

Ohio 2017 BRFSS Annual Report





To protect and improve the health of all Ohioans by preventing disease, promoting good health and assuring access to quality health care.

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Introduction

The Ohio Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey conducted by the Ohio Department of Health (ODH) and supported by the Centers for Disease Control and Prevention (CDC). The BRFSS is the primary source of health information among Ohio residents 18 years and older, including data related to chronic diseases, obesity, physical activity, nutrition, alcohol use, oral health, injuries, cancer screenings and access to health care, among many other measures. The collection of Ohio BRFSS data allows ODH, local health departments and other public health stakeholders to monitor health trends and develop and evaluate public health programs and policies designed to improve the health of Ohio residents.

Methodology

Sample Design

The BRFSS survey sample consists of non-institutionalized adults 18 years and older. Since 2011, the BRFSS has conducted both landline telephone- and cellular telephone-based surveys using Random-Digit-Dialing techniques. In conducting the BRFSS landline telephone survey, data are collected from a randomly selected adult in a household. In conducting the cellular telephone survey, data are collected from an adult who participates by using a cellular telephone. In 2017, the Ohio BRFSS conducted 12,289 interviews and oversampled 14 regions in order to produce regional estimates for key indicators.

Questionnaire

The Ohio BRFSS questionnaire is designed by a working group of BRFSS state coordinators and CDC staff as well as the Ohio BRFSS Data Users Group and other stakeholders. Currently, the questionnaire has three parts: 1) the core component questions, which must be asked by all states without modification in wording; 2) optional modules, which are supported by CDC but not required to be asked in all states; and 3) state-added questions not offered as core or optional modules. The Ohio BRFSS implements a two-way split survey design to allow for larger coverage of optional modules and state-added questions, while maintaining a sufficient sample size for each split.

Weighting

The Ohio BRFSS data are weighted to known proportions of age, race, ethnicity, gender and geographic region in Ohio to ensure that estimates are representative of the Ohio adult population. In 2011, the BRFSS moved to a new weighting methodology known as iterative proportional fitting or raking to allow for the incorporation of telephone ownership (landline and/or cellular telephone), as well as education level, marital status and renter vs. home owner status, into the BRFSS weighting methodology.

Prevalence Estimates/Statistical Significance

The results presented in this report provide a broad overview of the health status of Ohioans, and the degree to which health behaviors and outcomes can vary among different demographic and socioeconomic groups within Ohio. Prevalence estimates are based on a sample of Ohio's population and are presented with 95 percent confidence intervals (CI). A 95 percent CI means that if the same survey was repeated 100 times, the estimated prevalence would fall within the range of the CI 95 times out of 100. Statistical significance between populations was determined by comparing CIs; if the CIs do not overlap, the difference is determined to be statistically significant. This is particularly important when comparing prevalence estimates for smaller populations, because they often have wider confidence intervals.

Methodology, continued

Limitations

The *Ohio 2017 BRFSS Annual Report* provides data and information on the health status and health-related risk behaviors of adult Ohioans at both the state and regional level. When reading this report, the following data limitations should be considered:

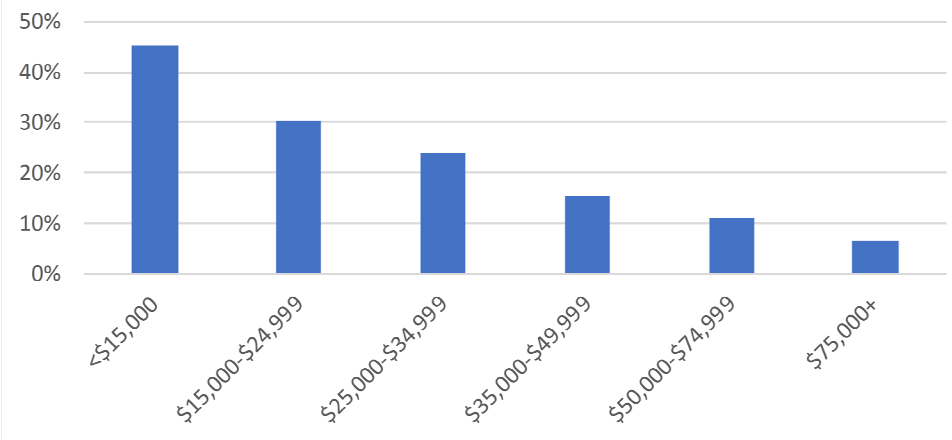
- Estimates through 2010 should not be compared to estimates from 2011-present because of the shift from post-stratification weighting to iterative proportional raking in 2011. For this reason, trend data are excluded from this report.
- Data estimates for fewer than 50 respondents are considered statistically unreliable by the CDC and are not included in this report. Respondents who answered that they do not know or refused to answer a question were excluded from the calculation of prevalence estimates related to that question. Therefore, the sample sizes used to calculate the estimates in this report are different for each indicator. Estimates with a relative standard error greater than 30 percent are also excluded as they do not meet CDC reporting criteria.
- The BRFSS only surveys adults living in households. Therefore, individuals living in a group setting such as a nursing home, the military or prison are not surveyed. In addition, adults who live in households without telephones or cell phones are not included in the sample.
- BRFSS prevalence estimates are based solely on respondents' self-reported answers to survey questions. Respondents may be uncomfortable sharing private health information, or conversely, may exaggerate particular feelings or experiences. Others may be tempted to provide responses that are more socially desirable. In some cases, information provided by respondents may be subject to recall bias. Thus, results should be interpreted with caution.

Key Findings

General Health Status

In 2017, an estimated 18.9 percent of Ohio adults reported that their health was fair or poor. Older adults and those with low levels of education and annual household income were significantly more likely to report fair or poor health. An estimated 45.1 percent of respondents with an annual household income less than \$15,000 reported fair or poor health, compared to only 6.8 percent of respondents with an annual household income of \$75,000 or more (Figure 1).

Figure 1. Fair or Poor Health by Annual Household Income, Ohio, 2017



Key Findings

Chronic Diseases and Conditions

In 2017, an estimated 45.9 percent of Ohio adults reported that they had at least one of the following chronic diseases or conditions: diabetes, heart disease, stroke, current asthma, chronic obstructive pulmonary disease (COPD), cancer, arthritis and/or kidney disease; 20.2 percent reported two or more chronic diseases or conditions. Among adults 65 years and older, 77.2 percent had at least one chronic disease or condition (Figure 2) and 43.7 percent had two or more chronic diseases or conditions. The most common chronic disease or condition among Ohio adults was arthritis (29.1 percent), followed by diabetes (11.3 percent) and current asthma (9.9 percent) (Figure 3).

Figure 2. Any Chronic Disease by Age, Ohio, 2017

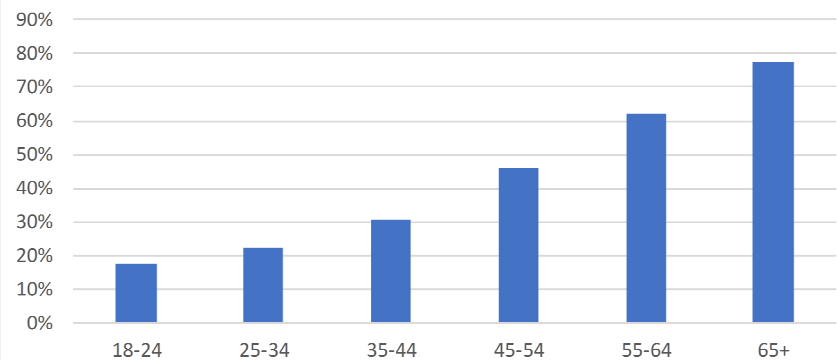
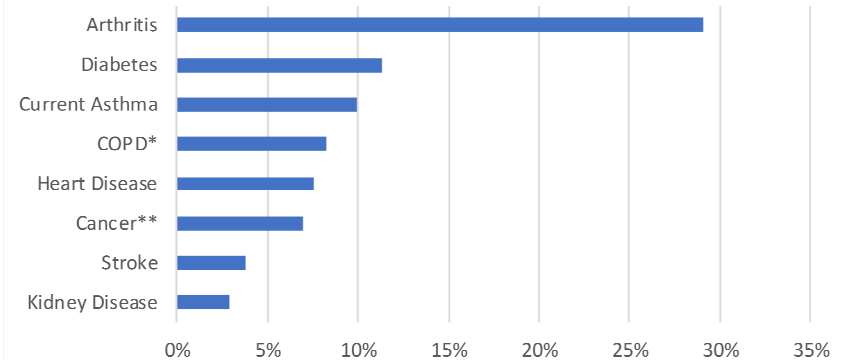


Figure 3. Chronic Diseases and Conditions, Ohio, 2017



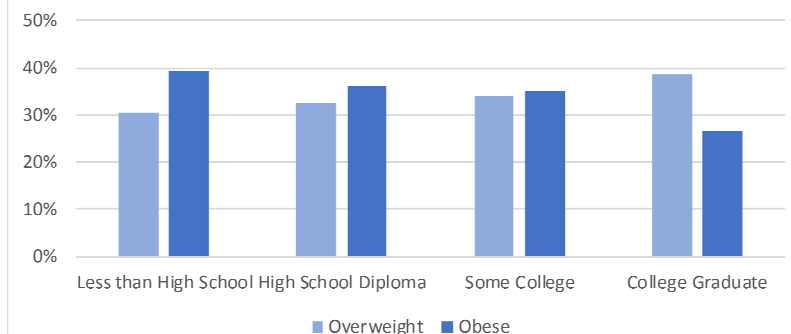
*Chronic Obstructive Pulmonary Disease

**Does not include skin cancer

Obesity/Physical Activity

In 2017, an estimated 33.8 percent of Ohio adults, based on reported height and weight, were obese and an additional 34.2 percent were overweight. Respondents with a lower level of education were more likely to be obese while respondents with a higher level of education were more likely to be overweight (Figure 4). In addition, only 70.4 percent of Ohio adults reported that they participated in any physical activity or exercise in the past month, and only 18.3 percent of Ohio adults met the 2008 Physical Activity Guidelines for Americans.

Figure 4. Overweight and Obese by Education Level, Ohio, 2017

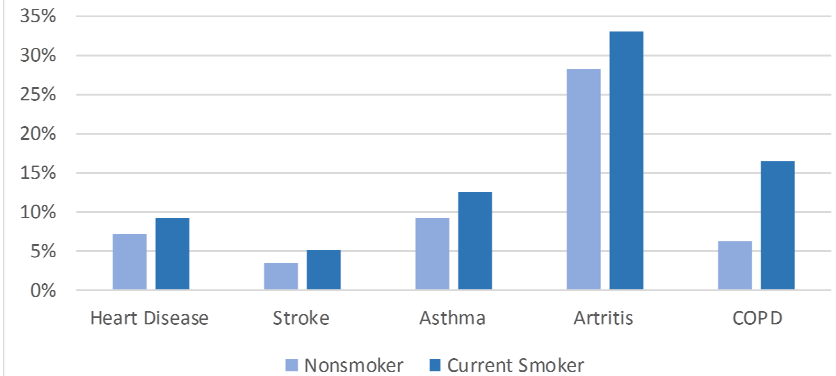


Key Findings

Current Smoking

In 2017, an estimated 21.1 percent of Ohio adults reported that they currently smoke cigarettes compared to 17.1 percent of adults in the United States. Respondents with lower levels of education and annual household income were significantly more likely to be current smokers. An estimated 42.4 percent of respondents with less than a high school education were current smokers, compared to 7.6 percent of college graduates. Current smokers are also more likely to report having heart disease, stroke, asthma, arthritis and COPD compared to nonsmokers (Figure 5).

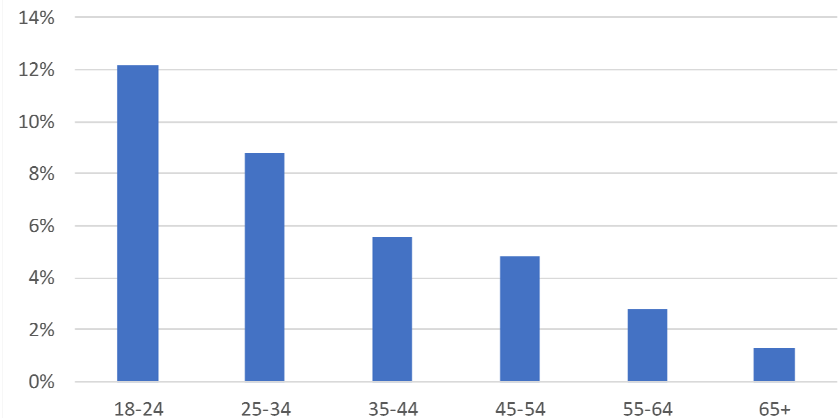
Figure 5. Chronic Diseases by Smoking Status, Ohio, 2017



E-Cigarette Use

In 2017, an estimated 5.5 percent of Ohio adults reporting using e-cigarettes some days or every day. Male respondents were more likely to be e-cigarette users compared to females, and white, non-Hispanics were more likely to be e-cigarette users compared to black, non-Hispanics. The prevalence of e-cigarette use decreases as age increases; 12.2 percent of adults ages 18-24 are current e-cigarette users while only 1.3 percent of adults age 65 and older are current e-cigarette users (Figure 6).

Figure 6. E-Cigarette Use by Age, Ohio, 2017



Key Findings

Poor Mental Health/Depression

In 2017, 14.0 percent of Ohio adults reported that their mental health was not good on 14 or more days in the past month. The prevalence of having poor mental health decreases as income increases; similarly, there is a decrease of poor mental health as education increases (Figure 7). An estimated 22.6 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they had a depressive disorder. Female respondents as well as respondents with lower levels of education and annual household income were more likely to report having been told that they have depression. The prevalence of depression is also significantly lower among adults ages 65 and older compared to adults younger than 65 (Figure 8).

Figure 7. Poor Mental Health Status by Education, Ohio, 2017

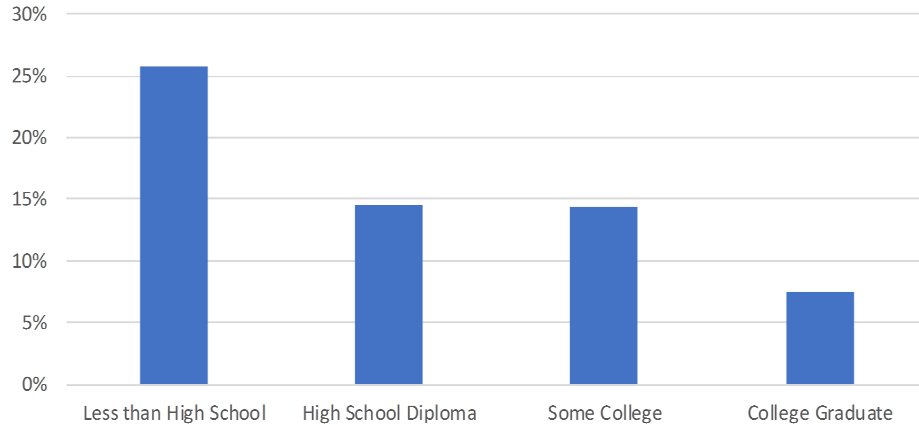
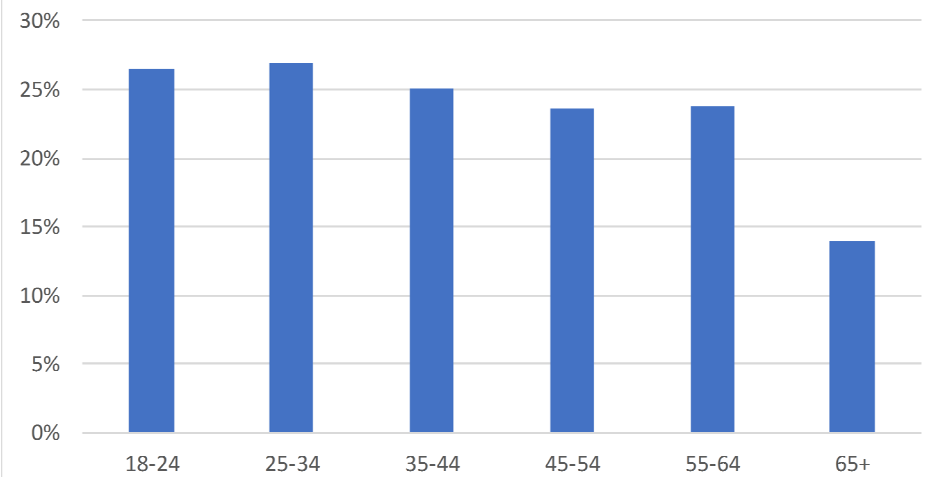


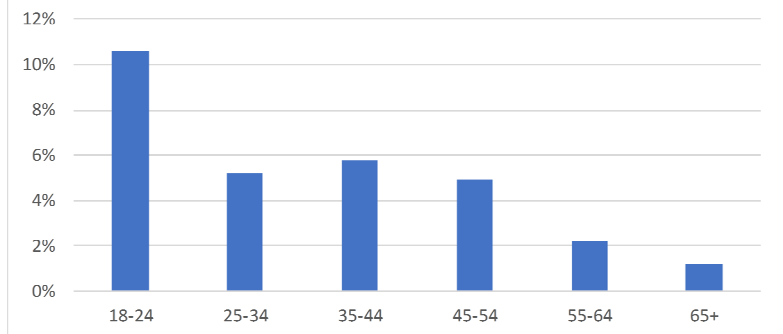
Figure 8. Depression by Age, Ohio, 2017



Suicide

In 2017, an estimated 4.6 percent of Ohio adults reported that they have seriously considered attempting suicide in the past 12 months. Similarly to poor mental health status and depression, respondents with low levels of education and annual household income are more likely to report seriously considering attempting suicide. The prevalence of suicide ideation also decreases as age increases; 10.6 percent of adults ages 18-24 have considered attempting suicide, while 1.2 percent of adults ages 65 and older have considered attempting suicide. (Figure 9).

