(348)*	3.4*	(0.2)	*(348)*	32.2	(3.9)

Table 21: Walking in Davidson County by Demographic Characteristics (cont.)

	Sit most of the day			Days in last week walk at least 10 minutes to get someplace			Days in last week walk at least 10 minutes for fun or relaxation			Use community trails and other paths at least weekly		
	(*n*)	%	(se)	(*n*)	Mean	(se)	(*n*)	Mean	(se)	(*n*)	%	(se)
Health Insurance Coverage												
Yes	*(1564)*	54.2	(2.3)	*(1564)*	3.0	(0.1)	*(1568)*	3.0	(0.1)	*(1582)*	23.6	(2.1)
No	*(127)*	33.9	(8.2)	*(129)*	3.8*	(0.4)	*(129)*	2.6	(0.4)	*(129)*	17.6	(5.2)
Sexual Orientation												
Heterosexual	*(1557)*	54.0	(2.3)	*(1572)*	3.0	(0.1)	*(1566)*	3.0	(0.1)	*(1580)*	24.3	(2.1)
Gay-lesbian-bisexual	*(105)*	44.7	(8.5)	*(105)*	2.9	(0.4)	*(105)*	2.8	(0.5)	*(105)*	20.1	(6.2)
Davidson County Zone												
East	*(321)*	47.3	(4.5)	*(330)*	2.7	(0.2)	*(328)*	3.0	(0.2)	*(331)*	22.4	(4.4)
Nashville Promise Zone	*(351)*	53.5	(4.4)	*(352)*	3.5	(0.2)	*(347)*	3.0	(0.2)	*(356)*	22.9	(3.9)
North West	*(242)*	43.2	(7.2)	*(246)*	3.1	(0.4)	*(242)*	2.8	(0.4)	*(245)*	22.8	(8.3)
South East	*(464)*	52.7	(4.4)	*(464)*	2.9	(0.2)	*(462)*	2.5	(0.2)	*(468)*	14.7	(2.7)
South West	*(361)*	59.3	(3.7)	*(364)*	3.3*	(0.2)	*(366)*	3.6*	(0.2)	*(363)*	36.2*	(3.9)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Sit most of the day – "On a typical day, do you sit during most of the day, stand during most of the day, or walk around most of the day?"
Days in last week walk at least 10 minutes to get someplace – During the past seven days, on how many days did you walk for at least ten minutes at a time to get to some place such as work, school, a store, or restaurant?"
Days in last week walk at least 10 minutes for fun or relaxation – "During the past seven days, on how many days did you walk for at least ten minutes at a time for fun, relaxation, exercise or to walk the dog?"
Use community trails and other paths at least weekly – "Does your community have trails, greenways, bike paths, or sidewalks for biking, walking or other activities?" [IF YES]: "How often do you use these for biking, walking or other activities? Would you say at least once a week, at least once a month, a few times per year, never?"

Another physical activity question asked respondents "*During the past seven days, on how many days did you walk for at least ten minutes at a time to get to some place such as work, school, a store, or restaurant?"* Adults in Davidson Country reported walking for at least ten minutes an average of 3.0 days per week (range=0-7). Males were more likely to do so (3.3 days vs. 2.8 days for females), and younger persons aged 18-29 years were more likely to walk for one of these purposes (3.5 days) than were persons aged 65 and older (2.2 days per week). Employed persons also walked more often (3.3 days) compared to the unemployed (2.6 days). Interestingly, there was little variation in walking time across household income groups, with the exception that those earning between $75-$100,000 reported walking less frequently (2.2 days per week, compared to 3.0-3.3 days per week for all other income groups). Those without health insurance walked more days per week (3.8 days) than did those with insurance (3.0 days). Differences in walking days were also found across the county, with mean number of days ranging from 2.7 in East Davidson County to 3.5 in the Nashville Promise Zone.

A related question asked respondents *"During the past seven days, on how may days did you walk for at least ten minutes at a time for fun, relaxation, exercise or to walk the dog?"* An average of 3.0 days per week were also reported for these activities (range=0-7), which varied across several sociodemographic measures, including gender, education, employment status, annual household income, and zone within Davidson County. Males (3.2 days), persons with graduate/professional degrees (3.3 days), employed persons (3.1 days), those with household incomes of $100,000 or more (3.4 days), and persons living in South West Davidson County (3.6 days) reported, on average, more days of walking as part of leisure activities.

A final question regarding physical activity asked respondents if they use community trails, greenways, bike paths, or sidewalks for biking, walking or other activities. Of the full sample (including persons responding that their community does not have any of these types of trails – 26.5% of the sample, se = 1.7, data not shown in tables), 23.2% reported using these community trails for biking, walking or other activities at least weekly. Use of these trails was greater among residents of South West Davidson County (36.2% were weekly users), and least common among persons in the South East part of the County (14.7%).

