

# Magruder Hospital

## Community Health Status Assessment 2020

---



*Examining the Health of  
Ottawa County*

*Released November 1, 2020*



# Foreword

Dear Community Member,

Magruder Hospital is pleased to present the 2020 Health Assessment of our community. This comprehensive Community Health Assessment is the result of a strong commitment by dedicated community partners to work together to improve the health and well-being of residents of Ottawa County.

The health assessment gives us the opportunity to glance into our community, as well as our state and nation. The data presented in this report will provide valuable information to develop strategies that focus on wellness, access to care, and unmet community needs. It will provide additional insight into our community structure in the area of health and well-being.

The 2020 assessment will prove invaluable to you as an agency or a community member. As we review the results of the assessment, we will continue to work collaboratively to coordinate resources, identify unmet needs in our community, and strive to initiate quality programs to improve the health of our residents.

Sincerely,

J. Todd Almendinger  
President & CEO  
Magruder Hospital

# Acknowledgements

## **This report has been funded by:**

Magruder Hospital

## **The 2017 report was originally commissioned by Ottawa County Health Partners:**

Ottawa County Health Department

Magruder Hospital

Mental Health and Recovery Board of Erie and Ottawa Counties

United Way of Ottawa County

Genoa Local School District

Ohio State University Extension

Ottawa County Board of Developmental Disabilities

Ottawa County Commissioners

Ottawa County Department of Job & Family Services

Ottawa County Sheriff

Port Clinton City School District

Port Clinton Police Department

## **Contact Information**

### **Rachel Fall, M.A., LSW**

Director of Community Outreach & Physician Recruitment, Magruder Hospital

Office: 419-732-4061

[rfall@magruderhospital.com](mailto:rfall@magruderhospital.com)

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

**Margaret Wielinski, MPH**

Interim Director of Community Health Improvement

**Gabrielle MacKinnon, MPH**

Community Health Improvement Coordinator

**Mallory Ohneck, MPH, CHES**

Community Health Improvement Data Manager

**Emily Stearns, MPH, CHES**

Community Health Improvement Manager

**Jodi Franks**

Graduate Assistant

## Original 2017 Data Collection & Analysis

**Joseph A. Dake, Ph.D., MPH**

Professor and Chair  
School of Population Health  
University of Toledo

**Aaron J. Diehr, PhD, CHES**

Consultant

**Samantha Schroeder, MPA**

Consultant

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

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

**The 2017 Ottawa County Health Assessment is available on the following websites:**

**Ottawa County Health Department**

[www.ottawahealth.org/](http://www.ottawahealth.org/)

**Hospital Council of Northwest Ohio**

<http://www.hcno.org/community-services/community-health-assessments/>

**Magruder Hospital**

<https://www.magruderhospital.com/>

**United Way of Ottawa County**

<https://www.ottawaunitedway.org/>

**Ottawa County Commissioners**

<http://www.co.ottawa.oh.us/index.php/commissioners/>

**Mental Health and Recovery Board of Erie and Ottawa Counties**

<http://www.mhrbeo.org/>

**Ohio State University Extension**

<https://ottawa.osu.edu/>

**Ottawa County Sheriff Office**

<https://ottawacountysheriff.info/>

# Table of Contents

<b>Executive Summary</b>	Pages 5-22
Internal Revenue Services (IRS) Requirements	Pages 5-6
Primary Data Collection Methods	Pages 7-8
Secondary Data Collection Methods	Page 8
2019 Ohio State Health Assessment (SHA)	Page 9
Data Summary	Pages 10-22
<b>Trend Summary</b>	Pages 23-26
<b>HEALTH CARE ACCESS</b>	
<b>Health Care Coverage</b>	Pages 27-29
<b>Access and Utilization</b>	Pages 30-36
<b>Preventive Medicine</b>	Pages 37-39
<b>Women's Health</b>	Pages 40-42
<b>Men's Health</b>	Pages 43-45
<b>Oral Health</b>	Pages 46-47
<b>HEALTH BEHAVIORS</b>	
<b>Health Status Perceptions</b>	Pages 48-49
<b>Adult Weight Status</b>	Pages 50-53
<b>Adult Tobacco Use</b>	Pages 54-57
<b>Adult Alcohol Consumption</b>	Pages 58-60
<b>Adult Drug Use</b>	Pages 61-66
<b>Adult Sexual Behavior</b>	Pages 67-70
<b>Adult Mental Health</b>	Pages 71-72
<b>CHRONIC DISEASE</b>	
<b>Cardiovascular Health</b>	Pages 73-77
<b>Cancer</b>	Pages 78-81
<b>Arthritis</b>	Page 82
<b>Asthma</b>	Pages 83-84
<b>Diabetes</b>	Pages 84-87
<b>Quality of Life</b>	Pages 88-89
<b>SOCIAL CONDITIONS</b>	
<b>Social Determinants of Health</b>	Pages 90-96
<b>Parenting</b>	Pages 97-99
<b>YOUTH HEALTH</b>	
<b>Youth Weight Status</b>	Pages 100-102
<b>Youth Tobacco Use</b>	Pages 103-105
<b>Youth Alcohol Consumption</b>	Pages 106-109
<b>Youth Drug Use</b>	Pages 110-112
<b>Youth Sexual Behavior</b>	Pages 113-115
<b>Youth Mental Health</b>	Pages 116-118
<b>Youth Social Determinants of Health</b>	Pages 119-122
<b>Youth Violence</b>	Pages 123-125
<b>APPENDICES</b>	
<b>APPENDIX I — Health Assessment Information Sources</b>	Pages 126-129
<b>APPENDIX II — Acronyms and Terms</b>	Pages 130-131
<b>APPENDIX III — Weighting Methods</b>	Pages 132-133
<b>APPENDIX IV — School Participation</b>	Page 134
<b>APPENDIX V — Demographic Profile</b>	Page 135
<b>APPENDIX VI — Demographics and Household Information</b>	Pages 136-142
<b>APPENDIX VII — County Health Rankings</b>	Pages 143-145
<b>APPENDIX VIII — Priority Areas and Resources</b>	Page 146
<b>APPENDIX IX — Community Wellness Survey Results</b>	Pages 147-150
<b>APPENDIX X — Evaluation of Impact</b>	Pages 151-155

# Executive Summary

This executive summary provides an overview of health-related data for Ottawa County adults (ages 19 and older) and youth (ages 12-18) who participated in a county-wide health assessment survey during January-May 2017. The findings are based on self-administered surveys using a structured questionnaire. The questions were modeled after the survey instruments used by the Centers for Disease Control and Prevention for their national and state Behavioral Risk Factor Surveillance System (BRFSS) and Youth Risk Behavior Surveillance System (YRBSS). 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.

## Internal Revenue Services (IRS) Requirements

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

## DEFINITION OF COMMUNITY & SERVICE AREA DETERMINATION

The community has been defined as Ottawa County. In 2019, over 85% of Magruder Hospital discharges were residents of Ottawa County. This includes discharge from the emergency department, urgent care, and the inpatient unit (inpatient/observation/swing). In addition, Magruder Hospital collaborates with multiple stakeholders, most of which provide services at the county-level. For these two reasons, the county was defined as the community.

## INCLUSION OF VULNERABLE POPULATIONS

Approximately 10% of Ottawa County residents were below the poverty line, according to the 2014-2018 American Community Survey 5 year estimates. For this reason, data is broken down by income (less than \$25,000 and greater than \$25,000) throughout the report to show disparities.

## PROCESS & METHODS FOR ENGAGING COMMUNITY

This community health needs assessment process was commissioned by the Ottawa County Health Partners. This coalition approximately 10 member organizations. Multiple sectors, including the general public, were asked through email list serves, social media, and public notices to participate in the process which included defining the scope of the project, choosing questions for the surveys, reviewing initial data, planning a community release, and identifying and prioritizing needs. Ten organizations worked together to create one comprehensive assessment and plan, with more than 10 community members attending the release and providing qualitative feedback.

## QUANTITATIVE & QUALITATIVE DATA ANALYSIS

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



## **IDENTIFYING & PRIORITIZING NEEDS**

The Ottawa County Health Partners met multiple times to complete the 2018-2021 Ottawa County Community Health Improvement Plan. The Ottawa County Health Partners used the Mobilizing for Action through Planning and Partnerships (MAPP) process, which is a community-driven strategic planning process for improving community health. This framework helps communities apply strategic thinking to prioritize health issues and identify resources to address them. There were ten coordinating agencies that comprised the CHIP steering committee and oversee the two priority area teams. The priority areas and coordinating agencies can be found in Appendix VIII.

Details of this process and its results can be found on the Ottawa County Health Department's website. Ottawa County is focused on the following priority areas: mental health & addiction and chronic disease prevention.

## **RESOURCES TO ADDRESS NEED**

Needs and priorities identified through the planning process, resulted in a comprehensive 2018-2021 Ottawa County Community Health Improvement Plan. Numerous resources were identified to address the needs found in the report, which can be found on the Ottawa County Health Department's website.

## **EVALUATION OF IMPACT**

The evaluation of impact takes into consideration the feedback from the last community health needs assessment. Magruder Hospital tracks the impact of priority action steps. The results can be found in Appendix X.

## **CHNA AVAILABILITY**

The 2020 Magruder Hospital's Community Health Needs Assessment, as well as the various other assessments used in creating this report can be found at the following websites:

Magruder Hospital: <https://www.magruderhospital.com/ottawa-county-health-assessment>

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

## **ADOPTION BY BOARD**

The Magruder Hospital's Board adopted the 2020 Magruder Hospital Community Health Needs Assessment on September 29, 2020.



## Primary Data Collection Methods

### DESIGN

This community health assessment was cross-sectional in nature and included a written survey of adults and adolescents within Ottawa 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

Two survey instruments were designed and pilot tested for this study: one for adults and one for adolescents in grades 6-12. As a first step in the design process, health education researchers from the University of Toledo and staff members from the Hospital Council of Northwest 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 the adults and adolescents. The investigators decided to derive most of the adult survey items from the BRFSS and many of the adolescent survey items from the YRBSS. This decision was based on being able to compare local data with state and national data.

The project coordinator from the Hospital Council of Northwest Ohio conducted a series of meetings with the planning committee from Ottawa County. During these meetings, HCNO and the planning committee reviewed and discussed banks of potential survey questions. Based on input from the Ottawa County planning committee, the project coordinator composed drafts of surveys containing 114 items for the adult survey and 77 items for the adolescent survey. Health education researchers from the University of Toledo reviewed and approved the drafts.

### SAMPLING | Adult Survey

The sampling frame for the adult survey consisted of adults ages 19 and over living in Ottawa County. There were 34,283 persons ages 19 and over living in Ottawa 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 380 adults was needed to ensure this level of confidence. The random sample of mailing addresses was obtained from Melissa Data Corporation in Rancho Santa Margarita, California.

### SAMPLING | Adolescent Survey

Youth in grades 6-12 in Ottawa County public school districts were used as the sampling frame for the adolescent survey. Using the U.S. Census Bureau data, it was determined that approximately 3,696 youth ages 12 to 18 years old live in Ottawa County. A sample size of 348 adolescents was needed to ensure a 95% confidence interval with a corresponding 5% margin of error. Students were randomly selected and surveyed in the schools.

### PROCEDURE | Adult Survey

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

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

The response rate for the mailing was 47% (n=527; CI=± 4.24). This return rate and sample size means that the responses in the health assessment should be representative of the entire county.

## **PROCEDURE | Adolescent Survey**

Three out of four potential school districts agreed to participate. The survey was approved by all participating superintendents. Schools and grades were randomly selected. Each student in that grade had to have an equal chance of being in the class that was selected, such as a general English or health class. Classrooms were chosen by the school principal.

Permission slips were mailed home to parents of any student whose class was selected to participate. Two districts used passive permission slips and one district used active permission slips. The response rate for the districts that used passive permission slips was 95% (n=301; CI=± 5.41). The response rate for the district that used active permission slips was 28% (n=55; CI=± 13.12). The total response rate was 69% (n=356; CI=± 4.94).

## **DATA ANALYSIS**

Individual responses were anonymous. Only group data was available. All data was analyzed by health education researchers at the University of Toledo using SPSS 21.0. Crosstabs were used to calculate descriptive statistics for the data presented in this report. To be representative of Ottawa County, the adult data collected was weighted by age, gender, race, and income using 2010 Census data. Multiple weightings were created based on this information to account for different types of analyses. For more information on how the weightings were created and applied, see Appendix III.

## **LIMITATIONS**

As with all county health assessments, it is important to consider the findings with respect to all possible limitations. First, the Ottawa 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 Ottawa County). If there were little to no differences between respondents and non-respondents, then this would not be a limitation.

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


Finally, 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 was collected using a set of questions from the total question bank, and adults were asked the questions over the telephone rather than via a mail survey. The youth CDC survey was administered in schools in a similar fashion as this county health assessment.

## **Secondary Data Collection Methods**

HCNO collected secondary data from over 50 sites, including county-level data, wherever possible. HCNO utilized sites, such as the Ohio Department of Health database, Behavioral Risk Factor Surveillance System (BRFSS), Youth Risk Behavior Surveillance System (YRBSS), numerous CDC sites, Census, American Community Survey, American Cancer Society, American Diabetes Association, Healthy People 2020, County Health Rankings, Job & Family Services (Individual & Family Services), etc. Most secondary data is from 2016-2018. However, trend data has been included starting from 2006 for some indicators. All of the data is included in the section of the report it corresponds with. All primary data collected in this report is from the 2017 Ottawa County Community Health Assessment. All other data will be sourced accordingly.

## 2019 Ohio State Health Assessment (SHA)

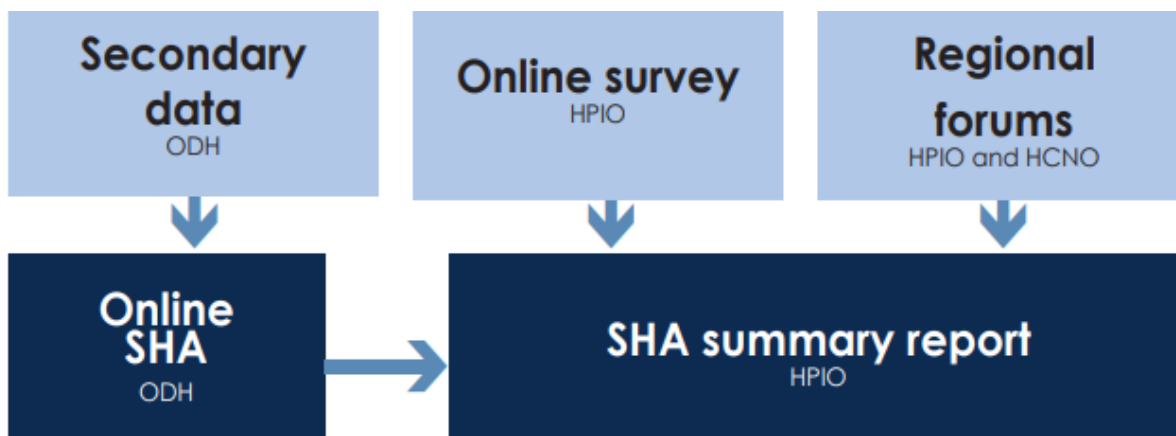
The 2019 Ohio State Health Assessment (SHA) provides data needed to inform health improvement priorities and strategies in the state. This assessment includes over 140 metrics, organized into data profiles, as well as information gathered through five regional forums, online surveys completed by over 300 stakeholders, and advisory and steering committee members who represented 13 state agencies, including sectors beyond health.

Similar to the 2019 Ohio SHA, the 2017 Ottawa County Community Health Assessment (CHA) examined a variety of metrics from various areas of health including, but not limited to, health behaviors, chronic disease, access to health care, and social determinants of health. Additionally, the CHA studied themes and perceptions from local public health stakeholders from a wide variety of sectors. **Note: This symbol  will be displayed in the trend summary when an indicator directly aligns with the 2019 Ohio SHA.**

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

To view the full 2019 Ohio State Health Assessment, please visit: <https://odh.ohio.gov/wps/portal/gov/odh/about-us/sha-ship/>.

**FIGURE 1.1 | Components of the 2019 State Health Assessment (SHA)**

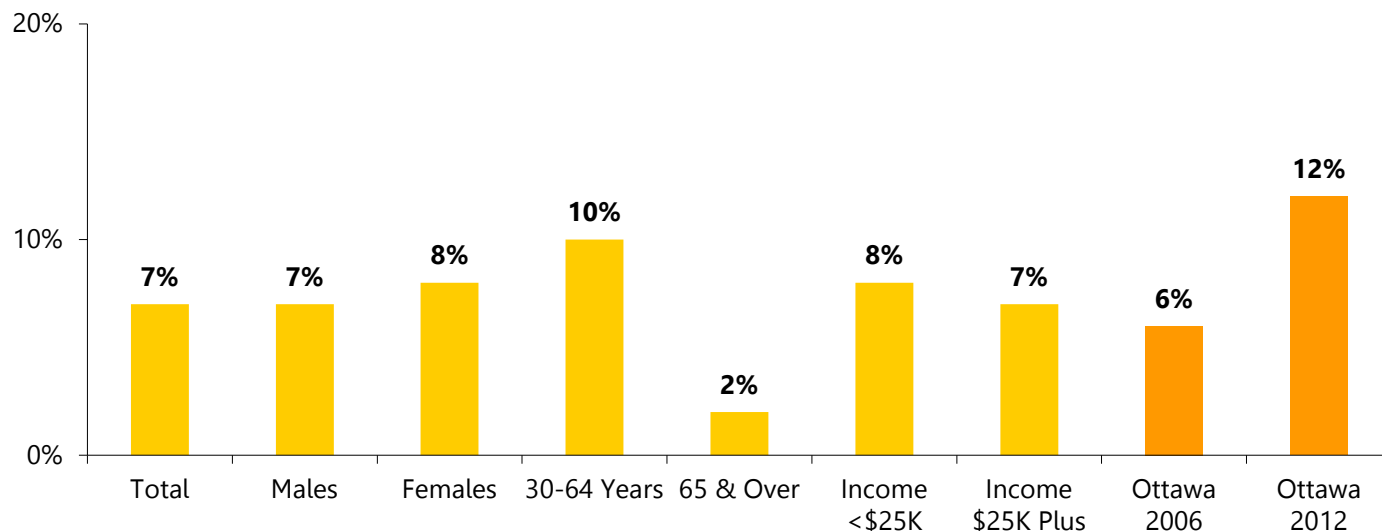


## Data Summary | Health Care Access

### HEALTH CARE COVERAGE

The health assessment identified that 7% of Ottawa County adults were without health care coverage. The top reason adults gave for being without health care coverage was not being able to afford to pay the premiums (43%).

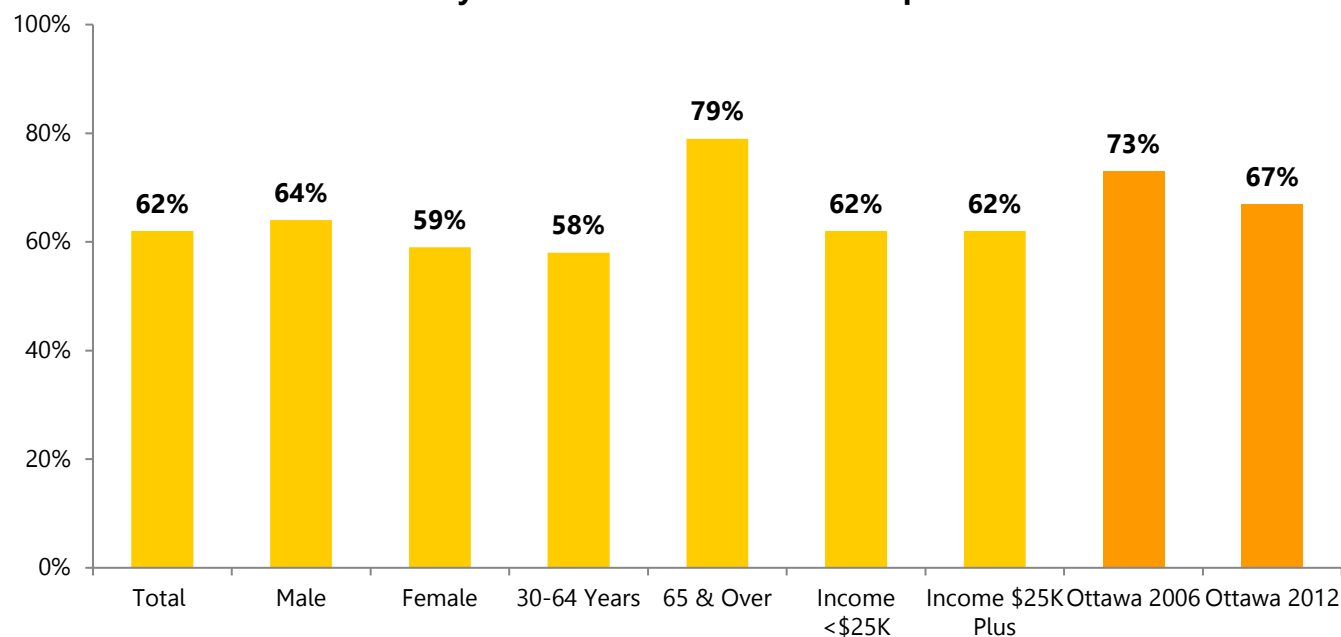
**Uninsured Ottawa County Adults**



### ACCESS AND UTILIZATION

More than three-fifths (62%) of Ottawa County adults had visited a doctor for a routine checkup in the past year. More than four-fifths (83%) of adults went outside of Ottawa County for health care services in the past year.

**Ottawa County Adults with a Routine Check-up in the Past Year**



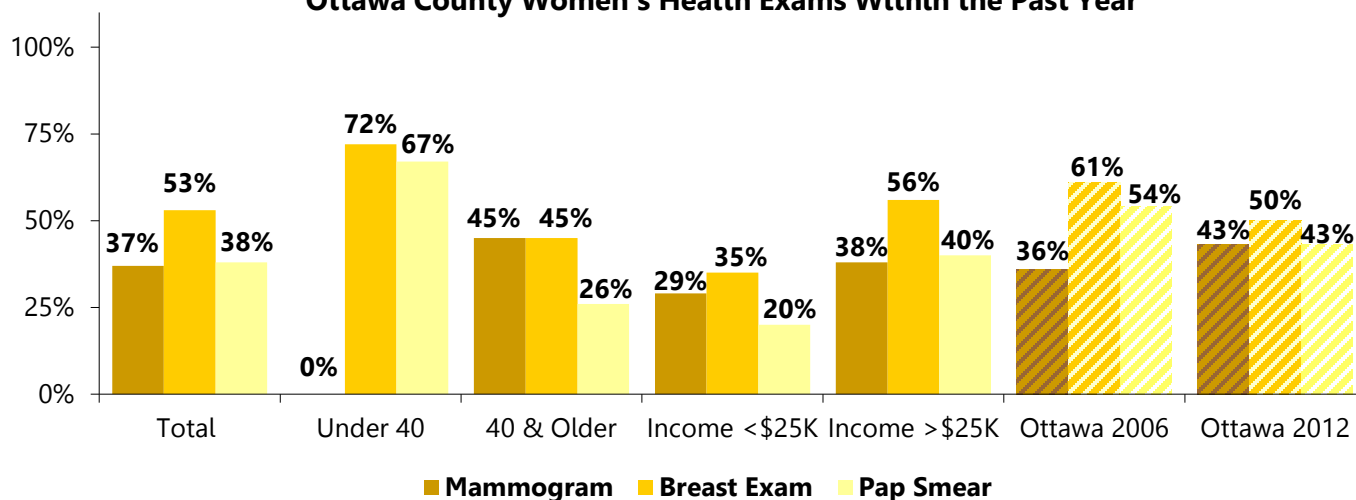
## PREVENTIVE MEDICINE

Almost three-quarters (71%) of adults ages 65 and over had a pneumonia vaccination at some time in their life. Nearly half (49%) of adults ages 50 and over had a colonoscopy or sigmoidoscopy in the past 5 years.

## WOMEN'S HEALTH

In 2017, more than two-fifths (45%) of Ottawa County women over the age of 40 reported having a mammogram in the past year. Fifty-three percent (53%) of Ottawa County women ages 19 and over had a clinical breast exam and 38% had a Pap smear to detect cancer of the cervix in the past year. The health assessment determined that 5% of women survived a heart attack and 2% survived a stroke at some time in their life. Nearly two-fifths (37%) of women were obese, 31% had high blood pressure, 35% had high blood cholesterol, and 13% were identified as smokers, all known risk factors for cardiovascular diseases.

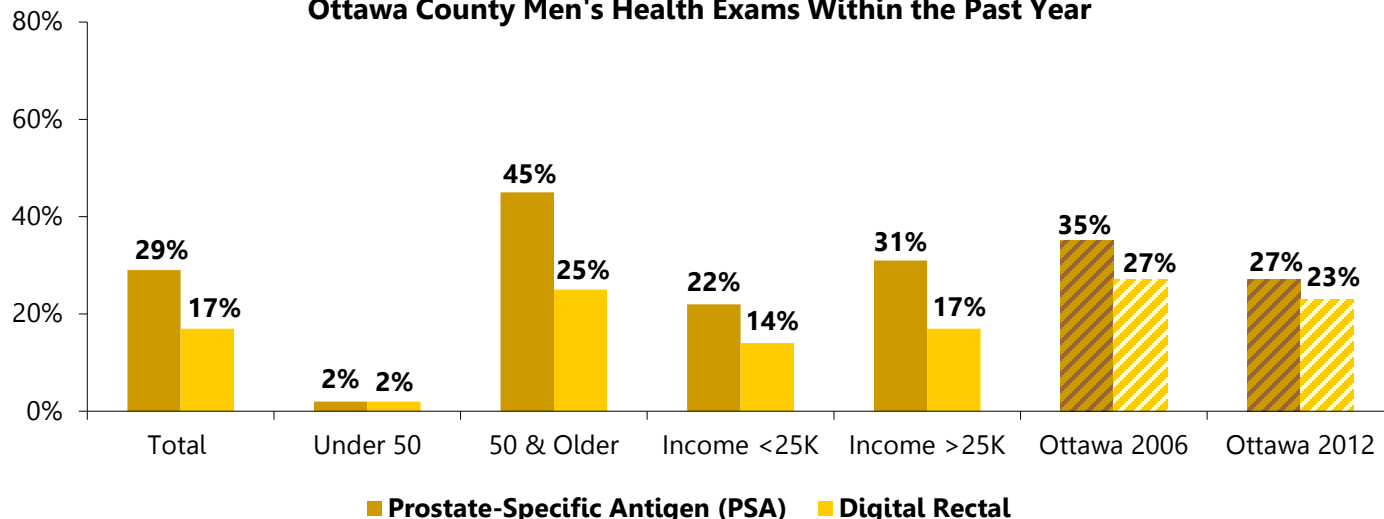
**Ottawa County Women's Health Exams Within the Past Year**



## MEN'S HEALTH

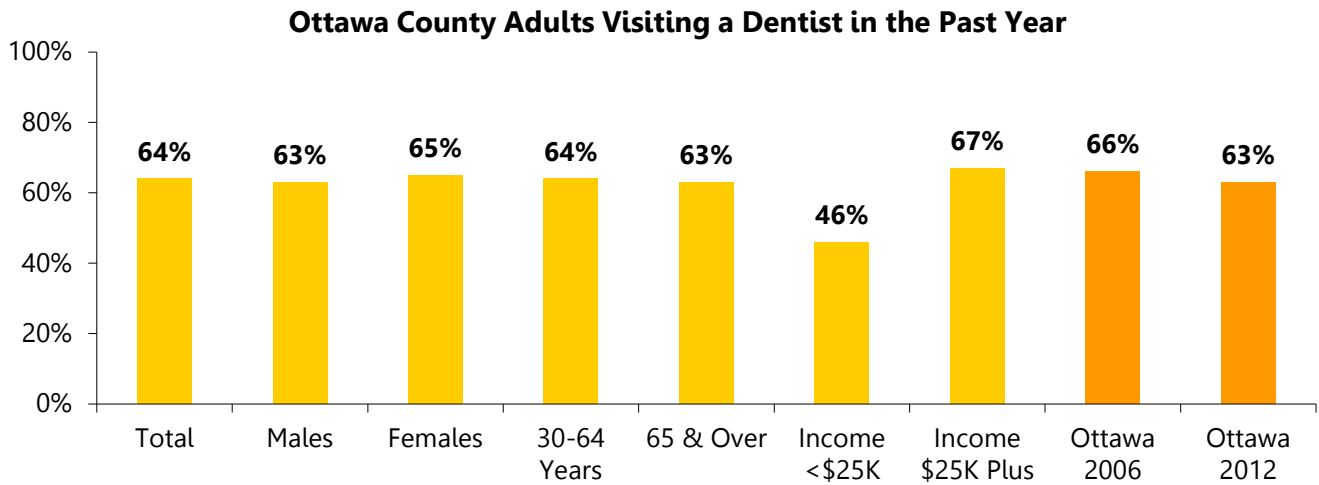
In 2017, 45% of Ottawa County males over the age of 50 had a Prostate-Specific Antigen (PSA) test within the past year. More than half (51%) of men had been diagnosed with high blood pressure, 44% had high blood cholesterol, and 17% were identified as smokers, which, along with obesity (45%), are known risk factors for cardiovascular diseases.

**Ottawa County Men's Health Exams Within the Past Year**



## ORAL HEALTH

The health assessment has determined almost two-thirds (64%) of Ottawa County adults had visited a dentist or dental clinic in the past year. The 2018 BRFSS reported that 67% of Ohio adults and 68% of U.S. adults had visited a dentist or dental clinic in the previous twelve months.

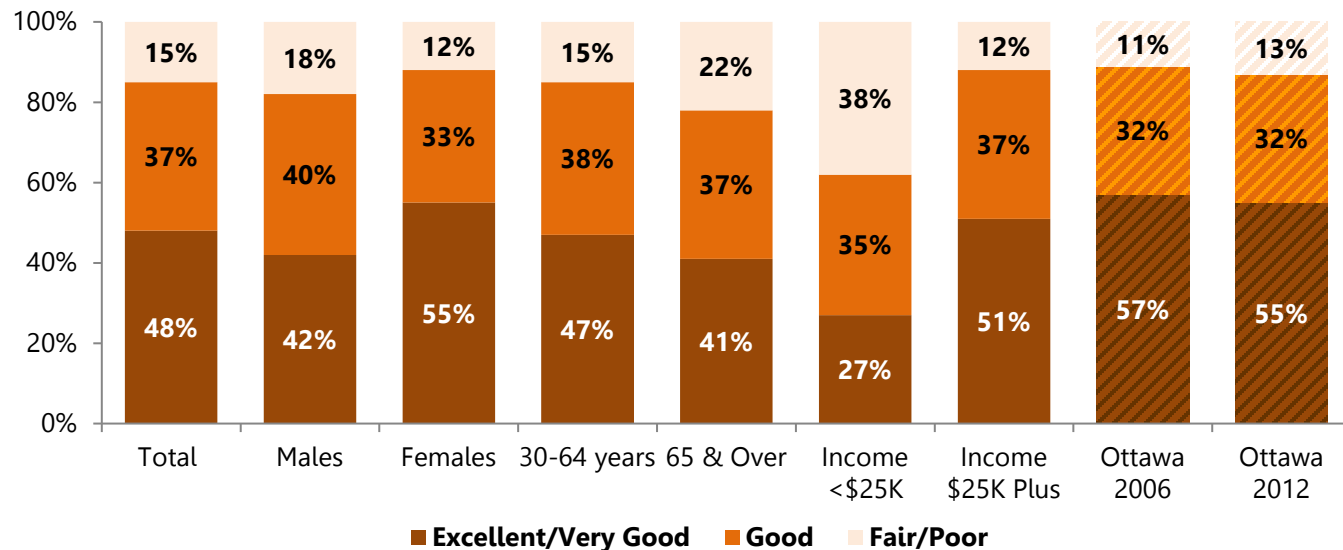


## Data Summary | Health Behaviors

### HEALTH STATUS PERCEPTIONS

In 2017, nearly half (48%) of Ottawa County adults rated their health status as excellent or very good. Conversely, 15% of adults described their health as fair or poor, increasing to 38% of those with incomes less than \$25,000.

**Ottawa County Adult Health Perceptions\***

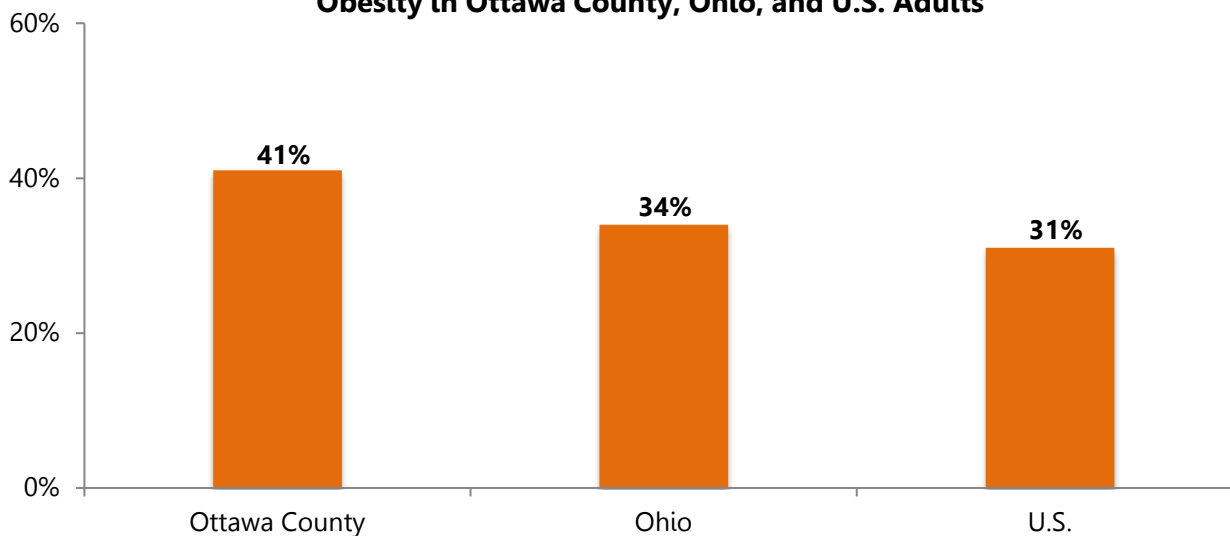


\*Respondents were asked: "Would you say that in general your health is excellent, very good, good, fair or poor?"

### ADULT WEIGHT STATUS

More than three-fourths (77%) of Ottawa County adults were overweight (36%) or obese (41%) based on Body Mass Index (BMI). Fifty-four percent (54%) of adults engaged regularly in some type of physical activity or exercise for at least 30 minutes 3 or more days per week.

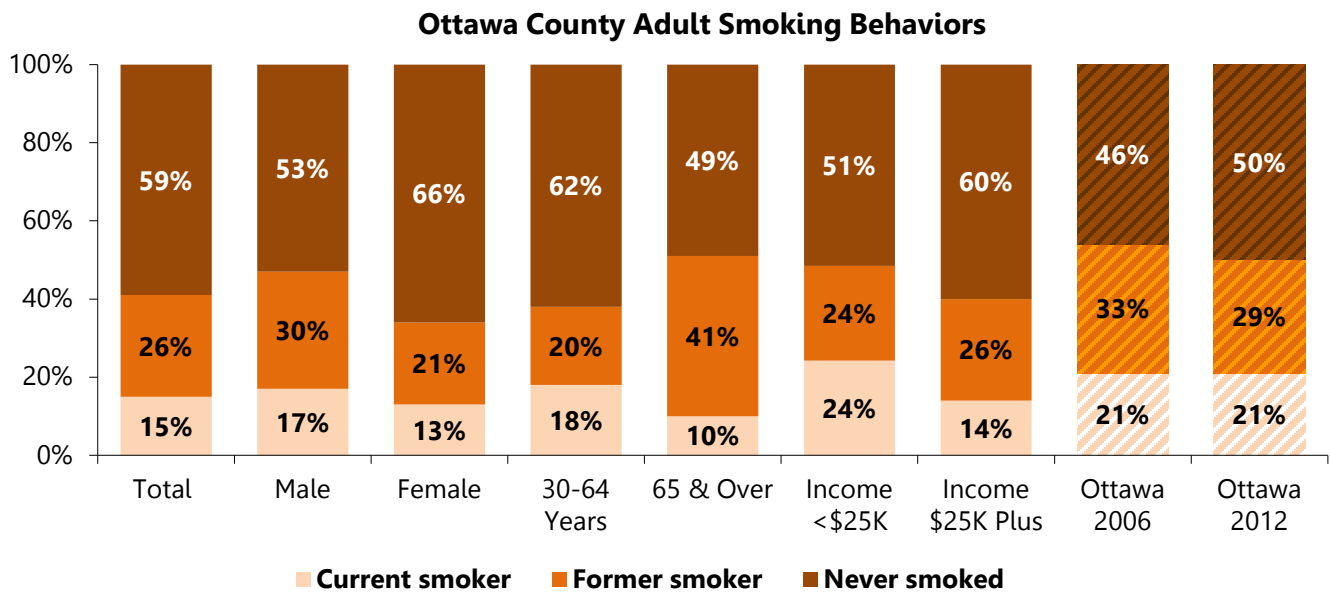
**Obesity in Ottawa County, Ohio, and U.S. Adults**





## ADULT TOBACCO USE

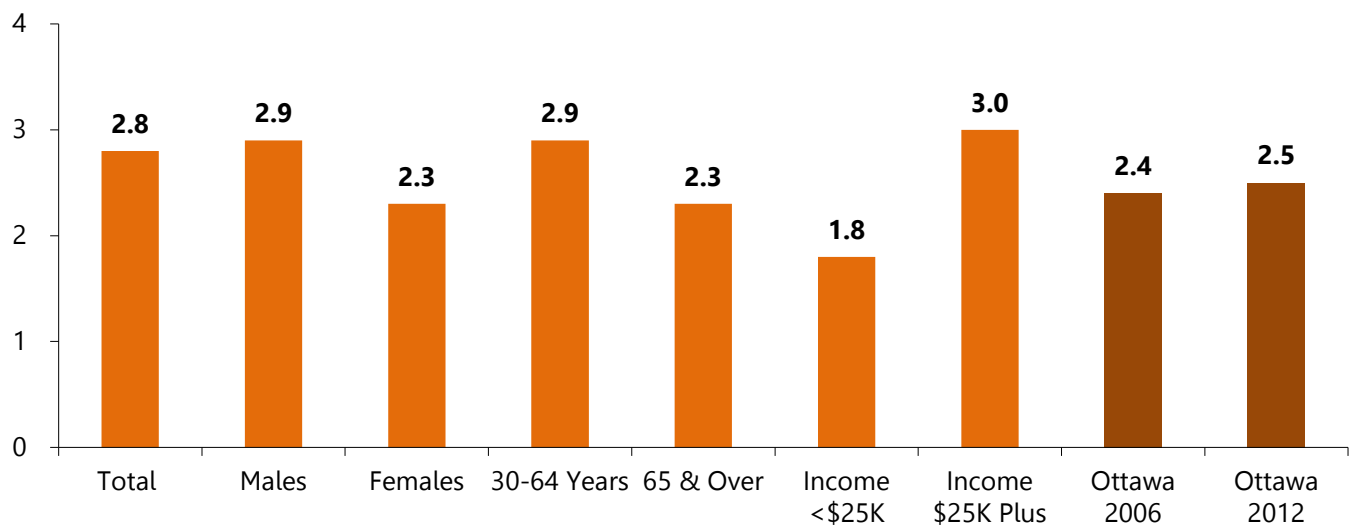
In 2017, 15% of Ottawa County adults were current smokers, and 26% were considered former smokers. Just over half (51%) of smokers reported trying to quit in the past year.



## ADULT ALCOHOL USE

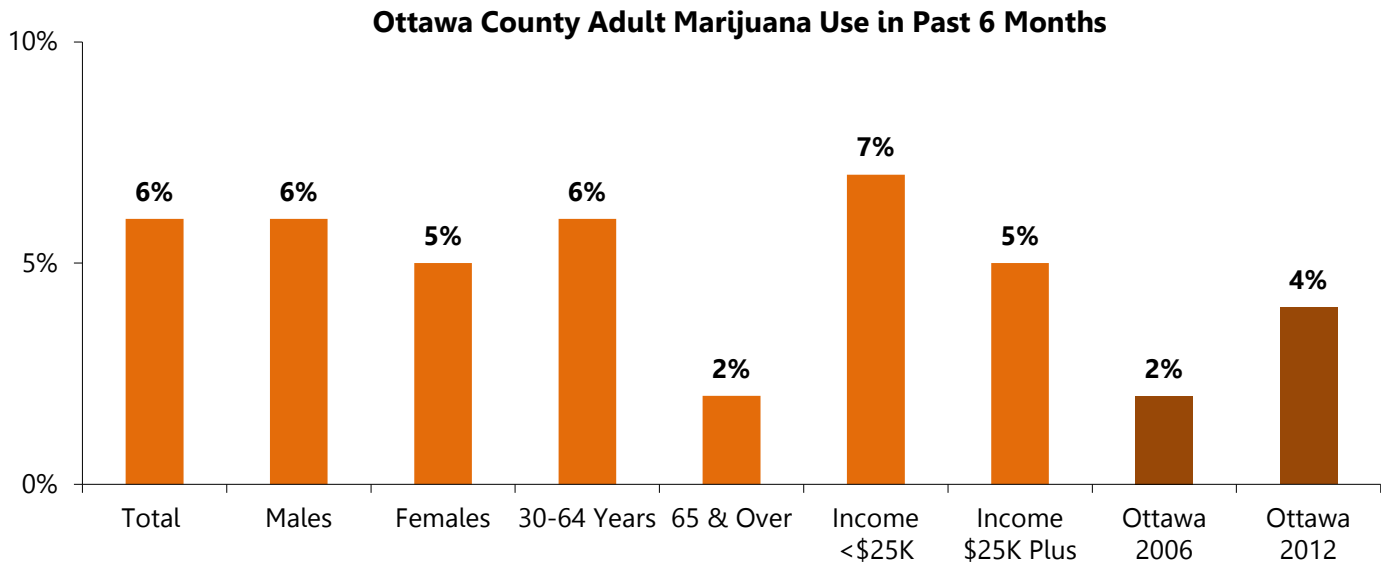
The health assessment indicated that 62% of Ottawa County adults were considered current drinkers. More than one-quarter (26%) of adults reported they had five or more alcoholic drinks (for males) or four or more drinks (for females) on an occasion in the last month and would be considered binge drinkers.

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



## ADULT DRUG USE

Six percent (6%) of Ottawa County adults had used marijuana during the past 6 months. Five percent (5%) of adults had used medication not prescribed for them or took more than prescribed to feel good or high and/or more active or alert during the past 6 months.

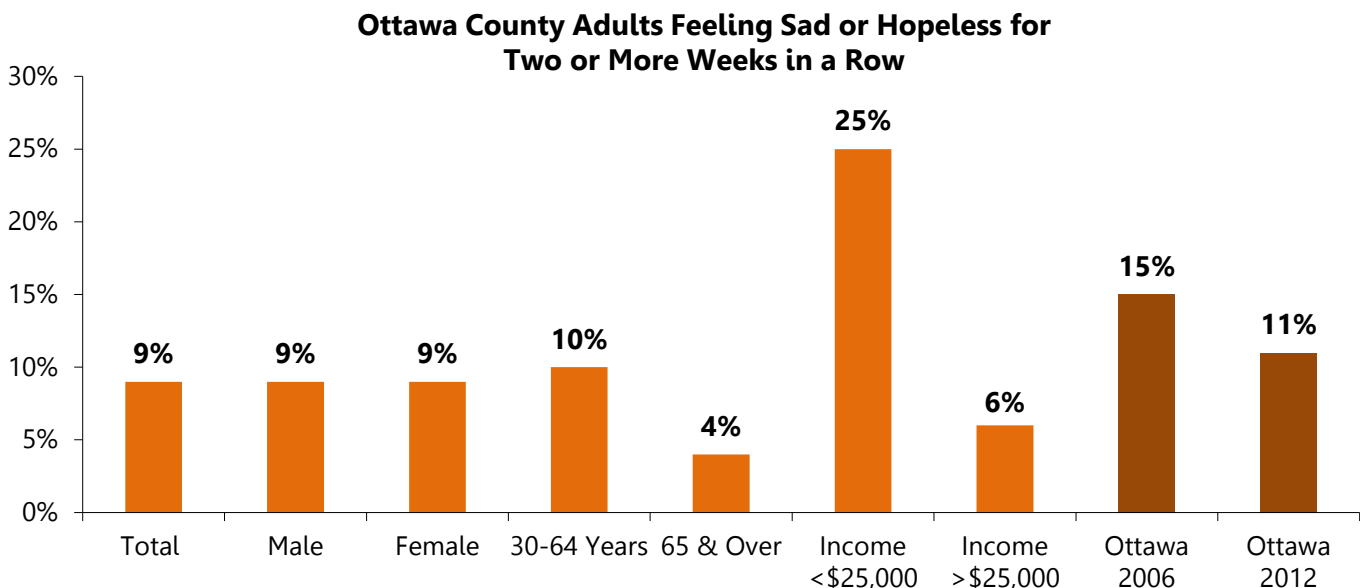


## ADULT SEXUAL BEHAVIOR

In 2017, 66% of Ottawa County adults had sexual intercourse. Four percent (4%) of adults had more than one partner. Prevalence estimates suggest that young people aged 15-24 years acquire half of all new STDs and that 1 in 4 sexually active adolescent females have an STD, such as chlamydia or human papillomavirus (HPV) (*Source: CDC, Sexually Transmitted Disease Surveillance 2018, Updated July 20, 2019*).

## ADULT MENTAL HEALTH

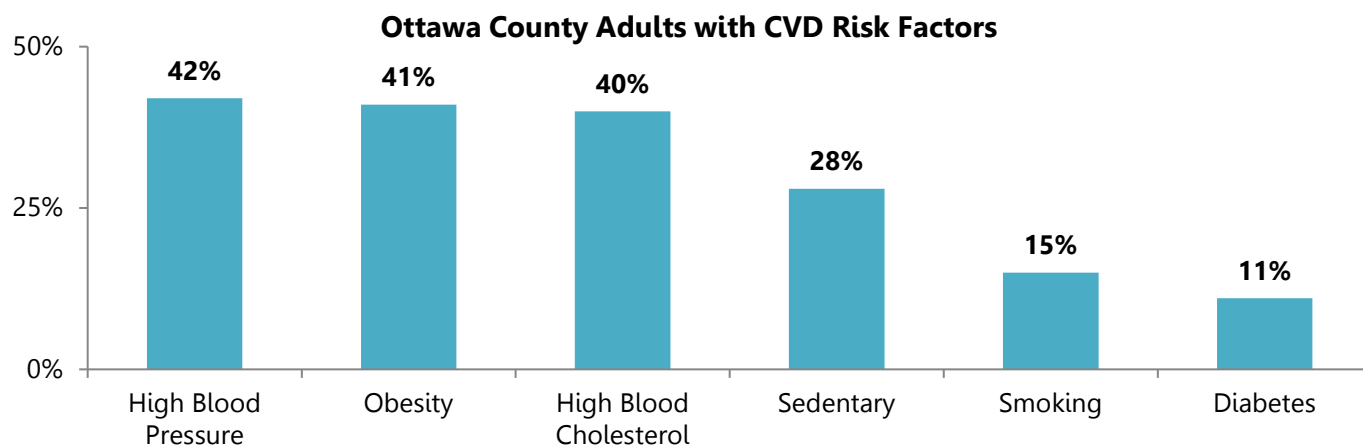
In 2017, 3% of Ottawa County adults considered attempting suicide. One out of eleven (9%) of adults felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing usual activities.



## Data Summary | Chronic Disease

### CARDIOVASCULAR HEALTH

The 2017 Ottawa County Health Assessment found that 7% of adults had survived a heart attack and 2% had survived a stroke at some time in their life. Just over two-fifths (42%) of Ottawa County adults had high blood pressure, 41% were obese, 40% had high blood cholesterol, and 15% were smokers, four known risk factors for heart disease and stroke. Heart disease (26.3%) and stroke (5.3%) accounted for 31.6% of all Ottawa County adult deaths in 2016-2018 (Source: Ohio Public Health Data Warehouse, 2016-2018).



### CANCER

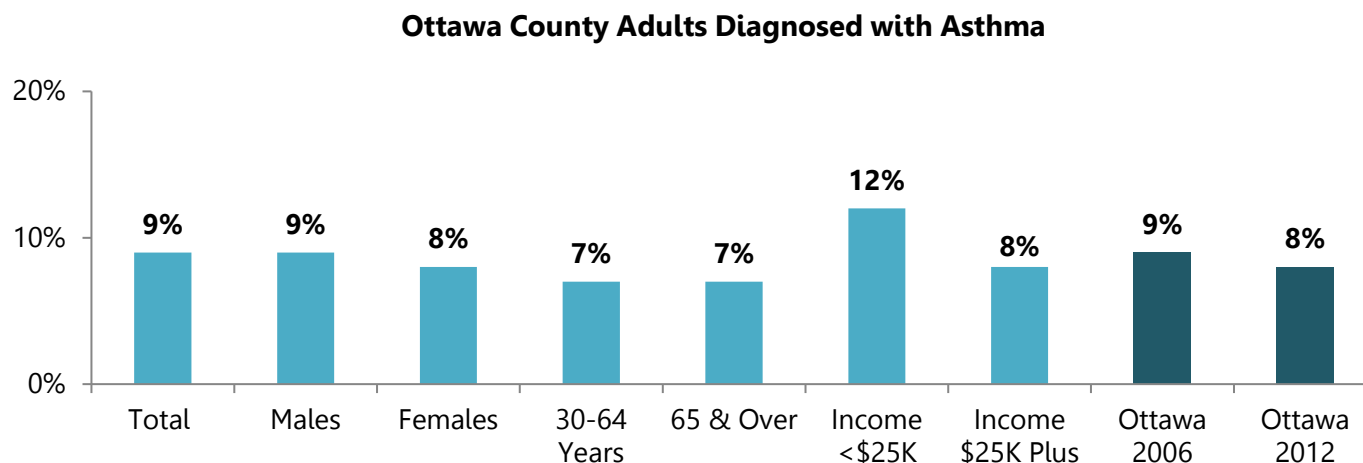
In 2017, 18% of Ottawa County adults had been diagnosed with cancer at some time in their life. The Ohio Department of Health indicates that from 2016-2018, a total of 83 Ottawa County residents died from cancer, the second leading cause of death in the county. The American Cancer Society advises that 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.

### ARTHRITIS

According to the Ottawa County survey data, 40% of Ottawa County adults were diagnosed with arthritis. The 2018 BRFSS indicates that 31% of Ohio adults and 26% of U.S. adults were told they had arthritis.

### ASTHMA

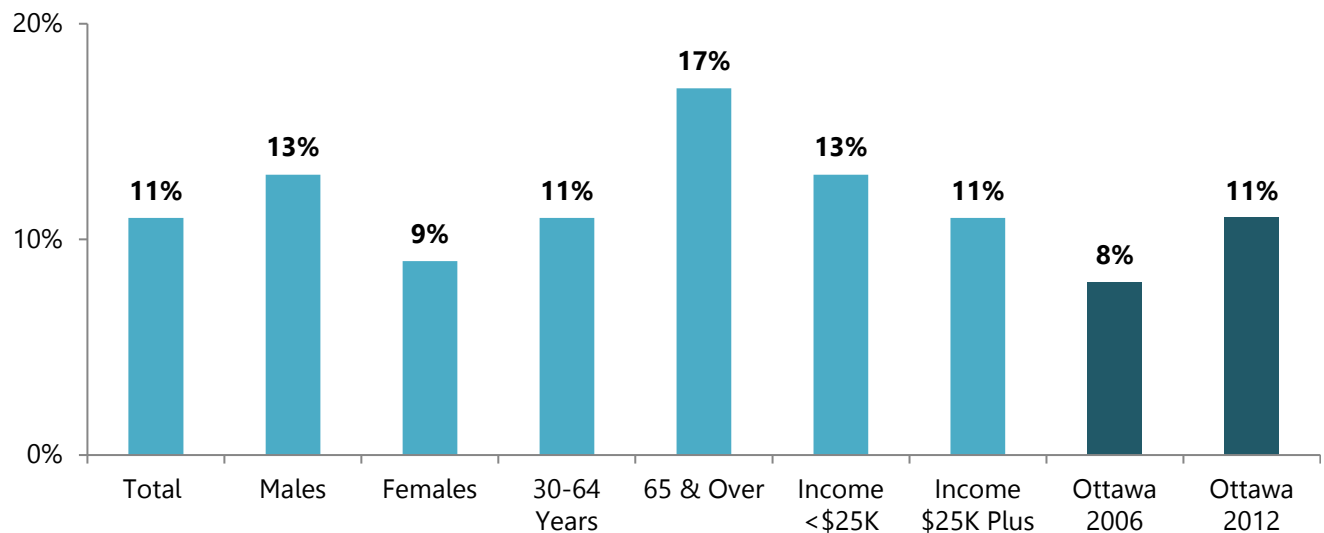
According to the Ottawa County survey data, 9% of adults had been diagnosed with asthma.



## DIABETES

In 2017, 11% of Ottawa County adults had been diagnosed with diabetes.

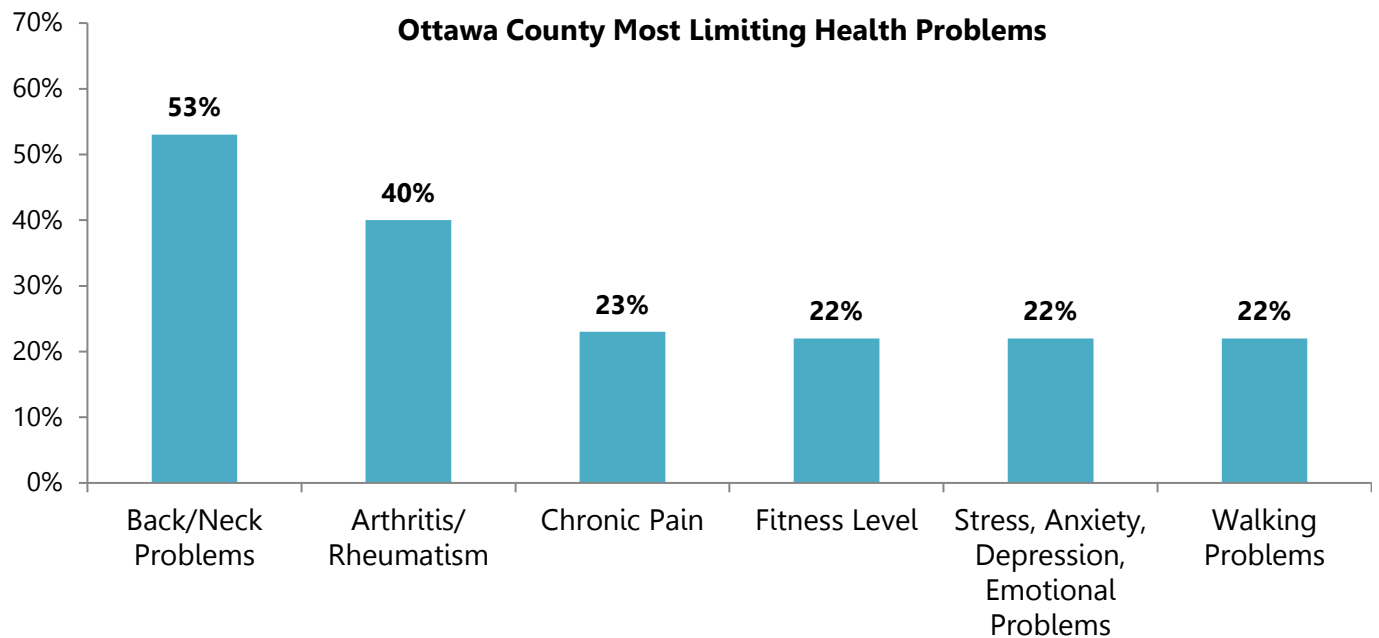
### Ottawa County Adults Diagnosed with Diabetes



## QUALITY OF LIFE

In 2017, back and neck problems were Ottawa County adult's most limiting health impairment.

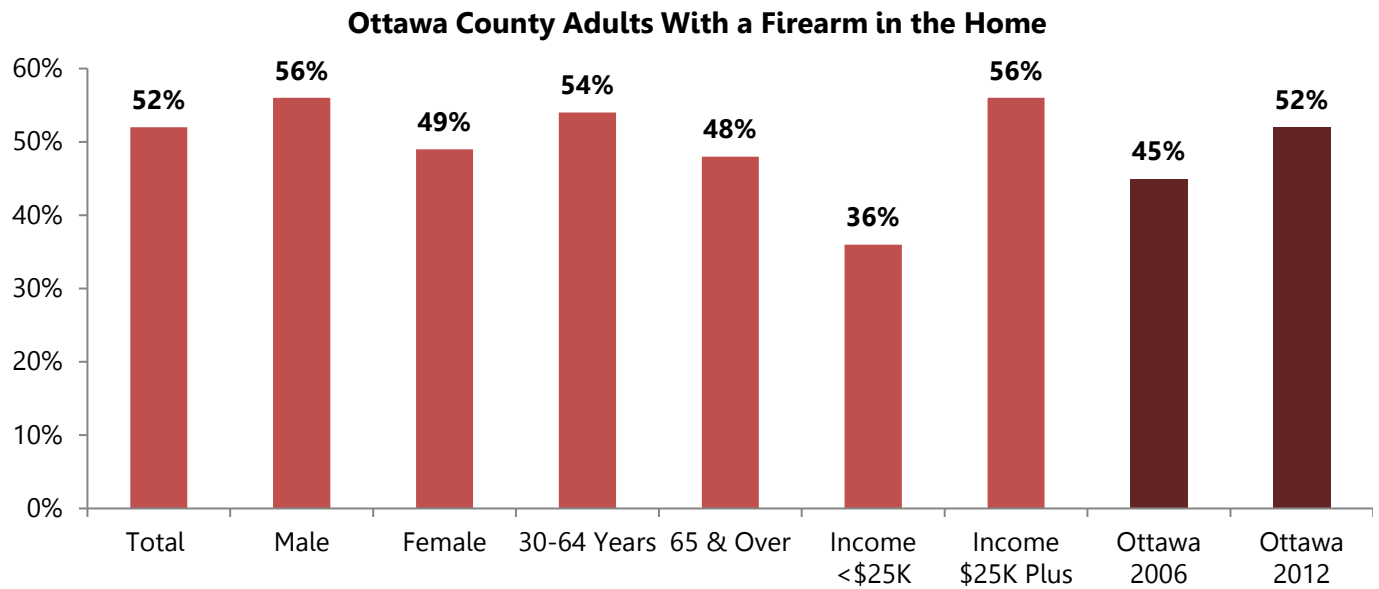
### Ottawa County Most Limiting Health Problems



## Data Summary | Social Conditions

### SOCIAL DETERMINANTS OF HEALTH

In 2017, 7% of Ottawa County adults were abused in the past year (including physical, sexual, emotional, financial, or verbal abuse). Nine percent (9%) of adults needed help meeting their general daily needs.



