2019

Portage County
Community Health Needs Assessment

Examining the health of Portage County

Released on 12.06.2019

Foreword

Portage County Community Health Partners are pleased to present the 2019 Portage County Community Health Needs Assessment (CHNA).

This report, which provides a comprehensive look at the health and well-being of Portage County children, youth, and adults, represents the ongoing work of Portage County's community health partners to create and implement a shared vision for providing and maintaining quality health and human services for all Portage County residents. The data contained in the 2019 Portage County CHNA will help guide Portage County's health systems in their efforts to develop innovative strategies for effectively and efficiently addressing high priority needs; to create evaluation/outcome measures that effectively track progress and ensure accountability; and to educate Portage County stakeholders about the community health vision.

The data was collected through surveys of status and behavior that were conducted by the Hospital Council of Northwest Ohio (HCNO). The survey results are reported along with health statistics and information gathered from the Ohio Department of Health and other relevant national, state and local data sources.

This report provides a "snapshot" of where county residents currently stand in terms of their health and health behaviors. The data components of this comprehensive review can serve as strategic planning sources for organizations and individuals who are striving to make Portage County a healthier community. In this era of rising costs and shrinking revenues, it is imperative that we focus our limited resources on those services and activities that will have the greatest positive impact on county residents' health. In that respect, the report's information can influence the current course of action and support new areas of interest. An added value with this year's report is the access to data from similar studies have been completed in more than 40 other Ohio counties; this information is available at www.hcno.org, and provides opportunities for comparison, sharing, and cross jurisdictional collaboration in planning.

This report would not exist without the financial support of the Portage County Combined General Health District, University Hospitals, the Kent City Health Department, and the Mental Health & Recovery Board of Portage County; or without the assistance of community leaders and many public and private health partners, whose members took the time to carefully plan and carry out the assessment. We are pleased to report that all Portage County schools participated in the assessment process and would also like to thank local school officials who assisted in the assessment process and set aside valuable time that allowed 6th to 12th grade students to participate in this important project.

It is our intent to periodically repeat this process to identify emerging issues and help ensure a high quality, healthy, and prosperous future for our county, while using existing resources as efficiently as possible. It is also our hope that this assessment will stimulate new collaborations among public and private agencies during economically challenging times.

Sincerely,

Portage County Community Health Partners

Acknowledgements

The 2019 Portage County Community Health Assessment was funded by:

Portage County Combined General Health District

University Hospitals

Kent City Health Department

Mental Health & Recovery Board of Portage County

The 2019 Portage County Community Health Assessment report was commissioned by the Portage County Community Health Partners:

Akron Children's Hospital

AxessPointe Community Health Center

Children's Advantage

Coleman Professional Services

Family and Children First Council

Family and Community Services

Hiram College

Kent City Board of Health

Kent City Health Department

Kent State University College of Public Health & Center for Public Policy and Health

Kent State University Health Services

Kent State University Center for Nutrition Outreach

Mental Health & Recovery Board of Portage County

Northeast Ohio Medical University

OhioCAN

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Portage County Board of Health

Portage County Children's Services

Portage County Combined General Health District

Portage County Commissioners

Portage County Job & Family Services

Portage County Safe Communities Coalition

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Portage County Sheriff's Department

Portage County Township Trustees

Portage County Veterans Services

Portage County WIC

Portage Learning Centers

Portage Park District

Portage Substance Abuse Community Coalition

Ravenna City Board of Health

Sequoia Wellness

Suicide Prevention Coalition of Portage County

The Portage Foundation

Townhall II

University Hospitals Portage Medical Center

United Way of Portage County

Contact Information

Becky Lehman, MPH, CHES
Director of Health Education and Promotion
Accreditation Coordinator
Public Information Officer
Portage County Health District
330-296-9919 ext. 137

Danielle Price
Director, Community Health Engagement
University Hospitals
11100 Euclid Avenue
Cleveland, Ohio 44106
(216) 844-2391
Danielle.Price3@UHhospitals.org

Project Management, Secondary Data, Data Collection, and Report Development
Hospital Council of Northwest Ohio (HCNO)

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

Britney L. Ward, MPH
Director of Community Health Improvement

Layla Abraham, MPH
Community Health Improvement Coordinator

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

Carolynn McCartney
Graduate Assistant

Erin Rauschenberg
Graduate Assistant

Margaret Wielinski, MPH
Assistant Director of Community Health Improvement

Tessa Elliott, MPH, CHES
Community Health Improvement Coordinator

Emily Stearns, MPH, CHES
Community Health Improvement Coordinator

Alyssa Miller
Graduate Assistant

Emily Soles
Graduate Assistant

Data Collection & Analysis

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

Aaron J Diehr, PhD, CHES
Consultant

Hospital Utilization and Discharge Data Compilation and Analysis

Cypress Research Group

To see data compared to other counties, please visit the HCNO's Data Link website at:

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

The 2019 Portage County Community Health Assessment is available at:

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

Portage County Health District
https://www.co.portage.oh.us/portage-county-health-district

University Hospitals
www.UHhospitals.org/CHNA-IS

Written Comments

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

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APPENDICES

Executive Summary

This executive summary provides an overview of health-related data for Portage County adults (ages 19 and older), youth (ages 12-18) and children (ages 0-11) who participated in a county-wide health assessment survey from February to May 2019. 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), Youth Risk Behavior Surveillance System (YRBSS), and the National Survey of Children's Health (NSCH) which was developed by the Child and Adolescent Health Measurement Initiative. The Hospital Council of Northwest Ohio (HCNO) collected the data, guided the health assessment process, and integrated sources of primary and secondary data into the final report.

The 2019 Portage County Community Health Needs Assessment represents an exciting collaboration between University Hospitals Portage Medical Center and Portage County Health District on behalf of the Portage County Community Health Partners. This assessment meets the requirements set forth under Treas. Reg. § 1.501(r) ("501(r) Regulations") and for the purposes of meeting these requirements, serves as the 2019 Community Health Needs Assessment ("CHNA") for the UH Portage Medical Center. Conducting periodic CHNAs are one critical way in which UH Portage Medical Center is working with partners to identify the greatest health needs, enabling it to ensure its resources are appropriately directed toward outreach, prevention, education and wellness opportunities where the greatest impact can be realized. The 2019 Portage County CHNA will serve as a foundation for developing a collaborative Implementation Strategy (IS) to address identified needs.

Similar to the CHNAs that hospitals conduct, completing a Community Health Assessment ("CHA") and a corresponding Community Health Improvement Plan ("CHIP") is an integral part of the process that local and state health departments must undertake to obtain accreditation through the Public Health Accreditation Board ("PHAB"). This assessment meets the requirements for PHAB accreditation. The Ohio Department of Health requires all local health departments to be accredited by 2020. The previous CHA and CHIP conducted by Portage County Health District were performed independently from hospital CHNAs.

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

HCNO worked with Portage County Community Health Partners to create one county-level CHNA/CHA that serves both the hospital and health department, as well as the entire Portage County community. This was done to exhibit their shared definition of community, data collection and analysis and identification of priority needs. It also aligns with the same three-year interval as the 2019 State Health Assessment. This shift in the way health assessments are conducted is a deliberate attempt by the partners to work together more effectively and efficiently to comprehensively address the needs of the community. The 2019 Assessment also reflects the partners' desire to align health assessment planning both among partners at the local level and with state population health planning efforts – as described more fully in *Improving Population Health Planning in Ohio: Guidance for Aligning State and Local Efforts*, released by the Ohio Department of Health (ODH).

Hospital Internal Revenue Services (IRS) Requirements

Certain hospitals as set forth in the Section 501(r) regulations are required to complete a CHNA and corresponding implementation strategy at least once every three years in accordance with regulations promulgated by the Internal Revenue Service pursuant to the Patient Protection and Affordable Care Act (ACA), 2010[1]. UH Portage Medical Center's last CHNA was adopted by its board on September 21, 2016.

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

DEFINITION OF COMMUNITY & SERVICE AREA DETERMINATION

The community has been defined as Portage County. Most (85%) of UH Portage Medical Center's discharges are residents of Portage County. In addition, University Hospitals collaborates with multiple stakeholders, most of which provide services at the county-level. In looking at the community population served by the hospital facilities and Portage County as a whole, it was clear that all of the facilities and partnering organizations involved in the collaborative assessment, define their community to be the same. Defining the community as such allows the hospital to readily collaborate with public health partners for both community health assessments and health improvement planning. Per Section 501(r) federal compliance, a joint CHNA is only allowable if it meets all the requirements of a separate CHNA; clearly identifies the hospital facilities involved; and if all of the collaborating hospital facilities and organizations included in the joint CHNA define their community to be the same[2]. This assessment meets 501(r) federal compliance for UH Portage Medical Center.

INCLUSION OF VULNERABLE POPULATIONS

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

PROCESS & METHODS FOR ENGAGING COMMUNITY

This CHNA process was commissioned by the Portage County Community Health Partners. This coalition has been in existence for three years and has approximately 37 member organizations. Multiple sectors, including the general public, were asked through email list servs, social media, and public notices to participate in the process which included defining the scope of the project, choosing questions for the surveys, reviewing initial data, planning a community release, and identifying and prioritizing needs. Thirty-seven organizations (see "Acknowledgments" section) worked together to create one comprehensive assessment. The general public will be invited to attend the release of the report and provide qualitative feedback. Portage county partners will continue to be invited to participate in the strategy development stage of the process. Additionally, the mail survey, described more fully in the Primary Data Collection Methods section of this report was the primary instrument used to engage and receive input from the community.

QUANTITATIVE & QUALITATIVE DATA ANALYSIS

Data for the 2019 CHNA were obtained by independent researchers from the Toledo-based Hospital Council of Northwest Ohio and their partners at the University of Toledo, who administered surveys to a cross-sectional, randomized sample of Portage County residents as follows: adults aged 19 years and older, youth aged 12 to 18 years, and parents of children aged 0 to 11 years. The survey instruments contained both customized questions and a set of core questions taken from the Center for Disease Control and Prevention's Behavioral Risk Factor Surveillance System, Youth Risk Behavior Surveillance System, and National Survey for Children's Health. The number of surveys completed and analyzed met the threshold for statistical significance at the 95% confidence level, with a 5% margin of error, with the exception of the child survey, which had a 95% confidence level with a 7% margin of error. Wherever possible, local findings have been compared to other local, regional, state, and national data. As we move forward with planning strategies, we continue to commit to serving those in our county who experience health and basic needs disparities. Finally, additional information was collected from health department data sources (e.g. vital statistics, Ohio Disease Reporting System, etc.) to supplement findings from the three surveys. Detailed data collection methods are described later in this section.

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

[2] §1.501r-3(b)(6)(v)

IDENTIFYING & PRIORITIZING NEEDS

The Portage County Community Health Partners, of which UH Portage Medical Center is a member, met in July 2019 to review the findings of the primary and secondary data.

Portage County Health District contracted with the Hospital Council of Northwest Ohio (HCNO), a neutral, regional, nonprofit hospital association, to facilitate the CHNA/CHA and IS/CHIP. Portage County Health District invited various community stakeholders to participate in community health improvement process. Data from the most recent CHNA was carefully considered and categorized into community priorities. This was done using the National Association of County and City Health Officials' (NACCHO) national framework, Mobilizing for Action through Planning and Partnerships (MAPP). This process will also be used to develop the Community Health Improvement Plan/Implementation Strategy. Over the next three years, these priorities and strategies will be implemented at the county-level with the hope to improve population health and create lasting, sustainable change.

Based on the 2019 Portage County CHNA, key issues were identified. Overall, there were 5 main key issues identified by the committee. The Portage County Community Health Partners then completed a ranking exercise, giving a score for magnitude, seriousness of the consequence and feasibility of correcting, resulting in an average score for each issue identified. Each organization was then given 3 votes to identify their top 3 key issues that they ranked; afterwards, Portage County Community Health Partners came to a consensus. This process determined the priorities that Portage County will focus on over the next three years. Strategies for the key issues will be outlined in the 2020-2022 IS/CHIP.

Portage County is focused on the following three priority areas: 1) mental health, substance use and addiction; 2) chronic disease; and 3) maternal, infant, and child health. The three priority areas reflect the broad interests of the community. Additionally, Portage County will focus on the following cross-cutting factors within the strategy development process that affect all three priority areas: healthcare system and access, social determinants of health, and health equity.

UH Portage Medical Center will address all three priority areas.

POTENTIAL RESOURCES AVAILABLE TO ADDRESS NEEDS

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

EVALUATION OF IMPACT

The evaluation of impact is a report on the actions taken and effectiveness of strategies implemented since the last community health needs assessment. UH Portage Medical Center conducted its last CHNA in 2016. It can be found on page 35 of this report.

CHNA AVAILABILITY

The 2019 Portage County Community Health Needs Assessment, as well as the various other assessments used in creating this report can be found at the following websites:

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

Portage County Health District
https://www.co.portage.oh.us/portage-county-health-district

University Hospitals
www.UHhospitals.org/CHNA-IS

ADOPTION BY BOARD

University Hospitals adopted the 2019 Portage County Community Health Needs Assessment on September 24, 2019. This assessment meets the CHNA requirements set forth under Treas. Reg. § 1.501(r) and serves as the 2019 Community Health Needs Assessment for UH Portage Medical Center.

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

National Public Health Accreditation status through the Public Health Accreditation Board (PHAB) requires Community Health Assessments (CHAs) to be completed at least every five years. The purpose of the community health assessment is to learn about the health of our community, including health issues and disparities, contributing factors that impact health outcomes, and community assets and resources that can be mobilized to improve population health.

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

Figure 1.1 The MAPP Framework

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

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

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

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

In order to identify strategic issues, the steering committee considers findings from the visioning process and the MAPP assessments in order to understand why certain issues remain constant across the assessments. The steering committee uses a strategic approach to prioritize issues that would have the greatest overall impact to drive

population health improvement and would be feasible, given the resources available in the community and/or needed, to accomplish. The steering committee also arranged issues that were related to one another, for example, chronic disease related conditions, which could be addressed through increased or improved coordination of preventative services. Finally, the steering committee members considered the urgency of issues and the consequences of not addressing certain items.

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

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

2019 Ohio State Health Assessment (SHA)

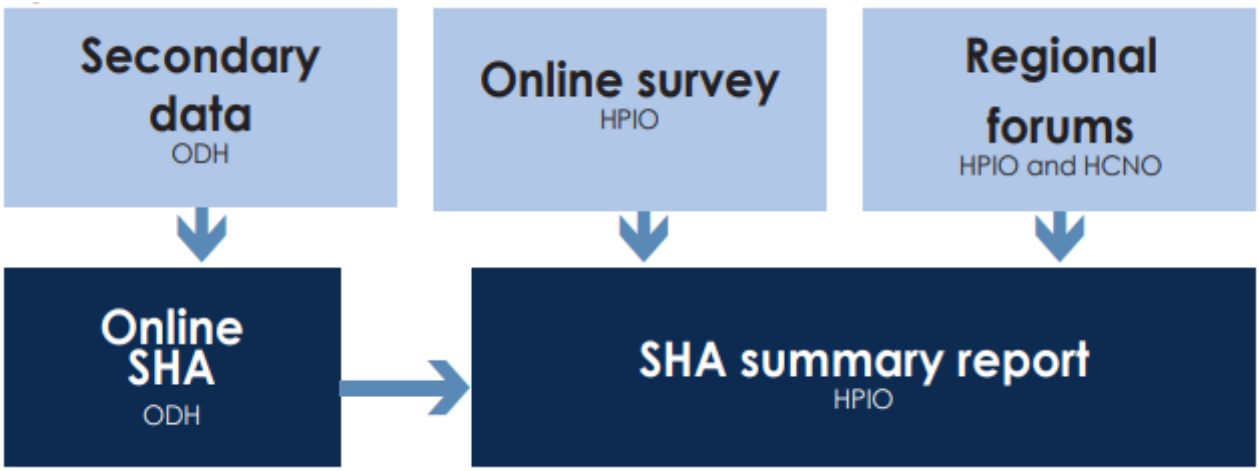
The 2019 Ohio State Health Assessment (SHA) provides data needed to inform health improvement priorities and strategies in the state. This assessment includes over 140 metrics, organized into data profiles, as well as information gathered through five regional forums, online surveys completed by over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

Similar to the 2019 Ohio SHA, the 2019 Williams 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 2019 Ohio State Health Assessment, please visit: https://odh.ohio.gov/wps/portal/gov/odh/explore-data-and-stats/interactive-applications/2019-Online-State-Health-Assessment

FIGURE 1.1 | Components of the 2019 SHA



Primary Data Collection Methods

DESIGN

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

Three survey instruments were designed and pilot tested for this study: one for adults, one for adolescents in grades 6 through 12, and one for parents of children ages 0 through 11. As a first step in the design process, health education researchers from the University of Toledo and staff members from HCNO met to discuss potential sources of valid and reliable survey items that would be appropriate for assessing the health status and health needs of adults, adolescents, and children. The investigators decided to derive the majority of the adult survey items from the BRFSS, the majority of the adolescent survey items from the YRBSS, and the majority of the survey items for the parents of children 0 through 11 from the NSCH. 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 Portage County Community Health Partners. During these meetings, HCNO and the planning committee reviewed and discussed banks of potential survey questions from the BRFSS, YRBSS, and NSCH surveys. Based on input from Portage County Community Health Partners, the project coordinator composed drafts of surveys containing 114 items for the adult survey, 72 items for the adolescent survey, and 76 items for the children's 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 Portage County. There were 124,468 persons ages 19 and over living in Portage 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 383 adults was needed to ensure this level of confidence. The random sample of mailing addresses of adults from Portage County was obtained from Melissa Data Corporation in Rancho Santa Margarita, California.

SAMPLING | Adolescent Survey

The sampling frame for the adolescent survey consisted of youth in grades 6 through 12 in Portage County public school districts. For more information on participating districts and schools, see Appendix IV. Using the U.S. Census Bureau data, it was determined that approximately 15,827 youth ages 12 through 18 years old lived in Portage County. A sample size of 375 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.

SAMPLING | Child Survey

The sampling frame for the child survey consisted of children ages 0 through 11 residing in Portage County. Using U.S. Census Bureau data, it was determined that 21,124 children ages 0 through 11 resided in Portage County. The investigators conducted a power analysis to determine what sample size was needed to ensure a 95% confidence level with corresponding confidence interval of 6% (i.e., we can be 95% sure that the "true" population responses are within a 6% margin of error). The sample size required to generalize to children aged 0 through 11 at a 5% margin of error was 263. The random sample of mailing addresses of parents from Portage County was obtained from Melissa Data Corporation in Rancho Santa Margarita, California.

PROCEDURE | Adult Survey

Prior to mailing the survey to adults, the project team mailed an advance letter to 1,200 adults in Portage County. This advance letter was personalized; printed on Portage county Health District stationery; and signed by Joseph Diorio, Portage County Health Commissioner. 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.

Two 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 describing the purpose of the study, a questionnaire printed on white paper, a self-addressed stamped return envelope, and a $2 incentive. Approximately two weeks after the first mailing, a second wave mailing included another personalized cover letter encouraging the recipient to reply, another copy of the questionnaire on white paper, and another reply envelope. Approximately three weeks after the second mailing, a third wave mailing included another personalized cover letter encouraging the recipient to reply, another copy of the questionnaire on white paper, and another reply envelope. A fourth wave postcard was sent two weeks after the third wave mailing. Surveys returned as undeliverable were not replaced with another potential respondent.

The response rate for the mailing was 27% (n=393: CI=± 4.94). **This return rate and sample size means that the responses in the health assessment should be representative of the entire county at a 5% margin of error.**

PROCEDURE | Adolescent Survey

The survey was approved by all participating superintendents. Schools and grades were randomly selected. To ensure that students in a particular grade had an equal chance of being selected, the research team used "general" school classes like English or Health to distribute surveys. Classrooms were chosen by the school principal. Passive permission slips were mailed home to parents of any student whose class was selected to participate. The response rate was 94% (n=462: CI=± 4.49). **This return rate and sample size means that the responses in the health assessment should be representative of the entire county at a 5% margin of error.**

PROCEDURE | Child Survey

Prior to mailing the survey to parents of 0 through 11-year-olds, the project team mailed an advance letter to 2,400 parents in Portage County. This advance letter was personalized; printed on Portage county Health District stationery; and signed by Joseph Diorio, Portage County Health Commissioner. 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.

Two 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 describing the purpose of the study, a questionnaire printed on white paper, a self-addressed stamped return envelope, and a $2 incentive. Approximately two weeks after the first mailing, a second wave mailing included another personalized cover letter encouraging the recipient to reply, another copy of the questionnaire on white paper, and another reply envelope. Approximately three weeks after the second mailing, a third wave mailing included another personalized cover letter encouraging the recipient to reply, another copy of the questionnaire on white paper, and another reply envelope. A fourth wave postcard was sent two weeks after the third wave mailing. Surveys returned as undeliverable were not replaced with another potential respondent. The response rate was 7% (n=177: CI=± 7.34). **This return rate and sample size means that the responses in the health assessment should be representative of the entire county at a 7% margin of error.**

DATA ANALYSIS

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

LIMITATIONS

As with all county assessments, it is important to consider the findings in light of all possible limitations. For example, 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 Portage 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 Portage County, those responding to the survey were more likely to be older. For example, only eight 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 Portage County residents under the age of 30).

It is important to note that although several questions were asked using the same wording as the Centers for Disease Control and Prevention (CDC) questionnaires and the NSCH questionnaire, the adult and parent data collection method differed. The CDC adult data and NSCH child data were collected using a set of questions from the total question bank, and adults were asked the questions over the telephone rather than via mail survey. The youth CDC survey was administered in schools in a similar fashion as this county health assessment.

This survey asked parents questions regarding their young children. Should enough parents have felt compelled to respond in a socially desirable manner which is inconsistent with reality, this would represent a threat to the internal validity of the results.

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

Secondary Data Collection Methods

HCNO collected secondary data from multiple sites, including county-level data, whenever possible. HCNO utilized sites such as the Behavioral Risk Factor Surveillance System (BRFSS), numerous CDC sites, U.S. Census data, Healthy People 2020, among other national and local sources. Additionally, Portage County Health District provided HCNO with secondary data. All primary data collected in this report is from the 2019 Portage County Health Assessment (CHA). All other data is cited accordingly.

Hospital Utilization Data Collection Methods

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

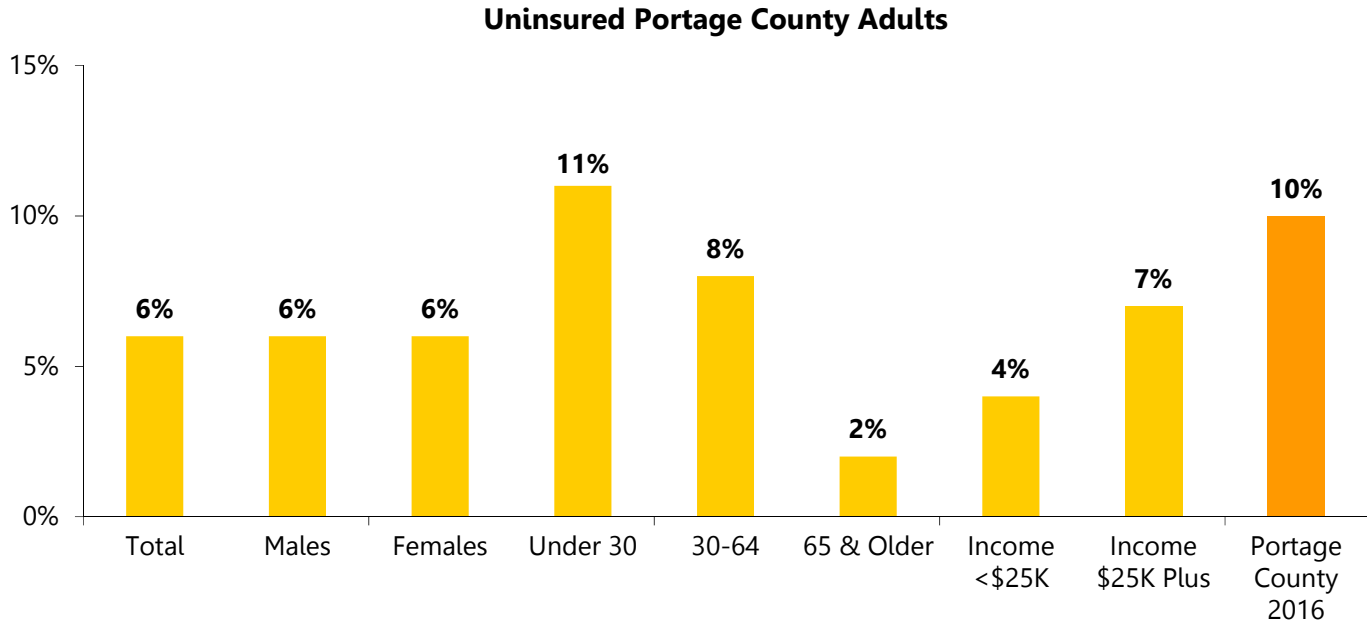
Each hospital provides data to the Ohio Hospitalization Association (OHA) for statewide consolidated reporting. Those data are at the patient level, where patients are de-identified. Each data record represents a single hospital admission; hence, individuals who are hospitalized multiple times are included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

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

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

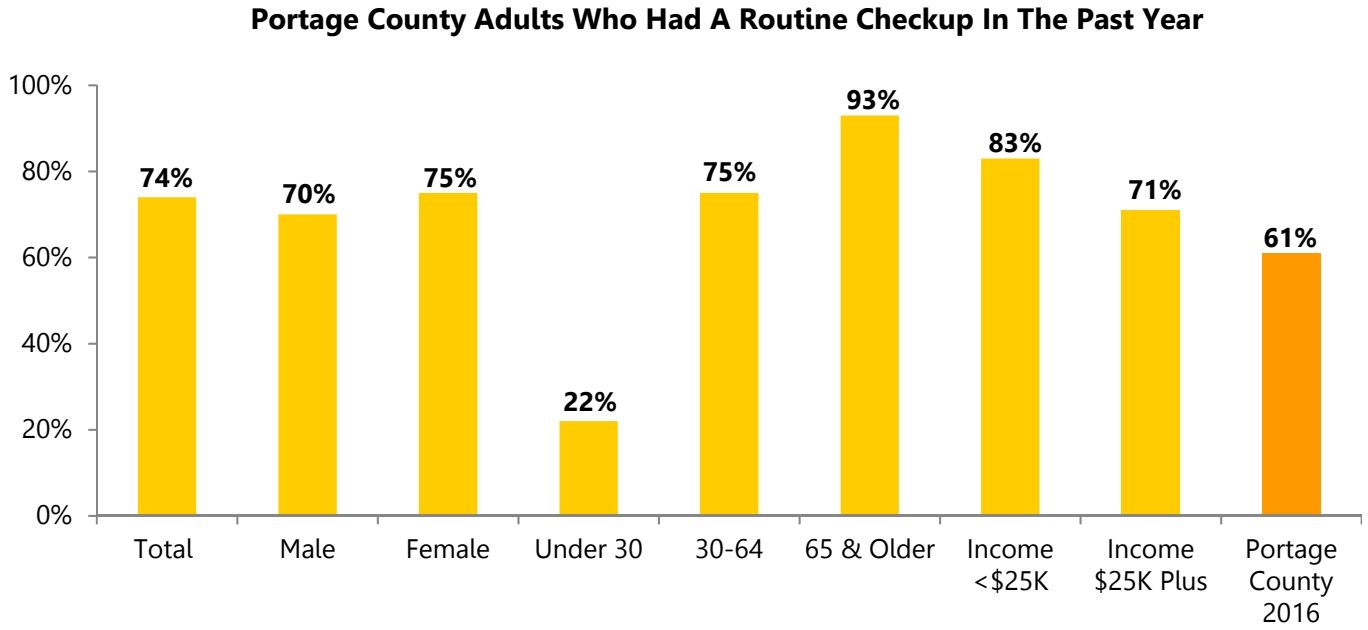
HEALTHCARE COVERAGE

Six percent (6%) of Portage County adults were without healthcare coverage. About one out of six (17%) adults did not get their prescriptions from their doctor filled in the past year.



ACCESS AND UTILIZATION

Almost three-quarters (74%) of Portage County adults visited a doctor for a routine checkup in the past year. More than four-fifths (83%) of adults indicated they had at least one person they thought of as their personal doctor or healthcare provider.

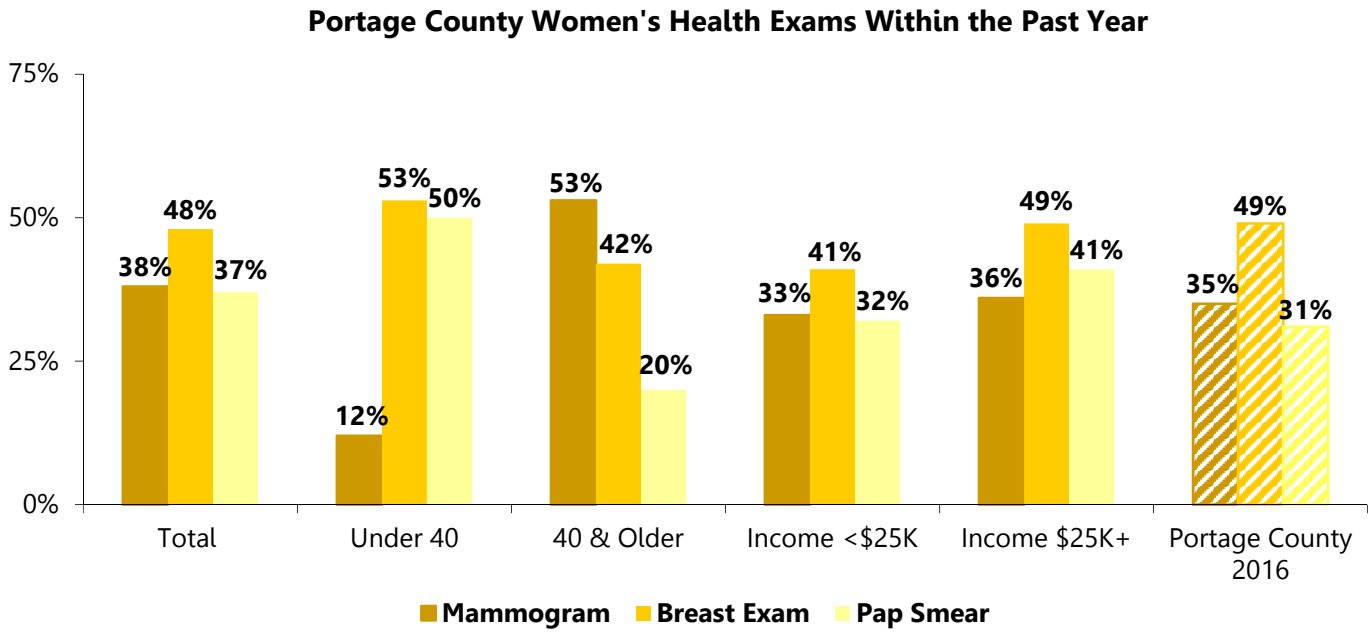


PREVENTIVE MEDICINE

Almost two-thirds (65%) of Portage County adults had a flu vaccine during the past 12 months. Just over three-quarters (76%) of adults ages 65 and older had a pneumonia vaccination at some time in their life.

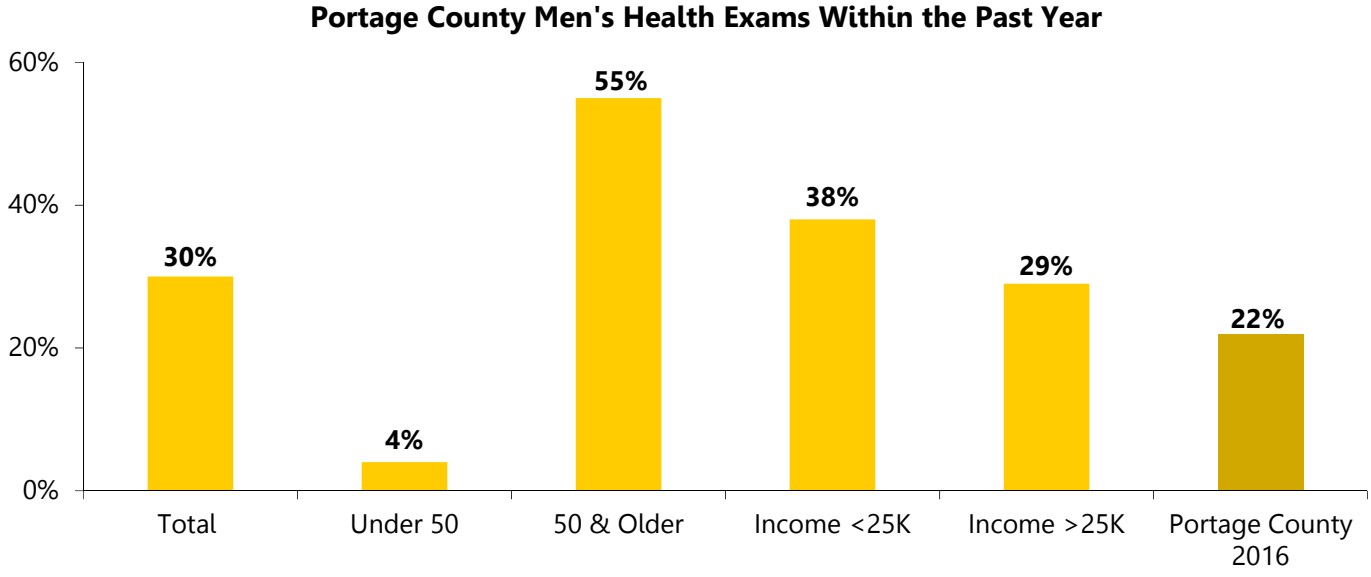
WOMEN'S HEALTH

Over half (53%) of women ages 40 and over had a mammogram in the past year. Nearly half (48%) of women had a clinical breast exam one within the past year. Two-thirds (66%) of women ages 21-65 had a Pap smear in the past three years. Thirty-seven percent (37%) of women were obese, 31% had high blood cholesterol, 29% had high blood pressure, and 13% were identified as smokers, all known risk factors for cardiovascular diseases.



MEN'S HEALTH

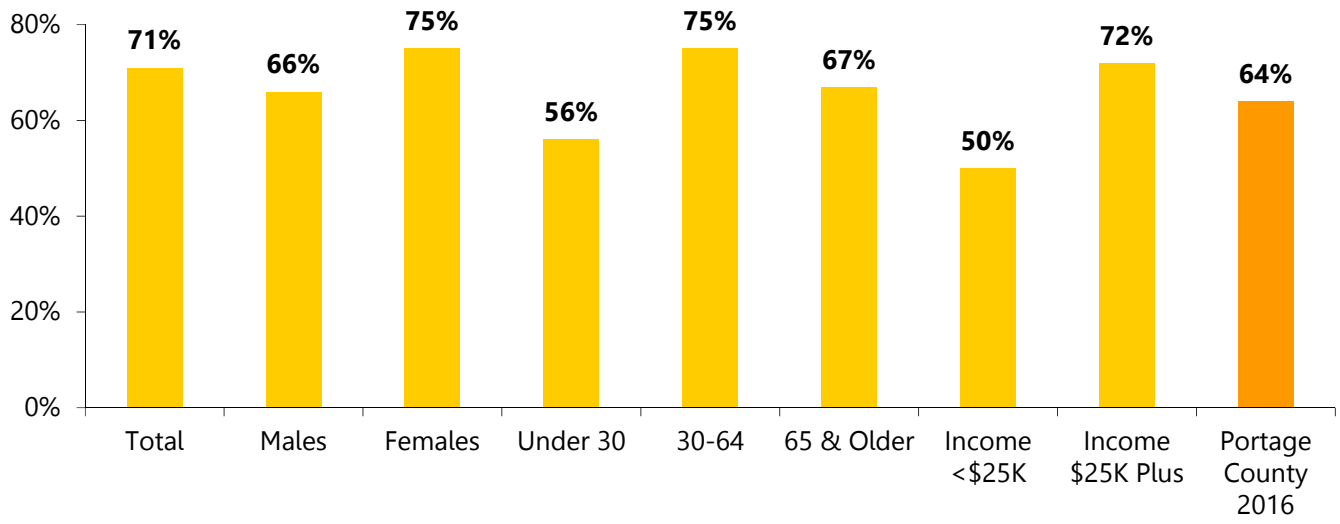
More than half (55%) of Portage County males 50 and older had a Prostate-Specific Antigen (PSA) test in the past year. Nearly half (40%) of men had high blood cholesterol, 40% had been diagnosed with high blood pressure, and 19% were identified as smokers, which, along with obesity (39%), are known risk factors for cardiovascular diseases.



ORAL HEALTH

About seven out of ten (71%) Portage County adults visited a dentist or dental clinic in the past year, and three out of ten (31%) adults did not see a dentist in the past year due to cost.

Portage County Adults Visiting a Dentist in the Past Year

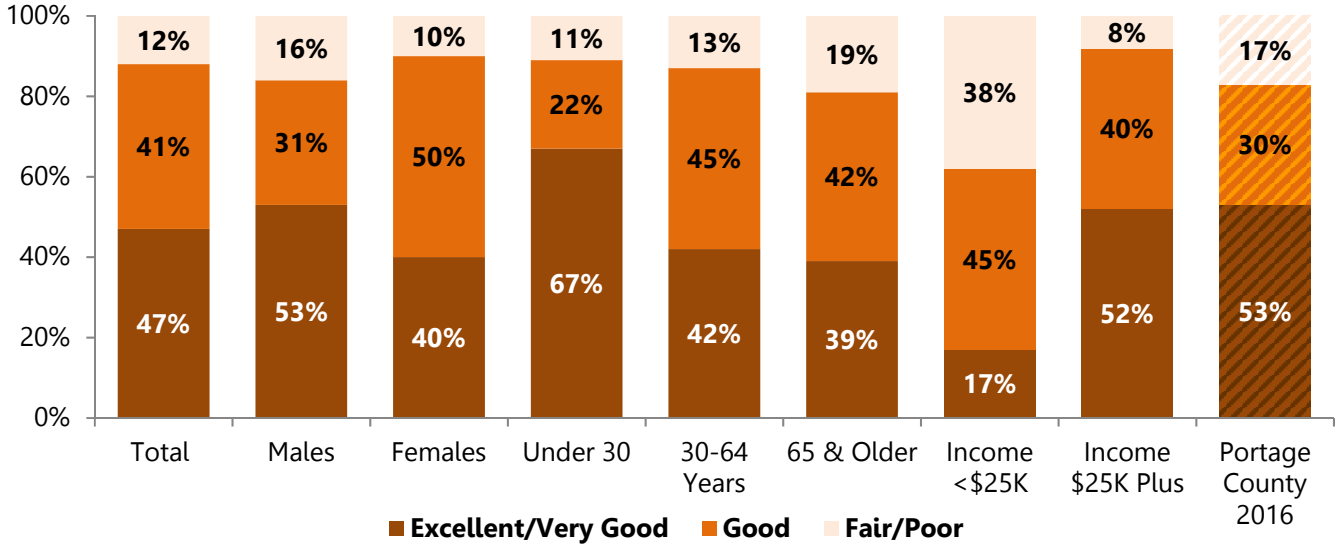


Data Summary | Health Behaviors

HEALTH STATUS PERCEPTIONS

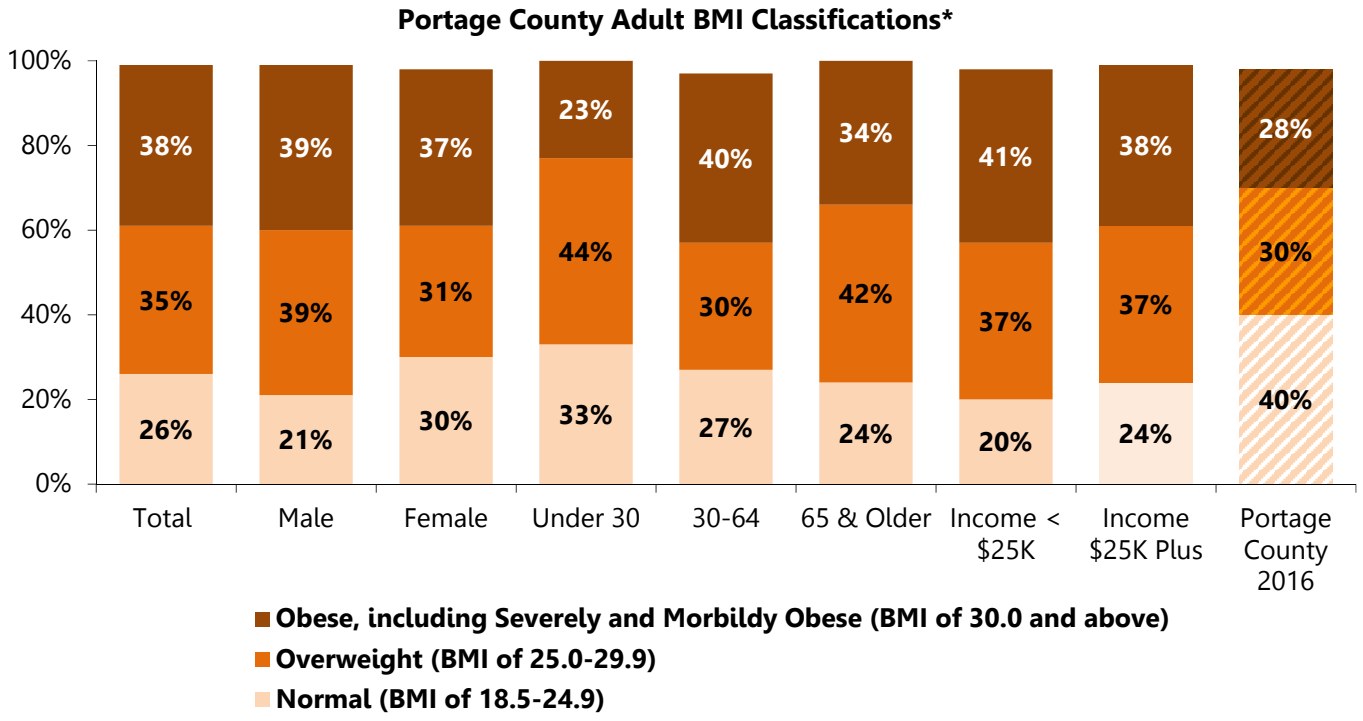
More than two-fifths (47%) of Portage County adults rated their health as excellent or very good. Conversely, about one out of eight (12%) adults described their health as fair or poor, increasing to 38% of those with incomes less than $25,000. More than one-fifth (23%) of Portage County adults rated their physical health as not good on four or more days in the past month, and 33% of adults rated their mental health as not good on four or more days in the past month.

Portage County Adult Health Perceptions*



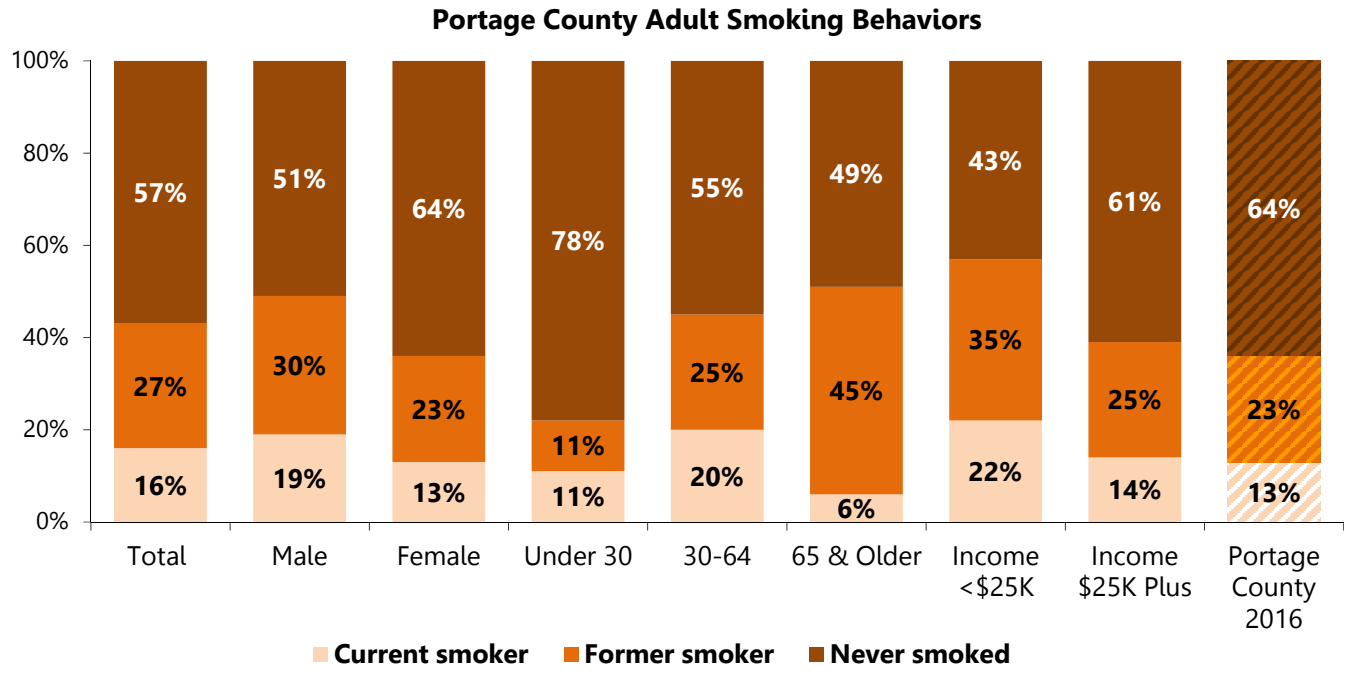
ADULT WEIGHT STATUS

Almost three-quarters (73%) of Portage County adults were either overweight (35%), obese (22%), severely obese (10%), or morbidly obese (6%) by Body Mass Index (BMI).



ADULT TOBACCO USE

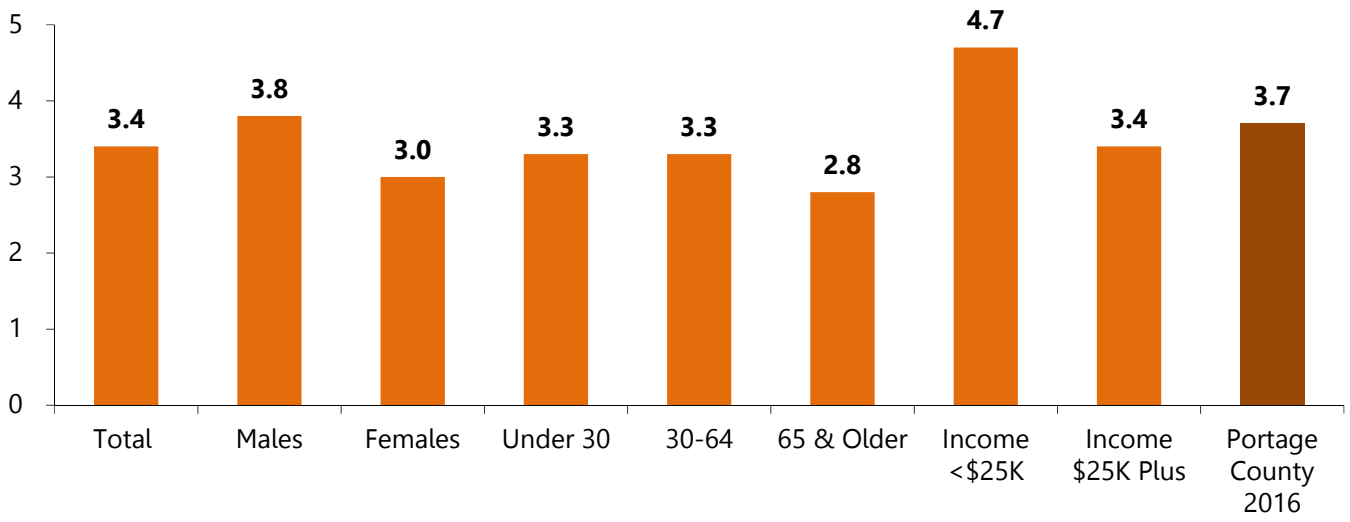
In 2019, 16% of Portage County adults were current smokers and 27% were considered former smokers. Four percent (4%) of Portage County adults were current electronic vapor product users.



ADULT ALCOHOL USE

More than three-quarters (78%) of Portage County adults had at least one alcoholic drink in the past month and are considered current drinkers. Thirty-five percent (35%) of those current drinkers were binge drinkers.

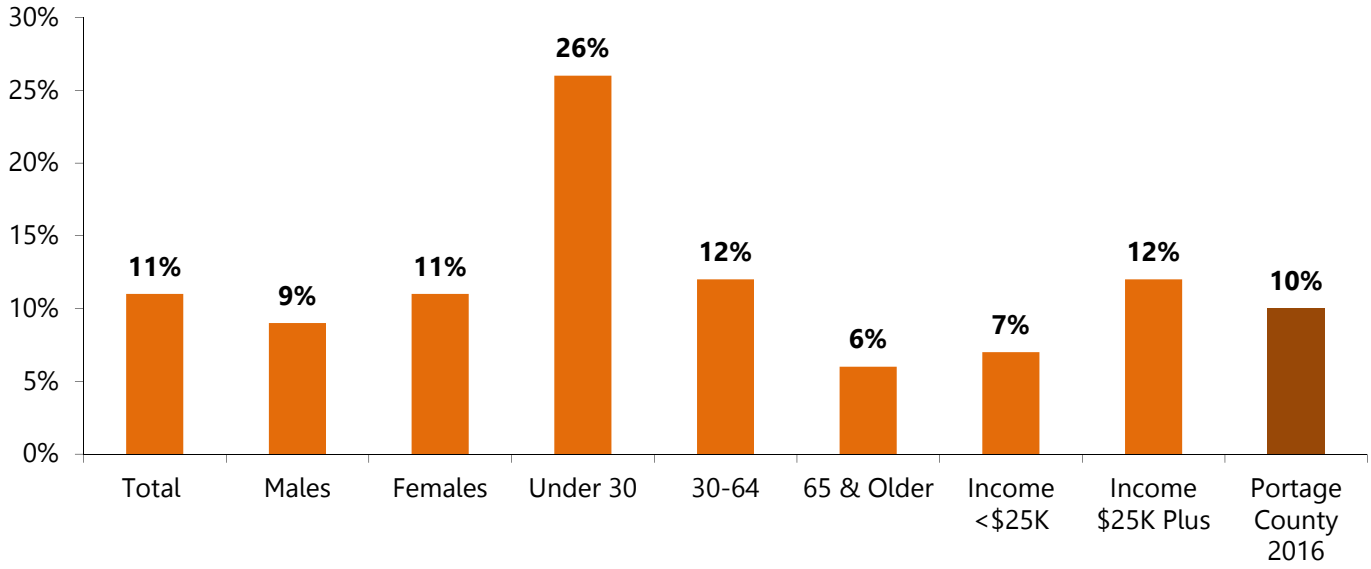
Adults Average Number of Drinks Consumed Per Drinking Occasion



ADULT DRUG USE

Eleven percent (11%) of Portage County adults had used marijuana in the past 30 days. Six percent (6%) 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.

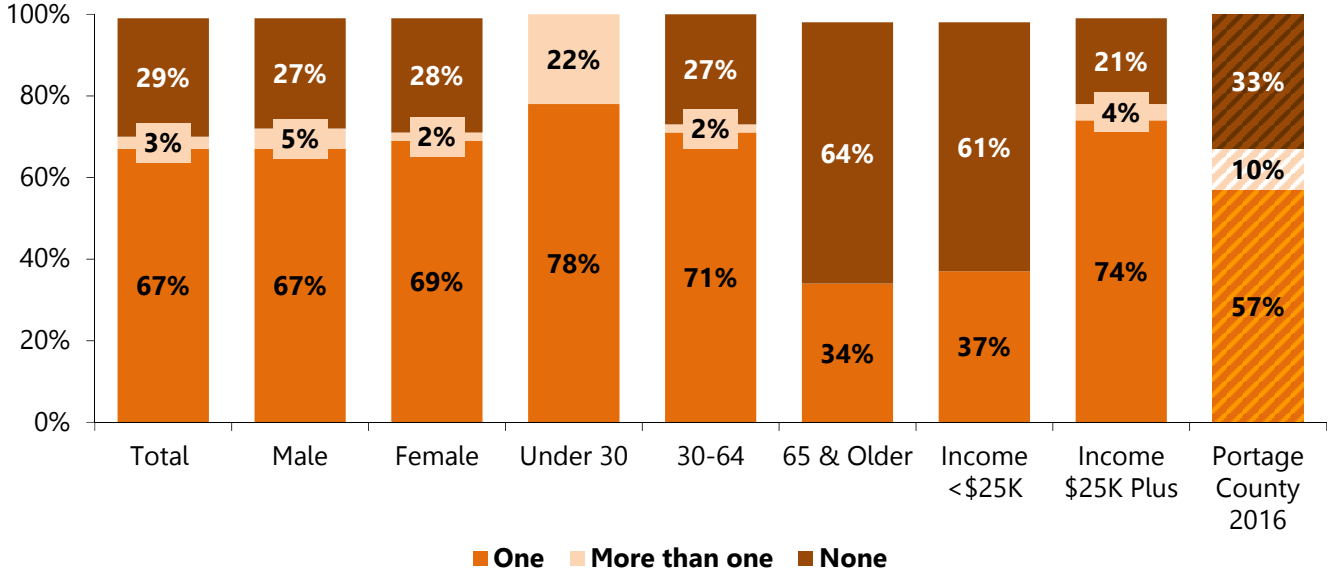
Portage County Adult Marijuana Use in the Past 30 Days



ADULT SEXUAL BEHAVIOR

Three percent (3%) of adults had more than one sexual partner in the past year. Seven percent (7%) of adults were forced to have sexual intercourse when they did not want to.

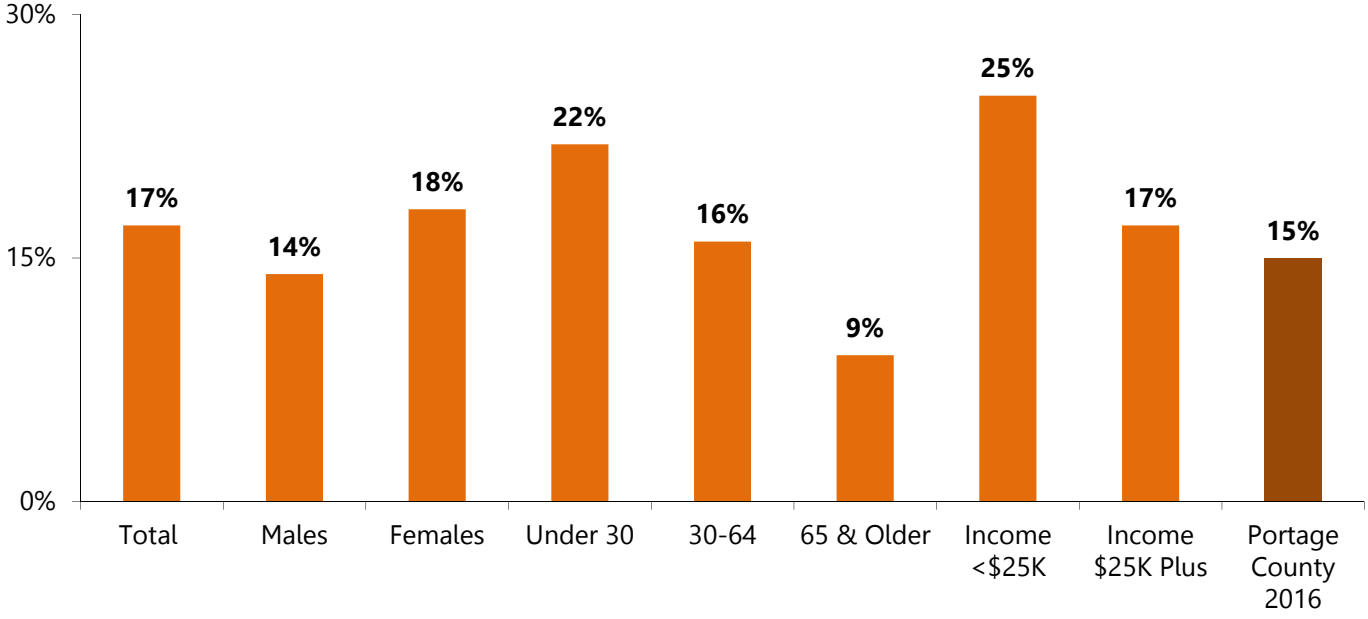
Number of Sexual Partners in the Past Year



ADULT MENTAL HEALTH

In the past year, 17% of Portage County adults had a period of two or more weeks when they felt so sad or hopeless nearly every day that they stopped doing usual activities. Six percent (6%) of Portage County adults considered attempting suicide, and 5% actually attempted suicide.

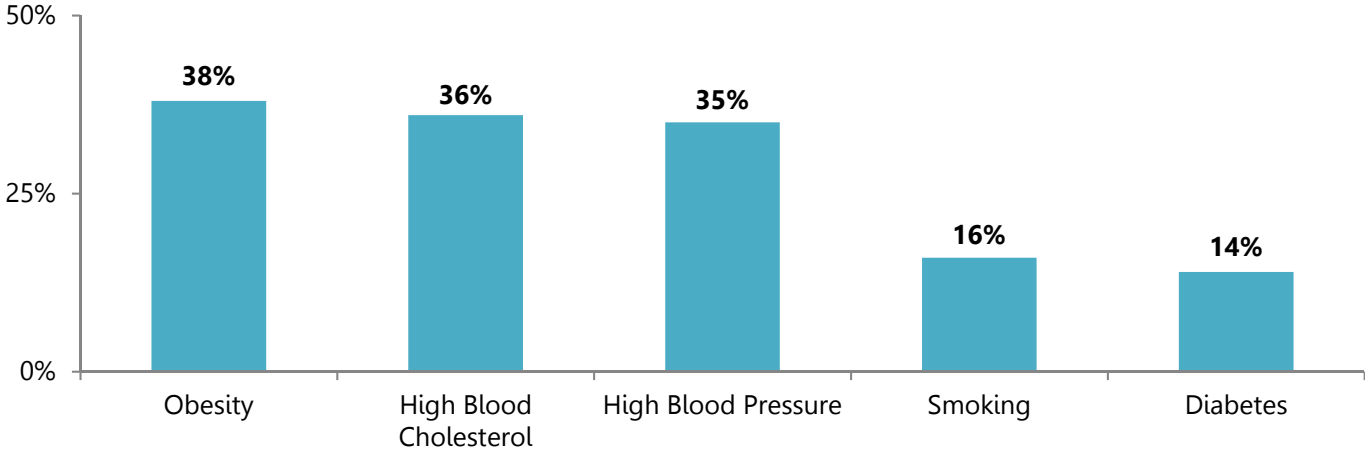
Portage County Adults Who Felt Sad or Hopeless for Two or More Weeks in a Row



CARDIOVASCULAR HEALTH

More than one-third (35%) of adults had high blood pressure and 36% had high blood cholesterol. Five percent (5%) of adults survived a heart attack and 3% survived a stroke.

Portage County Adults with CVD Risk Factors



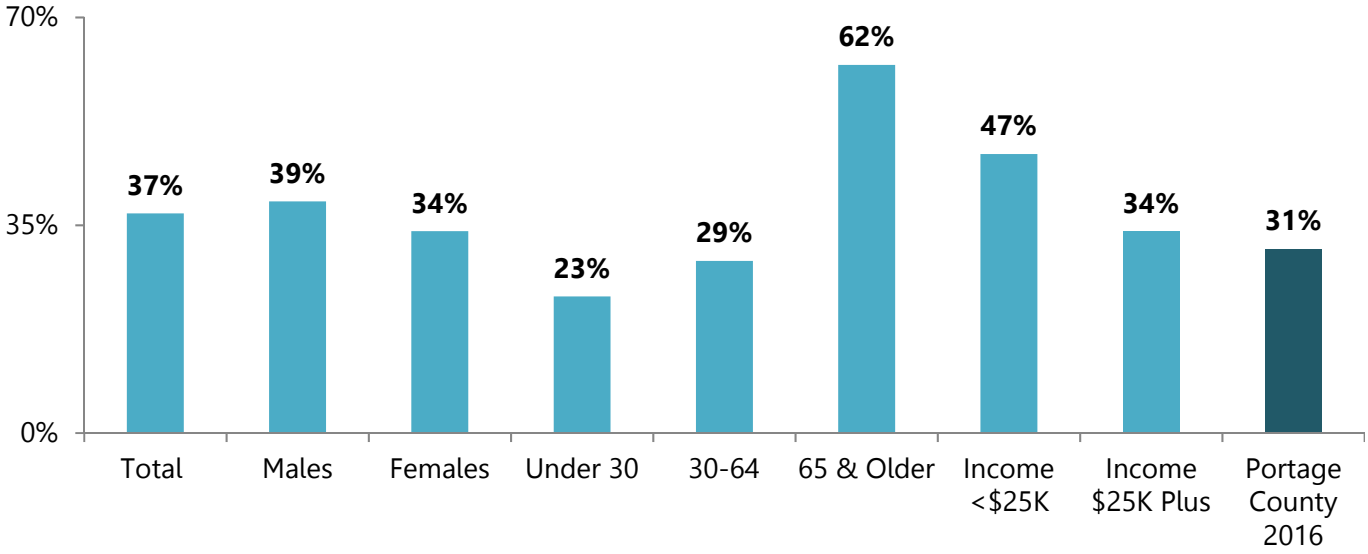
CANCER

In 2019, 10% of Portage County adults had been diagnosed with cancer at some time in their life. More than one-third (37%) of those diagnosed with cancer said cost might prevent them from seeing a doctor or health care provider for further treatment/medical care for their cancer diagnosis.

ARTHRITIS

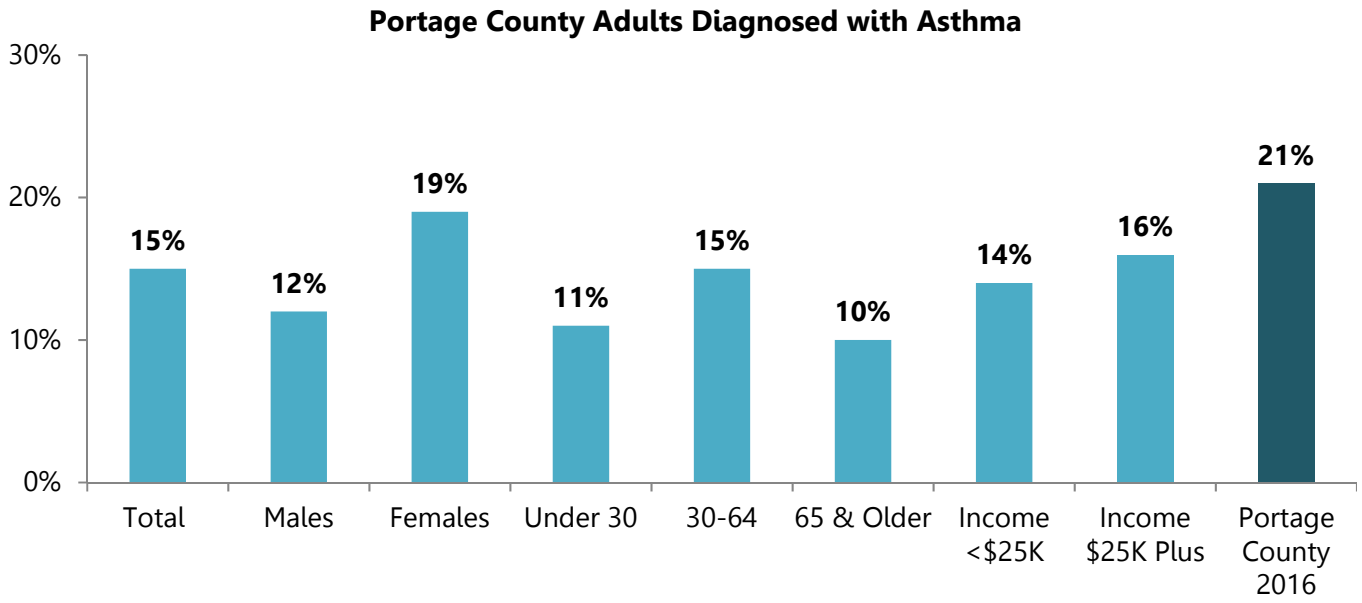
More than one-third (37%) of Portage County adults were diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

Portage County Adults Diagnosed with Arthritis



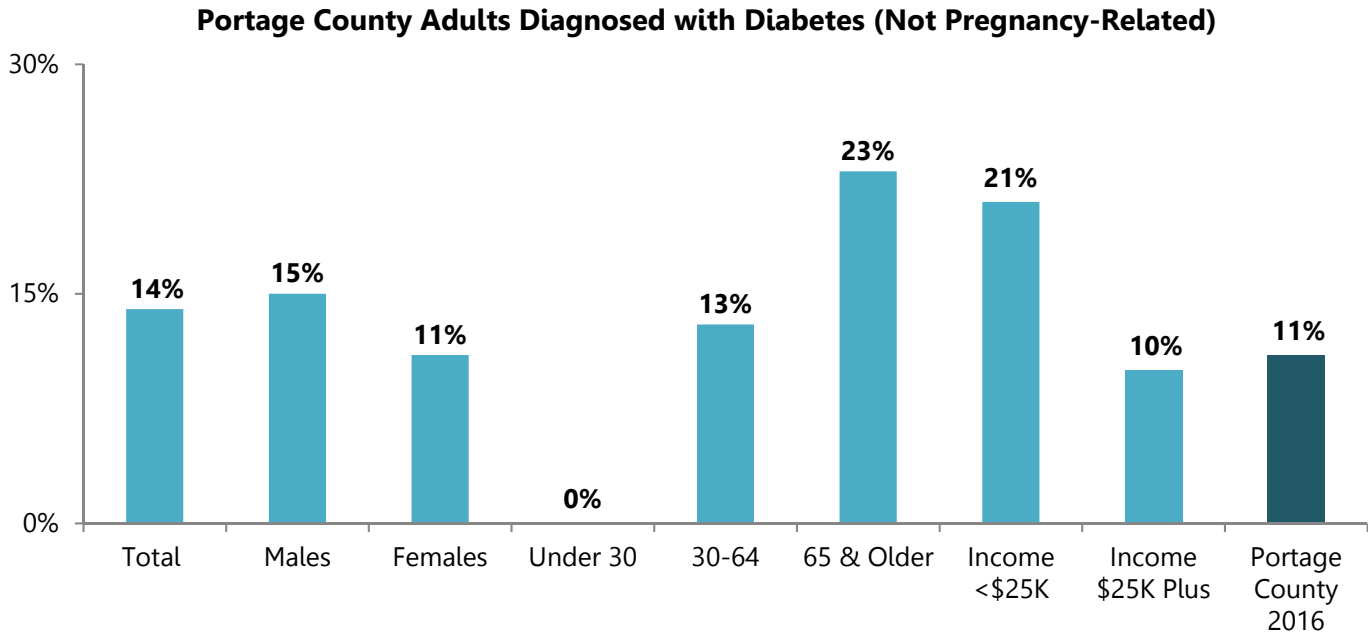
ASTHMA

In 2019, 15% of adults had been diagnosed with asthma.



DIABETES

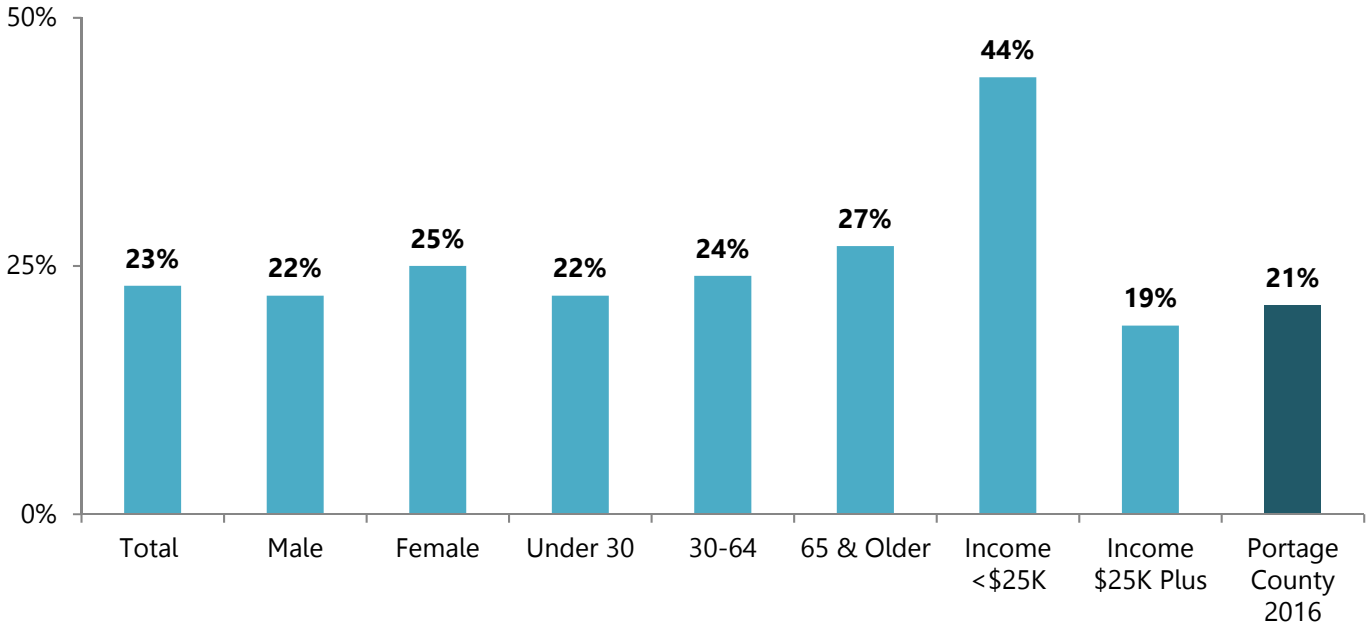
Fourteen percent (14%) of Portage County adults had been diagnosed with diabetes.



QUALITY OF LIFE

In 2019, 23% of Portage County adults were limited in some way because of a physical, mental or emotional problem.

Portage County Adults Limited in Some Way

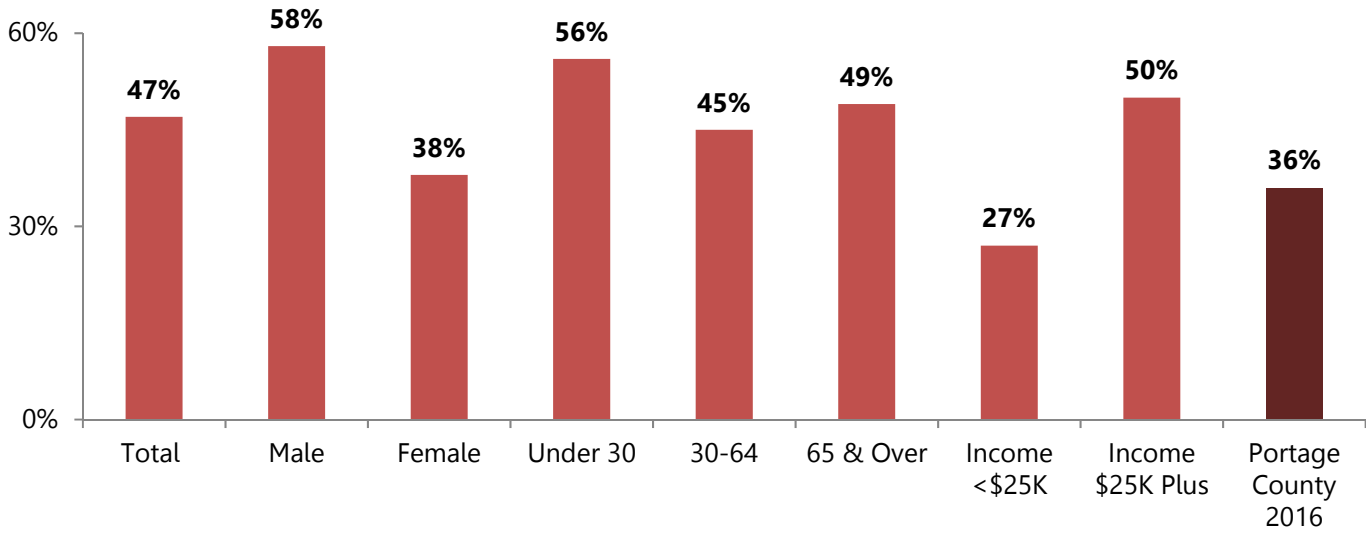


Data Summary | Social Conditions

SOCIAL DETERMINANTS OF HEALTH

In the past month, 10% of Portage County adults reported needing help meeting general daily needs such as food, clothes, shelter, or paying for utility bills. About one in six (16%) adults experienced four or more Adverse Childhood Experiences (ACEs). Almost half (47%) of Portage County adults kept a firearm in or around their home. Three percent (3%) of adults reported they were unlocked and loaded.

Portage County Adults With a Firearm in the Home



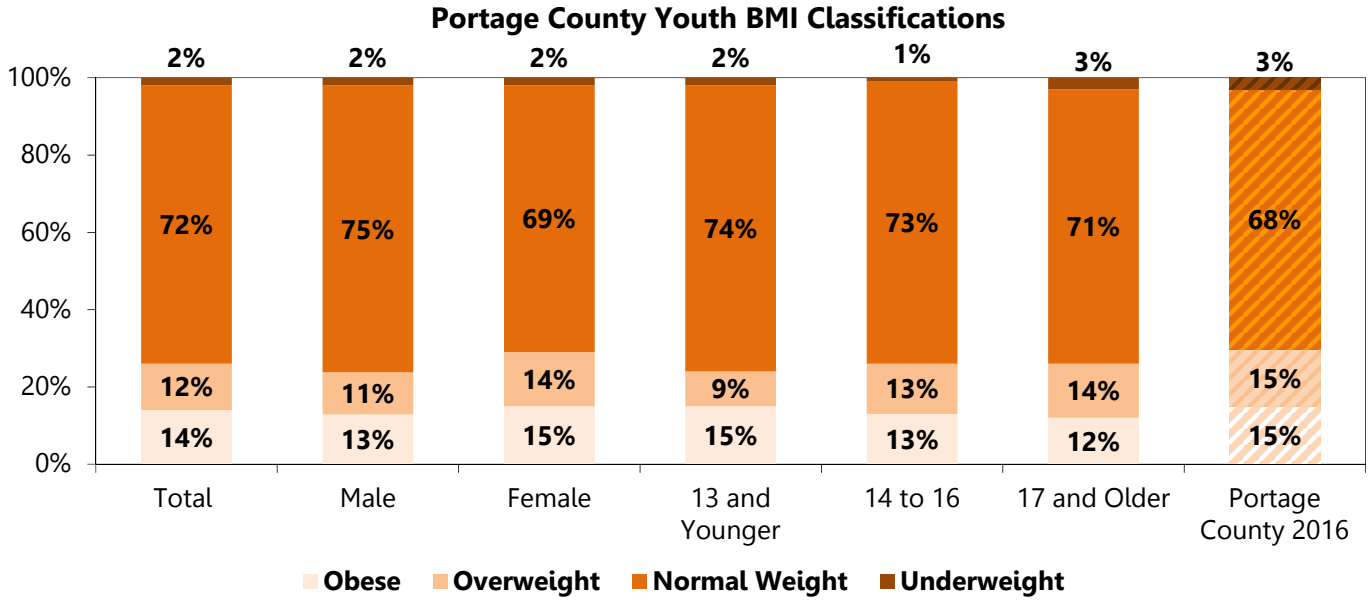
ENVIRONMENTAL HEALTH

Adults indicated that insects (5%) and mold (4%) threatened their health in the past year. Adults indicated their main method or way of getting information from authorities in a large-scale disaster or emergency was television (82%).

Data Summary | Youth Health

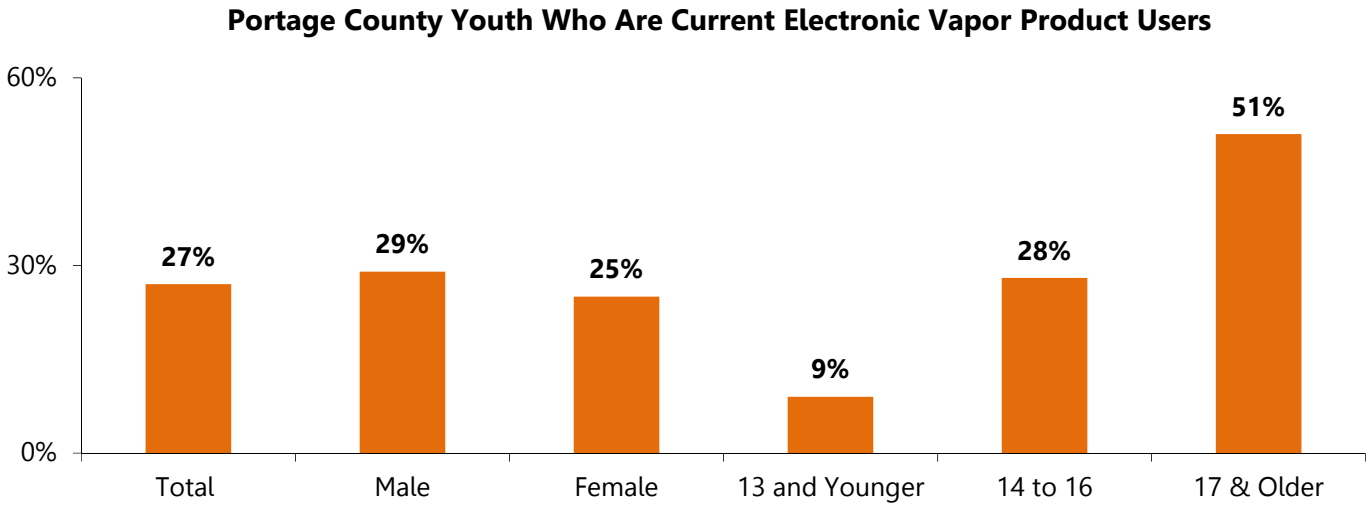
YOUTH WEIGHT STATUS

Fourteen percent (14%) of Portage County youth were obese, according to Body Mass Index (BMI) by age. When asked how they would describe their weight, 25% of Portage County youth reported that they were slightly or very overweight. Almost three-quarters (79%) of youth exercised for 60 minutes on 3 or more days per week.



YOUTH TOBACCO USE

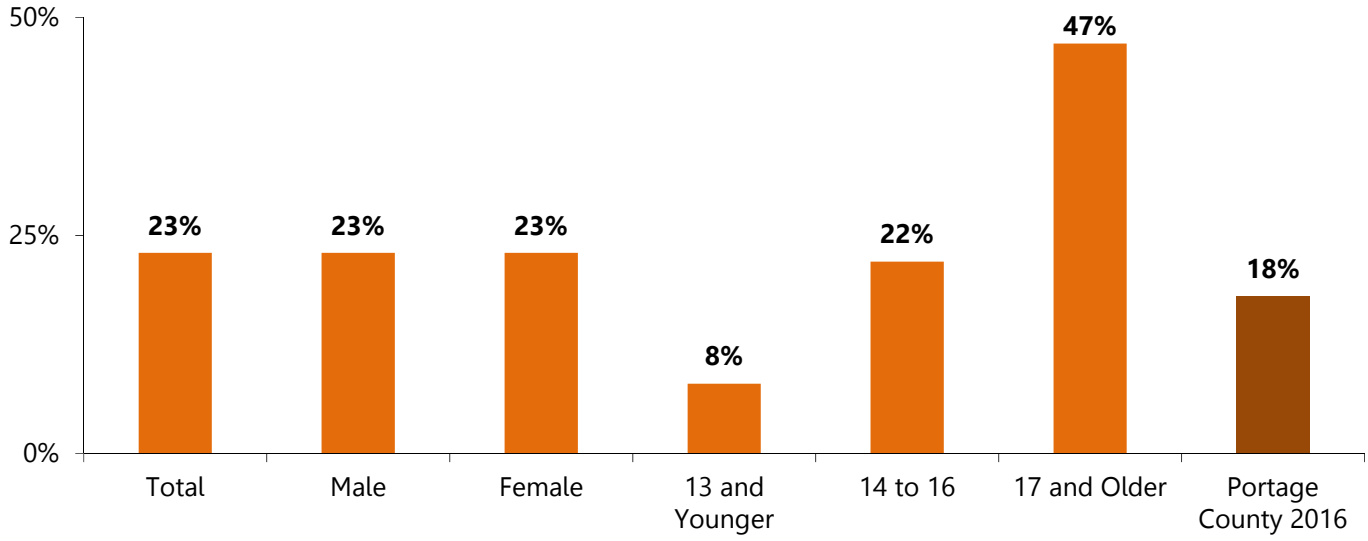
Seven percent (7%) of Portage County youth were current smokers, increasing to 16% of those ages 17 and older. Twenty-seven percent (27%) of youth used an electronic vapor product in the past 30 days, increasing to 51% of those ages 17 and older.



YOUTH ALCOHOL USE

Almost half (48%) of Portage County youth had at least one drink of alcohol in their life, increasing to 78% of youth 17 and older. Almost one-quarter (23%) of youth had at least one drink in the past 30 days, defining them as a current drinker. Of those who drank, 59% were defined as binge drinkers.

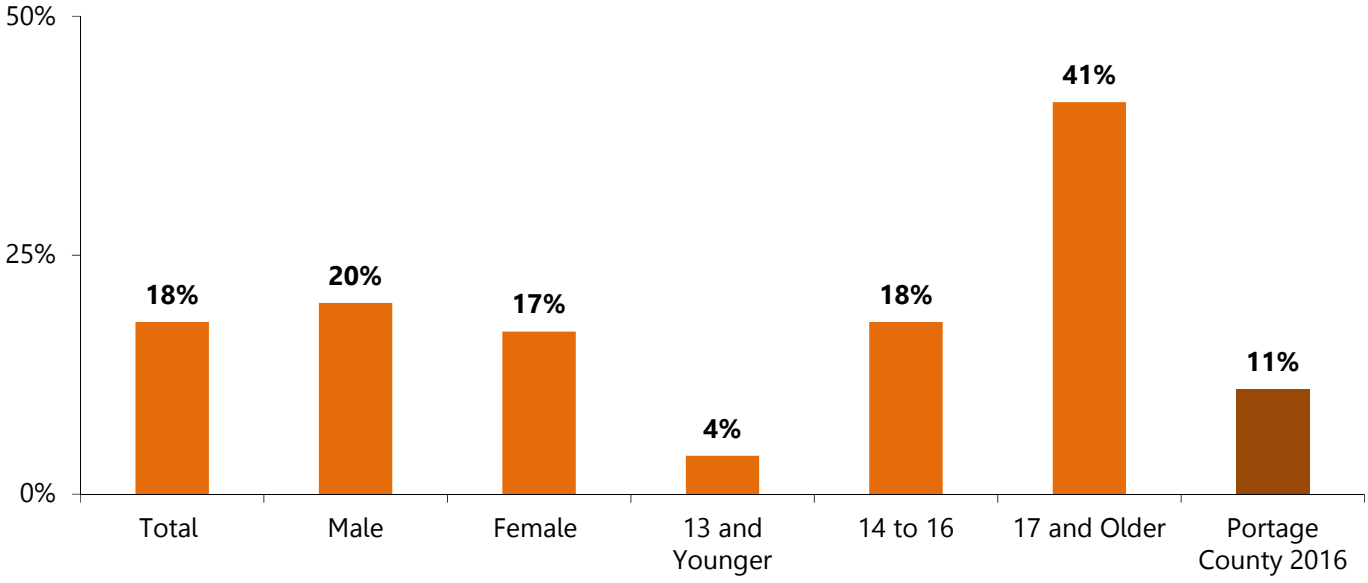
Portage County Youth Who Were Current Drinkers



YOUTH DRUG USE

In 2019, 18% of Portage County youth had used marijuana at least once in the past 30 days. Three percent (3%) of youth used medications that were not prescribed for them or took more than prescribed to get high at some time in their life.

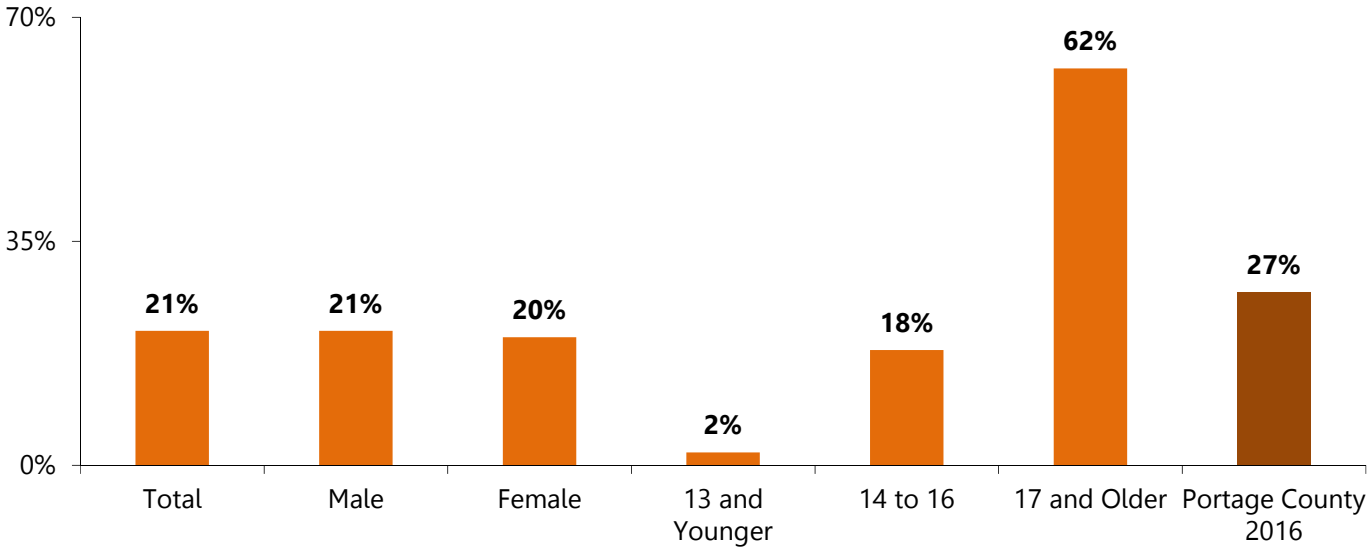
Portage County Youth Marijuana Use in Past Month



YOUTH SEXUAL BEHAVIOR

In 2019, 21% of youth reported having had sexual intercourse at least once in their lives. Twenty percent (20%) of sexually active youth had four or more sexual partners. Nine percent (10%) of youth engaged in intercourse without a reliable method of protection, and 14% reported they were unsure if they used a reliable method.

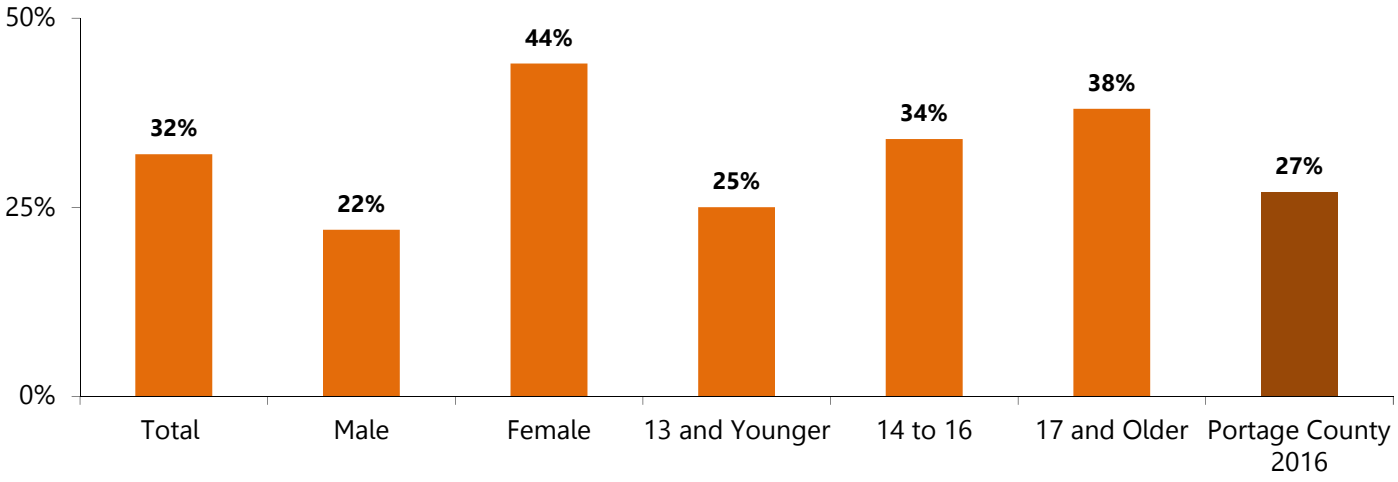
Portage County Youth Who Had Sexual Intercourse



YOUTH MENTAL HEALTH

About one in three (32%) 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. In the past year, 8% of youth had attempted suicide.

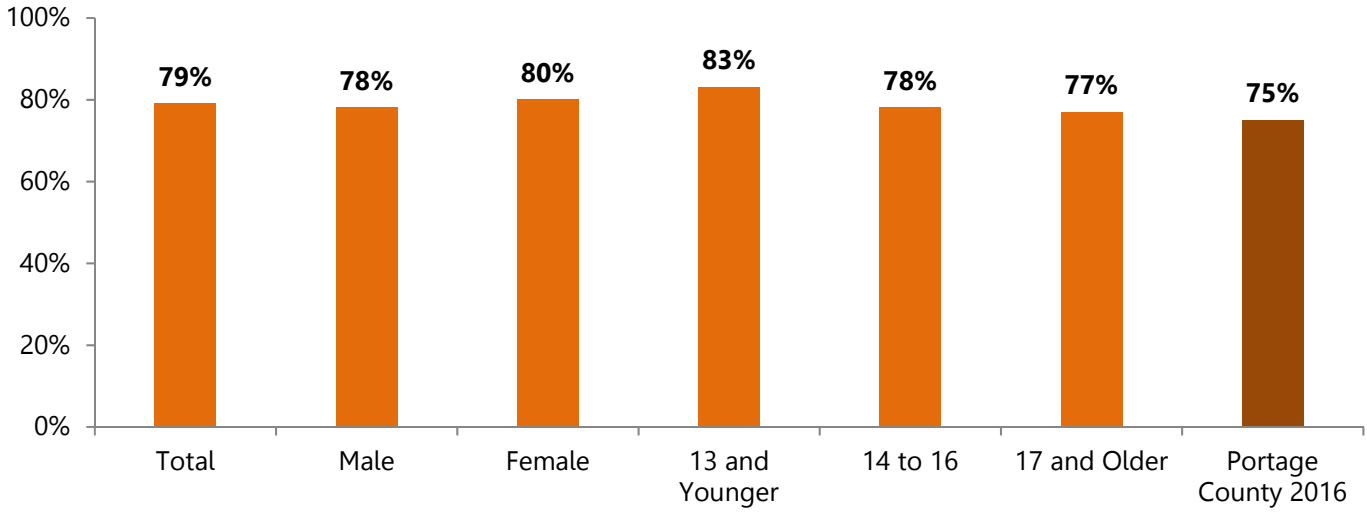
Portage County Youth Who Felt Sad or Hopeless for Two or More Weeks in a Row



YOUTH SOCIAL DETERMINANTS OF HEALTH

About one-quarter (26%) of youth had three or more adverse childhood experiences (ACEs) in their lifetime. Seventy-nine percent (79%) of youth had been to the doctor for a routine check-up in the past year. One-third (33%) of Portage County youth drivers had texted while driving in the past 30 days.

Portage County Youth Who Visited a Doctor Within the Past Year



YOUTH VIOLENCE

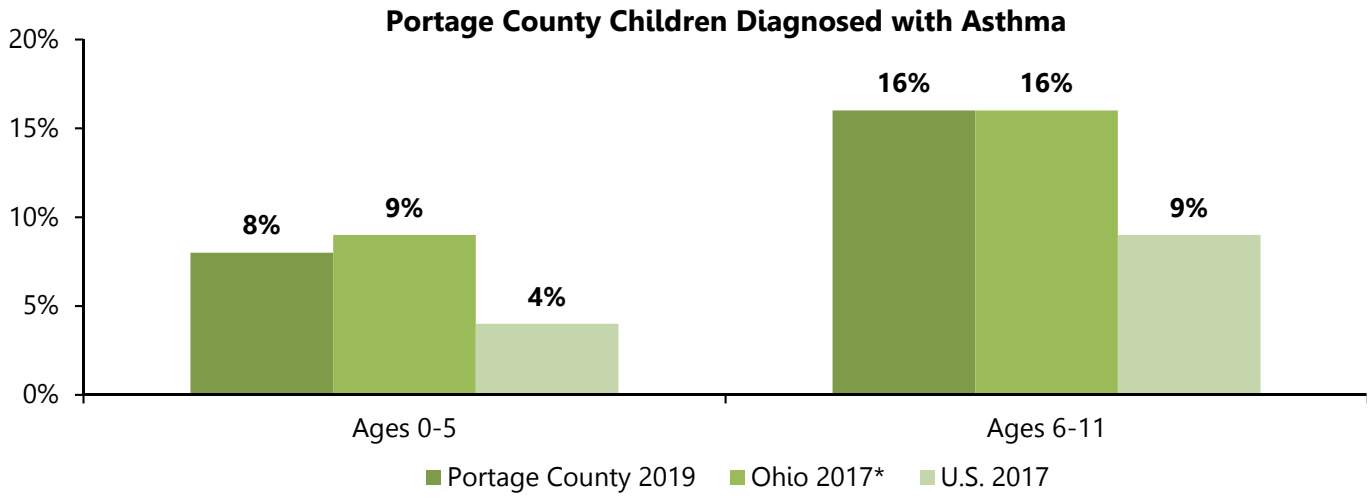
More than one-third (34%) of youth had been bullied in the past year. Eight percent (8%) of youth had ever been forced to participate in various sexual activities when they did not want to. Twenty-three percent (23%) of youth purposefully hurt themselves in their life by cutting, scratching, burning, hitting or biting, increasing to 32% of females.

Youth Behaviors	Total	Male	Female	13 and Younger	14-16 Years Old	17 and Older	Middle School	High School
Verbally Bullied	25%	23%	24%	30%	24%	19%	28%	22%
Indirectly Bullied	20%	16%	26%	22%	18%	22%	21%	19%
Cyber Bullied	9%	6%	12%	14%	7%	6%	12%	6%
Physically Bullied	6%	7%	5%	8%	6%	3%	7%	5%
Sexually Bullied	2%	1%	2%	1%	2%	1%	1%	2%

Data Summary | Child Health

HEALTH AND FUNCTIONAL STATUS

In 2019, 98% of Portage County parents rated their child's health as excellent (63%) or very good (35%). Seventeen percent (17%) of children were classified as obese by Body Mass Index (BMI) calculations. More than three-quarters (78%) of Portage County parents had taken their child to the dentist in the past year. Thirteen percent (13%) of Portage County parents reported their child had been diagnosed with asthma.

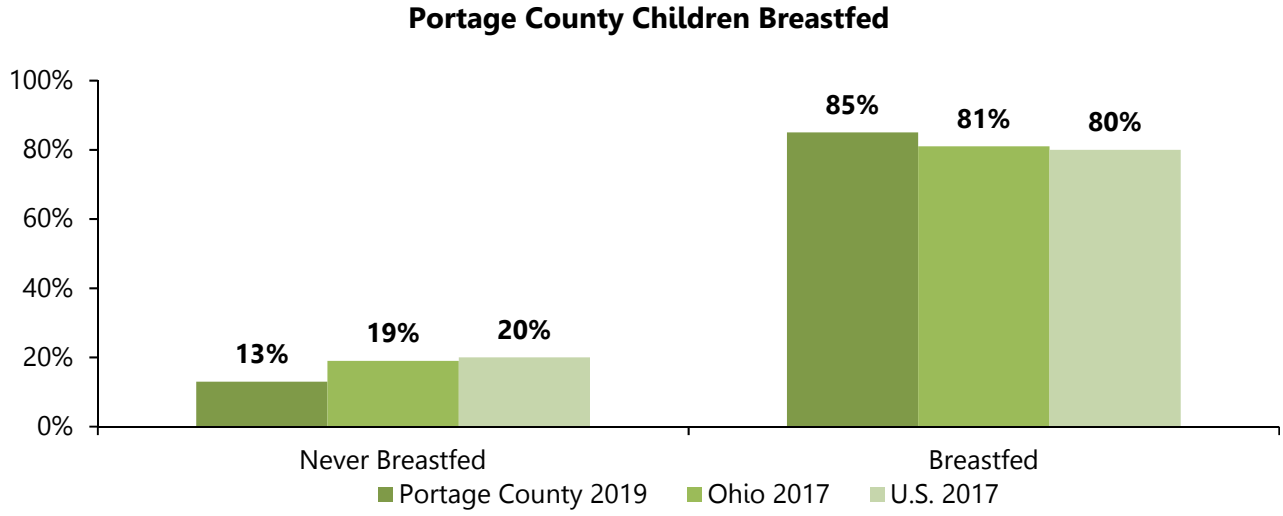


HEALTH CARE ACCESS

In 2019, all Portage County parents reported that their child had health insurance. Eighty-six percent (86%) of children had a personal doctor or nurse. Ninety-four percent (94%) of children had visited their health care provider for preventive care in the past 12 months.

