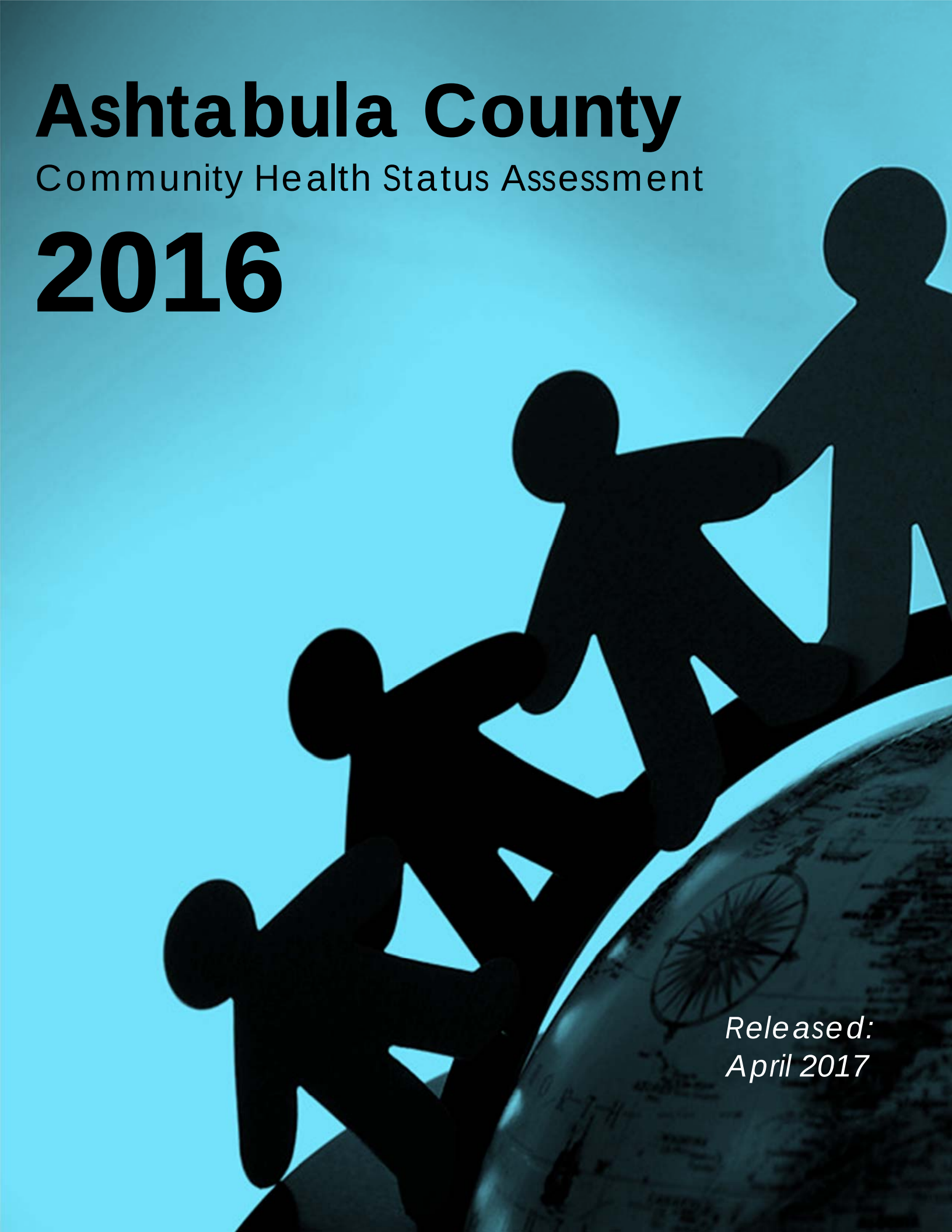
Ashtabula County

Community Health Status Assessment

2016



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FOREWORD

In December of 2015, the local health departments of Ashtabula County convened a meeting with area health and human services agencies to initially discuss the implementation of a Community Health Needs Assessment of Ashtabula County Residents in 2016. All health and human service agencies at the December 2015 meeting agreed to meet again in 2016 to discuss the importance of completing a Community Health Needs Assessment in 2016. In the spring of 2016, it was agreed by all health and human service agencies in attendance at a county health department meeting, that we complete a Community Health Needs Assessment in 2016.

A Community Health Needs Assessment is often used by local health and human service agencies to evaluate the health status of residents and identify health issues and concerns within a community.

The 2016 Ashtabula County Community Health Needs Assessment builds upon a previous County Health Needs Assessment completed in 2011. Conducting Community Health Needs Assessment every three to five years allows health and human service agencies to track and evaluate health issues and concerns over time.

This Community Health Needs Assessment report provides updated and statistical health status information on county residents. This report not only provides information on county death and disease rates, but also contains information on how county residents perceive the health status of the county, as well as how residents perceive the quality, accessibility and availability of health care services in Ashtabula County.

It is also worth mentioning that the 2016 Ashtabula County Health Needs Assessment Report allows for health and human service providers in Ashtabula County to directly compare health status indicators such as death and disease data with those found in the 2011 Community Health Needs Assessment Report.

As in the 2011 Health Needs Assessment Report, the major health problems confronting Ashtabula County residents as found in the 2016 Health Needs Assessment Report pertain to lifestyle. Choices that Ashtabula County residents make pertaining to diet, exercise, smoking, abuse of alcohol and drugs appear to contribute to the leading causes of death and disease in Ashtabula County.

The five leading causes of death listed in the 2016 Ashtabula County Health Needs Assessment Report are heart disease, cancer, chronic lower respiratory diseases (e.g. emphysema) accidents and strokes. All of these leading causes of death are to a certain extent associated with lifestyle choices. Unfortunately, the 2011 Ashtabula County Health Needs Assessment Report indicated that the five leading causes of death were heart disease, cancer, chronic lower respiratory diseases, strokes and accidents. Thus, there were no major changes in the leading causes of death between the 2011 and 2016 Community Health Needs Assessment reports.

These community health problems found in 2011 and 2016 in Ashtabula County have prompted county health and human service agencies to focus on these problems. A number of county health and human service agencies in Ashtabula County in 2012 and 2013 developed a Community Health Improvement Plan that attempts to reduce the incidence of most of the aforementioned health problems. The Community Health Improvement Plan of Ashtabula County contains objectives, strategies and programs to reduce the incidence of the said community health problems, and covers the time period of 2014 to 2018. It is anticipated that based on the 2016 Ashtabula County Health Needs Assessment report that the Community Health Improvement Plan for Ashtabula County will continue to contain objectives, strategies and programs to address most of the five leading causes of death of Ashtabula County residents. Additional programs and expansion of existing health prevention programs in Ashtabula County that are designed to address the said community health problems will most likely occur in the near future.

In the end, the 2016 Community Health Needs Assessment should increase public awareness of Ashtabula County residents of the priority health problems facing Ashtabula County. To that end, the Community Health Needs Assessment in conjunction with the Community Health Improvement Plan for Ashtabula County should provide a mechanism for Ashtabula County health and human service providers to offer additional health prevention and promotion programs to improve the health status of Ashtabula County residents.

Sincerely,

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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

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To see Ashtabula County data compared to other counties, please visit the Hospital Council of Northwest Ohio's Data Link website at the following website:
http://www.hcno.org/community/data-indicator.html

The 2016 Ashtabula County Health Assessment is available on the following websites:

Ashtabula County Health Department
http://www.ashtabulacountyhealth.com/

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

TABLE OF CONTENTS

EXECUTIVE SUMMARY PAGES 5-11

TREND SUMMARY PAGES 12-13

Adult Health (Ages 19 and Over)

HEALTH STATUS PERCEPTIONS PAGES 14-17

HEALTH CARE COVERAGE PAGES 18-20

HEALTH CARE ACCESS AND UTILIZATION PAGES 21-24

CARDIOVASCULAR HEALTH PAGES 25-29

CANCER PAGES 30-34

DIABETES PAGES 35-37

ARTHRITIS PAGES 38-39

ASTHMA AND OTHER RESPIRATORY DISEASE PAGES 40-42

WEIGHT STATUS PAGES 43-45

TOBACCO USE PAGES 46-51

ALCOHOL CONSUMPTION PAGES 52-57

DRUG USE PAGES 58-65

WOMEN'S HEALTH PAGES 66-70

MEN'S HEALTH PAGES 71-75

PREVENTIVE MEDICINE AND HEALTH SCREENINGS PAGES 76-78

SEXUAL BEHAVIOR AND PREGNANCY OUTCOMES PAGES 79-83

SOCIAL DETERMINANTS OF HEALTH PAGES 84-88

QUALITY OF LIFE PAGES 89-90

MENTAL HEALTH AND SUICIDE PAGES 91-93

ORAL HEALTH PAGES 94-96

PARENTING PAGES 97-98

Appendices

HEALTH ASSESSMENT INFORMATION SOURCES APPENDIX I PAGES 99-102

LIST OF ACRONYMS AND TERMS APPENDIX II PAGES 103-104

WEIGHTING METHODS APPENDIX III PAGES 105-107

DEMOGRAPHIC PROFILE APPENDIX IV PAGE 108

DEMOGRAPHICS AND HOUSEHOLD INFORMATION APPENDIX V PAGES 109-116

COUNTY HEALTH RANKINGS APPENDIX VI PAGES 117-119

EXECUTIVE SUMMARY

This executive summary provides an overview of health-related data for Ashtabula County adults (19 years of age and older) who participated in a county-wide health assessment survey from September through November, 2016. The findings are based on self-administered surveys using a structured questionnaire. The questions were modeled after the survey instrument used by the Centers for Disease Control and Prevention for their national and state Behavioral Risk Factor Surveillance System (BRFSS). The Hospital Council of Northwest Ohio collected the data, guided the health assessment process and integrated sources of primary and secondary data into the final report.

Primary Data Collection Methods

DESIGN

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

INSTRUMENT DEVELOPMENT

One survey instrument was designed and pilot tested for adults in this study. As a first step in the design process, health education researchers from the University of Toledo and staff members from 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 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 which time they reviewed banks of potential survey questions from the BRFSS. Based on input from the Ashtabula County planning committee, the Project Coordinator composed a draft of the survey containing 113 items. The draft was reviewed and approved by health education researchers at the University of Toledo.

SAMPLING | *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 | *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 county health assessment project and informed the readers that they may be randomly selected to receive the survey. The letter also explained that the respondents' confidentiality would be protected, and 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 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. 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 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.

Second, it is important to note that, although several questions were asked using the same wording as the CDC questionnaires, the adult data collection method differed. 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 through a mailed survey.

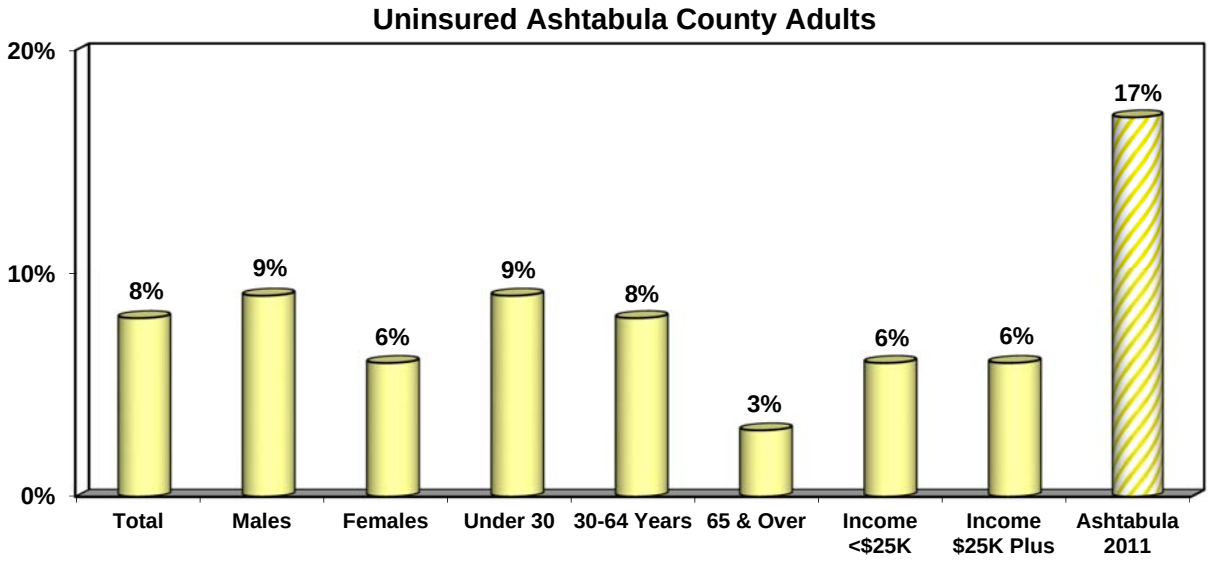
Data Summary

HEALTH PERCEPTIONS

In 2016, more than 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.

HEALTH CARE COVERAGE

The 2016 health assessment data has identified that 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, 20.1% of all residents live below the poverty level *(Source: U.S. Census, 2011-2015 American Community Survey 5 Year Estimates).*



HEALTH CARE ACCESS

The 2016 health assessment project identified that 64% of Ashtabula County adults had visited a doctor for a routine checkup in the past year. Three-quarters (75%) of adults went outside of Ashtabula County for health care services in the past year.

CARDIOVASCULAR HEALTH

Heart disease (26%) and stroke (4%) accounted for 30% of all Ashtabula County adult deaths from 2013-2015 *(Source: CDC Wonder).* The 2016 Ashtabula County health assessment found that 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
2013-2015

Total Deaths: 3,565

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

(Source: CDC Wonder, 2013-2015)

CANCER

In 2016, 8% of Ashtabula County adults had been diagnosed with cancer at some time in their life. CDC statistics indicate that from 2013-2015, a total of 749 Ashtabula County residents died from cancer, the second leading cause of death in the county. 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, 2009-2013

All Types: 3,108 cases

- Lung and Bronchus: 515 cases (16%)
- Breast: 383 cases (12%)
- Prostate: 368 cases (12%)
- Colon and Rectum: 316 cases (10%)

In 2015, there were 245 cancer deaths in Ashtabula County.

(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 4/27/2016)

DIABETES

In 2016, 13% of Ashtabula County adults had been diagnosed with diabetes.

ARTHRITIS

According to the Ashtabula County survey data, 44% of Ashtabula County adults were diagnosed with arthritis. According to the 2015 BRFSS, 28% of Ohio adults and 25% of U.S. adults were told they have arthritis.

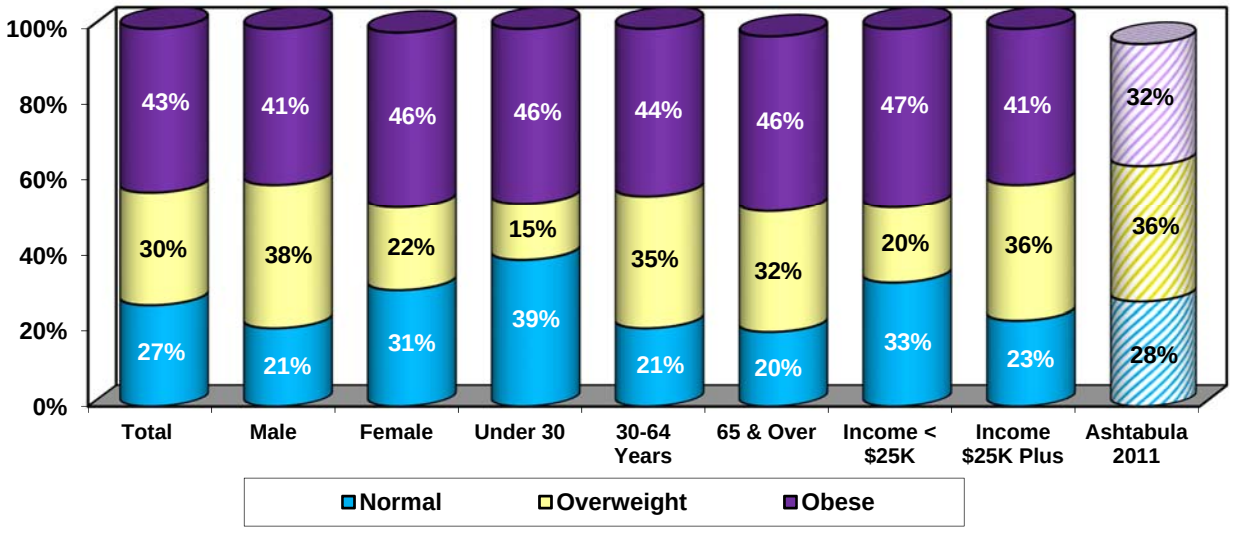
ASTHMA

According to the Ashtabula County survey data, 19% of adults had been diagnosed with asthma.

WEIGHT STATUS

The 2016 health assessment identified that 73% of Ashtabula County adults were overweight or obese based on Body Mass Index (BMI). The 2015 BRFSS indicates that 30% 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.

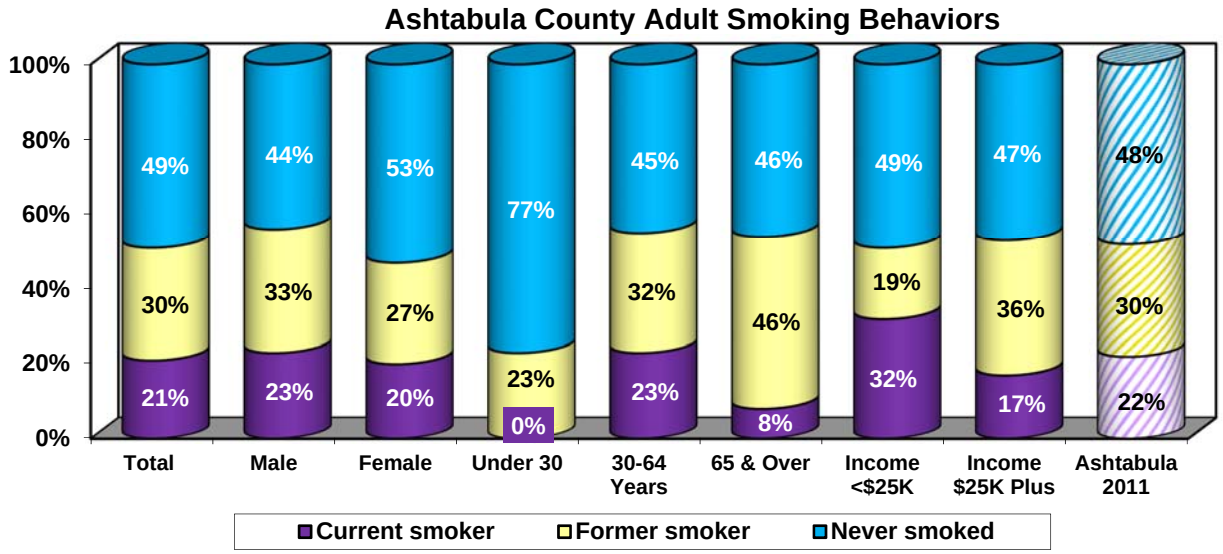
Ashtabula County Adult BMI Classifications



(Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight)

TOBACCO USE

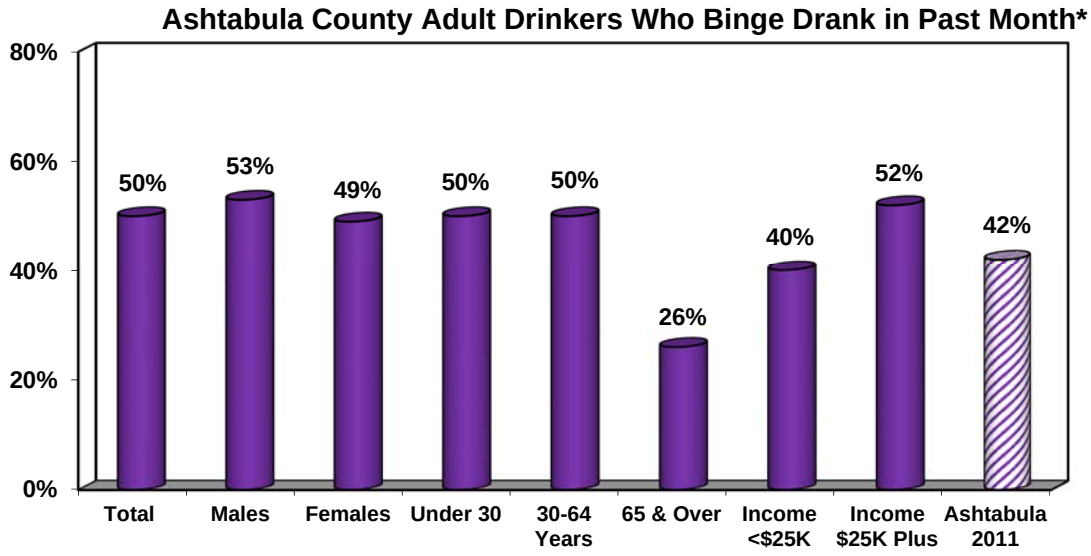
In 2016, 21% of Ashtabula County adults were current smokers, and 30% were considered former smokers. In 2017, the American Cancer Society (ACS) stated that tobacco use was the most preventable cause of death worldwide and is responsible for the deaths of approximately half of long-term users. Each year, 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).*



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

ALCOHOL CONSUMPTION

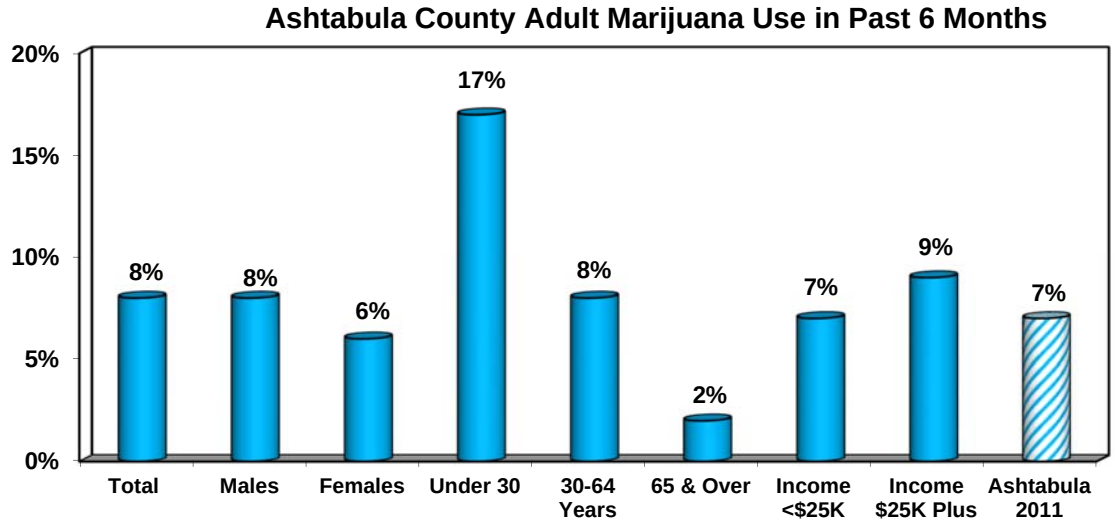
In 2016, 49% of Ashtabula County adults had at least one alcoholic drink in the past month. Additionally, 50% of adults who drank engaged in binge drinking (defined as 5 or more drinks for males or 4 or more drinks for females on one occasion) in the past month. One-fourth (25%) of adults drove after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



Based on adults who have drunk alcohol in the past month. Binge drinking is defined as having five or more drinks (for males) or four or more drinks (for females) on an occasion. Adults must have reported drinking five or more drinks (for males) or four or more drinks (for females) on an occasion at least once in the previous month.

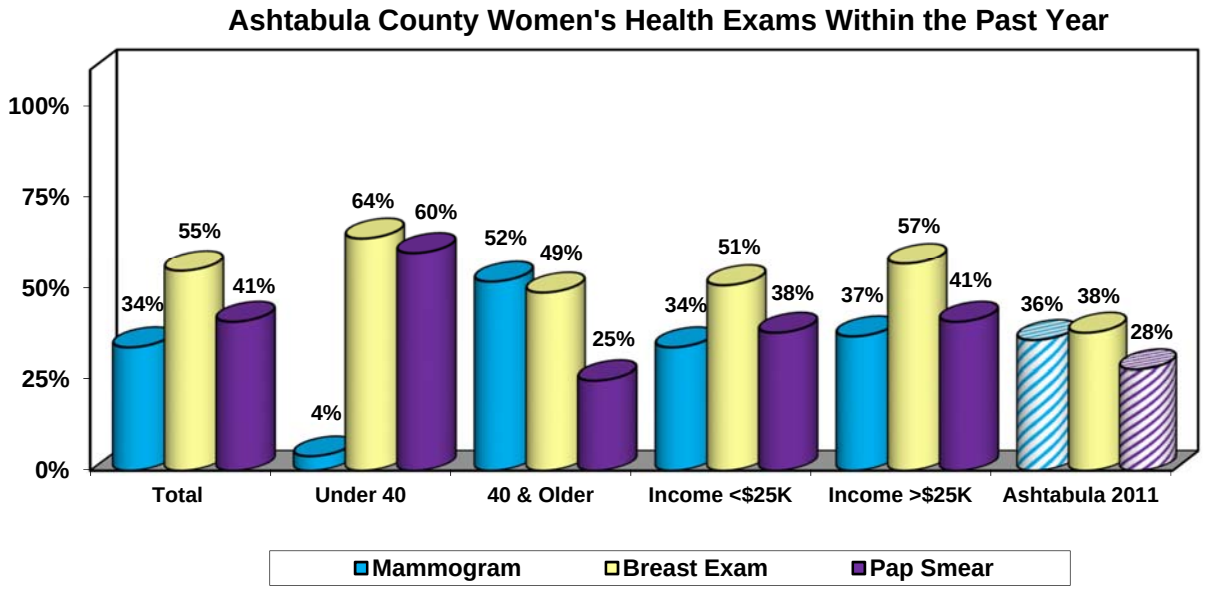
DRUG USE

In 2016, 8% of Ashtabula County adults had used recreational marijuana during the past 6 months. 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.



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. 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. The health assessment determined that 4% of women had survived a heart attack and 2% had survived a stroke at some time in their life. More than one-fourth (29%) had high blood pressure, 32% had high blood cholesterol, 46% were obese, and 20% were identified as smokers, all known risk factors for cardiovascular diseases.



MEN'S HEALTH

In 2016, 16% of Ashtabula County males had a digital rectal exam. Major cardiovascular diseases (heart disease and stroke) accounted for 30% and cancers accounted for 23% of all male deaths in Ashtabula County from 2013-2015 *(Source: CDC Wonder)*. Nearly one-third (31%) of Ashtabula County males performed a self-testicular exam in the past year. The health assessment determined that 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.

PREVENTIVE MEDICINE AND HEALTH SCREENINGS

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

SEXUAL BEHAVIOR AND PREGNANCY OUTCOMES

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).*

SOCIAL DETERMINANTS OF HEALTH

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

QUALITY OF LIFE

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

MENTAL HEALTH AND SUICIDE

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

ORAL HEALTH

The 2016 health assessment project has determined that three-fifths (60%) of Ashtabula County adults had visited a dentist or dental clinic in the past year. The 2014 BRFSS reported that 65% of Ohio adults and 65% of U.S. adults had visited a dentist or dental clinic in the previous twelve months.

PARENTING

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

Adult | **TREND SUMMARY**

Adult Variables	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Health Care Coverage				
Uninsured	17%	8%	8%	11%
Health Status Perceptions				
Rated general health as fair or poor	19%	21%	17%	16%
Rated health as excellent or very good	48%	43%	52%	52%
Arthritis, Asthma & Diabetes				
Has been diagnosed with arthritis	35%	44%	28%	25%
Has been diagnosed with asthma	10%	19%	14%	14%
Has been diagnosed with diabetes	10%	13%	12%	11%
Cardiovascular Health				
Had a heart attack	7%	5%	5%	4%
Had a stroke	6%	4%	4%	3%
Had angina or coronary heart disease	N/A	5%	4%	4%
Has been diagnosed with high blood pressure	31%	37%	34%	31%
Has been diagnosed with high blood cholesterol	34%	37%	37%	36%
Had blood cholesterol checked in the past 5 years	N/A	78%	78%	78%
Weight Status				
Overweight	36%	30%	37%	36%
Obese	32%	43%	30%	30%
Alcohol Consumption				
Drank alcohol at least once in past month	51%	49%	53%	54%
Binge drinker (5 or more drinks for males and 4 or more for females on an occasion)	21%	24%	18%	16%
Tobacco Use				
Current smoker (currently smoke some or all days)	22%	21%	22%	18%
Former smoker (smoked 100 cigarettes in lifetime & now do not smoke)	30%	30%	24%	25%
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

N/A – Data is not available

Adult Variables	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Preventive Health				
Had a pneumonia vaccine (age 65 and older)	N/A	69%	72%	73%
Had a flu vaccine in the past year (ages 65 and over)	62%	70%	58%	61%
Had a shingles or Zoster vaccination in lifetime	N/A	15%	21%*	22%*
Had a mammogram in the past two years (age 40 and older)	69%	70%	72%*	73%*
Had a Pap smear in the past 3 years	N/A	63%	74%*	75%*
Had a digital rectal exam in the past year	24%	16%	N/A	N/A
Oral Health				
Adults who have visited the dentist in the past year	61%	60%	65%*	65%*
Adults who had one or more permanent teeth removed	N/A	56%	47%*	43%*
Adults 65 years and older who had all of their permanent teeth removed	N/A	17%	18%*	15%*

N/A – Data is not available
** 2014 BRFSS Data*

Adult | HEALTH STATUS PERCEPTIONS

Key Findings

In 2016, more than 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 52% (2015)
- U.S. 52% (2015)

(Source: BRFSS 2015 for Ohio and U.S.)

General Health Status

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

- 22% of adults rated their health as fair or poor. The 2015 BRFSS has identified that 17% of Ohio and 16% 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 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 4.0 days and 3.8 days, respectively, in the previous month *(Source: 2014 BRFSS).*

- Ashtabula County adults were most likely to rate their physical health as not good if they:
  - Had an annual household income under $25,000 (47%)
  - Were female (38%)
  - Were ages 65 and 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 4.3 days and 3.7 days, respectively, in the previous month *(Source: 2014 BRFSS).*

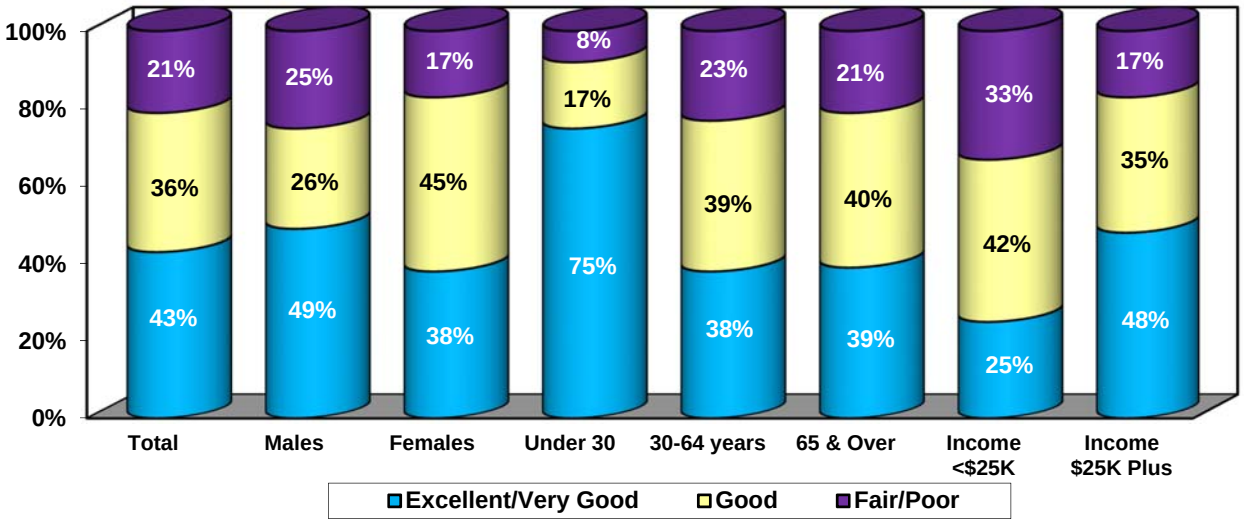
- Ashtabula County adults were most likely to rate their mental health as not good if they:
  - Had an annual household income under $25,000 (56%)
  - Were under the age of 30 (55%)
  - Were female (47%)

- 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 reported that poor mental or physical health kept them from doing usual activities an average of 4.1 days in the previous month.

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, 75% of those under age 30, 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.

Ashtabula County Adult Health Perceptions*

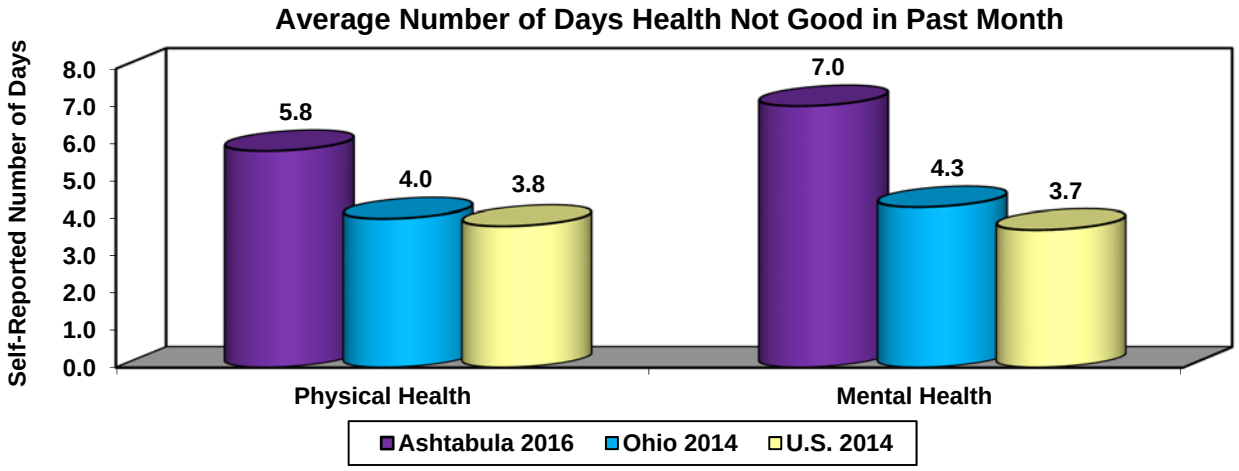


Respondents were asked: "Would you say that in general your health is excellent, very good, good, fair or poor?"

