



HIGHLAND COUNTY  
Healthcare  
Collaborative

Community Health Needs Assessment  
**November 2022**



**Public Health**  
Prevent. Promote. Protect.

**Highland County  
Health Department**

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Adena Health System, a member agency of the Highland County Health Collaborative, also contracted with the Hospital Council of Northwest Ohio to review and validate the secondary data for this assessment.

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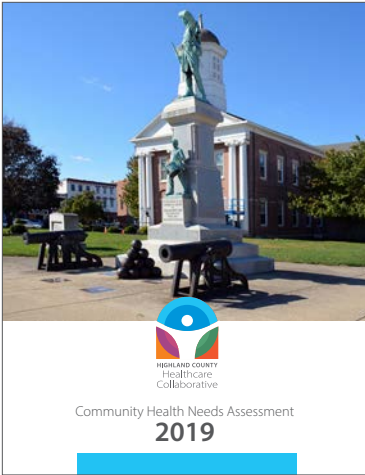
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### **Secondary Data Collection**

Healthcare Coalition of Northern Ohio

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## EXECUTIVE SUMMARY

### What is the Highland County Community Health Assessment?

A community health assessment (sometimes called a “CHA”), is a comprehensive and systematic data collection and analysis process, designed to inform communities about top health needs and priorities, in order to drive effective planning that results in positive change. Evidence-based practice indicates that multisector collaborations should support shared ownership of all phases of community health improvement, including assessment, planning, investment, implementation, and evaluation, to realize healthy communities. The Highland County Health Coalition completed its last assessment in 2019. The previous assessment was reviewed and updated in 2022, with additional data sets added to improve community knowledge and capacity to improve health.

### How was the CHA developed?

The Highland County Health Collaborative utilized the CDC and NACCHO’s Mobilizing Action through Planning and Partnership (MAPP) strategy for the 2022 assessment. MAPP is a six-phase process that guides the assessment of the community’s health needs, as well as the development of a community health improvement plan (CHIP). The assessment portion of the process includes a four-part strategy focused on collecting qualitative and quantitative data from both primary and secondary sources to identify community themes and strengths, community health status, and forces of change in the community, as well as to assess the local public health system. A total of 524 public surveys were obtained from the general public. Input on survey design was provided by a multisector collaborative group of Highland County representatives, including members of the general public, local businesses, government agencies, and organizations. In addition, demographic, socio-economic, health outcomes, and factors data were also obtained to create the assessment.

### How has the 2022 CHA been improved since the last assessment?

The 2022 CHA improves upon the 2019 CHA with the following additions:

- Questions specific to COVID-19 response in Highland County
- Additional survey questions that address adverse childhood events
- Additional data analysis of sub-group analysis of tobacco users and health outcomes based on reported income.



Figure 1: MAPP Four-Part Comprehensive Assessment Process

### Key Findings

The 2022 CHA process included review of the assessments completed in 2019, as well as current Robert Woods Johnson (RWJ) County Health Rankings to outline any trends impacting public health.

In 2022, health outcomes and health factors for Highland County continued to be in the lowest quartile of the state. In a reversal from recent trends, the health factors ranking for Highland County dropped to 82. Health outcomes increased to 69 out of 88 counties, continuing a significant improvement in health outcomes since 2019, when Highland was ranked 79 out of 88 counties.

	Year								
RWJ Rankings	2014	2015	2016	2017	2018	2019	2020	2021	2022
Health Outcomes	79	78	78	80	81	79	74	66	69
Health Factors	77	82	81	82	73	70	67	76	82

Table 1: RWJ County Health Rankings

In addition to RWJ County Health Rankings data, the CHA process collected input on forces of change that impact the community, feedback on the functioning of our local public health system, and community themes and strengths. Feedback from those assessments form an important foundation for the CHA document, and provide input to many public health system planning efforts.

Other data information used in the assessment was secondary data for Highland County and was collected by Healthcare Coalition of Northern Ohio. Secondary data is used to further analyze current community health conditions.

While most of the data continues to be consistent with the 2019 assessment and plan, several changes can be noted. The population of Highland County continues to decline. Median household income levels continue to be significantly below Ohio averages, with Highland County earning \$3,200 per household less than the Ohio average. Childhood poverty also continue to be at rates significantly higher than state averages. The average life expectancy in Highland County is 75.5 years, compared to a state average of 76.5 years.

Adult smoking rates are considerably higher than states averages. Those responses will be reviewed in more detail later in this report.

Primary and secondary data was collected and summarized from each of the four assessment categories; the results were analyzed to identify opportunities to improve the health of Highland County, and will be integral to the development of the Highland County Community Health Improvement Plan.

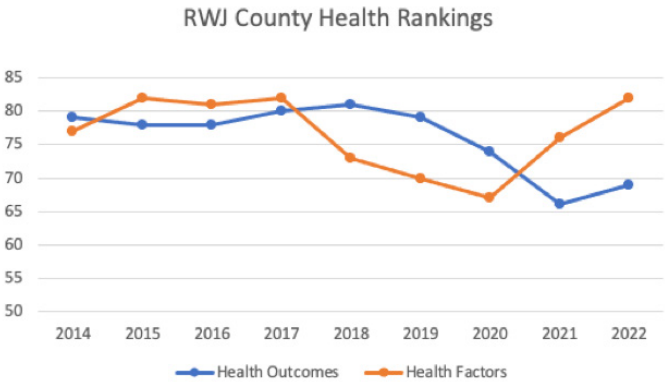
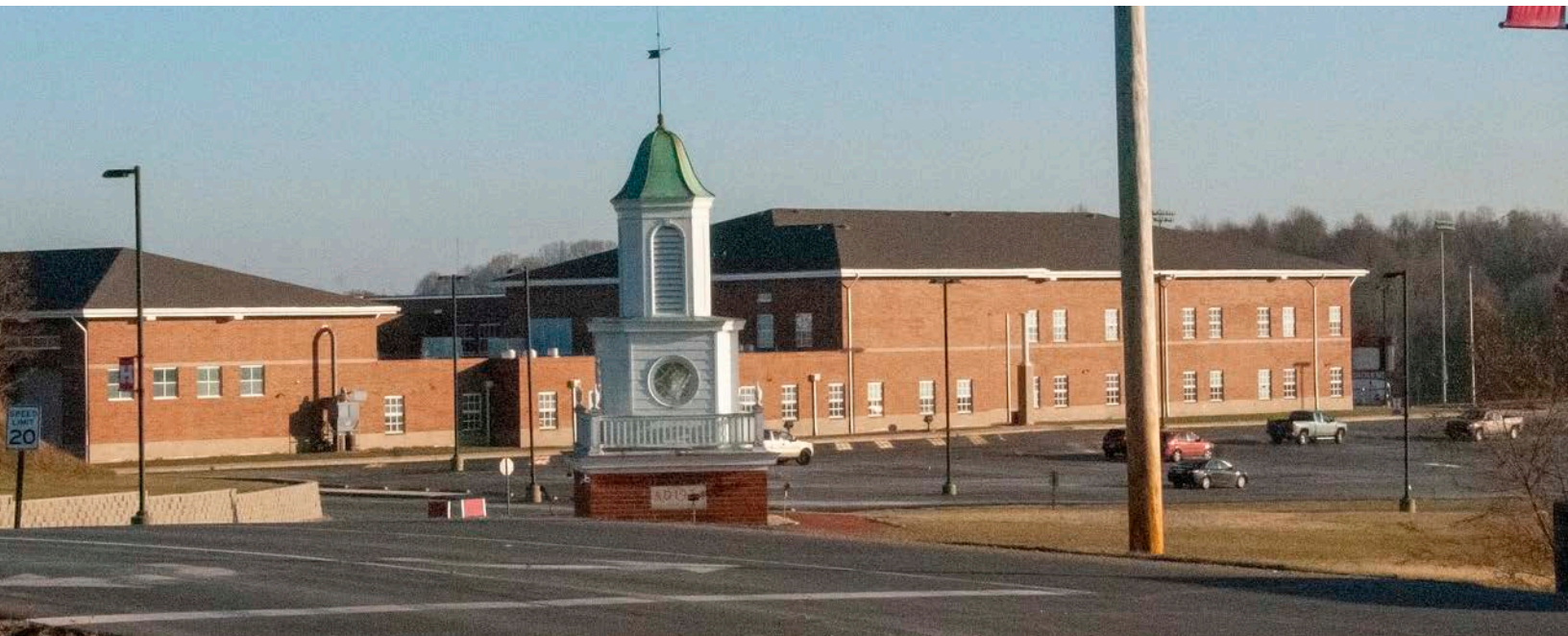


Figure 2: RWJ County Health Rankings - 2014-2022



## PURPOSE AND OVERVIEW

### Introduction

The term “health” embodies a multi-faceted concept, particularly from a community perspective. An individual’s health is measured by the presence and/or severity of illness; whether they engage in behaviors that are a risk to their health; and if so, the length of time the behavior has occurred. It can also be measured by asking individuals to report their personal perception of their overall health. The health of an entire community is measured by collecting and compiling data from individuals, and using individual data to establish community trends. Commonly used measurements of population health status are morbidity (incidence and prevalence of disease) and mortality (death rates). Socioeconomic data is usually included, as it relates to the environment in which individuals live. A particular population’s level of health is usually determined by comparing it to other populations or by looking at health related trends over time.

Everyone in a community has a stake in health. Poor health is costly to people trying to maintain employment, and employers pay for poor community health via high rates of absenteeism and higher health insurance costs. Entire communities

can suffer economic loss when groups of citizens are ill. As a result, everyone benefits from addressing determinants of social, environmental, economic, and behavioral health determinants.

Health status is closely related to a number of socioeconomic characteristics. Individuals of various socioeconomic status show different levels of health and incidence of disease, while race and culture matter in complex ways. Social and economic variables that have been shown to impact health include income, education, and employment, as well as literacy, language, and culture.

Obtaining information and perceptions from community members is one of the most important aspects of the community health needs assessment. It involves surveying a percentage of the community to determine those health issues that are most prevalent, as well as to solicit ideas concerning strategies to address those problems. Data gathering also explores the factors that impact the design of programs and services to effectively address the identified health problems on a broader scope.

## Influence of Healthy People 2030

In addition to collecting specific and direct population health data, surveys are also conducted to identify the forces of change, community strengths, community weaknesses, and other factors that indirectly influence health outcomes. The public health survey used in this assessment was designed with the desired health metrics for Healthy People 2030.

The United States Department of Health and Human Services established five overarching health goals for the year 2030:

1. *Attain healthy, thriving lives and well-being free of preventable disease, disability, injury, and premature death.*
2. *Eliminate health disparities, achieve health equity, and attain health literacy to improve the health and well-being of all.*
3. *Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all.*
4. *Promote healthy development, healthy behaviors, and well-being across all life stages.*
5. *Engage leadership, key constituents, and the public across multiple sectors to take action and design policies that improve the health and well-being of all.*

To achieve those goals, a comprehensive set of objectives was established (Healthy People 2030), with 23 leading health indicators arranged with 358 objectives to measure health over a 10-year period. Indicators were selected for their ability to motivate action, the availability of data to measure progress, and their importance as health issues for the public. Review of Healthy People 2030 influenced the development of the Highland County Health Collaborative's 2022 Community Health Needs Assessment.

## Healthy People 2030 Objectives and Measures



Figure 3: 2030 Healthy People Objectives and Measures



# Healthy People 2030 Leading Health Indicators (LHIs)

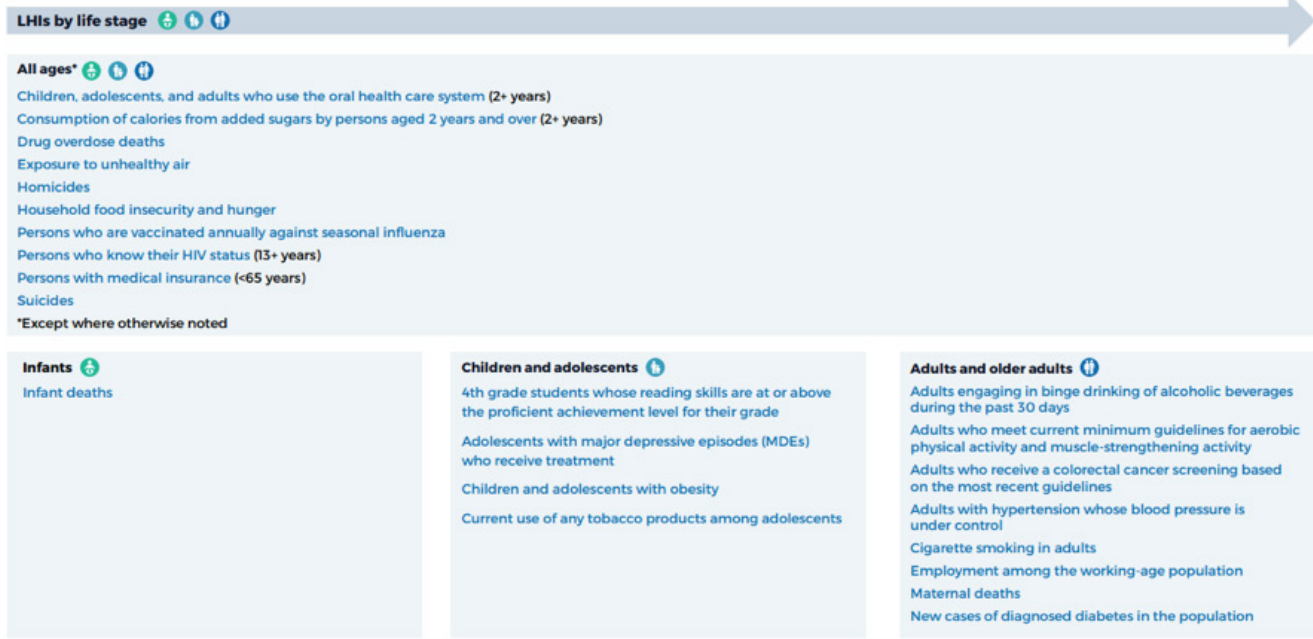


Figure 4: 2030 Healthy People 2030 Leading Health Indicators

The Ohio Department of Health has aligned statewide community health planning with the Healthy People 2030 approach. With the long-term goal of ensuring that all Ohioans achieve their full health potential, the Ohio state health improvement plan (SHIP) takes a comprehensive approach to achieving equity and addressing the many factors that shape our health, including housing, poverty, education, and trauma (Figure 4). The SHIP is a tool to strengthen state and local efforts to improve health, well-being, and economic vitality in Ohio. The Partners for a Healthier Ross County have aligned several local CHIP priorities with the SHIP. The SHIP's main components are:

- Six priorities, including three factors and three health outcomes
- 37 measurable objectives
- A menu of evidence-informed strategies
- An evaluation plan to track and report progress

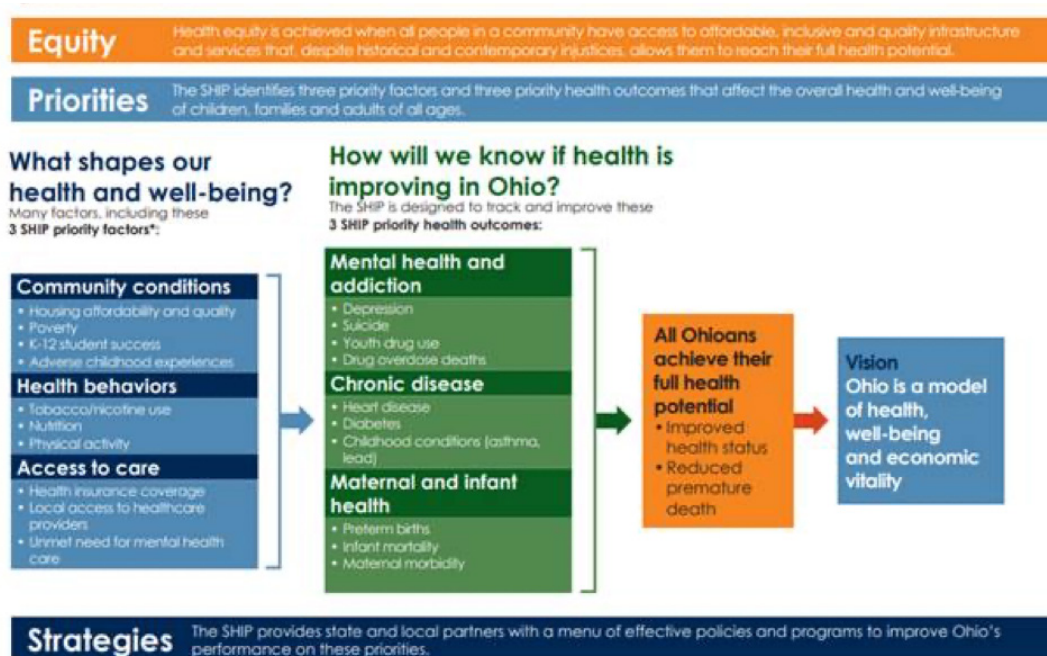


Figure 5: Ohio SHIP Plan

## Highland County Health Collaborative

The Highland County Health Collaborative is a community-based group whose efforts are aimed at improving the quality of life of Highland County residents. The coalition will continue its collaboration in 2022 for the completion of an updated assessment and strategic plan. The collaborative is structured with a steering committee and subcommittees focused on specific health priorities, with representation from:

- Corner Pharmacy
- Community members
- Highland County Probation Department
- Adena Health System
- Highland County Community Action
- Highland County Chamber of Commerce
- Highland County Emergency Management Agency
- Highland District Hospital
- Paint Valley ADAMH Board
- Bright Local School District
- Greenfield Village Exempted School District
- Adena-Greenfield Medical Center
- Highland County Health Department
- Highland County Board of Developmental Disabilities

For the 2022 CHA, the Highland County Health Collaborative utilized the data-driven Mobilizing Action for Planning and Partnership (MAPP) process developed by the National Association of City and County Health Officials (NACCHO) and the Centers for Disease Control (CDC). The six-phase process includes a four-part community health needs assessment, as well as an in-depth analysis of current community trends, gaps, and resources with which to comprehensively evaluate the current state of health in Highland County and to prioritize key public health issues. That data will be used to develop the community health strategic plan.

## MOBILIZING ACTION FOR PLANNING AND PARTNERSHIP (MAPP)

### Process

The 2022 Community Health Needs Assessment was completed through a comprehensive process of data collection and evaluation utilizing the MAPP process. The data for this report reflects Highland County only. Both qualitative and quantitative data were collected from primary and secondary sources. Data was collected in a total of four categories (Figure 5): Community Themes and Strengths; Local Public Health System; Community Health Status; and Forces of Community Change.

The completed assessment is intended to inform decision makers and funders about the challenges Highland County faces in improving community health and the priority areas in which support is most needed. The information is also intended to be useful as a planning tool for community organizations.

### Methods

Both quantitative and qualitative methods were used to collect information for the assessment. Quantitative data collected includes demographic data for the county's population, vital statistics such as birth and death rates, and disease prevalence for the county as a whole. Qualitative data for this report was collected to provide greater insight to the issues experienced by the population. Data includes opinions expressed from a widely distributed community health survey, which received 524 responses.

