2022

Trumbull County

Community Health Report

Public Health
Prevent. Promote. Protect.
Trumbull County

Accredited Health Department • Public Health Accreditation Board •
PHAB
Advancing public health performance

LETTER FROM HEALTH COMMISSIONERS

Dear Trumbull County Resident,

The 2021-2022 Trumbull County Community Health Needs Assessment (CHNA) is a report that provides a comprehensive look at the current health status of adults in Trumbull County. This report is a re-examination of the ongoing work of the combined partnership of Trumbull and Mahoning counties that began in 2019, to bridge individual health care services with population health needs aimed at providing and maintaining quality health and human services for all Trumbull and Mahoning county residents.

The data collected from surveys of Trumbull County adults is reported along with health information obtained from reputable national, state and local services, such as the Centers for Disease Control and Prevention and the Ohio Department of Health, as well as several diverse community groups in Trumbull County, with a focus on equity. The unique design of this CHNA will allow us to examine the diverse aspects of Trumbull County's health status in its urban, suburban and rural communities throughout Trumbull County, and evaluate our progress in improving health outcomes for all Trumbull County citizens.

This report would not exist without the financial support and collaborative assistance of our combined community organizations from both Trumbull and Mahoning counties, including Mercy Health, Mercy Health Foundation Mahoning Valley, Trumbull County Combined Health District, Mahoning County Public Health, Healthy Community Partnership-Mahoning Valley, Trumbull County Mental Health & Recovery Board, Mahoning County Mental Health & Recovery Board, Warren City Health District and Youngstown City Health District; as well as their talented staff representatives who took the time to carefully plan and carry out the assessments in both counties.

We sincerely hope that this assessment will be the catalyst to stimulate new collaborations among the public and private sector to continue our efforts with respect to appropriately addressing health concerns, as well as to measure the impact of our combined efforts and guide the most effective use of our resources to maximize our health outcomes.

Sincerely,

Frank Migliozzi, MPH, REHS
Health Commissioner
Trumbull County
Combined Health District

Ruth Quarles, M.D.
Health Commissioner/
Medical Director
Warren City Health District

John May, Jr., BS
Deputy Health
Commissioner
Warren City Health District

TABLE OF CONTENTS

ACRONYMS USED IN THIS REPORT

CHNA	Community Health Needs Assessment
CHOS	Community Health Opinion Survey
MTCHP	Mahoning Trumbull Community Health Partners
NCIPH	North Carolina Institute for Public Health
LGBTQIA+	Lesbian, Gay, Bisexual, Trans, Queer/Questioning, Intersex, Asexual
SNAP	Supplemental Nutritional Assistance Program
WIC	Supplemental Nutrition Program for Women, Infants, and Children
CDC	Centers for Disease Control and Prevention
USDA	United States Department of Agriculture
STI	Sexually Transmitted Infection
STD	Sexually Transmitted Disease

ACKNOWLEDGMENTS

COMMUNITY HEALTH NEEDS ASSESSMENT LEADERSHIP TEAM

The Community Health Needs Assessment for Trumbull County was undertaken in collaboration with partners in the County of Mahoning and the cities of Youngstown and Warren. The Community Health Needs Assessment leadership team met monthly with the community stakeholders group (see below) and more frequently as needed to coordinate the work of the CHNA. The team had leadership representation from each of the health districts and the hospital and included consultants from the North Carolina Institute for Public Health (NCIPH; see section below for full list of NCIPH contributors). This team focused on managing the CHNA data collection and timeline and providing strategic guidance.

Organization	Representative
Environmental Collaborative	Courtney Boyle
Health Community Partnership	Sarah Lowery
Mahoning County Public Health	Ryan Tekac
Mercy Health	Leigh Greene
Trumbull County Combined Health District	Frank Migliozzi
Warren City Health District	John May
Youngstown City Health District	Erin Bishop

COMMUNITY STAKEHOLDERS GROUP

The stakeholders group met monthly throughout the assessment process to provide input on survey questions, determine community conversation populations and topics, promote participation in CHNA activities, review assessment data, and prioritize topics. Additionally, most stakeholders were also involved in smaller CHNA workgroups dedicated to secondary data, survey, or community conversations, and met more frequently during the periods when those parts of data collection were active.

Representative	Organization
Golie Stennis	Access Health Mahoning Valley
Vicki Vicars	ACTION of Mahoning Valley
Paul Olivier	Akron Children's Hospital Mahoning Valley
Doug Franklin	City of Warren, Mayor
Robin Perry	Community Foundation of the Mahoning Valley
Jenna Johnston	Environmental Collaborative
Deryck Toles	Inspiring Minds, Executive Director
Dr. William Ayres	Kent State University Trumbull Campus
Brenda Heidinger	Mahoning County Mental Health & Recovery Board

Duane Piccirilli	Mahoning County Mental Health & Recovery Board
Bharat Chaturvedi	Mahoning County Public Health
Erica Horner	Mahoning County Public Health
Michelle Edison	Mahoning County Public Health
Tracy Styka	Mahoning County Public Health
Jessica Romeo	Mercy Health - Community Health Education
Beth Siwula	Mercy Health - Community Health
Mary Toomey	Mercy Health - Finance
Natalie Terry	Mercy Health - Mission
Debbie Hale	Mercy Health - Prescription Assistance Program
Deatrice (Dee) Traylor	Mercy Health - Resource Mothers and Fatherhood Support Program
Doris Bullock	Mercy Health - Stepping Out Program
Mirta Arrowsmith	Mercy Health - Hispanic Program
Stephanie Oakes	Mercy Health - Community Outreach
Crystal Jones	Mercy Health Foundation Mahoning Valley
Paul Homick	Mercy Health Foundation Mahoning Valley
Ron Dwinnells	ONE Health Ohio
Van Nelson	Trumbull Community Action Program
Tracey Williamson	Trumbull Community Action Program
Vinitra Murray	Trumbull Community Action Program
Jenna Amerine	Trumbull County Combined Health District
Daniel Bonacker	Trumbull County Combined Health District
Jessica King	Trumbull County Land Bank
April Caraway	Trumbull County Mental Health & Recovery Board
John Myers	Trumbull County Mental Health & Recovery Board
Lauren Thorp	Trumbull County Mental Health & Recovery Board
Julie Green	Trumbull County Planning Commission
Paul Monroe	Trumbull County Sheriff's Office
Cassandra Clevenger	Trumbull Neighborhood Partnership
Christian Bennett-Mosley	Trumbull Neighborhood Partnership
Matt Martin	Trumbull Neighborhood Partnership
Miles Jay	Trumbull Neighborhood Partnership
Cheryl Strother	Warren City Health District
Rose Leonhard	Warren City Health District
Helen Rucker	Warren City Health District & Council member at large

Steve Chiaro	Warren City Schools
Eric Merkel	Warren Police Department, Chief
Nicolette Powe	Youngstown State University
Tom Conley	Youngstown/Warren Urban League

NORTH CAROLINA INSTITUTE FOR PUBLIC HEALTH

The Mahoning Trumbull Community Health Partners contracted with the North Carolina Institute for Public Health (NCIPH) at the University of North Carolina-Chapel Hill to facilitate the Community Health Needs Assessment process and report-writing. The following report was drafted by the NCIPH team and reviewed by the CHNA Team and Steering Committee members. NCIPH team members contributing to this report include:

Name	**Role**
Alison Singer	Community Assessment Analyst & Advisor
Amanda Kwong	Student Assistant
Amy Belflower Thomas	Director of Community Assessment & Strategy
Destiny James	Community Engagement Coordinator
Emily McGee	Community Assessment Project Associate
Jaclyn Karasik	Research Assistant
Jessica Douglas	Qualitative Assessment Associate
Joe Dawson	Digital Communications Specialist
John Wallace	Project Lead, Senior Data Advisor
Laurel Booth	Community Assessment Associate
Margaret Benson Nemitz	Strategic Approaches Coordinator
Rose Byrnes	Qualitative Assessment Coordinator

UNC | GILLINGS SCHOOL OF GLOBAL PUBLIC HEALTH
North Carolina Institute for Public Health

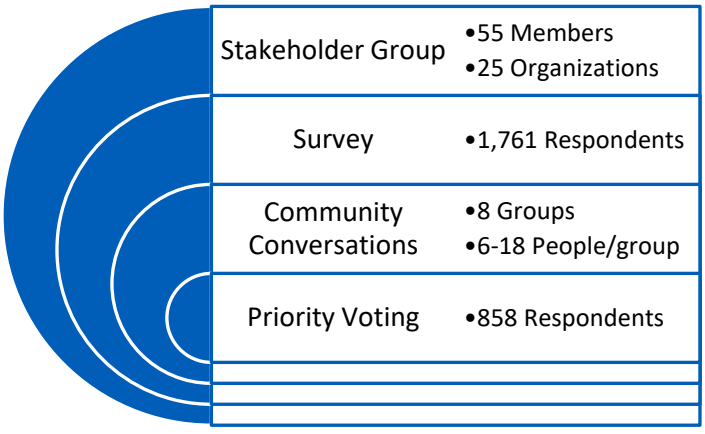
EXECUTIVE SUMMARY

PURPOSE OF THE COMMUNITY HEALTH NEEDS ASSESSMENT

A community health needs assessment (CHNA) is a systematic process for evaluating community health. Data is gathered and analyzed that describes the state of health and wellbeing within a community. During this process, community members and the assessment team work to identify community needs, areas for improvement, resources, and strengths. Using this information, priority areas are selected to be the focus of strategic planning, ensuring a data and community-informed approach to health improvement. The final report describes the process and contains the findings from the assessment. The community assessment process and the final report promote collaboration and resource sharing between local leaders, community-serving organizations, and community members as they work to improve community health in the priority areas.

PARTICIPATION AND COMMUNITY ENGAGEMENT

To conduct this community assessment, representatives from the County Health Departments in Mahoning and Trumbull, City Health Districts in Warren and Youngstown, Mercy Health hospital system, as well as community-based and health and human service organizations established the Mahoning and Trumbull Counties Health Partners (MTCHP) workgroup in 2021. The MTCHP consulted with the North Carolina Institute for Public Health (NCIPH) to facilitate the assessment process. The MTCHP was led by leadership representatives from each of the four public health jurisdictions and the hospital and included a community stakeholder group of the organizations mentioned above. The community stakeholder group met monthly to plan assessment implementation, develop community engagement strategies, discuss and analyze data, and select community priorities.



Community members across counties were engaged in this assessment process in a variety of ways. Community members were invited to take the Community Health Opinion Survey, participate in Community Conversations, attend assessment data presentations, and vote during prioritization. Community Conversations were held among specific populations in the counties who historically have been underserved and underrepresented. These groups included: community members experiencing homelessness, Black community members, community members in rural areas, LGBTQIA+ community members, and Latinx community members.

PROCESS

The MTCHP team worked from November 2021 to July 2022 to establish an assessment strategy and identify priority populations, collect and analyze data, present data for discussion to the steering committee and community members, establish priorities, and develop the assessment report. The data collection process included collecting and analyzing primary and secondary data. Primary data is data collected directly from the community and included the Community Health Opinions Survey (CHOS), and the Community Conversation groups. Secondary data is data collected from existing sources; the NCIPH team collected secondary data from federal, state, and local sources such as the Ohio Department of Health and the U.S. Census Bureau. Data walks are presentations of data analysis and trends to the steering committee and community members. These virtual presentations enabled the assessment team to gather real-time feedback from community stakeholders on the data presented.

This process resulted in a collaborative CHNA report that establishes shared community health priorities for the County Health Departments in Mahoning and Trumbull, City Health Districts in Warren and Youngstown, Mercy Health hospital system. This report for Trumbull County highlights key findings and data from the county, in addition to Mahoning County and the cities of Warren and Youngstown, as appropriate.

COMPARISONS AND FINDINGS

Throughout the assessment, when data was available, comparisons were made between indicators in Trumbull, Mahoning, and the state of Ohio as well as Allen, Lorain, and Portage Counties. These peer counties were selected due to similarities in demographic characteristics and rural and urban populations. Data were presented to the MTCHP team and community partners in a series of three presentations as part of the prioritization process described in the section below.

In general, the health and well-being of people living in Trumbull and Mahoning Counties are similar to that of the state and peer counties. Through these comparisons, highlights emerged where health outcomes in Trumbull and Mahoning Counties were trending in positive directions and better than the state or peers. Infant mortality has been declining in recent years and is lower than the state infant mortality rate of 683.2 infant deaths per 100,000 population, with sharp decreases in Trumbull County (from 1,195.6 per 100,000 in 2017 to 485.0 per 100,000 in 2021) and Mahoning County (from 985.4 per

100,000 in 2019 to 646.0 per 100,000 in 2021). The number of mental health providers has risen considerably in recent years across Ohio between 2016 and 2020, with the providers in Trumbull County climbing from 111.1 to 167.7 per 100,000, and 190.2 providers per 100,000 population to 371.7 per 100,000 in Mahoning County.

There are, however, concerning trends and disparities in health outcomes and community conditions that reinforce the need for further attention and investment in public health. After considerable declines in the percentage of adults aged 18 to 64 who are uninsured between 2012 and 2016, the percentage of community members without health insurance has increased in both counties to 10.2% and 9.2% in Trumbull and Mahoning Counties, respectively, which is higher than the peer counties. Both Trumbull and Mahoning Counties had mortality rates higher than the state and peer counties in 2021, even after adjustments for age, with rates of 1,093.9 per 100,000 in Trumbull County and 1,052.8 deaths per 100,000 population in Mahoning County. These age-adjusted mortality rates were considerably higher among Black or African American community members, with rates of 1,384 deaths per 100,000 in Trumbull County and 1,580 deaths per 100,000 in Mahoning County. Throughout this CHNA, health inequities and disparities are highlighted to the extent possible based on available data to inform all future community health improvement initiatives.

PRIORITIZATION

The MTCHP team and community partners were invited to participate in three data walk presentations. During these data walks, data from primary and secondary sources were grouped thematically in addition to the data from the CHOS. NCIPH facilitated data presentation and discussion, during which community members gave comments on areas that surprised them, resonated, and provided more insight into what might be contributing to the data. Prioritization voting occurred after the data walks were complete. An online prioritization survey was used to gather community votes. Priorities are shared between both counties, as Trumbull and Mahoning will collaboratively engage in strategic planning and take action together on these shared priorities. The MTCHP convened and reviewed the results from the community voting, after discussion the MTCHP team voted to select the final priorities. Health equity and reducing health disparities are prioritized throughout all three selected priority areas of mental health and substance use, access to care, and community conditions, with an emphasis on community safety.

NEXT STEPS

Upon completion, this assessment will be used to drive the community health improvement process in both counties. The priority areas will be the focus of the strategic planning, MTCHP, and additional

community partners and community members will continue to convene to engage in this planning. Together they will work to develop an action plan for each priority area. The action plans will be evidence-based, and the group will continue to collaborate on implementation, monitoring, and evaluation for the next three years.

COVID CONTEXT

COVID-19 IN TRUMBULL COUNTY

In December 2019, an emergent virus, SARS-CoV-2, was first detected in Wuhan, China and quickly spread internationally. Commonly termed COVID-19, the virus caused respiratory illness and was declared a pandemic on March 11, 2020, by the World Health Organization. A few days following this announcement, on March 13, 2020, the United States declared the COVID-19 pandemic a national emergency and effectively went into lockdown to contain the spread of the virus. In Ohio, Governor Mike DeWine declared a state of emergency for the State on March 9, 2020, following the confirmation of 3 patients testing positive for COVID-19 in Ohio. Since 2020, there have been over 2.7 million cases of COVID-19 in residents of Ohio, with at least 43,000 positive cases and 945 deaths confirmed in Trumbull County as of June 2022[1]. In addition to the loss of life Trumbull County, the pandemic has also affected healthcare and social service delivery, community cohesion, and our process for conducting community health needs assessments.

COMMUNITY ENGAGEMENT DURING COVID-19

Community engagement is a critical piece of the community health needs assessment process, beginning with the formation of steering committee and stakeholder groups made up of representatives from local public health, social service, and community-based organizations. While groups have still been able to be convened virtually, the relationship-building and networking that occurs spontaneously during in-person convenings is difficult to replicate in the virtual space. Additionally, the continued demands on everyone's time and energy during the pandemic have limited the participation of steering group members.

Another component of community engagement happens in convening Community Conversations. Community Conversations, and qualitative data collection broadly, are essential for bringing the voices and lived experiences of those most affected by health inequities to the attention of decision-makers and those designing and implementing public health and social service programs. Qualitative data provides context and insight that is often missed by survey and secondary data. Coordinating Community Conversations brought about unique challenges, as some conversations were held with participants gathering in person and facilitators guiding conversations virtually via the Zoom video-conferencing application. Not only did this bring about technical barriers with audio feedback issues and connection difficulties, but it strained the strength of engagement with participants and facilitators communicating via different mediums. When feasible, Community Conversations were co-facilitated by in-person facilitators to further address the challenges presented through virtual facilitation. Barriers

were navigated adequately to assure quality conversations were had and facilitators were able to capture the opinions, thoughts, and experiences of Community Conversations participants.

These effects play out in the representation of community voice in survey data collection as well. Prior to the COVID-19 pandemic, CHNA processes often employed door-to-door canvassing to collect responses to the Community Health Opinion Survey (CHOS); this surveying method assured that data included representation of voice across the county, with survey respondent demographics closely mimicking U.S. Census demographics of the county. Door-to-door surveys are a valuable tool for collecting data and a standard practice used to increase community engagement. Adapting to the measures taken to slow the spread of COVID-19 that made door-to-door surveying difficult, surveying for this CHNA relied on a modified method of inviting people living in Trumbull and Mahoning Counties to complete the survey online. Postcards with the survey URL and a QR code were mailed to households included in the random sample and the survey link was distributed through various community networks to promote an additional convenience sample; detailed descriptions of the survey methods are included in Chapter 3. This shift from in-person to online survey collection resulted in low response rates, sometimes lower than 5%, and restricted the community from seeing the faces behind the CHNA process. Besides low participation, responses to online surveys have tended to be heavily skewed towards White people, women, people with higher incomes, and people with higher levels of education than the general population.

IMPACT OF COVID-19 ON SECONDARY DATA AND INTERPRETATION

Beyond the impacts of COVID-19 on in-person meetings and data collection, secondary data collection was also affected. Data from surveillance systems and national surveys are often available on a delay, so for some measures the most recent data available is for 2017, or 2019, or 2021. This is a limitation normally, but especially during COVID-19, as we seek to measure its impact on our communities. Average life expectancy reported in 2019 will not yet reflect the significant loss of life due to the pandemic. Similarly, data for 2020 and 2021 should be considered within the context of COVID-19. For example, data on emergency room visits will not reflect the individuals who needed services but avoided seeking care due to the risk of exposure to the virus. Due to these limitations, the data presented in this report will not be wholly comprehensive of all health characteristics within the communities. Rather, the data provides us with a point of reference for tracking social, economic, and health indicators in our communities.

CHAPTER 1: INTRODUCTION

COMMUNITY HEALTH NEEDS ASSESSMENT OVERVIEW

The Community Health Needs Assessment (CHNA) was developed to help identify the unmet needs of a community and guide stakeholders towards prioritizing available resources to meet those needs. It is a systematic process for evaluating the overall health status of a community, the factors that contribute to community members' health and well-being, and the resources that are available or needed to address these factors. The CHNA process seeks to hear the voices of the communities, identify points of improvement and strengths, and identify trends. During the CHNA, peer counties are chosen in order to contextualize the available data and identify notable disparities and trends. Peer counties chosen for Trumbull and Mahoning in this process were Allen, Lorain, and Portage Counties selected due to similarities in demographics and rural and urban populations.

Figure 1: Phases of Community Health Needs Assessment process

The CHNA involves a collection of information and data on the county of interest from three main sources: secondary data, primary data, and community input. Secondary data are gathered from existing repositories for Trumbull and Mahoning counties as well as peer counties and the state of Ohio to allow comparison between trends. Primary data are gathered from Trumbull and Mahoning counties through a mixed-methods approach using quantitative and qualitative data. The findings from the data are then presented back to the community and community stakeholders for input on how the data compares to or reflects their lived experiences within the counties. Community members and stakeholders are invited to vote on top priorities and CHNA leadership convenes to review data, and votes to synthesize priorities. Action plans are developed with community stakeholders and service providers to address needs in the priority areas. The CHNA process is outlined in Figure 1.

COMMUNITY ENGAGEMENT

The CHNA team, comprised of Mahoning and Trumbull Counties Health Partners (MTCHP) met monthly from November 2021 to June 2022 to discuss the assessment strategy, analyze primary and secondary data, and identify key health priorities. Workgroup meetings took place on an as-needed basis, with three workgroups dedicated to key pieces of the process: secondary data, survey, and Community Conversations. Workgroups were comprised of the MTCHP Community Health Needs Assessment team members, with additional community stakeholders consulted as different areas of needed expertise were identified. Community engagement in the assessment process is essential to ensure that the identified priorities are representative of community needs. Community input was solicited in the following ways: the Community Health Opinion Survey (CHOS) was developed to solicit broad input from Trumbull and Mahoning residents; in addition, eight Community Conversations were held with residents in the following priority populations: people experiencing homelessness, community members living in rural areas, Black community members, LGBTQIA+ community members, and Latinx community members. These conversations were held to gain an understanding of the lived experiences of county residents regarding specific topics of interest determined by the Community Conversations workgroup and MTCHP CHNA team. The MTCHP team and stakeholder group also participated in three data walk sessions and prioritization voting to reach consensus about the final priorities for the current CHNA. Community members were again engaged during the process of selecting community priorities, through online prioritization voting.

DATA COLLECTION AND COMPARISONS

The CHNA process requires gathering and reviewing two kinds of data: primary data (new data collected from the community) and secondary data (existing statistics collected from external sources). To fulfill the primary data requirement, both quantitative data from online surveys and qualitative data from Community Conversations were collected and analyzed.

SURVEY METHODS

A two-pronged approach was used to recruit adults in Trumbull and Mahoning counties to participate in the Community Health Opinion Survey (CHOS). The first involved drawing a random sample of 6,000 selected households, 3,000 for each county with oversampling in census tracts with a high social vulnerability index (SVI). Households randomly selected received postcard mailers with a postcard number and a survey link. The random sample was then supplemented with an open-to-the-public convenience survey administered via the same link, which was open for anyone to take even if they did not receive a postcard mailer. The survey link was distributed publicly through 149 organizations and contacts via social media, listservs, businesses, and networks of stakeholders. The survey was approximately 80 questions long and included questions about personal health, access to care and barriers encountered, substance use, and other community health issues, and was open for responses from March 2022 to April 2022. A total of 1,761 responses were received, and only 70 responses came from those who received postcard mailers.

An important consideration is that this process was heavily reliant upon the general community survey, given the low response from the random sample. It was critical for the team to evaluate non-response bias and how well the survey respondent demographics align with county demographics. In general, the respondent demographics aligned with demographics of the counties, as the data showed roughly 85% of respondents identified as non-Hispanic White and 10% identified as Black or African American. While this generally aligns with demographics in Trumbull County, respondent demographics from Mahoning County were lower among Black or African American and among Hispanic or Latino residents. Warren and Youngstown had a higher percentage of respondents identifying as Black or African American.

COMMUNITY CONVERSATION METHODS

Eight Community Conversations were held in February and March 2022. Community Conversations were facilitated virtually, while some groups met in person and others all joined via Zoom. Participants were recruited through the networks of the MTCHP and stakeholder team and their constituent organizations. Community Conversations were held primarily in the evening to increase accessibility for community members with daytime commitments. A range of 6 to 18 community members participated in each session. Conversations were recorded, and field notes were analyzed to identify common themes in each conversation and across groups. The priority populations for the Community Conversations were people experiencing homelessness, Black community members, people living in rural areas, LGBTQIA+ community members, and Latinx community members.

While Community Conversations provide a great deal of insight into the perspectives and lived experiences of community members in Trumbull and Mahoning Counties, these experiences cannot be generalized to represent the entire county.

SECONDARY DATA

The secondary data collected for the CHNA included statistics from federal, state, and local sources around topics such as morbidity (illness) and mortality (death) rates for various health outcomes, demographics, education, poverty, health care services, disease tracking, environmental health, and others. The secondary data collected for this report also includes social determinants of health, which are social and environmental factors that influence personal health, health behaviors, and access to health care.

The secondary data collection process involved the comparison of several data measures from Trumbull and Mahoning Counties to the state of Ohio and three peer counties, Allen, Lorain, and Portage. These peers were selected because of similarities in demographic characteristics and rural and urban populations.

To compare across regions and across time, the data are often reported as rates, which show the count of an event within a defined population during a specified time interval (see figure 2). This allows comparisons over time, even when the size of the population is changing from year to year. Additionally, since many health conditions are related to age and the different communities may have older or younger populations, an age-adjusted rate is often used. Factoring in the age distribution allows for comparisons of disease burdens across different communities more accurately. Finally, some secondary data are presented as 5-year averages so that events in smaller communities or less frequent events are not distorted by the natural fluctuations of a few people from year to year. For the purposes of this report, 5-year averaged data will be referenced by the final year in the range. For example, the "2019 estimate" of a 5-year average refers to the average of data from 2015-2019. Full date ranges are referenced in figure captions. Alternatively, some secondary data from infrequent events is not aggregated and is suppressed (or withheld) from official reports. Aggregation or suppression is noted where appropriate.

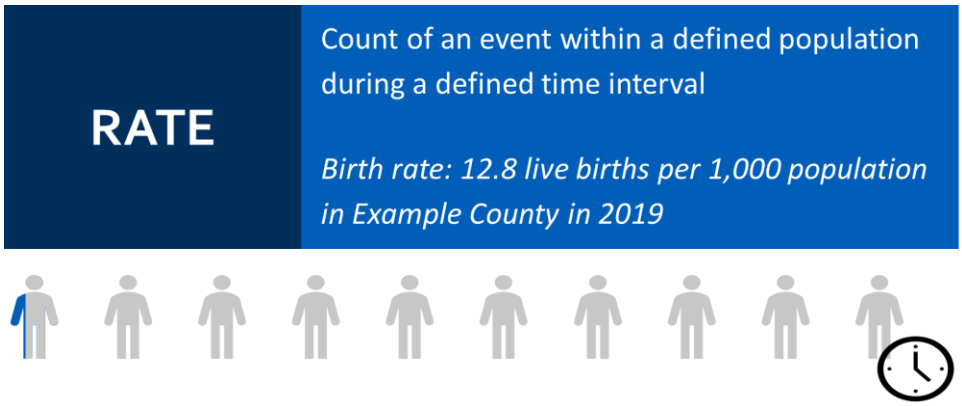


Figure 2: Definition of a rate. Image courtesy of the North Carolina Institute for Public Health

Secondary data is a useful tool for understanding community health at the population level. However, this type of data can be delayed by a few years due to the need to collect, process and analyze data which can be time and resource intensive. Efforts were made to collect the most recent data available at the time of collection in January 2022, but please be aware of a potential lag between what is happening today in the county and the latest available data. The COVID-19 pandemic has also added to this challenge as data collection and reporting activities may have been negatively impacted resulting in delays and interrupted processes. Secondly, the data presented provides an estimation of the true value in the population; while efforts are made to collect data using tools such as outreach and sampling, it is not possible to collect data on every single point of interest for every single resident.

Citations throughout this document refer to general source of the data, for example "U.S. Census Bureau, American Community Survey 5-year Data" with the most recent year of data included. The complete list of secondary data sources, including specific data table numbers and all years accessed can be found in Appendix 3.