Figure 9. Suicide Ideation by Age, Ohio, 2017



General Health Status

Self-assessed health status is based on a respondent's perceived general health. Self-rated health can reflect the state of both the body and the mind, and its association with mortality is well documented.ⁱ

Respondents were asked, "Would you say that in general your health is excellent, very good, good, fair or poor?"

- In 2017, 18.9 percent of Ohio adults reported that their general health was fair or poor.
- The prevalence of fair or poor health increases as age increases.
- The prevalence of fair or poor health does not significantly differ by sex.
- Black, non-Hispanic adults (23.7 percent) reported a significantly higher prevalence of fair or poor health compared to white, non-Hispanic adults (18.2 percent) and other, non-Hispanic adults (13.9 percent).
- The prevalence of fair or poor health decreases as annual household income increases.
- The prevalence of fair or poor health decreases as education level increases; 42.3 percent of adults with less than a high school education have fair or poor health, compared to 8.4 percent of those with a college degree.

Table 1. Prevalence of Fair or Poor Health by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Prevalence (%)	General Health, Fair or Poor ¹		
		95% Confidence Interval		
Total	18.9	17.8	-	19.9
Age				
18-24	9.6	6.5	-	12.8
25-34	13.7	10.8	-	16.6
35-44	16.2	13.3	-	19.0
45-54	18.9	16.1	-	21.7
55-64	24.4	22.1	-	26.7
65+	25.5	23.6	-	27.3
Sex				
Male	18.8	17.2	-	20.3
Female	19.0	17.6	-	20.4
Race/Ethnicity				
White, Non-Hispanic	18.2	17.0	-	19.3
Black, Non-Hispanic	23.7	20.2	-	27.1
Hispanic	23.4	15.4	-	31.5
Other, Non-Hispanic	13.9	8.0	-	19.7
Multi-Racial	21.1	13.0	-	29.2
Annual Household Income				
<\$15,000	45.1	40.3	-	50.0
\$15,000-\$24,999	30.3	27.2	-	33.4
\$25,000-\$34,999	23.8	20.0	-	27.6
\$35,000-\$49,999	15.5	12.7	-	18.3
\$50,000-\$74,999	11.0	8.6	-	13.3
\$75,000+	6.8	5.5	-	8.1
Education				
Less than High School	42.3	37.1	-	47.5
High School Diploma	21.4	19.6	-	23.1
Some College	15.9	14.2	-	17.6
College Graduate	8.4	7.4	-	9.4

¹Among adults, the proportion who reported that their health, in general, was either fair or poor.

Access to Healthcare Coverage

Healthcare coverage is a determinant of access to health care and health status. The major source of coverage for adults less than age 65 is private employee-sponsored group health insurance.ⁱⁱ

Respondents were asked, “Do you have any kind of healthcare coverage, including health insurance, prepaid plans such as HMOs, government plans such as Medicare or Indian Health Service?”

- In 2017, 92.2 percent of Ohio adults reported they have healthcare coverage.
- Access to healthcare coverage is lowest among adults ages 18-24 and generally increases as age increases.
- Access to healthcare coverage is significantly higher among females (94.1 percent) compared to males (90.2 percent).
- Access to healthcare coverage is significantly higher among white, non-Hispanic adults compared to all other race/ethnicity groups.
- Access to healthcare coverage is significantly higher among those with an annual household income of \$75,000 or more compared to those with an annual household income less than \$75,000.
- Access to healthcare coverage increases as education level increases; 85.1 percent of adults with less than a high school education have healthcare coverage, compared to 97.0 percent of those with a college degree.

Table 2. Access to Healthcare Coverage by Demographic Characteristics, Ohio, 2017
Access to Healthcare Coverage¹

Demographic Characteristics	Prevalence (%)	95% Confidence Interval		
Total	92.2	91.4	-	93.0
Age				
18-24	86.8	83.3	-	90.4
25-34	90.1	87.8	-	92.4
35-44	89.8	87.4	-	92.2
45-54	90.7	88.7	-	92.6
55-64	93.4	92.1	-	94.7
65+	98.6	98.1	-	99.1
Sex				
Male	90.2	88.9	-	91.5
Female	94.1	93.1	-	95.0
Race/Ethnicity				
White, Non-Hispanic	93.5	92.7	-	94.3
Black, Non-Hispanic	89.5	86.7	-	92.3
Hispanic	84.1	77.1	-	91.2
Other, Non-Hispanic	82.6	74.7	-	90.5
Multi-Racial	81.9	72.3	-	91.6
Annual Household Income				
<\$15,000	91.6	88.9	-	94.2
\$15,000-\$24,999	85.5	82.8	-	88.2
\$25,000-\$34,999	89.6	86.5	-	92.7
\$35,000-\$49,999	90.9	88.4	-	93.4
\$50,000-\$74,999	93.4	91.4	-	95.4
\$75,000+	97.5	96.8	-	98.3
Education				
Less than High School	85.1	81.2	-	89.0
High School Diploma	90.7	89.2	-	92.1
Some College	92.7	91.5	-	94.0
College Graduate	97.0	96.2	-	97.7

¹Among adults, the proportion of those who reported any kind of healthcare coverage, including health insurance, prepaid plans such as HMOs, government plans such as Medicare or Indian Health Service.

Heart Disease

Heart disease is the leading cause of death for both men and women. Key risk factors for heart disease include high blood pressure, high cholesterol and smoking. Other risk factors include diabetes, overweight and obesity, poor diet, physical inactivity and excessive alcohol use.ⁱⁱⁱ

Respondents were asked two questions related to heart attack and coronary heart disease which were combined to create one heart disease indicator:

- “Has a doctor, nurse or other health professional ever told you that you had a heart attack also called myocardial infarction?”
- “Has a doctor, nurse or other health professional ever told you that you had angina or coronary heart disease?”

- In 2017, 7.6 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they had a heart attack, angina or coronary heart disease.
- The prevalence of heart disease increases as age increases.
- The prevalence of heart disease is significantly higher among males (9.4 percent) compared to females (6.0 percent).
- The prevalence of heart disease does not significantly differ by race/ethnicity.
- The prevalence of heart disease decreases as annual household income increases.
- The prevalence of heart disease decreases as education level increases; adults with less than a high school education are more than three times as likely to have heart disease compared to college graduates.

Table 3. Prevalence of Heart Disease by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Heart Disease ¹			
	Prevalence (%)	95% Confidence Interval		
Total	7.6	7.0	-	8.2
Age				
18-24	N/A ²	N/A ²	-	N/A ²
25-34	N/A ²	N/A ²	-	N/A ²
35-44	3.1	1.8	-	4.4
45-54	4.8	3.6	-	6.1
55-64	12.1	10.4	-	13.8
65+	18.5	16.8	-	20.1
Sex				
Male	9.4	8.4	-	10.3
Female	6.0	5.3	-	6.7
Race/Ethnicity				
White, Non-Hispanic	7.6	6.9	-	8.2
Black, Non-Hispanic	8.5	6.4	-	10.7
Hispanic	6.3	2.4	-	10.2
Other, Non-Hispanic	5.9	1.6	-	10.3
Multi-Racial	7.8	3.6	-	12.0
Annual Household Income				
<\$15,000	13.9	11.2	-	16.6
\$15,000-\$24,999	12.4	10.5	-	14.4
\$25,000-\$34,999	8.0	6.1	-	9.9
\$35,000-\$49,999	6.2	4.9	-	7.6
\$50,000-\$74,999	4.7	3.5	-	5.9
\$75,000+	3.5	2.8	-	4.3
Education				
Less than High School	15.1	11.9	-	18.2
High School Diploma	8.2	7.3	-	9.2
Some College	6.7	5.7	-	7.7
College Graduate	4.5	3.8	-	5.2

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they had a heart attack (or myocardial infarction), angina or coronary heart disease.

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Stroke

Stroke is the fifth leading cause of death in the United States and one of the leading causes of serious disability among adults. Major risk factors for stroke include high blood pressure, high cholesterol and smoking.^{iv}

Respondents were asked, “Has a doctor, nurse or other health professional ever told you that you had a stroke?”

- In 2017, 3.8 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they had suffered a stroke.
- The prevalence of stroke is significantly higher among adults ages 65 and older compared to those younger than 65.
- The prevalence of stroke does not significantly differ by sex.
- The prevalence of stroke does not significantly differ by race/ethnicity.
- The prevalence of stroke decreases as annual household income increases.
- The prevalence of stroke decreases as education level increases; 7.9 percent of adults with less than a high school education have had a stroke, compared to 2.0 percent of college graduates.

Table 4. Prevalence of Stroke by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Stroke ¹			
	Prevalence (%)	95% Confidence Interval		
Total	3.8	3.3	-	4.2
Age				
18-24	N/A ²	N/A ²	-	N/A ²
25-34	N/A ²	N/A ²	-	N/A ²
35-44	N/A ²	N/A ²	-	N/A ²
45-54	3.1	2.0	-	4.2
55-64	5.3	4.1	-	6.5
65+	8.9	7.7	-	10.2
Sex				
Male	3.8	3.1	-	4.4
Female	3.8	3.2	-	4.4
Race/Ethnicity				
White, Non-Hispanic	3.6	3.2	-	4.1
Black, Non-Hispanic	5.3	3.5	-	7.0
Hispanic	N/A ²	N/A ²	-	N/A ²
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²
Multi-Racial	N/A ²	N/A ²	-	N/A ²
Annual Household Income				
<\$15,000	6.6	4.6	-	8.6
\$15,000-\$24,999	6.1	4.7	-	7.5
\$25,000-\$34,999	5.4	3.6	-	7.2
\$35,000-\$49,999	3.0	1.9	-	4.1
\$50,000-\$74,999	2.6	1.6	-	3.6
\$75,000+	1.2	0.7	-	1.6
Education				
Less than High School	7.9	5.6	-	10.2
High School Diploma	4.0	3.3	-	4.7
Some College	3.4	2.6	-	4.1
College Graduate	2.0	1.6	-	2.5

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they had a stroke.

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Cancer

Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells. Regular screening examinations by a healthcare professional can result in the detection of many cancers at earlier stages, when treatment is more likely to be successful.^v

Respondents were asked:

- “Has a doctor, nurse or other health professional ever told you that you had skin cancer?”

- “Has a doctor, nurse or other health professional ever told you that you had any other type of cancer?”

- In 2017, 5.8 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they had skin cancer; 7.0 percent of adults reported ever being told that they had any other type of cancer.

- The prevalence of skin cancer and other types of cancer is significantly higher among adults ages 65 and older compared to adults younger than 65.

- The prevalence of skin cancer does not significantly differ by sex; the prevalence of other types of cancer is significantly higher among females (8.2 percent) compared to males (5.8 percent).

- The prevalence of other types of cancer does not significantly differ by race/ethnicity.

- The prevalence of skin cancer and other types of cancer does not significantly differ by annual household income.

- The prevalence of skin cancer generally increases as educational attainment increases, with college graduates significantly more likely to report having skin cancer compared to those with less than a high school diploma.

Table 5. Prevalence of Cancer by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Skin Cancer ¹				Other Cancer ¹			
	Prevalence (%)	95% Confidence Interval			Prevalence (%)	95% Confidence Interval		
Total	5.8	5.3	-	6.3	7.0	6.5	-	7.6
Age								
18-24	N/A ²	N/A ²	-	N/A ²	N/A ²	N/A ²	-	N/A ²
25-34	N/A ²	N/A ²	-	N/A ²	N/A ²	N/A ²	-	N/A ²
35-44	1.1	0.5	-	1.8	3.3	1.9	-	4.8
45-54	3.7	2.6	-	4.7	4.4	3.3	-	5.5
55-64	8.6	7.2	-	10.1	8.3	7.0	-	9.7
65+	15.2	13.8	-	16.6	18.3	16.7	-	19.9
Sex								
Male	6.0	5.3	-	6.8	5.8	5.0	-	6.6
Female	5.6	5.0	-	6.2	8.2	7.4	-	9.0
Race/Ethnicity								
White, Non-Hispanic	7.0	6.4	-	7.6	7.5	6.8	-	8.1
Black, Non-Hispanic	N/A ²	N/A ²	-	N/A ²	5.7	4.0	-	7.4
Hispanic	N/A ²	N/A ²	-	N/A ²	N/A ²	N/A ²	-	N/A ²
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²	N/A ²	N/A ²	-	N/A ²
Multi-Racial	N/A ²	N/A ²	-	N/A ²	N/A ²	N/A ²	-	N/A ²
Annual Household Income								
<\$15,000	5.8	3.8	-	7.8	7.9	5.8	-	10.0
\$15,000-\$24,999	6.2	4.8	-	7.5	9.1	7.4	-	10.7
\$25,000-\$34,999	5.2	3.9	-	6.5	7.2	5.3	-	9.1
\$35,000-\$49,999	5.3	4.1	-	6.6	7.4	5.8	-	9.0
\$50,000-\$74,999	6.3	4.9	-	7.7	4.8	3.7	-	6.0
\$75,000+	5.9	5.0	-	6.8	5.6	4.5	-	6.6
Education								
Less than High School	4.0	2.4	-	5.5	8.0	5.7	-	10.3
High School Diploma	5.2	4.4	-	6.0	7.4	6.4	-	8.3
Some College	6.5	5.5	-	7.5	6.5	5.5	-	7.6
College Graduate	6.7	5.8	-	7.6	6.7	5.8	-	7.6

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they had skin cancer or other types of cancer.

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Chronic Obstructive Pulmonary Disease

Chronic Obstructive Pulmonary Disease (COPD), which includes emphysema and chronic bronchitis, is a disease where inflammation of the airways and destruction of lung tissue results in shortness of breath. COPD can cause long-term disability and is the third leading cause of death in the United States.^{vi}

Respondents were asked, “Have you ever been told by a doctor, nurse or other health professional that you have Chronic Obstructive Pulmonary Disease or COPD, emphysema or chronic bronchitis?”

- In 2017, 8.3 percent of Ohio adults reported being told by a doctor, nurse or other health professional that they have COPD.
- The prevalence of COPD increases as age increases.
- The prevalence of COPD is significantly higher among females (9.9%) compared to males (6.6%).
- The prevalence of COPD does not differ by race/ethnicity.
- The prevalence of COPD decreases as annual household income increases; 22.1 percent of adults with an annual household income less than \$15,000 have COPD, compared to 2.4 percent of those with an annual household income of \$75,000 or more.
- The prevalence of COPD decreases as education level increases; 18.3 percent of adults with less than a high school education have COPD, compared to 2.6 percent of those with a college degree.

