2018

Columbiana County
Community Health Assessment

Examining the health of Columbiana County

Foreword

On behalf of the Columbiana County Health Partners, we are pleased to present the 2019 Columbiana County Community Health Needs Assessment. This community health assessment conducted by the Health Partners and their contractor, the Hospital Council of Northwest Ohio (HCNO) consists of various social service, business, and government organizations in Columbiana County. Its purpose is to collect data to show the health and health behaviors of Columbiana County residents and then identify the health needs.

The members of the Columbiana County Health Partners want to use this data and monitor it to know how to better serve the individuals in the community. We want to provide the best possible health care for our residents and we can use this report to guide us in our strategic planning and decision making concerning future programs, clinics, and healthcare resources provided.

The Columbiana County Health Needs Assessment would not have been possible without the help of the Columbiana County Health Partners who contributed financially and with in-kind support to complete the assessment. All of the partners are acknowledged on the following pages. It is vital that assessments such as this continue so that we can know where to direct our resources and use them in the most advantageous ways. All contributions whether financial or expertise are greatly appreciated.

More importantly, the possibility of this report relies solely on the participation of individuals in our community, adults and youth who committed to honestly responding to the surveys they received each year. We are grateful for those individuals who are committed to the health of the community, as we are, and take the time to share their health behaviors.

The work of public health is a community job that involves various individual facets including our community members. Working together we can achieve a healthier Columbiana County.

Sincerely,

Lauren McIntosh, DNP, FNP-BC
Liverpool City Hospital

Debbie Pietrzak, VP
Salem Regional Medical Center

Wesley J. Vins, MS
Columbiana County Health District

Marcy Patton, MS Ed
Columbiana County Mental Health & Recovery Services Board

Carol Cowan,
East Liverpool City Health Department

Lynly Hayes, RS
Salem City Health Department

Sandy Geuzeski, RN
Columbiana County Community Action Agency East

Francine McBride,
Akron Children's Hospital

Acknowledgements

Contact Information

Columbiana County Health District
PO Box 309
Lisbon, OH 44432
330.424.0272
CCHD@columbiana-health.org

Project Management, Secondary Data, Data Collection, and Report Development

Britney L. Ward, MPH
Director of Community Health Improvement

Margaret Wielinski, MPH
Assistant Director of Community Health Improvement

Layla Abraham, MPH, CHES
Community Health Improvement Coordinator

Emily A. Golias, MPH, CHES
Community Health Improvement Coordinator

Tessa Elliott, MPH, CHES
Community Health Improvement Coordinator

Emily Stearns, MPH, CHES
Community Health Improvement Coordinator

Carolynn McCartney
Graduate Assistant

Emily Soles
Graduate Assistant

Erin Rauschenberg
Graduate Assistant

Alyssa Miller
Graduate Assistant

Data Collection & Analysis

Joseph A. Dake, Ph.D., MPH
Professor and Chair
School of Population Health
University of Toledo

Aaron J Diehr, PhD, CHES
Consultant

To see Columbiana County data compared to other counties, please visit the Hospital Council of Northwest Ohio's Data Link website at:

http://www.hcno.org/community/data-indicator.html

The 2018 Columbiana County Health Assessment is available on the following websites:

Columbiana County Health District
http://www.columbiana-health.org

Salem Regional Medical Center
http://www.salemregional.com/

East Liverpool City Hospital
http://www.elch.org/

Hospital Council of Northwest Ohio
http://www.hcno.org/community/reports.html

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Executive Summary

This executive summary provides an overview of health-related data for Columbiana County adults (19 years of age and older) who participated in a county-wide health assessment survey from September-November 2018. The findings are based on self-administered surveys using a structured questionnaire. The questions were modeled after the survey instruments used by the Centers for Disease Control and Prevention for their national and state Behavioral Risk Factor Surveillance System (BRFSS). The Hospital Council of Northwest Ohio (HCNO) collected the data, guided the health assessment process and integrated sources of primary and secondary data into the final report.

The state of Ohio mandated by law (ORC 3701.981) that all hospitals must collaborate with their local health departments on community health assessments (CHA) and community health improvement plans (CHIP). In addition, local hospitals must align with the Ohio State Health Assessment (SHA). This requires alignment of the CHA process timeline and indicators. This local alignment must take place by October 2020. East Liverpool City Hospital and Salem Regional Medical Center collaborated with the Columbiana County Health District, City of East Liverpool Health District, City of Salem Health District and other partners to create the 2018 Columbiana County CHA. East Liverpool City Hospital and Salem Regional Medical Center will also be participating in the upcoming CHIP, which along with the CHA, will align partners to be in compliance by 2020.

Internal Revenue Services (IRS) Requirements

The Affordable Care Act (ACA), enacted in March 2010, added new Section 501 (r) requirements in Part V, Section B, on 501 (c)(3) organizations that operate one or more hospital facilities. Each 501 (c)(3) hospital organization must conduct a community health needs assessment and adopt an implementation strategy at least once every three years. This report meets these IRS requirements.

DEFINITION OF COMMUNITY & SERVICE AREA DETERMINATION

The community has been defined as Columbiana County. East Liverpool City Hospital and Salem Regional Medical Center collaborates with multiple stakeholders, most of which provide services at the county-level. For this reason, the county was defined as the community.

INCLUSION OF VULNERABLE POPULATIONS

Columbiana County is a rural county. Approximately 15.4% of Columbiana County residents were below the poverty line, according to the 2013-2017 American Community Survey 5-year estimates. For this reason, data is broken down by income (less than $25,000 and greater than $25,000) throughout the report to show disparities.

PROCESS & METHODS FOR ENGAGING COMMUNITY

This community health needs assessment process was commissioned by The Columbiana County Health Partners. Multiple sectors, including the general public, were asked through email list servs, social media, and public notices to participate in the process which included defining the scope of the project, choosing questions for the surveys, reviewing initial data, planning a community release, and identifying and prioritizing needs.

QUANTITATIVE & QUALITATIVE DATA ANALYSIS

The Hospital Council of Northwest Ohio was contracted to collect and analyze the data, as well as overall project management. Detailed data collection methods are described later in this section.

EVALUATION OF IMPACT

The evaluation of impact takes into consideration the feedback from the last community health needs assessment. The Columbiana County Health Partners have a quarterly score card that tracks impact of priority action steps.

CHNA AVAILABILITY

The 2018 East Liverpool City Hospital and Salem Regional Medical Center's Community Health Needs Assessment, as well as the various other assessments used in creating this report can be found at the following websites:

Salem Regional Medical Center: http://www.salemregional.com/

East Liverpool City Hospital: http://www.elch.org/

Hospital Council of Northwest Ohio: http://www.hcno.org/community-services/community-health-assessments/

Public Health Accreditation Board (PHAB)

National public health accreditation status through the Public Health Accreditation Board (PHAB) requires community health assessments (CHAs) to be completed at least every five years. The purpose of the community health assessment is to learn the health of the population, identify areas for health improvement, identify contributing factors that impact health outcomes, and identify community assets and resources that can be mobilized to improve population health.

PHAB standards highly recommend that national models of methodology are utilized in compiling CHAs. The 2018 CHA was completed using the National Association of County and City Health Officials (NACCHO) Mobilizing Action through Partnerships and Planning (MAPP) process. MAPP is a community-driven planning process for improving community health. This process was facilitated by HCNO in collaboration with various local agencies representing a variety of sectors.

This assessment includes a variety of data and information from various sources, focusing on primary data at the county level. Supporting data, such as secondary data, demographics, health disparities (including age, gender, and income-based disparities), and social determinants of health, can be found throughout the report. For a more detailed approach on primary data collection methods, please see the section below.

Primary Data Collection Methods

DESIGN

This community health assessment was cross-sectional in nature and included a written survey of adults within Columbiana County. From the beginning, community leaders were actively engaged in the planning process and helped define the content, scope, and sequence of the study. Active engagement of community members throughout the planning process is regarded as an important step in completing a valid needs assessment.

INSTRUMENT DEVELOPMENT

One survey instrument was designed and pilot tested for adults in this study. As a first step in the design process, health education researchers from the University of Toledo and staff members from HCNO met to discuss potential sources of valid and reliable survey items that would be appropriate for assessing the health status and health needs of adults. The investigators decided to derive the majority of the survey items from the BRFSS. This decision was based on being able to compare local data with state and national data.

The project coordinator from HCNO conducted a series of meetings with the planning committee from Columbiana County. During these meetings, HCNO and the planning committee reviewed and discussed banks of potential survey questions from the BRFSS survey. Based on input from the Columbiana County planning committee, the project coordinator composed a draft of the survey containing 114 items for the survey. Health education researchers from the University of Toledo reviewed and approved the drafts.

SAMPLING

The sampling frame for the adult survey consisted of adults ages 19 and over living in Columbiana County. There were 82,884 persons ages 19 and over living in Columbiana County. The investigators conducted a power analysis to determine what sample size was needed to ensure a 95% confidence level with a corresponding margin of error of 5% (i.e., we can be 95% sure that the "true" population responses are within a 5% margin of error of the survey findings). A sample size of at least 382 adults was needed to ensure this level of confidence. The random sample of mailing addresses was obtained from Melissa Global Intelligence in Rancho Santa Margarita, California.

PROCEDURE

Prior to mailing the survey, the project team mailed an advance letter to 1,200 adults in Columbiana County. This advance letter was personalized; printed on Columbiana County Health Partners letterhead; and signed by Wesley J. Vins, Health Commissioner of the Columbiana County Health District. The letter introduced the county health assessment project and informed the readers that they may be randomly selected to receive the survey. The letter also explained that the respondents' confidentiality would be protected and encouraged the readers to complete and return the survey promptly if they were selected.

Three weeks following the advance letter, the project team implemented a three-wave mailing procedure to maximize the survey return rate. The initial mailing included a personalized hand-signed cover letter describing the purpose of the study, a questionnaire, a self-addressed stamped return envelope, and a $2 incentive. Approximately three weeks after the first mailing, a second wave mailing included another personalized cover letter encouraging them to reply, another copy of the questionnaire, and another reply envelope. A third wave postcard was sent three weeks after the second wave mailing. Surveys returned as undeliverable were not replaced with another potential respondent.

The response rate for the mailing was 33% (n=377: CI=± 5.04). Prior to surveys being sent, a power analysis was conducted which concluded that 382 surveys would need to be returned to have a ± 5% confidence interval which is standard. However, there were only 377 surveys returned, thus reducing the level of power and broadening the confidence interval to ± 5.04%.

DATA ANALYSIS

Individual responses were anonymous. Only group data was available. All data was analyzed by health education researchers at the University of Toledo using SPSS 23.0. Crosstabs were used to calculate descriptive statistics for the data presented in this report. To be representative of Columbiana County, the adult data collected was weighted by age, gender, race, and income using 2016 Census data. Multiple weightings were created based on this information to account for different types of analyses. For more information on how the weightings were created and applied, see Appendix III.

LIMITATIONS

As with all county assessments, it is important to consider the findings in light of all possible limitations. First, the Columbiana County adult assessment had a high response rate. However, if any important differences existed between the respondents and the non-respondents regarding the questions asked, this would represent a threat to the external validity of the results (the generalizability of the results to the population of Columbiana County). If there were little to no differences between respondents and non-respondents, then this would not be a limitation.

It is important to note that although several questions were asked using the same wording as the Centers for Disease Control and Prevention (CDC) questionnaire, the data collection method differed. The CDC adult data was collected using a set of questions from the total question bank, and participants were asked the questions over the telephone rather than through a mailed survey.

Lastly, caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Secondary Data Collection Methods

HCNO collected secondary data from multiple websites, including county-level data, whenever possible. HCNO utilized sites such as the Behavioral Risk Factor Surveillance System (BRFSS), numerous CDC sites, U.S. Census data, and Healthy People 2020, among other national and local sources. All data is included as a citation in the section of the report with which it corresponds, and the URLs are available in the references at the end of this report. All primary data collected in this report is from the 2018 Columbiana County Community Health Assessment (CHA).
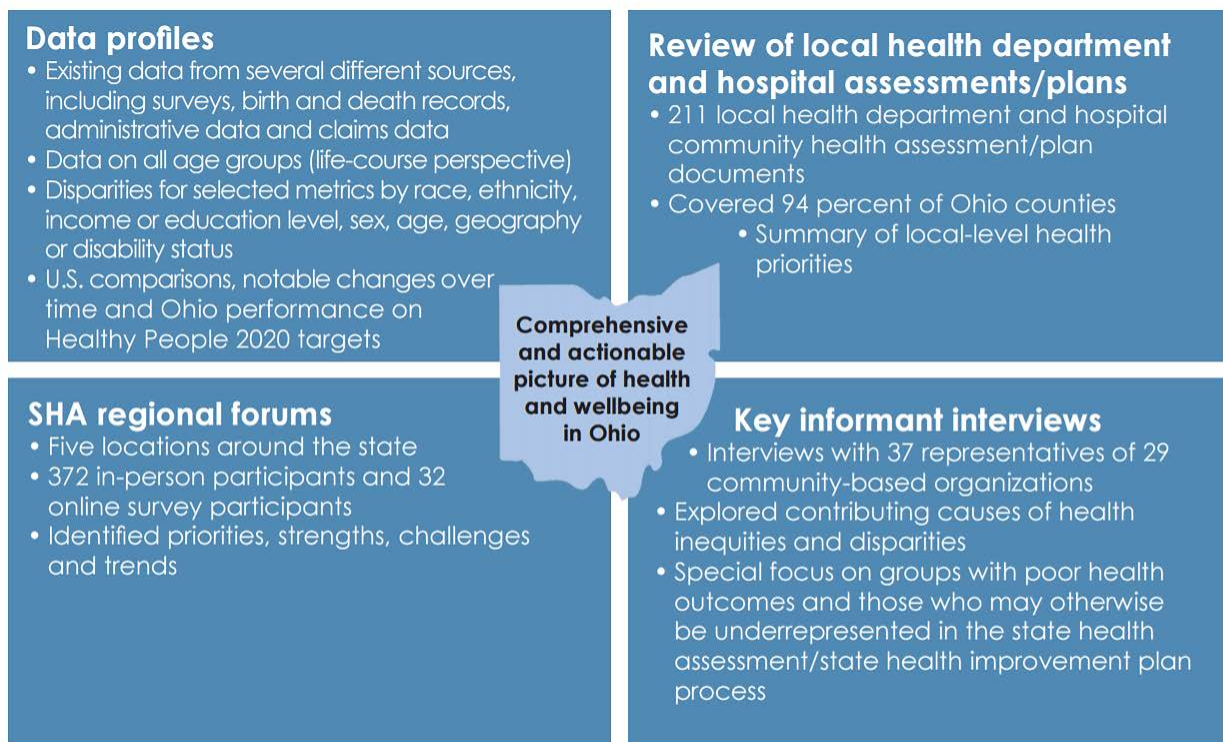
2016 Ohio State Health Assessment (SHA)

The 2016 Ohio state health assessment (SHA) provides data needed to inform health improvement priorities and strategies in the state. This assessment includes over 140 metrics, organized into data profiles, as well as information gathered through five regional forums, a review of local health department and hospital assessments and plans, and key informant interviews.

Similar to the 2016 Ohio SHA, the 2018 Columbiana County Community Health Assessment (CHA) examined a variety of metrics from various areas of health including, but not limited to, health behaviors, chronic disease, access to health care, and social determinants of health. Additionally, the CHA studied themes and perceptions from local public health stakeholders from a wide variety of sectors. **Note: This symbol 🛡 will be displayed in the trend summary when an indicator directly aligns with the 2016 Ohio SHA.**

The interconnectedness of Ohio's greatest health challenges, along with the overall consistency of health priorities identified in this assessment, indicates many opportunities for collaboration between a wide variety of partners at and between the state and local level, including physical and behavioral health organizations and sectors beyond health. It is our hope that this CHA will serve as a foundation for such collaboration.

To view the full 2016 Ohio State Health Assessment, please visit: http://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/chss/ship/SHA_FullReport_08042016.pdf?la=en

FIGURE 1.1 | State Health Assessment (SHA) Sources of Information

Data profiles
- Existing data from several different sources, including surveys, birth and death records, administrative data and claims data
- Data on all age groups (life-course perspective)
- Disparities for selected metrics by race, ethnicity, income or education level, sex, age, geography or disability status
- U.S. comparisons, notable changes over time and Ohio performance on Healthy People 2020 targets

Review of local health department and hospital assessments/plans
- 211 local health department and hospital community health assessment/plan documents
- Covered 94 percent of Ohio counties
  - Summary of local-level health priorities

Comprehensive and actionable picture of health and wellbeing in Ohio

SHA regional forums
- Five locations around the state
- 372 in-person participants and 32 online survey participants
- Identified priorities, strengths, challenges and trends

Key informant interviews
- Interviews with 37 representatives of 29 community-based organizations
- Explored contributing causes of health inequities and disparities
- Special focus on groups with poor health outcomes and those who may otherwise be underrepresented in the state health assessment/state health improvement plan process

Data Summary | Health Care Access

HEALTH CARE COVERAGE

Ten percent (10%) of Columbiana County adults were without health care coverage. Those most likely to be uninsured were adults under the age of 30 (38%). The main reason adults gave for being without health care coverage were because they could not afford to pay the insurance premiums (33%).

Uninsured Columbiana County Adults
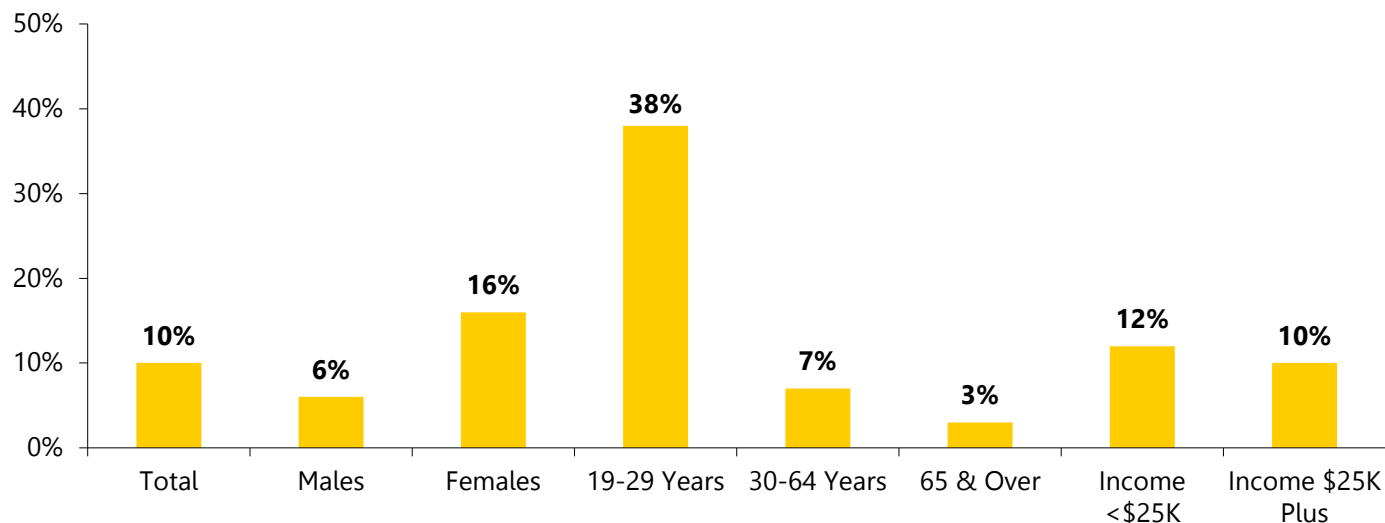
ACCESS AND UTILIZATION

Seventy-three percent (73%) of Columbiana County adults had visited a doctor for a routine checkup in the past year. Sixty percent (60%) of adults went outside of Columbiana County for health care services in the past year.

Columbiana County Adults Who Visited a Doctor for a Routine Checkup in the Past Year
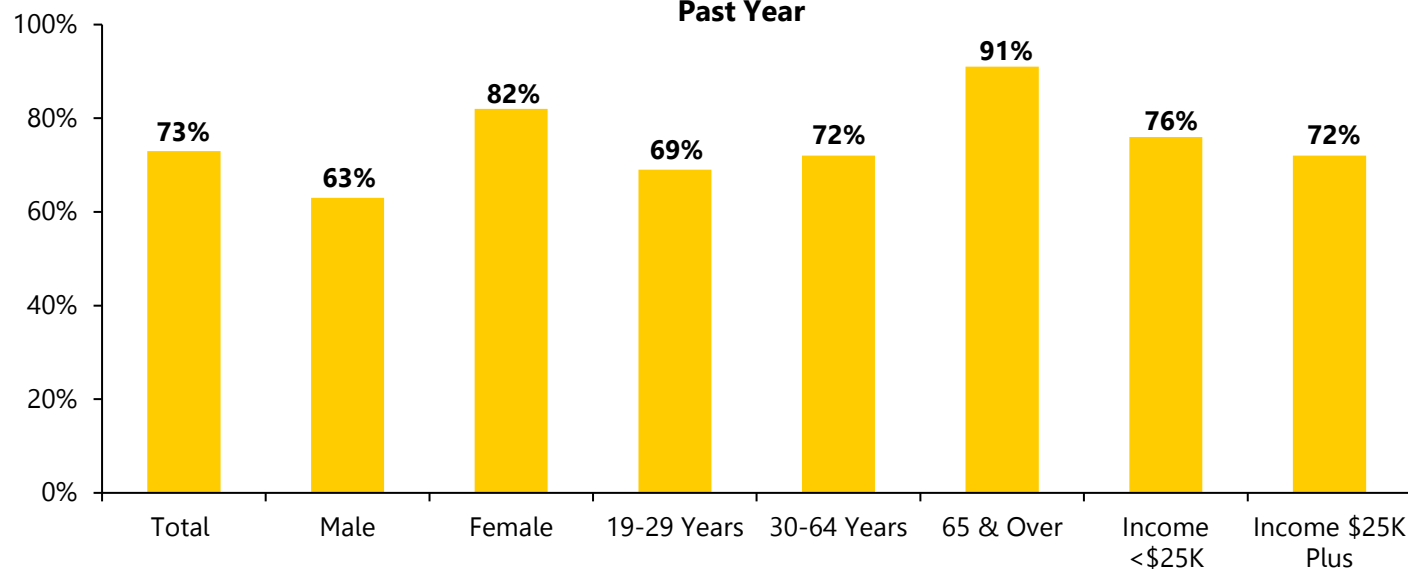
Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

PREVENTIVE MEDICINE

Nearly three-fourths (73%) of adults ages 65 and over had a pneumonia vaccination at some time in their life. One-third (33%) of adults had a colorectal cancer screening in the past 5 years.

Columbiana County Adults Who Received a Flu Vaccine Within the Past Year

A bar chart showing the following values:
- Total: 53%
- Male: 51%
- Female: 52%
- 19-29 Years: 27%
- 30-64 Years: 54%
- 65 & Over: 71%
- Income <$25K: 62%
- Income $25K Plus: 50%

WOMEN'S HEALTH

Seventy-three percent (73%) of Columbiana County women over the age of 40 reported having a mammogram in the past two years. Forty-six percent (46%) of women had a clinical breast exam and 38% had a Pap smear to detect cancer of the cervix in the past year. Seven out of ten (71%) Columbiana County women were overweight or obese, 40% had high blood cholesterol, 31% had high blood pressure, and 24% were identified as smokers, known risk factors for cardiovascular diseases.

Columbiana County Women's Health Exams Within the Past Year

A grouped bar chart (Mammogram, Clinical Breast Exam, Pap Smear) showing the following values:
- Total: Mammogram 38%, Clinical Breast Exam 46%, Pap Smear 38%
- Under 40: Mammogram 0%, Clinical Breast Exam 44%, Pap Smear 63%
- 40 & Older: Mammogram 55%, Clinical Breast Exam 44%, Pap Smear 24%
- Income <$25K: Mammogram 34%, Clinical Breast Exam 29%, Pap Smear 20%
- Income $25K Plus: Mammogram 37%, Clinical Breast Exam 48%, Pap Smear 44%

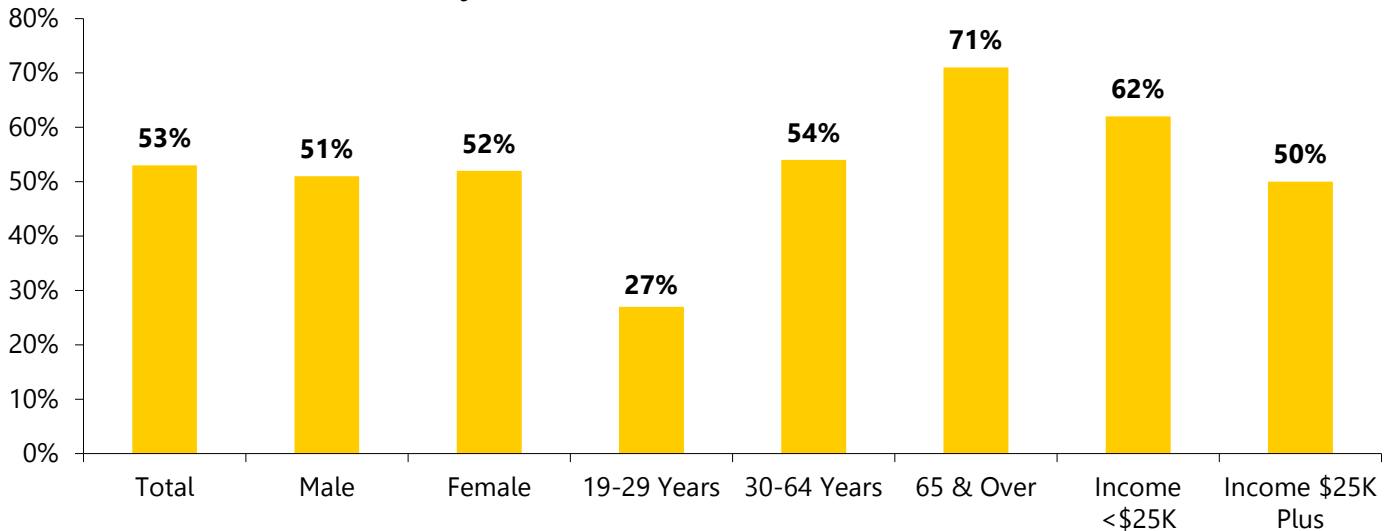Legend: ■ Mammogram   ■ Clinical Breast Exam   ■ Pap Smear
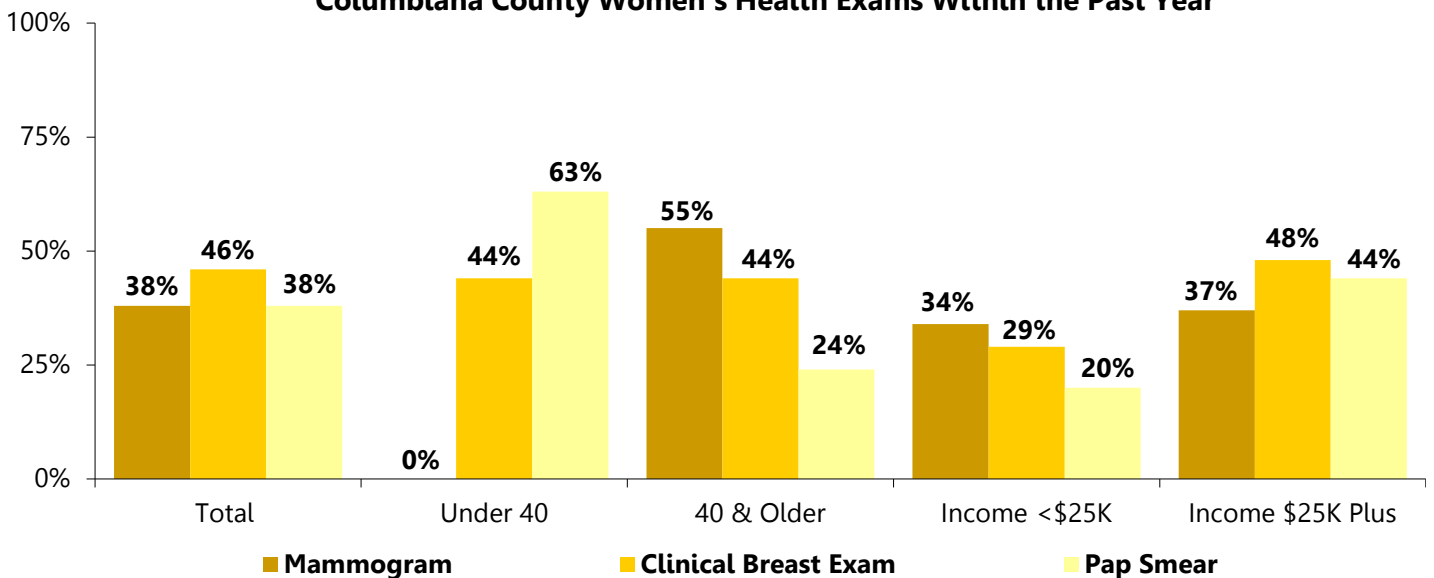
Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

MEN'S HEALTH

Over half (54%) of Columbiana County males over the age of 50 had a prostate-specific antigen (PSA) test in the past year. More than two-fifths (41%) of men had been diagnosed with high blood cholesterol, 38% had high blood pressure, and 18% were identified as current smokers, which, along with being overweight and obese (83%), are known risk factors for cardiovascular diseases.

Columbiana County Men's Health Exams Within the Past Year

■ **Prostate-Specific Antigen (PSA)**   ■ **Digital Rectal**
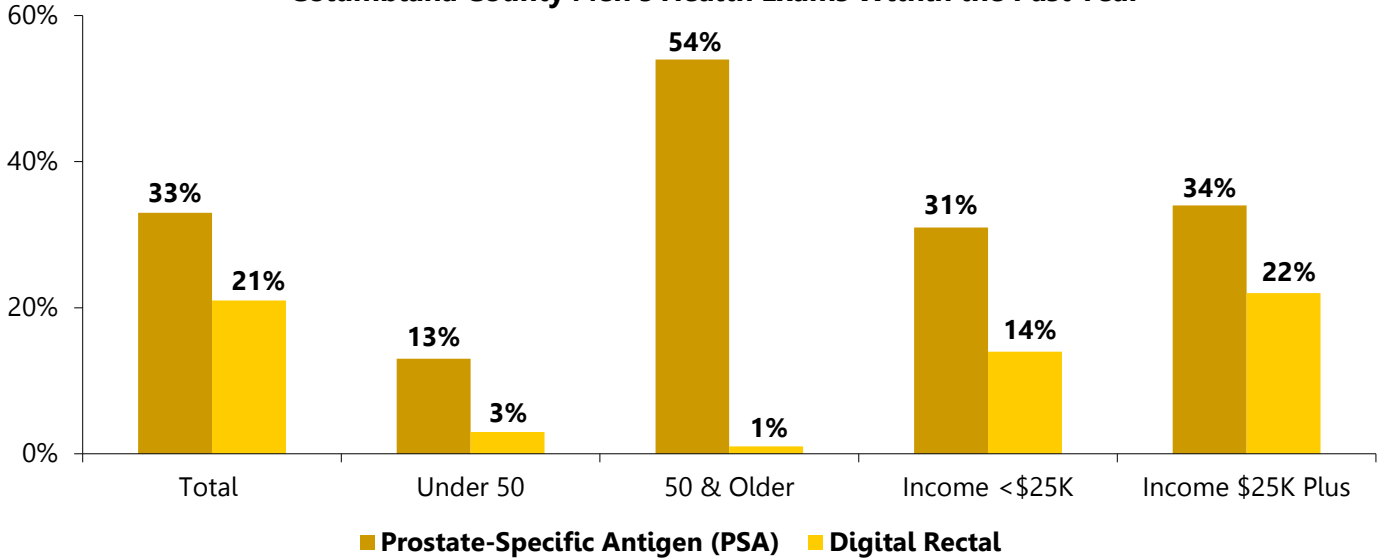
ORAL HEALTH

Sixty-three percent (63%) of Columbiana County adults had visited a dentist or dental clinic in the past year. The top three reasons adults gave for not visiting a dentist in the past year were cost (35%), no reason to go/had not thought of it (18%) and had dentures (15%).

Columbiana County Adults Who Visited a Dentist or Dental Clinic in the Past Year
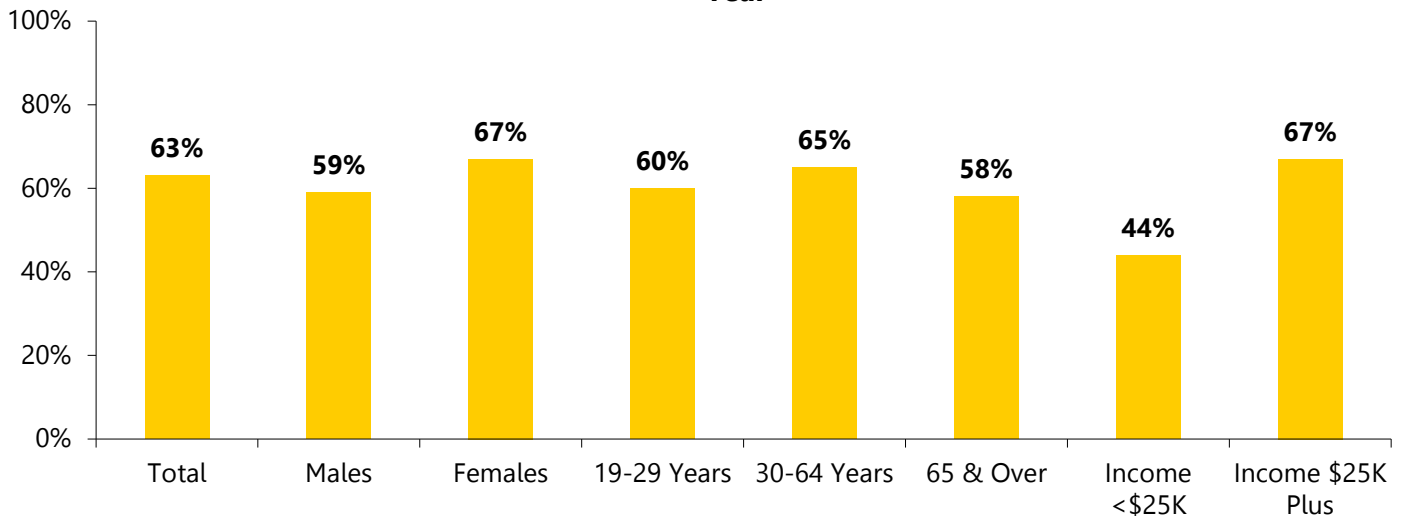
Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

HEALTH STATUS PERCEPTIONS

Forty-six percent (46%) of Columbiana County adults rated their health status as excellent or very good. Conversely, 15% of adults described their health as fair or poor, increasing to 34% of those with incomes less than $25,000.

Columbiana County Adult Health Perceptions*

Legend: ■ Excellent/Very Good ■ Good ■ Fair/Poor

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

WEIGHT STATUS

Seventy-six percent (76%) of Columbiana County adults were overweight or obese based on body mass index (BMI). Over one-fifth (22%) of adults did not participate in any physical activity in the past week, including 2% who were unable to exercise.

Columbiana County Adult BMI Classifications*

Legend: ■ Normal ■ Overweight ■ Obese
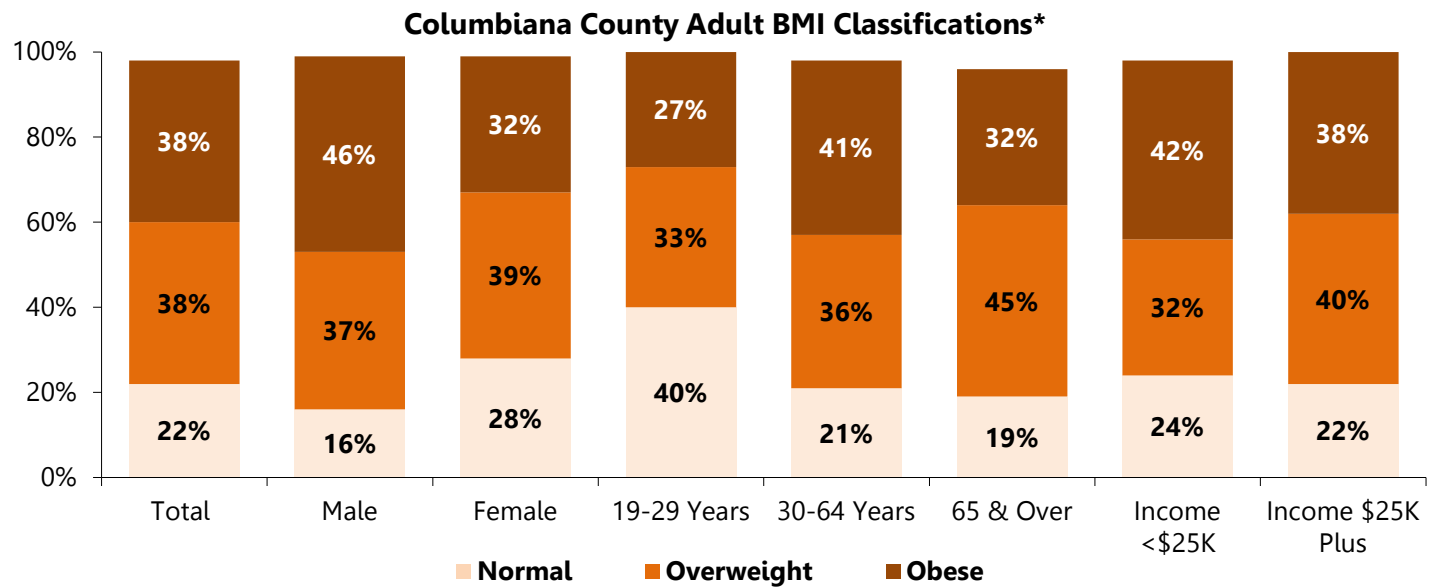
*Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight*

Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

TOBACCO USE

One-in-five (20%) Columbiana County adults were current smokers, and 25% were considered former smokers. Six percent (6%) of adults used e-cigarettes/vape pens in the past year.

Columbiana County Adult Smoking Behaviors*
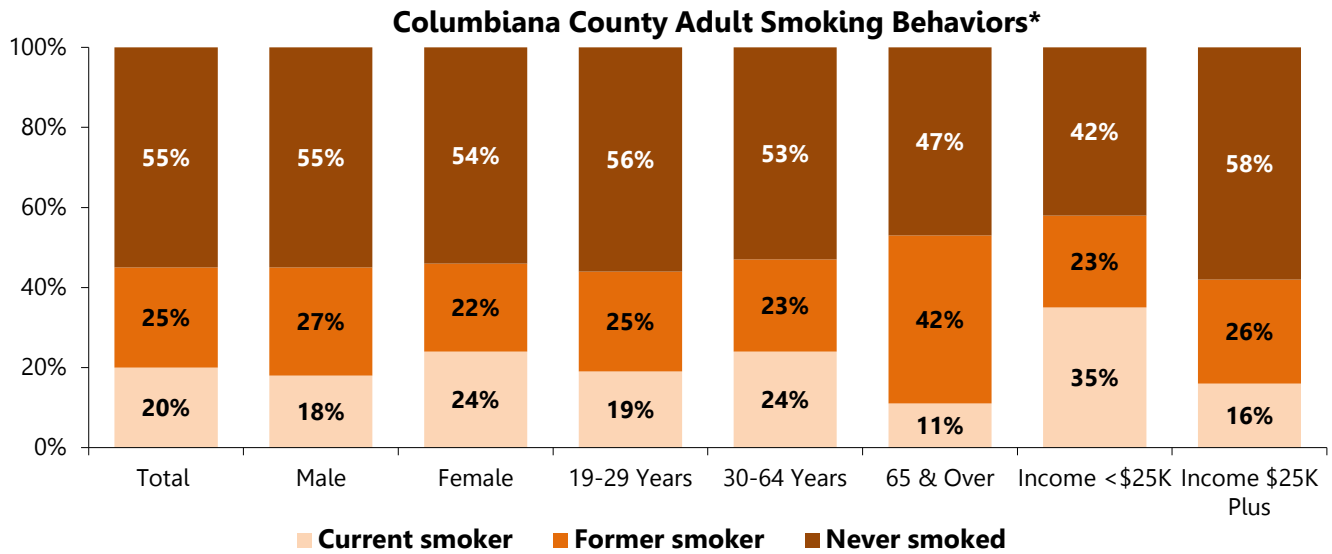
Respondents were asked: "Have you smoked at least 100 cigarettes in your entire life? If yes, do you now smoke cigarettes every day, some days or not at all?"

ALCOHOL CONSUMPTION

Fifty-nine percent (59%) of Columbiana County adults had at least one alcoholic drink in the past month and would be considered current drinkers. Nineteen percent (19%) of all adults reported they had five or more alcoholic drinks (for males) or four or more drinks (for females) on an occasion in the last month and would be considered binge drinkers.