PRIORITIES

Choosing community priorities is a crucial step in the CHNA process and enables communities to focus attention and resources to tackle pressing community needs. The prioritization process for the 2022 CHNA began with a review of secondary data trends as well as data collected from Trumbull and Mahoning County residents via the CHOS and Community Conversations to help understand the landscape of health needs. The NCIPH team conducted a series of three virtual data walk sessions to provide an overview of the findings for stakeholders to openly discuss. Data walks are designed as a presentation of findings through data visualization and discussion, and were held virtually in small breakout rooms – similar to in-person data walks – to allow for more discussion among small group members. After the data walks, an online prioritization survey was distributed through stakeholder networks and to CHOS respondents for community voting, receiving 844 eligible responses. After the community voting was the stakeholder prioritization meeting, where community members and stakeholders discussed community voting results and voted on what the top priorities should be. The CHNA Leadership team considered the feedback from community voting and stakeholder voting, leading to the selection of these three priorities: mental health and substance use; access to care; and community conditions, with an emphasis on community safety. Across all priorities, there is a focus on health equity and the critical need to address and tackle health issues at the root to see change in the community.

CHAPTER 2: DISTRICT PROFILE

HISTORY

Trumbull County is located in the northeastern corner of the state of Ohio. While originally populated by indigenous peoples of the Erie tribe, after the initial period of colonization in what is now the eastern part of the United States, members of other indigenous groups relocated to Ohio fleeing war and enslavement by European settlers. Some members of the Seneca tribe of the Iroquois Confederacy settled in the Mahoning Valley, but the land was ceded to the U.S. in 1795 in the Treaty of Greenville[2] and by the mid-1800s, most indigenous peoples had been forced out of Ohio, primarily to Oklahoma. [3]

Trumbull County was established in 1800, serving as the seventh county in the northwest territory of Ohio. It was carved out of the former counties of Wayne and Jefferson and initially covered an area of the northeast corner of Ohio currently broken into twelve counties. The county is named after Jonathan Trumbull, Governor of Connecticut, who once owned the land in this region. United States President William McKinley, Jr. was born in the Trumbull County village of Niles. Trumbull County also was the birthplace of Clarence Darrow, a prominent American attorney during the early twentieth century.[4]

Trumbull County has played an important role in American history, notably as an area through which the underground railroad passed and included several stops. People fleeing enslavement traveled through the county on the way to Lake Erie and the Canadian border. The largest stops on the underground railroad in the county were located in Warren, Gustavus, and North Bloomfield. One prominent Trumbull resident was Levi Sutliff who worked with the National Anti-Slavery Society and founded the Trumbull County Anti-Slavery Society. [5]

GEOGRAPHY

Trumbull County is situated on the border with Pennsylvania and directly north of Mahoning County. The county seat is the city of Warren which is also the largest city in the county. The cities of Cortland, Girard, Hubbard, Newton Falls, Niles are within the county, with the city of Youngstown the county seat of Mahoning County also considered part of the county [4]. Trumbull County is 637 square miles. In Trumbull, just over a quarter (27.3%) of the population lives in rural areas as of 2010.[6]

ECONOMY

The cost of living in Trumbull County falls below the national average. The largest industries in Trumbull County are manufacturing, health care and social assistance, and retail trade. The highest paying industries are utilities, mining, quarrying, and gas and oil extraction.[7] The area has experienced significant job loss as manufacturing plants, both steel and automotive have closed or downsized in recent decades. Additional information about economic opportunity metrics such as poverty and unemployment can be found in Chapter 3.

DEMOGRAPHICS

POPULATION GROWTH & DENSITY

This section explores the demographic trends in Trumbull and Mahoning counties as the CHNA process occurred across both counties and they are peers of one another, additional information is included for

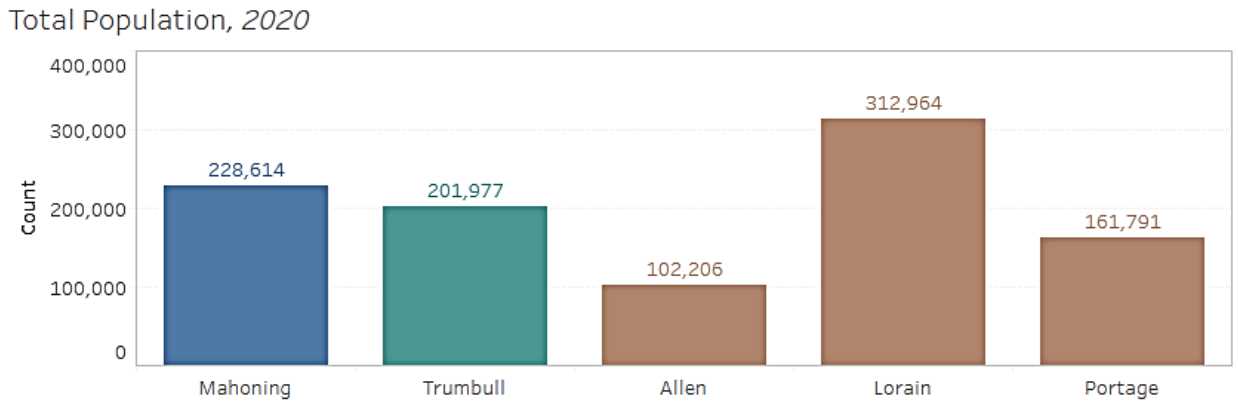


Figure 3: Total population by county, 2020. Source: U.S. Census Bureau, 2020 Census

the peer counties used for comparison purposes throughout this report. As of the 2020 census Trumbull County has a population of 201,977, the population of Mahoning County is slightly larger at 228,614 as of the 2020 census. By population, the counties are larger than Allen and Portage, but smaller than Lorain (see figure 3). When looking at population trends, population growth is expected to decline slightly in the next 15 years in both Trumbull and Mahoning, as well as across all peer counties except Loraine. Trumbull and Mahoning Counties have a slightly larger elderly population compared to Lorain, Portage, and Allen counties. Mahoning has a slightly larger immigrant population than Trumbull, and the population of recent immigrants is growing in Mahoning County, particularly among those entering in 2010 or later.

In Trumbull, the average life expectancy is 75.2 years. When examined by race and ethnicity the average life expectancy for Hispanic individuals is 94.9, followed by White individuals (75.6), and Black individuals (70.5). In Mahoning County, the average life expectancy is also 75.2 years. Asian individuals have the highest life expectancy (87.6), followed by Hispanic individuals (79.9), White individuals (76.3), and Black individuals (68.9).

BIRTH RATES

When looking at birth rates, Trumbull and Mahoning have similar birth rates to Allen and Lorain at around 60 births per 1,000 females ages 15-44. Digging a bit deeper we uncover that birth rates are rising among Asian or Pacific Islander females in Trumbull County, and among Hispanic females in Mahoning County. Otherwise, birth rates are stable or slightly decreasing. Around 22% of households in Trumbull and Mahoning have children under 18, slightly lower than peer and state data.

AGE & SEX

In Trumbull County, the median age is 44.4 years, 51.2% of residents are female. 20.3% of the total population is under 18 years, and 22.1% of the population is 65 and over. In Mahoning County, the median age is 43.5 years, 51% of residents are female, 19.9% of the population is under 18 years, and 21.4% of the population is 65 and over.

RACE & ETHNICITY

Trumbull's racial and ethnic makeup is most similar to Portage, while Mahoning's racial and ethnic makeup is more similar to Allen, Lorain, and the state. Trumbull County has a larger White, non-Hispanic community and smaller Black or African American community than Mahoning. Trumbull County is 86.9% White non-Hispanic, followed by 8.6% Black or African American descent, 1.9% Hispanic or Latino, and 2.2% of two or more races.

Mahoning County is 74% White non-Hispanic, followed by 14.8% Black or African American descent, 6.2% Hispanic or Latino descent, and 3.8% of two or more races. The racial breakdown of grandparents who live with their grandchildren is overall similar to county racial demographics; however, Mahoning has a higher percentage of grandparents living with their grandchildren who are Black or African American compared to peers and compared to its county demographics.

Over 90% of all counties speak English only at home. Other than English, other Indo-European languages are most common in Trumbull (3.3% of households) and Spanish is the most common non-English language in Mahoning (3.2% of households).

VETERANS

In Trumbull, Veterans make up nearly 10% of the population, higher than Mahoning, state, and peer counties where veterans make up between 7-8%.

DISABILITY

Over 11.1% of residents in Trumbull under the age of 65 have a disability. In Mahoning County, 11.5% of residents under the age of 65 have a disability.

EDUCATION

In Trumbull, 44% of the population have a high school degree or higher, and 12.8% have a bachelor's degree or higher. In Mahoning, 37.2% of residents have a high school graduate degree or higher, and 16.1% have a bachelor's degree or higher. In Trumbull County, while there are fewer people with a degree beyond high school compared to Mahoning, peer counties, and Ohio there are similar percentages of the populations with an associate's degree to Mahoning and Portage at about 8% however this is below the average for the state of Ohio.

MARGINALIZED POPULATIONS

Through this public health assessment, we are looking to understand how the community's health and wellness is changing and how it is distributed, with particular attention to groups that have been historically and systemically marginalized in Trumbull and Mahoning Counties. Throughout this process, particular attention was paid to groups that are at higher risk of experiencing poor conditions and poor health outcomes: low-wealth communities, communities of color, women, LGBTQIA+ community members, and other historically marginalized communities. When data are presented disaggregated by race, ethnicity, gender, age, or poverty status, any associated disparities are highlighted in the assessment findings that follow. While some disaggregated data were not available or were not readily accessible in the timeframe of the CHNA, state or national reference points are discussed, and opportunities for further investigation are highlighted. Through this assessment, the MTCHP was able to examine the unique health care needs or characteristics that impact determinants of health as well as health outcomes and associated health disparities in these two counties. Understanding the current conditions and trends of health in the counties and then prioritizing the most urgent needs lays the foundation for the next step in the process, the Community Health Improvement Plan.

CHAPTER 3: ASSESSMENT FINDINGS

Data collected from primary and secondary sources were analyzed for this assessment and summarized in eleven data categories, with the community priority areas highlighted in the linked buttons below. While summarizing the data in categories supports the understanding and usability of this report, it is with the recognition that the health outcomes and conditions that support or impede health are complex and interrelated. Multiple years of data were analyzed from most secondary data sources, and how conditions and outcomes have changed over time are described in the assessment findings that follow.

Click buttons below to jump to any section

Access to Care
Neighborhood & Environment
Housing
Lifelong Development
Economic Opportunity
Community Cohesion
Safety
Health Behavior
Disease Illness & Injury
Reproductive & Child Health
Mental Health & Substance Use

OHIO STATE HEALTH IMPROVEMENT PLAN

The Ohio State Health Improvement Plan (SHIP) serves as a blueprint for action to improve health and well-being in all 88 counties. This Community Health Needs Assessment aligns with the framework set out by the Ohio Department of Health in the 2020 SHIP: examining community factors that shape health outcomes to understand the health needs in the community, as a precursor to taking action to improve health (see figure 5). Throughout the Assessment Findings chapter, areas that are prioritized in the SHIP are indicated with a green rectangular icon, shown to the right in figure 3. While the SHIP does not lay out numeric targets for the state and counties, the desired outcome can be compared to recent trends to gauge progress and areas for improvement.

Figure 4: State Health Improvement Plan Icon

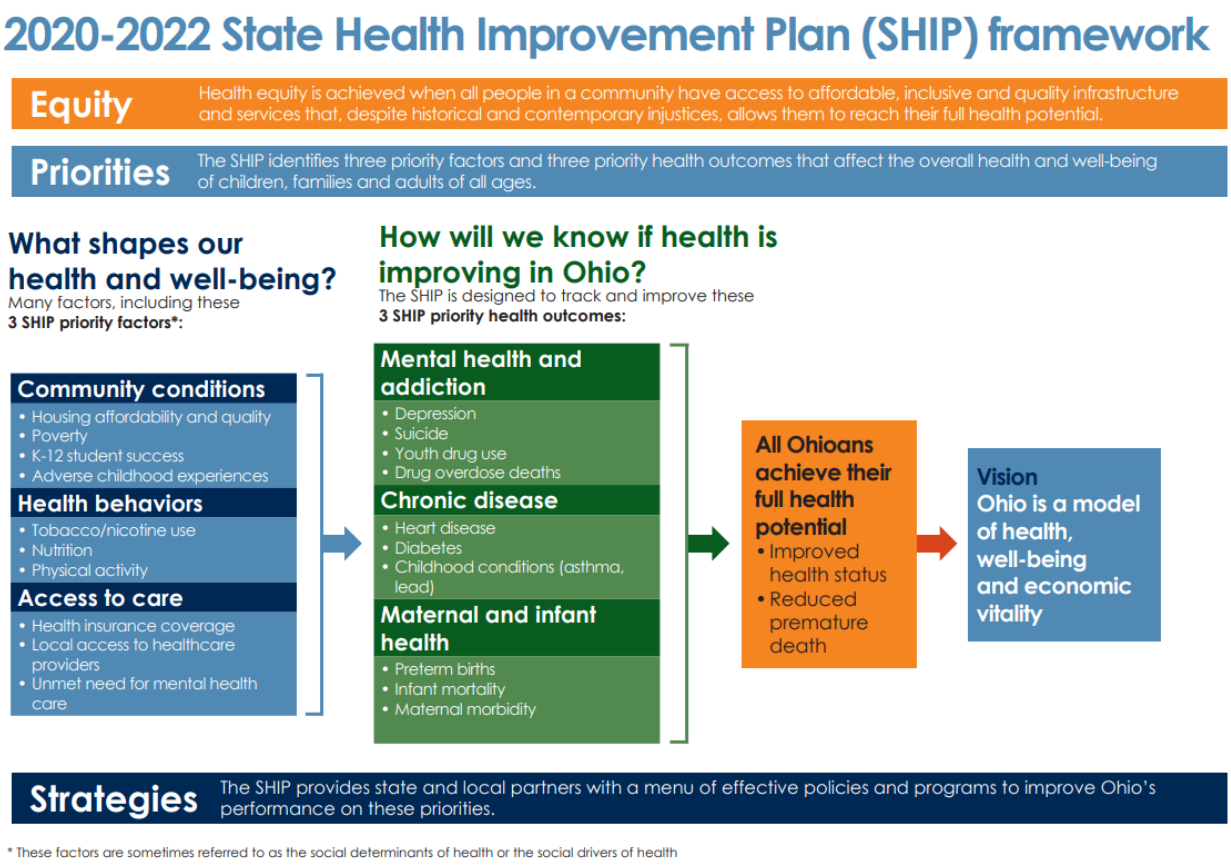


Figure 5: 2020-2022 Ohio State Health Improvement Plan Framework. Image credit Ohio Department of Health

ACCESS TO CARE

Access to healthcare is a key determinant of a community's health. Healthcare serves an important role in preventing illness and providing diagnosis and treatment. A community's access to healthcare can be challenged by barriers such as lack of health insurance, high cost of care, few providers, and limited transportation to healthcare facilities.

INSURANCE STATUS

Health Insurance is a vital component of access to care in the United States. In 2019, the estimated percentage of adults ages 18 to 64 who are uninsured was 10.2% in Trumbull and 9.2% in Mahoning. This is similar to the uninsured estimate in the state of Ohio as a whole at 9.1% [8]. The percentage of the population without health insurance decreased between 2012 and 2016 [8], likely reflecting the expansion of Medicaid in Ohio in 2013. However,

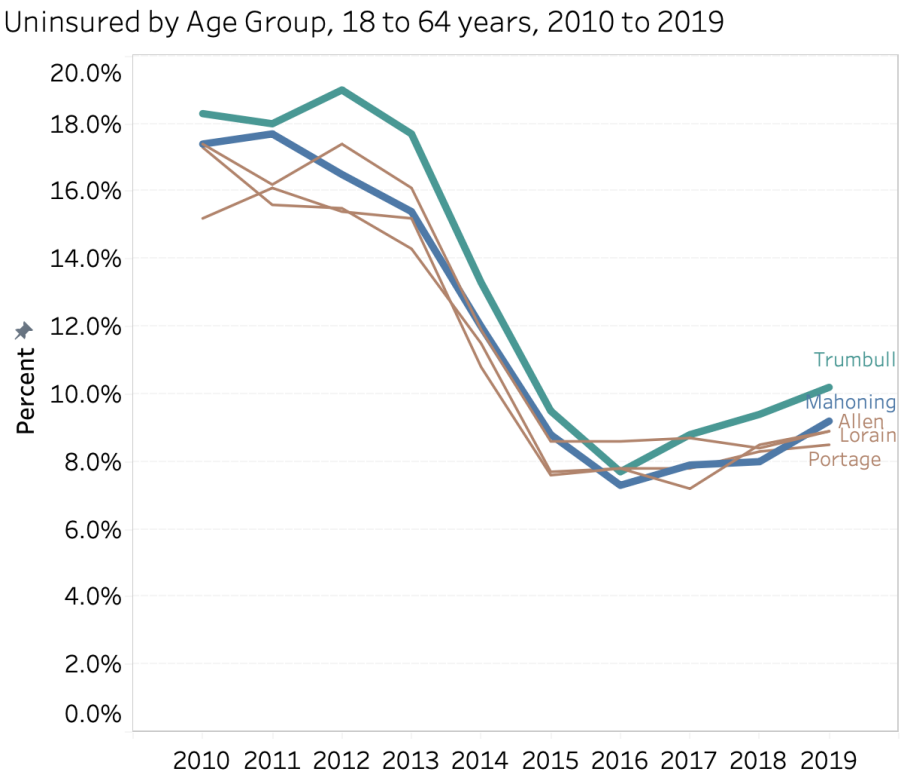


Figure 6: Percentage of population (18-64 years old) that are uninsured 2010-2014 to 2015-2019, 5-year estimates. Source U.S. Census Bureau Small Area Health Estimates

between 2016 and 2019 there has been a slight increase in the estimated percentage of community members without health insurance in both counties.

Uninsured rates are slightly higher for community members living at or below 250% of the Federal Poverty Level, about 12.0% of residents under age 65 in Trumbull, and 10.6% of residents under age 65 in Mahoning [8]. This is consistent with national data which demonstrates that uninsured people are more likely to be people with lower incomes. At the state level, race disparities exist for people in Ohio under the age of 65, with 7.2% of White people uninsured, 9.0% black, and 17.3% Hispanic. [9] Lack of health insurance is a challenge to community health as it may cause uninsured people to delay seeking care due to cost, additionally uninsured adults are more likely to have no usual source of care, postpone seeking care, go without care, and postpone or go without a needed prescription due to cost.[9] Delays in care may worsen health conditions and increase the cost of treatment. According to five-year estimates, almost 30% of the population in both counties are insured through public health insurance, this is slightly higher than the peer counties and the state. Similarly, Trumbull and Mahoning Counties have a larger percentage of community members on Medicaid and Medicare insurance plans than their peer counties [10]. In February of 2022, 33.6% of the population in Trumbull were enrolled in Medicaid, slightly below the 38.0% in Mahoning.[11] Between 2017 and 2020, estimates of public health insurance enrollment increased (public health insurance is an aggregate of enrollment in Medicaid, Medicare, and VA health insurance alone). Use of VA Health Care coverage is low in Trumbull and Mahoning counties, covering only 0.30% of the population [10]. In Community Conversations, health care for veterans was mentioned as an important issue for the community.

WORKFORCE

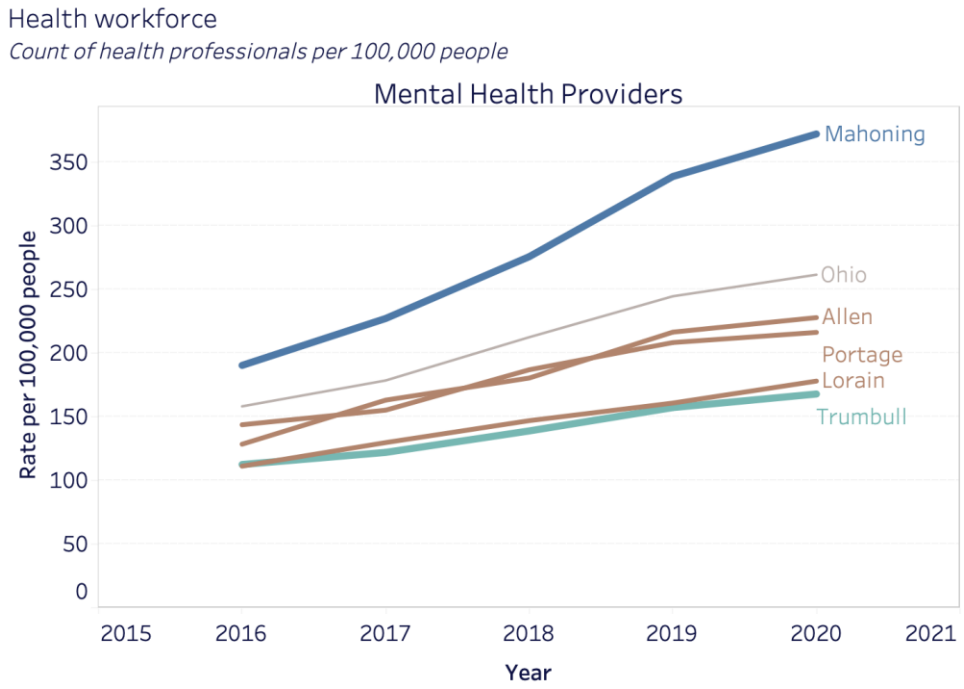


Figure 8: Mental Health Providers per 100,000 people, 2011-2016 to 2016-2020 5-year estimates. Source 2017-2021 County Health Rankings, Ohio

Ensuring there are enough trained providers to serve the community is another component of strengthening access to health care. Trumbull County has fewer providers than several peers and the state. Mahoning has a larger number of health professionals working in mental health, primary care, and dentistry per 100,000 people compared to the other counties and the state as a whole. In 2018 estimates, Trumbull County had 46.3 primary care physicians per 100,000 compared to Mahoning, which has 104.5 primary care physicians per 100,000 people and 76.7 in the state of Ohio. In 2019 estimates, Trumbull had 54.0 dentists per 100,000 people compared to 72.2 dentists per 100,000 people in Mahoning and 64.2 in the state of Ohio. Between 2016 and 2020, there was a large increase in the number of mental health providers working in Trumbull and Mahoning counties, increasing from 111.1 to 167.7 per 100,000 in Trumbull and 190.2 to 371.7 per 100,000 in Mahoning [12,13].

EXPERIENCE SEEKING CARE

In the Community Health Opinion Survey, community members in both counties shared their experiences seeking care. The majority of respondents, 75.6% in Trumbull and 81.2% in Mahoning indicated that when they feel sick, they seek care from a doctor's office. Alternate sources of care were urgent care centers, other services, hospital emergency rooms, and community clinics. Respondents from households making less than $50,000 reported slightly lower levels of seeking primary care (75.6% compared with 80.9% among respondents with a household income above $50,000).

Almost 20% of CHOS respondents reported a problem getting the healthcare they needed personally or for a family member within the past 12 months. Respondents in Trumbull County (18.9%) and Warren (16.2%) reported experiencing a problem accessing care compared to Mahoning County (16.6%) and

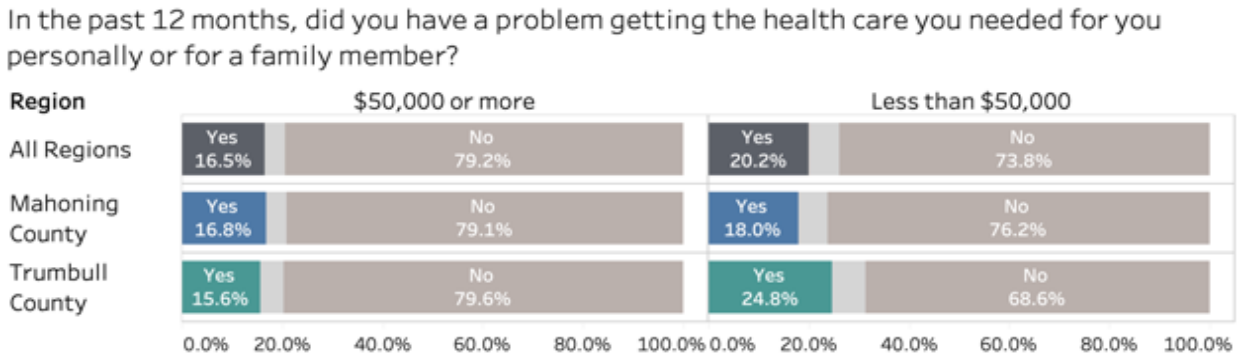


Figure 9: Percent of CHOS respondents experiencing challenges accessing care in the past 12 months by income. Source Community Health Opinion Survey 2022

Youngstown (17.3%). Respondents from households earning less than $50,000 experienced problems accessing healthcare more than those with a higher income, with 24.8% in Trumbull and 18.0% in Mahoning reporting difficulties. CHOS respondents from households earning more than $50,000 reported more difficulties accessing different providers than those from households who made less than $50,000. The top five providers that were difficult to access are listed in figure 9.

The most common problems that prevented access to care included: issues with insurance coverage, lack of providers, insufficient appointments available in the timeframe, and cost. Almost 30% of respondents identified additional issues not included in the response options list. Themes from the write-in responses included challenges making appointments (no follow up, miscommunication, COVID barriers) and wait times once at the healthcare location. For respondents from households earning

Types of providers/facilities CHOS respondents had difficulty accessing by income			
CHOS respondents making $50,000 or more		**CHOS respondents making less than $50,000**	
Specialist	28.7%	Dentist	36.8%
General Practitioner/Primary Care	26.1%	Mental Health Care Provider	31.6%
Mental Health Care Provider	21.7%	General Practitioner/Primary Care	31.6%
Hospital	18.3%	Specialist	25.0%
OB/GYN	11.3%	Eyecare/Ophthalmologist	21.1%

Figure 10: Types of providers/facilities CHOS respondents reported difficulty accessing, by income. Source: Community Health Opinion Survey 2022

below $50,000 who experienced challenges accessing care the top barriers were: insurance not covering the needed service, providers not accepting their insurance, and cost.

DENTAL

Almost 70% of respondents reported visiting the dentist or a dental clinic within the past year, 66.0% in Trumbull County, 58.7% in Warren, 70.8% in Mahoning County, and 64.8% in Youngstown. A disparity exists in accessing dental services among respondents from households earning less than $50,000 a

year; among this group, only 55.8% in Trumbull and 57.0% in Mahoning visited a dental provider in the past year. Among respondents who indicated not having visited a dentist in the past year, 52% of respondents in Warren identified cost as a barrier. Some of the other reasons respondents shared for not visiting a dental provider included: cast, fear of dentist, and concern about COVID-19.

HEALTH INFORMATION

During the Community Conversations, participants shared that there is a lack of information about available services, and a desire for affordable health care and resources to improve one's health. A majority of CHOS respondents (89.2%) reported receiving their health information from a doctor or primary care provider. Over a third of survey respondents (41.4%) receive their health information from news media and 36.5% received it from friends, family, or the community. In the Community Conversations members identified social media, word of mouth, radio and flyers as methods that have been effective when getting the word out. Thirty percent of CHOS respondents who had post-COVID syndrome have had a difficult time accessing information or treatment in the past year. More than 1 in 10 respondents with mental health diagnoses, coronary heart disease, depression, and arthritis have also had problems accessing information or treatment for those conditions.

ACCESS TO CARE IN COMMUNITY CONVERSATIONS

During the Community Conversations, community members expressed interest in strengthening preventive services and building a community culture of health to alleviate pressure on health services. Participants shared challenges such as a lack of information about available services, cost, and a lack of proximity to services. Difficulty accessing specialty care particularly due to long wait times were observed in Community Conversations. A desire to improve services for community members with and without health insurance was expressed, and a need to increase access to insurance and better serve veterans and elderly residents.

Community members noted some resources currently exist that promote access to care including mobile screening programs that serve residents in rural areas and proximity to world-class healthcare facilities such as the Cleveland Clinic which is located close by and has several satellite clinics in the area. Additionally, resources such as social workers at the Cleveland Clinic assist patients with finding resources to pay medical bills.

