2019 Community Health Needs Assessment

University Hospitals

UH CONNEAUT MEDICAL CENTER
UH GENEVA MEDICAL CENTER
Ashtabula County, Ohio

*Aligned with the 2019 Ashtabula County
Community Health Assessment*

Foreword

University Hospitals' (UH) long-standing commitment to the community spans more than 150 years. This commitment has grown and evolved through significant thought and care in considering our community's most pressing health needs. One way we do this is by conducting a periodic, comprehensive Community Health Needs Assessment (CHNA). The most current assessment was completed by an external health care consulting service working with UH and includes quantitative and qualitative data that serve to guide our community benefit planning. Through our CHNA, UH has identified the greatest health needs among each of the counties were our medical centers reside, enabling UH to ensure our resources are appropriately directed toward outreach, prevention, education and wellness opportunities where the greatest impact can be realized. The following document is a detailed joint CHNA for University Hospitals Conneaut Medical Center and University Hospitals Geneva Medical Center.

UH Conneaut Medical Center is a 25-bed, acute-care hospital that offers a wide range of medical and surgical services and is a federally designated Critical Access Facility. It offers myriad programs and activities to address the surrounding community health needs. These include a health education luncheon series for seniors, the Hospital to Home program, free monthly health screenings, Cardiopulmonary Resuscitation (CPR) and Automated External Defibrillator (AED) training for local organizations, and the Botvin Lifeskills education for youth program in local school districts.

Likewise, UH Geneva Medical Center is a 25-bed, acute-care hospital that offers comprehensive medical and surgical services and is also a federally designated Critical Access Facility. It offers a variety of programs and activities to address the surrounding community health needs. These range from the Friendly Neighbor Program to help seniors remain healthy and independent, to free mammograms and health education luncheons for seniors.

University Hospitals strives to meet the health needs of its community.

Acknowledgements

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

http://www.hcno.org/community-services/data-link/

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Written Comments
Individuals are encouraged to submit written comments, questions, or other feedback about University Hospitals' strategies to communitybenefit@UHhospitals.org. Please make sure to include the name of the UH Facility that you are commenting about, and if possible, a reference to the appropriate section within the document.

Table of Contents

Executive Summary

This executive summary provides an overview of health-related data for Ashtabula County adults (ages 19 and older) who participated in a county-wide health assessment survey from January through March 2019. The findings are based on self-administered surveys using a structured questionnaire. The questions were modeled after the survey instrument used by the Centers for Disease Control and Prevention for their national and state Behavioral Risk Factor Surveillance System (BRFSS).

In 2019, University Hospitals Conneaut Medical Center and University Hospitals Geneva Medical Center ("UH Conneaut and Geneva Medical Centers") conducted a joint community health needs assessment ("CHNA") in collaboration with the Ashtabula County Health Department and other Ashtabula county partners. The 2019 UH Conneaut and Geneva Medical Centers CHNA is compliant with the requirements set forth by Treas. Reg. §1.501(r) ("Section 501(r)") and Ohio Revised Code ("ORC") §3701.981.

The 2019 UH Conneaut and Geneva Medical Centers CHNA will serve as a foundation for developing an implementation strategy to address the needs that (a) the hospital determines it is able to meet in whole or in part; (b) are otherwise part of its mission; and (c) are not met (or are not adequately met) by other programs and services in the hospital's service area.

The Ashtabula County Health Department, on behalf of the Ashtabula County Health Needs Assessment Committee (includes UH Conneaut-Geneva Medical Centers), hired the Hospital Council of Northwest Ohio (HCNO) to conduct the assessment and to prepare separate but aligned reports to meet the needs of hospital and public health partner requirements. Similar to the CHNAs that hospitals conduct, HCNO also prepared the 2019 Ashtabula County Community Health Assessment ("CHA") and will prepare the corresponding community health improvement plan ("CHIP") to meet the local health department requirements for accreditation through the Public Health Accreditation Board ("PHAB").

HCNO collected the primary survey data, guided the health assessment process, integrated sources of primary and secondary data from a variety of sources, and prepared the written reports.

State of Ohio Requirements

In 2016, the state of Ohio through ORC §3701.981, mandated that all tax-exempt hospitals collaborate with their local health departments on community health assessments (CHA) and community health improvement plans (CHIP). This will reduce duplication of resources and provide a more comprehensive approach to addressing health improvement. In addition, local hospitals have to align with Ohio's State Health Assessment (SHA) and State Health Improvement Plan (SHIP). This requires alignment of the CHNA/CHA process timeline and indicators beginning, January 1, 2020.

The aligned 2019 Ashtabula County CHA and 2019 UH Conneaut-Geneva Medical Centers CHNA indicates the partners' desire to collaborate on health assessment planning both among partners at the local level and with state population health planning efforts – as described more fully in *Improving Population Health Planning in Ohio: Guidance for Aligning State and Local Efforts*, released by the Ohio Department of Health (ODH).

Internal Revenue Services (IRS) Requirements

Certain hospitals as set forth in the Section 501(r) regulations are required to complete a CHNA and corresponding implementation strategy at least once every three years in accordance with regulations promulgated by the Internal Revenue Service pursuant to the Patient Protection and Affordable Care Act (ACA), 2010[1]. University Hospitals adopted the last joint UH Conneaut-Geneva Medical Centers CHNA on September 27, 2018.

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[1] The Patient Protection and Affordable Care Act (Pub. L. 111-148) added section 501(r) to the Internal Revenue Code, which imposes new requirements on nonprofit hospitals in order to qualify for an exemption under Section 501(c)(3) and adds new reporting requirements for such hospitals under Section 6033(b) of the Internal Revenue Code. UH followed the final rule entitled "Additional Requirements for Charitable Hospitals; Community Health Needs Assessments for Charitable Hospitals";

DEFINITION OF COMMUNITY & SERVICE AREA DETERMINATION

The community has been defined as Ashtabula County. Most (92%) of University Hospitals Conneaut Medical Center's discharges and 74% of University Hospitals Geneva Medical Center's discharges are residents of Ashtabula County. In addition, University Hospital collaborates with multiple stakeholders, most of which provide services at the county-level. In looking at the community population served by the hospital facilities and Ashtabula County as a whole, it was clear that all of the facilities and partnering organizations involved in the collaborative assessment, define their community to be the same. Defining the community as such also allows the hospitals to more readily collaborate with public health partners for both community health assessments and health improvement planning. Per Section 501(r) federal compliance, a joint CHNA is only allowable if it meets all the requirements of a separate CHNA; clearly identifies the hospital facilities involved; and if all of the collaborating hospital facilities and organizations included in the joint CHNA define their community to be the same[2]. This assessment meets 501(r) federal compliance for UH Conneaut and UH Geneva Medical Centers.

INCLUSION OF VULNERABLE POPULATIONS

The Ashtabula collaborative, which includes UH Conneaut and Geneva Medical Centers, intentionally elected to use a random household survey to incorporate a broad range of perspectives across the county. The data is de-identified and aggregated in such a way to show several demographic categories such as income, gender, age, geography, etc. to further identify populations experiencing adverse conditions. It is described more fully in the Primary Data Collection Methods section of this report. Additionally, the planning committee itself includes a variety of human service organizations working collaboratively to complete the assessment.

PROCESS & METHODS FOR ENGAGING COMMUNITY

This community health needs assessment process was commissioned by the Ashtabula County Health Needs Assessment Committee. The names of the individual partners are listed in the Acknowledgements section at the beginning of this report. This coalition has been in existence for twenty years and has approximately twenty-four member organizations. 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. Twenty-four organizations worked together to complete the assessment and the general public will be invited to attend the release of the report and provide qualitative feedback. Lastly, the mail survey, described more fully in the Primary Data Collection Methods section of this report, was the primary instrument used to engage and receive input from the community.

QUANTITATIVE & QUALITATIVE DATA ANALYSIS

Data for the 2019 UH Conneaut-Geneva Medical Centers CHNA were obtained by independent researchers from the Toledo-based Hospital Council of Northwest Ohio and their partners at the University of Toledo, who administered surveys to a cross-sectional, randomized sample of 1,200 County adults aged 19 years and older. The survey instrument contained both customized questions and a set of core questions taken from the Center for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS). The number of surveys completed and analyzed met the threshold for statistical significance at the 95% confidence level, with a 5% margin of error. Wherever possible, local findings have been compared to other local, regional, state, and national data. As we move forward with planning strategies, we continue to commit to serving those in our county who experience health and basic needs disparities. Finally, additional information was collected from health department data sources (e.g. vital statistics, Ohio Disease Reporting System, etc.) to supplement findings from the three surveys. Detailed data collection methods are described later in this section.

Requirement of a Section 4959 Excise Tax Return and Time for Filing the Return, was published by the IRS on December 31, 2014, and requires compliance after December 29, 2015.

[2] §1.501r-3(b)(6)(v)

IDENTIFYING & PRIORITIZING NEEDS

The Ashtabula County Health Needs Assessment Committee, (includes UH Conneaut-Geneva Medical Centers), selected the following priority needs:

1. Chronic disease (heart disease; obesity)
2. Mental health/addiction (suicide prevention; overdose; depression; drug dependence)

Additionally, Ashtabula County will focus on the following cross-cutting factors within the strategy development process that affect all three priority areas: healthcare system and access and public health system, prevention and health behaviors; both of which align with the SHIP. More specifically, to include vaccines, screenings and oral health.

UH Conneaut and UH Geneva Medical Centers will work collaboratively with other Ashtabula partners to address both priority needs.

The priorities were determined via the following process:

The Ashtabula County Health Needs Assessment Committee contracted with HCNO to facilitate the CHNA/CHA process. The health department invited various community stakeholders to participate in the process. Data from the 2019 collaborative assessment was carefully considered and categorized into community priorities. This was done using the National Association of County and City Health Officials' (NACCHO) national framework, Mobilizing for Action through Planning and Partnerships (MAPP). MAPP is a community-driven strategic planning process and framework that helps communities apply strategic thinking to prioritize health issues and identify resources to address them. This process will also be used to develop the Community Health Improvement Plan/Implementation Strategy which will be implemented over the next three years at the county-level with the hope to improve population health and create lasting, sustainable change.

Based on the 2019 data, key issues were identified for adults. Overall, there were 12 key issues identified by the committee. Each organization was given 5 votes. The committee then voted and came to a consensus on the priority areas Ashtabula County will focus on over the next three years. The key issues will also be outlined in the 2020-2022 IS/CHIP.

POTENTIAL RESOURCES TO ADDRESS NEED

Priorities identified through the MAPP planning process, will result in a comprehensive 2020-2022 Ashtabula County Community Health Improvement Plan (CHIP). The CHIP will serve as the 2020-2022 Community Health Implementation Strategy (IS) for UH Conneaut and UH Geneva Medical Centers. Potential resources available can be found in Appendix X.

EVALUATION OF IMPACT

The evaluation of impact is a report on the actions taken and effectiveness of strategies implemented since the last CHNA. UH Conneaut and Geneva Medical Centers conducted their last CHNA in 2018. It can be found on page 26 of this report.

CHNA AVAILABILITY

The 2019 UH Conneaut and Geneva Medical Centers CHNA can be found at the following websites:

University Hospitals: www.UHhospitals.org/CHNA-IS

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

ADOPTION BY BOARD

University Hospitals adopted the 2019 University Hospitals Conneaut Medical Center and Geneva Medical Center joint Community Health Needs Assessment on September 24, 2019.

Primary Data Collection Methods

DESIGN

This community health assessment was cross-sectional in nature and included a written survey of adults within Ashtabula 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 Ashtabula 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 Ashtabula County planning committee, the project coordinator composed a draft of the survey containing 114 items. 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 Ashtabula County. There were 76,107 persons ages 19 and over living in Ashtabula 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 Ashtabula County. This advance letter was personalized; printed on Ashtabula County Health Needs Assessment Committee letterhead; and signed by Raymond J. Saporito, MPH, R.S., Health Commissioner, Ashtabula County Health Department. 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 process to maximize the survey return rate. The initial mailing included a personalized hand-signed cover letter (on Ashtabula County Health Needs Assessment Committee letterhead) 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 28% (n=308: CI=± 5.57). Since the power analysis recommended 382 completed surveys but 308 were returned, the level of power was reduced, and confidence interval broadened to ± 5.57%.

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 24.0. Crosstabs were used to calculate descriptive statistics for the data presented in this report. To be representative of Ashtabula County, the adult data collected was weighted by age, gender, race, and income using 2017 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 Ashtabula 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 Ashtabula County). If there were little to no differences between respondents and non-respondents, then this would not be a limitation.

Furthermore, while the survey was mailed to random households in Ashtabula County, those responding to the survey were more likely to be older. For example, only 11 respondents were under the age of 30. While weightings are applied during calculations to help account for this sort of variation, it still presents a potential limitation (to the extent that the responses from these 11 individuals might be are substantively different from the majority of Ashtabula County residents under the age of 30).

It is important to note that although several questions were asked using the same wording as the Centers for Disease Control and Prevention (CDC) questionnaires, 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 2019 Ashtabula County Community Health Assessment (CHA).

Hospital Utilization Data Collection Methods

HCNO worked with staff from University Hospitals and Cypress Research Group to incorporate county level hospital discharge and utilization data within the community health assessment. The hospital utilization data included within the community health assessment is from January 2017 through December 2017. Data is broken down into gender and age, where applicable.

Each hospital provides data to the Ohio Hospitalization Association (OHA) for statewide consolidated reporting. Those data are at the patient level, where patients are de-identified. Each data record represents a single hospital admission; hence, individuals who are hospitalized multiple times are included in the database for each time they are admitted/discharged from the hospital.

The hospital utilization data allows us to track the number of discharges for any Ohio-based acute care hospital over time. The database includes key demographic information (age, gender, race, county of residence) as well as information related to the hospitalization (primary diagnosis, and all secondary diagnoses). The data allowed us to isolate inpatients both in terms of where they were hospitalized (regardless of where they live) and where they live (regardless of where they were hospitalized).

For more information regarding hospital utilization data, see the Health Care Coverage and Access and Utilization sections.

Mobilizing for Action through Planning & Partnerships (MAPP) Process Overview

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 about the health of our community, including health issues and disparities, contributing factors that impact health outcomes, and community assets and resources that can be mobilized to improve population health.

This 2019 CHA was developed using the Mobilizing Action through Partnerships and Planning (MAPP) process, which is a nationally adopted framework developed by the National Association of County and City Health Officials (NACCHO) (see Figure 1.1). MAPP is a community-driven planning process for improving community health and is flexible in its implementation, meaning that the process does not need to be completed in a specific order. This process was facilitated by HCNO in collaboration with a broad range of local agencies representing a variety of sectors of the community. This process involved the following six phases:

1. Organizing for success and partnership development

Figure 1.1 The MAPP Framework

During this first phase, community partners examined the structure of its planning process to build commitment and engage partners in the development of a plan that could be realistically implemented. With a steering committee already in place, members examined current membership to determine whether additional stakeholders and/or partners should be engaged, its meeting schedule (which occurs on a quarterly basis and more frequently as needed), and responsibilities of partnering organizations for driving change. The steering committee ensured that the process involved local public health, health care, faith-based communities, schools, local leadership, businesses, organizations serving minority populations, and other stakeholders in the community health improvement process.

2. Visioning

Next, steering committee members re-examined its vision and mission. Vision and values statements provide focus, purpose, and direction to the CHA/CHIP so that participants collectively achieve a shared vision for the future. A shared community vision provides an overarching goal for the community—a statement of what the ideal future looks like. Values are the fundamental principles and beliefs that guide a community-driven planning process.

3. The four assessments

While each assessment yields valuable information, the value of the four MAPP assessments is multiplied considering results as a whole. The four assessments include: The Community Health Status Assessment (CHSA), the Local Public Health System Assessment (LPHSA), the Forces of Change (FOC) Assessment, and the Community Themes and Strengths Assessment (CTSA).

4. Identifying strategic issues

The process to formulate strategic issues occurs during the prioritization process of the CHA/CHIP. The committee considers the results of the assessments, including data collected from community members (primary data) and existing statistics (secondary data) to identify key health issues. Upon identifying the key health issues, an objective ranking process is used to prioritize health needs for the CHIP.

In order to identify strategic issues, the steering community considers findings from the visioning process and the MAPP assessments in order to understand why certain issues remain constant across the assessments. The steering committee uses a strategic approach to prioritize issues that would have the greatest overall impact to drive population health improvement and would be feasible, given the resources available in the community and/or needed, to accomplish. The steering committee also arranged issues that were related to one another, for example, chronic disease related conditions, which could be addressed through increased or improved coordination of preventative services. Finally, the steering committee members considered the urgency of issues and the consequences of not addressing certain items.

5. Formulate goals and strategies

Following the prioritization process, a gap analysis is completed in which committee members identify gaps within each priority area, identify existing resources and assets, and potential strategies to address the priority health needs. Following this analysis, the committee to formulate various goals, objectives, and strategies to meet the prioritized health needs.

6. Action cycle

The steering committee begins implementation of strategies as part of the next community health improvement cycle. Both progress data to track actions taken as part of the CHIP's implementation and health outcome data (key population health statistics from the CHA) are continually tracked through ongoing meetings. As the end of the CHIP cycle, partners review progress to select new and/or updated strategic priorities based on progress and the latest health statistics.

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 2019 Ashtabula County Community Health Needs Assessment (CHNA) 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
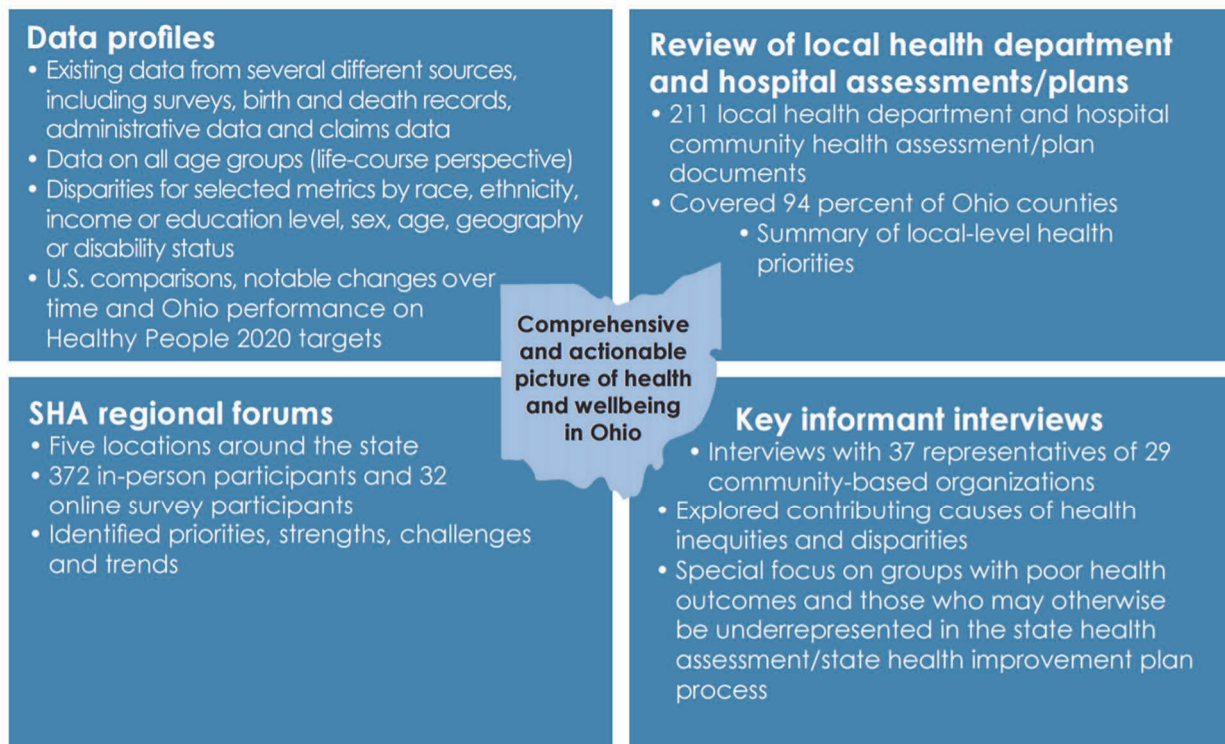
Data Summary | Health Care Access

HEALTH CARE COVERAGE

Ten percent (10%) of Ashtabula County adults were without health care coverage. The top reason adults gave for being without health care coverage was they could not afford to pay the insurance premiums (72%).

Uninsured Ashtabula County Adults

Category	Percentage
Total	10%
Males	7%
Females	13%
Under 30	11%
30-64 Years	10%
65 & Over	4%
Income <$25K	18%
Income $25K Plus	7%
Ashtabula 2011	17%
Ashtabula 2016	8%
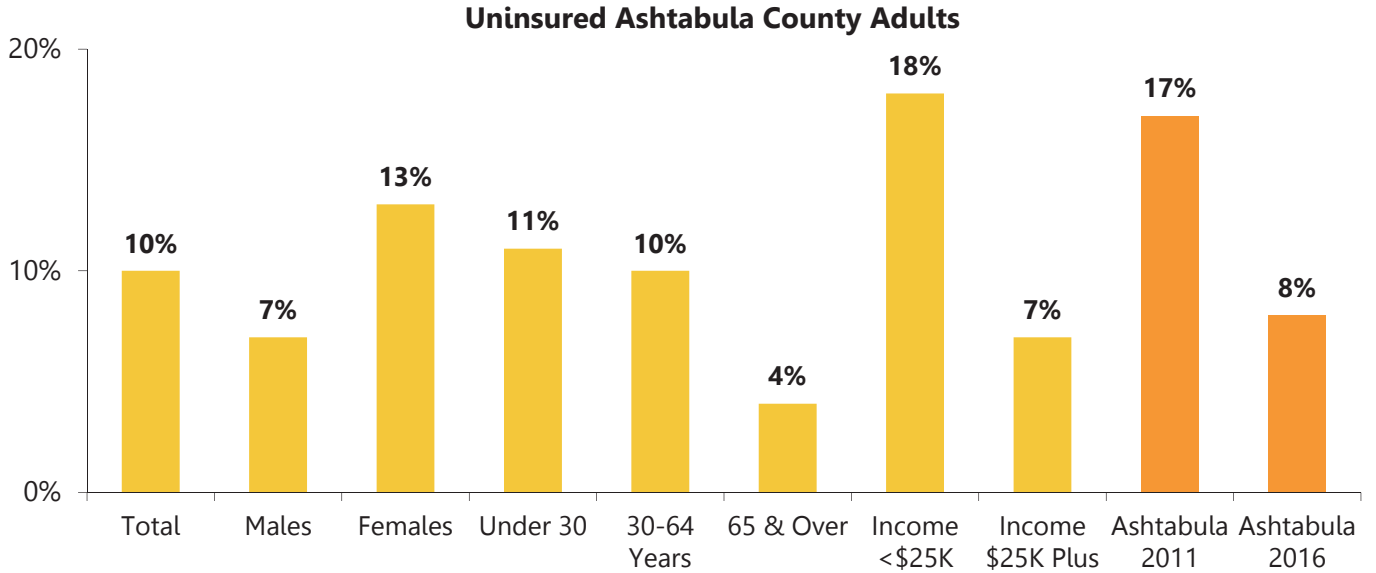
ACCESS AND UTILIZATION

Sixty-nine percent (69%) of Ashtabula County adults had visited a doctor for a routine checkup in the past year. Almost two-thirds (63%) of adults went outside of Ashtabula County for health care services in the past year.

Ashtabula County Adults Who Had a Routine Check-up in the Past Year

Category	Percentage
Total	69%
Males	62%
Females	73%
Under 30	73%
30-64 Years	72%
65 & Over	85%
Income <$25K	65%
Income $25K Plus	72%
Ashtabula 2011	48%
Ashtabula 2016	64%
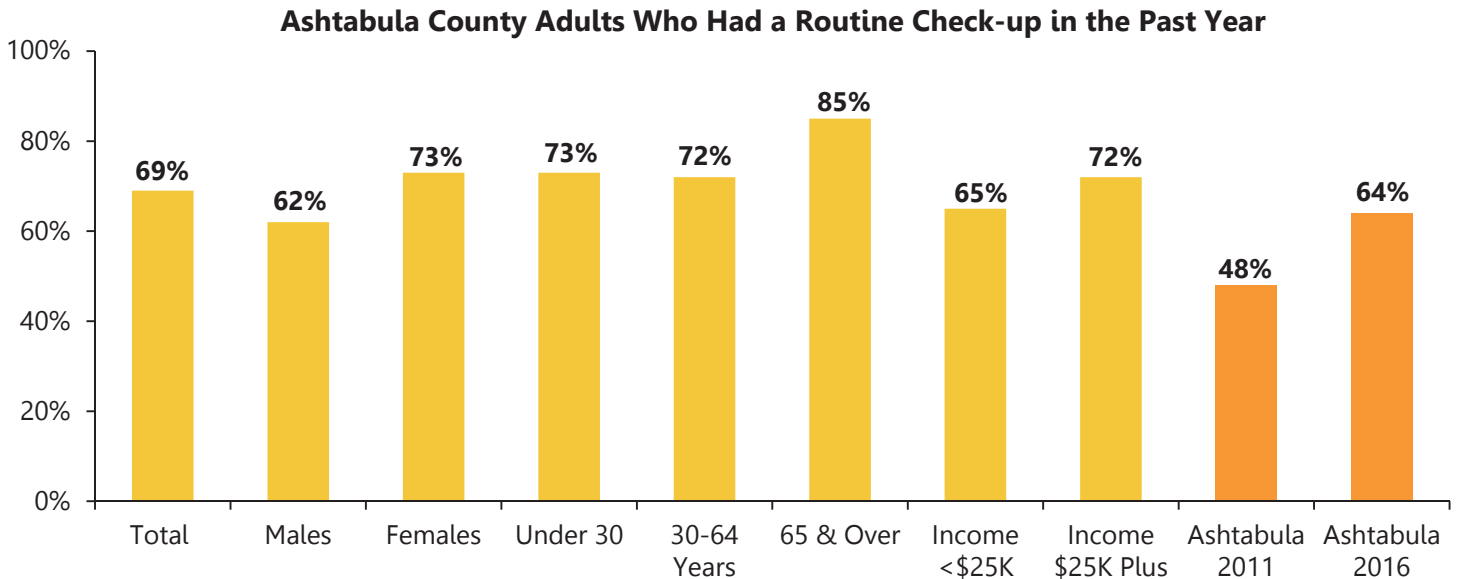
Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

PREVENTIVE MEDICINE

More than two-thirds (69%) of adults ages 65 and over had a pneumonia vaccination at some time in their life. Sixty-seven percent (67%) of adults age 65 and over received a flu vaccine in the past year.

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

Category	Percent
Total	45%
Male	49%
Female	40%
Under 30	20%
30-64 Years	52%
65 & Over	67%
Income <$25K	47%
Income $25K Plus	44%
Ashtabula 2011	44%
Ashtabula 2016	42%

WOMEN'S HEALTH

Over half (58%) of Ashtabula County women over the age of 40 reported having a mammogram in the past year. Forty-seven percent (47%) of women had a clinical breast exam in the past year, and 66% of women ages 21 to 65 had a Pap smear to detect cancer of the cervix in the past three years. Seventy-nine percent (79%) of Ashtabula County women were overweight or obese, 37% had high blood cholesterol, 35% had high blood pressure, and 23% were identified as current smokers, known risk factors for cardiovascular diseases.

Ashtabula County Women's Health Exams Within the Past Year

Category	Mammogram	Breast Exam	Pap Smear
Total	34%	47%	27%
Under 40	0%	29%	21%
40 & Older	58%	51%	26%
Income <$25K	31%	41%	23%
Income $25K Plus	35%	48%	33%
Ashtabula 2011	36%	38%	28%
Ashtabula 2016	34%	55%	41%

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

Fourteen percent (14%) of men had a digital rectal exam in the past year. One-quarter (25%) of Ashtabula County males performed a testicular self-exam in the past year. Seventy-one percent (71%) of men were overweight or obese, 46% had high blood pressure, 42% had high blood cholesterol, and 18% were identified as current smokers, known risk factors for cardiovascular diseases.

Ashtabula County Men Who Had a Digital Rectal Exam Within the Past Year

Category	Percent
Total	14%
Under 50	4%
50 & Older	23%
Income <$25K	12%
Income $25K Plus	18%
Ashtabula 2011	24%
Ashtabula 2016	16%

ORAL HEALTH

Fifty-eight percent (58%) of Ashtabula County adults had visited a dentist or dental clinic in the past year. The top two reasons adults gave for not visiting a dentist or dental clinic in the past year were cost (40%) and fear, apprehension, nervousness, pain and dislike going (26%).

Ashtabula County Adults Visiting a Dentist or Dental Clinic in the Past Year

Category	Percent
Total	58%
Males	61%
Females	56%
Under 30	40%
30-64 Years	62%
65 & Over	68%
Income <$25K	58%
Income $25K Plus	59%
Ashtabula 2011	61%
Ashtabula 2016	60%

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.

Data Summary | Health Behaviors

HEALTH STATUS PERCEPTIONS

Over two-fifths (42%) of Ashtabula County adults rated their health status as excellent or very good. Conversely, 14% of adults described their health as fair or poor, increasing to 29% of those with incomes less than $25,000.

Ashtabula County Adult Health Perceptions*

Category	Excellent/Very Good	Good	Fair/Poor
Total	42%	44%	14%
Males	44%	43%	13%
Females	41%	45%	14%
Under 30	50%	40%	10%
30-64 years	42%	41%	17%
65 & Over	38%	45%	17%
Income <$25K	29%	42%	29%
Income $25KPlus	49%	46%	5%
Ashtabula 2011	53%	34%	13%
Ashtabula 2016	43%	36%	21%

■ 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-five percent (75%) of Ashtabula County adults were overweight or obese based on body mass index (BMI). The top three reasons adults gave for not exercising were self-motivation/will power (22%), weather (22%), and time (21%).

Ashtabula County Adult BMI Classifications*
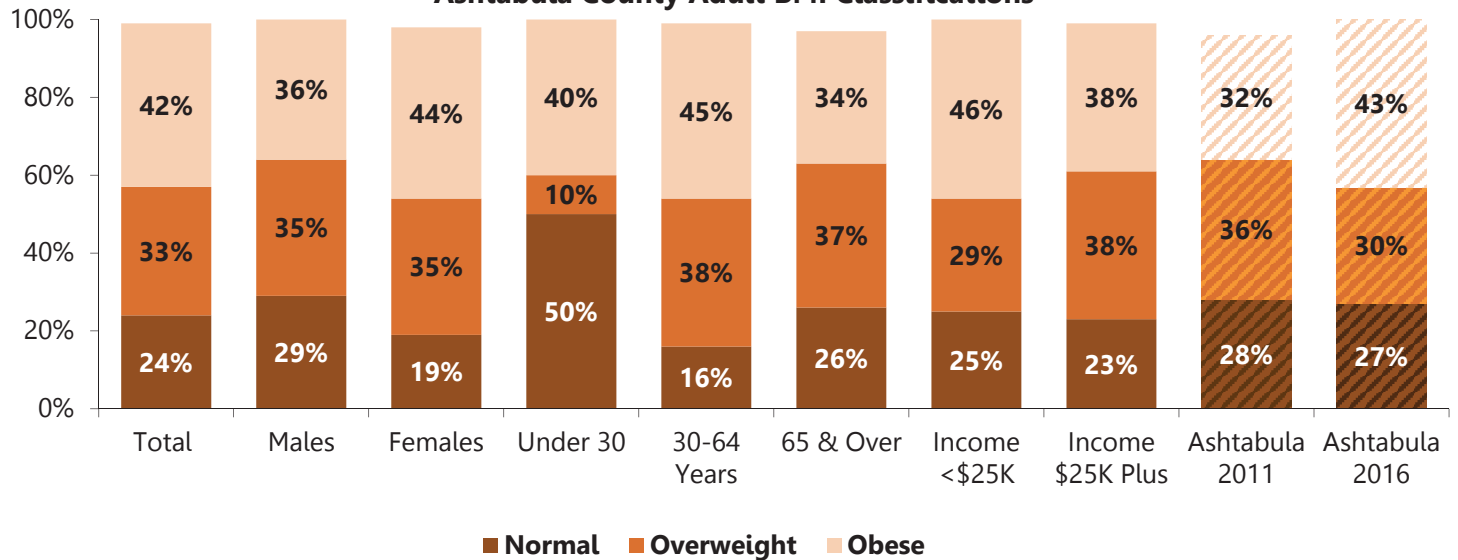
Category	Normal	Overweight	Obese
Total	24%	33%	42%
Males	29%	35%	36%
Females	19%	35%	44%
Under 30	50%	10%	40%
30-64 Years	16%	38%	45%
65 & Over	26%	37%	34%
Income <$25K	25%	29%	46%
Income $25K Plus	23%	38%	38%
Ashtabula 2011	28%	36%	32%
Ashtabula 2016	27%	30%	43%

■ Normal ■ Overweight ■ Obese

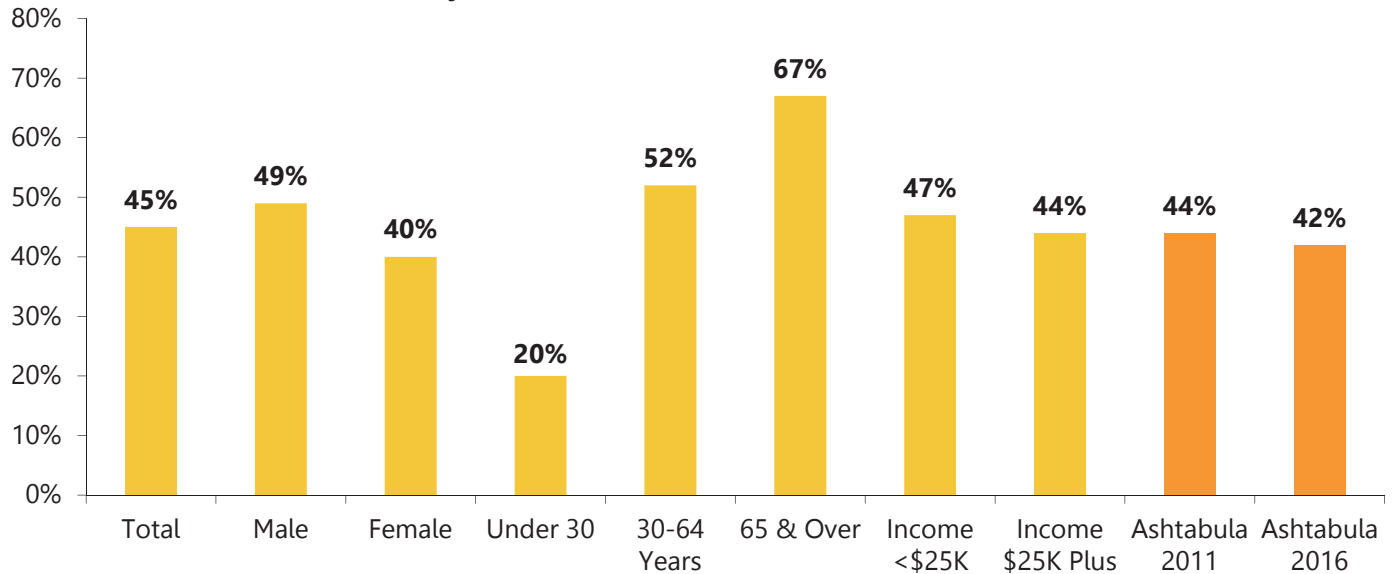*Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight.*
Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

TOBACCO USE

About one-in-five (21%) Ashtabula County adults were current smokers, and 28% were considered former smokers. Eight percent (8%) of adults used e-cigarettes or other electronic vaping products in the past year. One-fifth (20%) of adults used an e-cigarette or other electronic vaping product at least one time in their life.

Ashtabula County Adult Smoking Behaviors*

Category	Current smoker	Former smoker	Never smoked
Total	21%	28%	51%
Males	18%	33%	49%
Females	23%	23%	54%
Under 30	27%	9%	64%
30-64 Years	18%	32%	50%
65 & Over	9%	42%	49%
Income <$25K	40%	24%	36%
Income $25K Plus	15%	33%	52%
Ashtabula 2011	22%	30%	48%
Ashtabula 2016	21%	30%	49%
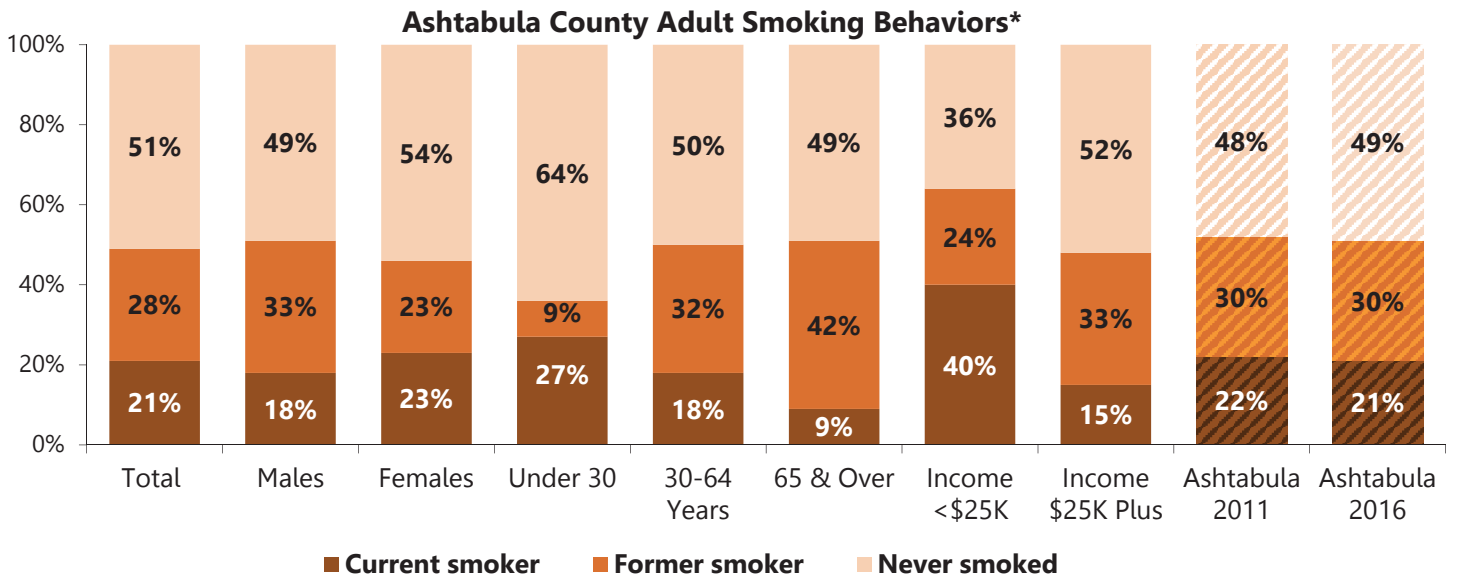
Respondents were asked: "Have you smoked at least 100 cigarettes in your entire life? If yes, do you now smoke cigarettes every day, some days or not at all?"

ALCOHOL CONSUMPTION

Nearly three-quarters (74%) of Ashtabula County adults had at least one alcoholic drink in the past month and would be considered current drinkers. Over one-fifth (23%) 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.

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

Category	Did not drink any	1-2 days	3 or more days
Total	26%	37%	37%
Males	22%	22%	56%
Females	30%	50%	20%
Under 30	22%	45%	33%
30-64 Years	22%	35%	43%
65 & Over	44%	28%	28%
Income <$25K	32%	46%	22%
Income $25K Plus	23%	32%	45%
Ashtabula 2011	40%	16%	42%
Ashtabula 2016	51%	13%	36%

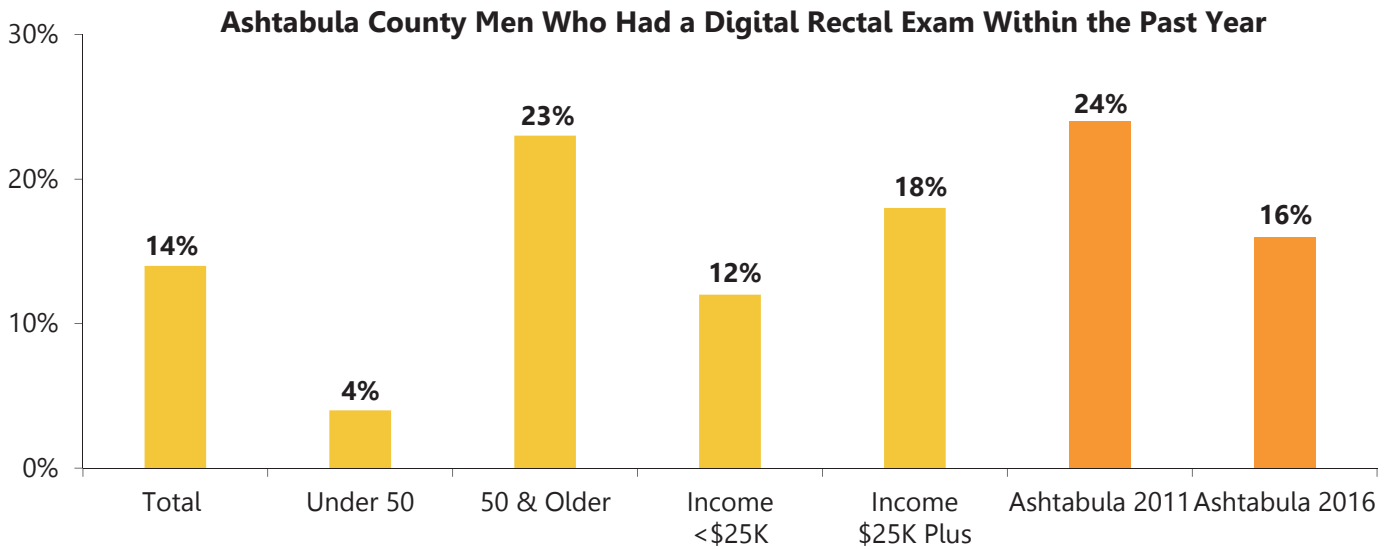*Percentages may not equal 100% as some respondents answered, "don't know".*
Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.
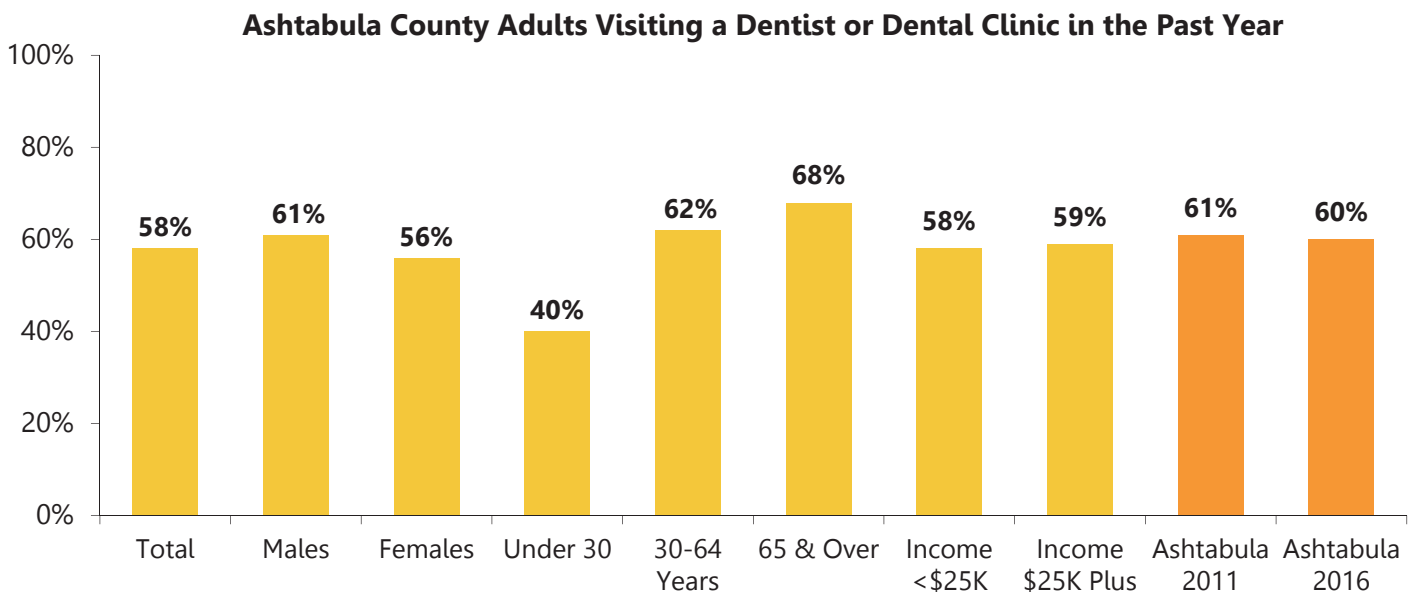
DRUG USE

Seven percent (7%) of Ashtabula County adults had used recreational marijuana or hashish during the past 6 months. Three percent (3%) 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.

Ashtabula County Adult Recreational Marijuana or Hashish Use in Past 6 Months

Category	Value
Total	7%
Males	10%
Females	4%
Under 30	18%
30-64 Years	6%
65 & Over	1%
Income <$25K	7%
Income $25K Plus	6%
Ashtabula 2011	7%
Ashtabula 2016	8%
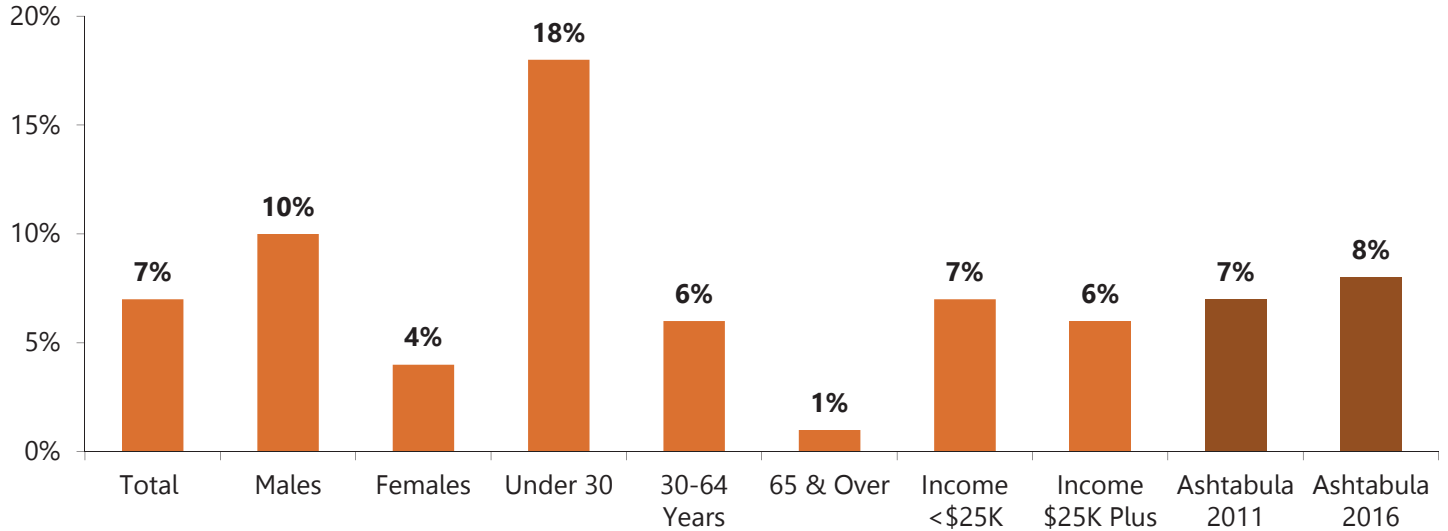
SEXUAL BEHAVIOR

Sixty-eight percent (68%) Ashtabula County adults had sexual intercourse in the past year. Six percent (6%) of adults had more than one sexual partner in the past year.

Ashtabula County Number of Sexual Partners in the Past Year*

Category	One	More than one	None
Total	62%	6%	32%
Males	67%	2%	31%
Females	59%	9%	32%
Under 30	70%	20%	10%
30-64 Years	66%	4%	30%
65 & Over	29%	2%	69%
Income <$25K	50%	12%	38%
Income $25K Plus	74%	0%	26%
Ashtabula 2011	70%	5%	25%
Ashtabula 2016	60%	9%	31%

■ One ■ More than one ■ None
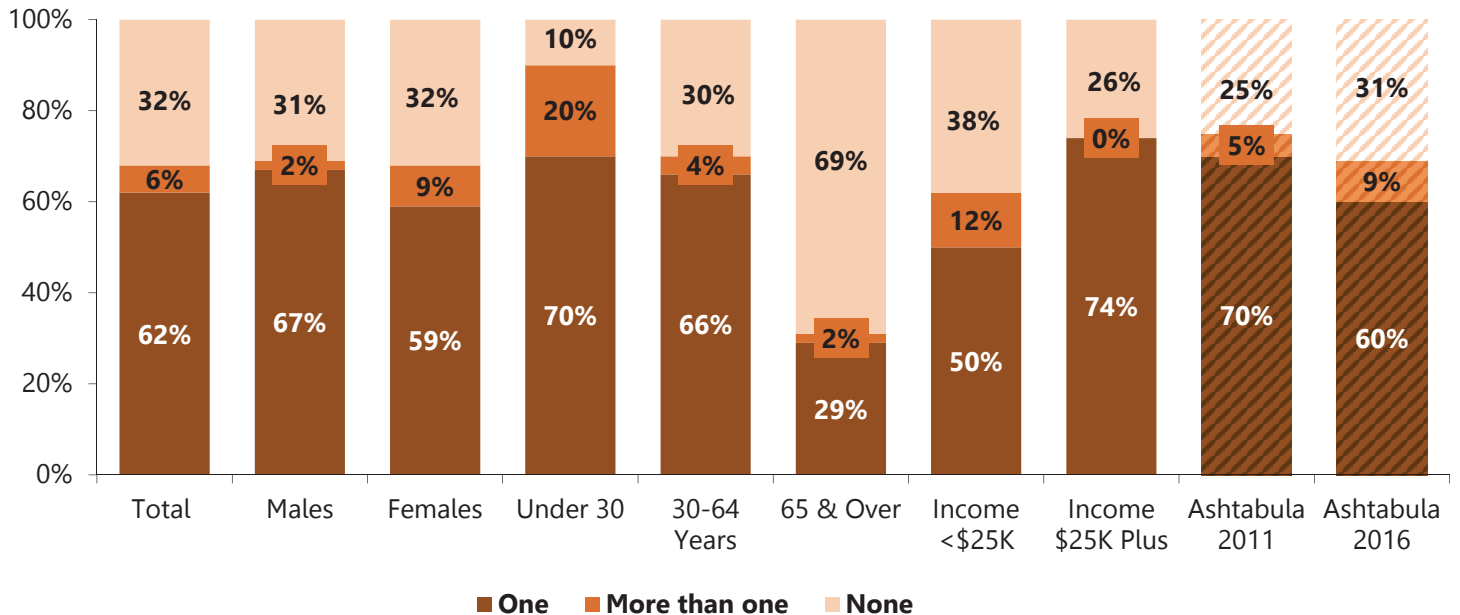
Respondents were asked: "During the past 12 months, with how many different people have you had sexual intercourse?"
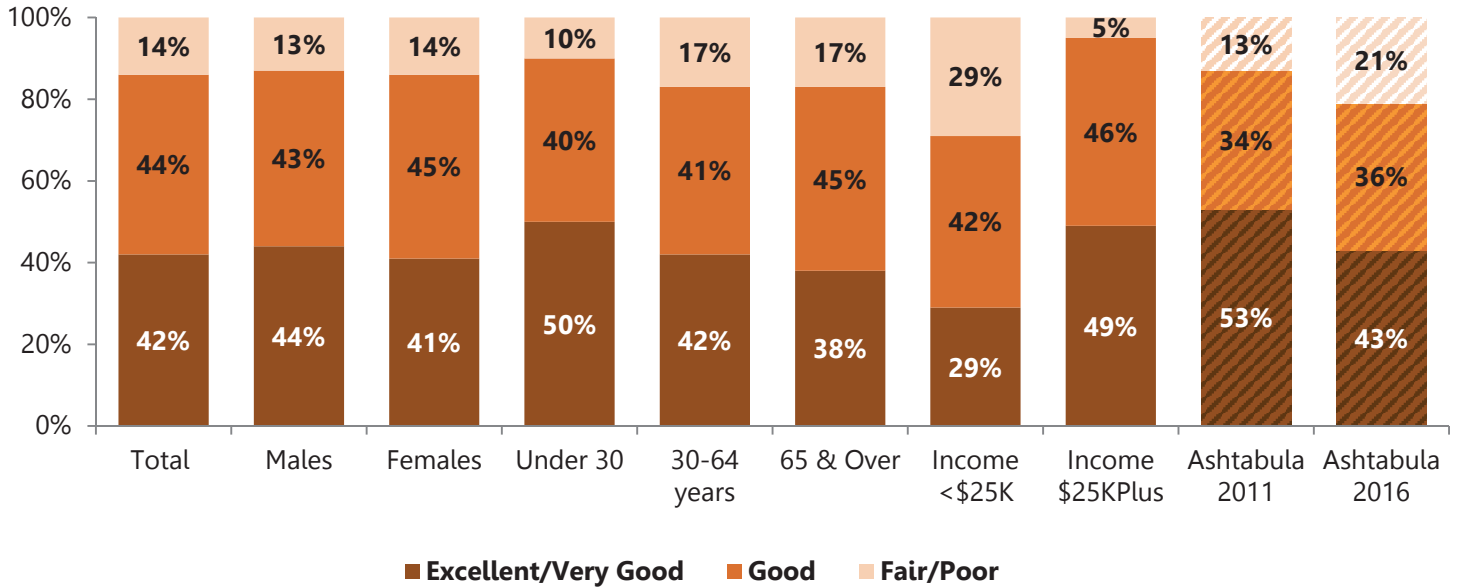*Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

MENTAL HEALTH

Six percent (6%) of Ashtabula County adults considered attempting suicide in the past year. Fifteen percent (15%) of adults had a period of two or more weeks when they felt so sad or hopeless nearly every day that they stopped doing usual activities in the past year.