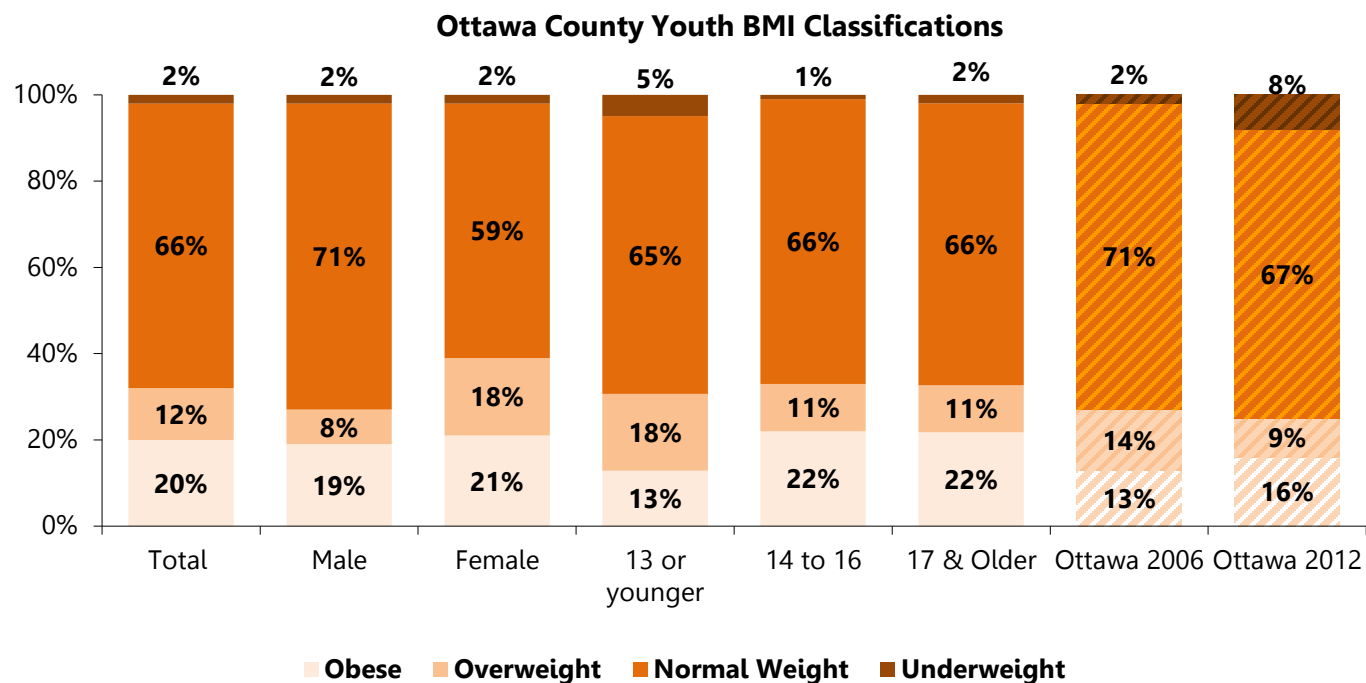
### PARENTING

More than two-thirds (68%) of Ottawa County parents discussed social media issues with their 10-to-17-year-old in the past year. Sixty-seven percent (67%) of parents put their infant to sleep on their back.

## Data Summary | Youth Health

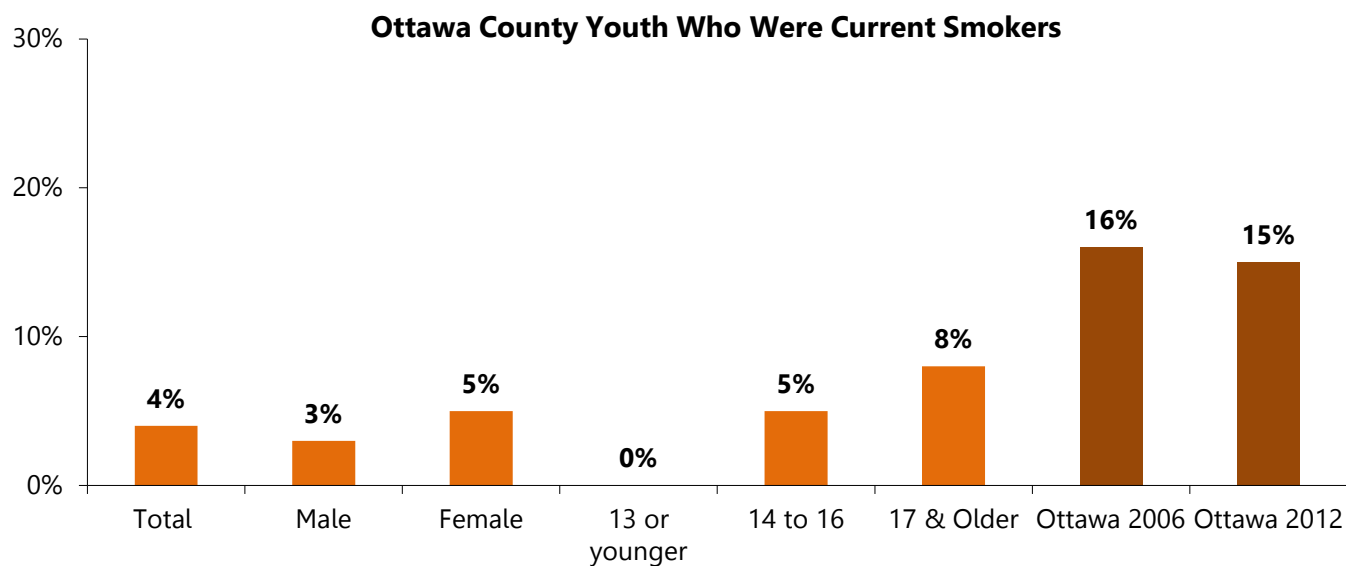
### YOUTH WEIGHT STATUS

In 2017, 32% of youth were classified as overweight (12%) or obese (20%) according to Body Mass Index (BMI) by age. When asked how they would describe their weight, 34% of Ottawa County youth reported that they were slightly or very overweight. About three-quarters (76%) of youth exercised for 60 minutes on 3 or more days per week.



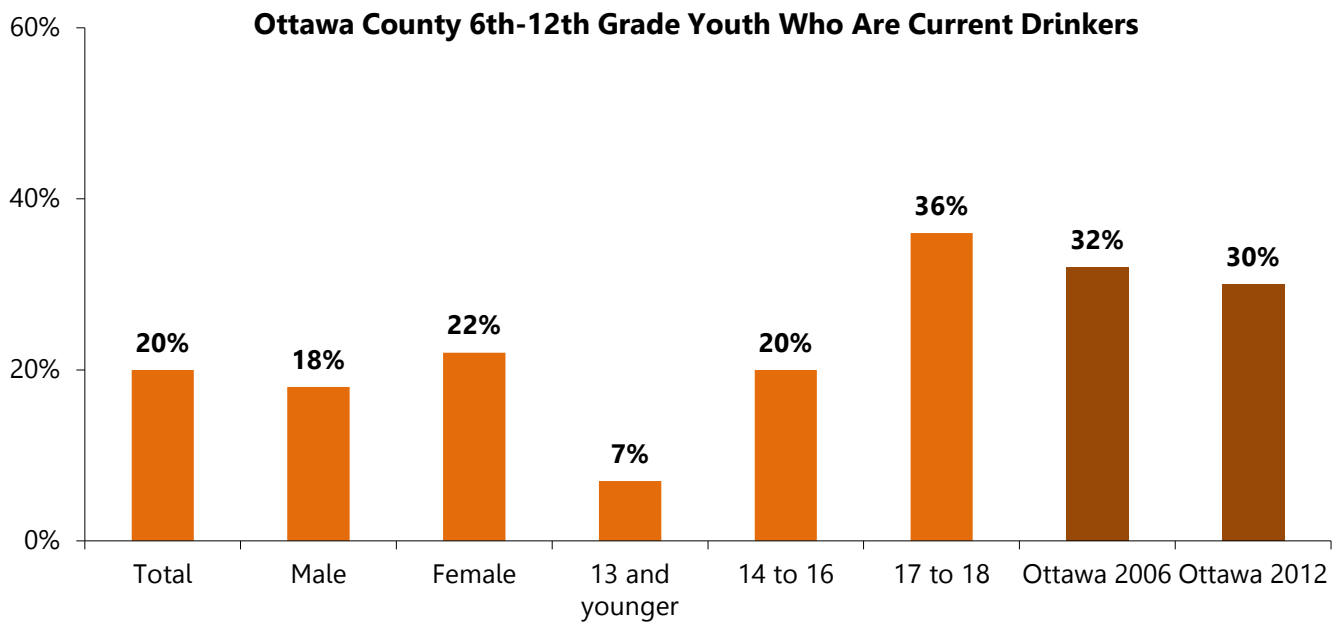
### YOUTH TOBACCO USE

The health assessment identified that 4% of Ottawa County youth were current smokers, increasing to 8% of those ages 17 and older. One-tenth (10%) of those who had smoked a whole cigarette did so at 10 years old or younger. Ten percent (10%) of youth used e-cigarettes in the past year. The average age of onset for smoking was 13.2 years old.



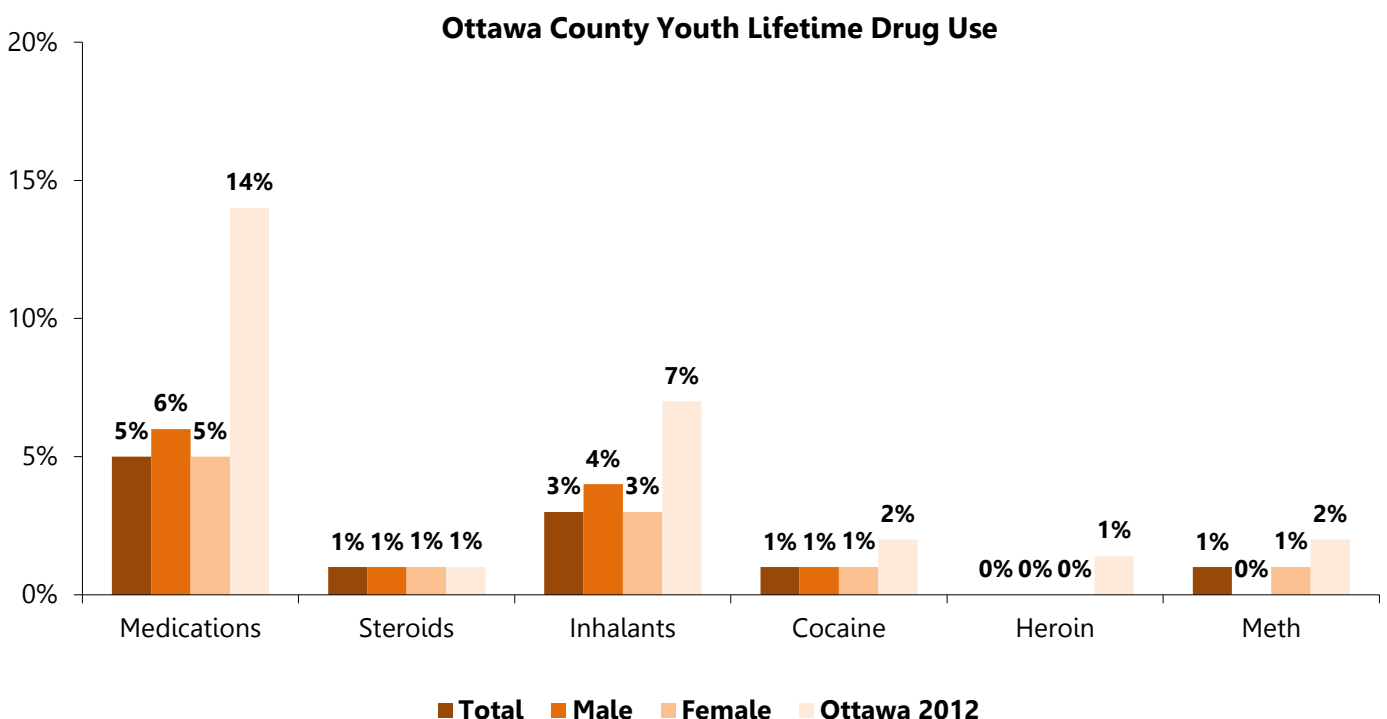
## YOUTH ALCOHOL USE

More than two-fifths (45%) of all Ottawa County youth had at least one drink of alcohol in their life. One-fifth (20%) of youth had at least one drink in the past 30 days, increasing to 36% of those ages 17 and older. In the past 30 days, 17% of youth had ridden in a car driven by someone who had been drinking alcohol.



## YOUTH DRUG USE

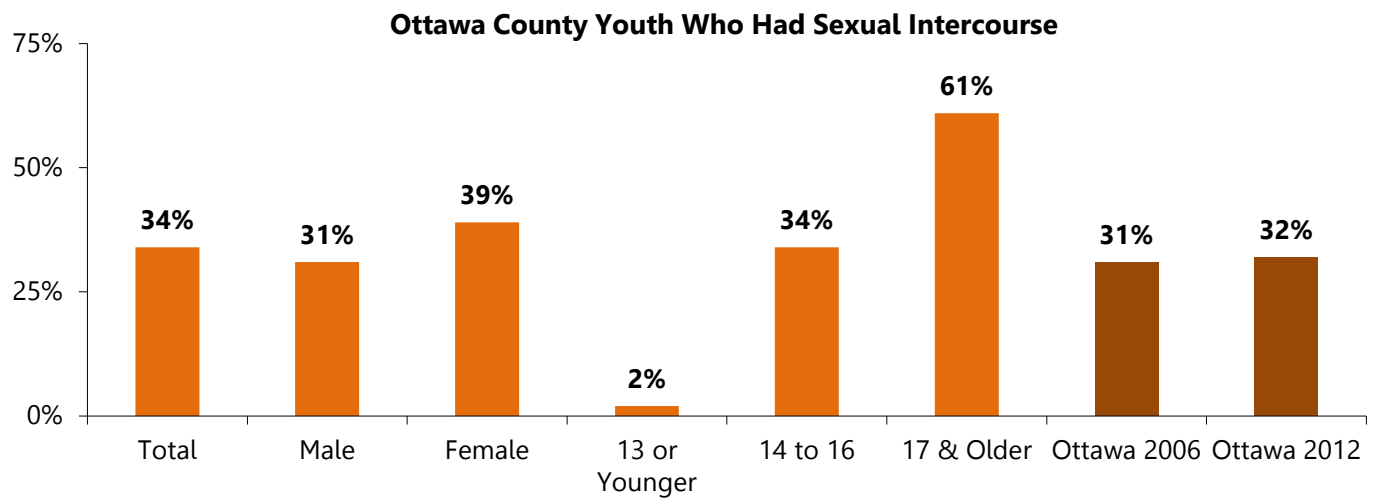
In 2017, 6% of Ottawa County youth had used marijuana at least once in the past 30 days, increasing to 11% of those ages 17 and older. Five percent (5%) of youth used medications that were not prescribed for them or took more than prescribed to get high at some time in their life.





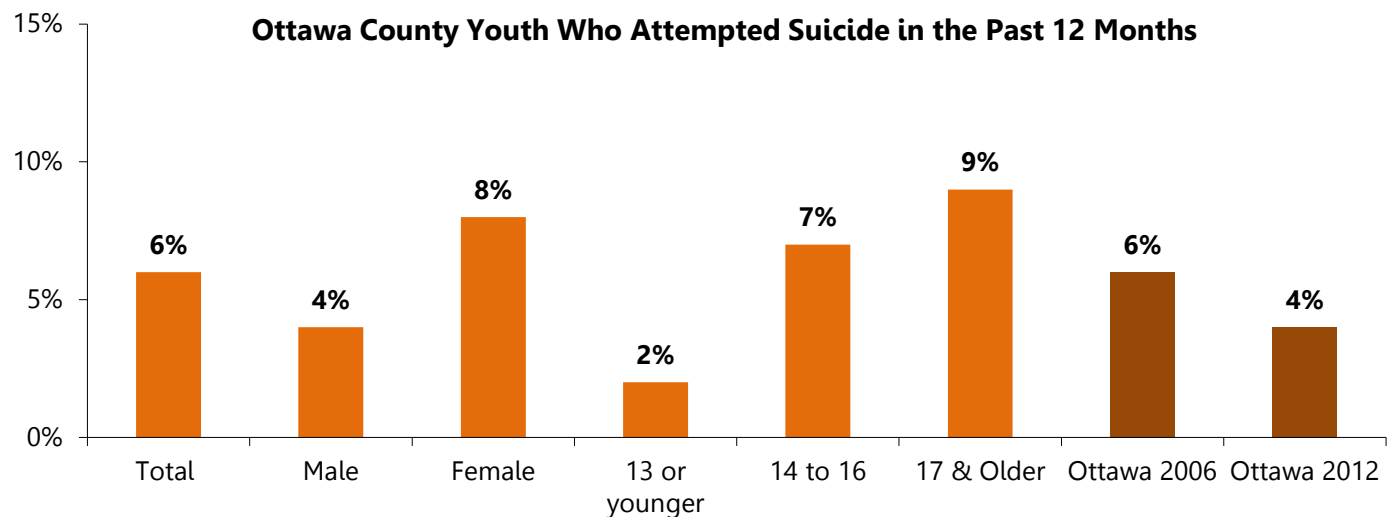
## YOUTH SEXUAL BEHAVIOR

Over one-third (34%) of Ottawa County youth had sexual intercourse. One-quarter (25%) of youth had participated in oral sex and 8% had participated in anal sex. Of those who had sexual intercourse, 43% had multiple sexual partners. Note: Two Ottawa County schools did not ask sexual behavior questions.



## YOUTH MENTAL HEALTH

In 2017, the health assessment results indicated that 26% of youth reported they felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities. Fourteen percent (14%) of Ottawa County youth had seriously considered attempting suicide in the past year, and 6% attempted suicide in the past year.

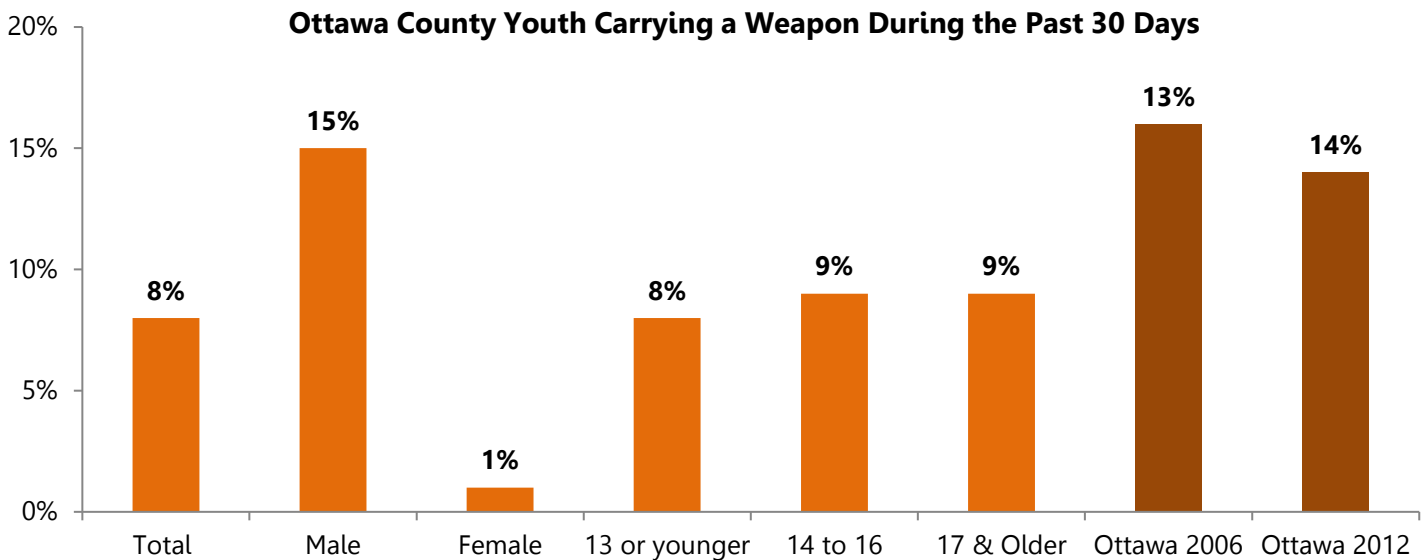


## YOUTH SOCIAL DETERMINANTS OF HEALTH











Nearly three-quarters (74%) of youth visited a doctor for a routine checkup in the past year. Twenty-three percent (23%) of youth experienced three or more adverse childhood experiences (ACEs).

## YOUTH VIOLENCE

Eight percent (8%) of Ottawa County youth carried a weapon (such as a gun, knife or club) in the past month. Just over one-fifth (22%) of youth had been involved in a physical fight, increasing to 32% of males. Over two-fifths (41%) of youth had been bullied in the past year.




# Adult Trend Summary

Adult Variables	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Health Status</b>					
Rated health as excellent or very good	57%	55%	48%	49%	51%
Rated general health as fair or poor 	11%	13%	15%	19%	17%
Rated their mental health as not good on four or more days in the previous month	18%	22%	26%	N/A	N/A
Average days that physical health not good in past month	N/A	3.1	4.8	3.9**	3.8**
Average days that mental health not good in past month	N/A	3.8	3.8	4.6**	4.0**
<b>Health Care Coverage, Access, and Utilization</b>					
Uninsured	6%	12%	7%	7%	11%
Visited a doctor for a routine checkup in the past year 	73%	67%	62%	79%	77%
<b>Arthritis, Asthma, &amp; Diabetes</b>					
Has been diagnosed with diabetes 	8%	11%	11%	12%	11%
Has been diagnosed with arthritis	37%	32%	40%	31%	26%
Has been diagnosed with asthma 	9%	8%	9%	13%	15%
<b>Cardiovascular Health</b>					
Had angina 	N/A	6%	6%	5%	4%
Had a heart attack 	4%	7%	7%	6%	5%
Had a stroke	1%	1%	2%	4%	3%
Has been diagnosed with high blood pressure 	32%	40%	42%	35%*	32%*
Has been diagnosed with high blood cholesterol	31%	38%	40%	33%*	33%*
Had blood cholesterol checked within the past 5 years	74%	76%	81%	85%*	86%*
<b>Weight Status</b>					
Overweight	34%	37%	36%	34%	35%
Obese 	33%	34%	41%	34%	31%
<b>Alcohol Consumption</b>					
Had at least one alcoholic beverage in past month	55%	63%	62%	52%	54%
Binge drinker (5 or more drinks in a couple of hours on an occasion) 	16%	24%	26%	16%	16%
<b>Tobacco Use</b>					
Current smoker 	21%	21%	15%	21%	16%
Former smoker	33%	29%	26%	25%	25%
Tried to quit smoking	70%	36%	51%	N/A	N/A
<b>Drug Use</b>					
Adults who used marijuana in the past 6 months	2%	4%	6%	N/A	N/A
Adults who misused prescription drugs in the past 6 months	8%	9%	5%	N/A	N/A

N/A - Not Available

\*2017 BRFSS Data

\*2017 BRFSS as compiled by 2020 County Health Rankings

 Indicates alignment with Ohio SHA

Adult Variables	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Preventive Medicine</b>					
Had a flu vaccine in the past year (age 65 and older)	N/A	70%	75%	56%	55%
Had a pneumonia vaccine (age 65 and older)	66%	61%	71%	74%	74%
Had a sigmoidoscopy/colonoscopy in the past 5 years (ages 50 and over)	N/A	54%	49%	65%*	66%*
Had a clinical breast exam in the past two years (age 40 and older)	68%	67%	61%	N/A	N/A
Had a mammogram in the past two years (age 40 and older)	64%	73%	64%	74%	72%
Had a Pap smear in the past three years	73%	68%	60%	79%‡	80%‡
Had a PSA test within the past year (age 40 and older)	N/A	54%	52%	34%€	33%€
Had a digital rectal exam within the past year	27%	23%	17%	N/A	N/A
<b>Mental Health</b>					
Felt sad or hopeless for two or more weeks in a row	15%	11%	9%	N/A	N/A
Considered attempting suicide in the past year	3%	5%	3%	N/A	N/A
<b>Oral Health</b>					
Adults who have visited the dentist in the past year	66%	63%	64%	67%	68%
Adults who had one or more permanent teeth removed	N/A	49%	42%	45%	41%
Adults 65 years and older who had all of their permanent teeth removed	N/A	9%	12%	17%	14%
<b>Sexual Behavior</b>					
Had more than one sexual partner in past year	5%	6%	4%	N/A	N/A









N/A - Not Available

\*Age 50-75 had either a sigmoidoscopy in the past 5 years or colonoscopy in the last 10 years


‡age 21-65




€ past 2 years

# Youth Trend Summary


Youth Variables	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2017 (9 <sup>th</sup> -12 <sup>th</sup> )
<b>Weight Control</b>					
<b>Obese</b> 	13%	16%	20%	23%	15%
<b>Overweight</b> 	13%	9%	12%	11%	16%
<b>Described themselves as slightly or very overweight</b>	28%	26%	34%	35%	32%
<b>Trying to lose weight</b>	51%	48%	50%	50%	47%
<b>Exercised to lose weight</b>	49%	50%	54%	54%	N/A
<b>Ate less food, fewer calories, or foods lower in fat to lose weight</b>	24%	34%	35%	36%	N/A
<b>Went without eating for 24 hours or more</b>	4%	5%	3%	1%	N/A
<b>Took diet pills, powders, or liquids without a doctor's advice</b>	2%	2%	1%	2%	N/A
<b>Vomited or took laxatives</b>	1%	2%	2%	2%	N/A
<b>Ate 1 to 4 servings of fruits and vegetables per day</b> 	N/A	78%	85%	88%	N/A
<b>Physically active at least 60 minutes per day on every day in past week</b>	N/A	66%	28%	25%	26%
<b>Physically active at least 60 minutes per day on 5 or more days in past week</b>	N/A	42%	55%	53%	47%
<b>Did not participate in at least 60 minutes of physical activity on any day in past week</b>	N/A	7%	10%	12%	15%
<b>Watched TV 3 or more hours per day</b>	N/A	35%	14%	15%	21%
<b>Unintentional Injuries and Violence</b>					
<b>Carried a weapon in past month</b>	16%	14%	8%	8%	16%
<b>Carried a weapon on school property in past month</b>	3%	1%	1%	1%	4%
<b>Been in a physical fight in past year</b>	30%	26%	22%	19%	24%
<b>Threatened or injured with a weapon on school property in past year</b>	N/A	7%	6%	4%	6%
<b>Did not go to school because felt unsafe</b> 	3%	6%	3%	3%	7%
<b>Electronically/cyber bullied in past year</b> 	N/A	15%	11%	10%	15%
<b>Bullied in past year</b>	N/A	50%	41%	40%	N/A
<b>Bullied on school property in past year</b>	N/A	34%	30%	28%	19%
<b>Hit, slapped, or physically hurt on purpose by their boyfriend/girlfriend in past year</b> 	7%	6%	2%	2%	8%
<b>Ever physically forced to have sexual intercourse</b>	5%	3%	2%	2%	10%
<b>Mental Health</b>					
<b>Youth who felt sad or hopeless almost every day for 2 or more weeks in a row</b> 	21%	24%	26%	27%	32%
<b>Youth who had seriously considered attempting suicide in the past year</b> 	13%	10%	14%	15%	17%
<b>Youth who had attempted suicide in the past year</b>	6%	4%	6%	7%	7%

N/A – Not available

 Indicates alignment with Ohio SHA

Youth Variables	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2017 (9 <sup>th</sup> -12 <sup>th</sup> )
<b>Alcohol Consumption</b>					
Ever tried alcohol	66%	59%	45%	52%	60%
Current drinker 	32%	30%	20%	25%	30%
Binge drinker (of all youth) 	18%	14%	10%	14%	14%
Drank for the first time before age 13 (of all youth)	38%	18%	11%	8%	16%
Rode with someone who had been drinking alcohol in past month	24%	17%	17%	14%	17%
Drove a car after drinking alcohol (of youth drivers)	7%	1%	1%	1%	6%
Obtained the alcohol they drank by someone giving it to them	N/A	32%	42%	44%	44%
<b>Tobacco Use</b>					
Ever tried cigarettes	37%	33%	17%	21%	29%
Current smokers	16%	15%	4%	5%	9%
Smoked cigarettes on 20 or more days during the past month (of all youth)	7%	6%	1%	1%	3%
Smoked a whole cigarette for the first time before the age of 13 (of all youth)	13%	8%	5%	4%	10%
Tried to quit smoking (of those youth who smoked in the past year)	43%	50%	57%	52%	41%
<b>Sexual Behavior</b>					
Ever had sexual intercourse	31%	32%	34%	42%	40%
Used a condom at last intercourse	76%	66%	59%	61%	54%
Used birth control pills at last intercourse	26%	37%	17%	18%	21%
Did not use any method to prevent pregnancy during last sexual intercourse	4%	15%	4%	4%	14%
Had four or more sexual partners (of all youth)	8%	8%	6%	6%	10%
Had sexual intercourse before age 13 (of all youth)	5%	2%	3%	5%	3%
<b>Drug Use</b>					
Used marijuana in the past month 	14%	9%	6%	11%	20%
Ever used methamphetamines	1%	2%	1%	0%	3%
Ever used cocaine	6%	2%	1%	1%	5%
Ever used heroin	1%	1%	0%	0%	2%
Ever used steroids	3%	1%	1%	1%	3%
Ever used inhalants	13%	7%	3%	3%	6%
Ever used ecstasy/MDMA/Molly	2%	2%	2%	2%	4%
Ever misused medications	15%	14%	5%	7%	N/A
Ever been offered, sold, or given an illegal drug by someone on school property in the past year	15%	13%	6%	7%	20%

N/A – Not available

 Indicates alignment with Ohio SHA

# Health Care Access: Health Care Coverage

## Key Findings

The health assessment identified that 7% of Ottawa County adults were without health care coverage. The top reason adults gave for being without health care coverage was not being able to afford to pay the premiums (43%).

## Health Coverage

- In 2017, 93% of Ottawa County adults had health care coverage.
- Seven percent (7%) of adults were uninsured, increasing to 10% of those ages 30-64. The 2018 BRFSS reported uninsured prevalence rates as 7% for Ohio and 11% for the U.S.
- One-in-twelve (8%) adults with children living in their household did not have health care coverage.
- The following types of health care coverage were used: employer (46%); Medicare (21%); someone else's employer (14%); Medicaid or medical assistance (5%); multiple sources, including private (5%); self-paid plan (3%); Health Insurance Marketplace (2%); military or VA (1%); and multiple sources, including government (1%).

## 7% of Ottawa County adults were uninsured.

- Ottawa County adult health care coverage included the following: medical (96%), prescription coverage (90%), immunizations (78%), outpatient therapy (74%), preventive health (74%), dental (63%), vision/eyeglasses (63%), mental health (56%), alcohol and drug treatment (42%), durable medical equipment (40%), skilled nursing/assisted living (35%), home care (29%), hospice (29%), and transportation (11%).
- The top three reasons uninsured adults gave for being without health care coverage were:
  1. They could not afford to pay the premiums (43%)
  2. They lost their job or changed employers (41%)
  3. Their employer does not/stopped offering coverage (19%)

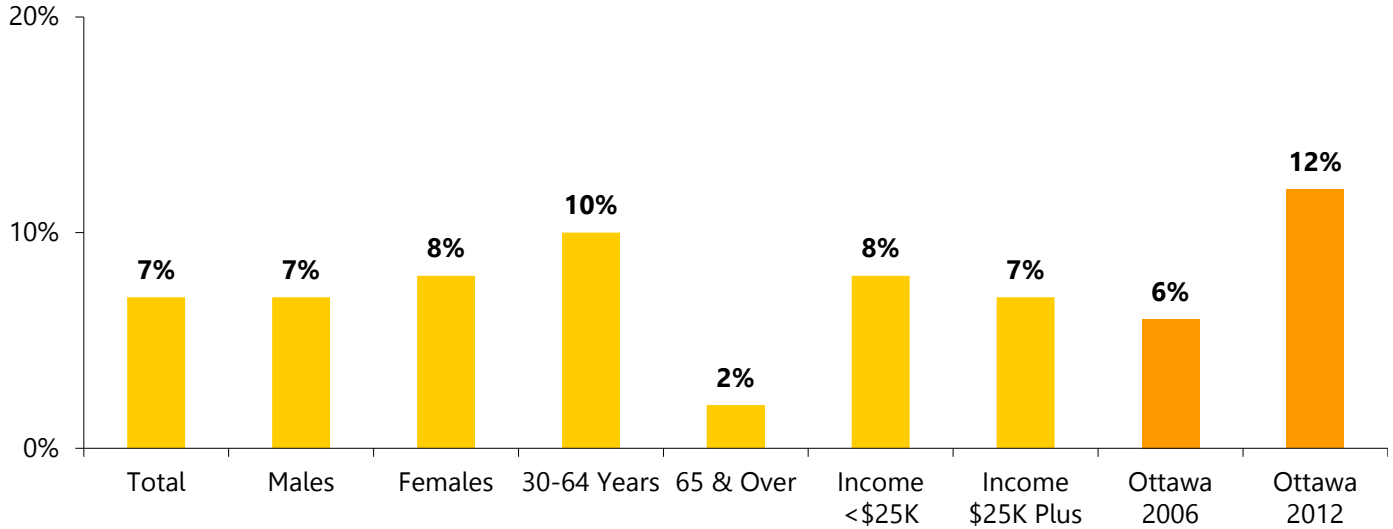
*\*Percentages do not equal 100% because respondents could select more than one reason*

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Uninsured</b>	6%	12%	7%	7%	11%

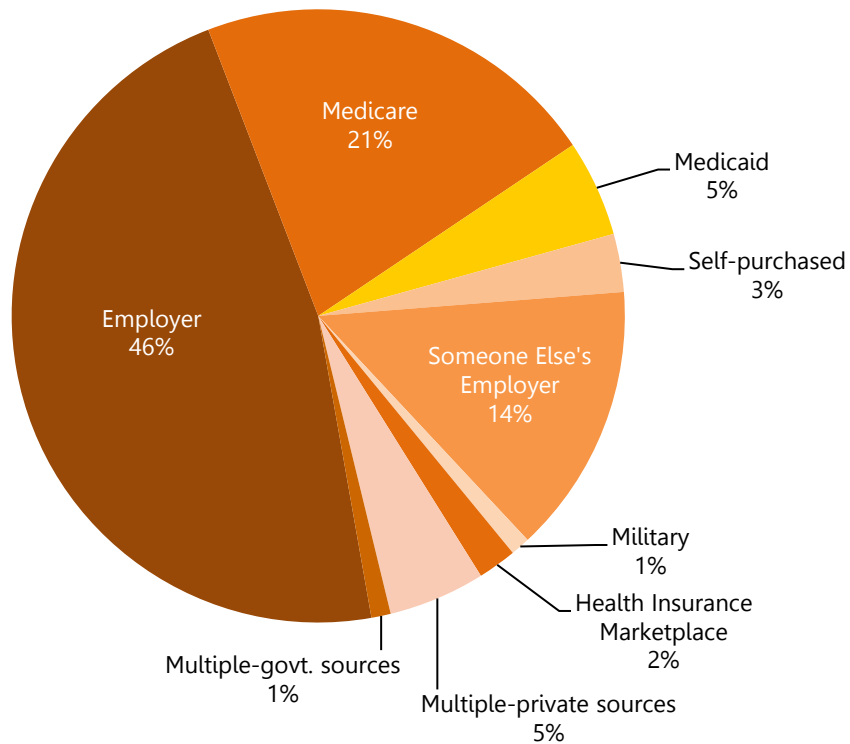


The following graph shows the percentages of Ottawa County adults who were uninsured by demographic. Examples of how to interpret the information in the graph include: 7% of all Ottawa County adults were uninsured, including 8% of adults with incomes less than \$25,000 and 10% of adults ages 30-64. The pie chart below shows sources of Ottawa County adults' health care coverage.

### Uninsured Ottawa County Adults



### Source of Health Coverage for Ottawa County Adults



The following table indicates what was included in Ottawa County adults' insurance coverage.

Health Coverage Includes:	Yes	No	Don't Know
Medical	96%	<1%	4%
Prescription Coverage	90%	6%	3%
Immunizations	78%	5%	17%
Outpatient Therapy	74%	3%	23%
Preventive Health	74%	7%	19%
Dental	63%	31%	5%
Vision/Eyeglasses	63%	30%	7%
Mental Health	56%	5%	39%
Alcohol and Drug Treatment	42%	7%	51%
Durable Medical Equipment	40%	6%	54%
Skilled Nursing/Assisted Living	35%	8%	57%
Home Care	29%	10%	61%
Hospice	29%	7%	64%
Transportation	11%	29%	60%

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

Objective	Ottawa County 2017	Ohio 2018	U.S. 2018*	Healthy People 2020 Target
<b>AHS-1.1: Persons under age of 65 years with health insurance</b>	100% age 20-24 90% age 25-34 92% age 35-44 92% age 45-54 89% age 55-64	87% age 18-24 89% age 25-34 92% age 35-44 92% age 45-54 95% age 55-64	83% age 18-24 81% age 25-34 83% age 35-44 87% age 45-54 91% age 55-64	100%

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

Sources: Healthy People 2020 Objectives, 2018 BRFSS, 2017 Ottawa County Health Assessment)

# Health Care Access: Access and Utilization

## Key Findings

*More than three-fifths (62%) of Ottawa County adults had visited a doctor for a routine checkup in the past year. More than four-fifths (83%) of adults went outside of Ottawa County for health care services in the past year.*

## Health Care Access

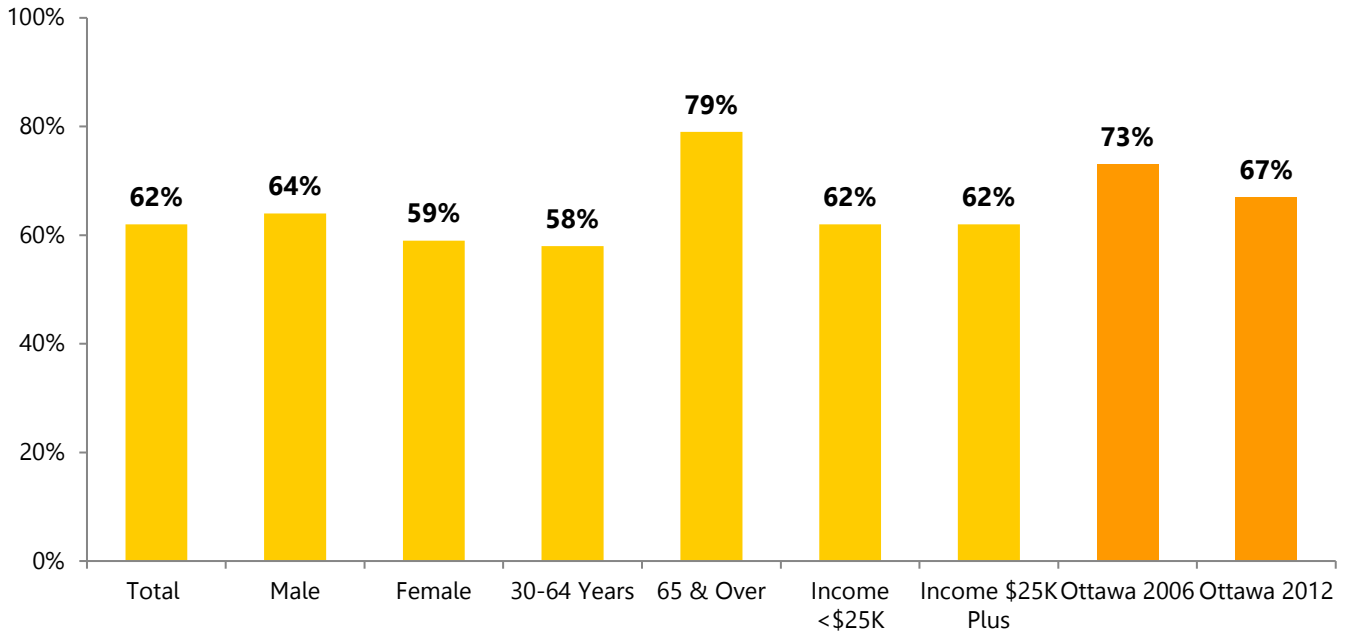
- More than three-fifths (62%) of Ottawa County adults visited a doctor for a routine checkup in the past year.
- Adults with health care coverage were more likely to have visited a doctor for a routine checkup in the past year (64%), compared to 40% of those without health care coverage.
- Adults visited the following places for health care services or advice: doctor's office (57%), multiple places including a doctor's office (22%), Internet (4%), urgent care center (3%), family and friends (3%), multiple places not including a doctor's office (3%), Department of Veteran's Affairs (VA) (2%), chiropractor (1%), hospital emergency room (1%), alternative therapies (<1%), and public health clinic or community health department (<1%). Three percent (3%) of adults indicated they had no usual place for health care services.
- Adults preferred to access information about their health or health care services from the following: doctor (85%), internet searches (37%), family member or friend (33%), Medical Portal (14%), advertisements or mailings from hospitals, clinics, or doctor's offices (5%), newspaper articles or radio/television news stories (5%), text messages (4%), social networks (3%), and billboards (<1%).
- The following may have prevented Ottawa County adults from seeing a doctor if they were sick, injured, or needed some type of health care: cost (29%), doctor would not take their insurance (15%), hours not convenient (13%), difficult to get an appointment (12%), could not get time off work (8%), worried they might find something wrong (6%), could not find childcare (3%), do not trust or believe doctors (3%), frightened of the procedure or doctor (2%), difficult to find/no transportation (2%), and some other reason (6%).
- More than four-fifths (83%) of adults went outside of Ottawa County for the following health care services in the past year: dental services (32%), specialty care (28%), primary care (24%), obstetrics/ gynecology (18%), cardiac care (10%), orthopedic care (10%), pediatric care (8%), cancer care (7%), pediatric therapies (4%), mental health care/counseling (3%), addiction services (2%), hospice/palliative care (1%), and other services (13%).
- Adults traveled to the following locations for their health care needs outside of Ottawa County: Toledo (42%), Sandusky (29%), Fremont (15%), Cleveland (12%), Bellevue (3%), Norwalk (2%), and other places (20%).
- Ottawa County adults had the following problems when they needed health care in the past year: could not get appointments when they wanted them (11%), did not have enough money to pay for health care or insurance (10%), too busy to get the health care they needed (7%), could not find a doctor they were comfortable with (4%), did not have child care (3%), could not find a doctor to take them as a patient (3%), too embarrassed to seek help (2%), health care plan did not allow them to see doctors in Ottawa County (2%), did not have transportation (1%), did not get health services because they were concerned about their confidentiality (<1%), and other problems that prevented them from getting health care (3%).
- Ottawa County adults had the following issues regarding their health care coverage: deductibles were too high (39%), premiums were too high (29%), co-pays were too high (26%), high HSA account deductible (10%), opted out of certain coverage because they could not afford it (9%), could not understand their insurance plan (7%), working with their insurance company (6%), opted out of certain coverage because they did not need it (3%), and did not know how to sign up or enroll (1%).

- More than one-quarter (29%) 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: too expensive (72%), no prescriptions to be filled (58%), there was no generic equivalent (30%), side effects (20%), they did not think they needed it (16%), no insurance (16%), they stretched their current prescription by taking less than prescribed (13%), fear of addiction (8%), transportation (4%), and they were taking too many medications (2%).

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
Visited a doctor for a routine checkup in the past year	73%	67%	62%	79%	77%

The following graph shows the percentage of Ottawa County adults who had a routine check-up in the past year. Examples of how to interpret the information include: 62% of all Ottawa County adults had a routine check-up in the past year, including 64% of males, 59% of females, and 79% of those ages 65 and older.

**Ottawa County Adults with a Routine Check-up in the Past Year**



## Magruder Hospital Discharge Data for Youth 0-17 Years of Age, 2017-2019

- The data have been compiled into three age groups (0-17 years; 18-64 years; and 65 or more years). This is how the federal government typically reports discharge data.
- The tables are compiled in decreasing frequency of the conditions. For youth 0-17 years of age, the five most frequent discharge conditions for 2017-2019 were: injury, poisoning, and certain other consequences of external causes (26%); symptoms, signs and abnormal clinical and lab findings not elsewhere classified (20%); diseases of the skin and subcutaneous tissue (18%); diseases of the respiratory system (17%); and diseases of the ear and mastoid process (5%).
- In comparison, the five most frequent discharge conditions in 2012-2014 for youth 0-17 years of age were: symptoms, signs, and ill-defined conditions (32%); injury (19%); diseases of the respiratory system (16%); diseases of the musculoskeletal system and connective tissue (9%); and diseases of the nervous system and sense organs (7%).

Disease Grouping	ICD-10 Codes	Total N (%)	Females N (%)	Males N (%)
<b>Injury, Poisoning, and Certain Other Consequences of External Causes</b>	S00-T88	1,680 (26%)	778 (24%)	903 (28%)
<b>Symptoms, Signs, And Abnormal Clinical and Lab findings not elsewhere classified</b>	R00-R99	1,245 (20%)	683 (21%)	562 (18%)
<b>Diseases of the Skin and Subcutaneous Tissue</b>	L00-L99	1,126 (18%)	503 (16%)	623 (20%)
<b>Diseases of the Respiratory System</b>	J00-J99	1,115 (17%)	553 (17%)	562 (18%)
<b>Diseases of the Ear and Mastoid Process</b>	H60-H95	291 (5%)	147 (5%)	144 (5%)
<b>Diseases of the Digestive System</b>	K00-K95	223 (3%)	123 (4%)	100 (3%)
<b>Diseases of the Musculoskeletal System and Connective Tissue</b>	M00-M99	151 (2%)	79 (2%)	72 (2%)
<b>Diseases of the Genitourinary System</b>	N00-N99	125 (2%)	102 (3%)	23 (1%)
<b>Mental, Behavioral, Neurodevelopmental Disorders</b>	F01-F99	71 (1%)	46 (1%)	25 (1%)
<b>Diseases of the Circulatory System</b>	I00-I99	23 (<1%)	17 (<1%)	6 (<1%)

(Source: Magruder Hospital Discharge Data 2017-2019)

## Magruder Hospital Admissions and Emergency Department Data for Adults 18-64 Years of Age, 2017-2019

- From 2017-2019, the five most frequent discharge conditions for adults 18-64 years of age were: symptoms, signs and abnormal clinical and lab findings not elsewhere classified (25%); injury, poisoning, and certain other consequences of external causes (24%); diseases of the respiratory system (11%); diseases of the musculoskeletal system and connective tissue (9%); and diseases of the digestive system (8%).
- In comparison, the five most frequent discharge conditions in 2012-2014 for adults 18-64 years of age were: symptoms, signs, and ill-defined conditions (32%); injury (17%); diseases of the musculoskeletal system and connective tissue (16%); diseases of the respiratory system (8%); and diseases of the nervous system and sense organs (6%).

Disease Grouping	ICD-10 Codes	Total N (%)	Females N (%)	Males N (%)
<b>Symptoms, Signs, And Abnormal Clinical and Lab findings not elsewhere classified</b>	R00-R99	4,950 (25%)	2,979 (27%)	1,971 (22%)
<b>Injury, Poisoning, and Certain Other Consequences of External Causes</b>	S00-T88	4,777 (24%)	2,318 (21%)	2,459 (27%)
<b>Diseases of the Respiratory System</b>	J00-J99	2,137 (11%)	1,261 (11%)	876 (10%)
<b>Diseases of the Musculoskeletal System and Connective Tissue</b>	M00-M99	1,874 (9%)	1,022 (9%)	852 (9%)
<b>Diseases of the Digestive System</b>	K00-K95	1,635 (8%)	854 (8%)	781 (9%)
<b>Diseases of the Genitourinary System</b>	N00-N99	1,180 (6%)	825 (7%)	355 (4%)
<b>Mental, Behavioral, Neurodevelopmental Disorders</b>	F01-F99	838 (4%)	450 (4%)	388 (4%)
<b>Diseases of the Skin and Subcutaneous Tissue</b>	L00-L99	745 (4%)	326 (3%)	419 (5%)
<b>Diseases of the Circulatory System</b>	I00-I99	668 (3%)	295 (3%)	373 (4%)
<b>Diseases of the Ear and Mastoid Process</b>	H60-H95	324 (2%)	193 (2%)	131 (1%)

(Source: Magruder Hospital Discharge Data 2017-2019)

## Magruder Hospital Admissions and Emergency Department Data for Adults 65 Years of Age and Older, 2017-2019

- From 2017-2019, the five most frequent discharge conditions for adults 65 years of age and older were: symptoms, signs and abnormal clinical and lab findings not elsewhere classified (22%); injury, poisoning, and certain other consequences of external causes (20%); diseases of the respiratory system (11%); diseases of the musculoskeletal system and connective tissue (8%); and mental, behavioral, neurodevelopmental disorders (7%).
- In comparison, the five most frequent discharge conditions in 2012-2014 for adults 65 years of age and older were: symptoms, signs, and ill-defined conditions (40%); injury (13%); diseases of the musculoskeletal system and connective tissue (13%); diseases of the circulatory system (8%); and diseases of the respiratory system (7%);

Disease Grouping	ICD-10 Codes	Total N (%)	Females N (%)	Males N (%)
<b>Symptoms, Signs, And Abnormal Clinical and Lab findings not elsewhere classified</b>	R00-R99	2,844 (22%)	1,476 (22%)	1,368 (22%)
<b>Injury, Poisoning, and Certain Other Consequences of External Causes</b>	S00-T88	2,559 (20%)	1,409 (21%)	1,150 (19%)
<b>Diseases of the Respiratory System</b>	J00-J99	1,385 (11%)	705 (10%)	680 (11%)
<b>Diseases of the Musculoskeletal System and Connective Tissue</b>	M00-M99	1,032 (8%)	586 (9%)	446 (7%)
<b>Mental, Behavioral, Neurodevelopmental Disorders</b>	F01-F99	921 (7%)	501 (7%)	420 (7%)
<b>Diseases of the Digestive System</b>	K00-K95	868 (7%)	468 (7%)	400 (7%)
<b>Diseases of the Circulatory System</b>	I00-I99	724 (6%)	322 (5%)	402 (7%)
<b>Diseases of the Genitourinary System</b>	N00-N99	722 (6%)	382 (6%)	340 (6%)
<b>Diseases of the Ear and Mastoid Process</b>	H60-H95	619 (5%)	340 (5%)	279 (5%)
<b>Diseases of the Skin and Subcutaneous Tissue</b>	L00-L99	357 (3%)	160 (2%)	197 (3%)

(Source: Magruder Hospital Discharge Data 2017-2019)

**Magruder Hospital Discharges for Patients without a Primary Care Physician,  
2012-2014 as compared to 2017-2019**

Patients without a Primary Care Physician at Discharge	2012-2014			2017-2019		
	Patients Age 0-17 Years	Patients Age 18-64 Years	Patients Age 65 Years and Older	Patients Age 0-17 Years	Patients Age 18-64 Years	Patients Age 65 Years and Older
<b>Total</b>	1,099 (13%)	4,308 (16%)	686 (6%)	853 (20%)	3,934 (28%)	516 (7%)

*(Source: Magruder Hospital Discharge Data for 2012-2014 and 2017-2019)*

**Magruder Hospital Discharges for Patients without Medical Insurance,  
2012-2014 as compared to 2017-2019**

Patients without Medical Insurance at Discharge	2012-2014			2017-2019		
	Patients Age 0-17 Years	Patients Age 18-64 Years	Patients Age 65 Years and Older	Patients Age 0-17 Years	Patients Age 18-64 Years	Patients Age 65 Years and Older
<b>Total</b>	262 (3%)	2,512 (9%)	2,532 (21%)	286 (4%)	3,494 (12%)	35 (<1%)

*(Source: Magruder Hospital Discharge Data for 2012-2014 and 2017-2019)*



## Availability of Services

- One-in-nine (11%) adults had looked for a program to assist in care for the elderly (either in-home or out-of-home) for either themselves or a loved one. Of those who looked, 44% looked for in-home care, 13% looked for out-of-home placement, 6% looked for an assisted living program, 2% looked for day care, and 2% looked for respite or overnight care. Thirty-three percent (33%) of adults looked for multiple types of programs to assist in care for the elderly.
- Seven percent (7%) of Ottawa County adults had looked for a program to assist in care for a disabled adult (either in-home or out-of-home) for either themselves or a loved one. Of those who looked, 44% looked for in-home care, 14% looked for out-of-home placement, 11% looked for a disabled adult program, 8% looked for an assisted living program, and 3% looked for day care. Nineteen percent (19%) of adults looked for multiple types of programs to assist in care for a disabled adult.
- Ottawa County adults reported they had looked for the following programs for themselves or a loved one: elderly care (10%); depression, anxiety or mental health (9%); weight problems (6%); disability (5%); end-of-life/hospice care (5%); marital/family problems (3%); alcohol abuse (2%); tobacco cessation (2%); detoxification of opiates/heroin (1%); family planning (1%); and drug abuse (<1%). No adults reported they had looked for a program for gambling abuse.

### Ottawa County Adults Able to Access Assistance Programs/Services

Types of Programs (% of all adults who looked for the programs)	Ottawa County adults who had looked but had <u>NOT</u> found a specific program	Ottawa County adults who had looked and had found a specific program
<b>Elderly Care</b> (10% of all adults looked)	19%	81%
<b>Depression or Anxiety</b> (9% of all adults looked)	28%	72%
<b>Weight Problems</b> (6% of all adults looked)	43%	57%
<b>End-of-Life/Hospice Care</b> (5% of all adults looked)	0%	100%
<b>Disability</b> (5% of all adults looked)	56%	44%
<b>Marital/Family Problems</b> (3% of all adults looked)	50%	50%
<b>Alcohol Abuse</b> (2% of all adults looked)	0%	100%
<b>Tobacco Cessation</b> (2% of all adults looked)	50%	50%
<b>Detoxification for Opiates/Heroin</b> (1% of all adults looked)	67%	33%
<b>Family Planning</b> (1% of all adults looked)	50%	50%
<b>Drug Abuse</b> (<1% of all adults looked)	0%	100%

# Health Care Access: Preventive Medicine

## Key Findings

Almost three-quarters (71%) of adults ages 65 and over had a pneumonia vaccination at some time in their life. Nearly half (49%) of adults ages 50 and over had a colonoscopy or sigmoidoscopy in the past 5 years.

## Preventive Medicine

- More than half (51%) of Ottawa County adults had a flu vaccine during the past 12 months.
- Three-quarters (75%) of Ottawa County adults ages 65 and over had a flu vaccine in the past 12 months. The 2018 BRFSS reported that 56% of Ohio and 55% of U.S. adults ages 65 and over had a flu vaccine in the past year.
- One-third (33%) of adults had a pneumonia shot in their life, increasing to 71% of those ages 65 and over. The 2018 BRFSS reported that 74% of Ohio and U.S. adults ages 65 and over had a pneumonia shot in their life.
- Ottawa County adults received the following vaccines: MMR in their lifetime (69%), tetanus booster (including Tdap) in the past 10 years (50%), chicken pox vaccine in their lifetime (44%), Zoster (shingles) vaccine in their lifetime (15%), pertussis vaccine in the past 10 years (11%), and human papillomavirus (HPV) vaccine in their lifetime (5%).
- Reasons for not receiving recommended immunization shots included the following: doctor did not recommend (3%), cost (3%), did not think immunization was necessary (2%), personal beliefs (2%), did not know where to go for immunization (1%), fear of immunization (1%), fear of getting sick (1%), fear of adverse effects (1%), pre-existing health issues (1%), religious beliefs (1%), fear of needles (<1%), and other reasons (3%). Five percent (5%) of adults indicated multiples reasons for not receiving the recommended immunizations.

## Preventive Health Screenings and Exams

- Nearly half (49%) of adults ages 50 and over had a colonoscopy or sigmoidoscopy in the past 5 years.
- In the past two years, adults had the following checked: vision (69%), hearing (27%), skin (21%), and bone density (12%).
- In the past year, 45% of Ottawa County women ages 40 and over had a mammogram.
- In the past year, more than two-fifths (45%) of men ages 50 and over had a PSA test.

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Had a pneumonia vaccination</b> (ages 65 and over)	66%	61%	71%	74%	74%
<b>Had a flu vaccine in the past year</b> (ages 65 and over)	N/A	70%	75%	56%	55%
<b>Had a sigmoidoscopy/colonoscopy in the past 5 years</b> (ages 50 and over)	N/A	54%	49%	65%*	66%*

N/A – Not Available

\*Age 50-75 had either a sigmoidoscopy in the past 5 years or colonoscopy in the last 10 years

## Ottawa County Adult Health Screening Results

General Screening Results	Total Sample*
Diagnosed with High Blood Pressure	42%
Diagnosed with High Blood Cholesterol	40%
Diagnosed with Diabetes	11%
Survived a Heart Attack	7%
Survived a Stroke	2%

\*Percentages based on all Ottawa County adults surveyed

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

Objective	Ottawa County 2017	Ohio 2018	U.S. 2018	Healthy People 2020 Target
<b>IID-13.1: Increase the percentage of non-institutionalized high-risk adults aged 65 years and older who are vaccinated against pneumococcal disease</b>	71%	74%	74%	90%

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

Sources: Healthy People 2020 Objectives, 2018 BRFSS, 2017 Ottawa County Health Assessment

## Influenza Vaccination

- An influenza shot is a vaccine given with a needle, usually in the arm. Seasonal influenza shots protect against the three or four influenza viruses that research indicates will be most common during the season.
- There are many vaccine options to choose from, but the most important thing is for all people 6 months and older to get an influenza vaccine every year. If you have questions about which vaccine is best for you, talk to your doctor or other health care professional.
- Influenza vaccine effectiveness (VE) can vary from season to season. The protection provided by an influenza vaccine depends on the age and health status of the person getting the vaccine, and the similarity or "match" between the viruses used to produce vaccine and those in circulation.
- While influenza vaccine varies in how well it works, every season influenza vaccines prevent millions of influenza illnesses, tens of thousands of hospitalizations and thousands of deaths.
- It's important to remember that influenza vaccine protects against 3 or 4 different viruses and multiple viruses usually circulate during any one season. For these reasons, CDC continues to recommend influenza vaccination for everyone 6 months and older even if vaccine effectiveness against one or more viruses is reduced.