AFFIRMING CARE

During Community Conversations access to appropriate and affirming healthcare arose as a major concern for the LGBTQIA+ community, particularly trans community members. A need was identified for affirming care, training for provider staff on gender identity and pronoun use, and updating health record forms to be more inclusive of gender and sexual diversity (e.g. additional form fields and name options). Akron Children's hospital was identified a potential resource to model local provider approaches on inclusivity and affirming care.

Gender-affirming care is a supportive form of healthcare, that consists of an array of services that may include medical, surgical, mental health, and non-medical services for transgender, nonbinary, and gender non-conforming people.[14] Transgender and non-binary individuals experience an increased risk of poor health outcomes compared to their peers, particularly mental health challenges such as depression and anxiety, as well as the risk of suicide.[15] Gender-affirming care, along with social and familial support are protective elements for the health of transgender and non-binary community members [15]. Ohio is one of several states in which some lawmakers are working to pass legislation restricting gender-affirming care for trans, non-binary, and gender non-conforming youth [16]. The results of this state action will have an impact on the care available in Trumbull and Mahoning Counties for people seeking gender-affirming care.

NEIGHBORHOOD & PHYSICAL ENVIRONMENT

The spaces in which people live, work, and play contribute to the health outcomes of community members. When examining the neighborhood and physical environment of Trumbull and Mahoning counties, this report will include aspects of the built and natural environment. This section will also include access to neighborhood resources such as grocery stores and public transportation used to navigate the counties.

AIR QUALITY

Air quality is generally good and has improved over the past four years in both Trumbull and Mahoning Counties. Quality is determined by using the Good Air Quality Index, days with a good air quality score of a value between 0 and 50, between 2017 and 2020. Trumbull County increased the number of good air quality days from 276 to 315, while Mahoning increased from 302 to 320 days [17]. The increase in good days is paralleled by a decline in the number of days with moderate air quality. Trumbull County

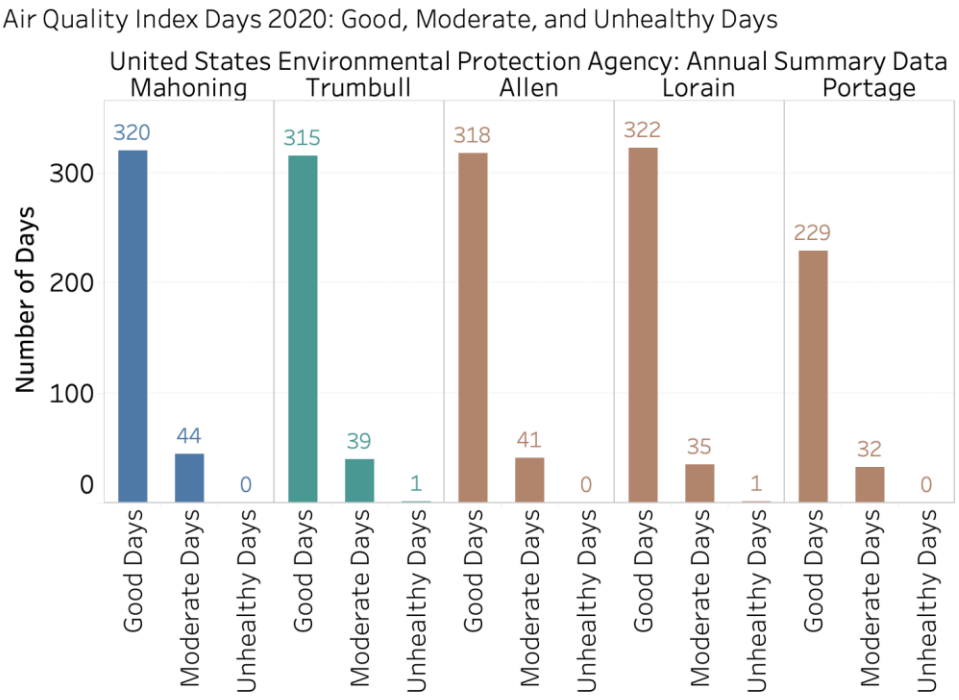


Figure 11: Number of good air quality days per year, 2011-2016 to 2017-2021, 5-year estimates. Source: U.S. Environmental Protection Agency Annual Summary Data

experienced a single day of unhealthy air quality in 2020. During a data walk, community experts identified this day as a high ozone day attributable to wildfires across the country; they observed that as effects of climate change continue, these poor air quality days may occur again.

AIR POLLUTION

The most common air pollutant in both counties is fine particles PM2.5. Air pollutant PM2.5 was the primary pollutant in Mahoning for 195 days in 2020, slightly above the number of days in Lorain (169), Trumbull (138), and Allen (134) [17]. Fine particles are 2.5 micrometers in diameter or less – because of their size, these particles can travel deep into the respiratory system and into the lungs. Exposure can result in irritation of the airways and difficulty breathing. Long-term exposure to fine particles is associated with chronic bronchitis, poor lung function and cancer, and heart disease. People with respiratory and cardiac problems, children, and elderly community members are among the most sensitive to fine particles. [17] [18] Sources of PM2.5 include emissions from vehicles, burning fuel, smoking, and cooking; these particles may travel long distances, and people can be exposed inside and outside.[18]

LEAD EXPOSURE

Lead exposure can damage the brain and nervous system, slow development, and contribute to learning, behavior, hearing, and speech problems. Lead exposure can occur by inhaling or ingesting lead particles. Common sources of lead include paint chips or dust from homes built before 1978, water pipes, toys and jewelry, some candies or traditional remedies, and occupational exposures [19]. After exposure, lead enters the bloodstream. Children are the primary focus of lead-prevention interventions as their development can be impacted by exposure and because they often put their hands or contaminated objects in their mouths [19]. The prevalence of confirmed elevated blood lead levels (5 µg/dL or higher) among children under six years of age who were tested was 1.2% in Trumbull County, 1.7% in Warren, and 1.9% in Mahoning County, 2.6% in Youngstown. These percentages are comparable to peer counties and the state of Ohio as a whole, with the exception of Youngstown which is higher than all regions.[20]

CLEAN WATER

Clean and safe drinking water is essential to community health. Households typically get their water from a Community Water System (CWS), which the EPA defines as a public water system that supplies water to the same population year-round [21], or a domestic well. While residents in Mahoning and Lorain County primarily use a Community Water System, over a quarter of residents in Trumbull and Portage Counties use water from a system outside the Community Water System. In 2015, 72.4% of the population in Trumbull was served by a CWS compared to 96.8% of the population in Mahoning [21]. Drinking water violations indicate that at least one community water system in the county received at least one health-based violation during the year [13]. In the five years between 2014 and 2018, Trumbull had four years in which there was at least one health-related water violation, and Mahoning had three years in which there was at least one health-related water violation [22]. Visit the U.S. Environmental Protection Agency Safe Drinking Water Information System search tool to learn more about water

violations. Community Conversation participants in a rural area identified maintaining water quality as a role of governmental public health, but they expressed concern about the cost burden of mandatory septic system upgrades. In addition to high cost, participants pointed out there is an incentive for inspectors to find violations if they are associated with the maintenance companies.

INTERNET

Access to the internet can be a determinant of health as it may increase direct access to health services through telemedicine, health information and impact broader social determinants, including employment and education. In 2020, an estimated four out of five households had an internet subscription in both counties. In Trumbull, 79.1% of households and 83.4% of households in Mahoning had internet subscriptions. The percentage of households with internet subscriptions has increased between 2017 and 2020.[23]

ENVIRONMENTAL CONCERNS

CHOS respondents were asked to indicate which environmental health concerns were a problem where they lived. Almost half of the respondents reported at least one environmental concern. Too many vacant or abandoned properties were a concern for respondents in Warren (31.8%) and Youngstown (35.2%). Flooding was the largest concern Trumbull (22.7%) and in Mahoning (22.8%), it was the second-largest concern for residents in Warren (22.7%). Too much noise was a slightly more prominent concern in Warren (9.1%) and Youngstown (11.13%) than in the counties Trumbull (7.7%) and Mahoning (8.6%),; as was proximity to industrial or polluted sites, Warren (6.1%), Youngstown (7.0%) compared to Trumbull (5.3%) and Mahoning (3.1%).

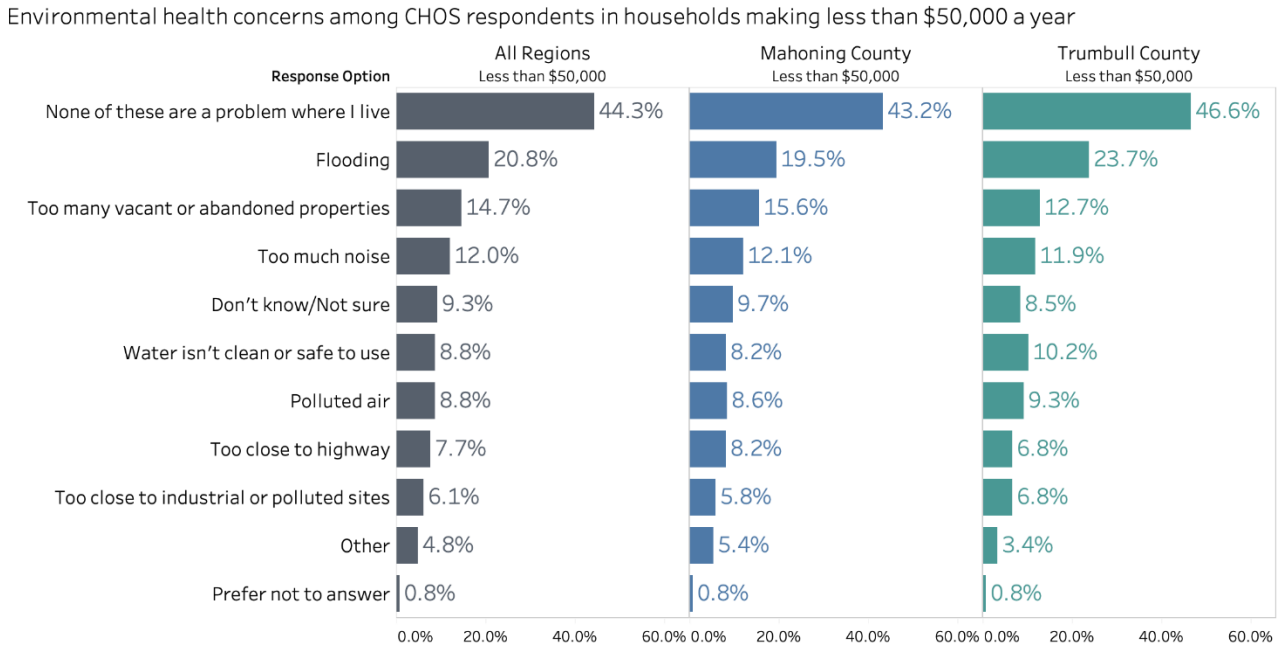


Figure 12: Environmental health concerns among CHOS respondents by income. Source Community Health Opinion Survey 2022

Experiencing an environmental concern was slightly more common among respondents living in a household that made less than $50,000 than those who made more. Lower-income respondents reported experiencing higher levels of environmental concern for too many vacant or abandoned properties, too much noise, polluted air, unsafe or unclean water, too close to highways, and too close to industrial or polluted sites. Overall, only 15.4% of CHOS respondents disagreed or strongly disagreed that the environment in their community is clean and supportive.

ACCESS TO PHYSICAL ACTIVITY

Access to spaces to conduct physical or recreational activity is an important component of the community environment and can promote physical and mental health. Of CHOS respondents, 63% agreed or strongly agreed with the statement, "I can find enough recreational and entertainment opportunities in my community." And 79.7% agreed or strongly agreed they had access to places where they could be physically active.

Access to physical activity opportunities is measured as the percentage of individuals in a county who live reasonably close to a park or recreational facility. Parks include local, state, and national parks. Recreational facilities include YMCAs as well as businesses including a wide variety of facilities such as gyms, community centers, dance studios and pools. Individuals are considered close if they reside in a census block that is within a half-mile of a park, reside in an urban census block within one mile of a recreational facility, or reside in a rural census block that is within three miles of a recreational facility. Around 4 in 5 people in Trumbull and Mahoning have access to physical activity opportunities. This is similar to the state of Ohio and varies slightly from the peer counties, with Lorain County having lower access and Allen County having higher access. Access to physical activity opportunities decreased in Trumbull County from 84% in 2014 to 82% in 2019, while access increased in Mahoning County from 75.9% in 2014 to 80.8% in 2019 [13].

TRANSPORTATION

Transportation is one aspect of the built environment, the extent to which community members can travel around their community influences access to key resources such as food, healthcare, and employment. Research has found that lack of public transportation limits mobility and can harm older people and people with disabilities as well as exacerbate racial and economic disparities [24]. An estimated 6,497 in Trumbull County and 8,828 households in Mahoning County do not own a vehicle.[23] Secondary data shows a reliance on cars as the primary mode of transportation in both counties; more than 4 out of 5 people drive alone to work in Trumbull, Mahoning and peer counties.[23] Workers in Trumbull got to work in the following ways: drove alone 87.4%, carpooled 6.4%, worked from home 3.3%, walked 1.2%, taxi, motor or other 1%, used public transport 0.6%, bicycle 0.1% [23].

When asked to rate agreement with the statement "I can easily travel within my community" 83.2% of CHOS respondents agreed or strongly agreed. Only 1% of CHOS respondents reported not having a vehicle available to their households. Across regions, 7% of respondents indicated they needed help finding transportation for themselves or someone in their household to receive medical assistance in the

past year; 16% of respondents in Warren indicated they needed assistance. Of all the respondents who needed transportation assistance to receive medical assistance, over a third overall were unable to receive services: 28.6% in Trumbull County and 36.9% in Mahoning County. Among CHOS respondents from households earning less than $50,000, a greater percentage reported needing help finding transportation to receive medical services, 14.2% compared to 3.8% of higher-income respondents. Of those needing help, higher-income respondents said that a higher percentage (69.2%) were able to receive services compared to lower-income respondents (59.3%).

In Community Conversations, transportation was identified as a barrier for people without a personal vehicle, particularly for community members living in more rural areas in the counties. Transportation was identified as a barrier to accessing healthcare services and food. While community members appreciated free buses as a strength of the public transportation system, they identified challenges, including late buses, limited-service hours, lack of heating in bus shelters, and the need for arrival alerts. In addition to expressing support for changes to the public transportation system, participants identified walkability and safe biking paths as components of a healthy community. Participants noted that the cities of Warren and Youngstown have work to do to improve community transportation. During data walks, representatives from community-serving organizations expressed the importance of public transportation for community members experiencing homelessness, mental illness, and substance use disorders to meet their basic needs. Recent strategic planning will shape the scope of public transportation in Trumbull and Mahoning Counties. For more information, please check out the report: https://www.wrtaonline.com/wp-content/uploads/2021/07/DRAFT_Coordinated-Plan_070121.pdf

FOOD ACCESS

Access to food stores is similar in Trumbull and Mahoning compared to peer counties. The number of SNAP-authorized stores increased in all counties between 2012 and 2017. Trumbull County has the highest rate of SNAP-authorized stores compared to peer counties. The SNAP-authorized stores increased from 0.83 to 0.94 stores per 1,000 between 2012-2017.[25] However, the growth was very slight in Mahoning County, 0.84 to 0.86 SNAP-authorized stores per 1,000 residents. Across all counties, there has been a slight decline in the rate of WIC-

SNAP-authorized stores: average monthly stores authorized to accept the Supplemental Nutritional Assistance Program (SNAP, previously known as food stamps), including supermarkets, grocery stores, convenience stores, superstores, warehouse club stores, and specialized food stores.

Fast-food restaurants: Establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons order/select items and pay before eating.

Grocery stores: Including supermarkets, not including convenience stores, supercenters, and warehouse club stores

WIC-authorized stores: Stores accepting Special Supplemental Nutrition Program for Women, infants, and Children (WIC) benefits, not including distribution centers; stores must maintain a minimum inventory of foods included in WIC benefit packages (such as milk, baby formula, vegetables, cereal)

For full documentation for food access-related definitions, explore the USDA Economic Research Service Documentation Site.

Fast-food Restaurants, Grocery Stores, WIC-authorized Stores per 1,000 Residents, 2016

Source: USDA Food Environment Atlas, Last updated 9/10/2020

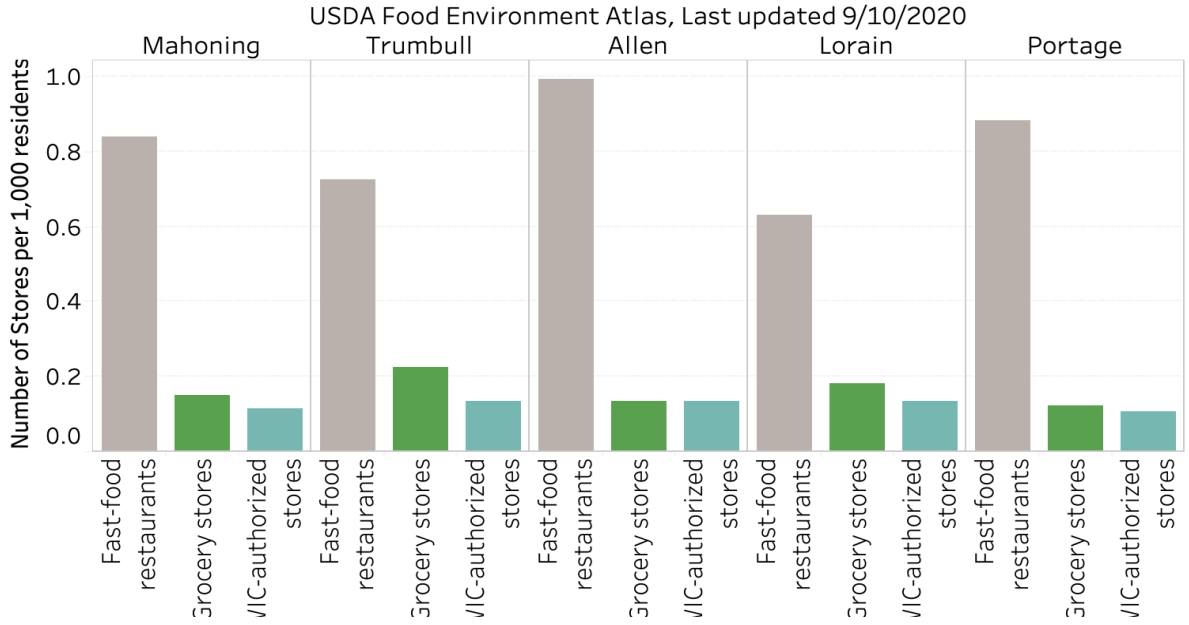


Figure 13: Number of Fast-food, Grocery Stores, WIC-authorized Stores per 1,000 residents in 2016. Source USDA Food Environment Atlas

SNAP-authorized Stores per 1,000 Residents, 2017

Source: USDA Food Environment Atlas, Last updated 9/10/2020

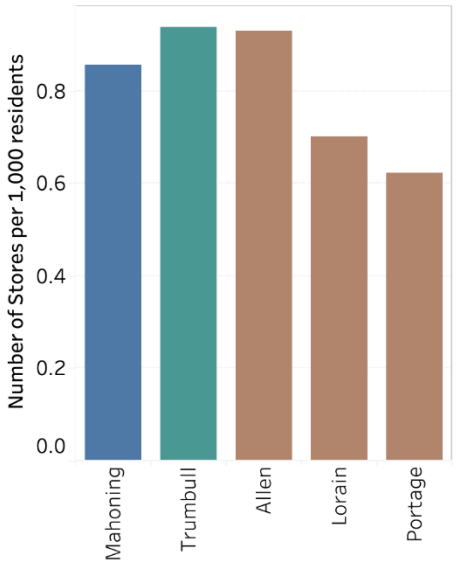


Figure 14: Number of SNAP-authorized stores per 1,000 residents in 2017. Source USDA Food Environment Atlas

authorized stores. WIC-authorized stores are also the least common type of store across all counties. In Trumbull County, the stores decreased from 0.14 to 0.13 per 1,000 in the same period. In Mahoning County, the number of WIC-authorized stores per 1,000 residents decreased from 0.13 in 2011 to 0.11 in 2016. [25]

Trumbull and Mahoning have lower rates of fast-food restaurants than Allen and Portage counties. Fast-food restaurants per 1,000 residents have increased since 2011 in Trumbull and Mahoning Counties. Trumbull has had a consistently lower rate of Fast-Food restaurants 0.72 per 1,000 than Mahoning which as 0.84 per 1,000. The availability of fast food was identified as a concern in both counties in the Community Conversations, as were families' limited time and knowledge to prepare healthy meals.

The rate of grocery stores remained stable in Trumbull County between 2011 and 2016. In 2016, it had 0.22 grocery stores per 1,000. The rate of grocery stores per 1,000 residents declined in Mahoning from 0.23 in 2012 to 0.14 in 2016. Overall, 73.7% of CHOS respondents agreed or strongly agreed with the statement "I can easily access healthy, affordable food." However, only 56.9% of CHOS respondents in Warren agreed or strongly agreed.

Increased access to fresh fruits and vegetables and nutritional information/education was a need identified through Community Conversations. Community members in the Community Conversations expressed concern regarding children's access to healthy meals and nutritional education. Concern for access to food among elderly residents was also highlighted. Community members expressed interest in leveraging churches and neighborhood networks to distribute excess produce from family gardens and increase access to food pantries.

Organizations such as the Healthy Community Partnership of Mahoning Valley were identified as important resources for food access in the community as well as the Warren Farmers market at courthouse square.

HOUSING

Many factors related to housing affordability and quality can negatively impact health outcomes, including poor air quality, lack of safety, limited space per individual, high cost, and homelessness, among others. Those who are most likely to experience these impacts are children and older adults.[26]

Participants of the Community Conversations were overall satisfied with the low cost of living in both Trumbull and Mahoning County; however, there were concerns expressed that the low cost of living is goes hand in hand with low wages, which creates challenges for people trying to support a family. Some

participants expressed difficulty for low-income families to afford housing, especially with limited apartment options.

HOUSING DENSITY

Trumbull and Mahoning have fewer total households than Lorain and more than Portage and Allen counties. Both counties have fewer people per household than all of the peer counties, with approximately 2.25 people per household in each county. Housing density is very similar across all counties, with about 99% of households having 1 or less occupants per room. Trumbull has slightly more households with 1-1.5 occupants per room at 1.2%, while all other counties are less than 1.0%. Both counties have slightly higher percentages of people living alone, with 32% in Trumbull County and 35% in Mahoning County. Among those aged 65 years or older, 15.8% live alone in Trumbull and 15.1% in Mahoning. Again, these are just slightly higher than percentages in peer counties.[23]

Housing Trends

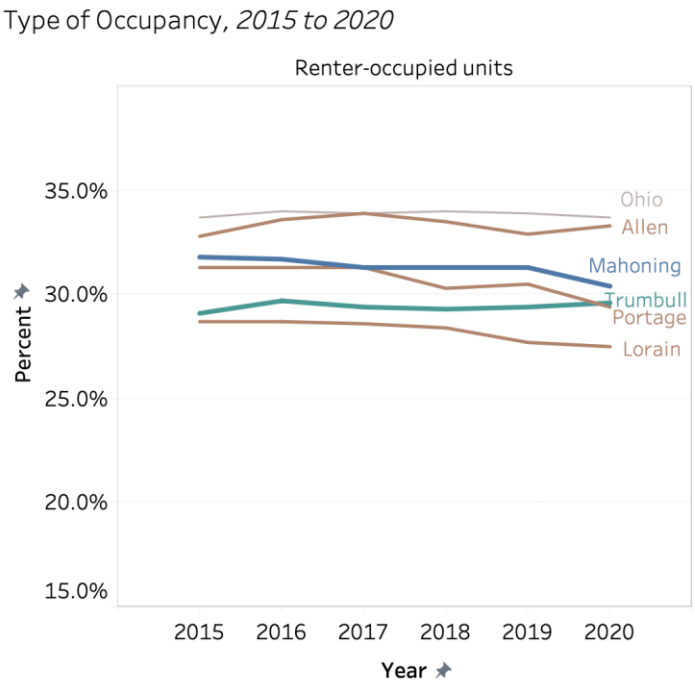


Figure 15:Percent of renter-occupied units 2011-2015 to 2016-2020 5-year estimates. Source: U.S. Census Bureau, American Community Survey 5-year Data, Table DP04

Housing trends are similar across all regions and have remained stable over recent years. Approximately 90% of housing units are occupied in all five counties with Trumbull and Mahoning falling slightly lower than peers, and approximately 10% of housing units are vacant, with Trumbull and Mahoning falling higher than peers. Trends are also similar in owner-occupied and renter-occupied units. In Trumbull and Mahoning counties, close to 70% of housing units are owner-occupied at 70.4% in Trumbull and 68.7% in Mahoning. The other 30% are renter-occupied in each county, which is similar to the state and peers.[23]

HOUSING COSTS

In both housing units with a mortgage and occupied units paying rent, Trumbull and Mahoning have lower housing costs compared to Portage and Lorain, and very similar costs compared to Allen County. Median monthly costs for housing units with a mortgage have remained stable over years and remain at approximately $1,000 in Trumbull and Mahoning. Monthly costs are slightly higher for homeowners than renters; however, rent costs have seen a slight increase in recent years. In 2020, average rent in both and Mahoning counties was $684 a month. While renters in both counties pay less monthly than homeowners, they tend to pay a higher

proportion of their household income towards housing; about one in five homeowners spend 30% or more of their income on housing but nearly half of all renters spend 30% or more.[23]

Homelessness & Severe Housing Problems

Homelessness has declined in recent years in Trumbull and Mahoning Counties although data are not available for 2020 and 2021 in Trumbull; both counties have had a lower level of homelessness than the state as a whole in 2019. Between 2018 and 2019 the rate of people experiencing homelessness during the point-in-time count decreased from 5.9 To 5.1 per 10,000 in Trumbull County. In 2021, 2.7 per 10,000 people experienced homelessness in Mahoning compared to 6.8 per 10,000 people across the state.[27] During Community Conversations, the availability of shelters and related services for people experiencing homelessness was highlighted as an asset in both counties; however, there was concern raised about poor treatment by shelter staff and other residents. Additionally, a lack of safe housing and shelter options for LGBTQIA+ community members were cited as an area of urgent concern.

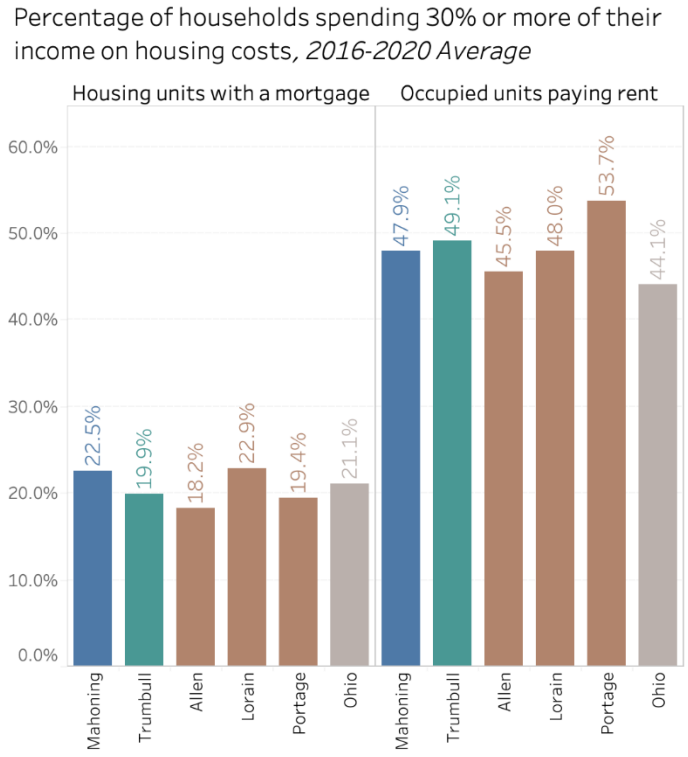


Figure 16: Percentage of households spending 30% or more of their income on housing costs, 2016-2020 averages, 5-Year estimates. Source American Community Survey, Table DP04

Severe housing problems are defined as incomplete kitchen facilities, incomplete plumbing facilities, more than 1 person per room, and cost burden greater than 50% of income. Trumbull and Mahoning have similar rates of people experiencing severe housing problems compared to peer counties and the state, with about 12% of people in both counties facing at least one severe housing problem.[28]

CHOS HOUSING CONCERNS

About 40% of survey respondents reported experiencing some housing issue or concern, with the most common concern being inclement weather conditions and snow removal issues at approximately 15%. Housing concerns were more common among those from households earning less than $50,000 in annual income, with about half of these respondents experiencing at least one of the concerns. In addition to inclement weather/snow removal (25.9%), no working carbon monoxide detector (19.6%) and difficulty paying utilities (17.7%) were other top-reported concerns among the lower-income group.