Columbiana County Adults Average Number of Drinks Consumed Per Drinking Occasion
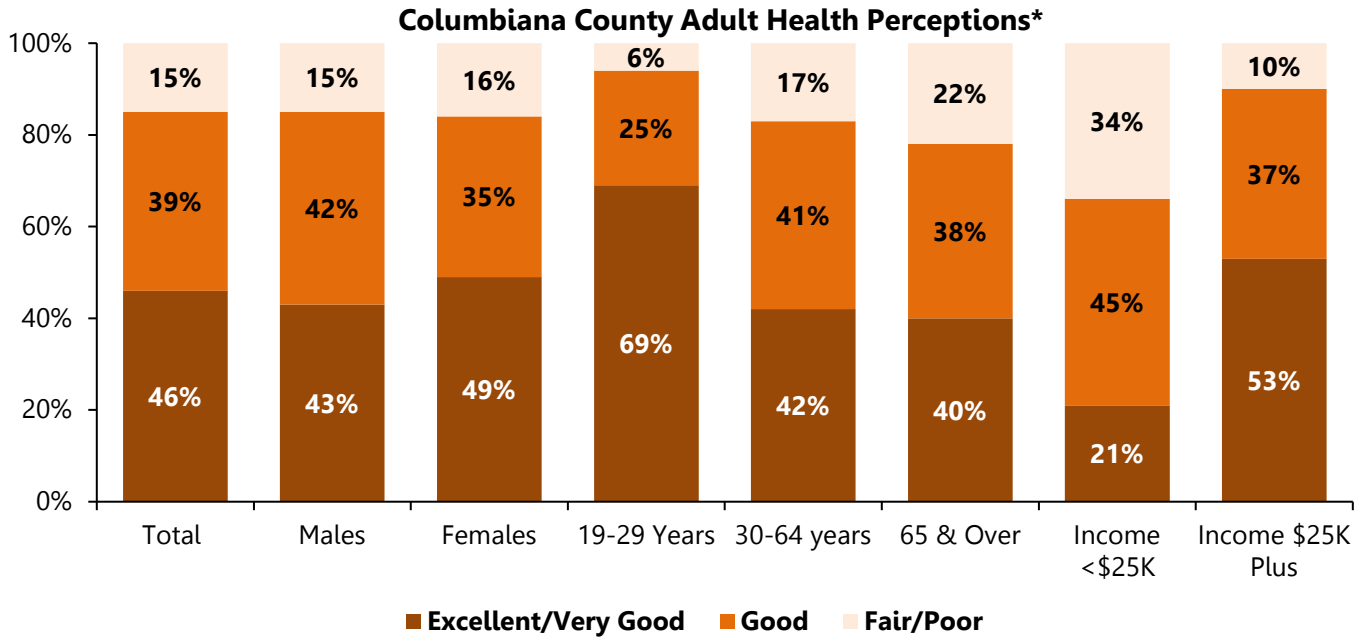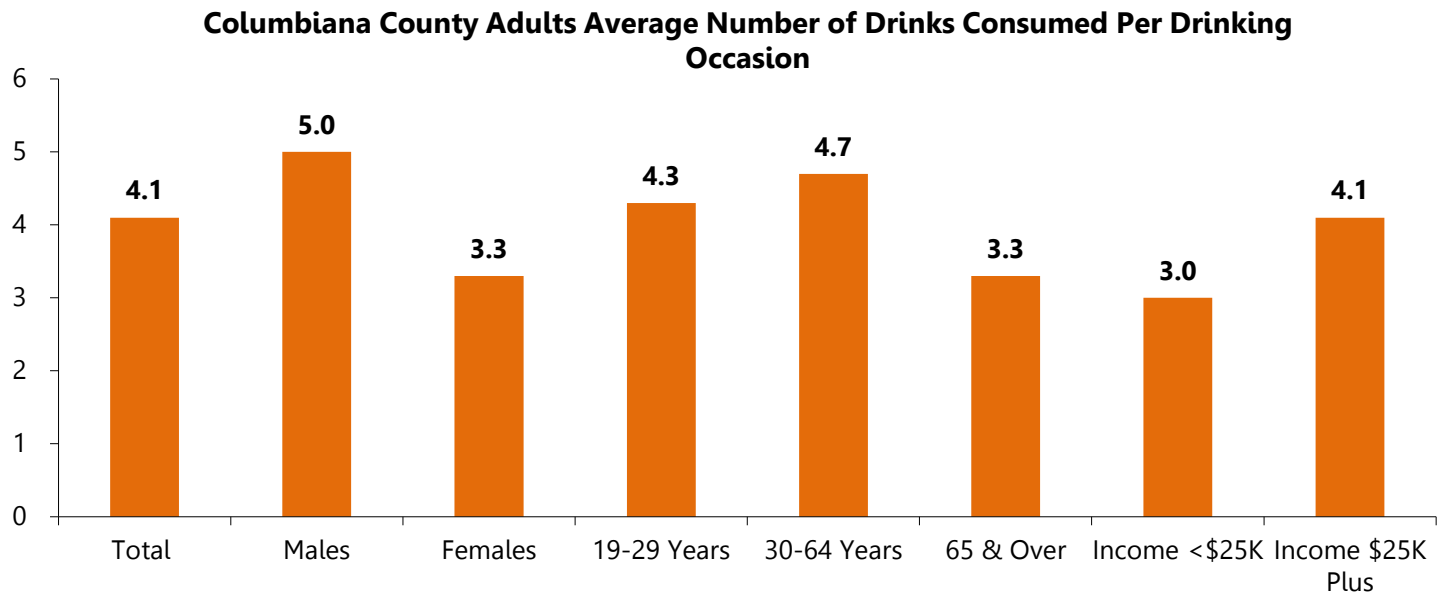

Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

DRUG USE

Three percent (3%) of Columbiana County adults had used recreational marijuana or hashish during the past 6 months. Seven percent (7%) of adults had used medication not prescribed for them or took more than prescribed to feel good or high and/or more active or alert during the past 6 months.

Columbiana County Adult Medication Misuse in Past 6 Months

Category	Value
Total	7%
Males	6%
Females	8%
19-29 Years	0%
30-64 Years	10%
65 & Over	9%
Income <$25K	17%
Income $25K Plus	4%

SEXUAL BEHAVIOR

Sixty-seven percent (67%) of Columbiana County adults had sexual intercourse in the past year. Two percent (2%) of adults had more than one partner.

Columbiana County Number of Sexual Partners in the Past Year*
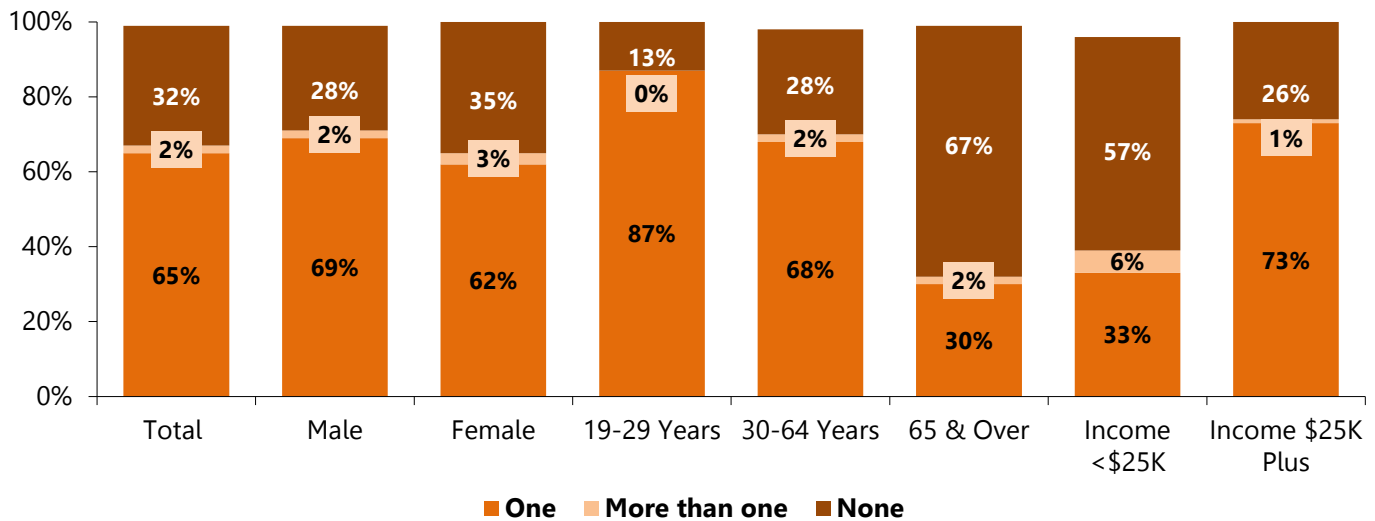
Category	One	More than one	None
Total	65%	2%	32%
Male	69%	2%	28%
Female	62%	3%	35%
19-29 Years	87%	0%	13%
30-64 Years	68%	2%	28%
65 & Over	30%	2%	67%
Income <$25K	33%	6%	57%
Income $25K Plus	73%	1%	26%

■ One ■ More than one ■ None

Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

MENTAL HEALTH
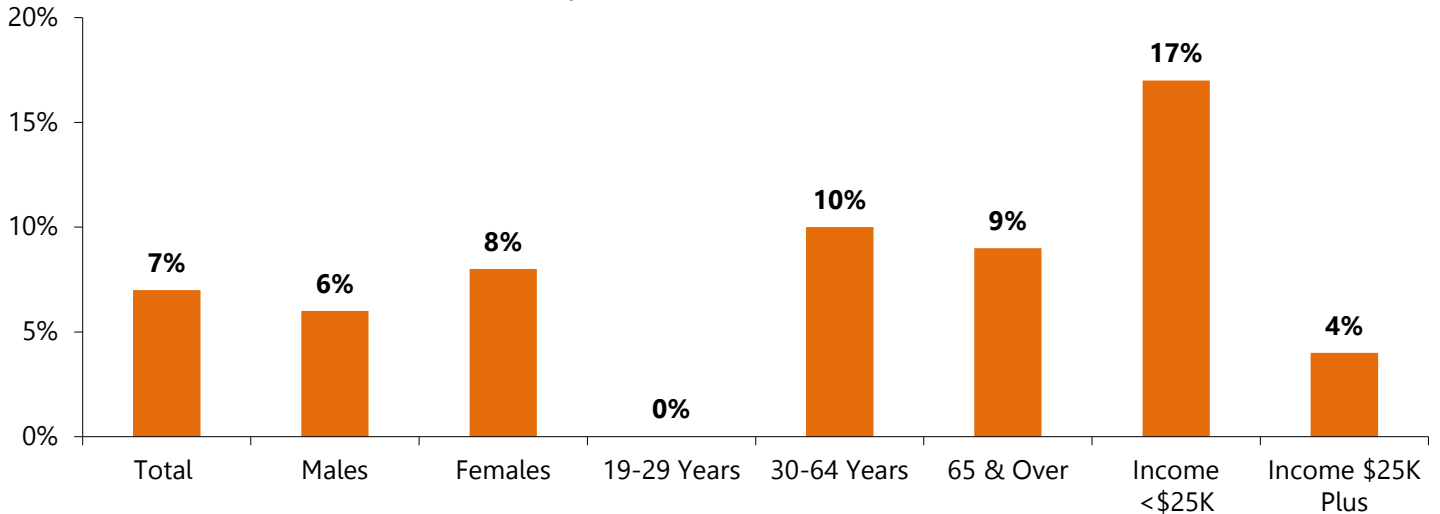
In the past year, 4% of Columbiana County adults considered attempting suicide. One-quarter (25%) of adults reported they or a family member were diagnosed with or treated for depression in the past year.

Data Summary | Chronic Disease

CARDIOVASCULAR HEALTH

Four percent (4%) of adults had survived a heart attack or myocardial infarction and 2% had survived a stroke at some time in their life. More than two-fifths (41%) of Columbiana County adults had high blood cholesterol, 38% were obese, 37% had high blood pressure, and 20% were current smokers, four known risk factors for heart disease and stroke.

Columbiana County Adults with CVD Risk Factors

Risk Factor	Percentage
High Blood Cholesterol	41%
Obesity	38%
High Blood Pressure	37%
Sedentary	22%
Smoking	20%
Diabetes	13%

CANCER

About one-in-five (19%) Columbiana County adults were diagnosed with cancer at some point in their lives.

ARTHRITIS

More than one-third (34%) of Columbiana County adults were ever diagnosed with some form of arthritis.
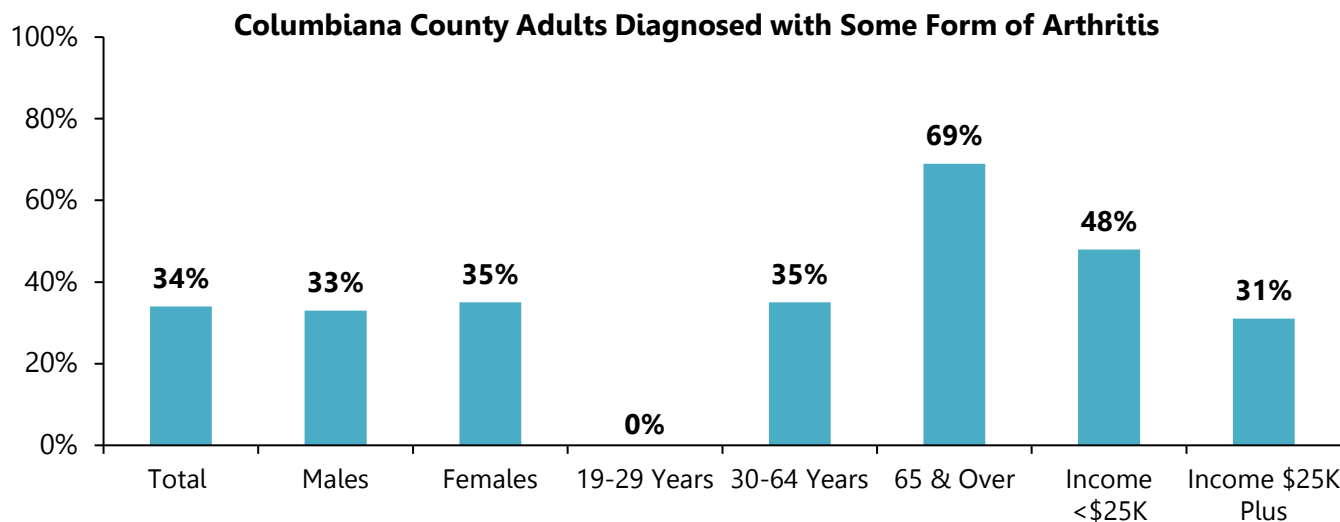
Columbiana County Adults Diagnosed with Some Form of Arthritis

Group	Percentage
Total	34%
Males	33%
Females	35%
19-29 Years	0%
30-64 Years	35%
65 & Over	69%
Income <$25K	48%
Income $25K Plus	31%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

ASTHMA

About one-in-eight (13%) Columbiana County adults had been diagnosed with asthma.
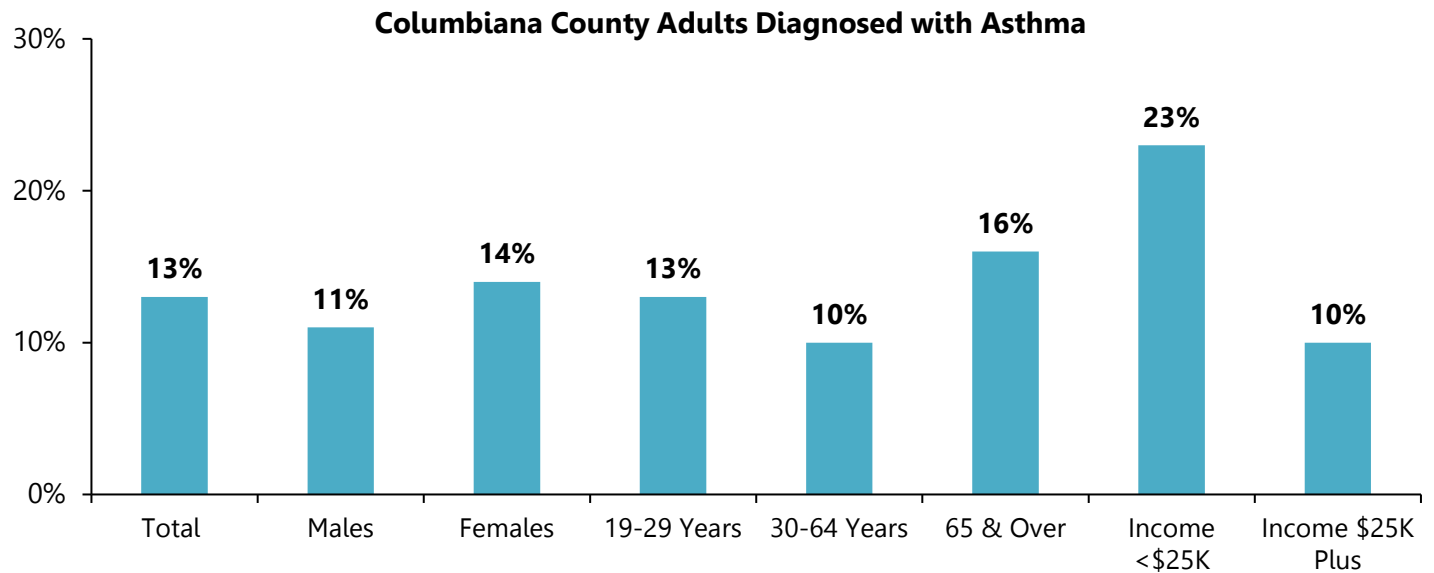
Columbiana County Adults Diagnosed with Asthma

Category	Percentage
Total	13%
Males	11%
Females	14%
19-29 Years	13%
30-64 Years	10%
65 & Over	16%
Income <$25K	23%
Income $25K Plus	10%

DIABETES

Thirteen percent (13%) of Columbiana County adults had been diagnosed with diabetes. Forty-five percent (45%) of diabetics rated their health as fair or poor.

Columbiana County Adults Diagnosed with Diabetes

Category	Percentage
Total	13%
Males	15%
Females	10%
19-29 Years	0%
30-64 Years	16%
65 & Over	22%
Income <$25K	26%
Income $25K Plus	9%

Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.
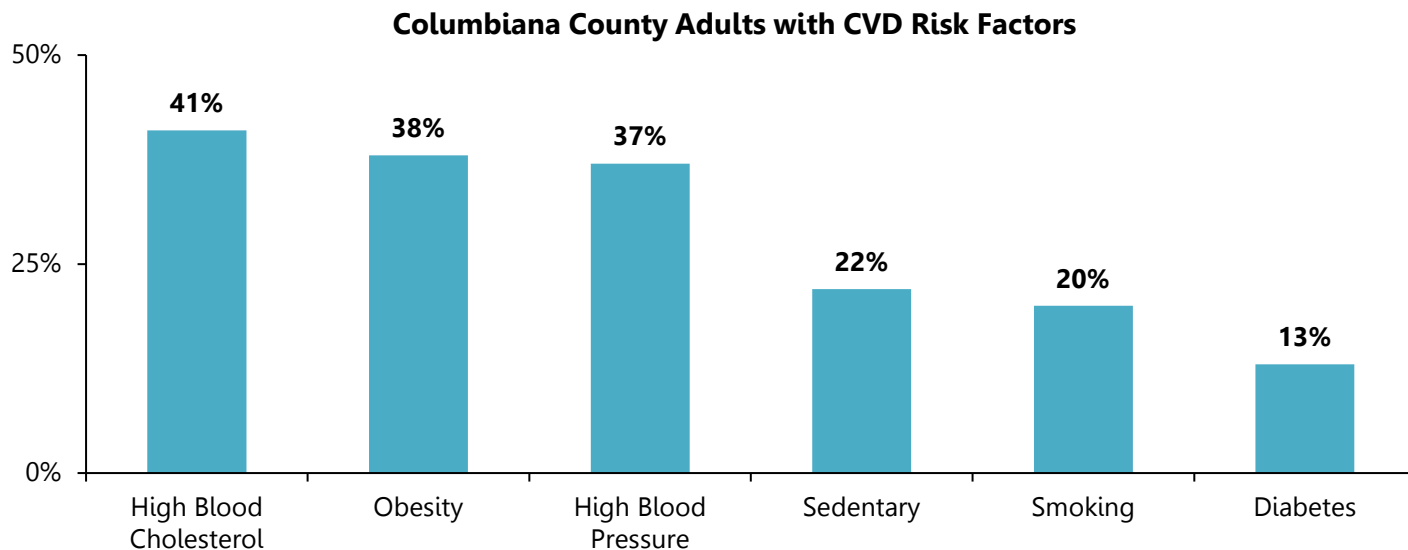
QUALITY OF LIFE

One-quarter (25%) of Columbiana County adults were limited in some way because of a physical, mental or emotional problem. The most limiting health problems were arthritis/rheumatism (37%); back or neck problems (32%); stress, depression, anxiety, or emotional problems (27%); chronic pain (23%); and walking problems (23%).

Columbiana County Adult's Most Limiting Health Problems
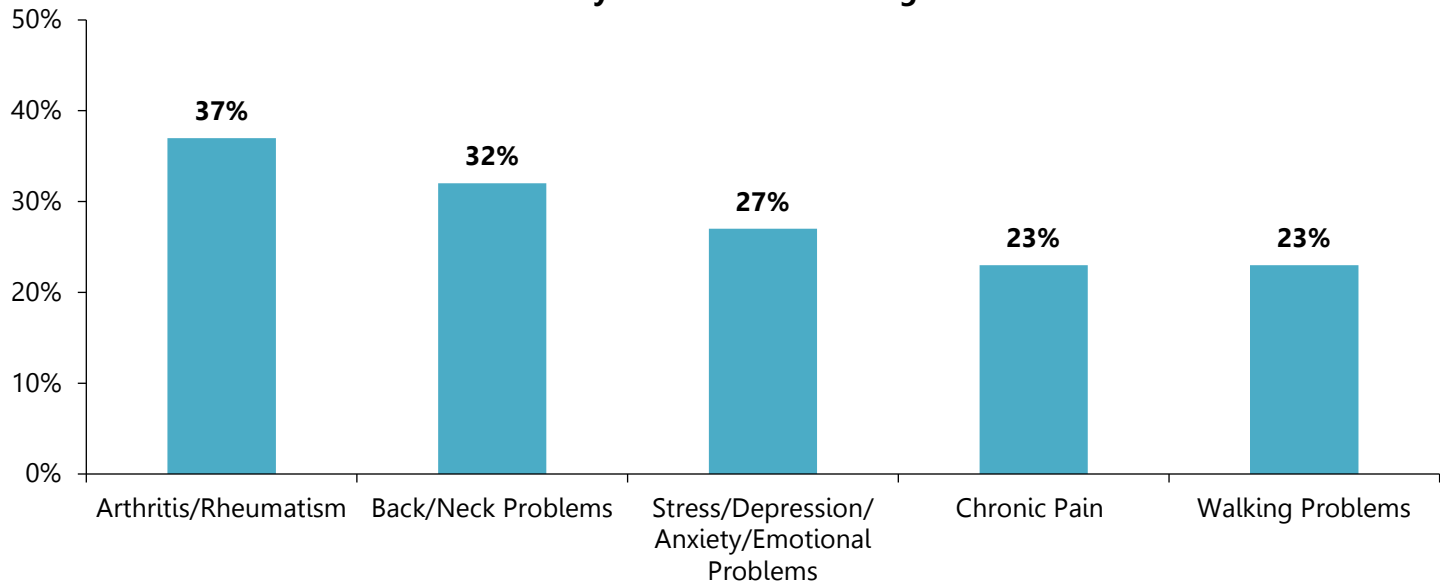
Data Summary | Social Conditions

SOCIAL DETERMINANTS OF HEALTH

Thirteen percent (13%) of Columbiana County adults had experienced four or more adverse childhood experiences (ACEs) in their lifetime. About one-in-six (16%) of adults had experienced at least one issue related to hunger/food insecurity in the past year. Eight percent (8%) of adults reported they had more than transportation issue.

Columbiana County Adults Who Needed Help Meeting General Daily Needs in the Past Month

Category	Percent
Total	8%
Male	6%
Female	8%
19-29 Years	6%
30-64 Years	9%
65 & Over	2%
Income <$25K	26%
Income $25K Plus	3%
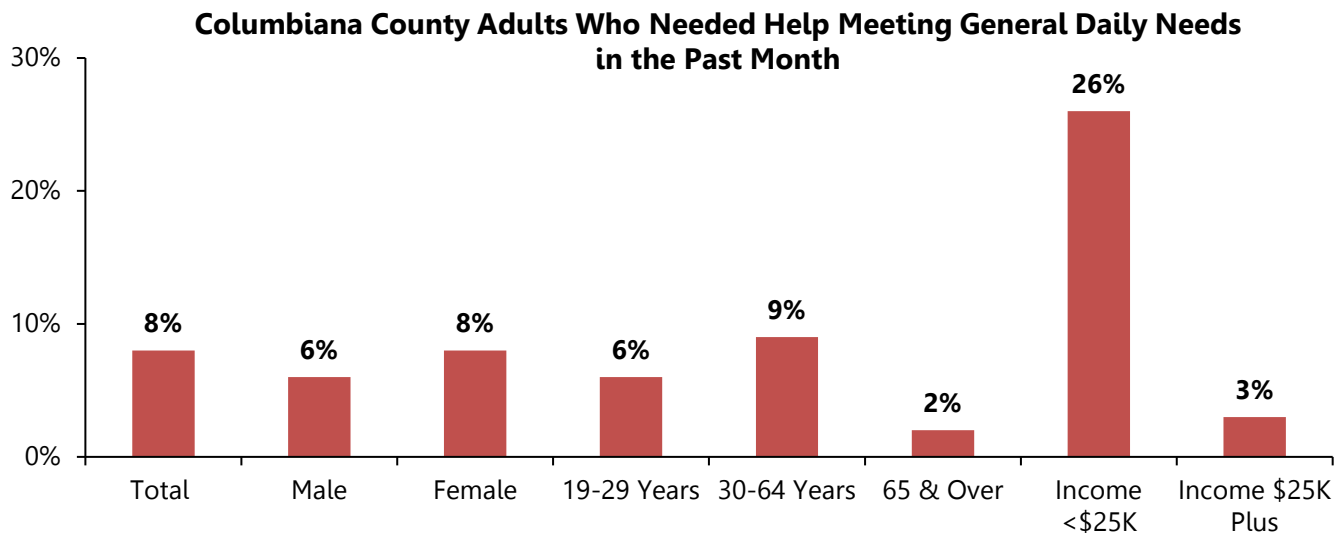
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.
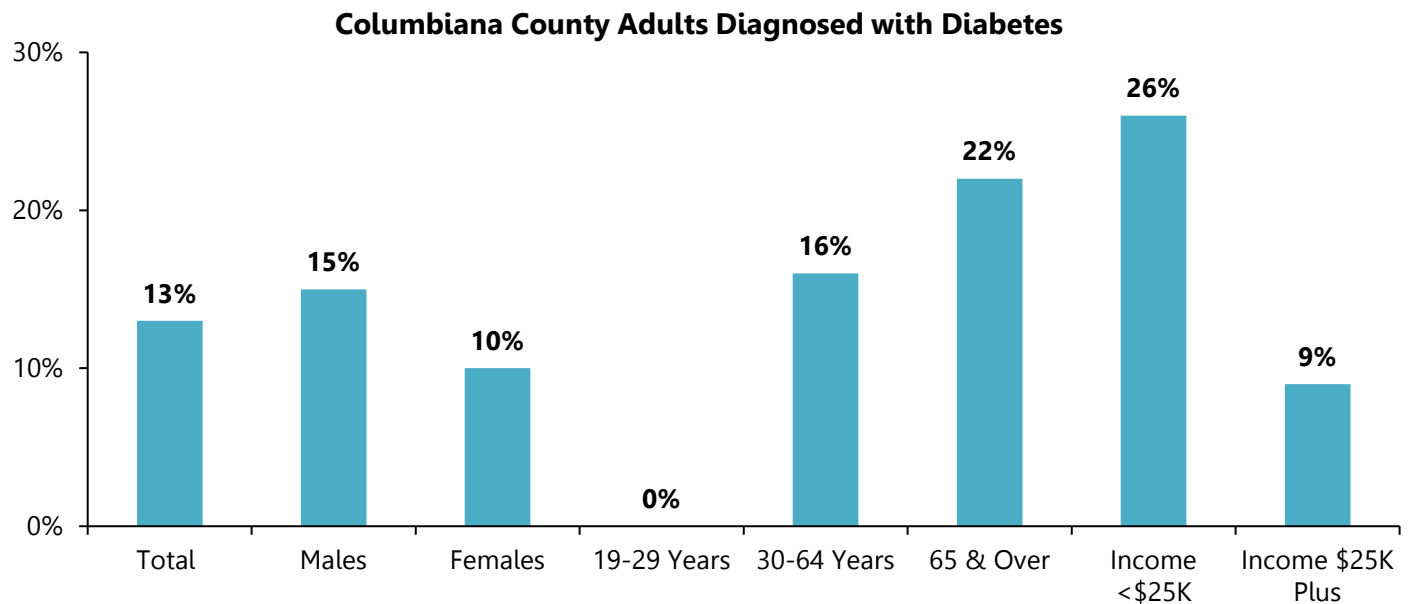
ENVIRONMENTAL HEALTH

The top three environmental health issues for Columbiana County adults were insects (13%), mold (9%), and rodents (8%). Twenty-one percent (21%) of adults did not know the last time their water source had been tested.

PARENTING

Seventy-four percent (74%) of parents put their child to sleep on their back as an infant. About nine out of ten (89%) parents reported their child had received all recommended immunizations.

Comparison Tables

Adult Variables	Columbiana County 2018	Ohio 2017	U.S. 2017
Health Care Coverage, Access, and Utilization			
Uninsured	10%	9%	11%
Visited a doctor for a routine checkup (in the past 12 months) 🛡	73%	72%	70%
Had one or more persons they thought of as their personal health care provider 🛡	84%	81%	77%
Preventive Medicine			
Had a flu shot within the past year (age 65 and older)	71%	63%	60%
Ever had a pneumonia vaccination (age 65 and older)	73%	76%	75%
Ever had a shingles or zoster vaccine	19%	29%	29%
Women's Health			
Had a mammogram within the past two years (age 40 and older)	73%	74%*	72%*
Had a Pap smear in the past three years (age 21-65)	69%	82%*	80%*
Men's Health			
Had a PSA test within the past two years (age 40 and older)	58%	39%*	40%*
Oral Health			
Visited a dentist or a dental clinic (within the past year) 🛡	63%	68%*	66%*
Visited a dentist or a dental clinic (5 or more years ago)	10%	11%*	10%*
Had any permanent teeth extracted	50%	45%*	43%*
Had all their natural teeth extracted (ages 65 and older)	14%	17%*	14%*
Health Status			
Rated general health as excellent or very good	46%	49%	51%
Rated general health as fair or poor 🛡	15%	19%	18%
Rated mental health as not good on four or more days (in the past 30 days)	32%	24%*	23%*
Average number of days that mental health not good (in the past 30 days) 🛡	5.4	4.3‡	3.8‡
Rated physical health as not good on four or more days (in the past 30 days)	25%	22%*	22%*
Average number of days that physical health not good (in the past 30 days) 🛡	4.3	4.0‡	3.7‡
Poor physical or mental health kept them from doing usual activities, such as self-care, work, or recreation (on at least one day during the past 30 days)	29%	22%*	22%*
Weight Status			
Normal Weight (BMI of 18.5 – 24.9)	22%	30%	32%
Overweight (BMI of 25.0 – 29.9)	38%	34%	35%
Obese (includes severely and morbidly obese, BMI of 30.0 and above) 🛡	38%	34%	32%

*2016 BRFSS
‡2016 BRFSS data as compiled by 2018 County Health Rankings
🛡 Indicates alignment with Ohio State Health Assessment (SHA)

Adult Variables	Columbiana County 2018	Ohio 2017	U.S. 2017
Tobacco Use			
Current smoker (currently smoke some or all days) 🛡	20%	21%	17%
Former smoker (smoked 100 cigarettes in lifetime and now do not smoke)	25%	24%	25%
Alcohol Consumption			
Current drinker (had at least one drink of alcohol within the past 30 days)	59%	54%	55%
Binge drinker (males having five or more drinks on one occasion, females having four or more drinks on one occasion) 🛡	19%	19%	17%
Drinking and driving (had driven after drinking too much)	6%	4%*	4%*
Cardiovascular Health			
Ever diagnosed with angina or coronary heart disease 🛡	2%	5%	4%
Ever diagnosed with a heart attack, or myocardial infarction 🛡	4%	6%	4%
Ever diagnosed with a stroke	2%	4%	3%
Had been told they had high blood pressure 🛡	37%	35%	32%
Had been told their blood cholesterol was high	41%	33%	33%
Had their blood cholesterol checked within the last five years	82%	85%	86%
Cancer			
Ever been told they had skin cancer	7%¥	6%	6%
Ever been told they had other types of cancer (other than skin cancer)	11%	7%	7%
Arthritis, Asthma, & Diabetes			
Ever diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia	34%*	29%	25%
Ever been told they have asthma 🛡	13%	14%	14%
Ever been told by a doctor they have diabetes (not pregnancy-related) 🛡	13%	11%	11%
Ever been diagnosed with pre-diabetes or borderline diabetes	9%	2%	2%
Quality of Life			
Limited in some way because of physical, mental, or emotional problem	25%	21%**	21%**

¥ *Melanoma and other skin cancers are included for "diagnosed with skin cancer"*
Only includes those diagnosed with some form of arthritis
2016 BRFSS Data
** 2015 BRFSS Data*
🛡 *Indicates alignment with Ohio SHA*

Health Care Access: Health Care Coverage

Key Findings

Ten percent (10%) of Columbiana County adults were without health care coverage. Those most likely to be uninsured were adults under the age of 30 (38%). The main reason adults gave for being without health care coverage were because they could not afford to pay the insurance premiums (33%).

Health Coverage

- Ninety percent (90%) of Columbiana County adults had health care coverage. Ten percent (10%) of adults were uninsured, increasing to 12% of those with incomes less than $25,000 and 38% of those under the age of 30.

- One-fifth (20%) of adults with children did not have health care coverage, compared to 6% of those who did not have children living in their household.

- The following types of health care coverage were used:
  — Employer (46%)
  — Medicare (20%)
  — Someone else's employer (10%)
  — Medicaid or medical assistance (9%)
  — Self-paid plan (5%)
  — Multiple, including private sources (3%)
  — Multiple, including governmental sources (3%)
  — Health Insurance Marketplace (2%)
  — Military, CHAMPUS, TriCare, CHAMPVA or the VA (1%)

- Columbiana County adults' health care coverage included the following: medical (93%), prescription coverage (88%), immunizations (73%), preventive health (69%), outpatient therapy (65%), dental (59%), vision/eyeglasses (58%), mental health (52%), durable medical equipment (38%), alcohol and drug treatment (35%), skilled nursing/assisted living (28%), home care (26%), hospice (19%), and transportation (18%).

8,288 of Columbiana County adults were uninsured.

- The top 5 reasons uninsured adults gave for being without health care coverage were:
  1. They could not afford to pay the insurance premiums (33%)
  2. They lost their job or changed employers (30%)
  3. They became ineligible (19%)
  4. Spouse or parent lost job or changed employers (10%)
  5. They became separated or divorced (10%)

Note: Percentages do not equal 100% because respondents could select more than one reason

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Uninsured	10%	9%	11%

The following graph shows the percentages of Columbiana County adults who were uninsured. An example of how to interpret the information in the graph includes: 10% of all Columbiana County adults were uninsured, including 12% of adults with incomes less than $25,000, 6% of males and 16% of females. The pie chart shows sources of Columbiana County adults' health care coverage.

Uninsured Columbiana County Adults
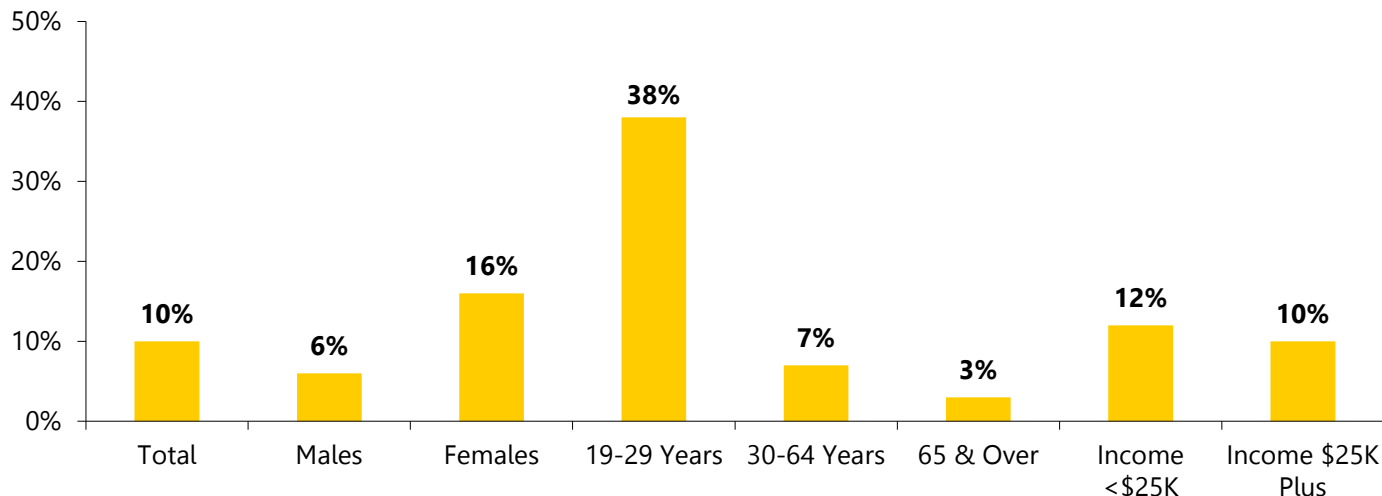
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Source of Health Coverage for Columbiana County Adults

- Medicare 20%
- Medicaid or medical assistance 9%
- Self-paid plan 5%
- Someone Else's Employer 10%
- Military, CHAMPUS, TriCare, CHAMPVA, or the VA 1%
- Health Insurance Marketplace 2%
- Multiple, including private sources 3%
- Multiple, including governmental sources 3%
- Employer 46%
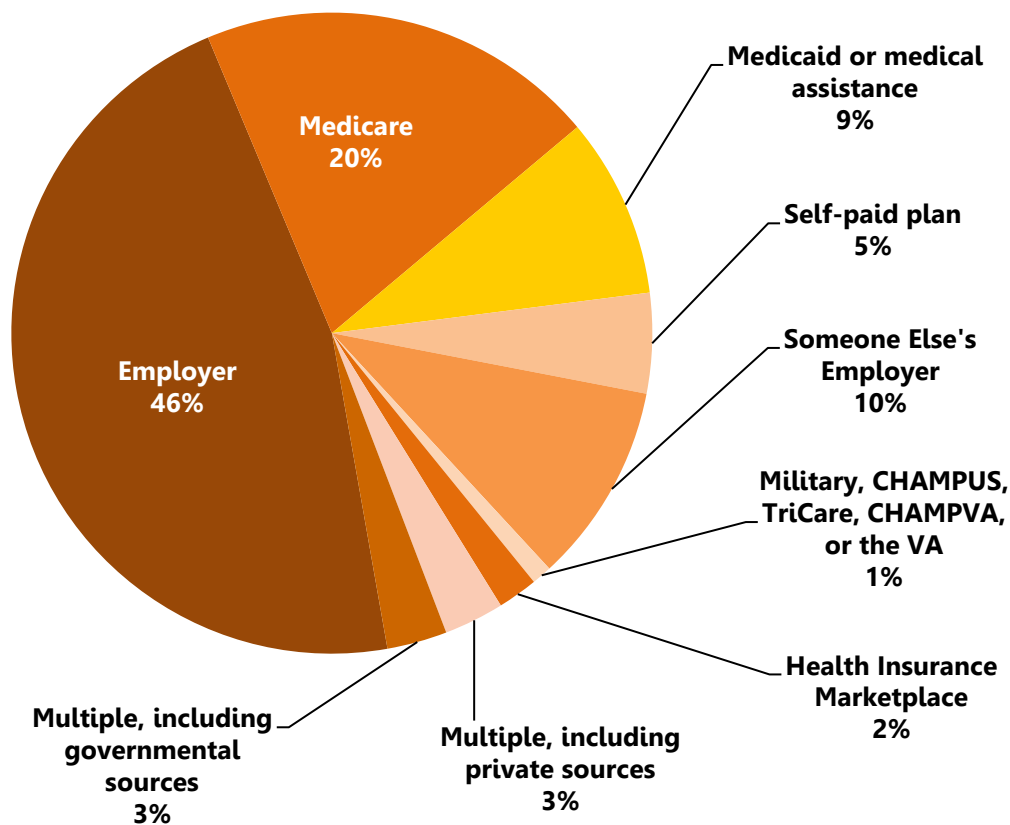
The following chart shows what is included in Columbiana County adults' insurance coverage.

Health Coverage Includes:	Yes	No	Don't Know
Medical	93%	1%	6%
Prescription Coverage	88%	7%	5%
Immunizations	73%	7%	20%
Preventive Health	69%	4%	27%
Outpatient Therapy	65%	4%	31%
Dental	59%	35%	6%
Vision/eyeglasses	58%	32%	10%
Mental Health	52%	7%	41%
Durable Medical Equipment	38%	9%	53%
Alcohol and Drug Treatment	35%	9%	56%
Skilled Nursing/Assisted Living	28%	6%	66%
Home Care	26%	9%	65%
Hospice	19%	7%	74%
Transportation	18%	18%	64%

Healthy People 2020
Access to Health Services (AHS)

Objective	Columbiana County 2018	Ohio 2017	U.S. 2016*	Healthy People 2020 Target
AHS-1.1: Persons under age of 65 years with health insurance	71% age 20-24 78% age 25-34 95% age 35-44 92% age 45-54 91% age 55-64	87% age 18-24 90% age 25-34 90% age 35-44 91% age 45-54 93% age 55-64	85% age 18-24 84% age 25-34 87% age 35-44 90% age 45-54 93% age 55-64	100%

*U.S. baseline is age-adjusted to the 2000 population standard
Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.
(Sources: Healthy People 2020 Objectives, 2016 BRFSS, 2017 BRFSS, 2018 Columbiana County Health Assessment)

Health Care Access: Access and Utilization

Key Findings

Seventy-three percent (73%) of Columbiana County adults visited a doctor for a routine checkup in the past year. Sixty percent (60%) of adults went outside of Columbiana County for health care services in the past year.

Health Care Access

- Seventy-three percent (73%) of Columbiana County adults visited a doctor for a routine checkup in the past year, increasing to 91% of those over the age of 65.

- Adults with health care coverage were more likely to have visited a doctor for a routine checkup in the past year (73%), compared to 65% of those without health care coverage.