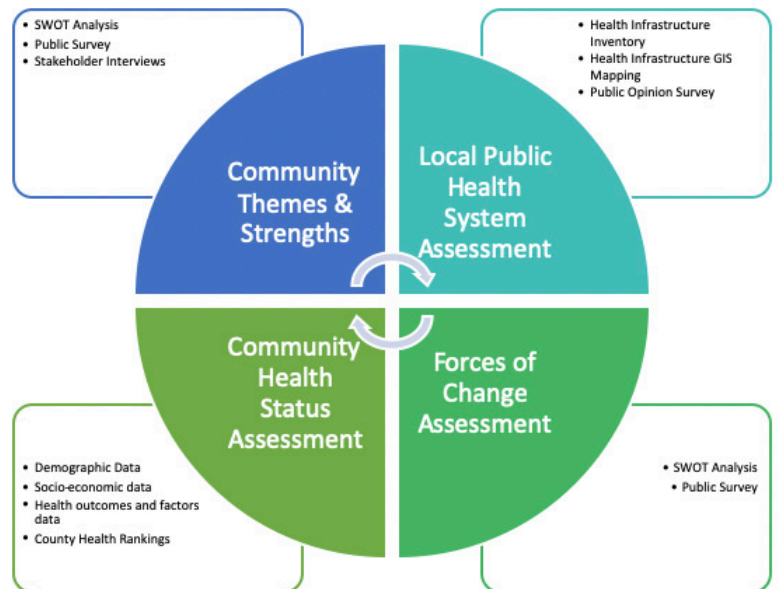
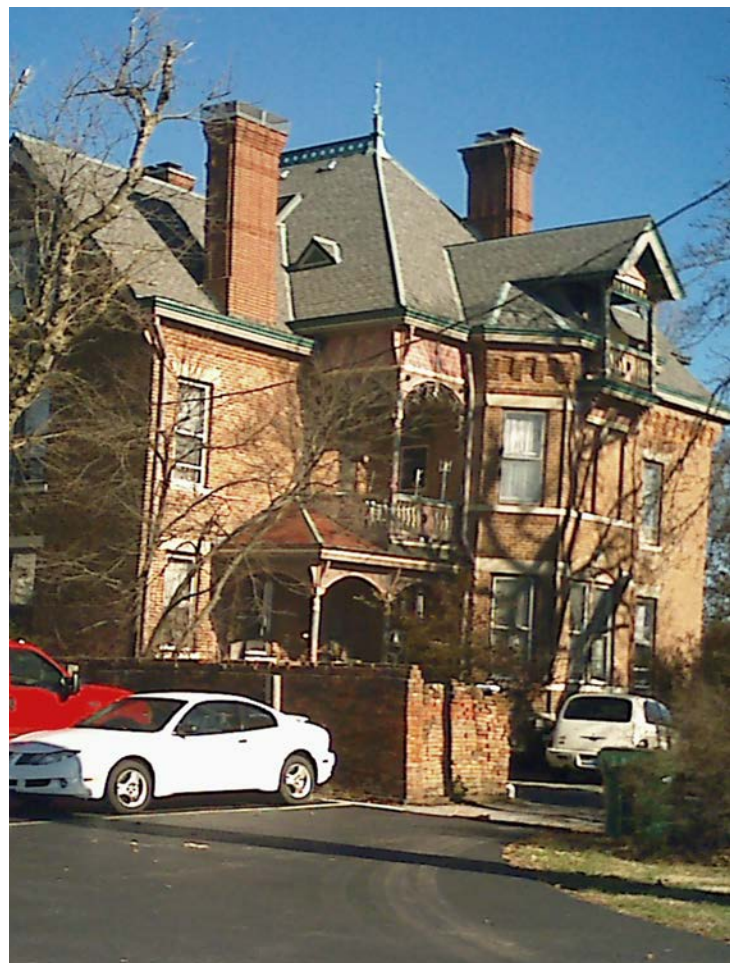


Figure 6: MAPP Four-Part Comprehensive Assessment Process



## Sources of Information

Primary and secondary data sources were used as part of the needs assessment and originated from both internal and external sources. Internal data came from within the health system/hospital (patient population data) and external sources from outside the health system/hospital (county and state). The primary data gathered includes new information that may be used to investigate and help solve a problem, such as the percentage of survey participants who ranked obesity as a top-10 health problem. Secondary data are the statistics and other data already published or reported to government agencies, such as childhood obesity rates.

### Secondary Data: Publicly-Available Statistics

Existing data were collected from all applicable local, state, and federal agency sources, including public health agencies (e.g., Ohio Department of Health, Ohio Department of Job and Family Services, U.S. Department of Labor, U.S. Census Bureau). Data included demographics, economic and health status indicators, and service capacity/availability. Local data on health infrastructure, including an inventory of all healthcare providers, nutrition, fitness, and social support was also taken as part of the public health system review and subsequently mapped, utilizing GIS technology to create a visual of health resource gaps in the community. That was also compared with local health system population health data to identify disparities in resource availability.

While data at the national and state level are generally available for community health-related indicators, local data (e.g., counties and cities) are less accessible and sometimes less reliable. Some data from publicly available sources also typically lags by at least two years, because it takes time for reported data to be received, reviewed, approved, analyzed, and prepared for presentation.

### Primary Data: Community Input

A community survey was the primary method used in the assessment process for collecting input.

## Community Questionnaire

A questionnaire was developed for the general public, which queried respondents about the most important health needs, common barriers, and habits they used to maintain their own personal health. The survey was distributed in hard-copy by member agencies and community partners to a variety of locations where the groups of interest would best be reached in Highland County. Those included local food banks, social service providers, community health clinics, public health department, and Adena Health System physician offices. In addition, the survey was made available broadly through an electronic survey. Notices about the online version with its link were posted on member agency's websites, social media pages, local media outlet pages, and emailed to members of local business, government, civic groups, schools, and colleges.

### Limitations

Conducting community health assessments and the other MAPP assessments in a rural community can be difficult and can lead to significant limitations to data collection, the reliability of survey results, and the ability of the health department to use survey results to drive future health department activities.

#### Limitations to the 2022 CHA survey:

- Limited interaction from male members of the population.
- Reliance on online survey tools to collect data, which can be a barrier to some in the community.
- Low overall community literacy rates, which could lead to some difficulty with understanding survey questions.
- Potential oversampling of health department clients as a result of increased exposure to social media outreach.
- Limited ability (self-reported) to verify that survey responses were provided from actual Highland County residents.

## 2019 CHIP PROGRESS REPORT

The Highland County General Health District coordinated the last community health assessment and improvement plan in partnership with the Highland County Health Collaborative in 2019. As part of the 2019 CHA, the coalition identified great need around a number of local health issues, systems improvements, the creation of collaborations, and resources to increase community capacity to improve health.

### Process

The Community Health Improvement Plan (CHIP) was developed in cooperation with the Highland County Health Collaborative. Due to consistently low ratings in the County Health Rankings over the last five years, the Highland County Health Collaborative has been working with PCHC to develop priorities and to strategize desired outcomes.

The Highland County Health Collaborative integrated a framework to distinguish CHIP priorities. The Mobilizing for Action through Planning and Partnerships (MAPP) framework is a community-driven strategic planning tool for improving community health. The six MAPP phases are organizing, visioning, assessments, strategic issues, goals/strategies, and action cycle.

### Priorities

In August 2019, the Highland County Health Collaborative finalized the priorities for the CHIP. The Highland County General Health District was instrumental to the process; as county priorities were aligned with the State Health Improvement Plan (SHIP). Those priorities were also based upon the survey that Highland County residents completed as part of the Community Health Assessment. The SHIP priorities consisted of: mental health and substance abuse, chronic disease, and maternal and infant health.

Aligning with the SHIP priorities, the following health factors were selected:

- Illegal Substance Abuse
- Mental Health
- Obesity, Physical Activity, and Nutrition
- Chronic Disease
- Child Fatality
- Tobacco Use



## COVID-19 IMPACT TO COMMUNITY HEALTH ASSESSMENT AND PLAN

It should be noted that the 2019 CHNA was completed in December 2019. By the end of the first quarter of efforts to update the CHIP and continue with initiatives, the COVID-19 pandemic forced an immediate re-prioritization of community health needs, with a sole focus on preventing deaths and hospital surges. Such focus was maintained well into 2021, with efforts re-centering on the 2019 CHNA at the beginning of 2022.

Although not a great deal of progress was made on the 2020 CHIP that was developed from the 2019 CHA, there was some progress in areas, as the community began to transition into a COVID-19 endemic at the end of 2021 and into 2022. The following outlines the 2019 health priorities, as well as the goals and objectives and the progress made.

**Highland County Community Health Improvement Plan Action Plan**

**Priority Area:** Illegal Substance Abuse

**Goal: Reduce unintentional overdose deaths in Highland County to less than 17 per 100,000 (less than eight overdose deaths per year) by January 1, 2019.**

Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress to Date
<p><b>Objective 1.1: Reduce unintentional drug overdose deaths.</b></p>	<p>Distribute at least 200 naloxone kits in 2018.</p>	<p>January 1, 2018 to December 31, 2018.</p>	<p>Health department maintains inventory of naloxone distributed.</p>	<p>11/2019: Over 200 naloxone kits have been distributed at more than 25 separate events.  Highland County Sheriff, Hillsboro Police Department, Lynchburg Police Department, and Leesburg Police Department are now carrying naloxone kits.  10/2022: Highland County Quick Response Team (QRT) has taken over the majority of naloxone distribution to community members and organizations in Highland County. The Highland County Health Department has worked closely with government partners, including the Highland County Court system, to provide naloxone to those agencies.</p>
<p>Support the implementation of a quick opioid overdose response team.</p>	<p>Support the implementation of a quick opioid overdose response team.</p>	<p>Implementation by January 1, 2018</p>	<p>Process established and put into place.  First referral of overdose survivor to QRT occurs.</p>	<p>11/2019: Quick response team has been established in Highland County and is actively interacting with overdose victims. Reach for Tomorrow is heading the initiative.</p>

				<p>10/2022: QRT continues to respond to drug overdose reports on a regular basis and connecting people to services that may help them address substance abuse issues.</p>
	<p>Increase the number of prescription medication drop boxes.</p>	<p>July 1, 2019</p>	<p>Development of agreements for drop box placement. Drop boxes installed and regular pick up scheduled.</p>	<p>11/2019: No progress to date; current legislation makes it difficult to create additional drop sites.</p> <p>Several agencies have distributed at home medication disposal kits to the community in place of prescription drop boxes. An estimated 400 home disposal kits have been distributed by the health department and other agencies.</p> <p>10/2022: Reach for Tomorrow is actively planning for the installation of 3 drug drop boxes in Highland County in partnership with local pharmacies.</p>
<p><b>Objective 1.2: Inform the public about drug issues, available resources in the community, and other drug prevention information.</b></p>	<p>Develop and distribute drug abuse prevention educational information utilizing various forms of media.</p>	<p>Ongoing. Annual media program in October during Red Ribbon Week.</p>	<p>Release of articles, program information</p>	<p>11/2019: The health department and many other agencies continue to produce, share, and distribute drug prevention related information to the community.</p> <p>10/2022: Efforts continue to distribute drug prevention information to the community.</p>

<p>COVID-19 response efforts temporarily halted this and many other education programs, but those programs have since been restarted.</p>				
<p>11/2019: Community resources are routinely shared at community meetings, through social media, and other methods of distribution.</p> <p>10/2022: Efforts continue to distribute drug prevention information to the community.</p> <p>COVID-19 response efforts temporarily halted this and many other education programs, but those programs have since been restarted.</p>	<p>Release of articles, program information</p>	<p>Ongoing. Annual media program in October during Red Ribbon Week.</p>	<p>Increase community awareness of available resources for drug prevention education, drug drop box options, and other resources available to the community.</p>	
<p>11/2019: The health department facilitated discussions between HDH, Adena, WIC, HMG, and other agencies during the 2018 order to ensure coordination between these key agencies.</p> <p>10/2022: This coordination effort was discussed again during the 2019, 2021, and 2022 child fatality review process. Efforts continue to coordinate and support education efforts of these agencies.</p>	<p>Report of progress to Child Fatality Review Board in February, 2019</p>	<p>January 1, 2019</p>	<p>Review the education and support process in place between Highland District Hospital, Help Me Grow, Women Infants and Children Program, and other resources.</p>	
<p>11/2019: The health department provided information to healthcare</p>	<p>Materials sent to local healthcare providers.</p>	<p>December 31, 2018</p>	<p>Provide drug abuse prevention information to healthcare providers in the county.</p>	



				<p>providers on several different occasions, most recently related to vaping injury reports.</p> <p>10/2022: Limited activity has occurred in this area, due to the COVID-19 response of the past several years.</p> <p>11/2019: Since January, 2018, the health department has attended more than 25 community events related to drug abuse prevention.</p> <p>10/2022: Limited activity has occurred in this area due to the COVID-19 response of the past several years.</p> <p>11/2019: FRS and ADAMH Board have both developed additional treatment programs in Highland County.</p> <p>10/2022: Additional treatment options and facilities have been opened, including additional residential locations.</p> <p>11/2019: FRS has increased Vivitrol access to the community.</p> <p>10/2022: FRS continues to provide Vivitrol access.</p>
			<p>Materials posted on Highland County Health Department website.</p>	
		<p>As they occur. Hope for Highland, other nonprofits regularly host events.</p>	<p>July 1, 2019</p>	
		<p>Support community events that increase awareness and education regarding substance abuse.</p>		
		<p>Pursue funding options for additional medication assisted treatment options.</p>	<p>Ongoing</p>	
		<p>Investigate the potential to increase access to Vivitrol.</p>	<p>Ongoing</p>	
		<p><b>Highland County Community Health Improvement Plan Action Plan</b></p>		
		<p><b>Objective 1.3: Expand local stabilization, treatment, and recovery support options for Highland County residents.</b></p>		
		<p><b>Priority Area: Illegal Substance Abuse</b></p>		

<b>Goal: By January, 2019, reduce the number of new Hepatitis C infections by 10% (fewer than 100 new cases per year).</b>					
<b>Objective</b>	<b>Action Step (Activities)</b>	<b>Timeline</b>	<b>Performance Indicator</b>	<b>Progress To Date</b>	
<b>Objective 2.1: Increase awareness of Hepatitis C resources in Highland County</b>	Encourage those entering treatment, surviving an overdose, or otherwise connected to medical or mental health treatment to seek testing for hepatitis C. 12/6/2018 update: Completed	July 1, 2018	Written request submitted to health department to local healthcare agencies.	11/2019: Health Department continues to work with FRS, Lynn Goff Center, and other treatment providers to increase access to preventative healthcare services. 10/2022: No update. Item completed.	
	Develop media campaign that promotes access to hepatitis C testing and educational resources. 12/6/2018 update: Completed	January 31, 2018	Release of media information	11/2019: Educational resources have been added to the HCHD website. 10/2022: No Update. Item Completed.	
	Develop online resource list for all hepatitis C resources in Highland County 12/6/2018 Update: No progress.	January 31, 2018	Website goes live with information	11/2019: Educational resources have been added to the HCHD website. 10/2022: No update or changes,.	

Highland County Community Health Improvement Plan Action Plan

Priority Area: Mental Health

**Goal: Increase the overall number of mental health services being received in Highland County by 5% by June 30, 2019.**

Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress to Date
<b>Objective 1.1: Increase the number of available stabilization, detox, treatment, and recovery beds in Highland County.</b>	Support nonprofit development of licensed and qualified stabilization, detox, treatment, and recovery beds.	Ongoing	Monthly review at Drug Abuse Prevention Coalition	10/2022: The Highland County Drug Abuse Prevention Coalition works with community organizations to accomplish this goal.
	Support the expansion of existing mental health agency resources.	Ongoing	Monthly review at Drug Abuse Prevention Coalition	10/2022: Grant applications in the works to increase access to those in legal system.
<b>Objective 1.2: Develop a more coordinated and streamlined process for accessing the existing mental healthcare system.</b>	Work with mental health agencies to determine if a centralized, coordinated process for connection to mental health services is possible.	January 1, 2019	Meeting conducted to evaluate potential of central process	11/2019: Additional work is needed in this area; no progress to-date.  10/2022: i Implemented a newly updated crisis line for mental health services.
	Develop an enhanced community resource directory that provides more comprehensive contact information for mental health services	January 1, 2019	Mental health resource list released to community partners	11/2019: Additional work is needed in this area, no progress to date.  10/2022: A revised community resource directory was released by Community Action in 2020.
	Investigate the use of 211 as an option for connecting people to local mental health resources	January 1, 2019	Meeting conducted to evaluate potential of 211 implementation	11/2019: Conversations continue with Ross County to implement 211. Additional work is needed in this area; no progress to-date.  10/2022: 211 has been implemented for Highland County as a consistent and simple way to connect people with mental health resources.

<p><b>Objective 1.3: Reduce the stigma associated with mental illness</b></p>	<p>Coordinate with faith leaders, citizens, other influential members of the community to change the way that our community views mental health issues.</p>	<p>January 1, 2019</p>	<p>Meeting conducted to discuss mental health stigma with local leaders</p>	<p>11/2019: Additional work is needed in this area; no progress to-date. 10/2022: Significant efforts have occurred in efforts to remove mental health stigma in the community, especially in regard to suicide prevention.</p>
	<p>Increase the availability of mental health training and information for the general public.</p>	<p>January 1, 2019</p>	<p>Trainings conducted</p>	<p>11/2019: Additional work is needed in this area; no progress to-date. 10/2022: No updates</p>

**Highland County Community Health Improvement Plan Action Plan**

**Priority Area:** Obesity, Physical Activity, and Nutrition

**Goal:** By January 1, 2019, reduce the Highland County Obesity Rate to 31%—a decrease of 1%.

Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date
<p><b>Objective 1.1: Increase access to healthy cooking classes</b></p>	<p>Promote existing health cooking / healthy eating classes and educational programs. 12/6/2018 update: completed. OSU continues to promote healthy eating classes.</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>11/2019: OSU Extension Office continues to promote healthy eating classes. HCHD has joined the local OSU Extension Office board. Additional work is needed in this area; no progress to-date.  10/2022: RMJ has changed its obesity reporting mechanisms and now show Highland County as having a 41% obesity rate. Revisit in the next CHIP process.</p>
	<p>Investigate funding opportunities for healthy eating education efforts</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>11/2019: Additional grant funds have been applied for multiple times.  10/2022: No updates. Much activity was suspended on additional grant applications due to COVID response efforts.</p>
<p><b>Objective 1.2: Encourage the development and implementation of workplace wellness programs</b></p>	<p>Promote the development of workplace wellness programs in government agencies</p>	<p>July 1, 2019</p>	<p>Formal promotion of workplace wellness plan presented to government partners</p>	<p>11/2019: Additional work is needed in this area; no progress to-date.  10/2022: No updates. Much activity was suspended on additional grant applications due to COVID response efforts.</p>
	<p>Promote the development of workplace wellness programs in private business</p>	<p>July 1, 2019</p>	<p>Formal promotion of workplace wellness plan presented to government partners</p>	<p>11/2019: Additional work is needed in this area; no progress to-date.  10/2022: No updates. Much activity was suspended on additional grant applications, due to COVID response efforts.</p>

<p><b>Objective 1.3: Investigate the development of community gardens and other community based efforts to promote healthy food options.</b></p>	<p>Work with Highland County cities and villages to discuss the possibility of creating community gardens and promoting health eating.</p>	<p>January 1, 2019</p>	<p>Meetings conducted with Greenfield, Hillsboro, and Paint Township</p>	<p>11/2019: Creating Healthy Communities Grant applied for by HCCHD. Other funding opportunities sought to fund these efforts.  10/2022: No updates. Much activity was suspended on additional grant applications, due to COVID response efforts.</p>
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**Highland County Community Health Improvement Plan Action Plan**

**Priority Area:** Chronic Disease

**Goal:** Reduce the breast cancer mortality rate from 26.7 per 100,000 (11.5 cases in Highland County) to 24 per 100,000 (10.3 cases in Highland County) by July 1, 2019.

Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date
<p><b>Objective 1.1: Increase the availability and utilization of breast cancer screenings.</b></p>	<p>Work with local healthcare providers to provide education on the importance of mammograms and to increase access to free or low-cost mammograms.</p>	<p>January 1, 2018</p>	<p>Meeting occurs to investigate expansion of existing program.</p>	<p>11/2019: HCCHD has partnered with HDH to offer mammograms on multiple occasions in a community partnership.  10/2022: Highland District Hospital has shifted their overall approach to mammograms and now offers regular free access to mammograms at its facility.</p>

Highland County Community Health Improvement Plan Action Plan				
Priority Area: Chronic Disease				
<b>Goal: Reduce the overall cancer mortality rate from 204.6 per 100,000 (88 deaths in Highland County) to 194 per 100,000 (75 deaths in Highland County) by July 1, 2022.</b>				
Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date
<b>Objective 2.1: Increase the availability and utilization of preventative and early detection cancer screenings.</b>	Work with local healthcare providers to increase access to free or low cost preventative health screenings, early detection cancer screenings, annual physical exams, and other preventative healthcare services.	January 1, 2018	Meeting occurs to investigate possibilities for partnerships.	11/2019: The HCHD has provided free access to prostate cancer screenings, mammograms, colorectal cancer screenings, blood pressure checks, and other preventative healthcare screenings on multiple occasions annually since the approval of the CHIP.  10/2022: HCHD continues to provide no cost preventative health screenings to the community.

Highland County Community Health Improvement Plan Action Plan					
Priority Area: Chronic Disease					
Goal: Reduce the overall heart disease mortality rate from 186.9 per 100,000 (80 deaths in Highland County) to 175 per 100,000 (75 deaths in Highland County) by July 1, 2022.					
Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date	
Objective 3.1: Increase the rates of physical activity in Highland County.	Work with community partners to sponsor active events for various ages and abilities.	January 1, 2019	Meeting occurs to investigate possibilities for partnerships.	11/2019: Additional work is needed in this area; no progress to-date.  10/2022: No updates. Much activity was suspended on additional grant applications, due to COVID response efforts.	
	Work with community partners to increase the availability of walking, biking, and other active transportation options.	January 1, 2019	Meeting occurs to investigate possibilities for partnerships.	11/2019: Additional work is needed in this area; no progress to-date.  10/2022: HCHD and other community partners are discussing active living projects that could be funded with upcoming Appalachian Community grants from the State of Ohio.	
Objective 3.2: Increase the rates of heart health screenings and opportunities for the public.	Promote healthy community programs and initiatives.	Ongoing	Ongoing	11/2019: Additional work is needed in this area; no progress to-date.  10/2022: No updates. Much activity was suspended on additional grant applications due to COVID response efforts.	
	Work with community partners and groups to increase the availability of free blood pressure screenings, lipid profiles, and other preventative screenings that support early detection of heart disease.	January 1, 2018	Meeting occurs to investigate possibilities for partnerships.	11/2019: The HCHD has provided free access to prostate cancer screenings, mammograms, colorectal cancer screenings, blood pressure checks, and other preventative healthcare screenings on multiple occasions annually since the approval of the CHIP.  10/2022: HCHD continues to provide many free preventative health screenings throughout the year. The number of available services increased significantly in 2022.	