LIFELONG DEVELOPMENT

Lifelong development includes educational enrollment, performance, environment, and outcomes, as well as access to high quality childcare. Higher educational attainment is linked to better mental and physical health outcomes through increased employment opportunities, higher income, and health literacy. Educational opportunities can also reduce inequalities and support human development.

EDUCATIONAL ATTAINMENT

High school graduation is the highest level of education attained by the largest proportion of people 25 and over living in Trumbull and Mahoning Counties: 44.5% in Trumbull and 37.6% in Mahoning. Trumbull County has fewer people with education beyond high school when compared to Mahoning, peer counties, and the state. In Trumbull County, 18.7% of residents have some college education with 12.4% obtaining a Bachelor's degree. In Mahoning County, 21.4% of residents have some college education with 16.1% obtaining a Bachelor's degree. During Community Conversations, participants commented on the limited job opportunities that are locally available for college graduates, and that young people are moving away to find jobs.

SCHOOL PERFORMANCE

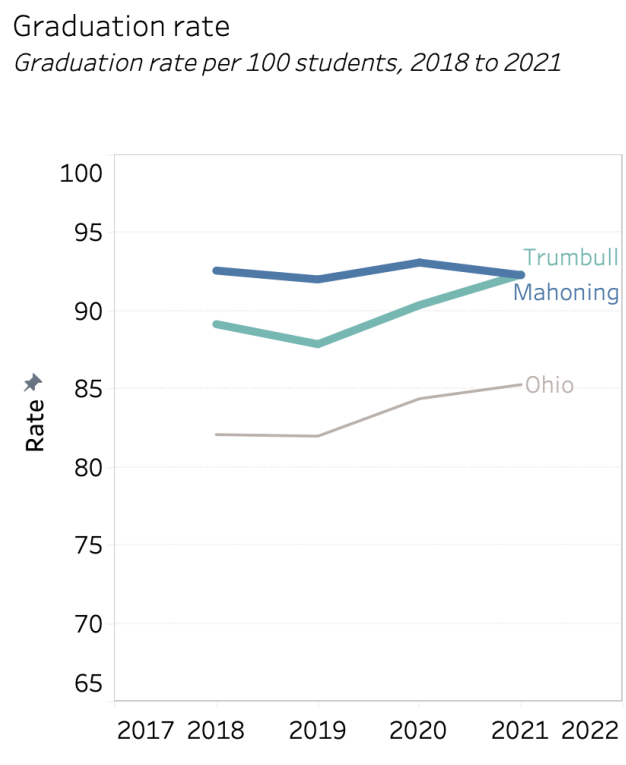


Figure 17: High School Graduation Rate 2018-2021. Source Ohio School Report Card Federal Graduation Report District Reports 2017-2018 to 2020-2021

In both Trumbull and Mahoning, the majority of school districts had 100% of 3rd grade students meet the promotion threshold in reading. Only 4 districts in each county had a slightly lower percentage, all school districts had over 90% of students meet the promotion threshold in 2020-2021 school year. High school graduation rates across Trumbull and Mahoning are higher than the state average of 85.3% of students at a rate of 92%; however, graduation rates for Southington Local (78.4%) in Trumbull County, and Youngstown City (79.6%) and Campbell City (78.9%) in Mahoning County and are lower than the state average. While the data for local school districts are not presented here disaggregated by race there are disparities in graduation rates. Across the state, the legacy of segregation and institutional racism play out in graduation rates, with Asian or Pacific Islanders having the highest graduation rate of 92.3%, followed by White, non-Hispanic (88.7%), multiracial (80.9%), American Indian or Alaskan Native (79.3%), Hispanic (75.5%), and Black,

non-Hispanic (73.5%).[29] It is important to note that data is often suppressed on a school district-level when counts are less than 10 in a category.

SCHOOL CULTURE AND ENROLLMENT

Trumbull and Mahoning have a similar number of students enrolled in K-12 school at 24,413 in Trumbull and 25,687 in Mahoning for the 2021-2022 school year. Broken down by race, the majority of students in these schools are White with 76.8% in Trumbull and 67.5% in Mahoning. In both counties, there are slightly more males than females, with 573 more male students in Trumbull and 651 more male students in Mahoning.[30]

Educational themes were discussed extensively during Community Conversations, and many needs were identified for the specific concerns expressed. One major concern mentioned was a lack of health education in schools, as Ohio is one of the few states without a state-wide health curriculum. Health education specifically related to nutrition, sexual health, gender identity, and mental health were noted as missing by participants, who felt classes should be available to cover these topics.

Challenges for school children were identified in both Community Conversations and the CHOS. These challenges included stress and mental health, disruption due to COVID-19, peer pressure, and bullying. Bullying was specifically highlighted related to LGBTQIA+ youth. Needs identified to address these challenges included additional education for the staff and administrators and development of a non-discrimination policy for LGBTQIA+ students.

While there is a generally high 3rd grade reading pass rate in most districts, low-performing schools and lack of reading proficiency were still expressed as major challenges by Community Conversation participants, and participants want to see increased accountability on school boards for these low-performing schools. A sentiment expressed in Community Conversations was that schools should be re-centered as the heart of the community, with more community participation in schools and more school participation in the community.

CHILDCARE

The Community Health Opinion Survey gathered feedback related to the challenges of childcare. The most needed childcare services identified were before or after school care and financial support. During Community Conversations, childcare was described as unaffordable compared to the average wages in the area, and it was also noted that there is limited availability. Participants of Community Conversations identified a need for increased availability of childcare, afterschool programs, and summer camps at an affordable price.

ECONOMIC OPPORTUNITY

Economic opportunity within a community can have a direct impact on health outcomes. Employment is often a primary source of access to health insurance, and having a stable income can increase a person's ability to access safe housing, make healthy food choices, and accumulate savings that can help in times of emergency.[31]

POVERTY

Trumbull and Mahoning have similar poverty levels in 2020 estimates, with 17.3% of people living below the federal poverty level in Trumbull and 17.6% of people in Mahoning. About one in three people live below 200% of the poverty line in both counties: 36.6% in Trumbull and 36.3% in Mahoning. Both counties have higher poverty levels than the state of Ohio and the peer counties of Allen, Lorain, and Portage.[23]

A breakdown of the poverty status by race and age reveals even greater disparities, among groups and between counties. In Trumbull County, 38.0% of Black/African American and 37.9% of Hispanic/Latino community members were living below the poverty level in 2020 estimates. In Mahoning County, 37.6% of Black/African American community members and 36.9% of Hispanic/Latino community members were living below the poverty level. These are higher percentages than in peer counties and the state. In contrast, 14.4% of non-Hispanic White community members were living below the poverty level in 2020 estimates in Trumbull County, and 11.7% in Mahoning County.[23]

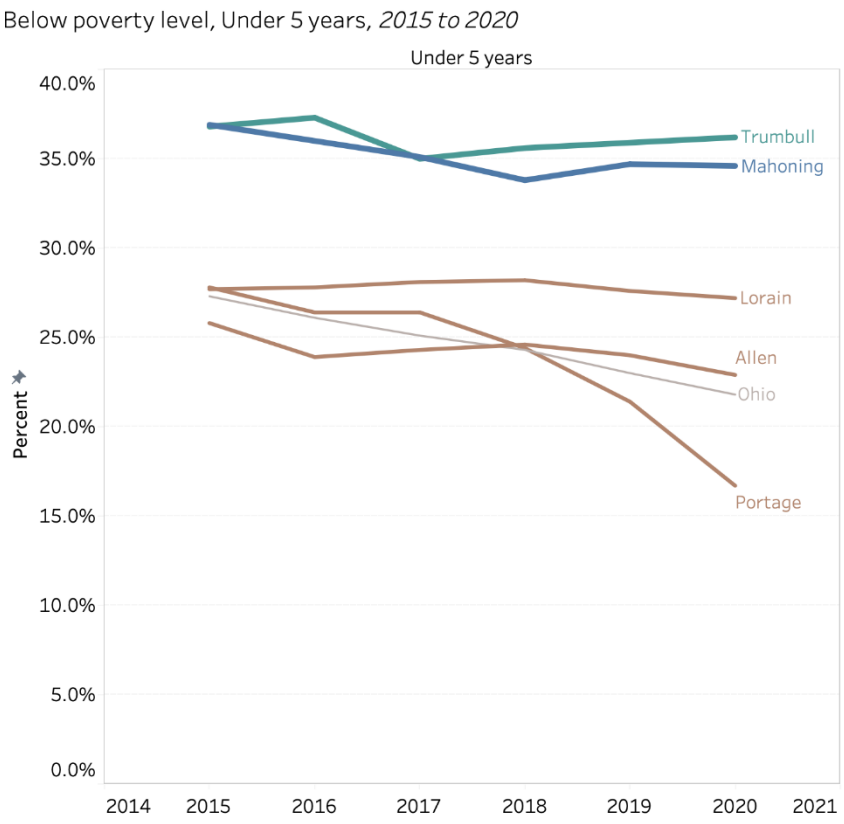


Figure 19: Percent of children under 5 below the federal poverty level in the past 12 months, 2011-2015 to 2016-2020, 5-year average. Source American Community Survey, 5-year estimates: Table S1701

Among the different age categories, children under 5 face the highest rates of poverty at 36.2% in Trumbull and 34.6% in Mahoning; this is a higher percentage than in the state and peer counties. These rates remained relatively unchanged between the 2015 and 2020 estimates.[23] Children living below the poverty level are at greater risk of poor health and developmental outcomes. While data broken down by both age and race are not presented here, national data indicate that children of color are more likely to live in poverty compared to their White peers.[32]

EMPLOYMENT AND INCOME

Trumbull and Mahoning see slightly higher percentages of unemployment compared to peer counties. In 2019, the unemployment rates were approximately 6% in Trumbull and Mahoning, while the rates in peer counties were 4.1% in Allen, 4.3% in Portage, and 4.4% in Lorain. All five counties saw a significant increase in unemployment in 2020 coinciding with the first year of the COVID-19 pandemic, with both Trumbull and Mahoning County reaching 10.4% and 10.2% unemployment rates respectively.[33] Unemployment data at the county level are not available by race/ethnicity, but national data show that the unemployment rate of White workers is lower than that of Black and Hispanic workers: Black workers have an unemployment rate 2.2 times that of White workers, and Hispanic workers' rate is 1.6 times that of White workers.[34] Given the disparities in poverty level by race and ethnicity in the counties, it is unlikely the disparities in unemployment rates seen on the national level are absent in Trumbull and Mahoning Counties.

Approximately 63% of residents in Trumbull work within the county, while 73% of Mahoning residents work within the county. During Community Conversations in both counties, participants shared that local, high-wage jobs are needed to strengthen the community and provide opportunities for college

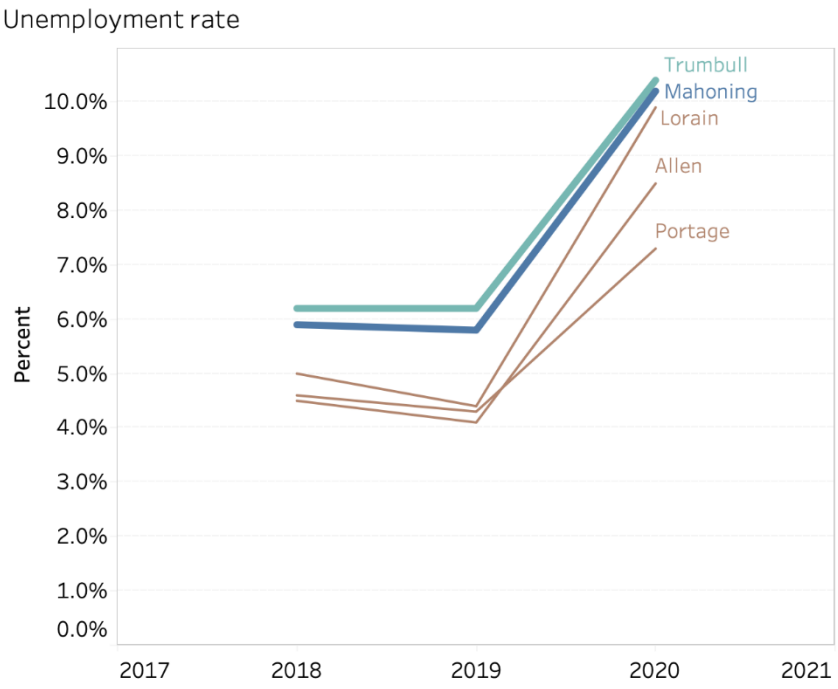


Figure 20: Unemployment rate, 2018-2020 1-year estimates. Source Ohio Department of Job and Family Services

graduates. Participants described seeing a ripple effect in the economy due to the closing of manufacturing plants in recent years.

Trumbull and Mahoning Counties had per capita incomes (average income earned per person in the county) that were lower than the average in the state of Ohio in 2020 5-year estimates. Mahoning's was higher ($28,693 per person) than Trumbull ($27,255 per person), yet both were lower than peers Portage and Loraine (both about $31,600 per person). Households in the 20th percentile of income in both counties make about $20,000 annually, which is consistent with peer counties and has remained relatively unchanged over time. Households in the 80th percentile make about $95,000 annually, similar to the peer county of Allen but significantly lower than Lorain and Portage. In all counties the income of the highest quintile has been steadily increasing from 2015 5-year estimates to 2020 5-year estimates.[23]

FOOD SECURITY

Approximately 13% of households in Trumbull County received Supplemental Nutrition Assistance Program (SNAP) benefits in 2020 estimates, slightly lower than the 18% of households in Mahoning County. Across all five counties and the state of Ohio, there is a higher percentage of White or White/non-Hispanic homes receiving SNAP benefits than all other race categories; however, it is important to note that 84% of Trumbull County community members and 74% Mahoning County are White.[23] Both Trumbull and Mahoning counites also have higher rates of low-income residents who have low access to grocery stores.[25]

In Trumbull County, 20.0% of children were food insecure but living in households that are above 185% of the federal poverty level, likely making them ineligible for SNAP benefits. In Mahoning County, 28.0% of children face this same situation.[35] About half, 49.2% of all children in Trumbull and 40.1% in Mahoning are eligible for the free and reduced-price lunch program.[13] Approximately 6% of children in Mahoning have low access to a grocery store similar to Lorain (6.7%) and Portage (6.2%), while 4.6% of children in Trumbull have low access to a grocery store, similar to Allen County at 4.4%. Low access to a

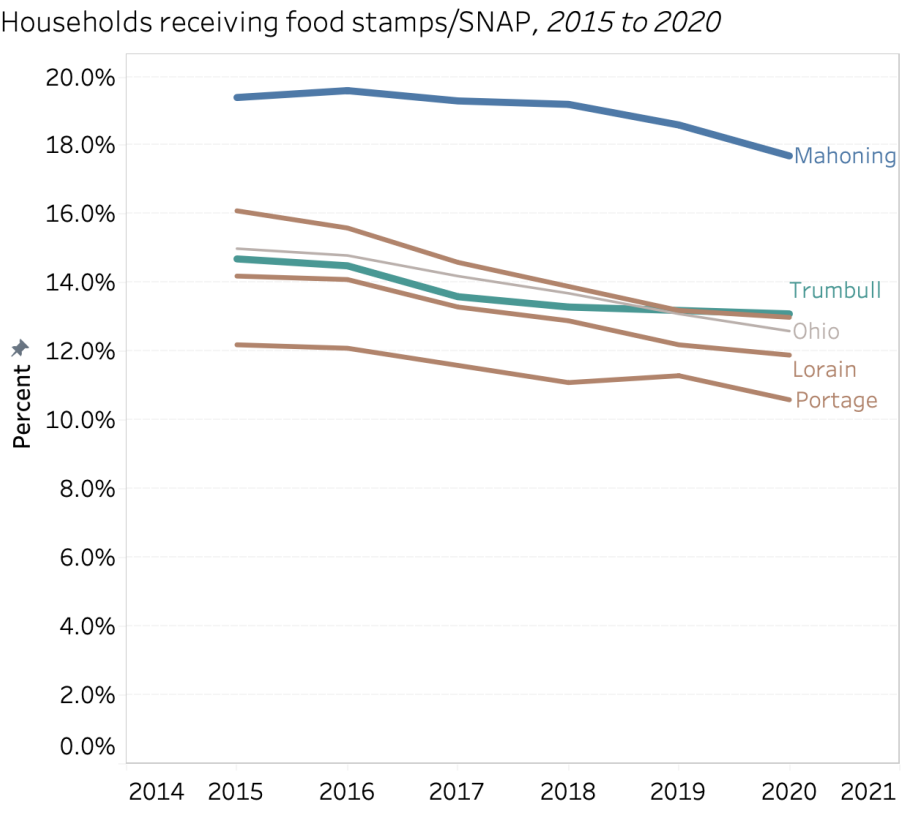


Figure 21: Percent of households receiving food stamps/SNAP, 2011-2015 to 2016-2020 five-year estimates. Source American Community Survey, 5-Year Estimates: Table S2201

grocery store is defined as living more than one mile from a grocery store in an urban area, or more than 10 miles in a rural area.[25]

CHOS ECONOMIC DATA

Among Community Health Opinion Survey respondents in both counties as well as in Warren and Youngstown, lack of income was ranked as the top social and economic factor impacting health in the community. This was followed by access to healthy and affordable food, and employment opportunities. When asked about personal finances, almost 40% of survey respondents made more than $75,000 in household income before taxes. This is greater than the median household income of both counties, $48,000. There was a more even spread across income levels among respondents living in Warren and Youngstown. Even when stratifying results by income level, 30% of those from households making greater than $50,000 per year also recognized the pressing importance of economic and food access on county health.

COMMUNITY COHESION

Community cohesion in this report refers to how community members in Trumbull and Mahoning County live, work and grow together. This section will spend time addressing residential segregation, linguistic isolation, social vulnerability, discrimination, and community needs. This section will engage with these topics as they are drivers of poor health outcomes and health disparities.

SOCIAL VULNERABILITY INDEX

According to the CDC, “Social vulnerability refers to the potential negative effects on communities caused by external stresses on human health. Such stresses include natural or human-caused disasters or disease outbreaks.” The social vulnerability index uses 15 indicators to gain an understanding of how

well a community would be able to respond to a disaster event. Ohio's 88 counties are ranked from lowest (1) to highest (88) in social vulnerability, Trumbull ranks 55th, and Mahoning ranks 67th [36].

RESIDENTIAL SEGREGATION

Residential segregation is "the degree to which two or more groups live separately from one another in a geographic area" [13]. While policies enforcing segregation have been illegal since the 1964 Civil Rights Act, segregation continues to result from structural, institutional, and individual racism that currently exists and existed in the past. Residential segregation has been considered a cause of health disparities because where someone lives, their physical and social environment immediately shapes health, the environment also contributes to socioeconomic mobility which shapes health in the future [13]. Trumbull and Mahoning have higher residential segregation between White and Non-White residents compared to peer counties. When scored on an index of dissimilarity where higher values indicate greater residential segregation between Non-White and White residents Trumbull scores 53, while Mahoning scores 60, compared to 58 for the State as a whole, Allen scores 47, Lorain scores 45, Portage scores 38.[13]

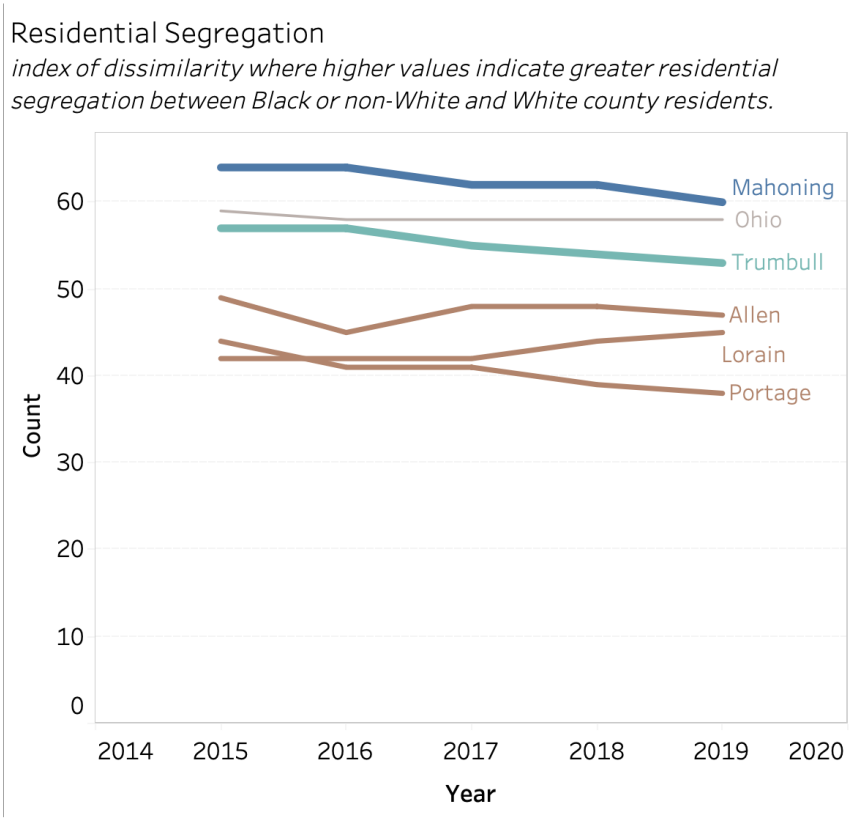


Figure 23: Residential segregation between Black and non-White county residents, index of dissimilarity scores 2015-2019. Source County Health Rankings 2021 from American Community Survey, 5-year estimates 2015-2019

LIMITED ENGLISH-SPEAKING HOUSEHOLDS

Ensuring that community members have access to services and information in a language they understand is important to ensure equal access to resources. Trumbull and Mahoning Counties have a similar number of limited English-speaking households relative to their peers. In 2020 0.6% of households in Trumbull were limited English-speaking households, this was fewer than 1.2% of households in Mahoning. Indo-European languages were the most prominent in limited English-speaking households in Trumbull (0.4%). Spanish was the dominant language in limited English-speaking households in Mahoning (0.7% of households).[23]

DISCRIMINATION

Almost 20% of CHOS respondents reported themselves or a household member experiencing some form of discrimination. Respondents indicated experiencing discrimination due to race (4.6%), age (4.4%), weight (4%), Other (3.3%), disability (2.8%), sexual orientation (1.5%), gender identity (1.5%), ethnicity (1.4%), and country of origin (0.1%). Among respondents from households making less than $50,000 per year, a greater percentage of respondents reported experiencing discrimination. Discrimination based on race and ethnicity was reported by more Warren (8.6%) and Youngstown (13.5%) respondents than in the counties overall.

Of the respondents who reported experiencing discrimination, the discrimination occurred most often while seeking healthcare and treatment (23.8%), followed by at work/while seeking employment (20.1%), within family/friends/social circles (11.3%), and at school or during an extracurricular activity (4.4%). Many respondents did not indicate specifics about the discrimination with Other (25.9%), Prefer not to answer (30.8%) selected.

CHOS respondents were asked if in the past 30 days they had felt emotionally upset as a result of discrimination based on their race; overall 8% reported feeling emotionally upset as a result of racial discrimination, which was experienced by more Warren (12.9%) and Youngstown residents (16.1%) than Trumbull (8.4%), and Mahoning (7.7%). A larger percentage of respondents from households making less than $50,000 per year (12.5%) reported feeling upset as a result of racial discrimination compared to higher-income respondents (5.8%).

COMMUNITY ASSISTANCE

CHOS respondents reported needing assistance to meet basic needs. Nearly 20% of respondents indicated that these needs were not met in the past year. Critical house repairs were the most common unmet need, about 9.9% of total respondents had unmet housing repair needs but these percentages were larger in Warren (19.2%) and Youngstown (13.6%). Additional unmet needs included household goods (furniture, a stove or refrigerator, 5.5%), medical or adaptive equipment not covered by insurance (4.1%), food for yourself and your family (3.7%), clothing for yourself and your family (3.2%), and access and safety modifications to your home (3.1%). Of these respondents, 5% felt that those unmet needs were due to racism or discrimination.

For lower-income respondents (those from households making less than $50,000) just under a third had assistance needs that were not met. Critical house repairs (17.5%), household goods (11.1%), food (10.3%), clothing (8.1%), medical or adaptive equipment (6.7%), and access and safety modifications (6.1%). Among lower-income respondents with unmet needs, 8.1% perceived unmet needs were due to racism or discrimination, higher than the overall percentage.

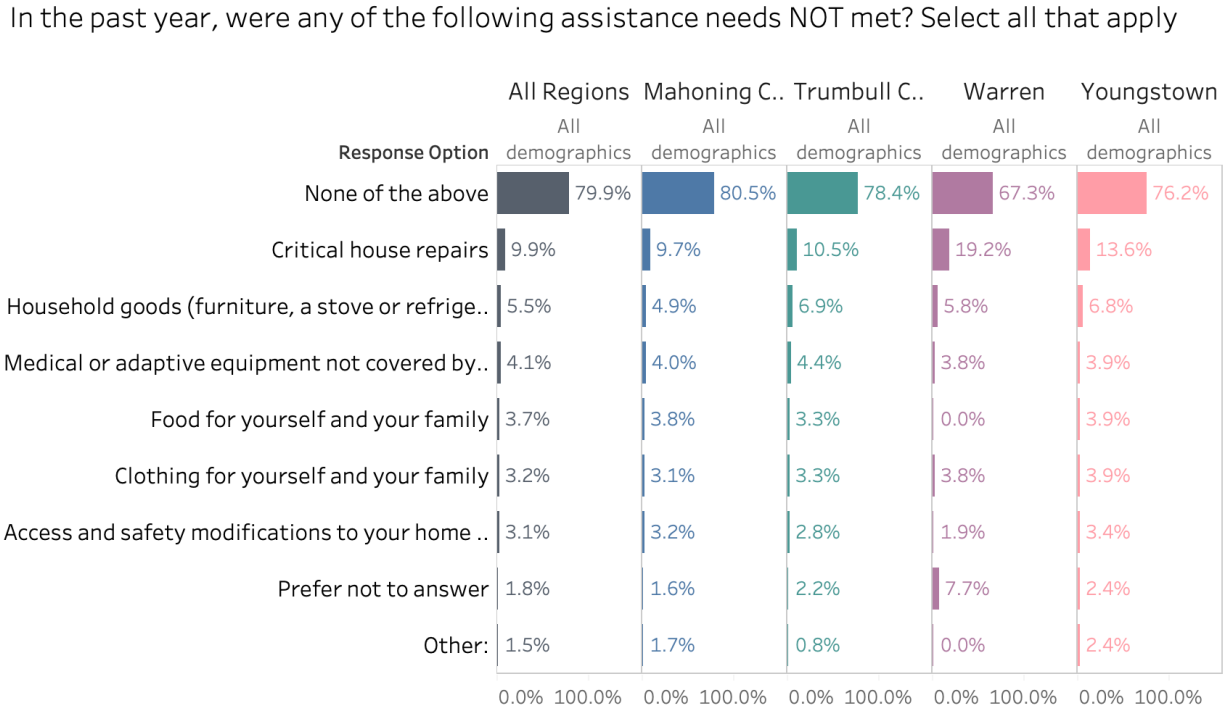


Figure 24: Housing assistance needs. Source Community Health Opinion Survey 2022

Community Conversation participants felt that government officials should take immediate action in addressing core challenges experienced within the community. Some suggestions were to involve pastors and clergy members in implementing change and to distribute funds to churches to provide services. Participants discussed creating a culture of connection and accountability, and shared a desire for community residents to come together to help one another and share resources.

