Partners for a Healthier Holmes County

2020 Holmes County Community Health Needs Assessment

Technical Report

Published: July 2021

Acknowledgements

The following report has been funded by Pomerene Hospital, Holmes County General Health District, and the Recovery Board of Wayne and Holmes Counties. Data collection and analysis, survey design and distribution, focus group conduction, and report construction was completed by the Lake County General Health District's Office of Health Policy and Performance Improvement. Several Holmes County community partners comprised the 2020 Holmes County Community Health Needs Assessment Steering Committee, including:

ANAZAO Community Partners

Mark Woods, *Executive Director*

East Holmes School District

Erik Beun, *Superintendent*

Family and Children First Council of Holmes County

Pam Semenya, *Council Coordinator*

Holmes County Board of Developmental Disabilities

Marianne Mader, *Superintendent*

Holmes County Emergency Management Agency

Gary Mellor, *Director*

Luke Hall, *Deputy Director*

Holmes County General Health District

Michael Derr, *Health Commissioner*

Jennifer Talkington, *Deputy Health Commissioner*

Mental Health and Recovery Board of Wayne and Holmes Counties

Judy Wood*, Executive Director*

Joanna Edwards, *Associate Director of Recovery*

Ohio University

Melissa Thomas, *Assistant Professor*

OneEighty Foundation

Tina Zickefoose, *Victim Advocate and Outreach Specialist*

Pomerene Hospital

Ayla Uhl, *Health and Wellness Manager, Pomerene Kinetics*

Tia Cernava, *Chief Financial Officer*

The Counseling Center of Wayne and Homes Counties

Jim Foley, *Director, Community Mental Health Education, Prevention, and Consultation*

Viola Startzman Clinic

Jaime Parsons, *Executive Director*

West Holmes Local Schools

Aaron Kaufman, *Superintendent*

Report Contact Information

Jennifer Talkington, MPH

Deputy Health Commissioner

Holmes County General Health District

PO Box 272

Millersburg, OH 44654

(330) 674-5035

Table of Contents

1. Executive Summary

Conduction of a community health needs assessment every three years is required for non-profit hospital systems to retain their respective 501(c)(3) status. Concurrently, local health departments seeking accreditation from the Public Health Accreditation Board are required to conduct a community health assessment every three years. As such, and in order to avoid duplicative assessment efforts and enhance collaboration and coordination between clinical care and public health in Holmes County, Pomerene Hospital and the Holmes County General Health District conducted a joint community health needs assessment beginning in December of 2019. This assessment was funded by Pomerene Hospital, Holmes County General Health District, and the Mental Health and Recovery Board of Wayne and Holmes Counties, satisfies both Internal Revenue Service and Public Health Accreditation Board requirements, and was conducted by the Lake County General Health District's Office of Health Policy and Performance Improvement. The assessment process was stepwise in nature, and included (1) secondary data collection, (2) community resident survey distribution, (3) community leader survey distribution, and (4) community resident focus groups.

The assessment process identified 49 county-specific health concerns; access to a mental health provider and access to a primary care provider were identified across all six assessment components. Six health concerns, including adults that were not physically active, lack of broadband internet, lack of health insurance among those under 19 years of age, 19 to 64 years of age, and 65 years of age and older, respectively, and lack of recreational facilities were consistent across five of the six assessment components. A total of 14 health concerns were uniquely and qualitatively identified by Holmes County community residents and community leaders, and not otherwise reflected by way of the collected secondary data.

2. Methods

2.1 Community Health Needs Assessment

Despite several differences between the community health needs assessment (CHNA) requirements for hospitals, and community health assessment (CHA) requirements for public health departments, these processes are not mutually exclusive; both assessments aim to establish a clear documentation of local health needs, and thereafter inform response to these needs. While the non-profit hospital CHNA mandate was prompted by the passage of the Affordable Care Act in 2010 (Public Law 111-148 2010) and is managed primarily by the Internal Revenue Service (IRS 2011), and the CHA is impelled for those local health departments seeking accreditation or reaccreditation from the Public Health Accreditation Board (Laymon et al. 2015), both agencies have expressed a preference that these assessments be the product of a collaborative process. Moreover, the Internal Revenue Service supports hospital collaboration with a public health department to conduct its CHNA, and the adoption of a joint CHA/CHNA report, as long as the hospital-specific CHNA requirements are met.

Beginning with a shared vision between Pomerene Hospital, Holmes County General Health District, and Partners for a Healthier Holmes County in December of 2019, this process was convened around shared data needs, as well as comparability to CHNA findings from previous years. In order to ensure local community partner engagement and participation, Partners for a Healthier Holmes County organizations effectively comprised the 2020 Holmes County CHNA Steering Committee. The 2020 Holmes County CHNA Steering Committee met during regularly scheduled monthly meetings, and was responsible for informing survey question content needs and distribution methods.

2.2 Secondary Data Collection

2.2.1 Secondary Data and Sources

Demographic, socioeconomic, morbidity, and mortality data were obtained from the following publically available sources:

i. Centers for Disease Control and Prevention (CDC)
    a. AtlasPlus
    b. Behavioral Risk Factor Surveillance Survey (BRFSS)
    c. National Center for Education Statistics (NCES)
    d. Wide-ranging Online Data for Epidemiologic Research (WONDER)
ii. Community Commons
iii. County Health Rankings
iv. Data.census.gov
v. Homefacts.com
vi. March of Dimes
vii. National Highway Traffic Safety Administration
    a. Fatality Analysis Reporting System (FARS)
viii. Network of Care
ix. Ohio Department of Health
    a. Ohio Public Health Data Warehouse
x. Radon.com
xi. The National Vital Statistics System

Initially, a total of 338 secondary data measures were identified and compiled across Healthy People 2020 (where available), national, state, and county values. In conjunction with Holmes County values, two demographically similar counties, Madison County and Fulton County, respectively, as determined by total population, poverty, age, and median household income, were included for benchmarking purposes. Based upon the quality, age, availability, and/or redundancy of the aforesaid measures, 176 of the initially compiled 338 (52%) measures were included for analysis. Secondary data categories included: (1) population, (2) education, (3) economic status, (4) housing, (5) pollution, (6) built environment, (7) healthcare access and utilization, (8) health insurance and healthcare cost, (9) injury and accidents, (10) crime and violence, (11) substance use and abuse, (12) mental health, (13) obstetrics, (14) sexual behavior and STD, (15) infectious disease, (16) cancer, and (17) chronic disease.

2.2.2 Relative Ranking Method

In order to prioritize the collected secondary data measures, a relative ranking method was employed. Relative ranking is an intuitive method for summarizing large volumes of data, has been previously recommended for the synthesis of community health needs assessment data (Oglesby and Slenkovich 2014), and involves the comparison of whether a given value is favorable or unfavorable to other included values. For the purposes of this analysis, the Holmes County value for each measure was compared to its respective Healthy People 2020, national, state, and comparison Ohio county values, the latter of which were utilized as benchmarks. As such, if the rate of heart disease in Holmes County was higher than the Healthy People 2020 goal, lower than both the national and state figures, and higher than both comparison county values, respectively, the measure would be unfavorable to three benchmarks. Holmes County values unfavorable to four or more benchmarks were considered county-specific health concerns.

2.3 Community Resident Survey

2.3.1 Question Content

In order to inform the construction of the community resident survey, 54 previously validated question content was referenced, utilized, and/or adapted from the following survey instruments and instrument subsets:

i. American Housing Survey (United States Census Bureau 2017)
ii. Behavioral Risk Factor Surveillance Survey
    a. Adverse Childhood Experiences (Centers for Disease Control and Prevention 2019a)
    b. General Survey (Centers for Disease Control and Prevention 2019b)
iii. Community Assessment for Public Health Emergency Response Questionnaire (Centers for Disease Control and Prevention 2019c)
iv. COVID-19 Knowledge, Risk Perceptions, and Precautionary Behavior Survey (Olepegba et al. 2020)
v. Diabetes Self-management Questionnaire (Schmitt et al. 2013)
vi. Eating Motivation Survey (Renner et al. 2012)
vii. Food Choice Questionnaire (Fotopoulos et al. 2019)
viii. Generalized Anxiety Disorder Scale (Spitzer et al. 2006)
ix. Health Reform Monitoring Survey (Lang et al. 2014)
x. HealthStyles (Kennedy et al. 2011)
xi. National Crime Victimization Survey (Bureau of Justice Statistics 2018)
xii. National Health and Nutrition Examination Survey (Centers for Disease Control and Prevention 2019d)

a. Acculturation
b. Audiometry
c. Blood Pressure
d. Cardiovascular Disease
e. Demographics
f. Diabetes
g. Diet Behavior and Nutrition
h. Dietary Supplements and Prescriptions
i. Early Childhood
j. Family Questionnaire
    i. Consumer Behavior
    ii. Demographics
    iii. Food Security
    iv. Housing Characteristics
    v. Income
k. Smoking
l. Functioning
m. Health Insurance
n. Hospital Utilization and Access to Care
o. Immunization
p. Kidney Conditions
q. Medical Conditions
r. Occupation
s. Oral Health
t. Osteoporosis
u. Physical Activity and Fitness
v. Sexual Behavior
w. Sleep Disorders
x. Smoking and Tobacco Use
y. Standing Balance
z. Weight History

xiii. National Health Interview Survey (Centers for Disease Control and Prevention 2019e)
    a. Adult
    b. Child

xiv. National Household Travel Survey (Federal Highway Administration 2018)

xv. National Survey on Drug Use and Health (Substance Abuse and Mental Health Services Administration 2019)

xvi. Ohio Healthy Youth Environments Survey (Ohio Department of Education 2019)

xvii. Patient Health Questionnaire (Kroenke et al. 2001)

xviii. Pregnancy Risk Assessment Monitoring System Survey (Centers for Disease Control and Prevention 2016)

xix. Stressful Life Event Questionnaire (Roohafza et al. 2011)

xx. Transportation Survey (Silver et al. 2010)

xxi. Transportation, Distance, and Healthcare Utilization Survey (Mattson 2011)

xxii. Youth Risk Behavioral Survey (Centers for Disease Control and Prevention 2019f)

a. High School

b. Middle School

A total of 149 questions were included in both electronic and paper survey distributions. The majority of these questions were adopted directly or amended from the previously-validated survey instruments listed above; remaining question content was created by the Office of Health Policy and Performance Improvement (OHPPI). Several survey questions were mutually exclusive, sex-specific, and/or prompted additional response based upon an individual's response to a preceding question. In order to direct survey participants to relevant questions based on their subsequent responses, skip patterns (electronic survey) and skip instructions (paper survey) were employed.

Included question content addressed the following health-related topics:

i. Adverse childhood experiences

ii. Alcohol and drug abuse

iii. Chronic disease

iv. Community health concerns

v. Crime

vi. Demographic information

vii. Dental care

viii. Emergency department utilization

ix. Employment and financial status

x. Functional needs

xi. Health insurance coverage

xii. Housing and neighborhood characteristics
xiii. Infectious disease
xiv. Maternal health
xv. Mental health
xvi. Nutrition and access to healthy food
xvii. Overall health
xviii. Physical activity and BMI
xix. Primary and preventative care
xx. Quality of life
xxi. Vaccination history and beliefs
xxii. Sexual activity
xxiii. Tobacco and E-cigarette use
xxiv. Transportation

2.3.2 Population, Sample Size, and Distribution

Given a representative sample, a total survey sample size of 380 respondents was necessary to generalize survey results across Holmes County's estimated 29,963 residents 18 years of age and older (Qualitrics 2020). A randomized sample of 1,200 Holmes County mailing addresses were utilized for distribution of an invitation postcard to participate in the 2020 Holmes County CHNA Community Resident Survey during the week of August 24, 2020. Survey packets containing the community resident survey, a survey incentive raffle card, and return envelopes with prepaid postage for both the completed community resident survey and raffle card were then mailed to the 1,200 Holmes County residents on September 1, 2020, and a reminder postcard was mailed on September 14, 2020. Included survey instructions requested return of the completed community resident survey and raffle card (optional) within 30 days of receipt.

2.3.3 Survey Burden

The community resident survey required approximately 30 minutes to complete.

2.3.4 Participation Incentive

While the completion of the community resident survey was voluntary, entry into a post-survey lottery for one of 24 $100 Visa gift cards was offered to those who completed the survey, based upon the documented link between survey completion and participation incentives (Laguilles et al. 2011). Participants that completed the mailed paper survey and wished to enter into the drawing were provided with a raffle card in their mailed survey packet, and asked to provide their first and last name, address, and telephone number. A dedicated return envelope with prepaid postage for raffle cards was provided, in order to separate survey responses from completed raffle cards, and maintain confidentiality.

2.3.5 Data Analysis

Results of the community resident survey were analyzed in IBM's Statistical Package for the Social Sciences (SPSS) v.27. Quantitative analysis consisted primarily of frequencies and descriptive techniques. In order to ensure survey sample representativeness, survey responses were weighted prior to analysis based upon actual Holmes County distributions in sex (Table 1), age (Table 2), race (Table 3), ethnicity (Table 4), education (Table 5), and annual household income (Table 6). A total of seven weight variables were created.

i. Composite Weight
    a. The product of age, sex, race, ethnicity, education, and annual household income, composite weight was applied to all analyses that were not differentiated by age, sex, race, ethnicity, and/or education.

ii. Composite Weight without Sex
    a. The product of age, race, ethnicity, education, and annual household income, composite weight without sex was applied to all analysis differentiated by sex.

Table 1. *Composite Weight without Sex*

Sex	Holmes County		Survey Sample		Weight
	N*	(%)*	N	(%)	
Male	21,904	49.9	109	29.5	1.69
Female	21,997	50.1	260	70.5	0.71

*Based on 2019 American Community Survey 5-year estimates.

iii. Composite Weight without Age

a. The product of sex, race, ethnicity, education, and annual household income, composite weight without age was applied to all analyses differentiated by age.

Table 2. *Composite Weight without Age*

Age (in years)	Holmes County		Survey Sample		Weight
	N*	(%)*	N	(%)	
18 to 19	1,244	2.8	4	1.1	2.55
20 to 24	1,568	7.0	7	1.9	3.68
25 to 29	1,574	6.8	22	6.0	1.13
30 to 34	1,259	5.8	32	8.8	0.66
35 to 39	1,264	5.4	26	7.1	0.76
40 to 44	1,122	5.4	25	6.8	0.79
45 to 49	1,179	5.5	31	8.5	0.65
50 to 54	1,177	5.4	37	10.1	0.53
55 to 59	1,364	6.2	28	7.7	0.81
60 to 64	1,007	4.5	41	11.2	0.40
65 to 69	965	4.6	43	11.8	0.39
70 to 74	618	2.9	29	7.9	0.37
75 to 79	393	2.1	18	4.9	0.43
80 to 84	276	1.5	15	4.1	0.37
85+	404	2.2	7	1.9	1.16

*Based on 2019 American Community Survey 5-year estimates.

iv. Composite Weight without Race

a. The product of age, sex, ethnicity, education, and annual household income, composite weight without race was applied to all analysis differentiated by race.

Table 3. *Composite Weight without Race*

Race	Holmes County		Survey Sample		Weight
	N*	(%)*	N	(%)	
Caucasian	43,219	98.4	292	75.8	1.29
African American	60	0.1	7	1.8	0.05
American Indian/ Alaskan Native	19	< 0.1	2	0.5	0.09
Native Hawaiian/ Pacific Islander	0	0	0	N/A	N/A
Asian	114	0.3	1	0.3	1.0
Other	28	0.1	50	12.9	0.01

*Based on 2019 American Community Survey 5-year estimates.

v. Composite Weight without Ethnicity

a. The product of age, sex, race, education, and annual household income, composite weight without ethnicity was applied to all analysis differentiated by ethnicity.

Table 4. *Composite Weight without Ethnicity*

Ethnicity	Holmes County		Survey Sample		Weight
	N*	(%)*	N	(%)	
Hispanic/ Latino	423	1	1	0.3	3.33
Not Hispanic/ Latino	43,478	99	311	99.7	0.99

*Based on 2019 American Community Survey 5-year estimates.

vi. Composite Weight without Education

a. The product of age, sex, race, ethnicity, and annual household income, composite weight without education was applied to all analysis differentiated by education.

Table 5. *Composite Weight without Education*

Education	Holmes County		Survey Sample		Weight
	N*	(%)*	N	(%)	
12th grade or less, no diploma	13,437	30.6	127	34.0	0.90
High school graduate (or GED equivalent)	9,763	22.2	104	27.9	0.80
Some college or Associate's	4,167	9.5	73	19.6	0.48
Bachelor's degree or higher	5,072	11.6	69	18.5	0.63

*Based on 2019 American Community Survey 5-year estimates.

vii. Composite Weight without Annual Household Income

a. The product of age, sex, race, ethnicity, and education, composite weight without annual household income was applied to all analysis differentiated by annual household income.

Table 6. *Composite Weight without Annual Household Income*

Household Income	Holmes County		Survey Sample		Weight
	N*	(%)*	N	(%)	
< $10,000	580	4.7	14	3.9	1.21
$10,000-$14,999	370	3.0	11	3.1	0.97
$15,000-$24,999	864	7.0	31	8.7	0.81
$25,000-$34,999	1,074	8.7	45	12.6	0.69
$35,000-$49,999	1,765	14.3	48	13.4	1.07
$50,000-$74,999	2,789	22.6	95	26.5	0.85
$75,000-$99,999	1,950	15.8	34	9.5	1.66
$100,000-$149,999	1,851	15.0	29	8.1	1.85
$150,000-$199,999	605	4.9	17	4.7	1.04
≥ $200,000	506	4.1	14	3.9	1.05

*Based on 2019 American Community Survey 5-year estimates.

2.4 Community Leader Survey

In order to obtain further contextual information and narrative pertaining to the community's health, as well as supplement the results of the community resident survey, brief electronic surveys were distributed to 27 Holmes County community leaders. Electronic surveys were distributed via Qualtrics, and a unique, shortened URL code (bit.ly/HolmesCommunityLeaderSurvey) was created with Bitly, a URL shortening service. The respective survey link remained live for a total of 30 days.

2.4.1 Question Content

A total of nine questions were included in the electronic survey. For comparison purposes, question content was sourced primarily from the community resident survey, and focused on community health concerns, as well as how these concerns might be addressed by Pomerene Hospital, Holmes County General Health District, and the respondent's respective agency or municipality.

2.4.2 Population

Community leader surveys were distributed to Holmes County elected officials, as well as community leaders representing hospitals, social service or non-profit organizations, local business, chambers of commerce, advocacy groups, law enforcement, education, and academic extension offices, respectively.

2.4.3 Survey Burden

The community leader survey required approximately five minutes to complete.

2.4.4 Data Analysis

Results of the community leader survey were analyzed in SPSS v.27, and quantitative analysis consisted primarily of frequencies and descriptive techniques.

2.5 Community Resident Focus Groups

In order to engage community residents, as well as supplement the results of the secondary data collection, community resident survey, and community leader survey, a total of four community resident focus groups were scheduled. Due to the concurrent COVID-19 pandemic and the inability to conduct in-person focus groups, all sessions were conducted virtually via GoToMeeting, a web-based meeting and video conferencing platform. Flyers were created for each of the four virtual focus groups, and included the date and time, a link to register for the focus group, and contact information for the Holmes County General Health District. Said flyers were distributed both electronically and in various physical settings by Holmes County General Health District, Pomerene Hospital, and Partners for a Healthier Holmes County. Focus group sessions required approximately 45 minutes to 1 hour to complete. A demographic survey was distributed to focus group participants at the beginning of each session, and a focus group discussion guide was utilized to direct discussion topics. Focus groups were recorded for transcription purposes, and deidentified. Target populations were identified for each of the four focus groups, and included the following:

i. Holmes County residents 60 years of age and older
ii. Holmes County residents of Hispanic/Latino ethnicity
iii. Holmes County residents residing in Killbuck Township and Glenmont Village
iv. Holmes County residents identifying as LGBTQ

2.5.1 Question Content

A total of six questions were included in the focus group discussion guide. For comparison purposes, question content was largely sourced from the community resident survey and focused on community health concerns, as well as how these concerns might be addressed by Pomerene Hospital, Holmes County General Health District, and the respective focus group participants. The 13-question focus group demographic survey was also sourced from the community resident survey, and included content pertaining to (1) community health concerns, (2) overall health, (3) health insurance coverage, (4) household income, and (5) demographic information.

2.5.2 Population

As identified in Section 2.5, each of the four focus groups were designed to capture a specific Holmes County population, including those residents (1) 60 years of age and older, (2) of Hispanic/Latino ethnicity, (3) individuals residing in Killbuck Township or Glenmont Village, or (4) those identifying as LGBTQ.

2.5.3 Participation Incentive

While focus group participation was voluntary, participants were eligible to receive a $25 Visa gift card.

2.5.4 Data Analysis

Focus group surveys were analyzed in SPSS v.27. Quantitative analysis consisted primarily of frequencies and descriptive statistics. Qualitative analysis consisted of response theme identification (Yang et al. 2015), and were accompanied by exemplary quotations where available.

3. Results

3.1 Secondary Data

3.1.1 Unranked

Table 7. *Unranked*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Total Population (in 1,000)	2014-2018	NA	322,903.0	11,641.8	**43.9**	43.9	42.3
Percentage of Male Residents	2014-2018	NA	49.2%	49.0%	**49.9%**	54.7%	49.5%
Percentage of Female Residents	2014-2018	NA	50.8%	51.0%	**50.1%**	45.3%	50.5%
Percentage of Female Residents	2014-2018	NA	50.8%	51.0%	**50.1%**	45.3%	50.5%
Percentage of Households With Children Under 18 Years of Age	2014-2018	NA	31.4%	29.6%	**42.1%**	33.9%	33.4%
Percentage of Single Parent Households	2013-2017	NA	9.0%	9.5%	**4.1%**	9.8%	9.0%
Percentage of Population Under 18 Years of Age	2014-2018	NA	22.8%	22.5%	**32.2%**	20.8%	23.9%
Percentage of Population 0 to 4 Years of Age	2014-2018	NA	6.1%	6.0%	**8.3%**	5.1%	5.9%
Percentage of Population 5 to 17 Years of Age	2014-2018	NA	16.6%	16.6%	**23.9%**	15.7%	18.1%
Percentage of Population 65 Years of Age and Older	2014-2018	NA	15.2%	16.3%	**13.0%**	14.9%	16.7%

Table 8. *Unranked (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Median Age	2014-2018	NA	37.9	39.3	**31.3**	40.7	40.8
Percentage of Foreign-born Population	2014-2018	NA	13.5%	4.5%	**0.5%**	1.7%	1.6%
Percentage of Undifferentiated Amish Population	2010	NA	<0.1%	0.5%	**41.7%**	<0.1%	0%
Percentage of Non-Hispanic White Population	2014-2018	NA	61.1%	79.2%	**97.9%**	88.6%	89.2%
Percentage of African American Population	2014-2018	NA	12.3%	12.2%	**0.1%**	5.8%	0.4%
Percentage of Population With Hispanic Origin	2014-2018	NA	17.8%	3.7%	**90.0%**	2.0%	8.6%
Percentage of Asian or Pacific Islander Population	2014-2018	NA	5.6%	2.1%	**0.2%**	1.2%	0.4%
Percentage of Population Living in a Rural Area	2010	NA	19.1%	22.1%	**93.0%**	48.5%	56.2%
Population Density	2014-2018	NA	84.3	284.2	**103.8**	94.4	104.4
Percentage of Renting Households	2014-2018	NA	36.2%	34.0%	**24.0%**	28.7%	22.8%
Total Housing Units (in 1,000)	2014-2018	NA	121,520.2	4,685.4	**12.4**	15.1	16.4
Persons per Household	2014-2018	NA	2.6	2.5	**3.5**	2.9	2.6
Total Children With Elevated Blood Lead Levels	2018	NA	88,271	3288	**4**	7	12

Table 9. *Unranked (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Number of Active National Priority List Superfund Sites	2020	1151	1,699	37	**0**	0	1
Number of Active Non-National Priority List Superfund Sites	2020	NA	10,771	451	**0**	0	1
Number of Resolved (Archived) Superfund Sites	2020	NA	36,693	1,194	**1**	0	3
Percentage of Population With Public Health Insurance Coverage (Medicare/ Medicaid/VA) Alone	2013-2018	NA	20.2%	21.6%	**11.8%**	20.5%	17.4%
Percentage of Population on Medicare Coverage	2014-2018	NA	5.0%	5.6%	**4.5%**	5.3%	4.7%
Percentage of Population on Medicaid/Means Tested Coverage Alone	2014-2018	NA	14.9%	15.7%	**7.2%**	15.0%	12.7%
Percentage of Population on VA Health Care Coverage Alone	2014-2018	NA	0.3%	0.3%	**0.1%**	0.2%	0.1%
Percentage of Population on Public Health Insurance Coverage Alone	2014-2018	NA	20.2%	21.6%	**11.8%**	20.5%	17.4%

3.1.2 Unfavorable to Zero Benchmarks

Table 10. *Unfavorable to Zero Benchmarks*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Percentage of Disabled Population	2014-2018	NA	12.6%	14.0%	**8.1%**	15.3%	13.5%
Children Eligible for SNAP	2017	NA	42.0%	34.1%	**7.4%**	30.6%	22.3%
Percentage of Households Receiving Public Assistance Income	2014-2018	NA	2.5%	3.0%	**1.2%**	2.2%	1.6%
Percentage of Female-headed Households Below Poverty Level With Children 5 to 17 Years of Age	2014-2018	NA	31.3%	34.6%	**27.6%**	32.5%	28.3%
Percentage of Female-headed Households Below Poverty Level With Children Under 5 Years of Age	2014-2018	NA	42.2.%	50.3%	**23.3.%**	47.9%	48.8%
Percentage of Families Below Poverty Level With Children 5 to 17 Years of Age	2014-2018	NA	13.6%	14.4%	**9.1%**	12.1%	9.2%
Percentage of Families Below Poverty Level With Children Under 5 Years of Age	2014-2018	NA	15.3%	19.6%	**9.7%**	21.8%	10.0%
Unemployment Rate	2020	NA	14.4%	17.4%	**6.5%**	13.0%	21.1%

Table 11. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Percentage of Households Receiving SNAP	2014-2018	NA	12.2%	13.7%	**5.1%**	12.6%	9.8%
Median Monthly Housing Costs per Owner-occupied Housing	2014-2018	NA	$1,113	$946	**$835**	$1,064	$873
Median Monthly Housing Costs per Renter-occupied Housing	2014-2018	NA	$1,023	$788	**$639**	$795	$707
Children in Foster Care	2017	NA	6.0	10.1	**2.3**	3.9	3.8
Rate of Fast Food Restaurants	2016	NA	77.1	80.6	**35.4**	50.7	58.6
Rate of Grocery Stores	2016	NA	21.2	17.7	**37.8**	11.5	16.4
Premature Death	2015-2017	NA	6,947	8,520	**5,499**	8,725	7,297
Death Rate from Accidents, Homicides, and Suicides	2017-2018	NA	68.3	90.8	**38.1**	73.2	80.8
Teen Death Rate from Accidents, Homicides, and Suicides	2001-2018	NA	41.1	38.6	**35.6**	39.1	77.2
Unintentional Injury Death Rate	2016-2018	36.4	35.3	56.5	**22.2**	48.4	39.6
Unintentional Injury Death Rate (Falls Omitted)	2016-2018	NA	26.0	46.4	**18.8**	37.2	29.5

Table 12. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Fall Death Rate	2008-2018	7.2	8.6	9.0	**4.2**	8.3	8.5
Firearm-related Death Rate	2009-2018	9.3	10.7	11.1	**5.7**	8.4	7.8
Motor Vehicle Crash Mortality Rate	2013-2018	12.4	11.0	9.8	**8.9**	13.6	21.9
Violent Crime Rate (FBI)	2020	NA	385.6	299.9	**20.6**	72.6	104.5
Percentage of Driving Deaths Associated With	2014-2018	NA	29.3%	33.0%	**22.0%**	29.0%	23.0%
Alcohol-related Death Rate	2006-2018	NA	8.3	7.0	**4.0**	5.1	5.1
Drug Overdose Deaths	2016-2018	11.3	19.3	38.3	**9.2**	29.3	20.1
Estimated Percentage of Population With a Disability	2014-2018	NA	12.6%	14.0%	**8.1%**	15.3%	13.5%
Estimated Percent of Persons With a Hearing Difficulty	2014-2018	NA	2.0%	2.2%	**0.8%**	3.2%	3.1%
Estimated Percent of Persons With a Vision Difficulty	2014-2018	NA	1.9%	2.0%	**1.1%**	1.7%	2.3%
Estimated Percent of Persons With a Cognitive Difficulty	2014-2018	NA	4.7%	5.7%	**3.2%**	6.2%	3.8%
Estimated Percent of Persons With an Ambulatory Difficulty	2014-2018	NA	7.1%	8.3%	**5.1%**	8.7%	7.2%

Table 13. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Estimated Percent of Persons With a Self-care Difficulty	2014-2018	NA	2.4%	2.7%	**1.8%**	3.2%	2.3%
Estimated Percent of Persons With an Independent Living Difficulty	2014-2018	NA	14.5%	14.0%	**10.4%**	15.1%	14.1%
Percentage of People in the Jurisdiction Who are Electricity-dependent	2020	NA	0.8%	1.0%	**0.5%**	1.1%	1.2%
Suicide Death Rate	2012-2018	10.2	13.3	13.8	**8.0**	13.8	17.6
Births to Teen Mothers 15 to 17 Years of Age	2016	NA	8.8	8.9	**6.6**	11.6	7.7
Percentage of Infants With Low Birth Weight	2017	7.8%	8.3%	8.7%	**4.0%**	8.3%	7.0%
Rate of Preterm Births	2014-2017	<11.4%	10.0%	10.3%	**6.6%**	9.4%	7.2%
Infant Mortality Rate	2012-2018	6.0	5.9	7.0	**5.0**	10.0	7.0
Chlamydia Rate	2018	NA	539.9	542.3	**91.0**	213.5	255.4
Gonorrhea Rate	2018	NA	179.1	215.7	**20.5**	88.6	42.6
Syphilis Rate (Primary and Secondary)	2018	NA	10.8	6.3	**0**	2.3	0
Syphilis Rate (Latent)	2018	NA	11.8	4.1	**0**	0	0

Table 14. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Hepatitis A Rate	2018	0.3	3.8	15.7	**0**	4.5	2.4
Mumps Rate	2018	0.2	0.8	0.3	**0**	0	0
Influenza-associated Hospitalization	2018	NA	246.9	123.5	**72.9**	146.4	101.7
Cancer Rate	2017	NA	437.8	458.9	**318.3**	457.1	452.3
Cervical Cancer Rate	2011-2017	NA	7.6	7.8	**3.8**	6.2	4.3
Breast Cancer	2017	NA	127.2	69.5	**43.6**	66.1	82.8
Lung and Bronchus Cancer Rate	2017	NA	50.9	63.8	**45.1**	61.8	50.9
Death Due to Malignant Neoplasm	2017-2018	50.6	35.7	43.8	**35.0**	47.1	45.4
Prostate Cancer Rate	2017	NA	112.2	109.9	**37.9**	121.2	115.1
Percentage of Medicare Population With Diabetes	2017	NA	27.2%	27.7%	**26.8%**	28.0%	28.4%
High Blood Pressure Death Rate	2016-2018	NA	22.9	23.1	**17.1**	24.1	22.8
Heart Disease Death Rate	2016-2018	NA	22.9	23.1	**17.1**	24.1	22.8
Stroke Death Rate	2017-2018	34.8	37.3	42.7	**33.1**	33.6	39.3

Table 15. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Heart Failure Death Rate	2016-2018	NA	20.5	24.3	**16.6**	28.7	22.1
Percentage of Medicare Population With Hyperlipidemia	2017	NA	40.7%	42.5%	**38.1%**	47.1%	39.8%
Lung Disease Mortality Rate	2013-2017	NA	41.1	48.5	**28.9**	64.1	46.1
Percentage of Medicare Population With COPD	2017	NA	11.7%	13.6%	**10.8%**	13.5%	13.7%
Percentage of Medicare Population With Osteoporosis	2017	NA	6.4%	6.0%	**3.8%**	5.5%	5.9%
Percentage of Medicare Population With Chronic Kidney	2017	NA	24.0%	24.9%	**21.1%**	26.3%	21.2%
Percentage of Medicare Population With Arthritis	2017	NA	33.1%	35.7%	**31.7%**	39.3%	36.6%
Percentage of Population With Limited Access to Healthy Foods	2015	6.0%	22.4%	25.3%	**5.1%**	36.3%	19.6%

3.1.3 Unfavorable to One Benchmark

Table 16. *Unfavorable to One Benchmark*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Percentage of Female-headed Households Below Poverty Level	2014-2018	NA	27.8%	31.5%	**24.9%**	24.3%	26.7%
Percentage of Families Below Poverty Level With Children Under 18	2014-2018	NA	15.9%	17.6%	**12.8%**	13.4%	11.0%
Median Household Income	2014-2018	NA	$61,937	$56,111	**$62,111**	$65,264	$60,231
Percentage of Renters Paying 35% or More of Household Income	2014-2018	NA	41.1%	37.3%	**28.7%**	31.0%	25.7%
Housing Cost Burden (30%)	2014-2018	NA	31.6%	26.7%	**19.3%**	20.5%	18.6%
Children in Single Parent Households	2014-2018	NA	33.0%	36.0%	**8.0%**	35.0%	31.0%
Preventable Hospital Stays	2017	NA	4,624	5,003	**3,225**	4,728	3,146
Obesity	2016	30.5%	28.8%	32.1%	**29.1%**	37.5%	30.5%
Food Insecurity Percentage	2017	6.0%	12.6%	14.5%	**11.1%**	11.7%	10.4%
Medicare Beneficiaries With Drug/Substance Abuse	2017	NA	3.4%	3.0%	**2.0%**	3.1%	1.4%
Medicare Beneficiaries With Alcohol Abuse	2017	NA	2.5%	2.5%	**1.8%**	2.0%	1.6%

Table 17. *Unfavorable to One Benchmark (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Cancer Death Rate	2018	161.4	183.2	215.3	**168.6**	200.4	217.6
Colorectal Cancer Rate	2017	40.0	37.2	39.5	**30.8**	53.9	28.9
Diabetes Death Rate	2017-2018	66.6	21.4	25.3	**21.5**	28.5	32.5
Percentage of Medicare Population With Heart Disease	2017	NA	26.9%	27.9%	**27.4%**	28.9%	30.1%
Percentage of Medicare Population With Stroke	2017	NA	3.8%	3.8%	**3.7%**	3.5%	3.7%
Percentage of Medicare Population With Heart Failure	2017	NA	13.9%	14.8%	**13.8%**	13.6%	16.3%
Percentage of Medicare Population With Ischemic Heart	2017	NA	26.9%	27.9%	**27.4%**	28.9%	30.1%
Percentage of Medicare Population With Asthma	2017	NA	5.1%	5.2%	**4.8%**	5.3%	4.7%

3.1.4 Unfavorable to Two Benchmarks

Table 18. *Unfavorable to Two Benchmarks*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Percentage of Female-headed Households Below Poverty Level With Children Under 18 Years of Age	2014-2018	NA	37.5%	42.1%	**36.1%**	35.9%	34.9%
Percentage of Families Below Poverty Level	2014-2018	NA	10.1%	10.4%	**8.4%**	7.1%	6.9%
Income Inequality Index	2014-2018	NA	0.5	0.5	**0.5**	0.4	0.4
Substandard Housing	2014-2018	NA	32.5%	26.8%	**23.8%**	22.3%	20.2%
Vacant Housing Units	2014-2018	NA	12.2%	10.3%	**8.8%**	6.1%	6.3%
Percentage of Diabetics 65 Years of Age and Older	2015	NA	85.7%	85.4%	**86.2%**	87.8%	86.9%
Percentage of Adults With Fair or Poor Health	2016	20.2%	16.4%	17.0%	**16.0%**	15.0%	15.0%
Percentage of Adults Excessively Using Alcohol	2017	24.2%	18.0%	20.0%	**20.0%**	19.0%	21.0%
Viral Meningitis Rate	2017	NA	7.6	4.1	**2.3**	0	0
Percentage of Medicare Population With High Blood Pressure	2017	26.9%	57.1%	59.8%	**57.3%**	63.3%	59.7%
Alzheimer's Disease Death Rate	2017-2018	NA	30.8	34.2	**35.8**	38.2	41.7

3.1.5 Unfavorable to Three Benchmarks

Table 19. *Unfavorable to Three Benchmarks*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Population Commuting to Work Over 60	2013-2017	NA	8.9%	5.0%	**5.5%**	4.7%	4.8%
Dentist Rate	2015	NA	65.6	59.1	**29.6**	22.7	35.3
Federal Qualified Health Center Rate	2019	NA	2.9	3.1	**0**	2.3	0
Children Eligible for Free or Reduced Lunch	2018-2019	NA	49.5%	24.6%	**33.4%**	33.3%	32.9%
Food Insecure Children	2017	0.2%	18.2%	19.6%	**18.2%**	17.9%	17.9%
Adult Smoking Rate	2017	12.0%	17.1%	21.0%	**18.0%**	19.0%	17.0%
Percentage of Medicare Population With Depression	2017	NA	17.9%	19.7%	**19.1%**	19.0%	17.2%
Salmonella Rate	2018	11.4	18.64	12.9	**13.5**	4.6	28.4
Varicella Rate	2018	NA	3.07	3.8	**11.4**	42.8	7.1
Death Due to Malignant Neoplasm of Ovary	2008-2018	NA	4.0	4.1	**4.6**	6.0	3.6
Death Due to Malignant Neoplasm of Uterus	2008-2018	NA	7.2	7.4	**8.7**	11.1	6.7
Colorectal Cancer Death Rate	2014-2018	14.5	10.3	11.3	**12.9**	9.6	14.9

Table 20. *Unfavorable to Three Benchmarks (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Percentage of Adults With Diabetes	2016	NA	9.3%	10.3%	**10.8%**	13.7%	9.2%
Parkinson's Disease Death Rate	2014-2018	NA	8.0	8.5	**10.1**	12.1	8.6

3.1.6 Unfavorable to Four Benchmarks

Table 21. *Unfavorable to Four Benchmarks*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Primary Care Physician Rate	2017	NA	76.6	76.2	**25.1**	34.1	37.9
Rate of Mental Health Provider Access	2019	NA	202.8	244.3	**13.7**	25.1	25.1
Women over 18 Years of Age Getting Pap Smear	2006-2012	66.2%	78.5%	78.7%	**77.2%**	86.3%	79.7%
Women Receiving Mammogram	2015	81.1%	63.2%	62.4%	**59.5%**	54.7%	62.2%
Non-fluent English Speakers	2014-2018	8.5%	2.5%	18.7%	**1.5%**	1.0%	8.5%
Student-Teacher Ratio	2017-2019	NA	16.0:1	15.3:1	**19.6:1**	19.0:1	16.6:1
Rate of Head Start Facilities	2019	NA	7.2	8.6	**5.0**	15.8	7.3
Population with Bachelor's Degree or Higher	2014-2018	NA	31.5%	27.8%	**8.9%**	16.9%	17.2%

Table 22. *Unfavorable to Four Benchmarks (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Population With Associate's Degree or Higher	2014-2018	NA	39.9%	36.4%	**12.8%**	24.4%	28.0%
No High School Diploma	2014-2018	NA	12.3%	9.9%	**42.4%**	13.0%	8.8%
Adults Not Physically Active	2016	32.6%	22.8%	25.4%	**28.0%**	27.5%	25.4%
Unintentional Injury Death Rate (Falls and Poisonings Omitted)	2011-2018	NA	6.8	6.9	**8.9**	6.7	5.5
Schizophrenia/ Psychotic Disorders	2017	NA	3.1%	3.1%	**6.7%**	2.0%	2.0%
Pertussis Incidence Rate	2018	NA	4.8	5.7	**15.9**	9.0	0
West Nile Virus Incidence Rate	2018	NA	0.8	0.6	**4.6**	0	2.4
Ovarian Cancer Rate	2015-2017	NA	10.7	10.3	**14.1**	7.3	11.5
Female Breast Cancer Death Rate	2014-2018	20.7	20.1	22.0	**26.8**	29.5	16.5
Mean Radon Test Results	2020	NA	1.3	6.5	**9.7**	7.0	3.5
Mean Daily Ambient PM2.5	2012	NA	9.1	11.3	**11.4**	11.2	10.7
Households With No Vehicle Available	2014-2018	NA	8.7%	8.2%	**29.5%**	5.3%	3.4%

Table 23. *Unfavorable to Four Benchmarks (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
SNAP-Authorized Food Stores	2019	NA	8.0	8.3	**4.4**	7.1	7.5
Recreation and Fitness Facility Access	2017	NA	11.0	9.8	**0**	4.6	7.0
Young People (Ages 16-19) Not in School and Not Working	2013-2017	NA	7.0%	5.7%	**7.7%**	6.1%	5.5%

3.1.7 Unfavorable to Five Benchmarks

Table 24. *Unfavorable to Five Benchmarks*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Mammography Screening	2017	81.1%	32.0%	32.0%	**29.9%**	33.0%	34.0%
Medicare Beneficiaries Receiving Influenza Vaccination	2017	70.0%	46.0.%	49.0%	**45.0%**	50.0%	53.0%
Residents 50 Years of Age and Older Having a Colonoscopy	2006-2012	70.5%	61.3%	60.0%	**37.8%**	42.6%	63.6%
Uterine Cancer Rate	2017	7.3	10.2	32.2	**32.3**	30.3	30.5
Prostate Cancer Death Rate	2014-2017	21.8	18.9	19.2	**30.5**	23.5	18.2
Broadband Internet Subscription	2014-2018	83.2%	80.4%	79.7%	**53.8%**	88.0%	80.6%

Table 25. *Unfavorable to Five Benchmarks (continued)*

Measure	Data Year	HP 2020	US	Ohio	**Holmes County**	Madison County	Fulton County
Persons Under 19 Years of Age Without Health Insurance	2014-2018	0%	5.2%	4.4%	**48.3%**	4.9%	2.0%
Civilian Non-institutionalized Population Ages 19-64 Years Without Health Insurance	2014-2018	0%	13.2%	8.9%	**40.2%**	9.4%	6.8%
Persons 65 Years of Age and Older Without Health Insurance	2014-2018	0%	0.8%	0.5%	**11.4%**	0.6%	0.2%
Population in Labor Force Without Health Insurance	2014-2018	0%	12.6%	8.6%	**36.3%**	8.9%	6.5%
Graduation Rate	2017-2018	87.0%	87.4%	88.3%	**84.5%**	86.6%	92.9%

3.2 Community Resident Survey

3.2.1 Overview

A total of 385 Holmes County residents completed the community resident survey. In order to ensure that the survey respondent demographic characteristics were proportional to the actual demographic characteristics of Holmes County residents, several statistical weights were utilized to adjust for sex (Table 1), age (Table 2), race (Table 3), ethnicity (Table 4), education (Table 5), and annual household income (Table 6), as identified in Section 2.3.5.

Unweighted respondents were primarily female (71%), Caucasian (76%), married (72%), between the ages of 60 and 69 years of age (23%), currently employed (40%), characterized by an

annual household income of $25,000 to $74,999 (53%), had less than a high school education (32%), and spoke English at home (70%).

Following the application of the aforementioned weights (which is reflected by all of the survey results to follow, is generalized to Holmes County residents for county-level content, and varies from the unweighted 2020 Holmes County Community Health Needs Assessment Executive Summary), overall health was predominately characterized as good (29%) to very good (47%), while Body Mass Index (BMI) calculations indicated that more than half of Holmes County residents were overweight (26%) or obese (31%). The majority of residents (51%) indicated that they had not been diagnosed with a chronic condition by a health professional, while less than one-quarter of residents reported being diagnosed with arthritis (21%), high blood pressure (20%), and high cholesterol (13%).

More than two-thirds of residents identified having a personal doctor (64%) and dentist (79%), and more than half of residents had received routine care from their respective doctor (63%) and dentist (57%) during the past 12 months; 76% percent of residents reported receiving their routine preventative care at a facility located within Holmes County.

The majority of residents had three or more individuals currently residing in their home, 86% of which reported having one or more individuals under the age of 18 years of age currently living in their home.

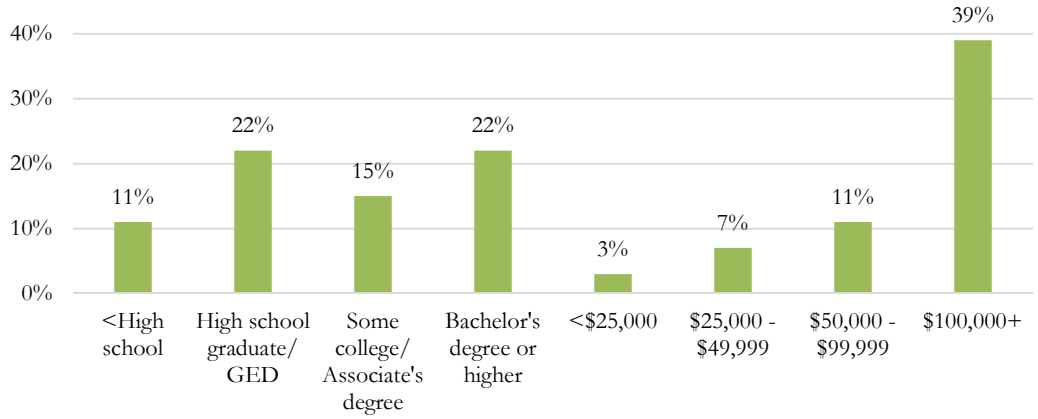
Overall Health

Figure 1. *Health Status*

Overall health was characterized predominately as "Very Good" (47%) and "Good" (29%), and few residents characterized their health as "Fair" (6%; Figure 1). Individuals with "Excellent" health were predominately male (20%), and 30 to 59 years of age (20%; Figure 2). "Excellent" health increased linearly with total annual household income and, with respect to education, was highest among high school graduates (22%), and those individuals with a Bachelor's degree or higher (22%; Figure 3).

Figure 2. *Composite, Sex, and Age of Individuals with Excellent Health Status*

Figure 3. *Education and Income of Individuals with Excellent Health Status*



Approximately one-fifth (18%) of Holmes County residents reported "Excellent" health status (Figure 2). Reporting of "Excellent" health status was higher among males than females (Figure 2), greater among those 30 to 59 years of age, as compared to those less than 30 years of age and individuals 60 years of age and older (Figure 2), varied with respect to educational attainment (Figure 3), was highest among those reporting a total annual household income of $100,000 or greater (Figure 3), and increased with advancing total annual household income (Figure 3).

Figure 4. *Composite, Sex, and Age of Individuals with Fair or Poor Health Status*

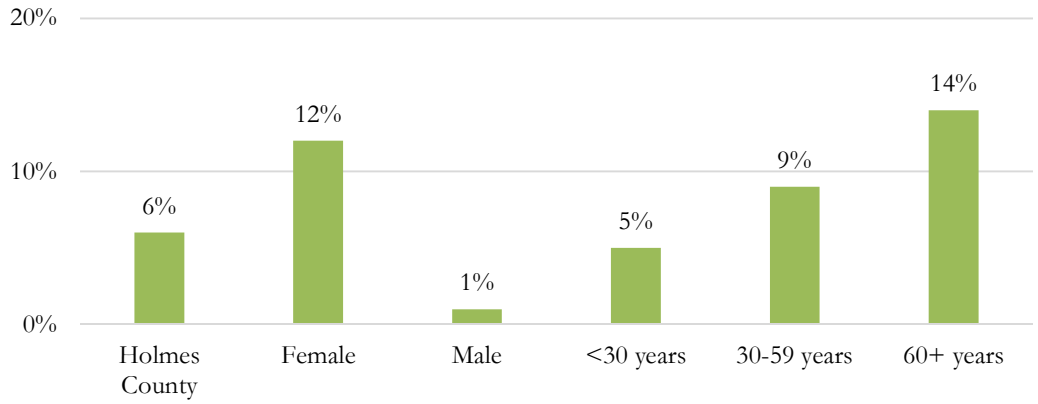
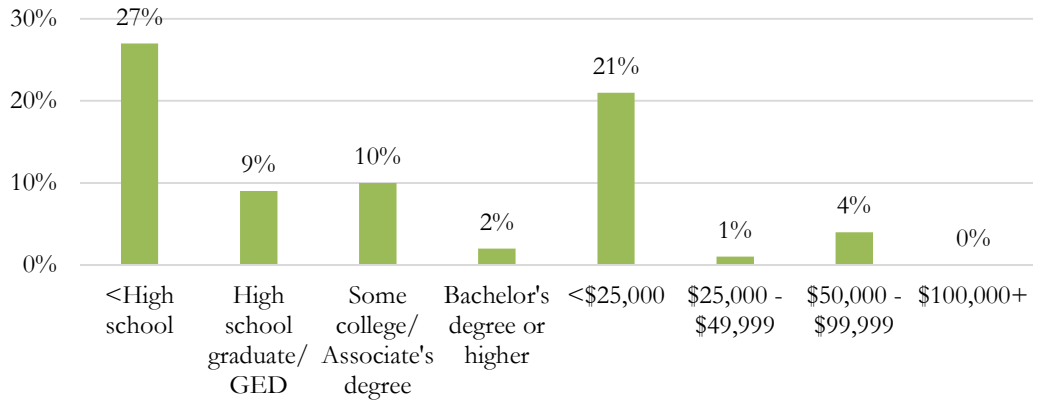


Figure 5. *Education and Income of Individuals with Fair or Poor Health Status*



Six percent of Holmes County residents reported having "Fair" or "Poor" health (Figure 4). Reporting "Fair" or "Poor" health was higher among females than males (Figure 4), increased with advancing age (Figure 4), declined with greater educational attainment (Figure 5), and was higher among those reporting a total annual household income less than $25,000, as compared to other included income levels (Figure 5). "Fair" or "Poor" health was highest among those individuals with less than a high school education, and lowest among those reporting a total annual household income of $100,000 or greater (Figure 5).

Quality of Life

Figure 6. *Composite, Sex and Age of Individuals with Poor Physical Health Days in the Past 30 Days*

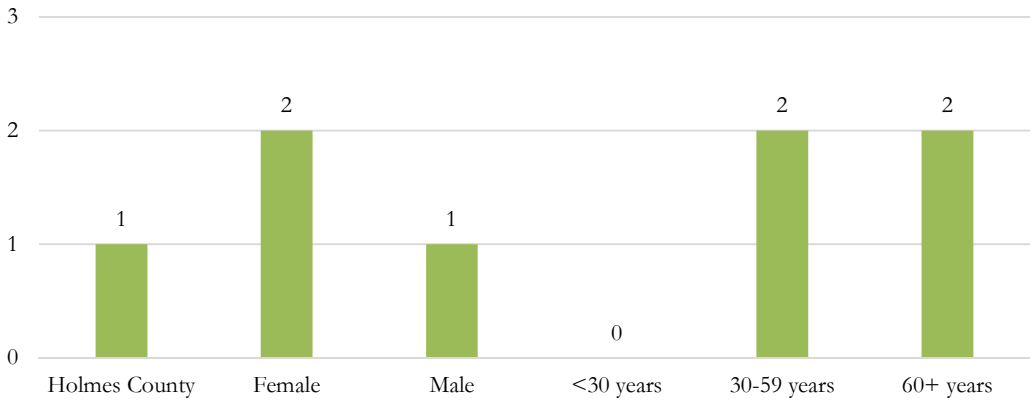


Figure 7. *Education and Income of Individuals with Poor Physical Health Days in the Past 30 Days*

Holmes County residents experienced one poor physical health day during the past 30 days (Figure 6). Females experienced one additional poor physical health day, as compared to males (Figure 6), the former of which was consistent with findings among those 30 years of age and older (Figure 6), high school graduates (Figure 7), and those residents with some college, or an Associate's degree (Figure 7). Individuals with a total annual household income less $25,000 experienced the greatest number of poor physical health days during the past 30 days (Figure 7).

Figure 8. *Composite, Sex, and Age of Individuals with Poor Mental Health Days in the Past 30 Days*

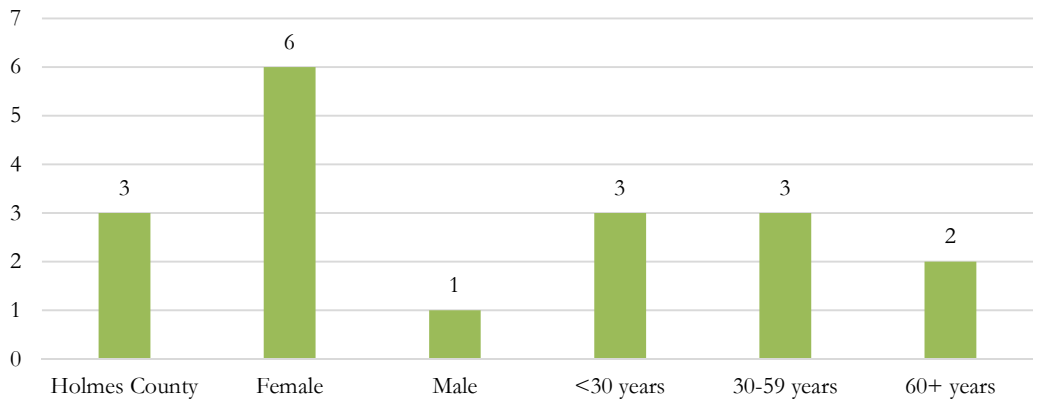


Figure 9. *Education and Income of Individuals with Poor Mental Health Days in the Past 30 Days*

Mean poor mental health days during the past 30 days was highest among females (Figure 8), followed by those reporting a total household income less than $25,000 and $50,000 to $99,999 (Figure 9, respectively). Males (Figure 8), and those with a total annual household income of $100,000 or more (Figure 9) experienced the lowest occurrence of poor mental health days during the past 30 days.

Figure 10. *Composite, Sex, and Age of Individuals with Poor Physical or Mental Health Days Interfering with Usual Activities in the 30 Days*

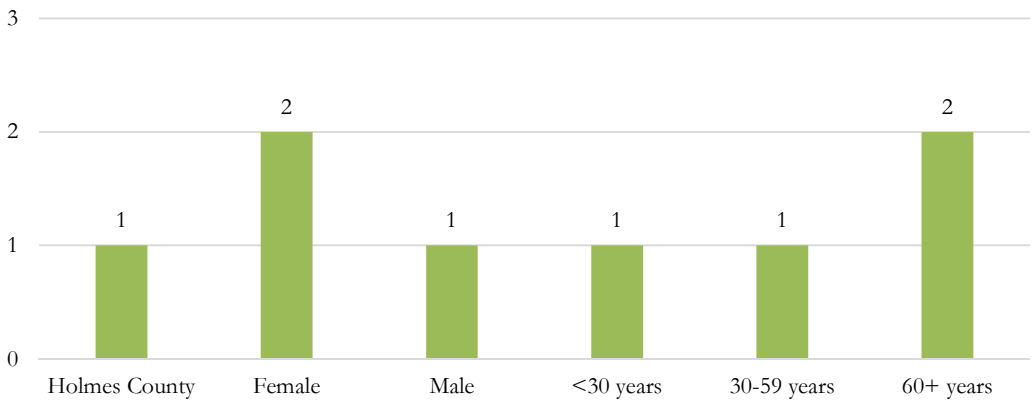


Figure 11. *Education and Income of Individuals with Poor Physical or Mental Health Days Interfering with Usual Activities in the Past 30 Days*

Collectively, Holmes County residents experienced one poor physical or mental health days that interfered with usual activities during the past 30 days (Figure 10). Findings were consistent between males, and those less than 30 years of age and 30 to 59 years of age (Figure 10). Females experienced two poor physical or mental health days that interfered with usual activities during the past 30 days (Figure 10), which was consistent among those 60 years of age and older (Figure 10), across all education levels save for those with less than a high school education (Figure 11), and individuals reporting a total annual household income of $25,000 to $49,999 (Figure 11). Poor physical or mental health days that interfered with usual activities during the past 30 days was

highest among individuals with a total annual household incomes of $50,000 to $99,999 and less than $25,000 (Figure 11).

3.2.2 Community Health Concerns

Based upon the benchmarking methodology used to rank the secondary data presented in Section 3.1, and the categorization of measures unfavorable to four or more benchmarks as county-specific health concerns, as outlined in Sections 3.1.6 and 3.1.7, survey respondents were provided a list of the secondary measures unfavorable to four or more benchmarks accompanied by the following question: "Do you think any of the following are health concerns in Holmes County? (Select all that apply)" (Tables 26-27).

Table 26. *Community Health Concerns Identified in the Community Resident Survey*

	(%)
Access to a mental health provider	34
Persons 19 to 64 years of age without health insurance	33
Adults that are not physically active	32
Lack of broadband internet	32
Persons in the labor workforce without health insurance	25
Lack of recreation and fitness facility access	20
Access to a primary care physician	19
Households without access to a vehicle	17
Young people (16 to 19 years of age) not in school and not working	15
Person under 19 years of age without health insurance	14
Residents without a high school diploma	14
Persons 65 years of age and older without health insurance	13
Women not receiving a mammogram	13
Non-fluent English speaking residents	12
Women over 18 years of age not receiving a pap smear	12

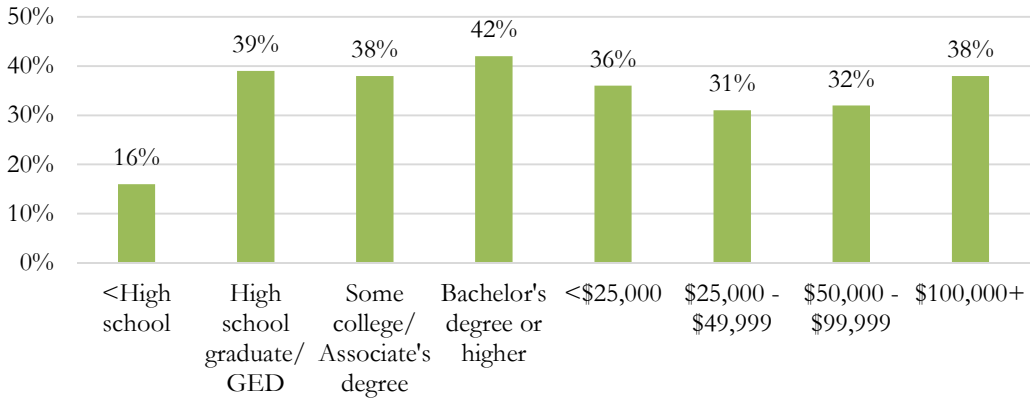
Table 27. *Community Health Concerns Identified in the Community Resident Survey (continued)*

	(%)
Residents without an Associate's degree or higher	10
Residents without a Bachelor's degree or higher	9
Lack of colonoscopy screening among those 50 years of age and older	9
Pertussis (whooping cough)	9
Schizophrenia/psychotic disorders	7
Female breast cancer deaths	5
Female ovarian cancer	5
Lack of an annual Influenza vaccine among those 65 years of age and older	5
Unintentional injury deaths (not including falls or poisoning)	5
Student-teacher ratio	5
Availability of Head Start facilities	4
Air pollution	4
Female uterine cancer	4
Radon	2
High school graduation rate	1
Lack of SNAP-authorized food stores	1
Prostate cancer deaths	1
West Nile virus	1

Demographic characteristics, including sex, age, education, and total annual household income are provided for community health concerns identified by 10% or more of Holmes County residents (Figures 12-43).

Figure 12. *Composite, Sex, and Age of Individuals Identifying Access to a Mental Health Provider as a Community Health Concern*

Figure 13. *Education and Income of Individuals Identifying Access to a Mental Health Provider as a Community Health Concern*



More than one-third of Holmes County residents (34%) identified the lack of access to a mental health provider as a health concern in Holmes County (Figure 12). Females identified this health concern more so than their male counterparts, and identification decreased slightly with advancing age (Figure 12). Identifying a lack of access to a mental health provider generally increased with increased educational attainment, and was highest among those with a total annual household income less than $25,000 (36%) and greater than $100,000 (38%), with respect to income (Figure 13).

Figure 14. *Composite, Sex, and Age of Individuals Identifying 19 to 64 Year Olds Without Health Insurance as a Community Health Concern*

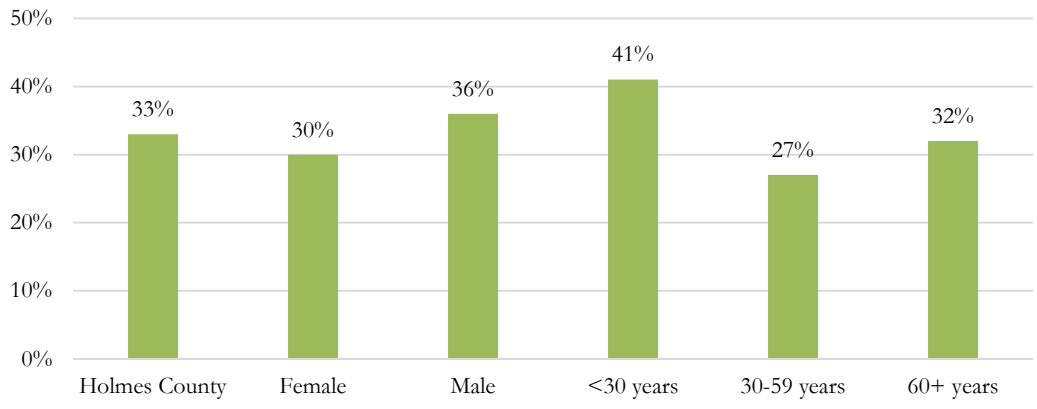
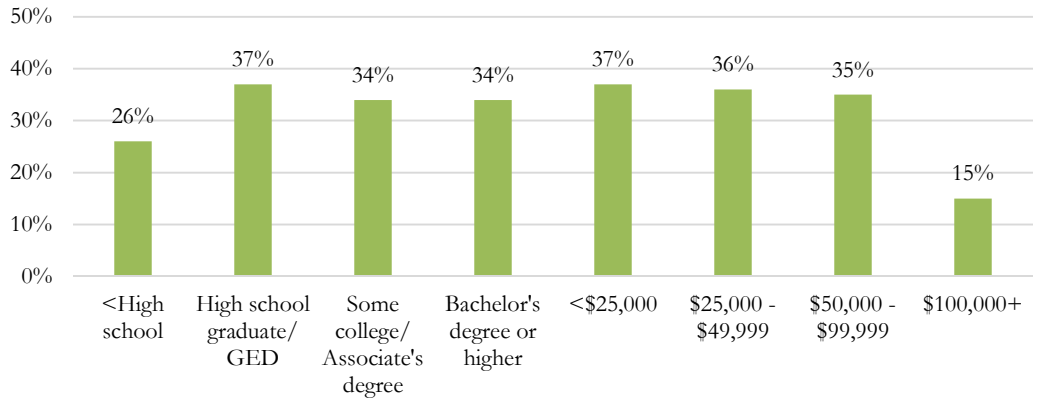


Figure 15. *Education and Income of Individuals Identifying 19 to 64 Year Olds Without Health Insurance as a Community Health Concern*



Approximately one-third (33%) of Holmes County residents identified the lack of health insurance among those 19 to 64 years of age as a community health concern (Figure 14). Males reported the lack of health insurance more than females, and identification was highest among those less than 30 years of age (Figure 14). Identification of the lack of health insurance among those 19 to 64 years of age as a health concern was relatively consistent across education levels, save for those with less than a high school education (Figure 15). Reports of this respective health concern declined with increasing total annual household income (Figure 15).

Figure 16. *Composite, Sex, and Age of Individuals Identifying Adults Not Physically Active as a Community Health Concern*

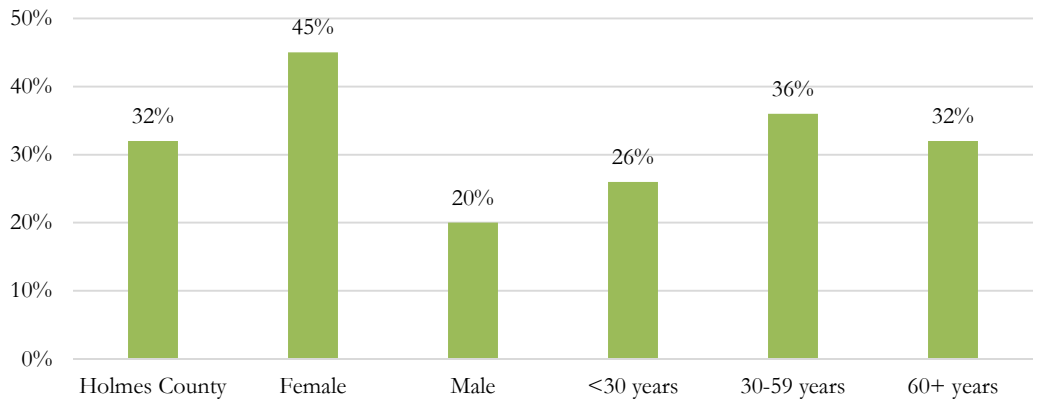
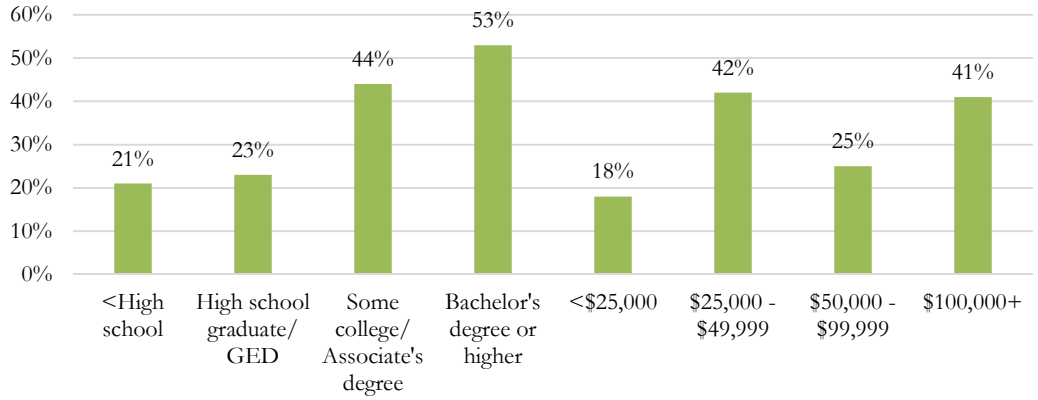


Figure 17. *Education and Income of Individuals Identifying Adults Not Physically Active as a Community Health Concern*



More than one-third of Holmes County residents (32%) identified the lack of physical activity among adults as a community health concern (Figure 16). Females reported the lack of physical activity among adults (45%) more than males (20%), and individuals 30 to 59 years of age (36%) more so than those under 30 years of age (26%) and 60 years of age and older (32%; Figure 16). Identification of the respective health concern increased with greater educational attainment, and was highest among individuals with a Bachelor's degree or higher (53%). With respect to income, individuals with a total annual household income of $25,000 to $49,999 (42%) identified a lack of physical activity among adults most often (Figure 17).

Figure 18. *Composite, Sex, and Age of Individuals Identifying Lack of Broadband Internet as a Community Health Concern*

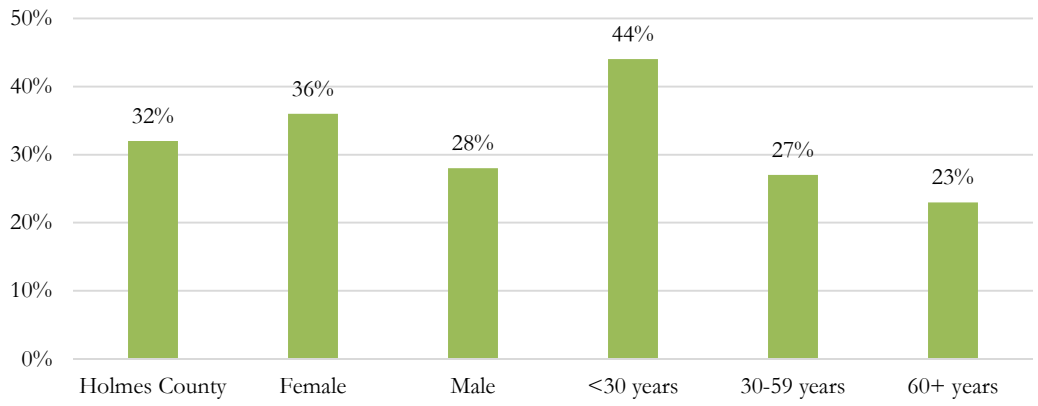
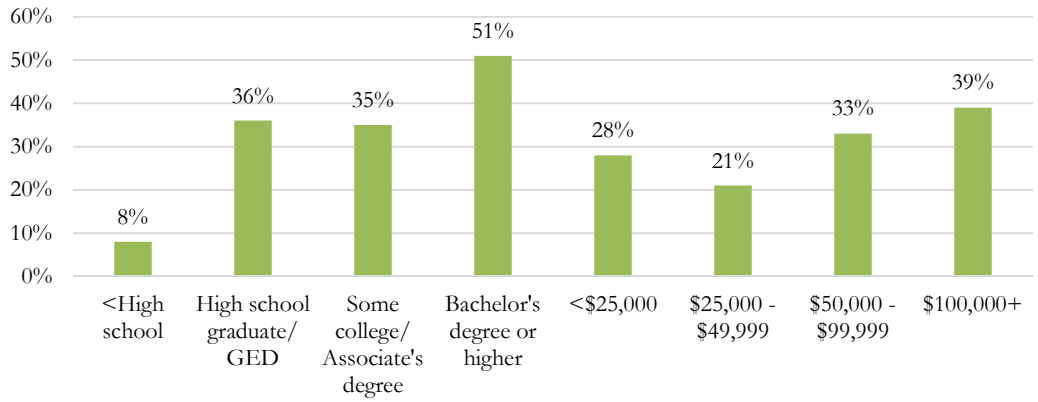


Figure 19. *Education and Income of Individuals Identifying Lack of Broadband Internet as a Community Health Concern*



Thirty-two percent of Holmes County residents identified the lack of broadband internet as a community health concern (Figure 18). Identification of a lack of broadband internet as a community health concern was greatest among those with a Bachelor's degree or higher (Figure 19), higher among females than males (Figure 18), decreased with advancing age (Figure 18), and generally increased with greater educational attainment and total annual household income, respectively (Figure 19).