Ashtabula County Adults Feeling Sad or Hopeless for Two or More Weeks in a Row

Category	Percentage
Total	15%
Males	8%
Females	20%
Under 30	30%
30-64 Years	11%
65 & Over	7%
Income <$25K	18%
Income $25K Plus	13%
Ashtabula 2011	15%
Ashtabula 2016	15%
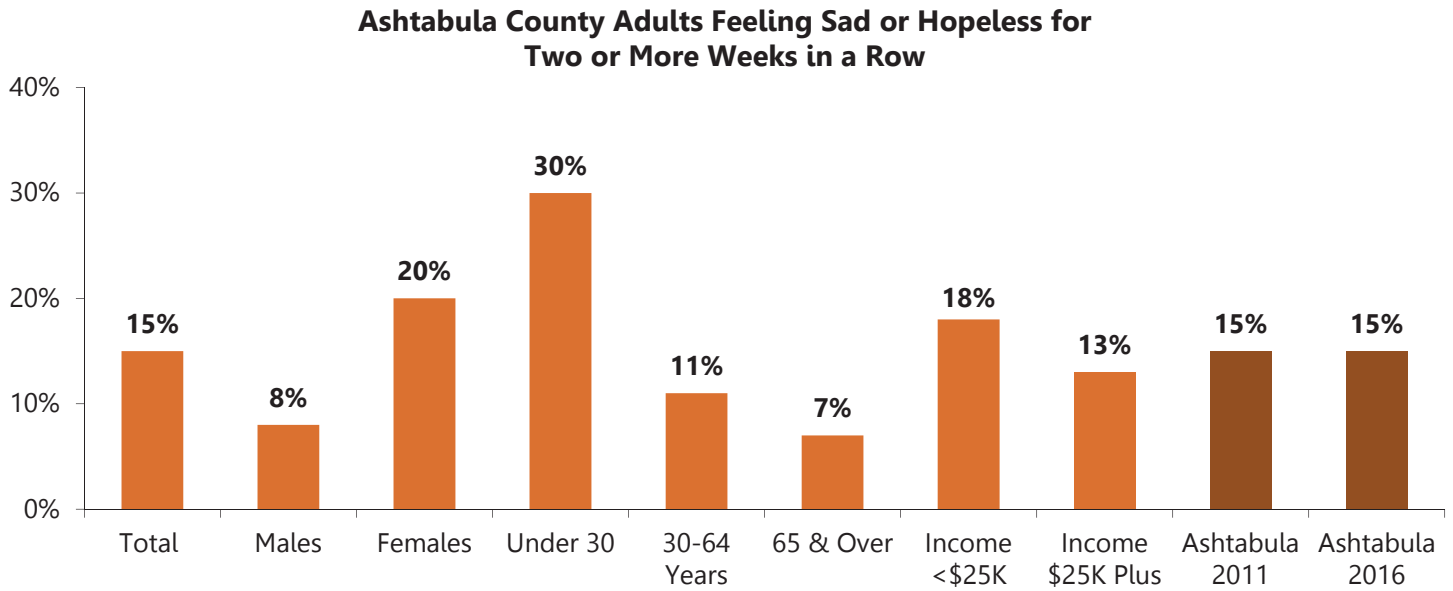
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.
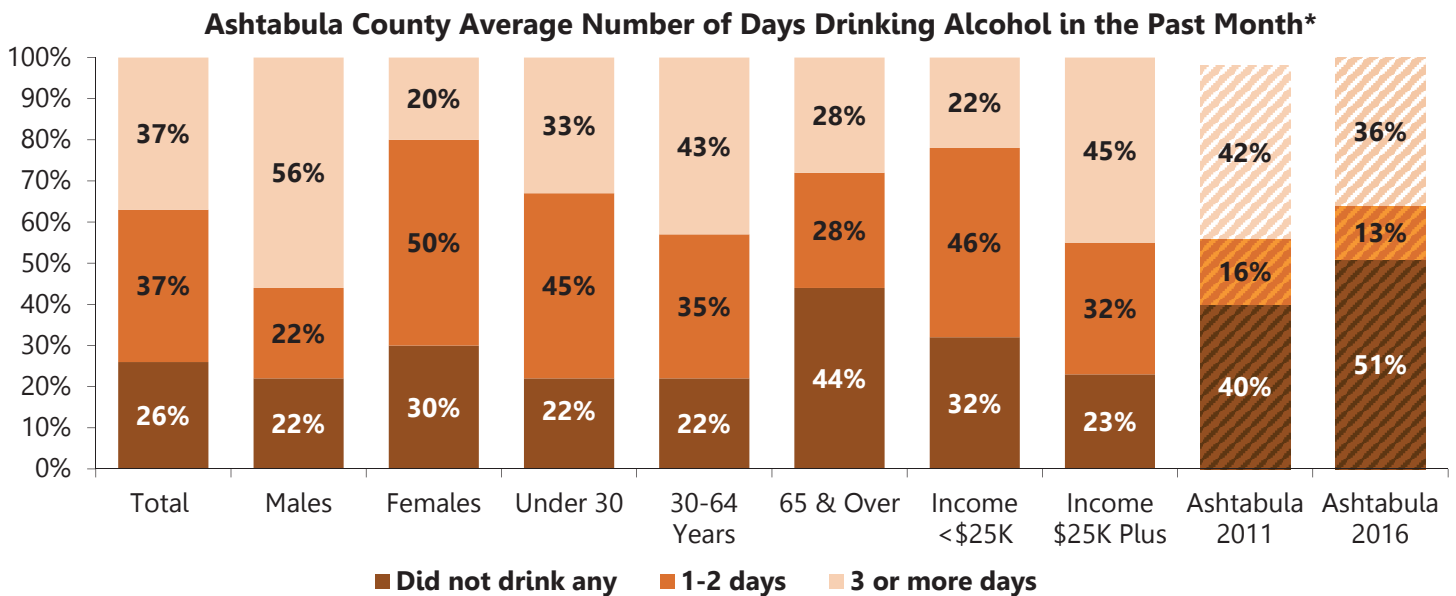
Data Summary | Chronic Disease

CARDIOVASCULAR HEALTH

Five percent (5%) of adults had survived a heart attack and 3% had survived a stroke at some time in their life. Forty-two percent (42%) of adults had been diagnosed with high blood pressure, 42% were obese, 40% were diagnosed with high blood cholesterol, and 21% were current smokers, four known risk factors for heart disease and stroke.

Ashtabula County Adults with Cardiovascular Disease Risk Factors

Category	Percentage
Obesity	42%
High Blood Pressure	42%
High Blood Cholestrol	40%
Smoking	21%
Diabetes	13%

CANCER

Fifteen percent (15%) of Ashtabula County adults had been diagnosed with cancer at some time in their life.

ASTHMA AND OTHER RESPIRATORY DISEASE

Nearly one-fifth (18%) of Ashtabula County adults had been diagnosed with asthma.
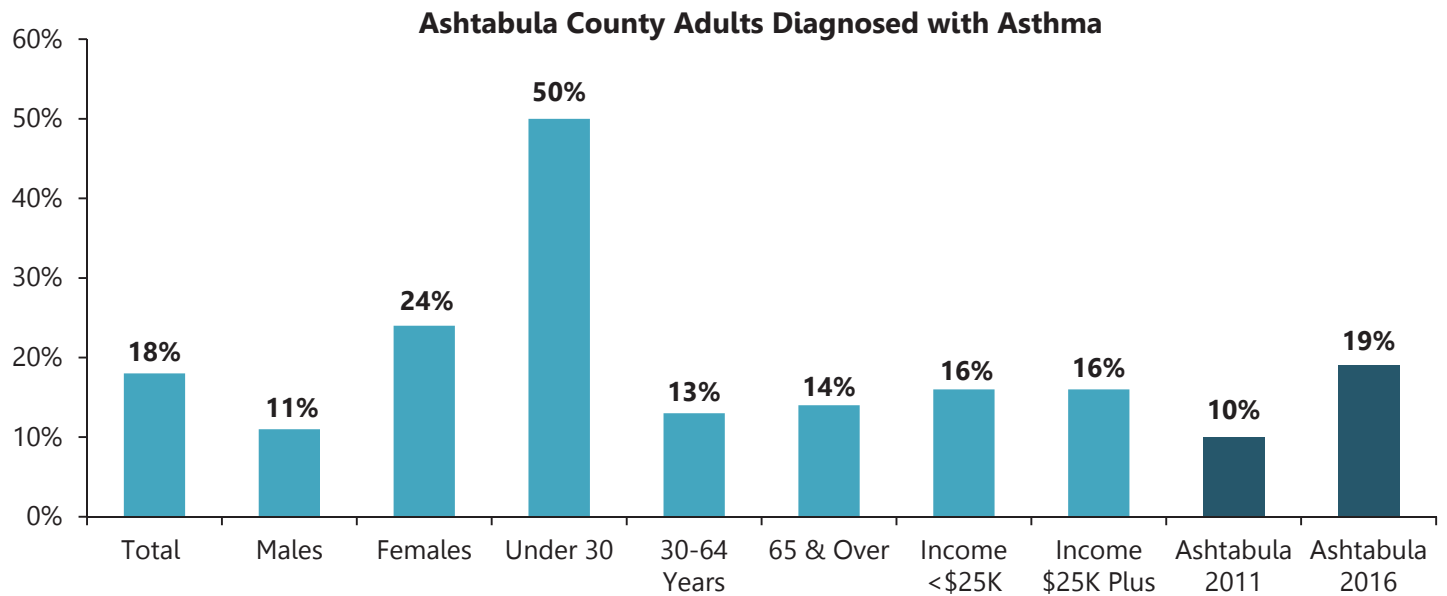
Ashtabula County Adults Diagnosed with Asthma

Category	Percentage
Total	18%
Males	11%
Females	24%
Under 30	50%
30-64 Years	13%
65 & Over	14%
Income <$25K	16%
Income $25K Plus	16%
Ashtabula 2011	10%
Ashtabula 2016	19%

ARTHRITIS

More than one-third (36%) of Ashtabula County adults were diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia.

Ashtabula County Adults Diagnosed with Arthritis

Category	Percentage
Total	36%
Males	36%
Females	34%
Under 30	0%
30-64 Years	44%
65 & Over	64%
Income <$25K	38%
Income $25K Plus	35%
Ashtabula 2011	35%
Ashtabula 2016	44%
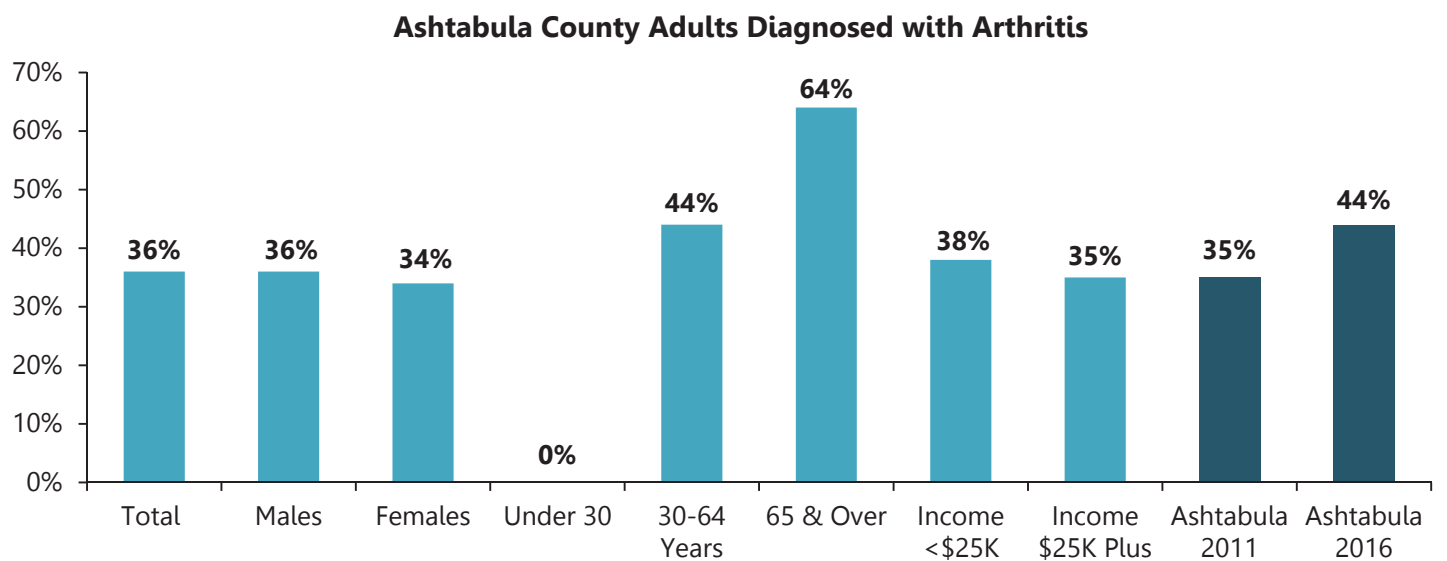
Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

DIABETES

Thirteen percent (13%) of Ashtabula County adults had been diagnosed with diabetes. Over one-third (35%) of adults with diabetes rated their health as fair or poor.

Ashtabula County Adults Diagnosed with Diabetes

Category	Percent
Total	13%
Males	13%
Females	12%
Under 30	0%
30-64 Years	14%
65 & Over	27%
Income <$25K	18%
Income $25K Plus	10%
Ashtabula 2011	10%
Ashtabula 2016	13%
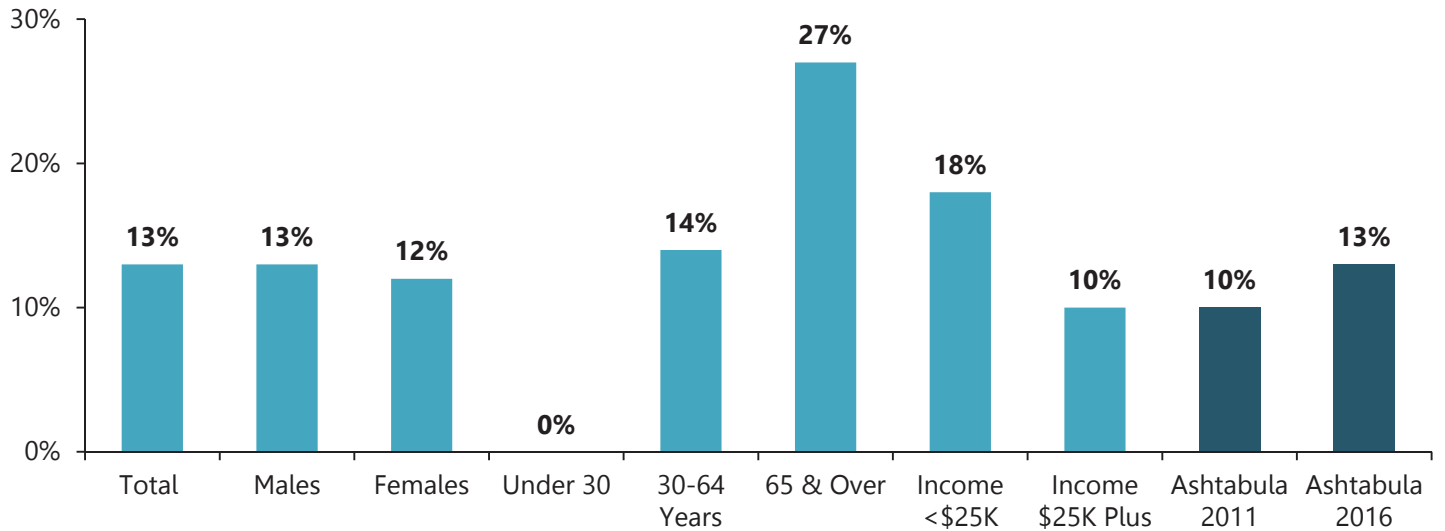
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

QUALITY OF LIFE

Over half (54%) of Ashtabula County adults reported they were limited in some way because of a physical, mental or emotional problem. The most limiting health problems were back or neck problems (48%), arthritis/rheumatism (40%), chronic pain (23%), walking problems (22%), and sleep problems (21%).

Ashtabula County Most Limiting Health Problems

Category	Percent
Back/Neck Problems	48%
Arthritis/Rheumatism	40%
Chronic Pain	23%
Walking Problems	22%
Sleep Problems	21%
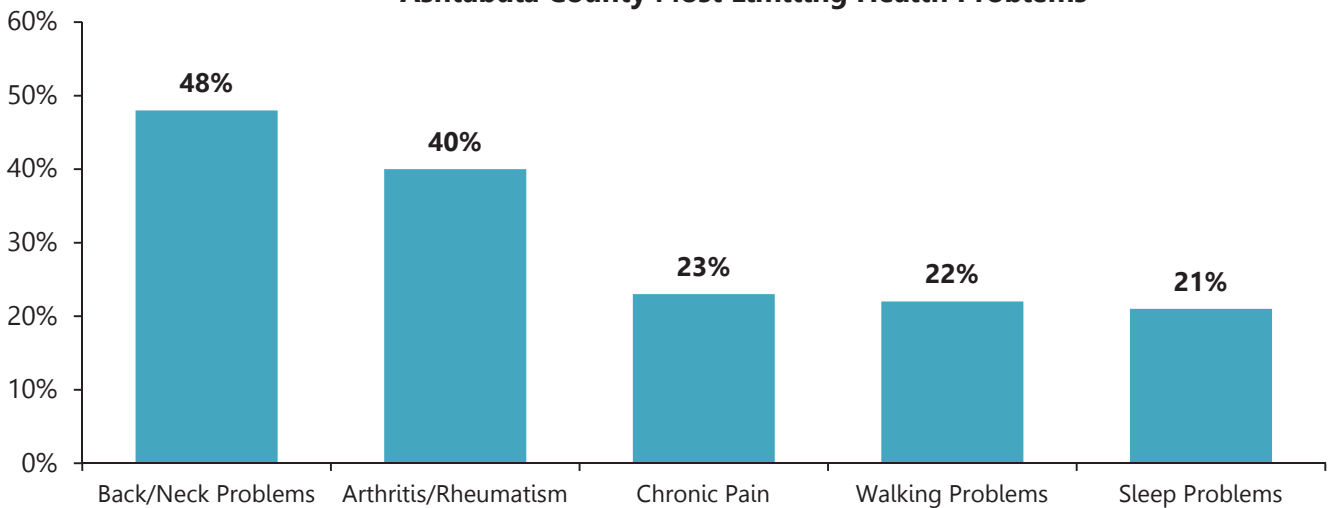
Data Summary | Social Conditions

SOCIAL DETERMINANTS OF HEALTH

Over one-fifth (23%) of Ashtabula County adults had four or more adverse childhood experiences (ACEs) in their lifetime. Seventeen percent (17%) of adults had experienced at least one issue related to hunger/food insecurity in the past year.

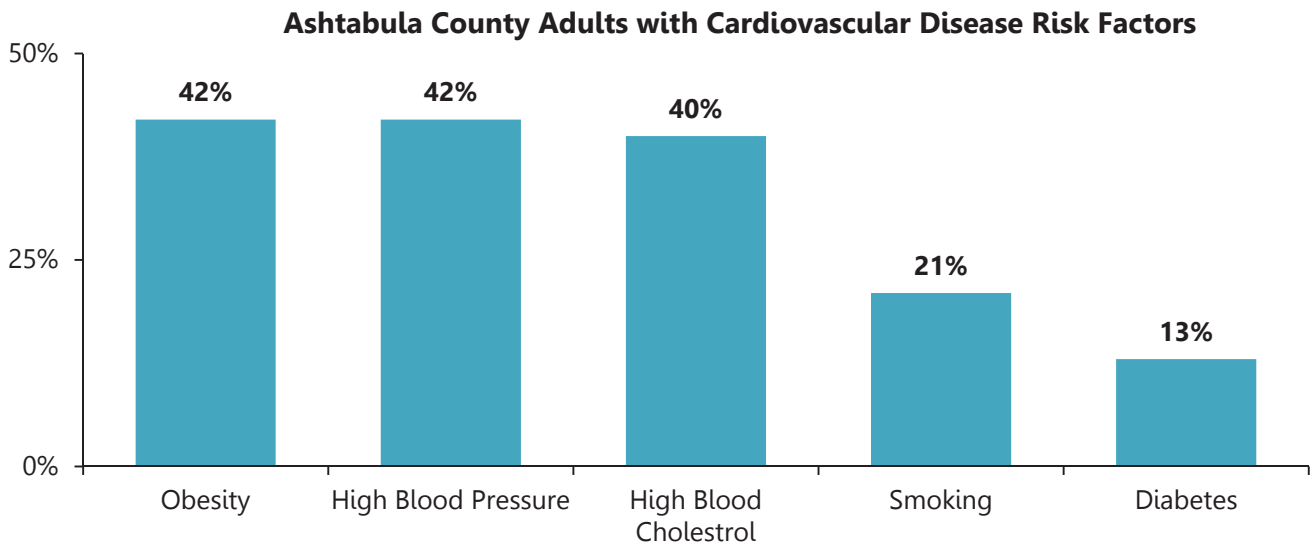**Ashtabula County Adults Who Experienced Four or More ACEs in their Lifetime**
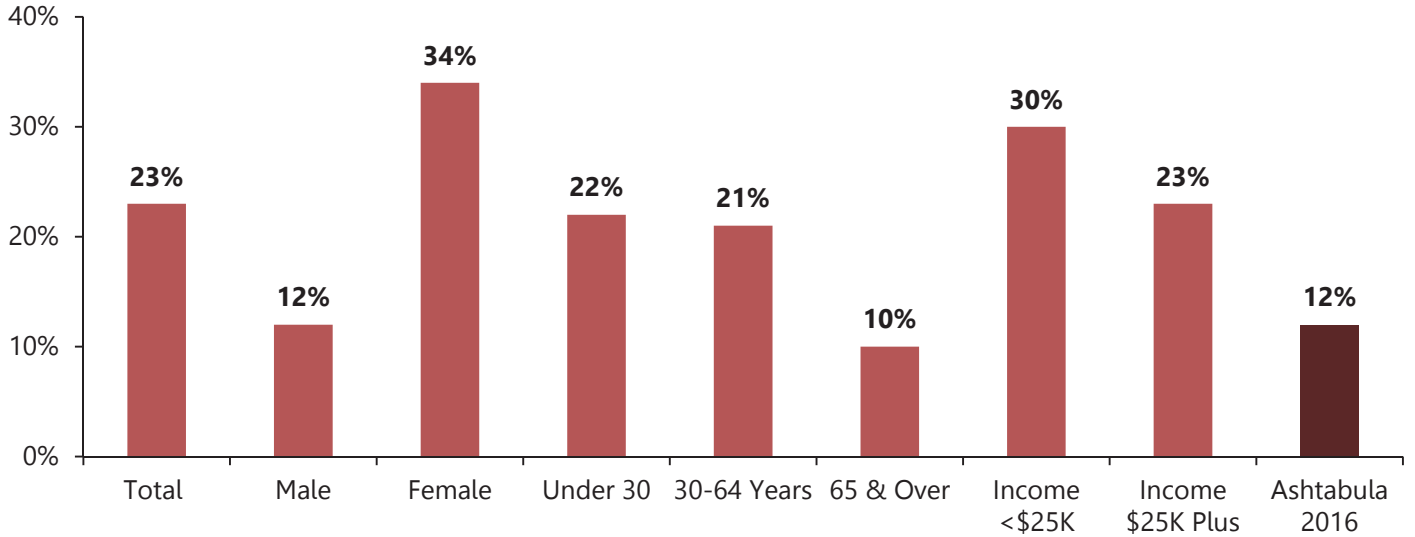
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

ENVIRONMENTAL HEALTH

Ashtabula County adults reported the following as the top four issues that threatened their health in the past year: insects (12%), temperature regulation (6%), rodents (5%), and mold (5%). Seventy-eight percent (78%) of adults reported they had a working smoke detector in their home.

PARENTING

More than four-fifths (86%) of parents indicated their child had received all recommended immunizations. Forty-two percent (42%) of parents discussed dating and relationships with their 10-to-17-year-old child.

Trend Summary

Variables	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Health Care Coverage					
Uninsured	17%	8%	10%	8%	11%
Access and Utilization					
Had at least one person they thought of as their personal doctor or health care provider	74%	83%	83%	81%	77%
Visited a doctor for a routine checkup in the past year	48%	64%	69%	72%	70%
Preventive Medicine					
Had a pneumonia vaccination (age 65 and over)	62%	69%	69%	76%	75%
Had a flu vaccine in the past year (age 65 and over)	N/A	70%	67%	63%	61%
Had a shingles or Zoster vaccination in lifetime	N/A	15%	25%	29%	29%
Women's Health					
Had a mammogram within the past two years (age 40 and older)	69%	70%	73%	74%*	73%*
Had a Pap smear within the past three years (age 21-65)	N/A	63%±	66%	82%*	80%*
Men's Health					
Had a digital rectal exam within the past year	24%	16%	14%	N/A	N/A
Oral Health					
Adults who had visited the dentist in the past year	61%	60%	58%	68%*	66%*
Adults who had one or more permanent teeth removed	N/A	56%	58%	45%*	43%*
Adults 65 years and older who had all their permanent teeth removed	N/A	17%	12%	17%*	14%*
Health Status Perceptions					
Rated health as excellent or very good	48%	43%	42%	49%	51%
Rated health as fair or poor	19%	22%	14%	19%	18%
Rated physical health as not good on four or more days (in the past 30 days)	25%	31%	24%	23%	22%
Average days that physical health not good in past month	N/A	5.8	3.8	4.0¥	3.7¥
Rated mental health as not good on four or more days (in the past 30 days)	29%	40%	36%	26%	24%
Average days that mental health not good in past month	N/A	7.0	6.1	4.3¥	3.8¥
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)	25%	30%	39%	24%	23%

N/A - Not Available
*2016 BRFSS
¥2016 BRFSS data as compiled by 2019 County Health Rankings
±Pap smear was reported for women ages 19 and over
 Indicates alignment with the Ohio State Health Assessment

Variables	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Weight Status					
Obese	32%	43%	42%	34%	31%
Overweight	36%	30%	33%	34%	35%
Tobacco Use					
Current smoker (currently smoke some or all days)🔵	22%	21%	21%	21%	17%
Former smoker (smoked 100 cigarettes in lifetime & now do not smoke)	30%	30%	28%	24%	25%
Alcohol Consumption					
Current Drinker (drank alcohol at least once in the past month)	51%	49%	74%	54%	55%
Binge drinker (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days)🔵	21%	24%	23%	19%	17%
Drove after having perhaps too much alcohol to drink (in the past month)	N/A	N/A	6%	4%*	4%*
Drug Use					
Adults who used recreational marijuana or hashish in the past 6 months	7%	8%	7%	N/A	N/A
Adults who misused prescription drugs in the past 6 months	8%	4%	3%	N/A	N/A
Adults who used recreational drugs in the past 6 months	1%	1%	3%	N/A	N/A
Sexual Behavior					
Had more than one sexual partner in the past year	5%	9%	6%	N/A	N/A
Mental Health					
Considered attempting suicide in the past year	8%	7%	6%	N/A	N/A
Felt so sad or hopeless almost every day for two weeks or more in a row	15%	15%	15%	N/A	N/A
Cardiovascular Disease					
Had angina or coronary heart disease🔵	N/A	5%	3%	5%	4%
Had a heart attack🔵	7%	5%	5%	6%	4%
Had a stroke	6%	4%	3%	4%	3%
Had high blood pressure🔵	31%	37%	42%	35%	32%
Had high blood cholesterol	34%	37%	40%	33%	33%
Had blood cholesterol checked within past 5 years	N/A	78%	80%	85%	86%

N/A - Not available
*2016 BRFSS Data
🔵 Indicates alignment with the Ohio State Health Assessment (SHA)

Variables	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Asthma, Arthritis and Diabetes					
Ever been told they have asthma 🔹	10%	19%	18%	14%	14%
Ever diagnosed with chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis	N/A	11%	8%	8%	7%
Ever diagnosed with arthritis	35%	44%	36%	29%	25%
Ever been told by a doctor they have diabetes (not pregnancy-related) 🔹	10%	13%	13%	11%	11%
Had been diagnosed with pre-diabetes or borderline diabetes	N/A	6%	6%	2%	2%
Quality of Life					
Limited in some way because of physical, mental, or emotional problems	31%	36%	54%	N/A	N/A

N/A- Not available
🔹 *Indicates alignment with the Ohio SHA*

Evaluation of Impact

UH Conneaut and Geneva Medical Centers

UH Conneaut and UH Geneva Medical Centers CHNA Implementation Plan: Impact Assessment

UH Conneaut Medical Center is a community-based hospital with 25 beds. This not-for-profit hospital serves mainly Ashtabula County, along with its 25-bed counterpart UH Geneva Medical Center.   Both of these acute-care facilities are federally designated as Critical Care Hospitals. The full spectrum of services includes specialists in cardiology, critical care medicine, orthopedics, oncology, pain management, family medicine, women's health, sleep medicine, and general surgery. These two hospitals are 30 miles apart, with UH Geneva Medical Center's location in the northwest part of Ashtabula County and UH Conneaut Medical Center in the northeast section of the county.

The last assessment conducted by UH Conneaut and Geneva Medical Centers was adopted by University Hospitals in September 2018. The corresponding Implementation Strategy was adopted in March 2019, while simultaneously conducting the 2019 collaborative CHNA with Ashtabula County Health District. This one-year consecutive process is atypical, in that there is usually a three-year period between assessments. This was done to fulfill State of Ohio requirements to align hospitals and public health departments on the same three-year planning cycle by 2020. As such, the reporting period covers 2018 and the first two quarters of 2019.

Upon review of the 2018 Community Health Needs Assessments, hospital leadership for UH Conneaut and UH Geneva Medical Centers' isolated two top priority community health needs:
1.   Chronic Disease Prevention
2.   Mental Health & Addiction

In the first two quarters of 2019, UH Conneaut and UH Geneva Medical Centers provided a variety of activities to address chronic disease prevention including: screenings for blood pressure, glucose, and cholesterol to 520 people. 54 participants were enrolled in the Diabetes Education program between the two hospitals. Lastly, 829 children were introduced to MyPlate and Rethink Your Drink programs aimed at improving nutrition.

Additionally, as it pertains to mental health and addiction, 3,020 students at school districts throughout Ashtabula County participated in Botvin Life Skills training which is a comprehensive, dynamic, and developmentally appropriate substance abuse and violence prevention program.

This builds upon the hospitals' previous strategies to address 1) **chronic disease management**; 2) **mental health**; and, 3) **childhood obesity**.   Within those areas, in consideration of the hospital's expertise and its being a community-based hospital, the following goals were established:
- Limit the burden and decrease the prevalence of chronic disease in Ashtabula County
- Promote optimal mental health and prevent suicide
- Increase the percentage of children in Ashtabula County who maintain a healthy weight as recommend by the American Academy of Pediatrics

With these goals in-hand, action plans were created to lend the hospitals' staff expertise and resources to combat each community health issue. Below we outline what actions were taken and provide an assessment of the impact of those actions.

1.   Chronic Disease
Limit the burden and decrease the prevalence of chronic disease in Ashtabula County

   a.   Improved patient awareness for those with chronic diseases. Both hospitals provided focused disease management education for their inpatients. In 2017, the educational efforts resulted in 49.5% (Conneaut) and 52.5% (Geneva) of patients increasing their level of understanding of their disease

and its management (self-reports). The number of patients with increased knowledge improved in 2018 by about 25 percentage points in both hospitals.

Proportion of Inpatients With Improved Understanding of Their Chronic Disease and Its Management

UH Conneaut: 2017 = 49.5%, 2018 = 75.8%
UH Geneva: 2017 = 52.5%, 2018 = 76.3%

Legend: ■ 2017 ■ 2018
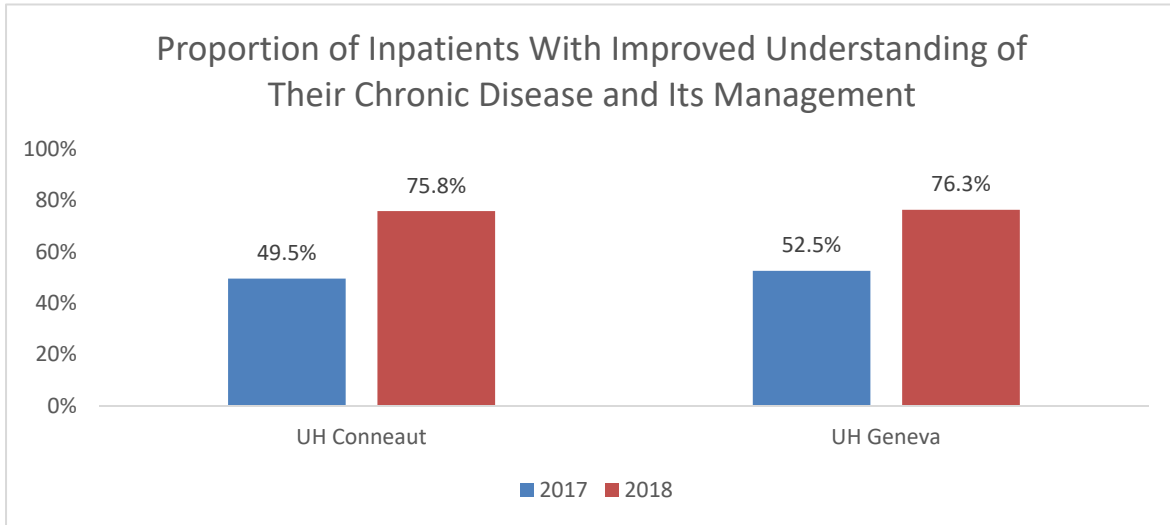
b. Increase awareness of services and resources available to 100 community members: There are numerous health support services available to community members in Ashtabula County. Simple lack of awareness of these services is often the major barrier to their being utilized. Both hospitals engaged in numerous community outreach events, screenings, and support groups, all of which included information related to services available for community members. In 2018, a total of 4,322 community members attended one or more of the community outreach events for community members, far exceeding the combined hospitals' goals of 200.

c. Increase early detection of risk factors via 5 screenings: Through efforts by both hospitals, several screening events were held throughout 2018. They included screenings for blood pressure, cholesterol, glucose levels, free mammograms, obstructive sleep apnea, stroke risk (carotid), body mass index, COPD symptoms, biometric screenings.

Number of Health Screenings, UH Geneva and UH Conneaut Medical Centers Combined, By Quarter, 2018

Q1 = 223
Q2 = 527
Q3 = 344
Q4 = 1013
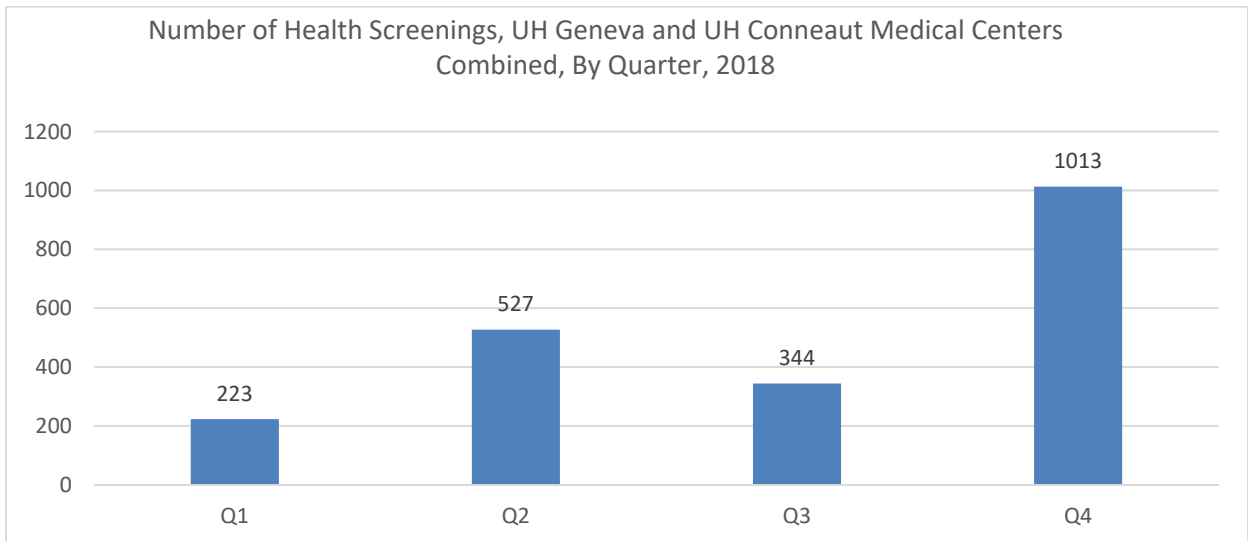
2. Mental Health and Suicide Prevention

   a. Increase knowledge of suicide recognizable symptoms for 5% patients

       UH Conneaut and UH Geneva Medical Centers did not reach its goal of improving knowledge about recognizable suicide symptoms by 5% (about 85 patients) in 2018. Efforts fell short with 55 patients receiving the education and improving their knowledge.

   b. Increase awareness of mental health and suicide prevention services and resources available to 100 community members

       The hospitals were more successful in this effort, which targeted school children in grades 3-8. In 2018, a total of 3,503 participated in educational programs aimed at increasing awareness of mental health and suicide prevention services.

   c. Increase early detection of risk factors via 2 community screenings and use of Geriatric Depression Scale for 60 and over through the Hospital to Home program

       In 2018, 172 community members over age 60 were screened for depression. This result was obtained via screenings at community-based events and through the hospitals' Hospital to Home program upon discharge. Each year, the hospitals discharge approximately 1,500 patients age 60 and older. The potential for the growth and impact of this program is large.

3. Childhood Obesity

   a. Increase awareness of services and resources available to 100 community members

       Through community partners focused on serving children (Head Start, nutrition health forums, an AHA Heart Walk, and a Healthy Holiday Foods program), a total of 1,383 children (and their family members) participated in programs focused on improving eating and exercise habits aimed at reducing childhood obesity. This far exceeded the hospitals' initial goal of 200.

   b. Increase awareness of food disparity resources to 100 people

       Much of Ashtabula County is a 'food dessert,' where there is no routine access to nutritious and fresh foods. This program focused on providing education at events where health and fresh foods are distributed to vulnerable community members. These included cooking demonstrations at senior centers, providing lunches for summer school programs, community gardens, and presentations at food pantries. Over 700 adults obtained information on services to address food insecurity problems in Ashtabula County. Thousands of meals were provided to school children during the summer school sessions.

Health Care Access: Health Care Coverage

Key Findings

Ten percent (10%) of Ashtabula County adults were without health care coverage. The top reason adults gave for being without health care coverage was they could not afford to pay the insurance premiums (72%).

> ### 7,611 Ashtabula County adults were uninsured.

Health Care Coverage

- In 2019, 90% Ashtabula County adults had health care coverage, leaving 10% who were uninsured.

- The following types of health care coverage were used:
  — Employer (38%)
  — Medicare (26%)
  — Medicaid or medical assistance (11%)
  — Someone else's employer (10%)
  — Self-paid plan (6%)
  — Military, CHAMPUS, TriCare, CHAMPVA, or the VA (3%)
  — Health Insurance Marketplace (1%)

- Ashtabula County adult health care coverage included the following:
  — Medical (99%)
  — Prescription coverage (93%)
  — Preventive health (82%)
  — Immunizations (80%)
  — Outpatient therapy (71%)
  — Dental (63%)
  — Vision/eyeglasses (63%)
  — Mental health (57%)
  — Alcohol and drug treatment (38%)
  — Durable medical equipment (33%)
  — Skilled nursing/assisted living (25%)
  — Home care (23%)
  — Transportation (21%)
  — Air ambulance (18%)
  — Hospice (18%)

- Top three reasons uninsured adults gave for being without health care coverage were:
  1. They could not afford to pay the insurance premiums (72%)
  2. They lost their job or changed employers (33%)
  3. Their employer does not/stopped offering coverage (21%)

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

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Uninsured	17%	8%	10%	8%	11%

The following graph shows the percentages of Ashtabula County adults who were uninsured. An example of how to interpret the information in the graph includes: 10% of all Ashtabula County adults were uninsured, including 18% of those with incomes less than $25,000 and 13% of females. The pie chart shows sources of Ashtabula County adults' health care coverage.
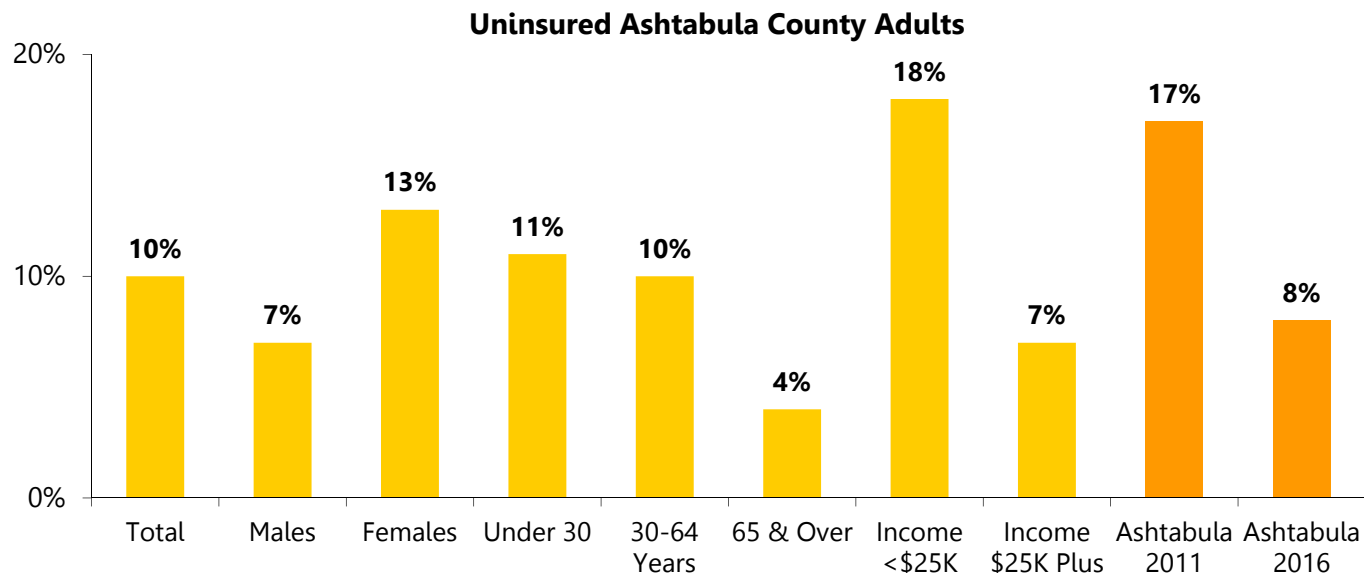
Uninsured Ashtabula County Adults

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 Ashtabula County Adults
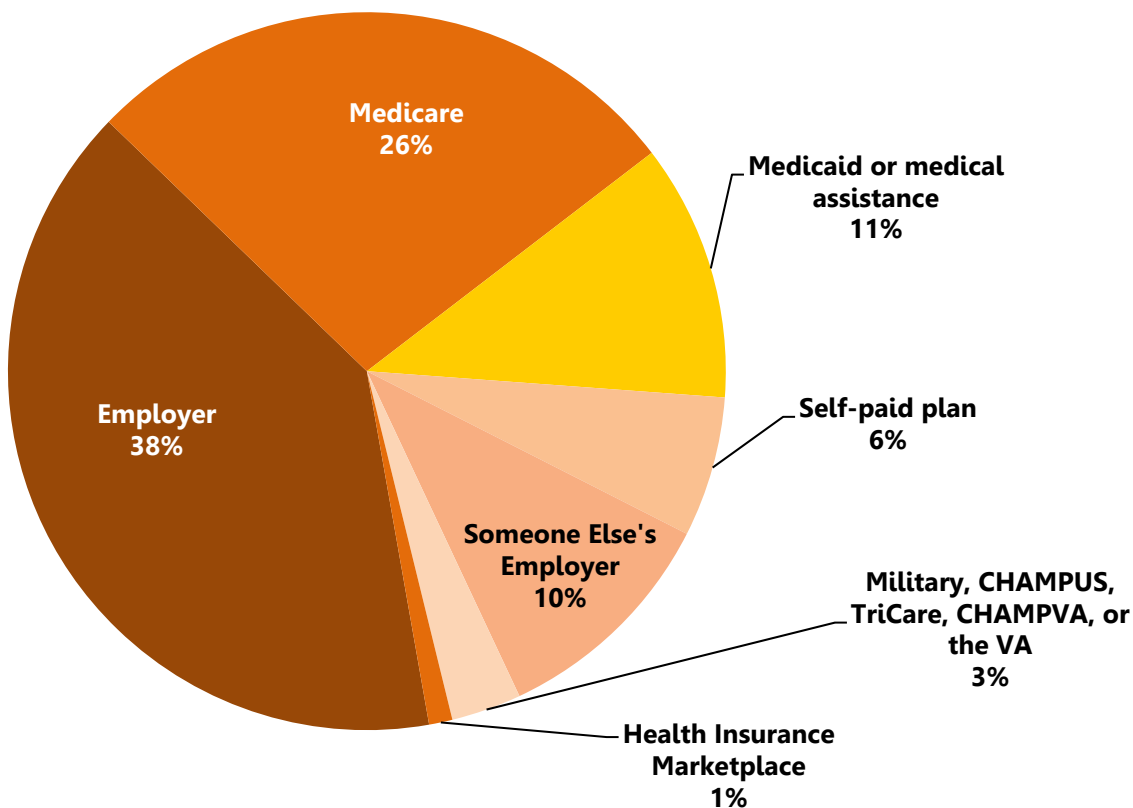
The following table shows what is included in Ashtabula County adults' insurance coverage.

Health Coverage Includes:	Yes	No	Don't Know
Medical	99%	0%	1%
Prescription Coverage	93%	5%	2%
Preventive Health	82%	1%	17%
Immunizations	80%	2%	18%
Outpatient Therapy	71%	3%	26%
Dental	63%	31%	6%
Vision/Eyeglasses	63%	29%	8%
Mental Health	57%	4%	39%
Alcohol and Drug Treatment	38%	6%	56%
Durable Medical Equipment	33%	4%	63%
Skilled Nursing/Assisted Living	25%	5%	70%
Home Care	23%	6%	71%
Transportation	21%	11%	68%
Air Ambulance	18%	10%	72%
Hospice	18%	5%	77%

Healthy People 2020
Access to Health Services (AHS)

Objective	Ashtabula County 2019	Ohio 2017	U.S. 2016*	Healthy People 2020 Target
AHS-1.1: Persons under age of 65 years with health care insurance	100% age 18-24 86% age 25-34 90% age 35-44 85% age 45-54 90% 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
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.
(Sources: Healthy People 2020 Objectives, 2016 BRFSS, 2017 BRFSS, 2019 Ashtabula County Health Assessment)

Hospital Discharges for Patients without Medical Insurance, 2017*

- There are two University Hospital acute care hospitals in Ashtabula County. Of the 1,751 inpatients for UH Conneaut Medical Center or UH Geneva Medical Center in 2017, only .7% of adults under age 65 were "self-pay." None of those age 65 and older hospitalized in either of those two acute care hospitals in 2017 were not covered by healthcare insurance.

	Patients Age 18-64 Years	Patients Age 65 Years and Older
Patients without Medical Insurance at Discharge	4 of 513 (.7%)	0 of 1,234 (0%)

Patients who were categorized as either 'self-pay' or 'charity care.'
(Source: Hospital Discharge Data, 2017, as analyzed and reported by Cypress Research)

Health Care Access: Access and Utilization

Key Findings

Sixty-nine percent (69%) of Ashtabula County adults had visited a doctor for a routine checkup in the past year. Almost two-thirds (63%) of adults went outside of Ashtabula County for health care services in the past year.

Health Care Access

- Sixty-nine percent (69%) of Ashtabula County adults visited a doctor for a routine checkup in the past year, increasing to 85% of those over the age of 65.

- More than half (53%) of Ashtabula County adults reported they had one person they thought of as their personal doctor or health care provider. Thirty percent (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.

The following graph shows the percentage of Ashtabula County adults who had a routine check-up in the past year. An example of how to interpret the information on the graph includes: 69% of all Ashtabula County adults have had a routine check-up in the past year, including 73% of females and 85% of those 65 years and older.
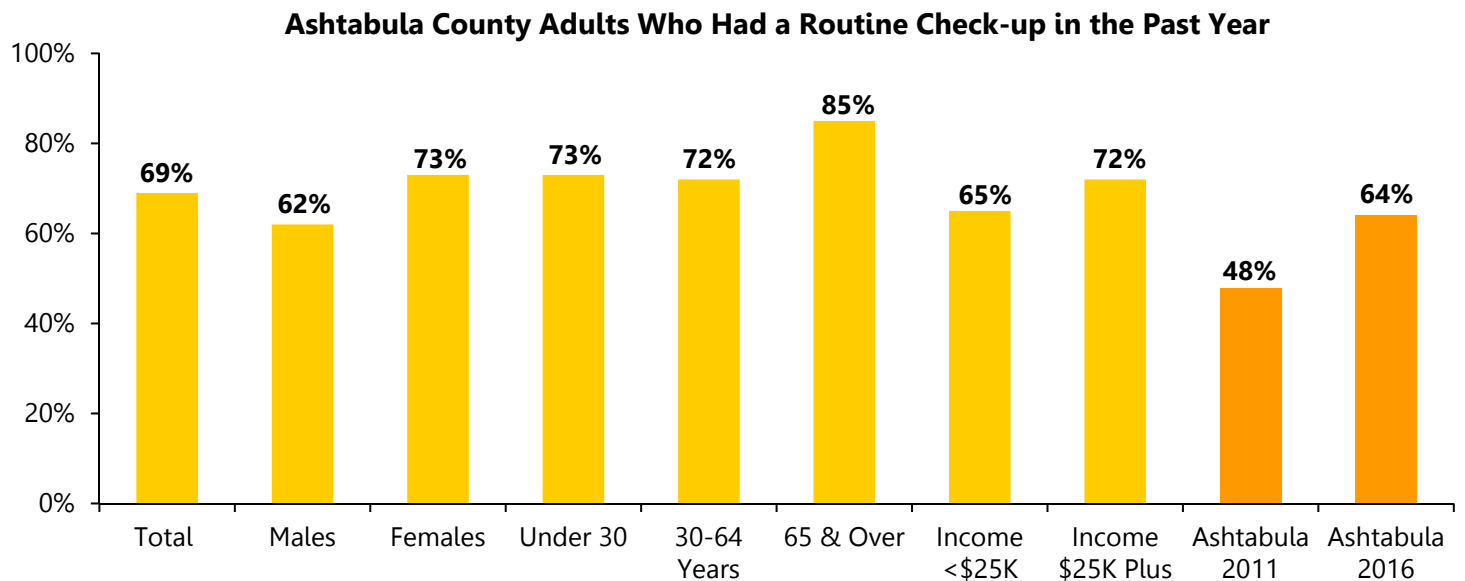
Ashtabula County Adults Who Had a Routine Check-up in the Past Year

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	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Had at least one person they thought of as their personal doctor or health care provider	74%	83%	83%	81%	77%
Visited a doctor for a routine checkup in the past year	48%	64%	69%	72%	70%

- Sixty-three percent (63%) of adults went outside of Ashtabula County for the following health care services in the past year:
  — Specialty care (27%)
  — Primary care (27%)
  — Dental services (21%)
  — Obstetrics/gynecology (14%)
  — Female health services (9%)
  — Orthopedic care (8%)
  — Cardiac care (6%)
  — Mental health care/counseling (6%)
  — Ear, nose, and throat care (6%)
  — Dermatological (skin) care (5%)
  — Podiatry (foot/ankle) care (5%)
  — Pediatric care (5%)
  — Cancer care (5%)
  — Addiction services (2%)
  — Pediatric therapies (1%)
  — Bariatric (obesity) care (<1%)
  — Other services (14%)

- Reasons for going outside of Ashtabula County for health care services included the following: did not like local services/providers (20%), better quality program (19%), service not locally available (16%), bad experience locally (11%), used to live there (8%), word of mouth (8%), wait list too long (4%), work there (3%), inconvenient hours (2%), insurance restriction (2%), confidentiality/anonymity (<1%) and other reasons (13%).