EARLY CHILDHOOD (0-5 YEARS OLD)

The following information was reported by parents of 0-5 year olds. Ninety-eight percent (98%) of mothers got prenatal care within the first three months during their last pregnancy. Twelve percent (12%) of mothers received WIC services during their last pregnancy. Eighty-five percent (85%) of parents put their child to sleep on his/her back. Thirteen percent (13%) of mothers never breastfed their child.



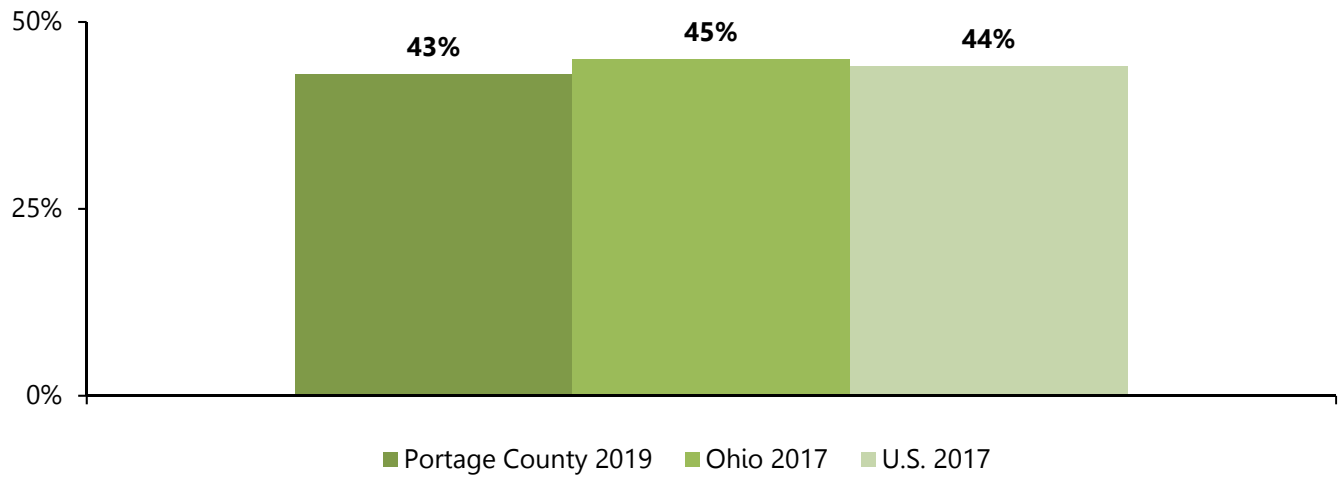
MIDDLE CHILDHOOD (6-11 YEARS OLD)

The following information was reported by Portage County parents of 6-11 year olds. Most (99%) parents definitely agreed (72%) or somewhat agreed (27%) their child was safe at school. Twelve percent (12%) of children were left unsupervised for 1 or more hours on the average school day. Ninety percent (90%) of children participated in extracurricular activities. Thirty-five percent (35%) of children were bullied.

FAMILY AND COMMUNITY CHARACTERISTICS

Forty-three percent (43%) of parents reported that every family member who lived in their household ate a meal together every day of the week. More than half (55%) of children never attended a religious service in the past month. Twenty percent (20%) of Portage County children experienced 1 or more Adverse Childhood Experiences (ACEs) and 8% experienced 2 or more ACEs.

Portage County Families that Ate Together Everyday of the Week



PARENT HEALTH

Almost three-quarters (74%) of parents rated their health as excellent or very good. Seven percent (7%) of parents were uninsured. Three out of ten (30%) parents were obese.

Adult Trend Summary

Adult Variables	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Health Status				
Rated general health as good, very good, or excellent	83%	88%	81%	83%
Rated general health as excellent or very good	53%	47%	49%	51%
Rated general health as fair or poor	17%	12%	19%	18%
Rated mental health as not good on four or more days (in the past 30 days)	27%	33%	26%	24%
Rated physical health as not good on four or more days (in the past 30 days)	20%	23%	23%	22%
Average number of days that physical health was not good (in the past 30 days)	3.7	4.0	4.0*	3.7*
Average number of days that mental health was not good (in the past 30 days)	4.7	5.2	4.3*	3.8*
Poor physical or mental health kept them from doing usual activities, such as self-care, work, or recreation (on at least one day during the past 30 days)	28%	32%	24%	23%
Healthcare Coverage, Access, and Utilization				
Uninsured	10%	6%	9%	11%
Had one or more persons they thought of as their personal health care provider	80%	83%	81%	77%
Visited a doctor for a routine checkup (in the past 12 months)	61%	74%	72%	70%
Visited a doctor for a routine checkup (5 or more years ago)	8%	7%	7%	8%
Arthritis, Asthma, & Diabetes				
Ever been told by a doctor they have diabetes (not pregnancy-related)	11%	14%	11%	11%
Ever diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia	31%	37%	29%	25%
Had ever been told they have asthma	21%	15%	14%	14%
Cardiovascular Health				
Ever diagnosed with angina or coronary heart disease	9%	6%	5%	4%
Ever diagnosed with a heart attack, or myocardial infarction	4%	5%	6%	4%
Ever diagnosed with a stroke	2%	3%	4%	3%
Had been told they had high blood pressure	29%	35%	35%	32%
Had been told their blood cholesterol was high	38%	36%	33%	33%
Had their blood cholesterol checked within the last five years	73%	86%	85%	86%
Cancer				
Diagnosed with skin cancer	N/A	3%	6%	6%
Diagnosed with any type of cancer (other than skin cancer)	8%**	7%	7%	7%
Weight Status				
Overweight (BMI of 25.0 – 29.9)	30%	35%	34%	35%
Obese (includes severely and morbidly obese, BMI of 30.0 and above)	28%	38%	34%	32%
Alcohol Consumption				
Current drinker (had at least one drink of alcohol within the past 30 days)	62%	78%	54%	55%
Binge drinker (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	22%	27%	19%	17%
Tobacco Use				
Current smoker (smoked on some or all days)	13%	16%	21%	17%
Former smoker (smoked 100 cigarettes in lifetime and now do not smoke)	23%	27%	24%	25%
Tried to quit smoking (on at least one day in the past year)	52%	66%	N/A	N/A
Current e-cigarette user (vaped on some or all days)	N/A	4%	5%	5%

N/A – Not Available

Indicates alignment with the Ohio State Health Assessment

**2016 BRFSS as compiled by 2019 County Health Rankings*

***Includes skin cancer. Please compare with caution.*

Adult Variables	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Drug Use				
Used marijuana or hashish (in the past 6 months)	10%	8%*	N/A	N/A
Used drugs not prescribed for them or took more than prescribed to feel good, high, and/or more active or alert (in the past 6 months)	10%	6%*	N/A	N/A
Preventive Medicine				
Had a flu shot in the past year (age 65 and older)	88%	72%	63%	60%
Had a pneumonia vaccine (age 65 and older)	71%	76%	76%	75%
Had a clinical breast exam in the past two years (age 40 and older)	71%	62%	N/A	N/A
Had a mammogram in the past two years (age 40 and older)	71%	73%	74%*	72%*
Had a Pap test in the past three years (ages 21-65)	64%	66%	82%*	80%*
Had a PSA test in within the past year (age 40 and over)	56%	62%	39%*	40%*
Quality of Life				
Limited in some way because of physical, mental or emotional problem	21%	23%	21%*	21%*
Mental Health				
Felt sad or hopeless for two or more weeks in the past year	15%	17%	N/A	N/A
Seriously considered attempting suicide in the past year	6%	6%	N/A	N/A
Attempted suicide in the past year	5%	5%	N/A	N/A
Oral Health				
Visited a dentist or a dental clinic (within the past year)	64%	71%	68%*	66%*
Visited a dentist or a dental clinic (5 or more years ago)	9%	10%	11%*	10%*

N/A – Not Available
**2016 BRFSS*

Youth Trend Summary

Youth Comparisons	Portage County 2016 (6th-12th)	Portage County 2019 (6th-12th)	Portage County 2019 (9th-12th)	U.S. 2017 YRBS (9th-12th)
Weight Control				
Obese	15%	14%	14%	15%
Overweight	15%	12%	13%	16%
Described themselves as slightly or very overweight	29%	25%	28%	32%
Were trying to lose weight	46%	44%	48%	47%
Exercised to lose weight (in the past 30 days)	47%	53%	58%	N/A
Ate less food, fewer calories, or foods lower in fat to lose weight (in the past 30 days)	31%	26%	31%	N/A
Went without eating for 24 hours or more (in the past 30 days)	6%	9%	12%	13%**
Took diet pills, powders, or liquids without a doctor's advice (in the past 30 days)	2%	3%	4%	5%**
Vomited or took laxatives (in the past 30 days)	2%	4%	4%	4%**
Ate 5 or more servings of fruit and/or vegetables per day	13%*	24%	22%	N/A
Ate 0 servings of fruits and/or vegetables per day	7%*	5%	6%	N/A
Physically active at least 60 minutes per day on every day in past week	34%	31%	29%	26%
Physically active at least 60 minutes per day on 5 or more days in past week	54%	58%	58%	46%
Did not participate in at least 60 minutes of physical activity on any day in past week	12%	8%	8%	15%
Watched 3 or more hours per day of television (on an average school day)	24%	17%	19%	21%
Unintentional Injuries and Violence				
Carried a weapon (in the past 30 days)	11%	11%	13%	16%
Carried a weapon on school property (in the past 30 days)	1%	2%	3%	4%
Threatened or injured with a weapon on school property (in the past 12 months)	5%	8%	9%	6%
Did not go to school because they felt unsafe (at school or on their way to or from school in the past 30 days)	4%	6%	5%	7%
Bullied (in past year)	43%	34%	31%	N/A
Bullied on school property (in past year)	33%	25%	19%	19%
Electronically bullied (in past year)	12%	9%	6%	15%
Were ever physically forced to have sexual intercourse (when they did not want to)	3%	2%	3%	7%
Experienced physical dating violence (including being hit, slammed into something, or injured with an object or weapon on purpose by someone they were dating or going out with in the past 12 months)	2%	3%	3%	8%
Purposefully hurt themselves in their life	30%	23%	24%	N/A
Mental Health				
Felt sad or hopeless (almost every day for 2 or more weeks in a row so that they stopped doing some usual activities in the past 12 months)	27%	32%	35%	32%
Seriously considered attempting suicide (in the past 12 months)	18%	13%	15%	17%
Attempted suicide (in the past 12 months)	9%	8%	8%	7%
Suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (in the past 12 months)	2%	2%	3%	2%

N/A – Not Available
**Calculations differed year to year. Please compare with caution.*
***Comparative YRBS data for U.S. is 2013*
Indicates alignment with Ohio SHA/SHIP

Youth Comparisons	Portage County 2016 (6th-12th)	Portage County 2019 (6th-12th)	Portage County 2019 (9th-12th)	U.S. 2017 YRBS (9th-12th)
Alcohol Consumption				
Ever drank alcohol (at least one drink of alcohol on at least 1 day during their life)	47%	48%	61%	60%
Current Drinker (at least one drink of alcohol on at least 1 day during the past 30 days)	18%	23%	32%	30%
Binge drinker (drank 5 or more drinks within a couple of hours on at least 1 day during the past 30 days)	9%	14%	20%	14%
Drank for the first time before age 13 (of all youth)	13%	17%	13%	16%
Obtained the alcohol they drank by someone giving it to them (of current drinkers)	32%	30%	32%	44%
Rode with a driver who had been drinking alcohol (in a car or other vehicle on 1 or more occasion during the past 30 days)	18%	14%	14%	17%
Drove when they had been drinking alcohol (in a car or vehicle, 1 or more times during the 30 days before the survey, among youth who had driven a car or other vehicle)	5%	7%	9%	6%
Tobacco Use				
Current smoker (smoked on at least 1 day during the past 30 days)	6%	7%	10%	9%
Smoked cigarettes frequently (smoked on 20 or more days during the past 30 days)	1%	1%	2%	3%
Smoked cigarettes daily (smoked on all 30 days during the past 30 days)	1%	1%	1%	2%
Currently used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, on at least 1 day during the past 30 days)	N/A	27%	37%	13%
Used electronic vapor products frequently (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, on 20 or more days during the past 30 days)	N/A	10%	16%	3%
Used electronic vapor products daily (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, on all 30 days during the past 30 days)	N/A	8%	12%	2%
Sexual Behavior				
Ever had sexual intercourse	27%	21%	34%	40%
Had sexual intercourse with four or more persons (of all youth during their life)	8%	5%	8%	10%
Had sexual intercourse before the age 13 (for the first time of all youth)	3%	3%	4%	3%
Used a condom (during last sexual intercourse)	54%	37%	40%	54%
Used birth control pills (during last sexual intercourse)	30%	23%	24%	21%
Used an IUD (during last sexual intercourse)	5%	2%	2%	4%
Used a shot, patch or birth control ring (during last sexual intercourse)	3%	5%	4%	5%
Did not use any method to prevent pregnancy (during last sexual intercourse)	11%	10%	10%	14%
Drug Use				
Currently used marijuana (in the past 30 days)	11%	18%	26%	20%
Ever used methamphetamines (in their lifetime)	1%	1%	1%	3%
Ever used cocaine (in their lifetime)	2%	1%	1%	5%
Ever used heroin (in their lifetime)	1%	<1%	<1%	2%
Ever used inhalants (in their lifetime)	4%	6%	5%	6%
Ever used ecstasy (also called MDMA in their lifetime)	3%	1%	1%	4%
Misused medications that were not prescribed to them or to ok more to get high and/or feel more alert (in their lifetime)	7%	3%	4%	N/A
Ever took steroids without a doctor's prescription (in their lifetime)	1%	1%	1%	3%
Were offered, sold, or given an illegal drug on school property (in the past 12 months)	9%	11%	15%	20%
Personal Health				
Visited a dentist within the past year (for a check-up, exam, teeth cleaning, or other dental work)	74%	78%	78%	74%*
Visited a doctor or other healthcare professional (for a routine check-up in the past year)	75%	79%	78%	N/A

N/A – Not Available
**Comparative YRBS data for U.S. is 2013*
Indicates alignment with Ohio SHA/SHIP

Child Trend Summary

Child Comparisons	Portage County 2016 Ages 0-5	Portage County 2019 Ages 0-5	Ohio 2017 Ages 0-5	U.S. 2017 Ages 0-5	Portage County 2016 Ages 6-11	Portage County 2019 Ages 6-11	Ohio 2017 Ages 6-11	U.S. 2017 Ages 6-11
Health and Functional Status								
Rated health as excellent or very good	95%	97%	91%	93%	92%	99%	88%	90%
Dental care visit in the past year	79%	51%	41%**	60%**	89%	93%	89%	90%
Diagnosed with asthma	10%	8%	9%±	4%	17%	16%	16%±	9%
Diagnosed with diabetes	0%	0%	N/A	<1%***	1%	0%	N/A	<1%***
Diagnosed with ADHD/ADD	3%	3%	2%*±	2%*	9%	11%	13%	10%
Diagnosed with behavioral or conduct problems	3%	0%	3%*±	4%*	5%	4%	13%	8%
Diagnosed with epilepsy or a seizure disorder	1%	3%	N/A	<1%***	<1%	0%	N/A	<1%***
Diagnosed with a brain injury, concussion, or head injury	0%	0%	N/A	<1%	2%	1%	N/A	<1%
Diagnosed with depression	0%	0%	N/A	<1%*	2%	1%	N/A	2%
Diagnosed with cerebral palsy	0%	2%	N/A	<1%***	0%	0%	N/A	<1%***
Diagnosed with anxiety problems	2%	3%	N/A	2%*	8%	7%	N/A	6%
Diagnosed with intellectual disability/mental retardation	N/A	5%	N/A	1%*	N/A	0%	N/A	1%
Diagnosed with learning disability	3%	3%	N/A	2%*	7%	3%	N/A	9%
Diagnosed with speech or language disorder	14%	18%	N/A	10%*	9%	9%	N/A	7%
Child had two or more health conditions	N/A	17%	7%	7%	N/A	11%	28%	21%
Health Care Access								
Had public insurance	24%	15%	28%±	32%	23%	17%	33%±	32%
Had one or more preventive care visits in past year	97%	98%	94%	89%	80%	92%	78%	80%
Had a personal doctor or nurse	81%	85%	75%	72%	76%	86%	72%	72%
Early Childhood (Ages 0-5)								
Never breastfed their child	18%	13%	19%	20%	N/A	N/A	N/A	N/A
Middle Childhood (Ages 6-11)								
Child did not miss any days of school because of illness or injury	N/A	N/A	N/A	N/A	22%	13%	26%±	30%
Parent definitely agreed that their child was safe at school	N/A	N/A	N/A	N/A	N/A	71%	80%	82%

**Ages 3-5*
***Ages 1-5*
****Ages 0-17*
±Indicates Ohio 2016 data from the National Survey of Children's Health. 2017 Ohio data is not available.
N/A – Not Available
Indicates alignment with the Ohio State Health Assessment

Child Comparisons	Portage County 2016 Ages 0-5	Portage County 2019 Ages 0-5	Ohio 2017 Ages 0-5	U.S. 2017 Ages 0-5	Portage County 2016 Ages 6-11	Portage County 2019 Ages 6-11	Ohio 2017 Ages 6-11	U.S. 2017 Ages 6-11
Family and Community Characteristics								
Family ate a meal together every day of the week	50%	50%	60%	54%	41%	39%	45%	44%
Parent definitely agreed that their child lives in a safe neighborhood	69%	72%	N/A	64%	60%	77%	N/A	65%
Two or more adverse childhood experiences	N/A	8%	13%	11%	N/A	8%	27%	21%

N/A – Not Available

Evaluation of Impact

UH Portage Medical Center

UH Portage Medical Center Implementation Plan: Impact Assessment

UH Portage Medical Center is a community-based hospital with 302 licensed beds. This not-for-profit hospital serves mainly Portage County residents. It operates a Level III Trauma Emergency Department, a freestanding emergency department in Kent, two urgent care facilities, comprehensive imaging facilities, a network of physician practices, and outpatient centers and medical facilities throughout the county. The main campus provides labor and delivery, surgical, orthopedic and rehabilitation services.

Portage County is a rural county but is within close drive distance to the cities of Akron and Cleveland, both of which house Level I trauma facilities.

Upon review of the 2016 Community Health Needs Assessments, hospital leadership for UH Portage Medical Centers' isolated three top priority community health needs: 1) **access to care for the underserved county residents;** 2) **diabetes management;** and 3) **mental health and substance abuse.** Within those areas, in consideration of the hospital's expertise and its being a community-based hospital, the following goals were established:

- Increase local health services in the Village of Windham
- Increase community awareness of local services; Increase access to diabetes education and support groups; encourage compliance by making expert care available close to home
- Improve the hospital's capacity to care for patients who present with mental health or substance abuse conditions which require medical stabilization; overall improvement and increased capacity of the mental health and/or substance abuse care network.

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

1) Increase local health services in the Village of Windham

Windham Village is the neighborhood with lowest average income in Portage County. Historically, access to health care services was very low in this neighborhood, with lack of health insurance or expendable income and poor transportation options being the biggest barriers to care. The hospital has focused on developing services within the neighborhood itself to improve the quality of life in the neighborhood for residents and to build awareness of available services throughout the county.

Increase in the number of participants in programming; increase resident awareness of available health and human services

UH Portage Medical Center designs, staffs and/or sponsors numerous events within the Windham neighborhood. In 2017, a total of 292 neighborhood residents participated in one or more of these events: blood pressure screening and health education event at the Renaissance Center community dinner and food bank; literacy night event at the high school; provided sports physicals for HS athletes; Windham Night Out event, with Police & Fire; Red Shield Food Bank event at the Renaissance Center; hosted Windham Career Day; mammogram resources and education at Renaissance Center Food Bank. Participation remained strong in 2018, with 343 residents taking advantage of the services provided to support their health right in their own neighborhood.

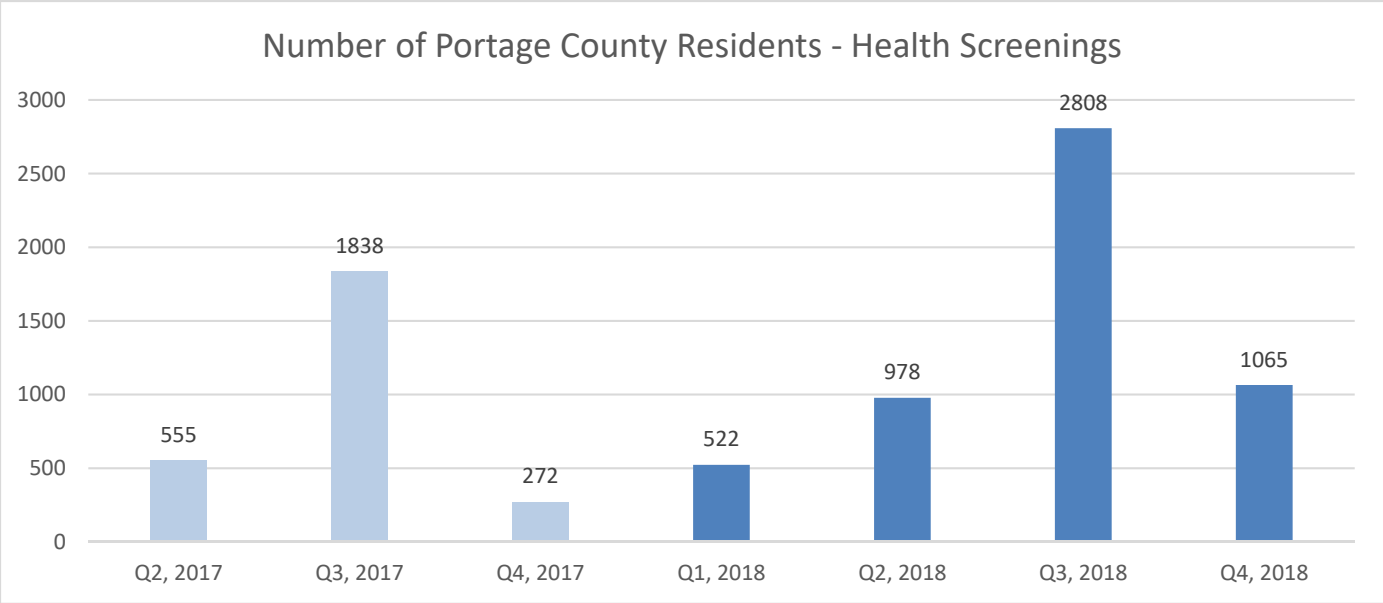
UH Portage Medical Center has been instrumental in the funding and building of a large community garden at the Renaissance Center in Windham Village. This garden is tended to by community residents and professional advisors, and the food grown is distributed to the residents. This community building asset is one example of outreach to the county's most vulnerable residents in a meaningful, sustained way.

2) Diabetes Management

Diabetes is a common co-morbidity for those hospitalized in UH Portage Medical Center. Hospital leadership has focused on improving early detection of diabetes, education of diabetics on effective self-management of the disease, and education and support for family members and other caregivers.

In late 2017, an endocrinologist was hired to provide specialty care for diabetics. Previously, most diabetics were receiving care from non-specialists.

In 2018, the hospital provided an increased number of health screenings to community members; on average, 888 residents were screened per quarter in 2017, and that increased to 1,343 per quarter in 2018. Various events throughout the county resulted



in a total of 5,373 individuals receiving screenings in 2018. These events generally include multiple screening types, thus capture risk information for health conditions in addition to diabetes. Screening types included blood pressure, cholesterol, body mass index, hearing, stroke and lower extremity vascular screenings.

A historically important component to UH Portage Medical Center's approach to serving the diabetic patients in the county has been its support groups, diabetic education sessions and diabetes community outreach events. In 2017, 132 community members participated in one or more of these groups or events. These were promoted more heavily in 2018, and attendance numbers remained high throughout the year. A total of 282 (a 114% increase) community residents benefitted from one or more of these custom programs for diabetes prevention and management.

Diabetes educational staff continue to examine the effectiveness of their programs; in 2018, about four-in-five of participants showed an increase in understanding of the disease and its management. In 2017, far fewer (about one-third) were showing that level of increase of understanding of diabetes and its proper management.

Finally, staff closely monitor the number of inpatients with a primary or secondary diagnosis of diabetes. In 2017 and 2018, that number was about the same on a quarter basis (45 inpatients). The quarterly and annual numbers will be monitored going forward as a measure of the community-based prevention and management programs continue. Of those inpatients in 2018, none were re-admitted to a hospital within 14 days of discharge.

3) Mental health and substance abuse

A growing appreciation of the interplay between mental health and physical health, along with a shortage of mental health services has led to renewed attention on mental health and substance abuse and the role that hospitals can play in ensuring access to important care.

One identified weakness was a lack of connection between the hospital and community-based services to provide outpatient treatment or ongoing care for mental health and/or addiction issues. Discharged patients need connections to services immediately; in 2017 and 2018, UH Portage Medical Center solidified working relationships between the hospital and all of the community-based services to ensure patients are connected to services with availability upon discharge.

In reaction to the opioid epidemic and the source of many addictions being tied to initial prescription pain medication abuse, hospitals are transitioning to alternative ways to help patients manage pain. In 2017, UH Portage Medical Center hired a pain management specialist to move the hospital's practices away towards minimizing the use of opioid medications for pain management.

In both 2017 and 2018, UH Portage Medical Center Medical Center had a goal of providing medical stabilization services to 100 in-patients with substance abuse issues. In 2017, 97 patients received this treatment, and the goal of 100 was far exceeded in 2018 (166 inpatients). Upon discharge, patients were connected to primary care physicians and/or other community resources to ensure continuity of care.

Healthcare Access: Healthcare Coverage

Key Findings

Six percent (6%) of Portage County adults were without healthcare coverage. About one out of six (17%) adults did not get their prescriptions from their doctor filled in the past year.

Health Coverage

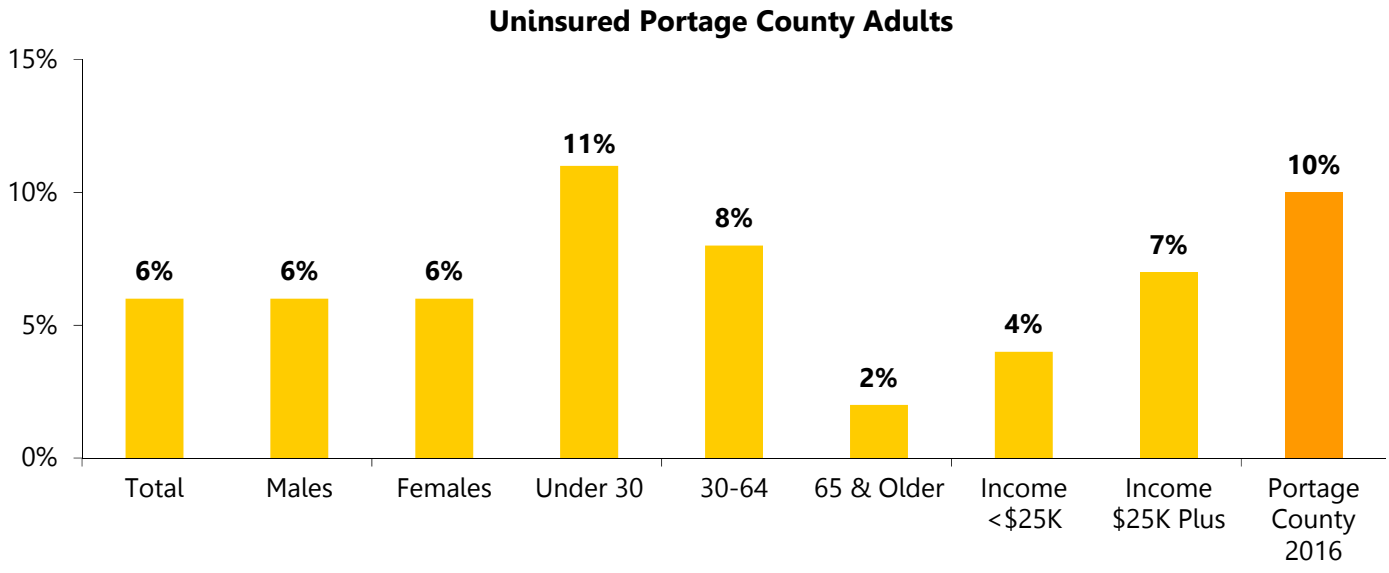
- In 2019, 94% of Portage County adults had healthcare coverage.
- In the past year, 6% of adults were uninsured.
- One in eleven (9%) adults with children did not have healthcare coverage, compared to 3% of those who did not have children living in their household.
- The main reasons uninsured adults gave for being without healthcare coverage were*:
    1. Cost, such as high co-pays, premiums, and high deductibles with Health Savings Account (60%)
    2. They lost their job or changed employers (25%)
    3. Their employer does not offer/stopped offering healthcare coverage (20%)

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

In Portage County, 7,468 adults were uninsured.

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Uninsured	10%	6%	9%	11%

The following graph shows the percentage of Portage County adults who were uninsured. An example of how to interpret the information in the graph includes: 6% of all Portage County adults were uninsured, including 6% of males and 6% of females.



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

Healthy People 2020
Access to Health Services (AHS)

Objective	Portage County 2019	Ohio 2017	U.S. 2016	Healthy People 2020 Target
AHS-1.1: Persons under age of 65 years with health insurance	67% age 18-24 90% age 25-34 100% age 35-44 96% age 45-54 90% age 55-64	87% age 18-24 90% age 25-34 90% age 35-44 91% age 45-54 93% age 55-64	85% age 18-24 84% age 25-34 87% age 35-44 90% age 45-54 93% age 55-64	100%

Note: U.S. baseline is age-adjusted to the 2000 population standard
(Sources: Healthy People 2020 Objectives, 2016 BRFSS, 2017 BRFSS, 2019 Portage County Community Health Assessment)

Hospital Discharges for Patients without Medical Insurance, 2017*

- Of the 6,252 inpatients for UH Portage Medical Center in 2017 who were Portage County residents, 4.0% of those under 18 were "self-pay" (19 of 519) or covered as "charity/uncompensated care" (2 of 519). Almost as many (3.6%) of the 2,613 adults added 18-64 were not covered by health insurance, although a higher proportion of those adults hospitalized in UH Portage Medical Center were classified as charity or uncompensated care cases compared to the children hospitalized (35 vs. 2, respectively). Among the 3,120 seniors hospitalized, only 1 was not covered by health insurance.

	Patients Age 0-17 Years	Patients Age 18-64 Years	Patients Age 65 Years and Older
Patients without Medical Insurance at Discharge	21 of 519 (4.0%)	94 of 2,613 (4.0%)	1 of 3,120 (0.1%)

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

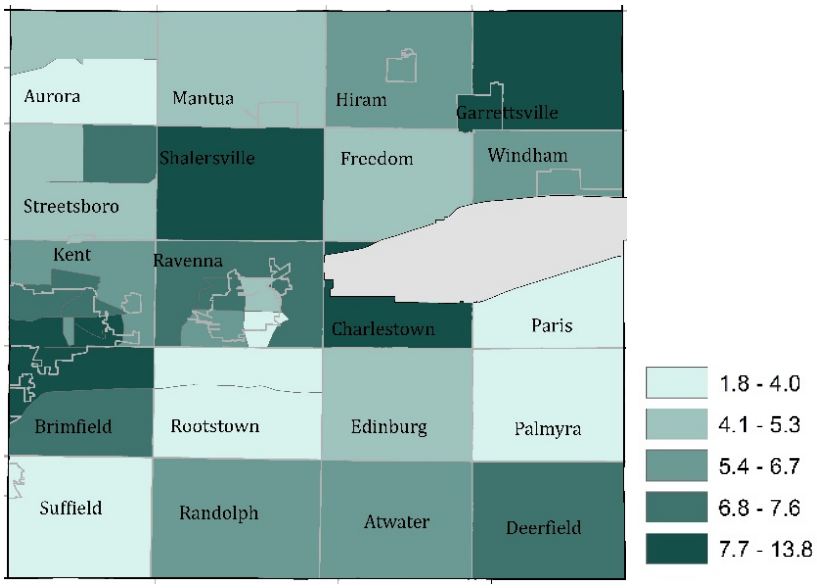
The following chart shows the percent of population with no insurance, by census tract, as identified by the American Community Survey 5-year Estimate for 2017.

Percent of Population with No Insurance, by Census Tract

Highest
Charlestown Twp.- 13.8%
North Brimfield- 13.3%
Kent, South Off-Campus- 13.3%

Lowest
South Aurora- 1.8%
North Rootstown- 2.7%
Paris Twp.- 2.8%

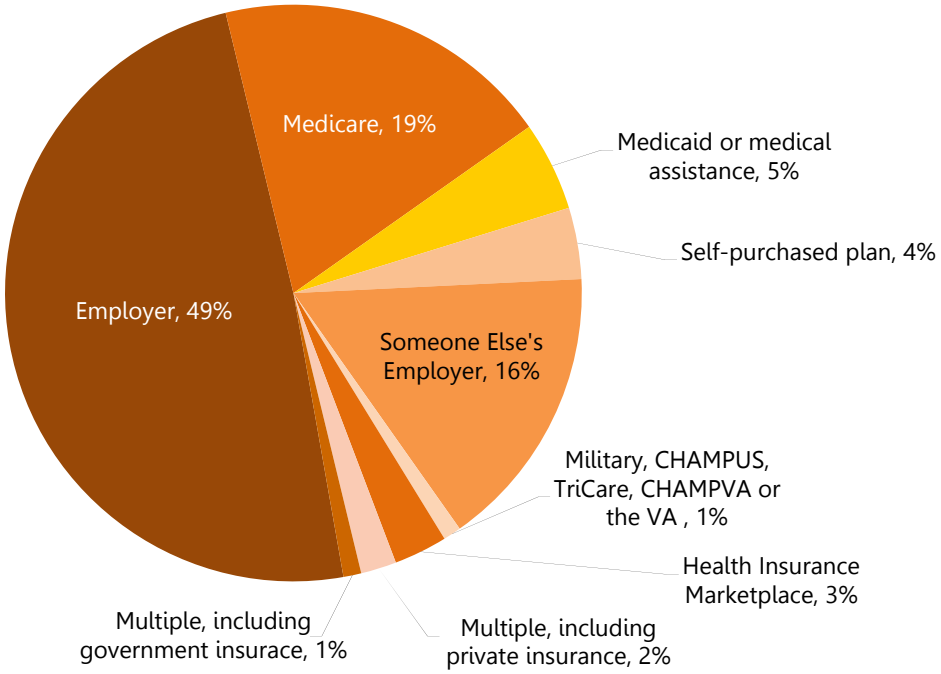
County: 6.5%



(Source: American Community Survey 5-year Estimate 2017 as compiled by Portage County Health District)

The following chart identifies sources of healthcare coverage for Portage County adults, as identified by the 2019 Community Health Assessment survey.

Source of Healthcare Coverage for Portage County Adults



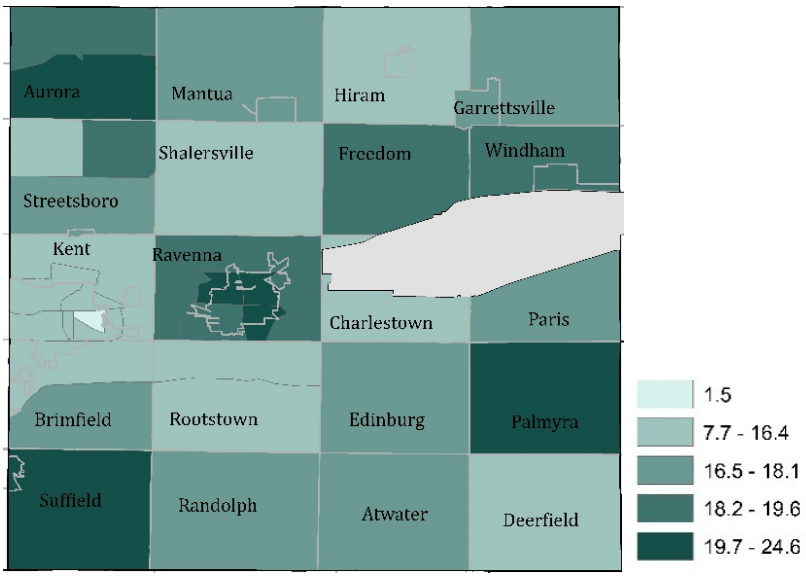
The following map shows the percent of total population on Medicare, by census tract, as identified by the American Community Survey 5-year Estimate for 2017.

Percent of Population on Medicare, by Census Tract

Highest
Northeast Ravenna- 24.6%
Northwest Ravenna- 22.8%
Suffield Twp.- 22.5%

Lowest
Kent, KSU - 1.5%
Kent, South Off-Campus- 8.2%
Kent, Northwest- 8.4%

County: 16.4%



(Source: American Community Survey 5-year Estimate 2017 as compiled by Portage County Health District)

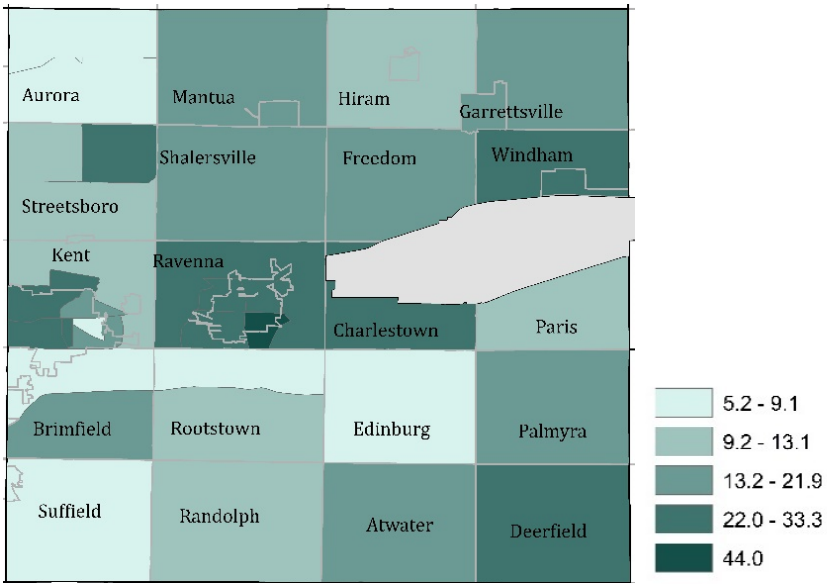
The following maps shows the percent of total population on Medicaid and the percent of population ages 0-17 on Medicaid , as identified by the American Community Survey 5-year Estimate for 2017.

Percent of Total Population on Medicaid, by Census Tract

Highest
Southeast Ravenna- 44.0%
Northwest Ravenna- 33.1%
Windham Twp.- 31.3%

Lowest
North Brimfield- 5.2%
North Aurora- 7.0%
Edinburg Twp.- 7.1%

County: 16.4%

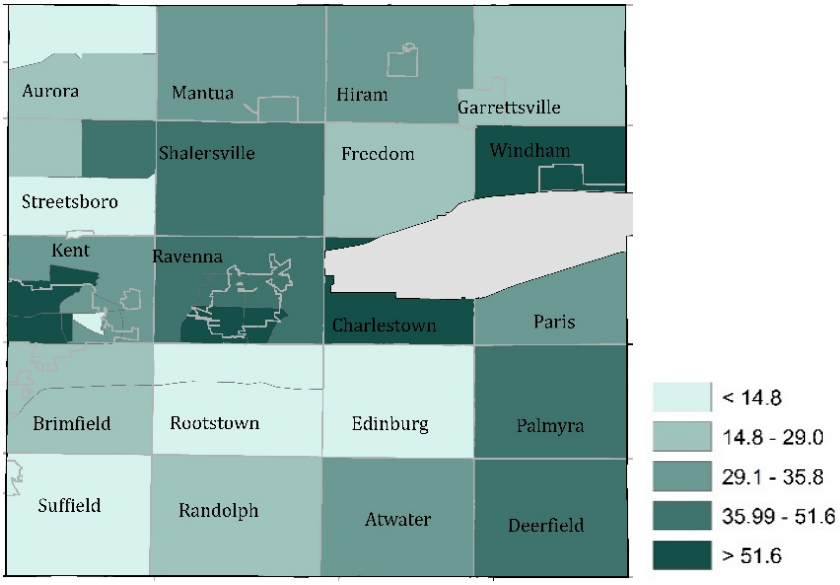


Percent of Population (ages 0-17) on Medicaid, by Census Tract

Highest
Southeast Ravenna- 71.3%
Windham Twp.- 66.3%
Kent, Southwest- 58.9%

Lowest
Kent, KSU- 5.7%
South Streetsboro- 9.4%
Edinburg Twp.- 9.9%

County: 31.7%



(Source for maps: American Community Survey 5-year Estimate 2017 as compiled by Portage County Health District)

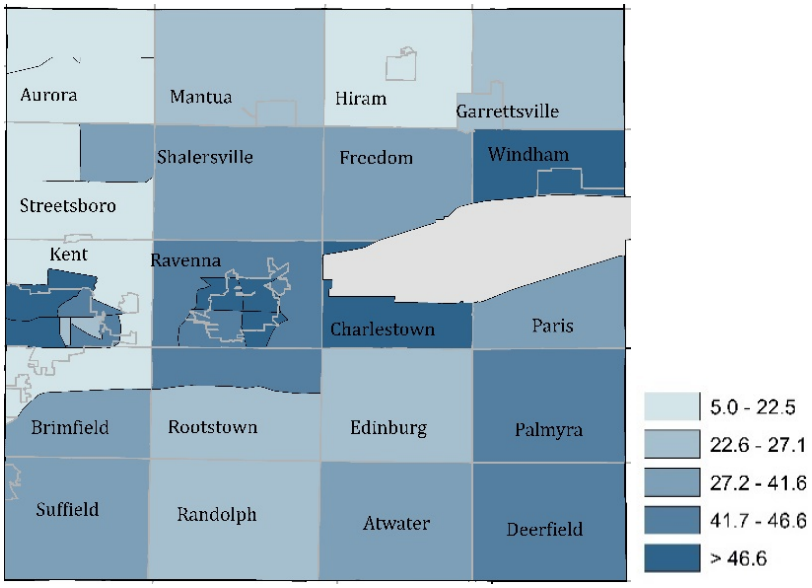
The following map shows the percent of births paid by Medicaid, by census tract, as identified by the Ohio Public Information Warehouse. The graph shows the percent of births paid by Medicaid, by race, as identified by the Ohio Public Information Warehouse.

Percent of Births Paid by Medicaid (2016-2018), by Census Tract

Highest
Northwest Ravenna – 76.3%
Southeast Ravenna – 62.9%
Charlestown Twp. – 61.4%

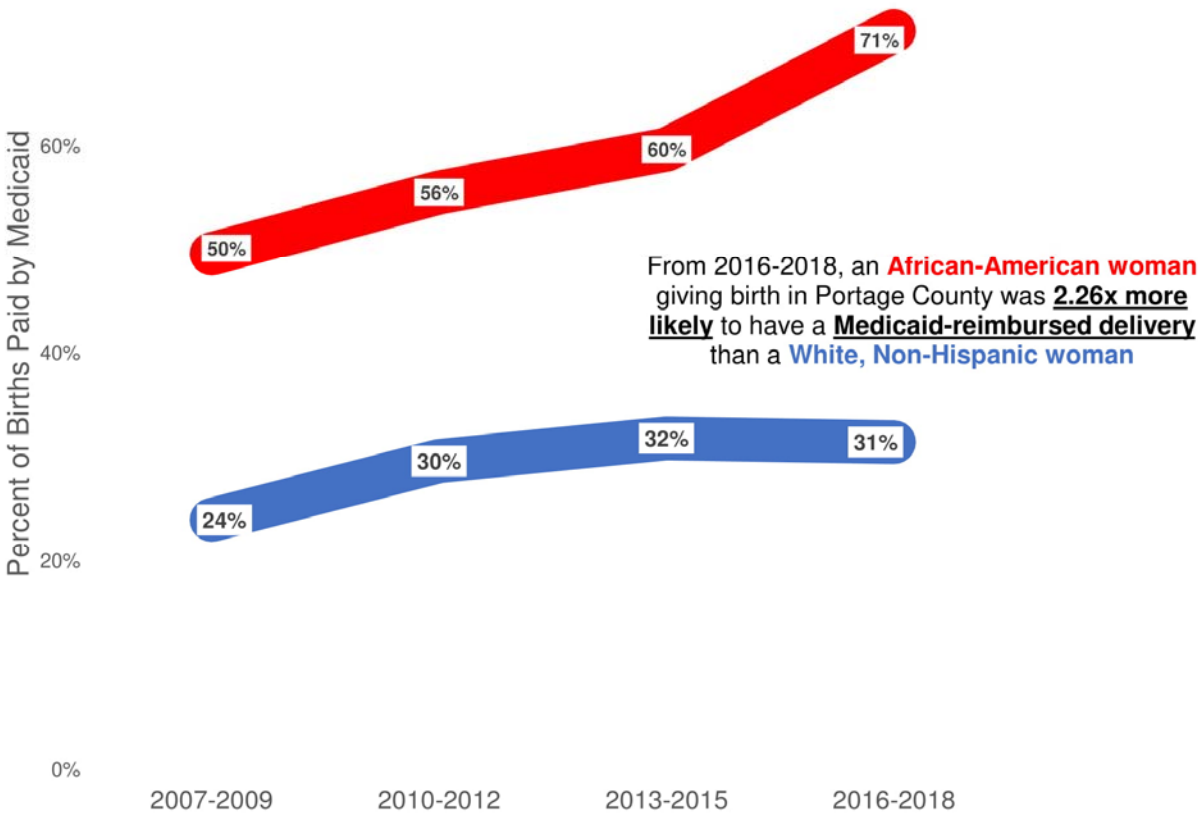
Lowest
South Aurora – 5.1%
North Aurora – 11.3%
South Streetsboro- 14.2%

County: 34.1%



(Source: Ohio Public Information Warehouse, 2016-2018 as compiled by Portage County Health District)

Percent of Births Paid by Medicaid 2007-2009 to 2016-2018, by Race



(Source: Ohio Public Information Warehouse, 2007-2009 to 2016-2018 as compiled by Portage County Health District)

- Adult healthcare coverage included the following:

Health Coverage Includes:	Yes	No	Don't Know
Medical	96%	0%	4%
Prescription Coverage	93%	3%	4%
Preventive Health	81%	2%	17%
Immunizations	82%	4%	14%
Outpatient Therapy	78%	1%	21%
Vision	67%	27%	6%
Dental	71%	27%	2%
Mental Health	66%	1%	33%
Alcohol and Drug Treatment	48%	4%	48%
Hospice	32%	4%	64%
Home Care	34%	6%	60%
Skilled Nursing/Assisted Living	33%	7%	60%
Transportation	18%	15%	67%
Durable Medical Equipment	46%	4%	50%

- Adults had the following issues regarding their healthcare coverage:
  - Cost (45%)
  - Currently working with their insurance company (11%)
  - Opted out of certain coverage because they could not afford it (8%)
  - Service not deemed medically necessary (7%)
  - Could not understand their insurance plan (7%)
  - Pre-existing conditions (7%)
  - Provider no longer covered (6%)
  - Opted out of certain coverage because they did not need it (4%)
  - Limited visits (4%)
  - Service no longer covered (3%)
  - No issues with healthcare coverage (36%)

- About one out of six (17%) adults did not get their prescriptions from their doctor filled in the past year. Those adults reported the following reasons for not getting their prescriptions filled in the past 12 months:
  - Too expensive (55%)
  - Doctor or healthcare provider did not prescribe medications (30%)
  - Stretched current prescription by taking less than what was prescribed (22%)
  - No generic equivalent of what was prescribed (14%)
  - Did not think they needed it (9%)
  - Side effects (5%)
  - They were already taking too many medications (5%)
  - No insurance (2%)
  - Transportation (2%)

Healthcare Access: Access and Utilization

Key Findings

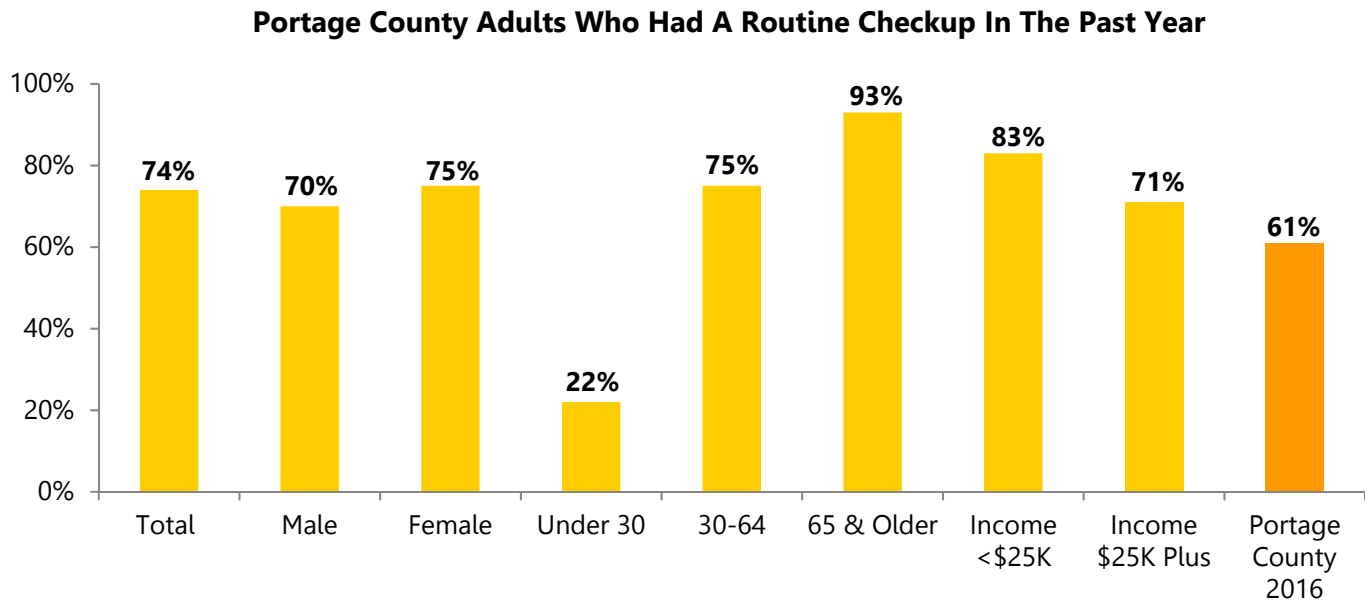
Almost three-quarters (74%) of Portage County adults visited a doctor for a routine checkup in the past year. More than four-fifths (83%) of adults indicated they had at least one person they thought of as their personal doctor or healthcare provider.

Healthcare Access and Utilization

- Almost three quarters (74%) of Portage County adults visited a doctor for a routine checkup in the past year, increasing to 93% of those ages 65 and older.
- Adults with healthcare coverage were more likely to have visited a doctor for a routine checkup in the past year (75%), compared to 58% of those without healthcare coverage.
- More than four-fifths (83%) of adults indicated they had at least one person they thought of as their personal doctor or healthcare provider, increasing to 97% of those ages 65 and older.
- Adults with healthcare coverage were more likely to have at least one person they thought of as their personal doctor or healthcare provider (85%), compared to 52% of those without healthcare coverage.

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Had one or more persons they thought of as their personal healthcare provider	80%	83%	81%	77%
Visited a doctor for a routine checkup (in the past 12 months)	61%	74%	72%	70%
Visited a doctor for a routine checkup (5 or more years ago)	8%	7%	7%	8%

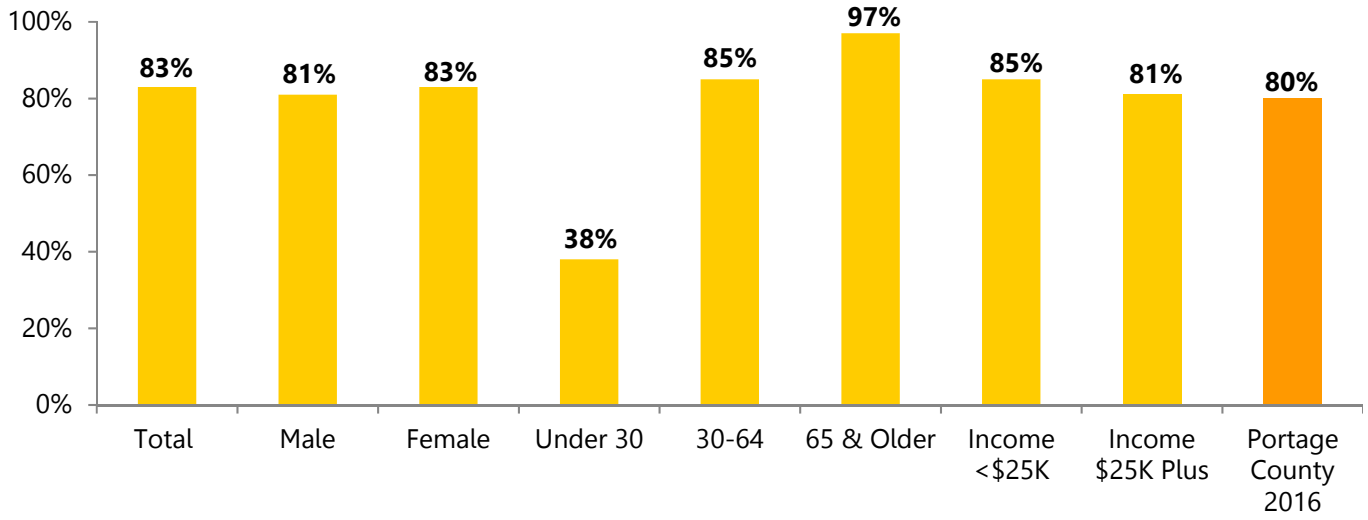
The following graph shows the percentage of Portage County adults who had a routine check-up in the past year. An example of how to interpret the information includes: 74% of all Portage County adults had a routine check-up in the past year, including 70% of males and 75% of females.



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

The following graphs show the percentage of Portage County adults who had one or more persons they thought of as their personal healthcare provider. An example of how to interpret the information includes: 83% of all Portage County adults had one or more persons they thought of as their personal healthcare provider, including 81% of males and 83% of females.

Portage County Adults Who Had One Or More Persons They Thought Of As Their Personal Healthcare Provider



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

In Portage County, 8,713 adults visited a doctor for a routine checkup 5 or more years ago.

- About seven out of ten (72%) adults reported they received medical care in the past 12 months, and more than a quarter (28%) did not. Those who did not receive medical care in the past 12 months gave the following reasons:
  - No need to go (63%)
  - Cost/no insurance (29%)
  - Too long of a wait for an appointment (17%)
  - Inconvenient appointment times (13%)
  - Office wasn't open when they could get there (10%)
  - Too embarrassed to seek help (9%)
  - Distance (8%)
  - Too long of a wait in the waiting room (7%)
  - Doctor/healthcare provider does not take their insurance (6%)
  - No transportation (5%)
  - Discrimination (3%)
  - No child care (2%)
  - Concerned about privacy (2%)
  - Other problems that prevented them from getting medical care (7%
- The following might prevent Portage County adults from seeing a doctor if they were sick, injured, or needed some kind of health care:
  - Nothing (58%)
  - Cost/no insurance (24%)
  - Inconvenient hours (13%)
  - Difficult to get an appointment (11%)
  - Doctor/healthcare provider would not take their insurance (10%)
  - Could not get time off work (9%)
  - Worried they might find something wrong (5%)
  - Frightened of the procedure or doctor/healthcare provider (4%)
  - Do not trust or believe doctors/healthcare providers (4%)
  - Difficult to find/no transportation (3%)
  - Could not find childcare (2%)
  - Discrimination (2%)
  - Some other reason (5%)

- Adults usually visited the following places when they were sick:
  - A doctor/healthcare provider office (82%)
  - Urgent care center (30%)
  - In-store health clinic (20%)
  - A hospital emergency room (17%)
  - A public health clinic or community health center (7%)
  - Chiropractor (5%)
  - Internet (5%)
  - 9-1-1 or use of ambulance service (3%)
  - Family and friends (3%)
  - Veteran Affairs or VA (3%)
  - Telemedicine (2%)
  - Alternative therapies (2%)
  - Health department (1%)
  - Did not have a usual place (5%)

- Adults get their local news and health information from the following resources:
  - Local television news station (54%)
  - Websites/Internet searches (40%)
  - Doctor/healthcare provider (36%)
  - Record Courier (32%)
  - Facebook, Twitter, or other social media (32%)
  - Family member/friend (22%)
  - Akron Beacon Journal (14%)
  - WKSU radio station (9%)
  - Mailings (8%)
  - The Villager (7%)
  - Aurora Advocate (6%)
  - WNIR radio station (6%)
  - Medical portal (6%)
  - School district (5%)
  - Health fairs/community events (4%)
  - Faith-based community/place of worship (3%)
  - Texts on cell phone (3%)
  - Billboards (2%)
  - Other (10%)

Availability of Services

- Portage County adults reported they had looked for the following programs for themselves:

Portage County Adults Able to Access Assistance Programs/Services

Type of Program	Did Not Look/ Need One	Looked and Found One	Looked but Could Not Afford It	Looked, but Did NOT Find One
Alcohol abuse	97%	3%	0%	0%
Assist in care for the disabled (either in-home or out-of-home)	95%	2%	2%	1%
Assist in care for the elderly (either in-home or out-of-home, or adult day care)	94%	3%	2%	1%
Cancer support group/counseling	98%	1%	<1%	<1%
Depression, anxiety, or some mental health problem	80%	15%	2%	3%
Detoxification for opiates/heroin	99%	1%	0%	0%
Disability	94%	4%	1%	1%
Drug abuse	98%	1%	1%	0%
End-of-life care or Hospice care	98%	2%	<1%	0%
Family planning	96%	4%	<1%	0%
Gambling abuse	100%	0%	0%	0%
Marital or family problems	96%	3%	1%	<1%
Tobacco cessation	95%	2%	2%	1%
Weight problem	82%	10%	3%	5%

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

- The number of inpatient hospitalizations (acute care) for Portage County residents (within any Ohio hospital) was stable from 2013 to 2017.

2011	2012	2013	2016	2017
19,762	18,905	17,990	17,658	17,834

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

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

- In 2017, there were 17,834 hospitalizations of Portage County residents. Relatively few (12.4%) of those were under age 18 (and of those, 7.9% were newborns). The adult admissions were almost evenly split between adults aged 17-64 (45.1%) and adults aged 65 and older (42.5%).

- Females somewhat dominate those age 18-64 because about 8% of those hospitalized in that age group are so because of childbirth.

	Patients Age 0-17 Years		Patients Age 18-64 Years		Patients Age 65 Years and Older	
	12.4% of Total Discharges		45.1% of Total Discharges		42.5% of Total Discharges	
	Male	Female	Male	Female	Male	Female
2017 Total	1,119	1,088	3,341	4,698	3,637	3,950

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

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

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

- There were 2,207 hospitalizations of Portage County aged 0-17 year (including newborns). The table below indicates that the three most frequent discharge conditions for hospitalized newborns, children and youth were: conditions originating in the perinatal period (7.2%), diseases of the respiratory system (4.3%), and mental and behavioral disorders (3.1%).

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

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

- There were 8,040 Portage County residents 18-64 years old who were discharged from an acute care facility in 2017.

Disease Grouping	ICD-10 Codes	Total n (%)	Males n (%)	Females n (%)
Total		2,207 (100%)	1,119 (100.0%)	1,088 (100.0%)
Certain conditions originating in the perinatal period	P00-P96	159 (7.2%)	93 (8.3%)	66 (6.1%)
Mental and behavioral disorders	F01-F99	104 (4.7%)	30 (2.7%)	74 (6.8%)
Diseases of the respiratory system	J00-J98	96 (4.3%)	49 (4.4%)	47 (4.3%)
Injury and poisoning	S00-T34	70 (3.2%)	39 (3.5%)	31 (2.8%$)
Diseases of the nervous system and sense organs	G00-G98	64 (2.9%)	30 (2.7%)	34 (3.1%)
Diseases of the digestive system	K00-K92	47 (2.1%)	22 (2.0%)	25 (2.3%)
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99	38 (1.7%)	24 (2.1%)	14 (1.3%)
Infectious and parasitic diseases	A00-B99	37 (1.6%)	19 (1.7%)	17 (1.6%)
Symptoms, signs and abnormal clinical findings, not elsewhere classified	R00-R99	24 (1.1%)	11 (1.0%)	13 (1.2%)
Diseases of the musculoskeletal system and connective tissue	M00-M99	20 (0.9%)	8 (0.7%)	12 (1.1%)
Diseases of the genitourinary system	N00-N98	20 (0.9%)	3 (0.3%)	17 (1.6%)
Diseases of the skin and subcutaneous tissue	L00-L98	19 (0.9%)	7 (0.6%)	12 (1.1%)
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50-D89	18 (0.8%)	9 (0.8%)	9 (0.8%)
Diseases of the circulatory system	I00-I99	18 (0.8%)	11 (1.0%)	7 (0.6%)
Endocrine, nutritional and metabolic diseases	E00-E88	16 (0.7%)	7 (0.6%)	9 (0.8%)
Cancers (neoplasms)	C00-D48	12 (0.5%)	6 (0.5%)	6 (0.6%)
Pregnancy, childbirth and the puerperium	O00-O99	11 (1.0%)	0 (0.0%)	11 (0.5%)
Diseases of the ear and mastoid process	H60-H93	5 (0.2%)	4 (0.4%)	1 (0.1%)
Other (mostly healthy newborns)		1,425 (64.6%)	745 (66.6%)	680 (62.5%)

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

- The table for adults 18-64 years of age indicates that the three most frequent primary conditions were: complications related to pregnancy, childbirth, and the puerperium (females only, 31.6%); diseases of the circulatory system (11.9%); and diseases of the digestive system (10.4%).

- Males were twice as likely as females to be hospitalized for diseases of the circulatory system (18.6% vs. 7.1%). Even if we do not include females hospitalized with conditions or circumstances related to childbirth (31.6% of all hospitalized females), the proportion of males with circulatory disease is significantly higher than the proportion of hospitalized females (10.6%).

Disease Grouping	ICD-10 Codes	Total n (%)	Males n (%)	Females n (%)
Total		8,040 (100%)	3,341 (100.0%)	4,698 (100.0%)
Complications of pregnancy, childbirth, and the puerperium	O00-O99	1,483 (18.4%)	-	1,483 (31.6%)
Diseases of the circulatory system	I00-I99	958 (11.9%)	623 (18.6%)	335 (7.1%)
Diseases of the digestive system	K00-K92	838 (10.4%)	412 (12.3%)	426 (9.1%)
Mental and behavioral disorders	F01-F99	780 (9.7%)	392 (11.7%)	387 (8.2%)
Injury and poisoning	S00-T34	581 (7.2%)	323 (9.7%)	258 (5.5%)
Diseases of the respiratory system	J00-J98	571 (7.1%)	274 (8.2%)	297 (6.3%)
Infectious and parasitic diseases	A00-B99	542 (6.7%)	272 (8.1%)	270 (5.7%)
Diseases of the musculoskeletal system and connective tissue	M00-M99	512 (6.4%)	238 (7.1%)	274 (5.8%)
Endocrine, nutritional and metabolic diseases	E00-E88	351 (4.4%)	156 (4.7%)	195 (4.2%)
Cancers (neoplasms)	C00-D48	327 (4.1%)	147 (4.4%)	180 (3.8%)
Diseases of the genitourinary system	N00-N98	308 (3.8%)	136 (4.1%)	172 (3.7%)
Diseases of the nervous system and sense organs	G00-G98	239 (3.0%)	97 (2.9%)	142 (3.0%)
Diseases of the skin and subcutaneous tissue	L00-L98	184 (2.3%)	103 (3.1%)	81 (1.7%)
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50-D89	73 (0.9%)	31 (0.9%)	42 (0.9%)
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99	14 (0.2%)	7 (0.2%)	7 (0.1%)
Other	-	264 (3.2%)	119 (3.1%)	145 (3.4%)

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

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

- Almost as many Portage County residents age 65 and older were hospitalized in an acute care facility in 2017 (7,587) as were those age 18-64 (8,040). Older adults have much higher hospitalization rates than their younger counterparts.

- For adults 65 years of age and older we see (below) that the three most frequent discharge conditions were: diseases of circulatory system (28.0%), diseases of the respiratory system (11.9%), and infectious and parasitic diseases (10.3%).

- There were not large differences between males and females on most diagnostic category frequencies. The exceptions were that males were notably more likely than females to have a primary diagnosis for circulatory disease (30.7% vs. 21.2%). Recall this gender gap was true for younger adults (age 18-64) also.

Disease Grouping	ICD-10 Codes	Total n (%)	Males n (%)	Females n (%)
Total		7,587 (100%)	3,637 (100.0%)	3,950 (100.0%)
Diseases of the circulatory system	I00-I99	2,121 (28.0%)	1,116 (30.7%)	1,005 (25.4%)
Diseases of the respiratory system	J00-J98	902 (11.9%)	406 (11.2%)	496 (12.6%)
Infectious and parasitic diseases	A00-B99	779 (10.3%)	335 (9.8%)	424 (10.7%)
Diseases of the digestive system	K00-K92	711 (9.4%)	318 (8.7%)	393 (9.9%)
Injury and poisoning	S00-T34	676 (8.9%)	315 (8.7%)	361 (9.1%)
Diseases of the musculoskeletal system and connective tissue	M00-M99	573 (7.6%)	262 (7.2%)	311 (7.9%)
Diseases of the genitourinary system	N00-N98	437 (5.8%)	186 (5.1%)	251 (6.4%)
Cancers (neoplasms)	C00-D48	363 (4.8%)	178 (4.9%)	185 (4.7%)
Endocrine, nutritional and metabolic diseases	E00-E88	246 (3.2%)	107 (2.9%)	139 (3.5%)
Diseases of the nervous system and sense organs	G00-G98	190 (2.5%)	104 (2.9%)	86 (2.2%)
Diseases of the skin and subcutaneous tissue	L00-L98	116 (1.5%)	56 (1.5%)	60 (1.5%)
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50-D89	107 (1.4%)	48 (1.3%)	59 (1.5%)
Mental and behavioral disorders	F01-F99	102 (1.3%)	47 (1.3%)	55 (1.4%)
Diseases of the ear and mastoid process	H60-H93	6 (0.1%)	3 (0.1%)	3 (0.1%)
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99	6 (0.1%)	*	*
Other	-	248 (3.3%)	131 (3.7%)	117 (2.9%)

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

Ambulatory Care Sensitive (ACS) Discharges (Primary Diagnosis), Portage County Residents (Hospitalized Anywhere), 2017

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

- In 2017, there were 17,834 Portage County residents who were discharged from an inpatient acute care hospital. Of those, 6,252 (35.1% of all Portage County resident hospitalizations) were hospitalized in UH Portage Medical Center.

- Below we show the frequency of ACS cases for both all Portage County resident hospitalizations and also Portage County residents who were hospitalized at UH Portage Medical Center.

- Overall, 13.5% of the hospitalizations of Portage County residents were due to an ACS condition. If we look at those hospitalized in UH Portage Medical Center, we see somewhat more (16.8%). We see this commonly as those who have an ACS condition can usually be treated at a community hospital, while those with more serious or life-threatening conditions (usually are not ACS conditions) are treated at a higher level regional medical center.

- The most common ACS condition among hospitalized Portage County residents in 2017 was Chronic Obstructive Pulmonary Disease, which comprised 2.0% of all Portage County residents hospitalized, and 2.7% of UH Portage Medical Center inpatients. The second and third most common ACS conditions were Bacterial Pneumonia (1.9% of county residents; 2.7% of county residents in UH Portage Medical Center) and Congestive Heart Failure (1.9% of county residents, and 2.9% of UH Portage Medical Center discharges.

- The types of the more common ACS conditions are a signal for the community to identify opportunities to improve primary care and its connection to the acute care facilities. The conditions which appear to be reactive to increased preventive and primary care attention in terms of reducing hospitalizations are COPD, Bacterial Pneumonia and Congestive Heart Failure.

	Inpatient in Any Hospital: Portage County Resident		Inpatient in UH Portage Medical Center	
	Number	**Percent***	**Number**	**Percent***
Total	17,834	100.0%	6,252	100.0%
Total ACS Cases		13.5%		16.8%
Specific Ambulatory Care Sensitive Conditions:				
Chronic Obstructive Pulmonary Disease	349	2.0%	170	2.7%
Bacterial Pneumonia	333	1.9%	150	2.4%
Congestive Heart Failure	331	1.9%	180	2.9%
Hypertension	270	1.5%	145	2.3%
Cellulitis	226	1.3%	97	1.6%
Diabetes	191	1.1%	92	1.5%
Hip/Femur Fracture (age 45 and older)	172	1.0%	86	1.4%
Gastrointestinal Obstruction	152	0.9%	60	1.0%
Grand Mal Seizure and Other Convulsions	145	0.8%	28	0.4%
Acute Myocardial Infarction	109	0.6%	39	0.6%
Dehydration	85	0.5%	42	0.7%
Appendicitis	51	0.3%	15	0.2%
Kidney/Urinary Tract Infection	46	0.3%	19	0.3%
Asthma	37	0.2%	10	0.2%
Convulsions/Epilepsy (age 6 and older)	35	0.2%	12	0.2%
Gastroenteritis	31	0.2%	15	0.2%
Anemia	22	0.1%	11	0.2%
Dental	18	0.1%		
Angina	5	<0.1%		
Pelvic Inflammatory Disease	5	<0.1%		

Fewer than 5 cases were omitted to ensure confidentiality (ACS cases related to Dental issues, Angina or PID not shown)
(Source: Hospital Ambulatory Care Sensitive Data, 2017, as analyzed and reported by Cypress Research)
**More than one ACS conditions is possible for any single admission; Total may be more than 100%*

Most Common* Ambulatory Care Sensitive (ACS) Discharges (Primary Diagnosis), 2017
All Portage County Residents (Hospitalized Anywhere), By Major Age Group (Adults Only, Age 18+)

- The incidence of ACS cases among Portage County residents in 2017 increased with age. Only 7.5% of those hospitalized adults under age 40 had an ACS condition, about half of those aged 40-64 (13.8%). Almost one in five seniors (17.8%) were hospitalized due to an ACS condition in 2017.

- The most common ACS condition (primary diagnosis) associated with hospitalization for younger adult (under 40 years) Portage County residents in 2017 were cellulitis (1.4% of younger adults), diabetes (1.1%), and seizure disorders/episodes (1.2%).

- Middle-aged adults (age 40-64) showed a somewhat different pattern of ACS conditions. The most common conditions were chronic obstructive pulmonary disease (COPD) (2.8%), bacterial pneumonia (1.8%) and cellulitis (1.5%). In addition, a significant proportion of that population's hospitalizations was due to diabetes (1.4%) or congestive heart failure (1.3%).

- For the oldest hospitalized group (age 65+), the most common ACS conditions were congestive heart failure (3.4%), hypertension (2.8%), bacterial pneumonia (2.8%), and COPD (2.7%).

	Adult Under 40	Adults Ages 40-64	Adults Age 65+
Total:	2,944 (100.0%)	5,096 (100.0%)	7,587 (100.0%)
Any ACS Condition:	220 (7.5%)	702 (13.8%)	1,351 (17.8%)
Specific Ambulatory Care Sensitive Conditions: **			
Congestive Heart Failure	7 (0.2%)	65 (1.3%)	258 (3.4%)
Hypertension	4 (0.1%)	50 (1.0%)	216 (2.8%)
Bacterial Pneumonia	15 (0.5%)	91 (1.8%)	214 (2.8%)
Chronic Obstructive Pulmonary Disease	3 (0.1%)	142 (2.8%)	204 (2.7%)
Hip/Femur Fracture (age 45 and older)	0 (0.0%)	17 (0.3%)	155 (2.0%)
Cellulitis	41 (1.4%)	76 (1.5%)	95 (1.3%)
Acute Myocardial Infarction	0 (0.0%)	21 (0.4%)	88 (1.2%)
Diabetes	32 (1.1%)	73 (1.4%)	80 (1.1%)
Gastrointestinal Obstruction	13 (0.4%)	54 (1.1%)	78 (1.0%)
Grand Mal Seizure and Other Convulsions	36 (1.2%)	38 (0.7%)	31 (0.4%)

**Only those ACS conditions associated with at least 1% of the group are shown.*
***Do not total to 100:; multiple ACS conditions are possible.*
(Source: Hospital Ambulatory Care Sensitive Data, 2017, as analyzed and reported by Cypress Research)

Portage County Residents, Primary & Secondary Diagnoses, 2017 Hospitalizations

Below are the diagnosis specifics for all hospitalizations of the 12,263 Portage County residents over age 40 in 2017. We show only this level of diagnostic detail for those over age 40, as the primary and secondary diagnoses for those in younger age groups are far more diverse and no condition dominates. In contrast, among older adults, we see certain disease categories and specific diagnoses (primary and secondary) which tend to be far more common.

Both the diagnostic category, and the most common specific diagnoses are shown. Information for both *primary* diagnosis and *secondary* diagnoses are shown. While the *primary* diagnosis is related to the main reason for hospitalization, understanding the incidence of various diagnoses which are secondary is often more telling on the chronic health conditions facing the community in general.

Noteworthy findings for Portage County:

- As highlighted previously, the most common diagnostic categories for the primary diagnoses were **diseases of the circulatory system** (23.6% of all hospitalizations), **diseases of the respiratory system** (10.9%), and **diseases of the digestive system** (10.7%). These three general categories comprised almost half (45%) of the hospitalizations for Portage County residents age 40 and older in 2017.

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

  Diseases of the Circulatory System:

  — The conditions associated with hospitalizations which relate to the circulatory system are numerous and varied. If we look at the primary diagnoses, hypertensive heart and/or kidney disease (they tend to go together) was the most common (4.3%), followed by myocardial infarction (3.1%), and atrial fibrillation (2.9%). The other primary diagnoses related to heart-specific conditions and diseases as well as cerebral and peripheral veins and arteries.

  — The secondary diagnoses of patients were also very telling; these comorbidities, all associated with circulatory disease, were very common among all hospitalizations: essential hypertension (42.4%); hypertensive heart and/or kidney disease (26.7%); artherosclerotic heart vessel disease (28.2%), congestive heart failure (27.9%); and atrial fibrillation (27.8%).

  Diseases of the Respiratory System:

  — The list of common respiratory system conditions was not nearly as long as the list of circulatory system conditions. Acute respiratory failure (3.4%) chronic obstructive pulmonary disease (COPD) (2.7%), and pneumonia (viral and/or bacterial) (2.6%) were the most common primary respiratory system diagnoses, accounting for almost all of the primary reasons for hospitalizations.

  — However, these three conditions (COPD, 29.0%0, respiratory failure (11.1%), and pneumonia 11.4%) were very common secondary diagnoses among those hospitalized in 2017. About half of the acute care inpatients had one or more of these comorbidities.

  Diseases of the Digestive System:

  — Compared to respiratory conditions, diseases of the digestive system were far more varied. With the exception of diverticulitis, no condition was a primary diagnosis for more than 1% of patients, while 10.7% were hospitalized primary due to some digestive system issue.

  — Diverticulitis of the intestine was also a relatively common secondary diagnosis of those hospitalized (5.0%), Gastro-esophageal reflux disease was far more common (27.7%) among these hospitalizations.

- The other notable diagnoses (primary or secondary) are below. It is important to keep in mind that these are not necessarily a reflection of the true incidence of these afflictions within the general population; rather, they should be considered only in terms of how they relate to hospitalization levels and/or the care patients need while inpatients in acute care hospitals.

  - Related to poor diet/lack of exercise:
    - Hyperlipidemia (52.9%)
    - Type II diabetes (46.8%)
    - Obesity (17.7%)

  - Behavioral or Mental Health Issues:
    - Nicotine dependence (19.6%)
    - Anxiety disorder (20.9%)
    - Major depressive disorder (acute or chronic) (21.4%)

  - Other Issues:
    - Osteoarthritis (18.3%)
    - Hypothyroidism (17.9%)
    - Anemia, associated with another disease or injury (17.2%)
    - Sleep apnea (14.5%)

- About one-in-twelve (7.2%) hospitalizations were in a septic state upon admission or during the hospitalization.

- While cancer is a leading cause of death in Portage County, it is not a relatively common reason for hospitalization (5.1% primary diagnosis for 2017 inpatients). The most common cancer type among those hospitalized was lung (3.1%). The second most common type was bone (1.5%). Almost as many, combined, were hospitalized with breast cancer or prostate cancer (.7%, each).

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

	Primary Diagnosis (Reason for Hospitalization)		Secondary Diagnosis (Patients can have multiple secondary diagnoses)	
Total Portage County Inpatients	**12,263**			
Diseases of the circulatory system	**2,988**	**23.6%**	**N/A**	**N/A**
Hypertensive heart and/or kidney disease	606	4.8%	3,384	26.7%
Myocardial Infarction	399	3.1%	616	4.9%
Atrial fibrillation/flutter	366	2.9%	3,532	27.8%
Cerebral Infarction	298	2.3%	319	2.5%
Artherolsclerotic heart vessel disease	270	2.1%	3,573	28.2%
Congestive heart failure	130	1.0%	3,543	27.9%
Embolism & thrombosis of peripheral veins	89	0.7%	471	3.7%
Essential (primary) hypertension			5,379	42.4%
Old myocardial infarction			1,427	11.3%
Hypotension			1,187	9.4%
Nonrheumatic mitral/aortic/tricuspid valve disorders			1,040	8.2%
Rheumatic valve disorders			303	2.4%
Pulmonary hypertension			649	5.1%
Peripheral vascular disease			575	4.5%
Cardiomyopathy			529	4.2%
Heart block			520	4.1%
Ventricular tachycardia/supraventricular tachycardia			448	3.5%
Ischemic cardiomyopathy			362	2.9%
Peripheral arterial aneurysm			231	1.8%
Monoplegia/hemiplegia after cerebral infarction			210	1.7%
Hypertensive urgency/emergency/crisis			189	1.5%
Pulmonary embolism			183	1.4%
Occlusion & stenosis of vertebral/carotid/precerebral artery			183	1.4%
Atherosclerosis of peripheral arteries			164	1.3%
Venous insufficiency (chronic) (peripheral)			159	1.3%
Diseases of the respiratory system	**1,382**	**10.9%**	**N/A**	**N/A**
Acute respiratory failure	432	3.4%	1,407	11.1%
Chronic obstructive pulmonary diseases	337	2.7%	3,674	29.0%
Pneumonia (various organisms, mainly unspecified)	330	2.6%	1,440	11.4%
Diseases of the digestive system	**1,358**	**10.7%**	**N/A**	**N/A**
Diverticulitis of intestine	153	1.2%	630	5.0%
Gastro-esophageal reflux disease			3,517	27.7%
Diaphragmatic hernia			367	2.9%
Gastrointestinal hemorrhage			305	2.4%
Gastritis			215	1.7%
Irritable bowel syndrome			214	1.7%
Cirrhosis of liver			210	1.7%
Alcoholism-induced gastrointestinal disease			197	1.6%
Hepatic failure			190	1.5%
Intestinal obstruction			178	1.4%
Noninfective gastroenteritis & colitis			159	1.3%
Ileus			154	1.2%
Gastroparesis			135	1.1%

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

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

Portage County Residents Age 40+, Primary & Secondary Diagnoses, 2017 Hospitalizations (cont.)

	Primary Diagnosis (Reason for Hospitalization)		Secondary Diagnosis (Patients can have multiple secondary diagnoses)	
Infectious and parasitic diseases	**1,204**	**9.5%**	**N/A**	**N/A**
Sepsis (multiple organisms, mainly bacterial)	1065	8.4%	919	7.2%
Escherichia coli [E. coli] as the cause of diseases classified elsewhere			305	2.4%
Methicillin susceptible Staphylococcus aureus infection as the cause of diseases classified elsewhere			221	1.7%
Streptococcus, as the cause of diseases classified elsewhere			197	1.6%
Enterocolitis			171	1.3%
Viral Hepatitis C			148	1.2%
Injury & poisoning	**1,105**	**8.7%**	**N/A**	**N/A**
Bone fracture	388	3.1%	921	7.3%
Adverse effect/overdose/poisoning of medication(s) (prescribed or over-the-counter)			1,113	8.8%
Diseases of the musculoskeletal system and connective tissue	**1,043**	**8.2%**	**N/A**	**N/A**
Osteoarthritis	**541**	4.3%	2,316	18.3%
Age-related osteoporosis			628	5.0%
Dorsalgia			598	4.7%
Gout			566	4.5%
Spinal stenosis			512	4.0%
Fibromyalgia			431	3.4%
Rheumatoid arthritis			415	3.3%
Diseases of the genitourinary system	664	5.2%	**N/A**	**N/A**
Acute kidney failure	296	2.3%	2,450	19.3%
Urinary tract infection	160	1.3%	1,244	9.8%
Chronic kidney disease			2,544	20.1%
Benign prostatic hyperplasia without lower urinary tract symptoms			1,165	9.2%
Hydronephrosis			144	1.1%
Cancers (malignant neoplasms)	**661**	**5.2**	**N/A**	**N/A**
Lung/bronchus malignant neoplasm	82	0.6%	391	3.1%
Secondary malignant neoplasm of bone			192	1.5%
Breast (female only) malignant neoplasm			94	0.7%
Malignant neoplasm of prostate (male only)			89	0.7%

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

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

Portage County Residents Age 40+, Primary & Secondary Diagnoses, 2017 Hospitalizations (cont.)

	Primary Diagnosis (Reason for Hospitalization)		Secondary Diagnosis (Patients can have multiple secondary diagnoses)	
Mental and behavioral disorders	**506**	**4.0%**	**N/A**	**N/A**
Alcohol Use/Abuse	144	1.1%	683	5.4%
Major depressive disorder	143	1.1%	2709	21.4%
Psychosis (various)	74	0.6%		
Schizophrenia			131	1.0%
Anxiety Disorder(s)			2,657	20.9%
Nicotine dependence			2,485	19.6%
Dementia			1,051	8.3%
Restless legs syndrome			329	2.6%
Bipolar Disorder			292	2.3%
Alzheimer's disease, unspecified			246	1.9%
Parkinson's disease			205	1.6%
Post-traumatic stress disorder			167	1.3%
Endocrine, nutritional and metabolic diseases	**503**	**4.0%**	**N/A**	**N/A**
Type II Diabetes	181	1.4%	5,934	46.8%
Type I Diabetes			340	2.7%
Hyperlipidemia			6,710	52.9%
Hypothyroidism			2,274	17.9%
Obesity			2,246	17.7%
Hypokalemia			1,701	13.4%
Protein-calorie malnutrition (mild to severe)			1,190	9.4%
Hypo-osmolality & hyponatremia			1,142	9.0%
Dehydration			1,134	8.9%
Acidosis			1,011	8.0%
Hypomagnesemia			713	5.6%
Hyperkalemia			665	5.2%
Vitamin D deficiency			566	4.5%
Disorders of phosphorus metabolism			380	3.0%
Hypovolemia			253	2.0%
Hyperosmolality & hypernatremia			239	1.9%
Fluid overload, unspecified			222	1.8%
Vitamin B Deficiency			193	1.5%
Hypocalcemia			173	1.4%
Diseases of the nervous system	**352**	**2.8**	**N/A**	**N/A**
Sleep apnea			1,840	14.5%
Chronic pain			1,470	11.6%
Encephalopathy			870	6.9%
Insomnia			582	4.6%
Epilepsy			423	3.3%
Polyneuropathy			350	2.8%
Hemiplegia/Paraplegia/Quadriplegia			276	2.2%
Toxic encephalopathy			200	1.6%
Multiple sclerosis			102	0.8%

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

Portage County Residents Age 40+, Primary & Secondary Diagnoses, 2017 Hospitalizations (cont.)

	Primary Diagnosis (Reason for Hospitalization)		Secondary Diagnosis (Patients can have multiple secondary diagnoses)	
Diseases of the skin and subcutaneous tissue	**235**	**1.9**	**N/A**	**N/A**
Cellulitis	169	1.3%	712	5.6%
Pressure Ulcer			501	4.0%
Non-pressure chronic ulcer			440	3.5%
Cutaneous abscess			179	1.4%
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**165**	**1.3**	**N/A**	**N/A**
Anemia (various types)	126	1.0%	2,186	17.2%
Acute post hemorrhagic anemia			1094	8.6%
Iron deficiency anemia			654	5.2%
Thrombocytopenia			711	5.6%
Elevated white blood cell count			407	3.2%
Pancytopenia			183	1.4%
Certain conditions arising in the perinatal period	**33**	**0.35%**	**N/A**	**N/A**
Congenital malformations, deformations and chromosomal abnormalities	**18**	**0.1%**	**N/A**	**N/A**
Diseases of the eye and adnexa	**8**	**<.1%**	**N/A**	**N/A**
Glaucoma			229	1.8%
Macular degeneration			195	0.1%
Diseases of the ear and mastoid process	**8**	**<.1%**	**N/A**	**N/A**
Hearing Loss			413	3.3%

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

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

Healthcare Access: Preventive Medicine

Key Findings

Almost two-thirds (65%) of Portage County adults had a flu vaccine during the past 12 months. Just over three-quarters (76%) of adults ages 65 and older had a pneumonia vaccination at some time in their life.

Vaccinations

- Almost two-thirds (65%) of Portage County adults reported having flu vaccine during the past 12 months.
- Seventy-two percent (72%) of Portage County adults ages 65 and older reported having a flu shot in the past 12 months.
- Adults who did not get the flu vaccine gave the following reasons: did not need it (40%), believed it does not work (16%), got sick from it (12%), time (7%), was not effective (7%), cost (3%), religious beliefs (1%), transportation (1%), insurance won't pay for it (1%), and other (34%).

Healthy People 2020
Immunization and Infectious Diseases (IID)

Objective	Portage County 2019	Ohio 2017	U.S. 2017	Healthy People 2020 Target
IID-12.7: Increase the percentage of non-institutionalized high-risk adults aged 65 years and older who are vaccinated annually against seasonal influenza	72%	63%	60%	90%

Note: U.S. baseline is age-adjusted to the 2000 population standard.
(Sources: Healthy People 2020 Objectives, 2017 BRFSS, 2019 Portage County Community Health Assessment)

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Had a flu shot within the past year (ages 65 and over)	88%	72%	63%	60%
Ever had a pneumonia vaccination (ages 65 and over)	71%	76%	76%	75%

- More than two-fifths (43%) of adults reported having pneumonia vaccination in their life, increasing to 76% of those ages 65 and over.

- Portage County adults reported that they received or did not receive the following vaccines:

	Yes	No	Don't Know
Measles, mumps, and rubella (MMR) in their lifetime	83%	10%	7%
Tetanus, diphtheria, and pertussis (Tdap or TD) in the past 10 years	76%	14%	10%
Hepatitis A vaccine in their lifetime	37%	32%	31%
Hepatitis B vaccine in their lifetime	40%	30%	30%
Haemophilus influenzae or Influenza type B (Hib) vaccine in their lifetime	37%	26%	37%
Chicken pox (Varicella) in their lifetime	60%	30%	10%
Meningococcal vaccine (MenACWY or MenB) in their lifetime	28%	27%	45%
Zoster (shingles) vaccine in their lifetime	27%	48%	25%
Human papillomavirus (HPV) vaccine in their lifetime	17%	55%	28%

Screenings

- The U.S. Preventive Services Task Force recommends that adults age 50 to 75 be screened for colorectal cancer. The decision to be screened after age 75 should be made on an individual basis *(Source: Division of Cancer Prevention and Control, Centers for Disease Control and Prevention, 2019)*

- Nearly half (48%) of adults ages 50 and older received a colonoscopy in the past 10 years.

Recommended Adult Immunization Schedule by Age Group
United States, 2019

Vaccine	19–21 years	22–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or **Influenza recombinant** (RIV)	1 dose annually				
or					
Influenza live attenuated (LAIV)	1 dose annually				
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap, then Td booster every 10 yrs				
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)				
Varicella (VAR)	2 doses (if born in 1980 or later)				
Zoster recombinant (RZV) *(preferred)*				2 doses	
or					
Zoster live (ZVL)					1 dose
Human papillomavirus (HPV) **Female**	2 or 3 doses depending on age at initial vaccination				
Human papillomavirus (HPV) **Male**	2 or 3 doses depending on age at initial vaccination				
Pneumococcal conjugate (PCV13)	1 dose				
Pneumococcal polysaccharide (PPSV23)	1 or 2 doses depending on indication				1 dose
Hepatitis A (HepA)	2 or 3 doses depending on vaccine				
Hepatitis B (HepB)	2 or 3 doses depending on vaccine				
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, then booster every 5 yrs if risk remains				
Meningococcal B (MenB)	2 or 3 doses depending on vaccine and indication				
***Haemophilus influenzae* type b** (Hib)	1 or 3 doses depending on indication				

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended vaccination for adults with an additional risk factor or another indication

No recommendation

(Source: Immunization Schedules, Centers for Disease Control and Prevention, 2019)

Healthcare Access: Women's Health

Key Findings

Over half (53%) of women ages 40 and over had a mammogram in the past year. Nearly half (48%) of women had a clinical breast exam one within the past year. Two-thirds (66%) of women ages 21-65 had a Pap smear in the past three years. Thirty-seven percent (37%) of women were obese, 31% had high blood cholesterol, 29% had high blood pressure, and 13% were identified as smokers, all known risk factors for cardiovascular diseases.

Portage County
Female Leading Causes of Death
2015–2017
Total Female Deaths: 2,227

1. Heart Diseases (24% of all deaths)
2. Cancers (22%)
3. Chronic Lower Respiratory Diseases (6%)
4. Stroke (5%)
5. Alzheimer's Disease (5%)

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

Ohio
Female Leading Causes of Death
2015–2017
Total Female Deaths: 180,539

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

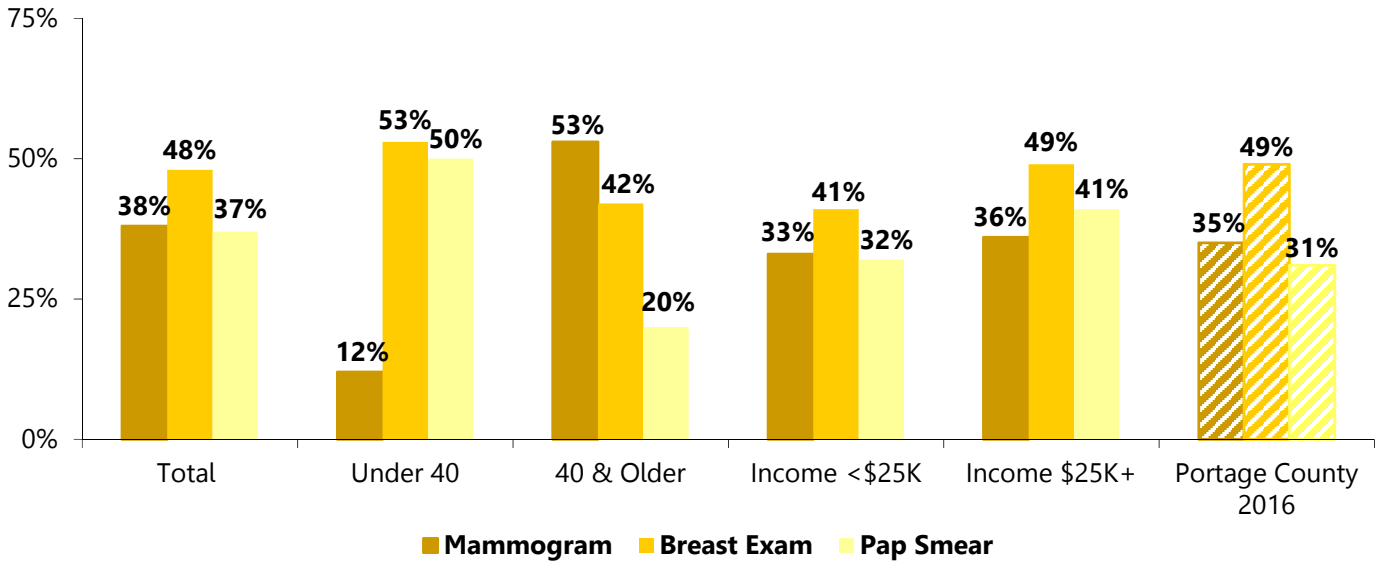
(Source: Ohio Public Health Data Warehouse, 2015-2017)

Women's Health Screenings

- Sixty-nine percent (69%) of women had a mammogram at some time in their life, and almost two-fifths (38%) had this screening in the past year.
- Over half (53%) of women ages 40 and over had a mammogram in the past year, and 73% had one in the past two years.
- Most (95%) Portage County women had a clinical breast exam at some time in their life, and 48% had one within the past year. About six out of ten (62%) women ages 40 and over had a clinical breast exam in the past two years.
- About nine out of ten (91%) Portage County women ages 21-65 had a Pap smear at some time in their life, and 37% reported having had the exam in the past year. Two-thirds (66%) of women ages 21-65 had a Pap smear in the past three years.

The following graph shows the percentage of Portage County female adults that had various health exams in the past year. An example of how to interpret the information shown on the graph includes: 38% of Portage County females had a mammogram within the past year, 48% had a clinical breast exam, and 37% had a pap smear.

Portage County Women's Health Exams Within the Past Year



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

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Had a mammogram within the past two years (ages 40 and over)	71%	73%	74%*	72%*
Had a pap test in the past three years (ages 21-65)	64%	66%	82%*	80%*
Had a clinical breast exam in the past two years (ages 40 and older)	71%	62%	N/A	N/A

**2016 BRFSS*
N/A – Not available

Women's Health Concerns

- From 2015 to 2017, major cardiovascular diseases (heart disease and stroke) accounted for 29% of all female deaths in Portage County *(Source: Ohio Public Health Data Warehouse, 2015-2017).*
- The 2019 health assessment has identified that:
  - 37% of women were obese (2017 BRFSS reported 34% for Ohio and 2016 BRFSS reported 30% for the U.S.)
  - 29% were diagnosed with high blood pressure (2017 BRFSS reported 33% for Ohio and 2016 BRFSS reported 30% for the U.S.)
  - 31% were diagnosed with high blood cholesterol (2017 BRFSS reported 33% for Ohio and 2016 BRFSS reported 35% for the U.S.)
  - 11% had been diagnosed with diabetes (2017 BRFSS reported 11% for Ohio and 2016 BRFSS reported 11% for the U.S.)
  - 13% of all women were current smokers (2017 BRFSS reported 20% for Ohio and 2016 BRFSS reported 14% for the U.S.)
- Two percent (2%) of women had survived a heart attack at some time in their life.
- Two percent (2%) had survived a stroke at some time in their life.
- Four percent (4%) of Portage County women reported that a health professional diagnosed them with coronary heart disease.

Pregnancy

- One in five (20%) Portage County women had been pregnant in the past five years.
- During their last pregnancy within the past 5 years, Portage County women did the following:
  - Had a prenatal appointment in the first 3 months (88%)
  - Took a multi-vitamin with folic acid during pregnancy (75%)
  - Had a dental exam (50%)
  - Experienced depression (13%)
  - Received WIC services (13%)

Fertility

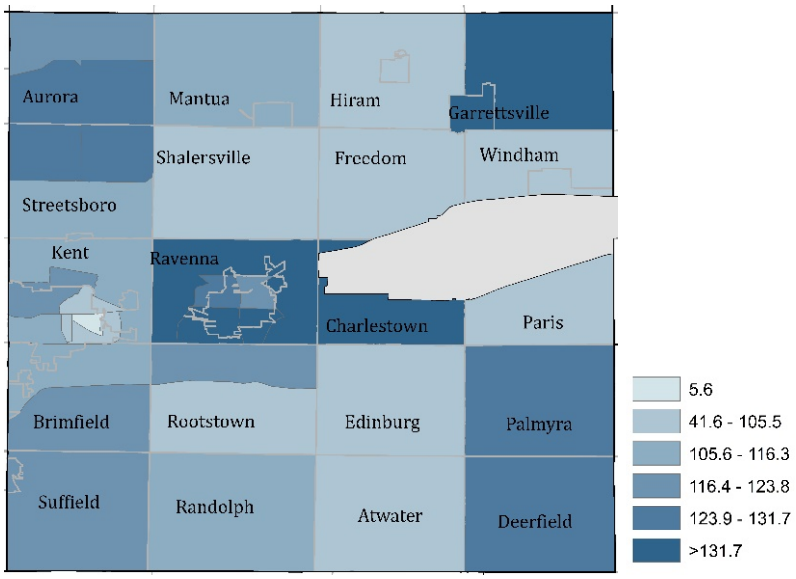
- The following map shows the fertility rate, by census tract, as identified by the Ohio Public Information Warehouse. The graph below shows fertility rate by race, by census tract, as identified by the Ohio Public Information Warehouse.