**Highland County Community Health Improvement Plan Action Plan**

**Priority Area:** Chronic Disease

**Goal:** Reduce the overall rate of diabetes prevalence below 11% (4,730 people in Highland County) by July 1, 2019.

Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date
<p><b>Objective 4.1: Provide educational and health promotion information for diabetes prevention and management.</b></p>	<p>Work with community partners to sponsor educational events related to diabetes prevention and disease management.</p>	<p>January 1, 2019</p>	<p>Meeting occurs to investigate possibilities for partnerships.</p>	<p>11/2019: Some organizations have made limited progress in increasing education events for diabetes. Additional work is needed in this area; no community wide progress to date.  10/2022: No updates. Much activity was suspended on additional grant applications, due to COVID response efforts.</p>
	<p>Promote healthy eating as a method for diabetes prevention.</p>	<p>January 1, 2019</p>	<p>Meeting occurs to investigate possibilities for partnerships.</p>	<p>11/2019: Some organizations have made limited progress in increasing education events for diabetes. Additional work is needed in this area; no communitywide progress to date.  10/2022: No updates. Much activity was suspended on additional grant applications, due to COVID response efforts.</p>

**Highland County Community Health Improvement Plan Action Plan**

**Priority Area:** Infant Mortality

**Goal:** Reduce the overall rate of infant mortality from 8.6 per 1,000 live births to 6 per 1,000 live births by July 1, 2019.

Objective	Action Step (Activities)	Timeline	Performance Indicator	Progress To Date
<p><b>Objective 1.1: Increase community education and information related to safe sleep practices, postpartum depression, child supervision, and other safety issues.</b></p>	<p>Promote safe sleep via social media, traditional media, and in community presentations and events.</p>	<p>April 1, 2018</p>	<p>Release infant mortality media information</p>	<p>11/2019: HCHD has provided safe sleep information annually each year to the media using the HCHD website, press releases, and social media.  10/2022: HCHD continues to provide safe sleep education. Highland District Hospital recently closed its OB surgery and delivery services, which may impact our ability to reach mothers with information.</p>
	<p>Support community events and activities that promote safe sleep education, postpartum depression, child supervision, and other safety issues.</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>11/2019: HCHD has provided safe sleep information annually each year to the media using the HCHD website, press releases, and social media.  10/2022: HCHD continues to provide safe sleep community events. Highland District Hospital recently closed its OB surgery and delivery services, which may impact our ability to reach mothers with important information.</p>
	<p>Improve the coordination between Highland District Hospital and Help Me Grow, Women, Infant, and Children's Health program, and</p>	<p>April 1, 2018</p>	<p>Meeting conducted to evaluate coordination of programs</p>	<p>11/2019: The health department facilitated discussions between HDH, Adena, WIC, HMG, and</p>

<p><b>Objective 1.2: Increase community access to safe sleep resources.</b></p>	<p>other prenatal education and infant education providers.</p>			<p>other agencies during the 2018 child fatality review process in order to ensure coordination between key agencies.</p>
	<p>Promote the availability of Cribs for Kids, Safe Sleep Boxes, and other safe bedding options for infants.</p>	<p>April 1, 2018</p>	<p>Release infant mortality media information</p>	<p>10/2022: Completed</p> <p>11/2019: HCHD has provided safe sleep information annually each year to the media using the HCHD website, press releases, and social media.</p> <p>10/2022: HCHD continues to provide information on cribs for kids and other local programs. Highland District Hospital recently closed its OB surgery and delivery services, which may impact our local ability to reach mothers with information.</p>
	<p>Investigate other funding opportunities and options for providing safe sleep resources to local parents.</p>	<p>Ongoing</p>	<p>Ongoing</p>	<p>11/2019: Additional work is needed in this area; no progress to-date.</p> <p>10/2022: No significant progress to-date.</p>

**Highland County Community Health Improvement Plan Action Plan**

**Priority Area:** Tobacco Use

**Goal:** Reduce the overall rate of adult tobacco use from 23.7% to 23% by July 1, 2019.

<b>Objective</b>	<b>Action Step (Activities)</b>	<b>Timeline</b>	<b>Performance Indicator</b>	<b>Progress To Date</b>
<p><b>Objective 1.1: Provide education and information to the community regarding the negative health effects of tobacco use.</b></p>	<p>Develop social media and traditional media campaigns for tobacco prevention education.</p>	<p>April 1, 2019</p>	<p>Release of tobacco prevention media information</p>	<p>11/2019: Health department has conducted multiple tobacco prevention campaigns with community children, including a program in 2017 and 2018, in which 800 students received education. In 2019, more than 300 students received vaping and tobacco use prevention education.</p> <p>10/2022: HCHD provided several presentations at local high schools related to the increase in teen vaping in 2019 and 2020.</p>
	<p>Promote local programs and efforts for smoking cessation. 12/6/2018 update: Completed</p>	<p>April 1, 2019</p>	<p>Release of tobacco prevention media information</p>	<p>11/2019: Health department has conducted multiple tobacco prevention campaigns with community children, including a program in 2017 and 2018, in which 800 students received education. In 2019, more than 300 students received vaping and tobacco use prevention education.</p> <p>10/2022: HCHD provided several presentations at local high schools related to the increase in teen vaping in 2019 and 2020.</p>

**Highland County Community Health Improvement Plan Action Plan**

**Priority Area:** Tobacco Use

**Goal:** Reduce the overall rate of student annual tobacco use from 28.2% to 25% by July 1, 2019.

<b>Objective</b>	<b>Action Step (Activities)</b>	<b>Timeline</b>	<b>Performance Indicator</b>	<b>Progress To Date</b>
<b>Objective 2.1: Provide education and information to the community regarding the negative health effects of tobacco use.</b>	Develop social media and traditional media campaigns for tobacco prevention 12/6/2018 update: Completed	April 1, 2019	Release of tobacco prevention media information	11/2019: HCHD conducted multiple tobacco and vaping prevention education efforts in 2018 and 2019. 10/2022: HCHD provided large amounts of education on social and traditional media related to the increase in teen vaping in 2019 and 2020.
	Support school based tobacco prevention efforts 12/6/2018 update: Completed	Ongoing	Ongoing	11/2019: Health department has conducted multiple tobacco prevention campaigns with community children, including a program in 2017 and 2018, in which 800 students received education. In 2019, more than 300 students received vaping and tobacco use prevention education. 10/2022: HCHD provided several presentations at local high schools related to the increase in teen vaping in 2019 and 2020.
	Increase prevention education targeted to grades 7-12. 12/6/2018 update: Completed	January 1, 2018	Meeting with interested community partners to address childhood tobacco use	11/2019: Health department has conducted multiple tobacco prevention campaigns with community children, including a

				<p>program in 2017 and 2018, in which 800 students received education. In 2019, more than 300 students received vaping and tobacco use prevention education.</p> <p>10/2022: HCHD provided several presentations at local high schools related to the increase in teen vaping in 2019 and 2020.</p>
	<p>Provide programs to elementary-age children that teach coping skills and healthy decision making.</p> <p>12/6/2018 update: Completed</p>	<p>July 1, 2019</p>	<p>Formal implementation of elementary programs</p>	<p>11/2019: Health department has conducted multiple tobacco prevention campaigns with community children, including a program in 2017 and 2018, in which 800 students received education. In 2019, more than 300 students received vaping and tobacco use prevention education.</p> <p>10/2022: HCHD provided several presentations at local high schools related to the increase in teen vaping in 2019 and 2020.</p>
	<p>Push for greater regulations for vaping and e-cigs</p> <p>12/6/2018 update: Completed</p>	<p>January 1, 2018</p>	<p>Correspondence sent to local legislative members</p>	<p>11/2019: HCHD has worked with Association of Ohio Health Commissioners to monitor ongoing proposed vaping legislation.</p> <p>10/2022: National legislation was passed in mid-2022 that restricted the sales of several major vaping manufacturer products.</p>

## COMMUNITY PROFILE

### Highland County, Ohio

Highland County is located in rural, southwestern Ohio and is one of Ohio's 32 Appalachian counties. The county covers 553 square miles, of which approximately six percent is used for residential, commercial or industrial purposes (Ohio Development Services Agency 2020). More than 32% of the land is forested and another 60% is farmland and/or pasture.

With a population of 6,483, Hillsboro is Highland County's largest city and provides the bulk of the county's employment. Highland County's leading industrial sector is service-driven by the transportation, trade, and utility industries. Education, healthcare, leisure and hospitality services also are the top areas of employment.

Highland County's population is 43,317 (U.S. Census Bureau 2020). It's part of the 2nd Congressional District and contains the population patterns and distinct economic conditions inherent to the Appalachian region such as low educational attainment, limited economic diversification, and growth.

The county's poverty levels are considerably high, with more than 14.9% of families living below the federal poverty level. Per capita income is \$24,058. Educational attainment is also considerably lower than the state and national averages, with only 13.8% of the population having a four-year college degree or higher, compared to state (28.9%) and national averages (32.9%).

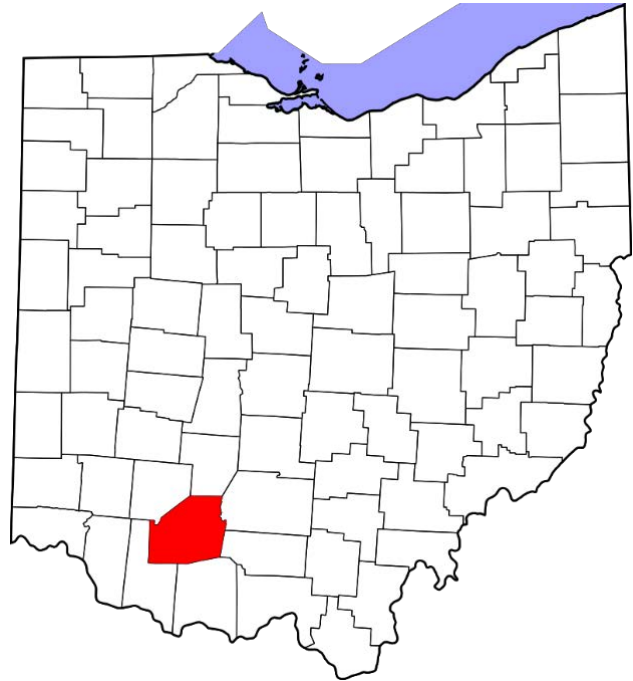


Figure 7: Highland County, Ohio

#### Community Snapshot

**Population:** 43,317

**Percent with four year college degree or higher:** 13.8%

**Median household income:** \$47,973

**Families living below poverty level:** 14.9%

**Median gross rent:** \$679

**2020 Unemployment Rate:** 5%

**Largest industrial sector:** Service Providing, 5,926 jobs (top three sectors trade, transportation, utilities, education, health services, leisure and hospitality)

## 2022 Data Review

The Highland County Health Collaborative collected a variety of data during 2022 to complete the Community Health Assessment (CHA). The data included both qualitative and quantitative data from primary and secondary sources.

Qualitative data included surveys, key stakeholder interviews, and public comment from 524 surveys that were collected from the general public. Internet and social media sites were utilized to post the survey and public comment information. Both electronic and paper copies of the surveys were collected at local healthcare and social service delivery sites, as well as via social media sharing from partner agencies.

Quantitative data included demographic, socio-economic, health status, health behavior, health outcomes, and factors data from multiples sources, such as the Ohio Department of Health, the U.S. Census Bureau, and the Ohio Development Services Agency, the Highland County Health Department, local law enforcement, the Adena Health System, and the Ohio Department of Job and Family Services, among others. In addition, new data analysis was conducted on tobacco use, tobacco use and poverty, and poverty impact on health outcomes, using CHA-collected survey data.

## County Health Rankings

Economic and educational challenges in Highland County and the surrounding region have been correlated to declining health. Many Appalachian Ohio counties, including Highland, are considered some of Ohio's unhealthiest. A 2022 report published by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, County Health Rankings: Mobilizing Action

Toward Community Health, outlines the outcomes and factors impacting health of Highland County residents.

Ohio ranked low nationally in overall positive health outcomes. All 88 Ohio counties were then ranked both related to health outcomes and health factors. Highland County's rates of death from heart disease, lung cancer, and pulmonary-respiratory disease are all above state and national averages. Highland County is currently ranked 69th out of 88 counties for health outcomes and 82nd for health factors. Although access to healthcare has improved, Highland County health outcomes and factors have remained relatively the same for the last several years for Socio-economic conditions, such as employment and educational attainment, have also improved slightly, as have health behaviors, which has improved overall ranking for health factors and would indicate eventual improvements in health outcomes. Opportunities exist to improve early death related to accidents (drug overdoses and traffic fatalities), as well as social support, mental health, and health behaviors, such as drinking and smoking.



	Year								
RWJ Rankings	2014	2015	2016	2017	2018	2019	2020	2021	2022
Health Outcomes	79	78	78	80	81	79	74	66	69
Health Factors	77	82	81	82	73	70	67	76	82

### RWJ County Health Rankings

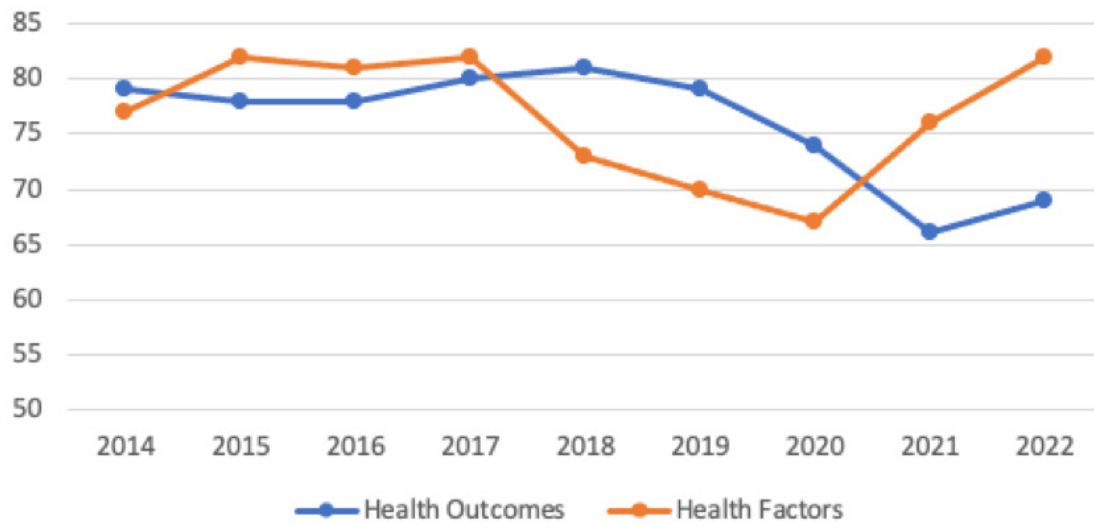


Figure 8: RWJ County Health Rankings



## 2022 County Health Rankings - Highland

	County	Error Margin	Top US Performers	State
<b>County Demographics</b>				
Population	43,304			11,693,217
% below 18 years of age	23.6%			22.0%
% 65 and older	19.1%			17.9%
% Non-Hispanic Black	1.4%			12.7%
% American Indian & Alaska Native	0.4%			0.3%
% Asian	0.5%			2.6%
% Native Hawaiian/Other Pacific Islander	0.0%			0.1%
% Hispanic	1.3%			4.2%
% Non-Hispanic White	94.8%			78.0%
% not proficient in English	0.0%			1%
% Females	50.9%			51.0%
% Rural	73.0%			22.1%
<b>Health Outcomes</b>				
<b>Length of Life</b>				
Premature Death	9,700	8,600-10,800	5,600	8,700
<b>Quality of Life</b>				
Poor or fair health	23%	21-27%	15%	18%
Poor physical health days	5.1	4.7-5.4	3.4	4.2
Poor mental health days	5.9	5.5-6.2	4	5.2
Low birthweight	8%	7-8%	6%	9%
<b>Additional Health Outcomes (not included in overall ranking) -</b>				
COVID-19 age-adjusted mortality	67	48-92	43	87
Life expectancy	75.5	74.6-76.4	80.6	76.5
Premature age-adjusted mortality	470	440-510	290	420
Child mortality	70	50-100	40	60
Infant mortality	8	5-12	4	7
Frequent physical distress	16%	15-18%	10%	13%
Frequent mental distress	20%	18-22%	13%	17%
Diabetes prevalence	12%	11-12%	8%	10%
HIV prevalence	72		38	235
<b>Health Factors</b>				
<b>Health Behaviors</b>				
Adult smoking	29%	25-32%	15%	22%

Adult obesity	41%	39-43%	30%	35%
Food environment index	7.3		8.8	6.8
Physical inactivity	34%	31-38%	23%	28%
Access to exercise opportunities	26%		86%	77%
Excessive drinking	17%	16-18%	15%	21%
Alcohol-impaired driving deaths	33%	24-42%	10%	33%
Sexually transmitted infections	210.8		161.8	559.4
Teen births	32	28-35	11	21
<b>Additional Health Behaviors (not included in overall ranking)</b>				
Food insecurity	17%		9%	13%
Limited access to healthy foods	2%		2%	7%
Drug overdose deaths	29	20-39	11	38
Motor vehicle crash deaths	16	11-21	9	10
Insufficient sleep	41%	40-43%	32%	41%
<b>Clinical Care</b>				
Uninsured	10%	8-11%	6%	8%
Primary care physicians	3,320:1		1,010:1	1,290:1
Dentists	2,550:1		1,210:1	1,570:1
Mental health providers	900:1		250:1	350:1
Preventable hospital stays	4,788		2,233	4,338
Mammography screening	35%		52%	45%
Flu vaccinations	44%		55%	51%
<b>Additional Clinical Care Factors (not included in overall ranking)</b>				
Uninsured adults	11%	9-13%	7%	9%
Uninsured children	6%	4-8%	3%	5%
Other primary care providers	1,440:1		580:1	830:1
<b>Social and Economic Factors</b>				
High school completion	84%	82-86%	94%	91%
Some college	44%	39-49%	74%	66%
Unemployment	8.70%		4.0%	8.10%
Children in poverty	22%	15-29%	9%	17%
Income inequality	4.8	4.2-5.3	3.7	4.6
Children in single-parent households	15%	11-19%	14%	27%
Social associations	12.3		18.1	10.9
Violent crime	92		63	293
Injury deaths	100	87-114	61	96
<b>Additional Social and Economic Factors (not included in overall ranking)</b>				
High school graduation	92%		96%	83%
Disconnected youth	18%	10-26%	4%	6%
Reading scores	3.3		3.3	3.1
Math scores	3		3.4	3

School segregation	0.04		0.02	0.3
School funding adequacy	\$665			\$927
Gender pay gap	0.81	0.73-0.88	0.88	0.79
Median household income	\$57,200	\$52,100 to \$62,200	\$75,100	\$60,400
Living wage	\$35.36			\$37.72
Children eligible for free or reduced-price lunch	62%		32%	36%
Residential segregation - Black/white	59		27	69
Residential segregation - non-white/white	38		16	57
Childcare cost burden	29%		18%	27%
Childcare centers	6		12	7
Homicides	9	6-13	2	6
Suicides	18	12-25	11	15
Firearm fatalities	13	8-18	8	14
Juvenile arrests	23			33
<b>Physical Environment</b>				
Air pollution - particulate matter	8.9		5.9	9
Drinking water violations	No			
Severe housing problems	14%	12-17%	9%	13%
Driving alone to work	82%	80-84%	72%	82%
Long commute - driving alone	43%	39-48%	16%	31%
<b>Additional Physical Environment (not included in overall ranking)</b>				
Traffic volume	50			404
Homeownership	70%	67-73%	81%	66%
Severe housing cost burden	10%	7-12%	7%	12%
Broadband access	76%	72-79%	88%	85%
<i>Note: Blank values reflect unreliable or missing data</i>				

Table 2: RWJ Highland County Health Rankings

## Demographic Characteristics

A profile of Highland County and its residents was formulated by collecting publicly available data, such as vital statistics, economic, and education data. Research shows that sociological and economic factors affect health in complicated ways, so it's understood that corresponding information must be reviewed with public opinion data (provided in the next section) to develop a clear understanding of the state of health of a particular community. The following tables describe the population in relation to diversity.

The current total population of Highland County is estimated at 43,317—an approximate 1% decline since 2010, or lesser growth than across both Ohio and the U.S.