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".

The following graph shows the average number of unhealthy days Ashtabula County adults experienced in the past year as compared to Ohio and the U.S. Examples of how to interpret the information shown on the graph include: Ashtabula County adults experienced an average of 3.4 days in the past month where their physical health was not good.



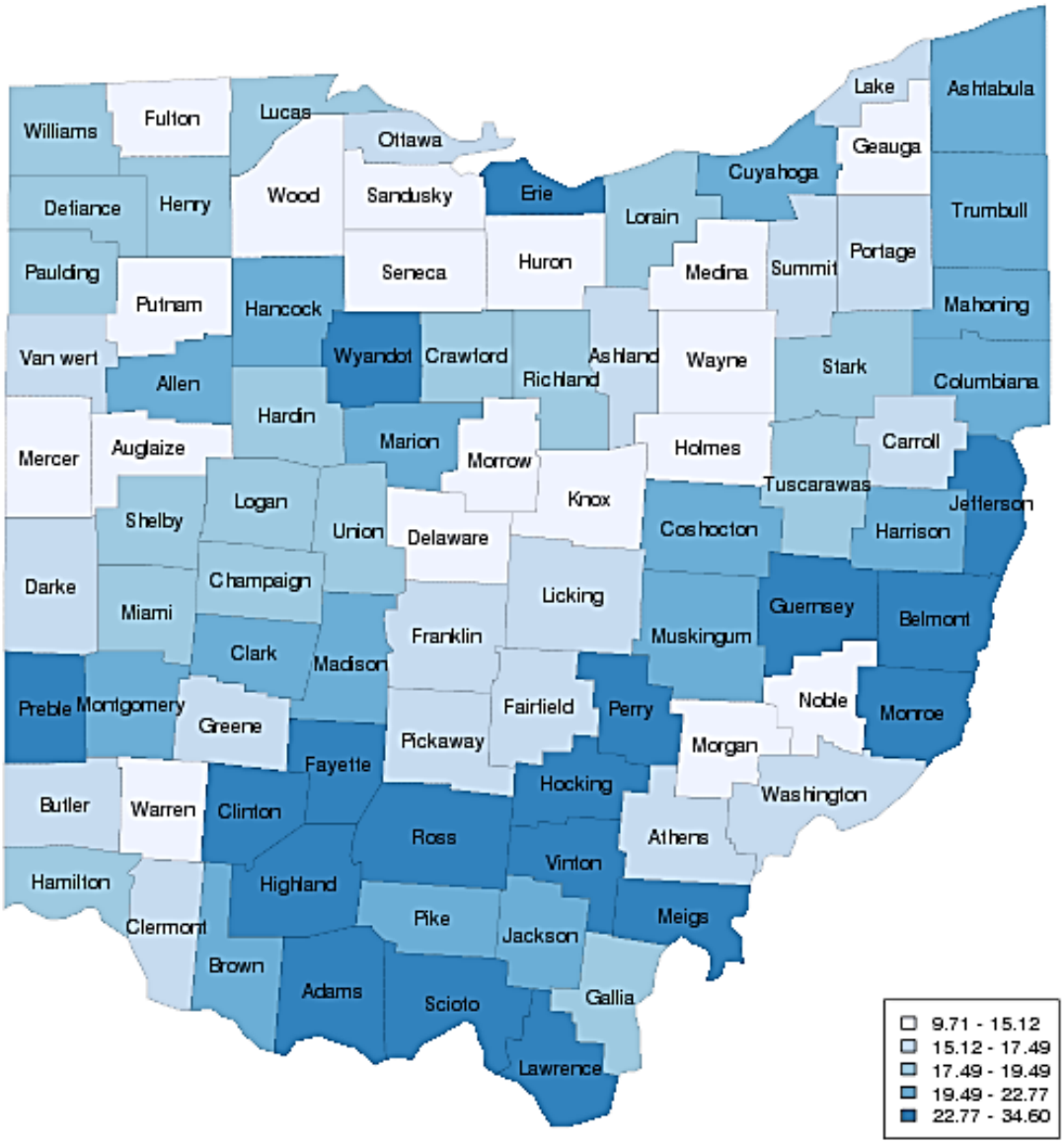
(Sources: 2016 Ashtabula County Health Assessment and 2014 BRFSS Data, as compiled by 2016 County Health Rankings)

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Rated health as excellent or very good	48%	43%	52%	52%
Rated health as fair or poor	19%	22%	17%	16%

The following map shows the estimated proportion of all adults, ages 19 years and older, who rated their overall health as fair/poor.

- Almost one-quarter (22%) of Ashtabula County adults, ages 19 years and older, rated their overall health as fair/poor, as compared to 18% of Ohio adults.

Estimated Proportion: Poor/Fair Overall Health, All Adults, Ages 19 Years and Older (2015)



(Source: Adult Ohio Medicaid Assessment Survey (OMAS) Dashboard, 2015)

Adult | HEALTH CARE COVERAGE

Key Findings

The 2016 health assessment data has identified that 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, 20.1% of all residents live below the poverty level (Source: U.S. Census, 2011-2015 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 2015 BRFSS reported uninsured prevalence rates as 8% for Ohio and 11% 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%).

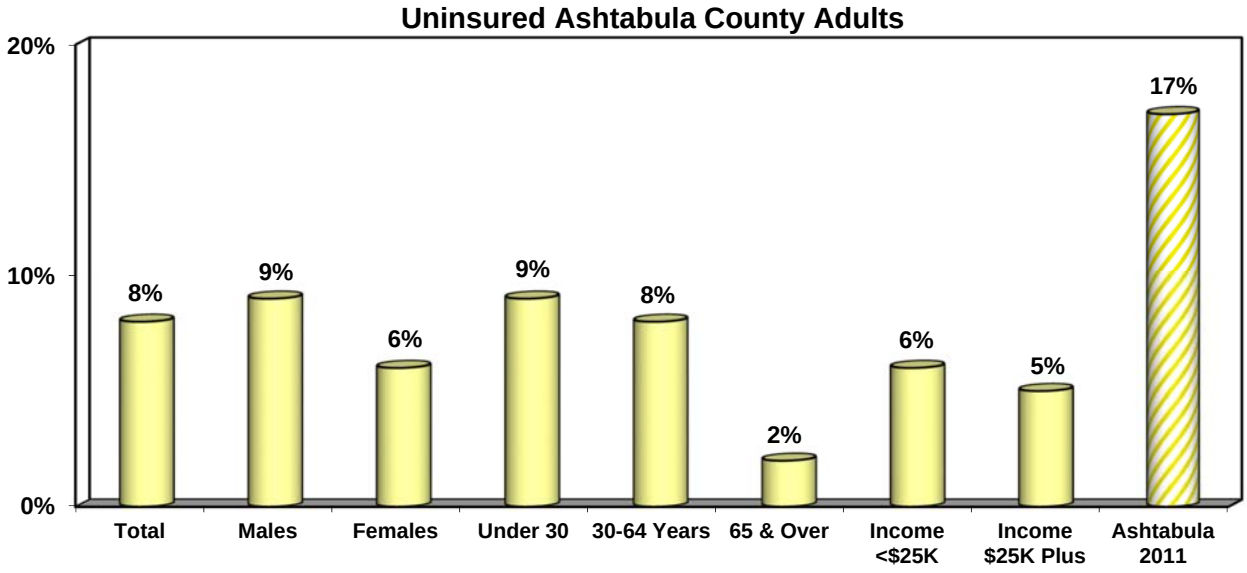
8% of Ashtabula County adults were uninsured.

- 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%)

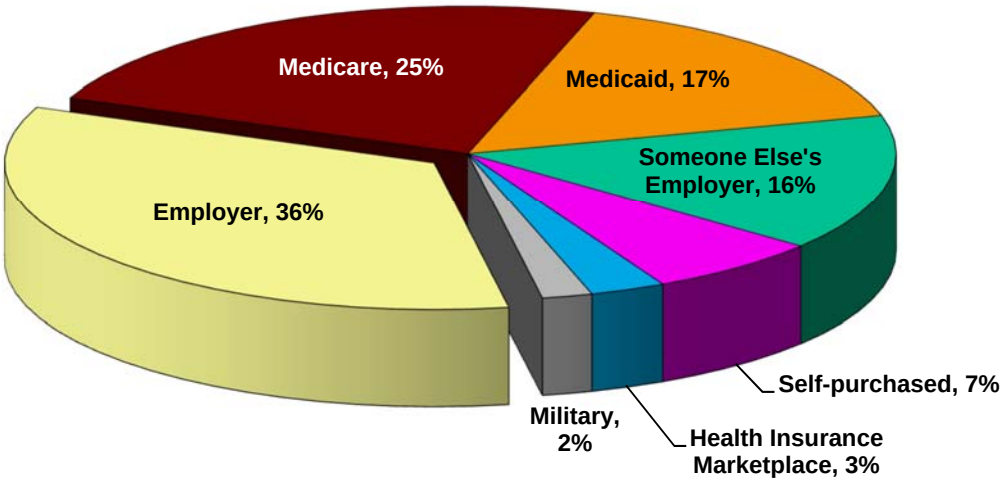
(Percentages do not equal 100% because respondents could select more than one reason)

The following graph shows the percentages of Ashtabula County adults who were uninsured by demographic characteristics. Examples of how to interpret the information in the graph include: 8% of all Ashtabula County adults were uninsured, 6% of adults with an income less than $25,000 reported being uninsured, and 9% of those under age 30 lacked health care coverage.



The pie chart shows sources of Ashtabula County adults' health care coverage.

Source of Health Coverage for Ashtabula County Adults



(Percentages do not equal 100% because respondents could select more than one reason)

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Uninsured	17%	8%	8%	11%

Healthy People 2020
Access to Quality Health Services

Objective	Ashtabula County 2016	Ohio 2015	Healthy People 2020 Target
AHS-1.1: Persons under age of 65 years with health care insurance	100% age 20-24 80% age 25-34 90% age 35-44 93% age 45-54 94% age 55-64	84% age 18-24 88% age 25-34 89% age 35-44 93% age 45-54 93% age 55-64	100%

*U.S. baseline is age-adjusted to the 2000 population standard

(Sources: Healthy People 2020 Objectives, 2015 BRFSS, 2016 Ashtabula County Health Assessment)

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%

Adult | HEALTH CARE ACCESS AND UTILIZATION

Key Findings

The 2016 health assessment project identified that 64% of Ashtabula County adults had visited a doctor for a routine checkup in the past year. Three-quarters (75%) of adults went outside of Ashtabula County for health care services in the past year.

How does Lack of Insurance Affect Access to Health Care?

- Uninsured people are far more likely than those with insurance to report problems getting needed medical care.
- Uninsured people are less likely than those with coverage to receive timely preventive care.
- Anticipating high medical bills, many uninsured people are not able to follow recommended treatments.
- 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 experience declines in their overall health.
- Lack of health coverage, even for short periods of time, results in decreased access to care.

(Source: The Henry Kaiser Family Foundation, How Does Lack of Insurance Affect Access to Health Care?)

Health Care Access

- Almost 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. 30% of adults had more than one person they thought of as their personal healthcare provider, and 15% did not have one at all.
- 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%). 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%). 3% of adults only encountered people of the same race, and 30% did not know how their experiences compared to people of other races.

- 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 adults traveled less than 15 miles to get to their healthcare provider. 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%).

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%

Health Insurance Coverage and Adverse Experiences with Physician Availability: United States, 2012

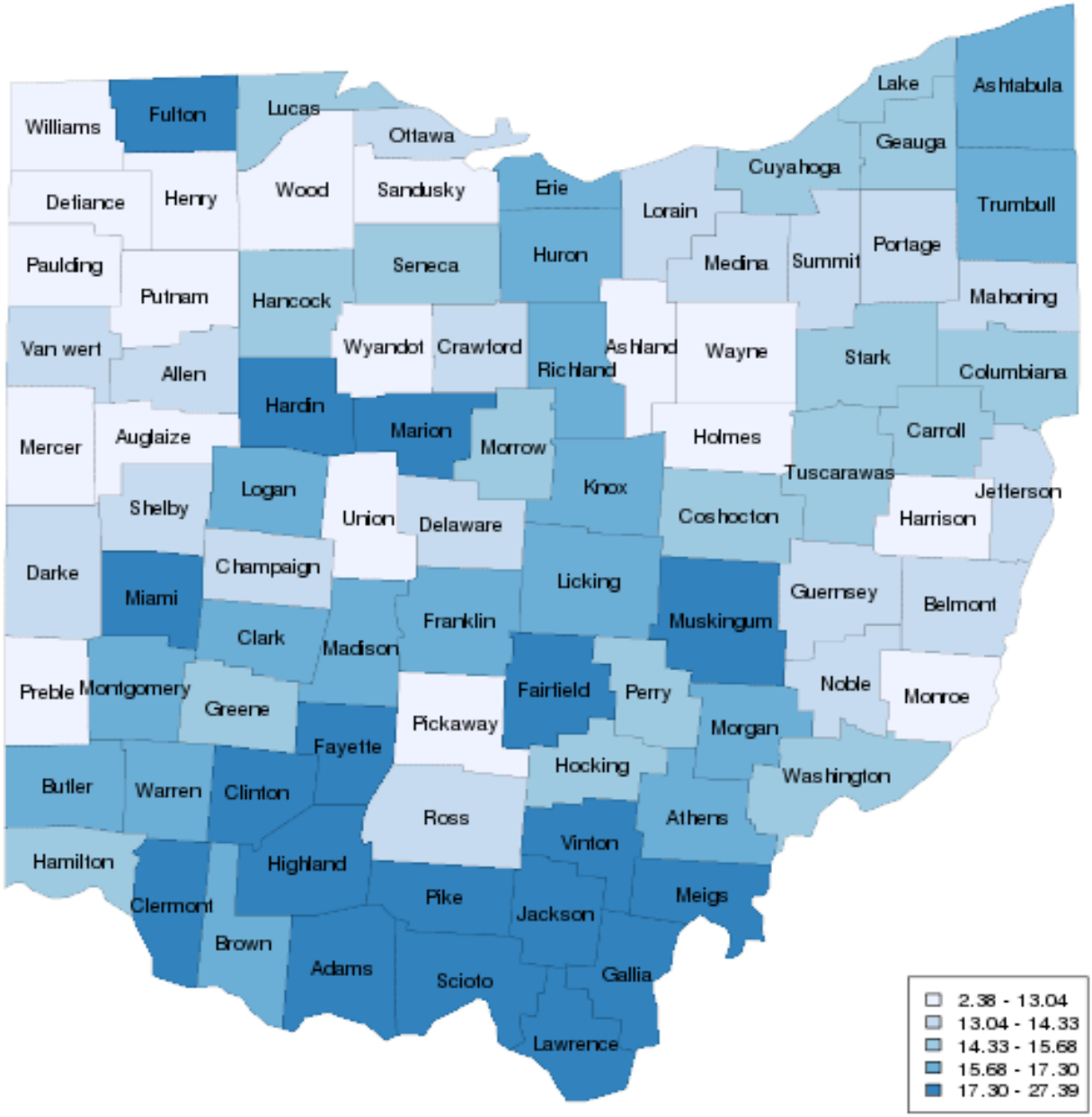
- In the 12 months prior to interview, adults aged 18–64 were more likely than other age groups to have had selected adverse experiences with physician availability.
- Among people under age 65, those who had public coverage only or were uninsured had more trouble finding a general doctor in the past year than those with private insurance.
- Among people under age 65, those who had public coverage only were more likely to have been told that a doctor's office or clinic would not accept them as new patients in the past year than those with private insurance.
- Among insured people under age 65, those who had public coverage only were more likely than those with private insurance to have been told in the past year that a doctor's office or clinic did not accept their health care coverage.

(Source: CDC, Health Insurance Coverage and Adverse Experiences with Physician Availability: United States, 2012)

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

- 16% of Ashtabula County adults, ages 19 years and older, had unmet needs in prescription medication.
- 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: The Adult Ohio Medicaid Assessment Survey (OMAS) Dashboard, 2015)

Adult | CARDIOVASCULAR HEALTH

Key Findings

Heart disease (26%) and stroke (4%) accounted for 30% of all Ashtabula County adult deaths from 2013-2015 (Source: CDC Wonder). The 2016 Ashtabula County health assessment found that 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
2013-2015

Total Deaths: 3,565

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

(Source: CDC Wonder, 2013-2015)

Ohio
Leading Causes of Death
2013-2015

Total Deaths: 345,955

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

(Source: CDC Wonder, 2013-2015)

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.
- 5% of Ohio and 4% of U.S. adults reported they had a heart attack or myocardial infarction *(Source: 2015 BRFSS)*.
- 4% of Ashtabula County adults reported they had survived a stroke, increasing to 9% of those over the age of 65.
- 4% of Ohio and 3% of U.S. adults reported having had a stroke *(Source: 2015 BRFSS)*.
- 5% of adults reported they had angina or coronary heart disease, increasing to 17% of those over the age of 65.
- 4% of Ohio and 4% of U.S. adults reported having had angina or coronary heart disease *(Source: 2015 BRFSS)*.
- 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.
- 7% of adults were told they were pre-hypertensive/borderline high.
- 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%)
  - Have been age 65 years or older (53%)
  - Have been classified as obese by Body Mass Index-BMI (44%)

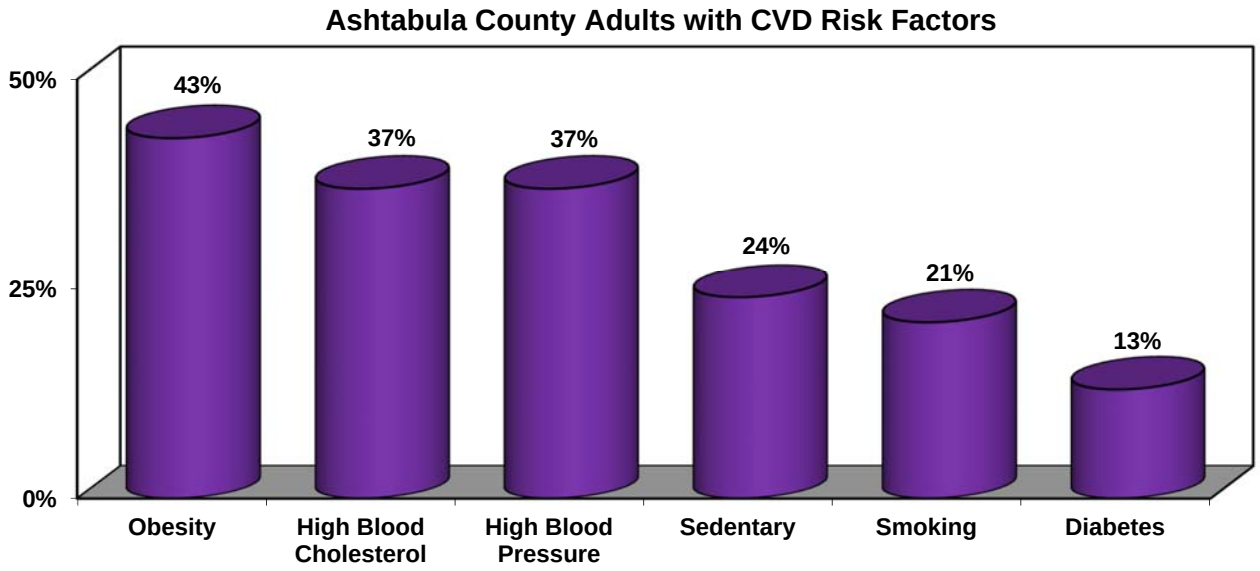
High Blood Cholesterol

- 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 78% of 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 age 65 years or older (54%)
  - Have rated their overall health as fair or poor (52%)
  - Have 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).

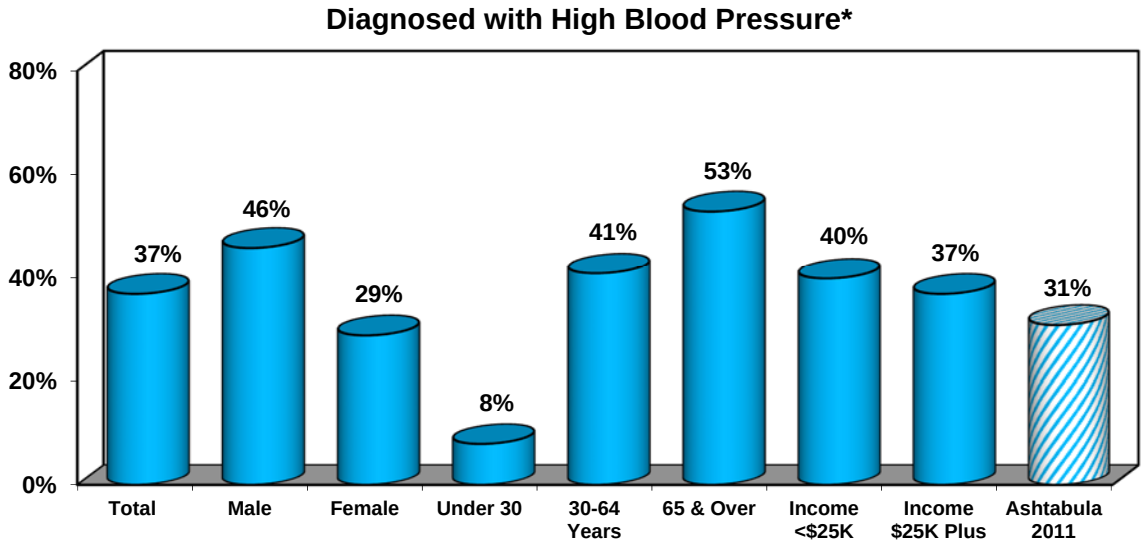


(Source: 2016 Ashtabula County Health Assessment)

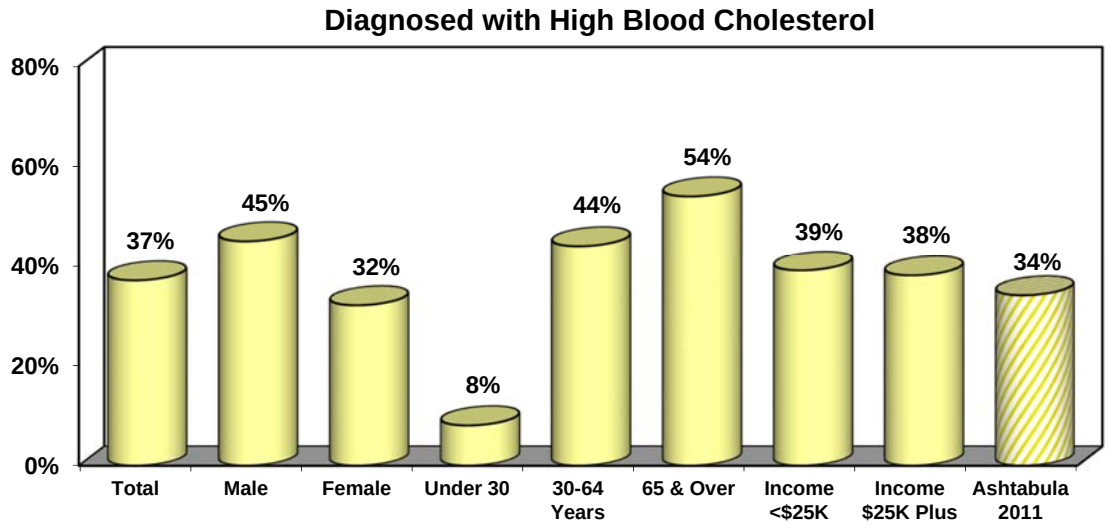
Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Had a heart attack	7%	5%	5%	4%
Had a stroke	6%	4%	4%	3%
Had angina or coronary heart disease	N/A	5%	4%	4%
Had high blood pressure	31%	37%	34%	31%
Had high blood cholesterol	34%	37%	37%	36%
Had blood cholesterol checked in the past 5 years	N/A	78%	78%	78%

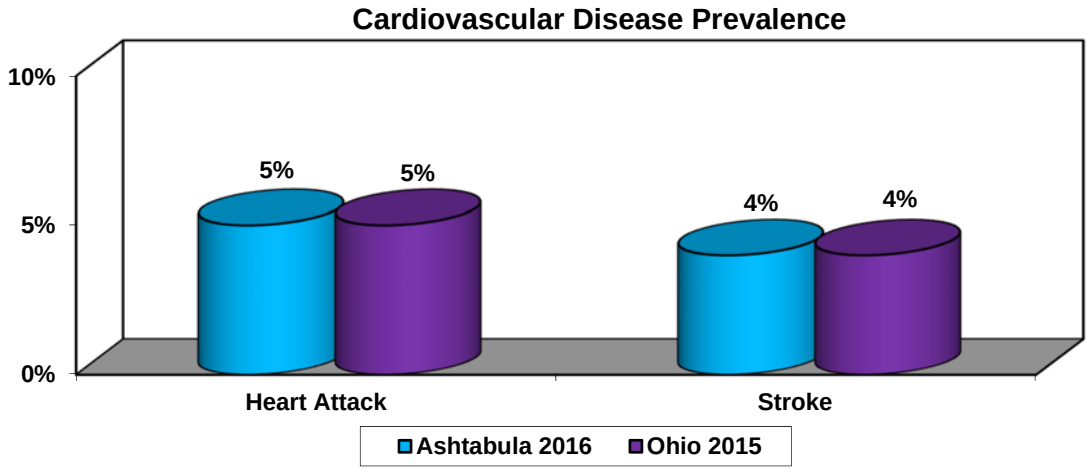
N/A – Not available

The following graphs show the percent diagnosed with high blood pressure, the percent diagnosed with high blood cholesterol, and the prevalence of cardiovascular disease among Ashtabula County adults. Examples of how to interpret the information on the first graph include 37% of all Ashtabula County adults have been diagnosed with high blood pressure: specifically, 46% of all Ashtabula County males, 29% of all females, and 53% of those 65 years and older.



Does not include respondents who indicated high blood pressure during pregnancy only.





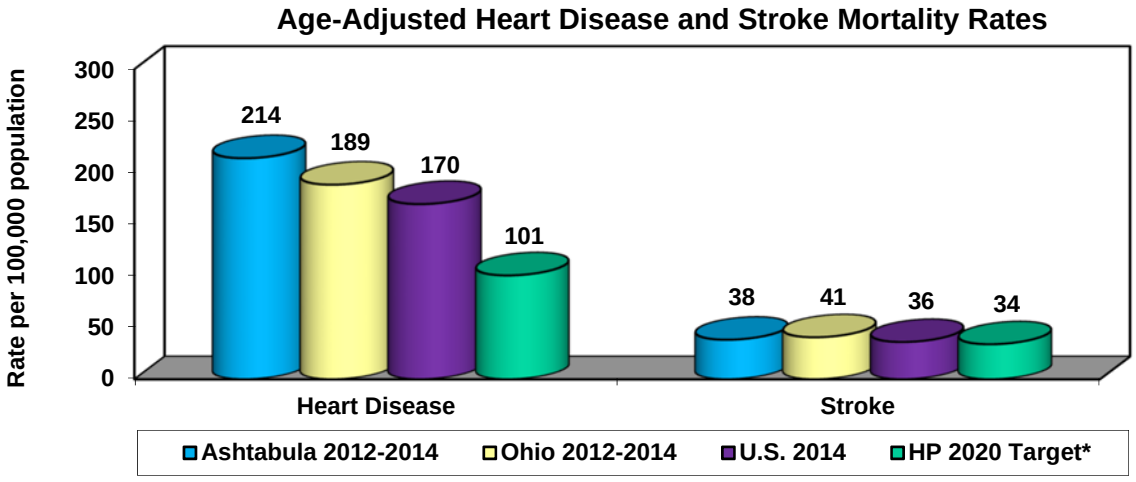
(Source: 2016 Ashtabula Health Assessment and 2015 BRFSS)

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

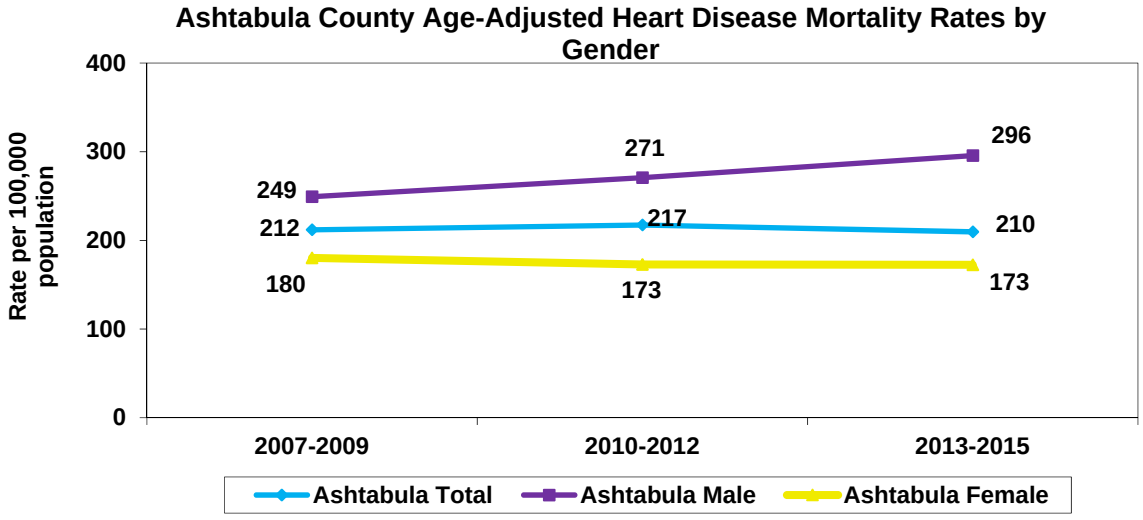
- When age differences are accounted for, the statistics indicate that from 2012-2014 Ashtabula County heart disease mortality rate was greater than the figure for the state, the U.S., and the Healthy People 2020 target.

- The Ashtabula County age-adjusted stroke mortality rate from 2012-2014 was lower than the state, but higher than the U.S. figure, and the Healthy People 2020 target objective.

- From 2006-2014, the total Ashtabula County age-adjusted heart disease mortality rate decreased.



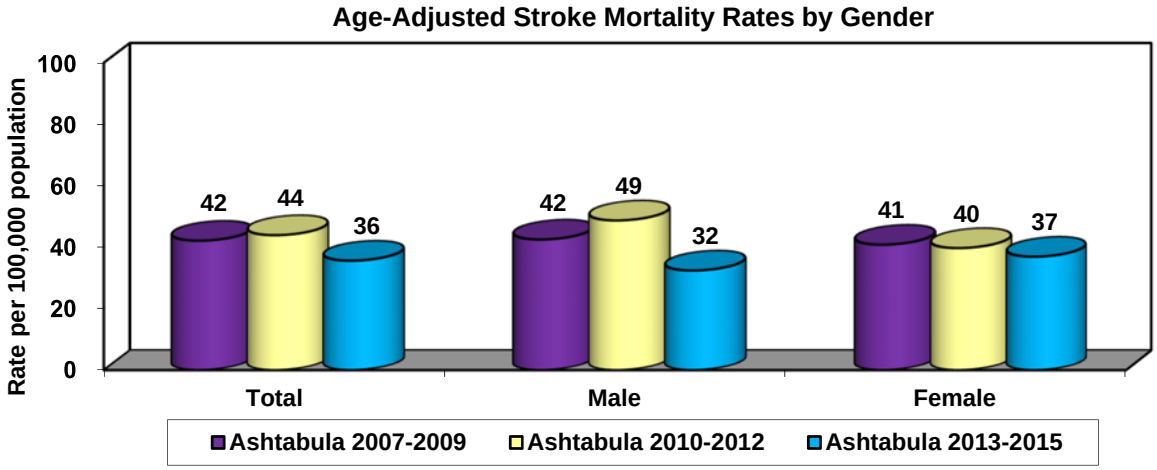
**The Healthy People 2020 Target objective for Coronary Heart Disease is reported for heart attack mortality.*
(Source: Health Indicators Warehouse, Healthy People 2020)



(Source: CDC Wonder, Underlying Cause of Death, 2007-2015)

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

- From 2007-2015, the Ashtabula County stroke mortality rate was higher for males than for females.



(Source: CDC Wonder, About Underlying Cause of Death, 2007-2015)

Healthy People 2020 Objectives

Heart Disease and Stroke (HDS)

Objective	2016 Ashtabula Survey Population Baseline	2015 U.S. Baseline*	Healthy People 2020 Target
HDS-5: Reduce proportion of adults with hypertension	37%	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%	78% Adults age 18 & up	82%
HDS-7: Decrease proportion of adults with high total blood cholesterol (TBC)	37%	36% Adults age 20 & up with TBC>240 mg/dl	14%

**All U.S. figures age-adjusted to 2000 population standard.*
(Source: Healthy People 2020, 2015 BRFSS, 2016 Ashtabula County Health Assessment)

Adult | CANCER

Key Findings

In 2016, 8% of Ashtabula County adults had been diagnosed with cancer at some time in their life. CDC statistics indicate that from 2013-2015, a total of 749 Ashtabula County residents died from cancer, the second leading cause of death in the county. 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, 2009-2013

All Types: 3,108 cases

- Lung and Bronchus: 515 cases (17%)
- Breast: 383 cases (12%)
- Prostate: 368 cases (12%)
- Colon and Rectum: 316 cases (10%)

In 2015, there were 245 cancer deaths in Ashtabula County.