Additional Health Related Topics

Several important topics not covered in previous sections of this report are considered here. These include the health effects of racial discrimination, electronic health literacy, and issues related to maternal and child health.

Discrimination and Health

Table 22 presents four previously developed BRFSS survey items concerned with perceptions of discrimination and health status (Purnell et al., 2012). The first item asked "*Within the past 12 months at work, do you feel you were treated worse than, the same as, or better than people of other races?"* Among persons employed in the past 12 months (*n* = 1,280), 13.9% reported feeling they had been treated worse than people of some other races at work. The only sociodemographic measure associated with this question was race/ethnicity. In particular, 31.5% of African Americans reported feelings of workplace discrimination. Non-Hispanic whites were least likely to report perceptions of work-related racial discrimination.

Table 22: Experiences of Discrimination in Davidson County by Demographic Characteristics (cont. next page)

	Perceived work place discrimination (among persons employed during past 12 months)			Perceived health care discrimination (among persons receiving health care in past 12 months)			Emotional effects of discrimination			Physical effects of discrimination		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Total Sample	*(1280)*	13.9	(1.8)	*(1582)*	8.3	(1.4)	*(1726)*	16.1	(1.9)	*(1699)*	8.3	(1.3)
Gender												
Female	*(813)*	17.4	(2.7)	*(1048)*	8.6	(2.5)	*(1133)*	15.6	(2.1)	*(1117)*	10.1	(2.0)
Male	*(467)*	10.7	(2.2)	*(534)*	8.1	(1.4)	*(593)*	16.7	(3.2)	*(582)*	6.3	(1.6)
Age												
18-29	*(260)*	7.9	(2.0)	*(253)*	10.1	(4.7)	*(277)*	18.8	(5.6)	*(273)*	4.1	(1.4)
30-49	*(551)*	13.3	(2.2)	*(566)*	8.7	(1.8)	*(613)*	14.6	(2.1)	*(604)*	9.7	(2.1)
50-64	*(309)*	22.9	(5.6)	*(375)*	8.7	(2.3)	*(405)*	20.0	(4.5)	*(400)*	13.0	(4.2)
65 and older	*(146)*	16.1	(5.3)	*(368)*	5.4	(1.9)	*(404)*	11.6	(2.5)	*(395)*	5.0	(1.5)
Race/Ethnicity												
African American	*(276)*	31.5	(5.2)	*(358)*	14.6	(3.4)	*(395)*	30.6	(4.3)	*(386)*	17.8	(3.8)
Hispanic/Latino	*(92)*	17.0	(5.9)	*(102)*	19.8	(8.2)	*(116)*	31.1	(10.0)	*(114)*	15.2	(5.1)
White, non-Hispanic	*(820)*	6.0	(1.3)	*(1026)*	3.1	(0.9)	*(1101)*	7.1	(1.2)	*(1088)*	3.1	(0.9)
Mixed/other	*(81)*	7.7*	(2.7)	*(84)*	11.4*	(4.5)	*(97)*	13.1*	(4.0)	*(94)*	5.5*	(2.0)
Education												
Less than high school	*(35)*	32.3	(12.5)	*(84)*	13.7	(5.3)	*(97)*	12.7	(4.8)	*(93)*	18.0	(6.2)
High school graduate/GED	*(123)*	12.4	(5.2)	*(197)*	6.8	(2.2)	*(222)*	19.3	(5.5)	*(216)*	9.4	(3.6)
Some college, no degree	*(264)*	17.1	(3.3)	*(331)*	12.6	(4.1)	*(369)*	17.1	(3.4)	*(364)*	8.8	(2.1)
College graduate	*(489)*	9.2	(2.0)	*(553)*	4.3	(1.2)	*(591)*	12.5	(2.0)	*(585)*	5.0	(1.3)
Graduate/professional degree	*(358)*	14.4	(3.0)	*(399)*	7.7	(2.3)	*(424)*	15.9	(2.9)	*(418)*	6.0	(2.2)
Employment Status												
Employed	*(1061)*	12.7	(1.9)	*(1009)*	9.2	(1.9)	*(1088)*	16.9	(2.5)	*(1070)*	7.7	(1.7)
Unemployed	*(192)*	18.2	(4.5)	*(542)*	5.9	(1.5)	*(602)*	15.0	(2.9)	*(596)*	8.6	(1.6)
Annual Household Income												
Less than $25,000	*(198)*	17.1	(4.0)	*(323)*	11.1	(2.5)	*(367)*	14.7	(2.5)	*(358)*	13.8	(2.7)
$25,000 to less than $50,000	*(317)*	17.3	(5.0)	*(383)*	6.9	(2.0)	*(421)*	17.5	(4.9)	*(413)*	10.5	(3.9)
$50,000 to less than $75,000	*(254)*	14.8	(3.7)	*(298)*	10.3	(4.0)	*(318)*	18.2	(4.4)	*(312)*	5.7	(2.3)
$75,000 to less than $100,000	*(166)*	6.8	(2.6)	*(172)*	9.4	(6.9)	*(185)*	9.8	(2.6)	*(183)*	2.2	(1.0)
$100,000 and greater	*(293)*	11.0	(3.1)	*(333)*	4.8	(1.8)	*(346)*	13.9	(3.1)	*(343)*	4.8	(1.9)

