University Hospitals

# 2018 Community Health Needs Assessment

UH Conneaut Medical Center
UH Geneva Medical Center
Ashtabula County

# Forward

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 both our community benefit and strategic 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 (UH Conneaut Medical Center) and University Hospitals Geneva Medical Center (UH 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


## The 2018 Ashtabula County Health Assessment report was commissioned by:

University Hospitals Conneaut Medical Center
University Hospitals Geneva Medical Center

## The 2016 Ashtabula County Health Assessment report was funded by:

Ashtabula County Health Department
Ashtabula City Health Department
Conneaut City Health Department
Ashtabula County Commissioners
Ashtabula County Community Action Agency
Ashtabula County Job & Family Services
Ashtabula County Mental Health Recovery Board
Ashtabula County Children's Services
Ashtabula County Regional Home Health Services
Catholic Charities of Ashtabula County
Community Counseling Center of Ashtabula County
Family Planning Association of Northeast Ohio
Ashtabula County Medical Center
University Hospitals Conneaut Medical Center
University Hospitals Geneva Medical Center
Center for Health Affairs

## Project Management, Secondary Data, Data Collection, and Report Development
## Hospital Council of Northwest Ohio

The Hospital Council of Northwest Ohio (HCNO) is a 501(c)3 non-profit regional hospital association located in Toledo, Ohio. They facilitate community health needs assessments and planning processes in 40+ counties in Ohio, Michigan, and Oregon. Since 2004, they have used a process that can be replicated in any county that allows for comparisons from county to county, within the region, the state, and the nation. HCNO works with coalitions in each county to ensure a collaborative approach to community health improvement that includes multiple key stakeholders, such as those listed above. All HCNO project staff have their master's degree in public health, with emphasis on epidemiology and health education.

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## Hospital Utilization and Discharge Data Compilation and Analysis

Cypress Research Group

## 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/

## The 2018 University Hospitals Ashtabula County Health Needs Assessment is available on the following websites:

University Hospitals
http://www.uhhospitals.org/about-uh/community-benefit/community-health-needs-assessment

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

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## Written Comments

University Hospitals solicited feedback on its 2015 Community Health Needs Assessments (CHNAs), which are posted on its website, but did not receive any comments. Individuals are encouraged to submit written comments on the current joint Community Health Needs Assessment (CHNA) to CommunityBenefit@UHhospitals.org. These comments provide additional information to hospital facilities regarding the broad interests of the community and help to inform future CHNAs and implementation strategies.

# Table of Contents

# Executive Summary

In 2018, University Hospitals Conneaut Medical Center and Geneva Medical Center worked to align their community health needs assessment (CHNA) process both at the local and state levels. The state of Ohio mandated by law (ORC 3701.981) that all hospitals must collaborate with their local health departments on community health assessments (CHA) and community health improvement plans (CHIP). In order to meet this requirement, University Hospitals Conneaut Medical Center and Geneva Medical Center shifted their definition of community to encompass the entire county. This will result in less duplication. In addition, local hospitals have to align with the Ohio State Health Assessment (SHA). This requires alignment of the CHA process timeline and indicators. This local alignment must take place by October 2020. This report serves as the initial CHA to move University Hospitals Conneaut Medical Center and Geneva Medical Center into a more collaborative approach. University Hospitals Conneaut Medical Center and Geneva Medical Center will be actively participating in the 2019 Ashtabula County CHA and CHIP, which will align partners to be in compliance by 2020.

University Hospitals hired the Hospital Council of Northwest Ohio (HCNO) to align the 2018 University Hospitals Conneaut and Geneva Medical Centers joint report with the existing 2016 Ashtabula County Community Health Assessment. HCNO collected the data, guided the health assessment process and integrated sources of primary data from the 2016 Ashtabula County Health Assessment, secondary data from 2008-2016, and hospital utilization and discharge data from 2016 into the final 2018 University Hospitals Ashtabula County Health Assessment report.

## Internal Revenue Services (IRS) Requirements

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

### DEFINITION OF COMMUNITY & SERVICE AREA DETERMINATION

The community has been defined as Ashtabula County. Most (93%) of University Hospitals Conneaut Medical Center's discharges and 78% of University Hospitals Geneva Medical Center's discharges were residents of Ashtabula County. In addition, University Hospitals collaborates with multiple stakeholders, most of which provide services at the county-level. For these two reasons, the county was defined as the community.

### INCLUSION OF VULNERABLE POPULATIONS

Ashtabula County is a rural county and was designated as an Appalachian County by the federal government. Approximately 20% of Ashtabula County residents were below the poverty line, according to the 2012-2016 American Community Survey 5 year estimates. For this reason, data is broken down by income (less than $25,000 and greater than $25,000) throughout the report to show disparities.

### PROCESS & METHODS FOR ENGAGING COMMUNITY

This community health needs assessment process was commissioned by the Ashtabula County Health Needs Advisory Committee. This coalition has been in existence for twenty years and has approximately 26 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. Thirty-six organizations worked together to create one comprehensive assessment and plan, with more than 70 community members attending the release and providing qualitative feedback.

## QUANTITATIVE & QUALITATIVE DATA ANALYSIS

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

## IDENTIFYING & PRIORITIZING NEEDS

The Ashtabula County Health Needs Assessment Advisory Committee met multiple times to complete the 2017-2020 Ashtabula County Community Health Improvement Plan. The Ashtabula County Health Needs Assessment Advisory Committee used the Mobilizing for Action through Planning and Partnerships (MAPP) process, which is a community-driven strategic planning process for improving community health. This framework helps communities apply strategic thinking to prioritize health issues and identify resources to address them. There were thirty-six coordinating agencies that comprised the CHIP steering committee and oversee the four priority area teams. The priority areas and coordinating agencies can be found in Appendix IX.

Details of this process and its results can be found on the Ashtabula County Health Department's website. Ashtabula County is focused on the following four priority areas: suicide prevention; childhood & adult obesity prevention; chronic disease prevention; and opiate overdose prevention.

## RESOURCES TO ADDRESS NEED

Needs and priorities identified through the planning process, resulted in a comprehensive 2017-2020 Ashtabula County Community Health Improvement Plan (CHIP). Numerous resources were identified to address the needs found in the report, which can be found in Appendix IX. The entire 2017-2020 Ashtabula County CHIP can be found on the Ashtabula County Health Department's website.

## EVALUATION OF IMPACT

The evaluation of impact is a report on the actions taken and effectiveness of strategies implemented since the last community health needs assessment. University Hospitals Conneaut Medical Center and Geneva Medical Center conducted their last CHNAs in 2015.

## CHNA AVAILABILITY

The 2018 University Hospitals Conneaut Medical Center and Geneva Medical Center's Community Health Needs Assessment, as well as the various other assessments used in creating this report can be found at the following websites:

University Hospitals: http://www.uhhospitals.org/about/community-benefit/community-health-needs-assessment

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

## ADOPTION BY BOARD

University Hospitals adopted the 2018 University Hospitals Conneaut Medical Center and Geneva Medical Center's joint Community Health Needs Assessment on September 27, 2018.

## Primary Data Collection Methods

### DESIGN

This community health assessment was cross-sectional in nature and included a written survey of adults within Ashtabula County in 2016. 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 the Hospital Council of NW Ohio 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 adult survey items from the Centers for Disease Control and Prevention for their national and state Behavioral Risk Factor Surveillance System (BRFSS). This decision was based on being able to compare local data with state and national data.

The project coordinator from the Hospital Council of NW Ohio 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 Ashtabula County, the project coordinator composed a draft of the survey containing 113 items for the adult survey. Health education researchers from the University of Toledo reviewed and approved the drafts.

### SAMPLING | Adult Survey

The sampling frame for the survey included adults ages 19 and over living in Ashtabula County. The U.S. Census Bureau reported 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. A random sample of mailing addresses of adults from Ashtabula County was obtained from Allegra Marketing Services in Louisville, KY.

### PROCEDURE | Adult Survey

Prior to mailing the survey, an advance letter was mailed to 1,200 adults in Ashtabula County. This advance letter was personalized, printed on Ashtabula County Health Needs Assessment Committee stationery and was signed by Raymond J. Saporito, Health Commissioner of the Ashtabula County Health Department. The letter introduced the 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 it encouraged the readers to complete and return the survey promptly if they were selected.

Two weeks following the advance letter, the project team implemented a three-wave mailing procedure to maximize the survey return rate. The initial mailing included a personalized hand signed cover letter (on Ashtabula County Health Needs Assessment Committee stationery) describing the purpose of the study, a questionnaire, a self-addressed stamped return envelope, and a $2 incentive. Approximately two weeks after the first mailing, the project team proceeded with a second wave mailing encouraging them to reply, that included another copy of the questionnaire and an additional reply envelope. The third and final wave consisted of a postcard mailed two weeks after the second wave mailing. Surveys returned as undeliverable were not replaced with another potential respondent. The mailing process took place from September to November 2016.

The response rate for the entire mailing was 41% (n=459: CI=$\pm$4.56). This return rate and sample size means that the responses in the health assessment should be representative of the entire county.

### DATA ANALYSIS

Individual responses were anonymous.  Only group data was available. Health education researchers at the University of Toledo analyzed all data using SPSS Version 23.0. 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 2014 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 health 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.

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 adult data collection method differed. The CDC adult data were collected using a set of questions from the total question bank, and participants were asked the questions over the telephone rather than as a mail survey.

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 over 50 sites, including county-level data, wherever possible.  HCNO utilized sites, such as the Ohio Department of Health database, Behavioral Risk Factor Surveillance System (BRFSS), Youth Risk Behavior Surveillance System (YRBSS), numerous CDC sites, Census, American Community Survey, American Cancer Society, American Diabetes Association, Healthy People 2020, County Health Rankings, Job & Family Services (Individual & Family Services), etc. Most secondary data is from 2014-2016. However, trend data has been included starting from 2008 for some indicators. All of the data is included in the section of the report it corresponds with. All primary data collected in this report is from the 2016 Ashtabula County Community Health Assessment. All other data will be sourced accordingly.

## Hospital Utilization Data Collection Methods

HCNO worked with staff from University Hospitals, the Center for Health Affairs and Cypress Research Group to incorporate hospital discharge and utilization data within the community health assessment. The hospital utilization data included within the community health assessment is from January 2016 through December 2016. Data is broken down into gender and age, where applicable.

Each hospital provides data to the Ohio Hospitalization Association (OHA) for state-wide 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 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 Health Care Access and Utilization.

## 2016 Ohio State Health Assessment (SHA)

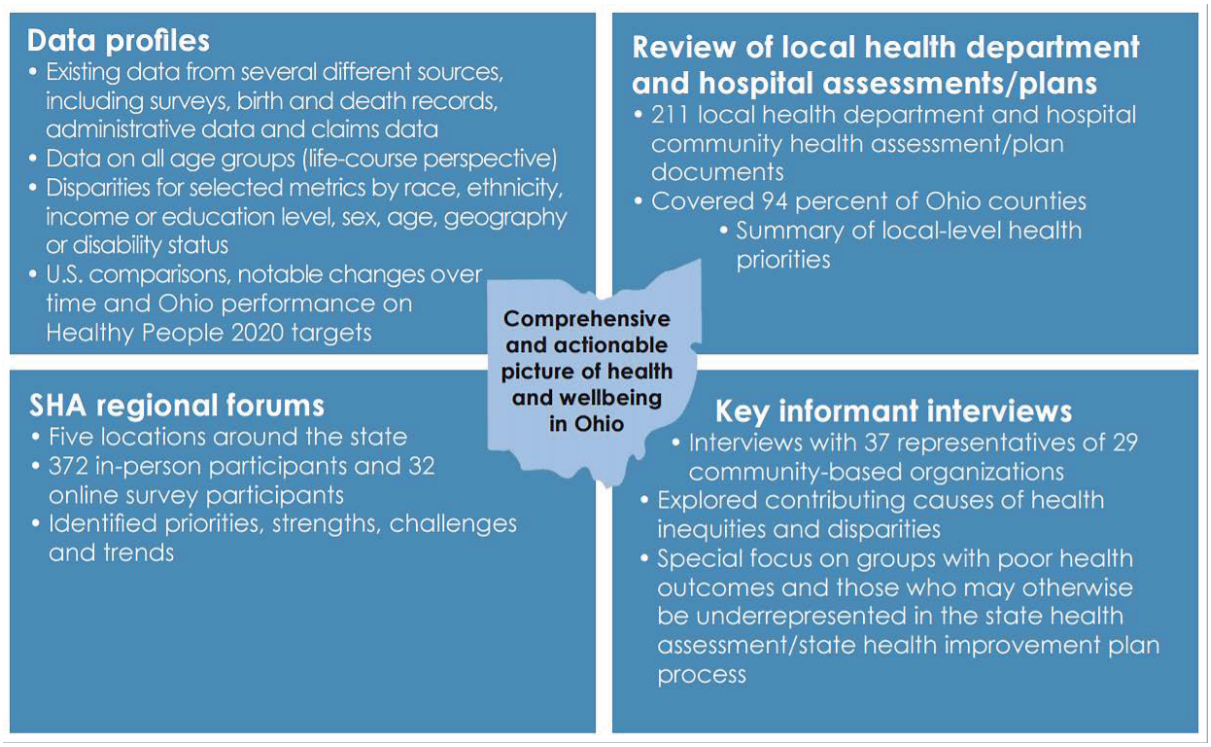
The 2016 Ohio State Health Assessment (SHA) provides data needed to inform health improvement priorities and strategies in the state. This assessment includes over 140 metrics, organized into data profiles, as well as information gathered through five regional forums, a review of local health department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

Similar to the 2016 Ohio SHA, the 2018 University Hospitals Ashtabula County Community Health Assessment (CHA) examined a variety of metrics from various areas of health including, but not limited to, health behaviors, chronic disease, access to health care, and social determinants of health. Additionally, the CHA studied themes and perceptions from local public health stakeholders from a wide variety of sectors. **Note: This symbol will be displayed in the comparison 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**

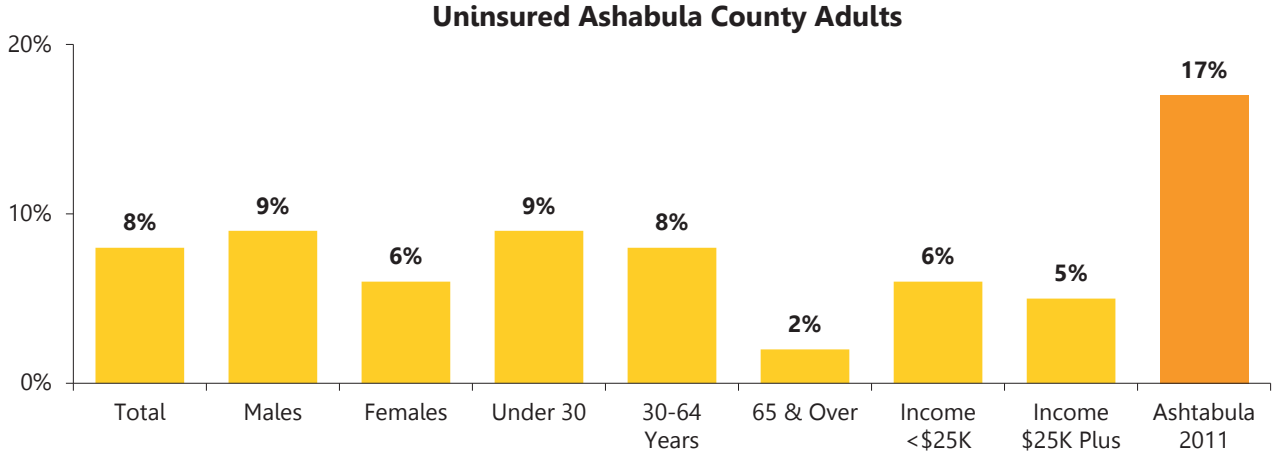


***The following section is a high level view of key findings from the HCNO adult surveys in Ashtabula County. Comparison data is provided in the following Trend Summary section.***

## Data Summary | Healthcare Access

### HEALTHCARE COVERAGE

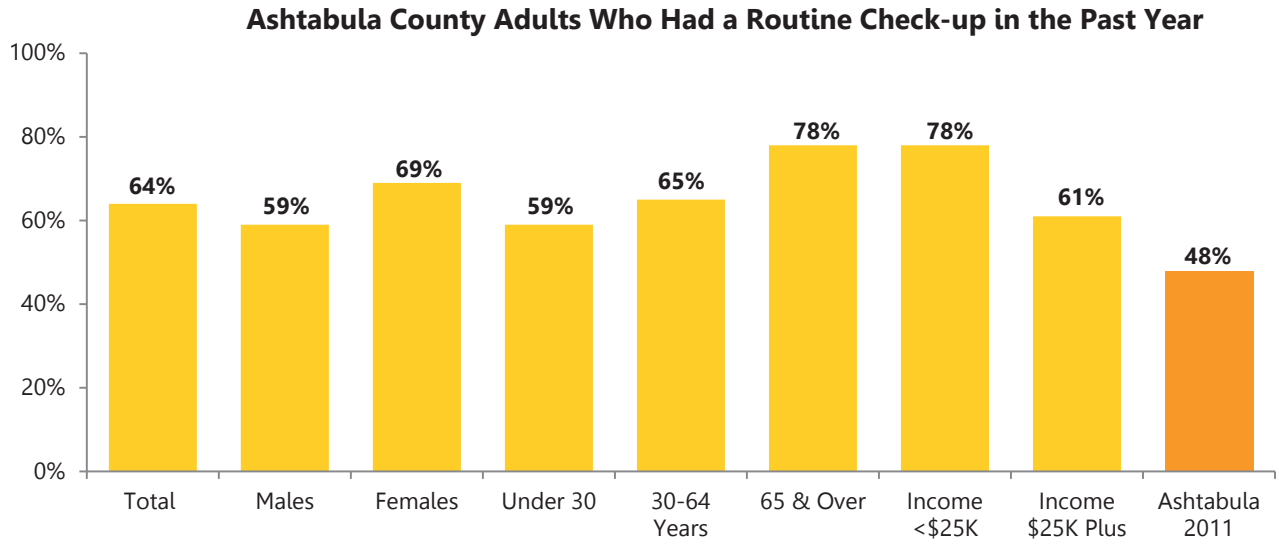
In 2016, 8% of Ashtabula County adults were without health care coverage. Those most likely to be uninsured were males and those under the age of 30. In Ashtabula County, 19.6% of all residents live below the poverty level
*(Source: U.S. Census, 2012-2016 American Community Survey 5 Year Estimates).*




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

### ACCESS AND UTILIZATION

In 2016, 64% of Ashtabula County adults had visited a doctor for a routine checkup in the past year. Seventy-five percent (75%) of adults went outside of Ashtabula County for health care services 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.*

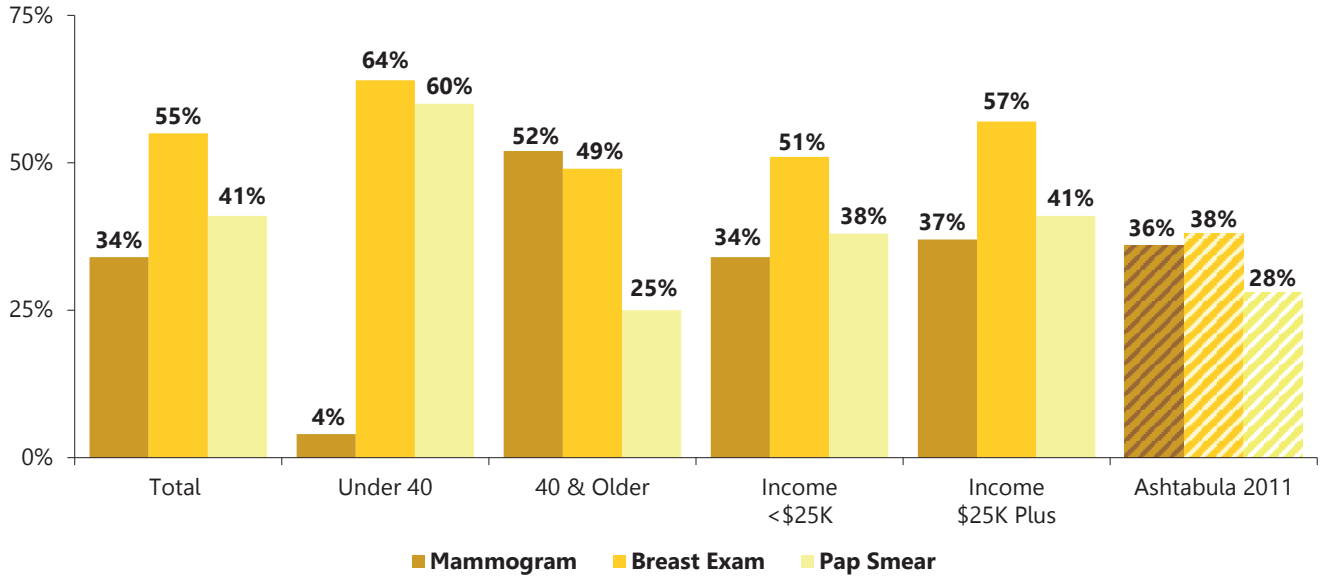
### PREVENTIVE MEDICINE

In 2016, more than two-thirds (69%) of adults ages 65 and over had a pneumonia vaccination at some time in their life. Seventy percent (70%) of adults age 65 and over had a flu vaccine in the past year.

## WOMEN'S HEALTH

In 2016, more than half (52%) of Ashtabula County women over the age of 40 reported having a mammogram in the past year. Fifty-five percent (55%) of Ashtabula County women ages 19 and over had a clinical breast exam and 41% had a Pap smear to detect cancer of the cervix in the past year. Four percent (4%) of women survived a heart attack and 2% survived a stroke at some time in their life. Forty-six percent (46%) of women were obese, 32% were diagnosed with high blood cholesterol, 29% had high blood pressure, and 20% were identifed as smokers, all known risk factors for cardiovascular diseases.

**Ashtabula County Women's Health Exams Within the Past Year**

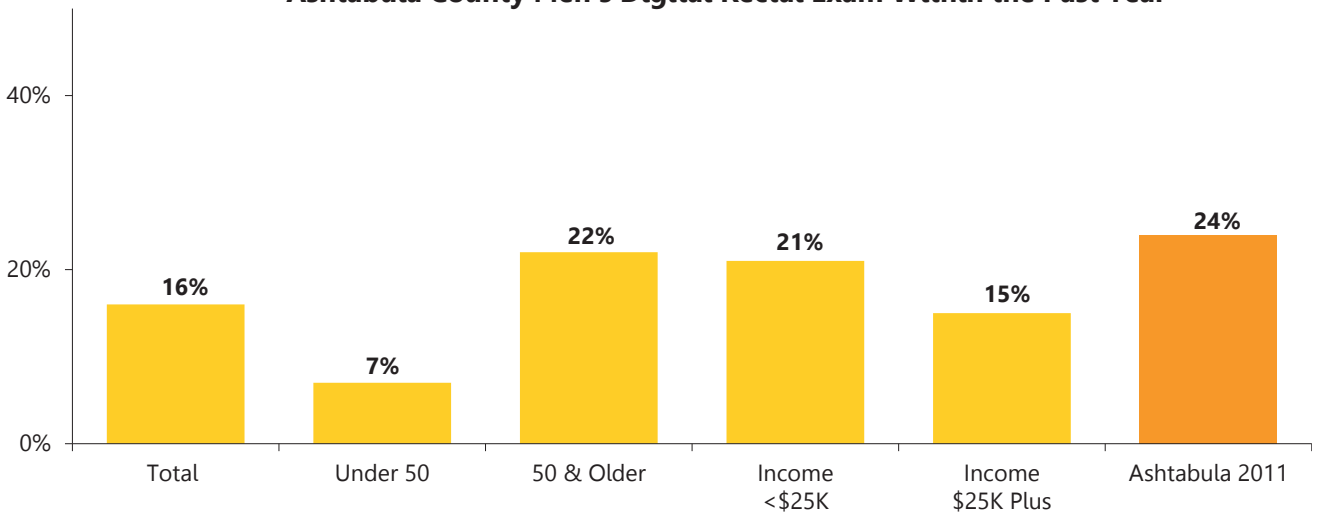



*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

## MEN'S HEALTH

In 2016, 16% of Ashtabula County males had a digital rectal exam. Nearly one-third (31%) of Ashtabula County males performed a self-testicular exam in the past year. Eight percent (8%) of men survived a heart attack and 6% survived a stroke at some time in their life. More than two-fifths (46%) of men had been diagnosed with high blood pressure, 45% had high blood cholesterol, 41% were obese, and 23% were identified as smokers, which are known risk factors for cardiovascular diseases.

**Ashtabula County Men's Digital Rectal Exam Within the Past Year**

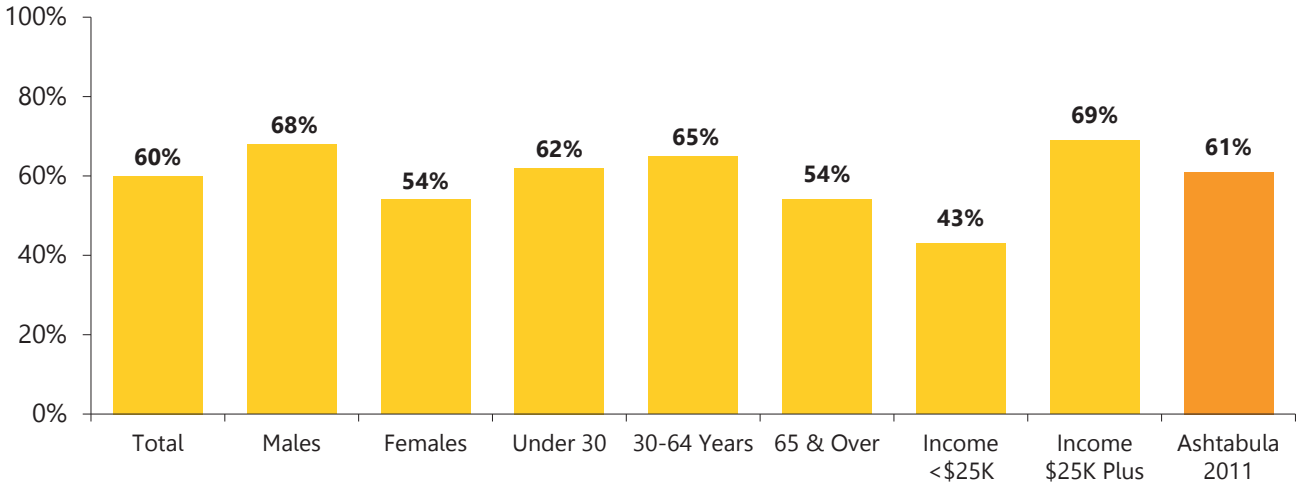



*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

## ORAL HEALTH

In 2016, three-fifths (60%) of Ashtabula County adults had visited a dentist or dental clinic in the past year. The 2016 BRFSS reported that 68% of Ohio adults and 66% of U.S. adults had visited a dentist or dental clinic in the previous twelve months.

**Ashtabula County Adults Visiting a Dentist in the Past Year**

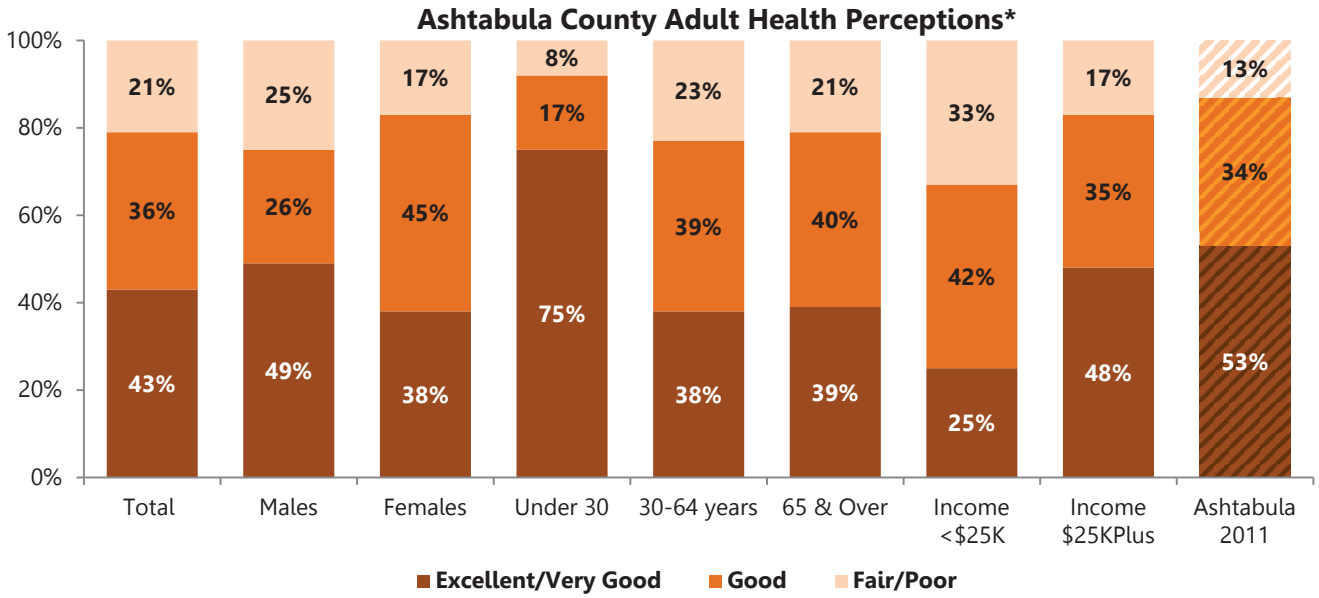



*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

## Data Summary | Health Behaviors

### HEALTH STATUS PERCEPTIONS

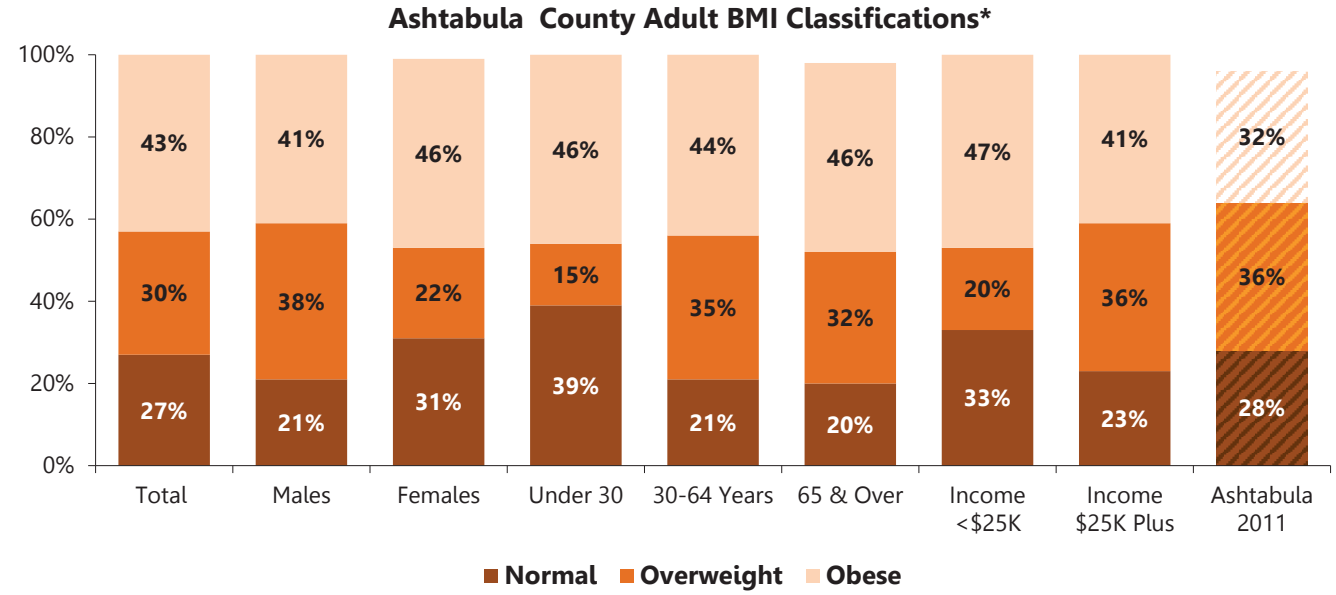
In 2016, over two-fifths (43%) of Ashtabula County adults rated their health status as excellent or very good. Conversely, 22% of adults described their health as fair or poor. That percentage increased to 33% among individuals with incomes less than $25,000.




**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.*

### ADULT WEIGHT STATUS

The 2016, more than two-thirds (73%) of Ashtabula County adults were overweight or obese based on Body Mass Index (BMI). The 2016 BRFSS indicates that 32% of Ohio and 30% of U.S. adults were obese as measured by BMI. More than two-fifths (43%) of Ashtabula County adults were obese. Nearly half (48%) of adults were trying to lose weight.

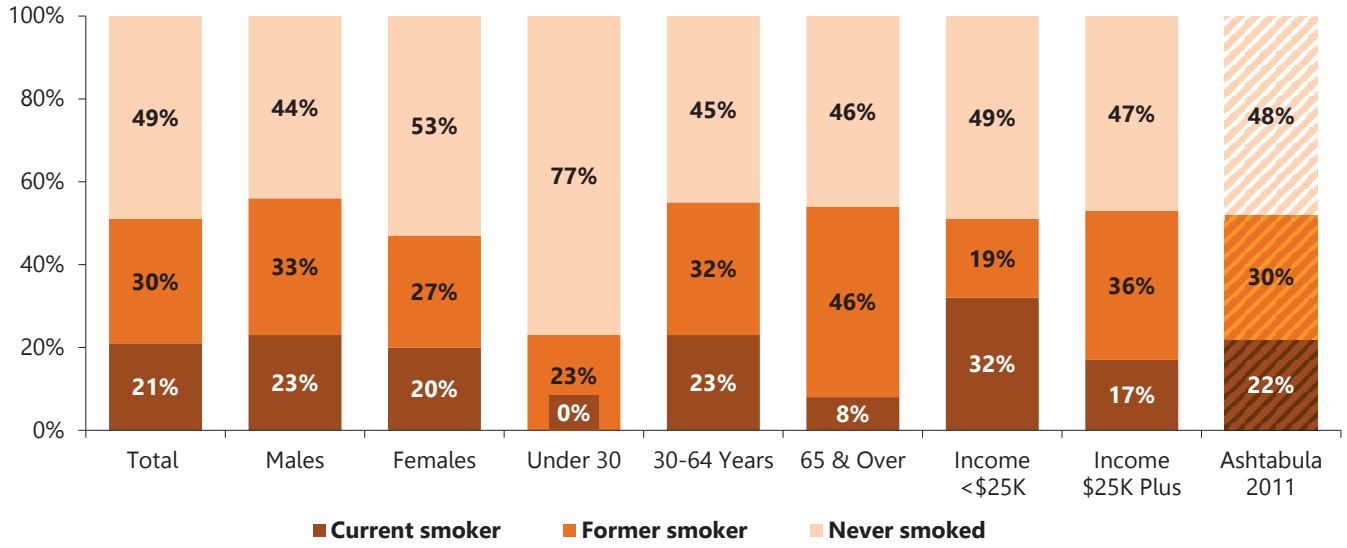



**Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight.*
*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

## ADULT TOBACCO USE

In 2016, 21% of Ashtabula County adults were current smokers, and 30% were considered former smokers. In 2017, the American Cancer Society (ACS) stated that tobacco use was the most preventable cause of death worldwide and is responsible for the deaths of approximately half of long-term users. Each year, cigarette smoking results in an estimated 480,000 premature deaths including 42,000 from secondhand smoke exposure *(Source: Cancer Facts & Figures, American Cancer Society, 2017).*

**Ashtabula County Adult Smoking Behaviors***

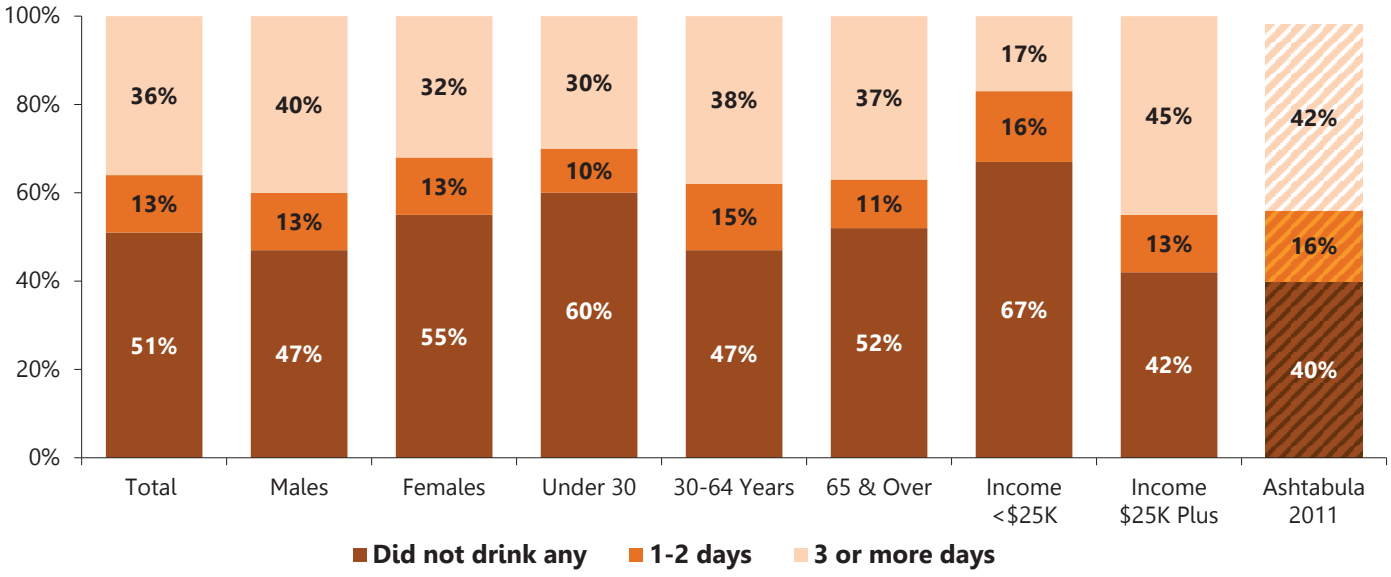



**Respondents were asked: "Have you smoked at least 100 cigarettes in your entire life? If yes, do you now smoke cigarettes every day, some days or not at all?"*
*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

## ADULT ALCOHOL CONSUMPTION

In 2016, 49% of Ashtabula County adults had at least one alcoholic drink in the past month. Additionally, 50% of adults who drank engaged in binge drinking (defined as 5 or more drinks for males or 4 or more drinks for females on one occasion) in the past month. One-fourth (25%) of adults drove after drinking any alcoholic beverages.

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

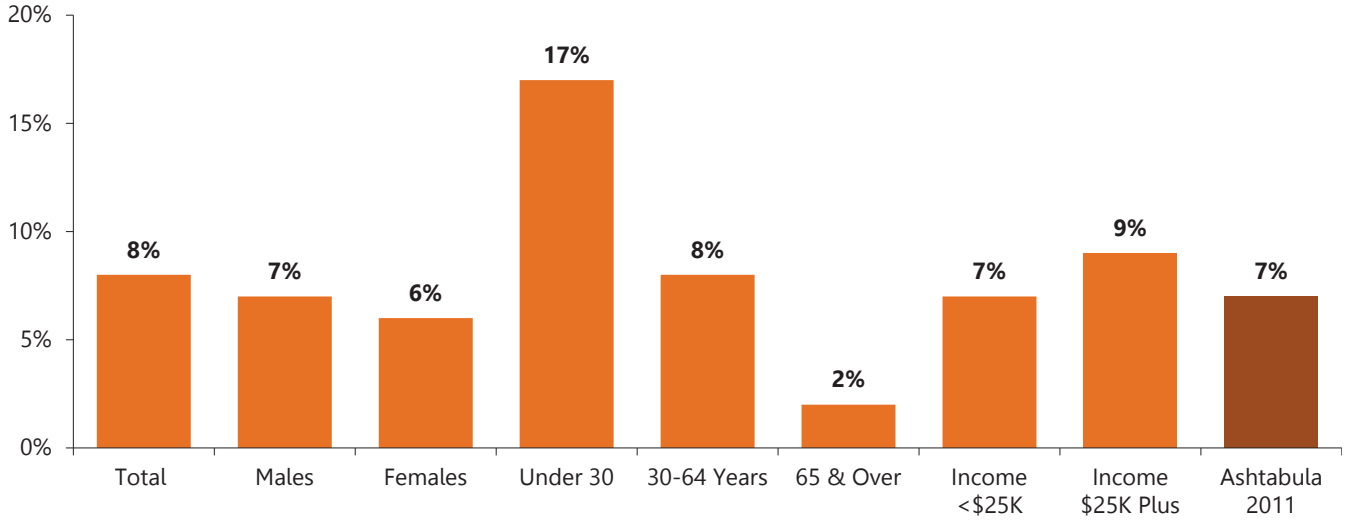



**Percentages may not equal 100% as some respondents answered, "don't know". Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

## ADULT DRUG USE

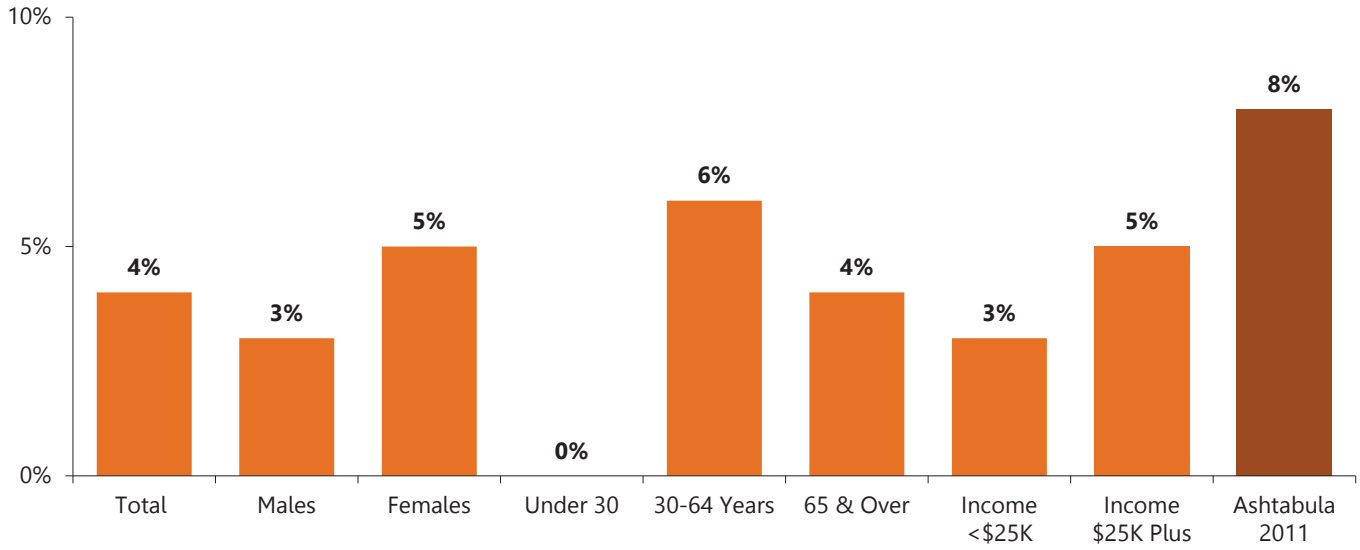
In 2016, 8% of Ashtabula County adults had used recreational marijuana during the past 6 months. Four percent (4%) of adults had used medication not prescribed for them or took more than prescribed to feel good or high and/or more active or alert during the past 6 months.

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




*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 Adult Medication Misuse in Past 6 Months***




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

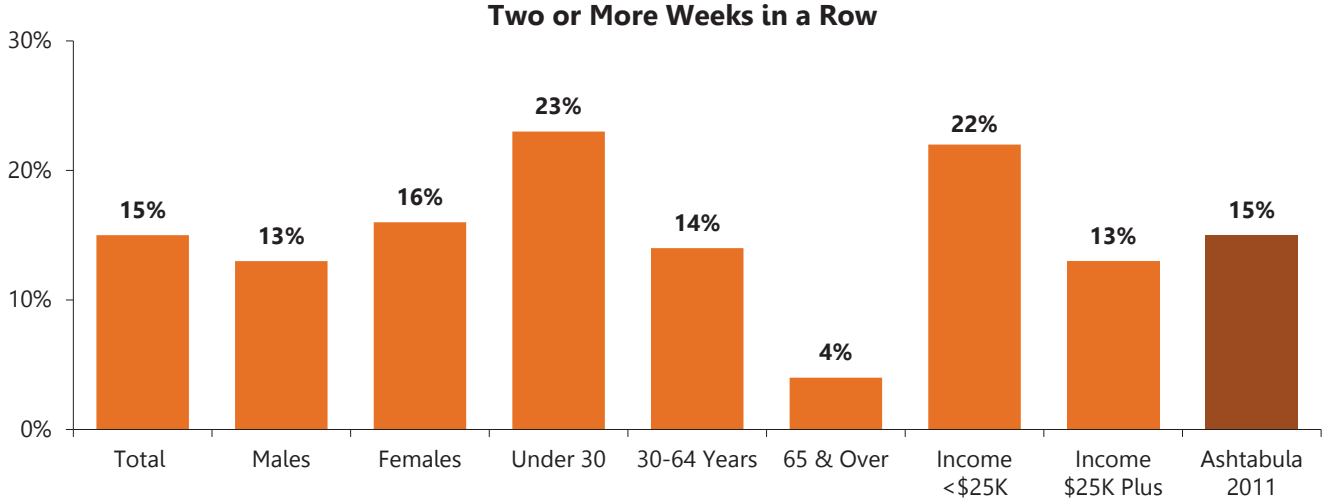
### ADULT SEXUAL BEHAVIOR

In 2016, more than two-thirds (69%) of Ashtabula County adults had sexual intercourse. Nine percent of adults had more than one partner. CDC estimates that youth ages 15-24 make up just over one quarter of the sexually active population, but account for half of the 20 million new sexually transmitted infections that occur in the United States each year *(Source: CDC, STDs in Adolescents and Young Adults, 2016 STD Surveillance).*

### ADULT MENTAL HEALTH

In 2016, 7% of Ashtabula County adults considered attempting suicide. 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.

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



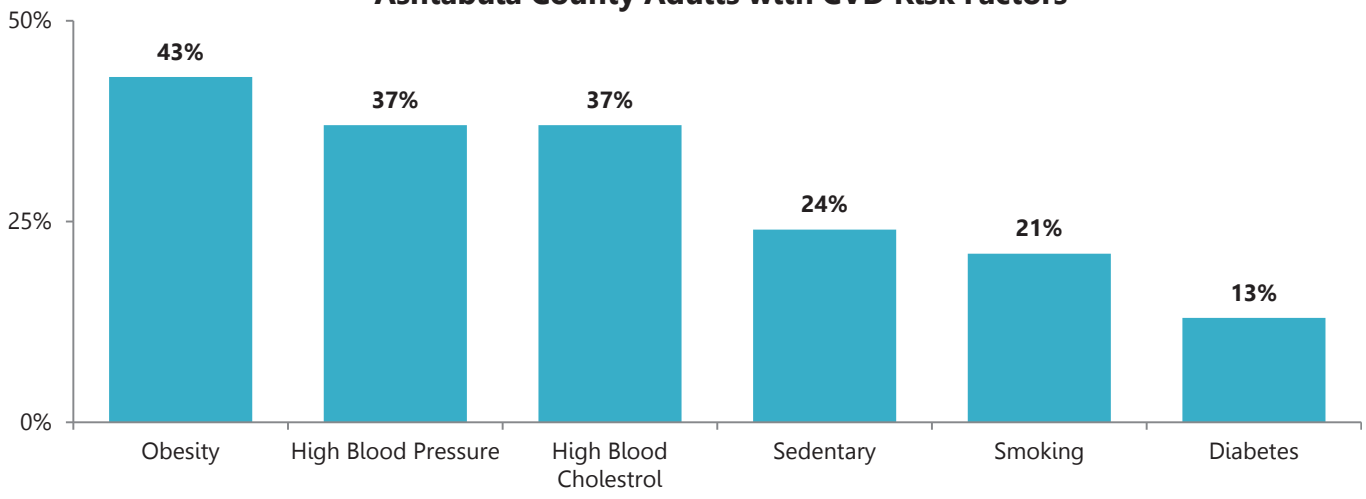

*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

## Data Summary | Chronic Disease

### CARDIOVASCULAR HEALTH

Five percent (5%) of adults had survived a heart attack and 4% had survived a stroke at some time in their life. More than one-third (37%) of Ashtabula County adults had been diagnosed with high blood pressure, 37% had high blood cholesterol, 43% were obese, and 21% were smokers, four known risk factors for heart disease and stroke.

**Ashtabula County Adults with CVD Risk Factors**

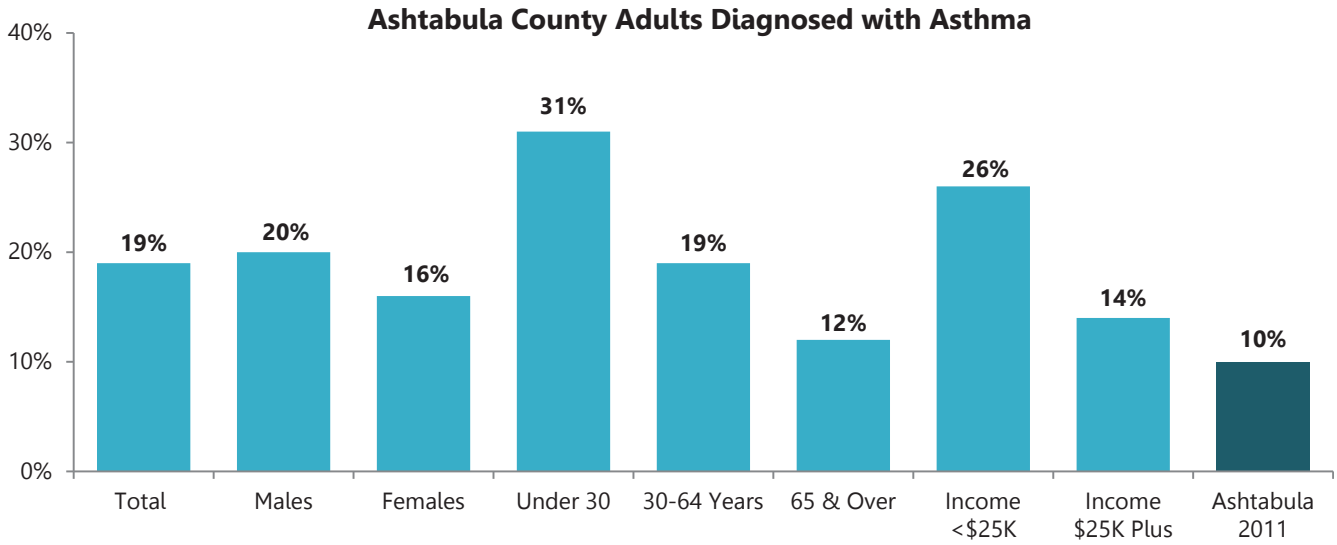


## CANCER

In 2016, 8% of Ashtabula County adults had been diagnosed with cancer at some time in their life. The Ohio Department of Health (ODH) indicates that from 2014-2016, cancers caused 21% of all Ashtabula County resident deaths. The American Cancer Society advises that avoiding tobacco products, maintaining a healthy weight, adopting a physically active lifestyle, eating more fruits and vegetables, limiting alcoholic beverages and early detection may reduce overall cancer deaths.

## ASTHMA

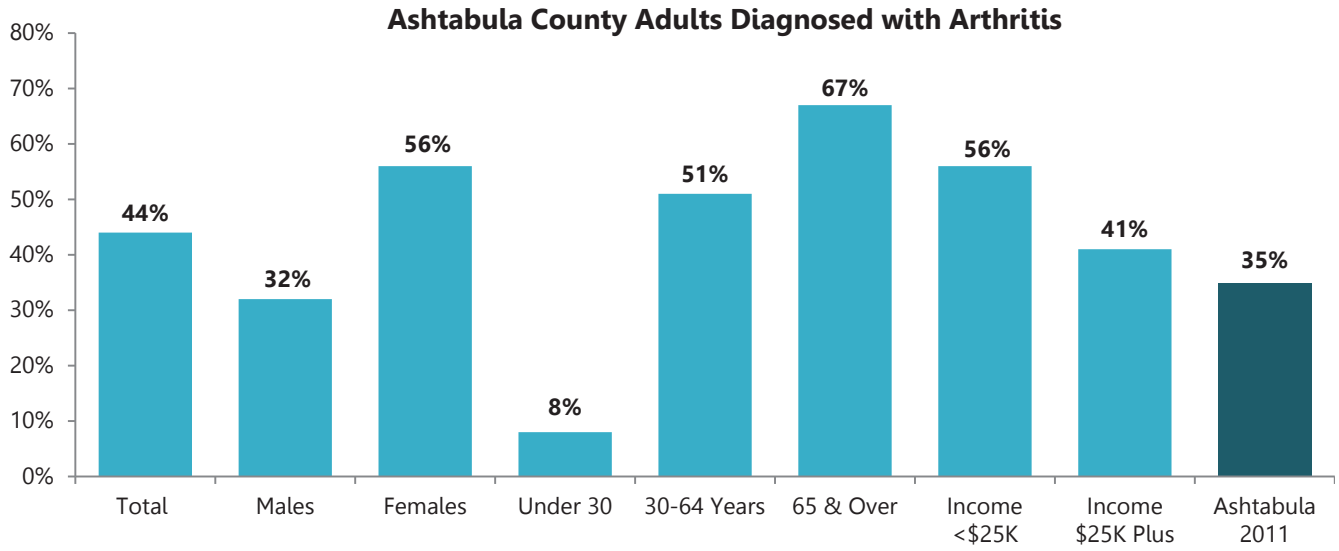
In 2016, 19% of Ashtabula County adults had been diagnosed with asthma.




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

## ARTHRITIS

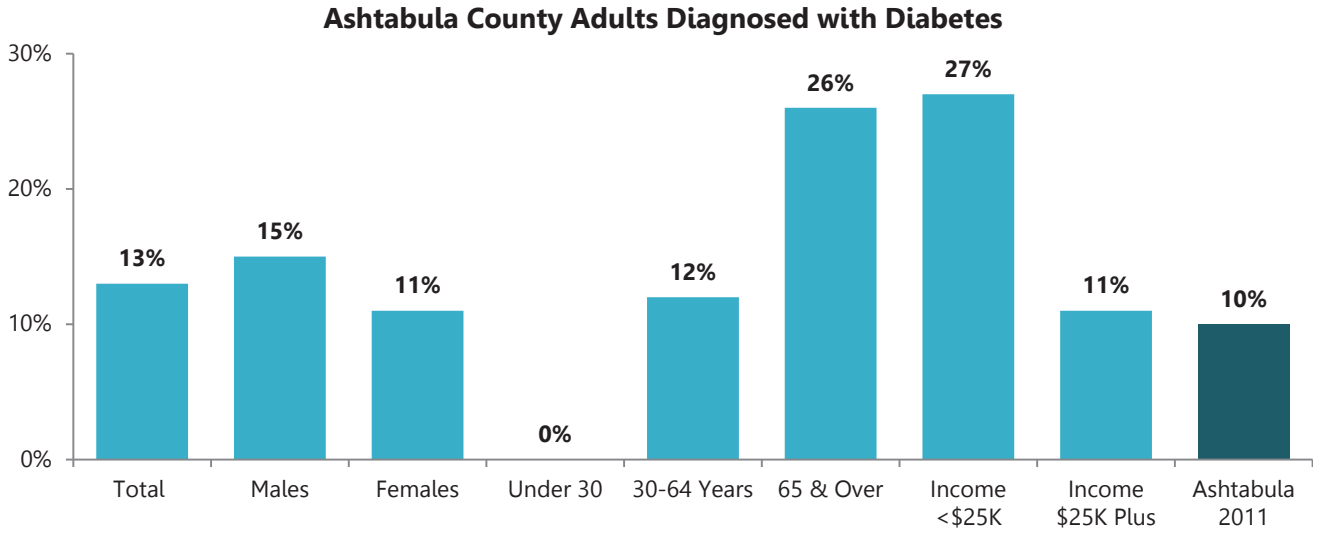
In 2016, 44% of Ashtabula County adults were diagnosed with arthritis. The 2016 BRFSS indicated that 31% of Ohio adults and 26% of U.S. adults were told they have arthritis.




*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

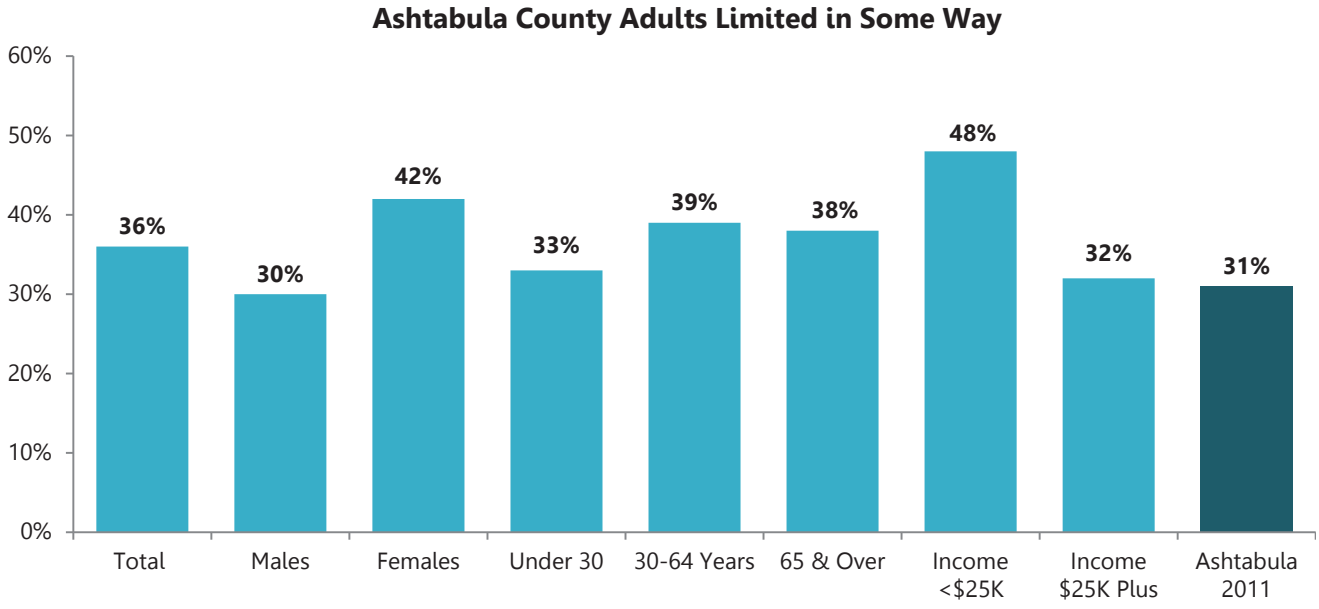
In 2016, 13% of Ashtabula County adults had been diagnosed with diabetes. Two-fifths (40%) of adults with diabetes rated their health as fair or poor.




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

## QUALITY OF LIFE

In 2016, 36% of Ashtabula County adults were limited in some way because of a physical, mental or emotional problem.



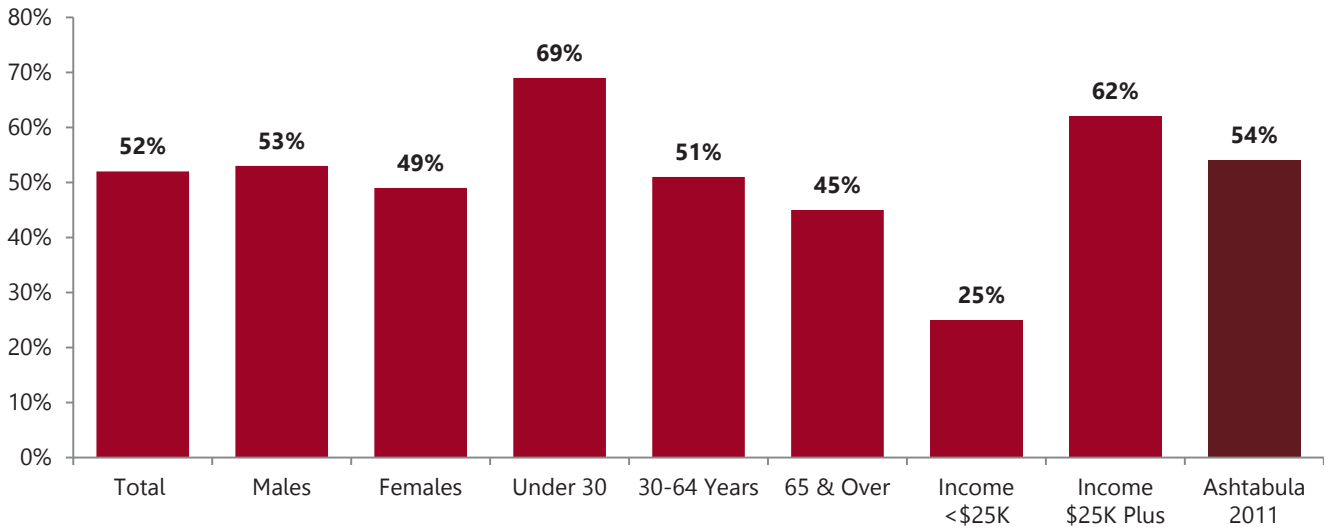

*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

## Data Summary | Social Conditions

### SOCIAL DETERMINANTS OF HEALTH

In 2016, 18% of Ashtabula County adults needed help meeting their general daily needs. Fifty-two percent (52%) of adults reported having firearms in and around their homes.

**Ashtabula County Adults With a Firearm in the Home**




*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 three issues that threatened their health in the past year: insects (13%), mold (8%), and air quality (5%). Seventy-six percent (76%) of adults reported they had a working smoke detector in their home.

### PARENTING

In 2016, more than four-fifths (81%) of parents indicated their child had received all recommended immunizations. Fifty-nine percent (59%) of parents discussed dating and relationships with their 10-to-17-year-old child.