(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 4/27/2016)

Adult Cancer

- 8% of Ashtabula County adults were diagnosed with cancer at some point in their lives.
- 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%).
- The age-adjusted cancer incidence rate from 2009-2013 for Ashtabula County was 492.2 cases per 100,000 population, as compared to 480.0 cases per 100,000 population for Ohio *(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 4/27/2016)*

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

Cancer Facts

- The Centers for Disease Control and Prevention (CDC) indicates that from 2013-2015, cancers caused 21% (749 of 3,565 total deaths) of all Ashtabula County resident deaths. The largest percent (30%) of cancer deaths were from lung and bronchus cancer *(Source: CDC Wonder).*
- 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 the following types of cancers: lung, colorectal, stomach, pancreatic, kidney, bladder, uterine, ovarian (mucinous) and acute myeloid leukemia.

Lung Cancer

- The CDC reports that lung cancer (n=146) was the leading cause of male cancer deaths from 2013-2015 in Ashtabula County. Cancer of the colon (n=42) and prostate cancer (n=28) caused male deaths during the same time period *(Source: CDC Wonder).*
- 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.
- The CDC reports that lung cancer was the leading cause of female cancer deaths (n=82) in Ashtabula County from 2013-2015, followed by breast (n=41) and colon (n=23) cancers *(Source: CDC Wonder).*
- Approximately 20% of female adults in the 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 *(Source: 2016 Ashtabula County Health Assessment).*
- According to the American Cancer Society, smoking causes 80% of lung cancer deaths in the U.S. Men and women who smoke are about 25 times more likely to develop lung cancer than nonsmokers *(Source: American Cancer Society, Facts & Figures 2017).*

23% of Ashtabula County male adults and 20% of female adults were current smokers.

Breast Cancer

- In 2016, 55% of Ashtabula County females reported having had a clinical breast examination in the past year.
- 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).*

More than half (52%) of Ashtabula County females over the age of 40 had a mammogram in the past year.

Colon and Rectum Cancer

- The CDC statistics indicate that colon, rectal, and anal cancer deaths accounted for 9% of all male and female cancer deaths from 2013-2015 in Ashtabula County.

- 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. Because of this, the American Cancer Society suggests that every person over the age of 50 have regular colon cancer screenings.

The leading types of cancer diagnoses for Ashtabula County adults were: breast (27%), other skin cancer (19%), cervical (13%), and prostate (13%).

Prostate Cancer

- 54% of men had a digital rectal exam in their lifetime, and 16% had one in the past year.

- CDC statistics indicate that prostate cancer deaths accounted for 6% of all male cancer deaths from 2013-2015 in Ashtabula County.

- 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).*

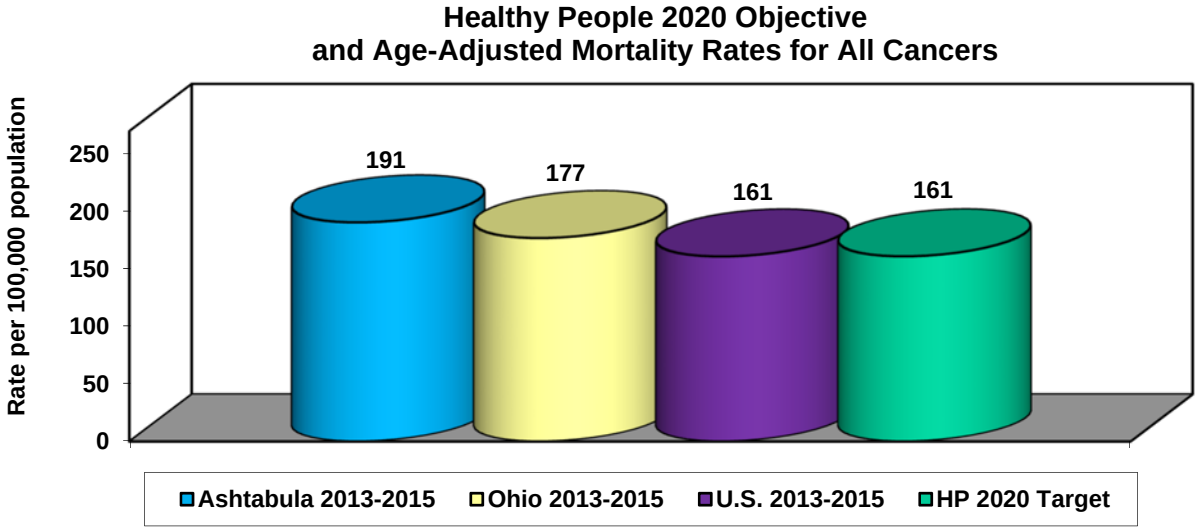
2017 Cancer Estimations

- In 2017, about 1,688,780 new cancer cases are expected to be diagnosed.
- The World Cancer Research Fund estimates that about 20% 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 155,870 cancer deaths will be caused by tobacco use.
- In 2017, estimates predict that there will be 68,180 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%).

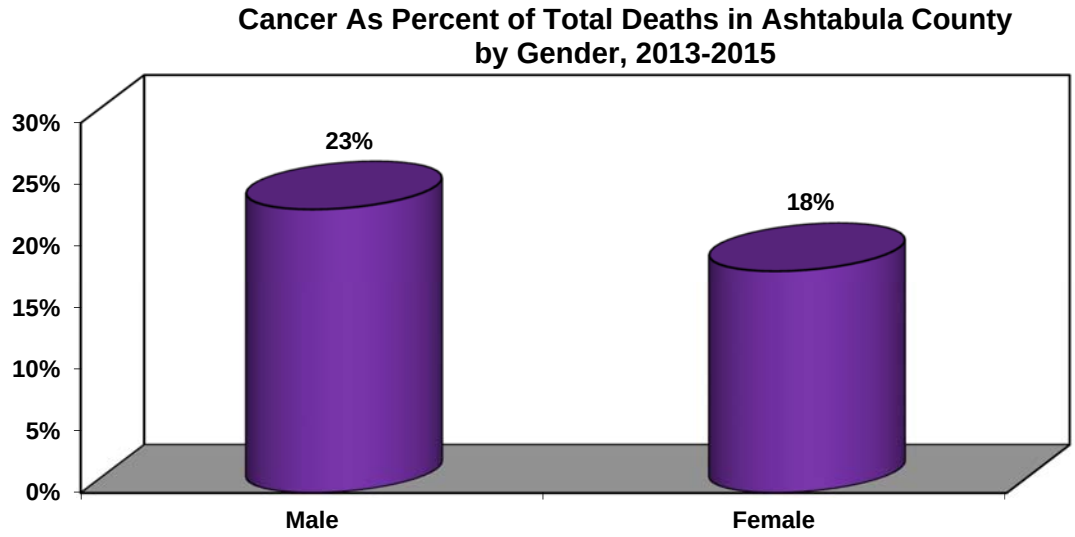
(Source: American Cancer Society, Facts and Figures 2017)

The following graphs 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 indicate:

- 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 CDC Wonder 2013-2015; Healthy People 2020)



(Source: CDC Wonder, 2013-2015)

Ashtabula County
Incidence of Cancer, 2009-2013

Type of Cancer	Number of Cases	Percent of Total Incidence of Cancer	Age-Adjusted Rates *(per 100,000 population)*
Lung and Bronchus	515	17%	79.2
Breast	383	12%	60.8
Prostate	368	12%	115.7
Colon and Rectum	316	10%	49.7
Other/Unspecified	238	8%	38.6
Bladder	173	6%	26.9
Non-Hodgkins Lymphoma	137	4%	21.4
Melanoma of Skin	119	4%	19.8
Uterus	107	3%	31.8
Kidney and Renal Pelvis	106	3%	17.6
Pancreas	102	3%	15.7
Thyroid	71	2%	13.7
Oral Cavity & Pharynx	75	2%	11.7
Leukemia	74	2%	12.1
Liver and Bile Ducts	54	2%	8.6
Stomach	51	2%	7.9
Brain and CNS	44	1%	7.7
Larynx	28	1%	4.3
Multiple Myeloma	25	1%	4.0
Cervix	22	1%	8.4
Ovary	35	1%	10.4
Esophagus	30	1%	4.6
Testis	20	1%	9.5
Hodgkins Lymphoma	15	<1%	2.8
Total	3,108	100%	492.2

(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 4/27/2016)

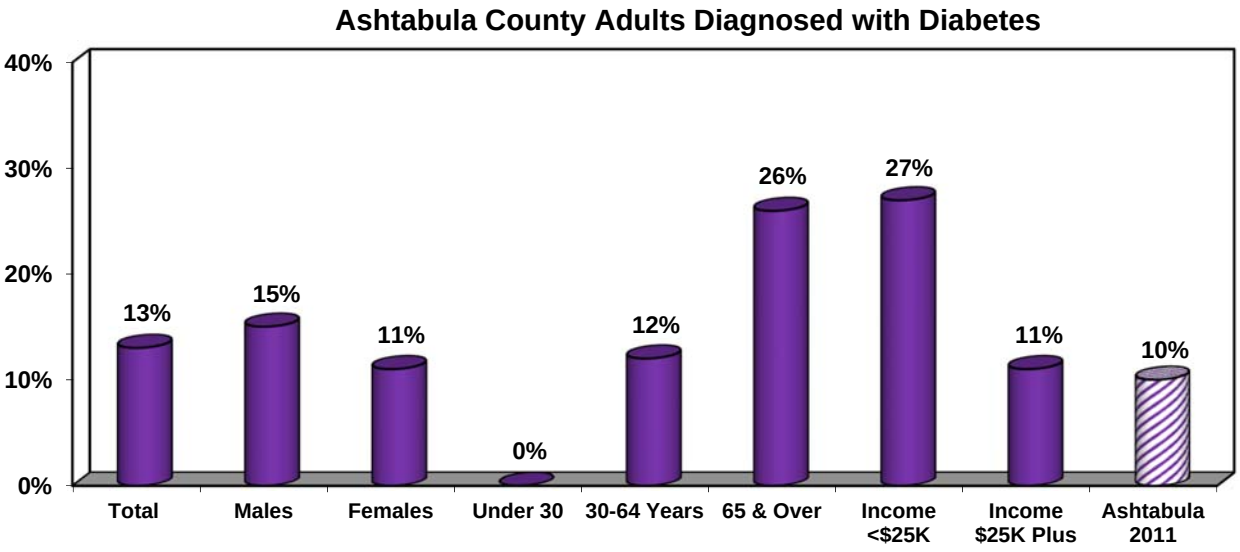
Adult | DIABETES

Key Findings

In 2016, 13% of Ashtabula County adults had been diagnosed with diabetes.

Diabetes

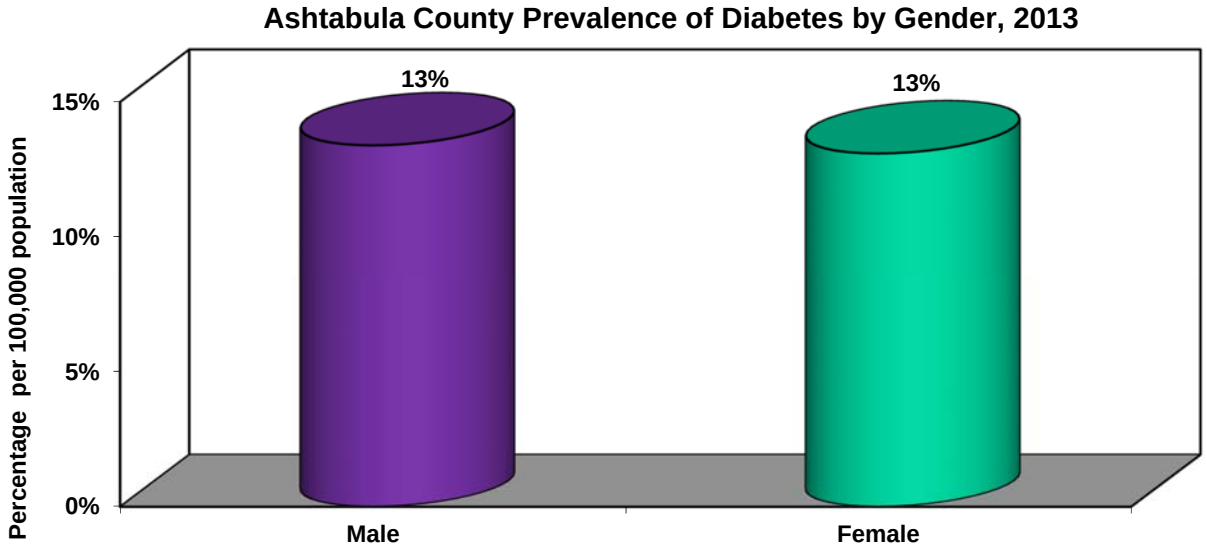
- The 2016 health assessment project has identified that 13% of Ashtabula County adults had been diagnosed with diabetes, increasing to 26% of those over the age of 65 and 27% of those with incomes less than $25,000. The 2015 BRFSS reports an Ohio prevalence of 11% and U.S. prevalence of 10%.
- 6% of 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



Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Diagnosed with diabetes	10%	13%	12%	11%

The following graphs show prevalence of diabetes by gender. The graph shows:

- In 2013, the prevalence of diabetes was equal among males and females in Ashtabula County.



(Source: Network of Care: Health Indicators, Public Health Assessment and Wellness)

Diabetes Facts

- Nearly 30 million children and adults in the United States have diabetes.
- 86 million Americans have prediabetes.
- 1.4 million Americans are diagnosed with diabetes every year.
- Nearly 10% of the entire U.S. population has diabetes, including over 25% of seniors.
- One person is diagnosed with diabetes every 23 seconds.
- As many as 1 in 3 American adults will have diabetes in 2050 if present trends continue.
- The economic cost of diagnosed diabetes in the U.S. is $245 billion per year.
- 8.1 million Americans have undiagnosed diabetes
- Diabetes kills more Americans every year than AIDS and breast cancer combined.
- Diabetes is the primary cause of death for 69,071 Americans each year, and contributes to the death of 234,051 Americans annually.

(Source: American Diabetes Association, 2015)

Diabetes Symptoms

The most common symptoms of type 1 and type 2 diabetes are:

TYPE 1 DIABETES

- Frequent urination
- Unusual thirst
- Extreme hunger
- Unusual weight loss
- Extreme fatigue and irritability
- Blurred vision

TYPE 2 DIABETES

- Any of the type 1 symptoms
- Tingling/numbness in hands or feet
- Recurring skin, gum, or bladder infections
- Cuts/bruises that are slow to heal
- Frequent infections

Who is at Greater Risk for Type 2 Diabetes

- People with impaired glucose tolerance (IGT) and/or impaired fasting glucose (IFG)
- People over age 45
- People with a family history of diabetes
- People who are overweight or obese
- People who do not exercise regularly
- People with low HDL cholesterol or high triglycerides, high blood pressure
- Certain racial and ethnic groups (e.g. Non-Hispanic Blacks, Hispanic/Latino Americans, Asian Americans and Pacific Islanders, and American Indians and Alaska Natives)
- Women who had gestational diabetes, or who have had a baby weighing 9 pounds or more at birth

(Source: American Diabetes Association, Diabetes Basics, Your Risk: Who is at Greater Risk for Type 2 Diabetes,)

Adult | ARTHRITIS

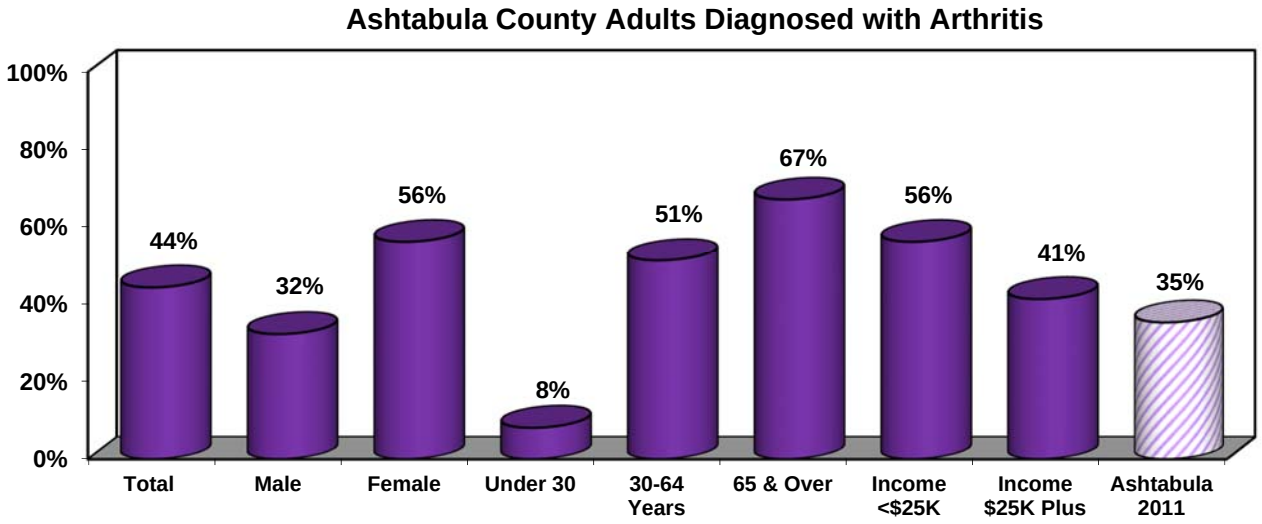
Key Findings

According to the Ashtabula County survey data, 44% of Ashtabula County adults were diagnosed with arthritis. According to the 2015 BRFSS, 28% of Ohio adults and 25% of U.S. adults were told they have arthritis.

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.

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 2015 BRFSS, 28% of Ohio adults and 25% of U.S. adults were told they have arthritis.
- An estimated 53 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 (26%) than men (19%), and it affects all racial and ethnic groups. Arthritis commonly occurs with other chronic diseases, like diabetes, heart disease, and obesity, and it can make it harder for people to manage these conditions *(Source: CDC, Arthritis at a Glance 2016).*
- 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).*



Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Diagnosed with arthritis	35%	44%	28%	25%

36% of Ashtabula County adults were limited in some way because of a physical, mental or emotional problem. Among those who were limited in some way, 46% were limited because of arthritis.

Arthritis: Key Public Health Messages

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

Key self-management activities include the following:

- **Learn arthritis management strategies**—These techniques have been proven valuable for helping people change their behavior and better manage their arthritis symptoms. Interactive workshops are low-cost (about $25-$35) and are available in communities across the country. Attending programs, like the Arthritis Self-Management Program and the Chronic Disease Self-Management Program, can help a person learn ways to manage pain, exercise safely, and gain control of arthritis.
- **Be Active** –Research has shown that physical activity decreases pain, improves function, and delays disability. Make sure you get at least 30 minutes of moderate physical activity at least 5 days a week. You can get activity in 10-minute intervals.
- **Watch your weight** –The prevalence of arthritis increases with increasing weight. Research suggests that maintaining a healthy weight reduces the risk of developing arthritis and may decrease disease progression. A loss of just 11 pounds can decrease the occurrence (incidence) of new knee osteoarthritis and a modest weight loss can help reduce pain and disability.
- **See your doctor** –Although there is no cure for most types of arthritis, early diagnosis and appropriate management is important, especially for inflammatory types of arthritis. For example, early use of disease-modifying drugs can affect the course of rheumatoid arthritis. If you have symptoms of arthritis, see your doctor and begin appropriate management of your condition.
- **Protect your joints** –Joint injury can lead to osteoarthritis. People who experience sports or occupational injuries or have jobs with repetitive motions like repeated knee bending have more osteoarthritis. Avoid joint injury to reduce your risk of developing osteoarthritis.

(Source: Centers for Disease Control and Prevention, Arthritis: Key Public Health Messages, updated May 9, 2016)

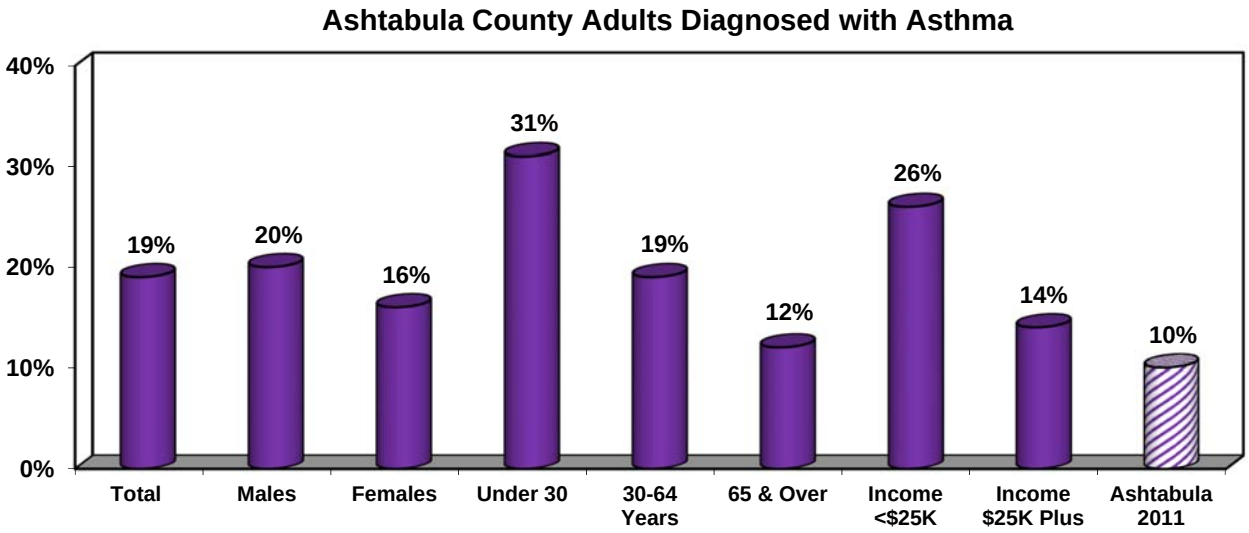
Adult | ASTHMA AND OTHER RESPIRATORY DISEASE

Key Findings

According to the Ashtabula County survey data, 19% of adults had been diagnosed with asthma.

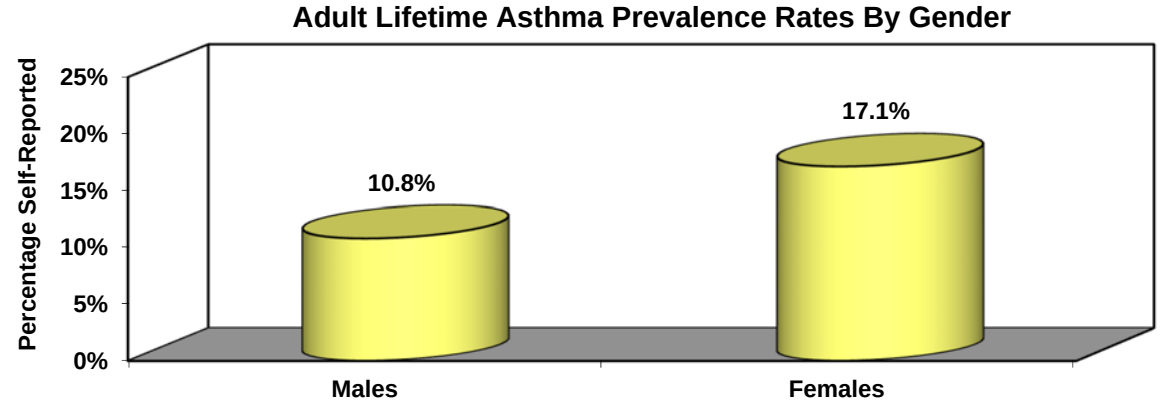
Asthma and Other Respiratory Disease

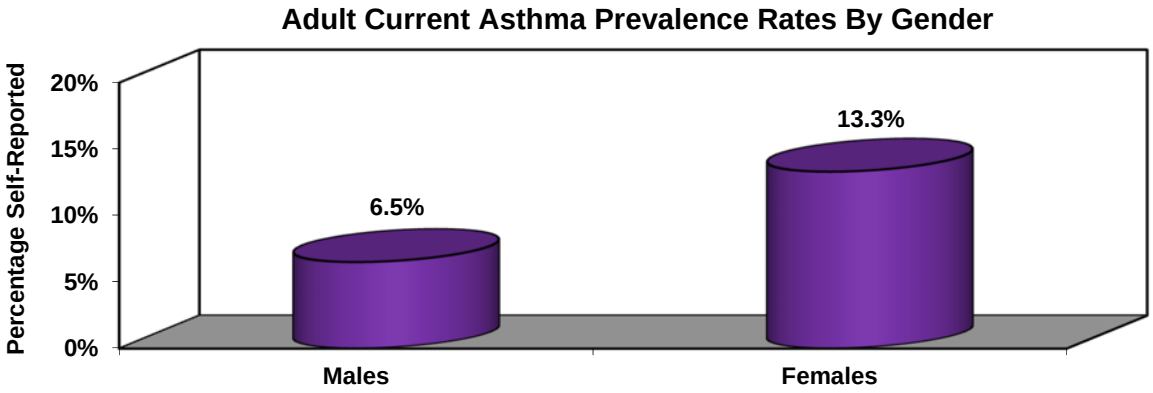
- In 2016, 19% of Ashtabula County adults had been diagnosed with asthma, increasing to 31% of those under the age of 30 and 26% of those with incomes less than $25,000.
- 14% of Ohio and 14% of U.S. adults have ever been diagnosed with asthma *(Source: 2015 BRFSS).*
- 11% of adults had been diagnosed 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, 2013).*
- Chronic lower respiratory disease was the 3rd leading cause of death in Ashtabula County and in Ohio from 2013-2015 *(Source: CDC Wonder, 2013-2015).*



Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Had been diagnosed with asthma	10%	19%	14%	14%

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





(Source for graphs: 2015 BRFSS)

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)

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, Vital Signs, Asthma)

Adult | **WEIGHT STATUS**

Key Findings

The 2016 health assessment identified that 73% of Ashtabula County adults were overweight or obese based on Body Mass Index (BMI). The 2015 BRFSS indicates that 30% 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.

Weight Status

- In 2016, the health assessment indicated that nearly three-fourths (73%) of Ashtabula County adults were either overweight (30%) or obese (43%) by Body Mass Index (BMI). This puts 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 are 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.

- 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%).

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.

- 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, CDC also recommends muscle-strengthening activities that work all major muscle groups on 2 or more days per week *(Source: CDC, Physical Activity for Everyone).*

Nutrition

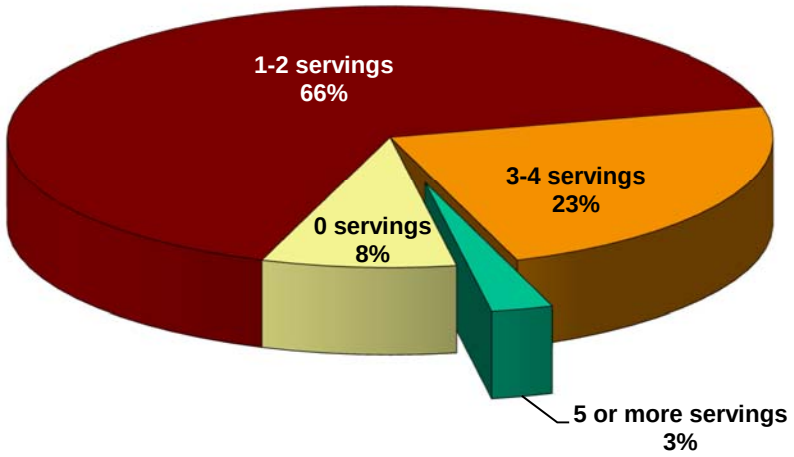
- In 2016, 66% of adults ate between 1 to 2 servings of fruits and vegetables per day. 23% ate between 3 to 4 servings, and 3% ate 5 or more servings of fruits and vegetables per day. One in twelve (8%) Ashtabula County adults did not have any servings of fruits and vegetables. The American Cancer Society 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%).

- 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 pie chart shows the average number of servings of fruits and vegetables Ashtabula County adults ate per day. Examples of how to interpret the information include: 3% of all Ashtabula County adults had the recommended number of 5 or more servings of fruits and vegetables per day.

Average Number of Servings of Fruits and Vegetables Per Day for Ashtabula County Adults

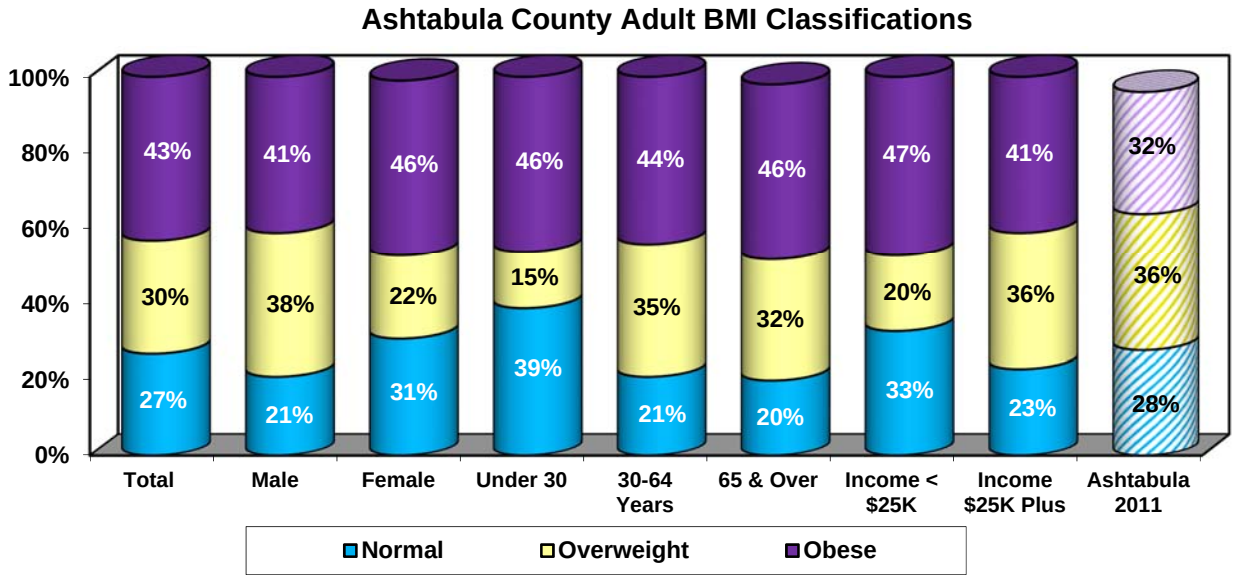


Obesity Facts

- Obesity-related conditions include heart disease, stroke, type 2 diabetes and certain types of cancer, some of the leading causes of preventable death.
- The estimated annual medical cost of obesity in the U.S. was $147 billion in 2008 U.S. dollars; the medical costs for people who are obese were $1,429 higher than those of normal weight.
- Non-Hispanic blacks have the highest age-adjusted rates of obesity (48.1%) followed by Hispanics (42.5%), non-Hispanic whites (34.5%), and non-Hispanic Asians (11.7%).
- Obesity is higher among middle age adults, 40-59 years old (40.2%) than among younger adults, age 20-39 (32.3%) or adults over 60 or above (37%) adults.

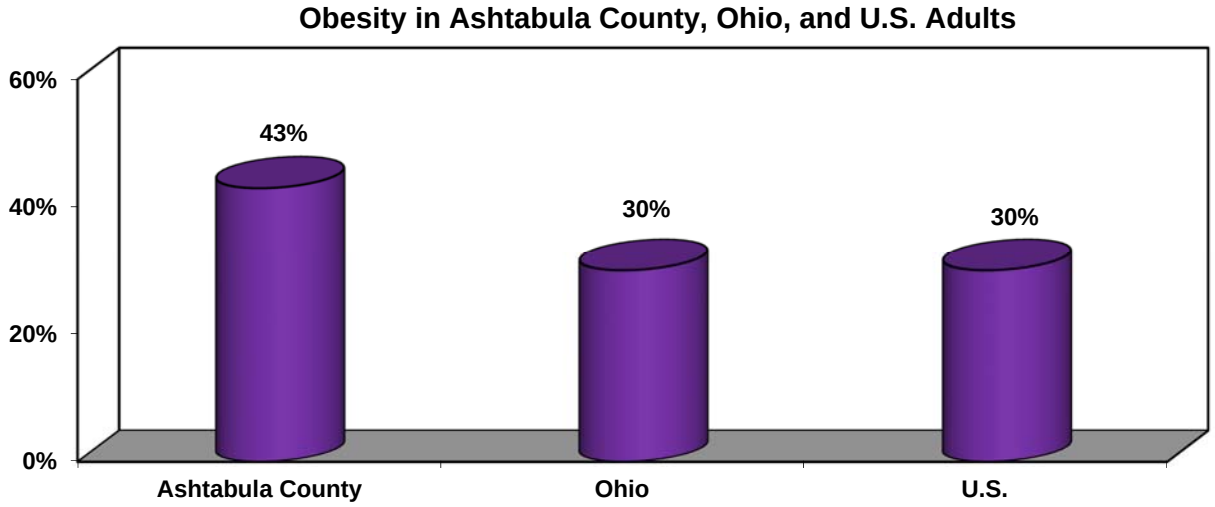
(Source: CDC, Adult Obesity Facts, updated September 1, 2016)

The following graphs show the percentage of Ashtabula County adults who are overweight or obese by Body Mass Index (BMI) and the percentage of Ashtabula County adults who are obese compared to Ohio and the U.S. 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. The following graphs show:



(Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight)

Nearly half (48%) of Ashtabula County adults were trying to lose weight.



(Source: 2016 Ashtabula County Health Assessment and 2015 BRFSS)

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Obese	32%	43%	30%	30%
Overweight	36%	30%	37%	36%

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).