- Nearly three-fourths (74%) of Ashtabula County adults traveled less than 20 miles for health care. Twenty-one percent (21%) traveled 20 to 40 miles, 4% traveled 41 to 60 miles and 1% traveled more than 60 miles.

- Sixty-two percent (62%) of adults had used an emergency room for their health care for the following reasons: serious illness/injury (52%), could not get in to see their primary physician because of time of day/too long of a wait (13%), doctor told them to go there (7%), did not have a primary physician (5%), and it's what they have always done/what they are used to (1%).

- Adults usually visited the following places for health care services and advice:
  — Doctor's office (65%)
  — Urgent care center (9%)
  — Hospital emergency room (6%)
  — Family and friends (4%)
  — Department of Veteran's Affairs (VA) (3%)
  — Internet (3%)
  — Multiple places, including a doctor's office (2%)
  — Multiple places, not including a doctor's office (1%)
  — Chiropractor (1%)
  — Public health clinic or community health center (1%)
  — Telemedicine (1%)
  — Some other kind of place (<1%)

- Six percent (6%) of adults indicated they had no usual place for health care services.

- Ashtabula County adults reported the following might prevent them from seeing a doctor if they were sick, injured, or needed some kind of health care:
  — Cost (38%)
  — Doctor/health professional would not take their insurance (18%)
  — Difficult to get an appointment (16%)
  — Inconvenient hours (11%)
  — Worried they might find something wrong (10%)
  — Could not get time off work (9%)
  — Difficult to find/no transportation (6%)
  — Do not trust or believe doctors (5%)
  — Frightened of the procedure or doctor (4%)
  — Could not find childcare (1%)
  — Language barrier (1%)
  — Discrimination (<1%)
  — Some other reason (6%)

- Ashtabula County adults did not get the following major or preventive care because of cost: lab testing (19%), colonoscopy (11%), Pap smear (10%), mammogram (9%), medication (8%), mental health services (7%), surgery (6%), weight loss program (6%), immunizations (5%), family planning services (5%), PSA test (4%), and smoking cessation (3%).

- In the past year, adults felt their health care experiences were the same as other races (63%), better than other races (6%), worse than some races but better than other races (1%), and worse than other races (<1%). Seven percent (7%) of adults only encountered people of the same race, and 18% did not know how their experiences compared to people of other races.

- More than one-quarter (26%) of adults did not get their prescriptions from their doctor filled in the past year. Those who did not get their prescriptions filled gave the following reasons: cost (53%), they did not think they needed it (22%), they stretched their current prescription by taking less than prescribed (21%), side effects (20%), no prescriptions to be filled (14%), there was no generic equivalent (13%), they did not have insurance (7%), they were taking too many medications (7%), fear of addiction (6%), and transportation (1%).

Availability of Services

Ashtabula County Adults Able to Access Assistance Programs/Services

Types of Programs (% of all adults who looked for the following programs)	Ashtabula County adults who have looked but have NOT found a specific program	Ashtabula County adults who have looked and have found a specific program
Depression, Anxiety, or Some Other Mental Health Problem (21% of all adults looked)	32%	68%
Disability (12% of all adults looked)	23%	77%
Weight Problem (8% of all adults looked)	29%	71%
Assist in Care for the Disabled (either in-home or out-of-home) (7% of all adults looked)	38%	62%
Assist in Care for the Elderly (either in-home or out-of-home) (6% of all adults looked)	32%	68%
Marital/Family Problems (5% of all adults looked)	21%	79%
End-of-Life or Hospice Care (4% of all adults looked)	9%	91%
Tobacco Cessation (4% of all adults looked)	67%	33%
Cancer Support/Counseling (3% of all adults looked)	25%	75%
Family Planning (3% of all adults looked)	40%	60%
Drug Abuse (3% of all adults looked)	67%	33%
Alcohol Abuse (2% of all adults looked)	40%	60%
Detoxification for Opiates/Heroin (2% of all adults looked)	71%	29%
Gambling Abuse (1% of all adults looked)	100%	0%

What can be Done to Improve the Health of Rural Americans?

Rural Americans face numerous health disparities compared with their urban counterparts. More than 46 million Americans, or 15% of the U.S. population, live in rural areas. Some rural areas have characteristics that put residents at higher risk of death, such as long travel distances to specialty and emergency care, exposures to specific environmental hazards, and higher rates of poverty. The gaps in health in rural areas can be addressed. For example, health care providers in rural areas can:

- **Screen patients for high blood pressure and make blood pressure control a quality improvement goal**
  — High blood pressure is a leading risk factor for heart disease and stroke.

- **Increase cancer prevention and early detection**
  — Rural health care providers should participate in the state-level comprehensive control coalitions. Comprehensive cancer control programs focus on cancer prevention, education, screening, access to care, support for cancer survivors, and overall good health.

- **Encourage physical activity and healthy eating to reduce obesity**
  — Obesity has been linked to a variety of serious chronic illnesses, including diabetes, heart disease, cancer, and arthritis.

- **Promote smoking cessation**
  — Cigarette smoking is the leading cause of preventable disease and death in the United States and is the most significant risk factor for chronic lower respiratory disease.

- **Identify additional support for families who have children with mental, behavioral, or developmental disorders**
  — Children with these issues would benefit from increased access to mental and behavioral health care; programs that support parents and caregivers; and increased opportunities to learn, play, and socialize. Because children in rural areas with these disorders more often experience financial difficulties, poor parental mental health, and a lack of neighborhood resources, these children may need additional support.

- **Promote motor vehicle safety**
  — Rural health care providers should encourage patients to always wear a seat belt and counsel parents and child care providers to use age- and size-appropriate car seats, booster seats, and seat belts on every trip.

- **Engage in safer prescribing of opioids for pain**
  — Health care providers should follow the CDC guidelines when prescribing opioids for chronic pain and educate patients on the risks and benefits of opioids and using nonpharmacologic therapies to provide greater benefit.

(Source: CDC, Centers for Disease Control and Prevention, Rural Health, About Rural Health, Updated on August 2, 2017)

Hospital Discharge Data for Youth 0-17 Years of Age, 2017

- The data have been categorized into three age groups (0-17 years; 18-64 years; and 65 or more years) and by gender. This is how the federal government typically reports discharge data.

- There were 1,813 hospitalizations of Ashtabula County residents aged 0-17 years (including newborns). The table below indicates that the three most frequent primary diagnoses for hospitalized newborns, children and youth were: diseases of the respiratory system (8.8%), conditions originating in the perinatal period (5.4%), and diseases of the digestive system (3.9%).
    - Note that the majority of the 1,813 hospitalizations of children/youth in 2017 were newborns (1,067).

Disease Grouping	ICD-10 Codes	Total n (%)	Males n (%)	Females n (%)
		1,813 (100%)	964 (53.2%)	849 (46.8%)
Diseases of the respiratory system	J00-J98	159 (8.8%)	95 (9.9%)	64 (7.5%)
Certain conditions originating in the perinatal period	P00-P96	98 (5.4%)	60 (6.2%)	38 (4.5%)
Diseases of the digestive system	K00-K92	70 (3.9%)	37 (3.8%)	33 (3.9%)
Endocrine, nutritional and metabolic diseases	E00-E88	62 (3.4%)	28 (2.9%)	34 (4.0%)
Injury, poisoning and certain other consequences of external causes	S00-T34	58 (3.2%)	36 (3.7%)	22 (2.6%)
Diseases of the nervous system and sense organs	G00-G98	42 (2.3%)	29 (3.0%)	13 (1.5%)
Infectious and parasitic diseases	A00-B99	32 (1.8%)	15 (1.6%)	17 (2.0%)
Mental and behavioral disorders	F01-F99	32 (1.8%)	14 (1.5%)	18 (2.1%)
Diseases of the skin and subcutaneous tissue	L00-L98	28 (1.5%)	9 (0.9%)	19 (2.2%)
Diseases of the genitourinary system	N00-N98	25 (1.4%)	4 (0.4%)	21 (2.5%)
Complications of pregnancy, childbirth, and the puerperium	O00-O99	18 (1.0%)	0 (0.0)	18 (2.1%)
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99	19 (1.0%)	12 (1.2%)	7 (0.8%)

(Source: Hospital Discharge Data, 2017, as analyzed and reported by Cypress Research)
*Fewer than 5 cases were not reported to protect privacy.

Hospital Discharge Data for Adults 18-64 Years of Age, 2017

- There were 7,129 Ashtabula County residents 18-64 years old who were discharged from an acute care facility in 2017.

- The table for adults 18-64 years of age indicates that the three most frequent discharge conditions were: complications related to pregnancy, childbirth, and the puerperium (females only, 27.1% of hospitalized females); mental and behavioral disorders (12.1%) and diseases of the circulatory system (11.6%).

Disease Grouping	ICD-10 Codes	Total n (%)	Males n (%)	Females n (%)
		7,129 (100%)	3,011 (42.2%)	4,118 (57.8%)
Complications of pregnancy, childbirth, and the puerperium	O00-O99	1,118 (15.7%)		1,118 (27.1%)
Mental and behavioral disorders	F01-F99	861 (12.1%)	441 (14.6%)	420 (10.2%)
Diseases of the circulatory system	I00-I99	828 (11.6%)	471 (15.6%)	357 (8.7%)
Diseases of the digestive system	K00-K92	717 (10.1%)	366 (12.2%)	351 (8.5%)
Diseases of the respiratory system	J00-J98	601 (8.4%)	275 (9.1%)	326 (7.9%)
Injury and poisoning	S00-T34	557 (7.8%)	297 (9.9%)	260 (6.3%)
Infectious and parasitic diseases	A00-B99	450 (6.3%)	221 (7.3%)	229 (5.6%)
Diseases of the musculoskeletal system and connective tissue	M00-M99	431 (6.0%)	226 (7.5%)	205 (5.0%)
Diseases of the genitourinary system	N00-N98	299 (4.2%)	109 (3.6%)	190 (4.6%)
Cancers (neoplasms)	C00-D48	272 (3.8%)	120 (4.0%)	152 (3.7%)
Diseases of the skin and subcutaneous tissue	L00-L98	221 (3.1%)	122 (4.1%)	99 (2.4%)
Endocrine, nutritional and metabolic diseases	E00-E88	262 (3.7%)	127 (4.2%)	135 (3.3%)
Diseases of the nervous system and sense organs	G00-G98	138 (1.9%)	57 (1.9%)	81 (2.0%)

(Source: Hospital Discharge Data, 2017, as analyzed and reported by Cypress Research)

Hospital Discharge Data for Adults 65 Years of Age and Older, 2017

- There were 6,745 Ashtabula County residents 65 years of age and older who were discharged from an acute care facility in 2017.

- For adults 65 years of age and older we see that the three most frequent discharge conditions were: diseases of circulatory system (25.4%), diseases of the respiratory system (12.9%), and injury/poisoning (9.2%).

- There were not large differences between males and females for most diagnostic categories. The one notable exception was that males were somewhat more likely than females to have a primary diagnosis for circulatory disease (27.7% vs. 23.4%).

Disease Grouping	ICD-10 Codes	Total n (%)	Males n (%)	Females n (%)
		6,745 (100%)	3,090 (45.2%)	3,655 (54.2%)
Diseases of the circulatory system	I00-I99	1,713 (25.4%)	856 (27.7%)	857 (23.4%)
Diseases of the respiratory system	J00-J98	872 (12.9%)	413 (13.4%)	459 (12.6%)
Injury and poisoning	S00-T34	619 (9.2%)	249 (8.1%)	370 (10.1%)
Infectious and parasitic diseases	A00-B99	597 (8.9%)	293 (9.5%)	304 (8.3%)
Diseases of the digestive system	K00-K92	588 (8.7%)	247 (8.0%)	341 (9.3%)
Diseases of the musculoskeletal system and connective tissue	M00-M99	547 (8.1%)	241 (7.8%)	306 (8.4%)
Diseases of the genitourinary system	N00-N98	442 (6.6%)	166 (5.4%)	276 (7.6%)
Cancers (neoplasms)	C00-D48	275 (4.1%)	148 (4.8%)	127 (3.5%)
Endocrine, nutritional and metabolic diseases	E00-E88	242 (3.6%)	122 (3.9%)	120 (3.3%)
Diseases of the nervous system and sense organs	T36-T50	183 (2.7%)	80 (2.6%)	103 (2.8%)
Diseases of the skin and subcutaneous tissue	L00-L98	151 (2.2%)	49 (1.6%)	102 (2.8%)
Mental and behavioral disorders	F01-F99	76 (1.1%)	38 (1.2%)	38 (1.0%)

* Fewer than 5 cases were not reported to protect privacy.
 (Source: Hospital Discharge Data, 2017, as analyzed and reported by Cypress Research)

Ambulatory Care Sensitive (ACS) Discharges (Primary Diagnosis), Ashtabula County Residents (Hospitalized in Ohio), 2017

- **A**mbulatory **C**are **S**ensitive ("ACS") conditions are those for which hospital admission could often be prevented by interventions in primary care. A relatively large proportion of ACSs within a geographic area is a signal that the primary care/prevention system has room for improvement, or that there is a shortage of primary care providers.

- In 2017, there were 15,687 Ashtabula County residents discharged from an inpatient acute care hospital. Of those, 1,747 (11.1% of all Ashtabula County resident hospitalizations) were hospitalized in either in UH Conneaut Medical Center (646) or UH Geneva Medical Center (1,101). Both of those hospitals are Critical Access Hospitals, with 25 beds each.

  o Also, UH Conneaut Medical Center cared for a total of 45 non-Ashtabula residents; that number for UH Geneva Medical Center was 308.

- Below we show the frequency of ACS cases for both all Ashtabula County resident hospitalizations and also Ashtabula County residents who were hospitalized at either UH Conneaut Medical Center or UH Geneva Medical Center. Overall, 17.3% of the hospitalizations of Ashtabula County residents were due to an ACS condition. If we look at those hospitalized in UH Conneaut Medical Center or UH Geneva Medical Center, we see significantly more (25.2% and 38.1%, respectively). We see this often as those who have an ACS condition can usually be treated at a community hospital, while those with more serious or life-threatening conditions (usually are not ACS conditions) are treated at a higher level regional medical center.

- The most common ACS condition among hospitalized Ashtabula County residents in 2017 was Chronic Obstructive Pulmonary Disease, which comprised 3.4% of all Ashtabula County residents hospitalized. A very high proportion of those hospitalized in UH Geneva Medical Center (9.8%) had a primary diagnosis of COPD. The second and third most common ACS conditions were bacterial pneumonia (2.9%) and congestive heart failure (2.3% of county resident's hospitalizations).

	Inpatient in Any Hospital: Ashtabula County Resident		Inpatient in UH Conneaut Medical Center		Inpatient in UH Geneva Medical Center	
	Number	**Percent***	**Number**	**Percent***	**Number**	**Percent***
Total	15,687	100.0%	646	100.0%	1,101	100%
Total ACS Cases	2,709	17.3%	163	25.2%	420	38.1%
Specific Ambulatory Care Sensitive Conditions:						
Chronic Obstructive Pulmonary Disease	539	3.4%	23	3.6%	108	9.8%
Bacterial Pneumonia	456	2.9%	31	4.8%	140	12.7%
Congestive Heart Failure	366	2.3%	27	4.2%	71	6.4%
Cellulitis	267	1.7%	21	3.3%	39	3.5%
Hypertension	207	1.3%	20	3.1%	23	2.1%
Diabetes	185	1.2%	17	2.6%	12	1.1%
Hip/Femur Fracture (age 45+)	143	0.9%	18	2.8%	13	1.2%
Dehydration	122	0.8%	5	0.8%	7	0.6%
Gastrointestinal Obstruction	130	0.8%				
Grand Mal Seizure and Other Convulsions	102	0.7%				
Acute Myocardial Infarction	94	0.6%				
Asthma	70	0.4%				
Gastroenteritis	55	0.4%				
Kidney/Urinary Tract Infection	44	0.3%				
Convulsions/Epilepsy (age 6+)	33	0.2%				

Fewer than 5 cases were omitted to ensure confidentiality.
(Source: Hospital Ambulatory Care Sensitive Data, 2017, as analyzed and reported by Cypress Research)
*More than one ACS conditions is possible for any single admission; Total may be more than 100%

Most Common* Ambulatory Care Sensitive (ACS) Discharges (Primary Diagnosis), 2017
All Ashtabula County Residents (Hospitalized Anywhere in Ohio), By Major Age Group
(Adults Only, Age 18+)
*(Minimum of 1% of cases shown)

- The incidence of ACS cases among Ashtabula County residents in 2017 increased with age. Only 8.1% of those hospitalized adults under age 40 had an ACS condition, one-half that of those aged 40-64 (17.7%). About one in five seniors (21.7%) were hospitalized due to an ACS condition in 2017. This suggests that improved access to primary care would have its greatest impact on seniors.

- The most common ACS condition (primary diagnosis) associated with hospitalization for younger adult (under 40 years) Ashtabula County residents in 2017 were cellulitis (1.3% of younger adults) and diabetes (1.7%). Bacterial pneumonia was also a common ACS condition among this population of inpatients (1.2%).

- Middle-aged adults (age 40-64) showed a slightly different pattern of ACS conditions. The most common conditions were chronic obstructive pulmonary disease (COPD) (4.9%), cellulitis (2.3%) and also bacterial pneumonia (2.6%).

- For the oldest hospitalized group (age 65+), the most common ACS conditions were COPD (4.6%), congestive heart failure (3.8%), and bacterial pneumonia (4.1%).

	Adult Under 40	Adults Ages 40-64	Adults Age 65+
Total:	2,516 (100.0%)	4,613 (100.0%)	6,745 (100.0%)
Any ACS Condition:	(8.1%)	(17.7%)	(21.7%)
Specific Ambulatory Care Sensitive Conditions:			
Chronic Obstructive Pulmonary Disease	1 (0.0%)	226 (4.9%)	311 (4.6%)
Congestive Heart Failure	5 (0.2%)	62 (1.3%)	256 (3.8%)
Bacterial Pneumonia	29 (1.2%)	120 (2.6%)	278 (4.1%)
Cellulitis	32 (1.3%)	104 (2.3%)	117 (1.7%)
Diabetes	43 (1.7%)	62 (1.3%)	68 (1.0%)
Gastrointestinal Obstruction	9 (0.4%)	24 (0.5%)	19 (0.3%)
Hypertension	2 (0.1%)	36 (0.8%)	169 (2.5%)
Acute Myocardial Infarction	0 (0.0%)	28 (0.6%)	66 (1.0%)
Hip/Femur Fracture (age 45 and older)	0 (0.0%)	15 (0.3%)	128 (1.9%)
Grand Mal Seizure and Other Convulsions	21 (0.8%)	22 (0.5%)	31 (0.5%)

*Only those ACS conditions associated with at least 1% of the group are shown.
(Source: Hospital Ambulatory Care Sensitive Data, 2017, as analyzed and reported by Cypress Research)

Ashtabula County Residents, Primary & Secondary Diagnoses, 2017 Hospitalizations

Below are the diagnosis specifics for all 11,358 of the Ashtabula County residents' hospitalizations in 2017, regardless of where they were hospitalized (in or out of the county). Both the diagnostic category, and the most common specific diagnoses are show, sorted by frequency of primary diagnosis category. Information for both primary diagnosis and for secondary diagnoses is shown; while the primary diagnosis is related to the primary reason for hospitalizations, understanding the incidence of various diagnoses which are secondary is often more telling of the chronic health conditions facing the community in general.

Some noteworthy findings for Ashtabula County:

- As highlighted previously, the most common diagnostic categories for the primary diagnoses were **diseases of the circulatory system** (21.7% of all hospitalizations), **diseases of the respiratory system** (12.2%), and **diseases of the digestive system** (10.1%) and. These three general categories comprise more than four-in-ten hospitalizations for Ashtabula County residents in 2017.

- Within each of those major diagnostic categories, we see several specific conditions which are far more common primary or secondary conditions:

  Diseases of the Circulatory System: (21.7% primary diagnostic category)
  - Hypertensive heart and chronic kidney disease (stages 1-5), (4.4%), myocardial Infarction (3.4%), atrial fibrillation (3.1%) and cerebral infarction (stroke) (1.9%) were the most common *primary* diagnoses. The secondary diagnoses of patients were very telling; these comorbidities, all associated with circulatory disease, were very common among all hospitalizations: essential hypertension (41.2%); atherosclerotic heart disease of the native coronary artery (27.0%); congestive heart failure (26.3%); hypertensive heart & chronic kidney disease (25.6%) and atrial fibrillation (24.6%). More than half of all hospitalized county resident adults (age 40+) suffered from some type of circulatory system disease in addition to their primary reason for hospitalization.

  Diseases of the Respiratory System:
  - Chronic obstructive pulmonary disease (COPD) (4.7%), pneumonia (unknown organism) (4.1%), and respiratory failure (1.7%) and were the most common primary respiratory system diagnoses.
  - However, COPD (29.4%), respiratory failure (18.3%), and pneumonia (11.5%) were very common secondary diagnoses. Over one-half of the acute care inpatients had one or more of these comorbidities.

  Diseases of the Digestive System:
  - Specific conditions related to the digestive system which were primary diagnoses were varied, with diverticulitis being the most common, but only associated with 1.2% of the hospitalizations.
  - However, about one-in-five (24.7%) of the inpatients had a secondary diagnosis of gastro-esophageal reflex disease.

- While mental/behavior related issues were only a primary diagnosis in one in twenty admissions, they were very commonly a secondary diagnosis: nicotine dependence (19.6%), anxiety disorder (15.4%), and major depressive order episode (16.5%) were the most common secondary diagnoses. These total to over one-half of inpatients in acute care settings.

- While cancer is a leading cause of death in Ashtabula County, it is not a very common reason for hospitalization (4.6% primary diagnosis for 2017 inpatients). Cancer is generally treated primary on an out-patient basis, and hospitalization levels do not fully reflect the impact of cancer diagnoses on Ashtabula County.

- Diseases of the nervous system were rarely a primary cause for hospitalization, however 4.7% had a secondary diagnosis of sleep apnea and 7.1% had encephalopathy. Of the hospitalizations in 2017, 8.3% were for those with a dementia diagnosis.

- While very few primary diagnoses were related to the endocrine, nutritional or metabolic diseases (1.3%), hyperlipidemia was very common as a secondary diagnosis (42.4%), as was type II diabetes (48.6%).

- The other notable diagnoses (primary or secondary) are below. It is important to keep in mind that these are not necessarily a reflection of the true incidence of these afflictions within the general population; rather, they should be informative only in terms of how they relate to hospitalization levels and/or the care patients need while inpatients in acute care hospitals.
    - Anemia (27.5%)
    - Osteoarthritis (12.8%)
    - Adverse reaction/poisoning from prescribed or over-the-counter (6.9%) or illicit drugs (.9%).
    - Chronic pain (6.4%)

Ashtabula County Residents, Primary & Secondary Diagnoses, 2017 Hospitalizations
Adults, Age 40+

	Primary Diagnosis (Reason for Hospitalization)		Secondary Diagnosis (Patients can have multiple secondary diagnoses)	
Total Ashtabula County Inpatients, age 40+	11,358			
Diseases of the circulatory system	**2,468**	**21.7%**	**N/A**	**N/A**
Hypertensive heart & chronic kidney disease with/without heart failure; stage 1-5	499	4.4%	2,908	25.6%
Myocardial infarction	388	3.4%	668	5.9%
Atrial fibrillation	349	3.1%	2,797	24.6%
Cerebral infarction (stroke)	212	1.9%	170	1.6%
Congestive heart failure	149	1.3%	2,991	26.3%
Atherosclerotic heart disease of native coronary artery with/without angina pectoris	122	1.1%	3,072	27.0%
Pulmonary embolism	86	.8%	155	1.4%
Nonrheumatic aortic or other valve prolapse, stenosis or insufficiency	77	.6%	638	5.6%
Acute or chronic peripheral embolism & thrombosis	67	.6%	309	2.7%
Essential Hypertension			4,684	41.2%
Previous myocardial infarction			1,060	9.3%
Hypotension			823	7.3%
Peripheral vascular disease			601	3.3%
Atrioventricular block			377	3.3%
Cardiomyopathies			350	3.1%
Pulmonary hypertension			341	3.0%
Cerebral artery occlusion/aneurysm			317	2.8%
Ischemic cardiomyopathy			275	2.4%
Motor deficit (hemiplegia, hemiparesis, ataxia, dysphagia, etc.) due to cerebral infarction			213	1.9%
Hypertensive urgency/emergency/crisis			155	1.4%
Aneurysm (peripheral)			112	1.0%
Diseases of the respiratory system	**1,391**	**12.2%**	**N/A**	**N/A**
Chronic obstructive pulmonary disease	530	4.7%	3,336	29.4%
Pneumonia, unspecified organism	469	4.1%	1,302	11.5%
Respiratory failure (acute and/or chronic)	198	1.7%	2,081	18.3%
Asthma			623	5.5%
Atelectasis			238	2.1%
Pneumonitis due to inhalation of food or vomit			186	1.6%
Bacterial Pneumonia			178	1.6%
Diseases of the digestive system	**1,150**	**10.1%**	**N/A**	**N/A**
Diverticulitis	134	1.2	285	2.5
Calculus of bile duct or gallbladder	95	.8	126	1.1
Gastro-esophageal reflux disease out/without esophagitis			2,802	24.7
Diaphragmatic hernia without obstruction and/or or gangrene			196	1.8
Cirrhosis of liver			164	1.4
Gastrointestinal hemorrhage			139	1.2
Alcoholic induced liver/hepatic diseases			135	1.2%
Melena			120	1.1

N/A – Multiple diagnoses possible; proportion is not applicable.
(Source: Annual Hospital Discharge Data Analysis, 2017, as analyzed and reported by Cypress Research)

Ashtabula County Residents, Primary & Secondary Diagnoses, 2017 Hospitalizations
Adults, Age 40+

	Primary Diagnosis (Reason for Hospitalization)		Secondary Diagnosis (Patients can have multiple secondary diagnoses)	
Injury & poisoning	**1,026**	**9.0%**	**N/A**	**N/A**
Bone fracture	336	2.9%	476	4.2%
Adverse effect/poisoning from prescription/over-the-counter drug			787	6.9%
Adverse effect/poisoning from illicit drug			103	.9%
Diseases of the musculoskeletal system and connective tissue	**943**	**8.3%**	**N/A**	**N/A**
Osteoarthritis	530	4.7%	1,362	12.0%
Spinal stenosis	56	.5%	256	2.3%
Gout			481	4.2%
Osteoporosis			417	3.7%
Dorsalgia			339	2.9%
Infectious and parasitic diseases	**943**	**8.3%**	**N/A**	**N/A**
Sepsis (streptococcus, group B; streptococcus pneumoniae; Methicillin susceptible or resistant Staphylococcus aureus, other Staphylococcus; Hemophilus influenzae; anaerobes; E. coli; pseudomonas; Enterococcus; but mostly unspecified organisms)	146	1.3%	437	3.8%
E. coli infection			199	1.8%
Hepatitis (A, B, or C)			151	1.3%
Enterocolitis			136	1.2%
Diseases of the genitourinary system	**655**	**5.8%**	**N/A**	**N/A**
Acute kidney failure	232	1.9%	1,838	16.2%
Urinary tract infection	222	2.0%	1,328	11.7%
Chronic kidney disease			2,305	20.3%
Benign prostatic hyperplasia with/without lower urinary tract symptoms			700	6.2%
Cancers (malignant neoplasms)	**518**	**4.6%**	N/A	N/A
Malignant neoplasm of lung, bronchus or pleura	82	.7%	211	1.9%
Secondary malignant neoplasm of lung, pleura			101	.9%
Secondary malignancy of bone			135	1.2%
Secondary malignancy of liver			124	1.1%
Mental and behavioral disorders	**503**	**4.4**	**N/A**	**N/A**
Bipolar disorder	236	2.1%	251	2.0%
Schizophrenia	115	1.0%	117	1.0%
Alcohol use/abuse/dependence (if primary, with other acute symptoms)	79	.7%	581	5.1%
Nicotine dependence			2,229	19.6%
Major depressive disorder, single episode or recurrent			1,872	16.5%
Anxiety disorder			1,745	15.4%
Dementia			948	8.3%
Opioid dependence (if primary, with withdrawal)			164	1.4%
Post-traumatic stress disorder			122	1.1%

N/A – Multiple diagnoses possible; proportion is not applicable.

(Source: Annual Hospital Discharge Data Analysis, 2017, as analyzed and reported by Cypress Research)

Ashtabula County Residents, Primary & Secondary Diagnoses, 2017 Hospitalizations
Adults, Age 40+

	Primary Diagnosis (Reason for Hospitalization)		Secondary Diagnosis (Patients can have multiple secondary diagnoses)	
Endocrine, nutritional and metabolic diseases	**427**	**3.8**	**N/A**	**N/A**
Type 2 diabetes mellitus (with complications if primary)	146	1.3	5521	48.6
Type 1 diabetes mellitus			146	1.3
Hyperlipidemia			4820	42.4
Obesity (not morbid)			1959	17.2
Morbid (severe) obesity due to excess calories			183	1.6
Hypothyroidism			1862	16.4
Hypokalemia			485	4.3
Hyperkalemia			1205	10.6
Hypo-osmolality & hyponatremia			203	1.8
Hyperosmolality & hypernatremia			791	7.0
Dehydration			1167	10.3
Pure hypercholesterolemia			310	2.7
Acidosis			608	5.4
Mild protein-calorie malnutrition (mild to severe)			894	7.9
Hypomagnesemia			322	2.8
Vitamin D deficiency			567	5.0
Vitamin B deficiency			206	1.8
Underweight			231	2.0
Overweight			162	1.5
Obese			1889	16.6
Diseases of the nervous system and sense organs	**280**	**2.5%**	**N/A**	**N/A**
Epilepsy	53	.5%	506	4.5%
Sleep apnea			1,374	12.1%
Encephalopathy			759	5.6%
Chronic pain			726	6.4%
Migraine			273	2.4%
Insomnia			272	2.4%
Polyneuropathy			257	2.3%
Alzheimer's Disease and other dementia			182	1.6%
Parkinson's Disease			143	1.3%
Multiple sclerosis			110	1.0%
Diseases of the skin and subcutaneous tissue	**306**	**2.7%**	**N/A**	**N/A**
Cellulitis	215	1.9%	625	5.5%
Pressure ulcer			545	4.8%
Non-pressure chronic ulcer			413	3.6%

N/A – Multiple diagnoses possible; proportion is not applicable.

(Source: Aannual Hospital Discharge Data Analysis, 2017, as analyzed and reported by Cypress Research)

Ashtabula County Residents, Primary & Secondary Diagnoses, 2017 Hospitalizations
Adults, Age 40+

	Primary Diagnosis (Reason for Hospitalization)		Secondary Diagnosis (Patients can have multiple secondary diagnoses)	
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	96	.8%	N/A	N/A
Anemia (associated with other disease or injury)	75	.7%	3,120	27.5%
Thrombocytopenia			544	4.8%
Elevated white blood cell count			428	3.7%
Pancytopenia			122	1.1%
Diseases of the ear and mastoid process	20	.2%	N/A	N/A
Complications of pregnancy, childbirth, and the puerperium	19	.2%	N/A	N/A
Certain conditions arising in the perinatal period	19	.2%	N/A	N/A
Congenital malformations, deformations and chromosomal abnormalities	13	.1%	N/A	N/A
Diseases of the eye and adnexa	2	<.01	N/A	N/A
Glaucoma			221	1.9%

N/A – Multiple diagnoses possible; proportion is not applicable.
(Source: annual Hospital Discharge Data Analysis, 2017, as analyzed and reported by Cypress Research)

Trend of Hospital Discharges for Ashtabula County Residents, 2011- 2017

- The number of inpatient hospitalizations (acute care) for Ashtabula County residents (within any Ohio hospital) increased by 3.4% from 2011 to 2017.

2011	2012	2013	...	2016	2017
15,170	13,889	14,069		15,491	15,687

Number of Hospital Discharges for Ashtabula County Residents, by Age Group and Gender, 2017

- In 2017, there were 15,687 hospitalizations of Ashtabula County residents. Relatively few (11.6%) of those were under age 18 (and of those, 6.8% were newborns). The adult admissions were almost evenly split between adults aged 17-64 (45.4%) and adults aged 65 and older (43.0%).

	Patients Age 0-17 Years		Patients Age 18-64 years		Patients Age 65 Years and Older	
	11.6% of Total Discharges (6.8% were newborns)		45.4% of Total Discharges		43.0% of Total Discharges	
	Male	Female	Male	Female	Male	Female
2017 Total	964	849	3,011	4,118	3,090	3,655

Health Care Access: Preventive Medicine

Key Findings

More than two-thirds (69%) of adults ages 65 and over had a pneumonia vaccination at some time in their life. Sixty-seven percent (67%) of adults age 65 and over received a flu vaccine in the past year.

Preventive Medicine

- Forty-five percent (45%) of Ashtabula County adults received a flu vaccine during the past 12 months, increasing to 67% of adults ages 65 and over.

- Reasons for not getting a flu vaccine included the following: did not need it (29%), does not think the vaccine works (11%), get sick from it (9%), cost (5%), vaccine was not effective (4%), time (2%), insurance would not pay for it (2%), transportation (<1%), and other reasons (15%).

- About one-third (32%) of adults had a pneumonia vaccine in their life, increasing to 69% of those ages 65 and over.

- Ashtabula County adults had the following vaccines:
  — MMR in their lifetime (72%)
  — Tetanus booster (including Tdap) in the past 10 years (64%)
  — Chicken pox in their lifetime (54%)
  — Hepatitis B in their lifetime (35%)
  — Hepatitis A in their lifetime (26%)
  — Zoster (shingles) vaccine in their lifetime (25%)
  — Human papillomavirus (HPV) vaccine in their lifetime (16%)

The following graph shows the percentage of Ashtabula County adults who received a flu vaccine within the past year. An example of how to interpret the information in the graph includes: 45% of all adults received the flu vaccine in the past year, including 67% of those ages 65 and older.
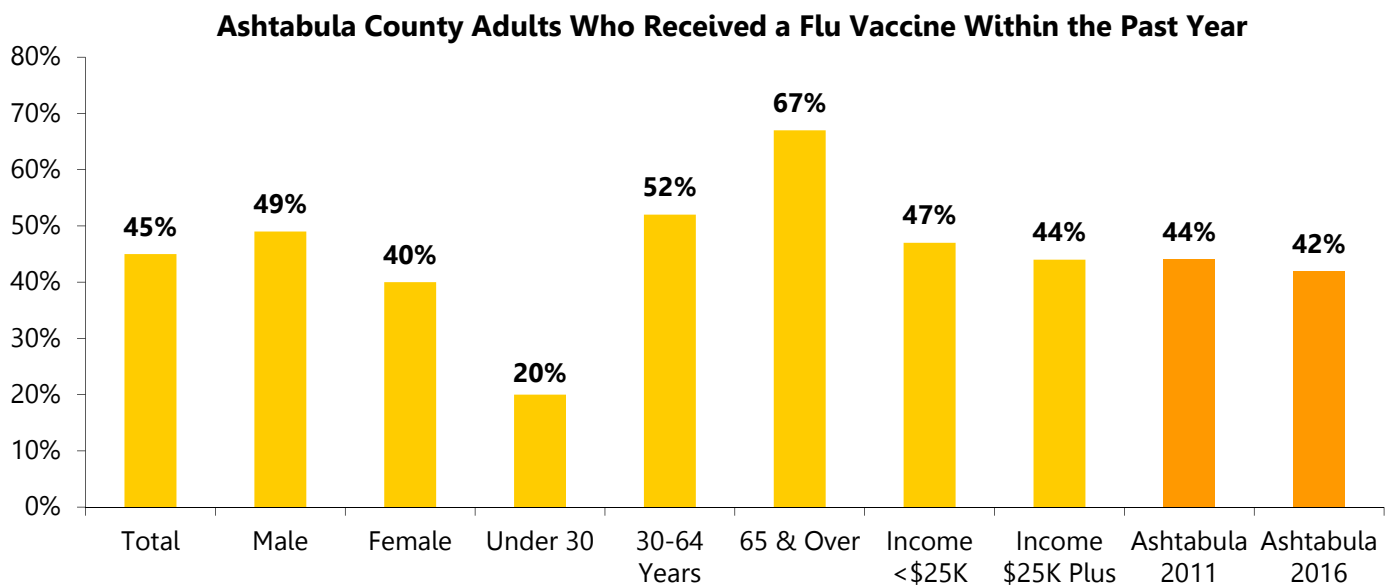
Ashtabula County Adults Who Received a Flu Vaccine Within the Past Year

Category	Percentage
Total	45%
Male	49%
Female	40%
Under 30	20%
30-64 Years	52%
65 & Over	67%
Income <$25K	47%
Income $25K Plus	44%
Ashtabula 2011	44%
Ashtabula 2016	42%

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

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Had a pneumonia vaccination (age 65 and over)	62%	69%	69%	76%	75%
Had a flu vaccine in the past year (age 65 and over)	N/A	70%	67%	63%	61%
Had a shingles or Zoster vaccination in lifetime	N/A	15%	25%	29%	29%

N/A - Not Available

Healthy People 2020
Immunization and Infectious Diseases (IID)

Objective	Ashtabula County 2019	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	69%	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	67%	90%
IID-14: Increase the percentage of adults who are vaccinated against zoster (shingles)	25%	30%

Note: U.S. baseline is age-adjusted to the 2000 population standard
(Sources: Healthy People 2020 Objectives, 2019 Ashtabula County Health Assessment)

Preventive Health Screenings and Exams

- Ashtabula County adults indicated a doctor or health professional talked to them about following topics in the past year:
  — Family history (40%)
  — Weight control (38%)
  — Immunizations (37%)
  — Depression, anxiety, or emotional problems (29%)
  — Mammography screening (28%)
  — Appropriate use of prescription pain medication (26%)
  — Tobacco use (21%)
  — Alternative pain therapy (18%)
  — Falls (14%)
  — Bone density (12%)
  — Prostate-specific antigen (PSA) test (12%)
  — Alcohol use (11%)
  — Family planning (9%)
  — Domestic violence (7%)
  — Genetic testing (7%)
  — Safe use of opiate based pain medication (7%)
  — Self-testicular exams (5%)
  — Illicit drug abuse (4%)
  — Injury prevention (4%)
  — Firearm safety (3%)
  — Sexually transmitted diseases (STDs) (2%)

- Ashtabula County adults indicated the following motivated them to make positive changes in their health: family/kids (26%), to have more energy (14%), health scare/fear of illness (13%), social support (10%), financial incentives (10%), exposure to a healthy environment (3%), incentives other than financial (2%), and discounted services (1%).

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

Health Care Topics	Total 2011	Total 2016	Total 2019
Family History	15%	23%	40%
Weight Control (Diet, Physical Activity)	N/A	N/A	38%
Immunizations	17%	28%	37%
Depression, Anxiety, or Emotional Problems	18%	23%	29%
Mammography screening	N/A	N/A	28%
Appropriate Use of Prescription Pain Medication	11%	16%	26%
Tobacco Use	12%	19%	21%
Alternative Pain Therapy	N/A	N/A	18%
Falls	N/A	N/A	14%
Bone Density	N/A	N/A	12%
Prostate-specific antigen (PSA) test	N/A	N/A	12%
Alcohol Use	8%	9%	11%
Family Planning	N/A	N/A	9%
Domestic Violence	3%	4%	7%
Genetic Testing	N/A	N/A	7%
Safe use of opiate-based pain medication	N/A	N/A	7%
Self-Testicular Exams	N/A	N/A	5%
Illicit Drug Abuse	2%	3%	4%
Injury Prevention Such as Safety Belt Use, Helmet Use or Smoke Detectors	6%	5%	4%
Firearm Safety	N/A	N/A	3%
Sexually Transmitted Diseases (STDs)	N/A	N/A	2%

N/A-Not Available

Health Care Access: Women's Health

Key Findings

Over half (58%) of Ashtabula County women over the age of 40 reported having a mammogram in the past year. Forty-seven percent (47%) of women had a clinical breast exam in the past year, and 66% of women ages 21 to 65 had a Pap smear to detect cancer of the cervix in the past three years. Seventy-nine percent (79%) of Ashtabula County women were overweight or obese, 37% had high blood cholesterol, 35% had high blood pressure, and 23% were identified as current smokers, known risk factors for cardiovascular diseases.

Women's Health Screenings

- Sixty-two percent (62%) of women had a mammogram at some time in their life, and 34% had this screening in the past year.

- Over half (58%) of women ages 40 and over had a mammogram in the past year, and 73% had one in the past two years.

- Eighty-four percent (84%) of Ashtabula County women had a clinical breast exam at some time in their life, and 47% had one within the past year. Sixty-six percent (66%) of women ages 40 and over had a clinical breast exam in the past two years.

- Seventy-eight percent (78%) of Ashtabula County women had a Pap smear at some time in their life, and 27% reported having had the exam in the past year. Sixty-six percent (66%) of women ages 21 to 65 had a Pap smear in the past three years.

Women's Health Concerns

- Women used the following as their usual source of services for female health concerns:
  — Private gynecologist (51%)
  — General or family physician (31%)
  — Family planning clinic (5%)
  — Community health center (1%)
  — Some other place (1%)

- Twelve percent (12%) of adults indicated they did not have a usual source of services for female health concerns.

- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Ashtabula County, the 2019 needs assessment has identified that:
  — 79% of women were overweight or obese (2017 BRFSS reports 64% for Ohio and 2016 BRFSS reports 59% for U.S.)
  — 37% were diagnosed with high blood cholesterol (2017 BRFSS reports 33% for Ohio 2016 BRFSS reports 35% for U.S.)
  — 35% were diagnosed with high blood pressure (2017 BRFSS reports 33% for Ohio 2016 BRFSS reports 30% for U.S.)
  — 23% were current smokers (2017 BRFSS reports 20% for Ohio 2016 BRFSS reports 14% for U.S.)
  — 12% had been diagnosed with diabetes (2017 BRFSS reports 11% for Ohio and 2016 BRFSS reports 11% for U.S.)

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

Total female deaths: 1,769

1. Heart Diseases (23% of all deaths)
2. Cancers (20%)
3. Chronic Lower Respiratory Diseases (7%)
4. Stroke (5%)
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)

The following graph shows the percentage of Ashtabula County females who had various health exams in the past year. An example of how to interpret the information shown on the graph includes: 34% of Ashtabula County females had a mammogram within the past year, 47% had a clinical breast exam, and 27% had a Pap smear.

Ashtabula County Women's Health Exams Within the Past Year

Mammogram · Breast Exam · Pap Smear

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	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Had a mammogram within the past two years (age 40 and older)	69%	70%	73%	74%*	73%*
Had a Pap smear within the past three years (age 21-65)	N/A	63%‡	66%	82%*	80%*

N/A-Not Available
*2016 BRFSS
‡Pap smear was reported for women ages 19 and over

Health Care Access: Men's Health

Key Findings

Fourteen percent (14%) of men had a digital rectal exam in the past year. One-quarter (25%) of Ashtabula County males performed a testicular self-exam in the past year. Seventy-one percent (71%) of men were overweight or obese, 46% had high blood pressure, 42% had high blood cholesterol, and 18% were identified as current smokers, known risk factors for cardiovascular diseases.

Men's Health Screenings

- More than half (55%) of men had a digital rectal exam in their lifetime, and 14% had one in the past year.

- One-quarter (25%) of Ashtabula County males performed a testicular self-exam in the past year.

Men's Health Concerns

- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Ashtabula County, the 2019 needs assessment has identified that:
  — 71% of men were overweight or obese (2017 BRFSS reports 72% for Ohio and 2016 reports 71% for U.S.)
  — 46% were diagnosed with high blood pressure (2017 BRFSS reports 37% for Ohio and 2016 reports 34% for U.S.)
  — 42% were diagnosed with high blood cholesterol (2017 BRFSS reports 34% for Ohio and 2016 reports 38% for U.S.)
  — 18% of all men were current smokers (2017 BRFSS reports 22% for Ohio and 2016 BRFSS reports 19% for U.S.)
  — 13% had been diagnosed with diabetes (2017 BRFSS reports 11% for Ohio and 2016 BRFSS reports 11% for U.S.)
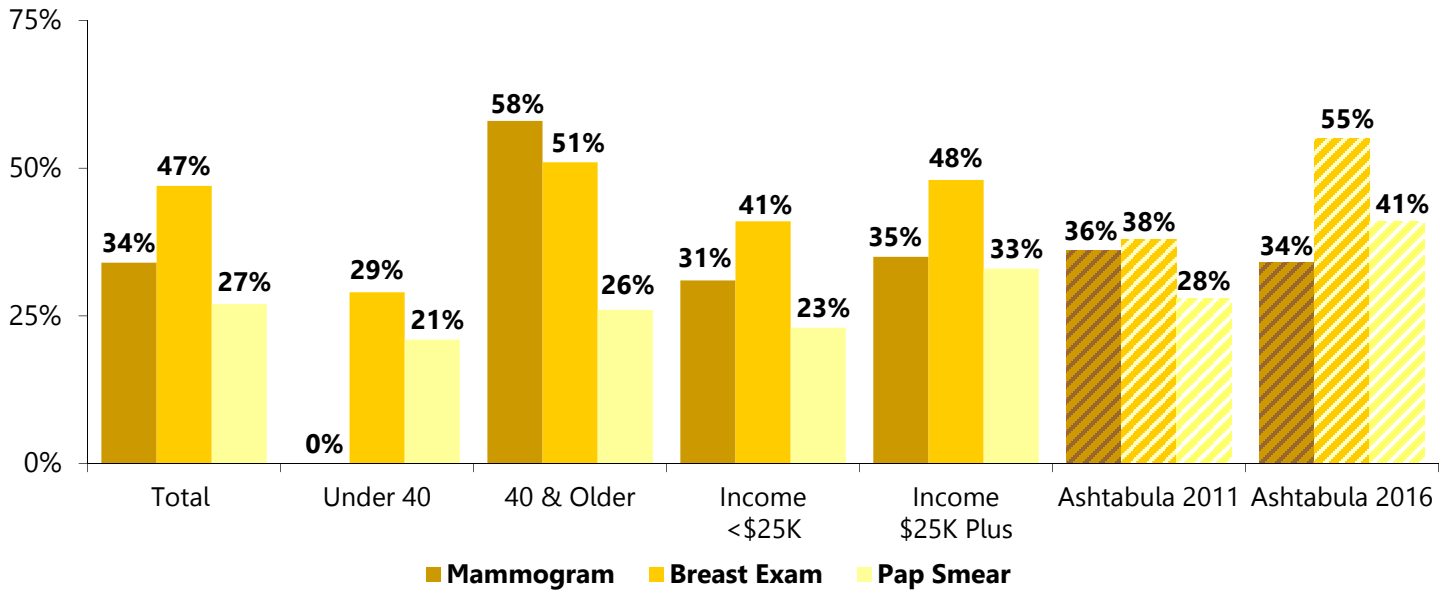
**Ashtabula County Male
Leading Causes of Death, 2015 – 2017**

Total male deaths: 1,842

1. Heart Diseases (26% of all deaths)
2. Cancers (23%)
3. Chronic Lower Respiratory Diseases (6%)
4. Accidents, Unintentional Injuries (6%)
5. Stroke (3%)

(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)

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Had a digital rectal exam within the past year	24%	16%	14%	N/A	N/A

N/A - Not Available

The following graph shows the percentage of Ashtabula County male adults who had a digital rectal exam in the past year. An example of how to interpret the information includes: 14% of Ashtabula County males had a digital rectal exam within the past year.
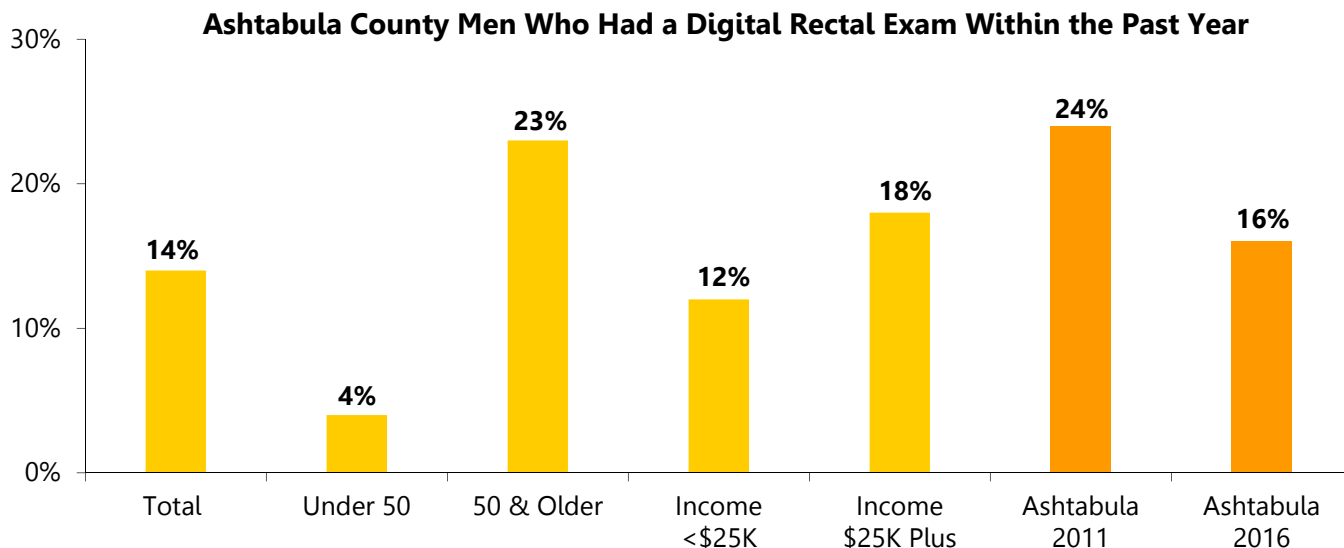
Ashtabula County Men Who Had a Digital Rectal Exam Within the Past Year

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.

U.S. Men's Health Data

- Approximately 12% of adult males ages 18 years or older reported fair or poor health.
- Sixteen percent (16%) of adult males in the U.S. currently smoke.
- Of the adult males in the U.S., 31% had five or more drinks in one day at least once in the past year.
- Fifty-eight percent (58%) of adult males in the U.S. met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity.
- Thirty-seven percent (37%) of men 20 years and over are obese.
- There are 12% of males under the age of 65 without health care coverage.
- The leading causes of death for males in the United States are heart disease, cancer and accidents (unintentional injuries).

(Source: CDC, National Center for Health Statistics, Men's Health, Fast Stats, Updated on May 3, 2017)

Health Care Access: Oral Health

Key Findings

Fifty-eight percent (58%) of Ashtabula County adults had visited a dentist or dental clinic in the past year. The top two reasons adults gave for not visiting a dentist or dental clinic in the past year were cost (40%) and fear, apprehension, nervousness, pain and dislike going (26%).

Oral Health

- In the past year, 58% of Ashtabula County adults had visited a dentist or dental clinic.

- More than two-thirds (73%) of Ashtabula County adults with dental insurance have been to the dentist in the past year, compared to 51% of those without dental insurance.