### Age, Sex, Ethnicity, Immigration, Veterans Disability Status

Highland County, Ohio, has limited diversity among its population, with more than 95.6% of residents being white/Caucasian. Approximately 18.9% of the population is over the age of 65, which is higher than the rest of Ohio and the U.S. The veteran population is also slightly higher at 10.8%. In addition, 14% of the population has a disability.

U.S. Census Bureau; 2016-2020 American Community Survey Estimates

Population Demographics	Highland County 2019	Highland County 2022	Ohio 2022	U.S. 2022
<b>Age</b>				
0-17 Years	24.1%	23.9%	22.2%	22.4%
18-24 Years	8.0%	7.7%	9.1%	9.3%
25-44 Years	23.2%	22.8%	25.1%	26.5%
45-64 Years	27.3%	27.3%	26.5%	25.6%
65 years or more	17.4%	18.3%	17.0%	16.0%
<b>Race &amp; Ethnicity</b>				
African American	1.4%	1.6%	12.4%	12.6%
Asian	0.4%	0.3%	2.3%	5.6%
Hispanic (of any race)	0.9%	1.2%	3.9%	18.2%
American Indian/ Alaska Native	0.2%	0.3%	0.2%	0.8%
Native Hawaiian/ Pacific Islander	0%	0.0%	0.0%	0.2%
White	96%	95.6%	80.5%	70.4%
Other	0.1%	0.2%	1.1%	5.1%
Two or more races	2%	2.0%	3.6%	5.2%
<b>Gender</b>				
Male	49.4%	48.9%	49.0%	49.2%
Female	50.6%	51.1%	51.0%	50.8%
<b>Veterans</b>				
Veterans	10.8%	9.4%	7.6%	7.1%
<b>Disabilities</b>				
Any age	19%	18.7%	14.0%	12.7%
Under the age of 18	6.4%	5.2%	5.0%	4.3%
Ages 18-64	18.1%	17.7%	11.9%	10.3%
65 years and over	40.1%	40.3%	34.0%	34.0%

Table 3: 2016-2020 American Community Survey Estimates

## Housing

The average household size in Highland County is slightly larger in comparison to households across Ohio, but smaller than the U.S. average. The same is true for the percentage of households with children under the age of 18. Nearly three-quarters of the population (73%) of Highland County resides in a rural area, which is a significantly larger portion of the population than in other parts of Ohio or the U.S. More than half (60%) of children under the age of 18 are being raised by grandparents or other family members, which is significantly higher than the state and national averages.

Tables 4 & 5: Household Demographics

Families and Living Arrangements – Size and Status	Highland County 2019	Highland County 2022	Ohio 2022	U.S. 2022
<b>Households (Table S1101 &amp; S1001) <sup>1</sup></b>				
<b>Total Households</b>	<b>16,731</b>	<b>16,747</b>	<b>4,717,226</b>	<b>122,354,219</b>
Average household size	2.54	2.54	2.41	2.60
Family households with children (under 18 years of age)	25.7%	27.2%	25.9%	27.3%
Children (under 18 years of age) living with a grandparent householder, with no parent present	59.5%	N/A	25.9%	27.3%
Female-led households with children (under 18 years of age)	6.4%	5.8%	6.9%	6.4%
<b>Marital Status (Table S1201) <sup>1</sup></b>				
Never-married males	28.1%	25.5%	35.8%	36.6%
Never-married females	22%	22.7%	29.7%	30.5%
Now-married males	53.5%	56.3%	48.9%	49.7%
Now-married females	49.7%	52.1%	46.1%	46.6%
Divorced males	13.4%	13.2%	10.8%	9.4%
Divorced females	13.6%	12.9%	13.1%	12.1%

Source: U.S. Census Bureau; 2016-2020 American Community Survey Estimates

<b>Housing</b>	
📍 Housing units, July 1, 2021, (V2021)	18,977
📍 Owner-occupied housing unit rate, 2016-2020	70.1%
📍 Median value of owner-occupied housing units, 2016-2020	\$123,400
📍 Median selected monthly owner costs -with a mortgage, 2016-2020	\$1,062
📍 Median selected monthly owner costs -without a mortgage, 2016-2020	\$384
📍 Median gross rent, 2016-2020	\$679
📍 Building permits, 2021	71
<b>Families &amp; Living Arrangements</b>	
📍 Households, 2016-2020	16,747
📍 Persons per household, 2016-2020	2.54
📍 Living in same house 1 year ago, percent of persons age 1 year+, 2016-2020	87.1%
📍 Language other than English spoken at home, percent of persons age 5 years+, 2016-2020	2.9%

Source: U.S. Census Bureau 2020 Census

## Education, Employment, Industry, Occupations, Income and Poverty

The Highland County region has many of the same socio-economic conditions prevalent in other parts of the Appalachian region. Educational attainment is considerably lower than in other parts of Ohio and U.S., particularly for advanced education. Median individual and family income is also significantly lower, with more than 20% of individuals living below the poverty level. More than 30% of children live below the poverty level. The following provides a breakdown of education, employment, industry, occupations, income, and poverty for Highland County, compared with the rest of Ohio and the U.S.

Table 6: Socioeconomic Condition Highland County

Education	
High school graduate or higher, percent of persons age 25 years+, 2016-2020	84.3%
Bachelor's degree or higher, percent of persons age 25 years+, 2016-2020	13.8%
Health	
With a disability, under age 65 years, percent, 2016-2020	14.0%
Persons without health insurance, under age 65 years, percent	10.3%
Economy	
In civilian labor force, total, percent of population age 16 years+, 2016-2020	56.9%
In civilian labor force, female, percent of population age 16 years+, 2016-2020	52.0%
Total accommodation and food services sales, 2017 (\$1,000) (c)	44,465
Total health care and social assistance receipts/revenue, 2017 (\$1,000) (c)	147,828
Total transportation and warehousing receipts/revenue, 2017 (\$1,000) (c)	21,586
Total retail sales, 2017 (\$1,000) (c)	436,168
Total retail sales per capita, 2017 (c)	\$10,160
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2016-2020	28.8
Income & Poverty	
Median household income (in 2020 dollars), 2016-2020	\$47,973
Per capita income in past 12 months (in 2020 dollars), 2016-2020	\$24,058
Persons in poverty, percent	14.9%

Source: U.S. Census Bureau 2020 Census

Table 7: Highland County Education Levels

Education Level (persons 25 years of age or older)	Highland County 2019	Highland County 2022	Ohio 2022	U.S. 2022
No high school diploma	16.2%	15.7%	9.2%	11.5%
High school graduate	44.7%	43.7%	32.8%	26.7%
Some college, no degree	18.6%	16.3%	20.3%	20.3%
Associate degree	8.2%	10.5%	8.8%	8.6%
Bachelor's degree or higher	12.3%	13.8%	28.9%	32.9%

Source: U.S. Census Bureau; 2016-2020 American Community Survey Estimates

<b>Estimated Employment Numbers for Highland County</b>	<b>Estimated #</b>	<b>%</b>
<b>Office and Administrative Support Occupations</b>	<b>1,138</b>	<b>10.6%</b>
<b>Food Preparation and Serving Related Occupations</b>	<b>1,121</b>	<b>10.4%</b>
<b>Sales and Related Occupations</b>	<b>1,267</b>	<b>11.8%</b>
<b>Transportation and Material Moving Occupations</b>	<b>882</b>	<b>8.2%</b>
<b>Production Occupations</b>	<b>1,229</b>	<b>11.4%</b>
<b>Healthcare Practitioners and Technical Occupations</b>	<b>563</b>	<b>5.2%</b>
<b>Educational Instruction and Library Occupations</b>	<b>969</b>	<b>9.0%</b>
<b>Healthcare Support Occupations</b>	<b>391</b>	<b>3.6%</b>
<b>Management Occupations</b>	<b>565</b>	<b>5.3%</b>
<b>Construction and Extraction Occupations</b>	<b>552</b>	<b>5.1%</b>
<b>Installation, Maintenance, and Repair Occupations</b>	<b>448</b>	<b>4.2%</b>
<b>Building and Grounds Cleaning and Maintenance Occupations</b>	<b>498</b>	<b>4.6%</b>
<b>Business and Financial Operations Occupations</b>	<b>316</b>	<b>2.9%</b>
<b>Community and Social Service Occupations</b>	<b>175</b>	<b>1.6%</b>
<b>Protective Service Occupations</b>	<b>144</b>	<b>1.3%</b>
<b>Personal Care and Service Occupations</b>	<b>192</b>	<b>1.8%</b>
<b>Computer and Mathematical Occupations</b>	<b>72</b>	<b>0.7%</b>
<b>Architecture and Engineering Occupations</b>	<b>64</b>	<b>0.6%</b>
<b>Farming, Fishing, and Forestry Occupations</b>	<b>41</b>	<b>0.4%</b>
<b>Arts, Design, Entertainment, Sports, and Media Occupations</b>	<b>47</b>	<b>0.4%</b>
<b>Military-only occupations</b>	<b>58</b>	<b>0.5%</b>
<b>Legal Occupations</b>	<b>24</b>	<b>0.2%</b>
<b>Life, Physical, and Social Science Occupations</b>		
<b>Grand Total</b>	<b>10,756</b>	<b>100%</b>

Source: Ohio Department of Job and Family Services; Emsi data



### Leading Causes of Death

The leading causes of death, particularly premature death, as well as illness, and injury are indicators to the primary health challenges facing a population in a particular region. They can also indicate the most prevalent health risk factors among a population. The life expectancy of a Highland County resident is 74.8 years, which is lower than the average age of an Ohioan (77 years) or those who live in some of the U.S.'s healthiest communities (81 years).

Tables 8 & 9: Leading Causes of Death, Highland County

Total Number of Deaths	Highland County 2022
Total Number of Deaths	495

Source: ODH Public Health Information Warehouse, Mortality, 2019

Cause of Death (Age-adjusted rate per 100,000 population)	Highland County, 2019	Highland County, 2022 <sub>1</sub>	Ohio 2022 <sub>1</sub>	U.S. 2022 <sub>2</sub>
Heart Disease	210.2	214.8	188.6	164.8
Cancer	199.6	190.2	169.6	152.3
Chronic lower respiratory diseases	84.6	68.4	48.1	40.2
Unintentional injury	80.5	64.6	65.8	47.5
Stroke	43.6	45.3	41.8	37.3
Diabetes	--*	28.1	25.2	21.3
Alzheimer's Disease	N/A	28.0	33.4	30.2
<b>Total death rate</b>	<b>922.7</b>	<b>901.8</b>	<b>835.3</b>	<b>726.3</b>

\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported

--\* Indicates rates have been suppressed for low, unreliable counts

N/A- Data unavailable

Source 1: ODH Public Health Information Warehouse, Mortality, 2015-2019

Source 2: CDC Wonder, Underlying Cause of Death, 2015-2019

### Premature Death

The premature death rate in Highland County, Ohio, is considerably higher (10,600) than Ohio (8,500), as well as the U.S. (5,400) healthiest areas. Some related factors, like suicide, infant, and child mortality contribute. Rates for those factors are much higher than state and national statistics.

Table 10: Comparison of 2019 to 2022 Causes of Death, Highland County

<b>Cause of Death (Crude rate per 100,000 population)</b>	<b>Highland County 2019 (crude rate per 100,000 population)</b>	<b>Highland County 2022 (crude rate per 100,000 population)</b>
<b>Cancer</b>	237.2	268.1
<b>Heart disease</b>	296.5	260.0
<b>Chronic lower respiratory diseases</b>	110.5	87.1
<b>Unintentional injury</b>	60.5	65.0
<b>Stroke</b>	62.8	61.5
<b>Alzheimer's Disease</b>	N/A	53.4
<b>Diabetes</b>	38.4	38.3
<b>Total death rate</b>	<b>1,179.1</b>	<b>1,157.2</b>

*\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported*

*N/A- Data unavailable*

*Source: ODH Public Health Information Warehouse, Mortality, 2018-2019*

Table 11: Highland County Comparison Suicide Deaths by Method

<b>Suicide Deaths by Method (Age-Adjusted Rate per 100,000 population)</b>	<b>Highland County 2022 <sup>1</sup></b>	<b>Ohio 2022 <sup>1</sup></b>	<b>U.S. 2022 <sup>2</sup></b>
<b>Firearm</b>	8.4	7.5	6.8
<b>Hanging, suffocation, or strangulation</b>	--*	4.3	4.0
<b>Poisoning</b>	--*	1.9	1.9
<b>Jumping from a high place</b>	--*	0.3	0.3
<b>Other</b>	--*	0.7	0.9
<b>Total suicide rate</b>	<b>16.6</b>	<b>14.6</b>	<b>13.6</b>

*--\* Indicates rates have been suppressed for low, unreliable counts*

*Source 1: Ohio Department of Health Public Health Information Warehouse, Mortality, 2015-2019*

*Source 2: Centers for Disease Control and Prevention, CDC Wonder, Underlying Cause of Death, 2015-2019*

Table 12: Highland County Comparison Suicide Rates by Demographic

<b>Suicide Deaths by Demographics (Age-adjusted Rate per 100,000 population)</b>	<b>Highland County 2022 <sub>1</sub></b>	<b>Ohio 2022 <sub>1</sub></b>	<b>U.S. 2022 <sub>2</sub></b>
<b>Female</b>	--*	5.9	6.1
<b>Male</b>	27.6	24.0	22.0
<b>14 and younger</b>	0.0	1.1	1.2
<b>15-24</b>	19.4	14.6	13.7
<b>25-34</b>	32.8	19.1	17.0
<b>35-44</b>	27.4	20.4	17.7
<b>45-54</b>	10.4	20.4	19.9
<b>55-64</b>	16.8	18.8	19.2
<b>65 and older</b>	15.5	16.5	16.9
<b>Total suicide rate</b>	<b>16.6</b>	<b>14.6</b>	<b>13.6</b>

--\* Indicates rates have been suppressed for low, unreliable counts

Source 1: Ohio Department of Health Public Health Information Warehouse, Mortality, 2015-2019

Source 2: Centers for Disease Control and Prevention, CDC Wonder Underlying Cause of Death, 2015-2019

Table 13: Highland County Infant and Child Mortality Rates

<b>Infant and Child Mortality</b>	<b>Highland County 2019</b>	<b>Highland County 2022</b>	<b>Ohio 2022</b>	<b>U.S. 2022</b>
<b>Infant Mortality (rate per 1,000 live births)</b>	9.7	8.1 <sub>1</sub>	7.1 <sub>1</sub>	5.8 <sub>2</sub>
<b>Child Mortality (rate per 100,000 population)</b>	69.8	73.2 <sub>3</sub>	56.9 <sub>3</sub>	48.1 <sub>4</sub>

Source 1: CDC Wonder, 2014-2020, as compiled by 2022 County Health Rankings

Source 2: CDC Wonder, Linked Birth/Infant Death Records, 2014-2019

Source 3: CDC Wonder, 2017-2020, as compiled by 2022 County Health Rankings

Source 4: CDC Wonder, Underlying Cause of Death, 2017-2020

## Social Vulnerability

The other complicating factor in Highland County is that the majority of those living in poverty reside in the more rural parts of the county, which makes it challenging to provide services and resources to those areas.

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. Reducing social vulnerability can reduce both human suffering and economic loss.

The Socially Vulnerable Index (SVI) is comprised of 15 indicators grouped into four themes, as defined by CDC and shown in the figure below. The tool includes interactive data and maps specific to all components of the SVI in an interactive format.

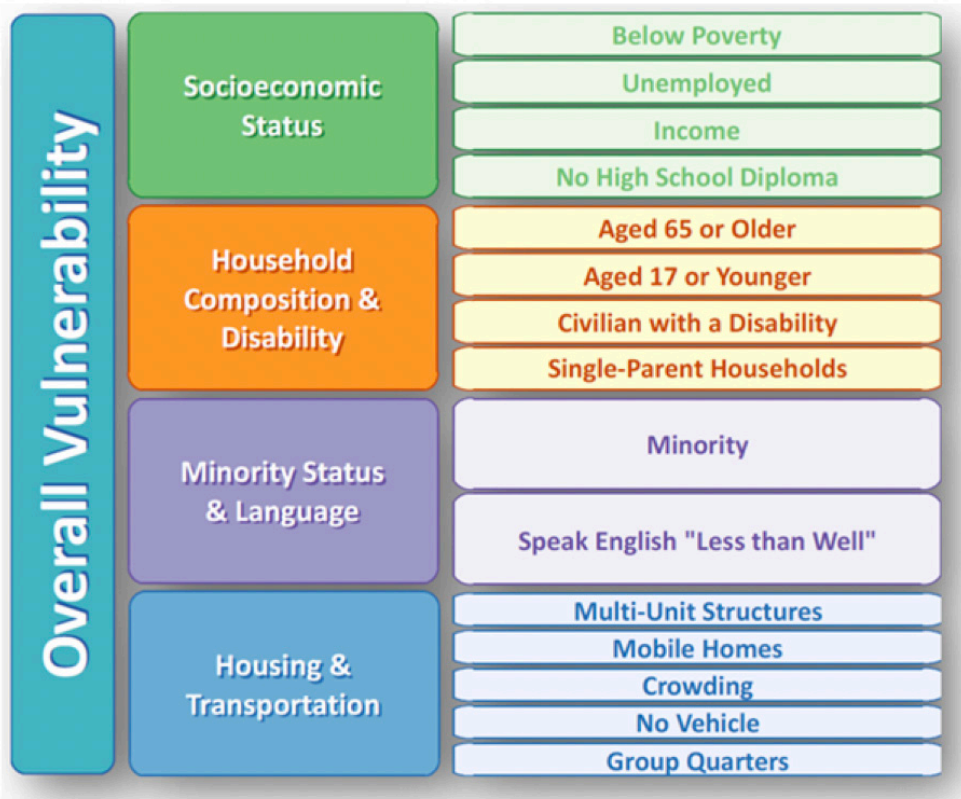


Figure 8: Social Vulnerable Index Markers

The Socially Vulnerable Index (SVI) contains both county-level and US Census Tract-level data to designate health improvement zones. The tool uses Social Vulnerability Index (SVI) created by the US Centers for Disease Control and Prevention (CDC), employing the most current data available from the US Census Bureau American Community Survey five-year estimates (2014-2018). The SVI is a score ranging from 0 – 1, detailing areas of high SVI (darker colors and higher scores) and areas of low SVI (lighter colors and lower scores).

The areas of Highland County with significant poverty issues closely resemble the areas of Highland County's most socially vulnerable, according to the SVI published by Ohio Department of Health and Centers for Disease Control . In Highland County, each census tract has some degree of social vulnerability, with areas ranked in the highest levels of vulnerability.

# CDC/ATSDR Social Vulnerability Index 2020

HIGHLAND COUNTY, OHIO

## Overall Social Vulnerability<sup>1</sup>

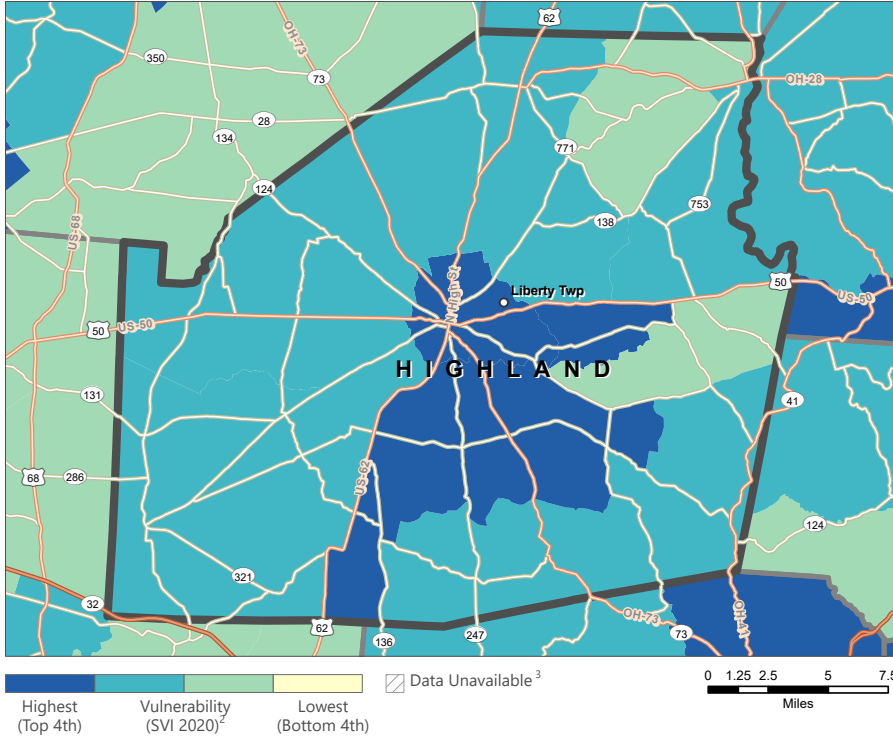


Figure 9: Overall Social Vulnerability Map - Highland County



ATSDR SVI 202 groups sixteen census-derived factors into four themes that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.