Tobacco Use Behaviors

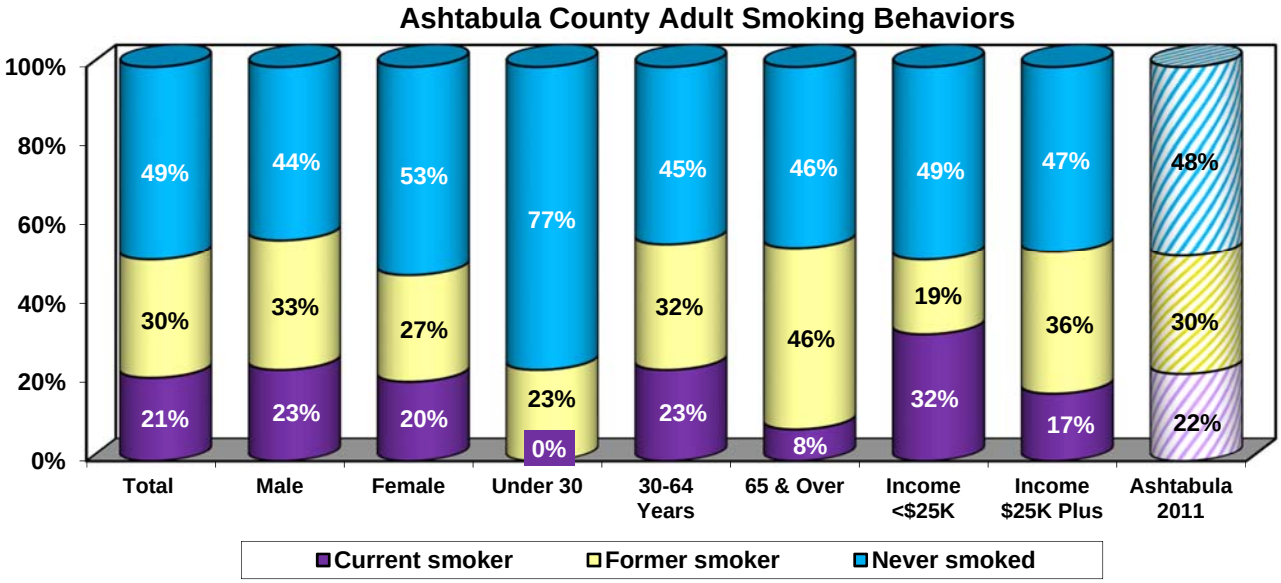
- The 2016 health assessment identified that one-in-five (21%) Ashtabula County adults were current smokers (those who indicated smoking at least 100 cigarettes in their lifetime and currently smoke some or all days).
- The 2015 BRFSS reported current smoker prevalence rates of 22% for Ohio and 18% for 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 2015 BRFSS reported former smoker prevalence rates of 24% for Ohio and 25% for the U.S.

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

- Ashtabula County adult smokers were more likely to:
  - 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%).
- 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 some times (6%), no rules about smoking (6%), not allowed with children around (5%), and allowed anywhere (5%).

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Current smoker	22%	21%	22%	18%
Former smoker	30%	30%	24%	25%

The following graph shows the percentage of Ashtabula County adults who used tobacco. 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?"

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.

Smoke-free Living: Benefits & Milestones

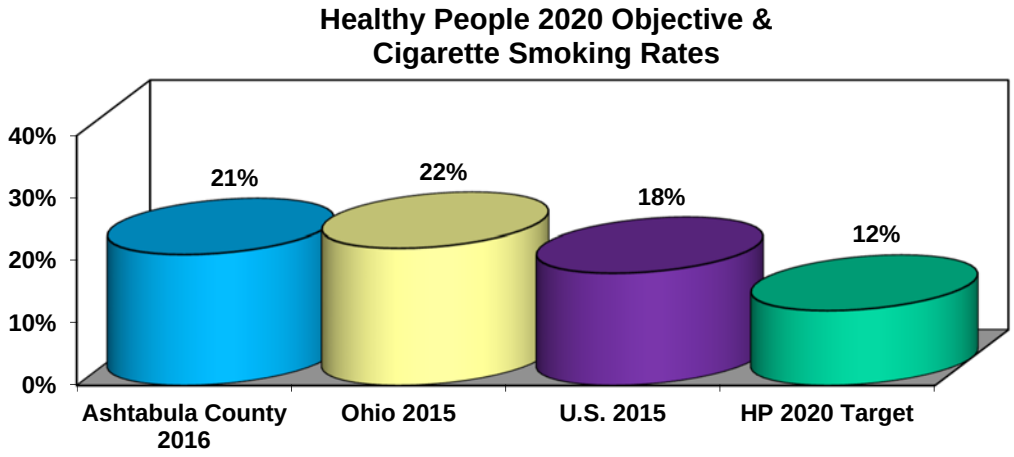
According to the American Heart Association and the U.S. Surgeon General, this is how your body starts to recover:

- 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 reduces your risk of infection.
- One year after quitting smoking, a person's risk of coronary heart disease is reduced by 50 percent.
- Five to 15 years after quitting smoking, a person's risk of stroke is similar to that of a nonsmoker.
- After 10 years of smoke-free living, your lung cancer death rate is about half that of a person who has continued to smoke. The risk of other cancers, such as throat, mouth, esophagus, bladder, cervix and pancreas decreases too.

(Source: American Heart Association, Smoke-free Living: Benefits & Milestones, 2015)

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:

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



(Source: 2016 Ashtabula County Health Assessment, 2015 BRFSS and Healthy People 2020)

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

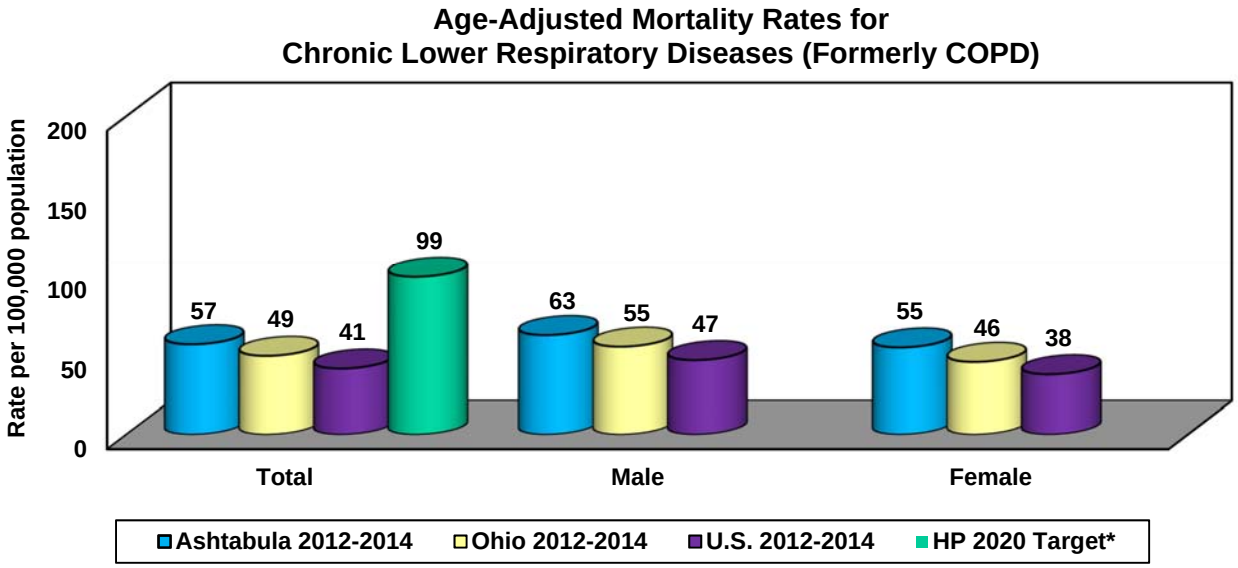
Electronic Cigarette Use Among Adults: United States, 2014

- Electronic cigarettes (e-cigarettes) are battery-powered products that typically deliver nicotine in the form of an aerosol.
- In 2014, 12.6% of adults had ever tried e-cigarette even one time, with use differing by sex, age, and race and Hispanic or Latino origin.
- About 3.7% of adults currently used e-cigarettes, with use differing by age and race and Hispanic or Latino origin.
- Current cigarette smokers and former smokers who quit smoking within the past year were more likely to use e-cigarettes than former smokers who quit smoking more than 1 year ago and those who had never smoked.
- Among current cigarette smokers who had tried to quit smoking in the past year, more than one-half had ever tried an e-cigarette and 20.3% were current e-cigarette users.
- Men were more likely than women to have ever tried an e-cigarette.
- More than 20% of adults aged 18-24 had ever tried an e-cigarette, with use declining steadily as age increased.
- In 2014, both non-Hispanic American Indian/Native American and non-Hispanic white adults were more likely than non-Hispanic black, non-Hispanic Asian, and Hispanic adults to have ever tried e-cigarettes and to be current e-cigarette users.

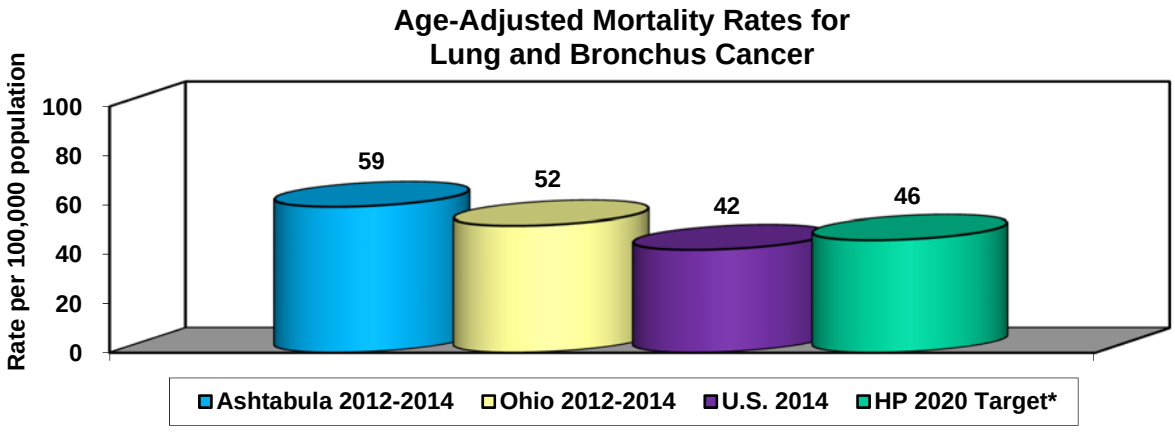
(Source: U.S. Department of Health and Human Services, National Center for Health Statistics Data Brief "Electronic Cigarette Use Among Adults, United States, 2014," October 2015)

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) and lung and bronchus cancer in comparison with the Healthy People 2020 objective. These graphs show:

- From 2012-2014, Ashtabula County's age-adjusted mortality rate for Chronic Lower Respiratory Disease was higher than the Ohio and the U.S. rates, but lower than the Healthy People 2020 target objective.
- Disparities existed by gender for chronic lower respiratory disease mortality rate. The 2012-2014 Ashtabula County male rates were higher than the Ashtabula County female rates.



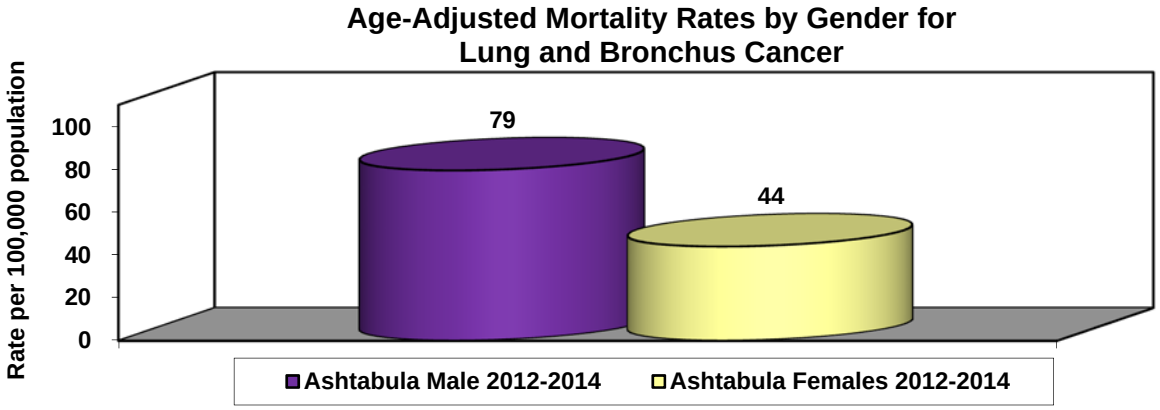
(Source: Health Information Warehouse and Healthy People 2020)
** Healthy People 2020's target rate and the U.S. rate is for adults aged 45 years and older.*
***HP2020 does not report different goals by gender.*



**Healthy People 2020 Target data is for lung cancer only*
(Sources: Healthy People 2020, National Cancer Institute, Health Indicators Warehouse, updated 2016)

The following graph shows Ashtabula County age-adjusted mortality rates per 100,000 population for lung and bronchus cancer by gender. The graph shows:

- Disparities existed by gender for Ashtabula County lung and bronchus cancer age-adjusted mortality rates. The 2012-2014 Ashtabula male rates were substantially higher than the Ashtabula female rates.



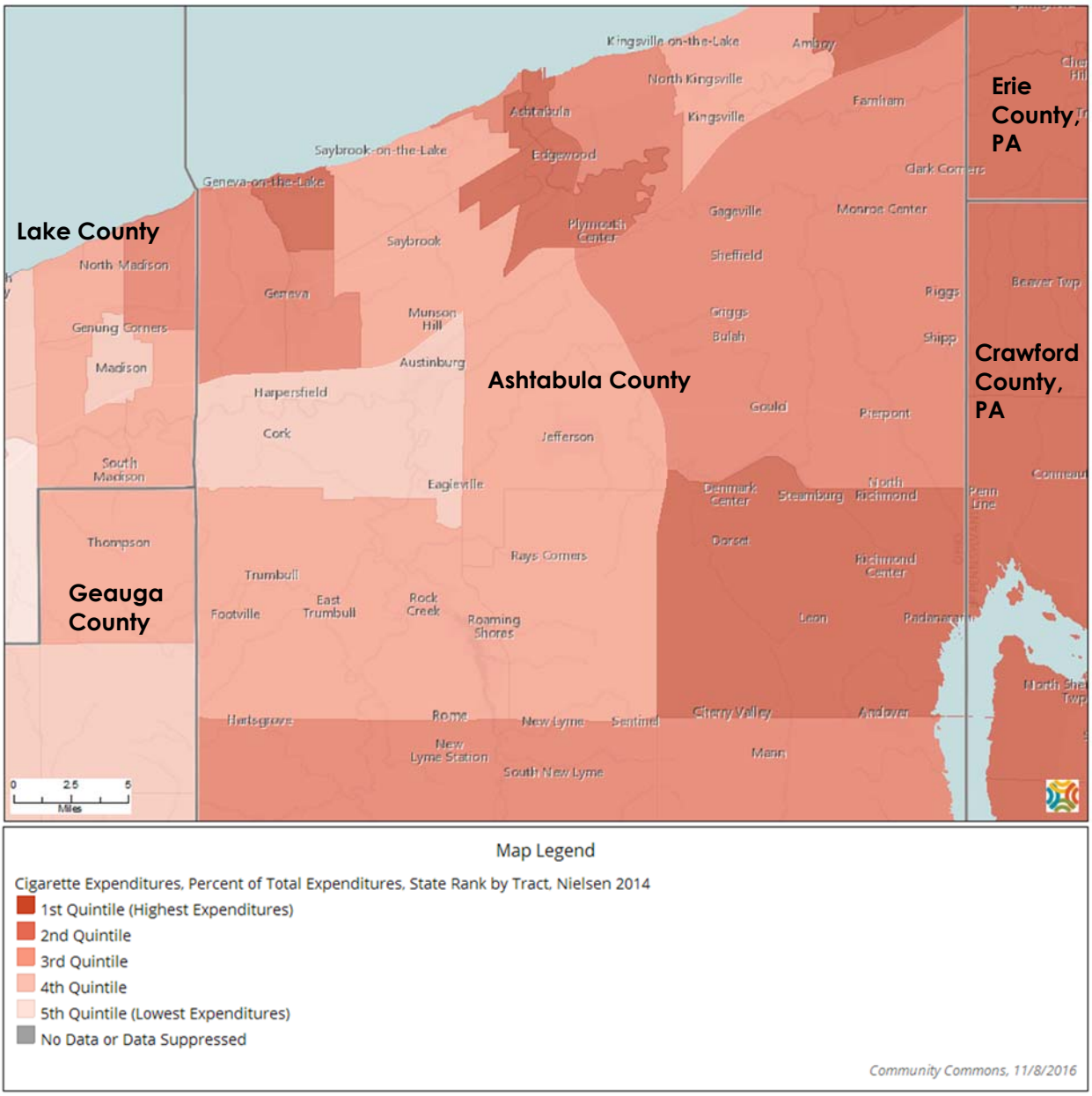
(Source: Health Indicators Warehouse, updated 2016)

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, December 1, 2016)

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



(Source: Nielsen, Nielsen Site Reports: 2014, as compiled by Community Commons)

TOBACCO

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.

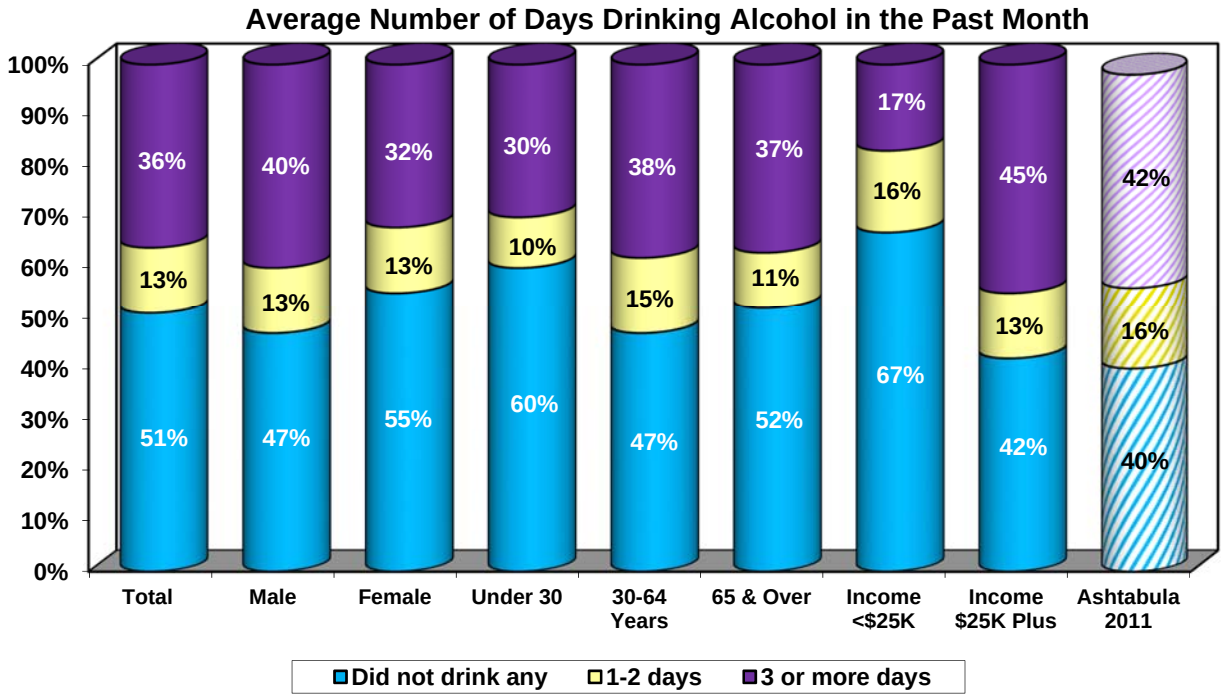
49% of Ashtabula County adults had at least one alcoholic drink in the past month.

Alcohol Consumption

- In 2016, 49% of Ashtabula County adults had at least one alcoholic drink in the past month, increasing to 58% of those with incomes more than $25,000.
- 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 and those with incomes more than $25,000.
- The 2015 BRFSS reported current drinker prevalence rates of 53% for Ohio and 54% for the U.S.
- Almost one-fourth (24%) of Ashtabula County adults 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. The 2015 BRFSS reported binge drinking rates of 18% for Ohio and 16% for the U.S.
- Half (50%) of current drinkers reported binge drinking in the last month.
- One in four (25%) of current drinkers reported driving after drinking any alcoholic beverages.
- 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%).

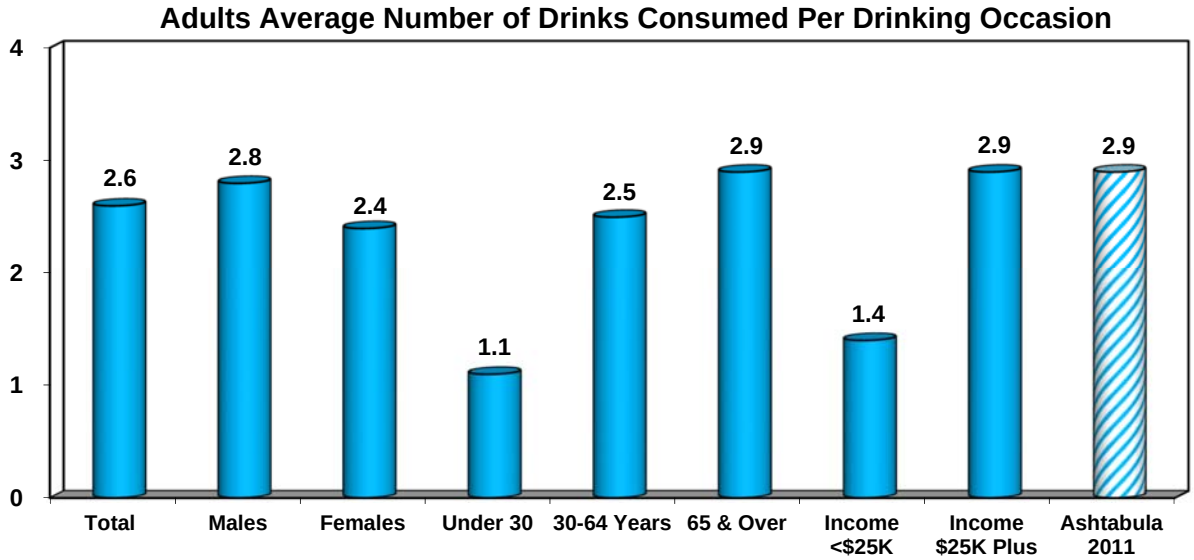
Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Drank alcohol at least once in past month	51%	49%	53%	54%
Binge drinker (drank 5 or more drinks for males and 4 or more for females on an occasion)	21%	24%	18%	16%

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.

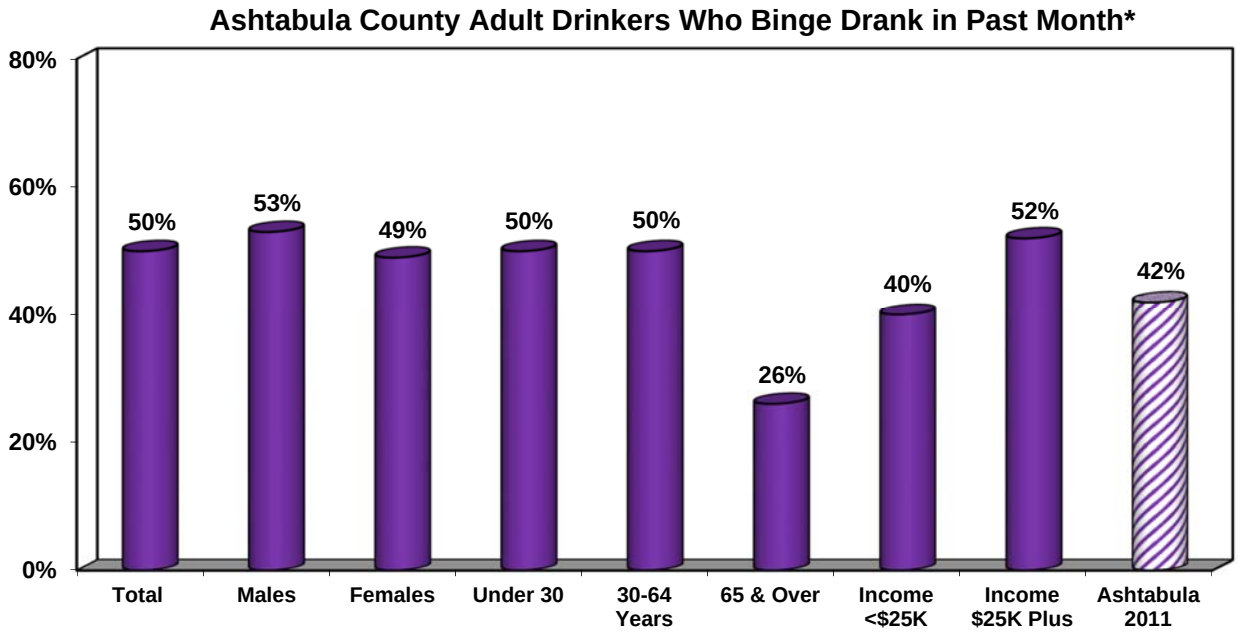


Percentages may not equal 100% as some respondents answered "don't know"

24% of Ashtabula County adults were considered binge drinkers.

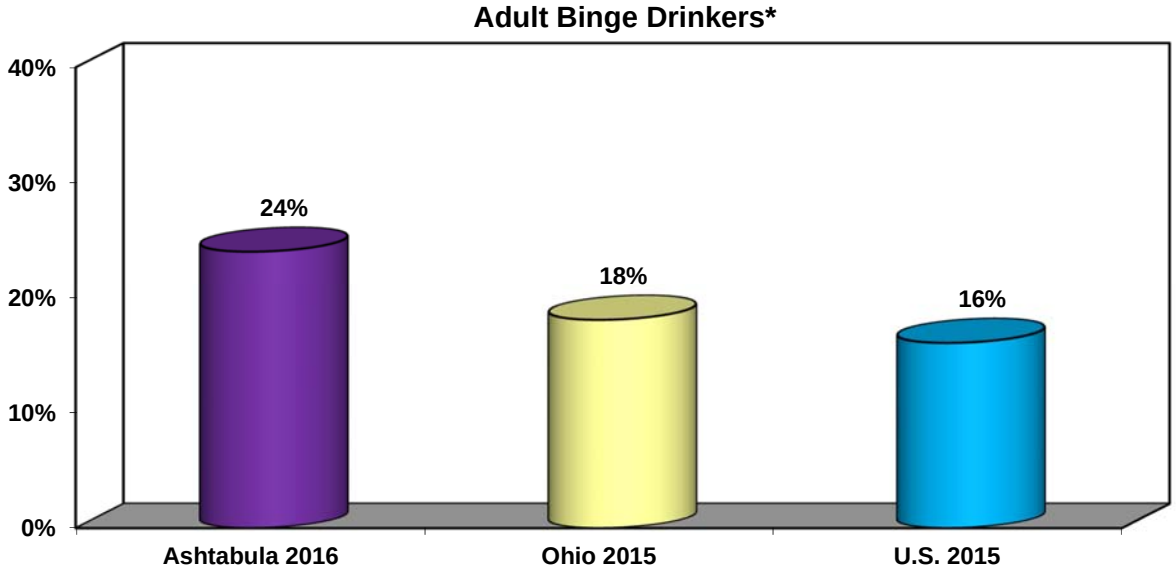


The following graphs show the percentage of Ashtabula County drinkers who binge drank in the past month and a comparison of Ashtabula County binge drinkers with Ohio and U.S.



*Based on adults who have drunk alcohol in the past month. Binge drinking is defined as having five or more drinks (for males) or four or more drinks (for females) on an occasion. Adults must have reported drinking five or more drinks (for males) or four or more drinks (for females) on an occasion at least once in the previous month.

25% of Ashtabula County current drinkers reported driving after drinking any alcoholic beverages.



(Source: 2015 BRFSS and 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.

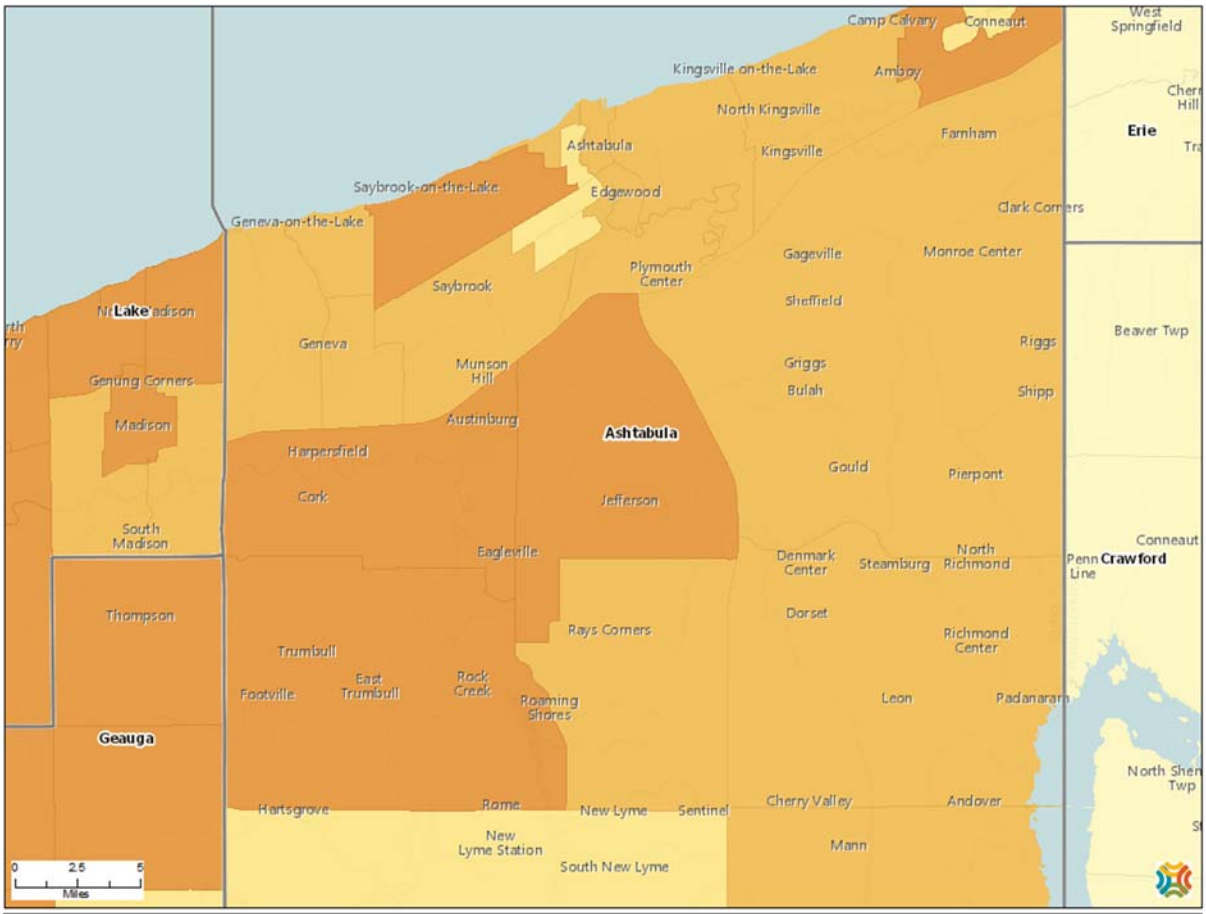
The following table shows the cities of Ashtabula, Conneaut, and Geneva, Ashtabula County, and Ohio motor vehicle accident statistics. The table shows:

- 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	305,273
Alcohol-Related Total Crashes	25	8	3	126	12,205
Fatal Injury Crashes	0	0	1	15	1,046
Alcohol-Related Fatal Injury Crashes	0	0	1	8	310
Alcohol Impaired Drivers in Crashes	25	7	2	120	11,926
Injury Crashes	80	36	17	539	77,348
Alcohol-Related Injury Crashes	6	4	1	45	5,060
Property Damage Only	352	141	22	1,566	226,879
Alcohol-Related Property Damage Only	19	4	1	73	6,835
Deaths	0	0	1	16	1,125
Alcohol-Related Deaths	0	0	1	8	340
Total Non-Fatal Injuries	111	53	18	809	112,085
Alcohol-Related Injuries	9	5	1	60	7,165

(Source: Ohio Department of Public Safety, Crash Reports, Updated 2/28/2017, Traffic Crash Facts)