Figure 20. *Composite, Sex, and Age of Individuals Identifying Persons in the Labor Workforce Without Health Insurance as a Community Health Concern*

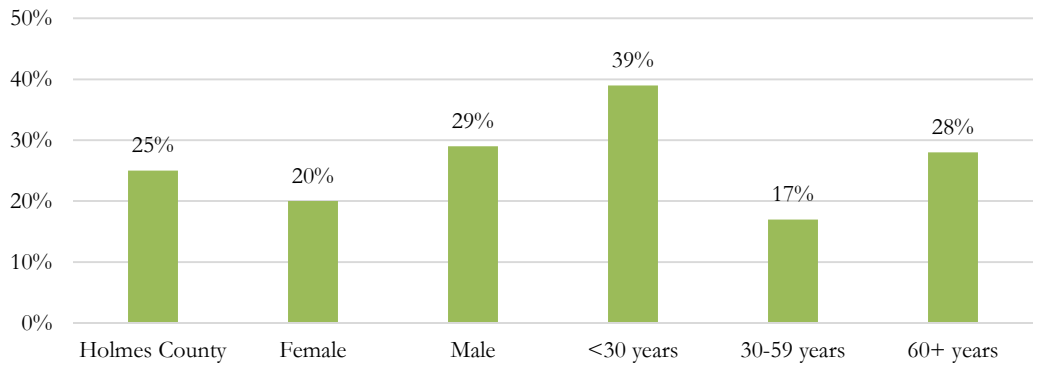
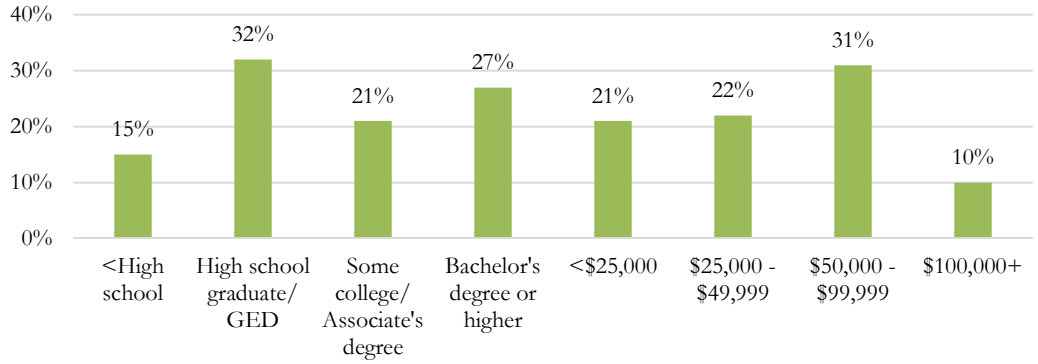


Figure 21. *Education and Income of Individuals Identifying Persons in the Labor Workforce Without Health Insurance as a Community Health Concern*



One-quarter of Holmes County residents identified persons in the labor workforce without health insurance as a community health concern (Figure 20). Identification of this concern was higher among males than females (Figure 20), lowest among residents with a total annual household income of $100,000 or more (Figure 21), and highest among residents less than 30 years of age (Figure 20).

Figure 22. *Composite, Sex, and Age of Individuals Identifying a Lack of Recreation and Fitness Facility Access as a Community Health Concern*

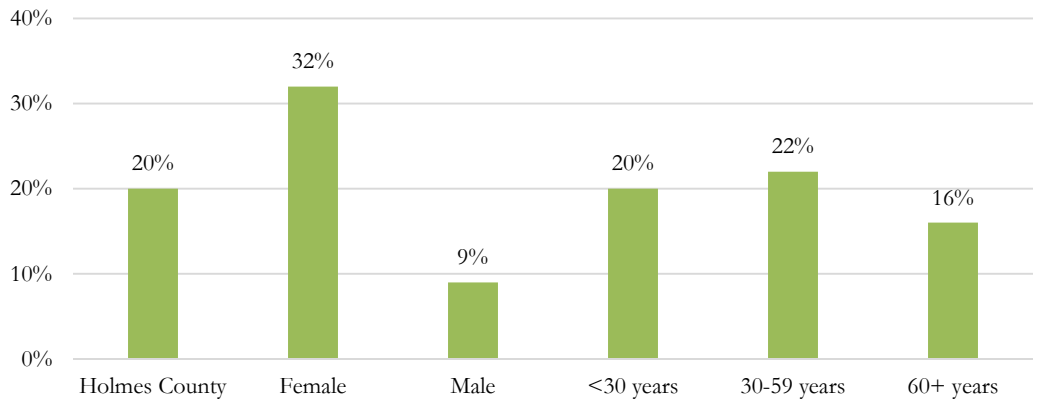
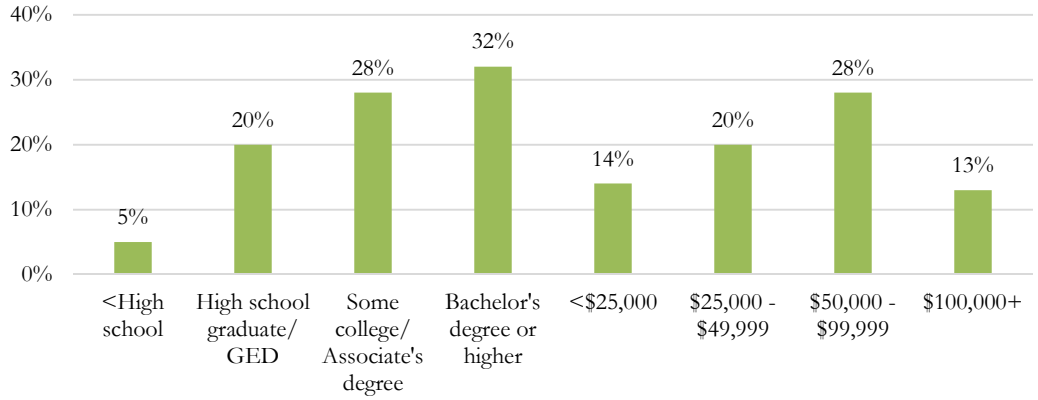


Figure 23. *Education and Income of Individuals Identifying a Lack of Recreation and Fitness Facility Access as a Community Health Concern*



One-fifth of Holmes County residents identified a lack of recreation and fitness facility access as a community health concern (Figure 22). Identification was higher among females than males (Figure 22), increased with greater educational attainment (Figure 23), and was lowest among those with less than a high school education (Figure 23). With respect to total household income, individuals identifying a lack of recreation and fitness facility access increased between those reporting a total annual household income of less than $25,000 (14%) and $50,000 to $99,999 (28%; Figure 23).

Figure 24. *Composite, Sex, and Age of Individuals Identifying Access to a Primary Care Physician as a Community Health Concern*

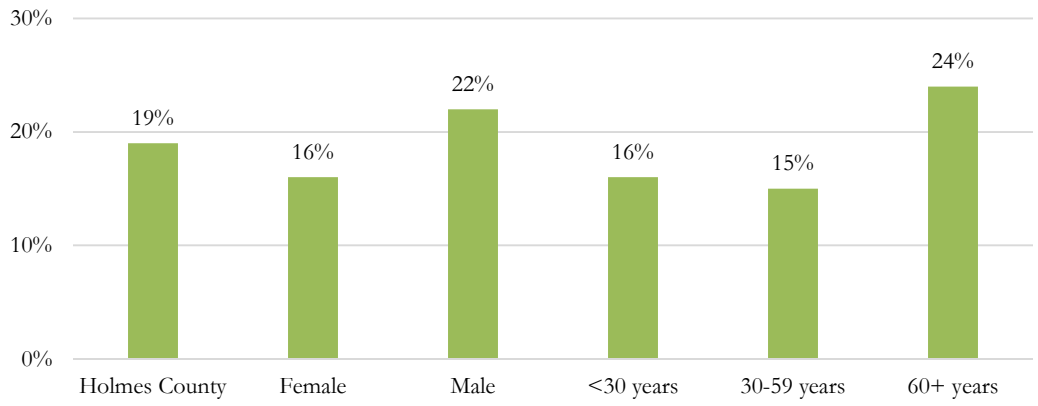
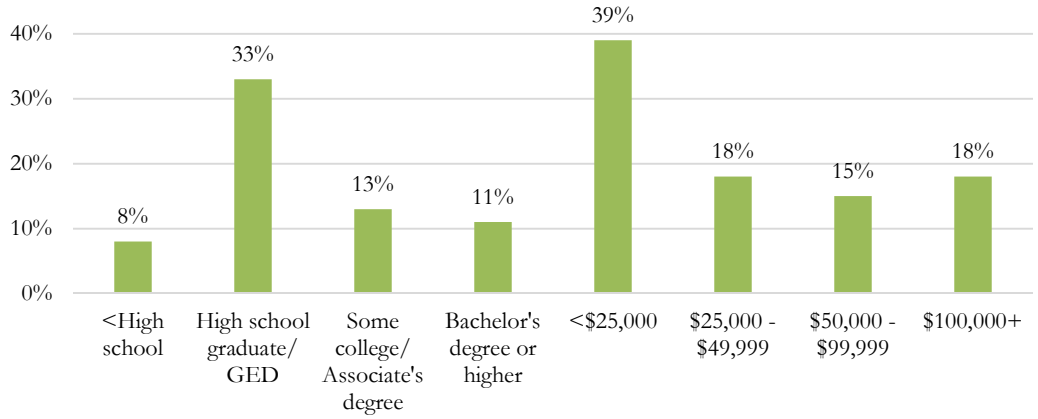


Figure 25. *Education and Income of Individuals Identifying Access to a Primary Care Physician as a Community Health Concern*



Less than one-fifth (19%) of Holmes County residents identified the lack of access to a primary care physician as a community health concern (Figure 24). Access to a primary care physician was most often identified by individuals with a total annual household income less than $25,000 (Figure 25), was greater among males than female (Figure 24), and was least often identified by those with less than a high school education (Figure 25).

Figure 26. *Composite, Sex, and Age of Individuals Identifying Households Without Access to a Vehicle as a Community Health Concern*

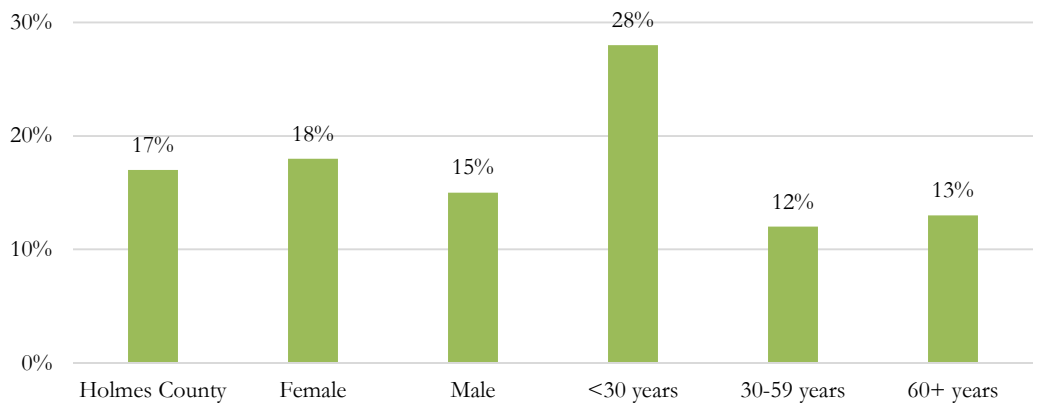
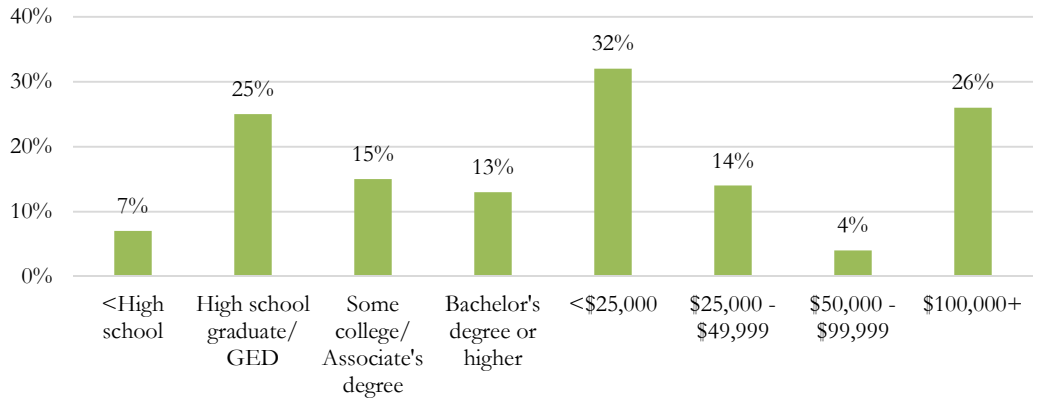


Figure 27. *Education and Income of Individuals Identifying Households Without Access to a Vehicle as a Community Health Concern*



Seventeen percent of Holmes County residents identified households without access to a vehicle as a community health concern (Figure 26). Individuals with a total annual household income less than $25,000 (Figure 27) cited households without access to a vehicle as a community health concern most often (32%), while those with a total annual household income of $50,000 to $99,999 (Figure 27) identified the health concern least often (4%). Identification declined among those with a high school education and greater (Figure 27), was higher among females than males (Figure 26), and was higher among individuals less than 30 years of age (Figure 26).

Figure 28. *Composite, Sex, and Age of Individuals 16 to 19 Years of Age Not Working and Not in School as a Community Health Concern*

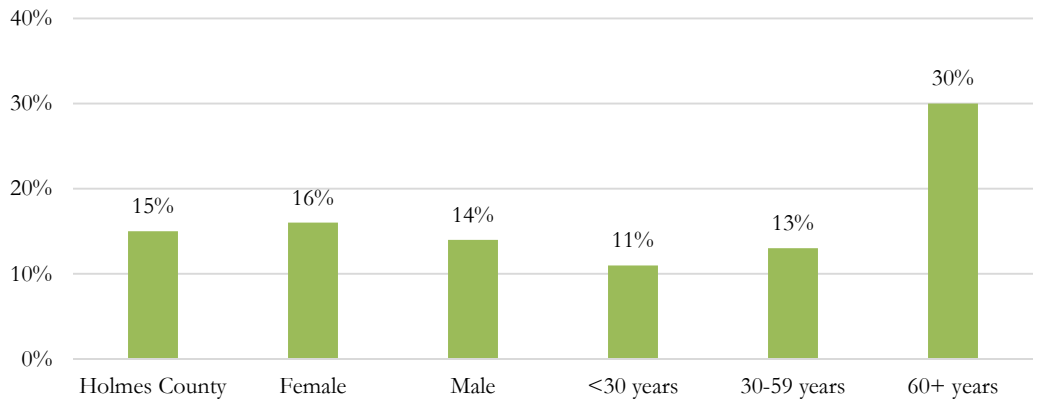
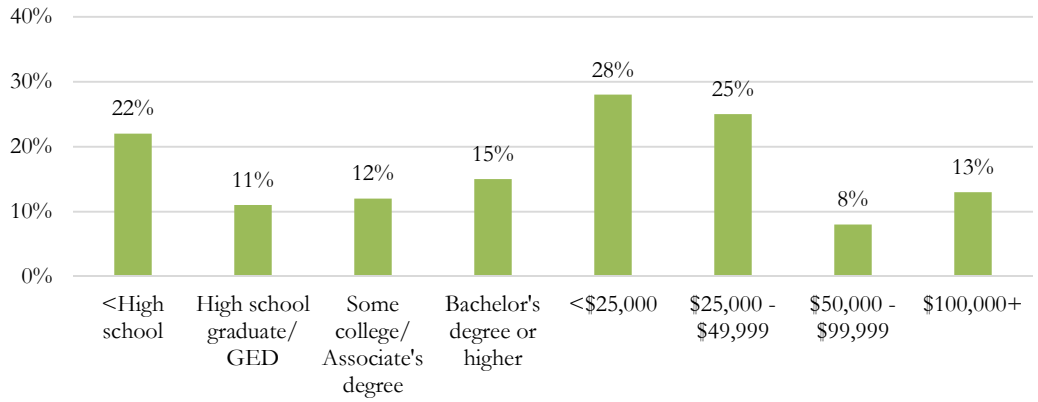


Figure 29. *Education and Income of Individuals 16 to 19 Years of Age Not Working and Not in School as a Community Health Concern*



Less than one-fifth of Holmes County residents (15%) identified those 16 to 19 years of age not working and not in school as a community health concern (Figure 28). Identification was greatest among individuals 60 years of age and older (Figure 28), greater among females than males (Figure 28), generally declined with greater total annual household income (Figure 29), and was higher among those with less than a high school education, as compared to individuals with a high school education or greater (Figure 29).

Figure 30. *Composite, Sex, and Age of Individuals Identifying Persons Under 19 Years of Age Without Health Insurance as a Community Health Concern*

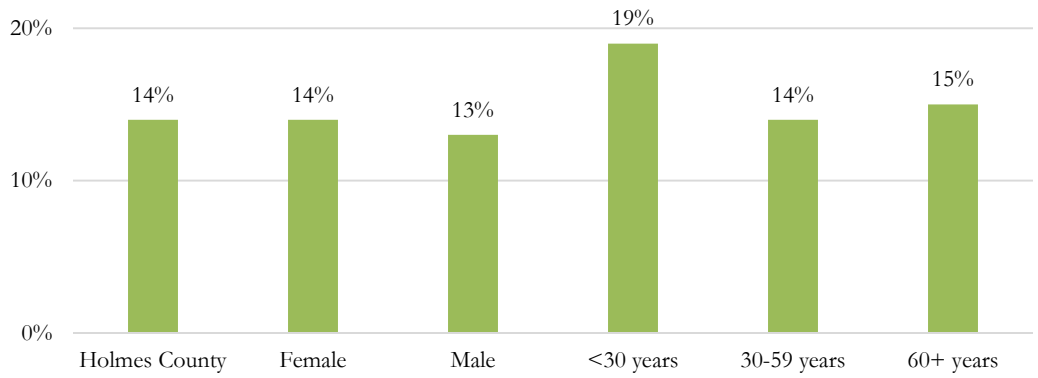
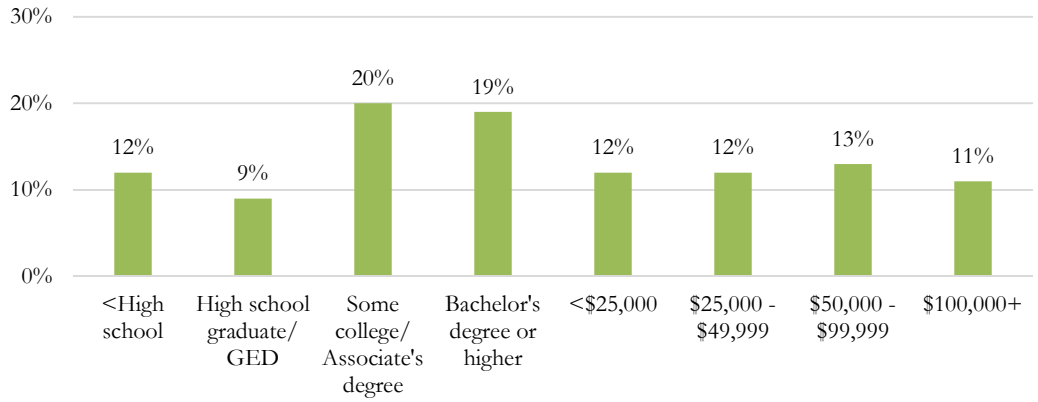


Figure 31. *Education and Income of Individuals Identifying Persons Under 19 Years of Age Without Health Insurance as a Community Health Concern*



Less than one-fifth of Holmes County residents (14%) identified persons under 19 years of age without health insurance as a community health concern (Figure 30). Identification was relatively consistent between males and females (Figure 30) and total annual household income levels (Figure 31), and highest among those with some college, or an Associate's degree (Figure 31). Individuals less than 30 years of age reported the respective health concern more so than those 30 years of age and older (Figure 30).

Figure 32. *Composite, Sex, and Age of Individuals Identifying Residents Without a High School Diploma as a Community Health Concern*

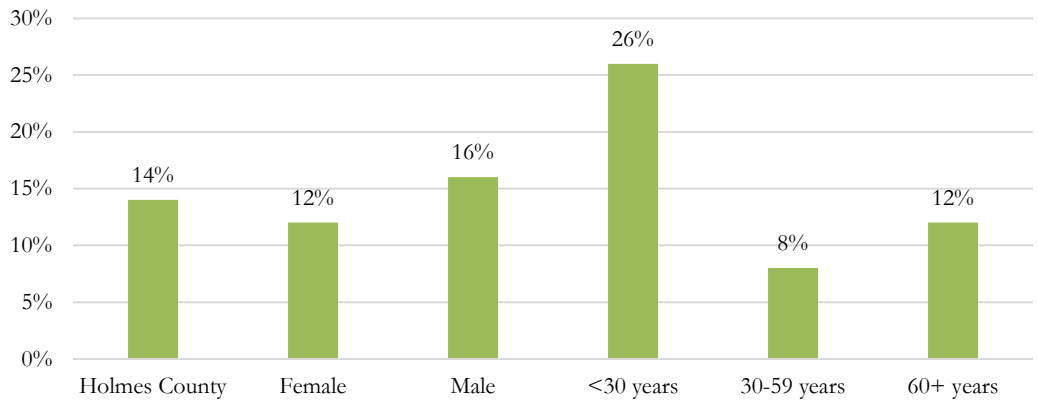
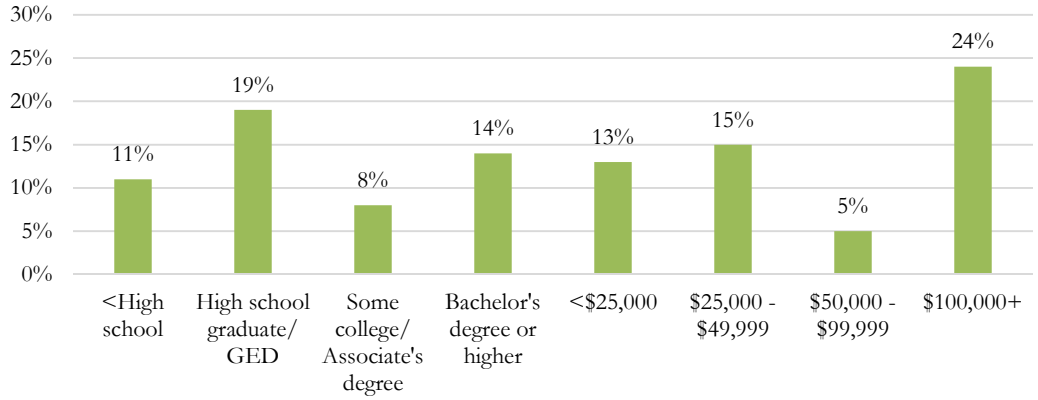


Figure 33. *Education and Income of Individuals Identifying Residents Without a High School Diploma as a Community Health Concern*



Fourteen percent of Holmes County residents identified residents without a high school diploma as a community health concern (Figure 32). Identification was highest among individuals less than 30 years of age (Figure 32), was higher among males than females, and varied considerably with respect to educational attainment and total annual household income (Figure 33).

Figure 34. *Composite, Sex, and Age of Individuals Identifying Persons 65 Years of Age and Older Without Health Insurance as a Community Health Concern*

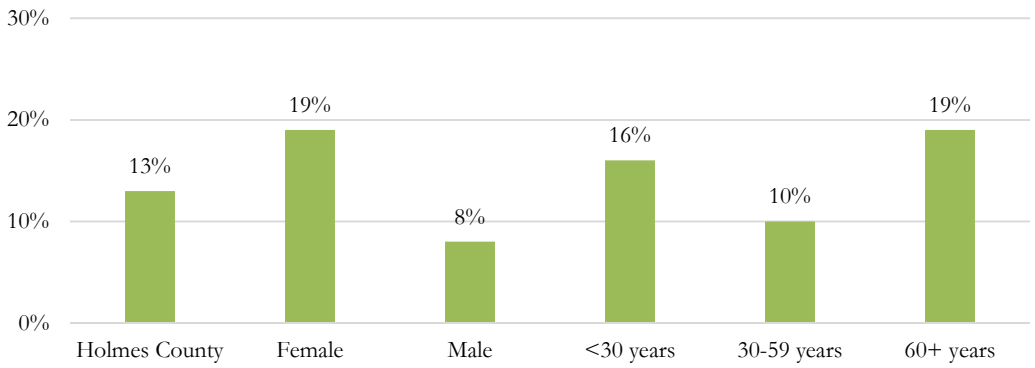
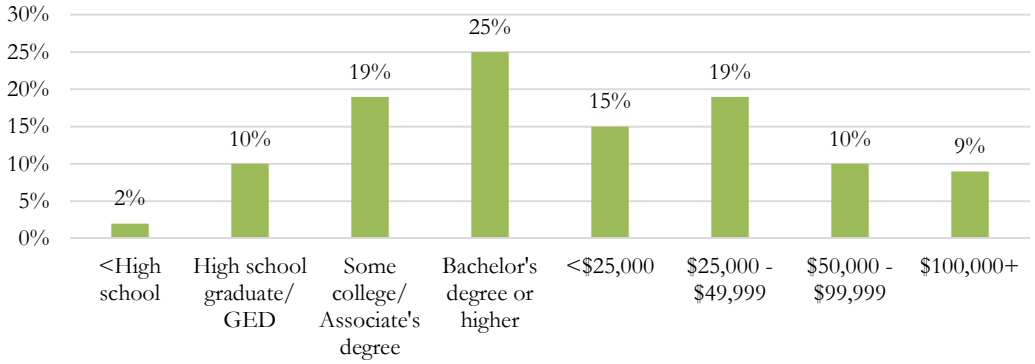


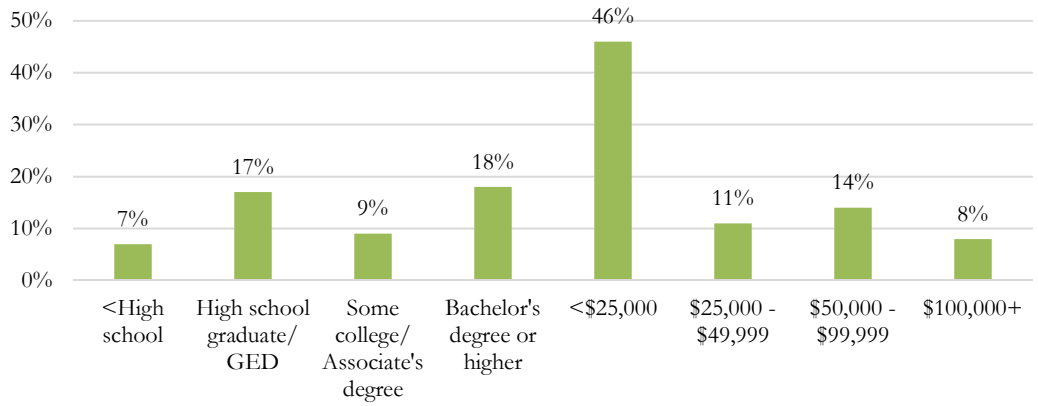
Figure 35. *Education and Income of Individuals Identifying Persons 65 Years of Age and Older Without Health Insurance as a Community Health Concern*



Less than one-fifth of Holmes County residents (13%) identified persons 65 years of age and older without health insurance as a community health concern (Figure 34). Identification was higher among females than males (Figure 34), was higher among individuals 60 years of age and older, as compared to those less than 60 years of age (Figure 34), and increased with greater educational attainment (Figure 35). With respect to income, 19% of those reporting a total annual household income of $25,000 to $49,999 identified the lack of health insurance among those 65 years of age and older as a health concern, as compared to 9% of individuals with a total annual household income of $100,000 or more (Figure 35).

Figure 36. *Composite, Sex, and Age of Individuals Identifying Women Not Receiving a Mammogram as a Community Health Concern*

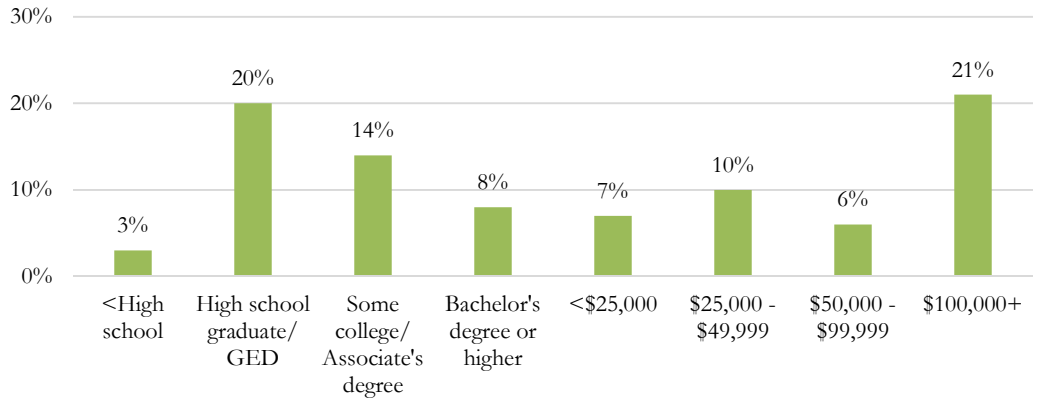
Figure 37. *Education and Income of Individuals Identifying Women Not Receiving a Mammogram as a Community Health Concern*



Thirteen percent of Holmes County residents identified women not receiving a mammogram as a community health concern (Figure 36). Identification was considerably higher among females than males (Figure 36), and higher among residents 60 years of age and older as compared to those 59 years of age or less (Figure 36). Nearly one-half (46%) of those with a total annual household income less than $25,000 reported the respective health concern, the latter of which was greater than any other included group (Figure 37). Identification according to education varied, and was highest among individuals with a Bachelor's degree or higher (Figure 37).

Figure 38. *Composite, Sex, and Age of Individuals Identifying Non-fluent English speaking residents as a Community Health Concern*

Figure 39. *Education and Income of Individuals Identifying Non-fluent English speaking residents as a Community Health Concern*



Less than one-fifth of Holmes County residents (12%) identified non-fluent English speaking residents as a community health concern (Figure 38). Identification was highest among individuals less than 30 years of age (Figure 38), relatively consistent between females and males (Figure 38), and lowest among those with less than a high school education (Figure 39). Individuals reporting a total annual household income of $100,000 or more identified non-fluent English speaking residents more so than the other included income groups (Figure 39).

Figure 40. *Composite, Sex, and Age of Individuals Identifying Women Over 18 Years of Age Not Receiving a Pap Smear as a Community Health Concern*

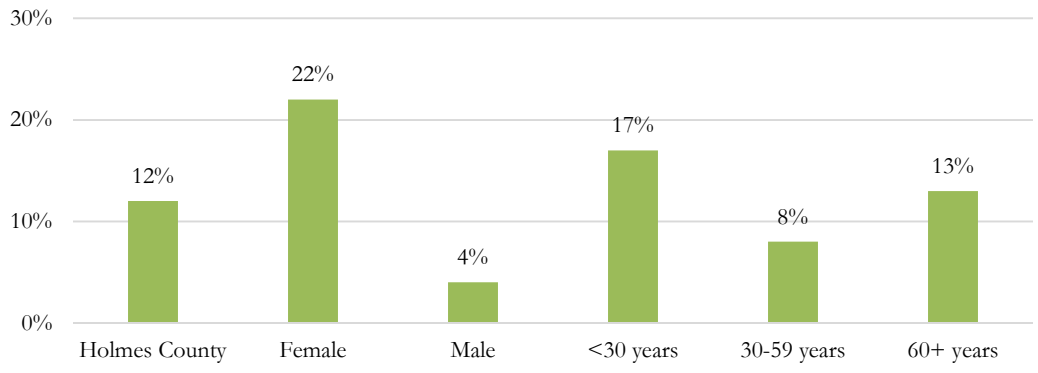
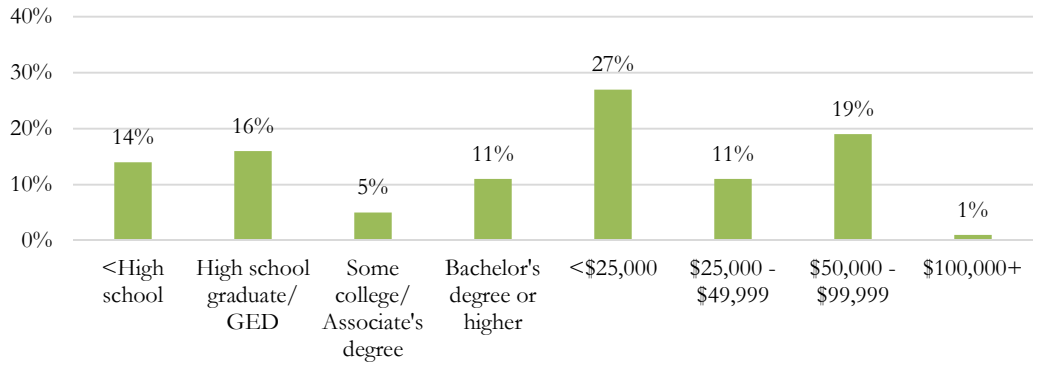


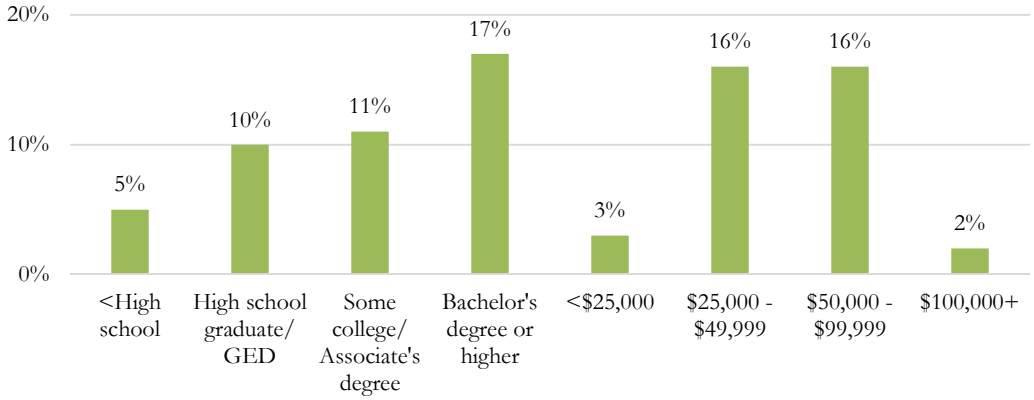
Figure 41. *Education and Income of Individuals Identifying Women Over 18 Years of Age Not Receiving a Pap Smear as a Community Health Concern*



Twelve percent of Holmes County residents identified women over 18 years of age not receiving a pap smear as a community health concern (Figure 40). Identification was considerably higher among females than males (Figure 40), was higher among those less than 30 years of age, as compared to individuals 30 years of age and older (Figure 40), was highest among individuals with a total annual household income less than $25,000 (Figure 41), and was lowest among those reporting a total annual household income of $100,000 or more (Figure 41). With respect to education, resident responses were relatively consistent, save for a low of 5% among those with some college, or an Associate's degree (Figure 41).

Figure 42. *Composite, Sex, and Age of Individuals Identifying Residents Without an Associate's Degree as a Community Health Concern*

Figure 43. *Education and Income of Individuals Identifying Residents Without an Associate's Degree as a Community Health Concern*



One-tenth of Holmes County residents identified residents without an Associate's degree as community health concern (Figure 42). Identification was highest among females (Figure 42) and those with a Bachelor's degree or higher (Figure 43), increased with greater educational attainment (Figure 43), and was lowest among those with a total annual household income of $100,000 or more (Figure 43). Responses organized by age were relatively consistent, with individuals 30 to 59 years of age identifying residents without an Associate's degree less than those under 30 years of age and 60 years of age and older (Figure 42).

Holmes County residents were asked to list the top three health problems in Holmes County in a qualitative, open-ended format. When organized in order of importance (first through third) and response frequency, residents identified the following health problems in Holmes County:

1. Cancer
2. Obesity
3. Heart disease

3.2.3 COVID-19

Figure 45. *COVID-19-like Illness in the Past 30 Days, Medical Care, COVID-19 Testing, and COVID-19 Positivity*

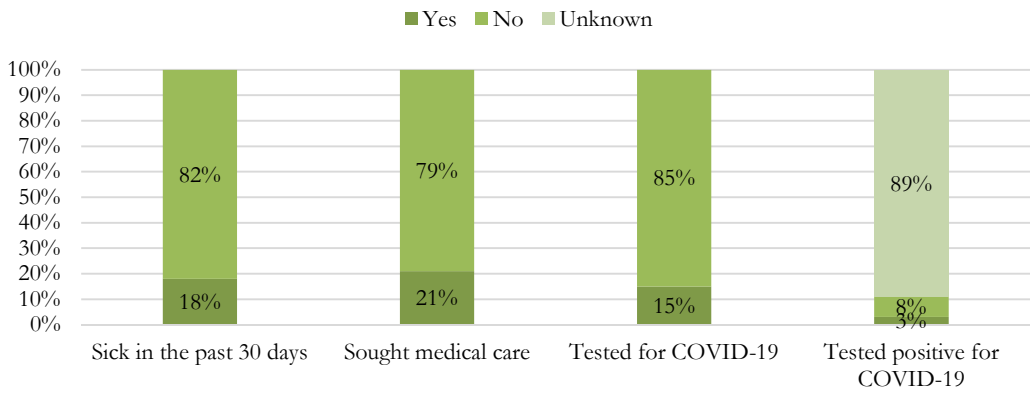
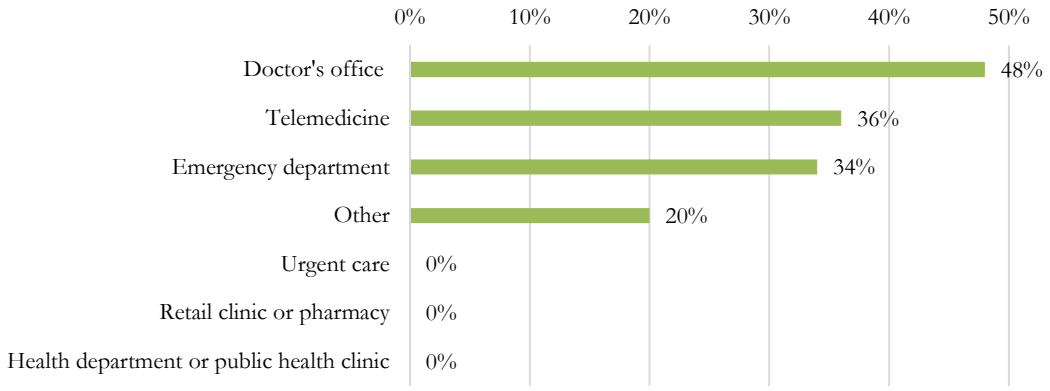


Figure 46. *Healthcare Settings Accessed by Individuals Who Sought Care for a COVID-19-like Illness in the Past 30 Days*



Approximately one-fifth (18%) of Holmes County residents were sick for more than one day (during the past 30 days) with a COVID-19-like illness that included a fever, cough, sore throat, or runny or stuffy nose (Figure 45). Of these residents, 21% sought medical care (Figure 45) from several healthcare settings (Figure 46). Among those Holmes County residents who were sick in the past 30 days with the aforementioned symptoms, 15% were tested for COVID-19, and 3% of said residents tested positive (Figure 45).

Table 28. *Activities During the Past Week During COVID-19*

	(%)
Went to the grocery store or pharmacy	86
Went to a friend, neighbor, or relative's house	55
Went out to a restaurant, bar, club, or other place where people gather	54
Visited with older friends, relatives, or neighbors	48
Went to a family gathering where there were more than ten people, such as a reunion, wedding, funeral, or birthday party	21
Had more than ten friends, neighbors, or relatives over to your house	14
Went to a gathering of friends where there were more than ten people, such as a party or concert	9
None of the above	5

Table 29. *COVID-19 Beliefs and Behaviors*

	(%)
"I frequently use hand sanitizer and/or wash my hands"	74
"I would self-isolate myself at home if needed"	69
"It really bothers me when people sneeze without covering their mouths"	59
"I dislike wearing a face mask when in public places"	54
"I avoid touching door handles and stair case railings at public locations"	46
"The likelihood of me contracting COVID-19 is low"	43
"I have changed the way I live my life because of COVID-19"	42
"I don't mind going to very crowded places"	33
"I avoid going to public places"	20
"I want people's temperature to be taken before they enter public places"	17
"None of the above"	1

Figure 47. *Composite, Sex, and Age of Individuals Who Frequently Utilized Hand Sanitizer and Regular Hand Washing*

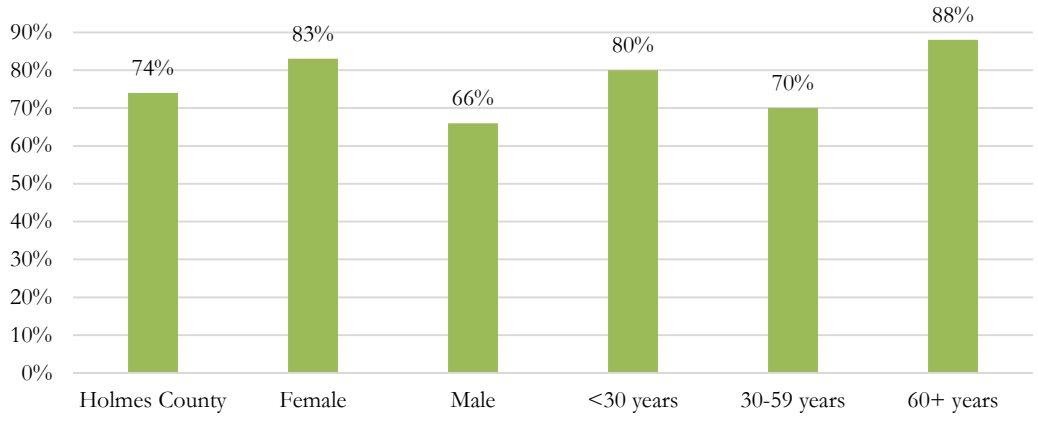
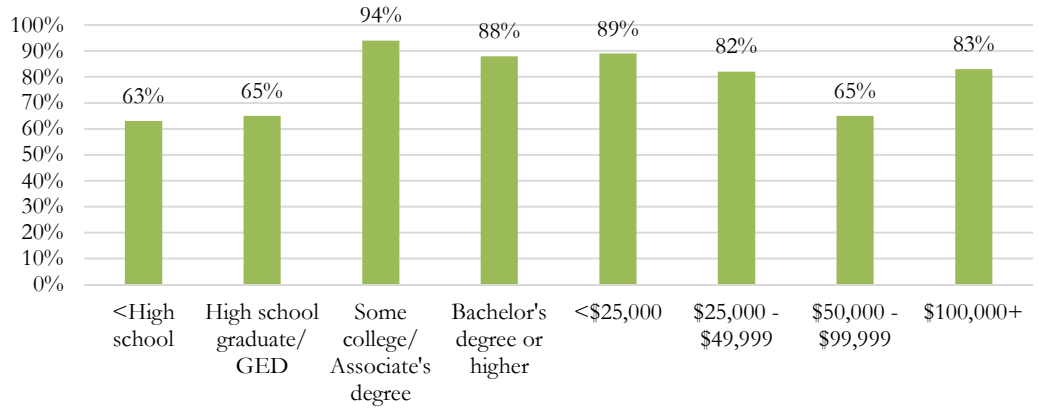


Figure 48. *Education and Income of Individuals Who Frequently Utilized Hand Sanitizer and Regular Hand Washing*



Approximately three-quarters of Holmes County residents (74%) reported frequent hand sanitizer use and regular hand washing (Figure 47). Frequent hand sanitizer use and regular hand washing was higher among females than males (Figure 47), highest among those with some college, or an Associate's degree (Figure 48), and lowest among those individuals with less than a high school education (Figure 48).

Figure 49. *Composite, Sex, and Age of Individuals Who Would Self-isolate at Home If Necessary*

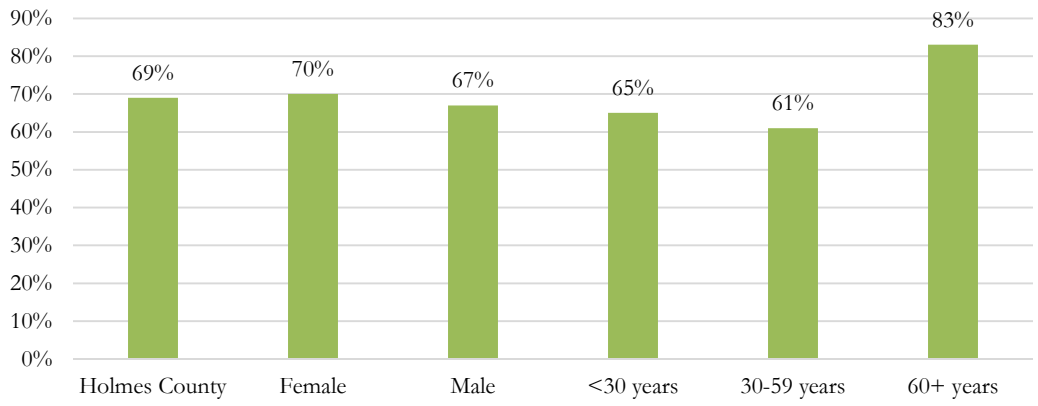
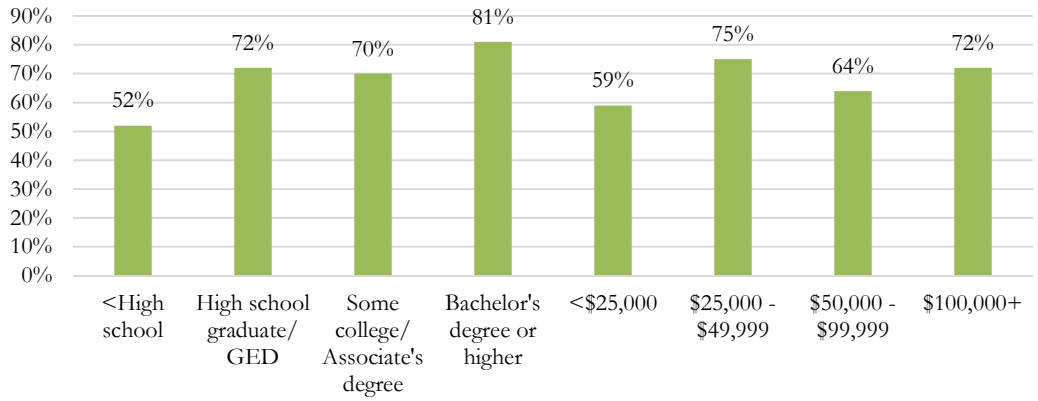


Figure 50. *Education and Income of Individuals Who Would Self-isolate at Home If Necessary*



Sixty-nine percent of Holmes County residents indicated that they would self-isolate at home if necessary (Figure 49). Willingness to self-isolate was highest among those 60 years of age and older (Figure 49), and was lowest among those with less than a high school education (Figure 50). Willingness to self-isolate relatively increased with greater educational attainment (Figure 50).

Figure 51. *Composite, Sex, and Age of Individuals Who are Bothered When Someone Sneezes Without Covering Their Mouth*

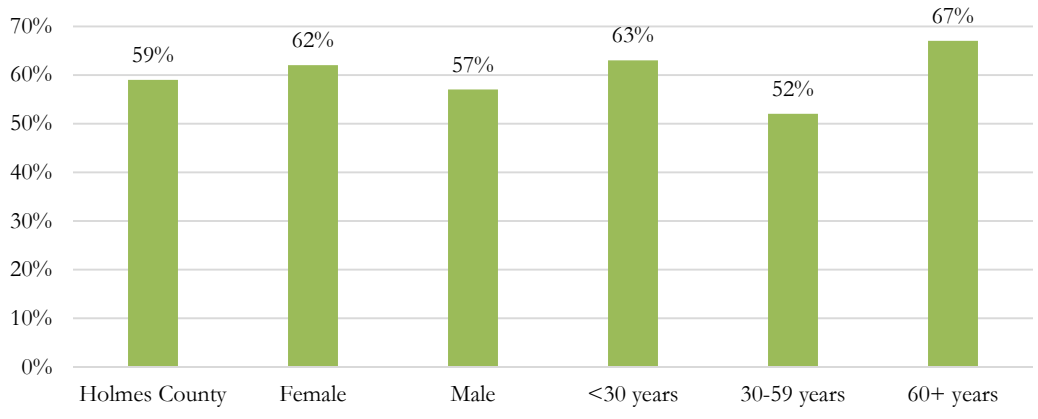
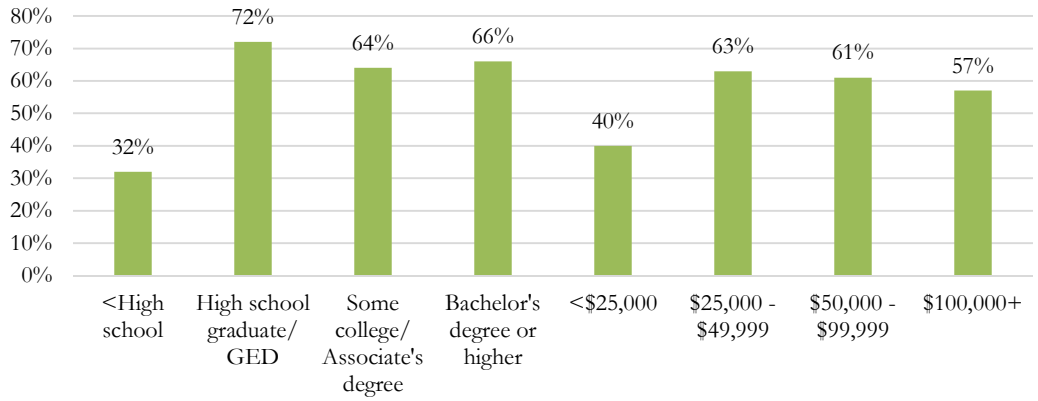


Figure 52. *Education and Income of Individuals Who are Bothered When Someone Sneezes Without Covering Their Mouth*



More than half of Holmes County residents (59%) indicated that they were bothered when someone sneezed without covering their mouth (Figure 51). Though relatively consistent across gender (Figure 51), individuals 30 to 59 years of age reported being bothered when someone sneezed without covering their mouth less than other included age groups (Figure 51). Those with less than a high school education reported this less than any other included group, while individuals with a high school education reported being bothered when someone sneezed without covering their mouth most often (Figure 52).

Figure 53. *Composite, Sex, and Age of Individuals Who Dislike Wearing a Facemask in Public Places*

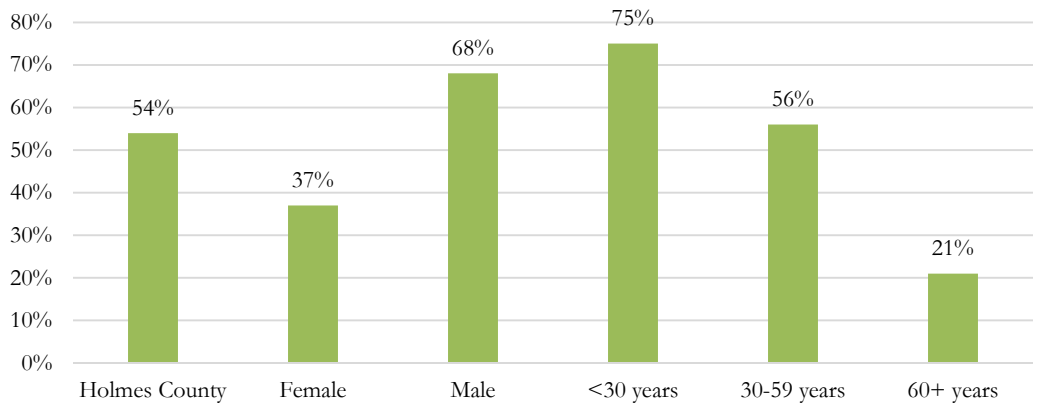
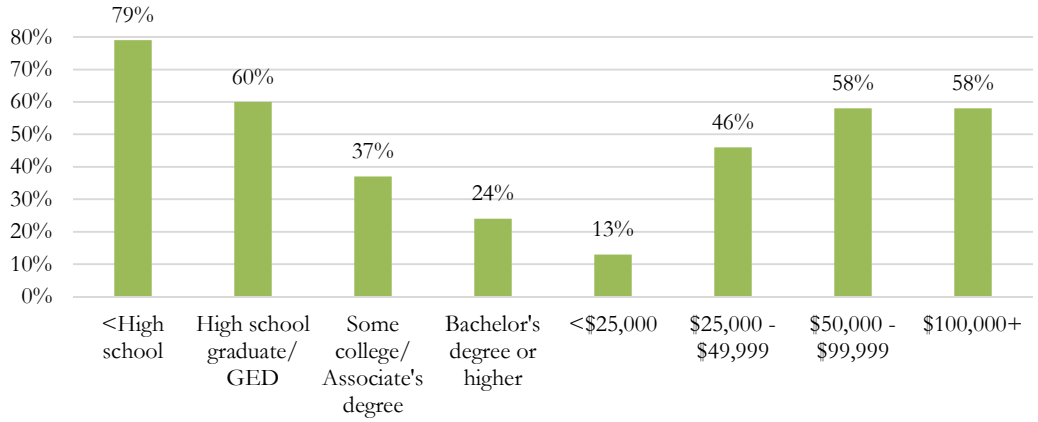


Figure 54. *Education and Income of Individuals Who Dislike Wearing a Facemask in Public Places*



Fifty-four percent of Holmes County residents disliked wearing a facemask in public places (Figure 53). Dislike for wearing a facemask in public was notably higher among males, as compared to females (Figure 53), declined with advancing age (Figure 53) and educational attainment (Figure 54), respectively, and increased with greater total annual household income (Figure 54).

Figure 55. *Composite, Sex, and Age of Individuals Who Avoid Touching Door Handles and Staircase Railings in Public Locations*

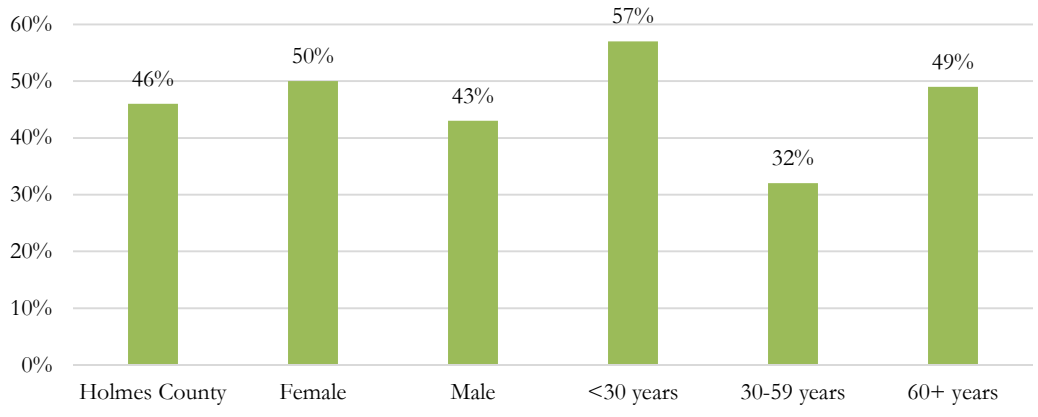
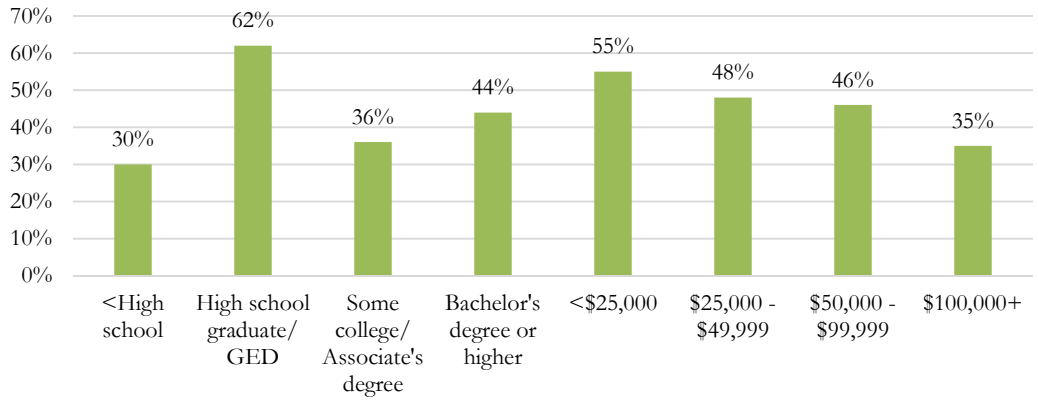


Figure 56. *Education and Income of Individuals Who Avoid Touching Door Handles and Staircase Railings in Public Locations*



Less than one-half of Holmes County residents reported avoiding touching door handles and staircase railings in public locations (Figure 55). Avoiding the touching of door handles and staircase railings in public locations was higher among females than males (Figure 55), higher among those less than 30 years of age, as compared to other included age groups (Figure 55), lowest among those with less than a high school education (Figure 56), highest among high school graduates (Figure 56), and declined with greater total annual household income (Figure 56).

Figure 57. *Composite, Sex, and Age of Individuals Who Believe their Likelihood of Contracting COVID-19 is Low*

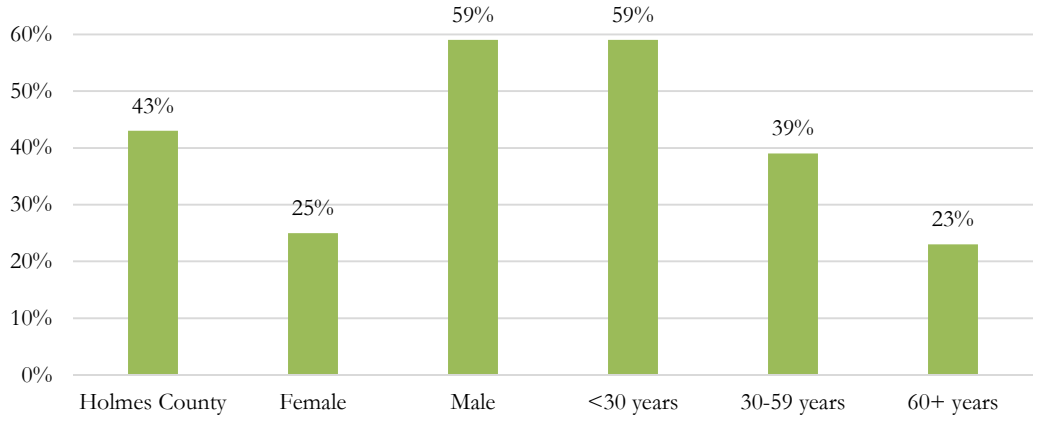
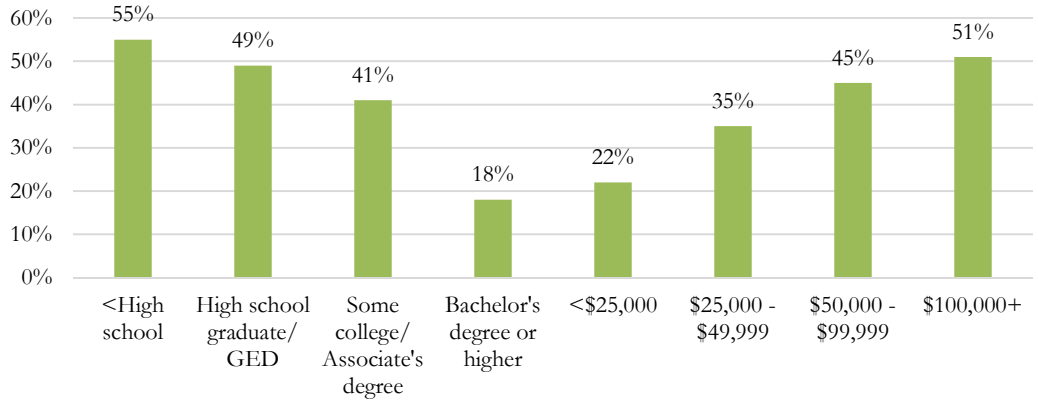


Figure 58. *Education and Income of Individuals Who Believe their Likelihood of Contracting COVID-19 is Low*



Less than half of Holmes County residents reported that their likelihood of contracting COVID-19 was low (Figure 57). Beliefs of a low likelihood of contracting COVID-19 were considerably higher among males than females (Figure 57), declined with advancing age (Figure 57) and greater educational attainment (Figure 58), and increased with increasing total annual household income (Figure 58).

Figure 59. *Composite, Sex, and Age of Individuals Who Have Changed Their Way of Life Due to COVID-19*

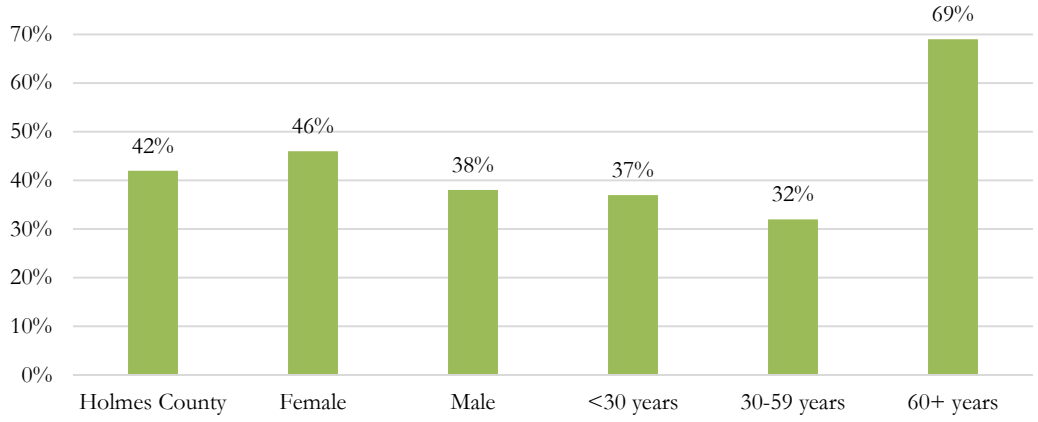


Figure 60. *Education and Income of Individuals Who Have Changed Their Way of Life Due to COVID-19*

Less than half of Holmes County residents reported changing their way of life due to COVID-19 (Figure 59). Reports were highest among those 60 years of age and older (Figure 59), lowest among those without a high school education (Figure 60), increased with greater educational attainment (Figure 60), and generally decreased with greater total annual household income (Figure 60).

Figure 61. *Composite, Sex, and Age of Individuals Who Don't Mind Going to Very Crowded Places*

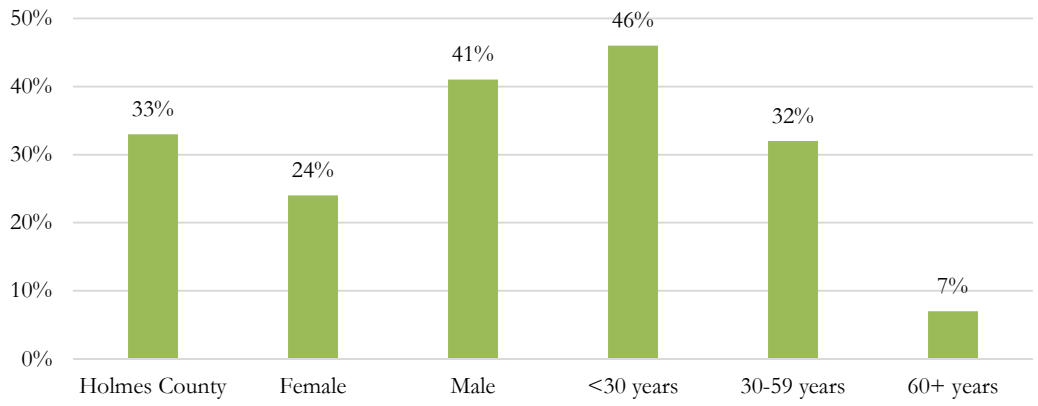
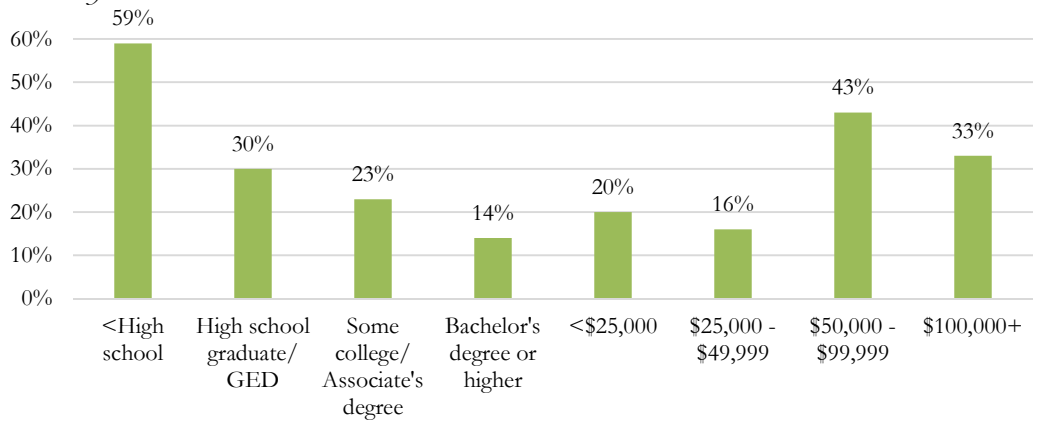


Figure 62. *Education and Income of Individuals Who Don't Mind Going to Very Crowded Places*



Approximately one-third of Holmes County residents (33%) didn't mind going to very crowded places (Figure 61). Individuals who reportedly didn't mind going to very crowded places was higher among males than females (Figure 61), decreased with advancing age (Figure 61) and greater educational attainment (Figure 62), was highest among those with less than a high school education (Figure 62), and was lowest among those 60 years of age and older (Figure 61).

Figure 63. *Composite, Sex, and Age of Individuals Who Avoid Going to Public Places*

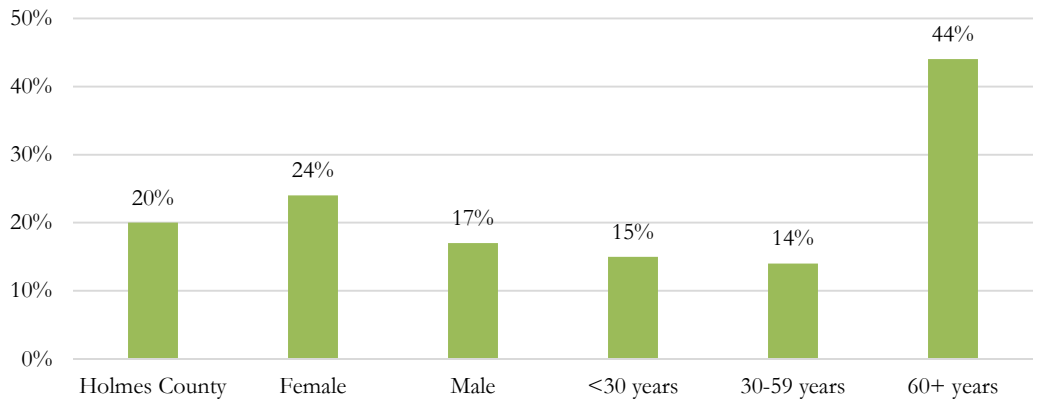
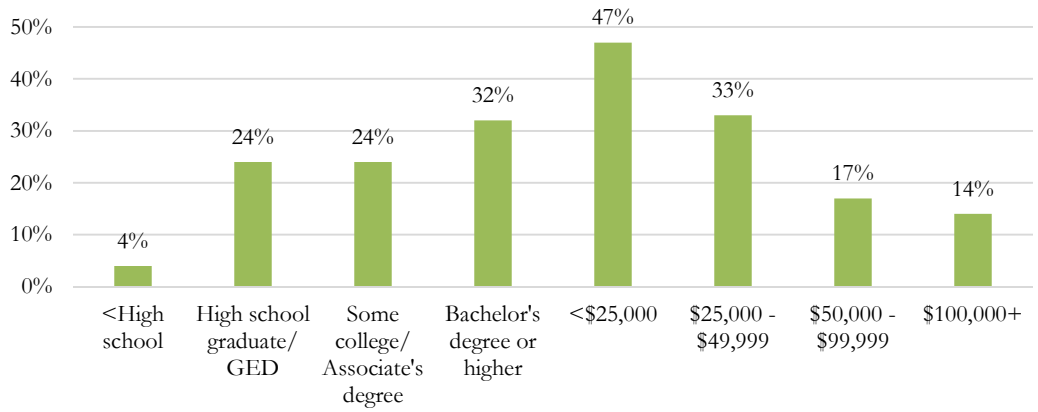


Figure 64. *Education and Income of Individuals Who Avoid Going to Public Places*



One-fifth of Holmes County residents (20%) reportedly avoided going to public places (Figure 63). Avoiding going to public places was higher among females than males (Figure 63), higher among those 60 years of age and older, as compared to other included age groups (Figure 63), increased with greater educational attainment (Figure 64), and decreased with greater total annual household income (Figure 64).