Other individual elements of the SVI assist public health leaders with designing better policies and programs to address health factors and outcomes. The subsequent figures show the disparities in disability, race, and transportation. The more challenges an area has, the more it impacts health and socioeconomic improvement outcomes.

Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The CDC/ATSDR Social Vulnerability Index (CDC/ATSDR SVI 2020) County Map depicts the social vulnerability of communities, at census tract level, within a specified county. CDC/

## CDC/ATSDR SVI Themes

Socioeconomic Status<sup>5</sup>

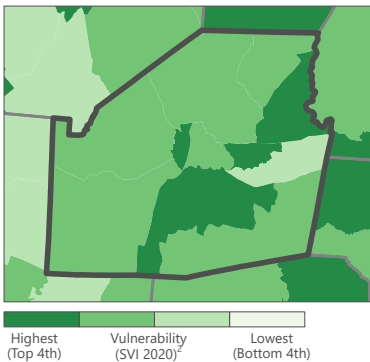


Figure 10: Socioeconomic Status - Highland County - Poverty, Unemployed, Per Capita Income, No High School Diploma

Household Characteristics<sup>6</sup>

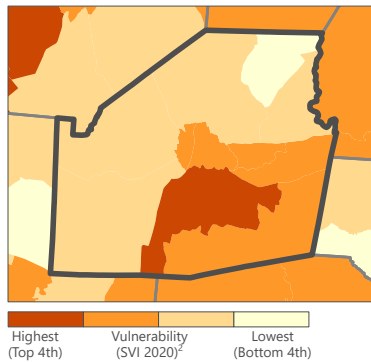


Figure 11: Household Composition/Disability Data - Household Composition/Disability: Aged 65 and Over, Aged 17 and Younger, Single-parent Household, Aged 5 and Over with a Disability

Racial and Ethnic Minority Status<sup>7</sup>

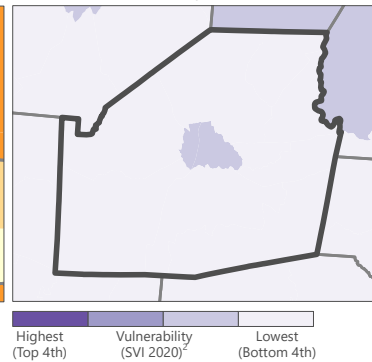
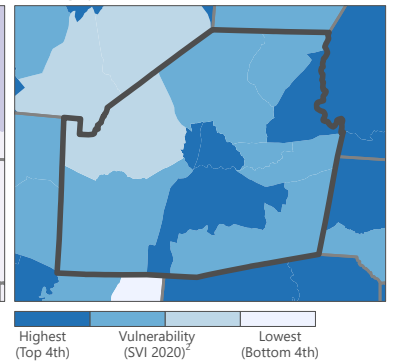


Figure 12: Housing and Transportation Vulnerability - Pike County, OH - 8 Housing Type/Transportation: Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarters

Housing Type/Transportation<sup>8</sup>



**Data Sources:** <sup>2</sup>CDC/ATSDR/GRASP, U.S. Census Bureau, Esri® StreetMap™ Premium.

**Notes:** <sup>1</sup>Overall Social Vulnerability: All 16 variables. <sup>2</sup>Census tracts with 0 population. <sup>3</sup>The CDC/ATSDR SVI combines percentile rankings of US Census American Community Survey (ACS) 2016-2020 variables, for the state, at the census tract level. <sup>4</sup>Socioeconomic Status: Below 150% Poverty, Unemployed, Housing Costs Burden, No High School Diploma, No Health Insurance. <sup>5</sup>Household Characteristics: Aged 65 and Older, Aged 17 and Younger, Civilian with a Disability, Single-Parent Household, English Language Proficiency. <sup>6</sup>Race/Ethnicity: Hispanic or Latino (of any race); Black and African American, Not Hispanic or Latino; American Indian and Alaska Native, Not Hispanic or Latino; Asian, Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander, Not Hispanic or Latino; Two or More Races, Not Hispanic or Latino; Other Races, Not Hispanic or Latino. <sup>7</sup>Housing Type/Transportation: Multi-Unit Structures, Mobile Homes, Crowding, No Vehicle, Group Quarters.

**Projection:** Ohio NAD 1983 UTM Zone 17N, CM shifted to -82.

**References:** Flanagan, B.E., et al., A Social Vulnerability Index for Disaster Management. *Journal of Homeland Security and Emergency Management*, 2011. 8(1). CDC/ATSDR SVI web page: <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

**POPULATION HEALTH**

The prevalence of certain health conditions, as well as disease, can provide insight to leading causes of death in a population in a particular region. They can also the health behaviors most prevalent among a population.

**Obesity and Related Issues**

Forty-one percent (41%) of Highland County’s adult residents are considered obese. Obesity rates are considerably higher than state (35.5%) and national averages (31.9%). The percentage of the population with other health conditions related to obesity – diabetes, high cholesterol, high blood pressure and heart disease – is comparable state and national averages

*Table 14: Highland County, Ohio Obesity, Diabetes, High Blood Pressure, and High Blood Cholesterol*

Illness and Disease	Highland County 2019*	Highland County 2022	Ohio 2022	U.S. 2022
<b>Overweight</b>	N/A	N/A	33.5% <sub>1</sub>	35.2 <sub>1</sub>
<b>Obese</b>	30.1%	41.0% <sub>2</sub>	35.5% <sub>1</sub>	31.9% <sub>1</sub>
<b>Diabetes</b>	11.0%	11.5% <sub>2</sub>	12.4% <sub>1</sub>	10.6% <sub>1</sub>
<b>High cholesterol</b>	N/A	N/A	32.8% <sub>3</sub>	33.1% <sub>3</sub>
<b>High blood pressure</b>	N/A	N/A	34.5% <sub>3</sub>	32.3% <sub>3</sub>

*\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported*

*N/A – Data unavailable*

*Source 1: CDC, 2020 BRFSS, Crude-Rate*

*Source 2: CDC, 2019 BRFSS Age-Adjusted Rate, as compiled by County Health Rankings, 2022*

*Source 3: CDC, 2019 BRFSS, Crude-Rate*

**Respiratory Issues**

Pulmonary and respiratory issues are also prevalent in Highland County.

*Table 15: Highland County, Ohio Asthma and Chronic Obstructive Pulmonary Disease (COPD)*

Illness and Disease	Highland County 2019*	Highland County 2022 <sub>1</sub>	Ohio 2022 <sub>2</sub>	U.S. 2022 <sub>2</sub>
<b>Currently have asthma</b>	N/A	7.8%	9.9%	9.6%
<b>Ever been told they have asthma</b>	N/A	N/A	14.4%	14.2%
<b>Ever been told they have COPD</b>	N/A	N/A	8.0%	6.2%

*\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported*

*N/A – Data unavailable*

*Source 1: CDC, State Maps for Asthma Prevalence, 2016-2018*

*Source 2: 2020 BRFSS, Crude-Rate*

## Cancer

Of all cases of cancer in Highland County, including of the breast, lung, and colon, are most common. Highland County tends to experience higher mortality rates from cancers than the state, due to limited access and use of preventative health screenings.

Table 16: Highland County, Ohio Age-Adjusted Cancer Mortality Rates per 100,000 population

Forms of Cancer	Highland County 2019*	Highland County 2022 <sub>1</sub>	Ohio 2022 <sub>1</sub>	U.S. 2022 <sub>2</sub>
Lung	48.1	56.1	45.0	36.7
Colon and rectal	--*	18.4	14.8	13.4
Prostate	--*	17.8	19.4	18.8
Breast	--*	14.9	12.0	11.0
Ovarian	N/A	6.1	6.5	6.5
Oral cavity & pharynx	N/A	--*	2.8	2.5
Larynx	N/A	--*	1.2	0.9
Testicular	N/A	--*	0.3	0.3

\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported

N/A – Data unavailable

--\* Indicates rates have been suppressed for low, unreliable counts

Source 1: ODH Public Health Data Warehouse, Mortality, 2015-2019

Source 2: CDC Wonder, 2015-2019

Table 17: Highland County, Ohio Age-Related Cancer Incidence Rates per 100,000 population

Forms of Cancer	Highland County 2019*	Highland County 2022 <sub>1</sub>	Ohio 2022 <sub>1</sub>	U.S. 2022 <sub>2</sub>
Prostate	82.5	110.7	112.5	106.2
Lung	73.6	78.6	66.7	57.3
Breast	113.3	61.0	69.9	67.7
Colon and rectal	48.7	49.9	40.5	38.0
Oral Cavity & Pharynx	12.4	16.0	12.5	11.9
Cervical	13.2	10.1	7.9	7.7
Brain	6.6	8.9	7.1	6.5
Ovarian	6.6	8.8	10.0	10.7
Testicular	5.0	7.2	5.8	5.7
Esophagus	4.3	6.4	5.6	4.5
Larynx	5.8	3.5	3.9	3.1

\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported

Source 1: ODH Public Health Data Warehouse, Cancer Incidence, 2015-2019

Source 2: CDC Wonder, Cancer Incidence, 2014-2018

## Sexually Transmitted Disease

The overall rate of occurrence for sexually transmitted disease in Highland County, Ohio, is considerably lower than state and national averages. Hepatitis C rates are higher than the state average.

Table 18: Highland County, Ohio Sexually Transmitted Diseases

Sexually Transmitted Diseases	Highland County 2019*	Highland County 2022	Ohio 2022	U.S. 2022
<b>Chlamydia</b> (rate per 100,000 population)	241.7	243.3 <sub>1</sub>	504.8 <sub>1</sub>	481.3 <sub>2</sub>
<b>Gonorrhea</b> (rate per 100,000 population)	27.9	37.1 <sub>1</sub>	262.6 <sub>1</sub>	206.5 <sub>2</sub>
<b>HIV</b> (rate per 100,000 population)	53.2	73.9 <sub>3</sub>	214.6 <sub>3</sub>	379.7 <sub>4</sub>
<b>Hepatitis C</b> (rate per 100,000 population)	N/A	134.4 <sub>5</sub>	111.0 <sub>5</sub>	N/A
<b>Hepatitis A</b> (rate per 100,000 population)	N/A	N/A	15.4 <sub>6</sub>	5.7 <sub>6</sub>

\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported

N/A – Data unavailable

Source 1: ODH STD Surveillance, 2020

Source 2: CDC STD Surveillance State Ranking Tables, 2020

Source 3: ODH Ohio HIV Surveillance Annual Report, 2020

Source 4: CDC, HIV National Profile, Prevalence, 2019

Source 5: ODH, 2020 Ohio Hepatitis C: Surveillance Summary

Source 6 : CDC, 2019 Viral Hepatitis Surveillance Report, 2015-2019

## Maternal Health

The rate of low birth weights in Highland County are comparable to the state average. The rate of smoking during pregnancy is significantly higher (16.9%) than the rest of Ohio (11.5%). The number of women receiving prenatal care within their first trimester of pregnancy is considerably lower (54.1%) than the rest of Ohio (68.9%).

Table 19: Highland County, Ohio Maternal Health

Maternal Health	Highland County 2019*	Highland County 2022	Ohio 2022	U.S. 2022
<b>Low birth weight</b> (1500g-2499g)	6.5%	7.3% <sub>1</sub>	7.1% <sub>1</sub>	6.9% <sub>2</sub>
<b>Very low birth weight</b> (<1500g)	N/A	1.7% <sub>1</sub>	1.4% <sub>1</sub>	1.3% <sub>2</sub>
<b>Pre-term birth</b> (<37 weeks gestation)	10.3%	12.2% <sub>1</sub>	10.3% <sub>1</sub>	10.3% <sub>2</sub>
<b>Maternal smoking</b> (any tobacco smoking during pregnancy)	N/A	16.9% <sub>1</sub>	11.5% <sub>1</sub>	5.5% <sub>2</sub>
<b>First trimester prenatal</b>	N/A	54.1% <sub>1</sub>	68.9% <sub>1</sub>	76.1% <sub>2</sub>
<b>Late prenatal care</b> (in third trimester)	N/A	--%*	4.2% <sub>1</sub>	4.2% <sub>2</sub>
<b>Breastfeeding at discharge</b>	N/A	61.2% <sub>1</sub>	75.0% <sub>1</sub>	71.0% <sub>2</sub>
<b>Unmarried</b>	46.3%	45.5% <sub>1</sub>	43.6% <sub>1</sub>	36.0% <sub>2</sub>

\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported

--\* Indicates rates have been suppressed for low, unreliable counts

N/A – Data unavailable

Source 1: Ohio Department of Health, Data Warehouse 2020

Source 2: CDC Wonder, Natality, 2020



## Child Health

A total of 333 children were screened for lead exposure in 2020 in Highland County, with 2% testing with elevated blood levels.

Table 20: Highland County, Ohio Child Health

Child Health	Highland County 2019*	Highland County 2022	Ohio 2022	U.S. 2022
Children lead screened (under age 6)	1.6%	333	143,705	N/A
Percentage of those with confirmed elevated blood levels ( $\geq 5\mu\text{g}/\text{dL}$ ) (under age 6)	1.6%	2%	2%	N/A

*\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported*

*N/A – Data unavailable*

*Source: ODH Public Health Data Warehouse, Lead Data, 2020*



**HEALTHY BEHAVIORS**

The prevalence of certain health behaviors can serve as early indicators for a number of health conditions and diseases, as well some causes of death. Nutrition, fitness, and other behaviors for Highland County were researched from public health information, as well as surveyed within the population. According to data from the Centers for Disease Control, more than 34.3% of Highland County residents are not engaging in sufficient physical activity. Alcohol consumption is not as high as other parts of Ohio and the U.S., but smoking prevalence continues to be higher than state and national rates.

*Table 21: Highland County, Ohio Adult Health Behaviors*

<b>Health Behaviors</b>	<b>Highland County 2019*</b>	<b>Highland County 2022</b>	<b>Ohio 2022</b>	<b>U.S. 2022</b>
<b>Physical inactivity</b> (did not participate in any physical activities in past month)	28.2%	34.3% <sup>1</sup>	27.6% <sup>1</sup>	26.3% <sup>2</sup>
<b>Fruit consumption</b> (less than one time per day)	N/A	N/A	42.7% <sup>2</sup>	39.3% <sup>2</sup>
<b>Vegetable consumption</b> (less than one time per day)	N/A	N/A	20.2% <sup>2</sup>	20.3% <sup>2</sup>
<b>Current drinkers</b> (had at least one drink of alcohol within the past 30 days)	N/A	N/A	50.8% <sup>3</sup>	52.9% <sup>3</sup>
<b>Binge drinkers</b> (males having five or more drinks on one occasion, females having four or more drinks on one occasion)	N/A	17.2% <sup>1</sup>	20.7% <sup>1</sup>	16.8% <sup>2</sup>
<b>Current smokers</b>	21.9%	28.5% <sup>1</sup>	21.8% <sup>1</sup>	16.0% <sup>2</sup>
<b>Current e-cigarette users</b>	N/A	N/A	5.4% <sup>4</sup>	5.6% <sup>4</sup>

*\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported*

*N/A – Data unavailable*

*Source 1: 2019 BRFSS age-adjusted rate, as compiled by County Health Rankings, 2022*

*Source 2 : BRFSS, Crude Prevalence, 2019*

*Source 3 : BRFSS, Crude Prevalence, 2020*

*Source 4: 2018 BRFSS, as compiled by State Tobacco Activities Tracking and Evaluation System*

## Demographics: County

Table 22: Number and Age-Adjusted Rate of Unintentional Drug Overdose Deaths by County, Ohio, 2011-2020

County <sup>1</sup>	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020 Rate <sup>2</sup>	2015-2020 Rate <sup>2</sup>	Order <sup>3</sup>
<b>Ohio</b>	<b>1,772</b>	<b>1,914</b>	<b>2,110</b>	<b>2,531</b>	<b>3,050</b>	<b>4,050</b>	<b>4,854</b>	<b>3,764</b>	<b>4,028</b>	<b>5,017</b>	<b>45.6</b>	<b>37.4</b>	
Highland	7	3	8	12	9	6	13	5	13	14	36.7	27.3	52/53

Overall, drug overdose deaths have increased across Ohio, but have remained relatively stable in Highland County since 2016.

## Injury and Violence

Accidental death is a leading cause of mortality in Highland County. Closer review reveals drug overdoses and traffic fatalities being the majority of those deaths. Local data is collected through the Highland County Coroner's Office, Highland County General Health District, and the local State Highway Patrol Outpost.

## Drug Overdose Deaths

Drug overdose deaths continue to be a leading accidental fatality cause in Highland County, although communitywide deployment of Narcan has reduced deaths. Highland County ranked among the lowest 20% of counties with overdose deaths between 2015 and 2020.

### Demographics: County

Figure 13: Average Age-Adjusted Rate of Unintentional Drug Overdose Deaths by County, Ohio, 2015-2020

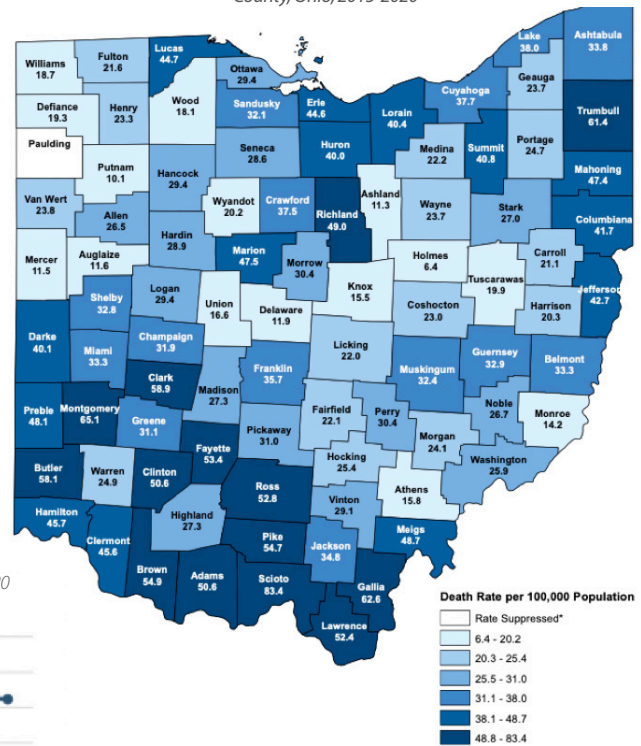
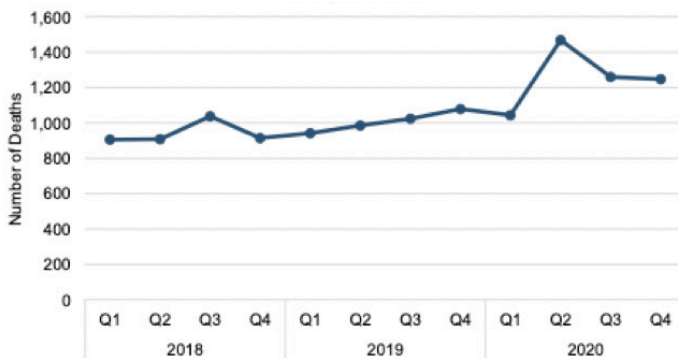


Figure 14: Number of Unintentional Drug Overdose Deaths by Quarter, Ohio, 2018-2020



- After an overall decrease in 2018, unintentional drug overdose deaths increased each quarter in 2019. Following a slight decrease in the first quarter of 2020, there was a notable increase in the number of deaths in the second quarter. Within the second quarter of 2020, the month of May had the highest number of unintentional drug overdose deaths per month (574 deaths) ever recorded in Ohio.

Source: Ohio Department of Health (ODH), Bureau of Vital Statistics. Analysis: ODH Violence and Injury Prevention Section. Includes Ohio residents who died due to unidentified drug poisoning (underlying cause of death International Classification of Diseases, Tenth Revision [ICD-10], codes X40-X44).

Source: Ohio Department of Health, Bureau of Vital Statistics, U.S. Census Bureau (Vintage 2020 population estimates). Analysis: ODH Violence and Injury Prevention Section. Includes Ohio residents who died due to unidentified drug poisoning (underlying cause of death ICD-10 codes X40-X44). County is determined by county of residence. \*Rates are suppressed when there are fewer than 10 total deaths.

## Traffic Safety

In 2019 through 2021, traffic fatalities significantly contributed to accidental death rates in Highland County. Operating a vehicle while under the influence of a substance was identified in four fatality accidents in 2021.

Table 23: Traffic Fatalities Highland County

Type	2021	2020	2019
# Rural	8	8	2
# Urban	0	2	0
# OVI Related	4	5	2
# Commercial Related	0	0	0
# Motorcycle Related	1	2	0



Data Source: SAU Fatal Crash Database  
 Map Design and Layout: OSHP Statistical Analysis Unit  
 Ohio State Highway Patrol  
 March 9, 2022

## Adverse Childhood Experiences (ACE)

Adverse Childhood Experiences (ACE) have been shown to be a strong indicator for other mental health, behavioral health, and physical health risks. The HCHD CHA survey collected ACE information from participants.