- Ashtabula County adults reported the following reasons for not visiting a dentist or dental clinic in the past year:
  — Cost (40%)
  — Fear, apprehension, nervousness, pain, dislike going (26%)
  — No reason to go/had not thought of it (10%)
  — Have dentures (10%)
  — Multiple reasons, including cost (5%)
  — Dentist did not accept their medical coverage (5%)
  — Did not have or know a dentist (1%)
  — Could not get into a dentist (1%)
  — Could not find a dentist that takes Medicaid (1%)

- More than half (58%) of adults had one or more of their permanent teeth removed, increasing to 77% of those ages 65 and over.

- Twelve percent (12%) of Ashtabula County adults ages 65 and over had all of their permanent teeth removed.

- Ashtabula County adults reported experiencing the following oral health issues:
  — Pain (16%)
  — Difficulty eating/chewing (13%)
  — Oral bleeding (7%)
  — Loose teeth (5%)
  — Skipped meals due to pain (4%)
  — Problems with dentures (4%)
  — No teeth (2%)
  — Missed work due to mouth pain (1%)

| Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Adults who had visited the dentist in the past year	61%	60%	58%	68%*	66%*
Adults who had one or more permanent teeth removed	N/A	56%	58%	45%*	43%*
Adults 65 years and older who had all their permanent teeth removed	N/A	17%	12%	17%*	14%*

N/A-Not Available
*2016 BRFSS

The following graph shows the percentage of Ashtabula County adults who had visited a dentist or dental clinic in the past year. An example of how to interpret the information on the graph includes: 58% of adults had been to the dentist or dental clinic in the past year, including 61% of males.

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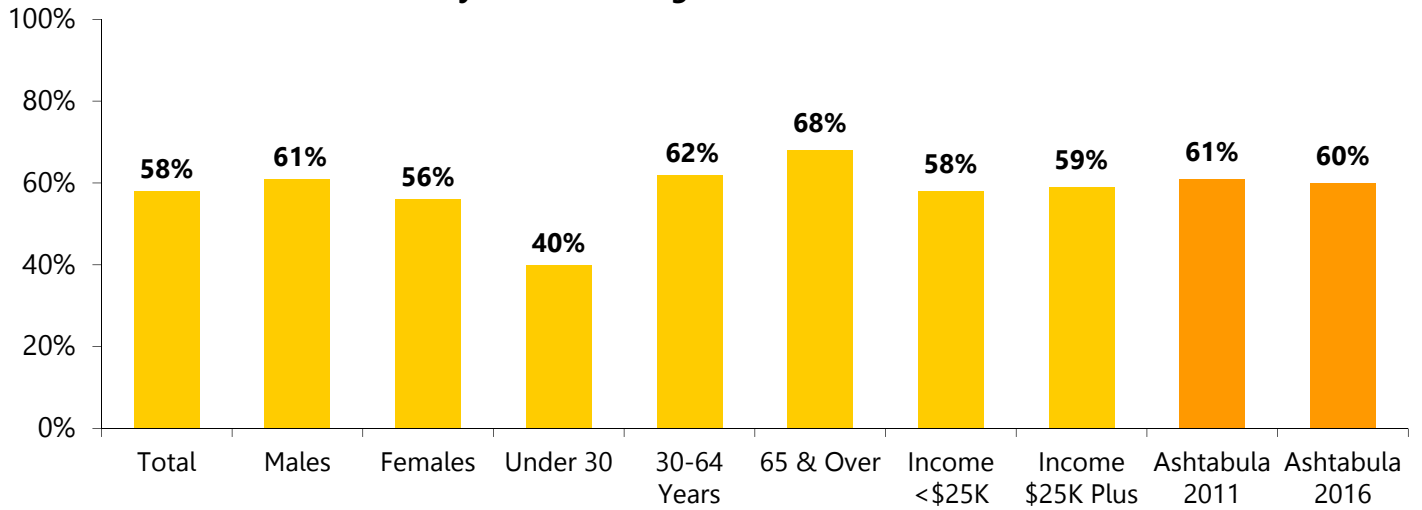
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Adult Oral Health	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	61%	14%	11%	10%	1%
Females	56%	6%	14%	19%	1%
Total	58%	10%	13%	15%	1%

Facts About Adult Oral Health

- The baby boomer generation is the first where most people will keep their natural teeth over their entire lifetime. This is largely because of the benefits of water fluoridation and fluoride toothpaste. However, threats to oral health, including tooth loss, continue throughout life.
- The major risks for tooth loss are tooth decay and gum disease that may increase with age because of problems with saliva production; receding gums that expose "softer" root surfaces to decay-causing bacteria; or difficulties flossing and brushing because of poor vision, cognitive problems, chronic disease, and physical limitations.
- Although more adults are keeping their teeth, many continue to need treatment for dental problems. This need is even greater for members of some racial and ethnic groups—about 3 in 4 Hispanics and non-Hispanic black adults have an unmet need for dental treatment, as do people who are poor. These individuals are also more likely to report having poor oral health.
- In addition, some adults may have difficulty accessing dental treatment. For every adult aged 19 years or older without medical insurance, there are three who don't have dental insurance.
- Oral health problems include the following: untreated tooth decay, gum disease, tooth loss, oral cancer, and chronic diseases such as arthritis, heart disease, and strokes.

(Source: Centers for Disease Control and Prevention, Division of Oral Health, Adult Oral Health, October 23, 2017)

Health Behaviors: Health Status Perceptions

Key Findings

Over two-fifths (42%) of Ashtabula County adults rated their health status as excellent or very good. Conversely, 14% of adults described their health as fair or poor, increasing to 29% of those with incomes less than $25,000.

General Health Status

- Over two-fifths (42%) of Ashtabula County adults rated their health as excellent or very good. Ashtabula County adults with higher incomes (49%) were most likely to rate their health as excellent or very good, compared to 29% of those with incomes less than $25,000.

- Fourteen percent (14%) of adults rated their health as fair or poor.

- Ashtabula County adults were most likely to rate their health as fair or poor if they:
  — Had high blood pressure (71%) or high blood cholesterol (51%)
  — Had been diagnosed with diabetes (33%)
  — Had an annual household income under $25,000 (29%)
  — Were divorced (23%) or widowed (9%)

- Thirty-nine percent (39%) of adults reported that poor mental or physical health kept them from doing usual activities such as self-care, work, or recreation in the past month

Physical Health Status

- Twenty-four percent (24%) of Ashtabula County adults rated their physical health as not good on four or more days in the previous month.

- Ashtabula County adults reported their physical health as not good on an average of 3.8 days in the previous month.

- Ashtabula County adults were most likely to rate their physical health as not good if they:
  — Were male (48%)
  — Were 65 years of age or older (41%)
  — Had an annual household income less than $25,000 (40%)

Mental Health Status

- Over one-third (36%) of Ashtabula County adults rated their mental health as not good on four or more days in the previous month.

- Ashtabula County adults reported their mental health as not good on an average of 6.1 days in the previous month.

- Ashtabula County adults were most likely to rate their mental health as not good if they:
  — Were under the age of 30 (80%)
  — Were female (68%)
  — Had an annual household income less than $25,000 (56%)

The table 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	41%	20%	14%	3%	12%
Females	48%	18%	10%	1%	10%
Total	44%	19%	11%	2%	11%
Mental Health Not Good in Past 30 Days*					
Males	54%	14%	7%	0%	11%
Females	30%	18%	8%	4%	35%
Total	43%	15%	7%	2%	28%

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

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Rated health as excellent or very good	48%	43%	42%	49%	51%
Rated health as fair or poor	19%	22%	14%	19%	18%
Rated physical health as not good on four or more days (in the past 30 days)	25%	31%	24%	23%	22%
Average days that physical health not good in past month	N/A	5.8	3.8	4.0¥	3.7¥
Rated mental health as not good on four or more days (in the past 30 days)	29%	40%	36%	26%	24%
Average days that mental health not good in past month	N/A	7.0	6.1	4.3¥	3.8¥
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)	25%	30%	39%	24%	23%

N/A-Not Available
¥2016 BRFSS data as compiled by 2019 County Health Rankings

The following graph shows the percentage of Ashtabula County adults who described their personal health status as excellent/very good, good, and fair/poor. An example of how to interpret the information includes: 42% of all Ashtabula County adults, 44% of males, and 38% of those ages 65 and older rated their health as excellent or very good.
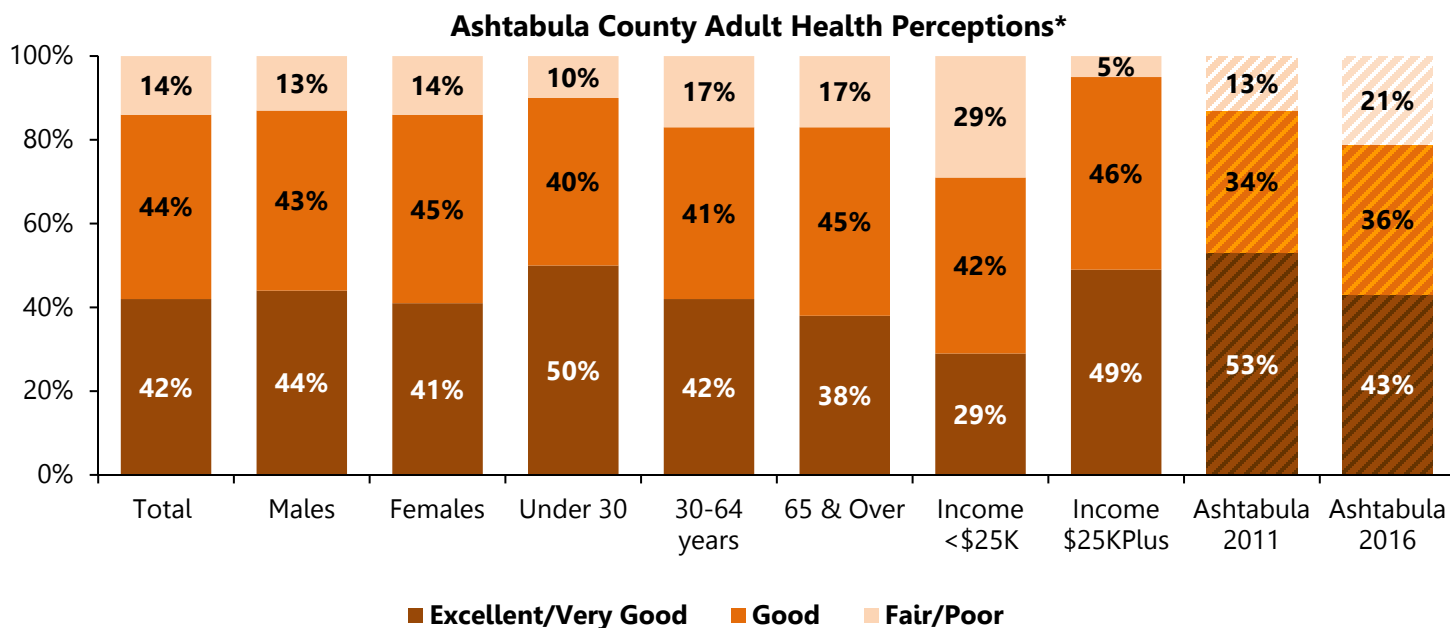
Ashtabula County Adult Health Perceptions*

	Total	Males	Females	Under 30	30-64 years	65 & Over	Income <$25K	Income $25KPlus	Ashtabula 2011	Ashtabula 2016
Fair/Poor	14%	13%	14%	10%	17%	17%	29%	5%	13%	21%
Good	44%	43%	45%	40%	41%	45%	42%	46%	34%	36%
Excellent/Very Good	42%	44%	41%	50%	42%	38%	29%	49%	53%	43%

■ **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?"
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: Weight Status
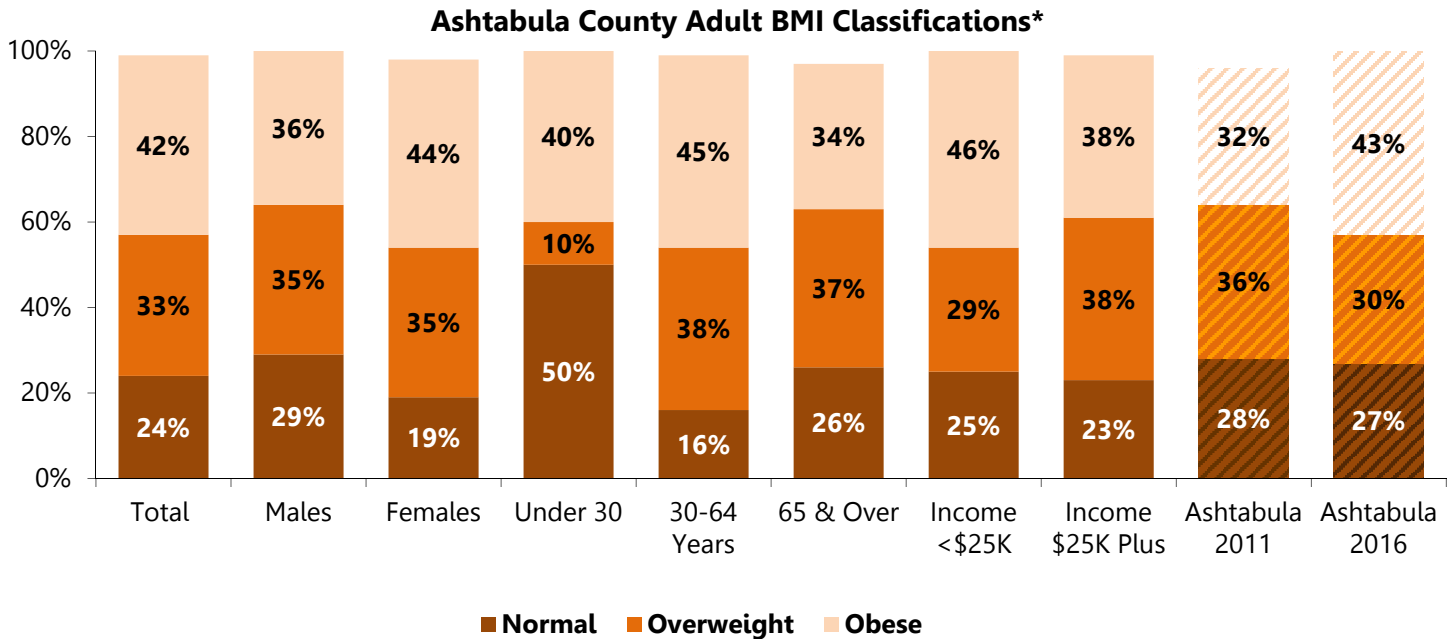
Key Findings

Seventy-five percent (75%) of Ashtabula County adults were overweight or obese based on body mass index (BMI). The top three reasons adults gave for not exercising were self-motivation/will power (22%), weather (22%), and time (21%).

31,965 Ashtabula County adults were obese.

Weight Status

- Seventy-five percent (75%) of Ashtabula County adults were either overweight (33%) or obese (42%) by body mass index (BMI), putting them at elevated risk for developing a variety of diseases.

The following graph shows the percentage of Ashtabula County adults who were normal weight, overweight or obese by body mass index (BMI). An example of how to interpret the information includes: 24% of all adults were classified as normal weight, 33% were overweight, and 42% were obese.

Ashtabula County Adult BMI Classifications*

Category	Normal	Overweight	Obese
Total	24%	33%	42%
Males	29%	35%	36%
Females	19%	35%	44%
Under 30	50%	10%	40%
30-64 Years	16%	38%	45%
65 & Over	26%	37%	34%
Income <$25K	25%	29%	46%
Income $25K Plus	23%	38%	38%
Ashtabula 2011	28%	36%	32%
Ashtabula 2016	27%	30%	43%

■ **Normal** ■ **Overweight** ■ **Obese**

*Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight.
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	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Obese	32%	43%	42%	34%	31%
Overweight	36%	30%	33%	34%	35%

Physical Activity

- In the past week, adults spent an average of 203 minutes (approximately 3.4 hours) doing some type of physical activity or exercise.

- Ashtabula County adults spent an average of 2.7 hours watching TV, 1.6 hours on their cell phone, 1.2 hours on the computer/tablet (outside of work), and 0.2 hours playing video games on an average day of the week.

- Adults reported the following reasons for not exercising:
  — Self-motivation/will power (22%)
  — Weather (22%)
  — Time (21%)
  — Too tired (18%)
  — Laziness (17%)
  — Pain or discomfort (14%)
  — Do not like exercise (14%)
  — Could not afford a gym membership (12%)
  — Poorly maintained/no sidewalks (11%)
  — Chose not to exercise (10%)
  — No exercise partner (9%)
  — Ill or physically unable (8%)
  — Did not know what activity to do (6%)
  — No child care (4%)
  — No gym available (4%)
  — No walking, biking trails, or parks (4%)
  — Afraid of injury (3%)
  — No transportation to a gym or other exercise opportunity (3%)
  — Neighborhood safety (2%)
  — Too expensive (1%)
  — Lack of opportunities for those with physical impairments or challenges (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 Ashtabula County adults consumed daily.

	5 or more servings	3-4 servings	1-2 servings	0 servings
Fruit	1%	10%	73%	16%
Vegetables	2%	23%	70%	5%
Sugar-sweetened beverages	3%	13%	33%	51%
Caffeinated beverages	7%	31%	51%	11%

- In 2019, 35% of adults ate 1 to 2 servings of fruits and/or vegetables per day, 42% ate 3 to 4 servings per day, and 19% ate 5 or more servings per day. Four percent (4%) of adults ate no servings of fruits and vegetables per day.

- Ashtabula County adults reported the following reasons they chose the types of food they ate:
  — Taste/enjoyment (73%)
  — Cost (52%)
  — Healthiness of food (51%)
  — Ease of preparation/time (46%)
  — Food they were used to (40%)
  — What their family prefers (37%)
  — Availability (32%)
  — Nutritional content (29%)
  — Calorie content (26%)
  — If it was organic (13%)
  — Artificial sweetener content (12%)
  — If it was genetically modified (8%)
  — Other food sensitivities (7%)
  — Limitations due to dental issues (6%)
  — Health care provider's advice (5%)
  — Availability of food at the food pantry (4%)
  — If it was gluten free (4%)
  — If it was lactose free (3%)
  — Limitations set by WIC (<1%)
  — Other reasons (4%)

- Adults reported the following barriers to consuming fruits and vegetables: too expensive (21%), did not like the taste (7%), did not know how to prepare (2%), transportation (1%), no variety (1%), no access (1%), stores do not take electronic benefit transfer (<1%), and other barriers (5%).

- Adults reported the following would help them use community parks, bike trails, and walking paths more frequently:
  — More available parks, bike trails, and walking paths (36%)
  — Designated safe routes (28%)
  — Improvements to existing parks, trails, and paths (25%)
  — Better promotion and advertising of existing parks, trails, and paths (25%)
  — More public events and programs involving parks, trails, and paths (16%)

Employee Wellness

- Ashtabula County adults had access to wellness programs through their employer or spouse's employer with the following features:
  — Free/discounted gym membership (13%)
  — Lower insurance premiums for participation in wellness program (11%)
  — Health risk assessment (9%)
  — Free/discounted smoking cessation program (7%)
  — Free/discounted weight loss program (6%)
  — On-site health screenings (5%)
  — Gift cards or cash for participation in wellness program (5%)
  — Lower insurance premiums for positive changes in health status (5%)
  — Healthier food options in vending machines or cafeteria (4%)
  — On-site health education classes (4%)
  — On-site fitness facility (3%)
  — Gift cards or cash for positive changes in health status (3%)

- Twenty-eight percent (28%) of adults did not have access to any wellness programs.


Summary of the American Cancer Society (ACS) Guidelines on Nutrition and Physical Activity

1. *Achieve and maintain a healthy weight throughout life*
   - Be as lean as possible throughout life without being underweight
   - Avoid excess weight gain at all ages. For those who are overweight or obese, losing even a small amount of weight has health benefits and is a good place to start.
   - Get regular physical activity and limit intake of high calorie foods and drinks as keys to help maintain a healthy weight.

2. *Be physically active*
   - Get at least 150 minutes of moderate intensity or 75 minutes of vigorous intensity activity each week (or a combination of these), preferably spread throughout the week.
   - Limit sedentary behavior such as sitting, lying down, watching TV, and other forms of screen-based entertainment.
   - Doing some physical activity above usual activities, no matter what one's level of activity, can have many health benefits.

3. *Eat a healthy diet, with an emphasis on plant foods*
   - Choose foods and drinks in amounts that help you get to and maintain a healthy weight.
   - Limit how much processed meat and red meat you eat.
   - Eat at least 2½ cups of vegetables and fruits each day.
   - Choose whole grains instead of refined grain products.

(Source: American Cancer Society, Summary of the ACS Guidelines on Nutrition and Physical Activity, Updated on April 13, 2017)

The Food Environment Index measures the quality of the food environment in a county on a scale from 0 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 Ashtabula County is 7.1.

- The food environment index in Ohio is 6.6.
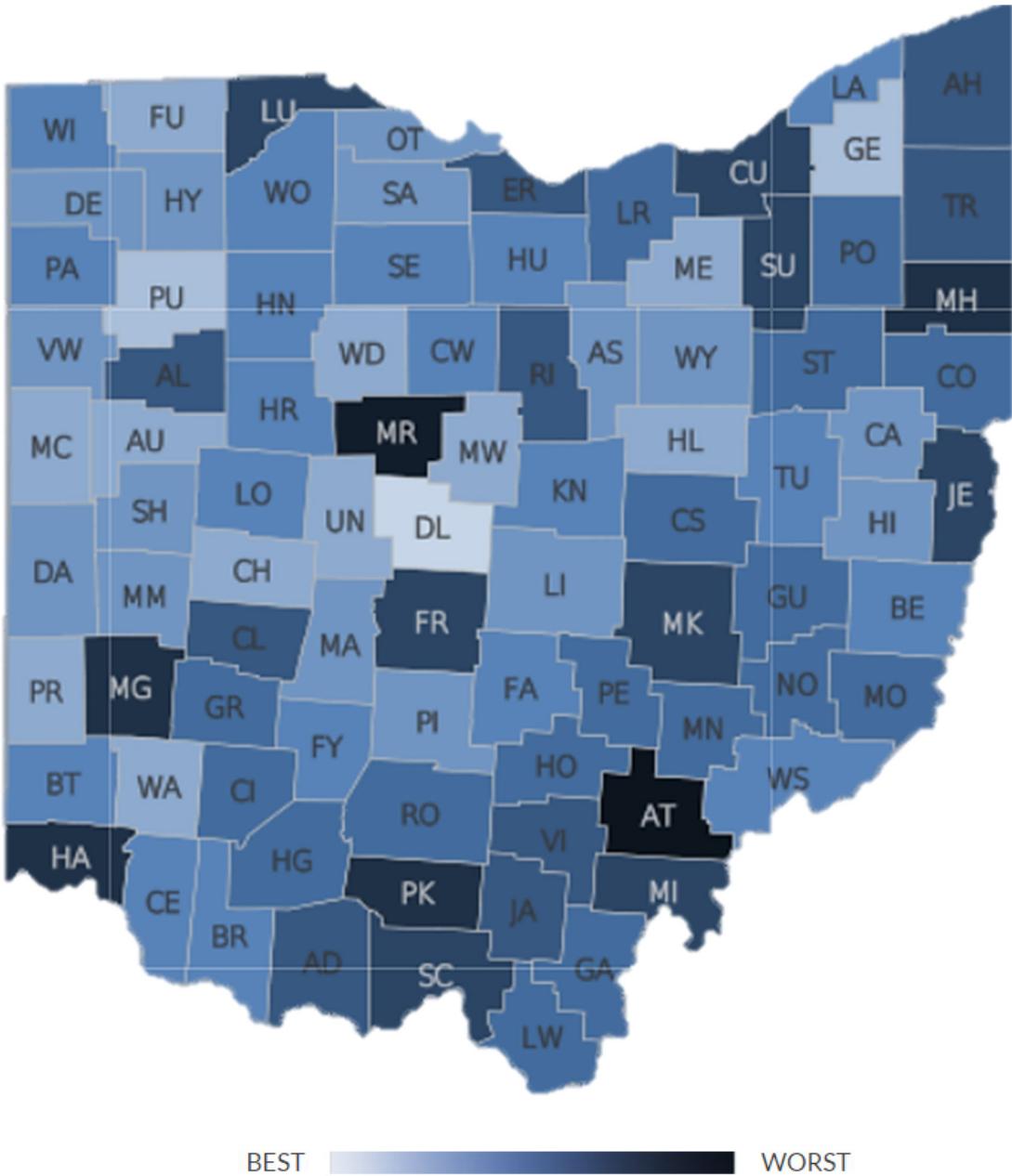
(Source: USDA Food Environment Atlas, as compiled by County Health Rankings 2019)
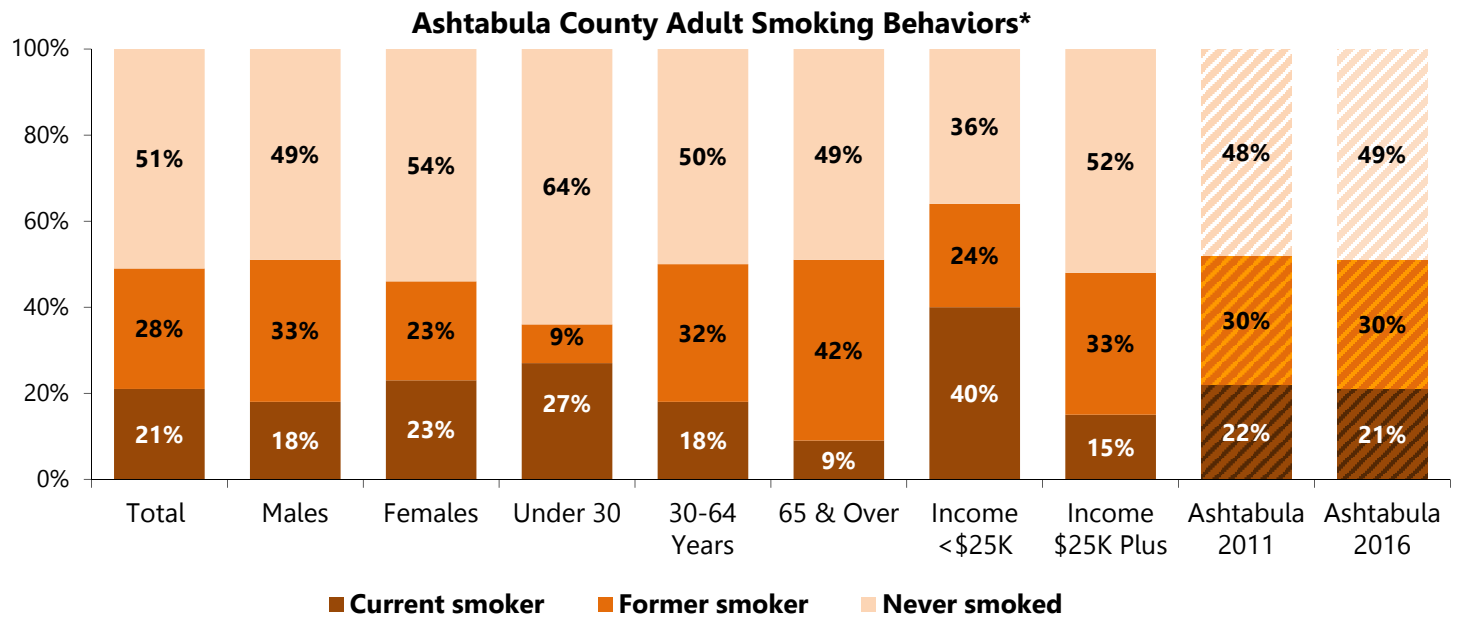
Key Findings

About one-in-five (21%) Ashtabula County adults were current smokers, and 28% were considered former smokers. Eight percent (8%) of adults used e-cigarettes or other electronic vaping products in the past year. One-fifth (20%) of adults used an e-cigarette or other electronic vaping product at least one time in their life.

15,982 Ashtabula County adults were current smokers.

Tobacco Use

- About one-in-five (21%) Ashtabula County adults were current smokers (those who indicated smoking at least 100 cigarettes in their lifetime and currently smoked some or all days).

- Over one-quarter (28%) of adults indicated that they were former smokers (smoked 100 cigarettes in their lifetime and now do not smoke).

- Ashtabula County adult smokers were more likely to have:
  — An annual income less than $25,000 (40%)
  — Been divorced (26%)
  — Been diagnosed with COPD, emphysema, or chronic bronchitis (11%)

- Sixty-three percent (63%) of current smokers responded that they had stopped smoking for at least one day in the past year because they were trying to quit smoking.

The following graph shows the percentage of Ashtabula County adults' smoking behaviors. An example of how to interpret the information includes: 21% of all adults were current smokers, 28% were former smokers, and 51% had never smoked.

Ashtabula County Adult Smoking Behaviors*

	Total	Males	Females	Under 30	30-64 Years	65 & Over	Income <$25K	Income $25K Plus	Ashtabula 2011	Ashtabula 2016
Never smoked	51%	49%	54%	64%	50%	49%	36%	52%	48%	49%
Former smoker	28%	33%	23%	9%	32%	42%	24%	33%	30%	30%
Current smoker	21%	18%	23%	27%	18%	9%	40%	15%	22%	21%

■ **Current smoker** ■ **Former smoker** ■ **Never smoked**

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

- Ashtabula County adults used the following tobacco products in the past year: cigarettes (24%); e-cigarettes or other electronic vaping products (8%); chewing tobacco, snuff or snus (4%); cigars (3%); little cigars (1%); pipes (1%); and cigarillos (<1%).

- One-fifth (20%) of adults used an e-cigarette or other electronic vaping product at least one time in their life, increasing to 26% of those with incomes less than $25,000.

- Adults that had used e-cigarettes/vapes in the past 12 months reported putting the following in them:
  - E-liquid or e-juice with nicotine (25%)
  - E-liquid or e-juice without nicotine (9%)
  - Marijuana or THC in the e-liquid (6%)
  - Homemade e-liquid or e-juice (0%)

- Ashtabula County adults had the following rules/practices about smoking in their home: never allowed (71%), allowed anywhere (13%), not allowed when children are present (10%) and allowed in certain rooms (5%).

- Adults had the following rules/practices about smoking in their car: never allowed (60%), not allowed when children are present (13%), allowed with windows open (11%) and allowed anywhere (10%).

- Adults indicated they would support an ordinance to ban smoking and vaping in the following places: vehicle with a minor present (72%), college/university campuses (54%), multi-unit housing (53%), parks or ball fields (49%), and fairgrounds (46%). Twenty-six percent (26%) of adults reported they would not support an ordinance to ban smoking and vaping in any of listed places.

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Current smoker (currently smoke some or all days)	22%	21%	21%	21%	17%
Former smoker (smoked 100 cigarettes in lifetime & now do not smoke)	30%	30%	28%	24%	25%

E-Cigarette Health Effects

- **Most e-cigarettes contain nicotine, which has known health effects.**
  - Nicotine is highly addictive.
  - Nicotine is toxic to developing fetuses.
  - Nicotine can harm adolescent brain development, which continues into the early-to-mid-20s.
  - Nicotine is a health danger for pregnant women and their developing babies.
- **Besides nicotine, e-cigarette aerosol can contain substances that harm the body.**
  - This includes cancer-causing chemicals and tiny particles that reach deep into lungs. However, e-cigarette aerosol generally contains fewer harmful chemicals than smoke from burned tobacco products.
- **E-cigarettes can cause unintended injuries.**
  - Defective e-cigarette batteries have caused fires and explosions, some of which have resulted in serious injuries. Most explosions happened when the e-cigarette batteries were being charged.
  - The Food and Drug Administration (FDA) collects data to help address this issue.
  - In addition, acute nicotine exposure can be toxic. Children and adults have been poisoned by swallowing, breathing, or absorbing e-cigarette liquid through their skin or eyes.

(Source: CDC, Smoking & Tobacco Use, About Electronic Cigarettes (E-Cigarettes), updated August 30, 2018)

Cigarette Smoking and Tobacco Use Among People of Low Socioeconomic Status

- Adults who have lower levels of educational attainment, who are unemployed, or who live at, near, or below the U.S. federal poverty level are considered to have low socioeconomic status (SES).

- In the U.S., people living below the poverty level and people having lower levels of educational attainment have higher rates of cigarette smoking than the general population.

Cigarette smoking disproportionately affects the health of people with low SES. Lower-income cigarette smokers suffer more from diseases caused by smoking than do smokers with higher incomes.
— Populations in the most socioeconomically deprived groups have higher lung cancer risk than those in the most affluent groups.
— People with less than a high school education have higher lung cancer incidence than those with a college education.
— People with family incomes of less than $12,500 have higher lung cancer incidence than those with family incomes of $50,000 or more.
— People living in rural, deprived areas have 18–20% higher rates of lung cancer than people living in urban areas.
— Lower-income populations have less access to health care, making it more likely that they are diagnosed at later stages of diseases and conditions.

People with low SES tend to smoke cigarettes more heavily.
— People living in poverty smoke cigarettes for a duration of nearly twice as many years as people with a family income of three times the poverty rate.
— People with high school education smoke cigarettes for a duration of more than twice as many years as people with at least a bachelor's degree.
— Blue-collar workers are more likely to start smoking cigarettes at a younger age and to smoke more heavily than white-collar workers.

Secondhand smoke exposure is higher among people living below the poverty level and those with less education.
— Low SES populations are more likely to suffer the harmful health consequences of exposure to secondhand smoke.
— Blue-collar workers are more likely to be exposed to secondhand smoke at work than white-collar workers.
— Service workers, especially bartenders and wait staff, report the lowest rates of workplace smoke-free policies than other occupation categories.

(Source: CDC, Smoking & Tobacco Use, Cigarette Smoking and Tobacco Use Among People of Low Socioeconomic Status, updated August 21, 2018)

Health Behaviors: Alcohol Consumption

Key Findings

Nearly three-quarters (74%) of Ashtabula County adults had at least one alcoholic drink in the past month and would be considered current drinkers. Over one-fifth (23%) 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.

56,319 adults had at least one alcoholic drink in the past month.

Alcohol Consumption

- Nearly three-quarters (74%) of Ashtabula County adults had at least one alcoholic drink in the past month, increasing to 78% of males and 77% those with incomes more than $25,000.

- Of those who drank, Ashtabula County adults drank 3.6 drinks on average, increasing to 4.5 drinks for males and 4.1 drinks for those with incomes less than $25,000.

- Over one-fifth (23%) of Ashtabula 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, 50% had at least one episode of binge drinking.

- Six percent (6%) of adults reported driving after having perhaps too much alcohol to drink in the past month.

- Ashtabula County adults experienced the following in the past six months:
  - Drove after having any alcoholic beverage (11%)
  - Used prescription drugs while drinking (6%)
  - Drank more than they expected (5%)
  - Spent a lot of time drinking (3%)
  - Drank more to get the same effect (2%)
  - Tried to quit or cut down but could not (2%)
  - Failed to fulfill duties at work, home, or school (2%)
  - Gave up other activities to drink (1%)
  - Continued to drink despite problems caused by drinking (1%)
  - Drank to ease withdrawal symptoms (1%)
  - Had legal problems (1%)
  - Placed themselves or their family in harm (<1%)

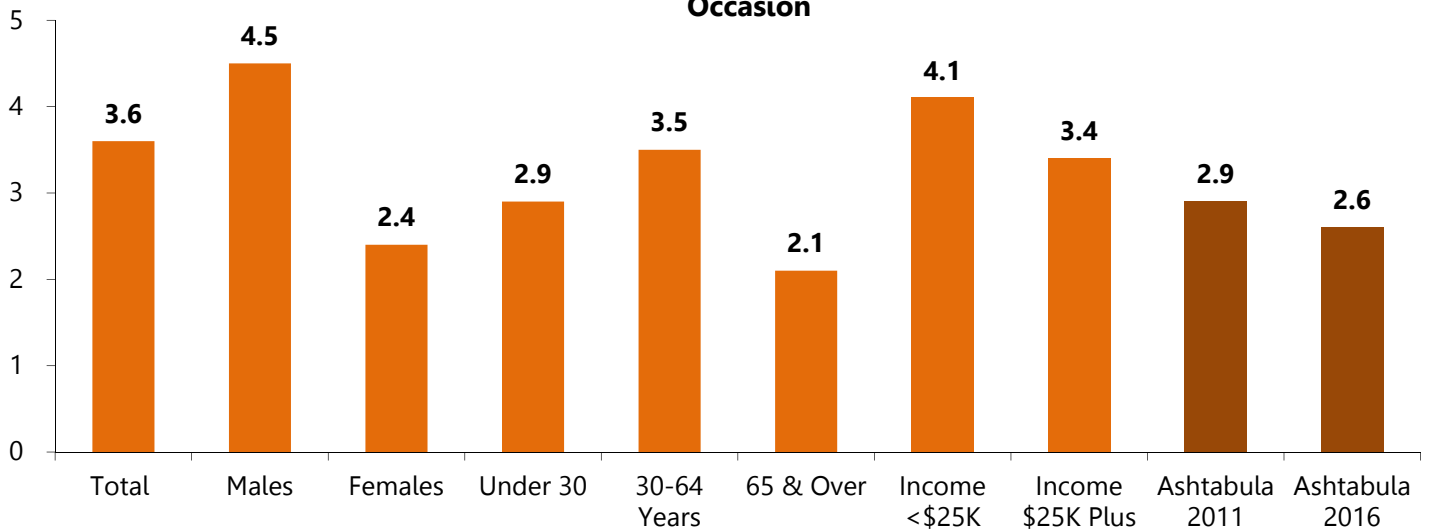| Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Current Drinker (drank alcohol at least once in the past month)	51%	49%	74%	54%	55%
Binge drinker (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days)	21%	24%	23%	19%	17%
Drove after having perhaps too much alcohol to drink (in the past month)	N/A	N/A	6%	4%*	4%*

N/A – Not Available
*2016 BRFSS

The following graphs show the percentage of Ashtabula County adults who consumed alcohol and the amount consumed on average in the past month. An example of how to interpret the information shown on the first graph includes: 26% of all Ashtabula County adults did not drink alcohol, 22% of Ashtabula County males did not drink, and 30% of adult females reported they did not drink.

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

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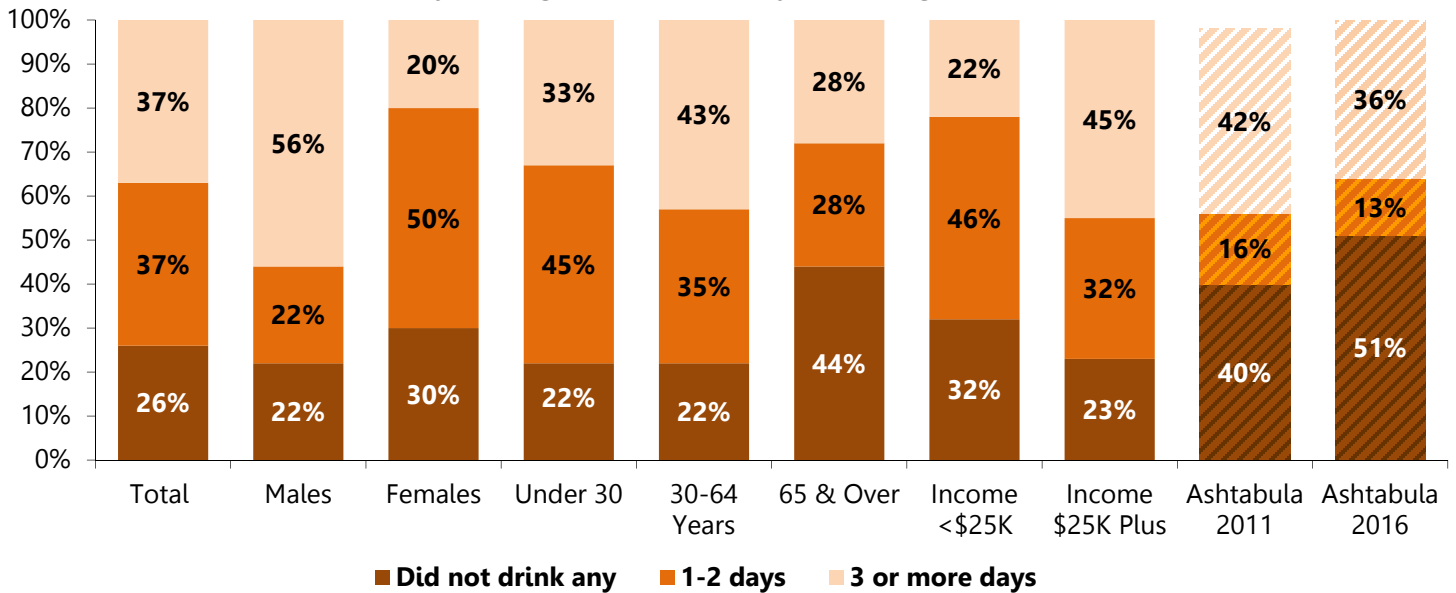
Percentages may not equal 100% as some respondents answered, "don't know"

Ashtabula 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 motor vehicle accident statistics for the cities of Ashtabula, Conneaut, and Geneva; Ashtabula County; and Ohio. The table shows:

- Six percent of the total crashes in Ashtabula County in 2016 were alcohol-related, as opposed to 4% for Ohio.

- More than half (53%) of all fatal injury crashes in Ashtabula County were alcohol-related, as compared to 30% of alcohol-related fatal injury crashes in Ohio.

- Of the total number of alcohol-related crashes (126) in Ashtabula County, 58% were property damage only, 36% were non-fatal injury, and 6% were fatal injury.

- There were 12,205 alcohol-related crashes in Ohio in 2016. Of those crashes, 56% were property damage only, 41% were non-fatal injury, and 3% were fatal injury.

	City of Ashtabula 2016	City of Conneaut 2016	City of Geneva 2016	Ashtabula County 2016	Ohio 2016
Total Crashes	432	177	37	2,120	305,958
Alcohol-Related Total Crashes	25	8	3	126	12,243
Fatal Injury Crashes	0	0	1	15	1,054
Alcohol-Related Fatal Crashes	0	0	1	8	313
Alcohol Impaired Drivers in Crashes	25	7	2	120	11,958
Injury Crashes	80	36	17	539	77,513
Alcohol-Related Injury Crashes	6	4	1	45	5,076
Property Damage Only	352	141	22	1,566	227,391
Alcohol-Related Property Damage Only	19	4	1	73	6,854
Deaths	0	0	1	16	1,133
Alcohol-Related Deaths	0	0	1	8	346
Total Non-Fatal Injuries	111	53	18	809	112,330
Alcohol-Related Injuries	9	5	1	60	7,199

(Source: Ohio Department of Public Safety, Crash Reports, Updated 12/12/2017, Traffic Crash Facts)
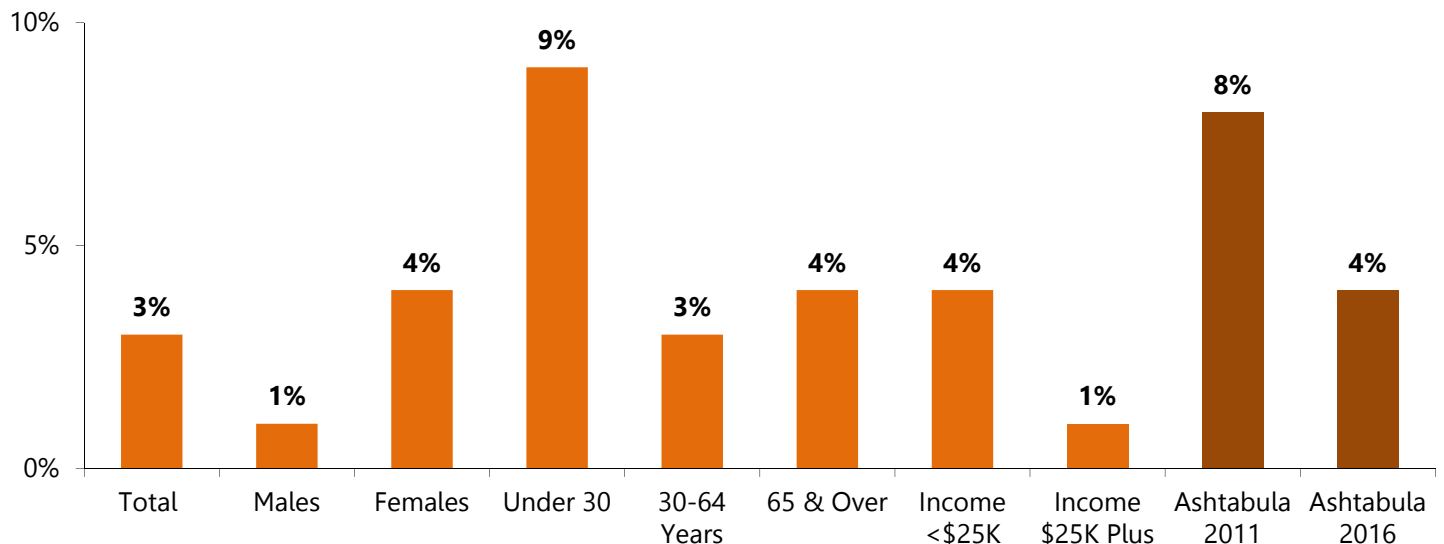
Health Behaviors: Drug Use

Key Findings

Seven percent (7%) of Ashtabula County adults had used recreational marijuana or hashish during the past 6 months. Three percent (3%) 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

- Three percent (3%) 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.

- Adults who misused prescription medication obtained their medication from the following: bought from a drug dealer (40%), primary care physician (33%), from multiple doctors (27%), from an ER or urgent care doctor (20%), free from friend or family member (20%) and bought from friend or family member (7%).

- Adults misused the following over-the-counter drugs in the past 6 months:
  — Cough and cold medicines, such as Nyquil, Robitussin, Coricidin, or pseudoephedrine (8%)
  — Sleeping pills, such as Tylenol PM, Unisom (3%)
  — Energy boosters, such as Vivarin or Stackers (1%)
  — Weight loss or diet pills (1%)
  — Other drugs (<1%)

- Ashtabula County adults indicated they did the following with their unused prescription medication: took as prescribed (27%), kept it (16%), took it to the medication collection program (12%), flushed it down the toilet (12%), threw it in the trash (8%), kept in a locked cabinet (4%), took it to the sheriff's office (2%), took it back on Drug Take Back Days (2%), used drug deactivation pouches (2%), mailer to ship back to pharmacy (1%), sold it (<1%), drugs were stolen (<1%), and some other method (4%). Forty-seven percent (47%) of adults did not have unused medication.

The following graph shows adult medication misuse in the past 6 months. An example of how to interpret the information in the graph includes: 3% of adults used misused medication in the past 6 months, including 9% of those under the age of 30.

Ashtabula County Adult Medication Misuse in Past 6 Months

	Total	Males	Females	Under 30	30-64 Years	65 & Over	Income <$25K	Income $25K Plus	Ashtabula 2011	Ashtabula 2016
	3%	1%	4%	9%	3%	4%	4%	1%	8%	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

- Seven percent (7%) of Ashtabula County adults had used recreational marijuana or hashish in the past 6 months, increasing to 18% of those under the age of 30.

- Three percent (3%) of adults reported using other recreational drugs in the past 6 months such as cocaine, synthetic marijuana/K2, heroin, LSD, inhalants, Ecstasy, bath salts, and methamphetamines.

- One percent (1%) of adults used a program or service to help with an alcohol or drug problem for them or a loved one. Reasons for not using such a program included the following: stigma of seeking drug services (3%), transportation (2%), could not afford to go (2%), insurance did not cover it (2%), did not want to get in trouble (2%), fear (1%), had not thought of it (1%), stigma of seeking alcohol services (1%), did not know how to find a program (1%), no program available (<1%), wait time (<1%), did not want to miss work (<1%), and other reason (2%). Ninety-two percent (92%) of adults indicated such a program was not needed.

The following graph shows adult recreational marijuana or hashish use in the past 6 months. An example of how to interpret the information in the graph includes: 7% of Ashtabula County adults used recreational marijuana or hashish in the past 6 months, including 10% of males.

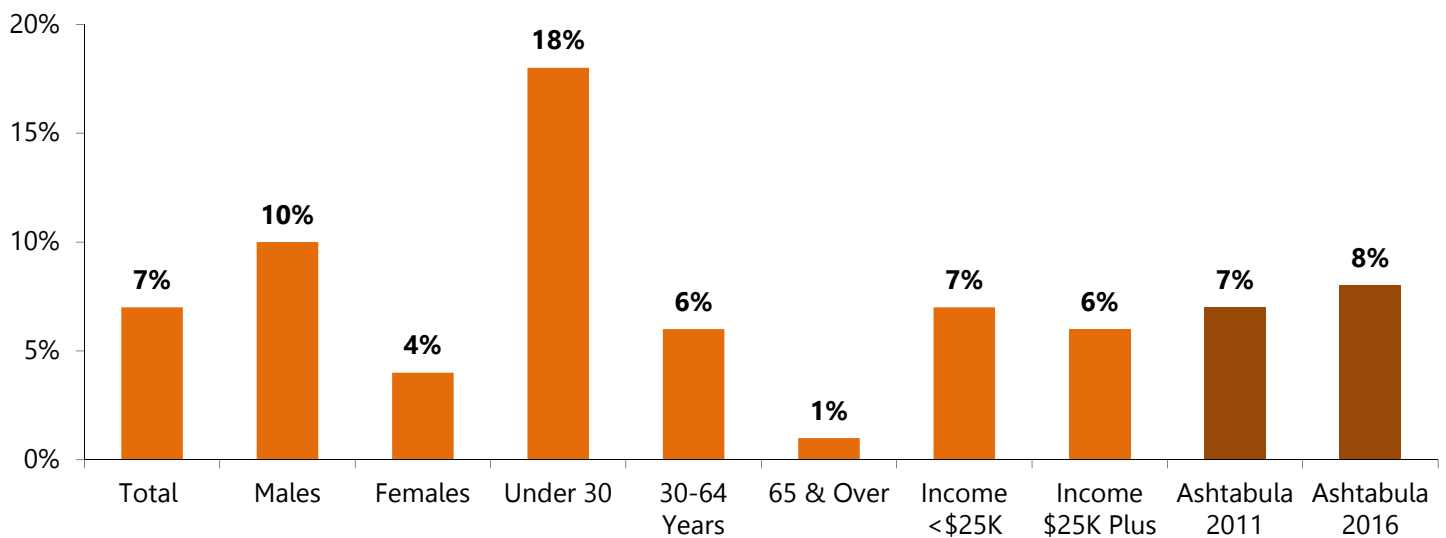**Ashtabula County Adult Recreational Marijuana or Hashish Use in Past 6 Months**

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	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Adults who used recreational marijuana or hashish in the past 6 months	7%	8%	7%	N/A	N/A
Adults who misused prescription drugs in the past 6 months	8%	4%	3%	N/A	N/A
Adults who used recreational drugs in the past 6 months	1%	1%	3%	N/A	N/A

N/A- Not Available

The following graph shows the Ashtabula County and Ohio age-adjusted unintentional drug overdose deaths from 2013 to 2017.

Ashtabula County and Ohio Age-Adjusted Unintentional Drug Overdose Death 2013-2017
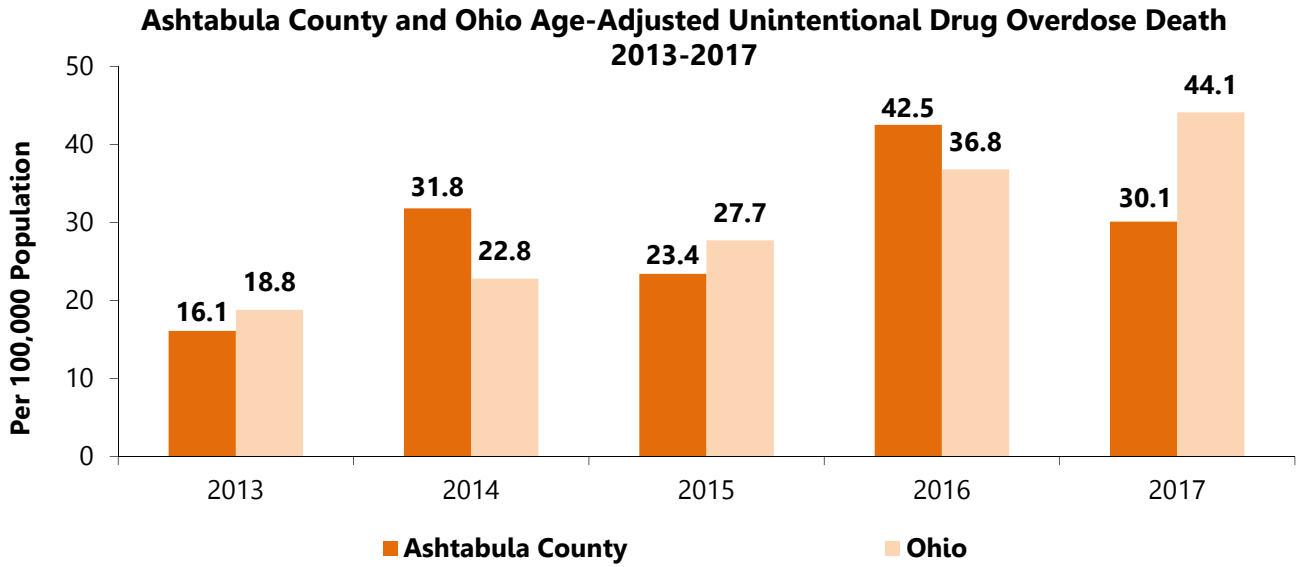
The following graph shows the number of unintentional drug overdose deaths from 2013 to 2017 in Ashtabula County.