Figure 65. *Composite, Sex, and Age of Individuals Who Would Like People's Temperature Taken Before They Enter Public Places*

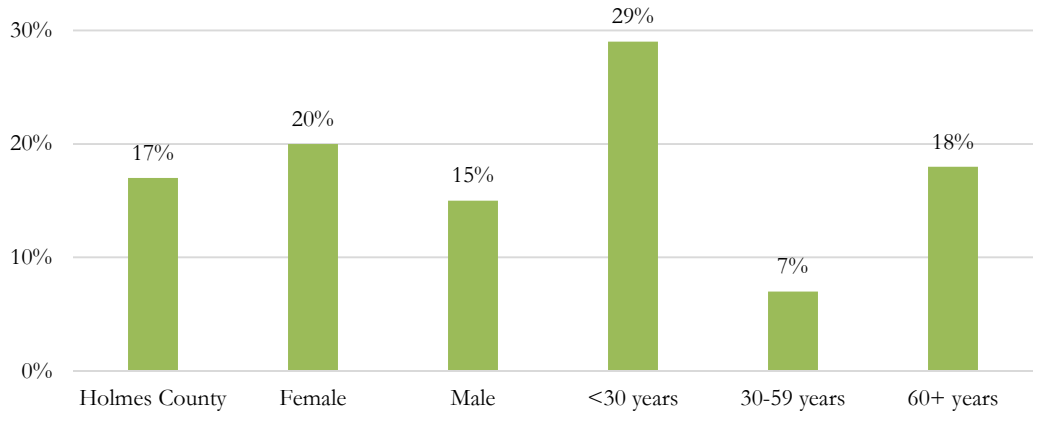
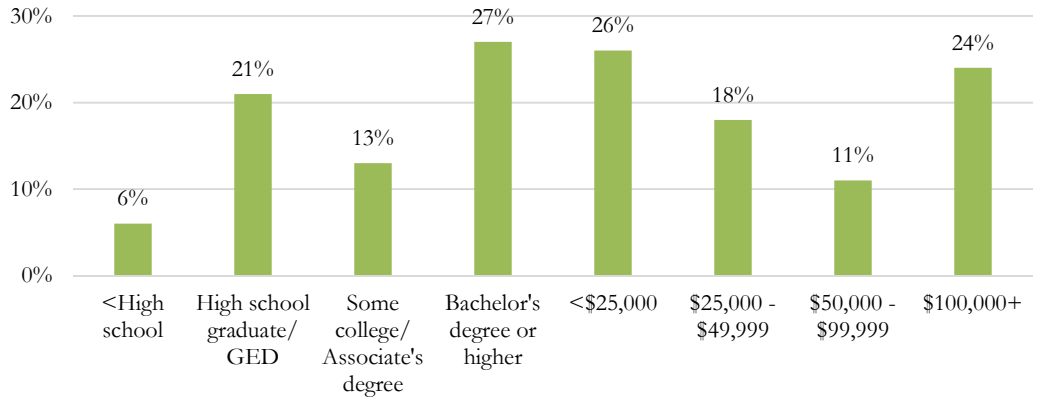


Figure 66. *Education and Income of Individuals Who Would Like People's Temperature Taken Before They Enter Public Places*



Less than one-fifth of Holmes County residents preferred people's temperature to be taken before they entered public places (Figure 65). Preference for people's temperature to be taken before entering a public place was higher among females than males (Figure 65), highest among those individuals less than 30 years of age (Figure 65), and lowest among individuals with less than a high school education (Figure 66).

Figure 67. *Composite, Sex, and Age of Individuals Who Have Delayed Medical Care in the Past 30 Days Due to COVID-19*

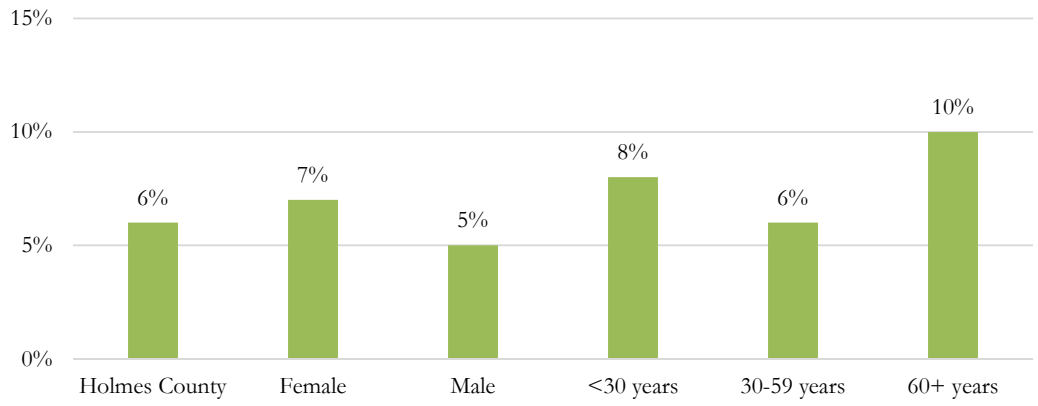
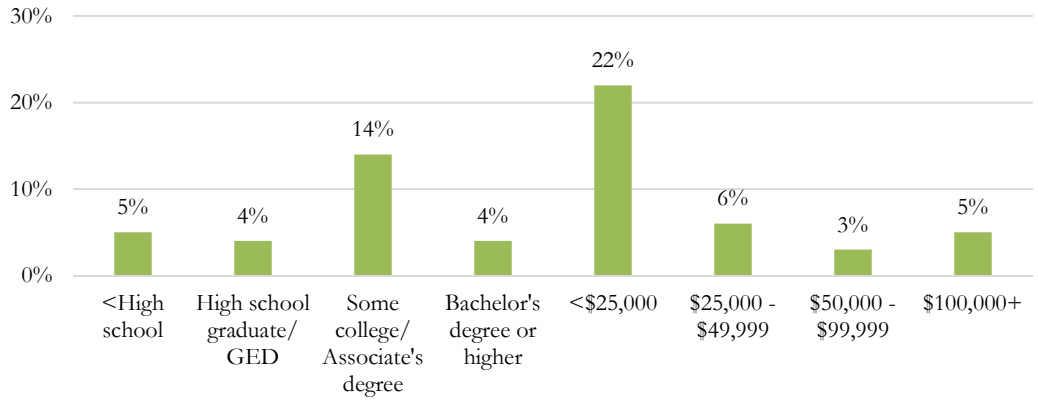
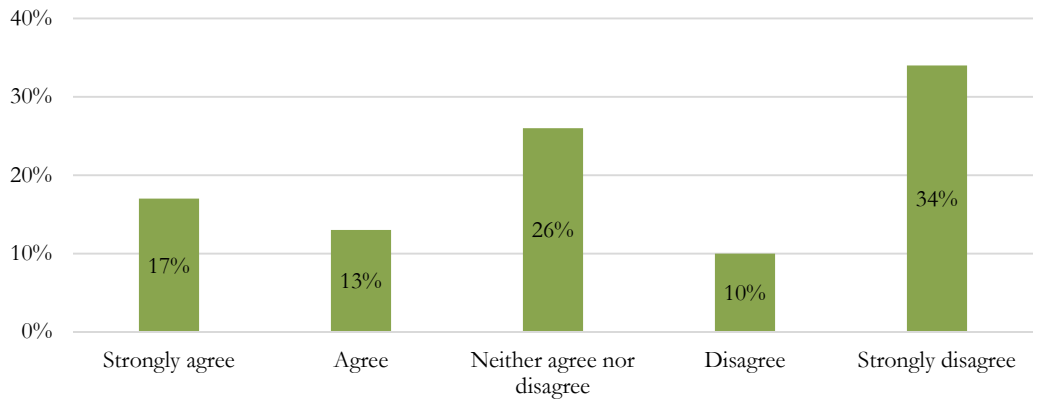


Figure 68. *Education and Income of Individuals Who Have Delayed Medical Care in the Past 30 Days Due to COVID-19*



Six percent of Holmes County residents reported delaying medical care in the past 30 days due to COVID-19 (Figure 67). Delaying medical care in light of COVID-19 was relatively consistent with respect to age and gender (Figure 67), while upwards of 14% of individuals with some college, or an Associate's degree, and 25% of those with a total annual household income less than $25,000 reported delaying medical care in the past 30 days (Figure 68).

Figure 69. *Individual Willingness to Receive the COVID-19 Vaccine if it Were Available*



Nearly one-third of Holmes County residents (30%) expressed a willingness to receive the COVID-19 vaccine if it were available (Figure 69). Approximately one-quarter (26%) of residents neither agreed nor disagreed, while 44% of residents indicated that they would not receive the vaccine if it were available.

Figure 70. *Composite, Sex, and Age of Individuals Who Agree or Strongly Agree to Recieve a COVID-19 Vaccine if Available*

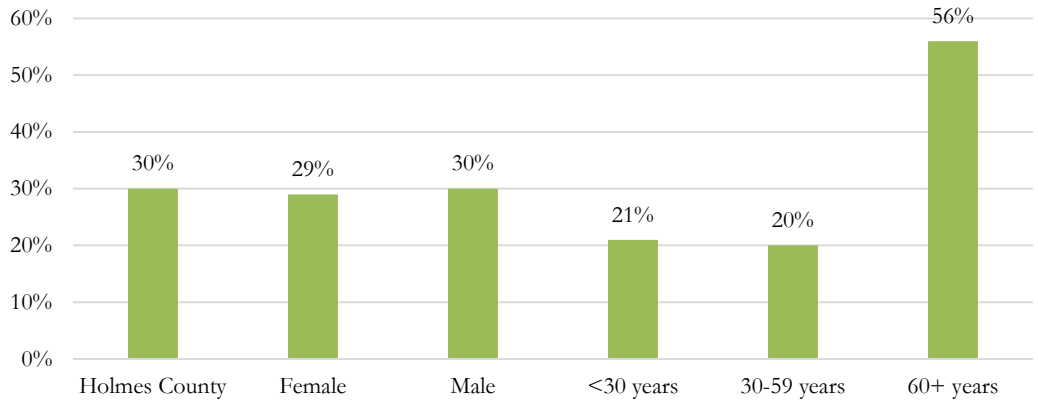
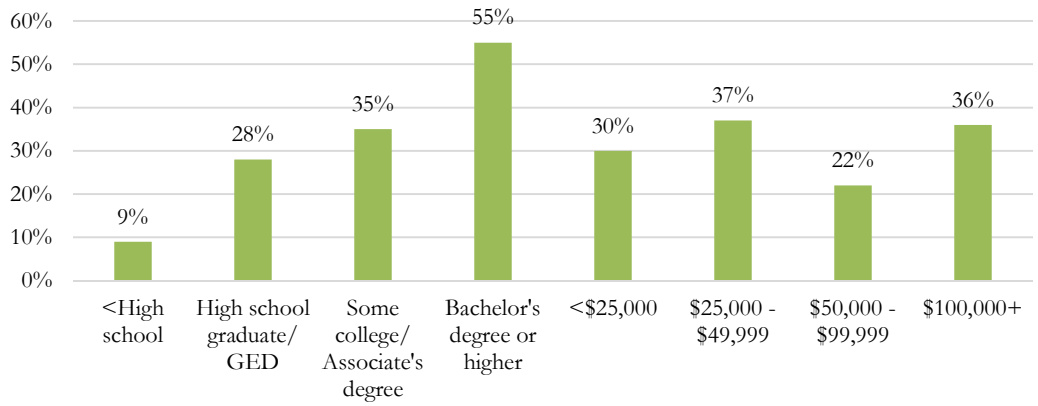


Figure 71. *Education and Income of Individuals Who Agree or Strongly Agree to Recieve a COVID-19 Vaccine if Available*



Less than one-third of Holmes County residents (30%) agreed or strongly agreed to receive the COVID-19 vaccine if it were available (Figure 70). Agreeing to receive the vaccine was highest among those 60 years of age and older (Figure 70), consistent between males and females (Figure 70), lowest among individuals with less than a high school education (Figure 71), and increased with a greater educational attainment (Figure 71). With respect to total annual household income, individuals with an annual household income of $50,000 to $99,999 reported the least willingness to receive the COVID-19 vaccine (Figure 71).

Figure 72. *Composite, Sex, and Age of Individuals Who Disagree or Strongly Disagree to Recieve a COVID-19 Vaccine if Available*

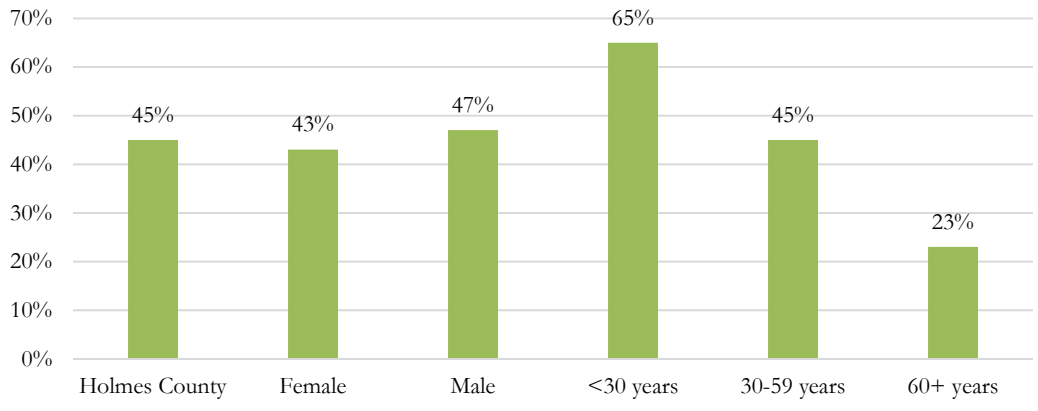
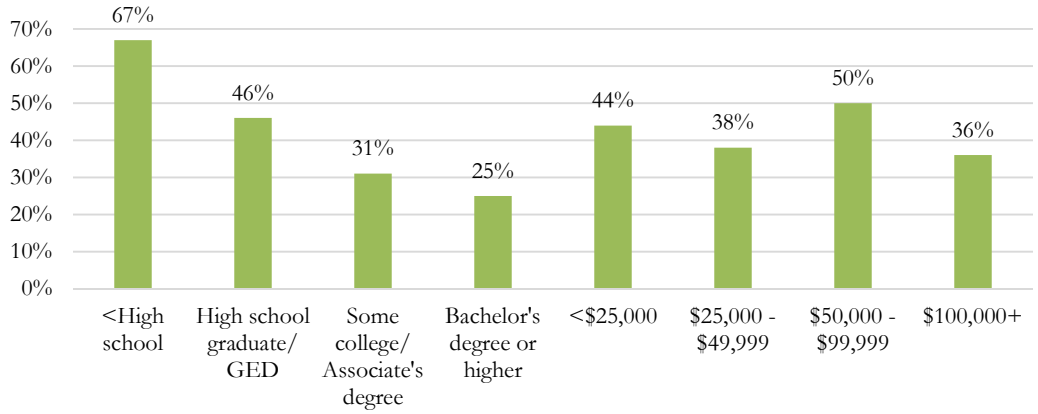


Figure 73. *Education and Income of Individuals Who Disagree or Strongly Disagree to Recieve a COVID-19 Vaccine if Available*



Nearly half of Holmes County residents (45%) indicated that they would not receive the COVID-19 vaccine if available (Figure 72). Refusal to receive the COVID-19 vaccine was slightly higher among males than females (Figure 72), declined with advancing age (Figure 72) and greater educational attainment (Figure 73), and was highest among those with a total annual household income of $50,000 to $99,999, as compared to other included income ranges (Figure 73).

Figure 74. *Composite, Sex, and Age of Individuals Who Neither Agree nor Disagree to Recieve a COVID-19 Vaccine if Available*

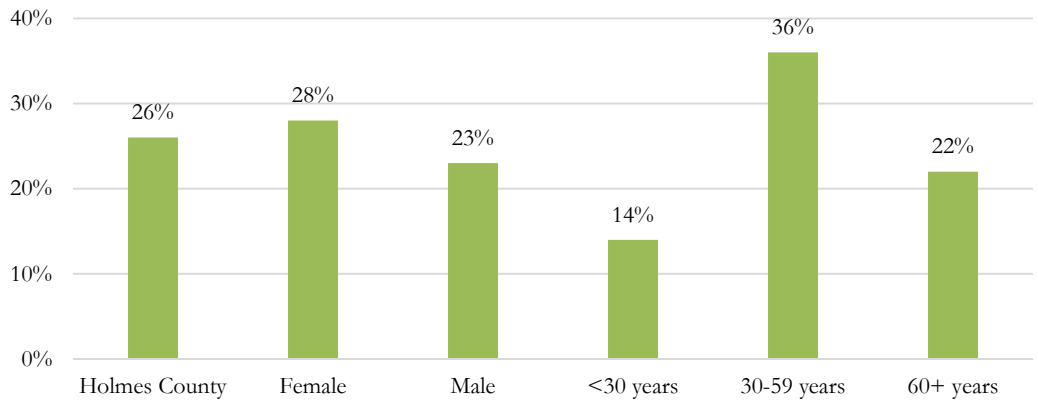
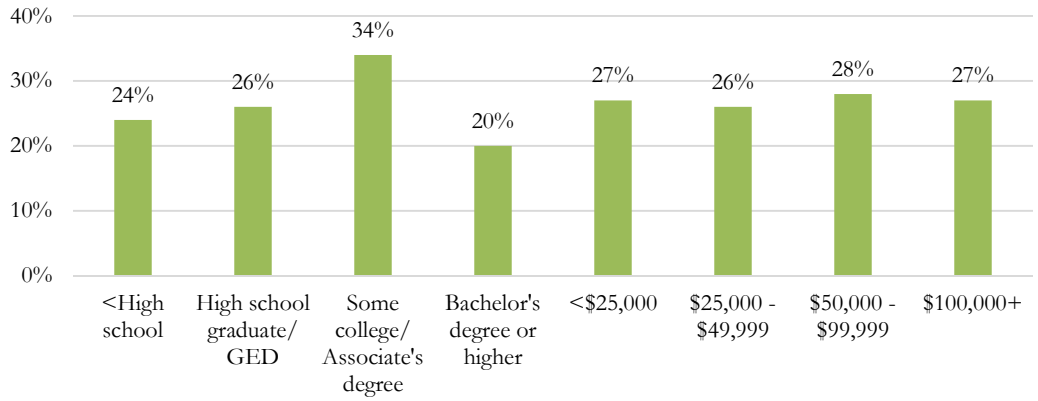


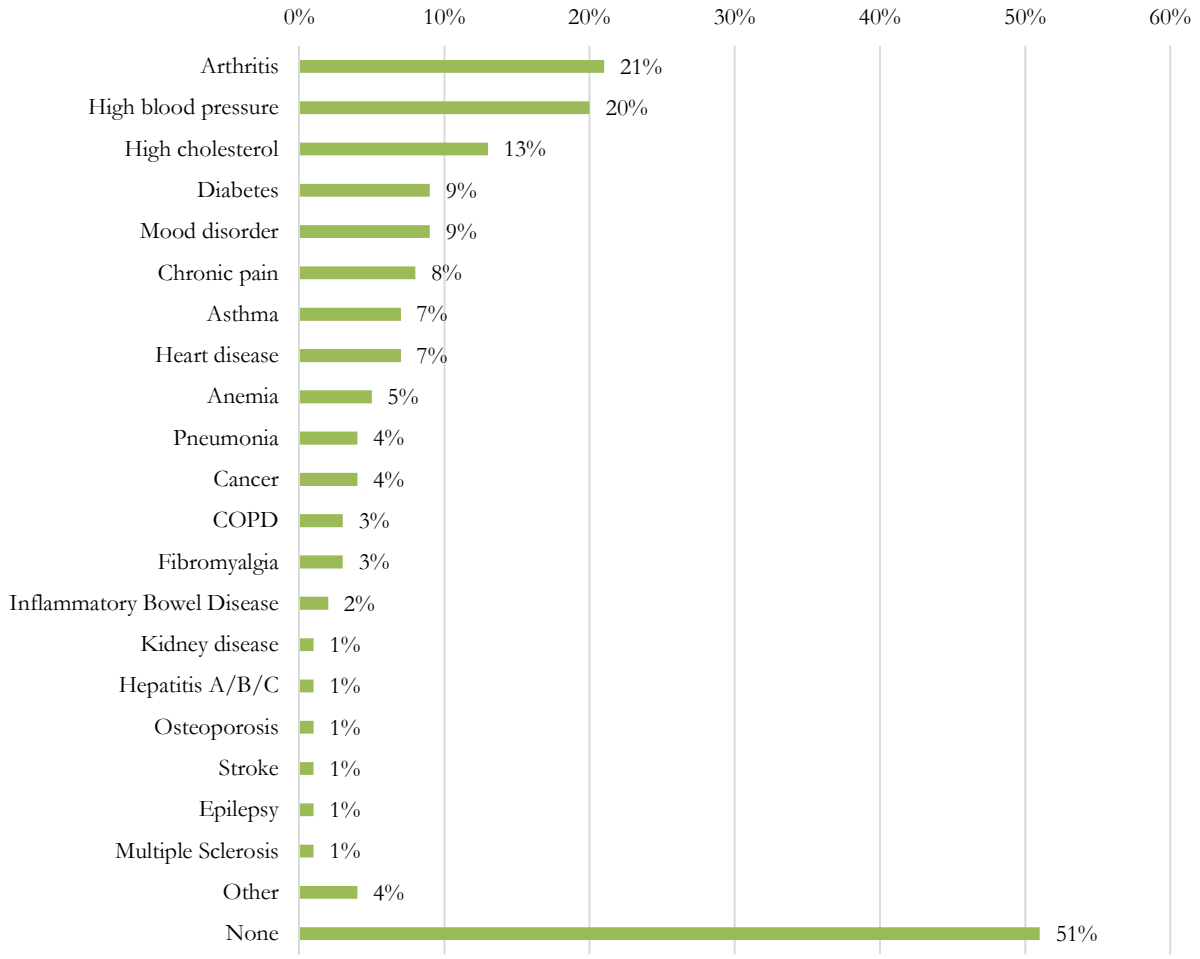
Figure 75. *Education and Income of Individuals Who Neither Agree nor Disagree to Recieve a COVID-19 Vaccine if Available*



More than one-quarter of Holmes County residents (26%) neither agreed nor disagreed to receiving the COVID-19 vaccine if it was available (Figure 74). Neither agreeing nor disagreeing to receiving the COVID-19 vaccine was higher among females than males (Figure 74), highest among those 30 to 59 years of age (Figure 74), lower among those with a Bachelor's degree or higher, as compared to other included education categories (Figure 75), and was relatively consistent all household income categories (Figure 75).

3.2.4 Chronic Disease

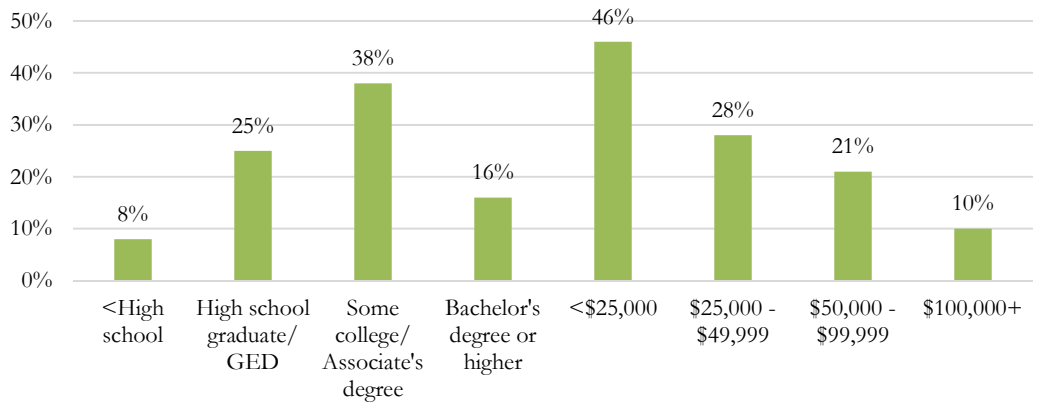
Figure 76. *Chronic Disease Diagnoses*



While more than 10% of Holmes County residents indicated that they had been diagnosed by a healthcare professional with arthritis (21%), high blood pressure (20%), and high cholesterol (13%), the majority of residents (51%) indicated that they had not been diagnosed with a chronic disease to date (Figure 76). Of the 20 included chronic conditions, 17 affected less than 10% of Holmes County residents, respectively.

Figure 77. *Composite, Sex, and Age of Individuals Who Have Ever Been Diagnosed With Arthritis by a Healthcare Professional*

Figure 78. *Education and Income of Individuals Who Have Ever Been Diagnosed With Arthritis by a Healthcare Professional*



Twenty-one percent of Holmes County residents had ever been diagnosed with arthritis by a healthcare professional (Figure 77). Arthritis diagnosis was higher among females than males (Figure 77), increased with advancing age (Figure 77), was highest among individuals with some college or an Associate's degree, with respect to education (Figure 78), and declined with greater total annual household income (Figure 78).

Figure 79. *Composite, Sex, and Age of Individuals Who Have Ever Been Diagnosed With High Blood Pressure by a Healthcare Professional*

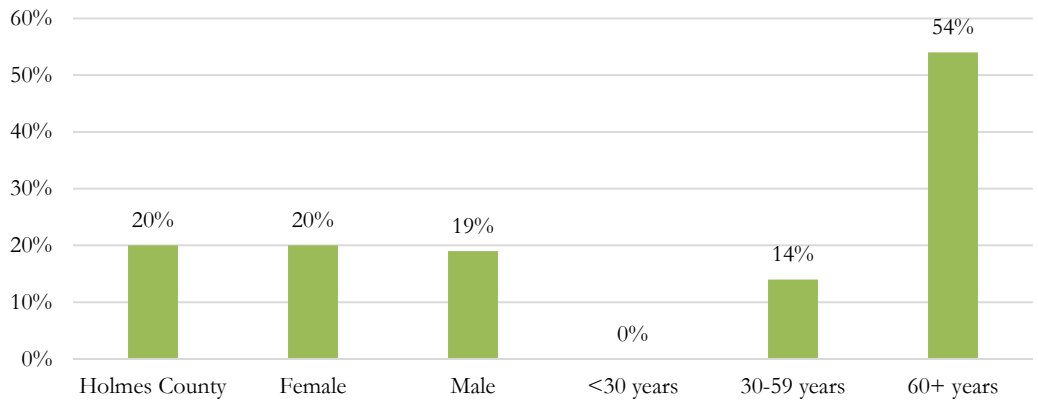
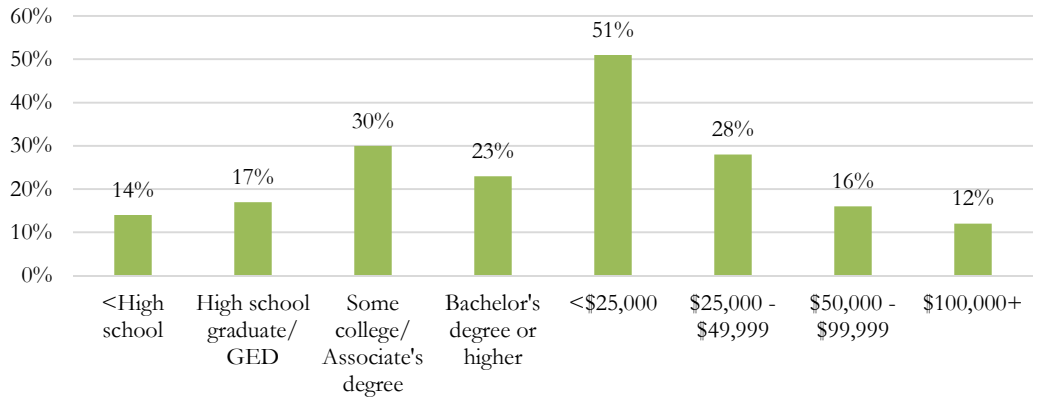


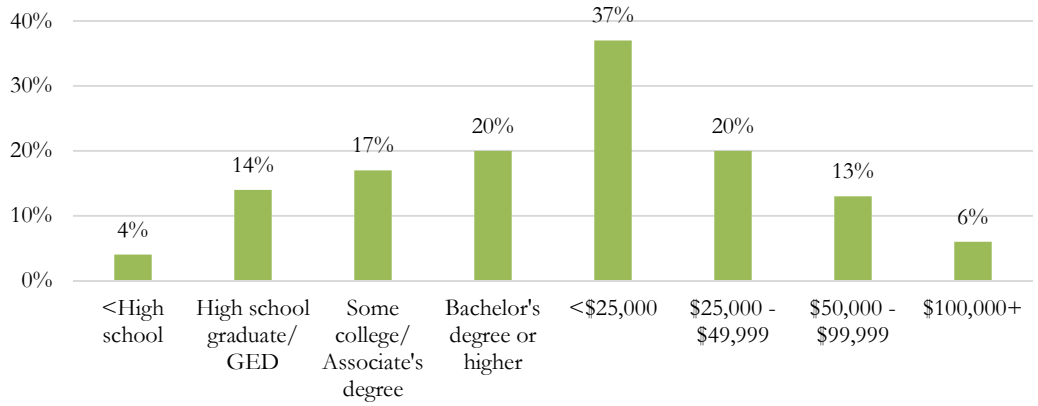
Figure 80. *Education and Income of Individuals Who Have Ever Been Diagnosed With High Blood Pressure by a Healthcare Professional*



One-fifth of Holmes County residents (20%) reported having ever being diagnosed with high blood pressure by a healthcare professional (Figure 79). High blood pressure diagnosis was highest among individuals 60 years of age and older and lowest among those less than 30 years of age (Figure 79), and declined with greater total annual household income (Figure 80). In regards to education, high blood pressure diagnoses were higher among individuals with some college or an Associate's degree (Figure 80).

Figure 81. *Composite, Sex, and Age of Individuals Who Have Ever Been Diagnosed With High Cholesterol by a Healthcare Professional*

Figure 82. *Education and Income of Individuals Who Have Ever Been Diagnosed With High Cholesterol by a Healthcare Professional*



Less than one-fifth of Holmes County residents (13%) reported ever being diagnosed with high cholesterol by a healthcare professional (Figure 81). High cholesterol diagnosis was higher among females than males (Figure 81), and increased with advancing age (Figure 81) and greater educational attainment (Figure 82), and decreased with greater total annual household income (Figure 82).

Figure 83. *Composite, Sex, and Age of Individuals Who Have Never Been Diagnosed With a Chronic Disease by a Healthcare Professional*

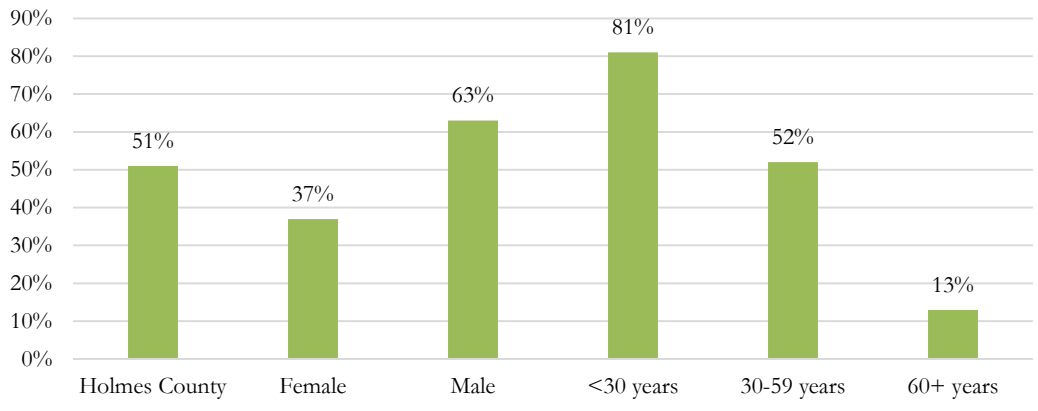
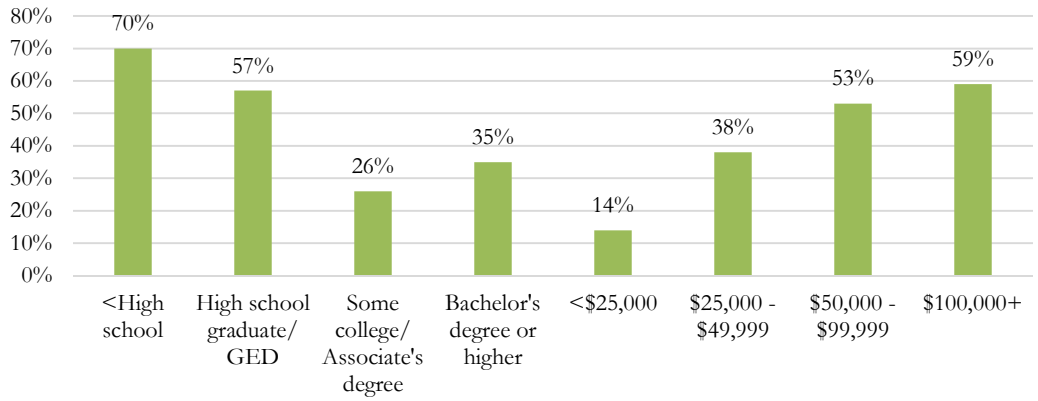


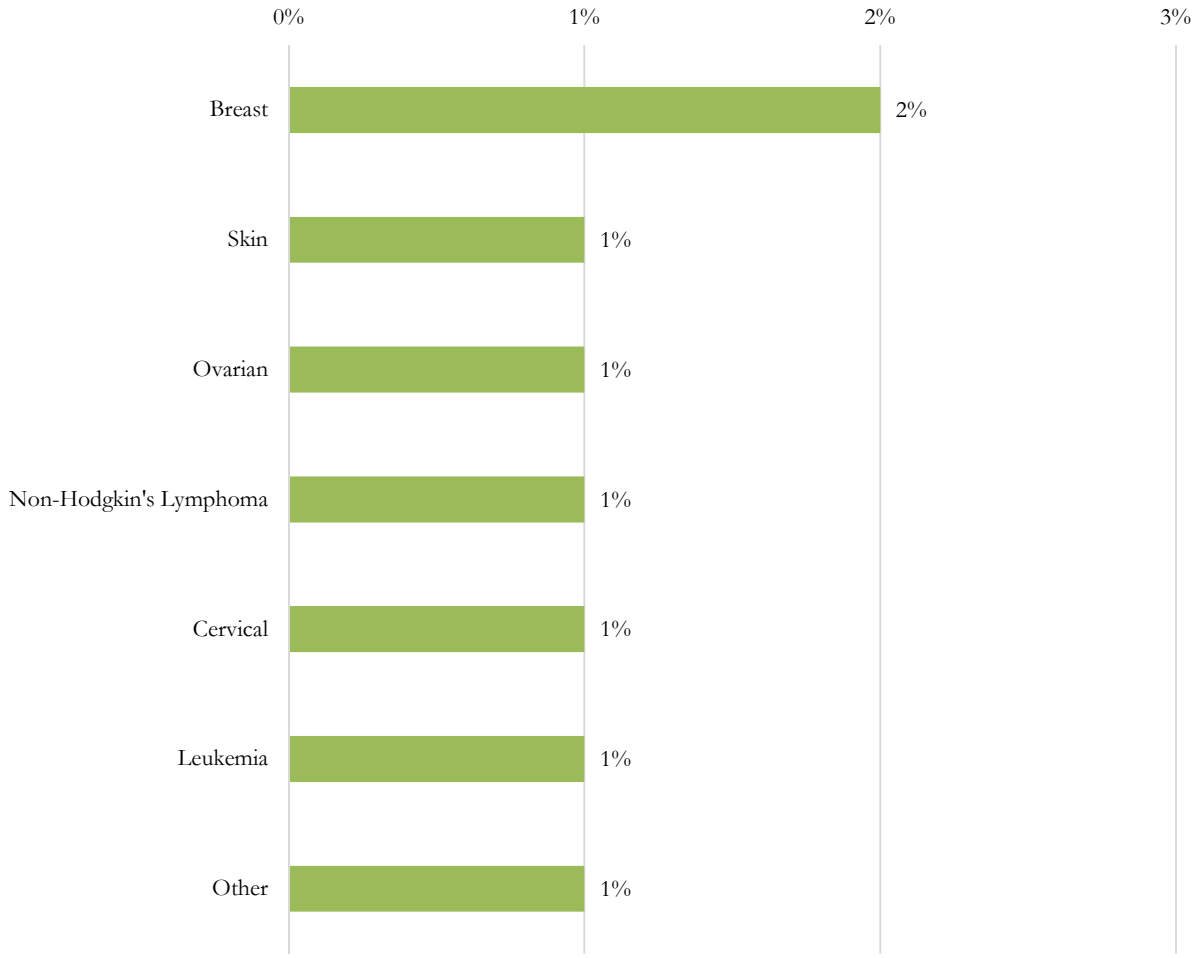
Figure 84. *Education and Income of Individuals Who Have Never Been Diagnosed With a Chronic Disease by a Healthcare Professional*



More than half of Holmes County residents (51%) reported having never being diagnosed with a chronic condition by a healthcare professional (Figure 83). Males reported less chronic disease diagnoses, as compared to females, and lack of a chronic disease diagnosis decreased with advancing age (Figure 83), generally decreased with greater educational attainment (Figure 84), and increased with greater total annual household income (Figure 84).

Cancer

Figure 85. *Cancer Diagnosis*



Reported cancer diagnosis among Holmes County residents was less than 3% for any given diagnosis, and highest among those with a breast cancer diagnosis (Figure 85). Remaining cancer diagnosis among residents included skin (1%), ovarian (1%), non-Hodgkin's lymphoma (1%), cervical (1%), and leukemia (1%); 1% of residents reported "Other".

Diabetes

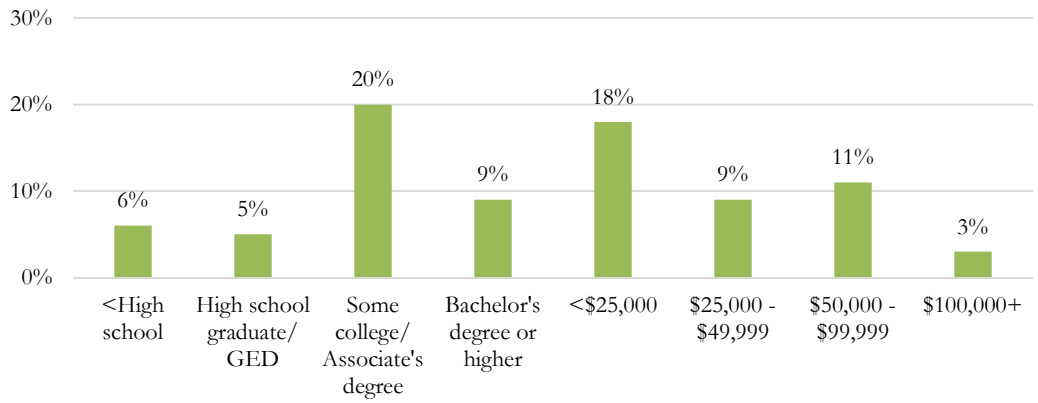
Table 30. *Diabetes Self-care Practices*

	(%)
"I take my diabetes medication as prescribed"	86
"I keep all doctors' appointments recommended for my diabetes treatment"	77
"I check my blood sugar levels with care and attention"	53
"I record my blood sugar levels regularly"	43
"I do regular physical activity to achieve optimal blood sugar levels"	42
"The food I choose to eat makes it easy to achieve optimal blood sugar levels"	35
"Occasionally I eat lots of sweets or other foods rich in carbohydrates"	33
"I do not check my blood sugar levels frequently enough as would be required for achieving good blood glucose control"	18
"Sometimes I have real food binges"	17
"I strictly follow the dietary recommendations given by my doctor or specialist"	14
"I avoid physical activity, although it would improve my diabetes"	10
"My diabetes self-care is poor"	5
"I tend to skip planned physical activity"	3
"Regarding my diabetes care, I should see my medical practitioner(s) more often"	3
"I tend to forget to take or skip my diabetes medication"	2

Those individuals who indicated they had been previously diagnosed with diabetes were asked to describe their diabetes self-care practices. More than three-quarters indicated correct medication usage practices (86%) and regular diabetes-related doctors' appointments (77%), while more than one-half (53%) indicated that they were attentive to their blood sugar levels (Table 30). Approximately one-third (33%) indicated that they occasionally ate sweets or foods rich in carbohydrates, while less than one-fifth reported not checking their blood sugar levels frequently (18%), occasional food binges (17%), avoidance of physical activity (10%), and poor diabetes self-care (5%). The mean age of diabetes diagnosis observed was 46 years of age.

Figure 86. *Composite, Sex, and Age of Individuals Who Have Been Diagnosed With Diabetes by a Healthcare Professional*

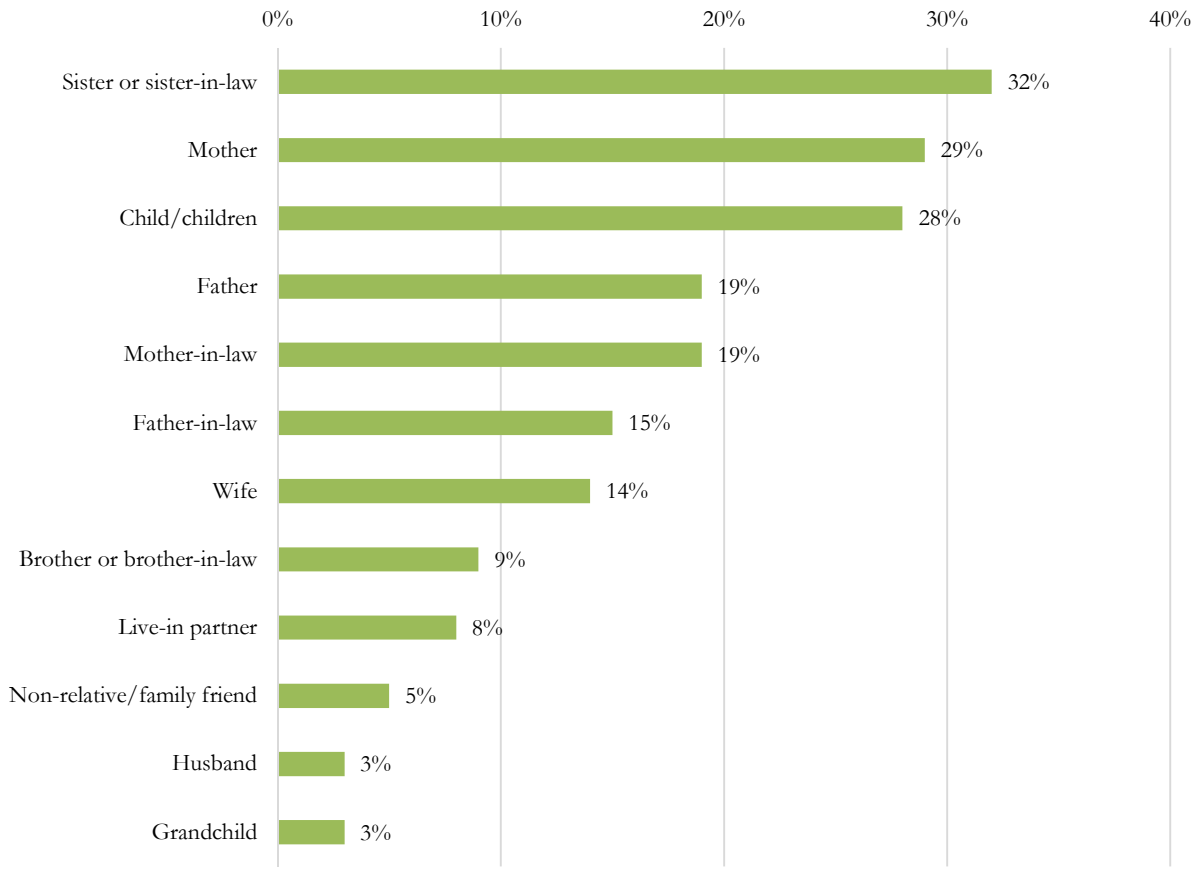
Figure 87. *Education and Income of Individuals Who Have Been Diagnosed With Diabetes by a Healthcare Professional*



Nine percent of Holmes County residents had ever been diagnosed with diabetes by a healthcare professional (Figure 86). Diabetes diagnosis was consistent between males and females (Figure 86), increased with advancing age (Figure 86), and was highest among those with some college or an Associate's degree, with respect to education (Figure 87), and generally declined with greater total annual household income (Figure 87).

Functional Needs

Figure 88. *Relationship to Individuals for Whom Caretakers are Providing Care During the Past 30 Days*



Approximately one-third of Holmes County caregivers were providing care to their sister or sister-in-law (32%), mother (29%), and/or child (28%) during the past 30 days (Figure 88). Less than one-fifth of residents provided care in the past 30 days to their father (19%), mother-in-law (19%), father-in-law (15%), and/or wife (14%), and less than 10% had provided care to a brother or brother-in-law (9%), live-in partner (8%), non-relative or family friend (5%), husband (3%), and/or grandchild (3%).

Figure 89. *Composite, Sex, and Age of Individuals Who Were Caretakers During the Past 30 Days*

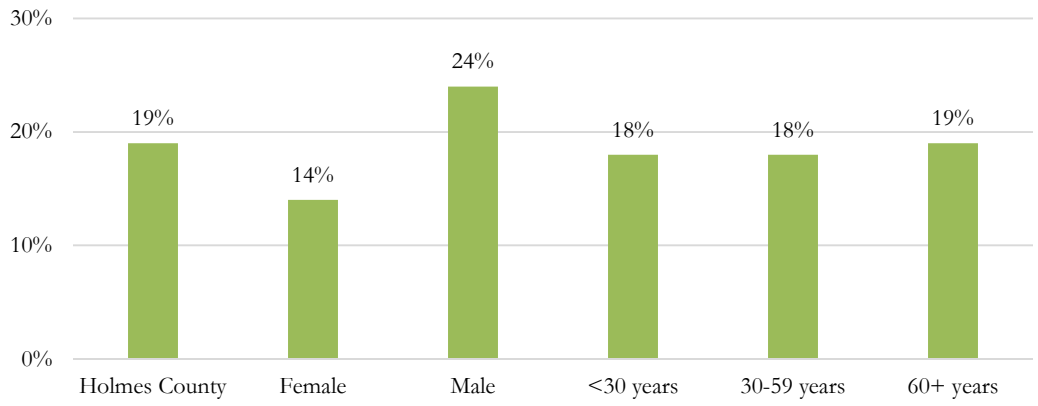
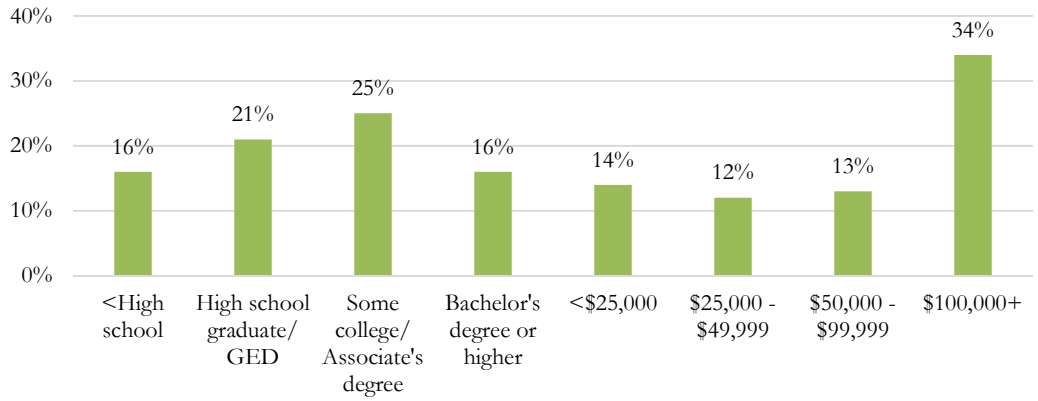


Figure 90. *Education and Income of Individuals Who Were Caretakers During the Past 30 Days*



Nineteen percent of Holmes County residents were caregivers during the past 30 days (Figure 89). Being a caregiver was higher among males than females (Figure 89), nearly identical with respect to age (Figure 89), highest among those with a total annual household income of $100,000 or more (Figure 90), and lowest among individuals reporting a total annual household income of $25,000 to $49,999 (Figure 90).

Figure 91. *Household Items Required to Support Functional Needs*

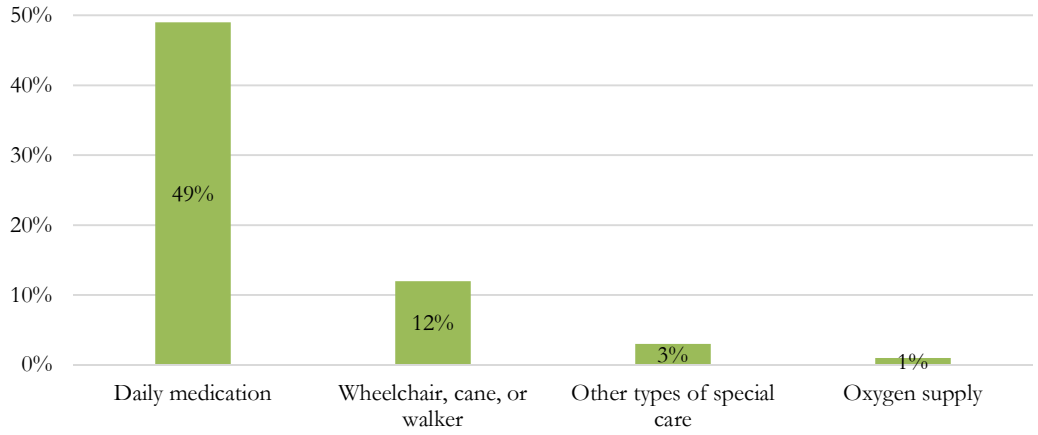


Table 31. *Situations That Are Difficult to Manage Alone, or Without Special Equipment*

	(%)
"Stoop, bend, or kneel"	11
"Stand or be on your feet for about 2 hours"	10
"Push or pull large objects like a living room chair"	6
"Walk a quarter of a mile, or about 3 city blocks"	5
"Sit for about 2 hours"	4
"Walk up 10 steps without resting"	3
"Lift or carry something as heavy as 10 pounds, such as a full bag of groceries"	3
"Go out to things like shopping, movies, or sporting events"	3
"Participate in social activities such as visiting friends, attending clubs and meetings, going to parties"	3
"Use your fingers to grasp or handle small objects"	2
"Reach up over your head"	2
"Do things to relax at home or for leisure (reading, watching TV, sewing, listening to music)"	2
"None of the above"	79

3.2.5 Healthcare Access and Utilization

Dental Care

Figure 92. *Composite, Sex, and Age of Individuals with a Dentist or Dental Care Provider*

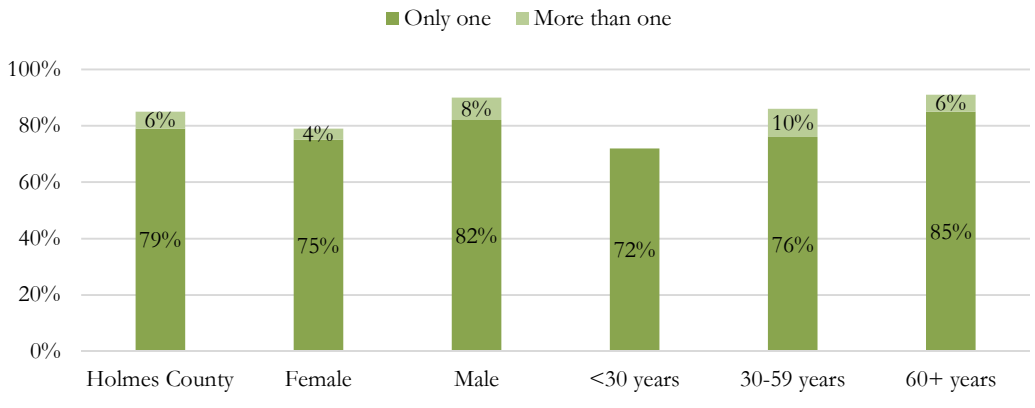
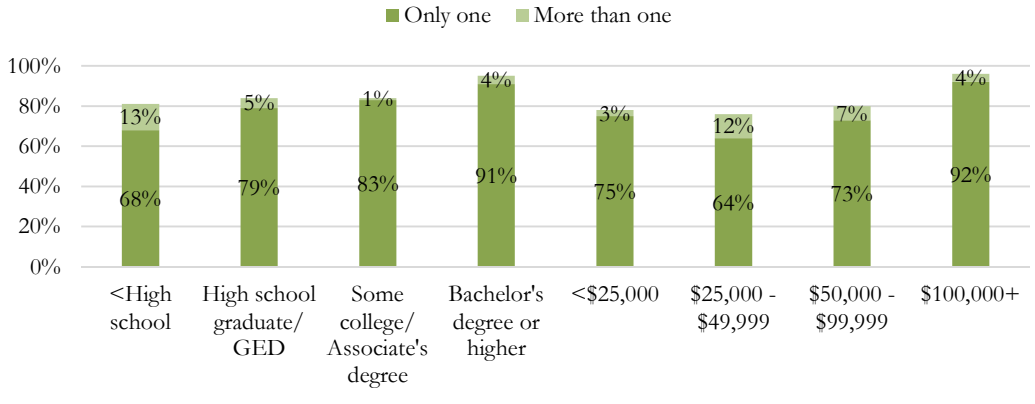


Figure 93. *Composite, Sex, and Age of Individuals with a Dentist or Dental Care Provider*



More than three-quarters (79%) of Holmes County residents indicated that they currently had one or more dentist or dental care provider (Figure 92). Individuals with a total annual household income of $100,000 or greater reported the greatest presence of a dentist or dental care provider (92%), and those with a total annual household income of $25,000 to $49,999 reported the least (64%; Figure 93). Individuals with a dentist or dental care provider increased with advancing

age (Figure 92), increased educational attainment (Figure 93), and total annual household income (Figure 93).

Figure 94. *Composite, Sex, and Age of Individuals Reporting Time Since Last Dental Visit*

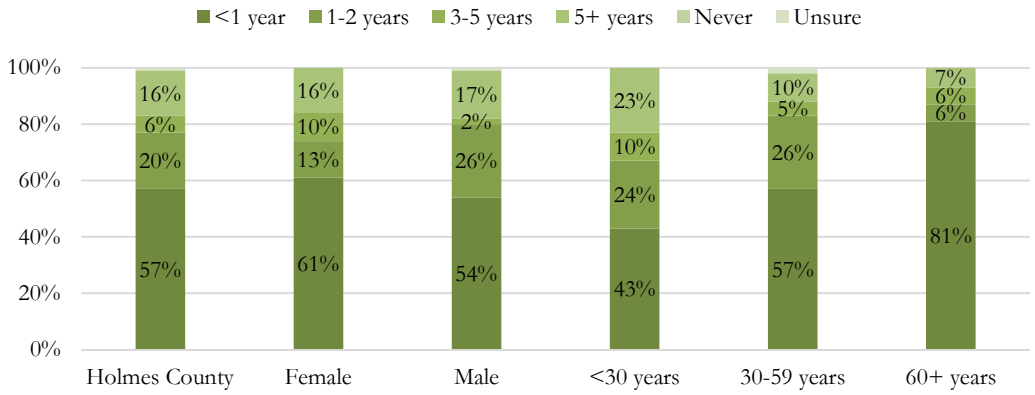
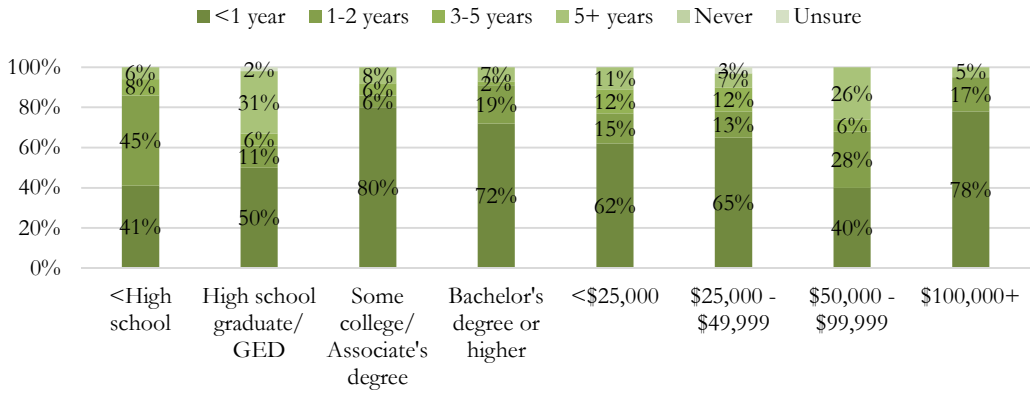


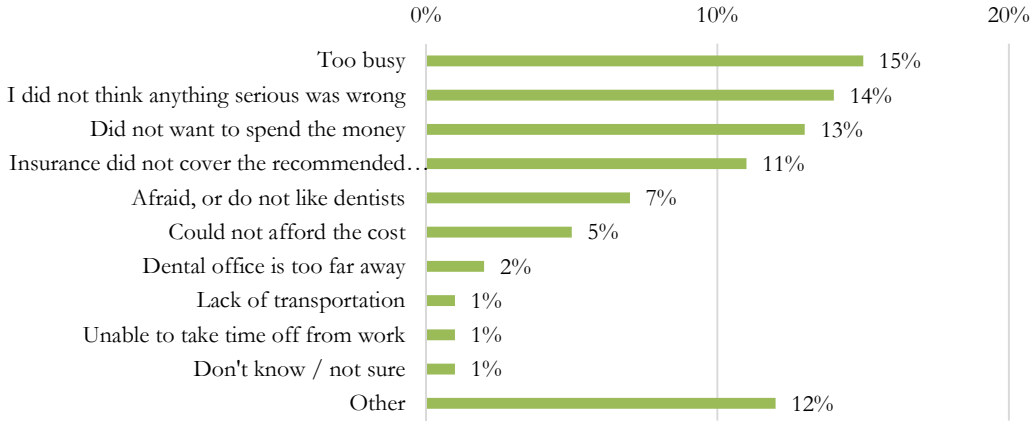
Figure 95. *Education and Income of Individuals Reporting Time Since Last Dental Visit*



More than half of Holmes County residents (57%) had a dental visit within the past year, and 77% had a dental visit within the past two years (Figure 94). Dental visits within the past year were higher among females than males (Figure 94), increased with advancing age (Figure 94), generally increased with greater educational attainment (Figure 95), and was higher among those individuals

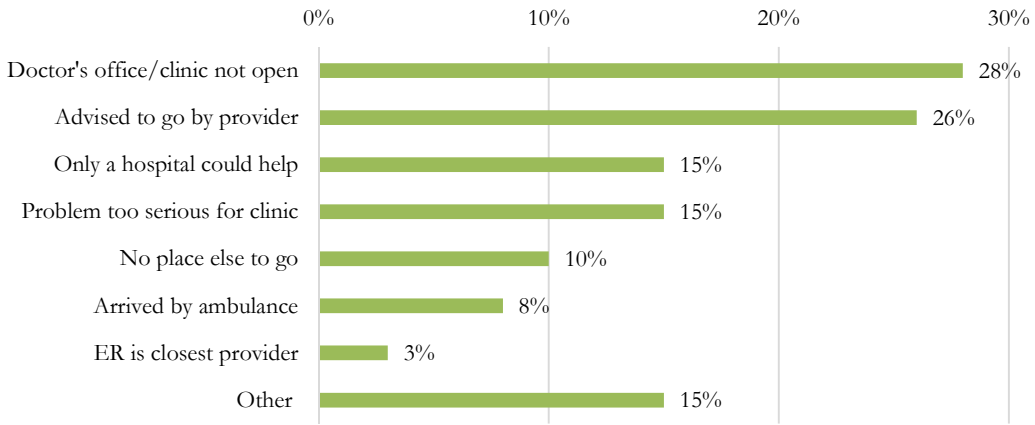
with a total annual household income of $100,000 or more, as compared to other included household income categories (Figure 95).

Figure 96. *Reasons for Not Recieving Dental Care in the Past Year*



Emergency Department Utilization

Figure 97. *Circumstances of Last ER Visit*

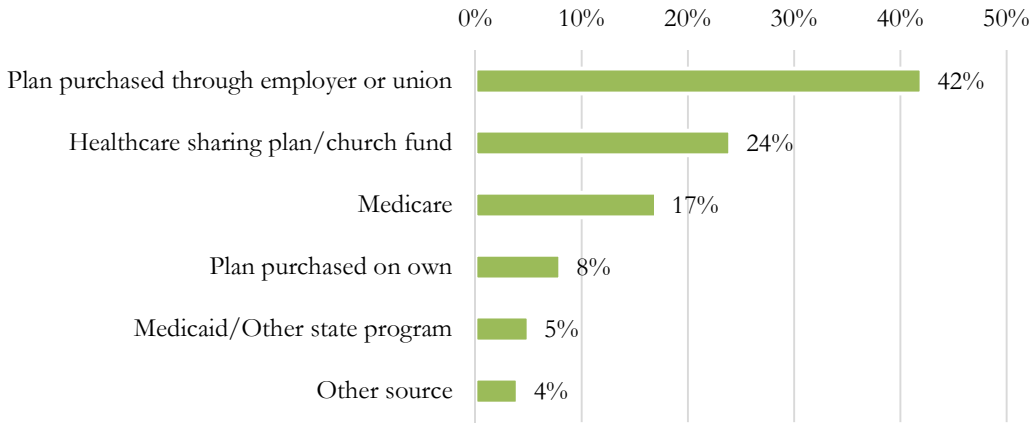


Ninety percent of Holmes County residents had not utilized the emergency room during the past year. Of those residents indicating that they went to the emergency room during the aforementioned timeframe, more than one-quarter indicated that they utilized that a doctor's office or clinic was not open (28%), and/or they were advised to go by their provider (26%; Figure 97).

Less than one-fifth of residents indicated that only a hospital could help (15%), their problem was too serious for a clinic (15%), they had no place to go (10%), they arrived by ambulance (8%), or that the ER was the closest provider (3%; Figure 97).

Health Insurance Coverage

Figure 98. *Primary Source of Healthcare Coverage*



Collectively, 84% of Holmes County residents currently had some form of health insurance coverage (Figure 98). Health insurance coverage was predominately acquired through an employer or union (42%) or healthcare sharing plan or church fund (24%), while others indicated that they accessed Medicare (17%), purchased a health insurance plan on their own, such as from a health insurance marketplace (8%), acquired health insurance through Medicaid or another state program (5%), or obtained another source of health insurance coverage (4%; Figure 98).

Among those residents whom did not currently have any form of health insurance, 39% indicated that they did not want health insurance, and 29% cited that the cost of health insurance was too high, and they could not afford it; 27% providing other reasons, and 5% did not provide a reason for the lack of health insurance.

Maternal Health

Table 32. *Pregnancy Complications*

	(%)
"Miscarriage"	17
"Decline in mental health"	5
"Preeclampsia/eclampsia"	5
"Infection"	2
"Other"	6

More than three-quarters (80%) of females reported having ever been pregnant. As a results of these pregnancies, 17% resulted in "Miscarriage" (Table 32). Other pregnancy-related complications included a "Decline in mental health" (5%), "Preeclampsia/eclampsia" (5%), and/or "Infection" (2%; Table 32); less than 10 percent indicated "Other". More than one-third of females (39%) whom had been ever been pregnant indicated that they did not experience any pregnancy-related complications.

Primary and Preventative Care

Figure 99. *Individuals with a Personal Doctor or Healthcare Provider*

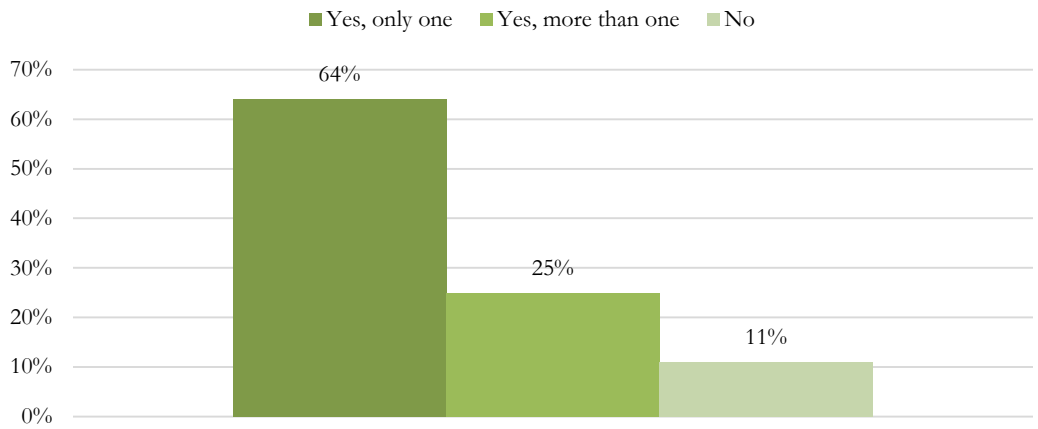
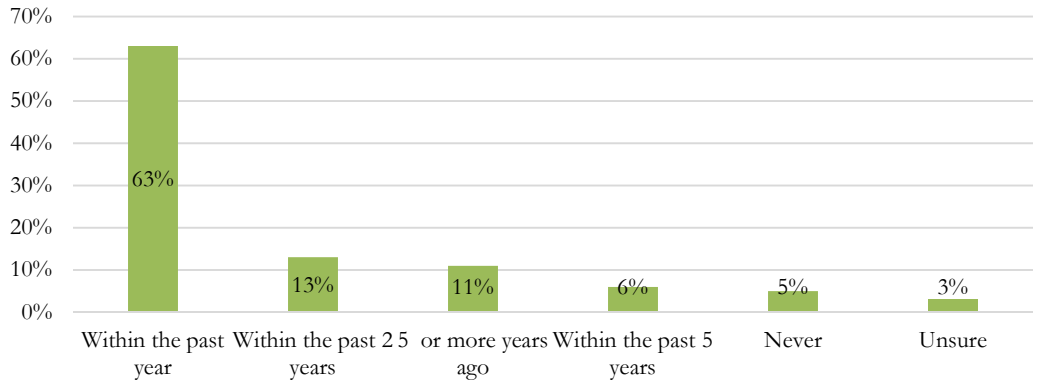


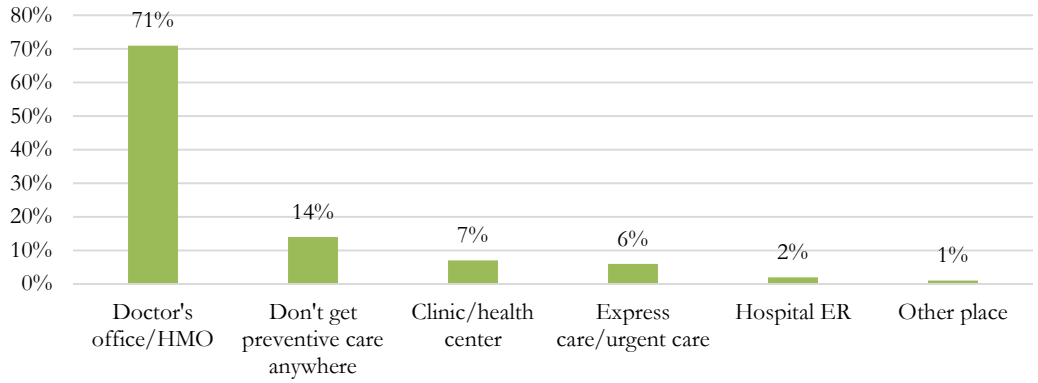
Figure 100. *Time Since Last Routine Check-up*



*Does not equal 100% due to rounding.

More than one-half of Holmes County residents (89%) indicated that they have one or more personal doctors or healthcare providers (Figure 99). Sixty-three percent of residents received a routine check-up in the past year, while 13% received a routine check-up within the past two years, 11% within the past five years, and 6% five or more years ago (Figure 100). Five percent of residents indicated that they have never received a routine check-up, and 3% were unsure of their last routine check-up (Figure 100).

Figure 101. *Routine and Preventative Care Facility Type*



*Does not equal 100% due to rounding.

The majority of Holmes County residents (71%) received their routine or preventative care from a doctor's office or HMO (Figure 101). Fourteen percent of residents did not access preventative care anywhere, while remaining residents accessed care at a clinic or health center (7%), express care or urgent care (6%), hospital ER (2%), or some other place (1%; Figure 101). More than three-quarters (76%) of residents receiving routine and preventative care were acquiring this care from a facility located in Holmes County.