Have you ever experienced any of the following? (Select all that apply)		
Answer Choices	Responses	
Someone in your home swearing at you, insulting you, putting you down or humiliating you	14.69%	77
Someone in your home pushing, hitting, grabbing, slapping, or throwing something at you	8.40%	44
Someone in your home who drinks too much or uses drugs	8.21%	43
Unwanted sexual contact from someone you know	7.44%	39
Being a victim of a crime (physical assault, sexual assault, robbery, etc.)	10.11%	53
Homelessness and/or unstable housing	5.15%	27
Discrimination because of gender, race/ethnicity, religious beliefs, sexual orientation, etc.	8.21%	43
Not having enough to eat or money to buy food	10.50%	55
Inability to pay bills	15.27%	80
Involuntary termination of a utility service	4.01%	21
Incarceration (jail time)	1.15%	6
Being removed from your home or family (by order of children's services or other agency)	1.72%	9
A house fire or natural disaster (flood, tornado, etc.)	3.44%	18
None of the above	61.07%	320
Other (please specify)	1.72%	9
	<b>Answered</b>	<b>524</b>

Table 24: Reported ACEs Highland County

**Access to Healthcare**

The Highland County community has the benefit of two critical access hospitals (Highland District Hospital and the Adena Greenfield Medical Center) serving the broader community. The critical access hospital and all other hospital facilities in the region have emergency departments. The community also has two federally qualified health centers.

**Healthcare Service Access**

Highland County has a partial medically underserved area (MUA) designation, as well as a partial medically underserved population (MUP). That’s due to the limited number of providers, those who access healthcare with Medicaid, and the geographic isolation of the more rural areas of the county. The area is considered a healthcare provider shortage area (HPSA) for primary care, oral health, and mental health, due to limited access for services.

Table 25: Highland County, Ohio Health Services

Health Services	Highland County 2019*	Highland County 2022
Number of physicians	23	N/A
Health professional shortage area	Yes	Yes
Number of free clinics	0	N/A
Number of FQHCs (Federally qualified health center)	2	2

*\*See Highland County 2019 Community Health Needs Assessment for sources and years of data reported*

*N/A – Data unavailable*

*Source: Health Resources and Services Administration, Health Professional Shortage Area (HPSA) Find*

CHA survey participants also provided insight into access to medical care. More than 27% of respondents reported cost as an issue preventing access to healthcare in the past 12 months.

**Was there a time in the past 12 months when you needed to see a doctor or medical professional/healthcare provider, but could not because of the cost?**

Answer Choices	Responses	
Yes	27.86%	146
No	67.75%	355
Don't know/not sure	3.44%	18
Prefer not to say	0.95%	5
	<b>Answered</b>	<b>524</b>

Table 26: Highland County, Ohio Health Services

## PHYSICAL ENVIRONMENT

Information on environmental and community factors - food, air, water, housing and crime - can provide insight to many of the underlying issues that impact the health of a community. Data on food and housing access and security, air and water quality, as well as safety, was collected to illustrate the basic needs of Highland County residents.

### Air Quality

Ambient air quality monitoring is currently not established in Highland County, and therefore not available for review as part of the 2019 Community Health Needs Assessment. Some toxic release inventory emissions inventory (TRI) is available from the EPA to provide some insight to the manner in which pollutants are disposed of and/or emitted in the community by local industry, as well car emissions, etc. Currently, diethanolamine, nickel, and toluene diisocyanate (mixed isomers) disposal information is available for review.

Table 27: Highland County, Ohio Environmental Health

Environmental Health	Highland County 2022	Ohio 2022	U.S. 2022
<b>Air Pollution – particulate matter</b> (Average daily density of fine particulate matter in micrograms per cubic meter [PM2.5]) <sup>1</sup>	8.9	9.0	7.5
<b>Water Quality – drinking water violations</b> (Presence of health-related drinking water violations) <sup>2</sup>	No	N/A	N/A
<b>Transportation – percentage of the workforce who drive alone to work</b> <sup>3</sup>	82%	82%	75%
<b>Transportation – commute 30 minutes alone</b> (Among workforce that drives alone to work) <sup>3</sup>	43%	31%	37%
<b>Households without a vehicle</b> <sup>4</sup>	8.7%	7.8%	8.5%
<b>Adequate access to exercise opportunities</b> <sup>5</sup>	26%	77%	80%
<b>Lead Detection – number of lead hazardous properties</b> (Properties with notices of non-compliance/orders to vacate due to lead hazards) <sup>6</sup>	2	N/A	N/A

N/A – Not Applicable

Source 1: 2018 Environmental Public Health Tracking Network, as compiled by 2022 County Health Rankings

Source 2: 2020 Safe Drinking Water Information System, as compiled by 2022 County Health Rankings

Source 3: 2016-2020 American Community Survey 5-Year Estimates, as compiled by 2022 County Health Rankings

Source 4: U.S. Census Bureau; 2016-2020 American Community Survey Estimates

Source 5: Business Analyst, ESRI, YMCA & US Census Tigerline Files, as compiled by 2022 County Health Rankings

Source 6: Ohio Public Health Information Warehouse, Ohio Lead Hazardous Properties, Updated 5/18/2022

## Crime

The rate of both property crime and violent crime Highland County is significantly less than the rest of Ohio and the U.S.

Table 28: Highland County, Ohio Crime

Highland County Crime	Crime Reported	Crime Cleared	Crime Reported Minus Crime Cleared*
<b>All Violent Crimes</b>	<b>381</b>	<b>208</b>	<b>173</b>
Homicide**	13	4	9
Rape	90	6	84
Robbery	22	4	18
Aggravated assault	256	194	62
<b>All Property Crimes</b>	<b>4,571</b>	<b>477</b>	<b>4,094</b>
Arson	30	9	21
Burglary	1,558	148	1,410
Larceny-theft	2,761	303	2,458
Motor vehicle theft	252	26	226

*\*Crimes are not necessarily cleared in the year they occur- use caution when interpreting data*

*\*\*Data only available from 2013-2020*

*Source: Federal Bureau of Investigation, Crime Data Explorer, Highland County Sheriff's Office, 2010-2020*

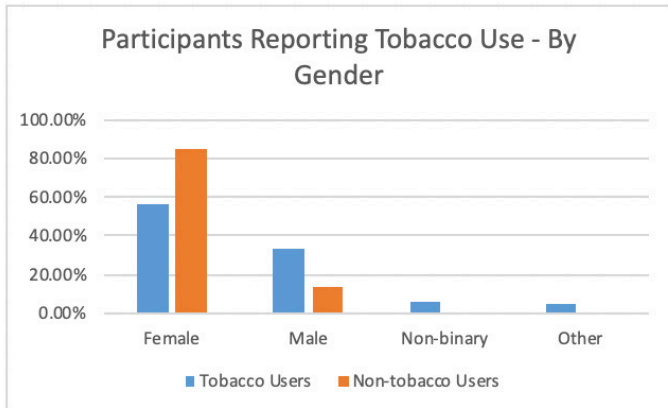
## SUB-POPULATION: SPECIAL FOCUS

The Highland County Community Health Coalition identified two specific sub-populations for a more detailed review. The rate of tobacco use in Highland County is significantly higher than other parts of Ohio and the nation, and is a contributing factor in many chronic health conditions, diseases, and pre-mature deaths. Poverty is another significant health issue for Highland County, and leads to many health barriers and poor health outcomes for its residents.

## Tobacco Users

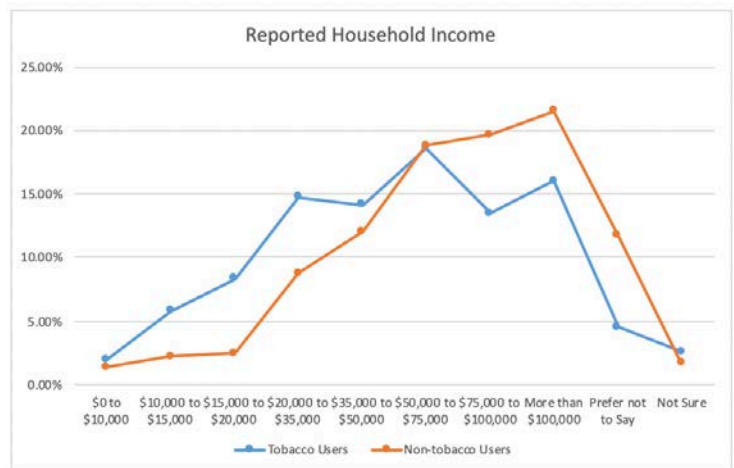
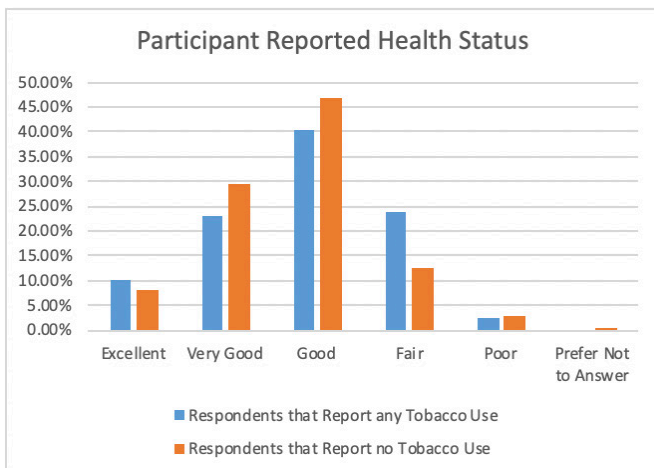
Tobacco users rated their own personal health condition worse than non-tobacco use. Tobacco users also reported less income per household than non-tobacco users. Those factors can have significant impacts on personal health.

What is your current gender identity?		
	Tobacco Users	Non-tobacco Users
Female	56.41%	85.01%
Male	33.33%	14.17%
Non-binary	5.77%	0.27%
Other	4.49%	0.54%



Reported Income	Tobacco Users	Non-tobacco Users
\$0 to \$10,000	1.92%	1.36%
\$10,000 to \$15,000	5.77%	2.18%
\$15,000 to \$20,000	8.33%	2.45%
\$20,000 to \$35,000	14.74%	8.72%
\$35,000 to \$50,000	14.10%	11.99%
\$50,000 to \$75,000	18.59%	18.80%
\$75,000 to \$100,000	13.46%	19.62%
More than \$100,000	16.03%	21.53%
Prefer not to say	4.49%	11.72%
Not Sure	2.56%	1.63%

Would you say that in general your health is - excellent, very good, good, fair, poor, prefer not to answer		
General health rating	Respondents who report any tobacco use	Respondents who report no tobacco use
Excellent	10.26%	7.90%
Very good	23.08%	29.43%
Good	40.38%	46.87%
Fair	23.72%	12.53%
Poor	2.56%	3.00%
Prefer not to answer		0.27%



Tables 29 - 31: Tobacco Use, Highland County



## Low Income Households and Self-Reported Health Status

Poverty is a significant indicator of health in Highland County, and a long-standing barrier to access to care, transportation, utilization of healthcare resources, and other health outcome factors. The 2022 CHA survey further supported the connection between health and wealth, with health outcomes reported as much poorer overall among those household earning below \$35,000 annually.

Federal poverty guidelines establish several thresholds based on household income. For the sake of comparison, survey respondent households who earned below \$35,000 annually were compared to households earning \$35,000 and over. The comparison clearly demonstrates the impact that low income has on health outcomes.

As demonstrated in the table and charts above, Highland County residents' income has a significant and lasting impact on the overall level of personal health.

Persons in family/household	Poverty guideline
1	\$12,880
2	\$17,420
3	\$21,960
4	\$26,500
5	\$31,040
6	\$35,580
7	\$40,120
8	\$44,660
For families/households with more than 8 persons, add \$4,540 for each additional person.	

Table 32: 2021 Poverty Guidelines For The 48 Contiguous States And The District of Columbia

General Health Rating	\$0-\$35,000	\$35,000 to \$100,000 +
Poor	5.94%	1.66%
Fair	20.79%	15.19%
Good	53.47%	41.44%
Very Good	16.83%	31.22%
Excellent	2.97%	10.50%

Table 33: Health Comparison of Health Rating to Income

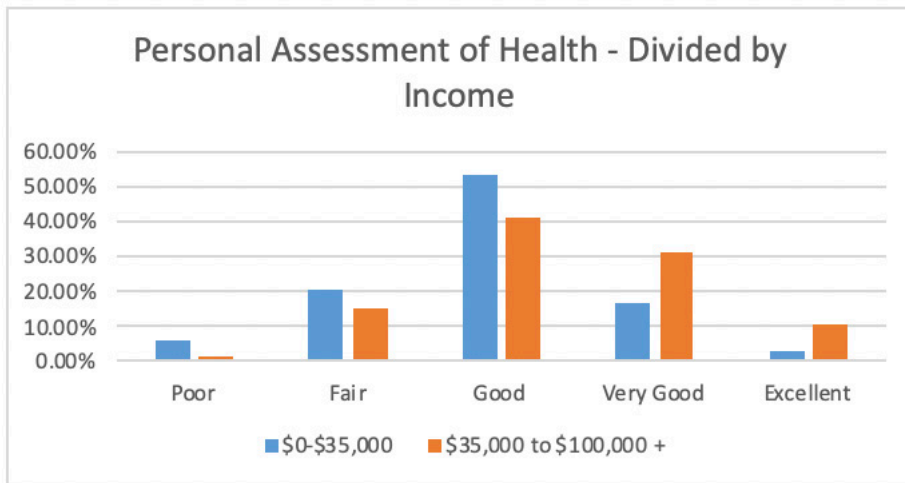


Figure 14: Personal Assessment of Health - Divided by Income

## Community Health Assessment Survey Results

Multiple methods of community input were sought for the community health assessment. It's important to note that not all rural communities, particularly those that are Appalachian, have the understanding of the relevance or importance of providing input to the community health assessment process, so it can be difficult to obtain a representative sample of the community.

### PUBLIC SURVEY SUMMARY

As part of the assessment process, the Highland County Health Collaborative engaged the broader community in a public survey to gain more insight to a variety of factors that may impact the health of the community, as well as to ask for feedback about the comprehensive community needs to improve overall health. In addition to asking general questions regarding demographics, education, income and social factors, questions regarding environmental factors, health behaviors, and top community health needs are also asked.

The survey was made available for more than two months in both electronic and paper form. The link to the electronic copy of the survey was shared on multiple social media and websites.

A copy of the full survey response summary is located in the appendix. The following highlights the most significant findings from the survey. The raw survey data will be made available to the public for in-depth analysis of specific topics of interest.

### Survey Response Snapshot

Total Surveys: 524

- **Gender:** 77% Female; 22% Male, 1% other/refused to answer
- **Race:** 89.31% white; 2.86% black; 3.44% American Indian or Alaska Native; 1.91% Asian or Asian American; 2.48% falling in other categories
- **Education:** 25.95% four-year degree or higher; 20.23% Associates degree; 18.51% high school diploma or GED and/or some college; 3.24% no high school diploma
- **Household Income:** 19.66% earning \$100,000 or more; 32.07% earning less than \$50,000; 8.7% earning less than \$20,000 per year
- **Children in the Home Younger than 18 years of Age:** 40% Yes; 60% No
- **Marital Status:** 10.69% divorced; 64.69% married; 6.11% widowed; 1.72% separated; 9.92% never married
- **Employment Status:** 68% employed; 4% self-employed; 3% unemployed; 6% homemaker; 4% disabled; 12% retired

### Environmental Factors

Environmental factors are wide-ranging and diverse, and have a significant impact on individual and public health, in general. A variety of questions related to personal and community factors identified critical indicators that may impact health.

The most significant findings for environmental issues in Highland County from the public survey included access to healthcare, including socio-economic barriers, like transportation, that may impact ability to access services. Those reporting barriers to healthcare in the Highland County community indicated that the cost of care was the most significant.

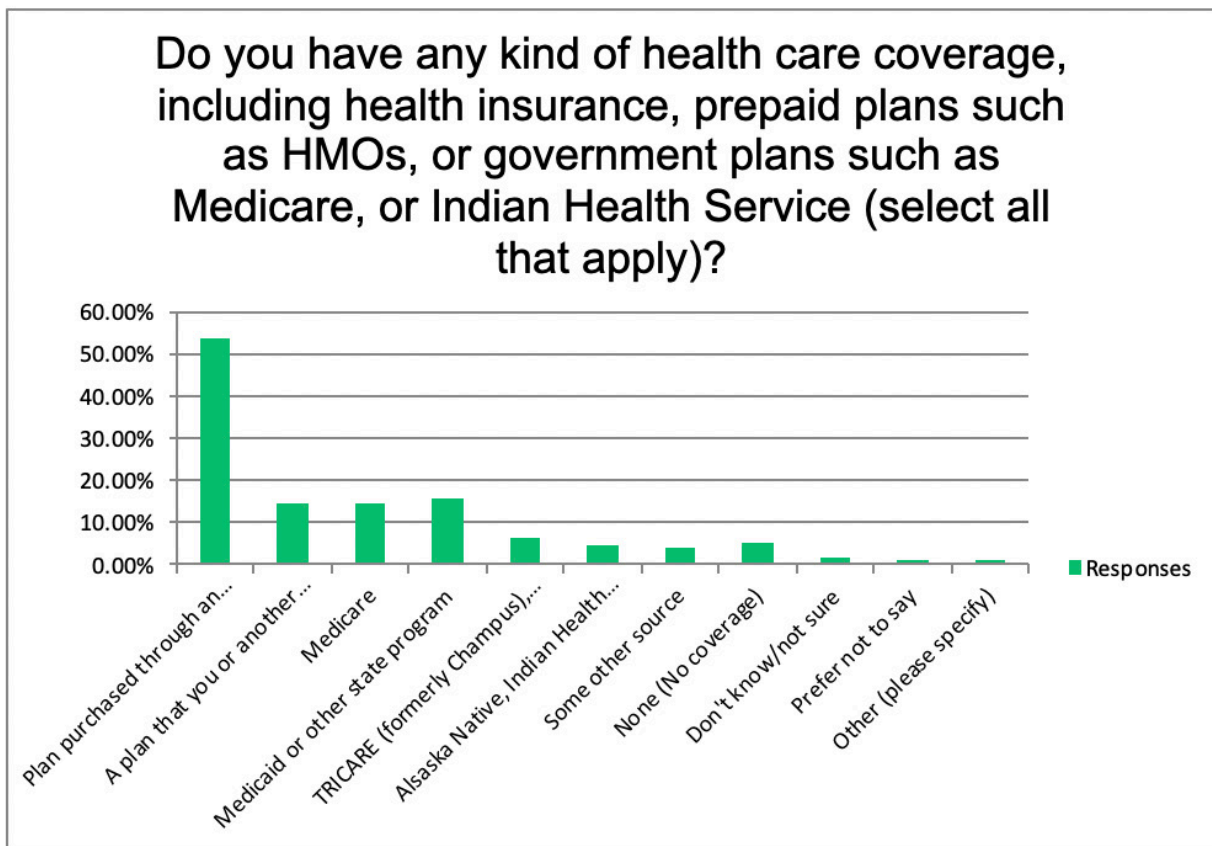
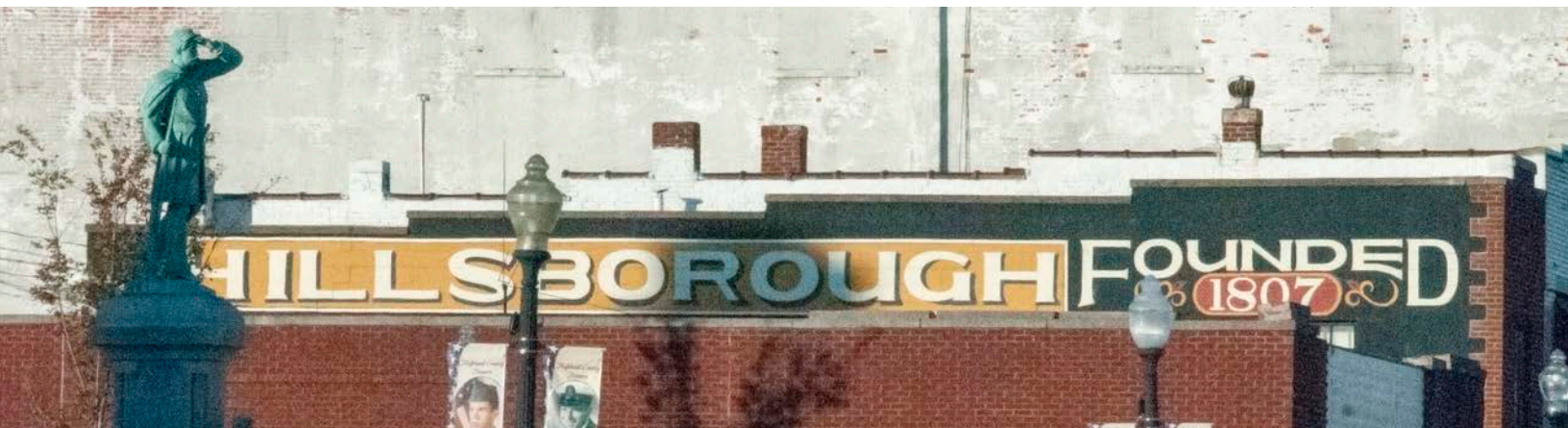


Table 34



Was there a time in the past 12 months when you needed to see a doctor or medical professional/healthcare provider, but could not because of the cost?