# Adult Trend Summary

Ashtabula County primary data was collected through local surveys. The comparative Ohio and U.S. data was compiled through the CDC's Behavioral Risk Factor Surveillance System data, unless reported otherwise.

| Adult Variables | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Health Status** | | | | |
| **Rated health as excellent or very good** | 48% | 43% | 51% | 52% |
| **Rated general health as fair or poor** | 19% | 22% | 18% | 17% |
| **Average days that physical health not good in past month** | N/A | 5.8 | 3.7‡ | 3.8‡ |
| **Average days that mental health not good in past month** | N/A | 7.0 | 4.0‡ | 3.8‡ |
| **Healthcare Coverage, Access, and Utilization** | | | | |
| **Uninsured** | 17% | 8% | 7% | 10% |
| **Had at least one person they thought of as their personal doctor or healthcare provider** | N/A | 53% | 83% | 77% |
| **Visited a doctor for a routine checkup in the past year** | 48% | 64% | 75% | 71% |
| **Diabetes, Asthma, and Arthritis** | | | | |
| **Had been diagnosed with diabetes** | 10% | 13% | 11% | 11% |
| **Had been diagnosed with asthma** | 10% | 19% | 14% | 14% |
| **Had been diagnosed with arthritis** | 35% | 44% | 31% | 26% |
| **Cardiovascular Health** | | | | |
| **Had angina or coronary heart disease** | N/A | 5% | 5% | 4% |
| **Had a heart attack** | 7% | 5% | 5% | 4% |
| **Had a stroke** | 6% | 4% | 4% | 3% |
| **Had been diagnosed with high blood pressure** | 31% | 37% | 34%* | 31%* |
| **Had been diagnosed with high blood cholesterol** | 34% | 37% | 37%* | 36%* |
| **Had blood cholesterol checked within the past 5 years** | N/A | 78% | 78%* | 78%* |
| **Weight Status** | | | | |
| **Overweight** | 36% | 30% | 35% | 35% |
| **Obese** | 32% | 43% | 32% | 30% |
| **Alcohol Consumption** | | | | |
| **Current Drinker** (drank alcohol at least once in the past month) | 51% | 49% | 53% | 54% |
| **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% | 18% | 17% |
| **Tobacco Use** | | | | |
| **Current smoker** (currently smoke some or all days) | N/A | 21% | 23% | 17% |
| **Former smoker** (smoked 100 cigarettes in lifetime & now do not smoke) | N/A | 30% | 24% | 25% |

*N/A - Not available*
*‡2015 BRFSS Data as compiled by 2017 County Health Rankings*
**2015 BRFSS Data*
*Indicates alignment with the Ohio State Health Assessment*

Ashtabula County primary data was collected through local surveys. The comparative Ohio and U.S. data was compiled through the CDC's Behavioral Risk Factor Surveillance System data, unless reported otherwise.

| Adult Variables | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Drug Use** | | | | |
| **Adults who used recreational marijuana in the past 6 months** | 7% | 8% | N/A | N/A |
| **Adults who misused prescription drugs in the past 6 months** | 8% | 4% | N/A | N/A |
| **Sexual Behavior** | | | | |
| **Had more than one sexual partner in past year** | 4% | 3% | N/A | N/A |
| **Preventive Medicine** | | | | |
| **Had a pneumonia vaccine** (age 65 and older) | N/A | 69% | 75% | 73% |
| **Had a flu vaccine in the past year** (ages 65 and over) | 62% | 70% | 57% | 58% |
| **Had a shingles or Zoster vaccination in lifetime** | N/A | 15% | 21%** | 22%** |
| **Had a clinical breast exam in the past two years** (age 40 and older) | 69% | 70% | N/A | N/A |
| **Had a mammogram in the past two years** (age 40 and older) | N/A | 63% | 74% | 72% |
| **Had a Pap smear in the past three years** | N/A | 63% | 82%¥ | 80%¥ |
| **Had a digital rectal exam within the past year** | 24% | 16% | N/A | N/A |
| **Quality of Life** | | | | |
| **Limited in some way because of physical, mental or emotional problem** | 31% | 36% | 21%* | 21%* |
| **Mental Health** | | | | |
| **Considered attempting suicide in the past year** | 8% | 7% | N/A | N/A |
| **Two or more weeks in a row felt sad or hopeless** | 15% | 15% | N/A | N/A |
| **Oral Health** | | | | |
| **Adults who have visited the dentist in the past year** | 61% | 60% | 68% | 66% |
| **Adults who had one or more permanent teeth removed** | N/A | 56% | 45% | 43% |
| **Adults 65 years and older who had all their permanent teeth removed** | N/A | 17% | 17% | 14% |

*N/A - Not available*
**2015 BRFSS Data*
***2014 BFRSS Data*
*¥ Ohio and U.S. BRFSS reports women ages 21-65*
*Indicates alignment with the Ohio State Health Assessment*

# Evaluation of Impact

University Hospitals Geneva and Conneaut Medical Centers

In their 2015 Community Health Needs Assessments, three community health areas were targeted for the UH Geneva and Conneaut Medical Centers' implementation plans. These were chosen as the areas of greatest need where the Medical Centers' leadership felt could benefit from the hospitals' resources and expertise.

The three areas were:

- Limit the burden and decrease the prevalence of chronic diseases in Ashtabula County
- Promote optimal mental health and prevent more suicides
- Increase the percentage of children and youth in Ashtabula County who maintain a healthy weight

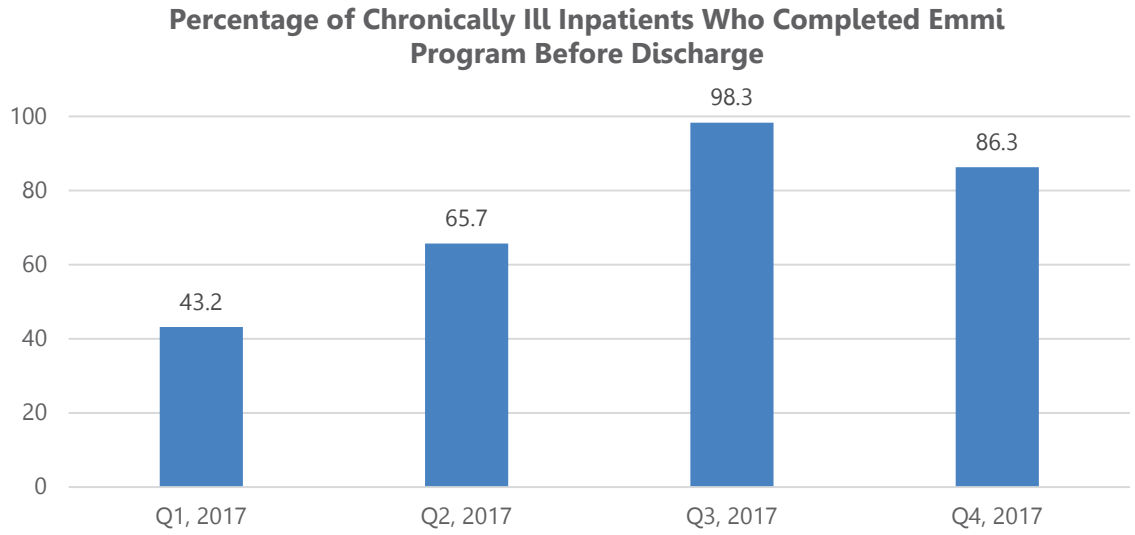
All of these goals and objectives relate to a change in the overall population in Ashtabula County and are too ambitious for two community hospitals to take on alone. Therefore, the hospitals aligned their goals and efforts with several health organization partners, including the County Board of Public Health. Information to assess the impact of the multi-faceted and multi-partner initiative will not be available until early 2018. Those data will be examined through the hospitals' 2019 Community Health Needs Assessments.

The hospitals assumed responsibility for specific programs to address these health issues which within their locus of control. At this point, we can examine their program development progress and impact, which we outline below.

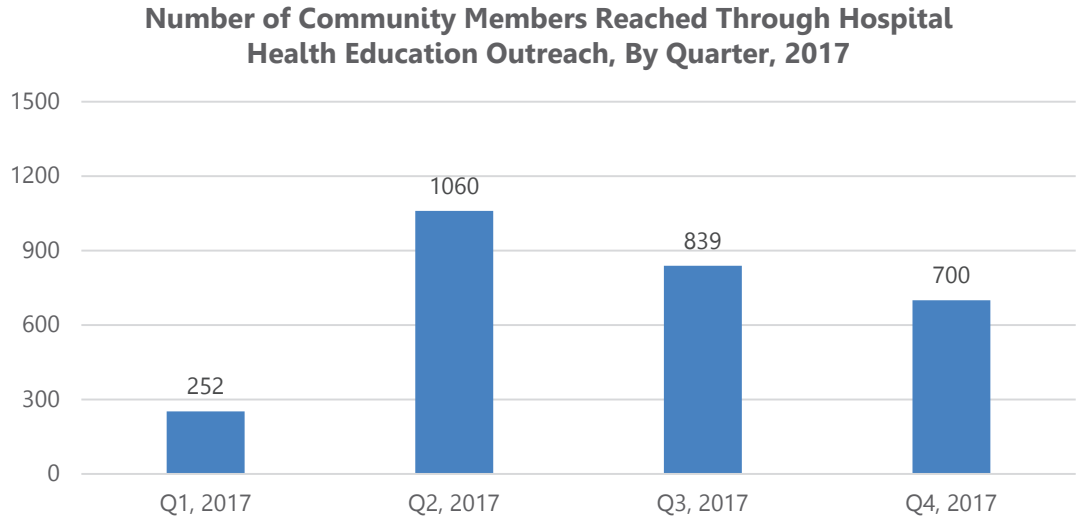
We address those processes and learnings, by health objective, below.

**Limit the burden and decrease the prevalence of chronic diseases in Ashtabula County**

1. EMMI is a technology-based solution designed to engage patients and educate, evaluate and monitor their disease self-management. UH Geneva and Conneaut Medical Centers use EMMI at the bedside for their chronically ill patients as an efficient and effective way to engage patients in their own care management. While in 2016 about half of the hospitals' targeted inpatients completed an EMMI program, through focused efforts, participation rates increased throughout 2017. By the end of 2017, nearly all targeted patients completed the program. In addition, 100% of patients in the Hospital to Home program completed education on their disease within 30 days post-discharge.



2. Hospital leadership determined that lack of awareness of support and medical programs for the chronically ill was a barrier to many seeking and obtaining services. Hence, they began a comprehensive series of community education outreach programs. These included diabetic counseling, Hospital-to-Home Program, SMOKELESS Program (tobacco cessation), Stop Bang OSA (sleep apnea screening), and community health forums. While the initial goal was to reach 100 county members in 2017, that goal was far exceeded. In 2017, 2,851 community members participated in an education outreach program.




3. Health screenings and early detection were also focused on to ensure more of those with chronic health issues learn good habits early in the management of their diseases and that they are linked to a healthcare provider to maximize good disease management. Through a series of 5 different community-based screening events in 2017, a total of 325 individuals received positive screenings and were given educational counseling and referred to the proper medical setting for ongoing care. Intent was to provide 5 different health screenings to all participating individuals and, when appropriate, provide referrals to PCP's. Screenings included blood pressure, cholesterol, glucose, potential for obstructive sleep apnea, cancers (skin, lung, breast), and stroke (carotid US screen).

**Promote optimal mental health and prevent more suicides**

Multiple strategies were utilized to address undetected mental health issues and prevent more suicides in Ashtabula County:

In the hospital setting, inpatients were administered screening surveys. Beginning in Q2, 2017, this survey identified a total of 52 inpatients whose screening uncovered vulnerabilities which signaled they could benefit from mental health assistance. All such patients were educated on the resources available to them and referred to appropriate services upon discharge.

Community member educational outreach programs focused on children, youth, and seniors. Programs were held in schools throughout the county and senior facilities and day centers. A total of 1,196 students in grades 3-8 and 11th received evidence-based education on healthy coping skills through the Botvin Lifeskills® program in 2017. A total of 75 seniors participated in educational programs related to identification of and treatment options for depression.

In addition, a particular focus on mental health was layered onto the Hospital-to-Home program for those aged 60 and over. Through that effort, and the other general community health screening programs, a total of 117 community members with risk factors were identified, counseled and referred to appropriate services. The general senior community screenings included the use of the Geriatric Depression Scale for 60 and over. Its intent is to identify potential mental health issues and/or signs of dementia/Alzheimer's Disease for referral as needed to the Norma N. Chapman Senior Assessment Program at University Hospitals Geauga Medical Center.

**Increase the percentage of children and youth in Ashtabula County who maintain a healthy weight**

Numerous nutrition and exercise programs were supported by the hospitals throughout 2017. These included healthy cooking demonstrations, community "walks," and local food bank support. These were designed to improve the quality of day-to-day family eating habits throughout the county. In the educational programs, a total of 330 adults received diet and exercise education.

Programs targeting children specifically were conducted during the summer months. A daily USDA approved lunch was provided to 440 school-aged children each week. Cooking demonstrations, using vegetables, were conducted throughout the summer months at various camp and childcare programs.

Going forward, the CDC-National Diabetes Prevention Program (Prevent T-2) implementation began in January 2018 to address increase in community diabetes numbers. This program will be evaluated also in the 2019 CHNA.

# HEALTH CARE ACCESS: HEALTH CARE COVERAGE

## Key Findings

*In 2016, 8% of Ashtabula County adults were without health care coverage. Those most likely to be uninsured were males and those under the age of 30. In Ashtabula County, 19.6% of all residents live below the poverty level (Source: U.S. Census, 2012-2016 American Community Survey 5 Year Estimates).*

## General Health Coverage

- In 2016, 92% Ashtabula County adults had health care coverage, leaving 8% who were uninsured. The 2016 BRFSS reported uninsured prevalence rates of 7% for Ohio and 10% for the U.S.

- The following types of health care coverage were used: employer (36%), Medicare (25%), Medicaid or medical assistance (17%), someone else's employer (16%), self-paid plan (7%), Health Insurance Marketplace (3%), and military or VA (2%)

**8% of Ashtabula County adults were uninsured.**

- Ashtabula County adult health care coverage included the following: medical (96%), prescription coverage (92%), immunizations (76%), outpatient therapy (75%), preventive health (73%), dental (61%), vision (61%), mental health (59%), durable medical equipment (42%), alcohol and drug treatment (39%), home care (31%), skilled nursing/assisted living (31%), hospice (26%), and transportation (16%).

- The top reasons uninsured adults gave for being without health care coverage were:
    1. They lost their job or changed employers (41%)
    2. They could not afford to pay the insurance premiums (41%)
    3. Their employer does not/stopped offering coverage (20%)

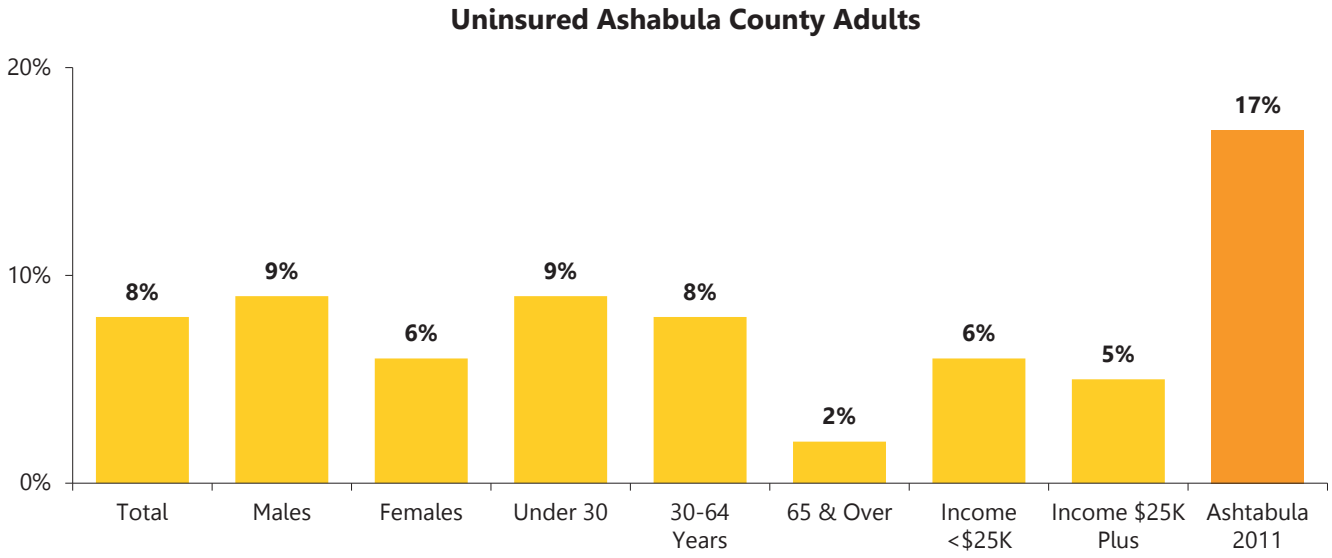
*Note: Percentages do not equal 100% because respondents could select more than one reason*

| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Uninsured** | 17% | 8% | 7% | 10% |

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Uninsured** | 8% | 17% | 5% |

*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 percentages of Ashtabula County adults who were uninsured. Examples of how to interpret the information in the graph include: 8% of all Ashtabula County adults were uninsured, including 6% of those with incomes less than $25,000 and 9% under the age of 30. The pie chart shows sources of Ashtabula County adults' health care coverage.***

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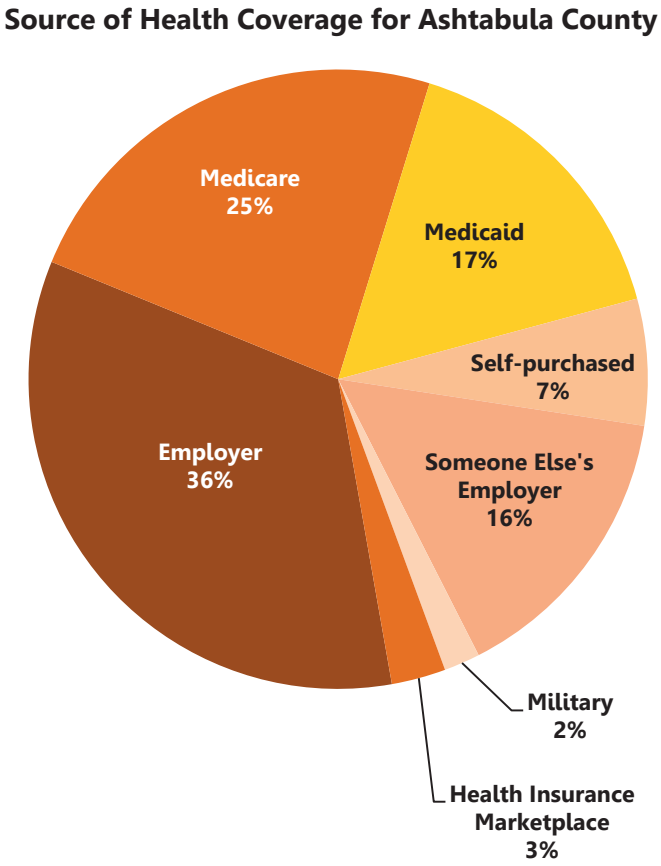


*The following chart shows what is included in Ashtabula County adults' insurance coverage.*

| Health Coverage Includes: | Yes | No | Don't Know |
|---|---|---|---|
| **Medical** | 96% | 1% | 3% |
| **Prescription Coverage** | 92% | 6% | 2% |
| **Immunizations** | 76% | 2% | 22% |
| **Outpatient Therapy** | 75% | 3% | 22% |
| **Preventive Health** | 73% | 3% | 24% |
| **Dental** | 61% | 35% | 4% |
| **Vision** | 61% | 33% | 6% |
| **Mental Health** | 59% | 5% | 36% |
| **Durable Medical Equipment** | 42% | 6% | 52% |
| **Alcohol and Drug Treatment** | 39% | 8% | 53% |
| **Home Care** | 31% | 9% | 60% |
| **Skilled Nursing/Assisted Living** | 31% | 9% | 60% |
| **Hospice** | 26% | 5% | 69% |
| **Transportation** | 16% | 27% | 56% |

## Healthy People 2020
### Access to Health Services (AHS)

| Objective | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 | Healthy People 2020 Target |
|---|---|---|---|---|
| **AHS-1.1: Persons under age of 65 years with health care insurance** | 100% age 20-24<br>80% age 25-34<br>90% age 35-44<br>93% age 45-54<br>94% age 55-64 | 90% age 18-24<br>89% age 25-34<br>91% age 35-44<br>94% age 45-54<br>94% age 55-64 | 85% age 18-24<br>84% age 25-34<br>87% age 35-44<br>90% age 45-54<br>93% age 55-64 | 100% |

*Note: U.S. baseline is age-adjusted to the 2000 population standard*
*(Sources: Healthy People 2020 Objectives, 2016 BRFSS, 2016 Ashtabula County Health Assessment)*

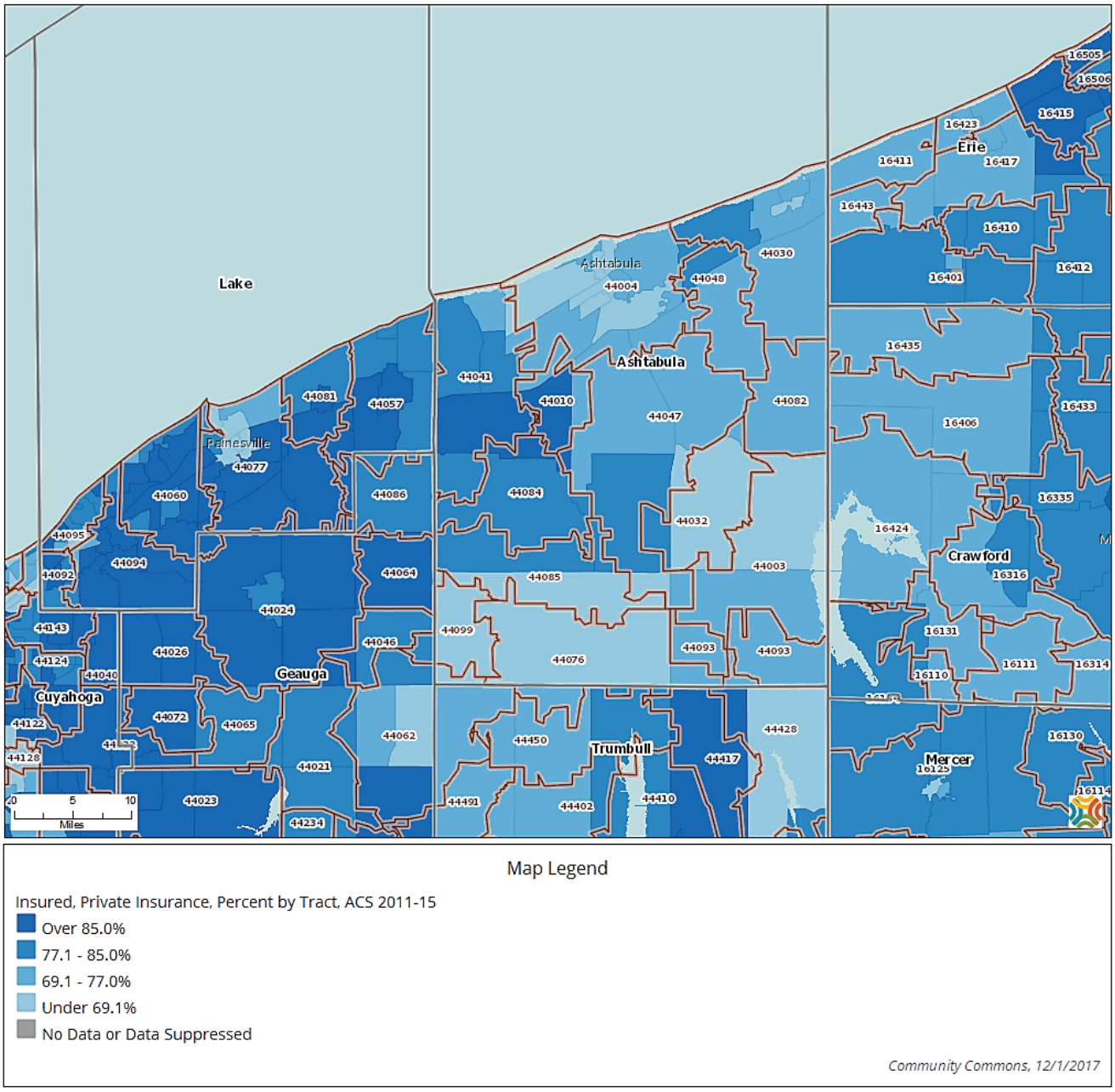
## University Hospital Discharges for Patients without Medical Insurance, 2016

| | Patients Age 18-64 Years | Patients Age 65 Years and Older |
|---|---|---|
| **Patients without Medical Insurance at Discharge** | 17 of 547 (3.2%) | 0 of 1,263 (0%) |

*(Source: University Hospital Discharge Data, 2016, as analyzed and reported by Cypress Research)*

## Insurance Type by Zip Code Tract Area, American Community Survey, 2011-2015

### Private Insurance




Map Legend

Insured, Private Insurance, Percent by Tract, ACS 2011-15

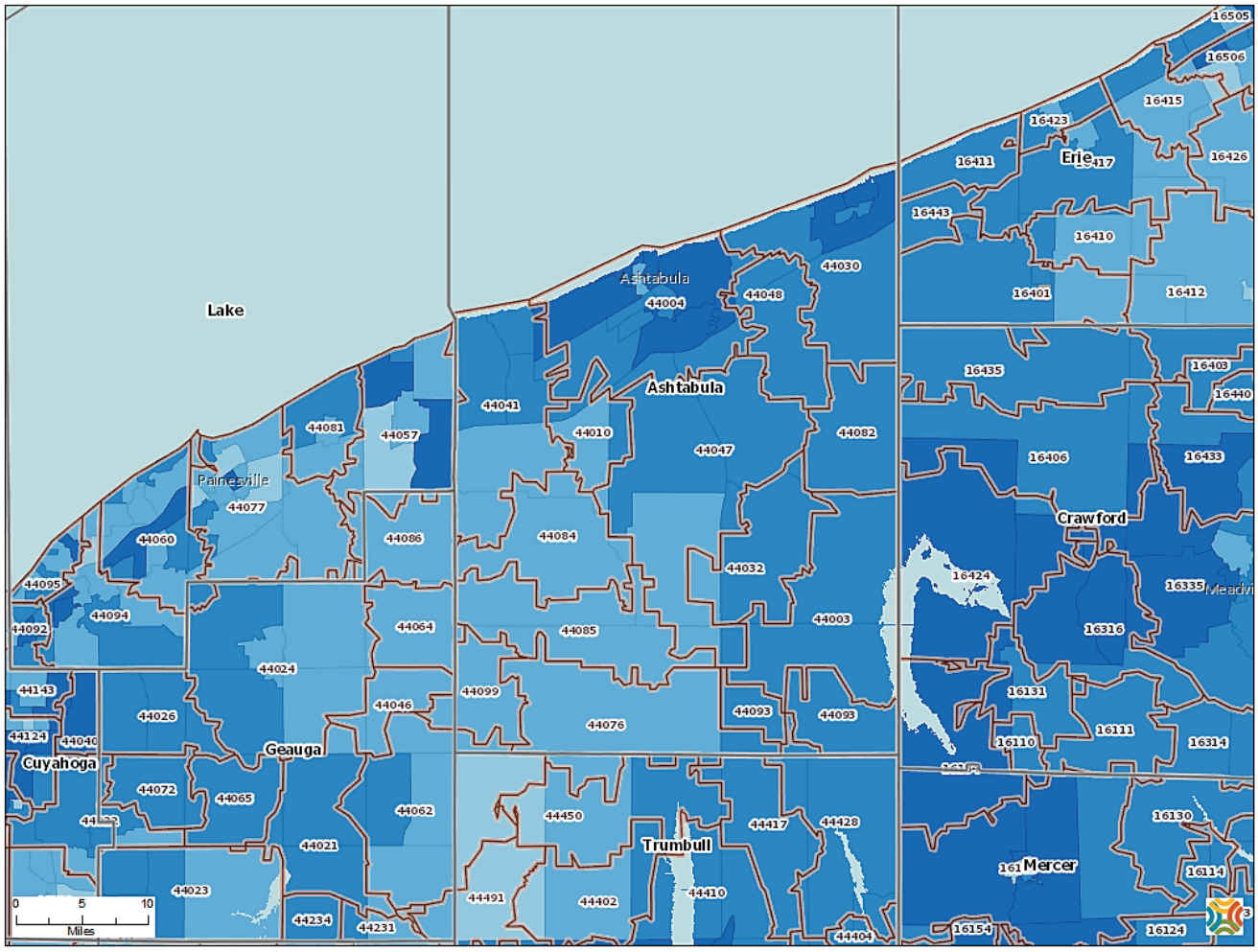
- Over 85.0%
- 77.1 - 85.0%
- 69.1 - 77.0%
- Under 69.1%
- No Data or Data Suppressed

*Community Commons, 12/1/2017*

*(Source: U.S. Census Bureau, American Community Survey: 2011-2015 as compiled by Community Commons)*

## Insurance Type by Zip Code Tract Area, American Community Survey, 2011-2015

### Medicare




Map Legend

Insured, Medicare, Percent by Tract, ACS 2011-15

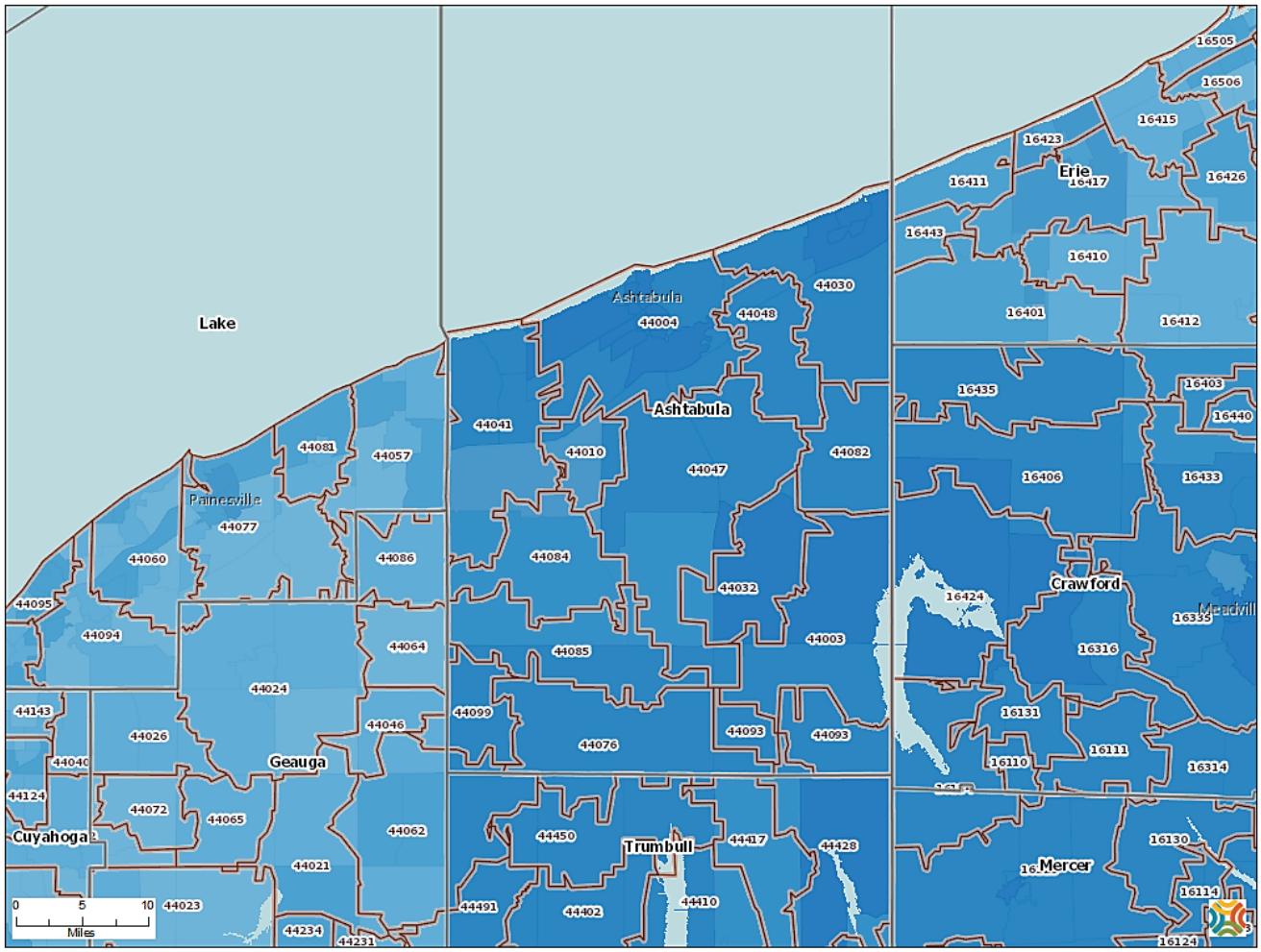
- Over 25.0%
- 20.1 - 25.0%
- 15.1 - 20.0%
- Under 15.1%
- No Data or Data Suppressed

*Community Commons, 12/1/2017*

*(Source: U.S. Census Bureau, American Community Survey: 2011-2015 as compiled by Community Commons)*

## Insurance Type by Zip Code Tract Area, American Community Survey, 2011-2015

### Public-Funded Insurance




Map Legend

Insured, Medicare, Percent by County, ACS 2011-15
- Over 25.0%
- 20.1 - 25.0%
- 15.1 - 20.0%
- Under 15.1%
- No Data or Data Suppressed

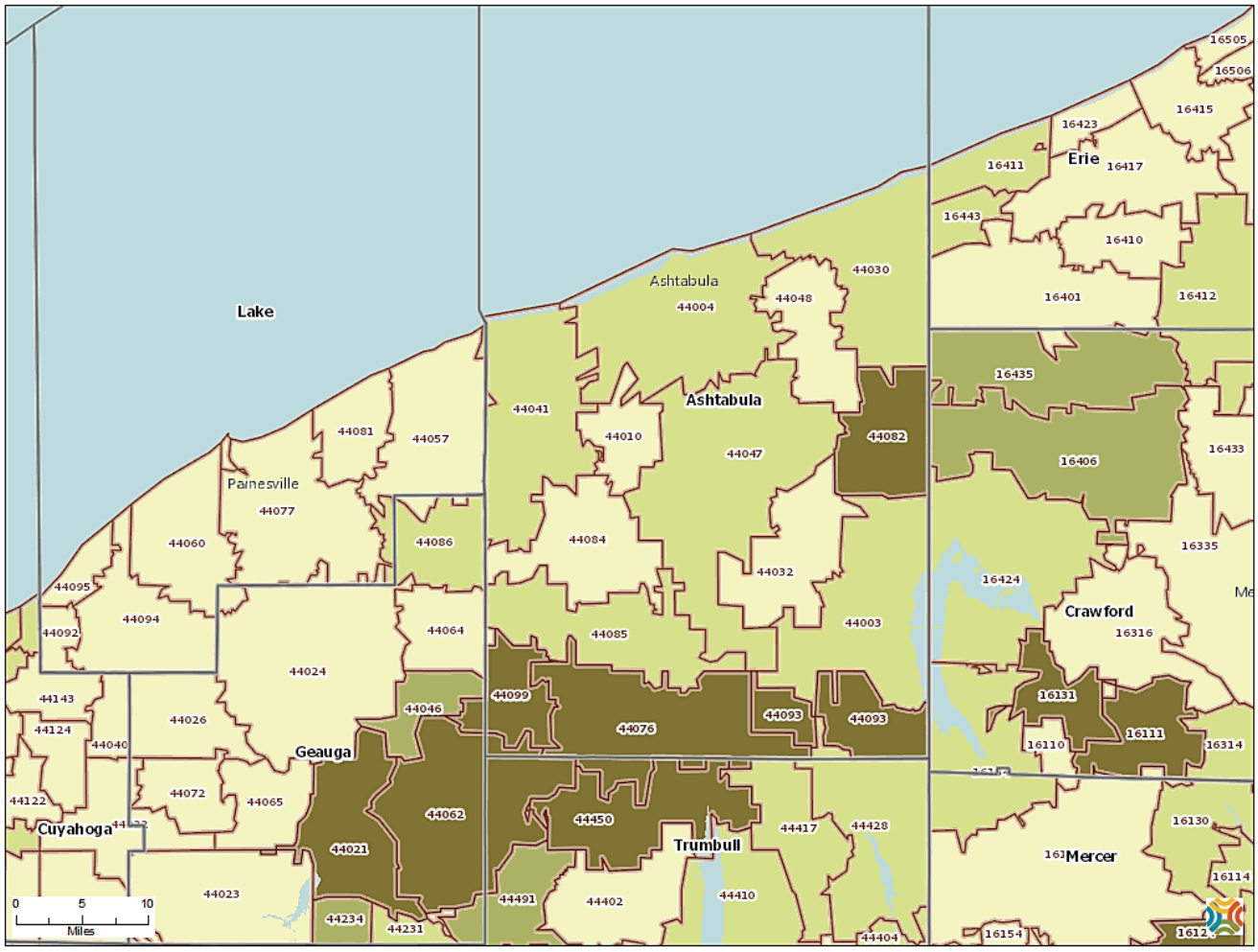
Insured, Public-Funded Insurance, Percent by Tract, ACS 2011-15
- Over 45.0%
- 35.1 - 45.0%
- 25.1 - 35.0%
- Under 25.1%
- No Data or Data Suppressed

*Community Commons, 12/1/2017*

*(Source: U.S. Census Bureau, American Community Survey: 2011-2015, as compiled by Community Commons)*

## Insurance Type by Zip Code Tract Area, American Community Survey, 2011-2015

### Uninsured




*(Source: U.S. Census Bureau, American Community Survey: 2011-2015, as compiled by Community Commons)*

# HEALTH CARE ACCESS: ACCESS AND UTILIZATION

## Key Findings

*In 2016, 64% of Ashtabula County adults had visited a doctor for a routine checkup in the past year. Seventy-five percent (75%) of adults went outside of Ashtabula County for health care services in the past year.*

## Health Care Access

- Nearly two-thirds (64%) of Ashtabula County adults visited a doctor for a routine checkup in the past year, increasing to 78% 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 healthcare provider. Thirty percent (30%) of adults had more than one person they thought of as their personal healthcare provider, and 15% did not have one at all.

- Sixty-four percent (64%) of adults had used an emergency room for their health care for the following reasons: serious illness/injury (50%), could not get in to see their primary physician because of time of day/too long of a wait (16%), doctor told them to go there (11%), did not have a primary physician (2%), 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 (69%), Internet (8%), urgent care center (6%), chiropractor (5%), family and friends (5%), hospital emergency room (4%), alternative therapies (1%), Department of Veteran's Affairs (VA) (1%), public health department or community health center (1%), telemedicine (1%), and some other kind of place (<1%). Seven percent (7%) 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 (36%), could not get time off work (15%), difficult to get an appointment (15%), doctor would not take their insurance (14%), inconvenient hours (14%), worried they might find something wrong (9%), difficult to find/no transportation (6%), frightened of the procedure or doctor (5%), do not trust or believe doctors (4%), could not find childcare (1%), discrimination (<1%), and some other reason (5%).

- Ashtabula County adults did not get the following major or preventive care because of cost: lab testing (9%), medication (9%), mammogram (7%), pap smear (7%), colonoscopy (6%), surgery (5%), weight loss program (5%), immunizations (4%), mental health services (3%), smoking cessation (2%), alcohol/drug treatment (1%), and family planning services (<1%).

- In the past year, adults felt their health care experiences were the same as other races (56%), better than other races (4%), worse than other races (1%), and worse than some races but better than other races (<1%). Three percent (3%) of adults only encountered people of the same race, and 30% did not know how their experiences compared to people of other races.

### Key Facts about the Uninsured Population

- Studies repeatedly demonstrate that the uninsured are less likely than those with insurance to receive preventive care and services for major health conditions and chronic diseases.
- Part of the reason for poor access among uninsured is that 50% do not have a regular place to go when they are sick or need medical advice.
- One in five (20%) nonelderly adults without coverage say that they went without care in the past year because of cost compared to 3% of adults with private coverage and 8% of adults with public coverage.
- In 2016, uninsured nonelderly adults were three times as likely as adults with private coverage to say that they postponed or did not get a needed prescription drug due to cost.
- Because people without health coverage are less likely than those with insurance to have regular outpatient care, they are more likely to be hospitalized for avoidable health problems and to experience declines in their overall health.

*(Source: The Henry Kaiser Family Foundation, Key Facts about the*

- Three-quarters (75%) of adults went outside of Ashtabula County for the following health care services in the past year: specialty care (35%), dental services (28%), primary care (26%), obstetrics/gynecology/NICU (16%), cardiac care (10%), orthopedic care (8%), pediatric care (5%), mental health care/counseling (3%), cancer care (2%), pediatric therapies (2%), addiction services (1%), and other services (13%).

- Half (50%) of Ashtabula County adults traveled less than 15 miles to get to their healthcare provider. Thirty-eight percent (38%) traveled 15 to 30 miles, and 12% traveled more than 30 miles.

- Ashtabula County adults had the following problems when they needed health care in the past year: could not get appointments when they wanted them (7%), had to change doctors because of their healthcare plan (7%), could not find a doctor they were comfortable with (6%), did not have enough money to pay for health care or insurance (6%), too busy to get the healthcare they needed (6%), could not find a doctor to take them as a patient (5%), did not have transportation (4%), healthcare plan did not allow them to see doctors in Ashtabula County (3%), too embarrassed to seek help (2%), did not have child care (1%), did not get health services because they were concerned about their confidentiality (1%), and other problems that prevented them from getting health care (2%).

- More than one-third (37%) 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: no prescriptions to be filled (35%), cost (32%), they did not think they needed it (24%), there was no generic equivalent (13%), they did not have insurance (13%), side effects (10%), they stretched their current prescription by taking less than prescribed (8%), they were taking too many medications (3%), and transportation (1%).

## Availability of Services

- Ashtabula County adults reported they had looked for the following programs for themselves or a loved one: depression, anxiety, or other mental health problem (15%); family planning (12%); disability (10%); weight problem (10%); end-of-life/hospice care (6%); marital/family problems (6%); tobacco cessation (6%); alcohol abuse (3%); drug abuse (2%); and gambling abuse (1%).

| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Had at least one person they thought of as their personal doctor** | N/A | 53% | 83% | 77% |
| **Visited a doctor for a routine checkup in the past year** | 48% | 64% | 75% | 71% |

*N/A- Data not available*

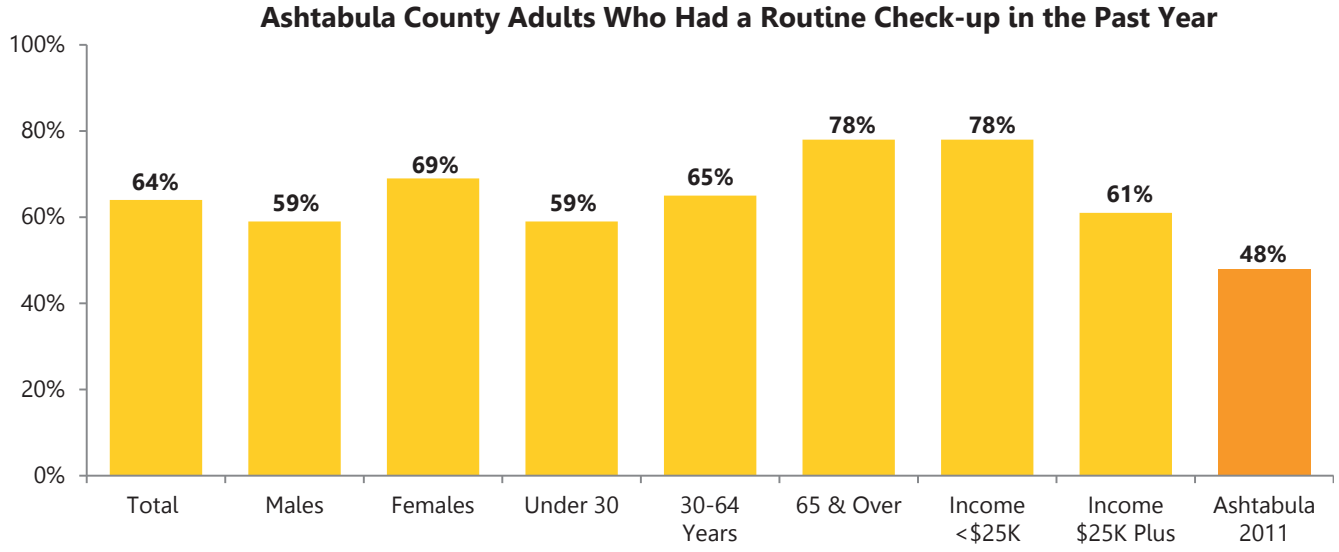
| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Had at least one person they thought of as their personal doctor** | 53% | 51% | 63% |
| **Visited a doctor for a routine checkup in the past year** | 64% | 61% | 65% |

*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 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, Other Mental Health Problem** (15% of all adults looked) | 27% | 73% |
| **Family Planning** (12% of all adults looked) | 2% | 98% |
| **Disability** (10% of all adults looked) | 15% | 85% |
| **Weight Problem** (10% of all adults looked) | 39% | 61% |
| **End-of-Life/Hospice Care** (6% of all adults looked) | 21% | 79% |
| **Marital/Family Problems** (6% of all adults looked) | 36% | 64% |
| **Tobacco Cessation** (6% of all adults looked) | 55% | 45% |
| **Alcohol Abuse** (3% of all adults looked) | 10% | 90% |
| **Drug Abuse** (2% of all adults looked) | 11% | 89% |
| **Gambling Abuse** (1% of all adults looked) | 100% | 0% |

***The following graph shows the percentage of Ashtabula County adults who had a routine check-up in the past year. Examples of how to interpret the information on the first graph include: 64% of all Ashtabula County adults have had a routine check-up in the past year, including 69% of all Ashtabula County females and 78% of those 65 years and older.***




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

## University Hospital Discharge Data for Adults 18-64 Years of Age, 2016

- The data have been compiled into two age groups (18-64 years, and 65 or more years) and by gender. This is how the federal government typically reports discharge data.
- Data was unavailable for Ashtabula County residents 0-17 years of age.
- There were 547 Ashtabula County adults 18-64 years of age who were discharged from an acute care facility in 2016.
- The table for adults 18-64 years of age indicates that the three most frequent discharge conditions were: diseases of the respiratory system (22.7%), diseases of the digestive system (16.3%), and diseases of the musculoskeletal system and connective tissues (15.0%).

| Disease Grouping | ICD-10 Codes | Total n (%) | Females n(%) | Males n (%) |
|---|---|---|---|---|
| **Total** | | 547 (100%) | 283 (100%) | 264 (100%) |
| | | | | |
| **Diseases of the respiratory system** | J00-J98 | 124 (22.7%) | 68 (24.0%) | 56 (21.2%) |
| **Diseases of the digestive system** | K00-K92 | 89 (16.3%) | 43 (15.2%) | 46 (17.4%) |
| **Diseases of the musculoskeletal system and connective tissue** | M00-M99 | 82 (15.0%) | 43 (15.2%) | 39 (14.8%) |
| **Diseases of the circulatory system** | I00-I99 | 55 (10.1%) | 22 (7.8%) | 33 (12.5%) |
| **Infectious and parasitic diseases** | A00-B99 | 46 (8.4%) | 20 (7.1%) | 26 (9.8%) |
| **Diseases of the skin and subcutaneous tissue** | L00-L98 | 37 (6.8%) | 14 (4.9%) | 23 (8.7%) |
| **Diseases of the genitourinary system** | N00-N98 | 32 (5.9%) | 27 (9.5%) | 5 (1.9%) |
| **Endocrine, nutritional and metabolic diseases** | E00-E88 | 25 (4.6%) | 17 (6.0%) | 8 (3.0%) |
| **Injury** | S00-T34 | 18 (3.3%) | 8 (2.8%) | 10 (3.8%) |
| **Other (not classified elsewhere)** | | 30 (5.5%) | 17 (6.0%) | 13 (4.9%) |

** Fewer than 5 cases were not reported to protect privacy.*

*(Source: University Hospital Discharge Data, 2016, as analyzed and reported by Cypress Research)*

## University Hospital Discharge Data for Adults 65 Years of Age and Older, 2016

- There were 1,263 Ashtabula County adults 65 years of age and older discharged from a UH Hospital in 2016.
- The table for adults 65 years of age and older indicates the three most frequent discharge conditions were: diseases of the respiratory system (24.8%), diseases of the circulatory system (20.7%) and infectious and parasitic diseases (9.6%).

| Disease Grouping | ICD-10 Codes | Total n (%) | Females n (%) | Males n (%) |
|---|---|---|---|---|
| **Total** | | 1,263 (100%) | 755 (100%) | 508 (100%) |
| | | | | |
| **Diseases of the respiratory system** | J00-J98 | 313 (24.8%) | 174 (23.0%) | 139 (27.4%) |
| **Diseases of the circulatory system** | I00-I99 | 261 (20.7%) | 150 (19.9%) | 111 (21.9%) |
| **Infectious and parasitic diseases** | A00-B99 | 121 (9.6%) | 71 (9.4%) | 50 (9.8%) |
| **Diseases of the digestive system** | K00-K92 | 112 (8.9%) | 67 (8.9%) | 45 (8.9%) |
| **Diseases of the genitourinary system** | N00-N98 | 105 (8.3%) | 71 (9.4%) | 34 (6.7%) |
| **Injury** | S00-T34 | 81 (6.4%) | 61 (8.1%) | 20 (3.9%) |
| **Diseases of the musculoskeletal system and connective tissue** | M00-M99 | 62 (4.9%) | 41 (5.4%) | 21 (4.1%) |
| **Diseases of the skin and subcutaneous tissue** | L00-L98 | 42 (3.3%) | 23 (3.0%) | 19 (3.7%) |
| **Endocrine, nutritional and metabolic diseases** | E00-E88 | 40 (3.2%) | 20 (2.6%) | 20 (3.9%) |
| **Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism** | D50-D89 | 13 (1.0%) | 6 (0.8%) | 7 (1.4%) |
| **Diseases of the nervous system and sense organs** | G00-G98 | 10 (0.8%) | 4 (0.5%) | 6 (1.2%) |
| **Cancers (neoplasms)** | C00-D48 | 9 (0.7%) | 6 (0.8%) | 3 (0.6%) |
| **Symptoms, signs, and ill-defined conditions** | R00-R99 | 8 (0.6%) | 5 (0.7%) | 3 (0.6%) |
| **Other (not classified elsewhere)** | | 81 (6.4%) | 53 (7.0%) | 28 (5.5%) |

** Fewer than 5 cases were not reported to protect privacy.*

*(Source: University Hospital Discharge Data, 2016, as analyzed and reported by Cypress Research)*

## Ambulatory Care Sensitive (ACS) Discharges (Primary Diagnosis), Ashtabula County Residents (Hospitalized Anywhere), vs. UH Conneaut or UH Geneva Inpatients, vs. Inpatients in Other Ashtabula County Hospitals, 2016

- **A**mbulatory **C**are **S**ensitive (ACS) conditions or discharges are conditions for which hospital admission could be prevented by interventions in primary care.
- In 2016, there were 15,000 Ashtabula County residents who were discharged, as inpatients, from an acute care hospital. Of those, 7,856 (52.4%) were hospitalized in an Ashtabula County based hospital. Of those in an Ashtabula hospital, 1,812 (23.1%, or 12% of all Ashtabula County hospitalized residents) were in a University Hospitals acute care facility.
- Overall, 15.7% of the hospitalizations of Ashtabula County residents in 2016 were due to an ACS condition. If only those hospitalized in UH Conneaut or Geneva Medical Centers were reviewed, the ACS incidence is much higher (28.1%), likely because those conditions are more likely to be addressed in a community hospital as opposed to a major medical center; that is, most likely a great number of patients requiring hospitalization due to non-ACS diagnoses were instead hospitalized in major medical centers outside of the county.
- The most common ACS condition was Chronic Obstructive Pulmonary Disease, which comprised 25.6% of all Ashtabula residents hospitalized, and 34.6% of UH Conneaut/Geneva Medical Centers hospitalized. A close second ACS condition was congestive heart failure (22.4% of all Ashtabula County hospitalized residents and 24.2% of UH Conneaut/Geneva inpatients) in 2016.
- Among the less common, but not uncommon, ACS conditions were cellulitis (8.9%/10.0%) and diabetes (8.3%/5.5%). All other ACS conditions were the primary diagnosis for fewer than 5% of UH Conneaut/Geneva inpatients.

| | Inpatient in Any Hospital: Ashtabula County Resident | | UH Conneaut or Geneva Hospitals: Inpatient | | Other Ashtabula Hospital: Inpatient | |
|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent |
| **Total** | 15,000 | 100.0% | 1,812 | 100.0% | 6,044 | 100.0% |
| **Total ACS Cases** | 2,538 | 15.7% | 509 | 28.1% | 1,209 | 20.0% |
| Chronic Obstructive Pulmonary Disease | 603 | 4.0% | 176 | 9.7% | 347 | 5.7% |
| Congestive Heart Failure | 529 | 3.5% | 123 | 6.8% | 283 | 4.7% |
| Cellulitis | 211 | 1.4% | 51 | 2.8% | 107 | 1.8% |
| Diabetes | 195 | 1.3% | 28 | 1.5% | 103 | 1.7% |
| Gastrointestinal Obstruction | 156 | 1.0% | 24 | 1.3% | 56 | 0.9% |
| Hip/Femur Fracture (age 45 and older) | 142 | 0.9% | 50 | 2.8% | 58 | 1% |
| Grand Mal Seizure and Other Convulsions | 117 | 0.8% | 1 | 0.1% | 47 | 0.8% |
| Dehydration | 76 | 0.5% | 11 | 0.6% | 51 | 0.8% |
| Asthma | 60 | 0.4% | 4 | 0.2% | 39 | 0.6% |
| Hypertension | 57 | 0.4% | 15 | 0.8% | 18 | 0.3% |
| Gastroenteritis | 53 | 0.4% | 21 | 1.2% | 28 | 0.5% |
| Kidney/Urinary Tract Infection | 47 | 0.3% | 7 | 0.4% | 29 | 0.5% |
| Appendicitis | 34 | 0.2% | 2 | 0.1% | 13 | 0.2% |
| Convulsions/epilepsy (age 6 and older) | 34 | 0.2% | 0 | 0.0% | 12 | 0.2% |
| Convulsions/epilepsy (age 5 and under) | 8 | 0.1% | 0 | 0.0% | 0 | 0.0% |
| Acute Myocardial Infarction | 14 | 0.1% | 0 | 0.0% | 0 | 0.0% |
| Severe Ear, Nose and Throat Infections | 12 | 0.1% | 0 | 0.0% | 6 | 0.1% |
| Bacterial Pneumonia | 12 | 0.1% | 5 | 0.3% | 5 | 0.1% |
| Angina | 12 | 0.1% | 3 | 0.2% | 6 | 0.1% |

*(Source: University Hospital Ambulatory Care Sensitive Data, 2016, as analyzed and reported by Cypress Research)*

## Most Common* Ambulatory Care Sensitive (ACS) Discharges (Primary Diagnosis), 2016
## All Ashtabula County Residents (Hospitalized Anywhere),
## By Major Age Group (Adults Only, Age 18+)

- **A**mbulatory **C**are **S**ensitive (ACS) conditions or discharges are conditions for which hospital admission could be prevented by interventions in primary care.
- The incidence of ACS cases among Ashtabula County residents in 2016 increased with age. Only 8.5% of those hospitalized adults under age 40 had an ACS condition; twice as many (16.3%) of those aged 40-64. One in five seniors (19.8%) were hospitalized due to an ACS condition in 2016.
- The most common ACS condition (primary diagnosis) associated with hospitalization for Ashtabula County residents in 2016 were diabetes (33.2%), cellulitis (15.0%) and grand mal seizures/convulsions (9.8%). Note that adults under age 40 comprised only 19% of the hospitalized patients in 2016.
- Middle-aged adults (aged 40-64) showed a somewhat different pattern of ACS conditions. The most common were Chronic Obstructive Pulmonary Disease (COPD) (33.2%), congestive heart failure (14.0%) and cellulitis (11.8%). Almost two in three of the Ashtabula County resident senior citizens who were hospitalized in 2016 were so because of COPD and congestive heart failure. One in ten seniors were hospitalized because of hip/femur fractures (9.8%).

| | Adult Under 40 | Adults Ages 40-64 | Adults Age 65+ |
|---|---|---|---|
| **Total:** | 2,531<br>100.0% | 4,531<br>100.0% | 6,242<br>100.0% |
| **Any ACS Condition:** | 214<br>(8.5%) | 738<br>(16.3%) | 1,239<br>(19.8%) |
| ***Specific Ambulatory Care Sensitive Conditions:*** | | | |
| Appendicitis | 10<br>(0.4%) | 8<br>(0.2%) | 5<br>(0.1%) |
| Asthma | 5<br>(0.2%) | 16<br>(0.4%) | 7<br>(0.1%) |
| Cellulitis | 32<br>(1.3%) | 87<br>(1.9%) | 74<br>(1.2%) |
| Chronic Obstructive Pulmonary Disease | 3<br>(0.1%) | 245<br>(5.4%) | 354<br>(5.7%) |
| Congestive Heart Failure | 8<br>(0.3%) | 103<br>(2.3%) | 417<br>(6.7%) |
| Convulsions/Epilepsy (age 6 and older) | 9<br>(0.4%) | 13<br>(0.3%) | 9<br>(0.1%) |
| Dehydration | 2<br>(0.1%) | 11<br>(0.2%) | 39<br>(0.6%) |
| Diabetes | 71<br>(2.8%) | 66<br>(1.5%) | 46<br>(0.7%) |
| Gastroenteritis | 11<br>(0.4%) | 17<br>(0.4%) | 22<br>(0.4%) |
| Gastrointestinal Obstruction | 16<br>(0.6%) | 59<br>(1.3%) | 71<br>(1.1%) |
| Grand Mal Seizure and Other Convulsions | 21<br>(0.8%) | 53<br>(1.2%) | 22<br>(0.4%) |
| Hip/Femur Fracture (age 45 and older) | 0<br>(0.0%) | 20<br>(0.4%) | 122<br>(2.0%) |
| Hypertension | 7<br>(0.3%) | 9<br>(0.2%) | 41<br>(0.7%) |
| Kidney/Urinary Tract Infection | 14<br>(0.6%) | 15<br>(0.3%) | 10<br>(0.2%) |

**Only those ACS conditions associated with at least 1% of the group are shown.*

*(Source: University Hospital Ambulatory Care Sensitive Data, 2016, as analyzed and reported by Cypress Research)*

## Ashtabula County Residents, Primary & Secondary Diagnoses, 2016 Hospitalizations

The diagnosis specifics were reviewed by Cypress Research for all 15,000 of the Ashtabula County residents hospitalized in 2016, regardless of where they were hospitalized (in or out of the county). The diagnostic category, and the most common specific diagnoses are shown. This information is shown for both primary diagnosis and for secondary diagnoses; 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:

- The most common diagnostic categories for the primary diagnoses were **diseases of the circulatory system** (16.3% of all hospitalizations), **diseases of the respiratory system** (10.7%) and **diseases of the digestive system** (9.4%). These three general categories comprise one-third of all primary diagnoses for inpatients in 2016.
    - No primary diagnosis dominates with the diseases of the circulatory or digestive systems but pneumonia (3.5%) and Chronic Obstructive Pulmonary Diseases (COPD) (2.7%) make up half of those hospitalized primarily for a respiratory system issue.

- Two other diagnostic categories stand out in terms of their frequency as primary diagnoses: complications of pregnancy, childbirth, and the puerperium (7.2%) and mental and behavioral disorders (7.1%). Keep in mind that these counts include duplicated counts of inpatients; that is, for many of these, each likely included individual patients who were hospitalized multiple times in 2016.

- While cancer is a leading cause of death in Ashtabula County, it is not a common reason for hospitalization (3.1% primary diagnosis for 2016 inpatients). Cancer is generally treated primary on an out-patient basis.

- Examination of the secondary diagnoses is very telling in terms of understanding the frequency of chronic diseases in Ashtabula County.
    - While almost no inpatients were hospitalized due to primary hypertension in 2016, 17.4% of them had hypertension as a secondary diagnosis. Likewise, 7.8% had a secondary diagnosis of atherosclerosis of the coronary artery.
    - Pneumonia was the most common primary diagnosis among the respiratory disease classifications (3.5%), but another 3.3% had a secondary diagnosis of pneumonia. And, same for COPD: 2.7% had COPD as a primary diagnosis, but another 8.7% had COPD as a secondary diagnosis; in sum, more than one-in-ten Ashtabula County residents' hospitalizations in 2016 were suffering from COPD.
    - By far the most common secondary diagnosis within the diseases of digestive system category was gastro-esophageal reflux disease (9.1% of inpatients).
    - Mental and behavioral disorders were common secondary diagnoses, especially major depressive disorder (7.6%), nicotine dependence (10.9%), and anxiety disorder (6.7%).
    - Also, noteworthy within the category of diseases of the genitourinary system was the relatively high incidence of the secondary diagnoses of acute kidney failure (5.7%), urinary tract infection (4.1%) and chronic kidney disease (4.5%).
    - While few primary diagnoses were related to the endocrine, nutritional or metabolic diseases (3.3%), hyperlipidemia was very common as a secondary diagnosis (18.9%), as was type II diabetes (15.2%; not all shown in figure).