Table 22: Experiences of Discrimination in Davidson County by Demographic Characteristics (cont.)

	Perceived work place discrimination (among persons employed during past 12 months)			Perceived health care discrimination (among persons receiving health care in past 12 months)			Emotional effects of discrimination			Physical effects of discrimination		
	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)	(*n*)	%	(se)
Health Insurance Coverage												
Yes	*(1172)*	13.5	(1.9)	*(1454)*	7.7	(1.4)	*(1547)*	15.5	(1.9)	*(1524)*	7.6	(1.3)
No	*(96)*	17.3	(5.8)	*(88)*	19.1	(6.8)	*(129)*	23.4	(8.3)	*(125)*	14.1	(5.2)
Sexual Orientation												
Heterosexual	*(1151)*	13.4	(1.9)	*(1447)*	8.5	(1.5)	*(1573)*	15.1	(1.9)	*(1551)*	7.1	(1.3)
Gay-lesbian-bisexual	*(100)*	14.1	(5.4)	*(97)*	4.7	(3.1)	*(105)*	31.6	(9.2)	*(103)*	17.2	(6.1)
Davidson County Zone												
East	*(228)*	13.4	(3.5)	*(297)*	6.9	(3.5)	*(328)*	18.8	(4.6)	*(319)*	5.8	(1.7)
Nashville Promise Zone	*(260)*	17.8	(4.3)	*(318)*	11.8	(3.2)	*(351)*	17.6	(3.4)	*(343)*	16.3	(3.6)
North West	*(163)*	26.3	(11.6)	*(209)*	10.8	(3.2)	*(235)*	22.3	(7.8)	*(235)*	14.0	(8.0)
South East	*(348)*	13.2	(2.8)	*(419)*	11.0	(3.1)	*(453)*	17.3	(3.9)	*(448)*	7.1	(1.7)
South West	*(281)*	8.0	(2.0)	*(339)*	2.4	(1.0)	*(359)*	7.4	(1.7)	*(354)*	2.8	(1.2)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Perceived work place discrimination – "Within the past 12 months at work, do you feel you were treated worse than, the same as, or better than people of other races?" [TABLE REPORTS % INDICATING "Worse than other races" or "Worse than some races, better than others].
Perceived health care discrimination – "Within the past 12 months when seeking health care, do you feel your experiences were worse than, the same as, or better than for people of other races?" [TABLE REPORTS % INDICATING "Worse than other races" or "Worse than some races, better than others].
Emotional effects of discrimination – "Within the past 30 days, have you felt emotionally upset, for example angry, sad, or frustrated, as a result of how you were treated based on your race?"
Physical effects of discrimination – "Within the past 30 days, have you experienced any physical symptoms, for example, a headache, an upset stomach, tensing of your muscles, or a pounding heart, as a result of how you were treated based on your race?"

A similar item asked about perceived discrimination when seeking health care: *"Within the past 12 months when seeking health care, do you feel your experiences were worse than, the same as, or better than for people of other races?"* Among those seeking health care in the past 12 months (*n* = 1,582), Hispanic/Latinos were most likely to report perceptions of discrimination in seeking health care (19.8%), followed by African Americans (14.6%). Non-Hispanic whites were least likely to indicate feelings of racial discrimination when obtaining health care (3.1%).

A third question asked "*Within the past 30 days, have you felt emotionally upset, for example angry, sad, or frustrated, as a result of how you were treated based on your race?"* In Davidson County, 16.1% of all adults reported emotional upset over perceptions of discrimination. Both Hispanic/Latinos and African Americans were most likely to report discrimination-based emotional upset (31.1% and 30.6%, respectively). Non-Hispanic whites were least likely to report being emotionally upset as a consequence of racial discrimination (7.1%).