(Source: CDC, Influenza (Flu), Flu Shot, Updated December 9, 2019)

## Recommended Adult Immunization Schedule by Age Group, United States, 2020

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
<b>Influenza inactivated (IIV) or Influenza recombinant (RIV)</b> <i>or</i> <b>Influenza live, attenuated (LAIV)</b>	1 dose annually			
<b>Tetanus, diphtheria, pertussis (Tdap or Td)</b>	1 dose Tdap, then Td or Tdap booster every 10 years			
<b>Measles, mumps, rubella (MMR)</b>	1 or 2 doses depending on indication (if born in 1957 or later)			
<b>Varicella (VAR)</b>	2 doses (if born in 1980 or later)		2 doses	
<b>Zoster recombinant (RZV) (preferred)</b> <i>or</i> <b>Zoster live (ZVL)</b>			2 doses <i>or</i> 1 dose	
<b>Human papillomavirus (HPV)</b>	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
<b>Pneumococcal conjugate (PCV13)</b>	1 dose			65 years and older
<b>Pneumococcal polysaccharide (PPSV23)</b>	1 or 2 doses depending on indication			1 dose
<b>Hepatitis A (HepA)</b>	2 or 3 doses depending on vaccine			
<b>Hepatitis B (HepB)</b>	2 or 3 doses depending on vaccine			
<b>Meningococcal A, C, W, Y (MenACWY)</b>	1 or 2 doses depending on indication, see notes for booster recommendations			
<b>Meningococcal B (MenB)</b>	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations			
	19 through 23 years			
<b>Haemophilus influenzae type b (Hib)</b>	1 or 3 doses depending on indication			

(Source: CDC, Adult Immunization Schedules, 2020)

# Health Care Access: Women's Health

## Key Findings

In 2017, more than two-fifths (45%) of Ottawa County women over the age of 40 reported having a mammogram in the past year. Just over half (53%) of Ottawa County women ages 19 and over had a clinical breast exam and 38% had a Pap smear to detect cancer of the cervix in the past year. The health assessment determined that 5% of women survived a heart attack and 2% survived a stroke at some time in their life. Nearly two-fifths (37%) of women were obese, 35% had high blood cholesterol, 31% had high blood pressure, and 13% were identified as smokers, all known risk factors for cardiovascular diseases.

## Women's Health Screenings

- In 2017, 73% of women had a mammogram at some time and nearly two-fifths (37%) had this screening in the past year.
- More than two-fifths (45%) of women ages 40 and over had a mammogram in the past year, and 64% had one in the past two years. The 2018 BRFSS reported that 74% of women 40 and over in Ohio and 72% in the U.S. had a mammogram in the past two years.
- Most (92%) Ottawa County women had a clinical breast exam at some time in their life, and 53% had one within the past year. More than three-fifths (61%) of women ages 40 and over had a clinical breast exam in the past two years.
- This assessment identified that 89% of Ottawa County women had a Pap smear, and 38% reported having had the exam in the past year. Sixty percent (60%) of women had a Pap smear in the past three years. The 2018 BRFSS indicated that 79% of Ohio and 80% of U.S. women age 21-65 had a Pap smear in the past three years.

## Women's Health Concerns

- Women used the following as their usual source of services for female health concerns: private gynecologist (58%), general or family physician (24%), community health center (2%), family planning clinic (2%), and health department clinic (1%). Twelve percent (12%) indicated they did not have a usual source of services for female health concerns.
- Ottawa County women had experienced the following: menopause (53%), premenstrual syndrome (PMS) (20%), incontinence (13%), hormone replacement therapy (11%), perimenopause (11%), and osteoporosis (10%).
- In 2017, the health assessment determined that 5% of women had survived a heart attack and 2% had survived a stroke at some time in their life.
- From 2016-2018, major cardiovascular diseases (heart disease and stroke) accounted for 30% of all female deaths in Ottawa County (Source: Ohio Public Health Data Warehouse, 2016-2018).

### Ottawa County Female Leading Causes of Death, 2016 – 2018

*Total Female Deaths: 757*

1. Heart Diseases (24% of all deaths)
2. Cancers (23%)
3. Stroke (6%)
4. Chronic Lower Respiratory Diseases (6%)
5. Accidents, Unintentional Injuries (4%)

*(Source: Ohio Public Health Data Warehouse, 2016-2018)*

### Ohio Female Leading Causes of Death, 2016 – 2018

*Total Female Deaths: 182,368*

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

*(Source: Ohio Public Health Data Warehouse, 2016-2018)*

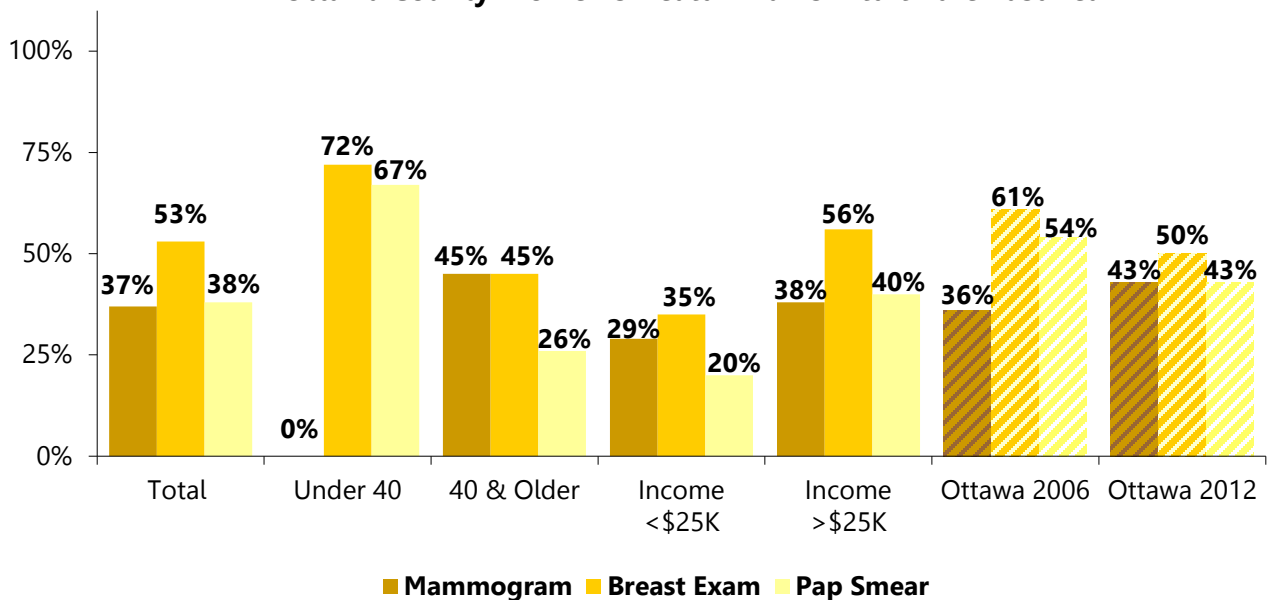
- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Ottawa County, the 2017 health assessment has identified that:
  - 71% of women were overweight (34%) or obese (37%) (2018 BRFSS reports 64% for Ohio and 61% for U.S.)
  - 34% were diagnosed with high blood cholesterol (2017 BRFSS reports 33% for Ohio and 32% for U.S.)
  - 31% were diagnosed with high blood pressure (2017 BRFSS reports 33% for Ohio and 31% for U.S.)
  - 13% of all women were current smokers (2018 BRFSS reports 19% for Ohio and 14% for U.S.)
  - 9% had been diagnosed with diabetes (2018 BRFSS reports 13% for Ohio and 11% for U.S.)

## Pregnancy

- Fourteen percent (14%) of Ottawa County women had been pregnant in the past 5 years.
- During their last pregnancy, Ottawa County women had a prenatal appointment in the first 3 months (48%), took a multi-vitamin with folic acid during pregnancy (33%), had a dental exam (21%), took a multi-vitamin with folic acid pre-pregnancy (15%), received WIC benefits (15%), and smoked cigarettes or used other tobacco products (3%).
- Thinking back to their last pregnancy, 41% of women wanted to be pregnant then, 35% did not recall, 8% wanted to be pregnant sooner, 8% wanted to be pregnant later, and 8% did not want to be pregnant then or any time in the future.

The following graph shows the percentage of Ottawa County females that had various health exams in the past year. Examples of how to interpret the information include: 37% of Ottawa County females had a mammogram within the past year, 53% had a clinical breast exam, and 38% had a pap smear.

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



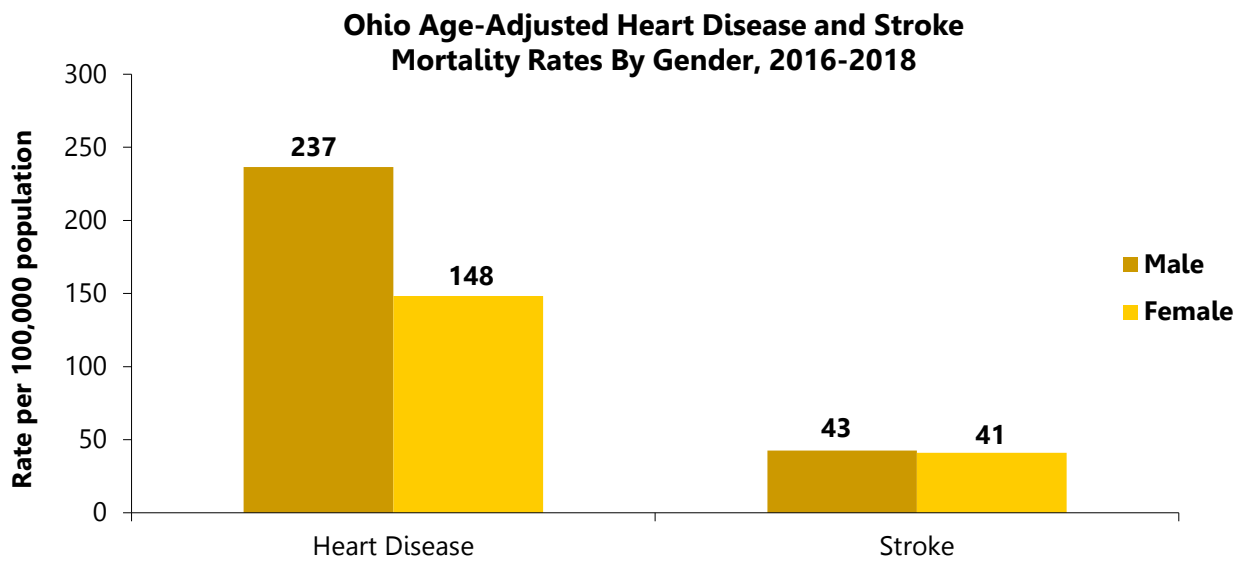
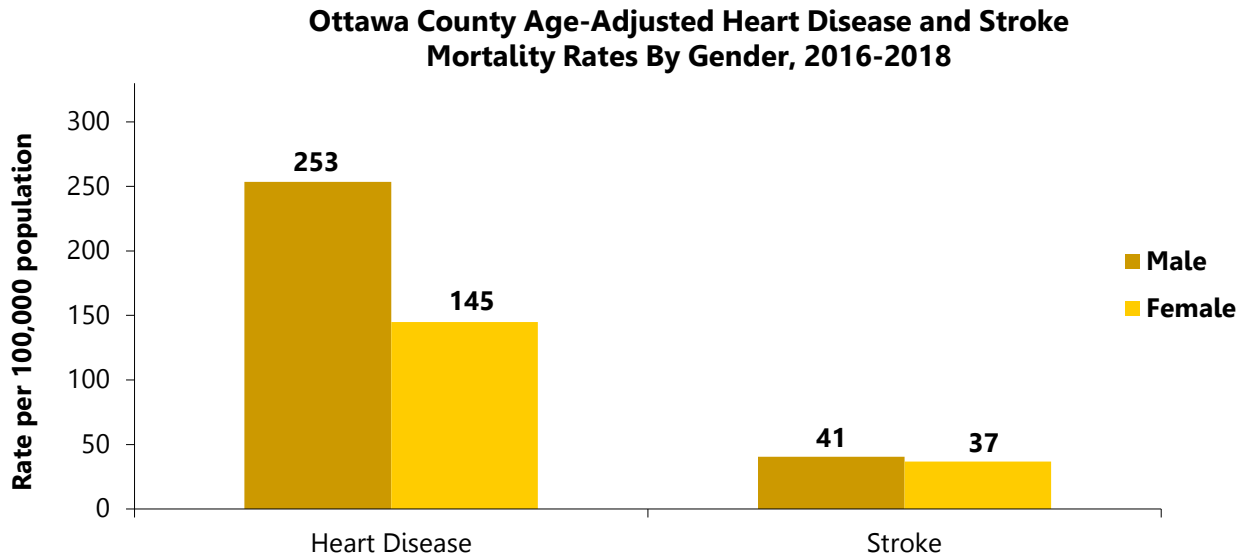
Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
Had a clinical breast exam in the past two years (age 40 & over)	68%	67%	61%	N/A	N/A
Had a mammogram in the past two years (age 40 & over)	64%	73%	64%	74%	72%
Had a Pap smear in the past three years	73%	68%	60%	79%*	80%*

N/A – Not Available

\*age 21-65

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

- From 2016-2018, the Ottawa County and Ohio female age-adjusted mortality rate was lower than the male rate for heart disease and stroke.



(Source: Ohio Public Health Data Warehouse, 2016-2018)



# Health Care Access: Men's Health

## Key Findings

In 2017, 45% of Ottawa County males over the age of 50 had a Prostate-Specific Antigen (PSA) test within the past year. More than half (51%) of men had been diagnosed with high blood pressure, 44% had high blood cholesterol, and 17% were identified as smokers, which, along with obesity (45%), are known risk factors for cardiovascular diseases.

## Men's Health Screenings and Concerns

- Half (50%) of Ottawa County males had a Prostate-Specific Antigen (PSA) test at some time in their life, and 29% had one in the past year.
- Three-quarters (75%) of males age 50 and over had a PSA test at some time in their life, and 45% had one in the past year.
- More than half (56%) of men had a digital rectal exam in their lifetime, and 17% had one in the past year.
- From 2016-2018, major cardiovascular diseases (heart disease and stroke) accounted for 33% of all male deaths in Ottawa County (Source: Ohio Public Health Data Warehouse, 2016-2018).
- In 2017, the health assessment determined that 10% of men had a heart attack and 2% had a stroke at some time in their life.
- Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Ottawa County, the 2017 health assessment has identified that:
  - 84% of men were overweight or obese (2018 BRFSS reports 73% for Ohio and 71% for U.S.)
  - 51% were diagnosed with high blood pressure (2017 BRFSS reports 37% for Ohio and 35% for U.S.)
  - 44% were diagnosed with high blood cholesterol (2017 BRFSS reports 34% for Ohio and 35% for U.S.)
  - 17% of all men were current smokers (2018 BRFSS reports 22% for Ohio and 18% for U.S.)
  - 13% had been diagnosed with diabetes (2018 BRFSS reports 12% for Ohio and 12% for U.S.)
- From 2016-2018, the leading cancer deaths for Ottawa County and Ohio males were lung, prostate, and colon and rectal cancers. (Source: Ohio Public Health Data Warehouse, 2016-2018).

### Ottawa County Male Leading Causes of Death, 2016 – 2018

Total Male Deaths: 809

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

(Source: Ohio Public Health Data Warehouse, 2016-2018)

### Ohio Male Leading Causes of Death, 2016 – 2018

Total Male Deaths: 185,146

1. Heart Diseases (24% of all deaths)
2. Cancers (22%)
3. Accidents, Unintentional Injuries (9%)
4. Chronic Lower Respiratory Diseases (6%)
5. Stroke (4%)

(Source: Ohio Public Health Data Warehouse, 2016-2018)

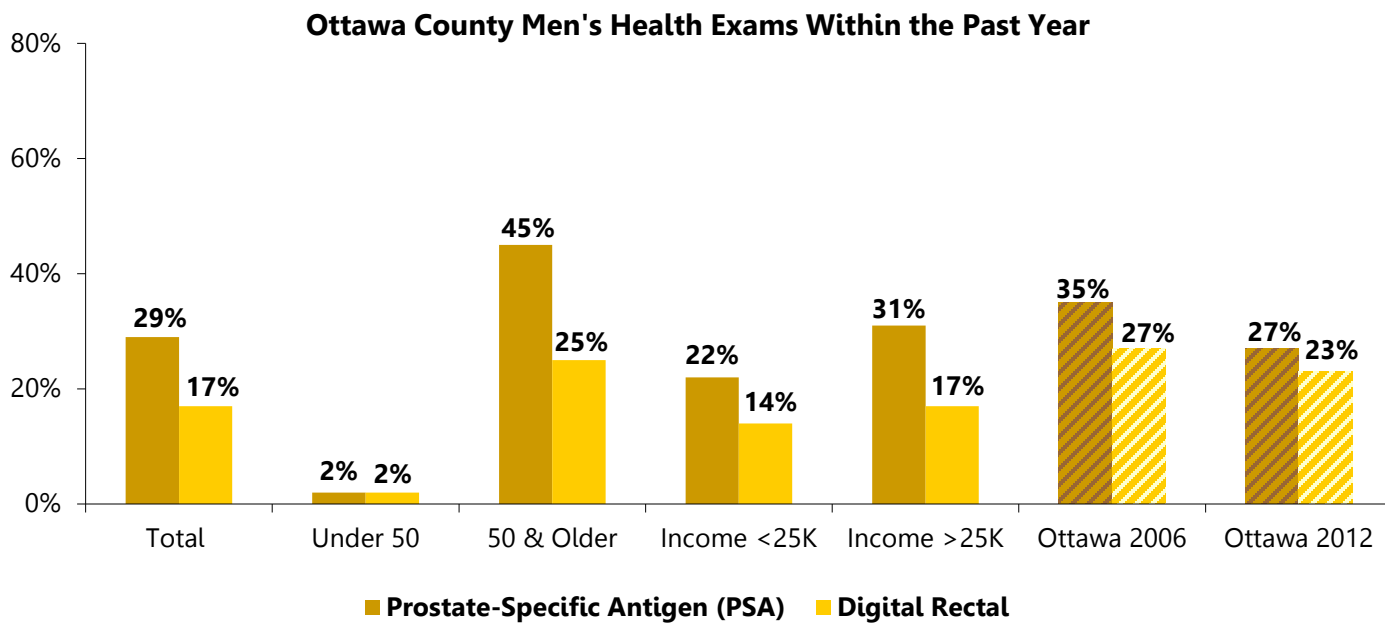
Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Had a PSA test within the past two years</b> (age 40 & over)	N/A	54%	52%	34%*	33%*
<b>Had a digital rectal exam within the past year</b>	27%	23%	17%	N/A	N/A

\* past 2 years

N/A – Not Available

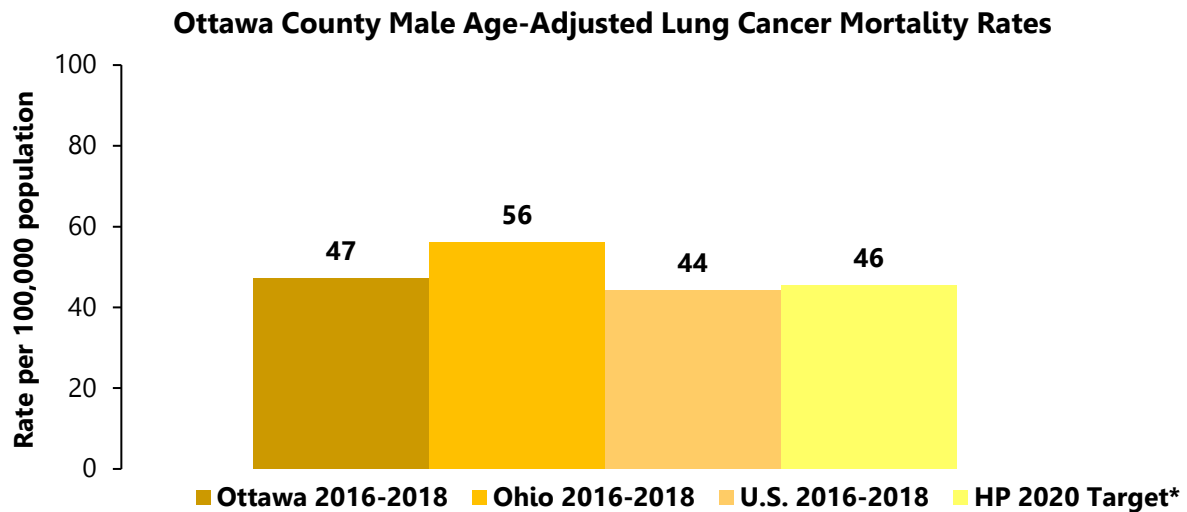


The following graph shows the percentage of Ottawa County male adults that had various health exams in the past year. Examples of how to interpret the information include: 29% of Ottawa County males had a PSA test within the past year, and 17% had a digital rectal exam.



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

- From 2016-2018, the Ottawa County age-adjusted mortality rate for male lung cancer was lower than the Ohio rate, but higher than the U.S. rate and Healthy People 2020 objective.



*\*Note: The Healthy People 2020 target rates are not gender specific.  
(Source: Ohio Public Health Data Warehouse 2016-2018, CDC Wonder 2016-2018, Healthy People 2020)*

### Cancer and Men

- The most common kinds of cancer among men in the U.S. are skin cancer, prostate cancer, lung cancer, and colorectal cancer.
- Most prostate cancers grow slowly, and don't cause any health problems in men who have them. Treatment can cause serious side effects. Talk to your doctor before you decide to get tested or treated for prostate cancer.
- Some cancers are caused by human papillomavirus (HPV), a very common sexually transmitted infection. The HPV vaccine protects against the types of HPV that most often cause cancers of the penis, anus, and oropharynx (back of the throat, including the base of the tongue and tonsils).
- Tips for lowering your chance of getting cancer:
  - Stay away from tobacco. If you smoke, try to quit and stay away from other people's smoke.
  - Stay up-to-date on screening tests for colorectal and lung cancer.
  - Limit the amount of alcohol you drink.
  - Protect your skin from the sun.
  - Keep a healthy weight and stay physically active.

*(Source: CDC, Cancer Prevention and Control, Cancer and Men, Updated June 5, 2019)*

# Health Care Access: Oral Health

## Key Findings

The health assessment has determined almost two-thirds (64%) of Ottawa County adults had visited a dentist or dental clinic in the past year. The 2018 BRFSS reported that 67% of Ohio adults and 68% of U.S. adults had visited a dentist or dental clinic in the previous 12 months.

## Access to Dental Care

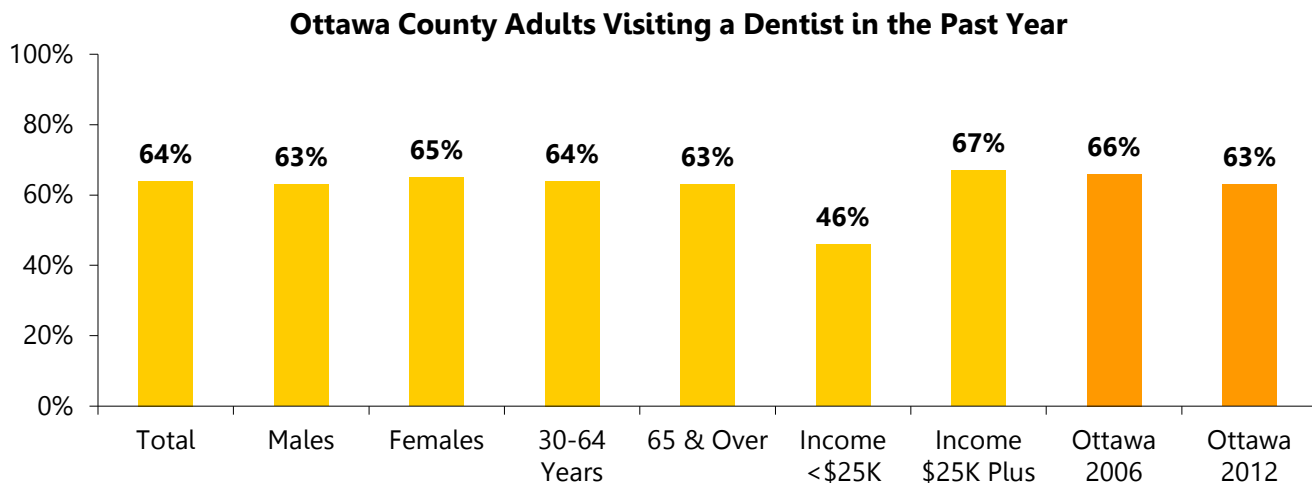
- In the past year, 64% of Ottawa County adults had visited a dentist or dental clinic, decreasing to 46% of those with incomes less than \$25,000.
- The 2018 BRFSS reported that 67% of Ohio adults and 68% of U.S. adults had visited a dentist or dental clinic in the previous twelve months.
- When asked the main reason for not visiting a dentist in the last year, 32% said cost; 20% had no reason to go/had not thought of it; 13% had dentures; 12% said fear, apprehension, nervousness, pain, and dislike going; 5% said their dentist did not accept their medical insurance; 2% did not have/know a dentist; 1% could not get into a dentist; 1% had transportation issues; and 1% could not find a dentist taking new Medicaid patients. Six percent (6%) of adults selected multiple reasons for not visiting a dentist in the past year.
- Nearly one-third (32%) of adults went outside of Ottawa County for dental services.
- More than two-fifths (42%) of adults had one or more of their permanent teeth removed, increasing to 65% of those ages 65 and over. The 2018 BRFSS reported that 45% of Ohio and 41% of U.S. adults had one or more permanent teeth removed.
- About one-in-eight (12%) Ottawa County adults ages 65 and over had all of their permanent teeth removed. The 2018 BRFSS reported that 17% of Ohio adults and 14% of U.S. adults ages 65 and over had all of their permanent teeth removed.

Adult Oral Health	Within the Past Year	Within the Past 2 Years	Within the Past 5 Years	5 or More years	Never
<b>Time Since Last Visit to Dentist/Dental Clinic</b>					
<b>Males</b>	63%	10%	11%	13%	1%
<b>Females</b>	65%	10%	9%	13%	0%
<b>Total</b>	64%	10%	11%	13%	1%

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Adults who had visited the dentist in the past year</b>	66%	63%	64%	67%	68%
<b>Adults who had one or more permanent teeth removed</b>	N/A	49%	42%	45%	41%
<b>Adults 65 years and older who had all of their permanent teeth removed</b>	N/A	9%	12%	17%	14%

N/A – Not available

The following graph provides information about the frequency of adult dental visits. Examples of how to interpret the information on the first graph include: 64% of all Ottawa County adults had been to the dentist in the past year, including 46% of those with incomes less than \$25,000.



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

### Facts About Oral Health

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

*(Source: CDC, Adult Oral Health, Updated December 19, 2019)*

# Health Behaviors: Health Status Perceptions

## Key Findings

*In 2017, nearly half (48%) of Ottawa County adults rated their health status as excellent or very good. Conversely, 15% of adults described their health as fair or poor, increasing to 38% of those with incomes less than \$25,000.*

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

- Ottawa County 48% (2017)
- Ohio 49% (2018)
- U.S. 51% (2018)

*(Source: BRFSS 2018 for Ohio and U.S.)*

## General Health Status

- In 2017, nearly half (48%) of Ottawa County adults rated their health as excellent or very good. Ottawa County adults with higher incomes (51%) were most likely to rate their health as excellent or very good, compared to 27% of those with incomes less than \$25,000.
- Fifteen percent (15%) of adults rated their health as fair or poor. The 2018 BRFSS has identified that 19% of Ohio and 17% of U.S. adults self-reported their health as fair or poor.
- Ottawa County adults were most likely to rate their health as fair or poor if they:
  - Had been diagnosed with diabetes (40%)
  - Had an annual household income under \$25,000 (38%)
  - Were separated (25%) or divorced (22%)
  - Were 65 years of age or older (22%)
  - Had high blood pressure (22%) or high blood cholesterol (19%)

## Physical Health Status

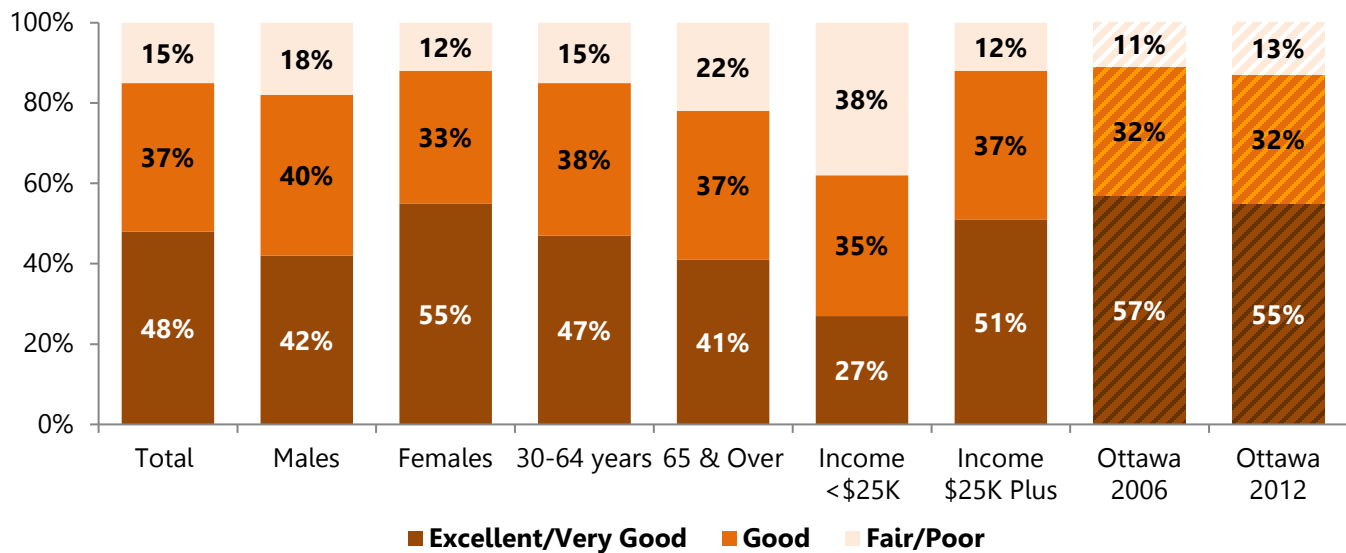
- In 2017, 31% of Ottawa County adults rated their physical health as not good on four or more days in the previous month.
- Ottawa County adults reported their physical health as not good on an average of 4.8 days in the previous month. Ohio and U.S. adults reported their physical health as not good on an average of 3.9 days and 3.8 days, respectively, in the previous month *(Source: 2017 BRFSS)*.

## Mental Health Status

- In 2017, 26% of Ottawa County adults rated their mental health as not good on four or more days in the previous month.
- Ottawa County adults reported their mental health as not good on an average of 3.8 days in the previous month. Ohio and U.S. adults reported their mental health as not good on an average of 4.6 days and 4.0 days, respectively, in the previous month *(Source: 2017 BRFSS)*.
- Ottawa County adults were most likely to rate their mental health as not good if they:
  - Had an annual household income under \$25,000 (45%)
  - Were female (32%)

The following graph shows the percentage of Ottawa County adults who described their personal health status as excellent/very good, good, and fair/poor. Examples of how to interpret the information include: 48% of all Ottawa County adults, including 55% of females, 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.

### Ottawa 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
<b>Physical Health Not Good in Past 30 Days*</b>					
<b>Males</b>	44%	22%	4%	4%	23%
<b>Females</b>	43%	22%	8%	5%	19%
<b>Total</b>	44%	22%	6%	5%	21%
<b>Mental Health Not Good in Past 30 Days*</b>					
<b>Males</b>	58%	17%	4%	<1%	17%
<b>Females</b>	46%	18%	5%	5%	21%
<b>Total</b>	52%	19%	4%	2%	19%

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

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Rated health as excellent or very good</b>	57%	55%	48%	49%	51%
<b>Rated health as fair or poor</b>	11%	13%	15%	19%	17%
<b>Rated their mental health as not good on four or more days in the previous month</b>	18%	22%	26%	N/A	N/A
<b>Average days that physical health not good in past month</b>	N/A	3.1	4.8	3.9*	3.8*
<b>Average days that mental health not good in past month</b>	N/A	3.8	3.8	4.6*	4.0*

\*2017 BRFSS data as compiled by County Health Rankings  
N/A – Not Available

# Health Behaviors: Adult Weight Status

## Key Findings

More than three-fourths (77%) of Ottawa County adults were overweight (36%) or obese (41%) based on Body Mass Index (BMI). Fifty four percent (54%) of adults engaged in some type of physical activity or exercise for at least 30 minutes three or more days per week.

## Adult Weight Status

- In 2017, the health assessment indicated that more than three-fourths (77%) of Ottawa County adults were either overweight (36%) or obese (41%) by Body Mass Index (BMI). This puts them at elevated risk for developing a variety of diseases.
- More than half (53%) of adults were trying to lose weight, 29% were trying to maintain their current weight or keep from gaining weight, and 1% were trying to gain weight.
- Ottawa County adults did the following to lose weight or keep from gaining weight: ate less food, fewer calories, or foods low in fat (57%); drank more water (54%); exercised (43%); ate a low-carb diet (17%); smoked cigarettes (5%); used a weight loss program (2%); bariatric surgery (1%); took laxatives (1%); took prescribed medications (1%); went without eating 24 or more hours (1%); participated in a prescribed dietary or fitness program (1%); took diet pills, powders or liquids without a doctor's advice (1%); and health coaching (1%).

## Physical Activity

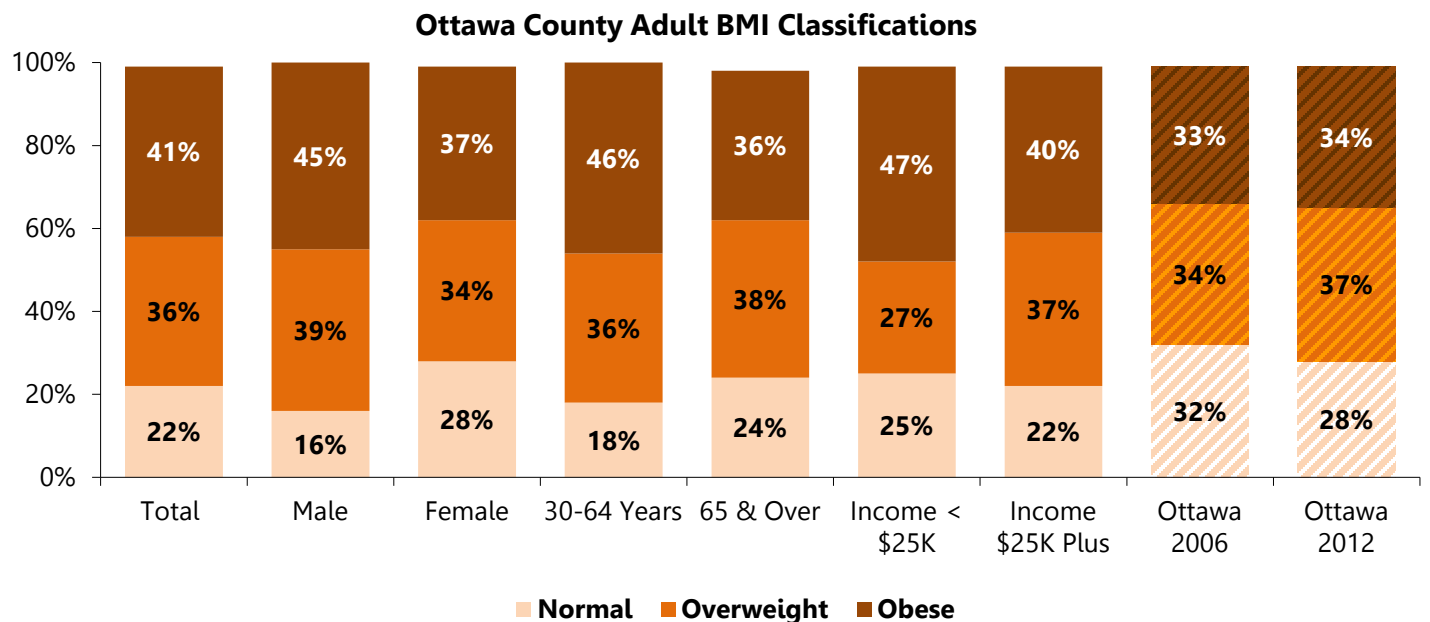
- In Ottawa County, 54% of adults engaged in some type of physical activity or exercise for at least 30 minutes on 3 or more days per week, and 28% of adults exercised 5 or more days per week. More than one-fourth (28%) of adults did not participate in any physical activity in the past week, including 5% who were unable to exercise.
- The CDC recommends that adults participate in moderate exercise for at least two hours and 30 minutes every week or vigorous exercise for at least one hour and 15 minutes every week. Whether participating in moderate or vigorous exercise, the CDC also recommends muscle-strengthening activities that work all major muscle groups on two or more days per week (Source: Department of Health and Human Services, *Physical Activity Guidelines, 2018*).
- Reasons for not exercising included the following: time (29%), laziness (20%), pain or discomfort (17%), too tired (17%), weather (17%), do not like to exercise (13%), could not afford a gym membership (9%), poorly maintained/no sidewalks (7%), no exercise partner (5%), no child care (5%), no walking/biking trails or parks (4%), no gym available (4%), lack of opportunities for those with physical impairments or challenges (3%), did not know what activities to do (2%), doctor advised them not to exercise (2%), neighborhood safety (1%), and transportation (1%).
- Ottawa County adults spent an average of 3.0 hours watching TV, 2.3 hours on the computer (during work), 1.3 hours on their cell phone, and 1.1 hours on the computer (outside of work) on an average day of the week.

## Nutrition

- In 2017, 6% of adults ate 5 or more servings of fruits and vegetables per day, 22% ate 3-4 servings, and 64% ate 1-2 servings. Seven percent (7%) of adults ate 0 servings of fruits and vegetables per day. The American Cancer Society recommends that adults eat at least 2½ cups of vegetables and 1½ cups of fruit each day to reduce the risk of cancer and to maintain good health. (Source: American Cancer Society Guideline for Diet and Physical Activity, Updated June 9, 2020).

- Ottawa County adults reported the following reasons they chose the types of food they ate: taste/enjoyment (66%), cost (45%), ease of preparation/time (44%), healthiness of food (44%), food they were used to (40%), what their family prefers (30%), nutritional content (28%), availability (27%), calorie content (25%), artificial sweetener content (9%), if it is organic (9%), if it is genetically modified (8%), health care provider's advice (7%), if it is gluten free (7%), if it is lactose free (3%), other food sensitivities (3%), and other reasons (4%).
- In a typical week, adults ate out in a restaurant or brought home take-out food at the following frequencies: 1-2 meals (55%), 3-4 meals (21%), and 5 or more meals (5%). Nineteen percent (19%) of adults did not eat out in a restaurant or bring home take-out food in a typical week.
- Ottawa County adults purchased their fruit and vegetables from the following places: large grocery store (70%), local grocery store (67%), farmer's market (39%), grow their own/garden (28%), Dollar General/Store (3%), food pantry (2%), group purchasing-community supported agriculture (2%), community garden (1%), mail order food services (<1%), corner/convenience store (<1%), and other places (1%).

*The following graph shows the percentage of Ottawa County adults who were overweight or obese by Body Mass Index (BMI). Examples of how to interpret the information include: 22% of all Ottawa County adults were classified as normal weight, 36% were overweight, and 41% were obese.*



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

### Improving Fruit and Vegetable Access

Poor diet quality is a leading risk factor associated with death and disability in the United States. Eating a diet rich in fruits and vegetables as part of an overall healthy diet can help protect against a number of serious and costly chronic diseases, including heart disease, type 2 diabetes, some cancers, and obesity. Fruits and vegetables also provide important vitamins and minerals that help the human body work as it should and fight off illness and disease.

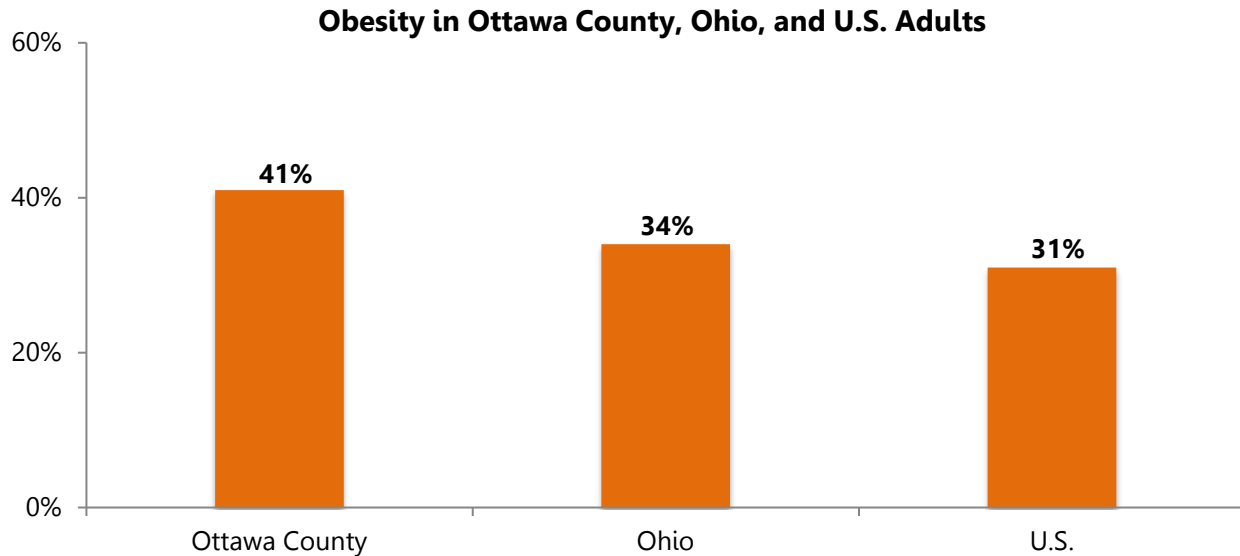
- The 2015–2020 Dietary Guidelines for Americans recommends that adults consume 1.5–2 cups of fruits and 2–3 cups of vegetables per day.
- Despite these recommendations, recent data show low consumption. Only 1 in 10 US adults eat the recommended amount of fruits or vegetables each day.
- Income-related disparities exist, with 7% of adults who live at or below the poverty level meeting the daily vegetable recommendation, compared to 11.4% of adults with the highest household incomes.

*(Source: CDC, State Indicator Report on Fruits and Vegetables, Updated June 2018)*



Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Overweight</b>	34%	37%	36%	34%	35%
<b>Obese</b>	33%	34%	41%	34%	31%

The following graph shows the percentage of Ottawa County adults who were obese compared to Ohio and U.S.



(Source: 2017 Ottawa County Health Assessment and 2018 BRFSS)

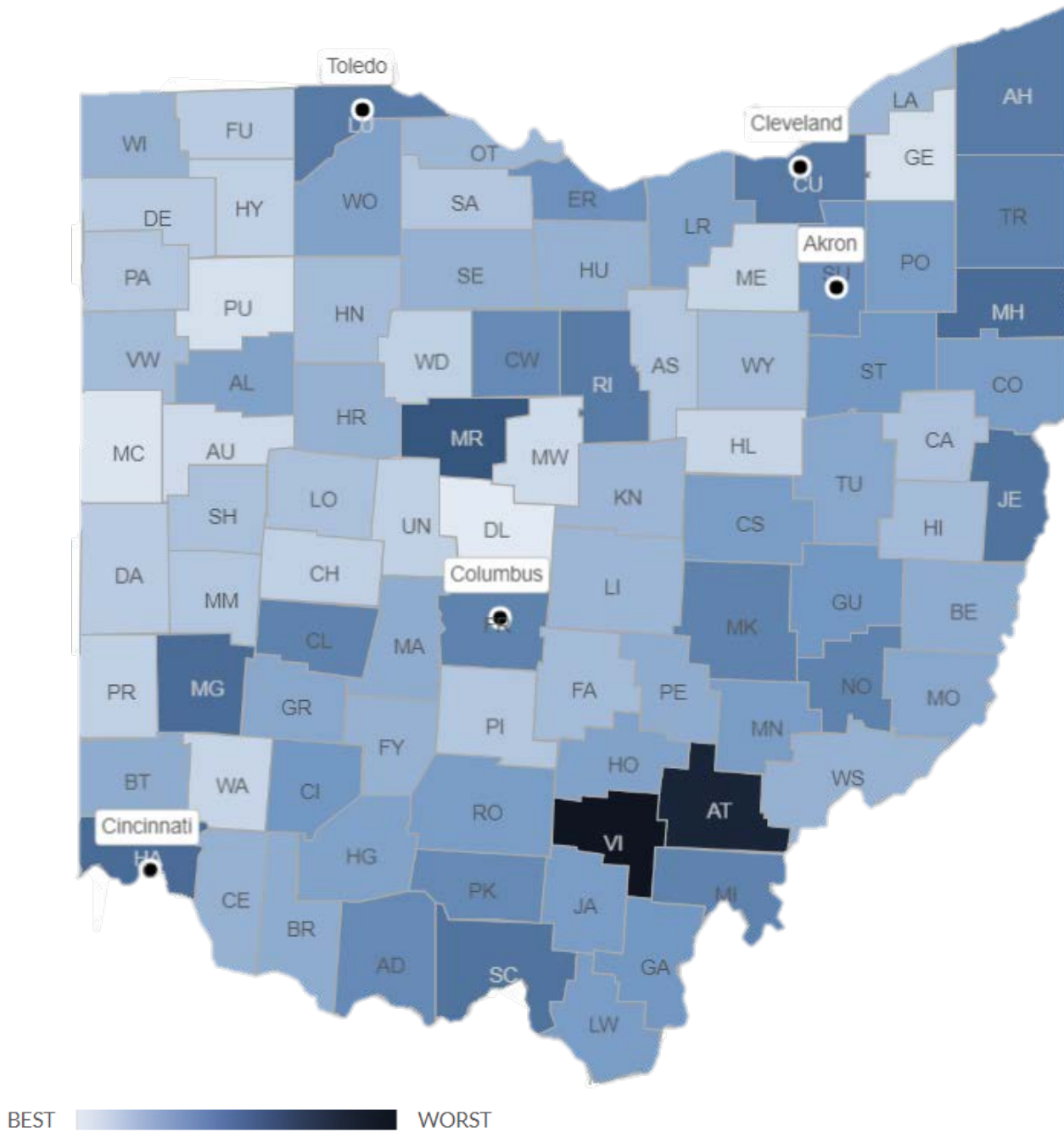
### Obesity Facts

- Obesity-related conditions include heart disease, stroke, type 2 diabetes, and certain types of cancer, some of the leading causes of preventable, premature 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 (49.6%) followed by Hispanics (44.8%), non-Hispanic whites (42.2%), and non-Hispanic Asians (17.4%).
- Obesity is highest among middle age adults 40-59 years old (44.8%), compared to younger adults age 20-39 (40.0%), and adults over 60 or above (42.8%) adults.

(Source: CDC, Adult Obesity Facts, updated February 27, 2020)

The Food Environment Index measures the quality of the food environment in a county on a scale from 0-10 (zero being the worst value in the nation, and 10 being the best). The two variables used to determine the measure are limited access to healthy foods & food insecurity.

- The food environment index in Ottawa County is 7.9.
- The food environment index in Ohio is 6.7.



(Source: USDA Food Environment Atlas, as compiled by County Health Rankings 2020)

# Health Behaviors: Adult Tobacco Use

## Key Findings

In 2017, 15% of Ottawa County adults were current smokers, and 26% were considered former smokers. Just over half (51%) of smokers reported trying to quit in the past year.

**In 2017, 15% of Ottawa County adults were current smokers.**

## Adult Tobacco Use Behaviors

- The health assessment identified that 15% of Ottawa County adults were current smokers (those who indicated smoking at least 100 cigarettes in their lifetime and currently smoked some or all days). The 2018 BRFSS reported current smoker prevalence rates of 21% for Ohio and 16% for the U.S.
- More than one-fourth (26%) of adults indicated that they were former smokers (smoked 100 cigarettes in their lifetime and now do not smoke). The 2018 BRFSS reported former smoker prevalence rates of 25% for Ohio and the U.S.
- Ottawa County adult smokers were more likely to have:
  - Been divorced (39%)
  - Rated their overall health as fair or poor (28%)
  - Incomes less than \$25,000 (24%)
- Ottawa County adults used the following tobacco products in the past year: cigarettes (21%), cigars (8%), chewing tobacco (6%), e-cigarettes (4%), Black and Milds (2%), Swishers (1%), little cigars (1%), cigarillos (1%), hookah (1%), and pouch (1%).
- Just over half (51%) 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.
- Ottawa County adults were exposed to second-hand smoke in the following places: friend's home (9%), home (7%), other relative's home (7%), car (6%), park/ball field (5%), and fairgrounds (4%). Seventy-four percent (74%) of adults indicated they were not exposed to second-hand smoke.

### Cost of Smoking Related Illness

Smoking-related illness in the United States costs more than \$300 billion each year, including:

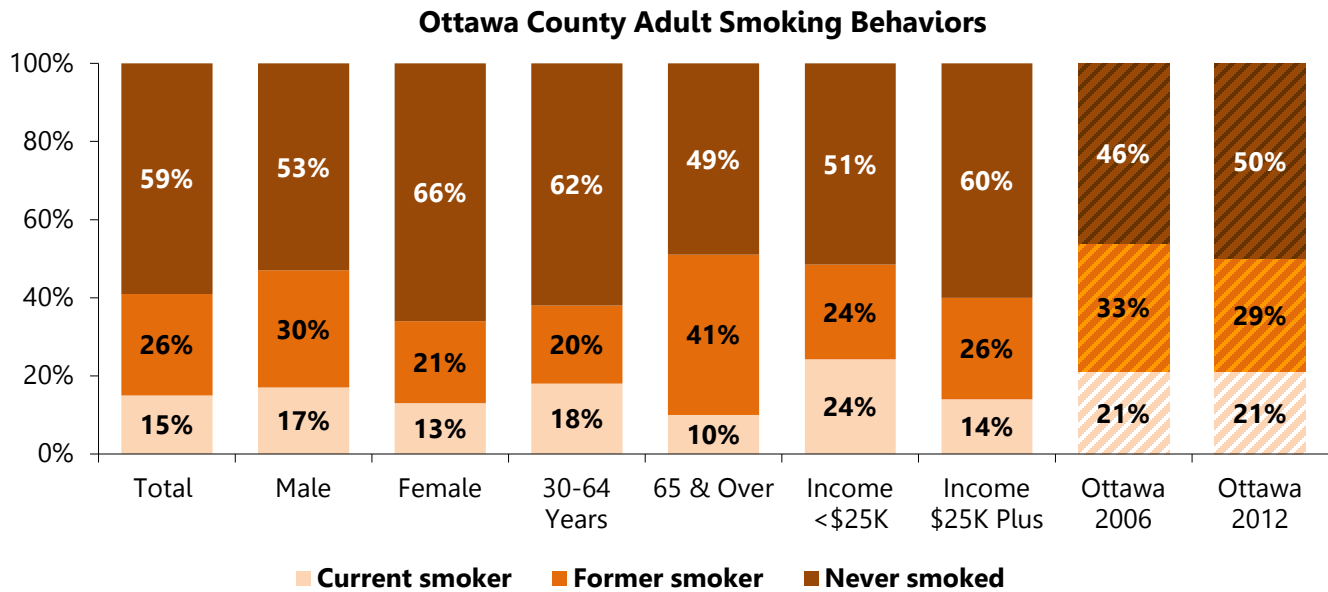
- Nearly \$170 billion for direct medical care for adults
- More than \$156 billion in lost productivity, including \$5.6 billion in lost productivity due to secondhand smoke exposure

*(Source: CDC, Smoking & Tobacco Use, Updated July 23, 2019)*

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Current smoker</b>	21%	21%	15%	21%	16%
<b>Former smoker</b>	33%	29%	26%	25%	25%
<b>Tried to quit smoking</b>	70%	36%	51%	N/A	N/A

N/A – Not Available

The following graph shows the percentage of Ottawa County adults who used tobacco. Examples of how to interpret the information include: 15% of adults were current smokers, 26% of adults were former smokers, and 59% 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?"*

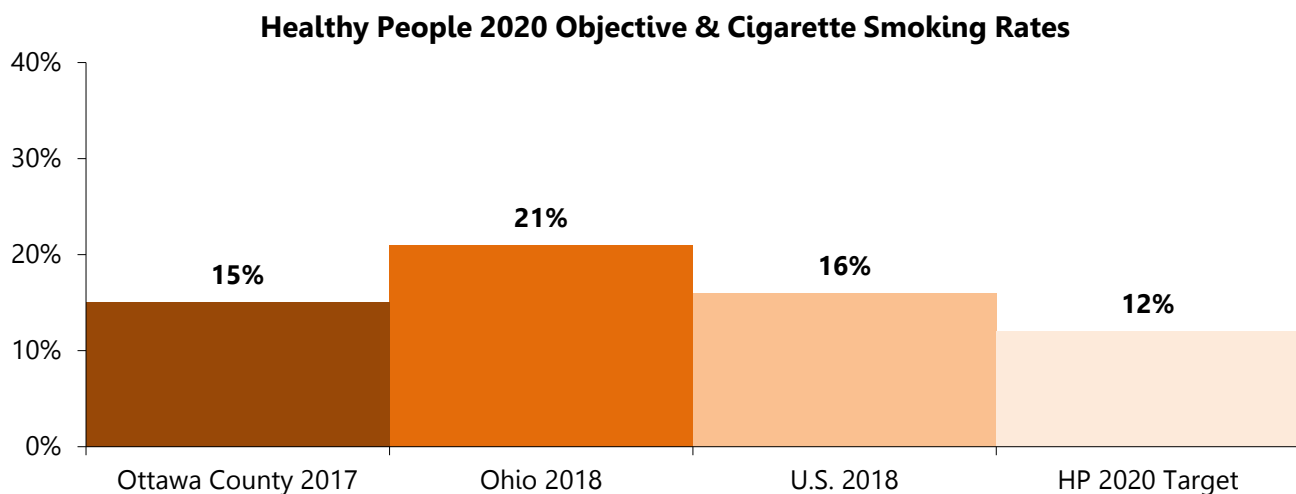
## E-Cigarette Health Effects

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

*(Source: CDC, About Electronic Cigarettes, Updated February 24, 2020)*

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

- The Ottawa County adult cigarette smoking rate was lower than the Ohio and U.S. rates, but slightly higher than the Healthy People 2020 target objective.



(Source: 2017 Ottawa County Health Assessment, 2018 BRFSS, and Healthy People 2020)

### Benefits of Quitting Smoking Over Time

Quitting smoking lowers your risk of diabetes, lets blood vessels work better, and helps your heart and lungs. Life expectancy for smokers is at least 10 years shorter than that of non-smokers. Quitting smoking before the age of 40 reduces the risk of dying from smoking-related disease by about 90%.

Quitting while you're younger will reduce your health risks more, but quitting at any age can give back years of life that would be lost by continuing to smoke.

#### Within minutes of smoking your last cigarette, your body begins to recover:

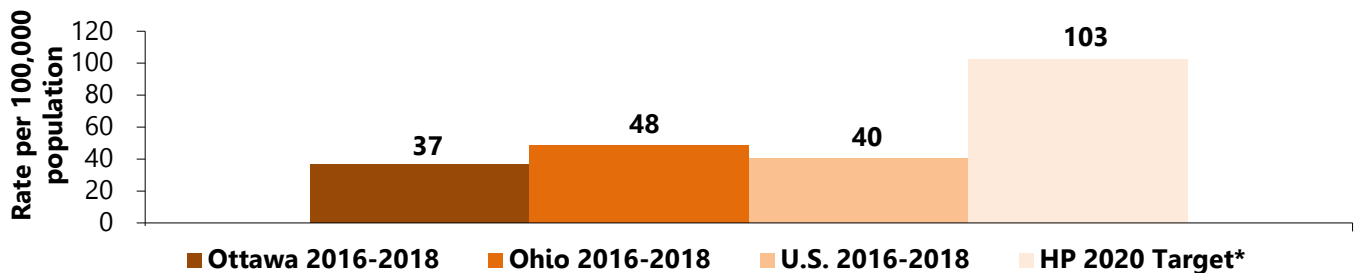
<b>20 minutes after quitting</b>	Your heart rate and blood pressure drop.
<b>12 hours after quitting</b>	The carbon monoxide level in your blood drops to normal.
<b>2 weeks to 3 months after quitting</b>	Your circulation improves and your lung function increases.
<b>1 to 9 months after quitting</b>	Coughing and shortness of breath decrease. Tiny hair-like structures that move mucus out of the lungs (called cilia) start to regain normal function in your lungs, increasing their ability to handle mucus, clean the lungs, and reduce the risk of infection.
<b>1 year after quitting</b>	The excess risk of coronary heart disease is half that of someone who still smokes. Your heart attack risk drops dramatically.
<b>5 years after quitting</b>	Your risk of cancers of the mouth, throat, esophagus, and bladder is cut in half. Cervical cancer risk falls to that of a non-smoker. Your stroke risk can fall to that of a non-smoker after 2 to 5 years.
<b>10 years after quitting</b>	Your risk of dying from lung cancer is about half that of a person who is still smoking. Your risk of cancer of the larynx (voice box) and pancreas decreases.
<b>15 years after quitting</b>	Your risk of coronary heart disease is that of a non-smoker's.

(Source: American Cancer Society, Benefits of Quitting Smoking Over Time, Updated November 1, 2018)

The following graphs show Ottawa 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. Ottawa County age-adjusted mortality rates for lung and bronchus cancer by gender are shown below as well. These graphs show:

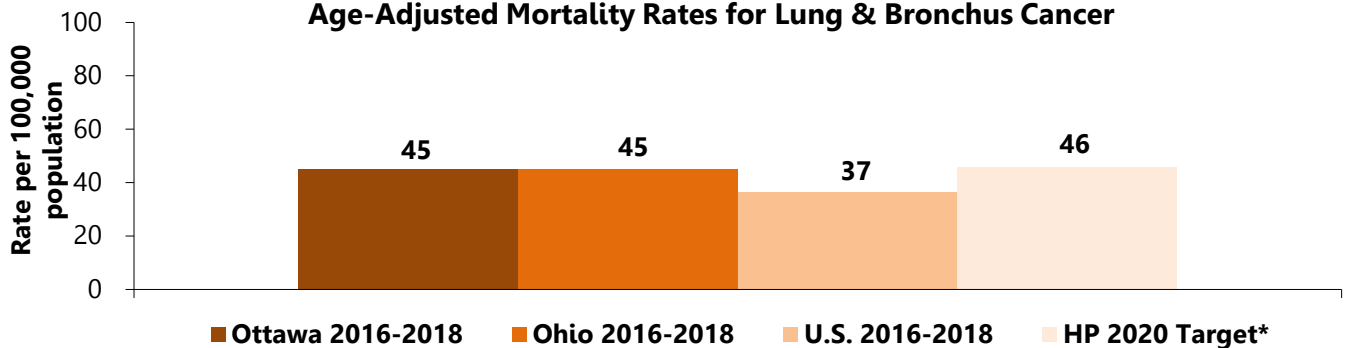
- From 2016-2018, Ottawa County's age-adjusted mortality rate for Chronic Lower Respiratory Disease was lower than the Ohio and U.S. mortality rate, as well as the Healthy People 2020 Target.
- Ottawa County's age-adjusted mortality rate for lung and bronchus cancer was the same as Ohio, higher than the U.S. mortality rate, and lower than the Health People 2020 Target.
- The 2016-2018 age-adjusted mortality rate for lung and bronchus cancer was higher for males compared to females.