## Ashtabula County Residents, Primary & Secondary Diagnoses, 2016 Hospitalizations

| | Primary Diagnosis (Reason for Hospitalization) | | Secondary Diagnosis (Patients can have multiple secondary diagnoses) | |
|---|---|---|---|---|
| **Total Ashtabula County Inpatients** | **15,000** | | | |
| **Subtotal: Diseases of the circulatory system** | **2,446** | **16.3%** | N/A | N/A |
| Non-ST elevation (NSTEMI) myocardial infarction | 283 | 1.9% | 122 | 0.8% |
| Acute on chronic diastolic (congestive) heart failure | 213 | 1.4% | 114 | 0.8% |
| Unspecified atrial fibrillation | 143 | 1.0% | 605 | 4.1% |
| Paroxysmal atrial fibrillation | 81 | 0.5% | 288 | 2.0% |
| Heart failure, unspecified | 46 | 0.3% | 416 | 2.8% |
| Atherosclerotic heart disease of native coronary artery without angina pectoris | 35 | 0.2% | 1,130 | 7.7% |
| Essential (primary) hypertension | 27 | 0.2% | 2,562 | 17.4% |
| Hypertensive chronic kidney disease with stage chronic kidney disease or end stage renal disease | 22 | 0.1% | 180 | 1.2% |
| Hypotension, unspecified | 17 | 0.1% | 519 | 3.5% |
| Hypertensive chronic kidney disease with stage through stage chronic kidney disease, or unspecified chronic kidney disease | 13 | 0.1% | 586 | 4.0% |
| Peripheral vascular disease, unspecified | 12 | <0.1% | 390 | 2.6% |
| Chronic atrial fibrillation | 11 | 0.1% | 163 | 1.1% |
| Other secondary pulmonary hypertension | 7 | <0.1% | 189 | 1.3% |
| Chronic diastolic (congestive) heart failure | 5 | <0.1% | 161 | 1.1% |
| Old myocardial infarction | 0 | 0.0% | 394 | 2.7% |
| **Subtotal: Diseases of the respiratory system** | **1,602** | **10.7%** | N/A | N/A |
| Pneumonia, unspecified organism | 520 | 3.5% | 491 | 3.3% |
| Chronic obstructive pulmonary disease with (acute) exacerbation | 396 | 2.6% | 320 | 2.2% |
| Pneumonitis due to inhalation of food and vomit | 69 | 0.5% | 102 | 0.7% |
| Acute and chronic respiratory failure with hypercapnia | 53 | 0.4% | 188 | 1.3% |
| Acute and chronic respiratory failure with hypoxia | 44 | 0.3% | 248 | 1.7% |
| Acute respiratory failure with hypoxia | 30 | 0.2% | 460 | 3.1% |
| Pleural effusion, not elsewhere classified | 19 | 0.1% | 233 | 1.6% |
| Acute respiratory failure with hypercapnia | 18 | 0.1% | 141 | 1.0% |
| Chronic obstructive pulmonary disease, unspecified | 8 | 0.1% | 957 | 6.5% |
| Unspecified asthma, uncomplicated | 8 | 0.1% | 458 | 3.1% |
| Atelectasis | 2 | <0.1% | 293 | 2.0% |
| **Subtotal: Diseases of the digestive system** | **1,405** | **9.4%** | N/A | N/A |
| Gastrointestinal hemorrhage, unspecified | 71 | 0.5% | 86 | 0.6% |
| Constipation, unspecified | 20 | 0.1% | 360 | 2.4% |
| Gastro-esophageal reflux disease without esophagitis | 15 | 0.1% | 1,337 | 9.1% |
| Diaphragmatic hernia without obstruction or gangrene | 13 | 0.1% | 127 | 0.9% |
| **Subtotal: Complications of pregnancy, childbirth, and the puerperium** | **1,073** | **7.2%** | N/A | N/A |

*N/A – Data is not available*

*(Source: University Hospital Ambulatory Care Sensitive Data, 2016, as analyzed and reported by Cypress Research)*

## Ashtabula County Residents, Primary & Secondary Diagnoses, 2016 Hospitalizations

| | Primary Diagnosis (Reason for Hospitalization) | | Secondary Diagnosis (Patients can have multiple secondary diagnoses) | |
|---|---|---|---|---|
| **Subtotal: Mental and behavioral disorders** | **1,071** | **7.1%** | N/A | N/A |
| Major depressive disorder, single episode, unspecified | 180 | 1.2% | 1,119 | 7.6% |
| Major depressive disorder, recurrent severe without psychotic features | 106 | 0.7% | 20 | 0.1% |
| Opioid dependence, uncomplicated | 91 | 0.6% | 50 | 0.3% |
| Opioid dependence with withdrawal | 70 | 0.5% | 103 | 0.7% |
| Bipolar disorder, unspecified | 55 | 0.4% | 174 | 1.2% |
| Unspecified dementia without behavioral disturbance | 7 | <0.1% | 253 | 1.7% |
| Anxiety disorder, unspecified | 2 | <0.1% | 994 | 6.7% |
| Generalized anxiety disorder | 1 | <0.1% | 122 | 0.8% |
| Nicotine dependence, cigarettes, uncomplicated | 0 | 0.0% | 1,177 | 8.0% |
| Nicotine dependence, unspecified, uncomplicated | 0 | 0.0% | 424 | 2.9% |
| Post-traumatic stress disorder, unspecified | 0 | 0.0% | 151 | 1.0% |
| Alcohol abuse, uncomplicated | 0 | 0.0% | 122 | 0.8% |
| Cannabis abuse, uncomplicated | 0 | 0.0% | 109 | 0.7% |
| **Subtotal: Diseases of the musculoskeletal system and connective tissue** | **935** | **6.2%** | N/A | N/A |
| Unilateral primary osteoarthritis, left knee | 135 | 0.9% | 62 | 0.4% |
| Unilateral primary osteoarthritis, right knee | 131 | 0.9% | 74 | 0.5% |
| Low back pain | 9 | 0.1% | 153 | 1.0% |
| Dorsalgia, unspecified | 2 | <0.1% | 220 | 1.5% |
| Rheumatoid arthritis, unspecified | 2 | <0.1% | 127 | 0.9% |
| Unspecified osteoarthritis, unspecified site | 1 | <0.1% | 401 | 2.7% |
| Gout, unspecified | 1 | <0.1% | 238 | 1.6% |
| Age-related osteoporosis without current pathological fracture | 0 | 0.0% | 274 | 1.9% |
| Fibromyalgia | 0 | 0.0% | 182 | 1.2% |
| **Subtotal: Infectious and parasitic diseases** | **907** | **6.0%** | N/A | N/A |
| Sepsis, unspecified organism | 556 | 3.7% | 157 | 1.1% |
| Enterocolitis due to Clostridium difficile | 67 | 0.4% | 75 | 0.5% |
| Unspecified viral hepatitis C without hepatic coma | 1 | <0.1% | 85 | 0.6% |
| Other specified bacterial agents as the cause of diseases classified elsewhere | 0 | 0.0% | 336 | 2.3% |
| Unspecified Escherichia coli [E. coli] as the cause of diseases classified elsewhere | 0 | 0.0% | 182 | 1.2% |
| Methicillin resistant Staphylococcus aureus infection as the cause of diseases classified elsewhere | 0 | 0.0% | 104 | 0.7% |
| Klebsiella pneumoniae [K. pneumoniae] as the cause of diseases classified elsewhere | 0 | 0.0% | 83 | 0.6% |
| Enterococcus as the cause of diseases classified elsewhere | 0 | 0.0% | 81 | 0.5% |
| **Subtotal: Diseases of the genitourinary system** | **678** | **4.5%** | N/A | N/A |
| Acute kidney failure, unspecified | 217 | 1.4% | 837 | 5.7% |
| Urinary tract infection, site not specified | 187 | 1.2% | 610 | 4.1% |
| Acute kidney failure with tubular necrosis | 12 | 0.1% | 105 | 0.7% |
| End stage renal disease | 2 | <0.1% | 229 | 1.6% |
| Chronic kidney disease, stage (moderate) | 0 | 0.0% | 398 | 2.7% |
| Chronic kidney disease, unspecified | 0 | 0.0% | 262 | 1.8% |
| Benign prostatic hyperplasia without lower urinary tract symptoms | 0 | 0.0% | 245 | 1.7% |
| Chronic kidney disease, stage (severe) | 0 | 0.0% | 104 | 0.7% |

*N/A – Data is not available*

*(Source: University Hospital Ambulatory Care Sensitive Data, 2016, as analyzed and reported by Cypress Research)*

## Ashtabula County Residents, Primary & Secondary Diagnoses, 2016 Hospitalizations

| | Primary Diagnosis (Reason for Hospitalization) | | Secondary Diagnosis (Patients can have multiple secondary diagnoses) | |
|---|---|---|---|---|
| **Subtotal: Injury** | **586** | **3.9%** | N/A | N/A |
| **Subtotal: Cancers (neoplasms)** | **501** | **3.3%** | N/A | N/A |
| Malignant neoplasm of unspecified part of unspecified bronchus or lung | 18 | 0.1% | 51 | 0.3% |
| Malignant neoplasm of prostate | 18 | 0.1% | 34 | 0.2% |
| Secondary malignant neoplasm of brain | 17 | 0.1% | 38 | 0.3% |
| Secondary malignant neoplasm of bone | 15 | 0.1% | 84 | 0.6% |
| Secondary malignant neoplasm of liver and intrahepatic bile duct | 10 | 0.1% | 87 | 0.6% |
| **Subtotal: Endocrine, nutritional and metabolic diseases** | **493** | **3.3%** | N/A | N/A |
| Dehydration | 73 | 0.5% | 767 | 5.2% |
| Morbid (severe) obesity due to excess calories | 44 | 0.3% | 498 | 3.4% |
| Hypo-osmolality and hyponatremia | 30 | 0.2% | 551 | 3.7% |
| Hyperkalemia | 24 | 0.2% | 417 | 2.8% |
| Type II diabetes mellitus with hyperglycemia | 23 | 0.2% | 332 | 2.2% |
| Hypokalemia | 11 | 0.1% | 970 | 6.6% |
| Hyperosmolality and hypernatremia | 9 | 0.1% | 179 | 1.2% |
| Hypomagnesemia | 3 | <0.1% | 309 | 2.1% |
| Hypothyroidism, unspecified | 2 | <0.1% | 977 | 6.6% |
| Acidosis | 2 | <0.1% | 473 | 3.2% |
| Unspecified severe protein-calorie malnutrition | 2 | <0.1% | 142 | 1.0% |
| Type II diabetes mellitus with diabetic chronic kidney disease | 1 | <0.1% | 184 | 1.2% |
| Hyperlipidemia, unspecified | 0 | 0.0% | 2,791 | 18.9% |
| Type II diabetes mellitus without complications | 0 | 0.0% | 1,061 | 7.2% |
| Obesity, unspecified | 0 | 0.0% | 690 | 4.7% |
| Vitamin D deficiency, unspecified | 0 | 0.0% | 504 | 3.4% |
| Type II diabetes mellitus with diabetic neuropathy, unspecified | 0 | 0.0% | 204 | 1.4% |
| Mixed hyperlipidemia | 0 | 0.0% | 191 | 1.3% |
| Pure hypercholesterolemia, unspecified | 0 | 0.0% | 179 | 1.2% |
| Deficiency of other specified B group vitamins | 0 | 0.0% | 142 | 1.0% |
| **Subtotal: Symptoms, signs, and ill-defined conditions** | **443** | **3.0%** | N/A | N/A |
| Syncope and collapse | 39 | 0.3% | 141 | 1.0% |
| Weakness | 24 | 0.2% | 396 | 2.7% |
| Chest pain, unspecified | 21 | 0.1% | 276 | 1.9% |
| Altered mental status, unspecified | 17 | 0.1% | 287 | 1.9% |
| Unspecified abdominal pain | 16 | 0.1% | 283 | 1.9% |
| Dizziness and giddiness | 10 | 0.1% | 160 | 1.1% |
| Fever, unspecified | 7 | <0.1% | 192 | 1.3% |
| Nausea with vomiting, unspecified | 7 | <0.1% | 179 | 1.2% |
| Localized edema | 7 | <0.1% | 163 | 1.1% |
| Dysphagia, unspecified | 6 | <0.1% | 201 | 1.4% |
| Tachycardia, unspecified | 4 | <0.1% | 164 | 1.1% |
| Shortness of breath | 2 | <0.1% | 860 | 5.8% |
| Suicidal ideations | 1 | <0.1% | 326 | 2.2% |
| Hyperglycemia, unspecified | 1 | <0.1% | 158 | 1.1% |
| Diarrhea, unspecified | 0 | 0.0% | 183 | 1.2% |
| Hypoxemia | 0 | 0.0% | 182 | 1.2% |

*N/A – Data is not available*

*(Source: University Hospital Ambulatory Care Sensitive Data, 2016, as analyzed and reported by Cypress Research)*

## Ashtabula County Residents, Primary & Secondary Diagnoses, 2016 Hospitalizations

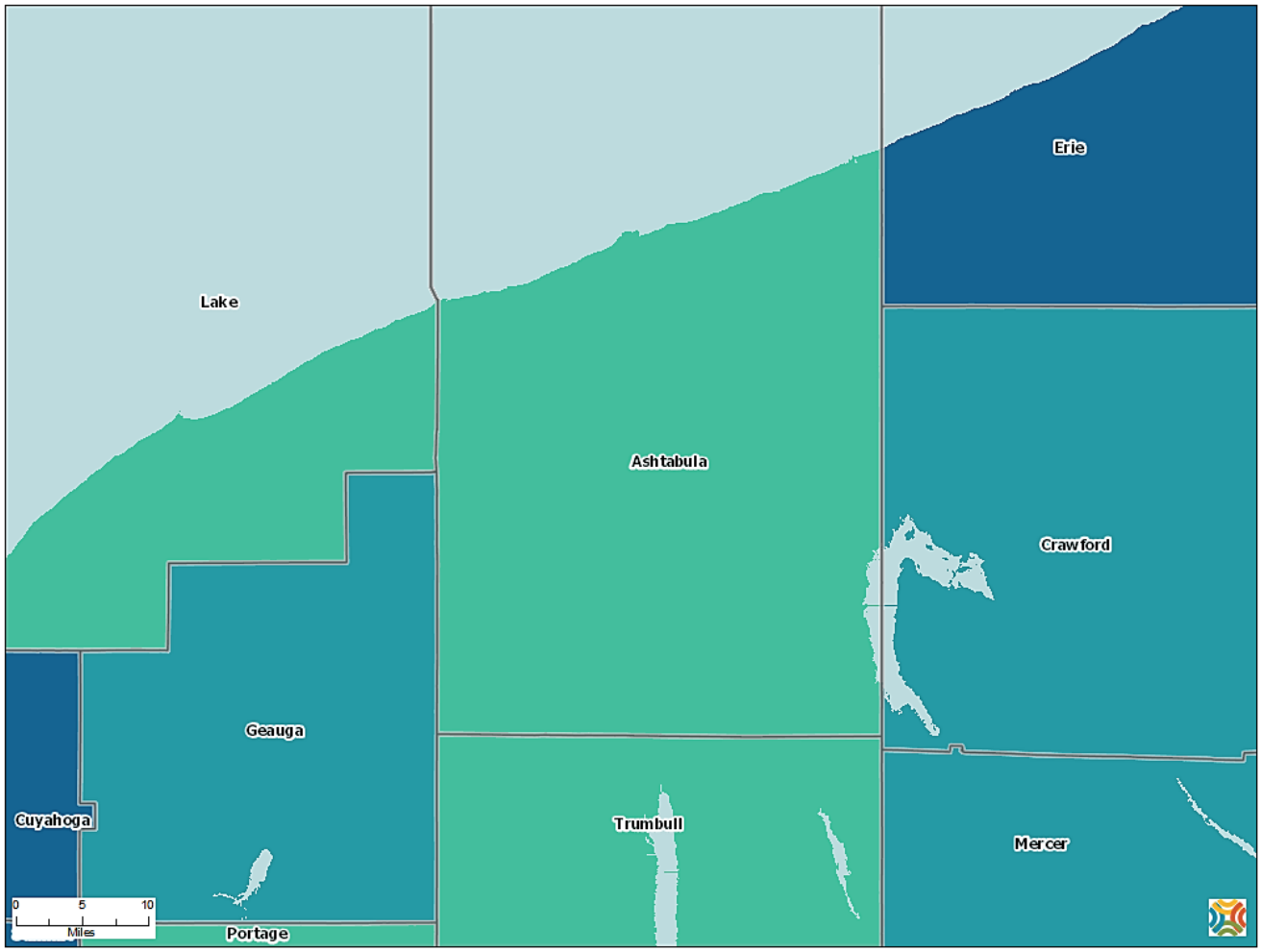
| | Primary Diagnosis (Reason for Hospitalization) | | Secondary Diagnosis (Patients can have multiple secondary diagnoses) | |
|---|---|---|---|---|
| **Subtotal: Diseases of the skin and subcutaneous tissue** | **391** | **2.6%** | N/A | N/A |
| Cellulitis of a lower limb | 146 | 1.0% | 202 | 1.4% |
| Cellulitis of an upper limb | 43 | 0.3% | 38 | 0.2% |
| Non-pressure chronic ulcer of foot | 1 | <0.1% | 982 | 0.7% |
| **Subtotal: Diseases of the nervous system and sense organs** | **357** | **2.4%** | N/A | N/A |
| Epilepsy, unspecified, not intractable, without status epilepticus | 47 | 0.3% | 239 | 1.6% |
| Metabolic encephalopathy | 18 | 0.1% | 233 | 1.6% |
| Parkinson's disease | 14 | 0.1% | 114 | 0.8% |
| Encephalopathy, unspecified | 9 | 0.1% | 170 | 1.2% |
| Migraine, unspecified, not intractable, without status migrainosus | 8 | 0.1% | 173 | 1.2% |
| Alzheimer's disease | 8 | 0.1% | 64 | 0.4% |
| Obstructive sleep apnea (adult) (pediatric) | 6 | <0.1% | 557 | 3.8% |
| Toxic encephalopathy | 5 | <0.1% | 96 | 0.7% |
| Chronic pain | 2 | <0.1% | 529 | 3.6% |
| Polyneuropathy, unspecified | 0 | 0.0% | 161 | 1.1% |
| Insomnia, unspecified | 0 | 0.0% | 158 | 1.1% |
| Restless legs syndrome | 0 | 0.0% | 107 | 0.7% |
| Sleep apnea, unspecified | 0 | 0.0% | 79 | 0.5% |
| **Subtotal: Poisoning** | **143** | **1.0%** | N/A | N/A |
| Poisoning by heroin, accidental (unintentional), initial encounter | 14 | 0.1% | 8 | 0.1% |
| Adverse effect of anticoagulants, initial encounter | 1 | <0.1% | 75 | 0.5% |
| Adverse effect of glucocorticoids and synthetic analogues, initial encounter | 0 | 0.0% | 56 | 0.4% |
| Adverse effect of antineoplastic and immunosuppressive drugs, initial encounter | 0 | 0.0% | 51 | 0.3% |
| Adverse effect of other opioids, initial encounter | 0 | 0.0% | 45 | 0.3% |
| **Subtotal: Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism** | **113** | **0.8%** | N/A | N/A |
| Anemia, unspecified | 18 | 0.1% | 757 | 5.1% |
| Iron deficiency anemia, unspecified | 14 | 0.1% | 187 | 1.3% |
| Acute post-hemorrhagic anemia | 12 | 0.1% | 489 | 3.3% |
| Iron deficiency anemia secondary to blood loss (chronic) | 9 | 0.1% | 64 | 0.4% |
| Other pancytopenia | 7 | <0.1% | 62 | 0.4% |
| Thrombocytopenia, unspecified | 3 | <0.1% | 337 | 2.3% |
| Elevated white blood cell count, unspecified | 2 | <0.1% | 335 | 2.3% |
| Anemia in other chronic diseases classified elsewhere | 1 | <0.1% | 122 | 0.8% |
| Anemia in chronic kidney disease | 0 | 0.0% | 96 | 0.7% |
| **Subtotal: Certain conditions originating in the perinatal period** | **99** | **0.7%** | N/A | N/A |
| **Subtotal: Congenital anomalies** | **39** | **0.3%** | N/A | N/A |
| **Subtotal: Diseases of the ear and mastoid process** | **21** | **0.1%** | N/A | N/A |
| **Subtotal: Diseases of the eye and adnexa** | **10** | **0.1%** | N/A | N/A |
| **Other** | **1,685** | **11.2%** | N/A | N/A |

*N/A – Data is not available*

*(Source: University Hospital Ambulatory Care Sensitive Data, 2016, as analyzed and reported by Cypress Research)*

## Access to Primary Care Physicians, Rate per 100,000 Population by County, Area Health Resource File (AHRF), 2017

- There were 36 primary care physicians in Ashtabula County in 2014.
- The rate of primary care physicians per 100,000 population for Ashtabula County was 36.3.

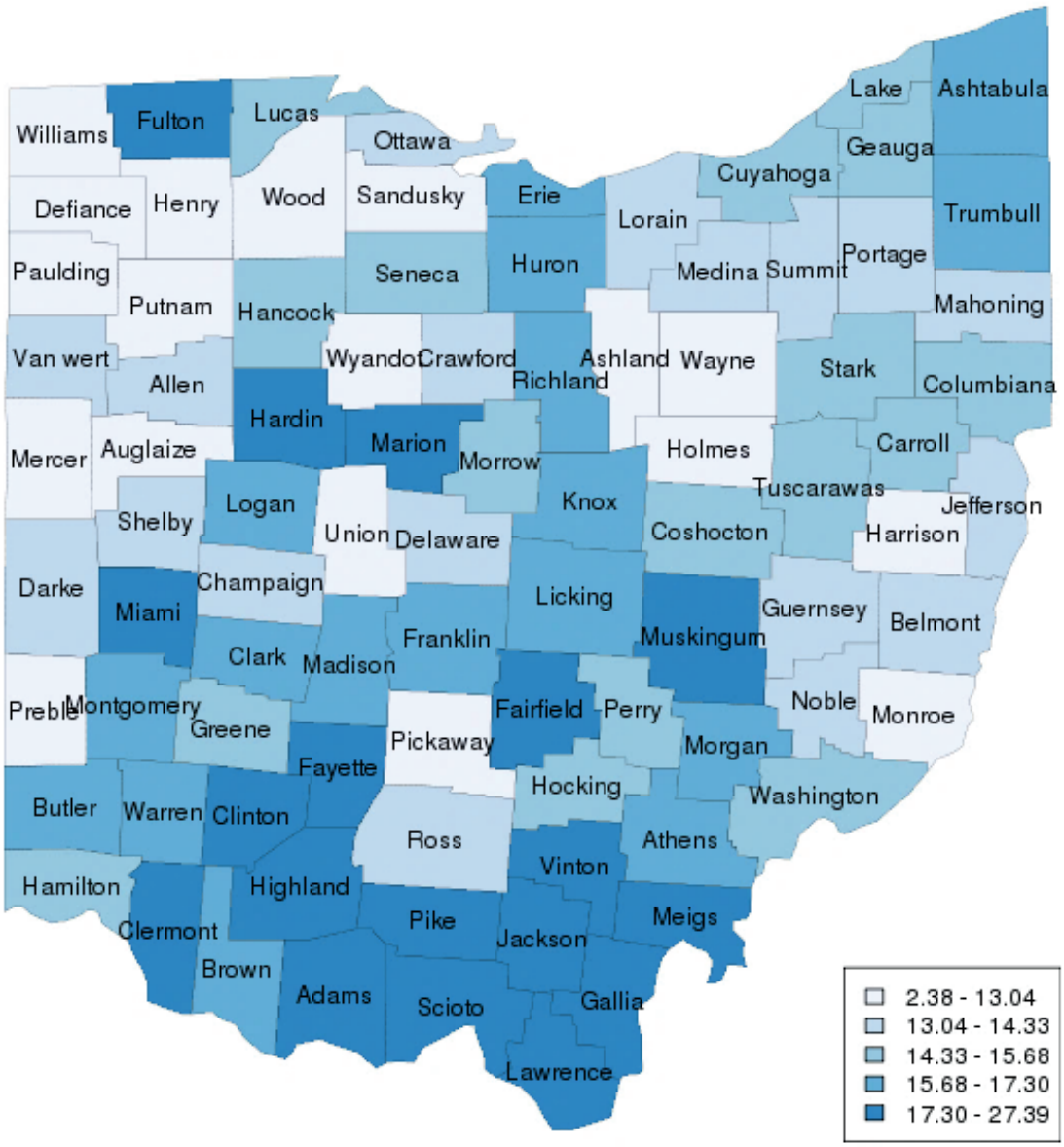



*(Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, Area Health Resource File (AHRF): 2014, as compiled by Community Commons, obtained on 12/1/17)*

***The following map shows the estimated proportion of all adults, ages 19 years and older, with unmet needs in prescription medication.***

- Sixteen percent (16%) of Ashtabula County adults, ages 19 years and older, had unmet needs in prescription medication.
- Fifteen percent (15%) of Ohio adults, ages 19 years and older, had unmet needs in prescription medication.

**Estimated Proportion: Unmet Needs in Prescription Medication, All Adults, Ages 19 and Older (2015)***




*(Source: Ohio Medicaid Assessment Survey (OMAS) Adult Dashboard, 2015)*
**Unmet needs indicate those who could not get prescriptions due to cost in the past 12 months*

# HEALTHCARE ACCESS: PREVENTIVE MEDICINE

## Key Findings

*In 2016, more than two-thirds (69%) of adults ages 65 and over had a pneumonia vaccination at some time in their life. Seventy percent (70%) of adults age 65 and over had a flu vaccine in the past year.*

## Preventive Medicine

- More than two-fifths (42%) of Ashtabula County adults had a flu vaccine in the past 12 months.
- Seventy percent (70%) of Ashtabula County adults ages 65 and over had a flu vaccine in the past 12 months. The 2016 BRFSS reported that 57% of Ohio and 58% of U.S. adults ages 65 and over had a flu vaccine in the past year
- Reasons for not getting a flu vaccine included the following: did not need it (27%), get sick from it (14%), vaccine does not work (13%), time (4%), cost (2%), religious beliefs (2%), insurance would not pay for it (1%), vaccine not available (<1%), and other reasons (9%).
- More than one-third (34%) of adults have had a pneumonia shot in their life, increasing to 69% of those ages 65 and over. The 2016 BRFSS reported that 75% of Ohio and 73% of U.S. adults ages 65 and over had a pneumonia shot in their life.
- Ashtabula County adults have had the following vaccines: tetanus booster (including Tdap) in the past 10 years (62%), MMR in their lifetime (61%), chicken pox in their lifetime (42%), pneumonia vaccine in their lifetime (34%), Zoster (shingles) vaccine in their lifetime (15%), pertussis vaccine in the past 10 years (10%), and human papillomavirus vaccine in their lifetime (10%).
- The 2014 BRFSS reported that 21% of Ohio and 22% of U.S. adults had a Zoster (shingles) vaccine in their life.
- Ashtabula County adults indicated the following motivated them to make positive changes in their health: to have more energy (57%), family/kids (51%), health scare/fear of illness (30%), exposure to a healthy environment (21%), social support (19%), financial incentives (17%), incentives other than financial (8%), discounted services (8%), and exposure to a negative environment (5%).

## Preventive Health Screenings and Exams

- In the past year, 52% of Ashtabula County women ages 40 and over have had a mammogram.
- In the past year, more than one-fifth (52%) of men ages 50 and over have had a digital rectal exam.
- See the Women and Men's Health Sections for further prostate, mammogram, clinical breast exam, and Pap smear screening test information for Ashtabula County adults.

| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Had a pneumonia vaccination** (ages 65 and over) | N/A | 69% | 75% | 73% |
| **Had a flu vaccine in the past year** (ages 65 and over) | 62% | 70% | 57% | 58% |
| **Had a shingles or Zoster vaccination in lifetime** | N/A | 15% | 21%** | 22%** |

*N/A- Data not available*
***2014 BRFSS data*

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Had a pneumonia vaccination** (ages 65 and over) | 69% | 77% | 55% |
| **Had a flu vaccine in the past year** (ages 65 and over) | 70% | 73% | 75% |
| **Had a shingles or Zoster vaccination in lifetime** | 15% | 12% | 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.*

### Ashtabula County Adult Health Screening Results

| General Screening Results | Total 2011 | Total 2016 |
|---|---|---|
| **Diagnosed with High Blood Pressure** | 31% | 37% |
| **Diagnosed with High Blood Cholesterol** | 34% | 37% |
| **Diagnosed with Diabetes** | 10% | 13% |
| **Diagnosed with a Heart Attack** | 7% | 5% |
| **Diagnosed with a Stroke** | 6% | 4% |

*(Note: Percentages based on all Ashtabula County adults surveyed)*

### Healthy People 2020
### Immunization and Infectious Diseases (IID)

| Objective | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 | 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% | 75% | 73% | 90% |
| **IID-14: Increase the percentage of adults who are vaccinated against zoster (shingles)** | 15% | 21% (2014) | 22% (2014) | 30% |

*Note: U.S. baseline is age-adjusted to the 2000 population standard*
*(Sources: Healthy People 2020 Objectives, 2016 BRFSS, 2016 Ashtabula County Health Assessment)*

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

| Healthcare Topics | Total 2011 | Total 2016 |
|---|---|---|
| **Physical Activity or Exercise** | 35% | 50% |
| **Diet or Eating Habits** | 32% | 48% |
| **Immunizations** | 17% | 28% |
| **Depression, Anxiety, or Emotional Problems** | 18% | 23% |
| **Significance of Family History** | 15% | 23% |
| **Quitting Smoking** | 12% | 19% |
| **Appropriate Use of Prescription Pain Medication** | 11% | 16% |
| **Alcohol Use** | 8% | 9% |
| **Alcohol Use When Taking Prescription Drugs** | 7% | 8% |
| **Sexual Practices Including Family Planning, STDs, AIDS, & Condom Use** | 5% | 8% |
| **Injury Prevention Such As Safety Belt Use & Helmet Use** | 6% | 5% |
| **Domestic Violence** | 3% | 4% |
| **Illicit Drug Abuse** | 2% | 3% |

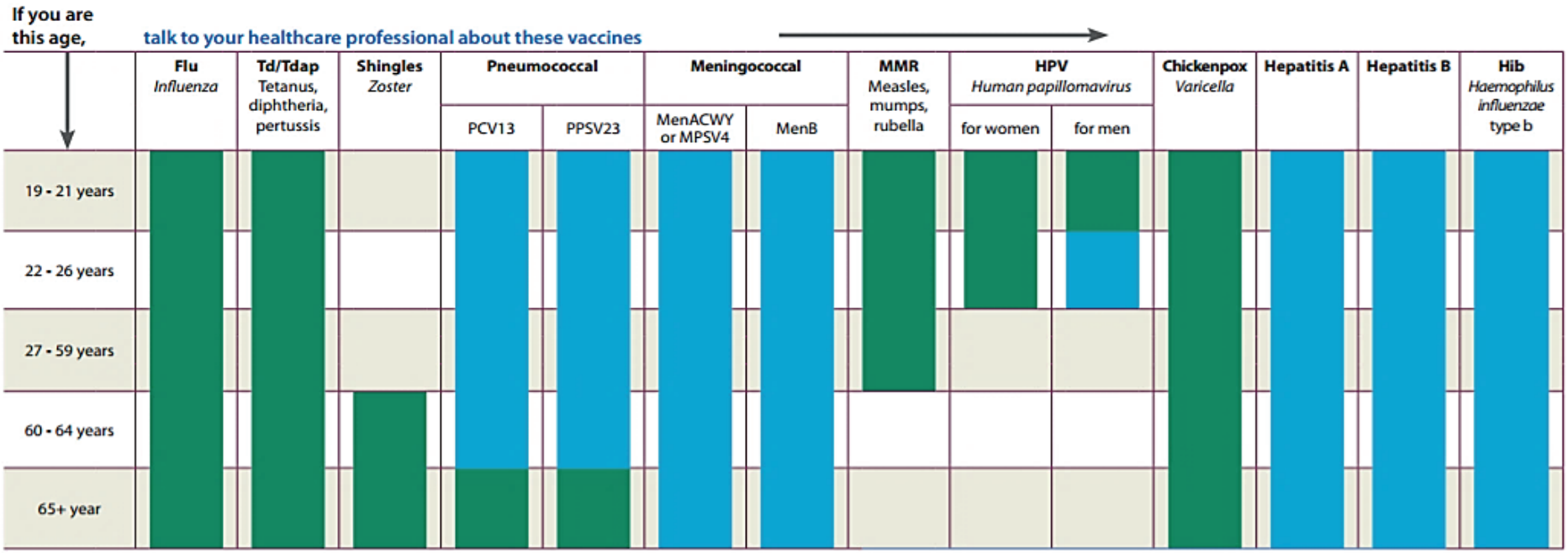
## Who Should Get a Yearly Flu Shot?

The following groups are recommended to get a yearly flu vaccine:

- All persons aged 6 months and older should be vaccinated annually.
- When vaccine supply is limited, vaccination efforts should focus on delivering vaccination to persons who:
  - Are aged 6 months through 4 years.
  - Are aged 50 years and older.
  - Have chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus).
  - Those who are immunosuppressed.
  - Are or will be pregnant during the influenza season.
  - Are residents of nursing homes and chronic-care facilities.
  - Are American Indians/Alaska Natives.
  - Are morbidly obese (body-mass index is 40 or greater).
  - Are health-care personnel.
  - Are household contacts and caregivers of children aged younger than 5 years and adults aged 50 years and older, with particular emphasis on vaccinating contacts of children aged younger than 6 months.
  - Are household contacts and caregivers of persons with medical conditions that put them at higher risk for severe complications from influenza.

## INFORMATION FOR ADULT PATIENTS

# 2017 Recommended Immunizations for Adults: By Age




**More Information:**

- **Flu:** You should get flu vaccine every year.
- **Td/Tdap:** You should get a Td booster every 10 years. You also need 1 dose of Tdap. Women should get a Tdap vaccine during every pregnancy to help protect the baby.
- **Shingles:** You should get shingles vaccine even if you have had shingles before.
- **Pneumococcal:** You should get 1 dose of PCV13 and at least 1 dose of PPSV23 depending on your age and health condition.
- **MMR, HPV, Chickenpox, Hepatitis A, Hepatitis B, Hib:** You should get this vaccine if you did not get it when you were a child.
- **HPV:** You should get HPV vaccine if you are a woman through age 26 years or a man through age 21 years and did not already complete the series.

**Recommended For You:** This vaccine is recommended for you ***unless*** your healthcare professional tells you that you do not need it or should not get it.

**May Be Recommended For You:** This vaccine is recommended for you if you have certain risk factors due to your health condition or other. Talk to your healthcare professional to see if you need this vaccine.

**If you are traveling outside the United States, you may need additional vaccines.**
Ask your healthcare professional about which vaccines you may need at least 6 weeks before you travel.

**For more information, call 1-800-CDC-INFO (1-800-232-4636) or visit www.cdc.gov/vaccines**


**U.S. Department of Health and Human Services**
Centers for Disease Control and Prevention

# HEALTHCARE ACCESS: WOMEN'S HEALTH

## Key Findings

*In 2016, more than half (52%) of Ashtabula County women over the age of 40 reported having a mammogram in the past year. Fifty-five percent (55%) of Ashtabula County women ages 19 and over had a clinical breast exam and 41% had a Pap smear to detect cancer of the cervix in the past year. Four percent (4%) of women survived a heart attack and 2% survived a stroke at some time in their life. Forty-six percent (46%) of women were obese, 32% were diagnosed with high blood cholesterol, 29% had high blood pressure, and 20% were identifed as smokers, all known risk factors for cardiovascular diseases.*

**Ashtabula County Female Leading Causes of Death, 2014 – 2016**

***Total female deaths: 1,670***

1. Heart Diseases (24% of all deaths)
2. Cancers (19%)
3. Chronic Lower Respiratory Diseases (8%)
4. Stroke (5%)
5. Unintentional Injuries (4%)

*(Source: Ohio Public Health Data Warehouse, 2014-2016)*

**Ohio Female Leading Causes of Death, 2014 – 2016**

***Total female deaths: 176,669***

1. Heart Diseases (22% of all deaths)
2. Cancers (21%)
3. Chronic Lower Respiratory Diseases (6%)
4. Stroke (6%)
5. Alzheimer's disease (5%)

*(Source: Ohio Public Health Data Warehouse, 2014-2016)*

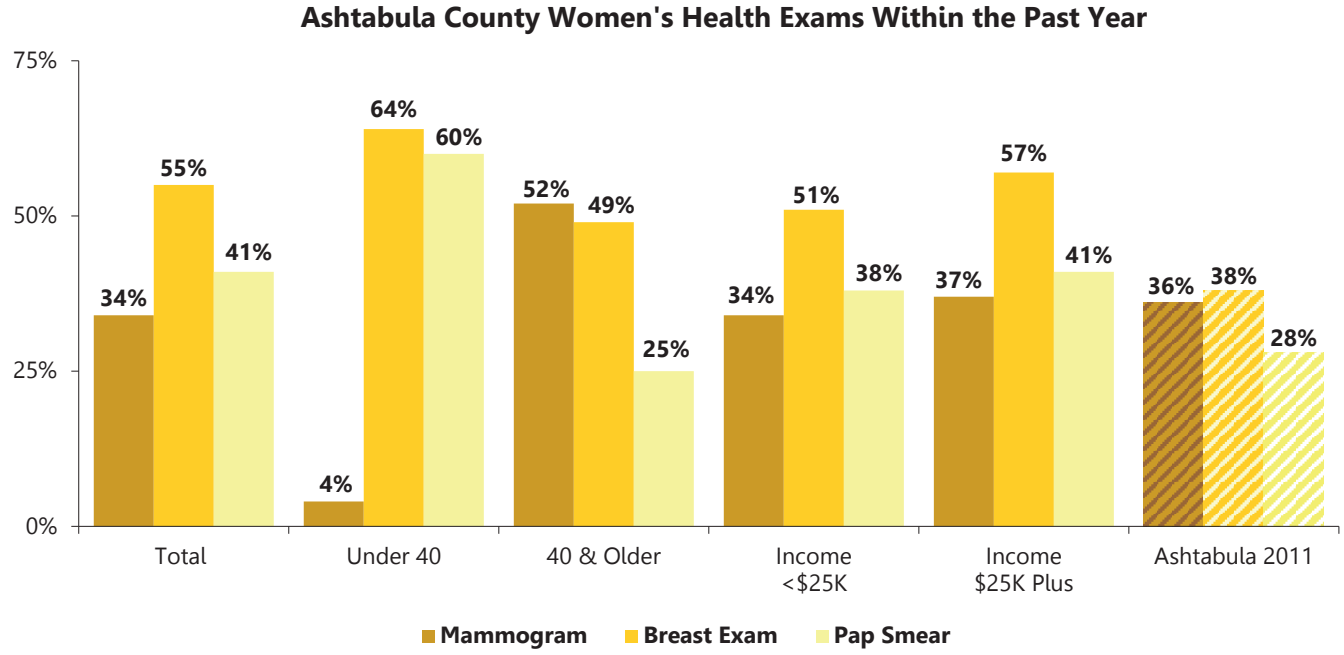
## Women's Health Screenings

- In 2016, 64% of women had a mammogram at some time, and more than one-third (34%) had this screening in the past year.
- More than half (52%) of women ages 40 and over had a mammogram in the past year, and 70% had one in the past two years. The 2016 BRFSS reported that 74% of women 40 and over in Ohio and 72% in the U.S. had a mammogram in the past two years.
- Most (92%) Ashtabula County women have had a clinical breast exam at some time in their life, and 55% had one within the past year. More than three-fifths (63%) of women ages 40 and over had a clinical breast exam in the past two years.
- Eighty-seven percent (87%) of Ashtabula County women had a Pap smear at some point in their life and 41% reported having had the exam in the past year. Sixty-three percent (63%) of women had a Pap smear in the past three years. The 2016 BRFSS indicated that 82% of Ohio and 80% of U.S. women ages 21-65 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 (64%), general or family physician (21%), family planning clinic (2%), and some other place (1%). Twelve percent (12%) indicated they did not have a usual source of services for female health concerns.
- In 2016, 4% of women had survived a heart attack and 2% had survived a stroke at some time in their life.
- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Ashtabula County, the 2018 needs assessment has identified that:
  - 68% of women were overweight or obese (2016 BRFSS reports 62% for Ohio and 2015 BRFSS reports 59% for U.S.)
  - 32% were diagnosed with high blood cholesterol (2015 BRFSS reports 36% for Ohio and 35% for U.S.)
  - 29% were diagnosed with high blood pressure (2015 BRFSS reports 31% for Ohio and 30% for U.S.)
  - 20% were current smokers (2016 BRFSS reports 21% for Ohio and 2015 BRFSS reports 15% for U.S.)
  - 11% had been diagnosed with diabetes (2016 BRFSS reports 11% for Ohio and 2015 BRFSS reports 10% for U.S.)
- From 2014-2016, major cardiovascular diseases (heart disease and stroke) accounted for 29% of all female deaths in Ashtabula County *(Source: Ohio Public Health Data Warehouse).*

***The following graph shows the percentage of Ashtabula County females who had various health exams in the past year. Examples of how to interpret the information shown on the graph include: 34% of Ashtabula County females had a mammogram within the past year, 55% had a clinical breast exam, and 41% had a Pap smear.***




*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 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Had a mammogram in the past two years** (age 40 & over) | 69% | 70% | 74% | 72% |
| **Had a Pap smear in the past 3 years** | N/A | 63% | 82%¥ | 80%¥ |

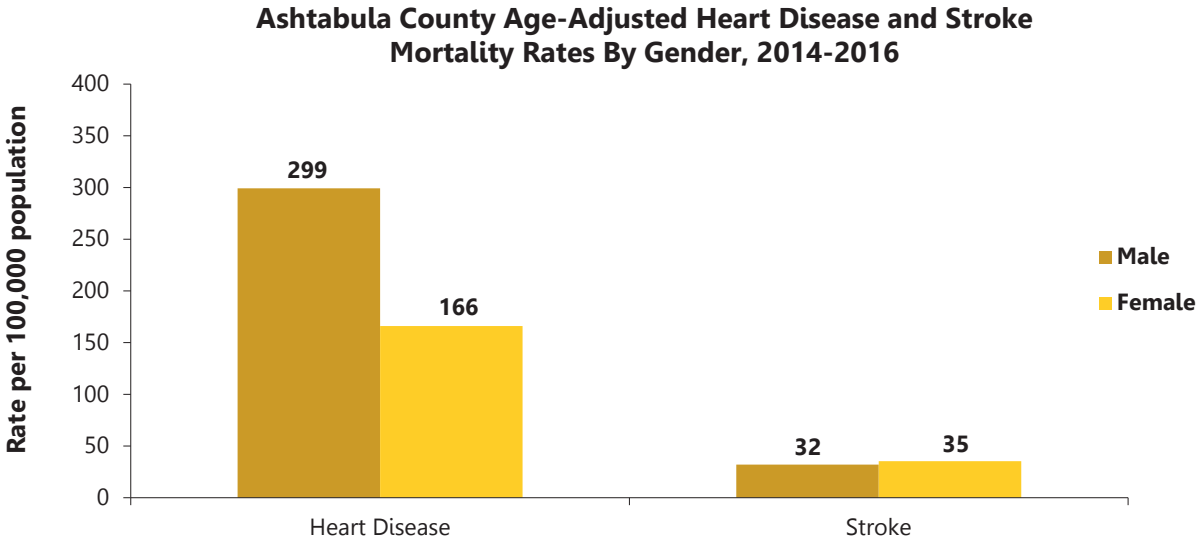
*N/A- Data not available*
*¥ Ohio and U.S. BRFSS reports women ages 21-65*

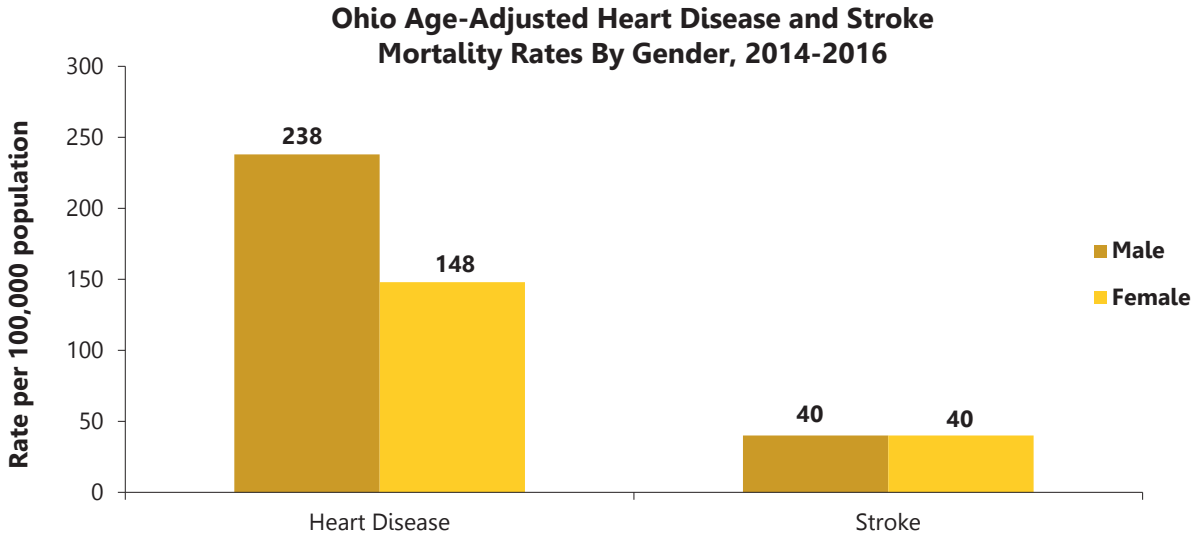
| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Had a mammogram in the past two years** (age 40 & over) | 70% | 62% | 75% |
| **Had a Pap smear in the past 3 years** | 63% | 38% | 4% |

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

***The following graphs show the Ashtabula County and Ohio age-adjusted mortality rates per 100,000 population for cardiovascular diseases. The graphs show:***

- From 2014-2016, the Ashtabula County and Ohio female age-adjusted mortality rate was lower than the male rate for heart disease.
- The Ashtabula County female heart disease mortality rate was higher than the Ohio female rate from 2014-2016.




*(Source: Ohio Public Health Data Warehouse, 2014-2016)*

# HEALTHCARE ACCESS: MEN'S HEALTH

## Key Findings

*In 2016, 16% of Ashtabula County males had a digital rectal exam. Nearly one-third (31%) of Ashtabula County males performed a self-testicular exam in the past year. Eight percent (8%) of men survived a heart attack and 6% survived a stroke at some time in their life. More than two-fifths (46%) of men had been diagnosed with high blood pressure, 45% had high blood cholesterol, 41% were obese, and 23% were identified as smokers, which are known risk factors for cardiovascular diseases.*

### Ashtabula County Male Leading Causes of Death, 2014 – 2016

***Total male deaths: 1,861***

1. Heart Diseases (28% of all deaths)
2. Cancers (24%)
3. Accidents, Unintentional Injuries (7%)
4. Chronic Lower Respiratory Diseases (6%)
5. Stroke (3%)

*(Source: Ohio Public Health Data Warehouse, 2014-2016)*

### Ohio Male Leading Causes of Death, 2014 – 2016

***Total male deaths: 175,247***

1. Heart Diseases (25% of all deaths)
2. Cancers (23%)
3. Accidents, Unintentional Injuries (8%)
4. Chronic Lower Respiratory Diseases (6%)
5. Stroke (4%)

*(Source: Ohio Public Health Data Warehouse, 2014-2016)*

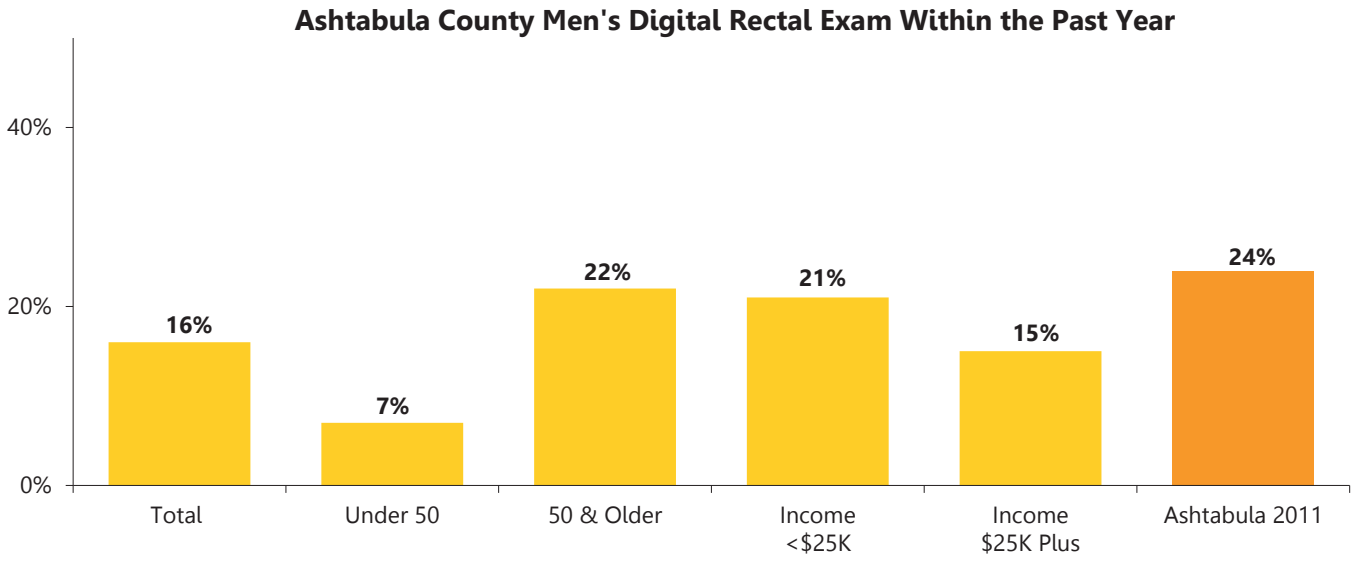
## Men's Health Screenings and Concerns

- More than half (54%) of men had a digital rectal exam in their lifetime, and 16% had one in the past year.
- Nearly one-third (31%) of Ashtabula County males performed a testicular self-exam (TSE) in the past year.
- An average of 2.2 self-testicular exams were done in the past year.
- From 2014-2016, major cardiovascular diseases (heart disease and stroke) accounted for 31% of all male deaths in Ashtabula County *(Source: Ohio Public Health Data Warehouse)*

**16% of Ashtabula County males had a digital rectal exam in the past year.**

- In 2016, 8% of men had survived a heart attack and 6% had survived a stroke at some time in their life.
- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Ashtabula County, the 2018 needs assessment has identified that:
  - 79% of men were overweight or obese (2016 BRFSS reports 71% for Ohio and 2015 reports 71% for U.S.)
  - 46% were diagnosed with high blood pressure (2015 BRFSS reports 38% for Ohio and 38% for U.S.)
  - 45% were diagnosed with high blood cholesterol (2015 BRFSS reports 38% for Ohio and 34% for U.S.)
  - 23% of all men were current smokers (2016 BRFSS reports 25% for Ohio and 2015 BRFSS reports 19% for U.S.)
  - 15% had been diagnosed with diabetes (2016 BRFSS reports 11% for Ohio and 11% for U.S.)
- From 2014-2016, the leading cancer deaths for Ashtabula County males were lung, colon and rectum, and prostate. Statistics from the same period for Ohio males indicate that lung, prostate, and colon and rectum cancers were the leading cancer deaths *(Source: Ohio Public Health Data Warehouse).*

***The following graph shows the percentage of Ashtabula County male adults who had a digital rectal exam in the past year. Examples of how to interpret the information shown on the graph include: 16% of Ashtabula County males had a digital rectal exam within 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 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Had a digital rectal exam within the past year** | 24% | 16% | N/A | N/A |

*N/A- Data not available*

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Had a digital rectal exam within the past year** | 16% | 5% | 11% |

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

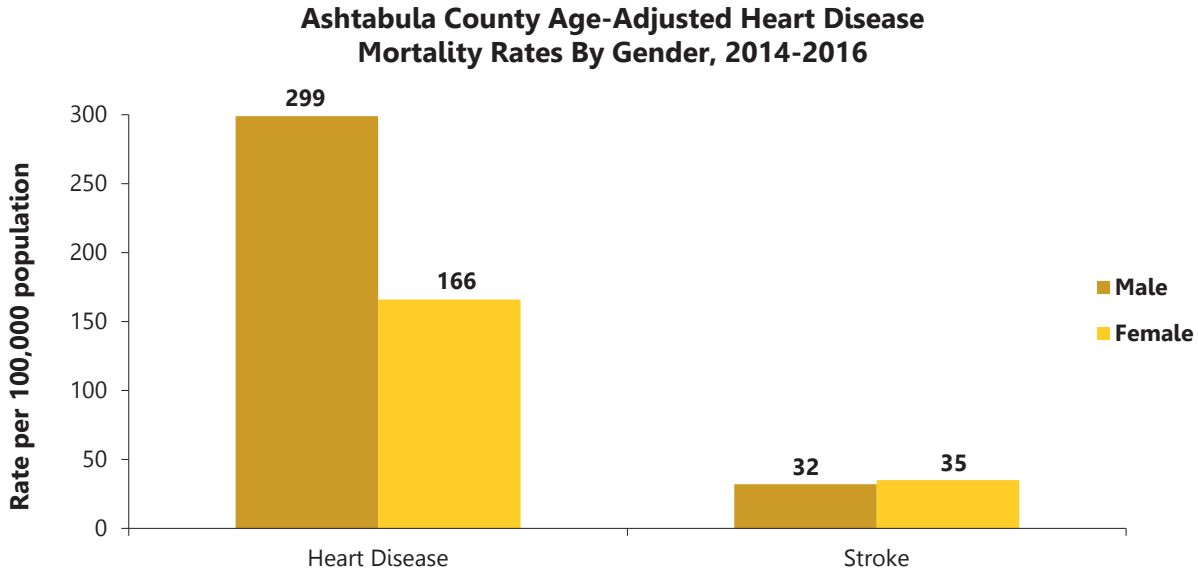
## Men's Health Data

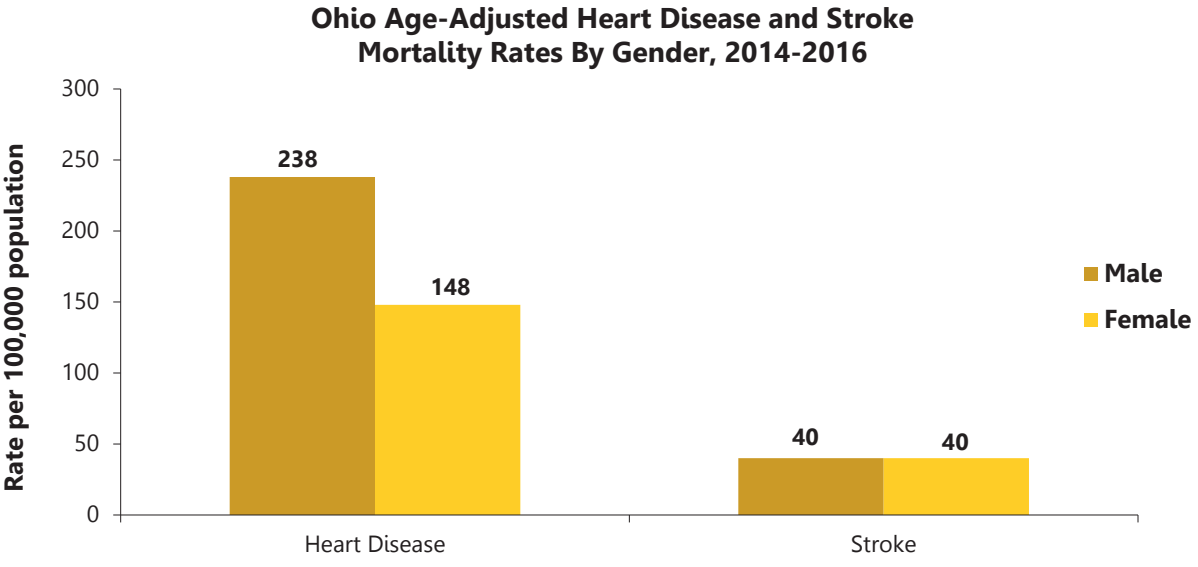
- Approximately 12% of adult males ages 18 years or older reported fair or poor health.
- 18% of adult males in the U.S. currently smoke.
- Of the adult males in the U.S., 32% had 5 or more drinks in 1 day at least once in the past year.
- Only 56% of adult males in the U.S. met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity.
- 35% of men 20 years and over are obese.
- There are 12% of males under the age of 65 without healthcare 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, May 3, 2017)*

***The following graphs show the Ashtabula County and Ohio age-adjusted mortality rates per 100,000 population for cardiovascular diseases by gender. The graphs show:***

- From 2014-2016, the Ashtabula County and Ohio male age-adjusted mortality rate was higher than the female rate for heart disease.
- The Ashtabula County male age-adjusted heart disease mortality rate was higher than the Ohio male rate.

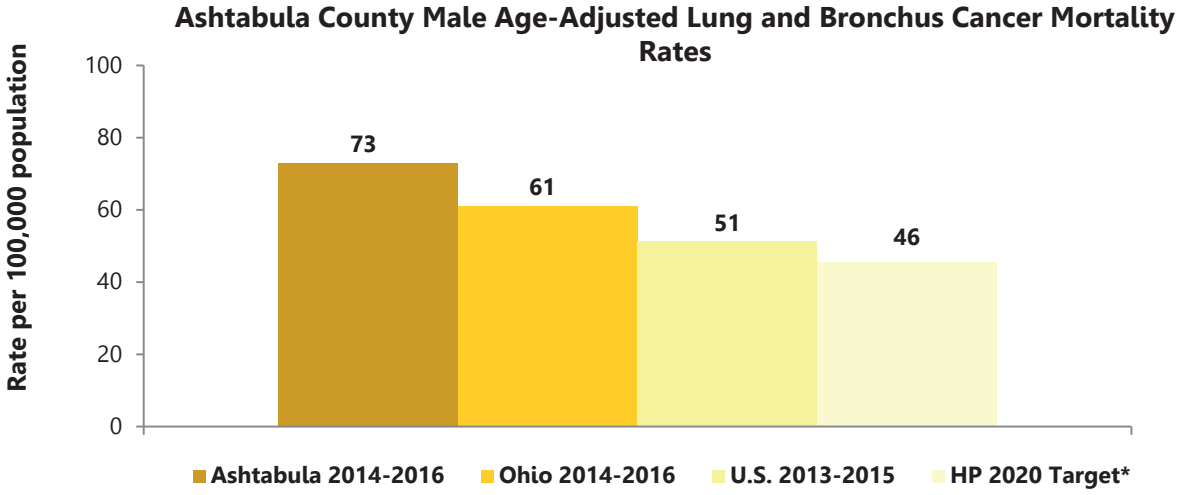



*(Source: Ohio Public Health Data Warehouse, 2014-2016)*

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

- From 2014-2016, the Ashtabula County age-adjusted mortality rate for male lung cancer was higher than the Ohio rate and the Healthy People 2020 objective.




*Note: The Healthy People 2020 target rates are not gender specific.*
*(Sources: CDC Wonder 2013-2015, Ohio Public Health Data Warehouse 2014-2016, and Healthy People 2020)*

## Prostate Cancer Awareness

- Prostate cancer is the most common cancer among American men. Most prostate cancers grow slowly and don't cause any health problems in men who have them.
- Men can have different symptoms for prostate cancer. Some men do not have symptoms at all. Some symptoms of prostate cancer are difficulty starting urination, frequent urination (especially at night), weak or interrupted flow of urine, and blood in the urine or semen.
- There is no way to know for sure if you will get prostate cancer. Men have a greater chance of getting prostate cancer if they are 50 years old or older, are African-American, or have a father, brother, or son who has had prostate cancer.
- Two tests are commonly used to screen for prostate cancer:
  - **Digital rectal exam (DRE):** A doctor, nurse, or other health care professional places a gloved finger into the rectum to feel the size, shape, and hardness of the prostate gland.
  - **Prostate specific antigen test (PSA):** PSA is a substance made by the prostate. The PSA test measures the level of PSA in the blood, which may be higher in men who have prostate cancer. However, other conditions such as an enlarged prostate, prostate infection and certain medical procedures also may increase PSA levels.

*(Source: Center for Disease Control and Prevention, Prostate Cancer Awareness, Updated September 21, 2017)*

# HEALTHCARE ACCESS: ORAL HEALTH

## Key Findings

*In 2016, three-fifths (60%) of Ashtabula County adults had visited a dentist or dental clinic in the past year. The 2016 BRFSS reported that 68% of Ohio adults and 66% of U.S. adults had visited a dentist or dental clinic in the previous twelve months.*

## Access to Dental Care

- In the past year, 60% of Ashtabula County adults had visited a dentist or dental clinic, decreasing to 43% of adults with annual household incomes less than $25,000.
- The 2016 BRFSS reported that 68% of Ohio adults and 66% of U.S. adults had visited a dentist or dental clinic in the previous twelve months.
- More than two-thirds (72%) of Ashtabula County adults with dental insurance have been to the dentist in the past year, compared to 58% of those without dental insurance.
- When asked the main reason for not visiting a dentist in the last year, 39% said cost; 21% had no oral health problems; 17% had dentures; 14% said fear, apprehension, nervousness, pain, and dislike going; 5% did not have/know a dentist; 5% had transportation issues; 3% could not find a dentist who took Medicaid; 3% said their dentist did not accept their medical coverage; and 2% could not get into a dentist.
- More than half (56%) of adults had one or more of their permanent teeth removed, increasing to 79% of those ages 65 and over. The 2016 BRFSS reported that 45% of Ohio adults and 43% of U.S. adults had one or more permanent teeth removed.
- Seventeen percent (17%) of Ashtabula County adults ages 65 and over had all of their permanent teeth removed. The 2016 BRFSS reported that 17% of Ohio adults and 14% of U.S. adults ages 65 and over had all of their permanent teeth removed.