Table 6. Prevalence of Chronic Obstructive Pulmonary Disease (COPD) by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	COPD ¹			
	Prevalence (%)	95% Confidence Interval		
Total	8.3	7.6	-	9.0
Age				
18-24	N/A ²	N/A ²	-	N/A ²
25-34	2.5	1.4	-	3.7
35-44	4.5	3.0	-	6.0
45-54	9.1	7.1	-	11.1
55-64	13.4	11.5	-	15.2
65+	14.3	12.9	-	15.8
Sex				
Male	6.6	5.8	-	7.5
Female	9.9	8.8	-	10.9
Race/Ethnicity				
White, Non-Hispanic	8.6	7.8	-	9.3
Black, Non-Hispanic	8.2	6.1	-	10.4
Hispanic	N/A ²	N/A ²	-	N/A ²
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²
Multi-Racial	N/A ²	N/A ²	-	N/A ²
Annual Household Income				
<\$15,000	22.1	18.4	-	25.9
\$15,000-\$24,999	14.1	11.8	-	16.4
\$25,000-\$34,999	12.1	9.5	-	14.7
\$35,000-\$49,999	6.3	4.8	-	7.8
\$50,000-\$74,999	3.9	2.6	-	5.1
\$75,000+	2.4	1.7	-	3.0
Education				
Less than High School	18.3	14.6	-	21.9
High School Diploma	10.0	8.8	-	11.1
Some College	7.4	6.3	-	8.5
College Graduate	2.6	2.1	-	3.2

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they have COPD, emphysema or chronic bronchitis.

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Asthma

Asthma is a chronic inflammatory disease of the airways. There is no cure for asthma, but it can be controlled through appropriate medical care and by avoiding known exposures that can trigger an attack.^{vii}

Adult respondents were asked, “Has a doctor, nurse or other health professional ever told you that you had asthma?” If yes, “Do you still have asthma?”

- In 2017, 13.7 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they had asthma; 9.9 percent of Ohio adults reported that they currently have asthma.
- The prevalence of lifetime asthma is significantly lower among adults ages 65 and older (11.8 percent) compared to adults ages 18-24 (19.6 percent).
- The prevalence of lifetime asthma among adults is significantly higher among females (16.0 percent) compared to males (11.3 percent).
- The prevalence of current asthma is significantly lower among white, non-Hispanic adults (9.2 percent) compared to black, non-Hispanic adults (14.2 percent).
- The prevalence of lifetime and current asthma among adults decreases as annual household income increases.
- The prevalence of lifetime and current asthma is significantly higher among adults with less than a high school education compared to all other levels of education.

Table 7. Prevalence of Asthma by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Asthma, Ever Told ¹			Current Asthma ¹		
	Prevalence (%)	95% Confidence Interval		Prevalence (%)	95% Confidence Interval	
Total	13.7	12.7	- 14.7	9.9	9.0	- 10.7
Age						
18-24	19.6	15.5	- 23.6	11.5	8.0	- 14.9
25-34	13.3	10.7	- 15.9	9.8	7.5	- 12.2
35-44	12.9	10.4	- 15.4	9.5	7.3	- 11.7
45-54	15.4	12.9	- 17.9	12.4	10.1	- 14.6
55-64	11.8	10.1	- 13.4	8.9	7.4	- 10.4
65+	11.8	10.3	- 13.3	8.5	7.2	- 9.7
Sex						
Male	11.3	10.0	- 12.6	7.2	6.1	- 8.2
Female	16.0	14.5	- 17.4	12.4	11.1	- 13.7
Race/Ethnicity						
White, Non-Hispanic	13.2	12.1	- 14.2	9.2	8.3	- 10.1
Black, Non-Hispanic	17.5	14.2	- 20.8	14.2	11.2	- 17.2
Hispanic	13.0	7.0	- 18.9	10.3	5.0	- 15.6
Other, Non-Hispanic	11.2	5.8	- 16.5	9.3	4.3	- 14.4
Multi-Racial	22.6	13.1	- 32.1	15.6	7.2	- 24.1
Annual Household Income						
<\$15,000	23.2	18.9	- 27.5	20.8	16.6	- 25.0
\$15,000-\$24,999	18.1	15.2	- 21.0	14.2	11.4	- 16.9
\$25,000-\$34,999	17.1	13.4	- 20.7	12.2	9.1	- 15.4
\$35,000-\$49,999	12.0	9.4	- 14.6	7.9	5.7	- 10.0
\$50,000-\$74,999	10.1	7.9	- 12.3	7.4	5.4	- 9.3
\$75,000+	10.0	8.4	- 11.5	5.9	4.7	- 7.1
Education						
Less than High School	23.5	18.7	- 28.3	19.0	14.5	- 23.5
High School Diploma	12.4	10.9	- 13.8	9.0	7.8	- 10.3
Some College	14.1	12.4	- 15.8	9.7	8.2	- 11.1
College Graduate	10.6	9.3	- 11.9	7.2	6.1	- 8.3

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they ever had asthma and currently have asthma.

Childhood Asthma

About one in 11 children in the United States has asthma. An asthma attack may be triggered by respiratory infections, cigarette smoke, allergies, air pollutants, exposure to cold air/temperature changes, excitement/stress or exercise.^{viii}

Respondents were asked, “Has a doctor, nurse or other health professional ever said that the child has asthma?” If yes, “Does the child still have asthma?”

- In 2017, an estimated 11.8 percent of Ohio children ages 0-17 were ever told by a doctor, nurse or other health professional that they had asthma; an estimated 8.6 percent of Ohio children currently have asthma.
- The prevalence of current and lifetime asthma is highest among children ages 15-17.
- The prevalence of lifetime and current asthma among children does not significantly differ by sex or annual household income.
- The prevalence of lifetime and current asthma is significantly higher among black, non-Hispanic Ohio children ages 0-17 (22.2 percent and 17.3 percent, respectively) compared to white, non-Hispanic children (8.8 percent and 6.4 percent, respectively).

Table 8. Prevalence of Childhood Asthma by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Asthma, Ever Told ¹				Current Asthma ¹			
	Prevalence (%)	95% Confidence Interval			Prevalence (%)	95% Confidence Interval		
Total	11.8	10.0	-	13.6	8.6	7.0	-	10.3
Age								
0-4	6.0	3.0	-	9.1	4.9	2.2	-	7.7
5-9	12.3	8.6	-	16.0	9.9	6.4	-	13.4
10-14	14.5	10.7	-	18.3	9.9	6.7	-	13.0
15-17	15.4	11.4	-	19.4	10.4	6.9	-	14.0
Sex								
Male	14.0	11.1	-	16.8	9.7	7.3	-	12.1
Female	9.9	7.5	-	12.3	7.8	5.5	-	10.0
Race/Ethnicity								
White, Non-Hispanic	8.8	7.2	-	10.5	6.4	4.9	-	7.9
Black, Non-Hispanic	22.2	15.3	-	29.1	17.3	11.0	-	23.5
Hispanic	N/A ²	N/A ²	-	N/A ²	N/A ²	N/A ²	-	N/A ²
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²	N/A ²	N/A ²	-	N/A ²
Multi-Racial	N/A ²	N/A ²	-	N/A ²	N/A ²	N/A ²	-	N/A ²
Annual Household Income								
<\$15,000	13.1	5.7	-	20.6	12.2	4.9	-	19.6
\$15,000-\$24,999	16.7	10.9	-	22.4	13	7.8	-	18.3
\$25,000-\$34,999	19.8	12.0	-	27.6	14.9	7.5	-	22.2
\$35,000-\$49,999	13.5	7.6	-	19.4	8.2	3.9	-	12.5
\$50,000-\$74,999	7.9	3.5	-	12.3	4.8	1.4	-	8.1
\$75,000+	9.3	6.7	-	12.0	7.1	4.6	-	9.5

¹The proportion of those who reported ever being told by a doctor, nurse or other health professional that the child has asthma and currently has asthma.

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Arthritis

Arthritis—an umbrella term that includes multiple conditions affecting the joints and connective tissues—is the leading cause of disability in the United States. Arthritis commonly occurs with other chronic conditions and can complicate the treatment of those conditions.^{ix}

Respondents were asked, “Has a doctor, nurse or other health professional ever told you that you have some form of arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia?”

- In 2017, 29.1 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they have arthritis.
- The prevalence of arthritis increases as age increases.
- The prevalence of arthritis is significantly higher among females (33.8 percent) compared to males (24.0 percent).
- The prevalence of arthritis is significantly higher among white, non-Hispanic adults (30.4 percent) compared to Hispanic adults (17.3 percent) and other, non-Hispanic adults (12.8 percent).
- The prevalence of arthritis decreases as annual household income increases.
- The prevalence of arthritis decreases as education level increases.

Table 9. Prevalence of Arthritis by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Arthritis ¹			
	Prevalence (%)	95% Confidence Interval		
Total	29.1	27.9	-	30.2
Age				
18-24	5.0	2.8	-	7.3
25-34	10.4	7.8	-	13.0
35-44	16.3	13.7	-	18.9
45-54	28.6	25.7	-	31.5
55-64	42.7	40.1	-	45.3
65+	55.0	52.9	-	57.1
Sex				
Male	24.0	22.4	-	25.6
Female	33.8	32.2	-	35.4
Race/Ethnicity				
White, Non-Hispanic	30.4	29.2	-	31.7
Black, Non-Hispanic	26.7	23.2	-	30.3
Hispanic	17.3	11.3	-	23.2
Other, Non-Hispanic	12.8	7.5	-	18.2
Multi-Racial	22.7	15.0	-	30.4
Annual Household Income				
<\$15,000	44.5	39.8	-	49.3
\$15,000-\$24,999	35.4	32.3	-	38.5
\$25,000-\$34,999	33.2	29.2	-	37.1
\$35,000-\$49,999	30.5	27.4	-	33.6
\$50,000-\$74,999	26.0	23.0	-	28.9
\$75,000+	18.9	17.1	-	20.7
Education				
Less than High School	41.5	36.4	-	46.5
High School Diploma	30.1	28.3	-	32.0
Some College	29.5	27.5	-	31.6
College Graduate	21.3	19.8	-	22.9

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they have some form of arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia.

Kidney Disease

CDC estimates that 15 percent of adults in the United States may have chronic kidney disease. Diabetes and high blood pressure increase the risk of developing kidney disease; approximately 1 in 3 adults with diabetes and 1 in 5 adults with high blood pressure have chronic kidney disease.^x

Respondents were asked, “Has a doctor, nurse or other health professional ever told you that you have kidney disease?”

- In 2017, 2.9 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they have kidney disease.
- The prevalence of kidney disease (among adults ages 45 and older) increases as age increases.
- The prevalence of kidney disease does not significantly differ by sex.
- The prevalence of kidney disease does not significantly differ by race/ethnicity.
- The prevalence of kidney disease is significantly higher among adults with an annual household income less than \$25,000 compared to those with an annual household income of \$50,000 or more.
- The prevalence of kidney disease generally decreases as education increases.

Table 10. Prevalence of Kidney Disease by Demographic Characteristics, Ohio, 2017
Kidney Disease¹

Demographic Characteristics	Prevalence (%)	95% Confidence Interval		
Total	2.9	2.5	-	3.2
Age				
18-24	N/A ²	N/A ²	-	N/A ²
25-34	N/A ²	N/A ²	-	N/A ²
35-44	N/A ²	N/A ²	-	N/A ²
45-54	1.9	1.0	-	2.7
55-64	4.4	3.3	-	5.4
65+	5.9	5.0	-	6.9
Sex				
Male	2.5	2.0	-	3.0
Female	3.3	2.7	-	3.8
Race/Ethnicity				
White, Non-Hispanic	3.0	2.6	-	3.4
Black, Non-Hispanic	2.9	1.8	-	4.1
Hispanic	N/A ²	N/A ²	-	N/A ²
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²
Multi-Racial	N/A ²	N/A ²	-	N/A ²
Annual Household Income				
<\$15,000	5.7	3.7	-	7.8
\$15,000-\$24,999	4.7	3.5	-	6.0
\$25,000-\$34,999	3.1	2.0	-	4.2
\$35,000-\$49,999	2.3	1.5	-	3.2
\$50,000-\$74,999	2.2	1.4	-	3.0
\$75,000+	1.2	0.7	-	1.7
Education				
Less than High School	4.0	2.5	-	5.6
High School Diploma	3.1	2.5	-	3.7
Some College	3.1	2.3	-	3.8
College Graduate	1.8	1.3	-	2.3

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they have kidney disease (not including kidney stones, bladder infection or incontinence).

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Diabetes

Diabetes can result in serious complications such as heart disease, stroke, kidney disease, blindness and death. Age, obesity, family history, history of gestational diabetes, impaired glucose metabolism, physical inactivity and race/ethnicity can contribute to one's risk of developing diabetes.^{xi}

Respondents were asked, "Has a doctor, nurse or other health professional ever told you that you have diabetes?"

- In 2017, 11.3 percent of Ohio adults reported ever being told by a doctor, nurse or other healthcare professional that they have diabetes.
- The prevalence of diabetes increases as age increases among those ages 25 and older.
- The prevalence of diabetes does not significantly differ by sex.
- The prevalence of diabetes is significantly higher among white, non-Hispanic (11.1 percent) and black, non-Hispanic adults (14.3 percent) compared to other, non-Hispanic adults (5.3 percent).
- The prevalence of diabetes decreases as annual household income increases; 19.4 percent of adults with an annual household income less than \$15,000 have diabetes, compared to 6.0 percent of those with an annual household income of \$75,000 or more.
- The prevalence of diabetes is significantly lower among college graduates compared to adults with less than a college degree.

Table 11. Prevalence of Diabetes by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Diabetes ¹			
	Prevalence (%)	95% Confidence Interval		
Total	11.3	10.6	-	12.0
Age				
18-24	N/A ²	N/A ²	-	N/A ²
25-34	1.7	1.0	-	2.5
35-44	6.6	4.7	-	8.5
45-54	9.4	7.6	-	11.3
55-64	18.6	16.5	-	20.6
65+	22.8	21.1	-	24.5
Sex				
Male	11.2	10.1	-	12.2
Female	11.4	10.4	-	12.4
Race/Ethnicity				
White, Non-Hispanic	11.1	10.4	-	11.9
Black, Non-Hispanic	14.3	11.6	-	16.9
Hispanic	9.6	5.0	-	14.2
Other, Non-Hispanic	5.3	2.0	-	8.6
Multi-Racial	6.9	3.4	-	10.4
Annual Household Income				
<\$15,000	19.4	15.9	-	22.9
\$15,000-\$24,999	14.6	12.6	-	16.7
\$25,000-\$34,999	14.5	11.7	-	17.3
\$35,000-\$49,999	10.0	8.4	-	11.7
\$50,000-\$74,999	9.5	7.8	-	11.2
\$75,000+	6.0	5.0	-	7.0
Education				
Less than High School	15.8	12.4	-	19.3
High School Diploma	12.6	11.4	-	13.8
Some College	10.8	9.6	-	12.0
College Graduate	7.9	6.9	-	8.9

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they have diabetes.

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Prediabetes

Prediabetes is a condition in which blood glucose or hemoglobin A1c levels are elevated but not high enough to be classified as diabetes. People with prediabetes have an increased risk of developing type 2 diabetes, heart disease and stroke, but not everyone with prediabetes will progress to diabetes.^{xii}

Respondents were asked, “Have you ever been told by a doctor, nurse or other health professional that you have prediabetes or borderline diabetes?”

- In 2017, 8.8 percent of Ohio adults reported being told by a doctor, nurse or other health professional that they have prediabetes.
- The prevalence of prediabetes is significantly higher among adults ages 65 and older compared to those younger than 45.
- The prevalence of prediabetes does not significantly differ by sex.
- The prevalence of prediabetes does not significantly differ by race/ethnicity.
- The prevalence of prediabetes among adults with an annual household income of less than \$15,000 (14.0 percent) is significantly higher compared to adults with an annual household income of \$75,000 or more (7.5 percent).
- The prevalence of prediabetes does not significantly differ by educational attainment.