### Age-Adjusted Mortality Rates for Chronic Lower Respiratory Diseases (Formerly COPD)



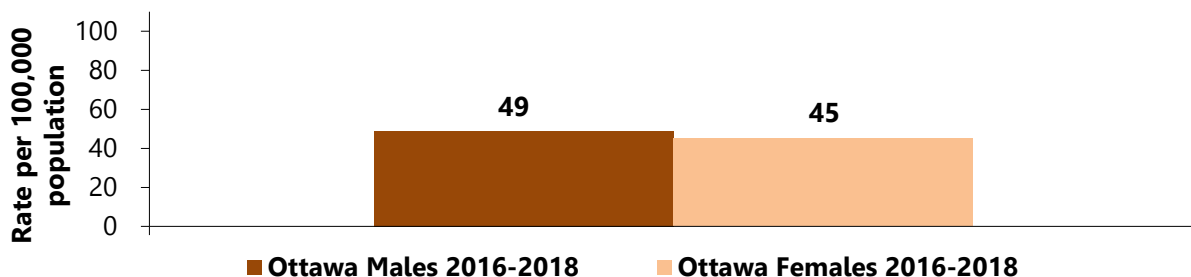
(Sources: ODH Public Health Data Warehouse, CDC Wonder, and Healthy People 2020)  
 \* Healthy People 2020's target rate is for adults aged 45 years and older.

### Age-Adjusted Mortality Rates for Lung & Bronchus Cancer



\*Healthy People 2020 Target data is for lung cancer only  
 (Sources: ODH Public Health Data Warehouse, CDC Wonder, Healthy People 2020)

### Age-Adjusted Mortality Rates by Gender for Lung & Bronchus Cancer



(Source: ODH Public Health Data Warehouse, 2016-2018)

# Health Behaviors: Adult Alcohol Consumption

## Key Findings

In 2017, the health assessment indicated that 62% of Ottawa County adults were considered current drinkers. More than one-quarter (26%) of adults reported they had five or more alcoholic drinks (for males) or four or more drinks (for females) on an occasion in the last month and would be considered binge drinkers

**62% of Ottawa County adults had at least one alcoholic drink in the past month.**

## Adult Alcohol Consumption

- In 2017, 62% of Ottawa County adults had at least one alcoholic drink in the past month. The 2018 BRFSS reported current drinker prevalence rates of 52% for Ohio and 54% for the U.S.
- Of those who drank, Ottawa County adults drank 2.8 drinks on average, increasing to 3.0 drinks for those with incomes more than \$25,000.

**26% of Ottawa County adults were considered binge drinkers.**

- More than one-quarter (26%) of Ottawa County adults reported they had five or more alcoholic drinks (for males) or four or more drinks (for females) on an occasion in the last month and would be considered binge drinkers (the 2018 BRFSS reported binge drinking rates of 16% for Ohio and the U.S.). Of those that drank in the past month, 41% were considered binge drinkers.
- Five percent (5%) of adults reported driving after having perhaps too much to drink.
- In the past month, Ottawa County adults reported driving the following motor vehicles after having one or more drinks: motor vehicle (38%), water craft (4%), ATV (2%), boat (1%), snowmobile (1%), motorcycle (1%), farm machinery (1%), and other vehicle (4%).

## Alcohol Impaired Driving

An alcohol impaired-driving fatality is defined as a fatality in a crash involving a driver or motorcycle rider (operator) with a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or greater.

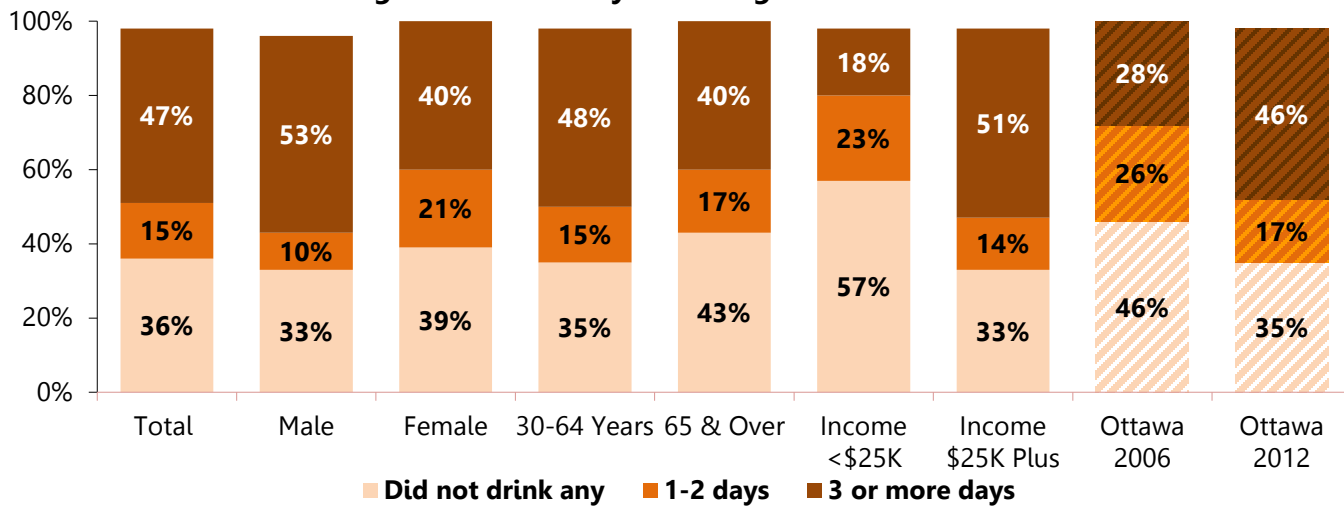
- Nationwide, more than one-quarter (29%) of the total motor vehicle fatalities were in alcohol-impaired-driving crashes.
- In Ohio, 294 alcohol-impaired-driving fatalities occurred in 2018, accounting for 28% of the total motor vehicle fatalities in the state.

*(Source: U.S. Department of Transportation, 2018 Fatal Motor Vehicle Crashes: Overview, Updated October 2019)*

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Drank alcohol at least once in past month</b>	55%	63%	62%	52%	54%
<b>Binge drinker (drank 5 or more drinks for males and 4 or more for females on an occasion)</b>	16%	24%	26%	16%	16%

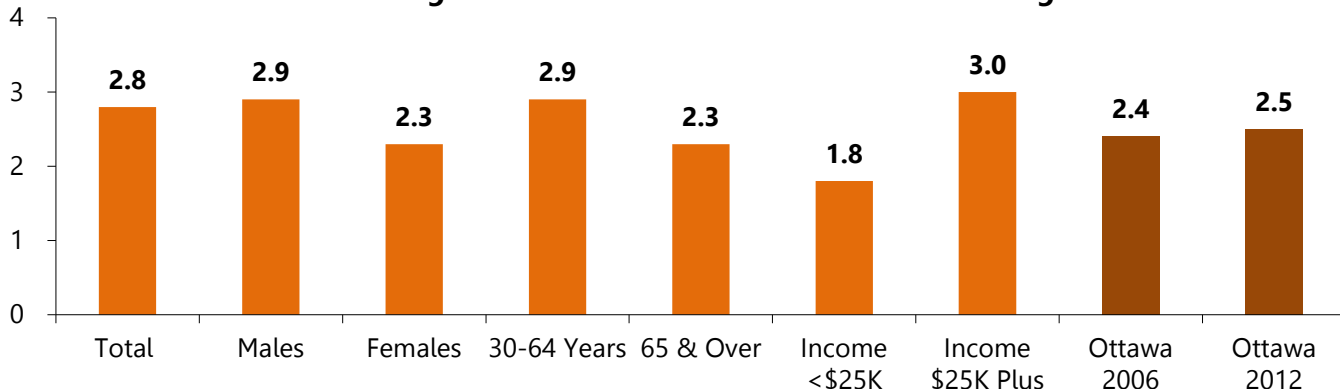
The following graphs show the percentage of Ottawa County adults consuming alcohol, the amount consumed on average, and a comparison of binge drinkers with Ohio and U.S. binge drinkers. Examples of how to interpret the information shown on the first graph include: 36% of all Ottawa County adults did not drink alcohol, 33% of Ottawa County males did not drink, and 39% of adult females did not drink.

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

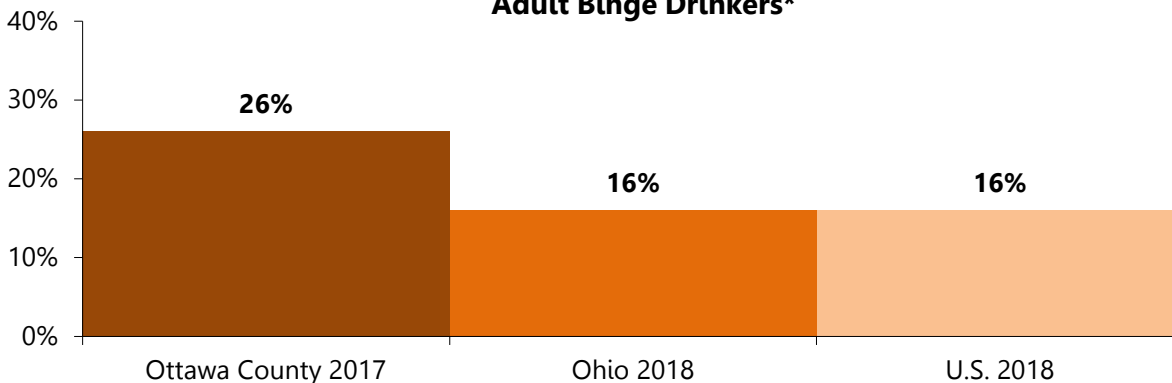


Note: Percentages may not equal 100% as some respondents answered "don't know"

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



### Adult Binge Drinkers\*

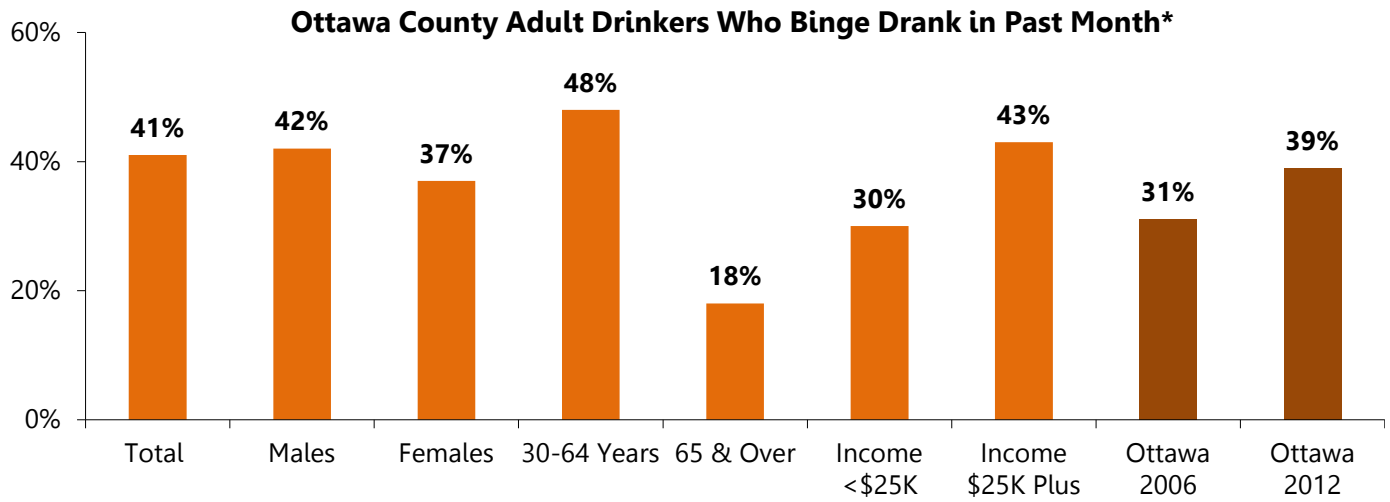


(Sources: 2018 BRFSS, 2017 Ottawa County Health Assessment)

\*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 graph shows the percentage of Ottawa County drinkers who binge drank in the past month.



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.

### Economic Costs of Excessive Alcohol Use

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

(Source: CDC, Alcohol and Public Health – Excessive Drinking, Updated January 2, 2020)

# Health Behaviors: Adult Drug Use

## Key Findings

Six percent (6%) of Ottawa County adults had used marijuana during the past 6 months. Five percent (5%) of adults had used medication not prescribed for them or took more than prescribed to feel good or high and/or more active or alert during the past 6 months.

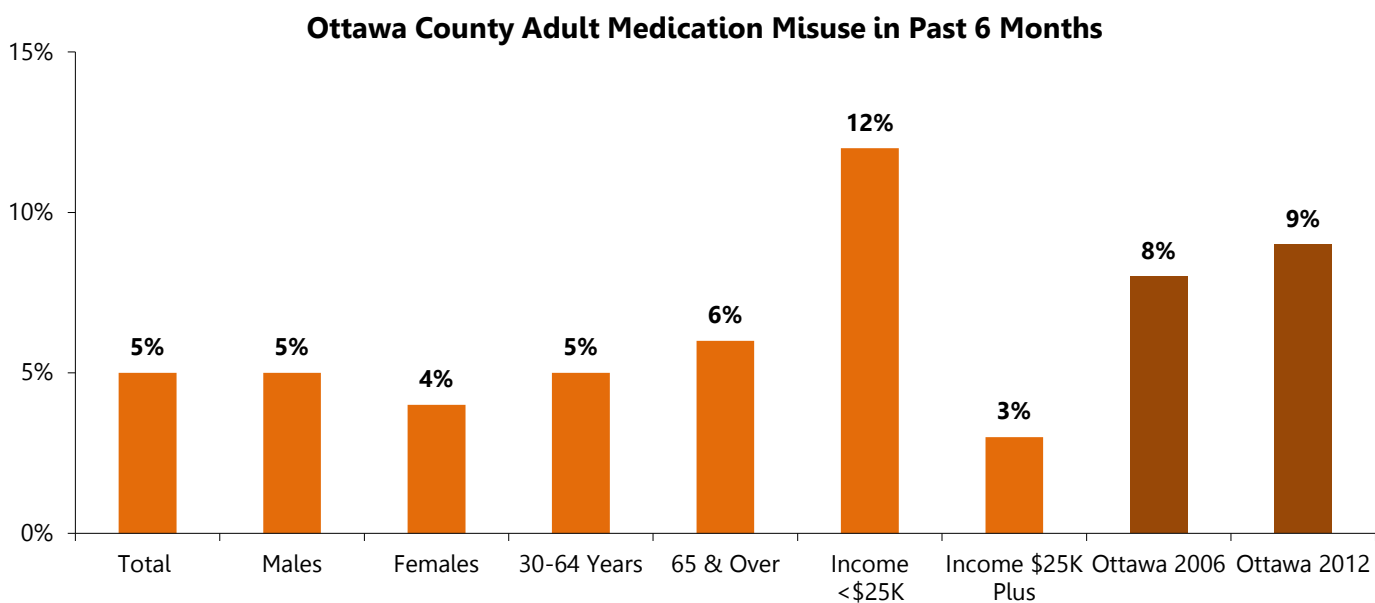
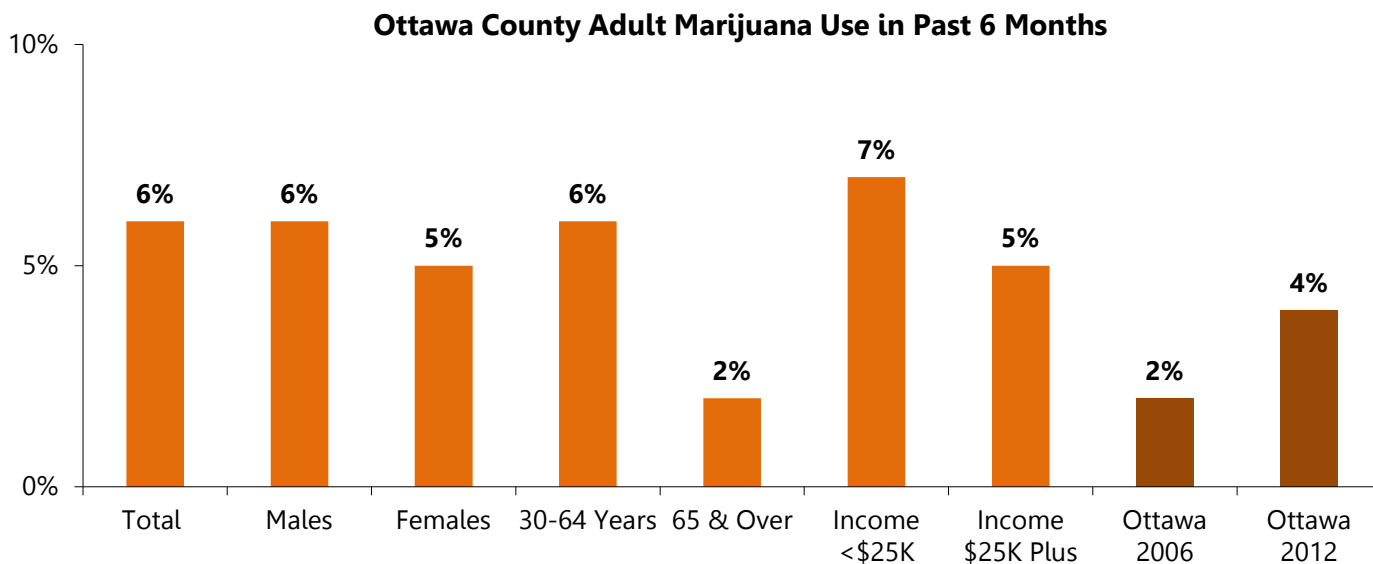
## Adult Drug Use

- Six percent (6%) of Ottawa County adults had used marijuana in the past 6 months, increasing to 7% of those with incomes less than \$25,000.
- Two percent (2%) of Ottawa 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.
- When asked about their frequency of marijuana and other recreational drug use in the past six months, 29% of Ottawa County adults who used drugs did so almost every day, and 26% did so less than once a month.
- Five percent (5%) of adults had used medication not prescribed for them or they took more than prescribed to feel good or high and/or more active or alert during the past 6 months, increasing to 12% of those with incomes less than \$25,000.
- When asked about their frequency of medication misuse in the past six months, 48% of Ottawa County adults who used these drugs did so almost every day, and 18% did so less than once a month.
- Ottawa County adults indicated they did the following with their unused prescription medication: took as prescribed (42%), took it to the medication collection program (32%), threw it in the trash (22%), flushed it down the toilet (12%), kept it (12%), gave it away (1%), sold it (<1%), and some other destruction method (4%).
- One percent (1%) of Ottawa County adults had used a program or service to help with alcohol or drug problems for either themselves or a loved one. Reasons for not using such a program included the following: did not use drugs (86%), not needed (18%), had not thought of it (2%), could not get to the office or clinic (1%), stigma of seeking drug services (1%), could not afford to go (<1%), did not know how to find a program (<1%), no program available (<1%), fear (<1%), transportation (<1%), and other reasons (1%).
- As a result of drug use, adults indicated they or a family member: sought medical attention (3%), overdosed (2%), used Naloxone (2%), and had become deceased (1%).

Adult Comparisons	Ottawa County 2008	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Adults who used marijuana in the past 6 months</b>	2%	4%	6%	N/A	N/A
<b>Adults who misused prescription drugs in the past 6 months</b>	8%	9%	5%	N/A	N/A

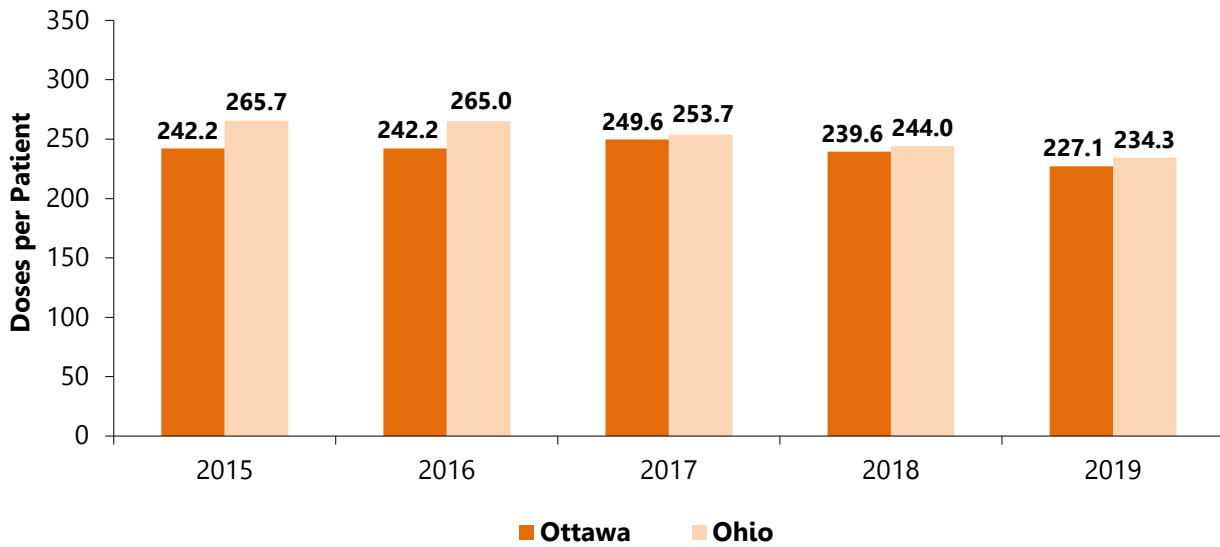
N/A – Not available

The following graphs indicate adult marijuana use and medication misuse in the past six months. Examples of how to interpret the information include: 6% of all Ottawa County adults used marijuana in the past six months; 7% of adults with incomes less than \$25,000 were current users.

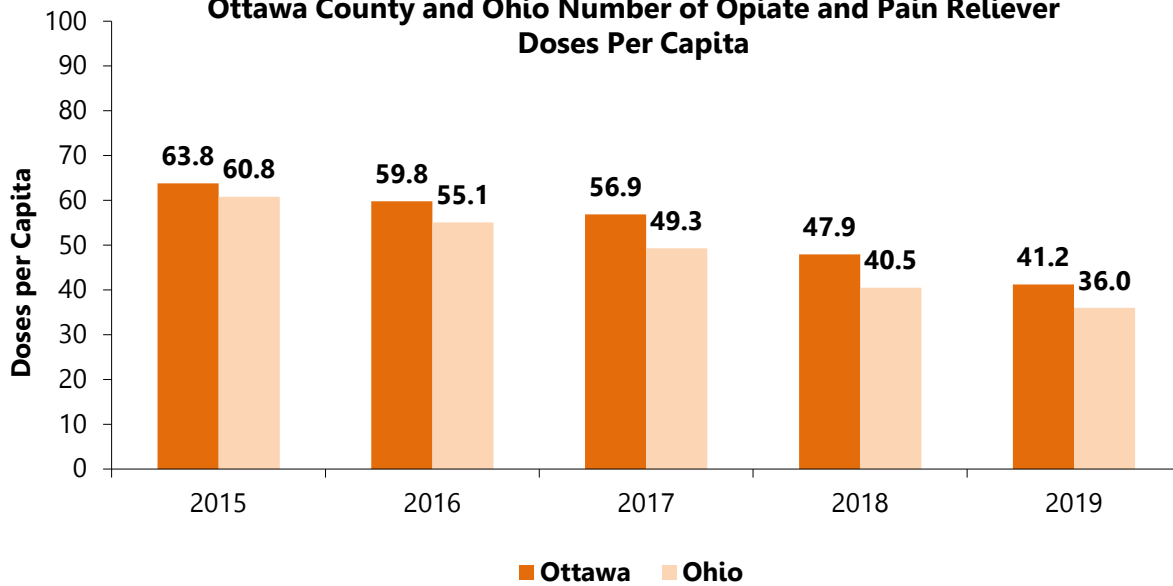


The following graphs show Ottawa County and Ohio opiate and pain reliever doses per patient and doses per capita.

**Ottawa County and Ohio Number of Opiate and Pain Reliever Doses Per Patient**

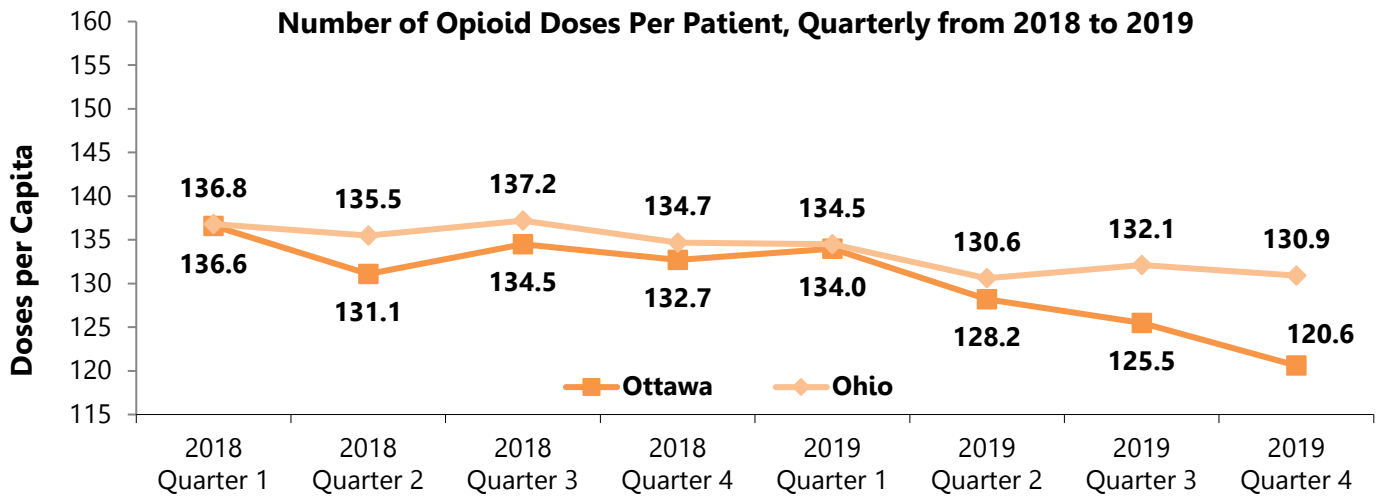
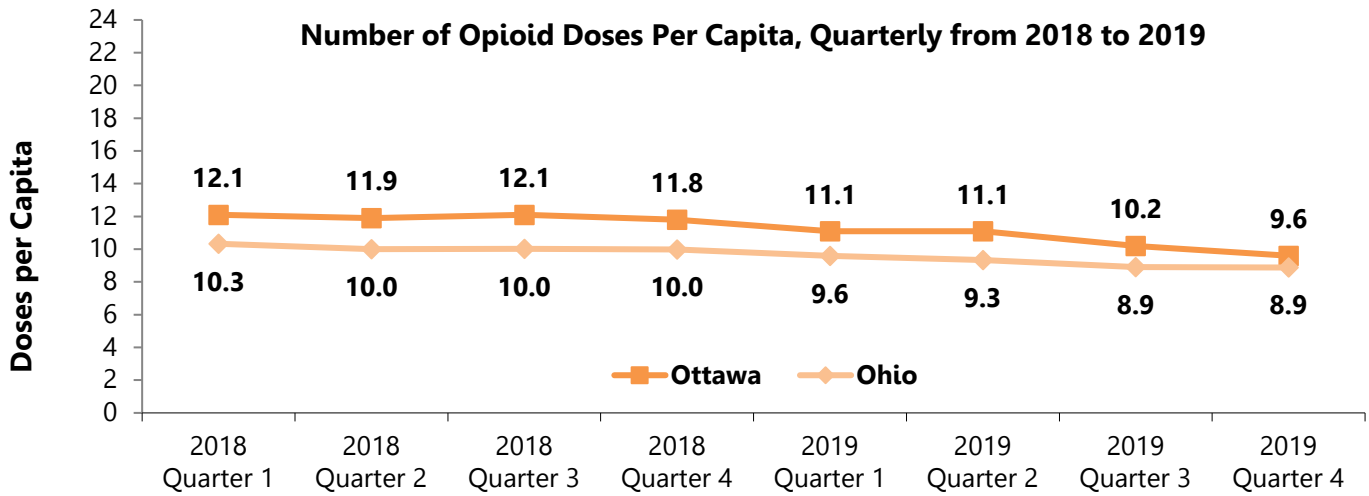


**Ottawa County and Ohio Number of Opiate and Pain Reliever Doses Per Capita**

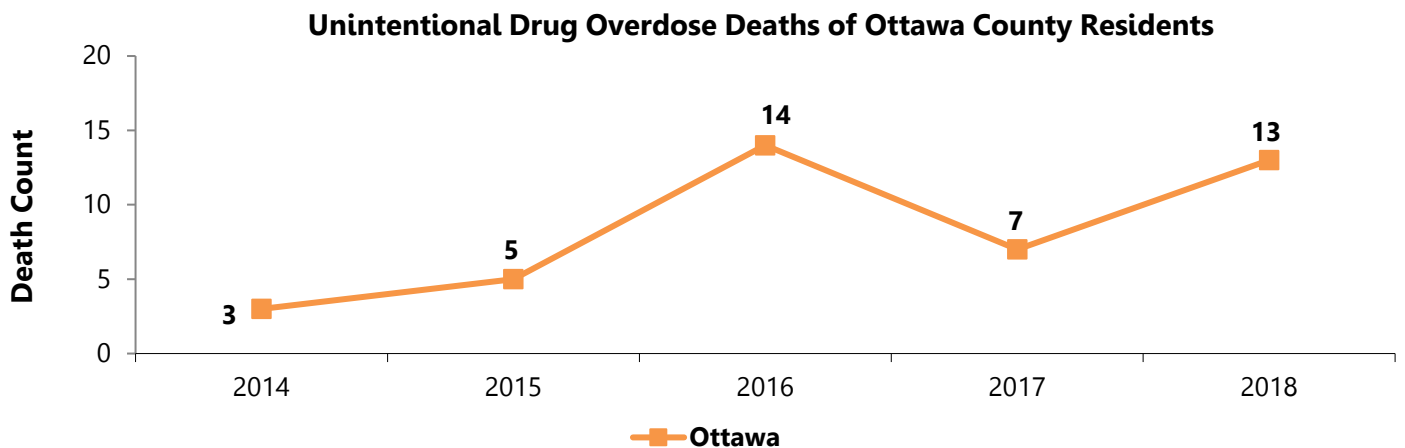


(Source: Ohio Automated Rx Reporting System, Quarterly County Data, 2015-2019)

The following graphs show Ottawa County and Ohio quarterly opiate and pain reliever doses per patient and per capita, and annual unintentional drug overdose deaths.



(Source: Ohio's Automated Rx Reporting System, 2018-2019)



(Source: ODH, Ohio Resident Mortality Data, 2014-2018)

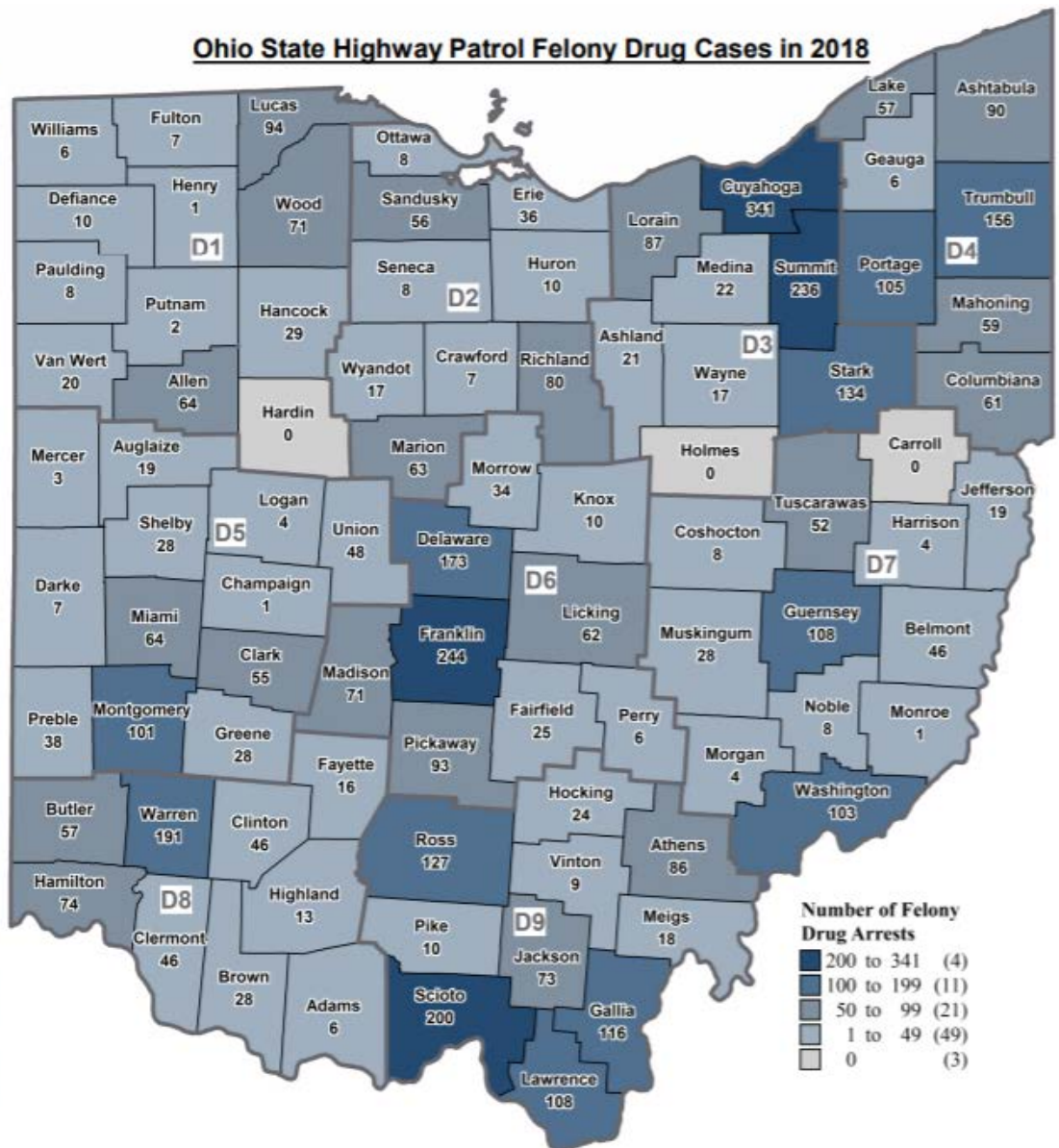
## Felony Cases and Drug Arrests 2018

- Ohio State Highway Patrol (OSHP) investigated a wide range of felony offenses in 2018, including vice (4,768), assault (2,170), larceny (686), false pretense (185), property crimes (153), homicide/death (45), robbery/burglary (7), and various other types of felony offenses (307).
- OSHP Troopers made 16,956 total drug arrests in 2018, a 2% increase compared to 2017 and a 20% increase compared to the previous 3-year average (2015-2017). Total drug arrests in 2018 were 76% higher than they were in 2013.
- Of the 16,956 drug arrests, more than one-quarter (4,732 or 28%) included one or more felony drug charges. This represents a 21% increase over the previous 3-year average (2015-2017).

OSHP felony cases by type <sup>1</sup>	
Homicide/Death	45
Robbery/Burglary	7
Larceny	686
Assault	2,170
False pretense <sup>2</sup>	185
Vice <sup>3</sup>	4,768
Property crimes	153
Other investigations	307
<b>Total:</b>	<b>8,321</b>

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

OSHP drug seizures in grams	
Marijuana	2,181,948
Cocaine	229,521
Methamphetamine	194,682
Heroin	133,383
OSHP scheduled pill seizures	
Opiate	25,475
Stimulant	4,700
Depressant	8,210
Hallucinogen	736



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





# Health Behaviors: Adult Sexual Behavior

## Key Findings

In 2017, 66% of Ottawa County adults had sexual intercourse. Four percent (4%) of adults had more than one partner. Prevalence estimates suggest that young people aged 15-24 years acquire half of all new STDs and that 1 in 4 sexually active adolescent females have an STD, such as chlamydia or human papillomavirus (HPV) (Source: CDC, *STDs in Adolescents and Young Adults, 2017 STD Surveillance*).

## Adult Sexual Behavior

- Four percent (4%) of adults reported they had intercourse with more than one partner in the past year, increasing to 10% of those with incomes less than \$25,000.
- Ottawa County adults used the following methods of birth control: vasectomy (22%), they or their partner were too old (20%), hysterectomy (14%), tubes tied (14%), abstinence (11%), birth control pill (10%), ovaries or testicles removed (6%), condoms (6%), withdrawal (6%), IUD (3%), infertility (3%), rhythm method (1%), and shots (<1%).
- One-in-ten (10%) Ottawa County adults were not using any method of birth control.
- Ottawa County adults had been diagnosed with the following sexually transmitted diseases (STDs) in the past 5 years: human papilloma virus (HPV) (2%), genital herpes (2%), gonorrhea (<1%), hepatitis C (<1%), chlamydia (<1%), and other STDs (<1%).
- The following situations applied to Ottawa County adults in the past year: had anal sex without a condom (2%), tested for an STD (2%), had sex with someone they did not know (2%), thought they may have an STD (1%), used intravenous drugs (1%), treated for an STD (1%), had sexual activity with someone of the same gender (1%), gave or received money or drugs in exchange for sex (<1%), tested positive for hepatitis C (<1%), and knew someone involved in sex trafficking (<1%).
- Almost one-fifth (18%) of adults had been tested for HIV.

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
Had more than one sexual partner in past year	5%	6%	4%	N/A	N/A

N/A – Not available

## The State of STDs in the United States

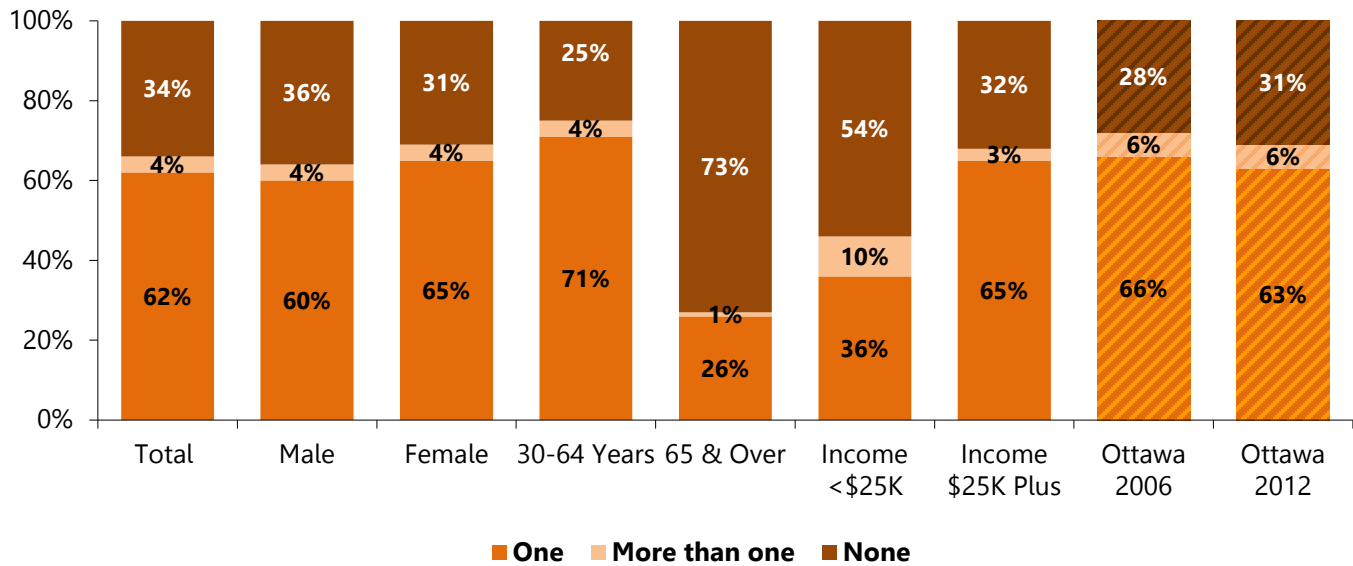
- In 2018, STDS surged for the fifth straight year reaching an all-time high of 2.4 million reported cases of chlamydia, gonorrhea, and syphilis.
  - 1.8 million cases of chlamydia were diagnosed in 2018, a 19% increase since 2014
  - 583,405 cases of gonorrhea were diagnosed, a 63% increase since 2014
  - 115,045 cases of syphilis were diagnosed, a 71% increase of infectious syphilis since 2014
  - 1,306 cases of syphilis were diagnosed among newborns in 2018, a 185% increase since 2014
- Anyone who has sex is at risk, but some groups are more affected by STDs including young people aged 15-24, gay and bisexual men, and pregnant women.
- If left untreated, STDs can cause:
  - Increased risk of giving or getting HIV
  - Long-term pelvic/abdominal pain
  - Inability to get pregnant or pregnancy complications

(Source: CDC, *Sexually Transmitted Disease Surveillance 2018, June 30, 2019*)



The following graph shows the sexual activity of Ottawa County adults. Examples of how to interpret the information include: 62% of all Ottawa County adults had one sexual partner in the last 12 months and 4% had more than one; and 60% of males had one partner in the past year.

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



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

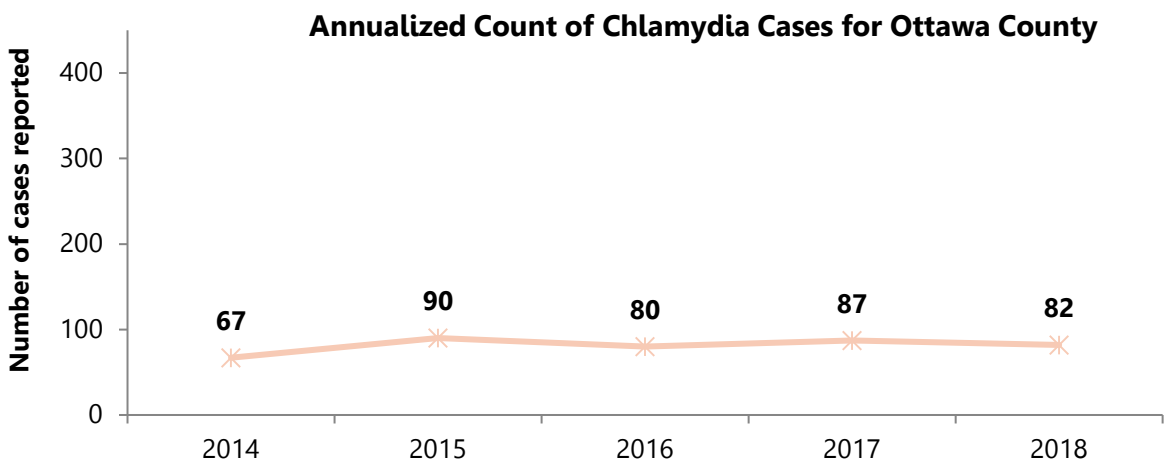
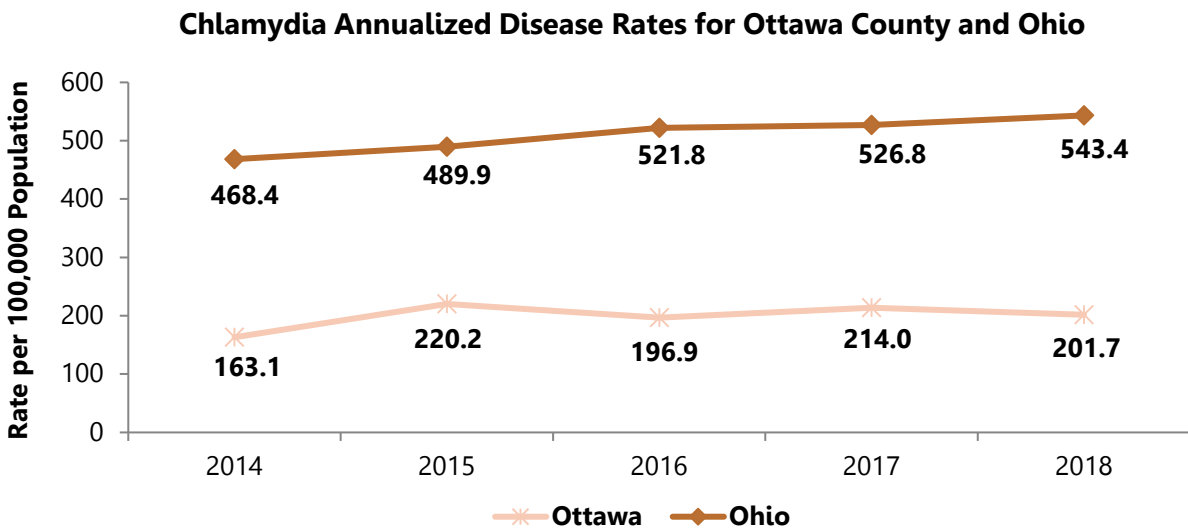
### HIV in the United States

- At the end of 2018, an estimated 1,173,900 people had HIV. Approximately 6 out of 7 individuals living with HIV are aware of their infection.
- In 2018, 37,968 people received an HIV diagnosis in the United States (US) and dependent areas. From 2014 to 2018, HIV diagnoses decreased 7% among adults and adolescents. However, diagnoses have increased between 2014-2018 among some groups including Native Hawaiians/Other Pacific Islanders (up 55%), American Indians/Alaska Natives (Up 6%), and people who inject drugs (up 9%).
- A person with HIV who takes HIV medicine as prescribed and gets and stays virally suppressed or undetectable can stay healthy and has effectively no risk of sexually transmitting HIV to HIV-negative partners.
- For every 100 people with HIV in 2018, 65 received some HIV care, 50 were retained in care, and 56 were virally suppressed.
- In 2018, there were 15,820 deaths among adults and adolescents with diagnosed HIV in the US. These deaths may be due to any cause.

(Source: CDC, HIV in the United States: At a Glance, June 10, 2020)

The following graphs show Ottawa County chlamydia disease rates per 100,000 population. The graphs show:

- Ottawa County chlamydia rates fluctuated from 2014-2018.

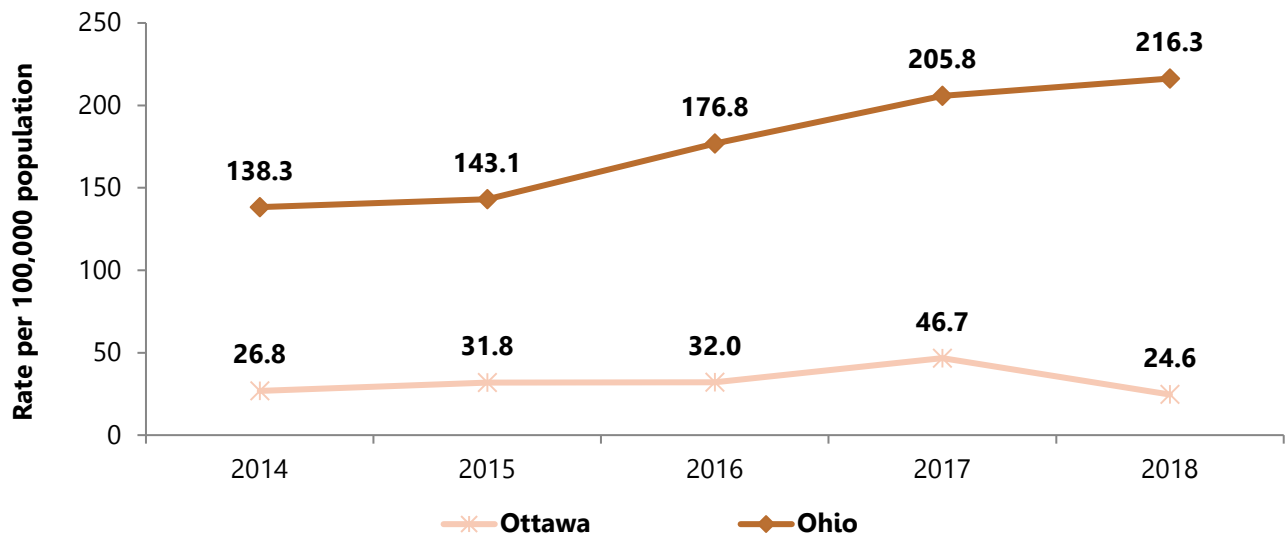


(Source for graphs: ODH, STD Surveillance, data reported through 05/02/2019)

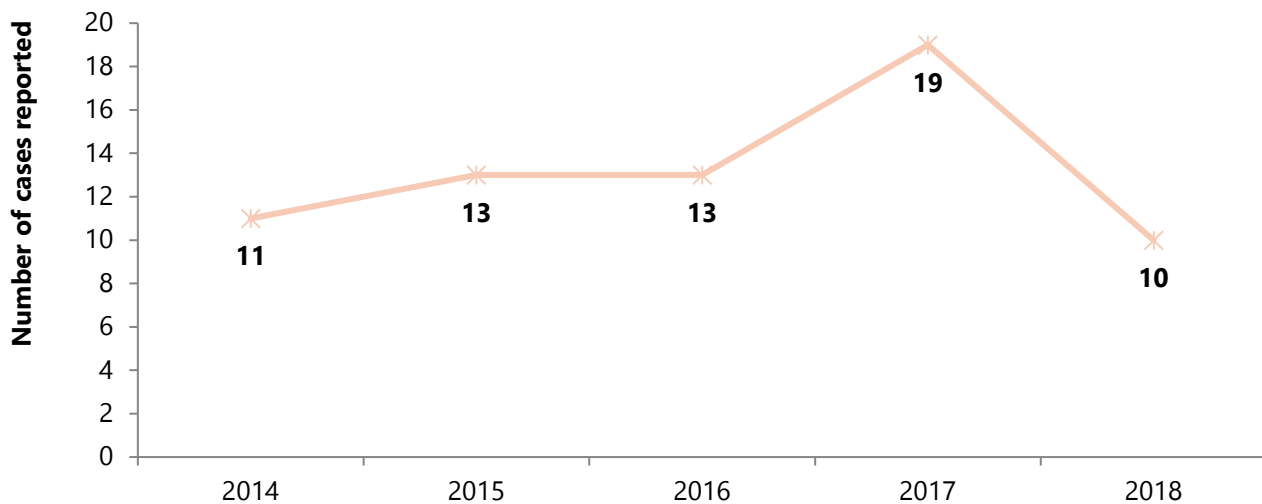
The following graphs show Ottawa County gonorrhea disease rates per 100,000 population. The graphs show:

- The Ottawa County gonorrhea rate increased from 2014-2018, then decreased in 2018.
- The Ohio gonorrhea rate stayed about the same between 2014-2015, then increased significantly from 2015-2018.
- The Healthy People 2020 Objective for gonorrhea is 252 new female and 195 new male cases per 100,000 population.

**Gonorrhea Annualized Disease Rates for Ottawa County and Ohio**



**Annualized Count of Gonorrhea Cases for Ottawa County**



(Source for graphs: ODH, STD Surveillance, data reported through 05/02/2019)

# Health Behaviors: Adult Mental Health

## Key Findings

*In 2017, 3% of Ottawa County adults considered attempting suicide. One out of eleven (9%) adults felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing usual activities.*

## Adult Mental Health

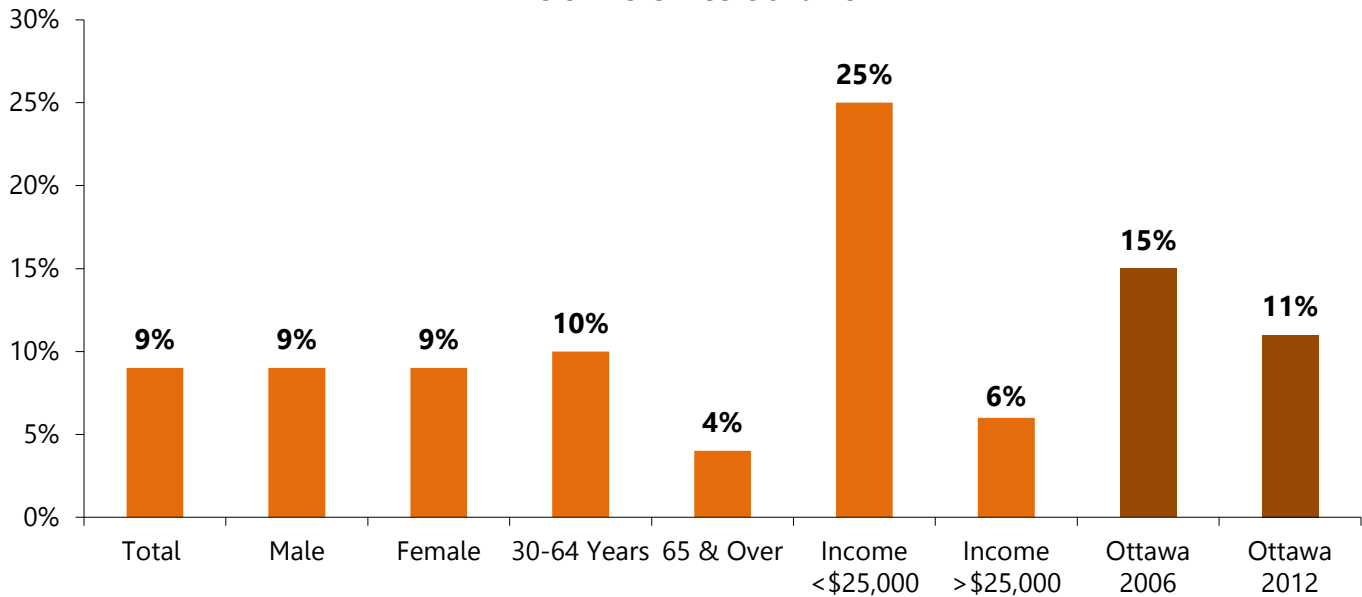
- Nine percent (9%) of Ottawa County adults felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing usual activities, increasing to 25% of those with incomes less than \$25,000.
- Three percent (3%) of Ottawa County adults considered attempting suicide in the past year.
- Less than one percent (<1%) of adults reported attempting suicide in the past year.
- Ottawa County adults reported they or a family member were diagnosed with or treated for the following mental health issues: anxiety or emotional problems (21%), depression (19%), an anxiety disorder (13%), attention deficit disorder (ADD/ADHD) (8%), post-traumatic stress disorder (PTSD) (5%), bipolar (4%), autism spectrum (3%), alcohol and illicit drug abuse (3%), developmental disability (3%), other trauma (3%), life-adjustment disorder (2%), eating disorder (1%), psychotic disorder (1%), problem gambling (<1%), and some other mental health disorder (2%). Sixteen percent (16%) indicated they or a family member had taken medication for one or more mental health issues.
- Ottawa County adults received the social and emotional support they needed from the following: family (72%), friends (64%), God/prayer (35%), church (21%), neighbors (8%), Internet (4%), community (4%), a professional (2%), self-help group (1%), and other (4%).
- Ottawa County adults indicated the following caused them anxiety, stress or depression: financial stress (35%), job stress (31%), marital/dating relationship (18%), death of close family member or friend (17%), fighting at home (17%), poverty/no money (17%), other stress at home (17%), sick family member (16%), unemployment (8%), caring for a parent (5%), family member with mental illness (5%), divorce/separation (4%), not having a place to live (2%), not having enough to eat (1%), sexual orientation/gender identity (1%), not feeling safe at home (1%), not feeling safe in the community (<1%), and other causes (13%).
- Ottawa County adults dealt with stress in the following ways: talked to someone they trust (39%), prayer/meditation (37%), slept (31%), ate more or less than normal (30%), exercised (29%), listened to music (29%), worked on a hobby (25%), drank alcohol (17%), worked (16%), took it out on others (8%), smoked tobacco (7%), used prescription drugs as prescribed (4%), used illegal drugs (1%), misused prescription drugs (1%), and other ways (10%).
- Nine percent (9%) of Ottawa County adults used a program or service for themselves or a loved one to help with depression, anxiety, or emotional problems. Reasons for not using such a program included the following: had not thought of it (12%), could not afford to go (7%), co-pay/deductible too high (5%), did not know how to find a program (4%), stigma of seeking mental health services (4%), other priorities (4%), fear (2%), could not get to the office/clinic (<1%), transportation (<1%), and other reasons (4%). Sixty-five percent (65%) of adults indicated they did not need such a program.

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
<b>Felt sad or hopeless for two or more weeks in a row</b>	15%	11%	9%	N/A	N/A
<b>Considered attempting suicide in the past year</b>	3%	5%	3%	N/A	N/A

N/A – Not Available

The following graph shows Ottawa 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 include: 9% of all Ottawa County adults felt sad or hopeless for two or more weeks in a row, including 9% of males and 9% of females.

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



### Suicide Facts

Several factors can increase the risk for suicide and protect against it. Suicide is connected to other forms of injury and violence, and causes serious health and economic consequences. For example, suicide risk is higher among people who have experienced violence, including child abuse, bullying, or sexual violence. Protective factors like family and community support, or, "connectedness," and easy access to health care can decrease the risk for suicidal thoughts and behavior.

#### Suicide is a large and growing public health problem.

- Suicide is the 10th leading cause of death in the United States. It was responsible for more than 48,000 deaths in 2018, resulting in about one death every 11 minutes.
- Every year, many more people think about or attempt suicide than die by suicide. In 2018, 10.7 million American adults seriously thought about suicide, 3.3 million made a plan, and 1.4 million attempted suicide.

#### Suicide affects all ages.

- Suicide is a problem throughout the life span. It is the second leading cause of death for people 10 to 34 years of age, the fourth leading cause among people 35 to 54 years of age, and the eighth leading cause among people 55 to 64 years of age

#### Some groups have higher rates of suicide than others.

- Suicide rates vary by race/ethnicity, age, and other population characteristics, with the highest rates across the life span occurring among non-Hispanic American Indian/Alaska Native and non-Hispanic White populations.
- Other Americans disproportionately impacted by suicide include Veterans and other military personnel and workers in certain occupational groups like construction and the arts, design, entertainment, sports, and media fields.
- Sexual minority youth bear a large burden as well, and experience increased suicidal ideation and behavior compared to their non-sexual minority peers

(Source: CDC, Violence Prevention, Fast Facts, Updated 4/21/2020)

# Chronic Disease: Cardiovascular Health

## Key Findings

The 2017 Ottawa County Health Assessment found that 7% of adults had survived a heart attack and 2% had survived a stroke at some time in their life. Just over two-fifths (42%) of Ottawa County adults had high blood pressure, 41% were obese, 40% had high blood cholesterol, and 15% were smokers, four known risk factors for heart disease and stroke. Heart disease (26%) and stroke (5%) accounted for 31% of all Ottawa County adult deaths in 2016-2018 (Source: Ohio Public Health Data Warehouse, 2016-2018).