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



Map Legend

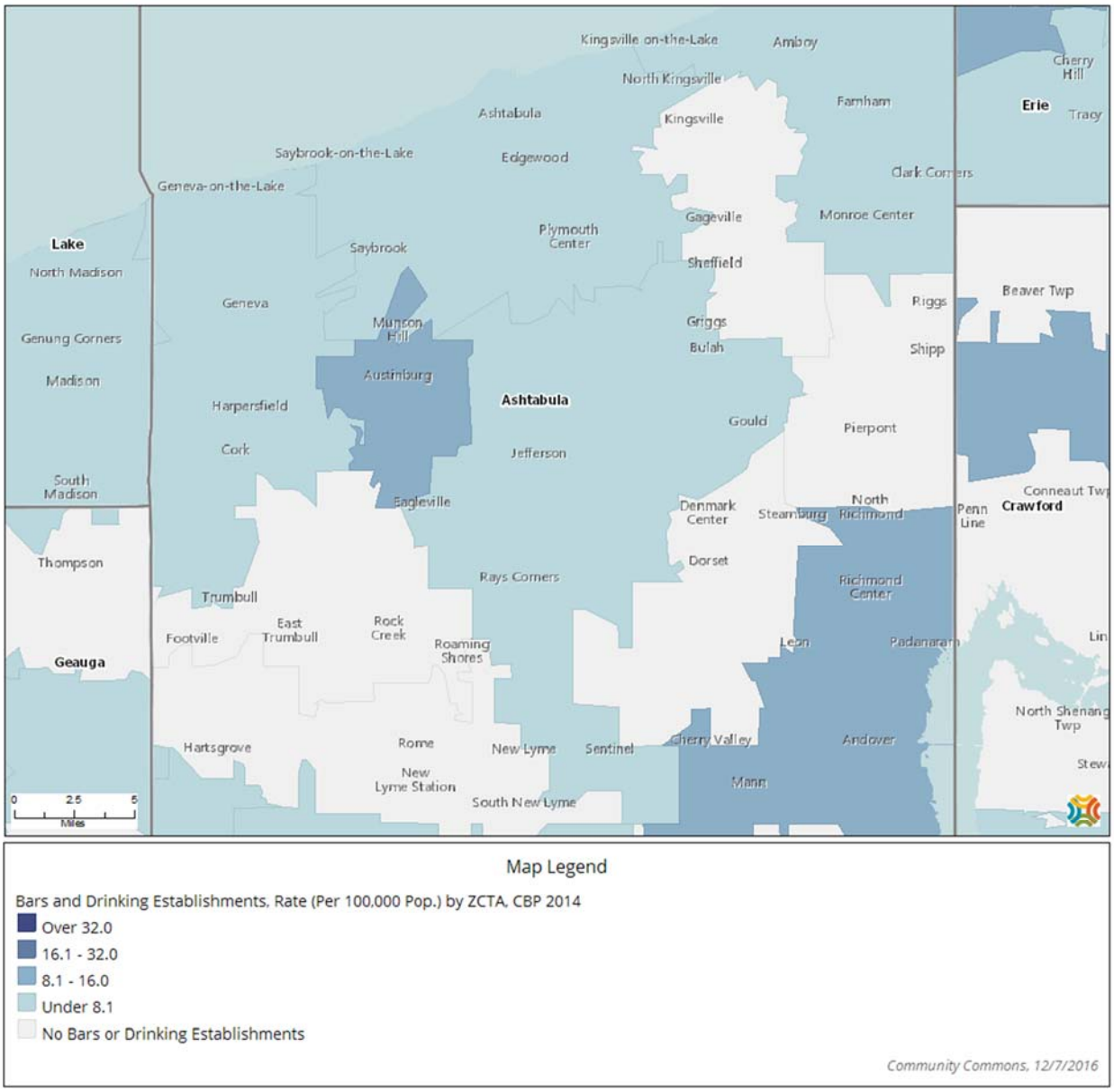
Alcoholic Beverage Expenditures, Percent of Food-At-Home Expenditures, National Rank by Tract, Nielsen 2014

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

Community Commons, 12/7/2016

(Source: Nielsen, Nielsen SiteReports: 2014, as compiled by Community Commons)

Bars and Drinking Establishments, Rate (Per 100,000 Pop.) by Zip Code Tabulation Area (ZCTA), County Business Patterns (CBP), 2014



(Source: US Census Bureau, County Business Patterns: 2014, as compiled by Community Commons)

Adult | DRUG USE

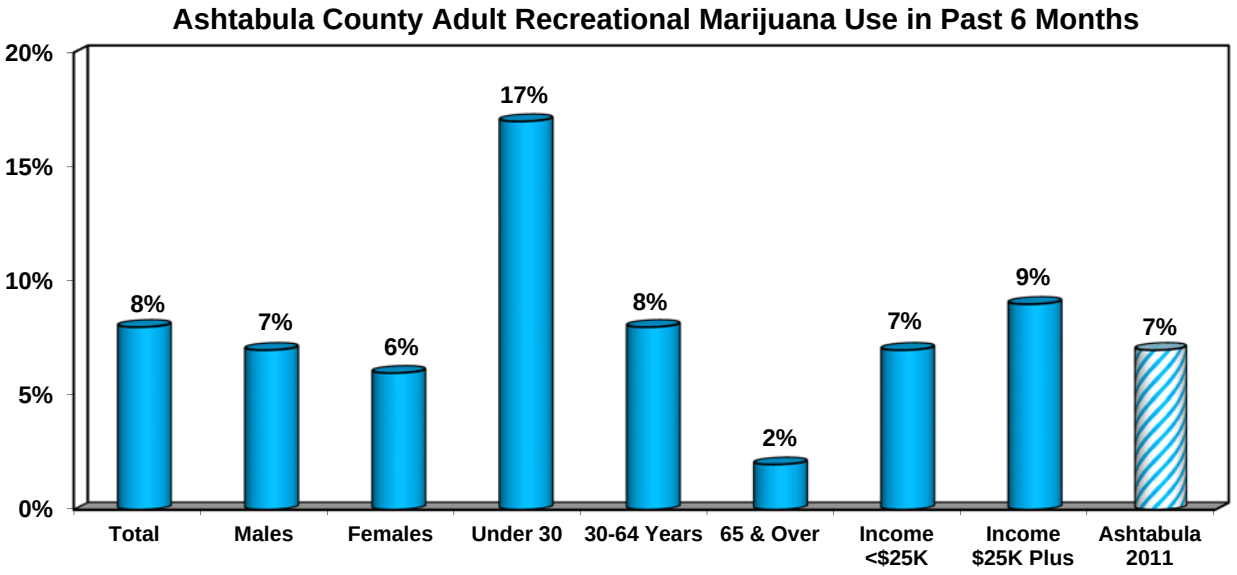
Key Findings

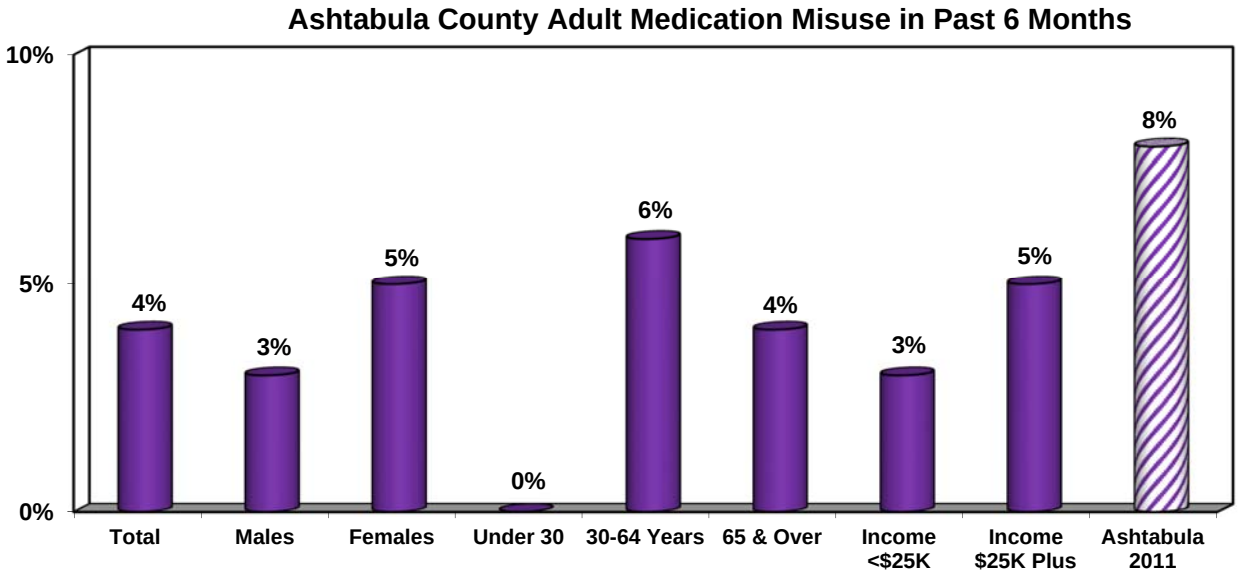
In 2016, 8% of Ashtabula County adults had used recreational marijuana during the past 6 months. 4% of adults had used medication not prescribed for them or took more than prescribed to feel good or high and/or more active or alert during the past 6 months.

Drug Use

- 8% of Ashtabula County adults had used recreational marijuana in the past 6 months, increasing to 17% of those under the age of 30.
- 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.
- 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%).
- 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.

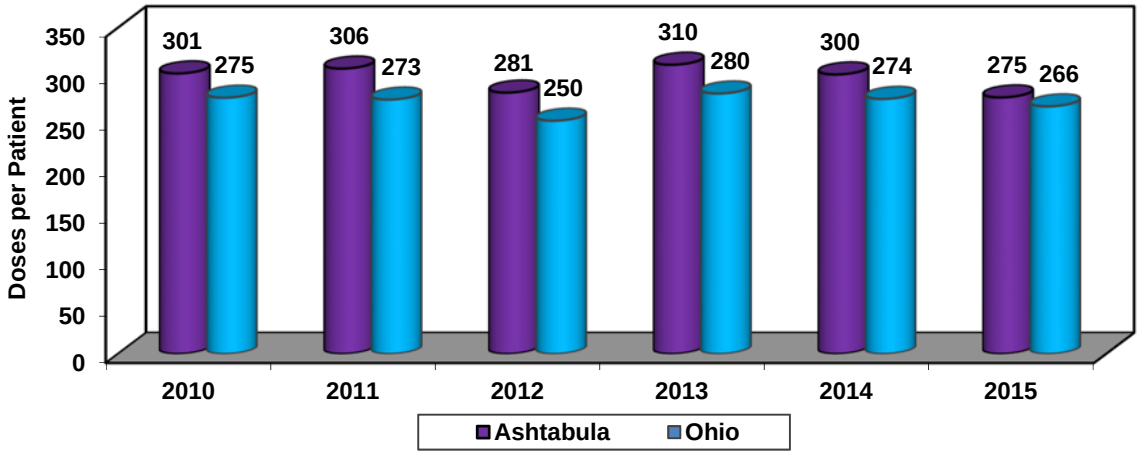
The following graphs are data from the 2016 Ashtabula County Health Assessment indicating adult recreational marijuana use in the past six months and medication misuse in the past six months. Examples of how to interpret the information include: 8% of all Ashtabula County adults used recreational marijuana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



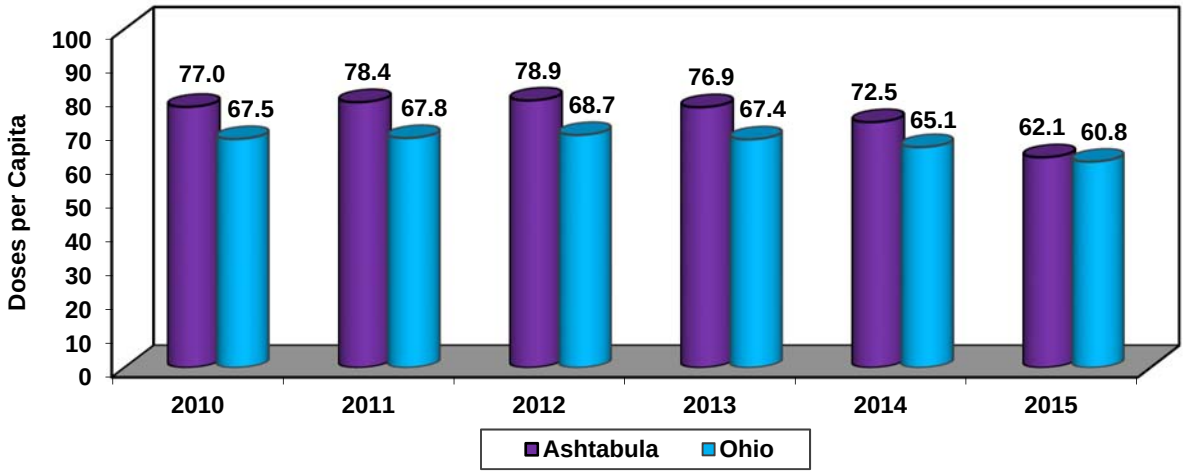


The following graphs are data from the Ohio Automated Prescription Reporting System indicating Ashtabula County and Ohio opioid doses per patient, as well as opioid doses per capita.

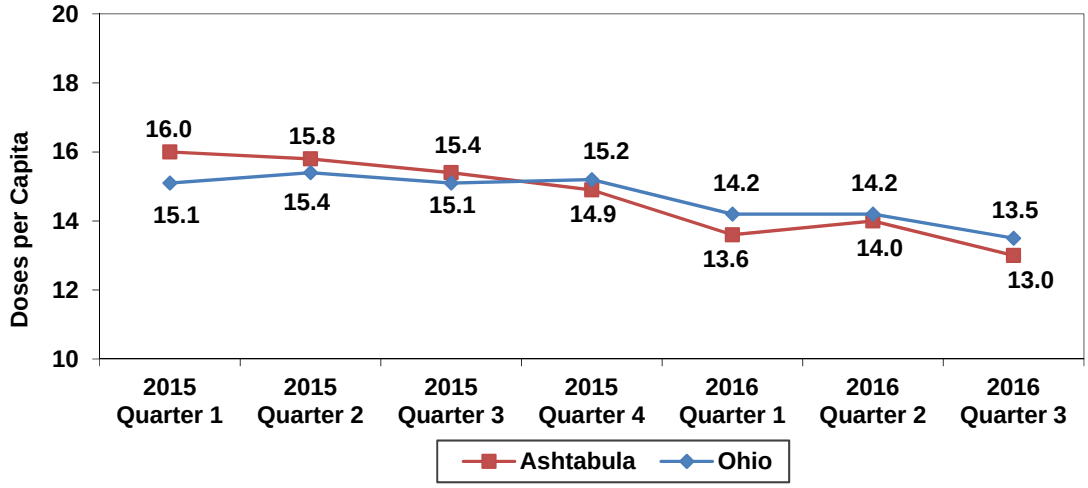
Ashtabula County and Ohio Number of Opioid Doses Per Patient, 2010-2015



Ashtabula County and Ohio Number of Opioid Doses Per Capita, 2010-2015



Ashtabula County and Ohio Number of Opioid Doses Per Capita, Quarterly from 2015 to 2016



(Source: Ohio Automated Rx Reporting System, Quarterly County Data, Accessed on July 7, 2016)

Opiod Addiction Facts and Figures

- Drug overdose is the leading cause of accidental death in the U.S., with 52,404 lethal drug overdoses in 2015. Opioid addiction is driving this epidemic, with 20,101 overdose deaths related to prescription pain relievers, and 12,990 overdose deaths related to heroin in 2015.
- In 2012, 259 million prescriptions were written for opioids, which is more than enough to give every American adult their own bottle of pills.
- Four in five new heroin users started out misusing prescription pain killers.
- Women are more likely to have chronic pain, be prescribed prescription pain relievers, be given higher doses, and use them for longer time periods than men.

(Source: National Institute on Drug Abuse, Abuse of Prescription (Rx) Drugs Affects Young Adults Most, February 2016))

Heroin

- Heroin is an opioid drug that is synthesized from morphine, a naturally occurring substance extracted from the seed pod of the Asian opium poppy plant.
- Heroin is a highly addictive opioid drug with a high risk of overdose and death for users.
- Heroin use has increased across the US among men and women, most age groups, and all income levels,
- Some of the greatest increases occurred in demographic groups with historically low rates of heroin use: women, the privately insured, and people with higher income.
- Heroin use more than doubled among young adults ages 18-25 in the past decade.
- More than 9 in 10 people who used heroin used at least one other drug.
- 45% of people who used heroin were also addicted to prescription opioid painkillers.
- People who are addicted to:
  - Alcohol are 2 times more likely to become addicted to heroin.
  - Marijuana are 3 times more likely to become addicted to heroin.
  - Cocaine are 15 times more likely to become addicted to heroin.
  - Prescription opioid painkillers are 40 times more likely to become addicted to heroin.
- Chronic users may develop collapsed veins, infection of the heart lining and valves, abscesses, constipation and gastrointestinal cramping, and liver or kidney disease.

(Source: CDC, Vital Signs, Today's Heroin Epidemic, July 7, 2015)

Unduplicated Admissions for Opiate Abuse and Dependence in 2014

- In Ashtabula County, approximately 35% of client admissions were opiate-related.
- Over one-third (37%) of client admissions throughout Ohio were associated with a primary diagnosis of opiate abuse or dependence.

Legend

ADAMHS Board

Opiate Addicts (%)

13.1% - 71.6%

< 25 cases

Map Information:

This map represents the percentage of clients in treatment with an opiate-related diagnosis (heroin and prescription opioid). On average, 37.0 percent of client admissions statewide were associated with a primary diagnosis of opiate abuse or dependence in SFY 2014. The highest concentrations of opiate admissions were in Marion (71.6%), Scioto (68.8%) and Vinton (68.5%) counties. The counties with the lowest concentrations of opiate-related admissions were Tuscarawas (13.1%), Coshocton (14.7%) and Henry (15.8%). Percentages are not displayed for counties with fewer than 25 admissions.

Note: Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Boards have black borders, and counties have white borders. Borders are black in cases where ADAMHS boards and counties have the same borders.

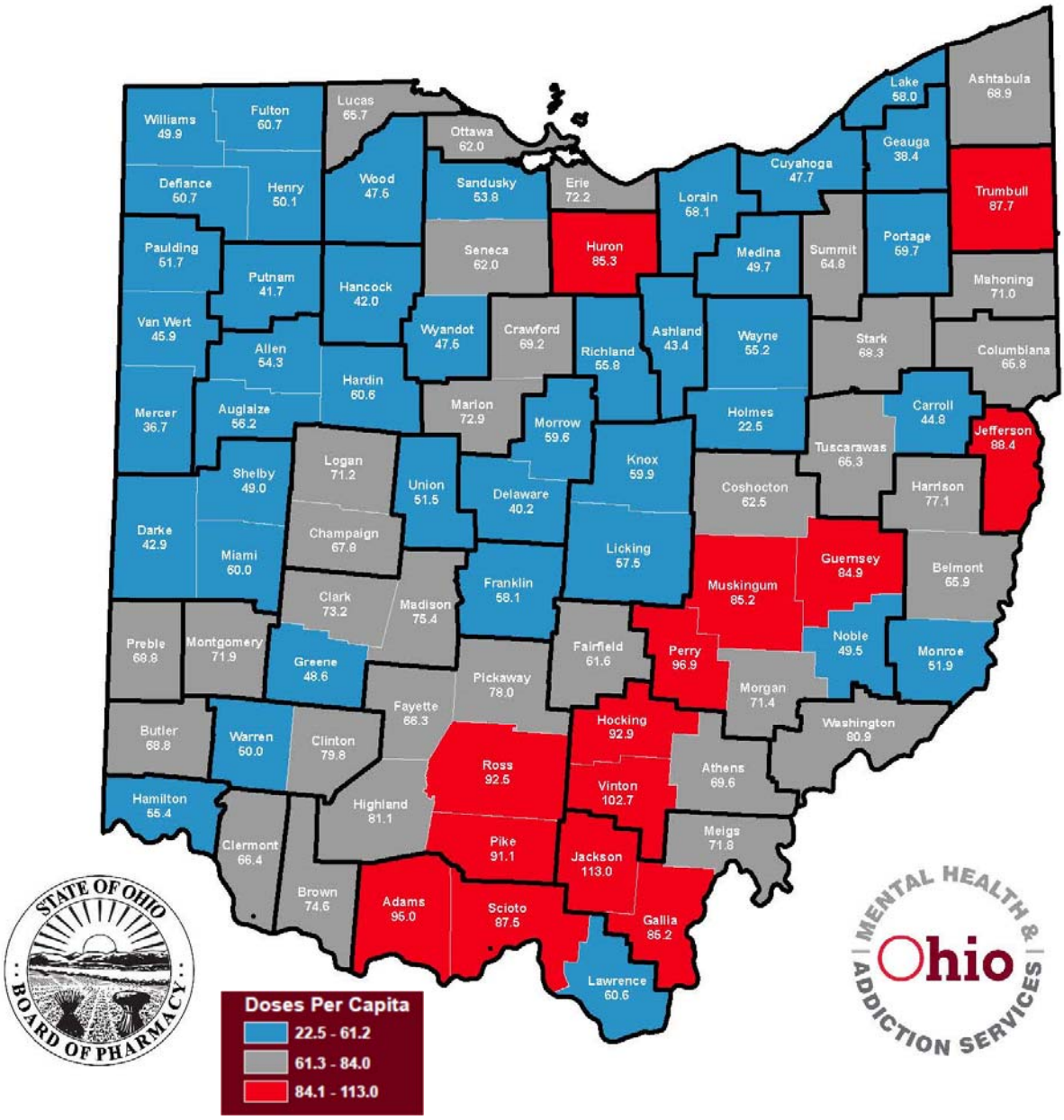
Data Source:
Data from Multi Agency Community Information Systems (MACSIS)
Map produced November 2015

(Source: Ohio Mental Health and Addiction Services, Doses Per Capita September 2014)

Prescription Doses Per Capita

- In 2014, the statewide average per capita dosage rate was 61.2 doses per person.
- The average per capita dosage rate was 68.9 doses per person in Ashtabula County in 2014.

Prescription Opioid Doses Per Capita
Ohio's Automated Rx Reporting System (OARRS) - 2014



(Source: Ohio Mental Health and Addiction Services, Doses Per Capita June 2015)

Felony Cases and Drug Arrests January – June 2016

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

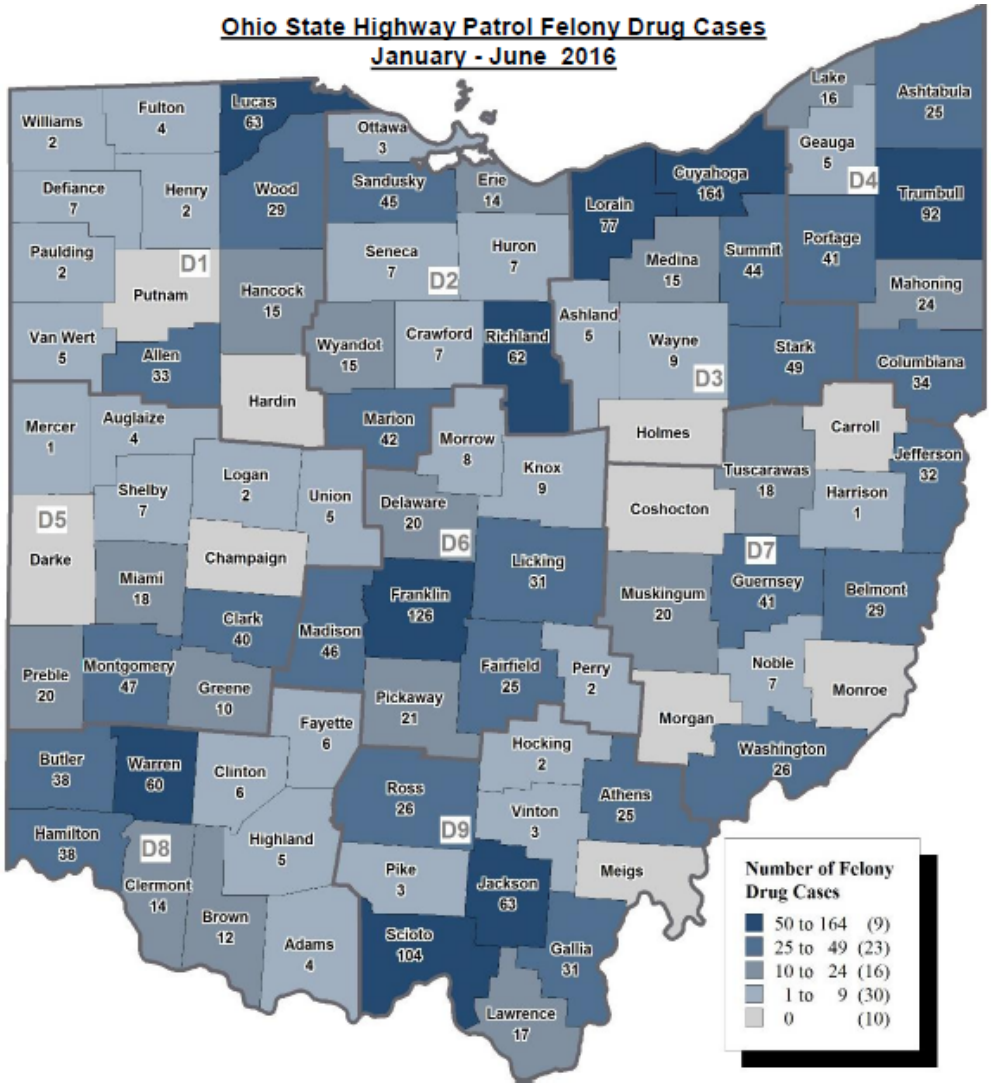
- OSHP Troopers made 7,493 total drug arrests during the first 6 months of 2016 – a 20% increase compared to 2015 and a 35% increase compared to the previous 3-year average (2013-2015).

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

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

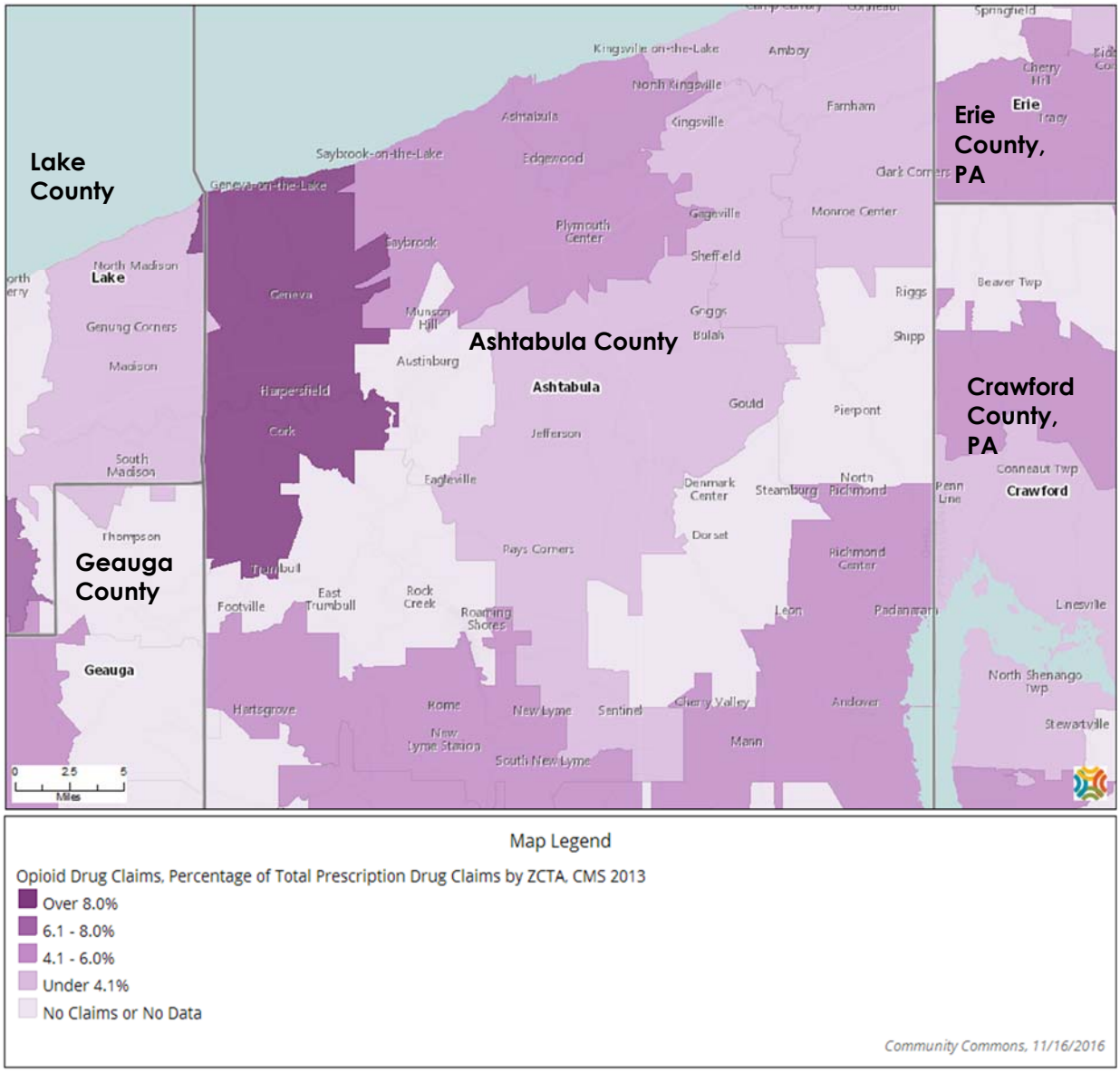
OSHP drug arrests (Jan. 1 - Jun. 30, 2016)	
Total drug arrests	7,493
Felony drug cases	2,037

OSHP drug seizures in grams (Jan. 1 - Jun. 30, 2016)	
Marijuana	885,221
Cocaine	38,804
Crack	1,266
Heroin	53,514
OSHP scheduled pill seizures (Jan. 1 - Jun. 30, 2016)	
Opiate	19,660
Stimulant	1,749
Depressant	11,059
Hallucinogen	316



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

Opioid Drug Claims, Percentage of Total Drug Claims by Zip Code Tabulation Area, Centers for Medicaid and Medicare (CMS), 2013



(Source: Centers for Medicare and Medicaid Services: 2013, as compiled by Community Commons)

Adult | 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. 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. The health assessment determined that 4% of women had survived a heart attack and 2% had survived a stroke at some time in their life. More than one-fourth (29%) had high blood pressure, 32% had high blood cholesterol, 46% were obese, and 20% were identified as smokers, all known risk factors for cardiovascular diseases.

Ashtabula County Female
Leading Causes of Death, 2013– 2015

1. Heart Diseases (25% of all deaths)
2. Cancers (18%)
3. Chronic Lower Respiratory Disease (8%)
4. Stroke (5%)
5. Diabetes (5%)

(Source: CDC Wonder, 2013-2015)

Ohio Female
Leading Causes of Death, 2013 – 2015

1. Heart Diseases (23% of all deaths)
2. Cancers (21%)
3. Chronic Lower Respiratory Diseases (6%)
4. Stroke (6%)
5. Alzheimer's disease (5%)

(Source: CDC Wonder, 2013-2015)

Women's Health Screenings

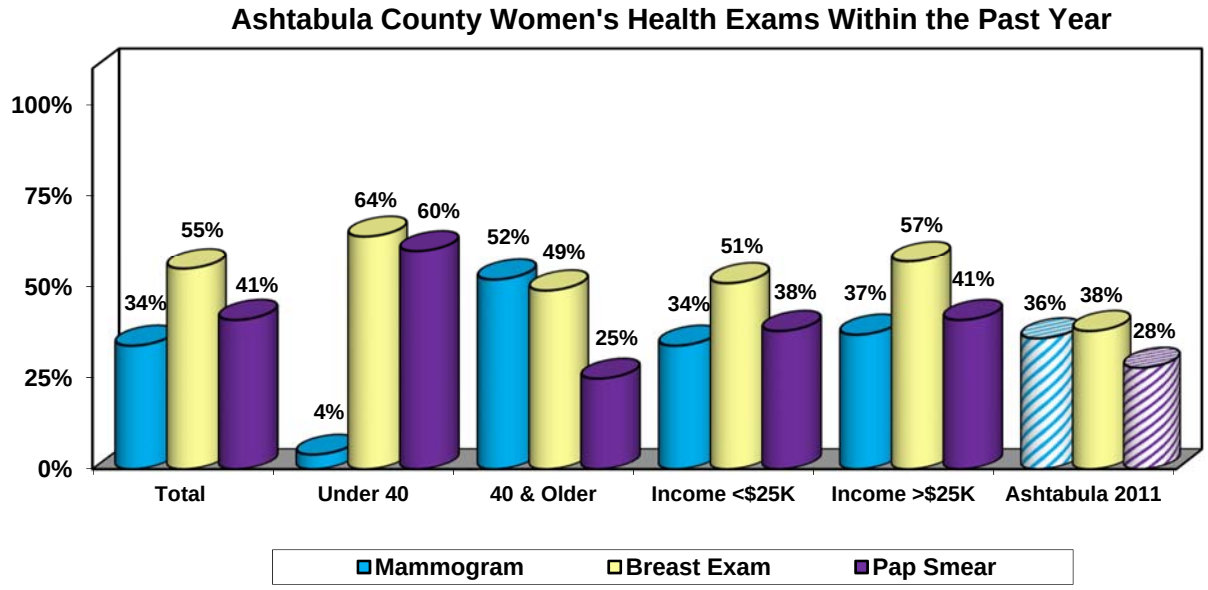
- In 2016, 64% of women had a mammogram at some time, and more than one-third (34%) had this screening in the past year.
- More than half (52%) of women ages 40 and over had a mammogram in the past year, and 70% had one in the past two years. The 2014 BRFSS reported that 72% of women 40 and over in Ohio and 73% 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.
- This assessment identified that 87% of Ashtabula County women have had a Pap smear, and 41% reported having had the exam in the past year. 63% of women had a Pap smear in the past three years. The 2014 BRFSS indicated that 74% of Ohio and 75% of U.S. women had a Pap smear in the past three years.
- 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%). 12% indicated they did not have a usual source of services for female health concerns.

Women's Health Concerns

- From 2013-2015, major cardiovascular diseases (heart disease and stroke) accounted for 30% of all female deaths in Ashtabula County *(Source: CDC Wonder)*.
- In 2016, the health assessment determined that 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, and diabetes. Among women of Ashtabula County, the 2016 health assessment has identified that:
  - 68% were overweight or obese (61% Ohio, 58% U.S., 2015 BRFSS)
  - 32% were diagnosed with high blood cholesterol (36% Ohio, 35% U.S.,2015 BRFSS)
  - 29% were diagnosed with high blood pressure (31% Ohio, 30% U.S., 2015 BRFSS)
  - 20% were current smokers (20% Ohio, 15% U.S., 2015 BRFSS)
  - 11% had been diagnosed with diabetes (11% Ohio, 10% U.S., 2015 BRFSS)

The following graph shows the percentage of Ashtabula County female adults that 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.