Table 12. Prevalence of Prediabetes by Demographic Characteristics, Ohio, 2017
Prediabetes¹

Demographic Characteristics	Prevalence (%)	95% Confidence Interval		
Total	8.8	7.9	-	9.7
Age				
18-24	5.5	2.7	-	8.3
25-34	4.5	2.6	-	6.3
35-44	7.3	4.9	-	9.7
45-54	9.9	7.3	-	12.5
55-64	10.8	8.9	-	12.7
65+	14.1	12.1	-	16.0
Sex				
Male	8.6	7.3	-	10.0
Female	9.0	7.8	-	10.3
Race/Ethnicity				
White, Non-Hispanic	8.3	7.4	-	9.3
Black, Non-Hispanic	10.9	7.6	-	14.2
Hispanic	N/A ²	N/A ²	-	N/A ²
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²
Multi-Racial	N/A ²	N/A ²	-	N/A ²
Annual Household Income				
<\$15,000	14.0	9.5	-	18.5
\$15,000-\$24,999	8.8	6.6	-	11.1
\$25,000-\$34,999	10.3	6.5	-	14.0
\$35,000-\$49,999	10.0	7.4	-	12.6
\$50,000-\$74,999	8.6	6.2	-	11.1
\$75,000+	7.5	5.9	-	9.2
Education				
Less than High School	9.4	5.5	-	13.4
High School Diploma	9.1	7.5	-	10.7
Some College	9.0	7.3	-	10.6
College Graduate	8.1	6.6	-	9.5

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they have prediabetes or borderline diabetes.

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Poor Mental Health

It is estimated that only 17 percent of adults in the United States are considered to be in a state of optimal mental health. There is emerging evidence that positive mental health is associated with improved health outcomes. Poor mental health is commonly reported as having mental health that was “not good” on 14 or more days in the past month.^{xiii}

Respondents were asked “Now thinking about your mental health, which includes stress, depression and problems with emotions, for how many days during the past 30 days was your mental health not good?”

- In 2017, 14.0 percent of Ohio adults reported that their mental health was not good on 14 or more days in the past 30 days.
- The prevalence of having poor mental health is significantly lower among those 65 and older compared to those younger than 65.
- The prevalence of having poor mental health is significantly higher among females (15.5 percent) compared to males (12.5 percent).
- The prevalence of having poor mental health is significantly higher among multi-racial adults (25.1 percent) compared to white, non-Hispanic adults (13.7 percent).
- The prevalence of having poor mental health is significantly higher among those with an annual household income of less than \$15,000 compared to those with an annual household income of \$15,000 or more.
- The prevalence of having poor mental health is significantly higher among those with less than a high school education compared to those with a high school diploma, some college or a college degree.

Table 13. Prevalence of Poor Mental Health by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Poor Mental Health ¹			
	Prevalence (%)	95% Confidence Interval		
Total	14.0	13.0	-	15.1
Age				
18-24	18.4	14.4	-	22.4
25-34	16.2	13.3	-	19.1
35-44	17.0	14.1	-	19.9
45-54	15.2	12.7	-	17.7
55-64	14.2	12.3	-	16.1
65+	6.9	5.9	-	7.9
Sex				
Male	12.5	11.0	-	13.9
Female	15.5	14.1	-	16.9
Race/Ethnicity				
White, Non-Hispanic	13.7	12.6	-	14.8
Black, Non-Hispanic	13.4	10.6	-	16.3
Hispanic	21.9	14.1	-	29.7
Other, Non-Hispanic	14.5	7.3	-	21.7
Multi-Racial	25.1	16.0	-	34.1
Annual Household Income				
<\$15,000	29.8	25.3	-	34.2
\$15,000-\$24,999	19.4	16.5	-	22.3
\$25,000-\$34,999	15.3	12.0	-	18.7
\$35,000-\$49,999	15.1	12.1	-	18.0
\$50,000-\$74,999	9.5	7.2	-	11.8
\$75,000+	6.5	5.1	-	7.9
Education				
Less than High School	25.7	20.7	-	30.6
High School Diploma	14.6	13.0	-	16.3
Some College	14.4	12.6	-	16.2
College Graduate	7.5	6.3	-	8.6

¹Among adults, the proportion of those who reported that their mental health was not good on 14 or more days in the past 30 days.

Depression

Depression is a serious, life-long condition that affects thoughts, feelings, behavior, mood and physical health. It is estimated that 16 million adults in the United States—almost 7 percent of the population—had at least one major depressive episode in the past year.^{xiv}

Respondents were asked, “Have you ever been told by a doctor, nurse or other health professional that you have a depressive disorder, including depression, major depression, dysthymia or minor depression?”

- In 2017, 22.6 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they have a depressive disorder.
- The prevalence of depression is significantly lower among adults 65 and older compared to adults 18-64 years of age.
- The prevalence of depression is significantly higher among females (27.7 percent) compared to males (17.2 percent).
- The prevalence of depression is significantly lower among black, non-Hispanic adults (18.1 percent) compared to white, non-Hispanic and multi-racial adults (23.3 percent and 31.2 percent), respectively.
- The prevalence of depression is significantly higher among those with an annual household income less than \$15,000 compared to those with an annual household income of \$15,000 or higher.
- The prevalence of depression decreases as education level increases.

Table 14. Prevalence of Depression by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Depression ¹			
	Prevalence (%)	95% Confidence Interval		
Total	22.6	21.4	-	23.7
Age				
18-24	26.5	22.1	-	30.9
25-34	26.9	23.5	-	30.4
35-44	25.1	21.9	-	28.3
45-54	23.7	20.9	-	26.5
55-64	23.8	21.6	-	26.1
65+	14.0	12.6	-	15.4
Sex				
Male	17.2	15.6	-	18.8
Female	27.7	26.0	-	29.3
Race/Ethnicity				
White, Non-Hispanic	23.3	22.0	-	24.6
Black, Non-Hispanic	18.1	14.9	-	21.3
Hispanic	23.7	16.5	-	30.8
Other, Non-Hispanic	17.5	10.6	-	24.4
Multi-Racial	31.2	21.8	-	40.6
Annual Household Income				
<\$15,000	41.2	36.5	-	45.9
\$15,000-\$24,999	30.3	27.0	-	33.5
\$25,000-\$34,999	28.1	23.9	-	32.4
\$35,000-\$49,999	20.3	17.2	-	23.5
\$50,000-\$74,999	16.8	14.2	-	19.5
\$75,000+	14.8	12.9	-	16.8
Education				
Less than High School	33.9	28.7	-	39.0
High School Diploma	21.7	19.8	-	23.6
Some College	24.0	21.9	-	26.1
College Graduate	17.0	15.3	-	18.6

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they have a depressive disorder, including depression, major depression, dysthymia or minor depression.

Suicide

Suicide is the 10th leading cause of death and is one of just three leading causes that are on the rise. It is estimated that more than 50 percent of individuals who have seriously considered attempting suicide do not receive mental health services.^{xv}

Respondents were asked, “During the last 12 months, did you ever seriously consider attempting suicide?”

- In 2017, 4.6 percent of Ohio adults reported that they have seriously considered attempting suicide in the past 12 months.
- The prevalence of considering suicide is highest among adults ages 18-24 (10.6 percent) and generally decreases as age increases.
- The prevalence of considering suicide does not significantly differ by sex.
- The prevalence of considering suicide does not significantly differ by race/ethnicity.
- The prevalence of considering suicide is significantly higher among those with an annual household income less than \$15,000 compared to those with an annual household income of \$50,000 or higher.
- The prevalence of considering suicide decreases as education level increases.

Table 15. Prevalence of Suicide by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Suicide ¹			
	Prevalence (%)	95% Confidence Interval		
Total	4.6	3.6	-	5.3
Age				
18-24	10.6	6.3	-	15.0
25-34	5.2	2.9	-	7.5
35-44	5.8	3.4	-	8.2
45-54	4.9	2.7	-	7.1
55-64	2.2	1.3	-	3.1
65+	1.2	0.6	-	1.8
Sex				
Male	4.4	3.2	-	5.7
Female	4.4	3.3	-	5.6
Race/Ethnicity				
White, Non-Hispanic	4.3	3.4	-	5.1
Black, Non-Hispanic	4.0	1.5	-	6.5
Hispanic	N/A ²	N/A ²	-	N/A ²
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²
Multi-Racial	N/A ²	N/A ²	-	N/A ²
Annual Household Income				
<\$15,000	10.4	6.3	-	14.5
\$15,000-\$24,999	6.1	3.9	-	8.4
\$25,000-\$34,999	7.7	2.9	-	12.5
\$35,000-\$49,999	4.1	1.8	-	6.3
\$50,000-\$74,999	1.8	0.7	-	2.9
\$75,000+	1.5	0.8	-	2.2
Education				
Less than High School	8.2	3.6	-	12.9
High School Diploma	5.2	3.8	-	6.7
Some College	4.3	2.9	-	5.8
College Graduate	1.9	1.1	-	2.6

¹Among adults, the proportion of those who reported that they have seriously considered attempting suicide in the past 12 months.

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Overweight/Obese

More than one-third of American adults are obese. Conditions associated with obesity include heart disease, stroke, type 2 diabetes and some cancers.^{xvi}

Overweight and obesity are determined by calculating a body mass index (BMI) based on one's height and weight. A BMI between 25.0-29.9 is considered overweight. A BMI of 30 or above is considered to be obese, which for a 5'9" adult would be a weight of 203 pounds or more. BRFSS height and weight data are self-reported. A previous study found that female BRFSS participants, on average, under-report their weight, while male participants over-report their height.^{xvii} This bias should be considered when interpreting BRFSS overweight/obesity prevalence estimates.

- In 2017, 34.2 percent of Ohio adults were classified as overweight and 33.8 percent were classified as obese.
- The prevalence of obesity is significantly higher among adults ages 25 and older compared to adults ages 18-24.
- The prevalence of overweight is significantly higher among males (38.4 percent) compared to females (29.9 percent) while the prevalence of obesity does not significantly differ by sex.
- The prevalence of obesity is significantly lower among other, non-Hispanic adults (21.7 percent) compared to white, non-Hispanic adults (33.1 percent) and black, non-Hispanic adults (41.7 percent).
- The prevalence of obesity is significantly lower among adults with an annual household income of \$75,000 or more compared to adults with an annual household income less than \$75,000.
- The prevalence of overweight is significantly higher among college graduates compared to those without a college degree, while the prevalence of obesity is significantly lower among college graduates compared to those without a college degree.

Table 16. Prevalence of Overweight/Obese by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Overweight ¹			Obese ²		
	Prevalence (%)	95% Confidence Interval		Prevalence (%)	95% Confidence Interval	
Total	34.2	32.9	- 35.5	33.8	32.5	- 35.1
Age						
18-24	27.3	22.5	- 32.0	18.9	14.9	- 23.0
25-34	28.4	24.9	- 32.0	32.5	28.8	- 36.3
35-44	33.6	30.1	- 37.1	38.8	35.2	- 42.5
45-54	34.4	31.2	- 37.6	42.0	38.7	- 45.3
55-64	36.3	33.7	- 38.8	37.6	35.0	- 40.1
65+	40.8	38.6	- 42.9	30.9	28.9	- 32.9
Sex						
Male	38.4	36.4	- 40.3	33.5	31.6	- 35.4
Female	29.9	28.2	- 31.6	34.1	32.3	- 35.9
Race/Ethnicity						
White, Non-Hispanic	34.9	33.5	- 36.3	33.1	31.7	- 34.5
Black, Non-Hispanic	31.3	27.3	- 35.3	41.7	37.5	- 46.0
Hispanic	35.3	25.6	- 45.0	38.2	29.0	- 47.4
Other, Non-Hispanic	28.0	19.9	- 36.0	21.7	12.9	- 30.4
Multi-Racial	24.9	16.6	- 33.2	29.2	19.8	- 38.6
Annual Household Income						
<\$15,000	26.8	22.5	- 31.0	39.0	34.2	- 43.9
\$15,000-\$24,999	32.5	29.1	- 35.9	37.8	34.4	- 41.3
\$25,000-\$34,999	30.9	26.9	- 34.9	36.7	32.2	- 41.2
\$35,000-\$49,999	33.9	30.4	- 37.4	36.4	32.7	- 40.1
\$50,000-\$74,999	36.6	33.2	- 40.0	35.4	31.9	- 38.8
\$75,000+	38.5	35.9	- 41.0	29.4	27.1	- 31.8
Education						
Less than High School	30.5	25.6	- 35.4	39.2	33.8	- 44.5
High School Diploma	32.5	30.3	- 34.7	36.0	33.7	- 38.2
Some College	33.9	31.5	- 36.3	35.0	32.7	- 37.4
College Graduate	38.6	36.4	- 40.8	26.6	24.6	- 28.5

¹Among adults, the proportion of respondents whose BMI was between 25.0 and 29.9.

²Among adults, the proportion of respondents whose BMI was greater than or equal to 30.0.

High Blood Pressure

Untreated high blood pressure puts one at higher risk of developing heart disease, stroke, kidney disease and many other health conditions.^{xviii}

Respondents were asked, “Have you ever been told by a doctor, nurse or other health professional that you have high blood pressure?”

- In 2017, 34.7 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they had high blood pressure.
- The prevalence of high blood pressure increases as age increases.
- The prevalence of high blood pressure is significantly higher among males (36.5 percent) than among females (33.0 percent).
- Multi-racial adults (21.7 percent) and other, non-Hispanic adults (20.2 percent) reported a significantly lower prevalence of high blood pressure compared with black, non-Hispanic adults (39.9 percent) and white, non-Hispanic adults (35.1 percent).
- The prevalence of high blood pressure is significantly lower among adults with an annual household income of \$75,000 or more compared to adults with an annual household income less than \$75,000.
- The prevalence of high blood pressure decreases as education level increases.

Table 17. Prevalence of High Blood Pressure by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	High Blood Pressure ¹			
	Prevalence (%)	95% Confidence Interval		
Total	34.7	33.5	-	35.9
Age				
18-24	9.9	6.8	-	13.0
25-34	13.9	11.1	-	16.8
35-44	22.5	19.4	-	25.5
45-54	35.6	32.4	-	38.7
55-64	49.7	47.1	-	52.2
65+	60.0	58.0	-	62.1
Sex				
Male	36.5	34.7	-	38.4
Female	33.0	31.4	-	34.6
Race/Ethnicity				
White, Non-Hispanic	35.1	33.7	-	36.4
Black, Non-Hispanic	39.9	35.9	-	43.9
Hispanic	28.1	19.8	-	36.4
Other, Non-Hispanic	20.2	13.2	-	27.2
Multi-Racial	21.7	14.7	-	28.8
Annual Household Income				
<\$15,000	46.6	41.8	-	51.4
\$15,000-\$24,999	39.6	36.4	-	42.9
\$25,000-\$34,999	37.3	33.2	-	41.5
\$35,000-\$49,999	35.8	32.4	-	39.3
\$50,000-\$74,999	32.7	29.5	-	35.9
\$75,000+	26.9	24.7	-	29.0
Education				
Less than High School	48.9	43.6	-	54.2
High School Diploma	36.9	34.8	-	38.9
Some College	33.2	31.0	-	35.4
College Graduate	26.9	25.1	-	28.7

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they had high blood pressure.

High Cholesterol

There are two types of cholesterol—LDL, or low-density lipoproteins, and HDL, or high-density lipoproteins. High levels of LDL can increase the risk of heart disease while high levels of HDL are protective.^{xix}

Respondents were asked, “Have you ever been told by a doctor, nurse or other health professional that you have high cholesterol?”

- In 2017, 31.4 percent of Ohio adults reported ever being told by a doctor, nurse or other health professional that they had high cholesterol.
- The prevalence of high cholesterol increases as age increases.
- The prevalence of high cholesterol does not significantly differ by sex.
- White, non-Hispanic adults (33.0 percent) have a significantly higher prevalence of high cholesterol than all other race/ethnicity groups, with the exception of Hispanic adults.
- The prevalence of high cholesterol is significantly lower among adults with an annual household income of \$75,000 or more compared to adults with an annual household income less than \$25,000.
- The prevalence of high cholesterol decreases as education level increases.