## Heart Disease and Stroke

- In 2017, 7% of Ottawa County adults reported they had survived a heart attack or myocardial infarction, increasing to 12% of those over the age of 65 and 14% of those with incomes less than \$25,000.
- Six percent (6%) of Ohio and 5% of U.S. adults reported they had a heart attack or myocardial infarction in 2018 (Source: 2018 BRFSS).
- Two percent (2%) of Ottawa County adults reported they had survived a stroke, increasing to 5% of those with incomes less than \$25,000 and 6% of those over the age of 65.
- Four percent (4%) of Ohio and 3% of U.S. adults reported having had a stroke in 2015 (Source: 2018 BRFSS).
- Six percent (6%) of adults reported they had angina or coronary heart disease, increasing to 9% of those over the age of 65 and 11% of those with incomes less than \$25,000.
- Five percent (5%) of Ohio and 4% of U.S. adults reported having had angina or coronary heart disease in 2018 (Source: 2018 BRFSS).
- Three percent (3%) of adults reported they had congestive heart failure, increasing to 6% of those over the age of 65 and 10% of those with incomes less than \$25,000.

## High Blood Pressure (Hypertension)

- More than two-fifths (42%) of adults had been diagnosed with high blood pressure. The 2017 BRFSS reports hypertension prevalence rates of 35% for Ohio and 32% for the U.S.
- Eight percent (8%) of adults were told they were pre-hypertensive/borderline high.
- Most (91%) adults had their blood pressure checked within the past year.
- Ottawa County adults diagnosed with high blood pressure were more likely to have:
  - Been ages 65 years or older (61%)
  - Rated their overall health as fair or poor (60%)
  - Been classified as obese by body mass index (57%)
  - Incomes less than \$25,000 (52%)

### Ottawa County Leading Causes of Death 2016-2018

**Total Deaths: 1,566**

- Heart Disease (26% of all deaths)
- Cancer (24%)
- Stroke (5%)
- Chronic Lower Respiratory Diseases (5%)
- Accidents, Unintentional Injuries (5%)

(Source: Ohio Public Health Data Warehouse, 2016-2018)

### Ohio Leading Causes of Death 2016-2018

**Total Deaths: 367,518**

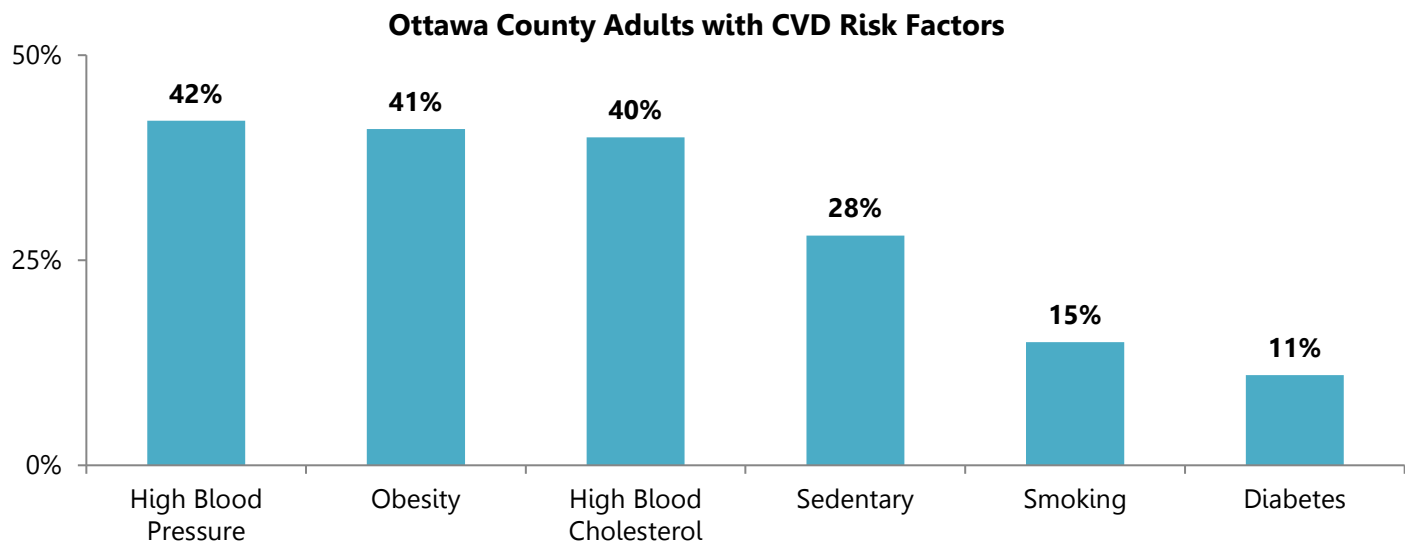
- Heart Disease (23% of all deaths)
- Cancers (21%)
- Accidents, Unintentional Injuries (7%)
- Chronic Lower Respiratory Diseases (6%)
- Stroke (5%)

(Source: Ohio Public Health Data Warehouse, 2016-2018)

## High Blood Cholesterol

- Two-fifths (40%) of adults had been diagnosed with high blood cholesterol. The 2017 BRFSS reported that 33% of Ohio and U.S. adults had been told they have high blood cholesterol.
- About four-fifths (81%) of adults had their blood cholesterol checked within the past 5 years. The 2017 BRFSS reported 85% of Ohio and 86% U.S. adults had their blood cholesterol checked within the past 5 years.
- Ottawa County adults with high blood cholesterol were more likely to:
  - Have been ages 65 years or older (55%)
  - Rated their overall health as fair or poor (49%)

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



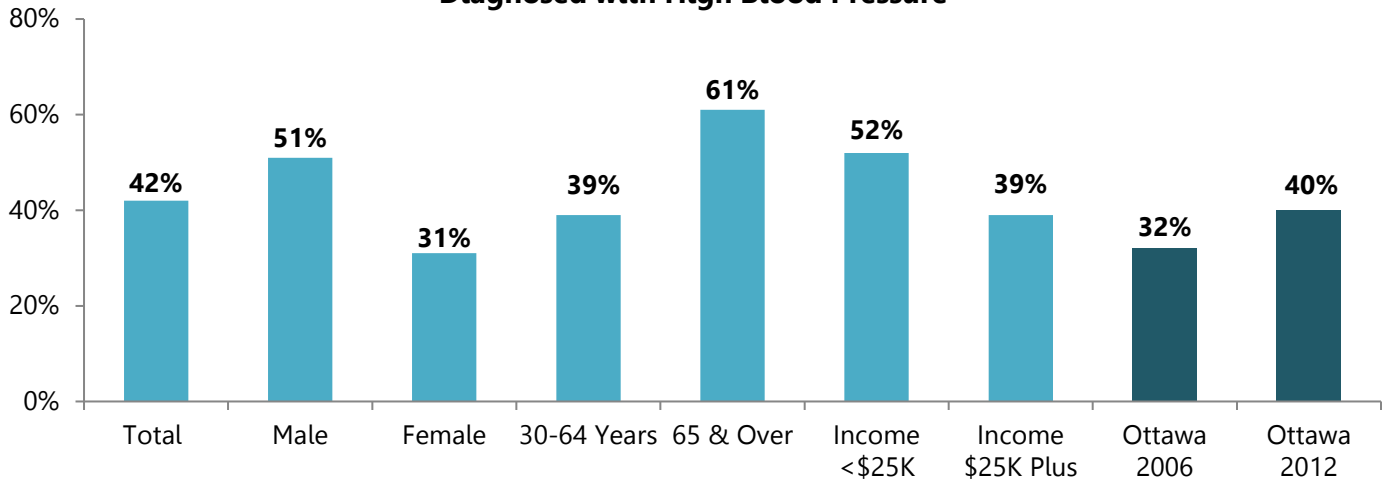
(Source: 2017 Ottawa County Health Assessment)

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
Had angina	N/A	6%	6%	5%	4%
Had a heart attack	4%	7%	7%	6%	5%
Had a stroke	1%	1%	2%	4%	3%
Had high blood pressure	32%	40%	42%	35%*	32%*
Had high blood cholesterol	31%	38%	40%	33%*	33%*
Had blood cholesterol checked within past 5 years	74%	76%	81%	85%*	86%*

N/A – Not Available  
\*2017 BRFSS

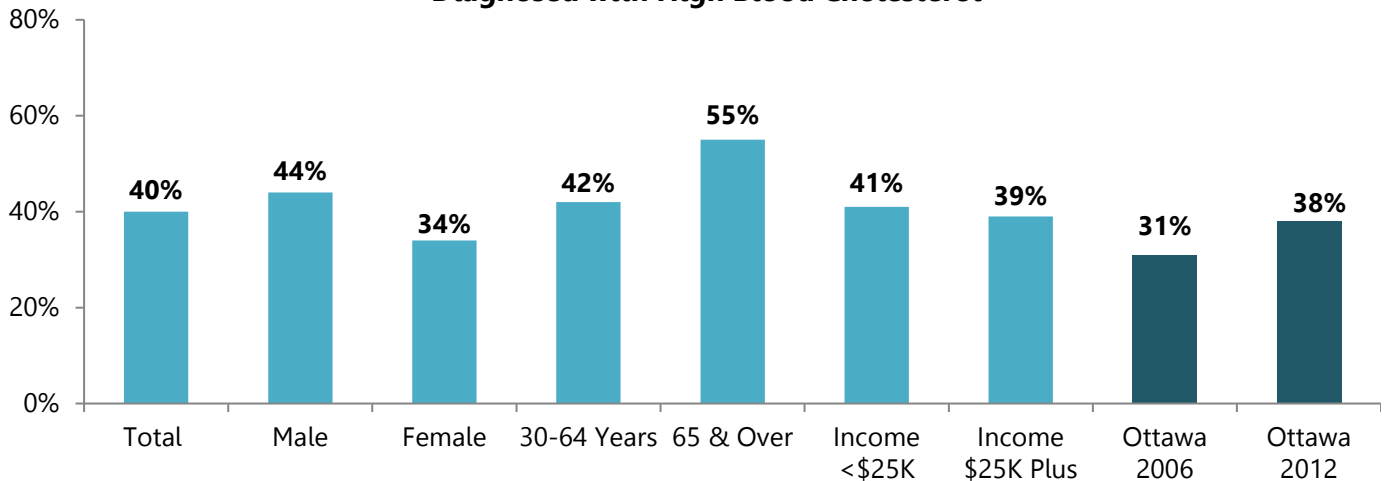
The following graphs show the percent of Ottawa County adults who had been diagnosed with high blood pressure, high blood cholesterol and cardiovascular disease. Examples of how to interpret the information on the first graph include: 42% of all Ottawa County adults had been diagnosed with high blood pressure, including 51% of males, 31% of females, and 61% of those 65 years and older.

### Diagnosed with High Blood Pressure\*

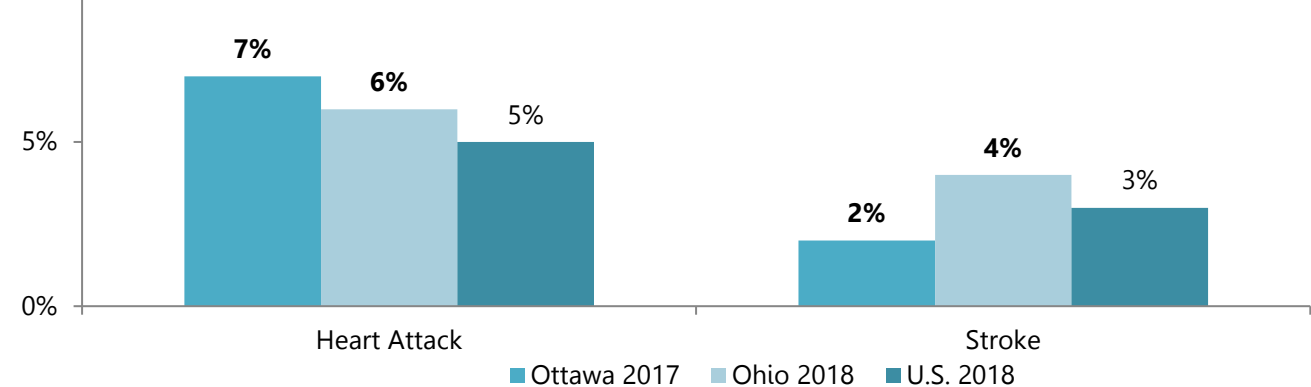


\*Does not include respondents who indicated high blood pressure during pregnancy only.

### Diagnosed with High Blood Cholesterol\*



### Cardiovascular Disease Prevalence

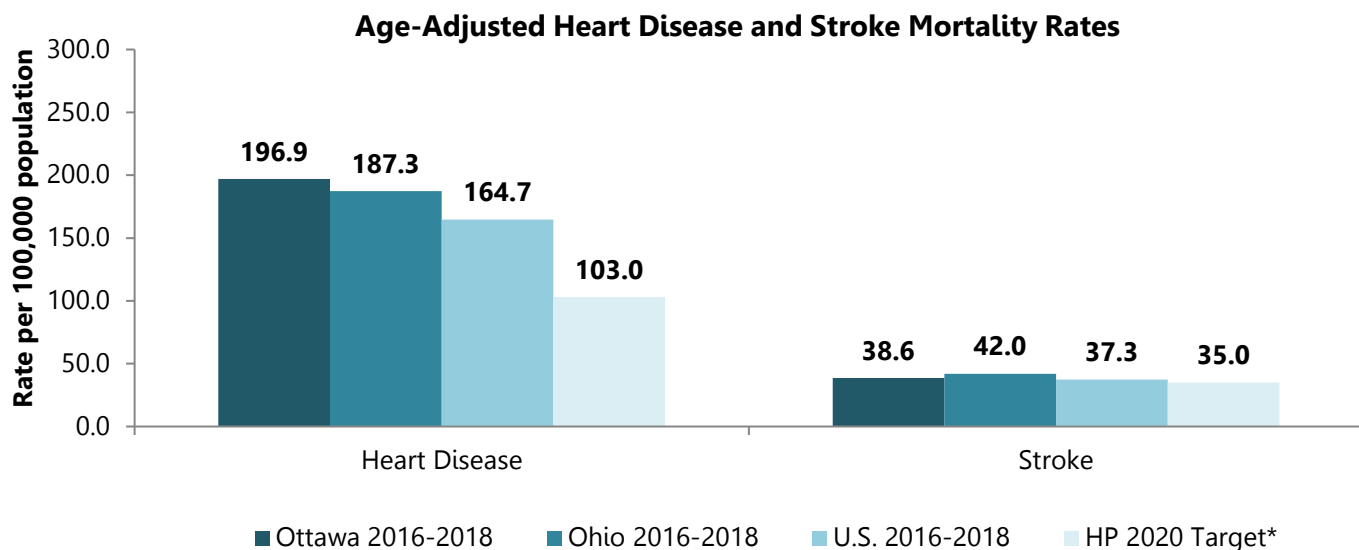


(Source: 2017 Ottawa County Health Assessment and 2018 BRFSS)

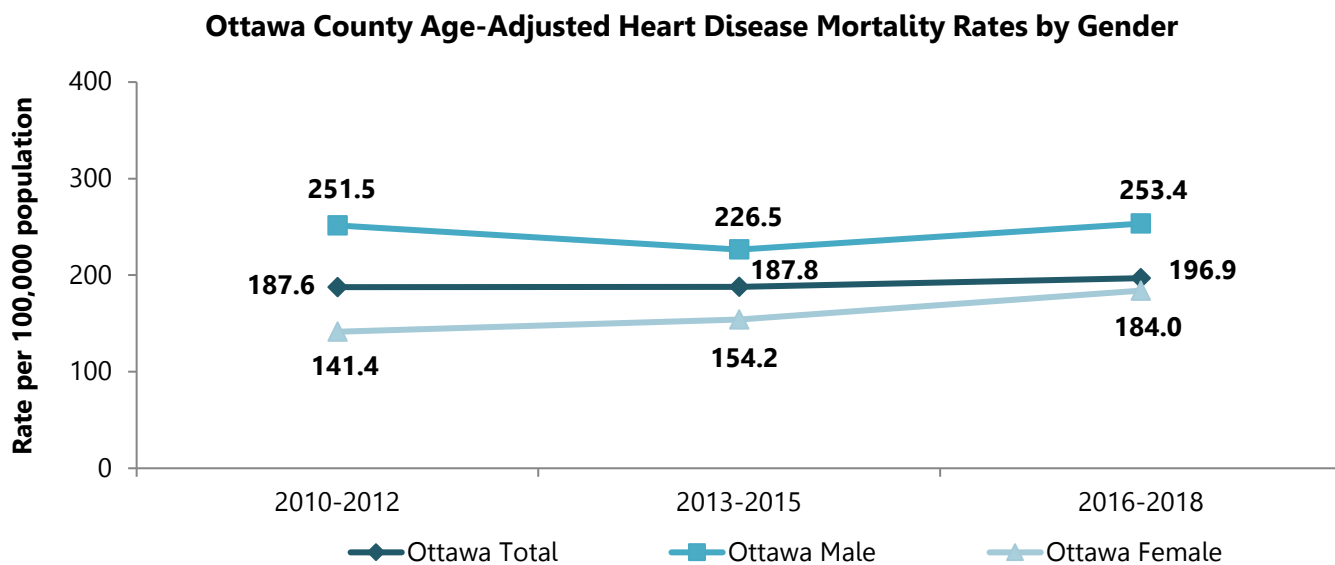


The following graphs are the age-adjusted mortality rates per 100,000 population for heart disease and stroke. These graphs show:

- When age differences are accounted for, statistics indicate that from 2016-2018, the Ottawa County heart disease mortality rate was higher than the Ohio and U.S. rate, as well as the Healthy People 2020 target.
- The Ottawa County age-adjusted stroke mortality rate from 2016-2018 was lower than Ohio’s rate, but higher than the U.S. rate and the Healthy People 2020 target objective.
- From 2010-2018, the total Ottawa County age-adjusted heart disease mortality rate increased.



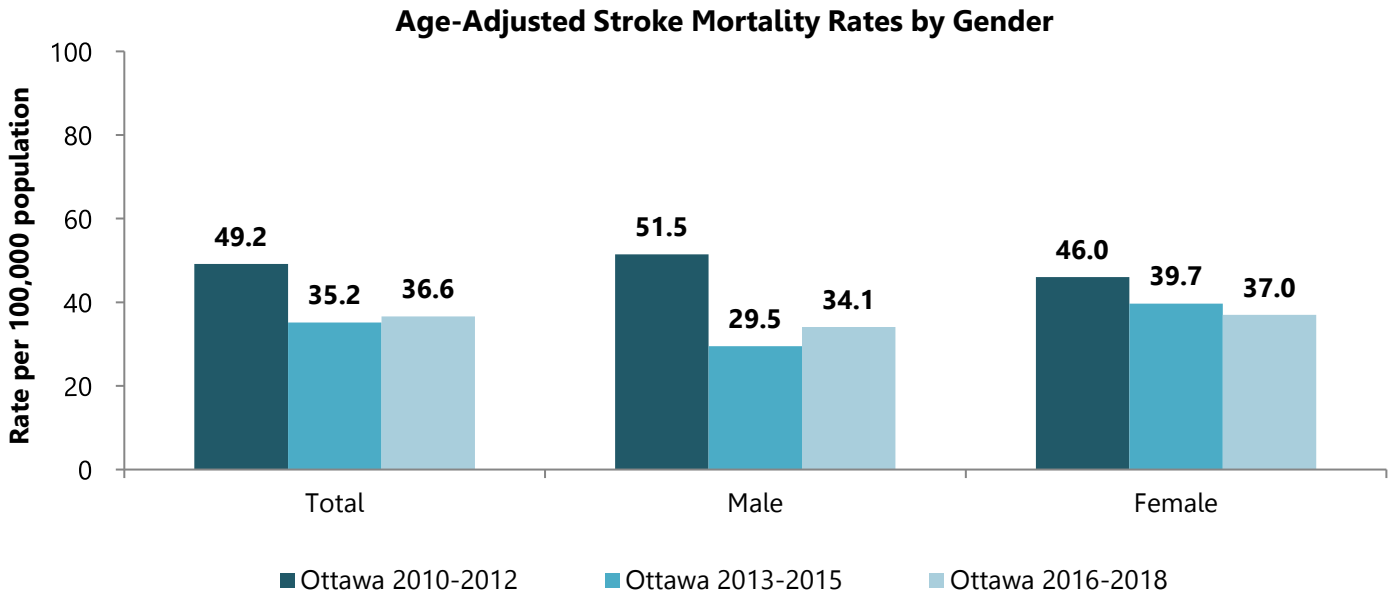
*\*The Healthy People 2020 Target objective for Coronary Heart Disease is reported for heart attack mortality. (Source: Ohio Public Health Data Warehouse, CDC Wonder, Healthy People 2020)*



*(Source: Ohio Public Health Data Warehouse, 2010-2018)*

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

- From 2010-2018, the Ottawa County stroke mortality rate has decreased for females and fluctuated for males.



(Source: Ohio Public Health Data Warehouse, 2010-2018)

### Healthy People 2020 Objectives Heart Disease and Stroke

Objective	Ottawa Survey Population Baseline	2017 U.S. Baseline	Healthy People 2020 Target
<b>HDS-5: Reduce proportion of adults with hypertension</b>	42% (2017)	32% Adults age 18 and up	27%
<b>HDS-7: Decrease proportion of adults with high total blood cholesterol (TBC)</b>	40% (2017)	33% Adults age 18 and up	14%

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

# Chronic Disease: Cancer

## Key Findings

In 2017, 18% of Ottawa County adults had been diagnosed with cancer at some time in their life. The Ohio Department of Health indicates that from 2014-2018, a total of 601 Ottawa 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.

## Adult Cancer

- Almost one-fifth (18%) of Ottawa County adults were diagnosed with cancer at some point in their lives, increasing to 34% of those over the age of 65.
- Of those diagnosed with cancer, they reported the following types: breast (28%), skin cancer (24%), prostate (22%), melanoma (12%), cervical (7%), bladder (4%), colon (4%), endometrial (2%), lung (2%), non-Hodgkin's lymphoma (2%), ovarian (2%), esophageal (1%), head and neck (1%), pancreatic (1%), rectal (1%), renal (1%), leukemia (1%), thyroid (1%), and other types of cancer (6%). Eight percent (8%) of adults reported being diagnosed with multiple types of cancer.

### Ottawa County Incidence of Cancer, 2013-2017

*All Types: 1,571 cases*

- Breast: 216 cases (14%)
- Lung and Bronchus: 200 cases (13%)
- Prostate: 196 cases (12%)
- Colon and Rectal: 169 cases (11%)

**In 2018, there were 123 cancer deaths in Ottawa County.**

*(Source: Ohio Public Health Data Warehouse, Updated 6/28/2020)*

**18% of Ottawa County adults had been diagnosed with cancer at some time in their life.**

## Cancer Facts

- The Ohio Department of Health indicates that from 2014-2018, cancers caused 24% (601 of 2,485 total deaths) of all Ottawa County resident deaths. The largest percent (24%) of cancer deaths were from lung and bronchus cancer *(Source: Ohio Public Health Data Warehouse)*.
- The American Cancer Society reports that cigarette smoking increases the risk of several cancers, including those of the oral cavity and pharynx, larynx, lung, esophagus, pancreas, uterine cervix, kidney, bladder, stomach, colorectum, liver; and acute myeloid leukemia. Smoking may also increase risk of fatal prostate cancer and a rare type of ovarian cancer. Health consequences increase with both duration and intensity of smoking. The 2017 health assessment has determined that 15% of Ottawa County adults were current smokers and many more were exposed to environmental tobacco smoke, also a cause of heart attacks and cancer.

## Lung Cancer

- The Ohio Department of Health reports that lung cancer (n=79) was the leading cause of male cancer deaths from 2014-2018 in Ottawa County. Cancer of the colon and rectum (n=27) and prostate cancer caused (n=28) male deaths during the same time period *(Source: ODH, Public Health Data Warehouse, 2014-2018)*.
- In Ottawa County, 17% of male adults were current smokers and 47% had stopped smoking for one or more days in the past 12 months because they were trying to quit.
- The Ohio Department of Health reports that lung cancer was the leading cause of female cancer deaths (n=67) in Ottawa County from 2014-2018, followed by breast (n=39), and colon and rectal (n=26) cancers *(Source: ODH, Public Health Data Warehouse, 2014-2018)*.

- Approximately 13% of female adults in the county were current smokers and 54% had stopped smoking for one or more days in the past 12 months because they were trying to quit.
- 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 2020*).

## Breast Cancer

- In 2017, 53% of Ottawa County females reported having had a clinical breast examination in the past year.
- Forty-five percent (45%) of Ottawa 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 2020*).
- For women at average risk of breast cancer, the American Cancer Society recommends that those 40 to 44 years of age have the option to begin annual mammography; those 45 to 54 undergo annual mammography; and those 55 years of age and older transition to biennial mammography or continue annual mammography. Women should continue mammography as long as overall health is good and life expectancy is 10 or more years. For some women at high risk of breast cancer, annual breast magnetic resonance imaging (MRI) is recommended to accompany mammography, typically starting at age 30. (*Source: American Cancer Society, Facts & Figures 2020*).

## Prostate Cancer

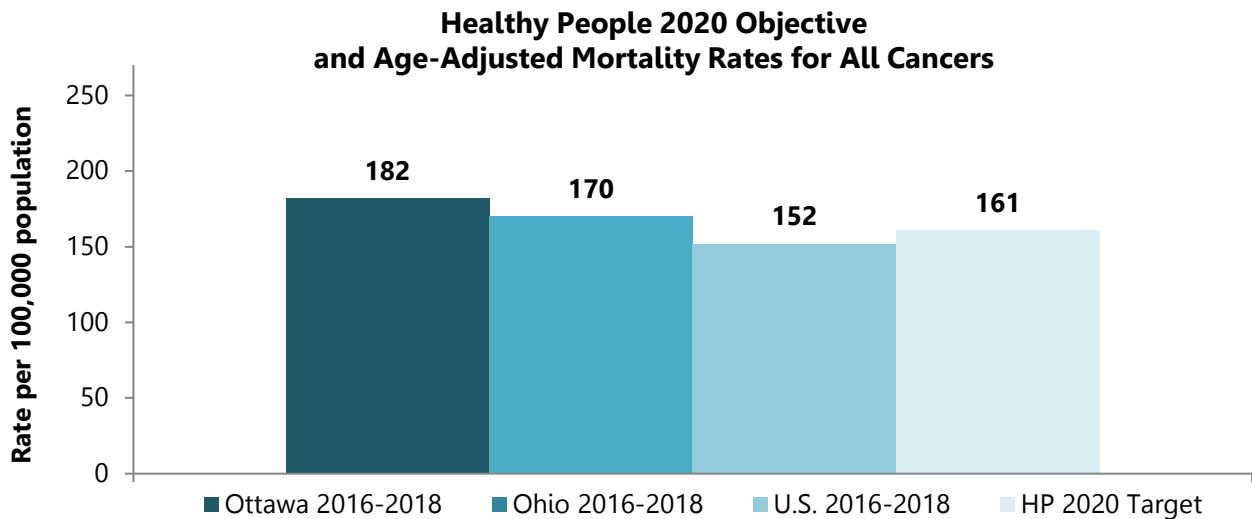
- Three-quarters (75%) of males age 50 and over had a PSA test at some time in their life, and 45% had one in the past year.
- More than half (56%) of men had a digital rectal exam in their lifetime, and 17% had one in the past year.
- Ohio Department of Health statistics indicate that prostate cancer deaths accounted for 9% of all male cancer deaths from 2014-2018 in Ottawa County.
- Well-established risk factors for prostate cancer are increasing age, African ancestry, a family history of the disease, and certain inherited genetic conditions (e.g., Lynch syndrome and BRCA1 and BRCA2 mutations). Black men in the US and the Caribbean have the highest documented prostate cancer incidence rates in the world. Genetic studies suggest that strong familial predisposition may be responsible for 5%-10% of prostate cancers. There is accumulating evidence that smoking increases the risk of fatal prostate cancer and excess body weight increases risk of aggressive and fatal prostate cancer. (*Source: American Cancer Society, Facts & Figures 2020*).

## Colon and Rectum Cancers

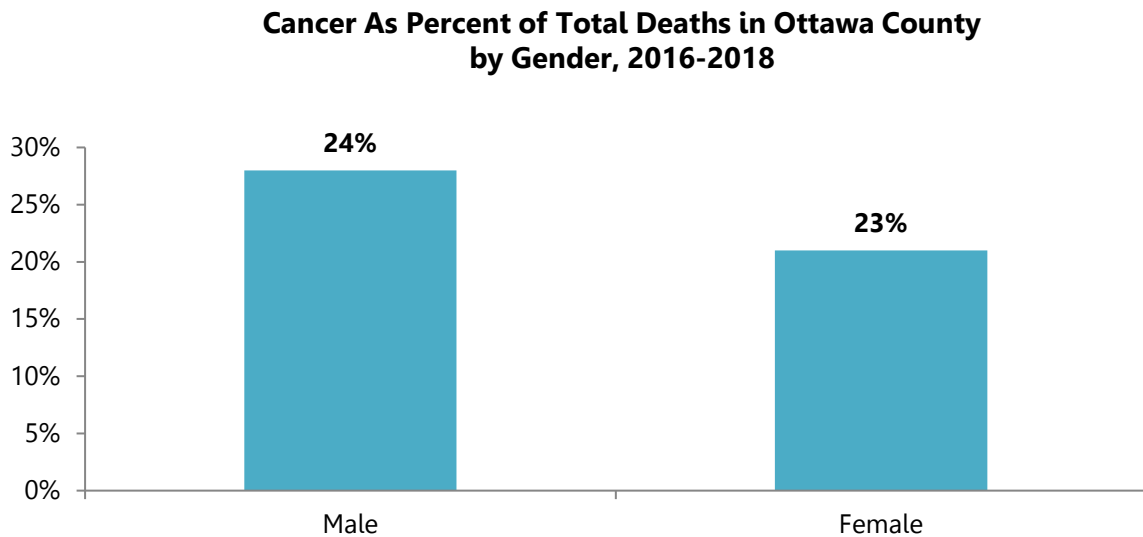
- The health assessment report identified that 49% of adults ages 50 and over had a colonoscopy or sigmoidoscopy in the past 5 years.
- The Ohio Department of Health statistics indicate that colon and rectal cancer deaths accounted for 7% of all male and female cancer deaths from 2014-2018 in Ottawa County.
- The American Cancer Society reports several risk factors for colorectal cancer including age; personal or family history of colorectal cancer or polyps; personal history of chronic inflammatory bowel disease or type 2 diabetes; excess body weight; physical inactivity; a diet high in red or processed meat; heavy alcohol consumption; long-term smoking; and very low intake of fruits and vegetables.
- Guidelines from the American Cancer Society recommend that men and women at average risk for colorectal cancer be regularly screened beginning at 45 years of age, with more individualized decision making from ages 76 to 85 years based on health status/life expectancy, patient preferences, (*Source: American Cancer Society, Facts & Figures 2020*).

The following graph shows the Ottawa 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. The graph indicates:

- When age differences are accounted for, Ottawa County had a higher cancer mortality rate than Ohio, the U.S., and the Healthy People 2020 target objective.
- The percentage of Ottawa County males who died from all cancers is higher than the percentage of Ottawa County females who died from all cancers. (Source: Ohio Public Health Data Warehouse; 2016-2018)



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



(Source: Ohio Public Health Information, 2016-2018)

## Ottawa County Incidence of Cancer 2013-2017

Types of Cancer	Number of Cases	Percent of Total Incidence of Cancer
Breast	216	14%
Lung and Bronchus	200	13%
Prostate	196	12%
Colon & Rectum	169	11%
Other Sites/Types	124	8%
Melanoma of Skin	90	6%
Bladder	78	5%
Non-Hodgkins Lymphoma	57	4%
Uterus	56	4%
Kidney & Renal Pelvis	51	3%
Thyroid	44	3%
Oral Cavity & Pharynx	42	3%
Pancreas	40	3%
Leukemia	38	2%
Multiple Myeloma	27	2%
Stomach	24	2%
Esophagus	21	1%
Liver & Intrahepatic Bile Duct	20	1%
Larynx	19	1%
Ovary	19	1%
Brain and Other CNS	18	1%
Cervix	14	1%
Hodgkins Lymphoma	6	0%
Testis	2	0%
<b>Total</b>	<b>1,571</b>	<b>100%</b>

*(Source: Ohio Cancer Incidence Surveillance System, ODH, Public Health Data Warehouse, Updated 6/28/2020)*

### 2020 Cancer Estimates

- In 2020, more than 1.8 million new cancer cases are expected to be diagnosed.
- The World Cancer Research Fund estimates that 18% of the new cancer cases expected to occur in the U.S. in 2020 will be related to overweight or obesity, physical inactivity, and poor nutrition, and thus could be prevented.
- About 606,520 Americans are expected to die of cancer in 2020.
- Tobacco was responsible for more than 8 million deaths in 2017, including 1.2 million deaths from secondhand smoke exposure among nonsmokers.
- In 2020, estimates predict that there will be 71,850 new cases of cancer and 25,380 cancer deaths in Ohio.
- Of the new cancer cases, approximately 10,110 (14%) will be from lung and bronchus cancers and 5,910 (8%) will be from colon and rectum cancers.
- About 10,350 new cases of female breast cancer are expected in Ohio.
- New cases of male prostate cancer in Ohio are expected to be 7,030.

*(Source: American Cancer Society, Facts and Figures 2020)*

# Chronic Disease: Arthritis

## Key Findings

According to the Ottawa County survey data, 40% of Ottawa County adults were diagnosed with arthritis. According to the 2018 BRFSS, 31% of Ohio adults and 26% of U.S. adults were told they had arthritis.

## Arthritis

- Adults are at higher risk of developing arthritis if they are female, have genes associated with certain types of arthritis, have an occupation that involves repetitive motions, are overweight or obese, and/or have joint injuries or infections (Source: CDC, *Arthritis Risk Factors*, Updated January 6, 2020).
- Two-fifths (40%) of Ottawa County adults were told by a health professional that they had some form of arthritis, increasing to 68% of those over the age of 65.
- Three percent (3%) of adults were diagnosed with rheumatoid arthritis.
- More than four-fifths (82%) of adults diagnosed with arthritis were overweight or obese.
- According to the 2018 BRFSS, 31% of Ohio adults and 26% of U.S. adults were told they had arthritis.
- An estimated 54 million U.S. adults (about 23%) report having doctor-diagnosed arthritis. The annual direct medical costs are at least \$140 billion in the U.S. Arthritis commonly occurs with other chronic diseases, like diabetes, heart disease, and obesity, and can make it harder for people to manage these conditions (Source: CDC, *Arthritis at a Glance*, Updated January 20, 2019).

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
Diagnosed with arthritis	37%	32%	40%	31%	26%

## Arthritis and Joint Pain Management

- Chronic pain caused by arthritis affects millions of people in the United States every year. About one in four adults with arthritis—15 million people—report experiencing severe joint pain related to arthritis. Additionally, nearly half of adults with arthritis have persistent pain. Arthritis-related severe joint pain affects adults of all ages, both sexes, and all races and ethnicities.
- Many professional organizations have guidelines for managing arthritis pain. A common theme across guidelines is that pain management strategies should be flexible, include options that do not involve medication, and be tailored to meet the needs of the patient. Such guidelines suggest the following for managing arthritis symptoms such as pain:
  - Over-the-counter medications like acetaminophen (e.g., Tylenol®) or ibuprofen (e.g., Advil® or Motrin®) and other nonsteroidal anti-inflammatory drugs (NSAIDs).
  - Physical activity/exercise or community-based physical activity programs.
  - Exercise therapy, including physical therapy.
  - Self-management education workshops.
  - Weight loss, if overweight or obese.
  - Cognitive behavioral therapy—a psychological, goal-directed approach in which patients learn how to modify physical, behavioral, and emotional triggers of pain and stress.

(Source: CDC *Pain and Arthritis*, Updated May 22, 2020)

# Chronic Disease: Asthma

## Key Findings

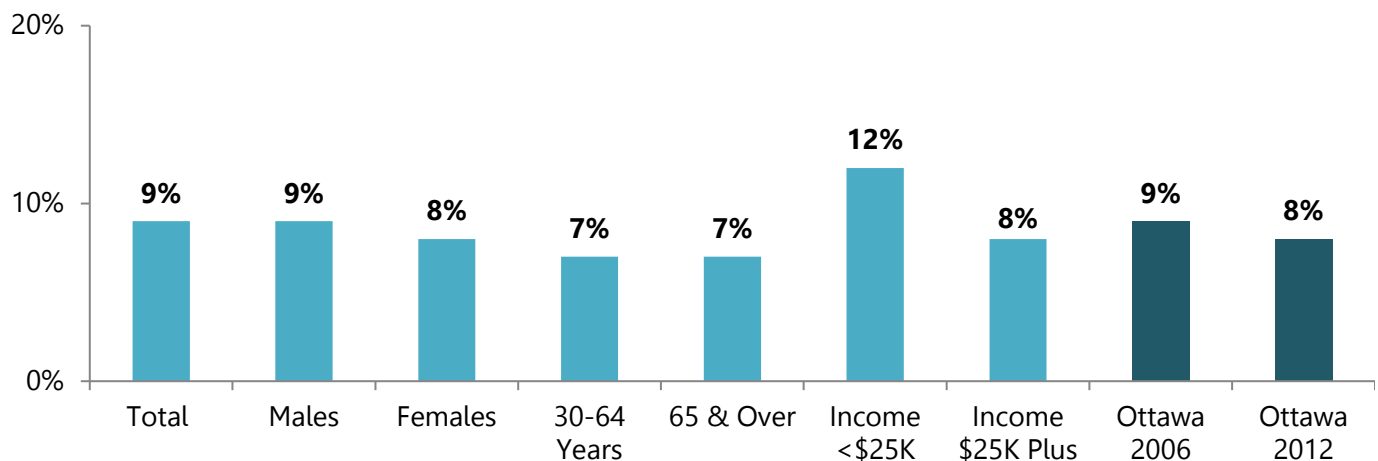
According to the Ottawa County survey data, 9% of adults had been diagnosed with asthma.

## Asthma and Other Respiratory Disease

- In 2017, 9% of Ottawa County adults had been diagnosed with asthma.
- Thirteen percent (13%) of Ohio and 15% of U.S. adults had ever been diagnosed with asthma *(Source: 2018 BRFSS)*.
- One-in-fourteen (7%) adults had been diagnosed with COPD, increasing to 12% of those over the age of 65.
- 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 like the flu. *(Source: CDC, Asthma, Updated September 6, 2019)*.
- Chronic lower respiratory disease was the third leading cause of death in Ottawa County and the fourth leading cause of death in Ohio, in 2018 *(Source: Ohio Public Health Data Warehouse, 2018)*.

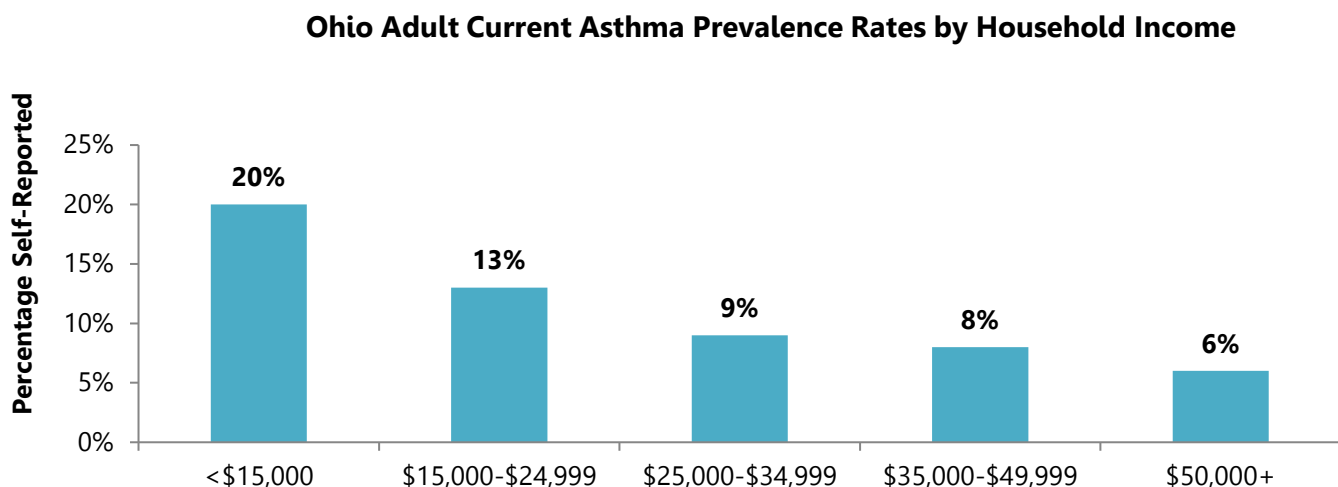
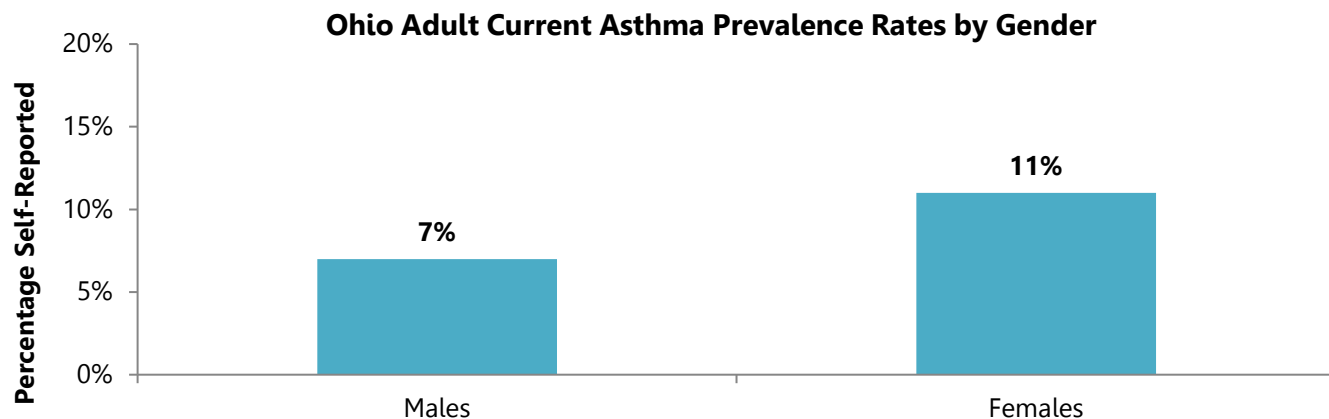
Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
Had been diagnosed with asthma	9%	8%	9%	13%	15%

### Ottawa County Adults Diagnosed with Asthma





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



(Source: 2018 BRFSS)

#### Asthma Facts

- The number of Americans with asthma grows every year. Currently, 26.5 million Americans have asthma. Of the 26.5 million, 20.4 million are adults.
- More than 2,500 people die of asthma each year, nearly half of whom are age 65 or older.
- Asthma results in 439,000 hospitalizations and 1.3 million emergency room visits annually.
- Patients with asthma reported 11 million visits to a doctor’s office and 1.7 million visits to hospital outpatient departments.
- Effective asthma treatment includes monitoring the disease with a peak flow meter, identifying and avoiding allergen triggers, using drug therapies including bronchodilators and anti-inflammatory agents, and developing an emergency plan for severe attacks.

(Source: American College of Allergy, Asthma, & Immunology, *Asthma Facts*, Updated June 13, 2018)

# Chronic Disease: Diabetes

## Key Findings

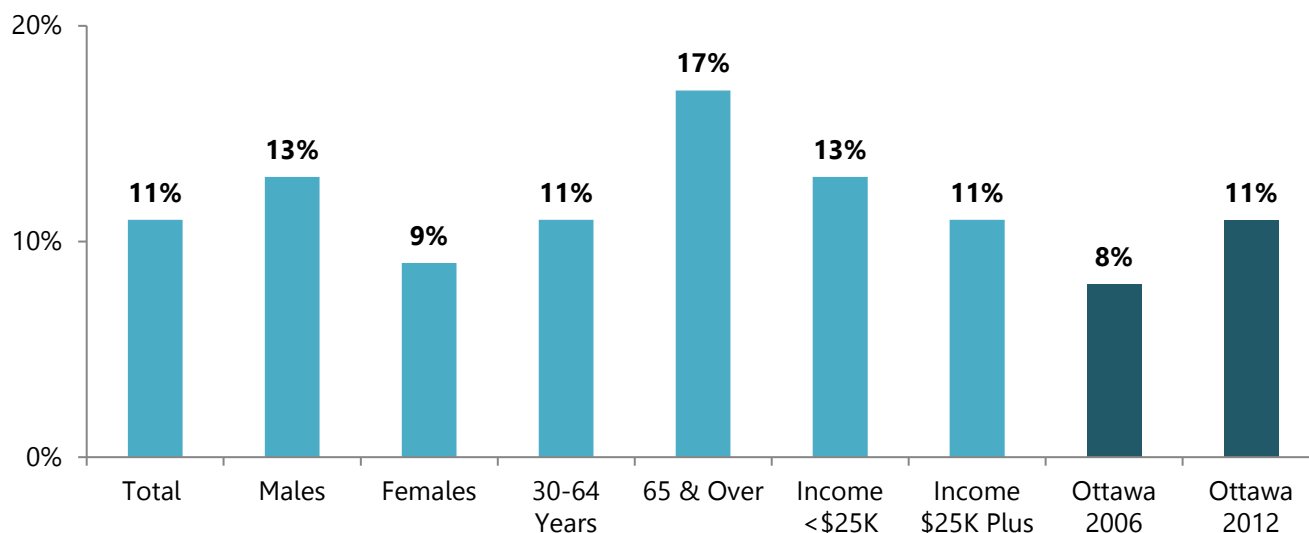
In 2017, 11% of Ottawa County adults had been diagnosed with diabetes.

## Diabetes

- The 2017 health assessment has identified that 11% of Ottawa County adults had been diagnosed with diabetes, increasing to 17% of those over the age of 65. The 2018 BRFSS reports an Ohio prevalence of 12%, and a U.S. prevalence of 11%.
- Nine percent (9%) of adults had been diagnosed with pre-diabetes.
- Diabetics were using the following to treat their diabetes: diet control (79%), checking blood sugar (75%), diabetes pills (71%), annual vision exam (62%), checking A1C annually (60%), exercise (60%), checking their feet (54%), dental exam (33%), insulin (24%), injectable (12%), and taking a class (10%).
- Two-fifths (40%) of adults with diabetes rated their health as fair or poor.
- Ottawa County adults diagnosed with diabetes also had one or more of the following characteristics or conditions:
  - 90% were obese or overweight
  - 76% had been diagnosed with high blood cholesterol
  - 71% had been diagnosed with high blood pressure

Adult Comparisons	Ottawa County 2006	Ottawa County 2012	Ottawa County 2017	Ohio 2018	U.S. 2018
Diagnosed with diabetes	8%	11%	11%	12%	11%

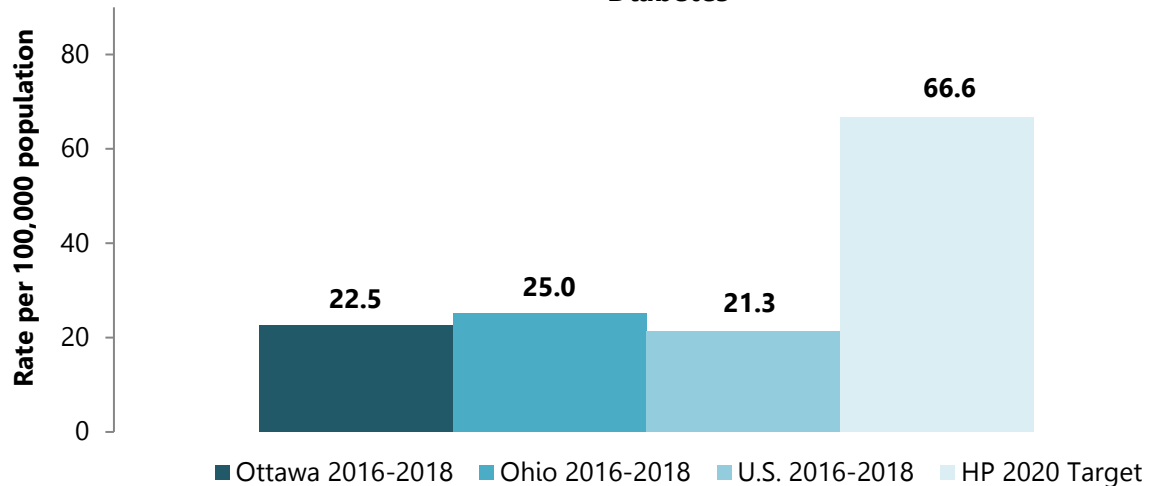
**Ottawa County Adults Diagnosed with Diabetes**



The following graphs show prevalence of diabetes by gender and the age-adjusted mortality rates from diabetes for Ottawa County and Ohio residents with comparison to the Healthy People 2020 target objective.

- From 2016-2018, Ottawa County's age-adjusted diabetes mortality rate was lower than the Ohio rate and Healthy People 2020 Objective, but slightly higher than the U.S. age-adjusted mortality rate.

### Healthy People 2020 Objectives and Age-Adjusted Mortality Rates for Diabetes



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

### Statistics About Diabetes

- Among the US population overall, crude estimates for 2018 indicated that:
  - 34.2 million people of all ages—or 10.5% of the US population—had diabetes.
  - 34.1 million adults aged 18 years or older—or 13.0% of all US adults—had diabetes.
  - 7.3 million adults aged 18 years or older who met laboratory criteria for diabetes were not aware of or did not report having diabetes. This number represents 2.8% of all US adults and 21.4% of all US adults with diabetes.
  - The percentage of adults with diabetes increased with age, reaching 26.8% among those aged 65 years or older.
- Among adults aged 18 or older in the U.S., 1.5 million new cases, or 6.9 per 1,000 persons, were diagnosed in 2018.
- Compared to adults aged 18 to 44 years, incidence rates of diagnosed diabetes in 2018 were higher among adults aged 45 to 64 years and those aged 65 years and older
- Prevalence of diagnosed diabetes was highest among American Indians/Alaska Natives (14.7%), people of Hispanic origin (12.5%), and non-Hispanic blacks (11.7%), followed by non-Hispanic Asians (9.2%) and non-Hispanic whites (7.5%)

(Source: CDC, 2020 National Diabetes Statistics Report, Updated February 14, 2020)

# A SNAPSHOT

# DIABETES IN THE UNITED STATES

## DIABETES

**34.2  
MILLION**

34.2 million people have diabetes



don't know they have diabetes

## TYPE 1

**BODY DOESN'T MAKE ENOUGH INSULIN**

- Can develop at any age
- No known way to prevent it

In adults, type 1 diabetes accounts for approximately

**5-10%**

of all diagnosed cases of diabetes



**Just over 18,000 youth diagnosed** each year in 2014 and 2015

## TYPE 2

**BODY CAN'T USE INSULIN PROPERLY**

- Can develop at any age
- Most cases can be prevented

In adults, type 2 diabetes accounts for approximately

**90-95%**

of all diagnosed cases of diabetes



**Nearly 6,000 youth diagnosed** each year in 2014 and 2015

## RISK FACTORS FOR TYPE 2 DIABETES:

**1.5  
MILLION**

People 18 years or older diagnosed with diabetes in 2018



**BEING OVERWEIGHT**



**HAVING A FAMILY HISTORY**



**BEING PHYSICALLY INACTIVE**



**BEING 45 OR OLDER**

## WHAT CAN YOU DO?

You can **prevent** or **delay** type 2 diabetes



**LOSE WEIGHT IF NEEDED**



**EAT HEALTHY**



**BE MORE ACTIVE**

LEARN MORE AT [www.cdc.gov/diabetes/prevention](http://www.cdc.gov/diabetes/prevention) OR SPEAK TO YOUR DOCTOR

You can **manage** diabetes



**WORK WITH A HEALTH PROFESSIONAL**



**EAT HEALTHY**



**STAY ACTIVE**

LEARN MORE AT [www.cdc.gov/diabetes/managing](http://www.cdc.gov/diabetes/managing) OR SPEAK TO YOUR DOCTOR

# Chronic Disease: Quality of Life

## Key Findings

In 2017, back or neck problems were Ottawa County adults' most limiting health impairments.

## Impairments and Health Problems

- Among those who were limited in some way, the following most limiting problems or impairments were reported: back or neck problems (53%); arthritis/rheumatism (40%); chronic pain (23%); walking problems (22%); fitness level (22%); stress, depression, anxiety, or emotional problems (22%); sleep problems (20%); chronic illness (17%); lung/breathing problems (17%); hearing problems (14%); fractures, bone/joint injuries (13%); eye/vision problems (7%); dental problems (5%); mental health illness/disorder (4%); a learning disability (3%); substance dependency (1%); drug addiction (<1%); and other impairment/problem (7%).
- Ottawa County adults were responsible for providing regular care or assistance to the following: multiple children (15%); an elderly parent or loved one (8%); a friend, family member or spouse with a health problem (8%); grandchildren (4%); someone with special needs (4%); an adult child (3%); children with discipline issues (2%); a friend, family member or spouse with a mental health issue (2%); and a friend, family member or spouse with dementia (2%).
- In the past year, Ottawa County adults reported needing the following services: eyeglasses or vision services (27%), pain management (7%), hearing aids or hearing care (6%), a cane (6%), help with routine needs (5%), medical supplies (5%), help with personal care needs (4%), a walker (4%), durable medical equipment (3%), oxygen or respiratory support (3%), a wheelchair (2%), a personal emergency response system (2%), a special bed (1%), special telephone (1%), mobility aids or devices (<1%), and a wheelchair ramp (<1%).

## Health Related Quality of Life

On the individual level, Health Related Quality of Life (HRQOL) includes physical and mental health perceptions (e.g., energy level, mood) and their correlates—including health risks and conditions, functional status, social support, and socioeconomic status. Focusing on HRQOL as an outcome can bridge boundaries between disciplines and between social, mental, and medical services.

- HRQOL is related to both self-reported chronic diseases (diabetes, breast cancer, arthritis, and hypertension) and their risk factors (body mass index, physical inactivity, and smoking status).
- Measuring HRQOL can help determine the burden of preventable disease, injuries, and disabilities, and can provide valuable new insights into the relationships between HRQOL and risk factors.

*(Source: CDC, Health-Related Quality of Life (HRQOL), Updated October 31, 2018)*

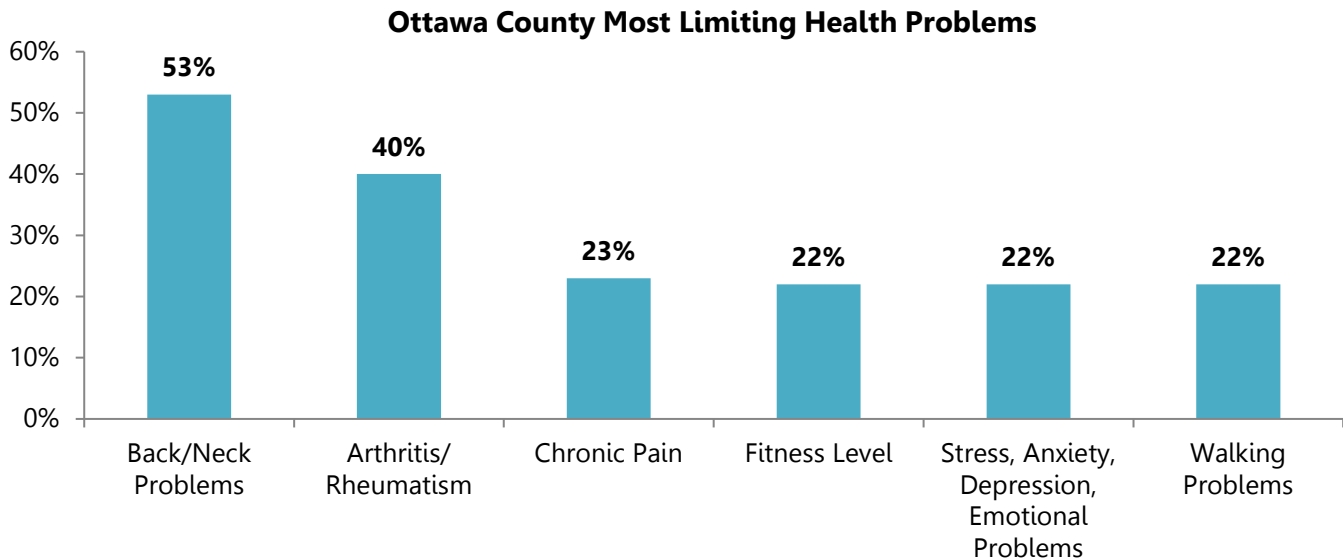
## Healthy People 2020

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

Objective	Ottawa County 2017	Healthy People 2020 Target
<b>AOCBC-2: Reduce the proportion of adults with doctor-diagnosed arthritis who experience a limitation in activity due to arthritis or joint symptoms</b>	40%	36%

*\*U.S. baseline is age-adjusted to the 2000 population standard  
(Sources: Healthy People 2020 Objectives, 2017 Ottawa County Health Assessment)*

The following graph shows Ottawa County adults' most limiting health problems.



### Caregiving: A Public Health Priority

- Caregivers can be unpaid family members or friends or paid caregivers. Informal or unpaid caregivers are the backbone of long-term care provided in people’s homes. In particular, middle-aged and older adults provide a substantial portion of this care in the US, as they care for children, parents or spouses.
- Caregiving can affect the caregiver’s life in a myriad of ways including his/her ability to work, engage in social interactions and relationships, and maintain good physical and mental health. Caregiving also can bring great satisfaction and strengthen relationships, thus enhancing the caregivers’ quality of life.
- Nearly one quarter (22.3%) of adults reported providing care or assistance to a friend or family member in the past 30 days.
  - 24.4% of adults aged 45 to 64 years are caregivers compared to 18.8% of adults aged 65 years and older.
  - One in four (25.4%) women are caregivers compared to one in five (18.9%) men.
  - 24.2% of adults with post-high school education are caregivers, compared to 21.8% with high school education and 15.9% with less than high school education.
- Caregiving can be emotionally and physically demanding. Over half (53%) of caregivers indicated that a decline in their health compromises their ability to provide care.
  - 14.5% of caregivers reported experiencing 14 or more mentally unhealthy days in the past month.
  - 17.6% of caregivers reported experiencing 14 or more physically unhealthy days in the past month.
  - 36.7% of caregivers reported getting insufficient sleep.
  - 40.7% of caregivers report having two or more chronic diseases.
  - 33.0% of caregivers reported having a disability.
- The need for caregivers is expected to continue to grow with increases in the US older adult population. Currently, there are 7 potential family caregivers per older adult. By 2030, it is estimated there will be only 4 potential family caregivers per older adult.
  - 17.2% of middle-aged and older adults who are not currently caregivers expect to provide care or assistance in the next two years to a friend or family members with a health problem or a disability.
  - 20.0% of adults aged 45-64 years who do not currently provide care to someone expect to do so in the future compared to 12.8% of adults aged 65 years and older.