Fertility Rate (2016-2018), by Census Tract

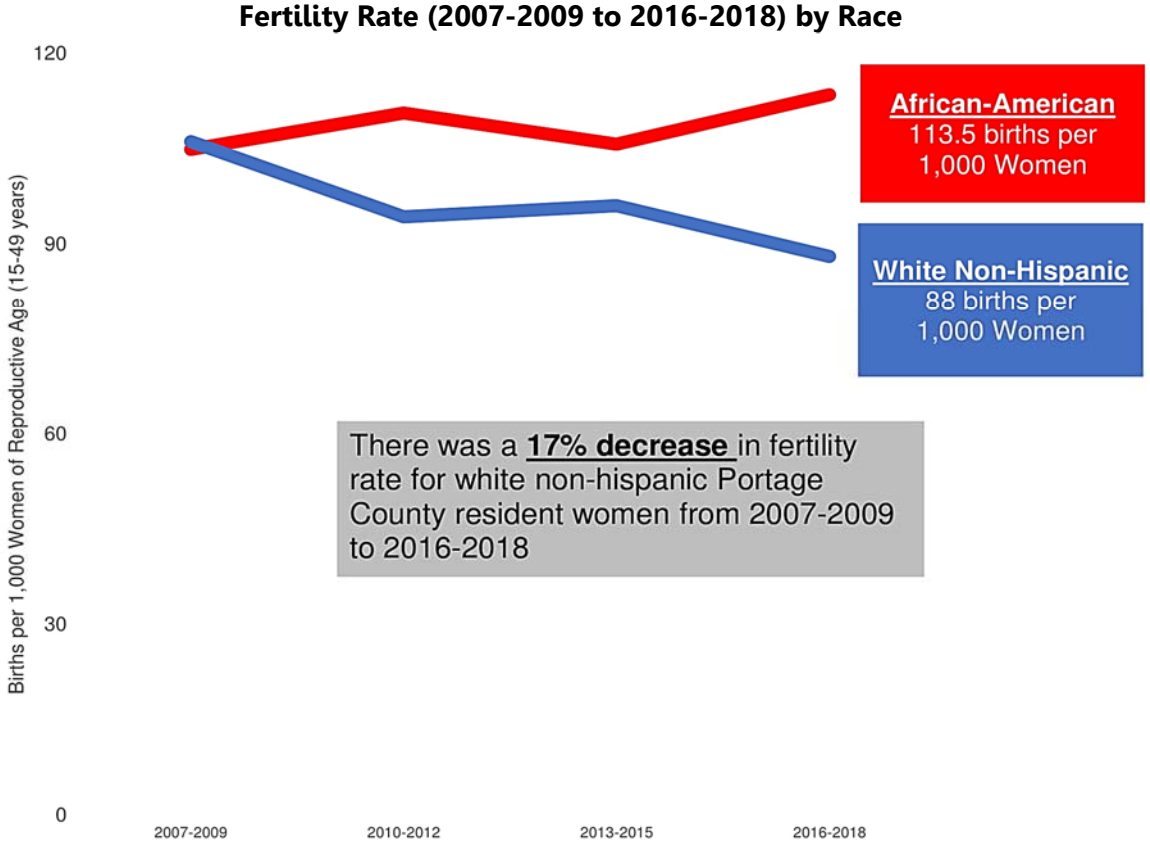
Highest
Nelson Twp.- 150.4
Southwest Ravenna - 144.9
Southeast Ravenna - 143.6

Lowest
Kent, KSU -5.6
Kent, Southeast Off-Campus 43.0
Kent, North Off-Campus- 52.5

County: 103.8



(Source for map: Ohio Public Information Warehouse, 2016-2018)
Note: Fertility Rate is calculated as births per 1,000 women of reproductive ages (15-49).



(Source for map: Ohio Public Information Warehouse, 2007-2009 to 2016-2018)

Healthcare Access: Men's Health

Key Findings

More than half (55%) of Portage County males 50 and older had a Prostate-Specific Antigen (PSA) test in the past year. Nearly half (40%) of men had high blood cholesterol, 40% had been diagnosed with high blood pressure, and 19% were identified as smokers, which, along with obesity (39%), are known risk factors for cardiovascular diseases.

Men's Health Screenings

- About two-fifths (43%) of Portage County males had a Prostate-Specific Antigen (PSA) test at some time in their life, and 30% had one in the past year.
- About three-quarters (74%) of males age 50 and over had a PSA test at some time in their life, and 55% had one in the past year.
- Eighty-five percent (85%) of males reported having their last PSA test done along with an appointment with their doctor or healthcare provider.

Portage County
Male Leading Causes of Death
2015–2017
Total Male Deaths: 2,289

1. Heart Diseases (26% of all deaths)
2. Cancers (24%)
3. Accidents, Unintentional Injuries (7%)
4. Chronic Lower Respiratory Diseases (5%)
5. Stroke (3%)

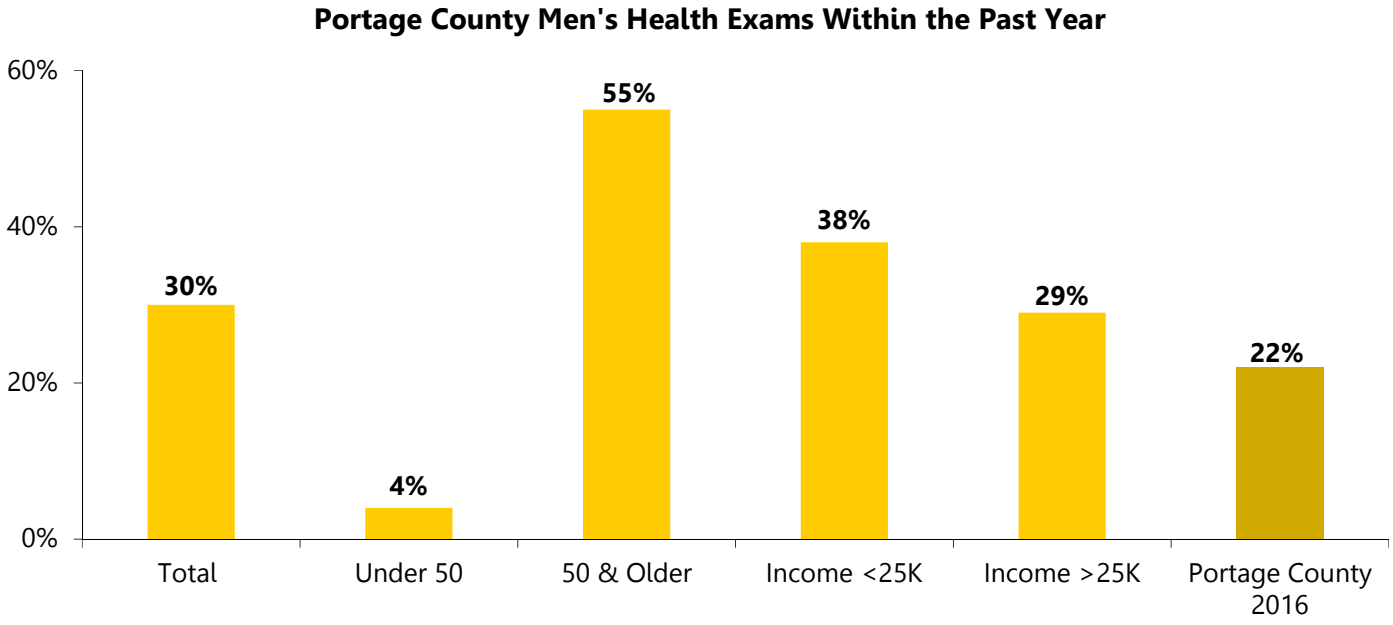
(Source: Ohio Public Health Data Warehouse, 2015-2017)

Ohio
Male Leading Causes of Death
2015–2017
Total Male Deaths: 180,695

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

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

The following graph shows the percentage of Portage County male adults that had various health exams in the past year. An example of how to interpret the information shown on the graph includes: 30% of Portage County males had a PSA test within the past year, including 55% of those age 50 and older.



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

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Had a PSA test within the past two years (ages 40 and older)	56%	62%	39%*	40%*

**2016 BRFSS*

Screening for Prostate Cancer

- The U.S. Preventive Services Task Force (USPSTF) is an organization made up of doctors and disease experts who look at research on the best way to prevent diseases and make recommendations on how doctors can help patients avoid diseases or find them early.
- In 2018 The USPSTF made the following recommendations about prostate cancer screening:
  - Men who are 55 to 69 years old should make individual decisions about being screened for prostate cancer with a prostate specific antigen (PSA) test.
  - Before deciding, men should talk to their doctor about the benefits and harms of screening for prostate cancer, including the benefits and harms of other tests and treatment.
  - Men who are 70 years old and older should not be screened for prostate cancer routinely.
- The goal of screening for prostate cancer is to find cancers that may be at high risk for spreading if not treated, and to find them early before they spread. However, most prostate cancers grow slowly or not at all.
- Screening men age 55 to 69 years of age may prevent about 1 death for every 1,000 men screened.
- Screening may prevent 3 men from developing prostate cancer that spreads to other places in the body for every 1,000 men screened.

(Source: Center for Disease Control and Prevention, What Are the Benefits and Harms of Screening? Updated on June 11, 2018)

Men's Health Concerns

- The 2019 health assessment identified:
  - 40% were diagnosed with high blood cholesterol (2017 BRFSS reported 34% for Ohio and 2016 BRFSS reported 38% for the U.S.)
  - 40% were diagnosed with high blood pressure (2017 BRFSS reported 37% for Ohio and 2016 BRFSS reported 34% for the U.S.)
  - 39% of Portage County men were obese (2017 BRFSS reported 34% for Ohio and 2016 BRFSS reported 30% for the U.S.)
  - 15% had been diagnosed with diabetes (2017 BRFSS reported 11% for Ohio and 2016 BRFSS reported 11% for the U.S.)
  - 19% of all men were current smokers (2017 BRFSS reported 22% for Ohio and 2016 BRFSS reported 19% for the U.S.)
- Eight percent (8%) of men had a heart attack at some time in their life.
- Three percent (3%) of men had a stroke at some time in their life.
- One out of eleven (9%) men reported that a health professional diagnosed them with coronary heart disease.

Healthcare Access: Oral Health

Key Findings

About seven out of ten (71%) Portage County adults visited a dentist or dental clinic in the past year, and three out of ten (31%) adults did not see a dentist in the past year due to cost.

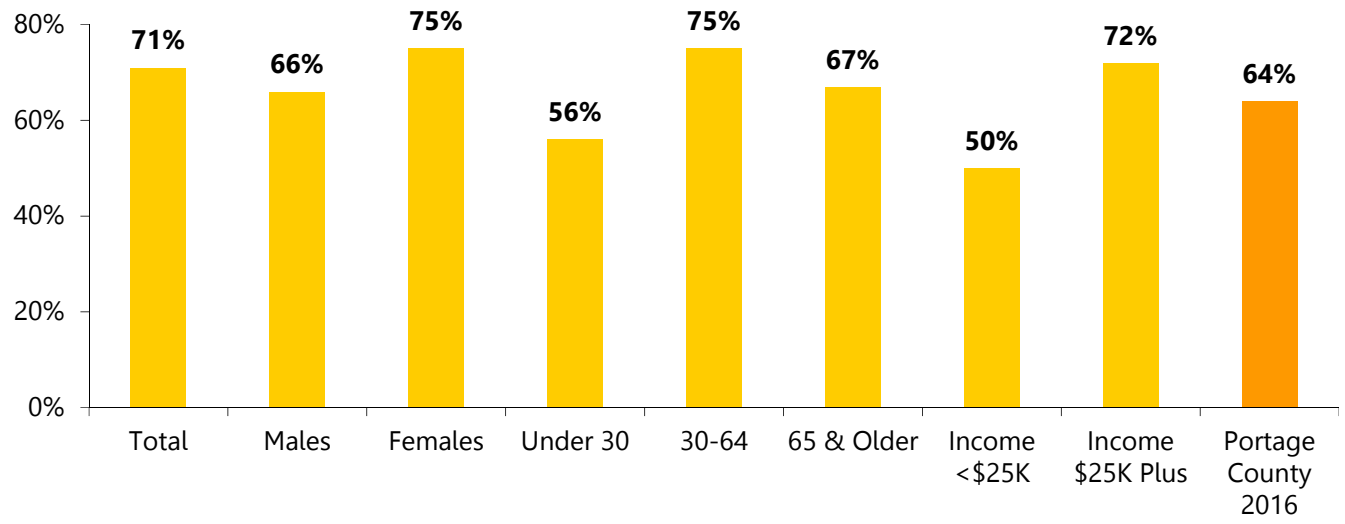
Access to Dental Care

- In the past year, 71% of Portage County adults had visited a dentist or dental clinic, decreasing to 50% of those with incomes less than $25,000.
- Seventy-three percent (73%) of Portage County adults with health insurance had been to the dentist in the past year, compared to 29% of those without health insurance.

12,447 Portage County adults last visited dentist or dental clinic 5 or more years ago.

The following graph provides information about the frequency of Portage County adult dental visits. An example of how to interpret the information includes: 71% of Portage County adults had been to the dentist in the past year, including 66% of males and 75% of females.

Portage County Adults Visiting a Dentist in the Past Year



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

Adult Oral Health	Within the Past Year	Within the Past 2 Years	Within the Past 5 Years	5 or More years	Never	Don't Know
Time Since Last Visit to Dentist/Dental Clinic						
Males	66%	11%	12%	10%	<1%	<1%
Females	75%	6%	5%	12%	0%	2%
Total	71%	10%	8%	10%	<1%	1%

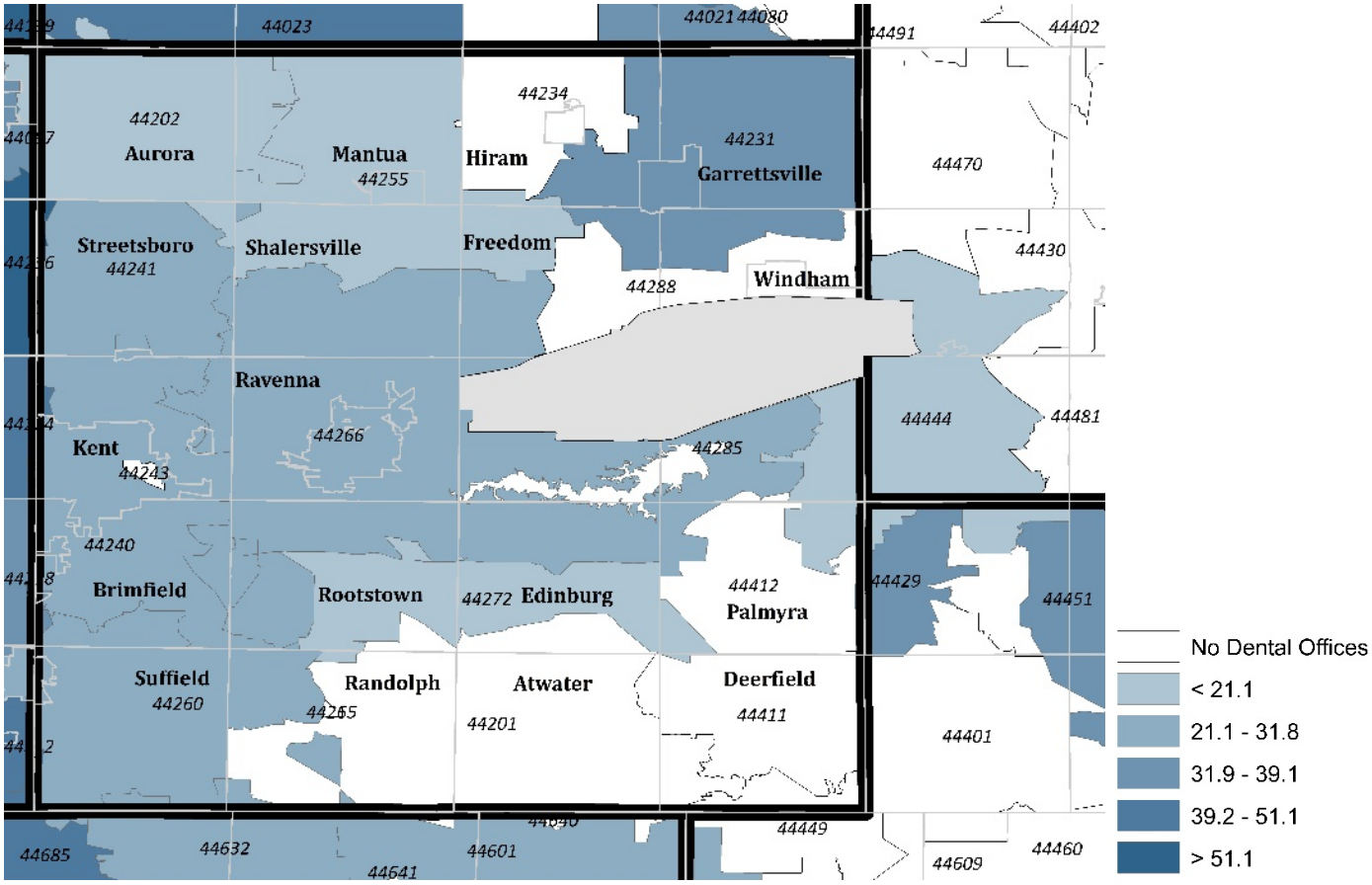
Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Visited a dentist or a dental clinic (within the past year)	64%	71%	68%*	66%*
Visited a dentist or a dental clinic (5 or more years ago)	9%	10%	11%*	10%*

**2016 BRFSS*

- Portage County adults who did not visit a dentist in the past year gave the following reasons:
  - Cost (31%)
  - Fear, apprehension, nervousness, pain, and dislike going (19%)
  - Had dentures (18%)
  - Had no reason to go/had not thought of it (10%)
  - Did not have/know a dentist (3%)
  - Transportation (1%)
  - Dentist did not accept their medical coverage (1%)
  - Other reasons (4%)
  - Multiple reasons (13%)

The following map shows dental offices, rate (per 100,000 persons) by zip code.

Dental Offices, Rate (Per 100,000 Persons) by Zip Code



(Source: U.S. Census Bureau, County Business Patterns, 2015. Provided by Portage County Health District.)

Oral Health

- Almost one-quarter (23%) of Portage County adults had the following oral health issues: pain (8%), difficulty eating/chewing (5%), problems with dentures (5%), loose teeth (4%), oral bleeding (2%), no teeth (2%), skipped meals due to pain (2%), missed work due to mouth pain (1%) and other (8%).

The following table shows oral health issues by smoking status for Portage County adults.

Oral Health Issue	Current Smoker	Former Smoker	Non-smoker
Oral pain	23%	7%	4%
Difficulty eating/chewing	21%	3%	1%
Loose teeth	11%	5%	2%
Skipped meals due to oral pain	10%	0%	0%
No teeth	5%	3%	1%
Problems with dentures	5%	10%	2%
Missed work due to oral pain	5%	2%	0%
Oral bleeding	0%	2%	3%
Other	19%	6%	5%

Oral Health Basics

- Oral health affects our ability to speak, smile, eat, and show emotions. It also affects self-esteem, school performance, and attendance at work and school. Oral diseases—which range from cavities to gum disease to oral cancer—cause pain and disability for millions of Americans. They also cost taxpayers billions of dollars each year.
- Cavities (also called tooth decay) are one of the most common chronic diseases in the United States. By age 34, more than 80% of people have had at least one cavity. More than 40% of adults have felt pain in their mouth in the last year. The nation spends more than $124 billion a year on costs related to dental care. On average, over 34 million school hours are lost and over $45 billion is lost in productivity each year due to unplanned (emergency) dental care.
- Oral health has been linked with other chronic diseases, like diabetes and heart disease. It is also linked with risk behaviors like using tobacco and eating and drinking foods and beverages high in sugar.
- Public health strategies such as community water fluoridation and school dental sealant programs have been proven to save money and prevent cavities.

(Source: CDC, Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion, Updated June 3, 2019)

Health Status and Behaviors: Health Status Perceptions

Key Findings

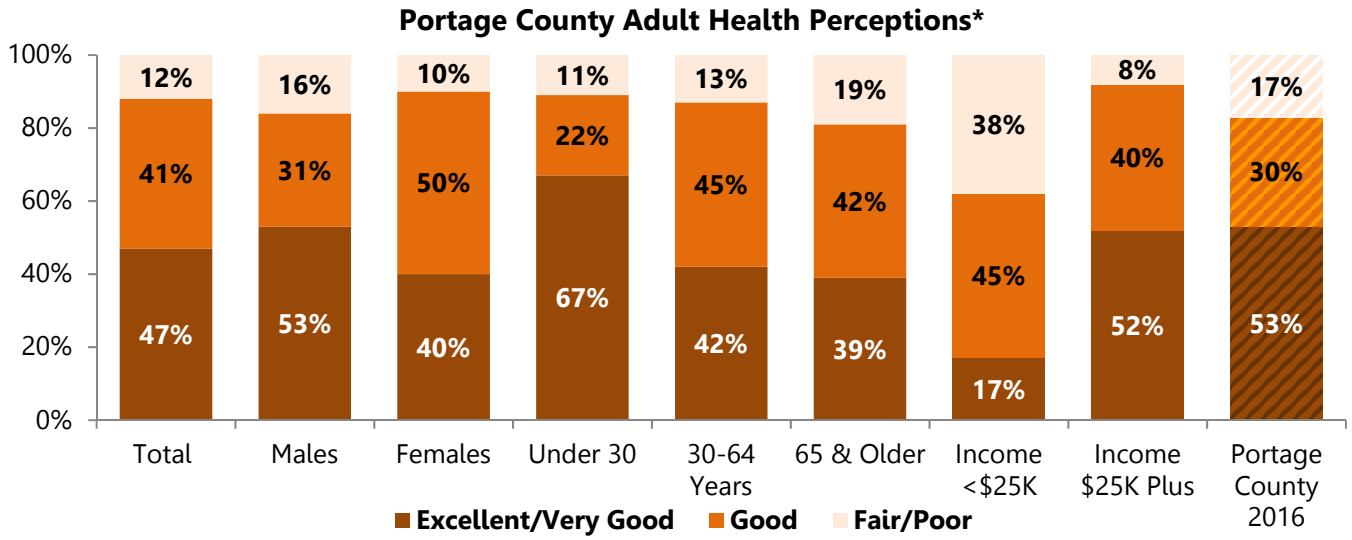
More than two-fifths (47%) of Portage County adults rated their health as excellent or very good. Conversely, about one out of eight (12%) adults described their health as fair or poor, increasing to 38% of those with incomes less than $25,000. More than one-fifth (23%) of Portage County adults rated their physical health as not good on four or more days in the past month, and 33% of adults rated their mental health as not good on four or more days in the past month.

General Health Status

- More than two-fifths (47%) of Portage County adults rated their health as excellent or very good. Portage County adults with higher incomes (52%) were most likely to rate their health as excellent or very good, compared to 17% of those with incomes less than $25,000.
- More than one-tenth (12%) of adults rated their health as fair or poor.
- Portage County adults were more likely to rate their health as fair or poor if they:
  - Had an annual household income under $25,000 (38%)
  - Were obese (37%)
  - Had been diagnosed with diabetes (25%)
  - Had angina or coronary heart disease (32%)
  - Were widowed (26%)
  - Had high blood pressure (20%)
  - Were 65 years of age or older (19%)
  - Had high blood cholesterol (18%)
  - Had asthma (14%)
- Nearly one-third (32%) of adults reported that poor mental or physical health kept them from doing usual activities such as self-care, work, or recreation at least one day in the past month.

14,936 adults rated their health as fair or poor.

The following graph shows the percentage of Portage County adults who described their general health status as excellent/very good, good, and fair/poor. An example of how to interpret the information includes: 47% of Portage County adults, 53% of males, and 40% of females, rated their health as excellent or very good.



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

Physical Health Status

- More than one-fifth (23%) of Portage County adults rated their physical health as not good on four or more days in the past month.
- Portage County adults reported their physical health as not good on an average of 4.0 days in the past month.
- Portage County adults were most likely to rate their physical health as not good (on four or more days during the past month) if they:
  - Had an annual household income under $25,000 (45%)
  - Were female (30%)
  - Were 65 and older (27%)

Mental Health Status

- One-third (33%) of Portage County adults rated their mental health as not good on four or more days in the past month.
- Portage County adults reported their mental health as not good on an average of 5.2 days in the past month.
- Portage County adults were most likely to rate their mental health as not good (on four or more days during the past month) if they:
  - Had an annual household income under $25,000 (43%)
  - Were female (40%)

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

Health Status	No Days	1-3 Days	4-5 Days	6-7 Days	8 or More Days
Physical Health Not Good in Past 30 Days*					
Males	51%	19%	5%	2%	16%
Females	35%	29%	5%	5%	14%
Total	43%	24%	5%	3%	15%
Mental Health Not Good in Past 30 Days*					
Males	57%	10%	6%	3%	17%
Females	44%	8%	8%	4%	29%
Total	51%	9%	7%	3%	23%

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

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Rated general health as good, very good, or excellent	83%	88%	81%	83%
Rated general health as excellent or very good	53%	47%	49%	51%
Rated general health as fair or poor	17%	12%	19%	18%
Rated mental health as not good on four or more days (in the past 30 days)	27%	33%	26%	24%
Rated physical health as not good on four or more days (in the past 30 days)	20%	23%	23%	22%
Average number of days that physical health was not good (in the past 30 days)	3.7	4.0	4.0*	3.7*
Average number of days that mental health was not good (in the past 30 days)	4.7	5.2	4.3*	3.8*
Poor physical or mental health kept them from doing usual activities, such as self-care, work, or recreation (on at least one day during the past 30 days)	28%	32%	24%	23%

**2016 BRFSS as compiled by 2019 County Health Rankings*

Health Status and Behaviors: Adult Weight Status

Key Findings

Almost three-quarters (73%) of Portage County adults were either overweight (35%), obese (22%), severely obese (10%), or morbidly obese (6%) by Body Mass Index (BMI).

Adult Weight Status

- Nearly three in four (73%) adults were either overweight (35%), obese (22%), severely obese (10%), or morbidly obese (6%) by Body Mass Index (BMI), putting them at elevated risk for developing a variety of preventable diseases.

- Adults did the following to lose weight or keep from gaining weight:
  - Ate less food, fewer calories, or foods low in fat (50%)
  - Exercised (48%)
  - Drank more water (42%)
  - Ate a low-carb diet (21%)
  - Used a weight loss program (6%)
  - Took diet pills, powders or liquids without a doctor's advice (4%)
  - Smoked cigarettes (3%)
  - Went without eating 24 or more hours (2%)
  - Health coaching (2%)
  - Take medications prescribed by a health professional (1%)
  - Vomit after eating (1%)
  - Participate in a dietary or fitness program prescribed for you by a health professional (<1%)
  - Nothing (33%)

47,298 Portage County adults were either obese, severely obese, or morbidly obese.

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Overweight (BMI of 25.0 – 29.9)	30%	35%	34%	35%
Obese (includes severely and morbidly obese, BMI of 30.0 and above)	28%	38%	34%	32%

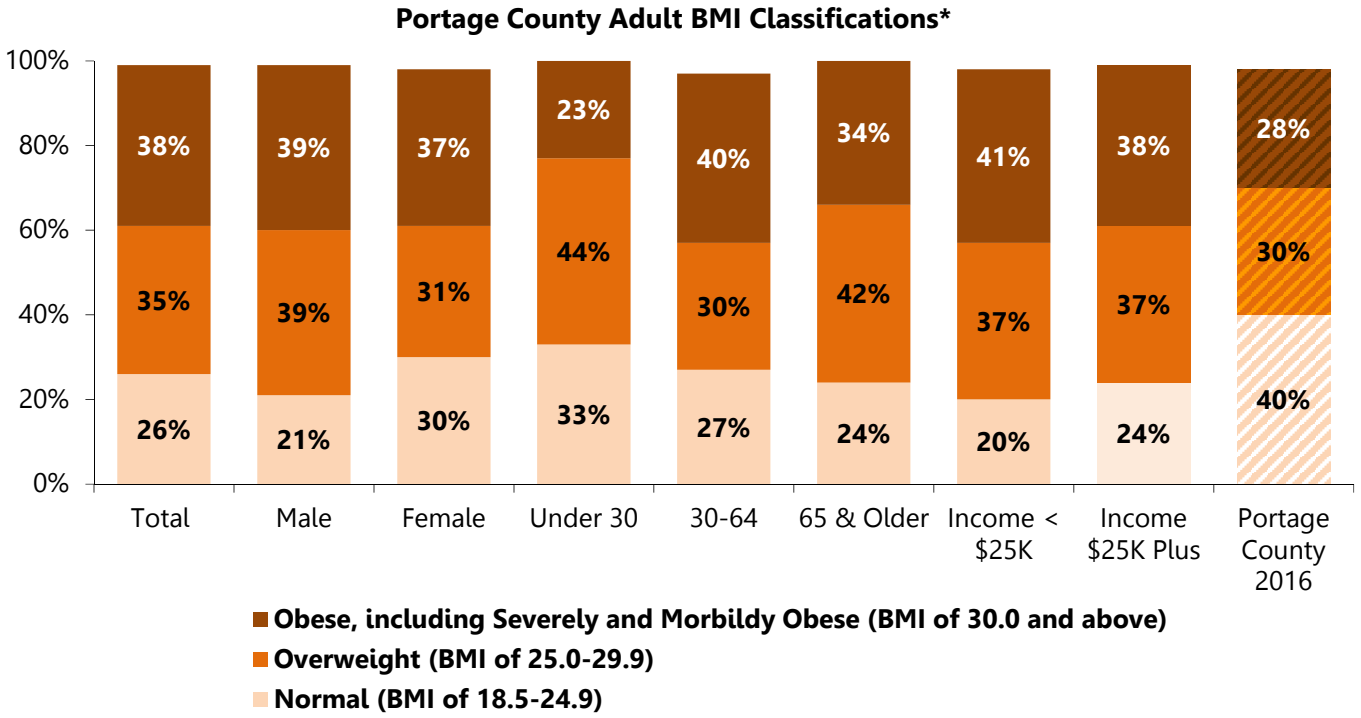
BMI Measurements

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

BMI	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal or Healthy Weight
25.0 – 29.9	Overweight
30.0-34.9	Class I Obese
35.0-39.9	Class II Obese (Severely Obese)
40.0 and above	Class III Obese (Morbidly Obese)

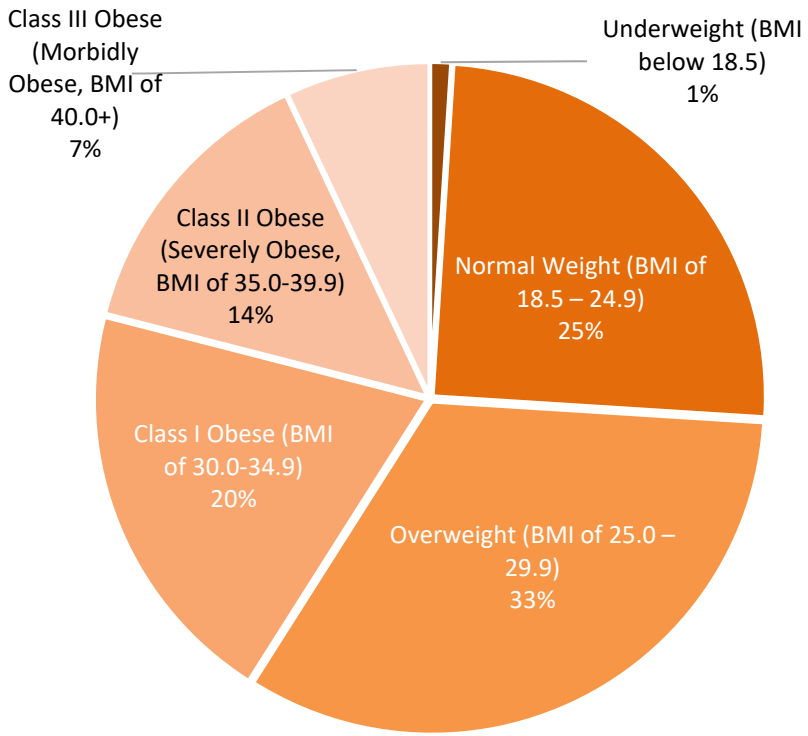
(Source: CDC, Healthy Weight, Updated on August 11, 2017)

The following graph shows the percentage of Portage County adults who are overweight or obese by Body Mass Index (BMI). An example of how to interpret the information includes: 26% of all Portage County adults were classified as normal weight, 35% were overweight, and 38% were obese.



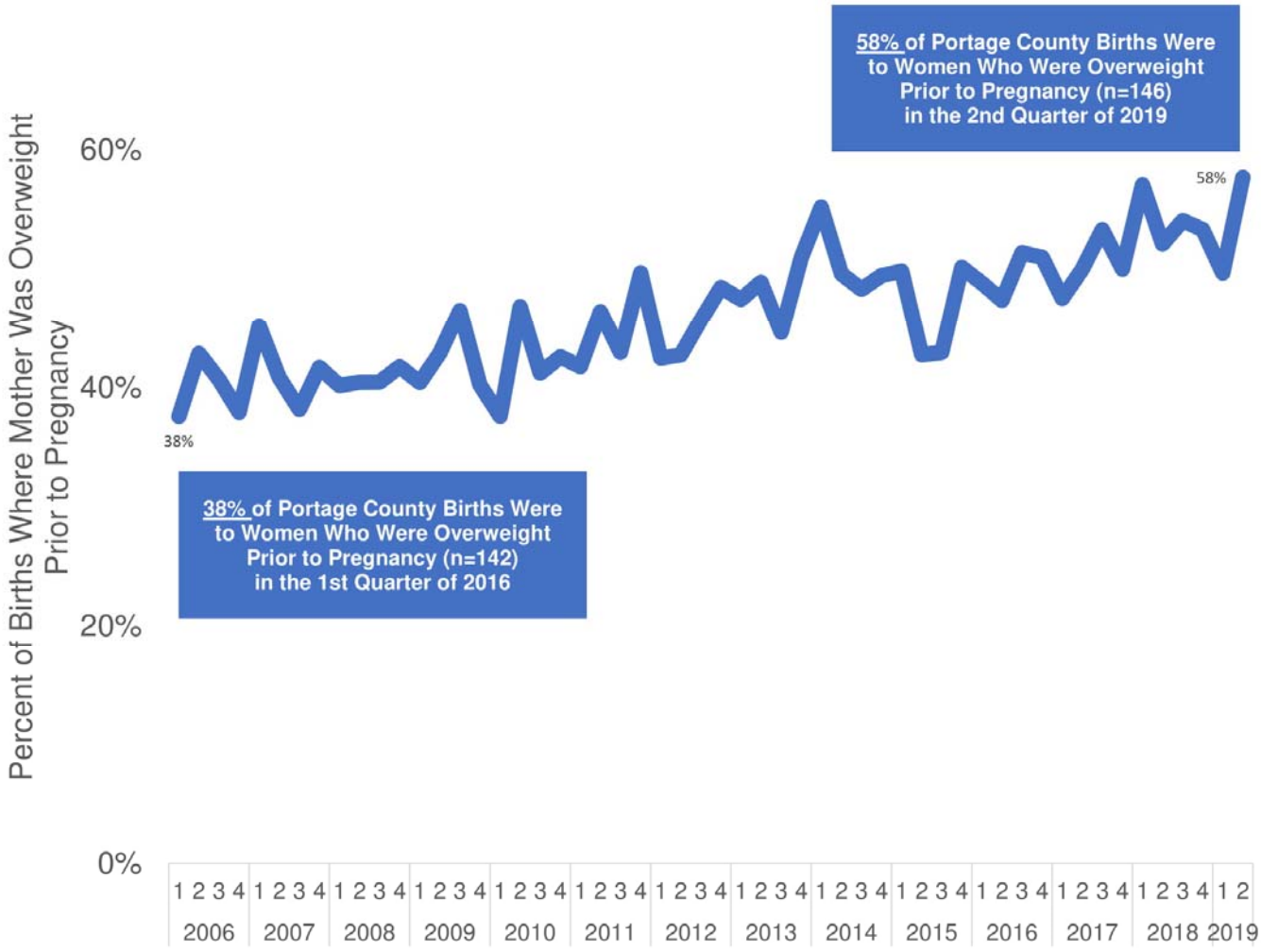
**Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight*
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following chart indicates the weight status of Portage County adults.



The following graph shows the percent of Portage County births where woman was overweight (BMI ≥ 25.0) prior to pregnancy, by quarter.

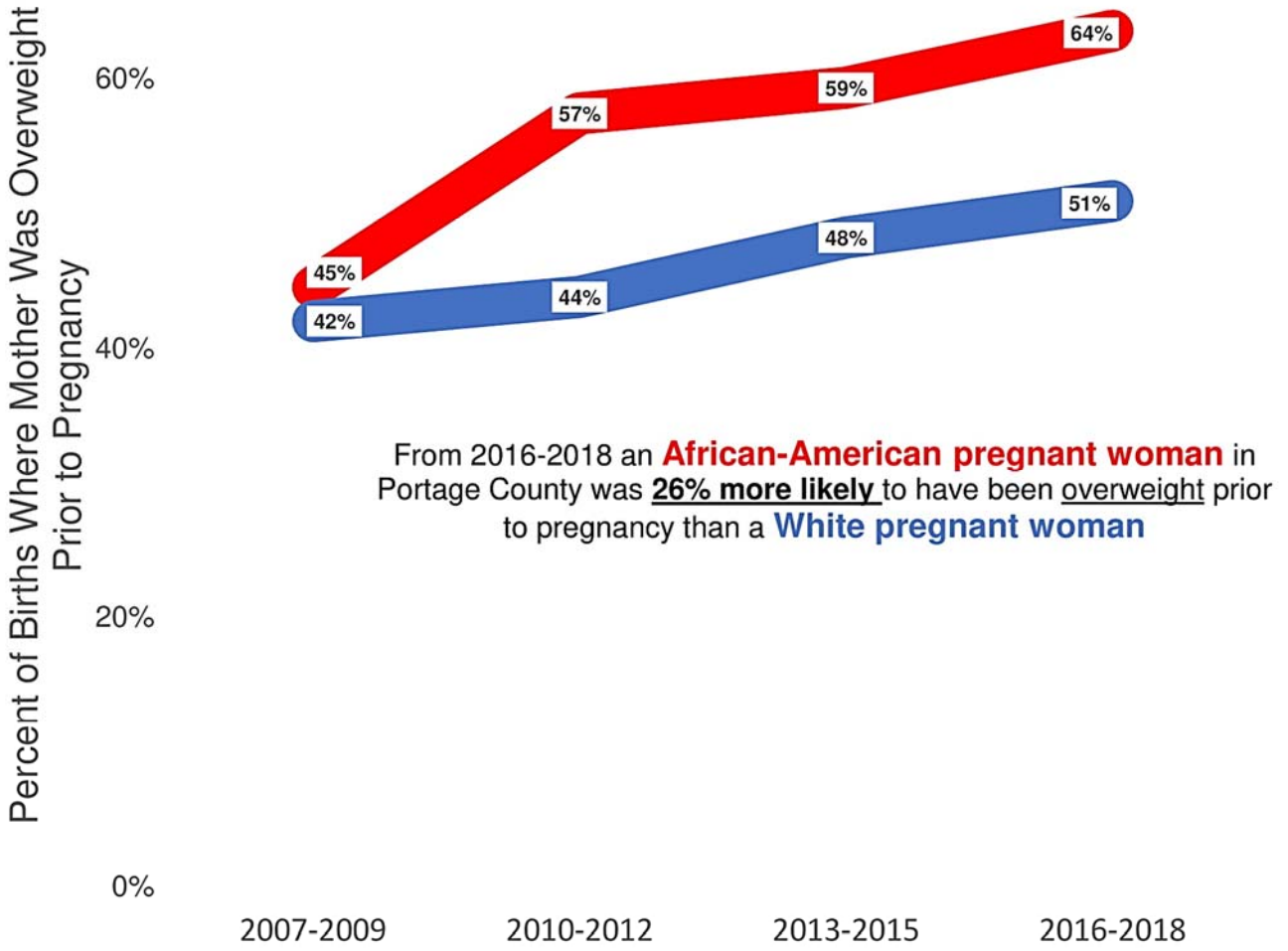
Percent of Portage County Births Where Woman Was Overweight (BMI ≥ 25.0) Prior to Pregnancy (2006-2019), by Quarter



(Source: Ohio Public Information Warehouse 2006-2019, as compiled by the Portage County Health District)

The following graph shows the percent of Portage County births where woman was overweight (BMI ≥ 25.0) prior to pregnancy, by race.

Percent of Portage County Births Where Woman Was Overweight (BMI ≥ 25.0) Prior to Pregnancy (2007-2009 to 2016-2018), by Race



(Source: Ohio Public Information Warehouse 2007-2009 to 2016-2018, as compiled by the Portage County Health District)

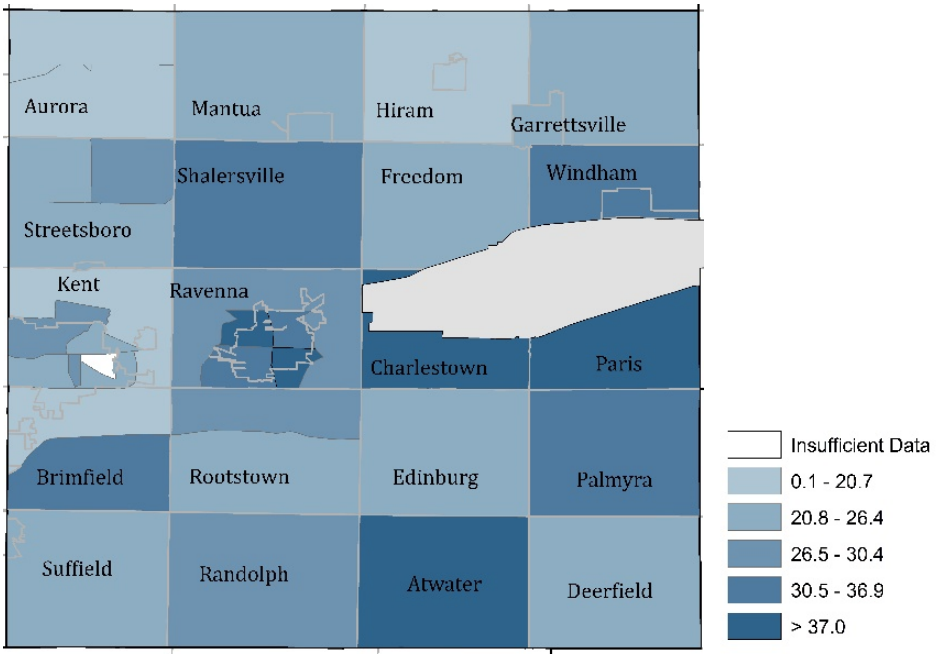
The following map shows the percent of Portage County births where woman was obese (BMI ≥ 30.0) prior to pregnancy by census tract.

Percent of Portage County Births Where Woman Was Obese (BMI ≥ 30.0) Prior to Pregnancy (2016-2018), by Census Tract

Highest
Southeast Ravenna – 44.9%
Northwest Ravenna – 41.2%
Charlestown Twp. – 40.4%

Lowest
Franklin Twp. – 15.0%
South Aurora – 15.2%
Hiram Twp. – 16.7%

County: 27.0%



(Source: Ohio Public Information Warehouse 2016-2018, as compiled by the Portage County Health District)

Physical Activity

- The CDC recommends that adults participate in moderate-intensity exercise for at least 150 minutes (2 hours and 30 minutes) every week, OR vigorous-intensity exercise for at least 75 minutes (1 hour and 15 minutes) every week. Whether participating in moderate or vigorous exercise, CDC also recommends muscle-strengthening activities that work all major muscle groups on 2 or more days per week *(Source: CDC, Physical Activity Guidelines for Americans, 2nd edition, 2019).*

- About one-fifth (21%) of adults engaged in some type of moderate-intensity aerobic exercise for at least 150 minutes in the past week. More than one-third (36%) of adults did so for less than 150 minutes. More than two-fifths (43%) of adults did not engage in any moderate intensity aerobic exercise in the past week.

- One in fourteen (7%) adults engaged in some type of vigorous-intensity aerobic exercise for at least 75 minutes in the past week. Almost one-fifth (18%) of adults did so for less than 75 minutes. Three-quarters (75%) of adults did not engage in any vigorous-intensity aerobic exercise in the past week.

- Two out of five (40%) adults engaged in some type of muscle-strengthening activity on 2 or more days per week. Seven percent (7%) of adults did so for 1 day a week. Just over half (53%) of adults did not engage in any muscle-strengthening activities in the past week.

- Portage County adults spent the most time doing the following physical activities in the past year:
  - Multiple types (35%)
  - Walking (30%)
  - Exercise machines (5%)
  - Cycling (3%)
  - Strength training (2%)
  - Running/jogging (2%)
  - Swimming (2%)
  - Exercise through their occupation (2%)
  - Exercise videos (1%)
  - Group exercise classes (<1%)
  - Other (3%)
  - Unable to exercise (2%)
  - Did not exercise in the past year (14%)

- Reasons for not exercising included the following:
  - Time (25%)
  - Too tired (15%)
  - Self-motivation or will power (15%)
  - Pain or discomfort (14%)
  - Laziness (13%)
  - Weather (13%)
  - Did not like to exercise (13%)
  - Choose not to exercise (8%)
  - Could not afford a gym membership (6%)
  - Ill or physically unable (6%)
  - Poorly maintained/no sidewalks (5%)
  - No child care (3%)
  - Lack of opportunities for those with physical impairments or challenges (2%)
  - Afraid of injury (2%)
  - No exercise partner (2%)
  - No walking, biking trails, or parks (1%)
  - Did not know what activities to do (1%)
  - No gym available (1%)
  - Too expensive (1%)
  - Transportation (1%)
  - Doctor/healthcare provider advised them not to exercise (<1%)
  - Other reasons (3%)

- Adults reported they use or visit the parks, bike trails, and walking paths in their community: very often (13%), somewhat often (26%), not very often (37%), and not at all (22%). Three percent (3%) reported there were no parks, bike trails, or walking paths are available in their community.

- Portage County adults spent an average of 2.6 hours watching TV, 1.5 hours on their cell phone, 1.5 hours on their PC or tablet, and 0.2 hours playing video games on an average day of the week.

Nutrition

- One percent (1%) of Portage County adults ate 5 or more servings of whole fruit per day; 13% ate 3-to-4 servings, 72% ate 1-to-2 servings, and 14% ate 0 servings.

- Four percent (4%) of Portage County adults ate 5 or more servings of whole vegetables per day; 19% ate 3-to-4 servings, 73% ate 1-to-2 servings, and 4% ate 0 servings.

- Twenty-three percent (23%) of adults ate 5 or more servings of fruits **and** vegetables per day; 41% ate 3-to-4 servings, 35% ate 1-to-2 servings, and 1% ate 0 servings.

- The American Cancer Society recommends that adults eat at least 2 ½ cups of fruits and vegetables per day to reduce the risk of cancer and to maintain good health.

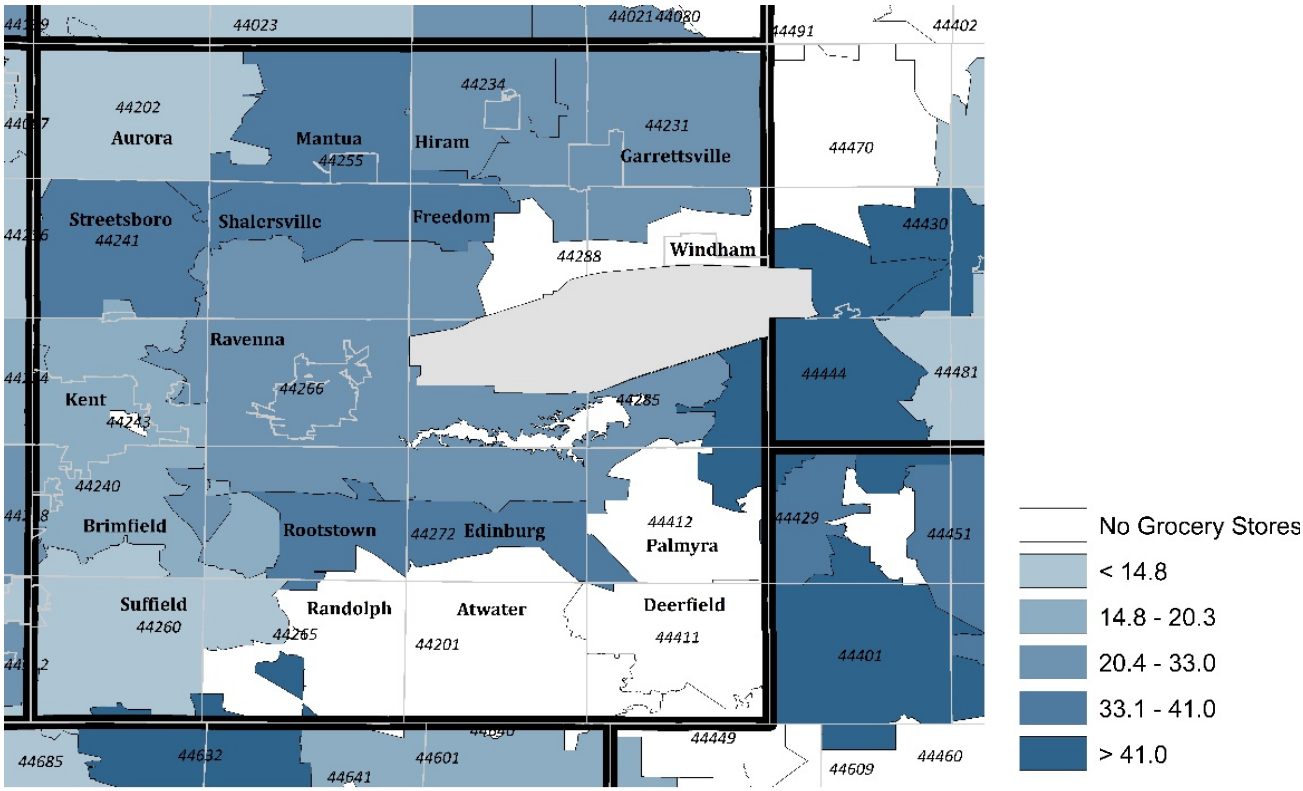
- Portage County adults reported they obtained their fresh fruits and vegetables from the following:
  - Large grocery store (such as Wal-Mart) (77%)
  - Local grocery store (47%)
  - Farmer's market (36%)
  - Grow their own/garden (28%)
  - Dollar General/Dollar Store (3%)
  - Corner/convenience stores (3%)
  - Food pantry (2%)
  - Veggie mobile/mobile produce (2%)
  - Group purchasing or community supported agriculture (1%)
  - Community garden (1%)
  - Mail order food services (such as Blue Apron) (<1%)
  - Other (6%)

- Portage County adults reported the following reasons they chose the types of food they ate:
  - Taste/enjoyment (66%)
  - Healthiness of food (59%)
  - Cost (54%)
  - Ease of preparation/time (41%)
  - Nutritional content (34%)
  - Food they were used to (33%)
  - What their family prefers (32%)
  - Availability (28%)
  - Calorie content (24%)
  - If it is organic (15%)
  - If it is genetically modified (11%)
  - Artificial sweetener content (9%)
  - Other food sensitivities (6%)
  - Health care provider's advice (4%)
  - Limitations due to dental issues (3%)
  - If it is lactose free (3%)
  - If it is gluten free (3%)
  - Availability of food at the food pantry (3%)
  - Other reasons (2%)

- In a typical week, adults ate out in a restaurant or brought home take-out food at the following frequencies: 1-to-2 times (60%), 3-to-4 times (17%), and 5 or more times (3%). Nearly one in five (19%) adults did not eat out in a restaurant or bring home take-out food in a typical week.
- Adults reported they engage in binge eating (eating a large amount of food and feeling out of control): everyday (<1%), some days (24%), and not at all (66%).
- Less than one percent (<1%) of adults consumed 5 or more servings of sugar-sweetened beverages per day; 9% drank 3-to-4 servings per day, 33% consumed 1-to-2 servings per day, and 58% consumed 0 servings.
- One out of ten (10%) adults consumed 5 or more servings of caffeinated beverages per day; 24% consumed 3-to-4 servings per day, 47% consumed 1-to-2 servings of per day, and 19% drank 0 servings.

The following map shows the rate of grocery stores per 100,000 persons by zip code.

Grocery Stores, Rate (Per 100,000 Persons) by Zip Code



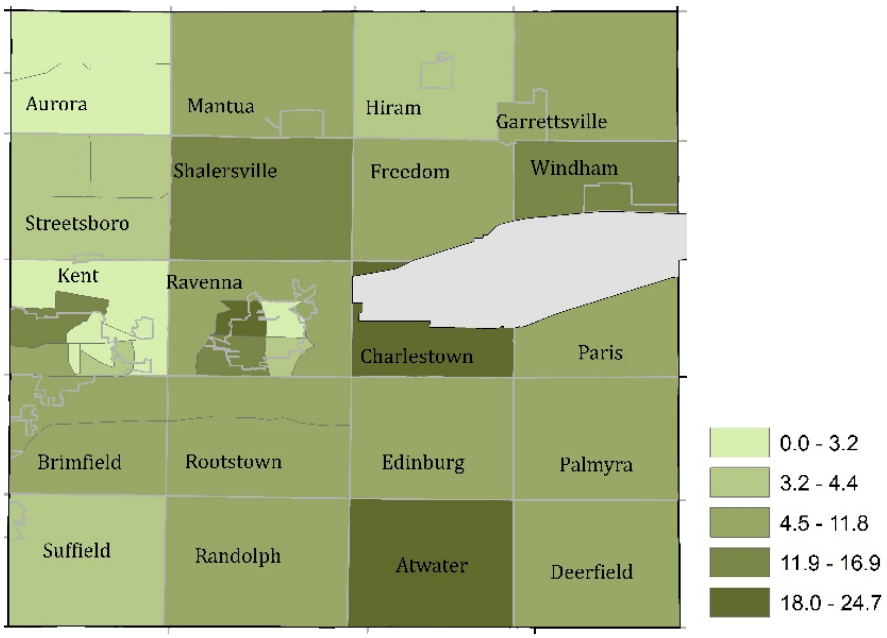
(Source: Census Bureau, County Business Patterns, 2015. Provided by Portage County Health District.)

The following map shows the proportion of population that are low-income and are beyond 1 mile from supermarket, by census tract.

Proportion of Population That Are Low-Income and Are Beyond 1 mile from Supermarket, by Census Tract

Highest
Northwest Ravenna- 24.7%
Charlestown Twp. - 21.8%
Atwater Twp.- 18.0%

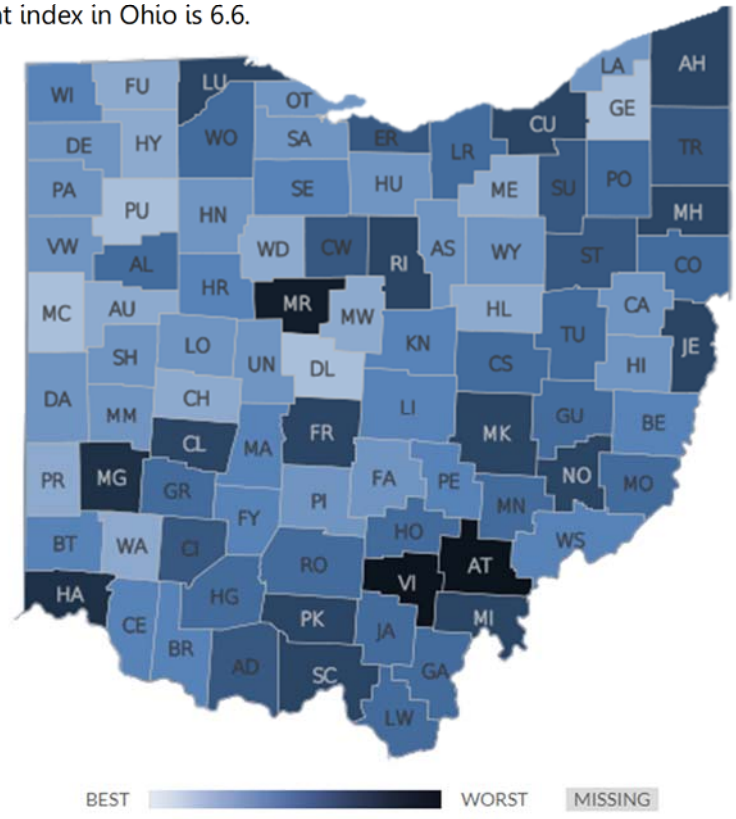
Lowest -
Kent, West Off Campus- 0.0%
Kent, KSU - 0.0%
North Aurora - 2.2%



Food Environment Index

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

- The food environment index in Portage County is 7.4.
- The food environment index in Ohio is 6.6.



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

Health Status and Behaviors: Adult Tobacco Use

Key Findings

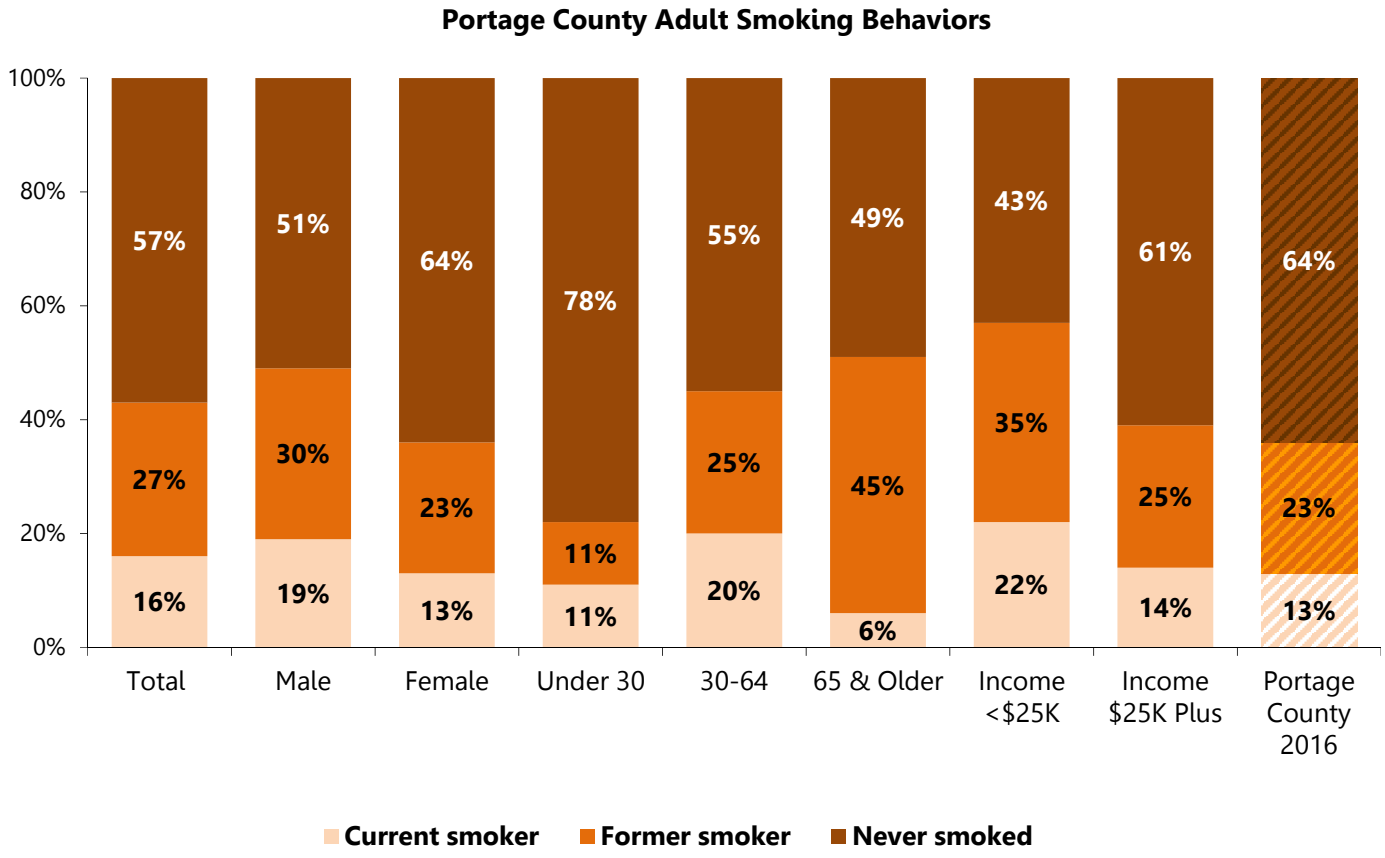
In 2019, 16% of Portage County adults were current smokers and 27% were considered former smokers. Four percent (4%) of Portage County adults were current electronic vapor product users.

19,915 Portage County adults were current smokers.

Adult Cigarette Use

- About one in six (16%) adults were current smokers (those who indicated smoking at least 100 cigarettes in their lifetime and currently smoked some or all days).
- In 2019, the American Cancer Society (ACS) stated that tobacco use remains the most preventable cause of death worldwide. Despite decades of declines in cigarette smoking prevalence, almost 32% of cancer deaths in the U.S. are still caused by smoking *(Source: Cancer Facts & Figures, American Cancer Society, 2019).*
- Of adult current smokers:
  - 81% were current drinkers
  - 56% were binge drinkers
  - 43% were married
  - 43% had experienced 3 or more Adverse Childhood Experiences (ACEs)
  - 39% had children under the age of 18
  - 32% felt sad or hopeless for two or more weeks
  - 23% seriously considered attempting suicided in the past 12 months
  - 13% attempted suicide in the past 12 months
- More than one-quarter (27%) of adults indicated that they were former smokers (smoked 100 cigarettes in their lifetime and now do not smoke).
- Two-thirds (66%) 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.
- Adults reported they used the following methods to quit smoking in the past year: cold turkey (61%), nicotine patch (44%), nicotine gum (22%), Chantix (22%), e-cigarette (11%), Wellbutrin (6%), hypnosis (8%), and substitute behaviors (3%).
- Portage County adults had the following rules/practices about smoking in their home or car: never allowed in the car (75%), never allowed in the home (69%), allowed inside the car (11%), not allowed with children present in the home (9%), and allowed anywhere in the home (8%), smoking is allowed but only in certain rooms of our home (8%), smoking is allowed but only with one or more of the windows open in the car (8%), and smoking is allowed but only if children are not in the car (7%).
- Portage County adults reported they would support an ordinance to ban smoking in the following places: vehicle with a minor present (76%), college/university campuses (60%), parks or ball fields (59%), fairgrounds (57%), and multi-unit housing (55%). About one in five (21%) adults reported they would not support an ordinance to ban smoking anywhere.

The following graph shows the percentage of Portage County adults' cigarettte smoking behaviors. An example of how to interpret the information includes: 16% of all Portage County adults were current smokers, 27% of all adults were former smokers, and 57% had never smoked.

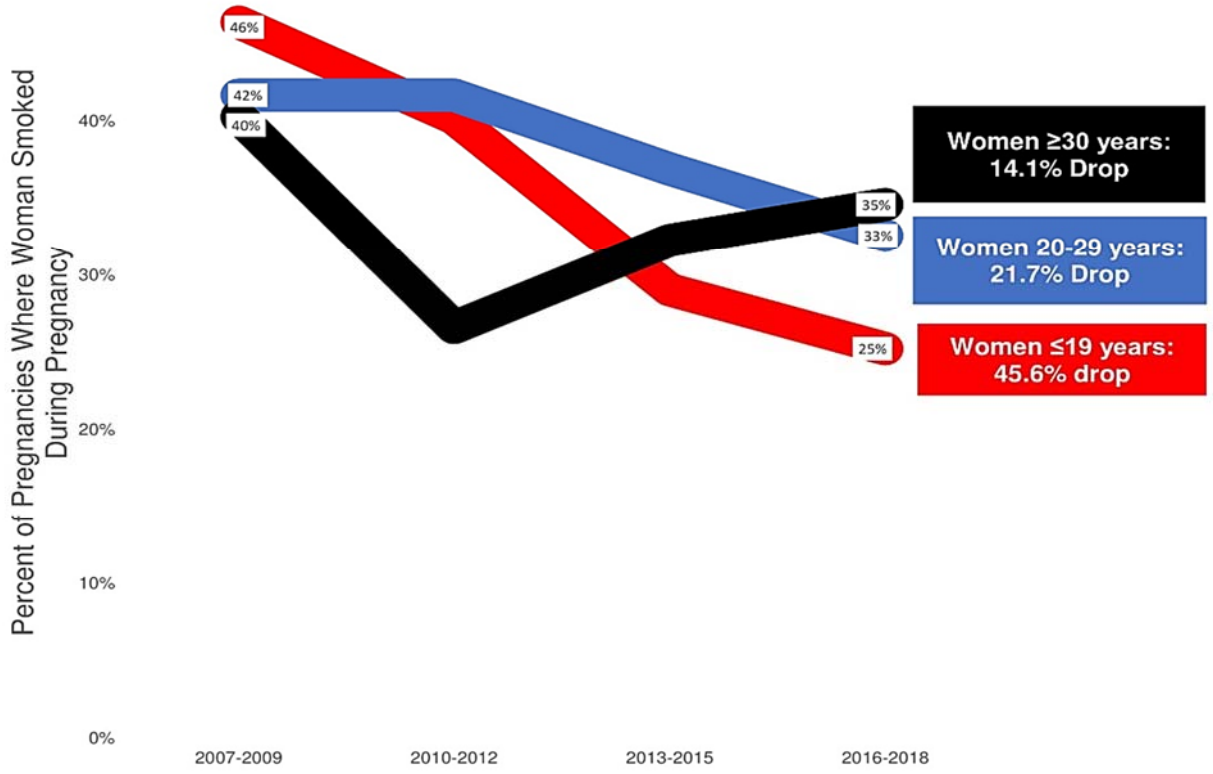


Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Smoking During Pregnancy

- The following graph shows the percentage of Portage County Births where woman ever smoked during pregnancy, by mother's age.

Percent of Portage County Births Where Woman Ever Smoked During Pregnancy (2007-2009 to 2016-2018), by Mother's Age



(Source: Ohio Public Information Warehouse, 2007-2009 to 2016-2018, as compiled by Portage County Health Distrcit)

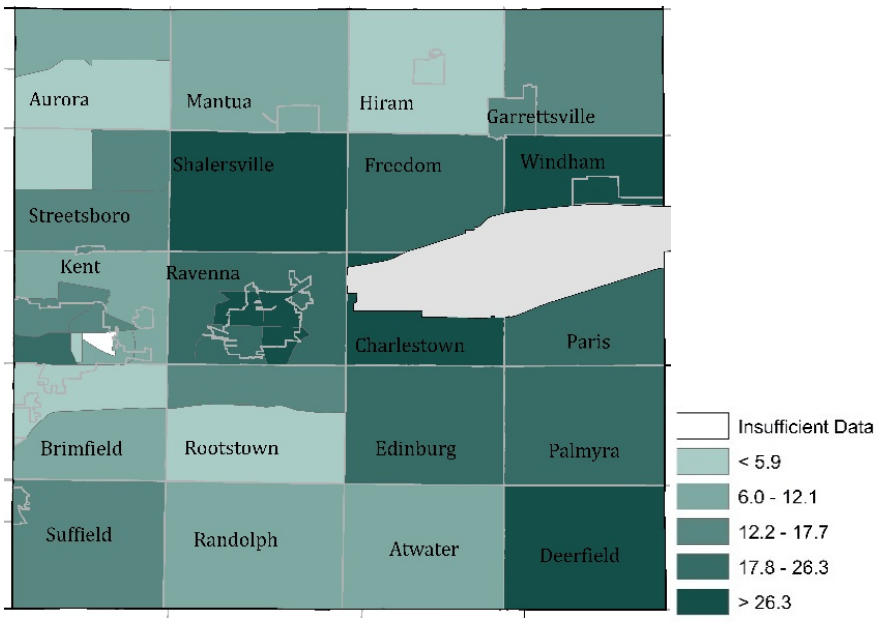
- The following map shows the percentage of Portage County births where woman ever smoked during pregnancy by census tract.

Percent of Portage County Births Where Woman Ever Smoked During Pregnancy (2016-2018), by Census Tract

Highest
Northwest Ravenna – 38.0%
Southeast Ravenna – 35.0%
Charlestown Twp. – 32.0%

Lowest
South Aurora – 1.0%
North Brimfield – 4.0%
Kent, West Off-Campus 5.0%

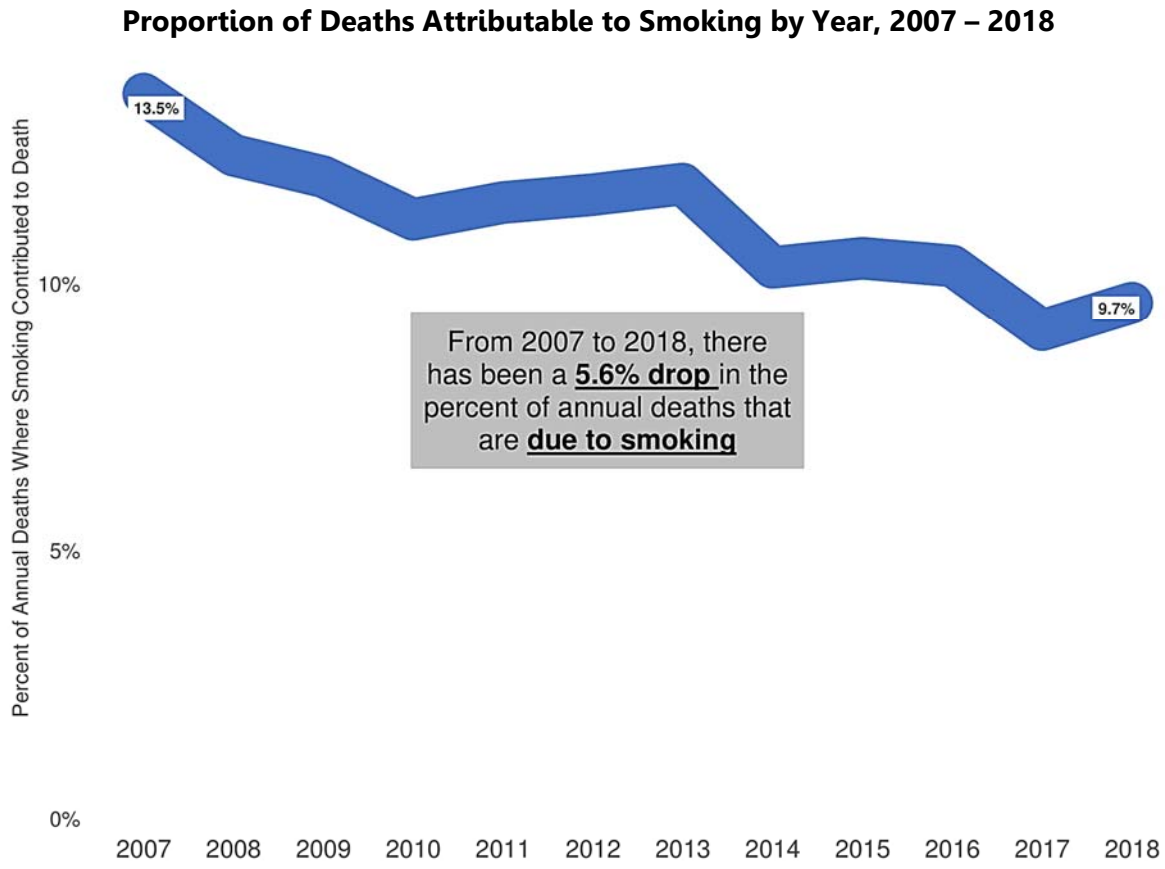
County: 16.0%



(Source: Ohio Public Information Warehouse, 2016-2018, as compiled by Portage County Health Distrcit)

Deaths Attributable to Smoking

- The following graph shows the proportion of deaths attributable to smoking by year.



(Source: Ohio Public Information Warehouse, 2007-2018, as compiled by Portage County Health Distrcit)

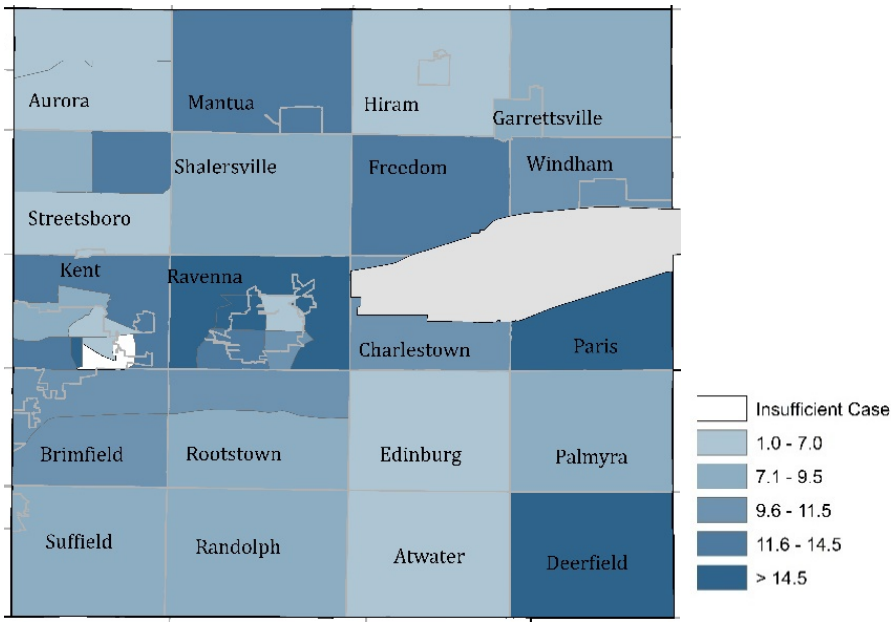
- The following map shows the proportion of deaths attributable to smoking by census tract.

Proportion of Deaths Attributable to Smoking (2016-2018), by Census Tract

Highest
Paris Twp. – 18.6%
Ravenna Twp. – 17.0%
Deerfield Twp. – 15.7%

Lowest
Kent, Southeast Off-Campus – 0.0%
Kent, North Off-Campus – 4.8%
Edinburg Twp. – 5.2%

County: 9.8%



(Source: Ohio Public Information Warehouse, 2016-2018, as compiled by Portage County Health Distrcit)

Cigarette Smoking and Tobacco Use Among People of Low Socioeconomic Status

- Adults who have lower levels of educational attainment, who are unemployed, or who live at, near, or below the U.S. federal poverty level are considered to have low socioeconomic status (SES).
- In the U.S., people living below the poverty level and people having lower levels of educational attainment have higher rates of cigarette smoking than the general population.

Cigarette smoking disproportionately affects the health of people with low SES. Lower income cigarette smokers suffer more from diseases caused by smoking than do smokers with higher incomes.

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

People with low SES tend to smoke cigarettes more heavily.

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

Secondhand smoke exposure is higher among people living below the poverty level and those with less education.

— Low SES populations are more likely to suffer the harmful health consequences of exposure to secondhand smoke.
— Blue-collar workers are more likely to be exposed to secondhand smoke at work than white-collar workers.
— Service workers, especially bartenders and wait staff, report the lowest rates of workplace smoke-free policies than other occupation categories.

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

Adult Electronic Vapor Product Use

- For percent (4%) of adults were current electronic vapor product users (those who indicated using an electronic vapor product in their lifetime and currently used it some or all days).

- More than half (58%) of Portage County adults believed that e-cigarette vapor was harmful to themselves. Fifty-six percent (56%) of adults believed that e-cigarette vapor was harmful to others, and 4% did not believe it was harmful to anyone. One-third (33%) of adults did not know if e-cigarette vapor was harmful.

E-Cigarette Health Effects

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

(Source: CDC, Smoking & Tobacco Use, About Electronic Cigarettes (E-Cigarettes), updated November 29, 2018)

Adult Tobacco Use

- Adults used the following tobacco products in the past **year**: cigars (8%); chewing tobacco, snuff, dip, Betel quid (4%); little cigars (3%); cigarillos (3%); pouch (1%); and pipes (1%). About one in eight (13%) adults used more than one tobacco product in the past year.

- Portage County adults used the following tobacco products in the past **month:** chewing tobacco, snuff, dip, Betel quid (2%); cigars (2%); little cigars (1%); hookah (<1%); pipes (<1%); and pouch (<1%). Four percent (4%) of adults used more than one tobacco product in the past month.

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Current smoker (smoked on some or all days)	13%	16%	21%	17%
Former smoker (smoked 100 cigarettes in lifetime and now do not smoke)	23%	27%	24%	25%
Tried to quit smoking (on at least one day in the past year)	52%	66%	N/A	N/A
Current e-cigarette user (vaped on some or all days)	N/A	4%	5%	5%

Health Status and Behaviors: Adult Alcohol Use

Key Findings

More than three-quarters (78%) of Portage County adults had at least one alcoholic drink in the past month and are considered current drinkers. Thirty-five percent (35%) of those current drinkers were binge drinkers.

Adult Alcohol Use

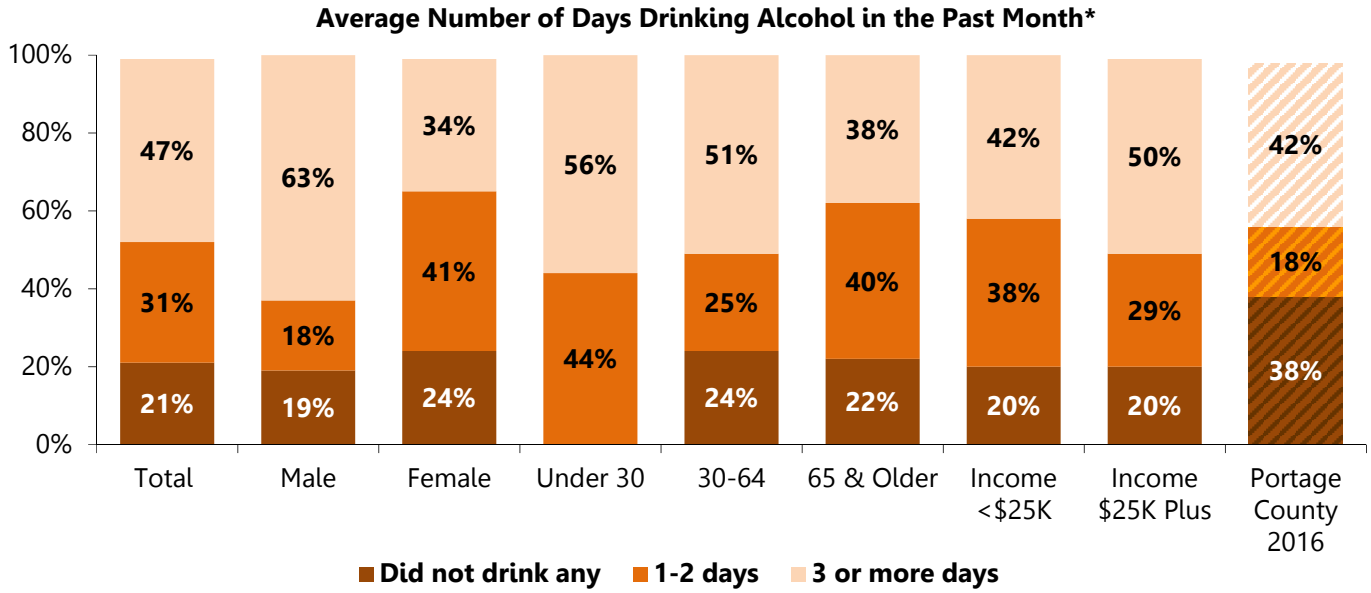
- More than three-quarters (78%) of adults had at least one alcoholic drink in the past month.
- Of adult current drinkers:
  - 26% had experienced 3 or more Adverse Childhood Experiences (ACEs)
  - 17% were current smokers
  - 15% felt sad or hopeless for two or more weeks
- Current drinkers drank 3.4 drinks on average on the days that they drank.
- More than one-quarter (27%) of all Portage County adults reported they had five or more alcoholic drinks (for males) or 4 or more drinks (for females) on an occasion in the last month and would be considered binge drinkers. Among current drinkers, 35% were considered binge drinkers.

33,606 Portage County adults were binge drinkers.

- Nearly one-quarter (24%) of adults reported driving after drinking an alcoholic beverage, increasing to 28% of males.
- Portage County adults, and/or someone living in their household, experienced the following in the past six months:
  - Drove a vehicle or other equipment after having any alcoholic beverages (19%)
  - Drank more than they expected (16%)
  - Used prescription drugs while drinking (12%)
  - Spent a lot of time drinking (7%)
  - Tried to quit or cut down but could not (7%)
  - Continued to drink despite problems caused by drinking (6%)
  - Drank more to get the same effect (5%)
  - Drank to ease withdrawal symptoms (4%)
  - Gave up other activities to drink (3%)
  - Placed themselves or their family in harm (3%)
  - Failed to fulfill duties at home or work (1%)
  - Other (2%)
- Five percent (5%) of Portage County adults used a program to help with an alcohol problem for themselves or a someone living in their household. Reasons for not using such a program included the following:
  - Had not thought of it (5%)
  - Could not afford to go (3%)
  - Did not want to miss work (1%)
  - Did not want to get in trouble (4%)
  - Fear (4%)
  - Program or service was not available (1%)
  - Unable to find a program or service (1%)
  - Did not know how to find a program (1%)
  - Program/services are always full (2%)
  - Did not have any openings (1%)
  - Stigma of seeking services (4%)
  - Other reasons (3%)
  - Program was not needed (47%

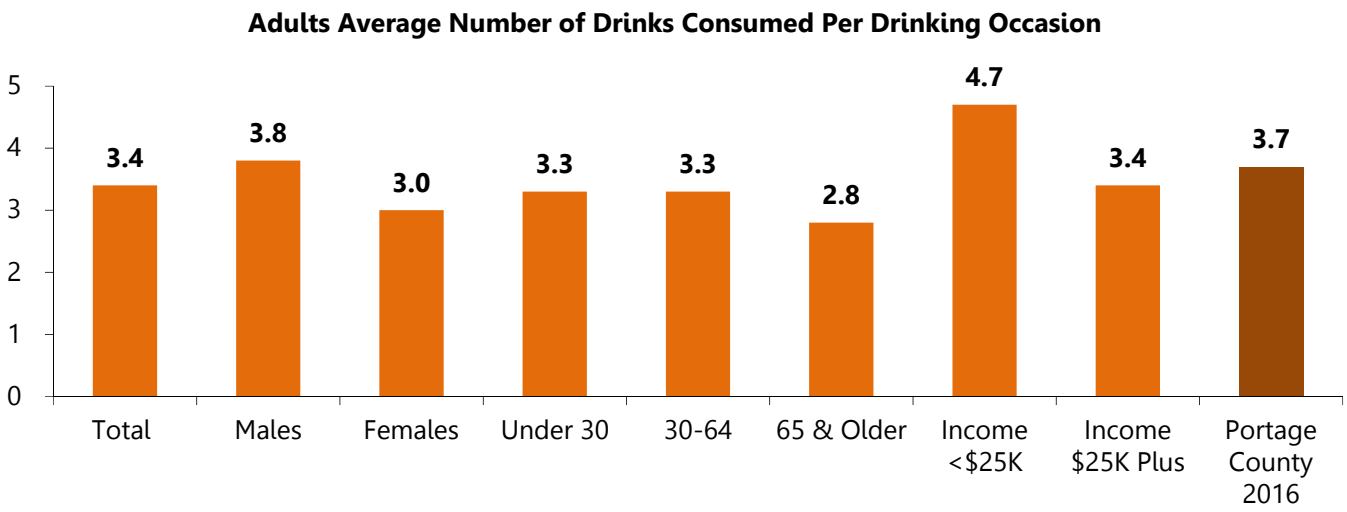
Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Current drinker (had at least one drink of alcohol within the past 30 days)	62%	78%	54%	55%
Binge drinker (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	22%	27%	19%	17%

The following graphs show the percentage of Portage County adults consuming alcohol and the amount consumed on average. An example of how to interpret the information shown on the first graph includes: 21% of all Portage County adults did not drink alcohol in the past month, including 19% of males and 24% of females.



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

The following graph shows the the average number of drinks consumed per drinking occasion. An example of how to interpret the information shown on the first graph includes: Portage County adults drank an average of 3.4 drinks per drinking occacion, increasing to 4.7 drinks for those with incomes less than $25,000.

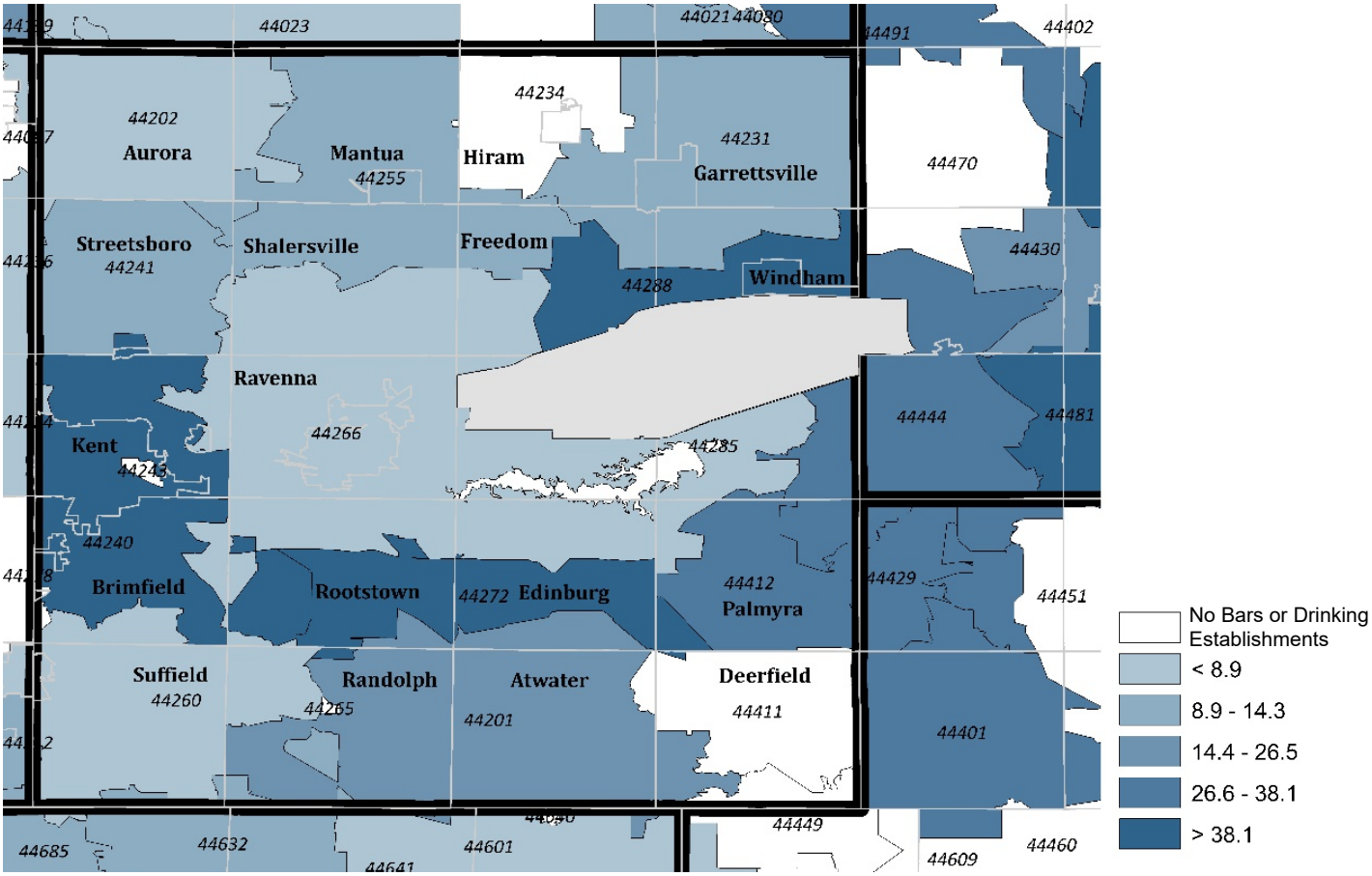


Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Drinking Establishment Rate

The following maps shows the drinking establishment rate (bars or drinking establishments per 100,000 people) by zip code.

Drinking Establishment Rate (Bars or Drinking Establishments per 100,000 People), by Zip Code

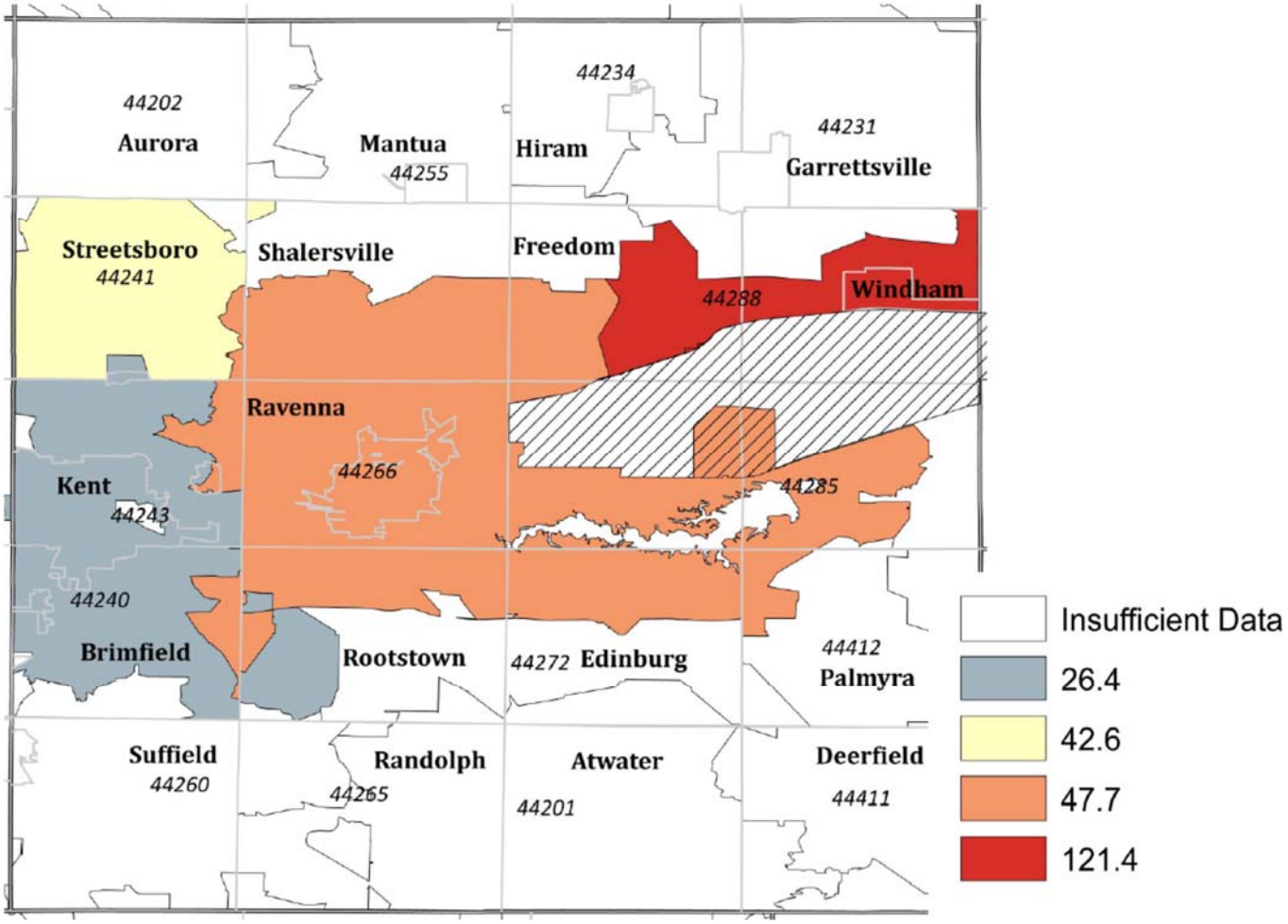


(Source: U.S. Census Bureau, County Business Patterns, 2015. Provided by Portage County Health District)

Deaths Due to Alcohol

The following maps shows the rate of deaths due to alcohol (per 100,000 persons) by Portage County zip code.

Rate of Deaths Due to Alcohol (per 100,000 persons) By Portage County Zip Code, 2018

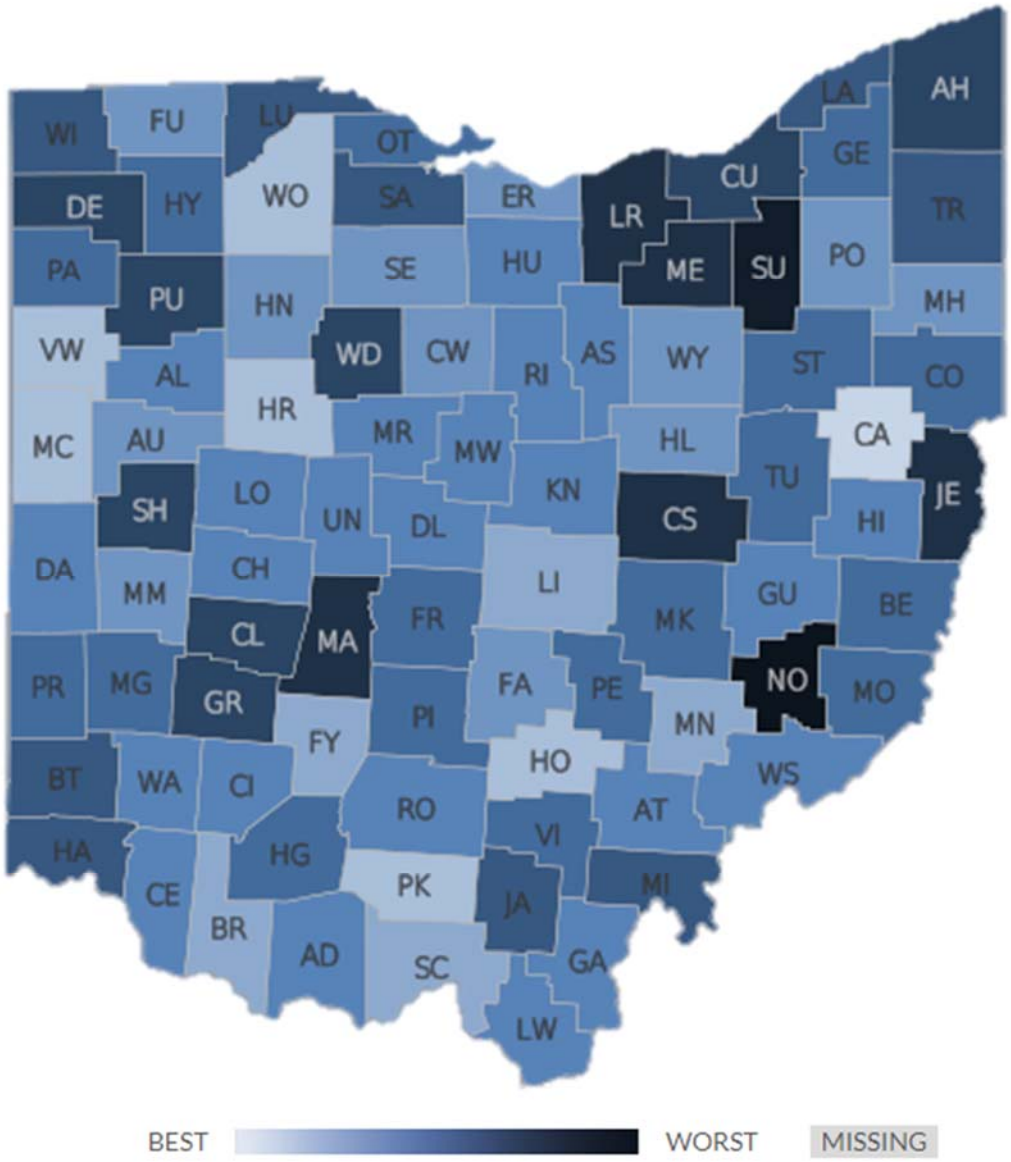


(Source: U.S. Census Bureau, County Business Patterns, 2015. Provided by Portage County Health District)

Alcohol-Impaired Driving Deaths

Alcohol-Impaired Driving Deaths is the percentage of motor vehicle crash deaths with alcohol involvement. Approximately 17,000 Americans are killed annually in alcohol-related motor vehicle crashes. Binge/heavy drinkers account for most episodes of alcohol-impaired driving.

- The alcohol-impaired driving deaths in Portage County is 20%.
- The alcohol-impaired driving deaths in Ohio is 34%.