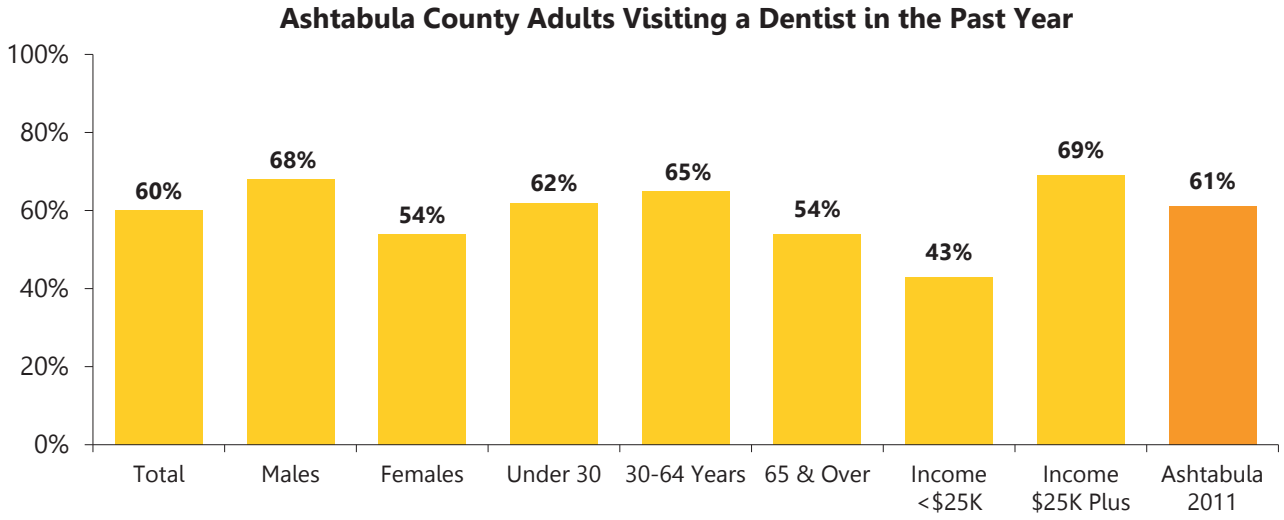
| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Adults who had visited the dentist in the past year** | 61% | 60% | 68% | 66% |
| **Adults who had one or more permanent teeth removed** | N/A | 56% | 45% | 43% |
| **Adults 65 years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

*N/A- Data not available*

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Adults who had visited the dentist in the past year** | 60% | 47% | 50% |
| **Adults who had one or more permanent teeth removed** | 56% | 60% | 45% |
| **Adults 65 years and older who had all their permanent teeth removed** | 17% | 20% | 8% |

*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 provides information about the frequency of Ashtabula County adult dental visits. Examples of how to interpret the information include: 60% of all Ashtabula County adults had been to the dentist in the past year, including 54% of females and 43% of those with incomes less than $25,000.***




*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** | 68% | 7% | 7% | 15% | 1% |
| **Females** | 54% | 14% | 11% | 16% | 2% |
| | | | | | |
| **Total** | 60% | 11% | 9% | 16% | 2% |

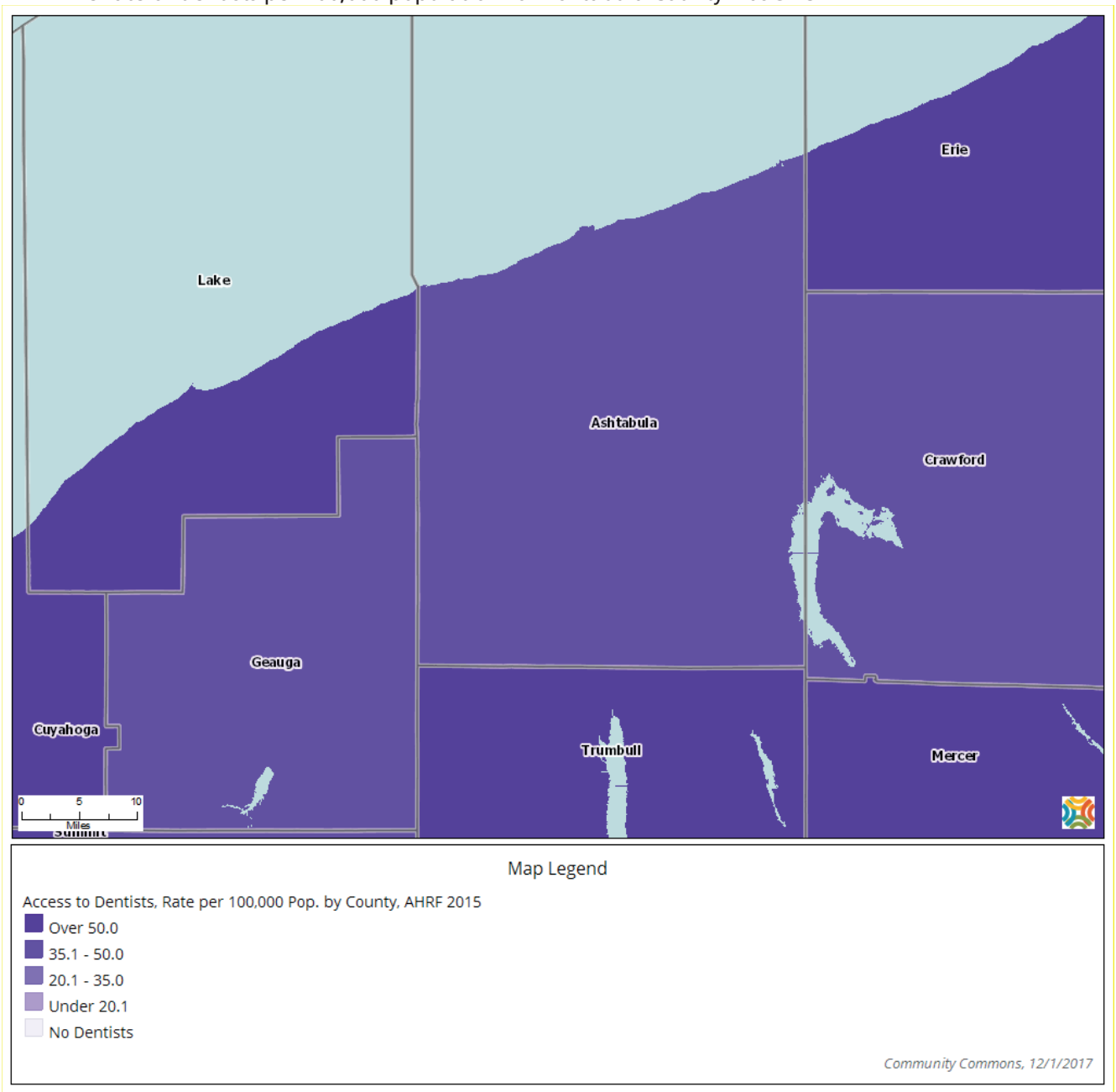
## Facts About Adult Oral Health

- 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)*

## Access to Dentists, Rate per 100,000 Population by County, Area Health Resource File (AHRF), 2015

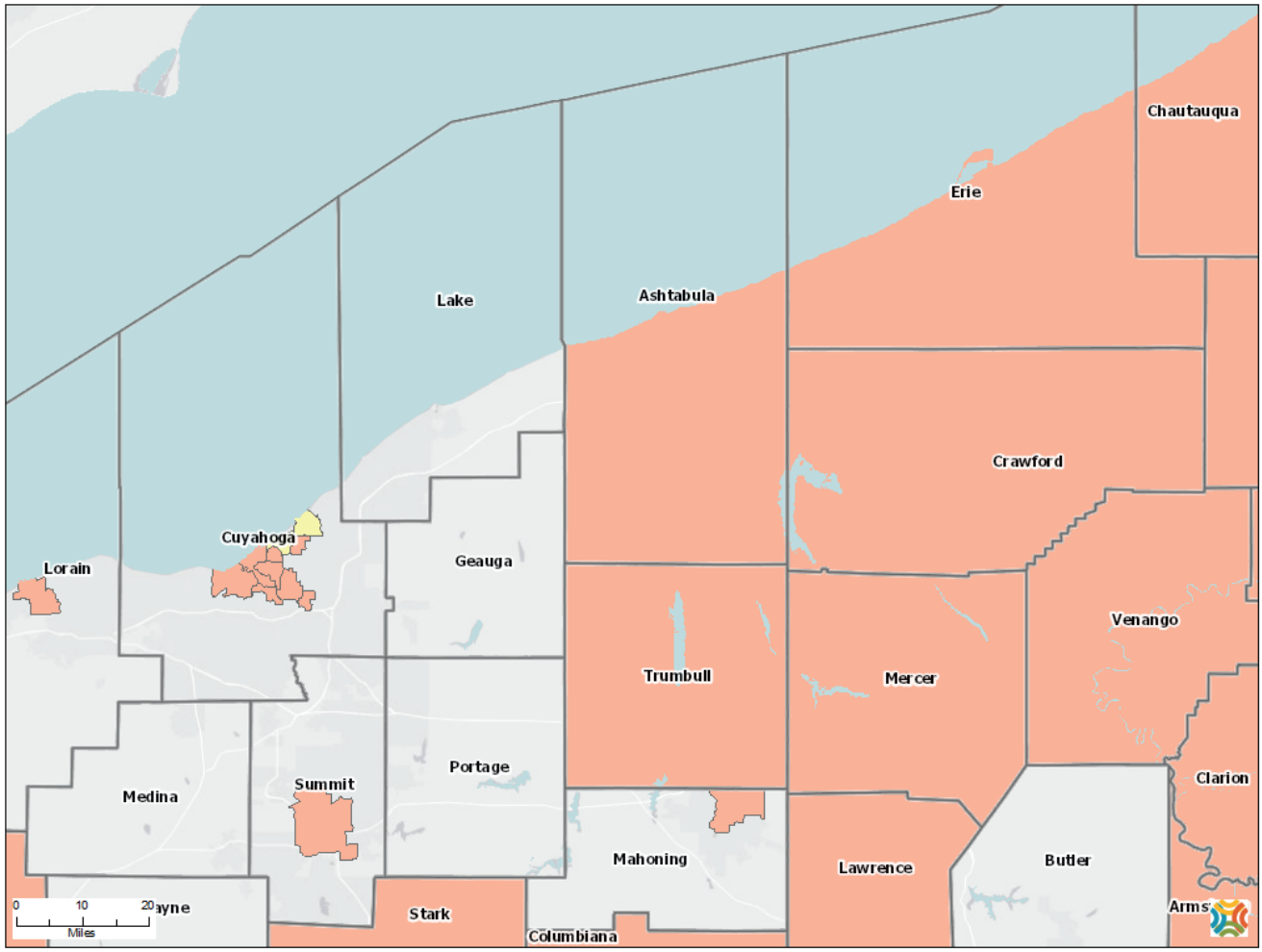
- There were 37 dentists in Ashtabula County in 2015.
- The rate of dentists per 100,000 population for Ashtabula County was 37.5.




*(Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, Area Health Resource File (AHRF): 2015, as compiled by Community Commons, obtained on 12/1/17)*

## Health Professional Shortage Area – Dental, Designated Population Group by Shortage Area, Health Resources and Services Administration (HRSA), April 2016

- Ashtabula County is designated as a Health Professional Shortage Area of dental health providers for the low income population.




Map Legend

Health Professional Shortage Area - Dental, Designated Population Group by Shortage Area, HRSA HPSA Database April 2016

- Homeless Population HPSA
- Low Income Population HPSA
- Low Income Homeless Population HPSA
- Low Income Migrant Farmworker Population HPSA
- Low Income Homeless Migrant Farmworker Population HPSA
- Low Income Migrant Seasonal Worker Population HPSA
- Low Income Homeless Migrant Seasonal Worker Population HPSA
- Medicaid Eligible Population HPSA
- Migrant Seasonal Worker Population HPSA
- Geographic HPSA

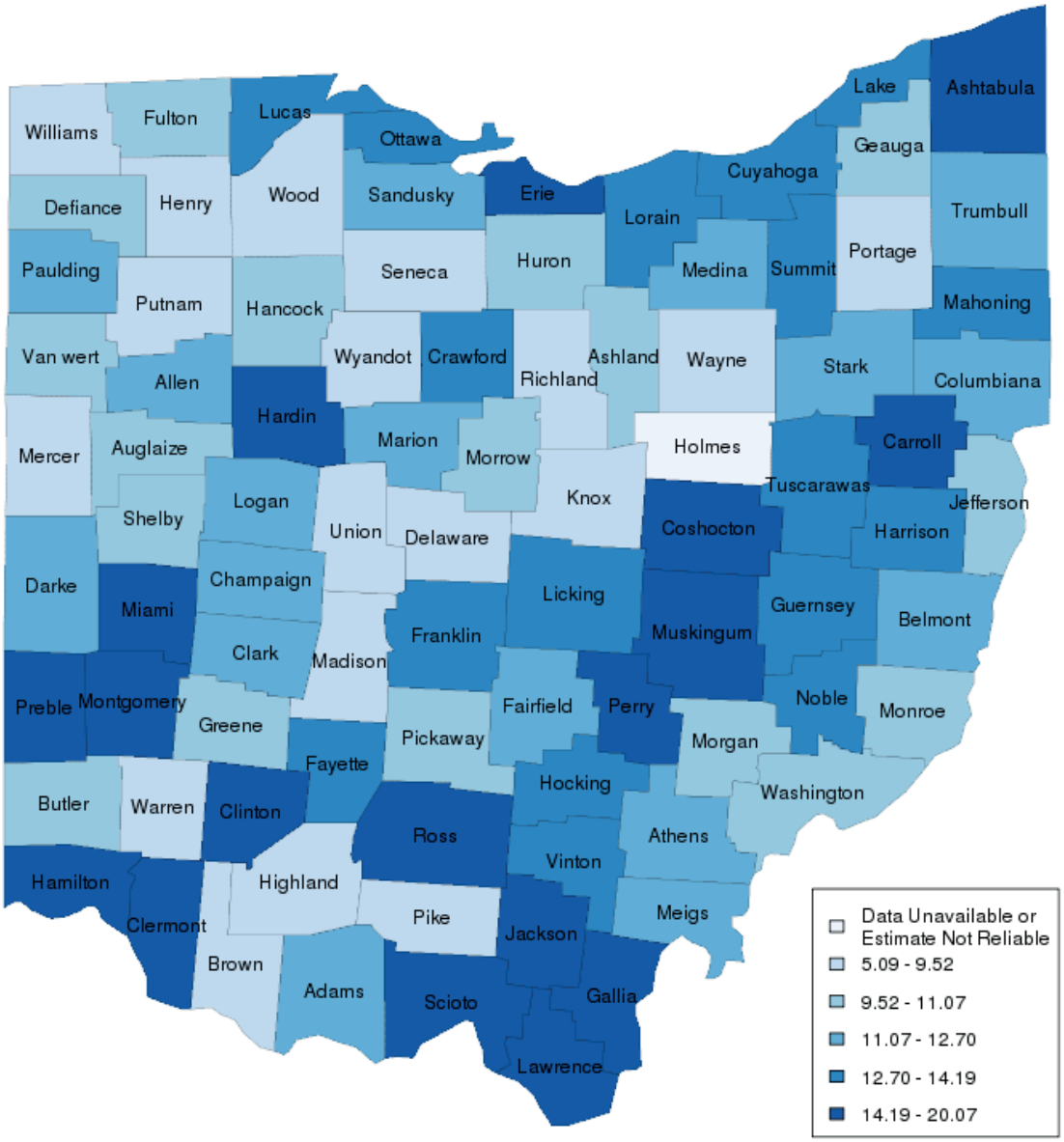
*Community Commons, 12/20/2017*

*(Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, April 2016, as compiled by Community Commons, obtained on 12/13/17)*

***The following map shows the estimated proportion of all adults, ages 19 years and older, with unmet needs in dental care.***

- Sixteen percent (16%) of Ashtabula County adults, ages 19 years and older, had unmet needs in dental care.
- Thirteen percent (13%) of Ohio adults, ages 19 years and older, had unmet needs in dental care.

## Estimated Proportion: Unmet Needs in Dental Care, All Adults, Ages 19 Years and Older (2015) *




*(Source: Ohio Medicaid Assessment Survey (OMAS) Adult Dashboard, 2015)*
**Unmet needs indicate those who could not get needed dental care in the past 12 months*

# Health Behaviors: Health Status Perceptions

## Key Findings

*In 2016, over two-fifths (43%) of Ashtabula County adults rated their health status as excellent or very good. Conversely, 22% of adults described their health as fair or poor. That percentage increased to 33% among individuals with incomes less than $25,000.*

**Adults Who Rated General Health Status Excellent or Very Good**

- Ashtabula County 43% (2016)
- Ohio 51% (2016)
- U.S. 52% (2016)

## General Health Status

- In 2016, over two-fifths (43%) of Ashtabula County adults rated their health as excellent or very good. Ashtabula County adults with higher incomes (48%) were most likely to rate their health as excellent or very good, compared to 25% of those with incomes less than $25,000.

- Twenty-two percent (22%) of adults rated their health as fair or poor. The 2016 BRFSS has identified that 18% of Ohio and 17% of U.S. adults self-reported their health as fair or poor.

- Ashtabula County adults were most likely to rate their health as fair or poor if they:
  - Were a member of an unmarried couple (75%) or were separated (60%)
  - Had been diagnosed with diabetes (40%)
  - Had an annual household income under $25,000 (33%)
  - Had high blood pressure (31%) or high blood cholesterol (30%)

## Physical Health Status

- In 2016, 31% 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 5.8 days in the previous month. Ohio and U.S. adults reported their physical health as not good on an average of 3.7 days and 3.8 days, respectively, in the previous month *(Source: 2017 Community Health Rankings, 2015 BRFSS).*

- Ashtabula County adults were most likely to rate their physical health as not good if they:
  - Had an annual household income less than $25,000 (47%)
  - Were female (38%)
  - Were 65 years of age or older (34%)

## Mental Health Status

- In 2016, 40% 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 7.0 days in the previous month. Ohio and U.S. adults reported their mental health as not good on an average of 4.0 days and 3.8 days, respectively, in the previous month *(Source: 2017 Community Health Rankings, 2015 BRFSS).*

- Nearly one-third (30%) 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

- Ashtabula County adults were most likely to rate their mental health as not good if they:
  - Had an annual household income less than $25,000 (56%)
  - Were under the age of 30 (55%)
  - Were female (47%)

| 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** | 57% | 15% | 3% | 2% | 19% |
| **Females** | 37% | 23% | 9% | 2% | 27% |
| **Total** | 46% | 19% | 6% | 1% | 24% |
| **Mental Health Not Good in Past 30 Days*** | | | | | |
| **Males** | 53% | 12% | 6% | 2% | 26% |
| **Females** | 37% | 14% | 9% | 4% | 32% |
| **Total** | 45% | 13% | 7% | 3% | 30% |

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

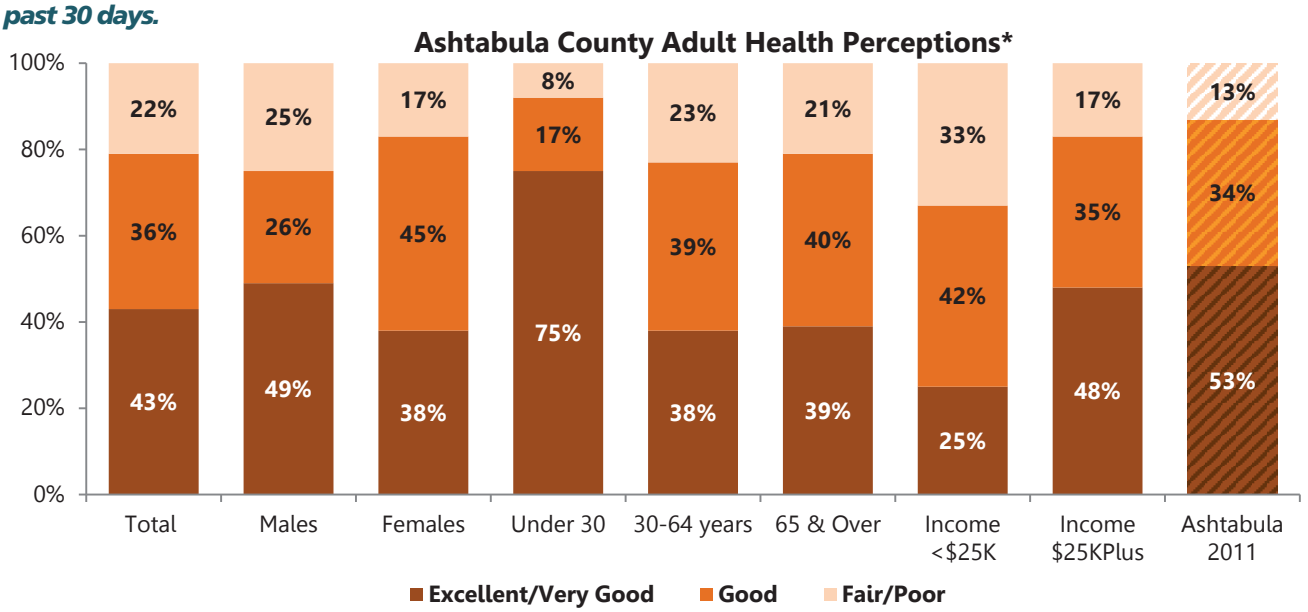
| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Rated health as excellent or very good** | 48% | 43% | 51% | 52% |
| **Rated health as fair or poor** | 19% | 22% | 18% | 17% |
| **Average days that physical health not good in past month** | N/A | 5.8 | 3.7‡ | 3.8‡ |
| **Average days that mental health not good in past month** | N/A | 7.0 | 4.0‡ | 3.8‡ |

*‡2015 BRFSS data as compiled by 2017 County Health Rankings*
*N/A – Data not Available*

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Rated health as excellent or very good** | 43% | 41% | 52% |
| **Rated health as fair or poor** | 22% | 20% | 19% |

*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 described their personal health status as excellent/very good, good, and fair/poor. Examples of how to interpret the information include: 43% of all Ashtabula County adults, 49% of males, and 39% of those ages 65 and older rated their health as excellent or very good. The table shows the percentage of adults with poor physical and mental health in the past 30 days.***




**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: Adult Weight Status

## Key Findings

*In 2016, more than two-thirds 73% of Ashtabula County adults were overweight or obese based on Body Mass Index (BMI). The 2016 BRFSS indicates that 32% of Ohio and 30% of U.S. adults were obese as measured by BMI. More than two-fifths (43%) of Ashtabula County adults were obese. Nearly half (48%) of adults were trying to lose weight.*

## Adult Weight Status

- In 2016, more than two-thirds (73%) of Ashtabula County adults were either overweight (30%) or obese (43%) by Body Mass Index (BMI), putting them at elevated risk for developing a variety of diseases.
- Nearly half (48%) of adults were trying to lose weight, 30% were trying to maintain their current weight or keep from gaining weight, and 2% were trying to gain weight. One in five Ashtabula County adults were not doing anything to lose or gain weight.
- Ashtabula County adults did the following to lose weight or keep from gaining weight: ate less food, fewer calories, or foods low in fat (46%); drank more water (45%); exercised (39%); ate a low-carb diet (17%); used health coaching (3%); used a weight loss program (3%); took laxatives (2%); participated in a prescribed dietary or fitness program (1%); smoked cigarettes (1%); took diet pills, powders or liquids without a doctor's advice (1%); prepared for bariatric surgery or underwent post-surgery maintenance (<1%); took prescribed medications (<1%); vomited after eating (<1%); and went without eating 24 or more hours (<1%).

**43% of Ashtabula County adults were obese.**

## Physical Activity

- In Ashtabula County, 52% of adults engaged in some type of physical activity or exercise for at least 30 minutes 3 or more days per week. More than one-quarter (26%) of adults exercised on 5 or more days per week. Nearly one-fourth (24%) of adults did not participate in any physical activity in the past week, including 2% who were unable to exercise.
- The CDC recommends that adults participate in moderate exercise for at least 2 hours and 30 minutes every week or vigorous exercise for at least 1 hour and 15 minutes every week. Whether participating in moderate or vigorous exercise, the CDC also recommends muscle-strengthening activities that work all major muscle groups on 2 or more days per week *(Source: CDC, Physical Activity Basics, 2015).*
- Reasons for not exercising included the following: time (26%); pain or discomfort (23%); too tired (20%); laziness (16%); chose not to exercise (13%); weather (13%); could not afford a gym membership (10%); no exercise partner (7%); lack of opportunities for those with physical impairments or challenges (4%); poorly maintained/no sidewalks (4%); no child care (3%); no gym available (3%); did not know what activity to do (2%); safety (2%); doctor advised them not to exercise (2%); no walking, biking trails, or parks (1%); and transportation (1%).

## Nutrition

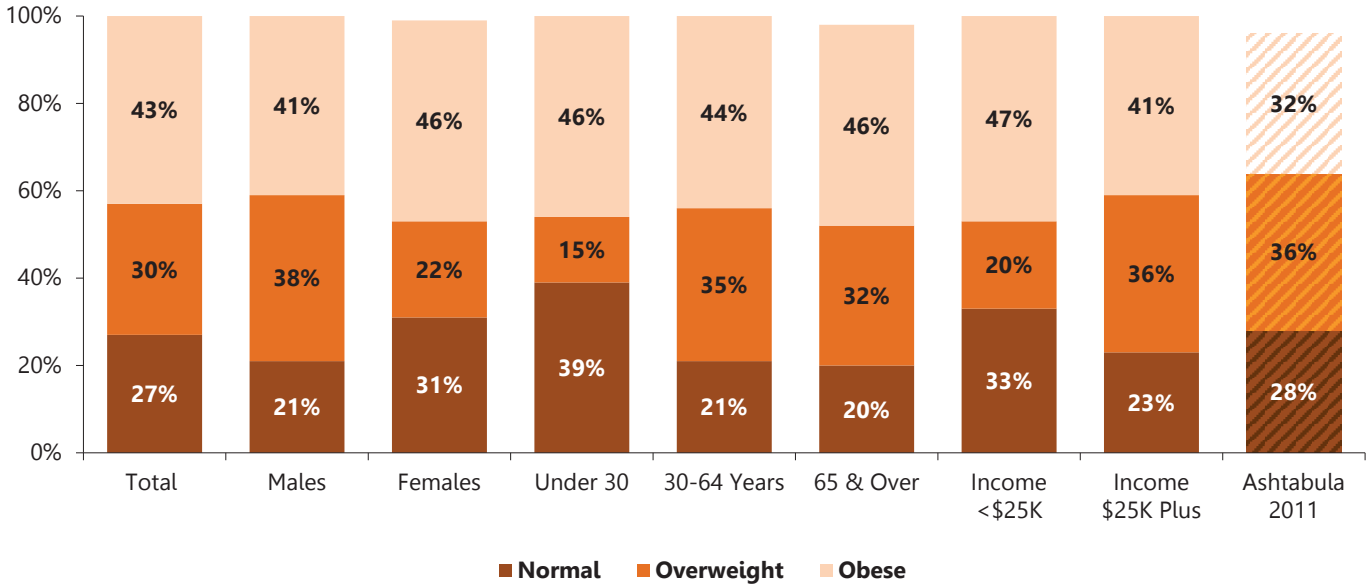
- In 2016, 66% of adults ate between 1 to 2 servings of fruits and vegetables per day. 23% ate between 3 to 4 servings, and 3% ate 5 or more servings of fruits and vegetables per day. One in twelve (8%) Ashtabula County adults did not have any servings of fruits and vegetables. The American Cancer Society recommends that adults eat at least 2 ½ cups (5 servings) of fruits and vegetables per day to reduce the risk of cancer and to maintain good health.

- Ashtabula County adults reported the following reasons they chose the types of food they ate: taste/enjoyment (61%), cost (51%), healthiness of food (46%), ease of preparation/time (42%), food they were used to (35%), what their family prefers (30%), nutritional content (30%), availability (26%), calorie content (22%), if it was organic (11%), if it was genetically modified (10%), artificial sweetener content (9%), health care provider's advice (6%), if it was gluten free (5%), if it was lactose free (4%), other food sensitivities (3%), and other reasons (2%).

- Almost three-quarters (74%) of adults ate out in a restaurant or brought home take-out food at least once in the past week, including 5% of adults who did so for 5 or more meals in the past week.

***The following graph shows the percentage of Ashtabula County adults who were overweight or obese by Body Mass Index (BMI). Examples of how to interpret the information include: 27% of all Ashtabula County adults were classified as normal weight, 30% were overweight, and 43% were obese.***

**Ashtabula County Adult BMI Classifications***



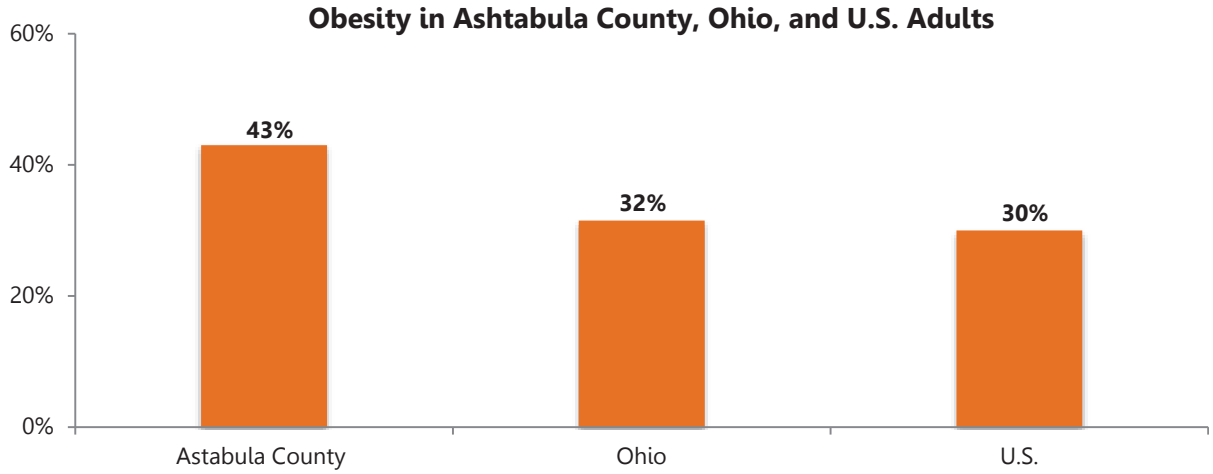

**Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight.*
*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey*

| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Obese** | 32% | 43% | 32% | 30% |
| **Overweight** | 36% | 30% | 35% | 35% |

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Obese** | 43% | 42% | 30% |
| **Overweight** | 30% | 26% | 35% |

*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 are obese compared to Ohio and U.S.***




*(Source: 2016 Ashtabula County Health Assessment and 2016 BRFSS)*

## BMI Measurements

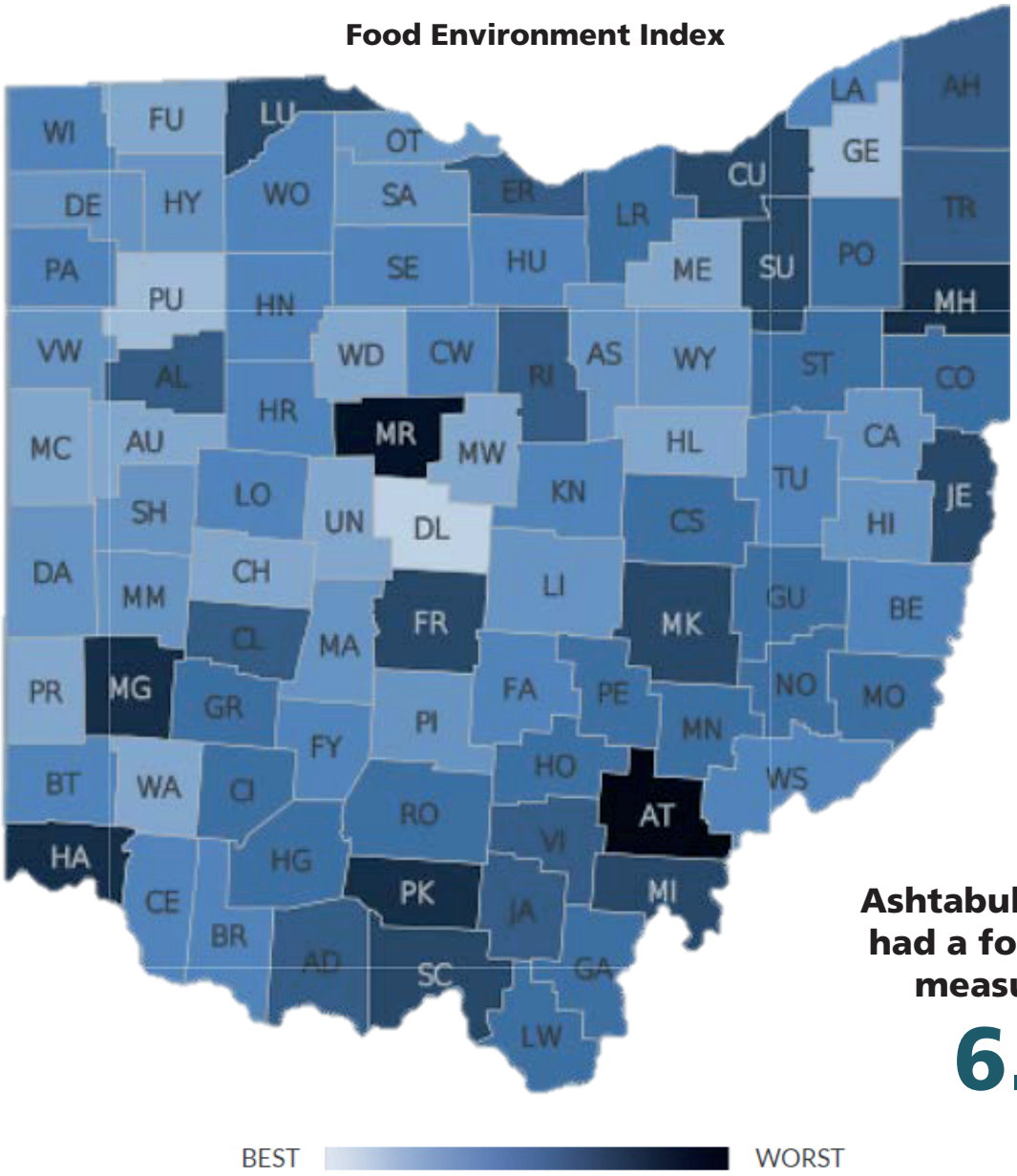
- Body Mass Index (BMI) is a person's weight in kilograms divided by the square of height in meters.
- A high BMI can be an indicator of high body fat.
- BMI can be used to screen for weight categories that may lead to health problems but it is not diagnostic of the body fatness or health of any individual.

| BMI | Weight Status |
|---|---|
| Below 18.5 | Underweight |
| 18.5 – 24.9 | Normal or Healthy Weight |
| 25.0 – 29.9 | Overweight |
| 30.0 and above | Obese |

*(Source: CDC, Healthy Weight: About Adult Weight, updated August 29, 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 6.9.
- The food environment index in Ohio is 7.0.

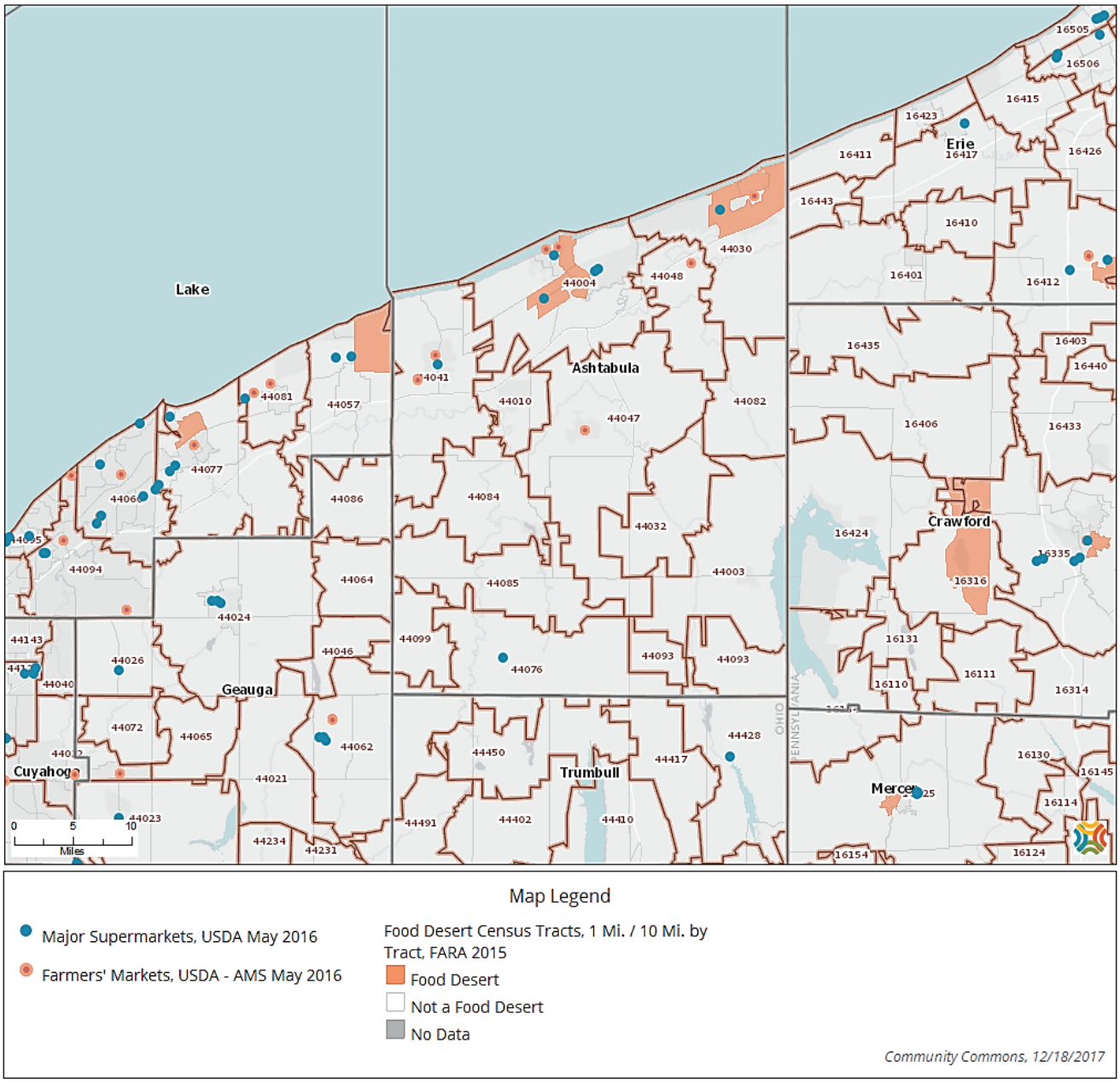



**Ashtabula County had a food index measure of:**

**6.9**

*(Source: USDA Food Environment Atlas, as compiled by County Health Rankings 2017)*

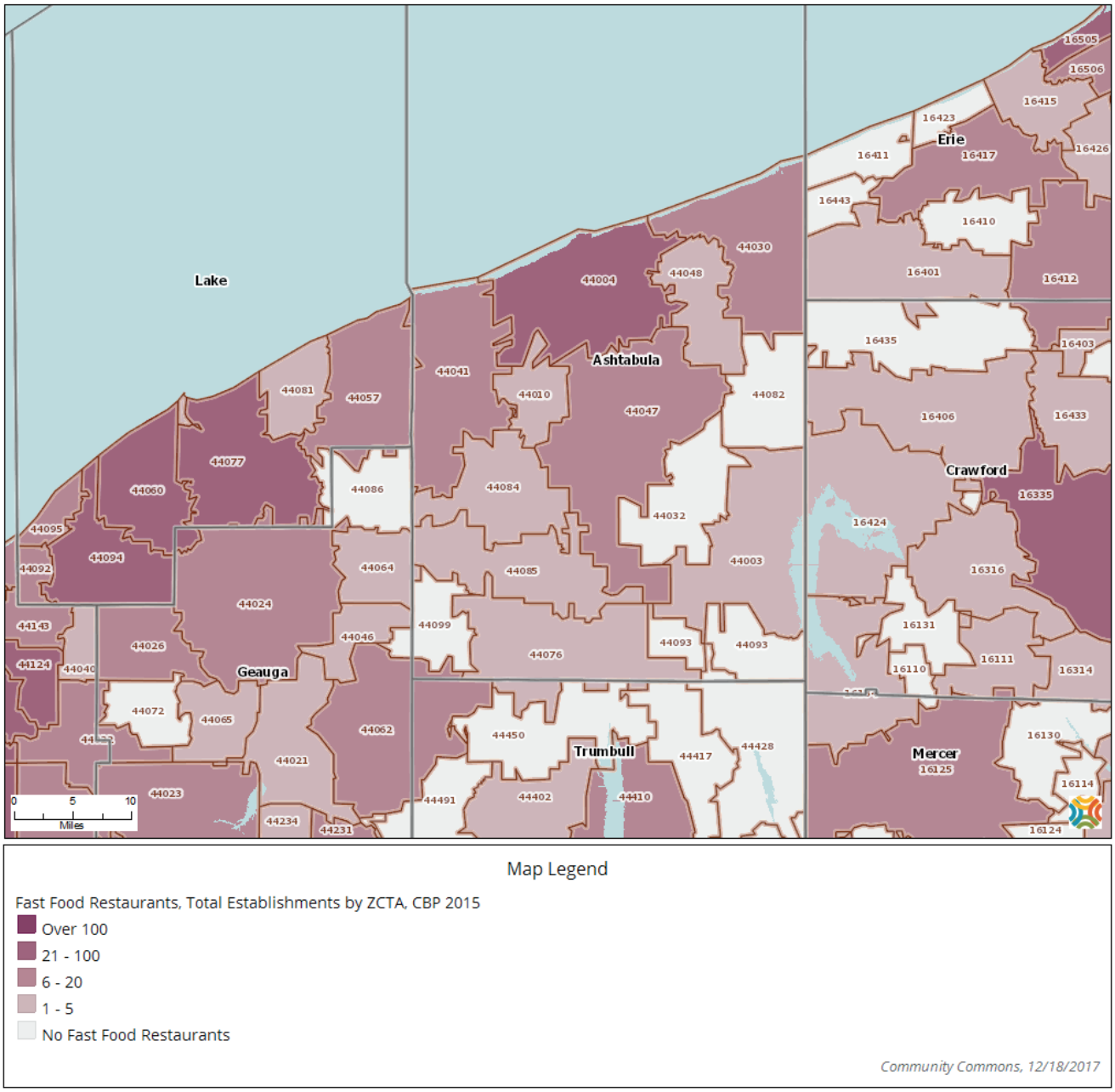
## Major Supermarkets, Farmer's Markets and Food Deserts




*(Sources: U.S. Department of Agriculture, Food and Nutrition Service, May 2016 and U.S. Department of Agriculture, Economic Research Service, USDA – Food Access Research Atlas: 2015, as compiled by Community Commons)*

## Total Number of Fast Food Restaurants by Zip Code Tract Area

- In 2015, there were 83.7 fast food restaurants per 100,000 population in Ashtabula County.




*(Source: US Census Bureau, County Business Patterns: 2015, as compiled by County Health*

# Health Behaviors: Adult Tobacco Use

## Key Findings

*In 2016, 21% of Ashtabula County adults were current smokers, and 30% were considered former smokers. In 2017, the American Cancer Society (ACS) stated that tobacco use was the most preventable cause of death worldwide and is responsible for the deaths of approximately half of long-term users. Each year, cigarette smoking results in an estimated 480,000 premature deaths including 42,000 from secondhand smoke exposure (Source: Cancer Facts & Figures, American Cancer Society, 2017).*

**In 2016, 21% of Ashtabula County adults were current smokers.**

## Adult Tobacco Use Behaviors

- 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). The 2016 BRFSS reported current smoker prevalence rates of 23% for Ohio and 17% for the U.S.

- Almost one-third (30%) of adults indicated that they were former smokers (smoked 100 cigarettes in their lifetime and now do not smoke). The 2016 BRFSS reported former smoker prevalence rates of 24% for Ohio and 25% for the U.S.

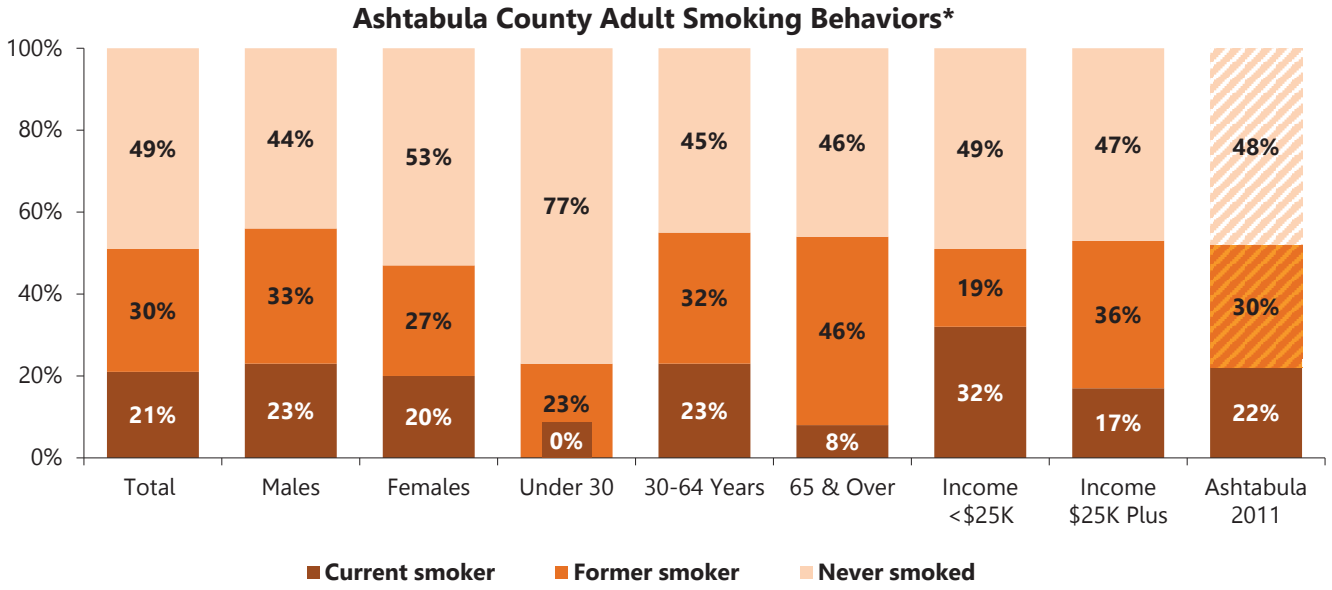
- Ashtabula County adult smokers were more likely to have:
  - Have rated their overall health as poor (55%)
  - Have been divorced (33%)
  - Have an annual income less than $25,000 (32%)

- Ashtabula County adults used the following tobacco products in the past year: cigarettes (26%), e-cigarettes (10%), roll-your-own (6%), cigars (5%), chewing tobacco (4%), little cigars (2%), snuff (2%), Black and Milds (1%), hookah (1%), pipes (1%), pouch (1%), cigarillos (<1%), and Swishers (<1%).

- Over half (52%) 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.

- Ashtabula County had the following rules/practices about smoking in their home: never allowed (78%), allowed in some places or at sometimes (6%), no rules about smoking (6%), not allowed with children around (5%), and allowed anywhere (5%).

***The following graph shows the percentage of Ashtabula County adults who smoked cigarettes. Examples of how to interpret the information include: 21% of all Ashtabula County adults were current smokers, 30% of all adults were former smokers, and 49% had 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.*

## 52% 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

| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Current smoker** (currently smoke some or all days) | N/A | 21% | 23% | 17% |
| **Former smoker** (smoked 100 cigarettes in lifetime & now do not smoke) | N/A | 30% | 24% | 25% |

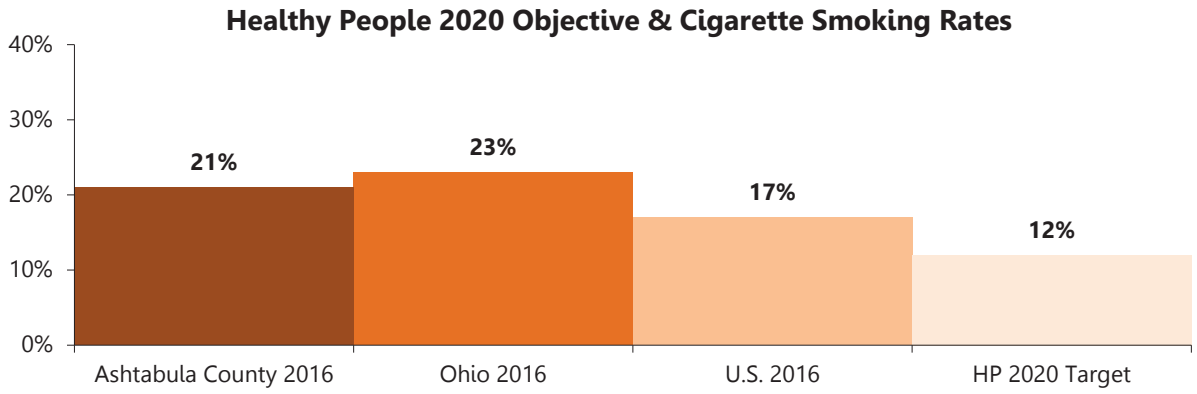
*N/A – Data not available*

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Current smoker** (currently smoke some or all days) | 21% | 35% | 28% |
| **Former smoker** (smoked 100 cigarettes in lifetime & now do not smoke) | 30% | 26% | 30% |

*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 Ashtabula County, Ohio, and U.S. adult cigarette smoking rates. The BRFSS rates shown for Ohio and the U.S. were for adults 18 years and older. This graph shows:***

- The Ashtabula County adult cigarette smoking rate was less than the Ohio rate, but higher than the U.S. rate and Healthy People 2020 target objective.




*(Source: 2016 Ashtabula County Health Assessment, 2016 BRFSS and Healthy People 2020)*

**30% of Ashtabula County adults indicated that they were former smokers.**

## Smoke-Free Living: Benefits and Milestones

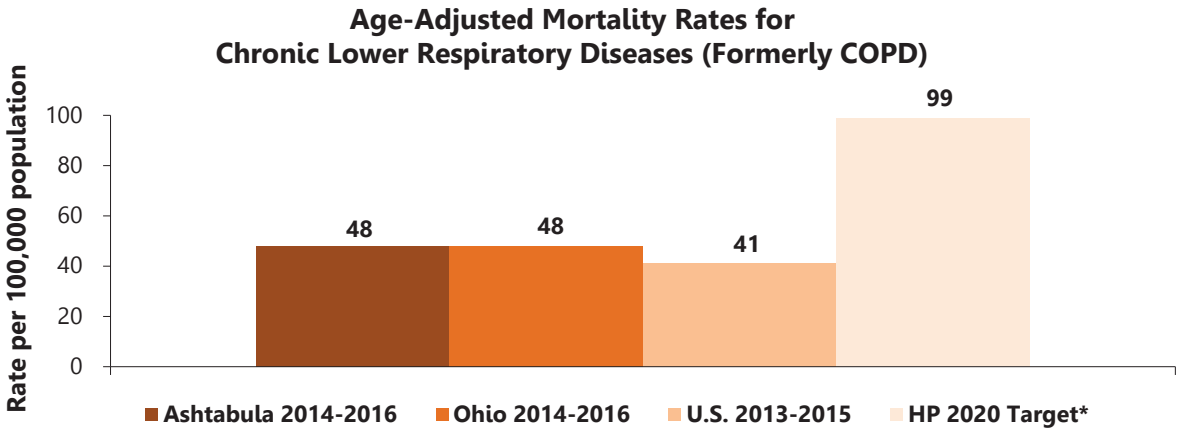
According to the American Heart Association and the U.S. Surgeon General:

- In your first 20 minutes after quitting: your blood pressure and heart rate recover from the cigarette-induced spike.
- After 12 hours of smoke-free living: the carbon monoxide levels in your blood return to normal.
- After two weeks to three months of smoke-free living: your circulation and lung function begin to improve.
- After one to nine months of smoke-free living: clear and deeper breathing gradually returns as coughing and shortness of breath diminishes; you regain the ability to cough productively instead of hacking, which cleans your lungs and reduce your risk of infection.
- After 5 years: Your risk of cancer of the mouth, throat, esophagus, and bladder are cut in half. Your risk of cervical cancer and stroke return to normal.
- After 10 years: You are half as likely to die from lung cancer. Your risk of larynx or pancreatic cancer decreases.
- After 15 years: Your risk of coronary heart disease is the same as a non-smoker's.

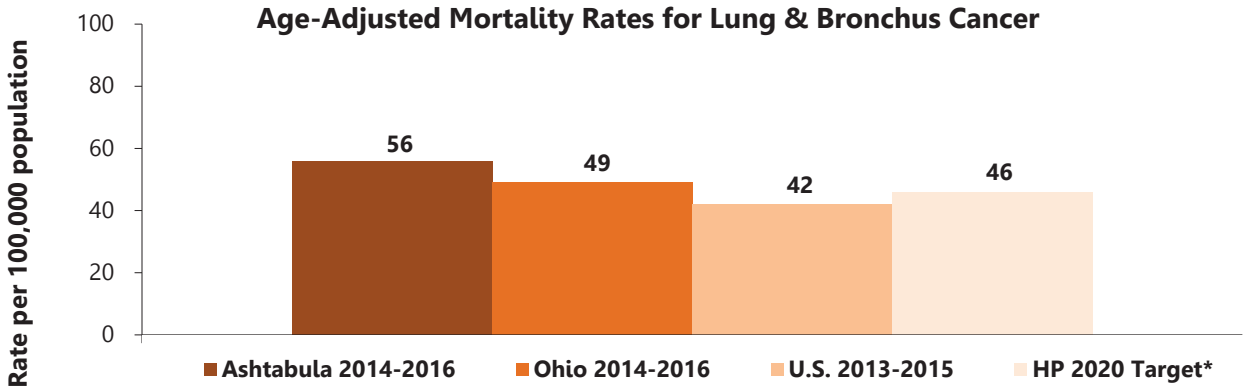
*(Source: American Heart Association, Your Non-Smoking Life, April 20, 2017)*

***The following graphs show Ashtabula County, Ohio, and U.S. age-adjusted mortality rates per 100,000 populations for chronic lower respiratory diseases (formerly COPD), as well as lung and bronchus cancer in comparison with the Healthy People 2020 objective. Ashtabula County age-adjusted mortality rates for lung and bronchus cancer by gender is shown below as well. These graphs show:***

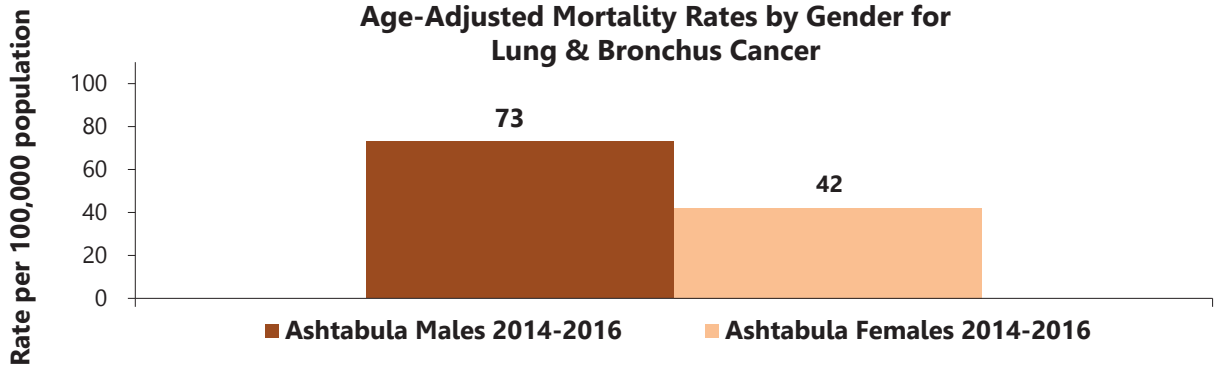
- From 2014-2016, Ashtabula County's age-adjusted mortality rate for Chronic Lower Respiratory Disease was the same as the Ohio and higher than the U.S. rate. Ashtabula County's age-adjusted rate for Chronic Lower Respiratory Disease was lower than the Healthy People 2020 target objective.
- Disparities existed by gender for lung and bronchus cancer rates. The 2014-2016 Ashtabula County male rates were higher than the Ashtabula County female rates.




*Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2014-2016, CDC Wonder 2013-2015)*
**Healthy People 2020's target rate and the U.S. rate is for adults aged 45 years and older.*

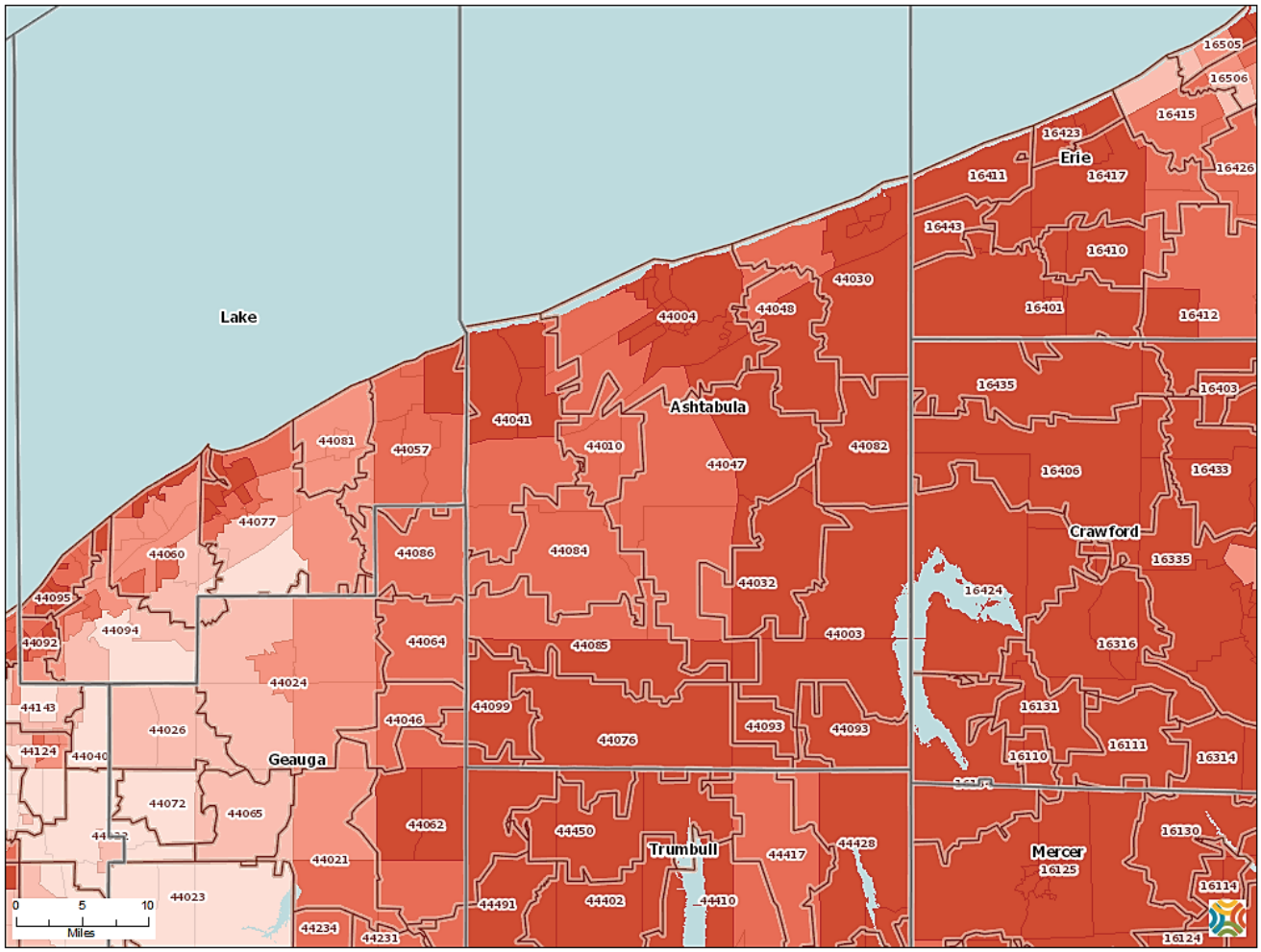



*Note: Healthy People 2020's target rate and the U.S. rate is for adults aged 45 years and older.*
**Healthy People 2020 Target data is for lung cancer only*
*(Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2014-2016, CDC Wonder 2013-2015)*




*(Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2014-2016)*

## Cigarette Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen (2014) *




Map Legend

Cigarette Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen 2014

- 1st Quintile (Highest Expenditures)
- 2nd Quintile
- 3rd Quintile
- 4th Quintile
- 5th Quintile (Lowest Expenditures)
- No Data or Data Suppressed

*Community Commons, 12/18/2017*

*(Source: Community Commons, updated 12/11/2017)*
**Tobacco expenditures indicate cigarettes only; cigars and other tobacco products are not included.*
*Description of indicator: To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map.*

## Smoking and Other Health Risks

- Smoking can make it harder for a woman to become pregnant and can affect her baby's health before and after birth. Smoking increases risks for:
  - Preterm (early) delivery
  - Stillbirth (death of the baby before birth)
  - Low birth weight
  - Sudden infant death syndrome (known as SIDS or crib death)
  - Ectopic pregnancy
  - Orofacial clefts in infants
- Smoking can also affect men's sperm, which can reduce fertility and also increase risks for birth defects and miscarriage (loss of the pregnancy).
- Smoking can affect bone health.
  - Women past childbearing years who smoke have lower bone density (weaker bones) than women who never smoked and are at greater risk for broken bones.
- Smoking affects the health of your teeth and gums and can cause tooth loss.
- Smoking can increase your risk for cataracts (clouding of the eye's lens that makes it hard for you to see) and age-related macular degeneration (damage to a small spot near the center of the retina, the part of the eye needed for central vision).
- Smoking is a cause of type 2 diabetes mellitus and can make it harder to control. The risk of developing diabetes is 30-40% higher for active smokers than nonsmokers.
- Smoking causes general adverse effects on the body, including inflammation and decreased immune function.
- Smoking is a cause of rheumatoid arthritis.

*(Source: CDC, Effects of Cigarette Smoking, Smoking and Other Health Risks, updated May 15, 2017)*

# Health Behaviors: Adult Alcohol Consumption

## Key Findings

*In 2016, 49% of Ashtabula County adults had at least one alcoholic drink in the past month. Additionally, 50% of adults who drank engaged in binge drinking (defined as 5 or more drinks for males or 4 or more drinks for females on one occasion) in the past month. One-fourth (25%) of adults drove after drinking any alcoholic beverages.*

**49% of Ashtabula County adults had at least one alcoholic drink in the past month.**

## Adult Alcohol Consumption

- In 2016, 49% of the Ashtabula County adults had at least one alcoholic drink in the past month. The 2016 BRFSS reported current drinker prevalence rates of 53% for Ohio and 54% for the U.S.
- Of those who drank, Ashtabula County adults drank 2.6 drinks on average, increasing to 2.9 drinks for those over the age of 65.
- Almost one-fourth (24%) Ashtabula County adults were considered binge drinkers. The 2016 BRFSS reported binge drinking rates of 18% for Ohio and 17% for the U.S.
- Half (50%) of those current drinkers reported they had five or more alcoholic drinks (for males) or 4 or more drinks (for females) on an occasion in the last month and would be considered binge drinkers by definition.

**24% of Ashtabula County adults were considered binge drinkers.**

- Ashtabula County adults experienced the following in the past six months: drove after having any alcoholic beverage (13%); drank more than they expected (6%); used prescription drugs while drinking (5%); continued to drink despite problems caused by drinking (4%); spent a lot of time drinking (3%); drank more to get the same effect (3%); gave up other activities to drink (2%); tried to quit or cut down but could not (2%); failed to fulfill duties at work, home, or school (2%); drank to ease withdrawal symptoms (2%); placed themselves or their family in harm (1%); and had legal problems (1%).