Another question investigated potential physical effects of perceived discrimination: "*Within the past 30 days, have you experienced any physical symptoms, for example, a headache, an upset stomach, tensing of your muscles, or a pounding heart, as a result of how you were treated based on your race?"* In Davidson County, 8.3% of all adults indicated physical symptoms stemming from how they felt they were treated as a consequence of their race. Again, responses to this question varied considerably based on race/ethnicity. African American respondents (17.8%) and Hispanic/Latinos (15.2%) were more likely than non-Hispanic whites (3.1%) and persons of mixed or other race/ethnicities (5.5%) to experience physical symptoms as a result of how they were treated based on their race.

One final question, not presented in tabular form, asked respondents "*How often do you think about your race? Would you say never, once a year, once a month, once a week, once a day, once an hour, or constantly?"* A plurality indicated they never think about their race (40.9%, se=2.1, *n*=1,720), while 9.4% (se=1.3) reported thinking about it constantly. Other responses included thinking about race yearly (7.8%, se=1.3), once a month (14.4%, se=1.8), once a week (13.5%, se=1.2), once a day (12.7%, se=1.4), and once an hour (1.2%, se=0.5). In terms of race/ethnicity, the proportions indicating they never think about their race included 45.8% of non-Hispanic whites, 40.0% of African Americans, 36.5% of persons of mixed or other races, and 18.6% of Hispanic/Latinos. African Americans were most likely to indicate constantly thinking about their race (21.7%), followed by persons of mixed/other races (16.1%), Hispanic/Latinos (15.6%), and non-Hispanic whites (2.0%).

Electronic Health Literacy

Four questions previously used by health services researchers (Chung and Nahm, 2015) asked respondents about their level of confidence in being able to find and effectively use health information on the internet. The four items included the following:

- *"How confident are you that you can find helpful health resources on the Internet?"*
- *"How confident are you that you can use the Internet to answer your health questions?"*
- *"How confident are you that you can tell high quality from low quality health resources on the Internet?"*
- *"How confident are you in using information from the Internet to make health decisions?"*

Responses to each question ranged from (0) not at all confident, to (4) extremely confident. When summed to form an online health literacy index, the score ranged from 0-16, with higher values representing greater levels of electronic health literacy. The coefficient alpha for this 4-item scale was 0.91, a value indicating the measure has a very high degree of internal consistency.

As shown in Table 23, in Davidson County, the mean electronic health literacy score was 9.4 (on a scale ranging from 0-16). Persons aged 30-49 rated themselves higher in electronic health literacy (10.1) and those 65 and older gave themselves the lowest ratings (7.5). Education was also strongly associated with electronic health literacy, ranging from 5.6 among persons with less than a high school degree to 10.9 among persons with graduate or professional degrees. Employed persons also self-rated their health literacy more highly (10.0) than did those who were unemployed (8.2). Electronic health literacy also increased with annual household income. Persons in the lowest income group (less than $25,000) scored an average of 8.3 on the literacy index, with scores increasing to 10.2 for those in households earning $75,000 and above. Persons living in South West Davidson County were also self-rated as having higher electronic health literacy scores (10.4), while those in North West Davidson County scored the lowest (8.2).

Table 23: Online Health Literacy in Davidson County by Demographic Characteristics (cont. next page)

	Online Health Literacy Index		
	(*n*)	Mean	(se)
Total Sample	*(1601)*	9.4	(0.2)
Gender			
Female	*(1029)*	9.1	(0.3)
Male	*(572)*	9.6	(0.2)
Age			
18-29	*(260)*	9.6	(0.5)
30-49	*(553)*	10.1	(0.3)
50-64	*(381)*	9.4	(0.4)
65 and older	*(380)*	7.5*	(0.4)
Race/Ethnicity			
African American	*(363)*	8.8	(0.4)
Hispanic/Latino	*(97)*	10.0	(0.5)
White, non-Hispanic	*(1034)*	9.5	(0.2)
Mixed/other	*(89)*	9.1	(0.9)
Education			
Less than high school	*(74)*	5.6	(0.9)
High school graduate/GED	*(194)*	8.6	(0.5)
Some college, no degree	*(345)*	9.4	(0.3)
College graduate	*(567)*	10.2	(0.2)
Graduate/professional degree	*(403)*	10.9*	(0.3)
Employment Status			
Employed	*(1011)*	10.0	(0.3)
Unemployed	*(550)*	8.2*	(0.3)
Annual Household Income			
Less than $25,000	*(307)*	8.3	(0.4)
$25,000 to less than $50,000	*(387)*	9.3	(0.5)
$50,000 to less than $75,000	*(303)*	9.6	(0.3)
$75,000 to less than $100,000	*(177)*	10.2	(0.5)
$100,000 and greater	*(331)*	10.2*	(0.3)

Table 23: Online Health Literacy in Davidson County by Demographic Characteristics (cont.)