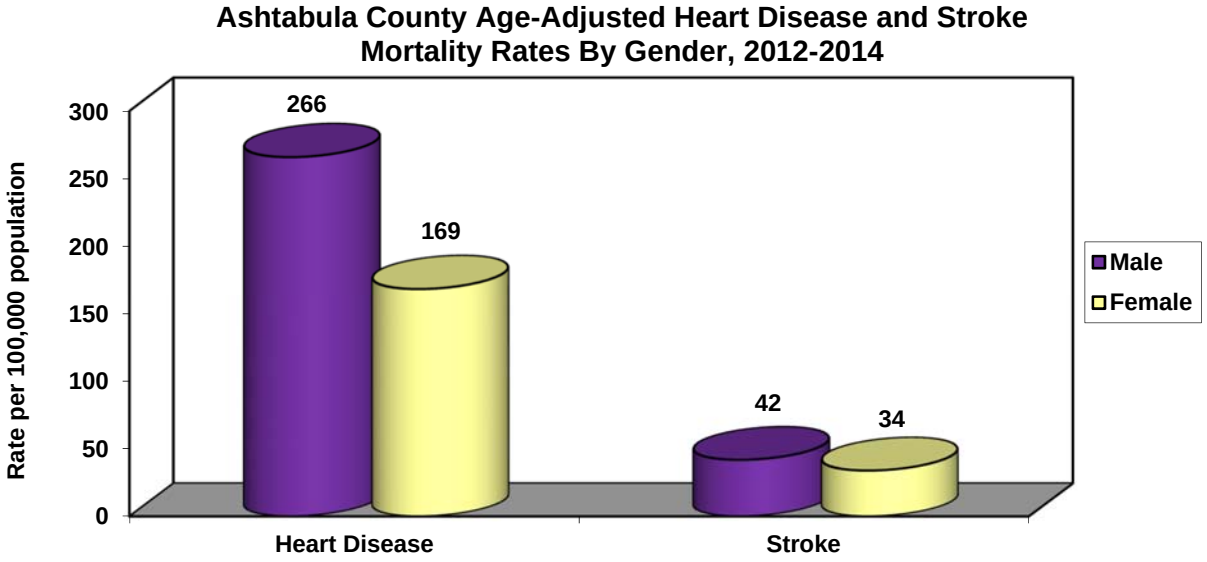


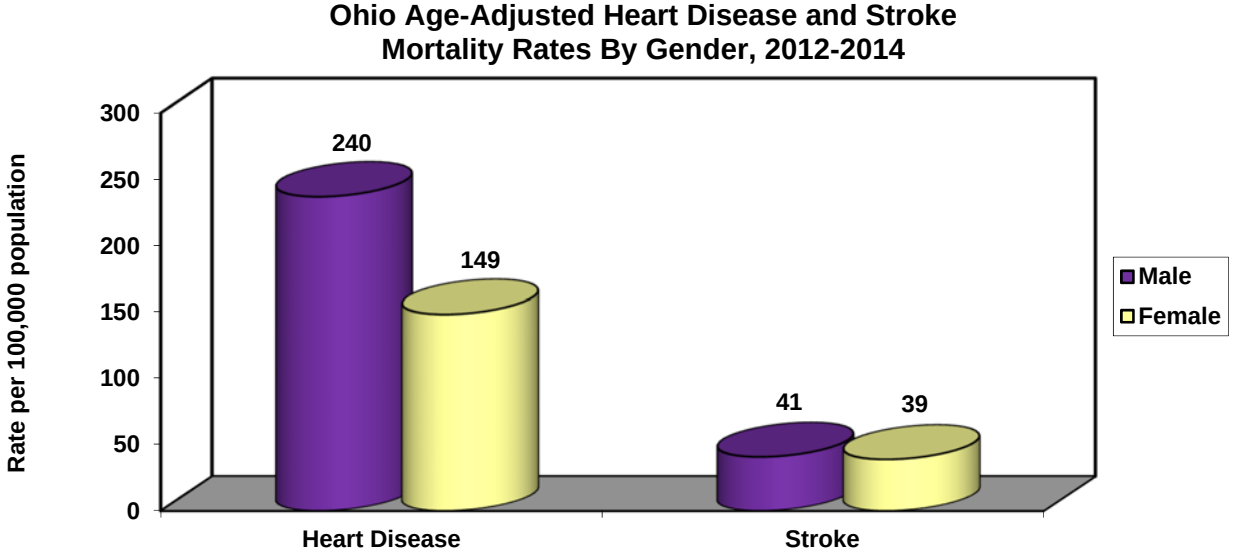
Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Had a mammogram in the past two years (age 40 & over)	69%	70%	72%*	73%*
Had a Pap smear in the past 3 years	N/A	63%	74%*	75%*

N/A- Not available
**2014 BRFSS Data*

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

- From 2012-2014, 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 greater than the Ohio female rate from 2012 to 2014.



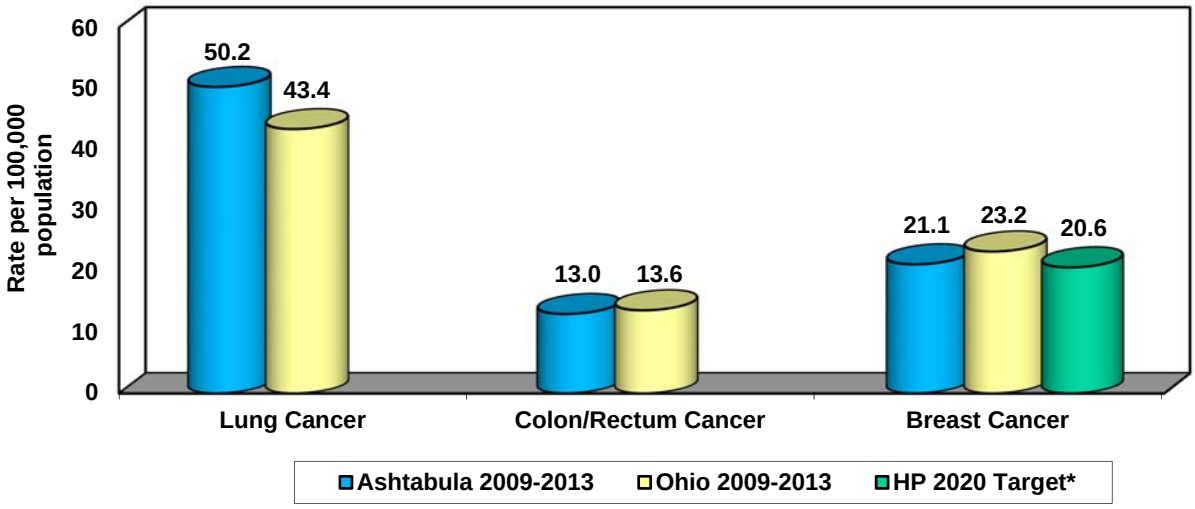


(Source: Health Indicators Warehouse, 2012-2014)

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

- From 2009-2013, the Ashtabula County age-adjusted mortality rate for female lung cancer was greater than the Ohio rate, but the colon/rectum and breast cancer mortality rates were less than the Ohio rate.

Ashtabula County Female Age-Adjusted Cancer Mortality Rates



(Source: Cancer in Ohio 2016 and Healthy People 2020)

What Can I Do to Reduce My Risk of Breast Cancer?

Many factors can influence your breast cancer risk, and most women who develop breast cancer do not have any known risk factors or a history of the disease in their families. However, you can help lower your risk of breast cancer in the following ways:

- Keep a healthy weight.
- Exercise regularly (at least four hours a week).
- Get enough sleep.
- Don't drink alcohol, or limit alcohol drinks to no more than one per day.
- Avoid exposures to chemicals that can cause cancer (carcinogens).
- Try to reduce your exposure to radiation during medical tests like mammograms, X-rays, CT scans, and PET scans.
- If you are taking, or have been told to take, hormone replacement therapy or oral contraceptives (birth control pills), ask your doctor about the risks and find out if it is right for you.
- Breastfeed your babies, if possible.

If you have a family history of breast cancer or inherited changes in your BRCA1 and BRCA2 genes, you may have a higher breast cancer risk. Talk to your doctor about these ways of reducing your risk;

- Anti-estrogens or other medicines that block or decrease estrogen in your body.
- Surgery to reduce your risk of breast cancer—
  - Prophylactic (preventive) mastectomy (removal of breast tissue).
  - Prophylactic (preventive) salpingo-oophorectomy (removal of the ovaries and fallopian tubes).

(Sources: Centers for Disease Control and Prevention, What Can I Do to Reduce My Risk of Breast Cancer? Updated April 14, 2016)

Binge Drinking: A Serious, Under Recognized Problem among Women and Girls

- Binge drinking for women is defined as consuming 4 or more alcohol drinks (beer, wine, or liquor) on an occasion.
- Binge drinking is a dangerous behavior but is not widely recognized as a women's health problem.
- Drinking too much results in about 23,000 deaths in women and girls each year.
- Binge drinking increases the chances of breast cancer, heart disease, sexually transmitted diseases, unintended pregnancy, and many other health problems.
- If women binge drink while pregnant, they risk exposing their developing baby to high levels of alcohol, increasing the chances the baby will be harmed by the mother's alcohol use.
- Drinking during pregnancy can lead to sudden infant death syndrome and fetal alcohol spectrum disorders.
- About 1 in 8 women aged 18 years and older and 1 in 5 high school girls binge drink. Women who binge drink do so frequently – about 3 times a month – and have about 6 drinks per binge.

(Source: Centers for Disease Control and Prevention, Binge Drinking, October 2015)

Adult | MEN'S HEALTH

Key Findings

In 2016, 16% of Ashtabula County males had a digital rectal exam. Major cardiovascular diseases (heart disease and stroke) accounted for 30% and cancers accounted for 23% of all male deaths in Ashtabula County from 2013-2015 (Source: CDC Wonder). Nearly one-third (31%) of Ashtabula County males performed a self-testicular exam in the past year. The health assessment determined that 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, 2013 – 2015

1. Heart Diseases (27% of all deaths)
2. Cancers (23%)
3. Accidents, Unintentional Injuries (6%)
4. Chronic Lower Respiratory Diseases (6%)
5. Stroke (3%)

(Source: CDC Wonder, 2013-2015)

Ohio Male
Leading Causes of Death, 2013 – 2015

1. Heart Diseases (25% of all deaths)
2. Cancers (23%)
3. Accidents, Unintentional Injuries (7%)
4. Chronic Lower Respiratory Diseases (6%)
5. Stroke (4%)

(Source: CDC Wonder, 2013-2015)

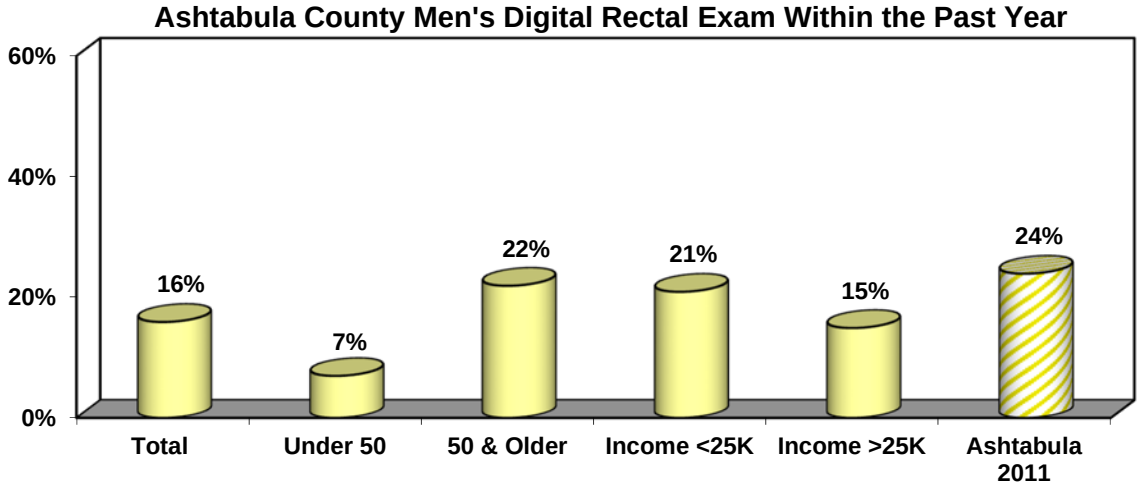
Men's Health Screenings and Concerns

- 54% of men had a digital rectal exam in their lifetime, and 16% had one in the past year.
- From 2013-2015, major cardiovascular diseases (heart disease and stroke) accounted for 30% of all male deaths in Ashtabula County *(Source: CDC Wonder).*
- 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.
- In 2016, the health assessment determined that 8% of men had survived a heart attack and 6% had survived a stroke at some time in their life.

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

- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, and diabetes. Among men of Ashtabula County, the 2016 health assessment has identified that:
  - 79% were overweight or obese (71% Ohio, 71% U.S.,2015 BRFSS)
  - 46% were diagnosed with high blood pressure (38% Ohio, 34% U.S., 2015 BRFSS)
  - 45% were diagnosed with high blood cholesterol (38% Ohio, 38% U.S., 2015 BRFSS)
  - 23% were current smokers (23% Ohio, 19% U.S., 2015 BRFSS)
  - 15% had been diagnosed with diabetes (11% Ohio, 11% U.S., 2015 BRFSS)
- From 2013-2015, the leading cancer deaths for Ashtabula County males were lung, colon/rectum and prostate cancers. Statistics from the same period for Ohio males show lung, prostate, colon and rectum cancers as the leading cancer deaths *(Source: CDC Wonder).*

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.



Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Had a digital rectal exam in the past year	24%	16%	N/A	N/A

N/A – Not available

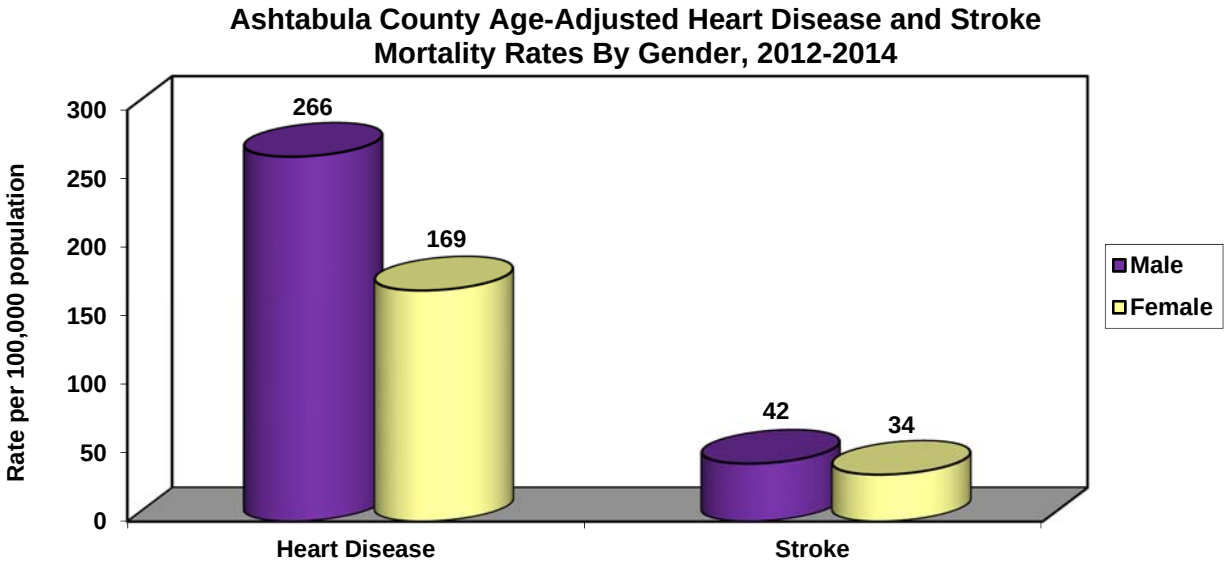
Men's Health Data

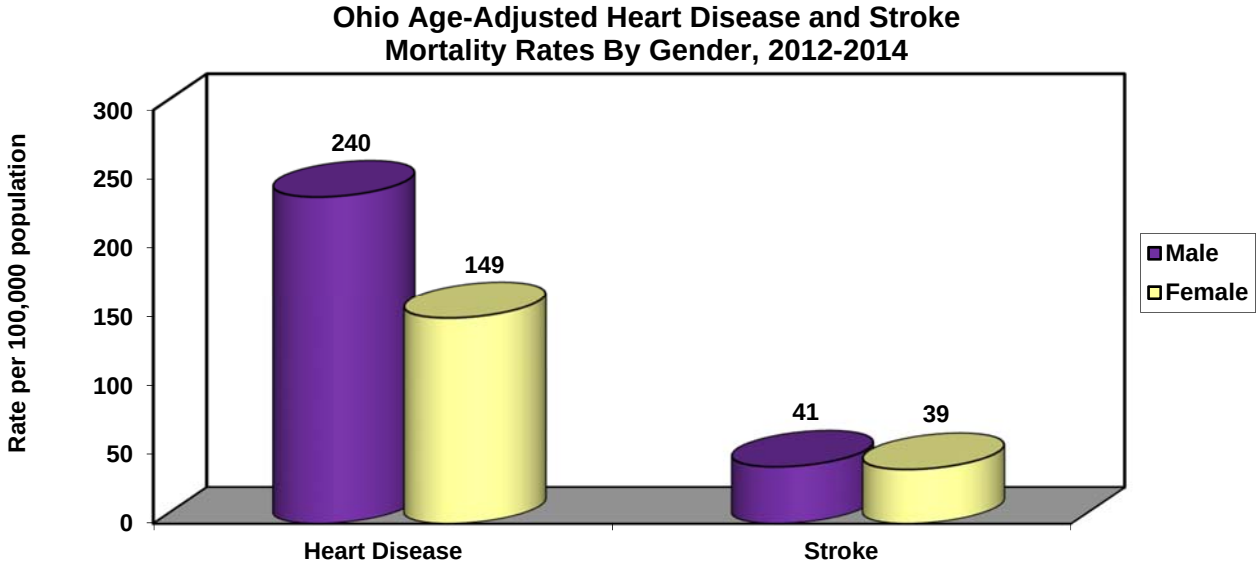
- Approximately 12% of adult males ages 18 years or older reported fair or poor health in 2014.
- There are 17% of adult males in the U.S. currently smoke cigarettes, according to the 2015 National Health Interview Survey.
- Of the adult males in the U.S. in 2015, 30% had 5 or more drinks in 1 day at least once in the past year.
- Only 52% of adult males in the U.S. met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity, as reported by the 2015 National Health Interview Survey.
- From 2011-2014, 35% of men 20 years and over were considered obese.
- The 2015 National Health Interview Survey reported there were 12% of males under the age of 65 without health care coverage.
- The leading causes of death for males in the United States are heart disease, cancer and accidents (unintentional injuries).

(Source: CDC, National Center for Health Statistics, Fast Stats, Men's Health, updated October 6, 2016)

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 2012-2014, the Ashtabula County and Ohio male age-adjusted mortality rates were higher than the female rates for heart disease.
- The Ashtabula County male age-adjusted heart disease mortality rate was higher than the Ohio male rate.

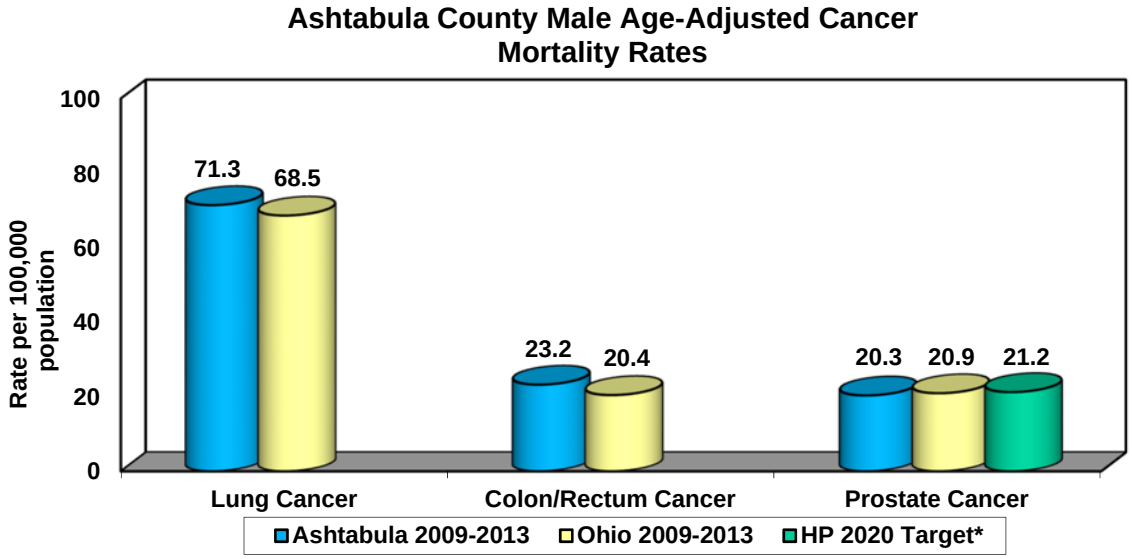




(Source: Health Indicators Warehouse, 2012-2014)

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

- From 2009-2013, the Ashtabula County age-adjusted mortality rate for male lung cancer and colon/rectum cancer were higher than the Ohio rate.
- The age-adjusted prostate cancer mortality rate in Ashtabula County for 2009-2013 was lower than the Ohio rate and the Healthy People 2020 objective.



**Note: Healthy People 2020 target rates are not gender specific.*
(Source: Cancer in Ohio 2016 and Healthy People 2020)

Heart Health and Stroke Facts for Men

- Heart disease is the leading cause of death for men in the United States, killing 321,000 men in 2013—that's 1 in every 4 male deaths.
- Heart disease is the **leading cause** of death for men of most racial/ethnic groups in the United States, including African Americans, American Indians or Alaska Natives, Hispanics, and whites. For Asian American or Pacific Islander men, heart disease is second only to cancer.
- About 8.5% of all white men, 7.9% of black men, and 6.3% of Mexican American men have coronary heart disease.
- Half of the men who die suddenly of coronary heart disease have **no previous symptoms**. Even if you have no symptoms, you may still be at risk for heart disease.
- Between 70% and 89% of sudden cardiac events occur in men
- High blood pressure, high LDL cholesterol, and smoking are key risk factors for heart disease. About half of Americans (49%) have at least one of these three risk factors. Several other medical conditions and lifestyle choices can also put people at higher risk for heart disease, including:
  - Diabetes
  - Physical inactivity
  - Excessive alcohol use
  - Poor diet
  - Overweight and obesity

(Source: CDC, Men and Heart Disease Fact Sheet, updated June 16, 2016)

Cancer and Men

- Every year, more than 300,000 men in America lose their lives to cancer.
- The most common kinds of cancer among men in the U.S. are skin cancer, prostate cancer, lung cancer, and colorectal cancer.
- Skin cancer is the most common cancer in the United States. Most cases of melanoma, the deadliest kind of skin cancer, are caused by exposure to ultraviolet (UV) light from the sun and tanning devices.
- More men in the U.S. die from lung cancer than any other type of cancer, and cigarette smoking accounts for 90% of lung cancer deaths.
- Smoking increases the risk of developing the following types of cancer: esophagus, pancreas, pharynx, larynx, lip, oral cavity, kidney, bladder, stomach, colorectal, and acute myeloid leukemia.
- In men, the following cancers are associated with being overweight: colorectal cancer, esophageal adenocarcinoma (a type of cancer of the tube that connects your throat to your stomach), and cancer of the kidney and pancreas. Adopting a lifestyle that includes healthy eating and regular physical activity can help lower the risk for several types of cancers.
- Prostate cancer is the most frequently diagnosed cancer in men aside from skin cancer. For unclear reasons, incidence rates are 63% higher in African Americans than in whites. It is the second most common cause of cancer deaths in men.

(Source: Centers for Disease Control and Prevention, Cancer Prevention and Control)

Adult | PREVENTIVE HEALTH DISASTER PREPAREDNESS

Key Findings

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

Preventive Health

- More than two-fifths (42%) of Ashtabula County adults had a flu vaccine in the past 12 months.
- 70% of Ashtabula County adults ages 65 and over had a flu vaccine in the past 12 months. The 2015 BRFSS reported that 58% of Ohio and 61% 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 2014 BRFSS reported that 70% of Ohio and 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%).

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Had a pneumonia vaccination (ages 65 and over)	N/A	69%	72%	73%
Had a flu vaccine in the past year (ages 65 and over)	62%	70%	58%	61%
Had a shingles or Zoster vaccination in lifetime	N/A	15%	21%*	22%*

N/A – Not available
** 2014 BRFSS Data*

Healthy People 2020: Immunization and Infectious Disease (IID)

Objective	Ashtabula County 2016	Ohio	U.S.	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%	72% (2015)	73% (2015)	90%
IID-14: Increase the percentage of adults who are vaccinated against zoster (shingles)	15%	21% (2014)	22% (2014)	30%

U.S. baseline is age-adjusted to the 2000 population standard
(Sources: Healthy People 2020 Objectives, 2015 BRFSS, 2014 BRFSS, 2016 Ashtabula County Health Assessment)

Preventive Health Screenings and Exams

- In the past year, 52% of Ashtabula County women ages 40 and over had a mammogram.
- In the past year, more than one-fifth (22%) of men ages 50 and over had a digital rectal exam.

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%

Ashtabula County Adult Health Screening Results

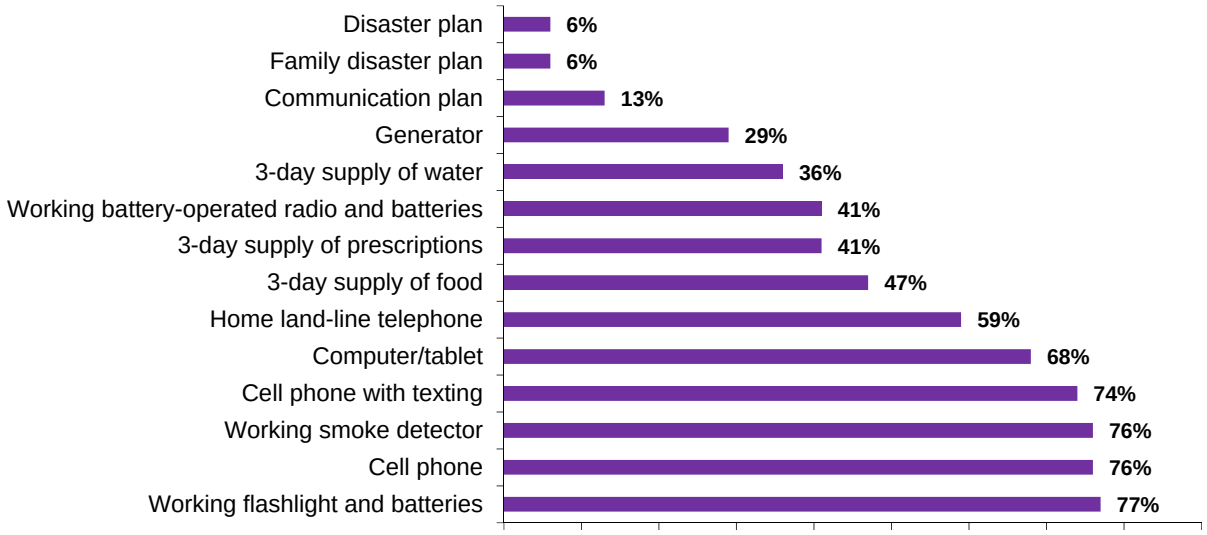
GENERAL SCREENING RESULTS	Total 2011	Total 2016
Diagnosed with High Blood Pressure	31%	37%
Diagnosed with High Blood Cholesterol	34%	37%
Diagnosed with Diabetes	10%	13%
Diagnosed with a Heart Attack	7%	5%
Diagnosed with a Stroke	6%	4%

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.

Disaster Preparedness Supplies in Ashtabula County Households



Basic Disaster Supplies Kit

A basic emergency supply kit could include the following recommended items:

- One gallon of water per person per day for at least three days, for drinking and sanitation.
- At least a three-day supply of non-perishable food.
- A working battery operated radio and working batteries.
- Flashlight and extra batteries.
- First aid kit.
- Whistle to signal for help.
- Dust mask to help filter contaminated air.
- Moist towelettes, garbage bags and plastic ties for personal sanitation.
- Cell phone with chargers, inverter or solar charger.
- Manual can opener for food.

(Source: Federal Emergency Management Agency (FEMA), Ready: Prepare. Basic Disaster Supplies Kit, Updated 6/10/2014)

Adult | SEXUAL BEHAVIOR AND PREGNANCY OUTCOMES

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).

HIV in the United States

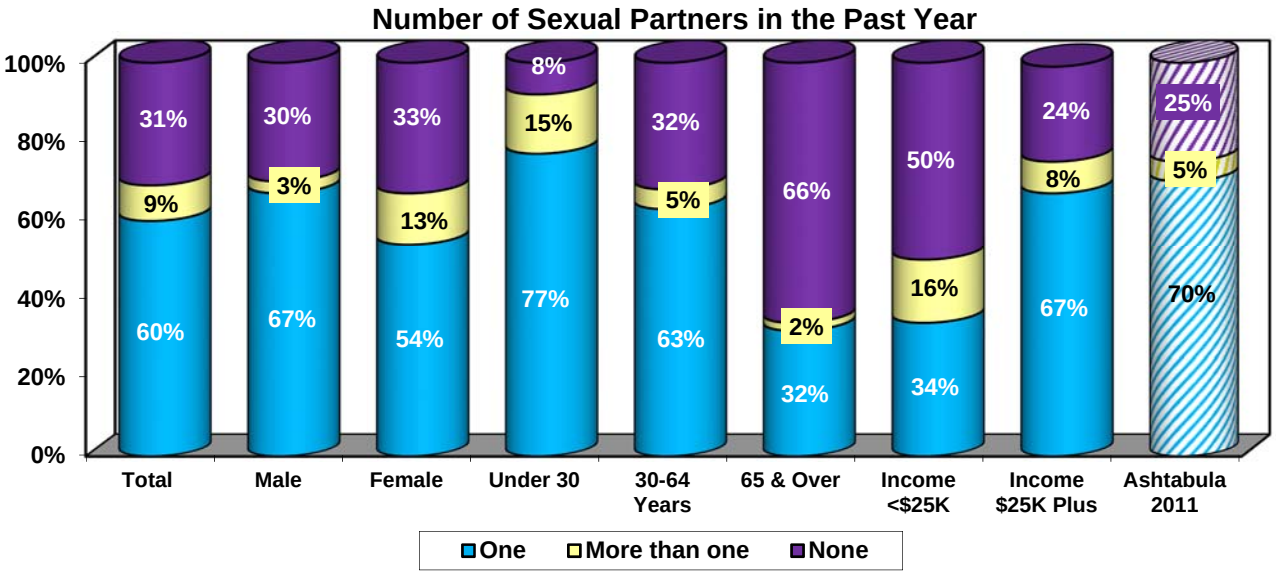
- More than 1.2 million people in the United States are living with HIV infection, and almost 1 in 8 are unaware of their infection.
- By race, African Americans face the most severe burden of HIV.
- The estimated incidence of HIV has remained stable overall in recent years, at about 50,000 new HIV infections per year.
- In 2014, an estimated 44,073 people were diagnosed with HIV infection in the United States. In that same year, an estimated 20,896 people were diagnosed with AIDS. Since the epidemic began, an estimated 1,210,835 people in the United States have been diagnosed with AIDS
- In 2013, there were an estimated 12,963 deaths (due to any cause) of people with diagnosed HIV infection ever classified as AIDS, and 6,955 deaths were attributed directly to HIV.

(Source: CDC, HIV in the United States: At a Glance, 7/11/2016)

Adult Sexual Behavior

- 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%).
- 11% of Ashtabula County adults were not using any method of birth control.
- 85% of adults did not use a condom the last time they had sexual intercourse, increasing to 92% of males.
- 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%).

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.

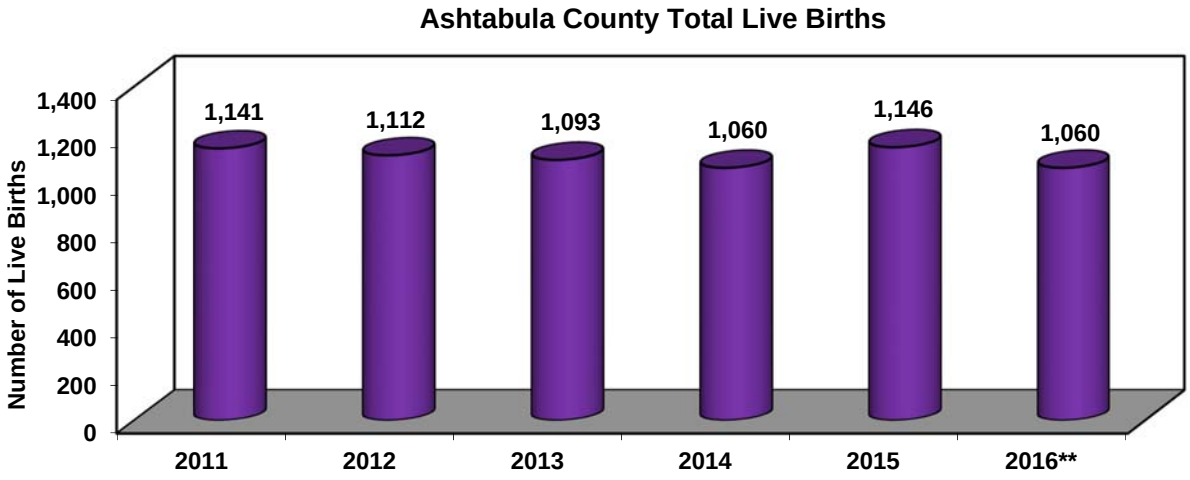


Respondents were asked: "During the past 12 months, with how many different people have you had sexual intercourse?"