(Source: CDC, *Caregiving for Family and Friends- a Public Health Issue, Updated July 30, 2019*)



# Social Conditions: Social Determinants of Health

## Key Findings

In 2017, 7% of Ottawa County adults were abused in the past year (including physical, sexual, emotional, financial, or verbal abuse). Nine percent (9%) of adults needed help meeting their general daily needs.

## Healthy People 2020

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

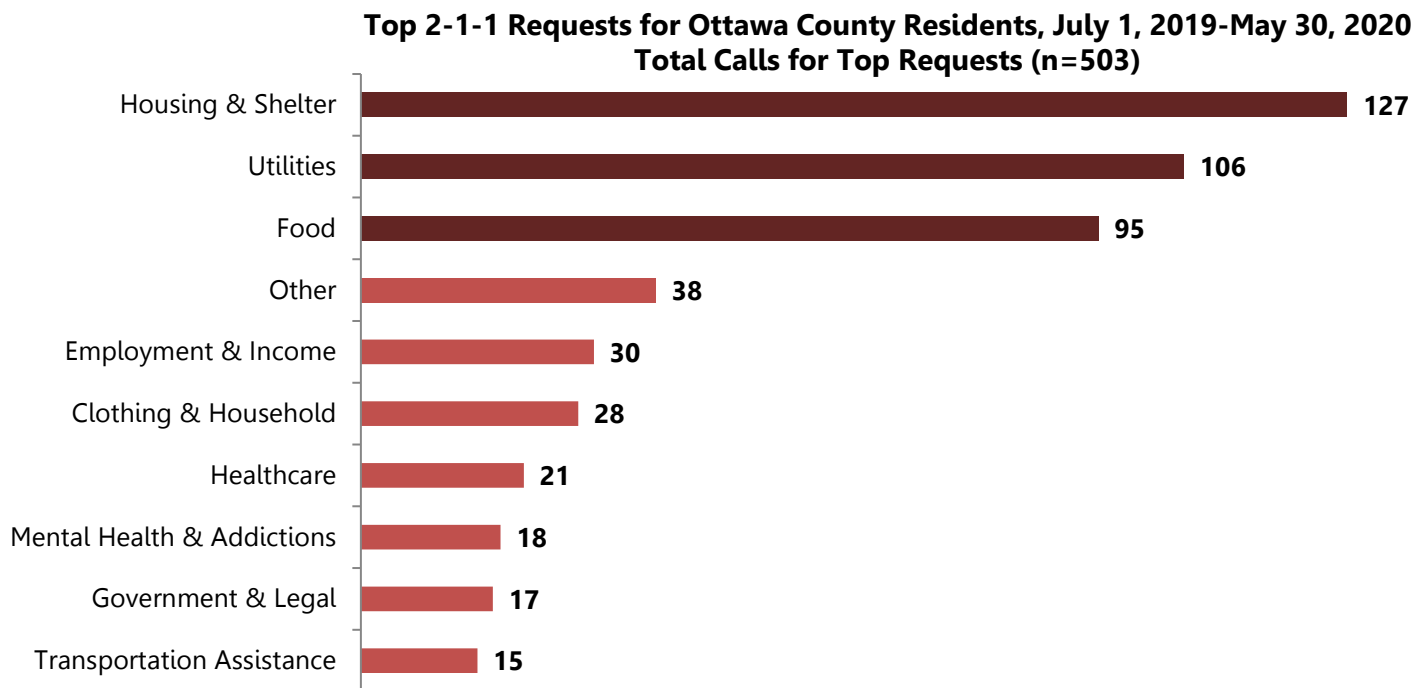
- Economic stability
- Education
- Social and community context
- Health and health care
- Neighborhood and built environment



## Economic Stability

- In the past month, 9% of adults needed help meeting their general daily needs, such as food, clothing, shelter or paying utilities, increasing to 30% of those with incomes less than \$25,000.
- Ottawa County adults received assistance for the following in the past year: health care (11%), food (8%), Medicare (8%), prescription assistance (7%), dental care (6%), mental illness issues (6%), home repair (5%), free tax preparation (4%), rent/mortgage (3%), utilities (3%), transportation (3%), employment (2%), legal aid services (2%), affordable childcare (2%), clothing (1%), diapers (1%), drug or alcohol addiction (1%), post-incarceration issues (<1%), and credit counseling (<1%).
- Ottawa County adults experienced the following food security issues in the past year: had to choose between paying bills and buying food (8%), went hungry/ate less to provide more food for their family (6%), loss of income led to food insecurity issues (5%), worried food would run out (4%), were hungry but did not eat because they did not have enough money for food (2%), and food assistance was cut (2%).
- The median household income in Ottawa County was \$57,918. The U.S. Census Bureau reports median income levels of \$54,533 for Ohio and \$60,293 for the U.S. (Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, 2014-2018).
- Almost 10% of all Ottawa County residents were living in poverty, and 13% of children and youth ages 0-17 were living in poverty (Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, 2018).
- The unemployment rate for Ottawa County was 10.6 as of June 2020, as compared to 4.0 in June 2019 (Source: Ohio Department of Job and Family Services, Office of Workforce Development, Bureau of Labor Market Information).
- There were 28,391 housing units, of which 38% were vacant (Source: U.S. Census Bureau, American Community Survey, 2014-2018).
- Nearly four-fifths (79%) of occupied housing units in Ottawa County were owner-occupied, and 21% were renter-occupied (Source: U.S. Census Bureau, American Community Survey, 2014-2018).
- Rent in Ottawa County cost an average of \$724 per month (Source: U.S. Census Bureau, American Community Survey, 2014-2018).

The table below shows the top request categories from the United Way of Greater Toledo's 2-1-1 for Ottawa County between July 1, 2019 and May 30, 2020.



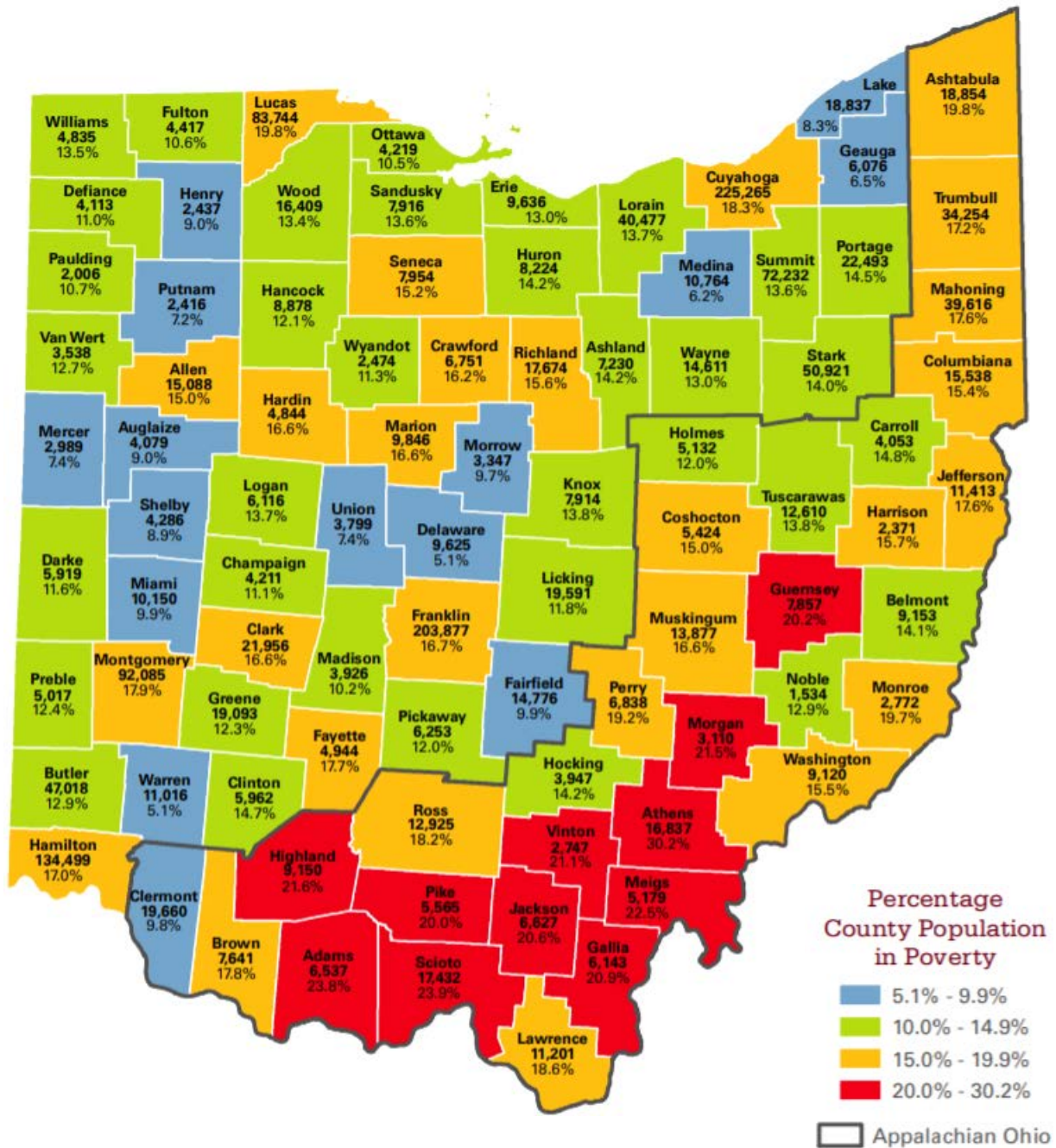
(Source: United Way of Greater Toledo, 2-1-1 Counts for Ottawa County Residents, July 1, 2019-May 30, 2020)



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

- According to 2013-2017 American Community Survey estimates, approximately 1,683,890 Ohio residents or 14.9% of the population were in poverty.
- From 2013-2017, almost one in nine (11%) of Ottawa County residents were in poverty.

### Estimated Poverty Rates in Ohio by County (2013-2017)



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

## Education

- Ninety-five percent (95%) of Ottawa County adults 25 years and over had a high school diploma or higher  
(Source: U.S. Census Bureau, American Community Survey, 2014-2018).
- Twenty-nine percent (29%) of Ottawa County adults 25 years and over had at least a bachelor's degree  
(Source: U.S. Census Bureau, American Community Survey, 2014-2018).

### 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 July 6, 2020)

## Social and Community Context

- Three percent (3%) of Ottawa County adults were threatened to be abused in the past year. They were threatened by the following: a spouse or partner (71%), someone outside their home (24%), a child (18%), and someone else (18%).
- Seven percent (7%) of Ottawa County adults were abused in the past year. They were abused by the following: a spouse or partner (71%), someone outside their home (24%), a child (12%), another family member (3%), and someone else (15%).
- Ottawa County adults experienced the following in the past 12 months: a close family member went to the hospital (41%); death of a family member or close friend (34%); had bills they could not pay (14%); someone in their household lost their job/had their hours at work reduced (10%); someone close to them had a problem with drinking or drugs (9%); household income was cut by 50% (6%); moved to a new address (4%); had someone homeless living with them (3%); became separated or divorced (3%); their child was threatened or abused by someone physically, emotionally, sexually, and/or verbally (1%); family was at risk for losing their household (1%); knew someone who lived in a hotel (1%); were homeless (1%); and witnessed someone in their family being hit or slapped (<1%).
- Ottawa County adults experienced the following adverse childhood experiences (ACEs): lived with someone who was a problem drinker or alcoholic (22%); their parents became separated or were divorced (21%); a parent or adult in their home swore at, insulted, or put them down (18%); lived with someone who was depressed, mentally ill, or suicidal (8%); someone at least 5 years older than them or an adult touched them sexually (8%); their parents or adults in their home slapped, hit, kicked, punched, or beat each other up (7%); a parent or adult in their home hit, beat, kicked, or physically hurt them (6%); their family did not look out for each other, feel close to each other, or support each other (5%); someone at least 5 years older than them or an adult tried to make them touch them sexually (5%); lived with someone who used illegal stress drugs, or who abused prescription medications (5%); lived with someone who served time or was sentenced to serve time in prison, jail or other correctional facility (3%); someone at least 5 years older than them or an adult forced them to have sex (2%); did not have enough to eat, had to wear dirty clothes, and had no one to protect them (1%); and their parents were not married (1%).
- Twelve percent (12%) of Ottawa County adults had four or more ACEs in their lifetime.

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

Adult Behaviors	Experienced 4 or More ACEs	Did Not Experience Any ACEs
<b>Current drinker (had at least one alcoholic beverage in the past month)</b>	59%	68%
<b>Binge drinker (drank five or more drinks for males and 4 or more for females on an occasion)</b>	34%	27%
<b>Had an income less than \$25,000</b>	32%	14%
<b>Felt sad or hopeless for two or more weeks in a row</b>	31%	5%
<b>Current smoker (currently smoke on some or all days)</b>	28%	15%
<b>Had two or more sexual partners</b>	5%	3%

*"ACEs" indicate adults who self-reported having experienced four or more adverse childhood experiences in their lifetime.*

**Adverse Childhood Experiences (ACE)**

- **Adverse childhood experiences, or ACEs, are potentially traumatic events that occur in childhood (0-17 years).** For example:
  - experiencing violence, abuse, or neglect
  - witnessing violence in the home or community
  - having a family member attempt or die by suicide
- Also included are aspects of the child’s environment that can undermine their sense of safety, stability, and bonding such as growing up in a household with:
  - substance misuse
  - mental health problems
  - instability due to parental separation or household members being in jail or prison
- ACEs are linked to chronic health problems, mental illness, and substance misuse in adulthood. ACEs can also negatively impact education and job opportunities. However, ACEs can be prevented.
- **ACEs are common.** About 61% of adults surveyed across 25 states reported that they had experienced at least one type of ACE, and nearly 1 in 6 reported they had experienced four or more types of ACEs.
- **Preventing ACEs could potentially reduce a large number of health conditions.** For example, up to 1.9 million cases of heart disease and 21 million cases of depression could have been potentially avoided by preventing ACEs.
- **Some children are at greater risk than others.** Women and several racial/ethnic minority groups were at greater risk for having experienced 4 or more types of ACEs.
- **ACEs are costly.** The economic and social costs to families, communities, and society totals hundreds of billions of dollars each year.
- **ACEs can have lasting, negative effects on health, well-being, and opportunity.** These experiences can increase the risks of injury, sexually transmitted infections, maternal and child health problems, teen pregnancy, involvement in sex trafficking, and a wide range of chronic diseases and leading causes of death such as cancer, diabetes, heart disease, and suicide.

*(Source: CDC Violence Prevention, Fast Facts, Updated April 3, 2020)*

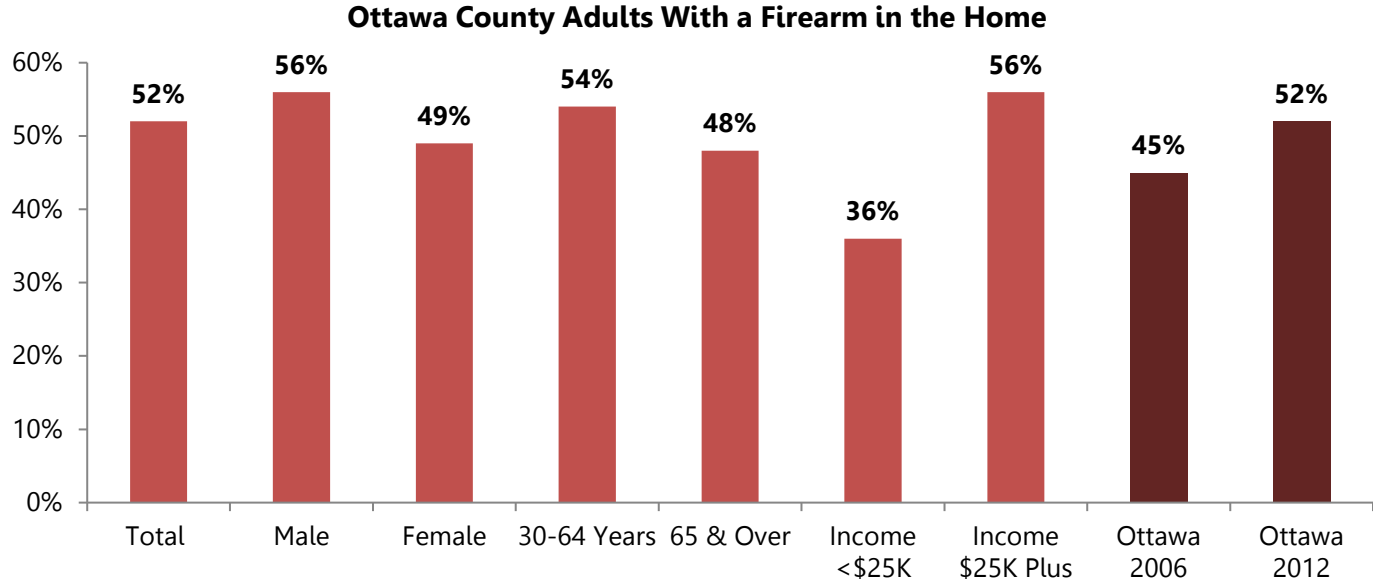
## Health and Health Care

- In the past year, 7% of adults were uninsured.
- Ottawa County adults had the following issues regarding their health care coverage: deductibles were too high (39%), premiums were too high (29%), co-pays were too high (26%), high HSA account deductible (10%), opted out of certain coverage because they could not afford it (9%), could not understand their insurance plan (7%), working with their insurance company (6%), opted out of certain coverage because they did not need it (3%), and did not know how to sign up or enroll (1%).
- See the Health Perceptions, Health Care Coverage, and Health Care Access sections for further health and health care information for Ottawa County adults.

## Neighborhood and Built Environment

- More than half (52%) of Ottawa County adults kept a firearm in or around their home. Six percent (6%) of adults reported they were unlocked and loaded.
- Ottawa County adults reported doing the following while driving: eating (40%), talking on hand-held cell phone (36%), talking on hands-free cell phone (34%), not wearing a seatbelt (15%), texting (14%), using internet on their cell phone (4%), being under the influence of alcohol (2%), being under the influence of prescription drugs (2%), reading (2%), being under the influence of recreational drugs (<1%), and other activities (such as applying makeup, shaving, etc.) (1%).

*The following graph shows the percentage of Ottawa County adults that had a firearm in or around the home. Examples of how to interpret the information shown on the graph include: 52% of all Ottawa County adults had a firearm in or around the home, including 56% of males.*



## Environmental Health

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

## Veterans' Affairs

- Just over half (51%) of adults reported an immediate family member had served in the military during the past 10-15 years. As a result of military service during the past 10-15 years, the following have affected veterans' immediate family members: post-traumatic stress disorder (PTSD) (6%), access to medical care at a VA facility (4%), had problems getting VA benefits (4%), marital problems (3%), had problems getting information on VA eligibility and applying (3%), could not find/keep a job (2%), housing issues (2%), major health problems due to injury (2%), access to mental health treatment (1%), substance/drug abuse (1%), access to medical care at a non-VA facility (<1%), and incarceration/re-entry (<1%).

## Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

### Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

(Source: Kaiser Family Foundation, *Social Determinants of Health*, 2018)



# Social Conditions: Parenting

## Key Findings

More than two-thirds (68%) of Ottawa County parents discussed social media issues with their 10-to-17-year-old in the past year. Sixty-seven percent (67%) of parents put their infant to sleep on their back.

## Parenting

- When asked how parents put their child to sleep as an infant, 67% said on their back, 28% said on their side, 15% said on their stomach, and 12% said in bed with them or another person.
- Children were put to sleep in the following places: crib/bassinet with bumper, blankets, or stuffed animals (56%); crib/bassinette without bumper, blankets, or stuffed animals (44%); pack n' play (38%); swing (37%); car seat (34%); in bed with parent or another person (30%); the floor (17%); and couch or chair (6%).
- Parents missed work an average of 2.5 days per year for their child's dental visits, 2.3 days for regular checkups, 1.6 days for injuries, 1.5 days for ear infections, 1.3 days due to behavioral or emotional problems, 1.3 days due to child's asthma, 1.2 days for head lice, 1.1 days for poisonings, and 2.5 days for other visits.
- Parents thought the following should be covered in sex education classes: biology/anatomy and physiology (74%), abstinence and refusal skills (73%), and birth control and use of condoms (68%). Ten percent (10%) of parents did not believe schools should offer sex education classes.
- Parents discussed the following topics with their child: social media issues (68%); bullying (66%); career plan/post-secondary education (63%); dating and relationships (59%); weight status (57%); body image (54%); negative effects of alcohol, tobacco, illegal drugs, or misusing prescription drugs (53%); volunteering (51%); school/legal consequences of using alcohol, tobacco, or other drugs (46%); abstinence and how to refuse sex (36%); birth control, condoms, safer sex and STD prevention (36%); refusal skills/peer pressure (34%); drinks (26%); and depression, anxiety, suicide (20%).

## Neonatal, Post-Neonatal, and Infant Mortality in 2018

	Number of Neonatal Deaths*	Number of Post-Neonatal Deaths**	Total Number of Infant Deaths	Number of Births
Ottawa	1	0	1	325
Ohio	632	306	938	135,226

\*Neonatal death is defined as a death of a live born infant during the first 28 days of life

\*\*Post-neonatal death is defined as a death of an infant between 29 days and 364 days of life

(Source: Ohio Department of Health, Bureau of Vital Statistics, 2018 Ohio Infant Mortality Data: General Findings)

### Safe Sleep for Babies

Every year, there are thousands of sleep-related deaths among babies.

- There are about 3,500 sleep-related deaths among US babies each year.
- 22% of mothers reported not placing their baby on his or her back to sleep, as recommended.
- 39% of mothers reported using soft bedding (not recommended) when placing babies to sleep.

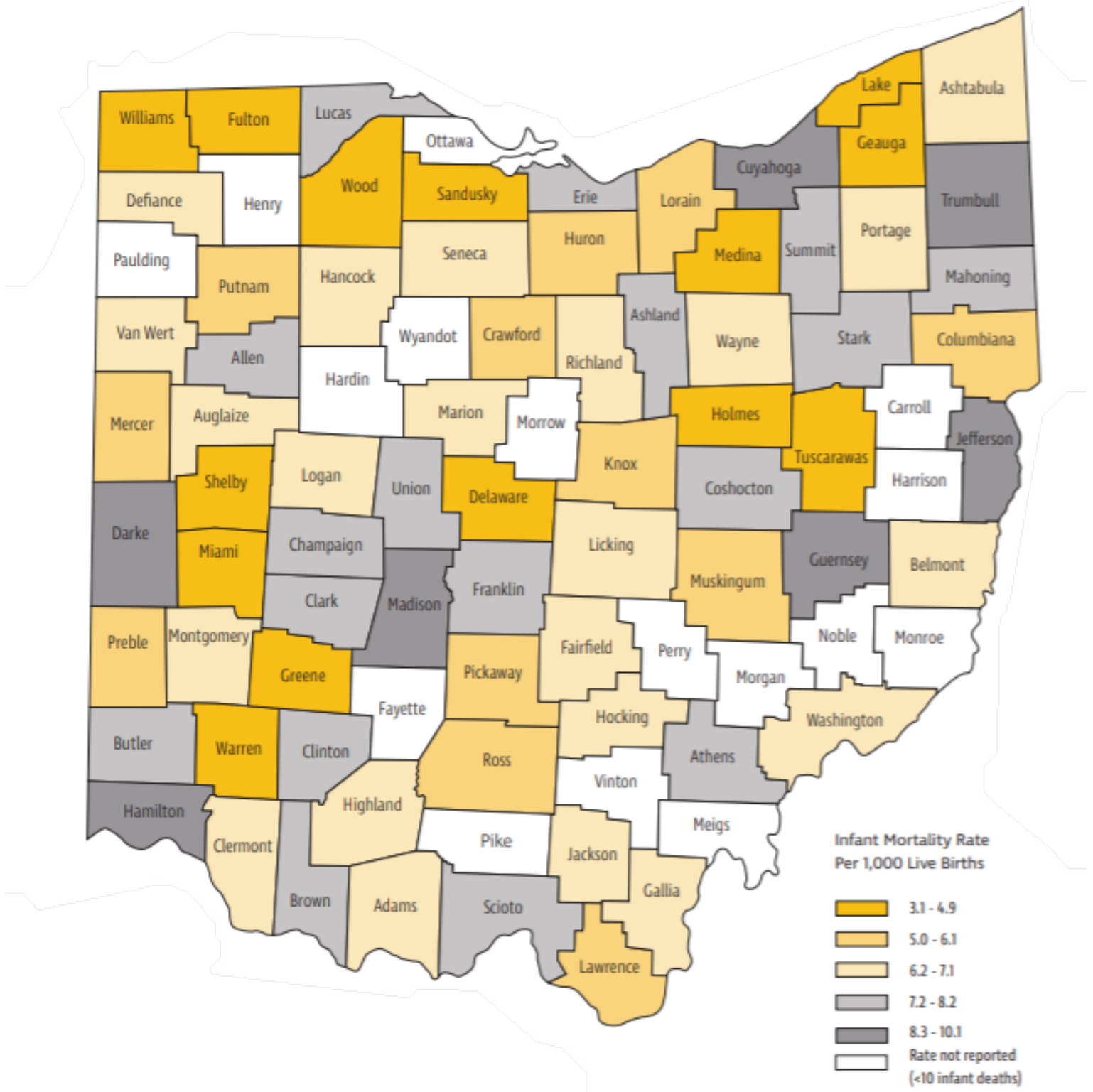
Recommended safe sleep practices today include:

- Placing your baby on his or her back for all sleep times – naps and at night.
- Using a firm sleep surface, such as a mattress in a safety-approved crib.
- Keeping soft bedding such as blankets, pillows, bumper pads, and soft toys of baby's sleep area.
- Have the baby share your room, not your bed.

(Source: CDC, Safe Sleep for Babies, Updated January 9, 2018)

The following map shows the Ohio 5-year average infant mortality rate by county from 2014-2018.

- From 2014 to 2018, the Ohio Infant mortality rate was 6.9 per 1,000 live births.

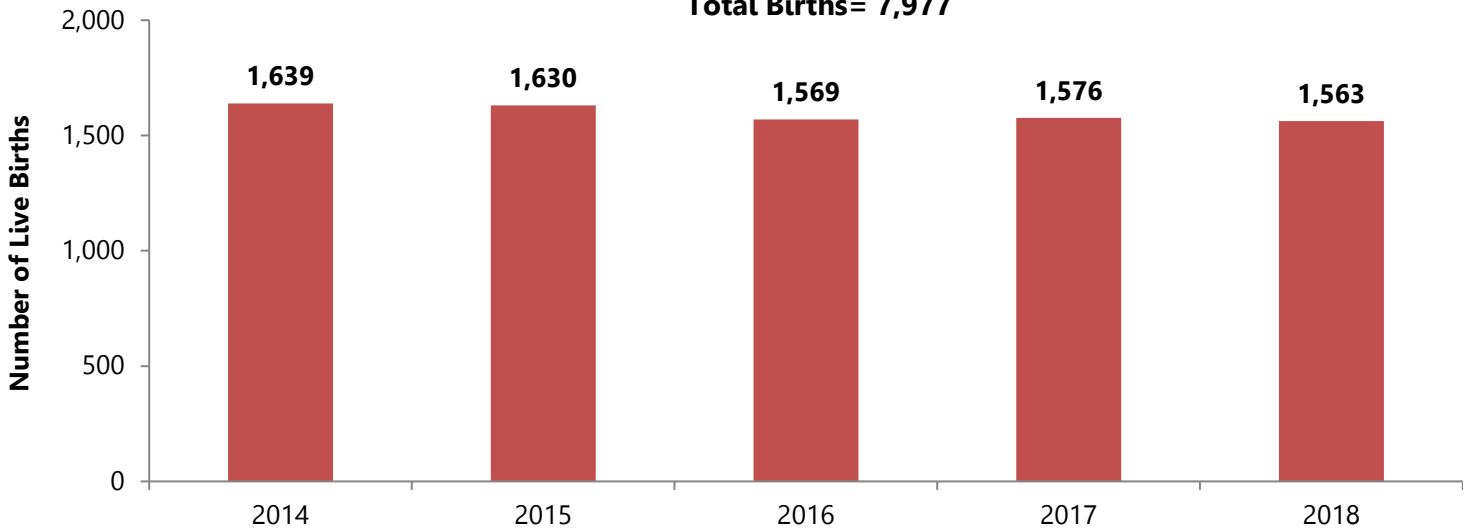


(Source: Ohio Department of Health, Bureau of Vital Statistics, 2018 Ohio Infant Mortality Data: General Findings)

The following graph shows the number of live births in Ottawa County by year. Please note that the pregnancy outcomes data include all births to adults and adolescents.

- From 2014-2018, there was an average of 1,595 live births per year in Ottawa County.

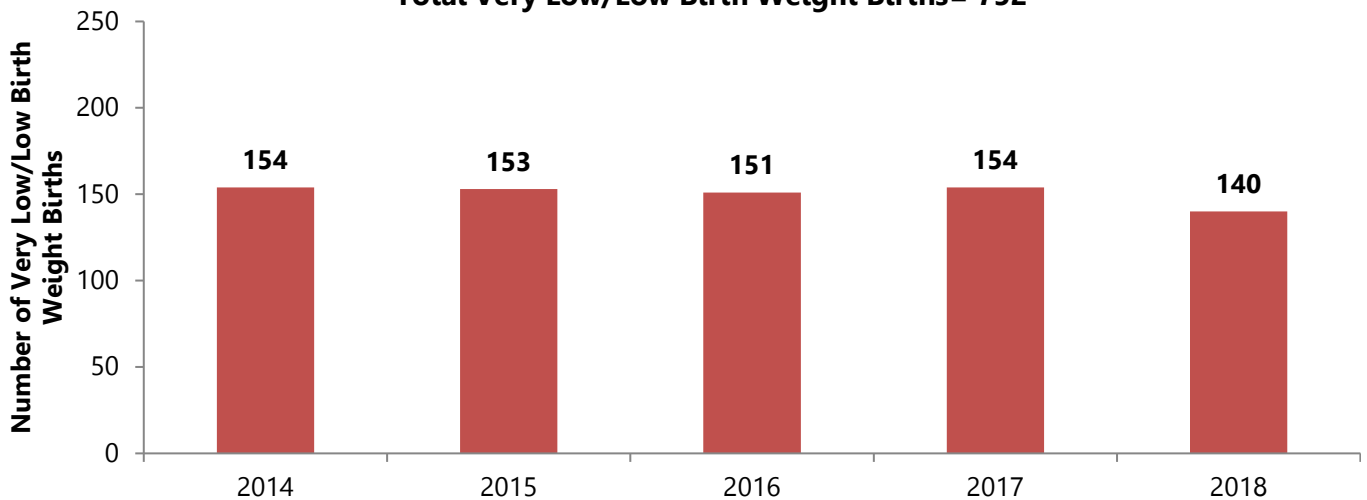
**Ottawa County Live Births, 2014-2018**  
**Total Births= 7,977**



Note: Births occurring in Ohio to non-Ohio residents are not included in the graph.  
 (Source: Ohio Department of Health, Public Health Information Warehouse, Updated 7/5/2020)

The following graph show the number of live births in Ottawa County that were very low or low birthweight by year. Very low birth weight is defined as weighing less than 1,500 grams or 3 pounds, 4 ounces or less. Low birth weight is defined as weighing less than 2,500 grams or 5 pounds, 8 ounces, but greater than 3 pounds, 4 ounces.

**Ottawa County Number of Very Low/Low Birth Weight Births, 2014-2018**  
**Total Very Low/Low Birth Weight Births= 752**



Note: Births occurring in Ohio to non-Ohio are not included in the graph.  
 (Source: Ohio Department of Health, Public Health Information Warehouse, Updated 7/5/2020)



# Youth Health: Weight Status

## Key Findings

In 2017, 32% of youth were classified as overweight (12%) or obese (20%) according to Body Mass Index (BMI) by age. When asked how they would describe their weight, 34% of Ottawa County youth reported that they were slightly or very overweight. About three-quarters (76%) of youth exercised for 60 minutes on 3 or more days per week.

## Weight Status

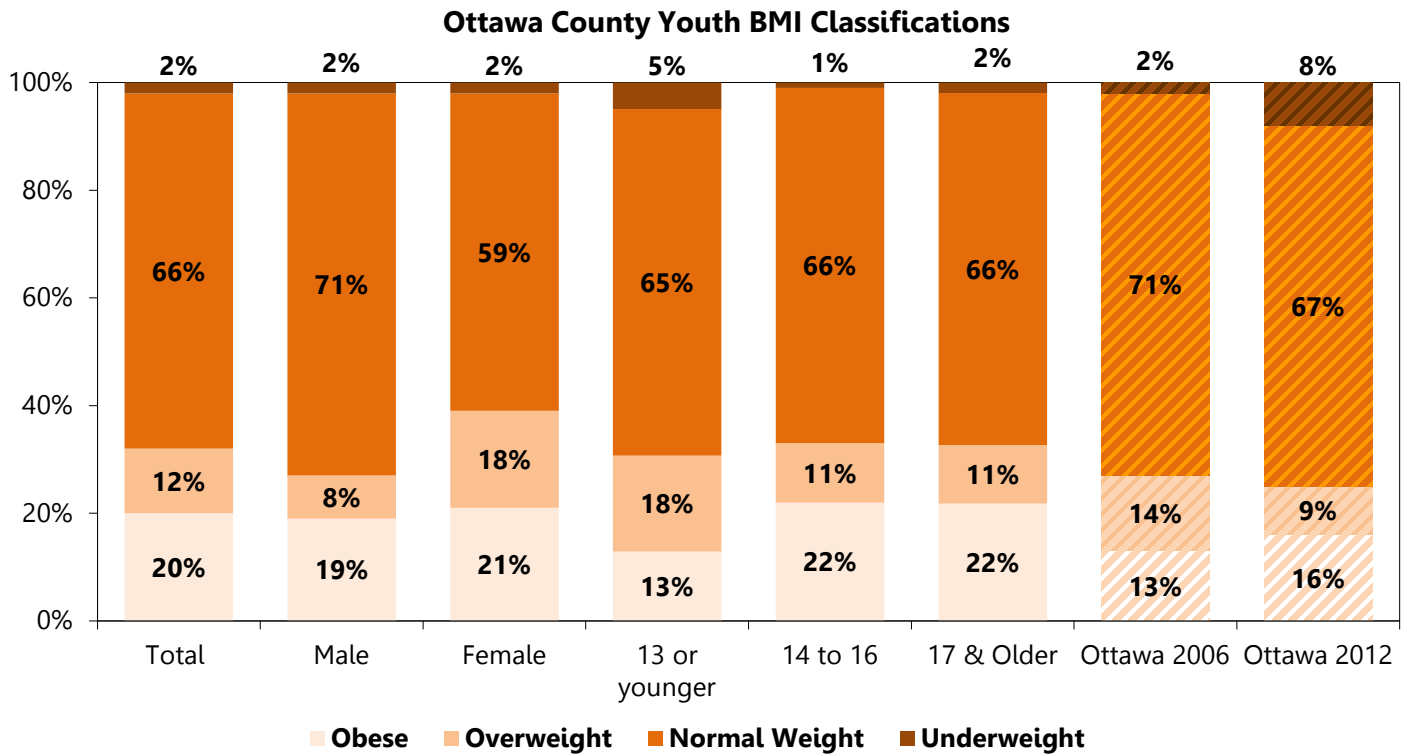
- BMI for children is calculated differently from adults. The CDC uses BMI-for-age, which is gender and age specific as children's body fatness changes over the years as they grow. In children and teens, BMI is used to assess underweight, normal, overweight, and obese.
- In 2017, 32% of youth were classified as overweight (12%) or obese (20%) by Body Mass Index (BMI) calculations, 66% were normal weight, and 2% were underweight.
- More than one-third (34%) of youth described themselves as being either slightly or very overweight (2017 YRBS reported 32% for the U.S.).
- Half (50%) of youth were trying to lose weight (YRBS reported 47% for the U.S. in 2017), increasing to 68% of Ottawa County female youth (compared to 34% of males).
- Youth did the following to lose or keep from gaining weight in the past 30 days:
  - Exercised (54%)
  - Drank more water (51%)
  - Ate more fruits and vegetables (42%)
  - Ate less food, fewer calories, or foods lower in fat (35%)
  - Skipped meals (16%)
  - Went without eating for 24 hours or more (3%)
  - Vomited or took laxatives (2%)
  - Smoked cigarettes or e-cigarettes to lose weight (2%)
  - Took diet pills, powders, or liquids without a doctor's advice (1%)
- Eight percent (8%) of Ottawa County youth ate 5 or more servings of fruits and vegetables per day, 25% percent ate 3-4 servings, 60% ate 1-2 servings, and 7% ate 0 servings.

## Physical Activity

- About three-fourths (76%) of Ottawa County youth participated in at least 60 minutes of physical activity on 3 or more days in the past week, 55% did so on 5 or more days in the past week (2017 YRBS reported 47% for the U.S.), and 28% did so every day in the past week (2017 YRBS reported 26% for the U.S.). One in ten (10%) youth did not participate in at least 60 minutes of physical activity on any day in the past week (2017 YRBS reported 15% for the U.S.).
- The U.S. Department of Health and Human Services recommends that children and adolescents participate in at least 60 minutes of physical activity per day. As part of their 60 minutes per day, children can engage in aerobic activity, muscle strengthening, and bone strengthening, as appropriate for their age. Children should participate in each of these types of activity on at least three days per week. *(Source: U.S. Department of Health and Human Services, Physical Activity Guidelines for Americans, 2018)*
- Ottawa County youth spent an average of 3.6 hours on their cell phone, 2.1 hours on their computer/tablet, 2.1 hours playing video games, and 1.6 hours watching TV on an average day of the week.

- Fourteen percent (14%) of youth spent 3 or more hours watching TV on an average day (2017 YRBS reported 21% for the U.S.).
- More than three-fifths (61%) of youth participated in a sports or intramural program, and 47% exercised outside of school.

The following graph shows the percentage of Ottawa County youth who were classified as obese, overweight, normal weight or underweight by Body Mass Index (BMI). Examples of how to interpret the information include: 66% of all Ottawa County youth were classified as normal weight, 20% were obese, 12% were overweight, and 2% were underweight for their age and gender.



### Healthy People 2020 Nutrition and Weight Status (NWS)

Objective	Ottawa County 2017	U.S. 2017	Healthy People 2020 Target
<b>NWS-10.4 Reduce the proportion of children and adolescents aged 2 to 19 years who are considered obese</b>	20% (6-12 Grade)	15% (9-12 Grade)	15%*
	23% (9-12 Grade)		

Note: The Healthy People 2020 target is for children and youth aged 2-19 years. Recent YRBS data unavailable for Ohio. (Sources: Healthy People 2020 Objectives, 2017 YRBS, 2017 Ottawa County Health Assessment)

Youth Comparisons	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2015 (9 <sup>th</sup> -12 <sup>th</sup> )
<b>Obese</b>	13%	16%	20%	23%	15%
<b>Overweight</b>	13%	9%	12%	11%	16%
<b>Described themselves as slightly or very overweight</b>	28%	26%	34%	35%	32%
<b>Trying to lose weight</b>	51%	48%	50%	50%	47%
<b>Exercised to lose weight</b>	49%	50%	54%	54%	N/A
<b>Ate less food, fewer calories, or foods lower in fat to lose weight</b>	24%	34%	35%	36%	N/A
<b>Went without eating for 24 hours or more</b>	4%	5%	3%	1%	N/A
<b>Took diet pills, powders, or liquids without a doctor's advice</b>	2%	2%	1%	2%	N/A
<b>Vomited or took laxatives</b>	1%	2%	2%	2%	N/A
<b>Ate 1 to 4 servings of fruits and vegetables per day</b>	N/A	78%	85%	88%	N/A
<b>Physically active at least 60 minutes per day on every day in past week</b>	N/A	66%	28%	25%	26%
<b>Physically active at least 60 minutes per day on 5 or more days in past week</b>	N/A	42%	55%	53%	47%
<b>Did not participate in at least 60 minutes of physical activity on any day in past week</b>	N/A	7%	10%	12%	15%
<b>Watched TV 3 or more hours per day</b>	N/A	35%	14%	15%	21%

N/A- Not available

## Preventing Eating Disorders

There are strategies you can use to help children and adolescents develop healthy behaviors and relationships with food:

- **Encourage healthy eating habits.** Adolescents begin making their own eating choices as they become more independent. Have meals as a family to ensure they get the nutrition they need and have conversations about healthy eating to make nutrition a priority. Adolescents may eat at restaurants with friends more often, become interested in different diets for humanitarian reasons, or be concerned with eating enough protein to participate in sports. For these reasons and more, providing guidance on nutrition and healthy eating is essential for all adolescents.
- **Avoid unhealthy dieting around your adolescent** and eat a balanced diet instead. Making healthy changes to improve your diet can be an important step, but extremely restrictive and unbalanced diets can be harmful. If you or your adolescent want to make dietary changes because of a health concern, consult your health care provider to ensure you are doing so safely.
- **Nurture a healthy body image** by discussing self-image and reassuring the teen that body shapes can vary. Also, talk with your adolescent about the messages they receive from media and avoid criticizing your own body.
- **Get help from your child's health care provider.** At well-child visits, providers may be able to identify early indicators of an eating disorder.

Eating disorders have many causes, including biological and psychological factors, but they are treatable. While treatment should include mental health services, adults can help adolescents establish a positive body image, healthy eating behaviors, and other habits that will set them on a healthier path.

(Source: U.S. Department of Health and Human Services, *Eating Disorders in Adolescence*, Updated April 18, 2018)

# Youth Health: Tobacco Use

## Key Findings

*The health assessment identified that 4% of Ottawa County youth were current smokers, increasing to 8% of those ages 17 and older. One-tenth (10%) of those who had smoked a whole cigarette did so at 10 years old or younger. Ten percent (10%) of youth used e-cigarettes in the past year. The average age of onset for smoking was 13.2 years old.*

## Youth Tobacco Use Behaviors

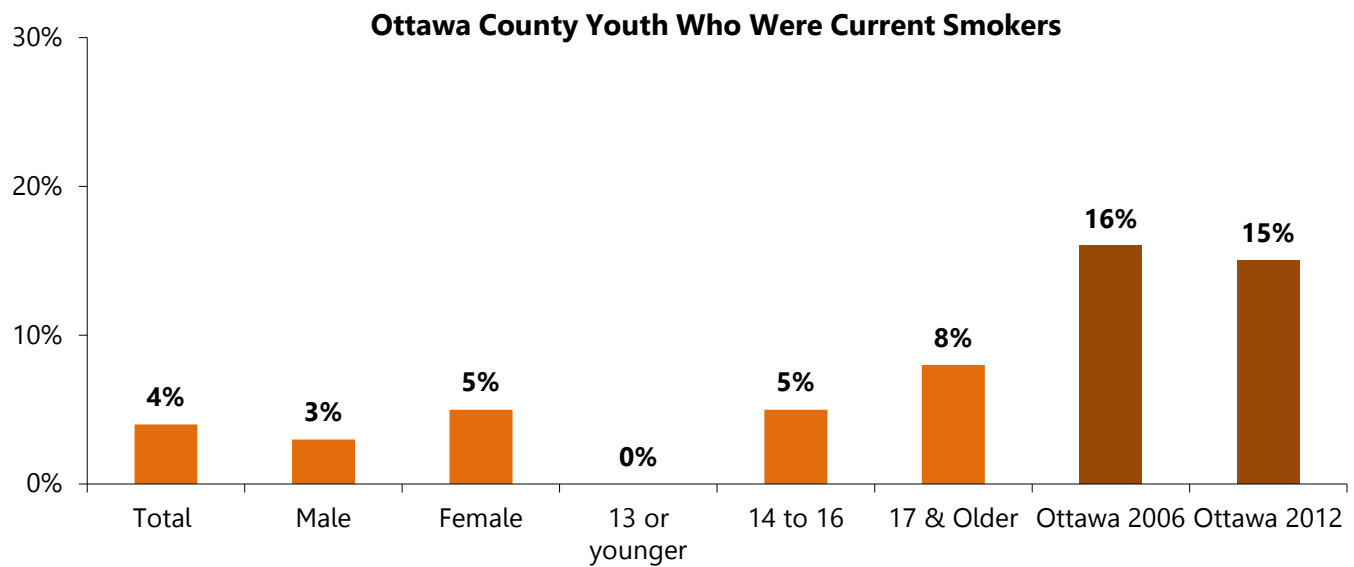
- Seventeen percent (17%) of Ottawa County youth had tried cigarette smoking, increasing to 21% of those ages 17 and older (YRBS reported 29% for the U.S. in 2017).
- Four percent (4%) of youth were current smokers, having smoked at some time in the past 30 days, increasing to 8% of those 17 and older (YRBS reported 9% for the U.S. in 2017).
- Five percent (5%) of all youth had smoked a whole cigarette for the first time before the age of 13 (2017 YRBS reported 10% for the U.S.).
- One-tenth (10%) of those who had smoked a whole cigarette did so at 10 years old or younger, and another 17% had done so by 12 years old. The average age of onset for smoking was 13.2 years old.
- One percent (1%) of all youth smoked cigarettes on 20 or more days during the past month (2017 YRBS reported 3% for the U.S. in 2017).
- One percent (1%) of current smokers smoked cigarettes daily.
- Youth used the following forms of tobacco in the past year: e-cigarettes (10%); cigarettes (9%); Black and Milds (7%); Swishers (5%); chewing tobacco, snuff, or dip (4%); pouch [snus] (2%); cigarillos (2%); hookah (2%); cigars (1%); and little cigars (1%).
- Youth smokers reported the following ways of obtaining cigarettes:
  - A person 18 years or older gave them the cigarettes (25%)
  - Bought cigarettes from a store or gas station (17%)
  - Took them from a store or family member (16%)
  - Borrowed cigarettes from someone else (13%)
  - Some other way (33%)
- More than half (57%) of youth who smoked in the past year had tried to quit smoking (2017 YRBS reported 41% for the U.S.).
- Youth reported being exposed to secondhand smoke in the following places: home (28%), other relative's home (28%), car (21%), friend's home (14%), park/ball field (9%), and fairgrounds (8%).

## Youth Electronic Cigarettes Use

- E-cigarettes are known by many different names. They are sometimes called "e-cigs," "e-hookahs," "mods," "vape pens," "vapes," "tank systems," and "electronic nicotine delivery systems (ENDS)."
- E-cigarette aerosol can contain harmful and potentially harmful substances, including:
  - Nicotine
  - Ultrafine particles that can be inhaled deep into the lungs
  - Flavoring such as diacetyl, a chemical linked to a serious lung disease
  - Volatile organic compounds
  - Cancer-causing chemicals
  - Heavy metals such as nickel, tin, and lead
- Nicotine can harm adolescent and young adult brain development, which continues into the early to mid-20s.
- In the United States, youth are more likely than adults to use e-cigarettes.
- In 2019, over 5 million U.S. middle and high school students used e-cigarettes in the past 30 days, including 10.5% of middle school students and 27.5% of high school students.

*(Source: CDC, About Electronic Cigarettes, Updated February 24, 2020)*

The following graph shows the percentage of Ottawa County youth who were current smokers (i.e. having smoked cigarettes in the past 30 days). Examples of how to interpret the information include: 4% of all Ottawa County youth were current smokers, including 3% of males and 5% of females.



"Current smokers" indicate youth who had self-reported smoking at any time during the past 30 days.

Youth Comparisons	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2015 (9 <sup>th</sup> -12 <sup>th</sup> )
Ever tried cigarettes	37%	33%	17%	21%	29%
Current smokers	16%	15%	4%	5%	9%
Smoked cigarettes on 20 or more days during the past month (of all youth)	7%	6%	1%	1%	3%
Smoked a whole cigarette for the first time before the age of 13 (of all youth)	13%	8%	5%	4%	10%
Tried to quit smoking (of those youth who smoked in the past year)	43%	50%	57%	52%	41%

### Healthy People 2020 Tobacco Use (TU)

Objective	Ottawa County 2017	U.S. 2017	Healthy People 2020 Target
TU-2.2 Reduce use of cigarettes by adolescents (past month)	4% (6-12 Grade) 5% (9-12 Grade)	9% (9-12 Grade)	16%*

\*Note: The Healthy People 2020 target is for youth in grades 9-12. Recent YRBS data unavailable for Ohio.  
(Sources: Healthy People 2020 Objectives, 2017 YRBS, 2017 Ottawa County Health Assessment)

**Behaviors of Ottawa County Youth**  
*Current Smokers vs. Non-Current Smokers*

Youth Behaviors	Current Smoker	Non-Current Smoker
<b>Had had sexual intercourse</b>	83%	32%
<b>Participated in extracurricular activities</b>	79%	92%
<b>Been bullied in any way in the past year</b>	71%	41%
<b>Experienced 3 or more adverse childhood experiences (ACEs) in their lifetime</b>	69%	21%
<b>Had had at least one drink of alcohol in the past 30 days</b>	57%	18%
<b>Attempted suicide in the past 12 months</b>	57%	4%
<b>Seriously considered attempting suicide in the past 12 months</b>	50%	12%
<b>Had used marijuana in the past 30 days</b>	43%	5%

### Youth Tobacco Use

**Factors associated with youth tobacco use include the following:**

- **Social and physical environments**
  - The way mass media show tobacco product use as a normal activity can make young people want to try these products.
  - Youth are more likely to use tobacco products if they see people their age using these products.
  - High school athletes are more likely to use smokeless tobacco than those of the same age who are not athletes.
  - Young people may be more likely to use tobacco products if a parent uses these products.
- **Biological and genetic factors**
  - There is evidence that youth may be sensitive to nicotine and that teens can feel dependent on nicotine sooner than adults.
  - Genetic factors may make quitting smoking harder for young people.
  - A mother’s smoking during pregnancy may increase the likelihood that her children will become regular smokers.
- **Mental health:** There is a strong relationship between youth smoking and depression, anxiety, and stress.
- **Personal views:** When young people expect positive things from smoking, such as coping with stress better or losing weight, they are more likely to smoke.
- Other influences that affect youth tobacco use include:
  - Lower socioeconomic status, including lower income or education
  - Not knowing how to say “no” to tobacco product use
  - Lack of support or involvement from parents
  - Accessibility, availability, and price of tobacco products
  - Doing poorly in school
  - Low self-image or self-esteem
  - Seeing tobacco product advertising in stores, on television, the Internet, in movies, or in magazines and newspapers

*(Source: CDC, Youth and Tobacco Use, Updated July 7, 2020)*

# Youth Health: Alcohol Consumption

## Key Findings

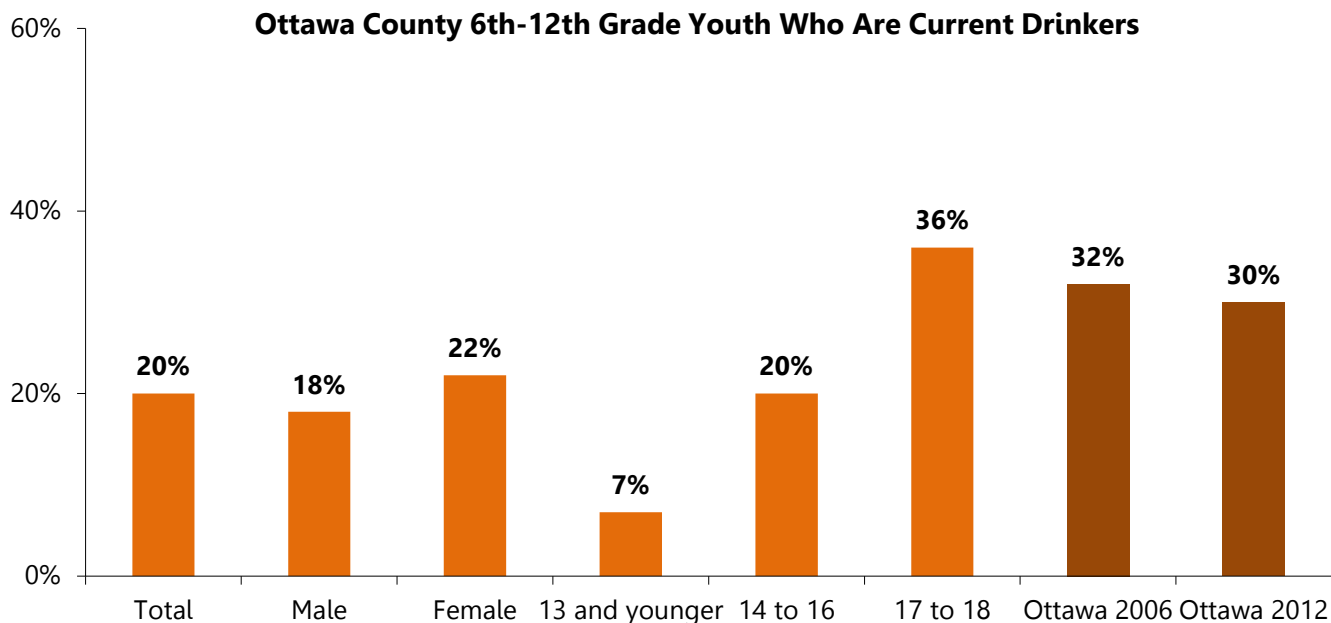
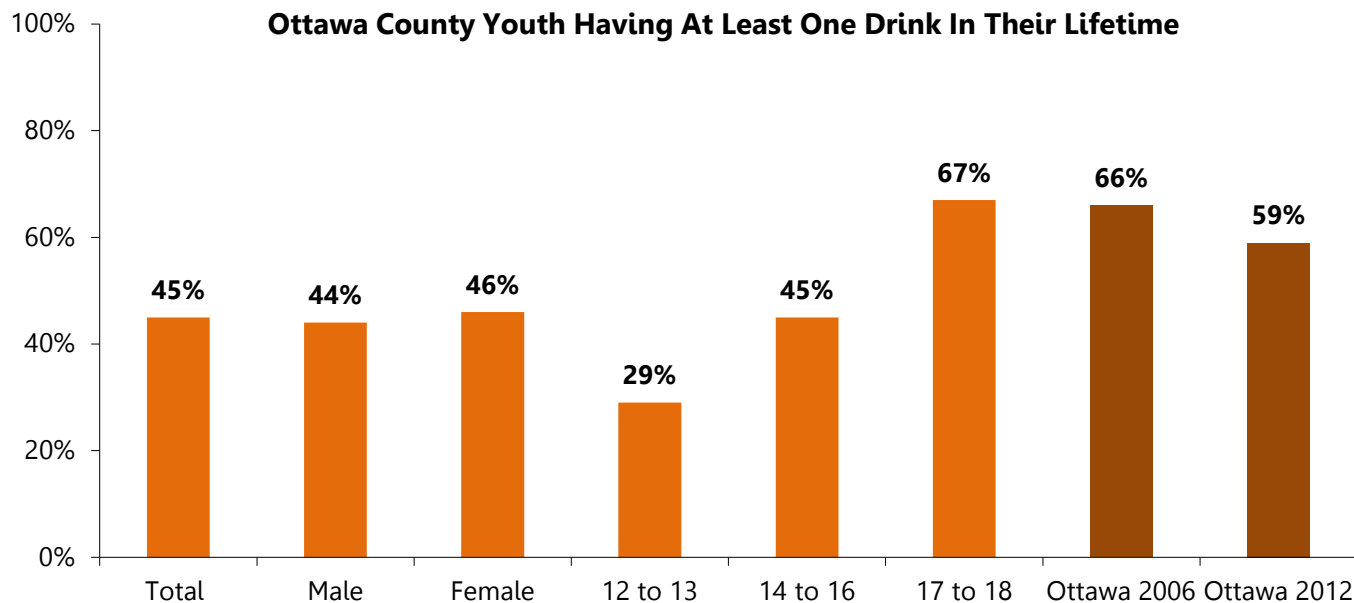
*More than two-fifths (45%) of all Ottawa County youth had at least one drink of alcohol in their life. One-fifth (20%) of youth had at least one drink in the past 30 days, increasing to 36% of those ages 17 and older. In the past 30 days, 17% of youth had ridden in a car driven by someone who had been drinking alcohol.*

## Youth Alcohol Consumption

- In 2017, the health assessment results indicated that more than two-fifths (45%) of all Ottawa County youth had at least one drink of alcohol in their life, increasing to 67% of those ages 17 and older (2017 YRBS reports 60% for the U.S.).
- One-fifth (20%) of youth had at least one drink in the past 30 days, increasing to 36% of those ages 17 and older (YRBS reports 30% for the U.S. in 2017).
- Based on all youth surveyed, 10% had five or more alcoholic drinks on an occasion and were defined as binge drinkers, increasing to 23% of those ages 17 and older (YRBS reports 14% for the U.S. in 2017). Of those who drank, 61% were considered binge drinkers, increasing to 66% of females.
- Of all Ottawa County youth, 11% had drunk alcohol for the first time before the age of 13 (2017 YRBS reports 16% for the U.S.).
- More than one-quarter (29%) of Ottawa County youth who reported drinking at some time in their life had their first drink at 12 years old or younger, 29% took their first drink between the ages of 13 and 14, and 43% started drinking at 15 and older. The average age of onset was 13.5 years old.
- Ottawa County youth drinkers reported they got their alcohol from the following: someone gave it to them (43%) (2017 YRBS reports 44% for the U.S.), a parent gave it to them (25%), someone older bought it for them (21%), took it from a store or family member (10%), an older friend or sibling bought it (7%), a friend's parent gave it to them (6%), bought it in a liquor store/convenience store/gas station (2%), bought it at a public event (2%), and obtained it some other way (19%).
- Youth drinkers reported drinking alcohol at the following places: in their home (52%); at a friend's home (48%), at another person's home (27%), in a public place (3%); at a public event (3%), and while riding in or driving a car or another vehicle (2%).
- Ottawa County youth binge drinkers reported they got their alcohol from the following: someone gave it to them (42%), someone older bought it for them (36%), an older friend or sibling bought it (30%), a parent gave it to them (18%), a friend's parent gave it to them (9%), took it from a store or family member (3%), bought it in a liquor store/convenience store/gas station (3%), and obtained it some other way (15%).\*
- Youth binge drinkers reported drinking alcohol at the following places: at a friend's home (58%), at another person's home (39%), in their home (36%), at a public event (3%), and while riding in or driving a car or another vehicle (3%).\*
- In the past 30 days, 17% of youth had ridden in a car driven by someone who had been drinking alcohol (YRBS reported 17% for the U.S. in 2017).
- One percent (1%) of youth drivers had driven a car themselves after drinking alcohol (YRBS reported 6% for the U.S. in 2017).