- More than half (54%) of adults reported they had one person they thought of as their personal doctor or health care provider, 30% of adults had more than one person they thought of as their personal health care provider, and 16% did not have one at all.

- Columbiana County adults visited the following places for health care services or advice: doctor's office (60%); multiple places, including a doctor's office (14%); urgent care center (7%); family and friends (4%); hospital emergency room (3%); multiple places, not including a doctor's office (3%); department of veteran's affairs (VA) (1%); internet (1%); chiropractor (1%); community health center (1%); mental health counseling center (1%); alternative therapies (<1%); telemedicine (<1%); and some other kind of place (1%). Three percent (3%) of adults indicated they had no usual place for health care services.

- The following might prevent Columbiana County adults from seeing a doctor if they were sick, injured, or needed some kind of health care: cost (32%), doctor would not take their insurance (15%), could not get time off work (12%), difficult to get an appointment (11%), hours not convenient (9%), worried they might find something wrong (8%), do not trust or believe doctors (5%), difficult to find/no transportation (4%), frightened of the procedure or doctor (3%), could not find child care (2%), and some other reason (4%).

- Sixty percent (60%) of adults went outside of Columbiana County for the following health care services in the past year:
  — Specialty care (25%)
  — Primary care (24%)
  — Dental services (20%)
  — Female health services (12%)
  — Cardiac care (9%)
  — Obstetrics/gynecology/NICU (8%)
  — Orthopedic care (8%)
  — Mental health care/counseling services (7%)
  — Neurological services (7%)
  — Cancer care (6%)
  — Pediatric care (6%)
  — Addiction services (3%)
  — Pediatric therapies (2%)
  — Hospice/palliative care (2%)
  — Another service (8%)

- Fifty percent (50%) of adults went outside of Columbiana County for mental health services in the past year. Reasons for going outside Columbiana County for mental health services included the following: better quality program (6%), used to live there (2%), insurance restriction (2%), did not like local program (1%), word of mouth (1%), work there (1%), confidentiality/anonymity (1%), wait list too long (1%), and other reasons (6%).

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Visited a doctor for a routine checkup (in the past 12 months)	73%	72%	70%
Had one or more persons they thought of as their personal health care provider	84%	81%	77%

The following graph shows the percentage of Columbiana County adults who had a routine check-up in the past year. An example of how to interpret the information on the first graph includes: 73% of all Columbiana County adults have had a routine check-up in the past year, including 82% of females and 91% of those 65 years and older.
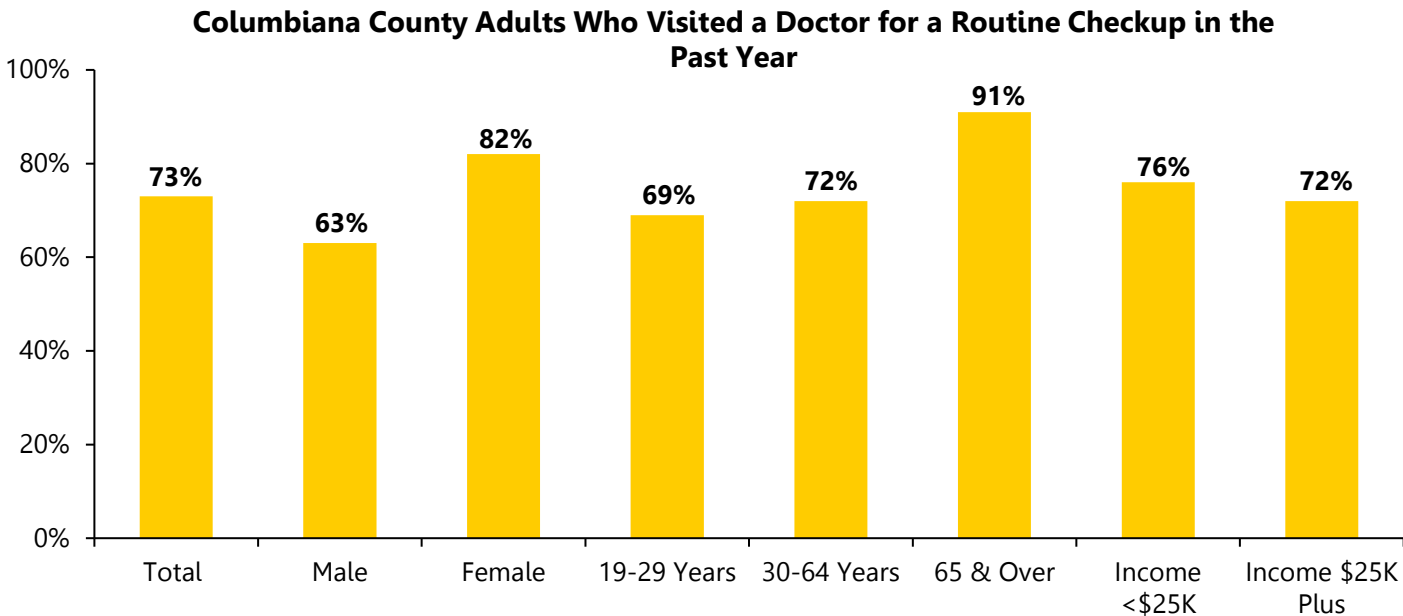
Columbiana County Adults Who Visited a Doctor for a Routine Checkup in the Past Year

Category	Percentage
Total	73%
Male	63%
Female	82%
19-29 Years	69%
30-64 Years	72%
65 & Over	91%
Income <$25K	76%
Income $25K Plus	72%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Availability of Services

- Columbiana County adults reported they had looked for the following programs: depression, anxiety or mental health (12%); assist in-care for the disabled (either in home or out of home) (5%); disability (4%); marital/family problems (3%); end-of-life/hospice care (3%); weight problems (2%); cancer support group/counseling (2%); tobacco cessation (2%); alcohol abuse (1%); drug abuse (1%); family planning (<1%); and detoxification of opiates/heroin (<1%). No adults reported they had looked for a program for gambling abuse or elder care.

Columbiana County Adults Able to Access Assistance Programs/Services

Types of Programs (% of all adults who looked for the programs)	Columbiana County adults who have looked but have NOT found a specific program	Columbiana County adults who have looked and have found a specific program
Depression, anxiety or some mental health problem (12% of all adults looked)	31%	69%
Assist in-care for the disabled (either in home or out of home) (5% of all adults looked)	33%	67%
Disability (4% of all adults looked)	20%	80%
End-of-Life/Hospice Care (3% of all adults looked)	60%	40%
Marital/family problems (3% of all adults looked)	22%	78%
Weight problem (2% of all adults looked)	75%	25%
Cancer support group/counseling (2% of all adults looked)	75%	25%
Tobacco cessation (2% of all adults looked)	40%	60%
Alcohol abuse (1% of all adults looked)	50%	50%
Drug abuse (1% of all adults looked)	50%	50%
Detoxification for Opiates/Heroin (<1% of all adults looked)	0%	100%
Family planning (<1% of all adults looked)	0%	100%

Health Care Access: Preventive Medicine

Key Findings

Nearly three-fourths (73%) of adults ages 65 and over had a pneumonia vaccination at some time in their life. One-third (33%) of adults had a colorectal cancer screening in the past 5 years.

Preventive Medicine

- Over half (53%) of Columbiana County adults had a flu vaccine during the past 12 months, increasing to 71% of adults ages 65 and over.

- Columbiana County adults reported the following reasons for not getting the flu vaccine: did not think they needed it (18%), got sick from it (8%), did not think it worked (8%), vaccine was not effective (4%), cost (3%), time (2%), insurance would not pay for it (1%), religious beliefs (1%), not available (<1%), transportation (<1%), and other (18%).

- One-third (33%) of adults have had a pneumonia shot in their life, increasing to 73% of those ages 65 and over.

- Columbiana County adults had the following vaccines:
  — MMR (measles, mumps, rubella) in their lifetime (67%)
  — Tetanus booster (including Tdap) in the past 10 years (61%)
  — Chicken pox in their lifetime (51%)
  — Hepatitis B in their lifetime (33%)
  — Hepatitis A in their lifetime (21%)
  — Zoster (shingles) vaccine in their lifetime (19%)
  — Pertussis vaccine in the past 10 years (17%)
  — Human papillomavirus (HPV) vaccine in their lifetime (7%)

Preventive Health Screenings and Exams

- Adults had the following screenings:
  — Vision in the past 2 years (38%)
  — Colorectal cancer in the past 5 years (33%)
  — Skin cancer in the past year (21%)
  — Oral cancer in the past year (19%)
  — Hearing in the past 2 years (13%)
  — Bone density in the past 2 years (12%)
  — Lung cancer in the past 3 years (8%)

- Columbiana County adults indicated a doctor or health professional talked to them about following topics in the past year: family history (40%); weight control (36%); immunizations (35%); depression, anxiety or emotional problems (28%); safe use of prescription medication (24%); tobacco use (23%); prostate-specific antigen (PSA) test (16%); bone density (12%); alternative pain therapy (10%); falls (9%); alcohol use (8%); self-testicular exams (8%); safe use of opiate-based pain medication (8%); injury prevention such as safety belt use, helmet use or smoke detectors (7%); sexually transmitted diseases (STDs) (6%); family planning (5%); illicit drug abuse (3%); firearm safety (3%); and domestic violence (3%).

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Had a flu shot within the past year (age 65 and older)	71%	63%	60%
Ever had a pneumonia vaccination (age 65 and older)	73%	76%	75%
Ever had a shingles or zoster vaccine	19%	29%	29%

The following graph shows the percentages of Columbiana County adults who received a flu vaccine within the past year. An example of how to interpret the information in the graph includes: 53% of all adults received the flu vaccine in the past year, including 71% of those ages 65 and older and 62% of those with incomes less than $25,000.
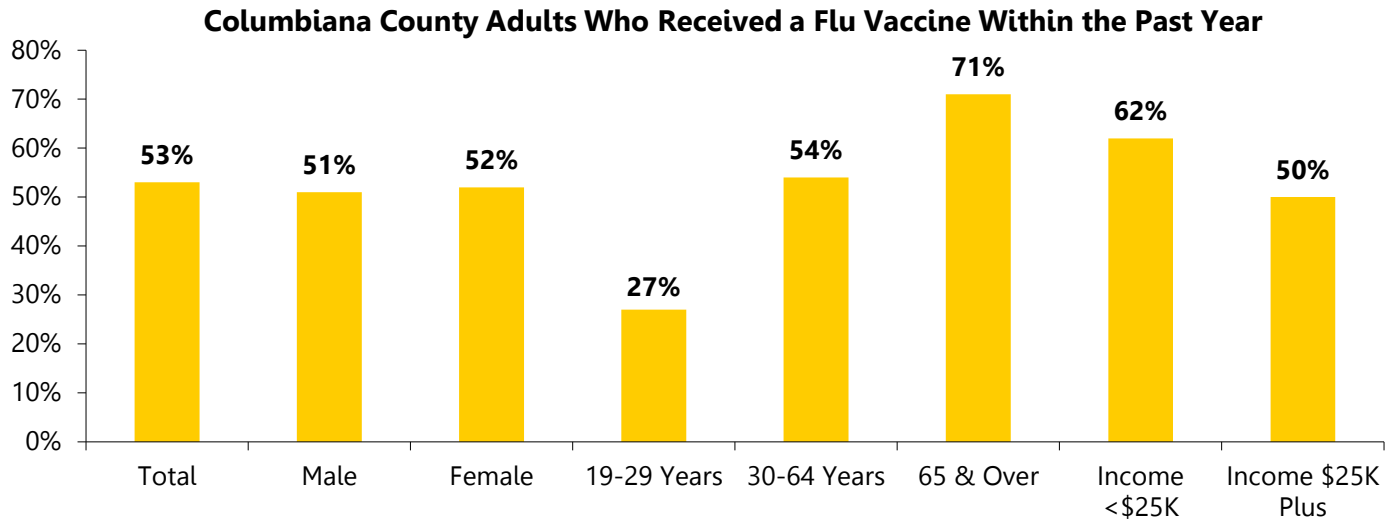
Columbiana County Adults Who Received a Flu Vaccine Within the Past Year

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

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Healthy People 2020
Immunization and Infectious Diseases (IID)

</div>

Objective	Columbiana County 2018	Ohio 2017	U.S. 2017	Healthy People 2020 Target
IID-13.1: Increase the percentage of non-institutionalized high-risk adults aged 65 years and older who are vaccinated against pneumococcal disease	73%	76%	75%	90%
IID-12.7: Increase the percentage of non-institutionalized high-risk adults aged 65 years and older who are vaccinated annually against seasonal influenza	71%	63%	60%	90%
IID-14: Increase the percentage of adults who are vaccinated against zoster (shingles)	19%	29%	29%	30%

Note: U.S. baseline is age-adjusted to the 2000 population standard
(Sources: Healthy People 2020 Objectives, 2017 BRFSS, 2018 Columbiana County Health Assessment)

**Columbiana County Adults Having Discussed Health Care Topics
With Their Health Care Professional in the Past 12 Months**

Health Care Topics	Total 2018
Family History	40%
Weight Control	36%
Immunizations	35%
Depression, Anxiety, or Emotional Problems	28%
Safe Use of Prescription Medication	24%
Tobacco Use	23%
Prostate-Specific Antigen (PSA) Test	16%
Bone Density	12%
Alternative Pain Therapy	10%
Falls	9%
Safe Use of Opiate-Based Pain Medication	8%
Alcohol Use	8%
Self-Testicular Exams	8%
Injury Prevention Such as Safety Belt Use, Helmet Use, or Smoke Detectors	7%
Sexually Transmitted Disease (STDs)	6%
Family Planning	5%
Illicit Drug Abuse	3%
Domestic Violence	3%
Firearm Safety	3%

Health Care Access: Women's Health

Key Findings

Seventy-three percent (73%) of Columbiana County women over the age of 40 reported having a mammogram in the past two years. Forty-six percent (46%) of women had a clinical breast exam and 38% had a Pap smear to detect cancer of the cervix in the past year. Seven out of ten (71%) Columbiana County women were overweight and obese, 40% had high blood cholesterol, 31% had high blood pressure, and 24% were identified as smokers, known risk factors for cardiovascular diseases.

Women's Health Screenings

- Sixty-eight percent (68%) of women had a mammogram at some time in their life, and 38% had this screening in the past year.

- Over half (55%) of women ages 40 and over had a mammogram in the past year, and 73% had one in the past two years.

- Most (91%) Columbiana County women have had a clinical breast exam at some time in their life, and 46% had one within the past year. Sixty-five percent (65%) of women age 40 and over had a clinical breast exam in the past two years.

- Eighty-nine percent (89%) of Columbiana County women have had a Pap smear, and 38% reported having had the exam in the past year. Sixty-nine percent (69%) of women ages 21 to 65 had a Pap smear in the past three years.

Pregnancy

- Sixteen percent (16%) of Columbiana County women had been pregnant in the past 5 years.

- During their last pregnancy, Columbiana County women did the following:
  — Had a prenatal appointment in the first 3 months (71%)
  — Took a multi-vitamin with folic acid during pregnancy (67%)
  — Took folic acid/prenatal vitamins (58%)
  — Took a multi-vitamin with folic acid pre-pregnancy (54%)
  — Took folic acid pre-pregnancy (42%)
  — Had a dental exam (38%)
  — Took folic acid during pregnancy (25%)
  — Experienced depression (13%)
  — Received WIC services (13%)

Women's Health Concerns

- Columbiana County women used the following as their usual source of services for female health concerns: private gynecologist (54%), general or family physician (21%), community health center (6%), family planning clinic (4%), health department clinic (2%), emergency room (1%) and some other kind of place (1%). Five percent (5%) had multiple sources, including a private gynecologist or family physician. Eight percent (8%) indicated they did not have a usual source of services for female health concerns.

**Columbiana County Female
Leading Causes of Death, 2015–2017**

Total Female Deaths: 1,916

1. Heart Diseases (25% of all deaths)
2. Cancers (20%)
3. Chronic Lower Respiratory Diseases (7%)
4. Stroke (6%)
5. Accidents, Unintentional Injuries (4%)

(Source: Ohio Public Health Data Warehouse, 2015-2017)

**Ohio Female
Leading Causes of Death, 2015–2017**

Total Female Deaths: 180,539

1. Heart Diseases (22% of all deaths)
2. Cancers (20%)
3. Chronic Lower Respiratory Diseases (6%)
4. Stroke (6%)
5. Alzheimer's Disease (6%)

(Source: Ohio Public Health Data Warehouse, 2015-2017)

- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Columbiana County, the 2018 health assessment identified that:
    — 71% of women were overweight and obese (2017 BRFSS reported 64% for Ohio and 2016 BRFSS reported 59% for the U.S.)
    — 40% were diagnosed with high blood cholesterol (2017 BRFSS reported 33% for Ohio and 2016 BRFSS reported 35% for the U.S.)
    — 31% were diagnosed with high blood pressure (2017 BRFSS reported 33% for Ohio and 2016 BRFSS reported 30% for the U.S.)
    — 24% of all women were current smokers (2017 BRFSS reported 20% for Ohio and 2016 BRFSS reported 14% for the U.S.)
    — 10% had been diagnosed with diabetes (2017 BRFSS reported 11% for Ohio and 2016 BRFSS reported 11% for the U.S.)

The following graph shows the percentage of Columbiana County female adults that had various health exams in the past year. An example of how to interpret the information shown on the graph includes: 38% of Columbiana County females had a mammogram within the past year, 46% had a clinical breast exam, and 38% had a Pap smear.

Columbiana County Women's Health Exams Within the Past Year

Category	Mammogram	Clinical Breast Exam	Pap Smear
Total	38%	46%	38%
Under 40	0%	44%	63%
40 & Older	55%	44%	24%
Income <$25K	34%	29%	20%
Income $25K Plus	37%	48%	44%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Had a mammogram within the past two years (age 40 and older)	73%	74%*	72%*
Had a Pap smear in the past three years (age 21-65)	69%	82%*	80%*

N/A – Not available
*2016 BRFSS

The following graphs show the Columbiana County and Ohio age-adjusted cancer mortality rates per 100,000 population for women with comparison to Healthy People 2020 objectives when available. The graph shows:

- From 2015 to 2017, the Columbiana County age-adjusted mortality rate for lung cancer was lower than the Healthy People 2020 target objective and the same as the Ohio rate.

- The Columbiana County age-adjusted mortality rate for colorectal cancer was higher than the Ohio rate but lower than the Healthy People 2020 target objective.

- The Columbiana County age-adjusted mortality rate for breast cancer was lower than the Ohio rate and the Healthy People 2020 target objective.

Columbiana County Female Age-Adjusted Cancer Mortality Rates, 2015-2017

	Columbiana 2015-2017	Ohio 2015-2017	HP 2020 Target*
Lung Cancer	38	38	46
Colon/Rectum Cancer	14	13	15
Breast Cancer	19	22	21

Rate per 100,000 population

■ **Columbiana 2015-2017** ■ **Ohio 2015-2017** ■ **HP 2020 Target***

(Source: Ohio Public Health Data Warehouse, 2015-2017)
*Note: The Lung and Colon/Rectum Cancer Healthy People 2020 target rates are not gender specific

Health Care Access: Men's Health

Key Findings

Over half (54%) of Columbiana County males over the age of 50 had a prostate-specific antigen (PSA) test in the past year. More than two-fifths (41%) of men had been diagnosed with high blood cholesterol, 38% had high blood pressure, and 18% were identified as current smokers, which, along with being overweight and obese (83%), are known risk factors for cardiovascular diseases.

Men's Health Screenings and Concerns

- Forty-seven percent (47%) of Columbiana County males had a prostate-specific antigen (PSA) test at some time in their life, and 33% had one in the past year.

- Sixty-eight percent (68%) of males age 40 and over had a PSA test at some time in their life, and 58% had one in the past two years.

- Almost three-quarters (72%) of males age 50 and over had a PSA test at some time in their life, and 54% had one in the past year.

- Over half (53%) of men had a digital rectal exam in their lifetime, and 21% had one in the past year.

Columbiana County Male Leading Causes of Death, 2015–2017

Total Male Deaths: 1,975

1. Heart Diseases (27% of all deaths)
2. Cancers (21%)
3. Accidents, Unintentional Injuries (8%)
4. Chronic Lower Respiratory Diseases (6%)
5. Stroke (4%)

(Source: Ohio Public Health Data Warehouse, 2015-2017)
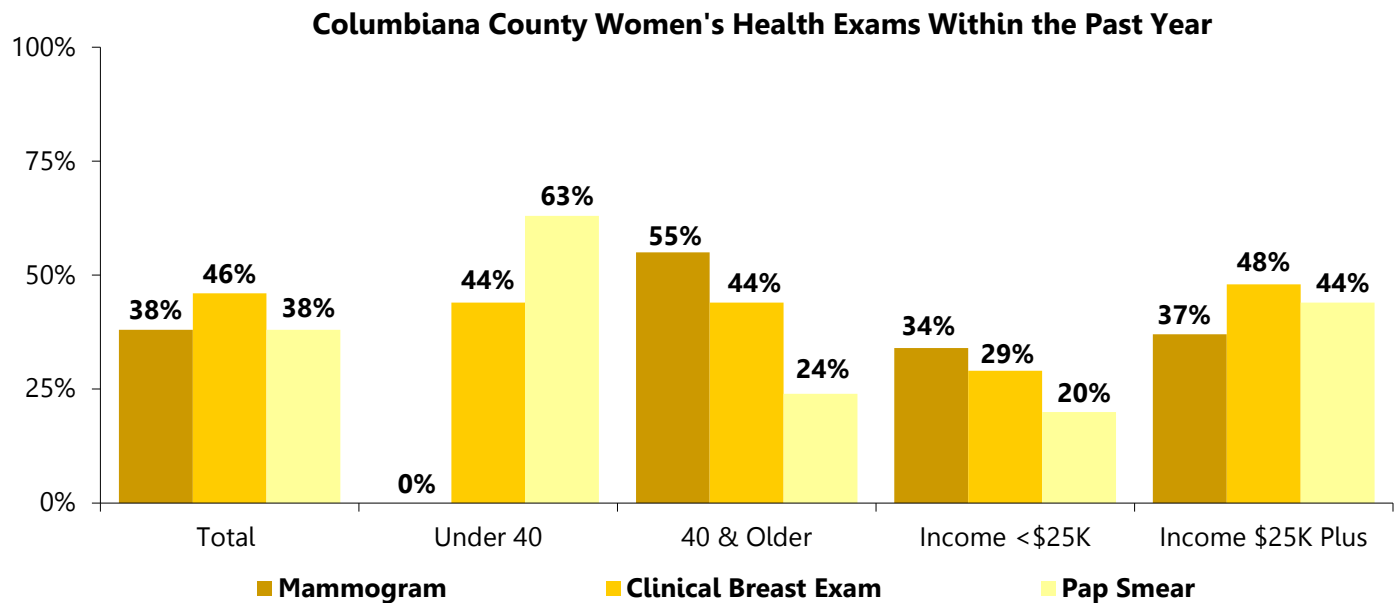
Ohio Male Leading Causes of Death, 2015–2017

Total Male Deaths: 180,695

1. Heart Diseases (24% of all deaths)
2. Cancers (22%)
3. Accidents, Unintentional Injuries (8%)
4. Chronic Lower Respiratory Diseases (6%)
5. Stroke (4%)

(Source: Ohio Public Health Data Warehouse, 2015-2017)

Men's Health Concerns

- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, and diabetes. In Columbiana County, the 2018 health assessment has identified that:
  — 83% of men were overweight and obese (2017 BRFSS reported 72% for Ohio and 2016 BRFSS reported 71% for the U.S.)
  — 41% were diagnosed with high blood cholesterol (2017 BRFSS reported 34% for Ohio and 2016 BRFSS reported 38% for the U.S.)
  — 38% were diagnosed with high blood pressure (2017 BRFSS reported 37% for Ohio and 2016 BRFSS reported 34% for the U.S.)
  — 18% of all men were current smokers (2017 BRFSS reported 22% for Ohio and 2016 BRFSS reported 19% for the U.S.)
  — 15% had been diagnosed with diabetes (2017 BRFSS reported 11% for Ohio and 2016 BRFSS reported 11% for the U.S.)

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Had a PSA test within the past two years (age 40 and older)	58%	39%*	40%*

*2016 BRFSS

The following graph shows the percentage of Columbiana County male adults that had various health exams in the past year. An example of how to interpret the information includes: 33% of Columbiana County males had a PSA test within the past year, and 21% had a digital rectal exam.
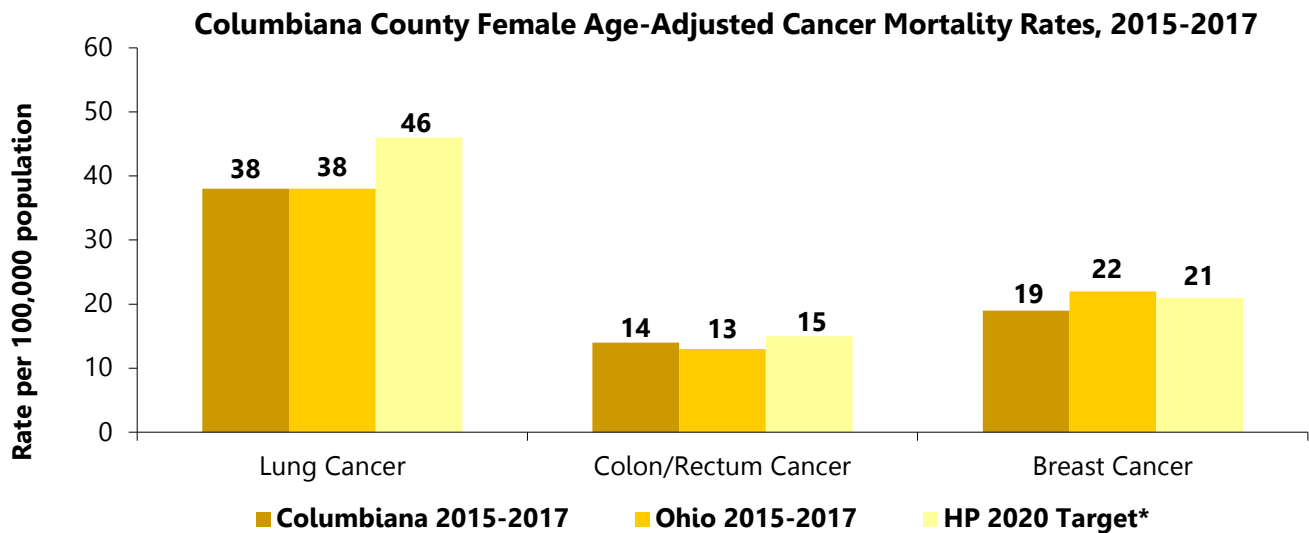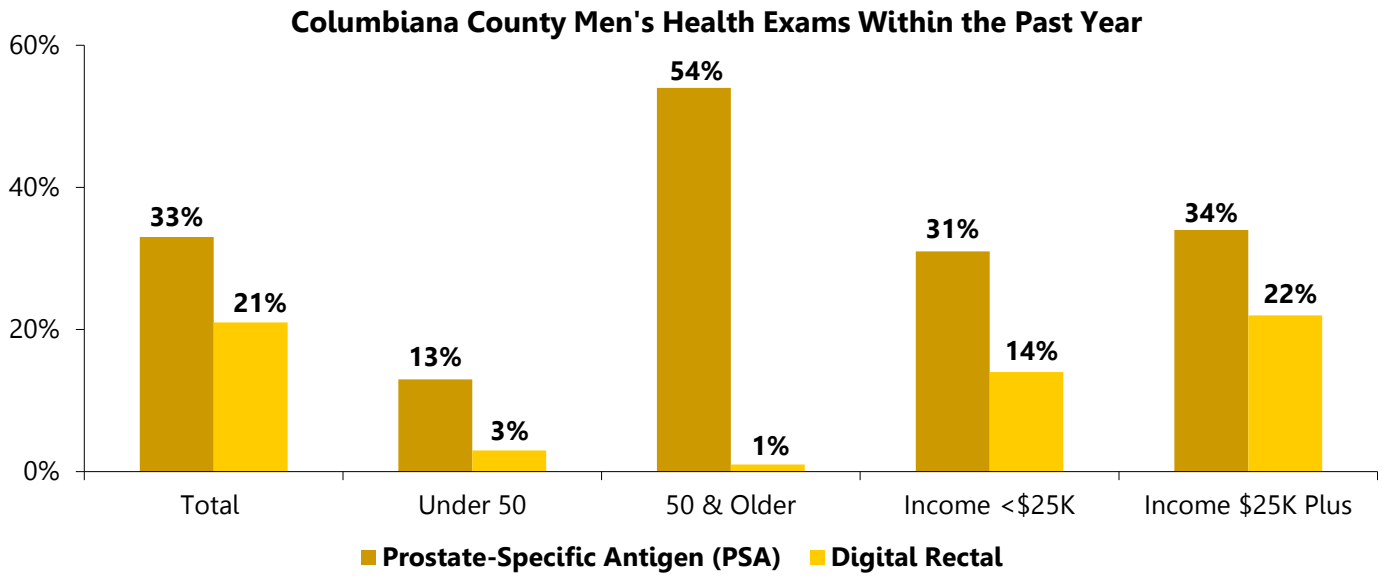
Columbiana County Men's Health Exams Within the Past Year

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following graph shows the Columbiana County, Ohio, and U.S. age-adjusted lung cancer mortality rates per 100,000 population for men with comparison to the Healthy People 2020 objective. The graph shows:

- From 2015 to 2017, the Columbiana County age-adjusted mortality rate for male lung cancer was equal to the Ohio rate but higher than the U.S. rate and the Healthy People 2020 objective.

Columbiana County Male Age-Adjusted Lung and Bronchus Cancer Mortality Rates
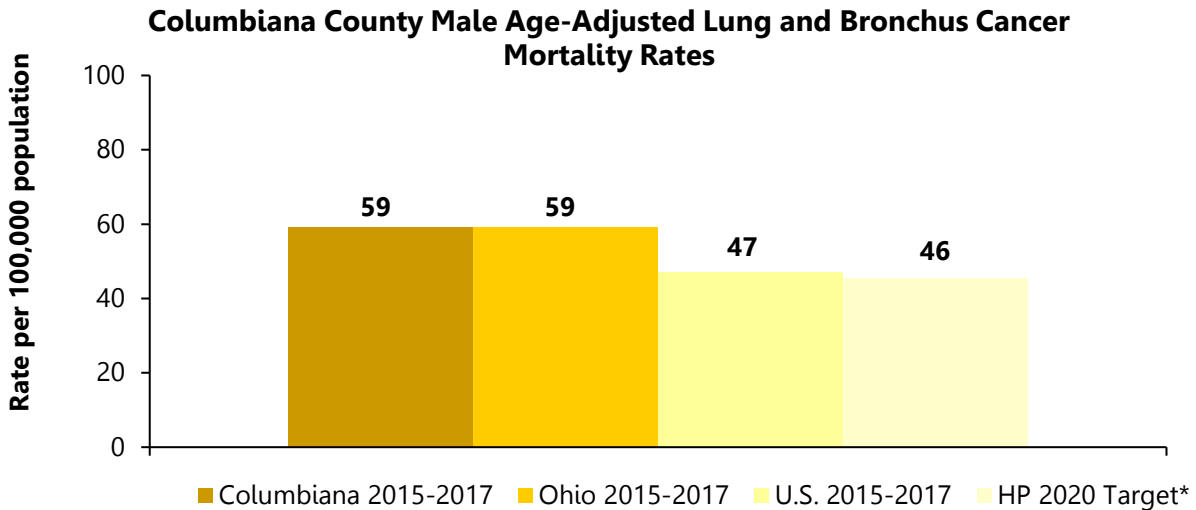
Note: The Healthy People 2020 target rates are not gender specific
(Sources: Ohio Public Health Data Warehouse, 2015-2017, CDC Wonder 2015-2017, and Healthy People 2020)

Health Care Access: Oral Health

Key Findings

Sixty-three percent (63%) of Columbiana County adults had visited a dentist or dental clinic in the past year. The top three reasons adults gave for not visiting a dentist in the past year were cost (35%), no reason to go/had not thought of it (18%), and had dentures (15%).

Access to Dental Care

- In the past year, 63% of Columbiana County adults had visited a dentist or dental clinic, decreasing to 44% of those with incomes less than $25,000.

- Seventy-one percent (71%) of Columbiana County adults with dental insurance had been to the dentist in the past year, compared to 56% of those without dental insurance.

- Columbiana County adults reported the following reasons for not visiting a dentist or dental clinic in the past year:
  — Cost (35%)
  — No reason to go/had not thought of it (18%)
  — Have dentures (15%)
  — Fear, apprehension, nervousness, pain, dislike going (11%)
  — Could not get into a dentist (3%)
  — Did not have or know a dentist (1%)
  — Dentist did not accept their medical coverage (1%)
  — Transportation (1%)

- Six percent (6%) of adults reported multiple reasons, including cost, for not visiting a dentist in the past year.

- Half (50%) of adults had one or more of their permanent teeth removed, increasing to 80% of those ages 65 and over.

- About one-in-seven (14%) Columbiana County adults ages 65 and over had all of their permanent teeth removed.

	Within the Past Year	Within the Past 2 Years	Within the Past 5 Years	5 or More years	Never
Time Since Last Visit to Dentist/Dental Clinic					
Males	59%	10%	16%	11%	2%
Females	67%	15%	5%	9%	0%
Total	63%	13%	10%	10%	1%

*Totals may not equal 100% as some respondents answered, "Don't know".

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Visited a dentist or a dental clinic (within the past year)	63%	68%*	66%*
Visited a dentist or a dental clinic (5 or more years ago)	10%	11%*	10%*
Had any permanent teeth extracted	50%	45%*	43%*
Had all their natural teeth extracted (ages 65 and older)	14%	17%*	14%*

*2016 BRFSS

The following graph shows the percentage of Columbiana County adults who had visited a dentist or dental clinic in the past year. An example of how to interpret the information includes: 63% of Columbiana County adults had been to the dentist or dental clinic in the past year, including 60% of those under the age of 30 and 44% of those with incomes less than $25,000.

Columbiana County Adults Who Visited a Dentist or Dental Clinic in the Past Year
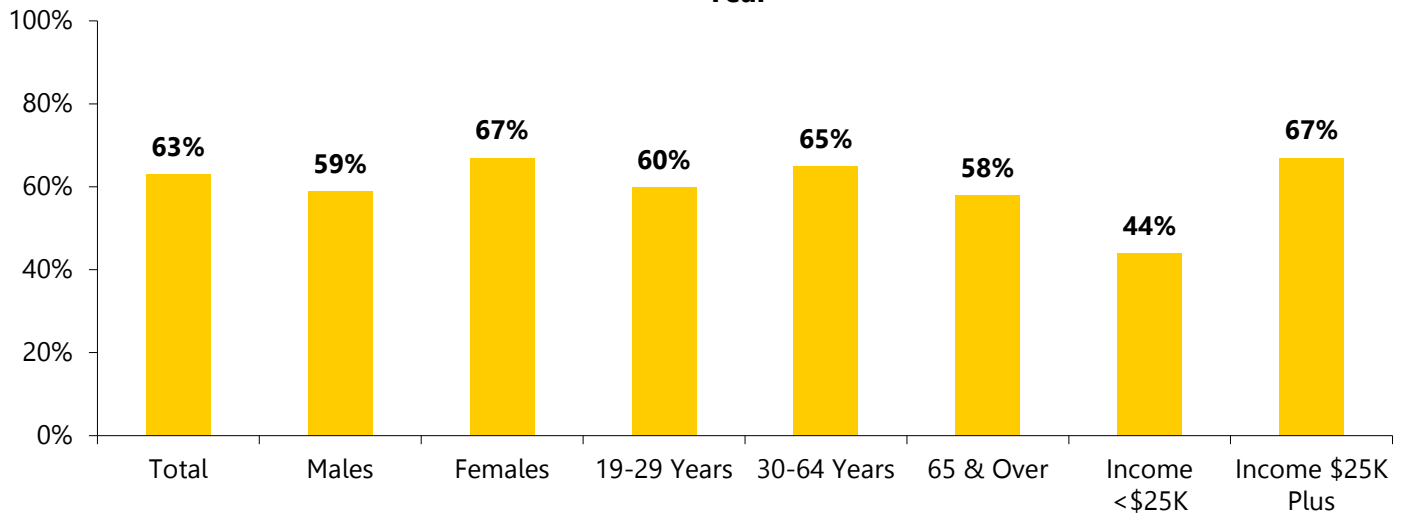
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Health Behaviors: Health Status Perceptions

Key Findings

Forty-six percent (46%) of Columbiana County adults rated their health status as excellent or very good. Conversely, 15% of adults described their health as fair or poor, increasing to 34% of those with incomes less than $25,000.

General Health Status

- Forty-six percent (46%) of Columbiana County adults rated their health as excellent or very good. Columbiana County adults with higher incomes (53%) were most likely to rate their health as excellent or very good, compared to 21% of those with incomes less than $25,000.

- Fifteen percent (15%) of adults rated their health as fair or poor, increasing to 34% of those with incomes less than $25,000.

- Columbiana County adults were most likely to rate their health as fair or poor if they:
  — Had high blood pressure (56%)
  — Had high blood cholesterol (51%)
  — Had been diagnosed with diabetes (36%)
  — Had an annual household income under $25,000 (34%)
  — Were 65 years of age or older (22%)
  — Were widowed (10%)

- Over one-quarter (29%) of adults reported that poor mental or physical health kept them from doing usual activities such as self-care, work, or recreation.

The following graph shows the percentage of Columbiana County adults who described their general health status as excellent/very good, good, and fair/poor. An example of how to interpret the information includes: 46% of all Columbiana County adults, 49% of females, and 53% of those with incomes more than $25,000 rated their health as excellent or very good.
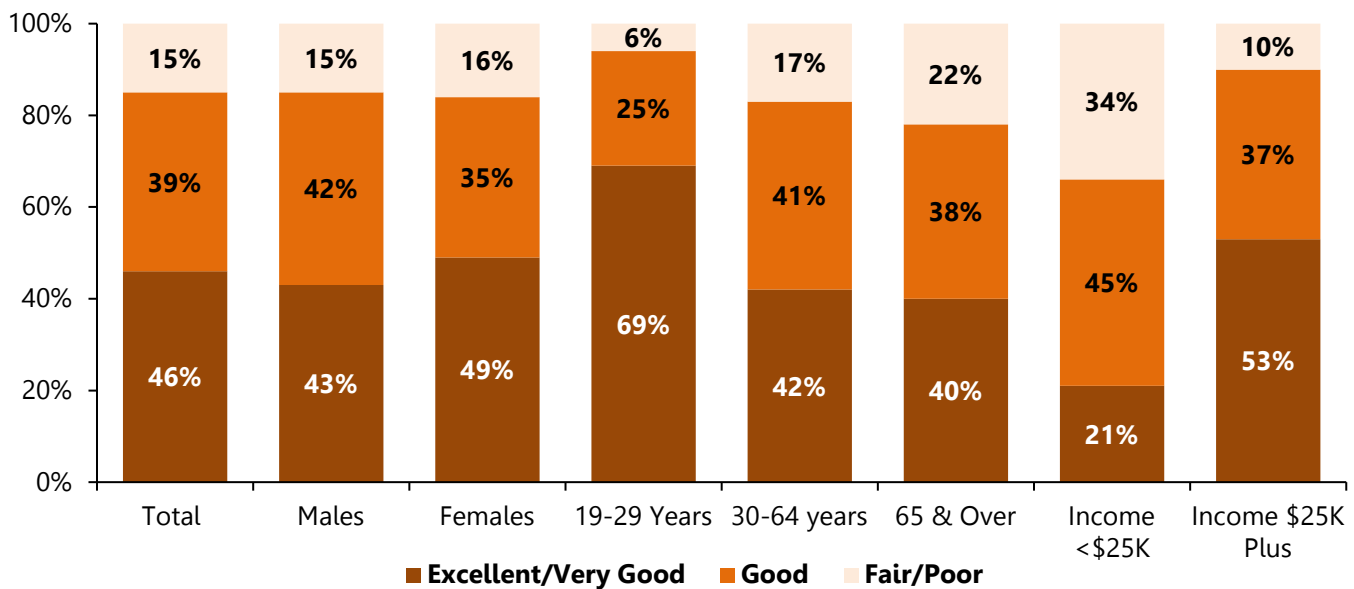
Columbiana County Adult Health Perceptions*

	Excellent/Very Good	Good	Fair/Poor
Total	46%	39%	15%
Males	43%	42%	15%
Females	49%	35%	16%
19-29 Years	69%	25%	6%
30-64 years	42%	41%	17%
65 & Over	40%	38%	22%
Income <$25K	21%	45%	34%
Income $25K Plus	53%	37%	10%

*Respondents were asked: "Would you say that in general your health is excellent, very good, good, fair or poor?"
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Physical Health Status

- One-fourth (25%) of Columbiana County adults rated their physical health as not good on four or more days in the previous month.

- Columbiana County adults reported their physical health as not good on an average of 4.3 days in the previous month.

- Columbiana County adults were most likely to rate their physical health as not good if they:
  — Had an annual household income under $25,000 (68%)
  — Were 65 years of age or older (56%)

Mental Health Status

- About one-third (32%) of Columbiana County adults rated their mental health as not good on four or more days in the previous month.

- Columbiana County adults reported their mental health as not good on an average of 5.4 days in the previous month.

- Columbiana County adults were most likely to rate their mental health as not good if they:
  — Had an annual household income under $25,000 (65%)
  — Were under the age of 30 (56%)

The table below shows the percentage of adults with poor physical and mental health in the past 30 days.

| Health Status	No Days	1-3 Days	4-5 Days	6-7 Days	8 or More Days
Physical Health Not Good in Past 30 Days*					
Males	48%	17%	10%	3%	14%
Females	53%	16%	7%	2%	14%
Total	50%	17%	8%	2%	15%
Mental Health Not Good in Past 30 Days*					
Males	56%	14%	4%	1%	16%
Females	40%	10%	15%	1%	25%
Total	48%	12%	10%	1%	21%

Totals may not equal 100% as some respondents answered, "Don't know".