Figure 102. *Composite, Sex, and Age of Individuals Not Currently Receiving Preventative Care*

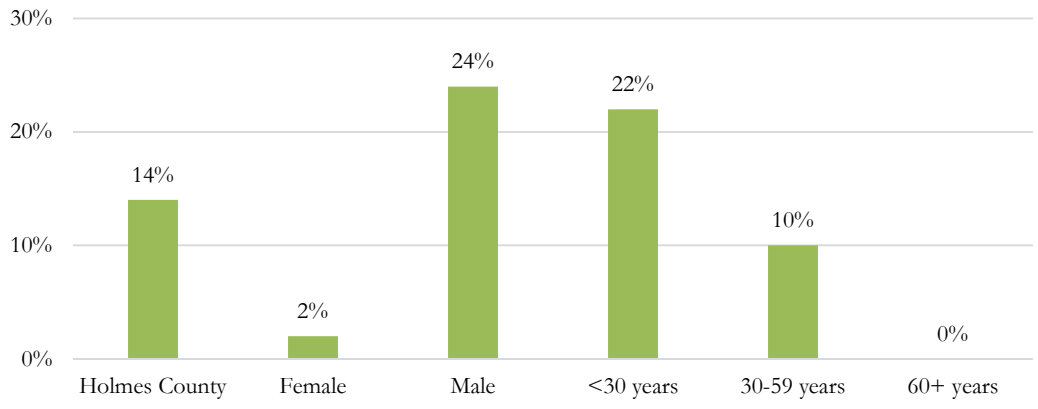
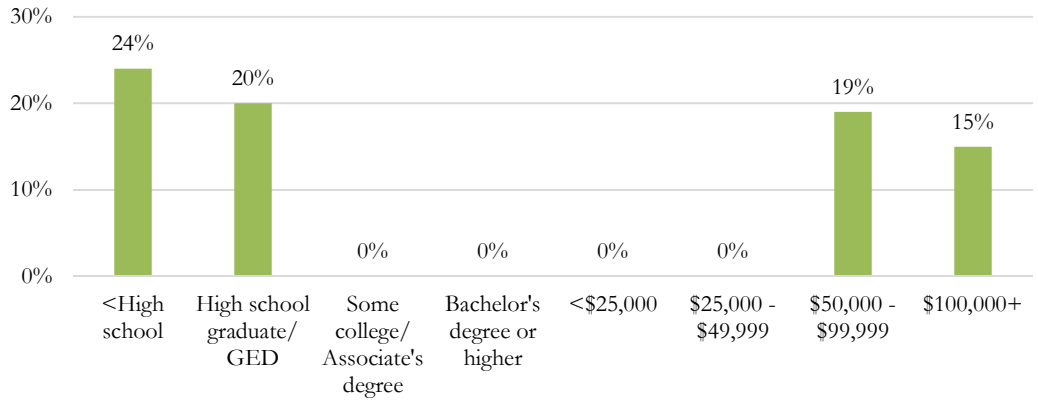


Figure 103. *Education and Income of Individuals Not Currently Receiving Preventative Care*



Fourteen percent of Holmes County residents indicated that they were not currently receiving preventative care (Figure 102). Failure to receive preventative care was highest among those whom were male (Figure 102), and had less than a high school education (Figure 103). Those not receiving preventative care declined with advancing age (Figure 102) and education (Figure 103), respectively. Individuals with a total annual household income of $50,000 or more failed to receive preventative care more often, as compared to those with a total household income of $49,999 or less (Figure 103).

Figure 104. *Healthcare Providers Accessed in the Past 12 Months*

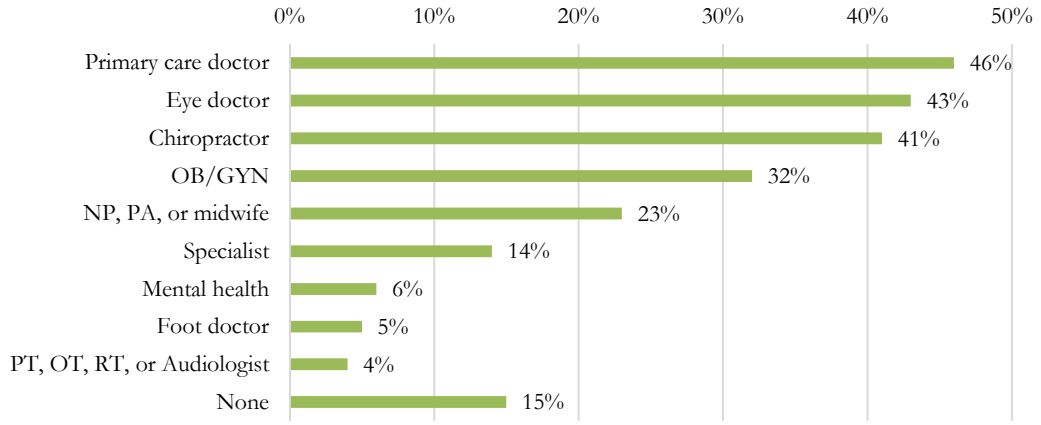
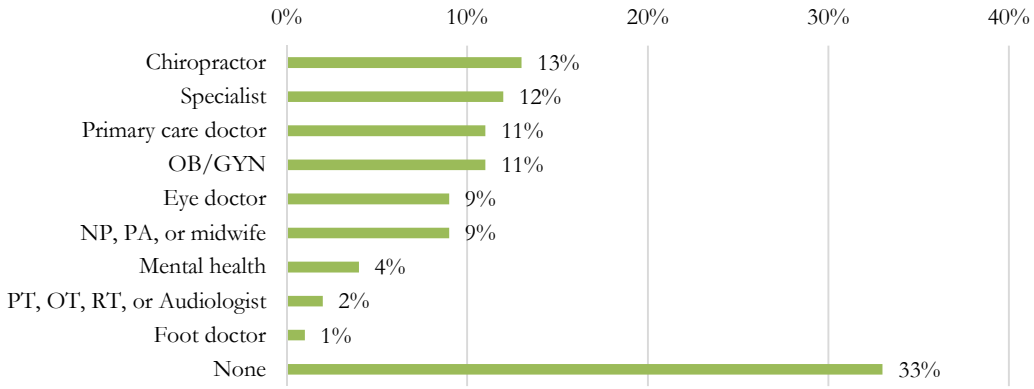


Figure 105. *Healthcare Providers Accessed in the Past 12 Months Located Outside of Holmes County*



Less than half of Holmes County residents (46%) reported seeing their primary care doctor, eye doctor (43%), or a chiropractor (41%) during the past 12 months (Figure 104). Other healthcare providers accessed in the past 12 months included an obstetrician or gynecologist (32%), nurse practitioner, physician assistant, or midwife (23%), specialist (14%), mental health provider (6%), foot doctor (5%), and/or Physical, Occupational, or Respiratory Therapists (PT, OT, RT), or Audiologist (4%; Figure 104). Fifteen percent of residents had not been to any of the aforementioned healthcare providers during the past 12 months (Figure 104), and less than 15% of any healthcare provider utilized was located outside of Holmes County (Figure 105).

Figure 106. *Composite, Sex, and Age of Individuals Who Saw a Primary Care Doctor in Past 12 Months*

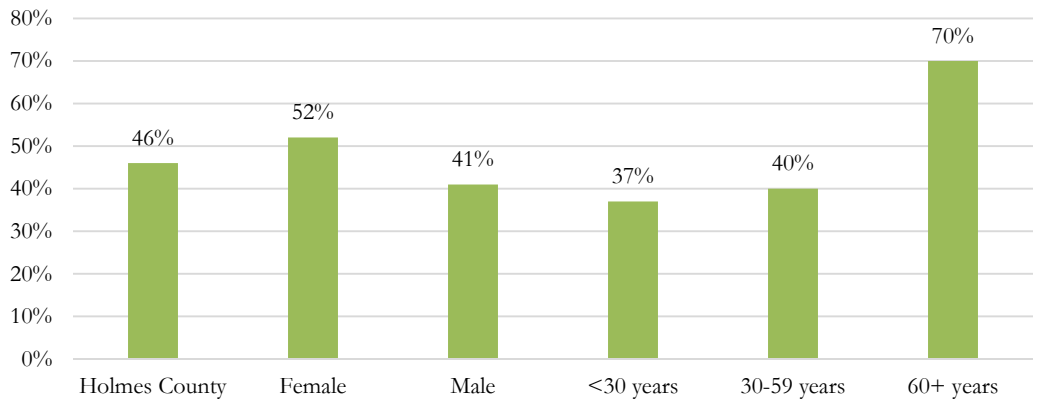
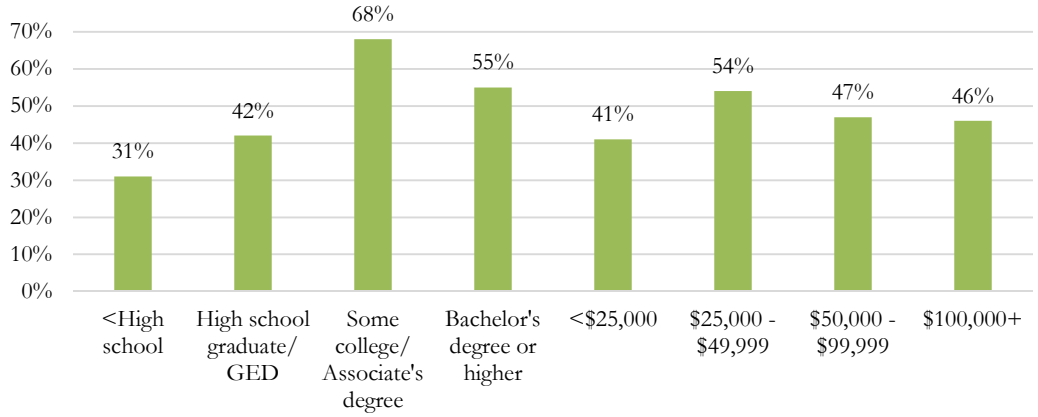


Figure 107. *Education and Income of Individuals Who Saw a Primary Care Doctor in the Past 12 Months*



Less than one-half of Holmes County residents (46%) indicated they had seen a primary care doctor in the past 12 months (Figure 106). Seeing a primary care doctor in the past 12 months was highest among individuals 60 years of age and older (70%), lowest among those with less than a high school education (31%), higher among females than males (Figure 106), and increased with advancing age (Figure 106). Greater educational attainment and total annual household income were also characterized by increases in primary care utilization in the past 12 months (Figure 107).

Figure 108. *Composite, Sex, and Age of Individuals Who Saw an Eye Doctor in the Past 12 Months*

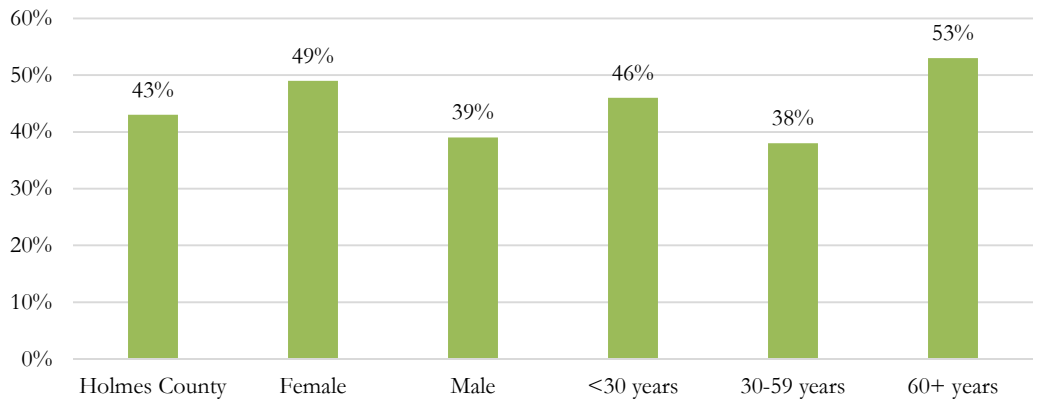
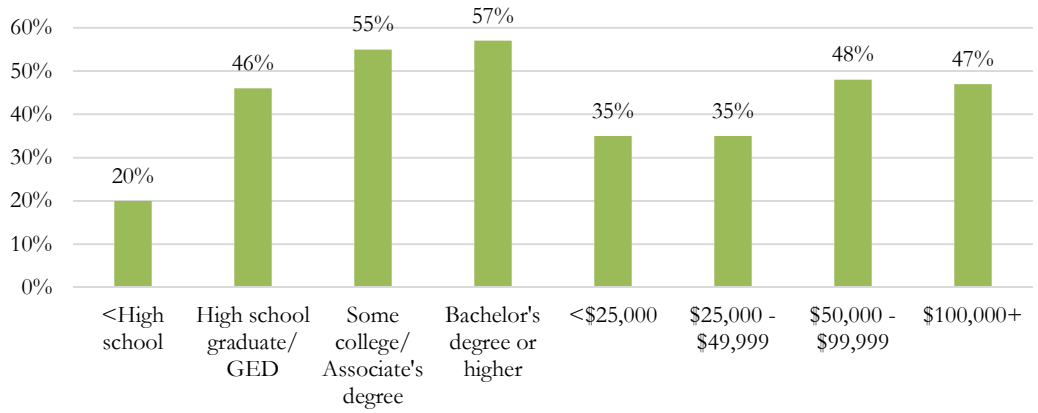


Figure 109. *Education and Income of Individuals Who Saw an Eye Doctor in the Past 12 Months*



More than one-third (43%) of Holmes County residents saw an eye doctor during the past 12 months (Figure 108). Eye doctor visits were higher among females than males (Figure 108), increased with greater educational attainment (Figure 109), were higher among those 60 years of age and older, as compared to other included ages (Figure 108), and were relatively consistent between those with a total annual household income less than $25,000 and $25,000 and $49,999, and $50,000 to $99,999 and $100,000 or more, respectively (Figure 109).

Figure 110. *Composite, Sex, and Age of Individuals Who Saw a Chiropractor in the Past 12 Months*

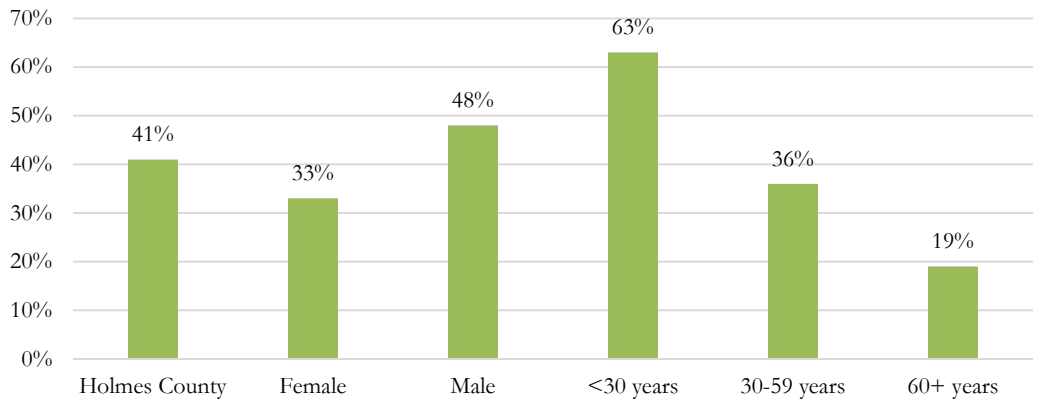


Figure 111. *Education and Income of Individuals Who Saw a Chiropractor in the Past 12 Months*

Forty-one percent of Holmes County residents saw a chiropractor during the past 12 months (Figure 110). Chiropractor visits were higher among male than females (Figure 110), decreased with advancing age (Figure 110), generally decreased with greater educational attainment (Figure 111), and increased with greater total annual household income (Figure 111).

Figure 112. *Composite and Age of Women Who Saw an OB/GYN in the Past 12 Months*

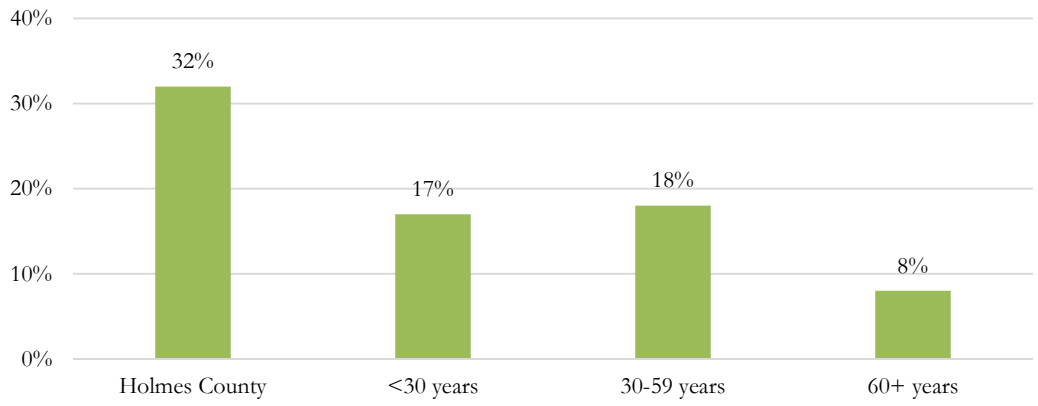
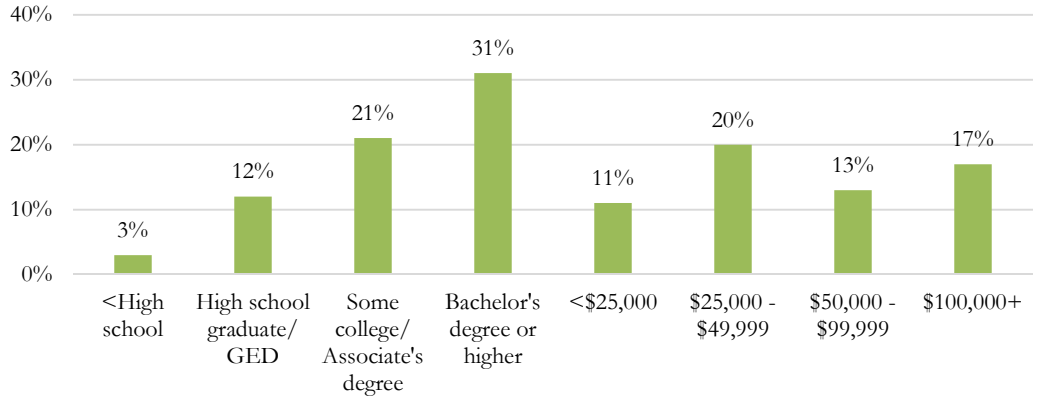


Figure 113. *Education and Income of Women Who Saw an OB/GYN in the Past 12 Months*



Approximately one-third of females (32%) saw an OB/GYN in the past 12 months (Figure 112). Utilization of an OB/GYN was higher among those females 30 to 59 years of age (Figure 112), increased with greater educational attainment (Figure 113), and was higher among those reporting a total annual household income of $25,000 to $49,999, as compared to other included income categories (Figure 113).

Figure 114. *Composite, Sex, and Age of Individuals Who Saw a Nurse Practicioner, Physician Assistant, or Midwife in the Past 12 Months*

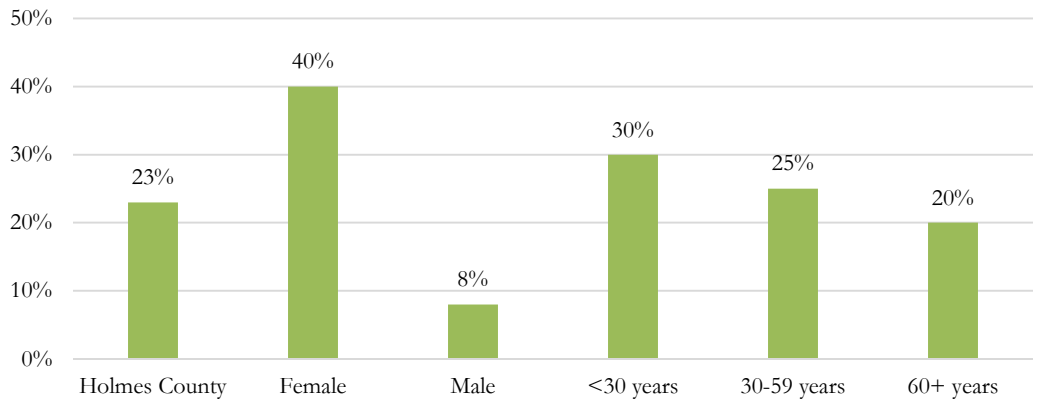
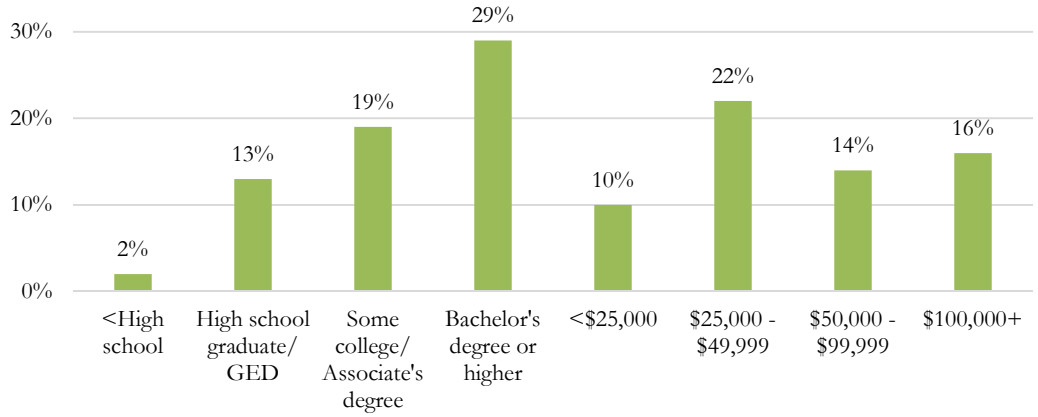


Figure 115. *Education and Income of Individuals Who Saw a Nurse Practicioner, Physician Assistant, or Midwife in the Past 12 Months*

Less than one-quarter of Holmes County residents (23%) saw a nurse practitioner, physician assistant, or midwife in the past 12 months (Figure 114). Seeing a nurse practitioner, physician assistant, or midwife was considerably higher among females as compared to males (Figure 114), decreased with advancing age (Figure 114), increased among those with less than a high school education and those with some college or an Associate's degree (Figure 115), and increased between individuals with a total annual household income of less than $25,000 and $50,000 to $99,999 (Figure 115).

Figure 116. *Composite, Sex, and Age of Individuals Who Saw a Specialist in the Past 12 Months*

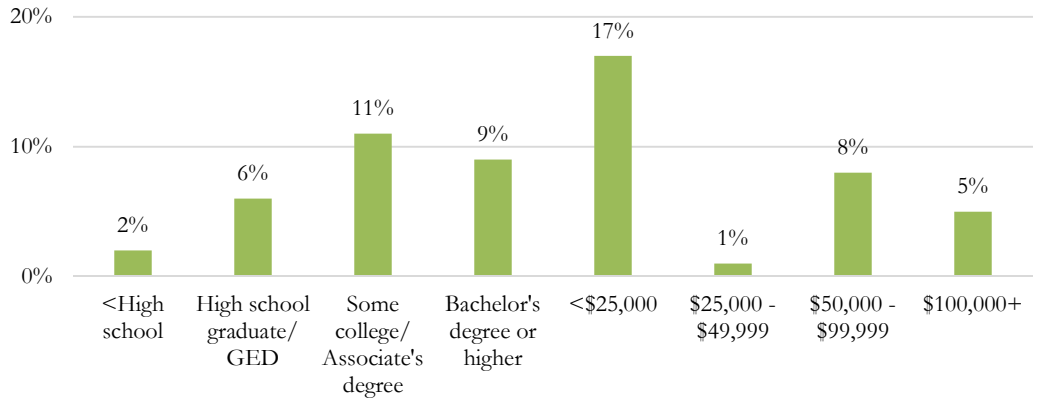
Figure 117. *Education and Income of Individuals Who Saw a Specialist in the Past 12 Months*



While less than one-sixth (14%) of Holmes County residents saw a specialist in the past 12 months, nearly one-third (28%) of those 60 years of age and older accessed a specialist during the aforementioned timeframe (Figure 116). Seeing a specialist in the past 12 months increased with advancing age (Figure 116), greater educational attainment (Figure 117), and varied with respect to total annual household income, with those reporting a incomes ranging from $25,000 to $49,999 utilizing a specialist most often (Figure 117). Individuals with a Bachelor's degree of higher accessed a specialist most often (Figure 117), with individuals less than 30 years of age (Figure 116) and those with less than a high school education (Figure 117) seeing a specialist least often.

Figure 118. *Composite, Sex, and Age of Individuals Who Saw a Mental Health Professional in the Past 12 Months*

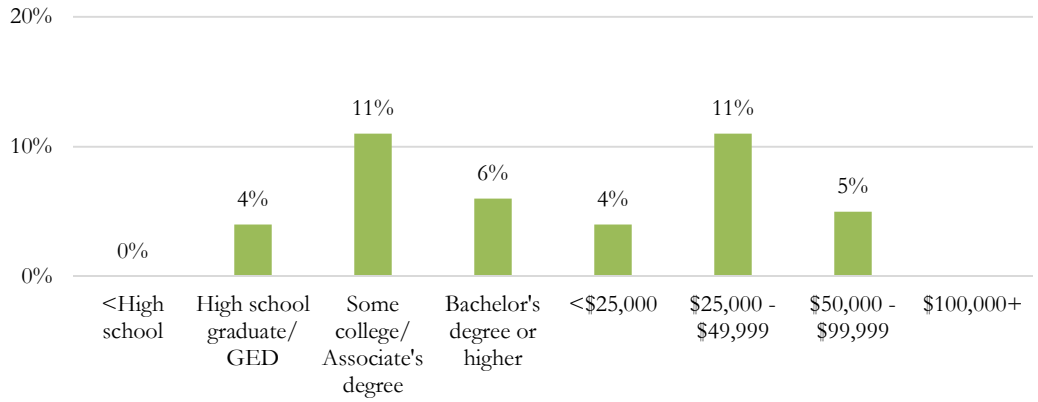
Figure 119. *Education and Income of Individuals Who Saw a Mental Health Professional in the Past 12 Months*



Less than 10% of Holmes County residents saw a mental health professional in the past 12 months (Figure 118). Mental health professionals were seen more by females than males (Figure 118), those less than 30 years of age (Figure 118), and individuals with some college or an Associate's degree (Figure 119). Individuals seeing a mental health professional in the past 12 months declined with age (Figure 118), increased from those with less than a high school education and individuals with some college or an Associate's degree (Figure 119), and was considerably higher among households reporting less than $25,000, as compared to the other income categories (Figure 119).

Figure 120. *Composite, Sex, and Age of Individuals Who Saw a Foot Doctor the Past 12 Months*

Figure 121. *Education and Income of Individuals Who Saw a Foot Doctor the Past 12 Months*



Five percent of Holmes County residents saw a podiatrist or foot doctor in the past 12 months (Figure 120). Seeing a foot doctor in the past 12 months increased with advancing age (Figure 120), was higher among females than males (Figure 120), and was highest among individuals with some college or an Associate's degree, and those reporting a total annual household income ranging from $25,000 to $49,999 (Figure 121).

Figure 122. *Composite, Sex, and Age of Individuals Who Saw a Physical, Occupational, or Respiratory Therapist in the Past 12 Months*

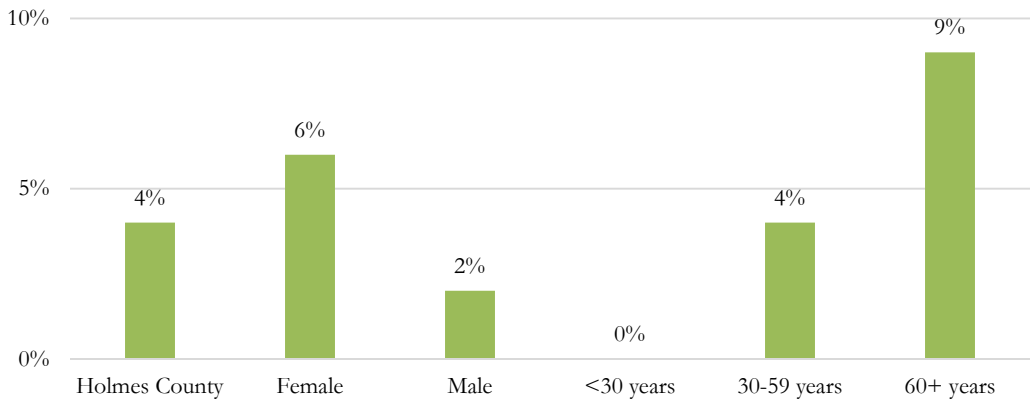
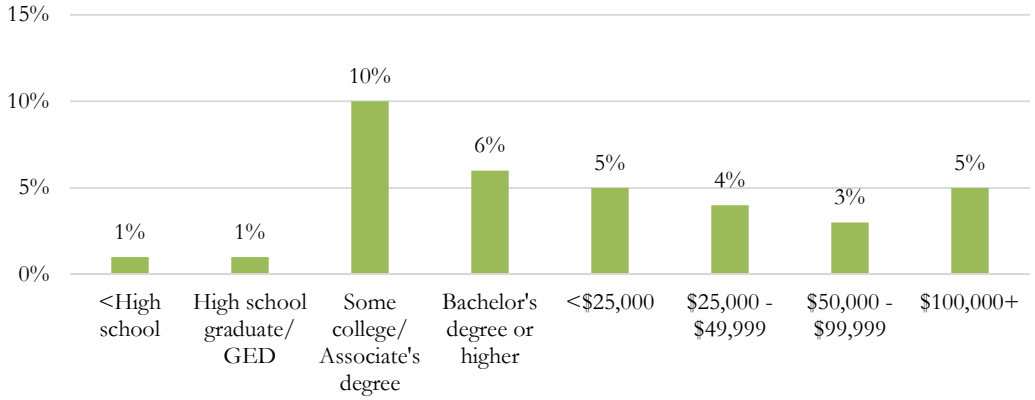


Figure 123. *Education and Income of Individuals Who Saw a Physical, Occupational, or Respiratory Therapist in the Past 12 Months*



Four percent of Holmes County residents saw a Physical, Occupational, or Respiratory Therapist in the past 12 months (Figure 122). Seeing a Physical, Occupational, or Respiratory Therapist was higher among females than males (Figure 122), increased with advancing age (Figure 122), was highest among those with some college or an Associate's degree (Figure 123), and remained relatively consistent across total annual household income categories (Figure 123).

Figure 124. *Composite, Sex, and Age of Individuals Who Didn't See a Healthcare Provider in the Past 12 Months*

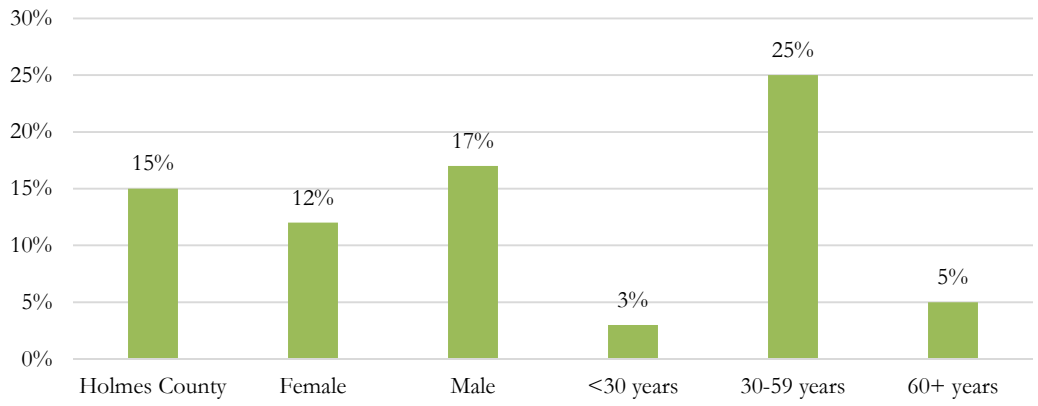
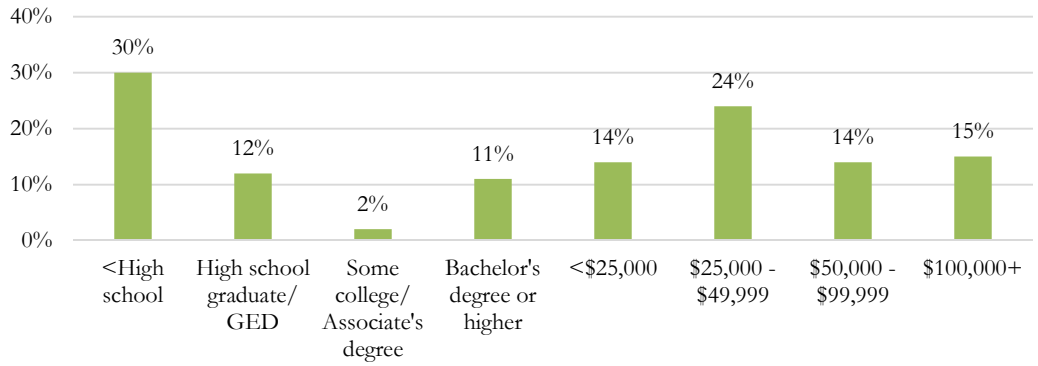


Figure 125. *Education and Income of Individuals Who Didn't See a Healthcare Provider in the Past 12 Months*



Less than one-fifth (15%) of Holmes County residents did not see a healthcare provider in the past 12 months (Figure 124). Not seeing a healthcare provider in the past 12 months was highest among individuals with less than a high school education (Figure 125), higher among males than females (Figure 124), and was considerably higher among individuals 30 to 59 years of age, as compared to those less than 30 years of age and 60 years of age and older (Figure 124). With respect to income, 24% of individuals reporting a total annual household income of $25,000 to $49,999 did not see a healthcare provider in the past 12 months, the latter of which was higher than the remaining included income categories (Figure 125).

Figure 126. *Health Services that Individuals Were Unable to Afford in the Past 12 Months*

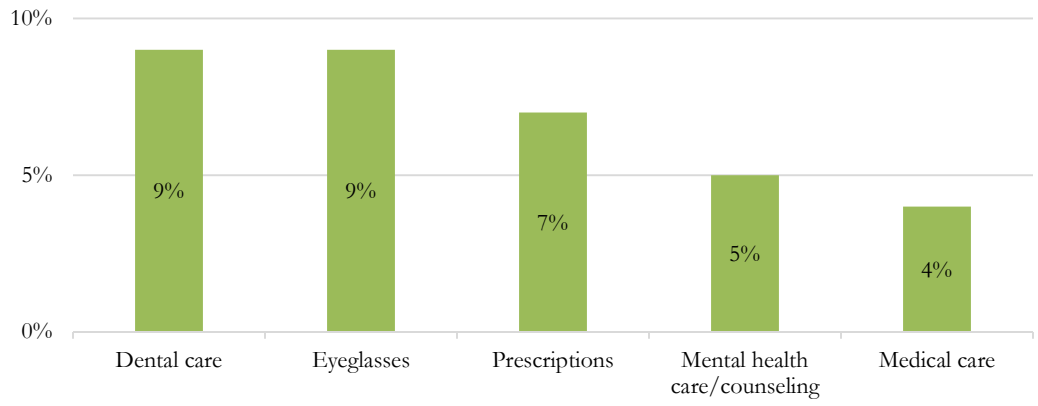
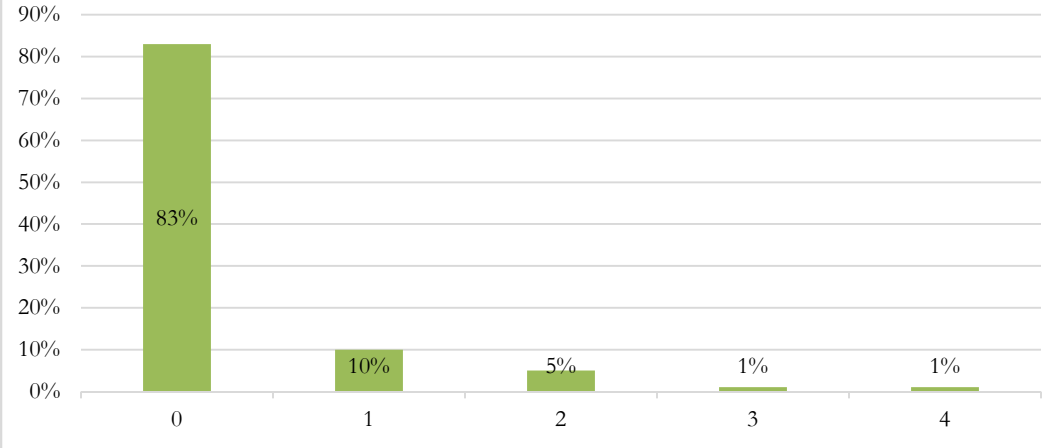
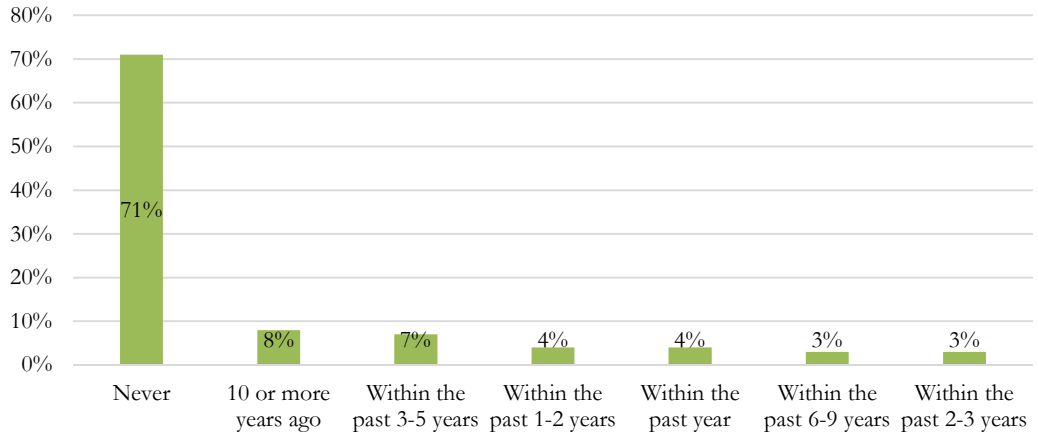


Figure 127. *Number of Urgent Care Visits in the Past 12 Months*



Nine percent of Holmes County residents were unable to afford dental care and eyeglasses in the past 12 months, while remaining residents indicated they were unable to afford prescriptions (7%), mental health care and/or counseling (5%), and medical care (4%; Figure 126). More than three-quarters (83%) of Holmes County residents had not utilized an urgent care during the past 12 months (Figure 127). Among those residents who had utilized an urgent care in the past 12 months, 59% indicated that the urgent care was located within Holmes County.

Figure 128. *Time Period Since Last Colonoscopy*



Nearly three-quarters (71%) of Holmes County residents indicated they had never received a colonoscopy (Figure 128). Of those residents whom had received a colonoscopy, 8% did so 10 or more years ago, or within the past three to five years (7%); less than 5% received a colonoscopy within the past one to two years (4%), within the past year (4%), within the past six to nine years (3%), or within the past two to three years (3%; Figure 128).

Figure 129. *Composite, Sex, and Age of Individuals Who Have Never Recieved a Colonoscopy*

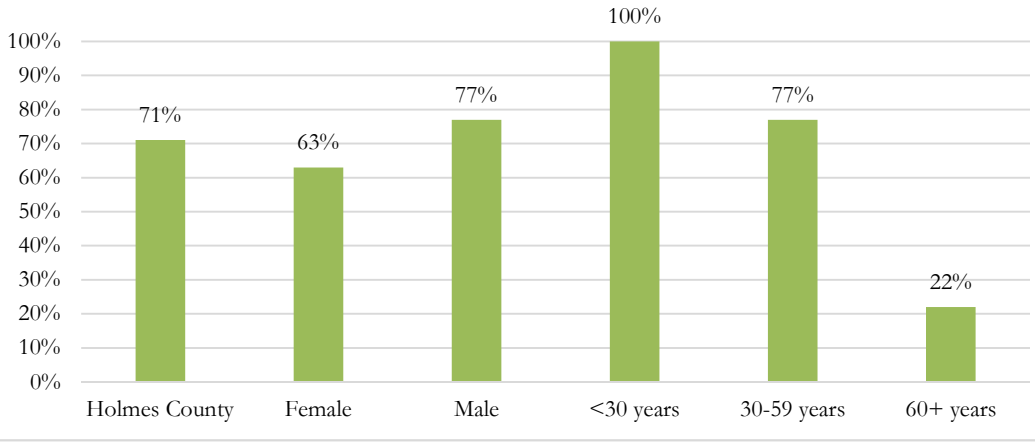
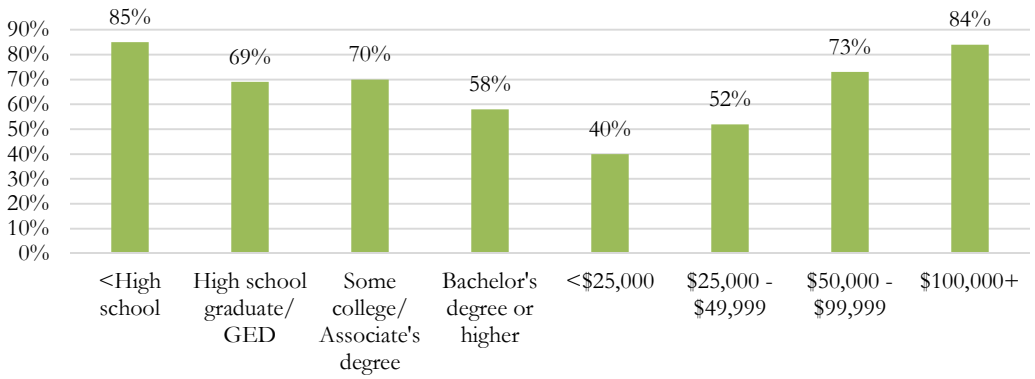
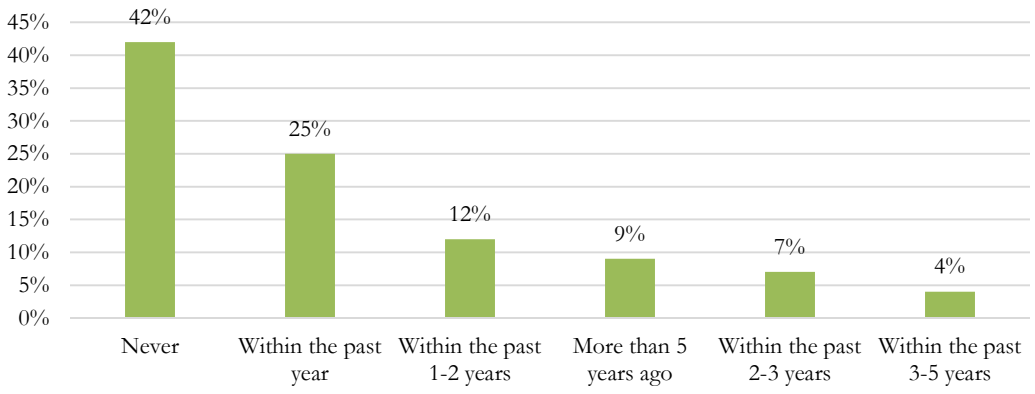


Figure 130. *Education and Income of Individuals Who Have Never Recieved a Colonoscopy*



Having never received a colonoscopy was higher among males than females, declined with advancing age (Figure 129), declined with greater educational attainment (Figure 130), and increased with greater total annual household income (Figure 130).

Figure 131. *Time Period Since Last Mammogram for Females*



*Does not equal 100% due to rounding.

Forty-two percent of females indicated that they had never received a mammogram (Figure 131). Among those females whom had received a mammogram, 25% had received their last mammogram within the past year, and 12% within the past two years (Figure 131); less than 10% of females had received a mammogram more than five years ago (9%), within the past two to three years (7%), and within the past three to five years (4%; Figure 131).

Figure 132. *Composite and Age of Females Who Have Never Recieved a Mammogram*

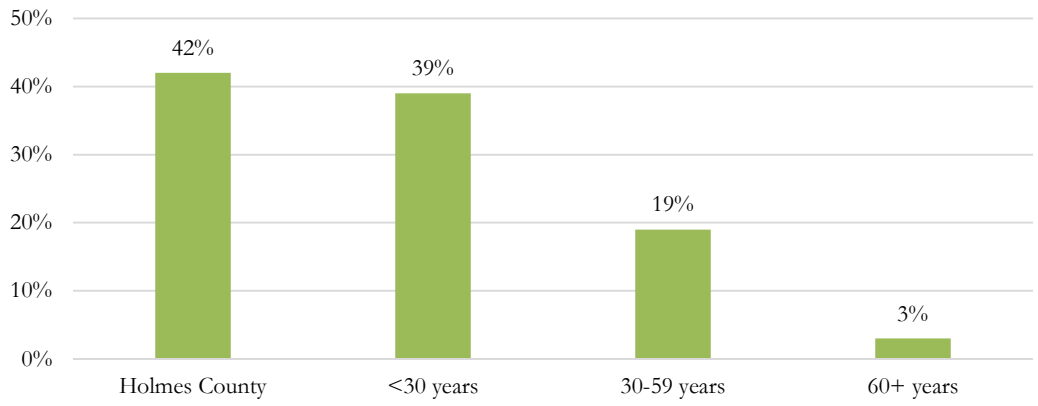
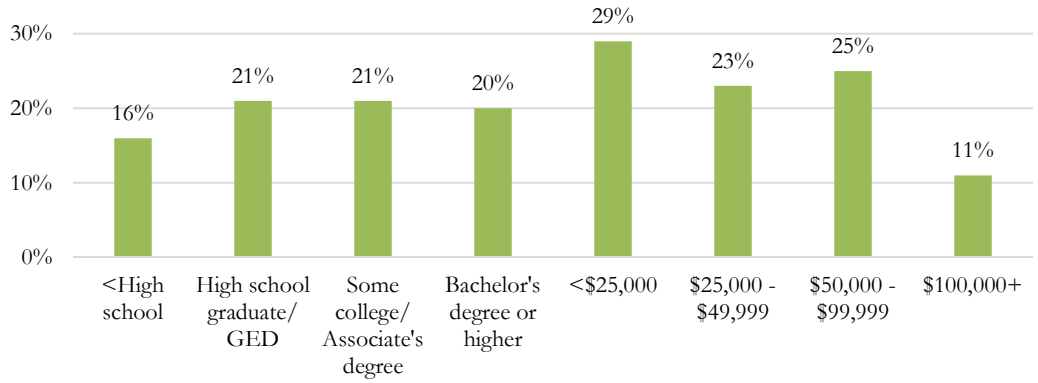
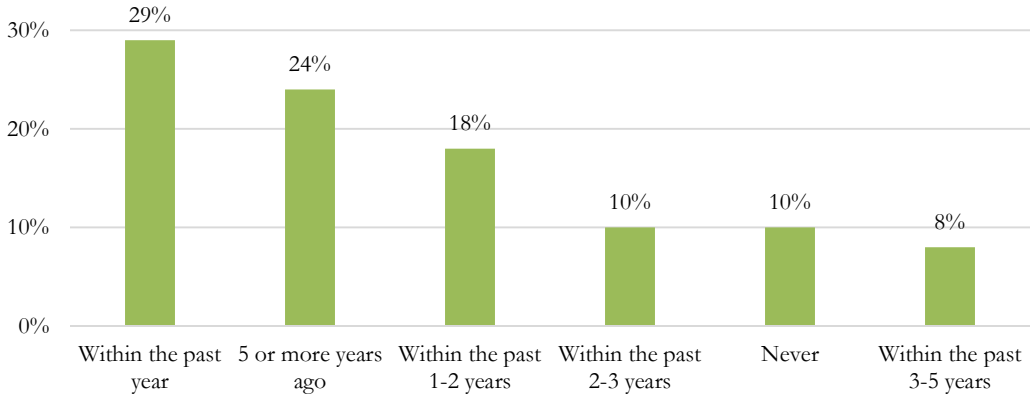


Figure 133. *Education and Income of Females Who Have Never Recieved a Mammogram*



Females indicating that they have never received a mammogram declined with advancing age, and was lowest among those 60 years of age and older (Figure 132). Have never received a mammogram generally increased with greater educational attainment (Figure 133); with respect to total annual household income, having never received a mammogram was lowest among those reporting a household income of $100,000 or more (Figure 133).

Figure 134. *Time Period Since Last Pap Test for Females*



*Does not equal 100% due to rounding.

Twenty-nine percent of females had received a pap test within the past year, and 24% five or more years ago (Figure 134). Less than one-fifth of females received a pap test within the past two years (18%) or within the past five years (8%), and 10% had never received a pap test (Figure 134).

Figure 135. *Composite and Age of Females Who Have Never Recieved a Pap Test*

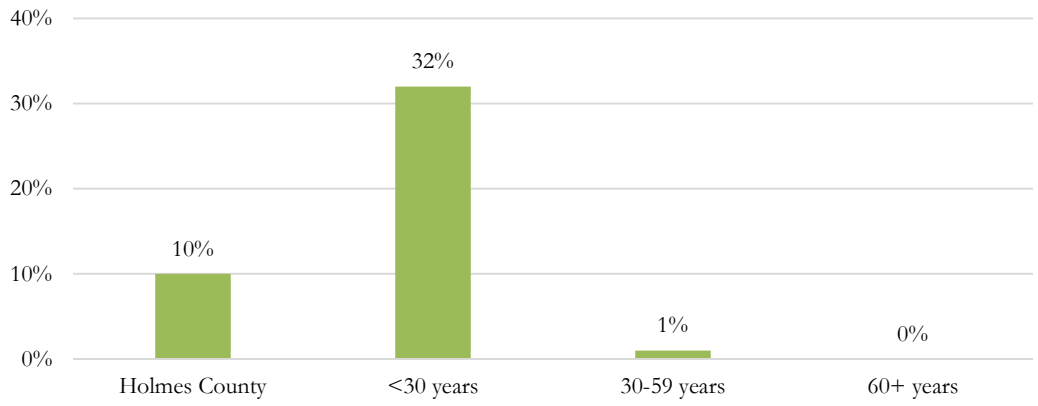
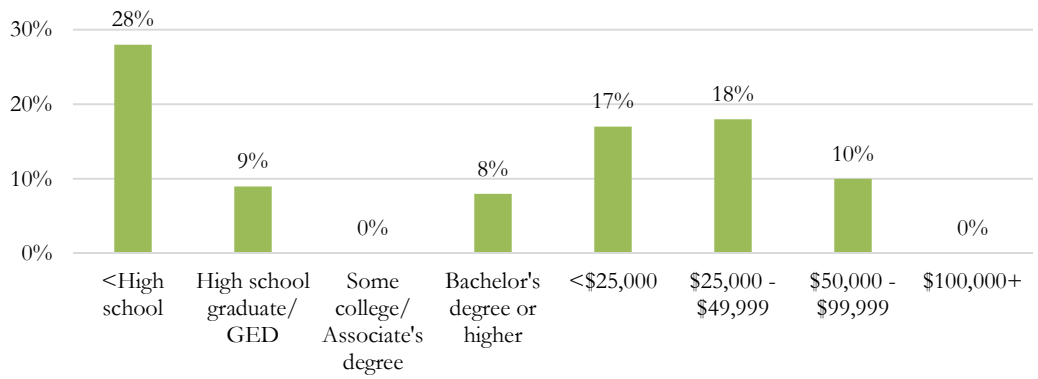


Figure 136. *Education and Income of Females Who Have Never Recieved a Pap Test*



More than one-third of females less than 30 years of age had never received a pap test (Figure 135). Not receiving a pap test was higher among females with less than a high school education (Figure 136), as compared to the other education categories, and generally declined with greater total annual household income (Figure 136).

Figure 137. *Composite, Sex, and Age of Individuals Who Received a Flu Vaccine in the Past 12 Months*

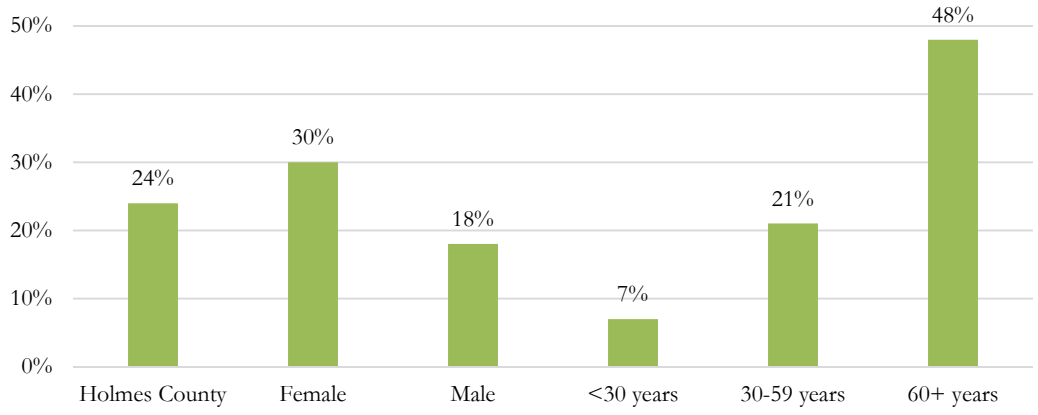
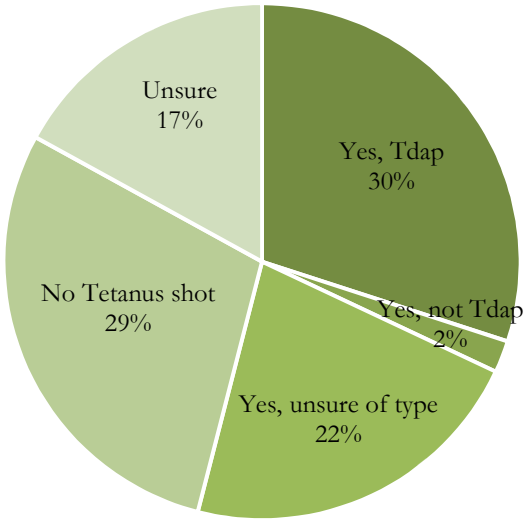


Figure 138. *Education and Income of Individuals Who Received a Flu Vaccine in the Past 12 Months*

Approximately one-quarter (24%) of Holmes County residents received a flu vaccine in the past 12 months (Figure 137). Receiving a flu vaccine in the past 12 months was higher among females than males (Figure 137), highest among individuals with less than a high school education (Figure 138) and those 60 years of age and older (Figure 137), and lowest among those less than 30 years of age (Figure 137). Receiving a flu vaccine in the past 12 months increased with both

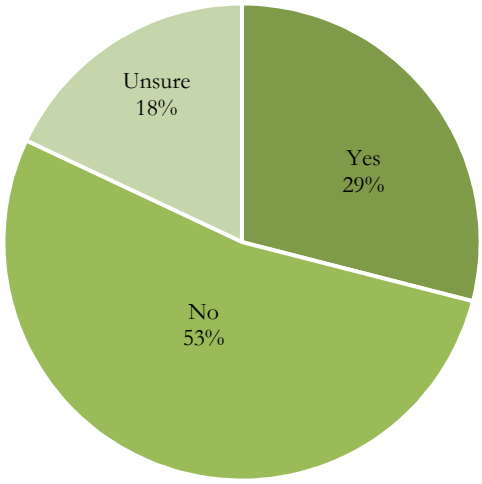
advancing age (Figure 137) and between those with a high school education and a Bachelor's degree or higher (Figure 138), and decreased with greater total annual household income (Figure 138).

Figure 139. *Individuals Who Received a Tetanus Vaccine in the Past 10 Years*



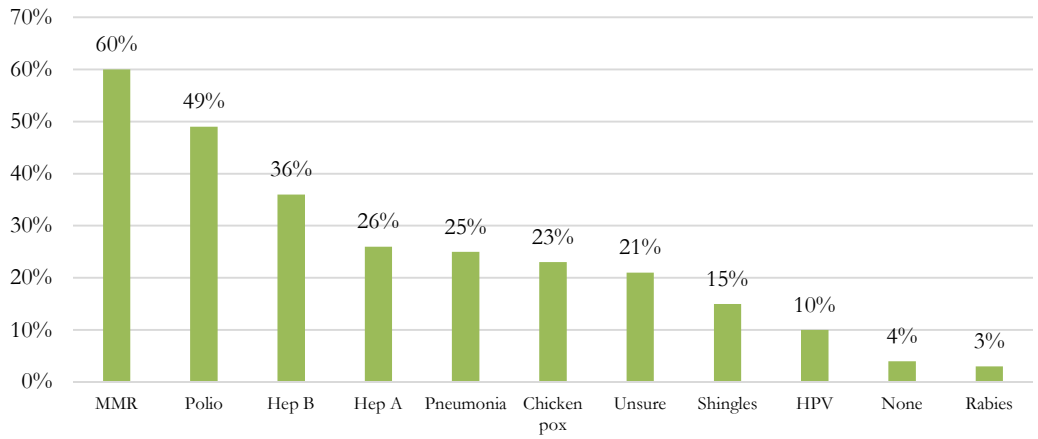
More than one-half of Holmes County residents (54%) reported received a tetanus vaccine in the past ten years (Figure 139). Thirty percent of residents indicated that they received the Tdap, and the remaining individuals were either unsure of the type of tetanus vaccine they had received (22%), or received a tetanus vaccine other than the Tdap (2%). Less than one-fifth of residents (17%) were unsure if they had received a tetanus vaccine in the past ten years, and 29% indicated that they had not received a tetanus vaccine.

Figure 140. *Individuals Who Received a Pertussis Vaccine in the Past 10 years*



Approximately one-third of Holmes County residents had received a pertussis vaccine in the past ten years; 18% were unsure, and 31% indicated they had not received a pertussis vaccine in the past ten years (Figure 140).

Figure 141. *Total Vaccines Received*



Among total lifetime vaccines received, more than one-half of Holmes County residents had received the MMR vaccine (60%), while 49% had received the polio, and 36% had received the hepatitis B vaccine (Figure 141). Less than one-third of residents had ever received a hepatitis A (26%), pneumonia (25%), chicken pox (23%), shingles (15%), HPV (10%), and/or rabies (3%) vaccine, respectively. Twenty-one percent of residents were unsure what vaccines they had received to date.

Figure 142. *Composite, Sex, and Age of Individuals Who Have Not Received a Vaccine in Their Lifetime*

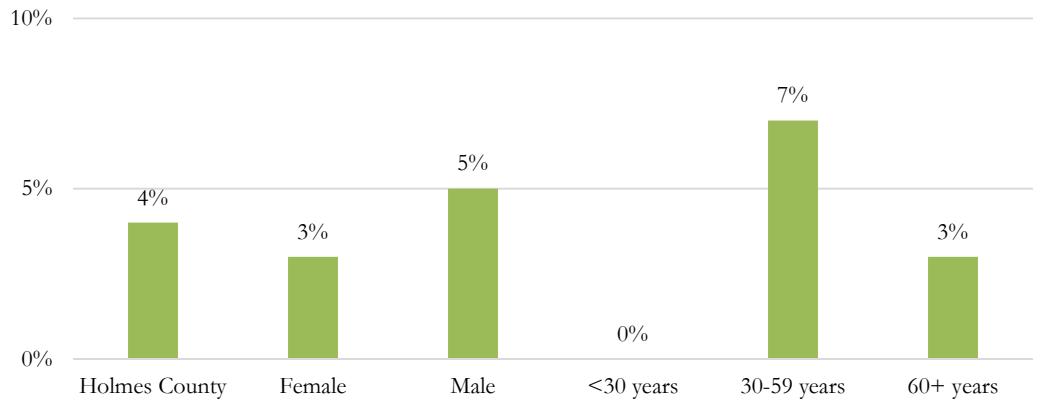
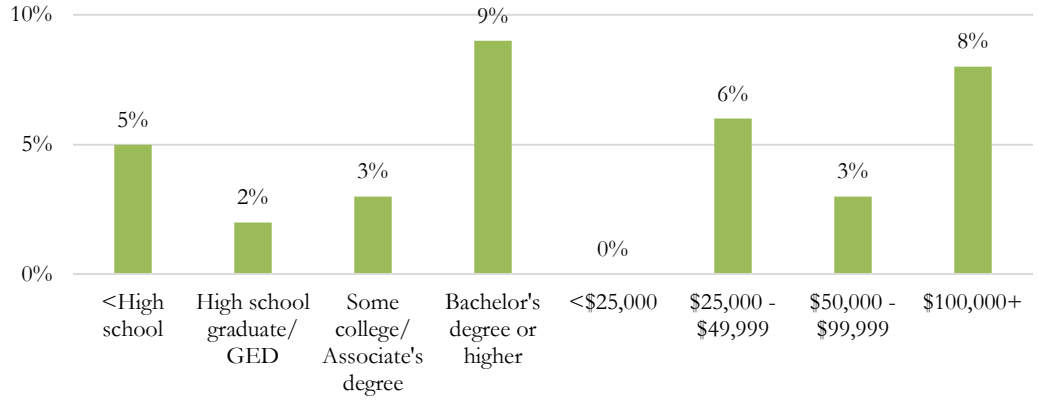


Figure 143. *Education and Income of Individuals Who Have Not Received a Vaccine in Their Lifetime*



Four percent of Holmes County residents had not received a vaccine in their lifetime (Figure 142). Not receiving a vaccine was highest among those with a Bachelor's degree or higher (9%), and lowest among high school graduates (2%; Figure 143). Overall, receipt of a vaccine varied between all included categories.

Table 33. *Vaccine-related Beliefs*

	(%)
"It is important for me to get vaccinated in order to prevent the spread of disease in my community"	50
"I could get a serious disease if I am not vaccinated"	46
"The benefits of vaccination outweigh the risks"	44
"Vaccines may cause learning disabilities in children (such as autism)"	23
"Vaccines may cause chronic disease (such as diabetes, asthma, or immune system problems"	19
"Vaccines are given to prevent diseases I am not likely to get"	16
"Vaccines are not tested enough for safety"	15

Fifty percent of Holmes County residents indicated that "It is important for me to get vaccinated in order to prevent the spread of disease in my community", while less than half affirmed "I could get a serious disease if I am not vaccinated" (46%), and "The benefits of vaccination outweigh the risks" (44%; Table 33). Less than one-quarter of residents indicated that "Vaccines may cause learning disabilities in children" (23%), "Vaccines may cause chronic disease" (19%), "Vaccines are to prevent diseases I'm unlikely to get" (16%), and "Vaccines are not tested enough for safety" (15%).

Figure 144. *Composite, Sex, and Age of Individuals Who Believe Vaccines are Importnant to Prevent the Spread of Disease*

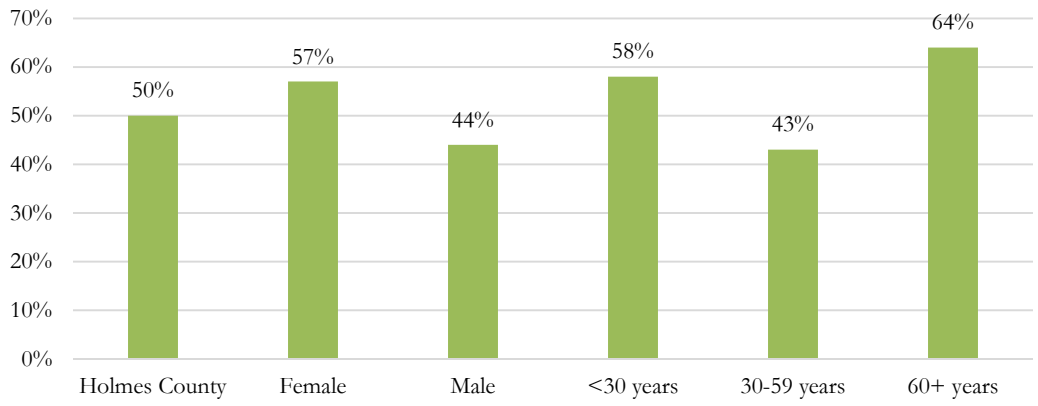
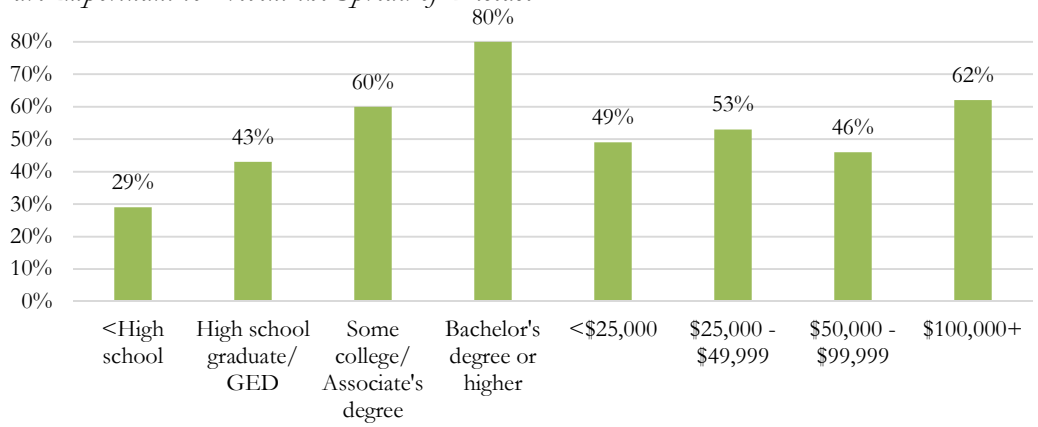


Figure 145. *Education and Income of Individuals Who Believe Vaccines are Importnant to Prevent the Spread of Disease*



One-half of Holmes County residents (50%) believed that vaccines were important in order to prevent the spread of disease (Figure 144). Beliefs that vaccines were important in preventing the spread of disease were more prevalent among females than males (Figure 144), higher among individuals 60 years of age and older, as compared to other included age groups (Figure 144), increased with greater educational attainment (Figure 145), and was higher among individuals with a total annual household income of $100,000 or greater, as compared to other included household income categories (Figure 145).

Figure 146. *Composite, Sex, and Age of Individuals Who Believe They Could Get a Serious Disease if Not Vaccinated*

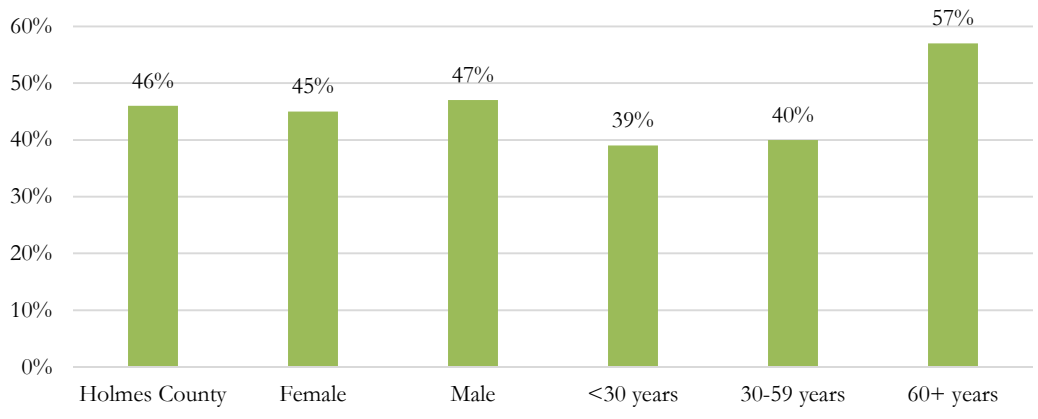
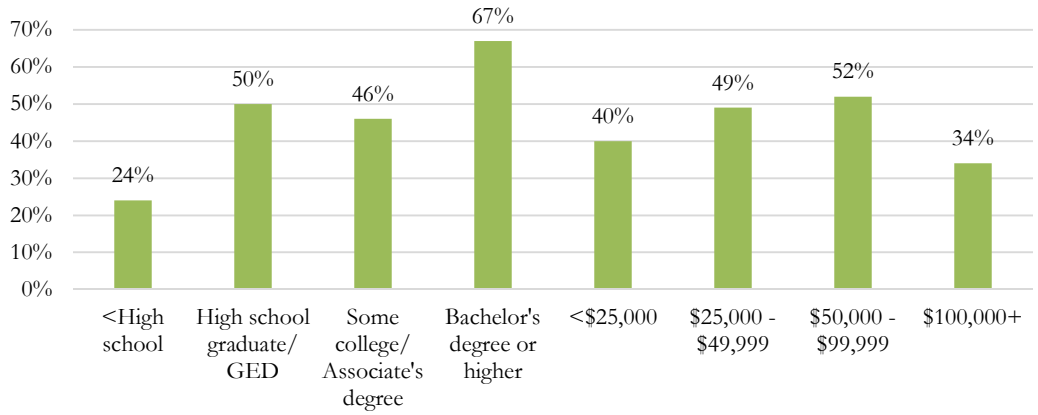


Figure 147. *Education and Income of Individuals Who Believe They Could Get a Serious Disease if Not Vaccinated*



Less than one-half of Holmes County residents (46%) believed that they could get a serious disease if not vaccinated (Figure 146). Said belief was relatively consistent between males and females (Figure 146), increased with advancing age (Figure 146), was highest among those individuals with a Bachelor's degree or higher (Figure 147), and was lowest among those with a total annual household income of $100,000 or more, with respect to other included household income categories (Figure 147).