SAFETY

Exposure to crime and violence in the home or neighborhood in which one lives is associated with adverse health outcomes.[37] Among Community Health Opinion Survey respondents, approximately 90% of respondents in both Trumbull and Mahoning counties said they feel safe in their neighborhood. Within Trumbull County, 82.1% of respondents who live in the city of Warren also reported feeling safe in their neighborhood. The primary reasons reported for not feeling safe were crime (75.0%) and not enough police presence (46.9%). Community conversation participants felt it was necessary for police to respond to 911 calls in a timely fashion and to only use force when it is warranted.

In Community Conversations, participants described an ideal healthy community as one where people can feel safe from crime, violence, and discrimination. Safety was expressed as a major concern across several conversations, with three primary areas being discussed: an increase in crime (both violent and property crime), sex trafficking, and hostility towards people in the LGBTQIA+ community, particularly trans individuals. Participants felt that community disconnection is a root cause of violence, and respondents to the CHOS also noted relational concerns, specifically hostility and racism.

CRIME RATES

The following section will provide crime rates per county between 2017 to 2021; however, it is important to understand that because reporting of crimes to the state database is currently a voluntary process, the trends we see from year to year may be due to reporting inconsistencies rather than true changes in crime rates. Additionally, rates of domestic violence and sexual assault are generally considered as undercounts of the true number of crimes in a community, as stigma and fear of retaliation keep many crimes from being reported.

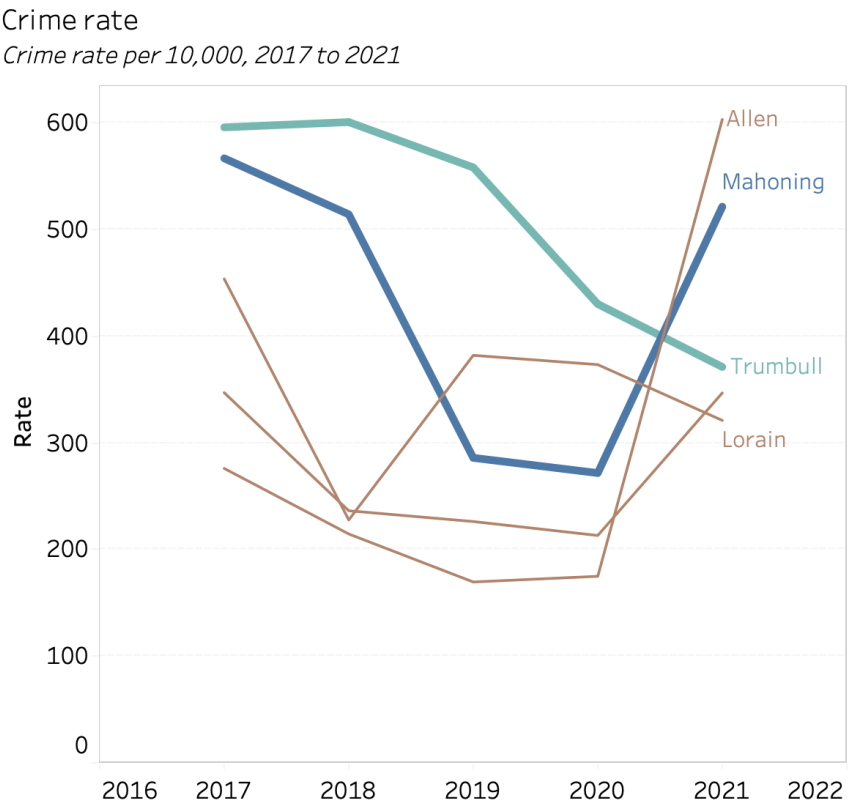


Figure 25: Crime rate per 10,000 2012-2016 to 2017-2021 5-year estimates. Source Ohio Incident-Based Reporting System (OIBRS) Crime in Ohio Reports, 2021

Trumbull and Mahoning Counties have had higher reported crime rates than peer counties. Since 2018, crime rates have been trending down in Trumbull County from 601.0 crimes per 10,000 population in 2018, to 371.3 per 10,000 population in 2021. In Mahoning County, rates appear to be higher in 2017 (567.0 per 10,000), 2018 (514.4 per 10,000), and 2021 (521.6 per 10,000) than in 2019 (286.0 per 10,000) and 2020 (271.8 per 10,000), but Youngstown did not report their data to the state in 2019 and 2020, which likely explains this pattern. Peer counties Allen and Lorain also saw increases from 2020 to 2021.[38]

Between the years of 2018-2020, Trumbull had a higher number of reported domestic violence cases per population size than Mahoning with a rate of about 72 per 10,000 people in Trumbull compared to about 53 per 10,000 in Mahoning. These rates are higher than two of the three peer counties, Lorain and Portage. Similar to overall crime rates, Trumbull had a higher rate of reported rapes between 2017 and 2020; however, Mahoning County saw an increase in this rate between 2020 and 2021, from 2.50 per 10,000 to 5.61 per 10,000. Trumbull County saw a slight decrease in reported rapes from 2019 to 2021, while Mahoning, Allen, and Portage counties all had increased rates in this time frame.

HEALTH BEHAVIOR

"Health behaviors are actions individuals take that affect their health. They include actions that lead to improved health, such as eating well and being physically active, and actions that increase one's risk of diseases, such as smoking, excessive alcohol intake, and risky sexual behavior." – County Health Rankings & Roadmaps

While health behaviors shape the health of individuals, the social, economic, and physical conditions of the environment they live in can promote or restrict people's ability to enact these behaviors. It is important to consider health behaviors within this context because not every community member has the same resources or opportunities. The Community Health Needs Assessment team encourages the reader to contextualize this section by referring to the other chapters within this report. Information on health behaviors related to substance use, smoking, and alcohol use can be found in the Mental Health and Substance Use section of the report.

PROTECTIVE HEALTH BEHAVIORS

Health behaviors, including seeking and accessing preventative services, are important determinants for the health of communities. Being physically active, getting sufficient sleep, avoiding smoking, and limiting alcohol use is protective against many leading causes of death and disease.

SLEEP

Adults need seven or more hours of sleep per night for their health and wellbeing. Adults who sleep for less than 7 hours a night are more likely to report experiencing chronic health conditions [39]. A larger percentage of people in Trumbull and Mahoning Counties have lower sleep levels than their peer counties. In 2018, 45.4% of people in Trumbull got less than 7 hours of sleep a night, and 43.5% of people in Mahoning got less than 7 hours of sleep, while peer counties Allen (41.9%), Lorain (39.3%), and Portage (40.0%) slept more. [40]

VACCINATION

One protective health behavior is getting the annual flu vaccination. Flu vaccines reduce an individual's chance of getting the flu and the severity of illness and help protect the community. Flu viruses evolve constantly; therefore, staying up to date on the flu vaccine is a critical way to protect oneself. While most people who catch the flu experience mild illness, hundreds of thousands each year become hospitalized, and tens of thousands die from flu viruses [41]. About half of Trumbull and Mahoning Medicare enrollees had an annual flu vaccination in 2018, slightly lower than Lorain and Portage. Between 2016 and 2018, yearly flu vaccinations among fee-for-service Medicare enrollees increased in both counties, reaching 51% of enrollees in Trumbull, and 48% of Mahoning enrollees. The percentage of enrollees receiving annual flu vaccination varies by race and ethnicity. Flu vaccination was slightly lower among Black Medicare Enrollees. [13]

The first COVID-19 vaccines were granted emergency use authorization in December 2020, and were granted full approval by the U.S. Food and Drug Administration in the summer of 2021.[42] Since then,

additional vaccines have been approved, and immunization efforts have spread nationwide. As of April 5, 2022, 54.6% in Trumbull and 56.9% of community members in Mahoning have been fully vaccinated. Adults ages 65 and older are the most vaccinated group, with 83.7% in Trumbull and 86.6% in Mahoning fully vaccinated. The population including younger age groups have a lower percentage vaccinated, with about two-thirds of those ages five and up.[43]

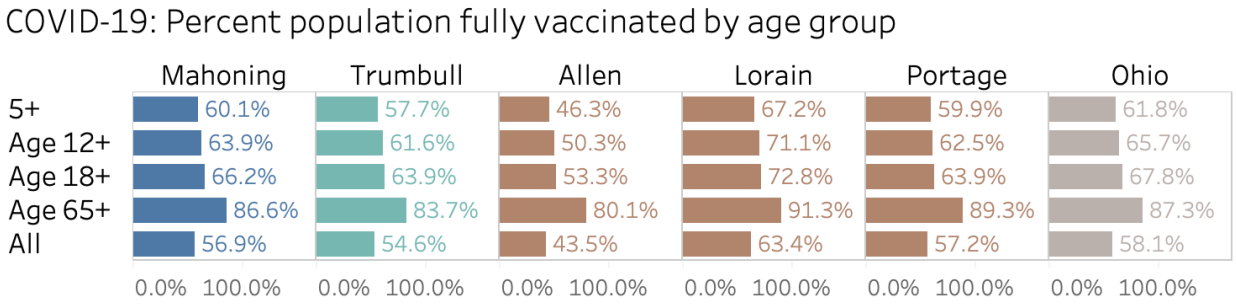


Figure 26: Percent of the population fully vaccinated against COVID-19 by age, 2020-2022 cumulative as of April 5, 2022. Source CDC COVID Data Tracker, County Level Vaccination Data for Ohio

SCREENINGS AND CHECK UPS

Other protective behaviors include visiting healthcare providers for annual checkups, receiving disease-specific screenings, and taking prescribed medications. However, these behaviors are inherently linked to access (both physical and financial) to these services. In 2019 estimates, 76.0% of adults in Trumbull and 77.2% in Mahoning received annual checkups. Dental visits were less common, with 61.7% adults in Trumbull and 65.5% of adults in Mahoning receiving dental services in 2018. [40] One of the most common screenings was for cholesterol. In 2019 an estimated 81.9% adults in Trumbull and 83.3% of adults in Mahoning received screenings for cholesterol. Among adults with high blood pressure in 2019, 59.7% in Trumbull and 60.2% in Mahoning were taking blood pressure medication.

The largest percentage of the population receiving cancer screenings were women aged 21-65, 84.4% of eligible women in Trumbull, and 85.4% in Mahoning received screenings (mammograms) per 2018 estimates. A slightly smaller percentage of eligible women ages 50-74 received mammography services, 73.3% in Trumbull and 76.5% in Mahoning. Colorectal cancer screening was the least common screening. In 2018 among eligible adults 50-75, only 58.8% in Trumbull and 62.5% in Mahoning received colorectal cancer screenings. [40]

In 2018 estimates, there were slight differences in the percentage of older adults receiving core preventive services by gender; in Trumbull, 21.6% of women 65 and older received services compared to 24.9% of men. In Mahoning, 23.0% of women 65 and older received services compared to 20.5% of men 65 and older. The peer counties of Allen, Lorain, and Portage had slightly larger percentages for older men and women receiving preventive services. [40]

PHYSICAL ACTIVITY

Physical activity is a necessary health behavior that promotes positive physical and mental health benefits. Physical activity can contribute to reducing and managing chronic diseases such as cardiovascular disease, cancer, and diabetes, as well as poor mental health symptoms of depression and anxiety [44]. Almost two-thirds of residents in both counties engage in physical activity. Physical activity was defined as physical activities or exercises, other than for one's regular job, such as running, calisthenics, gardening, or walking for exercise during the past month. In 2019, 32.3% of community members in Trumbull and 32.7% in Mahoning did not engage in physical activity during the past month as defined by the Behavioral Risk Factor Surveillance System.[40]

CHOS PHYSICAL ACTIVITY

CHOS respondents provided information on their physical activity. In a typical week, 71.2% of respondents across regions exercised continuously for at least 10 minutes; notably, fewer respondents (59.4%) in Warren reported exercising for at least 10 minutes. The top reasons provided for skipping exercise or doing it less than the respondent would have wanted to include lack of time or being too busy (39.9%), lack of motivation (36.8%), the weather or outdoor environment (32.0%), and being too tired to exercise (29.8%). Of respondents exercising for at least 10 minutes, on average, they exercised nearly four days a week for about 47 minutes. The most common kinds of exercise were walking (77.9%), yard work (31.2%), weightlifting (26.0%), other (23.7%), bicycling (20.1%), yoga (17.15), running (12.7%), swimming (6.0%), golf (5.9%), and playing sports (4.9%). The top three locations for conducting exercise were at home (55.6%), in their neighborhood (33.4%), and parks or trails (31.3%).

A disparity existed between respondents from households making $50,000 or more and those making less. Among the higher-income respondents, a larger percentage, 72.4% in Trumbull and 75.1% in Mahoning reported exercising for at least 10 minutes, while lower-income respondents reported a lower percentage of respondents exercising, 56.2% in Trumbull and 65.0% in Mahoning. Lower-income respondents reported higher percentages of barriers, including lack of motivation (40.4%), being physically unable (14.5%), cost (10.7%), having limited sidewalk access (10.1%), concern about getting COVID-19 (9.8%), having no safe place to exercise (4.6%), and a lack of transportation (2.7%).

CHOS NUTRITION

CHOS respondents also answered questions related to their eating habits. Nutrition experts recommend that adults eat 1.5 cups of fruit and 2-3 cups of vegetables daily [45]. About half of CHOS respondents reported eating 2-3 servings of vegetables in a typical day. Almost a third consumed one vegetable serving a day, and nearly 10% reported eating four or more servings. Fewer respondents ate 2-3 fruit servings daily, with almost 40% reporting eating 2-3 servings and 40.8% reporting eating only one serving of fruit daily.

The top reasons given for not meeting recommended levels of fruit and vegetable consumption included Other (29.3%), cost (21.0%), availability of other less healthy options (15.5%), lack of awareness of recommended servings (15.3%), and difficulty finding fruit and vegetables (12.3%). CHOS respondents

from households making less than $50,000 a year reported slightly smaller percentages of accessing fruits and vegetables than higher-income respondents. Of CHOS respondents, 8.7% from Trumbull County and 11.4% of respondents from Mahoning County reported cutting the size of a meal, using a food pantry, seeking reduced-cost community meals, or skipping a meal because there wasn't enough money for food within the last 12 months. In Warren, only 5.5% of respondents reported experiencing this situation, while the situation was experienced by 14.7% of respondents in Youngstown.

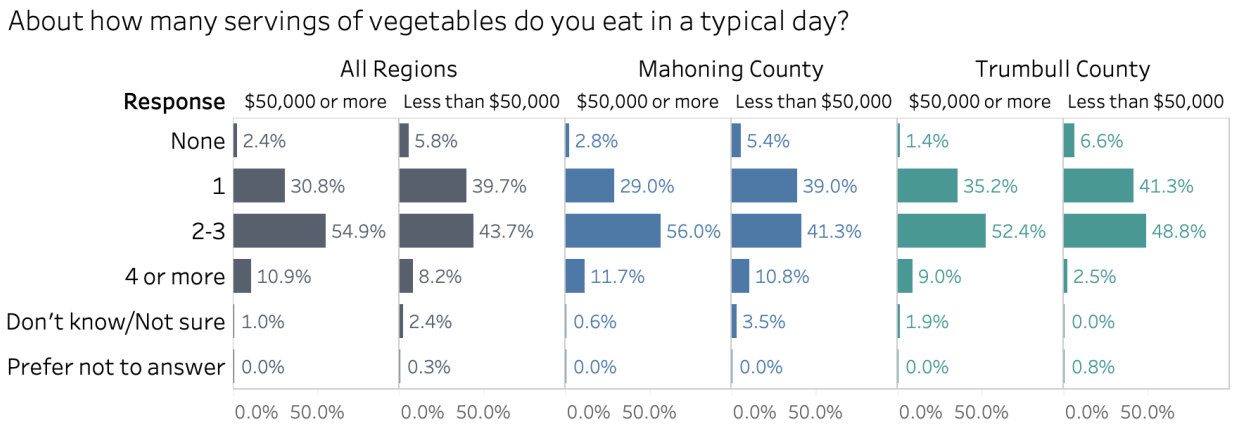


Figure 27: Vegetable serving consumed daily by income. Source Community Health Opinion Survey 2022

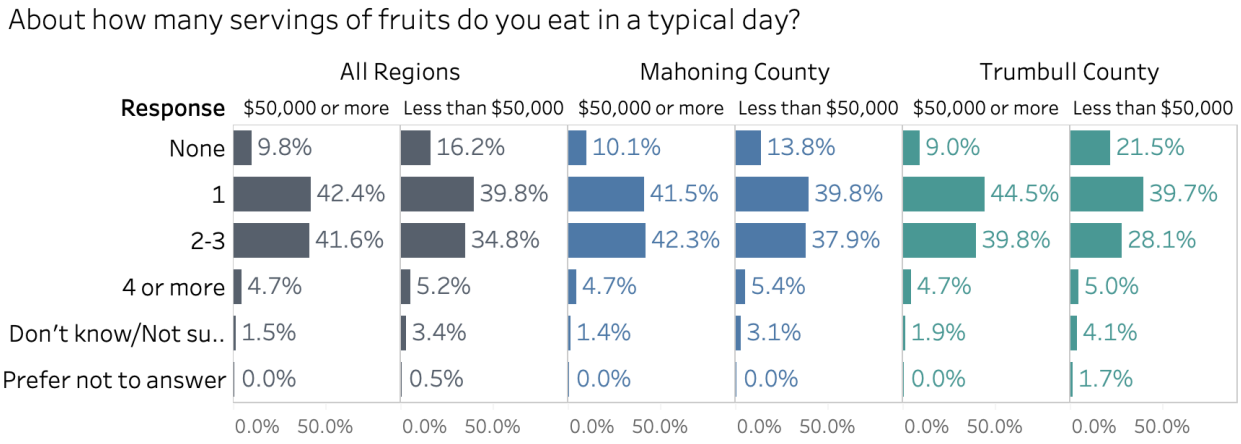


Figure 28: Fruit servings consumed daily by income. Source Community Health Opinion Survey 2022

DISEASE, ILLNESS, & INJURY

OVERALL MORTALITY

Trumbull and Mahoning Counties have a higher adjusted mortality rate than the state and peer counties. The unadjusted mortality rate in 2021 was 1,657.0 per 100,000 in Trumbull and 1,601.2 per 100,000 in Mahoning. When we adjust those mortality rates by age, the rates are much closer to state and peer counties, reflecting the older population in Trumbull and Mahoning. The age-adjusted mortality rate per 100,000 was 1,093.9 in Trumbull and 1,052.8 in Mahoning.[46] In the years 2020 and 2021, the estimated age-adjusted mortality rate increased across all counties, coinciding with the COVID-19 pandemic. In 2021, COVID-19 was the third leading cause of death in both Trumbull and Mahoning Counties.[46]

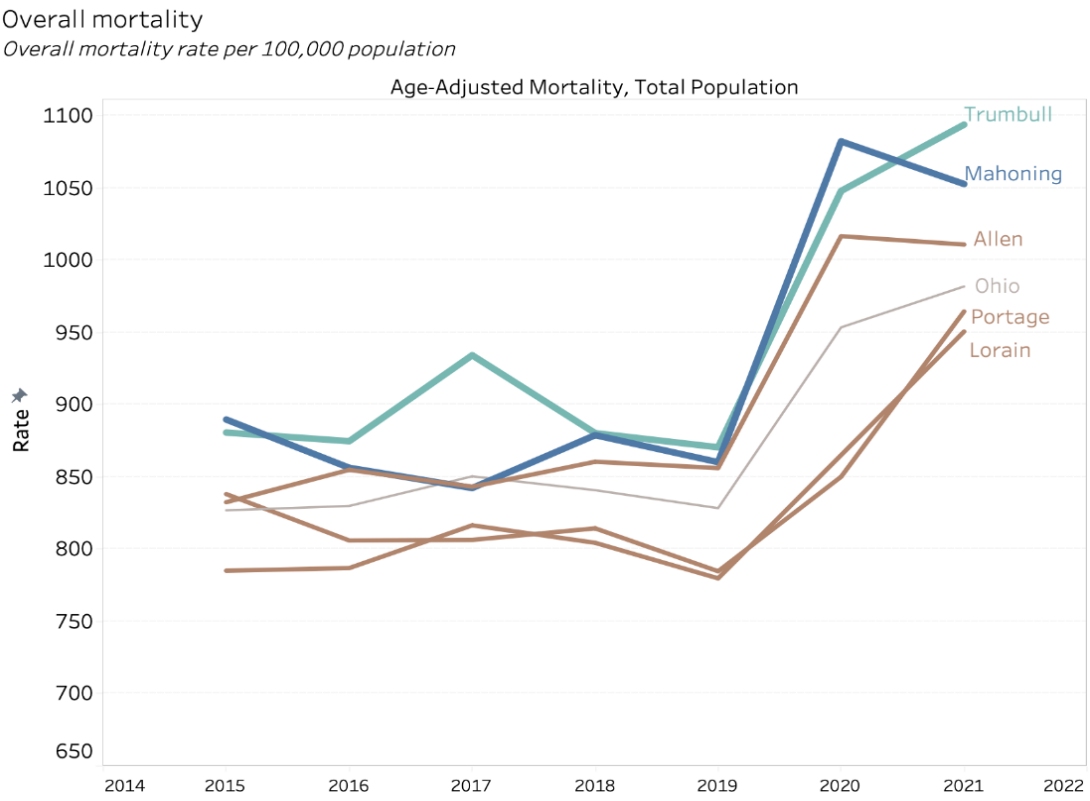


Figure 29: Age-adjusted mortality rate per 100,000 one-year estimate. Ohio Public Health Information Warehouse

Estimated mortality rates are higher among older adults and are highest among adults who are 85 years old or older. The mortality rate for male community members is larger than for female community members, with a rate of 1,311.3 per 100,000 for males and 909.3 per 100,000 for females in 2021 in

Trumbull County, and 1,302.6 per 100,000 for males and 830.3 per 100,000 for females in Mahoning in 2021.

Black or African American community members have a higher mortality rate than White community members. Between 2019 and 2021, the mortality rate for Black/African American community members increased dramatically. In Trumbull County, the annual estimated overall mortality rate per 100,000 in 2021 was 1,384 for Black community members and 1,072 for White community members. In Mahoning County, in 2021, the annual estimated overall mortality rate per 100,000 among Black community members was 1,580 compared to 960 for White community members.[46]

LEADING CAUSES OF DEATH

In 2021, the top four leading causes of death based on the age-adjusted mortality rate per 100,000 in Trumbull and Mahoning Counties were diseases of the heart, cancer, COVID-19, and unintentional injuries. These causes of death align with the top four causes of death in Ohio. Since 2020 deaths attributable to COVID-19 have surpassed accidents as a leading cause of death.[46]

In 2021 the age-adjusted rate for heart diseases was 234.3 per 100,000 in Trumbull and 239.0 per 100,000 in Mahoning. Age-adjusted cancer rates or malignant neoplasms were the second leading cause of death attributable to 154.7 per 100,000 in Trumbull and 156.3 in Mahoning. In 2021 the age-adjusted rate of COVID-19 mortality was 146.6 per 100,000 in Trumbull and 133.1 per 100,000 in Mahoning. The fourth leading cause of death was accidents or unintentional injuries, 101.1 per 100,000 in Trumbull and 108.8 per 100,000 in Mahoning. In Trumbull, cerebrovascular disease is the fifth leading cause of death, with an age-adjusted mortality rate of 51.3 per 100,000. In Mahoning, the fifth leading cause of death was Alzheimer's disease, with an age-adjusted mortality rate of 34.5 per 100,000. [46]

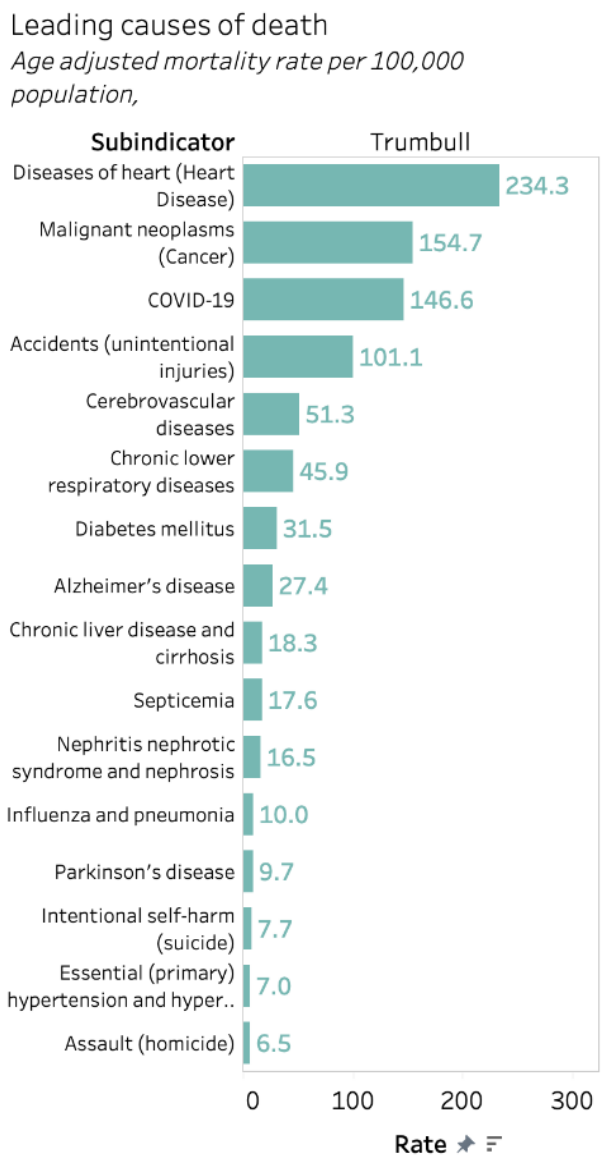


Figure 31: Leading causes of death in Trumbull County 2021 age-adjusted rates per 100,000 . Source: Ohio Public Health Information Warehouse, Mortality