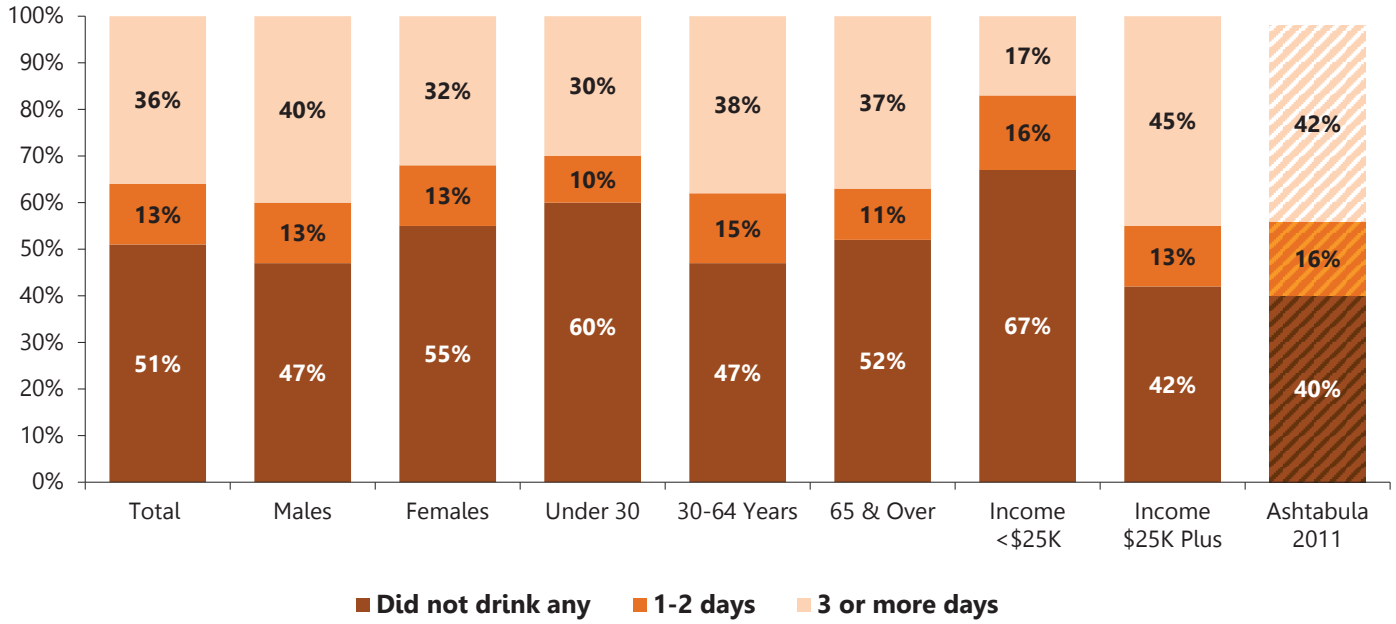
| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Current Drinker** (drank alcohol at least once in the past month) | 51% | 49% | 53% | 54% |
| **Binge drinker** (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days) | 21% | 24% | 18% | 17% |

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Current Drinker** (drank alcohol at least once in the past month) | 49% | 51% | 55% |
| **Binge drinker** (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days) | 24% | 20% | 28% |

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

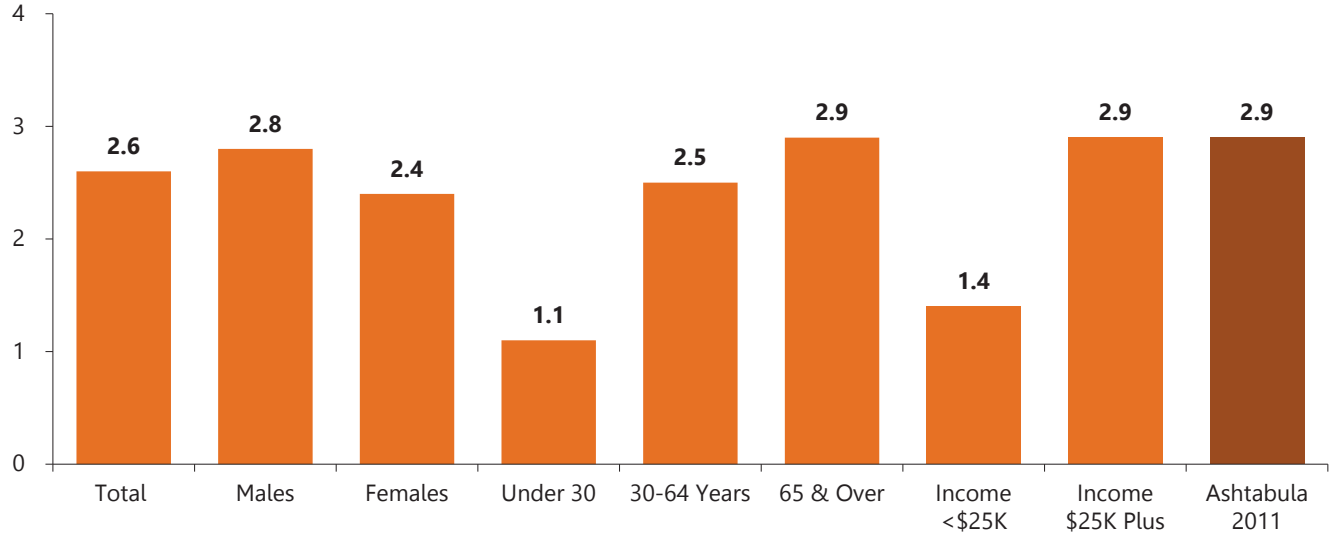
***The following graphs show the percentage of Ashtabula County adults consuming alcohol and the amount consumed on average. Examples of how to interpret the information shown on the first graph include: 51% of all Ashtabula County adults did not drink alcohol, 47% of Ashtabula County males did not drink, and 55% of adult females reported they did not drink.***

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



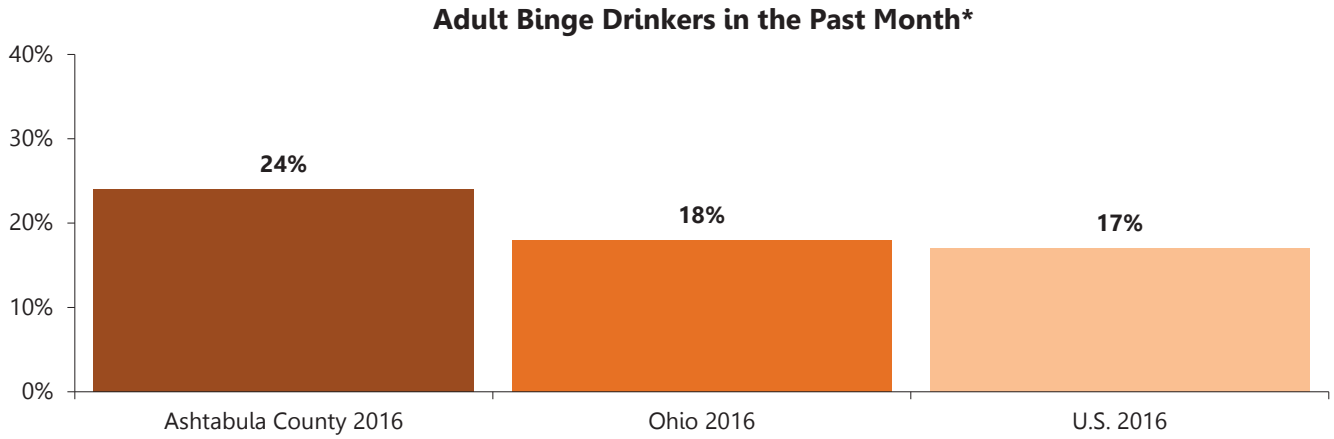

**Percentages may not equal 100% as some respondents answered, "don't know"*
*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey*

**Adults Average Number of Drinks Consumed Per Drinking Occasion**




*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 show the percentage of Ashtabula County drinkers who binge drank in the past month and a comparison of Ashtabula County binge drinkers with Ohio and U.S.***




*(Source: 2016 BRFSS, 2016 Ashtabula County Health Assessment)*
**Based on all adults. Binge drinking is defined as males having five or more drinks on an occasion, females having four or more drinks on one occasion.*

## Economic Costs of Excessive Alcohol Use

- Excessive alcohol consumption cost the United States $249 billion in 2010. This cost amounts to about $2.05 per drink, or about $807 per person.
- Costs due to excessive drinking largely resulted from loses in workplace productivity (72% of the total cost), health care expenses (11%), and other costs due to a combination of criminal justice expenses, motor vehicle crash costs, and property damage.
- Excessive alcohol use cost states and DC a median of $3.5 billion in 2010, ranging from $488 million in North America to $35 billion in California.
  - Excessive alcohol consumption cost Ohio $8.5 billion in 2010. This cost amounts to $2.10 per drink or $739 per person.
- Binge drinking, defined as consuming 4 or more drinks per occasion for women or 5 or more drinks per occasion for men, was responsible for 77% of the cost of excessive alcohol use in all states and DC.
- About $2 of every $5 of the economic costs of excessive alcohol use were paid by federal, state, and local governments.

*(Source: CDC, Alcohol and Public Health – Excessive Drinking, updated June 15, 2017)*

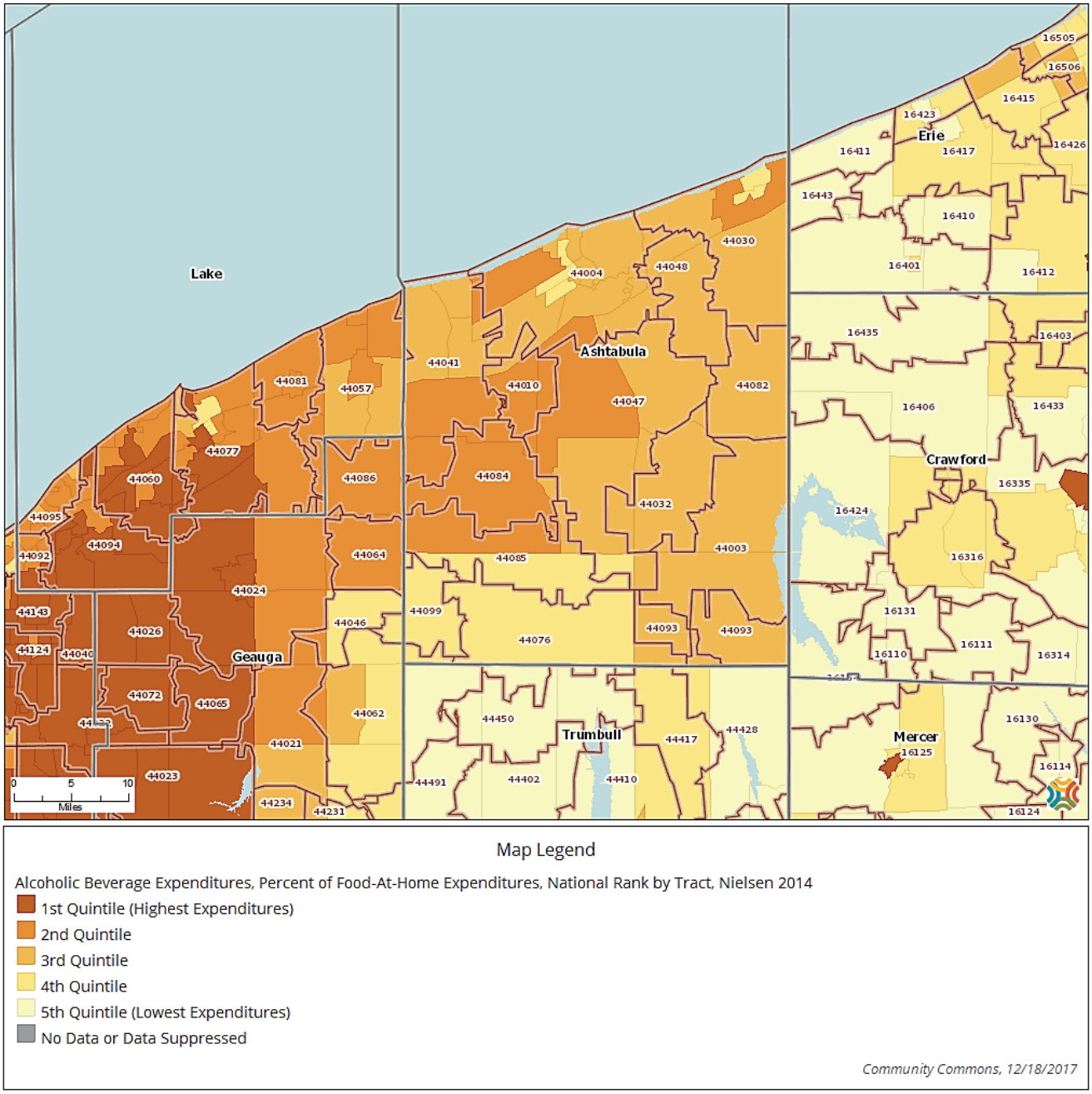
***The following table shows the cities of Ashtabula, Conneaut, and Geneva, Ashtabula County, and Ohio motor vehicle accident statistics. The table shows:***

- 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)*

## Alcohol Beverage Expenditures, National Rank by Tract, Nielsen (2014)




Map Legend

Alcoholic Beverage Expenditures, Percent of Food-At-Home Expenditures, National Rank by Tract, Nielsen 2014

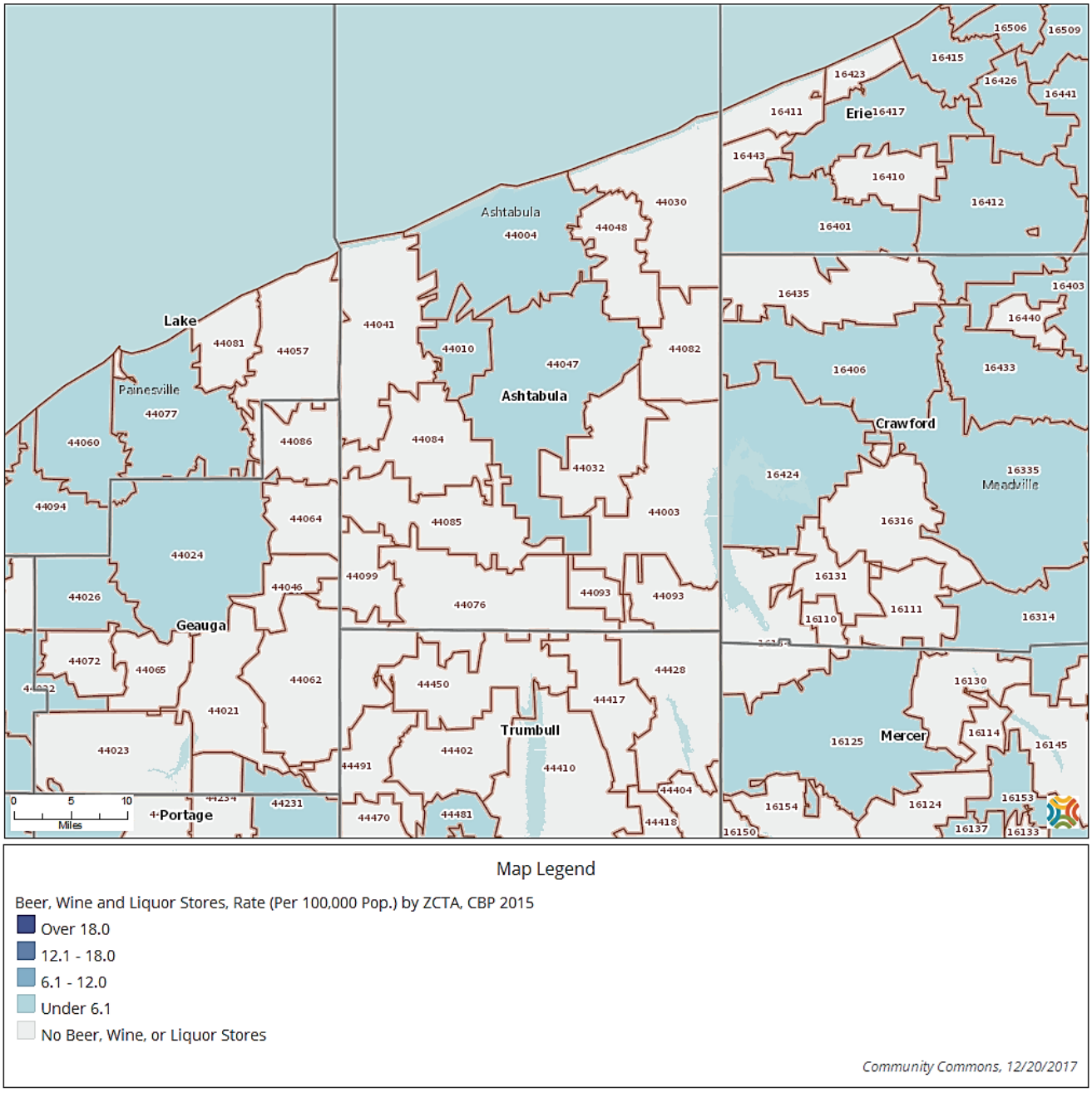
- 1st Quintile (Highest Expenditures)
- 2nd Quintile
- 3rd Quintile
- 4th Quintile
- 5th Quintile (Lowest Expenditures)
- No Data or Data Suppressed

*Community Commons, 12/18/2017*

*(Source: Community Commons, updated 12/11/2017)*

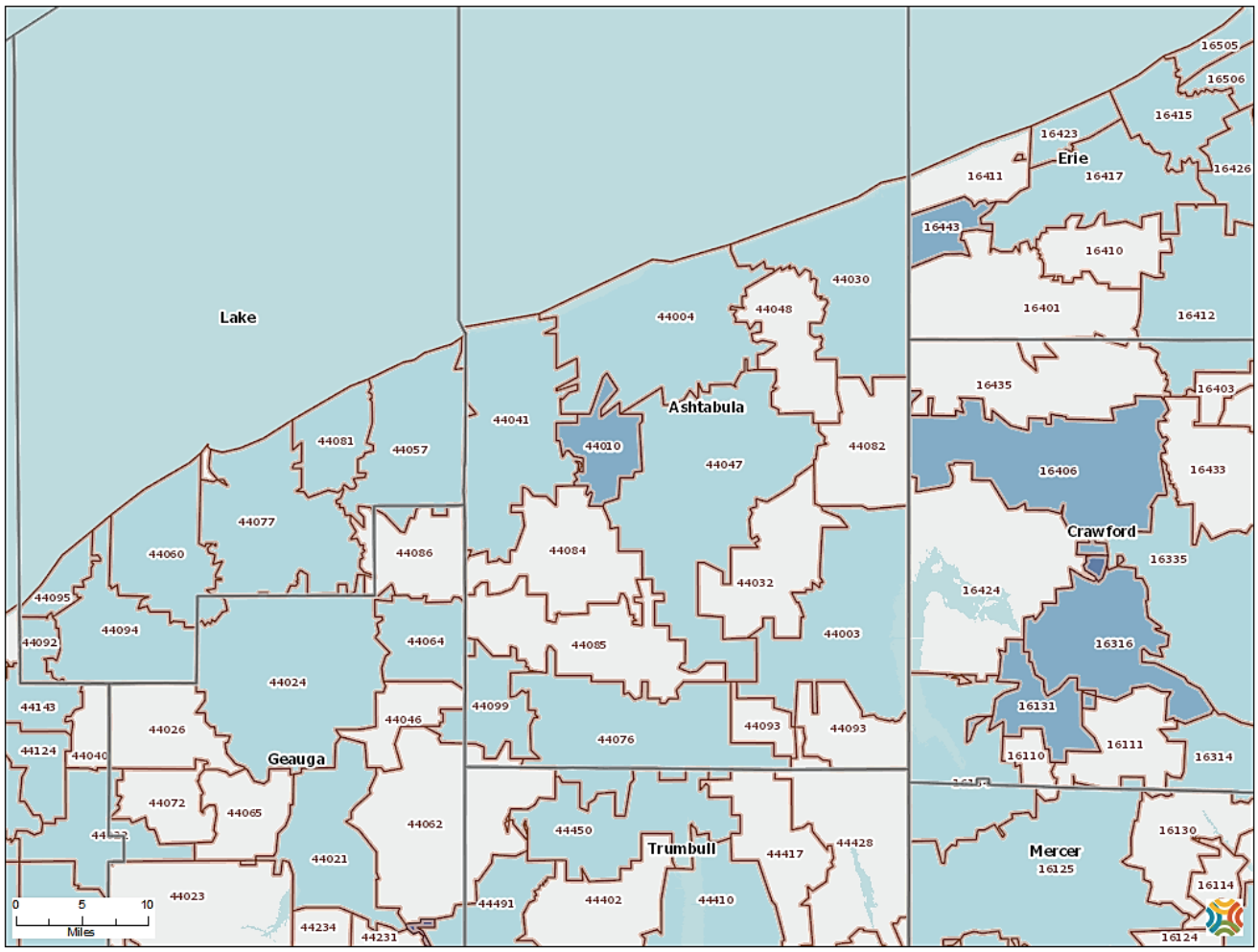
*Description of indicator: Alcohol expenditures included in this category are any beer, wine, and liquor purchased for consumption at home. Alcohol purchased at restaurants and bars is not included. Census tract level average and aggregated total household expenditures and category expenditures were acquired from the 2011 Nielsen Consumer Buying Power (CBP) Site Reports. To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map. Additional attributes include each tract's within-state rank and quintile.*

## Beer, Wine and Liquor Stores, Rate (Per 100,000 Pop.) by County, Census Business Patterns (CBP), 2015




*(Source: Community Commons, updated 11/27/2017)*
*Description of indicator: This layer provides information about select businesses and establishments across the United States. Data are from the US Census Bureau's County Business Patterns data series, which classifies businesses using the North American Industry Classification System (NAICS). Map layers include county-level establishment totals and establishment rates per 100,000 population. The population figures used in this analysis are from the US 2010 Decennial Census.*

## Bars and Drinking Establishments, Rate (Per 100,000 Pop.) ZCTA, CBP 2015




Map Legend

Bars and Drinking Establishments, Rate (Per 100,000 Pop.) by ZCTA, CBP 2015

- Over 32.0
- 16.1 - 32.0
- 8.1 - 16.0
- Under 8.1
- No Bars or Drinking Establishments

*Community Commons, 12/18/2017*

*(Source: Community Commons, updated 12/11/2017)*

*Description of indicator: This layer provides information about select businesses and establishments across the United States. Data are from the US Census Bureau's County Business Patterns data series, which classifies businesses using the North American Industry Classification System (NAICS). Map layers include county-level establishment totals and establishment rates per 100,000 population. The population figures used in this analysis are from the US 2010 Decennial Census.*

# Health Behaviors: Adult Drug Use

## Key Findings

*In 2016, 8% of Ashtabula County adults had used recreational marijuana during the past 6 months. Four percent (4%) 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.*

## Adult Drug Use

- Eight percent (8%) of Ashtabula County adults had used recreational marijuana in the past 6 months, increasing to 17% of those under the age of 30.
- One percent (1%) of Ashtabula County adults reported using other recreational drugs in the past six months such as cocaine, synthetic marijuana/K2, heroin, LSD, inhalants, Ecstasy, bath salts, and methamphetamines.
- Four percent (4%) 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, increasing to 6% of those ages 30-64.
- Adults who misused prescription medication obtained their medication from the following: primary care physician (80%), bought from a drug dealer (7%), free from friend or family member (7%), from multiple doctors (6%), bought from friend or family member (6%), and from ER or urgent care doctor (4%).
- Adults misused the following over-the-counter drugs in the past 6 months: cough and cold medicines (12%), sleeping pills (4%), energy boosters (1%), motion sickness pills (1%), weight loss or diet pills (1%), and other drugs (2%).
- Ashtabula County adults indicated they did the following with their unused prescription medication: took as prescribed (23%), flushed it down the toilet (14%), threw it in the trash (14%), took it to the Medication Collection program (11%), kept it (11%), took it to sheriff's office (3%), kept in a locked cabinet (2%), took back on Drug Take Back Days (2%), mailer to ship back to pharmacy (1%), gave it away (1%), traded it (<1%), and some other destruction method (2%). 46% of adults did not have unused medication.
- Adults indicated the following drugs were most commonly abused in Ashtabula County: heroin (70%), alcohol (65%), methamphetamines (59%), marijuana (58%), prescription medications (49%), cocaine (34%), inhalants (12%), Ecstasy or GHB (8%), and LSD, mescaline, peyote, psilocybin, DMT, or mushrooms (8%).
- 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: could not afford to go (2%), could not get to the office or clinic (1%), did not want to get in trouble (1%), did not want to miss work (1%), fear (1%), had not thought of it (1%), no program available (1%), stigma of seeking drug services (1%), wait time (1%), did not know how to find a program (<1%), and other reason (1%). 94% of adults indicated such a program was not needed.

| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Adults who used recreational marijuana in the past 6 months** | 7% | 8% | N/A | N/A |
| **Adults who misused prescription drugs in the past 6 months** | 8% | 4% | N/A | N/A |

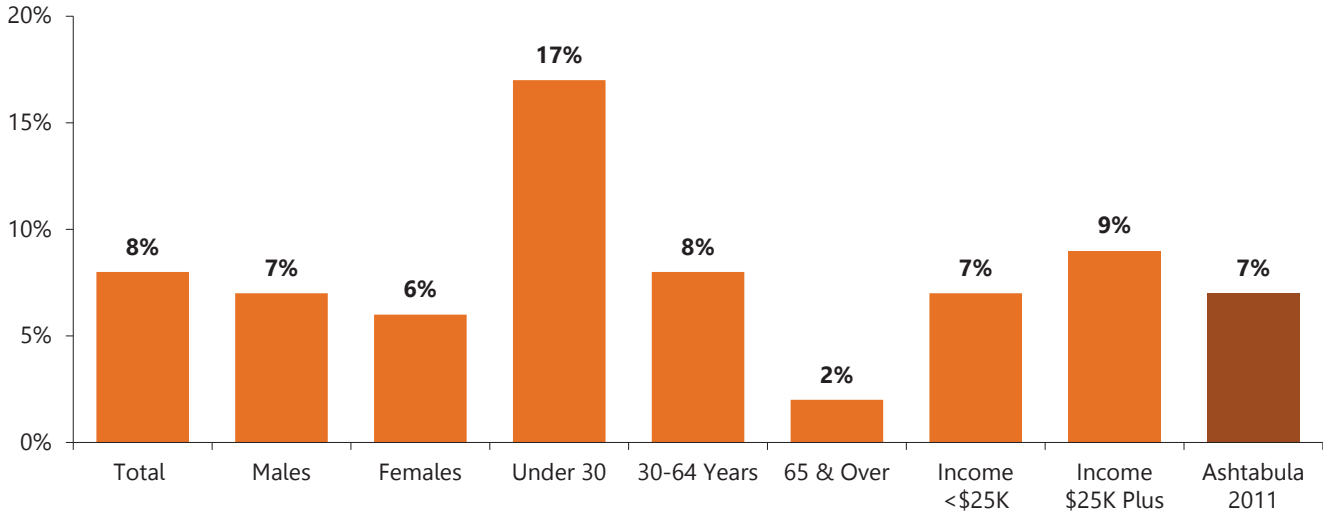
*N/A- Data not available*

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Adults who used recreational marijuana in the past 6 months** | 8% | <1% | 6% |
| **Adults who misused prescription drugs in the past 6 months** | 4% | <1% | 2% |

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

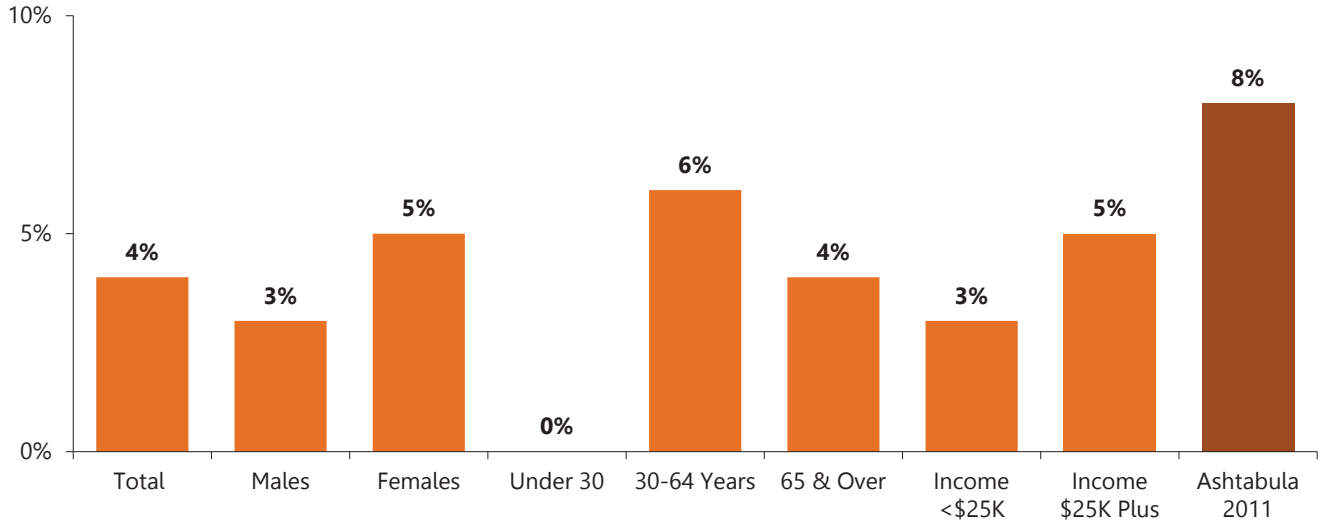
***The following graphs are data from the 2016 Ashtabula County Health Assessment indicating adult recreational marijuana use in the past six months and medication misuse in the past six months. Examples of how to interpret the information include: 8% of all Ashtabula County adults used recreational marijuana in the past six months, specifically 17% of adults under the age of 30.***

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



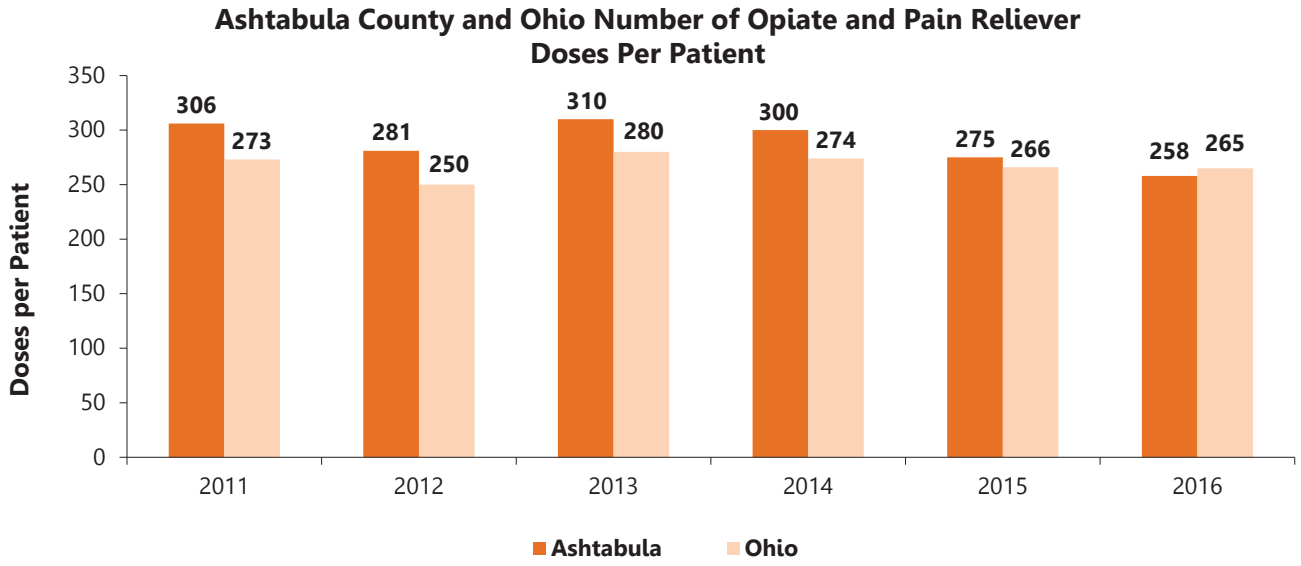

*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey*

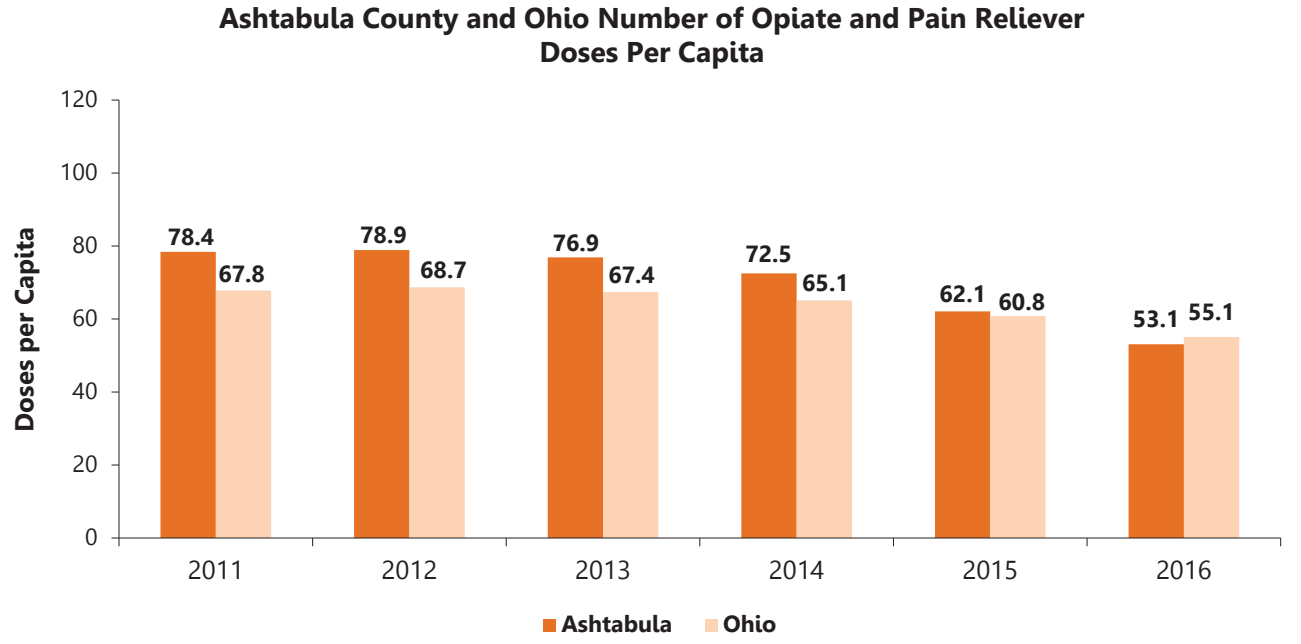
**Ashtabula County Adult Medication Misuse in Past 6 Months***




**Respondents were asked "during the past 6 months, have you used any of the following medications that were not prescribed to you, or you took more than was prescribed to feel good or high, more active or alert?"*
*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey*

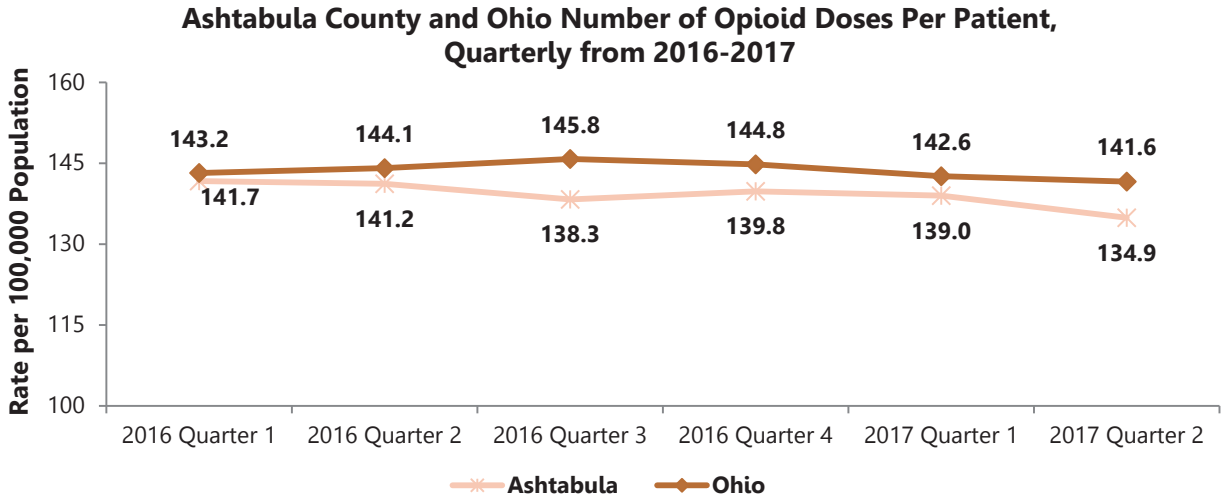
***The following graphs are data from the Ohio Automated Prescription Reporting System indicating Ashtabula County and Ohio opioid doses per patient, as well as opioid doses per capita.***



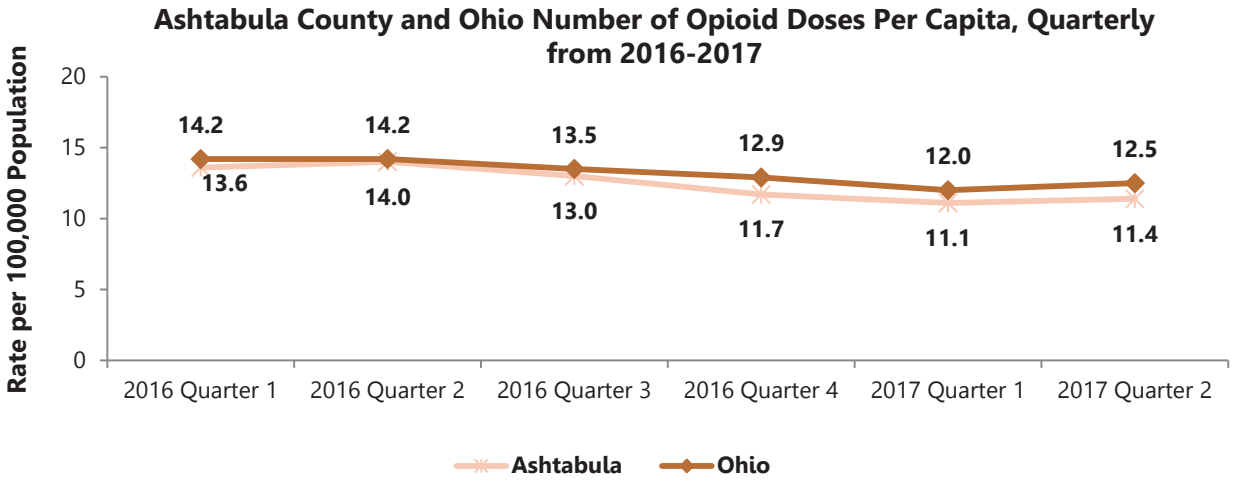




*(Source: Ohio's Automated Rx Reporting System, 2011-2016)*

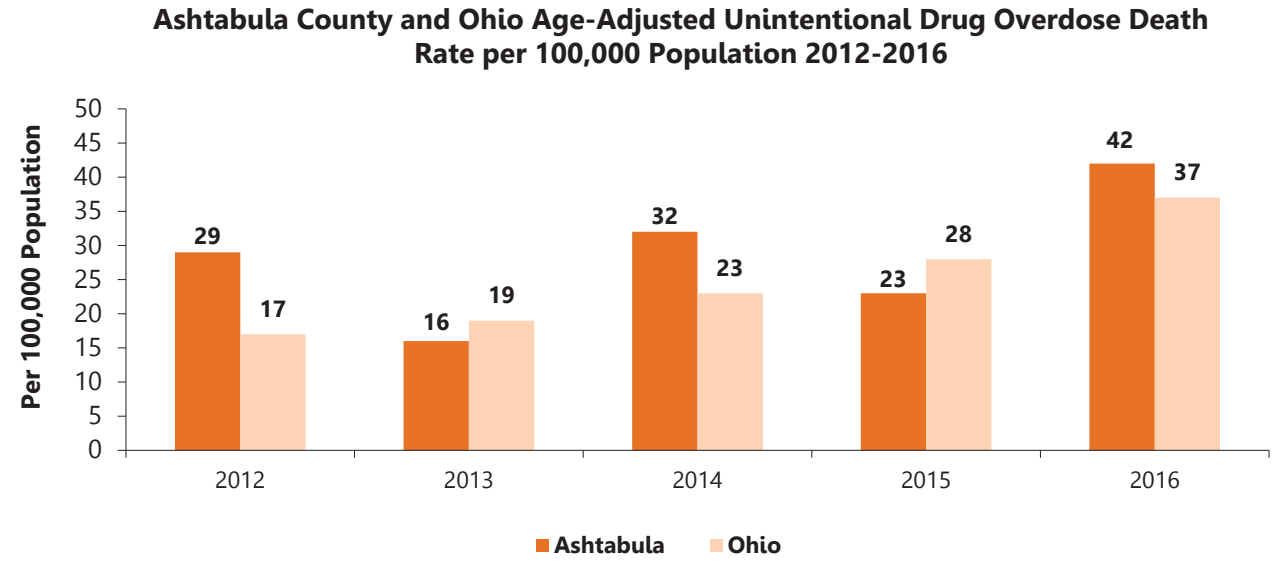
***The following graphs show Ashtabula County and Ohio quarterly opioid doses per patient and unintentional drug overdose deaths.***




*(Source: Ohio's Automated Rx Reporting System, 2016-2017)*




*(Source for graphs: Ohio's Automated Rx Reporting System, 2016-2017, retrieved on 12/6/17)*




*(Source for graphs: Ohio Public Health Data Warehouse)*

## Ohio's New Limits on Prescription Opiates

- The opioid epidemic is undeniably a major public health issue that Ohio has been addressing since 2012. Furthering steps to save lives, Ohio has updated its policies in limiting opiate prescriptions, especially acute pain. With the highlights of Ohio's new opiate prescribing limits below, Ohio hopes to reduce opiate doses by 109 million per year:
  - No more than seven days of opiates can be prescribed for adults; no more than five days of opiates can be prescribed for minors.
  - The total morphine equivalent dose (MED) of a prescription for acute pain cannot exceed an average of 30 MED per day.
  - Health care providers can prescribe opiates in excess of the new limits only if they provide a specific reason in the patient's medical record. Unless such a reason is given, a health care provider is prohibited from prescribing opiates that exceed Ohio's limits.
  - Prescribers will be required to include a diagnosis or procedure code on every controlled substance prescription, which will be entered into Ohio's prescription monitoring program, OARRS.
  - The new limits do not apply to opioids prescribed for cancer, palliative care, end-of-life/hospice care or medication-assisted treatment for addiction.
  - The new limits will be enacted through rules passed by the State Medical Board, Board of Pharmacy, Dental Board and Board of Nursing.

- Since 2012, Ohio has reduced opiate prescriptions by 20% yet, more needs to be done to reduce the possibility of opiate abuse to those who are prescribed.

*(Source: Ohio Mental Health and Addiction Services; New Limits on Prescription Opiates Will Save Lives and Fight Addiction, updated March 31, 2017)*

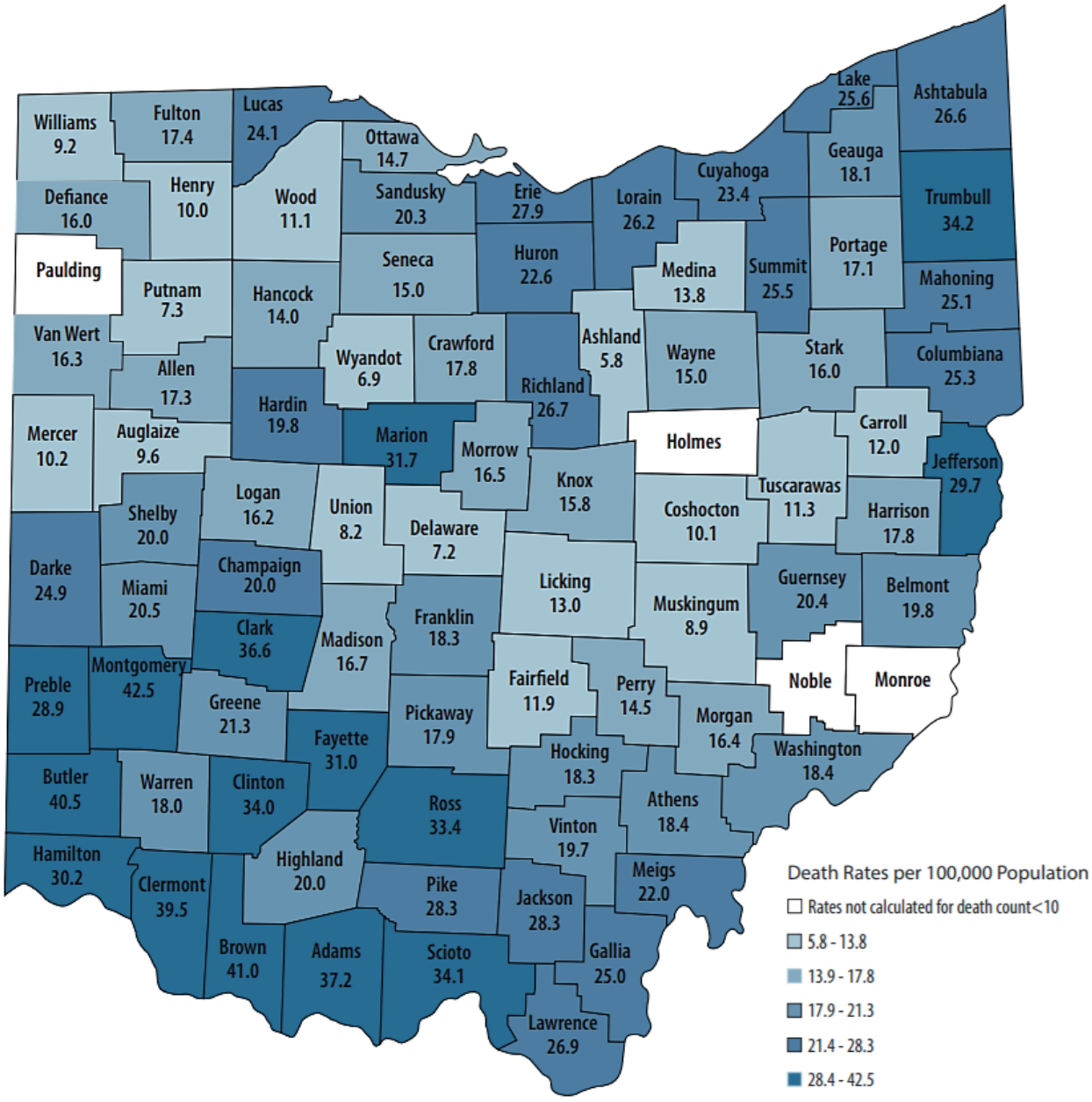
### Ohio Automated Rx Reporting System (OARRS)

- OARRS has been collecting information from all Ohio-licensed pharmacies and Ohio personal licensed prescribers regarding outpatient prescriptions for controlled substance since 2006.
  - All data reported is updated every 24 hours and is maintained in a secure database
- OARRS aims to be a reliable tool in addressing prescription drug diversion and abuse
- With many features such as a patient care tool, epidemic early warning system, drug diversion and insurance fraud investigation tool, OARRS is the only statewide electronic database that helps prescribers and pharmacists avoid potential life-threatening drug interactions.
  - OARRS also works in limiting patients who "doctor shop" which refers to individuals fraudulently obtaining prescriptions from multiple health care providers for the same or multiple prescription for abuse or illegal distribution
- Additionally, OARRS is also used for investigating and identifying health care professionals with continual inappropriate prescribing and dispensing to patients, and then aids in law enforcement cases against such acts.

*(Source: Ohio Automated RX Reporting System; What is OARRS?, updated August 15, 2017)*

## Average Age-Adjusted Unintentional Drug Overdose Death Rate Per 100,000 Population, by County, 2011-2016

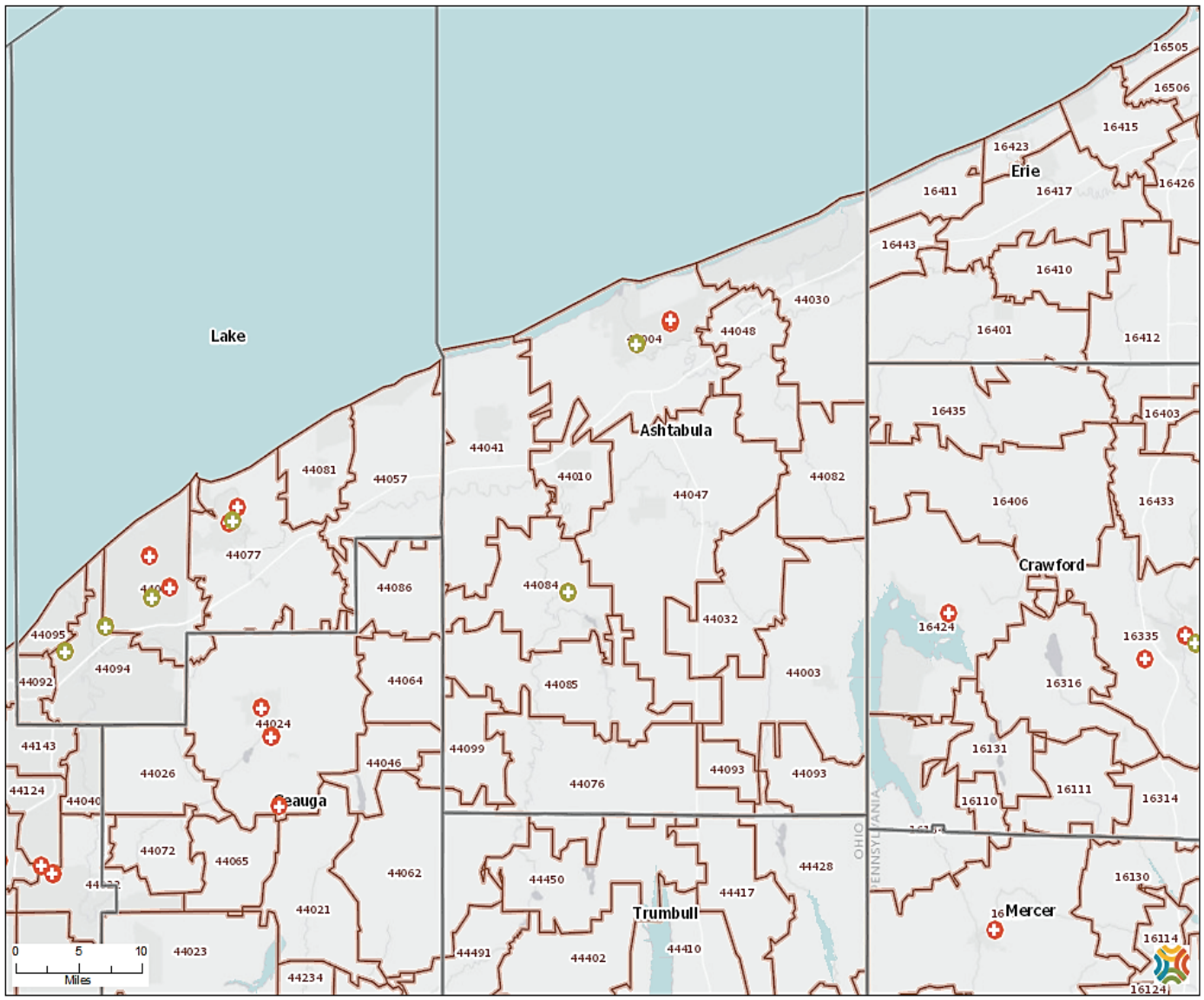
- The Ohio age-adjusted unintentional drug overdose death rate for 2011-2016 was 23.1 deaths per 100,000 population.
- Ashtabula's County's age-adjusted unintentional drug overdose death rate for 2011-2016 was 26.6 deaths per 100,000 population.




*(Sources: "2016 Ohio Drug Overdoes Data: General Findings," Ohio Department of Health; Ohio Department of Health, Bureau of Vital Statistics; analysis conducted by ODH Violence and Injury Prevention Program; U.S. Census Bureau (Vintage 2016 population estimates)*

*Note: Includes Ohio residents who died due to unintentional drug poisoning (underlying cause of death ICD-10 codes X40-X44). Rate suppressed if < 10 total deaths for 2011-2016.*

## Substance Abuse Treatment Facilities and Detox Services, February 2017




Map Legend

Substance Abuse Facilities - Detox Services, SAMHSA Feb. 2017

Substance Abuse Treatment Facilities, SAMHSA Feb. 2017

*Community Commons, 12/18/2017*

*(Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA): February 2017, as compiled by Community Commons, obtained on 12/11/17)*

# Health Behaviors: Adult Sexual Behavior

## Key Findings

*In 2016, more than two-thirds (69%) of Ashtabula County adults had sexual intercourse. Nine percent of adults had more than one partner. CDC estimates that youth ages 15-24 make up just over one quarter of the sexually active population, but account for half of the 20 million new sexually transmitted infections that occur in the United States each year (Source: CDC, STDs in Adolescents and Young Adults, 2016 STD Surveillance).*

## Adult Sexual Behavior

- One-in-eleven (9%) of adults reported they had intercourse with more than one partner in the past year, increasing to 15% of those under the age of 30 and 16% of those with incomes less than $25,000.
- Ashtabula County adults used the following methods of birth control: they or their partner were too old (18%), abstinence (14%), tubes tied (13%), birth control pill (11%), hysterectomy (11%), vasectomy (11%), condoms (9%), withdrawal (6%), infertility (4%), ovaries or testicles removed (4%), IUD (2%), and rhythm method (1%).
- One-in-nine (11%) of Ashtabula County adults were not using any method of birth control.
- Twenty-eight (28%) of adults have been tested for HIV. Reasons for not getting tested included: no reason to be tested (69%), did not think they could have HIV (5%), privacy (1%), and did not know where to go (1%).
- The following situations applied to Ashtabula County adults in the past year: tested for an STD (8%), had anal sex without a condom (4%), had sex with someone of the same gender (3%), used intravenous drugs (2%), treated for an STD (1%), had sex with someone they did not know (1%), thought they had an STD (1%), and tested positive for Hepatitis C (1%).

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

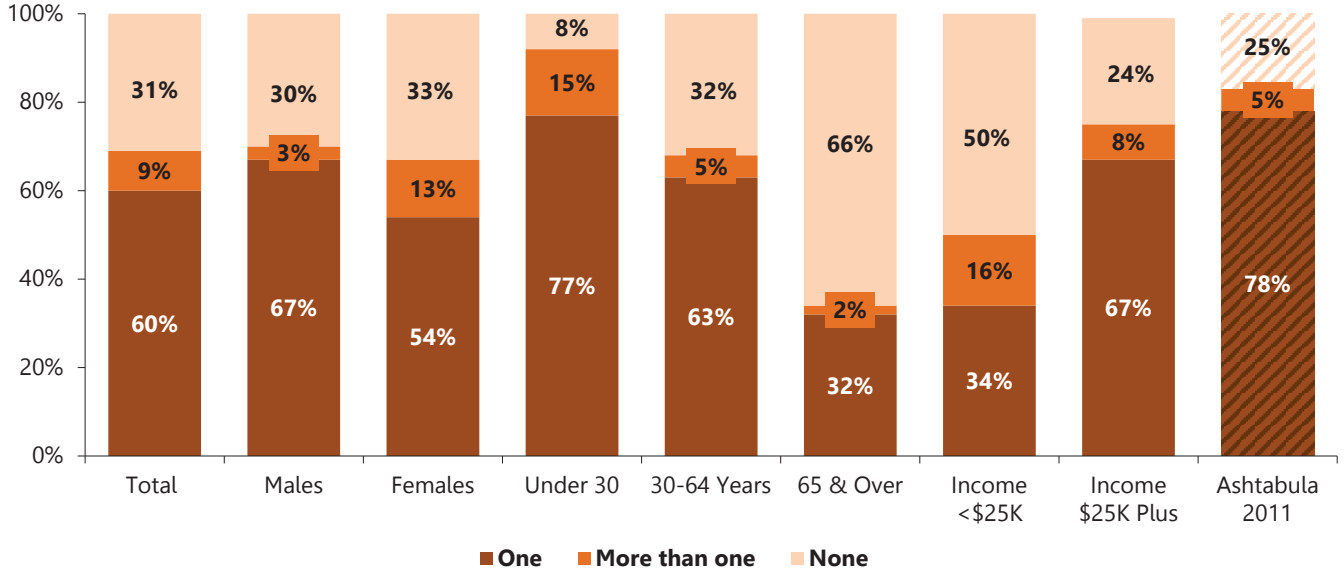
*N/A – Data not available*

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Had more than one sexual partner in the past year** | 9% | 9% | 3% |

*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 sexual partners Ashtabula County adults had in the past year. Examples of how to interpret the information in the graph include: 60% of all Ashtabula County adults had one sexual partner in the last 12 months, and 9% had more than one; 13% of females had more than one partner in the past year.***

**Number of Sexual Partners in the Past Year***




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

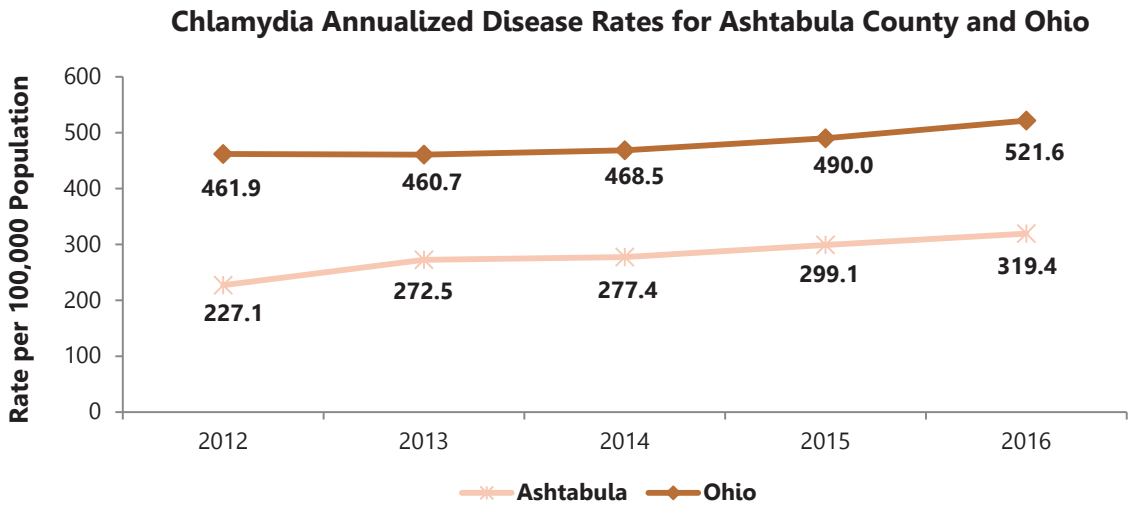
## Understanding Sexual Violence

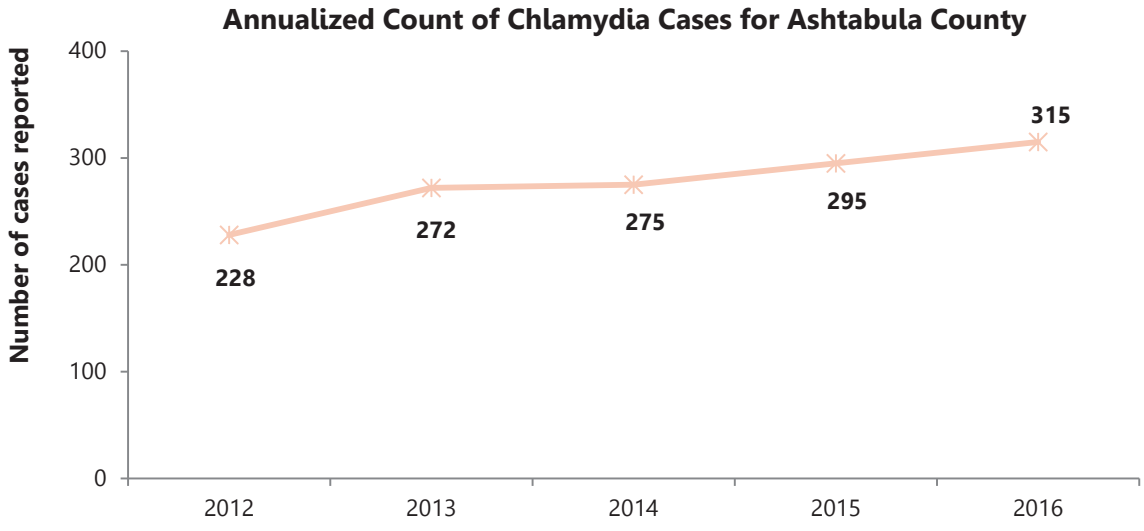
- Sexual violence refers to any sexual activity where consent is not obtained or freely given.
- Anyone can experience or perpetrate sexual violence.
  - Most victims of sexual violence are female
  - Perpetrators are usually someone known to the victim
- There are many types of sexual violence including unwanted touching, unwanted sexual penetration, sexual harassment, and threats.
- Sexual violence is a significant problem in the United States, even though many cases are not reported.
  - 7.3% of high school students reported having been forced to have sex
  - An estimated 20-25% of college women in the U.S. were victims of attempted or completed rape during their college career
  - About 1 in 5 women and 1 in 59 men in the U.S. have been raped at some time in their lives
- Sexual violence can negatively impact health in many ways including chronic pain and STD's and is also linked to negative health behaviors including tobacco, drug, and alcohol abuse.
- The ultimate goal is to stop sexual violence before it begins. Many activities are needed to accomplish this goal including:
  - Engaging middle and high school students in skill-building activities that address healthy sexuality
  - Helping parents identify and address violent attitudes and model healthy relationships
  - Engaging youth and adults as positive bystanders to speak up against sexism and violence supportive behaviors and intervene when they see someone at risk
  - Create and enforce policies at work, school, and other places that address sexual harassment
  - Implement evidence-based prevention strategies in schools and communities

*(Source: CDC, Sexual Violence, last updated April 4, 2017)*

***The following graphs show Ashtabula County chlamydia disease rates per 100,000 population updated May 7, 2017 by the Ohio Department of Health. The graphs show:***

- Ashtabula County chlamydia rates increased from 2012 to 2016. Ashtabula County rates remained below the Ohio rates.
- The number of chlamydia cases in Ashtabula County increased from 2015-2016.