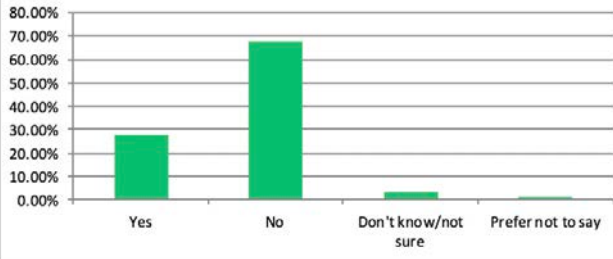


Table 35

Do you currently have a reliable source of personal transportation for travel to work, doctor's appointments, getting groceries, and other essential travel?

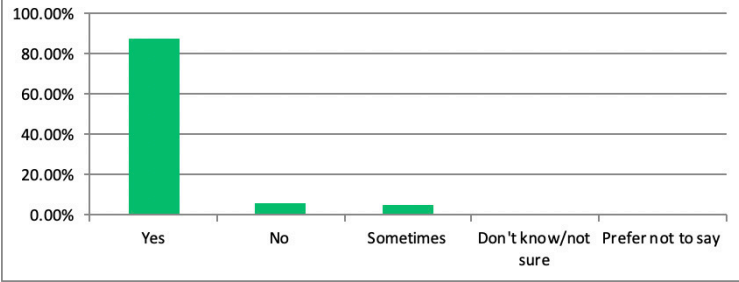


Table 36

Within the last year did you get groceries from a food pantry? If so, do you feel that the food pantry provided healthy food options (fruits, vegetables, and non-processed foods)?

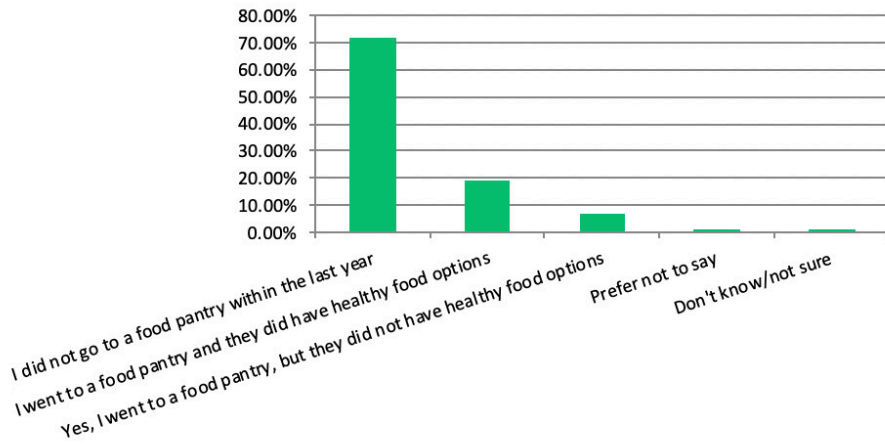


Table 37

### Health Behaviors and Experiences

Survey respondents were also asked to report their own health behaviors and what they experience as members of a broader community. More than 35% of respondents felt that their health was excellent or very good, while approximately 17% felt that their health was fair or poor. Close to 14% indicated they had some physical barriers limited their ability to walk or climb stairs. More than 29% of respondents indicated that they had high blood pressure. High cholesterol and arthritis were also other conditions reported.

Nearly 19% of respondents indicated that they've been diagnosed with a depressive disorder. Another 15% indicated that they had difficulty concentrating. When asked from whom they would seek help for a mental health or substance use disorder issue, more than 24% indicated they would speak to a physician first.

Approximately 46% of respondents indicated that they ate fruits and vegetables at least once a week and even more participants (66%) purposely participated in physical activity in the last month. Approximately 2% of respondents drink a type of alcoholic beverage daily.

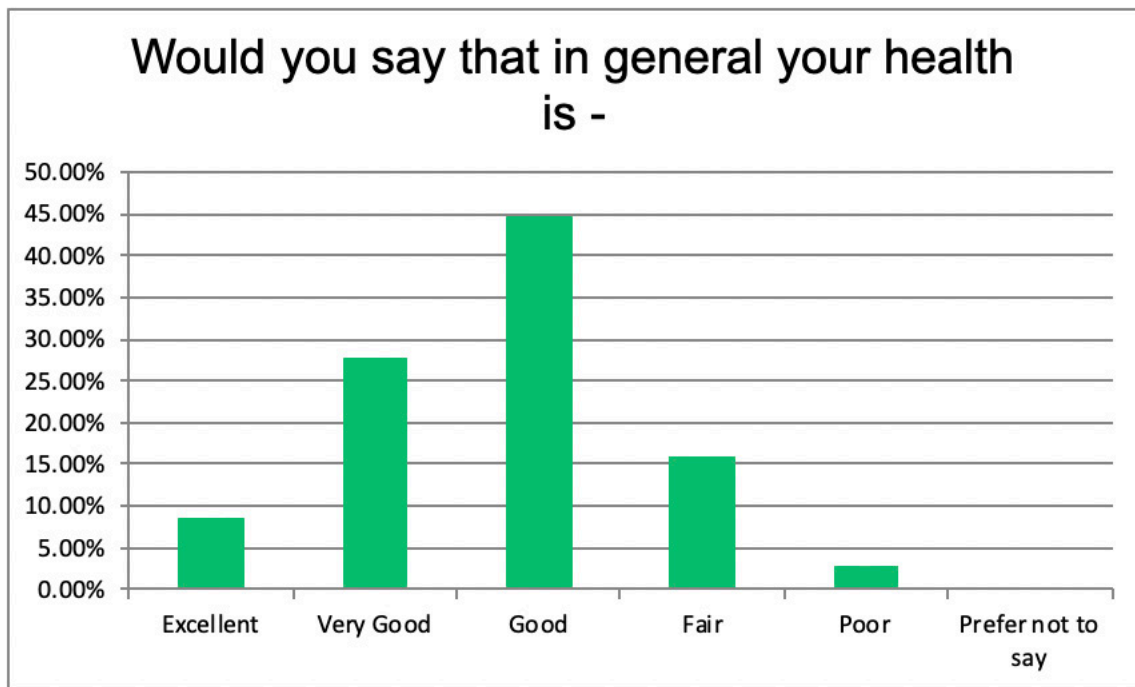


Table 38

Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?

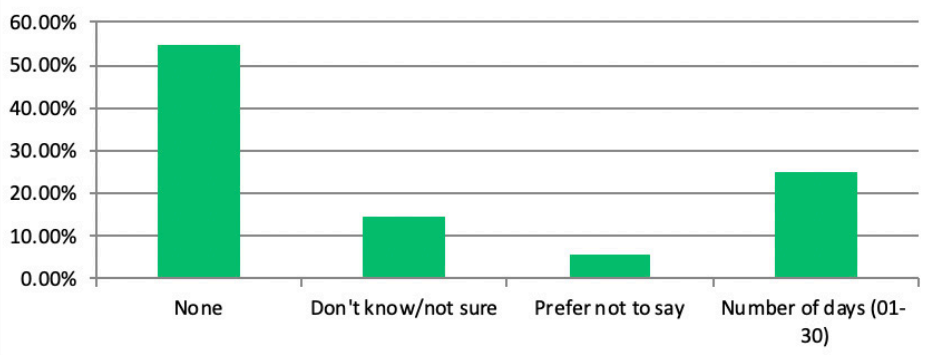


Table 39

Has a doctor, nurse or other health professional ever told you that you have any of the following (select all that apply)?

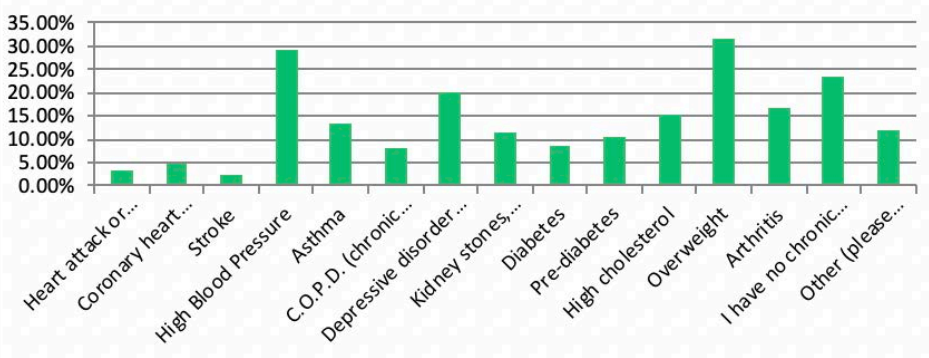


Table 40

Do you have problems with any of the following (select all that apply)?

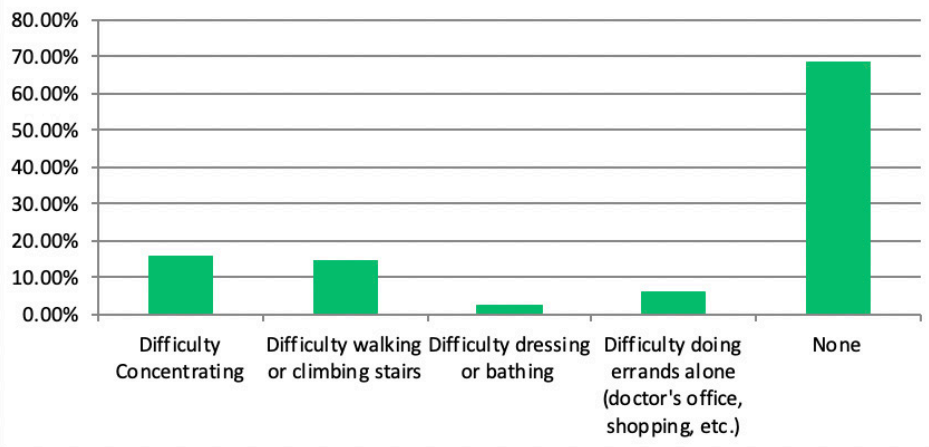


Table 41

If you, a friend, or family member needed counseling for a mental health or a drug/alcohol abuse problem, who is the first person or organization you would talk to or tell them to talk to (please choose only one)?

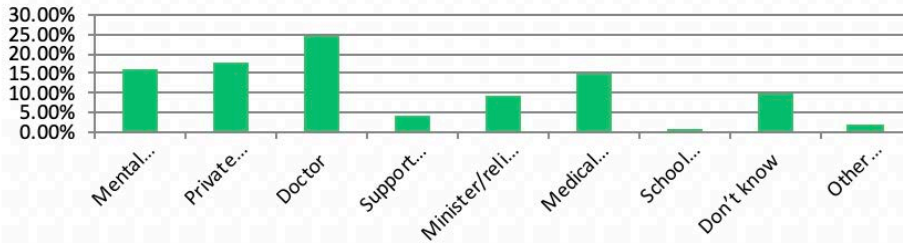


Table 42

During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage, such as beer, wine, or malt beverage liquor?

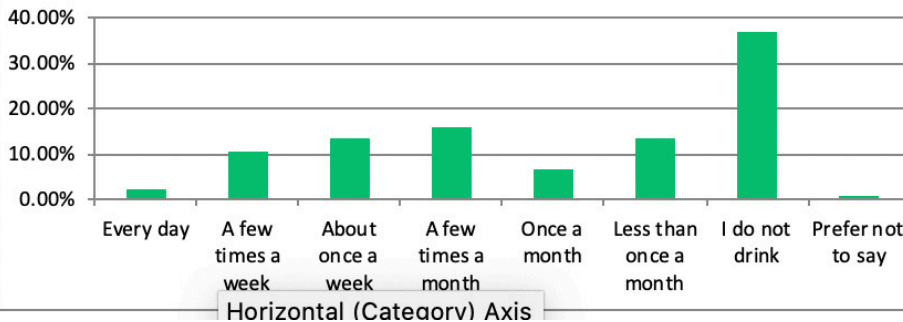


Table 43

During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, or walking?

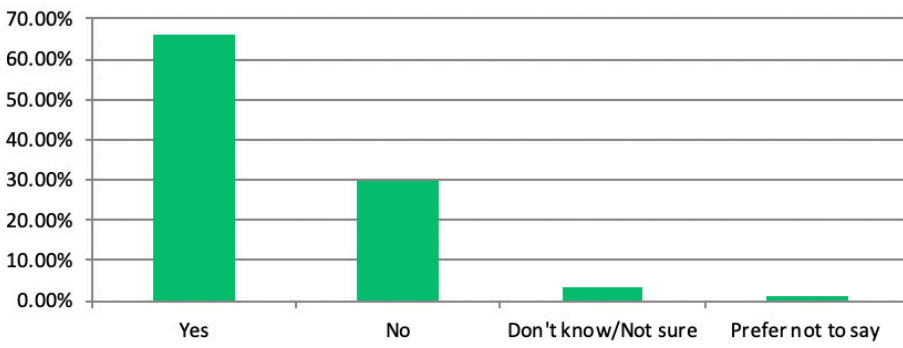


Table 44

If you answered "yes" in the last question, how many times per week did you take part in that activity (i.e., running, calisthenics, golf, or walking, etc.) during the past month?

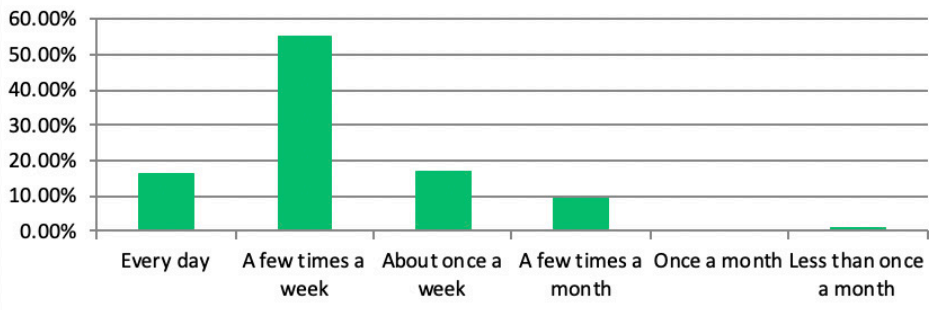


Table 45

How often do you eat fruit (not including juices)?

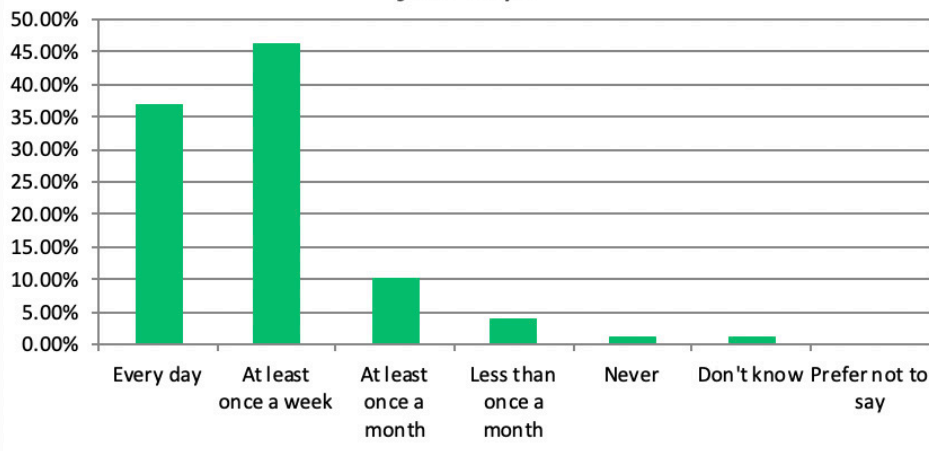


Table 46

How often do you eat a green leafy or lettuce salad, with or without other vegetables?

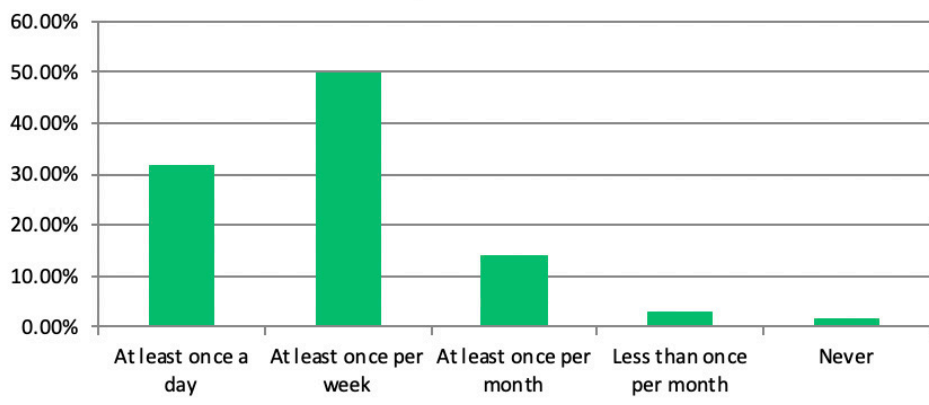


Table 47



### Quality of Life Indicators

Survey respondents were also asked questions related to quality of life in Highland County, including community conditions, such as safety and resources. The survey also included questions related to personal experiences, including trauma and poor mental health.

More than 14% of respondents indicated they experienced verbal abuse and another 8% indicated they had been victims of physical abuse. Food insecurity was another factor experienced by more than 10% of respondents. More than 15% of respondents indicated that they had considered suicide, with 2% of respondents indicating that they had attempted suicide/hurting themselves.