Pregnancy Outcomes

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

- From 2011-2016, there was an average of 1,102 live births per year in Ashtabula County.

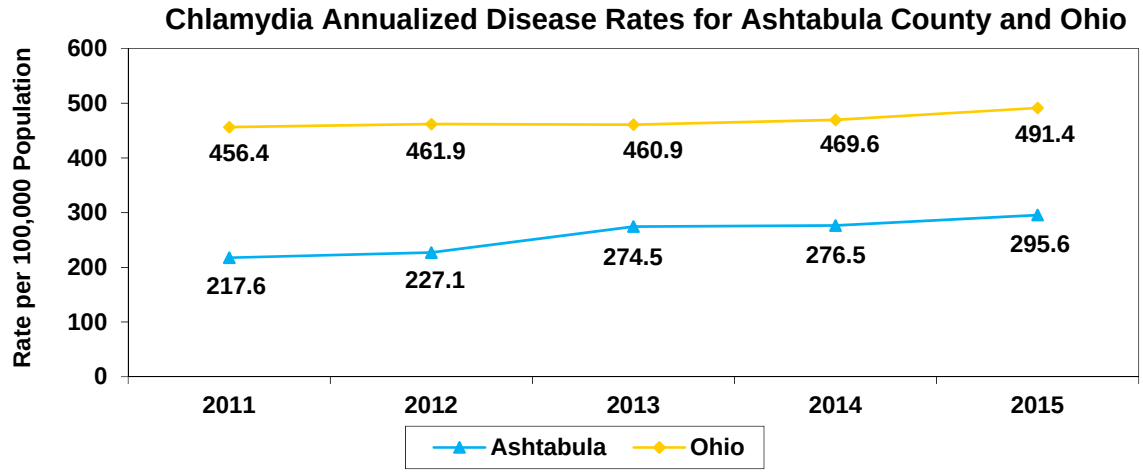


(Source for graphs: ODH Information Warehouse Updated 2/19/2017)

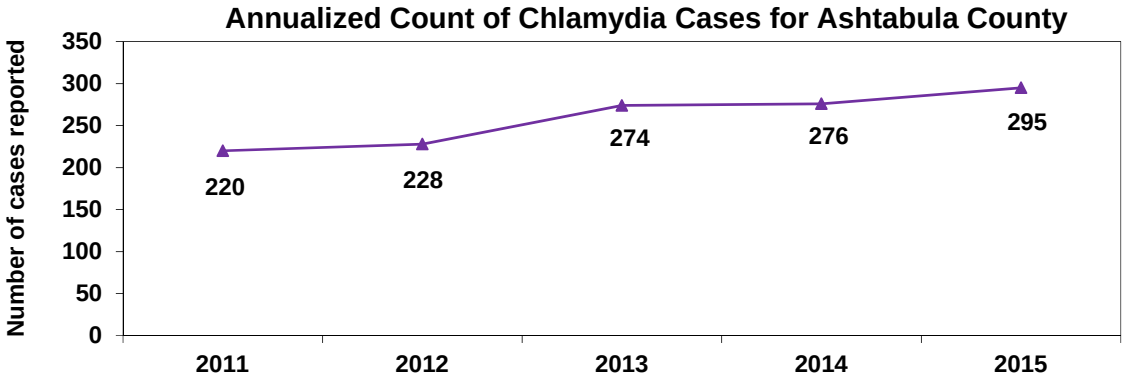
** - Indicates preliminary data that may change

The following graphs show Ashtabula County chlamydia disease rates per 100,000 population updated May 17, 2015 by the Ohio Department of Health. The graphs show:

- Ashtabula County chlamydia rates increased from 2011 to 2015. Ashtabula County rates remained below the Ohio rates.
- In 2015, the U.S. rate for new chlamydia cases was 479 per 100,000 population *(Source: CDC, STD Trends in the U.S., 2015).*



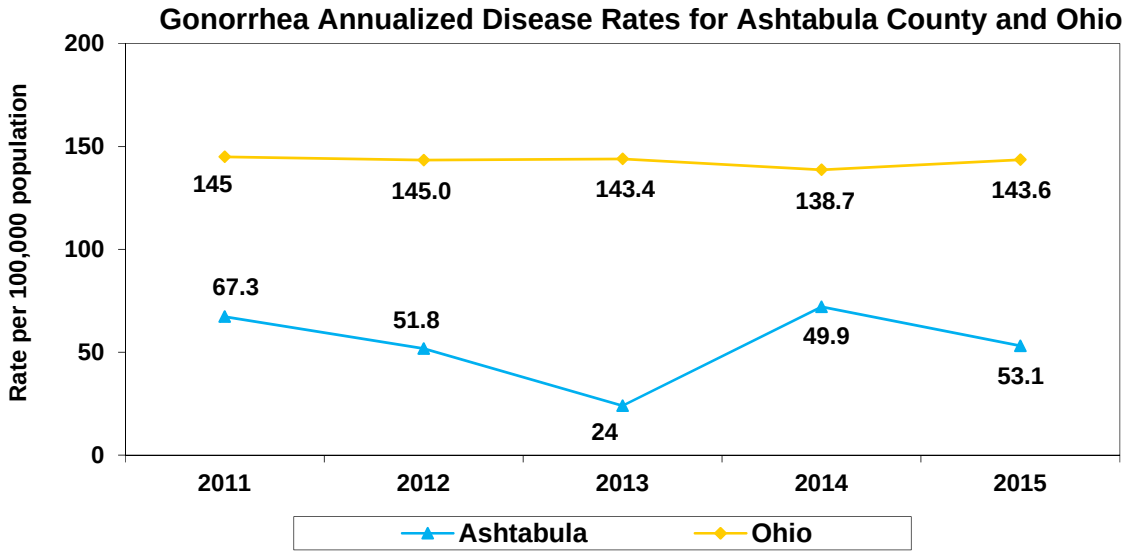
(Source for graph: ODH, STD Surveillance, data reported through 5-17-16)

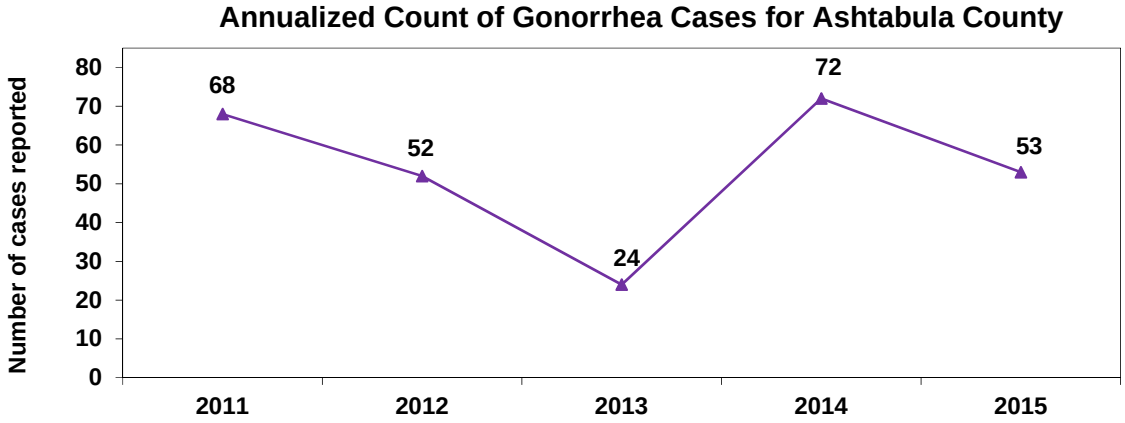


(Source for graphs: ODH, STD Surveillance, data reported through 5-15-16)

The following graphs show Ashtabula County gonorrhea disease rates per 100,000 population updated May 17, 2015 by the Ohio Department of Health. The graphs show:

- The Ashtabula County gonorrhea rate fluctuated from 2011 to 2015, and the gonorrhea rate remained below the Ohio rate.
- The Ohio gonorrhea rate fluctuated from 2011 to 2015.
- In 2015, the U.S. rate for new gonorrhea cases for the total population was 124 per 100,000 population *(Source: CDC, STD Trends in the U.S., 2015).*
- The Healthy People 2020 Objective for gonorrhea is 257 new female and 198 new male cases per 100,000 population.

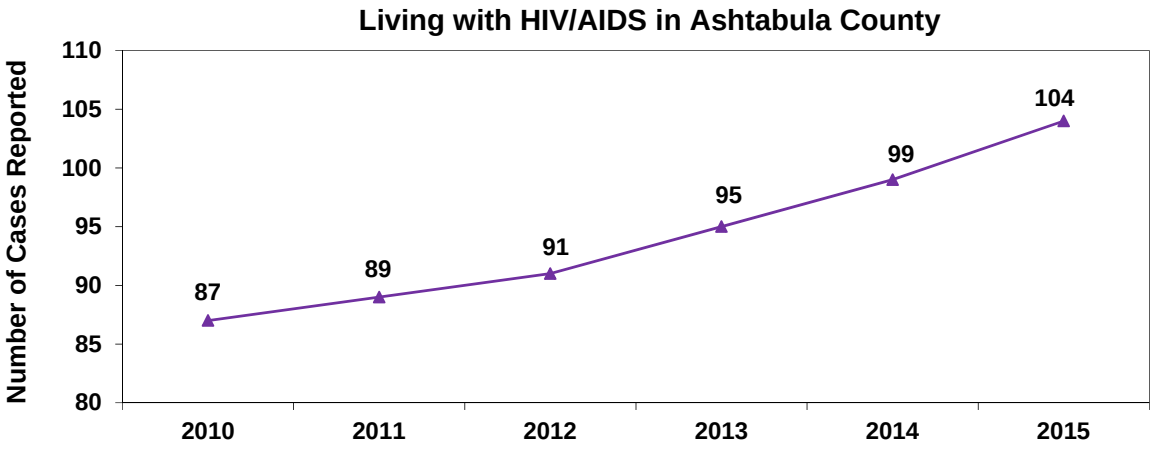




(Source for graphs: ODH, STD Surveillance, data reported through 5-15-2016)

The following graph shows Ashtabula County HIV/AIDS rates per 100,000 population updated December 31, 2015 by the Ohio Department of Health. The graph shows:

- From 2010-2015, the number of people living with HIV/AIDS in Ashtabula County has steadily increased.



(Source for graphs: ODH HIV/AIDS Surveillance Program, Updated 12-31-2015)

Adult | SOCIAL DETERMINANTS OF HEALTH

Key Findings

In 2016, 18% of Ashtabula County adults needed help meeting their general daily needs. 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 is $51,086 for Ohio and $55,775 for the U.S. *(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, 2015).*
- 19% of all Ashtabula County residents were living in poverty, and 28% of children and youth ages 0-17 were living in poverty *(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, 2015).*
- The unemployment rate for Ashtabula County was 7.4, as of February 2017 *(Source: Ohio Department of Job and Family Services, Office of Workforce Development, Bureau of Labor Market Information).*
- There were 45,907 housing units in Ashtabula County, of which, 15% were vacant *(Source: U.S. Census Bureau, American Community Survey, 2011-2015 – 5 year estimates).*
- 71% of occupied housing units in Ashtabula County were owner-occupied and 29% were renter-occupied *(Source: U.S. Census Bureau, American Community Survey, 2011-2015 – 5 year estimates).*
- Rent in Ashtabula County cost an average of $628 per month *(Source: U.S. Census Bureau, American Community Survey, 2011-2015 – 5 year estimates).*

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%).

- 18% of Ashtabula County adults had 3 or more ACEs in their lifetime, increasing to 34% of those with incomes less than $25,000.

Adverse Childhood Experiences (ACE)

- Childhood abuse, neglect, and exposure to other traumatic stressors which we term adverse childhood experiences (ACE) are common. The most common are separated or divorced parents, verbal, physical or sexual abuse, witness of domestic violence, and having a family member with depression or mental illness.
- The short and long-term outcomes of these childhood exposures include a multitude of health and social problems such as:
  - Depression
  - Early initiation of smoking
  - Risk for intimate partner violence
  - Fetal death
  - COPD
  - Alcoholism and alcohol abuse
  - Illicit drug use
  - Unintended pregnancies
  - Multiple sexual partners
  - Liver disease
  - Suicide attempts
  - STD's
- Given the high prevalence of ACEs, efforts are needed at the state and local level to reduce and prevent childhood maltreatment and associated family dysfunction in the US.
- Studies are finding that there is a repetitive does-response relationship between ACE and levels of exposure. A dose-response means that as the dose of the stressor increases, the intensity of the outcome will increase as well. As the number of ACEs increase so does the risk for the following:
  - Myocardial Infarction
  - Asthma
  - Diabetes
  - Mental Distress
  - Disability
  - Stroke
  - Unemployment
  - Lowered educational attainment

(Source: Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System Survey ACE Data, 2009-2014. As reported in 2015)

Education

- 86% of Ashtabula County adults 25 years and over had at least a high school diploma *(Source: U.S. Census Bureau, American Community Survey, 2011-2015 – 5 year estimates).*

- 13% of Ashtabula County adults 25 years and over had at least a bachelor's degree *(Source: U.S. Census Bureau, American Community Survey, 2011-2015 – 5 year estimates).*

Neighborhood and Built Environment

- More than half (52%) of Ashtabula County adults kept a firearm in or around their home. 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%).

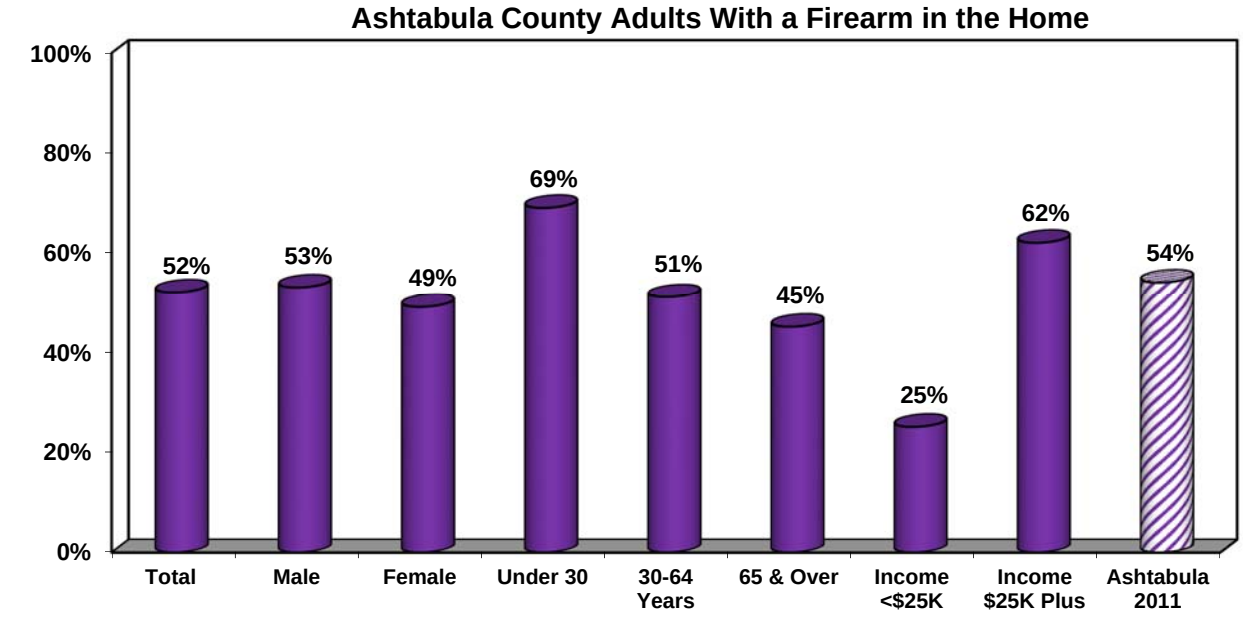
- Ashtabula County adults thought the following threatened their health in the past year.
  - Insects (13%)
  - Mold (8%)
  - Rodents (6%)
  - Air quality (5%)
  - Temperature regulation (5%)
  - Plumbing problems (3%)
  - Unsafe water supply/wells (3%)
  - Agricultural chemicals (2%)
  - Safety hazards (2%)
  - Sewage/waste water problems (2%)
  - Asbestos (1%)
  - Bed bugs (1%)
  - Chemicals found in products (1%)
  - Lead paint (1%)
  - Lice (1%)
  - Radiation (1%)
  - Radon (1%)
  - Cockroaches (<1%)

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.

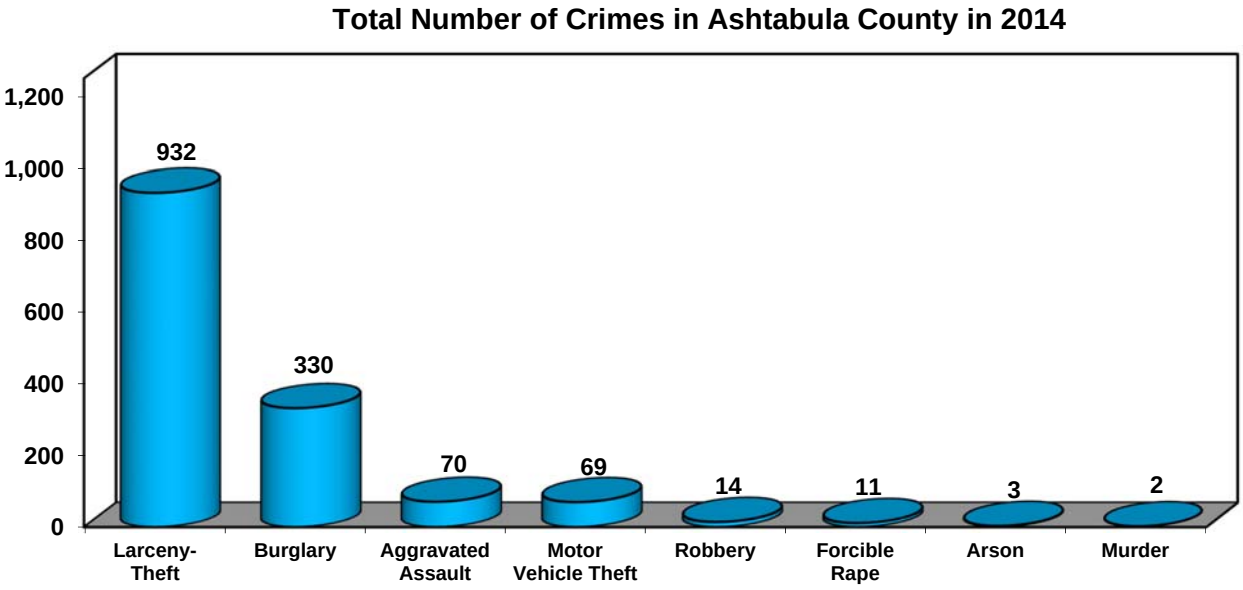
(Source: Healthy People 2020, Retrieved May 19, 2016)

The following graph shows the percentage of Ashtabula County adults that had a firearm in the home. Examples of how to interpret the information shown on the first graph include: 52% of all Ashtabula County adults kept a firearm in their home; 53% of males, and 51% of those ages 30-64 kept a firearm in their home.



Crime Data

- There were a total of 1,331 property crimes and 97 violent crimes in 2014.
- 65% of all crimes in Ashtabula County in 2014 were for larceny-theft.

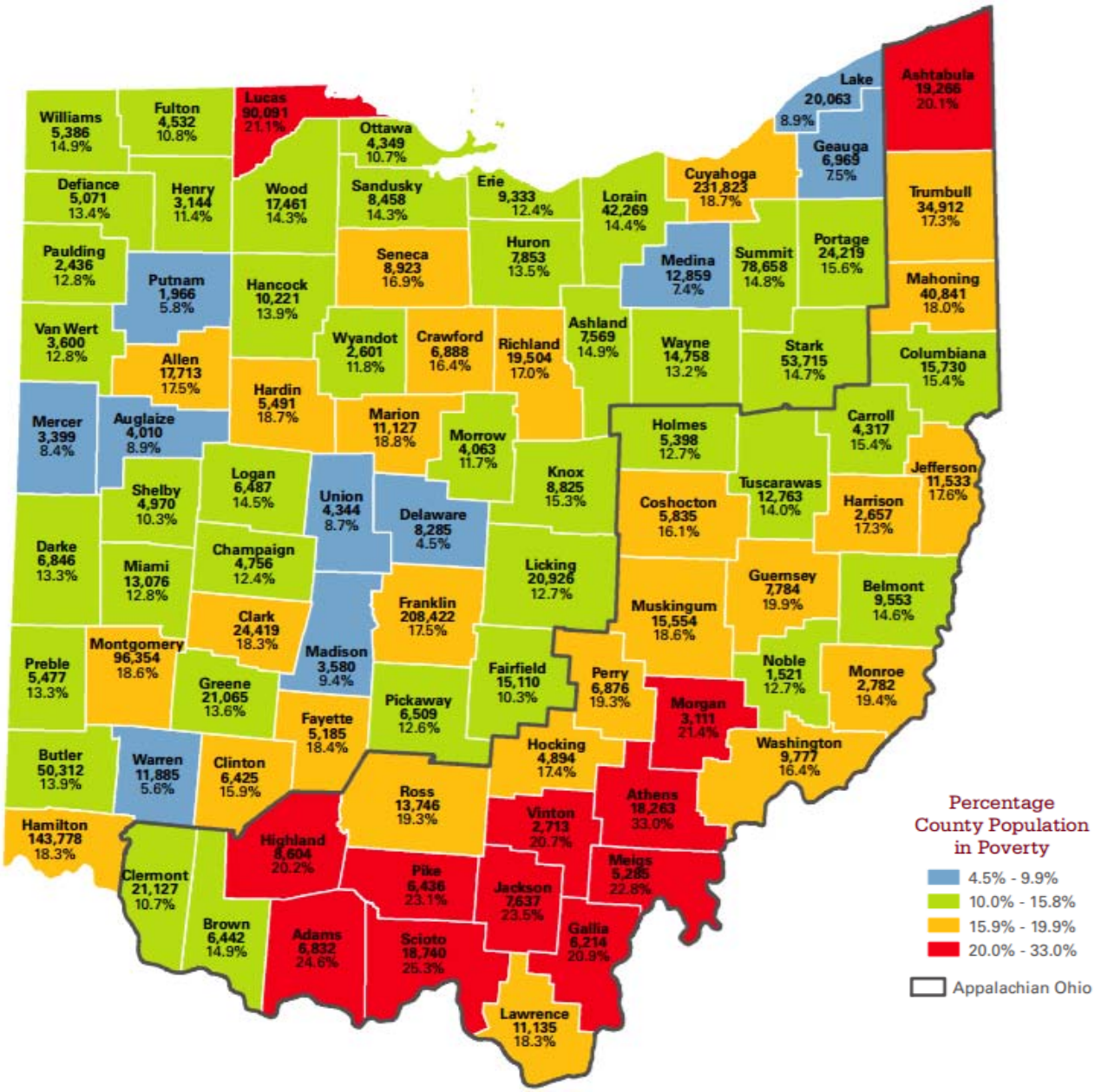


(Source: Office of Criminal Justice Services, Crime Statistics and Crime Reports, 2014)

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, one-fifth (20%) of Ashtabula County residents were in poverty.

Estimated Poverty Rates in Ohio by County (2011-2015)



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

Adult | 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.

Simple Tips for Healthy Eyes

Follow these simple guidelines for maintaining healthy eyes:

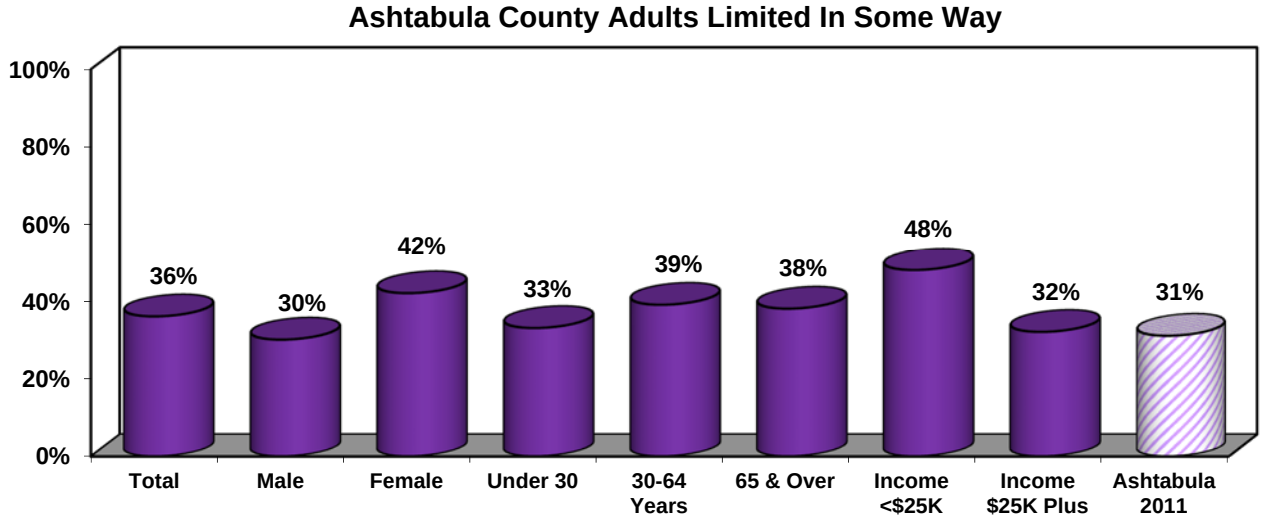
- Have a comprehensive dilated eye exam.
- Know your family's eye health history.
- Eat right to protect your sight.
- Wear sunglasses to protect your eyes from the sun's ultraviolet rays.
- Give your eyes a rest.
- Quit smoking or never start.
- Clean your hands and your contact lenses properly.

(Source: CDC, Vision Health Initiative, 2012)

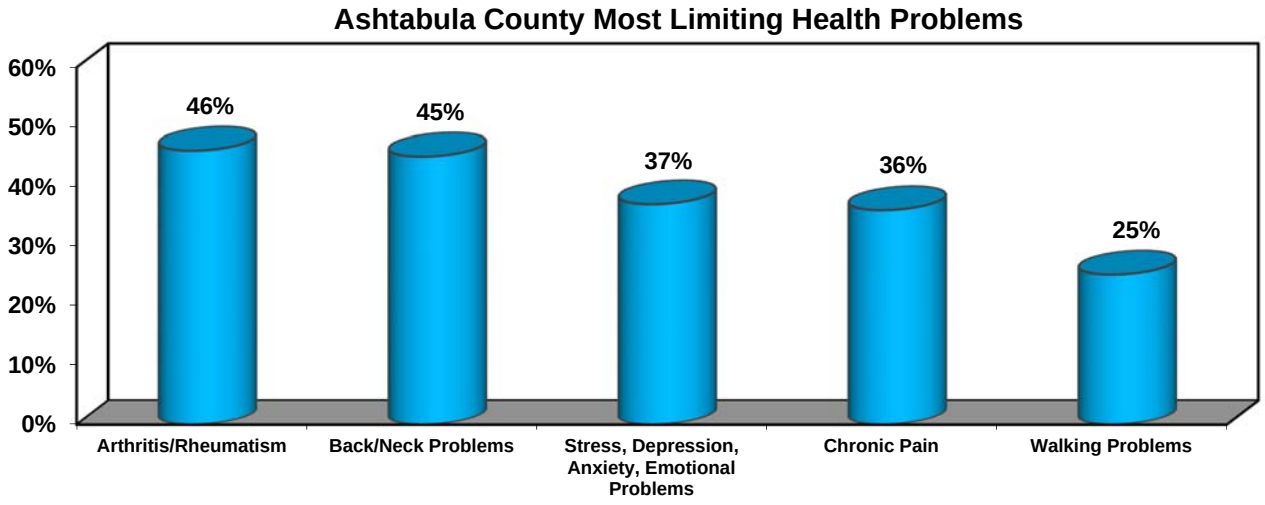
- Among those who were limited in some way, the following most limiting problems or impairments were reported: arthritis/rheumatism (46%); back or neck problems (43%); stress, depression, anxiety, or emotional problems (37%); chronic pain (36%); walking problems (25%); chronic illness (22%); sleep problems (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%).

The following graph shows the percentage of Ashtabula County adults that were limited in some way. Examples of how to interpret the information shown on the graph include: 36% of Ashtabula County adults were limited in some way; specifically, 42% of females, and 48% of those with incomes greater than $25,000 were limited in some way.



The following graph shows the most limiting health problems for Ashtabula County adults. Examples of how to interpret the information shown on the graph include: 46% of Ashtabula County adults were limited in some way due to arthritis/rheumatism.



Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Limited in some way because of a physical, mental, or emotional problems	31%	36%	21%	21%

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%

**U.S. baseline is age-adjusted to the 2000 population standard*

(Sources: Healthy People 2020 Objectives, 2016 Ashtabula County Health Assessment)

Adult | MENTAL HEALTH AND SUICIDE

Key Findings

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

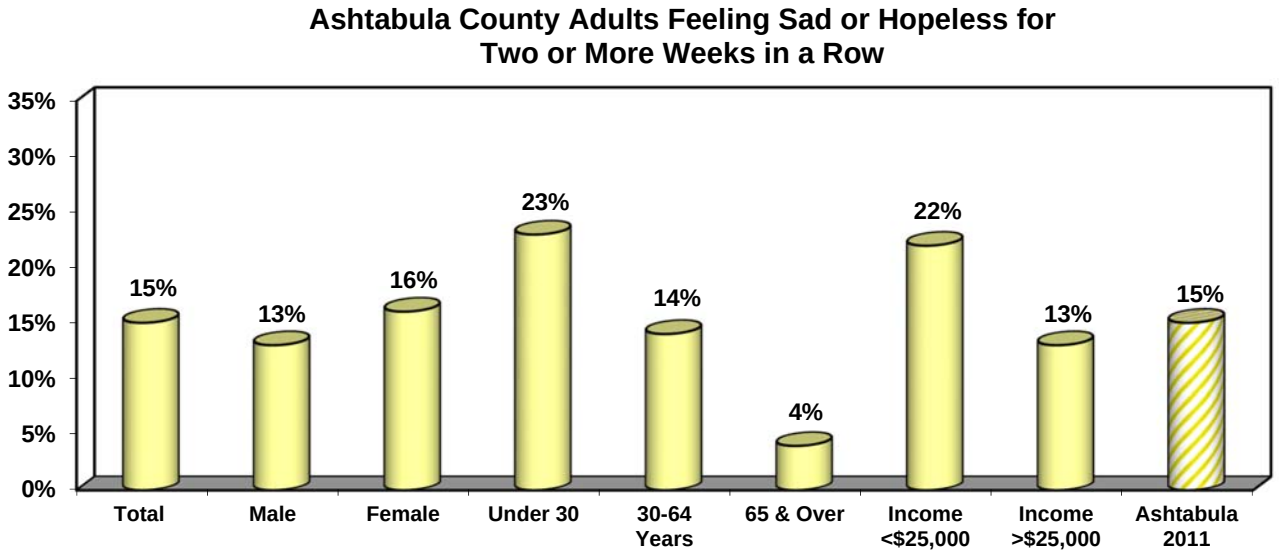
Adult Mental Health

- 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.
- 7% of Ashtabula County adults considered attempting suicide in the past year.
- 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%).
- 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

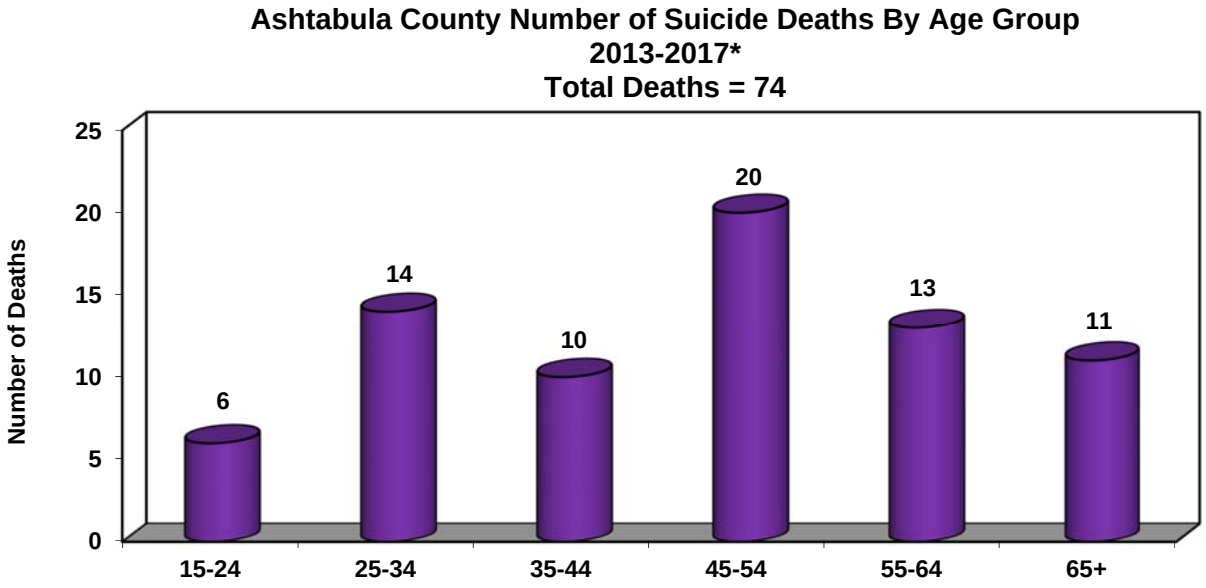
N/A – Not available

The following graph shows Ashtabula County adults who felt sad or hopeless for two or more weeks in a row in the past year. 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.



The graph below shows the Ashtabula County suicide counts. The graph shows:

- From 2013 to 2017, 32% of all Ashtabula County suicide deaths occurred in those ages 55 years old and older.