Table 18. Prevalence of High Cholesterol by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	High Cholesterol ¹			
	Prevalence (%)	95% Confidence Interval		
Total	31.4	30.2	-	32.6
Age				
18-24	5.5	3.0	-	7.9
25-34	13.0	10.1	-	15.8
35-44	20.3	17.3	-	23.4
45-54	31.7	28.6	-	34.8
55-64	44.0	41.4	-	46.6
65+	51.7	49.6	-	53.9
Sex				
Male	32.3	30.5	-	34.1
Female	30.6	29.0	-	32.2
Race/Ethnicity				
White, Non-Hispanic	33.0	31.7	-	34.4
Black, Non-Hispanic	26.5	22.8	-	30.2
Hispanic	24.7	16.5	-	32.9
Other, Non-Hispanic	23.4	15.3	-	31.6
Multi-Racial	16.0	9.8	-	22.1
Annual Household Income				
<\$15,000	39.4	34.6	-	44.2
\$15,000-\$24,999	32.9	29.8	-	36.1
\$25,000-\$34,999	32.4	28.3	-	36.5
\$35,000-\$49,999	34.6	31.1	-	38.0
\$50,000-\$74,999	31.3	28.0	-	34.6
\$75,000+	26.9	24.7	-	29.1
Education				
Less than High School	37.0	31.8	-	42.2
High School Diploma	32.8	30.7	-	34.8
Some College	30.4	28.2	-	32.5
College Graduate	28.3	26.4	-	30.2

¹Among adults, the proportion of those who reported ever being told by a doctor, nurse or other health professional that they had high cholesterol.

Fruit and Vegetable Consumption

Fruit and vegetable consumption recommendations are based on one's age, sex and activity level. A diet rich in fruits and vegetables may reduce the risk of cancer and other chronic diseases.^{xx}

Respondents were asked how many times per day, week or month they consumed the following: 100 percent fruit juice; fruit (not juiced); beans (not long green beans); dark green vegetables; orange vegetables; and other vegetables.

Responses were combined to create each fruit and vegetable indicator.

- In 2017, 37.7 percent of Ohio adults reported insufficient fruit consumption; 18.7 percent reported insufficient vegetable consumption.
- Insufficient vegetable consumption is highest among adults ages 18-24.
- Insufficient fruit and vegetable consumption is significantly higher among males (41.5 percent and 21.0 percent, respectively) compared with females (34.2 percent and 16.5 percent, respectively).
- Insufficient vegetable consumption is significantly higher among black, non-Hispanic adults (27.5 percent) compared with white, non-Hispanic and multi-racial adults (17.6 percent and 11.0 percent, respectively).
- Insufficient vegetable consumption is significantly higher among adults with an annual household income less than \$15,000 compared to adults with an annual household income of \$15,000 or more.
- As education level increases, insufficient fruit and vegetable consumption decreases.

Table 19. Prevalence of Insufficient Fruit and Vegetable Consumption by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Consume Fruits <1 Time/Day ¹				Consume Vegetables <1 Time/Day ²			
	Prevalence (%)	95% Confidence Interval			Prevalence (%)	95% Confidence Interval		
Total	37.7	36.4	-	39.1	18.7	17.5	-	19.8
Age								
18-24	37.5	32.4	-	42.6	24.3	19.7	-	28.9
25-34	38.9	34.9	-	42.9	19.7	16.3	-	23.1
35-44	36.1	32.6	-	39.6	16.4	13.4	-	19.4
45-54	42.0	38.7	-	45.2	19.3	16.6	-	22.1
55-64	39.3	36.7	-	41.9	17.4	15.3	-	19.4
65+	33.6	31.5	-	35.6	17.1	15.4	-	18.7
Sex								
Male	41.5	39.5	-	43.6	21.0	19.2	-	22.7
Female	34.2	32.4	-	35.9	16.5	15.0	-	18.1
Race/Ethnicity								
White, Non-Hispanic	37.6	36.1	-	39.1	17.6	16.4	-	18.8
Black, Non-Hispanic	40.2	35.8	-	44.6	27.5	23.3	-	31.7
Hispanic	39.1	30.0	-	48.3	22.4	14.4	-	30.4
Other, Non-Hispanic	33.0	23.6	-	42.4	18.5	11.0	-	26.0
Multi-Racial	31.7	21.9	-	41.5	11.0	4.2	-	17.8
Annual Household Income								
<\$15,000	49.5	44.4	-	54.6	32.6	27.4	-	37.7
\$15,000-\$24,999	39.3	35.7	-	42.8	23.2	20.0	-	26.5
\$25,000-\$34,999	42.2	37.7	-	46.7	19.0	15.2	-	22.8
\$35,000-\$49,999	39.1	35.4	-	42.9	19.5	16.3	-	22.6
\$50,000-\$74,999	34.9	31.4	-	38.3	16.3	13.4	-	19.2
\$75,000+	31.7	29.3	-	34.2	12.5	10.6	-	14.4
Education								
Less than High School	46.5	40.9	-	52.1	32.0	26.5	-	37.5
High School Diploma	44.4	42.1	-	46.8	21.2	19.3	-	23.2
Some College	36.6	34.2	-	39.0	17.4	15.4	-	19.4
College Graduate	26.4	24.4	-	28.4	11.3	9.8	-	12.7

¹Among adults, the proportion who reported consuming fresh, frozen or canned fruit or 100 percent fruit juice less than one time per day.

²Among adults, the proportion who reported consuming vegetables or vegetable juice less than one time per day. 27

Sugar-Sweetened Beverages

Sugar-sweetened beverages are any liquids that are sweetened with various forms of added sugars and are the leading source of added sugars in the American diet. Frequent consumption is associated with obesity, diabetes, heart disease, kidney disease and arthritis.^{xxi}

Respondents were asked, “During the past 30 days, how often did you drink regular soda or pop that contains sugar?”

- In 2017, an estimated 17.4 percent of Ohio adults drank sugar-sweetened beverages at least once per day in the past 30 days.
- The prevalence of sugar-sweetened beverage consumption is significantly lower among adults 65 and older compared to other age groups.
- The prevalence of sugar-sweetened beverage consumption is significantly higher among males (20.3 percent) than females (14.7 percent).
- The prevalence of sugar-sweetened beverage consumption does not significantly differ by race/ethnicity.
- The prevalence of sugar-sweetened beverage consumption decreases as annual household income increases; 30.9 percent of adults with an annual household income less than \$15,000 currently drink sugar-sweetened beverages at least once per day, while 8.9 percent of adults with a household income of \$75,000 or more currently drink sugar-sweetened beverages at least once per day.
- The prevalence of sugar-sweetened beverage consumption decreases as education level increases.

Table 20. Prevalence of Sugar-Sweetened Beverage Consumption by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Sugar-Sweetened Beverage Consumption ¹			
	Prevalence (%)	95% Confidence Interval		
Total	17.4	16.0	-	18.7
Age				
18-24	17.8	12.8	-	22.9
25-34	26.8	22.1	-	31.5
35-44	20.2	16.4	-	23.9
45-54	20.6	17.3	-	23.9
55-64	13.6	11.4	-	15.8
65+	9.2	7.7	-	10.8
Sex				
Male	20.3	18.0	-	22.5
Female	14.7	13.0	-	16.3
Race/Ethnicity				
White, Non-Hispanic	16.9	15.5	-	18.4
Black, Non-Hispanic	21.6	16.5	-	26.7
Hispanic	N/A ²	N/A ²	-	N/A ²
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²
Multi-Racial	N/A ²	N/A ²	-	N/A ²
Annual Household Income				
<\$15,000	30.9	24.6	-	37.2
\$15,000-\$24,999	23.4	19.6	-	27.2
\$25,000-\$34,999	19.6	14.8	-	24.5
\$35,000-\$49,999	20.2	16.0	-	24.5
\$50,000-\$74,999	14.3	10.9	-	17.6
\$75,000+	8.9	7.0	-	10.7
Education				
Less than High School	28.7	22.5	-	35.0
High School Diploma	23.2	20.6	-	25.8
Some College	14.3	12.1	-	16.5
College Graduate	8.5	6.9	-	10.1

¹Among adults, the proportion of those who reported drinking regular soda or pop that contains sugar at least once per day.

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Exercise

Physical activity can improve health. People who are physically active have a lower risk for heart disease, stroke, type 2 diabetes, depression and some cancers. Physical activity can also help with weight control and increase the chance of living longer.^{xxii}

Respondents were asked, “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?”

- In 2017, an estimated 70.4 percent of Ohio adults reported any physical activity in the past month.
- The prevalence of any physical activity decreases as age increases.
- The prevalence of any physical activity does not significantly differ by sex.
- The prevalence of any physical activity is highest among multi-racial adults compared to all other race/ethnicity groups.
- The prevalence of any physical activity is higher among adults with an annual household income of \$50,000 or more compared to adults with an annual household income less than \$50,000.
- The prevalence of any physical activity significantly increases as education level increases.

Table 21. Prevalence of Any Exercise by Demographic Characteristics, Ohio, 2017
(Any) Exercise¹

Demographic Characteristics	Prevalence (%)	95% Confidence Interval			
Total	70.4	69.1	-	71.6	
Age					
18-24	79.5	75.0	-	84.1	
25-34	77.7	74.3	-	81.1	
35-44	72.1	68.7	-	75.5	
45-54	68.3	65.3	-	71.4	
55-64	68.2	65.7	-	70.7	
65+	62.3	60.2	-	64.4	
Sex					
Male	71.9	70.0	-	73.7	
Female	69.0	67.3	-	70.7	
Race/Ethnicity					
White, Non-Hispanic	71.0	69.7	-	72.4	
Black, Non-Hispanic	65.4	61.2	-	69.7	
Hispanic	62.5	53.3	-	71.7	
Other, Non-Hispanic	68.6	58.8	-	78.5	
Multi-Racial	85.2	79.1	-	91.3	
Annual Household Income					
<\$15,000	59.5	54.5	-	64.5	
\$15,000-\$24,999	62.9	59.4	-	66.4	
\$25,000-\$34,999	63.4	59.1	-	67.7	
\$35,000-\$49,999	68.4	64.8	-	71.9	
\$50,000-\$74,999	75.5	72.4	-	78.6	
\$75,000+	80.8	78.6	-	82.9	
Education					
Less than High School	53.3	47.8	-	58.8	
High School Diploma	62.6	60.4	-	64.9	
Some College	74.5	72.4	-	76.5	
College Graduate	83.2	81.5	-	84.8	

¹Among adults, the proportion of those who reported that they participated in any regular physical activities or exercises during the past month other than their regular job.

Physical Activity

The 2008 *Physical Activity Guidelines for Americans* recommends for adults at least 150 minutes of moderate-intensity physical activity per week and muscle-strengthening activities two or more days a week. Only one in five adults in the United States meet these guidelines.^{xxiii}

Respondents were asked about the types of physical activities they participated in, how often they participated in those activities and for how long they participated to determine whether they met the 2008 Physical Activity Guidelines for Americans.

- In 2017, an estimated 18.3 percent of Ohio adults reported they meet both the aerobic and muscle strengthening guidelines established in the 2008 Physical Activity Guidelines for Americans.
- The prevalence of meeting the physical activity guidelines is significantly higher among males (20.5 percent) compared to females (16.3 percent).
- The prevalence of meeting the physical activity guidelines does not significantly differ by race/ethnicity.
- The prevalence of meeting the physical activity guidelines is significantly higher among adults with an annual household income of \$75,000 or more (24.0 percent) compared to adults with an annual household income less than \$50,000.
- The prevalence of meeting the physical activity guidelines is significantly higher among college graduates (24.7 percent) compared to adults with less education.

Table 22. Prevalence of Meeting Physical Activity Guidelines by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Meet Physical Activity Guidelines ¹			
	Prevalence (%)	95% Confidence Interval		
Total	18.3	17.2	-	19.4
Age				
18-24	26.3	21.5	-	31.0
25-34	21.5	18.2	-	24.9
35-44	20.6	17.5	-	23.7
45-54	14.9	12.6	-	17.1
55-64	15.2	13.3	-	17.0
65+	15.1	13.6	-	16.6
Sex				
Male	20.5	18.8	-	22.2
Female	16.3	14.8	-	17.7
Race/Ethnicity				
White, Non-Hispanic	18.0	16.8	-	19.3
Black, Non-Hispanic	18.7	15.1	-	22.3
Hispanic	22.3	13.8	-	30.8
Other, Non-Hispanic	16.0	9.3	-	22.7
Multi-Racial	21.2	12.5	-	30.0
Annual Household Income				
<\$15,000	13.8	10.4	-	17.2
\$15,000-\$24,999	13.5	10.7	-	16.2
\$25,000-\$34,999	16.1	12.4	-	19.8
\$35,000-\$49,999	18.0	14.9	-	21.1
\$50,000-\$74,999	19.3	16.4	-	22.1
\$75,000+	24.0	21.7	-	26.3
Education				
Less than High School	10.0	6.2	-	13.7
High School Diploma	15.5	13.6	-	17.4
Some College	19.1	17.0	-	21.2
College Graduate	24.7	22.7	-	26.7

¹Among adults, the proportion of those who reported that they meet both the aerobic and muscle strengthening guidelines established in the 2008 Physical Activity Guidelines for Americans.

Smoking

Smoking increases the risk of heart disease, stroke, COPD (including emphysema and chronic bronchitis) and cancer, and is the leading preventable cause of death in the United States. Nearly every organ of the body is harmed by smoking. Quitting smoking has been shown to reduce the risk of heart attack, stroke and cancer.^{xxiv}

Respondents were asked, “Have you smoked at least 100 cigarettes in your entire life?” If yes, “Do you now smoke cigarettes every day, some days or not at all?”

- In 2017, an estimated 21.1 percent of Ohio adults were current cigarette smokers.
- The prevalence of cigarette smoking is lowest among adults ages 18-24 and adults 65 and older.
- The prevalence of cigarette smoking does not significantly differ by sex.
- The prevalence of cigarette smoking is significantly higher among multi-racial adults (33.4 percent) compared to white, non-Hispanic adults (20.2 percent).
- The prevalence of cigarette smoking decreases as annual household income increases.
- The prevalence of cigarette smoking decreases as education level increases; 42.4 percent of adults with less than a high school education currently smoke cigarettes, while 7.6 percent of adults with a college degree currently smoke cigarettes.

Table 23. Prevalence of Current Smoking by Demographic Characteristics, Ohio, 2017
Current Smoking¹

Demographic Characteristics	Prevalence (%)	95% Confidence Interval		
Total	21.1	20.0	-	22.3
Age				
18-24	16.6	12.5	-	20.6
25-34	27.5	23.8	-	31.1
35-44	27.8	24.4	-	31.1
45-54	25.2	22.2	-	28.1
55-64	21.9	19.6	-	24.1
65+	11.1	9.7	-	12.5
Sex				
Male	22.4	20.7	-	24.2
Female	19.9	18.4	-	21.5
Race/Ethnicity				
White, Non-Hispanic	20.2	18.9	-	21.4
Black, Non-Hispanic	24.6	20.8	-	28.5
Hispanic	24.4	16.2	-	32.7
Other, Non-Hispanic	21.2	12.8	-	29.6
Multi-Racial	33.4	23.1	-	43.7
Annual Household Income				
<\$15,000	41.1	36.1	-	46.1
\$15,000-\$24,999	30.5	27.2	-	33.9
\$25,000-\$34,999	28.0	23.7	-	32.3
\$35,000-\$49,999	21.9	18.7	-	25.2
\$50,000-\$74,999	15.2	12.5	-	17.9
\$75,000+	10.3	8.6	-	12.0
Education				
Less than High School	42.4	37.0	-	47.9
High School Diploma	26.0	23.9	-	28.0
Some College	19.1	17.1	-	21.0
College Graduate	7.6	6.4	-	8.7

¹Among adults, the proportion of those who reported having smoked at least 100 cigarettes in their life and that they currently smoke, either every day or some days.

E-Cigarettes

E-cigarettes are electronic devices that produce a breathable vapor usually containing nicotine. The long term health effects of e-cigarette use are still unknown, but while e-cigarettes generally contain fewer toxic chemicals than cigarettes, most e-cigarettes contain nicotine which is highly addictive.^{xxv}

Respondents were asked, “Do you use e-cigarettes or other electronic “vaping” products every day, some days or not at all?”