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Rated general health as excellent or very good	46%	49%	51%
Rated general health as fair or poor	15%	19%	18%
Rated mental health as not good on four or more days (in the past 30 days)	32%	24%*	23%*
Average number of days that mental health not good (in the past 30 days)	5.4	4.3‡	3.8‡
Rated physical health as not good on four or more days (in the past 30 days)	25%	22%*	22%*
Average number of days that physical health not good (in the past 30 days)	4.3	4.0‡	3.7‡
Poor physical or mental health kept them from doing usual activities, such as self-care, work, or recreation (on at least one day during the past 30 days)	29%	22%*	22%*

*2016 BRFSS
‡2016 BRFSS data as compiled by 2018 County Health Ranking

Health Behaviors: Weight Status

Key Findings

Seventy-six percent (76%) Columbiana County adults were overweight or obese based on body mass index (BMI). Over one-fifth (22%) of adults did not participate in any physical activity in the past week, including 2% who were unable to exercise.

31,496 Columbiana County adults were obese.

Weight Status

- More than three-fourths (76%) of Columbiana County adults were either overweight (38%) or obese (38%) by body mass index (BMI), thus putting them at risk for developing a variety of preventable diseases.

- Two-fifths (40%) of adults were trying to lose weight, 32% were trying to maintain their current weight or keep from gaining weight, and 3% were trying to gain weight.

- Columbiana County adults did the following to lose weight or keep from gaining weight:
  — Ate less food, fewer calories, or foods low in fat (35%)
  — Exercised (35%)
  — Drank more water (32%)
  — Ate a low-carb diet (13%)
  — Smoked cigarettes (4%)
  — Used a weight loss program (2%)
  — Went without eating 24 or more hours (2%)
  — Took prescribed medications (1%)
  — Participated in a prescribed dietary or fitness program (1%)
  — Took diet pills, powders or liquids without a doctor's advice (1%)
  — Received health coaching (1%)

The following graph shows the percentage of Columbiana County adults who are overweight or obese by body mass index (BMI). An example of how to interpret the information includes: 22% of all Columbiana County adults were classified as normal weight, 38% were overweight, and 38% were obese.
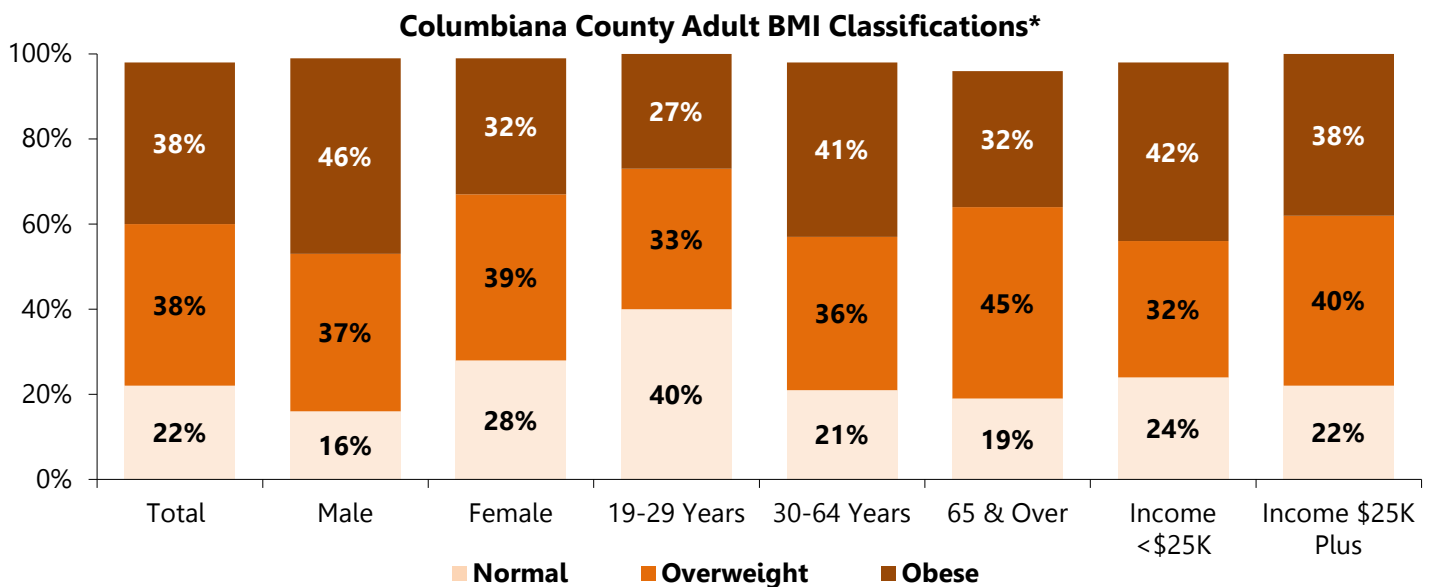
Columbiana County Adult BMI Classifications*

	Normal	Overweight	Obese
Total	22%	38%	38%
Male	16%	37%	46%
Female	28%	39%	32%
19-29 Years	40%	33%	27%
30-64 Years	21%	36%	41%
65 & Over	19%	45%	32%
Income <$25K	24%	32%	42%
Income $25K Plus	22%	40%	38%

Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Normal Weight (BMI of 18.5 – 24.9)	22%	30%	32%
Overweight (BMI of 25.0 – 29.9)	38%	34%	35%
Obese (includes severely and morbidly obese, BMI of 30.0 and above)	38%	34%	32%

Physical Activity

- Columbiana County adults spent an average of 2.7 hours watching TV, 1.4 hours on their cell phone, 0.9 hours on the computer/tablet (outside of work), and 0.1 hours playing video games on an average day of the week.

- Over half (57%) of adults engaged in some type of physical activity or exercise for at least 30 minutes 3 or more days per week; 31% exercised 5 or more days per week; and 22% were not participating in any physical activity in the past week, including 2% who were unable to exercise.

- Adults reported the following reasons for not exercising:
  — Time (24%)
  — Laziness (17%)
  — Lack of self-motivation or will power (16%)
  — Did not like to exercise (12%)
  — Weather (12%)
  — Pain or discomfort (12%)
  — Could not afford a gym membership (10%)
  — Poorly maintained/no sidewalks (9%)
  — No exercise partner (7%)
  — Ill or otherwise physically unable (6%)
  — Too expensive (3%)
  — Transportation (2%)
  — Do not know what activity to do (1%)
  — Afraid of injury (1%)
  — Neighborhood safety (1%)
  — No child care (1%)
  — No walking, biking trails or parks (1%)
  — Lack of opportunities for those with physical impairments or challenges (1%)
  — No gym available (1%)
  — Doctor advised them not to exercise (<1%)

Nutrition

The table below indicates the number of servings of fruit, vegetables, sugar-sweetened beverages, and caffeinated beverages Columbiana County adults consumed daily.

	5 or more servings	3-4 servings	1-2 servings	0 servings
Fruit	1%	7%	74%	18%
Vegetables	2%	15%	75%	8%
Sugar-sweetened beverages	4%	10%	45%	41%
Caffeinated beverages	8%	24%	53%	15%

- Forty-four percent (44%) of adults ate between 1 to 2 servings of fruits **and/or** vegetables per day. Thirty-nine percent (39%) ate between 3 to 4 servings per day, and 12% ate 5 or more servings per day. Four percent (4%) of adults ate 0 servings of fruits and/or vegetables per day.

- Eighty-four percent (84%) of adults ate out in a restaurant or brought home take-out in a typical week, 5% of whom did so for five or more meals.

- Adults reported the following barriers in consuming fruits and vegetables: too expensive (15%), do not like the taste (7%), no variety (3%), no access to fruits and vegetables (2%), do not know how to prepare (1%), stores do not take Electronic Benefit Transfer (EBT) (<1%), and transportation (<1%). Seventy-three percent (73%) of adults reported no barriers in consuming fruits and vegetables.

- Columbiana County adults reported the following reasons they chose the types of food they ate:
  — Taste/enjoyment (64%)
  — Cost (42%)
  — Healthiness of food (39%)
  — Ease of preparation/time (34%)
  — Food they were used to (30%)
  — What their family prefers (25%)
  — Nutritional content (22%)
  — Availability (20%)
  — Calorie content (20%)
  — If it is genetically modified (8%)
  — Artificial sweetener content (7%)
  — If it is organic (7%)
  — If it is gluten free (5%)
  — Other food sensitivities (5%)
  — If it is lactose free (3%)
  — Limitations due to dental issues (3%)
  — Availability of food at the food pantry (3%)
  — Health care provider's advice (2%)
  — Other reasons (5%)

The Food Environment Index measures the quality of the food environment in a county on a scale from zero to 10 (zero being the worst value in the nation, and 10 being the best). The two variables used to determine the measure are limited access to healthy foods (i.e., the percentage of the population who are low income and do not live close to a grocery store) & food insecurity (i.e., the percentage of the population who did not have access to a reliable source of food during the past year).

- The food environment index in Columbiana County is 7.4.
- The food environment index in Ohio is 6.6.
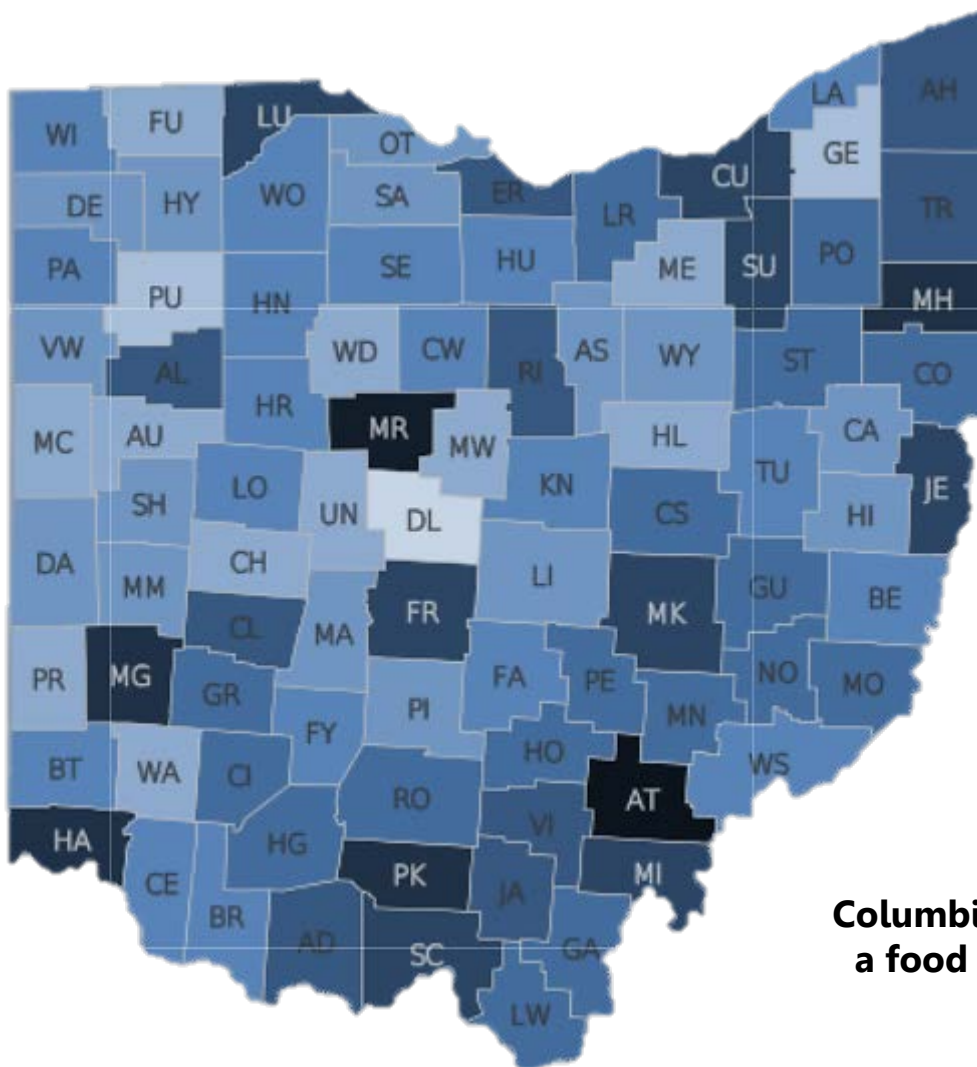
Columbiana County had a food index measure of:

7.4

BEST ▬▬▬▬▬▬▬ WORST

(Source: USDA Food Environment Atlas, as compiled by County Health Rankings 2018)

Health Behaviors: Tobacco Use

Key Findings

One-in-five (20%) Columbiana County adults were current smokers, and 25% were considered former smokers. Six percent (6%) of adults used e-cigarettes/vape pens in the past year.

16,577 Columbiana County adults were current smokers.

Tobacco Use Behaviors

- One-in-five (20%) Columbiana County adults were current smokers (those who indicated smoking at least 100 cigarettes in their lifetime and currently smoked some or all days).

- One-quarter (25%) of adults indicated that they were former smokers (smoked 100 cigarettes in their lifetime and now do not smoke).

- Columbiana County adult smokers were more likely to have:
  — Incomes less than $25,000 (35%)
  — Been 30-64 years old (24%)
  — Been diagnosed with asthma (22%)
  — Rated their overall health as fair or poor (22%)
  — Been divorced (17%)

- Columbiana County adults used the following tobacco products in the past year: cigarettes (26%); chewing tobacco, snuff, dip, Betel quid (8%); cigars (6%); e-cigarettes/vape pens (6%); little cigars (6%); pouch (snus) (3%); cigarillos (3%); pipes (2%); and hookah (<1%). Ten percent (10%) of adults used more than one tobacco product in the past year.

- Sixty-one percent (61%) of current smokers used one of the following methods to quit smoking in the past year: cold turkey (42%), nicotine patch (18%), e-cigarette (11%), nicotine gum (11%), Chantix (8%), Wellbutrin (4%), hypnosis (4%), support groups (4%), and substitute behaviors (1%).

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Current smoker (currently smoke some or all days)	20%	21%	17%
Former smoker (smoked 100 cigarettes in lifetime and now do not smoke)	25%	24%	25%

Healthy People 2020
Tobacco Use (TU)

Objective	Columbiana County 2018	Healthy People 2020 Target Objective
TU-1.1: Reduce cigarette smoking by adults	20%	12%

(Sources: 2018 Columbiana County Health Assessment, 2017 BRFSS, Healthy People 2020)

The following graph shows the percentage of Columbiana County adults' smoking bevahiors. An example of how to interpret the information includes: 20% of all Columbiana County adults were current smokers, 25% of all adults were former smokers, and 55% had never smoked.

Columbiana County Adult Smoking Behaviors*
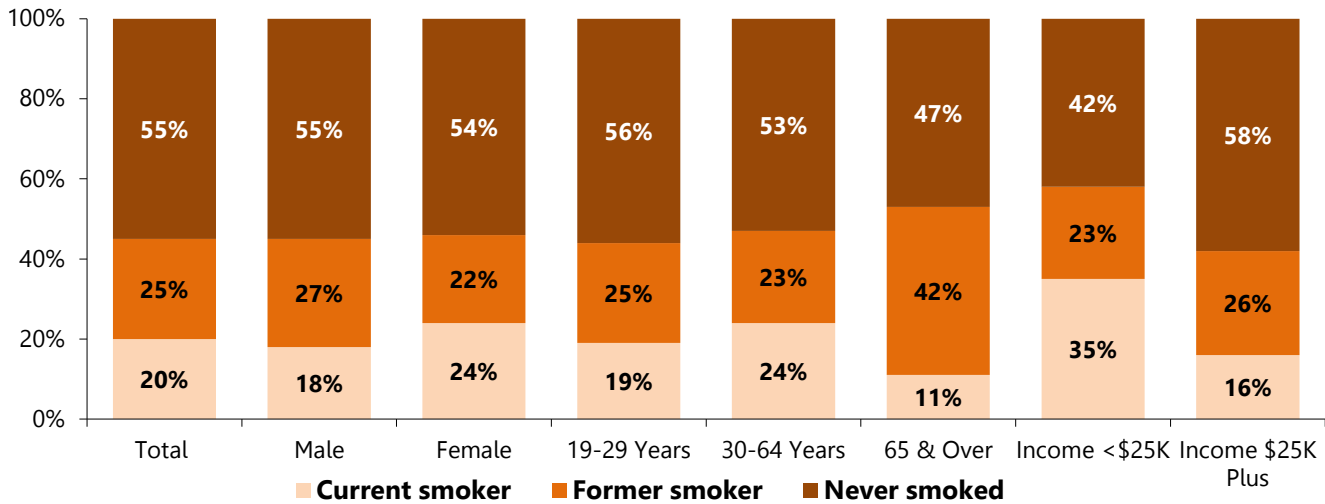
Respondents were asked: "Have you smoked at least 100 cigarettes in your entire life? If yes, do you now smoke cigarettes every day, some days or not at all?"
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following graph shows the Columbiana County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for chronic lower respiratory diseases (formerly COPD)

- From 2015 to 2017, Columbiana County's age-adjusted mortality rate for chronic lower respiratory disease was higher than the Ohio and U.S. rate, but lower than the Healthy People 2020 target objective.

Age-Adjusted Mortality Rates for Chronic Lower Respiratory Diseases (Formerly COPD)
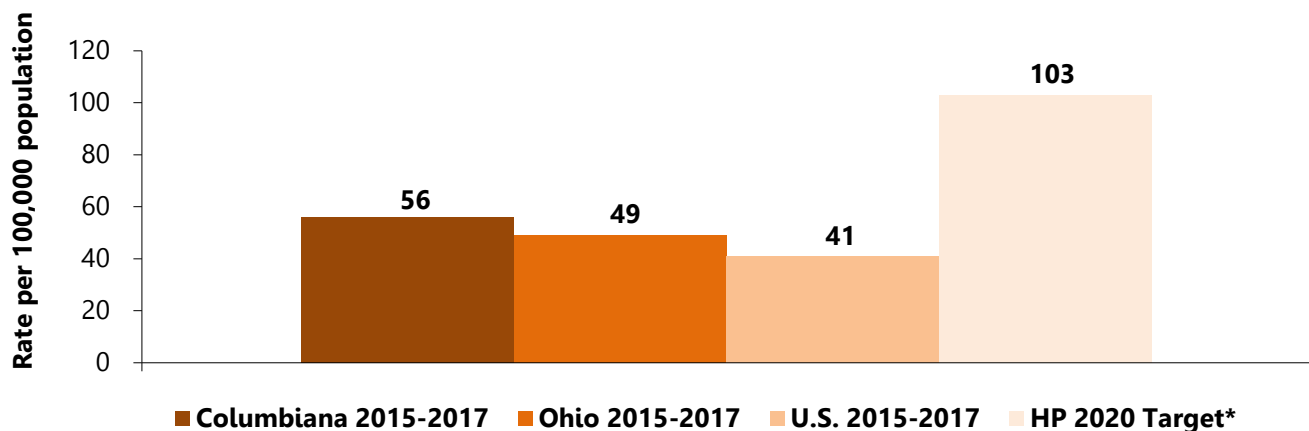
(Source: Ohio Public Health Data Warehouse 2015-2017, CDC Wonder 2015-2017, and Healthy People 2020)
Healthy People 2020's target rate and the U.S. rate is for adults aged 45 years and older.

The following graphs show Columbiana County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for lung and bronchus cancer in comparison with the Healthy People 2020 objective.

- Columbiana County's age-adjusted mortality rate for lung and bronchus cancer was equal to the Ohio rate and higher than the U.S. rate and the Healthy People 2020 target objective.

Age-Adjusted Mortality Rates for Lung & Bronchus Cancer
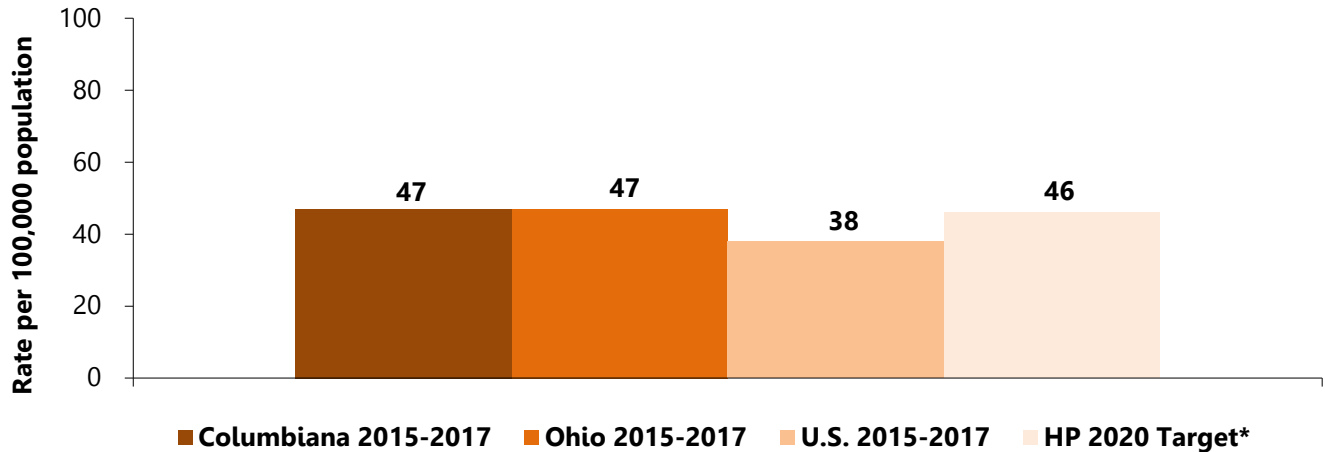
(Sources: Ohio Public Health Data Warehouse, 2015-2017, CDC Wonder, 2015-2017 and Healthy People 2020)
*The Health People 2020 target objective only includes the age-adjusted lung cancer death rate.

The following graph shows the Columbiana County age-adjusted mortality rates for lung and bronchus cancer by gender. The graph shows:

- Disparities existed by gender for Columbiana County lung and bronchus cancer age-adjusted mortality rates. The 2015-2017 Columbiana County male rate was substantially higher than the Columbiana County female rate.

Age-Adjusted Mortality Rates by Gender for Lung & Bronchus Cancer
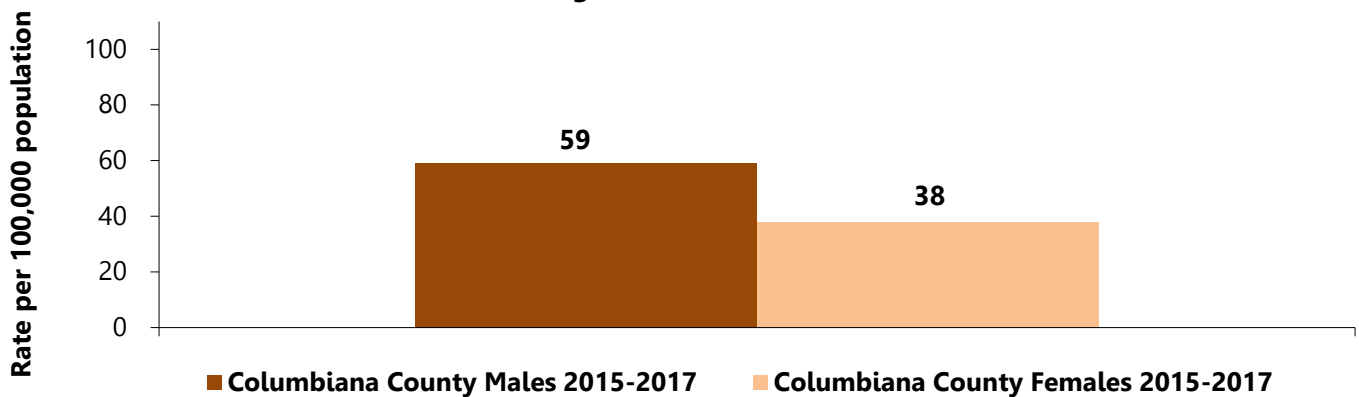
(Sources: Ohio Public Health Data Warehouse, 2015-2017)

Health Behaviors: Alcohol Consumption

Key Findings

Fifty-nine percent (59%) of Columbiana County adults had at least one alcoholic drink in the past month and would be considered current drinkers. Nineteen percent (19%) of all adults reported they had five or more alcoholic drinks (for males) or four or more drinks (for females) on an occasion in the last month and would be considered binge drinkers.

Alcohol Consumption

- Fifty-nine percent (59%) of Columbiana County adults had at least one alcoholic drink in the past month, increasing to 73% of those under the age of 30.

- Of those who drank, Columbiana County adults drank 4.1 drinks on average, increasing to 5.0 drinks for males.

> ### 48,902 of Columbiana County adults had at least one alcoholic drink in the past month

- Nineteen percent (19%) of Columbiana County adults reported they had five or more alcoholic drinks (for males) or four or more drinks (for females) on an occasion in the last month and would be considered binge drinkers. Of those who drank in the past month, 37% had at least one episode of binge drinking.

- Six percent (6%) of adults reported driving after having perhaps too much to drink.

- Columbiana County adults experienced the following in the past six months:
  — Drove a vehicle or other equipment after having any alcoholic beverage (13%)
  — Drank more than they expected (9%)
  — Spent a lot of time drinking (4%)
  — Used prescription drugs while drinking (4%)
  — Drank more to get the same effect (3%)
  — Failed to fulfill duties at work, home, or school (2%)
  — Gave up other activities to drink (1%)
  — Tried to quit or cut down but could not (1%)
  — Continued to drink despite problems caused by drinking (1%)
  — Placed themselves or their family in harm (1%)
  — Had legal problems (1%)
  — Drank to ease withdrawal symptoms (1%)

- Columbiana County current drinkers indicated they drank alcohol for the following reasons: taste/enjoyment (35%), social events (32%), helped them relax/relieved stress (28%), like the way it made them feel (9%), normal/part of the culture (8%), social expectation (5%), their parents drank alcohol (4%), not much else to do (1%), and other reasons (3%).

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Current drinker (had at least one drink of alcohol within the past 30 days)	59%	54%	55%
Binge drinker (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	19%	19%	17%
Drinking and driving (had driven after drinking too much)	6%	4%*	4%*

*2016 BRFSS

The following graphs show the percentage of Columbiana County adults consuming alcohol and the amount consumed on average. An example of how to interpret the information shown on the first graph includes: 39% of all Columbiana County adults did not drink alcohol, including 38% of Columbiana County males and 38% of females.

Columbiana County Average Number of Days Drinking Alcohol in the Past Month*

Legend: **Did not drink any** ■ **1-2 days** ■ **3 or more days**
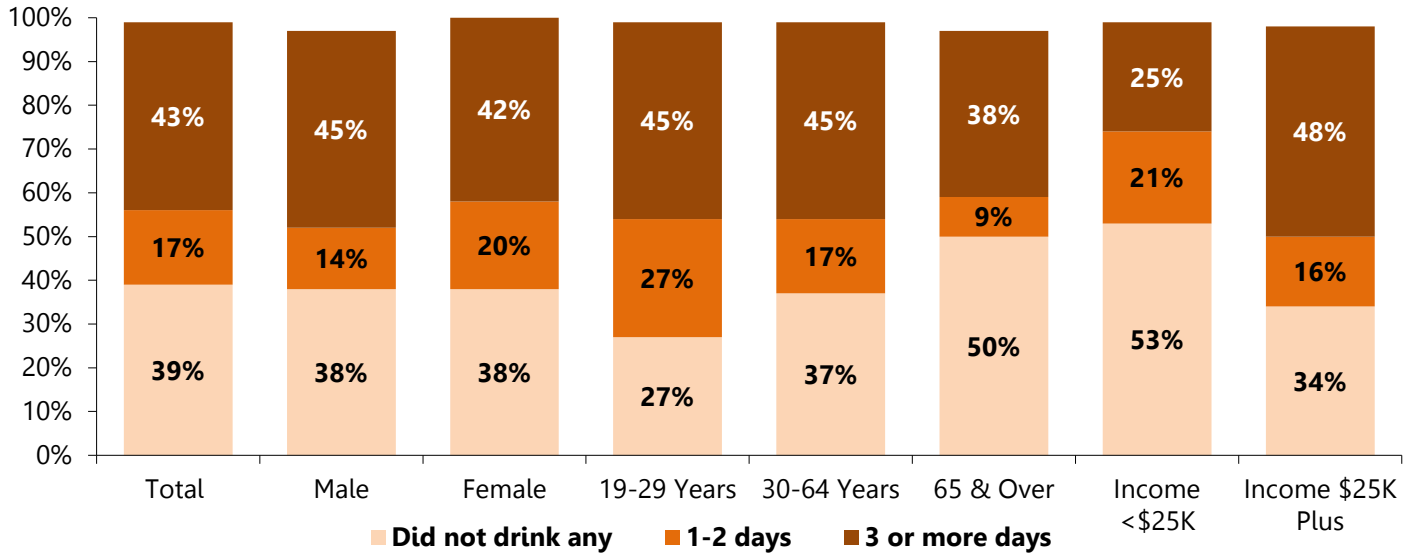
*Percentages may not equal 100% as some respondents answered, "Don't Know"

Columbiana County Adults Average Number of Drinks Consumed Per Drinking Occasion
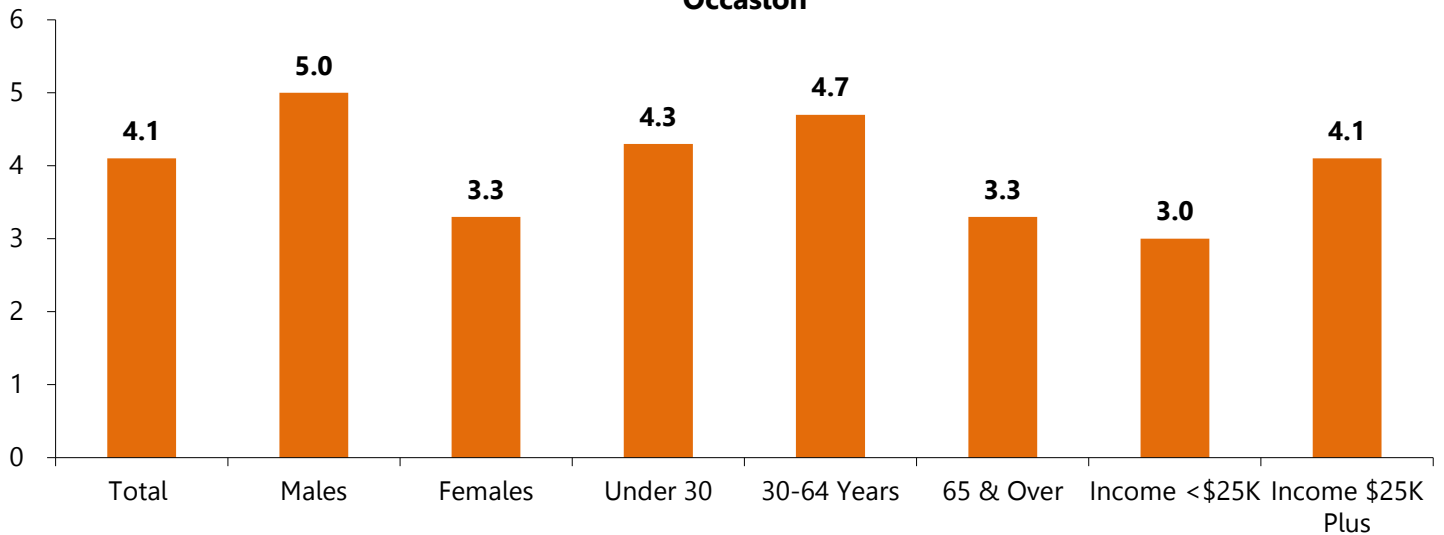
Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following table shows the City of Salem, Columbiana County, and Ohio motor vehicle accident statistics. The table shows:

- Six percent (6%) of the total crashes in Columbiana County in 2017 were alcohol-related, compared to 4% for Ohio.

- Of the total number of alcohol-related crashes (106) in Columbiana County, 58% were property damage only, 39% were alcohol-related injuries, and 4% were fatal injuries.

- There were 11,928 alcohol-related crashes in Ohio in 2017. Of those crashes, 56% were property damage only, 41% were alcohol-related injuries, and 2% were fatal injuries.

	City of Salem 2017	Columbiana County 2017	Ohio 2017
Crashes			
Property Damage Only (PDO) Crashes	139	1,286	226,756
Injury Crashes	58	484	75,435
Fatal Injury Crashes	0	5	1,094
Total Crashes	197	1,775	303,285
Drivers			
Total Drivers in Crashes	330	2,662	507,869
Alcohol Impaired Drivers in Crashes	12	103	11,666
Total Passengers in Crashes	140	1,051	179,664
Alcohol-Related			
Property Damage Only (PDO)	7	61	6,733
Injury (non-fatal)	5	41	4,898
Fatal Injury	0	4	297
Total Alcohol-Related Crashes	12	106	11,928
Alcohol-Related Deaths	0	4	314

(Source: Ohio Department of Public Safety, Crash Statistics, Updated 6/12/18, Traffic Crash Facts)

The term alcohol-impaired driving deaths refers to the percentage of motor vehicle crash deaths with alcohol involvement. Approximately 17,000 Americans are killed annually in alcohol-related motor vehicle crashes. Binge/heavy drinkers account for most episodes of alcohol-impaired driving.

- The alcohol-impaired driving deaths in Columbiana County is 34%*

- The alcohol-impaired driving deaths in Ohio is 34%.
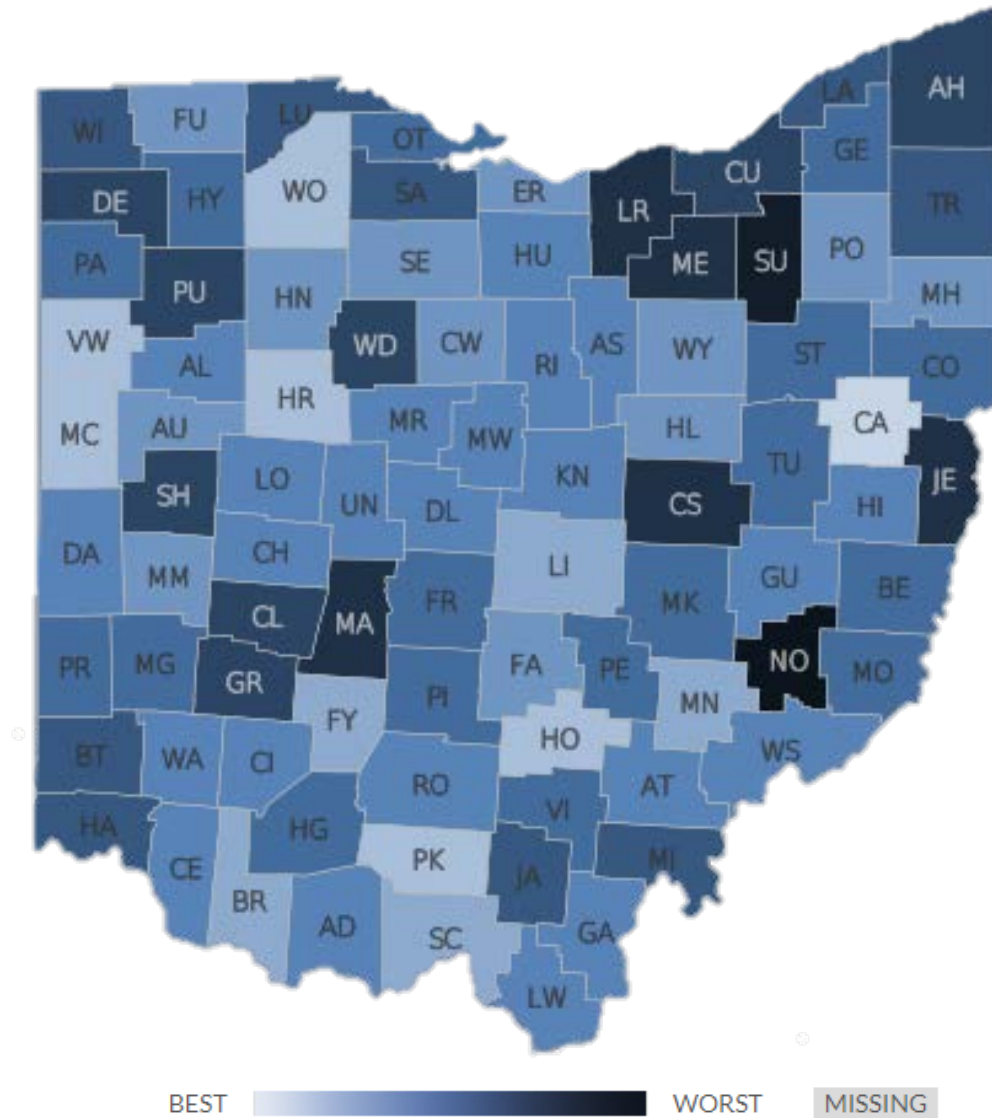
Driving deaths are reported for the county of occurrence.
(Source: Fatality Analysis Reporting System, as compiled by County Health Rankings, 2018)

Health Behaviors: Drug Use

Key Findings

Three percent (3%) of Columbiana County adults had used recreational marijuana or hashish during the past 6 months. Seven percent (7%) of adults had used medication not prescribed for them or took more than prescribed to feel good or high and/or more active or alert during the past 6 months.

Prescription Drug Misuse

- Seven percent (7%) of adults had used medication not prescribed for them or they took more than prescribed to feel good or high and/or more active or alert during the past 6 months, increasing to 17% of those with incomes less than $25,000.

- Columbiana County adults who misused prescription medications obtained them from the following sources: primary care physician (74%), multiple doctors (15%), free from a friend or family member (13%), emergency room (ER) or urgent care doctor (11%), bought from a drug dealer (9%), bought from a friend or family member (9%), and stole from a friend or family member (2%).

- Columbiana County adults indicated they did the following with their unused prescription medication:
  — Took all medication as prescribed (20%)
  — Threw it in the trash (16%)
  — Kept it (10%)
  — Flushed it down the toilet (10%)
  — Took it to the medication collection program (10%)
  — Took it in on drug take back days (8%)
  — Kept in a locked cabinet (5%)
  — Took it to the sheriff's office (2%)
  — Gave it away (1%)
  — Used a mailer to ship it back to the pharmacy (1%)
  — Sold them (1%)

- Forty-five percent (45%) of adults did not have unused medication.

The following graph indicates adult medication misuse in the past 6 months. An example of how to interpret the information in the graph includes: 7% of adults used misused medication in the past six months, including 17% of those with incomes less than $25,000.
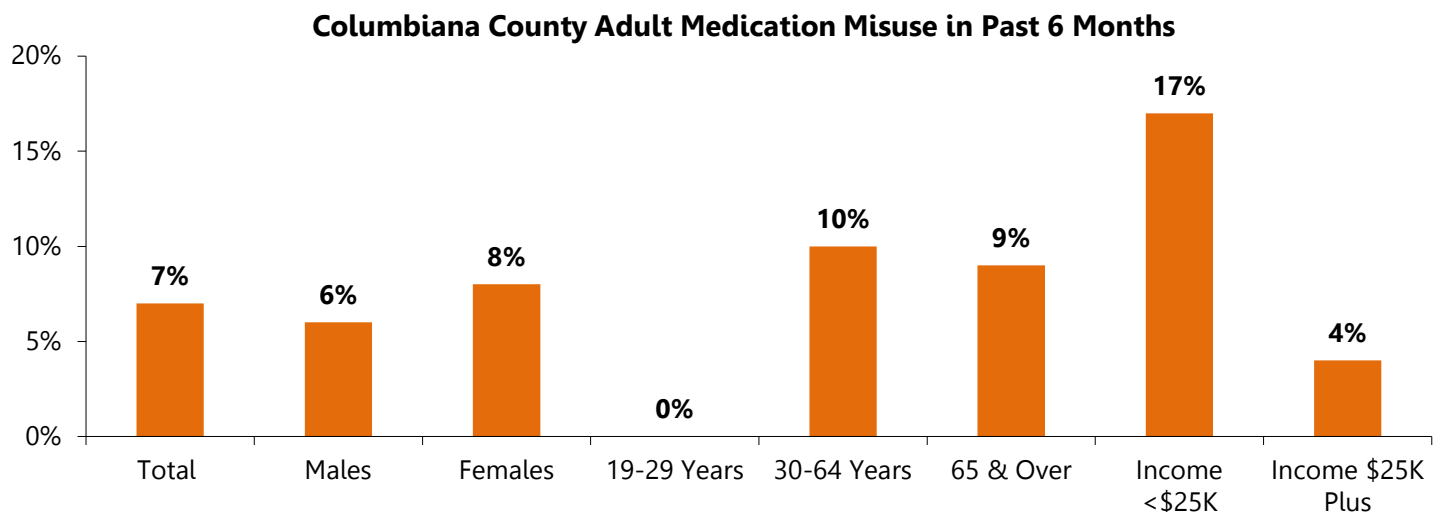
Columbiana County Adult Medication Misuse in Past 6 Months

Category	Percentage
Total	7%
Males	6%
Females	8%
19-29 Years	0%
30-64 Years	10%
65 & Over	9%
Income <$25K	17%
Income $25K Plus	4%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Marijuana and Other Drug Use

- Three percent (3%) of Columbiana County adults had used recreational marijuana or hashish in the past 6 months.

- Five percent (5%) of Columbiana County adults reported using other recreational drugs in the past six months such as cocaine, synthetic marijuana/K2, wax or oil with THC edibles, heroin, LSD, inhalants, Ecstasy, bath salts, and methamphetamines.