Ashtabula County Unintentional Drug Overdose Deaths, 2013-2017
Total Deaths=128
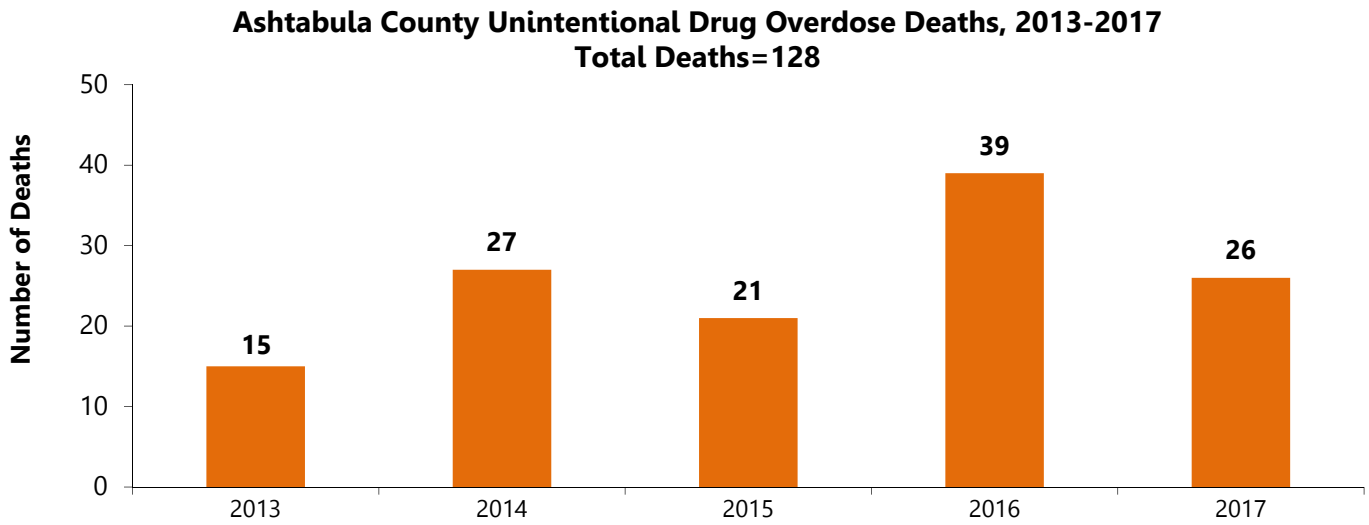
(Source for graphs: Ohio Public Health Data Warehouse, 2013-2017, Updated 5/9/19)

The following graphs are data from the Ohio Automated Prescription Reporting System (OARRS) indicating Ashtabula County and Ohio opioid doses per patient, as well as opioid doses per capita.

Ashtabula County and Ohio Number of Opiate and Pain Reliever Doses Per Patient

Doses per Patient

Year	Ashtabula County	Ohio
2014	300	274
2015	275	266
2016	258	265
2017	239	254
2018	226	244

■ Ashtabula County ■ Ohio
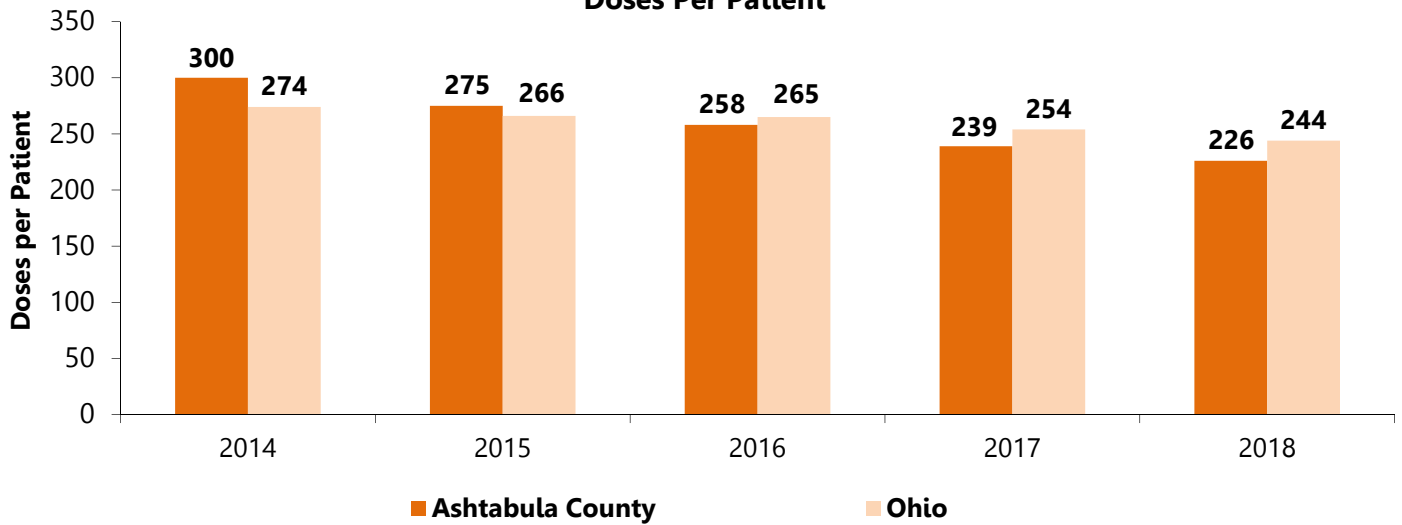
Ashtabula County and Ohio Number of Opiate and Pain Reliever Doses Per Capita

Doses per Capita

Year	Ashtabula County	Ohio
2014	73	65
2015	62	61
2016	53	55
2017	44	49
2018	35	41

■ Ashtabula County ■ Ohio
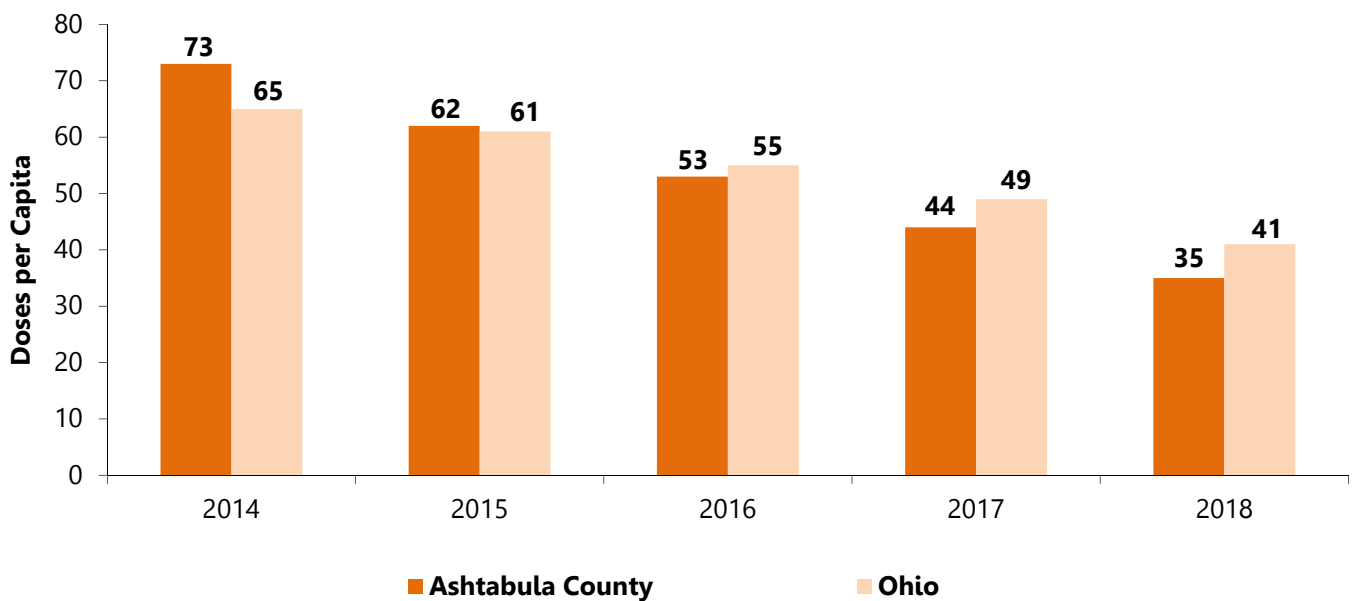
(Source for graphs: Ohio's Automated Rx Reporting System, 2014-2018)

The following graphs show Ashtabula County and Ohio quarterly opioid doses per patient and unintentional drug overdose deaths.

Ashtabula County and Ohio Number of Opioid Doses Per Patient, Quarterly from 2017-2019

Ashtabula County and Ohio Number of Opioid Doses Per Capita, Quarterly from 2017-2019
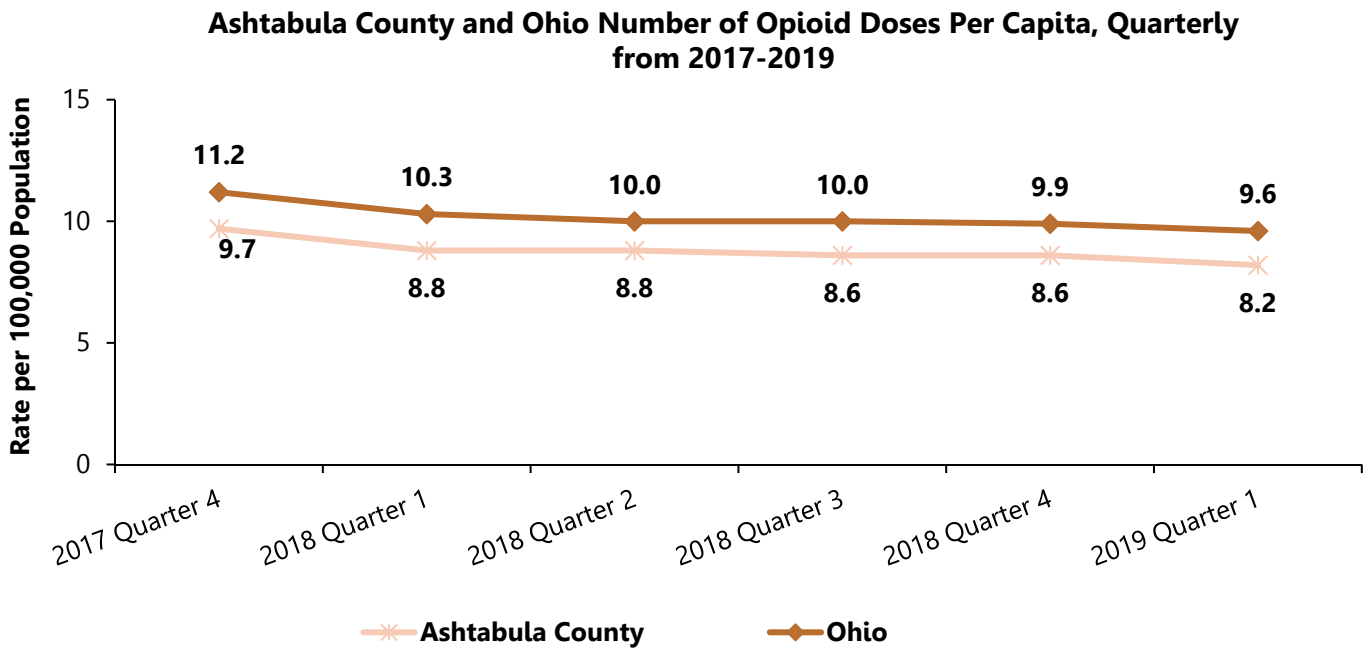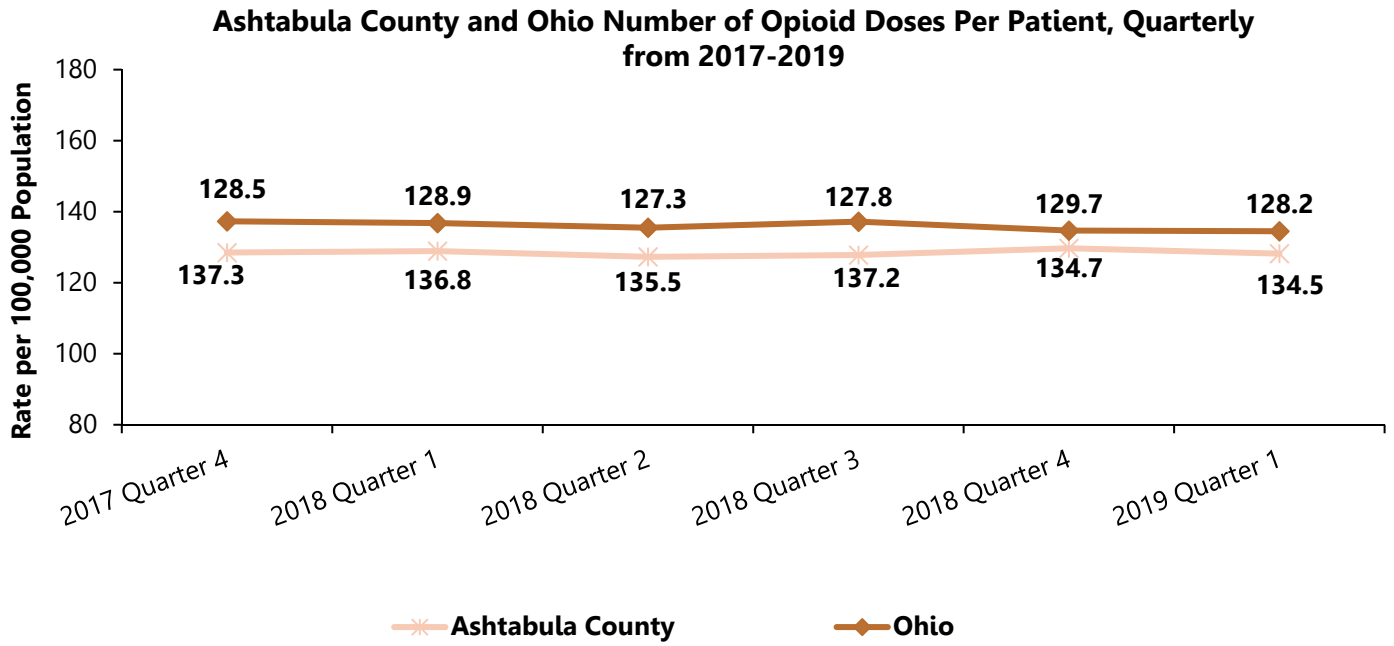
(Source for graphs: Ohio's Automated Rx Reporting System, 2017-2018, retrieved on 5/10/19)

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

County	Rate	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
Wayne 16.3
Stark 18.9
Columbiana 30.8
Mercer 12.0
Auglaize 11.0
Hardin 20.4
Marion 36.7
Morrow 20.5
Richland 32.7
Holmes
Carroll 17.2
Jefferson 31.9
Shelby 25.4
Logan 22.3
Union 10.4
Delaware 8.8
Knox 17.0
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
Montgomery 56.5
Greene 25.5
Fairfield 15.8
Perry 15.1
Morgan 18.0
Noble
Monroe
Preble 39.7
Fayette 45.7
Pickaway 18.8
Hocking 20.1
Washington 21.8
Butler 49.1
Warren 22.2
Clinton 44.8
Ross 36.3
Vinton 21.6
Athens 16.1
Hamilton 36.4
Highland 22.7
Pike 30.0
Jackson 29.6
Meigs 21.9
Clermont 43.2
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)

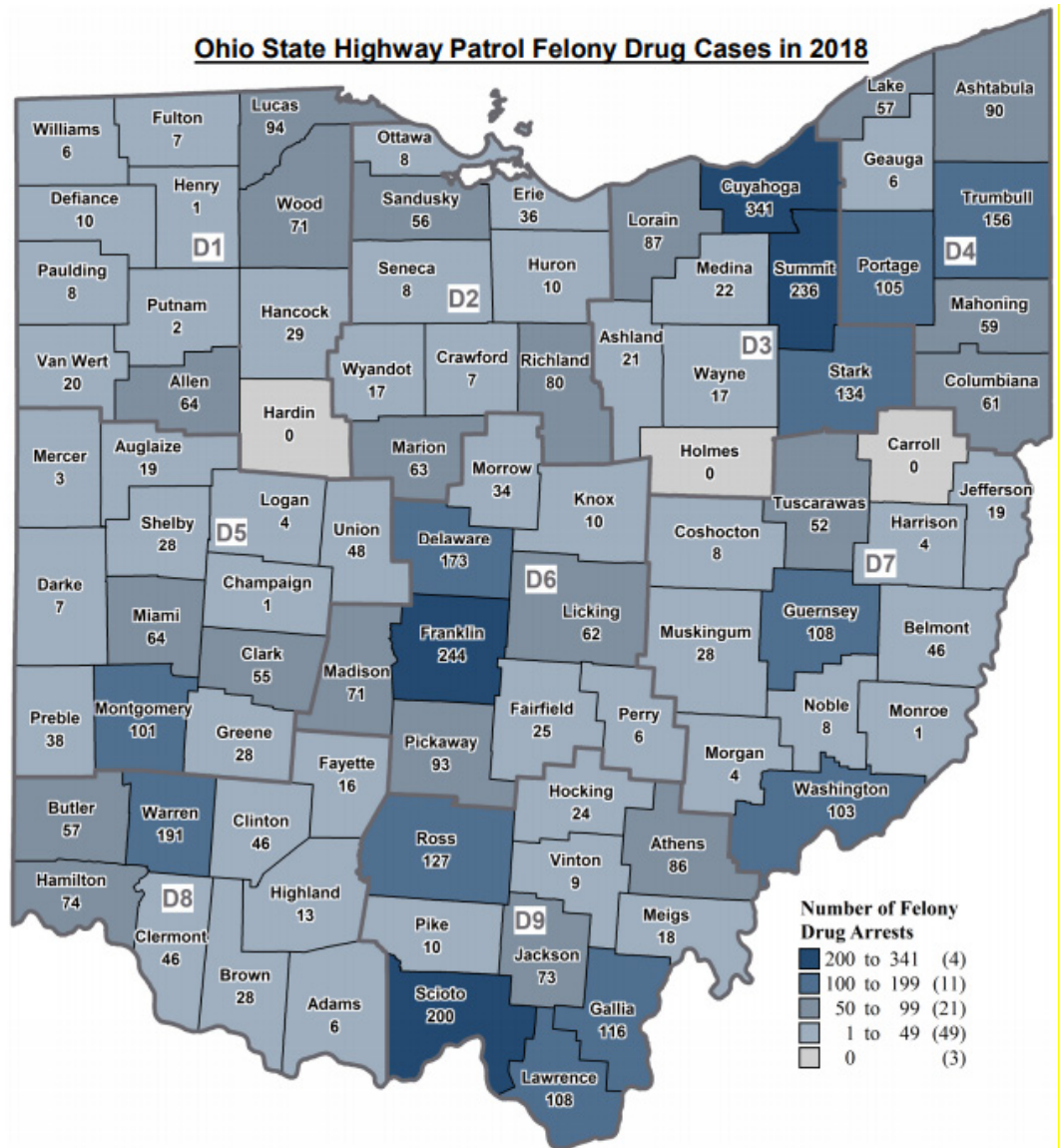## Felony Cases and Drug Arrests January – June 2018

- Ohio State Highway Patrol (OSHP) investigated a wide range of felony offenses in 2018 including homicide/death (45), robbery/burglary (7), larceny (686), assault (2,170), false pretense (185), vice (4,768), property crimes (153), and various other types of felony offenses (307).

- OSHP Troopers made 16,956 total drug arrests in 2018 - a 2% increase from 2017 and a 20% rise over the previous 3-year average (2015-2017). Total drug arrests in 2018 were 76% higher than they were in 2013.

OSHP felony cases by type[1]

Homicide/Death	45
Robbery/Burglary	7
Larceny	686
Assault	2,170
False pretense[2]	185
Vice[3]	4,768
Property crimes	153
Other investigations	307
Total:	8,321

OSHP drug arrests

Total drug arrests	16,956
Felony drug cases	4,732

OSHP drug seizures in grams

Marijuana	2,181,948
Cocaine	229,521
Methamphetamine	194,682
Heroin	133,383

OSHP scheduled pill seizures

Opiate	25,475
Stimulant	4,700
Depressant	8,210
Hallucinogen	736

Ohio State Highway Patrol Felony Drug Cases in 2018

Number of Felony Drug Arrests

- 200 to 341 (4)
- 100 to 199 (11)
- 50 to 99 (21)
- 1 to 49 (49)
- 0 (3)

(Source: Ohio State Highway Patrol, Felony Cases and Drug Arrests, January – June 2018)

Health Behaviors: Sexual Behavior

Key Findings

Sixty-eight percent (68%) Ashtabula County adults had sexual intercourse in the past year. Six percent (6%) of adults had more than one sexual partner in the past year.
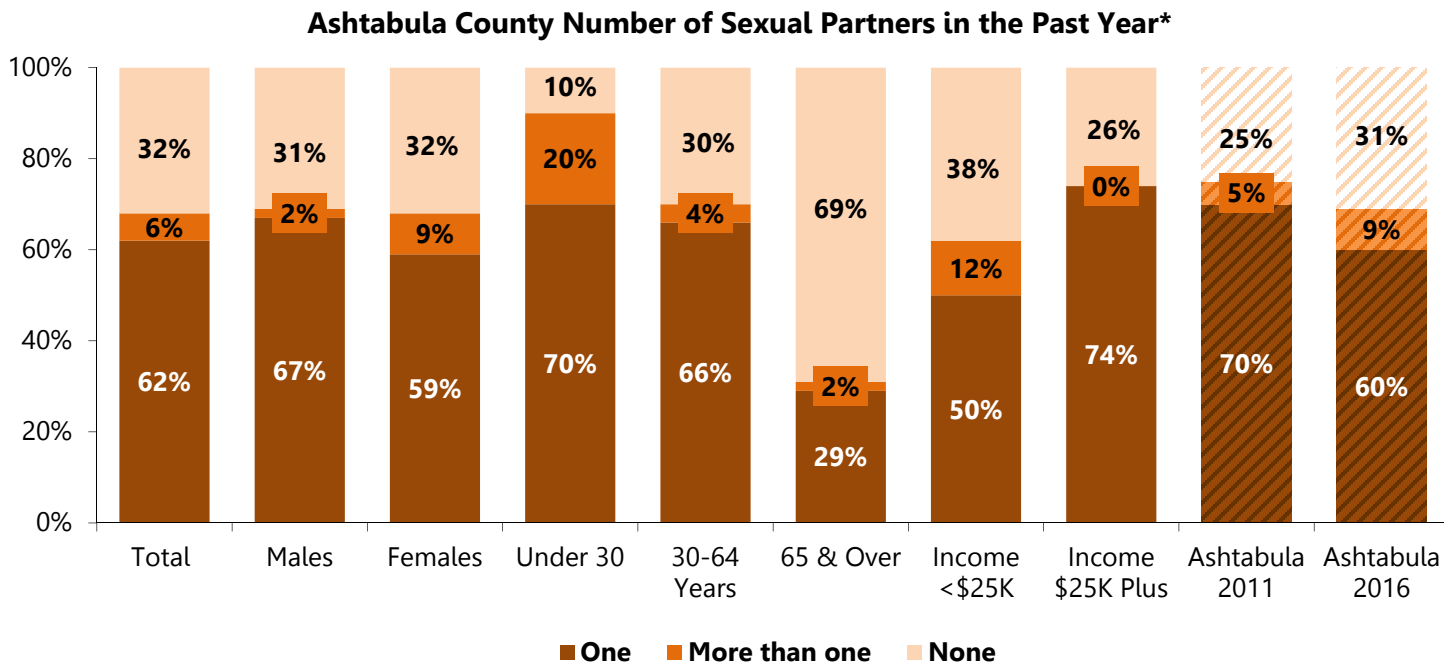
Sexual Behavior

- Over three-fifths (68%) of Ashtabula County adults had sexual intercourse in the past year. Six percent (6%) of adults reported they had intercourse with more than one partner in the past year, increasing to 20% of those under the age of 30.

- Ashtabula County adults used the following methods of birth control:
  - They or their partner were too old (16%)
  - Vasectomy (15%)
  - Tubes tied (12%)
  - Condoms (11%)
  - Infertility (7%)
  - Birth control pill (7%)
  - Hysterectomy (6%)
  - Withdrawal (5%)
  - Abstinence (2%)
  - Contraceptive implant (2%)
  - Ovaries or testicles removed (1%)
  - IUD (1%)
  - Shots (<1%)
  - Rhythm method (<1%)

- Three percent (3%) of adults reported they and their partner were trying to get pregnant, and 1% were currently pregnant.

- Nine percent (9%) of Ashtabula County adults were not using any method of birth control.

- The last time Ashtabula County adults had sexual intercourse, 13% said they used a condom to prevent pregnancy, and 2% said they used one to prevent diseases such as chlamydia, syphilis, gonorrhea and AIDS. Nine percent (9%) indicated they used a condom to prevent both pregnancy and disease.

- Twenty-nine percent (29%) of adults have been tested for HIV. Reasons for not getting tested included the following: no reason to be tested (68%), did not think they could have HIV (7%), did not want to know (2%), privacy (1%), and did not know where to go (<1%).

- The following situations applied to Ashtabula County adults:
  - Had sex without a condom in the past year (33%)
  - Had anal sex (7%)
  - Had sexual activity with someone of the same gender (5%)
  - Had anal sex without a condom in the past year (5%)
  - Tested positive for HPV (4%)
  - Had sex with someone they met on social media (3%)
  - Had sex with someone they did not know (2%)
  - Had 4 or more sexual partners in the past year (2%)
  - Engaged in sexual activity following alcohol or other drug use that they would not have done if sober (2%)
  - Been forced to have sex (2%)
  - Treated for an STD in the past year (1%)
  - Tested positive for Hepatitis C (1%)
  - Injected any drug other than those prescribed in the past year (<1%)

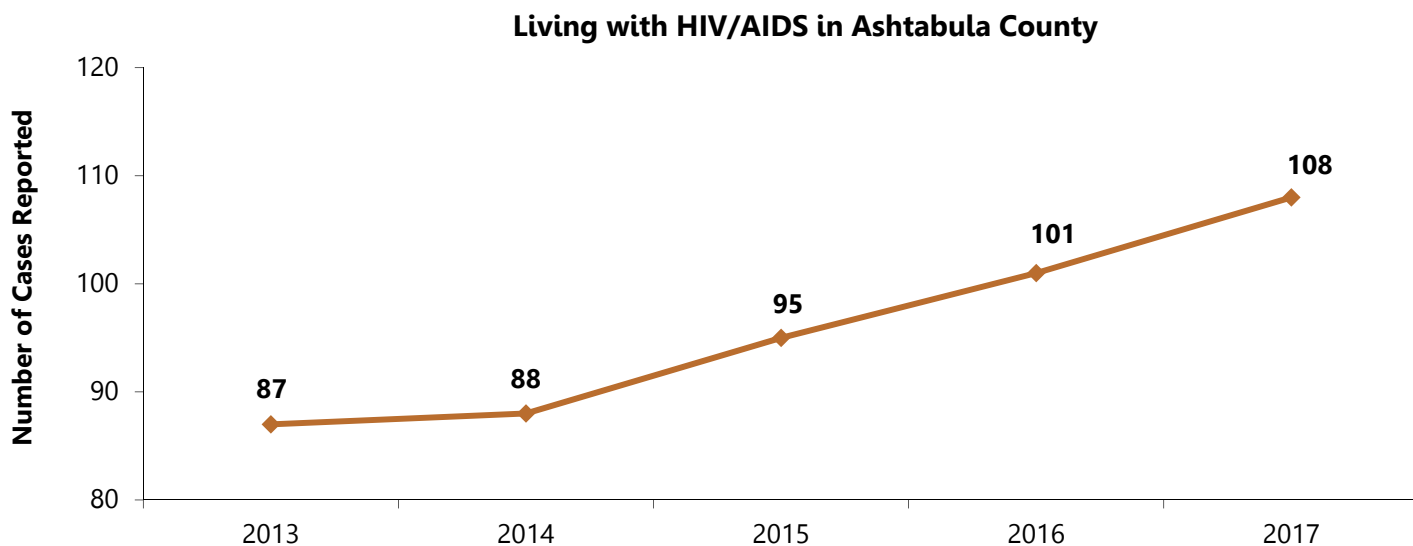| Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Had more than one sexual partner in the past year	5%	9%	6%	N/A	N/A

N/A –Not Available

The following graph shows the number of sexual partners Ashtabula County adults had in the past year. An example of how to interpret the information in the graph includes: 62% of all Ashtabula County adults had one sexual partner in the last 12 months, and 6% had more than one; 9% of females had more than one partner in the past year.

Ashtabula County Number of Sexual Partners in the Past Year*

	One	More than one	None
Total	62%	6%	32%
Males	67%	2%	31%
Females	59%	9%	32%
Under 30	70%	20%	10%
30-64 Years	66%	4%	30%
65 & Over	29%	2%	69%
Income <$25K	50%	12%	38%
Income $25K Plus	74%	0%	26%
Ashtabula 2011	70%	5%	25%
Ashtabula 2016	60%	9%	31%

*Respondents were asked: "During the past 12 months, with how many different people have you had sexual intercourse?"
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 number of Ashtabula County HIV/AIDS cases from 2013 to 2017. The graph shows:
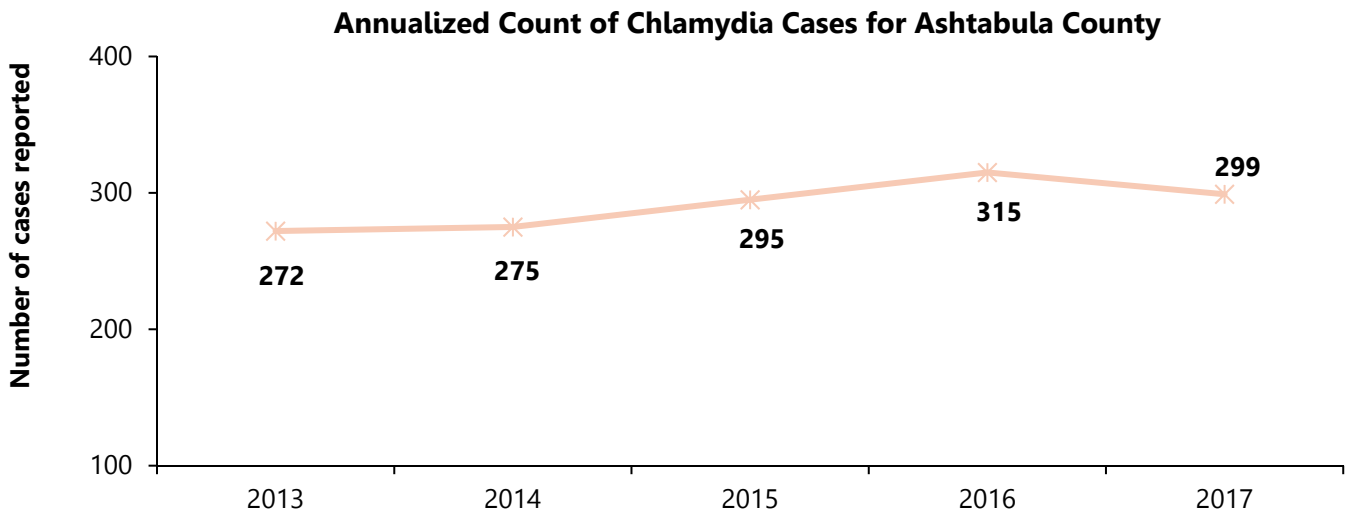
- From 2013 to 2017, the number of Ashtabula County HIV/AIDS cases steadily increased.

Living with HIV/AIDS in Ashtabula County

Year	Number of Cases Reported
2013	87
2014	88
2015	95
2016	101
2017	108

(Source for graphs: ODH, STD Surveillance, data reported through 6/30/18)

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

- Ashtabula County chlamydia rates decreased from 2016 to 2017. Ashtabula County rates remained below the Ohio rates.

Chlamydia Annualized Disease Rates for Ashtabula County and Ohio

Rate per 100,000 Population

460.7 468.4 490.0 521.8 528.9

272.5 277.4 299.1 320.7 304.4

2013 2014 2015 2016 2017

✳ Ashtabula County ◆ Ohio

Annualized Count of Chlamydia Cases for Ashtabula County

Number of cases reported

272 275 295 315 299

2013 2014 2015 2016 2017
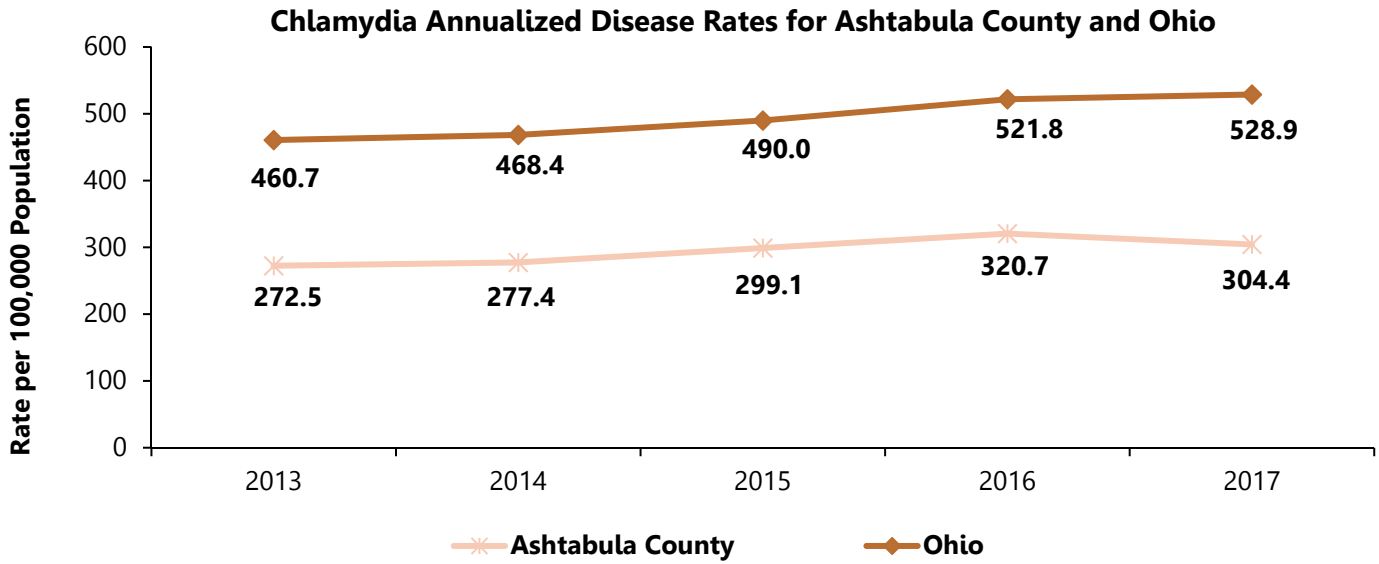
(Source for graphs: ODH, STD Surveillance, data reported through 5/24/18)

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

- The Ashtabula County gonorrhea rate increased from 2015 to 2016.

- The Ohio gonorrhea rate stayed about the same from 2013 to 2015 but increased from 2015 to 2017.

Gonorrhea Annualized Disease Rates for Ashtabula County and Ohio
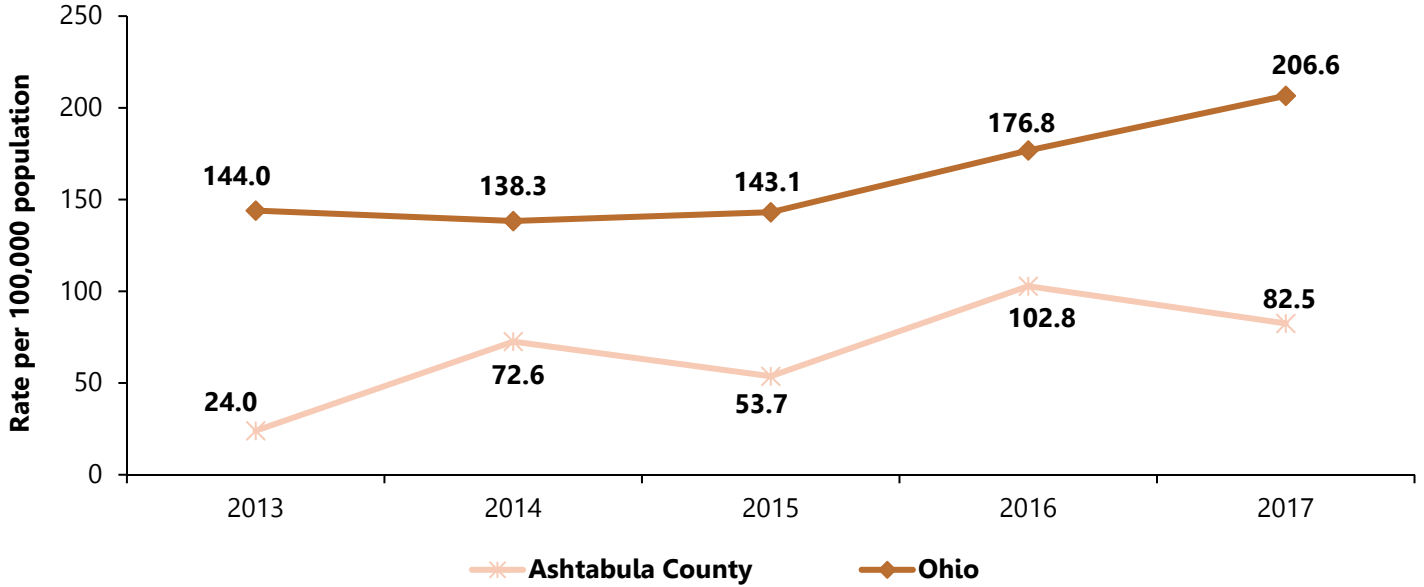
Annualized Count of Gonorrhea Cases for Ashtabula County
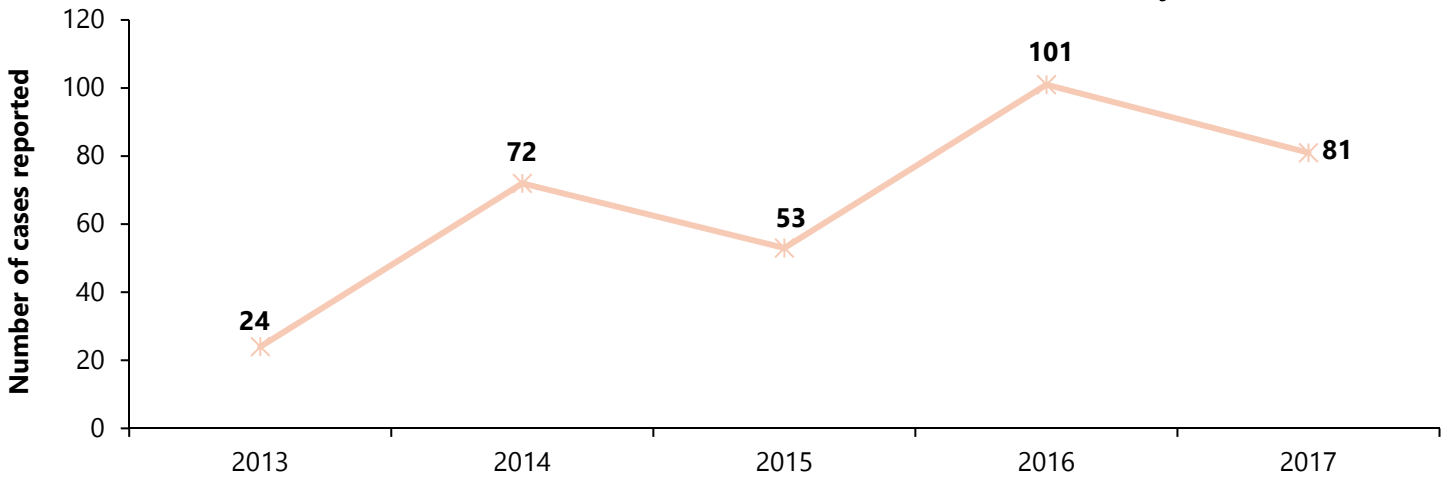
(Source for graphs: ODH, STD Surveillance, data reported through 5/24/18)

Health Behaviors: Mental Health

Key Findings

Six percent (6%) of Ashtabula County adults considered attempting suicide in the past year. Fifteen percent (15%) of adults had a period of two or more weeks when they felt so sad or hopeless nearly every day that they stopped doing usual activities in the past year.

Mental Health

- In the past year, 15% of Ashtabula County adults had a period of two or more weeks when they felt so sad or hopeless nearly every day that they stopped doing usual activities.

- Six percent (6%) of Ashtabula County adults considered attempting suicide in the past year.

- Less than one percent (<1%) of 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 (64%), try to calm them down (57%), call 911 (48%), call a crisis line (45%), take them to the ER (25%), call a friend (20%), call their spiritual leader (15%), text a crisis line (11%), and nothing (1%).

- Ashtabula County adults dealt with stress in the following ways: talked to someone they trust (52%), listened to music (45%), slept (36%), engaged in prayer/meditation (32%), worked on a hobby (29%), ate more or less than normal (28%), exercised (27%), worked (24%), drank alcohol (16%), smoked tobacco (16%), took it out on others (9%), talked to a professional (4%), used prescription drugs as prescribed (3%), used illegal drugs (3%), misused prescription drugs (<1%), self-harmed (<1%), and other ways (9%).

- Twelve percent (12%) of Ashtabula adults used a program or service for help with depression, anxiety, or other emotional problem for themselves or a loved one. Reasons for not using a program or service to help with depression, anxiety, or emotional problems included the following:
  — Could not afford to go (9%)
  — Fear (7%)
  — Had not thought of it (6%)
  — Other priorities (6%)
  — Stigma of seeking mental health services (5%)
  — Co-pay/deductible too high (3%)
  — Did not know how to find a program (2%)
  — Too long of a wait to see a doctor (1%)
  — Transportation (1%)
  — Could not get to the office or clinic (<1%)
  — Could not find a mental health doctor or provider (<1%)
  — Other reasons (4%)

- Sixty-seven percent (67%) of adults indicated they did not need a program or service for help with depression, anxiety, or other emotional problems for themselves or a loved one.

| Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Considered attempting suicide in the past year	8%	7%	6%	N/A	N/A
Felt so sad or hopeless almost every day for two weeks or more in a row	15%	15%	15%	N/A	N/A

N/A –Not Available

The following graph shows Ashtabula County adults who felt sad or hopeless for two or more weeks in a row in the past year. An example of how to interpret the information includes: 15% of all adults felt sad or hopeless for two or more weeks in a row, including 20% of females and 18% of those with incomes less than $25,000.
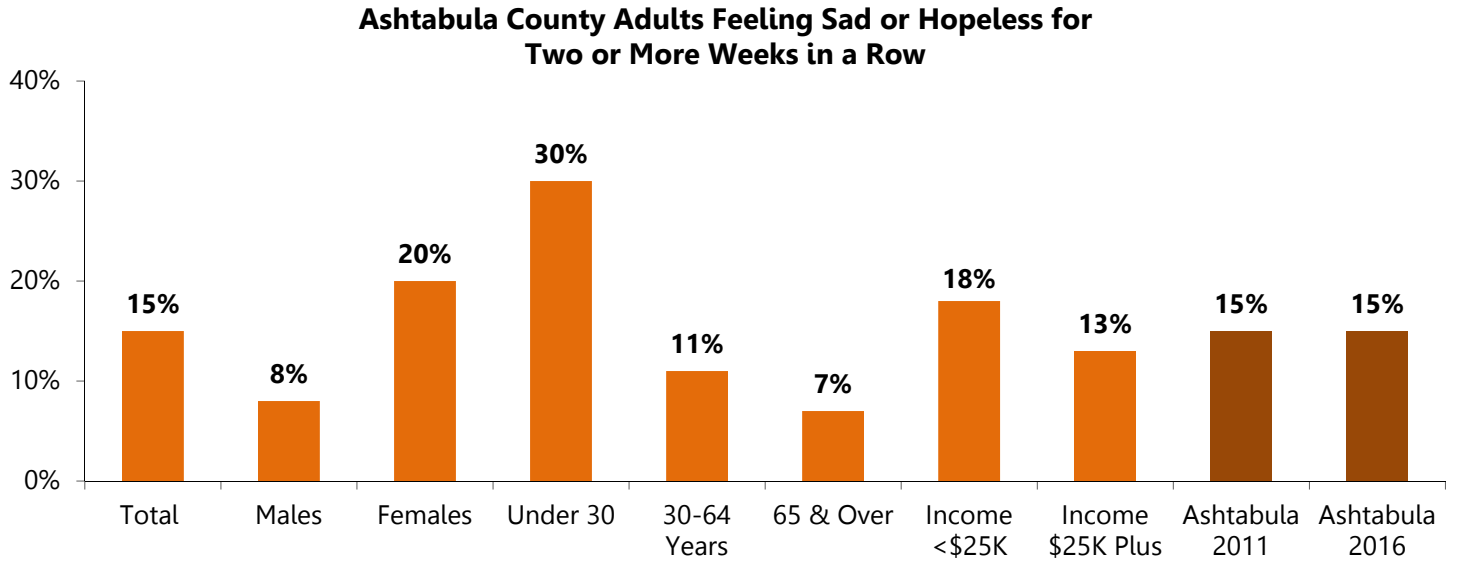
Ashtabula County Adults Feeling Sad or Hopeless for Two or More Weeks in a Row

*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 graph below shows the number of suicide deaths by year in Ashtabula County.
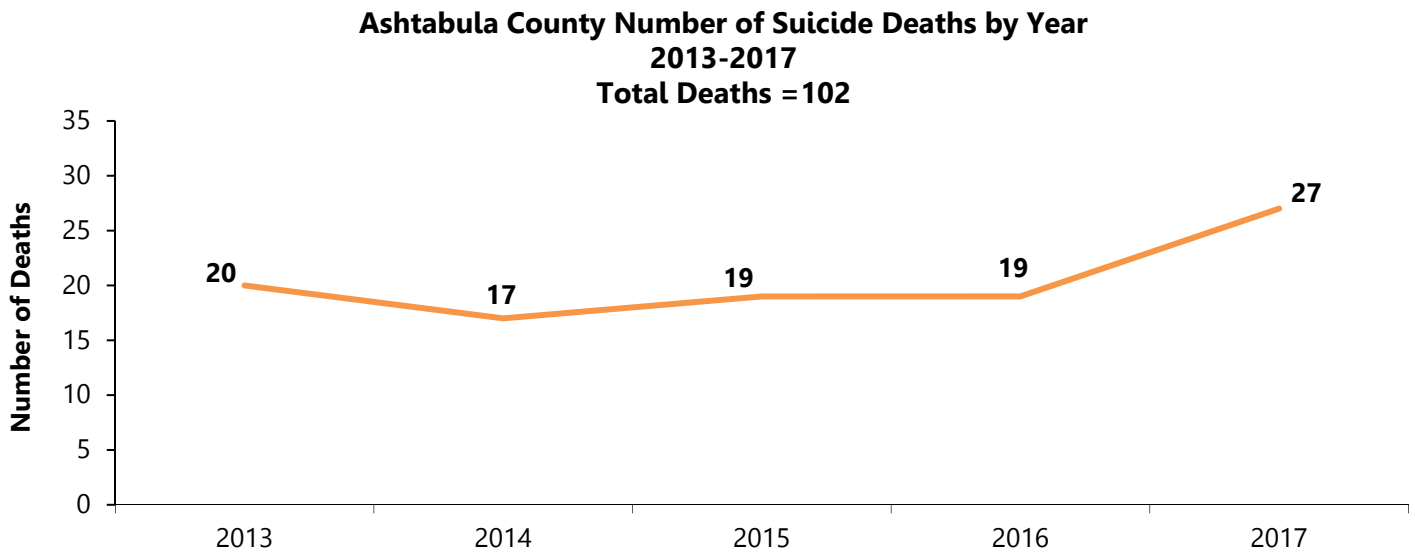
Ashtabula County Number of Suicide Deaths by Year 2013-2017 Total Deaths =102

(Source: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 5/9/19)

The graph below shows the number of suicide deaths by age group in Ashtabula County.
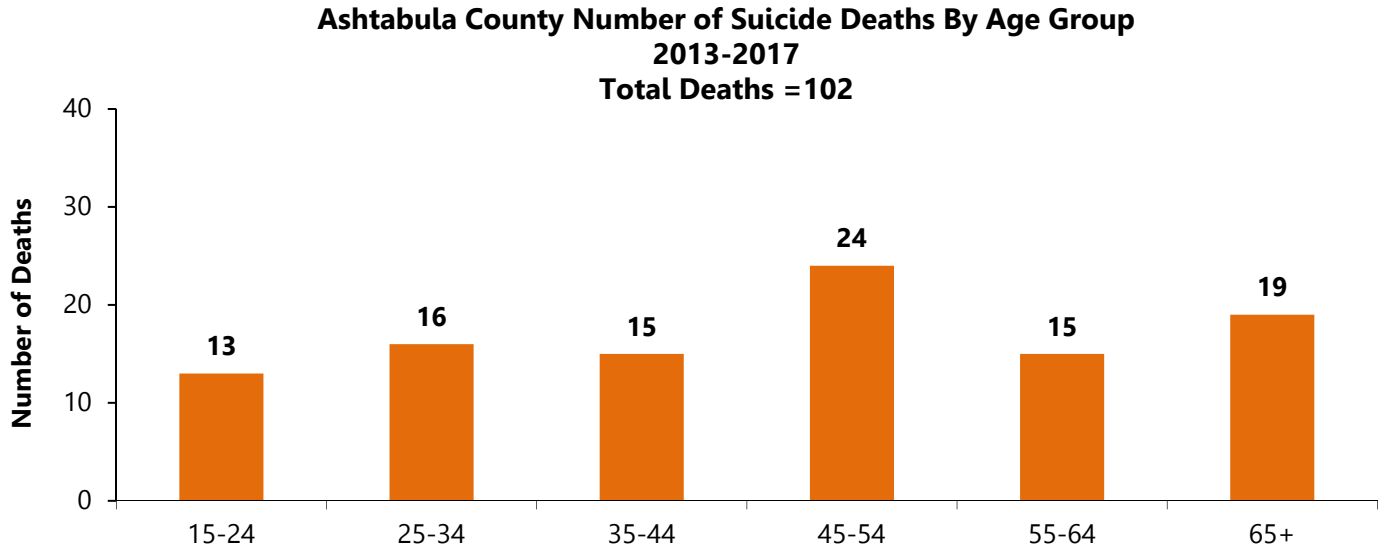
**Ashtabula County Number of Suicide Deaths By Age Group
2013-2017
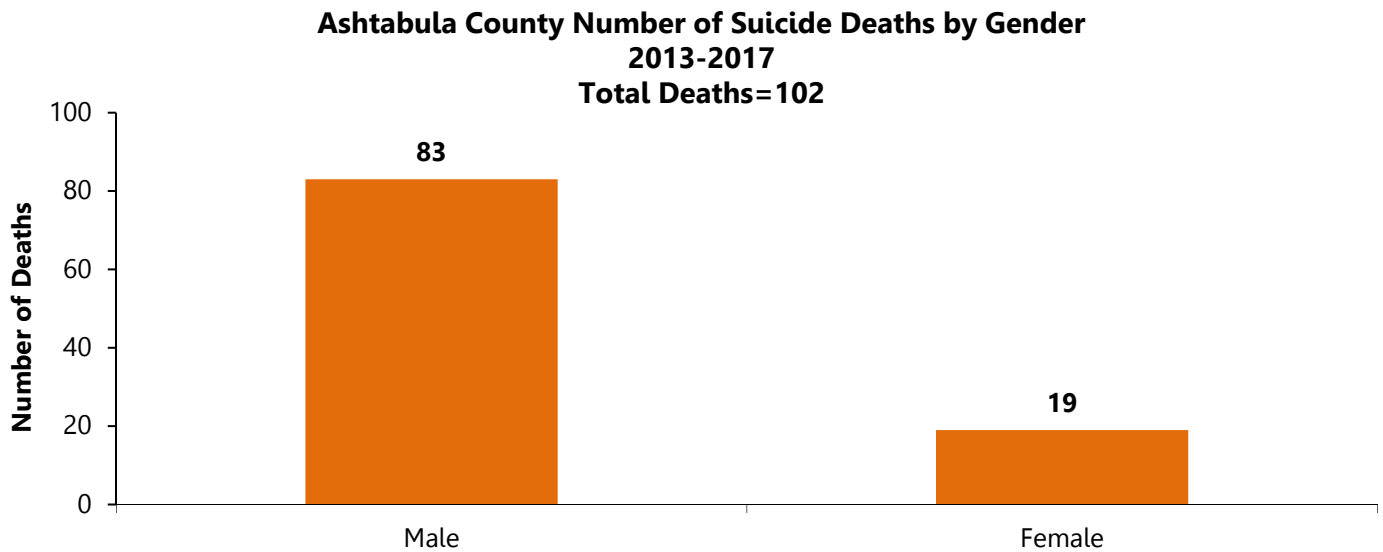Total Deaths =102**

(Source: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 5/9/19)

The graph below shows the number of suicide deaths by gender in Ashtabula County.