	Online Health Literacy Index		
	(*n*)	Mean	(se)
Health Insurance Coverage			
Yes	*(1450)*	9.5	(0.2)
No	*(105)*	8.6	(0.7)
Sexual Orientation			
Heterosexual	*(1430)*	9.3	(0.2)
Gay-lesbian-bisexual	*(138)*	10.2	(0.6)
Davidson County Zone			
East	*(297)*	9.4	(0.3)
Nashville Promise Zone	*(327)*	9.4	(0.4)
North West	*(220)*	8.2	(0.7)
South East	*(416)*	9.0	(0.4)
South West	*(341)*	10.4*	(0.2)

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019
*$p<.001$

Note: Question wordings include the following:
Health Literacy Index – this index ranges from values of 0 to 16, with higher values indicating greater self-reported levels of health literacy. The four questions used to construct this index are as follows: "How confident are you that you can find helpful health resources on the internet?"; "How confident are you that you can use the internet to answer your health questions?"; "How confident are you that you can tell high quality from low quality health resources on the internet?"; and "How confident are you in using information from the internet to make health decisions?" Responses to each item are coded as follows: "not at all confident" (coded as 0); "not very confident" (coded as 1); "somewhat confident" (coded as 2); "very confident" (coded as 3); and "extremely confident" (coded as 4).

An additional analysis—not shown—confirmed that those persons responding by mail questionnaire who reported no recent experience using the Internet (within the past 30 days) had by far the lowest self-rated electronic health literacy scores (literacy index = 4.7, *n* = 68 respondents), compared to persons who completed online and use the web on a regular basis (literacy index = 9.6, *n* = 1,089 respondents), those who completed online but have otherwise not used the web in the past 30 days (literacy index = 8.5, *n* = 23 respondents), and those who completed paper questionnaires and use the web on a regular basis (literacy index = 9.6, *n* = 386 respondents).

Maternal and Child Health

The health of mothers and children was another important topic covered by this survey; however, due to relatively small sample sizes, most data reported in this section do not appear in statistical tables.

The average number of children under age 18 found to be living in the households participating in the survey was 0.9 (se = 0.1, range = 0-8). Respondents with children were asked to randomly select one (if more than one was living in the household), and answer several questions about that child. These children had an average age of 8.3 years (se = 0.4, range = 0-17, *n* = 398). Of these children, 8.9% (se = 2.1) had ever been diagnosed with asthma by a doctor, nurse or other health professional. For those children 10 years and older, 46.0% (se = 6.3, *n* = 191) had ever had the HPV vaccination (also known as the cervical cancer vaccine, HPV shot, or GARDASIL®), which is designed to prevent the human papilloma virus or HPV infection.

Female respondents were asked if they were currently pregnant; 2.3% (se = 0.7, *n* = 23) indicated they were. An additional 6.9% of women reported having been pregnant sometime in the last 18 months (se = 1.3, *n* = 61). Among these, 81.1% (se = 6.6) reported having given birth. The average age of the newborns was 8.2 months (se = 1.3). One fetal death was reported.

Among women who were currently pregnant or who had been pregnant in the last 18 months, 78.8% (se = 7.1, *n* = 78) indicated having a regular checkup in a family doctor's office at some point during the 12 months before their pregnancy. Less than half (44.4%, se = 8.5) reported a visit for family planning or birth control during the 12 months during this time interval. These women were also asked to report whether or not they had various types of negative experiences during their pregnancy or during the 3 months before their pregnancy. Most commonly reported were loss of employment by either the woman (19.5%) or her partner (21.9%), and a husband/partner indicating not wanting her to be pregnant (18.3%). Responses to these and all other experiences are summarized in Table 24. Overall, 48.1% of these women reported having at least one of these experiences during or within the months immediately before their pregnancy (mean = 1.2 experiences, se = 0.2).

Table 24: Negative Experiences of Women who are Currently or were Recently (in the last 18 months) Pregnant (*n* = 78)

Experience	%	(se)
My husband or partner lost his job	21.9	(8.2)
I lost my job even though I wanted to go on working	19.5	(8.0)
My husband or partner said he didn't want me to be pregnant	18.3	(7.3)
A close family member was very sick and had to go into the hospital	16.4	(5.4)
Someone very close to me had a problem with drinking or drugs	12.3	(6.4)
My husband, partner, or I went to jail	9.8	(6.4)
Someone very close to me died	8.2	(4.4)
I got separated or divorced from my husband or partner	6.4	(5.3)
I was homeless or had to sleep outside, in a car, or in a shelter	3.0	(3.0)
I was apart from my husband or partner due to military deployment or extended work-related travel	0.3	(0.3)

These women were also asked how many alcoholic drinks they had consumed in an average week during the three months before they became pregnant. A majority reported not drinking during that time (27.1%, se = 7.4) or consuming less than one drink per week (27.5%, se = 6.8). Some reported heavy drinking, 14 or more drinks per week, during this time period (12.2%, se = 7.8%).