- In 2017, an estimated 5.5 percent of Ohio adults were current e-cigarette users.
- The prevalence of e-cigarette use decreases as age increases; 12.2 percent of adults ages 18-24 are current e-cigarette users, while 1.3 percent of adults ages 65 and older are e-cigarette users.
- The prevalence of e-cigarette use is significantly higher among males (6.6 percent) compared to females (4.1 percent).
- The prevalence of e-cigarette use is significantly lower among black, non-Hispanics adults (2.5 percent) compared to white, non-Hispanic adults (5.5 percent).
- The prevalence of e-cigarette use decreases as annual household income increases; 8.2 percent of adults with an annual household income less than \$15,000 are current e-cigarette users, while 3.6 percent of adults with a household income of \$75,000 or more are current e-cigarette users.
- The prevalence of e-cigarette use decreases as education level increases.

Table 24. Prevalence of E-Cigarette Use by Demographic Characteristics, Ohio, 2017
E-Cigarette Use¹

Demographic Characteristics	Prevalence (%)	95% Confidence Interval			
Total	5.5	4.6	-	6.0	
Age					
18-24	12.2	8.9	-	15.4	
25-34	8.8	6.2	-	11.3	
35-44	5.6	3.9	-	7.4	
45-54	4.8	3.3	-	6.2	
55-64	2.8	2.0	-	3.6	
65+	1.3	0.7	-	1.9	
Sex					
Male	6.6	5.4	-	7.8	
Female	4.1	3.3	-	4.9	
Race/Ethnicity					
White, Non-Hispanic	5.5	4.7	-	6.3	
Black, Non-Hispanic	2.5	1.3	-	3.8	
Hispanic	N/A ²	N/A ²	-	N/A ²	
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²	
Multi-Racial	N/A ²	N/A ²	-	N/A ²	
Annual Household Income					
<\$15,000	8.2	5.3	-	11.1	
\$15,000-\$24,999	6.1	4.2	-	8.0	
\$25,000-\$34,999	5.3	3.1	-	7.4	
\$35,000-\$49,999	5.4	3.4	-	7.4	
\$50,000-\$74,999	3.8	2.2	-	5.3	
\$75,000+	3.6	2.5	-	4.7	
Education					
Less than High School	6.5	3.5	-	9.5	
High School Diploma	6.2	4.9	-	7.4	
Some College	7.0	5.5	-	8.5	
College Graduate	1.5	1.0	-	2.0	

¹ Among adults, the proportion of those who reported currently using e-cigarettes, either every day or some days.

² Estimate does not meet the reliability criteria for reporting set by the CDC.

Binge Drinking

More than 90 percent of adults in the United States who drink excessively report binge drinking in the past 30 days. One in six adults in the United States binge drinks about four times per month, averaging eight drinks per binge. Binge drinking is associated with multiple health problems such as unintentional injury (crashes, falls, burns, drowning), intentional injury and violence, alcohol poisoning and many others.^{xxxvi}

Respondents were asked, “Considering all types of alcoholic beverages, how many times during the past 30 days did you have (5 for men, 4 for women) or more drinks on an occasion?”

- In 2017, 18.9 percent of Ohio adults reported binge drinking in the past month.
- The prevalence of binge drinking is significantly lower among adults ages 55 and older compared to those younger than 55.
- The prevalence of binge drinking is significantly higher among males (26.0 percent) compared to females (12.5 percent).
- The prevalence of binge drinking does not significantly differ by race/ethnicity.
- The prevalence of binge drinking is significantly higher among adults with an annual household income of \$75,000 or more compared to adults with an annual household income less than \$35,000.
- The prevalence of binge drinking does not significantly differ by education level.

Table 25. Prevalence of Binge Drinking by Demographic Characteristics, Ohio, 2017
Binge Drinking¹

Demographic Characteristics	Prevalence (%)	95% Confidence Interval			
Total	18.9	17.8	-	20.1	
Age					
18-24	29.4	24.8	-	34.1	
25-34	31.1	27.3	-	34.9	
35-44	24.6	21.3	-	27.9	
45-54	19.1	16.5	-	21.7	
55-64	13.7	11.8	-	15.6	
65+	4.7	3.8	-	5.6	
Sex					
Male	26.0	24.1	-	27.9	
Female	12.5	11.2	-	13.8	
Race/Ethnicity					
White, Non-Hispanic	19.2	17.9	-	20.4	
Black, Non-Hispanic	16.7	13.1	-	20.2	
Hispanic	N/A ²	N/A ²	-	N/A ²	
Other, Non-Hispanic	N/A ²	N/A ²	-	N/A ²	
Multi-Racial	N/A ²	N/A ²	-	N/A ²	
Annual Household Income					
<\$15,000	18.2	14.1	-	22.2	
\$15,000-\$24,999	15.9	13.1	-	18.7	
\$25,000-\$34,999	13.4	10.0	-	16.8	
\$35,000-\$49,999	21.1	17.8	-	24.4	
\$50,000-\$74,999	20.4	17.2	-	23.6	
\$75,000+	25.4	22.9	-	27.8	
Education					
Less than High School	14.9	10.9	-	18.9	
High School Diploma	18.5	16.4	-	20.5	
Some College	20.4	18.2	-	22.6	
College Graduate	19.7	17.8	-	21.6	

¹Among adults, the proportion of those who reported consuming five or more drinks per occasion (males) or four or more drinks per occasion (females) at least once in the

²Estimate does not meet the reliability criteria for reporting set by the CDC.

Seat Belt Use

More than 2.5 million adult drivers and passengers were treated in emergency departments for motor vehicle crash injuries in the United States in 2015. Seat belt use saves lives and reduces crash-related injuries.^{xxvii}

Respondents were asked, “How often do you use seat belts when you drive or ride in a car?”

- In 2017, 91.6 percent of Ohio adults reported using seat belts always or nearly always.
- The prevalence of seat belt use is significantly lower among adults ages 18-24 compared to those ages 55 and older.
- The prevalence of seat belt use is significantly higher among females (93.9 percent) compared to males (89.2 percent).
- The prevalence of seat belt use is significantly higher among white, non-Hispanic adults (92.3 percent) compared to black, non-Hispanic adults (87.6 percent).
- The prevalence of seat belt use is significantly higher among adults with an annual household income of \$75,000 or more compared to those respondents with an annual household income less than \$35,000.
- The prevalence of seat belt use is significantly higher among college graduates compared to those with less than a college degree.

Table 26. Prevalence of Seat Belt Use by Demographic Characteristics, Ohio, 2016

Demographic Characteristics	Seat Belt Use ¹			
	Prevalence (%)	95% Confidence Interval		
Total	91.6	90.8	-	92.5
Age				
18-24	87.6	84.0	-	91.2
25-34	90.3	87.8	-	92.8
35-44	90.5	88.1	-	92.8
45-54	91.0	89.0	-	92.9
55-64	93.4	92.0	-	94.8
65+	94.7	93.7	-	95.7
Sex				
Male	89.2	87.8	-	90.5
Female	93.9	92.9	-	95.0
Race/Ethnicity				
White, Non-Hispanic	92.3	91.5	-	93.2
Black, Non-Hispanic	87.6	84.5	-	90.8
Hispanic	90.5	85.4	-	95.7
Other, Non-Hispanic	94.6	90.2	-	98.9
Multi-Racial	84.3	76.2	-	92.4
Annual Household Income				
<\$15,000	87.1	83.6	-	90.5
\$15,000-\$24,999	88.5	85.8	-	91.2
\$25,000-\$34,999	87.8	84.6	-	90.9
\$35,000-\$49,999	93.4	91.5	-	95.3
\$50,000-\$74,999	92.8	90.8	-	94.9
\$75,000+	94.4	93.0	-	95.8
Education				
Less than High School	86.8	82.8	-	90.8
High School Diploma	88.2	86.6	-	89.8
Some College	93.2	91.9	-	94.5
College Graduate	96.5	95.5	-	97.4

¹Among adults, the proportion of those who reported wearing a seat belt always or nearly always.

Flu Shot

Influenza (flu) is a serious disease that can lead to hospitalization or death. CDC recommends that everyone ages six months and older receive a flu shot annually to reduce the spread of seasonal flu.^{xxviii}

Respondents were asked “During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose?”

- In 2017, 40.8 percent of Ohio adults reported that they had received a flu shot in the past year.
- The prevalence of having a flu shot is significantly higher among those ages 55 and older compared to those younger than 55.
- The prevalence of having a flu shot is significantly higher among females (45.0 percent) compared to males (36.3 percent).
- The prevalence of having a flu shot is significantly lower among Hispanic adults (26.5 percent) compared to white, non-Hispanics (41.6 percent) and black, non-Hispanics (41.9 percent).
- The prevalence of having a flu shot does not significantly differ by annual household income.
- The prevalence of having a flu shot is significantly higher among college graduates compared to those without a college degree.

Table 27. Prevalence of Having a Flu Shot by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	Flu Shot ¹			
	Prevalence (%)	95% Confidence Interval		
Total	40.8	39.5	-	42.2
Age				
18-24	28.0	23.3	-	32.6
25-34	28.8	25.2	-	32.4
35-44	31.0	27.6	-	34.4
45-54	34.4	31.3	-	37.5
55-64	47.2	44.5	-	49.9
65+	63.0	60.9	-	65.1
Sex				
Male	36.3	34.4	-	38.2
Female	45.0	43.2	-	46.9
Race/Ethnicity				
White, Non-Hispanic	41.6	40.1	-	43.0
Black, Non-Hispanic	41.9	37.6	-	46.3
Hispanic	26.5	18.9	-	34.1
Other, Non-Hispanic	37.2	28.3	-	46.2
Multi-Racial	33.0	22.8	-	43.1
Annual Household Income				
<\$15,000	40.7	35.6	-	45.7
\$15,000-\$24,999	39.0	35.6	-	42.4
\$25,000-\$34,999	41.6	37.1	-	46.0
\$35,000-\$49,999	39.7	36.1	-	43.2
\$50,000-\$74,999	43.1	39.5	-	46.6
\$75,000+	41.2	38.6	-	43.7
Education				
Less than High School	40.3	34.9	-	45.7
High School Diploma	35.4	33.3	-	37.6
Some College	40.4	38.0	-	42.8
College Graduate	49.1	46.8	-	51.3

¹Among adults, the proportion of those who reported having received a flu shot in the past year.

HIV Testing

Human immunodeficiency virus (HIV) weakens a person's immune system by destroying important cells that fight disease and infection. Although there is no cure for HIV, with proper medical care, HIV can be controlled. CDC recommends that everyone between the ages of 13 and 64 get tested for HIV at least once as part of routine health care.^{xxix}

Respondents were asked "Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth."

- In 2017, 34.1 percent of Ohio adults reported that they had been tested for HIV.
- HIV testing rates are significantly higher among adults ages 25-44 compared to all other age groups.
- The prevalence of HIV testing does not significantly differ by sex.
- The prevalence of HIV testing is significantly lower among white, non-Hispanic adults (30.2 percent) compared to black, non-Hispanic adults (58.2 percent) and multi-racial adults (55.4 percent).
- The prevalence of HIV testing is significantly higher among adults with an annual household income less than \$15,000 compared to those with an annual household income of \$35,000 or more.
- The prevalence of HIV testing is significantly higher among adults with a high school education compared to adults with some college or more education.

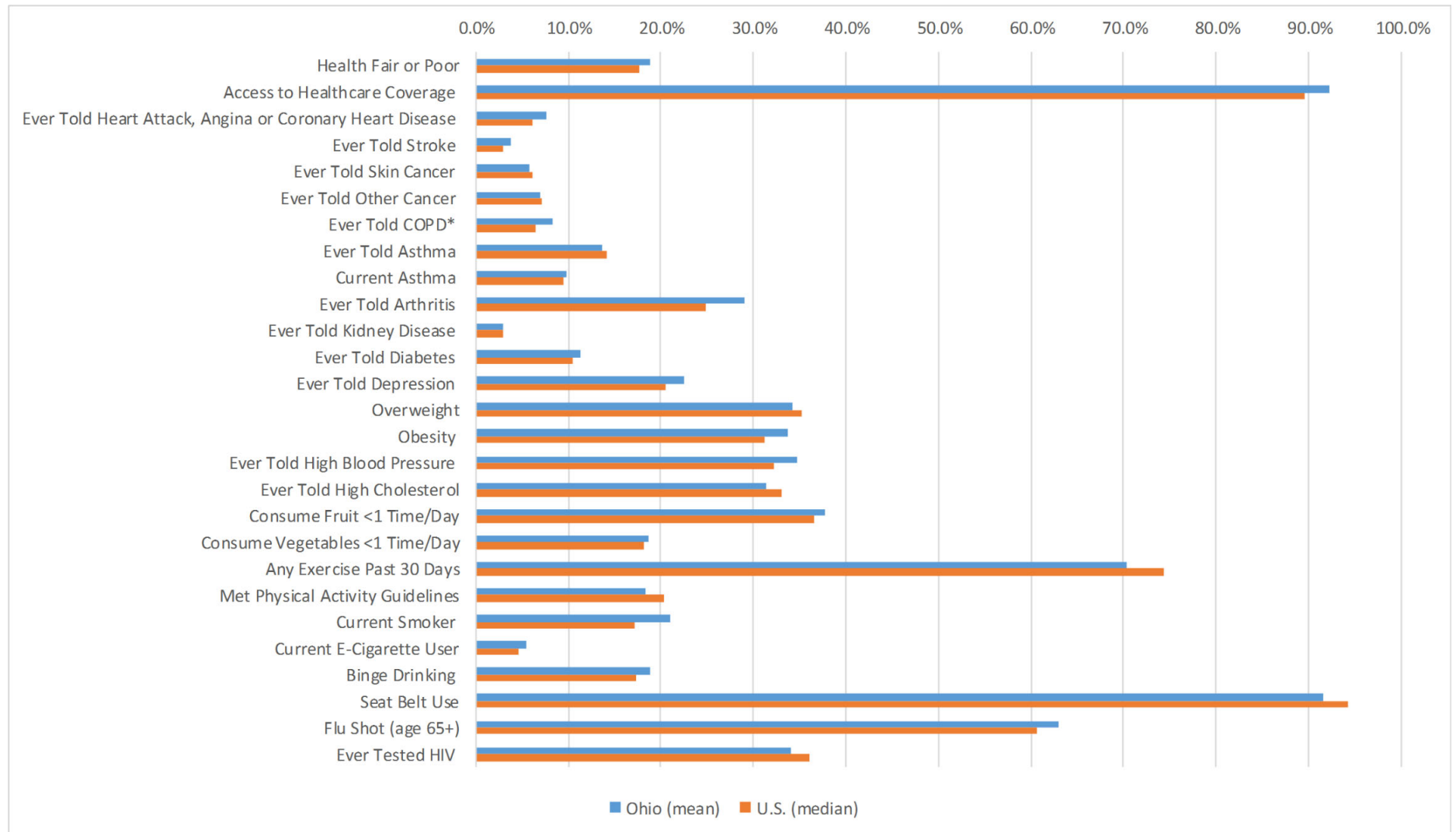
Table 28. Prevalence of HIV Testing by Demographic Characteristics, Ohio, 2017

Demographic Characteristics	HIV Testing ¹			
	Prevalence (%)	95% Confidence Interval		
Total	34.1	32.7	-	35.5
Age				
18-24	29.2	24.2	-	34.2
25-34	55.3	51.3	-	59.4
35-44	52.0	48.1	-	55.8
45-54	37.9	34.7	-	41.2
55-64	26.8	24.3	-	29.2
65+	12.1	10.6	-	13.5
Sex				
Male	33.7	31.6	-	35.7
Female	34.5	32.6	-	36.4
Race/Ethnicity				
White, Non-Hispanic	30.2	28.7	-	31.7
Black, Non-Hispanic	58.2	53.8	-	62.6
Hispanic	38.1	29.0	-	47.2
Other, Non-Hispanic	31.9	23.4	-	40.5
Multi-Racial	55.4	44.4	-	66.4
Annual Household Income				
<\$15,000	44.4	39.2	-	49.6
\$15,000-\$24,999	37.4	33.7	-	41.1
\$25,000-\$34,999	37.5	32.8	-	42.3
\$35,000-\$49,999	31.8	28.0	-	35.5
\$50,000-\$74,999	32.4	28.8	-	35.9
\$75,000+	34.9	32.3	-	37.6
Education				
Less than High School	34.1	28.4	-	39.8
High School Diploma	30.3	28.0	-	32.6
Some College	37.2	34.6	-	39.8
College Graduate	35.2	32.9	-	37.4

¹Among adults, the proportion of those who reported having ever been tested for HIV.