The following graph indicates adult recreational marijuana or hashish use in the past 6 months. An example of how to interpret the information in the graph includes: 3% of Columbiana County adults used recreational marijuana in the past six months, including 5% of those with incomes less than $25,000.
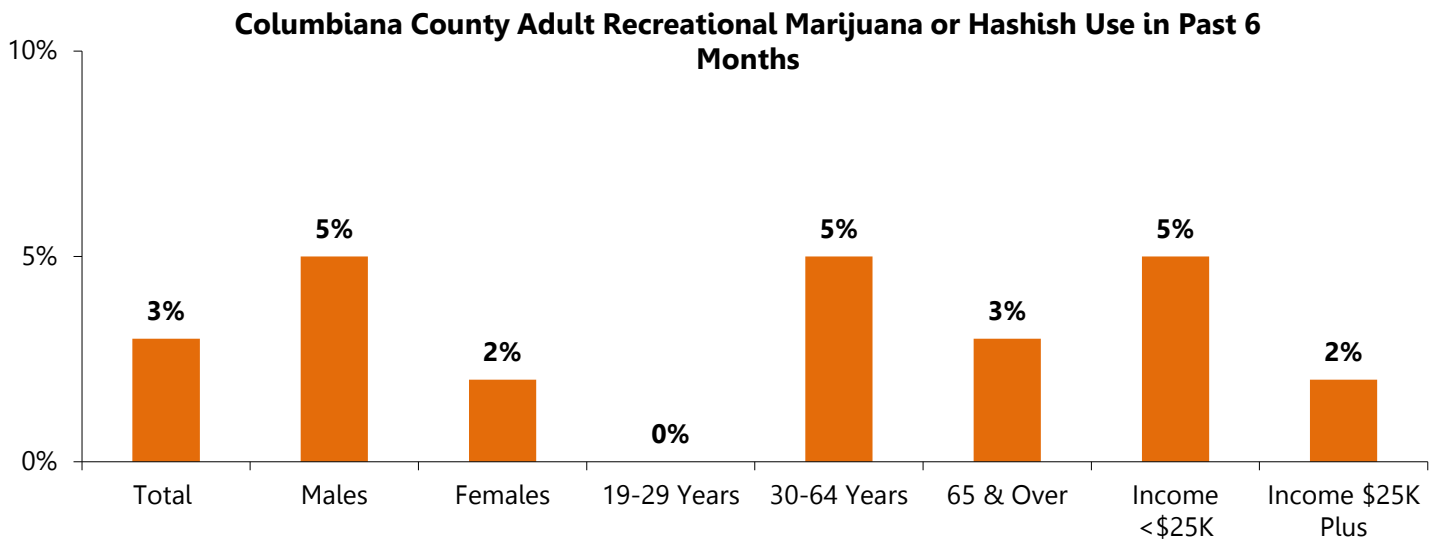
Columbiana County Adult Recreational Marijuana or Hashish Use in Past 6 Months

Category	Percent
Total	3%
Males	5%
Females	2%
19-29 Years	0%
30-64 Years	5%
65 & Over	3%
Income <$25K	5%
Income $25K Plus	2%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

- As a result of using drugs, Columbiana County adults indicated they or a family member had:
  — Overdosed and required EMS/hospitalization (33%)
  — Legal problems (27%)
  — Failed a drug screen (27%)
  — Placed themselves in dangerous situations (27%)
  — Administered Narcan or nasal Naloxone (13%)
  — Regularly failed to fulfill obligations at work or home (10%)
  — Received Narcan or nasal Naloxone (10%)

- One percent (1%) of adults used a program or service to help with an alcohol or drug problem for themselves or a loved one. Reasons for not using such a program included the following:
  — Had not thought of it (1%)
  — Could not afford to go (1%)
  — Stigma of seeking drug services (1%)
  — Stigma of seeking alcohol services (1%)
  — Did not know how to find a program (1%)
  — Cannot get to the office or clinic (1%)
  — Did not have any openings/wait-listed (1%)
  — Insurance does not cover it (1%)
  — Did not want to miss work (1%)
  — Did not want to get in trouble (<1%)
  — Fear (<1%)

The following graphs show Columbiana County and Ohio opiate and pain reliever doses per patient and doses per capita.

Columbiana County and Ohio Number of Opiate and Pain Reliever Doses Per Patient
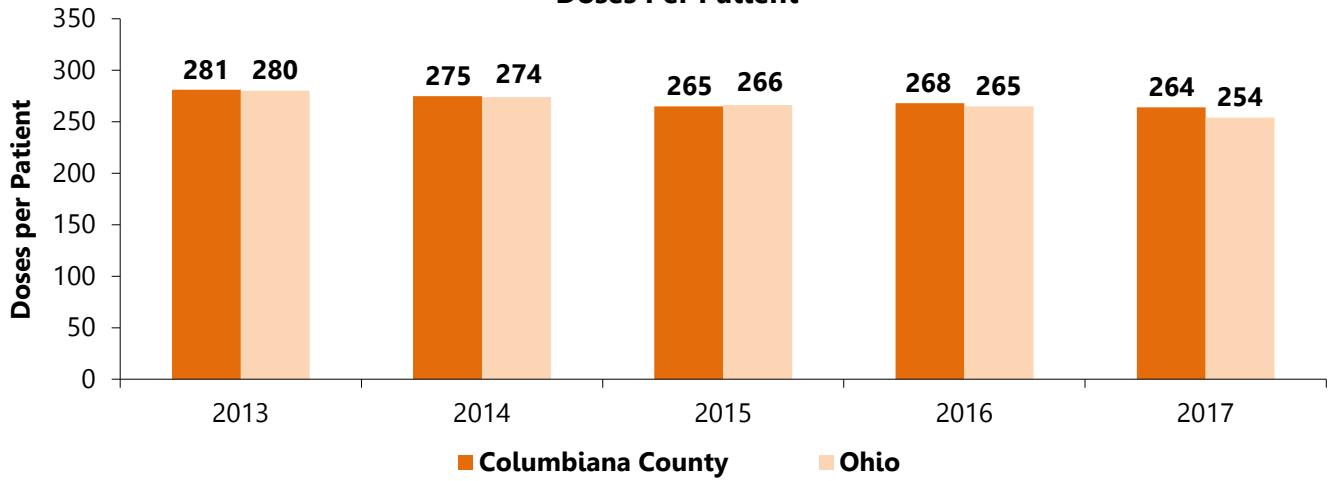
Year	Columbiana County	Ohio
2013	281	280
2014	275	274
2015	265	266
2016	268	265
2017	264	254

Columbiana County and Ohio Number of Opiate and Pain Reliever Doses Per Capita

Year	Columbiana County	Ohio
2013	73	67
2014	71	65
2015	66	61
2016	60	55
2017	53	49
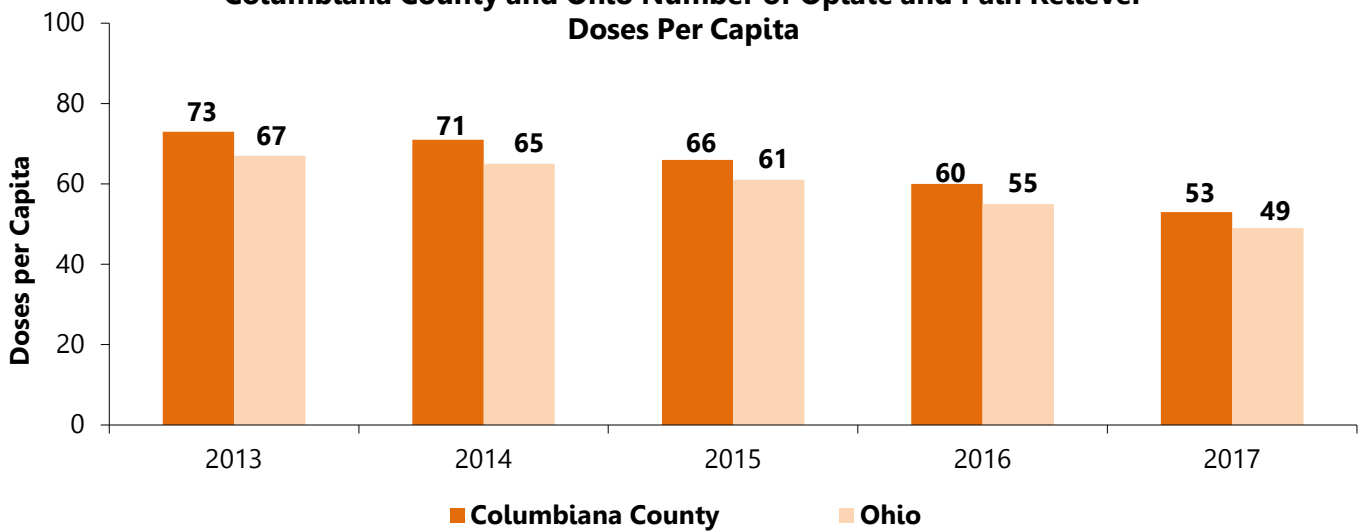
(Source for graphs: Ohio's Automated Rx Reporting System, 2013-2017, retrieved on 10/22/18)

The following graphs show Columbiana County and Ohio quarterly opiate and pain reliever doses per patient and doses per capita.

Number of Opioid Doses Per Capita, Quarterly from 2017 to 2018

Doses per Capita

	2017 Quarter 1	2017 Quarter 2	2017 Quarter 3	2017 Quarter 4	2018 Quarter 1
Columbiana County	12.5	13.3	12.9	12.0	11.1
Ohio	12.0	12.5	12.1	11.2	10.3

■ **Columbiana County**   ◆ **Ohio**

Number of Opioid Doses Per Patient, Quarterly from 2017 to 2018

Doses per Capita

	2017 Quarter 1	2017 Quarter 2	2017 Quarter 3	2017 Quarter 4	2018 Quarter 1
Columbiana County	140.9	144.3	143	141.3	142
Ohio	142.6	141.6	140.9	137.3	136.8

■ **Columbiana County**   ◆ **Ohio**

(Source for graphs: Ohio's Automated Rx Reporting System, 2017-2018, retrieved on 10/22/18)

The following graph shows the number of unintentional drug overdose deaths in Columbiana County from 2014-2018.

Columbiana County Number of Unintentional Drug Overdose Deaths, 2014-2018*
Total Deaths = 160
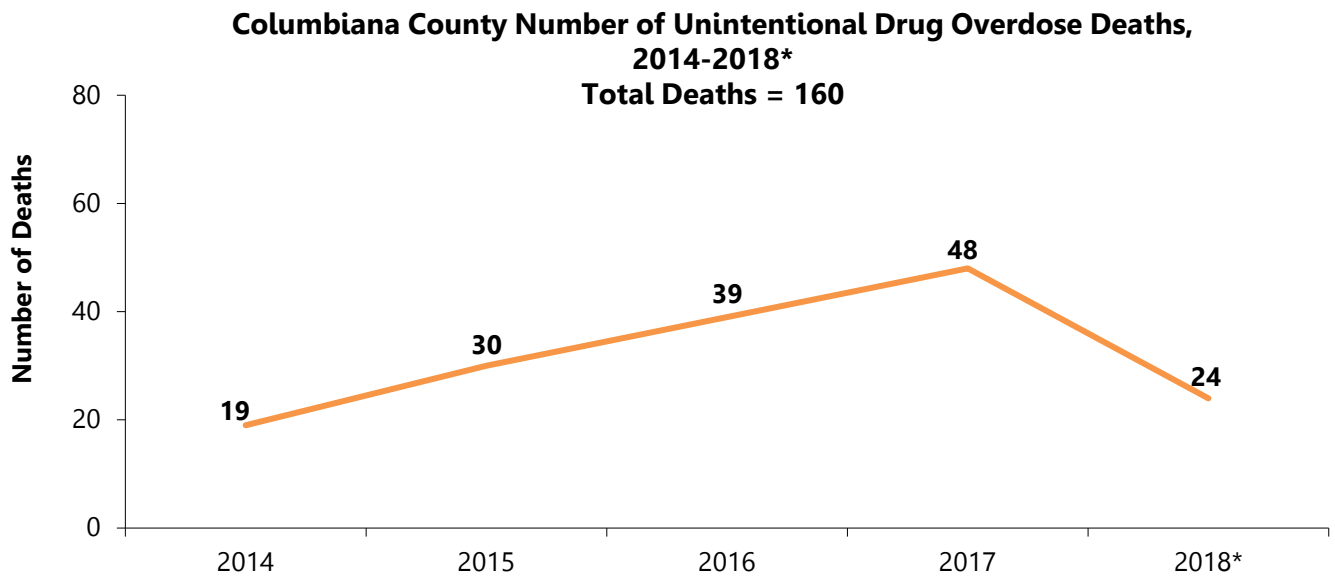
*Years with * are considered partial and may be incomplete*
(Source for graphs: Ohio Public Health Data Warehouse, 2014-2018, updated 1/08/2019)

The following map illustrates the average age-adjusted unintentional drug overdose death rate per 100,000 population, by county from 2012-2017.

County	Rate
Williams	11.4
Fulton	16.6
Lucas	28.4
Ottawa	16.7
Lake	30.0
Ashtabula	28.8
Defiance	15.2
Henry	12.3
Wood	12.7
Sandusky	24.1
Erie	33.9
Lorain	32.5
Cuyahoga	28.5
Geauga	21.1
Trumbull	42.0
Paulding	
Putnam	9.2
Hancock	19.5
Seneca	18.9
Huron	28.4
Medina	17.1
Summit	31.6
Portage	21.2
Mahoning	30.3
Van Wert	18.4
Allen	22.4
Wyandot	8.9
Crawford	23.4
Ashland	5.7
Richland	32.7
Wayne	16.3
Stark	18.9
Columbiana	30.8
Mercer	12.0
Auglaize	11.0
Hardin	20.4
Marion	36.7
Morrow	20.5
Knox	17.0
Holmes	
Carroll	17.2
Jefferson	31.9
Shelby	25.4
Logan	22.3
Union	10.4
Delaware	8.8
Coshocton	11.6
Tuscarawas	13.2
Harrison	18.6
Darke	33.7
Miami	26.1
Champaign	25.8
Licking	14.9
Muskingum	13.4
Guernsey	24.4
Belmont	23.4
Clark	45.9
Madison	23.1
Franklin	20.8
Preble	39.7
Montgomery	56.5
Greene	25.5
Fairfield	15.8
Perry	15.1
Morgan	18.0
Noble	
Monroe	
Washington	21.8
Fayette	45.7
Pickaway	18.8
Hocking	20.1
Athens	16.1
Butler	49.1
Warren	22.2
Clinton	44.8
Ross	36.3
Vinton	21.6
Hamilton	36.4
Highland	22.7
Meigs	21.9
Clermont	43.2
Pike	30.0
Jackson	29.6
Brown	49.4
Adams	42.7
Scioto	40.6
Gallia	31.7
Lawrence	32.5

Death Rates per 100,000 Population

- ☐ Rates not calculated for death count<10
- 5.7 - 13.8
- 13.9 - 17.8
- 17.9 - 21.3
- 21.4 - 28.3
- 28.4 - 42.5
- 42.6 - 56.5

(Source: Ohio Department of Health, 2017 Ohio Drug Overdose Data: General Findings)

Felony Cases and Drug Arrests January – June 2016

- Ohio State Highway Patrol (OSHP) investigated a wide range of felony offenses during the first half of 2016, including vice (2,154), assault (893), larceny (318), false pretense (92), property crimes (87), homicide/death (136), robbery/burglary (2), and various other types of felony offenses (143).

- OSHP Troopers made 7,493 total drug arrests during the first 6 months of 2016 – a 20% increase compared to 2015 and a 35% increase compared to the previous 3-year average (2013-2015).

- Of the 7,493 drug arrests, over one-quarter (2,037 or 27%) included one or more felony drug charges. This represents a 37% increase over the previous 3-year average (2013-2015).

OSHP felony cases by type[1] (Jan. 1 – Jun. 30, 2016)	
Homicide/Death	13
Robbery/Burglary	2
Larceny	318
Assault	893
False pretense[2]	92
Vice[3]	2,154
Property crimes	87
Other investigations	143
Total:	3,702

OSHP drug arrests (Jan. 1 - Jun. 30, 2016)	
Total drug arrests	7,493
Felony drug cases	2,037

OSHP drug seizures in grams (Jan. 1 - Jun. 30, 2016)	
Marijuana	885,221
Cocaine	38,804
Crack	1,266
Heroin	53,514

OSHP scheduled pill seizures (Jan. 1 - Jun. 30, 2016)	
Opiate	19,660
Stimulant	1,749
Depressant	11,059
Hallucinogen	316

Number of Felony Drug Cases
- 50 to 164 (9)
- 25 to 49 (23)
- 10 to 24 (16)
- 1 to 9 (30)
- 0 (10)

(Source: Ohio State Highway Patrol, Felony Cases and Drug Arrests, January – June 2016)

Health Behaviors: Sexual Behavior

Key Findings

Sixty-seven percent (67%) of Columbiana County adults had sexual intercourse in the past year. Two percent (2%) of adults had more than one partner.

Sexual Behavior

- Sixty-seven percent (67%) of Columbiana County adults had sexual intercourse in the past year.

- Two percent (2%) of adults reported they had intercourse with more than one partner in the past year, increasing to 6% of those with incomes less than $25,000.

- Columbiana County adults used the following methods of birth control: they or their partner were too old (17%); vasectomy (12%); tubes tied (9%); condoms (9%); hysterectomy (7%); withdrawal (7%); ovaries or testicles removed (4%); infertility (4%); IUD (1%); the rhythm method (1%); gay or lesbian (1%); contraceptive implants (1%); pills, all kinds (Ortho Tri-Cyclen) (1%); shots (Depo-Provera) (1%); contraceptive patch (1%); diaphragm, cervical ring or cap (1%); and emergency contraception (1%). Five percent (5%) of adults reported they and their partner were trying to get pregnant, and 3% reported they were currently pregnant.

- Seven percent (7%) Columbiana County adults were not using any method of birth control.

- The following situations applied to Columbiana County adults in the past year:
  — Had sex without a condom (37%)
  — Had anal sex without a condom (7%)
  — Tested for a sexually transmitted disease (STD) (5%)
  — Tested positive for HPV (2%)
  — Treated for a sexually transmitted disease (STD) (1%)
  — Tested positive for Hepatitis C (1%)
  — Had sexual activity with someone of the same gender (1%)
  — Were forced to have sex (1%)
  — Had sex with someone they did not know (<1%)

The following graph shows the number of sexual partners Columbiana County adults had in the past year. An example of how to interpret the information in the graph includes: 65% of all adults had one sexual partner in the past 12 months, and 2% had more than one.

Columbiana County Number of Sexual Partners in the Past Year*
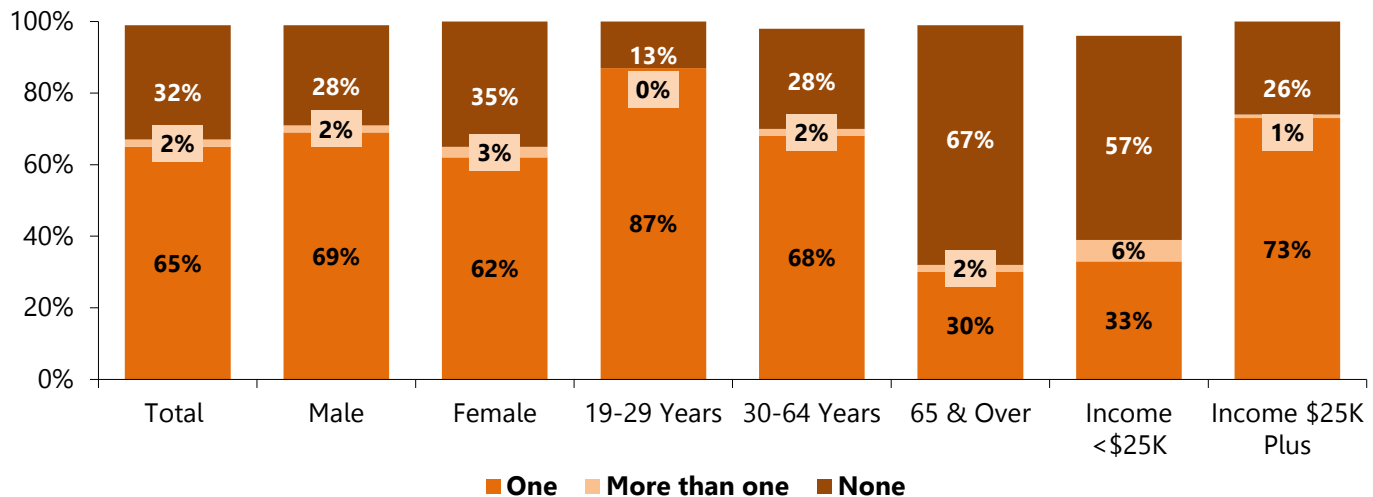
*Respondents were asked: "During the past 12 months, with how many different people have you had sexual intercourse?"
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following graphs show the Columbiana County chlamydia disease rates per 100,000 population and the number of chlamydia disease cases. The graphs show:

- Columbiana County chlamydia rates fluctuated from 2013 to 2017.

- The number of chlamydia cases in Columbiana County reached its lowest rate in 2016, but cases increased in 2017.

Chlamydia Annualized Disease Rates for Columbiana County and Ohio

Annualized Count of Chlamydia Cases for Columbiana County
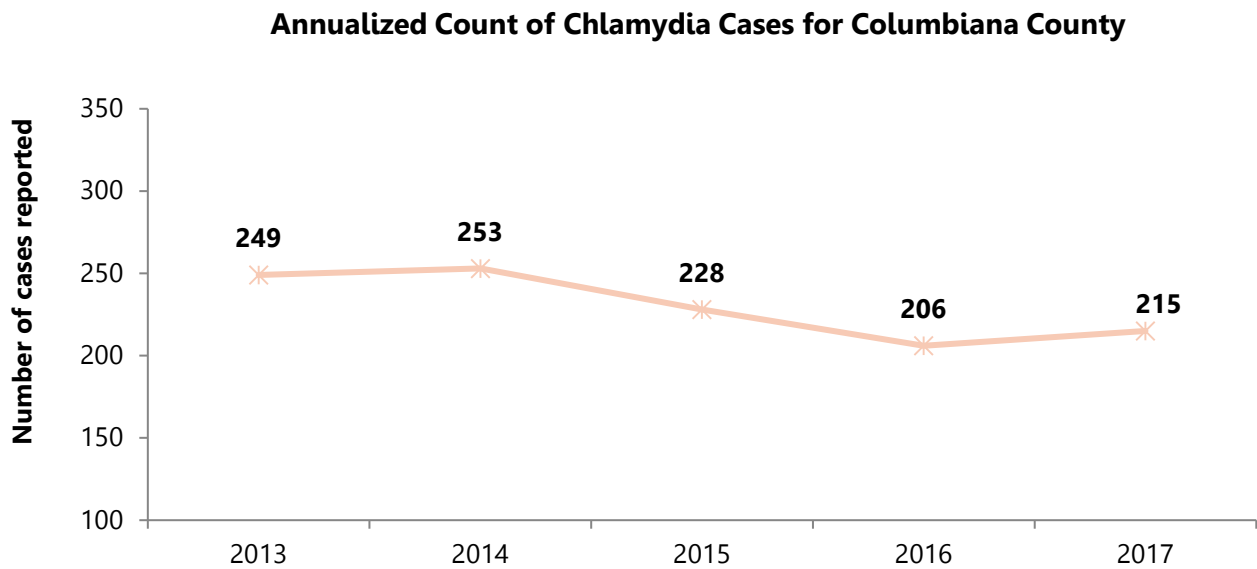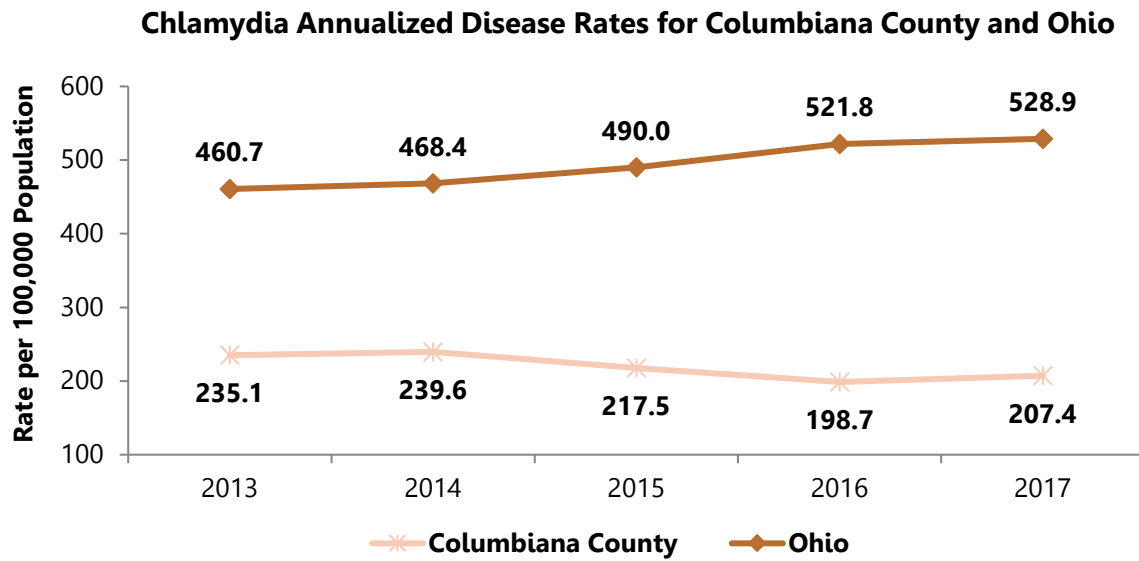
(Source for graphs: ODH, STD Surveillance, data reported through 5/7/17, updated on 5/29/18)

The following graphs show the Columbiana County gonorrhea disease rates per 100,000 population and the number of gonorrhea disease cases. The graphs show:

- The Columbiana County gonorrhea rate fluctuated from 2013 to 2017.

- The number of gonorrhea cases in Columbiana County decreased from 2014 to 2016 and significantly increased from 2016-2017.

Gonorrhea Annualized Disease Rates for Columbiana County and Ohio

Ohio: 144.0 (2013), 138.3 (2014), 138.4 (2015), 176.8 (2016), 206.6 (2017)

Columbiana County: 31.2 (2013), 42.6 (2014), 38.2 (2015), 38.2 (2016), 41.5 (2017)

Rate per 100,000 population

— Columbiana County   — Ohio

Annualized Count of Gonorrhea Cases for Columbiana County

Number of cases reported: 33 (2013), 45 (2014), 40 (2015), 33 (2016), 43 (2017)
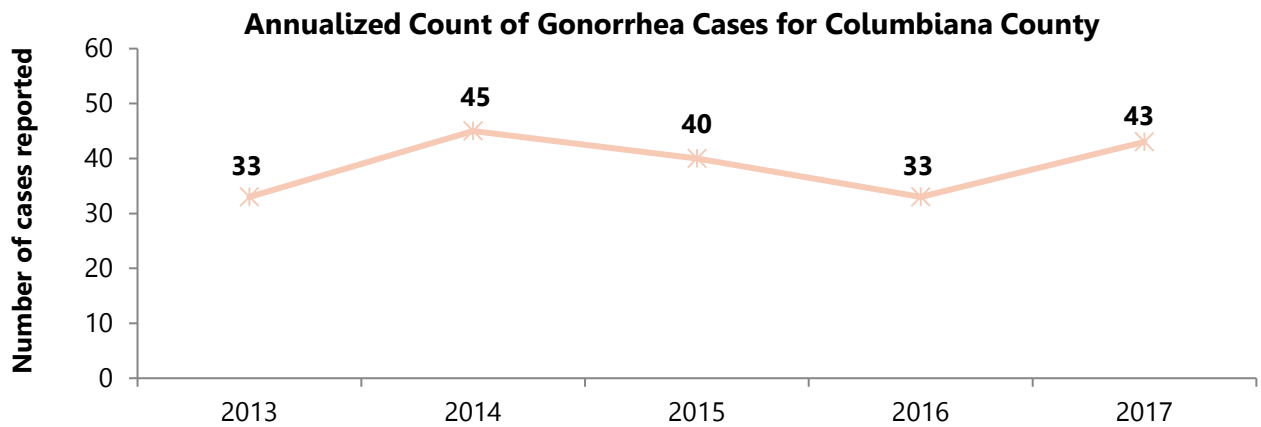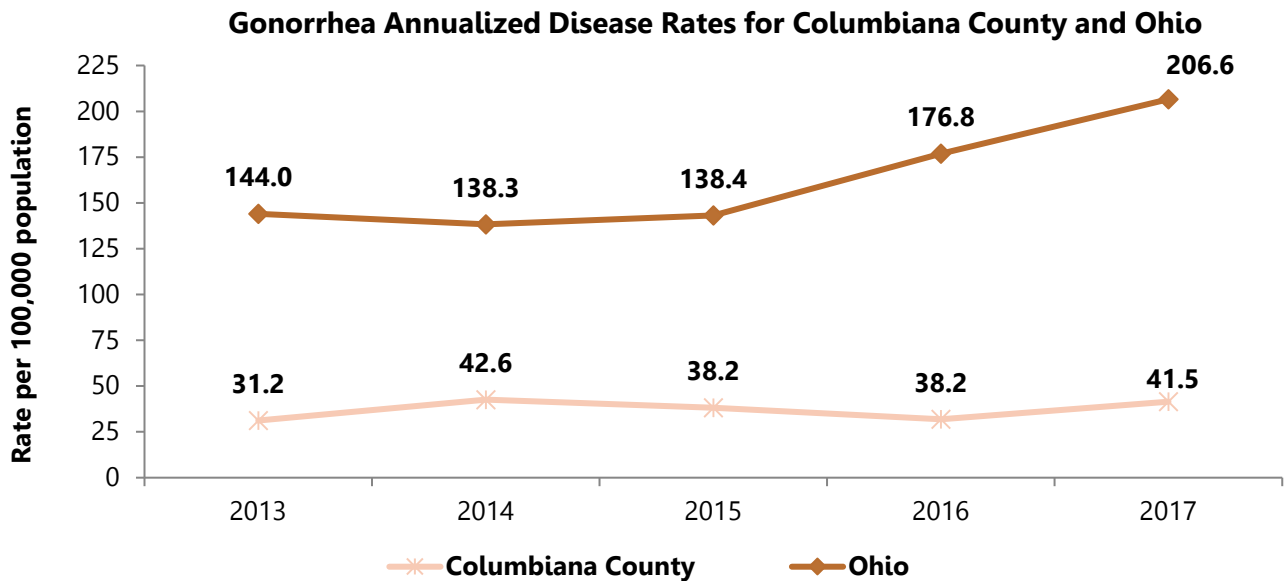
(Source for graphs: ODH, STD Surveillance, data reported through 5-7-17, updated on 5/30/18)

Pregnancy Outcomes

Please note that the pregnancy outcomes data includes all births to adults and adolescents.

- From 2013-2017, there was an average of 5,359 live births per year in Columbiana County.

Columbiana County Total Live Births

Number of Live Births

Year	Live Births
2013	1,094
2014	1,057
2015	1,106
2016	1,073
2017	1,029

Columbiana County Unwed Births

Percent of Live Births

Year	Columbiana County	Ohio
2013	21%	20%
2014	19%	20%
2015	20%	20%
2016	20%	20%
2017	20%	20%

■ **Columbiana County**　■ **Ohio**
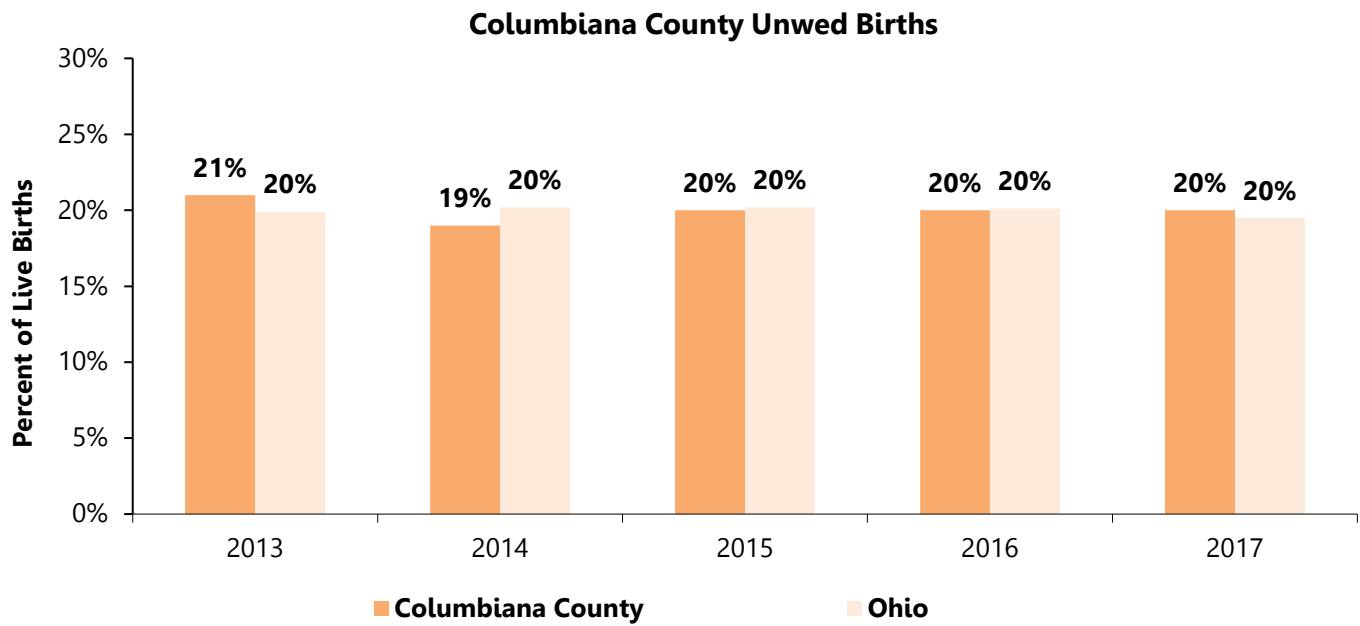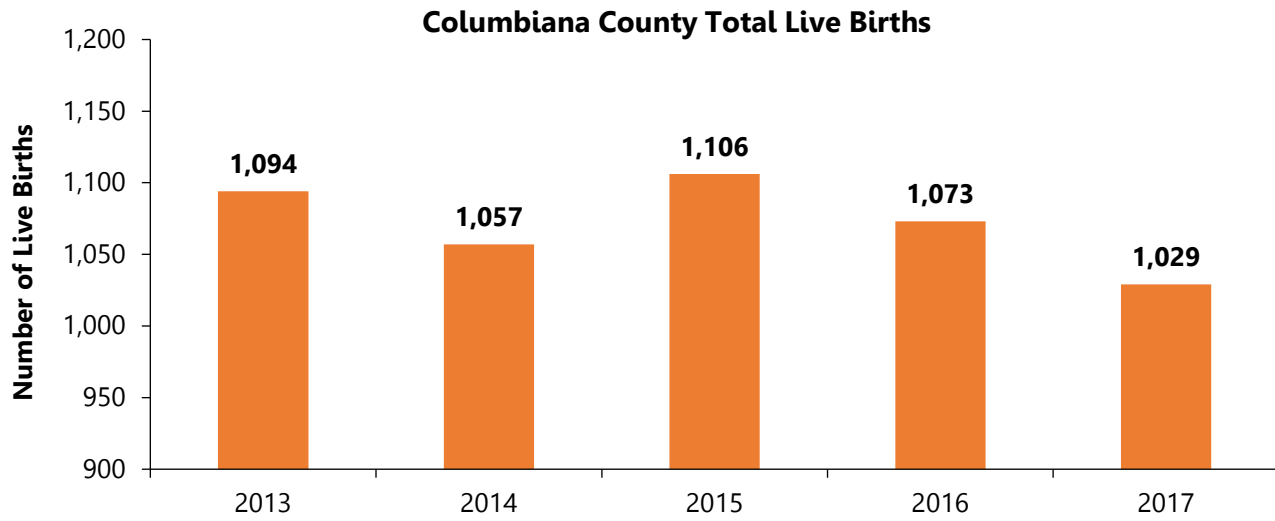
(Source for graphs: ODH Public Health Data Warehouse Updated 3-6-19)

Health Behaviors: Mental Health

Key Findings

In the past year, 4% of Columbiana County adults considered attempting suicide. One-quarter (25%) of adults reported they or a family member were diagnosed with or treated for depression in the past year.

Mental Health

- In the past year, Columbiana County adults experienced the following almost every day for two weeks or more in a row:
  — Did not get enough rest or sleep (34%)
  — Had high stress (30%)
  — Felt worried, tense, or anxious (27%)
  — Felt sad, blue, or depressed (17%)
  — Stopped doing usual activities (12%)
  — Felt very healthy and full of energy (12%)
  — Had an unusual increase or loss of appetite (8%)

- Four percent (4%) of adults seriously considered attempting suicide in the past year.

- No adults reported attempting suicide in the past year.

- Adults indicated they would do the following if they knew someone who was suicidal: talk to them (70%), try to calm them down (53%), call 911 (41%), call a crisis line (41%), take them to the ER (28%), call their spiritual leader (17%), call a friend (16%), text a crisis line (7%), and nothing (3%).

> ### 3,315 adults seriously considered attempting suicide in the past year.

- Adults reported the following caused them anxiety, stress and depression:
  — Job stress (39%)
  — Financial stress (29%)
  — Death of a close family member or friend (21%)
  — Other stress at home (18%)
  — Poverty/no money (15%)
  — Family member is sick (15%)
  — Fighting in the home (14%)
  — Marital/dating relationships (12%)
  — Caring for a parent (10%)
  — Unemployment (4%)
  — Family member with a mental illness (4%)
  — Not having enough to eat (4%)
  — Divorce/separation (3%)
  — Not having a place to live (1%)
  — Not feeling safe at home (1%)
  — Not feeling safe in the community (1%)

- One in seven (14%) Columbiana County adults used a program or service for themselves or a loved one to help with depression, anxiety, or emotional problems. Reasons for not using such a program included the following:
  — Had not thought of it (7%)
  — Could not afford to go (5%)
  — Co-pay/deductible too high (5%)
  — Other priorities (4%)
  — Did not know how to find a program (4%)
  — Stigma of seeking mental health services (3%)
  — Fear (3%)
  — Took too long to get in to see a doctor (2%)
  — Transportation (1%)
  — Could not find a mental health doctor or provider (1%)
  — Could not get to the office/clinic (<1%)
  — Other reasons (5%)

- Almost three-fifths (59%) of adults indicated they did not need a program or service to help themselves or a loved one with depression, anxiety, or emotional problems.

- Columbiana County adults reported they or a family member were diagnosed with or treated for the following mental health issues in the past year:
  - Depression (25%)
  - Anxiety or emotional problems (24%)
  - An anxiety disorder (e.g., panic attacks, phobia, obsessive compulsive disorder) (19%)
  - Alcohol and illicit drug abuse (7%)
  - Post-traumatic stress disorder (PTSD) (6%)
  - Autism spectrum (5%)
  - Attention Deficit Disorder (ADD/ADHD) (5%)
  - Bipolar Disorder (5%)
  - Other trauma (4%)
  - Developmental disability (cognitive/intellectual) (2%)
  - Eating disorder (2%)
  - Life-adjustment disorder/issue (1%)
  - Psychotic disorder (e.g., schizophrenia, schizoaffective disorder) (1%)
  - Problem gambling (1%)
  - Some other mental health disorder (4%)

- Twenty-four percent (24%) of adults indicated they or a family member had taken medication for one or more mental health issues.

The graph below shows the Columbiana County suicide counts by year. The graph shows:

- From 2008 to 2018, there was an average of 18 suicides per year in Columbiana County.

Columbiana County Number of Suicide Deaths By Year, 2008-2018*
Total Deaths= 200
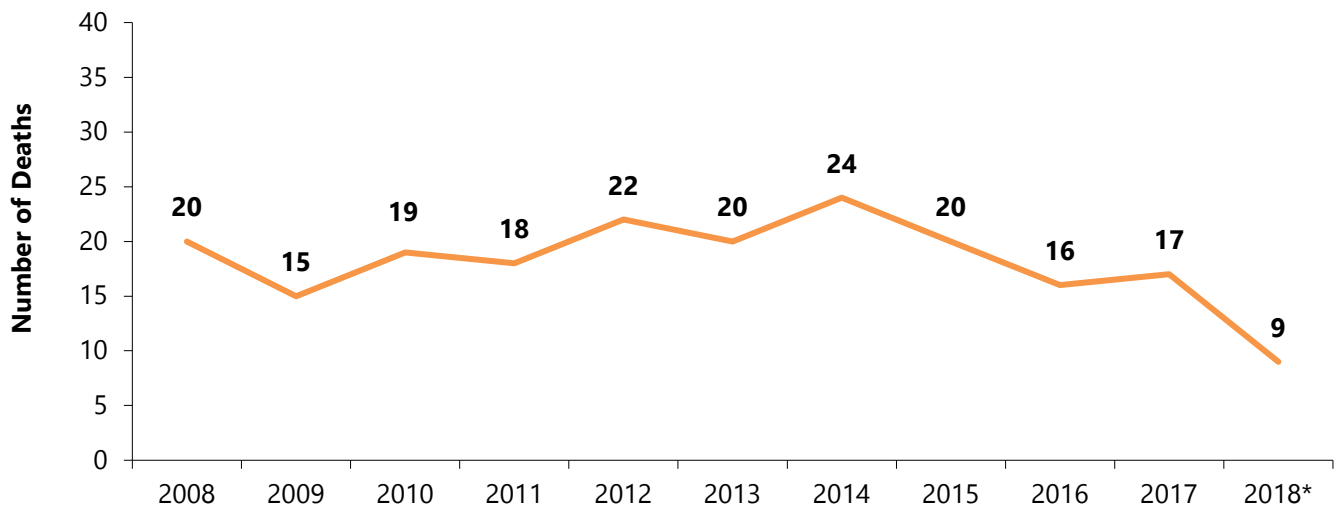
*Data for 2018 is partial and incomplete, and should be used with caution
(Source: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 1/9/19)

The graphs below show the Columbiana County suicide counts by age group and gender. The graphs show:

- From 2008 to 2018, 23% of all Columbiana County suicide deaths occurred in those ages 35-44 years old.