(Source: Fatality Analysis Reporting System, as compiled by County Health Rankings, 2015)

Health Status and Behaviors: Adult Drug Use

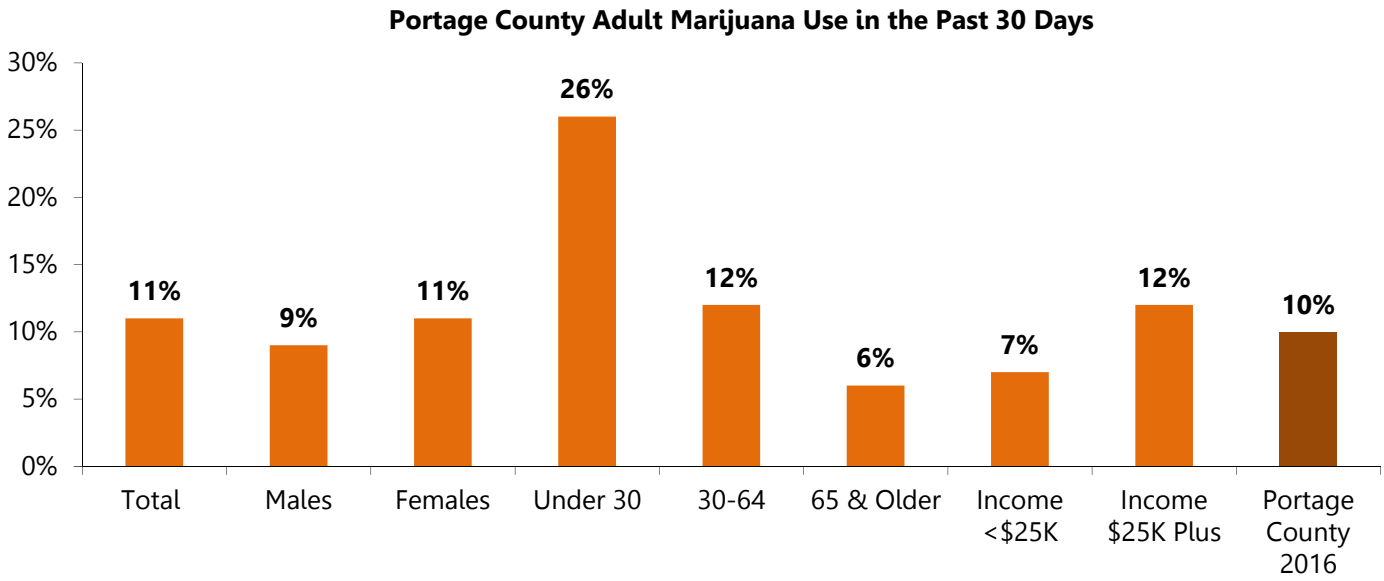
Key Findings

Eleven percent (11%) of Portage County adults had used marijuana in the past 30 days. Six percent (6%) 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.

Marijuana and Other Drug Use

- About one-in-nine (11%) adults reported using marijuana in the past 30 days.
- Adults who reported using marijuana in the past 30 days used it in the following ways: smoked it (38%), used it multiple ways (28%), vaporized it (18%), and ate it (18%).
- Approximately one-third (34%) of Portage County adults believed that marijuana was harmful to themselves. Thirty-five percent (35%) of adults believed that e-cigarette vapor was harmful to others, and 30% did not believe it was harmful to anyone. Thirty-two percent (32%) of adults did not know if marijuana was harmful.
- Adults reported that they or someone else in their household used the following in the past 6 months:
  - Recreational marijuana or hashish (12%)
  - Wax/oil with THC or edibles (7%)
  - Medicinal marijuana (3%)
  - Amphetamines, methamphetamines, or speed (3%)
  - LSD, mescaline, peyote, psilocybin, DMT, or mushrooms (2%)
  - Cocaine, crack, or coca leaves (2%)
  - Inappropriate use of over-the-counter medications (2%)
  - Ecstasy or GHB (2%)
  - Bath salts (1%)
  - Heroin/fentanyl (1%)
  - Synthetic marijuana/K2 (<1%)
  - Inhalants (<1%)

The following graph indicates adult marijuana use in the past days. An example of how to interpret the information includes: 11% of Portage County adults used marijuana in the past 30 days, including 9% of males and 11% of females.



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

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Used marijuana or hashish (in the past 6 months)	10%	8%*	N/A	N/A
Used drugs not prescribed for them or took more than prescribed to feel good, high, and/or more active or alert (in the past 6 months)	10%	6%*	N/A	N/A

** Data is for respondent only. Does not include someone else living in their household.*
N/A – Not available

Prescription Drug Misuse

- In the past 6 months, 6% of adults had used drugs not prescribed for them or took more than prescribed to feel good, high, and/or more active or alert, increasing to 10% of those with incomes less than $25,000.

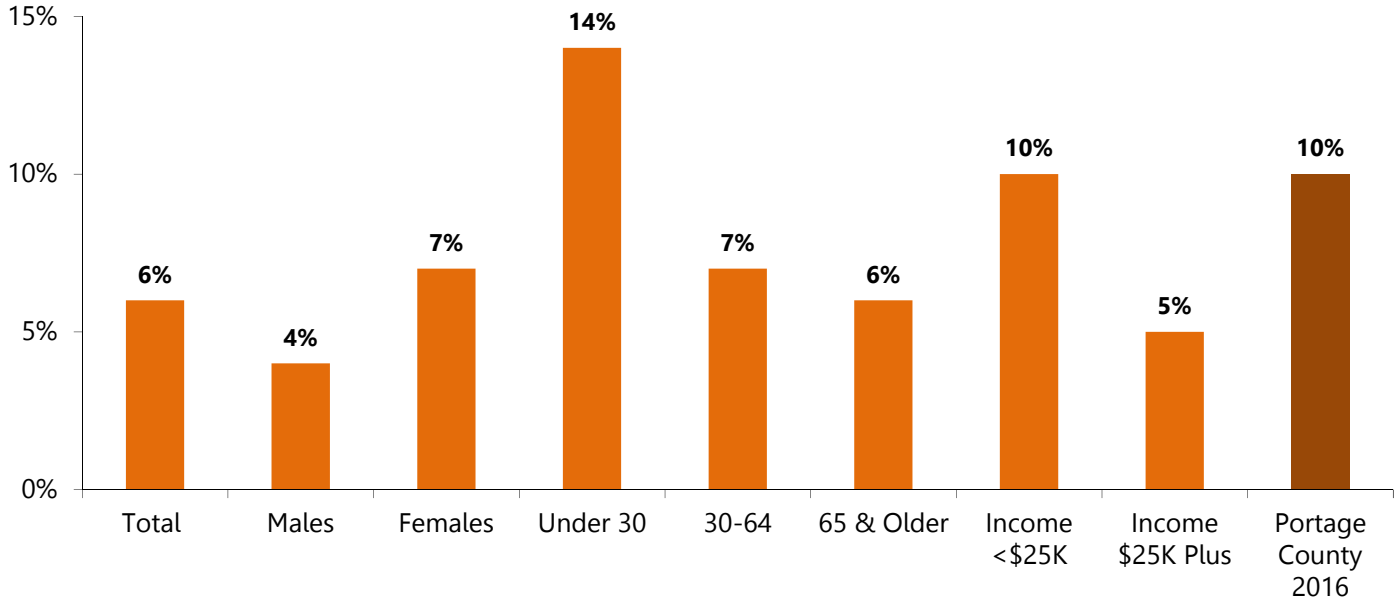
- Adults reported that they or someone else in their household used the following medications in the past 6 months that were either not prescribed for them, or they took more than was prescribed to feel good or high, more active or alert:
  - Tramadol/Ultram (4%)
  - Tranquilizers, such as Valium or Xanax (4%)
  - Ritalin (3%)
  - Codeine, Demerol, or Dilaudid (2%)
  - OxyContin (2%)
  - Steroids (2%)
  - Vicodin (2%)
  - Neurontin (1%)
  - Suboxone or Methadone (1%)

- Portage County adults who misused prescription medications obtained them from the following sources: primary care physician (92%), multiple doctors (17%), free from a friend or family member (17%), emergency room (ER) or urgent care doctor (17%), bought from a drug dealer (17%), bought from a friend or family member (13%), stole from a friend or family member (13%) and dentist (4%).

- Portage County adults indicated they did the following with their unused prescription medication:
  - Took all medication as prescribed (26%)
  - Took them to the medication collection program (20%)
  - Threw them in the trash (15%)
  - Kept it (15%)
  - Flushed them down the toilet (8%)
  - Took them in on National Prescription Drug Take Back Days (5%)
  - Kept in a locked cabinet (5%)
  - Took them to the sheriff's office (4%)
  - Used drug deactivation pouches (2%)
  - Sold them (1%)
  - Mailed them back to the pharmacy (<1%)
  - Other (3%)
  - Did not have unused prescription medication (38%)

The following graphs indicates adult medication misuse in the past 6 months. An example of how to interpret the information includes: 6% of Portage County adults misused prescription drugs in the past 6 months, including 4% of males and 7% of females.

Portage County Adult Prescription Drug Misuse in Past 6 Months



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

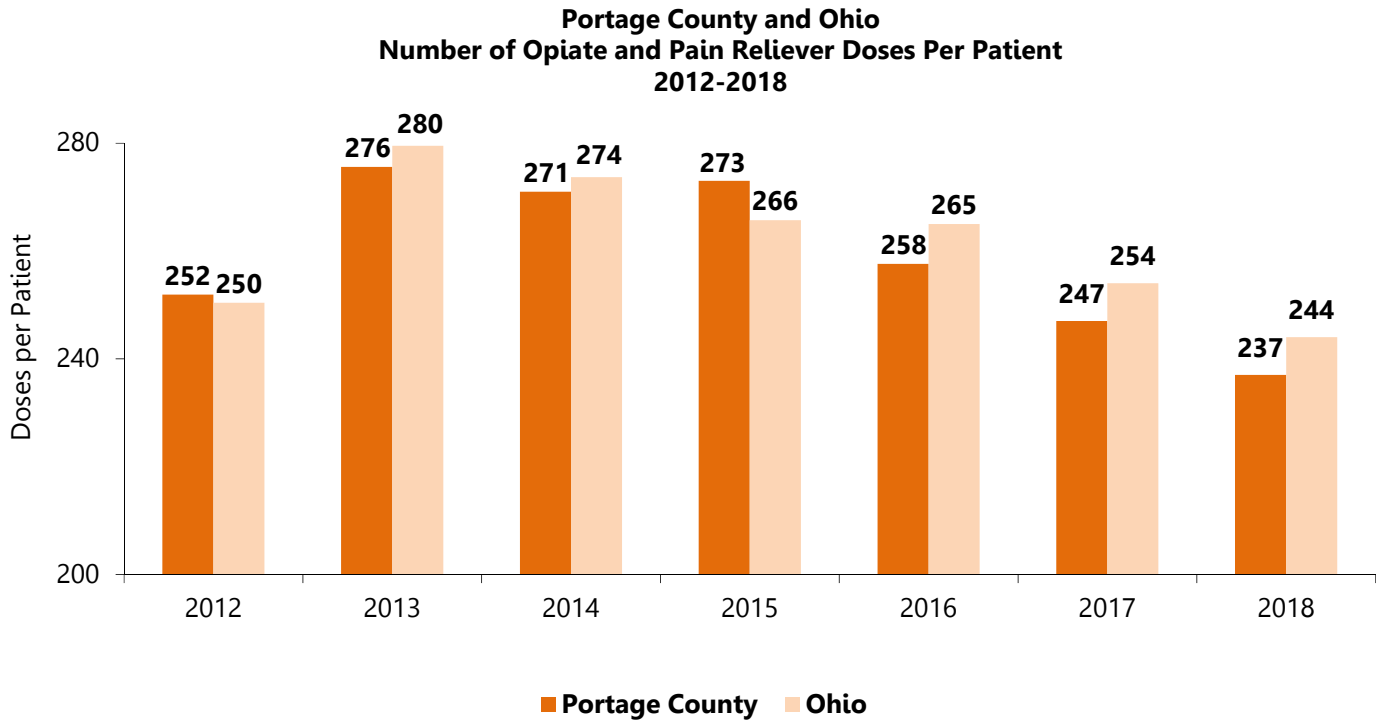
Ohio Automated Rx Reporting System (OARRS)

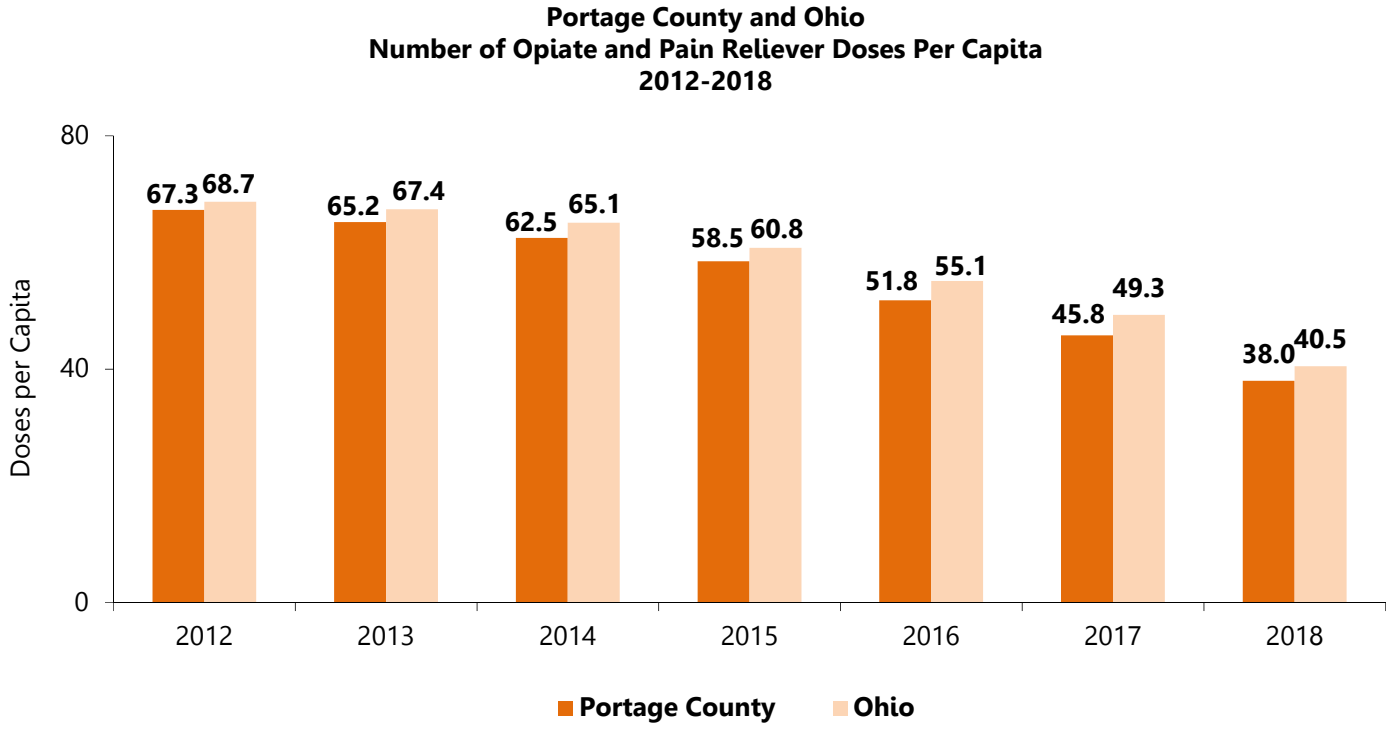
- OARRS has been collecting information from all Ohio-licensed pharmacies and Ohio personal licensed prescribers regarding outpatient prescriptions for controlled substance since 2006.
    - All data reported is updated every 24 hours and is maintained in a secure database.
- OARRS aims to be a reliable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

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

Opiate and Pain Reliever Doses

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

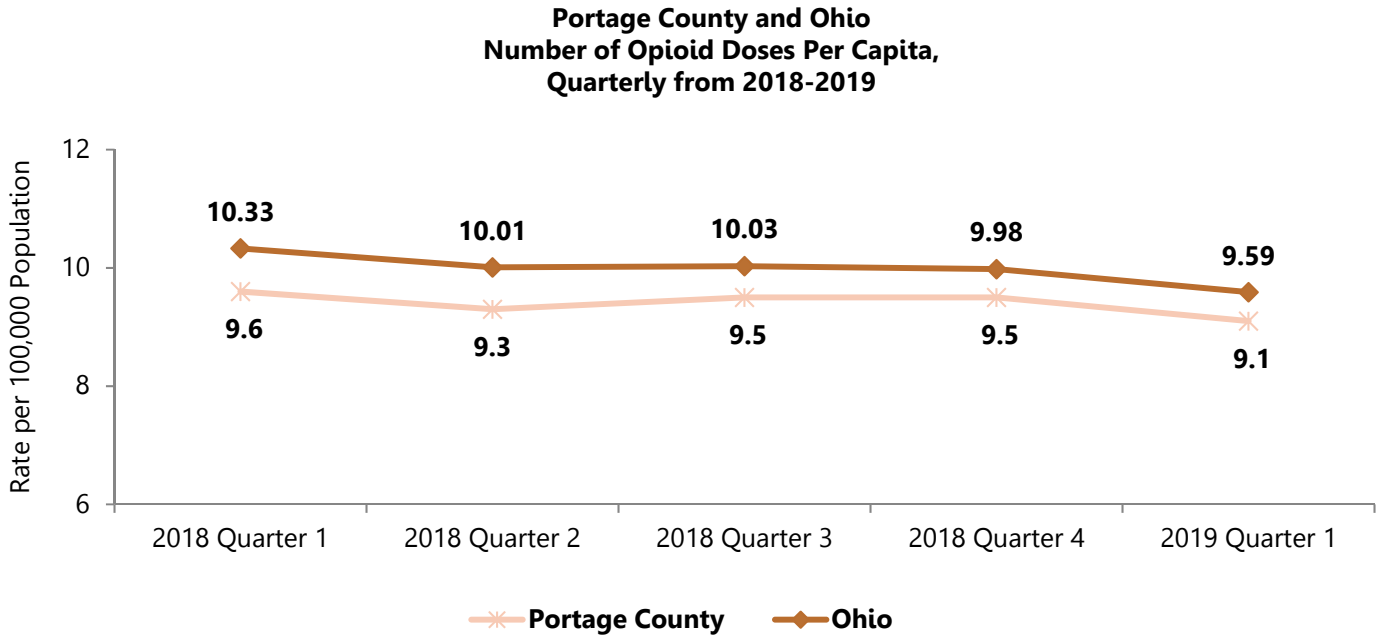


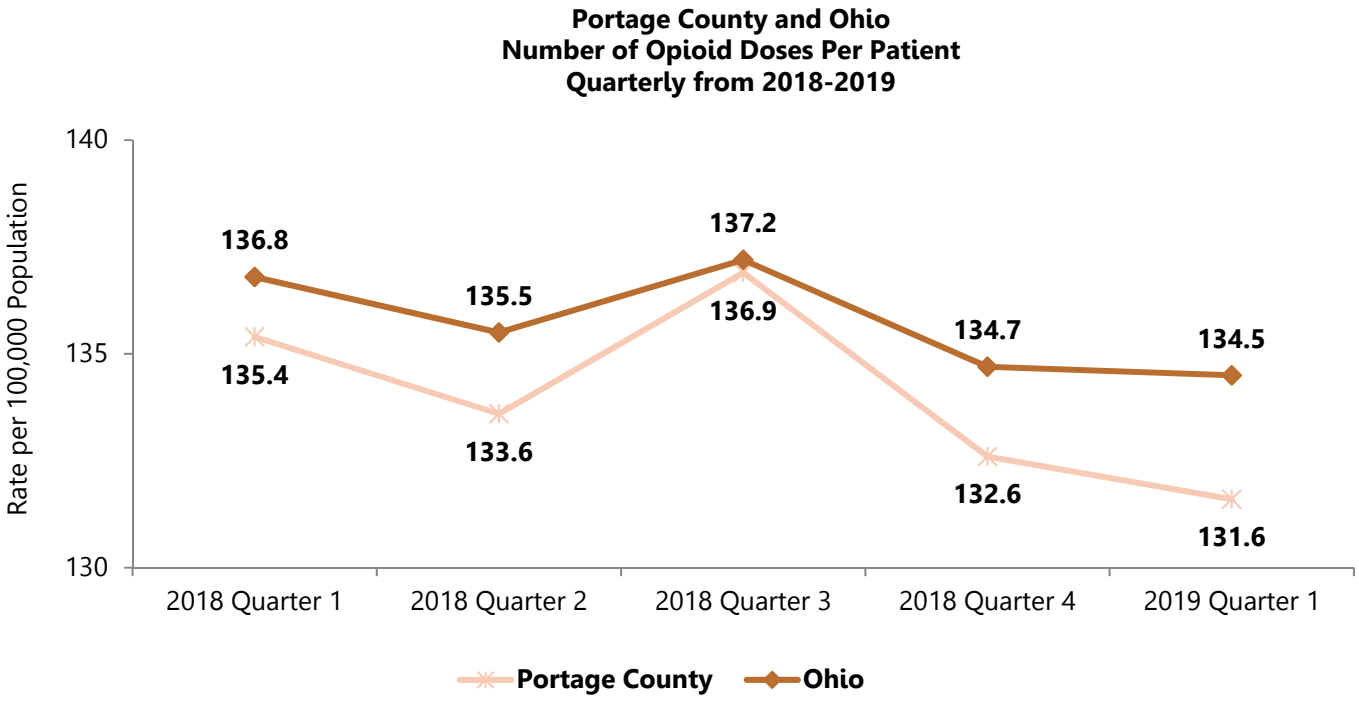


(Source: Ohio Automated Rx Reporting System, Quarterly County Data, 2012-2017)

Opioid Doses

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

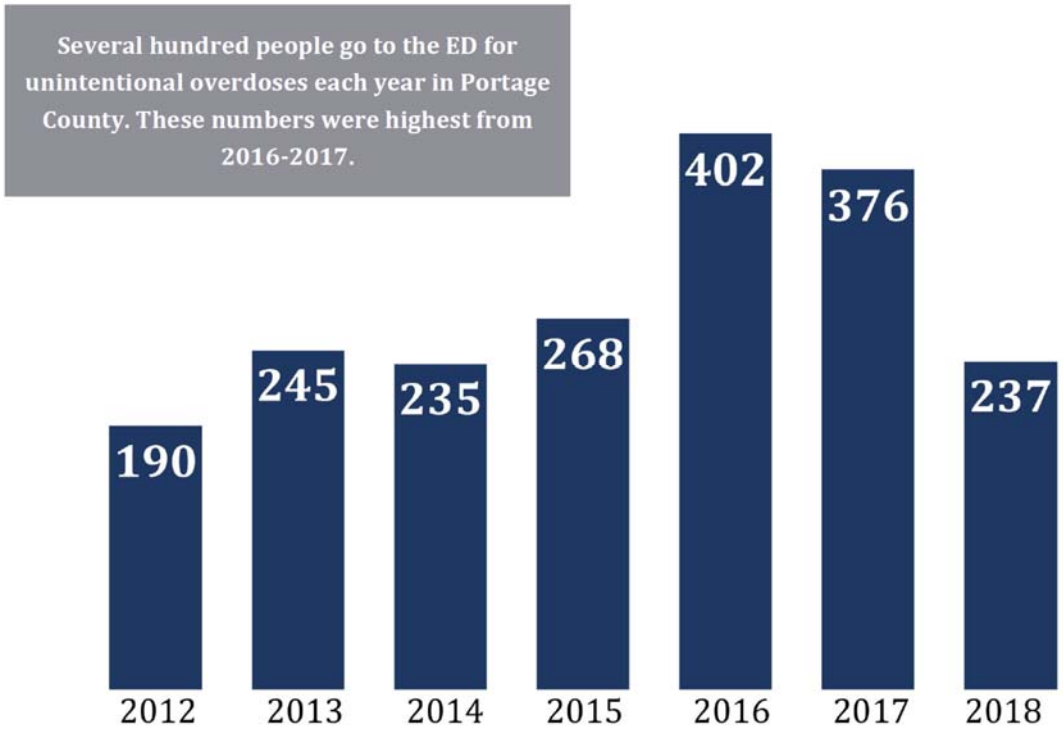




(Source: Ohio's Automated Rx Reporting System, 2018-2019)

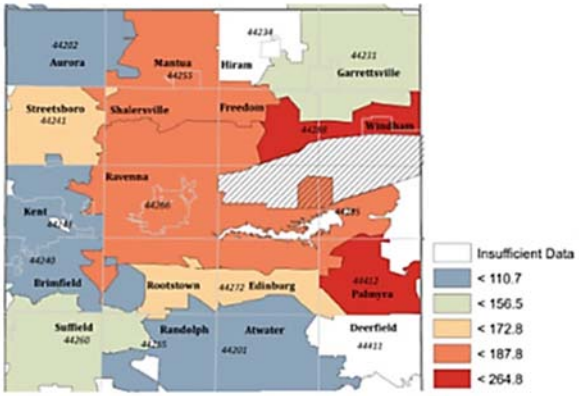
Unintentional Overdose Emergency Department Visits

- The following graph shows the unintentional overdose emergency department visits for Portage County from 2012-2018.



(Source: EpiCenter, 2012-2018. Provided by Portage County Health District.)

- The following graph shows the unintentional overdose emergency department visit rate per 100,000 persons for Portage County from 2014-2018.



(Source: Ohio Public Information Warehouse, 2014-2018. Provided by Portage County Health District.)

Unintentional Drug Overdose Deaths

The table below shows the number of unintentional drug overdose deaths, and average crude and age-adjusted annual death rates per 100,000 population, for Portage County and Ohio.

Number of Unintentional Drug Overdose Deaths and Average Crude and Age-Adjusted Annual Death Rates Per 100,000 Population, by County, 2005-2017

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2015	2015	2016	2017	2012-2017 Total	Crude Rate	Age Adjusted Rate
Portage County	7	12	8	5	16	14	6	16	22	30	36	46	39	189	19.4	21.2
Ohio	1,020	1,261	1,351	1,473	1,423	1,544	1,772	1,914	2,110	2,531	3,050	4,050	4,854	18,509	26.6	27.9

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

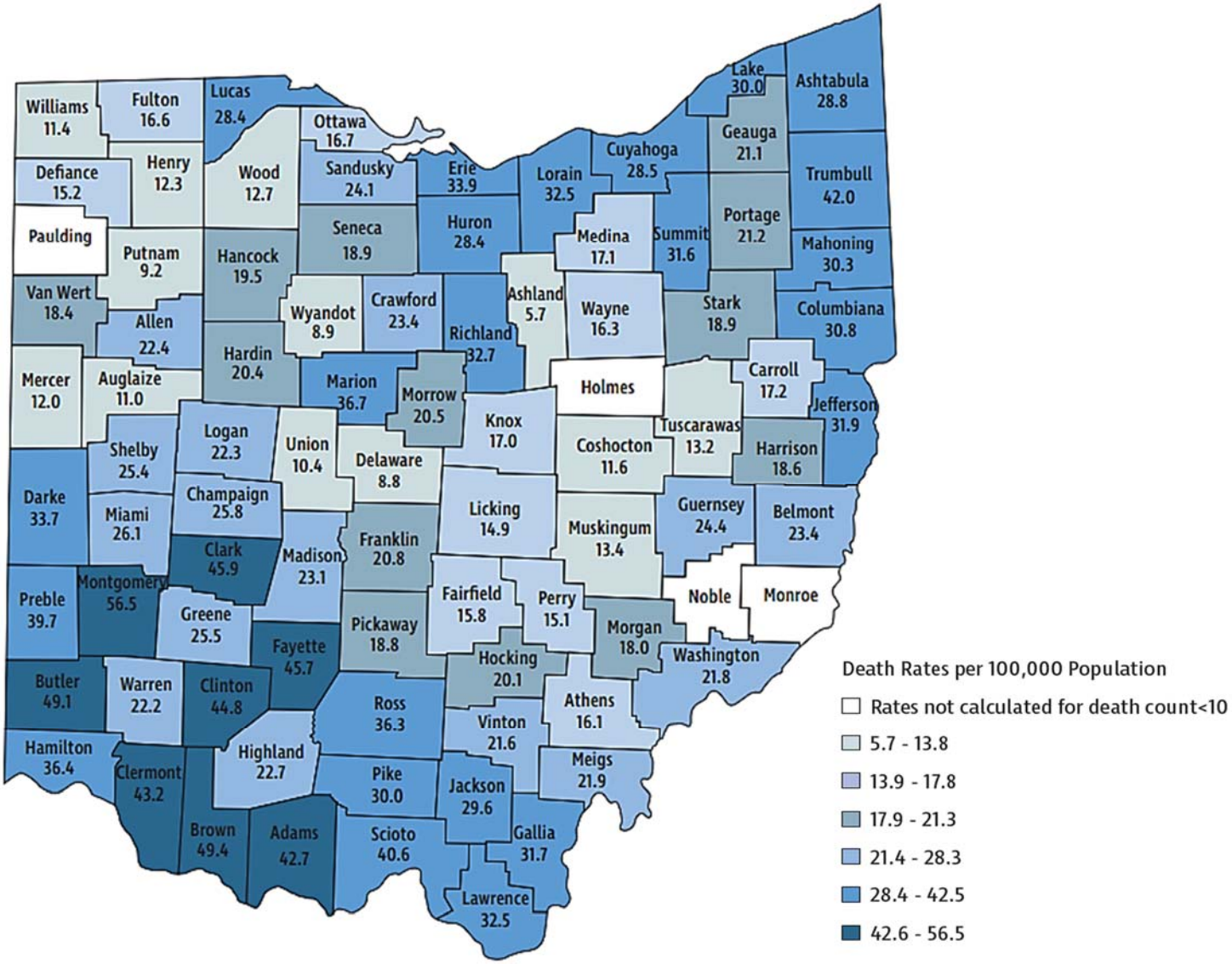
Ohio's New Limits on Prescription Opiates

- The opioid epidemic is undeniably a major public health issue that Ohio has been addressing since 2012. Furthering steps to save lives, Ohio has updated its policies in limiting opiate prescriptions, especially acute pain. With the highlights of Ohio's new opiate prescribing limits below, Ohio hopes to reduce opiate doses by 109 million per year:
  - No more than seven days of opiates can be prescribed for adults; no more than five days of opiates can be prescribed for minors
  - The total morphine equivalent dose (MED) of a prescription for acute pain cannot exceed an average of 30 MED per day
  - Health care providers can prescribe opiates in excess of the new limits only if they provide a specific reason in the patient's medical record. Unless such a reason is given, a health care provider is prohibited from prescribing opiates that exceed Ohio's limits
  - Prescribers will be required to include a diagnosis or procedure code on every controlled substance prescription, which will be entered into Ohio's prescription monitoring program, OARRS
  - The new limits do not apply to opioids prescribed for cancer, palliative care, end-of-life/hospice care or medication-assisted treatment for addiction
  - The new limits will be enacted through rules passed by the State Medical Board, Board of Pharmacy, Dental Board and Board of Nursing
- Since 2012, Ohio has reduced opiate prescriptions by 20% yet, more needs to be done to reduce the possibility of opiate abuse to those who are prescribed.

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

Age-Adjusted Unintentional Drug Overdose Death Rates for Ohio

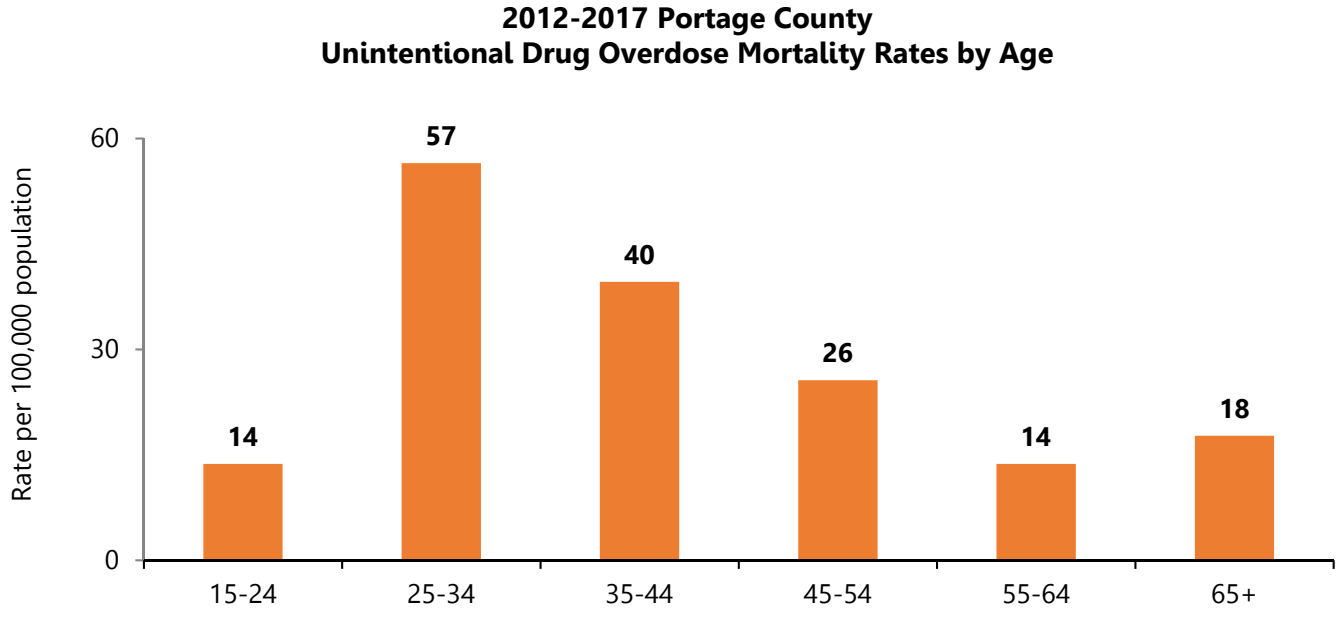
The following map illustrates the average age-adjusted unintentional drug overdose death rate per 100,000 population, by county from 2012-2017.

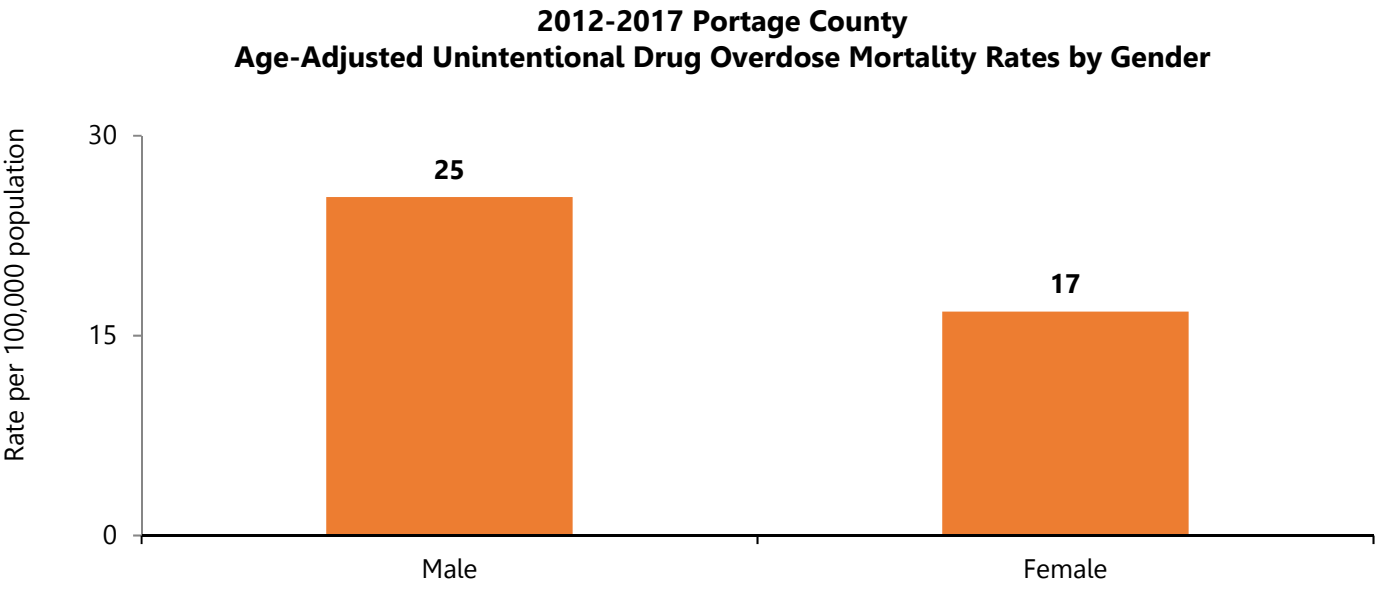


(Source: Ohio Department of Health, 2017 Ohio Drug Overdose Data: General Findings)

Unintentional Drug Overdose Death Rates by Age and Gender

The following graphs show the average age-adjusted unintentional drug overdose death rate per 100,000 population by age and gender from 2012-2017.

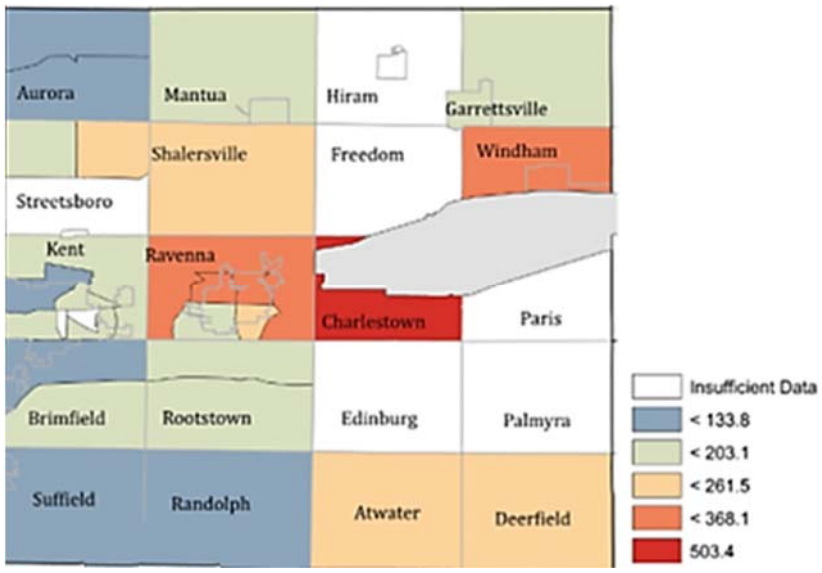




(Source for graphs: ODH, Ohio Public Health Data Warehouse, Mortality, Unintentional Drug Overdose Data, Unintentional Drug Overdose Resident Deaths per 100,000 Population by County, updated 7/8/2019)

Unintentional Drug Overdose Death Rates by Census Tract

The following graphs show the average age-adjusted unintentional drug overdose death rate per 100,000 population by census tract from 2007 to 2018.



(Source: Ohio Public Information Warehouse, 2007-2018. Provided by Portage County Health District.)

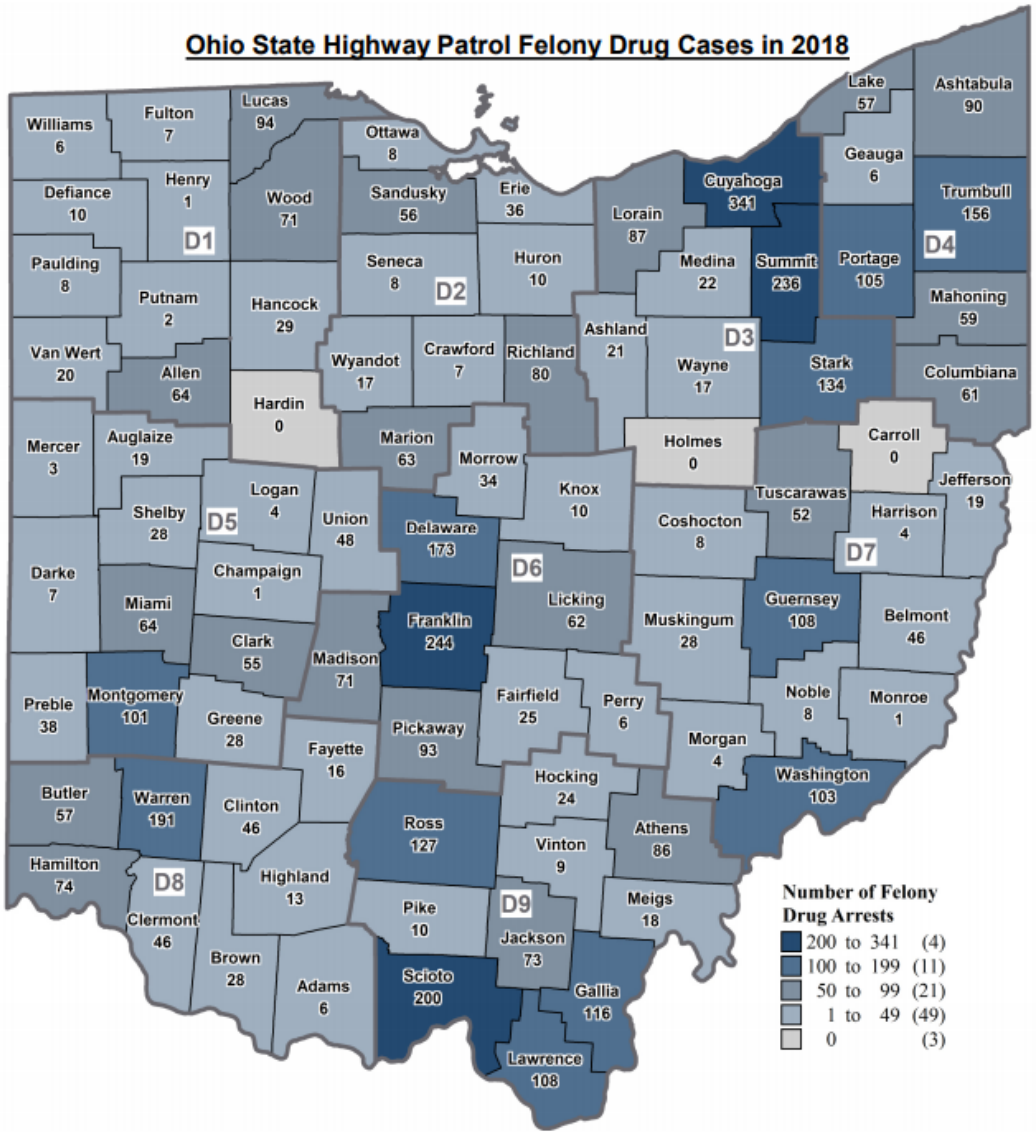
Felony Cases and Drug Arrests January – June 2018

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

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

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

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



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

Health Status and Behaviors: Adult Sexual Behavior

Key Findings

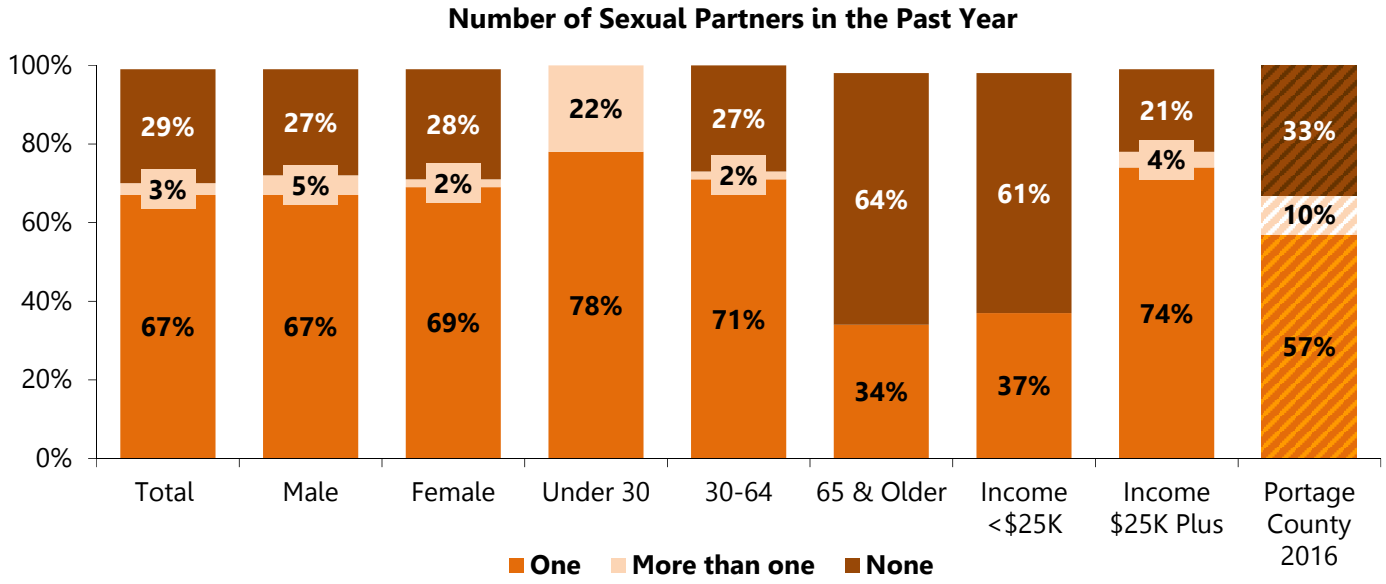
Three percent (3%) of adults had more than one sexual partner in the past year. Seven percent (7%) of adults were forced to have sexual intercourse when they did not want to.

Adult Sexual Behavior

- Seven in ten (70%) Portage County adults had sexual intercourse in the past year.
- Three percent (3%) of all Portage County adults reported they had intercourse with more than one partner in the past year.

3,734 Portage County adults had intercourse with more than one partner in the past year.

The following graph shows the number of sexual partners that Portage County adults had in the past year. An example of how to interpret the information in the graph includes: 67% of all Portage County adults had one sexual partner in the past year, 3% had more than one partner, and 29% did not have a sexual partner.



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

- Adults used the following methods to prevent pregnancy:
  - No partner/not sexually active (22%)
  - They or their partner were too old (21%)
  - Male sterilization or vasectomy (15%)
  - Hysterectomy (7%)
  - Condoms (6%)
  - Infertility (6%)
  - Had a same-sex partner (6%)
  - They or their partner were trying to get pregnant (5%)
  - IUD (5%)
  - Not practicing birth control methods (12%)
  - Female sterilization or tubes tied (10%)
  - Birth control pill (7%)
  - They were currently pregnant (3%)
  - Shots (3%)
  - Withdrawal (2%)
  - Having sex only at certain times (2%)
  - Abstinence (1%)
  - Had ovaries/testicles removed (1%)

- The following situations applied to Portage County adults in the past year:
  - Had sex without a condom (27%)
  - Tested positive for HPV (3%)
  - Had anal sex without a condom (3%)
  - Had sex with someone they met on social media (2%)
  - Had sex with someone they did not know (2%)
  - After alcohol or other drug use, engaged in sexual activity that you would not have done if sober (1%)
  - Had sexual activity with someone of the same gender (1%)
  - Treated for an STD (1%)
  - Tested positive for HIV (1%)
  - Was forced to have sex (1%)
  - Given or received money or drugs in exchange for sex (1%)
  - Used injectable drugs that were not prescribed for them (1%)
- Nearly one-third (32%) of adults had one or more of the previous situations apply to them in the past year.
- One in fourteen (7%) adults were forced to have sexual intercourse when they did not want to. Eight percent (8%) of those who were forced to have sexual intercourse reported it.

Scope of the Problem: Sexual Violence

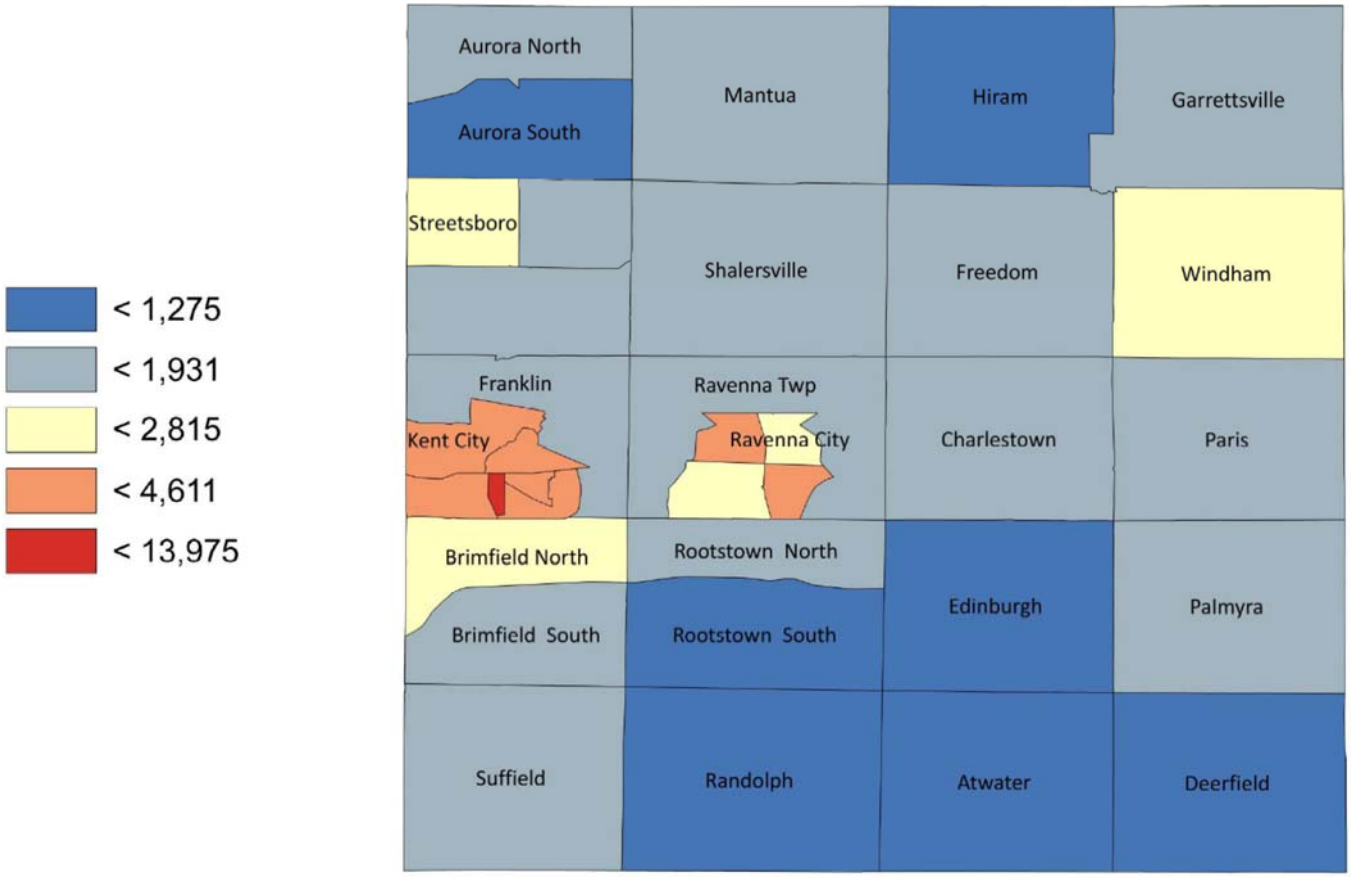
- 1 out of every 6 American women has been the victim of an attempted or completed rape in her lifetime (14.8% completed, 2.8% attempted).
- About 3% of American men—or 1 in 33—have experienced an attempted or completed rape in their lifetime.
- From 2009-2013, Child Protective Services agencies substantiated, or found strong evidence to indicate that, 63,000 children a year were victims of sexual abuse.
- A majority of child victims are 12-17. Of victims under the age of 18: 34% of victims of sexual assault and rape are under age 12, and 66% of victims of sexual assault and rape are age 12-17.
- Every 98 seconds another American is sexually assaulted.
- Number of people victimized each year:
  - 80,600 were sexually assaulted or raped
  - 60,000 were victims of "substantiated or indicated" sexual abuse
  - 321,500 Americans 12 and older were sexually assaulted or raped
  - 18,900 experienced unwanted sexual contact

(Source: RAINN 25 years, Scope of the Problem: Statistics, 2019)

Chlamydia

The following map shows Portage County chlamydia incidence rate (per 100,000 persons) by census tract for 2009-2018.

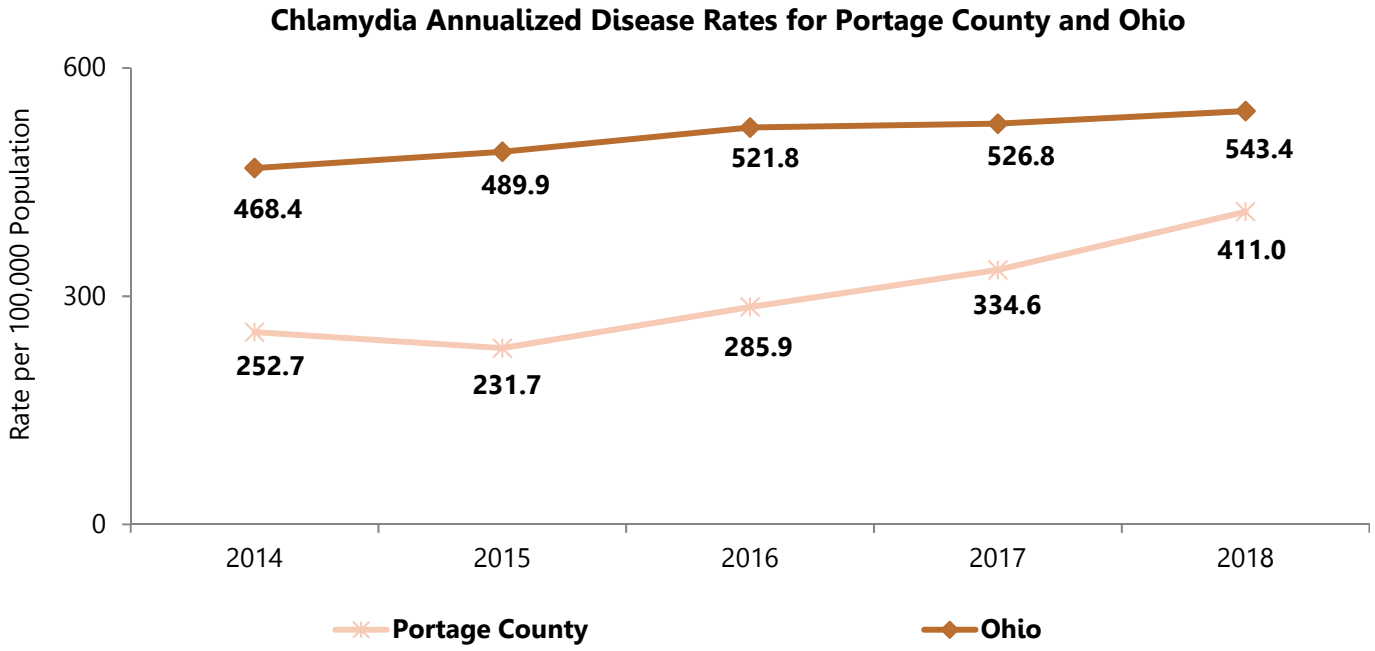
Chlamydia Incidence Rate (per 100,000 Persons) by Census Tract, 2009-2018

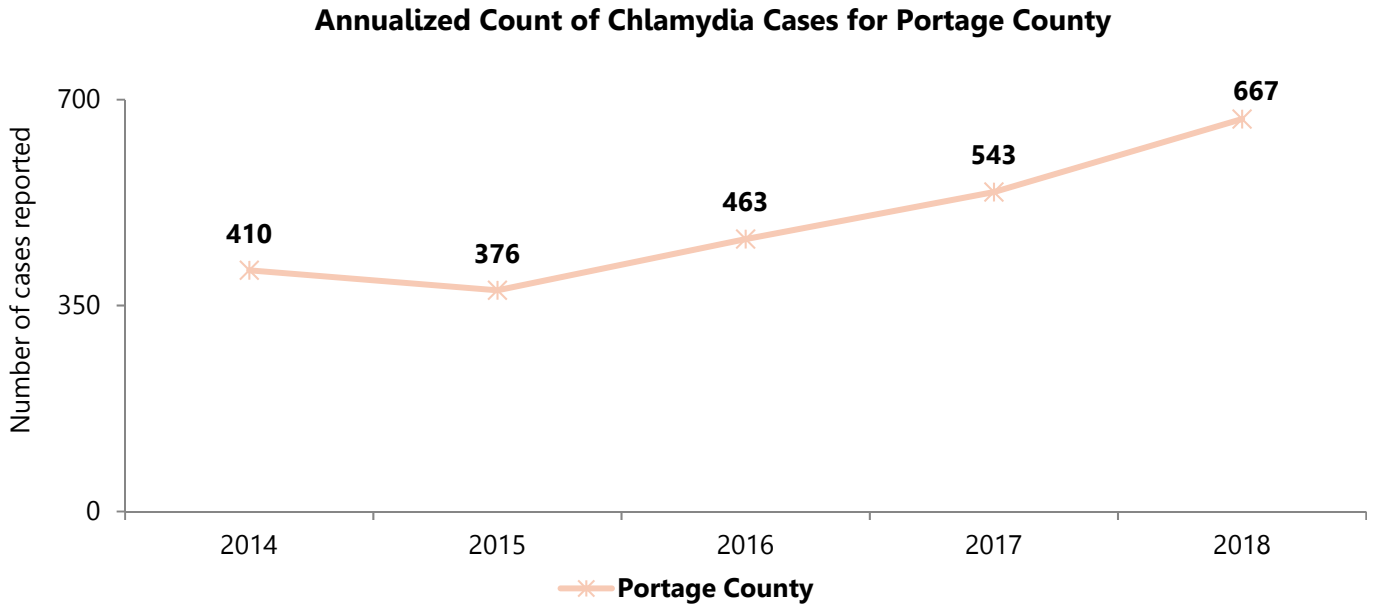


(Source: Portage County Health District, 2009-2018)

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

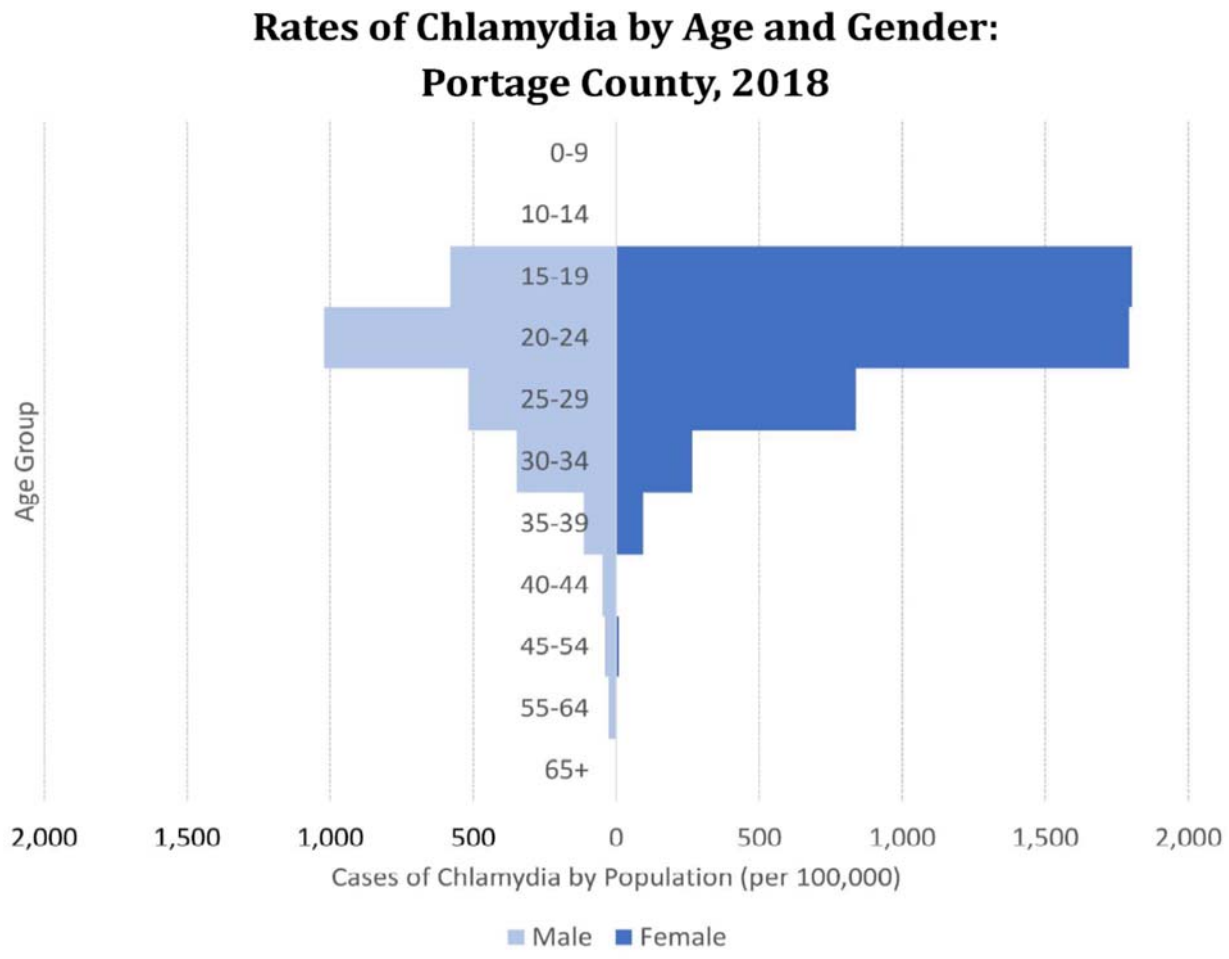
- Portage County chlamydia rates increased from 2015 to 2018.
- The number of chlamydia cases in Portage County increased significantly from 2015-2018.



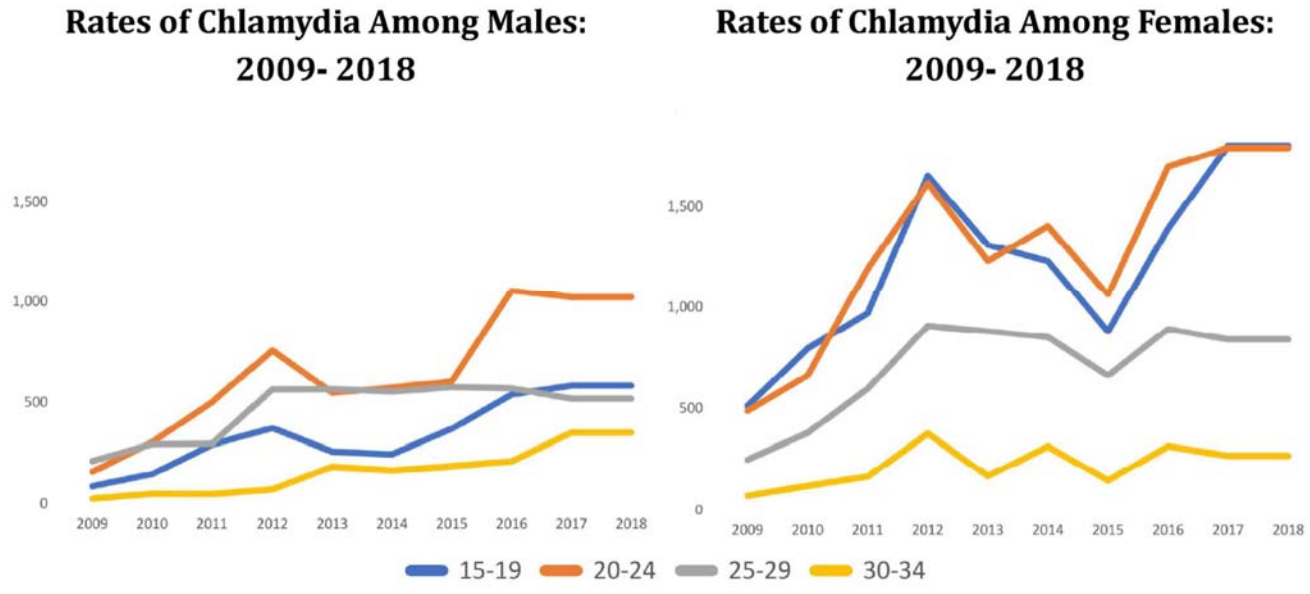


(Source for graphs: Ohio Department of Health, STD Surveillance Program, Data Reported through 5/2/19)

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



(Source: Portage County Health District, 2018)

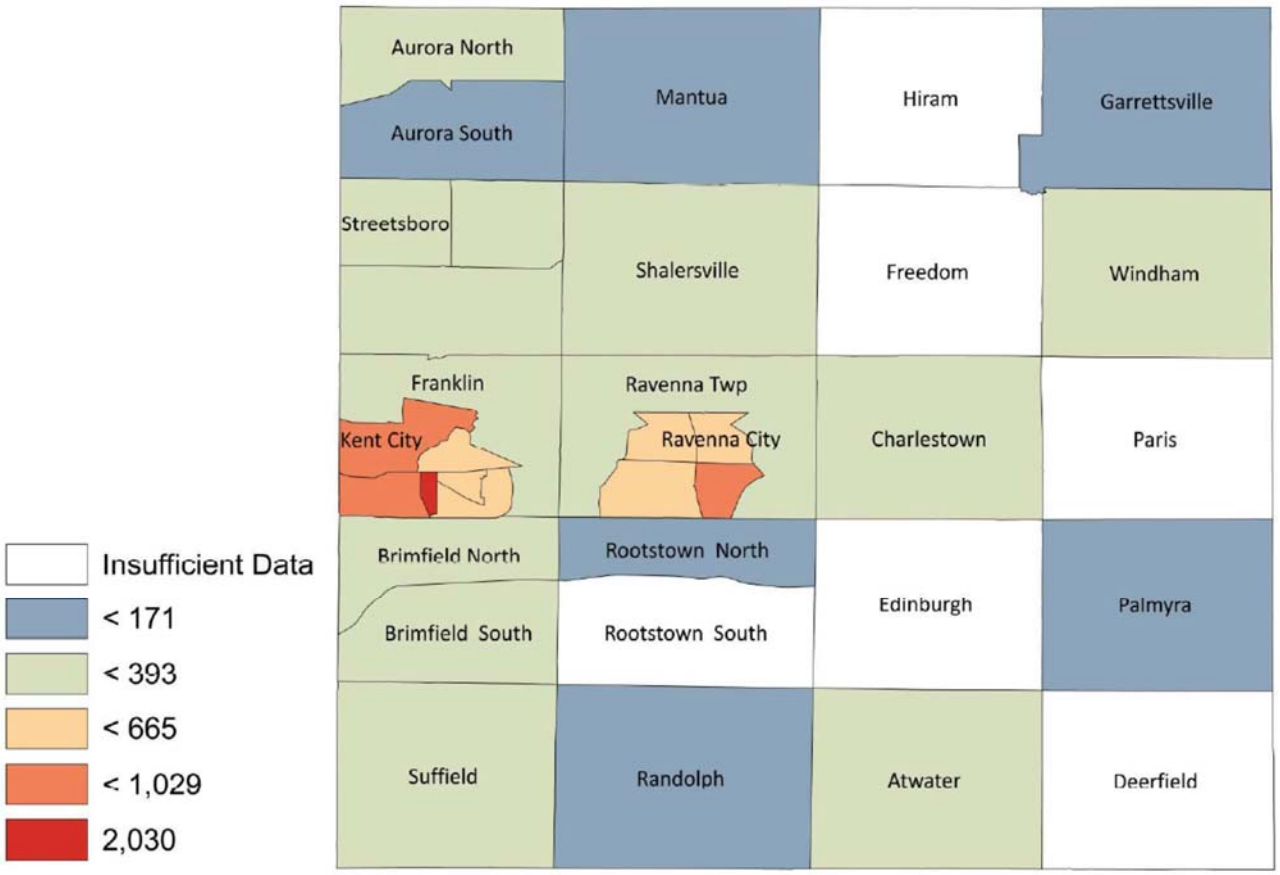


(Source: Portage County Health District, 2009-2018)

Gonorrhea

The following map shows Portage County gonorrhea incidence rate (per 100,000 persons) by census tract for 2009-2018.

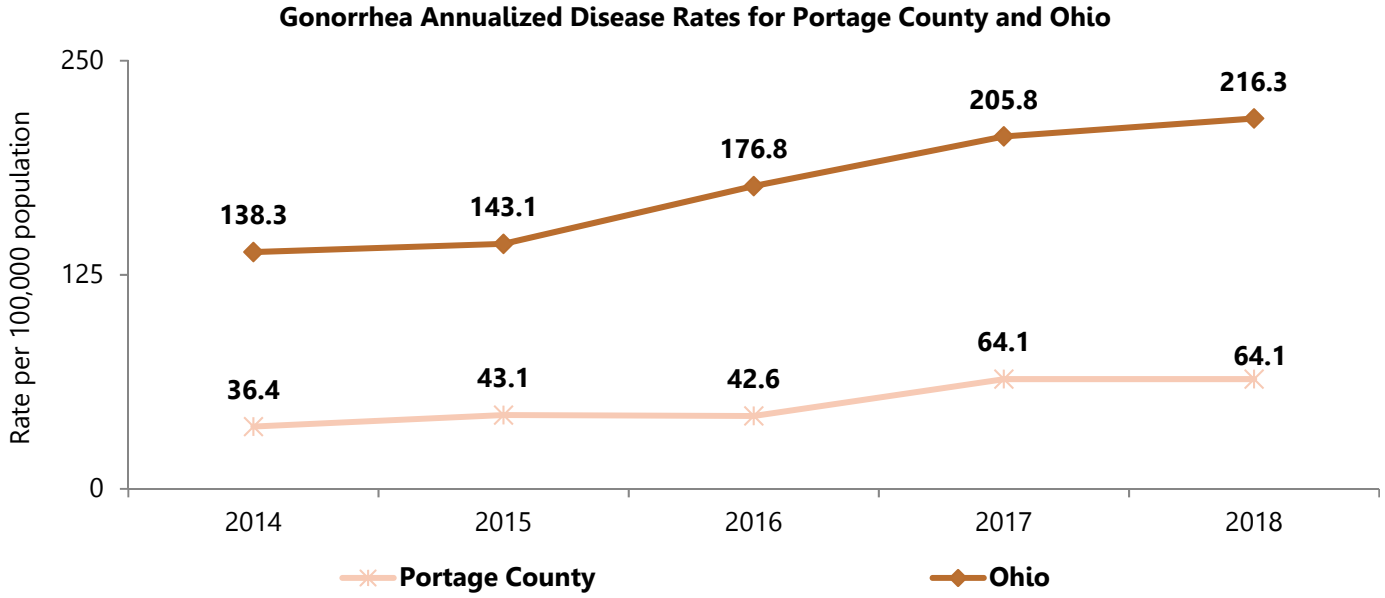
Gonorrhea Incidence Rate (per 100,000 Persons) by Portage County Census Tract, 2009-2018

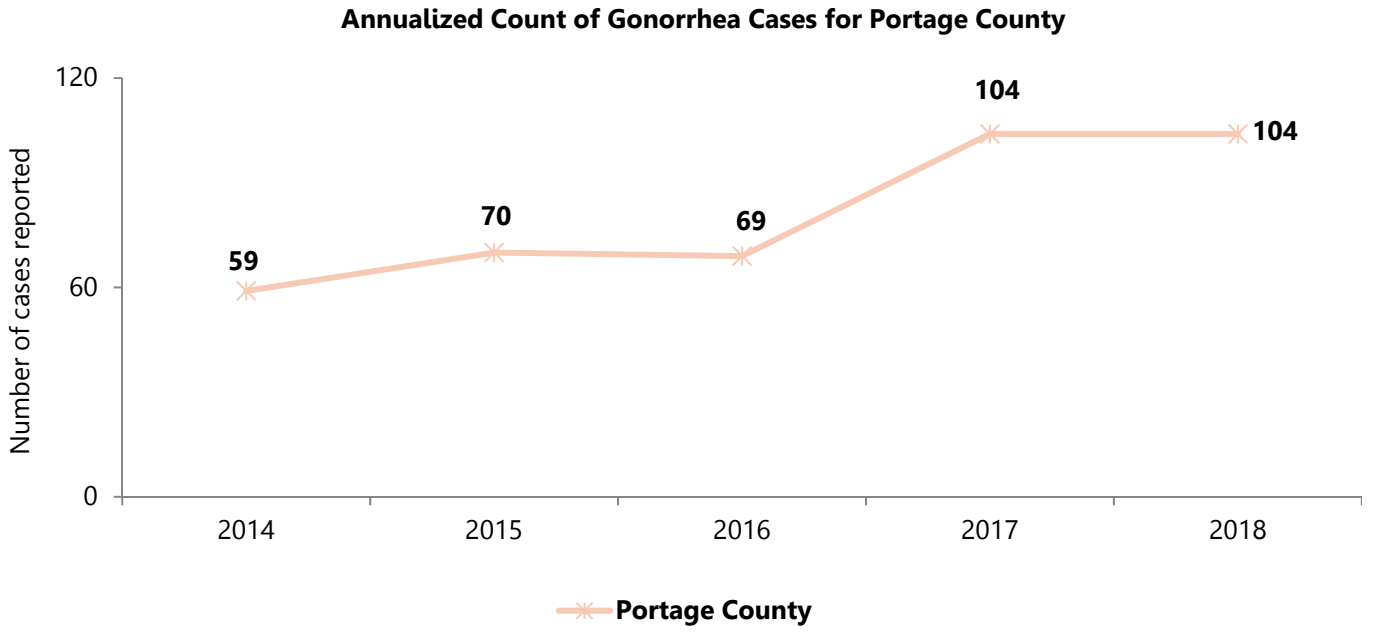


(Source: Portage County Health District, 2009-2018)

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

- The Portage County gonorrhea rate fluctuated from 2014 to 2017, then stayed the same from 2017-2018.
- The Ohio gonorrhea rate increased from 2014-2018.
- The Portage Country gonorrhea cases fluctuated from 2014-2016, then stayed the same from 2017-2018.



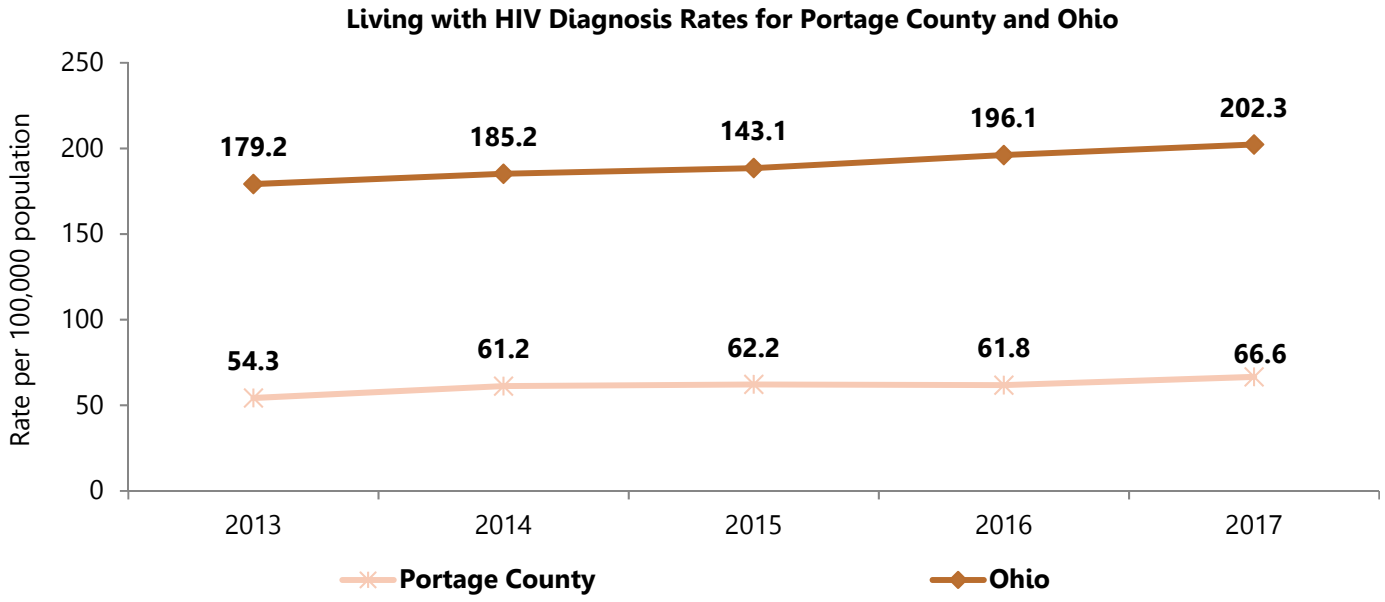


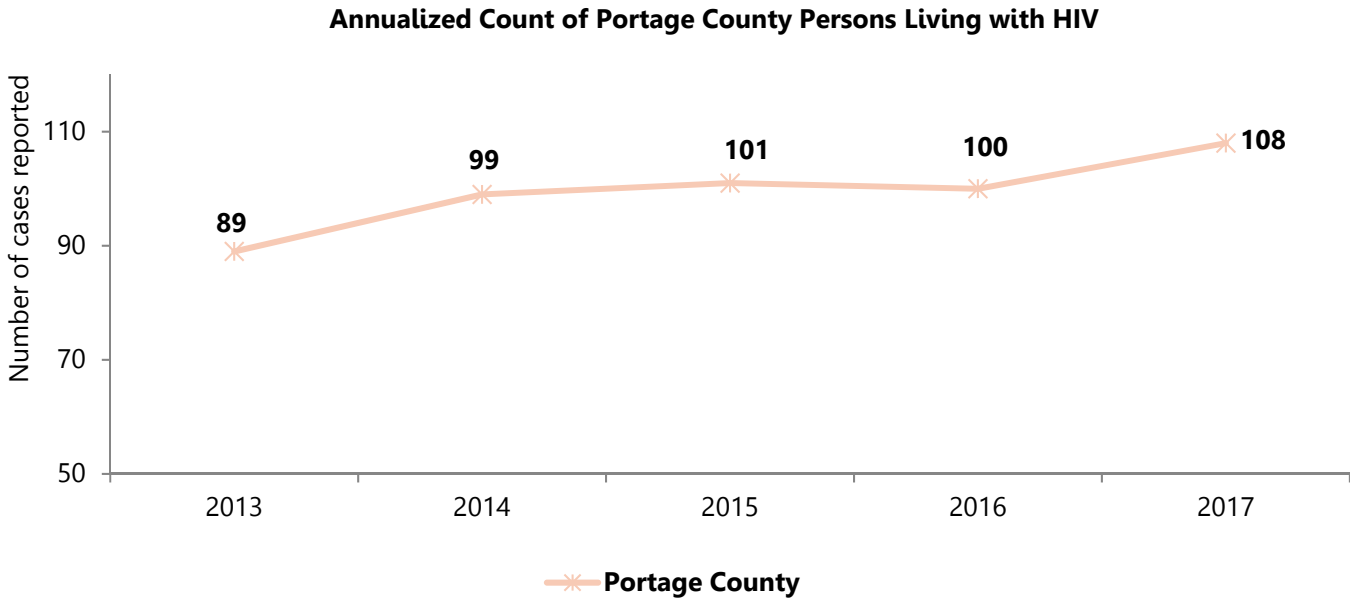
(Source for graphs: Ohio Department of Health, STD Surveillance Program, Data Reported through 5/2/19)

Human Immunodeficiency Virus Infection (HIV)

The following graphs show Portage County Human Immunodeficiency Virus Infection (HIV) rates per 100,000 population. The graphs show:

- The Portage County HIV rate has slightly increased from 2013-2017.
- The Ohio HIV rate steadily increased from 2013 to 2017.
- The Portage Country HIV cases slightly increased from 2013-2017.



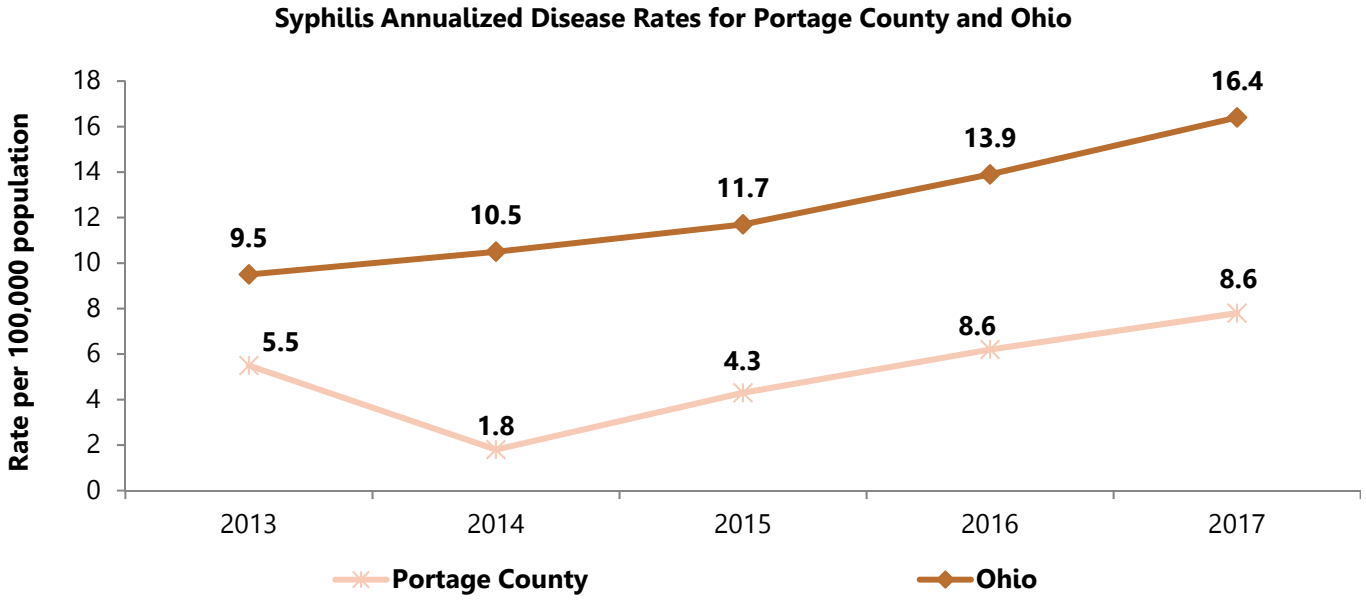


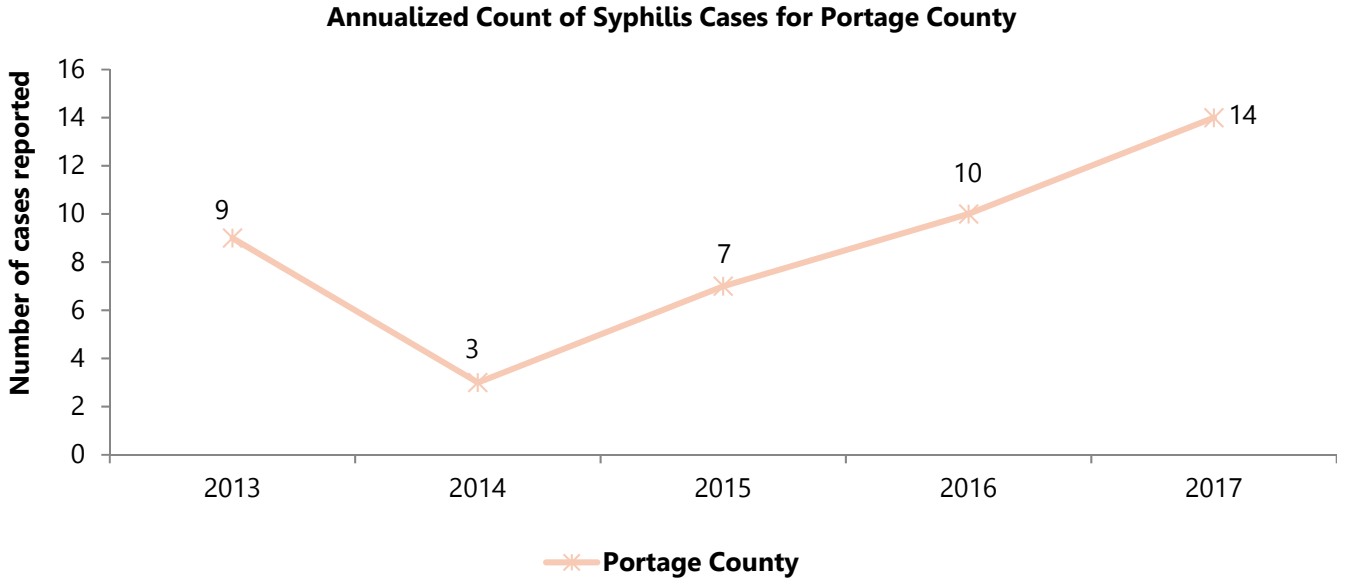
(Source: Ohio Department of Health, HIV Surveillance Program, Data Reported through 6/30/18)

Syphilis

The following graphs show Portage County syphilis disease rates per 100,000 population. The graphs show:

- The Portage County syphilis rates increased from 2014 to 2017.
- The Ohio syphilis rates gradually increased from 2013 to 2017.
- The Portage Country syphilis cases decreased from 2013-2014, then increased from 2014 to 2017.

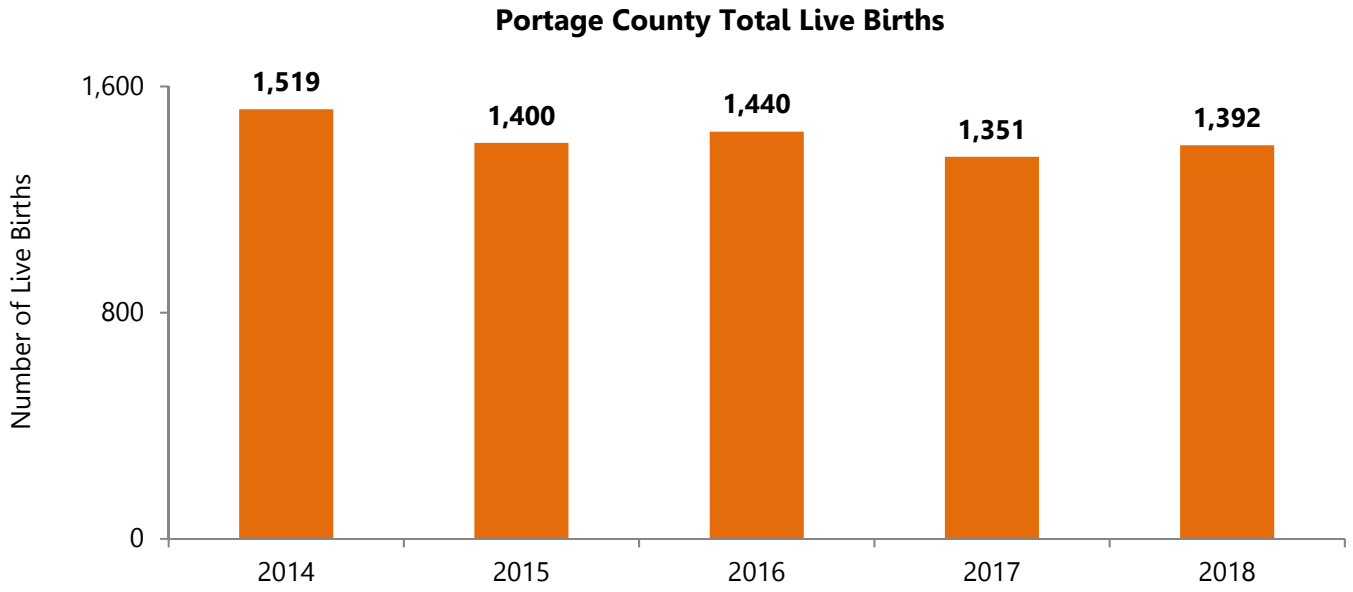


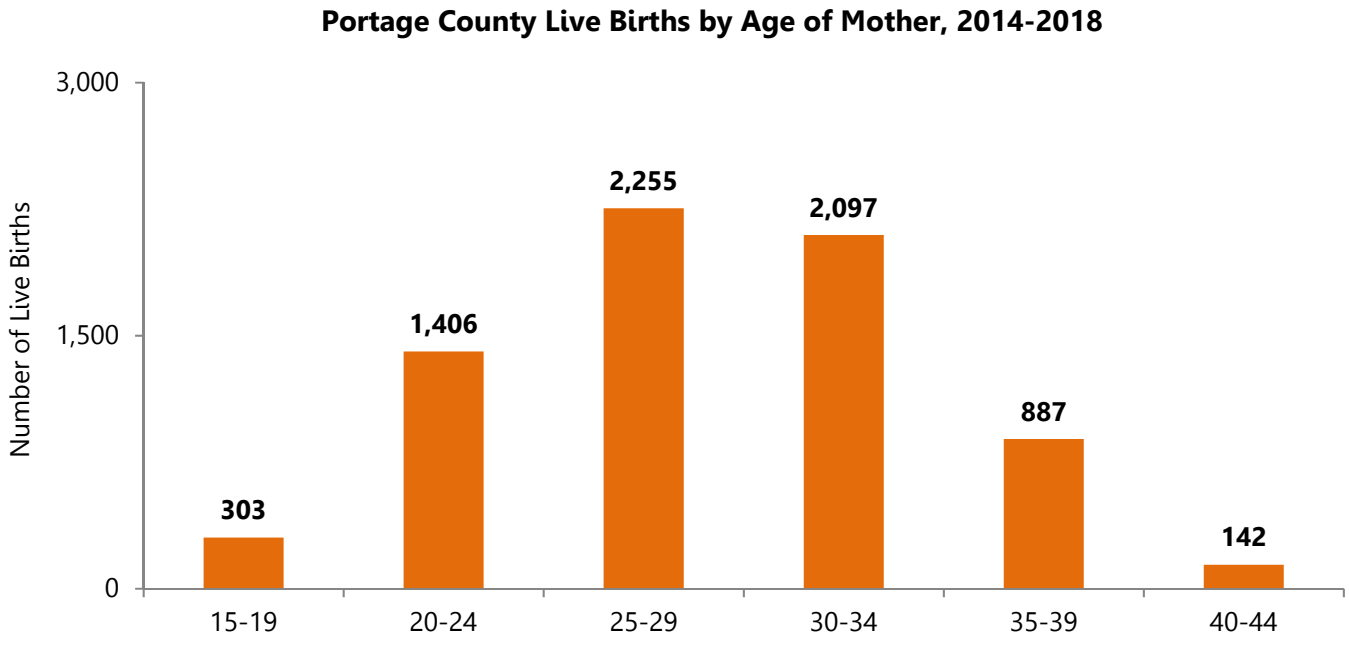


(Source: Ohio Department of Health, STD Surveillance Program, Data Reported through 5/24/18)

Birth Data

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



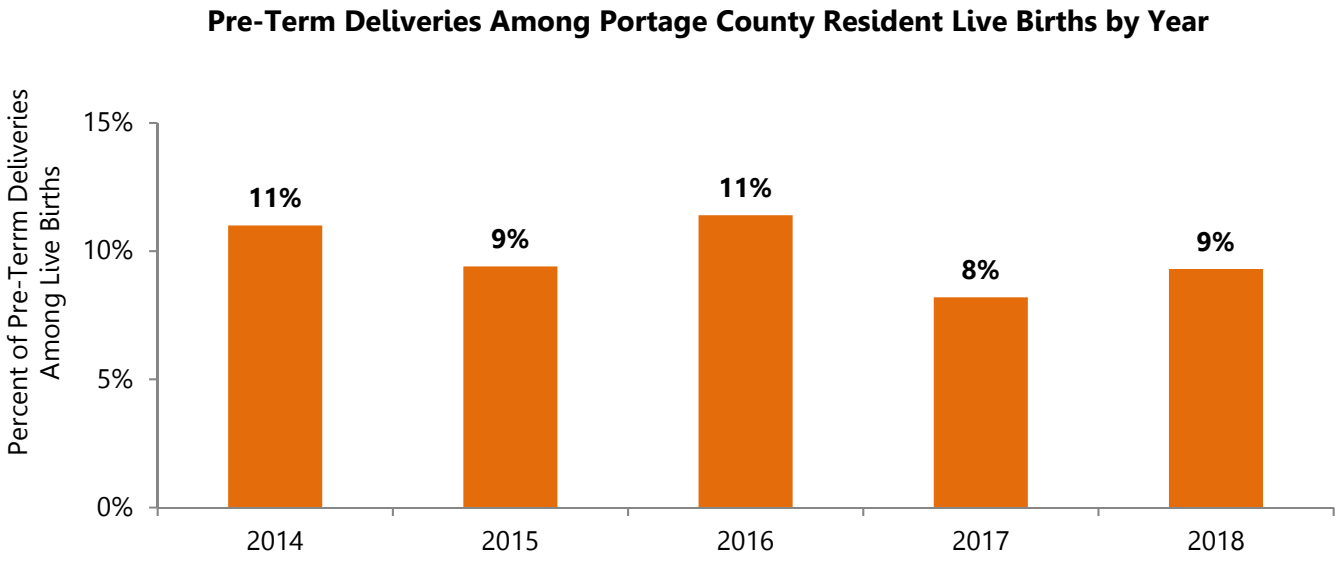


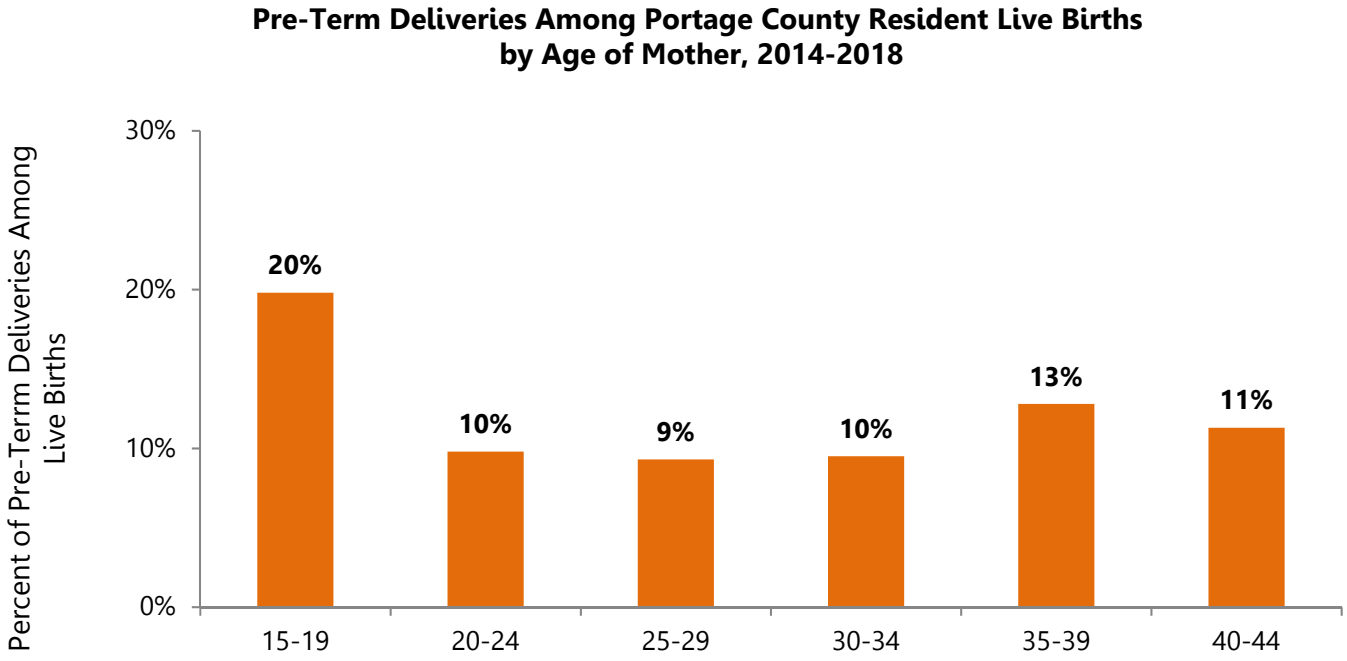
(Source: ODH Information Warehouse, updated 7/14/19)

Pre-Term Births

- Please note that birth data includes all births to adolescents and adults. Data available from Ohio Department of Health is for birth count only.

The following graph shows Portage County pre-term deliveries (<37 weeks) among live births by year and age of mother.





(Source for graphs: ODH Information Warehouse, 2019)

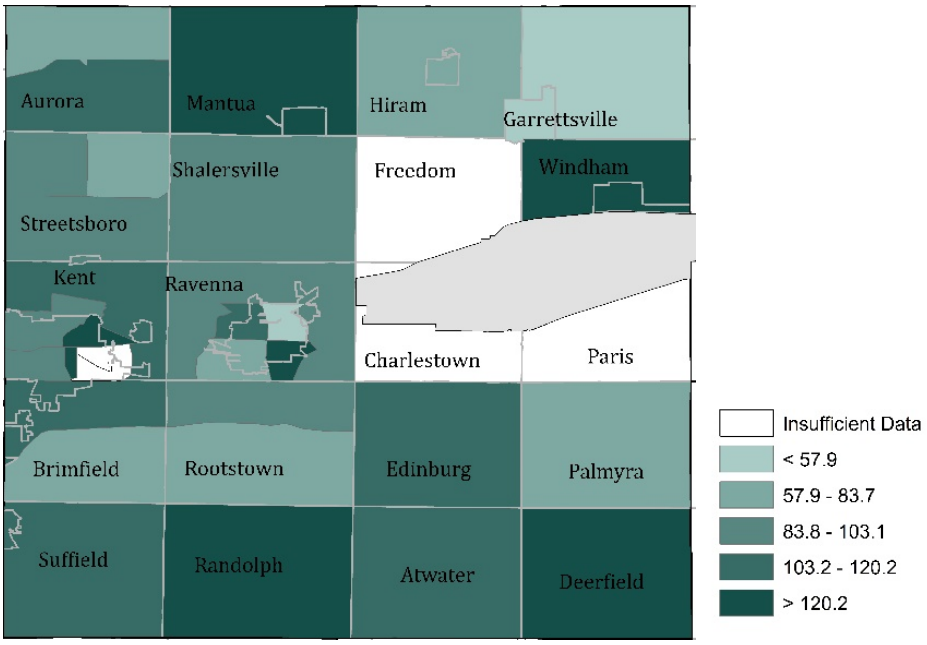
The following map shows the Portage County premature births (<37 weeks) per 1,000 live births by census tract.