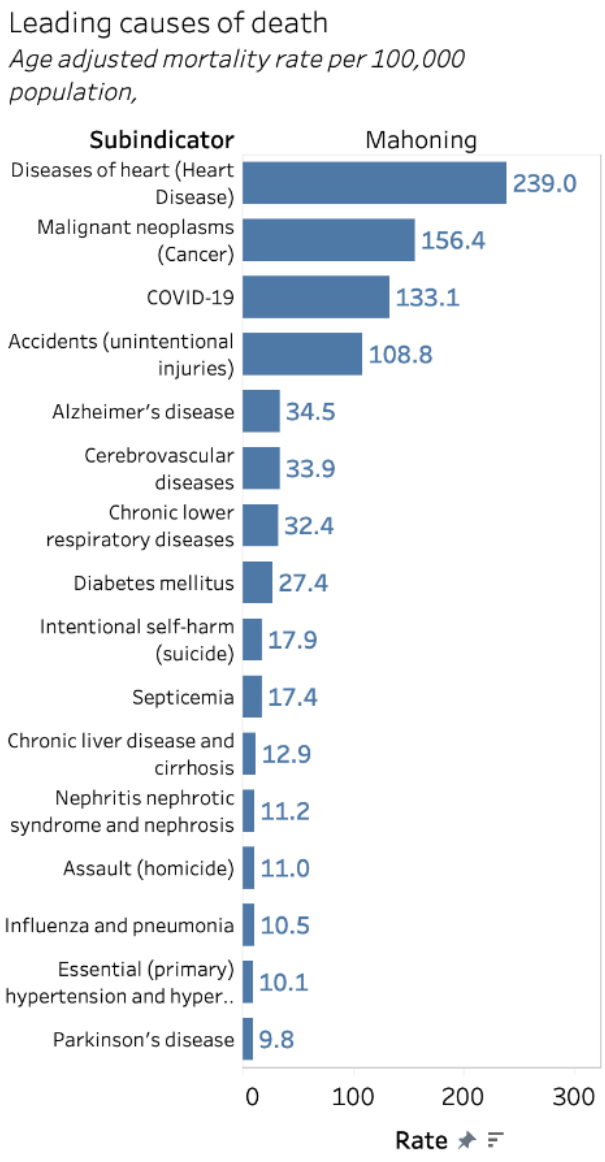


Figure 31: Leading causes of death in Mahoning County 2021 age-adjusted rates per 100,000. Source: Ohio Public Health Information Warehouse, Mortality

DISABILITY

Mahoning and Trumbull have similar disability prevalence to peers and the state as a whole, with about 15% of the population reporting a disability. Ambulatory difficulty is the most common type of disability across all regions. The five-year estimates of disability type identify 9.0% of the Trumbull population and 8.6% of the Mahoning population as having an ambulatory difficulty. The five-year estimates between 2016 and 2020 identified 6.7% of the population in Trumbull, and 7.4% in Mahoning as having an independent living difficulty. In Trumbull 6.0% of the population have a cognitive difficulty, slightly less

than the 6.7% in Mahoning. Hearing and vision difficulties were among the least common disabilities, with less than 5% of the population in each county experiencing these disabilities.[23]

Disability prevalence varies by age. The percentage of the population living with a disability increases as age increases. In Trumbull, 25.4% and Mahoning, 23.5% of the population of county residents ages 65 to 74 experience living with a disability; while 45.2% of adults ages 75 years and over in Trumbull and 46.3% in Mahoning live with a disability.[23]

The estimates of disability prevalence by race and ethnicity are based on small sample sizes with large margins of error and should be interpreted with caution. The five-year estimates indicate that Native Hawaiian or other Pacific Islanders in Mahoning, Asian and Some other race in Trumbull, and American Indian or Alaskan Native have a larger percent of community members living with a disability than White, Black or African American, Hispanic or Latino and people with Two or More races.[23]

COVID

Since 2020, the COVID-19 pandemic has shaped the health of communities across the country. Cumulative incidence is the total number of cases of COVID-19 identified. As of March 31, 2022, Trumbull County had the lowest number of incident cases per 100,000 compared to the peer counties, with 20,611 incident cases. Mahoning County and Allen County had the highest cumulative incidence of COVID-19 compared to Trumbull, Lorain, and Portage counties. Mahoning had 23,452 cases per 100,000, while Allen had 26,914 cases per 100,000. [1]

As of March 31, 2022, Trumbull and Mahoning Counties had higher COVID-19 mortality rates than Lorain and Portage but lower rates than Allen. The COVID-19-related mortality rate in Trumbull was 146.6 per 100,000, in Mahoning the mortality rate was 133.1 per 100,000.[46]

CHOS COVID-19 IMPACT

CHOS respondents were asked to share ways that the COVID-19 pandemic had impacted their and their households' lives. Over one-third of respondents reported losing a family member, friend, or loved one. About half of respondents reported experiencing isolation or feeling alone, as well as anxiety, fear, or concern for their life that kept them from doing things they wanted to do. Among respondents from households making less than $50,000 a year, 37.4% reported not having enough money compared to 12.7% of respondents making a higher income. Additionally, lower-income respondents reported higher percentages of job loss, 24.3%, compared to 14.5%. Financial strain was apparent again among lower-income respondents as 24.0% reported inability to pay bills, and 11.6% reported a lack of food or being hungry because they did not have enough to eat related to the COVID-19 pandemic.

STI/STID & OTHER INFECTIOUS DISEASE

Apart from COVID-19, Chlamydia and Gonorrhea are the most common infectious diseases in Trumbull and Mahoning counties. Rates of Chlamydia have increased across many counties since 2016. However, there has been a decline between 2019 and 2020 estimates. This decline may be partially attributable to the COVID-19 pandemic interrupting regular STI screening and should be interpreted cautiously. The Trumbull County Chlamydia estimated rate in 2019 was 511.2 and 430.9 in 2020. The 2019 rate of Chlamydia was 516.9 per 100,000 in Mahoning and increased to 540.0 per 100,000 in 2020. [47]

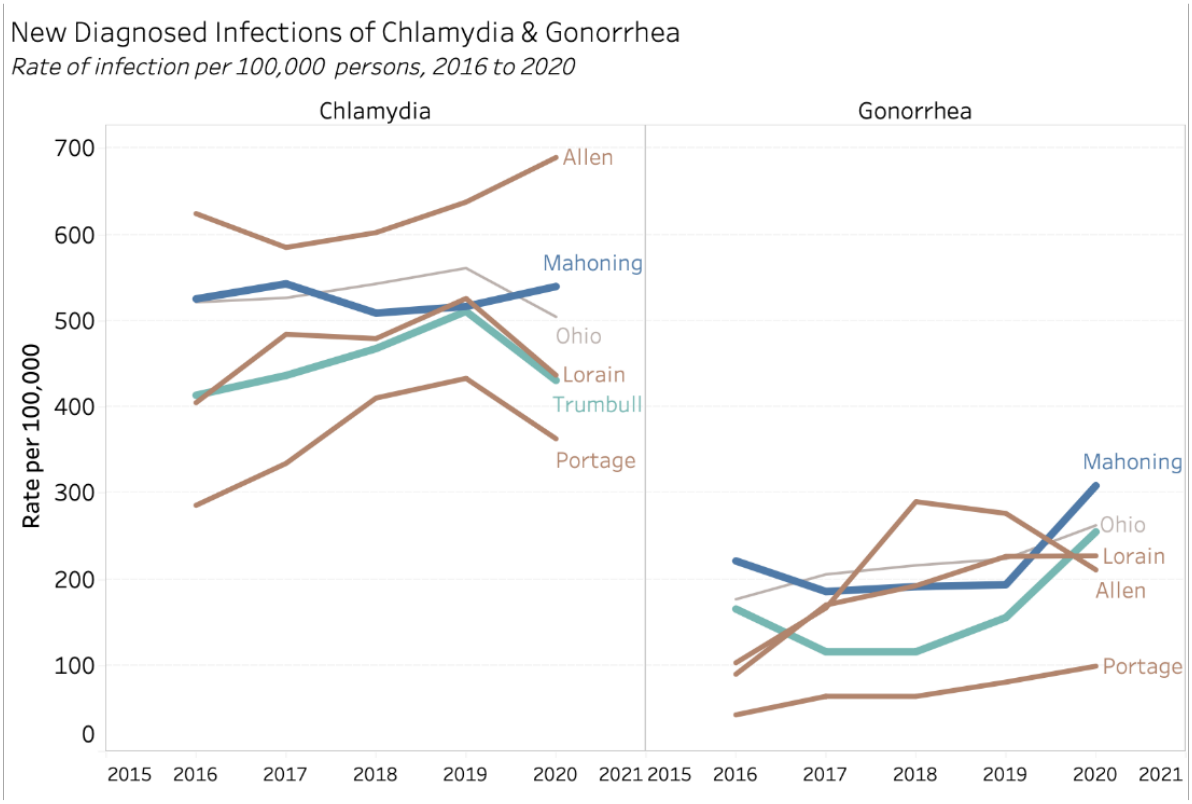


Figure 33: Rate of newly diagnosed infections of Chlamydia and Gonorrhea per 100,000 2016-2020, one-year estimates. Source Ohio Department of Health, STD Surveillance Program

Estimated rates of newly diagnosed Gonorrhea infections have increased in all counties and the state between 2016 and 2020. In 2020, the newly diagnosed infection rate for Gonorrhea in Trumbull was 255.1 per 100,000 and 308.7 per 100,000 in Mahoning.[47]

The rates of newly diagnosed Syphilis cases are low across all counties. Although there has been a slight increase in the cases within the state of Ohio, both Trumbull and Mahoning counties had lower rates in 2020. Trumbull County had the lowest rate of newly diagnosed Syphilis cases, with only 5.10 cases per 100,000 in 2020, while Mahoning had 15.7 per 100,000 in 2020. [47]

Rates of newly diagnosed HIV infection were lowest in Trumbull County, with 2.5 per 100,000 in 2020. In Mahoning County, rates of newly diagnosed HIV infections increased between 2019 and 2020 from 2.6 to 9.3 per 100,000.[48]

The estimated rate of people living with a diagnosed HIV infection has increased slightly between 2016 and 2020 in all counties. Compared to peer counties Trumbull County has a lower rate of people living with a diagnosed HIV infection with a similar rate to Lorain and slightly larger than Portage; in 2020, the rate of people living with a diagnosed HIV infection was 119.9 per 100,000. As of 2020, 219.4 per 100,000 community members in Mahoning were living with a diagnosed HIV infection based on five-year estimates. This is similar to the state of Ohio, which has a rate of 214.6 per 100,000. [48]

HEPATITIS

Both Trumbull and Mahoning counties have similar rates of Hepatitis B and C as the state and peer counties. Acute Hepatitis lasts for less than six months; if Hepatitis persists past six months, it becomes chronic Hepatitis. One-year estimates of acute Hepatitis C cases have remained stable between 2016 and 2020. In 2020, the rate of acute Hepatitis C infections was 6.2 in Trumbull and 1.7 Mahoning per 100,000. The total cases of Hepatitis C (including acute and chronic cases) have been decreasing since 2016; in 2020, the rates were 120.2 in Trumbull and 113.7 in Mahoning per 100,000. This decline in total cases and the stability of acute case rates imply that chronic Hepatitis C cases are decreasing in both counties.[49]

The total and acute Hepatitis B case rates have remained low and stable between 2016 and 2020. In Trumbull the total Hepatitis B rates were 11.7 and in Mahoning 12.8 total cases, while acute rates fall below 1 per 100,000. Again, it is important to note that in 2020 data may not represent a true decline in the incidence of disease as the numbers available may have been impacted by the COVID-19 pandemic.[49]

CHOS HEALTH STATUS

CHOS respondents described the state of their health. Across both counties, about 40% of respondents rated their health as excellent or very good. Similarly, about 40% of respondents reported good health, with 20% reporting fair or poor health. Respondents in Warren had the largest percentage of respondents reporting fair (21.9%) and poor health (6.3%). Respondents from households making less than $50,000 per year reported lower percentages of excellent or very good health (28.6%) compared to those from households making $50,000 or more (43.6%).

Among CHOS respondents, almost 40% reported being diagnosed with high cholesterol, arthritis, or high blood pressure. About a third reported being diagnosed with depression at one point. Similarly, over a third reported having received a positive COVID-19 test. 25.1% had received a mental health diagnosis. Almost a fifth had asthma. Lower-income CHOS respondents reported larger percentages of diagnosed conditions compared to higher-income respondents. For instance, lower-income CHOS respondents reported higher percentages of diagnosed depression (47.5%), arthritis (46.4%), high blood pressure (44.1%), mental health diagnosis (34.7%), and asthma (23.35), among others.

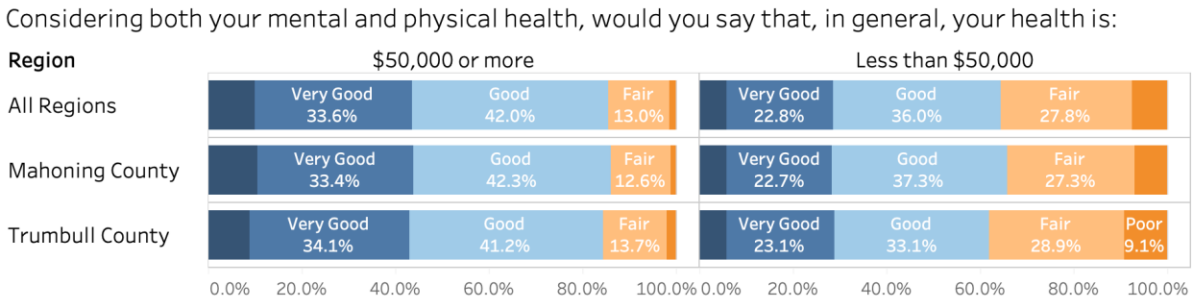


Figure 34: CHOS respondents self-reported state of general health by income. Source Community Health Opinion Survey, 2022

In 2018, Trumbull and Mahoning counties had a higher percentage of residents reporting fair or poor health than their peer counties and the state. When age-adjusted, 20.6% in Trumbull and 20.2% in Mahoning reported fair or poor health status. On average, adults reported four days in which they were physically unhealthy in the past month, while in Trumbull and Mahoning, adults reported five days [13]. When age-adjusted, Trumbull (14.2%) and Mahoning (13.8%) had higher percentages of adults reporting 14 or more days of poor physical health per month than Lorain, Portage, and the state. [13]

CHRONIC CONDITIONS: CANCER & DIABETES

Chronic diseases are defined by the CDC as "conditions that last 1 year or more and require ongoing medical attention or limit activities of daily living or both." [50] The chronic conditions discussed in this section include cancer and diabetes, both of which are among the top ten leading causes of death in Trumbull and Mahoning County, as well as peers.

Cancer incidence in Trumbull and Mahoning is lower than their peer counties and the state and has decreased slightly between 2014-2018. The age-adjusted rate in Trumbull in 2018 was 422.2 per 100,000, slightly higher than Mahoning County which had the lowest age-adjusted cancer incidence rate at 408.8 per 100,000 in 2018.[51]

According to estimates in 2018, prostate, breast, and lung and bronchus cancers have the greatest incidence across cancer types, consistent with state and peers. Prostate cancer has the highest estimated incidence rate among all the cancer types across all counties, the largest prostate cancer incidence rate in 2018 was 141.2 in Allen county. In Trumbull County, prostate cancer incidence was 93.8 per 100,000 much lower than 121.1 per 100,000 in Mahoning County. Breast Cancer incidence in both Trumbull and Mahoning counties was lower than the state average of 69.1 per 100,000 with 67.3 per 100,000 in Trumbull, and 62.2 per 100,000 in Mahoning. Lung and Bronchus cancer incidence was highest in Trumbull county in 2018 with an estimated 71.0 per 100,000, this exceeded the state average of 64.6 per 100,00 and was larger than 52.7 per 100,000 in Mahoning County.[51]

The percentage of adults ages 20+ with a diabetes diagnosis has seen a slight increase across all counties from 2014 to 2019. Trumbull County decreased from 10.8% in 2017 to 9.2% in 2018, but then saw another small increase to 9.8% in 2019. Mahoning County had an increase from 10.0% in 2017 to 11.9% in 2018 and has since stayed consistent. It is important to note that this data does not include adults

who are diagnosed with prediabetes or gestational diabetes, and it is inclusive of both type 1 and type 2 diabetes.[52]

CHRONIC CONDITIONS IN MEDICARE POPULATIONS

The chronic conditions with the highest prevalence among the Medicare population are Hypertension and Hyperlipidemia. Both have a prevalence of over 50% with Hypertension at 59.9% in Trumbull and 58.7% in Mahoning, and Hyperlipidemia at 52.9% in Trumbull and 51.5% in Mahoning. Arthritis prevalence is the next highest and has also been seeing a slight increase in recent years in both Trumbull and Mahoning, while diabetes and ischemic heart disease have been decreasing. The prevalence of chronic kidney disease has seen a significant increase in prevalence since 2015 across all counties and the state. Trumbull has increased from 18.5% in 2015 to 25.9% in 2018, and Mahoning from 19.7% in 2015 to 25.5% in 2018.[53]

REPRODUCTIVE & CHILD HEALTH

Reproductive and child health includes a specific subset of health services and outcomes pertaining to reproductive health, pregnancy, birth, and childhood. Infant mortality is a key indicator of reproductive and child health, and reproductive and child health outcomes are influenced by social, economic, and environmental factors. The United States holds a higher mortality rate for birthing parents when compared to other developed countries and has significant racial disparities in birth outcomes, particularly impacting non-Hispanic Black families.[54]

PREGNANCY

Smoking while pregnant is a risk factor for preterm birth and low birth weight, two contributing causes of infant mortality and morbidity. While smoking during any trimester of pregnancy is decreasing, it remains higher than the state rate in both Trumbull and Mahoning Counties.

Smoking during any trimester of pregnancy has seen a decline in all counties except for Mahoning, which saw an increase from 15% in 2019 to 20% in 2020. Trumbull has had the highest rate of smoking during pregnancy compared to peers over several years at 20% in 2021. The trends for smoking during any trimester of pregnancy look similar to pre-pregnancy smoking trends. Trumbull has the highest rate of pre-pregnancy smoking at 21% in 2021, and all counties have seen a decline in pre-pregnancy smoking with the exception of Mahoning, where there was an increase from 16% in 2019 to 21% in 2020.[55]

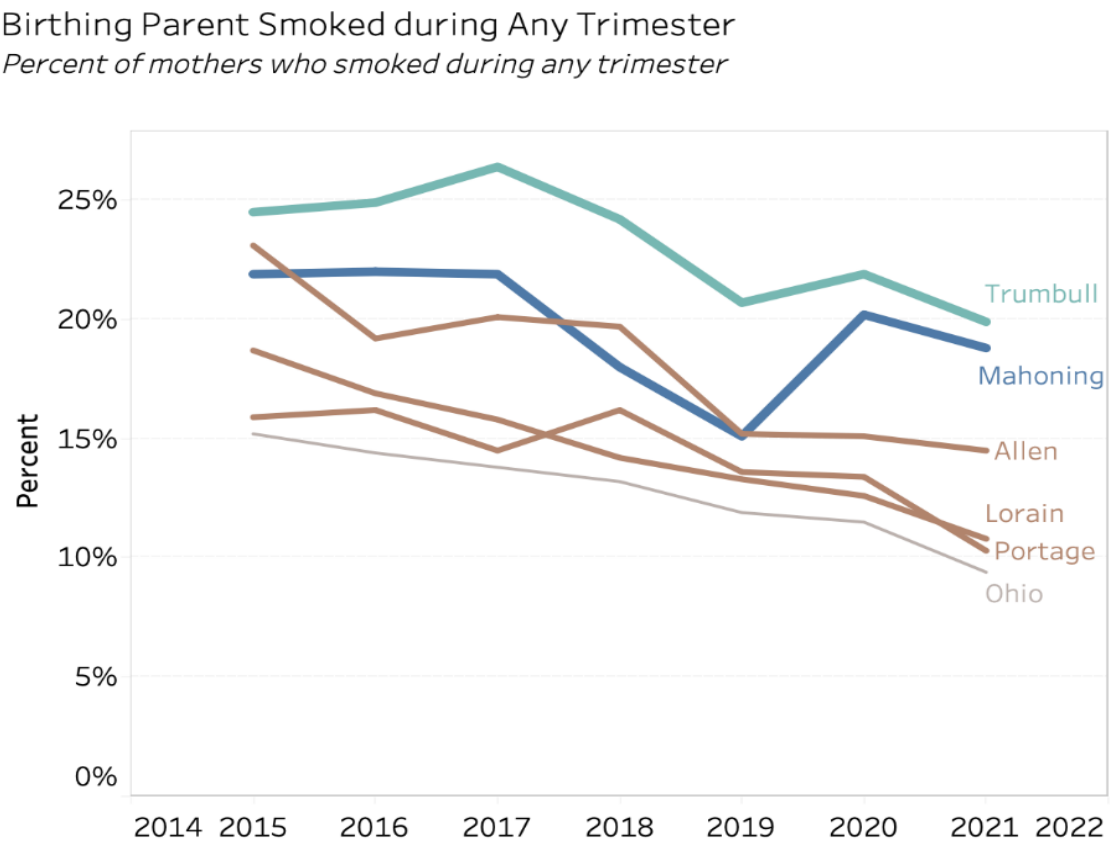


Figure 35: Percent of birthing parents who smoked during any trimester 2015-2021. Source: Ohio Public Health Information Warehouse Birth Residence, Live Births

BIRTH OUTCOMES

In 2021, Trumbull County had a preterm birth rate of 12.0% which is similar to peer counties and the state. Preterm birth rates in 2021 were highest in Mahoning at 14.0%. There is significantly more variation when breaking down pre-term births by race, with Black births consistently having a higher percentage than other racial categories across all counties. Black preterm births are at a rate of 15.0% in Trumbull and 18.0% in Mahoning. The percentage of infants with low birth weight has remained relatively stable over time at 10.0% in Trumbull and 11.0% in Mahoning; however, there has been an upward trend in recent years in Allen County from 9.0% in 2020 to 12.0% in 2021. Low birth weight varies by race, and again we see a significantly higher percentage of low birth weight among Black births across all counties: Allen (23.0%), Mahoning (17.0%), Portage (17.0%), Lorain (16.0%), Trumbull (15.0%).[55]

INFANT MORTALITY

Infant mortality has been declining in both Trumbull and Mahoning Counties in recent years. In Trumbull, there was a sharp decrease from 2017 to 2019, then the decrease slowed. In 2019, the rate in Trumbull was 534.2 per 100,000 and in 2021, the rate was 485.0 per 100,000. Mahoning has seen a sharp decrease from 985.4 per 100,000 in 2019 to 646.0 per 100,000 in 2021. [55]

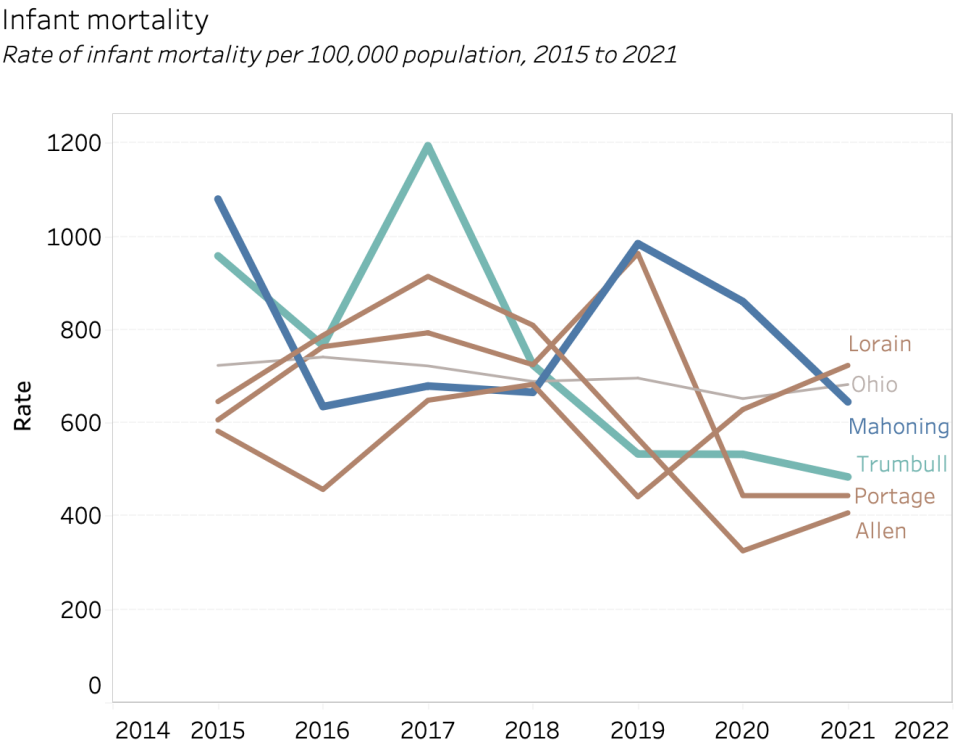


Figure 36: Rate of infant mortality per 100,000 2015-2021. Source Ohio Public Health Information Warehouse Birth Residence Mortality

The United States consistently has large racial disparities in infant mortality, especially between Black/African American and White births, and the same disparities exist in Trumbull and Mahoning Counties. The five-year average of infant mortality in Trumbull between 2015-2019 was 1,404.2 per 100,00 for Black/African American babies compared to 694.1 per 100,000 for White babies. This results in a disparity ratio of 2.0 in Trumbull County. Mahoning County has a larger disparity ratio of 3.5. [55] These racial disparities can be traced back to historical segregation and accumulated stress from discrimination, along with a variety of other disparities in social and economic factors.[56]

CHILD HEALTH

Rates of child mortality have remained relatively stable in all counties in recent years. The highest rates are in Trumbull at 67 deaths per 100,000 children under 18, followed by Allen County at 61.95, Portage at 58.20, Mahoning at 55.88, and Lorain at 47.61.[46]

During Community Conversations, many participants expressed hope for the children and youth in their communities. Many participants described their community as being a great place to raise kids; however, there were still a number of concerns shared about their health and wellbeing. These concerns included spending most of their time indoors with electronics and mobile devices and the decreased

ability of parents to teach family values due to hectic schedules. Several needs were identified during the Community Conversations such as bringing back the Mentoring Moms program, increased child abuse prevention resources, and increased recreation opportunities for children and youth.

CHOS CHILDREN WITH SPECIAL HEALTHCARE NEEDS

Of respondents with children in their household, 14.0% in Trumbull and 19.5% in Mahoning reported the child having a special health care need. Of respondents with children with special health needs, many children have multiple types of health insurance. All respondents in Trumbull County reported their children with special health needs have adequate insurance coverage; however, in Mahoning County 15.2% of respondents reported their children with special health care needs do not have adequate health insurance.

CHOS ADVERSE CHILDHOOD EXPERIENCES

About 80% of respondents were willing to answer some questions about their adverse childhood experiences (ACEs). Of those, more than 25% of respondents in both Trumbull and Mahoning counties reported the following ACEs: separated parents, had family members experiencing depression/mental illness, had adults swear, insult, or threaten them, and/or lived with someone with alcoholism or using drugs. Across regions, 37.4% of respondents reported having no ACEs, 20.8% reported one ACE, 12.0% reported two, 9.4% reported three, and 20.5% reported four or more.

MENTAL HEALTH & SUBSTANCE USE

"Mental health is an important part of overall health and well-being. Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood." –Centers for Disease Control and Prevention [57]

Mental health is as important as physical health to total well-being. Mental health is necessary for individuals and communities to thrive. While mental health and substance use data are reported in this section it should be noted that the topics although related are distinct. Both are shaped by the social determinants of health and are often stigmatized which makes identifying, discussing, and improving these issues particularly challenging.