**Ashtabula County Number of Suicide Deaths by Gender
2013-2017
Total Deaths=102**

(Source: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 5/9/19)

Suicide Rising Across the U.S.

- Suicide is a leading cause of death in the U.S.

- Suicide rates have increased more than 30% in half of states since 1999.

- Nearly 45,000 lives were lost to suicide in 2016.

- More than (54%) half of people who died by suicide did not have a known mental health condition.

- Many factors contribute to suicide among those with and without known mental health conditions such as relationship problems, crisis in the past or upcoming two weeks, physical health problems, problematic substance use, or job/financial problems.

- Making sure government, public health, health care, employers, education, the media and community organizations are working together is important for preventing suicide. Public health departments can bring together these partners to focus on comprehensive state and community efforts with the greatest likelihood of preventing suicide.

- States and communities can:
  — Identify and support people at risk of suicide.
  — Teach coping and problem-solving skills to help people manage challenges with their relationships, jobs, health, or other concerns.
  — Promote safe and supportive environments. This includes safely storing medications and firearms to reduce access among people at risk.
  — Offer activities that bring people together so they feel connected and not alone.
  — Connect people at risk to effective and coordinated mental and physical health care.
  — Expand options for temporary help for those struggling to make ends meet.
  — Prevent future risk of suicide among those who have lost a loved one to suicide.

(Source: CDC, Suicide rising across the US, Updated on June 11, 2018)

Chronic Disease: Cardiovascular Health

Key Findings

Five percent (5%) of adults had survived a heart attack and 3% had survived a stroke at some time in their life. Forty-two percent (42%) of adults had been diagnosed with high blood pressure, 42% were obese, 40% were diagnosed with high blood cholesterol, and 21% were current smokers, four known risk factors for heart disease and stroke.

Heart Disease and Stroke

- Five percent (5%) of Ashtabula County adults reported they had survived a heart attack or myocardial infarction, increasing to 7% of those over the age of 65.

- Three percent (3%) of Ashtabula County adults reported they had survived a stroke, increasing to 7% of those over the age of 65.

- Three percent (3%) of adults reported they had angina or coronary heart disease, increasing to 5% of those over the age of 65.

- Two percent (2%) of adults reported they had congestive heart failure, increasing to 5% of those over the age of 65.

High Blood Pressure (Hypertension)

- More than two-fifths (42%) of adults had been diagnosed with high blood pressure.

- Eight percent (8%) of adults were told they were pre-hypertensive/borderline high.

- Over four-fifths (84%) of adults had their blood pressure checked within the past year.

- Ashtabula County adults diagnosed with high blood pressure were more likely to have:
  — Been ages 65 years or older (61%)
  — Been classified as obese by body mass index (59%)
  — Rated their overall health as fair or poor (23%)

High Blood Cholesterol

- Forty percent (40%) of adults had been diagnosed with high blood cholesterol.

- Four-fifths (80%) of adults had their blood cholesterol checked within the past 5 years.

- Ashtabula County adults with high blood cholesterol were more likely to have:
  — Been ages 65 years or older (63%)
  — Been classified as obese by body mass index (51%)
  — Have rated their overall health as fair or poor (18%)

Ashtabula County
Leading Causes of Death, 2015-2017

Total Deaths: 3,611

1. Heart Disease (25% of all deaths)
2. Cancer (21%)
3. Chronic Lower Respiratory Diseases (7%)
4. Accidents, Unintentional Injury (5%)
5. Stroke (4%)

(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. Cancer (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 Ashtabula County adults who had major risk factors for developing cardiovascular disease (CVD).

Ashtabula County Adults with CVD Risk Factors
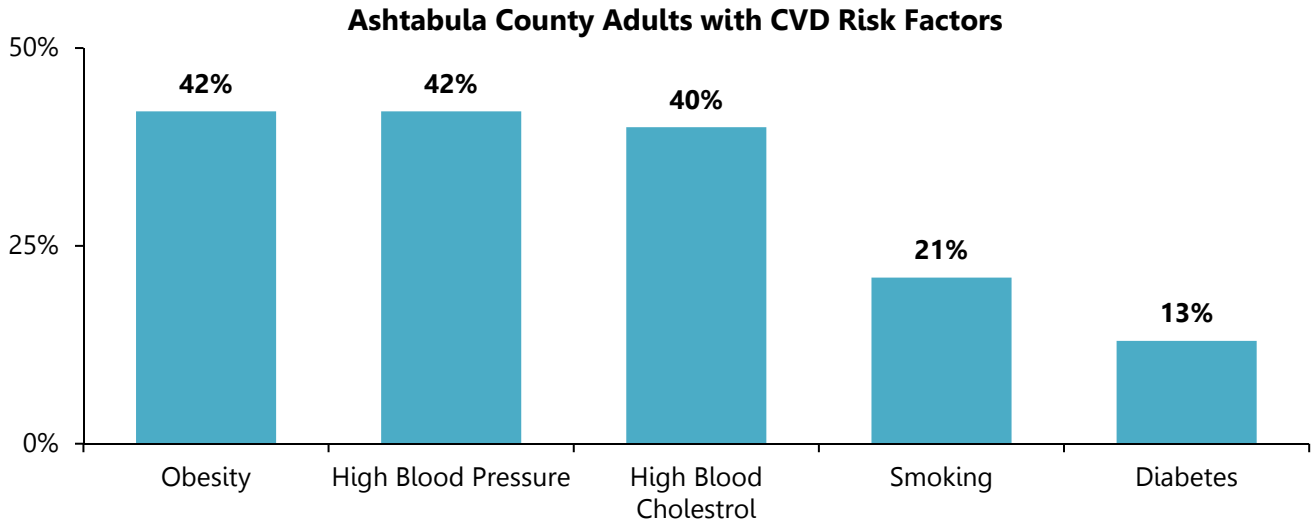
(Source: 2019 Ashtabula County Health Assessment)

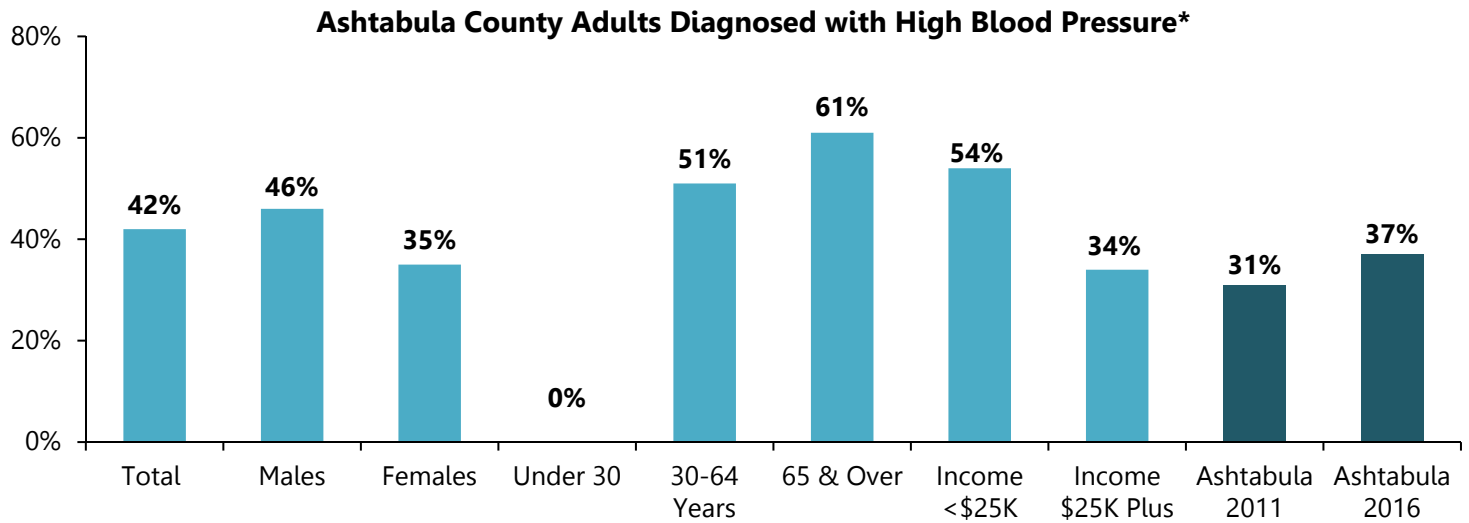| Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Had angina or coronary heart disease	N/A	5%	3%	5%	4%
Had a heart attack	7%	5%	5%	6%	4%
Had a stroke	6%	4%	3%	4%	3%
Had high blood pressure	31%	37%	42%	35%	32%
Had high blood cholesterol	34%	37%	40%	33%	33%
Had blood cholesterol checked within past 5 years	N/A	78%	80%	85%	86%

N/A – Not Available

Healthy People 2020 Objectives
Heart Disease and Stroke (HDS)

Objective	Ashtabula Survey Baseline 2019	2017 U.S. Baseline	Healthy People 2020 Target
HDS-5: Reduce proportion of adults with hypertension	42%	32% Adults age 18 and up	27%
HDS-6: Increase proportion of adults who had their blood cholesterol checked within the preceding 5 years	80%	86% Adults age 18 and up	82%
HDS-7: Decrease proportion of adults with high total blood cholesterol (TBC)	40%	33% Adults age 20+ with TBC>240 mg/dl	14%

Note: All U.S. figures age-adjusted to 2000 population standard.
(Source: Healthy People 2020, 2017 BRFSS, 2019 Ashtabula County Health Assessment)

The following graphs show the percent of Ashtabula County adults who had been diagnosed with high blood pressure and high blood cholesterol. An example of how to interpret the information on the first graph includes: 42% of all Ashtabula County adults had been diagnosed with high blood pressure, including 46% of all males and 61% of those 65 years and older.

Ashtabula County Adults Diagnosed with High Blood Pressure*

Category	Value
Total	42%
Males	46%
Females	35%
Under 30	0%
30-64 Years	51%
65 & Over	61%
Income <$25K	54%
Income $25K Plus	34%
Ashtabula 2011	31%
Ashtabula 2016	37%

Does not include respondents who indicated high blood pressure during pregnancy only.
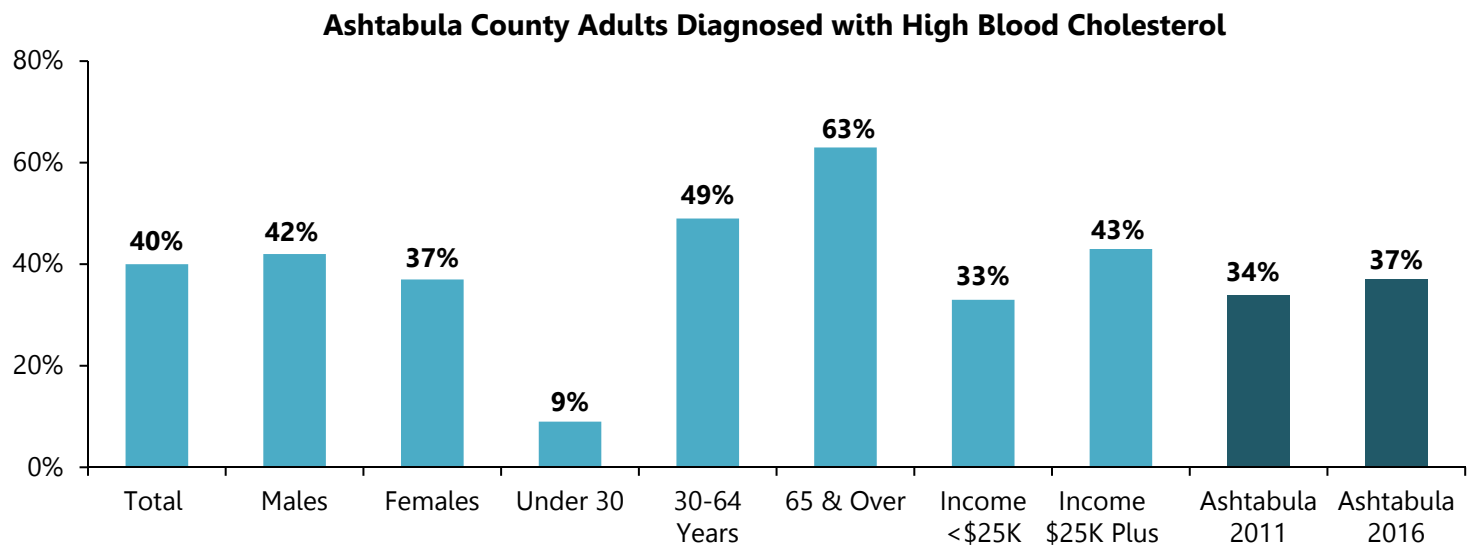
Ashtabula County Adults Diagnosed with High Blood Cholesterol

| Category	Value
Total	40%
Males	42%
Females	37%
Under 30	9%
30-64 Years	49%
65 & Over	63%
Income <$25K	33%
Income $25K Plus	43%
Ashtabula 2011	34%
Ashtabula 2016	37%

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 graph shows the percentage of Ashtabula County adults who had survived a heart attack or stroke in their lifetime by gender. An example of how to interpret the information includes: 5% of Ashtabula County males survived a stroke compared to 2% of females.

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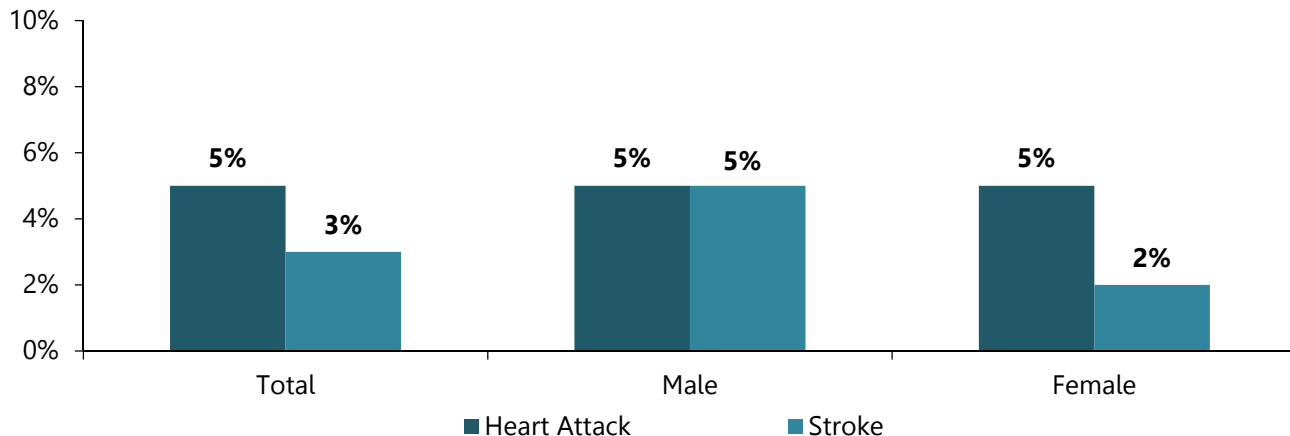

(Source: 2019 Ashtabula County Health Assessment)
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following graph shows the Ashtabula County, Ohio and U.S. age-adjusted mortality rates per 100,000 population for heart disease and stroke in comparison to the Healthy People 2020 target objective.

- When age differences are accounted for, the statistics indicate that from 2015 to 2017, the Ashtabula County heart disease mortality rate was greater than the figure for the state, the U.S., and the Healthy People 2020 target.

- The Ashtabula County age-adjusted stroke mortality rate from 2015 to 2017 was lower than the state and the U.S. figure, but higher as the Healthy People 2020 target objective.

Ashtabula County Age-Adjusted Heart Disease and Stroke Mortality Rates
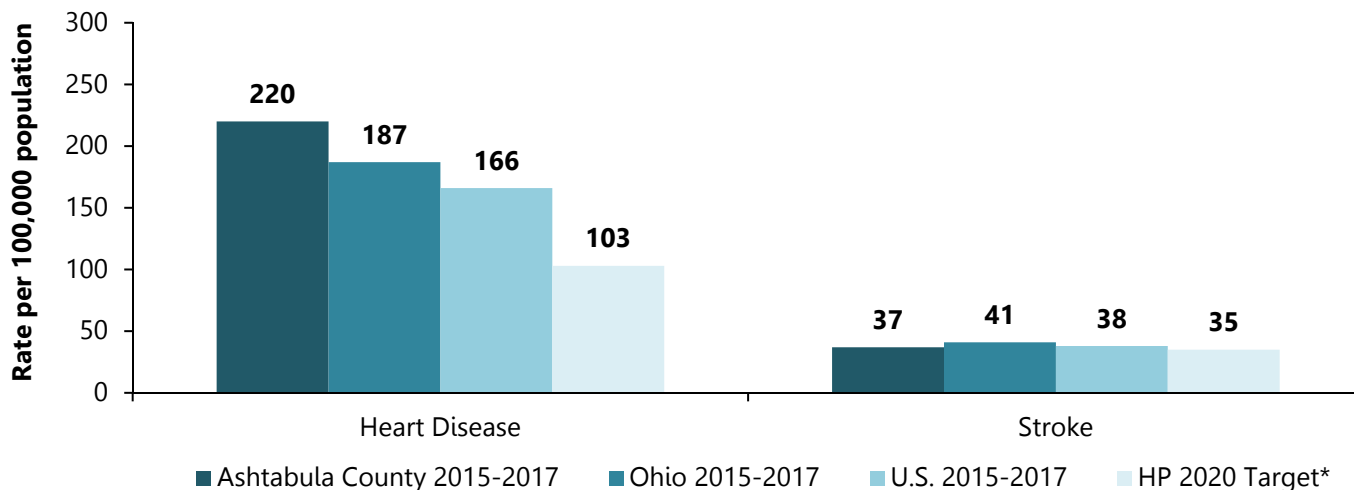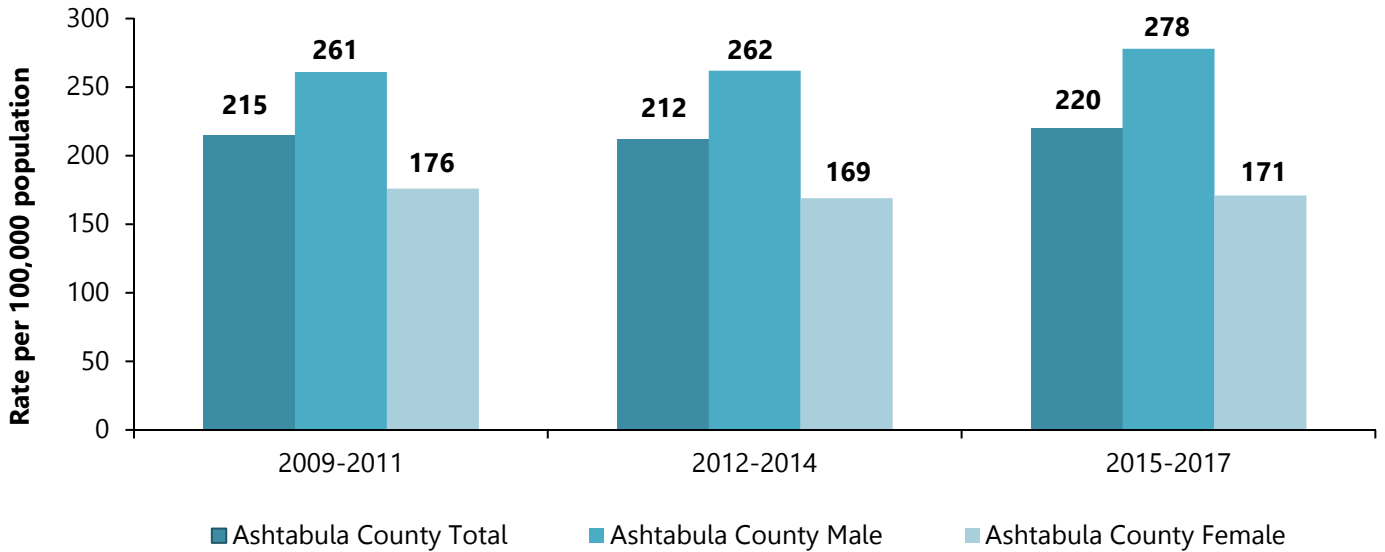

*The Healthy People 2020 Target objective for coronary heart disease is reported for heart attack mortality.
(Source: Ohio Public Health Data Warehouse, 2015-2017, CDC Wonder 2015-2017, Healthy People 2020)

The following graphs show the age-adjusted mortality rates per 100,000 population for heart disease and stroke by gender.
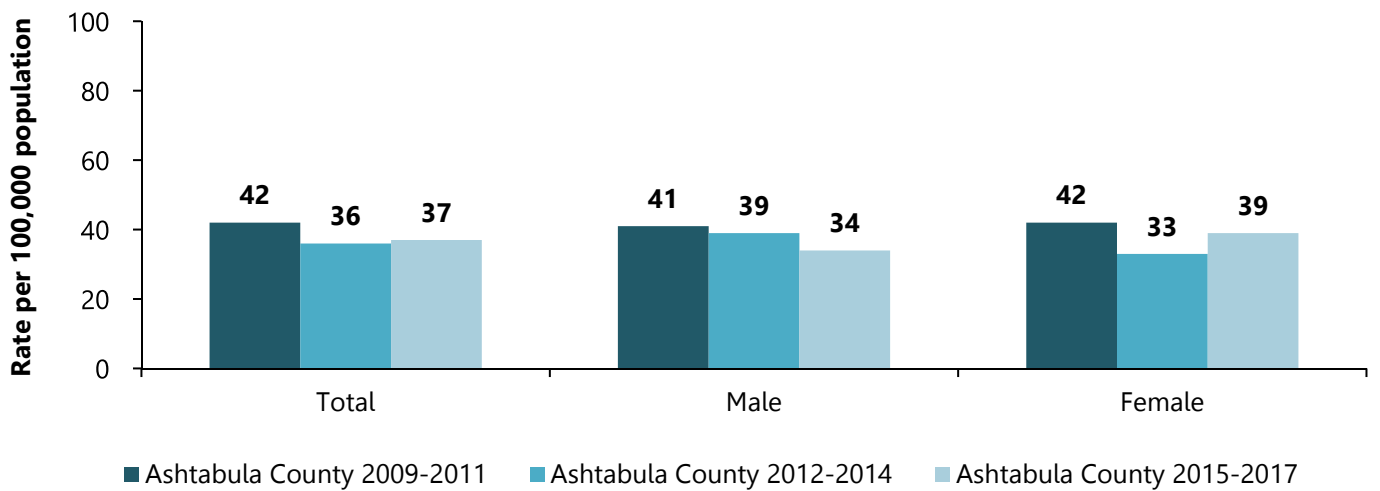
- From 2009 to 2017, the Ashtabula County stroke mortality rate was higher for males than for females.

Ashtabula County Age-Adjusted Heart Disease Mortality Rates by Gender

Rate per 100,000 population

	2009-2011	2012-2014	2015-2017
Total	215	212	220
Male	261	262	278
Female	176	169	171

■ Ashtabula County Total   ■ Ashtabula County Male   ■ Ashtabula County Female

(Source: Ohio Public Health Data Warehouse, 2009-2017)

Ashtabula County Age-Adjusted Stroke Mortality Rates by Gender

Rate per 100,000 population

	Total	Male	Female
2009-2011	42	41	42
2012-2014	36	39	33
2015-2017	37	34	39

■ Ashtabula County 2009-2011   ■ Ashtabula County 2012-2014   ■ Ashtabula County 2015-2017

(Source: Ohio Public Health Data Warehouse, 2009-2017)

Chronic Disease: Cancer

Key Findings

Fifteen percent (15%) of Ashtabula County adults had been diagnosed with cancer at some time in their life.

Cancer

- Fifteen percent (15%) of Ashtabula County adults were diagnosed with cancer at some point in their lives, increasing to 31% of those over the age of 65.

- Of those diagnosed with cancer, they reported the following types: cervical (30%), prostate (29%), breast (26%), other skin cancer (11%), leukemia (9%), lung (5%), colon/intestine (5%), bladder (5%), melanoma (2%), non-Hodgkin's lymphoma (2%), pancreatic (2%), esophageal (2%), renal (2%), and other types of cancer (9%).

Cancer Facts

- The Ohio Public Health Data Warehouse indicates that from 2015-2017, cancers caused 21% (773 of 3,611 total deaths) of all Ashtabula County resident deaths. The largest percent (17%) of 2015-2017 cancer deaths were from lung and bronchus cancers *(Source: Ohio Public Health Data Warehouse, 2015-2017)*.

- The American Cancer Society states that about 606,880 Americans are expected to die of cancer in 2019. Cancer is the second leading cause of death in the U.S., exceeded only by heart disease *(Source: American Cancer Society, Facts & Figures 2019)*.

The following graph shows the Ashtabula 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.

**Healthy People 2020 Objective
and Age-Adjusted Mortality Rates for All Cancers**
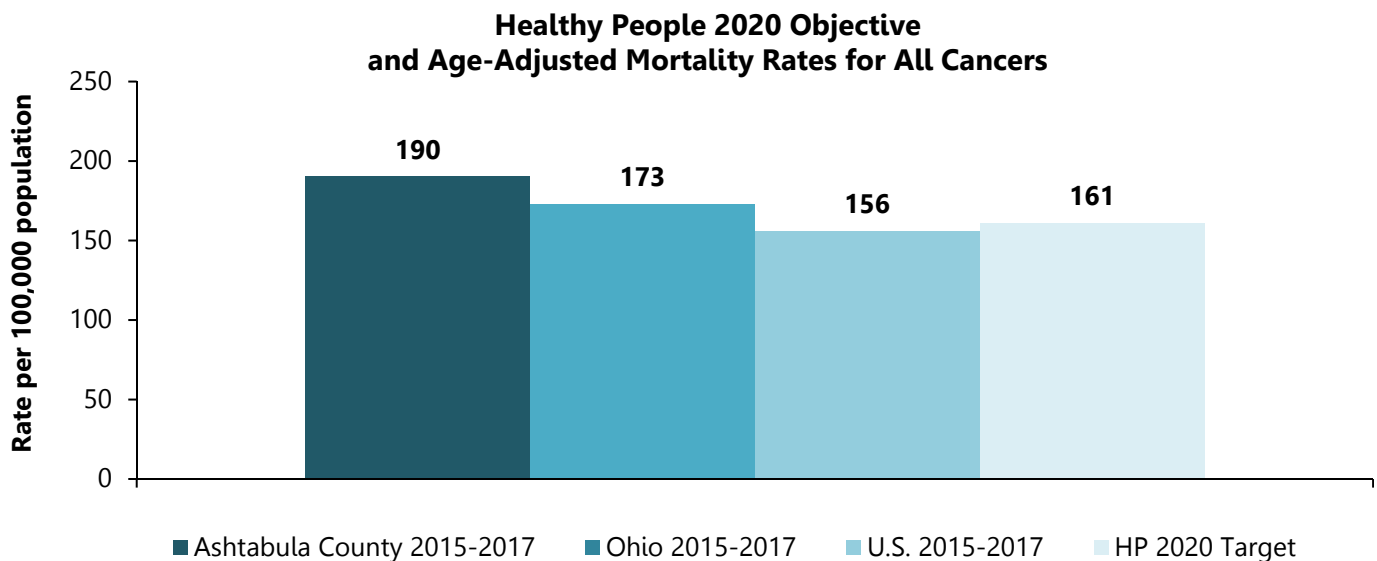
(Source: Ohio Public Health Data Warehouse, CDC Wonder, Healthy People 2020)

The following graph shows cancer as a percent of total deaths in Ashtabula County.

Cancer As Percent of Total Deaths in Ashtabula County by Gender, 2014-2016

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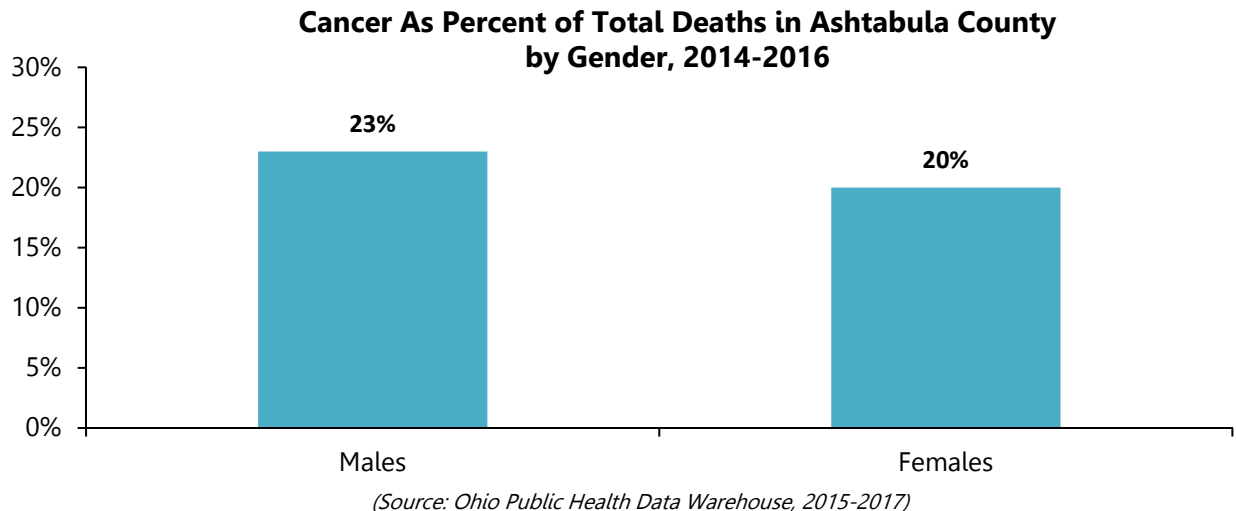
Breast Cancer

- Forty-seven percent (47%) of Ashtabula County females reported having had a clinical breast examination in the past year.

- Over half (58%) of Ashtabula County females over the age of 40 had a mammogram 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 2019).*

The following graph shows the Ashtabula County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for breast cancer in comparison with the Healthy People 2020 objective.
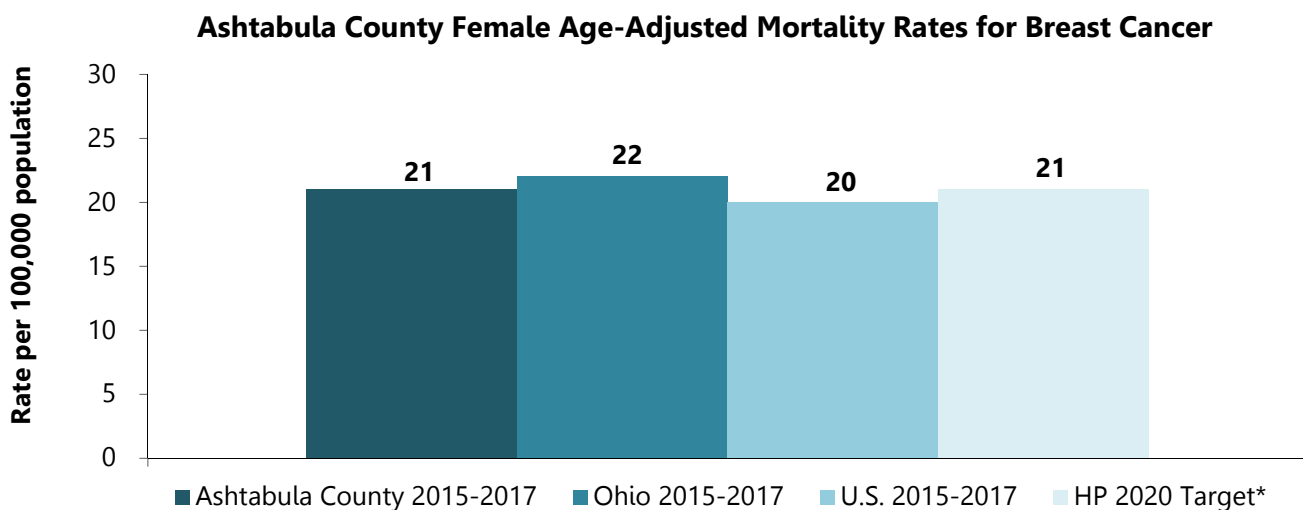
Ashtabula County Female Age-Adjusted Mortality Rates for Breast Cancer
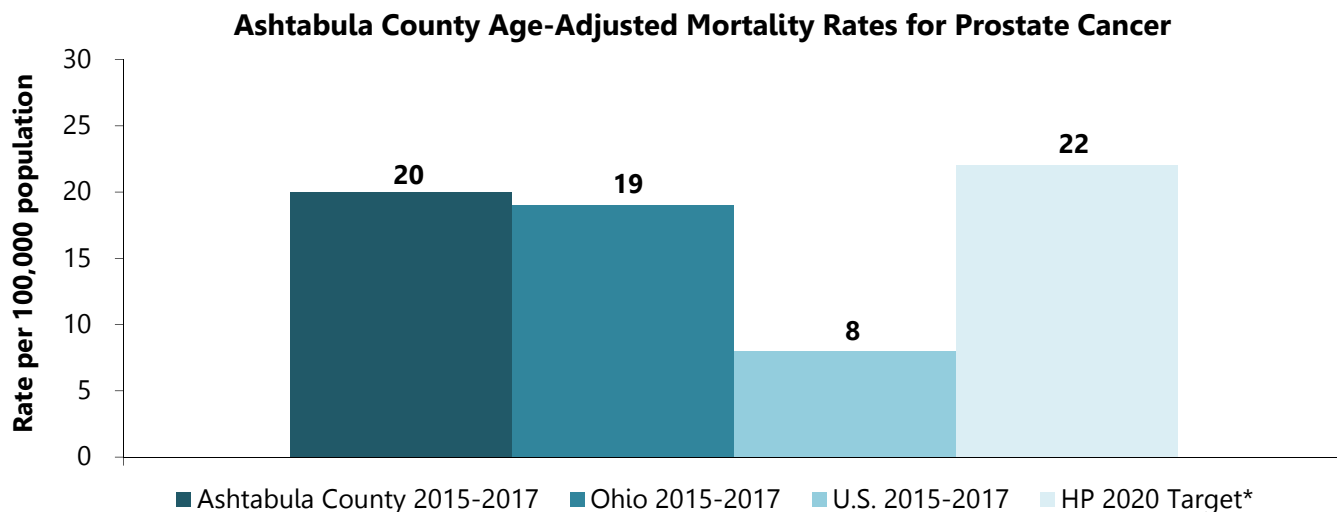

(Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2015-2017, CDC Wonder 2015-2017)

Prostate Cancer

- More than half (55%) of men had a digital rectal exam in their lifetime, and 14% had one in the past year.

- ODH statistics indicate that prostate cancer deaths accounted for 8% of all male cancer deaths from 2015-2017 in Ashtabula 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 2019).*

The following graph shows the Ashtabula County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for prostate cancer in comparison with the Healthy People 2020 objective.
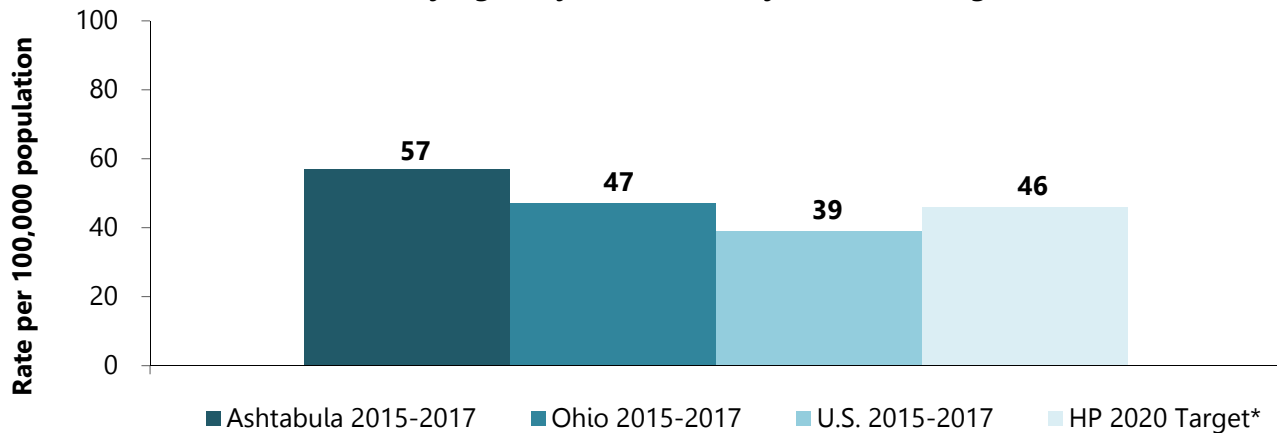
Ashtabula County Age-Adjusted Mortality Rates for Prostate Cancer

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

Lung Cancer

- In Ashtabula County, 18% of male adults and 23% of female adults were current smokers.

- The Ohio Department of Health (ODH) reports that lung and bronchus cancer was the leading cause of male cancer deaths (n=134) and female cancer deaths (n=103) from 2015-2017 in Ashtabula County *(Source: Ohio Public Health Data Warehouse, 2015-2017)*.

- According to the American Cancer Society, smoking causes 81% of lung cancer deaths in the U.S. Men and women who smoke are about 25 times more likely to develop lung cancer than nonsmokers *(Source: American Cancer Society, Facts & Figures 2019)*.

The following graphs show the Ashtabula 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, as well as by gender.

Ashtabula County Age-Adjusted Mortality Rates for Lung & Bronchus Cancer

*Healthy People 2020 Target data is for lung cancer only
(Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2015-2017, CDC Wonder 2015-2017)

Ashtabula County Age-Adjusted Mortality Rates by Gender for Lung & Bronchus Cancer
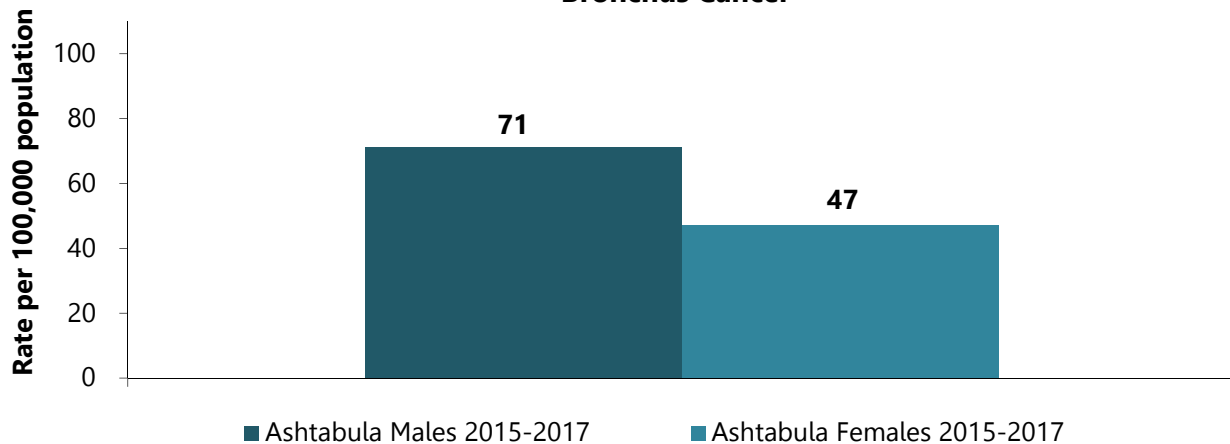
(Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2015-2017)

Colorectal Cancers

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

- Modifiable factors that increase colorectal 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 2019).*

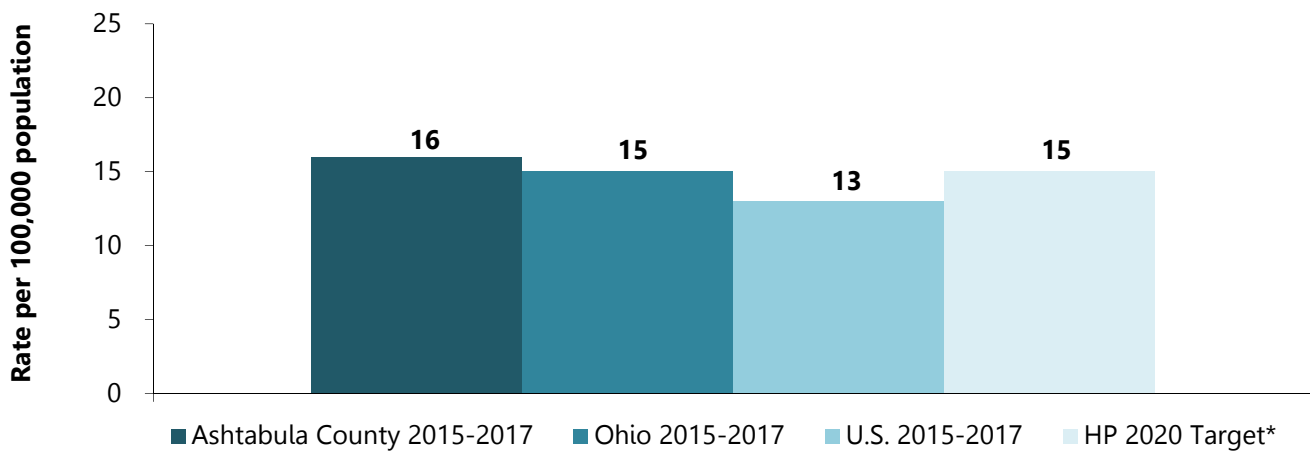*The following graphs show Ashtabula County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for colorectal cancer in comparison with the Healthy People 2020 objective, as well as by gender.*

Ashtabula County Age-Adjusted Mortality Rates for Colorectal Cancer

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

**Ashtabula County Colorectal Cancer
Age-Adjusted Mortality Rates by Gender, 2015-2017**
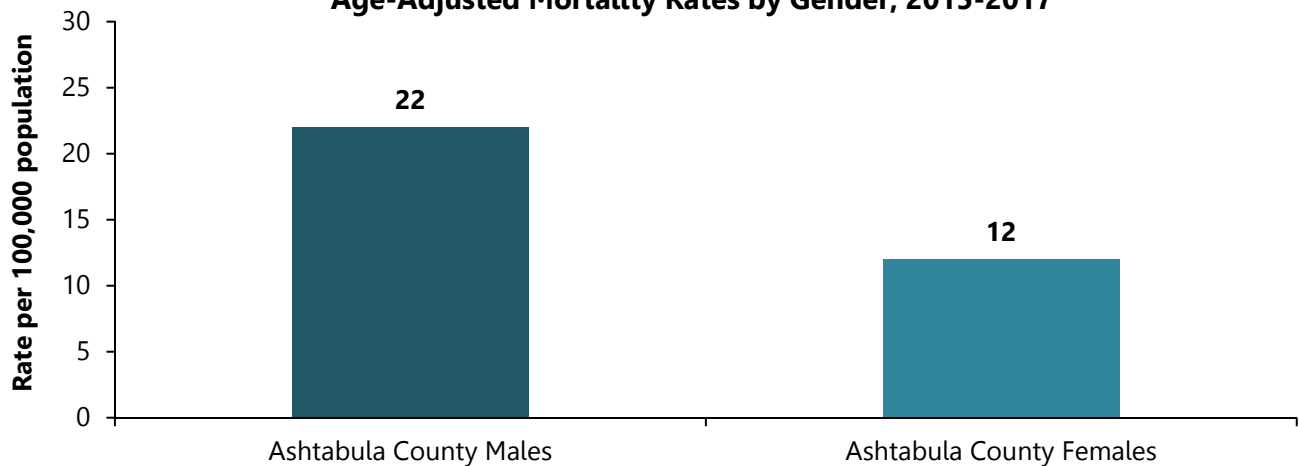
(Source: Ohio Public Health Data Warehouse 2015-2017)

Ashtabula County Incidence of Cancer, 2012-2016

Types of Cancer	Number of Cases	Percent of Total Incidence of Cancer	Age-Adjusted Rate
Lung and Bronchus	502	17%	74.3
Breast	401	14%	62.3
Colon & Rectum	289	10%	44.5
Prostate	283	10%	83.9
Other Sites/Types	226	8%	36.9
Bladder	158	5%	23.3
Melanoma of Skin	127	4%	20.5
Non-Hodgkins Lymphoma	116	4%	18.3
Uterus	112	4%	33
Kidney & Renal Pelvis	93	3%	14.7
Thyroid	91	3%	17.3
Pancreas	83	3%	12.1
Leukemia	75	3%	12.2
Oral Cavity & Pharynx	73	3%	11
Liver & Intrahepatic Bile Duct	54	2%	8.2
Stomach	50	2%	7.4
Esophagus	41	1%	5.7
Brain and Other CNS	32	1%	5.7
Larynx	26	1%	3.9
Ovary	25	1%	7.8
Multiple Myeloma	22	1%	3.3
Cervix	15	1%	5.7
Testis	12	<1%	5.6
Hodgkins Lymphoma	9	<1%	1.9
Total	2,916	100%	450.2

(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 3/28/18)

2019 Cancer Estimates

- In 2019, more than 1.7 million new cancer cases are expected to be diagnosed.
- The World Cancer Research Fund estimates that about eighteen percent of the new cancer cases expected to occur in the U.S. in 2018 will be related to overweight or obesity, physical inactivity, and poor nutrition, and thus could be prevented.
- About 606,880 Americans are expected to die of cancer in 2019.
- 81% of lung cancer deaths in the U.S are attributed to smoking.
- In 2019, estimates predict that there will be 67,150 new cases of cancer and 25,440 cancer deaths in Ohio.
- Of the new cancer cases in Ohio, approximately 9,680 (14%) will be from lung and bronchus cancers and 3,750 (6%) will be from melanoma (skin) cancer.
- About 10,240 new cases of female breast cancer are expected in Ohio.
- New cases of male prostate cancer in Ohio are expected to be 5,340 (8%).

(Source: American Cancer Society, Facts and Figures 2019)

Chronic Disease: Asthma and Other Respiratory Disease

Key Findings

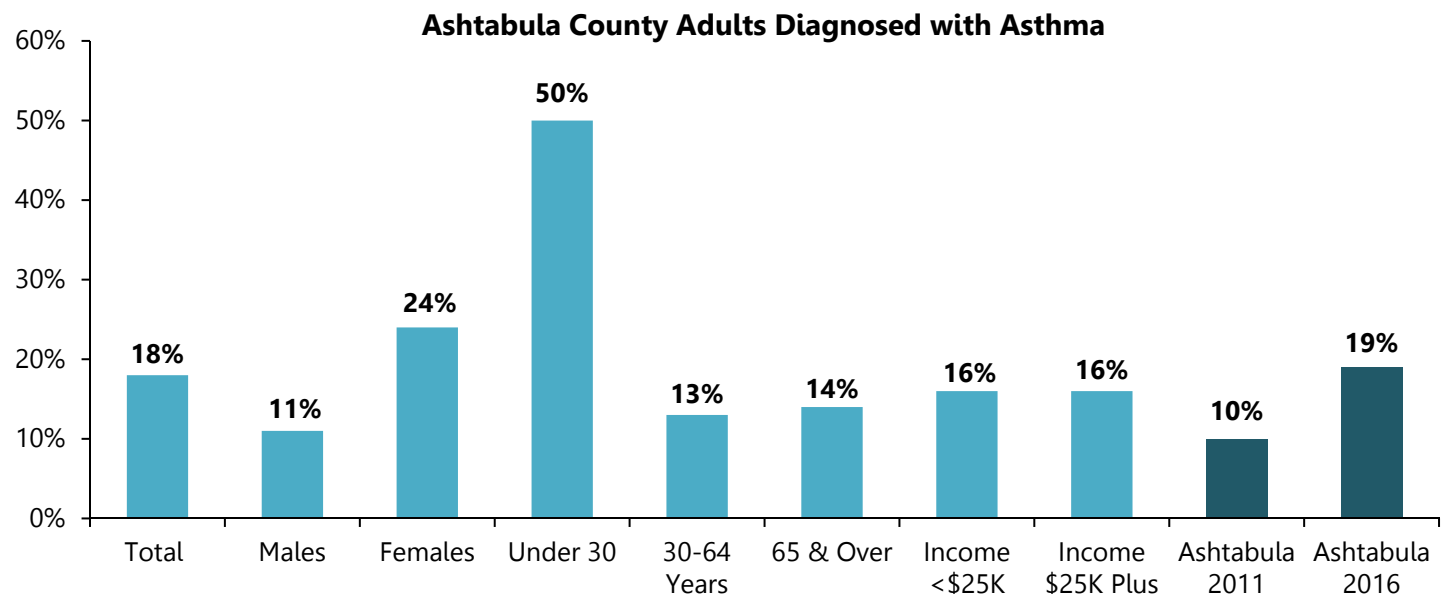*Nearly one-fifth (18%) of Ashtabula County adults had been diagnosed with asthma.*

Asthma and Other Respiratory Disease

- In 2019, 18% of Ashtabula County adults had been diagnosed with asthma, increasing to 24% of females.

- Eight percent (8%) of adults had been diagnosed with COPD, emphysema, or chronic bronchitis, increasing to 15% of those over the age of 65 and 16% of those with incomes less than $25,000.

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Ever been told they have asthma	10%	19%	18%	14%	14%
Ever diagnosed with chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis	N/A	11%	8%	8%	7%

N/A-Not Available

The following graph shows the percentage of Ashtabula County adults who were diagnosed with asthma. An example of how to interpret the information includes: 18% of adults were diagnosed with asthma, including 24% of females.

Ashtabula County Adults Diagnosed with Asthma

Category	Percentage
Total	18%
Males	11%
Females	24%
Under 30	50%
30-64 Years	13%
65 & Over	14%
Income <$25K	16%
Income $25K Plus	16%
Ashtabula 2011	10%
Ashtabula 2016	19%

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 percentage of Ashtabula County adults who were diagnosed with COPD, emphysema, or chronic bronchitis. An example of how to interpret the information includes: 8% of adults were diagnosed with COPD, emphysema, or chronic bronchitis, including 16% of adults with incomes less than $25,000.