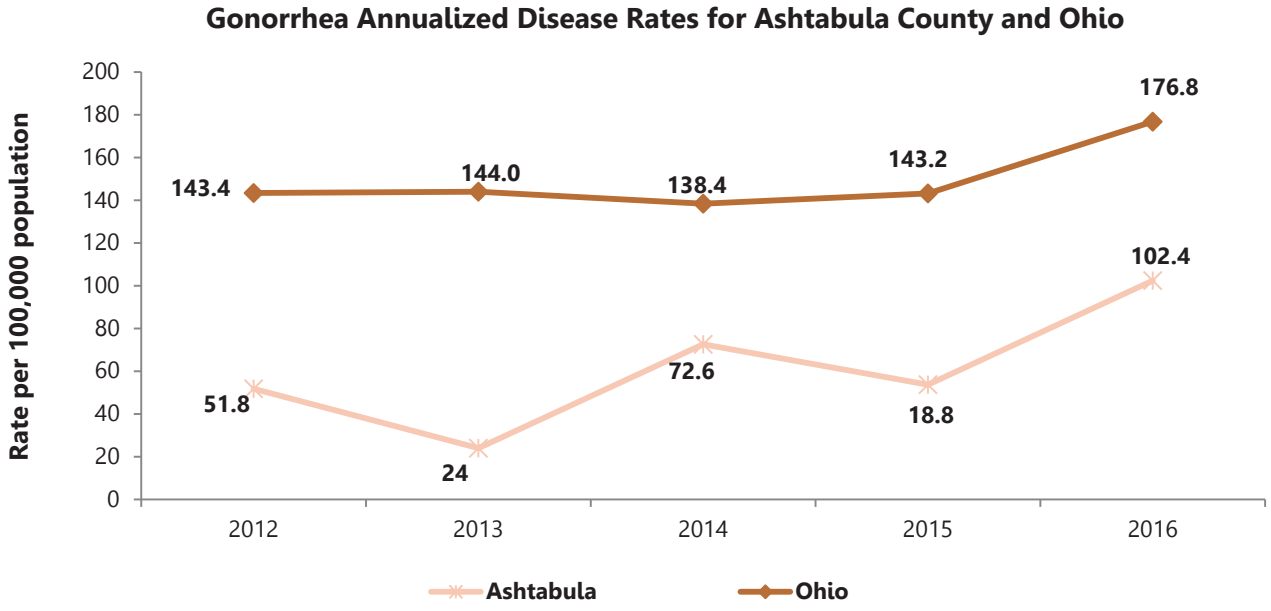


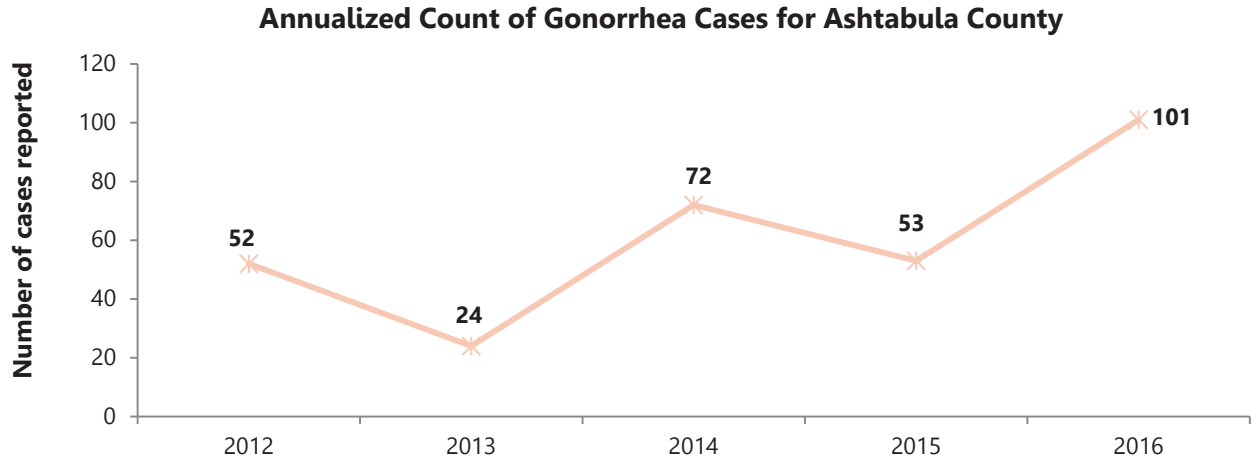




*(Source for graphs: ODH, STD Surveillance, data reported through 5/7/17)*

***The following graphs show Ashtabula County gonorrhea disease rates per 100,000 population updated May 7, 2017by the Ohio Department of Health. The graphs show:***

- The Ashtabula County gonorrhea rate increased from 2015-2016.
- The Ohio gonorrhea rate stayed about the same from 2012-2015, but increased in 2016.
- The Healthy People 2020 Objective for gonorrhea is 257 new female and 198 new male cases per 100,000 population.

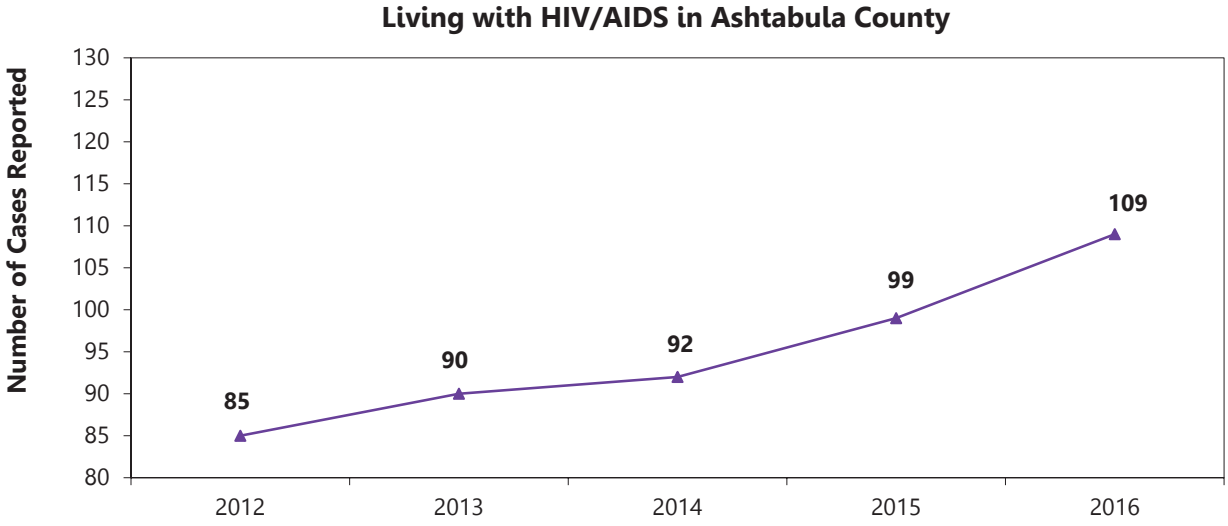



*(Source for graphs: ODH, STD Surveillance, data reported through 5/7/17)*

***The following graph shows Ashtabula County HIV/AIDS rates per 100,000 population updated June 30, 2017 by the Ohio Department of Health. The graph shows:***

- The Ashtabula County HIV/AIDS rate increased from 2015-2016.




*(Source for graphs: ODH, STD Surveillance, data reported through 5/7/17)*

# Health Behaviors: Adult Mental Health

## Key Findings

*In 2016, 7% of Ashtabula County adults considered attempting suicide. 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.*

## Adult 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.
- Seven percent (7%) of Ashtabula County adults considered attempting suicide in the past year.

### Mental Health in the U.S.

- In 2016, 3.6% of adults aged 18 and over experienced serious psychological distress in the past 30 days.
- There were 65.9 million visits to physicians' offices with mental disorders as the primary diagnosis in 2014.
- There were 5.0 million visits to emergency departments with mental disorders as the primary diagnosis in 2014.
- In 2014, there were 42,773 suicide deaths.

*(Source: CDC, National Center for Health Statistics, Mental Health, Depression, last updated 5/3/2017)*

- One percent (1%) of adults reported attempting suicide in the past year.
- Ashtabula County adults indicated the following caused them anxiety, stress or depression: financial stress (44%), job stress (28%), death of close family member or friend (20%), other stress at home (20%), poverty/no money (20%), marital/dating relationship (14%), fighting at home (12%), sick family member (12%), unemployment (10%), caring for a parent (8%), family member with mental illness (5%), divorce/separation (4%), not having enough to eat (3%), not feeling safe in the community (2%), sexual orientation/gender identity (2%), not feeling safe at home (1%), and not having a place to live (<1%).
- 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 (6%), fear (5%), had not thought of it (5%), stigma of seeking mental health services (5%), co-pay/deductible too high (5%), did not know how to find a program (5%), other priorities (4%), could not get to the office or clinic (1%), transportation (1%), and other reasons (4%). 72% of adults indicated they did not need such a program for themselves or a loved one.
- Ashtabula County adults received the social and emotional support they needed from the following: family (74%), friends (63%), God/prayer (32%), church (22%), neighbors (12%), a professional (7%), Internet (6%), community (5%), online support group (1%), self-help group (<1%), and other (2%).
- Adults indicated they would do the following if they knew someone who was suicidal: talk to them (69%), call 911 (46%), try to calm them down (45%), call a crisis line (32%), take them to the ER (20%), call a friend (12%), call their spiritual leader (10%), and nothing (1%).

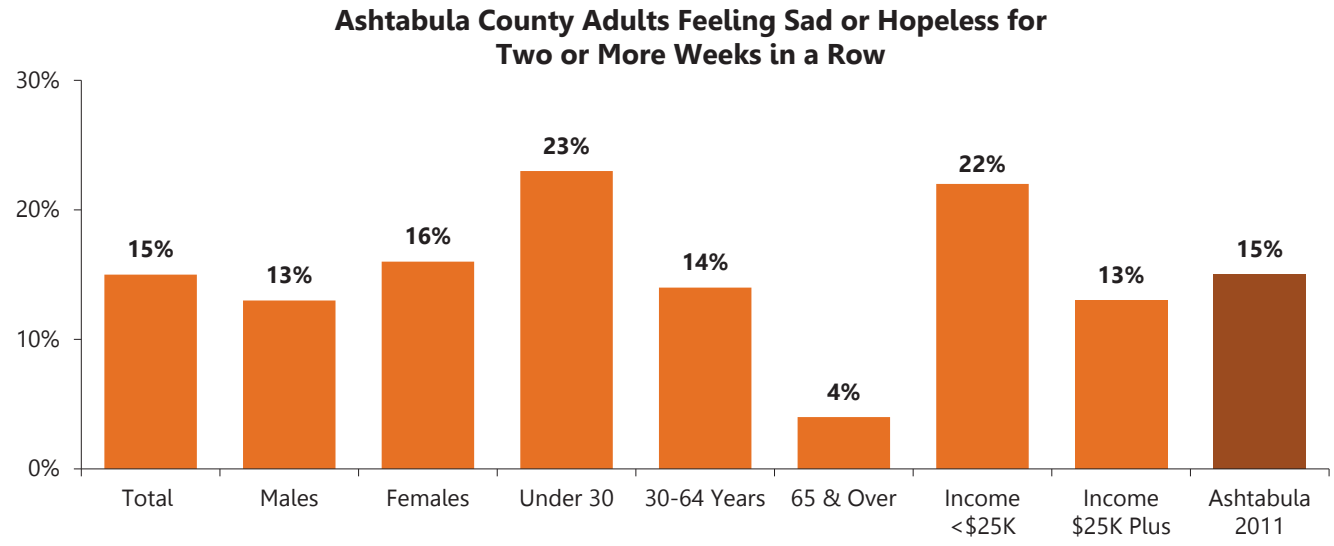
| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2015 | U.S. 2015 |
|---|---|---|---|---|
| **Considered attempting suicide in the past year** | 8% | 7% | N/A | N/A |
| **Two or more weeks in a row felt sad or hopeless** | 15% | 15% | N/A | N/A |

*N/A –Data not available*

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Considered attempting suicide in the past year** | 7% | 2% | 3% |
| **Two or more weeks in a row felt sad or hopeless** | 15% | 4% | 8% |

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

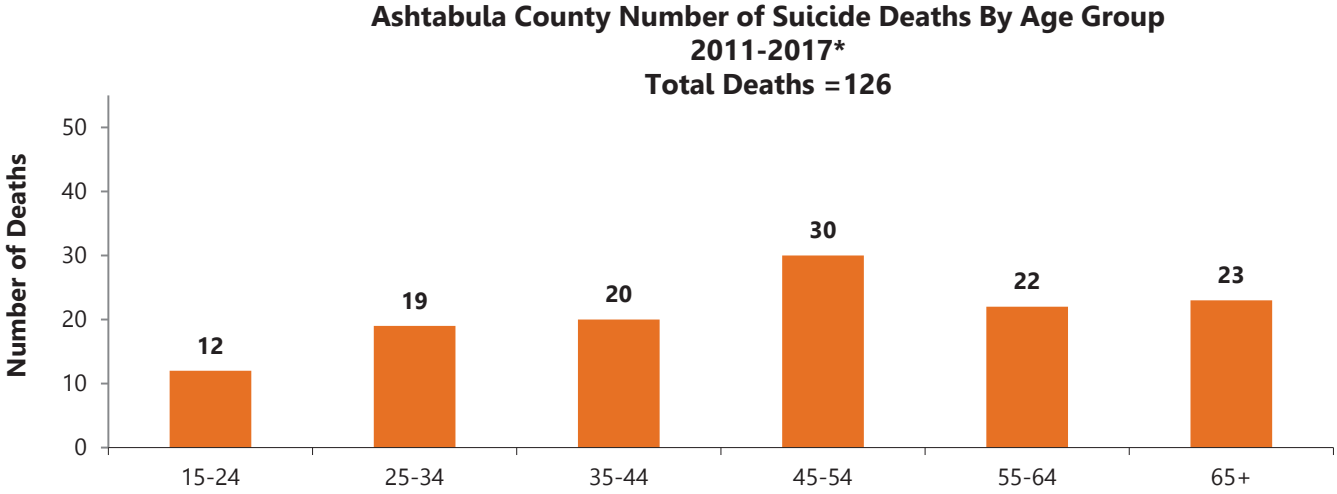
***The following graph shows Ashtabula County adults who felt sad or hopeless for two or more weeks in a row in the past year. Examples of how to interpret the information in the graph include: 15% of all Ashtabula County adults felt sad or hopeless for two or more weeks in a row; specifically, 13% of males and 16% of females were afflicted.***




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

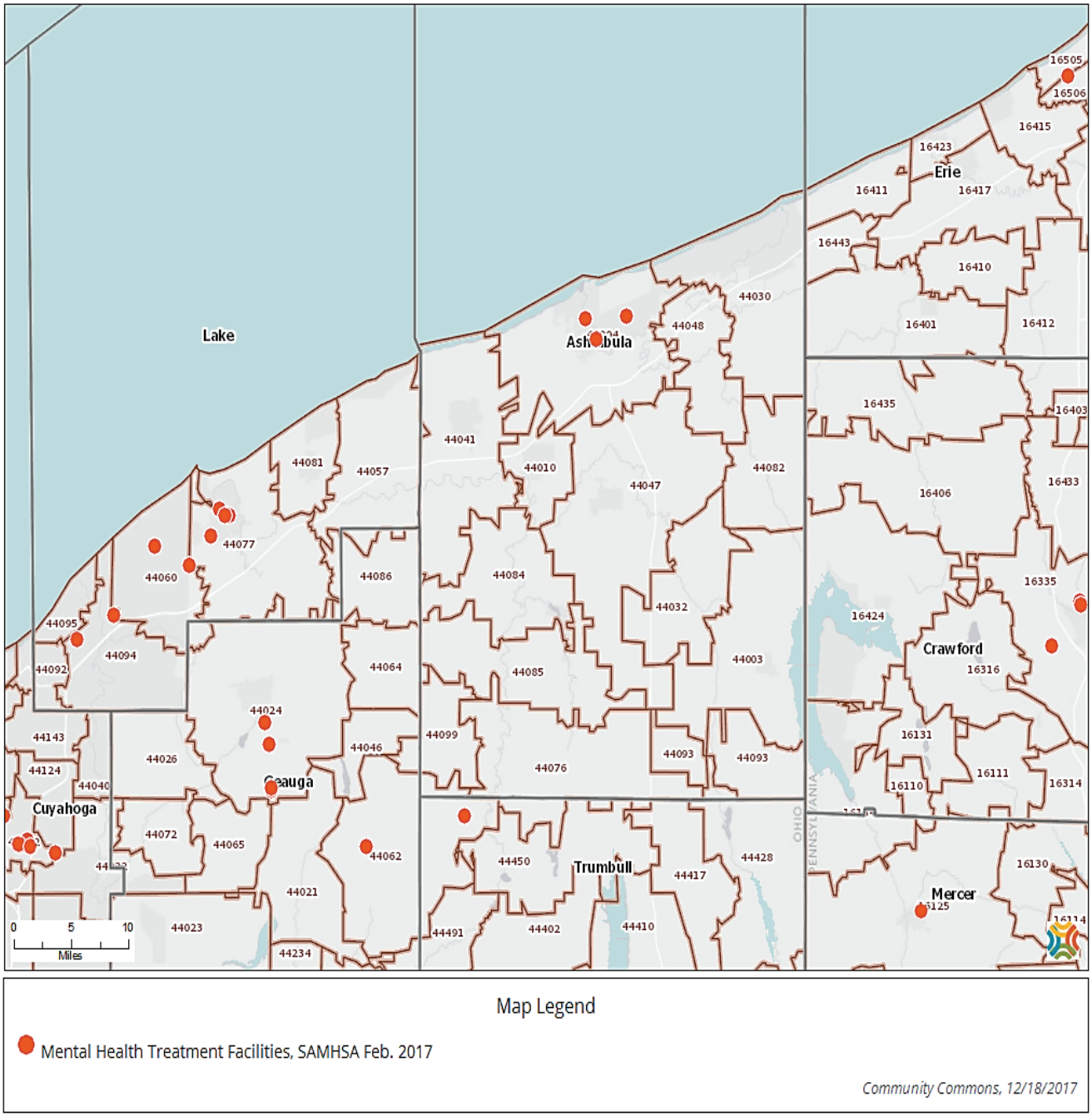
***The graph below shows the number of suicide deaths by age group in Ashtabula County. The graph shows:***

- From 2011-2017*, 24% of all Ashtabula County suicide deaths occurred among 45-54 years old.




**Data for 2017 are considered partial and may be incomplete, and should be used with caution*
*(Source: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 12/4/2017)*

## Mental Health Treatment Facilities, February 2017




*(Source: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA): February 2017, as compiled by Community Commons)*

# Chronic Disease: Cardiovascular Health

## Key Findings

*Five percent (5%) of adults had survived a heart attack and 4% had survived a stroke at some time in their life. More than one-third (37%) of Ashtabula County adults had been diagnosed with high blood pressure, 37% had high blood cholesterol, 43% were obese, and 21% were smokers, four known risk factors for heart disease and stroke.*

### Ashtabula County Leading Causes of Death 2014-2016

***Total Deaths: 3,531***

- Heart Disease (26% of all deaths)
- Cancer (21%)
- Chronic Lower Respiratory Diseases (7%)
- Accidents, Unintentional Injury (5%)
- Stroke (4%)

*(Source: Ohio Public Health Data Warehouse. 2014-*

### Ohio Leading Causes of Death 2014-2016

***Total Deaths: 352,105***

- Heart Disease (23% of all deaths)
- Cancers (22%)
- Chronic Lower Respiratory Diseases (6%)
- Accidents, Unintentional Injuries (6%)
- Stroke (5%)

*(Source: Ohio Public Health Data Warehouse, 2014-2016)*

## Heart Disease and Stroke

- In 2016, 5% of Ashtabula County adults reported they had survived a heart attack or myocardial infarction, increasing to 11% of those over the age of 65.
- Five percent (5%) of Ohio and 4% of U.S. adults reported they had a heart attack or myocardial infarction in 2016 *(Source: 2016 BRFSS).*
- Four percent (4%) of Ashtabula County adults reported they had survived a stroke, increasing to 9% of those over the age of 65.
- Four percent (4%) of Ohio and 3% of U.S. adults reported having had a stroke in 2016 *(Source: 2016 BRFSS).*
- Five percent (5%) of adults reported they had angina or coronary heart disease, increasing to 17% of those over the age of 65.
- Five percent (5%) of Ohio and U.S. adults reported having had angina or coronary heart disease in 2016 *(Source: 2016 BRFSS).*
- Three percent (3%) of adults reported they had congestive heart failure, increasing to 8% of those over the age of 65.

## High Blood Pressure (Hypertension)

- More than one-third (37%) of adults had been diagnosed with high blood pressure. The 2015 BRFSS reports hypertension prevalence rates of 34% for Ohio and 31% for the U.S.
- One-in-fourteen (7%) adults were told they were pre-hypertensive/borderline high.
- More than four-fifths (88%) of adults had their blood pressure checked within the past year.
- Ashtabula County adults diagnosed with high blood pressure were more likely to have:
  - Rated their overall health as fair or poor (53%)
  - Been ages 65 years or older (53%)
  - Been classified as obese by Body Mass Index-BMI (44%)

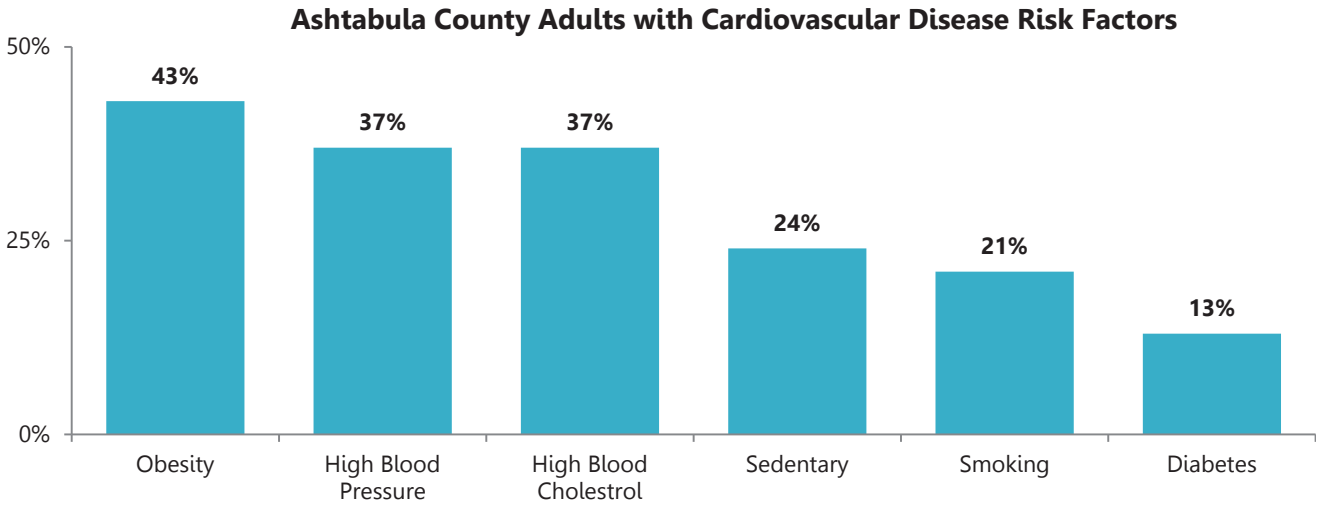
## High Blood Cholesterol

- More than one-third (37%) of adults had been diagnosed with high blood cholesterol. The 2015 BRFSS reported that 37% of Ohio and 36% of U.S. adults have been told they have high blood cholesterol.

- Nearly four-fifths (78%) of adults had their blood cholesterol checked within the past 5 years. The 2015 BRFSS reported 78% of Ohio and U.S. 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 (54%)
  - Have rated their overall health as fair or poor (52%)
  - Been classified as obese by Body Mass Index-BMI (44%)

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




*(Source: 2016 Ashtabula County Health Assessment)*

| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Had angina or coronary heart disease** | N/A | 5% | 5% | 4% |
| **Had a heart attack** | 7% | 5% | 5% | 4% |
| **Had a stroke** | 6% | 4% | 4% | 3% |
| **Had high blood pressure** | 31% | 37% | 34%* | 31%* |
| **Had high blood cholesterol** | 34% | 37% | 37%* | 36%* |
| **Had blood cholesterol checked within past 5 years** | N/A | 78% | 78%* | 78%* |

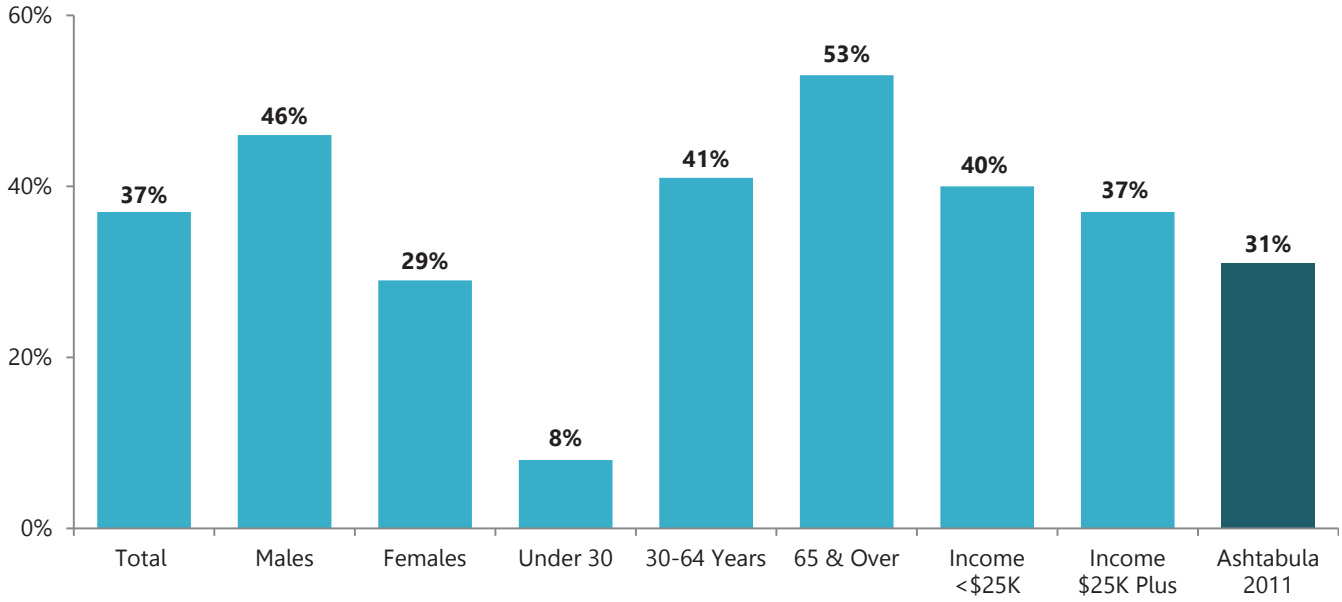
*N/A- Data not available*
**2015 BRFSS data*

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Had angina or coronary heart disease** | 5% | 2% | 3% |
| **Had a heart attack** | 5% | 21% | <1% |
| **Had a stroke** | 4% | 9% | 3% |
| **Had high blood pressure** | 37% | 51% | 34% |
| **Had high blood cholesterol** | 37% | 41% | 38% |
| **Had blood cholesterol checked within past 5 years** | 78% | 84% | 68% |

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

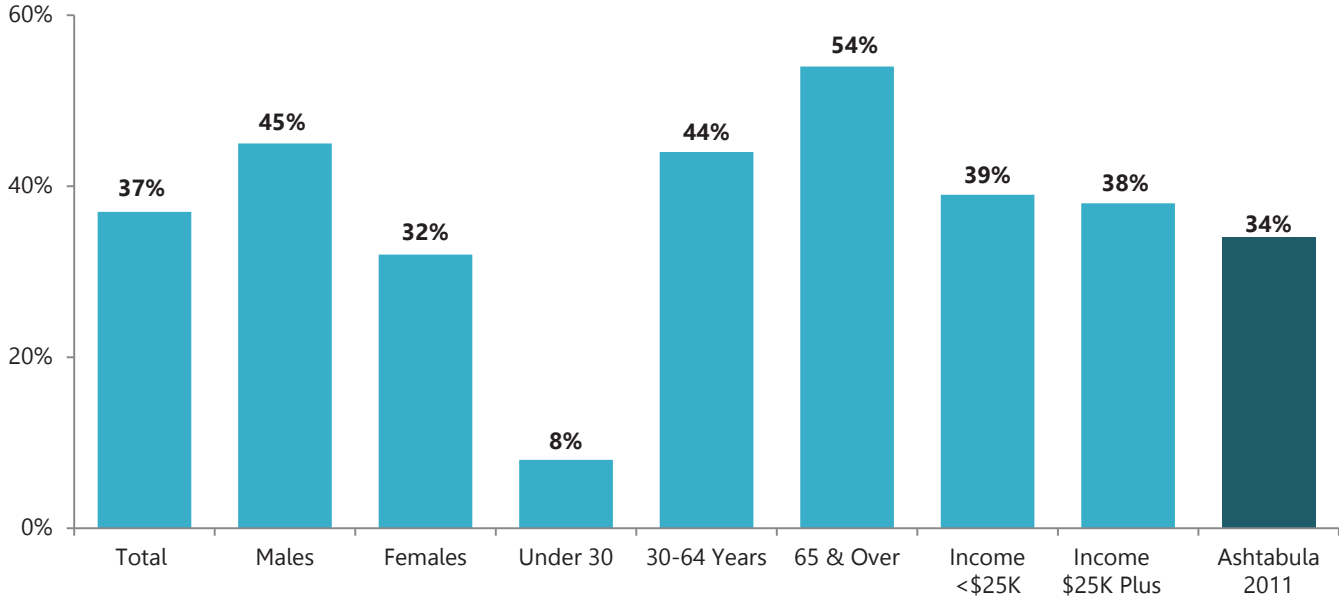
***The following graphs show the percent of Ashtabula County adults who had been diagnosed with high blood pressure and high blood cholesterol. Examples of how to interpret the information on the first graph include: 37% of all Ashtabula County adults had been diagnosed with high blood pressure, including 46% of all males and 53% of those 65 years and older.***

**Diagnosed with High Blood Pressure***




**Does not include respondents who indicated high blood pressure during pregnancy only.*
*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

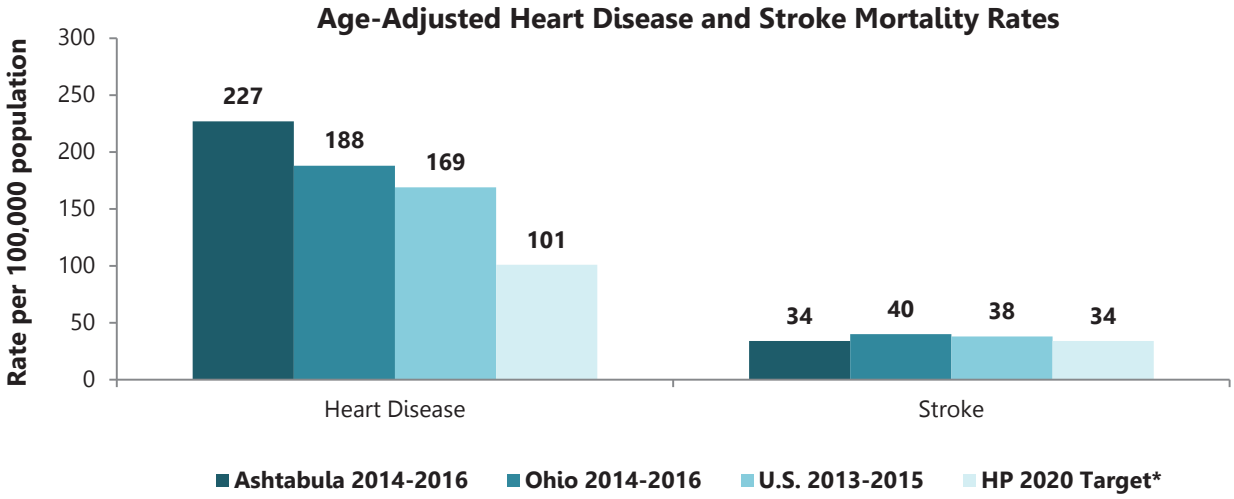
**Diagnosed with High Blood Cholesterol**



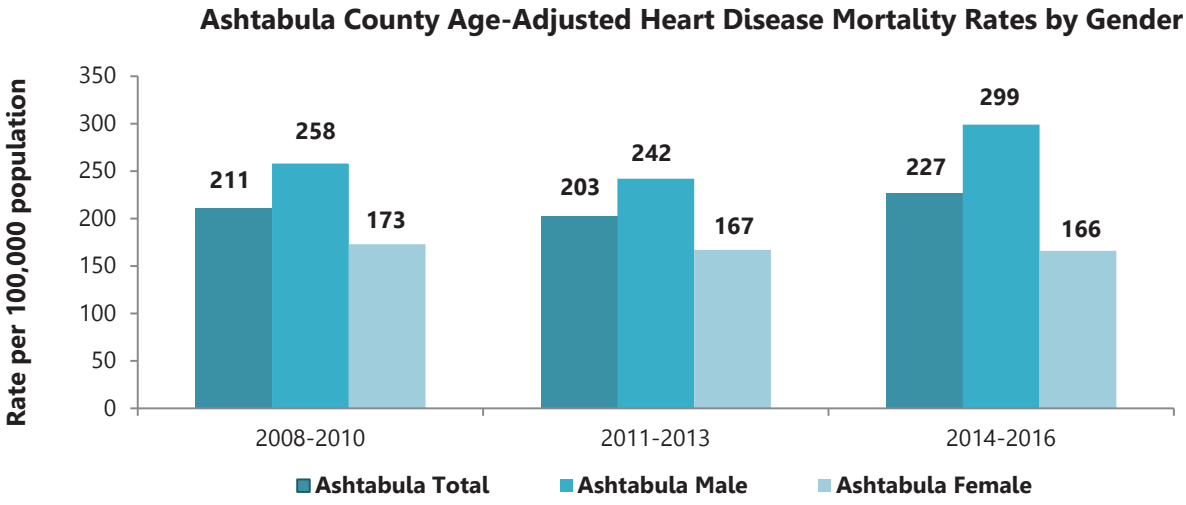

*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.*

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

- When age differences are accounted for, the statistics indicate that from 2014-2016 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 2014-2016 was lower than the state, and the U.S. figure, but the same as the Healthy People 2020 target objective.
- From 2008-2016, the total Ashtabula County age-adjusted heart disease mortality rate decreased.




**The Healthy People 2020 Target objective for coronary heart disease is reported for heart attack mortality.*
*(Source: Ohio Public Health Data Warehouse, 2014-2016, CDC Wonder 2013-2015, Healthy People 2020)*

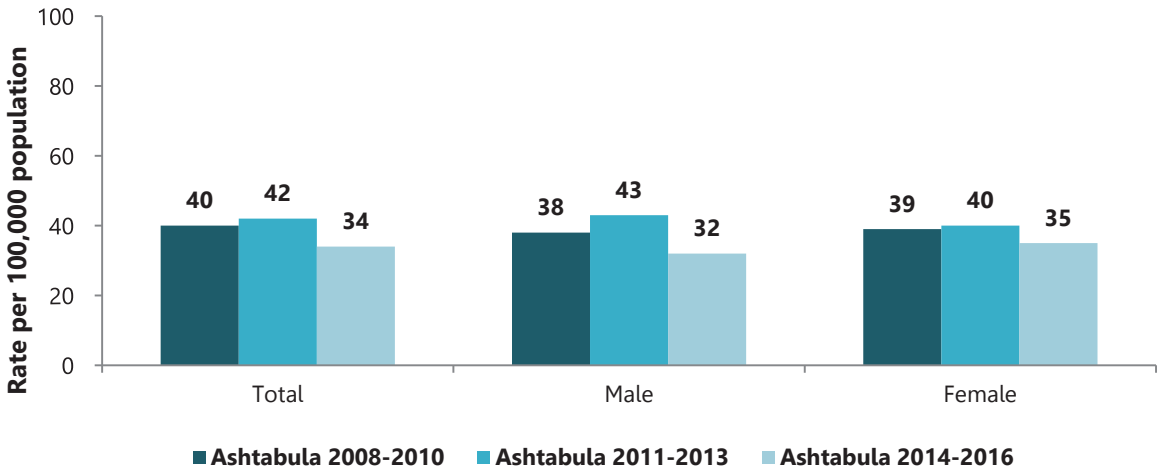



*(Source: Ohio Public Health Data Warehouse, 2008-2016)*

***The following graph shows the age-adjusted mortality rates per 100,000 population stroke by gender.***

- From 2011-2013, the Ashtabula County stroke mortality rate was higher for males than for females.
- From 2014-2016, the Ashtabula County stroke mortality rate was lower for males than for females.

**Ashtabula County Age-Adjusted Stroke Mortality Rates by Gender**



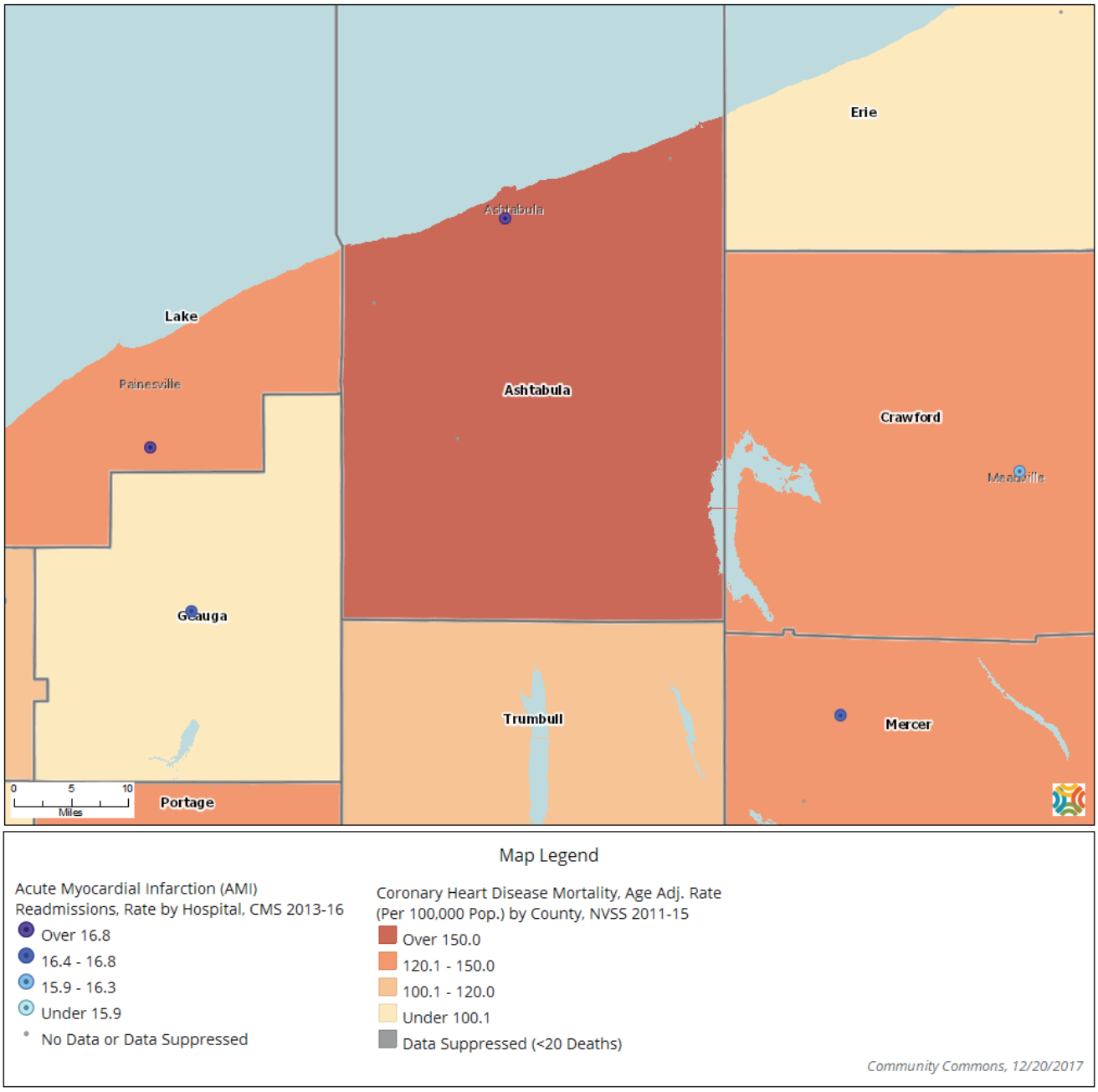

*(Source: Ohio Public Health Data Warehouse, 2008-2016)*

## Healthy People 2020 Objectives
### Heart Disease and Stroke

| Objective | Ashtabula Survey Population Baseline | 2016 U.S. Baseline* | Healthy People 2020 Target |
|---|---|---|---|
| **HDS-5: Reduce proportion of adults with hypertension** | 37% (2016) | 31% Adults age 18 and up | 27% |
| **HDS-6: Increase proportion of adults who had their blood cholesterol checked within the preceding 5 years** | 78% (2016) | 75% Adults age 18 & up | 82% |
| **HDS-7: Decrease proportion of adults with high total blood cholesterol (TBC)** | 37% (2016) | 36% Adults age 20+ with TBC>240 mg/dl | 14% |

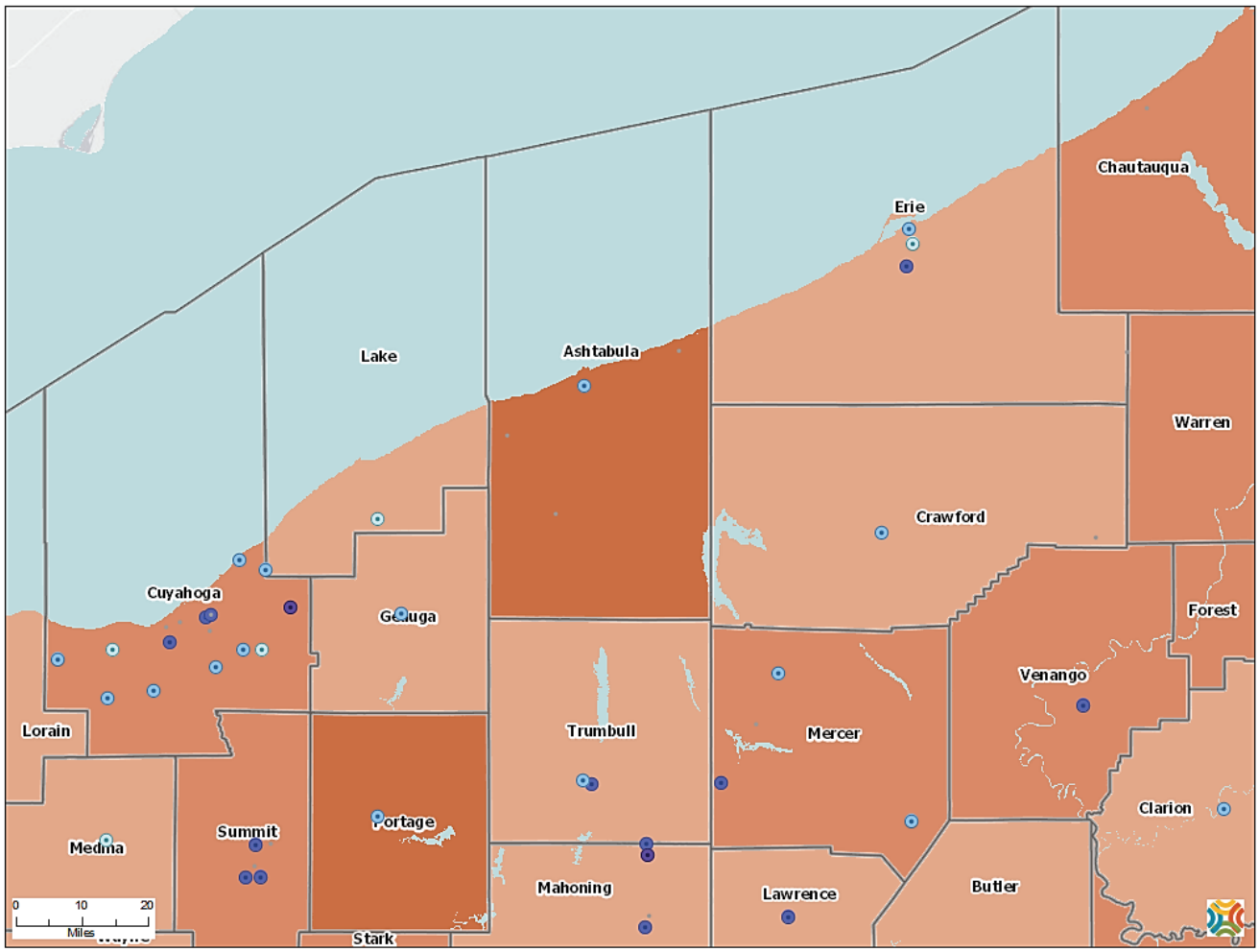
*Note: All U.S. figures age-adjusted to 2000 population standard.*
*(Source: Healthy People 2020, 2016 BRFSS, 2016 Ashtabula County Health Assessment)*

## Coronary Heart Disease Mortality, Age Adjusted Rate Per 100,000 Population, 2011-2015, and Acute Myocardial Infarction (AMI) Readmissions, Rate by Hospital, 2013-2016




*(Source: Centers for Disease Control and Prevention, National Vital Statistics System: 2011-15. Accessed via CDC WONDER and Centers for Medicare and Medicaid Services, 2013-2016, as compiled by Community Commons)*

## Percent of Medicare Beneficiaries with a Heart Attack, 2015 and Stroke Readmissions, Rate by Hospital, 2015-2016 by Stroke Mortality, 2011-2015




Map Legend

Stroke Readmissions, Rate by Hospital, CMS 2015-16

- Over 14.0
- 12.7 - 13.9
- 11.7 - 12.6
- Under 11.7
- No Data or Data Suppressed

Beneficiaries with Heart Attack, Percent by County, CMS 2015

- Over 16.0%
- 14.1 - 16.0%
- 12.1 - 14.0%
- Under 12.1%
- No Data or Data Suppressed

*Community Commons, 12/18/2017*

*(Source: Centers for Medicare and Medicaid Services, 2015, Centers for Medicare and Medicaid Services, 2015-2016, Centers for Disease Control and Prevention, National Vital Statistics System, 2011-2015, Accessed via CDC Wonder, as compiled by Community Commons)*

# Chronic Disease: Cancer

## Key Findings

*In 2016, 8% of Ashtabula County adults had been diagnosed with cancer at some time in their life. The Ohio Department of Health (ODH) indicates that from 2014-2016, cancers caused 21% of all Ashtabula County resident deaths. The American Cancer Society advises that avoiding tobacco products, maintaining a healthy weight, adopting a physically active lifestyle, eating more fruits and vegetables, limiting alcoholic beverages and early detection may reduce overall cancer deaths.*

**Ashtabula County**
**Incidence of Cancer, 2010-2014**

***All Types: 3,041***

- Lung and Bronchus: 516 cases (17%)
- Breast: 393 cases (13%)
- Prostate: 310 cases (10%)
- Colon and Rectum: 309 cases (10%)

**In 2014-2016, there were 754 cancer deaths in Ashtabula County.**

*(Source: Ohio Public Health Data Warehouse, 2010-2014)*

## Adult Cancer

- Eight percent (8%) Ashtabula County adults were diagnosed with cancer at some point in their lives, increasing to 34% of those over the age of 65.

- Of those diagnosed with cancer, they reported the following types: breast (27%), other skin cancer (19%), cervical (13%), prostate (13%), ovarian (7%), colon (6%), melanoma (6%), non-Hodgkin's lymphoma (6%), bladder (3%), bone (3%), Hodgkin's lymphoma (3%), larynx (3%), leukemia (3%), oral (3%), pancreatic (3%), and other types of cancer (6%).

**8% of Ashtabula County adults had been diagnosed with cancer at some time in their life.**

## Cancer Facts

- The Ohio Department of Health indicates that from 2014-2016, cancers caused 21% (754 of 3,533 total deaths) of all Ashtabula County resident deaths. *(Source: Ohio Public Health Data Warehouse).*

- The 2016 health assessment project has determined that 21% of Ashtabula County adults were current smokers, and many more were exposed to environmental tobacco smoke (secondhand smoke), also a cause of heart attacks and cancer. A current smoker is defined as someone who has smoked over 100 cigarettes in their lifetime and currently smokes some or all days.

- The American Cancer Society reports that smoking tobacco is associated with cancers of the mouth, lips, nasal cavity (nose) and sinuses, larynx (voice box), pharynx (throat), and esophagus (swallowing tube). Also, smoking has been associated with cancers of the lung, colorectal, stomach, pancreas, kidney, bladder, uterine, cervix, ovary (mucinous) and acute myeloid leukemia. In 2016, 10% of Ashtabula County adults were current smokers.

## Lung Cancer

- In Ashtabula County, 23% of male adults were current smokers, and 46% had stopped smoking for one or more days in the past 12 months because they were trying to quit.

- Approximately 20% of female adults in Ashtabula County were current smokers, and 57% had stopped smoking for one or more days in the past 12 months because they were trying to quit.

- ODH reports that lung and bronchus cancer (n=136) was the leading cause of male cancer deaths from 2014-2016 in Ashtabula County. Cancer of the colon and rectum (n=44) and prostate cancer caused (n=36) male deaths during the same time *(Ohio Public Health Data Warehouse, 2017).*

- ODH reports that lung and bronchus cancer was the leading cause of female cancer deaths (n=93) in Ashtabula County from 2014-2016, followed by breast (n=35) and colon and rectum (n=26) cancers.
- According to the American Cancer Society, smoking causes 80% of lung cancer deaths in the U.S. Men and women who smoke are about 15-30 times more likely to develop lung cancer than nonsmokers *(Source: American Cancer Society, Facts & Figures 2017)*.

## Breast Cancer

- In 2016, 55% of Ashtabula County females reported having had a clinical breast examination in the past year.
- Approximately three-fifths (52%) of Ashtabula County females over the age of 40 had a mammogram in the past year.
- The 5-year relative survival for women diagnosed with localized breast cancer (cancer that has not spread to lymph nodes or other locations outside the breast) is 99% *(Source: American Cancer Society, Facts & Figures 2017).*
- For women at average risk of breast cancer, recently updated American Cancer Society screening guidelines recommended that those 40 to 44 years of age have the choice of annual mammography; those 45 to 54 have annual mammography; and those 55 years of age and older have biennial or annual mammography, continuing as long as their overall health is good and life expectancy is 10 or more years. For some women at high risk of breast cancer, annual screening using magnetic resonance imaging (MRI) in addition to mammography is recommended, typically starting at age 30 *(Source: American Cancer Society, Facts & Figures 2017).*

## Prostate Cancer

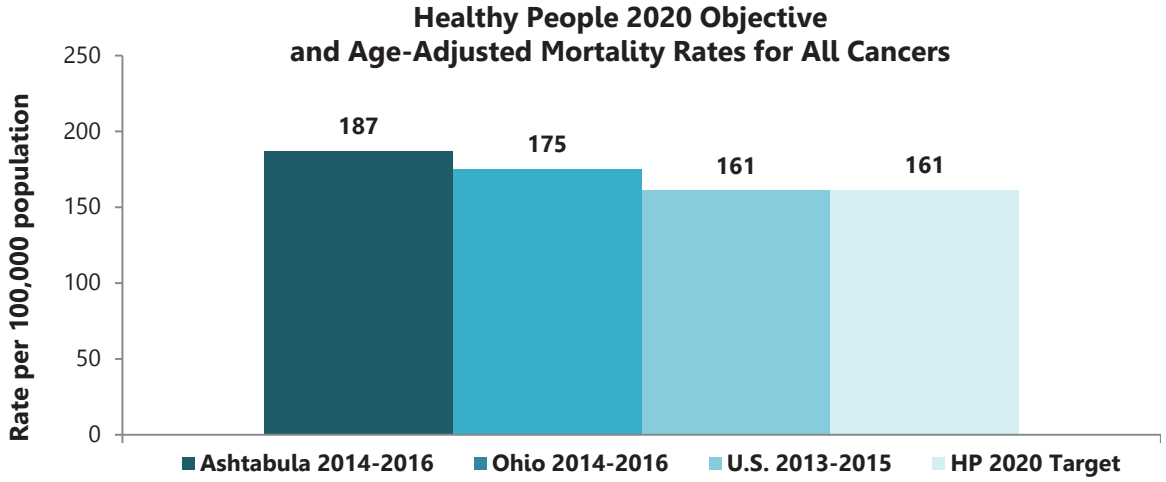
- More than half (54%) of Ashtabula County men had a digital rectal exam in their lifetime, and 16% had one in the past year.
- ODH statistics indicate that prostate cancer deaths accounted for 8% of all male cancer deaths from 2014-2016 in Ashtabula County *(Source: Ohio Public Health Data Warehouse, 2017).*
- Incidence rates for prostate cancer are 74% higher in African Americans than in whites, and they are twice as likely to die of prostate cancer. Other risk factors include strong familial predisposition, diet high in processed meat or dairy foods, and obesity. African American men and Caribbean men of African descent have the highest documented prostate cancer incidence rates in the world *(Source: American Cancer Society, Facts & Figures 2017)*.

## Colon and Rectum Cancers

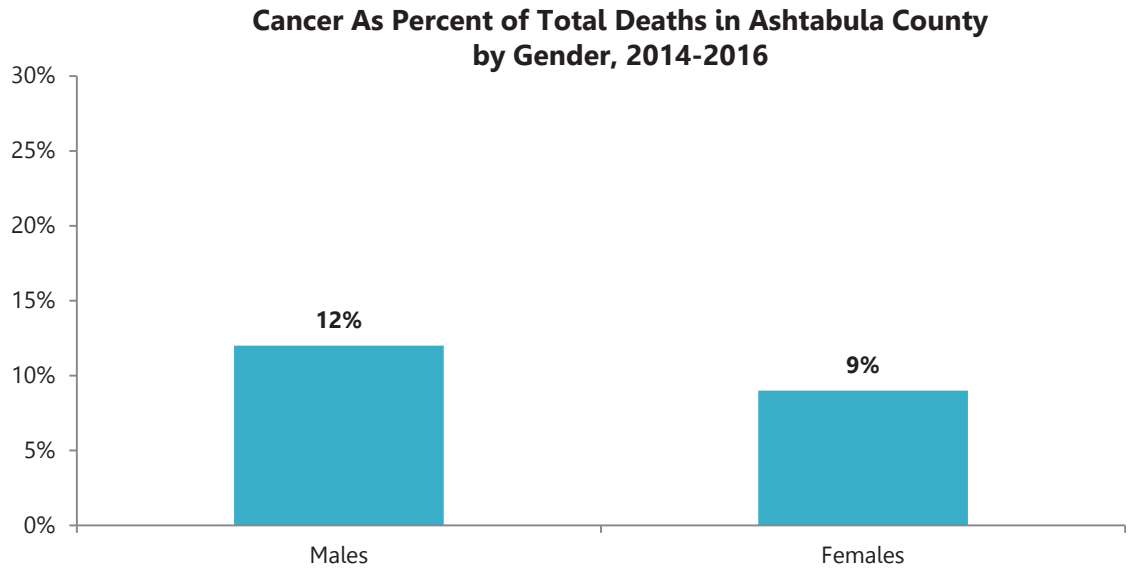
- ODH indicates that colon and rectum cancer deaths accounted for 10% of all male and female cancer deaths from 2014-2016 in Ashtabula County *(Source: Ohio Public Health Data Warehouse, 2017).*
- The American Cancer Society reports several risk factors for colorectal cancer, including age; personal or family history of colorectal cancer, polyps, or inflammatory bowel disease; obesity; physical inactivity; a diet high in red or processed meat; alcohol use; and long-term smoking. Very low intake of fruits and vegetables is also potentially a risk factor for colorectal cancer.
- In the U.S., 90% of colon cancers occur in individuals over the age of 50. Therefore, the American Cancer Society suggests every person over the age of 50 have regular colon cancer screenings.

***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, as well as cancer as a percent of total deaths in Ashtabula County. The graphs show:***

- When age differences are accounted for, Ashtabula County had a higher cancer mortality rate than Ohio, the U.S., and the Healthy People 2020 target objective.
- The percentage of Ashtabula County males who died from all cancers is higher than the percentage of Ashtabula County females who died from all cancers.




*(Source: Ohio Public Health Data Warehouse, CDC Wonder, Healthy People 2020)*




*(Source: Ohio Public Health Data Warehouse, 2014-2016)*

## Ashtabula County Incidence of Cancer
## 2010-2014

| Types of Cancer | Number of Cases | Percent of Total Incidence of Cancer | Age-Adjusted Rate |
|---|---|---|---|
| **Lung and Bronchus** | 516 | 17% | 78.1 |
| **Breast** | 393 | 13% | 61.9 |
| **Prostate** | 310 | 10% | 95.0 |
| **Colon and Rectum** | 309 | 10% | 48.1 |
| **Other/Unspecified** | 239 | 8% | 39.1 |
| **Bladder** | 172 | 6% | 26.1 |
| **Non-Hodgkins Lymphoma** | 127 | 4% | 19.8 |
| **Melanoma of Skin** | 119 | 4% | 19.5 |
| **Kidney and Renal Pelvis** | 109 | 4% | 18.2 |
| **Uterus** | 102 | 3% | 29.2 |
| **Pancreas** | 101 | 3% | 15.4 |
| **Thyroid** | 81 | 3% | 15.4 |
| **Oral Cavity & Pharynx** | 76 | 2% | 11.7 |
| **Leukemia** | 67 | 2% | 11.1 |
| **Liver and Bile Ducts** | 54 | 2% | 8.7 |
| **Stomach** | 46 | 2% | 7.2 |
| **Brain and CNS** | 39 | 1% | 6.7 |
| **Esophagus** | 38 | 1% | 5.6 |
| **Ovary** | 35 | 1% | 10.1 |
| **Multiple Myeloma** | 30 | 1% | 4.6 |
| **Larynx** | 29 | 1% | 4.3 |
| **Hodgkins Lymphoma** | 18 | 1% | 3.4 |
| **Cancer of Cervix Uteri** | 16 | 1% | 6.0 |
| **Testis** | 15 | <1% | 7.3 |
| **Total** | **3,041** | **100%** | |

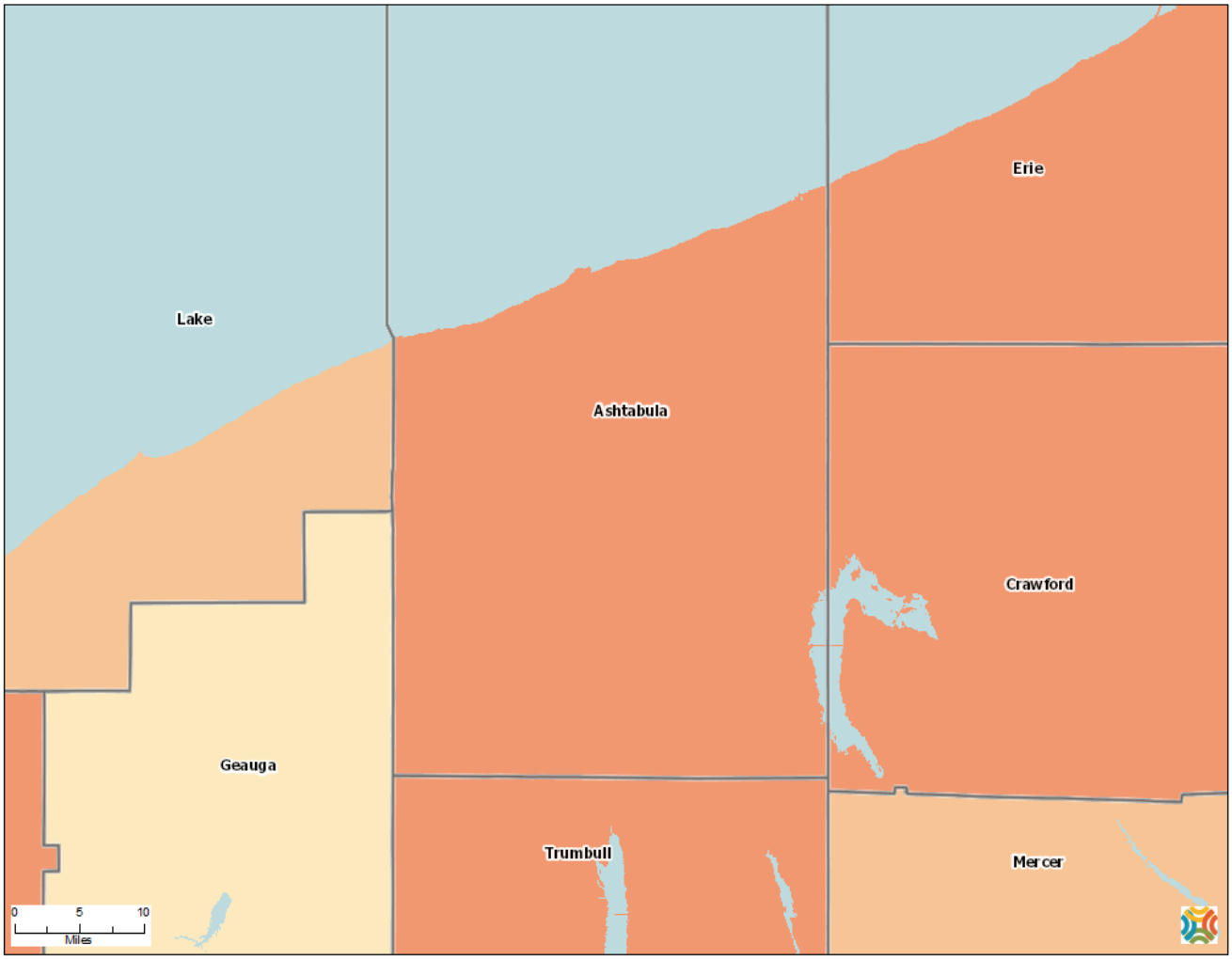
*(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 2/8/2018)*

### 2017 Cancer Estimates

- In 2017, about 1,688,780 new cancer cases are expected to be diagnosed.
- The World Cancer Research Fund estimates that about twenty percent of the new cancer cases expected to occur in the U.S. in 2017 will be related to overweight or obesity, physical inactivity, and poor nutrition, and thus could be prevented.
- About 600,920 Americans are expected to die of cancer in 2017.
- In 2017, about 158,870 cancer deaths will be caused by tobacco use.
- In 2017, estimates predict that there will be 68,160 new cases of cancer and 25,430 cancer deaths in Ohio.
- Of the new cancer cases, approximately 10,660 (16%) will be from lung and bronchus cancers and 5,510 (8%) will be from colon and rectum cancers.
- About 9,430 new cases of female breast cancer are expected in Ohio.
- New cases of male prostate cancer in Ohio are expected to be 5,840 (9%).