- From 2008-2018, the number of male suicide deaths in Columbiana County was more than four times higher than the number of female suicide deaths.

Columbiana County Number of Suicide Deaths By Age Group, 2008-2018*
Total Deaths= 197**
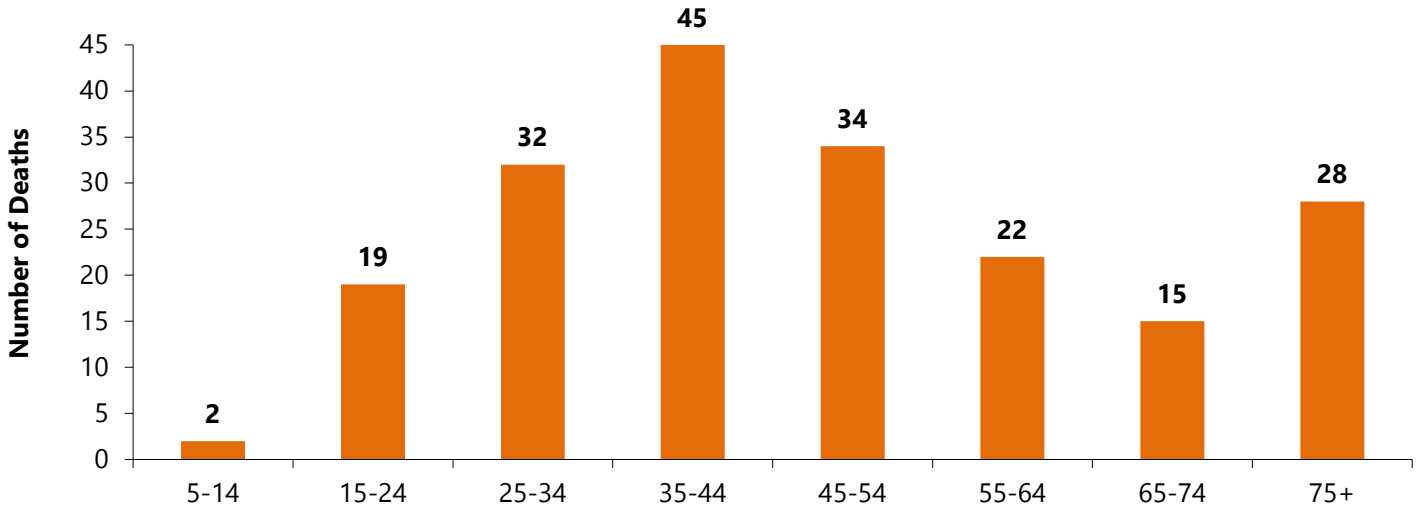
Data for 2018 is partial and incomplete, and should be used with caution
**The age for three of the suicide deaths from 2008-2018 was unknown

Columbiana County Number of Suicide Deaths By Gender, 2008-2018*
Total Deaths = 197**
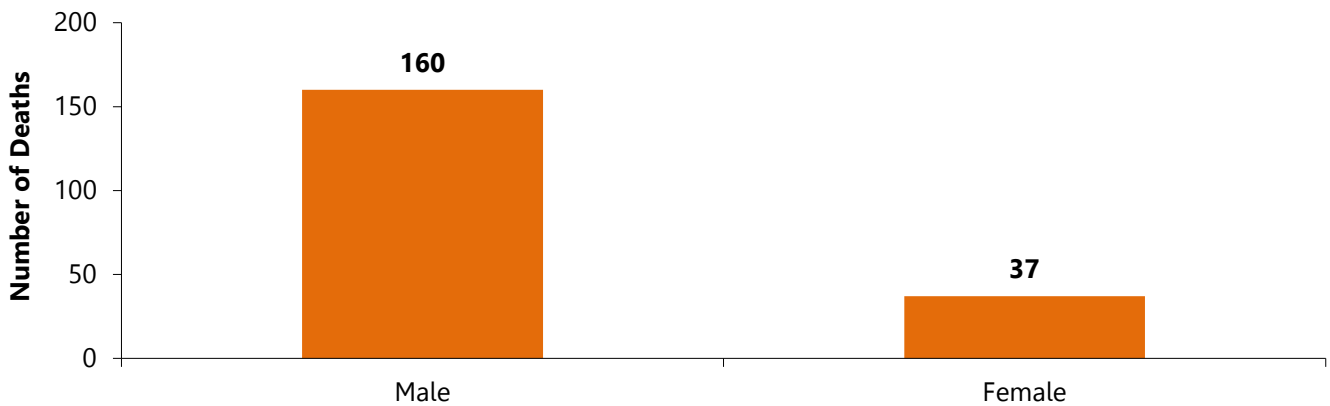
Data for 2018 is partial and incomplete, and should be used with caution
**The gender for three of the suicide deaths from 2008-2018 was unknown
(Source: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 1/9/19)

The following table shows a summary of mental health and substance abuse risk-taking behavior trends from 2011 to 2018, as shown in the Columbiana County Developmental Assets 2018 Survey Report.

Youth Variables	2011 (n=1,768)	2013 (n=2,306)	2015 (n=2,309)	2018 (2,314)
Eating Disorder				
Had engaged in bulimic or anorexic behavior	20%	17%	18%	24%
Depression				
Felt sad or depressed most or all of the time in the last month	20%	17%	19%	26%
Attempted Suicide				
Had attempted suicide one or more times	16%	16%	17%	20%
Alcohol				
Used alcohol one or more in the last 30 days	25%	23%	21%	21%
Got drunk once or more in the last two weeks	20%	14%	14%	12%
Tobacco				
Smoked cigarettes once or more in the last 30 days	13%	11%	9%	6%
Used smokeless tobacco once or more in the last 12 months	16%	15%	11%	9%
Inhalants				
Sniffed or inhaled substances to get high once or more in the last 12 months	9%	8%	7%	6%
Marijuana				
Used marijuana once or more in the last 12 months	19%	10%	9%	7%
Other Drug Use				
Used other illicit drugs once or more in the last 12 months	6%	3%	2%*	2%
Driving and Alcohol				
Drove after drinking once or more in the last 12 months	6%	5%	4%	3%
Rode with a driver who had been drinking once or more in the last 12 months	33%	33%	30%	24%

(Source: Columbiana County Developmental Assets 2018 Survey Report)
*2015 data is specifies used heroin or other narcotics once or more in the last 12 months
N/A-Not Available

Chronic Disease: Cardiovascular Health

Key Findings

Four percent (4%) of adults had survived a heart attack or myocardial infarction and 2% had survived a stroke at some time in their life. Just over two-fifths (41%) of Columbiana County adults had high blood cholesterol, 38% were obese, 37% had high blood pressure, and 20% were current smokers, four known risk factors for heart disease and stroke.

Heart Disease and Stroke

- Four percent (4%) of adults reported they had survived a heart attack or myocardial infarction, increasing to 9% of those over the age of 65 and 6% of those with incomes less than $25,000.

- Two percent (2%) of Columbiana County adults reported they had survived a stroke, increasing to 6% of those over the age of 65.

- Two percent (2%) of adults reported they had angina or coronary heart disease, increasing to 8% of those over the age of 65.

- Two percent (2%) of adults reported they had congestive heart failure, increasing to 4% of those over the age of 65.

High Blood Pressure (Hypertension)

- More than one-third (37%) of adults had been diagnosed with high blood pressure.

- Seven percent (7%) of adults were told they were pre-hypertensive/borderline high.

- Eighty-seven percent (87%) of adults had their blood pressure checked within the past year.

- Columbiana County adults diagnosed with high blood pressure were more likely to have:
  — Been ages 65 years or older (58%)
  — Been classified as obese by body mass index (46%)
  — Incomes less than $25,000 (43%)
  — Rated their overall health as fair or poor (24%)

High Blood Cholesterol

- Forty-one percent (41%) of adults had been diagnosed with high blood cholesterol.

- Over four-fifths (82%) of adults had their blood cholesterol checked within the past 5 years.

- Columbiana County adults with high blood cholesterol were more likely to have:
  — Been ages 65 years or older (61%)
  — Incomes less than $25,000 (53%)
  — Been classified as obese by body mass index (39%)
  — Rated their overall health as fair or poor (19%)

Columbiana County
Leading Causes of Death, 2015-2017

Total Deaths: 3,891

1. Heart Diseases (26% of all deaths)
2. Cancers (21%)
3. Chronic Lower Respiratory Diseases (7%)
4. Accidents, Unintentional Injuries (6%)
5. Stroke (5%)

(Source: Ohio Public Health Data Warehouse, 2015-2017)

Ohio
Leading Causes of Death, 2015-2017

Total Deaths: 361,238

1. Heart Diseases (23% of all deaths)
2. Cancers (21%)
3. Accidents, Unintentional Injuries (7%)
4. Chronic Lower Respiratory Diseases (6%)
5. Stroke (5%)

(Source: Ohio Public Health Data Warehouse, 2015-2017)

The following graph demonstrates the percentage of Columbiana County adults who had major risk factors for developing cardiovascular disease (CVD).

Columbiana County Adults with CVD Risk Factors

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Ever diagnosed with angina or coronary heart disease	2%	5%	4%
Ever diagnosed with a heart attack, or myocardial infarction	4%	6%	4%
Ever diagnosed with a stroke	2%	4%	3%
Had been told they had high blood pressure	37%	35%	32%
Had been told their blood cholesterol was high	41%	33%	33%
Had their blood cholesterol checked within the last five years	82%	85%	86%

The following graph shows the percentage of Columbiana County adults who survived a heart attack or stroke in their lifetime by gender. An example of how to interpret the information includes: 5% of Columbiana County males survived a heart attack compared to 3% of females.

Columbiana County Adults Who Had Survived a Heart Attack or Stroke In Their Lifetime

■ Heart Attack ■ Stroke
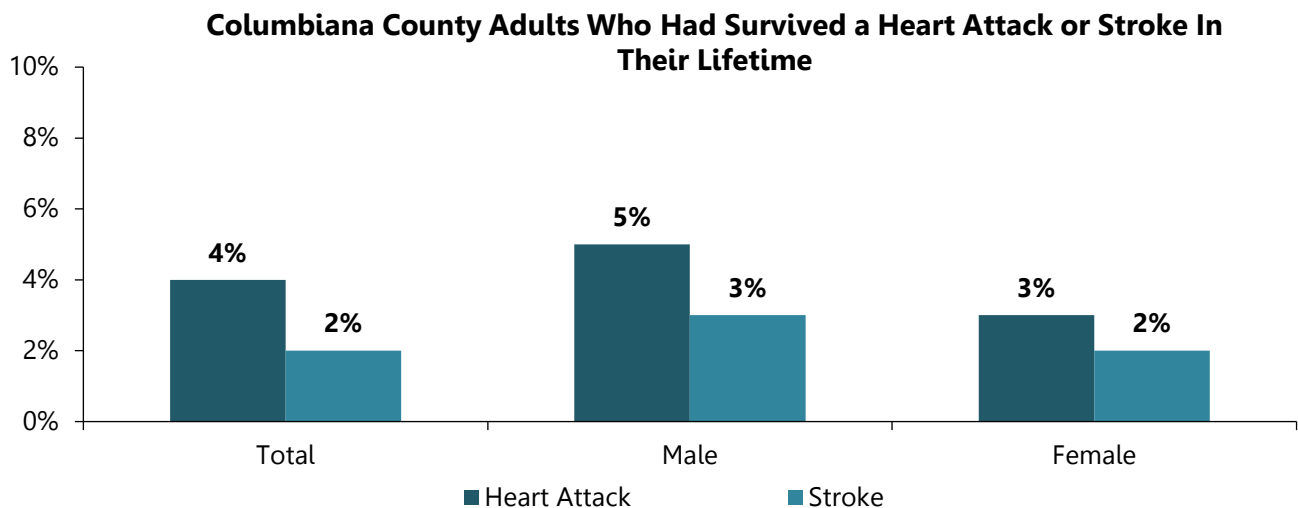
(Source: 2018 Columbiana County Health Assessment)
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following graphs show the number of Columbiana County adults who have been diagnosed with high blood pressure and high blood cholesterol. An example of how to interpret the information on the first graph includes: 37% of all Columbiana County adults have been diagnosed with high blood pressure including 58% of those 65 years and older.

Columbiana County Adults Diagnosed with High Blood Pressure*

Category	Percentage
Total	37%
Male	38%
Female	31%
19-29 Years	13%
30-64 Years	36%
65 & Over	58%
Income <$25K	43%
Income $25K Plus	35%
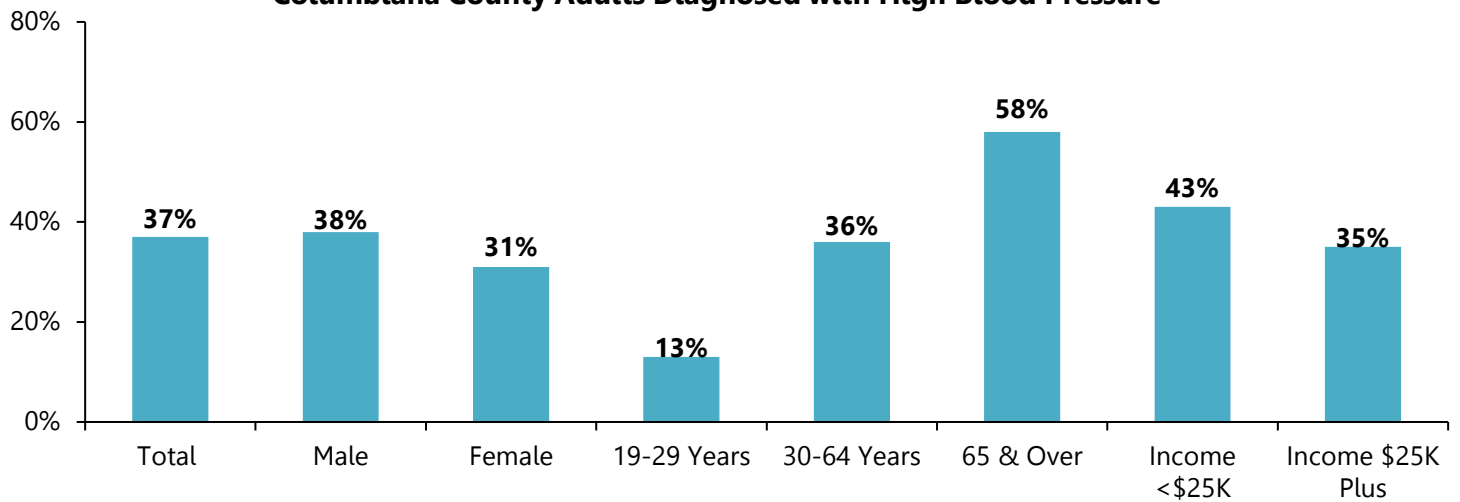
Does not include respondents who indicated high blood pressure during pregnancy only.

Columbiana County Adults Diagnosed with High Blood Cholesterol
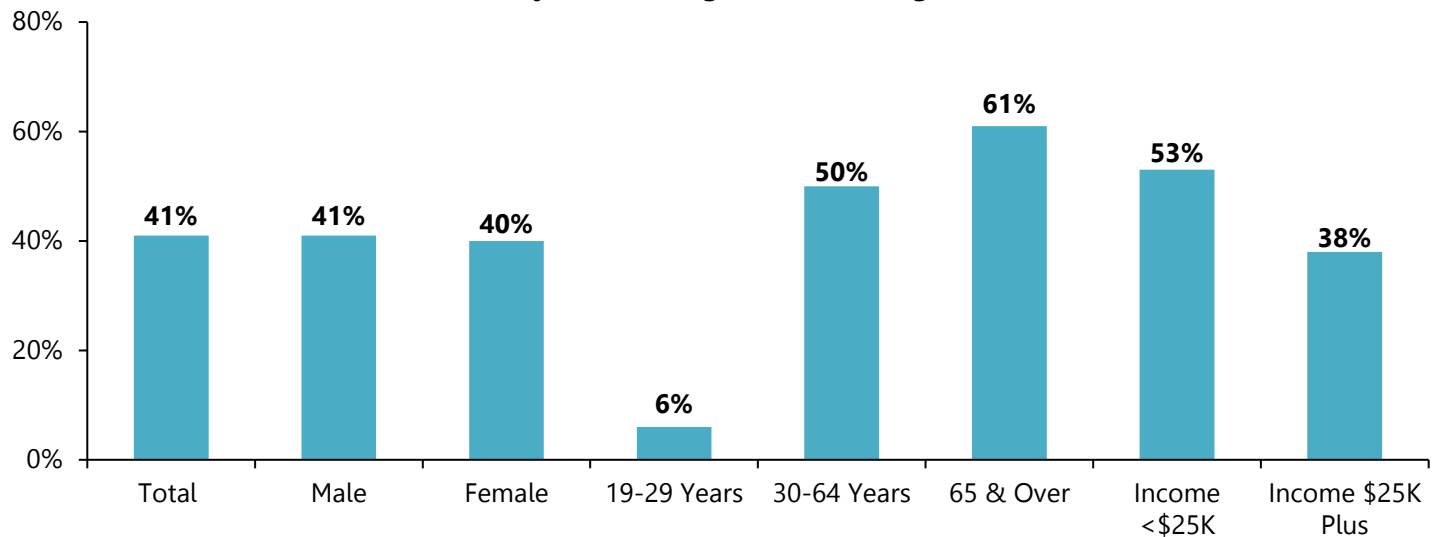
Category	Percentage
Total	41%
Male	41%
Female	40%
19-29 Years	6%
30-64 Years	50%
65 & Over	61%
Income <$25K	53%
Income $25K Plus	38%

Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following graphs shows the age-adjusted mortality rates per 100,000 population for heart disease and stroke by gender.

- From 2009 to 2017, the total Columbiana County age adjusted heart disease mortality rate, as well as the male and female heart disease mortality rate, increased.

- From 2015 to 2017, the Columbiana County male stroke mortality rate increased, while the female stroke mortality rate decreased.

Columbiana County Age-Adjusted Heart Disease Mortality Rates by Gender
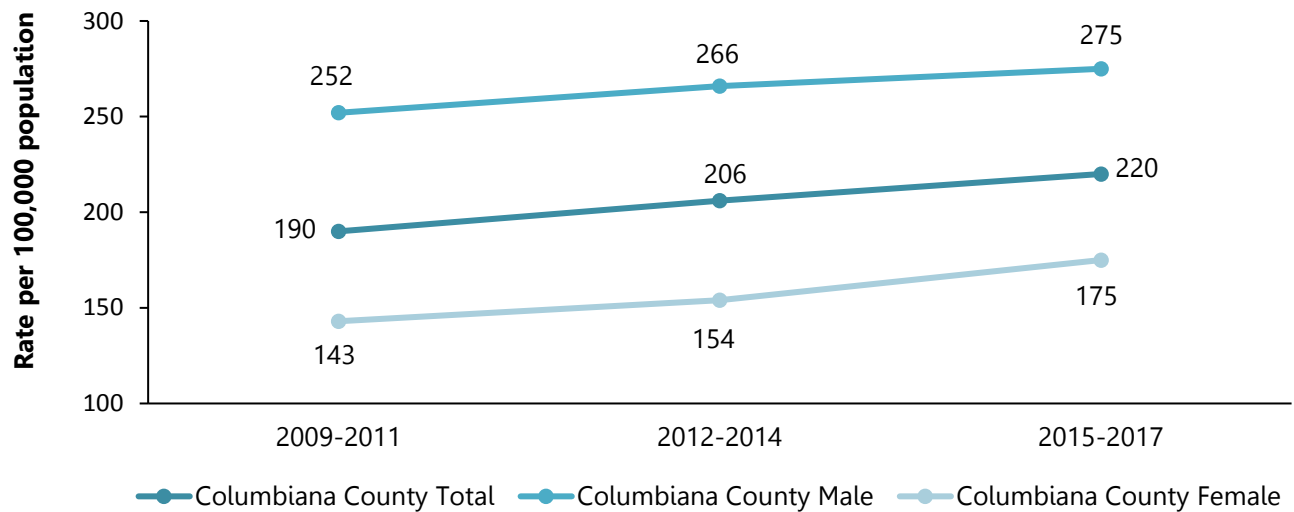
Columbiana County Age-Adjusted Stroke Mortality Rates by Gender
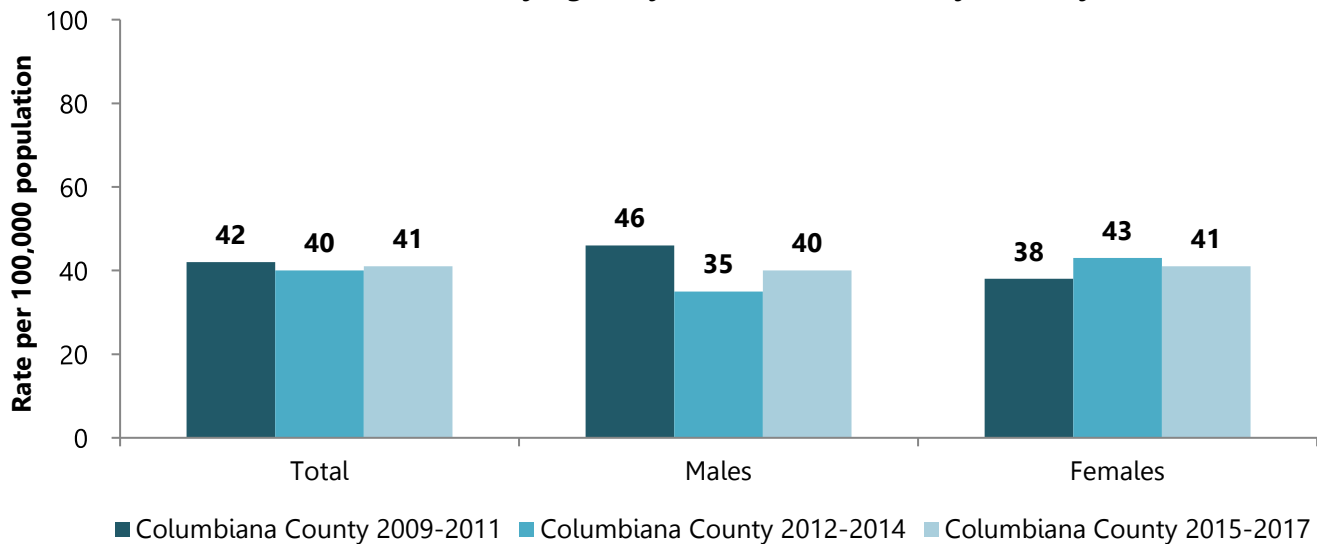
(Source for graphs: Ohio Public Health Data Warehouse, 2009-2017)

The following graph shows the age-adjusted mortality rates per 100,000 population for heart disease and stroke.

- When age differences are accounted for, the statistics indicate that, from 2015 to 2017, the Columbiana County heart disease mortality rate was higher than the Ohio rate, the U.S. rate, and the Healthy People 2020 target objective.

- The Columbiana County age-adjusted stroke mortality rate from 2015 to 2017 was equal to the Ohio rate, lower than the U.S. rate, and lower than the Healthy People 2020 target objective.
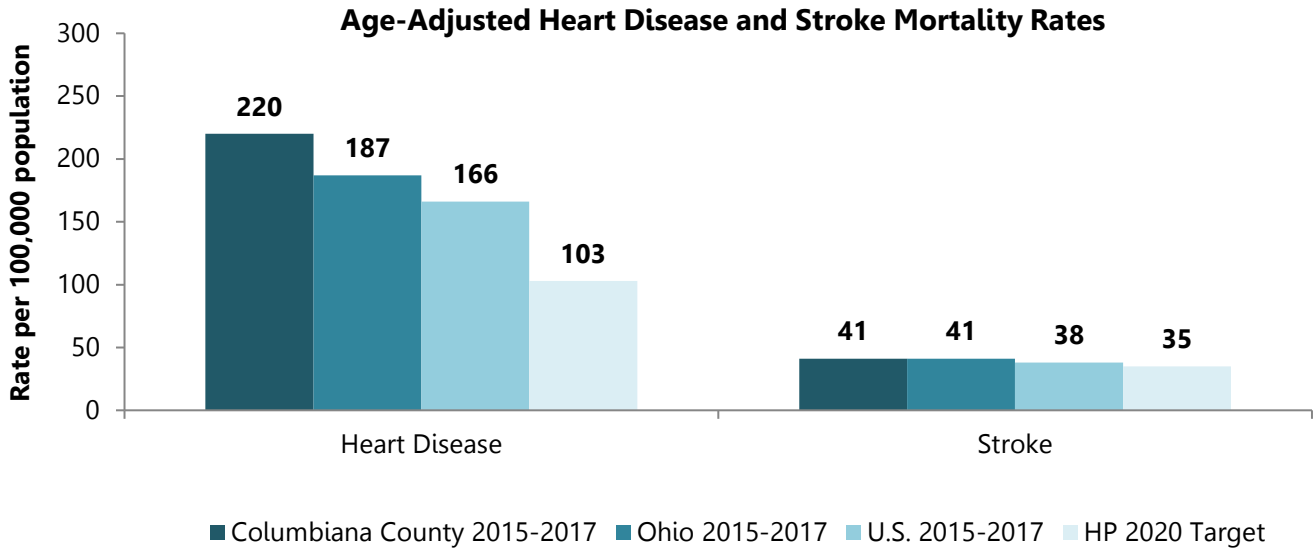
Age-Adjusted Heart Disease and Stroke Mortality Rates

(Source: Ohio Public Health Data Warehouse, 2015-2017, CDC Wonder, 2015-2017, and Healthy People 2020)

Healthy People 2020 Objectives
Heart Disease and Stroke

Objective	2018 Columbiana Survey Population Baseline	2017 U.S. Baseline	Healthy People 2020 Target
HDS-5: Reduce proportion of adults with hypertension	37%	32% Adults age 18 and up	27%
HDS-6: Increase proportion of adults who had their blood cholesterol checked within the preceding 5 years	82%	86% Adults age 18 and up	82%
HDS-7: Decrease proportion of adults with high total blood cholesterol (TBC)	41%	33% Adults age 20+ with TBC>240 mg/dl	14%

Note: All U.S. figures age-adjusted to 2000 population standard.
(Sources: 2018 Columbiana County Health Assessment, 2017 BRFSS, Healthy People 2020)

Chronic Disease: Cancer

Key Findings

About one-in-five (19%) Columbiana County adults were diagnosed with cancer at some point in their lives.

Cancer

- About one-in-five (19%) Columbiana County adults were diagnosed with cancer at some point in their lives, increasing to 34% of those over the age of 65.

- Of those diagnosed with cancer, they reported the following types: other skin cancer (23%), prostate (22%), cervical (17%), breast (14%), melanoma (12%), testicular (11%), endometrial (7%), leukemia (6%), ovarian (3%), colon intestine (3%), head and neck (2%), non-Hodgkin's lymphoma (2%), bladder (1%), brain (1%), and other types of cancer (8%).

**Columbiana County
Incidence of Cancer, 2011-2015**

All Types: 3,111 cases

- Lung and Bronchus: 506 cases (16%)
- Breast: 399 cases (13%)
- Colon and Rectum: 335 cases (11%)
- Prostate: 333 cases (11%)

From 2015-2017, there were 798 cancer deaths in Columbiana County.

(Source: Ohio Cancer Incidence, ODH Ohio Public Health Data Warehouse, Updated 1/14/19)

15,748 adults had been diagnosed with cancer at some time in their life.

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Ever been told they had skin cancer	7%¥	6%	6%
Ever been told they had other types of cancer (other than skin cancer)	11%	7%	7%

¥ *Melanoma and other skin cancers are included for "diagnosed with skin cancer"*

Cancer Facts

- The Ohio Public Health Data Warehouse indicates that from 2015-2017, cancers caused 21% (798 of 3,891) of all Columbiana County resident deaths. The largest percent (28%) of 2015-2017 cancer deaths were from lung and bronchus cancer *(Source: Ohio Public Health Data Warehouse, 2015-2017).*

Breast Cancer

- Over half (55%) of Columbiana County females over the age of 40 had a mammogram in the past year.

- Forty-six percent (46%) of Columbiana County females reported having had a clinical breast examination in the past year.

- For women at average risk of breast cancer, recently updated American Cancer Society screening guidelines recommend that those 40 to 44 years of age have the option to begin annual mammography; those 45 to 54 should undergo annual mammography; and those 55 years of age and older may transition to biennial mammography or continue annual mammography. Women should continue mammography as long as overall health is good and life expectancy is 10 or more years. For some women at high risk of breast cancer, annual magnetic resonance imaging (MRI) is recommended in addition to mammography, typically starting at age 30. *(Source: American Cancer Society, Facts & Figures 2018).*

Prostate Cancer

- Almost three-quarters (72%) of males age 50 and over had a PSA test at some time in their life, and 54% had one in the past year.

- ODH statistics indicate that prostate cancer deaths accounted for 6% of all male cancer deaths from 2015-2017 in Columbiana County *(Source: Ohio Public Health Data Warehouse, 2015-2017)*.

- No organizations presently endorse routine prostate cancer screening for men at average risk because of concerns about the high rate of overdiagnosis (detecting disease that would never have caused symptoms), along with the significant potential for serious side effects associated with prostate cancer treatment. The American Cancer Society recommends that beginning at age 50, men who are at average risk of prostate cancer and have a life expectancy of at least 10 years have a conversation with their health care provider about the benefits and limitations of PSA testing and make an informed decision about whether to be tested based on their personal values and preferences. Men at high risk of developing prostate cancer (black men or those with a close relative diagnosed with prostate cancer before the age of 65) should have this discussion beginning at age 45, and men at even higher risk (those with several close relatives diagnosed at an early age) should have this discussion beginning at age 40 *(Source: American Cancer Society, Facts & Figures 2018)*.

Lung Cancer

- The Ohio Department of Health (ODH) reports that lung and bronchus cancer was the leading cause of male cancer deaths (n=127) and female cancer deaths (n=96) in Columbiana County from 2015-2017. *(Source: Ohio Public Health Data Warehouse, 2015-2017)*.

Colon and Rectal Cancers

- One-third (33%) of Columbiana County men reported they had a colorectal cancer screening in the past five years.

- ODH indicates that colon and rectal cancer deaths accounted for 9% of all male and female cancer deaths from 2015-2017 in Columbiana County *(Source: Ohio Public Health Data Warehouse, 2015-2017)*.

- Modifiable factors that increase colon and rectal cancer risk include obesity, physical inactivity, long-term smoking, high consumption of red or processed meat, low calcium intake, moderate to heavy alcohol consumption, and very low intake of fruits and vegetables and whole-grain fiber. Hereditary and medical factors that increase risk include a personal or family history of colorectal cancer and/or polyps, certain inherited genetic conditions, a personal history of chronic inflammatory bowel disease, and type 2 diabetes. *(Source: American Cancer Society, Facts & Figures 2018)*.

The following graphs show the Columbiana County, Ohio and U.S. age-adjusted mortality rates (per 100,000 population, 2000 standard) for all types of cancer in comparison to the Healthy People 2020 objective and the percent of total cancer deaths in Columbiana County. The graphs show:

- When age differences are accounted for, Columbiana County had a higher cancer mortality rate than Ohio, the U.S., and the Healthy People 2020 target objective.

- The percentage of Columbiana County males who died from all cancers is slightly higher than the percentage of Columbiana County females who died from all cancers.
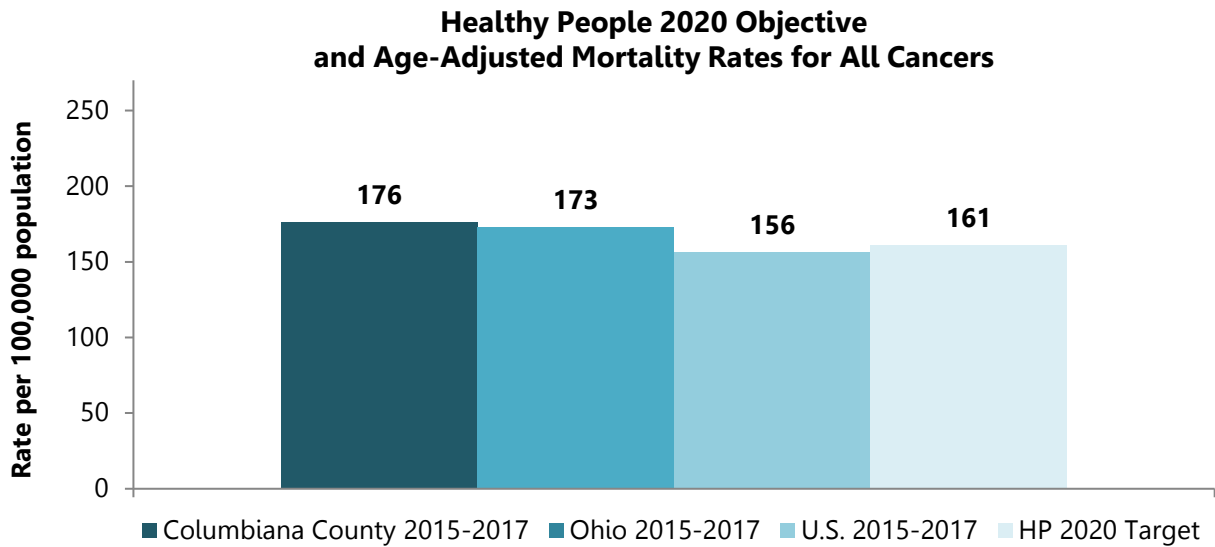
**Healthy People 2020 Objective
and Age-Adjusted Mortality Rates for All Cancers**

(Source: Ohio Public Health Data Warehouse, 2015-2017, CDC Wonder, 2015-2017, Healthy People 2020)

**Cancer As Percent of Total Deaths in Columbiana County
by Gender, 2015-2017**
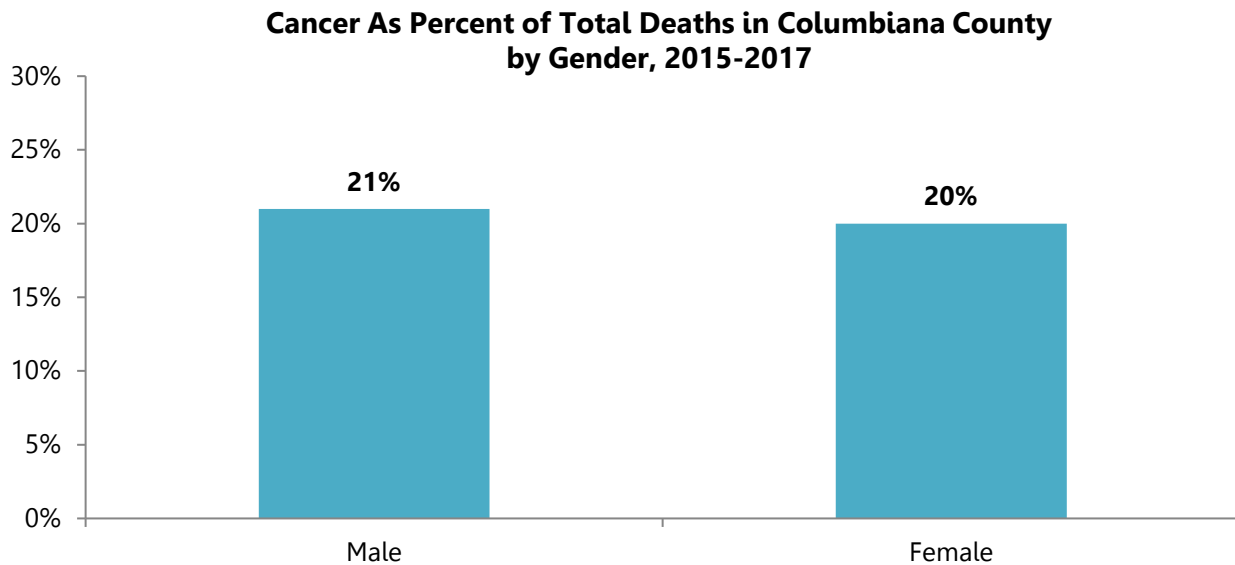
(Source: Ohio Public Health Data Warehouse, 2015-2017)

Columbiana County Incidence of Cancer, 2011-2015

Types of Cancer	Number of Cases	Percent of Total Incidence of Cancer	Age-Adjusted Rate
Lung and Bronchus	506	16%	66.7
Breast	399	13%	57.6
Colon and Rectum	335	11%	46.9
Prostate	333	11%	89.7
Other Sites/Types	251	8%	36.6
Bladder	175	6%	22.8
Melanoma of Skin	127	4%	18.8
Non-Hodgkins Lymphoma	113	4%	16
Kidney and Renal Pelvis	112	4%	15.6
Uterus	97	3%	26.9
Oral Cavity and Pharynx	85	3%	11.8
Pancreas	82	3%	10.9
Thyroid	79	3%	13.3
Leukemia	77	2%	11.4
Esophagus	49	2%	6.4
Stomach	46	1%	6.2
Ovary	44	1%	11.5
Liver and Intrahepatic Bile Duct	40	1%	5.3
Brain and Other CNS	37	1%	6
Larynx	34	1%	4.6
Multiple Myeloma	30	1%	4.1
Cervix	29	<1%	11.2
Hodgkins Lymphoma	18	<1%	3.4
Testis	13	<1%	5.2
Total	**3,111**	**100%**	**434.2**

(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 3/22/18)

Chronic Disease: Arthritis

Key Findings

Just over one-third (34%) of Columbiana County adults were ever diagnosed with some form of arthritis.

Arthritis

- More than two-fifths (42%) of Columbiana County adults were told by a doctor or other health professional that they had the following: some form of arthritis (34%), rheumatoid arthritis (5%), gout (3%), fibromyalgia (5%).

- Seventy-six percent (76%) of adults diagnosed with arthritis were overweight or obese.

- Nearly one-fourth (23%) of adults with arthritis rated their overall health as fair or poor.

The following graph shows the percentage of Columbiana County adults who were diagnosed with some form of arthritis. An example of how to interpret the information includes: 34% of adults were diagnosed with arthritis, including 69% of adults over the age of 65.
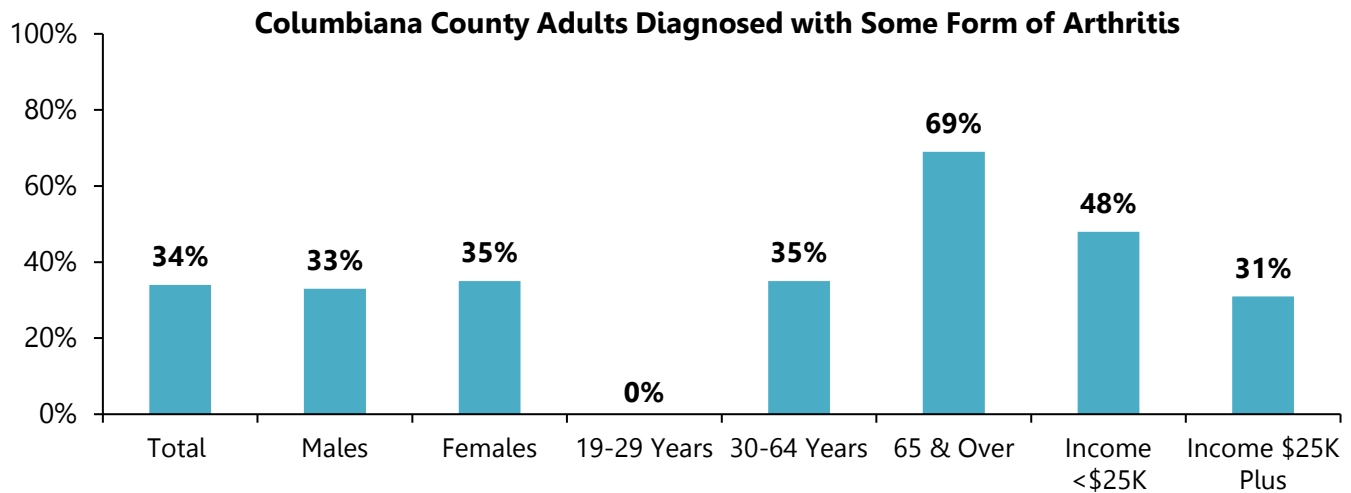
Columbiana County Adults Diagnosed with Some Form of Arthritis

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Ever diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia	34%*	29%	25%

*Only includes those diagnosed with some form of arthritis

28,181 of adults had been diagnosed with some form of arthritis in their lifetime

Chronic Disease: Asthma

Key Findings

About one-in-eight (13%) Columbiana County adults had been diagnosed with asthma.

Asthma and Other Respiratory Disease

- Thirteen percent (13%) of Columbiana County adults had been diagnosed with asthma, increasing to 23% of those with incomes less than $25,000.

- Over one-fifth (22%) of current smokers had been diagnosed with asthma, compared to 10% of non-current smokers.

- Adults with asthma were more likely to rate their overall health as fair or poor (30%) and be overweight or obese (76%).