Mental health was identified as a major area of concern in both the Community Conversations and Community Health Opinion Survey (CHOS). While this primary data may not be generalizable and only represents the experiences of the participants, it provides timely context and nuance to an area that can only partially be understood by looking at secondary data alone. Mental health outcome data, such as suicide mortality, self-harm, and overdose are only the extremes that are recorded by health systems and vital statistics, and do not represent the full scope of mental health issues in the community. Prevalence data on mental health conditions are only readily available among Medicare participants, which is limited to people who are age 65 or older, young people with disabilities, or people with end

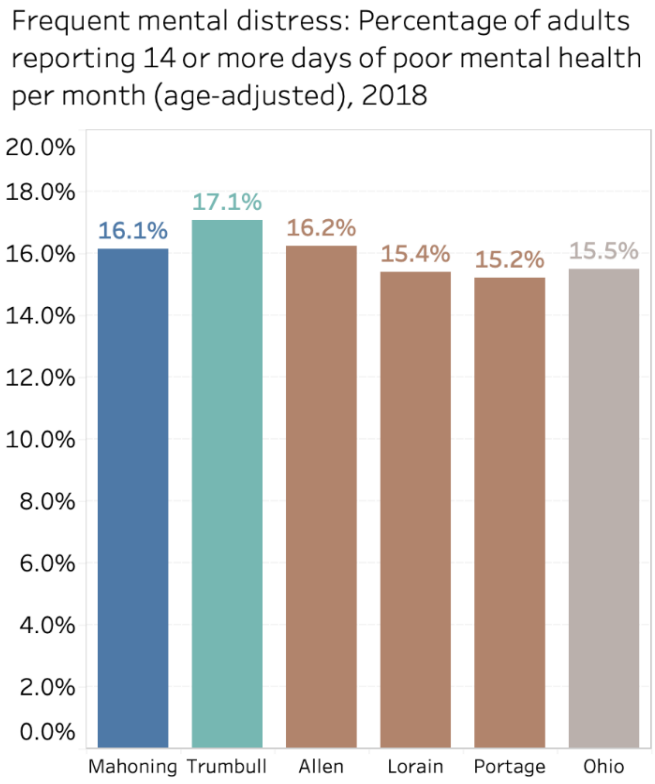


Figure 37: Percentage of adults reporting 14 or more days of poor mental health per month (age-adjusted) 2018. Source: County Health Rankings 2021

Stage Renal Disease [58], which represents only 9% of the population as of 2016-2020 estimates [23] Despite these limitations, when taken together, these primary and secondary data call attention to the important issue of mental health in Trumbull and Mahoning Counties.

As of 2018, 17.1% of Trumbull County community members, and 16.1% of Mahoning County, or about 1 in 6 adults, reported at least two weeks of poor mental health per month these rates are comparable to peer counties and the state as a whole. In all counties, adults reported an average of 5 mentally unhealthy days in the past month.[13]

DEPRESSION

The prevalence of depression among the Medicare population has remained relatively stable between 2013 and 2018. In 2018, 18% of the Trumbull Medicare population, and 17% of the Mahoning Medicare population experienced depression. This prevalence is slightly lower than peer counties and the state as a whole.[53] CHOS respondents were asked if they or someone in their household had experienced feeling down or sad for more than two weeks in the past six months (a symptom of depression), 35.8% of respondents in Trumbull County, 42.2% of respondents in Warren, 37.9% of respondents in Mahoning County and 39.8% in Youngstown reported they or a household member experienced this symptom. Among CHOS respondents from households who made less than $50,000 a year, a larger percentage reported this symptom 50.4% in Trumbull and 44% in Mahoning.

For those who reported experiencing feeling down or sad for more than two weeks within the past six months, 45.4% of respondents in Trumbull and Mahoning Counties did not receive treatment for depression, lack of treatment was higher among respondents in Warren (55.6%) and Youngstown (53.3%). Among respondents who received treatment the sources of care were mental health counselors (27.8%), primary care providers (19.7%), and mental health agencies (2.8%), Other sources (2.3%), Prefer not to answer (1.1%), Don't know not sure (0.9%). For respondents who experienced or

had a family member experience symptoms of depression for two weeks in the past six months there were differences in access to treatment and type of treatment by income as described in the table below.

	Mahoning County		Trumbull County	
	Earning less than $50,000	Earning $50,000 or more	Earning less than $50,000	Earning $50,000 or more
Did not receive treatment for depression	39.5%	48.7%	47.5%	42.0%
Received treatment from a mental health counselor	28.1%	31.7%	37.7%	23.2%
Received treatment from a primary care provider	27.2%	13.8%	9.8%	31.9%

SELF-HARM

Among CHOS respondents who indicated they or a family member were feeling down or sad for two weeks, about 11% (or 60 respondents) considered harming themselves. Lower-income respondents reported a slightly higher percentage considering self-harm (14.9% considered, 5.7% not sure or don't know, 3.4% prefer not to say) compared to higher-income respondents (10.1% considered, 6.2% not sure or don't know, 2.7% prefer not to say). Of those who reported they or their household member considered harming themselves, 23.3% did not receive treatment. However, those who did receive treatment received it from mental health counselors (48.3%), primary care providers (18.3%), mental health agencies (5%) and other sources (5%).

SUICIDE

The age-adjusted suicide rate per 100,000 population has decreased in Trumbull County between 2017 and 2021. In 2021 the age-adjusted suicide rate in Trumbull County was 8.2 per 100,000, this rate is below all the peer counties and the state as a whole. In Mahoning County, the age-adjusted suicide rate remained relatively stable but increased from 13.4 to 17.9 per 100,000 between 2020 and 2021. In Trumbull County, the higher suicide rate is among adults 55-64 (31.0 per 100,000), followed by adults over 85 (17.8 per 100,000). In Mahoning adults between the ages of 35-44 have the highest suicide rate (35.7 per 100,000), followed by adults 25-34 (28.8) and adults between 75 and 84 (28.1). The suicide rate is higher for males than females, and for White individuals in the state of Ohio overall. Suicide rates by sex are not available for Trumbull due to the small numbers, likewise, the suicide rate among White individuals is below the state level. [46]

Help is available if you or someone you know needs mental health support. Explore resources at https://www.namimahoningvalley.org/

PSYCHIATRIC ILLNESS

The prevalence of Schizophrenia and Other Psychotic Disorders among Medicare recipients decreased slightly across all counties between 2013 and 2018. In 2018, 2.6% of Trumbull Medicare population and 2.8% of the Mahoning Medicare population experienced one of these disorders.[53]

ALCOHOL

Binge drinking is defined as consuming five or more drinks on an occasion, and Binge drinking is associated with risk of illness and injury.[59] In 2019, the percentage of community members who reported engaging in binge drinking was similar across all counties. However, it is slightly higher in Mahoning (18.3%) and Portage (19.0%) than Lorain (17.9%), Allen (17.5%) and Trumbull (17.2%) [40]. Almost a third of CHOS respondents reported at least one instance of binge drinking in the past 30 days. Between 2015 and 2019, the percentage of driving deaths with alcohol involvement decreased in Trumbull County from 39% to 33%. However, alcohol-impaired driving deaths have increased in Mahoning County from 30% to 37%. [60]

NICOTINE AND TOBACCO

Tobacco is a commonly used substance in the state of Ohio, in 2020 almost 1 in 4 adults used a tobacco product, 1 in 5 smoked cigarettes. The prevalence of cigarette smoking is larger among adults who did not graduate from high school, adults who live with a disability, those who earn less than $15,000 a year, and adults who report poor mental health days on or more than 14 days in the past 30.[61] Smoking can cause cancer, heart and lung diseases, and chronic obstructive pulmonary disease. Second-hand smoke exposure is estimated to contribute to 41,000 deaths among nonsmoking adults and 400 infants each year in the United States [62]. In 2019, estimates of the percentage of community members who smoke were higher in Trumbull (26.8%) and Mahoning (23.5%) than in their peer counties Allen (22.8%), Lorian (21.6%), and Portage (21.7%) [40].

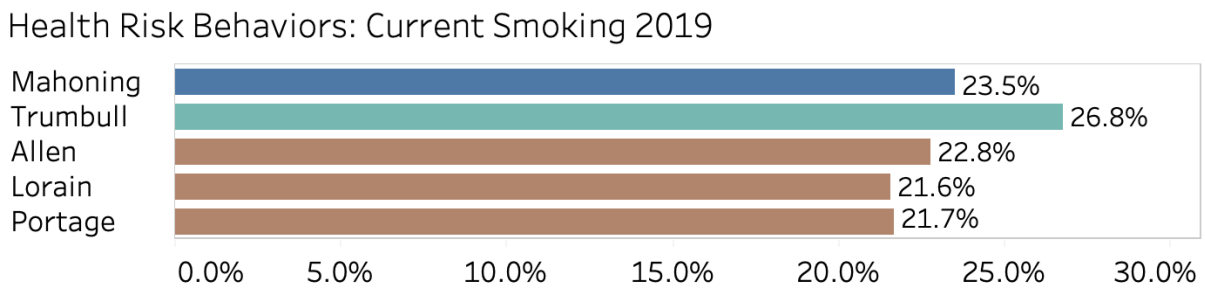


Figure 38: Percent of adults who currently smoke age-adjusted prevalence 2019. Source: BRFSS PLACES Local Data for Better Health County Data 2021

Just over 10% of CHOS respondents reported using tobacco or nicotine products on a daily basis. Across both counties, fewer CHOS respondents with a bachelor's degree (7.2%) reported daily use of a nicotine or tobacco product, compared to respondents who had not completed a bachelor's degree (17.3%). Among respondents who reported using tobacco, cigarettes were the most common product reported

(80.3% average across regions). Use of cigarettes was higher among Mahoning respondents (82% of people who reported tobacco use) than in Trumbull County (77%). Vape pens, e-cigarettes and Juuls were the most used non-cigarette tobacco product used by CHOS respondents, 16.4% in Trumbull, 37.5% in Warren, 20.5% in Mahoning, and 10.0% in Youngstown. Chewing tobacco and dip were more common in Trumbull (9.8%) and Warren (12.5%) than in Mahoning (8.2%) and Youngstown (3.3%). CHOS respondents reported being exposed to someone else smoking or vaping at home (11.2%), at work (6.4%), and in the car (7.3%).

Youth use of tobacco and nicotine products is a growing health challenge in the state and across the nation. Between 2016 and 2019, tobacco use among middle school students in the state of Ohio increased from 16.1% to 30.3%. While cigarettes are the most common tobacco product used in the state, e-cigarettes are the product most frequently used among youth, 11.9% of middle school students, and 29% of high school students use e-cigarettes. A statewide analysis found that the majority of youth obtain e-cigarettes by borrowing them from friends or family [63]. About 20% of CHOS respondents living in households with children reported that they were aware of their children or their children's friends using tobacco or nicotine products including cigarettes, e-cigarettes, or vape pens.

SUBSTANCE USE

CHOS respondents indicated that marijuana, prescription pain medication, cocaine or crack, and heroin were the most common illicit or misused substances used by friends and family. Of those who had friends or family members who used drugs in the past year, about 15% (or 355 respondents) sought treatment. CHOS respondents from Warren and Youngstown reported fewer instances of seeking treatment, with 11.1% in Warren, and 6.5% of respondents in Youngstown seeking treatment. About 14% of CHOS respondents whose family or friends used drugs were not sure or did not know if they sought treatment. Respondents from households who made less than $50,000 per year reported more instances of seeking treatment (20.4% yes) compared to those from households making more than $50,000 (16.2% yes), and lower-income respondents in Mahoning County reported seeking care more than respondents in Trumbull County (22.7% compared to 14.3%). For additional information on substance use please see the most recent Ohio Substance Abuse Monitoring Network Youngstown Region Report: https://mha.ohio.gov/research-and-data/data-and-reports/osam/drug-trend-reports.

OPIOIDS

Since 2015, opioid prescriptions have declined across all counties. In 2021, there were 53,130 opioid prescriptions per 100,000 population in Trumbull and 48,960 per 100,000 in Mahoning.[64] Opioid overdose hospital encounters (visits) were on the rise in all counties until 2017, after which they sharply declined and have plateaued since 2018. Encounters are defined as an inpatient or outpatient hospital visit, and do not include opioid overdoses that do not present for care at a hospital. Both Trumbull and Mahoning experienced more opioid overdose hospital encounters than their peer counties and the state average, 21.68 and 17.96 encounters per 10,000 population.[65]

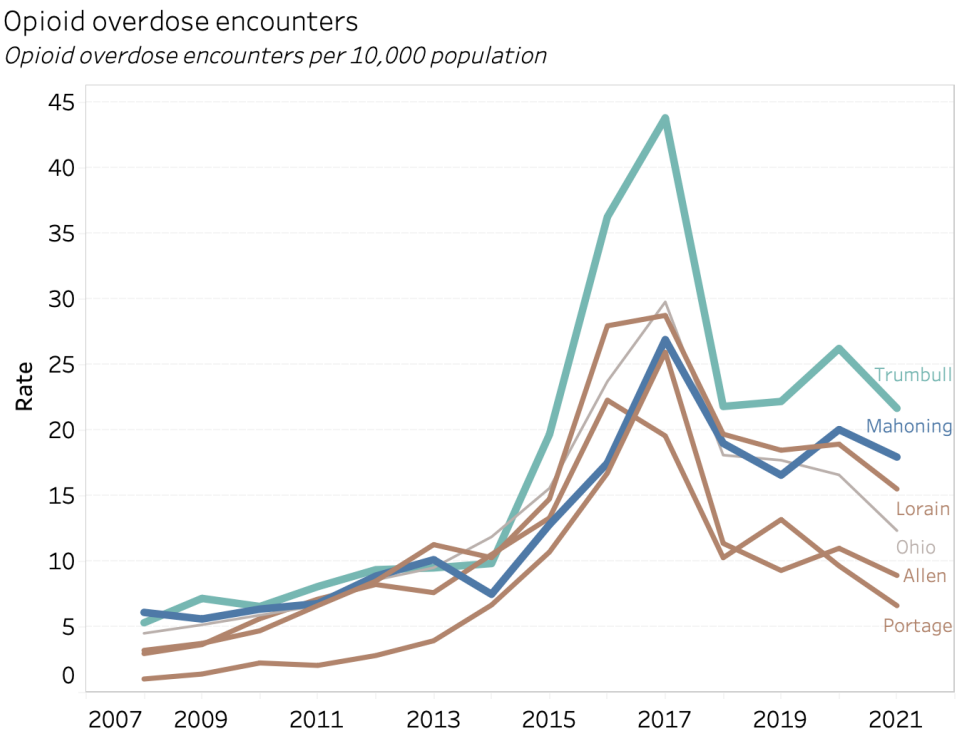


Figure 39: Rate of opioid overdose encounters per 10,000 population one-year estimates 2008-2021. Source: Ohio Hospital Association Overdose Data Sharing Program

SUBSTANCE-RELATED DEATHS

Trumbull and Mahoning experience higher rates of fatal unintentional drug overdoses compared to peer counties. Male community members experience higher rates of unintentional drug overdose death than females. In Trumbull, the unintentional drug overdose death estimate in 2021 for males was 110.9 per 100,000 male population compared to 44.2 per 100,000 for females, while Mahoning was slightly lower with 97.7 per 100,000 for males and 35.5 per 100,000 for females. Since 2018 males have experienced an increase in unintentional drug overdose mortality in both counties and peers except for Portage.[46]

While the number of fatal drug overdoses is greater for White community members, the rate per population of unintentional drug overdose deaths have increased dramatically among Black community members and in 2021 was greater than the rate for White community members. The unintentional drug overdose mortality rate among Black community members rose from 52.1 per 100,000 in 2016 to 139.2 per 100,000 in 2021 in Trumbull; and 34.3 per 100,000 in 2016 to 123.6 per 100,000 in 2021 in Mahoning. While the counts used to calculate these rates are small and some of the rates may be considered unreliable, these trends are consistent with overdose death increases among Black Ohioans statewide. In 2019 the unintentional overdose rate for non-Hispanic Black Ohioans became the highest among racial and ethnic groups. In 2020, the rate of unintentional overdose death was 81.3 for non-Hispanic Black males, and 62.8 per 100,000 for non-Hispanic White males.[46]

In the state of Ohio, deaths from unintentional overdoses increased by 25% between 2019 and 2020. A majority of overdose deaths in the state involved fentanyl (80%), often in combination with other substances including cocaine, psychostimulants (such as methamphetamine), benzodiazepine, natural and semi-synthetic opioids, and heroin. Unintentional deaths involving fentanyl have increased since 2013 despite a short decrease between 2017 and 2018.[46]

Substance use arose as a topic of concern during the Community Conversations. Participants spoke about the importance of access to care for mental health needs, and they drew a connection between untreated mental illness and substance use, highlighting that people who do not receive support for mental health may self-medicate with alcohol or drugs. Participants expressed concern that emergency responders are overwhelmed by overdose calls and people with other health emergencies are not getting timely attention.

Two courses of action were identified as needs. The first is additional resources to prevent substance use and support recovery, including treatment facilities and community support (such as accountability buddies). The second is expanded community availability of Naloxone also known by the brand name Narcan (an opioid overdose reversal medication) so that community members can save loved ones from an overdose. Naloxone kits are now available through Project DAWN. For more information, visit: https://www.mahoninghealth.org/project-dawn/.

ACCESS TO MENTAL HEALTH AND SUBSTANCE USE SERVICES

CHOS respondents were asked to indicate their agreement with statements related to substance use services in their community. Two-thirds of respondents did not think that substance use services were accessible and easy to find, and only about 1 in 7 thought the services were affordable and high quality.

Family or friends of CHOS survey respondents who have used drugs or misused prescription drugs in the past 12 months and who reported not seeking mental health treatment, chose not to because it was not needed (54.7%), they did not think of it (14.8%), another reason (21.5%), cannot afford to go (6.7%), or do not want to miss work (5.8%). CHOS respondents reported that if they wanted or needed counseling for mental health or drug/alcohol misuse they would seek care from a private counselor (54.5%), a doctor (34.6%), family (22.5%), a religious leader or clergy (11.2%), a community agency (10%), support group (6%) and a school counselor (1.3%).

In the Community Conversations, barriers to accessing current mental health services included cost (expensive care), lack of services due to long wait lists, and the need for more confidential treatment options. Stigma was also highlighted as a barrier to care. Community members described mental health concerns being dismissed and observed that people with a mental health diagnosis may be labeled as “crazy” which impacted their insurance and employment. Youth and LGBTQIA+ community members were identified as priority populations for mental health resources. Community Conversation participants called out that LGBTQIA+ community members, particularly Trans community members experience psychological distress and poor mental health outcomes due to a hostile community environment (in education, housing, healthcare, and employment).

CHAPTER 4: COMMUNITY PRIORITIES

One critical component of the Community Health Needs Assessment process is the identification of community health priorities which helps ensure that key issues flagged by community members are addressed. The top priorities selected will serve as a reference for the distribution of community resources, action planning, and collaboration. Details regarding the prioritization process and each individual priority along with the rationale for the section are highlighted within this chapter.

PRIORITIZATION PROCESS

The prioritization process began with reviewing data collected during the assessment, including both primary and secondary data. Three data walks were conducted with steering committee members from April to May, and additional contextual information was solicited from steering group members about the data and the existing resources and gaps in the community. The CHNA leadership team (comprised of the County and City Health Commissioners and Mercy Hospital, in consultation with the North Carolina Institute for Public Health) then reviewed the data and feedback and selected twelve priority voting options for the community-wide priority voting process, outlined in the figure below.

Candidate	Definition/Examples
Access to care	Affordability, insurance, specialty services, elder care
Access to information	Effective communication & engagement, awareness of resources, internet access, media literacy
Access to healthy food & physical activity	Food security, grocery stores, recreational facilities, parks
Chronic disease	Cancer, type 2 diabetes, heart disease, high blood pressure
Community safety	Gang and family violence, effective policing
Education	Childcare, K-12, training, higher ed, enrichment
Infectious Disease	COVID-19, flu, sexually transmitted infections
Mental health	Anxiety, depression, Suicide
Substance Use	Tobacco, opioid, heroin, alcohol
Community Conditions	Combine housing, transportation, and economic development
Discrimination	Discrimination based on age, disability, gender, nationality, race, religion, sexual orientation
Reproductive & Child Health	Birth outcomes, Infant mortality, maternal smoking, child mortality

Figure 40: Prioritization candidates for community prioritization voting

Community Prioritization Voting was conducted online from May 9th to May 27th, 2022 and was open to all adults living in Trumbull and Mahoning counties. In total, 844 community members participated, 253 from Trumbull and 591 from Mahoning. In both counties, a disproportionate number of respondents were women (76%). Regarding race and ethnicity, 83% of participants identified as White, compared to 10% Black/African American, and 3% Hispanic/Latino. While these demographics roughly align with the

racial/ethnic makeup of Trumbull County, Black/African American and Hispanic/Latino voices were underrepresented in priority voting in Mahoning County. The top six priorities selected by respondents in Trumbull and Mahoning County are provided in figure 45. Community members in Trumbull County voted to select the following top five priorities: Mental health (50%), Substance use (37%), Community safety (34%), Access to care (32%), Access to healthy food and physical activity (30%), and Education (24%). There was considerable alignment in priorities among respondents in both counties, apart from substance use, which was voted as a priority by 25% of respondents in Mahoning County (making it #5 in ranked priorities) compared to 37% of respondents in Trumbull County (making it #2 in ranked priorities). Among respondents who identify as Black/African American, community safety, community conditions, and education were more often selected as priorities. Among Hispanic/Latino respondents, access to care, community conditions, and mental health were more often selected.

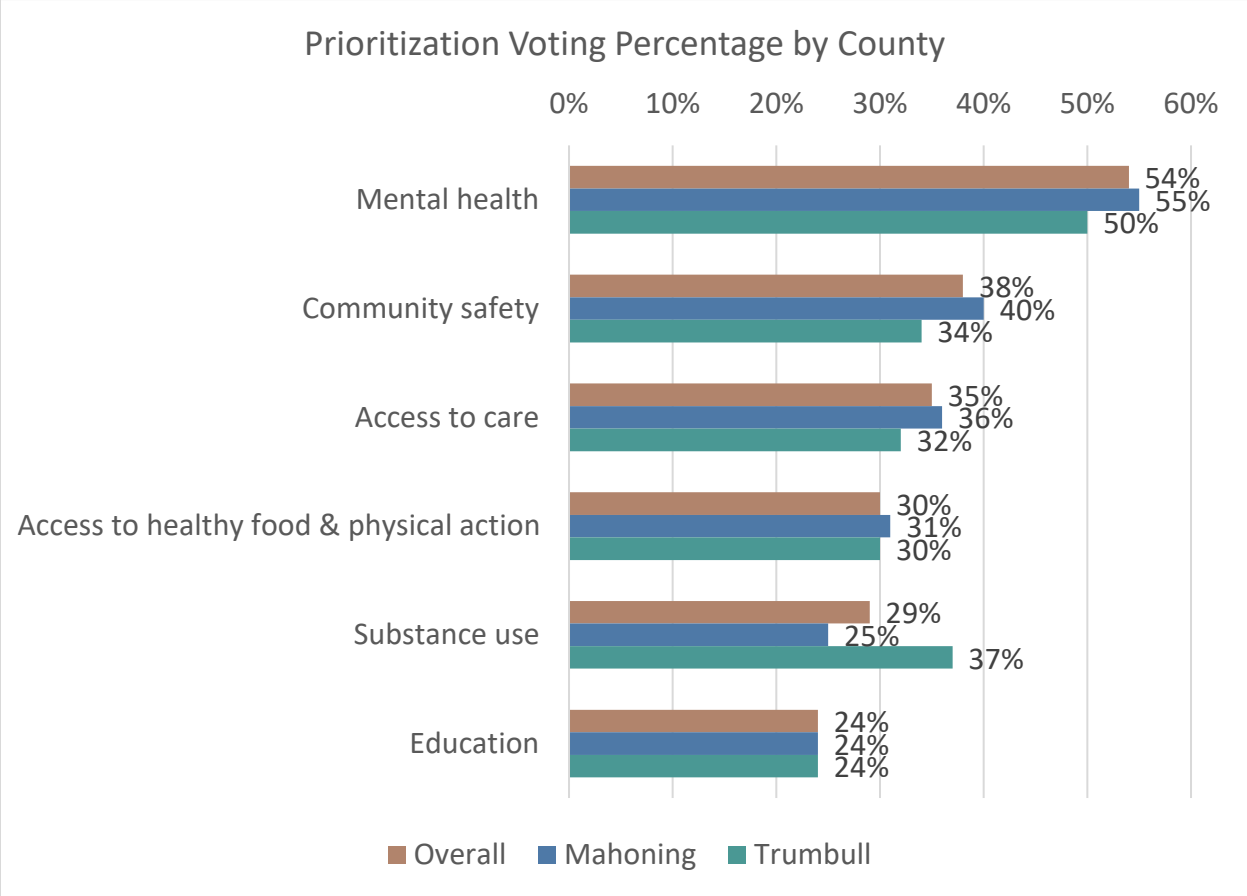


Figure 41: Prioritization candidates for community prioritization voting

On June 2nd, 2022, the steering group and additional community stakeholders met to review the prioritization voting and relevant data and to cast votes live as community representatives using the Mentimeter voting platform. Thirty-five community stakeholders from both counties in attendance cast votes, and voting results are seen in figure 46. The most votes were cast for mental health, followed by community safety, access to care, and community conditions. Further discussion suggested consensus around combining mental health and substance use as a single priority, acknowledging that there is alignment in services and existing efforts, although strategies to approach each will differ. Stakeholders

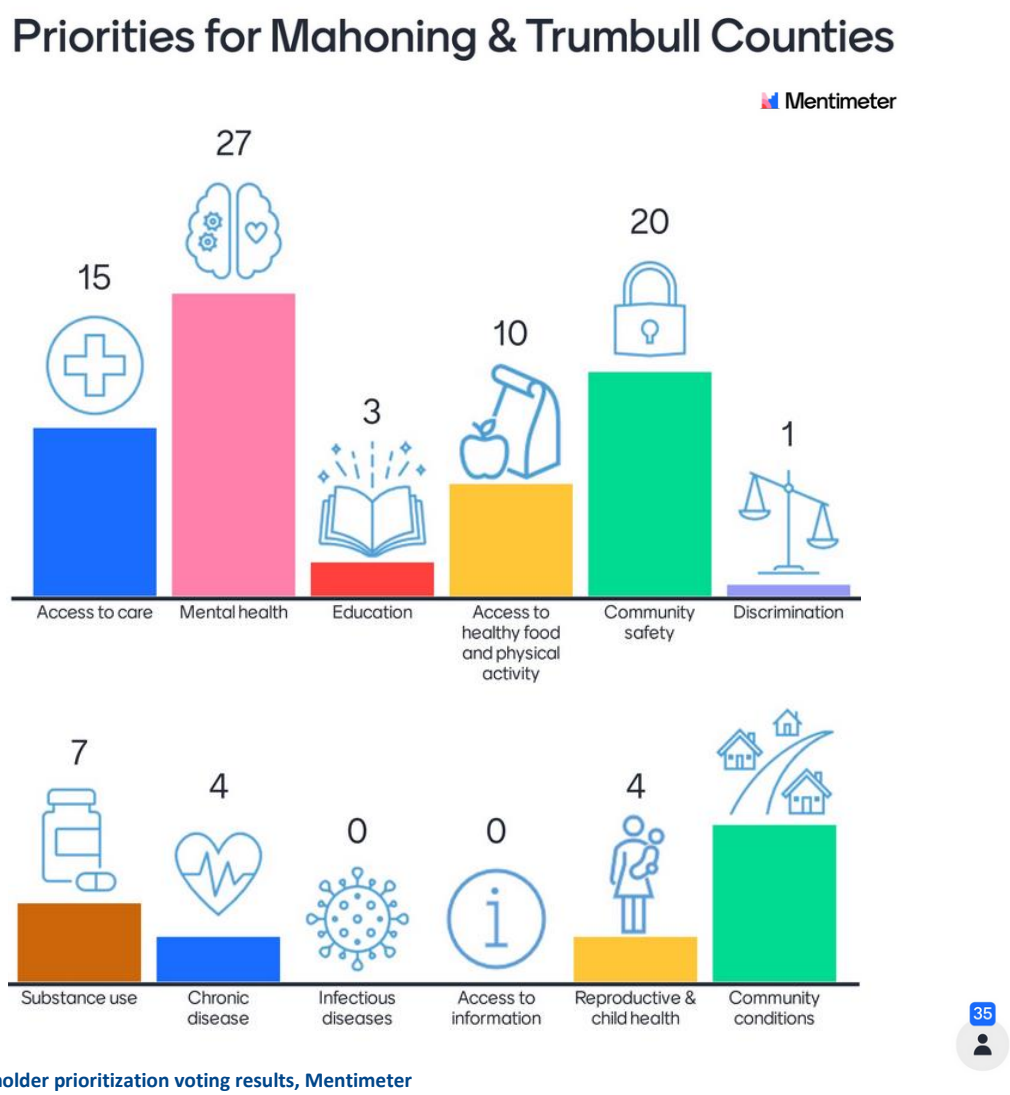


Figure 42: Stakeholder prioritization voting results, Mentimeter

also emphasized the need to center the voices of those most affected by poor outcomes in the priority selection, as well as to address root causes of health disparities.