Figure 148. *Composite, Sex, and Age of Individuals Who Believe The Benefits of Vaccination Outweigh the Risks*

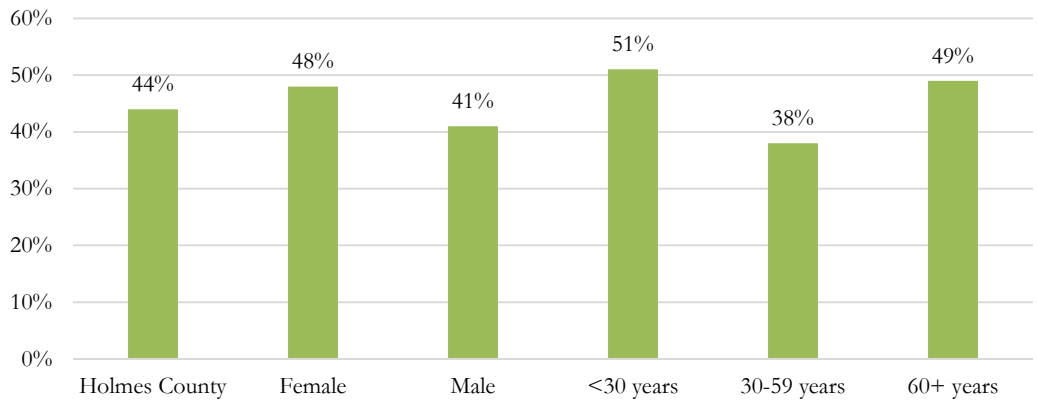
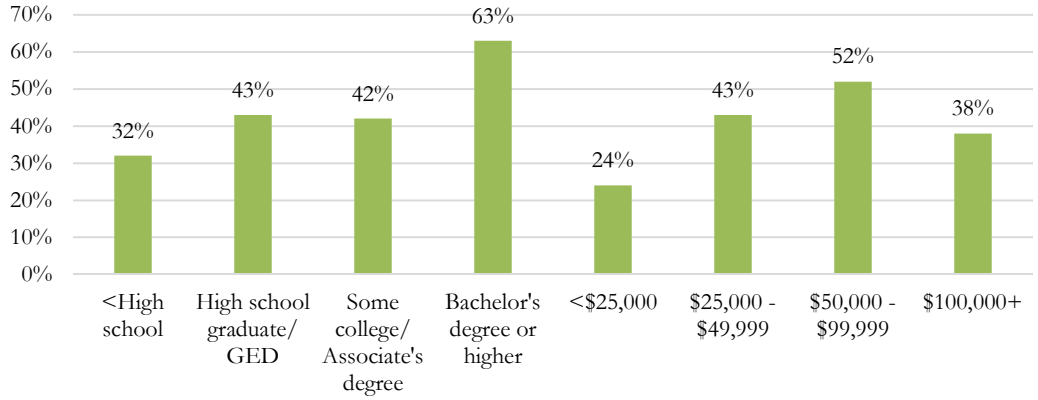


Figure 149. *Education and Income of Individuals Who Believe The Benefits of Vaccination Outweigh the Risks*



Less than half of Holmes County residents (44%) believed that the benefits of vaccination outweighed any potential risks (Figure 148). Belief in the benefits of vaccination was higher among females than males (Figure 148), highest among individuals less than 30 years of age, with respect to age (Figure 148), generally increased with greater educational attainment (Figure 149), and was lowest among those with a total annual household income less than $25,000 (Figure 149).

Figure 150. *Composite, Sex, and Age of Individuals Who Believe That Vaccines May Cause Learning Disabilities in Children*

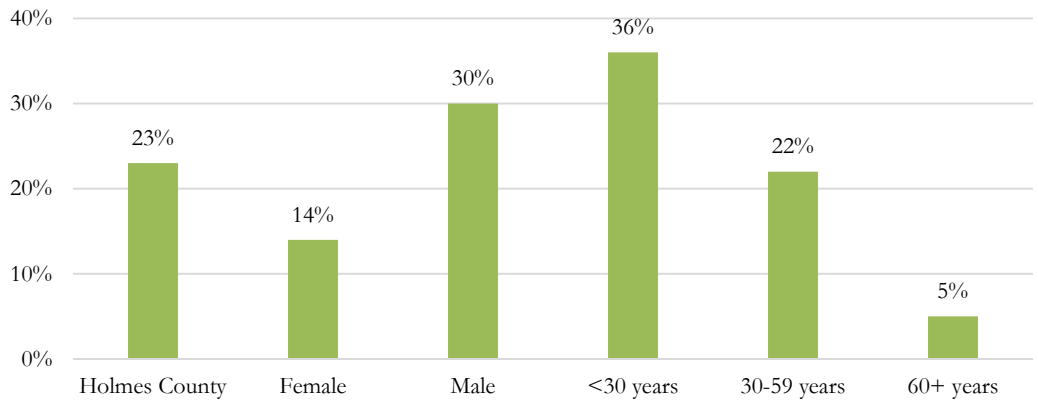
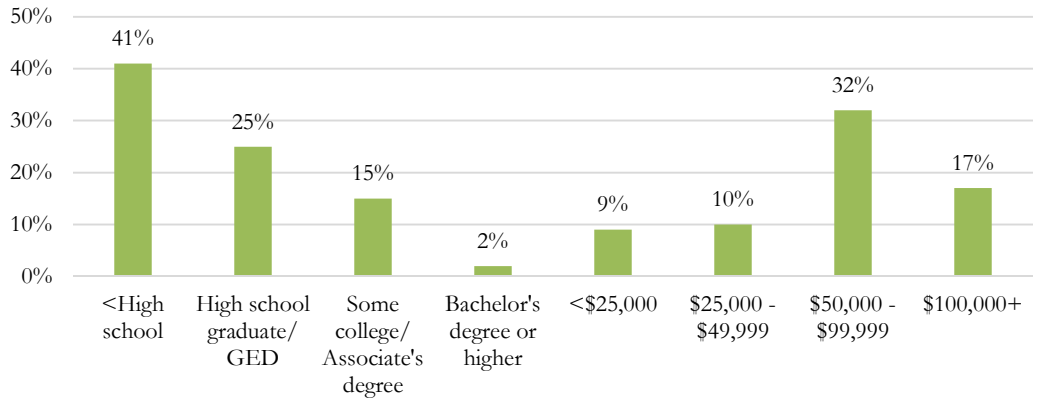


Figure 151. *Education and Income of Individuals Who Believe That Vaccines May Cause Learning Disabilities in Children*



Approximately one-quarter of Holmes County residents (23%) indicated a belief that vaccines may cause learning disabilities in children (Figure 150). Belief that vaccines can cause learning disabilities in children was considerably higher in males, as compared to females (Figure 150), declined with advancing age (Figure 150) and greater educational attainment (Figure 151), and was highest among those reporting a total annual household income of $50,000 to $99,999, as compared to other included household income categories (Figure 151).

Figure 152. *Composite, Sex, and Age of Individuals Who Believe That Vaccines May Cause Chronic Diseases*

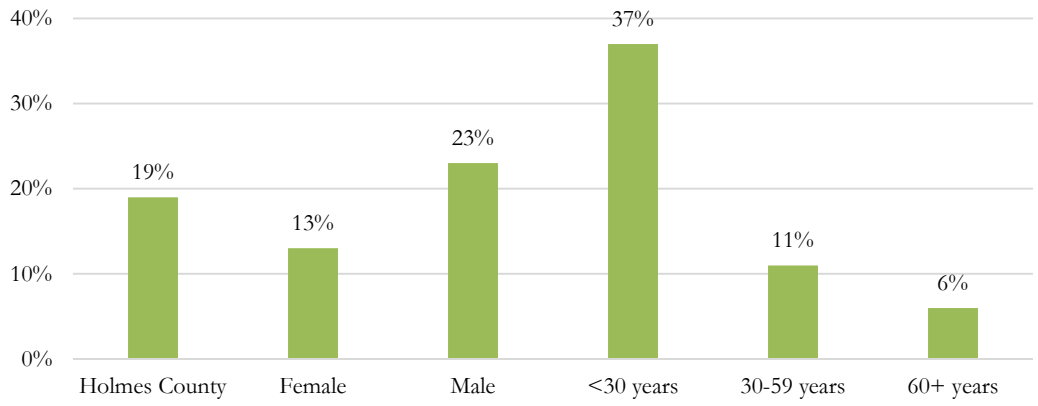
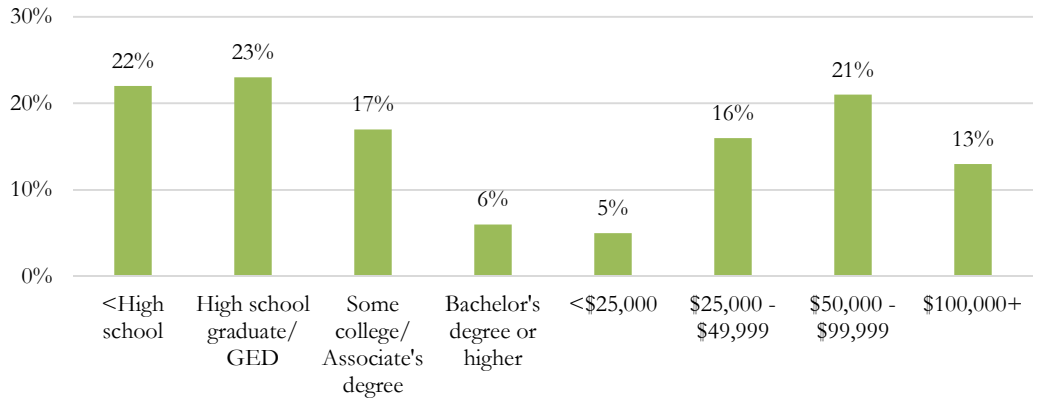


Figure 153. *Education and Income of Individuals Who Believe That Vaccines May Cause Chronic Diseases*



Less than one-fifth of Holmes County residents (19%) believed that vaccines may cause chronic diseases (Figure 152). Beliefs that vaccines may cause chronic diseases were higher among males than females (Figure 152), highest among individuals less than 30 years of age (Figure 152), declined with advancing age (Figure 152), declined with greater educational attainment (Figure 153), and was lowest among individuals reporting a total annual household income less than $25,000 (Figure 153).

Figure 154. *Composite, Sex, and Age of Individuals Who Believe That Vaccines Prevent Diseases They are Not Likely to Get*

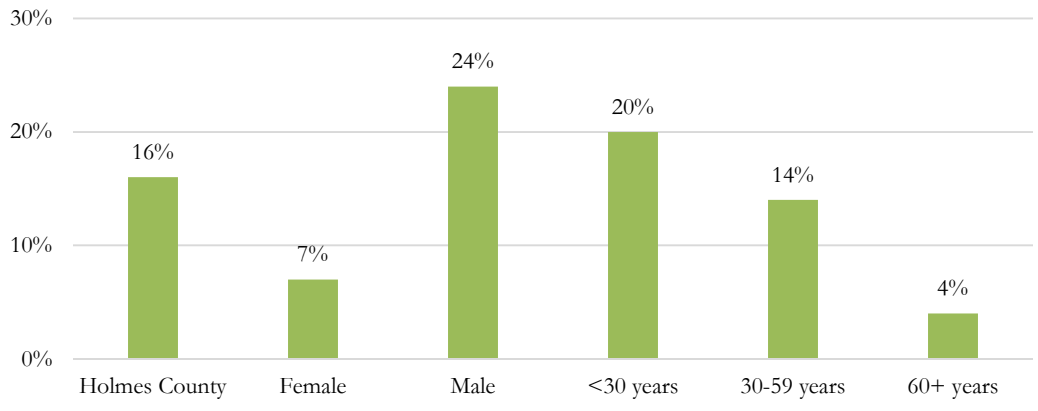
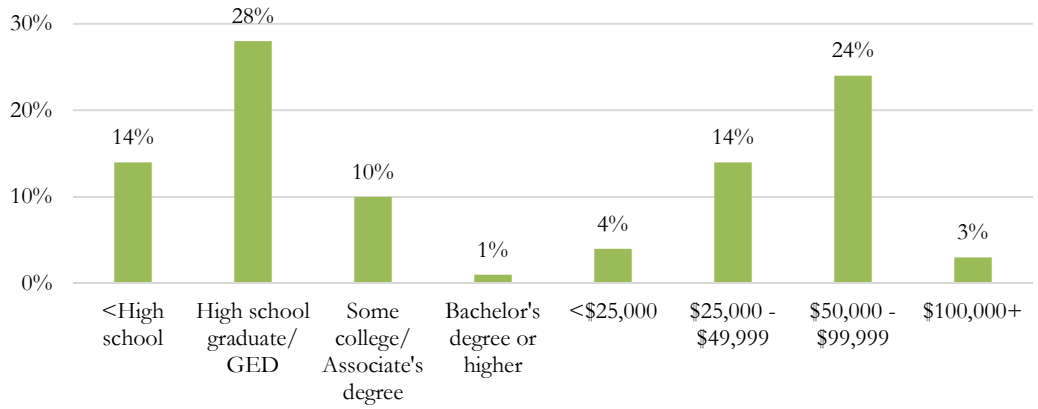


Figure 155. *Education and Income of Individuals Who Believe That Vaccines Prevent Diseases They are Not Likely to Get*



Sixteen percent of Holmes County residents believed that vaccines prevented diseases that they were not likely to get (Figure 154). The belief that vaccines prevent diseases not likely to contract was considerably higher among males than females (Figure 154), declined with advancing age (Figure 154), was highest among individuals with a high school education (Figure 155), and was highest among those reporting a total annual household of $50,000 to $99,999 (Figure 155).

Figure 156. *Composite, Sex, and Age of Individuals Who Believe That Vaccines are Not Tested Enough for Safety*

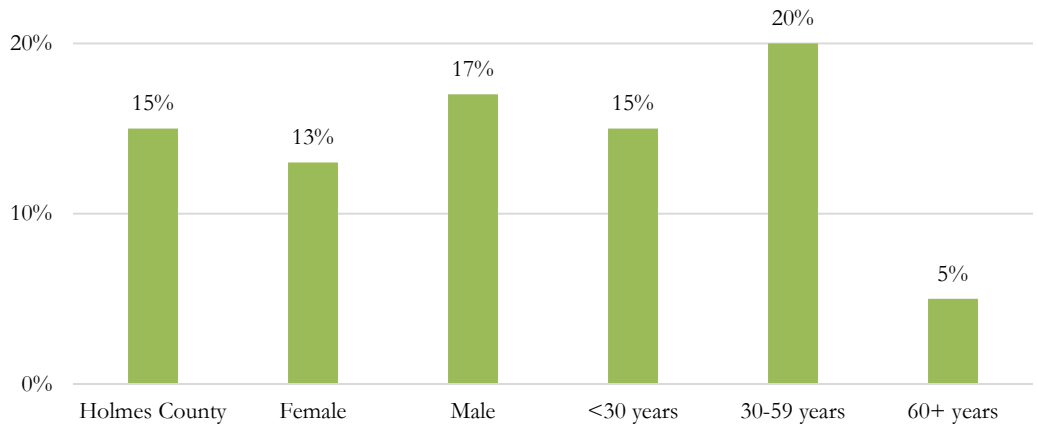
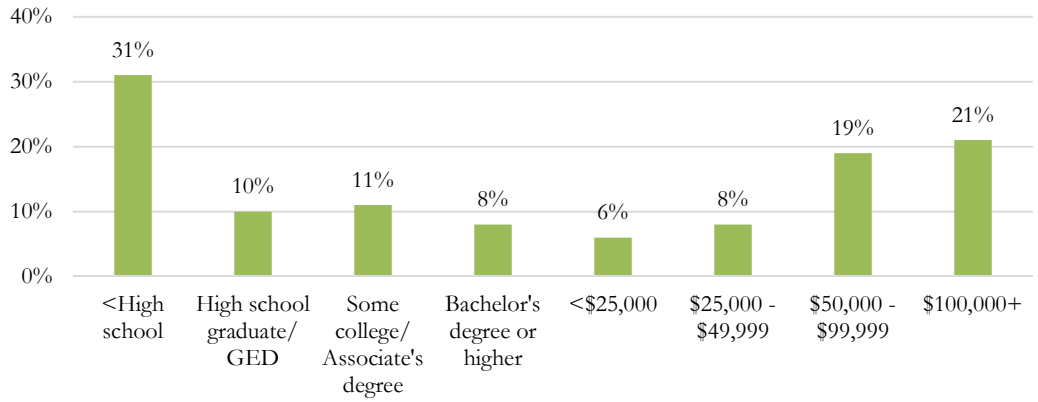


Figure 157. *Education and Income of Individuals Who Believe That Vaccines are Not Tested Enough for Safety*



Fifteen percent of Holmes County residents indicated that vaccines were not tested enough for safety (Figure 156). Reports that vaccines were not tested enough for safety was higher among males than females (Figure 156), greatest among those 30 to 59 years of age, as compared to other included age categories (Figure 156), highest among individuals with less than a high school education (Figure 157), generally declined with greater educational attainment (Figure 157), and increased with increasing total annual household income (Figure 157).

3.2.6 Health Behavior

Alcohol Use

Figure 158. *Number of Days per Week of Alcohol Consumption*

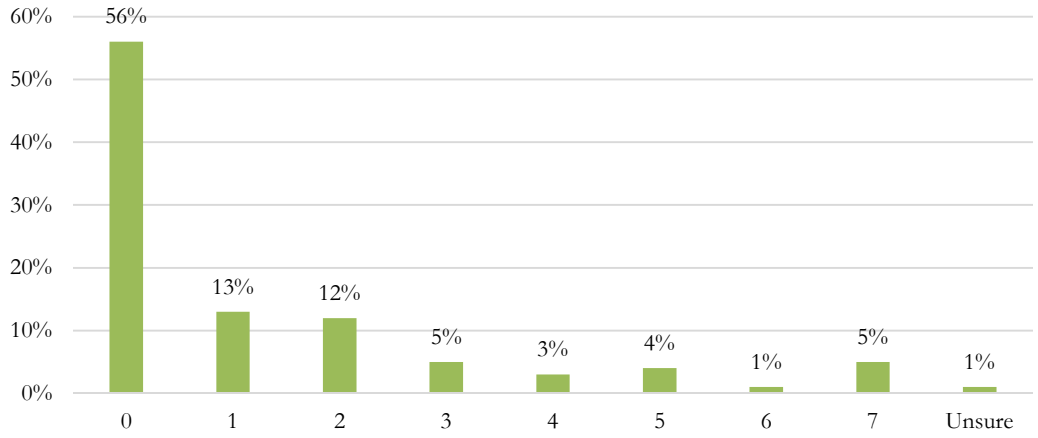
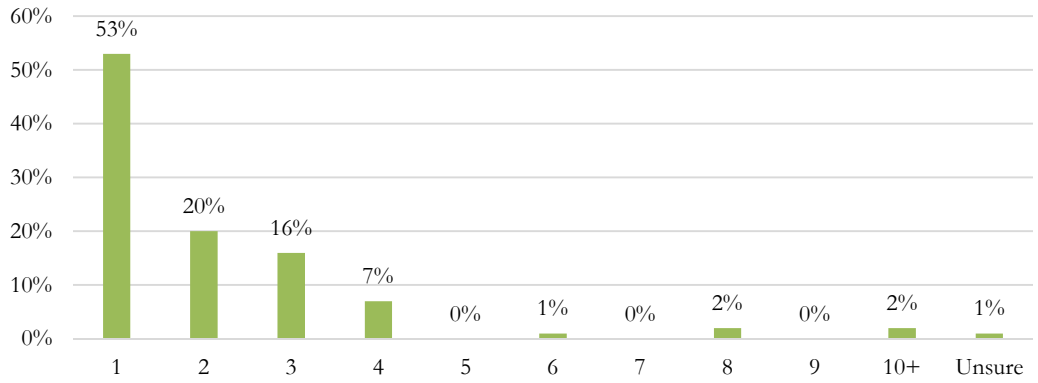


Figure 159. *Number of Alcoholic Drinks on Drinking Days*

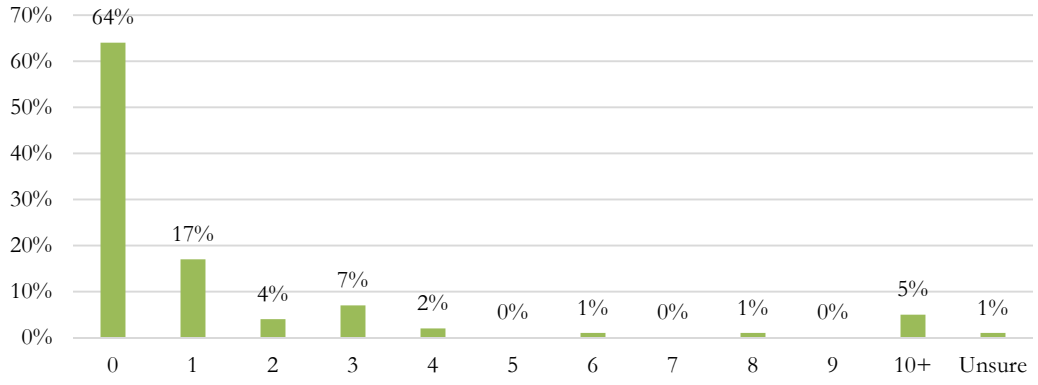


*Does not equal 100% due to rounding.

More than half of Holmes County residents (56%) indicated that they had no alcoholic drinks per week, during the past 30 days (Figure 158). Among those residents who did have at least one alcoholic drink per week in the past 30 days, drinking occurred predominately on one (13%) or two (12%) days per week (Figure 158). Fifty-three percent of residents consumed one alcoholic drink on a drinking day, while 20% consumed two drinks, and 16% consumed three drinks (Figure

159). Less than 10% of residents had an alcoholic drink more than 2 days per week (Figure 158), or had more than three alcoholic drinks on a given drinking day (Figure 159).

Figure 160. *Number of Binge Drinking Occurrences in the Past 30 Days*



*Does not equal 100% due to rounding.

More than two-thirds of Holmes County residents (64%) indicated that they had not consumed five or more drinks for males, or four or more drinks for females, on a single occasion in the past 30 days (Figure 160). Of those residents identifying a binge drinking occurrence in the past 30 days, 17% indicated binge drinking on one occasion, while 7% indicated binge drinking on three occasions, 5% on 10 or more occasions, 4% on two occasions, 2% on four occasions, and 1% on six and eight occasions. One percent of residents were unsure how many times they had binge drank in the past 30 days.

Figure 161. *Composite, Sex, and Age of Mean Binge Drinking Occurences in the Past 30 Days*

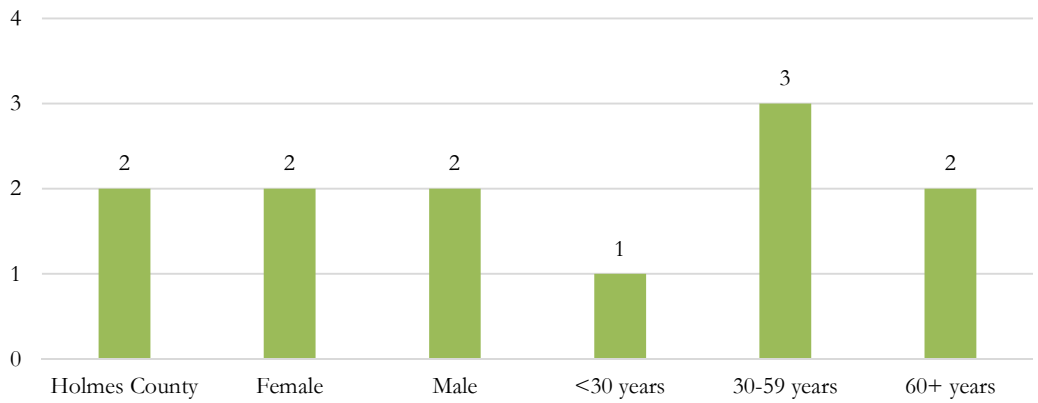


Figure 162. *Education and Income of Mean Binge Drinking Occurences in the Past 30 Days*

Overall, Holmes County residents reported two binge drinking occurrences during the past 30 days (Figure 161). Both males and females reported two binge drinking days, while those 30 to 59 years of age reported a total of three binge drinking days, as compared to those less than 30 years of age (1) and 60 years of age and older (2; Figure 161). Those with less than a high school education reported a one more binge drinking day than those with greater educational attainment, as did those individuals reporting a total annual household income of $59,999 or less, as compared to greater household incomes (Figure 162). Nearly all Holmes County residents (99%) indicated that they had not driven while intoxicated in the past 30 days.

Table 34. *Activities Performed While Driving*

	(%)
"Talk to passengers in the vehicle"	63
"Adjust the vehicle's radio"	58
"Eat or drink"	56
"Answer phone calls"	51
"Use a smartphone for driving directions"	48
"Make phone calls"	46
"Talk or interact with children in the vehicle"	39
"Use a portable music player, including a smartphone, with external speakers or with the vehicle's speakers (Bluetooth)"	29
"Use a navigation system for driving directions"	26
"Read text or email messages"	16
"Change CDs, DVDs, or tapes"	15
"Send text or email messages"	14
"Use smartphone apps, not including a navigation app"	11
"Take pictures with your phone"	10
"Look up information on the internet"	10
"None of the above"	8
"Other"	2

Illicit Drug Use

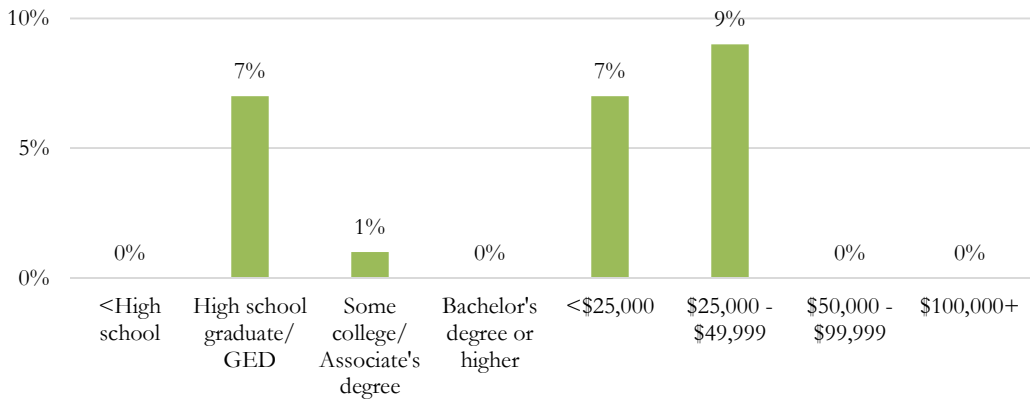
Approximately all of Holmes County residents (99.7%) indicated that they had not used illicit drugs in the past 30 days. Less than 1% of residents (0.3%) indicated "Don't know/not sure".

Marijuana Use

Ninety-seven percent of Holmes County residents indicated that they had not used marijuana in the past 30 days. Among the three percent of residents reporting marijuana use, 7% reported three days of marijuana use in the past 30 days, while 34% reported 20 days of use, and 58% reported using marijuana every day for the past 30 days. Marijuana use was characterized as "Medicinal (non-prescribed)" (47%), "Recreational" (40%), and "Medicinal (as prescribed by a physician)" (13%).

Figure 163. *Composite, Sex, and Age of Individuals Who Used Marijuana in the Past 30 Days*

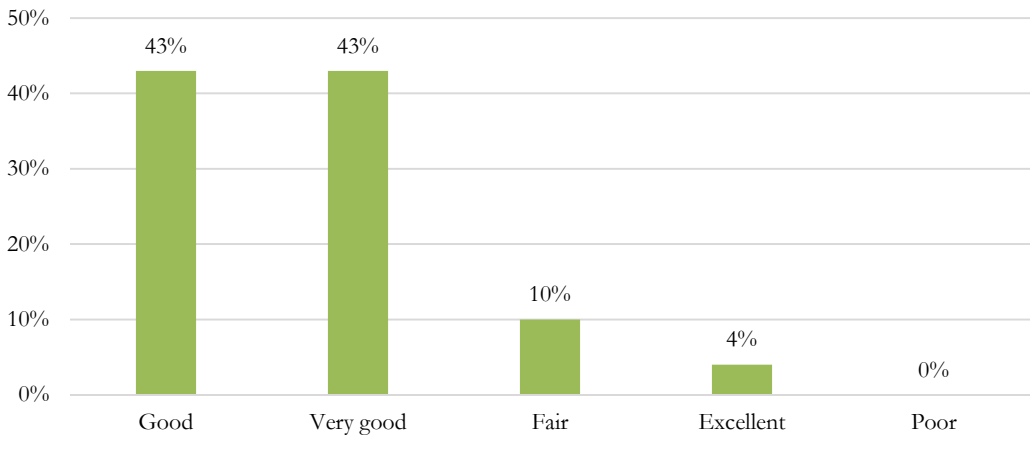
Figure 164. *Education and Income of Individuals Who Used Marijuana in the Past 30 Days*



Three percent of Holmes County residents reported using marijuana in the past 30 days (Figure 163). Marijuana use in the past 30 days was higher among females (4%) than males (2%), and highest (9%) among those reporting a total annual household income ranging from $25,000 to $49,999 (Figure 164). Seven percent of high school graduates, and those with a total annual household income less than $25,000 reported using marijuana in the past 30 days (Figure 164).

Nutrition and Access to Healthy Food

Figure 165. *Overall Diet*



More than three-quarters of Holmes County residents characterized their overall diet as "Good" (43%) or "Very good" (43%; Figure 165). Ten percent of residents characterized their overall diet as "Fair", and 4% as "Excellent". With respect to weight, more than half of residents (57%) indicated that they would prefer to weigh less than their current weight, while 41% stated they would prefer to weigh "About the same". Of those residents whom would prefer to weigh less, 64% had attempted to lose weight in the past 12 months, and utilized the following strategies (Table 35).

Table 35. *Strategies Utilized to Lose Weight During the Past 12 Months*

	(%)
"Ate less food"	66
"Exercised"	58
"Ate less junk food or fast food"	53
"Ate less sugar, candy, sweets, drank less soda, drank less sugar-sweetened beverages"	51
"Drank a lot of water"	50
"Ate more fruits, vegetables, and/or salads"	48
"Switched to foods with lower calories"	40
"Ate fewer carbohydrates"	35
"Changed eating habits (didn't eat late at night, ate several small meals a day, ate at home more)"	31
"Skipped meals or fasted"	29
"Ate less fat"	21
"Followed a special diet such as Dr. Atkins, South Beach, other high protein or low carbohydrate diet, Cabbage Soup Diet, Ornish, Nutrisystem, Body-for-Life, or juice diet"	15
"Took other pills, medicines, herbs, or supplements not needing a prescription"	5
"Ate diet foods or products"	3
"Joined a weight loss program such as Weight Watchers, Jenny Craig, Tops, or Overeaters Anonymous"	3
"Used a liquid diet formula such as Slimfast, Optifast, or Shakeology"	2
"Took diet pills prescribed by doctor"	1

Figure 166. *Total Meals Not Prepared at Home in the Past Seven Days*

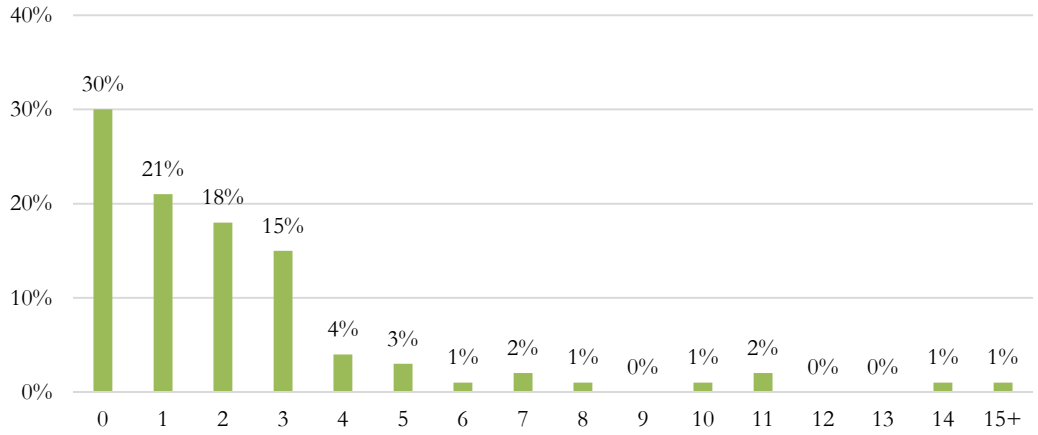
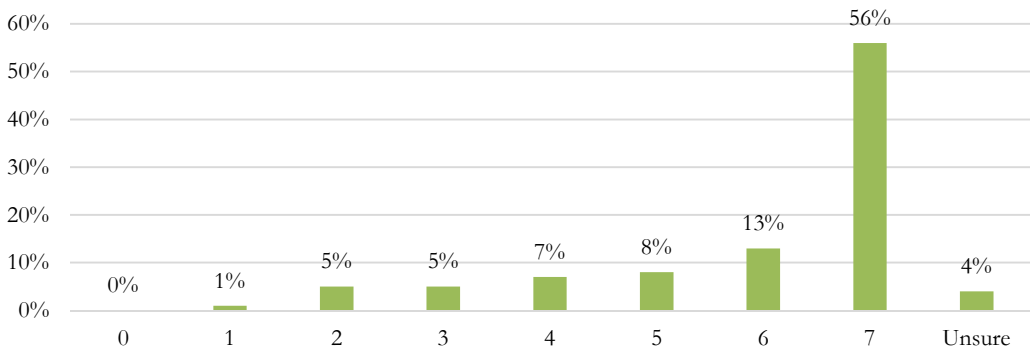


Figure 167. *Number of Days Fruits or Vegetables were Eaten in the Past 7 Days*



*Does not equal 100% due to rounding.

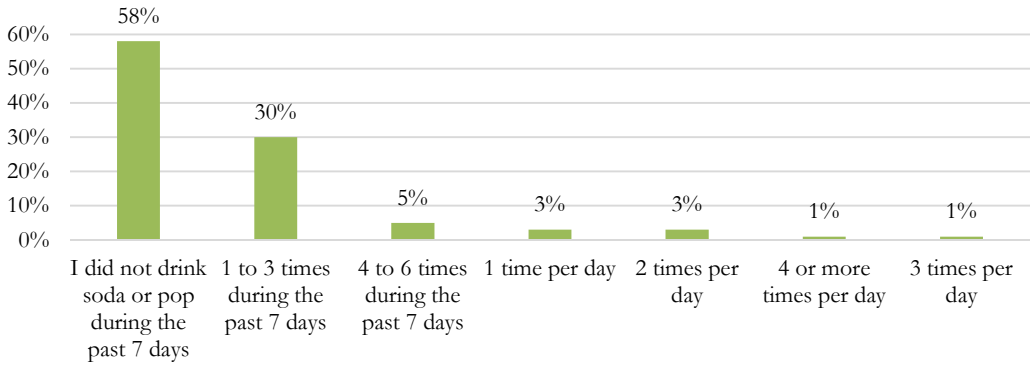
Thirty percent of Holmes County residents indicated that all of their meals for the past seven days were prepared at home (Figure 166). Approximately one-fifth reported obtaining one (21%) and two (18%) meals prepared away from home in the past seven days, while 15% reported a total of three meals. Less than 20% of residents obtained four or more meals away from home in the past seven days. More than half of residents (56%) consumed fruits or vegetables every day during the past seven days (Figure 167).

Table 36. *Food Preferences*

	(%)
"Tastes good"	81
"Is nutritious"	71
"Keeps me healthy"	65
"Is easy to prepare"	40
"Contains a lot of vitamins and minerals"	39
"Can be cooked very simply"	36
"Contains natural ingredients"	34
"Contains no artificial ingredients"	28
"Is not expensive"	27
"Makes me feel good"	25
"Has a pleasant texture"	19
"Smells nice"	18
"Contains no additives"	17
"Is like the food I ate when I was a child"	16
"Is cheap"	16
"Helps me control my weight"	15
"Cheers me up"	13
"Is low in calories"	11
"Helps me relax"	10
"Is low in fat"	7
"Takes no time to prepare"	7

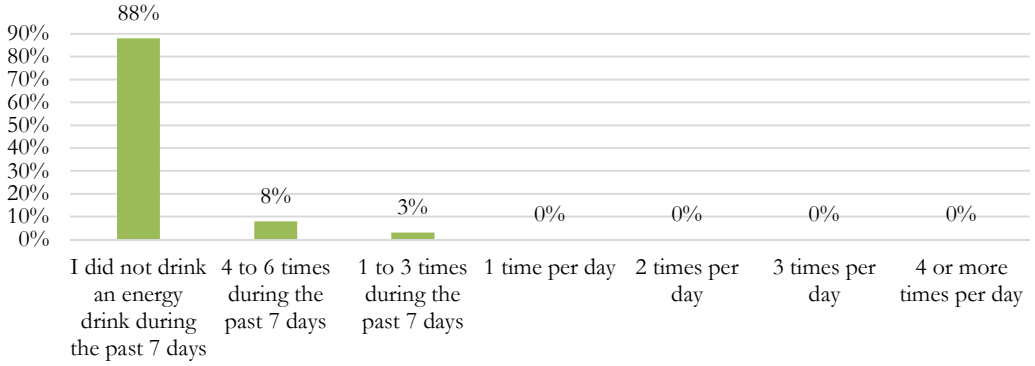
More than half of Holmes County residents indicated that it was important that the food they ate on a typical day "Tastes good" (81%), "Is nutritious" (71%), and "Keeps me healthy" (65%; Table 36).

Figure 168. *Number of Times Pop or Soda was Consumed in the Past 7 Days*



*Does not equal 100% due to rounding.

Figure 169. *Number of Times an Energy Drink was Consumed in the Past 7 Days*



*Does not equal 100% due to rounding.

More than half of Holmes County residents (58%) had not consumed a soda or pop in the past seven days (Figure 168), and 88% of residents indicated that they had not consumed an energy drink in the past 7 days (Figure 169). Of those residents who did drink a soda or pop, 30% of residents did so one to three times during the past 7 days, while 5% consumed a soda or pop four to six times during the past 7 days, 3% once daily, 3% twice daily, and 1% four or more times per day and three times daily, respectively (Figure 168). Residents that consumed an energy drink in the past 7 days did so four to six times (8%), or one to three times (3%; Figure 169).

Figure 170. *Composite, Sex, and Age of Individuals Who Consumed a Pop or Soda in the Past 7 Days*

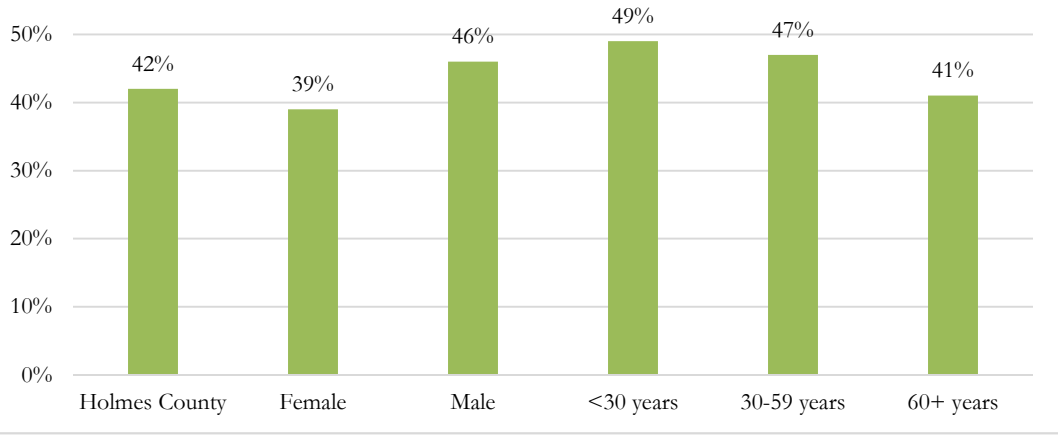


Figure 171. *Education and Income of Individuals Who Consumed a Pop or Soda in the Past 7 Days*

Less than half of Holmes County residents consumed a pop or soda during the past seven days (Figure 170). Consumption of soda or pop was higher among males than females (Figure 170), declined with advancing age (Figure 170), was highest among individuals with less than a high school education (Figure 171), and generally declined with greater total annual household income (Figure 171).

Figure 172. *Composite, Sex, and Age of Individuals Who Consumed an Energy Drink in the Past 7 Days*

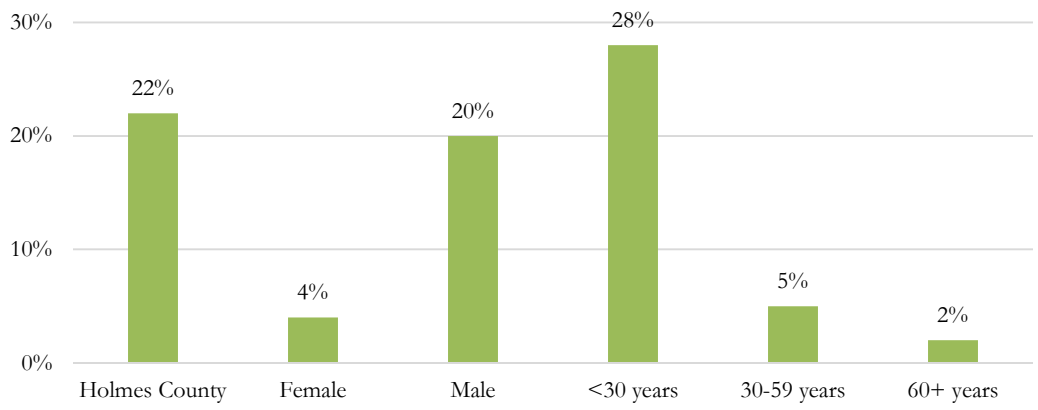
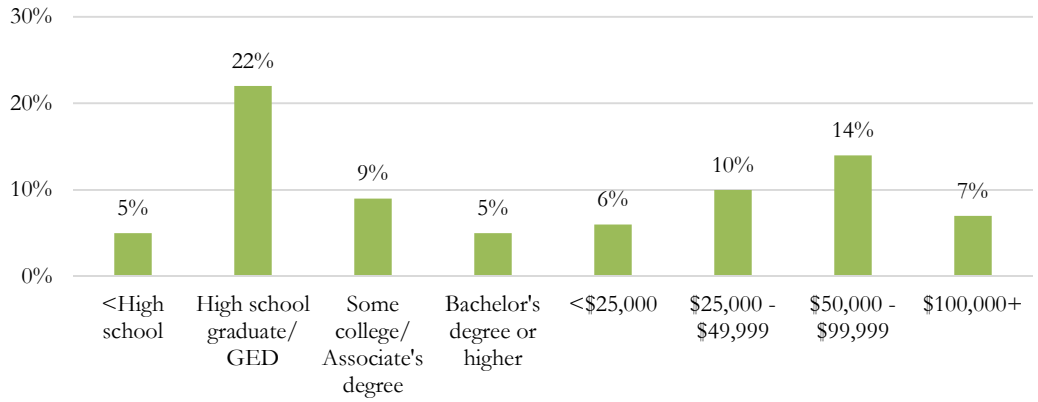


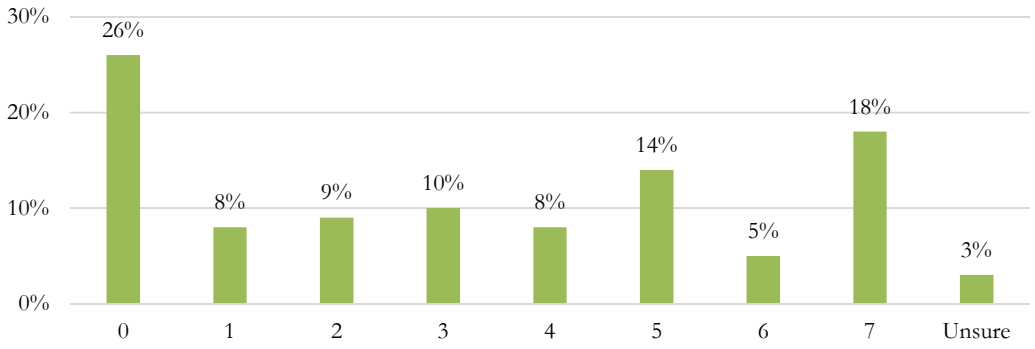
Figure 173. *Education and Income of Individuals Who Consumed an Energy Drink in the Past 7 Days*



Twenty-two percent of Holmes County residents consumed an energy drink during the past seven days (Figure 172). Energy drink consumption during the past seven days was considerably higher among males than females (Figure 172), highest among individuals less than 30 years of age (Figure 172), declined with advancing age (Figure 172), was highest among high school graduates, with respect to education (Figure 173), and increased between those with a total annual household income less than $25,000 to $99,999 (Figure 173).

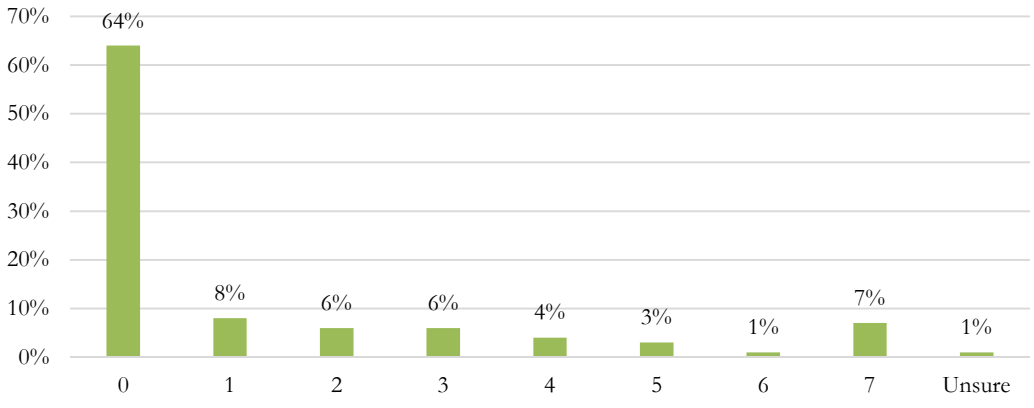
Physical Activity and BMI

Figure 174. *Number of Days per Week With at Least 10 Minutes of Moderate Intensity Sports, Fitness, or Recreational Activity*



*Does not equal 100% due to rounding.

Figure 175. *Number of Days per Week With at Least 10 Minutes of Vigorous Intensity Sports, Fitness, or Recreational Activity*



Less than one-third of Holmes County residents (26%) did not obtain at least 10 minutes of moderate intensity sports, fitness, or recreational activity during a typical week (Figure 174), and 64% did not obtain 10 minutes of vigorous intensity sports, fitness, or recreational activity during a typical week (Figure 175). Nearly one-fifth of residents (18%) indicated obtaining 10 minutes of moderate intensity sports, fitness, or recreational activity seven days per week during a typical week, while 14% did so five days per week (Figure 174). Less than 10% or less obtained 10 minutes of

moderate intensity sports, fitness, or recreational activity one, two, three, four, and six days per week (Figure 174), respectively. Only 36% of residents indicated any sort of vigorous intensity sports, fitness, or recreational during a typical week (Figure 175).

Figure 176. *Composite, Sex, and Age of Individuals Indicating Mean Number of Days per Week with at Least 10 Minutes of Moderate Intensity Sports, Fitness, or Recreational Activity*

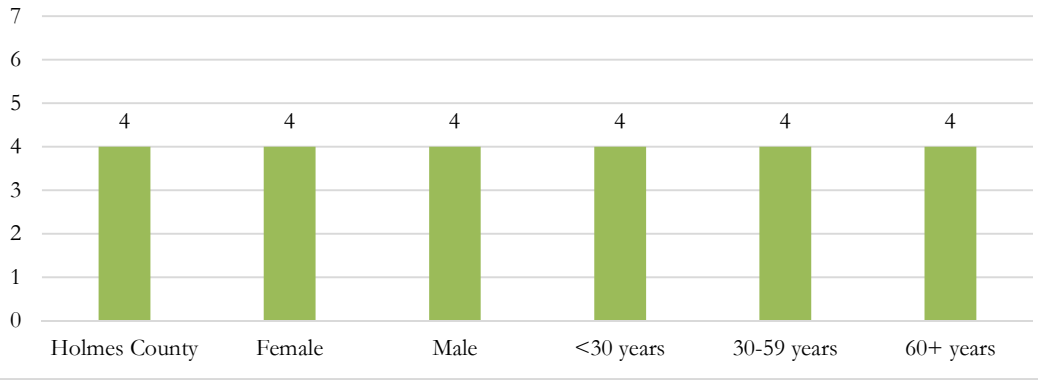
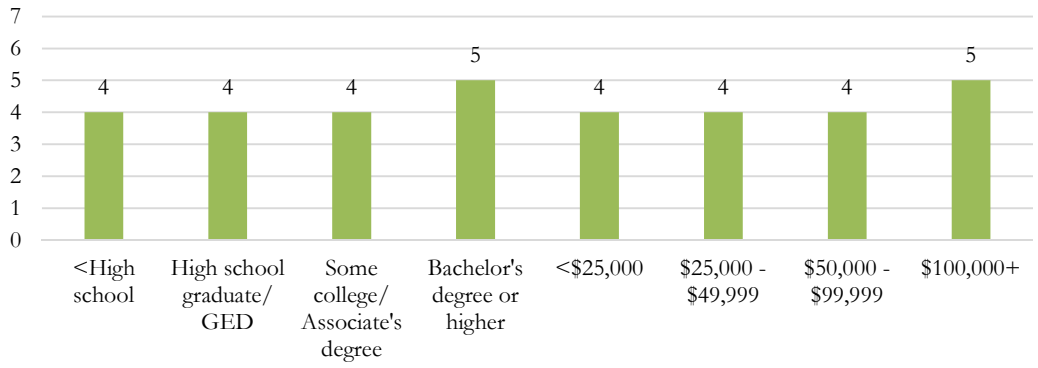


Figure 177. *Education and Income of Individuals Indicating Mean Number of Days per Week with at Least 10 Minutes of Moderate Intensity Sports, Fitness, or Recreational Activity*



No variation was observed across sex and age with respect to mean days per week of moderate intensity sports, fitness, or recreational activity (Figure 176). Mean days per week with at least ten minutes of moderate intensity sports, fitness, or recreational activity was highest among

individuals with a Bachelor's degree or higher (5), and those with a total annual household income of $100,000 or greater (Figure 177).

Figure 178. *Composite, Sex, and Age of Individuals Indicating Mean Number of Days per Week with at Least 10 Minutes of Vigorous Intensity Sports, Fitness, or Recreational Activity*

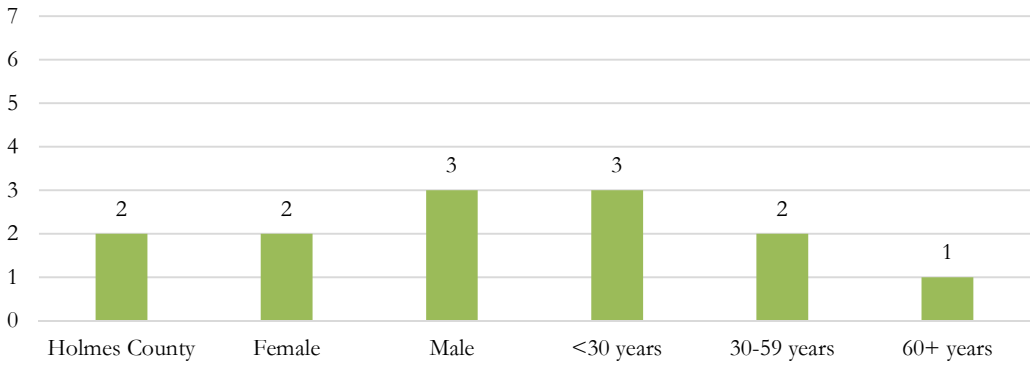


Figure 179. *Education and Income of Individuals Indicating Mean Number of Days per Week with at Least 10 Minutes of Vigorous Intensity Sports, Fitness, or Recreational Activity*

Holmes County residents reported an average of 2 days per week with at least ten minutes of vigorous intensity sports, fitness, or recreational activity (Figure 178). Said activity was higher among males than females (Figure 178), declined with advancing age (Figure 178), was highest among those reporting a total annual household income of $100,000 or greater (Figure 179), and was lowest among those 60 years of age and older (Figure 179).

Table 37. *Preferred Methods of Physical Activity and Exercise*

	(%)
"Walking"	45
"Lawn maintenance / yard care / gardening"	37
"Home renovation / household activities"	26
"Bicycling / Bicycling machine exercise / elliptical / stair climber"	17
"Carpentry"	13
"Farm or ranch work"	12
"Childcare"	11
"Jogging / running"	9
"Softball / baseball"	9
"Body weight exercises / calisthenics"	9
"Backpacking / hiking"	7
"Exercise machines / weight lifting"	7
"Golf"	5
"Hunting"	5
"Fishing"	4
"Swimming"	4
"Boating / rowing"	3
"Frisbee / paddleball"	3
"Pilates / yoga"	3
"I am not physically active"	3
"Aerobics video or class"	2
"Lacrosse / rugby / football"	2
"Dancing"	2
"Basketball"	1
"Horseback riding"	1
"Tai Chi"	1
"Volleyball"	1

Figure 180. *Number of Days per Week With at Least 60 Minutes of Physical Activity*

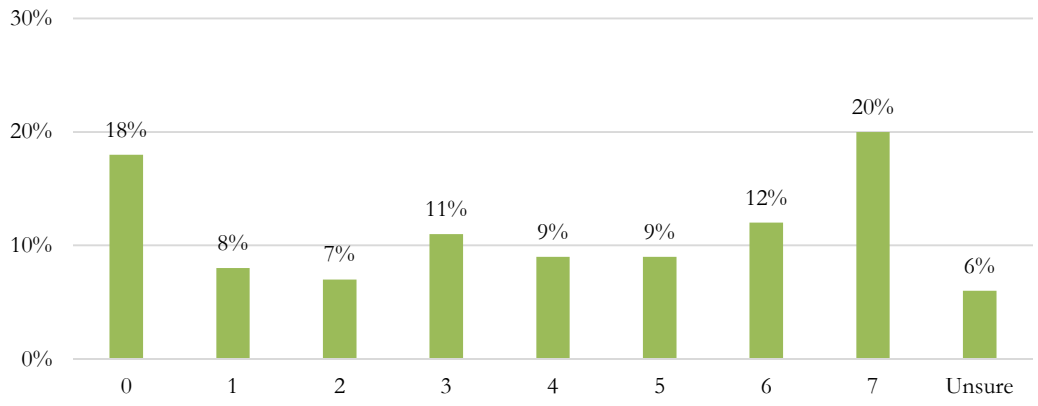
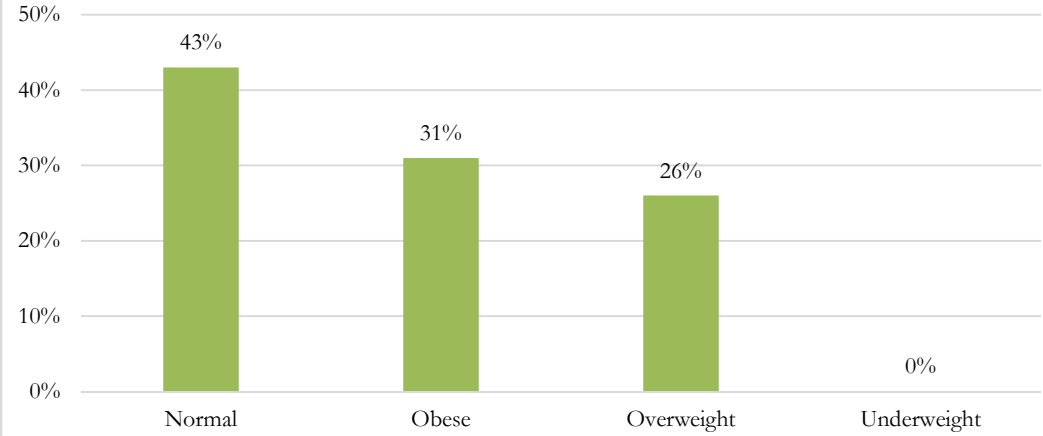


Figure 181. *Resident Body Mass Index (BMI)*



Less than one-fifth of Holmes County residents (18%) reported not obtaining at least 60 minutes of physical activity on any day during the past seven days (Figure 180). Of those residents who were physically active, 20% obtained at least 60 minutes of physical activity every day during the past seven days, while 12% and 11% were physically active for the aforementioned duration on six and three days during the past week, respectively (Figure 180). Less than 10% of residents were physically active for at least 60 minutes on five (9%), four (9%), one (8%), or two (7%) days during the past seven days; 6% of residents indicated "Don't know / not sure" (Figure 180). More than half of Holmes County residents retained a BMI of obese (31%) or overweight (26%; Figure 181).

During a typical day, Holmes County residents spent a mean of one hour with a smartphone, computer, watching television or a movie, or playing video games.

Figure 182. *Composite, Sex, and Age of Individuals Indicating Mean Number of Days per Week with at Least 60 Minutes of Physical Activity*

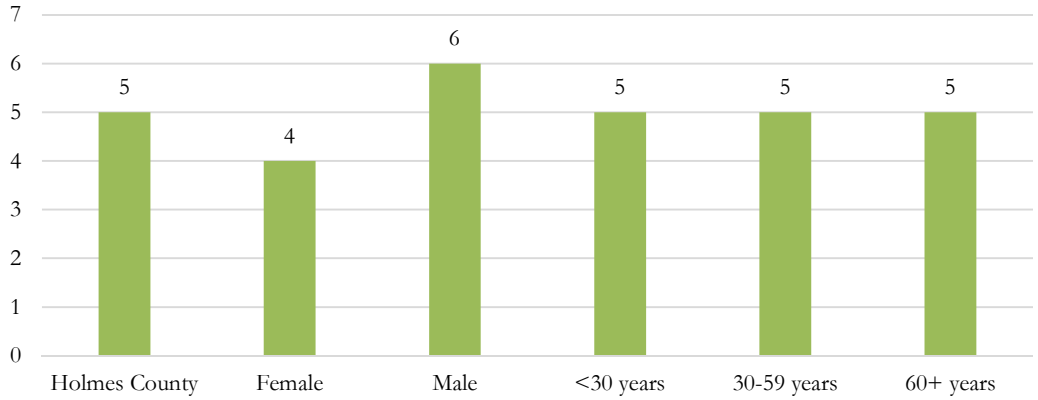


Figure 183. *Education and Income of Individuals Indicating Mean Number of Days per Week with at Least 60 Minutes of Physical Activity*

Little variation was observed across sex, age, education, and income with respect to mean days per week respondents acquired at least 60 minutes of physical activity (Figures 182-183). Mean days per week with at least 60 minutes of physical activity ranged from four to six days per week, and was highest among males (Figure 182) and those with less than a high school education (Figure 183).

Figure 184. *Composite, Sex, and Age of Individuals with a BMI Equal to or Greater than 30 (Obese)*

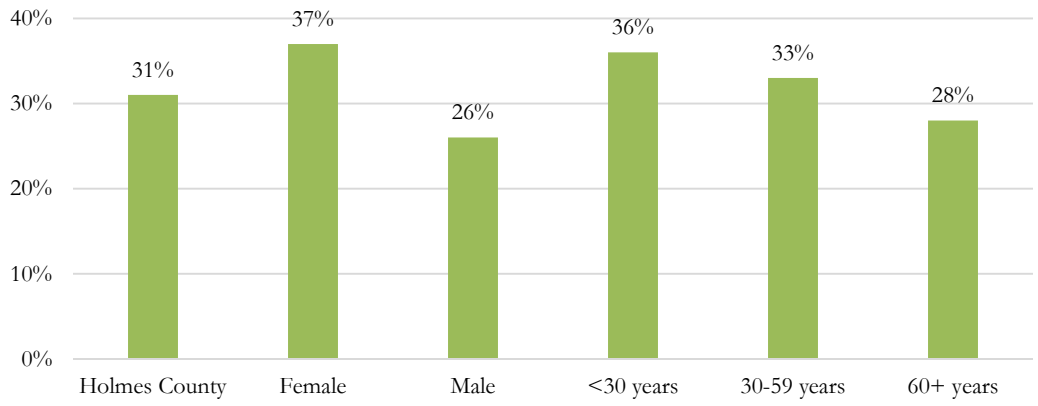
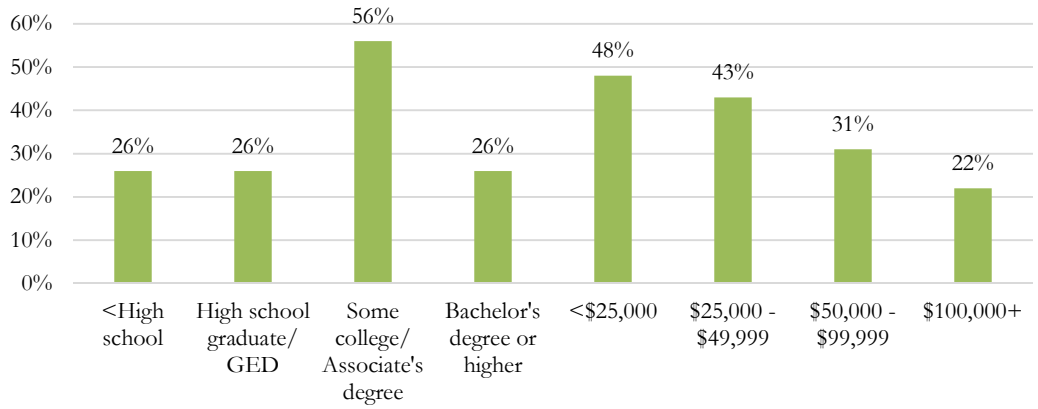


Figure 185. *Education and Income of Individuals with a BMI Equal to or Greater Than 30 (Obese)*



Approximately one-third (31%) of Holmes County residents were currently obese (Figure 180). Obesity was higher among females as compared to males (Figure 184), and declined with both advancing age (Figure 184) and greater total annual household income (Figure 185). Obesity was highest among those with some college or an Associate's degree (Figure 185).

Figure 186. *Composite, Sex, and Age of Individuals with a BMI Ranging from 25 to 29.9 (Overweight)*

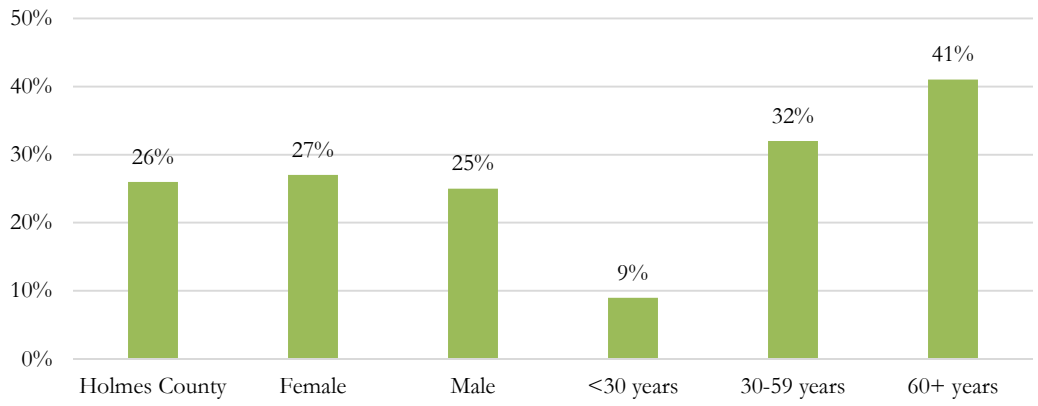
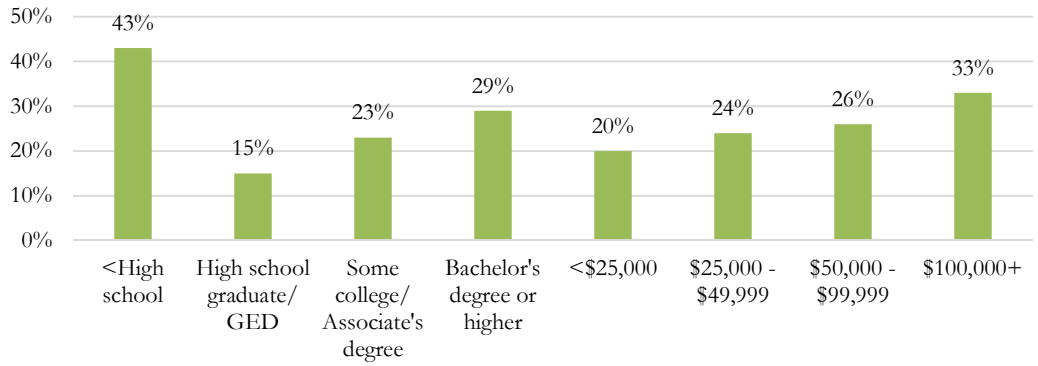


Figure 187. *Education and Income of Individuals with a BMI Ranging from 25 to 29.9 (Overweight)*



Less than one-third (26%) of Holmes County residents indicated that they were currently overweight. Being overweight was relatively consistent between males and females (Figure 186), increased with advancing age (Figure 186), was highest among those with less than a high school education (Figure 187), and increased with greater total annual household income (Figure 187).

Figure 188. *Composite, Sex, and Age of Individuals with a BMI Ranging from 18.5 to 24.9 (Normal)*

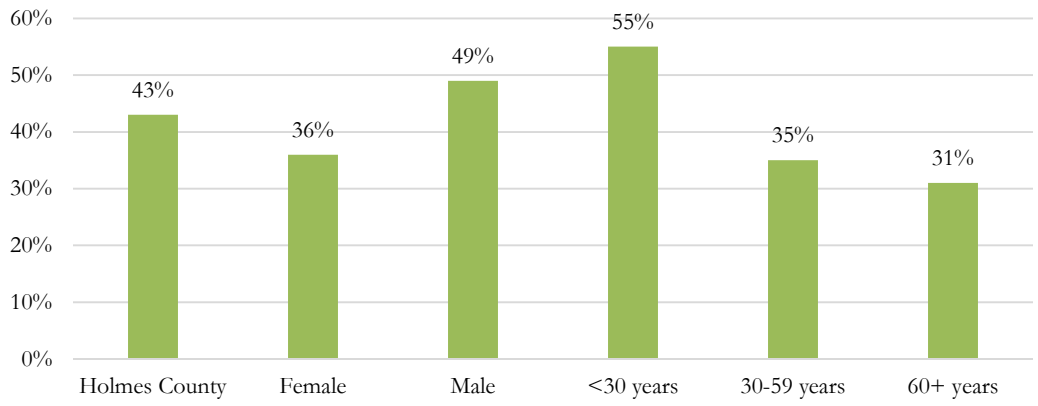
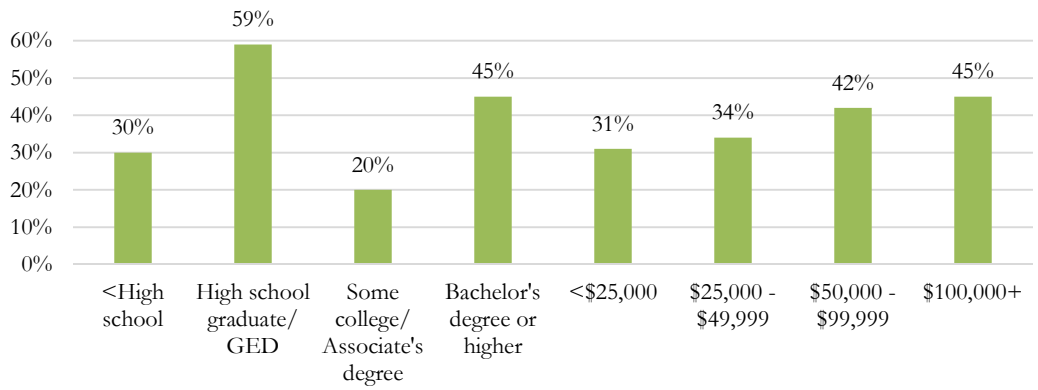


Figure 189. *Education and Income of Individuals with a BMI Ranging from 18.5 to 24.9 (Normal)*



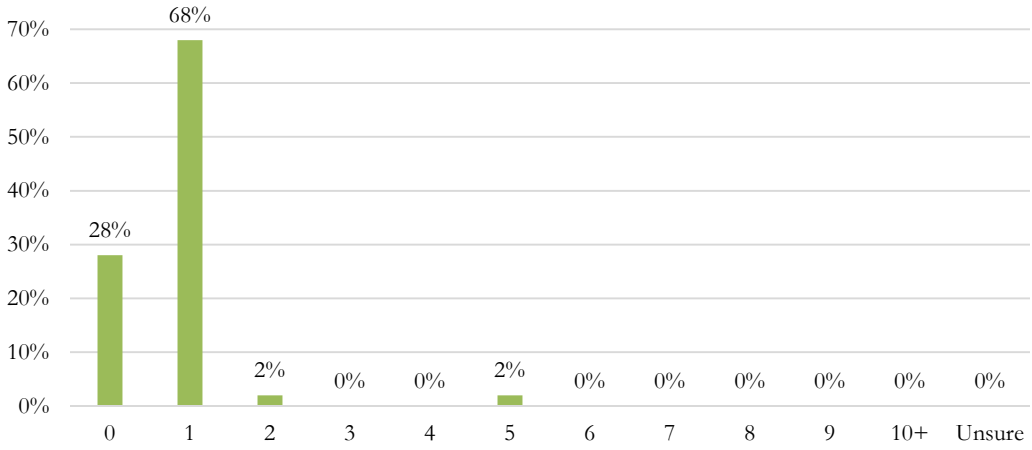
Nearly half of Holmes County residents (43%) had a BMI that is considered "Normal" (Figure 188). Males reported a normal BMI more so than females, and a normal BMI declined with advancing age (Figure 188). A normal BMI was highest among those with a high school education (59%), lowest among those with some college or an Associate's degree (20%), and increased with greater total annual household income (Figure 189).