Ashtabula County Adults Diagnosed with COPD, Emphysema, or Chronic Bronchitis
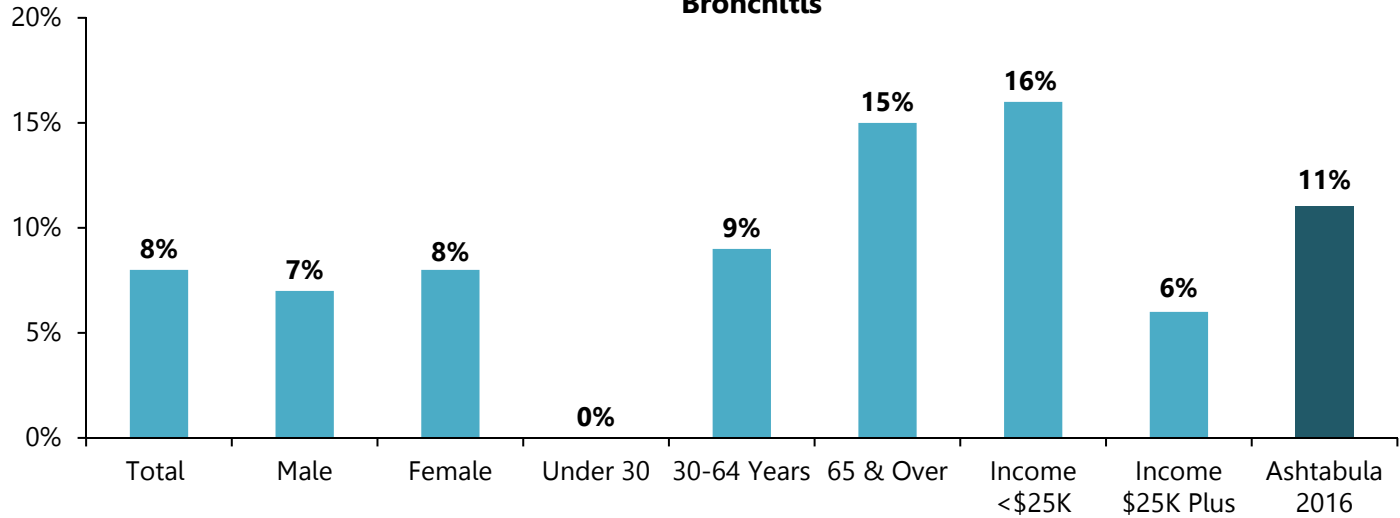
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following graph shows the Ashtabula County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for chronic lower respiratory diseases (formerly COPD) in comparison with the Healthy People 2020 objective. The graph shows:

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

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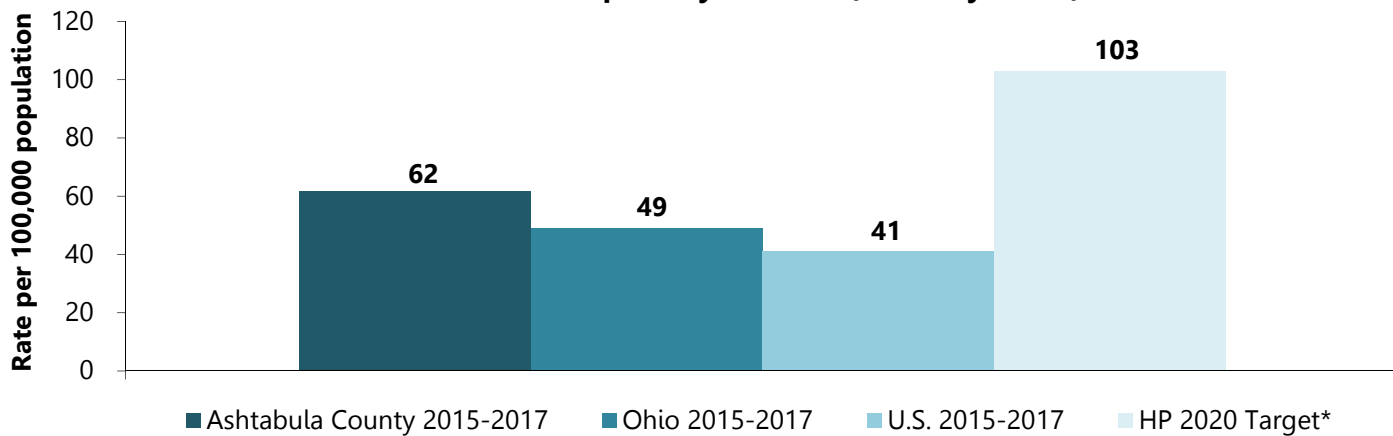
Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2015-2017, CDC Wonder 2015-2017)
*Healthy People 2020's target rate and the U.S. rate are for adults aged 45 years and older.

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
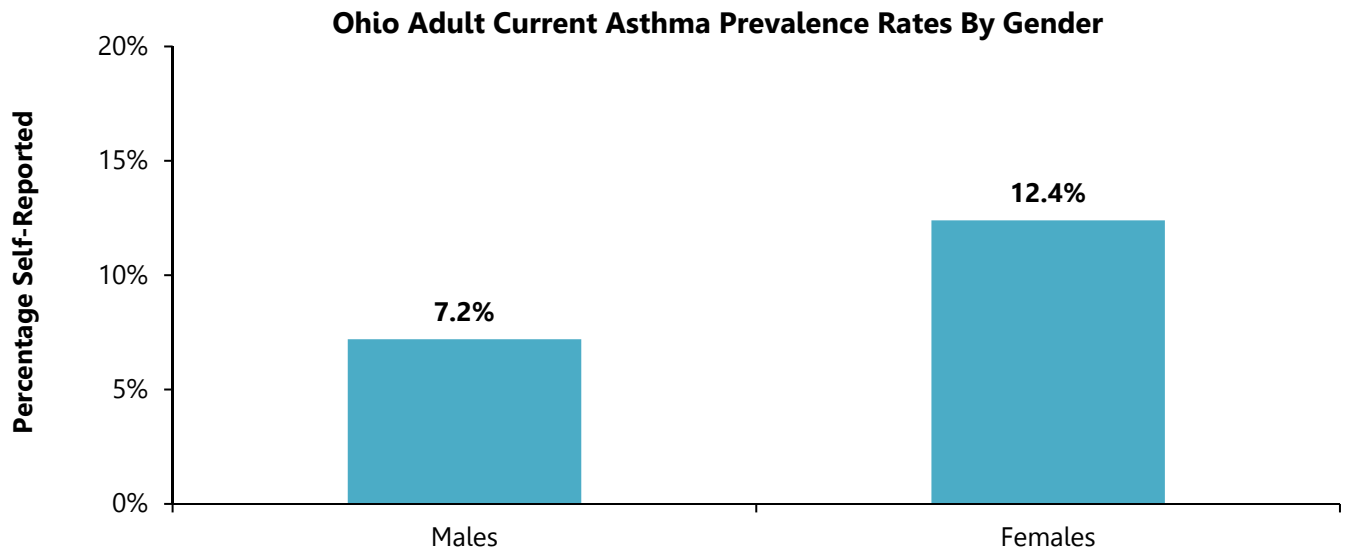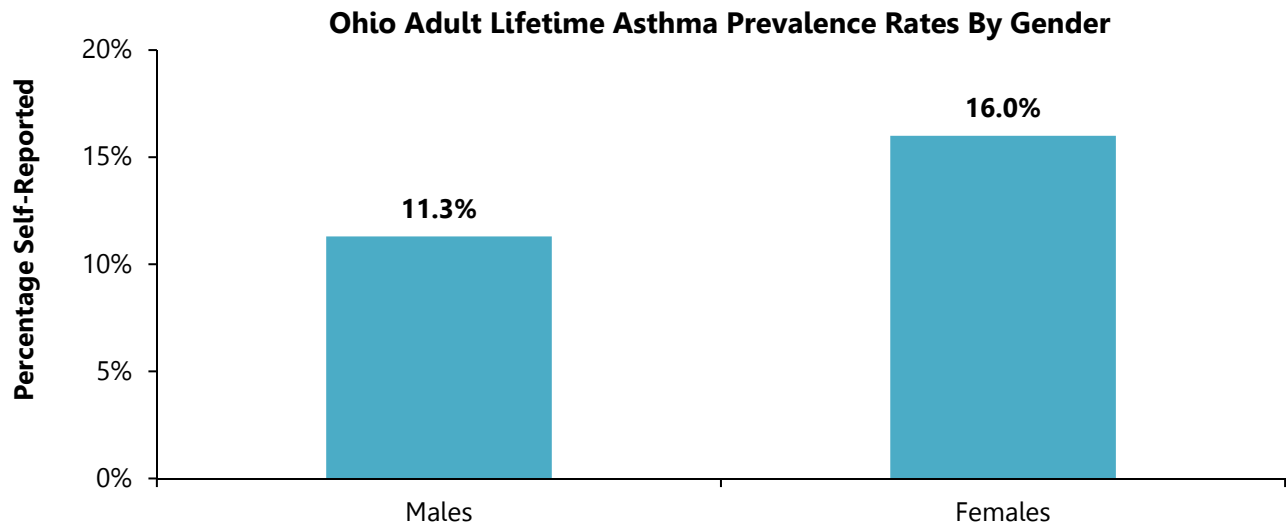
(Source: 2017 BFRSS)

Asthma Facts

- The number of Americans with asthma grows every year. Currently, 26.5 million Americans have asthma.
- Asthma mortality is almost 4,000 deaths per year.
- Asthma results in 439,000 hospitalizations and 1.8 million emergency room visits annually.
- Patients with asthma reported 14.2 million visits to a doctor's office and 1.3 million visits to hospital outpatient departments.
- Effective asthma treatment includes monitoring the disease with a peak flow meter, identifying and avoiding allergen triggers, using drug therapies including bronchodilators and anti-inflammatory agents, and developing an emergency plan for severe attacks.

(Source: American College of Allergy, Asthma, & Immunology, Asthma Facts, updated 6/13/18)

Chronic Disease: Arthritis

Key Findings

More than one-third (36%) of Ashtabula County adults were diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia.

Arthritis

- More than one-third (36%) of Ashtabula County adults were told by a health professional that they had some form of arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia, increasing to 64% of those over the age of 65.

- Over three-fourths (80%) of adults diagnosed with arthritis were overweight or obese.

Arthritis in the U.S.

- In the United States, 54 million people (23% of all adults) have arthritis. It is a leading cause of work-related disability. The annual direct costs are at least **$140 billion**.

- Arthritis commonly occurs with other chronic diseases. About half of US adults with heart disease or diabetes and one-third of people who have obesity also have arthritis. Having arthritis and other chronic conditions can reduce quality of life, reduce physical activity, and make disease management harder.

(Source: CDC. National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), updated on October 19, 2018)

The following graph shows the percentage of Ashtabula County adults who were diagnosed with arthritis. An example of how to interpret the information includes: 36% of adults were diagnosed with arthritis, including 64% of adults over the age of 65.

Ashtabula County Adults Diagnosed with Arthritis
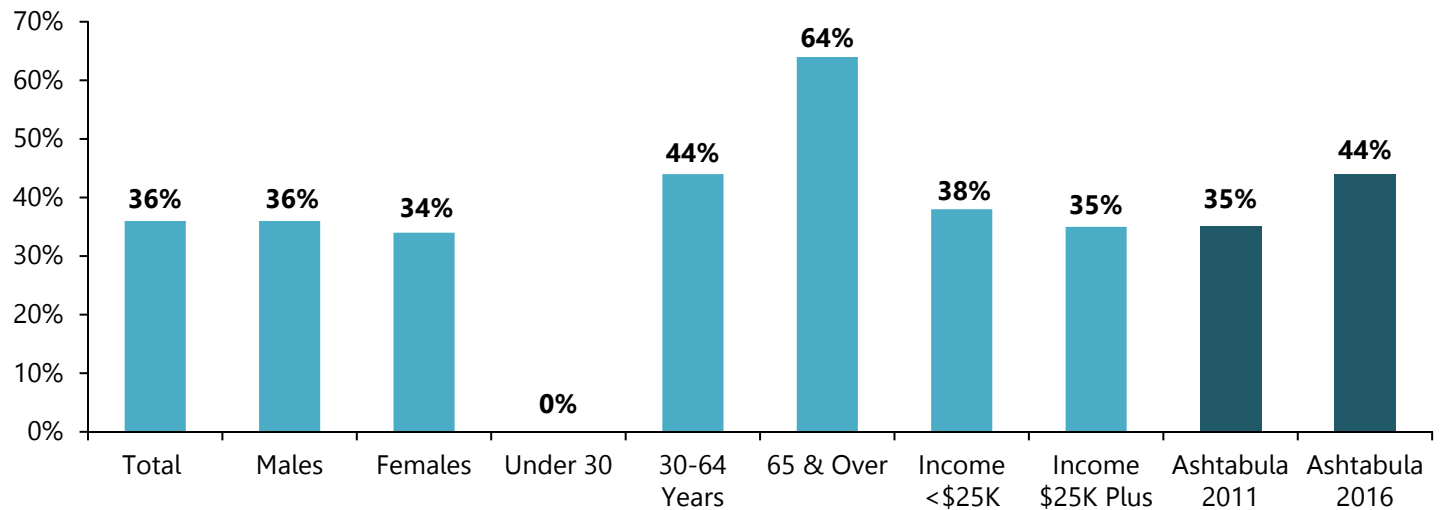
Category	Percentage
Total	36%
Males	36%
Females	34%
Under 30	0%
30-64 Years	44%
65 & Over	64%
Income <$25K	38%
Income $25K Plus	35%
Ashtabula 2011	35%
Ashtabula 2016	44%

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	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Ever diagnosed with arthritis	35%	44%	36%	29%	25%

Arthritis: Key Public Health Messages

Early diagnosis of arthritis and self-management activities can help people decrease their pain, improve function, and stay productive. Key self-management activities include the following:

- **Learn Arthritis Management Strategies:** Arthritis management strategies provide those with arthritis with the skills and confidence to effectively manage their condition. Self-Management Education has proven to be valuable for helping people change their behavior and better manage their arthritis symptoms. Interactive workshops such as the Arthritis Self-Management Program and the Chronic Disease Self-Management Program are low-cost (about $25 – $35) and available in communities across the country. Attending one of these programs can help a person learn ways to manage pain, exercise safely, and gain control of arthritis.

- **Be Active:** Research has shown that physical activity decreases pain, improves function, and delays disability. Make sure you get at least 30 minutes of moderate physical activity at least 5 days a week. You can get activity in 10-minute intervals.

- **Watch your weight:** The prevalence of arthritis increases with increasing weight. Research suggests that maintaining a healthy weight reduces the risk of developing arthritis and may decrease disease progression. A loss of just 11 pounds can decrease the occurrence (incidence) of new knee osteoarthritis and a modest weight loss can help reduce pain and disability.

- **See your doctor:** Although there is no cure for most types of arthritis, early diagnosis and appropriate management is important, especially for inflammatory types of arthritis. For example, early use of disease-modifying drugs can affect the course of rheumatoid arthritis. If you have symptoms of arthritis, see your doctor and begin appropriate management of your condition.

- **Protect your joints:** Joint injury can lead to osteoarthritis. People who experience sports or occupational injuries or have jobs with repetitive motions like repeated knee bending have more osteoarthritis. Avoid joint injury to reduce your risk of developing osteoarthritis.

(Source: Centers for Disease Control and Prevention, Arthritis: Key Public Health Messages, Updated on 2/7/18)
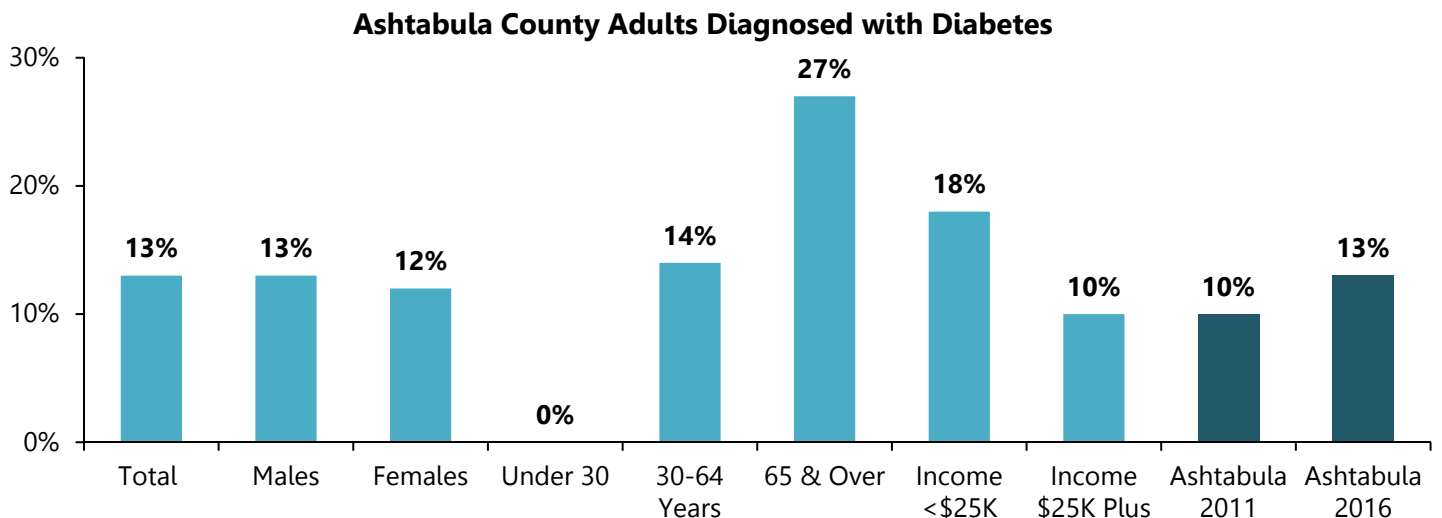
Chronic Disease: Diabetes

Key Findings

Thirteen percent (13%) of Ashtabula County adults had been diagnosed with diabetes. Over one-third (35%) of adults with diabetes rated their health as fair or poor.

9,894 of adults had been diagnosed with diabetes in their lifetime

Diabetes

- Thirteen percent (13%) of Ashtabula County adults had been diagnosed with diabetes, increasing to 27% of those over the age of 65 and 18% of those with incomes less than $25,000.

- Six percent (6%) adults had been diagnosed with pre-diabetes.

- Ashtabula County adults with diabetes were using the following to treat their diabetes:
  — Diet control (66%)
  — 6-month checkup with provider (59%)
  — Exercise (59%)
  — Diabetes pills (55%)
  — Annual vision exam (53%)
  — Checking A1C annually (52%)
  — Checking blood sugar (50%)
  — Checking their feet (38%)
  — Insulin (17%)
  — Get a dental exam (17%)
  — Use injectables (e.g., Vyettea, Victoza, Bydurean) (10%)
  — Taking a class (2%)

- Over one-third (35%) of adults with diabetes rated their overall health as fair or poor.

- Ashtabula County adults diagnosed with diabetes also had one or more of the following characteristics or conditions:
  — 88% were obese or overweight
  — 80% had been diagnosed with high blood pressure
  — 78% had been diagnosed with high blood cholesterol

The following graph shows the percentage of Ashtabula County adults who were diagnosed with diabetes. An example of how to interpret the information includes: 13% of adults were diagnosed with diabetes, including 27% of adults ages 65 and older and 18% of those with incomes less than $25,000.

Ashtabula County Adults Diagnosed with Diabetes

Total	Males	Females	Under 30	30-64 Years	65 & Over	Income <$25K	Income $25K Plus	Ashtabula 2011	Ashtabula 2016
13%	13%	12%	0%	14%	27%	18%	10%	10%	13%

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	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S. 2017
Ever been told by a doctor they have diabetes (not pregnancy-related)	10%	13%	13%	11%	11%
Had been diagnosed with pre-diabetes or borderline diabetes	N/A	6%	6%	2%	2%

N/A-Not Available

The following graph shows the Ashtabula 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, Ashtabula County had a higher diabetes mortality rate than Ohio and the U.S. but a lower mortality rate than the Healthy People 2020 objective.

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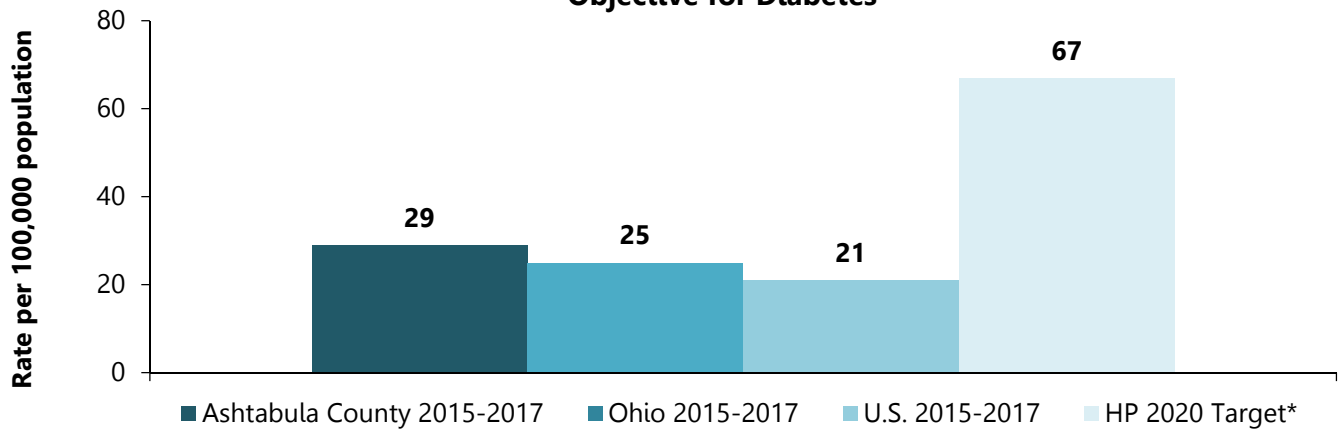
*Note: The Healthy People 2020 rate is for all diabetes-related deaths
(Source: Ohio Public Health Data Warehouse, 2015-2017, CDC Wonder, 2015-2017, Healthy People 2020)

Chronic Disease: Quality of Life

Key Findings

Over half (54%) of Ashtabula County adults reported they were limited in some way because of a physical, mental or emotional problem. The most limiting health problems were back or neck problems (48%), arthritis/rheumatism (40%), chronic pain (23%), walking problems (22%), and sleep problems (21%).

Impairments and Health Problems

- Over half (54%) of Ashtabula County adults were limited in some way because of a physical, mental or emotional problem, increasing to 68% of those with incomes less than $25,000.

- Among those who were limited in some way, the following most limiting problems or impairments were reported:
  — Back or neck problems (48%)
  — Arthritis/rheumatism (40%)
  — Chronic pain (23%)
  — Walking problems (22%)
  — Sleep problems (21%)
  — Stress, depression, anxiety, or emotional problems (20%)
  — Fitness level (19%)
  — Chronic illness [e.g., diabetes, cancer, heart and stoke related problems, high blood pressure] (16%)
  — Fractures, bone/joint injuries (14%)
  — Mental illness/disorder (13%)
  — Lung/breathing problems (9%)
  — Eye/vision problems (7%)
  — Dental problems (7%)
  — Hearing problems (7%)
  — Substance dependency (6%)
  — Confusion (6%)
  — Memory loss (4%)
  — Drug addiction (4%)
  — Learning disability (1%)
  — Other impairment/problem (8%)

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ashtabula County 2019	Ohio 2017	U.S 2017
Limited in some way because of physical, mental, or emotional problems	31%	36%	54%	N/A	N/A

N/A-Not Available

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

Objective	Ashtabula County 2019	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	40%	36%

Note: U.S. baseline is age-adjusted to the 2000 population standard
(Sources: Healthy People 2020 Objectives, 2019 Ashtabula County Health Assessment)

The following graphs show the percentage of Ashtabula County adults who were limited in some way and the most limiting health problems. An example of how to interpret the information shown on the first graph includes: 54% of Ashtabula County adults were limited in some way, including 57% of females and 68% of those with incomes less than $25,000.
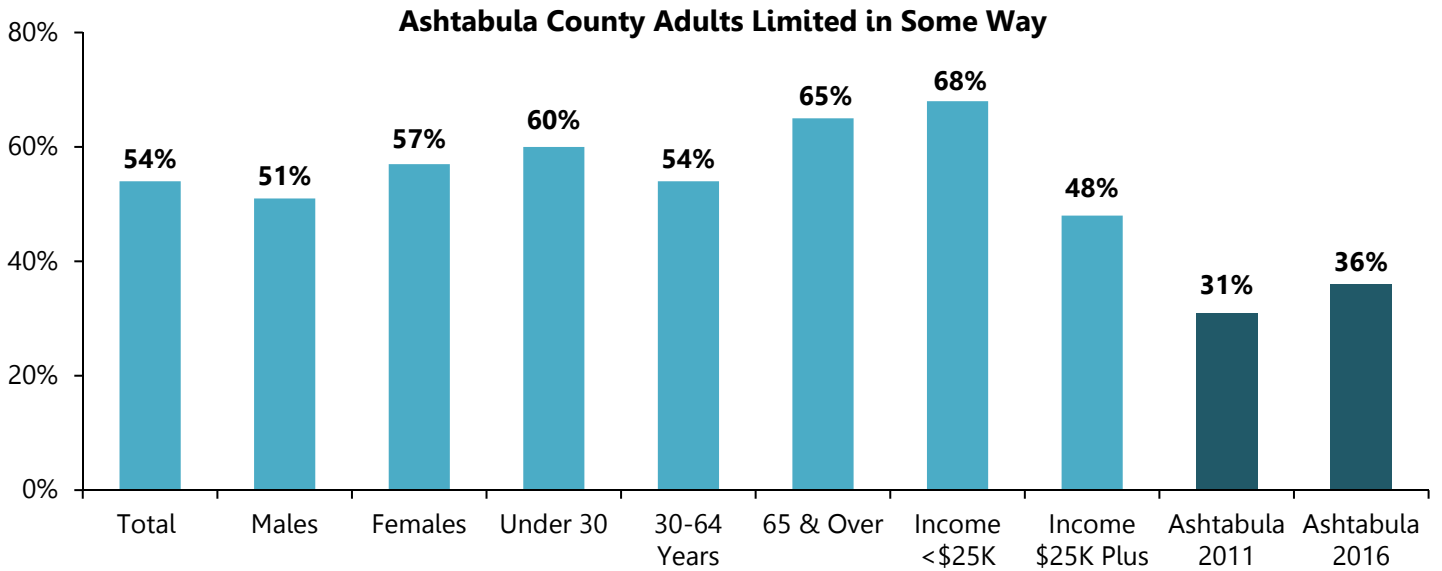
Ashtabula County Adults Limited in Some Way

Category	Percentage
Total	54%
Males	51%
Females	57%
Under 30	60%
30-64 Years	54%
65 & Over	65%
Income <$25K	68%
Income $25K Plus	48%
Ashtabula 2011	31%
Ashtabula 2016	36%

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

Ashtabula County Most Limiting Health Problems

Category	Percentage
Back/Neck Problems	48%
Arthritis/Rheumatism	40%
Chronic Pain	23%
Walking Problems	22%
Sleep Problems	21%
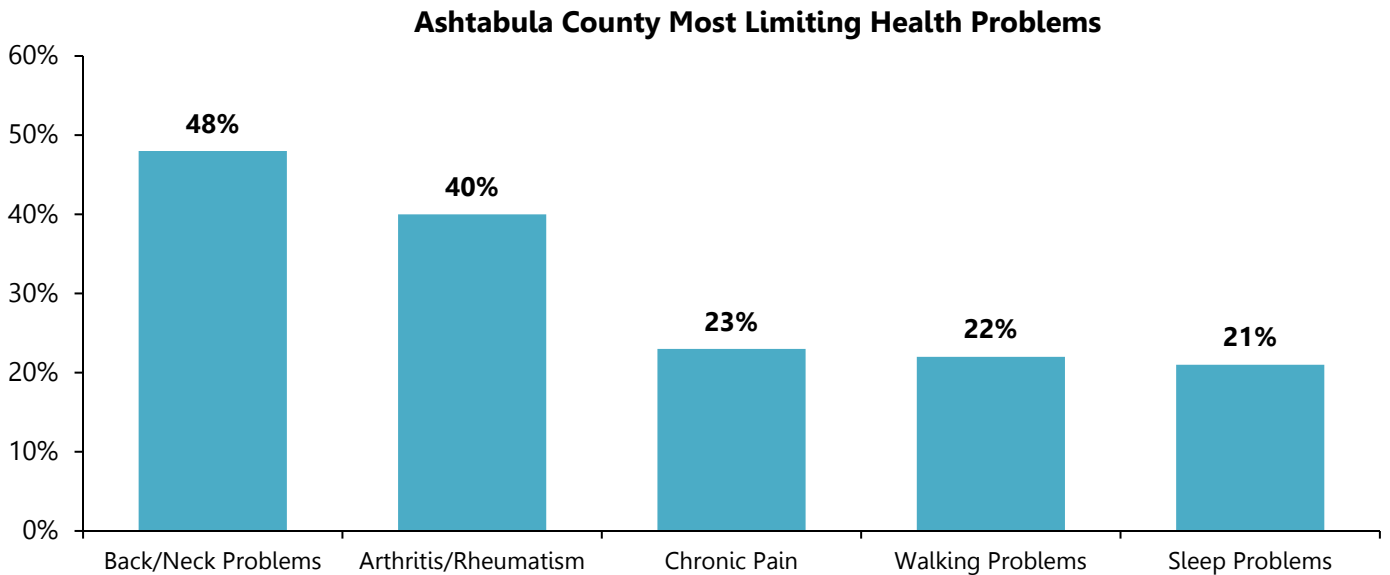
Ashtabula County Adults Most Limiting Problems or Impairments

	2011	2016	2019
Back or neck problems	21%	43%	48%
Arthritis/rheumatism	15%	46%	40%
Chronic pain	N/A	36%	23%
Walking problems	12%	25%	22%
Sleep problems	N/A	21%	21%
Stress, depression, anxiety, or emotional problems	11%	37%	20%
Fitness level	N/A	16%	19%
Chronic illness (e.g., diabetes, cancer, heart and stoke related problems, high blood pressure)	N/A	22%	16%
Fractures, bone/joint injuries	N/A	10%	14%
Mental illness/disorder	N/A	N/A	13%
Lung and breathing problems	8%	16%	9%
Eye/vision problems	N/A	10%	7%
Dental problems	N/A	7%	7%
Hearing problems	N/A	5%	7%
Substance dependency	N/A	2%	6%
Confusion	N/A	N/A	6%
Memory loss	N/A	N/A	4%
Drug addiction	N/A	1%	4%
Learning disability	N/A	N/A	1%
Other impairment/problem	N/A	N/A	8%

N/A-Not Available

Social Environment

- Ashtabula County adults reported they were involved in school, community, or neighborhood activities at the following frequencies: weekly (15%), monthly (12%), several times a year (20%), about once a year (19%), less often than that (8%), and never (27%).

- Adults reported they got together or talked with friends or neighbors daily (23%), weekly (46%), monthly (17%), less often than that (8%), and never (7%).

- In the past month, adults reported they participated in the following activities: contribute to charity (48%), went to a friend's house for dinner (38%), had friends over for dinner (38%), attended a church social function (29%), volunteer work (27%), went to a meeting of a club or civic organization (25%), and donated blood (5%).

- Thirty-nine percent (39%) of adults reported they had relationships with more than five people who they trusted and could turn to when in need of support. Fifty-seven percent (57%) of adults reported they had up to five people, and 4% reported they had no one.

- Ashtabula County adults reported they agreed/strongly agreed with the following statements regarding the place where they live and their neighborhood:
  — People in their neighborhood generally get along with each other (96%)
  — Children are safe in their neighborhood (91%)
  — People in their neighborhood can be trusted (75%)
  — People in their neighborhood know each other (72%)
  — People in their neighborhood are willing to help one another (72%)
  — People in their neighborhood are afraid to go out at night due to violence (12%)
  — Gangs are a serious problem in their neighborhood (4%)

Neighborhood Perceptions	Strongly Agree	Agree	Disagree	Strongly Disagree
People in their neighborhood generally get along with each other	29%	67%	3%	1%
Children are safe in their neighborhood	27%	64%	7%	2%
People in their neighborhood can be trusted	14%	61%	23%	2%
People in their neighborhood know each other	17%	55%	24%	4%
People in their neighborhood are willing to help one another	17%	55%	26%	2%
People in their neighborhood are afraid to go out at night due to violence	1%	11%	48%	40%
Gangs are a serious problem in their neighborhood	1%	3%	32%	64%

- Ashtabula County adults reported they agreed/strongly agreed with the following statements regarding relationship characteristics:
  — They know people will help them if they really need it (94%)
  — They have people who appreciate them for who they are (94%)
  — They feel a strong emotional tie with at least one other person (93%)
  — They often meet or talk with family or friends (93%)
  — They have someone to talk to about decisions in their life (93%)
  — They have close relationships that make them feel good (88%)
  — When they feel lonely, they have several people they can talk with (86%)
  — They have close relationships that help them cope with stress (86%)

Relationship Characteristics	Strongly Agree	Agree	Disagree	Strongly Disagree
They know people will help them if they really need it	47%	47%	5%	1%
They have people who appreciate them for who they are	46%	48%	4%	2%
They feel a strong emotional tie with at least one other person	56%	37%	6%	1%
They often meet or talk with family or friends	39%	54%	5%	2%
They have someone to talk to about decisions in their life	45%	48%	5%	2%
They have close relationships that make them feel good	41%	47%	11%	1%
When they feel lonely, they have several people they can talk with	36%	50%	13%	1%
They have close relationships that help them cope with stress	38%	48%	13%	1%

Social Conditions: Social Determinants of Health

Key Findings

Over one-fifth (23%) of Ashtabula County adults had four or more adverse childhood experiences (ACEs) in their lifetime. Seventeen percent (17%) of adults had experienced at least one issue related to hunger/food insecurity in the past year.

Economic Stability

- In the past year, Ashtabula County adults attempted to get assistance from the following sources:
  — Job & Family Services (20%)
  — WIC/Health Department (15%)
  — Friend or family member (14%)
  — Food pantries (8%)
  — Somewhere else (7%)
  — Church (7%)
  — Ashtabula County Community Action Commission (6%)
  — Other charities (5%)
  — Legal Aid (5%)
  — Personal debts/budgeting (3%)
  — United Way (1%)

- Four percent (4%) did not know where to look for assistance.

- Seventeen percent (17%) of adults had 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 (12%), loss of income led to food insecurity issues (9%), their food assistance was cut (7%). worried food might run out (7%), went hungry/ate less to provide more food for their family (6%), and did not eat because they did not have enough money for food (4%).

- Ten percent (10%) of adults experienced more than one issue related to hunger/food insecurity in the past year.

- The median household income in Ashtabula County was $45,157. 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).*

- Nineteen percent (19%) of all Ashtabula County residents were living in poverty, and 28% 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 Ashtabula County was 3.2 as of April 2019 *(Source: Ohio Department of Job and Family Services, Office of Workforce Development, Bureau of Labor Market Information).*

- There were 46,118 housing units. The owner-occupied housing unit rate was 70%. Rent in Ashtabula County cost an average of $648 per month *(Source: U.S. Census Bureau, American Community Survey, 2013-2017).*

Food Insecurity

- Food secure households had access, at all times, to enough food for an active, healthy life for all household members. 88.2 percent (112.3 million) of U.S. households were food secure throughout 2017.
- Food-insecure households are uncertain of having, or unable to acquire, at some time during the year, enough food to meet the needs of all their members because they had insufficient money or other resources for food. 11.8 percent (15.0 million) of U.S. households were food insecure at some time during 2017.
- Food-insecure households include those with low food security and very low food security.
  — 7.3 percent (9.3 million) of U.S. households had low food security in 2017.
  — 4.5 percent (5.8 million) of U.S. households had very low food security at some time during 2017.
- Households with very low food security are food insecure to the extent that normal eating patterns of some household members were disrupted at times during the year, with self-reported food intake below levels considered adequate.

(Source: United States Department of Agriculture (USDA), Food Insecurity in the U.S., Interactive Charts and Highlights, Updated on September 5, 2018)

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, 3,538 or 19.8% of Ashtabula County residents were in poverty.

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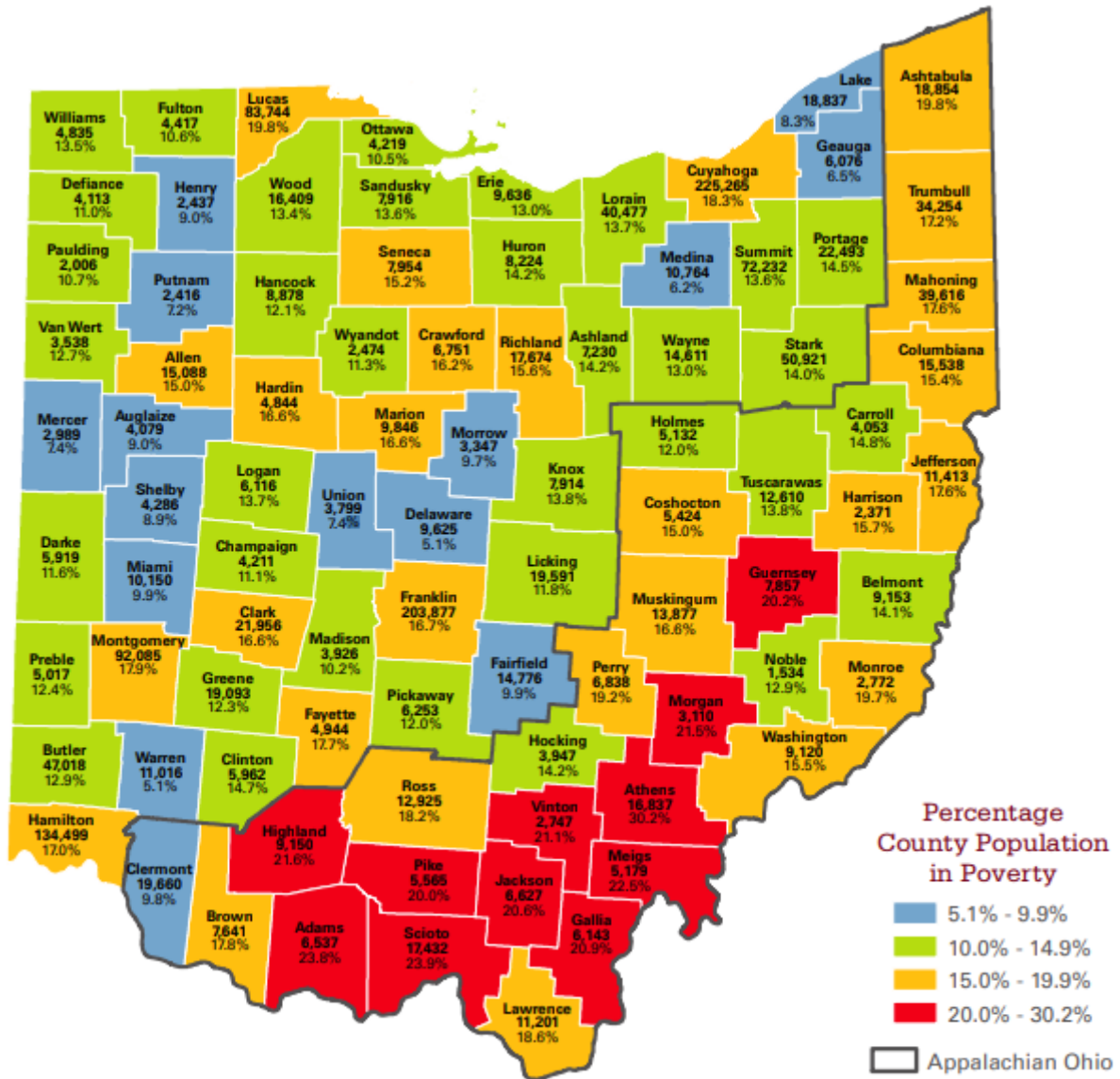
(Source: 2013-2017 American Community Survey 5-year estimates, as compiled by Ohio Development Services Agency, Office of Research, Ohio Poverty Report, February 2019)

Health and Health Care

- In the past year, 10% of adults were uninsured.

- Sixty-nine percent (69%) of Ashtabula County adults visited a doctor for a routine checkup in the past year, increasing to 85% of those over the age of 65.

- More than half (53%) of Ashtabula County adults reported they had one person they thought of as their personal doctor or health care provider. Thirty percent (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.

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

Neighborhood and Built Environment

- Ashtabula County adults reported doing the following while driving: eating (40%), talking on hand-held cell phone (38%), talking on hands-free cell phone (36%), texting (16%), not wearing a seatbelt (16%), using Internet on their cell phone (10%), were under the influence of alcohol (6%), reading (2%), being under the influence of recreational drugs (1%), were under the influence of prescription drugs (1%), and other activities (such as applying makeup, shaving, etc.) (1%).

- Twelve percent (12%) of Ashtabula County adults had the following transportation issues: suspended/no driver's license (5%), no car (4%), no car insurance (3%), could not afford gas (3%), did not feel safe to drive (3%), disabled (2%), no public transportation available or accessible (1%), cost of public or private transportation (1%), limited public transportation available or accessible (1%), and other car issues/expenses (3%).

- Six percent (6%) of adults reported they had more than one transportation issue.

Education

- Eighty-six percent (86%) of Ashtabula County adults 25 years and over had a high school diploma or higher *(Source: U.S. Census Bureau, American Community Survey 5-year Estimates, 2013-2017).*

- Fourteen percent (14%) had less than a high school diploma *(U.S. Census Bureau, American Community Survey 5-year Estimates, 2013-2017).*
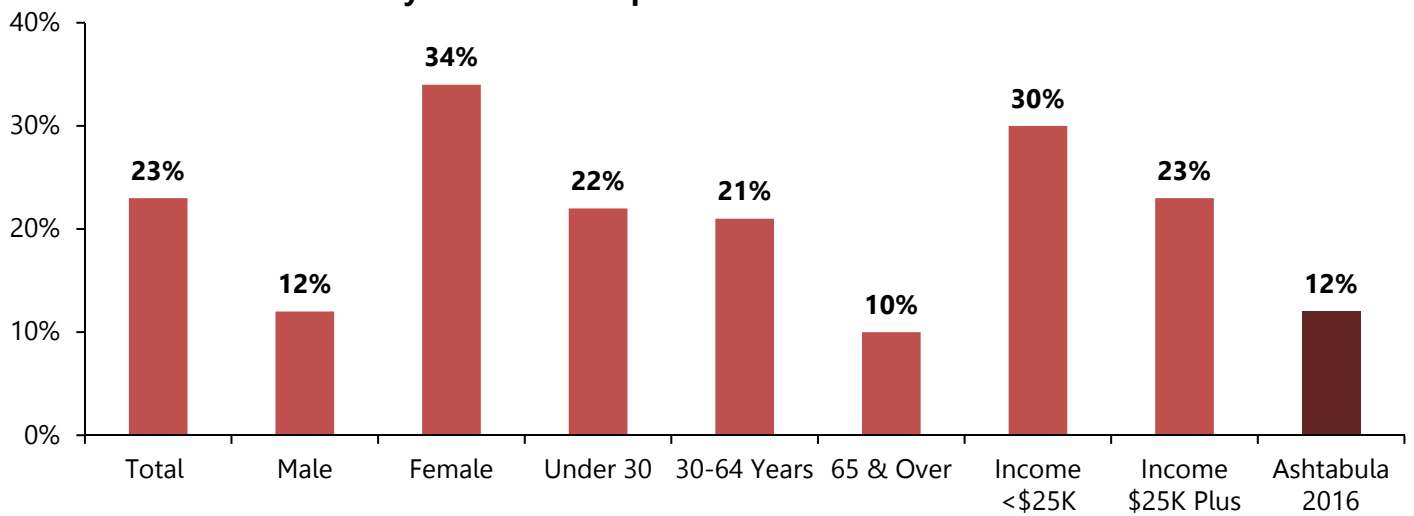
Social and Community Context

- Ashtabula County adults experienced the following in the past 12 months:
  — A close family member went to the hospital (53%)
  — Death of a family member or close friend (34%)
  — Had bills they could not pay (27%)
  — Experienced a decline in their own health (19%)
  — Someone in their household lost their job/had their hours at work reduced (16%)
  — Someone close to them had a problem with drinking or drugs (15%)
  — They were a caregiver (12%)
  — Household income was cut by 50% (11%)
  — Moved to a new address (8%)
  — Had someone homeless living with them/sleeping on their couch (7%)
  — Their family was at risk of losing their home (4%)
  — Were threatened or abused by someone physically, emotionally, sexually, and/or verbally (3%)
  — Were homeless (3%)
  — Became separated or divorced (2%)
  — Knew someone who lived in a hotel (2%)
  — Their child was threatened or abused by someone physically, emotionally, sexually, and/or verbally (1%)
  — Witnessed someone in their family being hit or slapped (1%)

- Ashtabula County adults experienced the following adverse childhood experiences (ACEs):
  — A parent or adult in their home swore at, insulted, or put them down (27%)
  — Their parents became separated or were divorced (24%)
  — Lived with someone who was a problem drinker or alcoholic (24%)
  — Lived with someone who was depressed, mentally ill, or suicidal (20%)
  — Their parents or adults in their home slapped, hit, kicked, punched, or beat each other up (18%)
  — A parent or adult in their home hit, beat, kicked, or physically hurt them (15%)
  — Someone at least 5 years older than them or an adult touched them sexually (13%)
  — Their family did not look out for each other, feel close to each other, or support each other (13%)
  — Lived with someone who used illegal street drugs, or who abused prescription medications (12%)
  — Someone at least 5 years older than them or an adult tried to make them touch them sexually (11%)
  — Lived with someone who served time or was sentenced to serve time in prison, jail or other correctional facility (9%)
  — Did not have enough to eat, had to wear dirty clothes, and had no one to protect them (5%)
  — Someone at least 5 years older than them or an adult forced them to have sex (5%)
  — Their parents were not married (5%)

- Twenty-three percent (23%) of adults experienced four or more adverse childhood experiences (ACEs).

17,505 adults experienced four or more ACEs in their lifetime.

The following graph shows the percentage of Ashtabula 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: 23% of all Ashtabula County adults had experienced four or more ACEs in their lifetime, including 34% of females.

Ashtabula County Adults Who Experienced Four or More ACEs in their Lifetime

Category	Percentage
Total	23%
Male	12%
Female	34%
Under 30	22%
30-64 Years	21%
65 & Over	10%
Income <$25K	30%
Income $25K Plus	23%
Ashtabula 2016	12%

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 table below indicates correlations between those who experienced four or more ACEs in their lifetime and participating in risky behaviors, as well as other activities and experiences. An example of how to interpret the information includes: 40% of those who experienced four or more ACEs were current smokers, compared to 11% of those who did not experience any ACEs.

Behaviors of Ashtabula County Adults
Experienced Four or More ACEs vs. Did Not Experience Any ACEs

Adult Behaviors	Experienced Four or More ACEs	Did Not Experience Any ACEs
Classified as overweight or obese by BMI	86%	76%
Current drinker (had at least one alcoholic beverage in the past month)	81%	70%
Binge drinker (drank 5 or more drinks for males and 4 or more for females on an occasion)	69%	33%
Current smoker (currently smoke on some or all days)	40%	11%
Felt sad or hopeless for two or more weeks in a row	30%	6%
Contemplated suicide in the past 12 months	12%	1%
Used recreational drugs in the past 6 months	11%	2%
Medication misuse in the past 6 months	3%	1%

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.

Social Conditions: Environmental Health

Key Findings

Ashtabula County adults reported the following as the top four issues that threatened their health in the past year: insects (12%), temperature regulation (6%), rodents (5%), and mold (5%). Seventy-eight percent (78%) of adults reported they had a working smoke detector in their home.

Environmental Health

- Ashtabula County adults thought the following threatened their health in the past year:
  - Insects (12%)
  - Temperature regulation (6%)
  - Rodents (5%)
  - Mold (5%)
  - Chemicals found in household products (4%)
  - Air quality (2%)
  - Plumbing problems (2%)
  - Moisture issues (2%)
  - Food safety/food borne illness (2%)
  - Agricultural chemicals (2%)
  - Safety hazards (1%)
  - Sewage/waste water problems (1%)
  - Bed bugs (1%)
  - Unsafe water supply/wells (1%)
  - Sanitation issues (1%)
  - Lyme disease (1%)
  - Excess medication in the home (<1%)
  - Fracking (<1%)
  - Asbestos (<1%)
  - Radiation (<1%)
  - Radon (<1%)

Disaster Preparedness

- Ashtabula County households had the following disaster preparedness supplies:
  - Cell phone (85%)
  - Working flashlight and working batteries (84%)
  - Cell phone with texting (81%)
  - Working smoke detector (78%)
  - Computer/tablet (76%)
  - 3-day supply of nonperishable food for everyone in the household (58%)
  - 3-day supply of prescription medication for each person who takes prescribed medicines (55%)
  - Home land-line telephone (52%)
  - Working battery-operated radio and working batteries (45%)
  - 3-day supply of water for everyone in the household (1 gallon of water per person per day) (38%)
  - Generator (34%)
  - Communication plan (22%)
  - A disaster plan (13%)
  - Family disaster plan (11%)

Social Conditions: Parenting

Key Findings

More than four-fifths (86%) of parents indicated their child had received all recommended immunizations. Forty-two percent (42%) of parents discussed dating and relationships with their 10-to-17-year-old child.

Parenting

- Eighty-eight percent (88%) of parents indicated their child had received the recommended immunizations. Reasons for not immunizing their child included the following: personal beliefs (7%), pre-existing health issues (4%), and other reasons (3%).

- Parents were aware of the following programs/services for their infant-to-5-year-old child: school (11%), WIC (6%), and Children's Services (3%).

- In the past year, parents took their child to the doctor for the following types of appointments: regular check-ups (77%), dental visits (74%), other visits for illness (62%), injuries (22%), behavioral problems (16%), ear infections (15%), asthma (7%), and head lice (6%).

- In the past year, parents missed at least one day of work due to the following issues with their child: medical appointments (46%), illnesses or injuries (46%), unreliable/lack of child care (8%), and behavioral or emotional problems (5%).

- Parents discussed the following sexual health and other health topics with their 10-to-17-year-old in the past year:
  — Social media issues (59%)
  — Career plan/post-secondary education (48%)
  — Bullying (43%)
  — Dating and relationships (42%)
  — Weight status (42%)
  — Negative effects of alcohol, tobacco, illegal drugs or misusing prescription drugs (40%)
  — Volunteering (36%)
  — School/legal consequences of using tobacco/alcohol/other drugs (33%)
  — Refusal skills/peer pressure (31%)
  — Abstinence/how to refuse sex (31%)
  — Anxiety/depression/suicide (30%)
  — Body image (27%)
  — Energy drinks (25%)
  — Birth control/condom use/safer sex/STD prevention (20%)

Maternal and Infant Health

The following graphs show the number of live births in Ashtabula County and the percent of preterm births by year. Please note that the pregnancy outcomes data include all births to adults and adolescents.

- From 2013-2018, there was an average of 1,112 live births per year in Ashtabula County.

Ashtabula County Total Live Births, 2013-2018
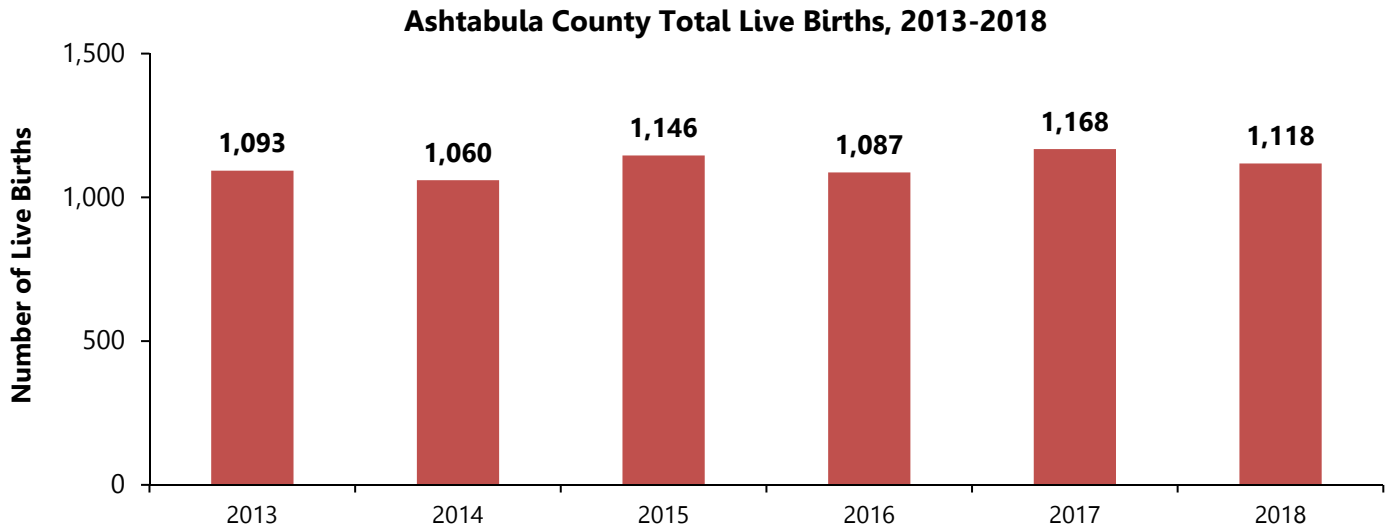
Note: Births occurring in Ohio to non-Ohio residents are not included in the graph.