Appendix A—Ohio/U.S. BRFSS Data

Figure A1. BRFSS Health Indicators: Ohio Compared to the United States, 2017



*COPD = Chronic Obstructive Pulmonary Disease.

Appendix B—Ohio Regional BRFSS Data

Table A1. Disease Prevalence and Health Behaviors by Region/County, Ohio, 2017

	Health Fair/Poor		Access to Healthcare Coverage		Ever Told Heart Attack, Angina or Coronary Heart Disease		Ever Told Stroke		Ever told Skin Cancer	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Ohio	18.9	17.8 - 19.9	92.2	91.4 - 93.0	7.6	7.0 - 8.2	3.8	3.3 - 4.2	5.8	5.3 - 6.3
Region 1	17.3	14.3 - 20.4	93.2	90.7 - 95.6	9.1	6.9 - 11.4	3.3	1.9 - 4.8	6.0	4.5 - 7.5
Region 2	15.7	11.6 - 19.8	90.2	85.8 - 94.7	7.8	5.6 - 10.1	3.3	1.9 - 4.7	5.7	3.7 - 7.7
Region 3	20.0	16.2 - 23.8	89.4	86.2 - 92.7	8.3	6.2 - 10.4	5.2	3.3 - 7.2	5.2	3.8 - 6.7
Region 4	19.5	16.3 - 22.7	93.6	91.4 - 95.8	7.1	5.3 - 8.9	4.5	3.0 - 5.9	5.3	3.9 - 6.8
Region 5	16.8	13.2 - 20.5	93.4	90.7 - 96.0	6.8	5.0 - 8.6	4.1	2.7 - 5.5	5.1	3.6 - 6.5
Region 6	14.9	11.5 - 18.3	92.4	89.3 - 95.5	6.6	4.6 - 8.6	2.9	1.4 - 4.4	4.3	2.9 - 5.8
Region 7	18.8	13.6 - 24.0	89.6	84.2 - 94.9	4.9	2.9 - 6.9	2.5	1.0 - 4.1	6.3	4.2 - 8.4
Region 8	16.6	14.1 - 19.1	92.5	90.7 - 94.4	5.7	4.3 - 7.1	2.9	1.9 - 3.8	5.9	4.6 - 7.2
Region 9	21.6	18.1 - 25.0	91.0	88.2 - 93.8	9.0	6.7 - 11.2	4.0	2.5 - 5.5	6.7	5.0 - 8.4
Region 10	19.5	16.3 - 22.7	92.2	90.1 - 94.3	7.8	6.1 - 9.5	3.3	2.1 - 4.6	6.0	4.6 - 7.5
Region 11	23.8	18.6 - 29.0	89.7	84.7 - 94.7	11.4	7.5 - 15.2	5.0	1.9 - 8.1	7.8	5.2 - 10.5
Region 12	20.7	17.6 - 23.9	90.0	87.0 - 93.0	10.1	8.0 - 12.2	4.9	3.5 - 6.4	7.6	5.8 - 9.4
Region 13	25.0	21.0 - 29.0	91.0	85.9 - 96.2	10.7	8.2 - 13.1	4.6	3.0 - 6.2	5.8	4.1 - 7.5
Region 14	29.0	24.7 - 33.2	94.2	91.9 - 96.6	12.5	9.8 - 15.2	5.0	3.4 - 6.7	6.8	4.7 - 9.0

Region 1	Defiance, Fulton, Henry, Lucas, Paulding, Williams, Wood
Region 2	Allen, Auglaize, Hancock, Hardin, Mercer, Putnam, Van Wert
Region 3	Crawford, Erie, Huron, Ottawa, Richland, Sandusky, Seneca, Wyandot
Region 4	Cuyahoga, Geauga, Lake, Lorain
Region 5	Ashland, Holmes, Medina, Stark, Summit, Wayne
Region 6	Ashtabula, Columbiana, Mahoning, Portage, Trumbull
Region 7	Delaware, Knox, Marion, Morrow, Union
Region 8	Fairfield, Franklin, Licking, Madison, Pickaway
Region 9	Champaign, Clark, Darke, Greene, Logan, Miami, Montgomery, Preble, Shelby
Region 10	Butler, Clermont, Clinton, Hamilton, Warren
Region 11	Adams, Brown, Fayette, Highland, Pike, Ross, Scioto
Region 12	Coshocton, Guernsey, Morgan, Muskingum, Noble, Perry, Tuscarawas
Region 13	Belmont, Carroll, Harrison, Jefferson, Monroe, Washington
Region 14	Athens, Gallia, Hocking, Jackson, Lawrence, Meigs, Vinton

Appendix B—Ohio Regional BRFSS Data

Table A1. Disease Prevalence and Health Behaviors by Region/County, Ohio, 2017 (continued)

	Ever Told Other Cancer		Ever Told Chronic Obstructive Pulmonary Disease		Ever Told Asthma		Current Asthma		Ever Told Arthritis	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Ohio	7.0	6.5 - 7.6	8.3	7.6 - 9.0	13.7	12.7 - 14.7	9.9	9.0 - 10.7	29.1	27.9 - 30.2
Region 1	5.8	4.3 - 7.2	8.4	6.2 - 10.6	12.3	9.5 - 15.0	8.7	6.2 - 11.2	28.7	25.1 - 32.2
Region 2	6.1	4.3 - 7.9	7.0	4.9 - 9.0	13.5	9.4 - 17.6	10.4	6.8 - 14.0	27.8	23.5 - 32.0
Region 3	8.1	6.1 - 10.2	9.1	6.7 - 11.6	12.9	9.6 - 16.3	10.1	7.0 - 13.2	28.8	24.9 - 32.6
Region 4	7.3	5.7 - 8.9	7.4	5.5 - 9.3	14.6	11.7 - 17.6	11.0	8.4 - 13.7	30.9	27.4 - 34.3
Region 5	7.4	5.5 - 9.4	6.4	4.4 - 8.4	13.0	9.6 - 16.3	10.3	7.2 - 13.4	28.2	24.4 - 31.9
Region 6	7.7	5.4 - 10.1	8.9	6.3 - 11.5	15.0	10.7 - 19.2	11.4	7.5 - 15.4	25.0	21.2 - 28.9
Region 7	6.1	4.1 - 8.1	7.8	5.0 - 10.6	13.7	9.1 - 18.2	9.6	5.6 - 13.6	28.5	23.5 - 33.4
Region 8	6.5	5.1 - 7.8	7.7	5.8 - 9.5	14.1	11.6 - 16.5	9.4	7.4 - 11.5	25.3	22.7 - 27.9
Region 9	8.2	6.0 - 10.4	10.4	7.9 - 12.8	15.7	12.4 - 19.0	9.9	7.3 - 12.4	32.3	28.5 - 36.0
Region 10	5.6	4.0 - 7.2	7.2	5.3 - 9.2	12.2	9.8 - 14.6	8.8	6.7 - 10.9	28.7	25.3 - 32.1
Region 11	8.9	6.3 - 11.5	14.1	9.8 - 18.4	12.3	8.2 - 16.4	10.1	6.1 - 14.1	33.5	27.7 - 39.4
Region 12	7.6	5.7 - 9.5	9.3	7.2 - 11.4	11.8	8.7 - 15.0	7.2	5.0 - 9.4	31.7	28.1 - 35.3
Region 13	8.1	6.2 - 10.0	11.2	8.5 - 13.9	13.6	10.4 - 16.7	9.9	7.3 - 12.5	33.3	29.1 - 37.4
Region 14	7.6	5.8 - 9.4	14.1	11.3 - 17.0	14.1	10.8 - 17.3	9.9	7.3 - 12.5	36.3	32.0 - 40.6

Region 1	Defiance, Fulton, Henry, Lucas, Paulding, Williams, Wood
Region 2	Allen, Auglaize, Hancock, Hardin, Mercer, Putnam, Van Wert
Region 3	Crawford, Erie, Huron, Ottawa, Richland, Sandusky, Seneca, Wyandot
Region 4	Cuyahoga, Geauga, Lake, Lorain
Region 5	Ashland, Holmes, Medina, Stark, Summit, Wayne
Region 6	Ashtabula, Columbiana, Mahoning, Portage, Trumbull
Region 7	Delaware, Knox, Marion, Morrow, Union
Region 8	Fairfield, Franklin, Licking, Madison, Pickaway
Region 9	Champaign, Clark, Darke, Greene, Logan, Miami, Montgomery, Preble, Shelby
Region 10	Butler, Clermont, Clinton, Hamilton, Warren
Region 11	Adams, Brown, Fayette, Highland, Pike, Ross, Scioto
Region 12	Coshocton, Guernsey, Morgan, Muskingam, Noble, Perry, Tuscarawas
Region 13	Belmont, Carroll, Harrison, Jefferson, Monroe, Washington
Region 14	Athens, Gallia, Hocking, Jackson, Lawrence, Meigs, Vinton

Appendix B—Ohio Regional BRFSS Data

Table A1. Disease Prevalence and Health Behaviors by Region/County, Ohio, 2017 (continued)

	Ever Told Kidney Disease		Ever Told Diabetes		Ever Told Prediabetes		Poor Mental Health		Ever told Depression	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Ohio	2.9	2.5 - 3.2	11.3	10.6 - 12.0	8.8	7.9 - 9.7	14.0	13.0 - 15.1	22.6	21.4 - 23.7
Region 1	2.2	1.2 - 3.2	12.8	10.4 - 15.1	8.5	5.8 - 11.2	13.4	10.3 - 16.6	24.9	21.2 - 28.6
Region 2	3.4	1.1 - 5.7	9.9	7.6 - 12.1	8.2	4.6 - 11.9	14.3	10.1 - 18.4	18.6	14.2 - 22.9
Region 3	2.2	1.3 - 3.1	11.3	8.8 - 13.7	7.1	4.5 - 9.6	11.5	8.1 - 14.9	19.2	15.3 - 23.0
Region 4	2.1	1.2 - 3.0	11.4	9.1 - 13.8	7.7	5.0 - 10.3	13.8	10.9 - 16.7	21.4	18.1 - 24.8
Region 5	2.6	1.4 - 3.9	12.0	9.4 - 14.7	6.5	3.8 - 9.3	10.6	7.9 - 13.3	19.4	15.9 - 23.0
Region 6	2.9	1.3 - 4.4	12.0	9.2 - 14.7	7.1	3.9 - 10.2	16.5	11.7 - 21.3	22.1	17.3 - 26.9
Region 7	2.4	0.8 - 3.9	9.9	6.8 - 12.9	9.3	4.8 - 13.8	7.1	4.1 - 10.1	17.2	12.5 - 21.9
Region 8	2.2	1.5 - 2.9	9.1	7.6 - 10.7	10.7	8.0 - 13.5	15.5	12.9 - 18.2	24.3	21.4 - 27.2
Region 9	3.4	2.2 - 4.6	12.6	10.0 - 15.1	9.1	6.3 - 11.8	15.6	12.1 - 19.0	23.9	20.1 - 27.7
Region 10	4.1	2.7 - 5.5	9.3	7.5 - 11.1	10.5	7.5 - 13.5	14.7	11.7 - 17.8	24.6	21.1 - 28.1
Region 11	5.2	2.9 - 7.4	13.6	10.2 - 17.0	12.1	7.2 - 17.1	19.6	13.9 - 25.2	30.2	23.3 - 37.2
Region 12	3.2	2.1 - 4.4	14.2	11.6 - 16.8	9.1	6.3 - 11.9	12.4	9.6 - 15.1	19.6	16.3 - 22.9
Region 13	2.4	1.3 - 3.5	14.5	11.6 - 17.4	9.0	5.7 - 12.3	14.3	11.2 - 17.5	22.9	19.0 - 26.8
Region 14	4.7	3.0 - 6.4	16.9	13.9 - 19.9	11.2	7.2 - 15.2	16.6	13.0 - 20.1	26.9	22.8 - 31.1

Region 1	Defiance, Fulton, Henry, Lucas, Paulding, Williams, Wood
Region 2	Allen, Auglaize, Hancock, Hardin, Mercer, Putnam, Van Wert
Region 3	Crawford, Erie, Huron, Ottawa, Richland, Sandusky, Seneca, Wyandot
Region 4	Cuyahoga, Geauga, Lake, Lorain
Region 5	Ashland, Holmes, Medina, Stark, Summit, Wayne
Region 6	Ashtabula, Columbiana, Mahoning, Portage, Trumbull
Region 7	Delaware, Knox, Marion, Morrow, Union
Region 8	Fairfield, Franklin, Licking, Madison, Pickaway
Region 9	Champaign, Clark, Darke, Greene, Logan, Miami, Montgomery, Preble, Shelby
Region 10	Butler, Clermont, Clinton, Hamilton, Warren
Region 11	Adams, Brown, Fayette, Highland, Pike, Ross, Scioto
Region 12	Coshocton, Guernsey, Morgan, Muskingum, Noble, Perry, Tuscarawas
Region 13	Belmont, Carroll, Harrison, Jefferson, Monroe, Washington
Region 14	Athens, Gallia, Hocking, Jackson, Lawrence, Meigs, Vinton

Appendix B—Ohio Regional BRFSS Data

Table A1. Disease Prevalence and Health Behaviors by Region/County, Ohio, 2017 (continued)

	Suicide		Overweight		Obesity		Ever Told High Blood Pressure		Ever Told High Cholesterol	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Ohio	4.4	3.6 - 5.3	34.2	32.9 - 35.5	33.8	32.5 - 35.1	34.7	33.5 - 35.9	31.4	30.2 - 32.6
Region 1	4.6	2.0 - 7.3	31.2	27.2 - 35.2	40.7	36.3 - 45.1	37.3	33.3 - 41.3	34.7	30.6 - 38.7
Region 2	4.2	1.0 - 7.4	33.4	28.1 - 38.7	38.5	33.0 - 44.0	34.6	29.8 - 39.4	31.1	26.2 - 36.0
Region 3	4.7	2.0 - 7.5	34.5	30.0 - 39.0	39.0	34.2 - 43.8	36.8	32.5 - 41.1	28.6	24.7 - 32.5
Region 4	4.3	1.6 - 7.0	35.1	31.3 - 38.9	32.9	28.9 - 36.8	35.4	31.7 - 39.0	30.8	27.3 - 34.4
Region 5	2.5	0.9 - 4.2	33.4	29.0 - 37.8	32.0	27.6 - 36.4	34.3	30.0 - 38.5	31.8	27.5 - 36.1
Region 6	3.7	0.2 - 7.2	35.6	30.3 - 41.0	32.3	27.0 - 37.5	34.5	29.7 - 39.3	30.3	25.7 - 34.9
Region 7	3.3	0.5 - 6.0	35.7	29.5 - 41.9	35.6	29.1 - 42.1	32.0	26.5 - 37.5	29.8	24.2 - 35.4
Region 8	4.0	2.2 - 5.9	35.9	32.6 - 39.1	31.9	28.8 - 35.0	32.7	29.7 - 35.7	28.3	25.3 - 31.2
Region 9	3.5	1.3 - 5.7	32.7	28.6 - 36.9	35.9	31.6 - 40.2	33.8	29.9 - 37.7	32.8	28.8 - 36.8
Region 10	7.3	3.8 - 10.8	32.4	28.8 - 36.0	29.7	26.2 - 33.2	33.0	29.6 - 36.4	31.3	28.0 - 34.7
Region 11	11.6	5.7 - 17.5	41.9	34.8 - 49.1	31.4	24.9 - 37.9	37.9	31.8 - 44.1	34.8	28.6 - 41.0
Region 12	2.7	0.2 - 5.2	31.6	27.6 - 35.6	39.5	35.1 - 43.8	38.5	34.5 - 42.5	33.7	29.9 - 37.4
Region 13	3.6	1.6 - 5.6	33.6	29.0 - 38.2	37.9	33.1 - 42.7	36.9	32.6 - 41.3	38.6	33.9 - 43.2
Region 14	2.0	0.4 - 3.6	34.4	29.3 - 39.4	37.8	33.1 - 42.6	42.3	37.7 - 46.9	37.2	32.7 - 41.8