Prescription Drug Abuse

Nearly all Holmes County residents (99%) indicated they had not abused prescription drugs in the past 30 days. Frequency of abuse among the 1% of respondents indicating prescription drug abuse in the past 30 days ranged from four to thirty days. Among those residents indicating prescription drug abuse in the past 30 days, the specific prescription drug type was not identified, but all prescriptions were acquired by way of a physician.

Sexual Activity

Figure 190. *Number of Sexual Partners in the Past 12 Months*



With respect to total sexual partners in the past 12 months, the majority of Holmes County residents reported having one (68%) or zero (28%) sexual partners (Figure 190). Two percent of residents reported having two sexual partners in the past 12 months, and the remaining two percent of residents reported having five sexual partners in the past 12 months.

Figure 191. *Frequency of Sexual Activity Without the Use of a Condom in the Past 12 Months*

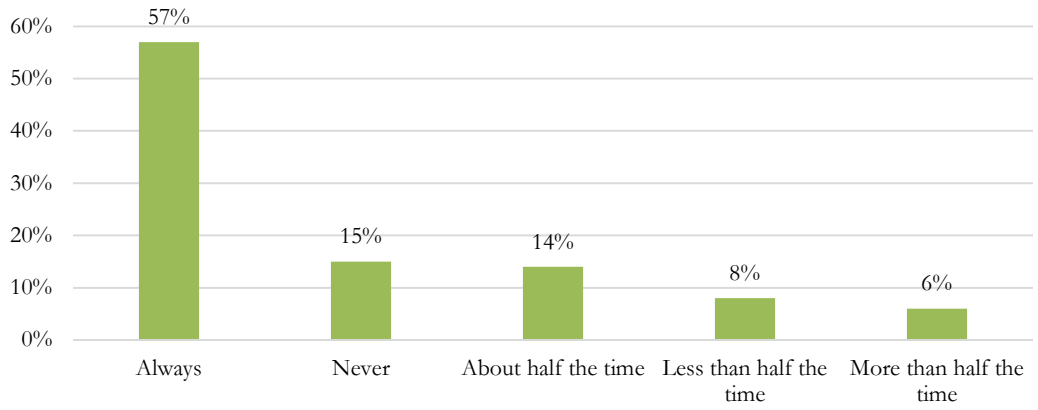
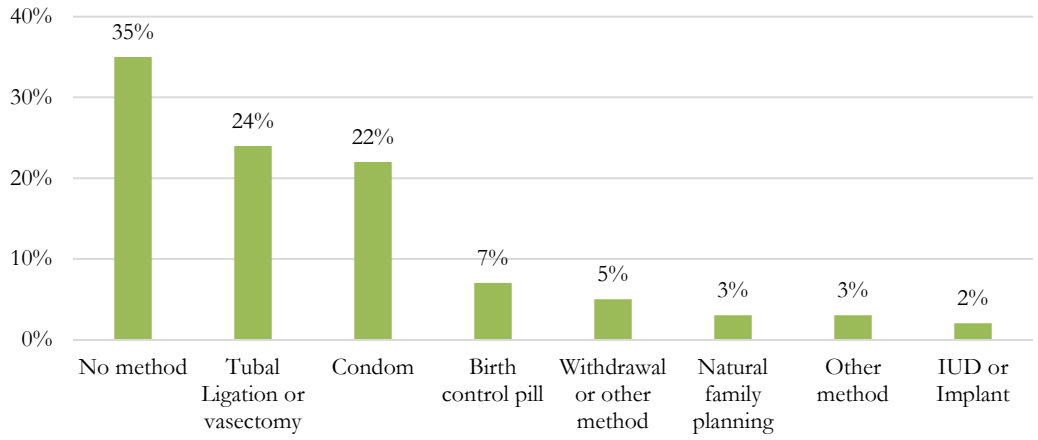


Figure 192. *Methods Used to Prevent Pregnancy*



More than half of Holmes County residents (57%) characterized sexual activity frequency in the past 12 months without a condom as "Always" (Figure 191). Less than one-quarter of residents (15%) indicated that they had not participated in sexual activity in the past 12 months without a condom, while 14% of residents used a condom "About half the time", 8% "Less than half the time", and 6% "More than half the time" (Figure 191). Methods used to prevent pregnancy included "Tubal Ligation or vasectomy" (24%), "Condom" (22%), "Birth control pill" (7%), "Withdrawal or other method" (5%), "Natural family planning" (3%), "Other method" (3%), and "IUD or implant" (2%); 35% of residents indicated "No method" (Figure 192).

Figure 193. *Composite, Sex, and Age of Individuals Always Having Sex Without a Condom During the Past 12 Months*

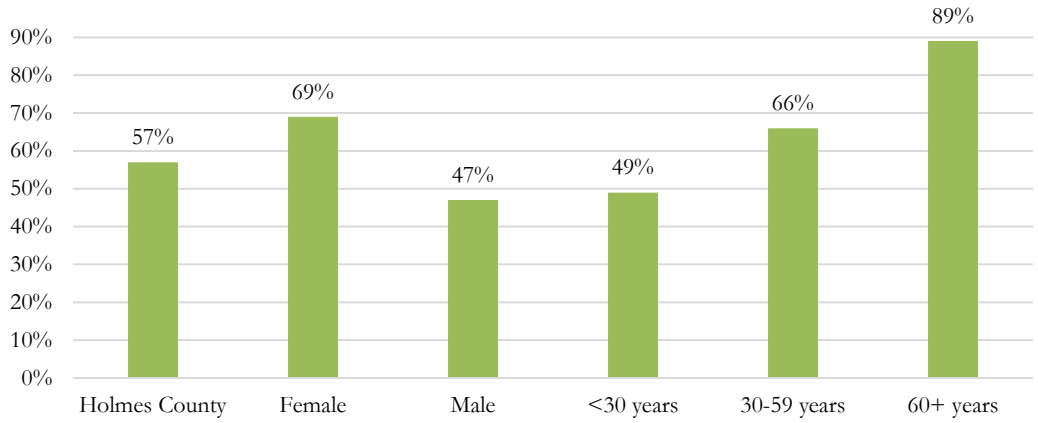
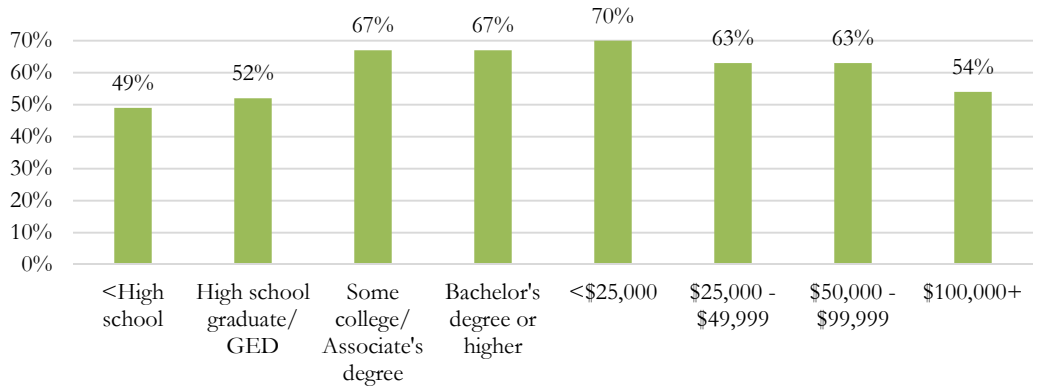


Figure 194. *Education and Income of Individuals Always Having Sex Without a Condom During the Past 12 Months*



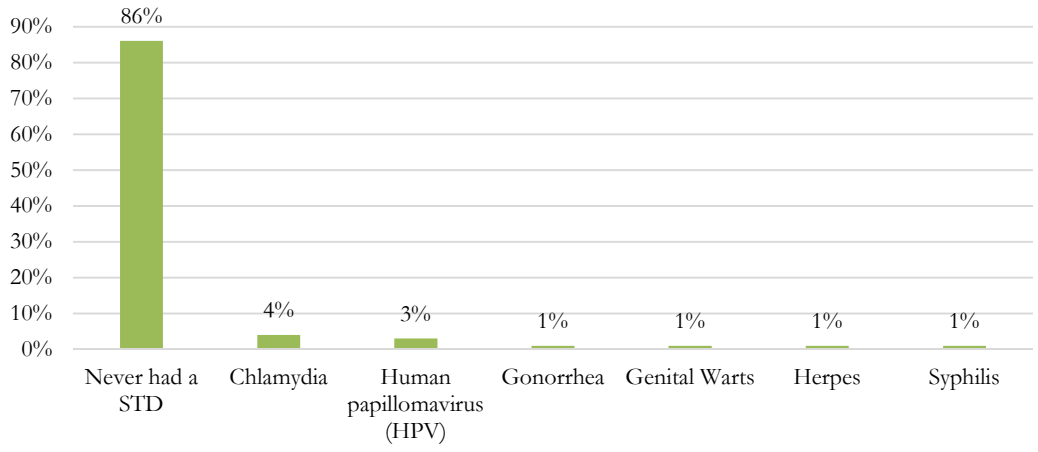
Holmes County residents who reported always having sex without a condom in the past 12 months was higher among females than males (Figure 193), increased with advancing age (Figure 193) and greater educational attainment (Figure 190), and decreased with greater total annual household income (Figure 194). Always having sex without a condom during the past 12 months was highest among those 60 years of age and older (Figure 193).

Table 38. *Main Reason for Not Using a Method to Prevent Pregnancy*

	(%)
"You or your partner had tubes tied, hysterectomy, or vasectomy"	28
"Other reasons"	25
"Don't think you or your partner could get pregnant (infertile or too old)"	20
"Don't care if you or your partner get pregnant"	10
"You or your partner want a pregnancy"	8
"Don't know / not sure"	5
"You or your partner just had a baby"	4
"Same sex partner"	1

Of the Holmes County residents who had not used a method to prevent pregnancy during the last time they had intercourse, nearly one-third (28%) indicated that they, or their partner, had a tubal ligation, hysterectomy, or vasectomy (Table 38). Residents also cited "Other reasons" (25%), and that they did not think them or their partner could get pregnant based on fertility or age (20%). Ten percent or less of residents indicated that they did not care if they or their partner got pregnant (10%), they wanted a pregnancy (8%), they or their partner just had a baby (4%), or that their partner was of the same sex (1%); 5% didn't know, or were unsure. Eighty-six percent of Holmes County residents had never been diagnosed with a sexually transmitted disease (Figure 195).

Figure 195. *Lifetime Diagnosis of an STD*



Tobacco and E-cigarette Use

Figure 196. *Composite, Sex, and Age of Individuals Who Have Smoked at Least 100 Cigarettes in Their Lifetime*

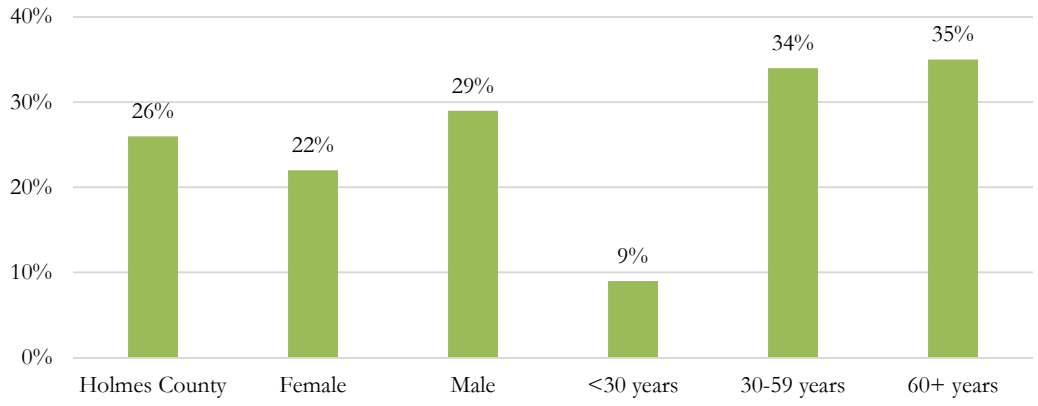
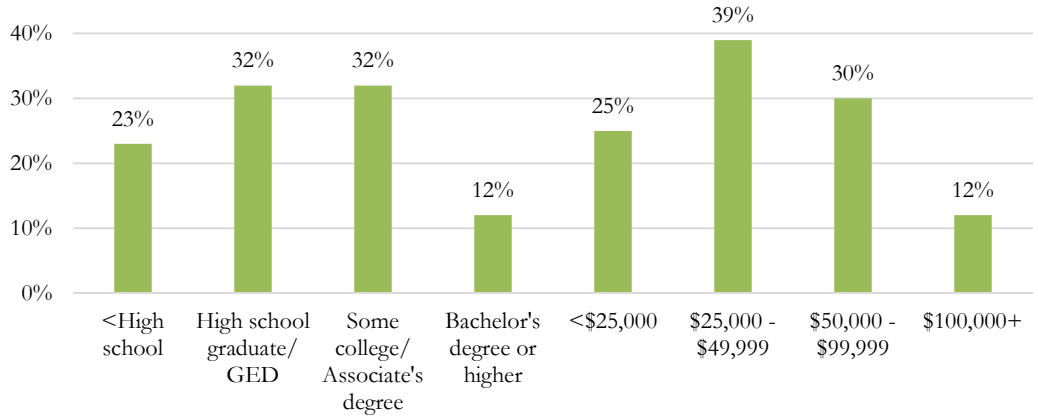


Figure 197. *Education and Income of Individuals Who Have Smoked at Least 100 Cigarettes in Their Lifetime*



Approximately one-quarter (26%) of Holmes County residents reported having smoked at least 100 cigarettes in their lifetime (Figure 196). Having smoked at least 100 cigarettes was highest among those with a total annual household income of $25,000 to $49,999 (Figure 197), and lowest among individuals less than 30 years of age (Figure 196). Having smoked at least 100 cigarettes increased with advancing age (Figure 196), and decreased among those with greater than an

Associate's degree, or reporting a total annual household income of $50,000 or more, respectively (Figure 197).

Figure 198. *Composite, Sex, and Age of Individuals Who Currently Smoke Everyday or Some Days*

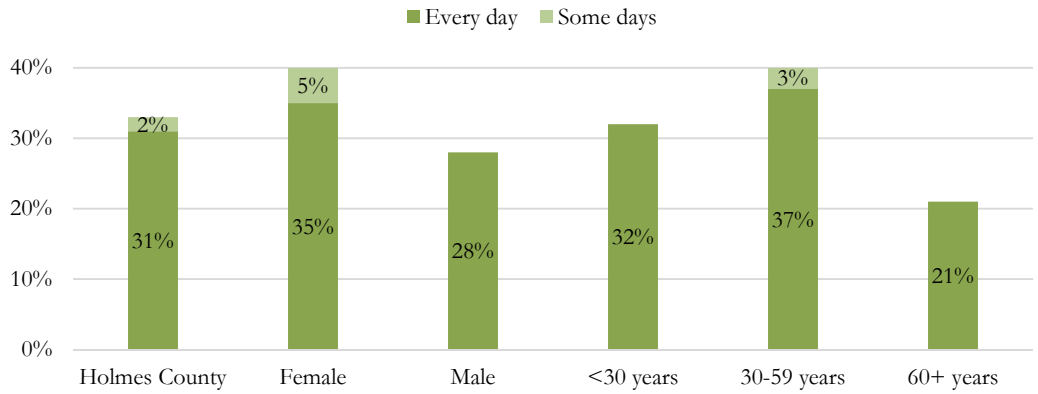
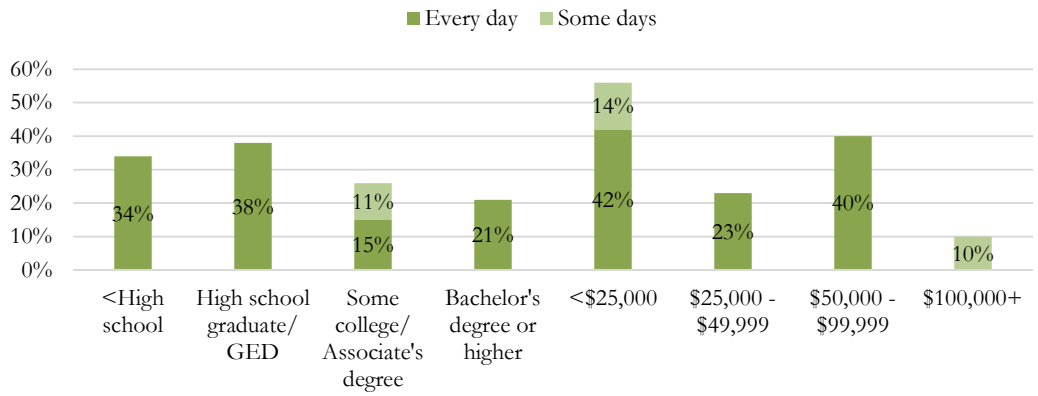


Figure 199. *Education and Income of Individuals Who Currently Smoke Everyday or Some Days*



More than one-third of Holmes County residents (31%) of Holmes County residents currently smoke every day, and 2% smoke some days (Figure 198). Smoking everyday was highest among those with a total annual household income less than $25,000, and lowest among those with a total annual household income of $100,000 or more (0%; Figure 199). Smoking every day or some days was higher among females than males, and those 30 to 59 years of age, as compared to the

other included age groups (Figure 198), and generally declined with greater educational attainment (Figure 199).

Figure 200. *Composite, Sex, and Age of Current Smokers That Have Tried to Quit in the Past 12 Months*

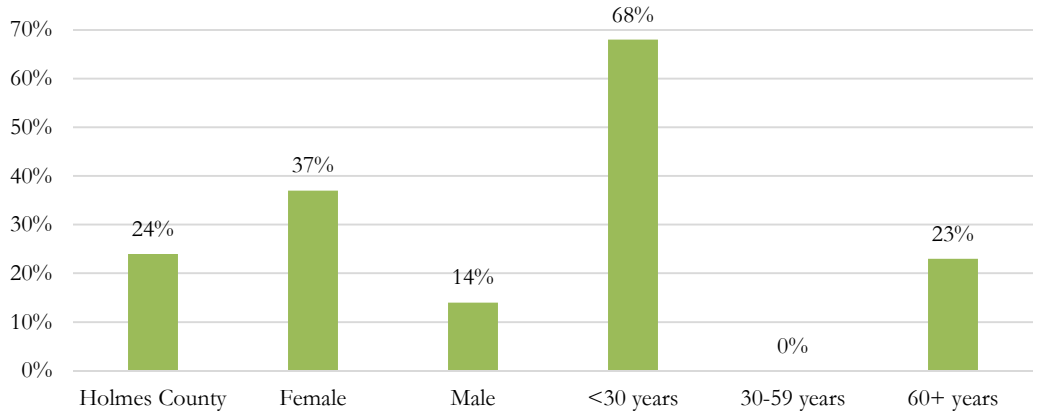
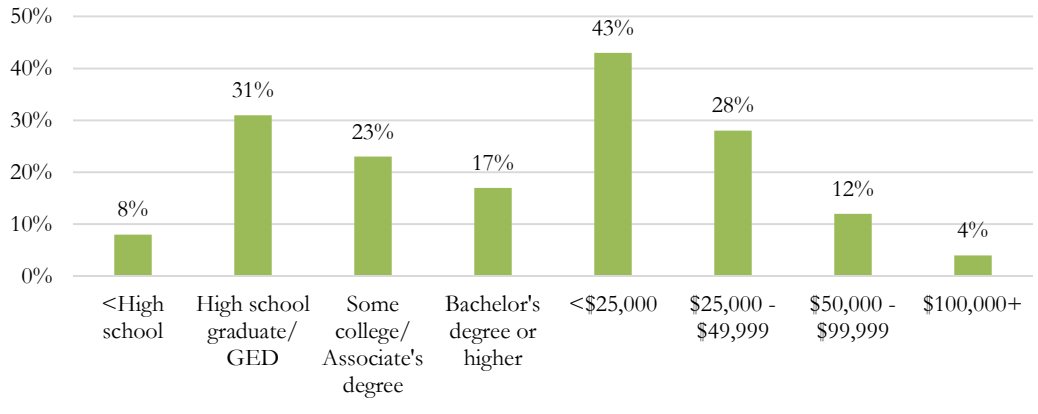


Figure 201. *Education and Income of Current Smokers That Have Tried to Quit in the Past 12 Months*



Less than one-quarter (24%) of Holmes County residents tried to quit smoking in the past 12 months (Figure 200). Trying to quit smoking in the past 12 months was considerably higher among females as compared to males, and highest among those under 30 years of age (Figure 200). Trying to quit smoking in the past 12 months declined among those with greater than a high school education, and with greater total annual household income (Figure 201).

Figure 202. *Composite, Sex, and Age of Individuals Who Currently Use Smokeless Tobacco*

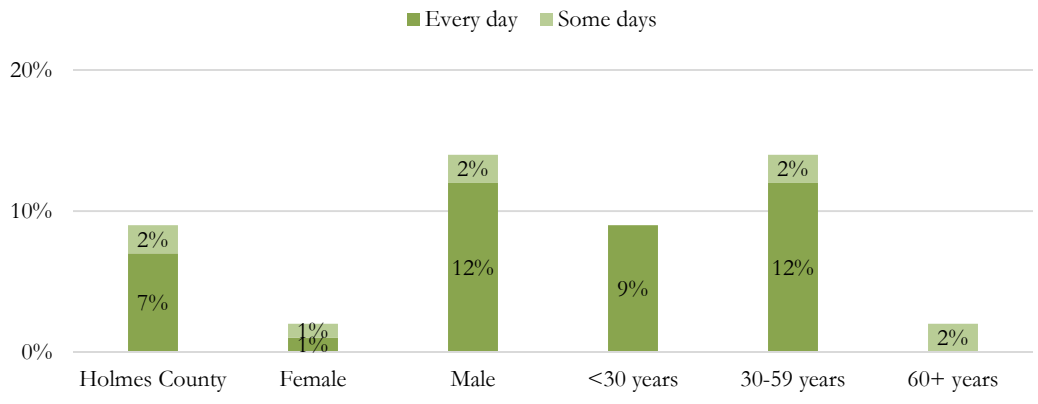
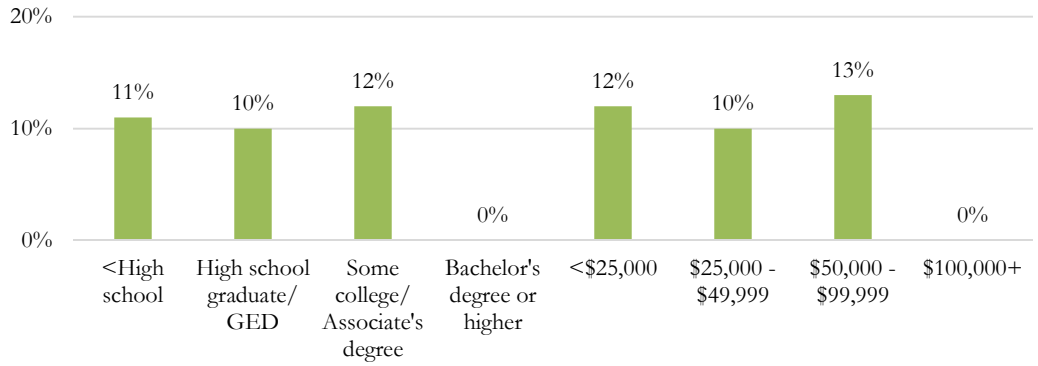


Figure 203. *Education and Income of Individuals Who Currently Use Smokeless Tobacco*

Less than 10% of Holmes County residents reported currently using smokeless tobacco (Figure 202). Current smokeless tobacco use was greater among males than females, and higher among those 30 to 59 years of age, as compared to individuals less than 30 years of age or 60 years of age and older (Figure 202). With respect to education, smokeless tobacco use was lowest among those with a Bachelor's degree or higher, and higher among those with a total annual household income of $50,000 to $99,999, as compared to those less than $50,000, and $100,000 or greater (Figure 203).

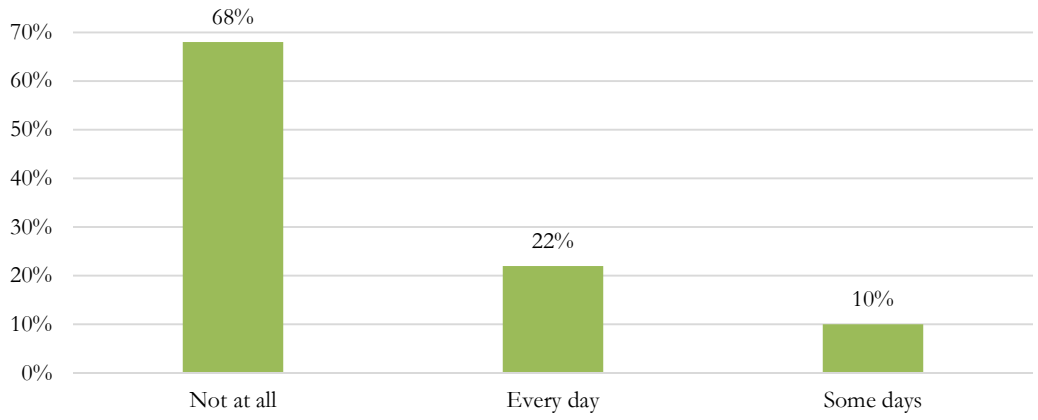
Figure 204. *Composite, Sex, and Age of Individuals Who Have Used E-cigarettes or an Electronic Vaping Product*

Figure 205. *Education and Income of Individuals Who Have Used E-cigarettes or an Electronic Vaping Product*



Less than 10% of Holmes County residents had ever used an e-cigarette or electronic vaping product (Figure 204). Females had used an e-cigarette or electronic vaping product more than males, and e-cigarette and electronic vaping product use declined with advancing age (Figure 204). E-cigarette and electronic vaping was highest among those reporting a total annual household income of $50,000 to $99,999, and lowest among those with a Bachelor's degree or higher, and/or reporting a total annual household income of $100,000 or greater (Figure 205).

Figure 206. *Frequency of E-cigarette or Electronic Vaping Product Use Among those Who Have Ever Tried Them*



Of those Holmes County residents who had ever tried an e-cigarette or electronic vaping product, less than one-quarter (22%) currently used these products every day, while 10% indicated using an e-cigarette or electronic vaping product on some days (Figure 206).

3.2.7 Mental Health

Adverse Childhood Events

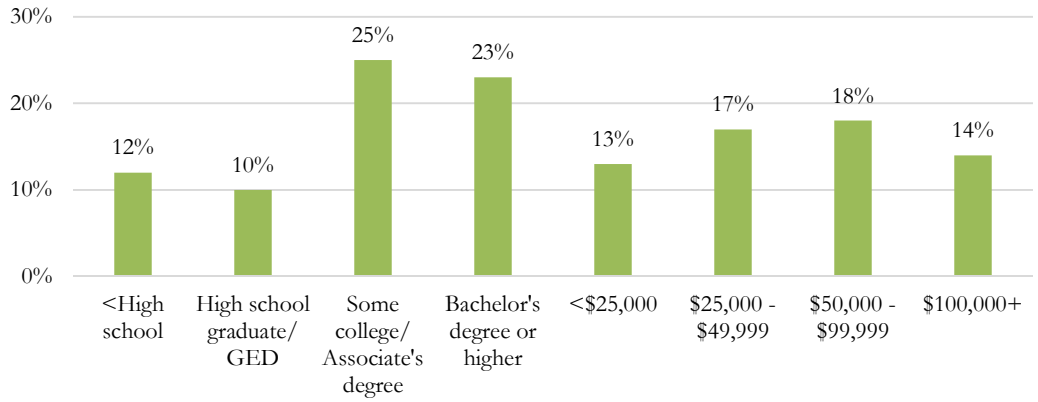
Less than 20% of Holmes County residents identified any one adverse childhood event that occurred to them prior to 18 years of age (Table 39). Sixteen percent of residents indicated that they had lived with someone who was depressed, mentally ill, or suicidal, and ten percent or more had a parent or adult that swore, insulted, or put them down (14%), their parents were separated or divorced (14%), or lived with a problem drinker or alcoholic (10%). Approximately two-thirds (65%) of Holmes County residents did not report any of the included adverse events prior to 18 years of age.

Table 39. *Adverse Childhood Experiences Occurring Prior to 18 Years of Age*

	(%)
"You lived with someone who was depressed, mentally ill, or suicidal"	16
"A parent or adult in your home swore at you, insulted you, or put you down"	14
"Your parents were separated or divorced"	14
"You lived with someone who was a problem drinker or alcoholic"	10
"Your parents or adults in your home slapped, hit, kicked, punched, or beat each	6
"Someone at least 5 years older than you or an adult touched you sexually"	5
"A parent or adult in your home hit, beat, kicked, or physically hurt you in any way (not including spanking)"	5
"You lived with someone who used illegal street drugs or who abused prescription medications"	4
"Someone at least 5 years older than you or an adult tried to make you touch them sexually"	4
"You lived with someone who served time or was sentenced to serve time in a prison, jail, or other correctional facility"	3
"Someone at least 5 years older than you or an adult forced you to have sex"	2
None of the above	65

Figure 207. *Composite, Sex, and Age of Individuals Who Lived with Someone Depressed, Mentally Ill, or Suicical Prior to 18 Years of Age*

Figure 208. *Education and Income of Individuals Who Lived with Someone Depressed, Mentally Ill, or Suicical Prior to 18 Years of Age*



Sixteen percent of Holmes County residents indicated living with someone who was depressed, mentally ill, or suicidal prior to 18 years of age (Figure 207). Living with someone depressed, mentally ill, or suicidal prior to 18 years of age was higher among females than males (Figure 207), declined with advancing age (Figure 207), was higher among those with some college or a Bachelor's degree, as compared to the other included education categories (Figure 208), and was relatively consistent across reported total annual household income categories (Figure 208).

Figure 209. *Composite, Sex, and Age of Individuals Whose Parents or Adults in the Home Swore at, Insulted, or Put Them Down Prior to 18 Years of Age*

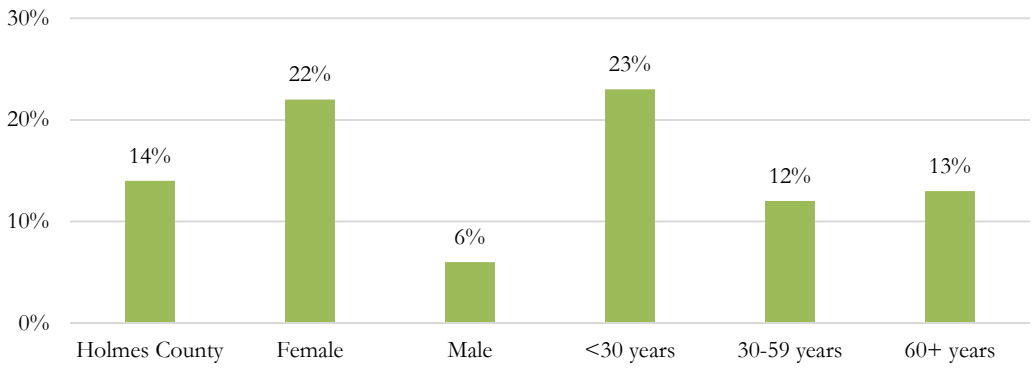
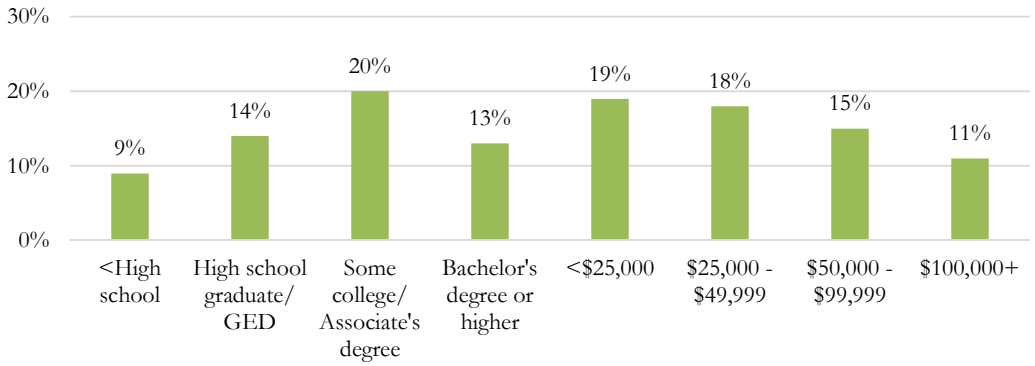


Figure 210. *Education and Income of Individuals Whose Parents or Adults in the Home Swore at, Insulted, or Put Them Down Prior to 18 Years of Age*



Less than one-fifth of Holmes County residents indicated that their parents or another adult in the home swore at, insulted, or put them down prior to 18 years of age (Figure 209). Living with a parent or adult who swore at, insulted, or put them down was higher among females than males (Figure 209), highest among individuals less than 30 years of age (Figure 209), was lowest among individuals with less than a high school education, with respect to education (Figure 210), and declined with greater total annual household income (Figure 210).

Figure 211. *Composite, Sex, and Age of Individuals Whose Parents were Separated or Divorced Prior to 18 Years of Age*

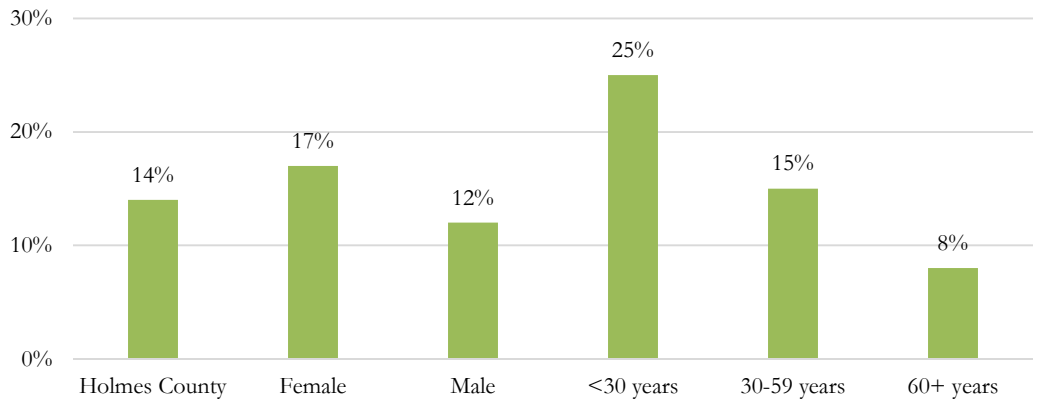
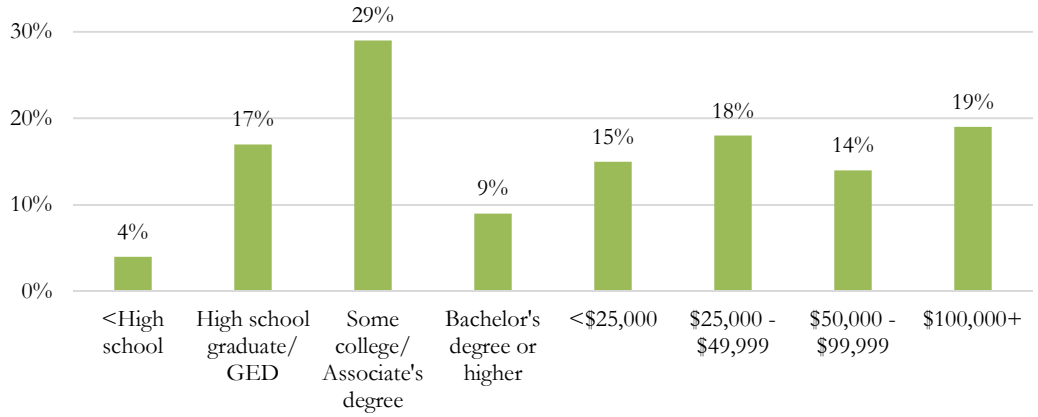


Figure 212. *Education and Income of Individuals Whose Parents were Separated or Divorced Prior to 18 Years of Age*



Fourteen percent of Holmes County resident's parents were separated or divorced prior to 18 years of age (Figure 211). Parents whom were divorced or separated prior to 18 years of age was higher among females than males (Figure 211), declined with advancing age (Figure 211), was highest among those with some college or an Associate's degree (Figure 212), and generally increased with greater total annual household income (Figure 212).

Figure 213. *Composite, Sex, and Age of Individuals who Lived with a Problem Drinker or Alcoholic Prior to 18 Years of Age*

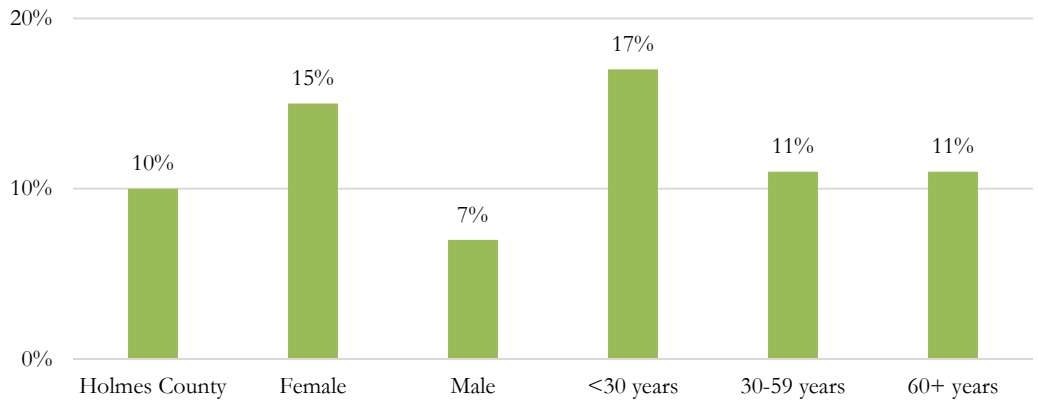
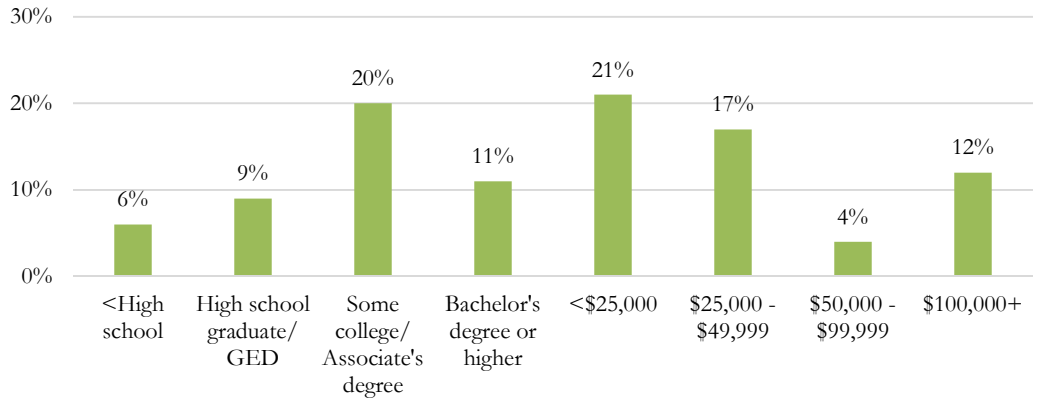


Figure 214. *Education and Income of Individuals who Lived with a Problem Drinker or Alcoholic Prior to 18 Years of Age*



Ten percent of Holmes County residents lived with a problem drinker or alcoholic prior to 18 years of age (Figure 213). Living with a problem drinker or alcoholic prior to 18 years of age was higher among females than males (Figure 213), higher among those less than 30 years of age, as compared to other included age groups (Figure 213), and generally increased with greater educational attainment (Figure 214), and was highest among individuals with a total annual household income less than $25,000 (Figure 214).

Diagnosis and Treatment

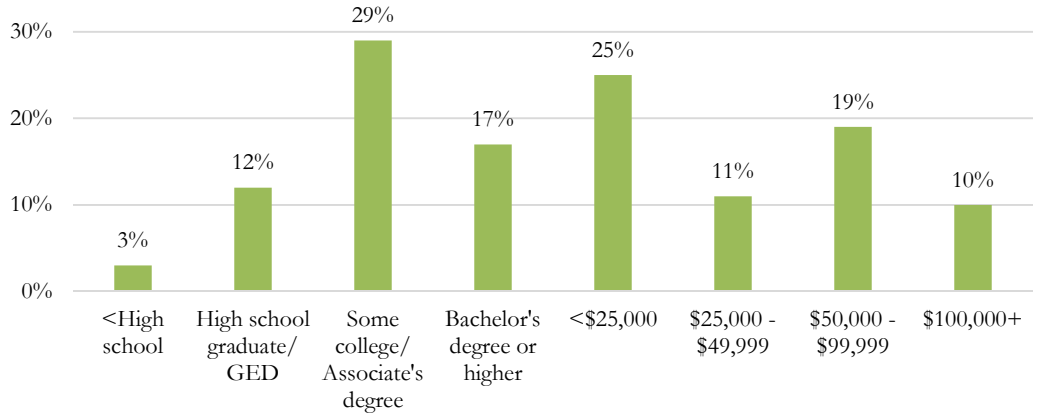
Table 40. *Personal Mental Health Diagnoses Among Residents*

	(%)
Depression	14
Anxiety Disorder	13
Attention Deficit Hyperactivity Disorder (ADHD)	4
Posttraumatic Stress Disorder (PTSD)	4
Bipolar Disorder	2
Eating Disorder (anorexia, bulimia, binge eating disorder)	2
Borderline Personality Disorder	1
Obsessive-Compulsive Disorder (OCD)	1
Psychosis/ Early Psychosis (hallucinations, delusions)	1
None of the above	74

Fourteen percent of Holmes County residents had ever been diagnosed with depression, and 13% with an anxiety disorder (Table 40). Less than 10% of residents had ever been diagnosed with ADHD (4%), PTSD (4%), bipolar disorder (2%), an eating disorder (2%), borderline personality disorder (1%), OCD (1%), and/or psychosis (1%); 74% of residents indicated that they had not been diagnosed with any of the aforementioned mental health diagnoses.

Figure 215. *Composite, Sex, and Age of Individuals Ever Diagnosed with Depression*

Figure 216. *Education and Income of Individuals Ever Diagnosed with Depression*



Less than one-fifth of Holmes County residents (14%) have ever been diagnosed with depression (Figure 215). Depression diagnosis was considerably higher among females as compared to males (Figure 215), declined with advancing age (Figure 215), was highest among those with some college or an Associate's degree (Figure 216) and, with respect to income, was lowest among individuals with a household income of $100,000 or more (Figure 216).

Figure 217. *Composite, Sex, and Age of Individuals Ever Diagnosed with an Anxiety Disorder*

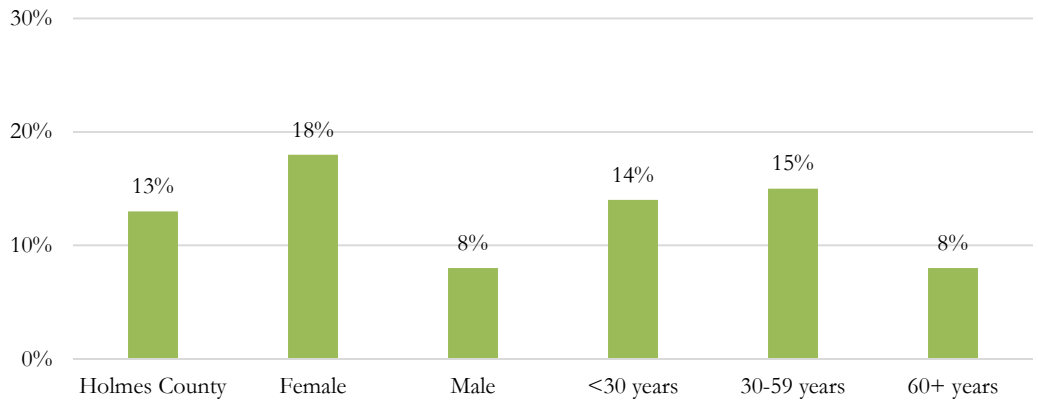
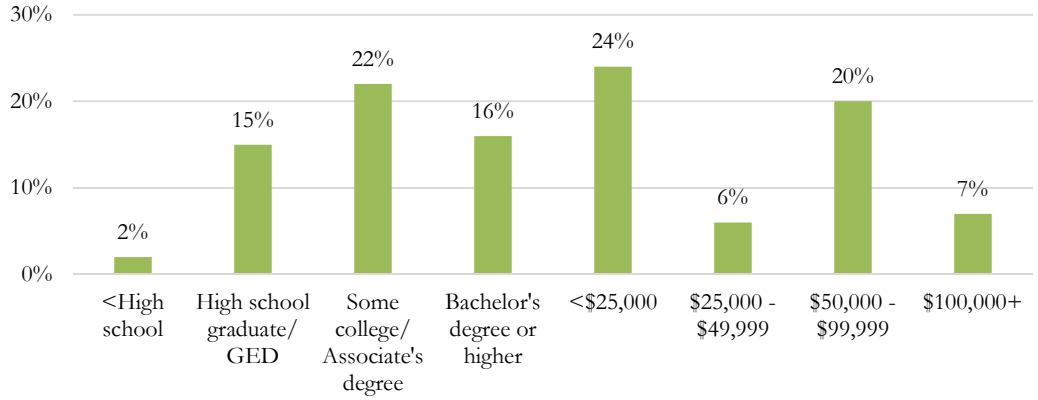


Figure 218. *Education and Income of Individuals Ever Diagnosed with an Anxiety Disorder*



Thirteen percent of Holmes County residents have ever been diagnosed with an anxiety disorder (Figure 217). Anxiety disorder diagnosis was higher among females than males (Figure 217), lowest among individuals with less than a high school education (Figure 218), and highest among those reporting a total annual household income less than $25,000 (Figure 218).

Table 41. *Mental Health Diagnoses Among Family Members of Residents*

	(%)
Depression	20
Anxiety Disorder	14
Attention Deficit Hyperactivity Disorder (ADHD)	14
Bipolar Disorder	10
Schizoaffective Disorder or Schizophrenia	4
Obsessive-Compulsive Disorder (OCD)	3
Posttraumatic Stress Disorder (PTSD)	3
Autism or Autism Spectrum Disorder (ASD)	3
Language or Speech Disorder	2
Borderline Personality Disorder	2
Eating Disorder (anorexia, bulimia, binge eating disorder)	2
Intellectual Disability	1
Psychosis/ Early Psychosis (hallucinations, delusions)	1
Dissociative Disorder (dissociative amnesia, depersonalization disorder, identity disorder)	1
None of the above	53
Don't know/ not sure	8

Twenty percent of Holmes County family members had ever been diagnosed with depression (Table 41). Other diagnoses include anxiety disorder (14%), ADHD (14%), and bipolar disorder (10%). Less than 10% of family members had ever been diagnosed with schizophrenia (4%), OCD (3%), PTSD (3%), ASD (3%), a language or speech disorder (2%), borderline personality disorder (2%), an eating disorder (2%), intellectual disability (1%), psychosis or early psychosis (1%), or dissociative disorder (1%). More than half of Holmes County residents (53%) did not have a family member who was diagnosed with any of the aforementioned mental health diagnoses.

Figure 219. *Composite, Sex, and Age of Individuals with a Family Member Diagnosed with Depression*

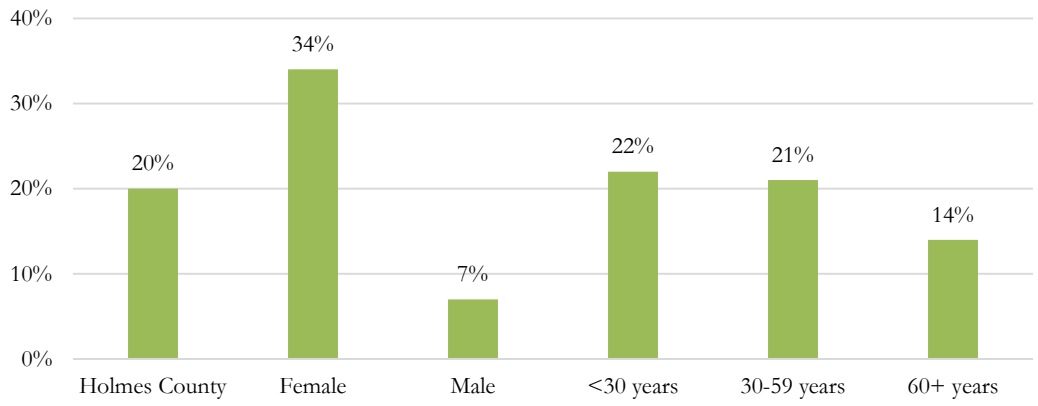
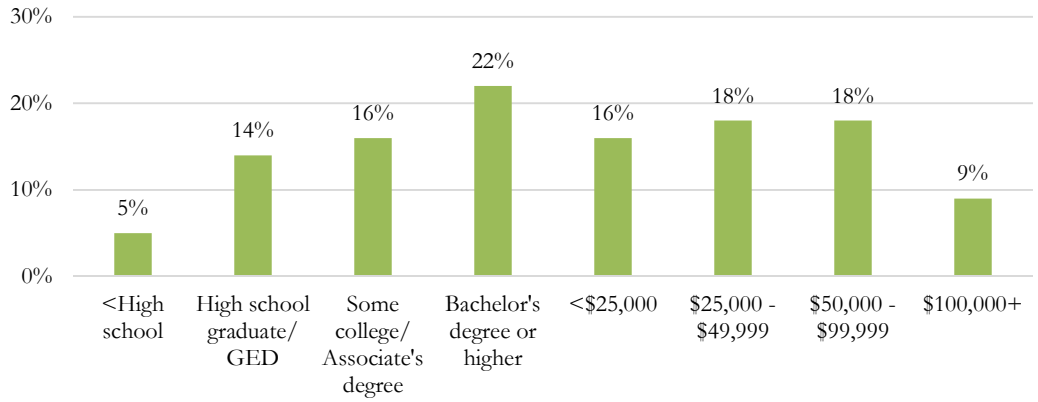


Figure 220. *Education and Income of Individuals with a Family Member Diagnosed with Depression*

One-fifth of Holmes County residents (20%) had a family member who had ever been diagnosed with depression (Figure 219). Having a family member diagnosed with depression was considerably higher among females than males (Figure 219), declined with advancing age (Figure 219), increased with greater educational attainment (Figure 220), and declined with greater total annual household income (Figure 220).

Figure 221. *Composite, Sex, and Age of Individuals with a Family Member Diagnosed with Anxiety Disorder*

Figure 222. *Education and Income of Individuals with a Family Member Diagnosed with Anxiety Disorder*



Fourteen percent of Holmes County residents reported having a family member who had been ever diagnosed with anxiety disorder (Figure 221). Having a family member who had been diagnosed with anxiety disorder was higher among females than males (Figure 221), declined with advancing age (Figure 221), increased with greater educational attainment (Figure 222) and, with respect to income, was lowest among those with a total annual household income of $100,000 or greater (Figure 222).

Figure 223. *Composite, Sex, and Age of Individuals with a Family Member Diagnosed with ADHD*

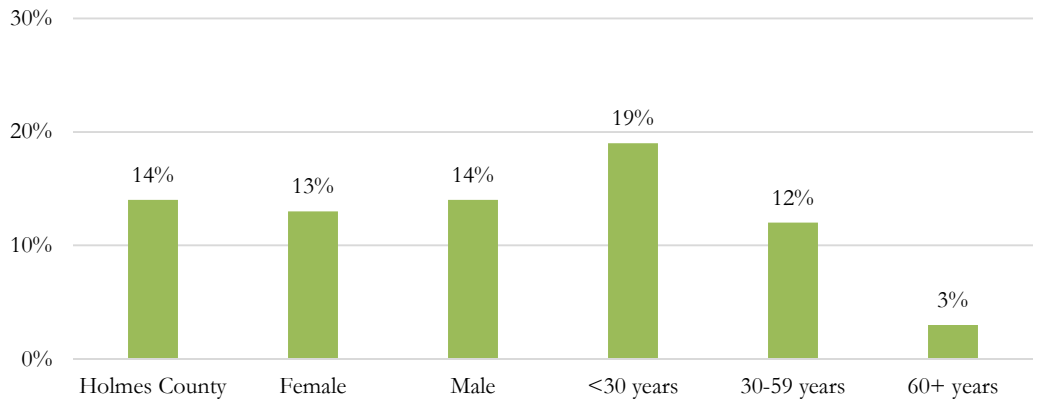
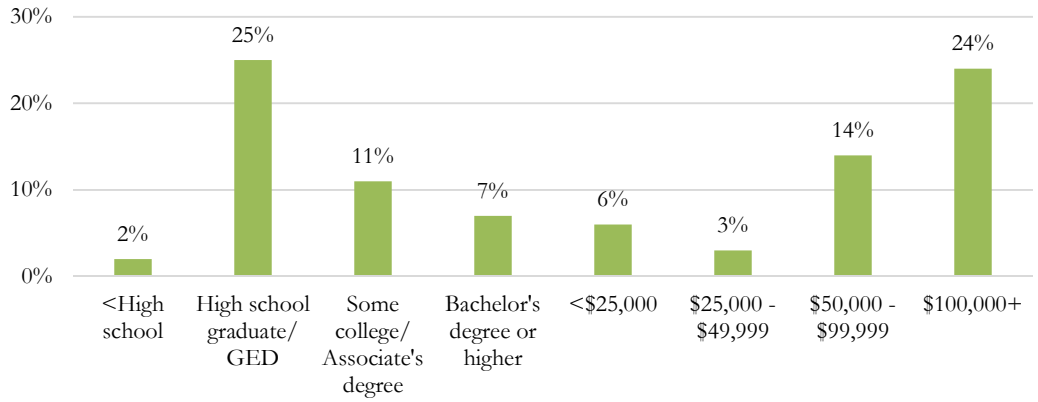


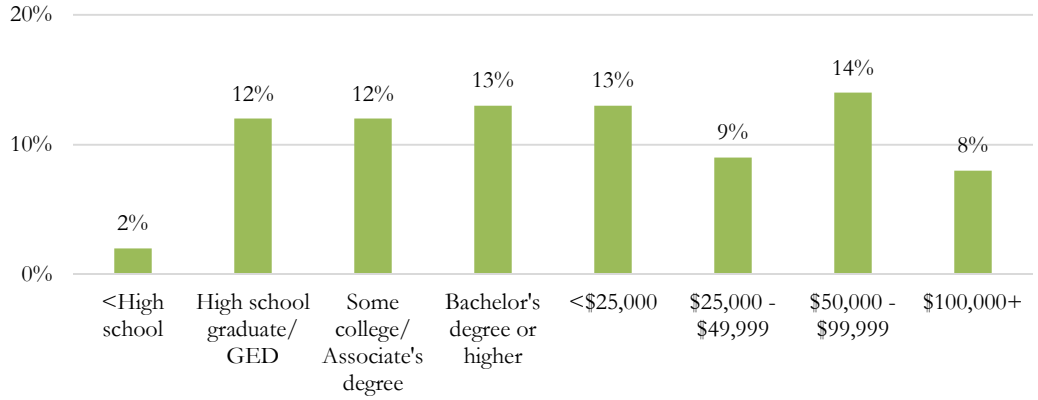
Figure 224. *Education and Income of Individuals with Family History of ADHD*



Fourteen percent of Holmes County residents reported having a family member who had ever been diagnosed with ADHD (Figure 223). Having a family member who had been diagnosed with ADHD was largely consistent with respect to sex (Figure 223), declined with advancing age (Figure 223), was lowest among those with less than a high school education (Figure 224), and generally increased with greater total annual household income (Figure 224).

Figure 225. *Composite, Sex, and Age of Individuals with a Family Member Diagnosed with Bipolar Disorder*

Figure 226. *Education and Income of Individuals with a Family Member Diagnosed with Bipolar Disorder*



Ten percent of Holmes County residents had a family member who had ever diagnosed with bipolar disorder (Figure 225). Having a family member who had ever been diagnosed with bipolar disorder was higher among females than males (Figure 225), was highest among individuals less than 30 years of age, with respect to age (Figure 225), was lowest among those with less than a high school education (Figure 226), and was lowest among those with a total annual household income of $100,000 or greater, with respect to household income (Figure 226).

Table 42. *Reasons for Not Receiving Mental Health Treatment or Counseling*

	(%)
Didn't need mental health treatment	38
Thought they could handle problem without treatment	8
Didn't think they needed treatment at the time	7
Didn't think treatment would help	5
Didn't know where to get services	5
Couldn't afford the cost	4
Didn't have time (because of job, childcare, other commitments)	3
Didn't want others to find out they needed treatment	3
Insurance does not pay enough for mental health treatment or counseling	3
Concerned information given to counselor might not be kept confidential	2
Concerned they might be committed to a psychiatric hospital or have to take medicine	2
Insurance does not cover any mental health treatment or counseling	1
Concerned getting mental health treatment or counseling might cause neighbors or community to have negative opinion of them	1
Had no transportation, treatment was too far away, or hours were not convenient	1
Concerned getting mental health treatment or counseling might have negative effect on their job	1
None of the above	38
Don't know/ not sure	2

More than one-third of Holmes County residents (38%) indicated that they did not need mental health treatment, and 38% cited none of the included reasons above (Table 42).

Figure 227. *Composite, Sex, and Age of Individuals Who Did Not Need Mental Health Treatment*

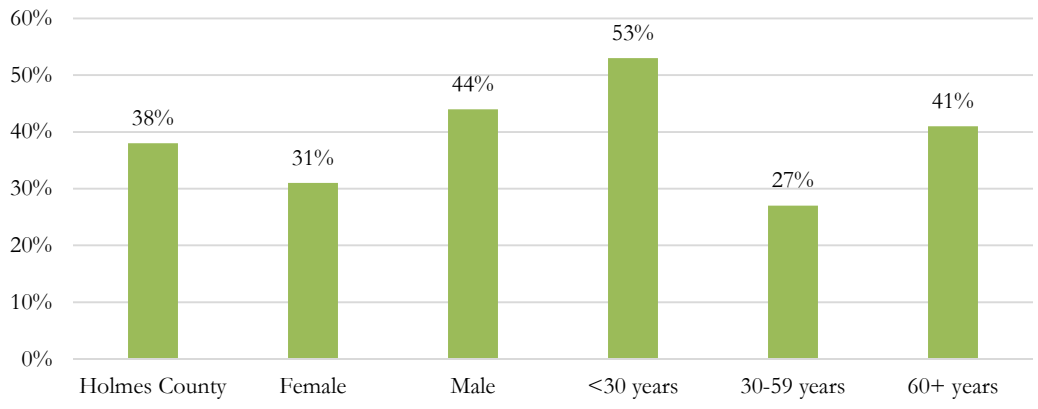
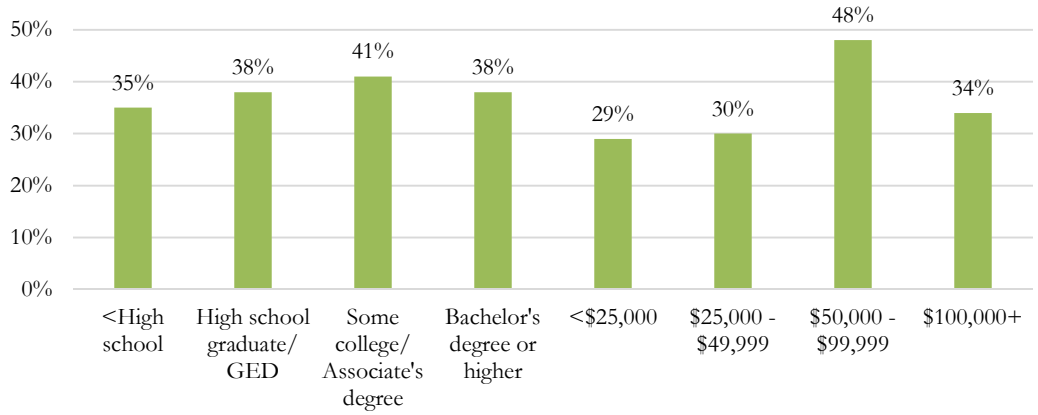


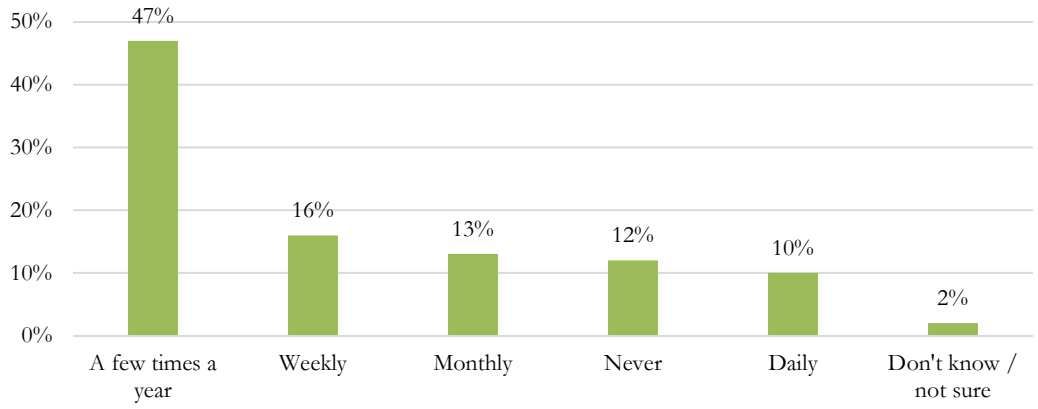
Figure 228. *Education and Income of Individuals Who Did Not Need Mental Health Treatment*



More than one-third of Holmes County residents (38%) indicated that they did not need mental health treatment (Figure 227). Not needed mental health treatment was higher among males than females (Figure 227), highest among individuals less than 30 years of age, with respect to age (Figure 227), varied only slightly across education categories, and was higher among individuals reporting a total annual household income of $50,000 to $99,999, as compared to other included household income levels (Figure 228).

Stress, Anxiety, and Depression

Figure 229. *Frequency of Individuals Feeling Worried, Nervous, or Anxious*



Nearly half of Holmes County residents (47%) indicated feeling worried, nervous, or anxious a few times per year (Figure 229). Less than 20% of residents felt worried, nervous, or anxious weekly (16%), monthly (13%), never (12%), or daily (10%); 2% of residents indicated "Don't know / not sure".

Figure 230. *Composite, Sex, and Age of Individuals who Feel Worried, Nervous, or Anxious a Few Times per Year*

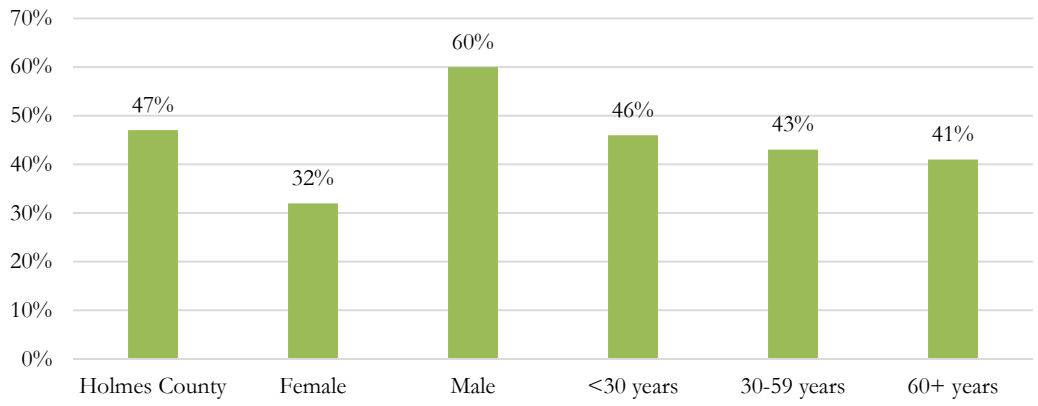
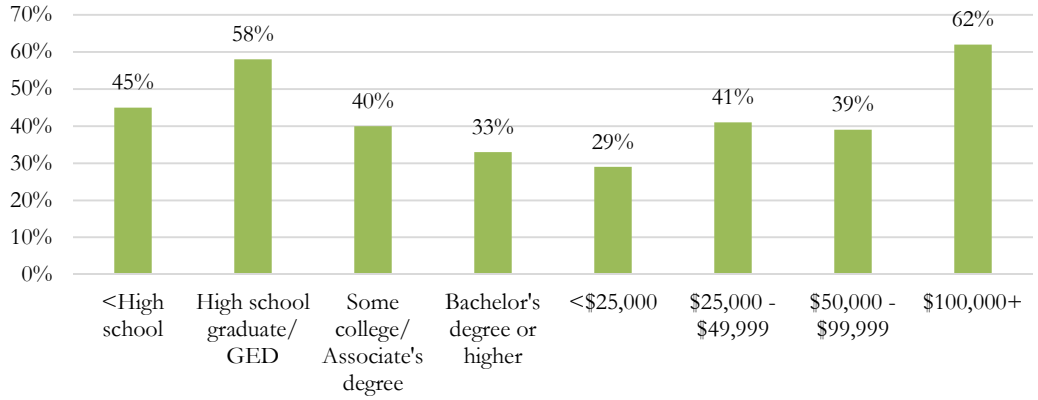


Figure 231. *Education and Income of Individuals who Feel Worried, Nervous, or Anxious a Few Times per Year*



Less than half of Holmes County residents (47%) felt worried, nervous, or anxious a few times per year (Figure 230). Feeling worried, nervous, or anxious a few times per year was considerably higher among males as compared to females (Figure 230), declined with advancing age (Figure 230), was highest among high school graduates, with respect to education (Figure 231), and increased with greater total annual household income (Figure 231).

Figure 232. *Composite, Sex, and Age of Individuals who Feel Worried, Nervous, or Anxious Weekly*

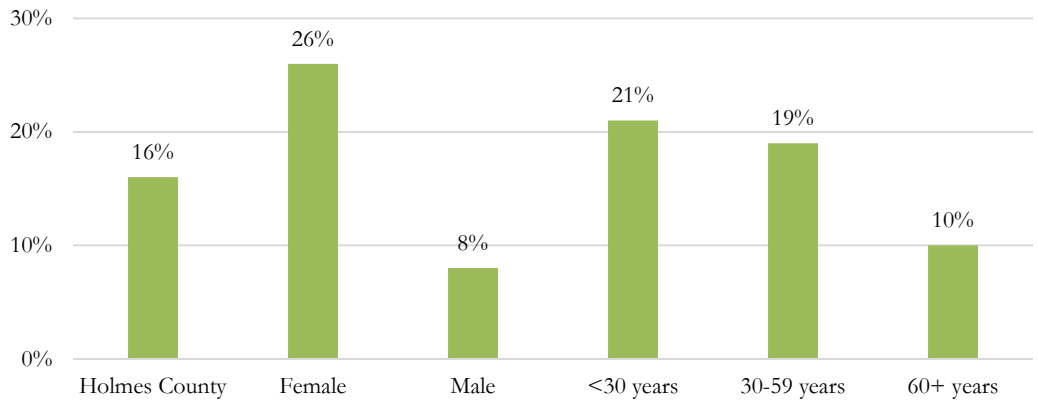
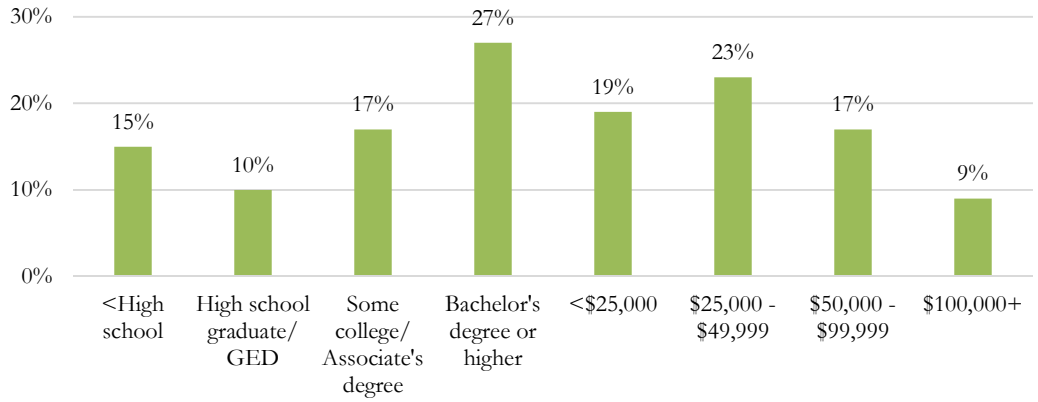


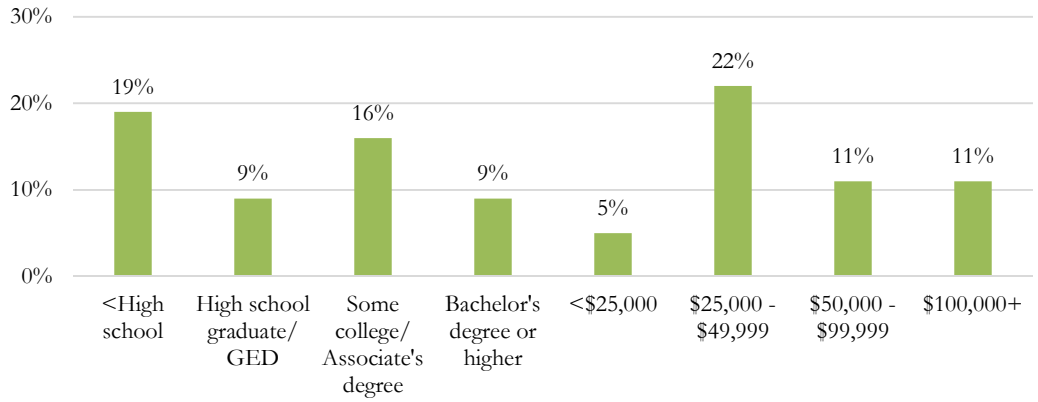
Figure 233. *Education and Income of Individuals who Feel Worried, Nervous, or Anxious Weekly*



Sixteen percent of Holmes County residents felt worried, nervous, or anxious weekly (Figure 232). Feeling worried, nervous, or anxious weekly was higher among females as compared to males (Figure 232), declined with advancing age (Figure 232), was highest among those with a Bachelor's degree or higher (Figure 233), and was lowest among those with a total annual household income of $100,000 or greater, with respect to household income (Figure 233).