- Chronic lower respiratory disease was the 3rd leading cause of death in Columbiana County and the 4th leading cause of death in Ohio from 2015-2017. *(Source: Ohio Public Health Data Warehouse, 2015-2017).*

10,775 of adults had been diagnosed with asthma in their lifetime

The following graph shows the percentage of Columbiana County adults who were diagnosed with asthma. An example of how to interpret the information includes: 13% of adults were diagnosed with asthma, including 23% of adults with incomes less than $25,000.
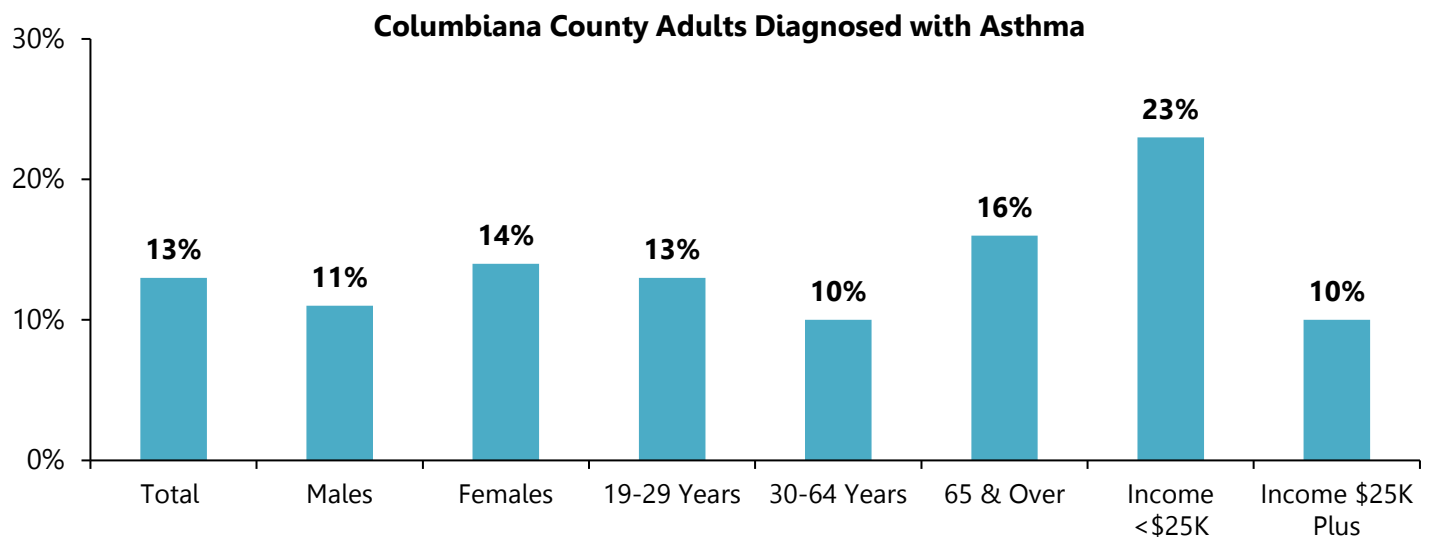
Columbiana County Adults Diagnosed with Asthma

Category	Percentage
Total	13%
Males	11%
Females	14%
19-29 Years	13%
30-64 Years	10%
65 & Over	16%
Income <$25K	23%
Income $25K Plus	10%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Ever been told they have asthma	13%	14%	14%

The following graphs demonstrate the lifetime and current prevalence rates of asthma by gender for Ohio residents.

Ohio Adult Lifetime Asthma Prevalence Rates By Gender
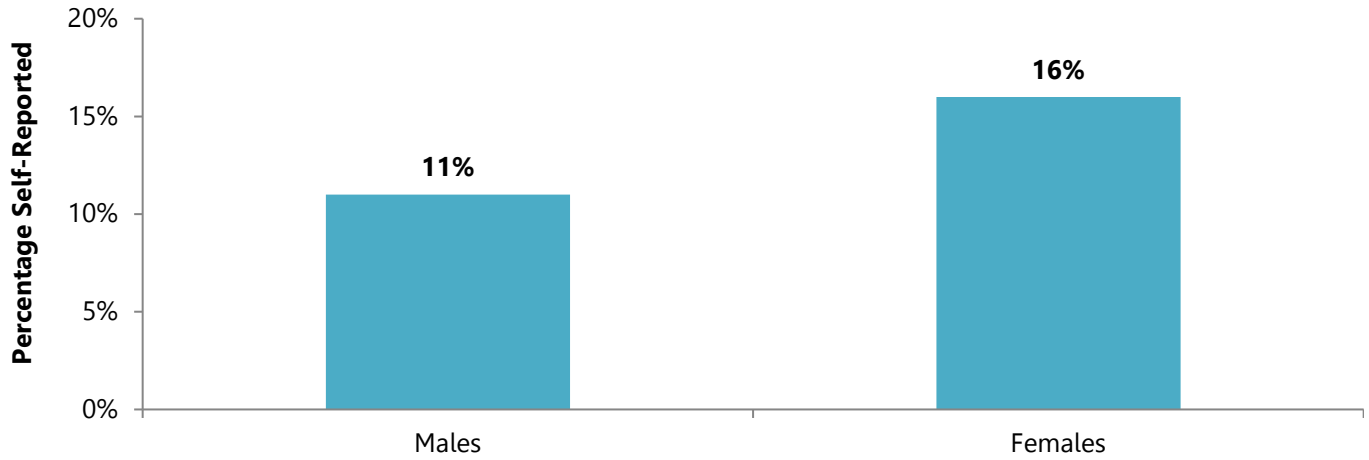
Ohio Adult Current Asthma Prevalence Rates By Gender
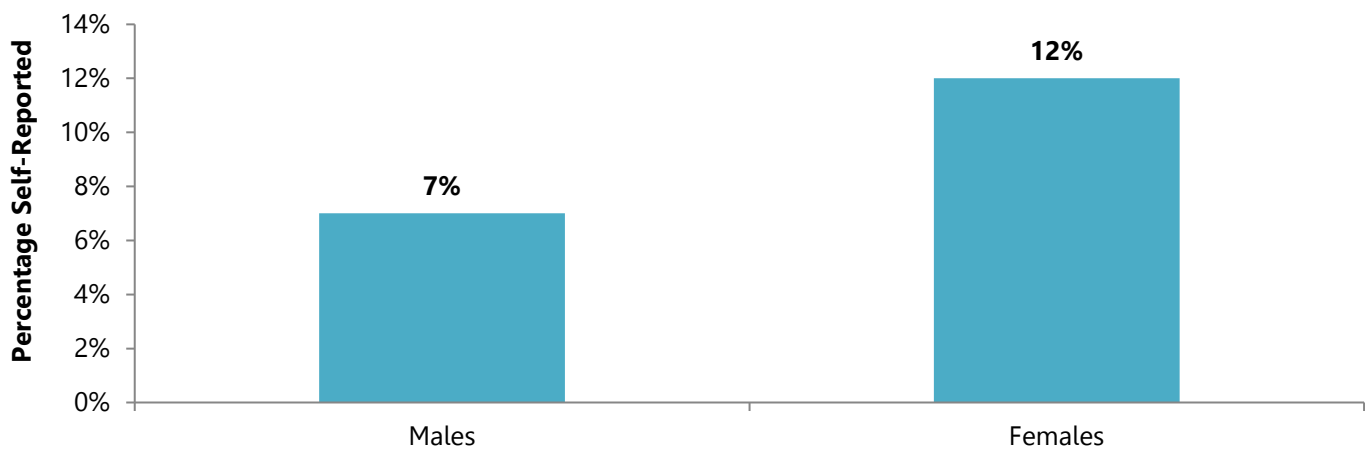
(Source: 2017 BRFSS)

Chronic Disease: Diabetes

Key Findings

Thirteen percent (13%) of Columbiana County adults had been diagnosed with diabetes. Forty-five percent (45%) of diabetics rated their health as fair or poor.

Diabetes

- Thirteen percent (13%) of Columbiana County adults had been diagnosed with diabetes, increasing to 22% of those over the age of 65 and 26% of those with incomes less than $25,000.

- One-in-eleven (9%) adults had been diagnosed with pre-diabetes or borderline diabetes.

- Over two-fifths (45%) of adults with diabetes rated their health as fair or poor.

- Columbiana County adults diagnosed with diabetes also had one or more of the following characteristics or conditions:
  — 86% were obese or overweight
  — 72% had been diagnosed with high blood cholesterol
  — 68% had been diagnosed with high blood pressure
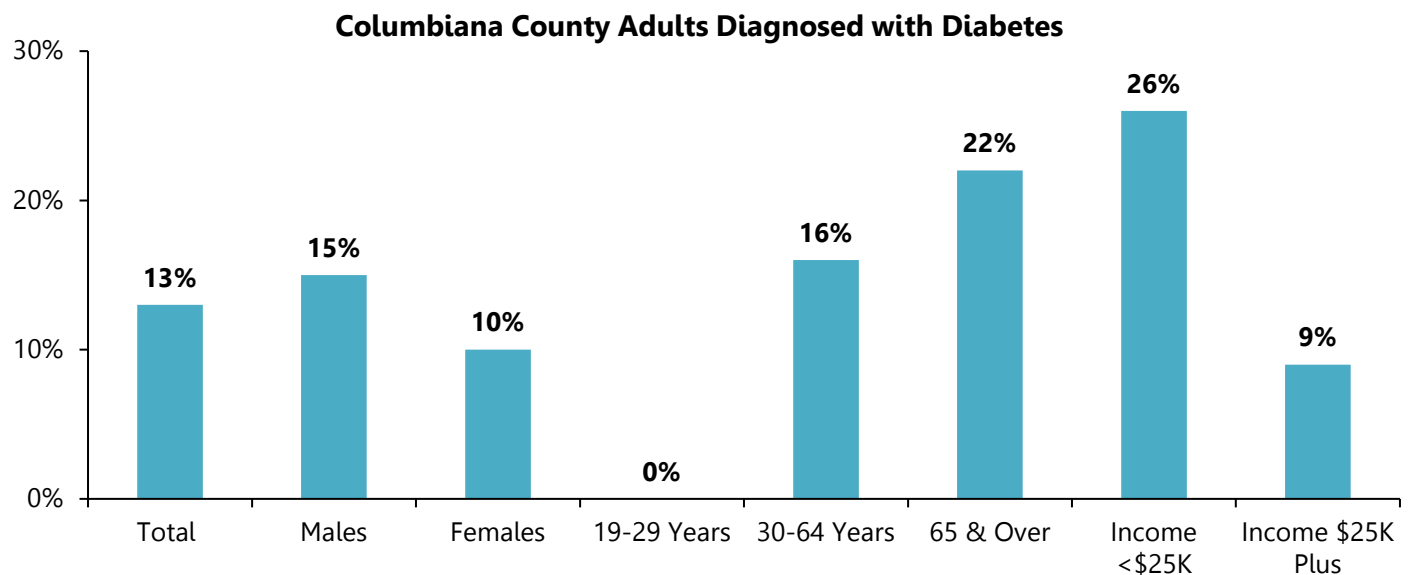
Columbiana County Adults Diagnosed with Diabetes

Category	Percent
Total	13%
Males	15%
Females	10%
19-29 Years	0%
30-64 Years	16%
65 & Over	22%
Income <$25K	26%
Income $25K Plus	9%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S. 2017
Ever been told by a doctor they have diabetes (not pregnancy-related)	13%	11%	11%
Ever been diagnosed with pre-diabetes or borderline diabetes	9%	2%	2%

The following graph shows the Columbiana County, Ohio and U.S. age-adjusted mortality rates (per 100,000 population, 2000 standard) for diabetes in comparison to the Healthy People 2020 objective. The graph shows:

- When age differences are accounted for, Columbiana County had a higher diabetes mortality rate than Ohio and the U.S. but a lower mortality rate than the Healthy People 2020 objective.

Healthy People 2020 Objective and Age-Adjusted Mortality Rates for Diabetes
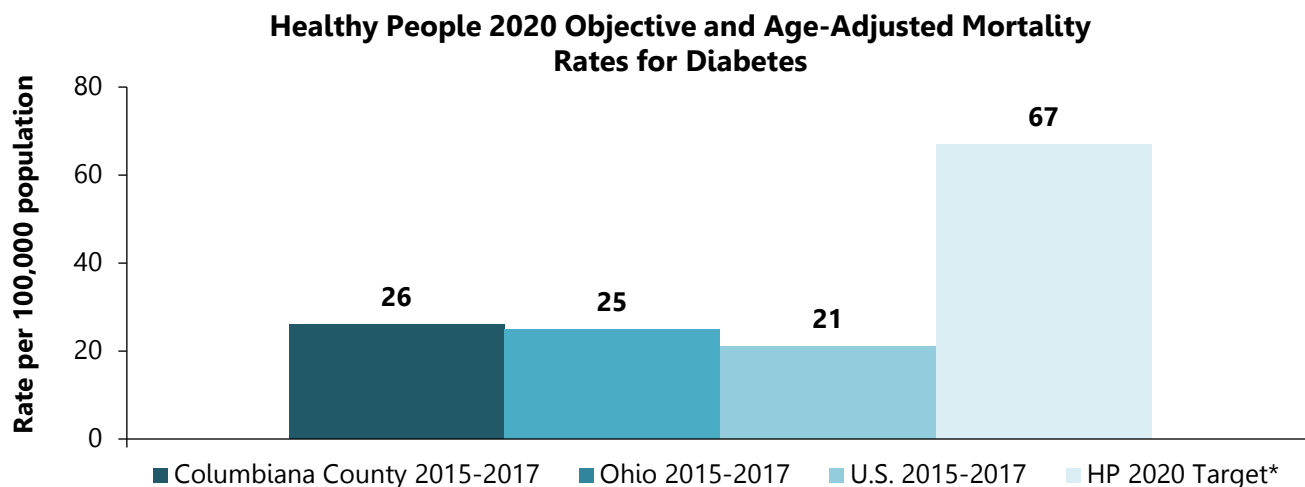
Note: The Healthy People 2020 rate is for all diabetes-related deaths
(Source: Ohio Public Health Data Warehouse, 2015-2017, CDC Wonder, 2015-2017, Healthy People 2020)

Chronic Disease: Quality of Life

Key Findings

One-quarter (25%) of Columbiana County adults were limited in some way because of a physical, mental or emotional problem. The most limiting health problems were arthritis/rheumatism (37%); back or neck problems (32%); stress, depression, anxiety, or emotional problems (27%); chronic pain (23%); and walking problems (23%).

Impairments and Health Problems

- Nearly one-fifth (18%) of Columbiana County adults had fallen in the past year. Twelve percent (12%) of adults had fallen two or more times.

- One-quarter (25%) of Columbiana County adults were limited in some way because of a physical, mental or emotional problem. Adults were limited by physical (20%), emotional (7%), and mental (5%) problems.

- Among those who were limited, the following most limiting health problems or impairments were reported:
  - Arthritis/rheumatism (37%)
  - Back or neck problems (32%)
  - Stress, depression, anxiety, or emotional problems (27%)
  - Chronic pain (23%)
  - Walking problems (23%)
  - Chronic illness (e.g., diabetes, cancer, heart and stroke related problems, high blood pressure) (20%)
  - Sleep problems (20%)
  - Fitness level (17%)
  - Lung/breathing problems (17%)
  - Hearing problems (12%)
  - Eye/vision problems (11%)
  - Fractures, bone/joint injuries (10%)
  - Mental health illness/disorder (7%)
  - Dental problems (7%)
  - Memory loss (6%)
  - Confusion (3%)
  - Drug addiction (2%)
  - Substance dependency (2%)
  - Learning disability (1%)
  - Other impairment/problem (3%)

The following graphs show the percentage of Columbiana County adults that were limited in some way and the most limiting health problems. An example of how to interpret the information includes: 25% of adults were limited in some way, including 37% of those 65 and older and 52% of those with incomes less than $25,000.

Columbiana County Adults Limited in Some Way

| Group	Percentage
Total	25%
Male	20%
Female	30%
19-29 Years	13%
30-64 Years	28%
65 & Over	37%
Income <$25K	52%
Income $25K Plus	18%
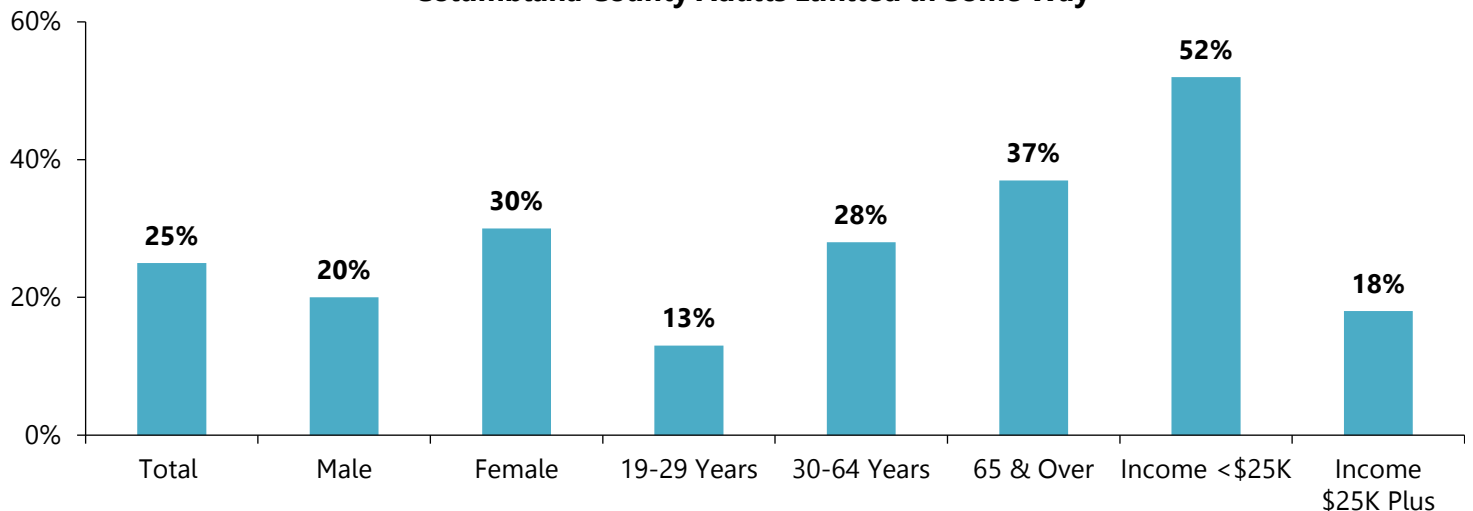
Notes: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Adult Comparisons	Columbiana County 2018	Ohio 2017	U.S 2017
Limited in some way because of physical, mental, or emotional problem	25%	21%*	21%*

*2015 BRFSS

- Columbiana County adults were responsible for providing regular care or assistance to the following:
  — Multiple children (16%)
  — An elderly parent or loved one (11%)
  — A friend, family member or spouse with a health problem (9%)
  — Grandchildren (5%)
  — An adult child (4%)
  — A friend, family member or spouse with a mental health issue (4%)
  — Children with discipline issues (2%)
  — Someone with special needs (2%)
  — A friend, family member or spouse with dementia (2%)
  — Foster children (1%)
  — Children whose parent(s) use drugs and/or are unable to care for their child(ren) (<1%)
  — Children whose parent(s) lost custody due to other reasons (<1%)

- Columbiana County adults needed the following services or equipment in the past year:
  — Eyeglasses or vision (21%)
  — Help with routine needs (everyday household chores, doing necessary business) (5%)
  — Medical supplies (5%)
  — Pain management (4%)
  — Cane (4%)
  — Hearing aids or hearing care (4%)
  — Wheelchair (3%)
  — Walker (3%)
  — Help with personal care needs (eating, bathing, dressing, getting around the house) (3%)
  — Oxygen or respiratory support (3%)
  — Mobility aids or devices (2%)
  — Durable medical equipment (e.g., Kaiser-Wells or O.E. Meyer) (1%)
  — Wheelchair ramp (1%)
  — Special bed (1%)
  — Personal emergency response system (1%)
  — Communication aides or devices (<1%)

Healthy People 2020
Arthritis, Osteoporosis, and Chronic Back Conditions (AOCBC)

Objective	Columbiana County 2018	Healthy People 2020 Target
AOCBC-2: Reduce the proportion of adults with doctor-diagnosed arthritis who experience a limitation in activity due to arthritis or joint symptoms	37%	36%

The following graph shows the most limiting health problems for Columbiana County adults.

Columbiana County Adult's Most Limiting Health Problems
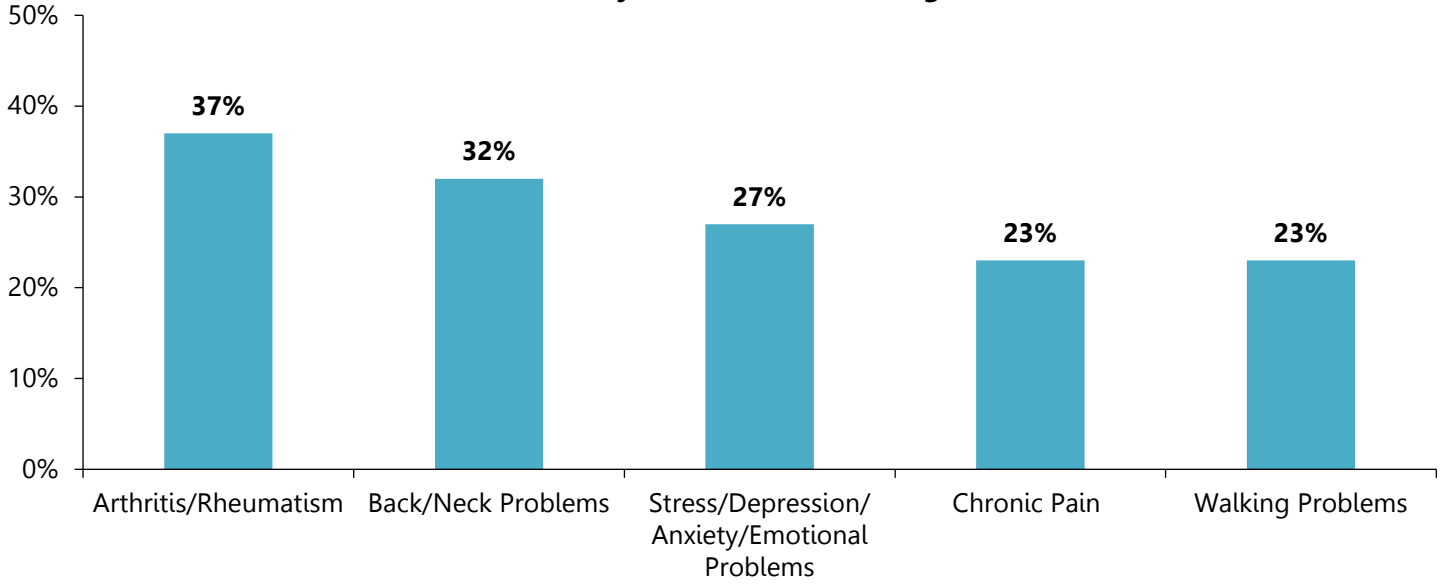
Social Conditions: Social Determinants of Health

Key Findings

Thirteen percent (13%) of Columbiana County adults had experienced four or more adverse childhood experiences (ACEs) in their lifetime. About one-in-six (16%) adults had experienced at least one issue related to hunger/food insecurity in the past year. Eight percent (8%) of adults reported they had more than transportation issue.

Economic Stability

- About one-in-six (16%) adults experienced at least one issue related to hunger/food insecurity in the past year. They experienced the following: had to choose between paying bills and buying food (9%), worried food might run out (7%), went hungry/ate less to provide more food for their family (5%), loss of income led to food insecurity issues (4%), their food assistance was cut (4%), did not eat because they did not have enough money for food (3%).

- Seven percent (7%) of adults experienced more than one issue related to hunger/food insecurity in the past year.

- About one-in-four (26%) adults with children experienced at least one issue related to hunger/food insecurity, compared to 15% of those who did not have children living in their household.

- Eight percent (8%) of Columbiana County adults reported needing help meeting their general daily needs such as food, clothing, shelter, or paying for utility bills in the past 30 days.

- Forty-seven percent (47%) of adults reported less than thirty percent of their household income went to their housing. Twenty-four percent (24%) said thirty to fifty percent, and 16% said fifty percent or more of their income went to housing. Thirteen percent (13%) of adults did not know what percent of their income went to their housing.

- Eighty-two percent (82%) of adults reported they owned their home, 8% said they rented, and 10% of adults reported they had another arrangement.

- Columbiana County adults received assistance for the following in the past year:
  - Medicare (12%)
  - Food (11%)
  - Health care (10%)
  - Dental care (9%)
  - Prescription assistance (8%)
  - Mental illnesses including depression (6%)
  - Utilities (5%)
  - Home repair (4%)
  - Employment (3%)
  - Affordable child care (3%)
  - Legal aid services (2%)
  - Clothing (2%)
  - Transportation (2%)
  - Rent/mortgage (2%)
  - Drug or alcohol addiction (2%)
  - Diapers (1%)
  - Free tax preparation (1%)
  - Unplanned pregnancy (1%)
  - Credit counseling (<1%)
  - Septic/well repairs (<1%)

- The median household income in Columbiana County was $43,123. The U.S. Census Bureau reports median income levels of $54,077 for Ohio and $60,336 for the U.S. *(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, 2017).*
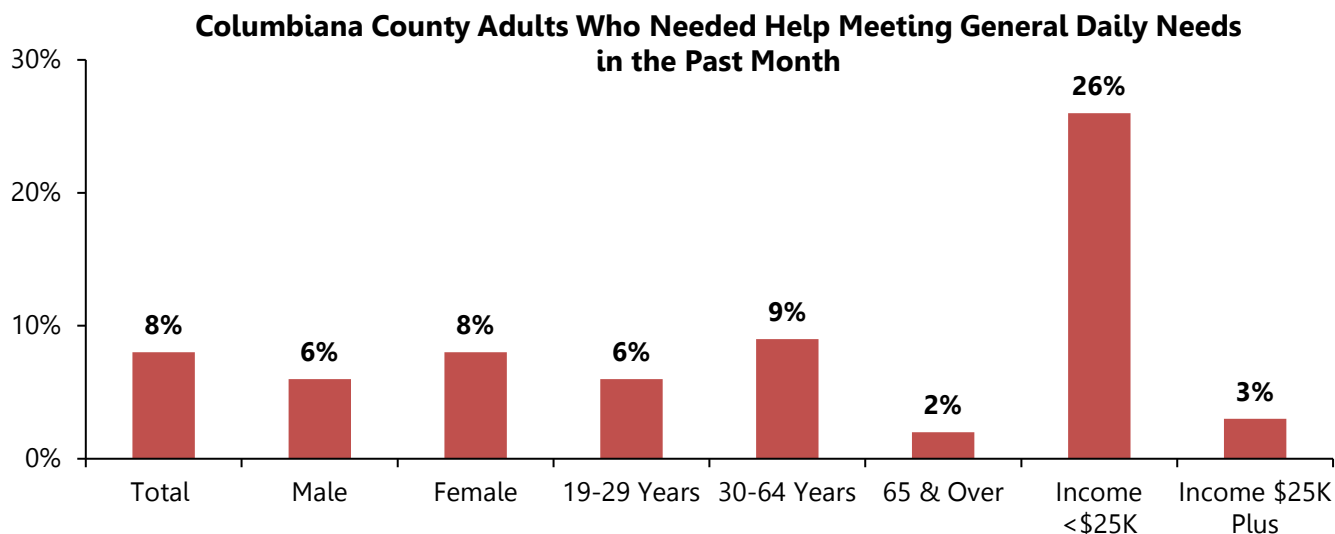
- Fifteen percent (15%) of all Columbiana County residents were living in poverty, and 24% of children and youth ages 0-17 were living in poverty *(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, 2017).*

- The unemployment rate for Columbiana County was 5.4 as of December 2018 *(Source: Ohio Department of Job and Family Services, Office of Workforce Development, Bureau of Labor Market Information).*

- There were 46,821 housing units. The owner-occupied housing unit rate was 73.4%. Rent in Columbiana County cost an average of $639 per month *(Source: U.S. Census Bureau, American Community Survey, 2017).*

The following graph shows the percentage of Columbiana County adults who needed help meeting general daily needs such as food, clothing, shelter or paying utilities bills in the past 30 days. An example of how to interpret the information on the graph includes: 8% of all adults needed help meeting their general daily needs, including 26% of those with incomes less than $25,000.

Columbiana County Adults Who Needed Help Meeting General Daily Needs in the Past Month

Category	Percentage
Total	8%
Male	6%
Female	8%
19-29 Years	6%
30-64 Years	9%
65 & Over	2%
Income <$25K	26%
Income $25K Plus	3%

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Education

- Eighty-seven percent (87%) of Columbiana County adults 25 years and over had a high school diploma or higher *(Source: U.S. Census Bureau, American Community Survey, 2017)*.

- Eleven percent (11%) of Columbiana County adults 25 years and over had at least a bachelor's degree *(Source: U.S. Census Bureau, American Community Survey, 2017)*.

Health and Health Care

- Ten percent (10%) of adults were uninsured, increasing to 12% of those with incomes less than $25,000 and 38% of those under the age of 30.

- Seventy-three percent (73%) of Columbiana County adults visited a doctor for a routine checkup in the past year, increasing to 91% of those over the age of 65.

- See the Health Perceptions, Health Care Coverage, and Health Care Access sections for further health and health care information for Columbiana County adults.

Columbiana County adults and their loved ones needed the following assistance in the past year:

Type of Assistance	Needed Assistance	Received Assistance	Did Not Know Where to Look	Did not qualify for assistance
Dental care	28%	9%	4%	16%
Food	26%	11%	2%	13%
Health Care	26%	10%	2%	14%
Legal aid services	26%	2%	2%	12%
Medicare	26%	12%	2%	12%
Mental illness issues including depression	23%	6%	4%	12%
Prescription assistance	22%	8%	1%	13%
Utilities	22%	5%	3%	14%
Home repair	21%	4%	5%	14%
Affordable child care	20%	3%	1%	17%
Clothing	18%	2%	3%	14%
Transportation	18%	2%	3%	13%
Credit counseling	17%	<1%	3%	14%
Drug or alcohol addiction	17%	2%	3%	13%
Rent/mortgage	17%	2%	2%	13%
Diapers	16%	1%	1%	14%
Employment	16%	3%	2%	11%
Septic/well repairs	16%	<1%	4%	12%
Free tax preparation	14%	1%	2%	12%
Post incarceration transition issues	14%	0%	1%	13%
Unplanned pregnancy	14%	1%	1%	12%
Gambling addiction	12%	0%	1%	12%

The map below shows the variation in poverty rates across Ohio during the 2013-17 period.

- The 2013 to 2017 American Community Survey 5-year estimates that approximately 1,683,890 Ohio residents, or 14.9% of the population, were in poverty.

- From 2013 to 2017, 15,538 or 15.4% of Columbiana County residents were in poverty.

Estimated Poverty Rates in Ohio by County (2013-2017)
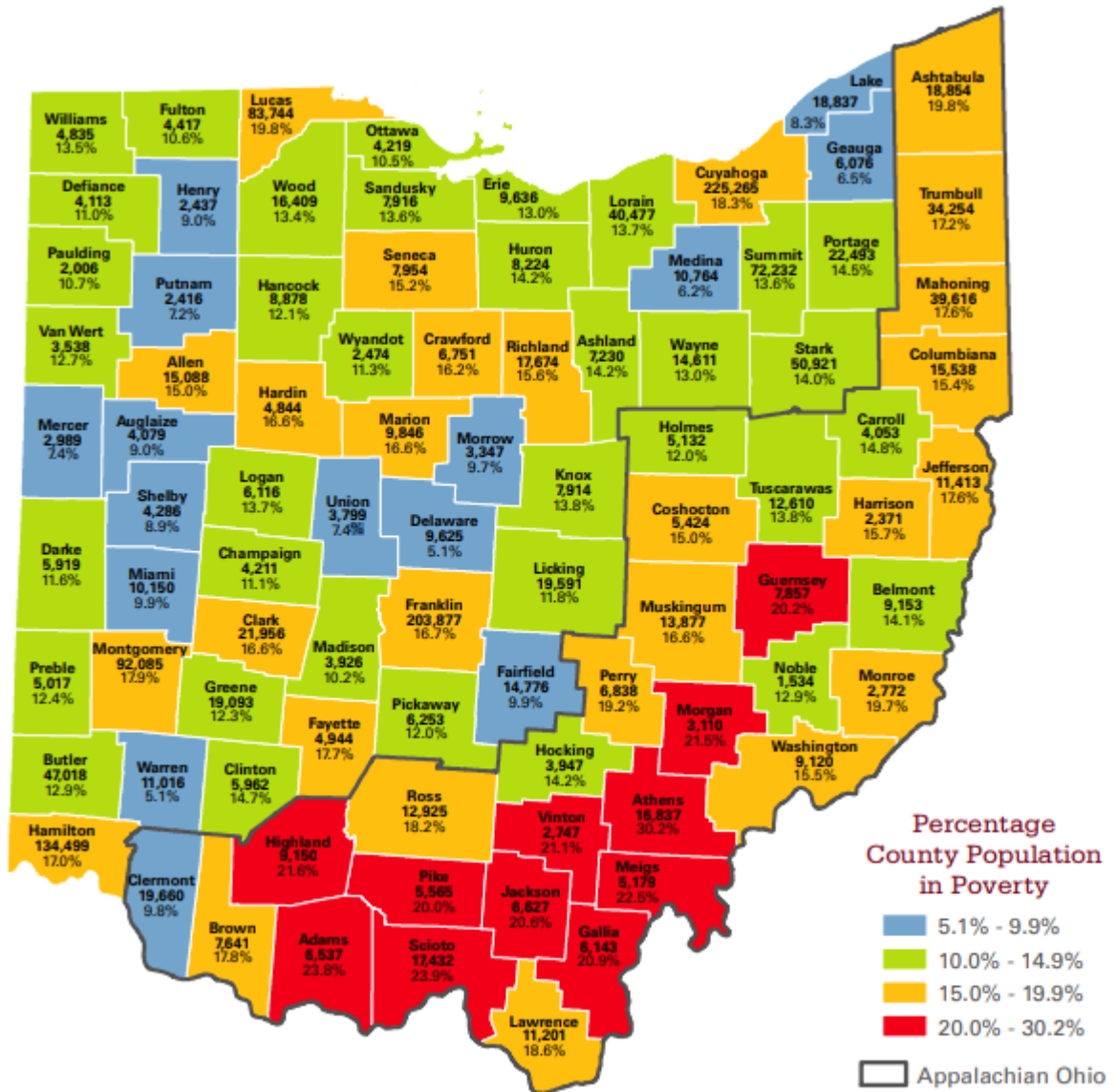
(Source: 2013-2017 American Community Survey 5-year estimates, as compiled by Ohio Development Services Agency, Office of Research, Ohio Poverty Report, February 2019)

Social and Community Context

- Columbiana County adults reported that they or a family member had the following literacy needs: learning computer skills (8%); reading and understanding instructions (3%); reading maps, signs, food ingredient labels, etc. (3%); and completing a job application (2%).

- Thirteen percent (13%) of Columbiana County adults had the following transportation issues: no car (5%), suspended/no driver's license (4%), could not afford gas (4%), no public transportation available or accessible (3%), did not feel safe to drive (2%), no car insurance (2%), limited public transportation available or accessible (1%), disabled (2%) and other car issues/expenses (4%).

- Eight percent (8%) of adults reported they had more than transportation issue.

- Adults reported that they engaged in some form of gambling at the following frequencies: daily (1%), weekly (4%), every few weeks (6%), monthly (2%), every few months (9%), and once or twice a year (29%). Forty-nine percent (49%) of adults reported they never engaged in gambling.

- Columbiana County adults experienced the following in the past 12 months:
  — A close family member went to the hospital (42%)
  — Death of a family member or close friend (33%)
  — Had bills they could not pay (13%)
  — A decline in their own health (11%)
  — They were a caregiver (8%)
  — Someone in their household lost their job/had their hours reduced at work (8%)
 — Someone close to them had a problem with drinking or drugs (8%)
  — Moved to a new address (7%)
  — Household income was cut by 50% (5%)
  — Were threatened or abused by someone physically, emotionally, sexually, or verbally (5%)
  — Had someone homeless living with them or sleeping on their couch (3%)
  — Became separated or divorced (2%)
  — Their family was at risk of losing their home (2%)
  — Knew someone who lived in a hotel (1%)
  — Witnessed someone in their family being hit or slapped (1%)
  — Their child was threatened or abused by someone physically, emotionally, sexually, or verbally (1%)
  — Were homeless (1%)

- Columbiana County adults experienced the following adverse childhood experiences (ACEs):
  — Their parents became separated or were divorced (24%)
  — Lived with someone who was a problem drinker or alcoholic (21%)
  — A parent or adult in their home swore at, insulted, or put them down (17%)
  — Lived with someone who was depressed, mentally ill, or suicidal (11%)
  — Someone at least 5 years older than them or an adult touched them sexually (11%)
  — A parent or adult in their home hit, beat, kicked, or physically hurt them (8%)
  — Their parents or adults in their home slapped, hit, kicked, punched, or beat each other up (7%)
  — Lived with someone who used illegal street drugs, or who abused prescription medications (6%)
  — Their family did not look out for each other, feel close to each other, or support each other (5%)
  — Someone at least 5 years older than them or an adult tried to make them touch them sexually (5%)
  — Their parents were not married (4%)
  — Lived with someone who served time or was sentenced to serve time in prison, jail or correctional facility (4%)
  — Someone at least 5 years older than them or an adult forced them to have sex (2%)
  — They didn't have enough to eat, had to wear dirty clothing, and had no one to protect them (1%)

- Thirteen percent (13%) of Columbiana County adults had four or more ACEs in their lifetime, increasing to 20% of females.

The following graph shows the percentage of Columbiana County adults who had experienced four or more adverse child experiences (ACEs) in their lifetime. An example of how to interpret the information on the graph includes: 13% of all adults had experienced four or more ACEs in their lifetime, including 20% of females and 18% of those with incomes less than $25,000.
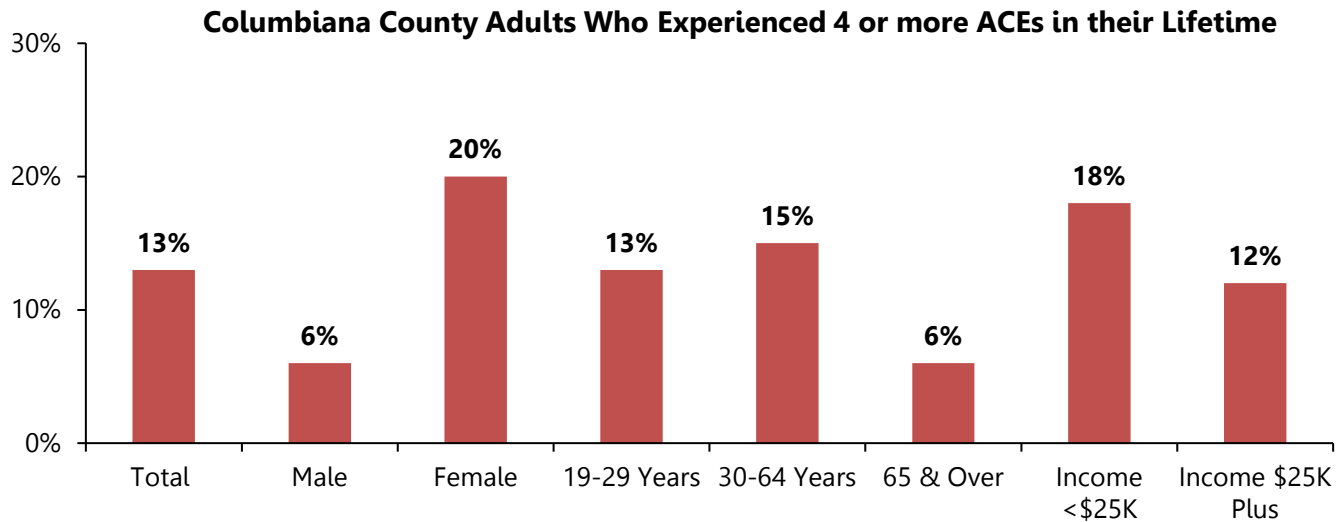
Columbiana County Adults Who Experienced 4 or more ACEs in their Lifetime

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Behaviors of Columbiana County Adults
Experienced 4 or More ACEs vs. Did Not Experience Any ACEs

Adult Behaviors	Experienced 4 or More ACEs	Did Not Experience Any ACEs
Classified as overweight or obese by BMI	77%	76%
Current drinker (had at least one alcoholic beverage in the past month)	70%	59%
Current smoker (currently smoke on some or all days)	45%	12%
Contemplated suicide in the past 12 months	15%	2%
Medication misuse in the past 6 months	11%	7%
Used recreational drugs in the past 6 months	4%	2%

Neighborhood and Built Environment

- Nearly three-fifths (58%) of Columbiana County adults kept a firearm in or around their home. Eleven percent (11%) of adults reported that their firearms were unlocked and loaded.

The following graph shows the percentage of Columbiana County adults who had a firearm in or around the home. Examples of how to interpret the information shown on the graph include: 58% of all Columbiana County adults had a firearm in or around the home, including 68% of males and 64% of those with incomes more than $25,000.
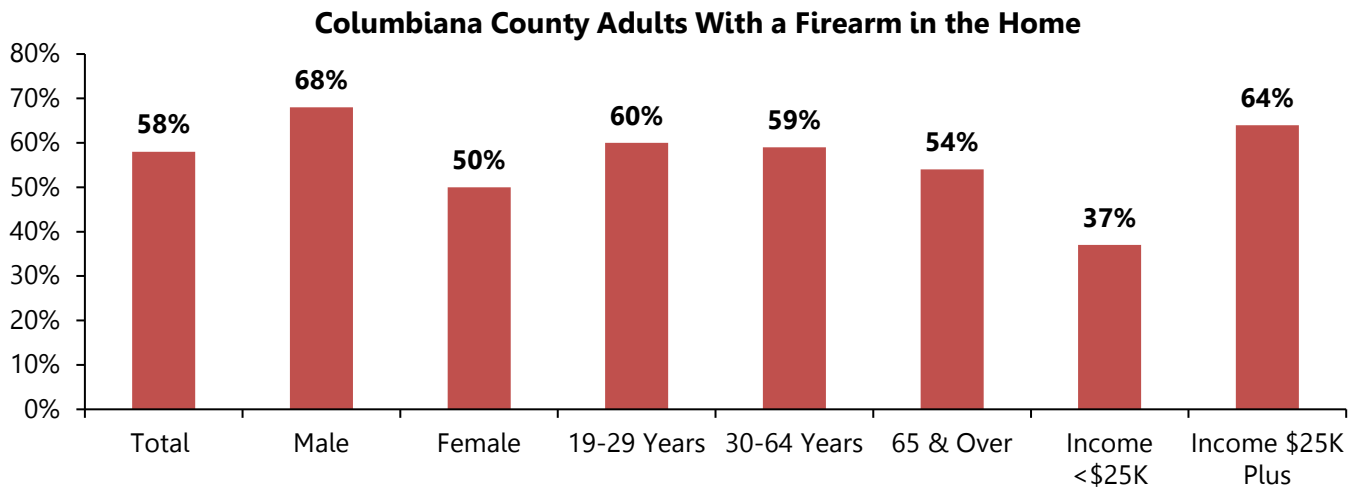
Columbiana County Adults With a Firearm in the Home

Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

- Just over one-fifth (22%) of Columbiana County adults reported that their neighborhood was extremely safe, 61% reported it to be quite safe, 12% reported it to be slightly safe, and 2% reported it to be not safe at all. Three percent (3%) reported that they did not know how safe from crime their neighborhood was.