Women who had been pregnant in the past 18 months, but who were not currently pregnant, were also asked follow-up questions about their post-pregnancy checkup (Table 25). About three-quarters of these women (78.0%) reported talking with a doctor, nurse or other health care worker about birth control methods during this checkup. A majority (57.7%) also indicated they had been given or prescribed a contraceptive method. These included the pill, patch, shot (Depo Provera®), NuvaRing®, or condoms, an IUD (Mirena®, ParaGard®, Liletta®, or Skyla®) or a contraceptive implant (Nexplanon® or Implanon®). More than half additionally reported talking about good nutrition (56.2%, se=9.6), and how long to wait before getting pregnant again (51.8%). A few reported not having a post-pregnancy checkup (7.2%).

Most women who had given birth to a live infant in the past 18 months reported having breastfed their babies or having pumped breast milk to feed them (89.5%, se = 6.4). Of these, a majority were currently breastfeeding or feeding pumped milk to their new baby (58.4%, se = 13.8), and reported having done so for an average of 7.0 months (se = 1.7, range = 0.5-18 months). When asked in which position they most often laid their baby down to sleep, about half (49.9%, se = 13.1) reported laying them on their back, and about one-quarter indicated laying the infant on their stomach (25.4%, se = 12.3) and on their side (24.7%, se = 13.9). These new mothers were also asked how many times their new baby had been to a doctor, nurse, or other health care worker for a well-baby checkup. The average number of visits was 4.8, se = 0.4, range=0-9 times).

Table 25: Post-Pregnancy Checkup Experiences of Women who were Pregnant during the Last 18 Months (*n* = 60)

Did a doctor, nurse, or other health care worker:	%	(se)
• Talk about birth control methods	78.0	(7.0)
• Give or prescribe a contraceptive method such as the pill, patch, shot (Depo Provera®), NuvaRing®, or condoms, an IUD (Mirena®, ParaGard®, Liletta®, or Skyla®) or a contraceptive implant (Nexplanon® or Implanon®)	57.7	(8.9)
• Talk about good nutrition	56.2	(9.6)
• Talk about how long to wait before getting pregnant	51.8	(9.6)
• Did not have a post-pregnancy checkup	7.2	(4.1)

Conclusions

This report provides basic estimates for a variety of essential health conditions, behaviors and health care access and utilization patterns in Davidson County, Tennessee. We are hopeful that this report will assist policy makers in designing and implementing new initiatives that lead to improved health for all citizens in the county. We also hope these findings are useful to the general public for better understanding the health risks confronting their community and some of the health-related resources now available to them.

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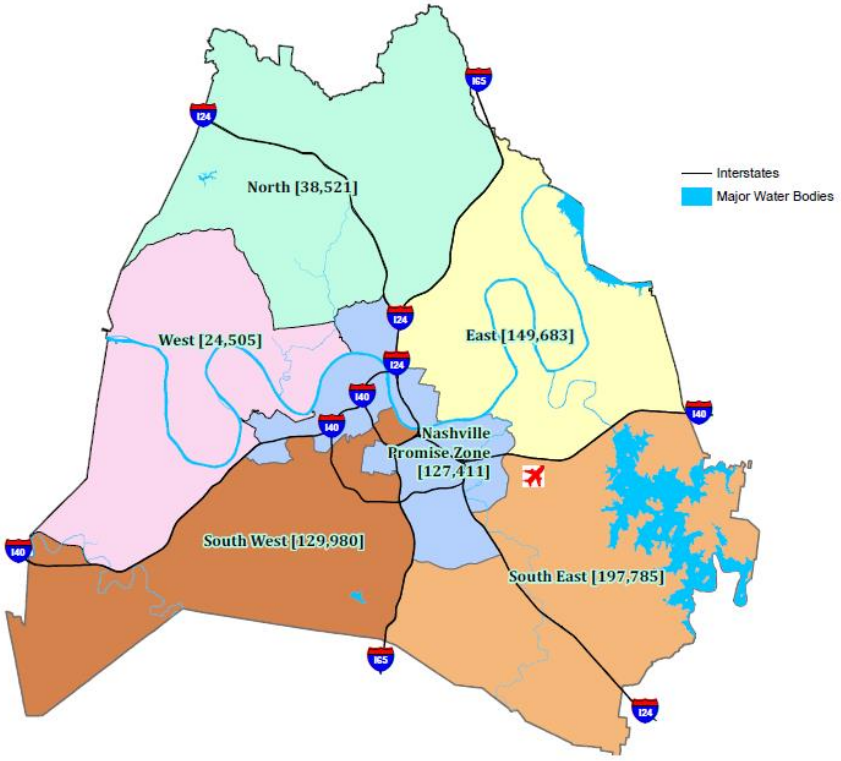
Appendix A