Figure 234. *Composite, Sex, and Age of Individuals who Feel Worried, Nervous, or Anxious Monthly*

Figure 235. *Education and Income of Individuals who Feel Worried, Nervous, or Anxious Monthly*



Less than one-fifth of Holmes County residents (13%) felt worried, nervous, or anxious monthly (Figure 234). Feeling worried, nervous, or anxious monthly was higher among females than males, increased with advancing age (Figure 234), and was highest among individuals with less than a high school education and a total annual household income of $25,000 to $49,999, with respect to education and household income, respectively (Figure 235).

Figure 236. *Composite, Sex, and Age of Individuals who Never Feel Worried, Nervous, or Anxious*

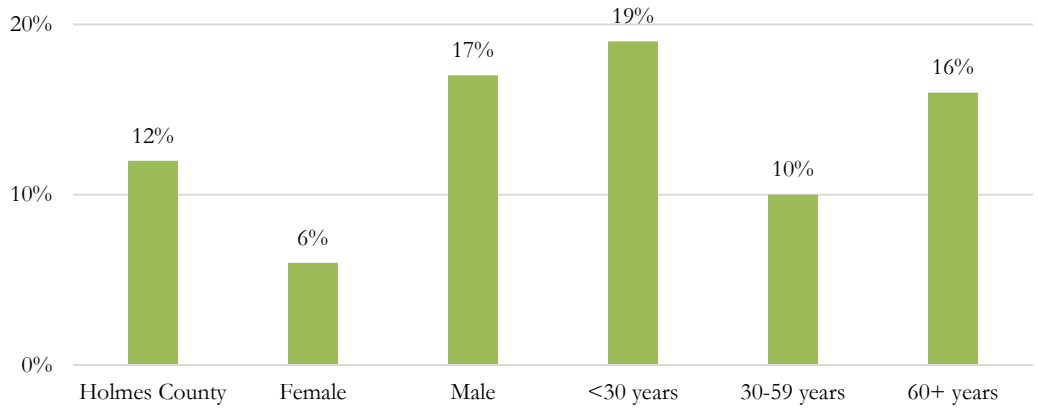
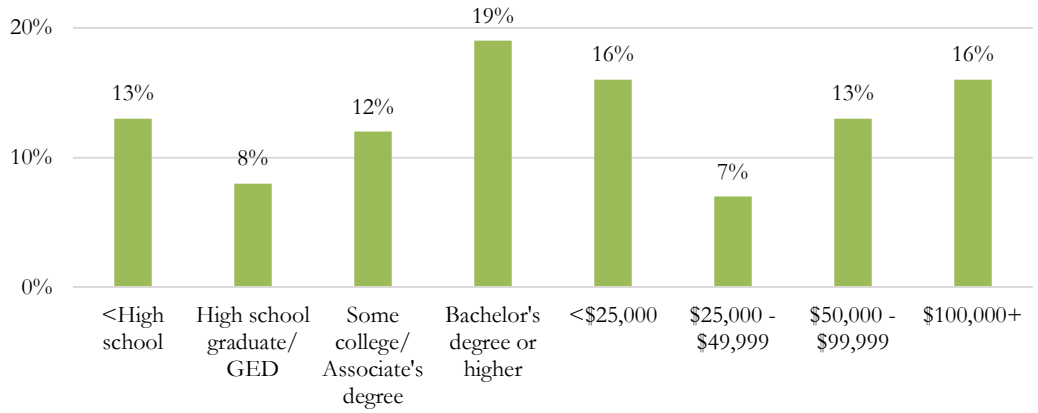


Figure 237. *Education and Income of Individuals who Never Feel Worried, Nervous, or Anxious*



Twelve percent of Holmes County residents never felt worried, nervous, or anxious (Figure 236). Never feeling worried, nervous, or anxious was higher among males, as compared to females (Figure 236), highest among individuals less than 30 years of age (Figure 236) and with a Bachelor's degree or higher (Figure 237), with respect to age and education, and lowest among those with a total annual household income of $25,000 to $49,999 (Figure 237).

Figure 238. *Composite, Sex, and Age of Individuals who Feel Worried, Nervous, or Anxious Daily*

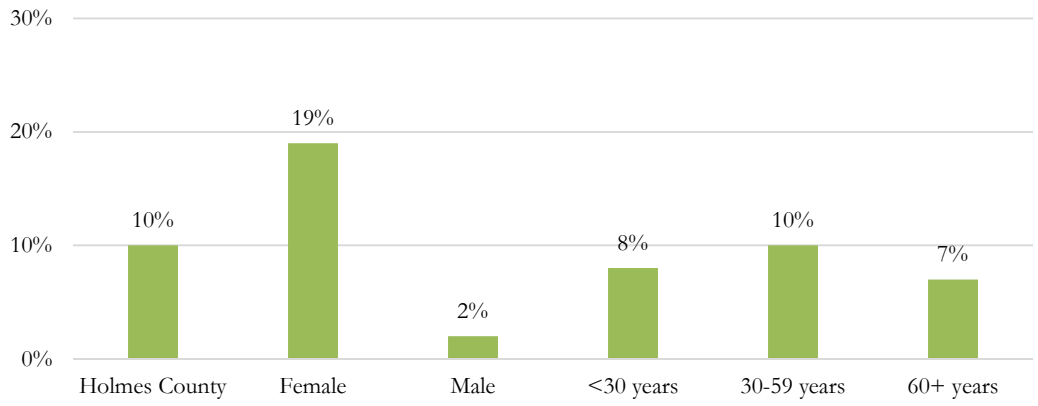
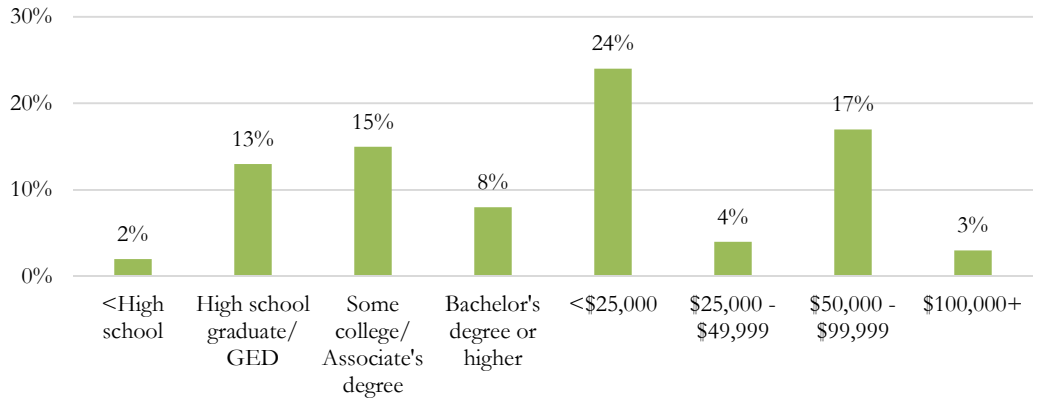


Figure 239. *Education and Income of Individuals who Feel Worried, Nervous, or Anxious Daily*



Ten percent of Holmes County residents felt worried, nervous, or anxious daily (Figure 238). Feeling worried, nervous, or anxious daily was considerably higher among females as compared to males (Figure 238), was generally consistent across the included age categories (Figure 238), lowest among males (Figure 238) and those with less than a high school education (Figure 239), and highest among individuals reporting a total annual household income less than $25,000 (Figure 239).

Figure 240. *Composite, Sex, and Age of Individuals who Experienced a Period of Time Lasting Several Days or Longer When They Lost Interest in Work, Hobbies, or Personal Relationships*

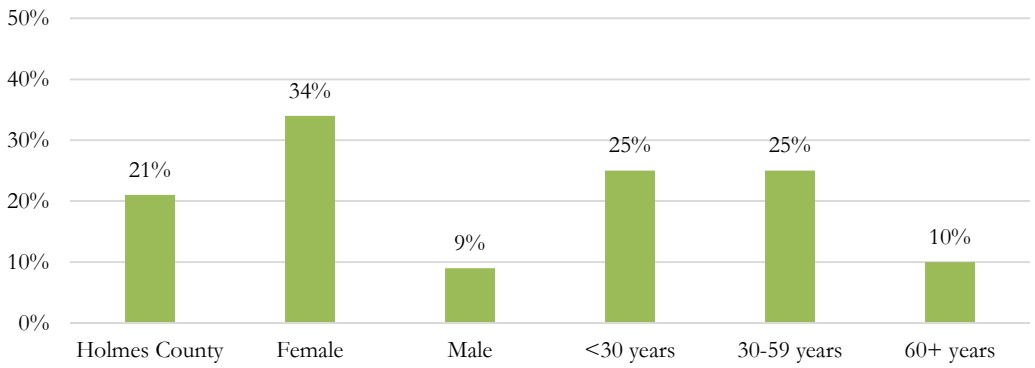
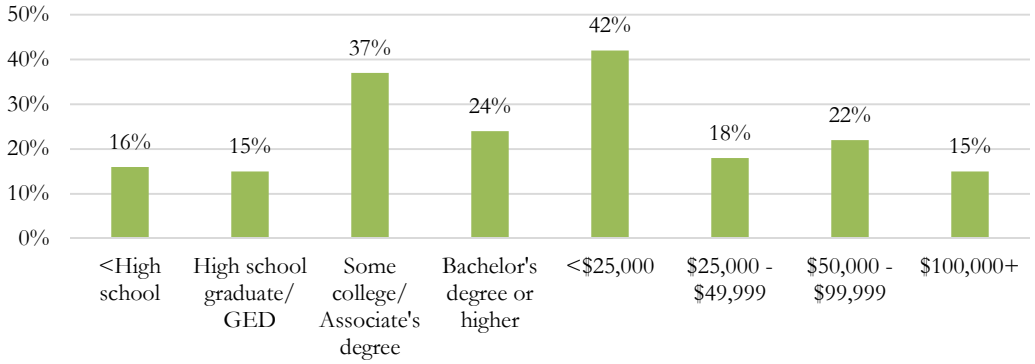


Figure 241. *Education and Income of Individuals who Experienced a Period of Time Lasting Several Days or Longer When They Lost Interest in Work, Hobbies, or Personal Relationships*



Approximately one-fifth of Holmes County residents (21%) experienced a period lasting several days or longer when they lost interest in work, hobbies, or personal relationships (Figure 240). Losing interest in work, hobbies, or personal relationships for several days or longer was considerably higher among females than males (Figure 240), declined with advancing age (Figure 240), was lowest among high school graduates, with respect to education (Figure 241), and was highest among those reporting a total annual household income less than $25,000 (Figure 241).

Figure 242. *Composite, Sex, and Age of Individuals who Experienced a Period of Time Lasting Two Weeks or Longer When They Lost Interest in Work, Hobbies, or Personal Relationships*

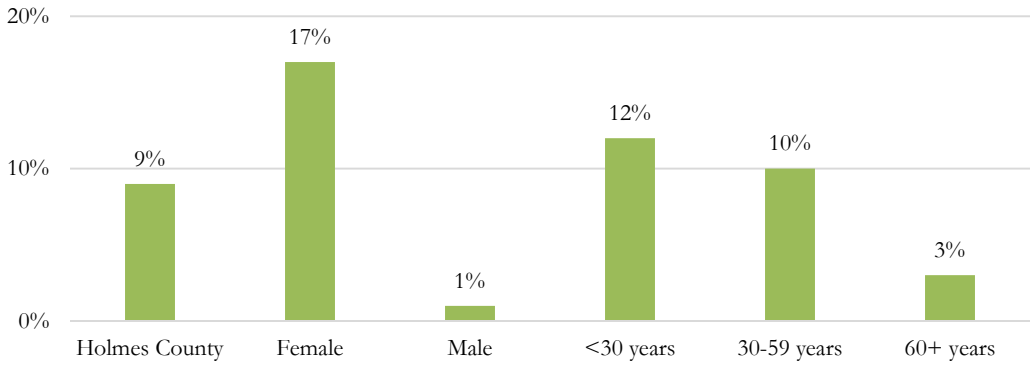
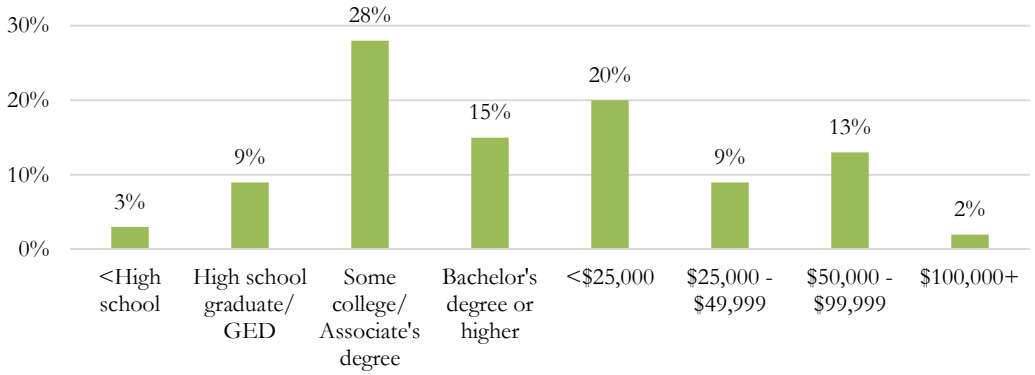


Figure 243. *Education and Income of Individuals who Experienced a Period of Time Lasting Two Weeks or Longer When They Lost Interest in Work, Hobbies, or Personal Relationships*



Nine percent of Holmes County residents experienced a period of time lasting two weeks or longer when they lost interest in work, hobbies, or personal relationships (Figure 242). Losing interest in work, hobbies, or personal relationships for two weeks or longer was nearly entirely among females (Figure 242), declined with advancing age (Figure 242), highest among individuals with some college or an Associate's degree (Figure 243), and lowest among those reporting a total annual household income of $100,00 or greater, with respect to household income (Figure 243).

Table 43. *Stressful Events During the Past 12 Months*

	(%)
Concerns about the future	24
Major social changes	21
Increased working hours	18
Quarrel with spouse/significant other	17
Low income	15
Death of a close family member	14
Major disease of family member leading to hospitalization	13
Loneliness	13
Mild illness	13
Failure in achieving life goals	12
Getting into debt	12
Concern about addiction of family member	10
Concern about job future	9
Social discrimination	8
Participation in major educational examinations	7
Major changes in sleeping or eating habits	7
Quarrels with colleagues/boss	7
Dealing with customers	7
Job layoff	6
Social insecurity	6
Major financial problems	5
Death of a parent, spouse, or sibling	5
Financial inflation	5
Pregnancy	4
Not having an intimate friend	4
Pregnancy	4
Air pollution/traffic	3
Lack of food	3
Divorce/separation	2
Not having a place to live	2
High educational expenses	1
Lasting unemployment	1

(table continued on next page)

Table 44. *Stressful Events During the Past 12 Months (continued)*

	(%)
Cultural alienation	1
Taking on a mortgage	1
Gender identity	1
Major physical disease leading to hospitalization	1
Lack of safety (home or community)	1
Other	10
None of the above	16

Table 45. *Methods Reported for Dealing with Stress*

	(%)
Pray or ask for spiritual help	67
Solve the problem	39
Talk to others	38
Look on the bright side	34
Avoid people	31
Eat more than usual	27
Do something enjoyable	27
Exercise	21
Sleep more than usual	19
Eat less than usual	14
Blame self	14
Drink more alcohol than usual	8
Smoke more cigarettes than usual	7
Try to feel better by using drugs or medication	0
Other	4
None of the above	2

Figure 244. *Composite, Sex, and Age of Individuals who have Taken Prescription Medication to Help with Emotions, Concentration, Behavior, or Mental Health in the Past 12 Months*

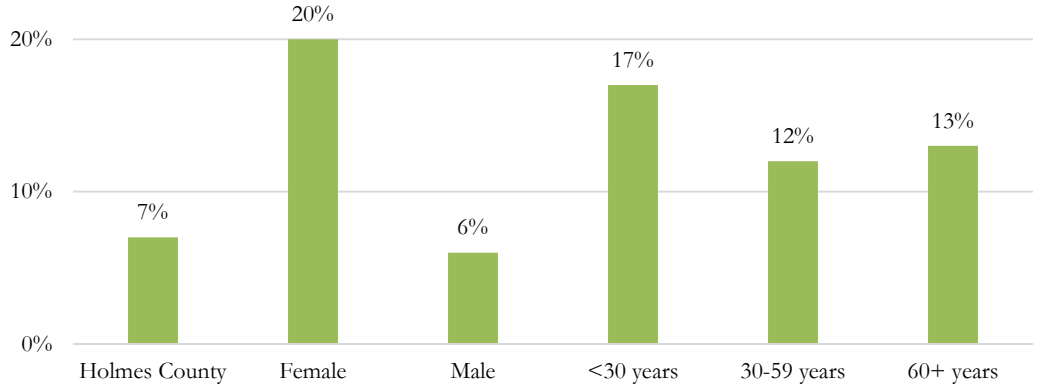
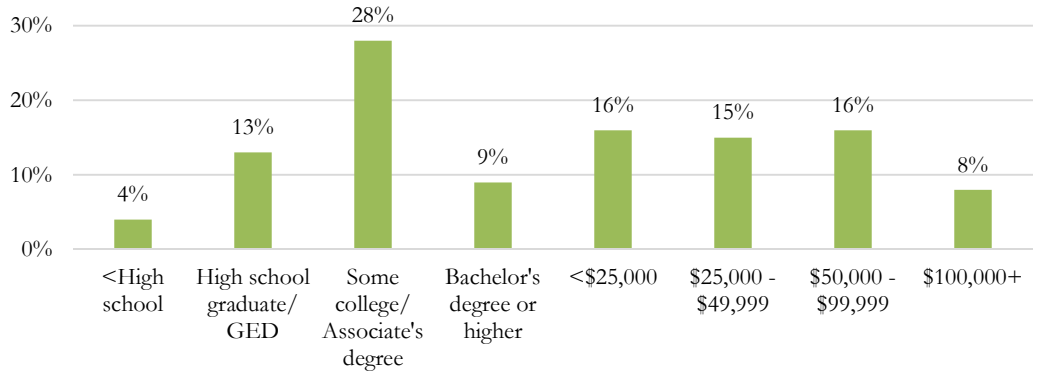


Figure 245. *Education and Income of Individuals who have Taken Prescription Medication to Help with Emotions, Concentration, Behavior, or Mental Health in the Past 12 Months*



Less than 10% of Holmes County residents had taken prescription medication to help with emotions, concentration, behavior, or mental health in the past 12 months (Figure 244). Taking prescription medication to help with emotions, concentration, behavior, or mental health was higher among females than males (Figure 244), highest among individuals less than 30 years of age, with respect to age (Figure 244), lowest among those with less than a high school education (Figure 245), and generally declined with greater total annual household income (Figure 245).

Suicide

Figure 246. *Composite, Sex, and Age of Individuals who Considered Suicide in Past 12 Months*

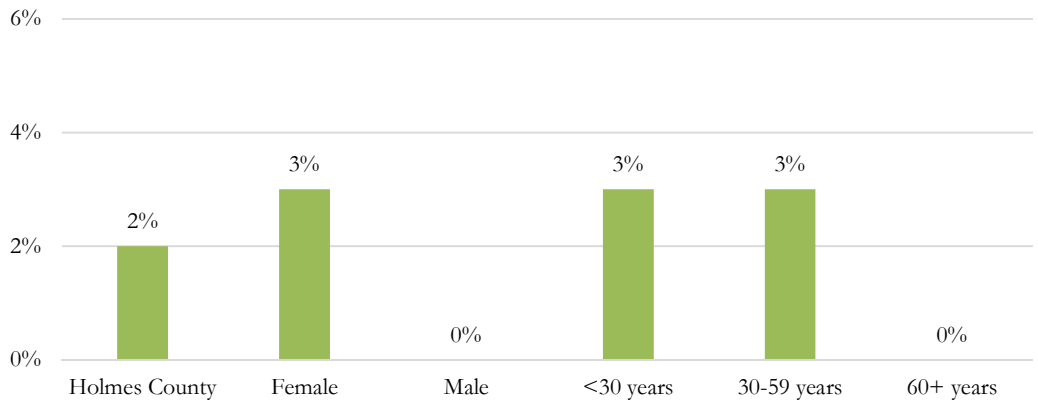
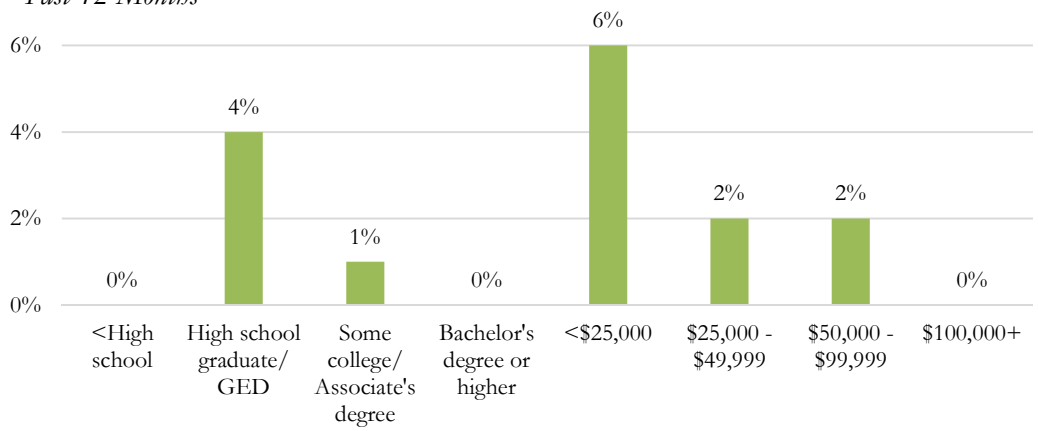


Figure 247. *Education and Income of Individuals who Considered Suicide Past 12 Months*



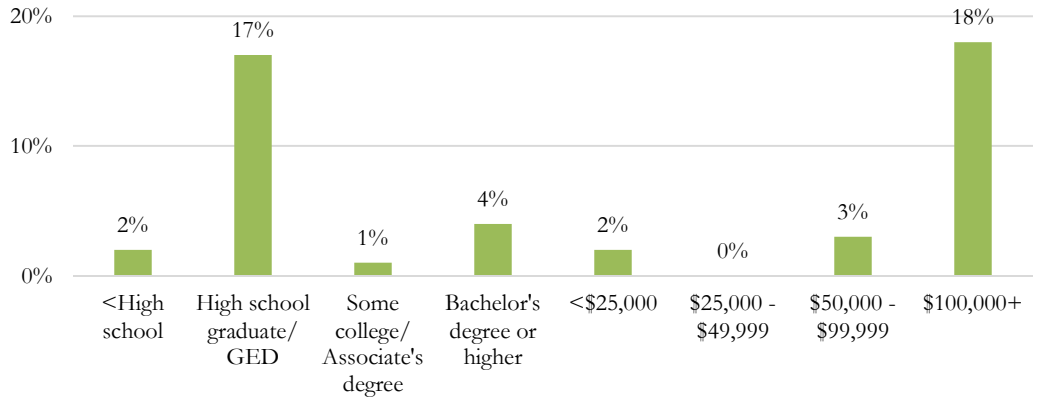
None of the residents who indicated considering suicide indicated having made any suicide attempts in the past 12 months. Individuals who had considered suicide in the past 12 months were female (Figure 246), less than 59 years of age (Figure 246), retained a high school education or greater (Figure 247), and predominately reported a total annual household income less than $25,000 (Figure 247).

3.2.8 Socioeconomic Factors

Crime

Figure 248. *Composite, Sex, and Age of Individuals who have Called Police in the Past 6 Months to Report a Crime*

Figure 249. *Education and Income of Individuals who have Called Police in the Past 6 Months to Report a Crime*



During the past six months, 8% of Holmes County residents called the police to report a crime (Figure 248), while less than 1% of residents indicated that they were affected by a crime in the same period, but did not call the police to report the incident.

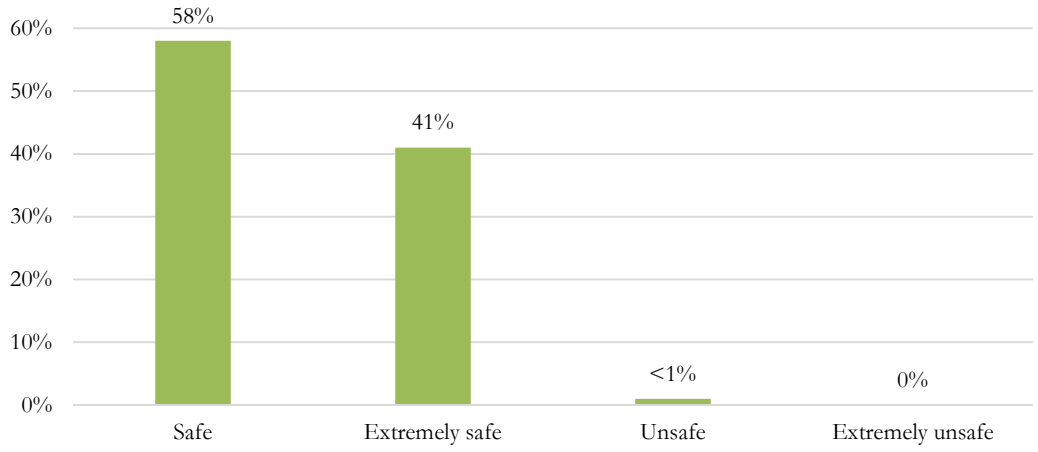
Table 46. *Types of Attacks Reported by Residents*

	(%)
Face-to-face threat	10
With any weapon, such as a gun or knife	4
By grabbing, punching, or choking	4
With something thrown, such as a rock or	2
By rape, attempted rape, or other type of sexual	2
With a baseball bat, frying pan, scissors, or stick	1
Any other attack, threat, or use of force	2
None of the above	87

Table 47. *Source of Attacks Reported by Residents*

	(%)
Another person you have met or know (not in another category)	3
A neighbor or friend	2
Someone at work or school	2
A relative or family member	1
None of the above	7

Figure 250. *Perception of Neighborhood Safety*



Nearly all of Holmes County residents characterized their neighborhood safety as "Safe" (58%) or "Extremely safe" (41%; Figure 250).

Demographic Information

Figure 251. *Educational Attainment*

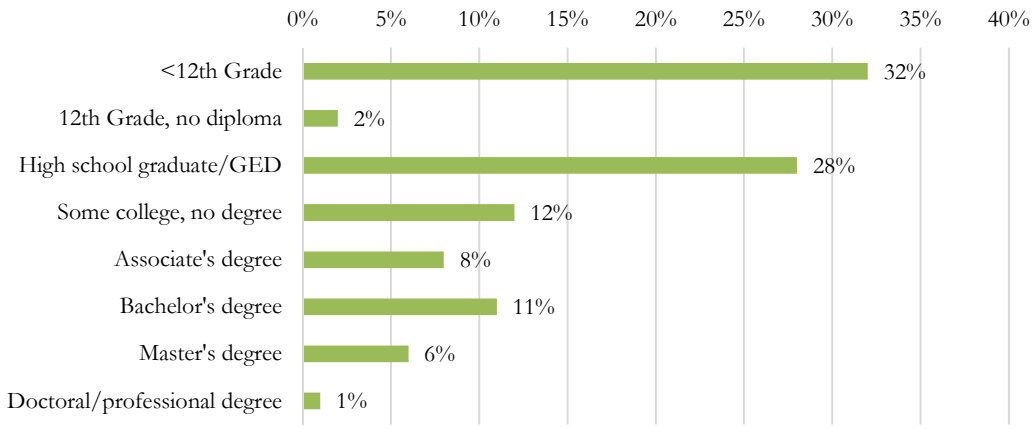
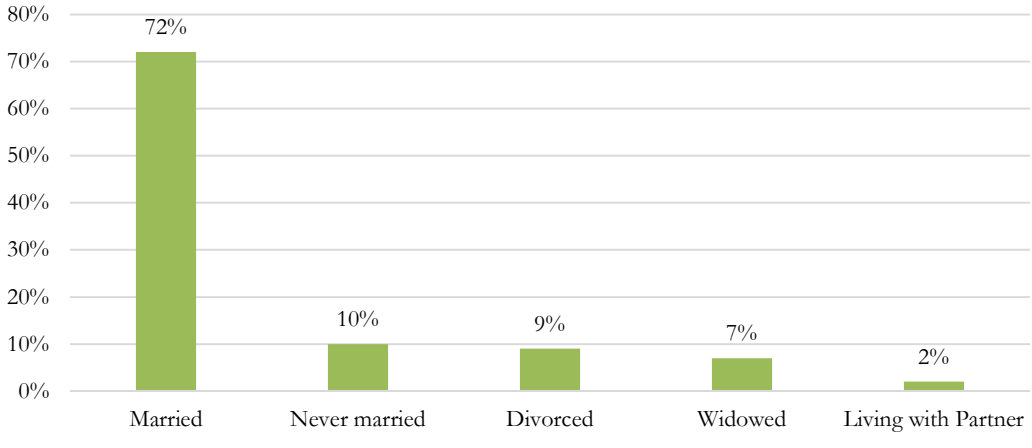


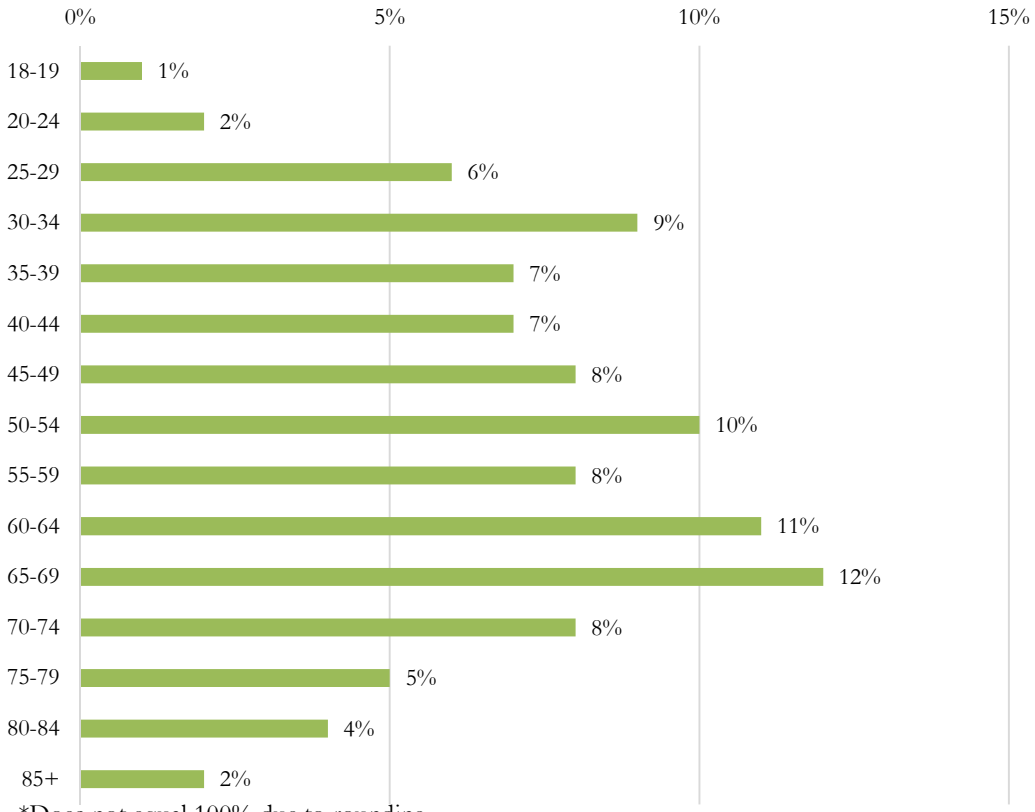
Figure 252. *Marital Status*



More than one-quarter of Holmes County residents obtained a post-secondary degree, including an Associate's degree (8%), Bachelor's degree (11%), Master's degree (6%), or Doctoral or professional degree (1%), and an additional 12% had some college, but no degree (Figure 251). Twenty-eight percent of residents were high school graduates or earned a GED equivalent, and nearly one in three respondents (32%) had less than a high school education (Figure 251). Nearly

three quarters (72%) of residents were currently married; 10% or less were never married (10%), divorced (9%), widowed (7%), or living with a partner (2%; Figure 252).

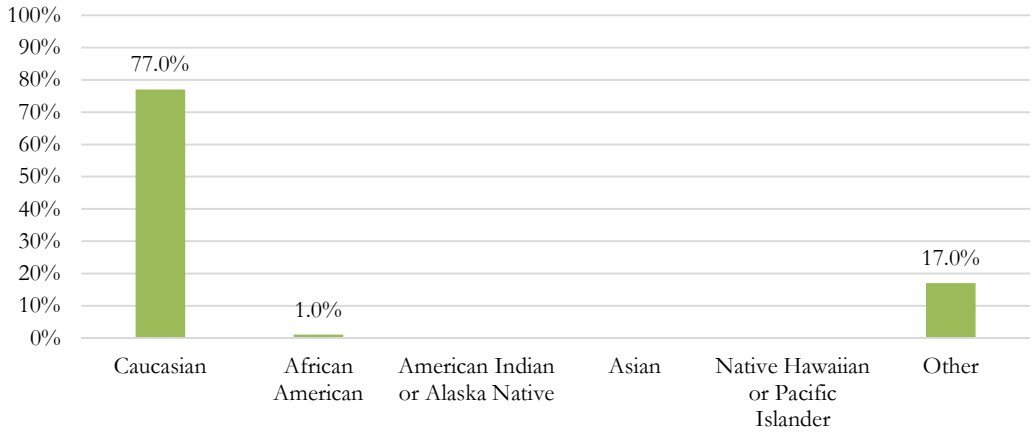
Figure 253. *Age*



*Does not equal 100% due to rounding.

Mean age of Holmes County residents was 54 years of age, and ranged from 18 to 94 years of age (Figure 253). More than half of respondents (51%) were 55 to 74 years of age, and respondents less than 30, 40, and 50 years of age accounted for approximately 6%, 10%, and 14%, respectively.

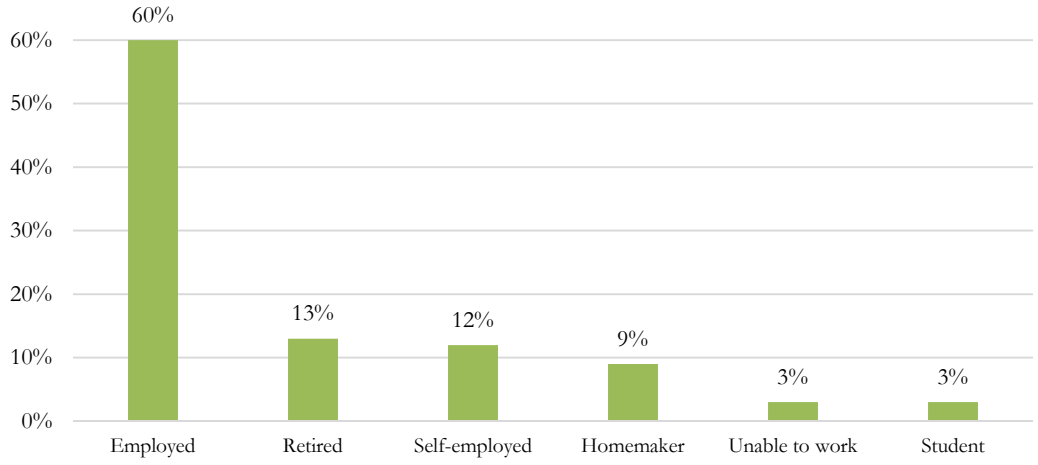
Figure 254. *Race*



Respondents were predominately "Caucasian" (77%), and remaining respondents indicated "Other" (17%), and African American (1%); 5% of residents did not indicate their race (Figure 254). Ninety-one percent of respondents indicated that they were not of Hispanic or Latino ethnicity, and 9% did not indicate their ethnicity. Approximately one-third of respondents (31%) identified as "Amish or Plain", and 26% of Holmes County residents reported speaking a language other than English at home, the latter of which included Dutch (53%), Pennsylvania Dutch (33%), Amish (5%), German (4%), and English, Spanish, Pennsylvania Dutch, and Romanian (4%). Given an individual's preferred language, 95% of Holmes County residents indicated that they had "No difficulty" being understood by others, while 5% indicated "Some difficulty". Respondents were 68% female and 32% male, heterosexual (99%), and considered themselves cisgender (99%).

Employment and Financial Status

Figure 255. *Employment Status*

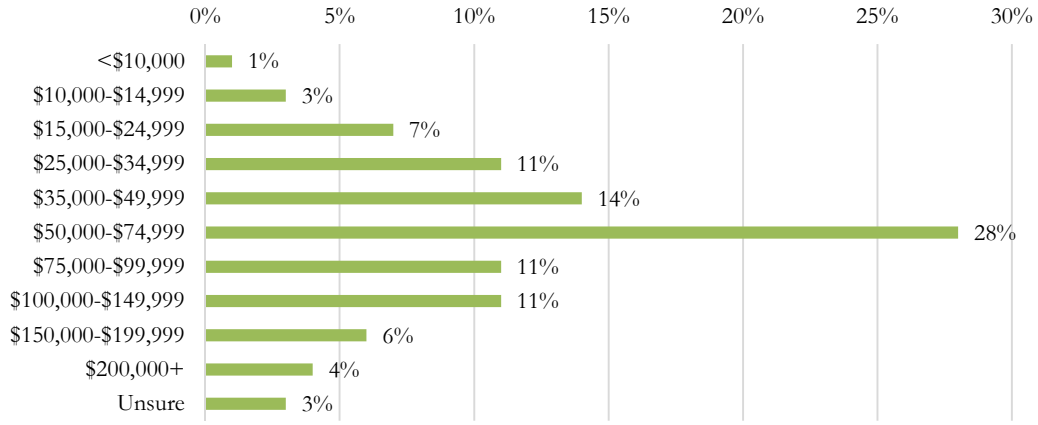


Approximately three-quarters (72%) of Holmes County residents were currently employed, 12% of which were self-employed (Figure 255). Less than 15% of residents were retired (13%), a homemaker (9%), unable to work (3%), or a student (3%). Among those residents unable to work, 64% were currently "Disabled", or otherwise "Taking care of house or family" (10%), "Temporarily unable to work for health reasons" (7%), "On layoff" (6%), "On family or maternity leave" (2%); 11% of residents indicated "Other" (Table 48).

Table 48. *Reasons for Current Unemployment*

	(%)
"Disabled"	64
"Taking care of house or family"	10
"Temporarily unable to work for health reasons"	7
"On layoff"	6
"On family or maternity leave"	2
"Other"	11

Figure 256. *Total Annual Household Income Before Taxes*



Total annual household income before taxes varied considerably among respondents (Figure 256). Approximately one-third of respondents (28%) reported a total annual household income between $50,000 and $74,999, followed by $35,000 to $49,999 (14%), $25,000 to $34,999 (11%), $75,000 to $99,999 (11%), and $100,000 to $149,999 (11%; Figure 256). Less than 15% percent of respondents reported total annual household incomes less than $25,000 (11%), or greater than $149,999 (10%). Three percent of respondents were unsure of their total annual household income. Three-quarters of Holmes County residents ended up with money left over at the end of each month, while 21% of residents had just enough, and 4% did not have enough money to make ends meet (Table 49).

Table 49. *End of Month Financial Situations Reported by Residents*

	(%)
"End up with some money left over"	75
"Have just enough money to make ends meet"	21
"Not have enough money to make ends meet"	4

Table 50. *Current Financial Concerns*

	(%)
"Being able to maintain the standard of living I enjoy"	30
"Not having enough money for retirement"	22
"Not having enough money to pay for my children's college"	18
"Being able to pay medical costs of a serious illness or accident"	16
"Being able to pay medical costs for normal healthcare"	11
"Not having enough to pay my normal monthly bills"	8
"Not being able to pay my rent, mortgage, or other housing costs"	6
"Not being able to make the minimum payments on my credit cards"	4
"None of the above"	44

Approximately one-third of Holmes County residents reported "Being able to maintain the standard of living I enjoy" (30%) as a current financial concern (Table 50). Additionally, approximately one in five residents indicated concerns about "Not having enough money for retirement" (22%), and "Not having enough money to pay for my children's college" (18%). Residents also expressed concern about healthcare costs, including "Being able to pay medical costs of a serious illness or accident" (16%), and "Being able to pay medical costs for normal healthcare" (11%). Less than 10% of residents reported "Not having enough to pay my normal monthly bills" (8%), "Not being able to pay my rent, mortgage, or other housing costs" (6%), and "Not being able to make the minimum payments on my credit cards" (4%). Forty-four percent of residents did not have any of the aforementioned financial concerns.

Table 51. *Current Financial Ability to Afford Food*

	(%)
"I couldn't afford to eat balanced meals"	5
"I was worried whether my food would run out before I got money to buy more"	4
"The food that I bought just didn't last, and I didn't have money to get more"	2
"I cut the size of my meals or skipped meals because there wasn't enough money for food"	2
"I ate less than I felt I should because there wasn't enough money for food"	2
"I was hungry but didn't eat because there wasn't enough money for food"	2
"I didn't eat for a whole day because there wasn't enough money for food"	1
"I lost weight because there wasn't enough money for food"	1
"None of the above"	93

The majority of Holmes County residents (93%) reported no financial concerns regarding the ability to afford food (Table 51). Among those residents indicating some financial inability to afford food, 5% could not afford to eat balanced meals. Less than five percent of residents reported concerns regarding whether food would last until more could be purchased (4%), buying food that didn't seem to last (2%), cutting meal sizes or skipping meals (2%), eating less than they should because there was not enough money for food (2%), being hungry because there was not enough money for food (2%), not eating because there was not enough money for food (1%), or losing weight because there was not enough money for food (1%). Among those reporting concerns in the last 30 days, the frequency of ranged from three to 10 days. Nine percent of residents reported receiving Women, Infant, and Children (WIC) benefits during the past 12 months.

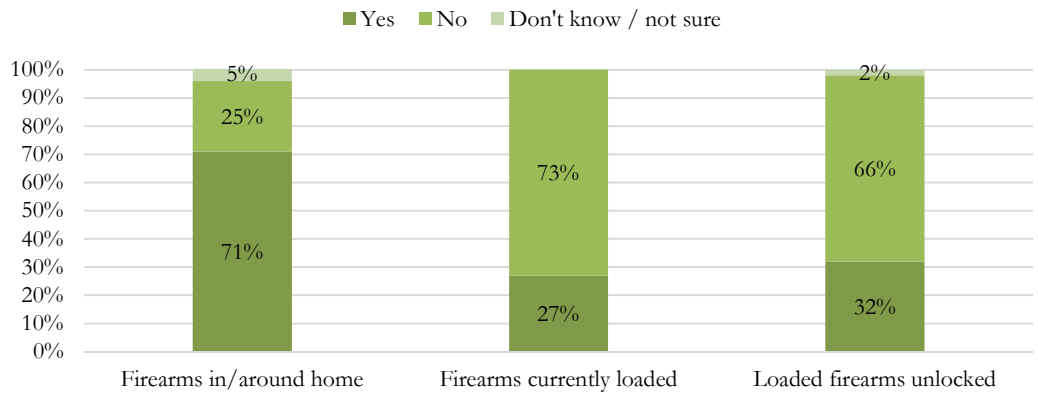
Table 52. *Employment and Financial Impacts of COVID-19 Pandemic Reported by Residents*

	(%)
Worked more hours than normal	20
Worked remotely or from home more than usual	16
Had difficulty arranging for childcare	13
Worked reduced hours	12
Was not able to work	7
Income or pay was reduced	6
Had serious financial problems	5
Incurred increased costs for childcare expenses	2
Not paid at all	2
Other Impact	6
None of the above	44

COVID-19 impacted employed Holmes County residents in a variety of ways. One-fifth of working residents "Worked more hours than normal", while others "Worked remotely or from home more than usual" (16%), had difficulty arranging for childcare (13%), and/or "Worked reduced hours" (12%; Table 52). Less than 10% of residents were not able to return to work (7%), experienced a reduction in income or pay (6%), had serious financial problems (5%), incurred increased costs for childcare (2%), and/or were not paid at all (2%). Six percent of residents cited other impacts as it relates to COVID-19, and 44% were not impacted with any of the included financial and employment situations.

Firearms

Figure 257. *Presence and Characteristics of Firearms In/Around the Home*



Nearly three-quarters of Holmes County residents (71%) reported keeping a firearm in or around their home (Figure 257). Of these residents, 27% had their firearms currently loaded, and 32% left their loaded firearms unlocked.

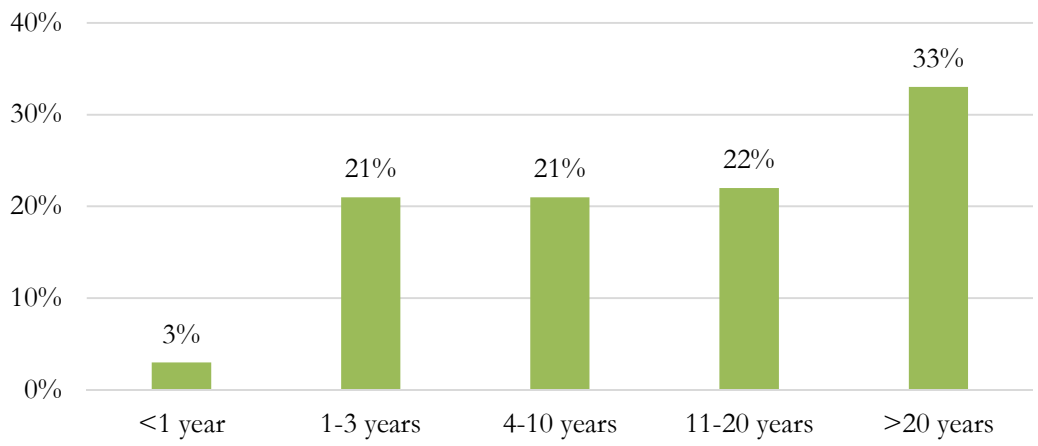
Table 53. *Political Subdivision*

	(%)
Millersburg	31
Berlin	8
Holmesville	7
Killbuck	7
Big Prairie	7
Walnut Creek	6
Winesburg	5
Mount Hope	4
Glenmont	4
Lakeville	4
Fredricksburg	4
Shreve	3
Loudonville	3
Nashville	2
Charm	2
Sugarcreek	1
Baltic	1
Brickhaven	1
Dundee	1
Wilmot	0
Coshocton	0

*Does not equal 100% due to rounding.

The majority of Holmes County residents whom completed the community resident survey resided in Millersburg (31%; Table 53). Five to ten percent or less resided in Berlin (10%), Walnut Creek (7%), Holmesville (6%), Killbuck (5%), or Winesburg (5%). Remaining political subdivision of residence included Charm (4%), Mount Hope (4%), Glenmont (3%), Lakeville (3%), Nashville (3%), Shreve (3%), Loudonville (3%), Sugarcreek (3%), Fredericksburg (2%), Big Prairie (2%), Baltic (2%), Brickhaven (1%), and Wilmot (1%).

Figure 258. *Length of Time in Current Neighborhood*



Approximately one-third of Holmes County residents (33%) have resided in their current neighborhood for more than 20 years, while 22% reported 11 to 20 years, 21% reported four to ten years, and 21% reported one to three years (Figure 258). Less than five percent of residents (3%) had lived in their current neighborhood for less than one year (Figure 258). The majority of residents indicated that they lived in a house (90%), and remaining residents resided in a "Manufactured/mobile home" (7%), or "Apartment or flat" (3%; Table 54). Ninety-percent of residents owned their respective residence, 9% were currently renting, and 2% had another arrangement, or where otherwise unsure.

Table 54. *Housing Type*

	(%)
"House"	90
"Apartment or flat"	3
"Manufactured/mobile home"	7

Figure 259. *Buildings Within a Block and a Half of Current Residence*

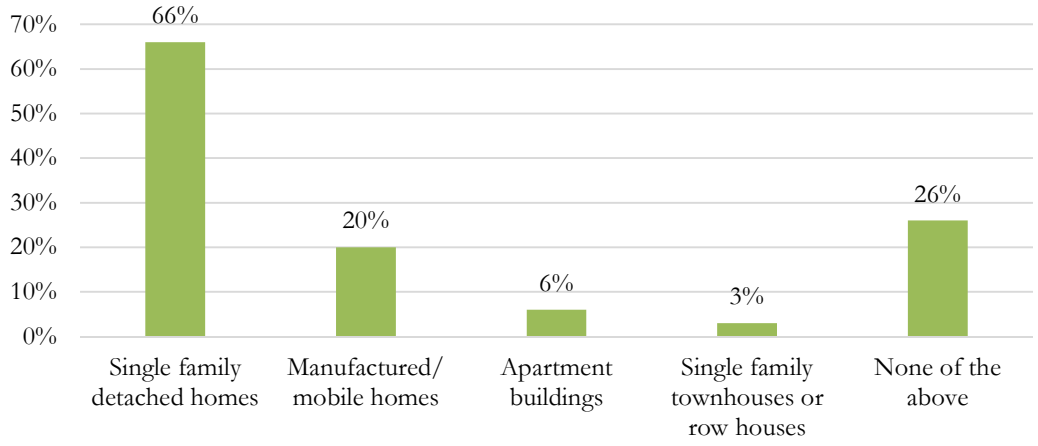
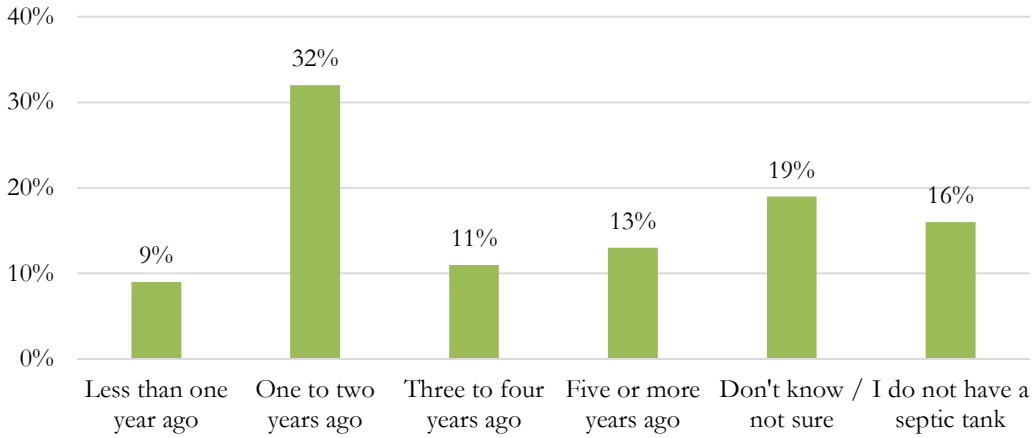


Figure 260. *Time Period Since Septic Tank Was Last Pumped*



Holmes County residents identified a variety of buildings within a block and a half from their current residence, and these buildings were predominately "Single family detached homes" (66%), "Manufactured/mobile homes" (20%), "Apartment buildings" (6%), and "Single family townhouses or row houses" (3%; Figure 259). Approximately one-quarter (26%) of residents indicated "None of the above". More than one-third of residents (41%) with a septic system had it pumped at least two years ago, while 24% had it pumped three or more years ago (Figure 260).

Figure 261. *Household Size*

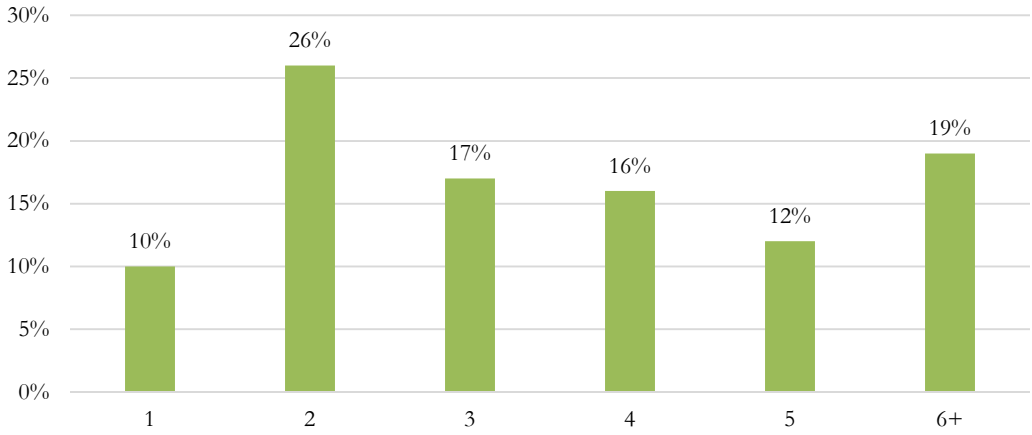
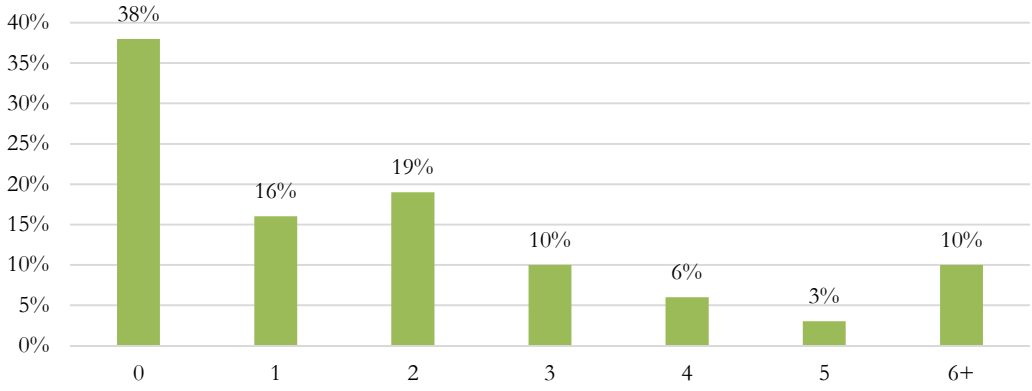


Figure 262. *Number of Household Members Under the Age of 18*



*Does not equal 100% due to rounding.

Less than one-half of Holmes County residents (36%) reported a total household size of two members or less (Figure 261). Seventeen percent of residents reported a household size of three members, while 16% reported four members, 12% reported five members, and 19% reported six or more members (Figure 261). More than one-third of residents (38%) did not have anyone under 18 years of age currently living in their home, while remaining residents reported having one (16%), two (19%), three (10%), four (6%), five (3%), or six or more (10%) individuals under 18 years of age currently residing in their residence (Figure 262).

Table 55. *Relationships of Individuals Living in the Household*

	(%)
"Opposite-sex husband/wife/spouse"	71
"Biological son or daughter"	57
"Father or mother"	12
"Brother or sister"	9
"Adopted son or daughter"	7
"Foster child"	6
"Opposite-sex unmarried partner"	5
"Nonrelative"	1
"Grandchild"	1
"Other relative"	1
"Roomer/boarder"	1

The majority of Holmes County residents reported currently living with an "Opposite-sex husband/wife/spouse" (71%), and/or "Biological son or daughter" (57%; Table 55). Twelve percent of residents indicated that their "Father or mother" was currently living in their household, while less than 10% identified "Brother or sister" (9%), "Adopted son or daughter" (7%), "Foster child" (6%), "Opposite-sex unmarried partner" (5%), "Nonrelative" (1%), "Grandchild" (1%), "Other relative" (1%), and/or "Roomer/boarder" (1%).

Table 56. *Household Emergency Plans*

	(%)
"Copies of important documents in a safe location (such as a waterproof container)"	41
"Designated meeting place immediately outside your home or close by in your neighborhood"	28
"Emergency communication plan such as a list of numbers and designated out-of-town contact"	24
"Multiple routes away from your home in case evacuation is necessary"	22
"Designated meeting place outside of your neighborhood in case you cannot return home"	13
"None of the above"	31

Table 57. *Household Preparations*

	(%)
"…enough non-perishable food (such as nuts, canned goods, etc) for the next three days"	54
"…enough drinking water (besides tap) for the next three days"	32
"…a seven day supply for each person in your household who takes prescribed medication"	29
"…an emergency supply kit with supplies like water, food, flashlights, and extra batteries that is kept in a designated place in your home"	22
"…a first aid kit with emergency supplies to take if your household had to leave quickly"	14
"None of the above"	33

Nearly half of Holmes County residents (41%) kept copies of important documents in a safe location, and more than one-fifth assigned a designated emergency meeting place outside their home (28%), had an emergency communication plan (24%), and/or had established multiple evacuation routes away from their home (22%; Table 56). More than half of residents (54%) kept enough perishable food to for the next three days, while approximately one-third retained enough drinking

water (32%) for the next three days, medications for the next seven days (29%), and had an emergency kit (22%; Table 57).

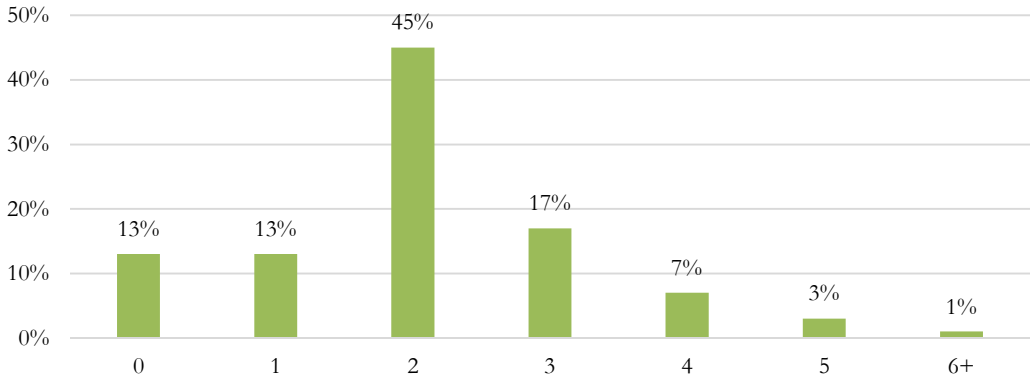
Transportation

Table 58. *Usual Method of Transportation to Purchase Groceries*

	(%)
"In my car"	76
"Ride bicycle"	6
"Taxi or other paid driver"	5
"In a car that belongs to someone who lives elsewhere"	4
"In a car that belongs to someone I live with"	3
"Walk"	1
"Someone else delivers groceries"	1
"No usual mode of traveling to store"	1
"Bus, subway, or other public transit"	1
"Other"	3

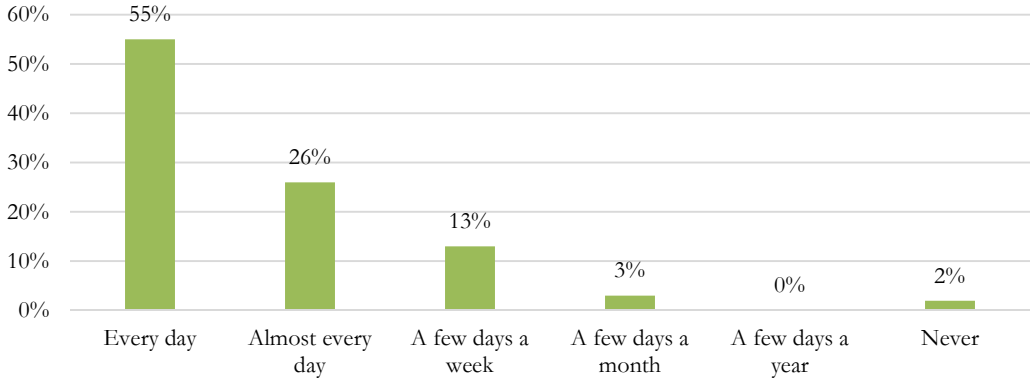
Usual method of transportation to purchase groceries (Table 58) was predominately characterized by Holmes County residents as "In my car" (76%). Less than ten percent of residents reported riding their bicycle (6%), using a taxi or paid driver (5%), utilizing a car that belonged to someone living elsewhere (4%) or in the same home (3%), or "Other" (3%) to purchase groceries. One percent of residents described their method of transportation to purchase groceries as "Walk", "Someone else delivers groceries", "No usual mode of traveling to store", or "Bus, subway, or other public transit".

Figure 263. *Number of Vehicles Available to Household Members*



*Does not equal 100% due to rounding.

Figure 264. *Frequency of Household Vehicle Use*



*Does not equal 100% due to rounding.

Approximately one-half of Holmes County residents (45%) reported having two vehicles available to their household members (Figure 263). Less than 20% of residents reported having three vehicles (17%), one vehicle (13%), or no vehicle (13%), and less than 10% of residents reported having four (7%), five (3%), and six or more (1%) vehicles available, respectively (Figure 263). The majority of residents described these vehicles as "Motorized" (95%), as compared to "Non-motorized" (5%), and more than three-quarters utilized these vehicle(s) "Every day" (55%) or "Almost every day" (26%; Figure 264). Eighty-three percent of Holmes County residents did not

have transportation problems in a typical month, and 78% had never rescheduled a healthcare appointment due to transportation problems.

3.3 Community Leader Survey

3.3.1 Overview

A total of 18 responses were received from the community leader survey, representing a response rate of 67%. Consistent with the community resident survey, community leaders were asked to list the top three health problems in Holmes County in a qualitative, open-ended format. When organized in order of importance (first through third) and response frequency, community leader respondents identified the following as top health problems in Holmes County:

1. Obesity
2. Access to healthcare providers
3. Mental health issues

Community leader respondents also identified several contributing factors to the aforementioned health problems, which included the following:

i. Lack of medical personnel and services
ii. Cultural and lifestyle choices
iii. Geography
iv. Poor nutritional choices
v. Lack of transportation
vi. Health literacy
vii. Psychological stressors

3.3.2 Community Health Concerns

Based upon the benchmarking methodology used to rank the secondary data presented in Section 3.1, and the categorization of measures unfavorable to four or more benchmarks as county-specific health disparities, as outlined in Sections 3.1.6 and 3.1.7, community leader respondents were provided a list of the secondary measures unfavorable to four or more benchmarks accompanied by the following question: "Do you think any of the following are health concerns in Holmes County? (Select all that apply)" (Table 59).

Table 59. *Community Health Concerns Identified in the Community Leader Survey*

	(%)
Access to a mental health provider	72
Lack of broadband internet	67
Adults that are not physically active	50
Schizophrenia/psychotic disorders	44
Women not receiving a mammogram	39
Lack of an annual influenza vaccination among those 65 years of age and older	39
Lack of colonoscopy screenings among those 50 years of age and older	39
Households without access to a vehicle	39
Persons 19 to 64 years of age without health insurance	33
Persons 65 years of age and older without health insurance	33
Persons in the labor workforce without health insurance	33
Lack of recreation and fitness facility access	28
Access to a primary care physician	28
Persons under 19 years of age without health insurance	28
Women over 18 years of age not receiving a pap smear	22
Female breast cancer deaths	22
Pertussis	22
Unintentional injury deaths (not including falls or poisonings)	22
Non-fluent English speaking residents	22

Table 60. *Community Health Concerns Identified in the Community Leader Survey (continued)*

	(%)
Residents without a high school diploma	22
Young people (16 to 19 years of age) not in school and not working	22
Residents without an Associate's degree or higher	22
Residents without a Bachelor's degree or higher	22
Residents without a high school diploma	22
Availability of Head Start facilities	17
Prostate cancer deaths	17
Female uterine cancer	11
High school graduation rate	11
Radon	6
Lack of SNAP-authorized food stores	6
Student-teacher ratio	6

Table 61. *"Based upon the health problems you identified, what do you think Pomerene Hospital can do to help address these problems?"*

"I think they are doing what they can with the resources that they have"
"Promote healthy habits, develop access to medical services, recruiting of appropriate personnel"
"Recruit more primary care, work with agencies to promote mental health, advocate for education"
"Institute telehealth, hold education sessions for the public, publish health education"
"Continue health fairs, community talks"
"Continue to provide access to treatment and increase education. Continue to increase the number of physicians in the area"
"Provide more education and information to the public, engage in mobile healthcare, develop a provider network"
"Not sure the hospital is accountable. Maybe should start with WIC, KNOHOCO Headstart, food stamps limited to healthy food"
"Follow-ups of at risk people, counseling, patient assistance programs"
"Nutrition education and consultation, reinforce recommendations to contain COVID"
"Have an alliance for referral source"
"Partner with community agencies, collocate community education programs throughout community, record educational classes"

Table 62. *"Based upon the health problems you identified, what do you think Holmes County General Health District can do to help address these problems?"*

"Assist in providing more resources"
"Continue to help educate the community and be a community resource"
"Align programming, leverage grants, provide safety net services"
"Publish and disseminate education"
"Continue to offer access to care, immunization clinics, follow up care"
"Community education/prevention, increase screening options"
"Collaborate with hospital for education/awareness, build collab(oration) between hospital and providers, secure funding/grants"
"Work with agencies to provide incentives to get awareness around good health"
"Public education – health diet, adverse effects of sedentary lifestyle, smoking, alcohol, psychological support"
"Educate the public"
"Follow ups of at risk people/counseling/patient assistance programs"
"Have an alliance for referral source"
"Partner with local agencies, conduct educational/screening events across the county"

Table 63. *"Based upon the health problems you identified, what do you think your agency/municipality can do to help address these problems?"*

"We provide transportation to recovery program(s) and family MH (mental health) education"
"Assist people in getting more resources that they need"
"Be a partner in programs that work successfully to educate the community"
"Institute telehealth, alter hours of operation to accommodate those who are working"
"Continue making referrals for high risk students and families"
"Continue to educate, provide prevention, and continue to offer increased availability of services"
"Collaborate with hospital for education/awareness, build collab(oration) between hospital and providers, secure funding/grants"
"Support these agencies through public awareness through social media"
"Public education – health(y) diet, adverse effects of sedentary life, smoking, alcohol, psychological support"
"Support your team"
"Marketing of MH (mental health) services and offer staff from each service area to consult with community providers on referrals"
"Identify and work with clients, addiction, and mental health"
"Partner with PH (Pomerene Hospital) and HCHD (Holmes County Health District). Offer more nutrition education/health promotion/disease prevention programs, and partner with org(anization)s"

3.4 Community Resident Focus Groups

3.4.1 Overview

A total of nine Holmes County community residents participated across the four focus groups. Due to the concurrent COVID-19 pandemic, and the inability to meet in-person, these focus groups were held virtually via GoToMeeting, and attendance was thereby limited. Participation was characterized by the following totals:

i. Sixty-years of Age and Older Focus Group, *7 participants*
ii. Hispanic Focus Group, *0 participants*
iii. Killbuck/Glenmont Focus Group, *0 participants*
iv. LGBTQ Focus Group, *2 participants*

Focus group participants were predominately female (82%), married (64%), Caucasian (71%), not Hispanic or Latino (89%), currently had health insurance (100%), reported a total annual household income less than $25,000 (33%), characterized their health as "Good" (58%) and "Very good" (17%), and ranged in age from 21 to 84 years of age. Focus group participants predominately resided in Millersburg (42%) and Killbuck (25%), indicated two to four people were currently living in their home (75%), and did not have individuals under the age of 18 living in their home (66%). The majority of focus group participants reported some level of college education (67%), including "Some college, no degree" (25%), "Associate's degree" (17%), "Bachelor's degree" (17%), or "Master's degree" (8%).

3.4.2 Community Health Concerns

Based upon the benchmarking methodology used to rank the secondary data presented in Section 3.1, and the categorization of measures unfavorable to four or more benchmarks as county-specific health disparities, as outlined in Sections 3.1.6 and 3.1.7, focus group participants were provided a list of the secondary measures unfavorable to four or more benchmarks accompanied by the following question: "Do you think any of the following are health concerns in Holmes County? (Select all that apply)" (Table 64).