Ashtabula County Preterm Births (<37 Weeks Gestation)
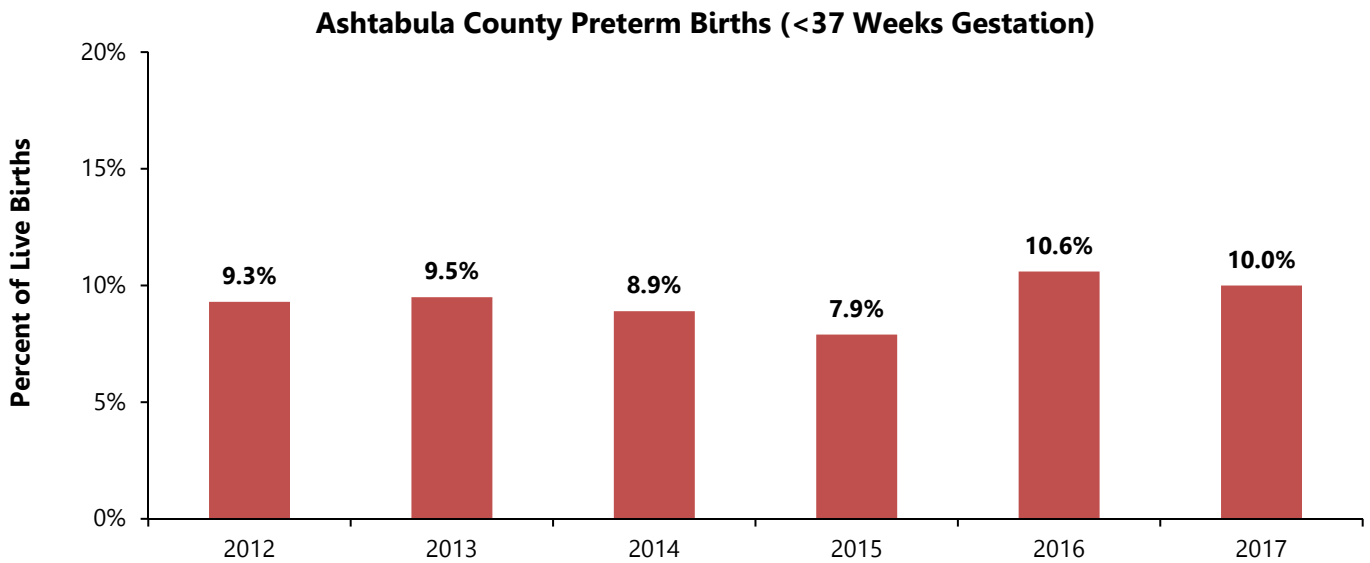
(Source for graphs: ODH, Ohio Public Health Data Warehouse Updated 7-17-19)

The following graph shows the percent of live births in Ashtabula County that were low birthweight. Please note that the pregnancy outcomes data include all births to adults and adolescents.

- Low birth weight is defined as weighing less than 2,500 grams or 5 pounds, 8 ounces, but greater than 3 pounds, 4 ounces. Very low birth weight is a term used to describe babies who are born weighing less than 3 pounds, 4 ounces.

- In 2017, approximately 8.7% of the Ashtabula County births were low birth weight.

Ashtabula County Low Birth Weight Births
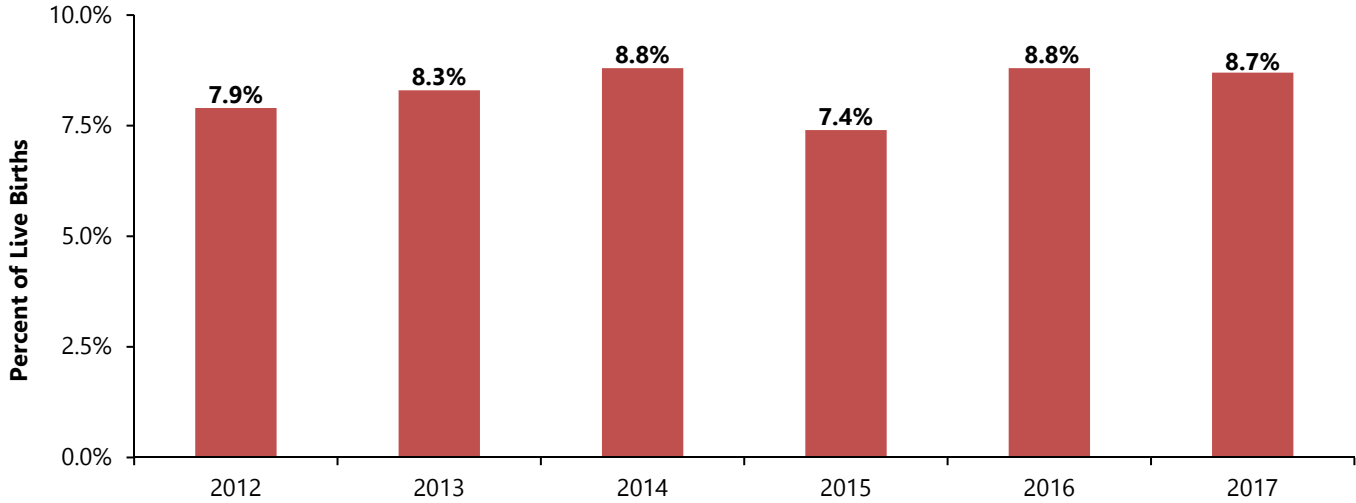
(Source: ODH, Ohio Public Health Data Warehouse, Updated 3-4-19)

Neonatal, Post-Neonatal and Infant Mortality in 2017

	Number of Neonatal Deaths*	Number of Post-Neonatal Deaths**	Total Number of Infant Deaths	Number of Births
Ashtabula	5	3	8	1,168
Ohio	684	298	982	136,895

*Neonatal death is defined as a death of live born infant during the first 28 days of life.
** Post-neonatal death is defined as a death of an infant between 29 days and 364 days of life.
(Source: Ohio Department of Health, Bureau of Vital Statistics, 2017 Ohio Infant Mortality Data: General Findings)

Ohio Infant Mortality Average 5-Year Rate by County, 2013 to 2017
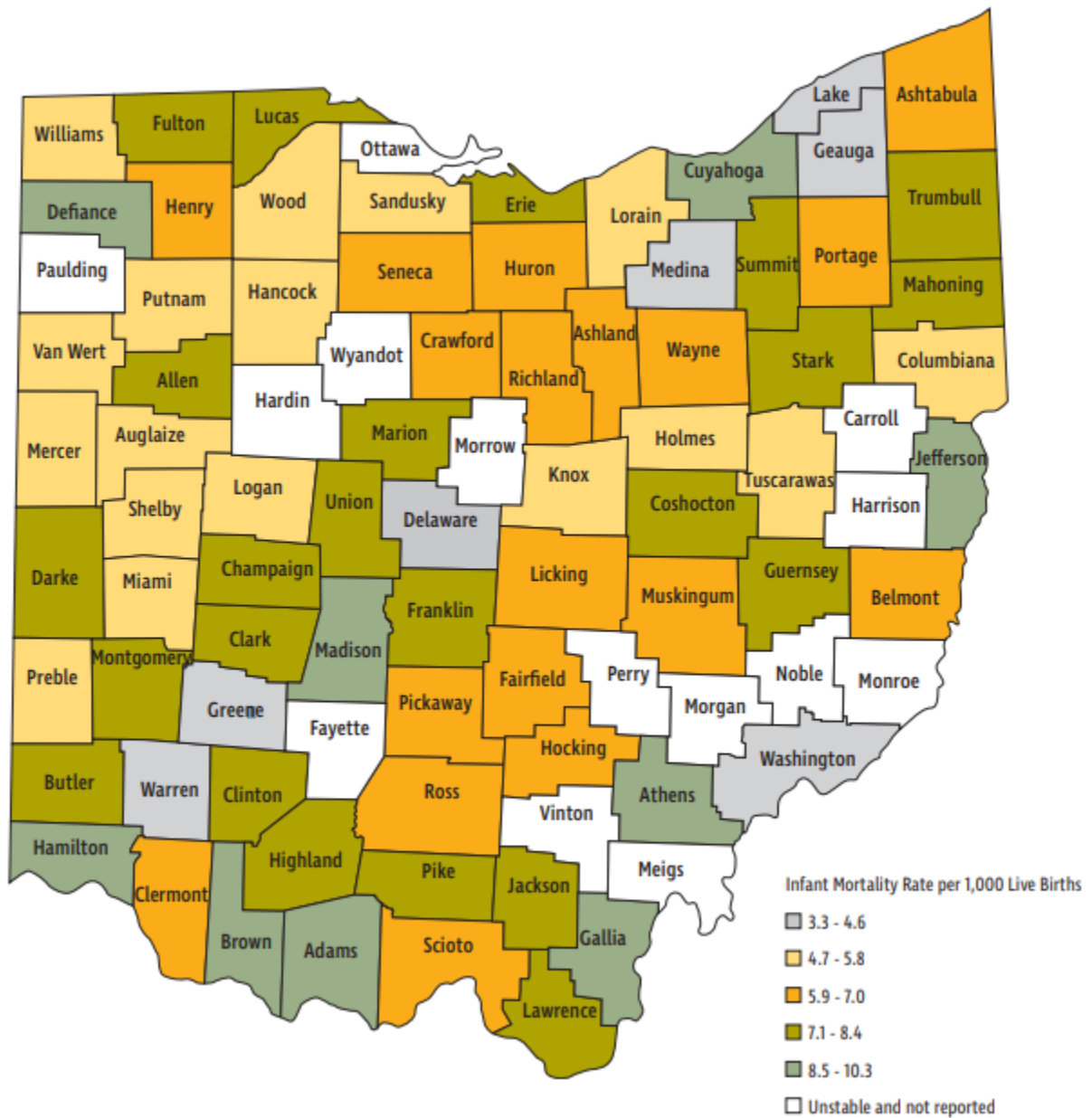
Infant Mortality Rate per 1,000 Live Births
- 3.3 - 4.6
- 4.7 - 5.8
- 5.9 - 7.0
- 7.1 - 8.4
- 8.5 - 10.3
- Unstable and not reported

(Source: Ohio Department of Health, Bureau of Vital Statistics, 2017 Ohio Infant Mortality Data: General Findings)

Appendix I: Health Assessment Information Sources

Source	Data Used	Website
American Cancer Society, Cancer Facts and Figures 2018. Atlanta: ACS, 2018	• 2018 Cancer Facts, Figures, and Estimates	www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2018.html
American Cancer Society, Nutrition and Physical Activity	• Summary of the ACS Guidelines on Nutrition and Physical Activity	www.cancer.org/healthy/eat-healthy-get-active/acs-guidelines-nutrition-physical-activity-cancer-prevention/summary.html
American College of Allergy, Asthma & Immunology	• Asthma Facts	http://acaai.org/news/facts-statistics/asthma
Arthritis at a Glance, 2016, Centers for Disease Control & Prevention,	• Arthritis Statistics	www.cdc.gov/chronicdisease/resources/publications/aag/arthritis.htm
Behavioral Risk Factor Surveillance System, National Center for Chronic Disease Prevention and Health Promotion, Behavioral Surveillance Branch, Centers for Disease Control	• 2017 Adult Ohio and U.S. Correlating Statistics	www.cdc.gov/brfss
CDC, Arthritis	• Arthritis: Key Public Health Messages	www.cdc.gov/arthritis/about/key-messages.htm
CDC, Division of Oral Health	• Facts About Adult Oral Health	www.cdc.gov/oralhealth/basics/adult-oral-health/index.html
CDC, Excessive Drinking	• Economic Costs of Excessive Alcohol Use	www.cdc.gov/features/costsofdrinking/index.html
CDC, Rural Health	• Rural Health Recommendations	www.cdc.gov/ruralhealth/about.html
CDC, Smoking and Tobacco Use	• Smoking and Other Health Risks	www.cdc.gov/tobacco/disparities/low-ses/index.htm
	• E-Cigarette Health Effects	www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html
CDC, Vital Signs	• Suicide Rising Across the US	www.cdc.gov/vitalsigns/suicide/index.html
CDC, Wonder, U.S.	• About Underlying Cause of Death, 2013-2015	http://wonder.cdc.gov/ucd-icd10.html
County Health Rankings	• Physical and Mental Health Status • Food Environment Index	www.countyhealthrankings.org/app/ohio/2017/measure/factors/133/map
Healthy People 2020: U.S. Department of Health & Human Services	• All Healthy People 2020 Target Data Points • Some U.S. Baseline Statistics	www.healthypeople.gov/

Ohio Automated RX Reporting System (OARRS), Quarterly County Data	• Ohio Automated Rx Reporting System • Opioid Doses Per Capita • Opioid Doses Per Patient	www.ohiopmp.gov/Portal/Reports.aspx
Ohio Department of Health, STD Surveillance Data	• STD Surveillance	https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/std-surveillance/data-and-statistics/sexually-transmitted-diseases-data-and-statistics
	• HIV/AIDS Surveillance Program	https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/hiv-aids-surveillance-program/welcome-to
Ohio Department of Health, Information Warehouse	• Ashtabula County and Ohio Birth Statistics	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality
	• Ashtabula County Cancer Incidence Surveillance System	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/StateLayoutLockdownCancers
	• Ashtabula County and Ohio Leading Causes of Death	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality
	• Ashtabula County and Ohio Mortality Statistics	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality
	• Ashtabula County and Ohio Unintentional Drug Overdose Deaths	http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality
	• County and State Infant Mortality Data	https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/infant-and-fetal-mortality/reports/2017-ohio-infant-mortality-report-final
Ohio Department of Public Safety, Crash Report	• City, County, and State Crash Reports	https://publicsafety.ohio.gov/wps/portal/gov/odps/what-we-do/crash-reports/
Ohio State Highway Patrol	• Felony Cases and Drug Arrests	www.statepatrol.ohio.gov/doc/2019_FelonyAndDrug.pdf
United States Department of Agriculture (USDA), Food Insecurity in the U.S.	• Food Insecurity	www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/interactive-charts-and-highlights/#characteristics
U. S. Department of Commerce, Census Bureau; Bureau of Economic Analysis	• American Community Survey 5-year estimate, 2017	www.census.gov/programs-surveys/acs/
	• Federal Poverty Threshold	www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html
	• Ohio and Ashtabula County 2015 Census Demographic Information	https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
	• Small Area Income and Poverty Estimates	www.census.gov/programs-surveys/saipe/data/datasets.html

Appendix II: Acronyms and Terms

ACS	**A**mbulatory **C**are **S**ensitive conditions or discharges are conditions for which hospital admission could be prevented by interventions in primary care.
AHS	**A**ccess to **H**ealth **S**ervices, Topic of Healthy People 2020 objectives
AOCBC	**A**rthritis, **O**steoporosis, and **C**hronic **B**ack **C**onditions, Topic of Healthy People 2020 objectives
Adult	Defined as 19 years of age and older.
Age-Adjusted Mortality Rates	Death rate per 100,000 adjusted for the age 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.
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.
CMS	**C**enter for **M**edicare and **M**edicaid **S**ervices
Current Smoker	Individual who has smoked at least 100 cigarettes in their lifetime and now smokes daily or on some days.
DRE	**D**igital **R**ectal **E**xam
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
IVP	**I**njury and **V**iolence **P**revention, Topic of Healthy People 2020 objectives
MHMD	**M**ental **H**ealth and **M**ental **D**isorders, Topic of Healthy People 2020 objectives
N/A	Data is not available.
NVSS	**N**ational **V**ital **S**tatistics **S**ystem
NWS	**N**utrition and **W**eight **S**tatus, Topic of Healthy People 2020 objectives
OARRS	**O**hio **A**utomated Prescription (**R**x) **R**eporting **S**ystem
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.
SA	**S**ubstance **A**buse, Topic of Healthy People 2020 objectives
Ohio SHA/SHIP	**Ohio S**tate **H**ealth **A**ssessment/**S**tate **H**ealth **I**mprovement **P**lan
TSE	**T**esticular **S**elf-**E**xam
TU	**T**obacco **U**se, Topic of Healthy People 2020 objectives
YPLL/65	**Y**ears of **P**otential **L**ife **L**ost before age 65. Indicator of premature death.
ZCTA	**Z**ip **C**ode **T**abulation **A**rea

Appendix III: Methods for Weighting the 2019 Ashtabula County Needs 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 2019 Ashtabula County survey, a weighting was applied prior to the analysis that weighted the survey respondents to reflect the actual distribution of Ashtabula 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 Ashtabula 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 2019 Ashtabula County Survey and the 2017 Census estimates.

2019 Ashtabula Survey			2017 Census		Weight
Sex	Number	Percent	Number	Percent	
Male	160	54.23729	49,509	50.20077	0.925577
Female	135	45.76271	49,113	49.79923	1.088205

In this example, it shows that there was a slightly larger portion of males in the sample compared to the actual portion in Ashtabula County. The weighting for males was calculated by taking the percent of males in Ashtabula County (based on Census information) (50.20077%) and dividing that by the percent found in the 2019 Ashtabula County sample (54.23729%) [50.20077 / 54.23729 = weighting of 0.925577 for males]. The same was done for females [49.79923 / 45.76271 = weighting of 1.088205 for females]. Thus males' responses are weighted slightly less by a factor of 0.925577 and females' responses weighted slightly greater by a factor of 1.088205.

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 2.83663 [1.08821 (weight for females) x 0.96515 (weight for White) x 2.41971 (weight for age 35-44) x 1.11618 (weight for income $50-$75k)]. Thus, each individual in the 2019 Ashtabula 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	Ashtabula County Sample	%	2017 Census*	%	Weighting Value
Sex:					
Male	160	54.23729	49,509	50.20077	0.925577
Female	135	45.76271	49,113	49.79923	1.088205
Age:					
20 to 34 years	15	5.15464	16,516	22.21087	4.30891
35 to 44 years	19	6.52921	11,748	15.79882	2.41971
45 to 54 years	40	13.74570	14,128	18.99946	1.38221
55 to 59 years	27	9.27835	6,841	9.19984	0.99154
60 to 64 years	51	17.52577	7,721	10.38327	0.59246
65 to 74 years	88	30.24055	10,041	13.50323	0.44653
75 to 84 years	41	14.08935	4,993	6.71463	0.47658
85+ years	10	3.43643	2,372	3.18989	0.92826
Race:					
White (NH)	284	93.11475	88,631	89.86940	0.96515
Non-White	21	6.88525	9,991	10.13060	1.47135
Household Income:					
Less than $25,000	85	30.35714	11,297	29.43383	0.96959
$25,000 to $34,999	30	10.71429	4,593	11.96686	1.11691
$35,000 to $49,999	47	16.78571	5,907	15.39043	0.91688
$50,000 to $74,999	49	17.50000	7,497	19.53310	1.11618
$75,000 to $99,999	23	8.21429	4,228	11.01587	1.34106
$100,000 to $149,999	39	13.92857	3,530	9.19726	0.66032
$150,000 or more	7	2.50000	1,329	3.46265	1.38506
Note: The weighting ratios are calculated by taking the ratio of the proportion of the population of Ashtabula County in each subcategory by the proportion of the sample in the Ashtabula County survey for that same category.					
*Ashtabula County population figures taken from the 2017 Census estimates.					

Appendix IV: Ashtabula County Sample Demographic Profile*

Variable	2019 Ashtabula County Adult Survey Sample*	Ashtabula County Census 2013-2017 (5-year estimate)	Ohio Census 2017 (1-year estimate)
Age			
20-29	14.7%	11.2%	13.3%
30-39	10.7%	11.2%	12.5%
40-49	19.5%	13.0%	12.0%
50-59	17.8%	14.4%	13.7%
60 plus	31.7%	25.5%	23.4%
Race/Ethnicity			
White	93.1%	92.9%	81.3%
Black or African American	2.6%	3.7%	12.4%
American Indian and Alaska Native	1.5%	0.2%	0.2%
Asian	0%	0.5%	2.2%
Other	1.9%	0.4%	0.9%
Hispanic Origin (may be of any race)	2.1%	4.0%	3.7%
Marital Status†			
Married Couple	50.5%	47.9%	47.4%
Never been married/member of an unmarried couple	25.2%	28.5%	32.6%
Divorced/Separated	16.1%	16.3%	13.7%
Widowed	6.7%	7.3%	6.3%
Education†			
Less than High School Diploma	4.5%	14.3%	9.7%
High School Diploma	34.0%	44.8%	33.3%
Some college/ College graduate	60.4%	40.9%	56.9%
Income (Families)			
$14,999 and less	13.9%	10.3%	6.9%
$15,000 to $24,999	11.7%	8.3%	6.6%
$25,000 to $49,999	23.1%	28.4%	21.2%
$50,000 to $74,999	20.4%	22.5%	19.5%
$75,000 or more	22.3%	30.5%	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 Ashtabula 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

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

	Total	Males	Females
Ashtabula County	**101,497**	**50,693**	**50,804**
0-4 years	**6,326**	**3,280**	**3,046**
1-4 years	5,072	2,607	2,465
< 1 year	1,254	673	581
1-2 years	2,471	1,283	1,188
3-4 years	2,601	1,324	1,277
5-9 years	**6,428**	**3,256**	**3,172**
5-6 years	2,516	1,298	1,218
7-9 years	3,912	1,958	1,954
10-14 years	**6,857**	**3,470**	**3,387**
10-12 years	4,068	2,053	2,015
13-14 years	2,789	1,417	1,372
12-18 years	9,940	5,046	4,894
15-19 years	**6,903**	**3,543**	**3,360**
15-17 years	4,396	2,254	2,142
18-19 years	2,507	1,289	1,218
20-24 years	5,500	2,861	2,639
25-29 years	5,468	2,870	2,598
30-34 years	5,584	2,901	2,683
35-39 years	6,277	3,217	3,060
40-44 years	6,821	3,467	3,354
45-49 years	7,791	3,995	3,796
50-54 years	8,016	4,057	3,959
55-59 years	7,396	3,719	3,677
60-64 years	6,253	3,064	3,189
65-69 years	4,891	2,416	2,475
70-74 years	3,547	1,644	1,903
75-79 years	2,854	1,256	1,598
80-84 years	2,275	948	1,327
85-89 years	1,471	525	946
90-94 years	663	171	492
95-99 years	153	27	126
100-104 years	21	6	15
105-109 years	2	0	2
110 years & over	0	0	0
Total 85 years and over	**2,310**	**729**	**1,581**
Total 65 years and over	**15,877**	**6,993**	**8,884**
Total 19 years and over	**76,107**	**37,730**	**38,377**

ASHTABULA COUNTY PROFILE

(Source: U.S. Census Bureau, 2017)
2013-2017 ACS 5-year estimates

General Demographic Characteristics

	Number	Percent (%)
Total Population		
2017 Total Population	98,622	100%
Largest City – Ashtabula City		
2017 Total Population	18,385	100%
Population by Race/Ethnicity		
Total Population	98,622	100%
White	91,628	92.9%
Two or more races	2,275	2.3%
Hispanic or Latino (of any race)	3,937	4.0%
African American	3,607	3.7%
Asian	479	0.5%
Some other race	403	0.4%
American Indian and Alaska Native	189	0.2%
Population by Age		
Under 5 years	5,513	5.6%
5 to 17 years	16,637	16.9%
18 to 24 years	7,722	7.8%
25 to 44 years	22,654	22.9%
45 to 64 years	28,690	29.0%
65 years and more	17,406	17.6%
Median age (years)	**42.5**	N/A
Household by Type		
Total households	38,381	100%
Total families	24,991	65.1%
Households with children <18 years	10,026	26.1%
Married-couple family household	18,091	47.1%
Married-couple family household with children <18 years	6,141	16.0%
Female householder, no husband present	4,855	12.6%
Female householder, no husband present with children <18 years	2,868	7.4%
Nonfamily household (single person)	13,390	34.9%
Nonfamily household (single person) living alone	11,238	83.9%
Nonfamily household (single person) 65 years and >	4,667	34.9%
Households with one or more people <18 years	11,322	29.5%
Households with one or more people 60 years and >	16,696	43.5%
Average household size	2.48 people	N/A
Average family size	3.05 people	N/A

General Demographic Characteristics, Continued

Housing Occupancy		
Median value of owner-occupied units	$106,300	N/A
Median housing units with a mortgage	$1,071	N/A
Median housing units without a mortgage	$380	N/A
Median value of occupied units paying rent	$648	N/A
Median rooms per total housing unit	5.8	N/A
Total occupied housing units	38,381	N/A
No telephone service available	903	2.4%
Lacking complete kitchen facilities	579	1.5%
Lacking complete plumbing facilities	272	0.7%

Selected Social Characteristics

School Enrollment		
Population 3 years and over enrolled in school	21,345	100%
Nursery & preschool	1,053	4.9%
Kindergarten	866	4.1%
Elementary School (Grades 1-8)	10,229	47.9%
High School (Grades 9-12)	5,560	26.0%
College or Graduate School	3,637	17.0%
Educational Attainment		
Population 25 years and over	68,750	100%
< 9th grade education	3,043	4.4%
9th to 12th grade, no diploma	6,773	9.9%
High school graduate (includes equivalency)	30,770	44.8%
Some college, no degree	13,767	20.0%
Associate degree	5,201	7.6%
Bachelor's degree	6,082	8.8%
Graduate or professional degree	3,114	4.5%
Percent high school graduate or higher	N/A	85.7%
Percent Bachelor's degree or higher	N/A	13.4%
Marital Status		
Population 15 years and over	80,521	100%
Never married	22,948	28.5%
Now married, excluding separated	38,570	47.9%
Separated	1,207	1.5%
Widowed	5,878	7.3%
Widowed females	4,476	5.6%
Divorced	11,917	14.8%
Divorced females	5,968	7.4%
Veteran Status		
Civilian population 18 years and over	76,386	100%
Veterans 18 years and over	8,141	10.7%

Selected Social Characteristics, Continued

Disability Status of the Civilian Non-Institutionalized Population		
Total civilian noninstitutionalized population	95,570	100%
Civilian with a disability	15,054	15.8%
Under 18 years	22,142	23.2%
Under 18 years with a disability	173	0.8%
18 to 64 years	56,994	59.6%
18 to 64 years with a disability	1,750	3.1%
65 Years and over	16,434	17.2%
65 Years and over with a disability	1,054	6.4%

Selected Economic Characteristics

Employment Status		
Population 16 years and over	79,229	100%
16 years and over in labor force	43,338	54.7%
16 years and over not in labor force	35,891	45.3%
Females 16 years and over	39,662	100%
Females 16 years and over in labor force	20,206	50.9%
Population living with own children <6 years	6,300	100%
All parents in family in labor force	3,294	52.3%
Class of Worker		
Civilian employed population 16 years and over	40,003	100%
Private wage and salary workers	32,209	83.0%
Government workers	4,383	11.0%
Self-employed workers in own not incorporated business	2,348	5.9%
Unpaid family workers	63	0.2%
Occupations		
Employed civilian population 16 years and over	40,003	100%
Production, transportation, and material moving occupations	9,975	24.9%
Management, business, science, and art occupations	10,425	26.1%
Sales and office occupations	8,572	21.4%
Service occupations	7,353	18.4%
Natural resources, construction, and maintenance occupations	3,678	9.2%
Leading Industries		
Employed civilian population 16 years and over	40,003	100%
Manufacturing	9,695	24.2%
Educational, health and social services	9,361	23.4%
Trade (retail and wholesale)	4,891	12.2%
Arts, entertainment, recreation, accommodation, and food services	3,181	8.0%
Transportation and warehousing, and utilities	2,413	6.0%
Professional, scientific, management, administrative, and waste management services	2,140	5.3%
Construction	2,521	6.3%
Other services (except public administration)	1,662	4.2%
Finance, insurance, real estate and rental and leasing	1,326	3.3%
Public administration	1,361	3.4%
Agriculture, forestry, fishing and hunting, and mining	790	2.0%
Information	662	1.7%

Selected Economic Characteristics, Continued

Income In 2017		
Households	36,704	100%
< $10,000	3,024	8.2%
$10,000 to $14,999	3,032	8.3%
$15,000 to $24,999	5,046	13.7%
$25,000 to $34,999	3,894	10.6%
$35,000 to $49,999	5,359	14.6%
$50,000 to $74,999	6,733	18.3%
$75,000 to $99,999	4,581	12.5%
$100,000 to $149,999	3,235	8.8%
$150,000 to $199,999	827	2.3%
$200,000 or more	973	2.7%
Median household income	*$44,173*	N/A
Income in 2017		
Families	23,734	100%
< $10,000	1,284	5.4%
$10,000 to $14,999	840	3.5%
$15,000 to $24,999	1,979	8.3%
$25,000 to $34,999	2,969	12.5%
$35,000 to $49,999	3,905	16.5%
$50,000 to $74,999	4,812	20.3%
$75,000 to $99,999	3,609	15.2%
$100,000 to $149,999	2,799	11.8%
$150,000 to $199,999	797	3.4%
$200,000 or more	740	3.1%
Median family income	*$52,385*	N/A
Per capita income in 2017	**$23,297**	N/A
Poverty Status in 2017		
Families	N/A	14.2%
Individuals	N/A	19.8%

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

	Income	Rank of Ohio Counties
BEA Per Capita Personal Income 2017	$36,974	64th of 88 counties
BEA Per Capita Personal Income 2016	$35,615	64th of 88 counties
BEA Per Capita Personal Income 2015	$32,246	67th of 88 counties
BEA Per Capita Personal Income 2014	$34,091	67th of 88 counties
BEA Per Capita Personal Income 2013	$32,501	68th of 88 counties

(Source: Bureau of Economic Analysis, https://apps.bea.gov/iTable/index_regional.cfm)
Note: 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, 5-year averages, 2013 to 2017

Category	Ashtabula	Ohio
Population in poverty	19.8%	14.9%
< 125% FPL (%)	26.2%	19.3%
< 150% FPL (%)	31.2%	23.6%
< 200% FPL (%)	43.0%	32.5%
Population in poverty (1999)	12.1%	10.6%

(Source: The Ohio Poverty Report, Ohio Development Services Agency, February 2019, http://www.development.ohio.gov/files/research/P7005.pdf)

Employment Statistics

Category	Ashtabula	Ohio
Labor Force	44,100	5,770,200
Employed	41,500	5,483,100
Unemployed	2,600	287,000
Unemployment Rate* in April 2019	3.9	3.3
Unemployment Rate* in March 2019	5.1	4.1
Unemployment Rate* in April 2018	5.0	4.3

Rate equals unemployment divided by labor force.
(Source: Ohio Department of Job and Family Services, February 2019, http://ohiolmi.com/laus/current.htm)

Estimated Poverty Status in 2017

Age Groups	Number	90% Confidence Interval	Percent	90% Confidence Interval
Ashtabula County				
All ages in poverty	18,127	15,860 to 20,394	19.3%	16.9 to 21.7
Ages 0-17 in poverty	6,011	4,984 to 7,038	28.4%	23.5 to 33.3
Ages 5-17 in families in poverty	4,090	3,337 to 4,843	26.0%	21.2 to 30.8
Median household income	$45,157	$41,553 to $48,761		
Ohio				
All ages in poverty	1,575,401	1,551,281 to 1,599,521	13.9%	13.7 to 14.1
Ages 0-17 in poverty	507,119	493,056 to 521,182	19.8%	19.2 to 20.4
Ages 5-17 in families in poverty	339,888	328,221 to 351,555	18.2%	17.6 to 18.8
Median household income	$54,077	$53,670 to $54,484		
United States				
All ages in poverty	42,583,651	42,342,619 to 42,824,683	13.4%	13.3 to 13.5
Ages 0-17 in poverty	13,353,202	13,229,339 to 13,477,065	18.4%	19.2 to 20.4
Ages 5-17 in families in poverty	9,120,503	9,033,090 to 9,207,916	17.3%	17.1 to 17.5
Median household income	$60,336	$60,250 to $60,422		

(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, https://www.census.gov/data-tools/demo/saipe/saipe.html?s_appName=saipe&map_yearSelector=2017&map_geoSelector=aa_c)

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

	Ashtabula County	Ohio	U.S.
Health Outcomes			
Premature death. Years of potential life lost before age 75 per 100,000 population (age-adjusted) (2015-2017)	9,600	8,500	6,900
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)	4.3	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) (2011-2017)	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 (2015)	37%	32%	29%
Food environment. Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best) (2015-2016)	7.1	6.7	7.7
Physical inactivity. Percentage of adults aged 20 and over reporting no leisure-time physical activity (2015)	30%	25%	22%
Active living environment. Percentage of population with adequate access to locations for physical activity (2010 & 2018)	73%	84%	84%
Drug and alcohol abuse. Percentage of adults reporting binge or heavy drinking (2016)	17%	19%	18%
Drug and alcohol abuse and injury. Percentage of driving deaths with alcohol involvement (2013-2017)	40%	33%	29%
Infectious disease. Number of newly diagnosed chlamydia cases per 100,000 population (2016)	319.0	520.9	497.3
Sexual and reproductive health. Teen birth rate per 1,000 female population, ages 15-19 (2011-2017)	35	26	25

(Source: 2019 County Health Rankings for Ashtabula County, Ohio and U.S. data)

	Ashtabula County 2019	Ohio 2019	U.S. 2019
Clinical Care			
Coverage and affordability. Percentage of population under age 65 without health insurance (2016)	9%	7%	10%
Access to health care/medical care. Ratio of population to primary care physicians (2016)	2,890:1	1,300:1	1,330:1
Access to dental care. Ratio of population to dentists (2017)	2,720:1	1,620:1	1,460:1
Access to behavioral health care. Ratio of population to mental health providers (2018)	860:1	470:1	440:1
Hospital utilization. Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees (2016)	6,268	5,135	4,520
Mammography screening. Percentage of female Medicare enrollees ages 67-69 that receive mammography screening (2016)	38%	41%	41%
Flu vaccinations. Percentage of Medicare enrollees that had an annual flu vaccination (2016)	46%	47%	45%
Social and Economic Factors			
Education. Percentage of ninth-grade cohort that graduates in four years (2017-2018)	88%	85%	85%
Education. Percentage of adults ages 25-44 years with some post-secondary education (2013-2017)	46%	65%	65%
Employment, poverty, and income. Percentage of population ages 16 and older unemployed but seeking work (2017)	6.0%	5.0%	4.4%
Employment, poverty, and income. Percentage of children under age 18 in poverty (2017)	28%	20%	18%
Employment, poverty, and income. Ratio of household income at the 80th percentile to income at the 20th percentile (2013-2017)	4.6	4.8	4.9
Family and social support. Percentage of children that live in a household headed by single parent (2013-2017)	36%	36%	33%
Family and social support. Number of membership associations per 10,000 population (2016)	12.0	11.2	9.3
Violence. Number of reported violent crime offenses per 100,000 population (2014-2016)	135	293	386
Injury. Number of deaths due to injury per 100,000 population (2013-2017)	92	82	67

(Source: 2019 County Health Rankings for Ashtabula County, Ohio and U.S. data)

	Ashtabula County 2019	Ohio 2019	U.S. 2019
Physical Environment			
Air, water, and toxic substances. Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) (2014)	11.0	11.5	8.6
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 (2017)	No	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 (2011-2015)	15%	15%	18%
Transportation. Percentage of the workforce that drives alone to work (2013-2017)	85%	83%	76%
Transportation. Among workers who commute in their car alone, the percentage that commute more than 30 minutes (2013-2017)	35%	30%	35%

(Source: 2019 County Health Rankings for Ashtabula County, Ohio and U.S. data)
N/A – Not Available

Appendix VII: Ashtabula City Data Summary

Adult Variables	Ashtabula City 2016	Ashtabula City 2019	Ashtabula County 2019	Ohio 2017	U.S. 2017
Health Care Coverage					
Uninsured	3%	13%	10%	8%	11%
Health Care Access and Utilization					
Had at least one person they thought of as their personal doctor or health care provider	N/A	72%	83%	81%	77%
Visited a doctor for a routine checkup in the past year	N/A	60%	69%	72%	70%
Preventive Medicine					
Had a pneumonia vaccination (age 65 and over)	70%	N/A	69%	76%	75%
Had a flu vaccine in the past year (age 65 and over)	66%	N/A	67%	63%	61%
Had a shingles or Zoster vaccination in lifetime	13%	N/A	25%	29%	29%
Women's Health					
Had a mammogram within the past two years (age 40 and older)	72%	N/A	73%	74%*	73%*
Had a pap test within the past three years (age 21-65)	67%±	N/A	66%	82%*	80%*
Men's Health					
Had a digital rectal exam within the past year	18%	7%	14%	N/A	N/A
Oral Health					
Adults who had visited the dentist in the past year	63%	53%	58%	68%*	66%*
Adults who had one or more permanent teeth removed	57%	56%	58%	45%*	43%*
Adults 65 years and older who had all their permanent teeth removed	20%	N/A	12%	17%*	14%*
Health Status Perceptions					
Rated health as excellent or very good	36%	33%	42%	49%	51%
Rated health as fair or poor	28%	19%	14%	19%	18%
Weight Status					
Obese (includes severely and morbidly obese, BMI of 30.0 and above)	50%	50%	42%	34%	31%
Overweight (BMI of 25.0 – 29.9)	27%	16%	33%	34%	35%
Tobacco Use					
Current smoker (currently smoke some or all days)	18%	29%	21%	21%	17%
Former smoker (smoked 100 cigarettes in lifetime & now do not smoke)	29%	20%	28%	24%	25%

N/A - Not Available
*2016 BRFSS
±In 2016, pap test was reported for women ages 19 and over

Adult Variables	Ashtabula City 2016	Ashtabula City 2019	Ashtabula County 2019	Ohio 2017	U.S. 2017
Alcohol Consumption					
Current Drinker (drank alcohol at least once in the past month)	47%	25%	74%	54%	55%
Binge drinker (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days)	22%	31%	23%	19%	17%
Mental Health					
Considered attempting suicide in the past year	11%	15%	6%	N/A	N/A
Felt so sad or hopeless almost every day for two weeks or more in a row	13%	26%	15%	N/A	N/A
Cardiovascular Health					
Had angina or coronary heart disease	8%	3%	3%	5%	4%
Had a heart attack	5%	8%	5%	6%	4%
Had a stroke	1%	5%	3%	4%	3%
Had high blood pressure	46%	43%	42%	35%	32%
Had high blood cholesterol	40%	35%	40%	33%	33%
Had blood cholesterol checked within past 5 years	83%	77%	80%	85%	86%
Asthma, Arthritis and Diabetes					
Ever been told they have asthma	16%	23%	18%	14%	14%
Ever diagnosed with chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis	N/A	9%	8%	8%	7%
Ever diagnosed with arthritis	48%	37%	36%	29%	25%
Ever been told by a doctor they have diabetes (not pregnancy-related)	16%	16%	13%	11%	11%
Quality of Life					
Limited in some way because of physical, mental, or emotional problems	35%	56%	54%	N/A	N/A

N/A - Not available

Ashtabula City Health Department Focus Group 2019 Qualitative Data

INTRODUCTION AND BACKGROUND

The Ashtabula City Health Department (ACHD) collaborated with Leadership Ashtabula County to design the focus group survey. The survey was modified from its original electronic format to allow for the option of a hard copy paper completion. Focus groups for the ACHD were conducted in April, May and June of 2019. Focus groups are useful to find a range of opinions across groups of people and are used to gain insight for community needs. The ACHD incorporated focus groups to complement our City trend data from this County Health Needs Assessment. Focus groups allow participants to share their thoughts and opinions. The qualitative data collected in these focus groups compliment the quantitative data captured in the Ashtabula County Health Needs Assessment Survey. Qualitative data provides a deeper understanding as to why participants from the community feel and act a certain way, while quantitative data identifies the extent of a specific health issue.

PARTICIPANT RECRUITMENT

Participants were approached at the Ashtabula Remote Area Medical Clinic (RAM) and informed about the details of the focus group process. Verbal explanations were given on how to complete the survey. ACHD staff served as facilitators and gave each participant time to read and respond to the survey questions. ACHD staff was available for additional dialogue and support. Participants were screened to ensure they lived in the Ashtabula 44004 zip code region and were over the age of 18 years. Electronic surveys were made available for participation to various Ashtabula City resident and stakeholder list serve groups.

PROCEDURE

The ACHD collaborated with Leadership Ashtabula County in multiple meetings and virtual meetings to design and format the topics to be covered in the focus group survey. The questions asked were related to health priorities, strengths and barriers of the community, social determinants of health and health inequities. Paper surveys were provided to all 44004 residents that attended the RAM clinic and the electronic surveys were sent out via email. 27 total of surveys were completed at the RAM clinic.   An overview of the purpose of the survey was included with the email and electronic link to take the survey. 35 total surveys were sent and 13 surveys were completed electronically. All survey data was tallied together for a complete set of results. Paper and electronic results were tallied individually by source.

ANALYSIS

Leadership Ashtabula County provided a Program Manager to analyze the data results. Excel and pdf data reports were provided to the ACHD from the Qualtrics electronic survey data collected.

LIMITATIONS

Limitations to consider for RAM participants were the event total attendance and individual's time restrictions. Limitations for the electronic survey participants were due to our targeted existing list serves and willingness to participate.

OVERALL FINDINGS AND REMARKS

Several themes emerged consistently across the focus groups conducted. Cost was the number one answer to barriers to receiving health care with insurance coverage (not enough or none) being second. Adult obesity, Childhood obesity and chronic disease were the top three health problems in our community. The health problems identified in the Community Health Needs Assessment are echoed in the results of our focus group surveys. The Ashtabula City Health Department along with the Ashtabula County Health Needs Assessment Committee are working on Community Health Improvement Projects to help combat these issues.

SURVEY RESULTS (TOP THREE ANSWERS)

Which of the following do you consider to be barriers to receiving healthcare?

1 – Cost, 2 – Insurance Coverage (not enough or none) and 3 – Dissatisfaction of the healthcare system

Participants were instructed to check all that apply. Which of the following do you see as health problems in the community?

1 – Adult obesity, 2 – Childhood obesity and 3 – Chronic disease (heart and lung disease, smoking, diabetes, cancer…)

ASHTABULA CITY PROFILE

	Number	Percent (%)
Total Population		
2017 Total Population	18,385	100%
Population by Race/Ethnicity		
Total Population	18,385	100%
White Alone	16,269	88.4%
Hispanic or Latino	1,700	9.2%
Black or African American	2,499	13.5%
Asian	40	0.2%
Two or More Races	830	4.5%
Some other race	196	1.0%
American Indian and Alaska Native	222	1.2%
Population by Age		
Under 5 Years	1,184	6.4%
5 to 19 Years	3812	20.7%
20 to 44 Years	5553	30.2%
45 to 64 Years	4964	27%
65 Years of More	2872	15.6%
Median age (years)	**38.0**	N/A
Household by Type		
Total Households	7,641	100%
Family households (families)	4,381	57.3%
With own children <18 years		
Married-Couple Family Household	2,400	31.4%
With own children <18 years		
Female Householder, No Husband Present	1,593	20.8%
With own children <18 years		
Non-Family Households	3,260	42.6%
Householder living alone	2,847	37.3%
Householder 65 years and older	999	13.1%
Households with Individuals < 18 years	2,377	31.1%
Average Household Size	2.37 People	N/A
Average Family Size	3.14 People	N/A

(Source: U.S. Census Bureau, 2013-2017 ACS 5-year estimates, 2017)

Appendix VIII: Conneaut City Data Summary

Adult Variables	Conneaut City 2016	Conneaut City 2019	Ashtabula County 2019	Ohio 2017	U.S. 2017
Health Care Coverage					
Uninsured	17%	6%	10%	8%	11%
Health Care Access and Utilization					
Had at least one person they thought of as their personal doctor or health care provider	N/A	87%	83%	81%	77%
Visited a doctor for a routine checkup in the past year	N/A	73%	69%	72%	70%
Preventive Medicine					
Had a pneumonia vaccination (age 65 and over)	77%	N/A	69%	76%	75%
Had a flu vaccine in the past year (age 65 and over)	73%	N/A	67%	63%	61%
Had a shingles or Zoster vaccination in lifetime	12%	N/A	25%	29%	29%
Women's Health					
Had a mammogram within the past two years (age 40 and older)	62%	N/A	73%	74%*	73%*
Had a pap test within the past three years (age 21-65)	38%±	N/A	66%	82%*	80%*
Men's Health					
Had a digital rectal exam within the past year	5%	11%	14%	N/A	N/A
Oral Health					
Adults who had visited the dentist in the past year	47%	65%	58%	68%*	66%*
Adults who had one or more permanent teeth removed	60%	73%	58%	45%*	43%*
Adults 65 years and older who had all their permanent teeth removed	20%	N/A	12%	17%*	14%*
Health Status Perceptions					
Rated health as excellent or very good	41%	37%	42%	49%	51%
Rated health as fair or poor	20%	17%	14%	19%	18%
Weight Status					
Obese (includes severely and morbidly obese, BMI of 30.0 and above)	42%	25%	42%	34%	31%
Overweight (BMI of 25.0 – 29.9)	26%	64%	33%	34%	35%
Tobacco Use					
Current smoker (currently smoke some or all days)	35%	9%	21%	21%	17%
Former smoker (smoked 100 cigarettes in lifetime & now do not smoke)	26%	42%	28%	24%	25%

N/A - Not Available
*2016 BRFSS
±In 2016, pap test was reported for women ages 19 and over

Adult Variables	Conneaut City 2016	Conneaut City 2019	Ashtabula County 2019	Ohio 2017	U.S. 2017
Alcohol Consumption					
Current Drinker (drank alcohol at least once in the past month)	51%	12%	74%	54%	55%
Binge drinker (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days)	20%	24%	23%	19%	17%
Mental Health					
Considered attempting suicide in the past year	2%	12%	6%	N/A	N/A
Two or more weeks in a row felt sad or hopeless	4%	9%	15%	N/A	N/A
Cardiovascular Health					
Had angina or coronary heart disease	2%	6%	3%	5%	4%
Had a heart attack	21%	3%	5%	6%	4%
Had a stroke	9%	0%	3%	4%	3%
Had high blood pressure	51%	59%	42%	35%	32%
Had high blood cholesterol	41%	41%	40%	33%	33%
Had blood cholesterol checked within past 5 years	84%	88%	80%	85%	86%
Asthma, Arthritis and Diabetes					
Ever been told they have asthma	4%	9%	18%	14%	14%
Ever diagnosed with chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis	N/A	9%	8%	8%	7%
Ever diagnosed with arthritis	48%	29%	36%	29%	25%
Ever been told by a doctor they have diabetes (not pregnancy-related)	2%	18%	13%	11%	11%
Quality of Life					
Limited in some way because of physical, mental, or emotional problems	22%	53%	54%	N/A	N/A

N/A - Not available

CONNEAUT CITY PROFILE

	Number	Percent (%)
Total Population		
2017 total Population	12,708	100%
Population by Race/Ethnicity		
Total Population	12,708	100%
White Alone	11,359	89.4%
Hispanic or Latino	308	2.4%
African American	1,051	8.3%
Asian	13	0.1%
Two or More Races	196	1.5%
Other	20	0.2%
American Indian and Alaska Native	94	0.7%
Population by Age		
Under 5 Years	410	3.2%
5 to 19 Years	2,033	16%
20 to 44 Years	4,440	34.9%
45 to 64 Years	3,682	29.0%
65 Years of More	2,143	16.9%
Median age (years)	**41.5**	
Household by Type		
Total Households	4,645	100%
Family households (families)	2,993	64.4%
With own children <18 years		
Married-Couple Family Household	2,323	50.0%
With own children <18 years		
Female Householder, No Husband Present	360	7.8%
With own children <18 years		
Non-Family Households	1,652	35.6%
Householder living alone	1,374	29.6%
Householder 65 years and older	772	16.6%
Households with Individuals < 18 years	1,019	21.9%
Average Household Size	**2.33 People**	N/A
Average Family Size	**2.85 People**	N/A

(Source: U.S. Census Bureau, 2013-2017 ACS 5-year estimates, 2017)

Appendix IX: Geneva City Data Summary

Adult Variables	Geneva City 2016	Geneva City 2019	Ashtabula County 2019	Ohio 2017	U.S. 2017
Health Care Coverage					
Uninsured	5%	7%	10%	8%	11%
Health Care Access and Utilization					
Had at least one person they thought of as their personal doctor or health care provider	63%	84%	83%	81%	77%
Visited a doctor for a routine checkup in the past year	65%	69%	69%	72%	70%
Preventive Medicine					
Had a pneumonia vaccination (age 65 and over)	55%	82%	69%	76%	75%
Had a flu vaccine in the past year (age 65 and over)	75%	50%	67%	63%	61%
Women's Health					
Had a mammogram within the past two years (age 40 and older)	75%	59%	73%	74%*	73%*
Had a pap test within the past three years (age 21-65)	4%±	77%	66%	82%*	80%*
Men's Health					
Had a digital rectal exam within the past year	11%	19%	14%	N/A	N/A
Oral Health					
Adults who had visited the dentist in the past year	50%	53%	58%	68%*	66%*
Adults who had one or more permanent teeth removed	45%	64%	58%	45%*	43%*
Adults 65 years and older who had all their permanent teeth removed	8%	18%	12%	17%*	14%*
Health Status Perceptions					
Rated health as excellent or very good	52%	38%	42%	49%	51%
Rated health as fair or poor	19%	11%	14%	19%	18%
Weight Status					
Obese (includes severely and morbidly obese, BMI of 30.0 and above)	30%	41%	42%	34%	31%
Overweight (BMI of 25.0 – 29.9)	35%	42%	33%	34%	35%
Tobacco Use					
Current smoker (currently smoke some or all days)	28%	20%	21%	21%	17%
Former smoker (smoked 100 cigarettes in lifetime & now do not smoke)	30%	34%	28%	24%	25%

N/A - Not Available
*2016 BRFSS
±In 2016, pap test was reported for women ages 19 and over

Adult Variables	Geneva City 2016	Geneva City 2019	Ashtabula County 2019	Ohio 2017	U.S. 2017
Alcohol Consumption					
Current Drinker (drank alcohol at least once in the past month)	55%	77%	74%	54%	55%
Binge drinker (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days)	28%	39%	23%	19%	17%
Mental Health					
Considered attempting suicide in the past year	3%	3%	6%	N/A	N/A
Two or more weeks in a row felt sad or hopeless	8%	5%	15%	N/A	N/A
Cardiovascular Health					
Had angina or coronary heart disease	3%	3%	3%	5%	4%
Had a heart attack	<1%	2%	5%	6%	4%
Had a stroke	3%	2%	3%	4%	3%
Had high blood pressure	34%	38%	42%	35%	32%
Had high blood cholesterol	38%	48%	40%	33%	33%
Had blood cholesterol checked within past 5 years	68%	77%	80%	85%	86%
Asthma, Arthritis and Diabetes					
Ever been told they have asthma	35%	20%	18%	14%	14%
Ever diagnosed with chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis	N/A	2%	8%	8%	7%
Ever diagnosed with arthritis	43%	32%	36%	29%	25%
Ever been told by a doctor they have diabetes (not pregnancy-related)	21%	15%	13%	11%	11%

N/A - Not available

Appendix X: Potential Resources Available

Ashtabula County is focused on the following two priority areas: chronic disease and mental health and addiction. Additionally, Ashtabula County will focus their efforts and strategies on factors that affect both priority areas: healthcare system and access, and public health system, prevention and health behaviors.

The following is a list of potential resources available to meet identified community health priorities:

Priority Area	Coordinating Agencies and Team Members	
Mental Health and Addiction	• Ashtabula County Coroner's Office • Ashtabula County funeral directors • Ashtabula County Incident Response Team • Ashtabula County LOSS Team • Ashtabula County Mental Health Recovery and Services Board • Ashtabula County Suicide Prevention Coalition • Ashtabula County Health Department • Ashtabula County Prevention Coalition • Ashtabula County Substance Abuse Leadership Team • Community Counseling Center of Ashtabula County • Crisis Text Line	• Geneva Rotary • Glenbeigh • Help Network of Northeast Ohio • Lake Area Recovery Center • Local Civic Organizations • Local media • Ohio Department of Health • Ohio Department of Mental Health and Addiction Services • Ohio Suicide Prevention Foundation • Prevention Coalition Facebook page • Signature Health • University Hospitals Conneaut Medical Center • University Hospitals Geneva Medical Center
Chronic Disease	• Ashtabula County Board of Children's Services • Ashtabula County Child and Family Health Services • Ashtabula County Elementary schools • Ashtabula County Head Start • Ashtabula County IPOD • Ashtabula County Job and Family Services • Ashtabula County Medical Center • Ashtabula County Mental Health Recovery and Services Board • Ashtabula County Metroparks • Ashtabula County Pediatric offices	• Community Action Agency of Ashtabula County • Conneaut Human Resource Center Right Track • Health Departments of Ashtabula County KIDS Only Day Care, • OSU-Ashtabula County Cooperative Extension Service • University Hospitals Conneaut Medical Center • University Hospitals Geneva Medical Center • YMCA