Map of Zones in Davidson County

Metro Public Health Dept
Nashville/Davidson County
Protecting, Improving, and Sustaining Health

Metro Community Health and Wellness Survey Sampling- Working Map
Davidson County, Tennessee

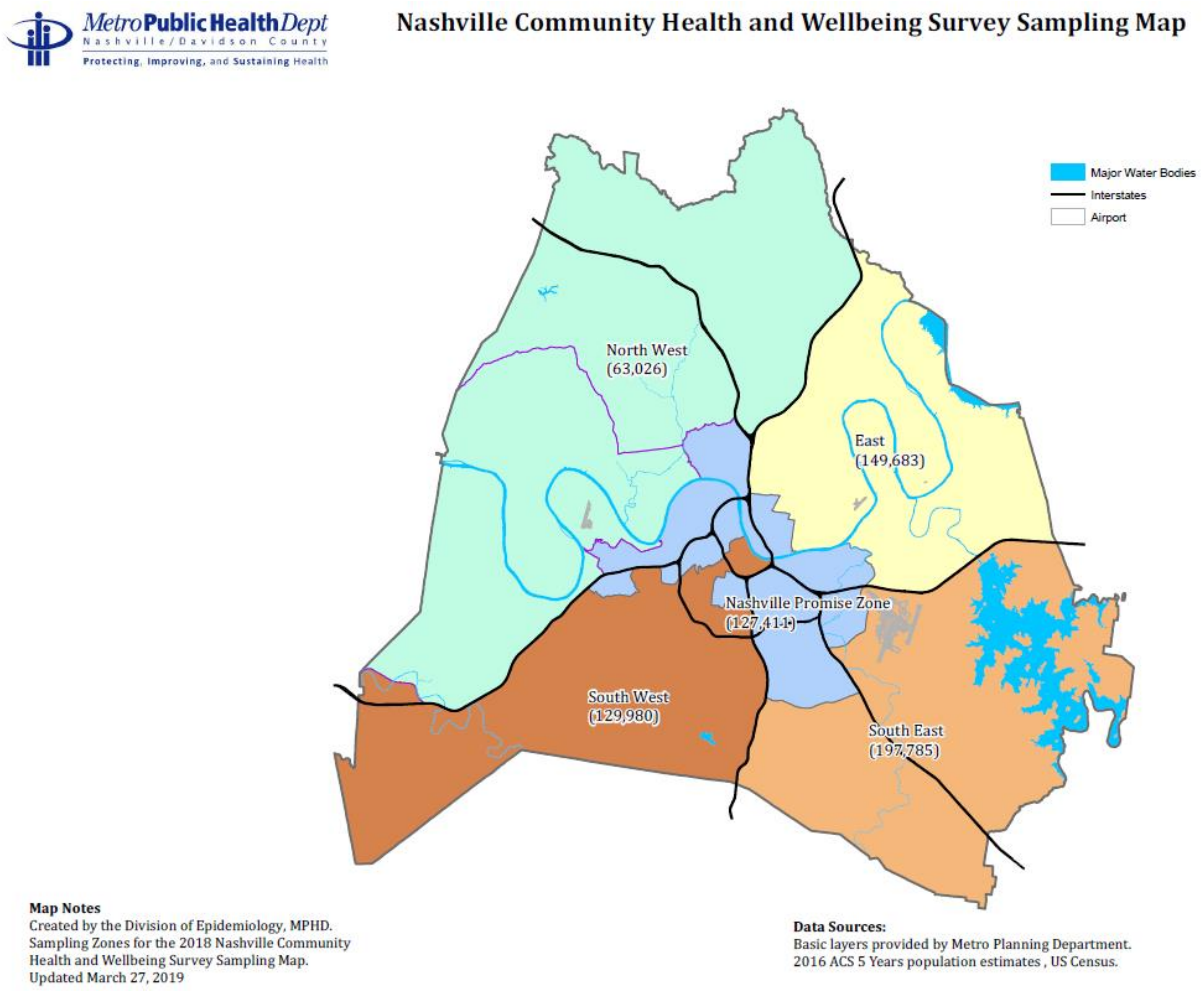


Map Notes
Created by the Division of Epidemiology, MPHD.
To vizualize Sampling Zones for the 2018 Metro Community Health and wellness Survey.
The figure inside each zone represent its population

Data Sources:
. Basic layers provided by Metro Planning Department.
. 2016 ACS 5 Years population estimates , US Census.