After reviewing the community voting, the stakeholder voting, the relevant data, and the reflections from the prioritization meeting, the CHNA leadership synthesized the priority areas into three: mental health and substance use, community conditions with an emphasis on community safety, and access to care. Health equity was also identified as a cross-cutting issue to incorporate into the community health improvement planning process in all three priorities.

PRIORITIES, RESOURCES, & GAPS

The rationale for each priority, along with community resources and identified gaps are outlined below. The following summaries are intended to be used as a snapshot of the importance, needs, and assets related to each priority, and are organized in a one-page format to facilitate sharing and use in community and stakeholder outreach. Comprehensive analysis of the data collected for this assessment related to each priority is contained in the Assessment Findings chapter, and a more extensive set of resources can be found in Appendix 5.

Mental Health & Substance Use

HIGHLIGHTED RESOURCES

Trumbull County Mental Health and Recovery Board: Provides a list of local resources and contact information for providers at their website: trumbullmhrb.org

COMPASS Family and Community Services: Mental health counseling, substance use recovery, domestic violence and sexual assault, youth services. compassfamily.org

Meridian Healthcare: Integrated primary and behavioral healthcare, including mental health and substance use treatment. meridianhealthcare.net

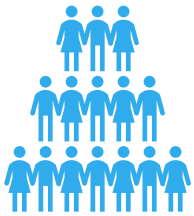
Ohio Department of Mental Health: Mental health and addiction services mha.ohio.gov. 24/7 crisis line: 1-800-720-9616. Crisis text line: text the keyword "**4hope**" to **741 741**

Help Network of Northeastern OH: Suicide Hotline – 330-747-2696

GAPS

In Community Conversations, participants highlighted the following gaps in community resources:

1. Affordable mental health services
2. Conflict-resolution and anger management
3. School-based mental health treatment
4. Resource guide for LGBTQIA+ affirming mental health counselling
5. Funding for community institutions such as churches and community centers that provide informal mental health care



Mental Health ranked as the #1 priority in community voting, both counties

Mental health ranked #1 in stakeholder prioritization voting

Across all 8 Community Conversations, mental health identified as a concern and area of need

Almost 40% of Community Health Opinion Survey respondents reported either they or a member of their household experienced feeling down or sad for more than 2 weeks in the past 6 months

National indicators of mental health, particularly youth mental health, suggest mental health may have been declining in the past two years

Substance use ranked as 5th overall priority in community voting, and #2 among Trumbull County respondents

Natural alignment of substance use and mental health because of overlapping root causes, comorbidities, and integration of service providers

Community Conditions & Safety

HIGHLIGHTED RESOURCES

Help Network of Northeast Ohio provides contact information for a variety of services from housing to food access and victims' assistance search their database by topic or location at helpnetworkneo.org

Trumbull Neighborhood Partnership: A non-profit community development corporation in Warren seeking to improve quality of life and build neighborhood capacity. tnpwarren.org

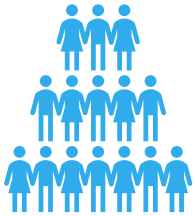
Warren Metropolitan Housing Authority: Is responsible for providing access to safe quality housing for community members. Offer a variety of assistance and education programs to community members. https://warrenmha.org/

United Returning Citizens: a non-profit serving formerly incarcerated individuals and the broader community in Youngstown, focusing on employment, financial literacy, and housing. unitedreturningcitizens.org

GAPS

In Community Conversations, participants highlighted the following gaps in community resources:

1. Local employment opportunities
2. Local investment in Black community and minority-owned businesses
3. Affordable, accessible recreational activities for youth
4. Safe housing for LGBTQIA+ community members experiencing homelessness
5. Responsive emergency and police services, trained in de-escalation



Community Conditions ranked as #4 priority among respondents who identify as Black/African American or Hispanic/Latino in community voting

Recognition by stakeholder group of how community conditions (housing, transportation, economic opportunity) drive health outcomes and may be root causes of many health disparities

Children under 5 face the highest rates of poverty at 34.6% in Mahoning and 36.2% in Trumbull; this is a higher percentage than in the state and peer counties

Community Safety ranked as #2 priority in community voting overall, and #1 among Black/African American respondents

Community Safety ranked #2 in stakeholder prioritization voting

Community safety raised as a major concern in Community Conversations, highlighting recent increase in crimes, particularly homicides; unsafe conditions for LGBTQ+ community members is a barrier to services and mental health

Access to Care

HIGHLIGHTED RESOURCES

Mercy Health: Hospital system in Mahoning and Trumbull Counties, providing primary, specialty, and emergency care. Financial assistance available for income-eligible patients www.mercy.com

Meridian Healthcare: Integrated primary and behavioral healthcare, pledged LGBTQIA+ safe zone. The Howland and Warren campuses are in Trumbull County. meridianhealthcare.net

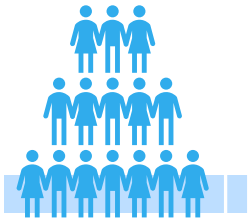
Mahoning Valley Pathways HUB: Pregnancy care coordination, culturally and linguistically appropriate services provided by community health workers www.mahoninghealth.org/mahoning-county-pathways-hub

ONE Health Ohio: A Federally Qualified Health Center with multiple locations serving both counties. https://onehealthohio.org/

GAPS

In Community Conversations, participants highlighted the following gaps in community resources:

1. Appropriate and affirming LGBTQIA+ healthcare, systems and staff that use chosen names/pronouns
2. Timely appointments for specialty care
3. Accessible healthcare for people with transportation barriers: clinics in more neighborhoods, mobile dentist truck, rural health nurse
4. Preventive services and culture of health



Access to Care ranked as #3 in community voting, and #2 among respondents who identify as Hispanic/Latino

Access to Care ranked #3 in stakeholder prioritization voting

Community Conversations highlighted access to care as an area of concern and source of inequities

Limited availability of appointments, transportation, cost of care, and lack of adequate care for LGBTQIA+ community members were cited as major barriers

Community Health Opinion Survey respondents who reported an income below $50,000 experienced more problems seeking care in the past year than higher-income respondents

Note: Resources listed are not comprehensive. Additional community resources can be found in Appendix 5 of this CHNA report.

For a centralized and up-to-date resource for community services in Mahoning and Trumbull Counties, contact the Help Network of Northeast Ohio, available 24 hours a day, by dialing 211 (TDD 330-744-0579) or visiting www.helpnetworkneo.org.

SCREEN READER ACCESSIBLE PRIORITY OVERVIEW

Mental Health & Substance Use

HIGHLIGHTED RESOURCES

Trumbull County Mental Health and Recovery Board: Provides a list of local resources and contact information for providers at their website: trumbullmhrb.org

COMPASS Family and Community Services: Mental health counseling, substance use recovery, domestic violence and sexual assault, youth services. compassfamily.org

Meridian Healthcare: Integrated primary and behavioral healthcare, including mental health and substance use treatment. meridianhealthcare.net

Ohio Department of Mental Health: Mental health and addiction services mha.ohio.gov. 24/7 crisis line: 1-800-720-9616. Crisis text line: text the keyword "**4hope**" to **741 741**

Help Network of Northeastern OH: Suicide Hotline – 330-747-2696

GAPS

In Community Conversations, participants highlighted the following gaps in community resources:

1. Affordable mental health services
2. Conflict-resolution and anger management
3. School-based mental health treatment
4. Resource guide for LGBTQIA+ affirming mental health counselling
5. Funding for community institutions such as churches and community centers that provide informal mental health care

RATIONALE:

- **Mental Health** ranked #1 priority in community voting, both counties
- Mental health ranked #1 in stakeholder prioritization voting
- Across Community Conversations, mental health identified as a concern and area of need
- Almost 40% of Community Health Opinion Survey respondents reported either they or a member of their household experienced feeling down or sad for more than 2 weeks in the past 6 months
- National indicators of mental health, particularly youth mental health, suggest mental health may have been declining in past two years
- **Substance use** ranked as 5th overall priority in community voting, but #2 among Trumbull County respondents
- Natural alignment of substance use and mental health because of overlapping root causes, comorbidities, and integration of service providers

Community Conditions & Safety

HIGHLIGHTED RESOURCES

Help Network of Northeast Ohio provides contact information for a variety of services from housing to food access and victims' assistance search their database by topic or location at helpnetworkneo.org

Trumbull Neighborhood Partnership: A non-profit community development corporation in Warren seeking to improve quality of life and build neighborhood capacity. tnpwarren.org

Warren Metropolitan Housing Authority: Is responsible for providing access to safe quality housing for community members. Offer a variety of assistance and education programs to community members. https://warrenmha.org/

United Returning Citizens: a non-profit serving formerly incarcerated individuals and the broader community in Youngstown, focusing on employment, financial literacy, and housing. unitedreturningcitizens.org

GAPS

In Community Conversations, participants highlighted the following gaps in community resources:

1. Local employment opportunities
2. Local investment in Black community and minority-owned businesses
3. Affordable, accessible recreational activities for youth
4. Safe housing for LGBTQIA+ community members experiencing homelessness
5. Responsive emergency and police services, trained in de-escalation

RATIONALE

- **Community Conditions** ranked as #4 priority among respondents who identify as Black/African American or Hispanic/Latino in community voting
- Recognition by stakeholder group of how community conditions (housing, transportation, economic opportunity) drive health outcomes and may be root causes of many health disparities
- Children under 5 face the highest rates of poverty at 34.6% in Mahoning and 36.2% in Trumbull; this is a higher percentage than in the state and peer counties
- **Community Safety** ranked at #2 priority in community voting overall, and #1 among Black/African American respondents
- Community Safety ranked #2 in stakeholder prioritization voting
- Community safety raised as a major concern in Community Conversations, highlighting recent increase in crimes, particularly homicides; unsafe conditions for LGBTQ+ community members is a barrier to services and mental health

Access to Care

HIGHLIGHTED RESOURCES

Mercy Health: Hospital system in Mahoning and Trumbull Counties, providing primary, specialty, and emergency care. Financial assistance available for income-eligible patients www.mercy.com

Meridian Healthcare: Integrated primary and behavioral healthcare, pledged LGBTQIA+ safe zone. The Howland and Warren campuses are in Trumbull County. meridianhealthcare.net

Mahoning Valley Pathways HUB: Pregnancy care coordination, culturally and linguistically appropriate services provided by community health workers www.mahoninghealth.org/mahoning-county-pathways-hub

ONE Health Ohio: A Federally Qualified Health Center with multiple locations serving both counties. https://onehealthohio.org/

GAPS

In Community Conversations, participants highlighted the following gaps in community resources:

1. Appropriate and affirming LGBTQIA+ healthcare, systems and staff that use chosen names/pronouns
2. Timely appointments for specialty care
3. Accessible healthcare for people with transportation barriers: clinics in more neighborhoods, mobile dentist truck, rural health nurse
4. Preventive services and culture of health

RATIONALE

- **Access to Care** ranked as #3 in community voting, and #2 among respondents who identify as Hispanic/Latino
- Access to Care ranked #3 in stakeholder prioritization voting
- Community Conversations highlighted access to care as an area of concern and source of inequities; limited availability of appointments, transportation, cost of care, and lack of adequate care for LGBTQ+ community members were cited as major barriers
- Community Health Opinion Survey respondents who reported an income below $50,000 experienced more problems seeking care in the past year than higher-income respondents

Note: Resources listed are not comprehensive. Additional community resources can be found in Appendix 5 of this CHNA report.

For a centralized and up-to-date resource for community services in Mahoning and Trumbull Counties, contact the Help Network of Northeast Ohio, available 24 hours a day, by dialing 211 (TDD 330-744-0579) or visiting www.helpnetworkneo.org.

CHAPTER 5: CONCLUSION & NEXT STEPS

The 2022 Community Health Needs Assessment brought together a variety of governmental, health, and community-serving organizations across Trumbull and Mahoning counties to assess the resources and challenges shaping health in the area and to prioritize topics for strategic planning for health improvement. The assessment process involved primary data collection in gathering data on the experience of community members, their health outcomes, and the contributing factors that drive those health outcomes. Primary data collection included a survey of 1,761 community members and eight community conversations with historically underserved groups (community members experiencing homelessness, Black or African American community members, community members in rural areas, LGBTQIA+ community members, and Latinx community members). Secondary data from the national and state level was used to examine trends in health outcomes over time. Throughout the assessment process, the steering committee engaged in continuous communication and collaboration, discussed metrics, planned community outreach, and participated in data synthesis. After examining the data and community votes on prioritization, the steering committee selected Mental Health and Substance Use, Access to Care, and Community Conditions with an emphasis on Safety as the priority areas for community health improvement planning in the coming years. Improvement in these areas will be driven by an effort to promote health equity across each topic.

Community health assessments are a recurring process that informs and drives community health improvement planning (CHIP). MTCHP and additional community partners and community members in Trumbull and Mahoning counties will leverage the momentum, collaborative relationships, and data from this assessment process to develop action plans for each priority area. The CHIP process will use a Results-Based Accountability approach to set measurable and actionable objectives, select evidence-based strategies, and establish an evaluation plan to track progress in each priority area for the next three years.

APPENDICES

Please see accompanying document for appendices.

REFERENCES

1. Ohio Department of Health. Ohio COVID-19 Dashboard. 2022. Accessed March 1, 2022. https://coronavirus.ohio.gov/dashboards

2. Britannica Online. Treaty of Greenville, United States-Northwest Indian Confederation [1795]. Accessed June 15, 2022. https://www.britannica.com/event/Treaty-of-Greenville

3. Walton J. The Forgotten History of Ohio's Indigenous Peoples. Midstory.org. July 16, 2020. Accessed June 15, 2022. https://www.midstory.org/the-forgotten-history-of-ohios-indigenous-peoples/

4. Data USA. Trumbull County, OH. Accessed June 15, 2022. https://datausa.io/profile/geo/trumbull-county-oh

5. Trumbull County Historical Society. The Underground Railroad. Trumbull County Historical Society - History at Home. Accessed July 5, 2022. https://www.trumbullcountyhistory.com/the-underground-railroad/

6. U.S. Census Bureau. Population Estimates Program. 2019. Accessed February 1, 2022. https://data.census.gov/cedsci/table?q=United%20States&tid=PEPPOP2019.PEPANNRES

7. Data USA. Mahoning County, OH. 2022. Accessed March 31, 2022. https://datausa.io/profile/geo/mahoning-county-oh/

8. U.S. Census Bureau. Small Area Health Insurance Estimates (SAHIE) Program. 2021. Accessed February 1, 2022. https://www.census.gov/programs-surveys/sahie.html

9. Tolbert J, Orgera K, Damico A. Key Facts about the Uninsured Population | KFF. November 6, 2020. Accessed June 8, 2022. https://www.kff.org/uninsured/issue-brief/key-facts-about-the-uninsured-population/

10. U.S. Census Bureau. 2015-2019 American Community Survey 5-year Estimates. 2021. Accessed February 1, 2022. https://data.census.gov/cedsci/all?d=ACS%205-Year%20Estimates%20Data%20Profiles

11. Ohio Department of Medicaid. Medicaid Managed Health Care Monthly Enrollment Reports. 2021. Accessed March 1, 2022. https://medicaid.ohio.gov/stakeholders-and-partners/reports-and-research/mmhc-monthly-enrollment-reports

12. University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps 2017. 2017. Accessed January 28, 2022. https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation/national-data-documentation-2010-2019

13. University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps 2021. 2021. Accessed January 31, 2022. https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation

14. *Gender-Affirming Care and Young People*. Office of the Assistant Secretary for Health Office of Population Affairs; 2022. Accessed June 9, 2022. https://opa.hhs.gov/sites/default/files/2022-03/gender-affirming-care-young-people-march-2022.pdf

15. The Trevor Project. Gender-Affirming Care for Youth. January 29, 2020. Accessed June 9, 2022. https://www.thetrevorproject.org/research-briefs/gender-affirming-care-for-youth/

16. NBC4 WCMH-TV. Ohio lawmakers to debate bill to ban gender-affirming care for LGBTQ+ youth. May 19, 2022. Accessed June 9, 2022. https://www.nbc4i.com/news/your-local-election-hq/ohio-lawmakers-to-debate-bill-to-ban-gender-affirming-care-for-lgbtq-youth/

17. U.S. Environmental Protection Agency. Air Data: Annual Summary Data. Accessed January 18, 2022. https://aqs.epa.gov/aqsweb/airdata/download_files.html

18. New York State Department of Health. Fine Particles (PM 2.5) Questions and Answers. February 2018. Accessed May 16, 2022. https://www.health.ny.gov/environmental/indoors/air/pmq_a.htm#:~:text=How%20can%20PM2.5%20affect,nose%20and%20shortness%20of%20breath.

19. Centers for Disease Control and Prevention. Lead Levels in Children Fact Sheet. May 3, 2022. Accessed May 9, 2022. https://www.cdc.gov/nceh/lead/docs/lead-levels-in-children-fact-sheet-508.pdf

20. Ohio Department of Health. Ohio Public Health Information Warehouse: Lead Data . 2021. Accessed March 1, 2022. https://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/LeadData

21. Dieter CA, Linsey KS. Estimated Use of Water in the United States County-Level Data for 2015. *US Geological Survey*. Published online 2017. doi:10.5066/f7tb15v5

22. University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps 2020. 2020. Accessed January 31, 2022. https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation/national-data-documentation-2010-2019

23. U.S. Census Bureau. 2016-2020 American Community Survey 5-year Estimates. 2022. Accessed April 1, 2022. https://data.census.gov/cedsci/all?d=ACS%205-Year%20Estimates%20Data%20Profiles

24. Heaps W, Abramsohn E, Skillen E. Public Transportation In The US: A Driver Of Health And Equity | Health Affairs. Health Affairs. July 29, 2021. Accessed May 19, 2022. https://www-healthaffairs-org.libproxy.lib.unc.edu/do/10.1377/hpb20210630.810356/full/

25. U.S. Department of Agriculture. USDA ERS Food Environment Atlas. October 9, 2020. Accessed January 31, 2022. https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads/

26. Office of Disease Prevention and Health Promotion. Quality of Housing | Healthy People 2020. Healthy People 2020. Accessed May 20, 2022. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/quality-of-housing

27. U.S. Department of Housing and Urban Development. Point-in-Time Estimates. 2022. Accessed March 1, 2022. https://www.hudexchange.info/resource/3031/pit-and-hic-data-since-2007/

28. U.S. Department of Housing and Urban Development (HUD). Consolidated Planning/Comprehensive Housing Affordability Strategy (CHAS) Data. 2021. Accessed March 1, 2022. https://www.huduser.gov/portal/datasets/cp.html

29. Ohio Department of Education. Ohio School Report Cards. 2021. Accessed March 1, 2022. https://reportcard.education.ohio.gov/download

30. Ohio Department of Education. Enrollment Data. 2021. Accessed March 1, 2022. https://education.ohio.gov/Topics/Data/Frequently-Requested-Data/Enrollment-Data

31. County Health Rankings & Roadmaps. What Works? Social and Economic Opportunities to Improve Health for All. September 2018. Accessed April 11, 2022. https://www.countyhealthrankings.org/reports/what-works-social-and-economic-opportunities-to-improve-health-for-all

32. National Academies of Sciences, Engineering, and Medicine. A Roadmap to Reducing Child Poverty. 2019. Accessed June 6, 2022. https://www.ncbi.nlm.nih.gov/books/NBK547361/pdf/Bookshelf_NBK547361.pdf

33. Ohio Job and Family Services. Ohio Labor Market Information: Unemployment. 2021. Accessed March 1, 2022. https://ohiolmi.com/

34. Economic Policy Institute. State unemployment by race and ethnicity. May 2022. Accessed June 6, 2022. https://www.epi.org/indicators/state-unemployment-race-ethnicity/

35. Gundersen C, Dewey A, Engelhard E, Strayer M, Hake M. Map the Meal Gap 2021: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2019. Feeding America. 2021. Accessed February 27, 2022. https://www.feedingamerica.org/sites/default/files/2020-06/Map%20the%20Meal%20Gap%202020%20Combined%20Modules.pdf

36. Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry/ Geospacial Research, Analysis, and Services Program. CDC/ATSDR Social Vulnerability Index. 2018. Accessed March 1, 2022. https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html

37. Robert Wood Johnson Foundation. Violence, Social Disadvantage, and Health. May 2012. Accessed May 1, 2022. http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70452

38. Ohio Office of Criminal Justice Services. Ohio Incident-Based Reporting System (OIBRS): Crime in Ohio Reports. 2022. Accessed March 1, 2022. https://dpsoibrspext.azurewebsites.net/

39. Centers for Disease Control and Prevention. Data and Statistics - Sleep and Sleep Disorders. 2017. Accessed June 13, 2022. https://www.cdc.gov/sleep/data_statistics.html

40. Centers for Disease Control and Prevention. PLACES: Local Data for Better Health, County Data 2021 release | Chronic Disease and Health Promotion Data & Indicators. 2021. Accessed March 1, 2022. https://chronicdata.cdc.gov/500-Cities-Places/PLACES-Local-Data-for-Better-Health-County-Data-20/swc5-untb

41. Centers for Disease Control and Prevention. Key Facts About Seasonal Flu Vaccine. 2021. Accessed June 14, 2022. https://www.cdc.gov/flu/prevent/keyfacts.htm

42. U.S. Food and Drug Administration. FDA Approves First COVID-19 Vaccine. August 23, 2021. Accessed June 14, 2022. https://www.fda.gov/news-events/press-announcements/fda-approves-first-covid-19-vaccine

43. Centers for Disease Control and Prevention. CDC COVID Data Tracker. September 3, 2022. Accessed March 9, 2022. https://covid.cdc.gov/covid-data-tracker/#county-view?list_select_state=all_states&list_select_county=all_counties&data-type=CommunityLevels

44. World Health Organization. Physical activity. 2018. Accessed June 14, 2022. https://www.who.int/news-room/fact-sheets/detail/physical-activity

45. Centers for Disease Control and Prevention. Only 1 in 10 Adults Get Enough Fruits or Vegetables. November 16, 2017. Accessed June 14, 2022. https://www.cdc.gov/media/releases/2017/p1116-fruit-vegetable-consumption.html

46. Ohio Department of Health. Ohio Public Health Information Warehouse: Mortality . 2021. Accessed March 1, 2022. https://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/Mortality

47. Ohio Department of Health. Sexually Transmitted Diseases Surveilance Program. 2021. Accessed February 28, 2022. https://odh.ohio.gov/know-our-programs/std-surveillance/data-and-statistics/sexually-transmitted-diseases-data-and-statistics

48. Ohio Department of Health. HIV Surveilance Program. 2021. Accessed February 28, 2022. https://odh.ohio.gov/know-our-programs/hiv-aids-surveillance-program/data-and-statistics

49. Ohio Department of Health. Viral Hepatitis Surveilance Program. 2021. Accessed March 1, 2022. https://odh.ohio.gov/know-our-programs/viral-hepatitis/data-statistics

50. Centers for Disease Control and Prevention. About Chronic Diseases | CDC. National Center for Chronic Disease Prevention and Health Promotion. May 6, 2022. Accessed May 26, 2022. https://www.cdc.gov/chronicdisease/about/index.htm#:~:text=Chronic%20diseases%20are%20defined%20broadly,disability%20in%20the%20United%20States.

51. Ohio Department of Health. Ohio Public Health Information Warehouse: Cancer Incidence. 2021. Accessed February 27, 2022. https://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/StateLayoutLockdownCancers

52. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Annual Survey Data. 2021. Accessed February 28, 2022. https://www.cdc.gov/brfss/annual_data/annual_data.htm

53. Centers for Medicare & Medicaid. Centers for Medicare & Medicaid Services Data: Chronic Conditions. 2021. Accessed February 1, 2022. https://data.cms.gov/medicare-chronic-conditions

54. Tikkanen R, Gunja MZ, FitzGerald M, Zephyrin L. Maternal Mortality Maternity Care US Compared 10 Other Countries | Commonwealth Fund. The Commonwealth Fund. November 18, 2020. Accessed June 30, 2022. https://www.commonwealthfund.org/publications/issue-briefs/2020/nov/maternal-mortality-maternity-care-us-compared-10-countries

55. Ohio Department of Health. Ohio Public Health Information Warehouse: Birth Residence. 2021. Accessed March 1, 2022. https://publicapps.odh.ohio.gov/EDW/DataBrowser/Browse/OhioLiveBirths

56. Artiga S, Pham O, Orgera K, Ranji U. Racial Disparities in Maternal and Infant Health: An Overview – Issue Brief – 9577 | KFF. November 10, 2020. Accessed June 30, 2022. https://www.kff.org/report-section/racial-disparities-in-maternal-and-infant-health-an-overview-issue-brief/#:~:text=The%20primary%20causes%20of%20infant,women%20(10.8%20and%209.4%20vs.

57. Centers for Disease Control and Prevention. Mental Health. May 6, 2022. Accessed June 9, 2022. https://www.cdc.gov/mentalhealth/index.htm

58. U.S. Department of Health and Human Services. Who is eligible for Medicare? | HHS.gov. September 11, 2014. Accessed June 9, 2022. https://www.hhs.gov/answers/medicare-and-medicaid/who-is-eligible-for-medicare/index.html

59. Centers for Disease Control and Prevention. Binge Drinking. January 6, 2022. Accessed June 2, 2022. https://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm

60. University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps 2018. 2018. Accessed January 27, 2022. https://www.countyhealthrankings.org/explore-health-rankings/rankings-data-documentation/national-data-documentation-2010-2019

61. *Tobacco Use Among Adults in Ohio, 2020 Highlights of the Ohio Adult Tobacco Survey* . Ohio Department of Health; 2020. Accessed May 27, 2022. https://beltss.ohio.gov/wps/wcm/connect/gov/50862cd5-fd6b-4819-8706-108e73fa17e0/2020+ATS+Brief+Final.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_K9I401S01H7F40QBNJU3SO1F56-50862cd5-fd6b-4819-8706-108e73fa17e0-n-dxi6R

62. Centers for Disease Control and Prevention. Health Effects, Smoking & Tobacco Use. 2014. Accessed June 14, 2022. https://www.cdc.gov/tobacco/basic_information/health_effects/index.htm

63. Ohio Department of Health. Tobacco use Highlights from the 2019 Ohio Youth Risk Behavior Survey/Youth Tobacco Survey. February 2020. Accessed May 18, 2022. https://odh.ohio.gov/wps/wcm/connect/gov/b17cb12d-8de9-4fc5-96b0-26ced4f5ccb3/YRBS_YTS+Governor+Report_final_02.24.2020_.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_K9I401S01H7F40QBNJU3SO1F56-b17cb12d-8de9-4fc5-96b0-26ced4f5ccb3-n-dwE8o

64. State of Ohio Board of Pharmacy. Ohio Automated Rx Reporting System. 2021. Accessed March 1, 2022. https://www.ohiopmp.gov/Stats.aspx

65. Ohio Hospital Association. OHA Overdose Data Sharing Program. 2022. Accessed March 1, 2022. https://ohiohospitals.org/Patient-Safety-Quality/Statewide-Initiatives/Opioid-Initiative/OHA-Overdose-Data-Sharing-Program