Premature Births (<37 weeks) per 1,000 Live Births (2016-2018), by Census Tract

Highest
Windham Twp.- 170.2
Kent, North Off-Campus- 139.5
Randolph Twp.- 133.5

Lowest
Northeast Ravenna- 52.1
Nelson Twp.- 57.9
South Rootstown- 68.0

County: 95.4

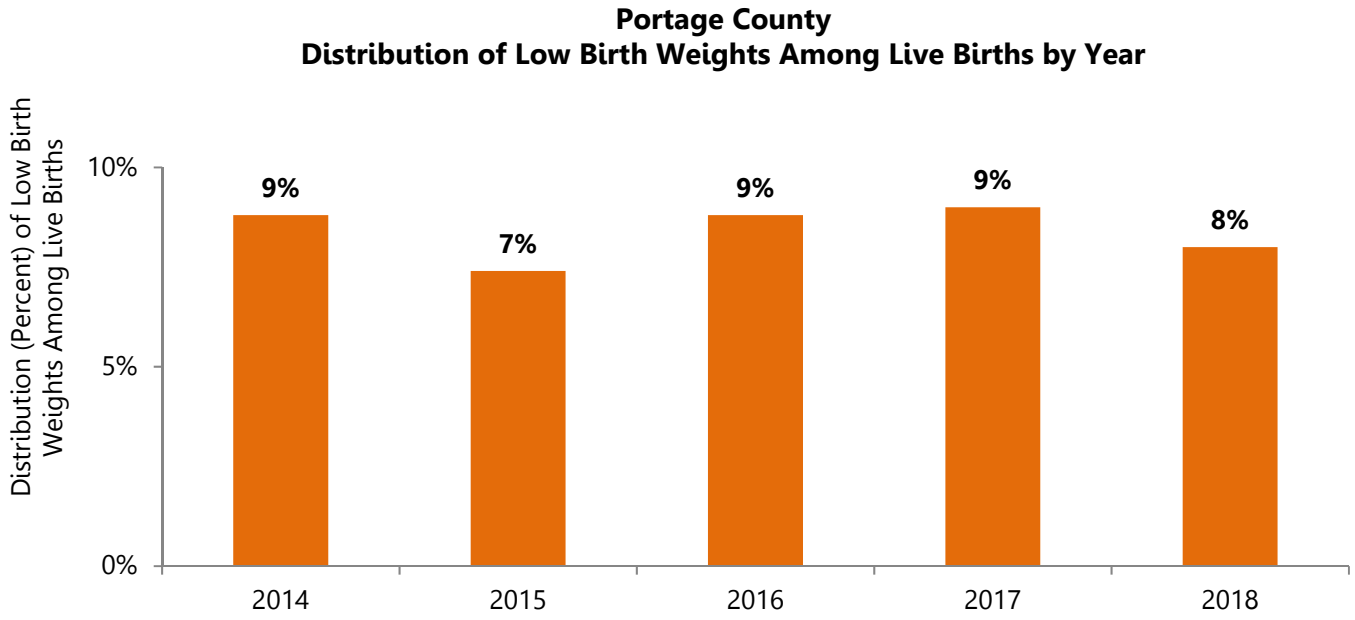


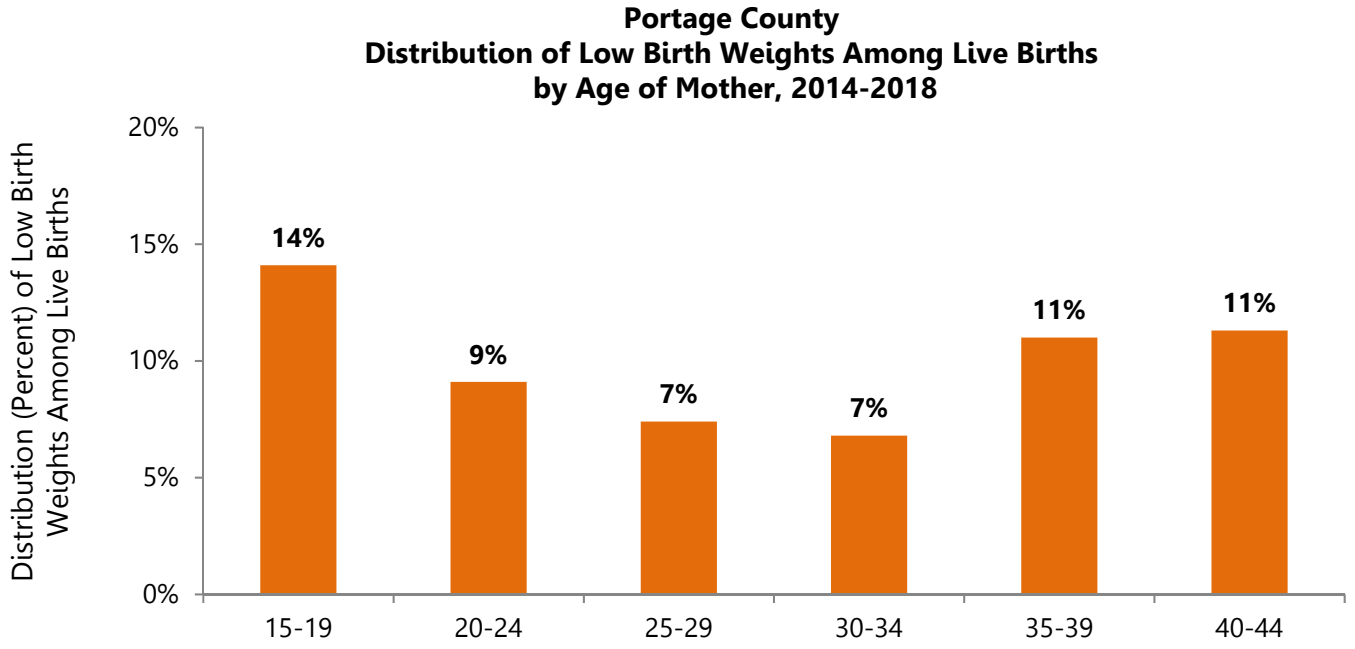
(Source: Ohio Information Warehouse, 2016-2018 as compiled by Portage County Health District)

Low Birth Weight

- Please note that birth data includes all births to adolescents and adults. Data available from Ohio Department of Health is for birth count only.

The following graph shows the Portage County distribution of low birth weights among live births by year and age of mother.





(Source for graphs: ODH Information Warehouse, 2019)

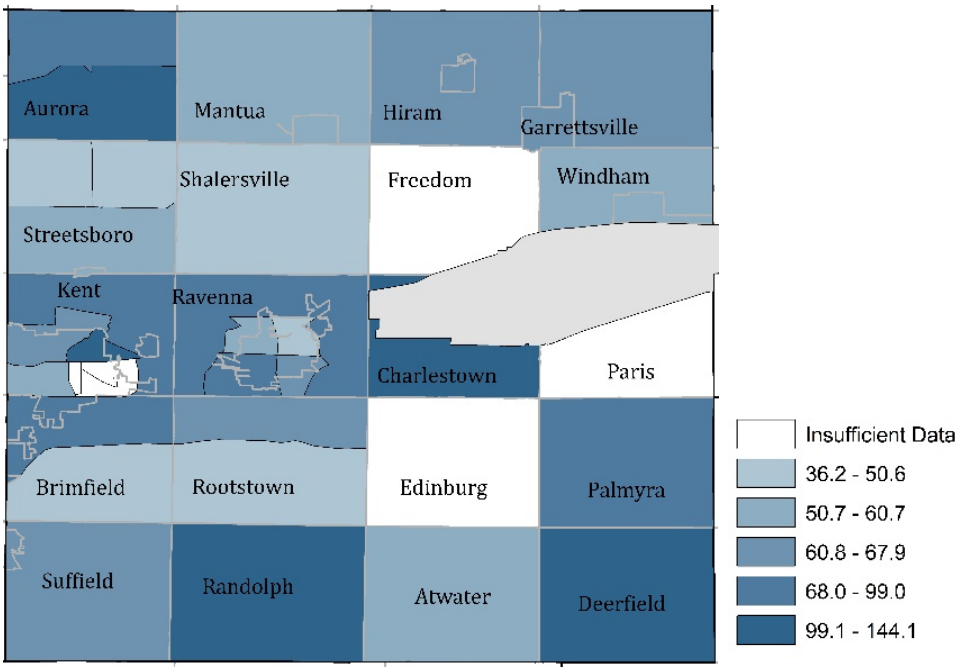
The following map shows the Portage County low birth weight (<2,500g) deliveries per 1,000 live births by census tract. The graph below shows low birth weight (<2,500 g) deliveries per 1,000 live births by race.

Low Birth Weight (<2,500 g) Deliveries per 1,000 Live Births (2016-2018), by Census Tract

Highest
Randolph Twp.- 144.1
South Aurora- 120.3
Deerfield Twp.- 113.4

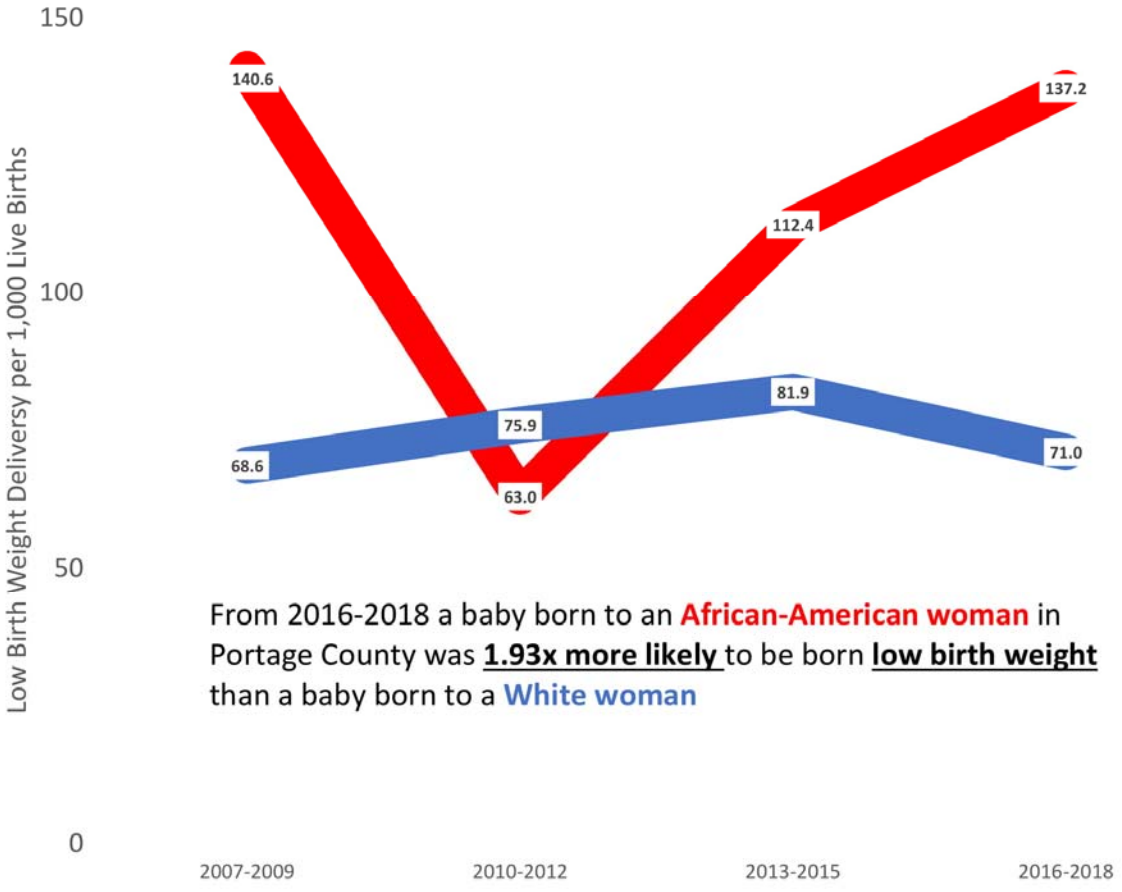
Lowest
South Rootstown- 36.2
Shalersville Twp.- 43.5
Northwest Streetsboro- 46.5

County: 76.8



(Source: Ohio Information Warehouse, 2016-2018 as compiled by Portage County Health District)

Low Birth Weight (<2,500 g) Deliveries per 1,000 Live Births by Race



(Source: Ohio Information Warehouse, 2007-2009 to 2016-2018 as compiled by Portage County Health District)

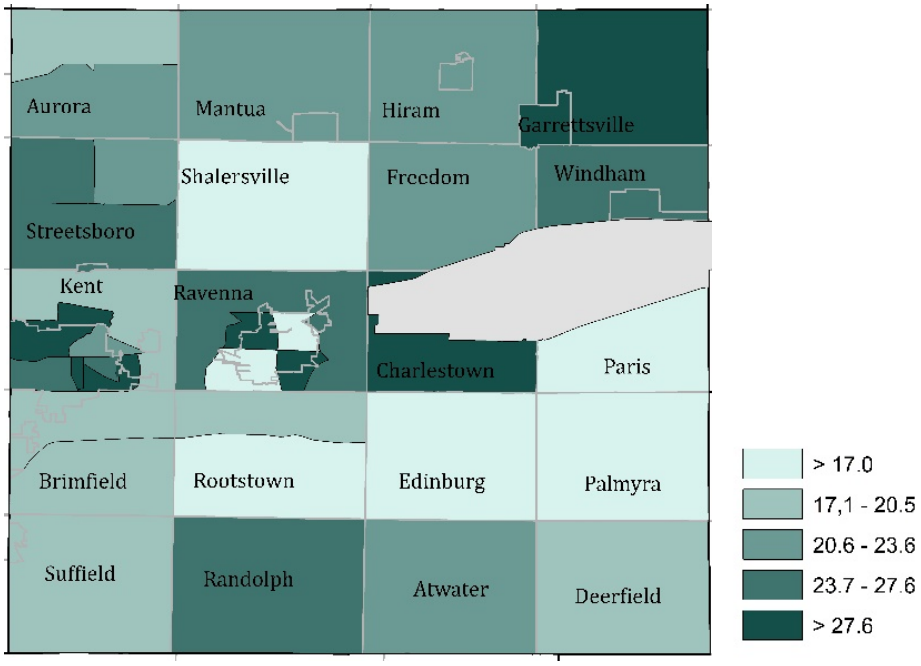
The following map shows the proportion of births receiving inadequate prenatal care (Kotelcuck) by census tract. The graph below shows the proportion of live births receiving inadequate prenatal care (Kotelcuck) by race.

Proportion of Births Receiving Inadequate Prenatal Care (Kotelcuck) by Census Tract, 2016-2018

Highest
Nelson Twp. – 43.2
Southeast Ravenna – 37.1
Kent, Northwest – 32.3

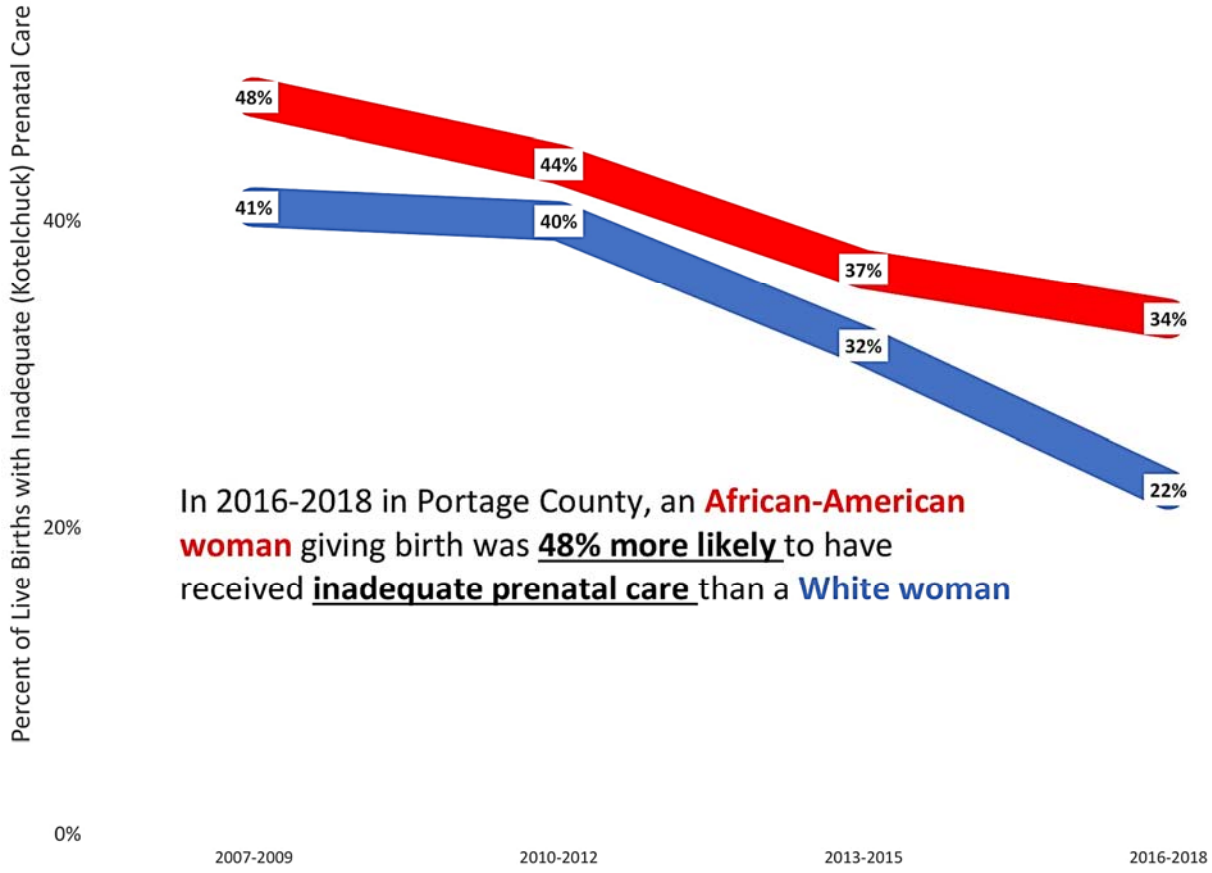
Lowest
Edinburg Twp.- 11.5
South Rootstown- 13.6
Northeast Ravenna– 14.6

County: 23.4



(Source: Ohio Information Warehouse 2016-2018 as compiled by Portage County Health District)

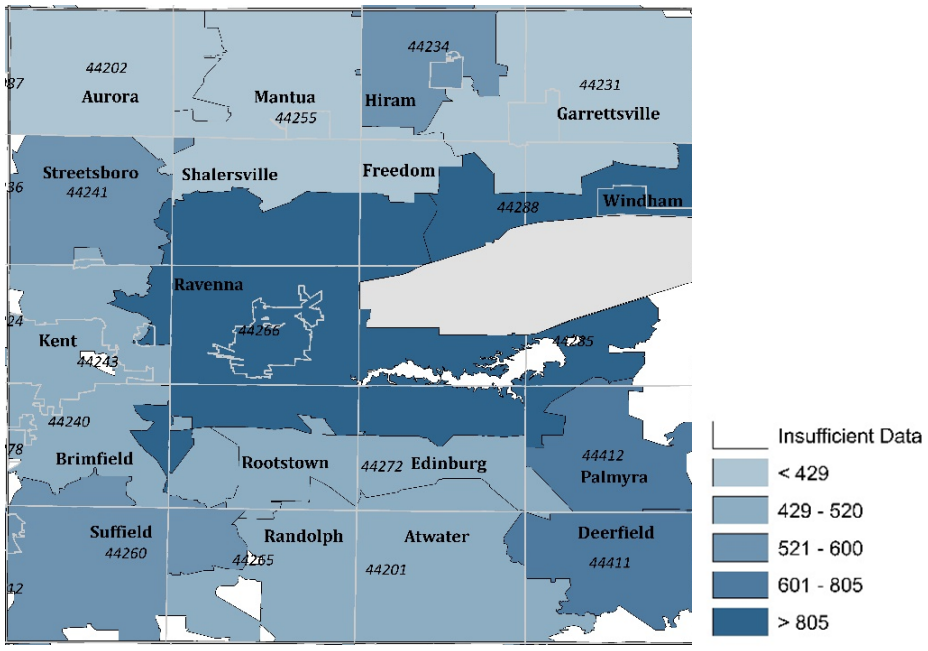
Proportion of Live Births Receiving Inadequate Prenatal Care (Kotelcuck) by Race



(Source: Ohio Information Warehouse, 2007-2009 to 2016-2018 as compiled by Portage County Health District)

The following map shows the rate of pregnancy-associated acute care interactions (visits per 1,000 live births) from January 2016 to June 2019.

Region	ZIP Code	Pregnancy-Associated Interactions per 1,000 Live Births
Windham	44288	949
Ravenna	44266	845
Deerfield	44411	805
Palmyra	44412	686
Streetsboro	44241	600
Suffield	44260	587
Hiram	44234	541
Kent	44240	520
Rootstown	44272	511
Atwater	44201	494
Mantua	44255	429
Garrettsville	44231	416
Aurora	44202	395



(Source: EpiCenter 2016-2019 as compiled by Portage County Health District)

Health Status and Behaviors: Adult Mental Health

Key Findings

In the past year, 17% of Portage County adults had a period of two or more weeks when they felt so sad or hopeless nearly every day that they stopped doing usual activities. Six percent (6%) of Portage County adults considered attempting suicide, and 5% actually attempted suicide.

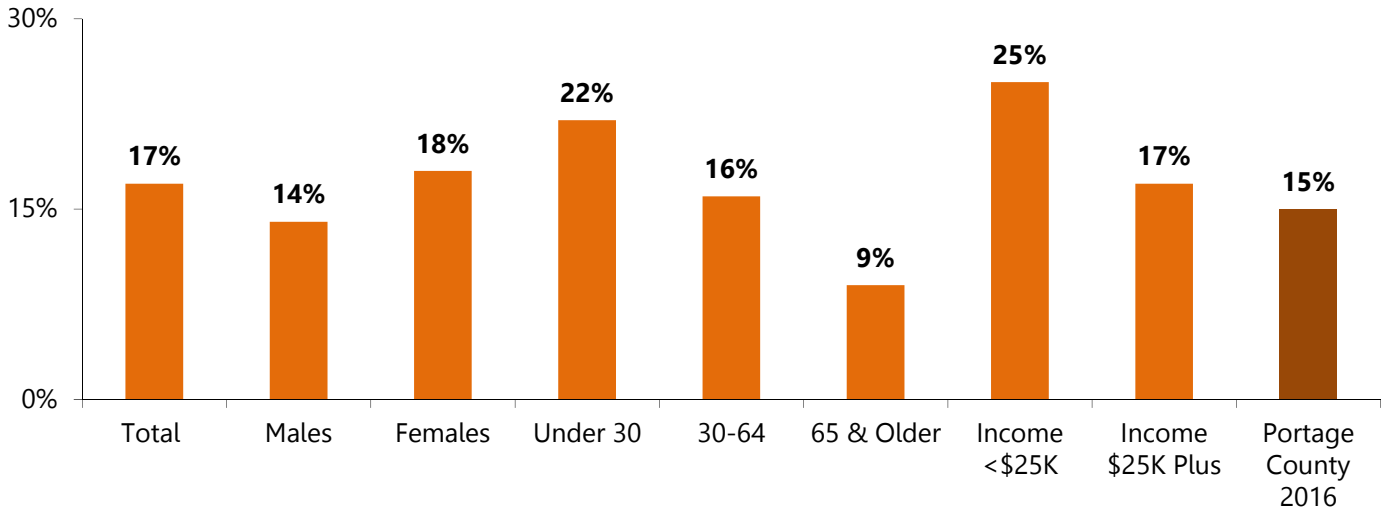
Adult Mental Health

- In the past year, one in six (17%) Portage County adults had a period of two or more weeks when they felt so sad or hopeless nearly every day that they stopped doing usual activities, increasing to 25% of those with incomes less than $25,000.

21,160 Portage County adults felt so sad or hopeless nearly every day for two or more weeks in a row.

The following graph shows adults who felt sad or hopeless for two or more weeks in a row. An example of how to interpret the information includes: 17% of Portage County adults felt sad or hopeless for two or more weeks in a row, including 14% of males and 18% of females.

Portage County Adults Who Felt Sad or Hopeless for Two or More Weeks in a Row



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

- Portage County adults reported the following caused them anxiety, stress, or depression:
  - Job stress (38%)
  - Financial stress (37%)
  - Death of close family member or friend (23%)
  - Other stress at home (19%)
  - Family member sick (18%)
  - Marital/dating relationships (14%)
  - Caring for a parent (12%)
  - Fighting in the home (12%)
  - Poverty/no money (12%)
  - Family member with a mental illness (8%)
  - Unemployment (5%)
  - Divorce/separation (3%)
  - Not having a place to live (2%)
  - Not having enough to eat (2%)
  - Not feeling safe at home (1%)
  - Not feeling safe in the community (1%)
  - Sexual orientation/gender identity (1%)
  - Other (10%)

- Six percent (6%) of all Portage County adults seriously considered attempting suicide in the past year.
- Of those who felt sad or hopeless for two or more weeks in a row, 34% seriously considered attempting suicide.
- Five percent (5%) of adults reported attempting suicide in the past year.

• Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2016	U.S. 2016
Felt sad or hopeless for two or more weeks in a row in the past year	15%	17%	N/A	N/A
Seriously considered attempting suicide in the past year	6%	6%	N/A	N/A
Attempted suicide in the past year	5%	5%	N/A	N/A

N/A – Not available

6,223 Portage County adults attempted suicide in the past year.

- Adults reported that they and/or a family member were diagnosed with or treated for the following mental health issues:
  - Anxiety or emotional problems (22%)
  - Depression (21%)
  - An anxiety disorder (21%)
  - Post-traumatic stress disorder (PTSD) (8%)
  - Alcohol and illicit drug abuse (7%)
  - Attention deficit disorder (ADD/ADHD) (6%)
  - Bipolar disorder (5%)
  - Other trauma (4%)
  - Eating disorder (4%)
  - Developmental disability (2%)
  - Life-adjustment disorder/issue (2%)
  - Autism spectrum (1%)
  - Psychotic disorder (<1%)
  - Some other mental health disorder (4%)
- Nearly one-quarter (23%) of adults indicated that they or a family member had taken medication for one or more mental health issues.
- Adults reported they would do they following if someone they knew was suicidal: talk to them (65%), call a crisis line (58%), call 9-1-1 (54%), try to calm them down (46%), take them to the ER (29%), call a friend (24%), call a spiritual leader (12%), and text a crisis line (10%). Two percent (2%) of adults reported they would do nothing if someone they knew was severely depressed, in crisis or suicidal.
- Portage County adults gave the following reasons for not using a program or service for themselves or a loved one to help with depression, anxiety, or emotional problems:
  - Not needed/not necessary (64%)
  - A program has been used (18%)
  - Had not thought of it (5%)
  - Other priorities (5%)
  - Could not afford to go (4%)
  - Fear (4%)
  - Co-pay/deductible too high (3%)
  - Stigma of seeking mental health services (2%)
  - Did not know how to find a program (2%)
  - Took too long to get in to see a doctor/healthcare provider (2%)
  - Could not find mental health provider (2%)
  - Transportation (1%)
  - Could not get to the office (1%)
  - Other reasons (4%)

Common Signs of Mental Illness in Adults

- Trying to tell the difference between what expected behaviors are and what might be the signs of a mental illness isn't always easy. There's no easy test that can let someone know if there is mental illness or if actions and thought might be typical behaviors of a person or the result of a physical illness.

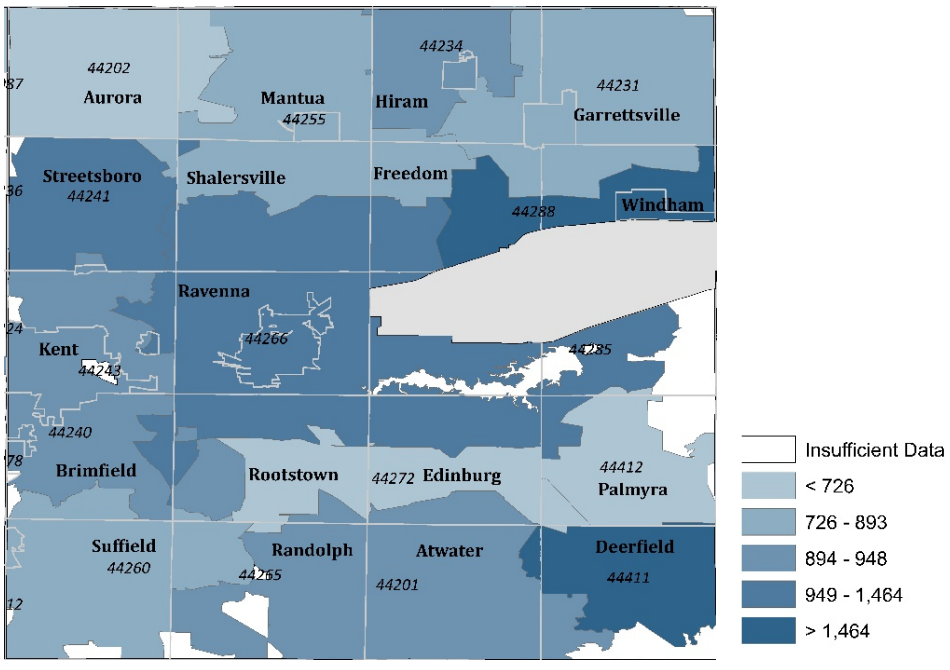
- Each illness has its own symptoms, but common signs of mental illness in adults can include:
  - Excessive worrying or fear
  - Feeling excessively sad or low
  - Extreme mood changes
  - Avoiding friends and social activities
  - Changing in sleeping habits or feeling tired and low energy
  - Abuse of substances like alcohol or drugs
  - Inability to carry out daily activities or handle daily problems and stress

(Source: National Alliance on Mental Illness, Know the Warning Signs, Updated 2019)

Acute Care Interactions

The map below shows the age-adjusted rate of acute care interactions (cases per 100,000 people) for attempted suicide or suicide ideation for Portage County from January 2016 to June 2019.

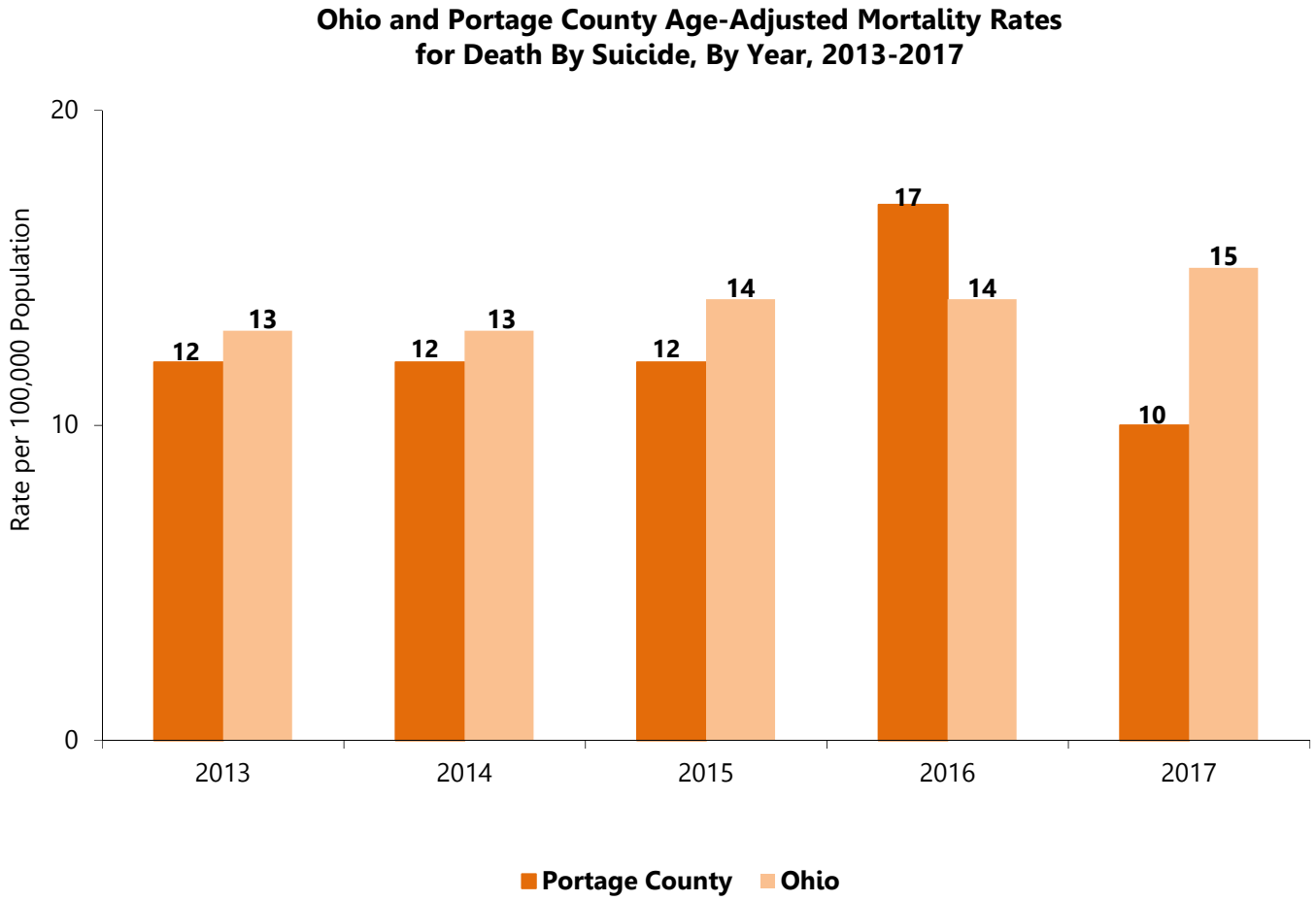
Region	ZIP Code	Suicide-Related Interactions per 100,000 people
Windham	44288	1,731
Deerfield	44411	1,654
Ravenna	44266	1,465
Streetsboro	44241	1,137
Atwater	44201	948
Hiram	44234	932
Kent	44240	901
Mantua	44255	893
Suffield	44260	864
Garrettsville	44231	755
Aurora	44202	727
Rootstown	44272	721
Palmyra	44412	667



(Source: EpiCenter, 2019. Provided by Portage County Health District.)

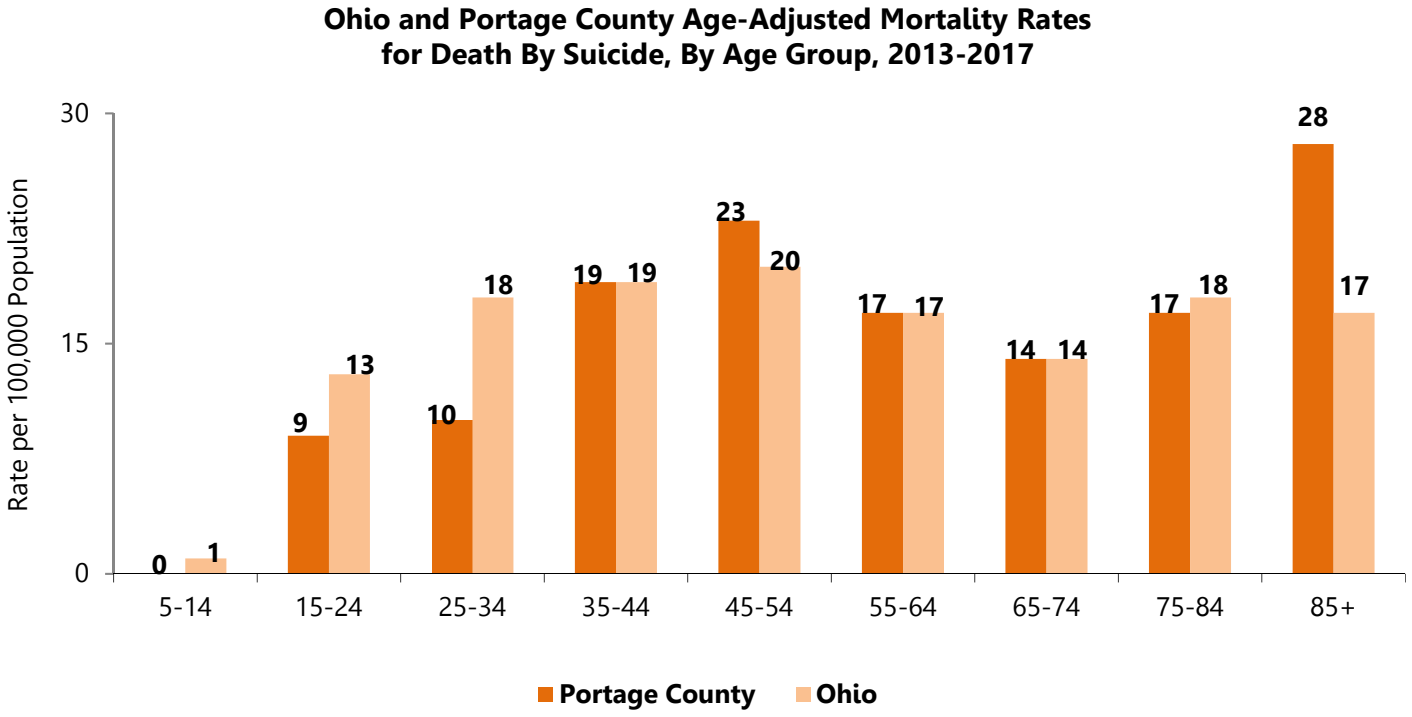
Death by Suicide

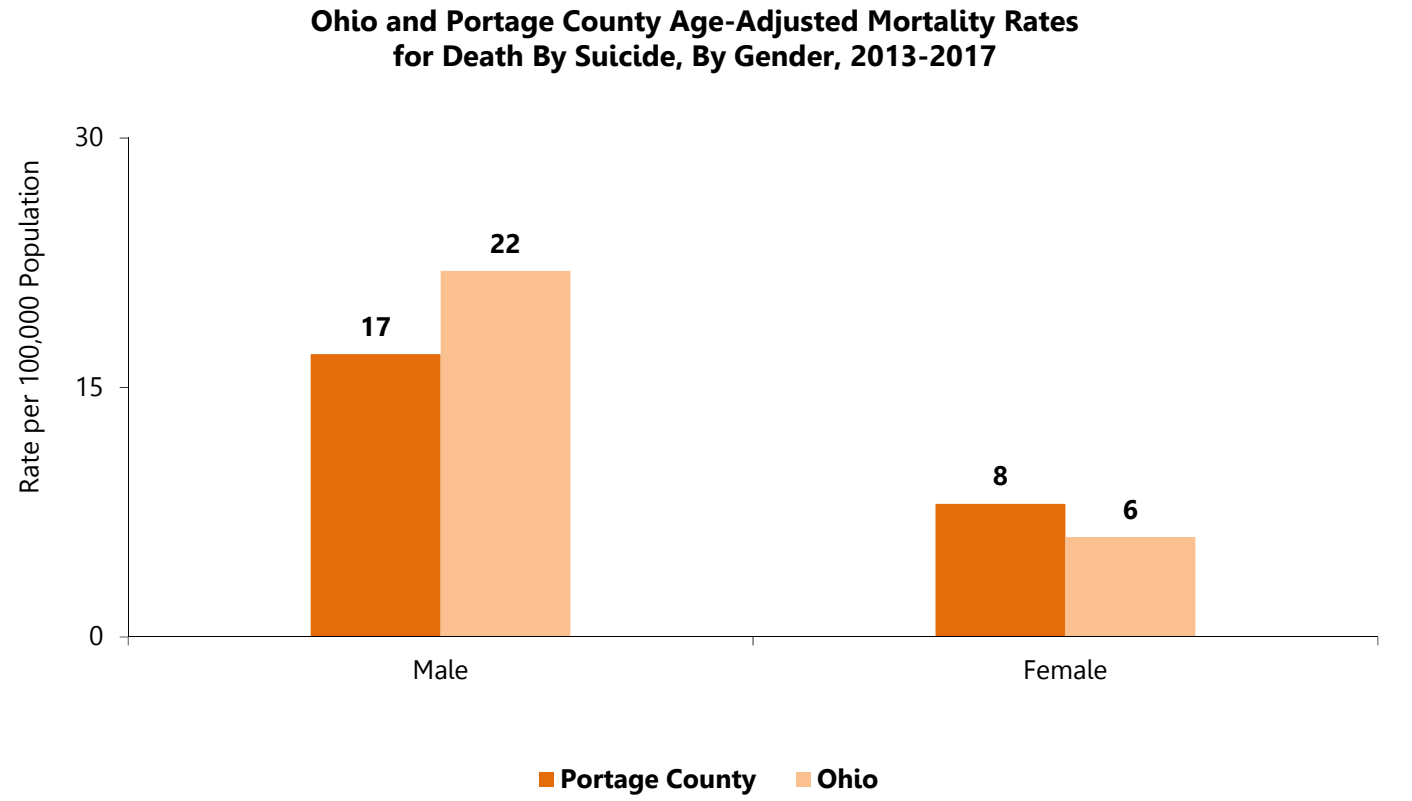
The graph below shows the Ohio and Portage County age-adjusted mortality rates for death by suicide by year.



(Source: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 7/8/2019)

The graphs below show the Ohio and Portage County age-adjusted mortality rates for death by suicide by age group and gender.





(Source: ODH, Ohio Public Health Data Warehouse, Mortality, Leading Causes of Death, updated 7/8/2019)

Suicide Rising Across the U.S.

- Suicide is a leading cause of death in the U.S.
- Suicide rates have increased more than 30% in half of states since 1999.
- Nearly 45,000 lives were lost to suicide in 2016.
- More than (54%) half of people who died by suicide did not have a known mental health condition.
- Many factors contribute to suicide among those with and without known mental health conditions. For instance, relationship problems, crisis in the past or upcoming two weeks, physical health problems, problematic substance use, or job/financial problems.
- Making sure government, public health, healthcare, employers, education, the media and community organizations are working together is important for preventing suicide. Public health departments can bring together these partners to focus on comprehensive state and community efforts with the greatest likelihood of preventing suicide.
- States and communities can:
  - Identify and support people at risk of suicide.
  - Teach coping and problem-solving skills to help people manage challenges with their relationships, jobs, health, or other concerns.
  - Promote safe and supportive environments. This includes safely storing medications and firearms to reduce access among people at risk.
  - Offer activities that bring people together so they feel connected and not alone.
  - Connect people at risk to effective and coordinated mental and physical healthcare.
  - Expand options for temporary help for those struggling to make ends meet.
  - Prevent future risk of suicide among those who have lost a loved one to suicide.

(Source: CDC, Centers for Disease Control and Prevention, Rural Health, Suicide in Rural America, Updated on May 2, 2019)

Chronic Disease: Cardiovascular Health

Key Findings

More than one-third (35%) of adults had high blood pressure and 36% had high blood cholesterol. Five percent (5%) of adults survived a heart attack and 3% survived a stroke.

Heart Disease and Stroke

- Five percent (5%) of adults reported they had survived a heart attack or myocardial infarction, increasing to 11% of those over the age of 65.
- Three percent (3%) of adults reported they had survived a stroke, increasing to 6% of those with incomes less than $25,00.
- Six percent (6%) of adults reported they had angina or coronary heart disease, increasing to 15% of those over the age of 65 and 16% of those with incomes less than $25,000.
- Four percent (4%) of adults reported they had congestive heart failure, increasing to 10% of those over the age of 65 and 14% of those with incomes less than $25,000.

Portage County
Leading Causes of Death, 2015-2017

Total Deaths: 4,516

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

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

Ohio
Leading Causes of Death, 2015-2017

Total Deaths: 361,238

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

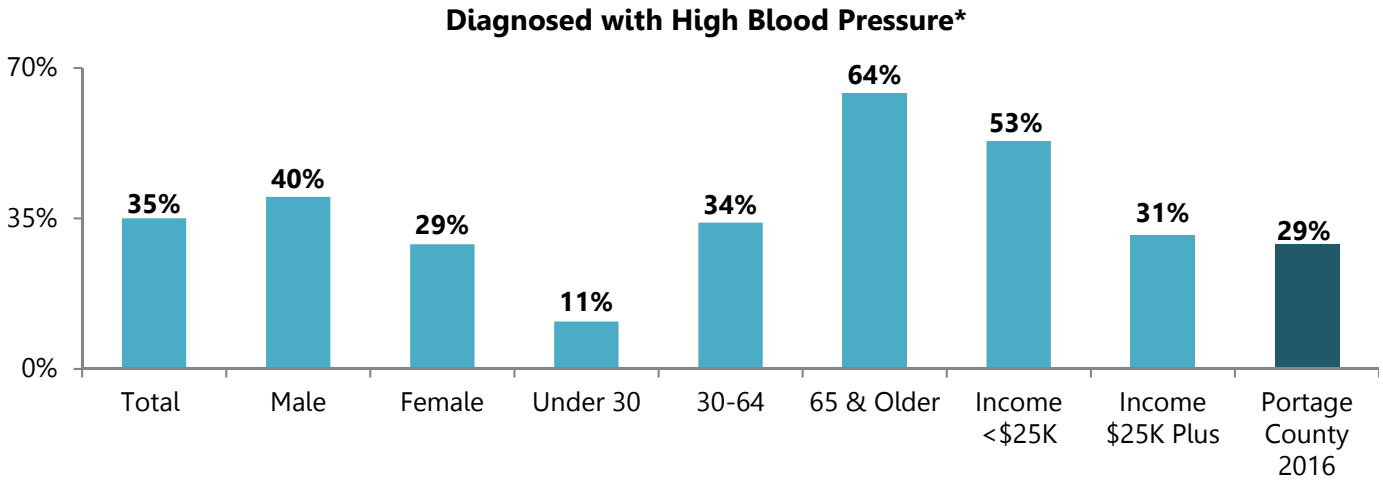
(Source: Ohio Public Health Data Warehouse, 2015-2017)

6,223 adults survived a heart attack or myocardial infarction.

High Blood Pressure (Hypertension)

- Ninety-four percent (94%) of adults had their blood pressure checked within the past year.
- More than one-third (35%) of adults had been diagnosed with high blood pressure.
- Of those diagnosed with high blood pressure:
  - 78% were overweight, obese, severely obese, or morbidly obese
  - 26% had diabetes
  - 20% rated their health as fair or poor
  - 14% had angina or coronary heart disease
  - 13% were current smokers
  - 11% had a heart attack or myocardial infarction
- Seven percent (7%) of adults were told they were pre-hypertensive/borderline high
- Of those who were diagnosed with high blood pressure, 82% of adults reported currently taking medication to help manage it.

The following graphs show the percentage of Portage County adults who have been diagnosed with high blood pressure and high blood cholesterol. An example of how to interpret the information in the first graph includes: 35% of all Portage County adults have been diagnosed with high blood pressure, including 40% of males and 29% of females.

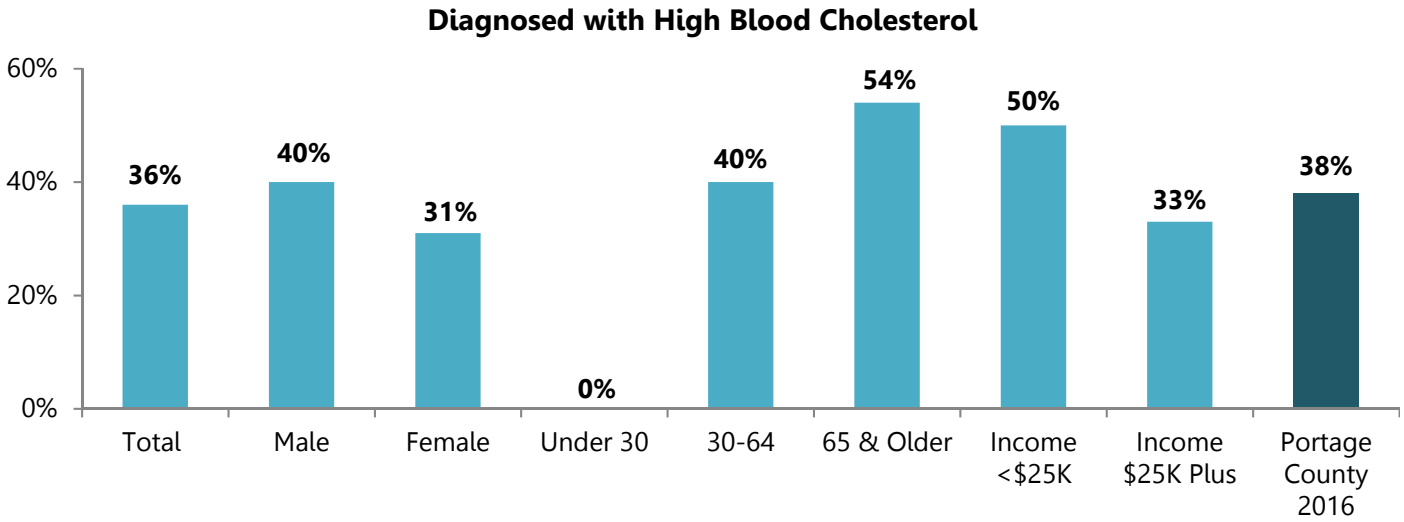


**Does not include respondents who indicated high blood pressure during pregnancy only.*
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

High Blood Cholesterol

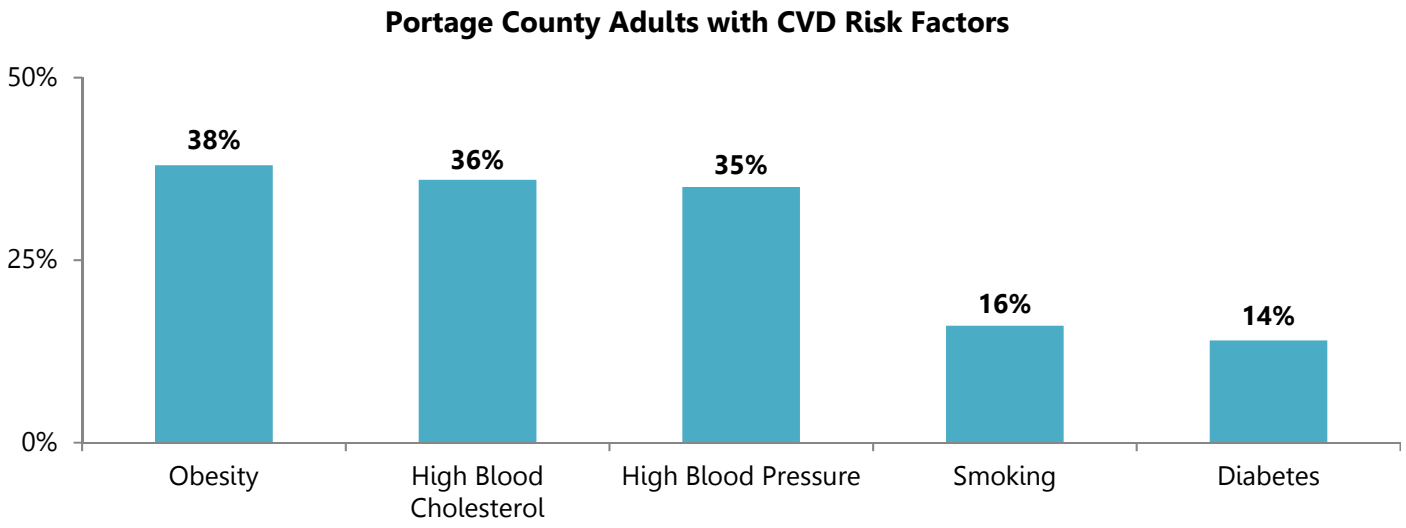
- More than four-fifths (86%) of adults had their blood cholesterol checked within the past 5 years.
- More than one third (36%) of adults had been diagnosed with high blood cholesterol.
- Of those who had high blood cholesterol:
  - 79% were overweight, obese, severely obese, or morbidly obese
  - 22% had diabetes
  - 18% rated their health as fair or poor
  - 14% were current smokers
  - 13% had coronary heart disease

The following graphs show the percentage of Portage County adults who have been diagnosed with high blood pressure and high blood cholesterol. An example of how to interpret the information in the first graph includes: 36% of all Portage County adults have been diagnosed with high blood pressure, including 40% of males and 31% of females.



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

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



Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Ever diagnosed with angina or coronary heart disease	9%	6%	5%	4%
Ever diagnosed with a heart attack or myocardial infarction	4%	5%	6%	4%
Ever diagnosed with a stroke	2%	3%	4%	3%
Had been told they had high blood pressure	29%	35%	35%	32%
Had been told their blood cholesterol was high	38%	36%	33%	33%
Had their blood cholesterol checked within the last five years	73%	86%	85%	86%

Healthy People 2020 Objectives
Heart Disease and Stroke

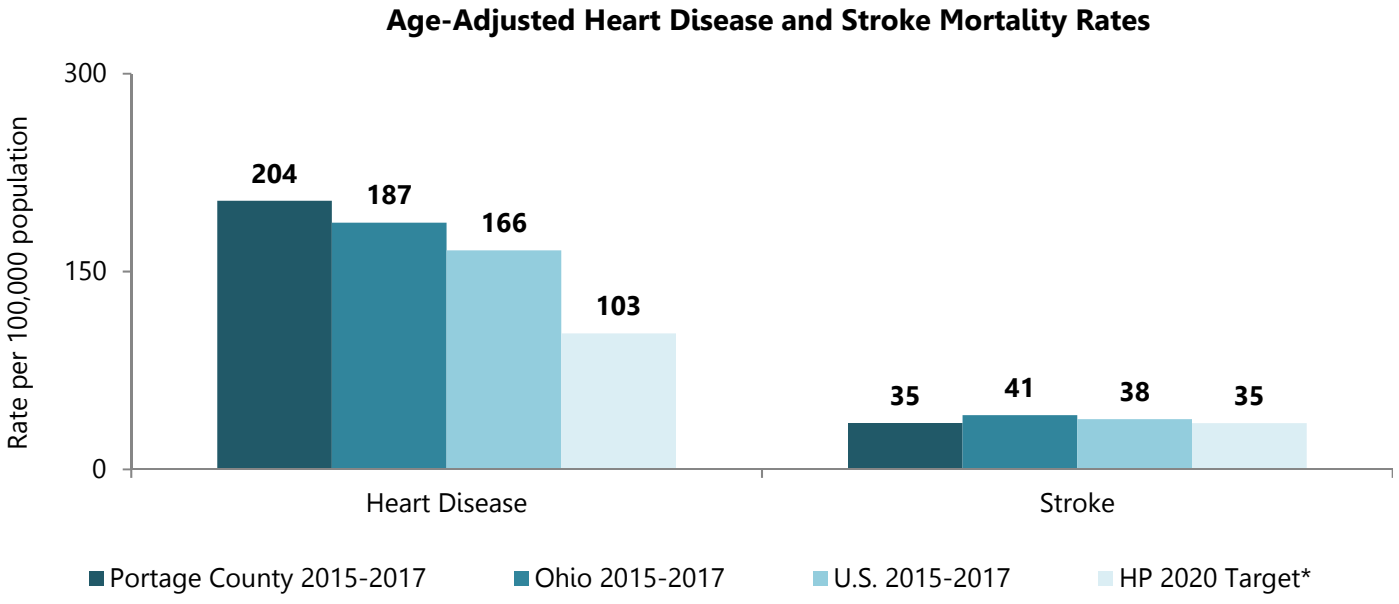
Objective	2019 Portage Survey Population Baseline	2017 U.S. Baseline	Healthy People 2020 Target
HDS-5: Reduce proportion of adults with hypertension	35%	32% Adults age 18 and up	27%
HDS-6: Increase proportion of adults who had their blood cholesterol checked within the preceding 5 years	86%	86% Adults age 18 and up	82%
HDS-7: Decrease proportion of adults with high total blood cholesterol (TBC) levels	36%	33% Adults age 20+ with TBC>240 mg/dl	14%

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

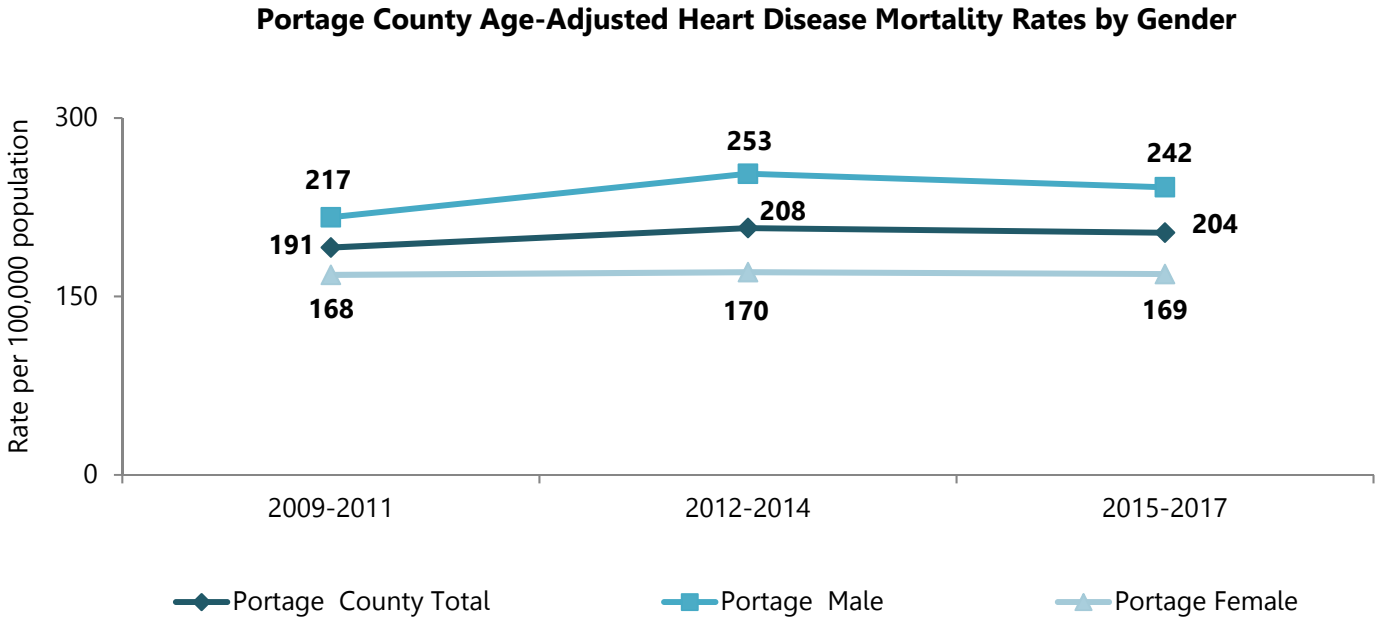
Age-Adjusted Heart Disease and Stroke Disease Mortality Rates

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

- When age differences are accounted for, the statistics indicate that the Portage County heart disease mortality rate was higher than the figures for the state, U.S., and Healthy People 2020 target from 2015-2017.
- The 2015-2017 Portage County age-adjusted stroke mortality rate was lower than the state, and U.S., but on par with the Healthy People 2020 target.
- From 2009-2017, the Portage County female and male age-adjusted heart disease mortality rates have fluctuated.



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

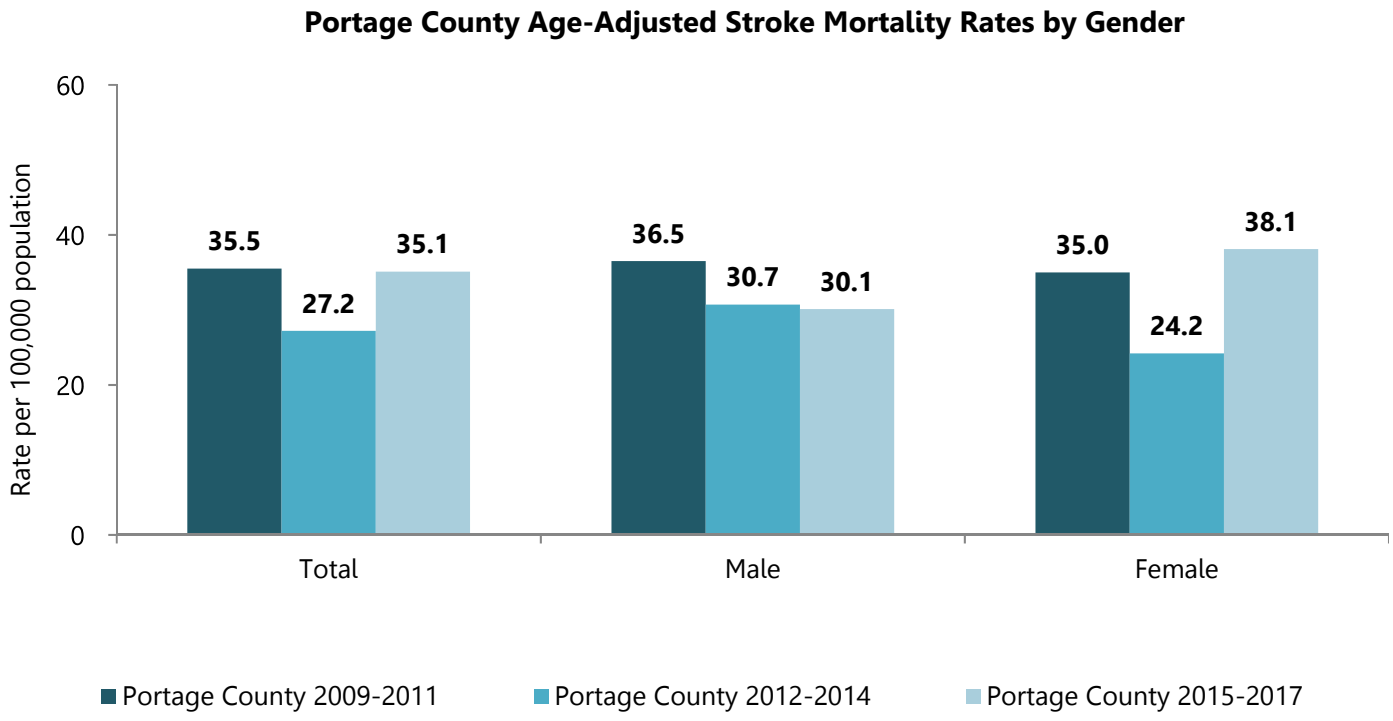


(Source: Ohio Public Health Data Warehouse, 2009-2017)

Age-Adjusted Stroke Mortality Rates

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

- From 2009-2017, the Portage County stroke mortality rate fluctuated.
- From 2009-2017, the Portage County stroke mortality rate for males decreased.
- The 2012-2017, the Portage County stroke mortality rate for females increased.

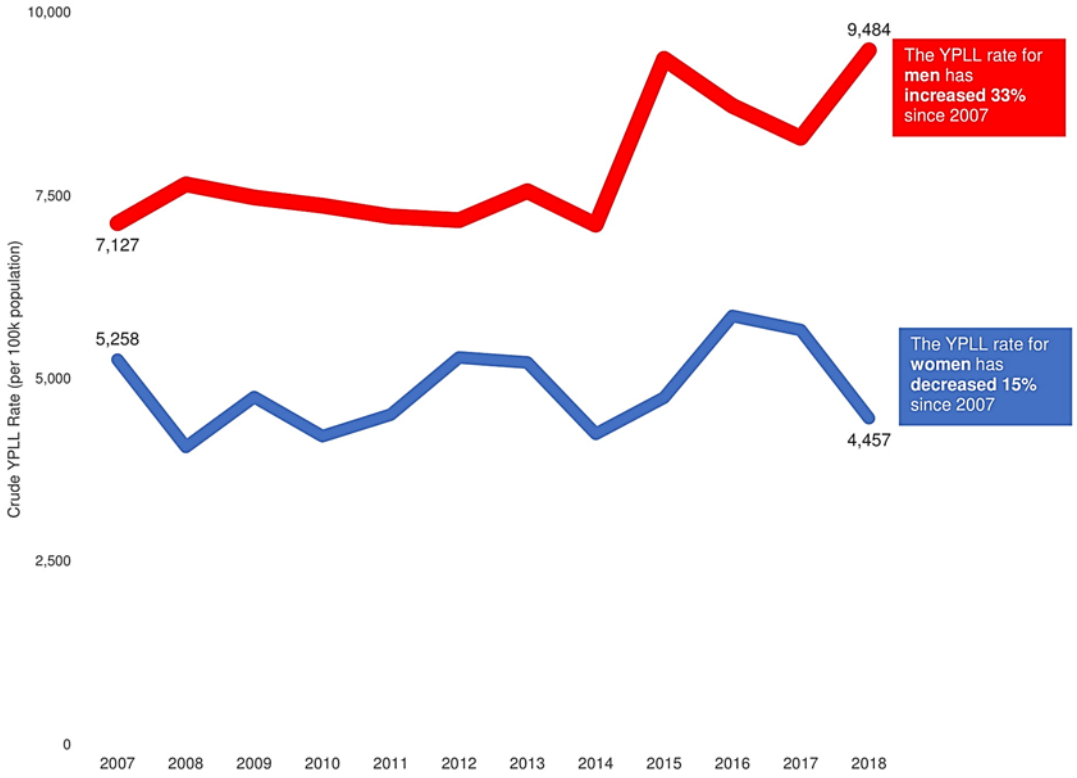


(Source: Ohio Public Health Data Warehouse, 2009-2017)

Years per Life Lost

- The following graph shows the crude years per life lost (YPLL 75) by sex from 2007-2018.
- The map below shows the crude years per life lost (under 75) per 100,000 people by census tract from 2015 to 2018).

Crude Years per Life Lost (YPLL 75) by Sex, 2007-2018



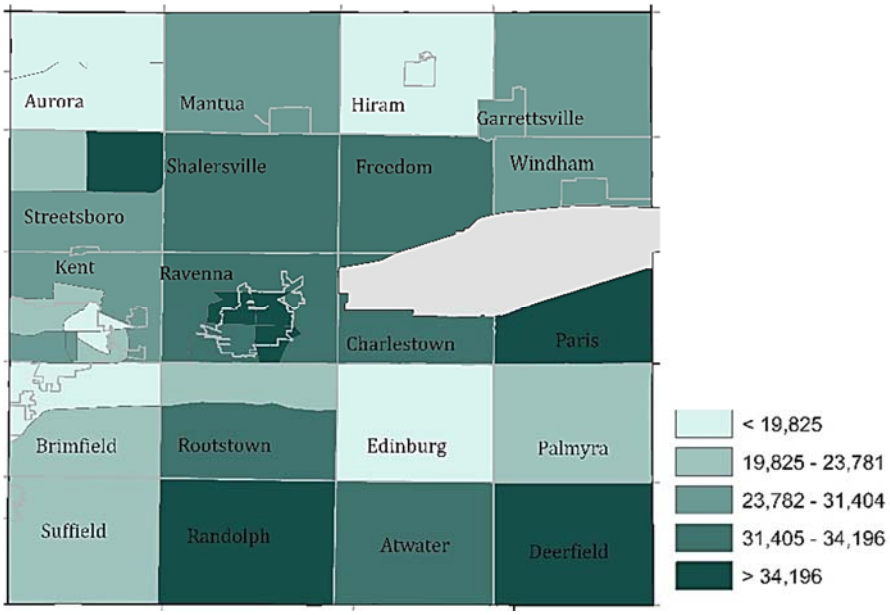
(Source: Ohio Public Information Warehouse, 2007-2018, as compiled by the Portage County Health District)

Crude Years per Life Lost (Under 75) per 100,000 People (2015-2018), by Census Tract

<u>Highest</u>
Southeast Ravenna – 48,480
Northwest Ravenna – 46,680
Northeast Ravenna – 45,716

<u>Lowest</u>
Kent, – KSU– 2,065
North Brimfield – 15,832
South Aurora – 16,591

County – 27,358

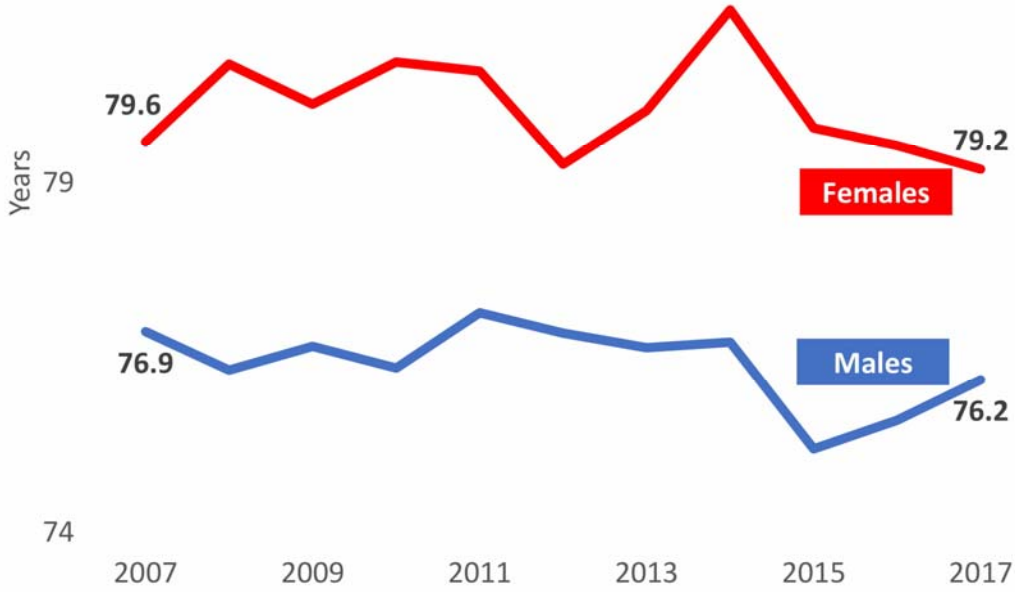


(Source: Ohio Public Information Warehouse, 2015-2018, as compiled by the Portage County Health District)

Life Expectancy

- The following graph shows life expectancy by year and sex from 2007 to 2017.
- The map below shows life expectancy by census tract from 2010 to 2015.

Life Expectancy, by Year and Sex

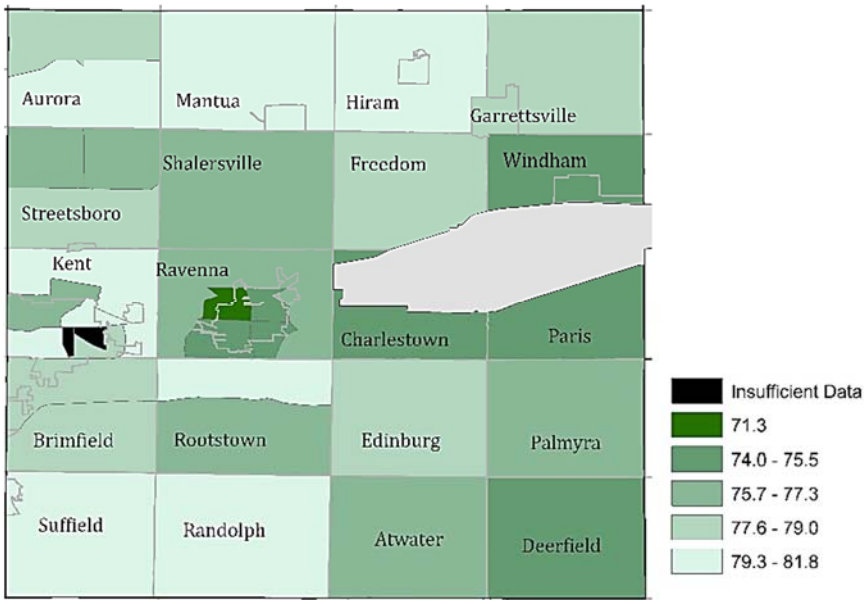


(Source: National Center for Health Statistics, 2007-2017, as compiled by the Portage County Health District)

Life Expectancy (2010-2015), by Census Tract

<u>Highest</u>
Franklin Twp.- 81.8 years
Kent, North Off-Campus- 81.2
South Aurora- 80.6

<u>Lowest</u>
Northwest Ravenna- 71.3
Southeast Ravenna- 74
Southwest Ravenna- 74.8



(Source: National Center for Health Statistics. U.S. Small-Area Life Expectancy Estimates Project (USALEEP): Life Expectancy Estimates, 2010-2015, as compiled by the Portage County Health District)

Chronic Disease: Cancer

Key Findings

In 2019, 10% of Portage County adults had been diagnosed with cancer at some time in their life. More than one-third (37%) of those diagnosed with cancer said cost might prevent them from seeing a doctor or health care provider for further treatment/medical care for their cancer diagnosis.

Portage County
Incidence of Cancer, 2012-2016

All Types: 4,412 cases

- Lung and Bronchus: 645 cases (15%)
- Breast: 604 cases (14%)
- Prostate: 506 cases (11%)
- Colon and Rectum: 373 cases (8%)

In 2015-2017, there were 1,051 cancer deaths in Portage County.

(Source: Ohio Cancer Incidence Surveillance System, ODH Ohio Public Health Data Warehouse)

Adult Cancer

- Ten percent (10%) of Portage County adults were diagnosed with cancer at some point in their lives, increasing to 21% of those over the age of 65.
- Of those diagnosed with cancer, they reported the following types: breast (25%), skin cancer (other than melanoma) (21%), prostate (13%), melanoma (11%), bladder cancer (8%), lung (5%), renal cancer (3%), colon (3%), cervical (3%), and other types of cancer (5%). Eight percent (8%) of adults were diagnosed with multiple types of cancer.

12,447 adults were diagnosed with cancer at some point in their lives.

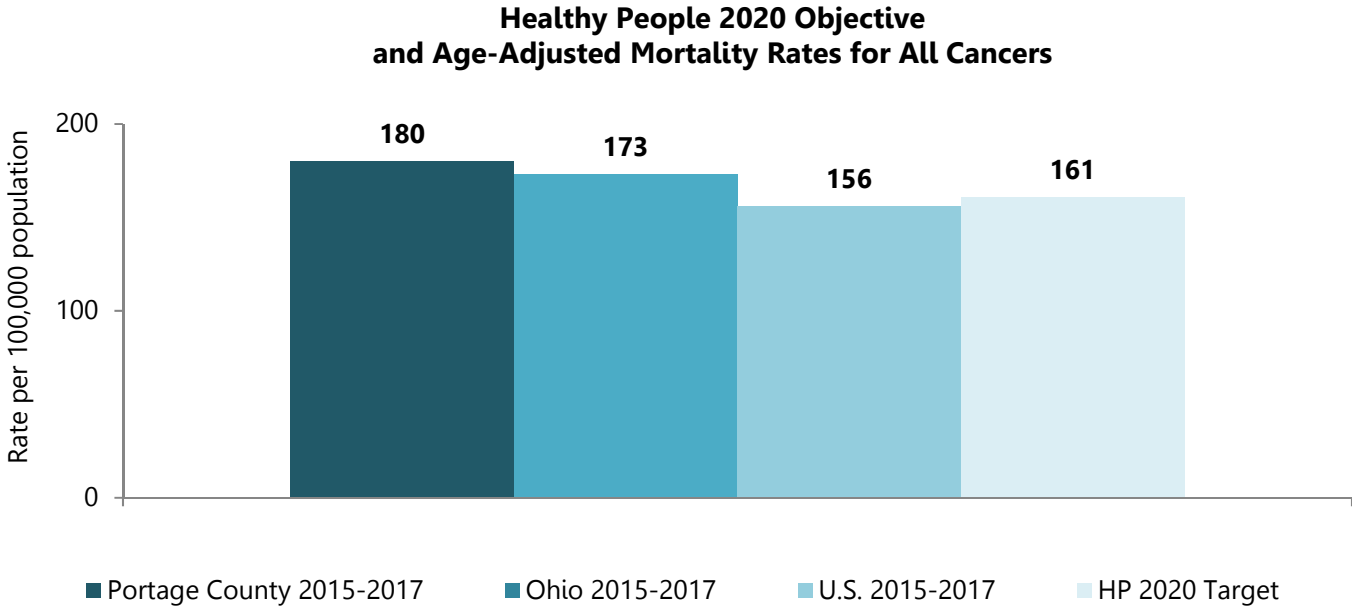
- Portage County adults who were diagnosed with cancer said the following might prevent them from seeing a doctor or health care provider for further treatment/medical care for their cancer diagnosis:
  - Cost (37%)
  - No insurance (21%)
  - Difficulty getting appointment (16%)
  - No transportation (11%)
  - Frightened of procedure or healthcare provider (11%)
  - Did not know where to go (6%)
  - Some other reason (37%)
- The Ohio Department of Health (ODH) indicates that from 2015-2017, a total of 1,051 Portage County residents died from cancer, the second leading cause of death in the county. Cancers caused 23% of all Portage County resident deaths from 2015-2017 *(Source: Ohio Public Health Data Warehouse, 2015-2017).*

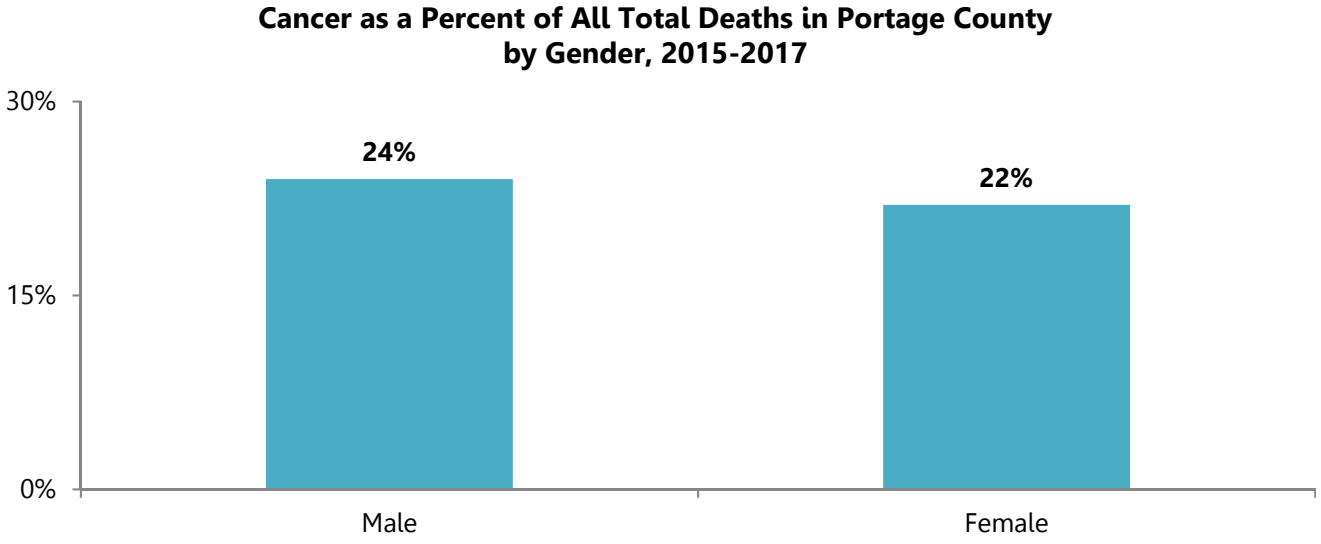
Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Ever been told they had skin cancer	N/A	3%	6%	6%
Ever been told they had other types of cancer (other than skin cancer)	8%*	7%	7%	7%

Note: Melanoma and other skin cancers are included for "ever been told they had skin cancer."
N/A – Not available
**Includes skin cancer. Please compare with caution.*

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

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





(Source: Ohio Public Health Data Warehouse 2015-2017, CDC Wonder 2015-2016, Healthy People 2020)

Portage County Incidence of Cancer, 2012-2016

Types of Cancer	Number of Cases	Percent of Total Incidence of Cancer
Lung and Bronchus	645	14.6%
Breast	604	13.7%
Prostate	506	11.5%
Colon & Rectum	373	8.5%
Other Sites/Types	342	7.8%
Melanoma of Skin	253	5.7%
Bladder	232	5.3%
Non-Hodgkins Lymphoma	185	4.2%
Uterus	160	3.6%
Kidney & Renal Pelvis	139	3.2%
Pancreas	125	2.8%
Thyroid	124	2.8%
Leukemia	118	2.7%
Oral Cavity & Pharynx	118	2.7%
Brain and Other CNS	76	1.7%
Ovary	64	1.5%
Esophagus	61	1.4%
Liver & Intrahepatic Bile Duct	60	1.4%
Multiple Myeloma	59	1.3%
Stomach	54	1.2%
Larynx	38	0.9%
Testis	31	0.7%
Cervix	28	0.6%
Hodgkins Lymphoma	17	0.4%
Total	**4,412**	**100%**

(Source: Ohio Cancer Incidence Surveillance System, ODH Information Warehouse, Updated 2/08/2019)

Lung Cancer

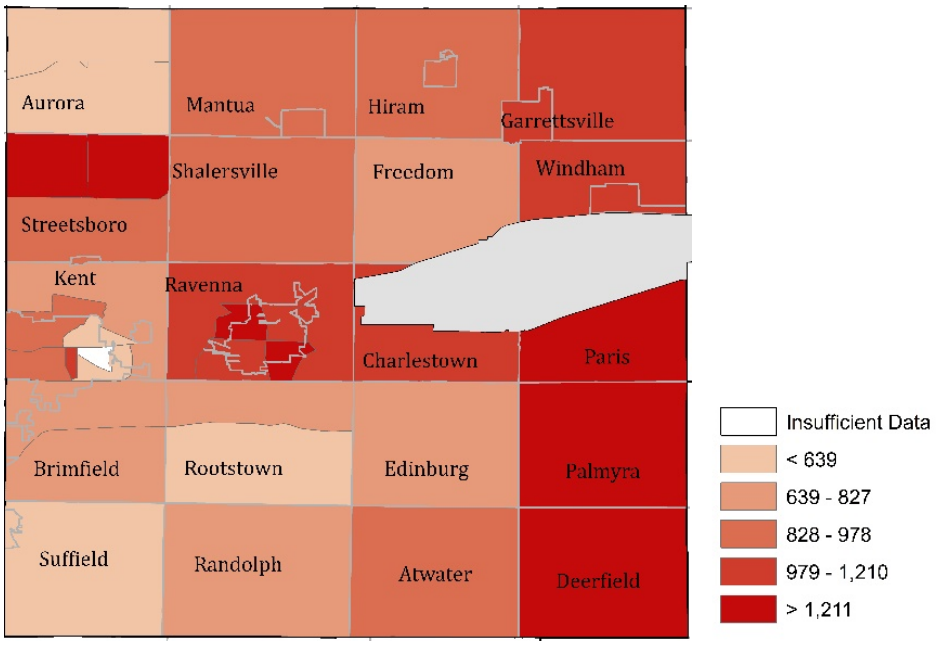
- Lung and Bronchus cancer was the leading cause of cancer deaths in Portage County from 2015-2017 *(Source: Ohio Public Health Data Warehouse, 2015-2017).*
- According to the American Cancer Society, smoking causes 80% of lung cancer deaths in the U.S. Men and women who smoke are about 25 times more likely to develop lung cancer than nonsmokers *(Source: American Cancer Society, Facts & Figures 2019).*
- ODH reports that lung cancer was the leading cause of male cancer deaths from 2015-2017 in Portage County. *(Source: Ohio Public Health Data Warehouse, 2015-2017).*
- In Portage County, 19% of male adults were current smokers and 31% were former smokers.
- ODH reports that lung cancer was the leading cause of female cancer deaths in Portage County from 2015-2017. *(Source: Ohio Public Health Data Warehouse, 2015-2017).*
- In Portage County, 13% of female adults were current smokers and 23% were former smokers.

The following map shows Portage County age-adjusted lung cancer incidence rate (cases per 100,000 persons) by census tract. The graph below shows lung cancer rolling 3-year age and sex-adjusted incidence and death rate per 100,000 population.

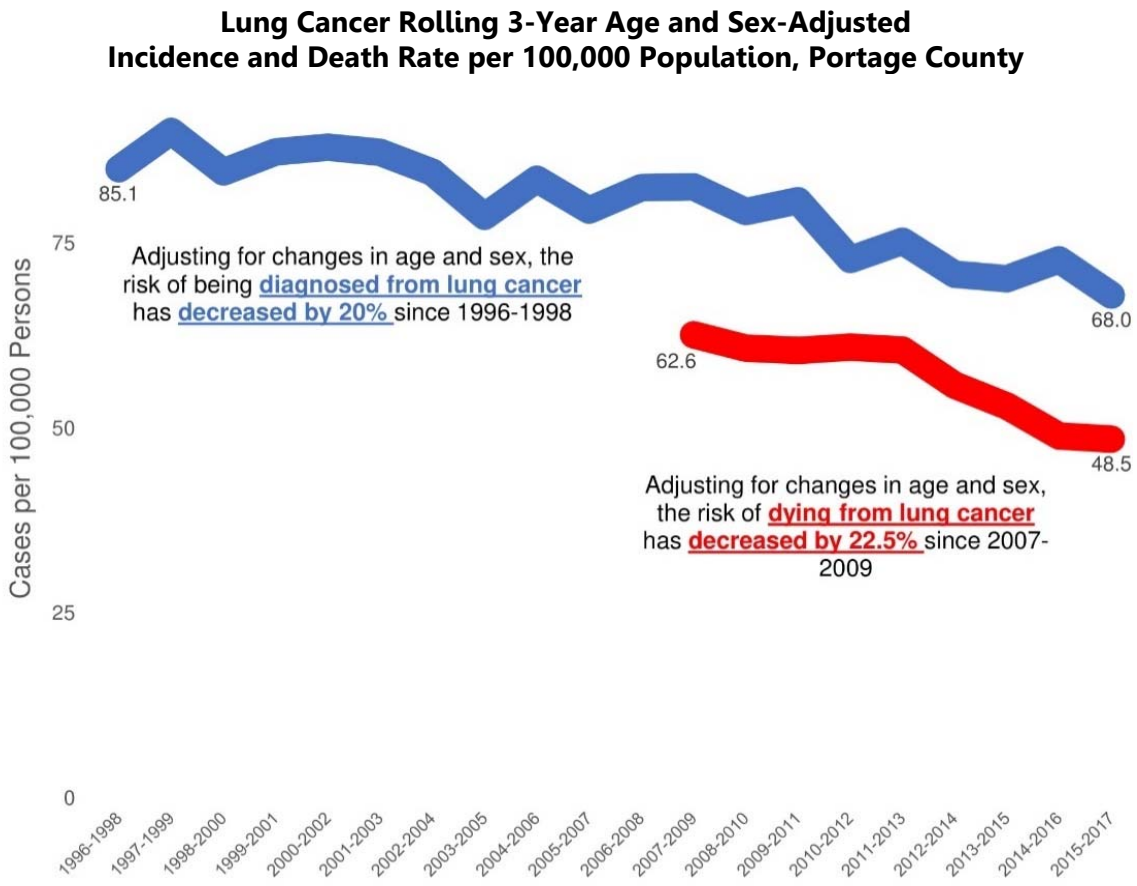
Age-Adjusted Lung Cancer Incidence Rate (Cases per 100,000 persons) 2008-2017, by Census Tract

Highest
Northeast Streetsboro – 1,640
Northwest Ravenna – 1,562
Deerfield Twp. – 1,326

Lowest
Kent – North Off-Campus – 390
South Aurora – 442
South Rootstown – 529

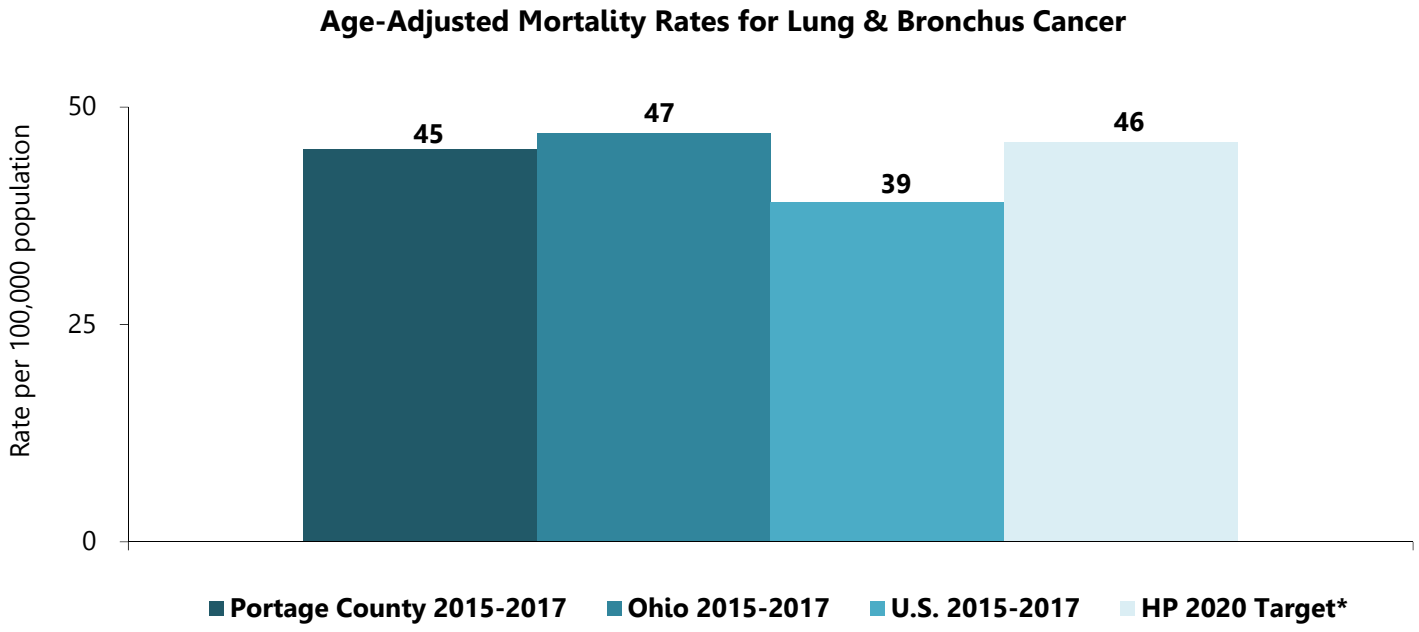


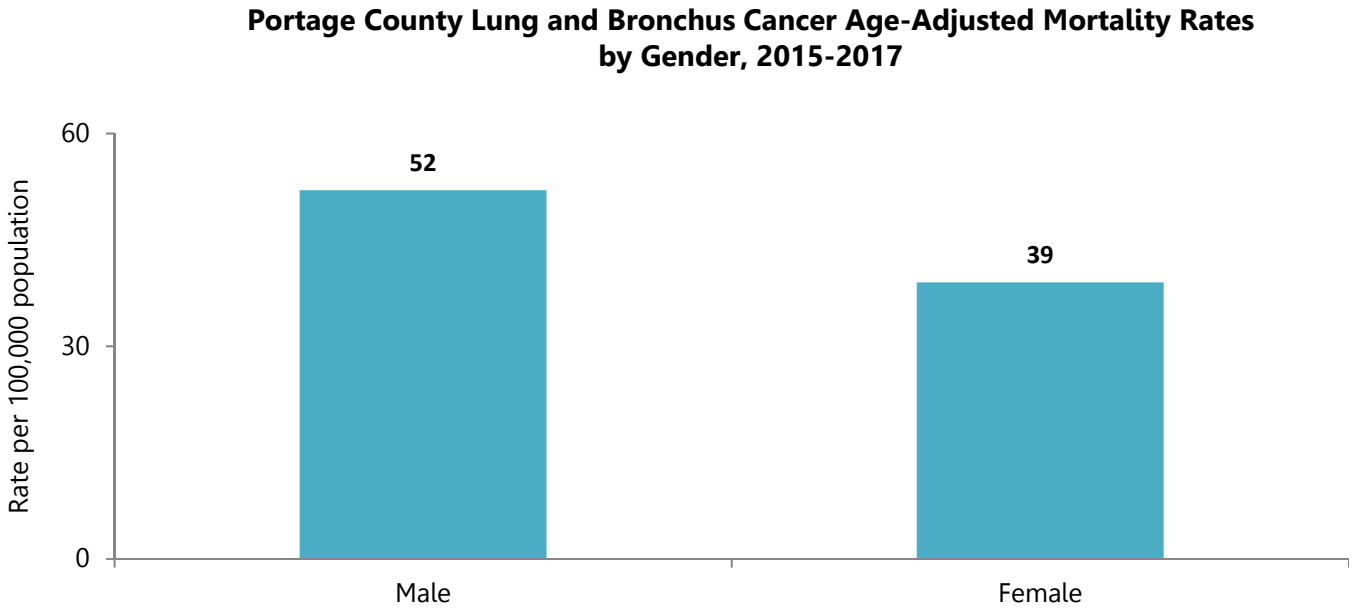
(Source: Ohio Public Information Warehouse 2008-2017 as compiled by the Portage County Health District)



(Source: Ohio Public Information Warehouse 1996-2017 as compiled by the Portage County Health District)

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





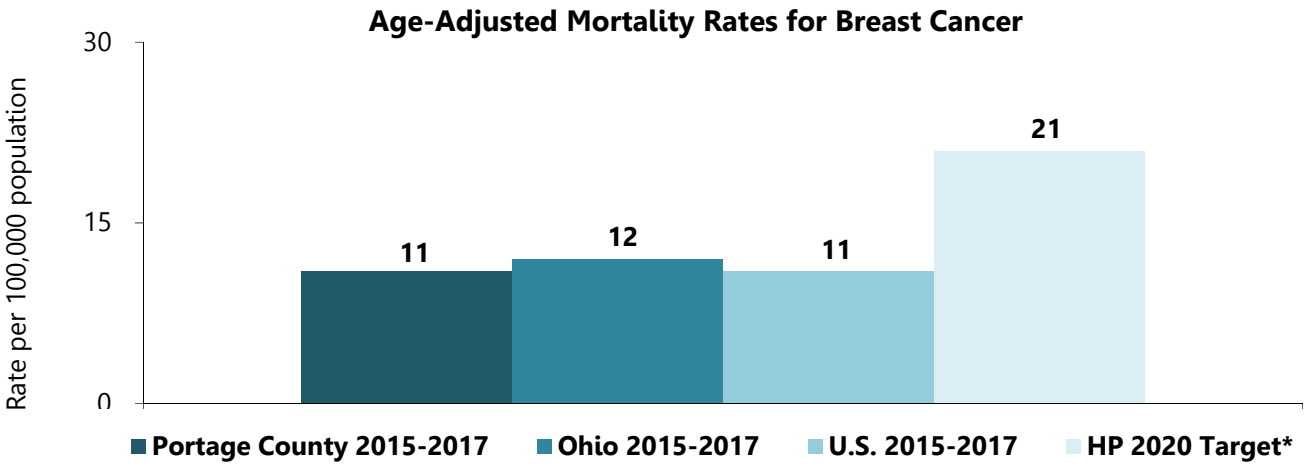
Note: Healthy People 2020's target rate and the U.S. rate is for adults aged 45 years and older.
**Healthy People 2020 Target data is for lung cancer only*
(Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2015-2017, CDC Wonder 2015-2017)

Breast Cancer

- Breast cancer was the fourth leading cause of cancer deaths among Portage County females from 2015-2017 *(Source: Ohio Public Health Data Warehouse, 2015-2017).*

- For women at average risk of breast cancer, American Cancer Society screening guidelines recommended that those 40 to 44 years of age have the choice of annual mammography; those 45 to 54 have an annual mammography, and those 55 years of age and older may transition to biennial or continue annual mammography. Women should continue mammography as long as their overall health is good and life expectancy is 10 or more years. For some women at high risk of breast cancer, annual screening using magnetic resonance imaging (MRI) in addition to mammography is recommended, typically starting at age 30 *(Source: American Cancer Society, Facts & Figures 2019).*

- Over half (53%) of women ages 40 and over had a mammogram in the past year



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

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

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

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

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

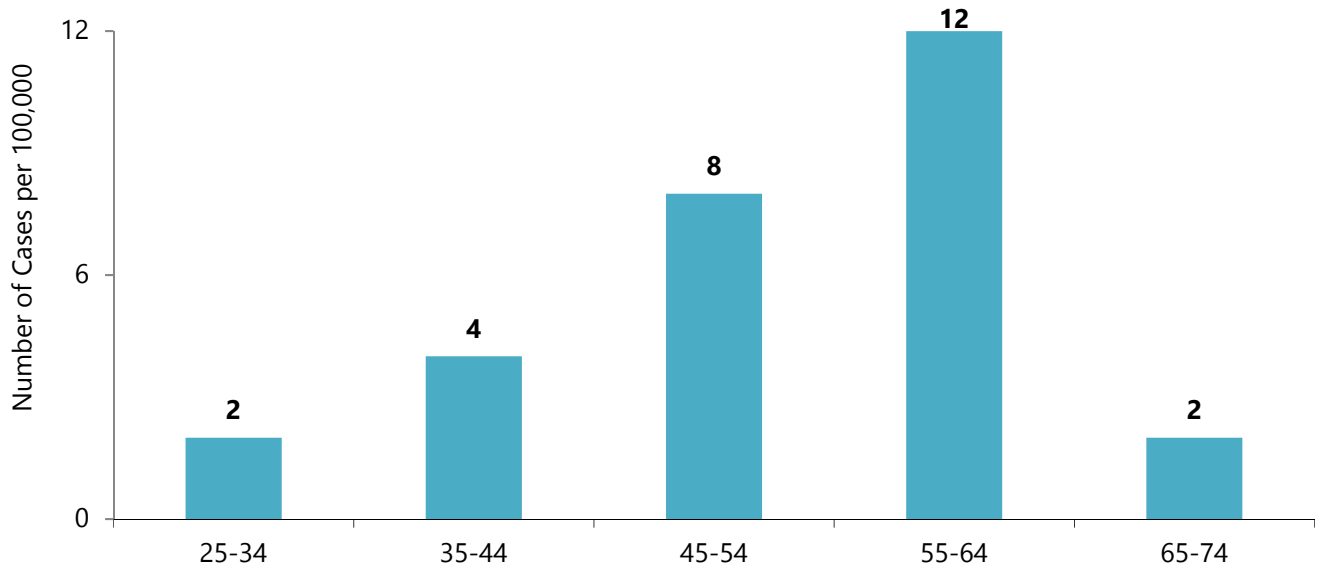
- Anti-estrogens or other medicines that block or decrease estrogen in your body.
- Surgery to reduce your risk of breast cancer—
- Prophylactic (preventive) mastectomy (removal of breast tissue).
- Prophylactic (preventive) salpingo-oophorectomy (removal of the ovaries and fallopian tubes).