- Columbiana County adults reported doing the following while driving:
  — Eating (37%)
  — Talking on hands-free cell phone (30%)
  — Talking on hand-held cell phone (29%)
  — Texting (12%)
  — Not wearing a seatbelt (11%)
  — Using internet on their cell phone (8%)
  — Being under the influence of alcohol (2%)
  — Being under the influence of prescription drugs (2%)
  — Reading (1%)
  — Being under the influence of recreational drugs (<1%)
  — Other activities (such as applying makeup, shaving, etc.) (1%)

- Adults reported regularly using the following to reduce their risk of injury: seat belts (88%); smoke detectors (83%); sunscreen (56%); carbon monoxide detectors (53%); safety equipment at work (28%); car seat or booster seat for a child in the household (24%); safety equipment at home (24%); lifejackets (18%); bike helmets (9%); and motorcycle, ATV, or snowmobile helmets (9%).

- Adults supported the following community improvement initiatives:
  — More locally grown foods or farmer's markets (66%)
  — Safe roadways (56%)
  — Local agencies partnering with grocery stores to provide healthier low-cost food items (49%)
  — Neighborhood safety (44%)
  — Bike/walking trail accessibility or connectivity (38%)
  — New and/or updated parks (37%)
  — New and/or updated recreation centers (33%)
  — Community gardens (32%)
  — Sidewalk accessibility (30%)

Veterans' Affairs

- Half (50%) of Columbiana County adults reported that someone in their immediate family had served in the military in the past 10 to 20 years.

- As a result of their military service, adults reported their immediate family members were affected by the following:
  — Post-traumatic stress disorder (PTSD) (10%)
  — Access to medical care at a VA facility (8%)
  — Problems getting VA benefits (6%)
  — Major health problems due to injury (5%)
  — Problems getting information on VA eligibility and applying (3%)
  — Marital problems (2%)
  — Access to medical care at a non-VA facility (2%)
  — Access to mental health treatment (1%)
  — Access to substance/drug abuse treatment (1%)
  — Cannot find or keep a job (1%)
  — Housing issues (1%)
  — Substance abuse/drug abuse/overdose (1%)

- Eighty-three percent (83%) of adults reported their immediate family members did not have any problems listed.

Youth Risk Factors and Protective Assets

- In 2018, over 2,300 Columbiana County adolescents enrolled in grades 7, 9 and 10 participated in the *Search Institute's Profiles of Student Life: Attitudes and Behaviors' Survey* to assess the impact of 40 identified internal and external assets which measure thriving indicators and risk-taking behaviors.
- Research has shown that the more assets a young person has, the less likely he/she will engage in harmful behaviors and be more likely to do well in school and become a productive adult. (See Appendix VIII, pages 119-132, for more on the Search Institute and Ohio Youth Risk Behaviors Survey results.)

- According to the Developmental Assets 2018 Youth Survey Report for 10 of 11 school districts in Columbiana County, risk factors for youth include:
  — 12% of youth have shoplifted in the past 12 months, 10% have vandalized property and 14% have been in trouble with the police
  — 29% of youth have hit someone once or more in the last 12 months, 15% have physically hurt someone once or more, 22% have carried a weapon for protection once or more, and 28% have threatened physical harm to someone once or more
  — 26% of youth have been victims of violence in the last 2 years, 29% have been physically harmed by someone in their family or living with them

(Source: Columbiana County Developmental Assets 2018 Survey Report)

Social Conditions: Environmental Conditions

Key Findings

The top three environmental health issues for Columbiana County adults were insects (13%), mold (9%), and rodents (8%). Twenty-one percent (21%) of adults did not know the last time their water source had been tested.

Environmental Health

- Fifty-nine percent (59%) of Columbiana County adults had a private water source for drinking water. Of those who had a private water source, 14% had it tested within the past year, and 27% had never had it tested. Over one-fifth (21%) of adults did not know the last time their water source had been tested.

- Three percent (3%) of adults reported that they had ever been treated for, suspected of, or diagnosed with Lyme disease in their lifetime and 2% reported their child had been treated for, suspected of or diagnosed with Lyme disease.

- Columbiana County adults thought the following threatened their health in the past year:
  - Insects (mosquitos, ticks, flies) (13%)
  - Mold (9%)
  - Rodents (mice or rats) (8%)
  - Moisture issues (7%)
  - Air quality (5%)
  - Unsafe water supply/wells (4%)
  - Temperature regulation (heating and air conditioning) (4%)
  - Agricultural chemicals (3%)
  - Lyme Disease (3%)
  - Fracking (3%)
  - Bed bugs (2%)
  - Chemicals found in household products (2%)
  - Plumbing problems (2%)
  - Cockroaches (1%)
  - Lice (1%)
  - Safety hazards (structural problems) (1%)
  - Radon (1%)
  - Asbestos (1%)
  - Sanitation issues (1%)
  - Lead paint (<1%)
  - Sewage/waste water problems (<1%)

Social Conditions: Parenting

Key Findings

Seventy-four percent (74%) of parents put their child to sleep on their back as an infant. About nine-out-of-ten (89%) parents reported their child had received all recommended immunizations.

Parenting

- Parents put their child to sleep in the following places as an infant:
  - Crib/bassinette (no bumper, blankets, stuffed animals) (59%)
  - Crib/bassinette (with bumper, blankets, stuffed animals) (43%)
  - Pack n' play (37%)
  - Car seat (34%)
  - Swing (30%)
  - In bed with parent or another person (28%)
  - Couch or chair (9%)
  - Floor (8%)

- When asked how parents put their child to sleep as an infant, 74% said on their back, 15% said on their side, 12% said in bed with themselves or another person, and 14% said on their stomach.

- Mothers breastfed their child for 2 weeks for less (6%), 3 to 6 weeks (18%), 7 weeks to 3 months (6%), 4 to 6 months (18%), 6 to 9 months (6%), more than 9 months (16%), still breastfeeding (8%), and never breastfed (24%).

- Eighty-nine percent (89%) of parents reported their child had received all recommended immunization shots. Reasons for not receiving all recommended immunization shots included the following: fear of immunizations (4%), did not think immunization was necessary (4%), religious beliefs (4%), fear of adverse side effects (3%), misconceptions about immunizations (3%), pre-existing health issues prevent them from using (3%), and other reasons (5%).

- Columbiana County children spent the following amounts of time unsupervised after school on the average school day: no unsupervised time (66%), less than one hour (15%), 1 to 2 hours (14%), 3 to 4 hours (1%), and more than 4 hours (4%).

Appendix I: Health Assessment Information Sources

Source	Data Used	Website
Behavioral Risk Factor Surveillance System, National Center for Chronic Disease Prevention and Health Promotion, Behavioral Surveillance Branch, Centers for Disease Control	• 2009 – 2017 Adult Ohio and U.S. Correlating Statistics	www.cdc.gov
CDC Wonder, About Underlying Cause of Death, 2009-2017	• U.S. comparison statistics	https://wonder.cdc.gov/
County Health Rankings, 2018	• Food Environment Index	http://countyhealthrankings.org
Healthy People 2020: U.S. Department of Health & Human Services	• All Healthy People 2020 Target Data Points	www.healthypeople.gov/2020/topicsobjectives2020
Ohio Department of Health	• 2017 Ohio Drug Overdose Data: General Finding	https://odh.ohio.gov/wps/wcm/connect/gov/5deb684e-4667-4836-862b-cb5eb59acbd3/2017_OhioDrugOverdoseReport.pdf
Ohio Department of Health, Public Health Data Warehouse	• Leading Causes of Death, 2015-2017 • Age-Adjusted Mortality Rates, 2015-2017 • Incidence of Cancer • Prescription Opiate Related Drug Overdose • Unintentional Drug Overdose Deaths • Suicide Deaths	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality
Ohio Department of Health, STD Surveillance	• Chlamydia Annualized Disease Rates and Cases • Gonorrhea Annualized Disease Rates and Cases	https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/std-surveillance/data-and-statistics/sexually-transmitted-diseases-data-and-statistics
Ohio Department of Public Safety	• 2017 Columbiana County and Ohio Crash Facts	https://services.dps.ohio.gov/CrashOnline/CrashStatistics/Home
Ohio Development Services Agency	• Ohio Poverty Report, February 2018	www.development.ohio.gov/files/research/P7005.pdf
Ohio Automated Rx Reporting System (OARRS), 2017-2018	• Opiate and Pain Reliever Doses Per Capita • Opiate and Pain Reliever Doses Per Patient • Ohio Automated Rx Reporting System (OARRS)	www.ohiopmp.gov/County.aspx

Appendix II: Acronyms and Terms

AHS   **A**ccess to **H**ealth **S**ervices, Topic of Healthy People 2020 objectives

Adult   Defined as 19 years of age and older.

Age-Adjusted   Death rate per 100,000 adjusted for the age
Mortality Rates   distribution of the population.

Adult Binge Drinking   Consumption of five alcoholic beverages or more (for males) or four or more alcoholic beverages (for females) on one occasion.

AOCBC   **A**rthritis, **O**steoporosis, and **C**hronic **B**ack **C**onditions

BMI   **B**ody **M**ass **I**ndex is defined as the contrasting measurement/relationship of weight to height.

BRFSS   **B**ehavior **R**isk **F**actor **S**urveillance **S**ystem, an adult survey conducted by the CDC.

CDC   **C**enters for **D**isease **C**ontrol and **P**revention.

Current Smoker   Individual who has smoked at least 100 cigarettes in their lifetime and now smokes daily or on some days.

HCNO   **H**ospital **C**ouncil of **N**orthwest **O**hio

HDS   **H**eart **D**isease and **S**troke, Topic of Healthy People 2020 objectives

HP 2020   **H**ealthy **P**eople **2020**, a comprehensive set of health objectives published by the Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services.

Health Indicator   A measure of the health of people in a community, such as cancer mortality rates, rates of obesity, or incidence of cigarette smoking.

High Blood Cholesterol 240 mg/dL and above

High Blood Pressure   Systolic $\geq$140 and Diastolic $\geq$ 90

IID   **I**mmunizations and **I**nfectious **D**iseases, Topic of Healthy People 2020 objectives

N/A   Data is not available.

ODH   **O**hio **D**epartment of **H**ealth

OSHP   **O**hio **S**tate **H**ighway **P**atrol

Race/Ethnicity   **Census 2010:** U.S. Census data consider race and Hispanic origin separately. Census 2010 adhered to the standards of the Office of Management and Budget (OMB), which define Hispanic or Latino as "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race." Data are presented as "Hispanic or Latino" and "Not Hispanic or Latino." Census 2010 reported five race categories including: White, Black or African American, American Indian & Alaska Native, Asian, Native Hawaiian and Other Pacific Islander. Data reported, "White alone" or "Black alone", means the respondents reported only one race.

Appendix III: Methods for Weighting the 2018 Columbiana County Health Assessment Data

Data from sample surveys have the potential for bias if there are different rates of response for different segments of the population. In other words, some subgroups of the population may be more represented in the completed surveys than they are in the population from which those surveys are sampled. If a sample has 25% of its respondents being male and 75% being female, then the sample is biased towards the views of females (if females respond differently than males). This same phenomenon holds true for any possible characteristic that may alter how an individual responds to the survey items.

In some cases, the procedures of the survey methods may purposefully over-sample a segment of the population in order to gain an appropriate number of responses from that subgroup for appropriate data analysis when investigating them separately (this is often done for minority groups). Whether the over-sampling is done inadvertently or purposefully, the data needs to be weighted so that the proportioned characteristics of the sample accurately reflect the proportioned characteristics of the population. In the 2018 Columbiana County survey, a weighting was applied prior to the analysis that weighted the survey respondents to reflect the actual distribution of Columbiana County based on age, sex, race, and income.

Weightings were created for each category within sex (male, female), race (White, Non-White), Age (8 different age categories), and income (7 different income categories). The numerical value of the weight for each category was calculated by taking the percent of Columbiana County within the specific category and dividing that by the percent of the sample within that same specific category. Using sex as an example, the following represents the data from the 2018 Columbiana County Survey and the 2017 Census estimates.

2018 Columbiana Survey			2017 Census		Weight
Sex	Number	Percent	Number	Percent	
Male	185	52.85714	52,586	50.28111	0.951264
Female	165	47.14286	51,998	49.71889	1.054643

In this example, it shows that there was a slightly larger portion of males in the sample compared to the actual portion in Columbiana County. The weighting for males was calculated by taking the percent of males in Columbiana County (based on Census information) (50.28111%) and dividing that by the percent found in the 2018 Columbiana County sample (52.85714%) [50.28111/52.85714= weighting of 0.951264 for males]. The same was done for females [49.71889/47.14286% = weighting of 1.054643 for females]. Thus males' responses are weighted less by a factor of 0.951264 and females' responses weighted greater by a factor of 1.054643.

This same thing was done for each of the 19 specific categories as described above. For example, a respondent who was female, White, in the age category 35-44, and with a household income in the $50-$75k category would have an individual weighting of 2.94805 [1.05464 (weight for females) x 0.97898 (weight for White) x 2.64482 (weight for age 35-44) x 1.07959 (weight for income $50-$75k)]. Thus, each individual in the 2018 Columbiana County sample has their own individual weighting based on their combination of age, race, sex, and income. See next page for each specific weighting and the numbers from which they were calculated.

Multiple sets of weightings were created and used in the statistical software package (SPSS 24.0) when calculating frequencies. For analyses done for the entire sample and analyses done based on subgroups other than age, race, sex, or income – the weightings that were calculated based on the product of the four weighting variables (age, race, sex, income) for each individual. When analyses were done comparing groups within one of the four weighting variables (e.g., smoking status by race/ethnicity), that specific variable was not used in the weighting score that was applied in the software package. In the example smoking status by race, the weighting score that was applied during analysis included only age, sex, and income. Thus a total of eight weighting scores for each individual were created and applied depending on the analysis conducted. The weight categories were as follows:

1. **Total weight** (product of 4 weights) – for all analyses that did not separate age, race, sex, or income.
2. **Weight without sex** (product of age, race, and income weights) – used when analyzing by sex.
3. **Weight without age** (product of sex, race, and income weights) – used when analyzing by age.
4. **Weight without race** (product of age, sex, and income weights) – used when analyzing by race.
5. **Weight without income** (product of age, race, and sex weights) – used when analyzing by income.
6. **Weight without sex or age** (product of race and income weights) – used when analyzing by sex and age.
7. **Weight without sex or race** (product of age and income weights) – used when analyzing by sex and race.
8. **Weight without sex or income** (product of age and race weights) – used when analyzing by sex and income.

Category	Columbiana County Sample	%	2017 Census	%		Weighting Value
Sex:						
Male	185	52.85714	52,586	50.28111		0.95126
Female	165	47.14286	51,998	49.71889		1.05464
Age:						
20 to 34 years	24	6.87679	17,216	21.33651		3.10268
35 to 44 years	21	6.01719	12,841	15.91439		2.64482
45 to 54 years	57	16.33238	14,684	18.19849		1.11426
55 to 59 years	41	11.74785	8,305	10.29273		0.87614
60 to 64 years	54	15.47278	7,938	9.83789		0.63582
65 to 74 years	90	25.78797	10,997	13.62904		0.52850
75 to 84 years	48	13.75358	5,949	7.37284		0.53607
85+ years	14	4.01146	2,758	3.41810		0.85208
Race:						
White	360	96.25668	98,553	94.23334		0.97898
Non-White	14	3.74332	6,031	5.76666		1.54052
Household Income:						
Less than $25,000	98	28.82353	10,836	26.05935		0.90410
$25,000 to $34,999	48	14.11765	5,146	12.37555		0.87660
$35,000 to $49,999	48	14.11765	6,676	16.05502		1.13723
$50,000 to $74,999	60	17.64706	7,922	19.05151		1.07959
$75,000 to $99,999	47	13.82353	5,041	12.12303		0.87699
$100,000 to $149,999	24	7.05882	4,076	9.80232		1.38866
$150,000 or more	15	4.41176	1,885	4.53321		1.02753
Note: The weighting ratios are calculated by taking the ratio of the proportion of the population of Columbiana County in each subcategory by the proportion of the sample in the Columbiana County survey for that same category. ***Columbiana County population figures taken from the 2017 Census estimates.**						

Appendix IV: Columbiana County Sample Demographic Profile*

Adult Variable	2018 Columbiana County Adult Survey Sample	Columbiana County Census 2017 (1-year estimate)	Ohio Census 2017
Age			
20-29	13.2%	10.6%	13.3%
30-39	13.5%	12.1%	12.5%
40-49	14.9%	14.1%	12.0%
50-59	20.4%	16.0%	13.7%
60 plus	30.7%	28.2%	23.4%
Race/Ethnicity			
White	95.2%	97.2%	81.3%
Black or African American	1.2%	3.1%	12.4%
American Indian and Alaska Native	0.7%	1.0%	0.2%
Asian	1.2%	N/A	2.2%
Other	1.4%	0.5%	0.9%
Hispanic Origin (may be of any race)	0.7%	1.7%	3.7%
Marital Status†			
Married Couple	59.5%	52.0%	47.4%
Never been married/member of an unmarried couple	21.5%	26.3%	32.6%
Divorced/Separated	11.1%	13.9%	13.7%
Widowed	6.8%	7.8%	6.3%
Education†			
Less than High School Diploma	5.3%	13.5%	9.7%
High School Diploma	37.3%	46.0%	33.3%
Some college/ College graduate	56.5%	40.5%	56.9%
Income (Families)			
$14,999 and less	11.4%	6.0%	6.9%
$15,000 to $24,999	9.7%	10.0%	6.6%
$25,000 to $49,999	24.9%	30.9%	21.2%
$50,000 to $74,999	18.7%	20.3%	19.5%
$75,000 or more	26.9%	32.7%	45.9%

The percents reported are the actual percent within each category who responded to the survey. The data contained within the report however are based on weighted data (weighted by age, race, sex, and income). Percents may not add to 100% due to missing data (non-responses).

† The Ohio and Columbiana County Census percentages are slightly different than the percent who responded to the survey. Marital status is calculated for those individuals 15 years and older. Education is calculated for those 25 years and older.

Appendix V: Demographics and Household Information

Columbiana County Population by Age Groups and Gender
U.S. Census 2010

Age	Total	Males	Females
Columbiana County	**107,841**	**54.185**	**53,656**
0-4 years	**5,975**	**3,021**	**2,954**
1-4 years	4,823	2,447	2,376
< 1 year	1,152	574	578
1-2 years	2,397	1,205	1,192
3-4 years	2,426	1,242	1,184
5-9 years	**6,361**	**3,306**	**3,055**
5-6 years	2,497	1,296	1,201
7-9 years	3,864	2,010	1,854
10-14 years	**6,817**	**3,581**	**3,236**
10-12 years	4,088	2,112	1,976
13-14 years	2,729	1,469	1,260
12-18 years	9,888	5,165	4,723
15-19 years	**6,989**	**3,602**	**3,387**
15-17 years	4,431	2,288	2,143
18-19 years	2,558	1,314	1,244
20-24 years	5,665	2,899	2,766
25-29 years	5,786	3,080	2,706
30-34 years	6,203	3,329	2,874
35-39 years	6,865	3,668	3,197
40-44 years	7,111	3,701	3,410
45-49 years	8,129	4,148	3,981
50-54 years	8,926	4,491	4,435
55-59 years	8,315	4,247	4,068
60-64 years	6,906	3,428	3,478
65-69 years	5,261	2,514	2,747
70-74 years	4,116	1,889	2,227
75-79 years	3,266	1,440	1,826
80-84 years	2,776	1,075	1,701
85-89 years	1,633	572	1,061
90-94 years	596	161	435
95-99 years	127	31	96
100-104 years	16	1	15
105-109 years	1	0	1
110 years & over	1	1	0
Total 85 years and over	**2,374**	**766**	**1,608**
Total 65 years and over	**17,793**	**7,684**	**10,109**
Total 19 years and over	**82,884**	**41,275**	**41,609**

COLUMBIANA COUNTY PROFILE

(Source: U.S. Census Bureau, 2017)
2017 ACE 1-year estimates

General Demographic Characteristics

	Number	Percent (%)
Total Population		
2017 Total Population	103,077	100%
Largest City – Salem City		
2017 Total Population	11, 939	100%
Population by Race/Ethnicity		
Total Population	103,077	100%
White	100,165	97.2%
African American	3,148	3.1%
Hispanic or Latino (of any race)	1,769	1.7%
Two or more races	N/A	N/A
Asian	N/A	N/A
Some other race	477	0.5%
American Indian and Alaska Native	1,028	1.0%
Population by Age		
Under 5 years	5,666	5.5%
5 to 17 years	15,416	15.0%
18 to 24 years	8,013	7.8%
25 to 44 years	23,557	22.8%
45 to 64 years	30,151	29.2%
65 years and more	29,012	28.2%
Median age (years)	**43.8**	N/A
Household by Type		
Total households	39,140	100%
Total families	25,446	65.0
Households with children <18 years	8,662	22.1
Married-couple family household	18,577	47.4
Married-couple family household with children <18 years	5,479	13.9
Female householder, no husband present	5,004	12.8
Female householder, no husband present with children <18 years	2,393	6.1
Nonfamily household (single person)	13,694	34.9
Nonfamily household (single person) living alone	34,443	88.0
Nonfamily household (single person) 65 years and >	16,282	41.6
Households with one or more people <18 years	9,863	25.2
Households with one or more people 60 years and >	18,826	48.1
Average household size	2.53 people	N/A
Average family size	3.14 people	N/A

General Demographic Characteristics, Continued

Housing Occupancy		
Median value of owner-occupied units	$102,000	N/A
Median housing units with a mortgage	$930	N/A
Median housing units without a mortgage	$363	N/A
Median value of occupied units paying rent	$639	N/A
Median rooms per total housing unit	5.8	N/A
Total occupied housing units	39,140	100%
No telephone service available	593	1.5%
Lacking complete kitchen facilities	182	0.5%
Lacking complete plumbing facilities	78	0.2%

Selected Social Characteristics

School Enrollment		
Population 3 years and over enrolled in school	19,400	100%
Nursery & preschool	1,077	5.6
Kindergarten	1,028	5.3
Elementary School (Grades 1-8)	9,691	49.9
High School (Grades 9-12)	4,774	24.6
College or Graduate School	2,830	14.6
Educational Attainment		
Population 25 years and over	73,982	100%
< 9th grade education	2,679	3.6%
9th to 12th grade, no diploma	7,291	9.9%
High school graduate (includes equivalency)	34,047	46.0%
Some college, no degree	14,754	19.9%
Associate degree	7,221	9.8%
Bachelor's degree	5,390	7.3%
Graduate or professional degree	2,600	3.5%
Percent high school graduate or higher	N/A	86.5%
Percent Bachelor's degree or higher	N/A	10.8%
Marital Status*		
Population 15 years and over	86,848	100%
Never married	22,841	26.3%
Now married, excluding separated	45,161	52.0%
Separated	1,389	1.6%
Widowed	6,774	7.8%
Widowed females	10,769	12.4%
Divorced	10,682	12.3%
Divorced females	10,943	12.6%
Veteran Status		
Civilian population 18 years and over	81,907	100%
Veterans 18 years and over	7,667	9.4%

2013-2017 5-year estimates were used due to small sample size numbers

Selected Social Characteristics, Continued

Disability Status of the Civilian Non-Institutionalized Population		
Total civilian noninstitutionalized population	99,366	100%
Civilian with a disability	16,413	16.5
Under 18 years	21,047	21.2
Under 18 years with a disability	822	6.2
18 to 64 years	58,802	59.2
18 to 64 years with a disability	8,710	26.0
65 Years and over	19,517	19.6
65 Years and over with a disability	6,881	74.5

Selected Economic Characteristics

Employment Status		
Population 16 years and over	84,431	100%
16 years and over in labor force	44,749	53.0%
16 years and over not in labor force	39,682	47.0%
Females 16 years and over	42,194	100%
Females 16 years and over in labor force	20,934	49.6%
Population living with own children <6 years	6,556	100%
All parents in family in labor force	4,616	70.4%
Class of Worker		
Civilian employed population 16 years and over	42,089	100%
Private wage and salary workers	35,597	84.60%
Government workers	3,433	8.20%
Self-employed workers in own not incorporated business	2,965	7.00%
Unpaid family workers	94	0.20%
Occupations		
Employed civilian population 16 years and over	42,089	100%
Management, business, science, and arts occupations	9,874	23.50%
Service occupations	8,212	19.50%
Sales and office occupations	8,330	19.80%
Natural resources, construction, and maintenance occupations	5,964	14.20%
Production, transportation, and material moving occupations	9,709	23.10%
Leading Industries		
Employed civilian population 16 years and over	42,089	100%
Agriculture, forestry, fishing and hunting, and mining	939	2.20%
Construction	3,695	8.80%
Manufacturing	7,934	18.90%
Wholesale trade	553	1.30%
Retail trade	4,582	10.90%
Transportation and warehousing, and utilities	2,899	6.90%
Information	906	2.20%
Finance and insurance, and real estate and rental and leasing	1,402	3.30%
Professional, scientific, and management, and administrative and waste management services	3,097	7.40%
Educational services, and health care and social assistance	9,681	23.00%
Arts, entertainment, and recreation, and accommodation and food services	3,057	7.30%
Other services, except public administration	2,539	6.00%
Public administration	805	1.90%

Selected Economic Characteristics, Continued

Income In 2017		
Households	39,140	100%
< $10,000	2,190	5.6%
$10,000 to $14,999	2,271	5.8%
$15,000 to $24,999	5,901	15.1%
$25,000 to $34,999	6,235	15.9%
$35,000 to $49,999	5,785	14.8%
$50,000 to $74,999	6,877	17.6%
$75,000 to $99,999	4,912	12.5%
$100,000 to $149,999	2,923	7.5%
$150,000 to $199,999	1,054	2.7%
$200,000 or more	992	2.5%
Median household income	*$41,818*	N/A
Income in 2017		
Families	25,446	100%
< $10,000	748	2.9%
$10,000 to $14,999	793	3.1%
$15,000 to $24,999	2,545	10.0%
$25,000 to $34,999	3,505	13.8%
$35,000 to $49,999	4,352	17.1%
$50,000 to $74,999	5,165	20.3%
$75,000 to $99,999	4,097	16.1%
$100,000 to $149,999	2,885	11.3%
$150,000 to $199,999	712	2.8%
$200,000 or more	644	2.5%
Median family income	*$53,290*	N/A
Per capita income in 2017	**$26,235**	N/A
Poverty Status in 2017		
Families	N/A	9.0%
Individuals	N/A	14.5%

Bureau of Economic Analysis (BEA) Per Capita Personal Income (PCPI) Figures

	Income	Rank of Ohio Counties
BEA Per Capita Personal Income 2017	36,142	73rd of 88 counties
BEA Per Capita Personal Income 2016	35,353	68th of 88 counties
BEA Per Capita Personal Income 2015	35,513	63rd of 88 counties
BEA Per Capita Personal Income 2014	34,478	63rd of 88 counties
BEA Per Capita Personal Income 2013	33,106	65th of 88 counties

(BEA PCPI figures are greater than Census figures for comparable years due to deductions for retirement, Medicaid, Medicare payments, and the value of food stamps, among other things)

Poverty Rates, 2012-2016 5-year averages

Category	Columbiana County	Ohio
Population in poverty	15.8%	15.4%
< 125% FPL (%)	20.7%	19.9%
< 150% FPL (%)	26.5%	24.3%
< 200% FPL (%)	37.6%	33.3%
Population in poverty (2001)	12.7%	10.3%

(Source: The Ohio Poverty Report, Ohio Development Services Agency, February 2018, http://www.development.ohio.gov/files/research/P7005.pdf)

Employment Statistics

Category	Columbiana County	Ohio
Labor Force	46,600	5,741,900
Employed	44,100	5,469,100
Unemployed	2,500	272,900
Unemployment Rate* in December 2018	5.4	4.8
Unemployment Rate* in November 2018	4.6	4.1
Unemployment Rate* in December 2017	5.2	4.5

Note: Rate equals unemployment divided by labor force
(Source: Ohio Department of Job and Family Services, August 2018, http://ohiolmi.com/laus/OhioCivilianLaborForceEstimates.pdf)

Estimated Poverty Status in 2016

Age Groups	Number	90% Confidence Interval	Percent	90% Confidence Interval
Columbiana County				
All ages in poverty	17,130	14,633 to 19,627	17.2%	14.7 to 19.7
Ages 0-17 in poverty	5,533	4,634 to 6,432	26.5%	22.2 to 30.8
Ages 5-17 in families in poverty	3,897	3,278 to 4,516	25.0%	21.0 to 29.0
Median household income	46,873	$43,719 to $50,027		
Ohio				
All ages in poverty	1,639,636	1,614,177 to 1,665,095	14.5%	14.3 to 14.7
Ages 0-17 in poverty	521,730	506,894 to 536,566	20.4%	19.8 to 21.0
Ages 5-17 in families in poverty	348,713	335,691 to 361,735	18.7%	18.0 to 19.4
Median household income	$ 52,357	$52,083 to $52,631		
United States				
All ages in poverty	44,268,996	44,022,086 to 44,515,906	14.0%	13.9 to 14.1
Ages 0-17 in poverty	14,115,713	13,976,345 to 14,255,081	19.5%	19.3 to 19.7
Ages 5-17 in families in poverty	9,648,486	9,548,767 to 9,748,205	18.3%	18.1 to 18.5
Median household income	57,617	$57,502 to $57,732		

(Source: U.S. Census Bureau, 2016 Poverty and Median Income Estimates,
https://www.census.gov/data/datasets/2016/demo/saipe/2016-state-and-county.html)

Federal Poverty Thresholds in 2018 by Size of Family and Number of Related Children Under 18 Years of Age

Size of Family Unit	No Children	One Child	Two Children	Three Children	Four Children	Five Children
1 Person <65 years	$13,064					
1 Person 65 and >	$12,043					
2 people Householder < 65 years	$16,815	$17,308				
2 People Householder 65 and >	$15,178	$17,242				
3 People	$19,642	$20,212	$20,231			
4 People	$25,900	$26,324	$25,465	$25,554		
5 People	$31,234	$31,689	$30,718	$29,967	$29,509	
6 People	$35,925	$36,068	$35,324	$34,612	$33,553	$32,925
7 People	$41,336	$41,594	$40,705	$40,085	$38,929	$37,581
8 People	$46,231	$46,640	$45,800	$45,064	$44,021	$42,696
9 People or >	$55,613	$55,883	$55,140	$54,516	$53,491	$52,082

(Source: U. S. Census Bureau, Poverty Thresholds 2018,
https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html)

Appendix VI: County Health Rankings

	Columbiana County	Ohio	U.S.
Health Outcomes			
Premature death. Years of potential life lost before age 75 per 100,000 population (age-adjusted) (2014-2016)	8,400	7,700	6,700
Overall heath. Percentage of adults reporting fair or poor health (age-adjusted) (2016)	18%	17%	16%
Physical health. Average number of physically unhealthy days reported in past 30 days (age-adjusted) (2016)	4.2	4.0	3.7
Mental health. Average number of mentally unhealthy days reported in past 30 days (age-adjusted) (2016)	4.2	4.3	3.8
Maternal and infant health. Percentage of live births with low birthweight (< 2500 grams) (2010-2016)	8%	9%	8%
Health Behaviors			
Tobacco. Percentage of adults who are current smokers (2016)	22%	23%	17%
Obesity. Percentage of adults that report a BMI of 30 or more (2014)	35%	32%	28%
Food environment. Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best) (2015)	7.4	6.6	7.7
Physical inactivity. Percentage of adults aged 20 and over reporting no leisure-time physical activity (2014)	26%	26%	23%
Active living environment. Percentage of population with adequate access to locations for physical activity (2010 & 2016)	81%	85%	83%
Drug and alcohol abuse. Percentage of adults reporting binge or heavy drinking (2016)	18%	19%	18%
Drug and alcohol abuse and injury. Percentage of driving deaths with alcohol involvement (2012-2016)	34%	34%	29%
Infectious disease. Number of newly diagnosed chlamydia cases per 100,000 population (2015)	212.9	489	479
Sexual and reproductive health. Teen birth rate per 1,000 female population, ages 15-19 (2010-2016)	35%	28	27

(Source: 2018 County Health Rankings for Columbiana County, Ohio, and U.S. data)

	Columbiana County	Ohio	U.S.
Clinical Care			
Coverage and affordability. Percentage of population under age 65 without health insurance (2015)	9%	8%	11%
Access to health care/medical care. Ratio of population to primary care physicians (2015)	2,280:1	1,310:1	1,320:1
Access to dental care. Ratio of population to dentists (2016)	4,320:1	1,660:1	1,480:1
Access to behavioral health care. Ratio of population to mental health providers (2017)	1,170:1	560:1	470:1
Hospital utilization. Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees (2015)	67	57	49
Diabetes. Percentage of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring (2014)	86%	85%	85%
Cancer. Percentage of female Medicare enrollees ages 67-69 that receive mammography screening (2014)	60%	61%	63%
Social and Economic Environment			
Education. Percentage of ninth-grade cohort that graduates in four years (2014-2015)	86%	81%	83%
Education. Percentage of adults ages 25-44 years with some post-secondary education (2012-2016)	51%	65%	65%
Employment, poverty, and income. Percentage of population ages 16 and older unemployed but seeking work (2016)	7%	5%	5%
Employment, poverty, and income. Percentage of children under age 18 in poverty (2016)	27%	20%	20%
Employment, poverty, and income. Ratio of household income at the 80th percentile to income at the 20th percentile (2012-2016)	4.2	4.8	5.0
Family and social support. Percentage of children that live in a household headed by single parent (2012-2016)	35%	36%	34%
Family and social support. Number of membership associations per 10,000 population (2015)	16	11	9
Violence. Number of reported violent crime offenses per 100,000 population (2012-2014)	67	290	380
Injury. Number of deaths due to injury per 100,000 population (2012-2016)	88	75	65

(Source: 2018 County Health Rankings for Columbiana County, Ohio, and U.S. data)

	Columbiana County	Ohio	U.S.
Physical Environment			
Air, water, and toxic substances. Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) (2012)	12.0	11.3	8.7
Air, water, and toxic substances. Indicator of the presence of health-related drinking water violations. Yes - indicates the presence of a violation, No - indicates no violation (2016)	Yes	N/A	N/A
Housing. Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities (2010-2014)	12%	15%	19%
Transportation. Percentage of the workforce that drives alone to work (2012-2016)	86%	83%	76%
Transportation. Among workers who commute in their car alone, the percentage that commute more than 30 minutes (2012-2016)	35%	30%	35%

(Source: 2018 County Health Rankings for Columbiana County, Ohio, and U.S. data)
N/A – Data is not available

Appendix VII: Summary of Community Input from Stakeholder Interviews and Focus Groups

Thirty-four stakeholder and focus group interviews, reflecting input from more than 115 participants, were conducted by the Steering Committee from October-December 2018, as part of the CHNA primary data gathering process. Participants were identified as experts in a particular field related to their background experience or professional position; and/or those who understand the needs of a particular community/geographic region or under-represented group, including medically underserved and vulnerable populations.

Participants represented in this data collection of broad community input included:
- School Districts and Youth Services
- Hospital Case Managers
- Juvenile Justice System
- Local Government Officials/ County Commissioners
- Community Resource Centers
- Health and Human Service Providers
- Food Pantries
- Mental Health and Recovery Providers
- Senior Services and Home Health Providers
- Faith-Based Organizations Providing Community Assistance
- Hispanic Community Members

A listing of participants and their organizations is included in the Appendix [To be filled in by the Columbiana County Health Partners].

Community input was obtained from these participants regarding factors impacting social determinants of health, top health care issues and priorities (Table A), community strengths and resources (Table B), opportunities to increase access to health care resources, and how to improve community supports. A copy of the interview tool and summary of results for each question is also included in the Appendix [To be filled in by the Columbiana County Health Partners].

1. Factors Impacting Social Determinants of Health & Community Health Status

A. Social and Economic Conditions: Stakeholder and focus group respondents identified 8 major social and economic factors that influence the health of the community:

- Poverty/generational poverty
- Poor income/lack of opportunity/unemployment
- Drug addiction
- Lack of transportation
- Entitlement/laziness
- Appalachian culture
- Language barriers/health literacy

B. Top 10 Community Concerns/Issues Related to Health and Safety:

- Drug addiction
- Environmental issues (air & water quality, gas lines, fracking, agriculture run-off)
- Lack of transportation
- Poverty/generational poverty/housing/homelessness
- Drug-related crime and hostile behavior
- Untreated mental health issues/lack of access to mental health providers
- Poor parenting skills/child safety
- Unhealthy lifestyles
- Lack of affordable insurance/lack of providers accepting medical cards/denials
- Lack of knowledge about health

Other issues mentioned with less frequency included: access to specialists, violence, poor nutrition/hunger, no inpatient psychiatric services, disrespect/lack of civility, and unsafe schools.

2. Top Two Health Topics to Address and Top Three Health Priorities

When asked in separate questions to identify the 2 most important health topics and the 3 most important health priorities to address/prevent, the top responses included:

(Table A)

Comparative Summary of "Top Health Topics" &" Top Priorities" Identified by Stakeholders and Focus Groups (N=115)	Top Health "Topics"	Top Health "Priorities"
Drug addiction	X	X
Mental illness	X	X
Transportation	X	X
Nutrition	X	X
Obesity/ Childhood obesity	X	X
Parenting skills	X	X
Cancer	X	X
Diabetes	X	X
Environmental health	X	
Healthier lifestyles	X	X
Pre-natal and maternity care	X	X
Smoking cessation	X	X
Lack of primary care services for Medicaid patients	X	X
Preventive health	X	X
Dental care	X	X
Immunizations	X	X
Medication affordability	X	
Underinsured	X	X
Adequate housing		X
Lack of exercise	X	
Chronic disease management		X
Effects of trauma		X
Heart disease		X
Lack of specialists in county		X

3. Community Strengths and Resources

When asked in 2 separate questions to identify community strengths and the programs/resources available to community members, the top responses included:

(Table B)

Comparative Summary of Top Strengths/Resources Identified by Stakeholders and Focus Groups	Top "Strengths"	Top "Resources"
Food pantries	X	X
Hospitals	X	
Health departments	X	X
Salem Community Center	X	X
YMCA	X	X
Parks	X	
Dental van	X	
Akron Children's Hospital	X	X
Way Station	X	X
Good people working together	X	
Community Action Agency		X
FISH		X
Salvation Army		X
WIC		X
CARTS		X
Community Resource Center		X
New Day Recovery		X
Silver Sneakers		X

4. Overcoming Barriers to Access and Program Participation

A. Barriers to Access

Over half of the stakeholders and focus group members (52%) identified "lack of transportation" as the single most important barrier to accessing resources and/or participating in programming. "Lack of motivation/apathy" and "cost/money/poverty" were both equally mentioned by 14% of respondents. Other barriers listed at 6% or less of the total responses included: stigma, lack of time, inadequate childcare, and pride.

The top 4 suggestions for overcoming barriers and increasing program participation included:
1. Increase awareness (through social media/advertising)
2. Provide transportation
3. Provide participation incentives
4. Use community outreach to take programs and services to the people

Other suggestions included:
- Use bilingual forms and advertising
- Offer programs at different times
- Rethink how information is presented
- Vaccinate at schools
- Provide more funding

B. How to Improve Participation

When asked in a separate but related question what area organizations could do to increase participation and/or help area residents improve their health, the top 12 responses were:
1. Increase awareness
2. Provide more outreach locations
3. Encourage healthy lifestyles
4. Agencies work together & coordinate services
5. Offer more health services in schools
6. Provide incentives for participation
7. Build trust between providers & clients
8. Simplify application process for clients to qualify for programs
9. Provide transportation
10. Provide community education
11. Provide support to parents/non-traditional families
12. Provide more funding for programs/grants

5. How to Improve Community Supports

The stakeholder and focus group interviews generated an extensive list of suggestions for how "the community" can provide more support to its community members. The top 8 suggestions as grouped by category and frequency of response included:
1. Increase access to mental health services
2. Improve access to healthy foods
3. Provide transportation
4. Agencies work together/coordinate services
5. Increase awareness of services & community outreach
6. Provide support to parents/non-traditional families
7. Provide health clinic/primary care provider access for Medicaid recipients
8. Increase funding/financial support

(See Appendix [To be filled in by the Columbiana County Health Partners] for a detailed listing of interview responses.)

Table [To be filled in by the Columbiana County Health Partners]: **Summary of Top Community Needs by Community Group**

Top Community Health Priorities	Community Surveys (n=377) [To be filled in by the Columbiana County Health Partners]	Focus Groups/Stakeholder Interviews (n=115)
Drug addiction		X
Mental illness		X
Transportation		X
Nutrition		X
Obesity/ Childhood obesity		X
Parenting skills		X
Cancer		X
Diabetes		X
Environmental health		
Healthier lifestyles		X
Maternity and pre-natal care		X
Smoking cessation		X
Lack of primary care services for Medicaid patients		X
Preventive health		X
Dental care		X
Immunizations		X
Medication affordability		
Underinsured		X
Adequate housing		X
Lack of exercise		
Chronic disease management		X
Effects of trauma		X
Heart disease		X
Lack of specialists in county		X