Table 64. *Community Health Concerns Identified in the Community Focus Groups*

	(%)
Access to a mental health provider	50
Adults that are not physically active	50
Lack of recreation and fitness facility access	43
Lack of broadband internet	36
Households without access to a vehicle	29
Persons 19 to 64 years of age without health insurance	29
Persons in the labor workforce without health insurance	21
Access to a primary care physician	14
Young people 16 to 19 years of age not in school and not working	14
Non-fluent English speaking residents	14
Persons under 19 years of age without health insurance	14
Persons 65 years of age and older without health insurance	14
Women over 18 years of age not receiving a pap smear	7
Lack of an annual Influenza vaccination among those 65 years of age and older	7
West Nile virus	7
Radon	7
Availability of Head Start facilities	7
Residents without an Associate's degree or higher	7
Residents without a Bachelor's degree or higher	7

With respect to health concerns in Holmes County, the following excerpts provide additional context to several health concerns identified by focus group participants.

i. Access to care

   a. "I would say that I'm concerned about the lack of primary care providers. We are losing one in the next year to retirement so we don't seem to have a lot of new ones coming in. And our primary care physicians are very local. Killbuck does not have a doctor. Glenmont does not have a doctor. Y'know, most of our small towns, there is no doctor, we either go to Millersburg or Berlin".

   b. "There seems to be – and I don't know if it's healthcare, but if someone has a healthcare issue, there seems to be – we don't have ambulatory care to transport people and there's no – so, you're kind of at the mercy of the local fire departments or something like that if you have – and then you can't, once they get you to Pomerene they can't get you any further".

   c. "One of the things that I've heard come up is the dentists that we have locally don't take Medicare or Medicaid, and so people are having to go – and if you're elderly and transportation is an issue, they're having trouble getting to…you know, to have good dental hygiene".

   d. "And we've got, what, three pharmacies in the entire county and two are basically across the street from each other. That's your access to go pick up your script after you get in to see the doctor".

ii. Infrastructure

   a. "And I think a lot of people have left. You know, we have friends who live a mile or so away. They can't get connected to Verizon, you know, they have to go with

the satellite internet. Well, that's not inexpensive. So for a lot of folks they just can't afford it. It's just not something that's accessible to all".

iii. Mental illness

a. "That is something (mental illness) that I believe very passionately that needs to be changed on how it's being handled, because the whole process is so wrong, and I mean…I've seen people wait in a tiny room with their door open, zero privacy, with a babysitter for over three days waiting to get placed somewhere".

iv. Physical activity

a. "It would be really nice if we had – I mean, I understand that we have Kinetics, but if there were easier access to exercise programs and health programs and eating-as-an-old-person programs…"

v. Social climate

a. "…I believe we should have a little more support for women's reproductive rights and managing our support if they're following through with the pregnancy and that sort because also that, I mean, that's more of a nationwide issue at this point, but I have encountered that and that's difficult on them as well".

vi. Technological literacy

a. "With the telehealth, I'm also thinking that we need for some of us older folks more technology on how to even access it. That can be hard for some of us".

4. Discussion

4.1 County-specific Health Disparities

Table 65. *Health Disparities Identified During the 2020 Holmes County Community Health Needs Assessment*

Measure	Secondary Data	Resident Survey (Quantitative)	Resident Survey (Qualitative)	Community Leader Survey	Focus Group Survey	Focus Group Themes (Qualitative)
Access to a mental health provider	✓	34%	✓	72%	50%	✓
Access to a primary care provider	✓	19%	✓	28%	14%	✓
Adults that are not physically active	✓	32%	✓	50%	50%	
Lack of broadband internet	✓	32%		67%	36%	✓
Individuals 19 to 64 years of age without health insurance	✓	33%		33%	29%	✓
Individuals 65 years of age and older without health insurance	✓	13%	✓	33%	14%	
Individuals under 19 years of age without health insurance	✓	14%	✓	28%	14%	
Lack of recreation and fitness facility access	✓	20%		28%	43%	✓
Households without access to a vehicle	✓	17%		39%	29%	

Table 66. *Health Disparities Identified During the 2020 Holmes County Community Health Needs Assessment (continued)*

Measure	Secondary Data	Resident Survey (Quantitative)	Resident Survey (Qualitative)	Community Leader Survey	Focus Group Survey	Focus Group Themes (Qualitative)
Lack of an annual flu vaccination	✓	5%		39%	7%	
Radon	✓	2%		6%	7%	
Non-fluent English speaking residents	✓	12%		22%	14%	
Individuals in the labor force without health insurance	✓	25%		33%	21%	
Population with a Bachelor's degree or higher	✓	9%		22%	7%	
Population with an Associate's degree or higher	✓	10%		22%	7%	
Women 18 years of age and older not receiving a pap smear	✓	12%		22%	7%	
Individuals 16 to 19 years of age not in school and not working	✓	15%		22%	14%	
Availability of head start facilities	✓	4%		17%	7%	
Female breast cancer deaths	✓	5%		22%		
High school graduation rate	✓	1%		11%		
Female ovarian cancer	✓	5%		11%		

Table 67. *Health Disparities Identified During the 2020 Holmes County Community Health Needs Assessment (continued)*

Measure	Secondary Data	Resident Survey (Quantitative)	Resident Survey (Qualitative)	Community Leader Survey	Focus Group Survey	Focus Group Themes (Qualitative)
Pertussis (whooping cough)	✓	9%		22%		
Prostate cancer deaths	✓	1%		17%		
Lack of colonoscopy screenings among those 50 years of age and older	✓	9%		39%		
Population without a high school diploma	✓	14%		22%		
Schizophrenia/ psychotic disorders	✓	7%		44%		
SNAP-authorized food stores	✓	1%		6%		
Student-teacher ratio	✓	5%		6%		
Unintentional injury deaths	✓	5%		22%		
Female uterine cancer	✓	4%		11%		
West Nile virus	✓	1%			7%	
Women not receiving a mammogram	✓	13%		39%		
Alcohol abuse			✓			✓
Drug abuse			✓			✓
Air pollution	✓	4%				
Mental health			✓			✓
Cancer			✓			
Diabetes			✓			
Diet quality			✓			

Table 68. *Health Disparities Identified During the 2020 Holmes County Community Health Needs Assessment (continued)*

Measure	Secondary Data	Resident Survey (Quantitative)	Resident Survey (Qualitative)	Community Leader Survey	Focus Group Survey	Focus Group Themes (Qualitative)
Heart disease			✓			
Lack of dental providers accepting Medicare/ Medicaid						✓
Lack of support for female reproductive rights						✓
Availability of home health care						✓
Lack of necessary ambulatory care						✓
Lack of regular immunization			✓			
Lack of retail pharmacies						✓
Obesity			✓			
Technology literacy						✓
Acceptance of nontraditional gender identity						✓

Two Holmes County-specific health concerns were consistent across (1) secondary data benchmarking, (2) qualitative and (3) quantitative components of the community resident survey, the (4) community leader and (5) focus group surveys, and (6) focus group dialogue (Table 65), including:

i. Access to a mental health provider
ii. Access to a primary care provider

Additionally, 14 health concerns that did not meet the benchmarking criteria identified in Section 2.2.2 were uniquely identified by way of the qualitative portions of the Holmes County community resident survey, or the community resident focus groups (Table 67-68).

i. Cancer
ii. Diabetes
iii. Diet quality
iv. Heart disease
v. Lack of dental providers accepting Medicare/Medicaid
vi. Lack of support for female reproductive rights
vii. Availability of home health care
viii. Lack of necessary ambulatory care
ix. Lack of regular immunization
x. Lack of retail pharmacies
xi. Obesity
xii. Technology literacy
xiii. Acceptance of nontraditional gender identity

With respect to evidence, best practices, and community resources, those health concerns identified by at least five of the six assessment components will be discussed in greater detail in Section 4.2. All of the aforementioned Holmes County-specific health concerns should be utilized to inform evidence-based strategy selection, in conjunction with community health improvement planning activities and strategies.

4.2 Evidence, Best Practices, and Community Resources

4.2.1 Access to a Mental Health Provider

Suitable access to a mental health provider for individuals in need of mental health services is critical, as unaddressed mental health conditions are often associated with premature death, loss of productivity, and increased rates of both disability and chronic disease (Alegria et al. 2018). Despite these associated health outcomes, access to mental health care is difficult for many across the United States, especially among those living in rural communities (Summers-Gabr 2020), segregated or impoverished neighborhoods, and among ethnic minority populations, the latter of which experience a high burden of mental illness, coupled with less access to mental health services as compared to their Caucasian peers (Cook et al. 2017). The added economic and health-related uncertainties associated with the COVID-19 pandemic have consequently heightened the need for mental health services (Moreno et al. 2020), a need for which, in many cases, has disproportionately affected those individuals already disproportionately in need of mental health care, including but not limited to racial and ethnic minorities (McKnight-Eily et al. 2021).

The efficacy of the following approaches to increase access to mental health providers have been well documented.

i. Integrating behavioral health care in primary or community-based care (Alegria et al. 2018)
ii. Telemedicine and mobile mental health care (Fletcher et al. 2018)
iii. Utilization of community health workers to deliver specific mental health services (Barnett et al. 2018)

The following community assets are immediately applicable to mental health care, and are available in Holmes County.

i. Anazao Community Partners

ii. Counseling Center of Wayne and Holmes Counties

iii. Family Life Counseling

iv. One-Eighty

v. SpringHaven Counseling Center

4.2.2 Access to a Primary Care Provider

Ensuring access to a primary care provider remains a central objective of healthcare systems. Sufficient access to primary care, which is associated with decreased hospitalizations and emergency department utilization (Shi 2012), decreased mortality (Basu et al. 2019), and better overall health outcomes (Shi 2012), shifts care from otherwise expensive and intensive alternatives (Glass et al. 2017). As such, ensuring adequate access to primary care providers has wide-reaching health and financial implications. Despite the impetus for ensuring access to primary care, several disparities related to access exist among racial and ethnic minorities, individuals with low income, individuals with little or no health insurance coverage (Shi et al. 2013), and those living in rural or remote areas (Peart et al. 2018).

The efficacy of the following approaches to increase access to primary care providers have been well documented.

i. Case management of those frequently hospitalized, or utilizing emergency department services (Shah et al. 2011, Glendenning-Napoli et al. 2012)

ii. Community-based care coordination programming (Bradley et al. 2012)

iii. Integrated primary intensive care (Brown et al. 2005)

iv. Patient-centered medical homes (Driscoll et al. 2013)

v. Telemedicine (Hoffman 2020)

The following community assets are immediately applicable to primary care, and are available in Holmes County.

i. Babbs Family Practice
ii. Charm Wellness Center
iii. East Holmes Family Care
iv. Grace Family Practice
v. Holmes Family Medicine
vi. Millersburg Clinic
vii. Mt. Hope Now Clinic
viii. Pomerene Express Care
ix. Pomerene Family Care

4.2.3 Adults that are Not Physically Active

Lack of physical activity is one of four main risk factors for preventable chronic disease in the United States (Centers for Disease Control and Prevention 2019). Historically, upwards of 9% of healthcare expenditures in the United States have been attributed to adults who were either physically inactive or insufficiently active (Carlson et al. 2015). Physical inactivity among adults, coupled with excessive caloric intake, is associated with a decreased quality of life (Suarez-Villar et al. 2020), depression (Pratt et al. 2014), and conditions including but not limited to obesity, type 2 diabetes, osteoporosis, cardiovascular disease, respiratory disease, colon cancer, and breast cancer (Gaetano 2016). With respect to adults 50 years of age and older, physical inactivity is disproportionately higher among women as compared to men, Hispanic and non-Hispanic African Americans, as compared to their Caucasian peers, and among those with certain chronic conditions (Watson et al. 2016).

The efficacy of the following approaches to increase access physical activity have been well documented.

i. Transportation system interventions and environmental design (Adlakha et al. 2015)
ii. Utilization of activity monitors (de Vries et al. 2016)
iii. Family-based physical activity interventions (Brown et al. 2016)
iv. Community physical activity campaigns (Heath et al. 2012)
v. Mobile phone physical activity applications (Mateo et al. 2015)

The following community assets are relevant to increasing physical activity, and are available in Holmes County.

i. Berlin Resort
ii. Deer Run Park
iii. Holmes County Parks and Recreation

4.2.4 Lack of Broadband Internet

Despite the ever-increasing reliance on broadband internet, many households across the nation are without broadband internet service. Reliable broadband internet is often limited in rural areas (Perrin 2019), as compared to suburban and urban areas, thereby limiting opportunities afforded by reliable broadband internet related to employment, education, economic development, and social connectedness (Conroy et al. 2021). According to Singh and colleagues, rural areas and small urban towns also have the lowest rate of internet and computer use (2020). Sufficient access to the internet and general computer literacy is a prerequisite for web-based healthcare telemedicine visits, the latter of which are associated with higher patient satisfaction and understanding, as compared to alternative telephone-based telemedicine visits (Nouri et al. 2020).

In addition to geographic variations in access to broadband internet, several racial and ethnic exist nationally. Of all racial groups, 90% of Asian and Pacific Islanders currently retain broadband internet service, as compared to Caucasian (84%), Hispanic (79%), African American (77%), and American Indian and Alaskan Natives (66%; Singh et al. 2020).

The efficacy of the following approaches to increase broadband internet access have been documented by the National Governor's Association (2020).

i. Establish cross-cutting governance structures
ii. Establish partnerships with state agencies, local and county government, and other entities
iii. Utilize anchor institutions
iv. Enhance coordination and avoid duplicity by leveraging current infrastructure projects
v. Leverage electric utility infrastructure to position broadband networks
vi. Ensure the availability of broadband internet affordability programs
vii. Utilize innovative procurement strategies
viii. Improve broadband internet coverage maps
ix. Identify funding and financing sources for broadband internet

The following community assets are immediately applicable to expanding access to broadband internet, and are available in Holmes County.

i. Agile Networks
ii. Blu Shift Wireless
iii. CenturyLink
iv. Dish
v. Frontier Communications
vi. HughesNet Satellite Internet

vii. Massillon Cable

viii. Mechcom Dot Net

ix. Viasat Satellite Internet

x. Watch Communications

4.2.5 Individuals without Health Insurance

Nearly 9%, or 28 million Americans, did not have any form of health insurance coverage in 2018 (Berchick et al. 2019). While the proportion of uninsured Americans has decreased considerably with the passage of the Affordable Care Act in 2010, the long-term ramifications associated with the COVID-19 pandemic on health insurance have yet to be determined (Woolhandler and Himmelstein 2020). Currently, individuals with lower levels of education, low income, and racial and ethnic minorities are less likely to carry health insurance (Health and Human Services 2020), the lack of which is associated with a higher risk for financial insecurity and medical debt (Kaiser Family Foundation 2017).

The efficacy of the following approaches to increase health insurance enrollment were documented by Artiga et al. (2016).

i. Promoting health insurance coverage through leadership and collaboration with key stakeholders

ii. Mass marketing health insurance campaigns coupled with localized grassroots efforts

iii. Supporting health insurance outreach efforts outside of the open enrollment period

iv. Targeting health insurance outreach and enrollment efforts to vulnerable populations, including but not limited to racial and ethnic minorities, the LGBTQ community, young adults, veterans, and immigrants

v. Utilizing messaging that provides direction to health insurance assistance resources, which may include personal testimonials, and emphasizing available financial help and coverage benefits

vi. One-on-one health insurance enrollment assistance provided by trained and trusted individuals, and coordination among those assisting with enrollment throughout the community

vii. Engaging providers with health insurance outreach and efforts

viii. Increasing health literacy and ensuring necessary provider capacity

ix. Using associated data to facilitate health insurance enrollment and renewal

The following community assets are immediately applicable to increasing health insurance coverage, and are available in Holmes County.

i. Dan Wakefield Insurance Agency/State Farm

ii. Healthcare.gov

iii. Holmes County Department of Job and Family Services

iv. Hummel Group

v. Troy Miller Agency

4.2.6 Lack of Recreation and Fitness Facility Access

The availability of community recreation and fitness facility center access is central to creating an environment that is conducive to physical activity. While it is well established that physical and social environments conducive to physical activity actually motivate physical activity (Sallis et al. 2006), are a critical component in the prevention of obesity (McGuire 2012), and are associated with residents of healthier body weights (Adams et al. 2015), many communities, and especially rural areas (Edwards et al. 2011), lack the respective amenities.

Briggs et al. identified that living in areas with fewer fitness facilities was associated with physical inactivity, obesity, and poor cardiovascular health (2019), while physical activity is directly linked to a wide array of favorable physiological and mental health outcomes (Health and Human Services 2008), and participation in outdoor recreation activities is often linked to improved self-esteem and reduced stress levels (Thomsen et al. 2018). Barriers to outdoor recreation among ethnic minorities, elderly, females, and those living in a rural area include, but are not limited to safety considerations, time, money, language, and transportation (Ghimire et al. 2014), while commonly cited constraints related to indoor recreation and fitness facility access include feeling unwelcomed by fitness center staff (Brown et al. 2017) and, among older adults, an unfavorable environment, lack of time, lack of motivation, and/or poor physical health (DeMano 2012).

As cited in Section 4.2.3, and with respect to adults 50 years of age and older, physical inactivity is disproportionately higher among women as compared to men, Hispanic and non-Hispanic African Americans, as compared to their Caucasian peers, and among those with certain chronic conditions (Watson et al. 2016). Access to a fitness facility is also often related to health insurance and/or the ability to afford fitness facility membership costs. As such, those individuals whom are uninsured or underinsured, as well as individuals with a lower total annual household income, may have more difficulty obtaining access to a fee-based fitness facility.

The efficacy of the following approaches to increase access to recreation and fitness facilities have been well documented.

i. Shared use agreements to allow public access at existing recreational and fitness facilities (Centers for Disease Control and Prevention 2020)
ii. Workplace facilities and policies (Centers for Disease Control and Prevention 2020)
iii. Community parks and recreation centers (Centers for Disease Control and Prevention 2020)

iv. Community fitness programs (County Health Rankings and Roadmaps 2021)

v. Incorporating mixed-use development (County Health Rankings and Roadmaps 2021)

The following community assets are immediately applicable to increasing access to recreation and fitness facilities in Holmes County.

iv. 9:24 CrossFit

v. Berlin Resort

vi. Cheryl's L.I.F.E Fitness LLC

vii. Deer Run Park

viii. Epic Fitness

ix. Holmes County Parks and Recreation

x. Joe's Gym

xi. Millersburg CrossFit

xii. Pomerene Kinetics Fitness for Life

xiii. Strive Health Fitness

xiv. Sugarcreek Fitness

5. References

Adams, M. A., Todd, M., Kurka, J., Conway, T. L., Cain, K. L., Frank, L. D., & Sallis, J. F. (2015). Patterns of walkability, transit, and recreation environment for physical activity. *American journal of preventive medicine*, *49*(6), 878-887.

Adlakha, D., Hipp, A. J., Marx, C., Yang, L., Tabak, R., Dodson, E. A., & Brownson, R. C. (2015). Home and workplace built environment supports for physical activity. *American journal of preventive medicine*, *48*(1), 104-107.

Alegría, M., Nakash, O., & NeMoyer, A. (2018). Increasing equity in access to mental health care: a critical first step in improving service quality. *World Psychiatry*, *17*(1), 43.

Artiga, S., Rudowitz, R., & Tolbert, J. (2016). Outreach and enrollment strategies for reaching the Medicaid eligible but uninsured population. *Menlo Park, CA: Henry J. Kaiser Family Foundation*.

Artiga, S., & Hinton, E. (2018). Beyond health care: the role of social determinants in promoting health and health equity. *Health*, *20*, 1-10.

Barnett, M. L., Gonzalez, A., Miranda, J., Chavira, D. A., & Lau, A. S. (2018). Mobilizing community health workers to address mental health disparities for underserved populations: a systematic review. *Administration and Policy in Mental Health and Mental Health Services Research*, *45*(2), 195-211.

Basu, S., Berkowitz, S. A., Phillips, R. L., Bitton, A., Landon, B. E., & Phillips, R. S. (2019). Association of primary care physician supply with population mortality in the United States, 2005-2015. *JAMA internal medicine*, *179*(4), 506-514.

Berchick, E. R., Hood, E., & Barnett, J. C. (2019). *Health insurance coverage in the United States: 2018* (p. 2). Washington, DC: US Department of Commerce.

Bradley, C. J., Gandhi, S. O., Neumark, D., Garland, S., & Retchin, S. M. (2012). Lessons for coverage expansion: a Virginia primary care program for the uninsured reduced utilization and cut costs. *Health Affairs*, *31*(2), 350-359.

Briggs, A. C., Black, A. W., Lucas, F. L., Siewers, A. E., & Fairfield, K. M. (2019). Association between the food and physical activity environment, obesity, and cardiovascular health across Maine counties. *BMC public health*, *19*(1), 374.

Brown, K. E., Levine, J. M., Fiellin, D. A., O'connor, P., & Sledge, W. H. (2005). Primary intensive care: pilot study of a primary care–based intervention for high-utilizing patients. *Disease management*, *8*(3), 169-177.

Brown, H. E., Atkin, A. J., Panter, J., Wong, G., Chinapaw, M. J., & Van Sluijs, E. M. F. (2016). Family-based interventions to increase physical activity in children: a systematic review, meta-analysis and realist synthesis. *Obesity reviews*, *17*(4), 345-360.

Bureau of Justice Statistics. (2018). National Crime Victimization Survey. Retrieved on June 29, 2021, from https://bjs.ojp.gov/data-collection/ncvs#surveys-0.

Carlson, S. A., Fulton, J. E., Pratt, M., Yang, Z., & Adams, E. K. (2015). Inadequate physical activity and health care expenditures in the United States. *Progress in cardiovascular diseases*, *57*(4), 315-323.

Centers for Disease Control and Prevention. (2016). Pregnancy risk assessment monitoring system. Retrieved on June 29, 2021 from https://www.cdc.gov/prams/pdf/questionnaire/Phase-8-Standard-Core-Questions-508.pdf.

Centers for Disease Control and Prevention. (2019a). BRFSS Adverse Childhood Experience Module. Retrieved on June 29, 2021 from https://www.cdc.gov/violenceprevention/acestudy/pdf/BRFSS_Adverse_Module.pdf.

Centers for Disease Control and Prevention. (2019b). BRFSS Questionnaire. Retrieved on June 29, 2021, from Lack of Physical Activity. Retrieved on June 17, 2021 from https://www.cdc.gov/brfss/questionnaires/pdf-ques/2019-BRFSS-Questionnaire-508.pdf.

Centers for Disease Control and Prevention. (2019c). Community Assessment for Public Health Emergency Response (CASPER) Toolkit. Retrieved on June 29, 2021 from https://www.cdc.gov/nceh/casper/docs/CASPER-toolkit-3_508.pdf.

Centers for Disease Control and Prevention. (2019d). National Health and Nutrition Examination Survey. Retrieved on June 29, 2021 from https://wwwn.cdc.gov/nchs/nhanes/continuousnhanes/questionnaires.aspx?BeginYear=2019.

Centers for Disease Control and Prevention. (2019e). National Health Interview Survey. Retrieved on June 29, 2021 from https://www.cdc.gov/nchs/nhis/2019nhis.htm.

Centers for Disease Control and Prevention. (2019f). Youth Risk Behavioral Survey. Retrieved on June 29, 2021 from https://www.cdc.gov/healthyyouth/data/yrbs/questionnaires.htm.

Centers for Disease Control and Prevention (CDC). (2020). Access to place for physical activity. Retrieved on June 29, 2021, from https://www.cdc.gov/physicalactivity/activepeoplehealthynation/strategies-to-increase-physical-activity/access-to-places-for-physical-activity.html.

Conroy T, Deller S, Kures M, Low S, Glazer J, Huyke G, & Stark C. (2021). Broadband and the Wisconsin Economy. The Wisconsin Economy Series 7. University of Wisconsin-Madison, Division of Extension. Retrieved 22 June 2021 from https://economicdevelopment.extension.wisc.edu/files/2021/01/2021-01-07-Broadband-Report.pdf

Cook, B. L., Trinh, N. H., Li, Z., Hou, S. S. Y., & Progovac, A. M. (2017). Trends in racial-ethnic disparities in access to mental health care, 2004–2012. *Psychiatric Services*, *68*(1), 9-16.

County Health Rankings and Roadmaps. (2021). Access to Exercise Opportunities. Retrieved on June 23, 2021, from https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/health-behaviors/diet-exercise/access-to-exercise-opportunities.

de Vries, H. J., Kooiman, T. J., van Ittersum, M. W., van Brussel, M., & de Groot, M. (2016). Do activity monitors increase physical activity in adults with overweight or obesity? A systematic review and meta-analysis. *Obesity*, *24*(10), 2078-2091.

DeMano Doehring, A. (2012). Does a faith-based community center impact physical activity practices among middle age and older adults?

Driscoll, D. L., Hiratsuka, V., Johnston, J. M., Norman, S., Reilly, K. M., Shaw, J., ... & Dillard, D. (2013). Process and outcomes of patient-centered medical care with Alaska Native people at Southcentral Foundation. *The Annals of Family Medicine*, *11*(Suppl 1), S41-S49.

Edwards, M. B., Jilcott, S. B., Floyd, M. F., & Moore, J. B. (2011). County-level disparities in access to recreational resources and associations with adult obesity. *Journal of Park and Recreation Administration*, *29*(2).

Federal Highway Administration. (2018). National Household Travel Survey. Retrieved on June 29, 2021 from https://nhts.ornl.gov/assets/2016/NHTS_Retrieval_Instrument_20180228.pdf.

Fletcher, T. L., Hogan, J. B., Keegan, F., Davis, M. L., Wassef, M., Day, S., & Lindsay, J. A. (2018). Recent advances in delivering mental health treatment via video to home. *Current psychiatry reports*, *20*(8), 1-9.

Fotopoulos, C., Krystallis, A., Vassallo, M., & Pagiaslis, A. (2009). Food Choice Questionnaire (FCQ) revisited. Suggestions for the development of an enhanced general food motivation model. *Appetite*, *52*(1), 199-208.

Gaetano, A. (2016). Relationship between physical inactivity and effects on individual health status. *Journal of Physical Education and Sport*, *16*(4), 1069-1074.

Ghimire, R., Green, G. T., Poudyal, N. C., & Cordell, H. K. (2014). An analysis of perceived constraints to outdoor recreation. *Journal of Park and Recreation Administration*, *32*(4).

Glass, D. P., Kanter, M. H., Jacobsen, S. J., & Minardi, P. M. (2017). The impact of improving access to primary care. *Journal of evaluation in clinical practice*, *23*(6), 1451-1458.

Glendenning-Napoli, A., Dowling, B., Pulvino, J., Baillargeon, G., & Raimer, B. G. (2012). Community-based case management for uninsured patients with chronic diseases: effects on acute care utilization and costs. *Professional case management*, *17*(6), 267-275.

Health and Human Services. (2008). 2008 Physical activity guidelines for Americans. Retrieved on June 15, 2021, from https://health.gov/sites/default/files/2019-09/paguide.pdf.

Health and Human Services (2020). Healthy People 2030: Health Insurance. Retrieved on June 18, 2021, from https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-insurance.

Heath, G. W., Parra, D. C., Sarmiento, O. L., Andersen, L. B., Owen, N., Goenka, S., ... & Lancet Physical Activity Series Working Group. (2012). Evidence-based intervention in physical activity: lessons from around the world. *The lancet*, *380*(9838), 272-281.

Hoffman, D. A. (2020). Increasing access to care: telehealth during COVID-19. *Journal of Law and the Biosciences*, *7*(1), lsaa043.

IRS Notice 2011-52. (2011). Internal Revenue Bulletin: 2011-30. Retrieved on June, 29, 2021, from http://www.irs.gov/irb/2011-30_IRB/ar08.html.

Kaiser Family Foundation. (2017). The Uninsured and the ACA: A Primer – Key Facts about Health Insurance and the Uninsured Under the Affordable Care Act. Retrieved on June 23, 2021, from https://www.kff.org/uninsured/report/the-uninsured-and-the-aca-a-primer-key-facts-about-health-insurance-and-the-uninsured-amidst-changes-to-the-affordable-care-act/.

Kennedy, A., Basket, M., & Sheedy, K. (2011). Vaccine attitudes, concerns, and information sources reported by parents of young children: results from the 2009 HealthStyles survey. *Pediatrics*, *127*(Supplement 1), S92-S99.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine*, *16*(9), 606-613.

Laguilles, J. S., Williams, E. A., & Saunders, D. B. (2011). Can lottery incentives boost web survey response rates? Findings from four experiments. *Research in Higher Education*, *52*(5), 537-553.

Laymon, B., Shah, G., Leep, C. J., Elligers, J. J., & Kumar, V. (2015). The proof's in the partnerships: Are affordable care act and local health department accreditation practices influencing collaborative partnerships in community health assessment and improvement planning? *Journal of Public Health Management and Practice*, *21*(1), 12-17.

Long, S. K., Kenney, G. M., Zuckerman, S., Goin, D. E., Wissoker, D., Blavin, F., ... & Hempstead, K. (2014). The Health Reform Monitoring Survey: addressing data gaps to provide timely insights into the Affordable Care Act. *Health Affairs*, *33*(1), 161-167.

Mateo, G. F., Granado-Font, E., Ferré-Grau, C., & Montaña-Carreras, X. (2015). Mobile phone apps to promote weight loss and increase physical activity: a systematic review and meta-analysis. *Journal of medical Internet research*, *17*(11), e253.

McGuire, S. (2012). Institute of Medicine. 2012. Accelerating progress in obesity prevention: solving the weight of the nation. Washington, DC: the National Academies Press. *Advances in nutrition*, *3*(5), 708-709.

McKnight-Eily, L. R., Okoro, C. A., Strine, T. W., Verlenden, J., Hollis, N. D., Njai, R., ... & Thomas, C. (2021). Racial and ethnic disparities in the prevalence of stress and worry, mental health conditions, and increased substance use among adults during the COVID-19 pandemic—United States, April and May 2020. *Morbidity and Mortality Weekly Report*, *70*(5), 162.

Moreno, C., Wykes, T., Galderisi, S., Nordentoft, M., Crossley, N., Jones, N., ... & Arango, C. (2020). How mental health care should change as a consequence of the COVID-19 pandemic. *The Lancet Psychiatry*.

National Governor's Association. (2020). Governor Strategies to Expand Affordable Broadband Access. Retrieved on June 23, 2021, from https://www.nga.org/center/publications/expand-affordable-broadband/.

Nouri, S., Khoong, E. C., Lyles, C. R., & Karliner, L. (2020). Addressing equity in telemedicine for chronic disease management during the Covid-19 pandemic. *NEJM Catalyst Innovations in Care Delivery*, *1*(3).

Oglesby, W. H., & Slenkovich, K. (2014). A mixed-methods approach to conducting Internal Revenue Service-compliant community health needs assessments: a case example for nonprofit hospital leaders. *Journal of Healthcare Leadership*, *2014*(1), 67-74.

Ohio Department of Education. (2019). Ohio healthy youth environments survey. Retrieved on June 29, 2021 from https://ohyes.ohio.gov/.

Olapegba, P. O., Iorfa, S. K., Kolawole, S. O., Oguntayo, R., Gandi, J. C., Ottu, I. F., & Ayandele, O. (2020). Survey data of COVID-19-related knowledge, risk perceptions and precautionary behavior among Nigerians. *Data in brief*, *30*, 105685.

Peart, A., Lewis, V., Brown, T., & Russell, G. (2018). Patient navigators facilitating access to primary care: a scoping review. *BMJ open*, *8*(3), e019252.

Perrin A. (2019). Digital Gap Between Rural and Nonrural America Persists. Retrieved June 22, 2021, from https://www.pewresearch.org/fact-tank/2019/05/31/digital-gap-between-rural-and-nonrural-america-persists/.

Pratt, M., Norris, J., Lobelo, F., Roux, L., & Wang, G. (2014). The cost of physical inactivity: moving into the 21st century. *British journal of sports medicine*, *48*(3), 171-173.

Public Law 111-148 (2010). The Patient Protection and Affordable Care Act. United 14 States Government Printing Office.

Renner, B., Sproesser, G., Strohbach, S., & Schupp, H. T. (2012). Why we eat what we eat. The Eating Motivation Survey (TEMS). *Appetite*, *59*(1), 117-128.

Sallis, J. F., Cervero, R. B., Ascher, W., Henderson, K. A., Kraft, M. K., & Kerr, J. (2006). An ecological approach to creating active living communities. *Annu. Rev. Public Health*, *27*, 297-322.

Schmitt, A., Gahr, A., Hermanns, N., Kulzer, B., Huber, J., & Haak, T. (2013). The Diabetes Self-Management Questionnaire (DSMQ): development and evaluation of an instrument to assess diabetes self-care activities associated with glycaemic control. *Health and quality of life outcomes*, *11*(1), 138.

Shah, R., Chen, C., O'Rourke, S., Lee, M., Mohanty, S. A., & Abraham, J. (2011). Evaluation of care management for the uninsured. *Medical care*, 166-171.

Shi, L. (2012). The impact of primary care: a focused review. *Scientifica*, *2012*.

Shi, L., Lebrun-Harris, L. A., Daly, C. A., Sharma, R., Sripipatana, A., Hayashi, A. S., & Ngo-Metzger, Q. (2013). Reducing disparities in access to primary care and patient satisfaction with care: the role of health centers. *Journal of Health Care for the Poor and Underserved*, *24*(1), 56-66.

Singh, G. K., Girmay, M., Allender, M., & Christine, R. T. (2020). Digital divide: marked disparities in computer and broadband internet use and associated health inequalities in the United States. *International Journal of Translational Medical Research and Public Health*, *4*(1), 64-79.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of internal medicine*, *166*(10), 1092-1097.

Suarez-Villar, R., Martinez-Urbistondo, D., Fernandez, M. A., Lopez-Cano, M., Fernandez, E., Dominguez, A., ... & Martínez, J. A. (2020). Cross-sectional evaluation of the interaction between activity relative-time expenditure and comorbidity concerning physical quality of life. *Medicine*, *99*(48).

Substance Abuse and Mental Health Services Administration. (2019). National survey on drug use and health. Retrieved on June 29, 2021 from https://www.samhsa.gov/data/report/nsduh-2019-questionnaire.

Summers-Gabr, N. M. (2020). Rural–urban mental health disparities in the United States during COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy*.

Thomsen, J. M., Powell, R. B., & Monz, C. (2018). A Systematic Review of the Physical and Mental Health Benefits of Wildland Recreation. *Journal of Park & Recreation Administration*, *36*(1).

Watson, K. B., Carlson, S. A., Gunn, J. P., Galuska, D. A., O'Connor, A., Greenlund, K. J., & Fulton, J. E. (2016). Physical inactivity among adults aged 50 years and older—United States, 2014. *Morbidity and Mortality Weekly Report*, *65*(36), 954-958.

Woolhandler, S., & Himmelstein, D. U. (2020). Intersecting US epidemics: COVID-19 and lack of health insurance.

Yang, J., Kingsbury, D., Nichols, M., Grimm, K., Ding, K., & Hallam, J. (2015). Using a qualitative approach for understanding hospital-affiliated integrated clinical and fitness facilities: characteristics and members' experiences. *BMC public health*, *15*(1), 567.

6. Appendix

6.1 Secondary Data Sources and Definitions

Table 1. *Unranked Secondary Data*

Measure	Data Year	Category	Source	Data Definition
Total Population	2014-2018	Population	Data.census.gov	Total population, based on the 2014-2018 American Community Survey 5-year estimate.
Male Residents	2014-2018	Population	Data.census.gov	Total male population, based on the 2014-2018 American Community Survey 5-year estimate.
Female Residents	2014-2018	Population	Data.census.gov	Total female population, based on the 2014-2018 American Community Survey 5-year estimate.
Households with Children under 18 Years of Age	2014-2018	Population	Data.census.gov	All occupied households in the report area are family households with one or more children under the age of 18, 2014-2018 American Community Survey 5-year estimate. As defined by the US Census Bureau, a family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage, or adoption. A non-family household is any household occupied by the householder alone, or by the householder and one or more unrelated
Percentage of Single Parent Households	2013-2017	Population	Data.census.gov	Percentage of households by composition, as identified by the American Community Survey 2013-2017 5-year estimate. Calculated using the sum of male householder, no wife with own children under 18 and female householder, no husband with own children under 18.
Population 0 to 4 Years of Age	2014-2018	Population	Data.census.gov	Total population percentage by age group, as identified by the 2014-2018 American Community Survey 5-year estimate.
Population 5 to 17 Years of Age	2014-2018	Population	Data.census.gov	Total population percentage by age group, as identified by the 2014-2018 American Community Survey 5-year estimate.

Table 2. *Unranked Secondary Data (continued)*				
Measure	Data Year	Category	Source	Data Definition
Population 65 Years of Age and Older	2014-2018	Population	Data.census.gov	Total population percentage by age group, as identified by the 2014-2018 American Community Survey 5-year estimate.
Median Age	2014-2018	Population	Data.census.gov	Median age of population, in years, as identified by the 2014-2018 America Community Survey 5-year estimate.
Foreign-born Population	2014-2018	Population	Data.census.gov	Percentage of the population that is foreign-born, as identified by the 2014-2018 American Community Survey 5-year estimate. The foreign-born population includes anyone who was not a U.S. citizen or a U.S. national at birth. This includes any non-citizens, as well as persons born outside of the U.S. who have become naturalized citizens. The native U.S. population includes any person born in the United States, Puerto Rico, a U.S. Island Area (such as Guam), or abroad of American (U.S. citizen) parent or parents.
Undifferentiated Amish Population	2010	Population	Association of Statisticians of American Religious Bodies/Data.census.gov	Number of Adherents per total population as of 2010 U.S. Census. Population data for U.S., State, and Counties from data.census.gov.
Non-Hispanic White Population	2014-2018	Population	Data.census.gov	Total percentage of the population that is non-Hispanic white, as identified by the 2014-2018 American Community Survey 5-year estimate.
African American Population	2014-2018	Population	Data.census.gov	Total percentage of the population that is non-Hispanic African American, as identified by the 2014-2018 American Community Survey 5-year estimate.

Table 3. *Unranked Secondary Data (continued)*

Measure	Data Year	Category	Source	Data Definition
Hispanic Population	2014-2018	Population	Data.census.gov	Total percentage of the population that is Hispanic or Latino, as identified by the 2014-2018 American Community Survey 5-year estimate.
Asian or Pacific Islander Population	2014-2018	Population	Data.census.gov	Total percentage of the population that is Asian or Pacific Islander, as identified by the 2014-2018 American Community Survey 5-year estimate.
Percentage of Population Living in a Rural Area	2010	Population	Community Commons – U.S. Census Bureau Decennial Census	Percentage of population living in rural areas.
Population Density	2014-2018	Population	American Community Survey 2018 Profile/Ohio Department of Health County CMIST Profile	Average persons per household, as identified by the 2018 American Community Survey 5-year estimate; calculated from jurisdiction population and square mileage.
Percentage of Renting Households	2014-2018	Housing	Data.census.gov	Percentage of renter-occupied housing units, as identified by the 2014-2018 American Community Survey 5-year estimate.
Total Housing Units	2014-2018	Housing	Data.census.gov	Number of housing units per jurisdiction, identified by the 2014- 2018 American Community Survey 5-year estimate.
Persons per Household	2014-2018	Housing	American Community Survey 2018 Profile/Ohio Department of Health County CMIST Profile	Average persons per household, as identified by the 2018 American Community Survey 5-year estimate.
Children with Elevated Blood Lead Levels	2018	Pollution	Ohio Department of Health, Centers for Disease Control and Prevention	Children under the age of six years of age who tested positive for elevated blood lead levels (>5ug/dl).

Table 4. *Unranked Secondary Data (continued)*

Measure	Data Year	Category	Source	Data Definition
Active National Priority List Superfund Sites	2020	Pollution	Homefacts.com	Number of active National Priority List Superfund Sites.
Active Non-national Priority List Superfund	2020	Pollution	Homefacts.com	Number of active Non-NPL Superfund Sites.
Resolved Superfund Sites	2020	Pollution	Homefacts.com	Number of resolved (archived) Superfund Sites.
Population with Public Health Insurance Coverage (Medicare/Medicaid/VA) Alone	2014-2018	Insurance and Health Care Cost	Data.census.gov	Percentage of population with public health insurance coverage alone, including Medicare, Medicaid, and VA as determined by the 2014-2018 American Community Survey 5-year estimate.
Population on Medicare Coverage Alone	2014-2018	Insurance and Health Care Cost	Data.census.gov	Percentage of population on Medicare Coverage alone, per the 2014-2018 American Community Survey 5-year estimate.
Population on Medicaid/ Means Tested Coverage Alone	2014-2018	Insurance and Health Care Cost	Data.census.gov	Percentage of population on Medicaid/Means Tested Coverage alone, per the 2014-2018 American Community Survey 5-year estimate.
Population on VA Health Care Coverage Alone	2014-2018	Insurance and Health Care Cost	Data.census.gov	Percentage of Population on VA Health Care Coverage Alone, per the 2014-2018 American Community Survey 5-year estimate.
Population on Public Health Insurance Coverage Alone	2014-2018	Insurance and Health Care Cost	Data.census.gov	Percentage of population on Public Health Insurance Coverage alone, per the 2014-2018 American Community Survey 5-year estimate.

Table 5. *Unfavorable to Zero Benchmarks*

Measure	Data Year	Category	Source	Data Definition
Percentage of Disabled Population	2014-2018	Population	Data.census.gov	Percentage of the total civilian non-institutionalized population with a disability, as identified by the 2014-2018 American Community Survey 5-year estimate.
Children Eligible for SNAP	2017	Economic Status	KidsCount, Ohio Department of Health	Percent of children eligible for Supplemental Nutrition Assistance Benefits (SNAP) during the state fiscal year.
Percentage of Households Receiving Public Assistance Income	2014-2018	Economic Status	Data.census.gov	Percentage of households that have received public assistance in the past 12 months. Public assistance income includes general assistance and Temporary Assistance to Needy Families (TANF). Separate payments received for hospital or other medical care (vendor payments) are excluded. This does not include Supplemental Security Income (SSI) or noncash benefits such as Food Stamps.
Percentage of Female-headed Households Below Poverty Level with Children 5 to 17 Years of Age	2014-2018	Economic Status	Data.census.gov	Percentage of families with children 5 to 17 years of age, with no husband present, with an income below the federal poverty level, as identified by the 2014-2018 American Community Survey 5-year estimate.
Percentage of Female-headed Households Below Poverty Level with Children Under 5 Years of Age	2014-2018	Economic Status	Data.census.gov	Percentage of families with children under 5 years of age with no husband present, with an income below the federal poverty level, as identified by the 2014-2018 American Community Survey 5-year estimate.

Table 6. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Percentage of Families Below Poverty Level with Children 5 to 17 Years of Age	2014-2018	Economic Status	Data.census.gov	Percentage of families with children 5 to 17 years of age, with an income below the federal poverty level, as identified by the 2014-2018 American Community Survey 5-year estimate.
Percentage of Families Below Poverty Level with Children Under 5 Years of Age	2014-2018	Economic Status	Data.census.gov	Percentage of families with children under 5 years of age, with an income below the federal poverty level, as identified by the 2014-2018 American Community Survey 5-year estimate.
Unemployment Rate	2020	Economic Status	Community Commons	Percentage of the civilian non-institutionalized population age 16 and older (non-seasonally adjusted).
Percentage of Households Receiving SNAP	2014-2018	Economic Status	Data.census.gov	Percentage of total households receiving SNAP benefits.
Median Monthly Housing Costs per Owner-occupied Housing	2014-2018	Housing	Data.census.gov	Median monthly housing costs per owner-occupied housing, as identified by the 2014-2018 American Community Survey 5-year estimate.
Median Monthly Housing Costs per Renter-occupied Housing	2014-2018	Housing	Data.census.gov	Median monthly housing costs per renter-occupied housing, as identified by the 2014-2018 American Community Survey 5-year estimate.
Child in Foster Care	2017	Housing	KidsCount, Ohio Department Health	The rate of children in substitute or foster care each year per 1,000 children in the population.

Table 7. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Rate of fast food restaurants	2016	Built Environment	Community Commons	Rate of fast food restaurants per 100,000 population. Fast food restaurants are defined as limited-service establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating.
Rate of Grocery Stores	2016	Built Environment	Community Commons	The rate of grocery stores per 100,000 population.
Percentage of Population with Limited Access to Healthy Foods	2015	Diet and Exercise	Community Commons	The percentage of the population with low food access. Low food access is defined as living more than a half mile from the nearest supermarket, supercenter, or large grocery store, and highlights populations and geographies facing food insecurity.
Premature Death	2015-2017	Population	Community Commons	Years of potential life lost before age 75 per 100,000 population for all causes of death, age-adjusted to the 2000 standard.
Death Rate from Accidents, Homicides, and Suicides	2017-2018	Injury and Accidents	CDC WONDER	Age-adjusted rate of deaths resulting from accidents, homicides, and suicides per 100,000 population (ICD Codes V01-V99 Transport accidents, W00-X59 Other external causes, X60-X84 Intentional self-harm, X85-Y09 Assault).
Teen Death Rate from Accidents, Homicides, and Suicides	2001-2018	Injury and Accidents	CDC WONDER	Crude rate of teen deaths resulting from accidents, homicides, and suicides, among individuals 15 to 19 years of age, per 100,000 population (ICD Codes V01-V99 Transport accidents, W00-X59 Other external causes, X60-X84 Intentional self-harm, X85-Y09 Assault).

Table 8. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Unintentional Injury Death Rate	2016-2018	Injury and Accidents	CDC WONDER	Age-adjusted rate of death due to unintentional injury per 100,000 population (ICD Codes W00-X59).
Unintentional Injury Death Rate (Falls Omitted)	2016-2018	Injury and Accidents	CDC WONDER	Age-adjusted rate of death due to unintentional injury per 100,000 population (ICD Codes W20-X59).
Fall Death Rate	2008-2018	Injury and Accidents	CDC WONDER	Age-adjusted death rate due to falls per 100,000 population (ICD Codes W00-W19 Falls).
Firearm-related Death Rate	2009-2018	Injury and Accidents	CDC WONDER	Age-adjusted rate of age-adjusted death due to firearm related injuries, accidental and intentional, per 100,000 population (ICD Codes W32-34 firearm discharge; X72-74 Intentional self-harm by firearm discharge; X93-95 Assault by firearm discharge; Y22-24 firearm discharge, undetermined intent).
Motor Vehicle Crash Mortality Rate	2013-2018	Injury and Accidents	Community Commons	Age-adjusted rate of death due to motor vehicle crashes per 100,000 population, which include collisions with another motor vehicle, a non-motorist, a fixed object, and a non-fixed object, an overturn, and any other non-collision.
Violent Crime Rate (FBI)	2020	Crime and Violence	Community Commons	Violent crime includes homicide, rape, robbery, and aggravated assault per 100,000 population.
Percentage of Driving Deaths Associated with Alcohol	2014-2018	Substance Use and Abuse	Fatality Analysis Reporting System (FARS)	Percentage of driving deaths with alcohol involvement. National value includes 2018, 2017, 2015, and 2014.
Alcohol-related Death Rate	2006-2018	Substance Use and Abuse	CDC WONDER	Age-adjusted alcohol-related death rate per 100,000 population.

Table 9. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Drug Overdose Deaths	2016-2018	Substance Use and Abuse	Ohio Department of Health, CDC WONDER	Age-adjusted unintentional drug overdose death rate per 100,000 population.
Percentage of Population with a Disability	2014-2018	Mental Health	Community Commons	The percentage of the total civilian non-institutionalized population with a disability.
Percentage of Population with a Disability	2014-2018	Mental Health	American Community Survey 2018 Profile/Ohio Department of Health County CMIST Profile	Estimated percentage of jurisdiction population with a disability, per the American Community Survey 5-year estimate.
Persons with a Hearing Difficulty	2014-2018	Mental Health	American Community Survey 2018 Profile/Ohio Department of Health County CMIST Profile	Estimated percentage of jurisdiction population with hearing difficulty, per the American Community Survey 2014-2018 5-year estimate.
Persons with a Vision Difficulty	2014-2018	Mental Health	American Community Survey 2018 Profile/Ohio Department of Health County CMIST Profile	Estimated percentage of jurisdiction population with vision difficulty, per the American Community Survey 2014-2018 5-year estimate.
Persons with a Cognitive Difficulty	2014-2018	Mental Health	American Community Survey 2018 Profile/Ohio Department of Health County CMIST Profile	Estimated percentage of jurisdiction population with cognitive difficulty, per the American Community Survey 2014-2018 5-year estimate.
Persons with an Ambulatory Difficulty	2014-2018	Mental Health	American Community Survey 2018 Profile/Ohio Department of Health County CMIST Profile	Estimated percentage of jurisdiction population with ambulatory difficulty, per the American Community Survey 2014-2018 5-year estimate.

Table 10. *Unfavorable to Zero Benchmarks (continued)*				
Measure	Data Year	Category	Source	Data Definition
Persons with a Self-Care Difficulty	2014-2018	Mental Health	American Community Survey 2018 Profile/Ohio Department of Health County CMIST Profile	Estimated percentage of jurisdiction population with self-care difficulty, per the American Community Survey 2014-2018 5-year estimate.
Persons with an Independent Living Difficulty	2014-2018	Mental Health	American Community Survey 2018 Profile/Ohio Department of Health County CMIST Profile	Estimated percentage of jurisdiction population with independent living difficulty, per the American Community Survey 2014-2018 5-year estimate.
Percentage of People in Jurisdiction who are Electricity-Dependent	2020	Mental Health	Empowermap.hhs.gov	Number of Medicare beneficiaries who have electricity-dependent equipment.
Suicide Death Rate	2012-2018	Mental Health	CDC WONDER	Age-adjusted suicide death rate per 100,000 population. Figures are age-adjusted to year 2000 standard, and are re-summarized for report areas from county level data where data is available.
Births to Teen Mothers Age 15-17	2016	Obstetrics	KidsCount, Ohio Department of Health, Centers for Disease Control & Prevention	Rate of births to teen mothers between the 15 and 17 years of age. The rate is the number of births per 1,000 women in the age group.
Percentage of Infants with Low Birth Weight	2017	Obstetrics	KidsCount, Ohio Department of Health, Centers for Disease Control & Prevention	Percentage of infants born below 5 pounds, 8 ounces.
Rate of pre-term births	2014-2017	Obstetrics	March of Dimes	Percentage of live births at less than 37 weeks gestation.

Table 11. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Infant Mortality Rate	2012-2018	Obstetrics	County Health Rankings & Roadmaps	Age-adjusted infant mortality rate per 1,000 live births.
Chlamydia Rate	2018	Sexual Behavior and STIs	Community Commons	Chlamydia incidence rate per 100,000 population.
Gonorrhea Rate	2018	Sexual Behavior and STIs	Community Commons	Gonorrhea incidence rate per 100,000 population.
Syphilis Rate (primary and secondary)	2018	Sexual Behavior and STIs	CDC Atlas Plus	Syphilis (primary and secondary) incidence rate per 100,000 population.
Syphilis Rate (latent)	2018	Sexual Behavior and STIs	CDC Atlas Plus	Syphilis (latent) incidence rate per 100,000 population.
Hepatitis A Rate	2018	Infectious Disease	Ohio Department of Health, CDC WONDER	Hepatitis A incidence rate per 100,000 population.
Mumps Rate	2018	Infectious Disease	Ohio Department of Health, CDC WONDER	Mumps incidence rate per 100,000 population.
Influenza-associated Hospitalization	2018	Infectious Disease	Ohio Department of Health, Centers for Disease Control and Prevention	Rate of influenza-associated hospitalization per 100,000 population.
Cancer Rate	2017	Cancer	ODH Data Warehouse, Centers for Disease Control and Prevention	Age-adjusted invasive cancer incidence rate per 100,000 population.

Table 12. *Unfavorable to Zero Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Cervical Cancer Rate	2011-2017	Cancer	ODH Data Warehouse, Centers for Disease Control and Prevention	Age-adjusted invasive cervix cancer incidence rate per 100,000 female population.
Breast Cancer	2017	Cancer	ODH Data Warehouse, National Cancer Institute - SEER	Age-adjusted invasive breast cancer incidence rate per 100,000 population. The national value represents a crude rate.
Lung and Bronchus Cancer Rate	2017	Cancer	ODH Data Warehouse, National Cancer Institute - SEER	Age-adjusted invasive lung and bronchus cancer incidence rate per 100,000 population. The national value represents a crude rate.
Death Due to Malignant Neoplasm of Bronchus and Lung	2017-2018	Cancer	CDC WONDER	Age-adjusted death rate due to malignant neoplasm of lung and bronchus (ICD 10 Code C34 Malignant Neoplasm of bronchus and lung).
Prostate Cancer Rate	2017	Cancer	ODH Data Warehouse, National Cancer Institute - SEER	Age-adjusted invasive prostate cancer incidence rate per 100,000 male population.
Percentage of Medicare Population With Diabetes	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of the Medicare fee-for-service population with diabetes.
High Blood Pressure Death Rate	2016-2018	Chronic Disease	CDC WONDER	Age-adjusted high blood pressure death rate per 100,000 population (ICD 10 Codes I10-I15 Hypertensive Diseases).
Heart Disease Death Rate	2016-2018	Chronic Disease	CDC WONDER	Age-adjusted heart disease death rate per 100,000 population.
Stroke Death Rate	2017-2018	Chronic Disease	CDC WONDER	Age-adjusted stroke death rate per 100,000 population (ICD 10 Codes I60-I69 Cerebrovascular Diseases).

Table 13. *Unfavorable to Zero Benchmarks (continued)*				
Measure	Data Year	Category	Source	Data Definition
Heart Failure Death Rate	2016-2018	Chronic Disease	CDC WONDER	Age-adjusted heart failure death rate per 100,000 population (ICD 10 Code I50).
Percentage of Medicare Population With Hyperlipidemia	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of Medicare beneficiaries with hyperlipidemia.
Lung Disease Mortality Rate	2013-2017	Chronic Disease	Community Commons	Age-adjusted rate of death due to chronic lower respiratory disease per 100,000 population.
Percentage of Medicare Population with COPD	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of Medicare fee-for-service population with COPD.
Percentage of Medicare Population With Osteoporosis	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of Medicare beneficiaries who have osteoporosis.
Percentage of Medicare Population with Chronic Kidney Disease	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of the Medicare fee-for-service population with chronic kidney disease.
Percentage of Medicare Population with Arthritis	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of the Medicare fee-for-service population with Arthritis.

Table 14. *Unfavorable to One Benchmark*

Measure	Data Year	Category	Source	Data Definition
Percentage of Female-headed Households Below Poverty Level	2014-2018	Economic Status	Data.census.gov	Percentage of families with no husband present with an income below the federal poverty level, as identified by the 2014-2018 American Community Survey 5-year estimate.
Percentage of Families Below Poverty Level with Children Under 18 Years of Age	2014-2018	Economic Status	Data.census.gov	Percentage of families with children under 18 years of age, with an income below the federal poverty level, as identified by the 2014-2018 American Community Survey 5-year estimate.
Median Household Income	2014-2018	Economic Status	Community Commons	Median household income based on the 2014-2018 American Community Survey 5-year estimates.
Percentage of renters paying 35% or more of household income	2014-2018	Housing	Data.census.gov	Percentage of renters who are paying 30% or more of household income on rent, as identified by the 2014-2018 American Community Survey 5-year estimate.
Housing Cost Burden (30%)	2014-2018	Housing	Community Commons	Percentage of the households where housing costs exceed 30% of total household income.
Children in Single Parent Households	2014-2018	Housing	County Health Rankings & Roadmaps	Percentage of children that live in a household headed by single parent.
Preventable Hospital Stays	2017	Health Care Access and Utilization	Community Commons	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees. Preventable hospitalizations include hospital admissions for one or more of the following conditions: diabetes with short- or long-term complications, uncontrolled diabetes without complications, diabetes with lower-extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, heart failure, bacterial pneumonia, or urinary tract infection.

Table 15. *Unfavorable to One Benchmark (continued)*

Measure	Data Year	Category	Source	Data Definition
Obesity	2016	Diet and Exercise	Community Commons	Percentage of adults 20 years of age and older who self-report that they have a Body Mass Index (BMI) greater than 30.
Food Insecurity Percentage	2017	Diet and Exercise	Community Commons	Estimated percentage of the population that experienced food insecurity at some point during the report year.
Medicare Beneficiaries with Drug/Substance Abuse	2017	Substance Use and Abuse	CMS Chronic Conditions Public Use Data	Percentage of Medicare Fee-for-Service beneficiaries who abuse drugs/substances.
Medicare Beneficiaries with Alcohol Abuse	2017	Substance Use and Abuse	CMS Chronic Conditions Public Use Data	Percentage of Medicare Fee-for-Service beneficiaries who abuse alcohol.
Cancer Death Rate	2018	Cancer	CDC WONDER	Age-adjusted death rate due to malignant neoplasm (ICD 10 Codes C00-C97 Malignant Neoplasms).
Colorectal Cancer Rate	2017	Cancer	ODH Data Warehouse, NCI SEER	Age adjusted colorectal cancer incidence rate per 100,000 population. The national value represents a crude rate.
Diabetes Death Rate	2017-2018	Chronic Disease	CDC WONDER	Age-adjusted diabetes mellitus death rate per 100,000 population (ICD 10 Codes E10-E14 Diabetes Mellitus).
Percentage of Medicare Population with Heart Disease	2017	Chronic Disease	Community Commons	Percentage of the Medicare fee-for-service population with heart disease.
Percentage of Medicare Population With Stroke	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of Medicare Fee-for-Service Beneficiaries with history of Stroke

Table 16. *Unfavorable to One Benchmark (continued)*

Measure	Data Year	Category	Source	Data Definition
Percentage of Medicare Population With Heart Failure	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of Medicare beneficiaries with heart failure.
Percentage of Medicare Population With Ischemic Heart Disease	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of Medicare beneficiaries with ischemic heart disease.
Percentage of Medicare Population With Asthma	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of Medicare beneficiaries who have asthma.

Table 17. *Unfavorable to Two Benchmarks*

Measure	Data Year	Category	Source	Data Definition
Percentage of Female-headed Households Below Poverty Level with Children Under 18 Years of Age	2014-2018	Economic Status	Data.census.gov	Percentage of families with children under 18 years of age, with no husband present, with an income below the federal poverty level, as identified by the 2014-2018 American Community Survey 5-year estimate.
Percentage of Families Below Poverty Level	2014-2018	Economic Status	Data.census.gov	Percentage of families with income below the federal poverty level, as identified by the 2014-2018 American Community Survey 5-year estimate.

Table 18. *Unfavorable to Two Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Income Inequality Index	2014-2018	Economic Status	Community Commons	Indicator reports income inequality using the Gini coefficient. Gini index values range between zero and one. A value of one indicates perfect inequality where only one house-hold has any income. A value of zero indicates perfect equality, where all households have equal income.
Substandard Housing	2014-2018	Housing	Community Commons	Percentage of owner- and renter-occupied housing units having at least one of the following conditions: 1) lacking complete plumbing facilities, 2) lacking complete kitchen facilities, 3) with 1.01 or more occupants per room, 4) selected monthly owner costs as a percentage of household income greater than 30%, and 5) gross rent as a percentage of household income greater than 30%.
Vacant Housing Units	2014-2018	Housing	Data.census.gov	Percentage of housing units that are vacant. A housing unit is considered vacant by the American Community Survey if no one is living in it at the time of interview.
Percentage of Diabetics 65 Years of Age and Older Receiving a Screening	2015	Health Care Access and Utilization	Community Commons	The percentage of diabetic Medicare patients who have had a hemoglobin A1c (hA1c) test, administered by a health care professional in the past year.
Percentage of Adults With Fair or Poor Health	2016	Population	County Health Rankings & Roadmaps	Percentage of adults 18 years of age and older who self-report having poor or fair health in response to the question "Would you say that in general your health is excellent, very good, good, fair, or poor"?

Table 19. *Unfavorable to Two Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Percentage of Adults Excessively Using Alcohol	2017	Substance Use and Abuse	County Health Rankings & Roadmaps	Percentage of adults 18 years of age or older who binge or heavy drinking in the past 30 days.
Viral Meningitis Rate	2017	Infectious Disease	Ohio Department of Health	Aseptic meningitis incidence rate per 100,000 population.
Percentage of Medicare Population With High Blood Pressure	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of Medicare fee-for-service population with high blood pressure.
Alzheimer's Disease Death Rate	2017-2018	Chronic Disease	CDC WONDER	Age-adjusted Alzheimer's disease death rate per 100,000 population (ICD 10 Code: G30 Alzheimer Disease).

Table 20. *Unfavorable to Three Benchmarks*

Measure	Data Year	Category	Source	Data Definition
Population Commuting to Work Over 60 minutes	2013-2017	Built Environment	Community Commons	The percentage of the population that commutes to work for over 60 minutes in each direction.
Dentist Rate	2015	Health Care Access and Utilization	Community Commons	The rate of dentists per 100,000 population.

Table 21. *Unfavorable to Three Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Federal Qualified Health Center Rate	2019	Health Care Access and Utilization	Community Commons	The rate of FQHCs per 100,000 population.
Children Eligible for Free or Reduced Lunch	2018-2019	Diet and Exercise	Community Commons	Percentage of student children with income under 185% (reduced price) or under 130% (free lunch) of the US federal poverty threshold, as part of the federal National School Lunch Program (NSLP).
Food Insecure Children	2017	Diet and Exercise	Community Commons	Estimated percentage of the population under age 18 that experienced food insecurity at some point during the report year.
Adult Smoking Rate	2017	Substance Use and Abuse	County Health Rankings & Roadmaps	Percentage of adults 18 years of age and older who are current smokers.
Percentage of Medicare Population with Depression	2017	Mental Health	Community Commons	Percentage of the Medicare fee-for-service population with depression.
Salmonella Rate	2018	Infectious Disease	Ohio Department of Health, CDC WONDER	Salmonella incidence rate per 100,000 population.
Varicella Rate	2018	Infectious Disease	Ohio Department of Health, CDC WONDER	Varicella incidence rate per 100,000 population.
Death Due to Malignant Neoplasm of Ovary	2008-2018	Cancer	CDC WONDER	Age-adjusted death rate due to malignant neoplasm of ovary (ICD 10 Code C56 Malignant Neoplasm of Ovary)
Death Due to Malignant Neoplasm of Uterus	2008-2018	Cancer	CDC WONDER	Age-adjusted female death rate due to malignant neoplasm of ovary (ICD 10 Code C53-55 Malignant Neoplasm of cervix uteri, corpus uteri, uterus part unspecified).

Table 22. *Unfavorable to Three Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Colorectal Cancer Death Rate	2014-2018	Cancer	CDC WONDER	Age-adjusted colorectal cancer death rate per 100,000 population. Figures are age-adjusted to year 2000 standard, and are re-summarized for report areas from county level data where data is available.
Percentage of Adults With Diabetes	2016	Chronic Disease	Community Commons	Percentage of adults 20 years of age and older who have ever been told by a doctor that they have diabetes.
Parkinson's Disease Death Rate	2014-2018	Chronic Disease	CDC WONDER	Age-adjusted Parkinson's disease death rate per 100,000 population (ICD 10 Code: G28 Parkinson Disease).

Table 23. *Unfavorable to Four Benchmarks*

Measure	Data Year	Category	Source	Data Definition
Percentage of Non-fluent English Speakers	2014-2018	Population	Data.census.gov	Percentage of population five 5 years of age and older who speak a language other than English at home and speak English less than "very well".
Student to Teacher Ratio	2017-2019	Education	NCES-CCD Public School Data	Ratio of students to teachers.
Rate of Head Start Facilities	2019	Education	Community Commons	Rate of Head Start program facilities per 10,000 children under age 5 (data from HHS Head Start locator).
Percentage of Population with a Bachelor's Degree or Higher	2014-2018	Education	Data.census.gov	Percentage of the population 25 years of age and older with a Bachelor's Degree or higher.

Table 24. *Unfavorable to Four Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Percentage of Population with an Associate's Degree or Higher	2014-2018	Education	Data.census.gov	Percentage of the population 25 years of age and older with an Associate's Degree or higher.
No High School Diploma	2014-2018	Education	Data.census.gov	Percentage of persons aged 25 and older without a high school diploma (or equivalency) or higher.
Young People Not in School and Not Working	2013-2017	Economic Status	Data.census.gov	Percentage of youth age 16-19 who are not currently enrolled in school and who are not employed.
Mean Radon Test Results	2020	Pollution	Radon.com	Mean indoor radon level in picocuries.
Mean Daily Ambient PM2.5	2012	Pollution	Community Commons	Mean daily ambient particulate matter 2.5.
SNAP-Authorized Food Stores	2019	Transportation	Community Commons	SNAP-authorized food stores as a rate per 10,000 population. SNAP-authorized stores include grocery stores as well as supercenters, specialty food stores, and convenience stores that are authorized to accept SNAP (Supplemental Nutrition Assistance Program) benefits.

Table 25. *Unfavorable to Four Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Primary Care Physician Rate	2017	Health Care Access and Utilization	Community Commons	The rate of primary care physicians per 100,000 population. Doctors classified as "primary care physicians" by the American Medical Association include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs and General Pediatrics MDs. Physicians 75 years of age and older, and physicians practicing sub-specialties within the listed specialties, are excluded.
Rate of Mental Health Provider Access	2019	Health Care Access and Utilization	Community Commons	The rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counsellors that specialize in mental health care (per 100,000 population).
Recreation and Fitness Facility Access	2017	Diet and Exercise	Community Commons	The rate of recreation and fitness facilities, as defined by the North American Industry Classification System (NAICS) Code 713940, per 100,000 population.
Percentage of Adults Not Physically Active	2016	Diet and Exercise	Community Commons	Adults 20 years of age and older who self-report no leisure time for activity, based on 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"?
Unintentional Injury Death Rate (Falls and Poisonings Omitted)	2011-2018	Injury and Accidents	CDC WONDER	Age-adjusted rate of death due to unintentional injury per 100,000 population (ICD Codes W20-X39; X50-59).

Table 26. *Unfavorable to Four Benchmarks (continued)*

Measure	Data Year	Category	Source	Data Definition
Percentage of Medicare Beneficiaries with Schizophrenia/ Other Psychotic Disorders	2017	Mental Health	CMS Chronic Conditions Public Use Data	Percentage of Medicare Fee-for-Service beneficiaries with schizophrenia or other psychotic disorders.
Pertussis Rate	2018	Infectious Disease	Ohio Department of Health, CDC WONDER	Pertussis incidence rate per 100,000 population (including probable and confirmed cases).
West Nile Virus Rate	2018	Infectious Disease	Ohio Department of Health, CDC WONDER	West Nile Virus incidence rate per 100,000 population.
Percentage of Women Over 18 Years of Age Getting a Pap Smear	2006-2012	Cancer	Community Commons	Percentage of women 18 years of age and older who received a pap smear in the last 3 years.
Ovarian Cancer Rate	2015-2017	Cancer	ODH Data Warehouse, Centers for Disease Control & Prevention	Age-adjusted invasive ovarian cancer incidence rate per 100,000 female population.
Percentage of Women Receiving a Mammogram	2015	Cancer	Community Commons	Female Medicare enrollees, age 67-69, who have received one or more mammograms in the past two years.
Breast Cancer Death Rate	2014-2018	Cancer	CDC WONDER	Age-adjusted female breast cancer death rate per 100,000 population. Figures are age-adjusted to year 2000 standard, and are re-summarized for report areas from county level data where data is available.

Table 27. *Unfavorable to Four Benchmarks (continued)*				
Measure	Data Year	Category	Source	Data Definition
Alzheimer's Disease/Dementia Prevalence Among Medicare Beneficiaries	2017	Chronic Disease	CMS Chronic Conditions Public Use Data	Percentage of the Medicare Fee-for-Service population with Alzheimer's disease or dementia.

Table 28. *Unfavorable to Five Benchmarks*				
Measure	Data Year	Category	Source	Data Definition
Graduation Rate	2017-2018	Education	Community Commons	Percentage of students are receiving their high school diploma within four years (date range represents school year).
Broadband Internet Subscription	2014-2018	Built Environment	Data.census.gov	Percentage of households with a broadband internet subscription, based on 2014-2018 American Community Survey 5-year estimate.
Mammography Screening	2017	Health Care Utilization & Access	Community Commons	Percentage of female Medicare beneficiaries age 35 and older who had a mammogram in most recent reporting year.
Percentage of persons without health insurance under 19 years of age	2014-2018	Insurance and Health Care Cost	ODH CMIST Profile	Percentage of population under age 19 without health insurance, per most recent American Community Survey 5-year estimate.

Table 29. *Unfavorable to Five Benchmarks*				
Measure	Data Year	Category	Source	Data Definition
Percentage of civilian non-institutionalized population 19-64 years without health insurance	2014-2018	Insurance and Health Care Cost	ODH CMIST Profile	Percentage of civilian non-institutionalized population 19 to 64 years of age without health insurance, per the 2014-2018 American Community Survey 5-year estimate.
Percentage of persons without health insurance 65 years of age and older	2014-2018	Insurance and Health Care Cost	ODH CMIST Profile	Percentage of population 65 years and older without health insurance, per the 2014-2018 American Community Survey 5-year estimate.
Percentage of population in labor force without health insurance	2014-2018	Insurance and Health Care Cost	ODH CMIST Profile	Percentage of population in labor force without health insurance, per the American Community Survey 5-year estimate.
Flu Vaccination among Medicare Beneficiaries	2017	Infectious Disease	County Health Rankings & Roadmaps, CMS Mapping Medicare Disparities	Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination.
Uterine Cancer Rate	2017	Cancer	ODH Data Warehouse, CDC WONDER	Age-adjusted invasive uterine cancer incidence rate per 100,000 female population.
Percentage of Residents 50 Years of Age and Older Having a Colonoscopy	2006-2012	Cancer	Community Commons	Percentage of adults 50 years of age and older who had a colonoscopy or sigmoidoscopy in their lifetime.
Prostate Cancer Death Rate	2014-2018	Cancer	CDC WONDER	Age-adjusted invasive prostate cancer death rate per 100,000 male population.