** Data for 2016 and 2017 are partial and incomplete, and should be used with caution*

Warning Signs for Suicide

More than 90 percent of people who kill themselves are suffering from one or more psychiatric disorders, in particular:

- Major depression
- Bipolar depression
- Schizophrenia
- Drug abuse & dependence
- Alcohol abuse & dependence
- Post-Traumatic Stress Disorder (PTSD)
- Eating disorders
- Personality disorders

The core symptoms of major depression are a "down" or depressed mood most of the day or a loss of interest or pleasure in activities that were previously enjoyed for at least two weeks, as well as:

- Changes in sleeping patterns
- Change in appetite or weight
- Intense anxiety, agitation, restlessness
- Fatigue or loss of energy
- Decreased concentration, indecisiveness, or poorer memory
- Feelings of hopelessness, worthlessness, self-reproach or excessive or inappropriate guilt
- Recurrent thoughts of suicide

Prevention: Take it Seriously

Fifty to 75% of all suicides give some warning of their intentions to a friend or family member. Recognize the imminent dangers:

- Threatening to hurt or kill oneself
- Talking or writing about death, dying, or suicide
- Looking for ways to kill oneself (weapons, pills, or other means)
- Has made plans or preparations for a potentially serious attempt

(Source: American Foundation for Suicide Prevention, When You Fear Someone May Take Their Life)

(Source: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 4/13/2017)

Suicide Facts

- 44,193 people in the U.S. died from suicide, and 1,104,825 people attempted suicide in the 2015.
- An average of one person killed themselves every 11.9 minutes
- Suicide is the 10th ranking cause of death in the U.S.
- For every female death by suicide, there are 3.3 male deaths.
- In 2015, there were 1,650 suicide deaths in Ohio.
- The leading suicide methods included:
  - Firearm suicides (49.8%)
  - Suffocation/Hanging (26.8%)
  - Poisoning (15.4%)
  - Cutting/Piercing (1.7%)
  - Drowning (1.2%)

(Sources: American Association of Suicidology, Facts & Statistics. Updated in 2015)

Adult | ORAL HEALTH

Key Findings

The 2016 health assessment project has determined that three-fifths (60%) of Ashtabula County adults had visited a dentist or dental clinic in the past year. The 2014 BRFSS reported that 65% of Ohio adults and 65% of U.S. adults had visited a dentist or dental clinic in the previous twelve months.

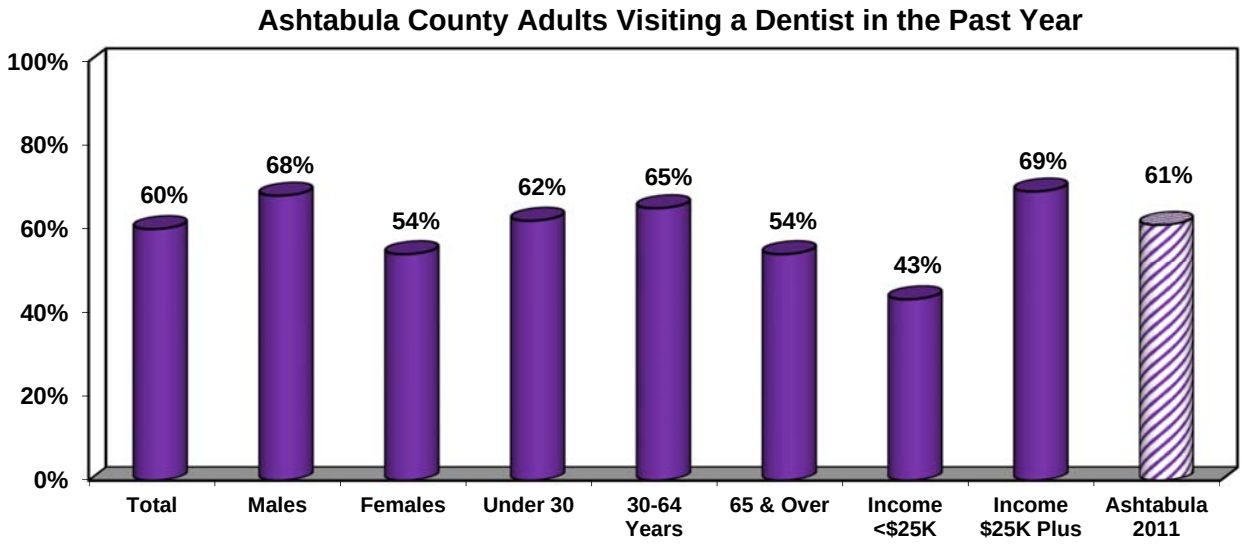
Access to Dental Care

- 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 2014 BRFSS reported that 65% of Ohio adults and 65% 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 2014 BRFSS reported that 43% of U.S. adults and 47% of Ohio adults had one or more permanent teeth removed.
- 17% of Ashtabula County adults ages 65 and over had all of their permanent teeth removed. The 2014 BRFSS reported that 15% of U.S. adults and 18% of Ohio adults ages 65 and over had all of their permanent teeth removed.

Adult Comparisons	Ashtabula County 2011	Ashtabula County 2016	Ohio 2015	U.S. 2015
Adults who have visited the dentist in the past year	61%	60%	65%*	65%*
Adults who had one or more permanent teeth removed	N/A	56%	47%*	43%*
Adults 65 years and older who had all of their permanent teeth removed	N/A	17%	18%*	15%*

N/A- Not available
**2014 BRFSS Data*

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



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%

Totals may not equal 100% as some respondents answered do not know.

What You Can Do to Maintain Good Oral Health

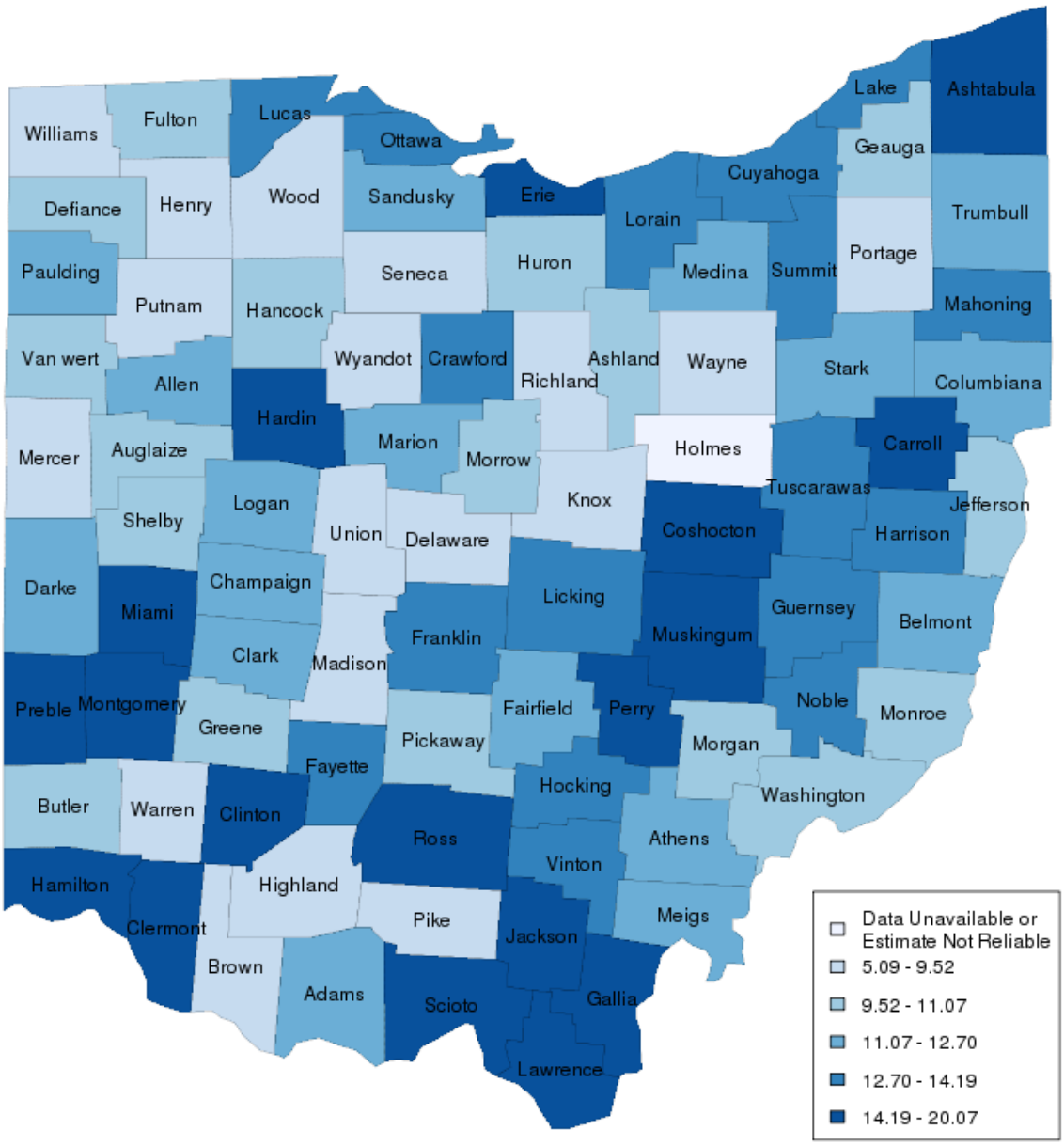
- Drink fluoridated water and use fluoride toothpaste. Fluoride's protection against tooth decay works at all ages.
- Take care of your teeth and gums. Thorough tooth brushing and flossing to reduce dental plaque can prevent gingivitis—the mildest form of gum disease.
- Avoid tobacco. In addition to the general health risks posed by tobacco, smokers have 4 times the risk of developing gum disease compared to non-smokers.
- Limit alcohol. Heavy use of alcohol is a risk factor for oral and throat cancers.
- Eat wisely. Adults should avoid snacks full of sugars and starches.
- Visit the dentist regularly. Check-ups can detect early signs of oral health problems and can lead to treatments that will prevent further damage, and in some cases, reverse the problem.

(Source: CDC: Oral Health for Adult)

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

- There were 16% of Ashtabula County adults who had unmet needs for dental care in 2015, as compared to 13% of Ohio adults.

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



(Source: Adult Ohio Medicaid Assessment Survey (OMAS) Dashboard, 2015)

Adult | PARENTING

Key Findings

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

Parenting

- 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%).

- 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%)

- Parents were concerned with the following: having enough time with their child (68%), how child copes with stressful things (68%), child's self-esteem (64%), child's anxiety (59%), cell phone and technology use (57%), child's academic performance (57%), Internet use (54%), their relationship with their child (53%), child being bullied by classmates (49%), child's learning difficulties (39%), child's depression (39%), child getting along with others (38%), violence in school, home, or neighborhood (31%), risky behaviors (26%), substance abuse (24%), child talking (22%), eating disorder (20%), child crawling, walking, or running (10%),

Tips for Parents – Ideas to Help Children Maintain a Healthy Weight

- Encourage healthy eating habits by providing fruits, vegetables, whole grains, low-fat or non-fat dairy products, and lean meats and proteins for your family.
- Find ways to make your family's favorite dishes in a healthier way.
- Limit or reduce the consumption of calorie-rich, sugary and/or saturated fat in your home.
- Adding physical activity into the family's routine will lead to it becoming a healthy habit. Some examples of moderate intensity physical activity include brisk walking, playing tag, jumping rope, playing soccer, swimming and dancing.
- Encourage fun activities to reduce the amount of sedentary time watching TV, playing video games or on the computer.
- The goal is to reduce the rate of weight gain in overweight and obese children and teens while still accounting for normal growth and development. Children and teens should not be placed on a diet without consulting a doctor.

(Source: CDC, Healthy Weight, "Tips for Parents – Ideas to Help Children Maintain a Healthy Weight")

Talking to your Teen about Drinking

- Be honest and direct.
- Encourage your teen to talk to you about drinking, remain calm when listening.
- Try not to judge or criticize. Make it comfortable for your teen to talk honestly.
- Remind your teen that drinking comes with serious risks.
- Emphasize that your teen should never drink and drive or ride with a driver who has been drinking.

(Source: MedlinePlus, Talking to your Teen about Drinking)

Appendix I | ASHTABULA COUNTY HEALTH ASSESSMENT INFORMATION SOURCES

Source	Data Used	Website
American Association of Suicidology	▪ Suicide Facts	www.suicidology.org/Portals/14/docs/Resources/FactSheets/2015/2015datapgsv1.pdf
American Cancer Society, Cancer Facts and Figures 2017.	▪ 2017 Cancer Facts, Figures, and Estimates ▪ Nutrition Recommendations	www.cancer.org
American College of Allergy, Asthma & Immunology	▪ Asthma Facts	http://acaai.org/news/facts-statistics/asthma
American Diabetes Association	▪ Type 1 and 2 Diabetes ▪ Risk Factors for Diabetes ▪ Diabetes Facts	www.diabetes.org
American Foundation for Suicide Prevention	▪ Warning Signs for Suicide	www.afsp.org/
American Heart Association, 2015	▪ Stroke Warning Signs and Symptoms ▪ Smoke-free Living: Benefits & Milestones	www.heart.org/HEARTORG/HealthyLiving/QuitSmoking/YourNon-mokingLife/Smoke-free-Living-Benefits-Milestones_UCM_322711_Article.jsp#.WKs5RW8rKM8
American Society of Addiction Medicine, Opioid Addiction, 2016 Facts & Figures	▪ Opioid Addiction Statistics	www.asam.org/docs/default-source/advocacy/opioid-addiction-disease-facts-figures.pdf
Arthritis at a Glance, 2016	▪ Arthritis: Improving the Quality of Life for People with Arthritis	www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2016/aag-arthritis.pdf
Behavioral Risk Factor Surveillance System, National Center for Chronic Disease Prevention and Health Promotion, Behavioral Surveillance Branch, Centers for Disease Control	▪ 2009 - 2015 Adult Ohio and U.S. Correlating Statistics	www.cdc.gov/brfss

APPENDIX I

Source	Data Used	Website
Cancer in Ohio 2016	▪ Ohio and County rates for Lung Cancer, Colorectal Cancer and Prostate Cancer	www.healthy.ohio.gov/-/media/ODH/ASSETS/Files/health/OCISS/Cancer-in-Ohio-2016.pdf?la=en
Centers for Disease Control and Prevention (CDC)	▪ Adverse Childhood Experiences (ACE) ▪ Asthma Attacks ▪ Binge Drinking Among Women ▪ Cancer and Men ▪ Health Care Access Among the Employed and Unemployed ▪ Health Care Access and Utilization ▪ Health Insurance Coverage and Adverse Experience with Physician Availability ▪ Healthy Eyes ▪ HIV in the U.S. ▪ Heart Health and Stroke Facts for Men ▪ Obesity Facts ▪ Oral Health for Adult ▪ Smoking facts ▪ Healthy Weight Tips for Parents ▪ Reduce Breast Cancer Risk	www.cdc.gov
CDC, Arthritis	▪ Key Public Health Messages	www.cdc.gov/arthritis/basics/key.htm
CDC, Injury Center: Violence Prevention 2015	▪ Suicide Prevention	www.cdc.gov/ViolencePrevention/suicide/youth_suicide.html
CDC, National Center for Health Statistics	▪ Leading Causes of Death in U.S. ▪ Fast Stats for Men's Health ▪ Electronic Cigarette Use Among Adults	www.cdc.gov/nchs/fastats/
CDC, Physical Activity for Everyone	▪ Physical Activity Recommendations	www.cdc.gov/physicalactivity/resources/recommendations.html
CDC, Sexually Transmitted Diseases Surveillance, 2015	▪ U.S. Chlamydia and Gonorrhea Rates ▪ U.S. STD Surveillance Profile	www.cdc.gov/std/stats/

Source	Data Used	Website
CDC, Wonder	▪ About Underlying Cause of Death, 1999-2015 ▪ Cancer Statistics	http://wonder.cdc.gov/ucd-icd10.html
Community Commons	▪ Cigarette Expenditures ▪ Alcohol Beverage Expenditures ▪ Beer, Wine and Liquor Stores ▪ Bars and Drinking Establishments ▪ Opioid Drug Claims	www.communitycommons.org/
Federal Emergency Management Agency (FEMA)	▪ Basic Disaster Supplies Kit	www.ready.gov/kit
Health Indicators Warehouse	▪ Chronic Lower Respiratory Disease Rates ▪ Heart Disease and Stroke Mortality Rates	www.healthindicators.gov/Indicators/Selection
Healthy People 2020: U.S. Department of Health & Human Services	▪ All Healthy People 2020 Target Data Points ▪ Some U.S. Baseline Statistics ▪ Predictors of Access to Health Care ▪ Social Determinants of Health	www.healthypeople.gov/
Henry Kaiser Family Foundation	▪ How Does Lack of Insurance Affect Access to Health Care?	http://kff.org/report-section/the-uninsured-a-primer-2013-4-how-does-lack-of-insurance-affect-access-to-health-care/
Medline Plus	▪ Talking to your Teen about Drinking	https://medlineplus.gov/ency/patientinstructions/000505.htm
National Institute on Drug Abuse	▪ Drug Facts: Heroin	www.drugabuse.gov
National Vital Statistics Report	▪ Live Birth Data	www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_01.pdf#table01
Network of Care	▪ Health Indicators ▪ Age-Adjusted Mortality Rates	http://Ashtabula.oh.networkofcare.org/ph/county-indicators.aspx#cat1
Ohio Automated RX Reporting System (OARRS), Quarterly County Data	▪ Opioid Doses Per Capita ▪ Opioid Doses Per Patient	www.ohiopmp.gov/Portal/Reports.aspx

APPENDIX I

Source	Data Used	Website
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 Public Safety	▪ 2016 Ashtabula County and Ohio Crash Facts ▪ OSHP Computer-Aided Dispatch (CAD) System	https://services.dps.ohio.gov/Crashstatistics/CrashReports.aspx
Ohio Department of Public Safety, Office of Criminal Justice Services	▪ Crime Statistics and Crime Reports	www.ocjs.ohio.gov/crime_stats_reports.stm
Ohio Development Services Agency, Office of Research, Ohio Poverty Report	▪ 2011-2015 Poverty Rates by County	https://development.ohio.gov/files/research/P7005.pdf
Ohio Medicaid Assessment Survey	▪ Healthcare Coverage ▪ Poor/Fair Overall Health ▪ Unmet Needs in Prescription Medication ▪ Unmet Dental Needs	http://grcapps.osu.edu/dashboards/OMAS/adult
Ohio Mental Health and Addiction Services (MHA)	▪ Prescription Opioid Doses Per Capita	http://mha.ohio.gov/Portals/0/assets/Research/Maps/Per_Capita_2014_v2_NoBup.pdf
Ohio State Highway Patrol	▪ Felony Cases and Drug Arrests ▪ Ashtabula County Activity Statistics	http://statepatrol.ohio.gov/
U. S. Department of Commerce, Census Bureau; Bureau of Economic Analysis	▪ American Community Survey 5 year estimates, 2015 ▪ Ohio and Ashtabula County 2015 Census Demographic Information ▪ Ohio and U.S. Health Insurance Sources ▪ Small Area Income and Poverty Estimates ▪ Federal Poverty Thresholds	www.census.gov

Appendix II | ASHTABULA COUNTY ACRONYMS AND TERMS

AHS	**A**ccess to **H**ealth **S**ervices, Topic of Healthy People 2020 objectives
ACS	**A**merican **C**ommunity **S**urvey
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.
AOCBC	**A**rthritis, **O**steoporosis, and **C**hronic **B**ack **C**onditions, Topic of Healthy People 2020 objectives
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.
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
N/A	Data is not available.

APPENDIX II

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.
TSE	**T**esticular **S**elf **E**xam
YPLL/65	**Y**ears of **P**otential **L**ife **L**ost before age 65. Indicator of premature death.
ZCTA	**Z**ip Code **T**abulation **A**rea

Appendix III | METHODS FOR WEIGHTING THE 2016 ASHTABULA COUNTY 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 Estimate*	%		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 III

Appendix IV | ASHTABULA COUNTY SAMPLE DEMOGRAPHIC PROFILE*

Variable	2016 Survey Sample	Ashtabula County Census 2011-2015 (5 year estimate)	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

Age	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**

APPENDIX V

ASHTABULA COUNTY PROFILE

General Demographic Characteristics
(Source: U.S. Census Bureau, Census 2015)

2011-2015 ACS 5-year estimate

Total Population		
2015 Total Population	99,777	
2000 Total Population	102,728	
Largest City-Ashtabula City		
2015 Total Population	18,663	100%
2000 Total Population	20,962	100%
Population By Race/Ethnicity		
Total Population	99,777	100%
White Alone	93,048	93.3%
Hispanic or Latino (of any race)	3,755	3.8%
African American	3,399	3.4%
Asian	471	0.5%
Two or more races	2,228	2.2%
Other	483	0.5%
American Indian and Alaska Native	125	0.1%
Population By Age 2010		
Under 5 years	6,326	6.2%
5 to 17 years	17,681	17.1%
18 to 24 years	8,007	7.6%
25 to 44 years	24,150	23.0%
45 to 64 years	29,456	28.8%
65 years and more	15,877	17.4%
Median age (years)	**41.0**	
Household By Type		
Total Households	38,890	100%
Family Households (families)	25,206	64.8%
With own children <18 years	10,064	25.9%
Married-Couple Family Households	18,416	15.9%
With own children <18 years	6,336	16.3%
Female Householder, No Husband Present	4,806	12.4%
With own children <18 years	2,788	7.2%
Non-family Households	13,684	35.2%
Householder living alone	11,345	29.2%
Householder 65 years and >	4,814	12.4%
Households With Individuals < 18 years	11,689	30.1%
Households With Individuals 65 years and >	11,814	30.4%
Average Household Size	2.48 people	
Average Family Size	3.04 people	

General Demographic Characteristics, Continued
(Source: U.S. Census Bureau, Census 2015)

2011-2015 ACS 5-year estimate

Median Value of Owner-Occupied Units	$106,000
Median Monthly Owner Costs (With Mortgage)	$1,062
Median Monthly Owner Costs (Not Mortgaged)	$382
Median Gross Rent for Renter-Occupied Units	$628
Median Rooms Per Housing Unit	5.9
Total Housing Units	45,907
No Telephone Service	819
Lacking Complete Kitchen Facilities	590
Lacking Complete Plumbing Facilities	307

Selected Social Characteristics
(Source: U.S. Census Bureau, Census 2015)

2011-2015 ACS 5-year estimates

School Enrollment		
Population 3 Years and Over Enrolled In School	23,338	100%
Nursery & Preschool	1,168	5.2%
Kindergarten	1,151	5.2%
Elementary School (Grades 1-8)	10,146	45.4%
High School (Grades 9-12)	5,726	25.6%
College or Graduate School	4,147	18.6%
Educational Attainment		
Population 25 Years and Over	69,039	100%
< 9th Grade Education	3,021	4.4%
9th to 12th Grade, No Diploma	7,011	10.2%
High School Graduate (Includes Equivalency)	30,982	44.9%
Some College, No Degree	13,900	20.1%
Associate Degree	4,935	7.1%
Bachelor's Degree	6,164	8.9%
Graduate Or Professional Degree	3,026	4.4%
Percent High School Graduate or Higher	*(X)	85.5%
Percent Bachelor's Degree or Higher	*(X)	13.3%

**(X) – Not available*

APPENDIX V

Selected Social Characteristics, Continued
(Source: U.S. Census Bureau, Census 2015)

2011-2015 ACS 5-year estimates

Marital Status		
Population 15 Years and Over	81,212	100%
Never Married	22,628	27.9%
Now Married, Excluding Separated	39,136	48.2%
Separated	1,079	1.3%
Widowed	6,404	7.9%
Female	4,904	6.0%
Divorced	11,965	14.7%
Female	6,281	7.7%
Veteran Status		
Civilian Veterans 18 years and over	8,695	11.3%
Disability Status of the Civilian Non-institutionalized Population		
Total Civilian Noninstitutionalized Population	96,631	100%
With a Disability	15,104	15.6%
Under 18 years	22,733	100%
With a Disability	7,827	13.5%
18 to 64 years	58,034	100%
With a Disability	7,827	13.5%
65 Years and Over	15,864	100%
With a Disability	6,139	38.7%

Selected Economic Characteristics
(Source: U.S. Census Bureau, Census 2015)

2011-2015 ACS 5-year estimate

Employment Status		
Population 16 Years and Over	79,659	100%
In Labor Force	44,418	55.8%
Not In Labor Force	44,349	55.7%
Females 16 Years and Over	39,970	100%
In Labor Force	20,697	51.8%
Population Living With Own Children <6 Years	6,657	100%
All Parents In Family In Labor Force	4,062	61.0%
Class of Worker		
Employed Civilian Population 16 Years and Over	40,422	100%
Private Wage and Salary Workers	34,148	84.5%
Government Workers	4,213	10.4%
Self-Employed Workers in Own Not Incorporated Business	2,028	5.0%
Unpaid Family Workers	33	0.1%

Selected Economic Characteristics, Continued
(Source: U.S. Census Bureau, Census 2015)

2011-2015 ACS 5-year estimate

Occupations

Employed Civilian Population 16 Years and Over	40,422	100%
Production, Transportation, and Material Moving Occupations	9,656	23.9%
Management, business, science, and art occupations	10,237	25.3%
Sales and Office Occupations	8,973	22.2%
Service Occupations	7,491	18.5%
Natural Resources, Construction, and Maintenance Occupations	4,065	10.1%

Leading Industries

Employed Civilian Population 16 Years and Over	40,422	100%
Manufacturing	9,885	24.5%
Educational, health and social services	9,203	22.8%
Trade (retail and wholesale)	5,586	13.8%
Arts, entertainment, recreation, accommodation, and food services	2,877	7.1%
Professional, scientific, management, administrative, and waste management services	2,202	5.4%
Transportation and warehousing, and utilities	2,326	5.8%
Finance, insurance, real estate and rental and leasing	1,462	3.6%
Other services (except public administration)	1,805	4.5%
Construction	2,500	6.2%
Public administration	1,341	3.3%
Information	607	1.5%
Agriculture, forestry, fishing and hunting, and mining	628	1.6%

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

	Income	Rank of Ohio Counties
BEA Per Capita Personal Income 2014	$33,412	69th of 88 counties
BEA Per Capita Personal Income 2013	$32,066	70th of 88 counties
BEA Per Capita Personal Income 2012	$31,741	69th of 88 counties
BEA Per Capita Personal Income 2011	$31,290	66th of 88 counties
BEA Per Capita Personal Income 2010	$29,432	64th 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)

APPENDIX V

Selected Economic Characteristics, Continued
(Source: U.S. Census Bureau, Census 2015)

2011-2015 ACS 5-year estimate

Income In 2015		
Households	38,890	100%
< $10,000	3,523	9.1%
$10,000 to $14,999	3,308	8.5%
$15,000 to $24,999	5,317	13.7%
$25,000 to $34,999	5,123	13.2%
$35,000 to $49,999	5,727	14.7%
$50,000 to $74,999	7,644	19.7%
$75,000 to $99,999	3,195	10.1%
$100,000 to $149,999	3,360	8.6%
$150,000 to $199,999	696	1.8%
$200,000 or more	277	0.7%
Median Household Income	***$40,544***	

Income In 2015		
Families	25,206	100%
< $10,000	1,487	5.9%
$10,000 to $14,999	1,162	4.6%
$15,000 to $24,999	2,370	9.4%
$25,000 to $34,999	3,168	12.6%
$35,000 to $49,999	4,225	16.8%
$50,000 to $74,999	5,933	23.5%
$75,000 to $99,999	3,042	12.1%
$100,000 to $149,999	2,980	11.8%
$150,000 to $199,999	584	2.3%
$200,000 or more	255	1.0%

Median Household Income (families)	***$50,502***

Per Capita Income In 2011-2015	**$20,378**

Poverty Status In 2015	***Number Below Poverty Level***	***% Below Poverty Level***
Families	*(X)	14.4%
Individuals	*(X)	20.1%

**(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	5,719,600
Employed	40,700	5,379,600
Unemployed	3,300	340,000
Unemployment Rate* in February 2017	7.4	5.9
Unemployment Rate* in January 2017	8.0	6.0
Unemployment Rate* in February 2016	7.3	5.5

**Rate equals unemployment divided by labor force.*
(Source: Ohio Department of Job and Family Services, February 2017)

APPENDIX V

Estimated Poverty Status in 2015

Age Groups	Number	90% Confidence Interval	Percent	90% Confidence Interval
Ashtabula County				
All ages in poverty	17,636	14,794 to 20,478	18.6%	15.6 to 21.6
Ages 0-17 in poverty	6,177	5,023 to 7,331	28.6%	23.3 to 33.9
Ages 5-17 in families in poverty	4,249	3,364 to 5,134	26.3%	20.8 to 31.8
Median household income	$44,258	$42,113 to $46,403		
Ohio				
All ages in poverty	1,670,487	1,646,455 to 1,694,519	14.8%	14.6 to 15.0
Ages 0-17 in poverty	546,968	532,624 to 561,312	21.2%	20.6 to 21.8
Ages 5-17 in families in poverty	365,471	352,710 to 378,232	19.3%	18.6 to 20.0
Median household income	$51,086	$50,853 to $51,319		
United States				
All ages in poverty	46,153,077	45,878,016 to 46,428,138	14.7%	14.6 to 14.8
Ages 0-17 in poverty	15,000,273	14,862,975 to 15,137,571	20.7%	20.5 to 20.9
Ages 5-17 in families in poverty	10,245,028	10,145,484 to 10,344,572	19.5%	19.3 to 19.7
Median household income	$55,775	$55,690 to $55,860		

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

Federal Poverty Thresholds in 2016 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	$12,486					
1 Person 65 and >	$11,511					
2 people Householder < 65 years	$16,072	$16,543				
2 People Householder 65 and >	$14,507	$16,480				
3 People	$18,774	$19,318	$19,337			
4 People	$24,775	$25,160	$24,339	$24,424		
5 People	$29,854	$30,288	$29,360	$28,643	$28,205	
6 People	$34,337	$34,473	$33,763	$33,082	$32,070	$31,470
7 People	$39,509	$39,756	$38,905	$38,313	$37,208	$35,920
8 People	$44,188	$44,578	$43,776	$43,072	$42,075	$40,809
9 People or >	$53,155	$53,413	$52,702	$52,106	$51,127	$49,779

(Source: U. S. Census Bureau, Federal Poverty Thresholds, 2016)

Appendix VI | ASHTABULA 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) (2011-2013)	8,700	7,534	6,600
Overall heath. Percentage of adults reporting fair or poor health (age-adjusted) (2014)	17%	17%	18%
Physical health. Average number of physically unhealthy days reported in past 30 days (age-adjusted) (2014)	4.0	4.0	3.8
Mental health. Average number of mentally unhealthy days reported in past 30 days (age-adjusted) (2014)	4.2	4.3	3.7
Maternal and infant health. Percentage of live births with low birthweight (< 2500 grams) (2007-2013)	8%	9%	8%
Health Behaviors			
Tobacco. Percentage of adults who are current smokers (2014)	22%	21%	17%
Obesity. Percentage of adults that report a BMI of 30 or more (2012)	31%	30%	27%
Food environment. Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best) (2013)	6.6%	6.9	7.2
Physical activity. Percentage of adults aged 20 and over reporting no leisure-time physical activity (2012)	26%	26%	23%
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 (2014)	16%	19%	17%
Drug and alcohol abuse and injury. Percentage of driving deaths with alcohol involvement (2010-2014)	40%	35%	31%
Infectious disease. Number of newly diagnosed chlamydia cases per 100,000 population (2013)	271.9	460	447
Sexual and reproductive health. Teen birth rate per 1,000 female population, ages 15-19 (2007-2013)	42	34	35

(Source: 2016 County Health Rankings for Ashtabula County, Ohio and U.S. data)

APPENDIX VI

	Ashtabula County	Ohio	U.S
Clinical Care			
Coverage and affordability. Percentage of population under age 65 without health insurance (2013)	15%	13%	17%
Access to health care/medical care. Ratio of population to primary care physicians (2013)	2,560:1	1,296:1	1,320:1
Access to dental care. Ratio of population to dentists (2014)	2,750:1	1,713:1	1,540:1
Access to behavioral health care. Ratio of population to mental health providers (2015)	1,340:1	642:1	490:1
Hospital utilization. Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees (2013)	87	65	54
Diabetes. Percentage of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring (2013)	82%	85%	85%
Cancer. Percentage of female Medicare enrollees ages 67-69 that receive mammography screening (2013)	54%	60%	63%
Social and Economic Environment			
Education. Percentage of ninth-grade cohort that graduates in four years (2012-2013)	90%	83%	82%
Education. Percentage of adults ages 25-44 years with some post-secondary education (2010-2014)	48%	63%	64%
Employment, poverty, and income. Percentage of population ages 16 and older unemployed but seeking work (2014)	7%	6%	6%
Employment, poverty, and income. Percentage of children under age 18 in poverty (2014)	32%	23%	22%
Employment, poverty, and income. Ratio of household income at the 80th percentile to income at the 20th percentile (2010-2014)	4.5	4.8	4.7
Family and social support. Percentage of children that live in a household headed by single parent (2010-2014)	39%	35%	34%
Family and social support. Number of membership associations per 10,000 population (2013)	11.8%	11.4	9.0
Violence. Number of reported violent crime offenses per 100,000 population (2010-2012)	140%	307	392
Injury. Number of deaths due to injury per 100,000 population (2009-2013)	74	63	60

(Source: 2016 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) (2011)	13.8%	13.5	11.4
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 (2008-2012)	17%	15%	19%
Transportation. Percentage of the workforce that drives alone to work (2010-2014)	83%	84%	76%
Transportation. Among workers who commute in their car alone, the percentage that commute more than 30 minutes (2010-2014)	33%	29%	31%

N/A – Data is not available

(Source: 2016 County Health Rankings for Ashtabula County, Ohio and U.S. data)

APPENDIX VI