Appendix B

Map of Combined Zones in Davidson County



Appendix C

Detailed Unweighted Demographic Composition of Sample

Table B-1. Detailed Unweighted Demographic Composition of Nashville Community Health + Well-being Survey Sample (*n* = 1,805)

	(*n*)	%		(*n*)	%
Gender			**Annual Household Income**		
Female	*(1188)*	65.8	Less than $10,000	*(118)*	7.1
Male	*(617)*	34.2	$10,000 to less than $15,000	*(85)*	5.1
Age			$15,000 to less than $20,000	*(68)*	4.1
18-29	*(280)*	16.2	$20,000 to less than $25,000	*(101)*	6.1
30-49	*(617)*	35.6	$25,000 to less than $35,000	*(175)*	10.6
50-64	*(418)*	24.1	$35,000 to less than $50,000	*(251)*	15.2
65 and older	*(418)*	24.1	$50,000 to less than $60,000	*(142)*	8.6
Race/Ethnicity			$60,000 to less than $75,000	*(19)*	10.8
African American, Non-Hispanic	*(407)*	23.3	$75,000 to less than $100,000	*(187)*	11.3
White, Non-Hispanic	*(1124)*	64.4	$100,000 to less than $125,000	*(111)*	6.7
Hispanic/Latino	*(116)*	6.7	$125,000 to less than $150,000	*(78)*	4.7
Mexican	*[47]*	2.7	$150,000 to less than $200,000	*(83)*	5.0
Puerto Rican	*[15]*	0.9	$200,000 and greater	*(77)*	4.7
Cuban	*[7]*	0.4	**Health Insurance Coverage**		
Central America & Caribbean	*[17]*	1.0	Yes-insured	*(905)*	50.6
South America	*[15]*	0.9	Employer/union plan	*(117)*	6.5
Other	*[15]*	0.9	Purchased plan	*(401)*	22.4
Asian	*(46)*	2.6	Medicare	*(77)*	4.3
Pacific Islander	*(7)*	0.4	Medicare or other state program	*(42)*	2.4
American Indian/Alaska Native	*(17)*	1.0	TRICARE, VA, or military	*(70)*	3.9
Mixed/other	*(28)*	1.6	Some other source	*(137)*	7.7
Education			No-not insured	*(40)*	2.2
Never attended	*(4)*	0.3	**Household Size**		
Grades 1-8	*(16)*	1.2	One	(718)	41.9
Grades 9-11	*(80)*	6.1	Two	(815)	47.6
High school graduate/GED	*(233)*	17.8	Three	(121)	7.1
Some college, no degree	*(384)*	29.4	Four	(46)	2.7
College degree	*(483)*	3.7	Five	(10)	0.6
Some graduate education	*(114)*	8.7	Six	(2)	0.1
Graduate/professional degree	*(428)*	32.8	**Children in Household**		
Employment Status			None	*(922)*	52.5
Employed for wages	*(947)*	57.2	One	*(563)*	32.1
Self-employed	*(150)*	9.1	Two	*(153)*	8.7
Out-of-work for 1 year or more	*(24)*	1.5	Three	*(81)*	4.6
Out-of-work for less than 1 year	*(34)*	2.1	Four	*(29)*	1.7
Homemaker	*(77)*	4.7	Five or more	*(8)*	0.5
Student	*(49)*	3.0	**Sexual Orientation**		
Retired	*(348)*	21.0	Heterosexual	*(1595)*	92.7

Unable to work	*(26)*	1.6	Gay-Lesbian	*(59)*	3.4
Marital Status			Bisexual	*(41)*	2.4
Married	*(707)*	40.3	Other	*(25)*	1.5
Divorced	*(292)*	16.7	**Consider Self Transgender***		
Widowed	*(113)*	6.4	Yes-transgender (male to female)	*(2)*	0.1
Separated	*(32)*	1.8	Yes-transgender (female to male)	*(1)*	0.1
Single/never married	*(488)*	27.8	No	*(1728)*	99.8
Member of an unmarried couple	*(122)*	7.0	**Davidson County Zone**		
Personally has a cell/smart phone			East	*(341)*	18.9
Yes	*(1670)*	97.8	Nashville Promise Zone	*(361)*	20.0
No	*(38)*	2.2	North West	*(252)*	14.0
Used Internet in past 30 days			South East	*(480)*	26.6
Yes	*(1568)*	93.5	South West	*(371)*	20.6
No	*(109)*	6.5			

DATA SOURCE: Nashville Community Health + Well-being Survey, 2019

*All respondents who self-identified as transgendered also self-identified as heterosexual and are reported as such in the tables within the report.