(Source: Centers for Disease Control and Prevention, What Can I Do to Reduce My Risk of Breast Cancer? Updated on September 27, 2017)

Cervical Cancer

- In the United States, Hispanic women are most likely to get cervical cancer, followed by African-Americans, Asians and Pacific Islanders, and whites. *(Source: American Cancer Society (ACS) Key Statistics for Cervical Cancer, 2019).*
- In 2019, more than 13,000 new cases of cervical cancer are estimated to be diagnosed in the U.S., and 4,250 women are estimated to die from cervical cancer. (*ACS 2019 Estimates).*
- Cervical cancer was once one of the most common causes of cancer death for American women. The cervical cancer death rate dropped significantly with the increased use of the Pap test. All women should begin cervical cancer testing (screening) at age 21. Women aged 21 to 29, should have a Pap test every 3 years. Beginning at age 30, the preferred way to screen is with a Pap test combined with an HPV test every 5 years. Women over 65 years of age who have had regular screening in the previous 10 years should stop cervical cancer screening as long as they haven't had any serious pre-cancers found in the last 20 years. Women who have been vaccinated against HPV should still follow these guidelines *(ACS Guidelines for Prevention and Early Detection of Cervical Cancer).*
- Two-thirds (66%) of women ages 21-65 had a Pap smear in the past three years.

Portage County Age-Adjusted Cervical Cancer Incidence Rates, 2012-2016

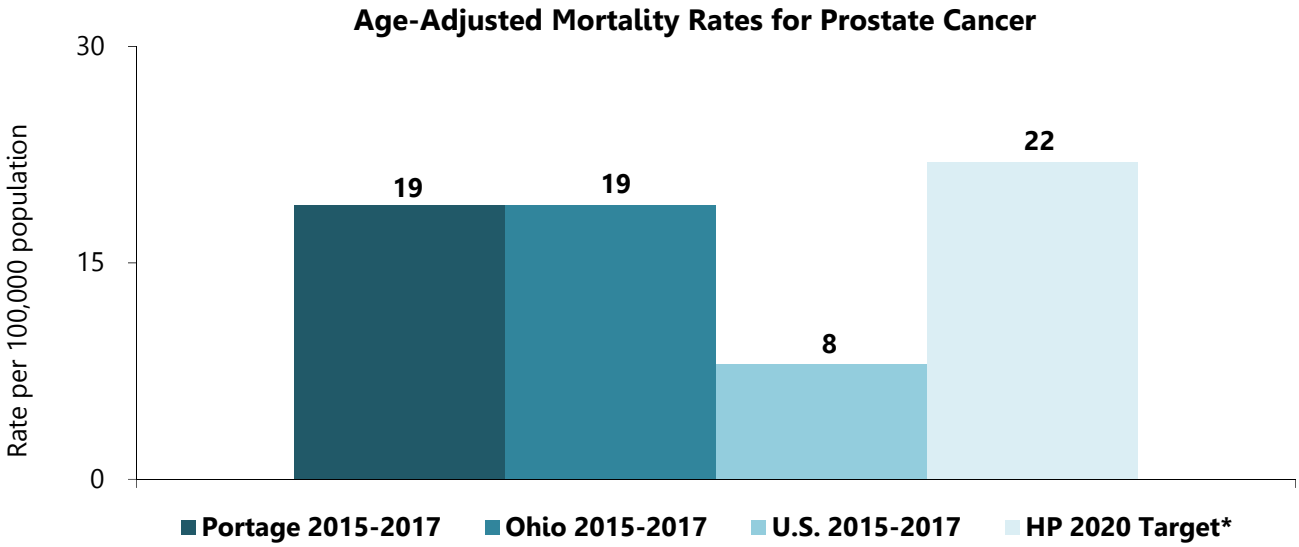


(Source: Ohio Public Health Data Warehouse 2012-2016)

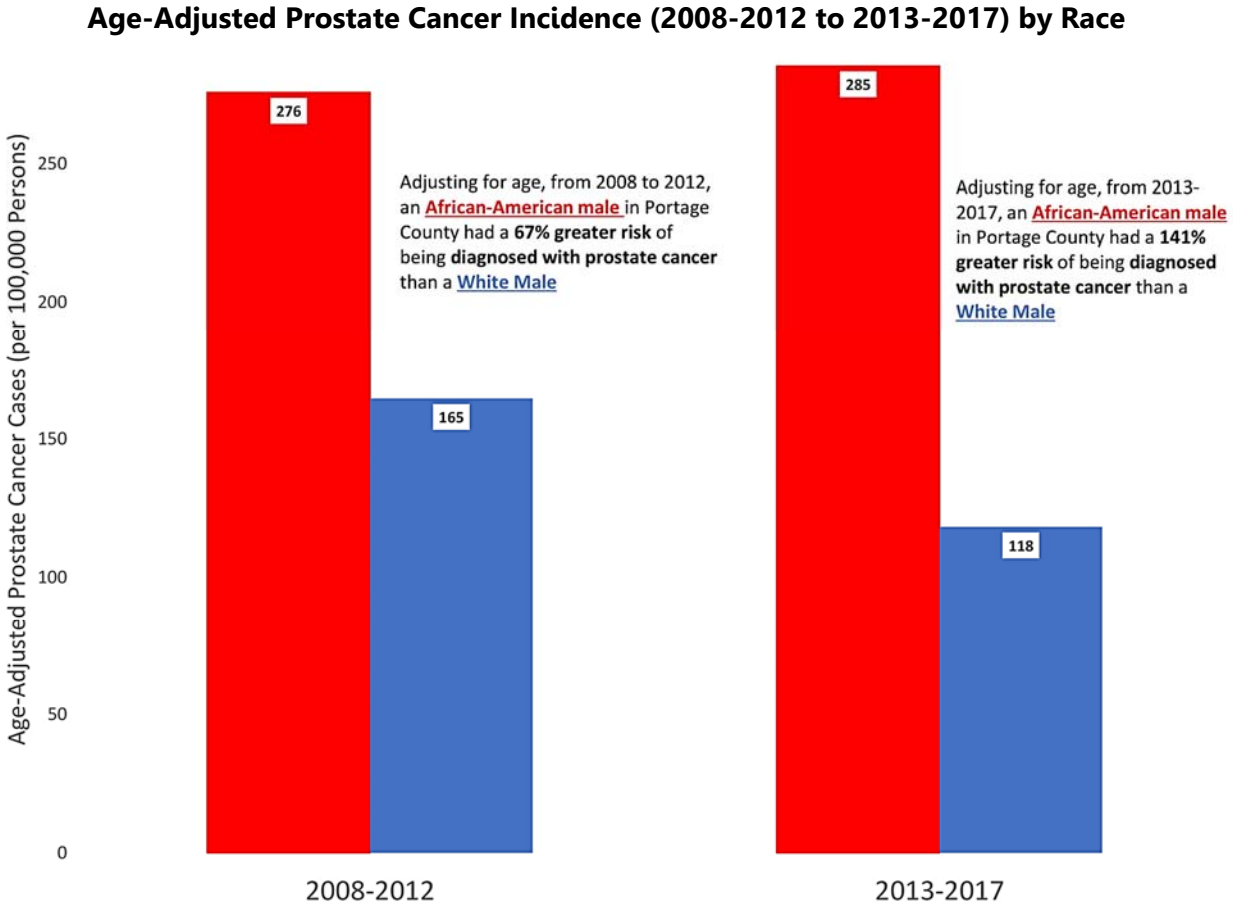
Prostate Cancer

- ODH statistics indicate that prostate cancer deaths accounted for 9% of all male cancer deaths from 2015-2017 in Portage County *(Source: Ohio Public Health Data Warehouse, 2015-2017).*

- About three-quarters (74%) of males age 50 and over had a PSA test at some time in their life, and 55% had one in the past year.



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

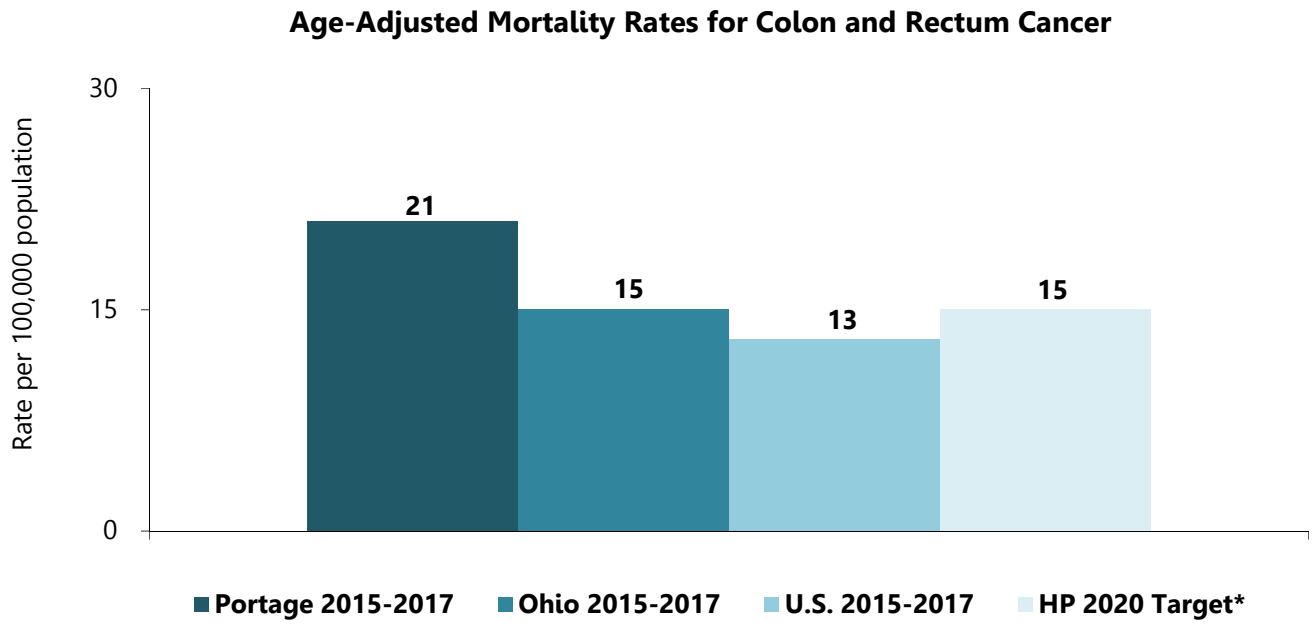


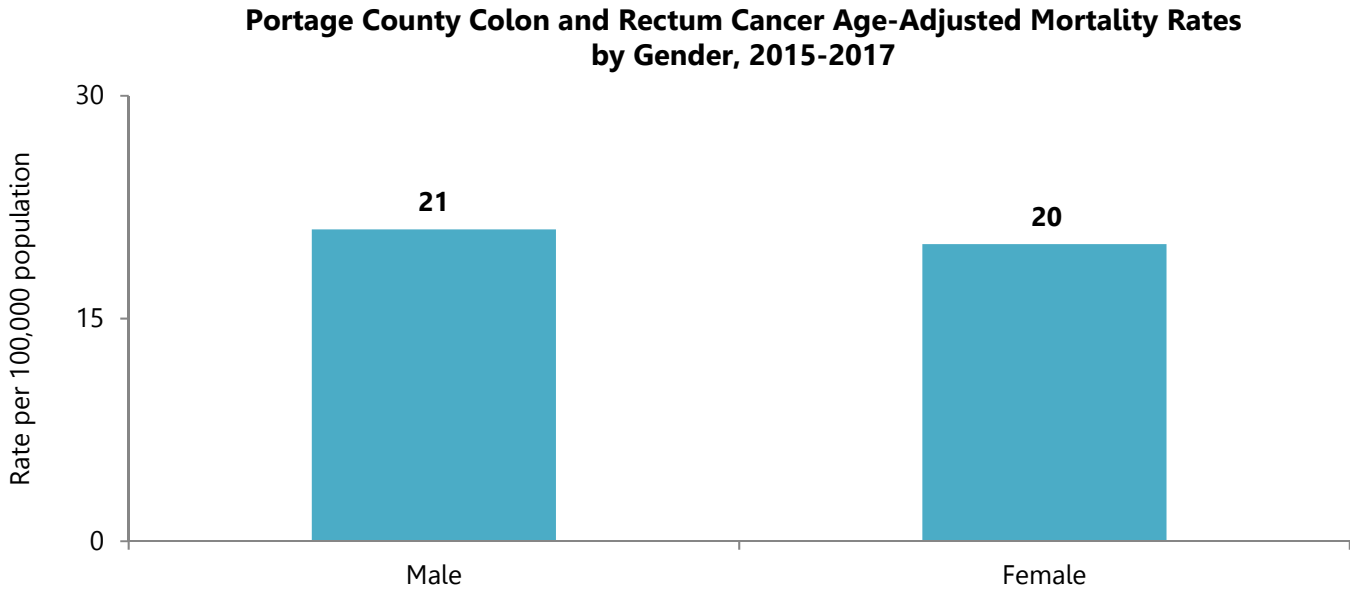
(Source: Ohio Public Information Warehouse 2008-2012 to 2013-2017 as compiled by the Portage County Health District)

Colon and Rectum Cancers

- ODH indicates that colon and rectum cancer deaths accounted for 11% of all Portage County cancer deaths from 2015-2017 *(Source: Ohio Public Health Data Warehouse, 2015-2017).*
- In the U.S., 90% of colon cancers occur in individuals over the age of 50. Therefore, the American Cancer Society suggests every person over the age of 50 have regular colon cancer screenings *(Source: American Cancer Society, Facts & Figures 2019).*
- Nearly half (48%) of adults ages 50 and older received a colonoscopy in the past 10 years.

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





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

Chronic Disease: Arthritis

Key Findings

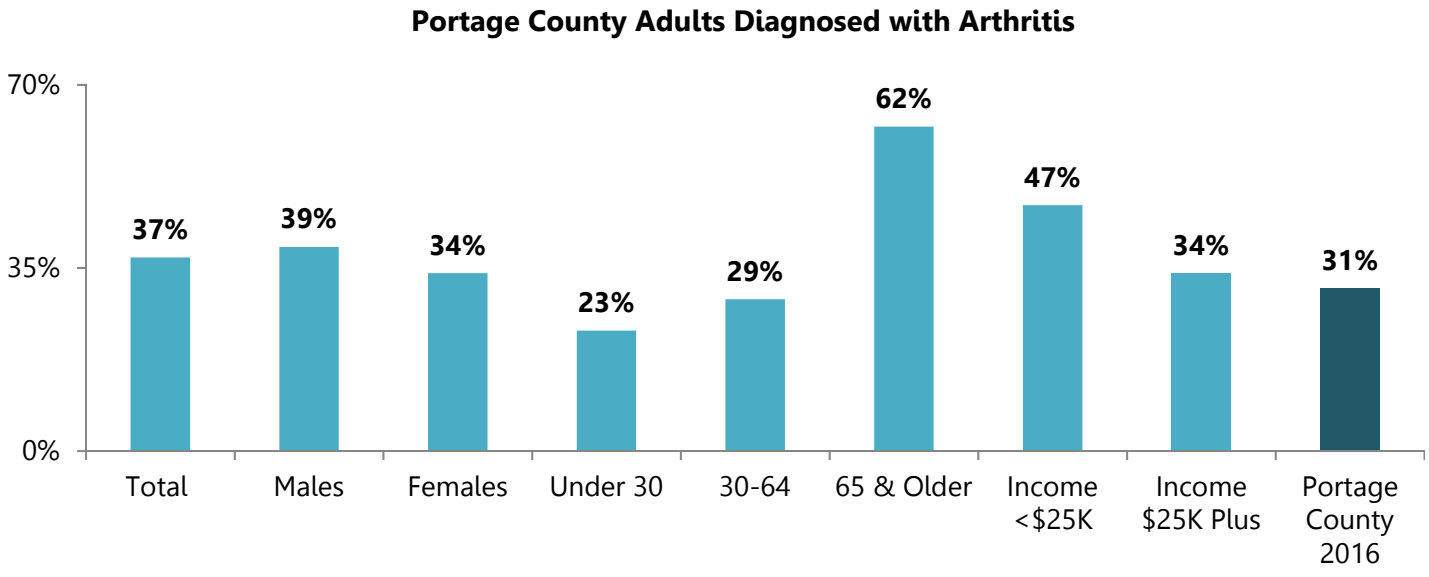
More than one-third (37%) of Portage County adults were diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

Arthritis

- Adults are at higher risk of developing arthritis if they are female, have genes associated with certain types of arthritis, have an occupation associated with arthritis, are overweight or obese, and/or have joint injuries or infections *(Source: CDC, Risk Factors, 2018).*
- More than one-third (37%) of Portage County adults were told by a health professional that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia, increasing to 62% of those over the age of 65.
- Eighty percent (80%) of adults diagnosed with arthritis were also overweight, obese, severely obese, or morbidly obese.
- In the U.S., 54 million adults (about 23%) report having doctor-diagnosed arthritis. Arthritis can limit the type of work they are able to do or keep them from working at all. In fact, 8 million working-age adults report that their ability to work is limited because of their arthritis. 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 Fast Facts, 2019).*

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Ever diagnosed with some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia	31%	37%	29%	25%

The following graph shows the percentage of Portage County adults who were diagnosed with some form of arthritis. An example of how to interpret the information includes: 37% of adults were diagnosed with some form of arthritis, including 39% of males and 34% of females.



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

Arthritis: Key Public Health Messages

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

Key self-management activities include the following:

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

- Be Active –Research has shown that physical activity decreases pain, improves function, and delays disability. Make sure you get at least 150 minutes of moderate physical activity at least 5 days a week.

- Watch your weight –The prevalence of arthritis increases with increasing weight. Research suggests that maintaining a healthy weight reduces the risk of developing arthritis and may decrease disease progression. For every pound lost, there is a 4 pound reduction in the load exerted on the knee.

- See your doctor – Early diagnosis and professionally guided management is critical to maintaining a good quality of life, particularly for adults with inflammatory arthritis. Essential disease modifying drugs are beneficial in rheumatoid arthritis and other inflammatory arthritis conditions and are available only by prescription.

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

(Source: Centers for Disease Control and Prevention, Arthritis: Key Public Health Messages, Updated on 2/5/19)

Chronic Disease: Asthma

Key Findings

In 2019, 15% of adults had been diagnosed with asthma.

Asthma and Other Respiratory Disease

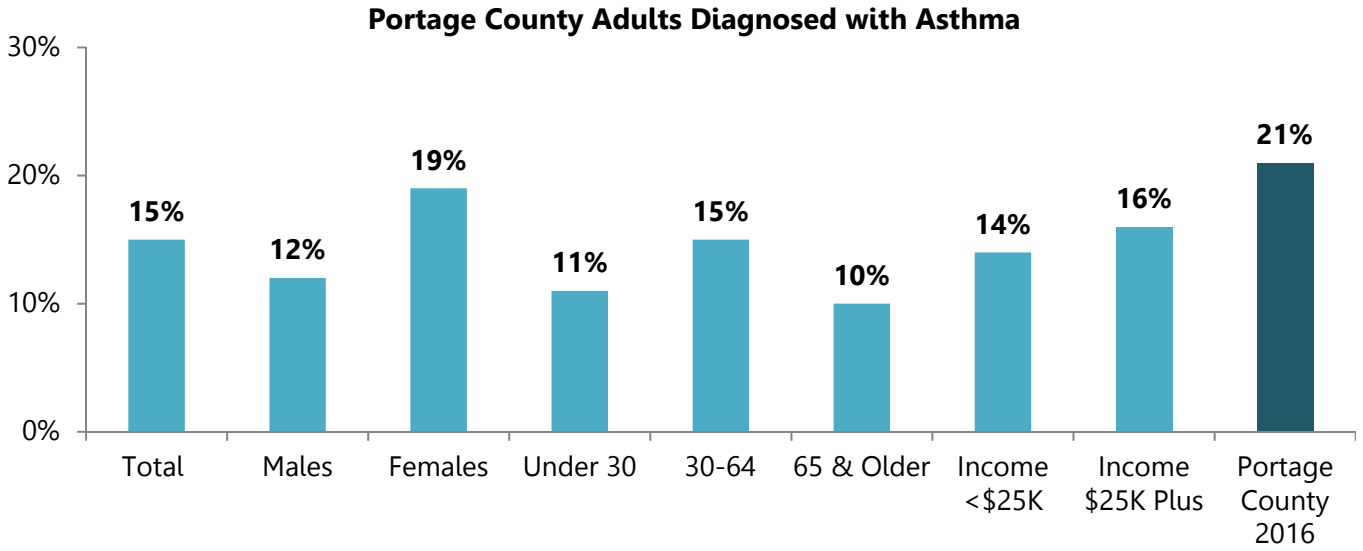
- In 2019, 15% of Portage County adults had been diagnosed with asthma, increasing to 19% of females.

18,670 adults were diagnosed with asthma.

- In the past year, adults with asthma visited the emergency room or urgent care due to their asthma one time (3%), two times (2%), three or more times (2%) and no times (93%).
- Eighty-one percent (81%) of those diagnosed with asthma were overweight, obese, severely obese, or morbidly obese, and 10% were current smokers.
- There are several important factors that may trigger an asthma attack. Some of these triggers are tobacco smoke, dust mites, outdoor air pollution, cockroach allergens, pets, mold, smoke from burning wood or grass, infections linked to the flu, colds, and respiratory viruses *(Source: CDC, Asthma, 2017).*
- Chronic lower respiratory disease was the fourth leading cause of death in Portage County and the 4th leading cause of death in Ohio from 2015-2017. *(Source: Ohio Public Health Data Warehouse, 2015-2017).*

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Had ever been told they have asthma	21%	15%	14%	14%

The following graph shows the percentage of Portage County adults who were diagnosed with asthma. An example of how to interpret the information includes: 15% of adults were diagnosed with asthma, including 12% of males and 19% of females.



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

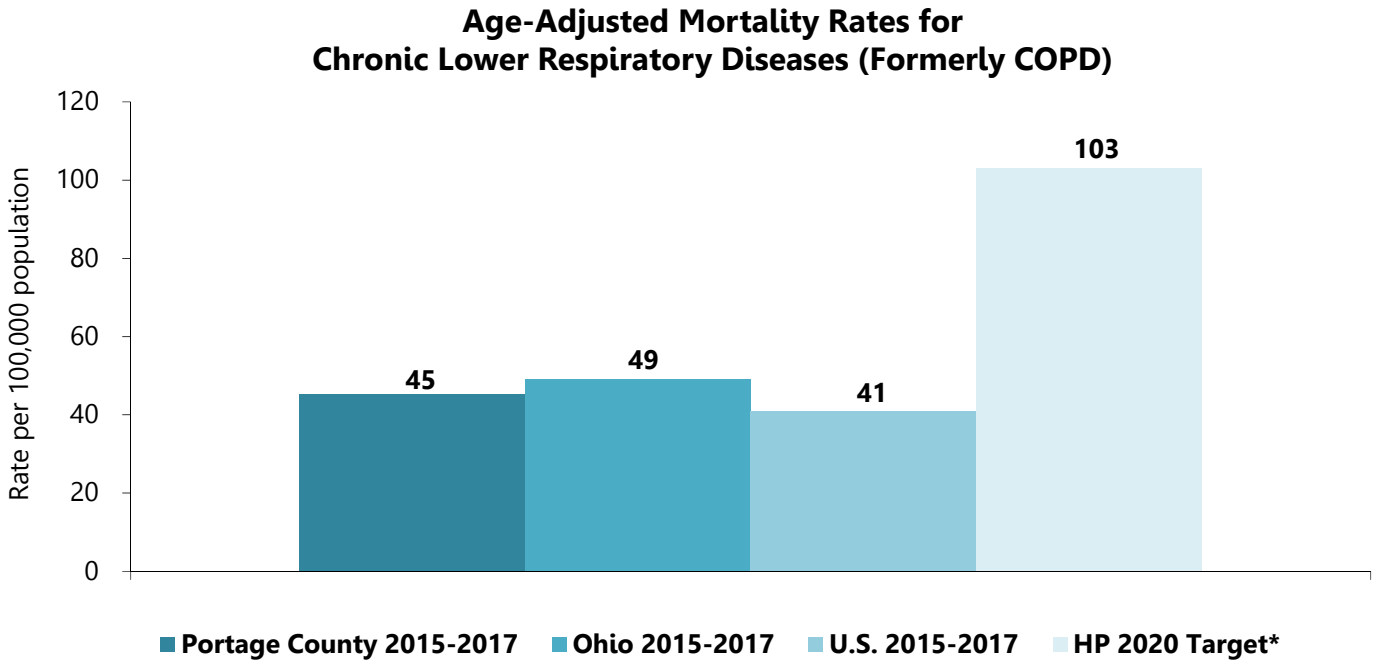
COPD and Smoking

- Chronic obstructive pulmonary disease (COPD) refers to a group of diseases that cause airflow blockage and breathing-related problems. COPD includes emphysema, chronic bronchitis, and in some cases, asthma.
- COPD is usually caused by smoking. Smoking accounts for as many as 8 out of 10 COPD-related deaths nationwide. However, as many as 1 out of 4 Americans with COPD never smoked cigarettes.
- The best way to prevent COPD is to never start smoking, and if you smoke, quit. Additionally, stay away from secondhand smoke, which is smoke from burning tobacco products, such as cigarettes, cigars, or pipes, as well as smoke that has been exhaled, or breathed out, by a person smoking.

(Source: Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2018.)

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

- From 2015-2017, Portage County's age-adjusted mortality rate for Chronic Lower Respiratory Disease was lower than the Ohio and the Healthy People 2020 target objective, but higher than the U.S. rate.



(Sources: Healthy People 2020, Ohio Public Health Data Warehouse 2015-2017, CDC Wonder 2015-2017)
**Healthy People 2020's target rate and the U.S. rate is for adults aged 45 years and older.*

Chronic Disease: Diabetes

Key Findings

Fourteen percent (14%) of Portage County adults had been diagnosed with diabetes.

Diabetes

- Fourteen percent (14%) of Portage County adults had been diagnosed with diabetes (not pregnancy-related), increasing to 23% of those over the age of 65.
- Four percent (4%) of women had been diagnosed with diabetes during pregnancy.
- Seven percent (7%) of adults had been diagnosed with pre-diabetes, increasing to 12% of those over the age of 65.
- A test for "A1C" measures the average level of blood sugar over the past three months. Portage County adults had their A1C checked by a doctor or health care provider in the past year: one time (28%), two times (13%), three or more times (6%) and none (41%). Twelve percent (12%) of adults did not know if their A1C was checked.

Diabetes by the Numbers

- Diabetes is the seventh leading cause of death in the US.
- Diabetes is the number 1 cause of kidney failure, lower-limb amputations, and adult-onset blindness.
- In the last 20 years, the number of adults diagnosed with diabetes has more than tripled as the American population has aged and become more overweight or obese.

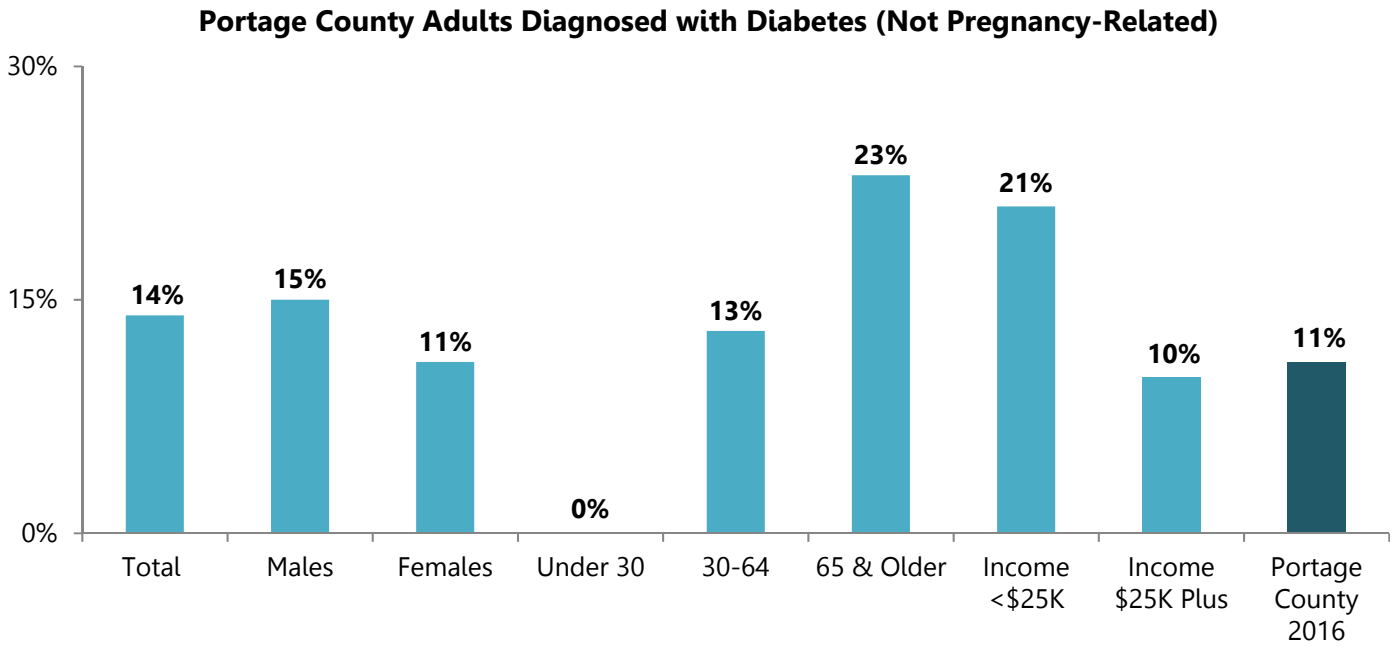
(Source: CDC, Diabetes by the Numbers, Updated on July 18, 2017)

17,426 adults had diabetes.

- Of those diagnosed with diabetes:
  - 81% were overweight, obese, severely obese, or morbidly obese
  - 71% had high blood pressure
  - 58% had high blood cholesterol
  - 16% had angina or coronary heart disease
  - 10% were current smokers

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S. 2017
Ever been told by a doctor they have diabetes (not pregnancy-related)	11%	14%	11%	11%

The following graph shows the percentage of Portage County adults who were diagnosed with diabetes. An example of how to interpret the information includes: 14% of adults were diagnosed with diabetes, including 15% of males and 11% of females..

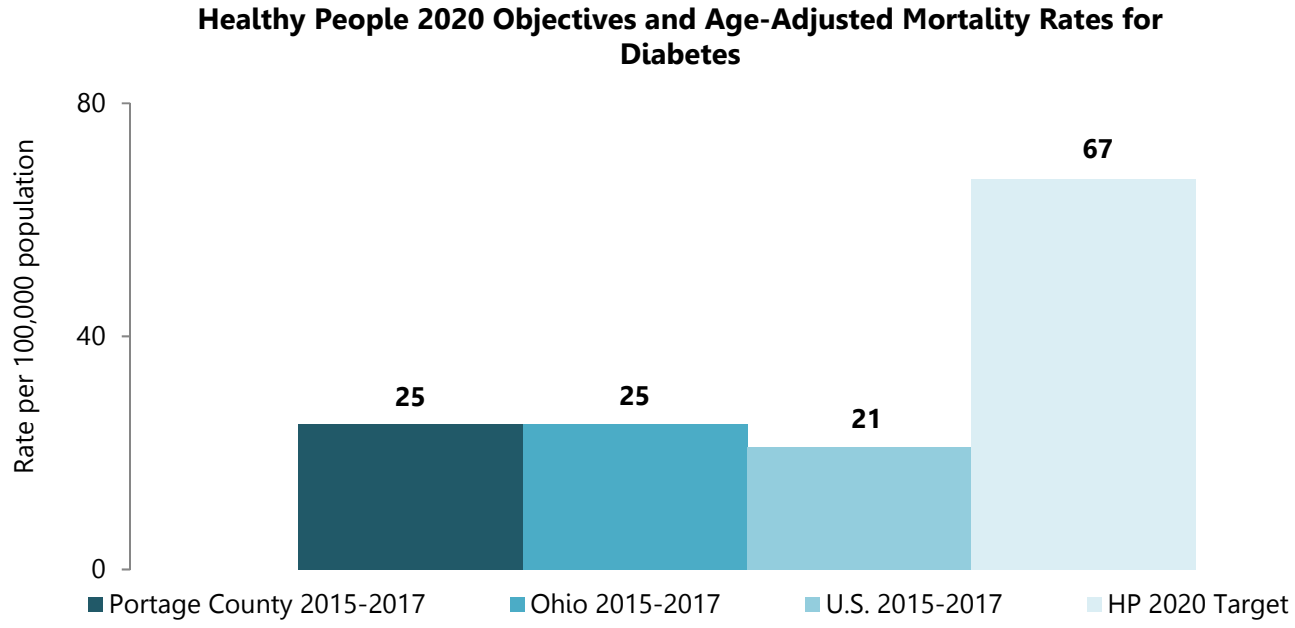


Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Age-Adjusted Mortality Rates for Diabetes

The following graph shows the age-adjusted mortality rates for diabetes for Portage County, Ohio, and U.S. residents with comparison to the Healthy People 2020 target objective.

- From 2015-2017, Portage County's age-adjusted diabetes mortality rate was equal to Ohio, higher than the U.S., and lower than the Healthy People 2020 target objective.



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

Gestational Diabetes

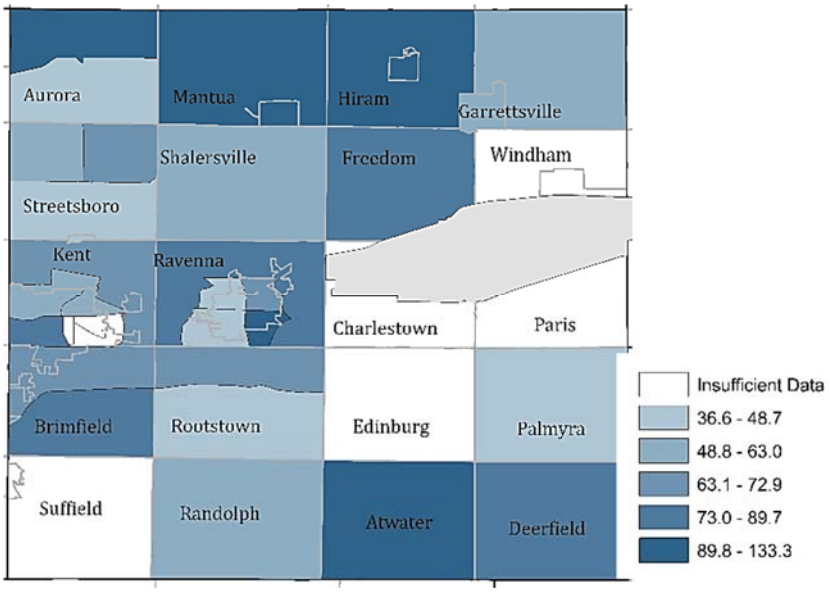
The following map shows the rate of gestational diabetes (per 1,000 live births) by census tract from 2016-2018.

Rate of Gestational Diabetes (per 1,000 Live Births) by Census Tract, 2016-2018

Highest
Atwater Twp.- 133.3
Hiram Twp.- 125.0
Mantua Twp.- 107.1

Lowest
South Aurora 25.3
Southwestern Ravenna 36.6
Northwestern Ravenna 38.2

County: 63.3



(Source: Ohio Public Information Warehouse, 2016-2018, as compiled by the Portage County Health District)

Chronic Disease: Quality of Life

Key Findings

In 2019, 23% of Portage County adults were limited in some way because of a physical, mental or emotional problem.

Impairments and Health Problems

- Almost one-quarter (23%) of Portage County adults were limited in some way because of a physical, mental or emotional problem, increasing to 44% of those with incomes less than $25,000.

28,628 adults were limited in some way.

- Among those who were limited in some way, the following most limiting problems or impairments were reported:
  - Stress, depression, anxiety, or emotional problems (37%)
  - Back or neck problems (36%)
  - Arthritis/rheumatism (34%)
  - Sleep problems (27%)
  - Chronic pain (26%)
  - Walking problems (21%)
  - Chronic illness (21%)
  - Fractures, bone/joint injuries (19%)
  - Fitness level (17%)
  - Mental health illness/disorder (16%)
  - Eye/vision problems (10%)
  - Lung/breathing problems (7%)
  - Hearing problems (7%)
  - Memory loss (7%)
  - Learning disability (4%)
  - Dental problems (4%)
  - Drug addiction (3%)
  - Confusion (3%)
  - Substance dependency (3%)
  - Other impairments/problems (18%)

Adult Comparisons	Portage County 2016	Portage County 2019	Ohio 2017	U.S 2017
Limited in some way because of physical, mental, or emotional problem	21%	23%	21%*	21%*

**2015 BRFSS*

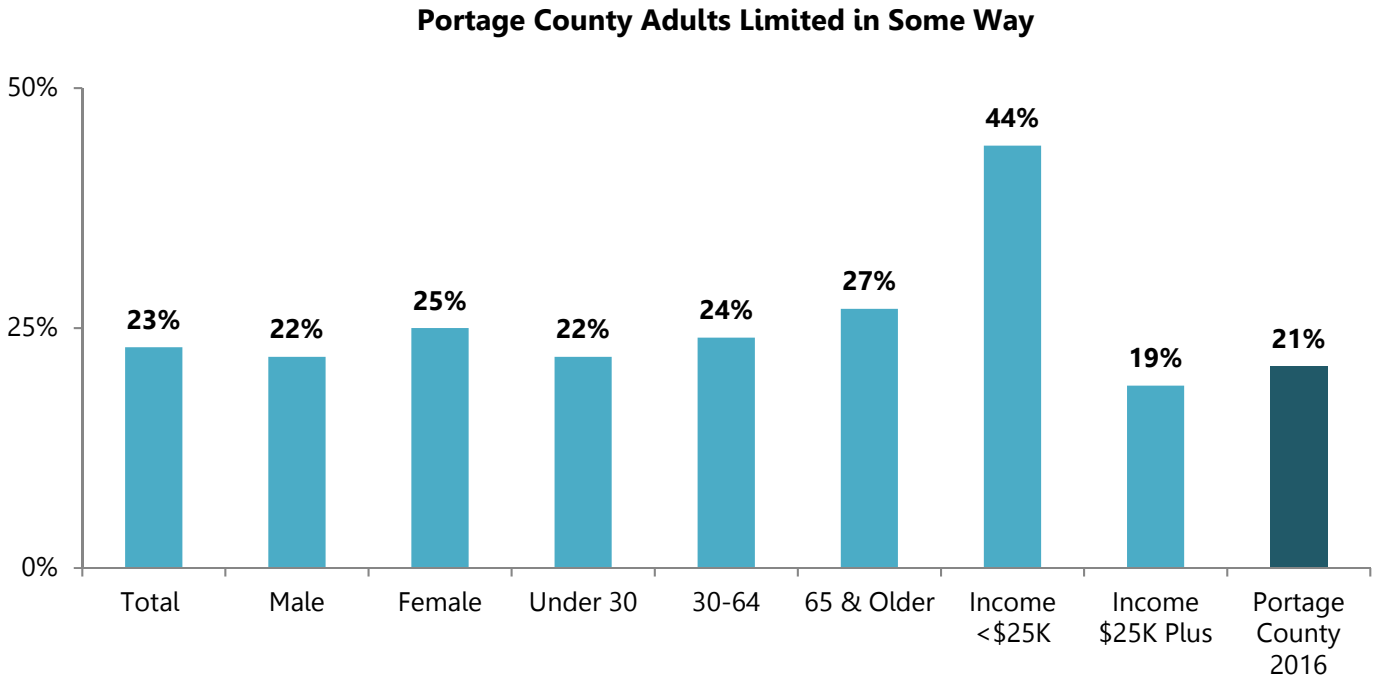
Healthy People 2020

Arthritis, Osteoporosis, and Chronic Back Conditions (AOCBC)

Objective	Portage County 2019	Healthy People 2020 Target
AOCBC-2: Reduce the proportion of adults with doctor-diagnosed arthritis who experience a limitation in activity due to arthritis or joint symptoms	34%	36%

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

The following graph shows the percentage of Portage County adults who were limited in some way. An example of how to interpret the information shown in the graph includes: 23% of Portage County adults were limited in some way, including 22% of males and 25% of females.



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

Social Conditions: Social Determinants of Health

Key Findings

In the past month, 10% of Portage County adults reported needing help meeting general daily needs such as food, clothes, shelter, or paying for utility bills. About one in six (16%) adults experienced four or more Adverse Childhood Experiences (ACEs). Almost half (47%) of Portage County adults kept a firearm in or around their home. Three percent (3%) of adults reported they were unlocked and loaded.

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, Social Determinants of Health, Updated on 7/09/18)

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

Demographic Information

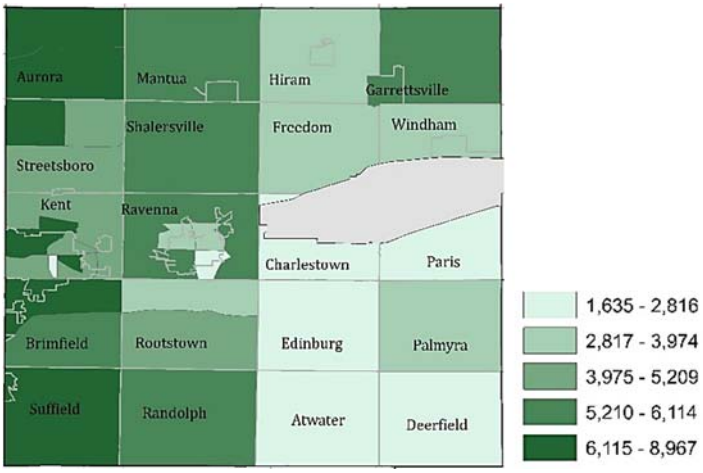
- The maps below show the total population by census tract, percent of population by block tract, and percent of population ages 65+ by block tract. For more demographic information, see Appendix V and VI.

Total Population by Census Tract

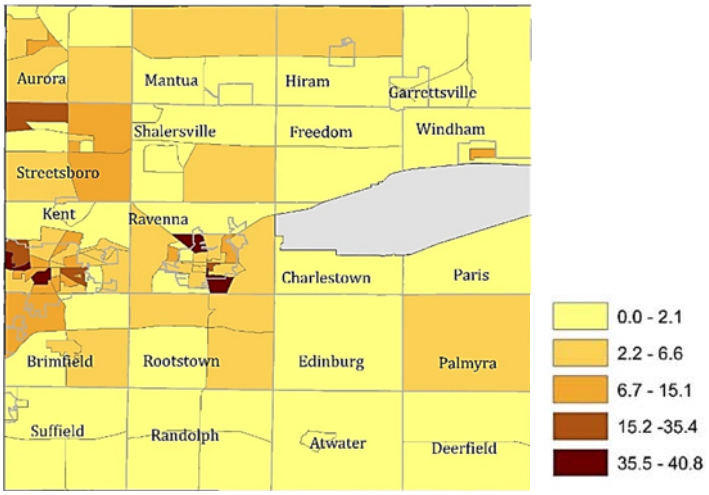
<u>Most populated</u>
North Aurora- 8,967 people
Kent, Northwest - 8,220
Suffield Twp.- 7,177

<u>Least populated</u>
Paris Twp.- 1,635
Charlestown Twp.- 1,788
Kent, West Off-Campus- 1,974

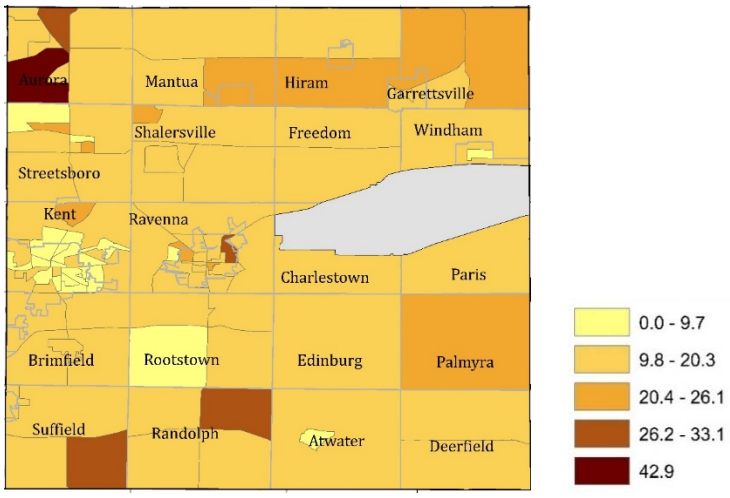
County: 162,080



Percent of Population, African American, Block Tracts



Percent of Population, Age 65+, Block Tracts



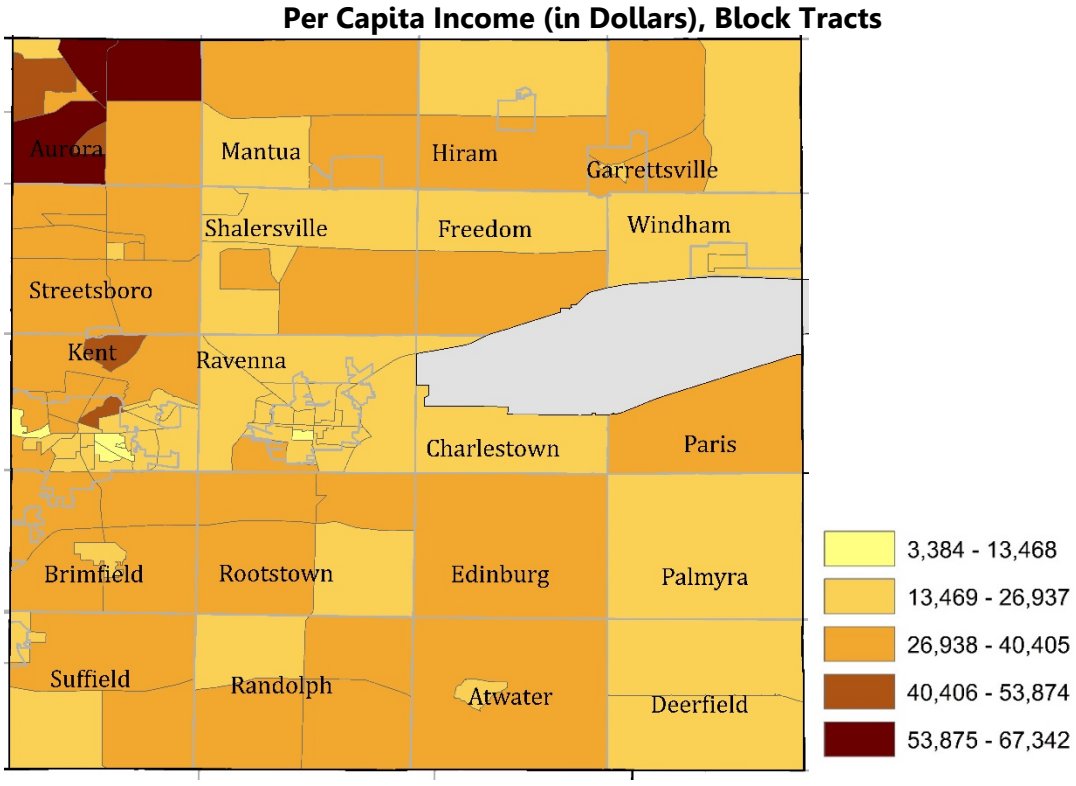
(Source for maps: American Community Survey (ACS) 2013-2017 5-Year Estimates. Provided by Portage County Health District)

Economic Stability

- The median household income in Portage County was $58,816. The U.S. Census Bureau reports median income levels of $52,407 for Ohio and $57,652 for the U.S. *(Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-year Estimates).*
- Fifteen percent (15%) of all Portage County residents were living in poverty*(Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-year Estimates).*
- The unemployment rate for Portage County was 3.3 as of May 2019 *(Source: Bureau of Labor Statistics, Local Area Unemployment Statistics).*
- There were 68,623 housing units. The owner-occupied housing unit rate was 69%. Rent in Portage County cost an average of $824 per month *(Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-year Estimates).*
- In the past month, 10% of Portage County adults reported needing help meeting general daily needs such as food, clothes, shelter, or paying for utility bills.
- Six percent (6%) of adults reported being concerned about not having enough food for them or their family in the past month.
- Three percent (3%) of Portage County adults did not have enough food, because they could not afford food, on one or more days in the past week.

12,447 adults needed help meeting their general daily needs such as food, clothing, shelter or paying utility bills.

The following map shows per capita income (in dollars) by block tracts.



(Source: American Community Survey (ACS) 2013-2017 5-Year Estimates. Provided by Portage County Health District)

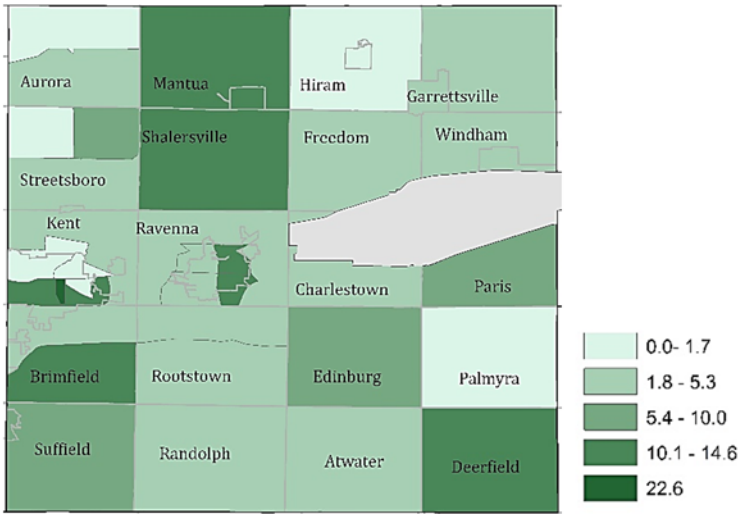
The following maps show:

- The proportion of population (65+) living below the federal poverty line by census tract.

Proportion of Population (65+) Living Below Federal Poverty Line, Census Tract

Highest
Kent, West Off-Campus 22.6%
South Brimfield 14.6%
Shalersville Twp.- 13.7%

County: 5.3%



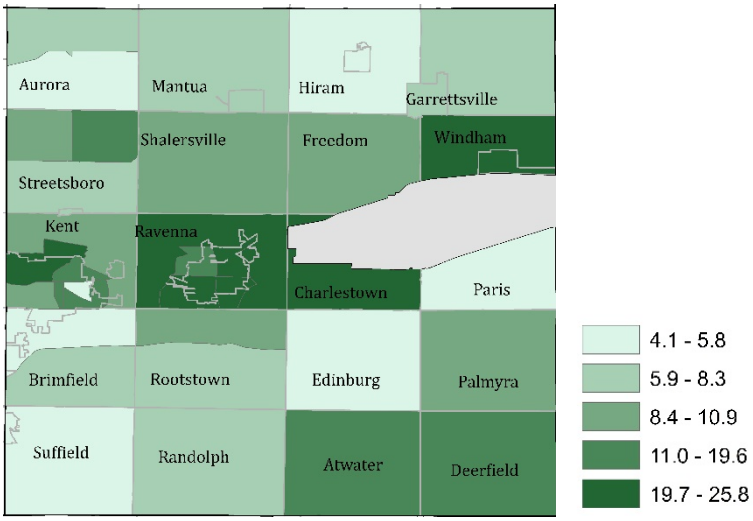
- The percent of households receiving food stamp/SNAP benefits in the past 12 months by census tract.

Percent of Households Receiving Food Stamp/SNAP Benefits in the past 12 months, Census Tract

Highest
Southeast Ravenna- 25.8%
Windham Twp.- 24.7%
Southwest Ravenna- 22.7%

Lowest
Hiram Twp.- 4.1%
South Aurora- 4.3%
Kent, KSU -4.7%

County: 11.6%



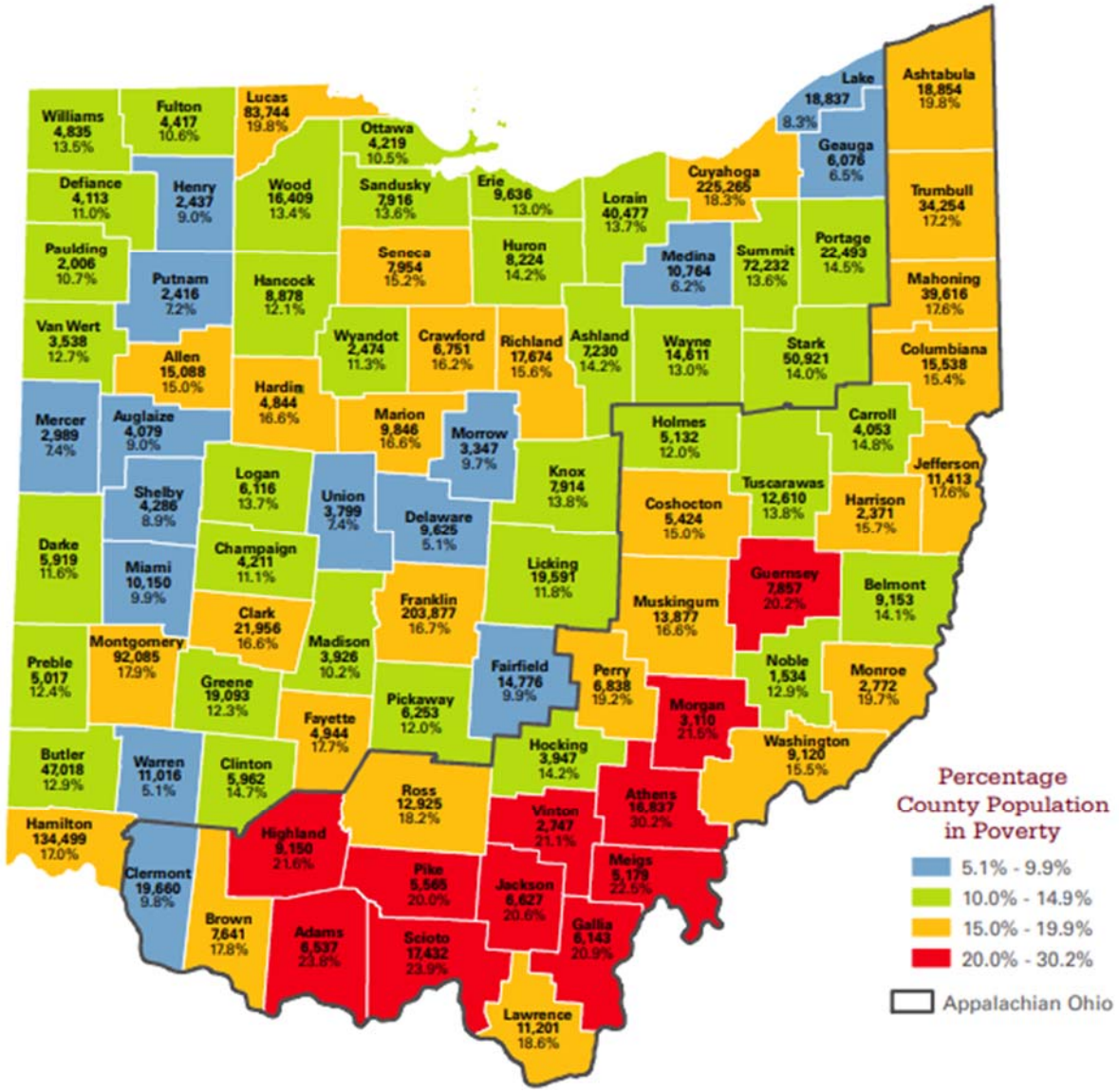
(Source for maps: American Community Survey (ACS) 2013-2017 5-Year Estimates. Provided by Portage County Health District)

Estimated Poverty Rates

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

- The 2013-2017 American Community Survey 5-year estimates that approximately 1,639,890 Ohio residents, or 14.9% of the population, were in poverty.
- From 2013-2017, 14.5% of Portage County residents were in poverty.

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



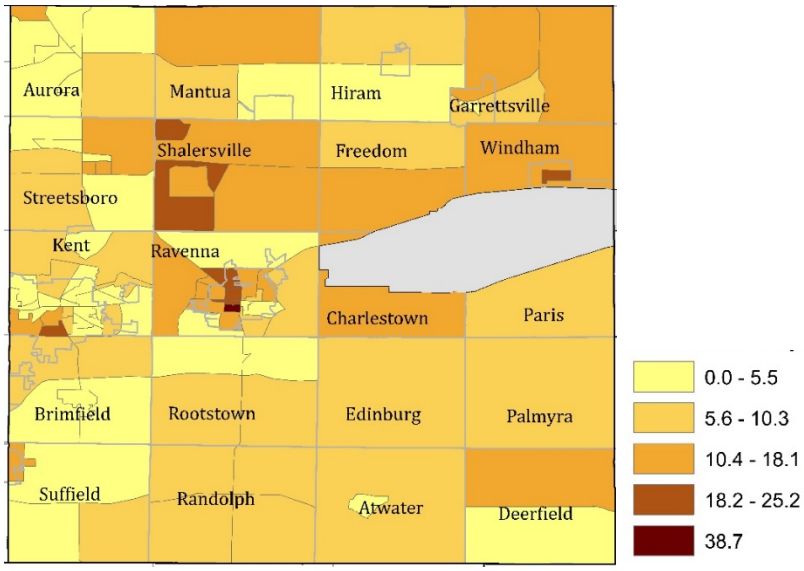
(Source: 2013-2017 American Community Survey 5-year estimates, as compiled by Ohio Development Services Agency, Office of Research, Ohio Poverty Report, February 2019)

Education

- Ninety percent (92%) of Portage County adults 25 years and over had a high school diploma or higher *(Source: U.S. Census Bureau, 2013-2017American Community Survey 5-year Estimates).*
- Sixteen percent (27%) of Portage County adults 25 years and over had at least a bachelor's degree or higher *(Source: U.S. Census Bureau, 2013-2017American Community Survey 5-year Estimates).*

The following maps shows the percent of population with no high school education (age 25 and older), by block tracts.

Percent of Population, No High School Education (Age 25 and older), Block Tracts



(Source: American Community Survey (ACS) 2013-2017 5-Year Estimates. Provided by Portage County Health District)

Social and Community Context

- Portage County adults were abused in the past year including physical, sexual, emotional, or financial and verbal abuse. They were abused by the following: a spouse or partner (1%), another person outside the home (1%), someone else (1%), a child (<1%), and a parent (<1%). Ninety-eight percent (98%) of adults were not abused in the past year.
- Portage County adults did the following while driving:
  - Wore a seatbelt (90%)
  - Ate (40%)
  - Talked on hands-free cell phone (41%)
  - Talked on hand-held cell phone (21%)
  - Texted (15%)
  - Used internet on their cell phone (9%)
  - Was under the influence of alcohol (7%)
  - Read (3%)
  - Was under the influence of recreational drugs (3%)
  - Was under the influence of prescription drugs (2%)
  - Other activities (such as applying makeup, shaving, etc.) (3%)
- Forty percent (40%) of adults had two or more distractions while driving.

- Adverse Childhood Experiences (ACEs) are stressful or traumatic events, including abuse and neglect. They also include household dysfunction such as witnessed domestic violence or growing up with family members who have substance use disorders. ACEs are strongly related to the development of depression, alcoholism and alcohol abuse; depression; illicit drug use; chronic obstructive pulmonary disease; suicide attempts; and many other health problems throughout a person's lifespan *(SAMHA, Adverse Childhood Experiences, Updated on 7/2/2019).*

- Portage County adults experienced the following Adverse Childhood Experiences (ACEs):
  - Lived with someone who was a problem drinker or alcoholic (25%)
  - A parent or adult in their home swore at, insulted, or put them down (23%)
  - Their parents became separated or were divorced (22%)
  - Lived with someone who was depressed, mentally ill, or suicidal (20%)
  - Someone at least 5 years older than them or an adult touched them sexually (11%)
  - A parent or adult in their home hit, beat, kicked, or physically hurt them (10%)
  - Their parents or adults in their home slapped, hit, kicked, punched, or beat each other up (8%)
  - Someone at least 5 years older than them or an adult tried to make them touch them sexually (8%)
  - Lived with someone who used illegal stress drugs, or who abused prescription medications (7%)
  - Lived with someone who served time or was sentenced to serve time in prison, jail or correctional facility (5%)
  - Someone at least 5 years older than them or an adult forced them to have sex (3%)
  - They didn't have enough to eat, had to wear dirty clothing, and had no one to protect them (3%)
  - Their parents were not married (3%)

- Nearly one in six (16%) of adults experienced four or more Adverse Childhood Experiences (ACEs).

19,915 adults experienced four or more ACEs.

The table below indicates correlations between those who experienced 4 or more ACEs in their lifetime and participating in risky behaviors, as well as other experiences. An example of how to interpret the information includes: 85% of those who experienced 4 or more ACEs were current drinkers, compared to 77% of those who did not experience any ACEs.

Behaviors of Portage 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
Current drinker (had at least one alcoholic beverage in the past 30 days)	85%	77%
Overweight, obese, severely obese, or morbidly obese by BMI	85%	69%
Depressed (felt sad or hopeless for two or more weeks in a row)	50%	7%
Binge drinker (drank five or more drinks for males and 4 or more for females on an occasion in the past 30 days)	40%	26%
Current smoker (currently smoke on some or all days)	33%	10%
Seriously considered attempting suicide (in the past 12 months)	33%	0%
Attempted suicide (in the past 12 months)	20%	3%
Had an annual household income less than $25,000	12%	14%

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

Health and Health Care

- In the past year, 6% of adults were uninsured. See the Healthcare Coverage and Access and Utilization sections for more information.

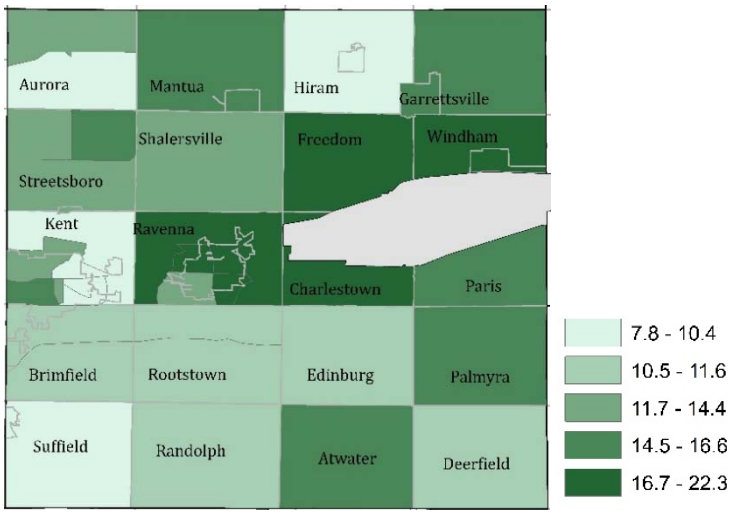
The following maps shows the percent of population with disability.

Percent of Population with Disability

Highest
Northeast Ravenna- 22.3%
Ravenna Twp.- 22.0%
Charlestown Twp.- 21.3%

Lowest
South Aurora -7.8%
Kent, KSU - 7.9%
Hiram Twp. - 9.6%

County: 13.2%



(Source: American Community Survey (ACS) 2013-2017 5-Year Estimates. Provided by Portage County Health District)

Neighborhood and Built Environment

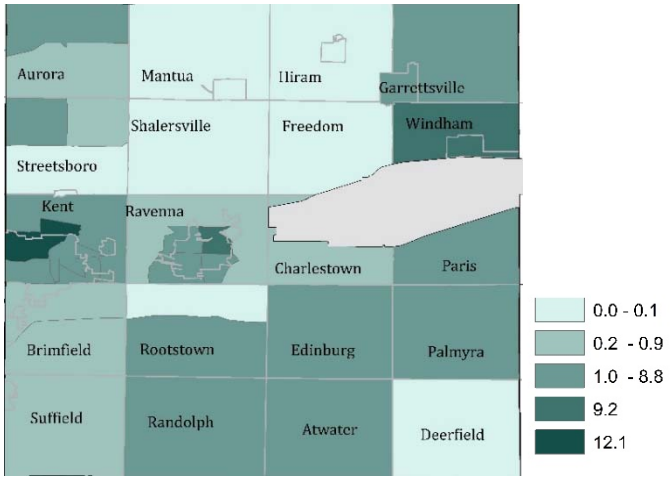
- Portage County adults had the following transportation issues:
  - No transportation issue (91%)
  - No car (3%)
  - Did not feel safe to drive (3%)
  - Could not afford gas (3%)
  - Other car issues/expenses (2%)
  - Suspended/no driver's license (2%)
  - Disabled (2%)
  - Cost of public or private transportation (2%)
  - Limited public transportation available or accessible (1%)
  - No car insurance (1%)
  - No public transportation available or accessible (1%)
- Five percent (5%) of adults had 2 or more transportation issues.

The following maps shows the proportion of households with two or more people with no vehicle.

Proportion of households with 2 or more people with no vehicle

Highest
Kent, Northwest- 12.1%
Northeast Ravenna- 9.2%
Windham Twp.- 9.2%

County: 2.8%

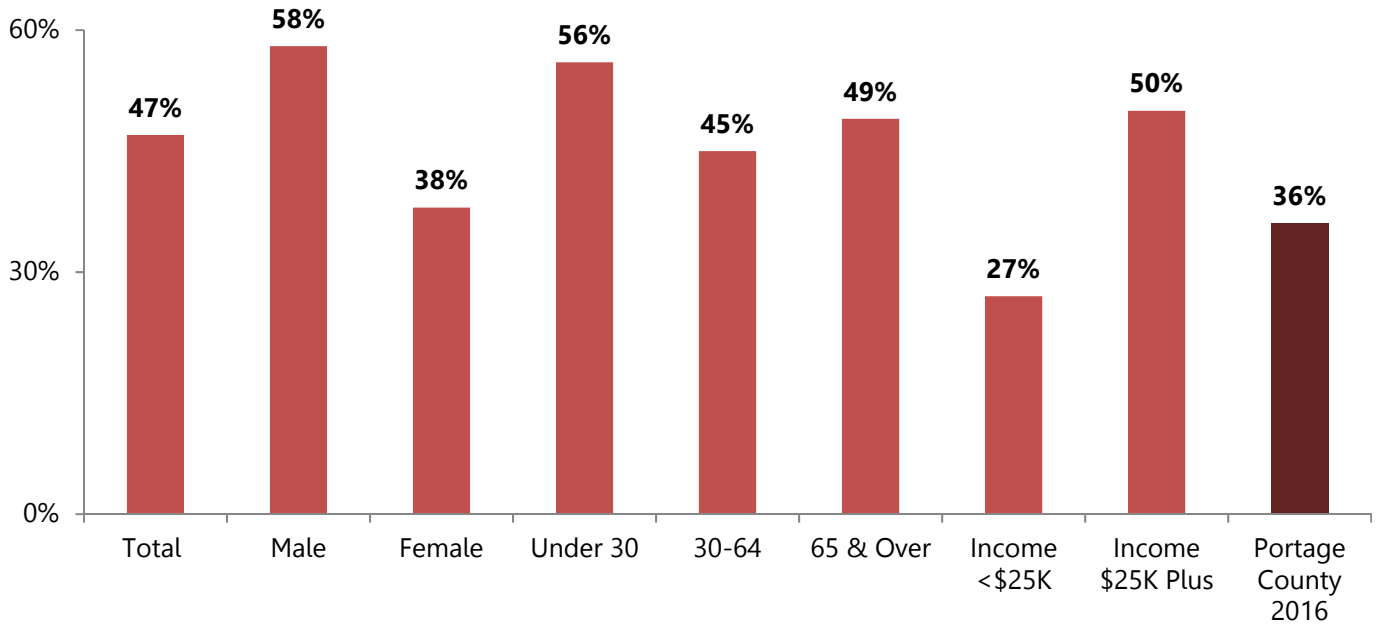


(Source: American Community Survey (ACS) 2013-2017 5-Year Estimates. Provided by Portage County Health District)

- Almost half (47%) of Portage County adults kept a firearm in or around their home. Three percent (3%) of adults reported they were unlocked and loaded.

The following graph shows the percentage of Portage County adults that have a firearm in or around the home. An example of how to interpret the information shown on the graph includes: 47% of all Portage County adults have a firearm in or around the home, including 58% of males and 38% of females

Portage County Adults With a Firearm in the Home



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

Victims of Gun Violence in America

- More than 124,000 people are shot in murders, assaults, suicides & suicide attempts, accidents or by police intervention in America in an average year.
  - 35,141 people die from gun violence and 89,620 people survive gun injuries.
- Every day, an average of 342 people is shot in America. Of those 342 people, 96 people die and 246 are shot, but survive.
  - Of the 342 people who are shot every day, an average of 47 are children and teens.
  - Of the 96 people who die, 34 are murdered, 59 are suicides, 1 die accidently and 1 with an unknown intent and 1 by legal intervention.
  - Of the 246 people who are shot but survive, 183 are from assault, 49 are shot accidently, 11 are suicide attempts, and 4 are legal interventions.
- Despite more than 90% of Americans across the political spectrum agreeing that a background check should be conducted for every gun sale, a least one in five (or 20%) of guns are sold without a background check.
- Approximately 1.7 million children live in homes with unlocked, loaded guns, leading to tragic accidental, unintentional or self-inflicted shootings, particularly of youth.
- Two out of three (66%) of hate crimes nationally are never reported to law enforcement

(Source: Brady Campaign and Brady Center to Prevent Gun Violence, August 23, 2018)

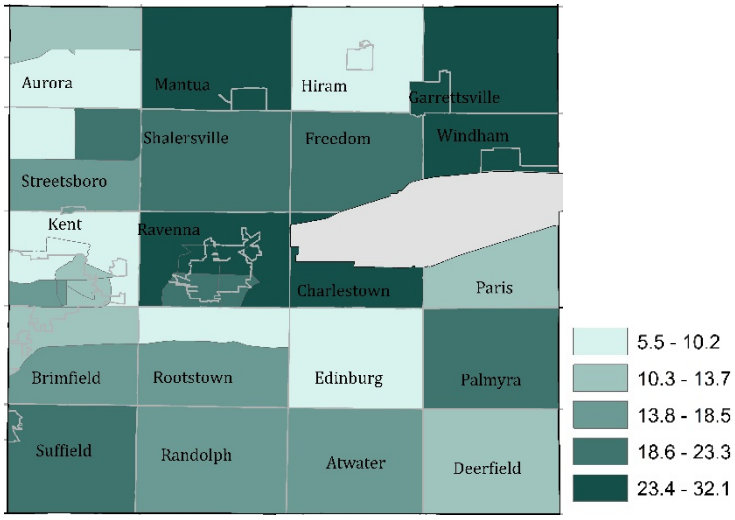
The following map shows the proportion of households with no household internet.

Proportion of Households with No Household Internet

Highest
Northeast Ravenna- 32.1%
Mantua Twp.- 27.9%
Northwest Ravenna- 26.5%

Lowest
Hiram Twp.- 5.5%
Northwest Streetsboro- 6.6%
Edinburg Twp.- 6.9%

County: 16.6%

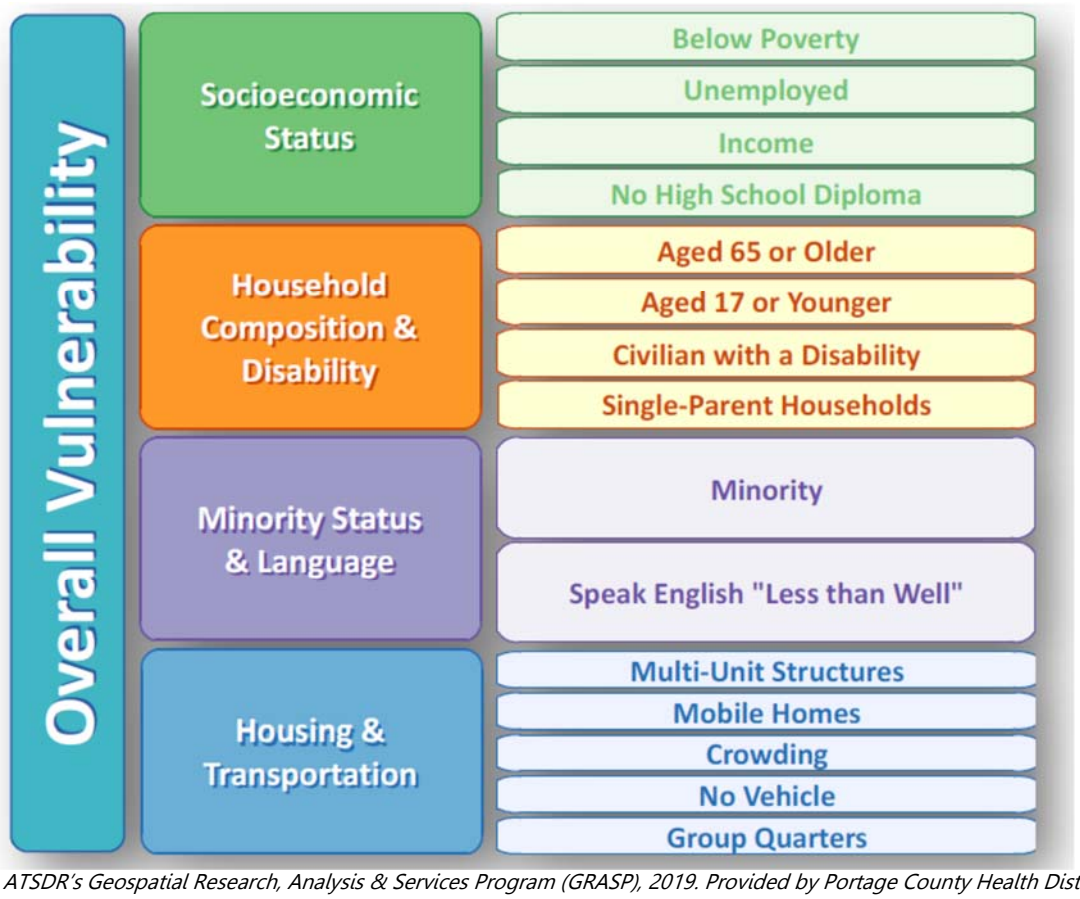


(Source: American Community Survey (ACS) 2013-2017 5-Year Estimates. Provided by Portage County Health District)

Portage County Social Vulnerability

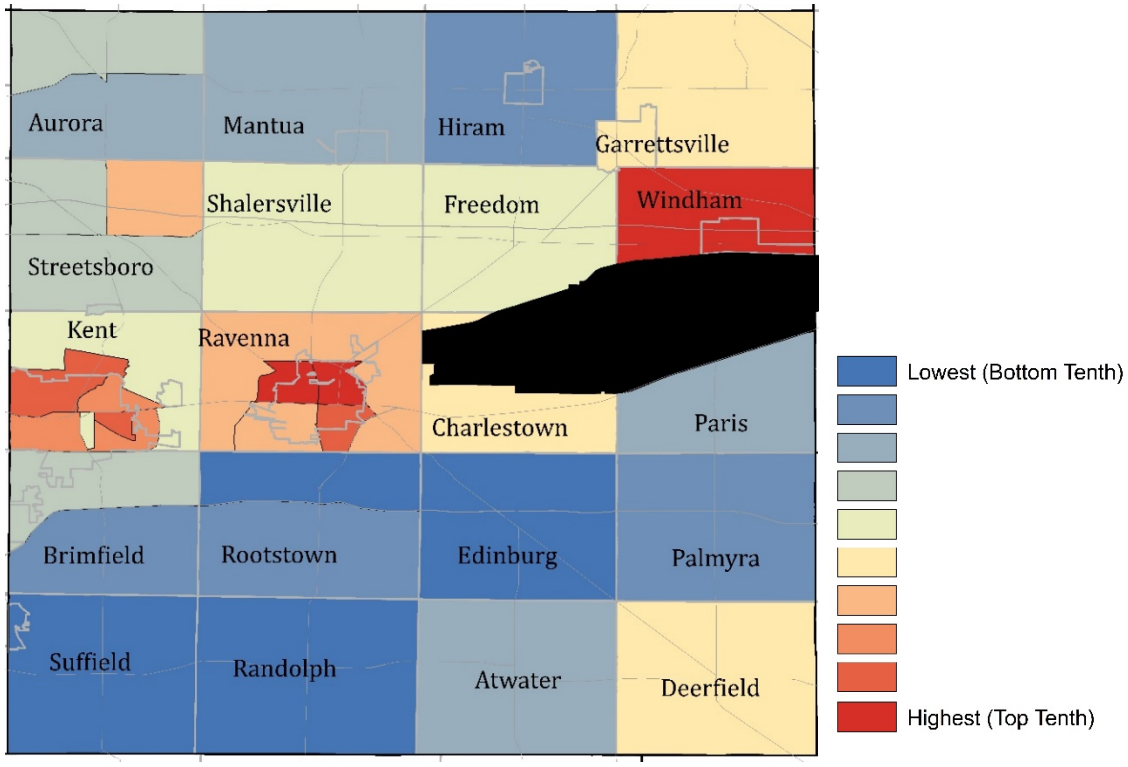
ATSDR's Geospatial Research, Analysis & Services Program (GRASP) created the Social Vulnerability Index (SVI) indicates the relative vulnerability of every U.S. Census tract. The SVI ranks the tracts on 15 social factors, including unemployment, minority status, and disability, and further groups them into four related themes. Tracts receive a ranking for each Census variable and for each of the four themes, as well as an overall ranking.

The score uses data collected by the American Community Survey (2016) and is broken down into four categories:

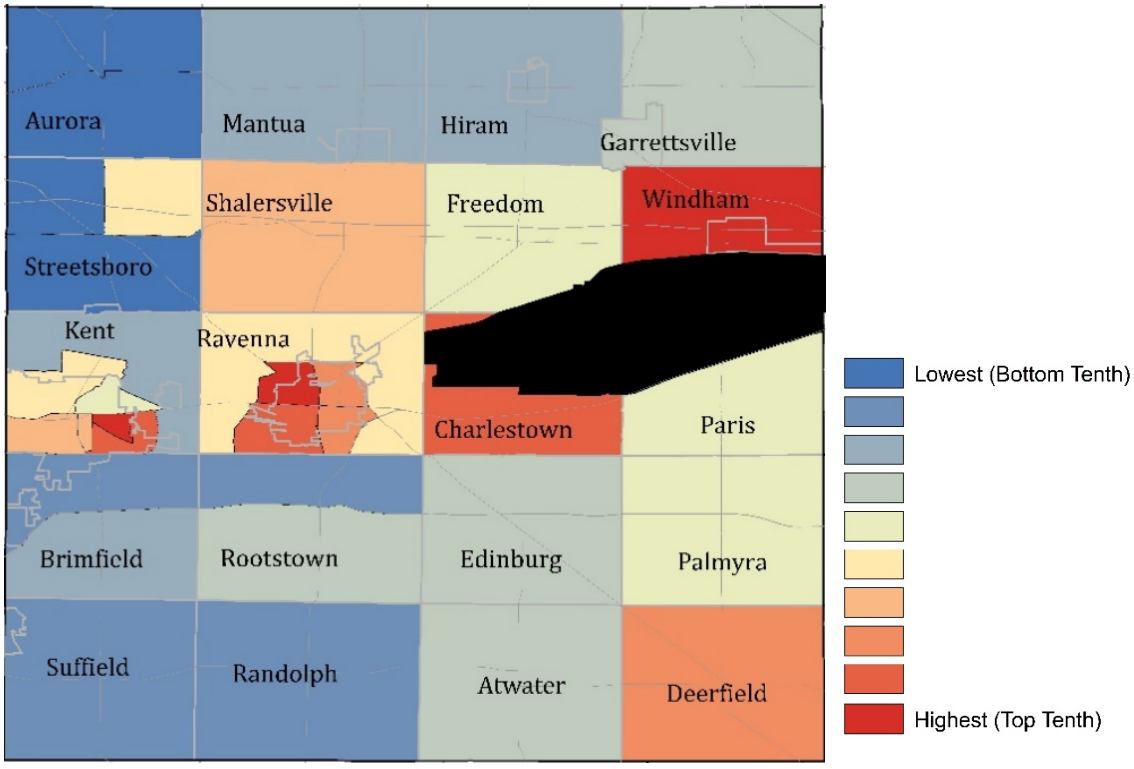


(Source: ATSDR's Geospatial Research, Analysis & Services Program (GRASP), 2019. Provided by Portage County Health District.)

The following map shows overall social vulnerability for Portage County.

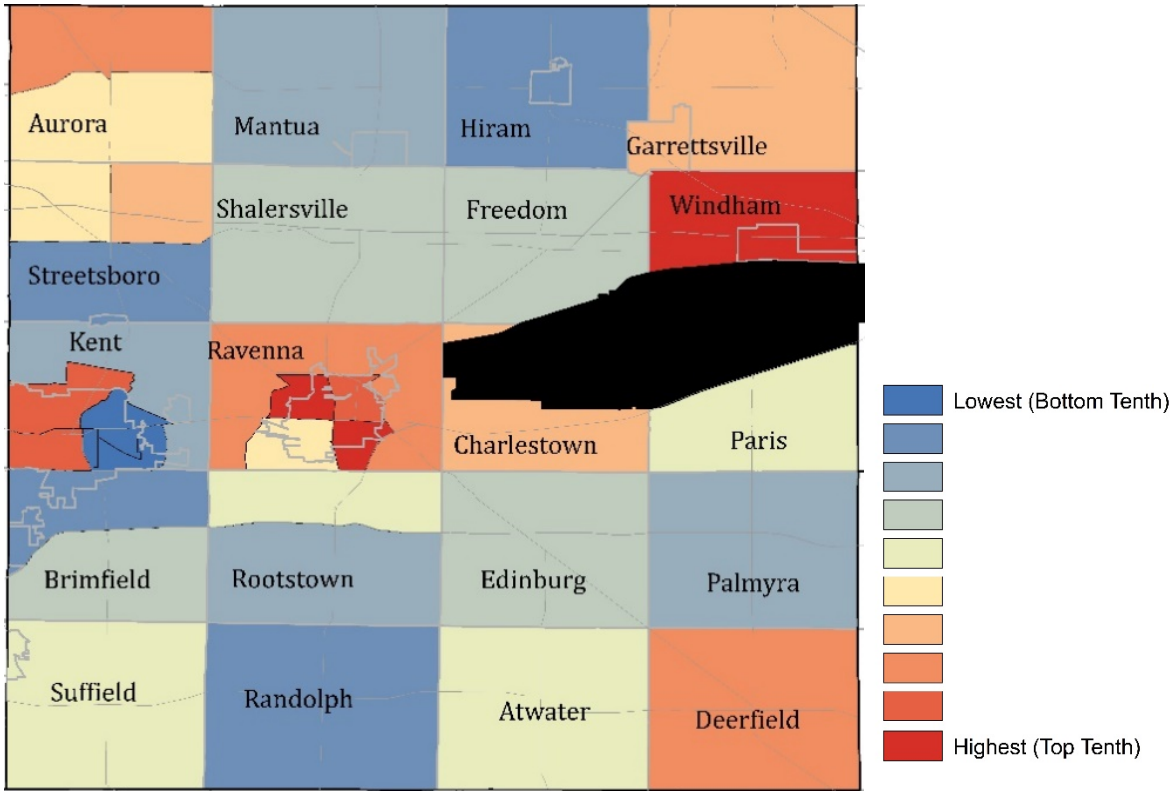


The following map shows socioeconomic status vulnerability for Portage County.

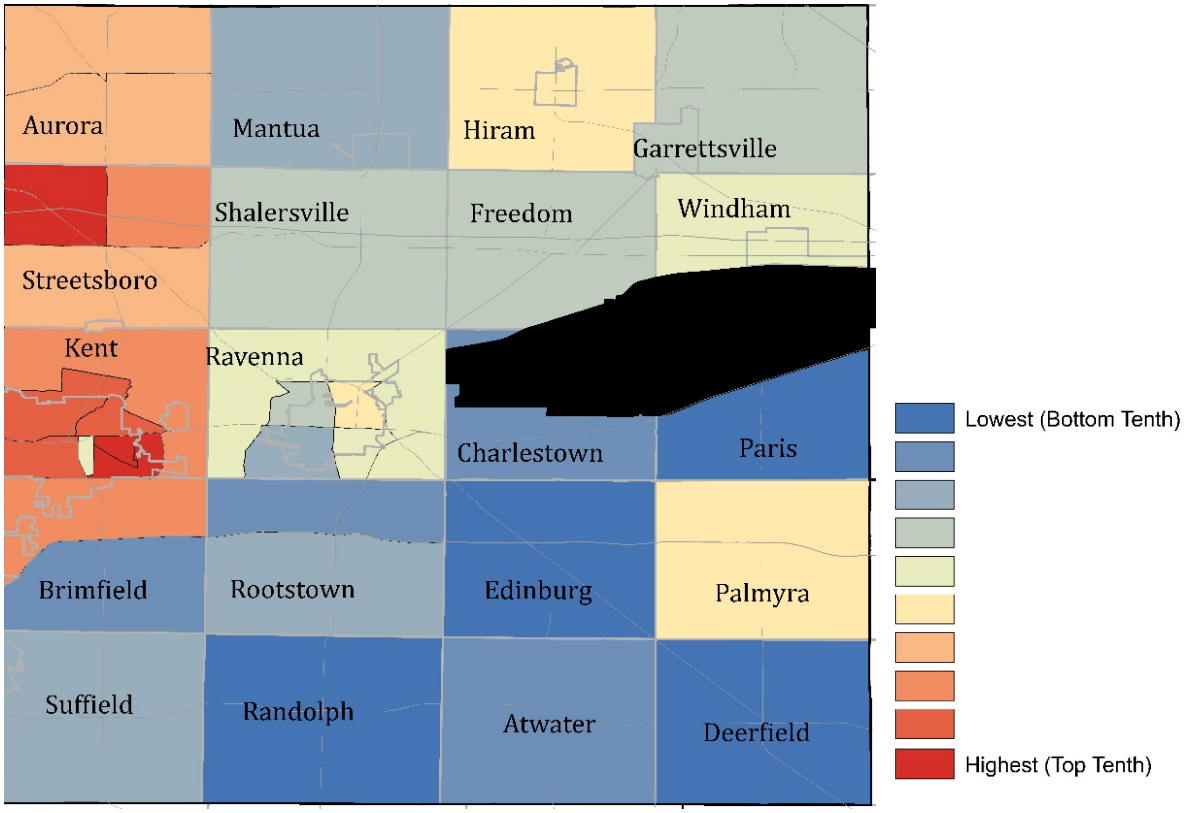


(Source for maps: ATSDR's Geospatial Research, Analysis & Services Program (GRASP), 2019. Provided by Portage County Health District.)

The following map shows household composition/disability vulnerability for Portage County.

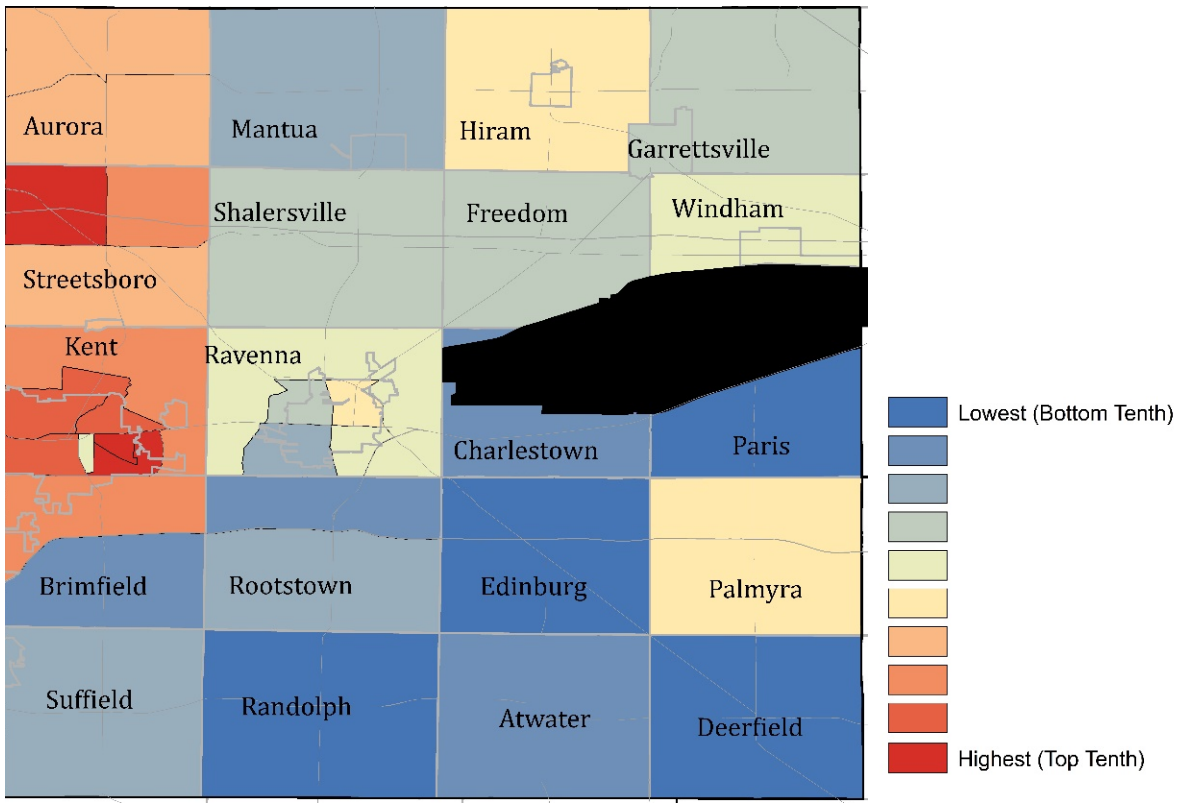


The following map shows race/ethnicity/language vulnerability for Portage County.



(Source for maps: ATSDR's Geospatial Research, Analysis & Services Program (GRASP), 2019. Provided by Portage County Health District.)

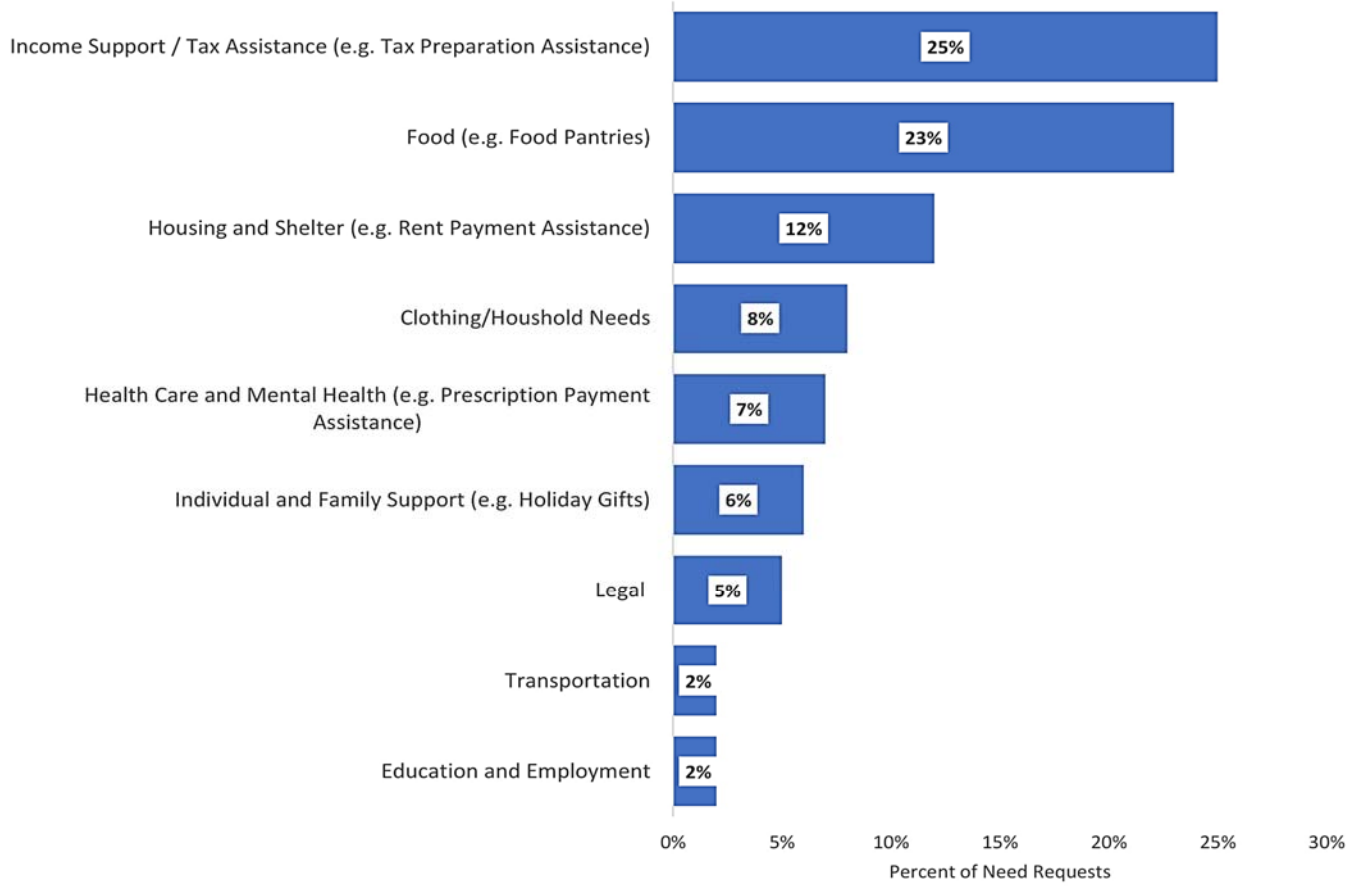
The following map shows housing/transportation vulnerability for Portage County.



(Source for maps: ATSDR's Geospatial Research, Analysis & Services Program (GRASP), 2019. Provided by Portage County Health District.)

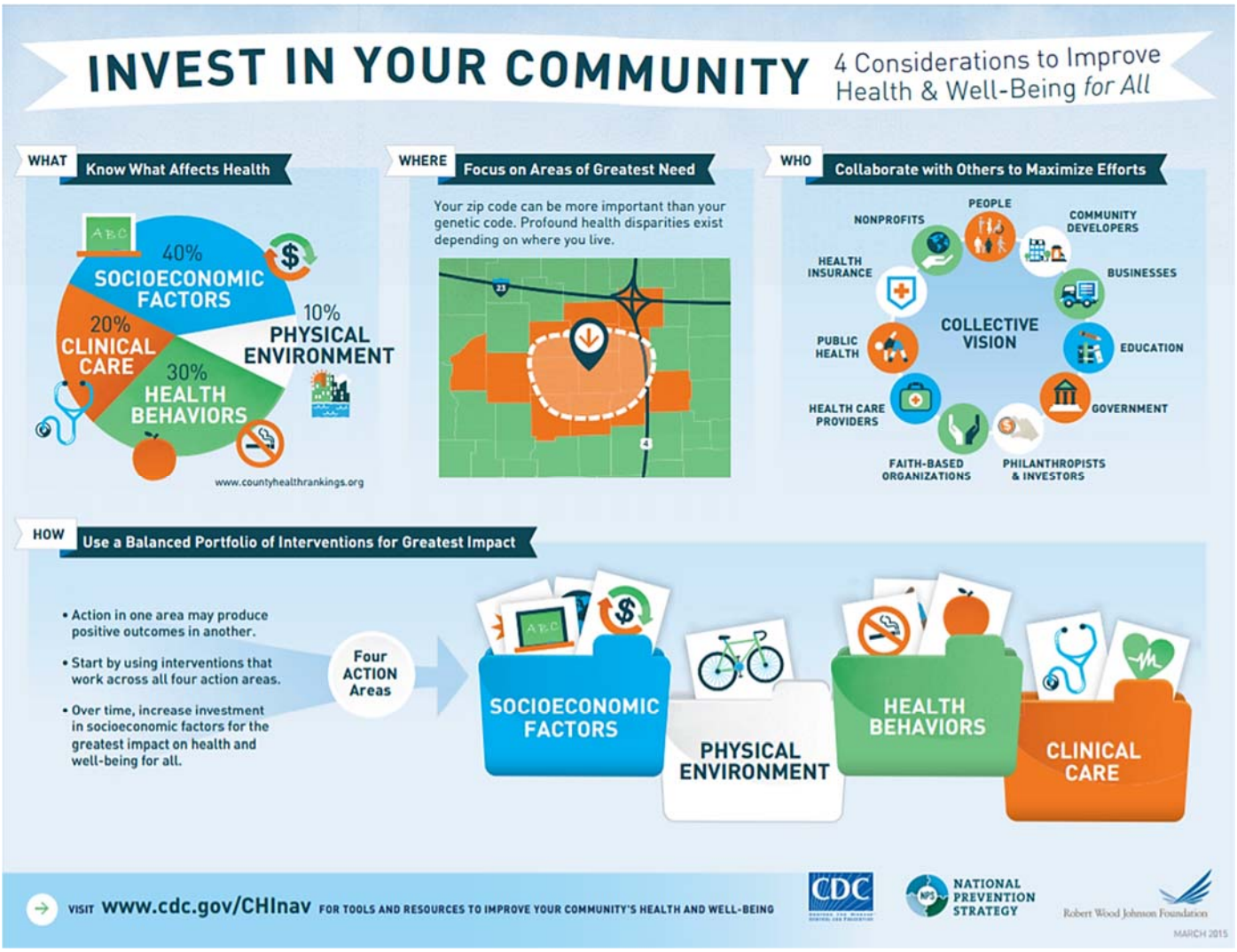
The following graph shows the proportion of contacts to United Way 2-1-1 from January 2017 to March 2019.