*(Source: American Cancer Society, Facts and Figures 2017)*

## Cancer Mortality, Age Adjusted Rate per 100,000 Population, by County, NVSS 2011-2015




Map Legend

Cancer Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, NVSS 2011-15

- Over 200.0
- 180.1 - 200.0
- 160.1 - 180.0
- Under 160.1
- Data Suppressed (<20 Deaths)

*Community Commons, 12/18/2017*

*(Source: Centers for Disease Control and Prevention, National Vital Statistics System, 2011-2015, Accessed via CDC Wonder, compiled by Community Commons)*

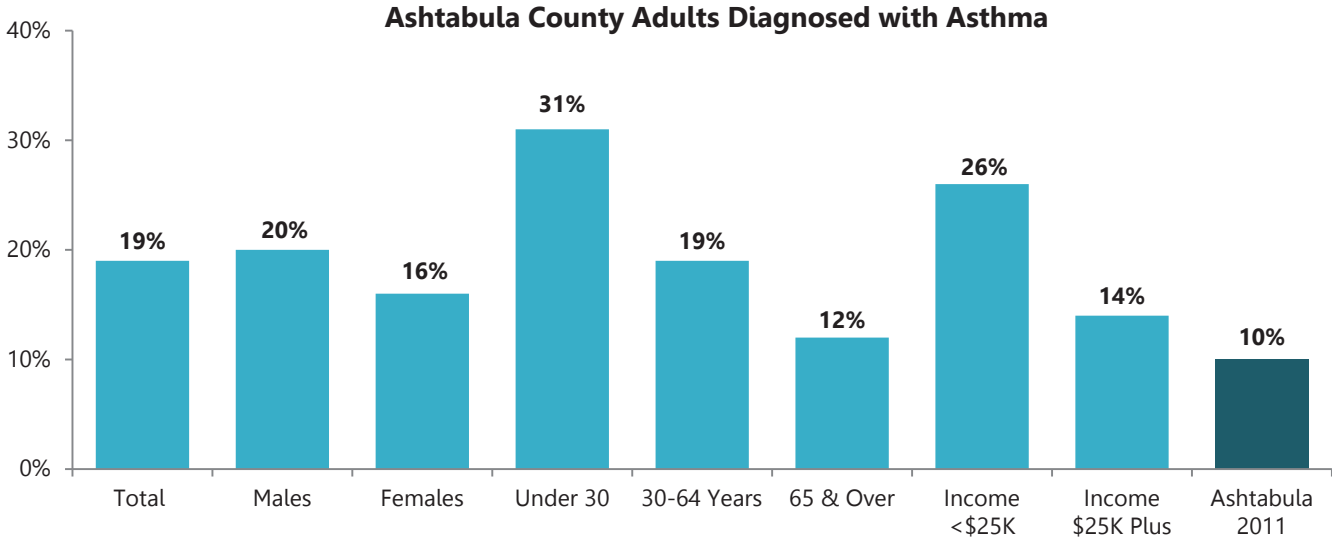
# Chronic Disease: Asthma

## Key Findings

*In 2016, 19% of Ashtabula County adults had been diagnosed with asthma.*

## Asthma and Other Respiratory Disease

- In 2016, 19% of Ashtabula County adults had been diagnosed with asthma, increasing to 31% of those under the age of 30 and 26% of those with incomes less than $25,000.
- Fourteen percent (14%) of Ohio and 14% of U.S. adults have ever been diagnosed with asthma *(Source: 2016 BRFSS).*
- Eleven percent (11%) of adults had been diagnosed with COPD or emphysema, increasing to 15% of those over the age of 65 and 18% of those with incomes less than $25,000.
- There are several important factors that may trigger an asthma attack. Some of these triggers are tobacco smoke, dust mites, outdoor air pollution, cockroach allergens, pets, mold, smoke from burning wood or grass, infections linked to the flu, colds, and respiratory viruses *(Source: CDC, 2017).*
- Chronic lower respiratory disease was the third leading cause of death in Ashtabula County and the third leading cause of death in Ohio from 2014-2016 *(Source: Ohio Public Health Data Warehouse, 2014-2016)*




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

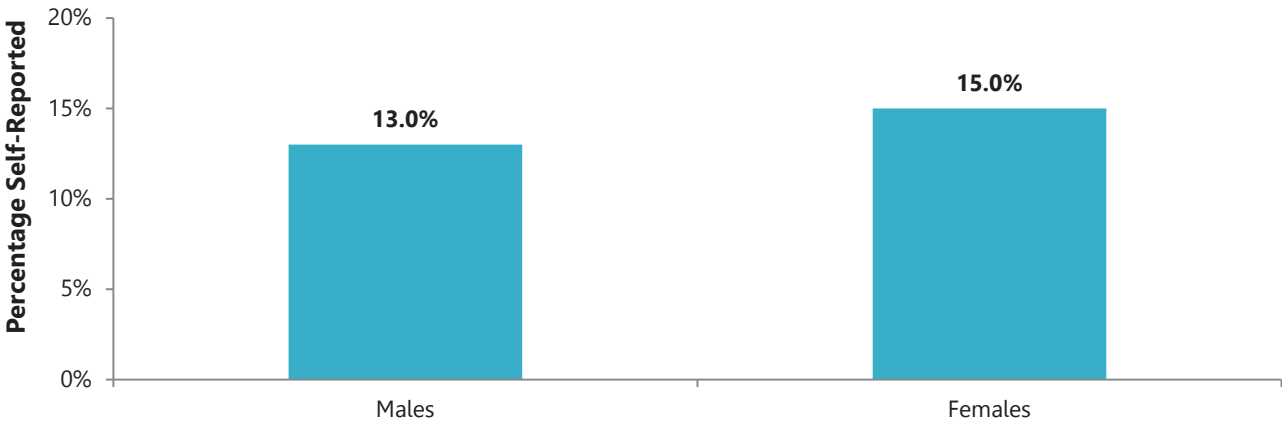
| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2017 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| Had been diagnosed with asthma | 10% | 19% | 14% | 14% |

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| Had been diagnosed with asthma | 19% | 4% | 35% |

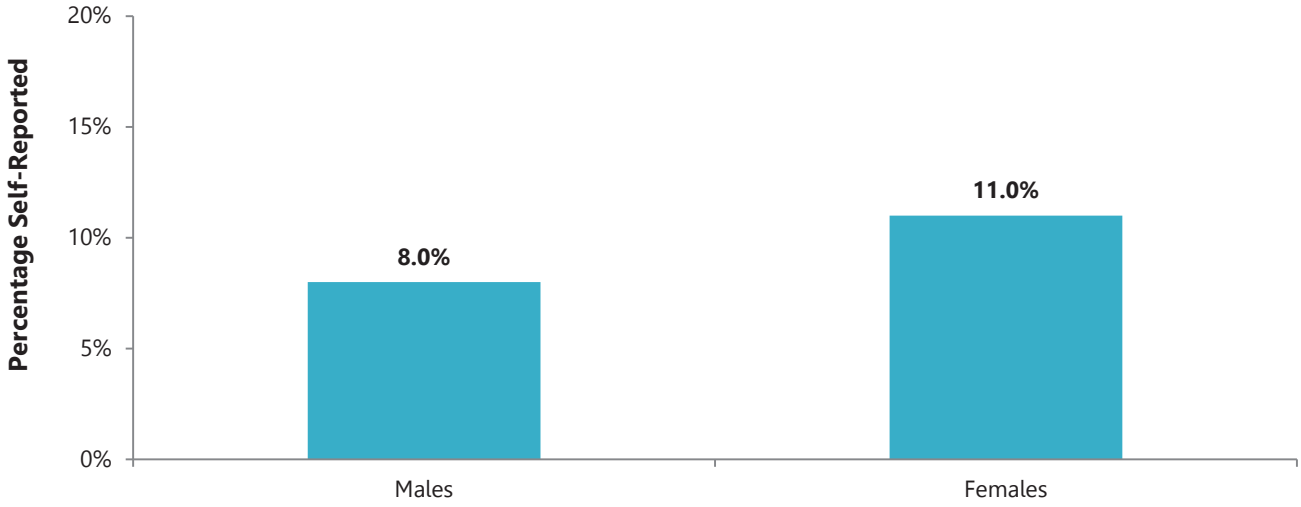
*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall*

***The following graphs demonstrate the lifetime and current prevalence rates of asthma by gender for Ohio residents, as well as asthma related ER visits among Ashtabula County residents.***

**Ohio Adult Lifetime Asthma Prevalence Rates By Gender**

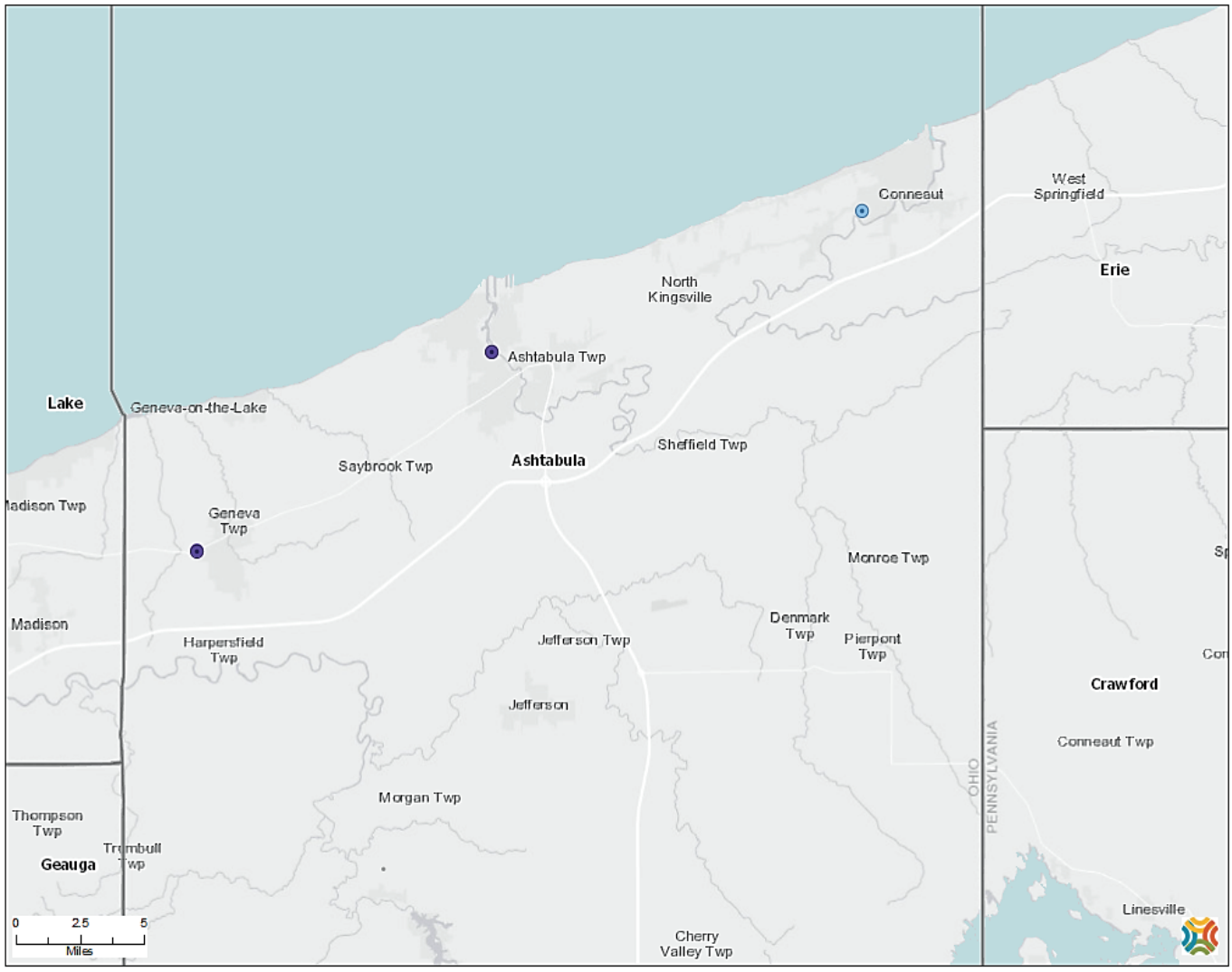



**Ohio Adult Current Asthma Prevalence Rates By Gender**




*(Source: 2016 BFRSS)*

## Pneumonia Readmissions, Rate by Hospital, CMS 2015-2016




Map Legend

Pneumonia Readmissions, Rate by Hospital, CMS 2015-16

- Over 18.0
- 17.1 - 18.0
- 16.1 - 17.0
- Under 16.1
- No Data or Data Suppressed

*Community Commons, 12/8/2017*

*(Source for maps: Centers for Medicare and Medicaid Services, 2015-2016, as compiled by Community Commons)*

## Chronic Obstructive Pulmonary Disease Readmissions, Rate by Hospital, CMS 2015-2016


Map Legend

COPD Readmissions, Rate by Hospital, CMS 2015-16

- Over 21.0
- 20.1 - 21.0
- 19.1 - 20.0
- Under 19.1
- No Data or Data Suppressed

*Community Commons, 12/8/2017*

*(Source for maps: Centers for Medicare and Medicaid Services, 2015-2016, as compiled by Community Commons)*

## Asthma Facts

- The number of Americans with asthma grows every year. Currently, 26 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 4/22/16)*

### What Causes an Asthma Attack?

- **Tobacco Smoke:** People should never smoke near you, in your home, in your car, or wherever you may spend a lot of time if you have asthma. Tobacco smoke is unhealthy for everyone, especially people with asthma. If you have asthma and you smoke, quit smoking.
- **Dust Mites:** If you have asthma, dust mites can trigger an asthma attack. To prevent attacks, use mattress covers and pillowcase covers to make a barrier between dust mites and yourself. Do not use down-filled pillows, quilts, or comforters. Remove stuffed animals and clutter from your bedroom.
- **Outdoor Air Pollution:** This pollution can come from factories, automobiles, and other sources. Pay attention to air quality forecasts to plan activities when air pollution levels will be low.
- **Cockroach Allergens:** Get rid of cockroaches in your home by removing as many water and food sources as you can. Cockroaches are often found where food is eaten and crumbs are left behind. Cockroaches and their droppings can trigger an asthma attack, so vacuum or sweep areas that might attract cockroaches at least every 2 to 3 days.
- **Pets:** Furry pets can trigger an asthma attack. If you think a furry pet may be causing attacks, you may want to find the pet another home. If you can't or don't want to find a new home for a pet, keep it out of the person with asthma's bedroom.
- **Mold:** Breathing in mold can trigger an asthma attack. Get rid of mold in your home to help control your attacks. Humidity, the amount of moisture in the air, can make mold grow. An air conditioner or dehumidifier will help keep the humidity level low.
- **Smoke from Burning Wood or Grass:** Smoke from burning wood or other plants is made up of a mix of harmful gases and small particles. Breathing in too much of this smoke can cause an asthma attack. If you can, avoid burning wood in your home.
- **Other Triggers**: Infections linked to influenza (flu), colds, and respiratory syncytial virus (RSV) can trigger an asthma attack. Sinus infections, allergies, breathing in some chemicals, and acid reflux can also trigger attacks. Physical exercise, some medicines, bad weather, breathing in cold air, some foods, and fragrances can also trigger an asthma attack.

*(Source: Centers for Disease Control, Asthma, Common Asthma Triggers, retrieved on 12/17/17)*

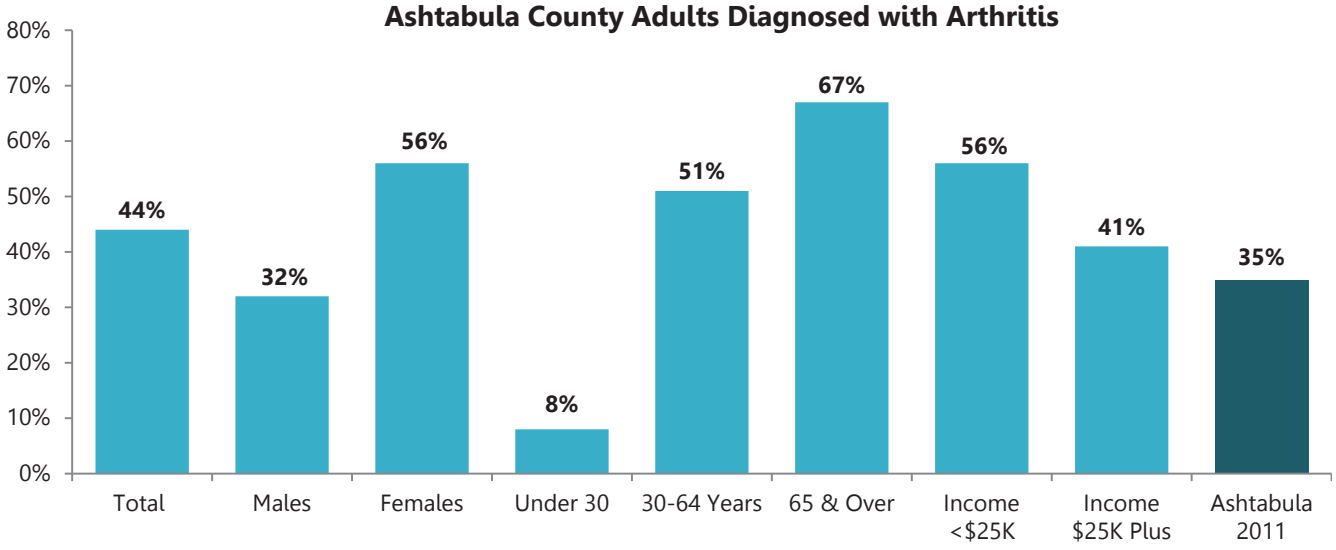
# Chronic Disease: Arthritis

## Key Findings

*In 2016, 44% of Ashtabula County adults were diagnosed with arthritis. The 2016 BRFSS indicated that 31% of Ohio adults and 26% of U.S. adults were told they have arthritis.*

## Arthritis

- More than two-fifths (44%) of Ashtabula County adults were told by a health professional that they had some form of arthritis, increasing to 67% of those over the age of 65.
- According to the 2016 BRFSS, 31% of Ohio adults and 26% of U.S. adults were told they have arthritis.
- Adults are at higher risk of developing arthritis if they are female, have genes associated with certain types of arthritis, have an occupation associated with arthritis, are overweight or obese, and/or have joint injuries or infections *(Source: CDC, 2016).*
- An estimated 54 million U.S. adults (about 23%) report having doctor-diagnosed arthritis. By 2040, over 78 million people will have arthritis. Arthritis is more common among women (24%) than men (18%), and it affects all racial and ethnic groups. Arthritis commonly occurs with other chronic diseases, like diabetes, heart disease, and obesity, and can make it harder for people to manage these conditions *(Source: CDC, Arthritis at a Glance, March 2017).*




*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 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Diagnosed with arthritis** | 35% | 44% | 31% | 26% |

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Diagnosed with arthritis** | 44% | 48% | 43% |

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

## 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:

- **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.
- **Learn Arthritis Management Strategies-** Arthritis management strategies provide those with arthritis with the skills and confidence to effectively manage their condition. These techniques have proven to be valuable for helping people change their behavior and better manage their arthritis symptoms.

*(Source: Centers for Disease Control and Prevention, Arthritis: Key Public Health Messages, July 2017)*

# Chronic Disease: Diabetes

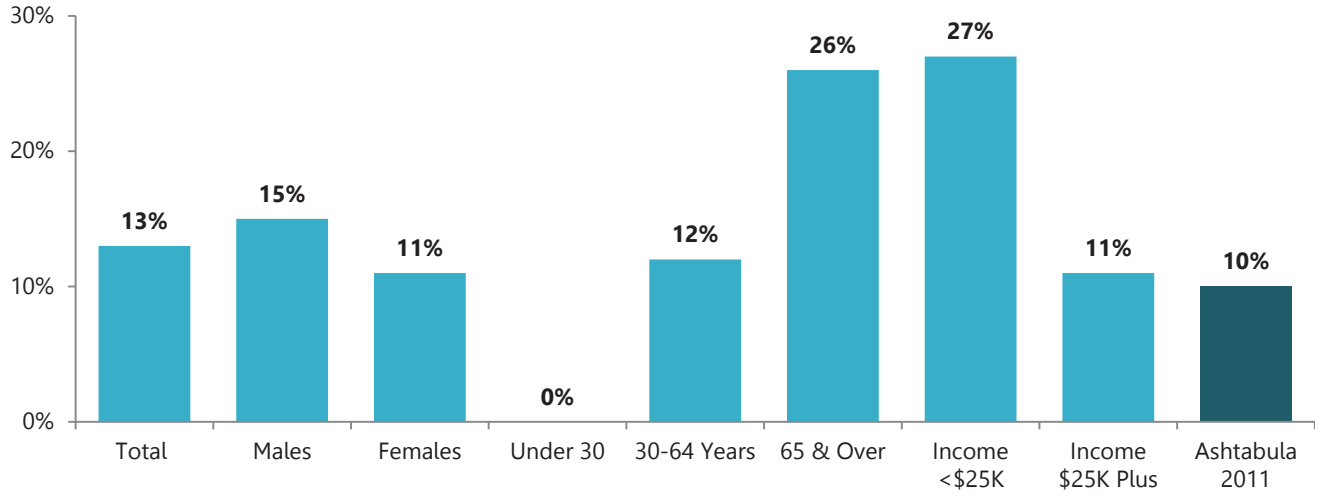
## Key Findings

*In 2016, 13% of Ashtabula County adults had been diagnosed with diabetes. Two-fifths (40%) of adults with diabetes rated their health as fair or poor.*

## Diabetes

- In 2016, 13% of Ashtabula County adults had been diagnosed with diabetes, increasing to 26% of those over the age of 65 and 27% of those with incomes less than $25,000. The 2016 BRFSS reports an Ohio prevalence of 11% and U.S. prevalence of 11%.
- Six percent (6%) adults had been diagnosed with pre-diabetes.
- Diabetics were diagnosed at an average age of 45.0 years.
- Two-fifths (40%) 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:
  - 92% were obese or overweight
  - 68% had been diagnosed with high blood pressure
  - 68% had been diagnosed with high blood cholesterol

**Ashtabula County Adults Diagnosed with Diabetes**



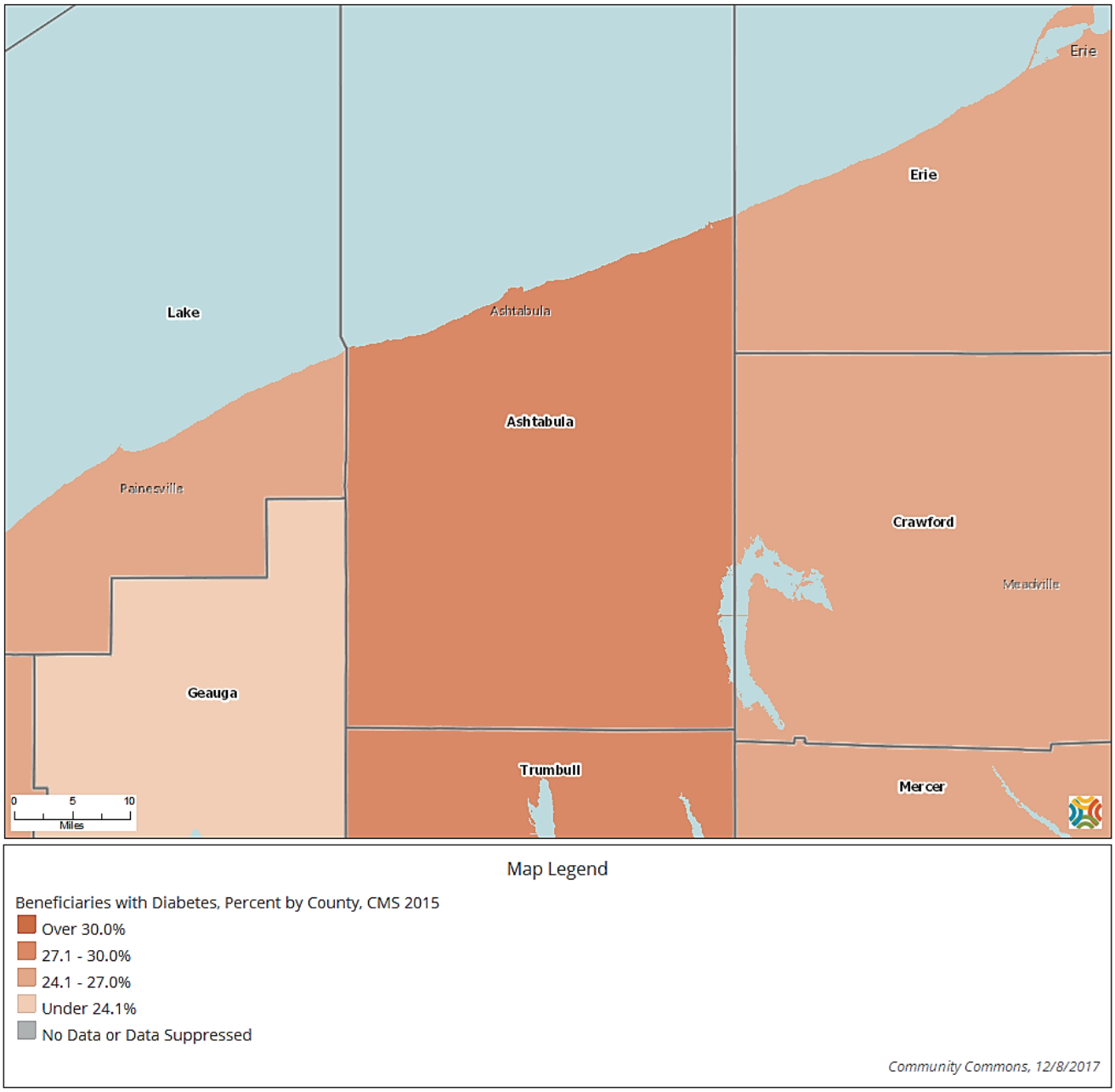

*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall*

| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|
| **Diagnosed with diabetes** | 10% | 13% | 11% | 11% |

| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Diagnosed with diabetes** | 13% | 2% | 21% |

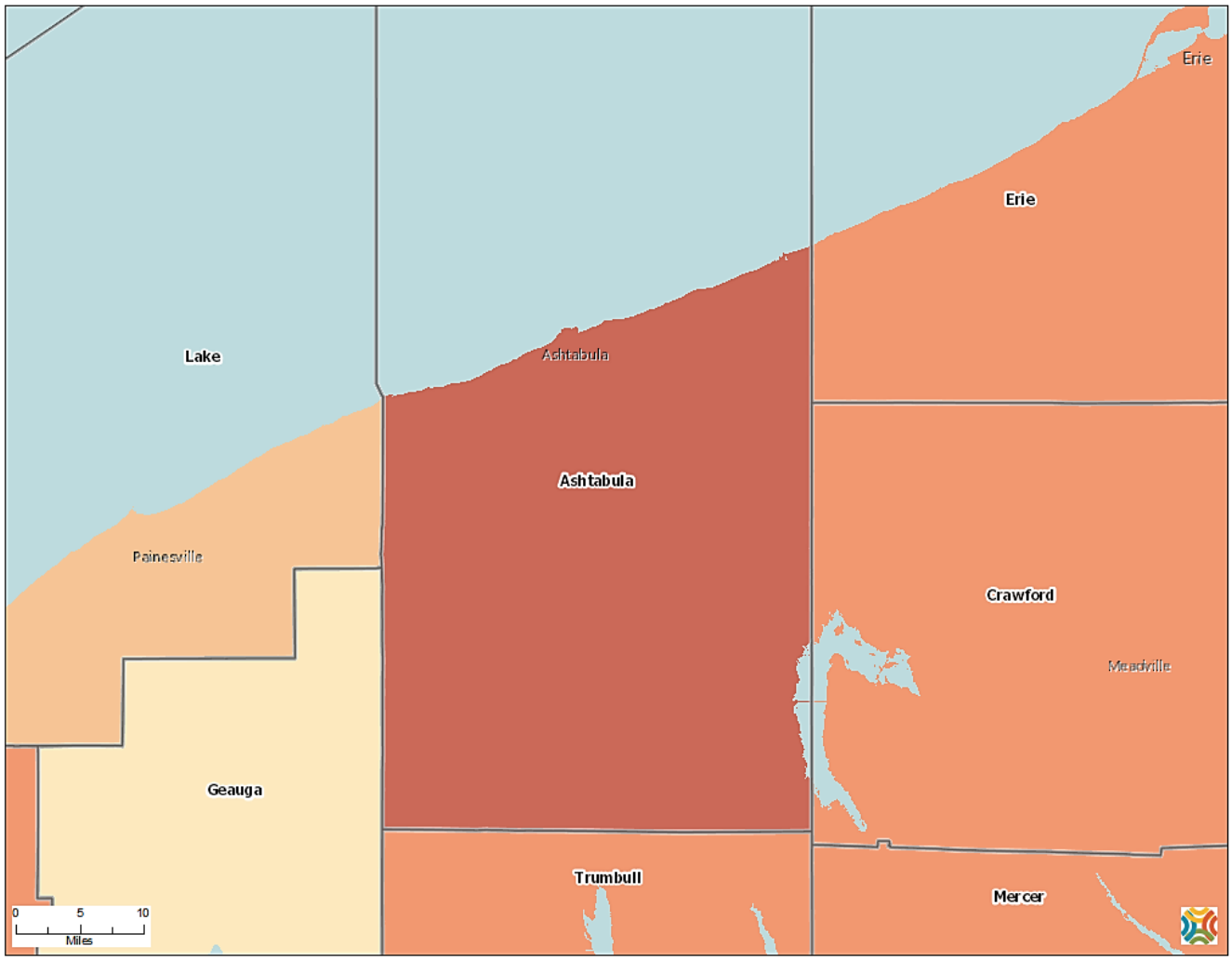
*Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall*

## Medicare Beneficiaries with Diabetes, Percent by County, CMS 2015




*(Source: Centers for Medicare & Medicaid Services (CMS): 2015, as compiled by Community Commons)*

## Diabetes Mortality, Age Adjusted Rate per 100,000 Population, 2011-2015




Map Legend

Diabetes Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, NVSS 2011-15

- Over 30.0
- 23.1 - 30.0
- 16.1 - 23.0
- Under 16.1
- Data Suppressed (<20 Deaths)

*Community Commons, 12/8/2017*

*(Source: Centers for Disease Control and Prevention, National Vital Statistics System, 2011-2015, accessed via CDC Wonder, as compiled by Community Commons)*

# Chronic Disease: Quality of Life

## Key Findings

*In 2016, 36% of Ashtabula County adults were limited in some way because of a physical, mental or emotional problem.*

## Impairments and Health Problems

- In 2016, more than one-third (36%) of Ashtabula County adults were limited in some way because of a physical, mental or emotional problem (21% Ohio, 21% U.S., 2015 BRFSS), increasing to 48% 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: arthritis/rheumatism (46%); back or neck problems (43%); stress, depression, anxiety, or emotional problems (37%); chronic pain (36%); walking problems (25%); chronic illness (22%); sleep problems (21%); fitness level (16%); lung/breathing problems (16%); eye/vision problems (10%); fractures, bone/joint injuries (10%); dental problems (7%); hearing problems (5%); substance dependency (2%); and drug addiction (1%).

- In the past year, Ashtabula County adults reported needing the following services or equipment: eyeglasses or vision services (28%); durable medical equipment (8%); pain management (8%); a cane (7%); help with routine needs (7%); medical supplies (4%); hearing aids or hearing care (4%); help with personal care needs (3%), oxygen or respiratory support (3%); a walker (3%); a wheelchair (2%); personal emergency response system (1%); a special bed (1%); wheelchair ramp (1%); mobility aids or devices (1%); and communication aids or devices (<1%).

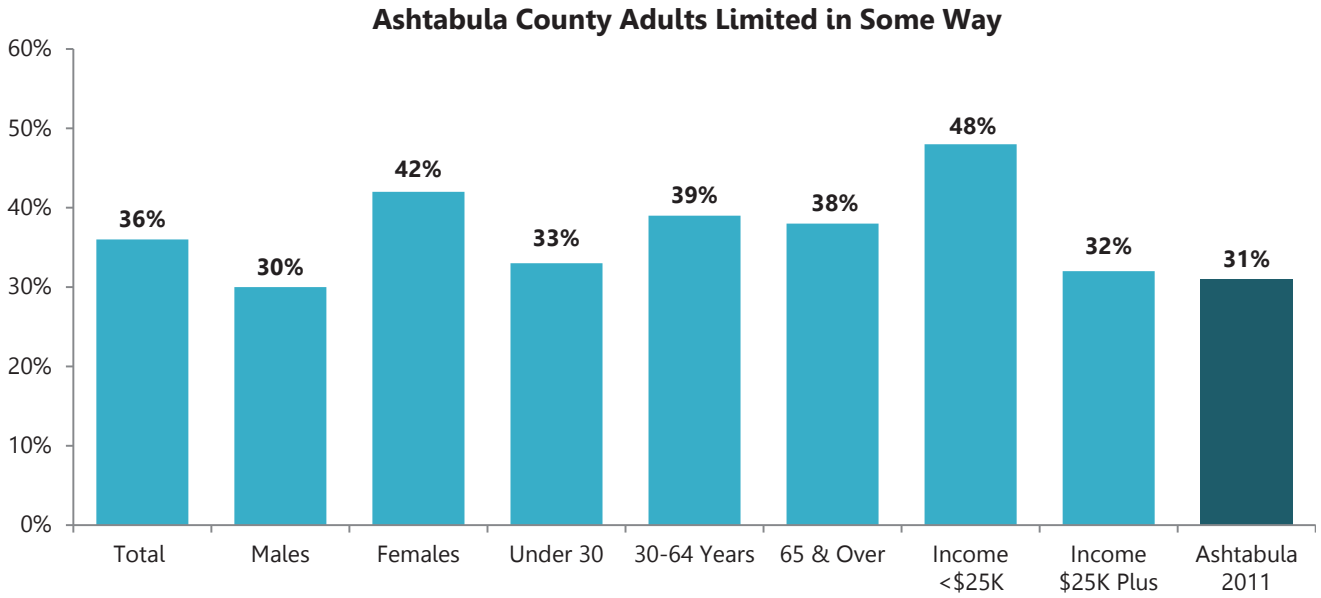
| Adult Comparisons | Ashtabula County 2011 | Ashtabula County 2016 | Ohio 2016 | U.S 2016 |
|---|---|---|---|---|
| **Limited in some way because of physical, mental, or emotional problems** | 31% | 36% | 21%* | 21%* |

**2015 BRFSS Data*

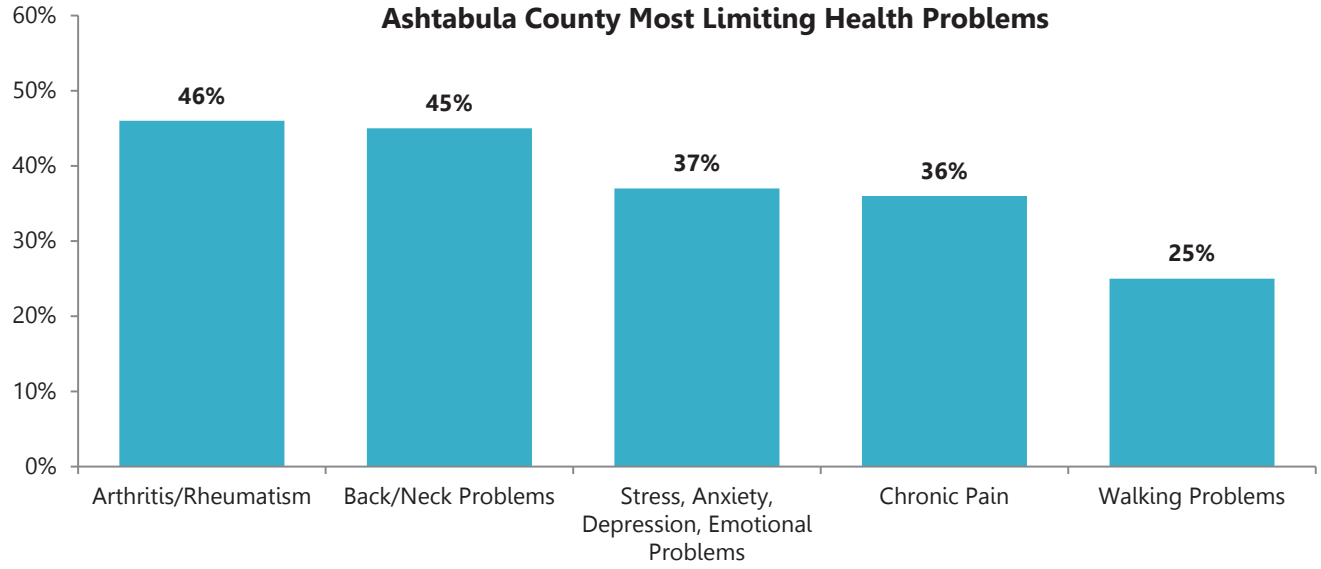
| Adult Comparisons | Ashtabula County 2016 | Conneaut City 2016 | Geneva City 2016 |
|---|---|---|---|
| **Limited in some way because of physical, mental, or emotional problems** | 36% | 22% | 42% |

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

***The following graphs show the percentage of Ashtabula County adults who were limited in some way and the most limiting health problems. Examples of how to interpret the information shown on the graph include: 36% of Ashtabula County adults were limited in some way, including 30% of males and 48% of those with incomes less than $25,000.***




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




## Healthy People 2020

**Arthritis, Osteoporosis, and Chronic Back Conditions (AOCBC)**

| Objective | Ashtabula County 2016 | 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** | 46% | 36% |

*Note: U.S. baseline is age-adjusted to the 2000 population standard*
*(Sources: Healthy People 2020 Objectives, 2016 Ashtabula County Health Assessment)*

# Social Conditions: Social Determinants of Health

## Key Findings

*In 2016, 18% of Ashtabula County adults needed help meeting their general daily needs. Fifty-two percent (52%) of adults reported having firearms in and around their homes.*

## Healthy People 2020

Healthy People 2020 developed five key determinants as a "place-based" organizing framework. These five determinants include:

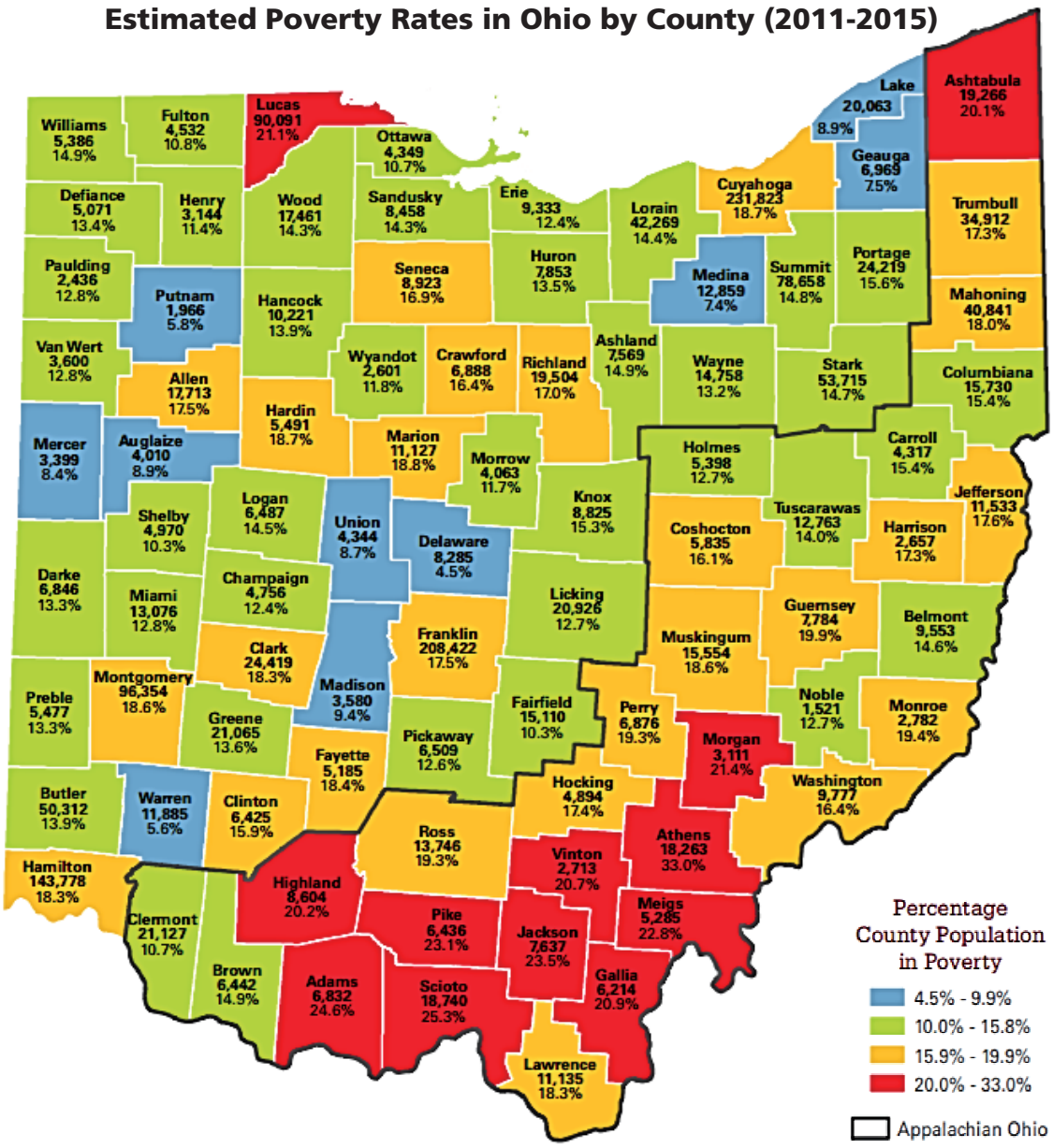
- Economic stability
- Education
- Social and community context
- Health and health care
- Neighborhood and built environment


## Economic Stability

- In the past month, 18% of adults needed help meeting their general daily needs, such as food, clothing, shelter or paying utilities, increasing to 38% of those with incomes less than $25,000.
- Ashtabula County adults attempted to get assistance from the following sources: Job & Family Services (18%), friend or family member (9%), Ashtabula County Community Action Commission (7%), food pantries (6%), church (5%), 2-1-1/United Way (3%), other charities (2%), WIC/Health Department (2%), personal debts/budgeting (1%), Legal Aid (1%), and somewhere else (2%). 1% did not know where to look for assistance.
- Ashtabula County adults experienced the following in the past year: had to choose between paying bills and buying food (16%), worried food would run out (8%), loss of income led to food insecurity issues (6%), were hungry but did not eat because they did not have enough money for food (5%), went hungry/ate less to provide more food for their family (5%), and food assistance was cut (3%).
- The median household income in Ashtabula County in 2016 was $41,158. The U.S. Census Bureau reports median income levels of $50,674 for Ohio and $55,332 for the U.S.
- Nineteen (19%) of all Ashtabula County residents were living in poverty, and 30% of children and youth ages 0-17 were living in poverty *(Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates).*
- The unemployment rate for Ashtabula County civilian labor force was 5% as of 2017 *(Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates).*
- There were 45,850 housing units. The owner-occupied housing unit rate was 85%. Rent in Ashtabula County cost an average of $637 per month *(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates).*

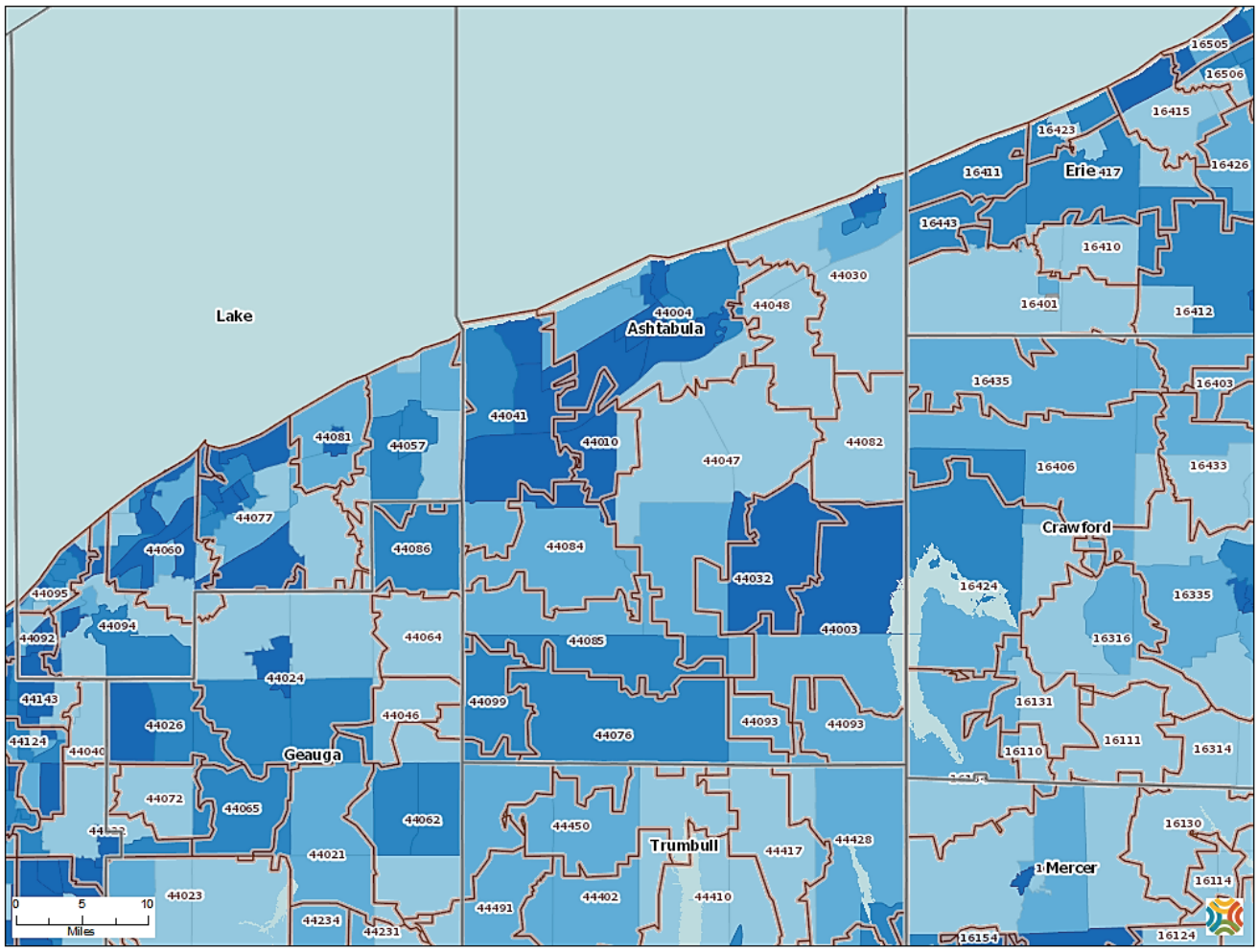
***The map below shows the variation in poverty rates across Ohio during the 2011-15 period.***

- The 2011-2015 American Community Survey 5 year estimates that approximately 1,775,836 Ohio residents or 15.8% of the population were in poverty.
- From 2011-2015, 20.1% of Ashtabula County residents were in poverty.




*(Source: 2011-2015 American Community Survey 5-year estimates, as compiled by Ohio Development Services Agency, Office of Research, Ohio Poverty Report, February 2017)*

## Households with Housing Costs Over 30% of Household Income, Renter-Occupied, ACS 2011-15




*(Source: U.S. Census Bureau, American Community Survey, 2011-2015, as compiled by Community Commons)*

## Education

- Forty-one percent (41%) 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, 2012-2016).*

- Fourteen percent (14%) had less than a high school diploma.
  *(U.S. Census Bureau, American Community Survey 5-year Estimates, 2012-2016).*

### Social Determinants of Health

- Social determinants of health are conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.
- Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been referred to as "place." In addition to the more material attributes of "place," the patterns of social engagement and sense of security and well-being are also affected by where people live.
- Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include safe and affordable housing, access to education, public safety, availability of healthy foods, local emergency/health services, and environments free of life-threatening toxins.
- Understanding the relationship between how population groups experience "place" and the impact of "place" on health is fundamental to the social determinants of health—including both social and physical determinants.

*(Source: Healthy People 2020, Updated 12/11/17)*

## Social and Community Context

- Ashtabula County adults experienced the following in the past 12 months: death of a family member or close friend (37%); a close family member went to the hospital (29%); had bills they could not pay (24%); someone close to them had a problem with drinking or drugs (14%); moved to a new address (11%); someone in their household lost their job/had their hours at work reduced (11%); household income was cut by 50% (7%); became separated or divorced (4%); were threatened or abused by someone physically, emotionally, sexually, and/or verbally (4%); had someone homeless living with them (4%); their child was threatened or abused by someone physically, emotionally, sexually, and/or verbally (4%); witnessed someone in their family being slapped (2%); knew someone who lived in a hotel (1%); and were homeless (1%).

- Ashtabula County adults experienced the following adverse childhood experiences (ACEs): their parents became separated or were divorced (23%); lived with someone who was a problem drinker or alcoholic (16%); a parent or adult in their home swore at, insulted, or put them down (15%); someone at least 5 years older than them or an adult touched them sexually (11%); their family did not look out for each other, feel close to each other, or support each other (10%); someone at least 5 years older than them or an adult tried to make them touch them sexually (8%); their parents or adults in their home slapped, hit, kicked, punched, or beat each other up (8%); a parent or adult in their home hit, beat, kicked, or physically hurt them (7%); lived with someone who was depressed, mentally ill, or suicidal (7%); lived with someone who used illegal stress drugs, or who abused prescription medications (5%); did not have enough to eat, had to wear dirty clothes, and had no one to protect them (4%); lived with someone who served time or was sentenced to serve time in prison, jail or other correctional facility (4%), someone at least 5 years older than them or an adult forced them to have sex (4%), and their parents were not married (2%).

- Twelve percent (12%) of adults experienced 4 or more adverse childhood experiences (ACEs).

## Adverse Childhood Experiences (ACEs)

- Adverse childhood experiences (ACEs) are stressful or traumatic events, including abuse and neglect. They may also include household dysfunction such as witnessing domestic violence or growing up with family members who have substance use disorders. Some ACEs include:
  - Physical abuse
  - Sexual abuse
  - Mother treated violently
  - Physical/emotional neglect
  - Emotional abuse
  - Household mental illness
  - Parental separation or divorce
  - Incarcerated household member
  - Substance misuse within household
  - Intimate partner violence

- Preventing ACEs and engaging in early identification of people who have experienced them could have a significant impact on a range of critical health problems. You can strengthen your substance misuse prevention efforts by: increasing awareness of ACEs among state and community level substance misuse prevention professionals, emphasizing the relevance of ACEs to behavioral health disciplines.
- Research has demonstrated a strong relationship between ACEs, substance use disorders, and behavioral problems. When children are exposed to chronic stressful events, their neurodevelopment can be disrupted. As a result, the child's cognitive functioning or ability to cope with negative or disruptive emotions may be impaired. Over time, and often during adolescence, the child may adopt negative coping mechanisms, such as substance use or self-harm. Eventually, these unhealthy coping mechanisms can contribute to disease, disability, and social problems, as well as premature mortality.

*(Source: SAMHSA, Adverse Childhood Experiences, Updated 09/05/2017)*

## ACEs Can Have Lasting Effects on Behavior & Health

- Childhood experiences have a tremendous, lifelong impact on the health and quality of a person's life. The ACE Study showed dramatic links between adverse childhood experiences and risky behavior, psychological issues, serious illness and the leading causes of death.
- The following charts compare how like a person with 1, 2, 3 or 4 ACEs will experience specified behaviors than a person without ACEs.


## What Can be Done About ACEs?

- The following wide-ranging health and social consequences underscore the importance of preventing ACEs before they happen. Safe, stable, and nurturing relationships and environments (SSNREs) can have a positive impact on a broad range of health problems and on the development of skills that will help children reach their full potential. Strategies that address the needs of children and their families include:


*(Sources: CDC, Adverse Childhood Experiences, Looking How ACEs Affect our Lives and Society, June 2016)*
*Note: Having an ACE score does not imply that an individual could not have other risk factors for these health behaviors/diseases*

## Health and Health Care

- In 2016, 92% Ashtabula County adults had health care coverage, leaving 8% who were uninsured. The 2016 BRFSS reported uninsured prevalence rates of 7% for Ohio and 10% for the U.S.
- Ashtabula County adult health care coverage included the following: medical (96%), prescription coverage (92%), immunizations (76%), outpatient therapy (75%), preventive health (73%), dental (61%), vision (61%), mental health (59%), durable medical equipment (42%), alcohol and drug treatment (39%), home care (31%), skilled nursing/assisted living (31%), hospice (26%), and transportation (16%).
- 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

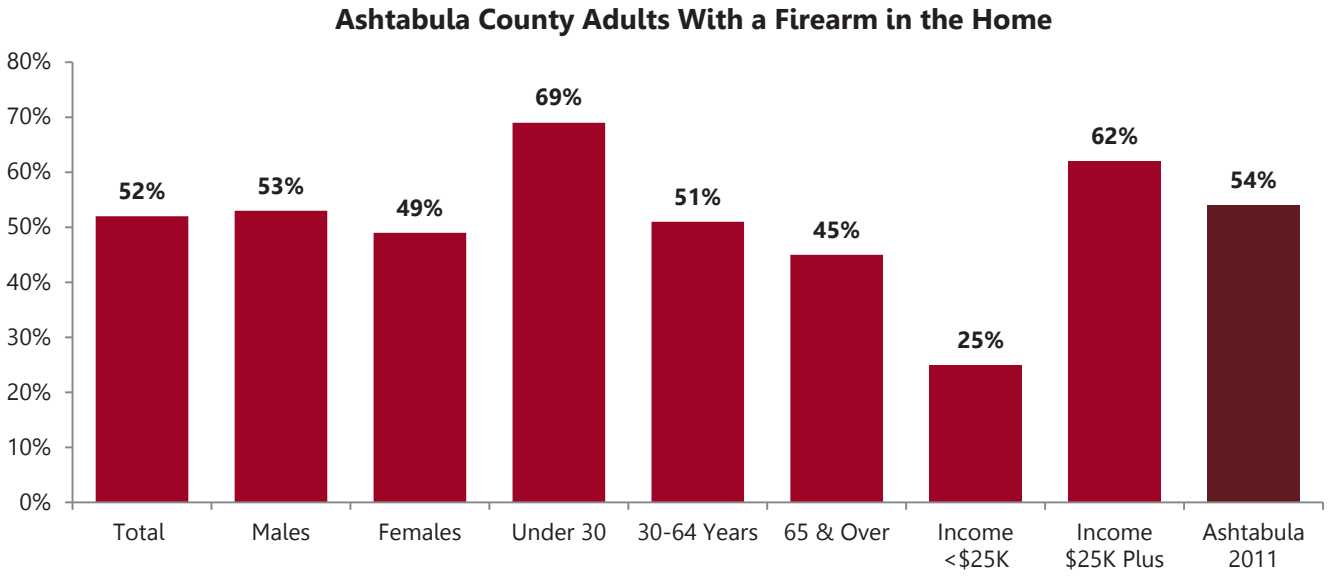
- More than half (52%) of Ashtabula County adults kept a firearm in or around their home. Four percent (4%) of adults reported they were unlocked and loaded.
- Ashtabula County adults considered their neighborhood extremely safe (15%), quite safe (54%), slightly safe (25%), and not at all safe (3%).
- Ashtabula County adults reported doing the following while driving: eating (38%), talking on hand-held cell phone (32%), talking on hands-free cell phone (24%), texting (14%), not wearing a seatbelt (13%), using internet on their cell phone (5%), being under the influence of alcohol (5%), reading (1%), being under the influence of recreational drugs (1%), and other activities (such as applying makeup, shaving, etc.) (1%).
- Adults had the following transportation issues: other car issues/expenses (7%), no car (6%), suspended/no driver's license (5%), could not afford gas (4%), limited public transportation available or accessible (4%), no car insurance (4%), disabled (2%), and did not feel safe to drive (1%).

### Victims of Gun Violence in America

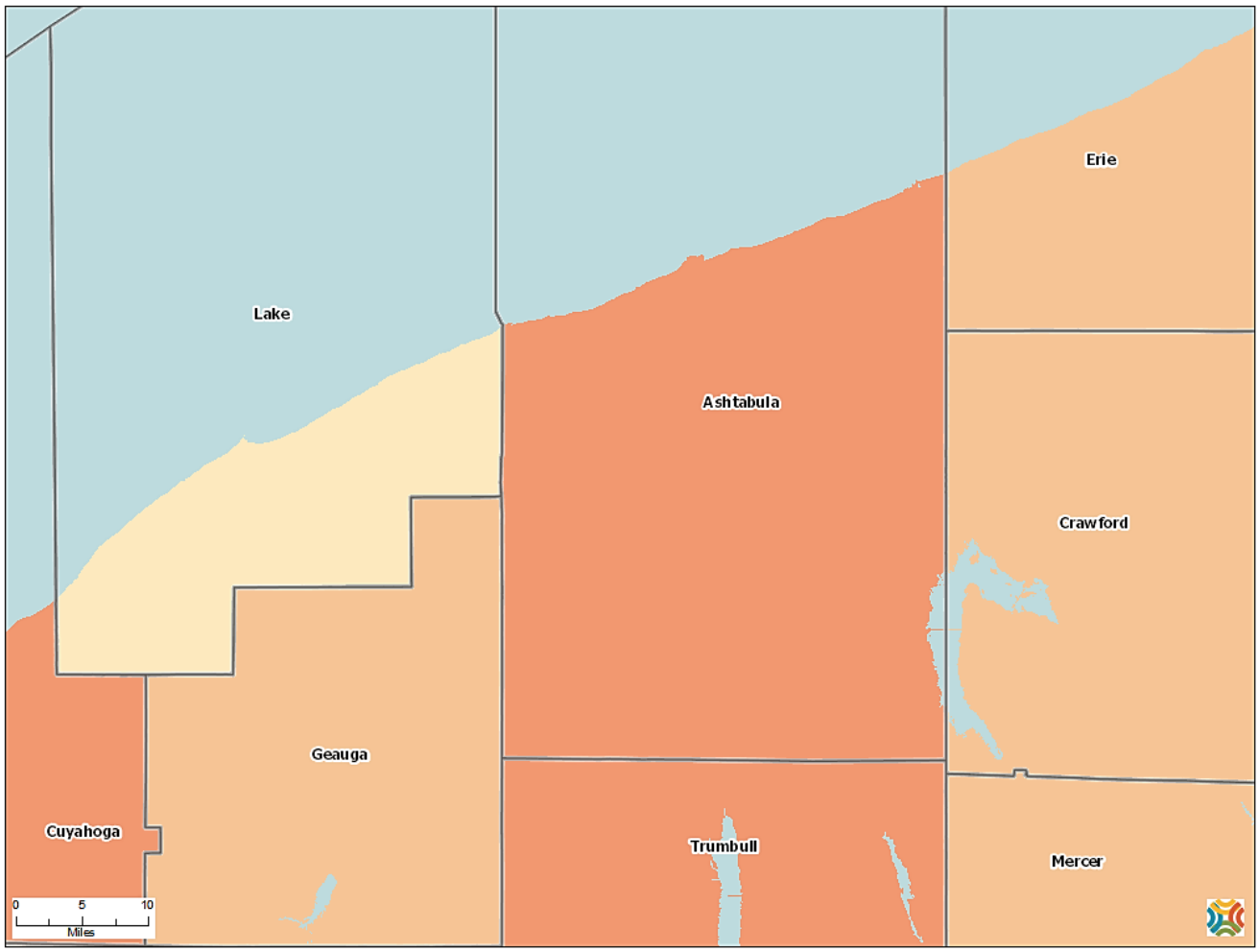
- More than 100,000 people are shot in murders, assaults, suicides & suicide attempts, accidents or by police intervention in America in an average year.
  - 33,880 people die from gun violence and 81,114 people survive gun injuries.
- Every day, an average of 315 people is shot in America. Of those 315 people, 93 people die and 222 are shot, but survive.
  - Of the 315 people who are shot every day, an average of 46 are children and teens.
  - Of the 93 people who die, 32 are murdered, 58 are suicides, 1 die accidently, 1 with an unknown intent and 1 by legal intervention.
  - Of the 222 people who are shot but survive, 164 are from assault, 45 are shot accidently, 10 are suicide attempts, and 3 are police interventions.

*(Source: Brady Campaign to Prevent Gun Violence, "There Are Too Many Victims of Gun Violence" Fact Sheet, June 2017)*

***The following graph shows the percentage of Ashtabula County adults who had a firearm in or around the home. Examples of how to interpret the information shown on the graph include: 52% of all Ashtabula County adults had a firearm in or around the home, including 53% of males and 69% of those under the age of 30.***



## Firearm-Related Injury Mortality, Age Adjusted Rate per 100,000 Population, 2011-2015




Map Legend

Firearm-related Injury Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, NVSS 2011-15

- Over 18.0
- 12.1 - 18.0
- 9.1 - 12.0
- Under 9.1
- Data Suppressed (<20 Deaths)

*Community Commons, 12/12/2017*

*(Source: Centers for Disease Control and Prevention, National Vital Statistics System, 2011-2015, accessed via CDC Wonder, as compiled by Community Commons*

# Social Conditions: Environmental Health

## Key Findings

*Ashtabula County adults reported the following as the top three issues that threatened their health in the past year: insects (13%), mold (8%), and air quality (5%). Seventy-six percent (76%) of adults reported they had a working smoke detector in their home.*

## Disaster Preparedness

- Ashtabula County households had the following disaster preparedness supplies: working flashlight and working batteries (77%), cell phone (76%), working smoke detector (76%), cell phone with texting (74%), computer/tablet (68%), home land-line telephone (59%), 3-day supply of nonperishable food for everyone in the household (47%), 3-day supply of prescription medication for each person who takes prescribed medicines (41%), working battery-operated radio and working batteries (41%), 3-day supply of water for everyone in the household (1 gallon of water per person per day) (36%), generator (29%), communication plan (13%), family disaster plan (6%), and a disaster plan (4%).

- Ashtabula County adults indicated the following reasons they might not evacuate if asked to do so: concern about leaving pets (30%), concern about leaving property behind (29%), concern about family safety (21%), concern about personal safety (14%), concern about traffic jams and inability to get out (11%), lack of trust in public officials (10%), lack of transportation (6%), health problems (4%), and other reasons (4%). 34% of adults indicated more than one reasons for not evacuating.