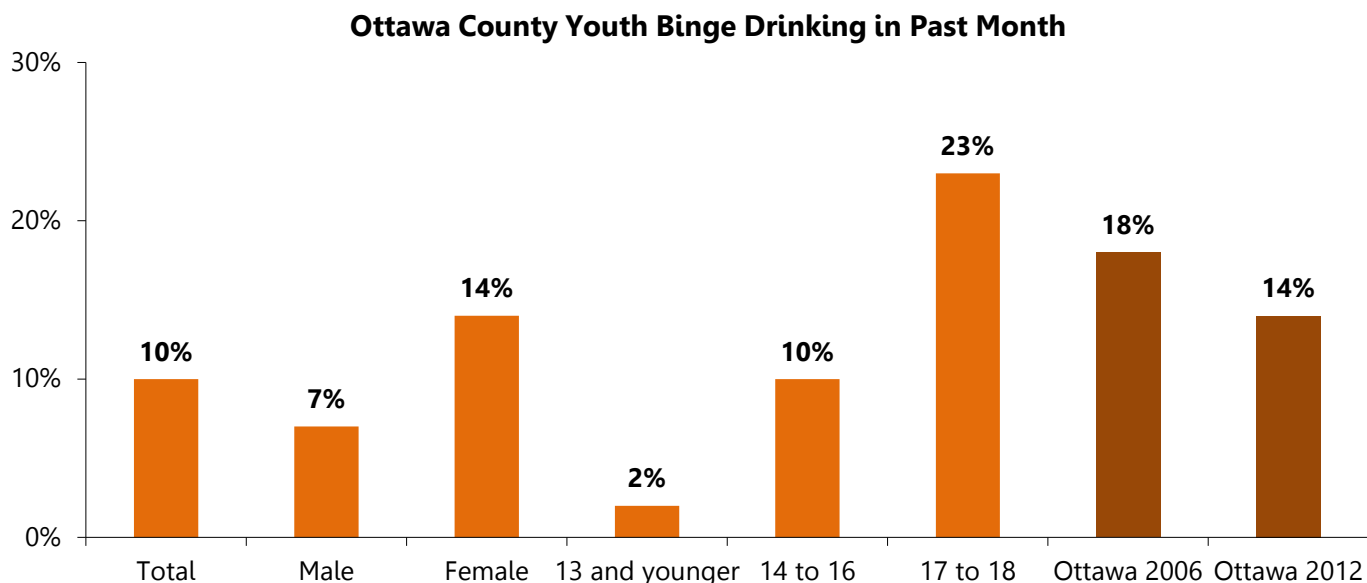
*\*Please use data with caution as the number of reported binge drinkers (in the past 30 days) is small.*

The following graphs show the percentage of Ottawa County youth who had drunk in their lifetime and those who were current drinkers. Examples of how to interpret the information include: 45% of all Ottawa County youth had drunk at some time in their life, including 44% of males and 46% of females.





The following graph shows the percentage of Ottawa County youth who were binge drinkers. Examples of how to interpret the information include: 10% of youth binge drank in the past month, including 7% of males and 14% of females.



### Behaviors of Ottawa County Youth Current Drinkers vs. Non-Current Drinkers

Youth Behaviors	Current Drinker	Non-Current Drinker
Participated in extracurricular activities	94%	91%
Had sexual intercourse in the past 12 months	75%	23%
Had been bullied in the past 12 months	58%	38%
Experienced 3 or more adverse childhood experiences (ACEs) in their lifetime	46%	18%
Had used marijuana in the past 30 days	26%	1%
Seriously considered attempting suicide in the past 12 months	25%	11%
Had smoked cigarettes in the past 30 days	12%	2%
Attempted suicide in the past 12 months	9%	5%

Current smokers are those youth surveyed who had self-reported smoking at any time during the past 30 days.

### Healthy People 2020 Substance Abuse (SA)

Objective	Ottawa County 2017	U.S. 2017	Healthy People 2020 Target
SA-14.4 Reduce the proportion of persons engaging in binge drinking during the past month	10% (6-12 Grade)  14% (9-12 Grade)	14% (9-12 Grade)	5%*

\*Note: The Healthy People 2020 target is for youth aged 12-17 years. Recent YRBS data unavailable for Ohio.  
(Sources: Healthy People 2020 Objectives, 2017 YRBS, 2017 Ottawa County Health Assessment)

Youth Comparisons	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2017 (9 <sup>th</sup> -12 <sup>th</sup> )
<b>Ever tried alcohol</b>	66%	59%	45%	52%	60%
<b>Current drinker</b>	32%	30%	20%	25%	30%
<b>Binge drinker (of all youth)</b>	18%	14%	10%	14%	14%
<b>Drank for the first time before age 13 (of all youth)</b>	38%	18%	11%	8%	16%
<b>Rode with someone who had been drinking alcohol in past month</b>	24%	17%	17%	14%	17%
<b>Drove a car after drinking alcohol (of youth drivers)</b>	7%	1%	1%	1%	6%
<b>Obtained the alcohol they drank by someone giving it to them</b>	N/A	32%	42%	44%	44%

### Underage Drinking

- Excessive drinking is responsible for more than 4,300 deaths among underage youth each year, and cost the U.S. \$24 billion in economic costs in 2010.
- Although the purchase of alcohol by persons under the age of 21 is illegal, people aged 12 to 20 years drink 11% of all alcohol consumed in the United States. More than 90% of this alcohol is consumed in the form of binge drinks.
- On average, underage drinkers consume more drinks per drinking occasion than adult drinkers.
- In 2013, there were approximately 119,000 emergency rooms visits by persons aged 12 to 21 for injuries and other conditions linked to alcohol.
- Youth who drink alcohol are more likely to experience
  - School problems, such as higher absence and poor or failing grades.
  - Social problems, such as fighting and lack of participation in youth activities.
  - Legal problems, such as arrest for driving or physically hurting someone while drunk.
  - Physical problems, such as hangovers or illnesses.
  - Unwanted, unplanned, and unprotected sexual activity.
  - Disruption of normal growth and sexual development.
  - Physical and sexual assault.
  - Higher risk for suicide and homicide.
  - Alcohol-related car crashes and other unintentional injuries, such as burns, falls, and drowning.
  - Memory problems.
  - Misuse of other drugs.
  - Changes in brain development that may have life-long effects.
  - Death from alcohol poisoning.
- In general, the risk of youth experiencing these problems is greater for those who binge drink than for those who do not binge drink.
- Early initiation of drinking is associated with development of an alcohol use disorder later in life

(Source: CDC, Alcohol and Public Health, Updated January 3, 2020)

# Youth Health: Drug Use

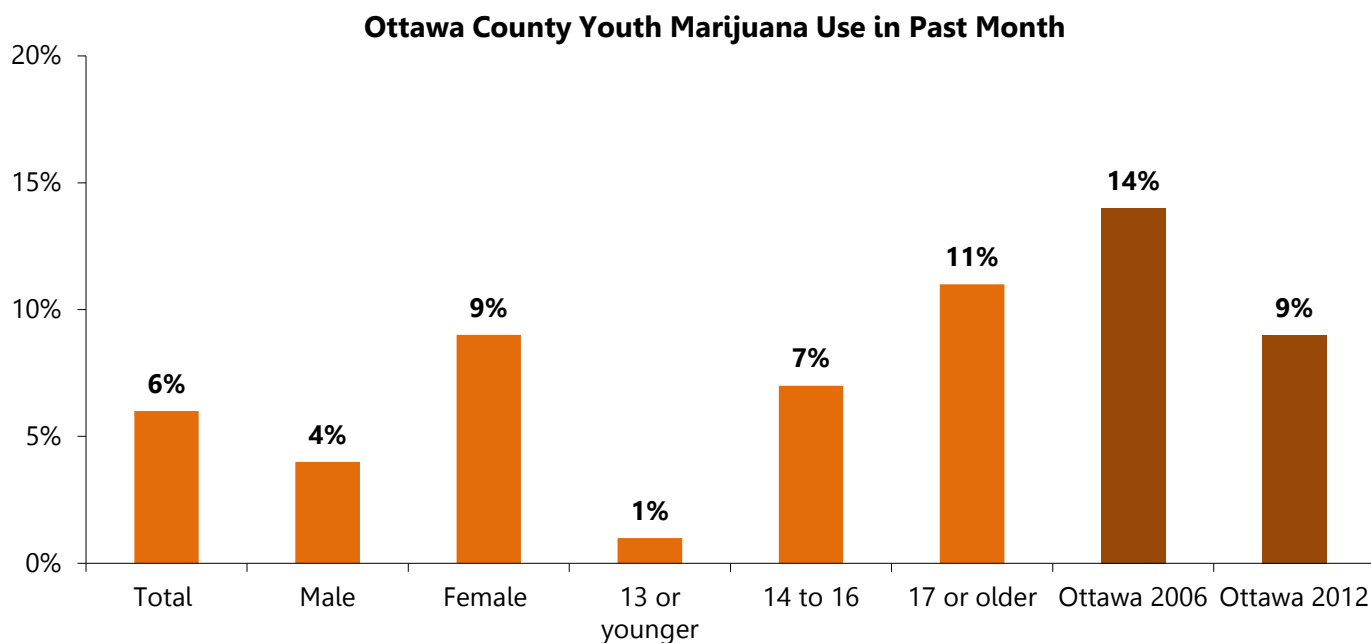
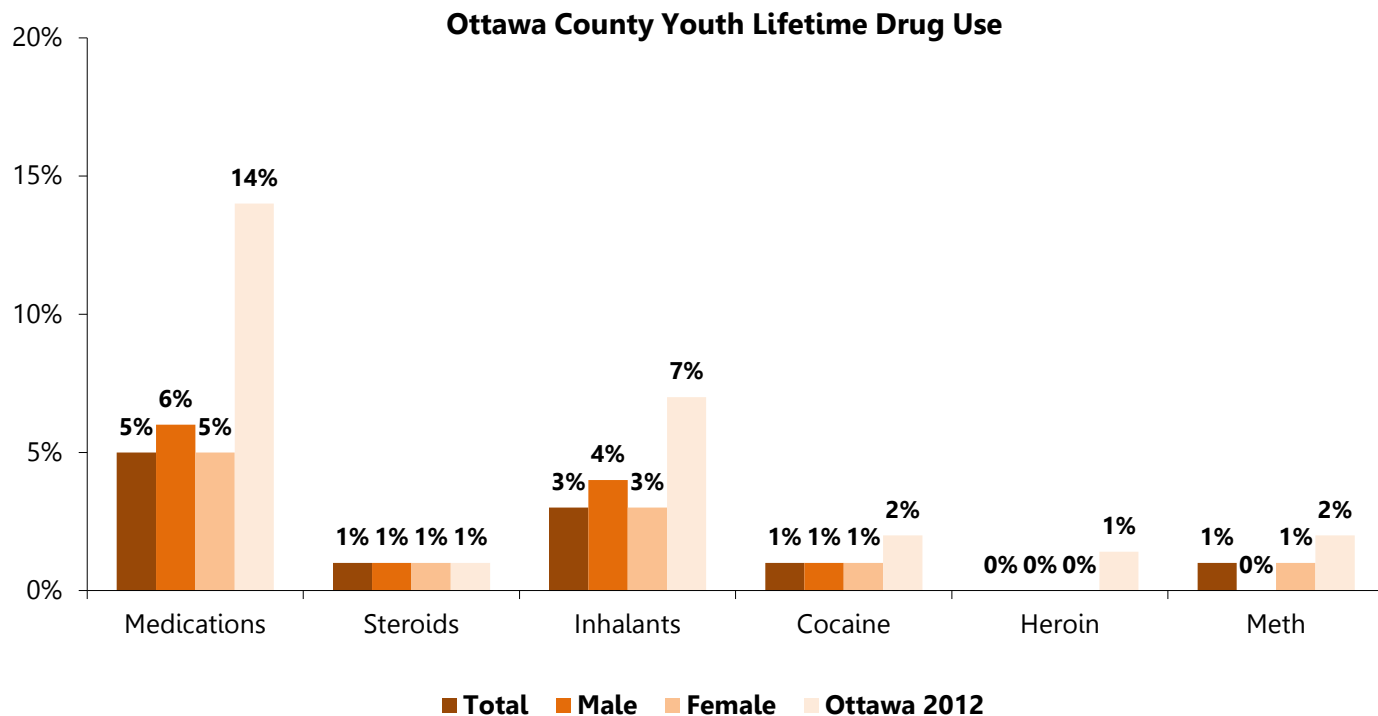
## Key Findings

*In 2017, 6% of Ottawa County youth had used marijuana at least once in the past 30 days, increasing to 11% of those ages 17 and older. Five percent (5%) of youth used medications that were not prescribed for them or took more than prescribed to get high at some time in their life.*

## Youth Drug Use

- In 2017, 6% of all Ottawa County youth had used marijuana at least once in the past 30 days, increasing to 11% of those over the age of 17. The 2017 YRBS found a prevalence of 20% for U.S. youth.
- Ottawa County youth had tried the following in their life:
  - Inhalants (3%) (YRBS reports 6% for the U.S. in 2017)
  - Liquid THC (3%)
  - Misused over-the-counter medications (2%)
  - Misused cough syrup (2%)
  - Ecstasy/MDMA/Molly (2%) (YRBS reports 4% for the U.S. in 2017)
  - K2/spice (1%)
  - Posh/salvia/synthetic marijuana (1%)
  - Methamphetamines (1%) (YRBS reports 3% for U.S. in 2017)
  - Cocaine (1%) (YRBS reports 5% for U.S. in 2017)
- During the past 12 months, 6% of all Ottawa County youth reported that someone had offered, sold, or given them an illegal drug on school property (YRBS reports 20% for the U.S. in 2017).
- Five percent (5%) of Ottawa County youth used medications that were not prescribed for them or took more than prescribed to feel good or get high at some time in their lives, increasing to 8% of those over the age of 17.
- Youth reported having used the following substances during the school day while on school property:
  - E-cigarettes (1%)
  - Chewing tobacco (1%)
  - Illegal (1%)
  - Cigarettes (<1%)
  - Prescription drugs not prescribed to them (<1%)
- Youth reported their parents would disapprove of them doing the following:
  - Misusing prescription drugs (86%)
  - Smoking cigarettes (85%)
  - Using marijuana (82%)
  - Drinking alcohol (76%)
- Youth reported the following would keep them from seeking help if they were dealing with an alcohol, tobacco, or other drug problem: they can handle it themselves (16%), worried what others may think (8%), do not know where to go (6%), no time (4%), family would not support them in getting help (3%), paying for it (2%), transportation (1%), no treatment available (1%), and their friends would not support them in getting help (1%). Nearly three-quarters (72%) of youth reported that they would seek help.

The following graphs indicate youth lifetime drug use and youth marijuana use in the past 30 days. Examples of how to interpret the information include: 5% of youth had misused medication at some point in their life, including 6% of males and 5% of females.



Youth Comparisons	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2017 (9 <sup>th</sup> -12 <sup>th</sup> )
Youth who used marijuana in the past month	14%	9%	6%	11%	20%
Ever used methamphetamines	1%	2%	1%	0%	3%
Ever used cocaine	6%	2%	1%	1%	5%
Ever used heroin	1%	1%	0%	0%	2%
Ever used steroids	3%	1%	1%	1%	3%
Ever used inhalants	13%	7%	3%	3%	6%
Ever used ecstasy/MDMA/Molly	2%	2%	2%	2%	4%
Ever misused medications	15%	14%	5%	7%	N/A
Ever been offered, sold, or given an illegal drug by someone on school property in the past year	15%	13%	6%	7%	20%

N/A- Not Available

### Behaviors of Ottawa County Youth Current Marijuana Use vs. Non-Current Marijuana Use

Youth Behavior	Current Marijuana User	Non-Current Marijuana User
Participated in extracurricular activities	90%	92%
Drank alcohol in the past 30 days	82%	15%
Smoked cigarettes in the past 30 days	27%	2%
Experienced 3 or more adverse childhood experiences (ACEs) in their lifetime	68%	20%
Ever misused medications	23%	4%
Seriously considered attempting suicide in the past 12 months	43%	12%
Attempted suicide in the past 12 months	24%	5%

"Current marijuana use" indicates youth who self-reported using marijuana at any time during the past 30 days.

### How to Talk to Kids about Alcohol and Other Drugs

- **Show you disapprove of underage drinking and other drug misuse.** Over 80 percent of young people ages 10–18 say their parents are the leading influence on their decision whether to drink. Send a clear and strong message that you disapprove of underage drinking and misuse of other drugs.
- **Show you're a good source of information about alcohol and other drugs.** You want your child to make informed decisions about alcohol and other drugs with reliable information about their dangers. You don't want your child to learn about alcohol and other drugs from unreliable sources. Establish yourself as a trustworthy source of information.
- **Show you're paying attention and you'll discourage risky behaviors.** Show you're aware of what your child is up to, as young people are more likely to drink or use other drugs if they think no one will notice. Do this in a subtle way, without prying.
- **Build your child's skills and strategies for avoiding underage drinking and drug use.** Even if you don't think your child wants to drink or try other drugs, peer pressure is a powerful thing. Having a plan to avoid alcohol and drug use can help children make better choices. Talk with your child about what they would do if faced with a decision about alcohol and drugs, such as texting a code word to a family member or practicing how they'll say "no thanks."

(Source: SAMHSA, Parent Resources, Updated April 22, 2020)

# Youth Health: Sexual Behavior

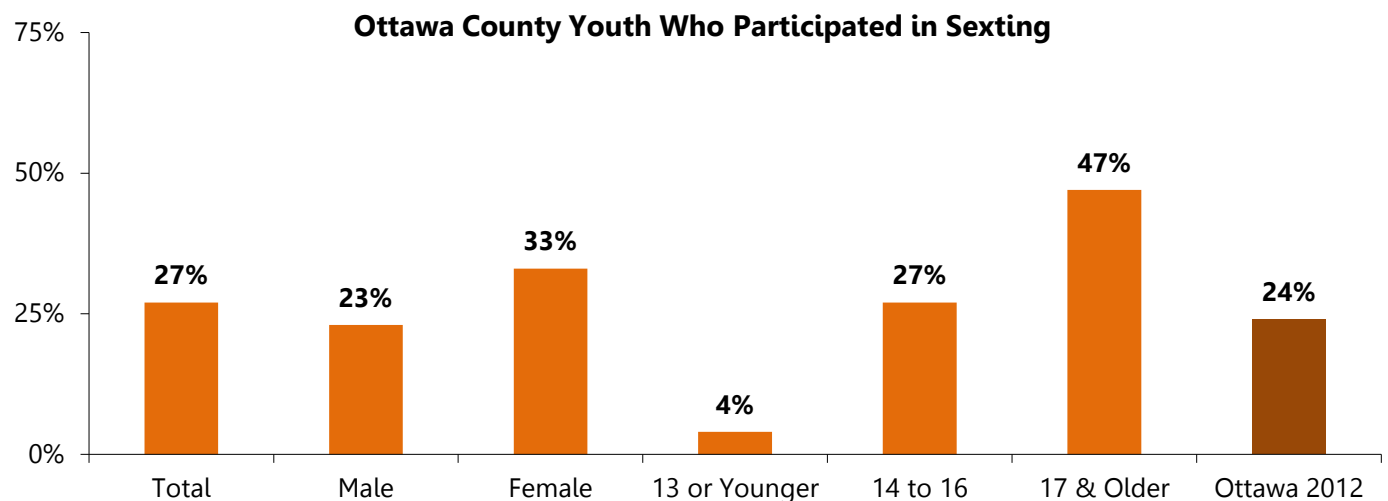
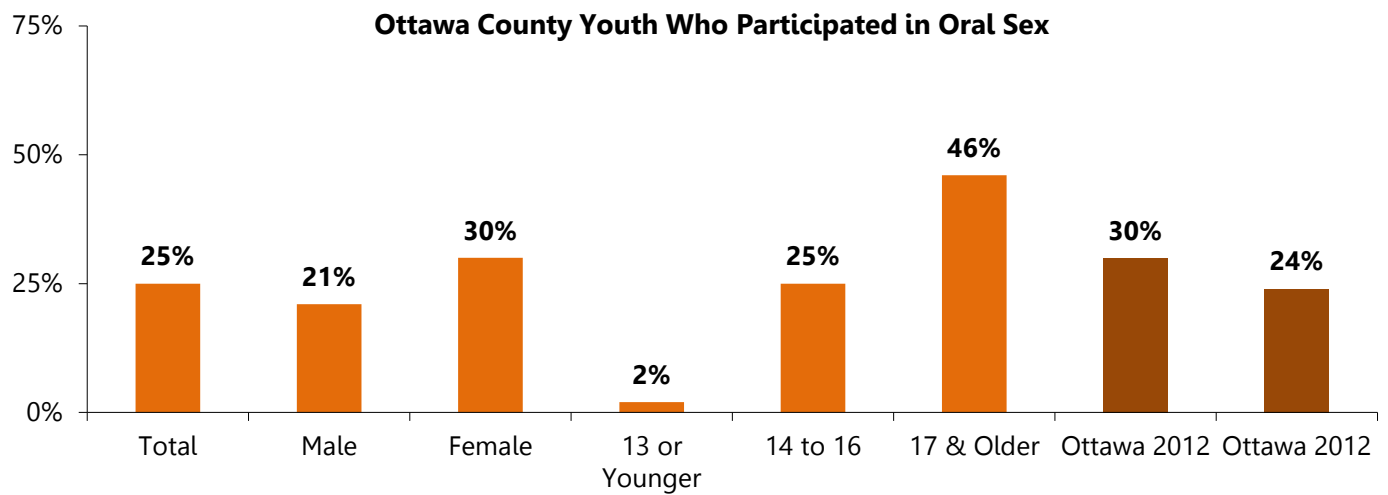
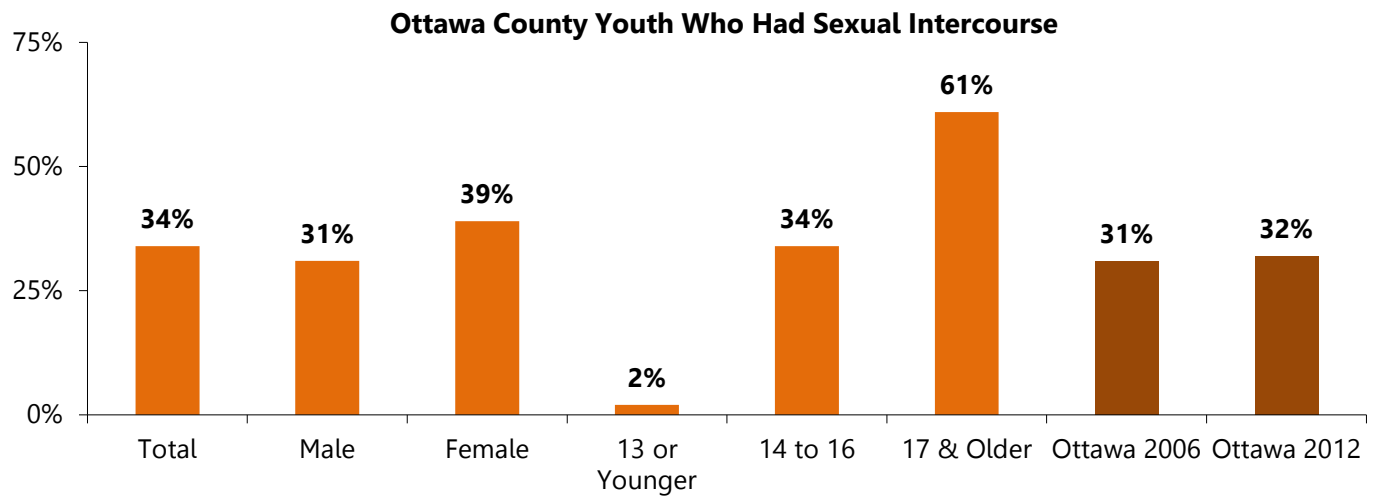
## Key Findings

*Over one-third (34%) of Ottawa County youth had sexual intercourse. One-quarter (25%) of youth had participated in oral sex and 8% had participated in anal sex. Of those who had sexual intercourse, 43% had multiple sexual partners. Note: Two Ottawa County schools did not ask sexual behavior questions.*

## Youth Sexual Behavior

- Over one-third (34%) of Ottawa County youth had sexual intercourse, increasing to 61% of those ages 17 and older (YRBS reports 40% for U.S. in 2017).
- One-quarter (25%) of youth had participated in oral sex, increasing to 46% of those ages 17 and older.
- One out of twelve (8%) youth had participated in anal sex, increasing to 18% of those ages 17 and older.
- More than one-quarter (27%) of youth had participated in sexting, increasing to 47% of those ages 17 and older.
- Thirty percent (30%) of youth had viewed pornography, increasing to 37% of males and 47% of those ages 17 and older.
- Of youth who had sexual intercourse in their lifetime, 57% had one sexual partner and 43% had multiple partners.
- Six percent (6%) of all Ottawa County youth had four or more sexual partners (YRBS reports 10% for the U.S. in 2017).
- Seventeen percent (17%) of sexually active youth had four or more partners.
- Of sexually active youth, 12% had done so by the age of 13. Another 52% had done so by 15 years of age. The average age of onset was 14.9 years old.
- Of all youth, 4% were sexually active before the age of 13 (YRBS reports 3% for the U.S. in 2017).
- Ottawa County youth had experienced the following: wanted to get pregnant (2%); had sex in exchange for something of value such as food, drugs, shelter or money (1%); been pregnant (1%); had a miscarriage (1%); had been treated for an STD (1%); and tried to get pregnant (<1%).
- Nearly three-fifths (59%) of sexually active youth used condoms to prevent pregnancy; 17% used birth control pills; 6% used the withdrawal method; 4% reported they were gay or lesbian; 3% used a shot, patch or birth control ring; and 3% used an IUD. However, 4% engaged regularly in intercourse without a reliable method of protection, and 3% reported they were unsure.
- Youth reported the following situations applied to them: they received a text or an e-mail with a revealing or sexual photo of someone (15%); they texted, e-mailed, or electronically posted a revealing or sexual photo of themselves (10%); and a revealing or sexual photo of them was texted, e-mailed, or posted electronically without their permission (2%).
- Youth were taught about pregnancy prevention, sexually transmitted diseases, HIV/AIDS, or the use of condoms by the following: school (80%), parents (64%), doctor (29%), friends (29%), internet or social media (26%), siblings (17%), church (4%), and somewhere else (2%). Six percent (6%) of youth reported they had not been taught about these subjects.

The following graphs show the percentage of Ottawa County youth who participated in sexual intercourse, oral sex, and sexting. Examples of how to interpret the information include: 34% of all Ottawa County youth had sexual intercourse, including 31% of males and 39% of females.



Youth Comparisons	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2017 (9 <sup>th</sup> -12 <sup>th</sup> )
<b>Ever had sexual intercourse</b>	31%	32%	34%	42%	40%
<b>Used a condom at last intercourse</b>	76%	66%	59%	61%	54%
<b>Used birth control pills at last intercourse</b>	26%	37%	17%	18%	21%
<b>Did not use any method to prevent pregnancy during last sexual intercourse</b>	4%	15%	4%	4%	14%
<b>Had four or more sexual partners (of all youth)</b>	8%	8%	6%	6%	10%
<b>Had sexual intercourse before age 13 (of all youth)</b>	5%	2%	4%	5%	3%

### Sexual Risk Behaviors

Many young people engage in sexual risk behaviors that can result in unintended health outcomes. For example, among U.S. high school students surveyed in 2017:

- Less than 10% of all high school students have ever been tested for HIV.
- 40% had ever had sexual intercourse.
- 30% had had sexual intercourse during the previous 3 months, and, of these
  - 46% did not use a condom the last time they had sex.
  - 14% did not use any method to prevent pregnancy.
  - 19% had drunk alcohol or used drugs before last sexual intercourse.

Sexual risk behaviors place youth at risk for HIV infection, other STDs, and unintended pregnancy:

- 21% of all new HIV diagnoses were among young people (aged 13-24) in 2018; 87% were young men and 13% were young women.
- Half of the 20 million new STDs reported each year were among young people (aged 15 to 24).
- Nearly 180,000 babies were born to teen girls (aged 15–19 years) in 2018.

*(Source: CDC, Adolescent and School Health, updated March 25, 2020)*



# Youth Health: Mental Health

## Key Findings

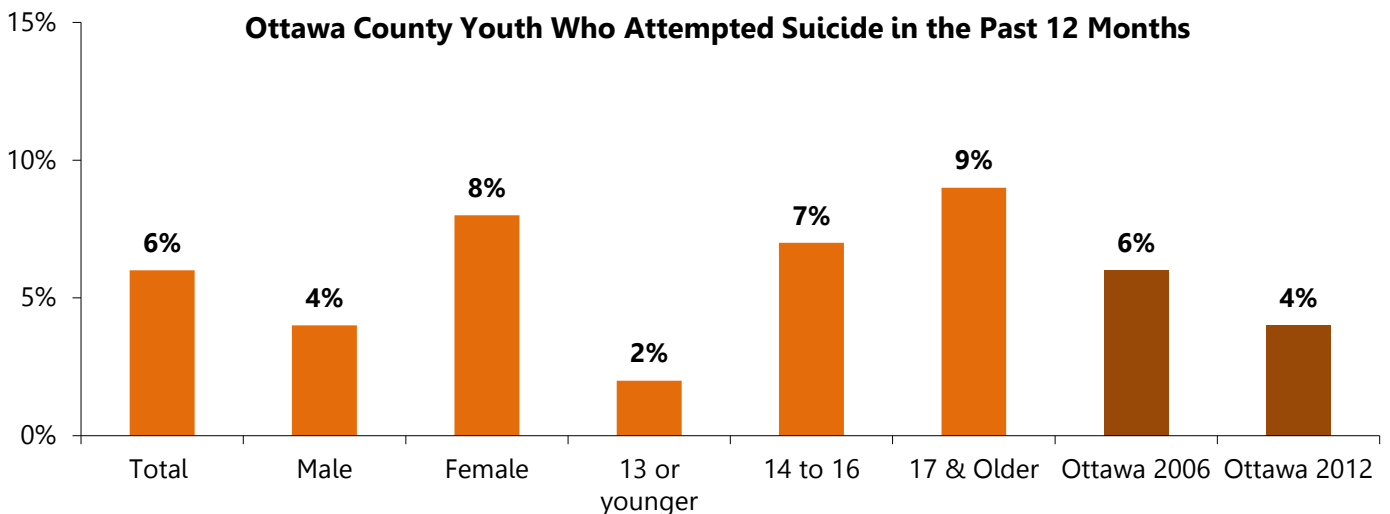
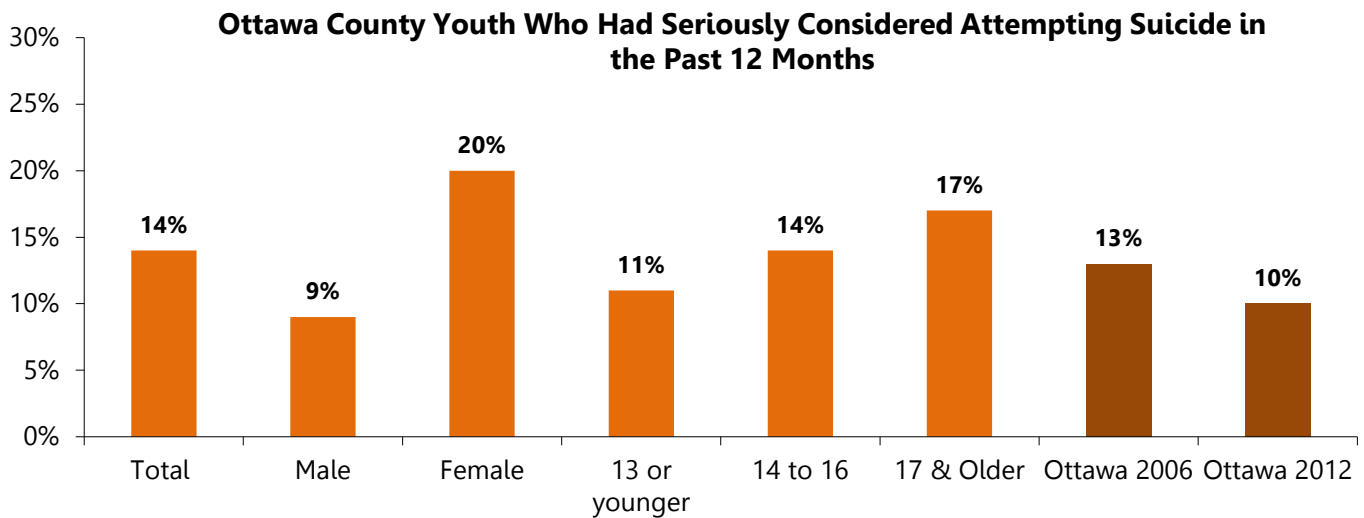
*In 2017, the health assessment results indicated that 26% of youth reported they felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities. Fourteen percent (14%) of Ottawa County youth had seriously considered attempting suicide in the past year, and 6% attempted suicide in the past year.*

## Youth Mental Health

- In 2017, over one-quarter (26%) of youth reported they felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities, increasing to 40% of females (YRBS reported 32% for the U.S. in 2017).
- One out of seven (14%) youth reported they had seriously considered attempting suicide in the past 12 months, increasing to 20% of females. Fifteen percent (15%) of high school youth had seriously considered attempting suicide, compared to the 2017 YRBS rate of 17% for U.S. youth.
- In the past year, 6% of Ottawa County youth had attempted suicide, increasing to 9% of youth ages 17 and older. Three percent (3%) of youth had made more than one attempt. The 2017 YRBS reported a suicide attempt prevalence rate of 7% for U.S. youth.
- Youth reported the following caused them anxiety, stress or depression: academic success (49%), fighting with friends (35%), self-image (33%), fighting at home (33%), sports (32%), death of close family member or friend (31%), stress at home (28%), peer pressure (24%), dating relationship (24%), being bullied (23%), breakup (23%), parent divorce/separation (15%), poverty/no money (14%), caring for younger siblings (7%), sick parent (6%), alcohol or drug use in the home (6%), sexual orientation (4%), not having enough to eat (3%), not having a place to live (2%), and other (15%). Sixteen percent (16%) of youth reported they did not have anxiety, stress or depression.
- Youth reported the following ways of dealing with anxiety, stress, or depression: sleeping (52%); hobbies (38%); texting someone (35%); exercising (30%); talking to a peer (24%); eating (24%); talking to someone in their family (22%); using social media (15%); breaking something (12%); praying/reading the Bible (8%); writing in a journal (8%); shopping (8%); and drinking alcohol, smoking/using tobacco, or using illegal drugs (4%). Sixteen percent (16%) of youth reported they did not have anxiety, stress or depression.
- When youth had feelings of depression or suicide, they talked to the following: best friend (53%), parents (32%), girlfriend or boyfriend (26%), brother/sister (15%), an adult relative (9%), caring adults (10%), school counselor (7%), adult friend (6%), professional counselor (4%), teacher (4%), coach (4%), youth minister (3%), pastor/priest (1%). Teen Line or First Call for Help (2%); and other (8%). More than one-quarter (27%) of youth reported they had no one to talk to when they had feelings of depression or suicide.
- Almost half (48%) of youth reported they would seek help if they were dealing with anxiety, stress, depression or thoughts of suicide. Reasons for not seeking help included the following: they can handle it themselves (32%), worried what others might think (18%), did not know where to go (13%), no time (12%), cost (8%), their family would not support them (6%), they were already in treatment (5%), transportation (5%), their friends would not support them (4%), and no treatment available (1%).
- Twelve percent (12%) of youth suffered a blow or jolt to their head while playing with a sports team which caused them to get “knocked out,” have memory problems, experience double or blurry vision, have headaches or “pressure” in the head, and/or cause nausea or vomiting.

Youth Comparisons	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2017 (9 <sup>th</sup> -12 <sup>th</sup> )
Youth who felt sad or hopeless almost every day for 2 or more weeks in a row	21%	24%	26%	27%	32%
Youth who had seriously considered attempting suicide in the past year	13%	10%	14%	15%	17%
Youth who had attempted suicide in the past year	6%	4%	6%	7%	7%

The following graphs show Ottawa County youth who had seriously considered attempting suicide in the past year and those who attempted suicide in the past year. Examples of how to interpret the information includes: 14% of all Ottawa County youth seriously considered attempting suicide, including 9% of males and 20% of females.



**Healthy People 2020**  
**Mental Health and Mental Disorders (MHMD)**

Objective	Ottawa County 2017	U.S. 2017	Healthy People 2020 Target
<b>HMD-2 Reduce suicide attempts by adolescents<sup>#</sup></b>	7% (9-12 Grade)	7% (9-12 Grade)	2%*

*\*Note: The Healthy People 2020 target is for youth in grades 9-12. Recent YRBS data unavailable for Ohio.*

*<sup>#</sup>This objective is based upon attempted suicide that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse.  
(Sources: Healthy People 2020 Objectives, 2017 YRBS, CDC/NCHHSTP, 2017 Ottawa County Health Assessment)*

**Behaviors of Ottawa County Youth**  
*Contemplated Suicide vs. Did Not Contemplate Suicide*

Youth Behaviors	Contemplated Suicide	Did Not Contemplate Suicide
<b>Been bullied in any way in the past year</b>	73%	36%
<b>Experienced 3 or more adverse childhood experiences (ACEs) in their lifetime</b>	67%	15%
<b>Had at least one drink of alcohol in the past 30 days</b>	35%	17%
<b>Smoked cigarettes in the past 30 days</b>	15%	2%
<b>Used marijuana in the past 30 days</b>	19%	4%

*"Contemplated suicide" indicates youth who self-reported seriously considering attempting suicide in the past year.*

**Youth Depression: Signs and Symptoms**

- Occasionally being sad or feeling hopeless is a part of every child's life. However, some children feel sad or uninterested in things that they used to enjoy, or feel helpless or hopeless in situations they are able to change. When children feel persistent sadness and hopelessness, they may be diagnosed with depression.
- Examples of behaviors often seen in children with depression include:
  - Feeling sad, hopeless, or irritable a lot of the time
  - Not wanting to do or enjoy doing fun things
  - Showing changes in eating patterns – eating a lot more or a lot less than usual
  - Showing changes in sleep patterns – sleeping a lot more or a lot less than normal
  - Showing changes in energy – being tired and sluggish or tense and restless a lot of the time
  - Having a hard time paying attention
  - Feeling worthless, useless, or guilty
  - Showing self-injury and self-destructive behavior
- Extreme depression can lead a child to think about suicide or plan for suicide. For youth ages 10-24 years, suicide is among the leading causes of death.
- Some children may not talk about their helpless and hopeless thoughts, and may not appear sad. Depression might also cause a child to make trouble or act unmotivated, causing others not to notice that the child is depressed or to incorrectly label the child as a trouble-maker or lazy.

*(Source: CDC, Children's Mental Health, Anxiety and Depression, Updated March 30, 2020)*

# Youth Health: Social Determinants of Health

## Key Findings

Nearly three-quarters (74%) of youth visited a doctor for a routine checkup in the past year. Twenty-three percent (23%) of youth experienced three or more adverse childhood experiences (ACEs).

## Personal Health

- Nearly three-quarters (74%) of Ottawa County youth visited a doctor for a routine checkup in the past year.
- Youth last saw a dentist for a check-up, exam, teeth cleaning, or other dental work less than a year ago (75%), 1 to 2 years ago (12%), more than 2 years ago (5%), never (2%) (2017 YRBS reported 2% for the U.S.), and do not know (6%).

## Personal Safety

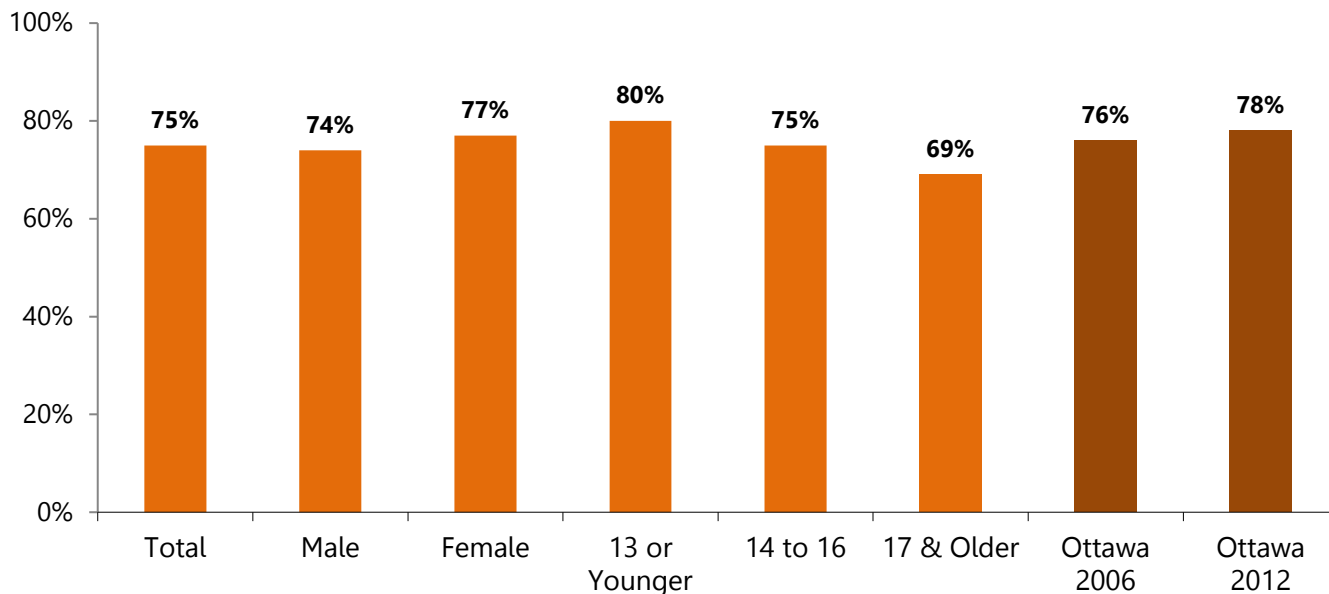
- Ottawa County youth drivers did the following while driving in the past month: wore a seatbelt (90%), ate (44%), drove while tired or fatigued (31%), talked on their cell phone (30%), texted (28%), used cell phone for other things (25%), misused prescription drugs (6%), read (2%) and applied makeup (1%).
- Nearly 9 out of 10 (89%) youth had a Twitter, Instagram, Facebook, online gaming, or other social network account.
- Of those who had an account, they reported the following:
  - Their account was currently checked private (63%)
  - They knew all their “friends” (56%)
  - Their parents had their password (23%)
  - They knew all the people they play online (25%)
  - Their friends had their password (12%)
  - They shared personal information (7%)
  - They had been asked to meet someone they met online (6%)
  - They were bullied because of their accounts (6%)
  - Their parents did not know they had an account (3%)
  - They had participated in sexual activity with someone they met online (2%)
- Over half (63%) of the youth who had a Twitter, Instagram, Facebook, online gaming, or other social network account believed that sharing information online is dangerous.

Youth Comparisons	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2017 (9 <sup>th</sup> -12 <sup>th</sup> )
Visited a dentist for a check-up within the past year	76%	78%	75%	72%	N/A

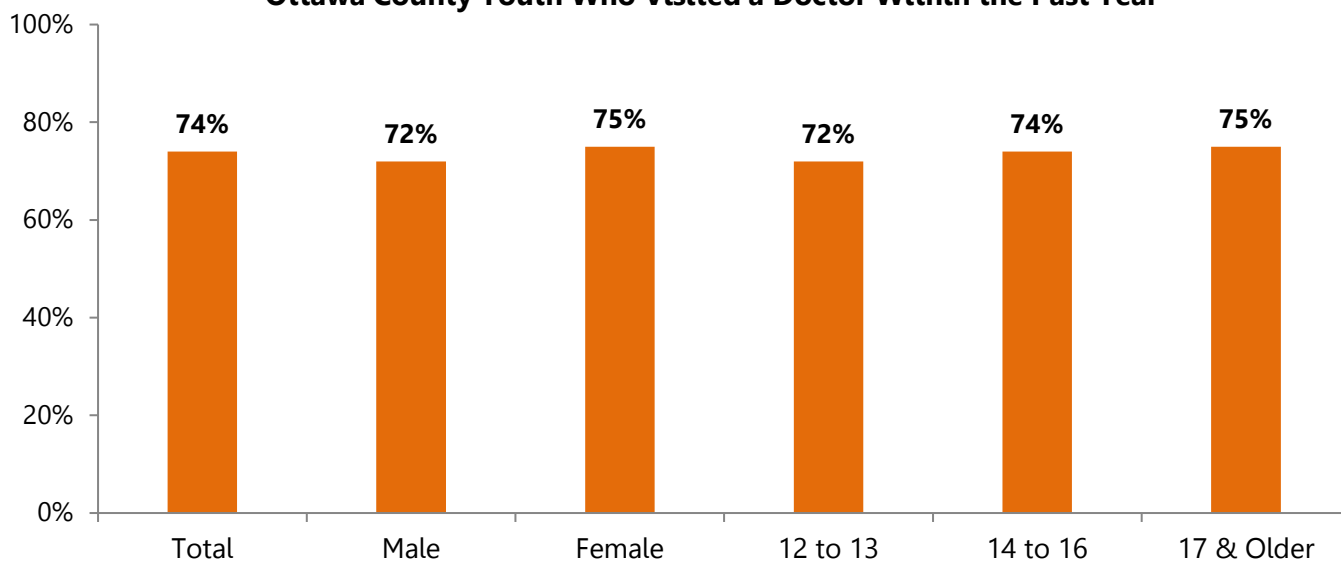
N/A- Not Available

The following graph provides information about the frequency of Ottawa County youth dental visits and routine doctor visits. Examples of how to interpret the information on the graphs include: 75% of all Ottawa County youth had been to the dentist in the past year, including 77% of females and 69% of those 17 and older.

**Ottawa County Youth Visiting a Dentist in the Past Year**



**Ottawa County Youth Who Visited a Doctor Within the Past Year**



## Economic Stability

- One out of twelve youth (8%) reported they went to bed hungry because their family did not have enough money for food at least one night per week.

## Social and Community Context

- Ottawa County youth lived with the following: both parents (56%), mother only (17%), mother and step-father (14%), father and step-mother (7%), father only (6%), grandparents (5%), mother and partner (3%), father and partner (3%), another relative (3%), guardians/foster parents (1%), and on their own with friends (1%).
- Youth indicated that their parent or guardian regularly talked to them about school (73%); asked about their homework (73%); made the family eat a meal together (63%); went to meetings or events at their school (60%); helped them with school work (50%); talked to them about healthy choices (46%); talked to them about social media (39%); and talked to them about drugs, alcohol and sex (33%). One out of eleven (9%) youth reported that their parent or guardian did not talk to them about any of these topics.
- Youth participated in the following extra-curricular activities: sports or intramural program (60%), exercised outside of school (47%), school club or social organization (30%), church or religious organization (15%), church youth group (13%), part-time job (26%), some other organized activity (13%), take care of siblings after school (18%), babysit for other kids (18%), volunteer in the community (12%), and take care of parents or grandparents (5%). One out of eleven (9%) youth did not participate in any extra-curricular activities.
- Youth did not participate in extra-curricular activities for the following reasons: they were not interested (27%), they did not fit in or feel comfortable (10%), they had a job (9%), transportation (7%), they could not afford it (6%), they had to watch younger siblings (5%), the activity did not exist or was not offered (3%), and their parents would not take them (2%).
- More than half (54%) of youth reported the following adverse childhood experiences (ACEs): parents became separated or were divorced (33%); parents or adults in home swore at them, insulted them or put them down (28%); family did not look out for each other, feel close to each other, or support each other (20%); lived with someone who was a problem drinker or alcoholic (13%); lived with someone who served time or was sentenced to serve in prison or jail (13%); lived with someone who was depressed, mentally ill or suicidal (10%); parents were not married (10%); lived with someone who used illegal drugs or misused prescription drugs (10%); parents or adults in the home abused each other (6%); parents or adults in home abused them (5%); did not have enough to eat, had to wear dirty clothes, and had no one to protect them (3%); an adult or someone 5 years older than them touched them sexually (3%); an adult or someone 5 years older than them made them touch them sexually (1%); and an adult or someone 5 years older than them forced them to have sex (1%).
- Nearly one-quarter (23%) of youth had three or more ACEs.

### What are Adverse Childhood Experiences?

- Adverse childhood experiences, or ACEs, are potentially traumatic events that occur in childhood (0-17 years). Examples include:
  - experiencing violence, abuse, or neglect
  - witnessing violence in the home or community
  - having a family member attempt or die by suicide
  - growing up in a household with substance misuse, mental health problems, or instability due to parental separation or household members being in jail or prison
- ACEs can have lasting, negative effects on health, well-being, and opportunity. These experiences can increase the risks of injury, sexually transmitted infections, maternal and child health problems, teen pregnancy, involvement in sex trafficking, and a wide range of chronic diseases and leading causes of death such as cancer, diabetes, heart disease, and suicide.
- ACEs are preventable. Creating and sustaining safe, stable, nurturing relationships and environments for all children and families can prevent ACEs and help all children reach their full potential.

(Source: CDC, Violence Prevention, Updated April 3, 2020)

**Behaviors of Ottawa County Youth**  
*Experienced 3 or More ACEs vs. Did Not Experience Any ACEs*

Youth Behaviors	Experienced 3 or More ACEs	Did Not Experience Any ACEs
<b>Participated in extracurricular activities</b>	89%	93%
<b>Had had at least one drink of alcohol in the past 30 days</b>	39%	14%
<b>Seriously considered attempting suicide in the past 12 months</b>	40%	3%
<b>Used marijuana in the past 30 days</b>	19%	1%
<b>Had smoked cigarettes in the past 30 days</b>	11%	1%
<b>Attempted suicide in the past 12 months</b>	17%	3%

*"ACEs" indicate youth who self-reported having experienced three or more adverse childhood experiences in their lifetime.*

### Preventing Adverse Childhood Experiences

ACEs are preventable. Creating and sustaining safe, stable, nurturing relationships and environments for all children and families can prevent ACEs and help all children reach their full potential. The CDC recommends the following approaches:

- **Strengthen economic supports to families** by strengthening household financial security and promoting family-friendly work policies.
- **Promote social norms that protect against violence and adversity** using public education campaigns, legislative approaches to reduce corporal punishment, bystander approaches, and encouraging men and boys to serve as allies in prevention efforts.
- **Ensure a strong start for children** by providing early childhood home visitation, high-quality childcare, and preschool enrichment with family engagement.
- **Teach skills** such as social-emotional learning, parenting skills, and family relationship approaches. Also provide safe dating and healthy relationship skill programs.
- **Connect youth to caring adults and activities** by offering mentoring and after-school programs.
- **Intervene to lessen immediate and long-term harms** by providing enhanced primary care, victim-centered services, treatment to lessen the harms of ACEs, treatment to prevent problem behavior and future involvement in violence, and family-centered treatment for substance use disorders.

*(Source: CDC, Violence Prevention, Updated April 3, 2020)*

# Youth Health: Violence

## Key Findings

*Eight percent (8%) of Ottawa County youth carried a weapon (such as a gun, knife or club) in the past month. Just over one-fifth (22%) of youth had been involved in a physical fight, increasing to 32% of males. Over two-fifths (41%) of youth had been bullied in the past year.*

## Violence-Related Behaviors

- About one out of twelve (8%) of youth carried a weapon (such as a gun, knife or club) in the past 30 days, increasing to 15% of males (YRBS reported 16% for the U.S. in 2017).
- One percent (1%) of youth had carried a weapon on school property in the past 30 days.
- Six percent (6%) of youth were threatened or injured with a weapon on school property in the past year (2017 YRBS reported 6% for the U.S.).
- Three percent (3%) of youth did not go to school on one or more days because they did not feel safe at school or on their way to or from school (YRBS reported 7% for the U.S. in 2017).

## Physical and Sexual Violence

- In the past year, 22% of youth had been involved in a physical fight, increasing to 32% of males (YRBS reported 24% for the U.S. in 2017).
- Of those who had been in a physical fight, 63% had been in a fight on more than one occasion.
- In the past year, 8% of youth had been involved in a physical fight on school property.
- Two percent (2%) of youth reported a boyfriend or girlfriend hit, slapped, or physically hurt them on purpose in the past 12 months (2017 YRBS reported 8% for the U.S.).
- In the past year, 3% of youth reported a parent or caregiver had hit, slapped or physically hurt them on purpose.
- One-fifth (20%) of youth purposefully hurt themselves by cutting, scratching, burning, hitting or biting, increasing to 29% of females.
- Four percent (4%) of youth reported someone touched them in an unsafe sexual way.
- Five percent (5%) of youth had been forced to participate in a sexual activity, increasing to 8% of those over the age of 17.

## Bullying

- Just over two-fifths (41%) of youth had been bullied in the past year. The following types of bullying were reported:
  - 32% of youth were verbally bullied (teased, taunted or called harmful names)
  - 25% of youth were indirectly bullied (spread mean rumors about them or kept them out of a “group”)
  - 11% of youth were cyber bullied (teased, taunted or threatened by e-mail or cell phone) (YRBS reported 15% for the U.S. in 2017)
  - 6% of youth were physically bullied (were hit, kicked, punched or people took their belongings)
  - 2% of youth were sexually bullied (used nude or semi-nude pictures to pressure someone to have sex that did not want to, blackmail, intimidate, or exploit another person)



- Nearly one-third (30%) of youth reported being bullied on school property in the past year.
- Thirty-seven percent (37%) of youth reported being a victim of teasing or name calling for the following reasons: weight, size, or physical appearance (30%); someone thought they were gay, lesbian or bisexual (10%); race or ethnic background (7%); and gender (3%).

### Types of Bullying Ottawa County Youth Experienced in Past Year

Youth Behaviors	Total	Male	Female	13 and younger	14-16 years old	17 and older
<b>Verbally Bullied</b>	32%	24%	41%	41%	28%	32%
<b>Indirectly Bullied</b>	25%	14%	38%	23%	26%	27%
<b>Cyber Bullied</b>	11%	7%	16%	11%	10%	15%
<b>Physically Bullied</b>	6%	8%	5%	14%	4%	3%
<b>Sexually Bullied</b>	2%	0%	5%	1%	3%	3%

### Behaviors of Ottawa County Youth

*Bullied vs. Non-Bullied*

Youth Behaviors	Bullied	Non-Bullied
<b>Participated in extracurricular activities</b>	88%	94%
<b>Felt sad or hopeless for two or more weeks in a row</b>	43%	13%
<b>Overweight or Obese</b>	31%	11%
<b>Had drank alcohol in the past 30 days</b>	28%	15%
<b>Seriously considered attempting suicide in the past 12 months</b>	25%	6%
<b>Had used marijuana in the past 30 days</b>	12%	3%
<b>Attempted suicide in the past 12 months</b>	11%	2%
<b>Had smoked cigarettes in the past 30 days</b>	7%	2%

### Healthy People 2020

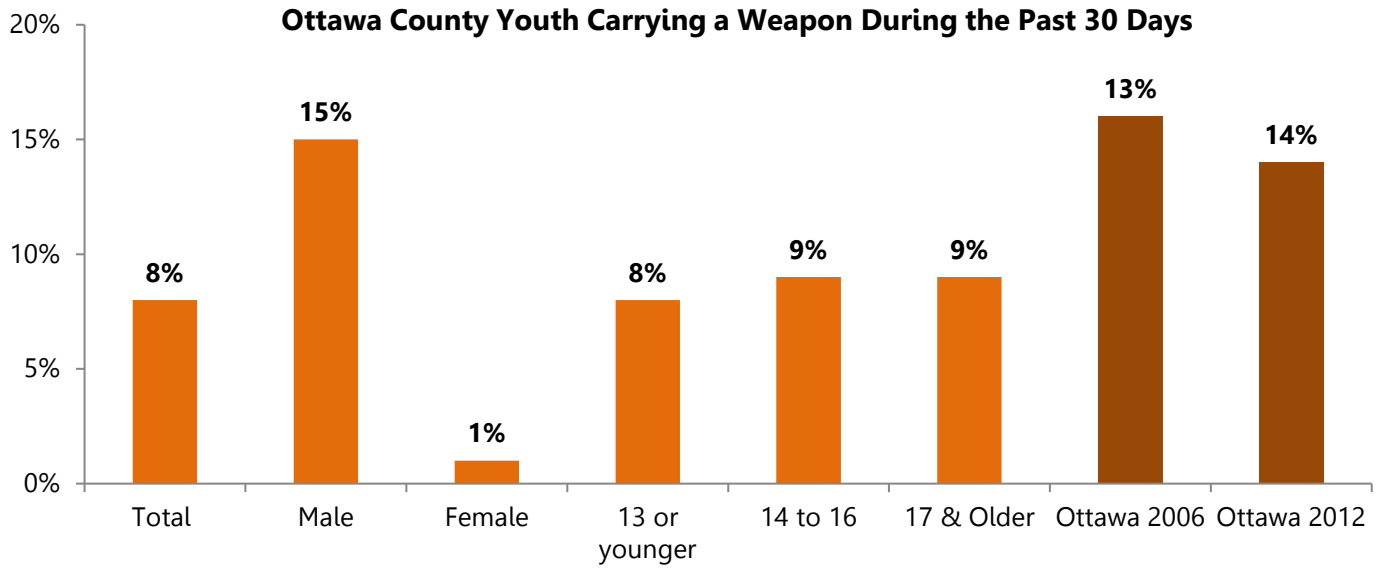
#### Injury and Violence Prevention (IVP)

Objective	Ottawa County 2017	U.S. 2017	Healthy People 2020 Target
<b>IVP-35 Reduce bullying among adolescents</b>	41% (6-12 Grade)  40% (9-12 Grade)	N/A	18%*

\*Note: The Healthy People 2020 target is for youth in grades 9-12 who reported they were bullied on school property in the past year. Recent YRBS data unavailable for Ohio.

(Sources: Healthy People 2020 Objectives, 2017 YRBS, CDC/NCHHSTP, 2017 Ottawa County Health Assessment)

The following graph shows Ottawa County youth who carried a weapon in the past 30 days. The graph shows 8% of all youth had carried a weapon in the past 30 days, including 15% of males and 1% of females.