Proportion of Contacts to United Way 2-1-1, Portage County January 2017 to March 2019



From 2017 to March of 2019, 16,775 contact United Way 2-1-1 for support. The most common needs were tax assistance (3,537 requests) and food assistance (3,535 requests). Assistance was most common among those 50-64 (29%) and living in 44266 (3,809 requests)
Source: https://www.211oh.org/reports

(Source for maps: Ohio 2-1-1, 2019. Provided by Portage County Health District.)



(Source: Centers for Disease Control and Prevention, Community Health Improvement Navigator, Updated on March 10, 2016)

Social Conditions: Environmental Conditions

Key Findings

Adults indicated that insects (5%) and mold (4%) threatened their health in the past year. Adults indicated their main method or way of getting information from authorities in a large-scale disaster or emergency was television (82%).

Environmental Health

- Portage County adults thought the following threatened their or their family member's health in the past year:
  - Insects (5%)
  - Mold (4%)
  - Moisture issues (4%)
  - Agricultural chemicals (3%)
  - Sewage/waste water problems (2%)
  - Chemicals found in products (2%)
  - Rodents (2%)
  - Fracking (2%)
  - Air quality (1%)
  - Lyme disease (1%)
  - Lice (1%)
  - Temperature regulation (1%)
  - Unsafe water supply/wells (1%)
  - Safety hazards (1%)
  - Plumbing problems (<1%)
  - Asbestos (<1%)
  - Bed bugs (<1%)
  - Radon (<1%)
  - Excess medication in the home (<1%)
  - Nothing (83%)

6,223 adults said insects threatened their or their family's health in the past year.

Disaster Preparedness

- Adults indicated the following as their main method or way of getting information from authorities in a large-scale disaster or emergency:
  - Television (82%)
  - Internet (69%)
  - Radio (66%)
  - Friends/family (53%)
  - Wireless emergency alerts (46%)
  - Facebook (40%)
  - Text message (40%)
  - Neighbors (36%)
  - Portage County Emergency Alert System (36%)
  - Smart phone app (26%)
  - Newspaper (23%)
  - Other social media (13%)
  - Twitter (13%)
  - Land-line phone (12%)
  - Other method (1%)

Youth Health: Weight Status

Key Findings

Fourteen percent (14%) of Portage County youth were obese, according to Body Mass Index (BMI) by age. When asked how they would describe their weight, 25% of Portage County youth reported that they were slightly or very overweight. Almost three-quarters (79%) of youth exercised for 60 minutes on 3 or more days per week.

Youth 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 fat changes over the years as they grow. In children and teens, BMI is used to assess underweight, normal, overweight, and obese.
- Fourteen percent (14%) of Portage County youth were classified as obese by Body Mass Index (BMI) calculations, 12% of youth were classified as overweight, 72% were normal weight, and 2% were underweight.

4,115 Portage County youth were classified as overweight or obese.

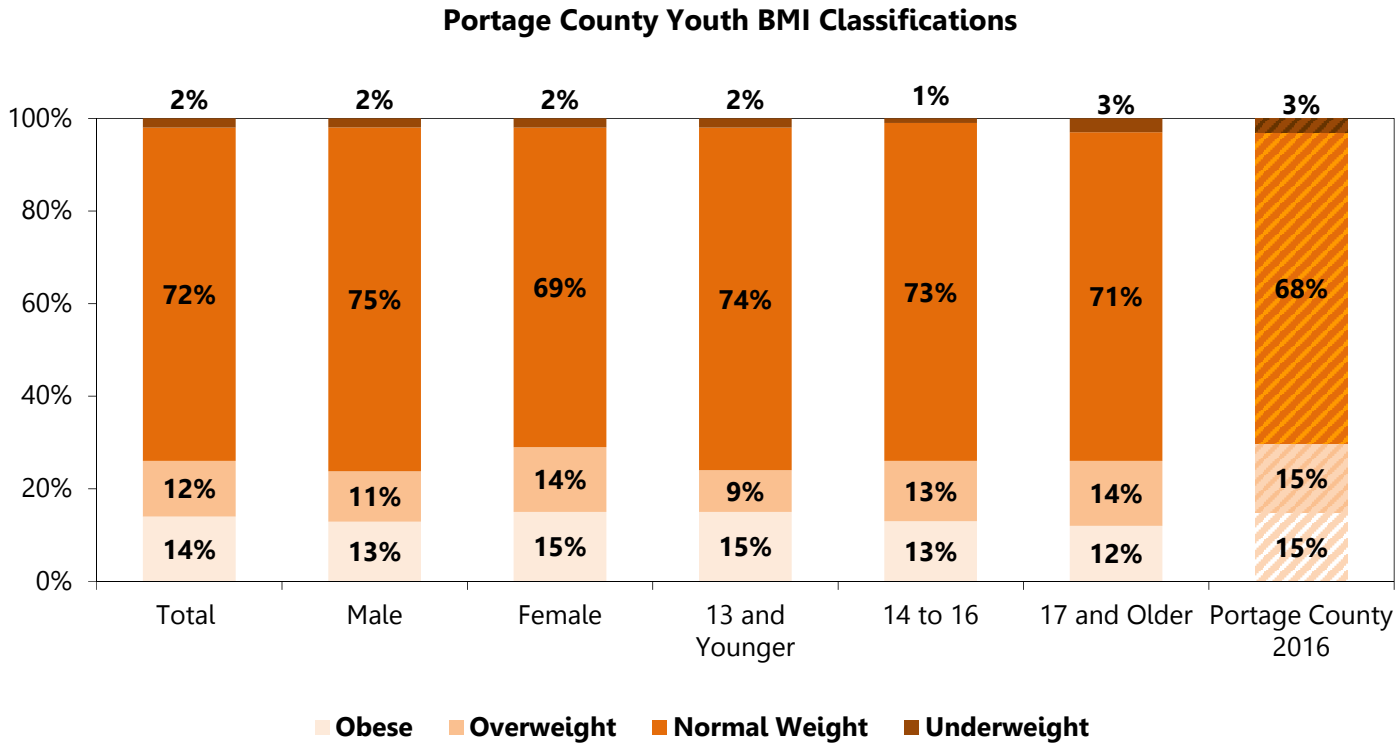
- One quarter (25%) of youth described themselves as being either slightly or very overweight.
- Youth reported they were trying to either lose weight (44%), gain weight (18%), or stay the same weight (19%). Almost one-fifth (19%) of youth reported they were not trying to do anything about their weight.
- Youth did the following to lose or keep from gaining weight in the past 30 days:
  - Exercised (53%)
  - Drank more water (46%)
  - Ate more fruits and vegetables (32%)
  - Ate less food, fewer calories, or foods lower in fat (26%)
  - Skipped meals (18%)
  - Went without eating for 24 hours or more (9%)
  - Vomited or took laxatives (4%)
  - Smoked cigarettes or e-cigarettes to lose weight (4%)
  - Took diet pills, powders, or liquids without a doctor's advice (3%)
  - Used illegal drugs (1%)
  - Nothing (37%)

Healthy People 2020
Nutrition and Weight Status (NWS)

Objective	Portage County 2019	U.S. 2017	Healthy People 2020 Target
NWS-10.4 Reduce the proportion of children and adolescents aged 2 to 19 years who are considered obese	14% (6-12 Grade) 14% (9-12 Grade)	15% (9-12 Grade)	15%

Note: The Healthy People 2020 target is for children and youth aged 2-19 years.
(Sources: Healthy People 2020 Objectives, 2017 U.S. YRBS, 2018 Portage County Health Assessment)

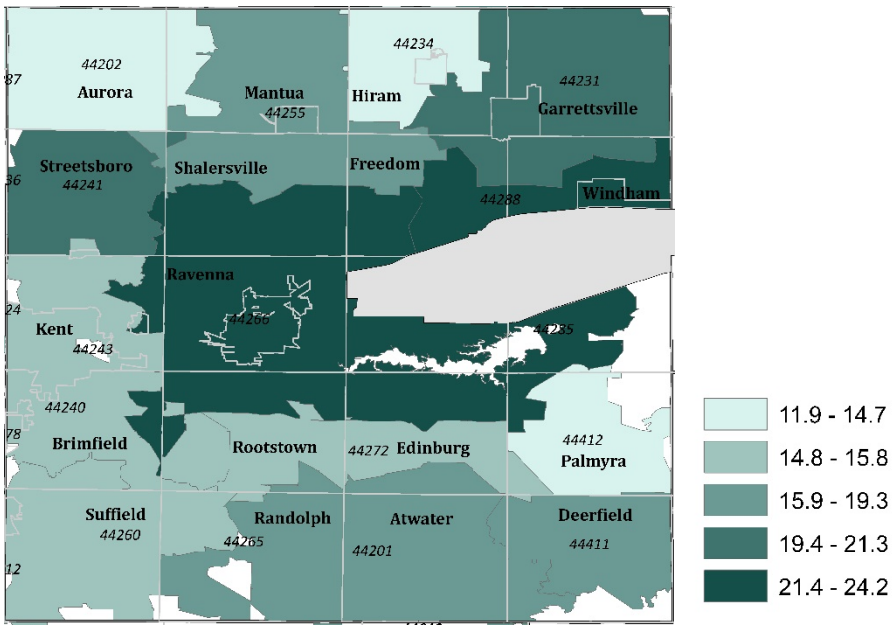
The following graph shows the percentage of Portage County youth who were classified as obese, overweight, normal weight or underweight according to Body Mass Index (BMI) by age. An example of how to interpret the information includes: 72% of all Portage County youth were classified as normal weight, 14% were obese, 12% were overweight, and 2% were underweight.



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

The map below shows the percent of children overweight or obese by zip code. *

Region	ZIP Code	Percent of Children Overweight or Obese
Windham	44288	24.2%
Ravenna	44266	21.5%
Garrettsville	44231	21.3%
Streetsboro	44241	19.7%
Deerfield	44411	19.3%
Mantua	44255	19.3%
Atwater	44201	18.5%
Rootstown	44272	15.8%
Kent	44240	15.6%
Suffield	44260	15.4%
Hiram	44234	14.8%
Palmyra	44412	13.4%
Aurora	44202	11.9%



**Note: Data is for children ages 2-18.*

(Source: Better Health Partnership, Report 4 (released March 2019). Provided by the Portage County Health District).

Nutrition

- Five percent (5%) of youth ate 5 or more servings of fruit per day, 25% of youth ate 3-4 servings, and 59% of youth ate 1-2 servings. One in nine (11%) youth ate 0 servings of fruit per day.
- Three percent (3%) of youth ate 5 or more servings of vegetables per day, 17% of youth ate 3-4 servings, and 66% of youth ate 1-2 servings. Fifteen percent (15%) of youth ate 0 servings of vegetables per day.
- About one-quarter (24%) of youth ate 5 or more servings of fruits **and/or** vegetables per day, 34% of youth ate 3-4 servings, and 26% of youth ate 1-2 servings. Five percent (5%) of youth ate 0 servings of fruits and/or vegetables per day.
- Six percent (6%) of youth drank 5 or more servings of sugar-sweetened beverages per day, 18% of youth drank 3-4 servings, and 53% of youth drank 1-2 servings. Twenty-three percent (23%) of youth drank 0 servings of sugar-sweetened beverages per day.
- Seven percent (7%) of youth drank 5 or more servings of caffeinated beverages per day, 12% of youth drank 3-4 servings, and 39% of youth drank 1-2 servings. Forty-two percent (42%) of youth drank 0 servings of caffeinated beverages per day.
- Ninety-four percent (94%) Portage County youth reported that if they are home alone, they can prepare their own food. One percent (1%) reported they usually do not have food in the house to prepare.

Physical Activity

- During the past week, youth participated in at least 60 minutes of physical activity at the following frequencies:
  - 3 or more days (79%)
  - 5 or more days (58%)
  - Every day (31%)
- Eight percent (8%) of youth did not participate in at least 60 minutes of physical activity on any day in the past week.
- The CDC recommends that children and adolescents participate in at least 60 minutes of physical activity per day. As part of their 60 minutes per day, aerobic activity, muscle strengthening, and bone strengthening are three distinct types of physical activity that children should engage in, appropriate to their age. Children should participate in each of these types of activity on at least three days per week.
- On an average day of the week, youth spent an average of 3.7 hours on their cell phone, 1.4 hours watching TV, 1.3 hours on their computer/tablet, and 1.2 hours playing video games.
- Seventeen percent (17%) of youth spent 3 or more hours watching TV on an average school day.

Youth Comparisons	Portage County 2016 (6th-12th)	Portage County 2019 (6th-12th)	Portage County 2019 (9th-12th)	U.S. 2017 (9th-12th)
Obese	15%	14%	14%	15%
Overweight	15%	12%	13%	16%
Described themselves as slightly or very overweight	29%	25%	28%	32%
Were trying to lose weight	46%	44%	48%	47%
Exercised to lose weight (in the past 30 days)	47%	53%	58%	N/A
Ate less food, fewer calories, or foods lower in fat to lose weight (in the past 30 days)	31%	26%	31%	N/A
Went without eating for 24 hours or more (in the past 30 days)	6%	9%	12%	13%**
Took diet pills, powders, or liquids without a doctor's advice (in the past 30 days)	2%	3%	4%	5%**
Vomited or took laxatives (in the past 30 days)	2%	4%	4%	4%**
Ate 5 or more servings of fruit and/or vegetables per day	13%*	24%	22%	N/A
Ate 0 servings of fruits and/or vegetables per day	7%*	5%	6%	N/A
Physically active at least 60 minutes per day on every day in past week	34%	31%	29%	26%
Physically active at least 60 minutes per day on 5 or more days in past week	54%	58%	58%	46%
Did not participate in at least 60 minutes of physical activity on any day in past week	12%	8%	8%	15%
Watched 3 or more hours per day of television (on an average school day)	24%	17%	19%	21%

N/A – Not Available
**Calculations differed year to year. Please compare with caution.*
***Comparative YRBS data for U.S. is 2013*

Youth Health: Tobacco Use

Key Findings

Seven percent (7%) of Portage County youth were current smokers, increasing to 16% of those ages 17 and older. Twenty-seven percent (27%) of youth used an electronic vapor product in the past 30 days, increasing to 51% of those ages 17 and older.

Youth Tobacco Use

- Seven percent (7%) of youth were current smokers, having smoked at some time in the past 30 days, increasing to 16% of those 17 and older.
- Youth used the following forms of tobacco in the past year: electronic vapor products (30%); Swishers (14%); Black and Milds (13%); cigarettes (8%); chewing tobacco, snuff, or dip (7%); cigars (6%); hookah (4%); cigarillos (4%); pouch [Snus] (2%); little cigars (2%); Bidis (1%); dissolvable tobacco products (1%).

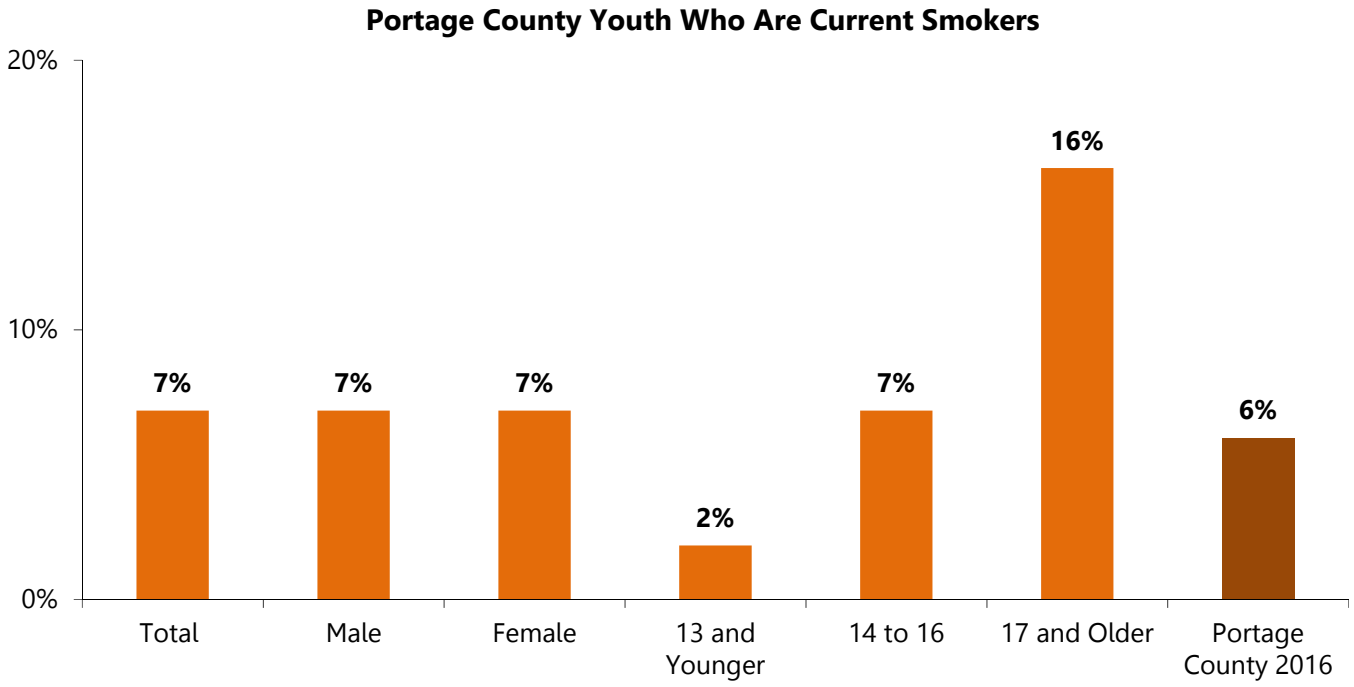
Youth Electronic Vaping Product Use

- Twenty-seven percent (27%) of youth used an electronic vapor product, such as JUUL, Vuse, MarkTen, blu, e-cigarettes, vape pens, hookah pens, mods, in the past 30 days, increasing to 51% of those 17 and older.

4,273 Portage County youth were current electronic vapor product users.

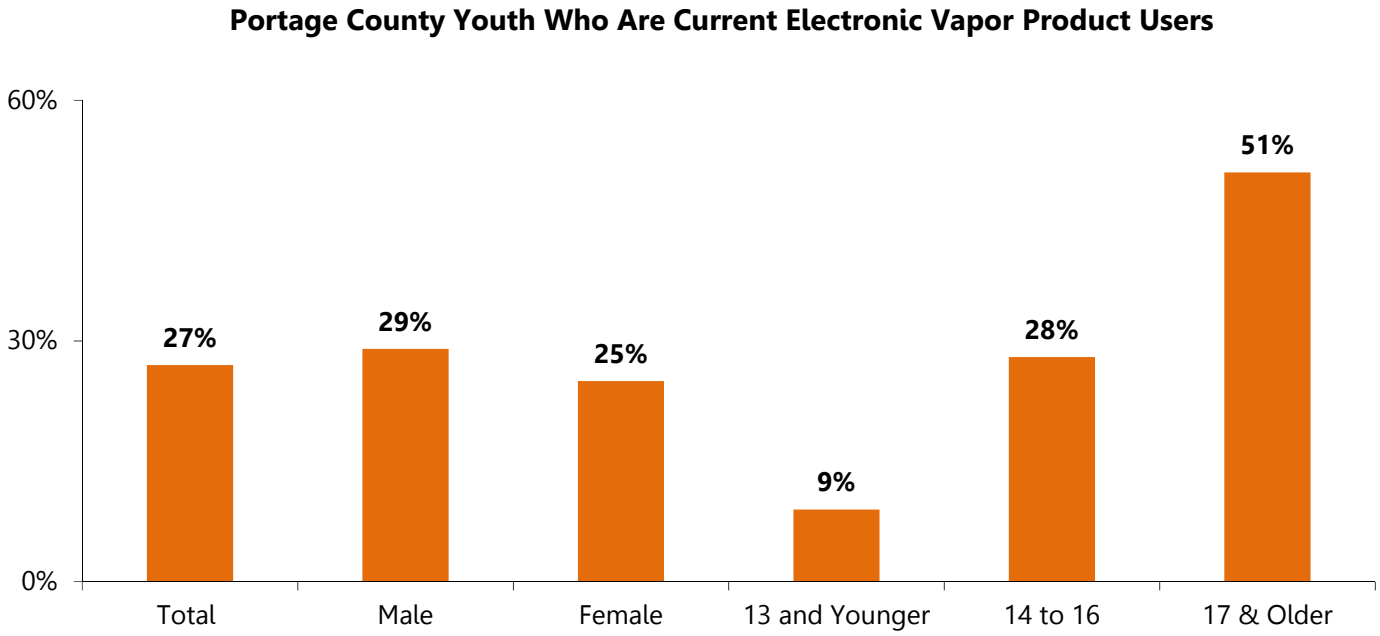
- Youth electronic vapor product users reported the following ways of obtaining electronic vapor products:
  - Borrowed from someone else (35%)
  - Multiple ways (23%)
  - Bought it in a store such as a convenience store, supermarket, discount store, gas station, or vape store (16%)
  - Gave someone money to buy it for them (7%)
  - A person 18 years or older gave it to them (4%)
  - From the internet (2%)
  - Took it from a store or another person (1%)
  - Some other way (13%)
- Of youth that had used e-cigarettes/vapes in the past 12 months, they reported putting the following in them:
  - E-liquid or e-juice with nicotine (73%)
  - E-liquid or e-juice without nicotine (32%)
  - Marijuana or THC in the e-liquid (32%)
  - Homemade e-liquid or e-juice (3%)
  - Other drugs in your e-liquid (1%)
- Twenty-eight percent (28%) of Portage County youth thought there was a great risk in harming themselves physically or in other ways if used electonic vapor products. Twenty-eight percent (28%) said moderate risk, 31% said slight risk, and 13% said no risk.

The following graph shows the percentage of Portage County youth who were current smokers. An example of how to interpret the information includes: 7% of all Portage County youth were current smokers, including 7% of males and 7% of females.



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

The following graph shows the percentage of Portage County youth who were current electronic vapor product users. An example of how to interpret the information includes: 27% of all Portage County youth were current electronic vapor product users, including 29% of males and 25% of females.



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

Youth Comparisons	Portage County 2016 (6th-12th)	Portage County 2019 (6th-12th)	Portage County 2019 (9th-12th)	U.S. 2017 (9th-12th)
Current smoker (smoked on at least 1 day during the past 30 days)	6%	7%	10%	9%
Smoked cigarettes frequently (smoked on 20 or more days during the past 30 days)	1%	1%	2%	3%
Smoked cigarettes daily (smoked on all 30 days during the past 30 days)	1%	1%	1%	2%
Currently used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, on at least 1 day during the past 30 days)	N/A	27%	37%	13%
Used electronic vapor products frequently (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, on 20 or more days during the past 30 days)	N/A	10%	16%	3%
Used electronic vapor products daily (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens, on all 30 days during the past 30 days)	N/A	8%	12%	2%

The table below indicates correlations between current smokers and participating in risky behaviors, as well as other activities and experiences. An example of how to interpret the information includes: 79% of current smokers had at least one drink of alcohol in the past 30 days, compared to 19% of non-current smokers.

Behaviors of Portage County Youth

*Current Smokers vs. Non-Current Smokers**

Youth Behaviors	Current Smoker	Non-Current Smoker
Currently participate in extracurricular activities	85%	89%
Had at least one drink of alcohol (in the past 30 days)	79%	19%
Had sexual intercourse (in their lifetime)	67%	17%
Used marijuana (in the past 30 days)	64%	15%
Experienced 3 or more adverse childhood experiences (ACEs) (in their lifetime)	53%	24%
Felt sad or hopeless for two or more weeks in a row (in the past 12 months)	52%	30%
Bullied (in the past 12 months)	49%	33%
Contemplated suicide (in the past 12 months)	33%	11%
Attempted suicide (in the past 12 months)	28%	6%

**"Current smokers" indicate youth who self-reported smoking at any time during the past 30 days.*
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Healthy People 2020
Tobacco Use (TU)

Objective	Portage County 2019	U.S. 2017	Healthy People 2020 Target
TU-2.2 Reduce use of cigarettes by adolescents (past month)	7% (6-12 Grade) 10% (9-12 Grade)	9% (9-12 Grade)	16%*

**The Healthy People 2020 target is for youth in grades 9-12.*
(Sources: Healthy People 2020 Objectives, 2017 YRBS, 2019 Portage County Health Assessment)

E-Cigarette Use Among Youth and Young Adults

- E-cigarettes are now the most commonly used tobacco product among youth, surpassing conventional cigarettes in 2014.
- E-cigarette aerosol is not harmless "water vapor". It can contain harmful and potentially harmful constituents, including nicotine. Nicotine exposure during adolescence can cause addiction and can harm the developing adolescent brain.
- The most recent estimates available show that 13.5% of middle school students (2015), 37.7% of high school students (2015), and 35.8% of young adults (2013–2014) had ever used an e-cigarette.
- Among middle and high school students, both ever and past-30-day e-cigarette use have more than tripled since 2011.
- The most recent data available show that the prevalence of past-30-day use of e-cigarettes is similar among high school students (16% in 2015, 13.4% in 2014) and young adults 18–24 years of age (13.6% in 2013–2014) compared to middle school students (5.3% in 2015, 3.9% in 2014) and adults 25 years of age and older (5.7% in 2013–2014).
- In 2015, 58.8% of high school students who were current users of combustible tobacco products were also current users of e-cigarettes.
- E-cigarette products can be used as a delivery system for cannabinoids and potentially for other illicit drugs. More specific surveillance measures are needed to assess the use of drugs other than nicotine in e-cigarettes.

(Source: U.S. Department of Health and Human Services, A Report of the Surgeon General, December 2016)

Youth Health: Alcohol Use

Key Findings

Almost half (48%) of Portage County youth had at least one drink of alcohol in their life, increasing to 78% of youth 17 and older. Almost one-quarter (23%) of youth had at least one drink in the past 30 days, defining them as a current drinker. Of those who drank, 59% were defined as binge drinkers.

Youth Alcohol Consumption

- Almost half (48%) of youth had at least one drink of alcohol in their life, increasing to 78% of those ages 17 and older.
- Of all youth, 17% had drunk alcohol for the first time before the age of 13.
- More than one-third (36%) of youth who reported drinking at some time in their life had their first drink at 12 years old or younger, 33% took their first drink between the ages of 13 and 14, and 31% started drinking between the ages of 15 and 18. The average age of onset was 12.8 years old.
- Almost one-quarter (23%) of youth had at least one drink in the past 30 days, defining them as current drinkers, increasing to 47% of those ages 17 and older.

3,640 youth were current drinkers.

- Based on all youth surveyed, 14% had five or more alcoholic drinks on an occasion in the last month and would be considered binge drinkers, increasing to 38% of those ages 17 and older. Of those who were current drinkers, 59% were defined as binge drinkers.
- Youth drinkers reported they got their alcohol from the following: someone gave it to them (30%); an older friend or sibling bought it for them (30%); a parent gave it to them (26%); someone older bought it (24%); took it from a store or family member (13%); bought it in a liquor store/convenience store/gas station (8%); a friend's parent gave it to them (6%); bought it with a fake ID (4%); and some other way (17%).
- One in seven (14%) youth reported that they rode in a car or other vehicle with a driver who had been drinking alcohol. Of those who rode with a driver that had been drinking alcohol, 52% did so two or more times.
- Seven percent (7%) youth drivers reported that they drove in a car or other vehicle after they had been drinking alcohol. Of those who drove after drinking alcohol, 3% did so two or more times.
- Portage County youth reported the following reasons for not drinking alcohol: to be healthy (55%), parents would be upset (50%), values (36%), legal consequences (35%), kicked out of extra-curricular activities (25%), friends would not approve (23%), health problems (20%), and some other reason (21%).

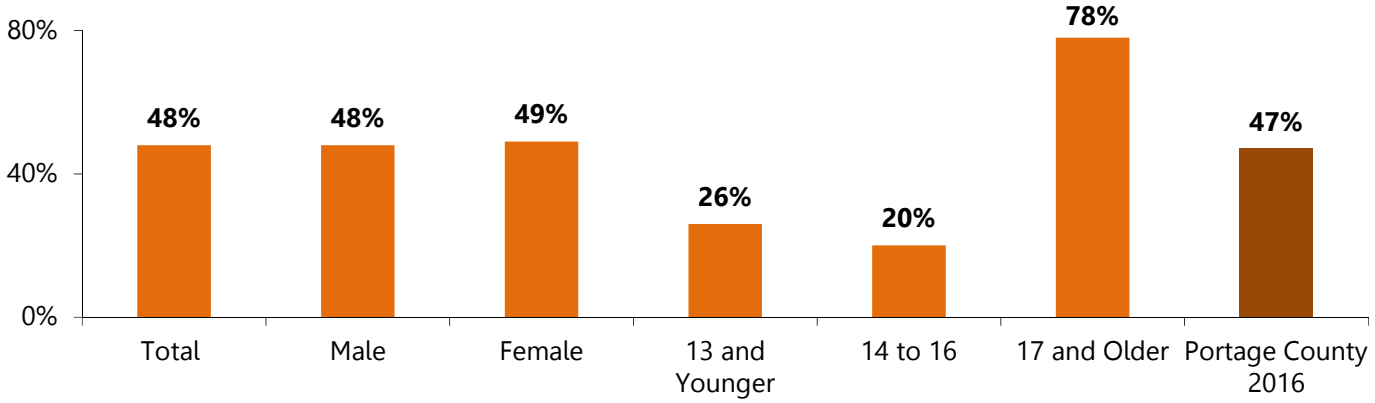
Healthy People 2020
Substance Abuse (SA)

Objective	Portage County 2019	U.S. 2017	Healthy People 2020 Target
SA-14.4 Reduce the proportion of persons engaging in binge drinking during the past month	14% (6-12 Grade) 20% (9-12 Grade)	14% (9-12 Grade)	9%*

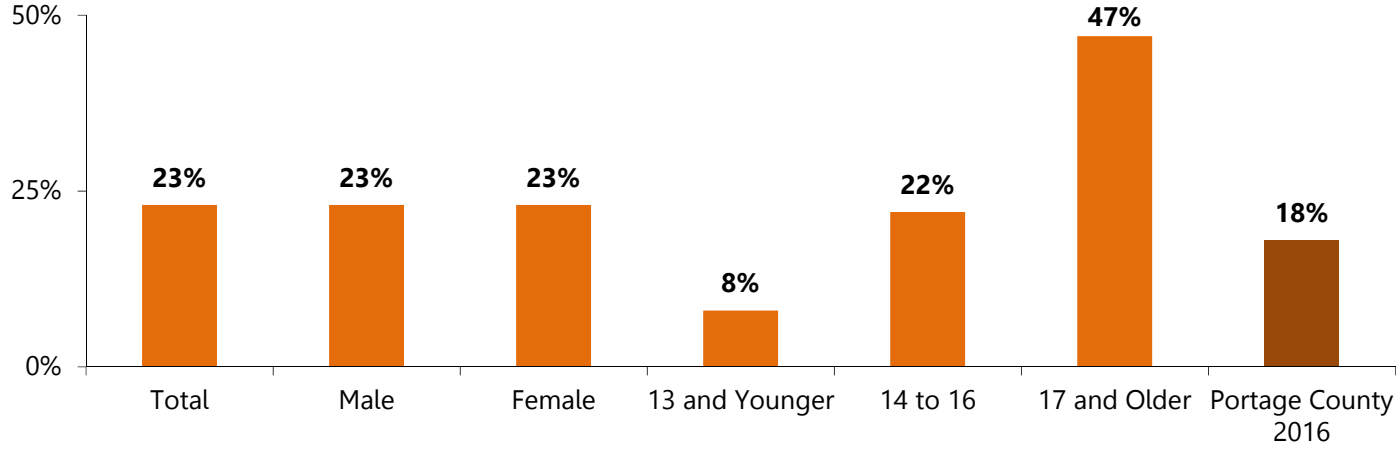
**The Healthy People 2020 target is for youth aged 12-17 years.*
(Sources: Healthy People 2020 Objectives, 2017 YRBS, 2019 Portage County Health Assessment)

The following graphs show the percentage of Portage County youth who drank in their lifetime, were current drinkers, and were binge drinkers. An example of how to interpret the information on the first graph includes: 48% of all Portage County youth had drunk at some time in their life, including 48% of males and 49% of females.

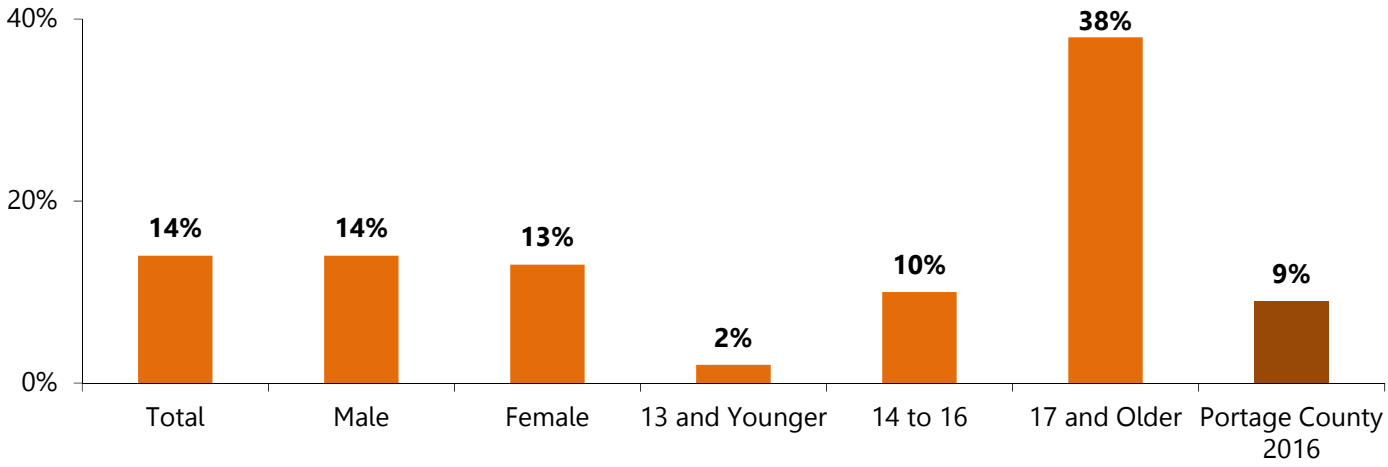
Portage County Youth Who Had At Least One Drink In Their Lifetime



Portage County Youth Who Were Current Drinkers



Portage County Youth Binge Drinking in Past Month



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

Youth Comparisons	Portage County 2016 (6th-12th)	Portage County 2019 (6th-12th)	Portage County 2019 (9th–12th)	U.S. 2017 (9th–12th)
Ever drank alcohol (at least one drink of alcohol on at least 1 day during their life)	47%	48%	61%	60%
Current Drinker (at least one drink of alcohol on at least 1 day during the past 30 days)	18%	23%	32%	30%
Binge drinker (drank 5 or more drinks within a couple of hours on at least 1 day during the past 30 days)	9%	14%	20%	14%
Drank for the first time before age 13 (of all youth)	13%	17%	13%	16%
Obtained the alcohol they drank by someone giving it to them (of current drinkers)	32%	30%	32%	44%
Rode with a driver who had been drinking alcohol (in a car or other vehicle on 1 or more occasion during the past 30 days)	18%	14%	14%	17%
Drove when they had been drinking alcohol (in a car or vehicle, 1 or more times during the 30 days before the survey, among youth who had driven a car or other vehicle)	5%	7%	9%	6%

The table below indicates correlations between current drinkers and participating in risky behaviors, as well as other activities and experiences. An example of how to interpret the information includes: 53% of current drinkers had sexual intercourse in their lifetime, compared to 11% of non-current drinkers.

Behaviors of Portage County Youth

Current Drinkers vs. Non-Current Drinkers*

Youth Behaviors	Current Drinker	Non-Current Drinker
Currently participate in extracurricular activities	92%	88%
Had sexual intercourse (in their lifetime)	53%	11%
Used marijuana (in the past 30 days)	53%	8%
Felt sad or hopeless for two or more weeks in a row (in the past 12 months)	43%	28%
Experienced 3 or more adverse childhood experiences (ACEs) (in their lifetime)	38%	8%
Bullied (in the past 12 months)	37%	32%
Contemplated suicide (in the past 12 months)	26%	9%
Smoked cigarettes (in the past 30 days)	25%	2%
Attempted suicide (in the past 12 months)	18%	4%

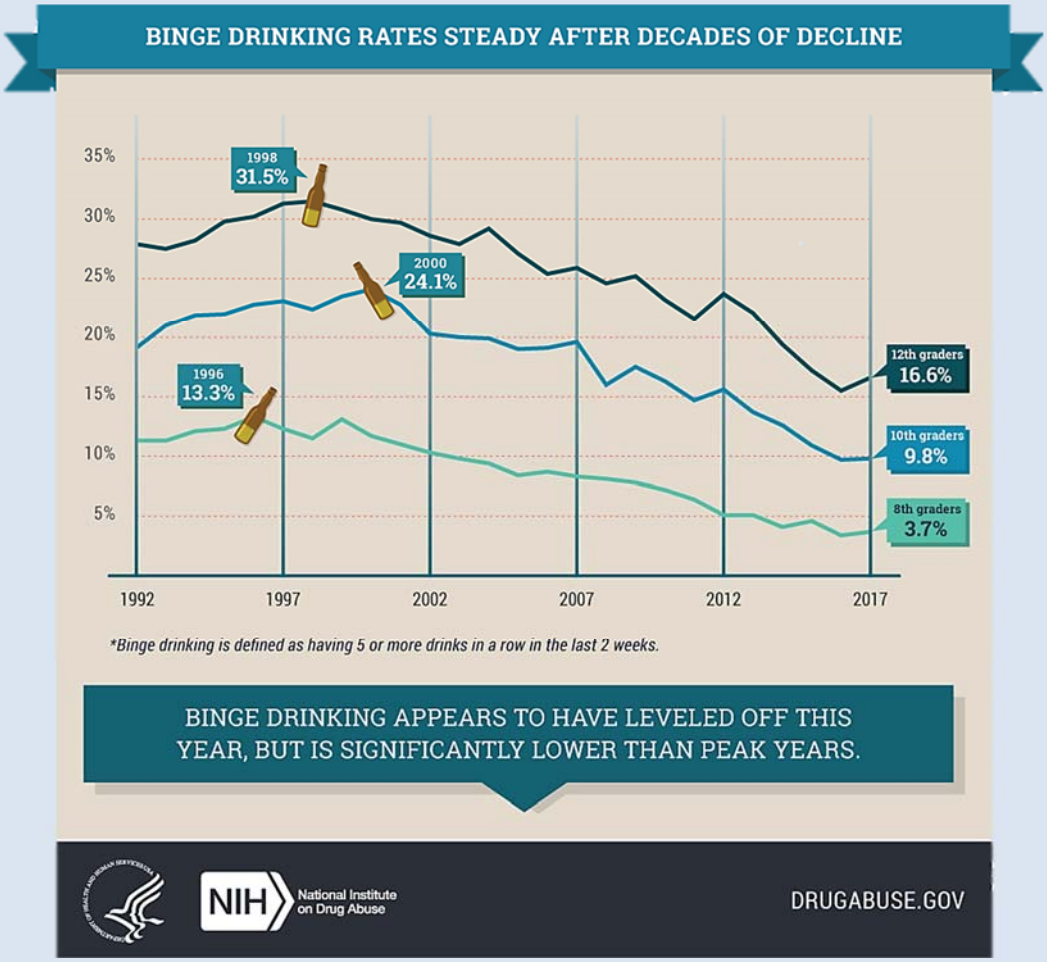
**" Current drinkers" indicate youth who self-reported having had at least one drink of alcohol during the past 30 days.*
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Teen Binge Drinking: On the Decline

- According to the 2018 Monitoring the Future (MTF) survey, alcohol consumption continues to show significant longer-term declines among the nations' 8th, 10th and 12th graders. For the three grades combined (8th, 10th and 12th) the proportion of students reporting lifetime, annual, past month alcohol consumption, and binge drinking are at the lowest levels since the study began

- Seventy-seven percent (77%) 8th graders report they have never consumed alcohol, down 66% proportionally from 70% in 1991 to 24% in 2018. Lifetime consumption of alcohol among tenth graders and twelfth graders declined proportionally 49% and 36%, respectively, since 1991

- One in five eighth grade students (19%), 38% of tenth graders, and 53% of twelfth graders report they consumed alcohol in the past year. See more at: https://www.responsibility.org/alcohol-statistics/underage-drinking-statistics



(Source: Foundation for Advancing Alcohol Responsibility, Underage Drinking Statistics, 2018 and National Institute of Drug Abuse; *Monitoring the Future 2017 Survey Results, 2017)*

Youth Health: Drug Use

Key Findings

In 2019, 18% of Portage County youth had used marijuana at least once in the past 30 days. Three percent (3%) of youth used medications that were not prescribed for them or took more than prescribed to get high at some time in their life.

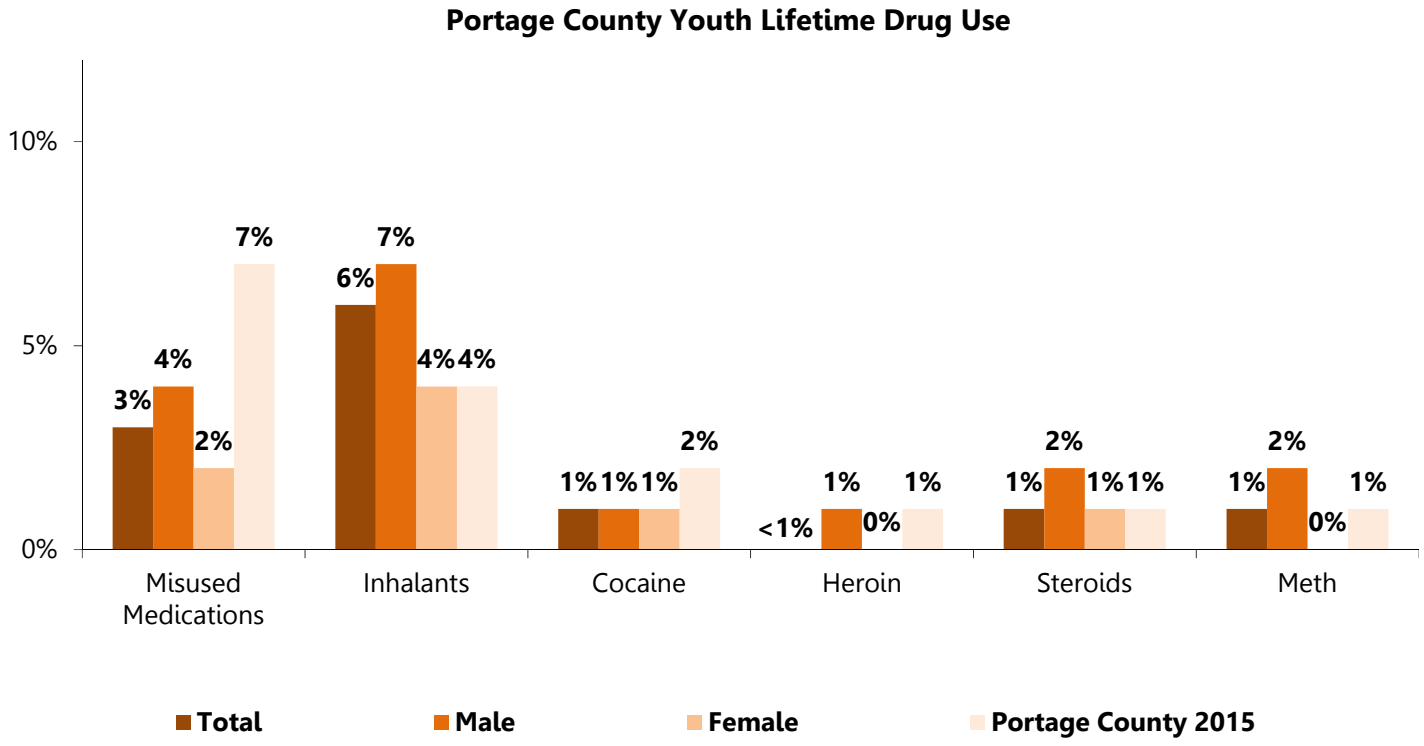
Youth Drug Use

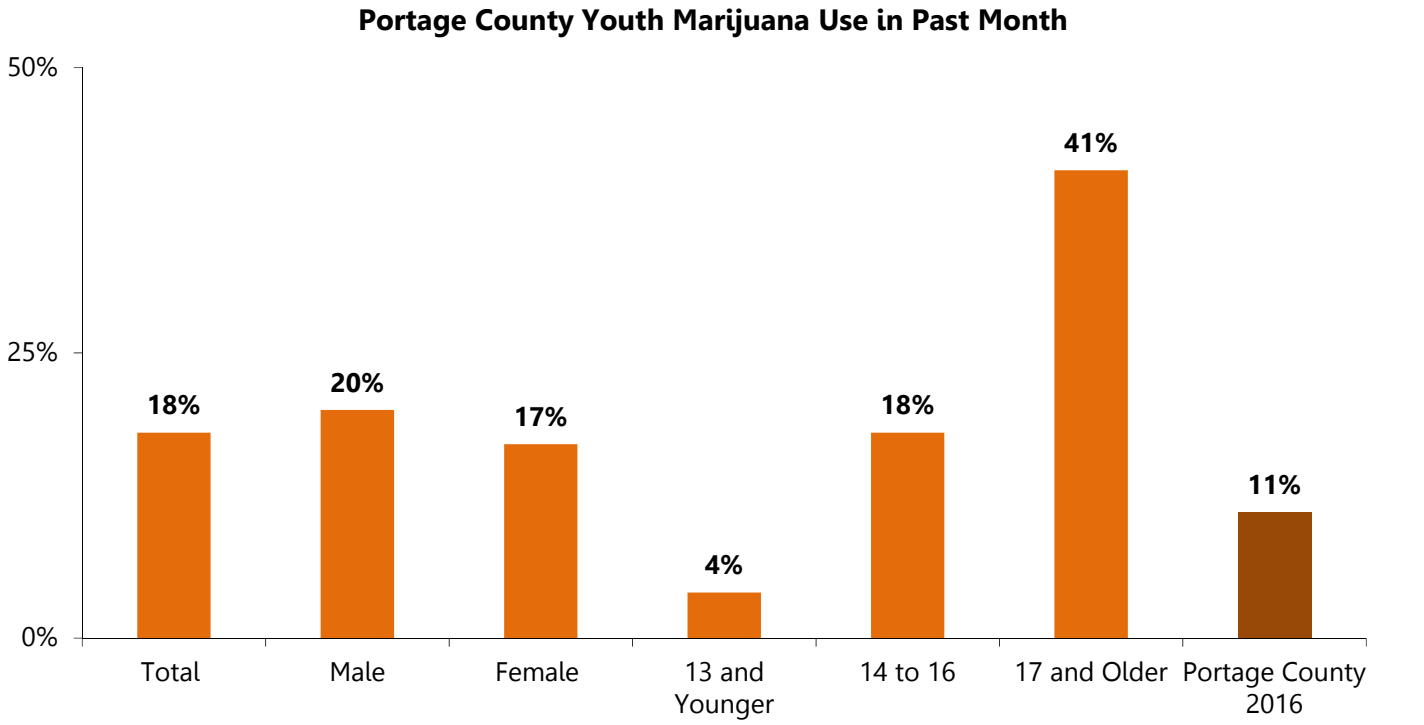
- In 2019, 18% of Portage County youth used marijuana at least once in the past 30 days, increasing to 41% of those ages 17 and older.
- Almost one-third (32%) of youth thought there was great risk in harming themselves physically or in other ways if they smoked marijuana once or twice a week; 18% said moderate risk, 26% said slight risk, and 24% said no risk.

2,849 youth used marijuana in the past 30 days.

- Portage County youth have tried the following in their one or more times in their life:
  - Liquid THC (14%)
  - Inhalants (6%)
  - Misused cough syrup (9%)
  - Misused hand sanitizer (4%)
  - Misused over-the-counter medications (2%)
  - Cocaine (1%)
  - Methamphetamines (1%)
  - Steroids without doctor's prescription (1%)
  - Ecstasy/MDMA/Molly (1%)
  - Heroin (<1%)
- Three percent (3%) of youth misused medications that were not prescribed to them or took more to get high and/or feel more alert in their lifetime.
- In the past 12 months, 11% of youth reported being offered, sold, or given an illegal drug on school property.
- Youth reported the following ways of obtaining medication that was not prescribed to them:
  - A friend gave it to them (40%)
  - A parent gave it to them (33%)
  - Took it from a friend or family member (30%)
  - Another family member gave it to them (20%)
  - Bought them from a friend (17%)
  - Bought from someone else (17%)
  - From the internet (7%)
- Portage County youth reported the following reasons for not using drugs: to be healthy (68%), parents would be upset (63%), legal consequences (54%), values (50%), kicked out of extra-curricular activities (38%), health problems (36%), friends would not approve (35%), random student drug testing (21%), and some other reason (18%).

The following graphs indicate youth lifetime drug use and youth marijuana use in the past 30 days. An example of how to interpret the information includes: 3% of youth have misused medication at some point in their life, including 4% of males and 2% of females.





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

Youth Comparisons	Portage County 2016 (6th-12th)	Portage County 2019 (6th-12th)	Portage County 2019 (9th-12th)	U.S. 2017 (9th-12th)
Currently used marijuana (in the past 30 days)	11%	18%	26%	20%
Ever used methamphetamines (in their lifetime)	1%	1%	1%	3%
Ever used cocaine (in their lifetime)	2%	1%	1%	5%
Ever used heroin (in their lifetime)	1%	<1%	<1%	2%
Ever used inhalants (in their lifetime)	4%	6%	5%	6%
Ever used ecstasy (also called MDMA in their lifetime)	3%	1%	1%	4%
Misused medications that were not prescribed to them or to ok more to get high and/or feel more alert (in their lifetime**)**	7%	3%	4%	N/A
Ever took steroids without a doctor's prescription (in their lifetime)	1%	1%	1%	3%
Were offered, sold, or given an illegal drug on school property (in the past 12 months)	9%	11%	15%	20%

N/A – Not Available

The table below indicates correlations between current marijuana use and participating in risky behaviors, as well as other activities and experiences. An example of how to interpret the information includes: 67% of current marijuana users had at least one drink of alcohol in the past 30 days, compared to 13% of non-marijuana users.

Behaviors of Portage County Youth

Current Marijuana Use vs. Non-Current Marijuana Use*

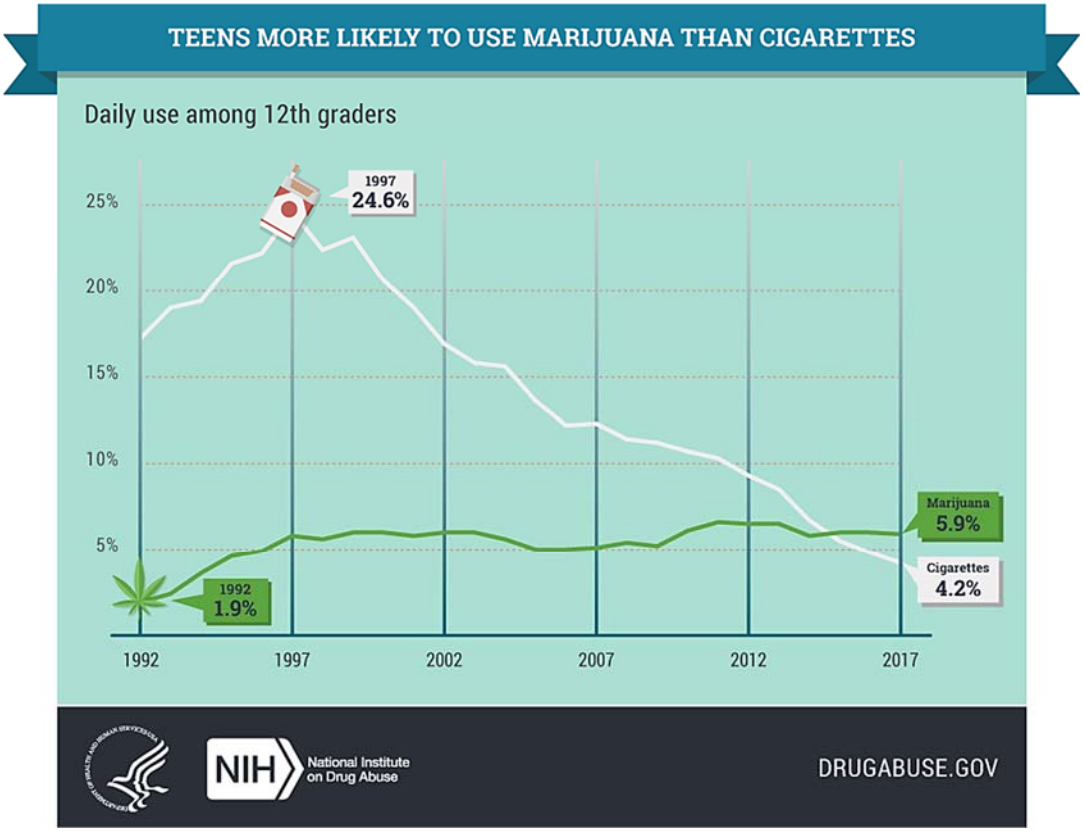
Youth Behavior	Current Marijuana User	Non-Current Marijuana User
Currently participate in extracurricular activities	95%	89%
Had at least one drink of alcohol (in the past 30 days)	67%	13%
Had sexual intercourse (in their lifetime)	64%	12%
Felt sad or hopeless for two or more weeks in a row (in the past 12 months)	46%	28%
Experienced 3 or more adverse childhood experiences (ACEs) (in their lifetime)	41%	22%
Bullied (in the past 12 months)	31%	34%
Smoked cigarettes (in the past 30 days)	26%	3%
Contemplated suicide (in the past 12 months)	23%	11%
Attempted suicide (in the past 12 months)	12%	7%

**"Current marijuana use" indicates youth who self-reported using marijuana at any time during the past 30 days.*
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Marijuana Use and Teens

- Marijuana remains the most used illicit substance among youth. Recent public discussions about medical marijuana and the public debate over its legal status is leading to a reduced perception of harm among young people. However, using marijuana can have harmful and long-lasting effects on a teen's health and well-being. Consider these facts:
  - — Research suggests that the effects on attention, memory, and learning can be long-term and even permanent in people who begin using marijuana regularly as teens.
  - — Marijuana use has been linked to a range of mental health problems in teens such as depression or anxiety. Psychosis (loss of reality) has also been seen in teens at higher risk like those with a family history of marijuana use.
  - — Drugs, including marijuana, affect the way teens drive, which puts them, their passengers, and other drivers on the road at risk. Drugs can alter a teen's perception, attention, balance, coordination, reaction time, and other skills they need to stay alert and safe.
  - — Research shows that about 1 in 6 teens who repeatedly use marijuana can become addicted, which means they may make unsuccessful efforts to quit using marijuana or give up important activities with friends and family in favor of using marijuana.
- Various factors can contribute to teen marijuana use, from a family history of drug abuse to hanging around people who use marijuana. However, research has shown that parents do have a big influence on their teens even when it doesn't appear that way. In fact, teens are more likely to use marijuana if their parents or friends use it, and less likely to use marijuana if their parents do not approve of it.
- The bottom line: using marijuana can have harmful and long-lasting effects on a teen's health and well-being. Unlike adults, the teen brain is actively developing and often will not stop until the mid-20s. Marijuana use during this period can have a detrimental impact, affecting a teen's brain and their ability to progress and grow.

(Source: Marijuana Use and Teens, Centers for Disease Control and Prevention 2017)



(Source: National Institute of Drug Abuse; Monitoring the Future 2017 Survey Results, 2017)

Youth Health: Sexual Behavior

Key Findings

In 2019, 21% of youth reported having had sexual intercourse at least once in their lives. Twenty percent (20%) of sexually active youth had four or more sexual partners. Nine percent (10%) of youth engaged in intercourse without a reliable method of protection, and 14% reported they were unsure if they used a reliable method.

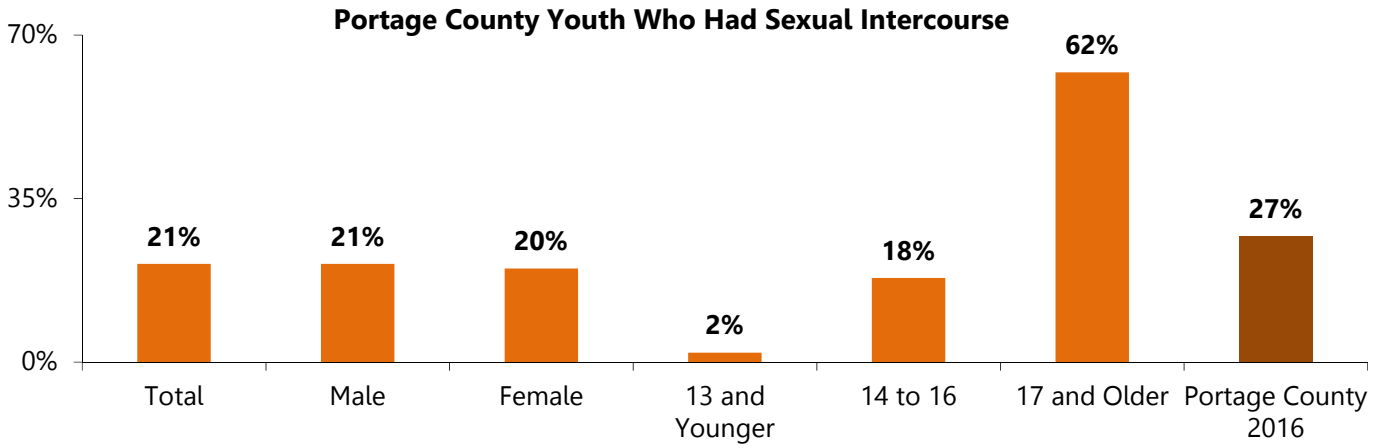
Youth Sexual Behavior

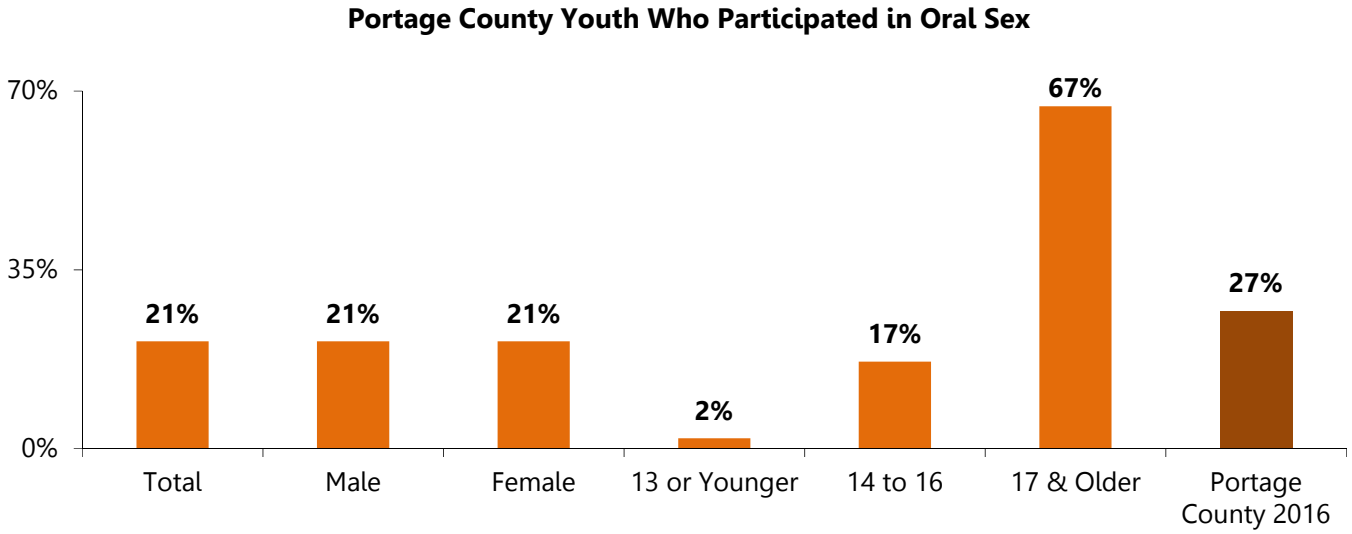
- About one-fifth (21%) of Portage County youth have had sexual intercourse, increasing to 62% of those ages 17 and older.
- Of sexually active youth, 47% had one sexual partner and 53% had multiple partners.
- One in five (20%) sexually active youth had four or more sexual partners.
- Five percent (5%) of all youth had four or more sexual partners.
- Of sexually active youth, 14% had done so before age of 13, 25% had done so before age 15, and another 61% had done so by age 17. The average age of onset was 14.5 years old.
- Of all youth, 3% were sexually active before the age of 13.

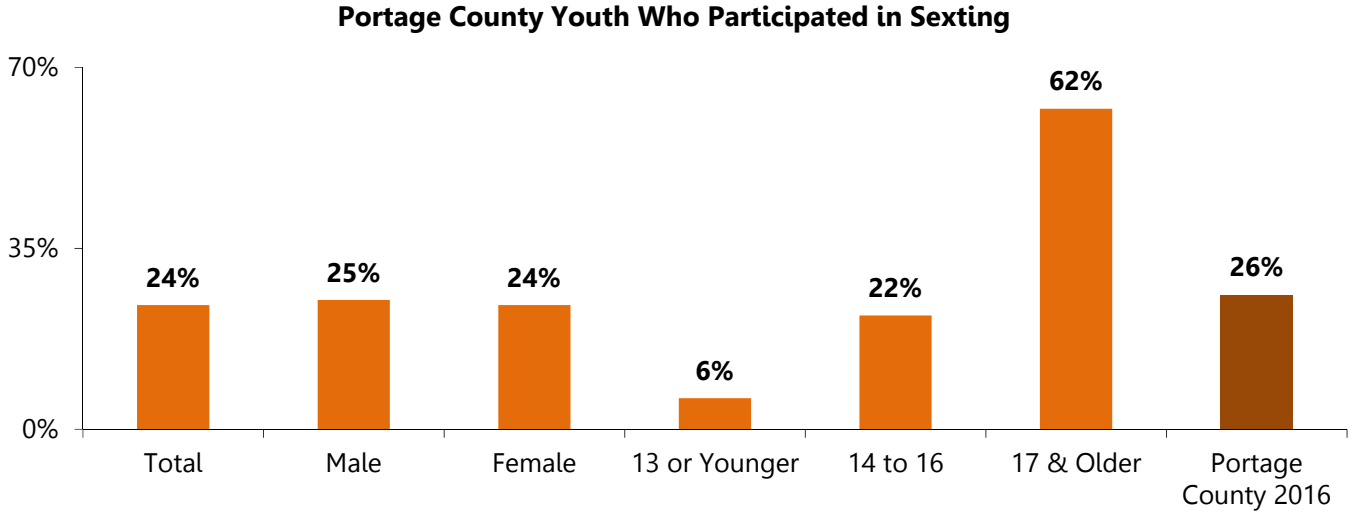
3,324 youth have had sexual intercourse at least once in their lives.

- Portage County youth have participated in the following:
  - 21% participated in oral sex (increasing to 67% of those ages 17 and older)
  - 4% participated in anal sex (increasing to 15% of those ages 17 and older)
  - 24% participated in sexting (increasing to 62% of those ages 17 and older)
  - 30% viewed pornography (increasing to 43% of males and 51% of those ages 17 and older)
- More than one-third (37%) of youth who were sexually active used condoms to prevent pregnancy; 23% used birth control pills; 6% used the withdrawal method; 2% used an IUD; 5% used a shot, patch or birth control ring; 4% were gay or lesbian; and 1% used some other method. However, 10% engaged in intercourse without a reliable method of protection, and 14% reported they were unsure.
- Portage County youth had experienced the following in their lifetime: had sex in exchange for something of value (2%), wanted to get pregnant (2%), had a miscarriage (1%), had a child (1%), treated for and STD (1%), been pregnant (1%), gotten someone pregnant (1%), had an abortion (1%) and tried to get pregnant (1%).
- Youth were taught about pregnancy prevention, sexually transmitted diseases (STD's), HIV/AIDS infection, or the use of condoms from the following: school (78%), parents (62%), doctor (31%), internet or social media (29%), friends (29%), church (4%), siblings (16%), and somewhere else (8%).
- In the past 30 days, Portage County youth reported the following situations applied to them: they received a text or an e-mail with a revealing or sexual photo of someone (19%); they texted, emailed, or posted electronically 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 (3%).

The following graphs show the percentage of Portage County youth who participated in sexual intercourse, oral sex, and sexting. An example of how to interpret the information includes: 21% of all Portage County youth had sexual intercourse, including 21% of males, and 20% of females.







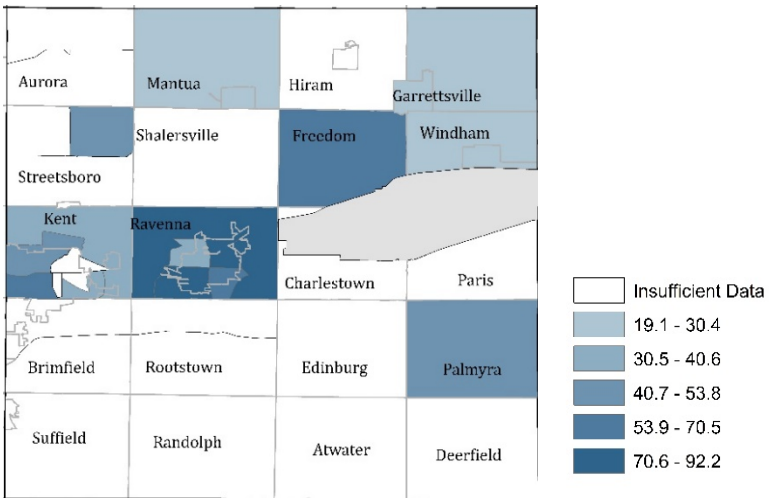
Note for graphs: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The map below shows the teen birth rate by census tract from 2016-2018.

Teen Birth Rate (2016-2018), by Census Tract

Highest
Southwest Ravenna- 92.2
Northeast Ravenna- 89.9
Ravenna Twp.- 75.8

County: 13.2



(Ohio Public Information Warehouse, 2018. Provided by the Portage County Health District.)
Note: Teen birth rate is calculated as births per 1,000 women aged 15-19.

Youth Comparisons	Portage County 2016 (6th-12th)	Portage County 2019 (6th-12th)	Portage County 2019 (9th-12th)	U.S. 2017 (9th-12th)
Ever had sexual intercourse	27%	21%	34%	40%
Had sexual intercourse with four or more persons (of all youth during their life)	8%	5%	8%	10%
Had sexual intercourse before the age 13 (for the first time of all youth)	3%	3%	4%	3%
Used a condom (during last sexual intercourse)	54%	37%	40%	54%
Used birth control pills (during last sexual intercourse)	30%	23%	24%	21%
Used an IUD (during last sexual intercourse)	5%	2%	2%	4%
Used a shot, patch or birth control ring (during last sexual intercourse)	3%	5%	4%	5%
Did not use any method to prevent pregnancy (during last sexual intercourse)	11%	10%	10%	14%

Youth Health: Mental Health

Key Findings

About one in three (32%) 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. In the past year, 8% of youth had attempted suicide.

Youth Mental Health

- About one in three (32%) 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 44% of females.

5,065 youth felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities.

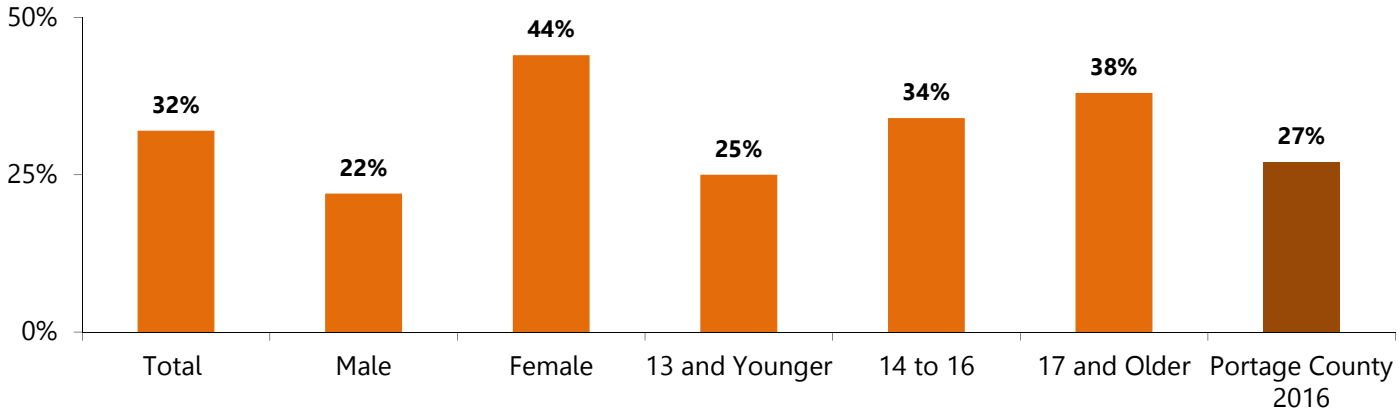
- Thirteen percent (13%) of youth reported they had seriously considered attempting suicide in the past 12 months, increasing to 15% of females and those ages 14-16.
- In the past year, 8% of youth had attempted suicide. Four percent (4%) of youth had made more than one attempt.
- Of those who attempted suicide, 2% resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse.

2,058 youth seriously considered attempting suicide.

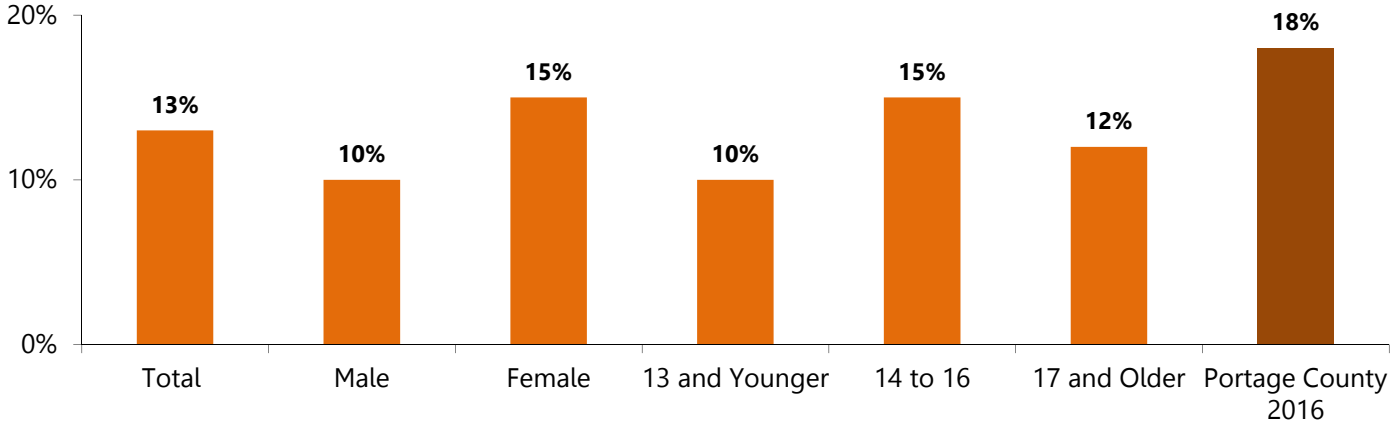
- Eighty-two percent (82%) of youth reported the following caused them anxiety, stress or depression:
  - Academic success (49%)
  - Fighting with friends (40%)
  - Self-image (34%)
  - Sports (33%)
  - Death of close family member or friend (32%)
  - Fighting at home (31%)
  - Stress at home (31%)
  - Peer pressure (29%)
  - Being bullied (21%)
  - Breakup (21%)
  - Dating relationship (19%)
  - Social media (17%)
  - Poverty/no money (14%)
  - Parent divorce/separation (12%)
  - Caring for younger siblings (11%)
  - Current world news/politics (10%)
  - Parent is sick (9%)
  - Alcohol or drug use in the home (8%)
  - Not having enough to eat (6%)
  - Sexual orientation (5%)
  - Not having a place to live (4%)
  - Other (16%)
- Eighty-one percent (81%) of youth reported the following ways of dealing with anxiety, stress, or depression:
  - Sleeping (47%)
  - Exercise/sports (36%)
  - Texting someone (35%)
  - Play video games (31%)
  - Eating (28%)
  - Talking to a peer (26%)
  - Talking to someone in their family (25%)
  - Using social media (20%)
  - Praying/Religion (14%)
  - Breaking something (13%)
  - Writing in a journal (11%)
  - Shopping (11%)
  - Drinking alcohol, smoking/using tobacco, or using illegal drugs (11%)
- Youth reported they would do they following if someone they knew was suicidal: talk to them (81%), try to calm them down (67%), call a crisis line (42%), call 9-1-1 (35%), call a friend (25%), text crisis line (18%), take them to the ER (11%), and call a spiritual leader (7%). Three percent (3%) of Portage County youth reported they would do nothing if someone they knew someone who was suicidal.

The following graphs show Portage County youth who felt sad or hopeless for two or more weeks in a row, seriously considered attempting suicide in the past year and had attempted suicide in the past year. An example of how to interpret the information on the first graph includes: 32% of youth felt sad or hopeless for two or more weeks in a row, including 22 of males, and 44% of females.

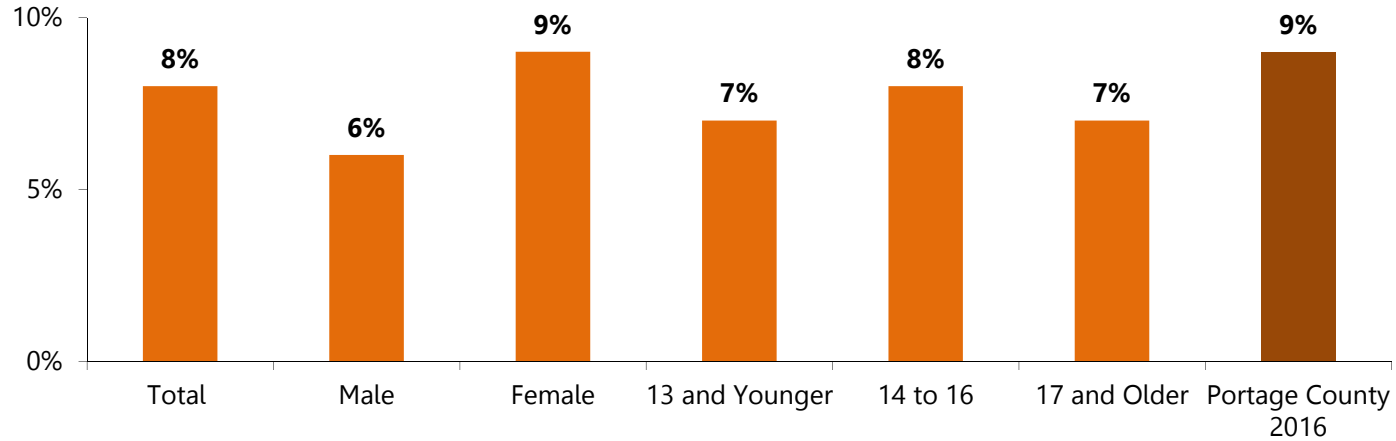
Portage County Youth Who Felt Sad or Hopeless for Two or More Weeks in a Row



Portage County Youth Who Had Seriously Considered Attempting Suicide in the Past 12 Months



Portage County Youth Who Attempted Suicide in the Past 12 Months



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

Youth Comparisons	Portage County 2016 (6th-12th)	Portage County 2019 (6th-12th)	Portage County 2019 (9th-12th)	U.S. 2017 (9th-12th)
Felt sad or hopeless (almost every day for 2 or more weeks in a row so that they stopped doing some usual activities in the past 12 months)	27%	32%	35%	32%
Seriously considered attempting suicide (in the past 12 months)	18%	13%	15%	17%
Attempted suicide (in the past 12 months)	9%	8%	8%	7%
Suicide attempt resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (in the past 12 months)	2%	2%	3%	2%

The table below indicates correlations between those who contemplated suicide in the past 12 months and participating in risky behaviors, as well as other activities and experiences. An example of how to interpret the information includes: 70% of those who contemplated suicide were bullied in the past 12 months, compared to 29% of those who did not contemplate suicide.

Behaviors of Portage County Youth

Contemplated Suicide vs. Did Not Contemplate Suicide*

Youth Behaviors	Contemplated Suicide	Did Not Contemplate Suicide
Currently participate in extracurricular activities	83%	90%
Bullied (in the past 12 months)	70%	29%
Experienced 3 or more adverse childhood experiences (ACEs) (in their lifetime)	54%	21%
Had at least one drink of alcohol (in the past 30 days)	46%	20%
Had sexual intercourse (in their lifetime)	34%	19%
Used marijuana (in the past 30 days)	33%	16%
Smoked cigarettes (in the past 30 days)	19%	6%

**"Contemplated suicide" indicates youth who self-reported seriously considering attempting suicide in the past year.*
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Healthy People 2020

Mental Health and Mental Disorders (MHMD)

Objective	Portage County 2019	U.S. 2017	Healthy People 2020 Target
MHMD-2 Reduce suicide attempts by adolescents‡	2%‡ (6-12 Grade) 3%‡ (9-12 Grade)	2%‡ (9-12th Grade)	2%*

**The Healthy People 2020 target is for youth in grades 9-12.*
‡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, 2019 Portage County Health Assessment)

Youth Health: Social Determinants of Health

Key Findings

About one-quarter (26%) of youth had three or more adverse childhood experiences (ACEs) in their lifetime. Seventy-nine percent (79%) of youth had been to the doctor for a routine check-up in the past year. One-third (33%) of Portage County youth drivers had texted while driving in the past 30 days.

Personal Health

- Almost four-fifths (79%) of youth had been to the doctor for a routine check-up in the past year, increasing to 83% of those ages 13 and younger.
- During their last routine check-up, their doctor discussed the following with them: how to maintain a healthy weight (25%), ways to deal with feelings of hopelessness or sadness (17%), ways to avoid alcohol use (13%), and ways to avoid tobacco use (13%).
- Youth last saw a dentist for a check-up, exam, teeth cleaning, or other dental work: less than a year ago (78%), 1 to 2 years ago (10%), more than 2 years ago (3%), never (<1%), and do not know (9%).
- Youth reported they got the following hours of sleep on an average school night; 4 hours or less (6%), 5-7 hours (59%), 8-9 hours (32%), 10 hours or more (3%).

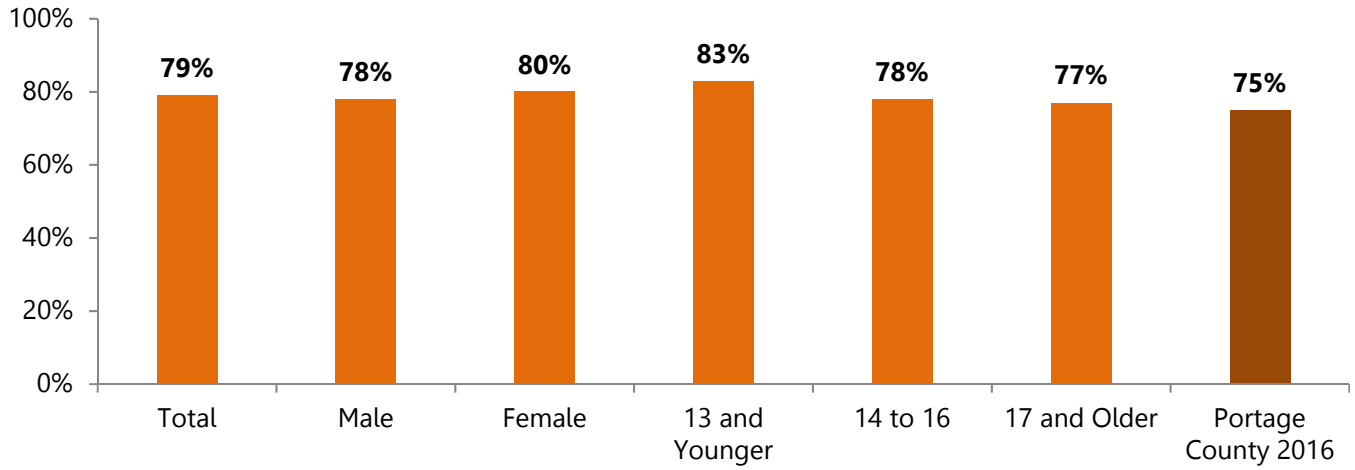
Personal Safety

- In the past 30 days, youth drivers did the following while driving: wore a seatbelt (100%), ate (50%), drove while tired or fatigued (35%), used their cell phone other than for talking or texting (34%), texted (33%), talked on their cell phone (14%), used marijuana (12%), applied makeup (5%), read (3%), used illegal drugs (3%), drank alcohol (2%), and drove while misusing prescription drugs (1%).
- In the past year, 17% of youth reported having a concussion from playing a sport or being physically active.
- Ninety-four percent (94%) of Portage County youth had a social media or online gaming account.
- Of those who had an account, they reported the following:
  - Their account was currently checked private (52%)
  - They believed that sharing information online is dangerous (49%)
  - They knew all of their "friends" (46%)
  - Their parents had their password (20%)
  - They knew all of the people they play online (24%)
  - Their friends had their password to some or all of their accounts (10%)
  - They had been asked to meet someone they met online (8%)
  - They share personal information (6%)
  - They were bullied because of their accounts (5%)
  - Their parents do not know they have an account (5%)
  - They had participated in sexual activity with someone they met online (4%)

Youth Comparisons	Portage County 2016 (6th-12th)	Portage County 2019 (6th-12th)	Portage County 2019 (9th-12th)	U.S. 2017 (9th-12th)
Visited a dentist within the past year (for a check-up, exam, teeth cleaning, or other dental work)	74%	78%	78%	74%**
Visited a doctor or other healthcare professional (for a routine check-up in the past year)	75%	79%	78%	N/A

***Comparative YRBS data for U.S. is 2013*

Portage County Youth Who Visited a Doctor Within the Past Year



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

The table below indicates correlations between those who experienced 3 or more ACEs in their lifetime and participating in risky behaviors, as well as other activities and experiences. An example of how to interpret the information includes: 58% of those who experienced 3 or more ACEs felt sad or hopeless for two or more weeks in a row during the past 12 months, compared to 14% of those who did not experience any ACEs.

Behaviors of Portage 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
Currently participate in extracurricular activities	90%	90%
Felt sad or hopeless for two or more weeks in a row (in the past 12 months)	58%	14%
Had at least one drink of alcohol (in the past 30 days)	35%	18%
Had sexual intercourse (in their lifetime)	30%	13%
Used marijuana (in the past 30 days)	29%	12%
Seriously considered attempting suicide (in the past 12 months)	28%	3%
Attempted suicide (in the past 12 months)	20%	2%
Smoked cigarettes (in the past 30 days)	15%	4%

**"ACEs" indicate youth who self-reported having experienced three or more adverse childhood experiences in their lifetime.*
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Economic Stability

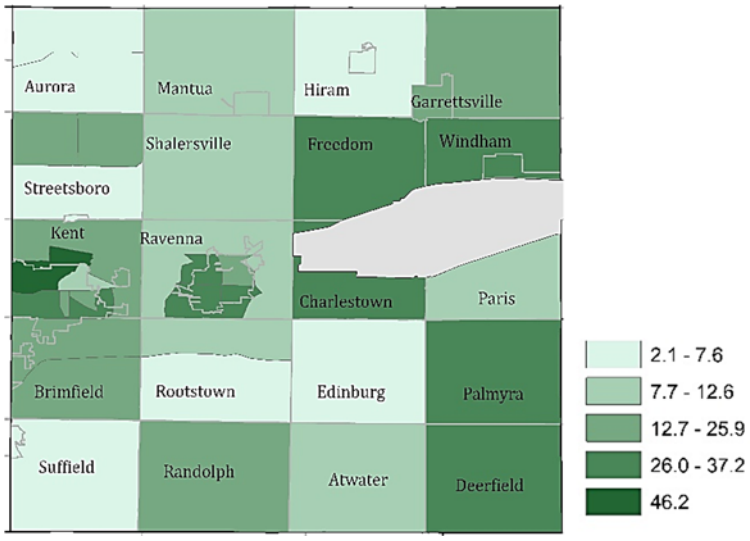
- The following map shows the percent of population ages 0-17 living below the federal poverty level.

Percent of population ages 0-17 living below the federal poverty level

Highest
Kent, Northwest - 46.2%
Kent, South Off-Campus- 36.5%
Kent, Southwest- 35.2%

Lowest
South Rootstown- 2.1%
Suffield Twp.- 2.3%
Edinburg Twp. - 3.7%

County: 18.7%



(Source: American Community Survey (ACS) 2013-2017 5-Year Estimates. Provided by Portage County Health District)

Social and Community Context

- Portage County youth lived with the following: both parents (58%), mother and step-father (11%), mother only (12%), father and step-mother (4%), father only (3%), parents have joint custody (11%), grandparents (8%), another relative (6%), guardians/foster parents (1%) and on their own or with friends (1%).

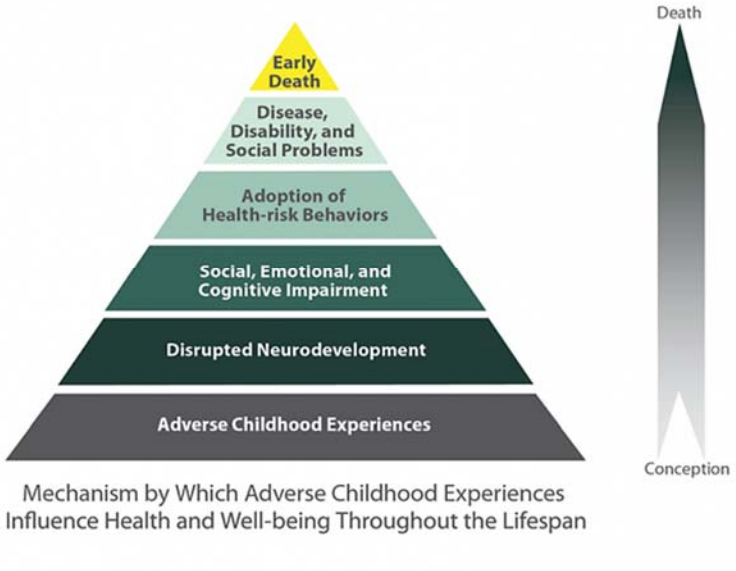
- Youth reported their parent or guardian regularly did the following: talked to them about school (69%); asked about homework (63%); made the family eat a meal together (58%); went to school meetings or events at school (50%); talked about healthy choices (47%); helped with school work (40%); talked about social media (32%); and talked about alcohol use, drug use or sex (28%). Ten percent (10%) of youth reported their parent or guardian never did any of those things.

- Youth reported they were doing excellent in school (19%), very good (24%), good (33%), fair (21%) and poor (3%).

- Eighty-nine percent (89%) of youth participated in the following extra-curricular activities:
  - Sports or intramural program (54%)
  - Exercise outside of school (49%)
  - School club or social organization (31%)
  - Church or religious organization (15%)
  - Part-time job (21%)
  - Take care of siblings after school (19%)
  - Church youth group (14%)
  - Volunteer in the community (13%)
  - Babysit for other kids (12%)
  - Some other organized activity (9%)
  - Take care of parents or grandparents (3%)

Adverse Childhood Experiences (ACEs)

- Childhood abuse, neglect, and exposure to other traumatic stressors which we term adverse childhood experiences (ACE) are common. The most common are separated or divorced parents, verbal, physical or sexual abuse, witness of domestic violence, and having a family member with depression or mental illness.
- The short and long-term outcomes of these childhood exposures include a multitude of health and social problems such as:
  - Depression
  - Fetal death
  - Illicit drug use
  - Liver disease
  - STD's
  - Multiple sexual partners
  - Alcoholism and alcohol abuse
  - COPD
  - Unintended pregnancies
  - Suicide attempts
  - Early initiation of smoking
  - Risk for intimate partner violence
- Given the high prevalence of ACEs, additional efforts are needed at the state and local level to reduce and prevent childhood maltreatment and associated family dysfunction in the US.



Mechanism by Which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

(Source: CDC, Adverse Childhood Experiences, June 2016)

- More than half (56%) of youth reported the following adverse childhood experiences (ACEs):
  - Parents became separated or were divorced (30%)
  - Parents or adults in home swore at them, insulted them or put them down (25%)
  - Family did not look out for each other, feel close to each other, or support each other (19%)
  - Lived with someone who was depressed, mentally ill or suicidal (17%)
  - Lived with someone who was a problem drinker or alcoholic (15%)
  - Lived with someone who served time or was sentenced to serve in prison or jail (15%)
  - Parents were not married (13%)
  - Lived with someone who used illegal drugs or misused prescription drugs (12%)
  - Parents or adults in the home abused each other (8%)
  - Parents or adults in home abused them (7%)
  - Did not have enough to eat, had to wear dirty clothes, and had no one to protect them (5%)
  - An adult or someone 5 years older than them touched them sexually (3%)
  - An adult or someone 5 years older than them tried to make them touch them sexually (2%)
  - And an adult or someone 5 years older than them forced them to have sex (1%)
- About one-quarter (26%) of youth had three or more adverse childhood experiences in their lifetime.

Youth Health: Violence

Key Findings

More than one-third (34%) of youth had been bullied in the past year. Eight percent (8%) of youth had ever been forced to participate in various sexual activities when they did not want to. Twenty-three percent (23%) of youth purposefully hurt themselves in their life by cutting, scratching, burning, hitting or biting, increasing to 32% of females.

Violence-Related Behaviors

- Eleven percent (11%) of youth had carried a weapon in the past 30 days. Two percent (2%) of youth had carried a weapon on school property in the past 30 days.
- Eight percent (8%) of youth were threatened or injured with a weapon on school property in the past year.
- Six percent (6%) of youth did not go to school on one or more days in the past month because they did not feel safe at school or on their way to or from school.

Physical and Sexual Violence

- Twenty-three percent (23%) of youth purposefully hurt themselves in their life by cutting, scratching, burning, hitting or biting, increasing to 32% of females.
- Three percent (3%) of youth reported a boyfriend or girlfriend hit, slapped, or physically hurt them on purpose in the past 12 months; 4% said an adult or caregiver did; 1% said another adult did; and 19% said another teen/student did.
- Eight percent (8%) of youth had ever been forced to participate in various sexual activities when they did not want to.

Bullying

- More than one-third (34%) of youth had been bullied in the past year. The following types of bullying were reported:
  - 25% of youth were verbally bullied (teased, taunted or called harmful names)
  - 20% youth were indirectly bullied (spread mean rumors about them or kept them out of a "group")
  - 9% of youth were cyber bullied (teased, taunted or threatened by e-mail or cell phone)
  - 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)
- Twenty-five percent (25%) reported being bullied on school property in the past year.
- In the past year, Portage County youth reported they have been a victim of teasing or name calling because of the following reasons: weight, size, or physical appearance (26%); someone thought they were gay, lesbian or bisexual (10%); race or ethnic background (7%); and gender (4%).

Types of Bullying Portage County Youth Experienced in Past Year

Youth Behaviors	Total	Male	Female	13 and Younger	14-16 Years Old	17 and Older	Middle School	High School
Verbally Bullied	25%	23%	24%	30%	24%	19%	28%	22%
Indirectly Bullied	20%	16%	26%	22%	18%	22%	21%	19%
Cyber Bullied	9%	6%	12%	14%	7%	6%	12%	6%
Physically Bullied	6%	7%	5%	8%	6%	3%	7%	5%
Sexually Bullied	2%	1%	2%	1%	2%	1%	1%	2%

Youth Comparisons	Portage County 2016 (6^{th}-12^{th})	Portage County 2019 (6^{th}-12^{th})	Portage County 2019 (9^{th}-12^{th})	U.S. 2017 (9^{th}-12^{th})
Carried a weapon (in the past 30 days)	11%	11%	13%	16%
Carried a weapon on school property (in the past 30 days)	1%	2%	3%	4%
Threatened or injured with a weapon on school property (in the past 12 months)	5%	8%	9%	6%
Did not go to school because they felt unsafe (at school or on their way to or from school in the past 30 days)	4%	6%	5%	7%
Bullied (in past year)	43%	34%	31%	N/A
Bullied on school property (in past year)	33%	25%	19%	19%
Electronically bullied (in past year)	12%	9%	6%	15%
Were ever physically forced to have sexual intercourse (when they did not want to)	3%	2%	3%	7%
Experienced physical dating violence (including being hit, slammed into something, or injured with an object or weapon on purpose by someone they were dating or going out with in the past 12 months)	2%	3%	3%	8%
Purposefully hurt themselves in their life	30%	23%	24%	N/A

N/A – Not available

Preventing Youth Violence

- Youth violence is defined as the intentional use of physical force or power to threaten or harm others by young people ages 10-24. It is the leading cause of death for young people and results in more than 500,000 nonfatal injuries each year.
- Youth violence starts early. Many risk factors are the result of experiencing chronic stress which can alter and/or harm the brain development of children and youth such as
    - Living in impoverished neighborhoods
    - Living in dilapidated housing
    - Frequently moving
    - Experiencing food insecurity
    - Experiencing racism
    - Limited access to support and medical services
    - Living in homes with violence
    - Mental health problems
    - Substance abuse
    - And other instability
- Youth violence is an adverse childhood experience and is connected to other forms of violence, including child abuse and neglect, teen dating violence, adult intimate partner violence, sexual violence, and suicide. Different forms of violence have common risk and protective factors, and victims of one form of violence are more likely to experience other forms of violence.
- Violence increases health care costs, decreases property value, and disrupts social services. Youth violence negatively impacts perceived and actual safety, participation in community events, youth's school attendance, and viability of businesses.
- Youth homicides and nonfatal physical assault-related injuries result in more than $21 billion annually through medical and lost productivity costs. This does not include costs associated with the criminal justice system; psychological and social consequences for victims, perpetrators and/or their families; nor the costs incurred by communities.

(Source: CDC, Violence Prevention; Preventing Youth Violence, 2018)

Child Health: Health and Functional Status

Key Findings

In 2019, 98% of Portage County parents rated their child's health as excellent (63%) or very good (35%). Seventeen percent (17%) of children were classified as obese by Body Mass Index (BMI) calculations. More than three-quarters (78%) of Portage County parents had taken their child to the dentist in the past year. Thirteen percent (13%) of Portage County parents reported their child had been diagnosed with asthma.

Child Health

- In 2019, 98% of Portage County parents rated their child's health as excellent (63%) or very good (35%). Two percent (2%) of parents rated their child's health as fair. No parents (0%) rated their child's health as poor.
- Parents reported their child got the following amounts of sleep on an average weeknight: less than 8 hours (6%), 8 hours (18%), 9 hours (34%), 10 hours (25%), and 11 hours or more (18%).

Oral Health

- Seventy-eight percent (78%) of children had been to the dentist in the past year, decreasing to 57% of those with incomes less than $25,000. Nine percent (9%) of children were not old enough to go to the dentist and 1% did not have teeth yet.
- Almost one-third (34%) of Portage County parents reported their child had the following problems with their teeth:
  - Cavities (21%)
  - Crooked teeth or teeth that need braces (19%)
  - Family history of dental problems (6%)
  - Hygiene (4%)
  - Discoloration (4%)
  - Broken front teeth or teeth that need repair (2%)
  - Bottle rot/baby bottle tooth decay (1%),
  - Pain (1%)
  - Enamel problems (1%)
  - Gum problems (1%)
  - Nerve problems (1%)
  - Other (2%)
- Twenty percent (20%) of parents indicated their child did not get all the dental care they needed for the following reasons:
  - Child was not old enough to go/dentist would not see child yet because of their age (9%)
  - No insurance (3%)
  - Child refused to go (2%)
  - Inconvenient times/could not get an appointment (2%)
  - Cost (1%)
  - Insurance problem/insurance was not accepted (1%)
  - No referral (1%)
  - Dissatisfaction with dentist/staff (1%)
  - Other reasons (5%)

Weight Status and Nutrition

- Seventeen percent (17%) of children were classified as obese by Body Mass Index (BMI) calculations. Sixteen percent (16%) of children were classified as overweight, 60% were normal weight, and 7% were underweight.
- Eighty-six percent (86%) of parents reported their child was physically active for at least 60 minutes on 3 or more days per week. Nearly two-thirds (64%) were physically active on 5 or more days, and 41% were physically active for at least 60 minutes every day per week. Four percent (4%) were unable to be physically active.
- Portage County children spent an average of 1.9 hours watching TV, 1.3 hours reading, 1.1 hours playing video games, and 1.0 hour on a computer on an average day of the week.