## Environmental Health

- Ashtabula County adults thought the following threatened their health in the past year:
  - Insects (13%)
  - Mold (8%)
  - Air quality (5%)
  - Temperature regulation (5%)
  - Plumbing problems (3%)
  - Unsafe water supply/wells (3%)
  - Agricultural chemicals (2%)
  - Safety hazards (2%)
  - Sewage/waste problems (2%)
  - Asbestos (1%)
  - Bed bugs (1%)
  - Chemical found in products (1%)
  - Lead paint (1%)
  - Lice (1%)
  - Radiation (1%)
  - Radon (1%)
  - Cockroaches (1%)

# Social Conditions: Parenting

## Key Findings

*In 2016, more than four-fifths (81%) of parents indicated their child had received all recommended immunizations. Fifty-nine percent (59%) of parents discussed dating and relationships with their 10-to-17-year-old child.*

## Parenting

- Eighty-one percent (81%) of parents indicated their child had received all of the recommended immunizations. Reasons for not immunizing their child included the following: fear of immunizations (2%), cost (1%), did not think immunization is necessary (1%), fear of adverse effects (1%), fear of getting sick (1%), pre-existing health issues (1%), and other reasons (7%).
- Almost half (46%) of parents indicated they would immunize their child with the human papillomavirus (HPV) vaccine, and 34% of parents indicated their child had already been vaccinated with the HPV vaccine.
- Parents were aware of the following programs/services for their infant-to-5-year-old child: WIC (20%), school (18%), Head Start (15%), Help Me Grow (9%), Health Check (7%), Pregnancy Related Services (PRS) (5%), Children's Services (4%), Early Interventions Services (4%), out-of-home daycare (3%), and newborn home visits (2%).
- In the past year, parents took their child to the doctor for the following types of appointments: regular check-ups (73%), dental visits (71%), other visits for illness (53%), injuries (24%), ear infections (14%), behavioral problems (11%), asthma (9%), head lice (3%), and poisonings (1%).
- In the past year, parents missed at least one day of work due to the following issues with their child: medical appointments (21%), illnesses or injuries (19%), behavioral or emotional problems (5%), asthma (3%), and unreliable/lack of child care (2%).
- Parents discussed the following sexual health and other health topics with their 10-to-17-year-old in the past year:
  - Dating and relationships (59%)
  - Career plan/post-secondary education (57%)
  - Negative effects of alcohol, tobacco, illegal drugs, or misusing prescription drugs (53%)
  - Bullying (52%)
  - Weight status (52%)
  - Social media issues (49%)
  - Abstinence/how to refuse sex (42%)
  - Birth control/condom use/safer sex/STD prevention (42%)
  - Body image (37%)
  - Refusal skills/peer pressure (36%)
  - Anxiety/depression/suicide (34%)
  - School/legal consequences of using tobacco/alcohol/other drugs (34%)
  - Volunteering (29%)
  - Energy drinks (24%)

### How to Help Increase Your School-Aged Child's Social Ability

Consider the following as ways to foster your school-aged child's social abilities:

- Set and provide appropriate limits, guidelines, and expectations and consistently enforce using appropriate consequences.
- Model appropriate behavior.
- Offer compliments for your child being cooperative and for any personal achievements.
- Help your child choose activities that are appropriate for your child's abilities.
- Encourage your child to talk with you and be open with his or her feelings.
- Encourage your child to read and read with your child.
- Encourage your child to get involved with hobbies and other activities.
- Encourage physical activity.
- Encourage self-discipline; expect your child to follow rules that are set.
- Teach your child to respect and listen to authority figures.
- Encourage your child to talk about peer pressure and help set guidelines to deal with peer pressure.
- Spend uninterrupted time together—giving full attention to your child.
- Limit television, video, and computer time.

*(Source: eClinicalWorks, The Growing Child: School Age (6 to 12 Years), 2017)*

# Social Conditions: Maternal and Infant Health

## Key Findings

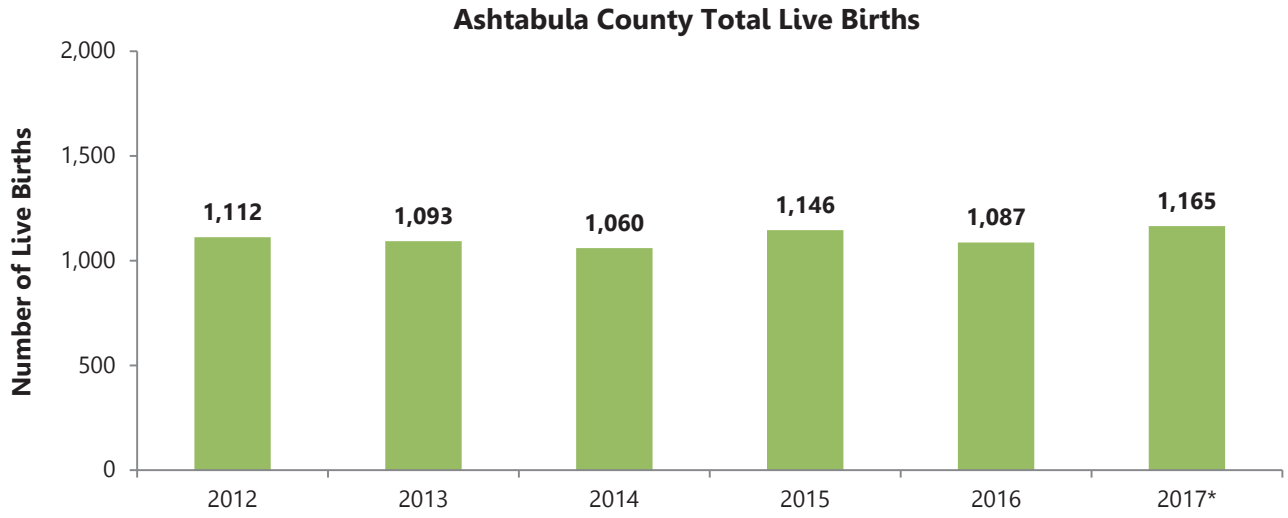
*In 2017, approximately 7.3% of the Ashtabula County births were low birth weight* *(Source: ODH, Ohio Public Health Data Warehouse).*

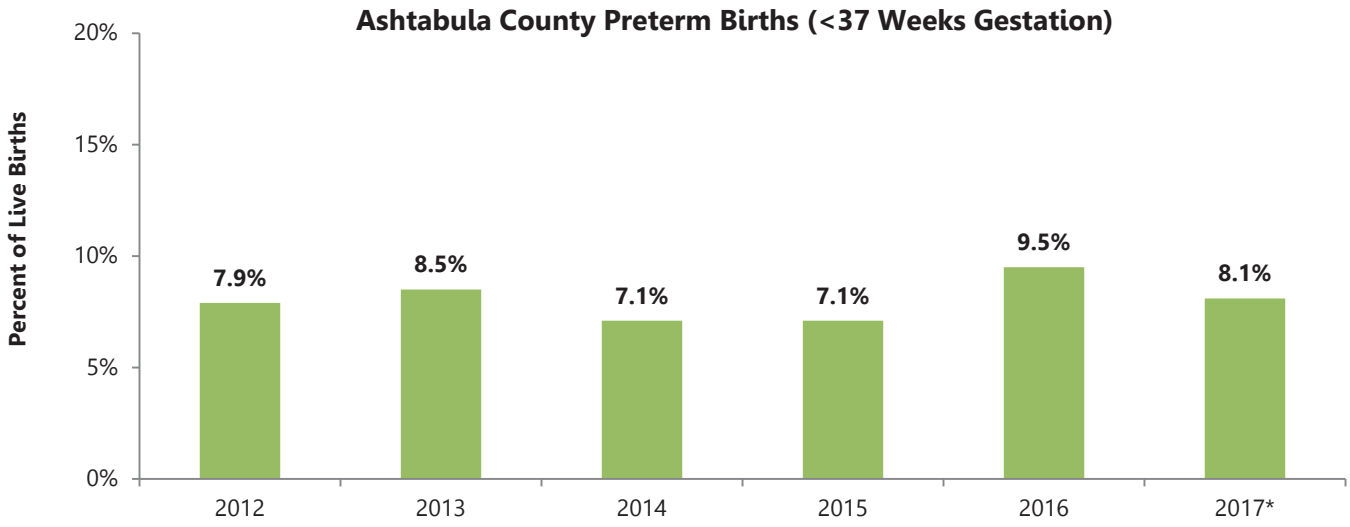
## Maternal and Infant Health

- In the past year, adults went outside of Ashtabula County for the following maternal and child health care services: obstetrics/gynecology/NICU (16%), pediatric care (5%), and pediatric therapies (2%).

***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 2012-2017, there was an average of 1,111 live births per year in Ashtabula County.



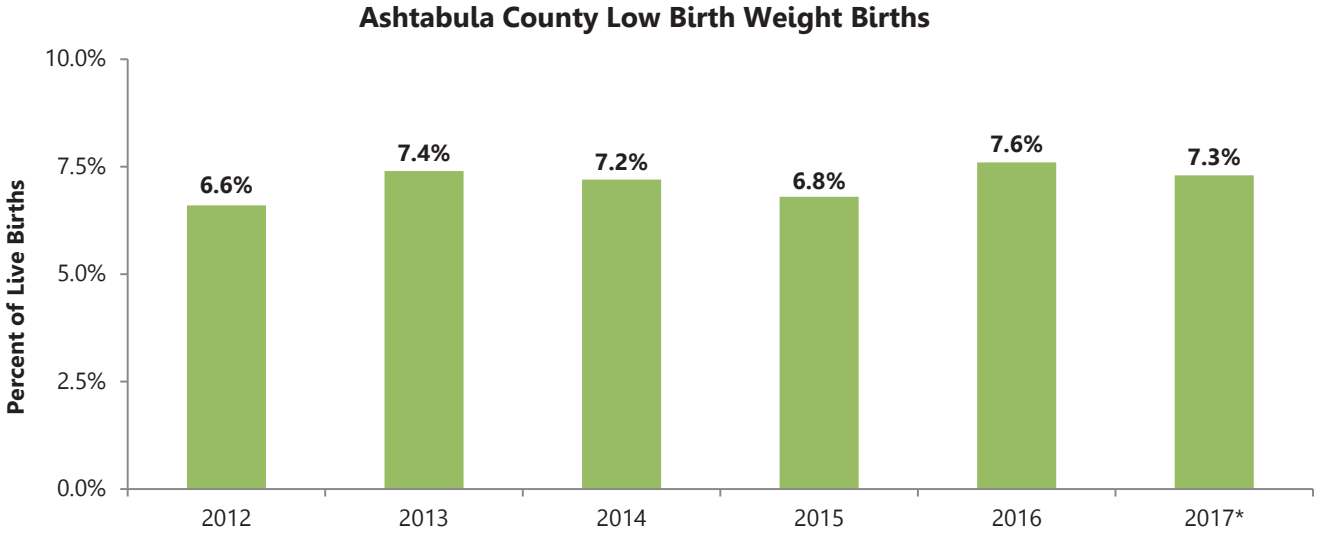




**Data is preliminary and subject to change*
*(Source for graphs: ODH, Ohio Public Health Data Warehouse Updated 3-11-18)*

***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 7.3% of the Ashtabula County births were low birth weight.




**Data is preliminary and subject to change*
*(Source: ODH, Ohio Public Health Data Warehouse, Updated 3-11-18)*

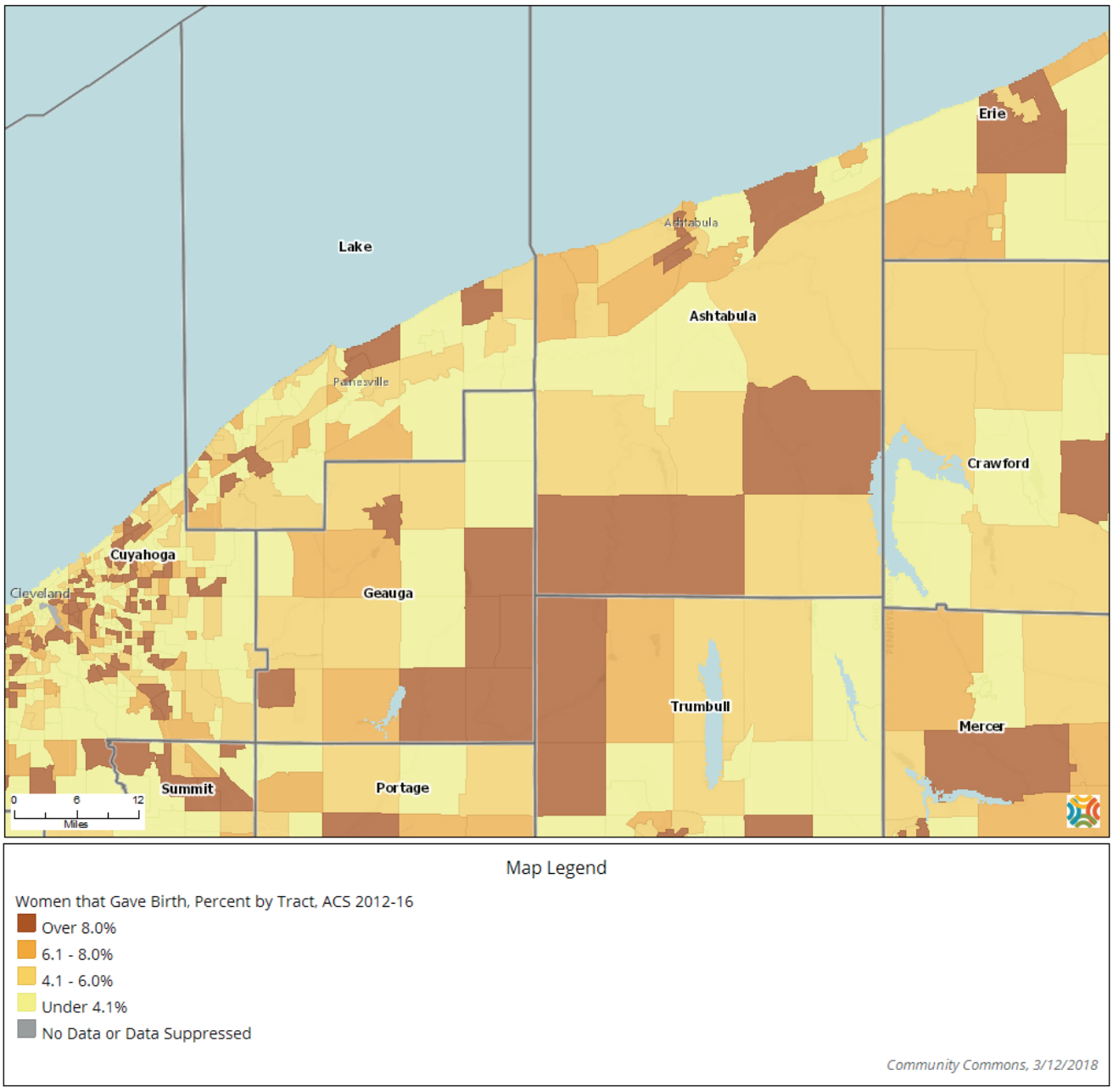
## Neonatal, Post-Neonatal and Infant Mortality in 2016

| | Number of Neonatal Deaths* | Number of Post-Neonatal Deaths** | Total Number of Infant Deaths | Number of Births |
|---|---|---|---|---|
| **Ashtabula** | 4 | 0 | 4 | 1,087 |
| | | | | |
| **Ohio** | **713** | **311** | **1,024** | **138,198** |

**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, 2016 Ohio Infant Mortality Data: General Findings, obtained from: http://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/cfhs/OEI/2016-Ohio-Infant-Mortality-Report-FINAL.pdf?la=en)*

## Ashtabula County Women that Gave Birth, Percent by Census Tract, American Communities Survey, 2012-2016




Map Legend

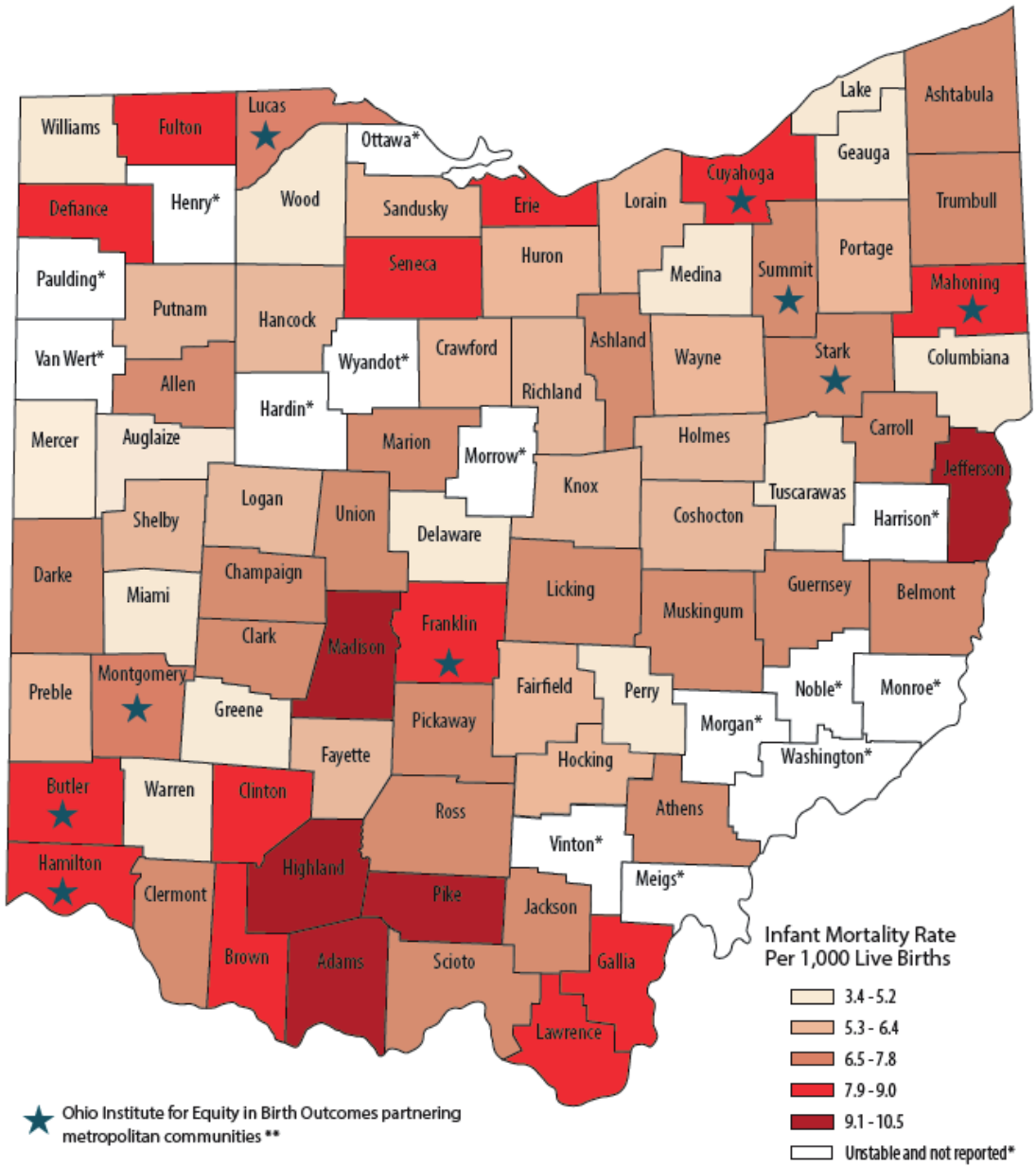
Women that Gave Birth, Percent by Tract, ACS 2012-16

- Over 8.0%
- 6.1 - 8.0%
- 4.1 - 6.0%
- Under 4.1%
- No Data or Data Suppressed

*Community Commons, 3/12/2018*

*(Source: American Community Survey, 2012-2016, 5 Year Estimates, as compiled by Community Commons, 3/12/18)*

## Ohio Infant Mortality Average 5-Year Rate by County, 2012-2016




*Source: Ohio Department of Health, Bureau of Vital Statistics.*
*Infant mortality rate county groupings were determined by Jenks Natural Breaks. This method finds the best way to split up the ranges by minimizing the variation within each group, so the areas within each color are as close as possible in value to each other.*
** Rates based on fewer than 10 infant deaths are unstable and not reported.*
*** Ohio Institute for Equity in Birth Outcomes partnering communities seek to improve overall birth outcomes and reduce racial and ethnic disparities in infant mortality. These metropolitan areas accounted for 59 percent of all infant deaths, and 86 percent of black infant deaths, in Ohio in 2016.*

*(Source: Ohio Department of Health, Bureau of Vital Statistics, 2016 Ohio Infant Mortality Data: General Findings, obtained from: https://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/cfhs/OEI/2016-Ohio-Infant-Mortality-Report-FINAL.pdf?la=en)*

# Appendix I: Needs Assessment Information Sources

| Source | Data Used | Website |
|---|---|---|
| American Cancer Society, Cancer Facts and Figures 2017. Atlanta: ACS, 2017 | • 2017 Cancer Facts, Figures, and Estimates | www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2017.html |
| American College of Allergy, Asthma & Immunology | • Asthma Facts | http://acaai.org/news/facts-statistics/asthma |
| American Heart Association | • Smoke-free Living: Benefits & Milestones | www.heart.org/HEARTORG/HealthyLiving/QuitSmoking/YourNon-mokingLife/Smoke-free-Living-Benefits-Milestones_UCM_322711_Article.jsp#.WKs5RW8rKM8 |
| 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 | • 2016 Adult Ohio and U.S. Correlating Statistics | www.cdc.gov/brfss |
| Brady Campaign to Prevent Gun Violence | • Victims of Gun Violence | www.bradycampaign.org/sites/default/files/Brady-Campaign-5Year-Gun-Deaths-Injuries-Stats_June2017.pdf |
| CDC, Alcohol and Public Health | • Excessive Alcohol Use and Risks to Women's Health<br>• Economic Costs of Excessive Alcohol Use | www.cdc.gov/alcohol/fact-sheets/womens-health.htm |
| CDC, Arthritis | • Arthritis: Key Public Health Messages | www.cdc.gov/arthritis/basics/key.htm |
| CDC, Asthma | • Asthma Attacks | www.cdc.gov/asthma/triggers.html |
| CDC, Breast Cancer | • Reduce Risk of Breast Cancer | www.cdc.gov/cancer/breast/basic_info/prevention.htm |
| CDC, Cancer Prevention and Control | •<br>• Prostate Cancer Awareness | www.cdc.gov/cancer/dcpc/resources/features/cancerandmen/ |
| CDC, Division of Oral Health | • Facts About Adult Oral Health | www.cdc.gov/oralhealth/basics/adult-oral-health/index.html |
| CDC, Healthy Weight | • Adult BMI | www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html |
| CDC, National Center for Health Statistics | • Health Care Access and Utilization | www.cdc.gov/nchs/fastats/access-to-health-care.htm |
| | • Men's Health | www.cdc.gov/nchs/fastats/mens-health.htm |
| | • Mental Health in the U.S. | www.cdc.gov/nchs/fastats/mental-health.htm |
| CDC, Physical Activity for Everyone | • Physical Activity Recommendations | www.cdc.gov/physicalactivity/everyone/guidelines/adults.html |
| CDC, Seasonal Influenza (Flu), 2017 | • Who Should Get a Yearly Flu Shot? | www.cdc.gov/flu/protect/whoshouldvax.htm |
| CDC, Sexual Violence | • Understanding Sexual Violence | www.cdc.gov/features/sexualviolence/index.html |

| Source | Data Used | Website |
|---|---|---|
| CDC, Sexually Transmitted Diseases Surveillance, 2017 | • STD's in Adolescents and Young Adults | www.cdc.gov/std/life-stages-populations/adolescents-youngadults.htm |
| CDC, Smoking and Tobacco Use | • Smoking and Other Health Risks | www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm |
| CDC, Wonder, U.S. | • About Underlying Cause of Death, 2013-2015 | http://wonder.cdc.gov/ucd-icd10.html |
| Community Commons | • Access to Dentist<br>• Access to Primary Care Physicians<br>• Alcohol Beverage Expenditures<br>• Beer, Wine and Liquor Stores<br>• Bars and Drinking Establishments<br>• Cancer Mortality<br>• Cigarette Expenditures<br>• Chronic Obstructive Pulmonary Disease Readmissions<br>• Coronary Heart Disease<br>• Diabetes Mortality<br>• Firearm-Related Injury Mortality<br>• Health Professional Shortage Area<br>• Households with Housing Cost Over 30% of Household Income<br>• Insurance Type by Zip Code Tract Area<br>• Major Supermarkets, Farmers Markets and Food Deserts<br>• Medicare Beneficiaries with Heart Attack<br>• Mental Health Treatment Facilities<br>• Substance Abuse Treatment Facilities<br>• Pneumonia Readmissions<br>• Total Number of Fast Food Restaurants by Zip Code | www.communitycommons.org/ |
| County Health Rankings | • Physical and Mental Health Status<br>• 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<br>• Some U.S. Baseline Statistics<br>• Predictors of Access to Health Care<br>• Social Determinants of Health | www.healthypeople.gov/ |

| Source | Data Used | Website |
|---|---|---|
| Office of Health Transformation | • Ohio Medicaid Assessment Survey | http://grc.osu.edu/OMAS/2015Survey |
| Office of Criminal Justice Services | • Crime Statistics and Crime Reports | www.ocjs.ohio.gov/crime_stats_reports.stm |
| Ohio Automated RX Reporting System (OARRS), Quarterly County Data | • Ohio Automated Rx Reporting System<br>• Opioid Doses Per Capita<br>• Opioid Doses Per Patient | www.ohiopmp.gov/Portal/Reports.aspx |
| Ohio Department of Health | • Drug Overdose Data: General Findings | www.odh.ohio.gov/-/media/ODH/ASSETS/Files/health/injury-prevention/2016-Ohio-Drug-Overdose-Report-FINAL.pdf |
| Ohio Department of Health, STD Surveillance Data | • Sexually Transmitted Diseases<br>• Ashtabula County and Ohio Chlamydia and Gonorrhea Disease Rates<br>• Ashtabula County Chlamydia and Gonorrhea Cases<br>• HIV/AIDS Surveillance Program | www.odh.ohio.gov/odhprograms/stdsurv/stdsur1.aspx |
| Ohio Department of Health, Information Warehouse | • Ashtabula County and Ohio Birth Statistics | www.odh.ohio.gov/healthstats/dataanddstats.aspx |
| | • 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 |
| Ohio Department of Job & Family Services, Labor Market Information, Current Civilian Labor Force Estimates | • Ashtabula County Employment Statistics | http://ohiolmi.com/laus/current.htm |
| Ohio Department of Job and Family Services | • Ashtabula County and Ohio Medicaid Statistics | http://jfs.ohio.gov/County/cntypro/pdf13/Ashtabula.stm |
| Ohio Department of Public Safety | • Vehicle Accident Statistics | www.publicsafety.ohio.gov/crashes.stm |
| Ohio Development Services Agency, Office of Research | • Ohio Poverty Report | www.development.ohio.gov/files/research/p7005.pdf |
| Ohio Medicaid Assessment Survey | • Unmet Needs in Prescription Medication<br>• Unmet Dental Needs | http://grcapps.osu.edu/dashboards/OMAS/adult |
| Ohio Mental Health and Addiction Services | • Ohio's New Limits on Prescription Opiates | http://mha.ohio.gov/Portals/0/assets/Initiatives/GCOAT/AcutePrescribingLimits_FINAL.pdf |
| Ohio Suicide Prevention Foundation | • Suicide Deaths by Gender and Age Group | www.ohiospf.org/content.php?pageurl=ohio_statistics |

| Source | Data Used | Website |
|---|---|---|
| SAMHSA, Adverse Childhood Experiences | • Adverse Childhood Experiences (ACEs) | www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences |
| Sandford Children's Health | • How to Increase Your School-Aged Childs Social Ability | www.stanfordchildrens.org/en/topic/default%3Fid%3Dthe-growing-child-school-age-6-to-12-years-90-P02278&sa=U&ei=eMq7VNe2I8_4yQSX-oCwAw&ved=0CEIQFjAI&usg=AFQjCNFn5tO-78ISMzUno4_7cO4dCvft1Q |
| The Henry Kaiser Family Foundation | • Key Facts about the Uninsured Population | www.kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/ |
| U. S. Department of Commerce, Census Bureau; Bureau of Economic Analysis | • American Community Survey 5-year estimate, 2016 | 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/dud/www/saipe |

# 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. |
| **CBP** | **C**ounty **B**usiness **P**atterns |
| **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. |
| **CY** | **C**alendar **Y**ear |
| **DRE** | **D**igital **R**ectal **E**xam |
| **FY** | **F**iscal **Y**ear |
| **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 |
| **Weapon** | Defined in the YRBS as "a weapon such as a gun, knife, or club" |
| **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 2016 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 2016 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 (9 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 2016 Ashtabula County Survey and the 2014 Census estimates.

| **2016 Ashtabula Survey** | | | **2014 Census** | | **Weight** |
|---|---|---|---|---|---|
| Sex | Number | Percent | Number | Percent | |
| Male | 204 | 50.00000 | 50,307 | 50.13353 | 1.00267 |
| Female | 204 | 50.00000 | 50,039 | 49.86646 | 0.99733 |

In this example, it shows that, while nearly the same, there was a slightly larger portion of females 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) (50.13353%) and dividing that by the percent found in the 2016 Ashtabula County sample (50.00000%) [50.13353 / 50.00000 = weighting of 1.00267 for males]. The same was done for females [49.86646/ 50.00000 = weighting of 0.99733 for females]. Thus males' responses are weighted slightly more by a factor of 1.00267 and females' responses weighted slightly less by a factor of 0.99733.

This same thing was done for each of the 20 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 2.53840 [0.99733 (weight for females) x 0.95149 (weight for White) x 2.35912 (weight for age 35-44) x 1.13388 (weight for income $50-$75k)]. Thus, each individual in the 2016 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 21.0) 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 Sample | % | 2014 Census* | % | | Weighting Value |
|---|---|---|---|---|---|---|
| | | | | | | |
| **Sex:** | | | | | | |
| Male | 204 | 50.00000 | 50,307 | 50.13353 | | 1.00267 |
| Female | 204 | 50.00000 | 50,039 | 49.86646 | | 0.99733 |
| | | | | | | |
| **Age:** | | | | | | |
| 20-24 | 8 | 1.89573 | 5,810 | 7.74068 | | 4.08321 |
| 25-34 | 20 | 4.73933 | 10,953 | 14.59271 | | 3.07906 |
| 35-44 | 30 | 7.10900 | 12,588 | 16.77103 | | 2.35912 |
| 45-54 | 81 | 19.19431 | 15,024 | 20.01652 | | 1.04284 |
| 55-59 | 56 | 13.27014 | 7,445 | 9.91899 | | 0.74747 |
| 60-64 | 64 | 15.16587 | 6,793 | 9.05033 | | 0.59676 |
| 65+ | 163 | 38.62559 | 16,445 | 21.90972 | | 0.56723 |
| | | | | | | |
| **Race:** | | | | | | |
| White | 397 | 94.97607 | 90,681 | 90.36832 | | 0.95149 |
| Non-White | 21 | 5.02392 | 9,665 | 9.63167 | | 1.91716 |
| | | | | | | |
| **Household Income:** | | | | | | |
| Less than $10,000 | 24 | 6.26631 | 3610 | 9.27234 | | 1.47971 |
| $10k-$15k | 30 | 7.83289 | 3232 | 8.30144 | | 1.05982 |
| $15k-$25k | 61 | 15.92689 | 5,557 | 14.27324 | | 0.89617 |
| $25k-$35k | 54 | 14.09921 | 4,977 | 12.78350 | | 0.90668 |
| $35k-$50 | 72 | 18.79895 | 5,812 | 14.92821 | | 0.79410 |
| $50k-$75k | 65 | 16.97127 | 7,492 | 19.24332 | | 1.13388 |
| $75k or more | 77 | 20.10443 | 8,253 | 21.19796 | | 1.05439 |

**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 2014 Census estimates from the American Community Survey**

# Appendix IV: Ashtabula County Sample Demographic Profile*

| Variable | 2016 Survey Sample | Ashtabula County Census 2015 | Ohio Census 2015 |
|---|---|---|---|
| **Age** | | | |
| 20-29 | 11.3% | 11.2% | 13.3% |
| 30-39 | 21.3% | 11.5% | 12.2% |
| 40-49 | 14.4% | 13.3% | 12.5% |
| 50-59 | 22.4% | 15.1% | 14.3% |
| 60 plus | 23.9% | 23.2% | 22.4% |
| | | | |
| **Race/Ethnicity** | | | |
| White | 91.7% | 93.3% | 82.0% |
| Black or African American | 2.1% | 3.4% | 12.3% |
| American Indian and Alaska Native | 2.3% | 0.1% | 0.2% |
| Asian | 0.5% | 0.5% | 2.0% |
| Other | 1.9% | 0.5% | 0.8% |
| Hispanic Origin (may be of any race) | 3.6% | 3.8% | 3.5% |
| | | | |
| **Marital Status**† | | | |
| Married Couple | 53.9% | 48.2% | 47.5% |
| Never been married/member of an unmarried couple | 19.1% | 27.9% | 32.1% |
| Divorced/Separated | 18.5% | 16.0% | 14.0% |
| Widowed | 6.8% | 7.9% | 6.4% |
| | | | |
| **Education**† | | | |
| Less than High School Diploma | 7.7% | 14.6% | 10.3% |
| High School Diploma | 34.1% | 44.9% | 33.7% |
| Some college/ College graduate | 54.8% | 40.5% | 56.0% |
| | | | |
| **Income (Families)** | | | |
| $14,999 and less | 15.8% | 10.5% | 7.7% |
| $15,000 to $24,999 | 11.7% | 9.4% | 7.4% |
| $25,000 to $49,999 | 21.3% | 29.4% | 22.1% |
| $50,000 to $74,999 | 19.0% | 23.5% | 20.2% |
| $75,000 or more | 20.2% | 27.2% | 44.7% |

** 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

***General Demographic Characteristics***
***(Source: U.S. Census Bureau, Census 2016)***

***2012-2016 ACS 5-year estimates***

| | | |
|---|---|---|
| ***Total Population*** | | |
| 2016 Total Population | 99,175 | |
| 2010 Total Population | 101,497 | |
| | | |
| ***Largest City-Ashtabula City*** | | |
| 2016 Total Population | 18,540 | 100% |
| 2010 Total Population | 19,124 | 100% |
| | | |
| ***Population By Race/Ethnicity*** | | |
| Total Population | 99,175 | 100% |
| White Alone | 92,233 | 93.0% |
| Hispanic or Latino (of any race) | 3,843 | 3.9% |
| African American | 3,471 | 3.5% |
| Asian | 397 | 0.4% |
| Two or more races | 2,380 | 2.4% |
| Other | 479 | 0.5% |
| American Indian and Alaska Native | 198 | 0.2% |
| | | |
| ***Population By Age*** | | |
| Under 5 years | 5,554 | 5.6% |
| 5 to 17 years | 16,860 | 17.0% |
| 18 to 24 years | 7,934 | 8.0% |
| 25 to 44 years | 22,711 | 22.9% |
| 45 to 64 years | 28,860 | 29.1% |
| 65 years and more | 17,256 | 17.4% |
| **Median age (years)** | **42.2** | |
| | | |
| ***Household By Type*** | | |
| Total Households | 38,800 | 100% |
| Family Households (families) | 24,966 | 64.3% |
| With own children <18 years | 11,562 | 29.8% |
| Married-Couple Family Households | 18,236 | 47.0% |
| With own children <18 years | 6,211 | 16.0% |
| Female Householder, No Husband Present | 4,844 | 12.5% |
| With own children <18 years | 2,737 | 7.1% |
| Non-family Households | 13,834 | 35.7% |
| Householder living alone | 11,524 | 29.7% |
| Householder 65 years and > | 4,889 | 12.6% |
| | | |
| Households With Individuals < 18 years | 11,562 | 29.8% |
| Households With Individuals 60 years and > | 16,529 | 42.6% |
| | | |
| Average Household Size | 2.47 people | |
| Average Family Size | 3.05 people | |

***General Demographic Characteristics, Continued***
***(Source: U.S. Census Bureau, Census 2016)***

***2012-2016 ACS 5-year estimates***

| | | |
|---|---|---|
| Median Value of Owner-Occupied Units | $104,700 | |
| Median Monthly Owner Costs (With Mortgage) | $1,062 | |
| Median Monthly Owner Costs (Not Mortgaged) | $375 | |
| Median Gross Rent for Renter-Occupied Units | $637 | |
| Median Rooms Per Housing Unit | 5.9 | |
| | | |
| Total Occupied Housing Units | 38,800 | |
| No Telephone Service | 874 | 2.3% |
| Lacking Complete Kitchen Facilities | 589 | 1.5% |
| Lacking Complete Plumbing Facilities | 264 | 0.7% |

***Selected Social Characteristics***
***(Source: U.S. Census Bureau, Census 2016)***

***2012-2016 ACS 5-year estimates***

| | | |
|---|---|---|
| ***School Enrollment*** | | |
| Population 3 Years and Over Enrolled In School | 22,112 | 100% |
| Nursery & Preschool | 1,176 | 5.3% |
| Kindergarten | 1,059 | 4.8% |
| Elementary School (Grades 1-8) | 10,247 | 46.3% |
| High School (Grades 9-12) | 5,650 | 25.6% |
| College or Graduate School | 3,980 | 18.0% |
| | | |
| ***Educational Attainment*** | | |
| Population 25 Years and Over | 68,800 | 100% |
| < 9th Grade Education | 3,105 | 4.5% |
| 9th to 12th Grade, No Diploma | 6,917 | 10.1% |
| High School Graduate (Includes Equivalency) | 30,505 | 44.3% |
| Some College, No Degree | 14,213 | 20.7% |
| Associate Degree | 5,034 | 7.3% |
| Bachelor's Degree | 5,866 | 8.5% |
| Graduate Or Professional Degree | 3,160 | 4.6% |
| | | |
| Percent High School Graduate or Higher | *(X) | 85.4% |
| Percent Bachelor's Degree or Higher | *(X) | 13.1% |

**(X) – Not available*

***Selected Social Characteristics, Continued***
***(Source: U.S. Census Bureau, Census 2016)***

***2012-2016 ACS 5-year estimates***

| | | |
|---|---|---|
| ***Marital Status*** | | |
| Population 15 Years and Over | 80,869 | 100% |
| Never Married | 22,644 | 28.0% |
| Now Married, Excluding Separated | 38,898 | 48.1% |
| Separated | 1,051 | 1.3% |
| Widowed | 6,146 | 7.6% |
| Female | 4,735 | 11.7% |
| Divorced | 12,130 | 15.0% |
| Female | 6,070 | 15.0% |
| ***Veteran Status*** | | |
| Civilian Population 18 years and over | 76,674 | 100% |
| Veterans 18 years and over | 8,506 | 11.1% |
| ***Disability Status of the Civilian Non-Institutionalized Population*** | | |
| Total Civilian Noninstitutionalized Population | 96,088 | 100% |
| With a Disability | 15,331 | 16.0% |
| Under 18 years | 22,419 | 23.3% |
| With a Disability | 1,041 | 4.6% |
| 18 to 64 years | 57,457 | 59.8% |
| With a Disability | 7,998 | 13.9% |
| 65 Years and Over | 16,212 | 16.9% |
| With a Disability | 6,292 | 38.8% |

***Selected Economic Characteristics***
***(Source: U.S. Census Bureau, Census 2016)***

***2012-2016 ACS 5-year estimates***

| | | |
|---|---|---|
| ***Employment Status*** | | |
| Population 16 Years and Over | 79,602 | 100% |
| In Labor Force | 43,914 | 55.2% |
| Not In Labor Force | 35,688 | 44.8% |
| Females 16 Years and Over | 39,805 | 100% |
| In Labor Force | 20,453 | 51.4% |
| Population Living With Own Children <6 Years | 6,513 | 100% |
| All Parents In Family In Labor Force | 3,645 | 56.0% |
| ***Class of Worker*** | | |
| Employed Civilian Population 16 Years and Over | 40,294 | 100% |
| Private Wage and Salary Workers | 33,722 | 83.7% |
| Government Workers | 4,427 | 11.0% |
| Self-Employed Workers in Own Not Incorporated Business | 2,072 | 5.1% |
| Unpaid Family Workers | 73 | 0.2% |

***Selected Economic Characteristics, Continued***
***(Source: U.S. Census Bureau, Census 2016)***

***2012-2016 ACS 5-year estimates***

| ***Occupations*** | | |
|---|---|---|
| Employed Civilian Population 16 Years and Over | 40,294 | 100% |
| Production, transportation, and material moving occupations | 9,951 | 24.7% |
| Management, business, science, and art occupations | 10,065 | 25.0% |
| Sales and office occupations | 8,805 | 21.9% |
| Service occupations | 7,666 | 19.0% |
| Natural resources, construction, and maintenance occupations | 3,807 | 9.4% |

| ***Leading Industries*** | | |
|---|---|---|
| Employed Civilian Population 16 Years and Over | 40,294 | 100% |
| Manufacturing | 9,734 | 24.2% |
| Educational, health and social services | 9,408 | 23.3% |
| Trade (retail and wholesale) | 5,233 | 13.0% |
| Arts, entertainment, recreation, accommodation, and food services | 3,095 | 7.7% |
| Transportation and warehousing, and utilities | 2,459 | 6.1% |
| Construction | 2,258 | 5.6% |
| Professional, scientific, management, administrative, and waste management services | 2,146 | 5.3% |
| Other services (except public administration) | 1,822 | 4.5% |
| Finance, insurance, real estate and rental and leasing | 1,415 | 3.5% |
| Public administration | 1,367 | 3.4% |
| Agriculture, forestry, fishing and hunting, and mining | 742 | 1.8% |
| Information | 615 | 1.5% |

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

| | **Income** | **Rank of Ohio Counties** |
|---|---|---|
| BEA Per Capita Personal Income 2016 | $35,654 | 61st of 88 counties |
| BEA Per Capita Personal Income 2015 | $34,987 | 66th of 88 counties |
| BEA Per Capita Personal Income 2014 | $33,754 | 66th of 88 counties |
| BEA Per Capita Personal Income 2013 | $32,199 | 69th of 88 counties |
| BEA Per Capita Personal Income 2012 | $31,849 | 66th of 88 counties |

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

***Selected Economic Characteristics, Continued***
***(Source: U.S. Census Bureau, Census 2016)***

***2016 ACS 1-year estimate***

| ***Income In 2016*** | | |
|---|---|---|
| Households | 38,728 | 100% |
| < $10,000 | 4,593 | 11.9% |
| $10,000 to $14,999 | 2,288 | 5.9% |
| $15,000 to $24,999 | 5,145 | 13.3% |
| $25,000 to $34,999 | 3,727 | 9.6% |
| $35,000 to $49,999 | 6,465 | 16.7% |
| $50,000 to $74,999 | 7,296 | 18.8% |
| $75,000 to $99,999 | 3,780 | 9.8% |
| $100,000 to $149,999 | 4,174 | 10.8% |
| $150,000 to $199,999 | 409 | 1.1% |
| $200,000 or more | 851 | 2.1% |
| ***Median Household Income*** | ***$42,965*** | |

| ***Income In 2016*** | | |
|---|---|---|
| Families | 24,683 | 100% |
| < $10,000 | 1,759 | 7.1% |
| $10,000 to $14,999 | 1,312 | 5.3% |
| $15,000 to $24,999 | 2,128 | 8.6% |
| $25,000 to $34,999 | 1,589 | 6.4% |
| $35,000 to $49,999 | 4,279 | 17.3% |
| $50,000 to $74,999 | 5,392 | 21.8% |
| $75,000 to $99,999 | 3,531 | 14.3% |
| $100,000 to $149,999 | 3,459 | 14.0% |
| $150,000 to $199,999 | 383 | 1.6% |
| $200,000 or more | 851 | 3.4% |
| ***Median Family Income*** | ***$53,332*** | |

| ***Per Capita Income In 2016*** | **$23,266** |
|---|---|

| ***Poverty Status In 2016*** | ***Number Below Poverty Level*** | ***% Below Poverty Level*** |
|---|---|---|
| Families | *(X) | 13.9% |
| Individuals | *(X) | 18.5% |

**(X) – Not available*

## Poverty Rates, 5-year averages
## 2011 to 2015

| Category | Ashtabula | Ohio |
|---|---|---|
| Population in poverty | 20.1% | 15.8% |
| < 125% FPL (%) | 26.4% | 20.3% |
| < 150% FPL (%) | 30.9% | 24.8% |
| < 200% FPL (%) | 43.0% | 33.9% |
| Population in poverty (1999) | 12.1% | 10.6% |

*(Source: The Ohio Poverty Report, Ohio Development Services Agency, February 2017, http://www.development.ohio.gov/files/research/P7005.pdf)*

## Employment Statistics

| Category | Ashtabula | Ohio |
|---|---|---|
| Labor Force | 44,000 | 5,748,400 |
| Employed | 41,300 | 5,473,400 |
| Unemployed | 2,700 | 275,000 |
| Unemployment Rate* in February 2018 | 6.1 | 4.8 |
| Unemployment Rate* in January 2018 | 6.6 | 5.1 |
| Unemployment Rate* in February 2017 | 7.5 | 5.9 |

**Rate equals unemployment divided by labor force.*
*(Source: Ohio Department of Job and Family Services, February 2018, http://ohiolmi.com/laus/current.htm)*

## Estimated Poverty Status in 2016

| Age Groups | Number | 90% Confidence Interval | Percent | 90% Confidence Interval |
|---|---|---|---|---|
| **Ashtabula County** | | | | |
| All ages in poverty | 17,202 | 14,907 to 19,497 | 18.2% | 15.8 to 20.6 |
| Ages 0-17 in poverty | 5,652 | 4,608 to 6,696 | 26.5% | 21.6 to 31.4 |
| Ages 5-17 in families in poverty | 3,903 | 3,132 to 4,674 | 24.5% | 19.7 to 29.3 |
| Median household income | $43,668 | $40,842 to $46,494 | | |
| **Ohio** | | | | |
| All ages in poverty | 1,639,636 | 1,614,177 to 1,665,095 | 14.5% | 14.3 to 14.7 |
| Ages 0-17 in poverty | 521,730 | 506,894 to 536,566 | 20.4% | 19.8 to 21.0 |
| Ages 5-17 in families in poverty | 348,713 | 335,691 to 361,735 | 18.7% | 18.0 to 19.4 |
| Median household income | $52,357 | $52,083 to $52,631 | | |
| **United States** | | | | |
| All ages in poverty | 44,268,996 | 44,022,086 to 44,515,906 | 14.0% | 13.9 to 14.1 |
| Ages 0-17 in poverty | 14,115,713 | 13,976,345 to 14,255,081 | 19.5% | 19.3 to 19.7 |
| Ages 5-17 in families in poverty | 9,648,486 | 9,548,767 to 9,748,205 | 18.3% | 18.1 to 18.5 |
| Median household income | $57,617 | $57,502 to $57,732 | | |

*(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, http://www.census.gov/did/www/saipe/data/interactive/#)*

## Federal Poverty Thresholds in 2017 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 | $12,752 | | | | | |
| 1 Person 65 and > | $11,756 | | | | | |
| 2 people Householder < 65 years | $16,414 | $16,895 | | | | |
| 2 People Householder 65 and > | $14,816 | $16,831 | | | | |
| 3 People | $19,173 | $19,730 | $19,749 | | | |
| 4 People | $25,283 | $25,696 | $24,858 | $24,944 | | |
| 5 People | $30,490 | $30,933 | $29,986 | $29,253 | $28,805 | |
| 6 People | $35,069 | $35,208 | $34,482 | $33,787 | $32,753 | $32,140 |
| 7 People | $40,351 | $40,603 | $39,734 | $39,129 | $38,001 | $36,685 |
| 8 People | $45,129 | $45,528 | $44,708 | $43,990 | $42,971 | $41,678 |
| 9 People or > | $54,287 | $54,550 | $53,825 | $53,216 | $52,216 | $50,840 |

*(Source: U. S. Census Bureau, Poverty Thresholds 2017, 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) (2012-2014) | 9,300 | 7,600 | 6,600 |
| **Overall heath.** Percentage of adults reporting fair or poor health (age-adjusted) (2015) | 18% | 15% | 15% |
| **Physical health.** Average number of physically unhealthy days reported in past 30 days (age-adjusted) (2015) | 4.2 | 3.7 | 3.6 |
| **Mental health.** Average number of mentally unhealthy days reported in past 30 days (age-adjusted) (2015) | 4.3 | 4.0 | 3.7 |
| **Maternal and infant health.** Percentage of live births with low birthweight (< 2500 grams) (2008-2014) | 8% | 9% | 8% |
| **Health Behaviors** | | | |
| **Tobacco.** Percentage of adults who are current smokers (2015) | 22% | 22% | 18% |
| **Obesity.** Percentage of adults that report a BMI of 30 or more (2015) | 34% | 31% | 28% |
| **Food environment.** Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best) (2014) | 6.9 | 7.0 | 7.3 |
| **Physical activity.** Percentage of adults aged 20 and over reporting no leisure-time physical activity (2013) | 26% | 25% | 22% |
| **Active living environment.** Percentage of population with adequate access to locations for physical activity (2010 & 2014) | 63% | 83% | 84% |
| **Drug and alcohol abuse.** Percentage of adults reporting binge or heavy drinking (2015) | 15% | 19% | 18% |
| **Drug and alcohol abuse and injury.** Percentage of driving deaths with alcohol involvement (2011-2015) | 45% | 34% | 30% |
| **Infectious disease.** Number of newly diagnosed chlamydia cases per 100,000 population (2014) | 281.5 | 474 | 456:1 |
| **Sexual and reproductive health.** Teen birth rate per 1,000 female population, ages 15-19 (2008-2014) | 40 | 32 | 32 |

*Source: 2017 County Health Rankings for Ashtabula County, Ohio and U.S. data*

| | Ashtabula County | Ohio | U.S. |
|---|---|---|---|
| **Clinical Care** | | | |
| **Coverage and affordability.** Percentage of population under age 65 without health insurance (2014) | 11% | 10% | 14% |
| **Access to health care/medical care.** Ratio of population to primary care physicians (2014) | 2,750:1 | 1300:1 | 1,320:1 |
| **Access to dental care.** Ratio of population to dentists (2015) | 2,670:1 | 1690:1 | 1,520:1 |
| **Access to behavioral health care.** Ratio of population to mental health providers (2016) | 1,450:1 | 630:1 | 500:1 |
| **Hospital utilization.** Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees (2014) | 79 | 60 | 50 |
| **Diabetes.** Percentage of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring (2014) | 82% | 85% | 85% |
| **Cancer.** Percentage of female Medicare enrollees ages 67-69 that receive mammography screening (2014) | 57% | 61% | 63% |
| **Social and Economic Environment** | | | |
| **Education.** Percentage of ninth-grade cohort that graduates in four years (2014-2015) | 88% | 81% | 83% |
| **Education.** Percentage of adults ages 25-44 years with some post-secondary education (2011-2015) | 46% | 64% | 64% |
| **Employment, poverty, and income.** Percentage of population ages 16 and older unemployed but seeking work (2015) | 6% | 5% | 5% |
| **Employment, poverty, and income.** Percentage of children under age 18 in poverty (2015) | 29% | 21% | 21% |
| **Employment, poverty, and income.** Ratio of household income at the 80th percentile to income at the 20th percentile (2011-2015) | 4.5 | 4.8 | 5.0 |
| **Family and social support.** Percentage of children that live in a household headed by single parent (2011-2015) | 37% | 36% | 34% |
| **Family and social support.** Number of membership associations per 10,000 population (2015) | 11.9 | 11.3 | 9 |
| **Violence.** Number of reported violent crime offenses per 100,000 population (2012-2014) | 121 | 290 | 380 |
| **Injury.** Number of deaths due to injury per 100,000 population (2011-2015) | 81 | 70% | 62 |

*Source: 2017 County Health Rankings for Ashtabula County, Ohio and U.S. data*

| | Ashtabula County | Ohio | U.S. |
|---|---|---|---|
| **Physical Environment** | | | |
| **Air, water, and toxic substances.** Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) (2012) | 10.6 | 11.3 | 8.7 |
| **Air, water, and toxic substances.** Indicator of the presence of health-related drinking water violations. 1 - indicates the presence of a violation, 0 - indicates no violation (FY 2013-2014) | Yes | N/A | N/A |
| **Housing.** Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities (2009-2013) | 16% | 15% | 19% |
| **Transportation.** Percentage of the workforce that drives alone to work (2011-2015) | 83% | 83% | 76% |
| **Transportation.** Among workers who commute in their car alone, the percentage that commute more than 30 minutes (2011-2015) | 33% | 30% | 34% |

*Source: 2017 County Health Rankings for Ashtabula County, Ohio and U.S. data*
*N/A – Data is not available*

# Appendix VII: Youth Data Summary

*This data was collected by the Ashtabula County Mental Health Recovery Services Board in November 2015.*

| Youth Variables | Ashtabula County 2015 (7th, 9th, 10th Grades) | Ohio 2013 (9th-12th Grades) | U.S. 2015 (9th-12th Grades) |
|---|---|---|---|
| **Unintentional Injuries and Violence** | | | |
| **Did not go to school in past 30 days because they felt unsafe at school or on way to or from school** | 10% | 5% | 6% |
| **Threatened or injured with a weapon on school property in past year** | 10% | 5% | 6% |
| **Ever been electronically/cyber bullied in past year** (of all youth) | 15% | 15% | 16% |
| **Bullied on school property in the past year** (of all youth) | 28% | 21% | 20% |
| **Been in a physical fight in past year** | 21% | 20% | 23% |
| **Been in a physical fight on school property in past year** | 9% | 6% | 8% |
| **Rode with someone who was drinking in past month** | 13% | 13% | 17% |
| **Drank and drove in past month** (of youth drivers) | 4% | 4% | 8% |
| **Mental Health and Suicide** | | | |
| **Felt sad or hopeless almost every day for 2 or more weeks in a row** | 23% | 26% | 30% |
| **Considered attempting suicide in past year** | 13% | 14% | 18% |
| **Attempted suicide in past year** | 6% | 6% | 9% |
| **Weight Control and Physical Activity** | | | |
| **Trying to lose weight** | 43% | 47% | 46% |
| **Drank a can, bottle, or glass of soda or pop one more times per day** | 21% | 21% | 20% |
| **Did not eat breakfast during the past week** | 14% | 15% | 14% |
| **Did not eat breakfast on all 7 days** | 62% | 64% | 64% |
| **Physically active at least 60 minutes per day on less than 7 days in past week** | 68% | 74% | 73% |
| **Physically active at least 60 minutes per day on less than 5 days in past week** | 40% | 52% | 51% |
| **Did not participate in at least 60 minutes of physical activity on any day in past week** | 11% | 13% | 14% |
| **Watched TV 3 or more hours per day** | 27% | 28% | 25% |
| **Played video or computer games, or used computer 3 or more hours per day** | 34% | 37% | 42% |

| Youth Variables | Ashtabula County 2015 (7th, 9th, 10th Grades) | Ohio 2013 (9th-12th) | U.S. 2015 (9th-12th) |
|---|---|---|---|
| **Tobacco Use** | | | |
| **Current smokers** | 6% | 15% | 11% |
| **Used chewing tobacco, snuff or dip in past month** | 4% | 9% | 7% |
| **Used an electronic vapor product in past month** | 10% | N/A | 24% |
| **Alcohol Consumption** | | | |
| **Ever had at least one drink of alcohol in lifetime** | 30% | 71%* | 63% |
| **Used alcohol during past month** | 9% | 30% | 33% |
| **Drank alcohol before 13 years old** | 16% | 13% | 17% |
| **Drug Use** | | | |
| **Ever tried marijuana** | 13% | 36% | 39% |
| **Used marijuana in past month** | 5% | 21% | 22% |
| **Used marijuana before 13 years old** | 4% | 6% | 8% |
| **Ever used prescription medications without a doctor's prescription** | 8% | N/A | 17% |
| **Miscellaneous** | | | |
| **Visited a dentist for a check-up, cleaning or other dental work in past year** | 64% | 75% | 74% |
| **Did not have 8 or more hours of sleep** | 60% | 74% | 73% |

*N/A - Data is not available*
** 2011 Ohio YRBS data*

# Appendix VIII: Conneaut City and Geneva City Trend Summary

| Adult Variables | Conneaut City 2016 | Geneva City 2016 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|---|
| **Health Care Access & Coverage** | | | | | |
| **Uninsured** | 17% | 5% | 8% | 7% | 10% |
| **Had at least one person they thought of as their personal doctor or healthcare** | 51% | 63% | 53% | 83% | 77% |
| **Visited a doctor for a routine checkup in the past year** | 61% | 65% | 64% | 75% | 71% |
| **Health Status Perceptions** | | | | | |
| **Rated general health as fair or poor** | 20% | 19% | 22% | 18% | 17% |
| **Rated health as excellent or very good** | 41% | 52% | 43% | 51% | 52% |
| **Arthritis, Asthma & Diabetes** | | | | | |
| **Has been diagnosed with arthritis** | 48% | 43% | 44% | 31% | 26% |
| **Has been diagnosed with asthma** | 4% | 35% | 19% | 14% | 14% |
| **Has been diagnosed with diabetes** | 2% | 21% | 13% | 11% | 11% |
| **Cardiovascular Health** | | | | | |
| **Had a heart attack** | 21% | <1% | 5% | 5% | 4% |
| **Had a stroke** | 9% | 3% | 4% | 4% | 3% |
| **Had angina or coronary heart disease** | 2% | 3% | 5% | 5% | 4% |
| **Has been diagnosed with high blood pressure** | 51% | 34% | 37% | 34%* | 31%* |
| **Has been diagnosed with high blood cholesterol** | 41% | 38% | 37% | 37%* | 36%* |
| **Had blood cholesterol checked in the past 5 years** | 84% | 68% | 78% | 78%* | 78%* |
| **Weight Status** | | | | | |
| **Overweight** | 26% | 35% | 30% | 35% | 35% |
| **Obese** | 42% | 30% | 43% | 32% | 30% |
| **Alcohol Consumption** | | | | | |
| **Current drinker** (drank alcohol at least once in the past month) | 51% | 55% | 49% | 53% | 54% |
| **Binge drinker** (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days) | 20% | 28% | 24% | 18% | 17% |
| **Tobacco Use** | | | | | |
| **Current smoker** (currently smoke some or all days) | 35% | 28% | 21% | 23% | 17% |
| **Former smoker** (smoked 100 cigarettes in lifetime & now do not smoke) | 26% | 30% | 30% | 24% | 25% |

**2015 BRFSS Data*

| Adult Variables | Conneaut City 2016 | Geneva City 2016 | Ashtabula County 2016 | Ohio 2016 | U.S. 2016 |
|---|---|---|---|---|---|
| **Drug Use** | | | | | |
| **Adults who used recreational marijuana in the past 6 months** | <1% | 6% | 8% | N/A | N/A |
| **Adults who misused prescription drugs in the past 6 months** | <1% | 2% | 4% | N/A | N/A |
| **Sexual Behavior** | | | | | |
| **Had more than one sexual partner in the past year** | 9% | 3% | 9% | N/A | N/A |
| **Mental Health** | | | | | |
| **Considered attempting suicide in the past year** | 2% | 3% | 7% | N/A | N/A |
| **Two or more weeks in a row felt sad or hopeless** | 4% | 8% | 15% | N/A | N/A |
| **Preventive Health** | | | | | |
| **Had a pneumonia vaccine** (age 65 and older) | 77% | 55% | 69% | 75% | 73% |
| **Had a flu vaccine in the past year** (ages 65 and over) | 73% | 75% | 70% | 57% | 58% |
| **Had a shingles or Zoster vaccination in their lifetime** | 12% | 13% | 15% | 21%** | 22%** |
| **Had a mammogram in the past two years** (age 40 and older) | 62% | 75% | 70% | 74% | 72% |
| **Had a Pap smear in the past 3 years** | 38% | 4% | 63% | 82%¥ | 80%¥ |
| **Had a digital rectal exam in the past year** | 5% | 11% | 16% | N/A | N/A |
| **Oral Health** | | | | | |
| **Adults who had visited the dentist in the past year** | 47% | 50% | 60% | 68% | 66% |
| **Adults who had one or more permanent teeth removed** | 60% | 45% | 56% | 45% | 43% |
| **Adults 65 years and older who had all of their permanent teeth removed** | 20% | 8% | 17% | 17% | 14% |
| **Quality of Life** | | | | | |
| **Limited in some way because of physical mental or emotional problem** | 22% | 42% | 36% | 21%* | 21%* |

*N/A- Data not available*
**2015 BRFSS Data*
***2014 BRFSS Data*
*¥ Ohio and U.S. BRFSS reports women ages 21-65*

# Appendix IX: Priority Areas and Resources

The Ashtabula County Health Needs Assessment Advisory Committee met multiple times to complete the 2017-2020 Ashtabula County Community Health Improvement Plan. The Ashtabula County Health Needs Assessment Advisory Committee used the Mobilizing for Action through Planning and Partnerships (MAPP) process, which is a community-driven strategic planning process for improving community health. This framework helps communities apply strategic thinking to prioritize health issues and identify resources to address them. There were thirty-six coordinating agencies that comprised the CHIP steering committee and oversee the four priority area teams.

Details of this process and its results can be found on the Ashtabula County Health Department's website. Ashtabula County is focused on the following four priority areas: Suicide Prevention; Childhood & Adult Obesity Prevention; Chronic Disease Prevention; and Opiate Overdose Prevention.

The following is a list of available facilities and resources that the University Hospitals Conneaut Medical Center and University Hospitals Geneva Medical Center use to assist in meeting identified community health needs:

| Priority Area | Coordinating Organizations and Team Members | |
|---|---|---|
| Suicide Prevention | • Ashtabula County Coroner's Office<br>• Ashtabula County funeral directors<br>• Ashtabula County Incident Response Team<br>• Ashtabula County LOSS Team<br>• Ashtabula County Mental Health Recovery and Services Board<br>• Ashtabula County Suicide Prevention Coalition<br>• Community Counseling Center | • Crisis Text Line<br>• Help Network of Northeast Ohio<br>• Local Civic Organizations<br>• Local media<br>• Ohio Suicide Prevention Foundation<br>• Prevention Coalition Facebook page<br>• University Hospitals Conneaut Medical Center<br>• University Hospitals Geneva Medical Center |
| Childhood & Adult Obesity Prevention | • Ashtabula County Board of Children's Services<br>• Ashtabula County Child and Family Health Services<br>• Ashtabula County Elementary schools<br>• Ashtabula County Health Department<br>• Ashtabula County IPOD<br>• Ashtabula County Job and Family Services<br>• Ashtabula County Medical Center | • Ashtabula County Metroparks<br>• Ashtabula County Pediatric offices<br>• Community Action Agency of Ashtabula County<br>• OSU-Ashtabula County Cooperative Extension Service<br>• University Hospitals Conneaut Medical Center<br>• University Hospitals Geneva Medical Center WIC<br>• YMCA |
| Chronic Disease Prevention | • Ashtabula County IPOD<br>• Ashtabula County Mental Health Recovery and Services Board<br>• Health Departments of Ashtabula County | • University Hospitals Conneaut Medical Center<br>• University Hospitals Geneva Medical Center |
| Opiate Overdose Prevention | • Ashtabula County Health Department<br>• Ashtabula County Mental Health and Recovery Services Board<br>• Ashtabula County Prevention Coalition<br>• Ashtabula County Substance Abuse Leadership Team<br>• Community Counseling Center of Ashtabula County | • Glenbeigh<br>• Lake Area Recovery Center<br>• Local media<br>• Ohio Department of Health<br>• Ohio Department of Mental Health and Addiction Services<br>• Signature Health |