Youth Comparisons	Ottawa County 2006 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2012 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (6 <sup>th</sup> -12 <sup>th</sup> )	Ottawa County 2017 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2017 (9 <sup>th</sup> -12 <sup>th</sup> )
Carried a weapon in past month	16%	14%	8%	8%	16%
Carried a weapon on school property in past month	3%	1%	1%	1%	4%
Been in a physical fight in past year	30%	26%	22%	19%	24%
Threatened or injured with a weapon on school property in past year	N/A	7%	6%	4%	6%
Did not go to school because felt unsafe	3%	6%	3%	3%	7%
Electronically/cyber bullied in past year	N/A	15%	11%	10%	15%
Bullied in past year	N/A	50%	41%	40%	N/A
Bullied on school property in past year	N/A	34%	30%	28%	19%
Hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend in past year	7%	6%	2%	2%	8%
Ever physically forced to have sexual intercourse	5%	3%	2%	2%	10%

N/A – Not available

# Appendix I: Health Assessment Information Sources

Source	Data Used	Website
American Cancer Society	<ul style="list-style-type: none"> <li>• Benefits of Quitting Smoking Over Time</li> </ul>	<a href="https://www.cancer.org/healthy/stay-away-from-tobacco/benefits-of- quitting-smoking-over-time.html">https://www.cancer.org/healthy/stay-away-from-tobacco/benefits-of- quitting-smoking-over-time.html</a>
	<ul style="list-style-type: none"> <li>• Guidelines for Diet and Physical Activity</li> </ul>	<a href="http://www.cancer.org/healthy/eat-healthy-get-active/acs-guidelines-nutrition-physical-activity-cancer-prevention/guidelines.html">www.cancer.org/healthy/eat-healthy-get-active/acs-guidelines-nutrition-physical-activity-cancer-prevention/guidelines.html</a>
	<ul style="list-style-type: none"> <li>• 2020 Cancer Facts, Figures, and Estimates</li> </ul>	<a href="http://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2020.html">www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2020.html</a>
American College of Allergy, Asthma & Immunology	<ul style="list-style-type: none"> <li>• Asthma Facts</li> </ul>	<a href="https://acaai.org/news/facts-statistics/asthma#:~:text=Asthma%20results%20in%20439%2C000%20hospitalizations%20and%201.3%20million%20emergency%20room%20visits%20annually.&amp;text=Asthma%20is%20the%20most%20common,lost%20work%20days%20for%20adults.">https://acaai.org/news/facts-statistics/asthma#:~:text=Asthma%20results%20in%20439%2C000%20hospitalizations%20and%201.3%20million%20emergency%20room%20visits%20annually.&amp;text=Asthma%20is%20the%20most%20common,lost%20work%20days%20for%20adults.</a>
Behavioral Risk Factor Surveillance System, National Center for Chronic Disease Prevention and Health Promotion, Behavioral Surveillance Branch, Centers for Disease Control	<ul style="list-style-type: none"> <li>• 2017 - 2018 Adult Ohio and U.S. Correlating Statistics</li> </ul>	<a href="http://www.cdc.gov/brfss/index.html">www.cdc.gov/brfss/index.html</a>
Centers for Disease Control and Prevention (CDC)	<ul style="list-style-type: none"> <li>• Adolescent and School Health: Sexual Risk Behaviors</li> </ul>	<a href="http://www.cdc.gov/healthyyouth/sexualbehaviors/index.htm">www.cdc.gov/healthyyouth/sexualbehaviors/index.htm</a>
	<ul style="list-style-type: none"> <li>• Adult Obesity Facts</li> </ul>	<a href="http://www.cdc.gov/obesity/data/adult.html">www.cdc.gov/obesity/data/adult.html</a>
	<ul style="list-style-type: none"> <li>• Adverse Childhood Experiences (ACEs)</li> <li>• Preventing Adverse Childhood Experiences</li> <li>• What are Adverse Childhood Experiences?</li> </ul>	<a href="http://www.cdc.gov/violenceprevention/acestudy/fastfact.html">www.cdc.gov/violenceprevention/acestudy/fastfact.html</a>
	<ul style="list-style-type: none"> <li>• Arthritis and Joint Pain Management</li> </ul>	<a href="http://www.cdc.gov/arthritis/pain/index.htm">www.cdc.gov/arthritis/pain/index.htm</a>
	<ul style="list-style-type: none"> <li>• Cancer and Men</li> </ul>	<a href="http://www.cdc.gov/cancer/dcpc/resources/features/cancerandmen/index.htm">www.cdc.gov/cancer/dcpc/resources/features/cancerandmen/index.htm</a>
	<ul style="list-style-type: none"> <li>• Caregiving: A Public Health Priority</li> </ul>	<a href="http://www.cdc.gov/aging/caregiving/caregiver-brief.html">www.cdc.gov/aging/caregiving/caregiver-brief.html</a>
	<ul style="list-style-type: none"> <li>• Children's Mental Health</li> </ul>	<a href="http://www.cdc.gov/childrensmentalhealth/depression.html">www.cdc.gov/childrensmentalhealth/depression.html</a>
	<ul style="list-style-type: none"> <li>• Cost of Smoking Related Illness</li> </ul>	<a href="http://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm">www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm</a>
	<ul style="list-style-type: none"> <li>• E-Cigarette Health Effects</li> <li>• Youth Electronic Cigarette Use</li> </ul>	<a href="http://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html">www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html</a>

Source	Data Used	Website
Centers for Disease Control and Prevention (CDC)	<ul style="list-style-type: none"> <li>Economic Costs of Excessive Alcohol Use</li> </ul>	<a href="http://www.cdc.gov/features/costsofdrinking/index.html#:~:text=Total%20costs,drinks%20per%20occasion%20for%20men.">www.cdc.gov/features/costsofdrinking/index.html#:~:text=Total%20costs,drinks%20per%20occasion%20for%20men.</a>
	<ul style="list-style-type: none"> <li>Facts About Oral Health</li> </ul>	<a href="http://www.cdc.gov/oralhealth/basics/adult-oral-health/index.html">www.cdc.gov/oralhealth/basics/adult-oral-health/index.html</a>
	<ul style="list-style-type: none"> <li>Influenza Vaccination</li> </ul>	<a href="http://www.cdc.gov/flu/prevent/flushot.htm">www.cdc.gov/flu/prevent/flushot.htm</a>
	<ul style="list-style-type: none"> <li>National Diabetes Statistics Report, 2020</li> </ul>	<a href="http://www.cdc.gov/diabetes/library/features/diabetes-stat-report.html">www.cdc.gov/diabetes/library/features/diabetes-stat-report.html</a>
	<ul style="list-style-type: none"> <li>Recommended Adult Immunization Schedule</li> </ul>	<a href="http://www.cdc.gov/vaccines/schedules/hcp/imz/adult.html">www.cdc.gov/vaccines/schedules/hcp/imz/adult.html</a>
	<ul style="list-style-type: none"> <li>Safe Sleep for Babies</li> </ul>	<a href="http://www.cdc.gov/media/releases/2018/p0109-sleep-related-deaths.html">www.cdc.gov/media/releases/2018/p0109-sleep-related-deaths.html</a>
	<ul style="list-style-type: none"> <li>Sexually Transmitted Disease Surveillance</li> </ul>	<a href="http://www.cdc.gov/std/life-stages-populations/adolescents-youngadults.htm">www.cdc.gov/std/life-stages-populations/adolescents-youngadults.htm</a>
	<ul style="list-style-type: none"> <li>State Indicator Report on Fruits and Vegetables</li> </ul>	<a href="http://www.cdc.gov/nutrition/data-statistics/2018-state-indicator-report-fruits-vegetables.html">www.cdc.gov/nutrition/data-statistics/2018-state-indicator-report-fruits-vegetables.html</a>
	<ul style="list-style-type: none"> <li>Suicide Facts, Violence Prevention</li> </ul>	<a href="http://www.cdc.gov/violenceprevention/suicide/fastfact.html">www.cdc.gov/violenceprevention/suicide/fastfact.html</a>
	<ul style="list-style-type: none"> <li>The State of STDs in the U.S,</li> </ul>	<a href="http://www.cdc.gov/std/stats18/default.htm">www.cdc.gov/std/stats18/default.htm</a>
	<ul style="list-style-type: none"> <li>Underage Drinking</li> </ul>	<a href="http://www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm">www.cdc.gov/alcohol/fact-sheets/underage-drinking.htm</a>
	<ul style="list-style-type: none"> <li>Youth Tobacco Use</li> </ul>	<a href="http://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm">www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm</a>
CDC, Wonder	<ul style="list-style-type: none"> <li>About Underlying Cause of Death, 2016-2018</li> <li>U.S. Causes of Death, 2016-2018</li> </ul>	<a href="https://wonder.cdc.gov/ucd-icd10.html">https://wonder.cdc.gov/ucd-icd10.html</a>
County Health Rankings	<ul style="list-style-type: none"> <li>Ottawa County, Ohio, and U.S. Rankings</li> <li>Food Environment Index</li> </ul>	<a href="http://www.countyhealthrankings.org/">www.countyhealthrankings.org/</a>
Department of Health and Human Services	<ul style="list-style-type: none"> <li>Physical Activity Guidelines for Americans</li> </ul>	<a href="https://health.gov/our-work/physical-activity/current-guidelines">https://health.gov/our-work/physical-activity/current-guidelines</a>
Healthy People 2020: U.S. Department of Health & Human Services	<ul style="list-style-type: none"> <li>All Healthy People 2020 Target Data Points</li> <li>Social Determinants of Health</li> </ul>	<a href="http://www.healthypeople.gov/2020/topics-objectives">www.healthypeople.gov/2020/topics-objectives</a>
Kaiser Family Foundation	<ul style="list-style-type: none"> <li>Social Determinants of Health</li> </ul>	<a href="http://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/">www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/</a>

Source	Data Used	Website
Ohio Automated Rx Reporting System	<ul style="list-style-type: none"> <li>Ottawa County and Ohio Opiate and Pain Reliever Doses per Capita, 2015-2019</li> <li>Ottawa County and Ohio Opiate and Pain Reliever Doses per Patient</li> </ul>	<a href="http://www.ohiopmp.gov/Reports.aspx">www.ohiopmp.gov/Reports.aspx</a>
Ohio Department of Health, Bureau of Vital Statistics, 2018 Ohio Infant Mortality Report	<ul style="list-style-type: none"> <li>Ohio Infant Mortality Data, 2018</li> </ul>	<a href="https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/infant-and-fetal-mortality/reports/2018-ohio-infant-mortality-report">https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/infant-and-fetal-mortality/reports/2018-ohio-infant-mortality-report</a>
Ohio Department of Health, Bureau of Vital Statistics, Violence and Injury Prevention Section, 2018 Ohio Drug Overdose Data: General Findings.	<ul style="list-style-type: none"> <li>Ohio Unintentional Drug Overdose Death Data, 2018</li> </ul>	<a href="https://odh.ohio.gov/wps/wcm/connect/gov/d9ee6d3b-bf62-4b4f-8978-d7cfd11348f/2018_OhioDrugOverdoseReport.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-d9ee6d3b-bf62-4b4f-8978-d7cfd11348f-mXhFqNO">https://odh.ohio.gov/wps/wcm/connect/gov/d9ee6d3b-bf62-4b4f-8978-d7cfd11348f/2018_OhioDrugOverdoseReport.pdf?MOD=AJPERES&amp;CONVERT_TO=url&amp;CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-d9ee6d3b-bf62-4b4f-8978-d7cfd11348f-mXhFqNO</a>
Ohio Department of Health, Public Health Data Warehouse	<ul style="list-style-type: none"> <li>Ottawa County and Ohio Leading Causes of Death, 2014-2018</li> </ul>	<a href="http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality">http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality</a>
	<ul style="list-style-type: none"> <li>Ottawa County and Ohio Birth Resident Data, 2014-2018</li> </ul>	<a href="http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/OhioLiveBirths">http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/OhioLiveBirths</a>
	<ul style="list-style-type: none"> <li>Ottawa County Cancer Incidence Surveillance System, 2013-2017</li> </ul>	<a href="http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/StateLayoutLockdownCancers">http://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/StateLayoutLockdownCancers</a>
Ohio Department of Health, STD Surveillance	<ul style="list-style-type: none"> <li>STD Surveillance, 2014-2018</li> </ul>	<a href="https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/std-surveillance/data-and-statistics/sexually-transmitted-diseases-data-and-statistics">https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/std-surveillance/data-and-statistics/sexually-transmitted-diseases-data-and-statistics</a>
Ohio Development Services Agency	<ul style="list-style-type: none"> <li>Ohio Poverty Report, February 2019</li> </ul>	<a href="http://www.development.ohio.gov/files/research/p7005.pdf">www.development.ohio.gov/files/research/p7005.pdf</a>
Ohio State Highway Patrol	<ul style="list-style-type: none"> <li>Felony Cases and Drug Arrests</li> </ul>	<a href="https://ohiohighwaysafetyoffice.ohio.gov/stats/2019_FelonyAndDrug.pdf">https://ohiohighwaysafetyoffice.ohio.gov/stats/2019_FelonyAndDrug.pdf</a>

Source	Data Used	Website
U. S. Department of Commerce, Census Bureau; Bureau of Economic Analysis	<ul style="list-style-type: none"> <li>• American Community Survey 5 year estimate, 2018</li> <li>• Ohio and Ottawa County 2018 Census Demographic Information</li> <li>• Ohio and U.S. Health Insurance Sources</li> <li>• Small Area Income and Poverty Estimates</li> <li>• Federal Poverty Thresholds</li> </ul>	<a href="https://data.census.gov/cedsci/">https://data.census.gov/cedsci/</a>
U.S. Department of Health and Human Services	<ul style="list-style-type: none"> <li>• Eating Disorders in Adolescence</li> </ul>	<a href="http://www.hhs.gov/ash/oah/news/e-updates/april-2018-eating-disorders/index.html">www.hhs.gov/ash/oah/news/e-updates/april-2018-eating-disorders/index.html</a>
	<ul style="list-style-type: none"> <li>• Physical Activity Guidelines for Americans</li> </ul>	<a href="https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf">https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf</a>
Youth Risk Behavior Surveillance System, National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health, Centers for Disease Control	<ul style="list-style-type: none"> <li>• 2017 Youth U.S. correlating statistics</li> </ul>	<a href="http://www.cdc.gov/healthyyouth/data/yrebs/index.htm">www.cdc.gov/healthyyouth/data/yrebs/index.htm</a>

## Appendix II: Acronyms and Terms

<b>AHS</b>	<b>A</b> ccess to <b>H</b> ealth <b>S</b> ervices, Topic of Healthy People 2020 objectives
<b>Adult</b>	Defined as 19 years of age and older.
<b>Age-Adjusted Mortality Rates</b>	Death rate per 100,000 adjusted for the age distribution of the population.
<b>Adult Binge Drinking</b>	Consumption of five alcoholic beverages or more (for males) or four or more alcoholic beverages (for females) on one occasion.
<b>AOCBC</b>	<b>A</b> rthritis, <b>O</b> steoporosis, and <b>C</b> hronic <b>B</b> ack <b>C</b> onditions
<b>BMI</b>	<b>B</b> ody <b>M</b> ass <b>I</b> ndex is defined as the contrasting measurement/relationship of weight to height.
<b>BRFSS</b>	<b>B</b> ehavior <b>R</b> isk <b>F</b> actor <b>S</b> urveillance <b>S</b> ystem, an adult survey conducted by the CDC.
<b>CDC</b>	<b>C</b> enters for <b>D</b> isease <b>C</b> ontrol and <b>P</b> revention.
<b>Current Smoker</b>	Individual who has smoked at least 100 cigarettes in their lifetime and now smokes daily or on some days.
<b>CY</b>	<b>C</b> alendar <b>Y</b> ear
<b>FPL</b>	<b>F</b> ederal <b>P</b> overty <b>L</b> ine
<b>FY</b>	<b>F</b> iscal <b>Y</b> ear
<b>HCNO</b>	<b>H</b> ospital <b>C</b> ouncil of <b>N</b> orthwest <b>O</b> hio
<b>HDS</b>	<b>H</b> eat <b>D</b> isease and <b>S</b> troke, Topic of Healthy People 2020 objectives
<b>HP 2020</b>	<b>H</b> ealthy <b>P</b> eople <b>2020</b> , a comprehensive set of health objectives published by the Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services.
<b>Health Indicator</b>	A measure of the health of people in a community, such as cancer mortality rates, rates of obesity, or incidence of cigarette smoking.
<b>High Blood Cholesterol</b>	240 mg/dL and above
<b>High Blood Pressure</b>	Systolic $\geq 140$ and Diastolic $\geq 90$
<b>IID</b>	<b>I</b> mmunizations and <b>I</b> nfectious <b>D</b> iseases, Topic of Healthy People 2020 objectives
<b>N/A</b>	Data is not available.
<b>NSCH</b>	<b>N</b> ational <b>S</b> urvey of <b>C</b> hildren's <b>H</b> ealth
<b>ODH</b>	<b>O</b> hio <b>D</b> epartment of <b>H</b> ealth
<b>OSHP</b>	<b>O</b> hio <b>S</b> tate <b>H</b> ighway <b>P</b> atrol

<b>Race/Ethnicity</b>	<b>Census 2010:</b> 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.
<b>Weapon</b>	Defined in the YRBS as “a weapon such as a gun, knife, or club”
<b>Youth</b>	Defined as 12 through 18 years of age
<b>YPLL/65</b>	Years of <b>P</b> otential <b>L</b> ife <b>L</b> ost before age 65. Indicator of premature death.
<b>Youth BMI Classifications</b>	<b>Underweight</b> is defined as BMI-for-age $\leq$ 5 <sup>th</sup> percentile <b>Overweight</b> is defined as BMI-for-age 85 <sup>th</sup> percentile to < 95 <sup>th</sup> percentile. <b>Obese</b> is defined as $\geq$ 95 <sup>th</sup> percentile.
<b>YRBS</b>	Youth <b>R</b> isk <b>B</b> ehavior <b>S</b> urvey, a youth survey conducted by the CDC



# Appendix III: Methods for Weighting the 2017 Ottawa County Health Assessment Data

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

In some cases, the procedures of the survey methods may purposefully over-sample a segment of the population in order to gain an appropriate number of responses from that subgroup for appropriate data analysis when investigating them separately (this is often done for minority groups). Whether the over-sampling is done inadvertently or purposefully, the data needs to be weighted so that the proportioned characteristics of the sample accurately reflect the proportioned characteristics of the population. In the 2016 Ottawa County survey, a weighting was applied prior to the analysis that weighted the survey respondents to reflect the actual distribution of Ottawa County based on age, sex, race, and income.

Weightings were created for each category within sex (male, female), race (White, Non-White), Age (7 different age categories), and income (9 different income categories). The numerical value of the weight for each category was calculated by taking the percent of Ottawa 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 Ottawa County Survey and the 2015 Census estimates.

<u>Sex</u>	<u>2017 Ottawa Survey</u>		<u>2015 Census Estimates</u>		<u>Weight</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
Male	230	45.81673	20,432	49.63802	1.083404
Female	272	54.18327	20,730	50.36198	0.929475

In this example, it shows that there was a slightly larger portion of females in the sample compared to the actual portion in Ottawa County. The weighting for males was calculated by taking the percent of males in Ottawa County (based on Census information) (49.63802%) and dividing that by the percent found in the 2016 Ottawa County sample (45.81673%) [49.63802 / 45.81673 = weighting of 1.083404 for males]. The same was done for females [50.36198 / 54.18327 = weighting of 0.929475 for females]. Thus males' responses are weighted heavier by a factor of 1.083404 and females' responses weighted less by a factor of 0.929475.

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 1.368314 [0.929475 (weight for females) x 0.98464 (weight for White) x 1.48784 (weight for age 35-44) x 1.00488 (weight for income \$50-\$75k)]. Thus, each individual in the 2016 Ottawa 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 23.0) 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	Ottawa Sample	%	2015 Census Estimate*	%	Weighting Value
<b>Sex:</b>					
Male	230	45.81673	20,432	49.63802	1.083404
Female	272	54.18327	20,730	50.36198	0.929475
<b>Age:</b>					
20-24	1	0.19011	1,899	5.90008	31.03442
25-34	19	3.61217	3,905	12.13260	3.35882
35-44	49	9.31559	4,461	13.86006	1.48784
45-54	78	14.82890	6,211	19.29721	1.30132
55-59	64	12.16730	3,673	11.41179	0.93791
60-64	82	15.58935	3,318	10.30883	0.66127
65+	227	43.15589	8,719	27.08942	0.62771
<b>Race:</b>					
White	490	94.04990	38,118	92.60483	0.98464
Non-White	31	5.95010	3,044	7.39517	1.24287
<b>Household Income:</b>					
Less than \$10,000	15	3.12500	712	4.10753	1.31441
\$10k-\$15k	22	4.58333	844	4.86904	1.06234
\$15k-\$25k	67	13.95833	1,728	9.96885	0.71419
\$25k-\$35k	62	12.91667	1,964	11.33033	0.87719
\$35k-\$50	74	15.41667	2,773	15.99746	1.03767
\$50k-\$75k	97	20.20833	3,520	20.30691	1.00488
\$75k-\$100k	55	11.45833	2,138	12.33414	1.07643
\$100k-\$150k	53	11.04167	2,381	13.73601	1.24402
\$150k or more	35	7.29167	1,274	7.34972	1.00796

Note: The weighting ratios are calculated by taking the ratio of the proportion of the population of Ottawa County in each subcategory by the proportion of the sample in the Ottawa County survey for that same category.

\* Ottawa County population figures taken from the 2015 Census estimates.

# Appendix IV: School Participation

*The following schools were randomly chosen and agreed to participate in the 2017 Ottawa County Health Assessment:*

## **Benton-Carroll-Salem Local Schools**

Oak Harbor Middle School  
Oak Harbor High School

## **Genoa Area Local Schools**

Genoa Area Middle School  
Genoa Area High School

## **Port Clinton City Schools**

Port Clinton Middle School  
Port Clinton High School

# Appendix V: Ottawa County Sample Demographic Profile\*

Variable	2017 Survey Sample	Ottawa County Census 2014-2018 (5 year estimate)	Ohio Census 2015
<b>Age</b>			
20-29	3.8%	9.1%	13.2%
30-39	14.2%	10.1%	12.5%
40-49	17.9%	11.6%	12.1%
50-59	23.6%	15.9%	13.5%
60 plus	39.0%	32.5%	23.9%
<b>Race/Ethnicity</b>			
White	95.3%	95.6%	81.0%
Black or African American	0.8%	1.1%	12.4%
American Indian and Alaska Native	0%	0.2%	0.2%
Asian	1.6%	0.2%	2.3%
Other	2.4%	1.4%	1.0%
Hispanic Origin (may be of any race)	3.3%	5.0%	3.9%
<b>Marital Status†</b>			
Married Couple	61.2%	56.9%	46.8%
Never been married/member of an unmarried couple	13.2%	23.0%	33.2%
Divorced/Separated	15.1%	12.0%	13.7%
Widowed	9.7%	8.0%	6.2%
<b>Education†</b>			
Less than High School Diploma	3.5%	9.9%	9.3%
High School Diploma	27.7%	33.3%	32.7%
Some college/ College graduate	68.0%	56.9%	57.9%
<b>Income (Families)</b>			
\$14,999 and less	6.9%	4.5%	6.5%
\$15,000 to \$24,999	10.0%	4.9%	6.2%
\$25,000 to \$49,999	23.8%	23.2%	20.2%
\$50,000 to \$74,999	21.7%	19.3%	19.2%
\$75,000 or more	30.6%	48.3%	48.0%

\* 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 Ottawa 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 VI: Demographics and Household Information

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

Age	Total	Males	Females
<b>Ottawa County</b>	<b>41,428</b>	<b>20,437</b>	<b>20,991</b>
<b>0-4 years</b>	<b>2,033</b>	<b>1,005</b>	<b>1,028</b>
1-4 years	1,660	829	831
< 1 year	373	176	197
1-2 years	825	425	400
3-4 years	835	404	431
<b>5-9 years</b>	<b>2,334</b>	<b>1,179</b>	<b>1,155</b>
5-6 years	881	447	434
7-9 years	1,453	732	721
<b>10-14 years</b>	<b>2,557</b>	<b>1,323</b>	<b>1,234</b>
10-12 years	1,525	780	745
13-14 years	1,032	543	489
12-18 years	3,696	1,931	1,765
<b>15-19 years</b>	<b>2,567</b>	<b>1,348</b>	<b>1,219</b>
15-17 years	1,671	887	784
18-19 years	896	461	435
20-24 years	1,822	937	885
25-29 years	1,850	933	917
30-34 years	1,939	981	958
35-39 years	2,242	1,110	1,132
40-44 years	2,561	1,250	1,311
45-49 years	3,301	1,636	1,665
50-54 years	3,690	1,831	1,859
55-59 years	3,466	1,733	1,733
60-64 years	3,198	1,615	1,583
65-69 years	2,569	1,284	1,285
70-74 years	1,811	869	942
75-79 years	1,388	639	749
80-84 years	1,098	468	630
85-89 years	666	209	457
90-94 years	269	69	200
95-99 years	56	15	41
100-104 years	11	3	8
105-109 years	0	0	0
110 years & over	0	0	0
<b>Total 85 years and over</b>	<b>1,002</b>	<b>296</b>	<b>706</b>
<b>Total 65 years and over</b>	<b>7,868</b>	<b>3,556</b>	<b>4,312</b>
<b>Total 19 years and over</b>	<b>32,342</b>	<b>15,786</b>	<b>16,556</b>

# OTTAWA COUNTY PROFILE

(Source: U.S. Census Bureau, 2018)  
2014-2018 ACS 5-year estimates

## General Demographic Characteristics

	Number	Percent (%)
<b>Total Population</b>		
2018 Total Population	40,709	100%
<b>Largest City – Port Clinton City</b>		
2018 Total Population	5,939	100%
<b>Population by Race/Ethnicity</b>		
Total Population	40,709	100%
White	38,906	95.6%
African American	467	1.1%
American Indian and Alaska Native	90	0.2%
Asian	75	0.2%
Some other race	555	1.4%
Hispanic or Latino (of any race)	2,046	5.0%
<b>Population by Age</b>		
Under 5 years	1,724	4.2%
5 to 14 years	4,465	11.0%
15 to 24 years	4,218	10.3%
25 to 44 years	8,065	19.8%
45 to 64 years	12,639	31.1%
65 years and more	9,598	23.6%
<b>Median age (years)</b>	<b>49.0</b>	N/A
<b>Household by Type</b>		
Total households	17,691	100%
Total families	11,915	67.4%
Households with children <18 years	3,794	21.4%
Married-couple family household	9,417	53.2%
Married-couple family household with children <18 years	2,571	14.5%
Female householder, no husband present	1,710	9.7%
Female householder, no husband present with children <18 years	839	4.7%
Nonfamily household (single person)	5,776	32.6%
Nonfamily household (single person) living alone	4,886	27.6%
Nonfamily household (single person) 65 years and >	2,466	13.9%
Households with one or more people <18 years	4,423	25.0%
Households with one or more people 60 years and >	8,828	49.9%
Average household size	2.25 people	N/A
Average family size	2.71 people	N/A

**General Demographic Characteristics, Continued**

<b>Housing Occupancy</b>		
Median value of owner-occupied units	\$148,400	N/A
Median housing units with a mortgage	\$1,217	N/A
Median housing units without a mortgage	\$435	N/A
Median value of occupied units paying rent	\$724	N/A
Median rooms per total housing unit	5.8	N/A
Total occupied housing units	17,691	62.3%
No telephone service available	466	2.6%
Lacking complete kitchen facilities	151	0.9%
Lacking complete plumbing facilities	35	0.2%

**Selected Social Characteristics**

<b>School Enrollment</b>		
Population 3 years and over enrolled in school	7954	100%
Nursery & preschool	554	7.0%
Kindergarten	396	5.0%
Elementary School (Grades 1-8)	3,662	46.1%
High School (Grades 9-12)	2,109	26.5%
College or Graduate School	1,233	15.5%
<b>Educational Attainment</b>		
Population 25 years and over	30,302	100%
< 9 <sup>th</sup> grade education	702	2.3%
9 <sup>th</sup> to 12 <sup>th</sup> grade, no diploma	1,716	5.7%
High school graduate (includes equivalency)	10,747	35.5%
Some college, no degree	7,033	23.2%
Associate degree	3,307	10.9%
Bachelor's degree	4,306	14.2%
Graduate or professional degree	2,491	8.2%
Percent high school graduate or higher	27,884	92.0%
Percent Bachelor's degree or higher	6,797	22.4%
<b>Marital Status</b>		
Population 15 years and over	34,520	100.0%
Never married	7940	23.0%
Now married, excluding separated	19642	56.9%
Separated	380	1.1%
Widowed	2762	8.0%
Widowed females	2,030	5.9%
Divorced	3763	10.9%
Divorced females	1,960	5.7%
<b>Veteran Status</b>		
Civilian population 18 years and over	32,911	100%
Veterans 18 years and over	3,468	10.5%

***Selected Social Characteristics, Continued***

<b><i>Disability Status of the Civilian Non-Institutionalized Population</i></b>		
Total civilian noninstitutionalized population	40,272	100%
Civilian with a disability	6,327	15.7%
Under 18 years	7,772	19.3%
Under 18 years with a disability	427	5.5%
18 to 64 years	23,177	57.6%
18 to 64 years with a disability	2,561	11.0%
65 Years and over	9,323	23.2%
65 Years and over with a disability	3,339	35.8%

***Selected Economic Characteristics***

<b><i>Employment Status</i></b>		
Population 16 years and over	34,057	100%
16 years and over in labor force	20,439	60.0%
16 years and over not in labor force	13,618	40.0%
Females 16 years and over	17,307	50.8%
Females 16 years and over in labor force	9,504	46.5%
Population living with own children <6 years	1,921	100%
All parents in family in labor force	1,457	75.8%
<b><i>Class of Worker</i></b>		
Civilian employed population 16 years and over	19,463	100.0%
Private wage and salary workers	16,337	83.9%
Government workers	2,016	10.4%
Self-employed in own not incorporated business workers	1,094	5.6%
Unpaid family workers	16	0.1%
<b><i>Occupations</i></b>		
Civilian employed population 16 years and over	19,463	100.0%
Management, business, science, and arts occupations	6,181	31.8%
Production, transportation, and material moving occupations	4,119	21.2%
Service occupations	3,705	19.0%
Sales and office occupations	3,659	18.8%
Natural resources, construction, and maintenance occupations	1,799	9.2%
<b><i>Leading Industries</i></b>		
Employed civilian population 16 years and over	19,463	100.0%
Manufacturing	3,746	19.2%
Arts, entertainment, and recreation, and accommodation and food services	2,214	11.4%
Retail trade	1,823	9.4%
Transportation and warehousing, and utilities	1,601	8.2%
Professional, scientific, and management, and administrative and waste management services	1,239	6.4%
Construction	1,152	5.9%
Finance and insurance, and real estate and rental and leasing	779	4.0%
Other services, except public administration	751	3.9%
Public administration	673	3.5%
Agriculture, forestry, fishing and hunting, and mining	340	1.7%
Wholesale trade	320	1.6%
Information	221	1.1%



***Selected Economic Characteristics, Continued***

<b><i>Income In 2018</i></b>		
Households	17,691	100%
< \$10,000	808	4.6%
\$10,000 to \$14,999	559	3.2%
\$15,000 to \$24,999	1,574	8.9%
\$25,000 to \$34,999	1,938	11.0%
\$35,000 to \$49,999	2,718	15.4%
\$50,000 to \$74,999	3,360	19.0%
\$75,000 to \$99,999	2,265	12.8%
\$100,000 to \$149,999	2,998	16.9%
\$150,000 to \$199,999	740	4.2%
\$200,000 or more	731	4.1%
<b>Median household income</b>	<b><i>\$57,918</i></b>	N/A
<b><i>Income in 2018</i></b>		
Families	11,915	100%
< \$10,000	334	2.8%
\$10,000 to \$14,999	198	1.7%
\$15,000 to \$24,999	579	4.9%
\$25,000 to \$34,999	1,107	9.3%
\$35,000 to \$49,999	1,654	13.9%
\$50,000 to \$74,999	2,294	19.3%
\$75,000 to \$99,999	1,897	15.9%
\$100,000 to \$149,999	2,551	21.4%
\$150,000 to \$199,999	651	5.5%
\$200,000 or more	650	5.5%
<b>Median family income</b>	<b><i>\$72,652</i></b>	N/A
<b>Per capita income in 2018</b>	<b><i>\$33,081</i></b>	N/A
<b><i>Poverty Status in 2018</i></b>		
Families	N/A	6.8%
Individuals	N/A	10.4%

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

	<b>Income</b>	<b>Rank of Ohio Counties</b>
BEA Per Capita Personal Income 2018	\$51,637	10 <sup>th</sup> of 88 counties
BEA Per Capita Personal Income 2017	\$49,171	11 <sup>th</sup> of 88 counties
BEA Per Capita Personal Income 2016	\$47,787	12 <sup>th</sup> of 88 counties
BEA Per Capita Personal Income 2015	\$45,923	14 <sup>th</sup> of 88 counties
BEA Per Capita Personal Income 2014	\$44,317	14 <sup>th</sup> of 88 counties

*(Source: Bureau of Economic Analysis, [https://apps.bea.gov/iTable/index\\_regional.cfm](https://apps.bea.gov/iTable/index_regional.cfm))*

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

**Poverty Rates, 5-year averages  
2013 to 2017**

Category	Ottawa	Ohio
Population in poverty	10.5%	14.9%
< 125% FPL (%)	14.8%	19.3%
< 150% FPL (%)	18.5%	23.6%
< 200% FPL (%)	27.1%	32.5%
Population in poverty (2000)	5.9%	10.6%

*(Source: The Ohio Poverty Report, Ohio Development Services Agency, February 2019,  
<https://www.development.ohio.gov/files/research/p7005.pdf>)*

**Employment Statistics**

Category	Ottawa	Ohio
Labor Force	20,800	5,849,200
Employed	18,600	5,198,900
Unemployed	2,200	650,300
Unemployment Rate* in June 2020	10.6	11.1
Unemployment Rate* in May 2020	14.1	13.5
Unemployment Rate* in June 2019	4.2	4.3

*\*Rate equals unemployment divided by labor force.*

*(Source: Ohio Department of Job and Family Services, June 2020, <https://ohiolmi.com/portals/206/LAUS/OhioCivilianLaborForceEstimates.pdf>)*

### Estimated Poverty Status in 2018

Age Groups	Number	90% Confidence Interval	Percent	90% Confidence Interval
<b>Ottawa County</b>				
All ages in poverty	3,807	3,15316 to 4,461	9.5%	7.9 to 11.1
Ages 0-17 in poverty	931	690 to 1,172	12.5%	9.3 to 15.7
Ages 5-17 in families in poverty	641	455 to 827	11.3%	8.0 to 14.6
Median household income	\$58,345	\$53,401 to \$63,289		
<b>Ohio</b>				
All ages in poverty	1,568,586	1,542,309 to 1,594,863	13.8%	13.6 to 14.0
Ages 0-17 in poverty	489,053	474,343 to 503,763	19.2%	18.6 to 19.8
Ages 5-17 in families in poverty	329,764	317,103 to 342,425	17.8%	17.1 to 18.5
Median household income	\$56,155	\$55,735 to \$56,575		
<b>United States</b>				
All ages in poverty	41,852,315	41,619,366 to 42,085,264	13.1%	13.0 to 13.2
Ages 0-17 in poverty	12,997,532	12,873,127 to 13,121,937	18.0%	17.8 to 18.2
Ages 5-17 in families in poverty	8,930,152	8,834,521 to 9,025,783	17.0%	16.8 to 17.2
Median household income	\$61,937	\$61,843 to \$62,031		

(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, <https://www.census.gov/data/datasets/2018/demo/saipe/2018-state-and-county.html>)

### Federal Poverty Thresholds in 2019 by Size of Family and Number of Related Children Under 18 Years of Age

Size of Family Unit	No Children	One Child	Two Children	Three Children	Four Children	Five Children
1 Person <65 years	\$13,300					
1 Person 65 and >	\$12,261					
2 people Householder < 65 years	\$17,120	\$17,622				
2 People Householder 65 and >	\$15,453	\$17,555				
3 People	\$19,998	\$20,578	\$20,598			
4 People	\$26,370	\$26,801	\$25,926	\$26,017		
5 People	\$31,800	\$32,263	\$31,275	\$30,510	\$30,044	
6 People	\$36,576	\$36,721	\$35,965	\$35,239	\$34,161	\$33,522
7 People	\$42,085	\$42,348	\$41,442	\$40,811	\$39,635	\$38,262
8 People	\$47,069	\$47,485	\$46,630	\$45,881	\$44,818	\$43,470
9 People or >	\$56,621	\$56,895	\$56,139	\$55,503	\$54,460	\$53,025

(Source: U. S. Census Bureau, Poverty Thresholds 2019, <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>)

## Appendix VII: County Health Rankings

	Ottawa County 2020	Ohio 2020	U.S. 2020
<b>Health Outcomes</b>			
<b>Premature death.</b> Years of potential life lost before age 75 per 100,000 population (age-adjusted) (2016-2018)	8,700	8,600	6,900
<b>Overall health.</b> Percentage of adults reporting fair or poor health (age-adjusted) (2017)	14%	18%	17%
<b>Physical health.</b> Average number of physically unhealthy days reported in past 30 days (age-adjusted) (2017)	3.9	3.9	3.8
<b>Mental health.</b> Average number of mentally unhealthy days reported in past 30 days (age-adjusted) (2017)	4.2	4.6	4.0
<b>Maternal and infant health.</b> Percentage of live births with low birthweight (< 2500 grams) (2012-2018)	7%	9%	8%
<b>Health Behaviors</b>			
<b>Tobacco.</b> Percentage of adults who are current smokers (2017)	17%	21%	17%
<b>Obesity.</b> Percentage of adults that report a BMI of 30 or more (2016)	34%	32%	29%
<b>Food environment.</b> Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best) (2015-2017)	7.9	6.7	7.6
<b>Physical inactivity.</b> Percentage of adults aged 20 and over reporting no leisure-time physical activity (2016)	28%	26%	23%
<b>Active living environment.</b> Percentage of population with adequate access to locations for physical activity (2010 & 2019)	75%	84%	84%
<b>Drug and alcohol abuse.</b> Percentage of adults reporting binge or heavy drinking (2017)	17%	20%	19%
<b>Drug and alcohol abuse and injury.</b> Percentage of driving deaths with alcohol involvement (2014-2018)	41%	33%	28%
<b>Infectious disease.</b> Number of newly diagnosed chlamydia cases per 100,000 population (2017)	214.0	526.6	524.6
<b>Sexual and reproductive health.</b> Teen birth rate per 1,000 female population, ages 15-19 (2012-2018)	19	24	23

Source: 2020 County Health Rankings for Ottawa County, Ohio and U.S. data

	Ottawa County 2020	Ohio 2020	U.S. 2020
<b>Clinical Care</b>			
<b>Coverage and affordability.</b> Percentage of population under age 65 without health insurance (2017)	7%	7%	10%
<b>Access to health care/medical care.</b> Ratio of population to primary care physicians (2017)	2,260:1	1,310:1	1,330:1
<b>Access to dental care.</b> Ratio of population to dentists (2018)	2,260:1	1,610:1	1,450:1
<b>Access to behavioral health care.</b> Ratio of population to mental health providers (2019)	1,270:1	410:1	400:1
<b>Hospital utilization.</b> Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees (2017)	4,611	5,168	4,535
<b>Mammography screening.</b> Percentage of female Medicare enrollees ages 67-69 that receive mammography screening (2017)	49%	43%	42%
<b>Flu vaccinations.</b> Percentage of Medicare enrollees that had an annual flu vaccination (2017)	49%	49%	46%
<b>Social and Economic Environment</b>			
<b>Education.</b> Percentage of ninth-grade cohort that graduates in four years (2017-2018)	96%	85%	85%
<b>Education.</b> Percentage of adults ages 25-44 years with some post-secondary education (2014-2018)	69%	65%	66%
<b>Employment, poverty, and income.</b> Percentage of population ages 16 and older unemployed but seeking work (2018)	6.3%	4.6%	3.9%
<b>Employment, poverty, and income.</b> Percentage of children under age 18 in poverty (2018)	13%	19%	18%
<b>Employment, poverty, and income.</b> Ratio of household income at the 80th percentile to income at the 20th percentile (2014-2018)	4.0	4.7	4.9
<b>Family and social support.</b> Percentage of children that live in a household headed by single parent (2014-2018)	33%	36%	33%
<b>Family and social support.</b> Number of membership associations per 10,000 population (2017)	15.5	11.2	9.3
<b>Violence.</b> Number of reported violent crime offenses per 100,000 population (2014-2016)	113	293	386
<b>Injury.</b> Number of deaths due to injury per 100,000 population (2014-2018)	65	87	70

Source: 2020 County Health Rankings for Ottawa County, Ohio and U.S. data

	Ottawa County 2020	Ohio 2020	U.S. 2020
<b>Physical Environment</b>			
<b>Air, water, and toxic substances.</b> Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) (2014)	11.4	11.5	8.6
<b>Air, water, and toxic substances.</b> Indicator of the presence of health-related drinking water violations. Yes - indicates the presence of a violation, No - indicates no violation (2018)	Yes	N/A	N/A
<b>Housing.</b> Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities (2012-2016)	11%	14%	18%
<b>Transportation.</b> Percentage of the workforce that drives alone to work (2014-2018)	87%	83%	76%
<b>Transportation.</b> Among workers who commute in their car alone, the percentage that commute more than 30 minutes (2014-2018)	33%	31%	36%

Source: 2020 County Health Rankings for Ottawa County, Ohio and U.S. data  
N/A – Data is not available

## Appendix VIII: Priority Areas and Resources

The Ottawa County Health Partners met multiple times to complete the 2018-2021 Ottawa County Community Health Improvement Plan. The Ottawa County Health Partners used the Mobilizing for Action through Planning and Partnerships (MAPP) process, which is a community-driven strategic planning process for improving community health. This framework helps communities apply strategic thinking to prioritize health issues and identify resources to address them. There were ten coordinating agencies that comprised the CHIP steering committee and oversee the two priority area teams.

Details of this process and its results can be found on the Ottawa County Health Department's website. Ottawa County is focused on the following priority areas: Mental Health & Addiction and Chronic Disease Prevention.

The following is a list of available facilities and resources that Magruder Hospital uses to assist in meeting identified community health needs:

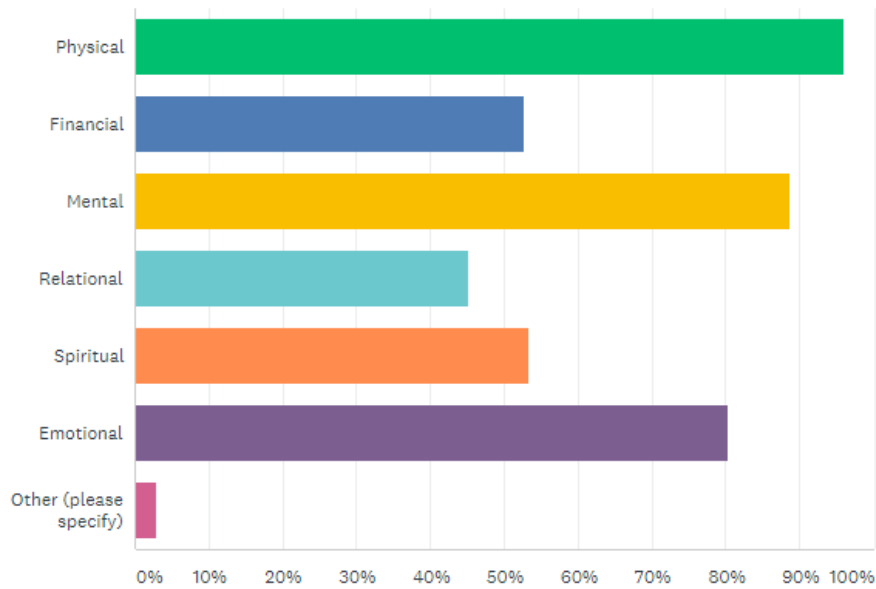
Priority Area	Coordinating Organizations and Team Members
Mental Health & Addiction	<ul style="list-style-type: none"><li>• Magruder Hospital</li><li>• Mental Health and Recovery Board of Erie and Ottawa Counties</li><li>• Ottawa County Health Department</li></ul>
Chronic Disease Prevention	<ul style="list-style-type: none"><li>• Magruder Hospital</li><li>• OSU Extension Office</li><li>• Ottawa County Health Department</li></ul>

# Appendix IX: Community Wellness Survey Results

Magruder Hospital administered a community wellness survey through Survey Monkey in December 2019 to January 2020. There were 507 respondents.

What does wellness mean to you? Check all that apply, and feel free to share other ideas.

Answered: 506 Skipped: 1



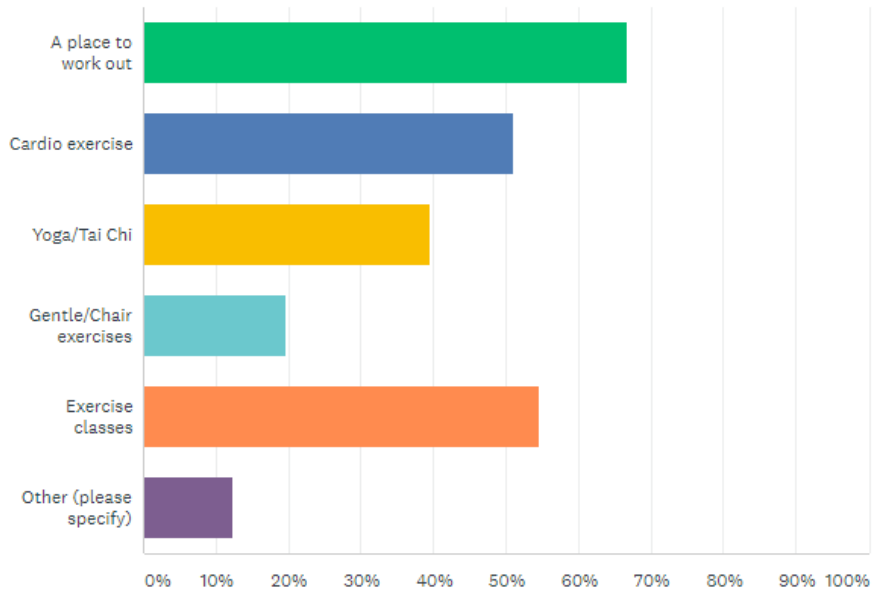
ANSWER CHOICES	RESPONSES
Physical	96.05% 486
Financial	52.77% 267
Mental	88.74% 449
Relational	45.26% 229
Spiritual	53.36% 270
Emotional	80.43% 407
Other (please specify)	Responses 2.96% 15
<b>Total Respondents: 506</b>	

(Source for data: Magruder Hospital, obtained June 2020)



# What in terms of EXERCISE would be helpful for you on your wellness journey? Check all that apply, and feel free to share other ideas.

Answered: 501 Skipped: 6

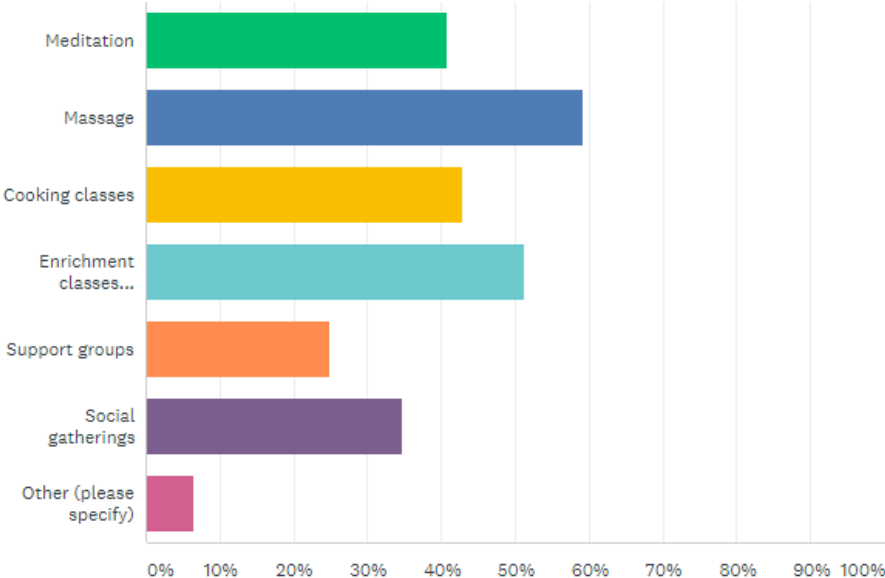


ANSWER CHOICES	RESPONSES
▼ A place to work out	66.67% 334
▼ Cardio exercise	51.10% 256
▼ Yoga/Tai Chi	39.52% 198
▼ Gentle/Chair exercises	19.56% 98
▼ Exercise classes	54.69% 274
▼ Other (please specify)	Responses 12.38% 62
<b>Total Respondents: 501</b>	

(Source for data: Magruder Hospital, obtained June 2020)

What in terms of LIFESTYLE would be helpful for you on your wellness journey? Check all that apply, and feel free to share other ideas.

Answered: 500 Skipped: 7

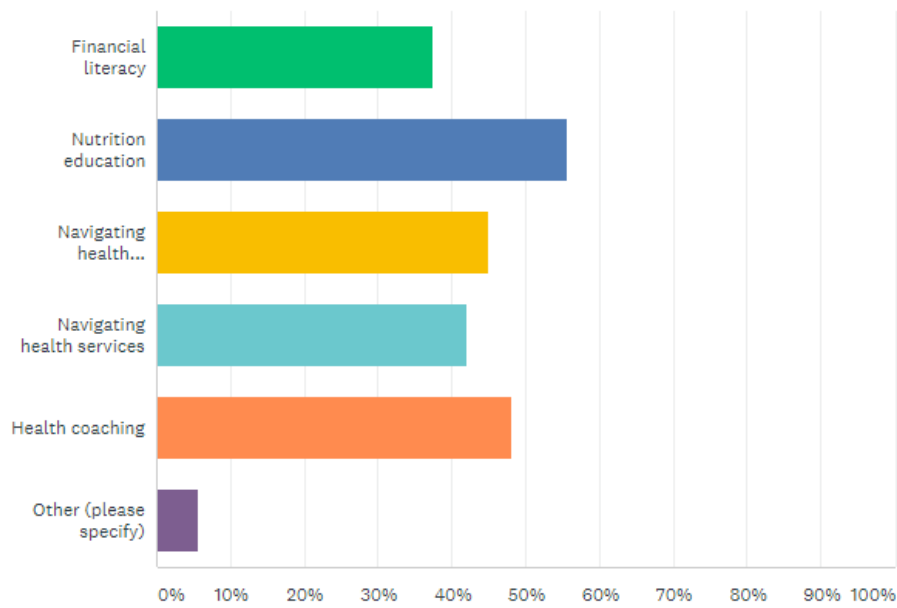


ANSWER CHOICES	RESPONSES
▼ Meditation	40.80% 204
▼ Massage	59.20% 296
▼ Cooking classes	42.80% 214
▼ Enrichment classes (painting, learn a language, etc.)	51.20% 256
▼ Support groups	25.00% 125
▼ Social gatherings	34.80% 174
▼ Other (please specify)	Responses 6.40% 32
<b>Total Respondents: 500</b>	

(Source for data: Magruder Hospital, obtained June 2020)

What in terms of EDUCATION would be helpful for you on your wellness journey? Check all that apply, and feel free to share other ideas.

Answered: 493 Skipped: 14



ANSWER CHOICES	RESPONSES
Financial literacy	37.53% 185
Nutrition education	55.58% 274
Navigating health insurance	45.03% 222
Navigating health services	41.99% 207
Health coaching	48.07% 237
Other (please specify) <span style="color: blue;">Responses</span>	5.68% 28
<b>Total Respondents: 493</b>	

(Source for data: Magruder Hospital, obtained June 2020)

# Appendix X: Evaluation of Impact

## Magruder CHNA Update 2019-2020

For year two, Magruder Hospital continued working within our various hospital departments as well as with community organizations and agencies on the issues of mental health, addiction and chronic disease. As we know, the only constant is change, so there have been a few instances where we have needed to slow down or pivot our direction. But we continue our journey to help improve the health of the communities we serve.

### Priority Topic: Mental Health

**Strategy 2:** Screen for clinical depression for all patients 12 or older using a standardized tool.

Baseline / Year 1 data from April 2019

Month	January	February	March	YTD Total
Screenings	153	109	151	413
No. ED Visits	890	846	1071	2,807
Rate	17%	13%	14%	15%

Month	January	February	March	YTD Total
Screenings	105	89	110	304
No. of Patients	112	97	115	324
Rate	97%	94%	95%	93%

*Education was conducted in April, 2019 in both areas, and compliance with assessment and appropriate referral was monitored. Results are found in the two tables below.*

Month	April	May	June	July
Screenings	596	1061	1142	1241
No. ED Visits	965	1104	1168	1282
Rate	62%	96%	98%	97%

Month	April	May	June	July
Screenings	135	99	109	118
No. of Patients	141	109	111	123
Rate	95%	91%	98%	96%

## Priority Topic: Mental Health continued

**Strategy 2:** Screen for clinical depression for all patients 12 or older using a standardized tool.

**Year 2:** Continue efforts from year 1. Increase the number of healthcare providers using PHQ-9, or another screening tool, by 25% from baseline. Introduce to Magruder employed primary care providers.

Depression Screening	Baseline Data	Data for 5/2019-4/2020	Change from baseline
Emergency Dept	15%	92%	77% increase
2S/ICU	93%	93%	0% increase

### Magruder Medical Group Clinic Offices Baseline Data for Depression

Month	September 2019	October 2019	November 2019	December 2019	Total
<b>Screenings</b>	24	49	33	43	<b>149</b>
<b># of Visits</b>	2395	2577	2150	2196	<b>9318</b>
<b>Rate</b>	<b>1%</b>	<b>2%</b>	<b>1.5%</b>	<b>2%</b>	<b>1.6%</b>

*(Due to COVID-19, baseline data was obtained from the last 4 months of 2019.)*

**Year 2:** Conduct one educational session on mental health identification and/or resources for community. Measure post education efficacy with goal of 85% indicating improved understanding at the end of the session.

*Firelands Counseling conducted Mental Health First Aid training for the public in October 2019.*

- *All 13 participants agreed or strongly agreed with the statement "As a result of this training, I feel more confident that I can recognize the signs that someone may be dealing with a mental health problem, substance use challenge or crisis."*
- *All 13 participants also agreed or strongly agreed with the statement "As a result of this training, I can offer a distressed person basic "first aid" level information and reassurance about mental health and substance use challenges."*
- *All 13 participants also agreed or strongly agreed with the statement "As a result of this training, I can assist a person who may be dealing with a mental health problem, substance use challenge or crisis in seeking professional help."*

## Priority Topic: Addiction

**Strategy 2:** Screening, brief intervention and referral to treatment

**Year 2:** Continue efforts from year 1. Increase the number of healthcare providers using an evidenced based tool by 25% from baseline. Introduce to Magruder employed primary care providers.

Substance Abuse	Baseline Data	Data for 5/2019-4/2020	Change from baseline
Emergency Dept	24%	80%	56% increase
2S/ICU	64%	70%	6% increase

### Magruder Medical Group Clinic Offices Baseline Data for Substance Abuse Screening

Month	September 2019	October 2019	November 2019	December 2019	Total
<b>Screenings</b>	838	932	775	991	<b>3,536</b>
<b># of Visits</b>	2,395	2,577	2,150	2,196	<b>9,318</b>
<b>Rate</b>	<b>35%</b>	<b>36%</b>	<b>36%</b>	<b>45%</b>	<b>38%</b>

*(Due to COVID-19, baseline data was obtained from the last 4 months of 2019.)*

**Year 2:** Conduct one educational session on substance abuse disease process and/or resources for community. Measure post education efficacy with goal of 85% indicating improved understanding at the end of the session.

*Firelands Counseling conducted Mental Health First Aid training for the public in October 2019.*

- *All 13 participants agreed or strongly agreed with the statement "As a result of this training, I feel more confident that I can recognize the signs that someone may be dealing with a mental health problem, substance use challenge or crisis."*
- *All 13 participants also agreed or strongly agreed with the statement "As a result of this training, I can offer a distressed person basic "first aid" level information and reassurance about mental health and substance use challenges."*
- *All 13 participants also agreed or strongly agreed with the statement "As a result of this training, I can assist a person who may be dealing with a mental health problem, substance use challenge or crisis in seeking professional help."*

## Priority Topic: Chronic Disease

**Strategy 2:** Increase prediabetes screening and referral for treatment

**Year 2:** Continue efforts from year 1. Increase the number of providers screening for prediabetes by 25% from baseline.

*Our Nutrition Department continues to work with physicians, nurse practitioners and clinicians in other departments on using the Prediabetes Risk Assessment.*

**Year 2:** Conduct 1 educational session on diabetes disease and management for community. Measure post education efficacy with goal of 85% indicating improved understanding at the end of the session.

*Our Nutrition Department was the scheduled speaker for our March 16, 2020 monthly educational luncheon, but due to COVID-19, the luncheon was cancelled. We plan to reschedule it when we are able.*

*There were 12 individuals who completed the Diabetes Self Management Education between May 2019 and May 2020. Their average pre-test score was 69.3 and average post-test score was 90.8, making an average 31% improvement in understanding.*

**Year 2:** Monitor Magruder Hospital DSME program participants for 5% improvement in A1C.

*The average A1c for participants of DSME program (5/2019-5/2020) is 8.99%*

*The average post-program A1C for participants of DSME program (5/2019-5/2020) is 7.02%*

*This is a decrease of 12% for program participants*

## Priority Topic: Chronic Disease

### Strategy 3: Implement healthy food initiatives

**Year 2:** Assist churches, libraries and other organizations in applying for grants to obtain funding for a community garden or farmers market.

*The Family Advocacy Center moved into their new location in May 2019. We will continue to work with them on developing plans for a community garden at their new location.*

**Year 2:** Work with food pantries to offer fresh produce and assist pantries in seeking donations from local grocers.

*We did not accomplish this task in year 2, but will reach out to the food pantries and grocers in the area to establish if this would be a possibility. We have a pay-it-forward concept restaurant, Bistro 163, that offers a free community meal monthly and they have an area with fresh produce that has been donated by local farms and gardens for people to take what they want.*

*Also, Ottawa County Senior Resources partners with the Area Office on Aging for the Farmers Market coupon program each year. In 2019 354 seniors received \$40 in coupons to be used at farmers market stands in Ottawa County.*

**Year 2:** Explore the use of SNAP/EBT (Electronic Benefit Transfer) at farmers' markets.

*We worked with Ottawa County Department of Job & Family Services who helped research this topic. Individuals can use SNAP/EBT at Farmer's Markets as long as the market has the Point of Sale machine that supports the EBT cards. Based on the 2020 list, however, there are no farmer's markets in Ottawa County that accept the EBT cards. The closest are the Toledo Farmer's Market on Market Street in Toledo, or the Westgate Farmer's Market on West Central Ave in Toledo. OCDJFS provided us with information on how to become certified to accept the EBT card for Farmer's Markets that we will share with area Farmer's Markets.*