Region 1	Defiance, Fulton, Henry, Lucas, Paulding, Williams, Wood
Region 2	Allen, Auglaize, Hancock, Hardin, Mercer, Putnam, Van Wert
Region 3	Crawford, Erie, Huron, Ottawa, Richland, Sandusky, Seneca, Wyandot
Region 4	Cuyahoga, Geauga, Lake, Lorain
Region 5	Ashland, Holmes, Medina, Stark, Summit, Wayne
Region 6	Ashtabula, Columbiana, Mahoning, Portage, Trumbull
Region 7	Delaware, Knox, Marion, Morrow, Union
Region 8	Fairfield, Franklin, Licking, Madison, Pickaway
Region 9	Champaign, Clark, Darke, Greene, Logan, Miami, Montgomery, Preble, Shelby
Region 10	Butler, Clermont, Clinton, Hamilton, Warren
Region 11	Adams, Brown, Fayette, Highland, Pike, Ross, Scioto
Region 12	Coshocton, Guernsey, Morgan, Muskingum, Noble, Perry, Tuscarawas
Region 13	Belmont, Carroll, Harrison, Jefferson, Monroe, Washington
Region 14	Athens, Gallia, Hocking, Jackson, Lawrence, Meigs, Vinton

Appendix B—Ohio Regional BRFSS Data

Table A1. Disease Prevalence and Health Behaviors by Region/County, Ohio, 2017 (continued)

	Consume Fruit <1 Time/ Day		Consume Vegetables <1 Time/Day		Sugar-Sweetened Beverage Consumption		Any Exercise (Past 30 Days)		Met Physical Activity Guidelines	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Ohio	37.7	36.4 - 39.1	18.7	17.5 - 19.8	17.4	16.0 - 18.7	70.4	69.1 - 71.6	18.3	17.2 - 19.4
Region 1	39.8	35.5 - 44.1	19.9	16.1 - 23.7	19.3	14.5 - 24.0	68.0	63.9 - 72.1	16.2	12.9 - 19.5
Region 2	40.8	35.1 - 46.4	22.0	16.5 - 27.6	18.8	13.2 - 24.4	62.8	57.1 - 68.6	12.2	8.7 - 15.7
Region 3	34.8	30.1 - 39.4	19.6	15.4 - 23.8	16.6	12.2 - 21.0	72.3	68.2 - 76.3	18.1	14.1 - 22.1
Region 4	34.3	30.5 - 38.2	18.1	14.9 - 21.3	12.4	8.5 - 16.3	72.1	68.5 - 75.6	18.8	15.6 - 22.0
Region 5	38.5	33.7 - 43.2	17.1	13.1 - 21.0	15.9	11.2 - 20.7	67.9	63.3 - 72.4	17.9	14.0 - 21.8
Region 6	33.1	27.9 - 38.4	22.9	17.2 - 28.5	17.5	11.8 - 23.2	68.8	63.5 - 74.1	18.5	13.8 - 23.2
Region 7	38.0	31.4 - 44.6	13.8	9.3 - 18.4	17.1	11.1 - 23.2	71.6	65.4 - 77.8	17.7	12.7 - 22.8
Region 8	37.1	33.8 - 40.5	17.8	15.1 - 20.4	18.3	14.6 - 22.0	73.2	70.3 - 76.2	21.0	18.1 - 23.9
Region 9	41.4	37.0 - 45.9	19.4	15.5 - 23.2	18.8	14.2 - 23.4	68.7	64.6 - 72.8	18.0	14.5 - 21.6
Region 10	35.8	32.0 - 39.6	17.7	14.6 - 20.9	17.1	13.1 - 21.2	75.3	71.9 - 78.6	20.1	17.0 - 23.2
Region 11	49.7	42.5 - 56.9	23.7	17.4 - 30.0	23.1	16.1 - 30.1	61.1	54.4 - 67.9	18.2	11.7 - 24.6
Region 12	42.5	38.2 - 46.8	20.2	16.5 - 23.8	23.8	18.9 - 28.7	66.9	62.8 - 70.9	12.4	9.5 - 15.3
Region 13	38.0	33.2 - 42.9	14.7	11.5 - 17.8	19.7	15.0 - 24.4	66.5	62.0 - 71.1	15.1	11.8 - 18.4
Region 14	46.7	41.6 - 51.8	20.1	15.2 - 24.9	23.0	17.3 - 28.7	64.9	60.4 - 69.4	13.8	10.4 - 17.2

Region 1	Defiance, Fulton, Henry, Lucas, Paulding, Williams, Wood
Region 2	Allen, Auglaize, Hancock, Hardin, Mercer, Putnam, Van Wert
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Region 4	Cuyahoga, Geauga, Lake, Lorain
Region 5	Ashland, Holmes, Medina, Stark, Summit, Wayne
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Region 7	Delaware, Knox, Marion, Morrow, Union
Region 8	Fairfield, Franklin, Licking, Madison, Pickaway
Region 9	Champaign, Clark, Darke, Greene, Logan, Miami, Montgomery, Preble, Shelby
Region 10	Butler, Clermont, Clinton, Hamilton, Warren
Region 11	Adams, Brown, Fayette, Highland, Pike, Ross, Scioto
Region 12	Coshocton, Guernsey, Morgan, Muskingum, Noble, Perry, Tuscarawas
Region 13	Belmont, Carroll, Harrison, Jefferson, Monroe, Washington
Region 14	Athens, Gallia, Hocking, Jackson, Lawrence, Meigs, Vinton

Appendix B—Ohio Regional BRFSS Data

Table A1. Disease Prevalence and Health Behaviors by Region/County, Ohio, 2017 (continued)

	Current Smoker		Current E-Cigarette Use		Binge Drinking		Seat Belt Use (Always or Nearly Always)		Flu Shot (Past Year)	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Ohio	21.1	20.0 - 22.3	5.5	4.6 - 6.4	18.9	17.8 - 20.1	91.6	90.8 - 92.5	40.8	39.5 - 42.2
Region 1	20.1	16.3 - 23.8	5.3	2.5 - 8.0	20.0	16.2 - 23.8	89.6	86.7 - 92.6	39.6	35.5 - 43.8
Region 2	18.5	13.9 - 23.1	4.5	1.2 - 7.9	19.1	13.8 - 24.4	92.2	88.1 - 96.3	35.8	30.6 - 41.0
Region 3	22.1	18.1 - 26.2	4.3	1.7 - 7.0	17.0	13.1 - 20.9	94.2	92.1 - 96.3	33.0	28.8 - 37.2
Region 4	23.0	19.4 - 26.6	7.6	4.3 - 10.8	22.1	18.6 - 25.5	90.6	88.1 - 93.1	42.7	38.8 - 46.6
Region 5	15.9	12.5 - 19.4	5.7	2.3 - 9.0	16.7	12.8 - 20.5	92.1	89.5 - 94.7	41.4	36.8 - 46.1
Region 6	21.3	16.4 - 26.1	4.3	0.9 - 7.7	14.9	10.4 - 19.4	89.4	84.9 - 93.8	35.1	29.8 - 40.3
Region 7	18.0	12.4 - 23.7	5.8	1.2 - 10.5	19.5	13.2 - 25.8	96.2	93.9 - 98.5	42.8	36.4 - 49.3
Region 8	21.9	18.9 - 24.8	6.2	4.0 - 8.3	20.7	17.8 - 23.6	91.7	89.6 - 93.7	45.0	41.7 - 48.4
Region 9	21.6	17.8 - 25.4	6.0	3.3 - 8.6	18.5	14.8 - 22.2	90.7	87.9 - 93.4	40.3	36.0 - 44.5
Region 10	21.9	18.4 - 25.4	4.3	1.5 - 7.0	20.0	16.7 - 23.3	92.5	90.3 - 94.7	41.2	37.5 - 45.0
Region 11	30.5	23.1 - 37.9	6.4	2.0 - 10.8	15.2	9.5 - 21.0	94.4	91.8 - 96.9	41.0	34.3 - 47.7
Region 12	21.3	17.6 - 25.0	3.1	1.4 - 4.9	17.1	13.6 - 20.7	90.8	88.1 - 93.5	36.8	32.7 - 40.9
Region 13	18.4	14.8 - 22.0	4.6	2.6 - 6.7	14.5	11.0 - 18.0	91.9	89.2 - 94.5	38.4	33.8 - 43.0
Region 14	22.3	18.4 - 26.2	3.3	1.4 - 5.2	15.4	11.2 - 19.6	93.7	91.1 - 96.3	43.4	38.4 - 48.4

Region 1	Defiance, Fulton, Henry, Lucas, Paulding, Williams, Wood
Region 2	Allen, Auglaize, Hancock, Hardin, Mercer, Putnam, Van Wert
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Region 4	Cuyahoga, Geauga, Lake, Lorain
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Region 8	Fairfield, Franklin, Licking, Madison, Pickaway
Region 9	Champaign, Clark, Darke, Greene, Logan, Miami, Montgomery, Preble, Shelby
Region 10	Butler, Clermont, Clinton, Hamilton, Warren
Region 11	Adams, Brown, Fayette, Highland, Pike, Ross, Scioto
Region 12	Coshocton, Guernsey, Morgan, Muskingum, Noble, Perry, Tuscarawas
Region 13	Belmont, Carroll, Harrison, Jefferson, Monroe, Washington
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Appendix B—Ohio Regional BRFSS Data

Table A1. Disease Prevalence and Health Behaviors by Region/County, Ohio, 2017 (continued)

	Ever Tested HIV	
	%	95% CI
Ohio	34.1	32.7 - 35.5
Region 1	35.1	30.7 - 39.5
Region 2	24.6	19.2 - 30.0
Region 3	26.9	22.1 - 31.6
Region 4	38.1	34.1 - 42.1
Region 5	28.5	24.1 - 32.9
Region 6	37.8	31.7 - 43.9
Region 7	24.4	18.4 - 30.4
Region 8	41.1	37.6 - 44.5
Region 9	34.3	29.9 - 38.7
Region 10	35.9	31.9 - 39.9
Region 11	26.4	20.0 - 32.8
Region 12	24.5	20.6 - 28.5
Region 13	26.5	22.1 - 31.0
Region 14	32.7	27.6 - 37.7

Region 1	Defiance, Fulton, Henry, Lucas, Paulding, Williams, Wood
Region 2	Allen, Auglaize, Hancock, Hardin, Mercer, Putnam, Van Wert
Region 3	Crawford, Erie, Huron, Ottawa, Richland, Sandusky, Seneca, Wyandot
Region 4	Cuyahoga, Geauga, Lake, Lorain
Region 5	Ashland, Holmes, Medina, Stark, Summit, Wayne
Region 6	Ashtabula, Columbiana, Mahoning, Portage, Trumbull
Region 7	Delaware, Knox, Marion, Morrow, Union
Region 8	Fairfield, Franklin, Licking, Madison, Pickaway
Region 9	Champaign, Clark, Darke, Greene, Logan, Miami, Montgomery, Preble, Shelby
Region 10	Butler, Clermont, Clinton, Hamilton, Warren
Region 11	Adams, Brown, Fayette, Highland, Pike, Ross, Scioto
Region 12	Coshocton, Guernsey, Morgan, Muskingum, Noble, Perry, Tuscarawas
Region 13	Belmont, Carroll, Harrison, Jefferson, Monroe, Washington
Region 14	Athens, Gallia, Hocking, Jackson, Lawrence, Meigs, Vinton

References

- ⁱJylhä M. What is self-rated health and why does it predict mortality? Towards a unified conceptual model. *Soc Sci Med*. 2009; 69: 307-316
- ⁱⁱCenters for Disease Control and Prevention. 2017. Health Insurance Coverage. <https://www.cdc.gov/nchs/fastats/health-insurance.htm>
- ⁱⁱⁱCenters for Disease Control and Prevention. 2017. Heart Disease Facts. <http://www.cdc.gov/heartdisease/facts.htm>
- ^{iv}Centers for Disease Control and Prevention. 2017. Stroke Facts. <http://www.cdc.gov/stroke/facts.htm>
- ^vAmerican Cancer Society. *Cancer Facts & Figures 2018*. Atlanta, GA: American Cancer Society; 2018
- ^{vi}Centers for Disease Control and Prevention. 2018. Chronic Obstructive Pulmonary Disease. <http://www.cdc.gov/copd/index.html>
- ^{vii}Centers for Disease Control and Prevention. Asthma's Impact on the Nation. http://www.cdc.gov/asthma/impacts_nation/asthmafactsheet.pdf
- ^{viii}American Lung Association. 2018. Asthma and Children Fact Sheet. <http://www.lung.org/lung-disease/asthma/resources/facts-and-figures/asthma-children-fact-sheet.html>
- ^{ix}Centers for Disease Control and Prevention. 2018. Arthritis-Related Statistics. <http://www.cdc.gov/arthritis/press/factsheet.htm>
- ^xCenters for Disease Control and Prevention. 2017. National Chronic Kidney Disease Fact Sheet, 2017. http://www.cdc.gov/diabetes/pubs/pdf/kidney_factsheet.pdf
- ^{xi}Centers for Disease Control and Prevention. 2017. National Diabetes Statistics Report, 2017. <https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf>
- ^{xii}Centers for Disease Control and Prevention. 2018. Prediabetes; Your Chance to Prevent Type 2 Diabetes. <http://www.cdc.gov/diabetes/basics/prediabetes.html>
- ^{xiii}Centers for Disease Control and Prevention. 2018. Learn About Mental Health. <https://www.cdc.gov/mentalhealth/learn/index.htm>
- ^{xiv}National Alliance on Mental Illness. 2015. Depression. <https://www.nami.org/NAMI/media/NAMI-Media/Images/FactSheets/Depression-FS.pdf>
- ^{xv}Centers for Disease Control and Prevention. 2018. Suicide rates rising across the U.S. <https://www.cdc.gov/media/releases/2018/p0607-suicide-prevention.html>
- ^{xvi}Centers for Disease Control and Prevention. 2018. Adult Obesity Facts. <http://www.cdc.gov/obesity/data/adult.html>
- ^{xvii}Ezzati M, Martin H, Skjold S, Hoorn SV, Murray CJL. Trends in national and state level obesity in the USA after correction for self-report bias: analysis of health surveys. *J R Soc Med* 2006; 99: 250-257
- ^{xviii}American Heart Association. 2016. Health Threats from High Blood Pressure. http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/WhyBloodPressureMatters/WhyBlood-Pressure-Matters_UCM_002051_Article.jsp#
- ^{xix}American Heart Association. 2018. About Check. Change. Control. Cholesterol. <https://www.heart.org/en/health-topics/cholesterol/cholesterol-tools-and-resources/about-check-change-control-cholesterol>
- ^{xx}Centers for Disease Control and Prevention. 2018. State Indicator Report on Fruits and Vegetables, 2018. <https://www.cdc.gov/nutrition/data-statistics/2018-state-indicator-report-fruits-vegetables.html>
- ^{xxi}Centers for Disease Control and Prevention. 2017. Get the Facts: Sugar-Sweetened Beverages and Consumption. <https://www.cdc.gov/nutrition/data-statistics/sugar-sweetened-beverages-intake.html>
- ^{xxii}Centers for Disease Control and Prevention. 2018. Physical Activity Basics. <https://www.cdc.gov/physicalactivity/basics/index.htm>
- ^{xxiii}Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. <https://health.gov/paguidelines/2008/>

References (cont.)

^{xxiv}Centers for Disease Control and Prevention. 2018. Health Effects of Cigarette Smoking. http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/

^{xxv}Centers for Disease Control and Prevention. 2018. About Electronic Cigarettes (E-Cigarettes). https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html

^{xxvi}Centers for Disease Control and Prevention. 2018. Fact Sheets – Binge Drinking. <http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm>

^{xxvii}Centers for Disease Control and Prevention. 2017. Seat Belts: Get the Facts. <http://www.cdc.gov/Motorvehiclesafety/seatbelts/facts.html>

^{xxviii}Centers for Disease Control and Prevention. 2018. Key Facts About Seasonal Flu Vaccine. <http://www.cdc.gov/flu/protect/keyfacts.htm>

^{xxix}Centers for Disease Control and Prevention. 2018. HIV Basics. <https://www.cdc.gov/hiv/basics/index.html>

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