- Three percent (3%) of children ate 5 or more servings of fruit per day. Sixty-five percent (65%) ate 1 to 2 servings per day, and 27% ate 3 to 4 servings of fruit per day. Five percent (5%) of children ate 0 servings of fruit per day.
- One percent (1%) of children ate 5 or more servings of vegetables per day. Seventy-four percent (74%) ate 1 to 2 servings per day, and 16% ate 3 to 4 servings of vegetables per day. Nine percent (9%) of children ate 0 servings of vegetables per day.
- One percent (1%) of children had a sugar-sweetened beverage 5 or more times per day. Over half (52%) of youth had a sugar-sweetened beverage at least 1 to 2 times during the past week. Four percent (4%) had a sugar-sweetened beverage at least 3 to 4 times during the past week. Forty-four percent (44%) of children did not drink any sugar-sweetened beverages in the past week.
- Three percent (3%) of children had a drink that was high in caffeine such as coffee, espresso or energy drinks 2 to 3 times during the past week. Ten percent (10%) of children had a high caffeine drink once during the past week, and 87% did not drink any high caffeine drinks in the past week.
- Portage County children usually ate the following breakfast:
  - Cereal (74%)
  - Milk (58%)
  - Toast (43%)
  - Eggs (43%)
  - Yogurt (36%)
  - Fruit/fruit juice (30%)
  - Pop Tart/donut/pastry (29%)
  - Bacon/sausage/ham (25%)
  - Oatmeal (23%)
  - Child eats at school breakfat program (9%)
  - Nothing (5%)
  - Breast milk/formula (5%)
  - Pizza (1%)Other (13%)

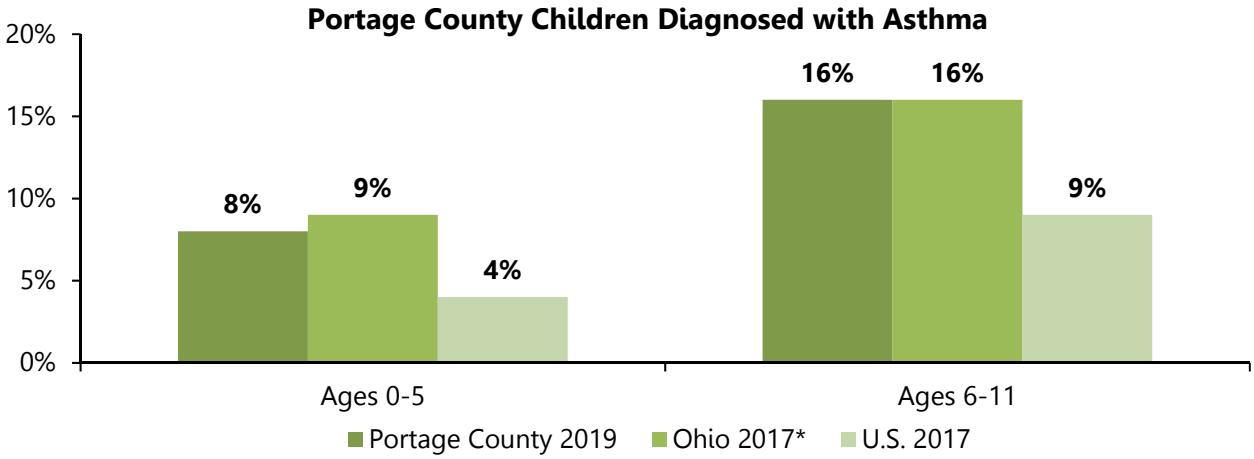
Health Conditions

- A doctor, health professional, or health educator told Portage County parents their child had the following conditions:
  - Asthma (13%)
  - Speech and language delay (12%)
  - ADD/ADHD (8%)
  - Developmental delay (6%)
  - Anxiety problems (6%)
  - Genetic or inherited condition (4%)
  - Learning disability (3%)
  - Intellectual disability or mental retardation (2%)
  - Behavioral/conduct problems (2%)
  - Autism or Autism Spectrum Disorder (ASD) (1%)
  - Brain injury, concussion or head injury (1%)
  - Obsessive-compulsive disorder (1%)
  - Cerebral palsy (1%)
  - Depression (1%)
  - Epilepsy/seizure disorder (1%)
- Thirty-six percent (36%) of Portage County children ages 0-11 had one or more health conditions.
- Parents reported their children had the following allergies: environmental allergies (17%), animal allergies (7%), red dye (1%), peanuts (1%), wheat (1%), milk (1%), gluten (1%), other food allergies (2%), and other (2%). Nine percent (9%) of parents of children with allergies had an Epi-pen.
- Six percent (6%) of parents reported their child had an episode of asthma or had an asthma attack during the past 6 months.

Asthma

The following graph shows the percentage of children who were diagnosed with asthma in Portage County, Ohio, and the U.S.

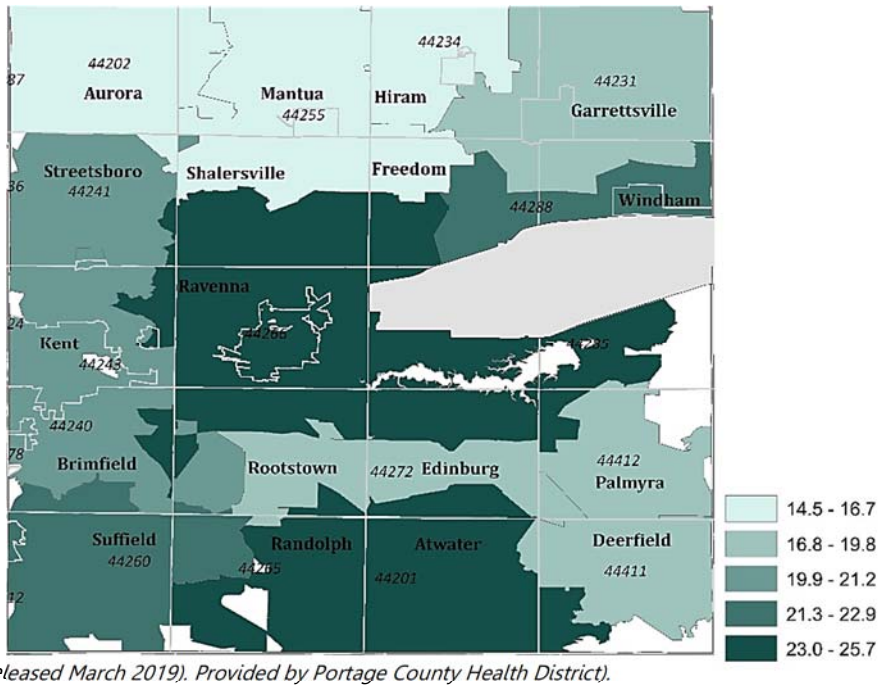
- Portage County had a lower percentage of children ages 6-11 who were diagnosed with asthma compared to both Ohio and the U.S.



(Source: 2017 National Survey of Children's Health & 2019 Portage County Health Assessment)
**Indicates Ohio 2016 data from the National Survey of Children's Health. 2017 Ohio data is not available.*
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

The following map shows the percent of children with diagnosed asthma from July 2017 to June 2018.

Region	ZIP Code	Percent of Children Diagnosed with Asthma
Ravenna	44266	25.7%
Atwater	44201	24.4%
Suffield	44260	22.9%
Windham	44288	21.9%
Kent	44240	21.2%
Streetsboro	44241	21.1%
Rootstown	44272	19.8%
Palmyra	44412	19.8%
Garrettsville	44231	19.7%
Deerfield	44411	17%
Aurora	44202	16.7%
Mantua	44255	15.3%
Hiram	44234	14.5%



(Source: Better Health Partnership, Report 4 (released March 2019). Provided by Portage County Health District).

Asthma and Children

- Asthma is the most common chronic condition among children, currently affecting an estimated 6.1 million children under 18 years old, of which 3.5 million suffered from an asthma attack or episode in 2016.

- An asthma episode is a series of events that results in constricted airways. These include swelling of the airway lining, tightening of the muscle around the airways and increased secretion of mucus inside the airway. This narrowed airway causes difficulty breathing with the familiar "wheeze."

- When a child has asthma, their lungs are extra sensitive to certain "triggers." Each child reacts differently to the factors that may trigger asthma, including:
  - Respiratory infections and colds
  - Cigarette smoke
  - Allergic reactions to allergens such as pollen, mold, animal dander, feather, dust, food and cockroaches
  - Indoor and outdoor air pollutants, including ozone and particle pollution
  - Exposure to cold air or sudden temperature change
  - Excitement/stress
  - Exercise

- Secondhand smoke can cause serious harm to children. An estimated 400,000 to one million children with asthma have their condition worsened due to secondhand smoke.

- Asthma can be a life-threatening disease if not properly managed. In 2016, 3,651 deaths were attributed to asthma.

- The number of deaths increases with age. In 2016, 169 children under 15 years old died from asthma compared to 554 adults over 85 years old.

- Asthma is the third leading cause of hospitalization among children under the age of 15.

(Source: American Lung Association, Asthma & Children Fact Sheet, Updated July 10, 2019)

Child Comparisons	Portage County 2016 Ages 0-5	Portage County 2019 Ages 0-5	Ohio 2017 Ages 0-5	U.S. 2017 Ages 0-5	Portage County 2016 Ages 6-11	Portage County 2019 Ages 6-11	Ohio 2017 Ages 6-11	U.S. 2017 Ages 6-11
Rated health as excellent or very good	95%	97%	91%	93%	92%	99%	88%	90%
Dental care visit in the past year	79%	51%	41%**	60%**	89%	93%	89%	90%
Diagnosed with asthma	10%	8%	9%±	4%	17%	16%	16%±	9%
Diagnosed with diabetes	0%	0%	N/A	<1%***	1%	0%	N/A	<1%***
Diagnosed with ADHD/ADD	3%	3%	2%*±	2%*	9%	11%	13%	10%
Diagnosed with behavioral or conduct problems	3%	0%	3%*±	4%*	5%	4%	13%	8%
Diagnosed with epilepsy or a seizure disorder	1%	3%	N/A	<1%***	<1%	0%	N/A	<1%***
Diagnosed with a brain injury, concussion, or head injury	0%	0%	N/A	<1%	2%	1%	N/A	<1%
Diagnosed with depression	0%	0%	N/A	<1%*	2%	1%	N/A	2%
Diagnosed with cerebral palsy	0%	2%	N/A	<1%***	0%	0%	N/A	<1%***
Diagnosed with anxiety problems	2%	3%	N/A	2%*	8%	7%	N/A	6%
Diagnosed with intellectual disability/mental retardation	N/A	5%	N/A	1%*	N/A	0%	N/A	1%
Diagnosed with learning disability	3%	3%	N/A	2%*	7%	3%	N/A	9%
Diagnosed with speech or language disorder	14%	18%	N/A	10%*	9%	9%	N/A	7%
Child had two or more health conditions	N/A	17%	7%	7%	N/A	11%	28%	21%

¥Ages 3-5
***Ages 1-5*
****Ages 0-17*
±Indicates Ohio 2016 data from the National Survey of Children's Health. 2017 Ohio data is not available.
N/A – Not Available

Child Health: Health Care Access

Key Findings

In 2019, all Portage County parents reported that their child had health insurance. Eighty-six percent (86%) of children had a personal doctor or nurse. Ninety-four percent (94%) of children had visited their health care provider for preventive care in the past 12 months.

Health Insurance

- All Portage County parents reported that their child had health insurance.
- Portage County children were covered by the following types of health insurance: parent's employer (84%); Medicaid, Buckeye, Paramount, Molina, United, Care Source, or State Children's Health Insurance Program (S-CHIP) (14%); TRICARE or other military health care (2%); insurance purchased directly from an insurance company (1%); Medicare (1%); and some other source of insurance (1%).
- Parents reported their child's health insurance covered the following: doctor visits (100%); immunizations (100%); well visits (99%); coverage (98%); prescription hospital stays (97%); dental (87%); mental health (82%); vision (79%); and therapies (speech, occupational therapy, physical therapy, etc.) (70%).

Medical Home

- Eighty-six percent (86%) of parents reported they had one or more people they think of as their child's personal doctor or nurse.
- Ninety-four percent (94%) of children had visited their health care provider for preventive care in the past 12 months, increasing to 98% of 0-5 year olds.

Access and Utilization

- When their child is sick, Portage County parents usually take their child to a doctor's office (89%), retail store or "Minute Clinic" (6%), clinic or health center (3%), and hospital emergency room (<1%), hospital outpatient department (<1%), some other place (<1%). About one percent (<1%) reported not having one perticular place to go when their child is sick.
- Four percent (4%) of children did not get all of the medical care they needed in the past year for the following reasaons:
  - Cost (1%)
  - No referral (1%)
  - Too long of a wait for an appointment (1%)
  - No convenient times/could not get appointment (1%)
  - Not available in area/transportation problems (1%)
  - Did not know where to go for treatment (1%)
  - Treatment is ongoing (1%)
  - Other reasons (1%)

- Portage County parents were referred to the following specialists:

	Referred, but did not go	Referred and went	Not applicable
Heart doctor?	1%	8%	91%
Ear, Nose and Throat doctor?	1%	24%	75%
Endocrinologist?	0%	1%	99%
Psychiatrist/mental health provider?	0%	7%	93%
Oncologist/cancer doctor?	0%	1%	99%
Pulmonologist/lung doctor?	0%	6%	94%
Ophthalmologist/eye doctor?	1%	29%	70%
Dermatologist/skin doctor?	1%	12%	87%
Allergist?	0%	10%	90%
Neurologist?	1%	7%	92%
Developmental pediatrician?	1%	5%	94%
Other specialist?	1%	19%	80%

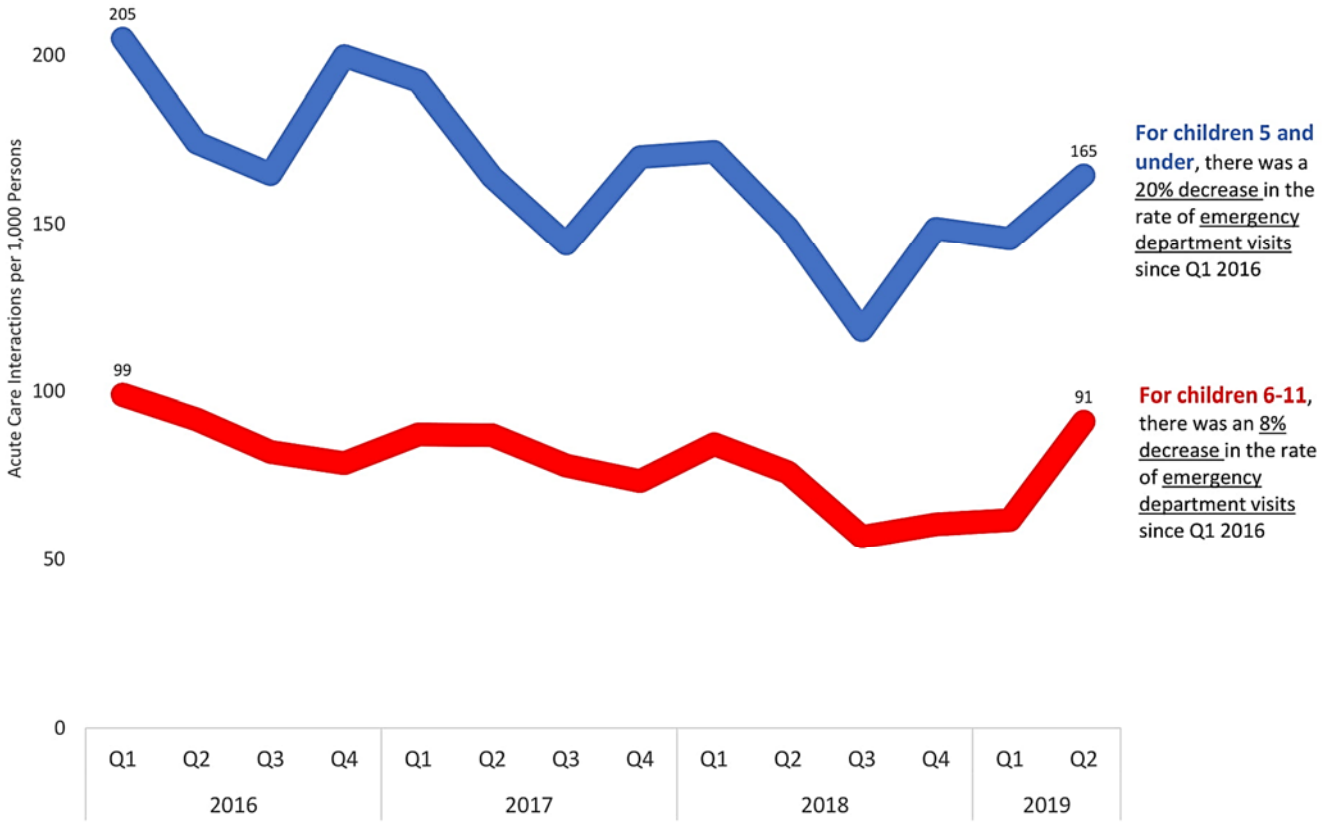
- Parents reported their child did not get all of the prescription medications they needed in the past year for the following reasons: their child was not prescribed medication (12%), cost (1%), health plan problem (1%), and no convenient times/could not get appointment (1%). Eighy-nine percent of parents reported their child did receive all their prescription medicaitons.

- Fifty-nine percent (59%) of Portage County children received the flu vaccine during the past year.

- Children did not get all of their recommended vaccinations for the following reasons: alternate vaccination schedule used (4%); child had received some, but not all, recommended vaccinations (2%); parents chose to not vaccinate their child (2%); fear of negative effects (1%); religious or cultural beliefs (1%); not sure of recommendations (1%), and other reasons (1%). Ninety-five percent (95%) of children did get all of their recommended vaccinations.

The following maps shows the rate (per 1,000 people) of acute care interactions for children from January 2016 to June 2019.

Rate (per 1,000 people) of Acute Care Interactions for Children from January 2016 to June 2019



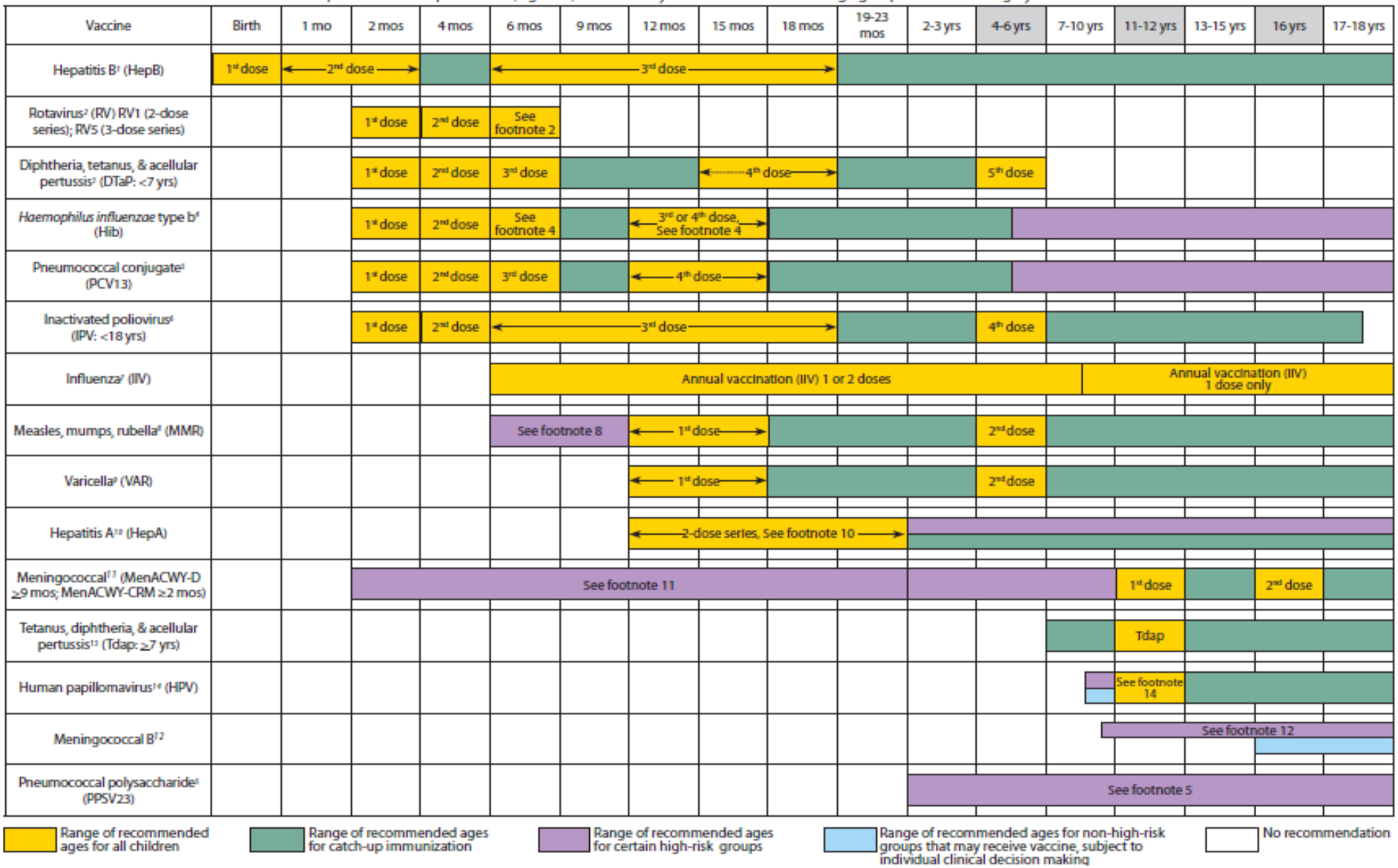
(Source: EpiCenter, 2019, as compiled by Portage County Health District)

Child Comparisons	Portage County 2016 Ages 0-5	Portage County 2019 Ages 0-5	Ohio 2017 Ages 0-5	U.S. 2017 Ages 0-5	Portage County 2016 Ages 6-11	Portage County 2019 Ages 6-11	Ohio 2017 Ages 6-11	U.S. 2017 Ages 6-11
Had public insurance	24%	15%	28% *	32%	23%	17%	33% *	32%
Had one or more preventive care visits in past year	97%	98%	94%	89%	80%	92%	78%	80%
Had a personal doctor or nurse	81%	85%	75%	72%	76%	86%	72%	72%

**Indicates Ohio 2016 data from the National Survey of Children's Health. 2017 Ohio data is not available.*

Figure 1. Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger—United States, 2018.
(FOR THOSE WHO FALL BEHIND OR START LATE, SEE THE CATCH-UP SCHEDULE [FIGURE 2]).

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are shaded in gray.



(Source: Centers for Disease Control and Prevention, Immunization Schedules, 2019)

Child Health: Early Childhood (Ages 0-5)

Key Findings

The following information was reported by parents of 0-5 year olds. Ninety-eight percent (98%) of mothers got prenatal care within the first three months during their last pregnancy. Twelve percent (12%) of mothers received WIC services during their last pregnancy. Eighty-five percent (85%) of parents put their child to sleep on his/her back. Thirteen percent (13%) of mothers never breastfed their child.

Early Childhood

The following information was reported by Portage County parents of 0-5 year olds:

- Mothers who were pregnant in the past 5 years did the following during pregnancy:
  - Received prenatal care within the first 3 months (98%)
  - Took a multivitamin with folic acid (90%)
  - Received a dental exam (61%)
  - Experienced depression during or after pregnancy (27%)
  - Received WIC services (12%)
  - Smoked cigarettes or other tobacco products (2%)
  - For options for an unwanted pregnancy (2%)
  - Used marijuana (2%)

Sudden Infant Death Syndrome: Who is at Risk?

- Sudden infant death syndrome (SIDS) is the sudden and unexplained death of a baby younger than 1 year old. Most SIDS deaths are associated with sleep, which is why it's sometimes still called "crib death."
- Babies younger than 1 year old should be placed on their backs to sleep — never face down on their stomachs or on their sides. Sleeping on the stomach or side increases the risk for SIDS.
- Several risk factors might combine to cause an at-risk infant to die of SIDS. Most SIDS deaths happen in babies 2 to 4 months old, and cases rise during cold weather.
- Black and Native American infants are more likely to die of SIDS than Caucasian infants. More boys than girls fall victim to SIDS.

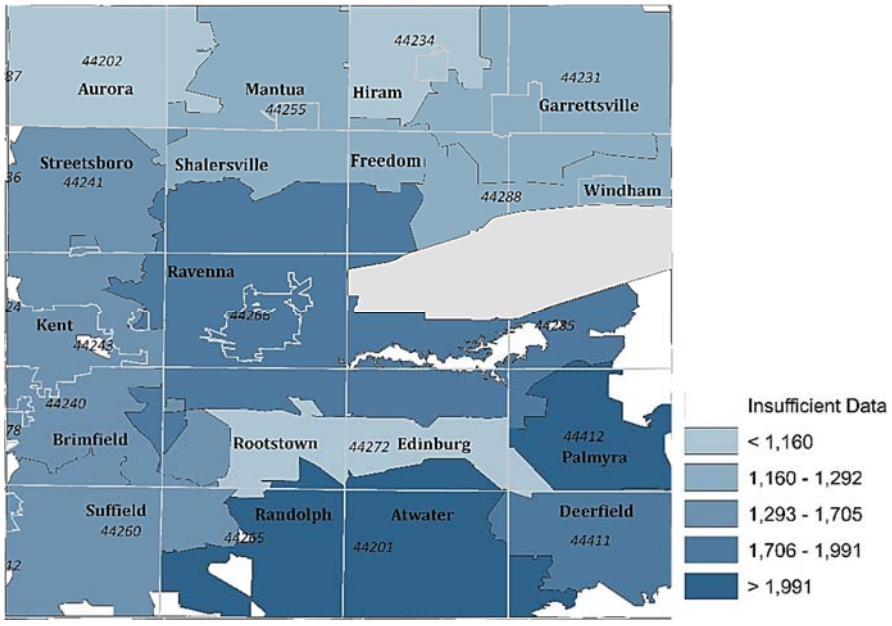
(Source: KidsHealth from Nemours, For Parents, Sudden Infant Death Syndrome, February 2017)

- Thinking back to their last pregnancy, 48% of women wanted to be pregnant then, 32% wanted to be pregnant sooner, 6% did not want to be pregnant then or any time in the future, 6% wanted to be pregnant later, and 9% of women did not recall.
- Nine percent (9%) of parents reported their child was born more than three weeks before their due date.
- Twenty-two percent (22%) of parents had their children less than two years apart.
- When asked how parents put their child to sleep as an infant, 85% said on their back, 7% said in bed with themselves or another person, 3% said on their side, and 3% said on their stomach.
- Children were put to sleep in the following places: crib/bassinette without bumper, blankets, or stuffed animals (85%); pack n' play (44%); swing (26%); in bed with parent or another person (25%); car seat (25%); crib/bassinette with bumper, blankets, or stuffed animals (10%); floor (3%); and couch or chair (3%).
- Portage County parents reported that they or another family member read to their child at the following frequencies: 1 to 3 days per week (20%), 4 to 6 days per week (18%), and every day (62%).

The following maps shows the rate (per 1,000 people) of acute care interactions for children 5 and under by zip code from January 2016 to June 2019.

Rate of Acute Care Interactions 0-5 Years Old (per 1,000 children)

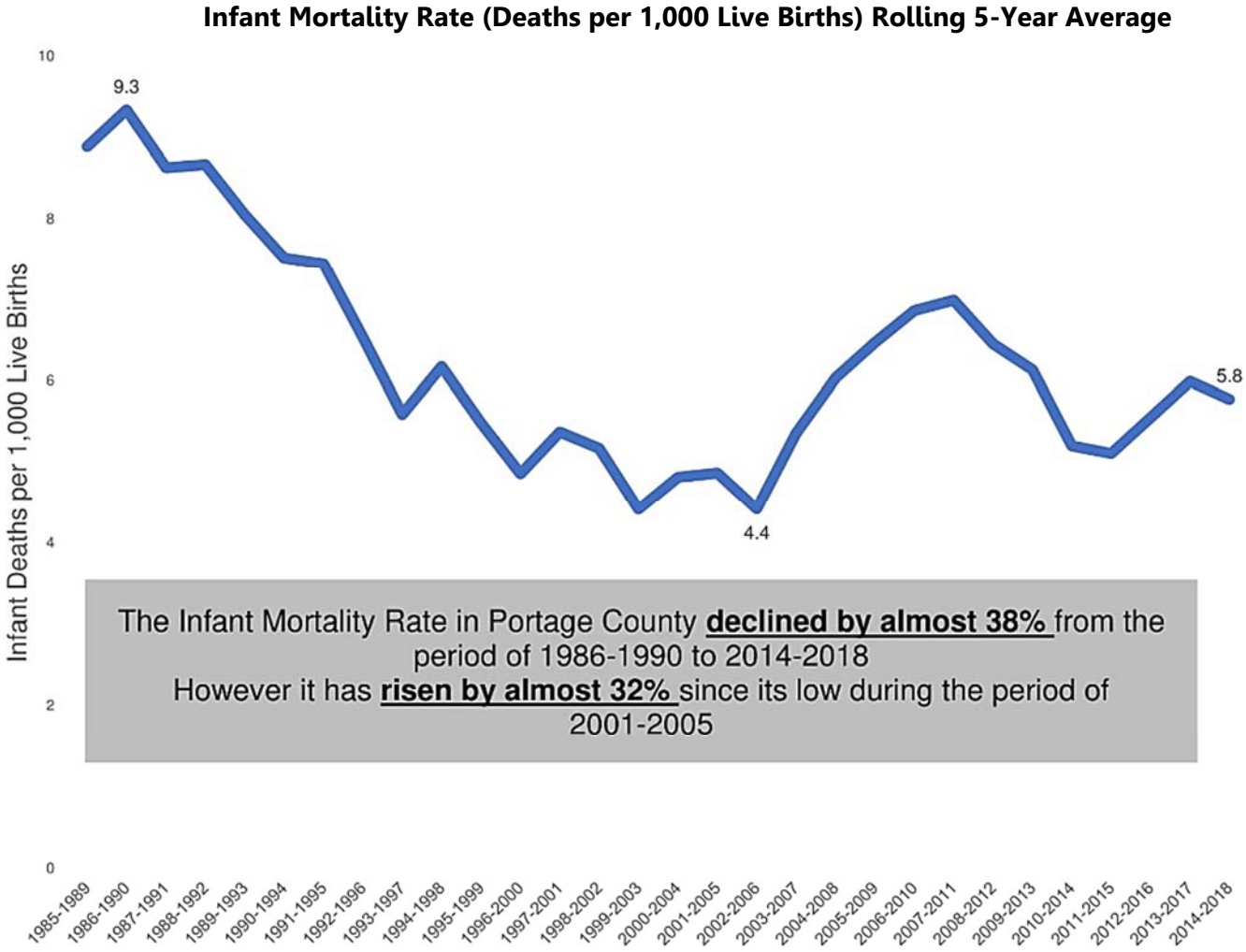
Region	ZIP Code	Rate of Acute Care Interactions 0-5 Years Old (per 1,000 children)
Palmyra	44412	2,151
Atwater	44201	2,133
Ravenna	44266	1,991
Deerfield	44411	1,977
Suffield	44260	1,706
Kent	44240	1,448
Streetsboro	44241	1,332
Garrettsville	44231	1,292
Windham	44288	1,227
Mantua	44255	1,204
Rootstown	44272	1,160
Hiram	44234	1,150
Aurora	44202	1,036



(Source: EpiCenter, 2019, as compiled by the Portage County Health District)

Infant Mortality

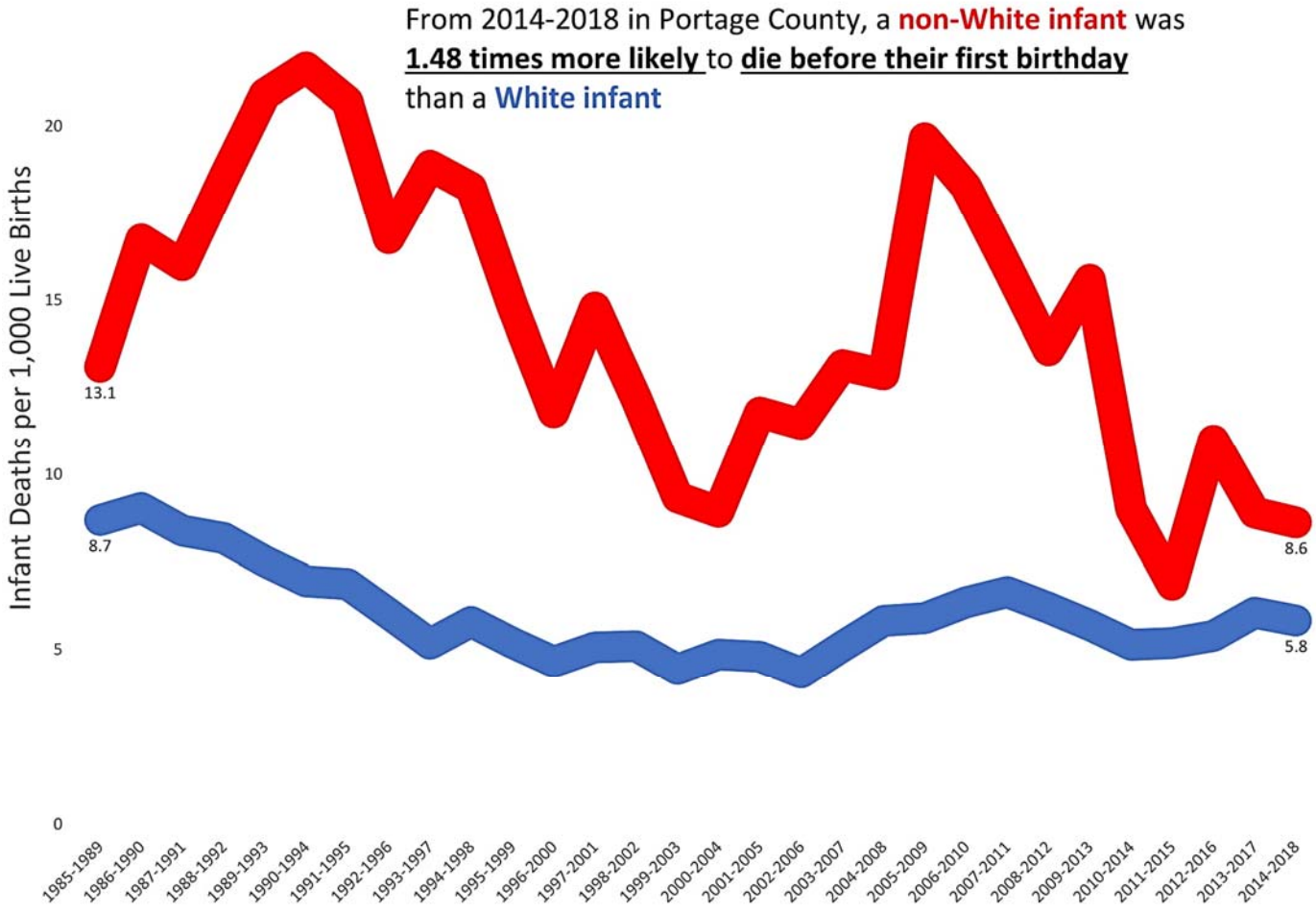
- *The following graph shows the infant mortality rate (deaths per 1,000 live births) rolling 5-year average for Portage County.*



(Source: Ohio Public Information Warehouse, 2018, as compiled by Portage County Health District)

- *The following graph shows the infant mortality rate (deaths per 1,000 live births) rolling 5-year average by race for Portage County.*

Infant Mortality Rate (Deaths per 1,000 Live Births)
Rolling 5-Year Average by Race, Portage County



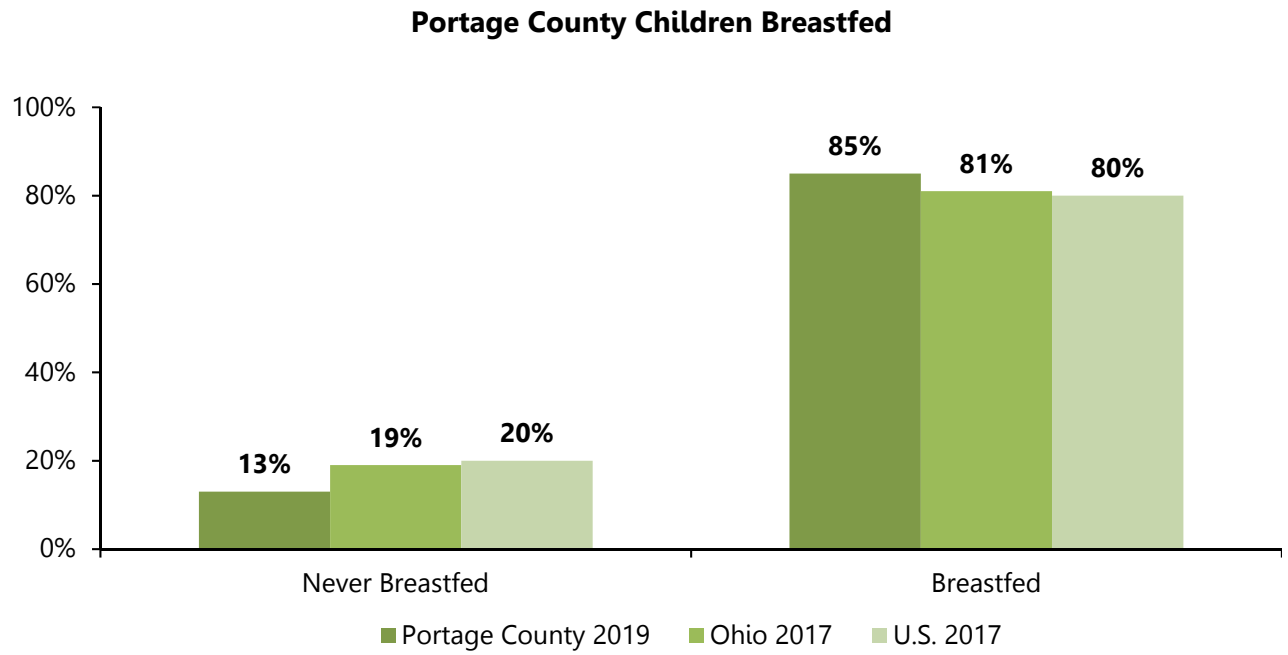
(Source: Ohio Public Information Warehouse, 2018, as compiled by Portage County Health District)

Breastfeeding

- Mothers breastfed their child less than 3 months (17%), 4 to 6 months (8%), 7 to 9 months (13%), 10 to 12 months (18%), more than one year (20%), still breastfeeding (8%), and never breastfed (13%).
- Mothers who chose not to breastfeed for 1 year reported the following reasons: did not produce enough milk (63%), did not want to (16%), did not have adequate support (13%), did not have workplace support (9%), and medical issue with mother (9%), inconvenient (9%), did not have time (9%), medical issue with baby (6%), did not hve adequate education (6%), other reasons (9%).

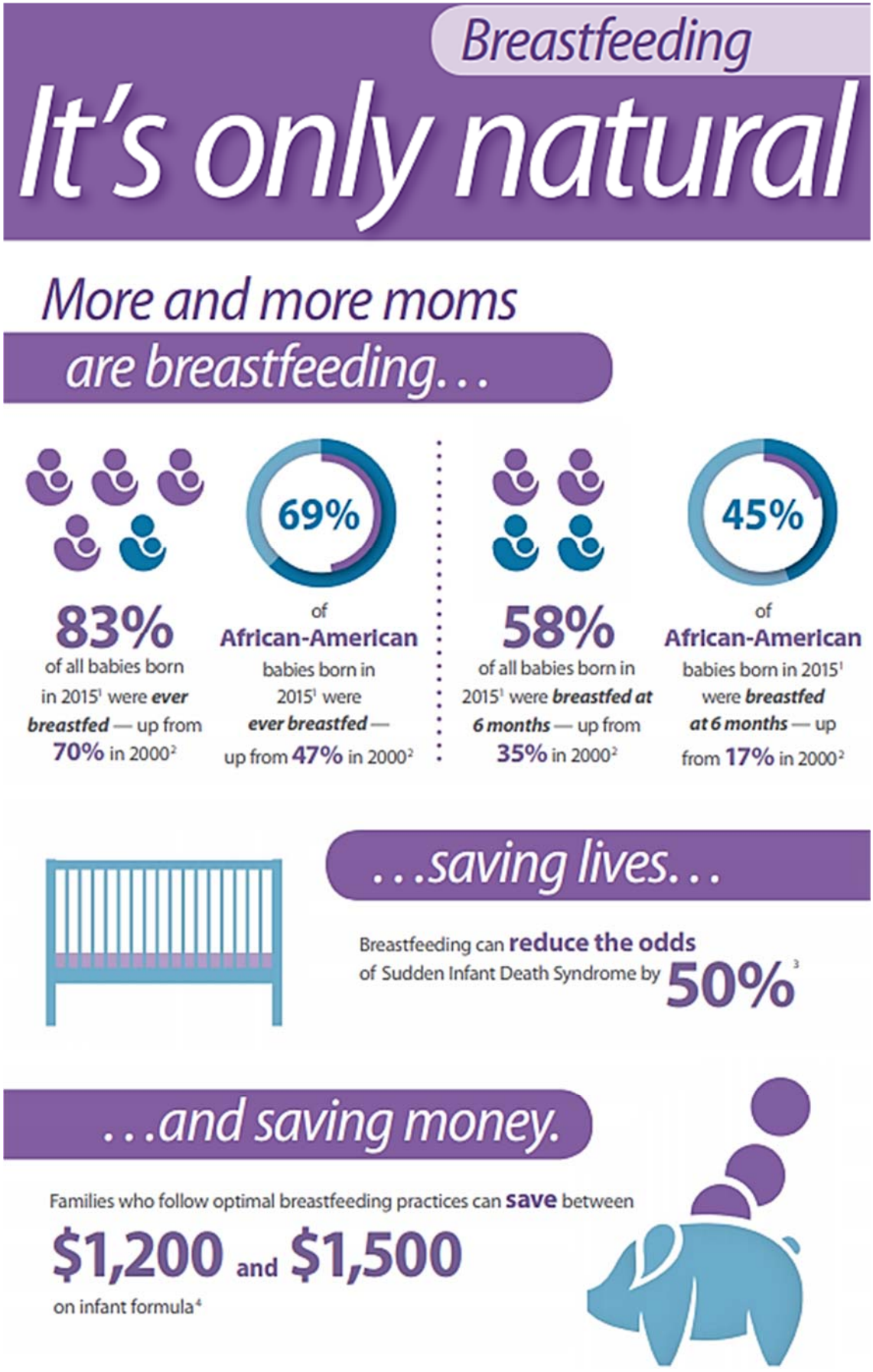
The following graph shows the percent of infants who had been breastfed in Portage County, Ohio, and U.S.

- Portage County had a higher percent of children who had been breastfed for any length of time, compared to Ohio and the U.S.



(Sources: 2017 National Survey of Children's Health & 2019 Portage County Health Assessment)
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Child Comparisons	Portage County 2016 Ages 0-5	Portage County 2019 Ages 0-5	Ohio 2017 Ages 0-5	U.S. 2017 Ages 0-5
Never breastfed their child	18%	13%	19%	20%



(Source: Office of Women's Health, Breastfeeding: It's Only Natural, 2018)

Child Health: Middle Childhood (Ages 6-11)

Key Findings

The following information was reported by Portage County parents of 6-11 year olds. Most (99%) parents definitely agreed (72%) or somewhat agreed (27%) their child was safe at school. Twelve percent (12%) of children were left unsupervised for 1 or more hours on the average school day. Ninety percent (90%) of children participated in extracurricular activities. Thirty-five percent (35%) of children were bullied.

Middle Childhood

The following information was reported by Portage County parents of 6-11 year olds.

- Portage County children were enrolled in the following types of schools: public (92%), private (6%), charter (1%) and home-schooled (1%).

- Most (99%) Portage County parents definitely agreed (72%) or somewhat agreed (27%) their child was safe at school. One percent (1%) of parents somewhat disagreed that their child was safe at school.

- Parents reported their child missed school because of illness or injury at the following frequencies: 0 days (13%), 1 to 3 days (60%), 4 to 6 days (22%), 7 to 10 days (3%), and 11 or more days (3%).

- Portage County children spent the following amount of time unsupervised after school on the average school day: no unsupervised time (64%), less than one hour (25%), 1 to 2 hours (8%), 3 to 4 hours (2%), and more than 4 hours (2%).

- Children participated in the following extracurricular activities in the past year:
  - A sports team or sports lessons (77%)
  - A club or organization after school or on weekends (51%)
  - Any other organized activities or lessons, such as music, dance, language, or other arts (37%)
  - Any type of volunteer work (31%)
  - Any paid work, such as babysitting, grass-cutting, or a regular paid job (9%)
  - None of these (10%)

- Parents discussed the following topics with their 6-11 year old child in the past year:
  - Screen time (TV or computer) (81%)
  - Bullying/violence (80%)
  - Eating habits (79%)
  - Cyber/internet safety (62%)
  - Gun safety (51%)
  - Body image (48%)
  - Negative effects of tobacco (48%)
  - Cultural sensitivity (43%)
  - Negative effects of alcohol (32%)
  - Negative effects of marijuana and other drugs (30%)
  - Respect for gender identity/sexual orientation (30%)
  - Negative effects of heroin/opiates (30%)
  - Refusal skills (17%)
  - Dating and relationships (16%)
  - Abstinence and how to refuse sex (11%)
  - Misuse of prescription drugs (9%)
  - Condoms, safer sex and STD prevention (5%)
  - Birth control (3%)
  - None of these (5%)

- In the past year, parents discussed the following safety concerns with their child:
  - Stranger safety (79%)
  - Internet safety (72%)
  - Bike helmets (56%)
  - Fire safety (54%)
  - Water safety (48%)
  - Firearms/gun safety (43%)
  - Falls (31%)
  - Human trafficking (29%)
  - Burns (22%)
  - Poisoning (15%)
  - Furniture falling (12%)
  - None of these (2%)

- Twenty-three percent (23%) of parents reported their child had a social media account or other virtual network account. Of those who had an account, they reported the following:
  - They had their child's password (85%)
  - They knew all of the people in their child's "friends" (58%)
  - Child's account was checked private (50%)
  - Child's friends have the password (4%)
  - Child has had problems as a result of a social media account/other virtual network account (4%)

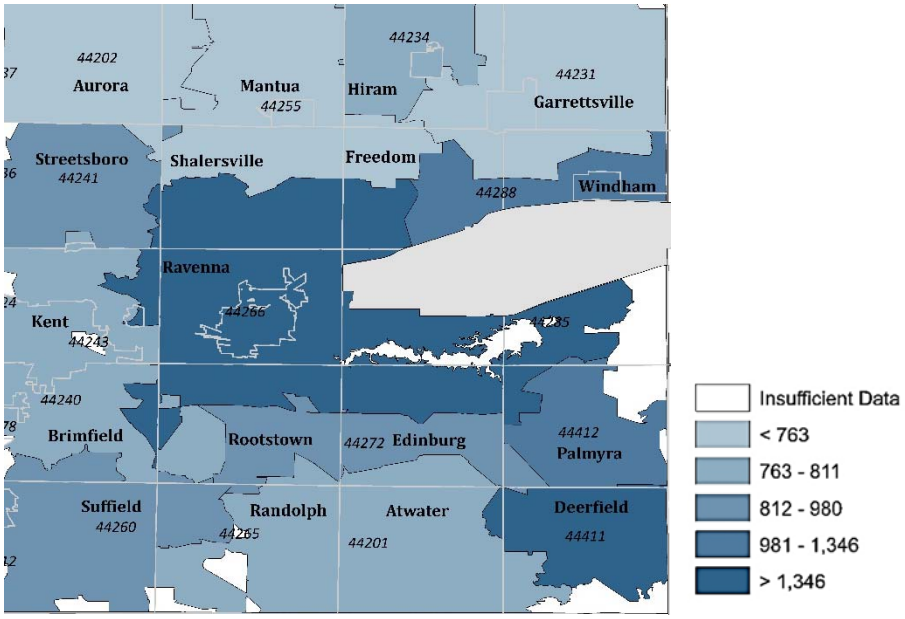
- Thirty-five percent (35%) of parents reported their child was bullied in the past year. The following types of bullying were reported:
  - 25% were verbally bullied (teased, taunted or called harmful names)
  - 7% were indirectly bullied (spread mean rumors about them or kept out of a "group")
  - 7% were physically bullied (they were hit, kicked, punched or people took their belongings)
  - 2% were cyber bullied (teased, taunted or threatened by e-mail or cell phone)
  - 0% were sexually bullied (using nude or semi-nude pictures to pressure someone to have sex that does not want to, blackmail, intimidate, or exploit another person)

- Eighty-five percent (85%) of parents reported their 6-11 year old child was physically active for at least 60 minutes on 3 or more days per week. More than half (54%) were physically active on 5 or more days, and 26% were physically active for at least 60 minutes every day per week.

The following map shows the rate (per 1,000 people) of acute care interactions from January 2016 to June 2019.

Rate of Acute Care Interactions 6-11-year old's (per 1,000 children)

Region	ZIP Code	Rate of Acute Care Interactions 6-11-year old's (per 1,000 children)
Deerfield	44411	1,814
Ravenna	44266	1,375
Windham	44288	1,346
Palmyra	44412	1,075
Rootstown	44272	981
Streetsboro	44241	948
Suffield	44260	847
Hiram	44234	811
Atwater	44201	811
Kent	44240	767
Mantua	44255	764
Aurora	44202	633
Garrettsville	44202	633



(Source: EpiCenter, 2019, as compiled by the Portage County Health District)

Recommendations for Physical Activity

- The U.S. Department of Health and Human Services provides guidance on healthy physical activity habits. The national recommendation for those ages 6 to 17 years old should have 60 minutes or more of physical activity including:
  - **Aerobic:** Most of the 60 minutes a day should be moderate or vigorous intensity physical activity and should include vigorous-intensity physical activity at least 3 days a week.
  - **Muscle-strengthening:** As part of the 60 minutes of daily physical activity, children and adolescents should include muscle-strengthening physical activity on at least 3 days a week.
  - **Bone-strengthening:** As part of the 60 or more minutes of daily physical activity, children and adolescents should include bone-strengthening physical activity on at least 3 days of the week.
- These guidelines also encourage children and adolescents to participate in physical activities that are appropriate for their age, that are enjoyable, and that offer variety.

(Source: Centers for Disease Control and Prevention, Physical Activity Facts, Updated 2018)

Child Comparisons	Portage County 2016 Ages 6-11	Portage County 2019 Ages 6-11	Ohio 2017 Ages 6-11	U.S. 2017 Ages 6-11
Child did not miss any days of school because of illness or injury	22%	13%	26%*	30%
Parent definitely agreed that their child was safe at school	N/A	71%	80%	82%

**Indicates Ohio 2016 data from the National Survey of Children's Health. 2017 Ohio data is not available.*

Child Health: Family and Community Characteristics

Key Findings

Forty-three percent (43%) of parents reported that every family member who lived in their household ate a meal together every day of the week. More than half (55%) of children never attended a religious service in the past month. Twenty percent (20%) of Portage County children experienced 1 or more Adverse Childhood Experiences (ACEs) and 8% experienced 2 or more ACEs.

Family Functioning

- Forty-three percent (43%) of parents reported that every family member who lived in their household ate a meal together every day of the week. Two percent (2%) did not eat a meal at any time during the week. Families ate a meal together an average of 5.2 days per week.

- Two percent (2%) of parents reported their child went to bed hungry at least one day per week because they did not have enough money for food.

- In the past year, parents reported that someone in the household received the following: free or reduced cost breakfast or lunches at school (10%), benefits from WIC program (2%), SNAP/food stamps (5%), Job and Family Services (1%), mental health/substance abuse treatment (4%), cash assistance from state or county welfare program (1%), Help Me Grow (4%), and Head Start/Early Head Start (1%).

- Parents reported that their child attended a religious service at the following frequencies during the past month: never (55%), 1 time (8%), 2 times (6%), 3 times (8%), and 4 or more times (23%).

- Portage County parents reported they or someone in their household had to quit their job, not take a job or greatly change their job because of the following problems concerning child care: could not afford child care (2%), child was medically fragile (1%), child had physical disabilities (1%), and child had developmental disability (1%). Ninety-six percent (96%) of parents or someone in their houshold did not have these problems.

- Parents used the following forms of discipline for their child: take away privileges (73%), time out (53%), yell (34%), grounding (26%), spanking (19%), wash mouth out (1%), and other (7%). Nine percent (9%) of parents reported their child had not been disciplined.

- Portage County parents reported their child had experienced the following Adverse Childhood Experiences (ACEs):
  - Parent or guardian divorced or separated (11%)
  - Lived with anyone who was mentally ill, suicidal, or severely depressed (7%)
  - Lived with anyone who had a problem with alcohol or drugs (4%)
  - Parent or guardian served time in jail (4%)
  - Parent or guardian died (2%)
  - Saw or heard any parents or adults slap, hit, kick, or punch one another in the home (2%)
  - Victim of violence or witnessed violence in neighborhood (1%)
  - Treated or judged unfairly because of his or her race/ethnic group (2%)

- Twenty percent (20%) of Portage County children experienced 1 or more ACEs and 8% experienced 2 or more ACEs.

Child Safety Characteristics

- Parents reported having the following safety items in their home: working smoke alarm/detector (98%), carbon monoxide detector (74%), fire extinguisher (68%), gun lock/safe (42%), and Poison Control number by the phone (42%). Ninety-four percent (94%) had two or more safety items in their home and 1% had none of these safety items in their home.

- Parents reported their child used the following while riding in a car:

Car Seat	Booster Seat	Seat Belt with No Booster Seat
Always (43%)	Always (27%)	Always (57%)
Nearly always (1%)	Nearly always (3%)	Nearly always (1%)
Sometimes (0%)	Sometimes (5%)	Sometimes (1%)
Seldom (0%)	Seldom (1%)	Seldom (1%)
Never (4%)	Never (11%)	Never (5%)
Child is too big for a car seat (52%)	Child is over 4'9" and 80 lbs. (30%)	Child is too small for seat belt with no booster seat (smaller than 4'9" and 80 lbs.) (35%)
	Child is too small for booster seat (23%)	

- Four percent (4%) reported that someone in the household used e-cigarettes around their children.
- Portage County parents had the following rules about smoking in their home or car: no one is allowed to smoke inside their car at any time (86%), no one is allowed to smoke inside their home at any time (77%), smoking is allowed anywhere in their home (5%), smoking is not allowed in the car when children are present (4%), smoking smoking is allowed in some rooms only (2%), and smoking is allowed as long as a window is open (1%).

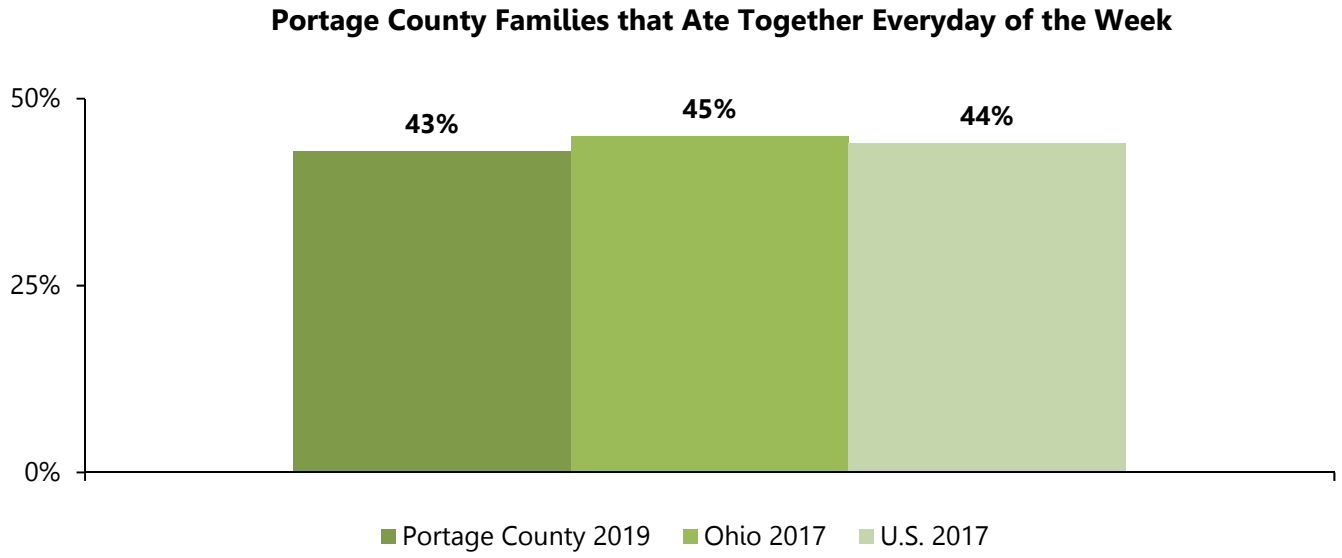
Neighborhood and Community Characteristics

- During the past month, parents reported their child attended the following:
  - Elementary school (57%)
  - Child care in your home provided by a relative other than a parent or guardian (35%)
  - Child care outside of your home provided by a relative other than a parent or guardian (24%)
  - Nursery school, preschool, or kindergarten (19%)
  - A child care center (17%)
  - Child care in your home provided by a baby sitter (10%)
  - Family-based childcare outside of your home (9%)
  - Head Start or Early Start program (1%)
- Parents used the following service for their child: Help Me Grow (14%), Portage County WIC (12%), Portage County Health District (7%), Head Start (2%), Early Head Start (2%), and some other service (4%).
- Most (99%) Portage County parents definitely safe (75%) or somewhat agreed (24%) their child was safe in their neighborhood. One percent (1%) of parents somewhat disagreed that their child is safe in their neighborhood.
- Parents reported their neighborhood was unsafe due to the following concerns: no sidewalks accessible (12%), heavy traffic area (10%), crime (4%), no place for kids to play (4%), loud/disrespectful noise levels (3%), bullying (2%), bad weather conditions (1%), and other (7%). Seventy-seven percent (77%) of parents said their neighbord was safe.

Family Dinners

The following graph shows the percent of Portage County, Ohio, and U.S. families that ate a meal together every day of the week.

- The percentage of Portage County families who ate a meal together every day of the week was lower than the Ohio and U.S. percentages.



(Source: 2017 National Survey of Children's Health & 2019 Portage County Health Assessment)
Note: Caution should be used when interpreting subgroup results as the margin of error for any subgroup is higher than that of the overall survey.

Child Comparisons	Portage County 2016 Ages 0-5	Portage County 2019 Ages 0-5	Ohio 2017 Ages 0-5	U.S. 2017 Ages 0-5	Portage County 2016 Ages 6-11	Portage County 2019 Ages 6-11	Ohio 2017 Ages 6-11	U.S. 2017 Ages 6-11
Family ate a meal together every day of the week	50%	50%	60%	54%	41%	39%	45%	44%
Parent definitely agreed that their child lives in a safe neighborhood	69%	72%	N/A	64%	60%	77%	N/A	65%
Two or more adverse childhood experiences	N/A	8%	13%	11%	N/A	8%	27%	21%

N/A – Not Available

Child Health: Parent Health

Key Findings

Almost three-quarters (74%) of parents rated their health as excellent or very good. Seven percent (7%) of parents were uninsured. Three out of ten (30%) parents were obese.

Parent Health

- Those filling out the survey had the following relationship to the child: mother (67%), father (30%), grandparent (3%), and other relative (<1%).
- Parents reported that their child lived with the following: both parents (84%), mother only (6%), parents have joint custody (5%), father only (1%), mother and step-father (1%), father and step-mother (1%), mother and partner (1%), grandparents (4%), another relative (1%), and guardian/foster parent (1%).
- Almost three-quarters (74%) of parents rated their health as excellent or very good. Twenty-three percent (23%) of parents rated their health as good, and 3% of parents rated their health as fair.
- Sixty-nine percent (69%) of parents rated their mental and emotional health as excellent or very good. More than one-fifth (22%) rated their mental and emotional health as good, and 9% of parents rated their mental and emotional health as fair.
- Three out of ten (30%) parents were obese, 31% were overweight, 38% were normal weight, and 1% were underweight.
- Seven percent (7%) parents were uninsured.
- Parents reported the following challenges they face in regards to the day-to-day demands of parenthood/raising children:
  - Demands of multiple children (42%)
  - Working long hours (22%)
  - Financial challenges (22%)
  - Managing child's behavior (10%)
  - Being a single parent (9%)
  - Loss of freedom (9%)
  - Difficulty with lifestyle changes (6%)
  - Mental health (4%)
  - Affordable housing (4%)
  - Child has special needs (4%)
  - Lack of parental support (3%)
  - Post-partum depression (2%)
  - Lack of transportation (1%)
  - Unemployment (1%)
  - Moved a lot (1%)
  - None of these (37%)
- In the past year, parents missed work at the following frequencies due to the following health issues with their child:

	Days of Work Missed			
	No Days	1 Days	2 Days	3+ Days
Chronic illness	92%	3%	2%	3%
Illnesses or injuries	41%	19%	21%	19%
Medical appointments	50%	18%	19%	13%
Behavioral/emotional problems	97%	2%	0%	1%
Unreliable/lack of child care	91%	4%	3%	2%
Suspension/expulsion	99%	<1%	<%	0%

- Portage County parents received local news and health information from the following:
  - My doctor/healthcare provider (54%)
  - Facebook, Twitter, or other social media (53%)
  - Local television news station (50%)
  - Websites/Internet searches (50%)
  - School district (39%)
  - Family member/friend (27%)
  - Record Courier (23%)
  - Mailings (11%)
  - Akron Beacon Journal (10%)
  - Aurora Advocate (9%)
  - WKSU radio station (8%)
  - Medical portal (8%)
  - Faith-based community/place of worship (5%)
  - Texts on cell phone (5%)
  - The Villager (4%)
  - WNIR radio station (4%)
  - Health fairs/community events (3%)
  - Billboards (2%)
  - Other (6%)

Appendix I: Health Assessment Information Sources

Source	Data Used	Website
American Association of Suicidology	• Facts & Statistics, 2016	www.suicidology.org/resources/facts-statistics
American Cancer Society, Cancer Facts and Figures, 2018. Atlanta: ACS, 2017	• 2019 Cancer Facts, Figures, and Estimates	www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2019/cancer-facts-and-figures-2019.pdf
American Cancer Society (ACS), 2017	• ACS Guidelines for Nutrition and Physical Activity	www.cancer.org/healthy/eat-healthy-get-active/acs-guidelines-nutrition-physical-activity-cancer-prevention/guidelines.html
American College of Allergy, Asthma & Immunology, 2018	• Asthma Facts	acaai.org/news/factsstatistics/asthma
American Heart Association, 2017	• Your Non-Smoking Life	newjersey.heart.org/non-smoking-life/
American Lung Association	• Asthma and Children	www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/learn-about-asthma/asthma-children-facts-sheet.html
Behavioral Risk Factor Surveillance System, National Center for Chronic Disease Prevention and Health Promotion, Behavioral Surveillance Branch, Centers for Disease Control	• 2010 - 2017 Adult Ohio and U.S. Correlating Statistics	www.cdc.gov/brfss/index.html
Better Health Partnership	• Children's Health Initiative Report	www.betterhealthpartnership.org/data_center
Brady Campaign to Prevent Gun Violence	• Victims of Gun Violence	www.bradycampaign.org/sites/default/files/Brady-Campaign-5Year-Gun-Deaths-Injuries-Stats_08-23-2018.pdf
CDC, Alcohol and Public Health	• Alcohol Use and Your Health	www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm
CDC, Arthritis	• Key Public Health Messages	www.cdc.gov/arthritis/about/key-messages.htm
CDC, Asthma	• Common Asthma Triggers	www.cdc.gov/asthma/triggers.html
CDC, Breast Cancer	• What Can I do to Reduce My Risk of Breast Cancer?	www.cdc.gov/cancer/breast/basic_info/prevention.htm
CDC, Cancer Prevention and Control	• Prostate Cancer Awareness	www.cdc.gov/cancer/dcpc/resources/features/prostatecancer/index.htm
CDC, Diabetes	• About Diabetes	www.cdc.gov/diabetes/basics/diabetes.html
CDC, Marijuana Use	• Marijuana Use and Teens, 2017	www.cdc.gov/healthcommunication/toolstemplates/entertainmented/ResearchAgenda.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fhealthcommunication%2Ftoolstemplates%2Fentertainmented%2Ftips%2Fmarijuana-teens.html

Source	Data Used	Website
CDC, National Center for Health Statistics	• Men's and Women's Health Statistics	www.cdc.gov/nchs/fastats/mens-health.htm
	• Contraceptive Use in the United States	www.cdc.gov/nchs/fastats/contraceptive.htm
CDC, Oral Health	• Oral Health Basics	www.cdc.gov/oralhealth/basics/adult-oral-health/index.html
CDC, Physical Activity	• Physical Activity Facts	www.cdc.gov/physicalactivity/basics/index.htm
CDC, Smoking & Tobacco Use	• Smoking and Other Health Risks	www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm
CDC, Social Vulnerability	• Social Vulnerability Index (SVI)	svi.cdc.gov/
CDC, Violence Prevention	• Preventing Youth Violence	www.cdc.gov/violenceprevention/pdf/yv-factsheet508.pdf
	• Adverse Childhood Experiences (ACE's)	www.cdc.gov/violenceprevention/acestudy/index.html
CDC, Centers for Disease Control and Prevention	• Suicide Rising Across the U.S.	www.cdc.gov/vitalsigns/suicide/index.html
CDC Wonder, About Underlying Cause of Death	• U.S. Comparisons, 2008-2017	wonder.cdc.gov/ucd-icd10.html
County Health Rankings	• Food Environment Index • Alcohol-Impaired Driving Deaths	countyhealthrankings.org
CDC, Sexually Transmitted Diseases Surveillance, 2018	• U.S. Chlamydia and Gonorrhea Rates • STD's in Adolescents and Young Adults	www.cdc.gov/std/stats/
Foundation for Advancing Alcohol Responsibility, Underage Drinking Statistics	• Teen Binge Drinking: On the Decline	monitoringthefuture.org/pubs/monographs/mtf-overview2018.pdf
Health Monitoring Systems, Inc.	• Epicenter	epicenter.hmsinc.com
Healthy People 2020: U.S. Department of Health & Human Services	• All Healthy People 2020 Target Data Points • Some U.S. Baseline Statistics • Predictors of Access to Health Care • Social Determinants of Health	www.healthypeople.gov/2020/topicsobjectives2020

Source	Data Used	Website
KidsHealth from Nemours, For Parents, Sudden Infant Death Syndrome	• Sudden Infant Death Syndrome: Who is at Risk?	kidshealth.org/en/parents/sids.html
National Center for Health Statistics	• U.S. Small-Area Life Expectancy Estimates Project (USALEEP): Life Expectancy Estimates File for Portage County, 2010-2015	www.cdc.gov/nchs/nvss/usaleep/usaleep.html
National Institute on Drug Abuse	• Drug Facts: Heroin • Abuse of Prescription Drugs • Drug Facts; Drugged Driving	www.drugabuse.gov
National Survey of Children's Health, Data Resource Center	• National Survey of Children's Health	childhealthdata.org/learn/NSCH
Foundation for Advancing Alcohol Responsibility, 2017	• Underage Drinking Statistics	www.responsibility.org/get-the-facts/research/statistics/underage-drinking-statistics/
National Alliance of Mental Illness, 2019	• Common Signs of Mental Illness in Adults	www.nami.org/Learn-More/Know-the-Warning-Signs
Ohio Department of Health, Information Warehouse	• Portage County and Ohio Birth Statistics, Pre-Term Births, Low Birth Weight • Sexually Transmitted Diseases • Incidence of Cancer, 2012-2016 • HIV/AIDS Surveillance Program • Statistics: Access to Health Services • 2015-2017 Portage County and Ohio Leading Causes of Death • Age-Adjusted Mortality Rates	www.odh.ohio.gov/
Ohio Department of Job & Family Services	• Unemployment Rates	ohiolmi.com/laus/current.htm
Ohio Department of Health, General Findings	• 2017 Ohio Drug Overdose Data	www.odh.ohio.gov/-/media/ODH/ASSETS/Files/health/injuryprevention/doverdose18/ODH-2017-Ohio-Drug-Overdose-Report.pdf?la=en
Ohio Development Services Agency	• Ohio Poverty Report, February 2018	www.development.ohio.gov/files/research/p7005.pdf
Ohio Medical Marijuana Control Program, 2018	• Ohio Medical Marijuana Control Program	www.medicalmarijuana.ohio.gov/

Source	Data Used	Website
The Ohio Automated Rx Reporting System	• Opiate and Pain Reliever Doses Per Capita, 2018-2019 • Opiate and Pain Reliever Doses Per Patient, 2018-2019 • New Limits on Prescription Opiates Will Save Lives and Fight Addiction	www.ohiopmp.gov/About.aspx
Ohio State Highway Patrol	• Compliant Data • Electronic Crash Records • Felony Cases and Drug Arrests • Portage County Activity Statistics	statepatrol.ohio.gov/
The Henry Kaiser Family Foundation	• Key Facts about the Uninsured Population, 2017 • Health and Health Care for Blacks in the U.S., 2018	www.kff.org/uninsured/factsheet/key-facts-about-the-uninsured-population/ www.kff.org/infographic/health-and-health-care-for-blacks-in-the-united-states/
U.S. Census Bureau	• American Community Survey, 2010 American Community Survey 5-Year Estimates • County Business Patterns: 2015	factfinder.census.gov
U. S. Department of Commerce, Census Bureau; Bureau of Economic Analysis	• American Community Survey 5-year estimates, 2012-2016 • Ohio and Portage County 2016 Census Demographic Information • Ohio and U.S. Health Insurance Sources • Small Area Income and Poverty Estimates • Federal Poverty Thresholds	www.census.gov
United States Department of Agriculture (USDA), Food Insecurity in the U.S.	• Food Insecurity	www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/interactive-charts-and-highlights/#characteristics
United States Department of Health and Human Services	• E-cigarette Use Among Youth and Young Adults	ecigarettes.surgeongeneral.gov/documents/2016_sgr_full_report_non-508.pdf
United Way	• United Way 2-1-1	www.211oh.org/reports
Youth Risk Behavior Surveillance System, National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health, Centers for Disease Control	• 2013-2017 U.S. Youth correlating statistics	nccd.cdc.gov/youthonline/App/Results.aspx?LID=XX

Appendix II: Acronyms and Terms

AHS	Access to Health Services, Topic of Healthy People 2020 objectives
Adult	Defined as 19 years of age and older.
Age-Adjusted Mortality Rates	Death rate per 100,000 adjusted for the age distribution of the population.
Adult Binge Drinking	Consumption of five alcoholic beverages or more (for males) or four or more alcoholic beverages (for females) on one occasion.
AOCBC	Arthritis, Osteoporosis, and Chronic Back Conditions
BMI	Body Mass Index is defined as the contrasting measurement/relationship of weight to height.
BRFSS	Behavior Risk Factor Surveillance System, an adult survey conducted by the CDC.
CDC	Centers for Disease Control and Prevention.
CHA	Community Health Assessment: A collaborative, county-level health assessment conducted by the health department and other community members to measure the health status of the population. It is required by the Public Health Accreditation Board (PHAB) and is conducted every 3 years in Ohio. The data collected from a CHA informs the community health improvement plan (CHIP).
CHIP	Community Health Improvement Plan: A collaborative, county-level improvement plan conducted by the health department and other community members that identifies priorities, strategies, and measurable indicators to address health needs identified in the CHA. It is required by the Public Health Accreditation Board (PHAB) and is conducted every 3 years in Ohio. CHIP's are required to align with the SHIP beginning in 2020.
CHNA	Community Health Needs Assessment: A health assessment conducted by hospitals to measure the health status of the population. It is required by Section 501(r) of the Internal Revenue Code and conducted every 3 years. The data collected from a CHNA informs the implementation plan (IP).
CHR	County Health Rankings
Current Smoker	Individual who has smoked at least 100 cigarettes in their lifetime and now smokes daily or on some days.
CY	Calendar Year
FY	Fiscal Year
HCNO	Hospital Council of Northwest Ohio
HDS	Heart Disease and Stroke, Topic of Healthy People 2020 objectives
HP 2020	Healthy People 2020, a comprehensive set of health objectives published by the Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services.
Health Indicator	A measure of the health of people in a community, such as cancer mortality rates, rates of obesity, or incidence of cigarette smoking.

High Blood Cholesterol	240 mg/dL and above
High Blood Pressure	Systolic $\geq$140 and Diastolic $\geq$ 90
IID	Immunizations and Infectious Diseases, Topic of Healthy People 2020 objectives
IS	Implementation Strategy: A hospital plan that identifies priorities, strategies, and measurable indicators to address health needs identified in the CHNA. It is required by Section 501(r) of the Internal Revenue Code and conducted every 3 years. IP's are required to align with the SHIP beginning in 2020.
MAPP	Mobilizing for Planning and Partnerships
N/A	Data is not available.
NSCH	National Survey of Children's Health
ODH	Ohio Department of Health
OSHP	Ohio State Highway Patrol
Ohio state law (ORC 3701.981)	A state law that requires all hospitals to collaborate with their local health departments on CHAs and CHIPs.
PHAB	Public Health Accreditation Board: A national body that issues accreditation to health departments based on a set of standards. All health departments in Ohio are mandated to become accredited by 2020.
Race/Ethnicity	Census 2010: U.S. Census data consider race and Hispanic origin separately. Census 2010 adhered to the standards of the Office of Management and Budget (OMB), which define Hispanic or Latino as "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race." Data are presented as "Hispanic or Latino" and "Not Hispanic or Latino." Census 2010 reported five race categories including: White, Black or African American, American Indian & Alaska Native, Asian, Native Hawaiian and Other Pacific Islander. Data reported, "White alone" or "Black alone", means the respondents reported only one race.
SHA	State Health Assessment: A health assessment conducted by the state of Ohio to measure the health status of Ohioans. It is conducted every 3 years. The data collected from a SHA informs the state health improvement plan (SHIP).
SHIP	State Health Improvement Plan: An improvement plan conducted by the state of Ohio that contains priorities, strategies, and measurable indicators to address health needs identified in the SHA. The SHIP is conducted every 3 years and serves as a guide for local improvement plans and hospital implementation plans.
UH	University Hospitals
Weapon	Defined in the YRBS as "a weapon such as a gun, knife, or club"
Youth	Defined as 12 through 18 years of age
YPLL/65	Years of Potential Life Lost before age 65. Indicator of premature death.
Youth BMI Classifications	Underweight is defined as BMI-for-age $\leq$ 5th percentile Overweight is defined as BMI-for-age 85th percentile to < 95th percentile. Obese is defined as $\geq$ 95th percentile.
YRBS	Youth Risk Behavior Survey, a youth survey conducted by the CDC

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

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

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

Weightings were created for each category within sex (male, female), race (White, Non-White), Age (8 different age categories), and income (7 different income categories). The numerical value of the weight for each category was calculated by taking the percent of Portage County within the specific category and dividing that by the percent of the sample within that same specific category. Using sex as an example, the following represents the data from the 2019 Portage County Survey and the 2017 Census.

2019 Portage Survey			**2017 Census**		**Weight**
Sex	Number	Percent	Number	Percent	
Male	211	56.56836	79,258	48.90054	0.864450
Female	162	43.43164	82,822	51.09946	1.176549

In this example, it shows that there was a larger portion of males in the sample compared to the actual portion in Portage County. The weighting for males was calculated by taking the percent of males in Portage County (based on Census information) (48.90054%) and dividing that by the percent found in the 2019 Portage County sample (56.56836%) [48.90054/56.56836 = weighting of 0.864450 for males]. The same was done for females [51.09946/ 43.43164% = weighting of 1.176549 for females]. Thus, males' responses are weighted less by a factor of 0.864450 and females' responses weighted heavier by a factor of 1.176549.

This same thing was done for each of the 19 specific categories as described above. For example, a respondent who was female, White, in the age category 35-44, and with a household income in the $50-$75k category would have an individual weighting of 3.16863 [1.176549 (weight for females) x 0.97225 (weight for White) x 2.93103 (weight for age 35-44) x 0.94507 (weight for income $50-$75k)]. Thus, each individual in the 2018-2018 Portage County sample has their own individual weighting based on their combination of age, race, sex, and income. See next page for each specific weighting and the numbers from which they were calculated.

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

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

Category	Portage Sample	%	Portage 2017 Census*	%		Weighting Value
Sex:						
Male	211	56.56836	79,258	48.90054		0.864450
Female	162	43.43164	82,822	51.09946		1.176549
Age:						
20 to 34 years	19	5.14905	18,718	17.87740		3.47198
35 to 44 years	21	5.69106	17,465	16.68067		2.93103
45 to 54 years	45	12.19512	22,060	21.06932		1.72768
55 to 59 years	45	12.19512	12,047	11.50599		0.94349
60 to 64 years	54	14.63415	10,211	9.75244		0.66642
65 to 74 years	114	30.89431	14,365	13.71989		0.44409
75 to 84 years	60	16.26016	7,008	6.69328		0.41164
85+ years	11	2.98103	2,828	2.70100		0.90606
Race:						
White	351	92.61214	145,941	90.04257		0.97225
Non-White	28	7.38786	16,139	9.95743		1.34781
Household Income:						
Less than $25,000	72	20.16807	13,750	22.10327		1.09595
$25,000 to $34,999	35	9.80392	5,938	9.54540		0.97363
$35,000 to $49,999	54	15.12605	9,414	15.13310		1.00047
$50,000 to $74,999	69	19.32773	11,363	18.26614		0.94507
$75,000 to $99,999	48	13.44538	8,401	13.50469		1.00441
$100,000 to $149,999	38	10.64426	8,356	13.43236		1.26193
$150,000 or more	41	11.48459	4,986	8.01505		0.69790

Note: The weighting ratios are calculated by taking the ratio of the proportion of the population of Portage County in each subcategory by the proportion of the sample in the Portage County survey for that same category.
*** Portage County population figures taken from the 2017 Census.**

Appendix IV: Portage County School Participation

The following schools were randomly chosen and agreed to participate in the 2019 Portage County Health Assessment:

Aurora City
Aurora HS
Harmon MS

Crestwood Local
Crestwood HS

Field Local
Field HS
Field MS

James A. Garfield Local
James A. Garfield MS

Kent City
Roosevelt HS
Stanton MS

Ravenna City
Ravenna HS
Brown MS

Rootstown Local
Rootstown HS

Southeast Local
Southeast HS

Streetsboro City
Streetsboro MS

Waterloo Local
Waterloo HS

Windham Exempted Village
Windham JHS

Maplewood Career Center
Maplewood Career Center

Appendix V: Portage County Sample Demographic Profile*

Adult Variable	2019 Adult Survey Sample	Portage County Census 2017 (1-year estimate)
Age		
20-29	8.5%	17.4%
30-39	22.1%	11.3%
40-49	12.3%	10.6%
50-59	25.3%	13.8%
60 plus	31.7%	22.7%
Gender		
Male	45.4%	49.0%
Female	54.4%	51.0%
Race/Ethnicity		
White	93.0%	91.0%
Black or African American	0.8%	4.1%
Hispanic Origin (may be of any race)	2.9%	1.7%
Asian	1.8%	1.9%
Other	4.1%	0.6%
American Indian and Alaska Native	4.2%	0.1%
Marital Status†		
Married Couple	62.0%	46.0%
Never been married/member of an unmarried couple	16.8%	35.9%
Divorced/Separated	12.2%	12.8%
Widowed	9.0%	5.2%
Education†		
Less than High School Diploma	6.4%	8.1%
High School Diploma	25.6%	37.2%
Some college/College graduate	68.0%	54.7%
Income (Families)		
$14,999 and less	6.1%	6.9%
$15,000 to $24,999	9.4%	5.5%
$25,000 to $49,999	21.5%	20.2%
$50,000 to $74,999	16.0%	20.3%
$75,000 or more	45.0%	47.3%

** The percent's 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). Percent's may not add to 100% due to missing data (non-responses).*

† The Ohio and Portage 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

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

Age	Total	Males	Females
Portage County	161,419	78,841	82,578
0-4 years	**8,190**	**4,158**	**4,032**
1-4 years	6,716	3,398	3,318
< 1 year	1,474	760	714
1-2 years	3,289	1,654	1,635
3-4 years	3,427	1,744	1,683
5-9 years	**8,959**	**4,530**	**4,429**
5-6 years	3,508	1,815	1,693
7-9 years	5,451	2,715	2,736
10-14 years	**10,125**	**5,183**	**4,942**
10-12 years	6,033	3,078	2,955
13-14 years	4,092	2,105	1,987
12-18 years	34,423	16,984	17,439
15-19 years	**14,504**	**6,929**	**7,575**
15-17 years	6,404	3,335	3,069
18-19 years	8,100	3,594	4,506
20-24 years	17,081	8,248	8,833
25-29 years	9,313	4,804	4,509
30-34 years	8,411	4,193	4,218
35-39 years	9,133	4,484	4,649
40-44 years	10,467	5,080	5,387
45-49 years	12,211	5,999	6,212
50-54 years	12,312	6,088	6,224
55-59 years	10,866	5,349	5,517
60-64 years	9,028	4,442	4,586
65-69 years	6,772	3,257	3,515
70-74 years	4,875	2,287	2,588
75-79 years	3,819	1,709	2,110
80-84 years	2,902	1,238	1,664
85-89 years	1,652	629	1,023
90-94 years	634	186	448
95-99 years	147	42	105
100-104 years	18	6	12
105-109 years	0	0	0
110 years & over	0	0	0
Total 85 years and over	**2,451**	**863**	**1,588**
Total 65 years and over	**20,819**	**9,354**	**11,465**
Total 19 years and over	**124,468**	**60,177**	**64,291**

PORTAGE COUNTY PROFILE

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

General Demographic Characteristics

	Number	Percent (%)
Total Population		
2017 Total Population	162,080	100%
Largest City - Kent City		
2017 Total Population	29,771	18.4%
Population by Race/Ethnicity		
Total Population	162,080	100%
White	147,473	91.0%
African American	6,699	4.1%
Asian	2,999	1.9%
Hispanic or Latino (of any race)	2,744	1.7%
American Indian or Alaska Native	237	0.1%
Native Hawaiian and Pacific Islander	25	0.0%
Some other race	955	0.6%
Two or more races	3,692	2.3%
Population by Age		
Under 5 years	7,512	4.6%
5 to 19 years	14,365	8.9%
20 to 24 years	18,718	11.5%
25 to 44 years	35,373	21.8%
45 to 64 years	44,318	27.3%
65 years and more	24,201	14.9%
Median age (years)	**37.8**	N/A
Household by Type		
Total households	68,623	100%
Total families	39,535	63.6%
Households with children <18 years	15,361	24.7%
Married-couple family household	30,132	48.4%
Married-couple family household with children <18 years	10,437	16.8%
Female householder, no husband present	6,542	10.5%
Female householder, no husband present with children <18 years	3,550	5.7%
Nonfamily household (single person)	22,673	36.4%
Nonfamily household (single person) living alone	17,640	77.8%
Nonfamily household (single person) 65 years and >	6,144	27.1%
Households with one or more people <18 years	17,294	27.8%
Households with one or more people 65 years and >	23,390	37.6%
Average household size	2.49 people	N/A
Average family size	3.06 people	N/A

General Demographic Characteristics Continued

Housing Occupancy		
Median value of owner-occupied units	$152,000	N/A
Median housing units with a mortgage	$1,304	N/A
Median housing units without a mortgage	$485	N/A
Median value of occupied units paying rent	$824	N/A
Median rooms per total housing unit	5.9	N/A
Total occupied housing units	68,623	N/A
No telephone service available	1,047	1.7%
Lacking complete kitchen facilities	542	0.9%
Lacking complete plumbing facilities	150	0.2%

Selected Social Characteristics

School Enrollment		
Population 3 years and over enrolled in school	46,733	100%
Nursery & preschool	1,954	4.2%
Kindergarten	1,678	3.6%
Elementary School (Grades 1-8)	13,682	29.2%
High School (Grades 9-12)	8,580	18.4%
College or Graduate School	20,839	44.5%
Educational Attainment		
Population 25 years and over	103,892	100%
< 9th grade education	1,892	1.8%
9th to 12th grade, no diploma	6,533	6.3%
High school graduate (includes equivalency)	38,609	37.2%
Some college, no degree	21,063	20.3%
Associate degree	7,266	7.0%
Bachelor's degree	17,476	16.8%
Graduate or professional degree	11,053	10.6%
Percent high school graduate or higher	N/A	91.9%
Percent Bachelor's degree or higher	N/A	27.4%
Marital Status		
Population 15 years and over	136,975	100%
Never married	49,174	35.9%
Now married, excluding separated	63,009	46.0%
Separated	1,918	1.4%
Widowed	7,123	5.2%
Widowed females	5,634	8.0%
Divorced	15,615	11.4%
Divorced females	8,663	12.3%
Veteran Status		
Civilian population 18 years and over	130,797	100%
Veterans 18 years and over	10,740	8.2%

Selected Social Characteristics, Continued

Disability Status of the Civilian Non-Institutionalized Population		
Total civilian noninstitutionalized population	161,013	100%
Civilian with a disability	21,256	13.2%
Under 18 years	31,248	19.4%
Under 18 years with a disability	1,759	8.3%
18 to 64 years	106,060	65.9%
18 to 64 years with a disability	11,664	20.8%
65 Years and over	23,705	14.7%
65 Years and over with a disability	7,833	71.4%

Selected Economic Characteristics, Continued

Employment Status		
Population 16 years and over	134,981	100%
16 years and over in labor force	88,413	65.5%
16 years and over not in labor force	46,568	34.5%
Females 16 years and over	69,453	100%
Females 16 years and over in labor force	42,158	60.7%
Population living with own children <6 years	8,495	100%
All parents in family in labor force	5768	67.9%
Class of Worker		
Civilian employed population 16 years and over	82,049	100%
Private wage and salary workers	68,816	83.9%
Government workers	9,370	11.4%
Self-employed workers in own not incorporated business	3,728	4.5%
Unpaid family workers	135	0.2%
Occupations		
Civilian employed population 16 years and over	82,049	100%
Management, business, science, and arts occupations	26,401	32.2%
Sales and office occupations	19,979	24.4%
Service occupations	15,060	18.4%
Production, transportation, and material moving occupations	13,969	17.0%
Natural resources, construction, and maintenance occupations	6,640	8.1%
Leading Industries		
Civilian employed population 16 years and over	82,049	100%
Educational services, and health care and social assistance	18,183	22.2%
Manufacturing	15,143	18.5%
Retail trade	10,549	12.9%
Arts, entertainment, and recreation, accommodation and food services	8,888	10.8%
Professional, scientific, management, administrative, waste management services	7,049	8.6%
Construction	4,282	5.2%
Other services, except public administration	3,937	4.8%
Finance and insurance, and real estate and rental and leasing	3,511	4.3%
Transportation and warehousing, and utilities	3,468	4.2%
Public administration	2,434	3.0%
Wholesale trade	2,348	2.9%
Information	1,278	1.6%
Agriculture, forestry, fishing and hunting, and mining	979	1.2%

Income In 2017		
Total households	62,208	62,208
Less than $10,000	4,857	7.8%
$10,000 to $14,999	3,010	4.8%
$15,000 to $24,999	5,883	9.5%
$25,000 to $34,999	5,938	9.5%
$35,000 to $49,999	9,414	15.1%
$50,000 to $74,999	11,363	18.3%
$75,000 to $99,999	8,401	13.5%
$100,000 to $149,999	8,356	13.4%
$150,000 to $199,999	3,010	4.8%
$200,000 or more	1,976	3.2%
Median household income (dollars)	53,816	N/A
Income in 2017		
Families	39,535	39,535
Less than $10,000	1,762	4.5%
$10,000 to $14,999	931	2.4%
$15,000 to $24,999	2,156	5.5%
$25,000 to $34,999	2,728	6.9%
$35,000 to $49,999	5,250	13.3%
$50,000 to $74,999	8,021	20.3%
$75,000 to $99,999	6,881	17.4%
$100,000 to $149,999	7,342	18.6%
$150,000 to $199,999	2,740	6.9%
$200,000 or more	1,724	4.4%
Median family income (dollars)	**$71,373**	N/A
Per capita income in 2017	**$27,985**	N/A
Poverty Status in 2017		
Families	3,677	9.3%
Individuals	22,493	14.5%

(Source: U.S. Census Bureau, 2017)

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

	Income	Rank of Ohio Counties
BEA Per Capita Personal Income 2013	$37,887	34th of 88 counties
BEA Per Capita Personal Income 2014	$39,165	33rd of 88 counties
BEA Per Capita Personal Income 2015	$40,618	32nd of 88 counties
BEA Per Capita Personal Income 2016	$40,645	33rd of 88 counties
BEA Per Capita Personal Income 2017	$41,983	22nd of 88 counties

(Source: Bureau of Economic Analysis, https://apps.bea.gov/iTable/index_regional.cfm)

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

Poverty Rates, 2013-2017 5-year averages

Category	Portage County	Ohio
Population in poverty	11.8%	13.9%
< 125% FPL (%)	18.1%	19.3%
< 150% FPL (%)	21.7%	23.6%
< 200% FPL (%)	30.2%	32.5%
Population in poverty (2002)	8.6%	10.2%

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

Employment Statistics

Category	Portage County	Ohio
Labor Force	88,000	5,741,900
Employed	83,800	5,469,100
Unemployed	4,200	272,900
Unemployment Rate* in December 2018	4.8	4.8
Unemployment Rate* in November 2018	4.0	4.1
Unemployment Rate* in December 2017	4.7	4.5

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

Estimated Poverty Status in 2017

Age Groups	Number	90% Confidence Interval	Percent	90% Confidence Interval
Portage County				
All ages in poverty	20,743	18,253 to 23,233	13.5%	11.9 to 15.1
Ages 0-17 in poverty	4,519	3,661 to 5,377	27.2%	23.6 to 30.8
Ages 5-17 in families in poverty	8,850	7,595 to 10,105	15.0%	12.1 to 17.9
Median household income	$52,947	$48,864 to $57,030		
Ohio				
All ages in poverty	1,575,401	1,551,281 to 1,599,521	13.9%	13.7 to 14.1
Ages 0-17 in poverty	507,119	493,056 to 521,182	19.8%	19.2 to 20.4
Ages 5-17 in families in poverty	339,888	328,221 to 351,555	18.2%	17.6 to 18.8
Median household income	$54,077	$53,670 to $54,484		
United States				
All ages in poverty	42,583,651	42,342,619 to 42,824,683	13.4%	13.3 to 13.5
Ages 0-17 in poverty	13,353,202	13,229,339 to 13,477,065	18.4%	18.2 to 18.6
Ages 5-17 in families in poverty	9,120,503	9,033,090 to 9,207,916	17.3%	17.1 to 17.5
Median household income	$60,336	$60,250 to $60,422		

(Source: U.S. Census Bureau, 2017 Poverty and Median Income Estimates, https://www.census.gov/data/datasets/2017/demo/saipe/2017-state-and-county.html)

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

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

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

Appendix VII: County Health Rankings

	Portage County 2019	Ohio 2019	U.S. 2019
Health Outcomes			
Premature death. Years of potential life lost before age 75 per 100,000 population (age-adjusted) (2015-2017)	7,300	8,500	6,900
Overall heath. Percentage of adults reporting fair or poor health (age-adjusted) (2016)	15%	17%	16%
Physical health. Average number of physically unhealthy days reported in past 30 days (age-adjusted) (2016)	3.7	4.0	3.7
Mental health. Average number of mentally unhealthy days reported in past 30 days (age-adjusted) (2016)	3.9	4.3	3.8
Maternal and infant health. Percentage of live births with low birthweight (< 2500 grams) (2011-2017)	8%	9%	8%
Health Behaviors			
Tobacco. Percentage of adults who are current smokers (2016)	20%	23%	17%
Obesity. Percentage of adults that report a BMI of 30 or more (2015)	31%	32%	29%
Food environment. Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best) (2015 and 2016)	7.4	6.7	7.7
Physical inactivity. Percentage of adults aged 20 and over reporting no leisure-time physical activity (2015)	24%	25%	22%
Active living environment. Percentage of population with adequate access to locations for physical activity (2010 & 2018)	84%	84%	84%
Drug and alcohol abuse. Percentage of adults reporting binge or heavy drinking (2016)	19%	19%	18%
Drug and alcohol abuse and injury. Percentage of driving deaths with alcohol involvement (2013-2017)	28%	33%	29%
Infectious disease. Number of newly diagnosed chlamydia cases per 100,000 population (2016)	283	521	497.3
Sexual and reproductive health. Teen birth rate per 1,000 female population, ages 15-19 (2011-2017)	10	26	25

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

	Portage County 2019	Ohio 2019	U. S. 2019
Clinical Care			
Coverage and affordability. Percentage of population under age 65 without health insurance (2016)	7%	7%	10%
Access to health care/medical care. Ratio of population to primary care physicians (2016)	2,460:1	1,300:1	1,330:1
Access to dental care. Ratio of population to dentists (2017)	2,250:1	1,620:1	1,460:1
Access to behavioral health care. Ratio of population to mental health providers (2018)	540:1	470:1	440:1
Hospital utilization. Number of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees (2016)	4,169	5,135	4,520
Mammography screening. Percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening (2016)	86%	41%	41%
Flu vaccinations. Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination (2016)	47%	47%	45%
Social and Economic Factors			
Education. Percentage of ninth-grade cohort that graduates in four years (2017-2018)	92%	85%	85%
Education. Percentage of adults ages 25-44 years with some post-secondary education (2013-2017)	67%	65%	65%
Employment, poverty, and income. Percentage of population ages 16 and older unemployed but seeking work (2017)	5%	5%	4%
Employment, poverty, and income. Percentage of children under age 18 in poverty (2017)	14%	20%	18%
Employment, poverty, and income. Ratio of household income at the 80th percentile to income at the 20th percentile (2013-2017)	4.5	4.8	4.9
Family and social support. Percentage of children that live in a household headed by single parent (2013-2017)	31%	36%	33%
Family and social support. Number of membership associations per 10,000 population (2016)	9	11	9
Violence. Number of reported violent crime offenses per 100,000 population (2014 and 2016)	117	293	386
Injury. Number of deaths due to injury per 100,000 population (2013-2017)	62	82	67

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

	Portage County 2019	Ohio 2019	U.S. 2019
Physical Environment			
Air, water, and toxic substances. Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) (2014)	11.5	11.5	8.6
Air, water, and toxic substances. Indicator of the presence of health-related drinking water violations. Yes - indicates the presence of a violation, No - indicates no violation (2017)	Yes	N/A	N/A
Housing. Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities (2011-2015)	15%	15%	19%
Transportation. Percentage of the workforce that drives alone to work (2013-2017)	84%	83%	76%
Transportation. Among workers who commute in their car alone, the percentage that commute more than 30 minutes (2013-2017)	39%	30%	35%

(Source: 2019 County Health Rankings for Portage County, Ohio, and U.S. data)
N/A – Data is not available

Appendix VIII: Potential Resources Available

Priorities

Portage County is focused on the following three priority areas: mental health, substance use and addiction; chronic disease; and maternal, infant and child health. Additionally, Portage County will focus their efforts and strategies on factors that affect all three priority areas: healthcare system and access, social determinants of health, and health equity.

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

Priority Area	Coordinating Agencies and Team Members
Mental Health, Substance Use and Addiction	• Children's Advantage • Coleman Professional Services • Family and Community Services • Kent City Health Department • Law enforcement • Mental Health & Recovery Board of Portage County • Ohio Department of Mental Health and Addiction Services • Portage County Health District • Portage County Safe Communities Coalition • Substance Abuse and Mental Health Services Administration • Suicide Prevention Coalition • Townhall II • University Hospitals Portage County Medical Center
Chronic Disease	• AxxessPoint Community Health Center • Kent State University • Kent State University Center of Nutrition Outreach • NEOMED • Portage County Health District • Portage Park District • SOAR • University Hospitals Portage County Medical Center
Maternal, Infant and Child Health	• AxxessPoint Community Health Center • Portage County Health District • Portage County WIC • Safe Kids Coalitions • University Hospitals Portage Medical Center

Hospital Requirement

UH Portage Medical Center more specifically identified the following potential resources available to meet the three identified priorities:

Mental Health and Addiction

- Tobacco cessation classes
- Health education regarding the prevention of youth vaping

Chronic Disease: Prevention/Management

- Free health screenings
- Pre-diabetes and hypertension screening and referral
- Health & wellness events to the community
- Nutrition education including a summer lunch program and back pack program for youth

Maternal and Infant

- Work with county partners to connect patients and community members to valuable services promoting maternal and infant health