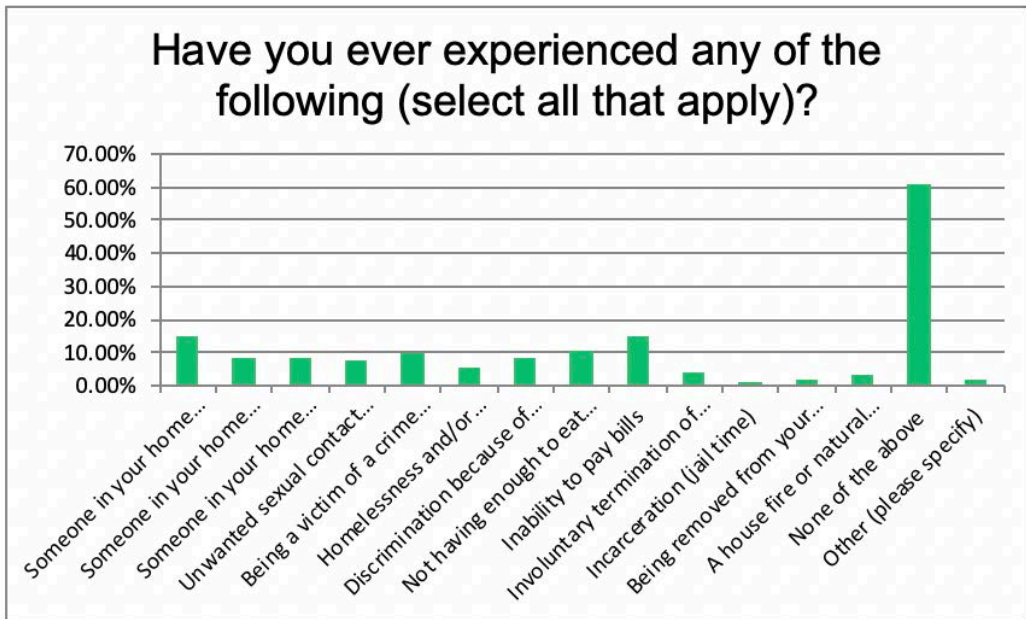


Table 48

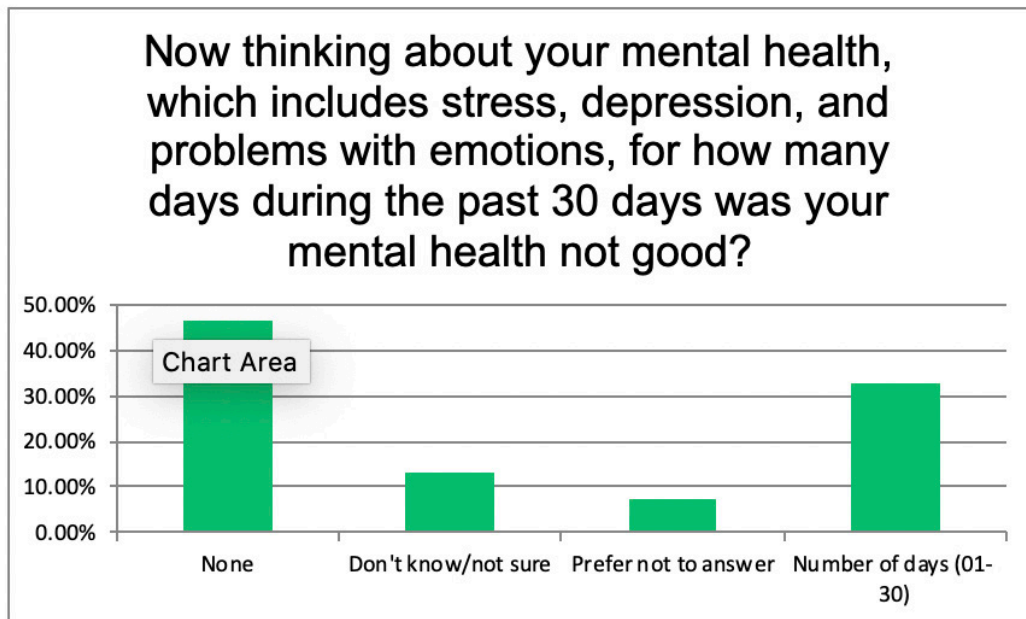


Table 49

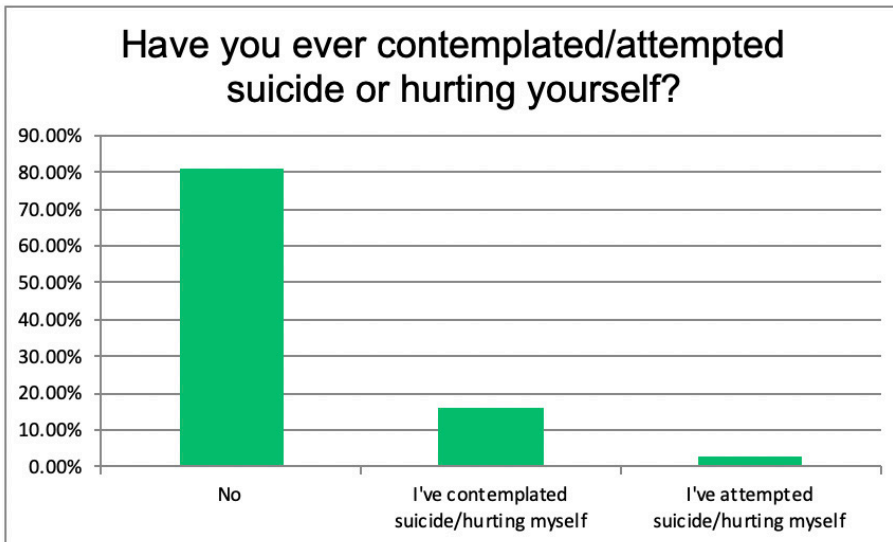


Table 50

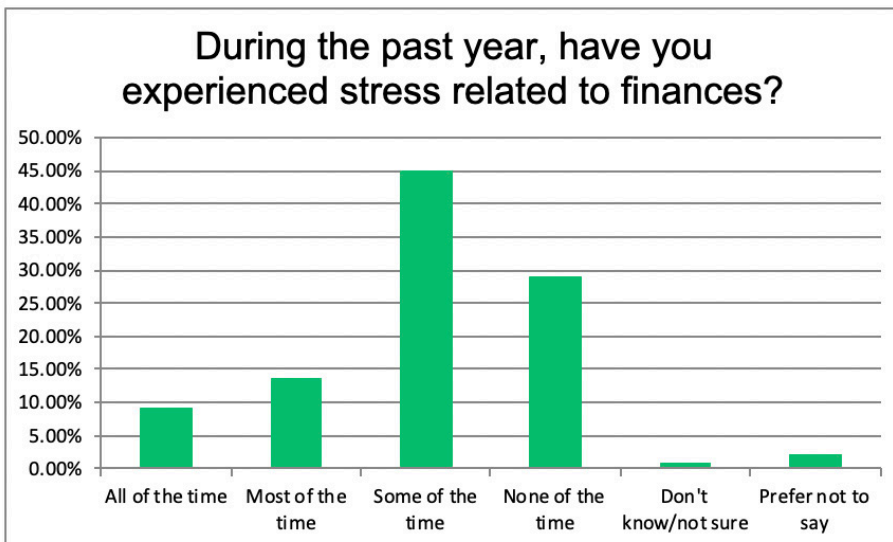


Table 51

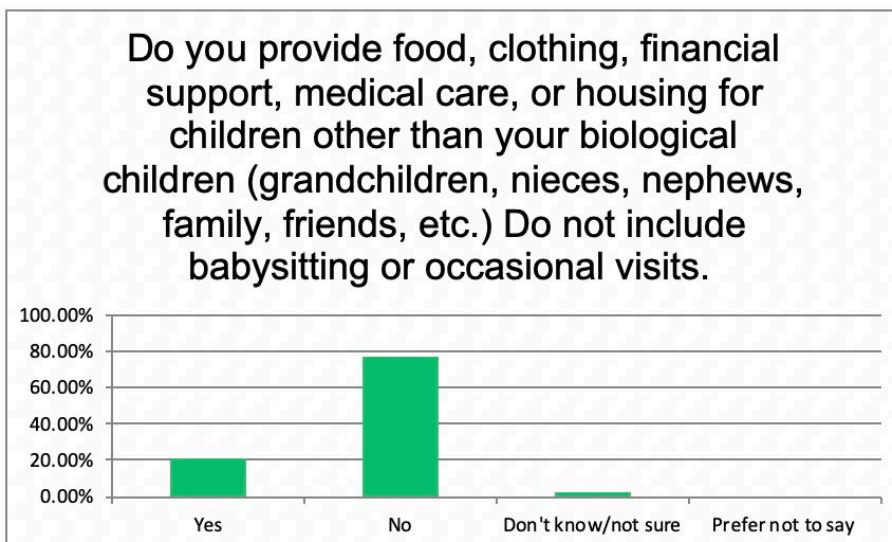


Table 52

## COMMUNITY THEMES AND STRENGTHS ASSESSMENT RESULTS

In April 2022, the HCHD began collecting survey responses for the community themes and strengths survey, which is intended to garner feedback from participants about how they view their community. A total of 69 county residents completed the survey.

Figure 15

What is the highest grade or year of school you have completed?

69 responses



Figure 16

Is your annual household income (from all sources)

69 responses

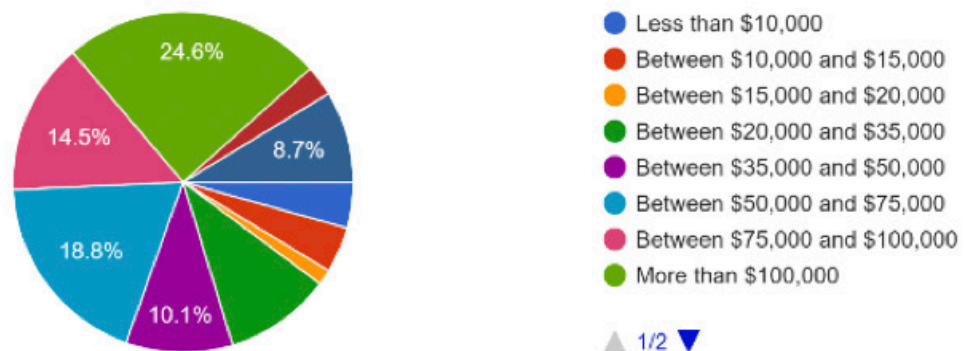


Figure 17

How satisfied are you with the quality of life in Highland County?

68 responses

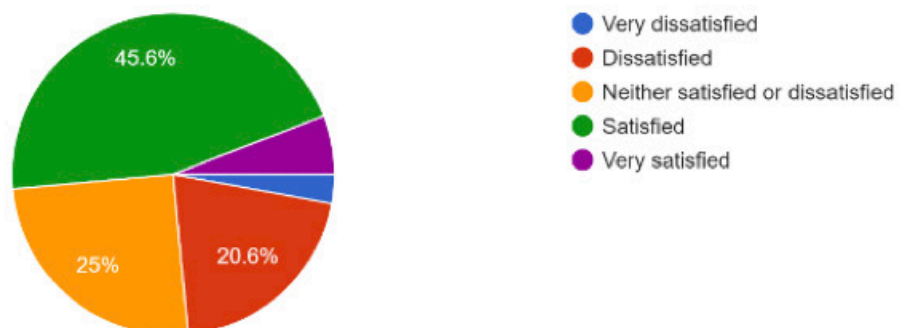


Figure 18

To what extent do you agree with the following statement? Highland County is a good place to raise children.

69 responses

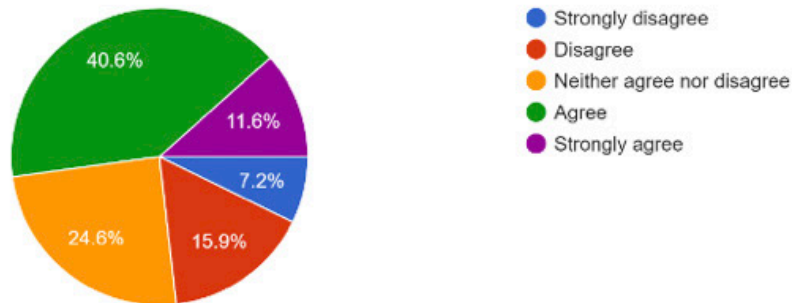


Figure 19

To what extent do you agree with the following statement? Highland County is a good place to grow older.

69 responses

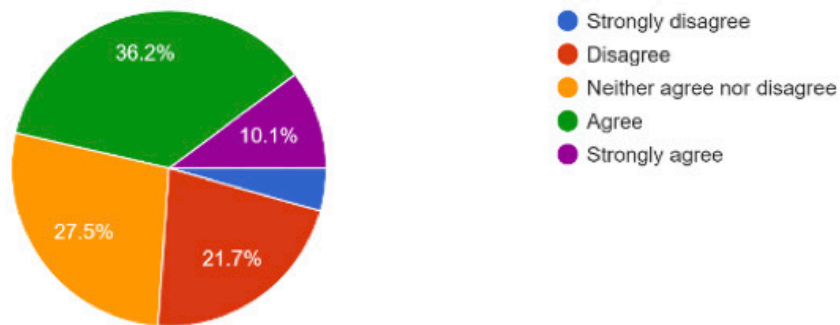


Figure 20

To what extent do you agree with the following statement? There is economic opportunity in Highland County.

69 responses

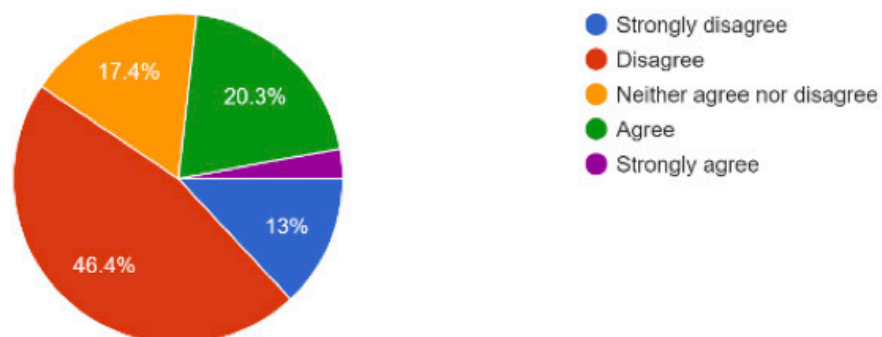


Figure 21

To what extent do you agree with the following statement? Highland County is a safe place to live.

68 responses

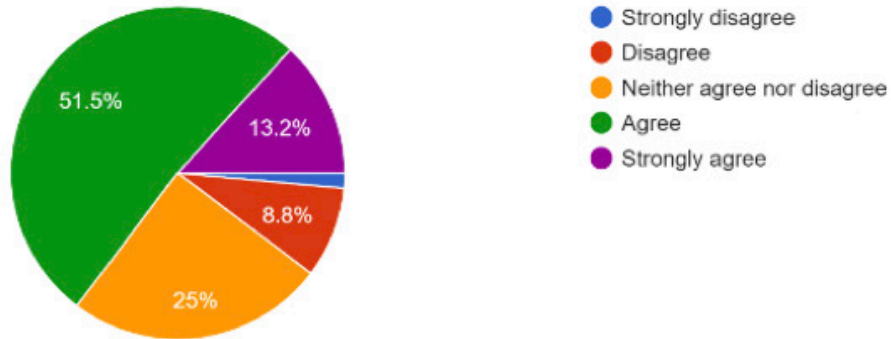
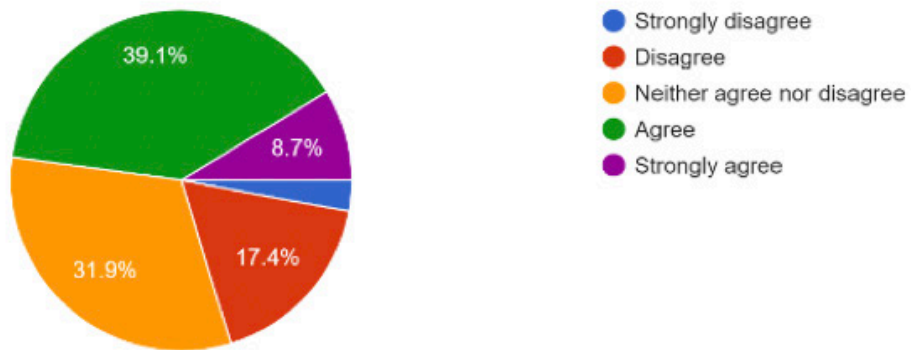


Figure 22

To what extent do you agree with the following statement? There are networks within Highland County that can provide support for individuals and families.

69 responses



## COMMON FEEDBACK FROM THE COMMUNITY THEMES AND STRENGTHS SURVEY 2022

**Q: What do you believe are the two or three most important characteristics of a healthy community?**

- Inclusivity
- Support
- Good education
- Outdoor spaces for the community
- Opportunities
- Safety
- Secure housing

**Q: What makes you most proud of our community in Highland County?**

- H.A.R.D (Hillsboro Against Racism and Discrimination)
- Small town
- Community sticking together/support
- Resilience

**Q: What are some specific examples of people or groups working together to improve the health and quality of life in our community?**

- H.A.R.D (Hillsboro Against Racism and Discrimination)
- Churches
- HCHD (especially the care-a-van)
- 4-H/AG programs
- Schools
- Hospitals
- Community action

**Q: What do you believe are the two or three most important issues that must be addressed to improve the health + quality of life in our community?**

- Access to mental health resources and education
- Drug use
- Crime
- More job opportunities
- Create family friendly outdoor spaces

**Q: What do you believe is keeping our community from doing what needs to be done to improve our health and quality of life?**

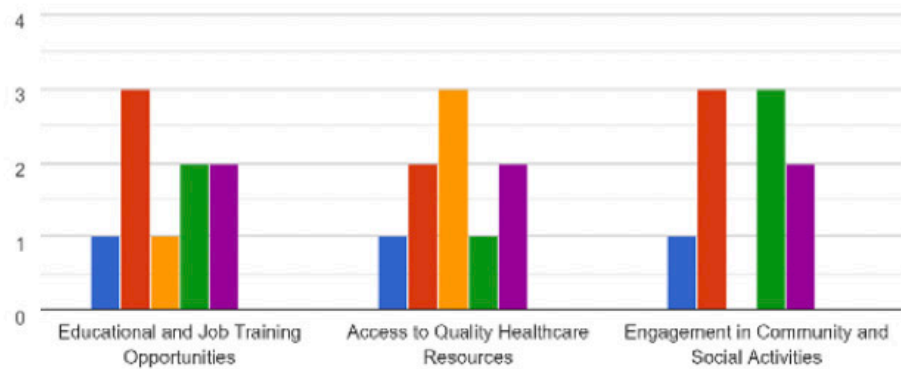
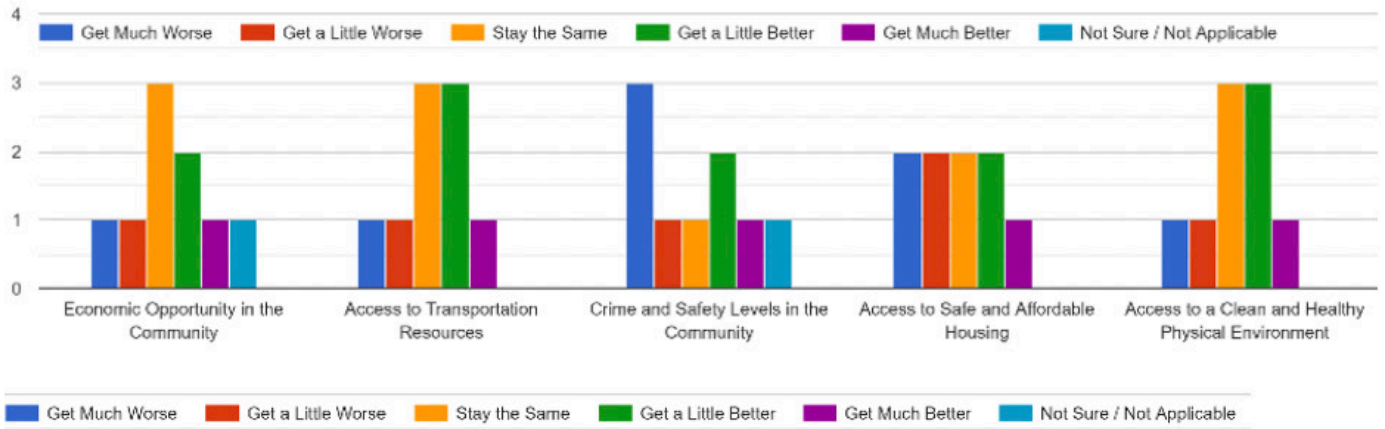
- Lack of education
- Lack of education on the resources offered to our community
- Poverty
- Politics
- Stuck in our “old ways”
- Better food options (healthier options)
- Improve the sex education



## FORCES OF CHANGE ASSESSMENT RESULTS

The Forces of Change assessment is intended to capture the underlying factors in Highland County that influence health outcomes and general quality of life. Those forces can be positive or negative. A total of nine respondents completed the survey.

Figure 23: Forces of Change Responses



<b>Have any recent events, legislation, technology, or other changes impacted our local community's health?</b>
Covid and everything President Biden has done.
Covid-19 and political climate
Abortion ban
Yes - I am concerned with peoples lack of concern for vaccinations to prevent Covid. The government has also been wishy washy with regulations.
Covid ups & downs
Covid, lack of rural internet
Abortion ban and reduced cellular service after 5G which inhibits access to education and medical services information. RFL area has worsened service.
Pandemic. The One-Payer model beginning 10/1/22 for Medicaid recipients should be a blessing for Highland County Medicaid recipients and their pharmacies (better access). TRICARE and Express Scripts have created a new contract for pharmacies that are forcing veterans to either use a large chain pharmacy or their VA for ALL scripts - the new contract will not be signed by Highland Co Independent Pharmacies because we will lose money on 95% of claims. That is sad.
No

<b>Are there any future forces of change that you expect to impact our community's health?</b>
President Biden
Progressivism
Climate change
I am not sure if the increased solar farms will have any impact but...changes in power sources could cause stress.
Lack of people getting vaccinated
Covid, economy
Recent legislative changes should lower pharmacy costs, but time will tell. Abortion bans could increase maternal deaths with illegal unsafe home abortions like pre-Roe vs. Wade. Real numbers will be untold.
The TRICARE contract for veterans through Express Scripts will impact patient care in the county at the pharmacy level.
no



<b>What forces are having an impact at the state and national level that could eventually impact Highland County?</b>
President Biden
Liberalism
Abortion bans and climate change
Healthcare funding and big pharmaceutical companies ties to insurance premiums will make medical care more difficult.
Pres Biden decisions
Covid, economy
Which political party controls our state and federal governments will impact health care - prevention, insurance deductibles, access to care, Medicaid expansions, nursing roles and authorities (APRN independence), and pharmacy costs.
Monkey Pox could cause problems but we should be able to mobilize and vaccinate quickly if we have supply. Inflation and the ripple effect will continue to hurt us at the pump and grocery. It will affect retired accounts and their incomes and could burden the county. Public Education funding seems stable at the moment thank heavens.
n/a

<b>What characteristics exist in our community that can be beneficial as we encounter forces of change? (Example: tight-knit community, safe school systems, etc.)</b>
We are a small tight-knit community
Mostly conservative Christian's in highland county keeping socialism and left wing ideals at bay.
Better leaders.
Strong local leaders who listen to the local community leaders and react according to community needs.
Small community, religious community
Strong community, safe schools, interconnected people,
Strong churches, good schools, overall caring community.
I think we know these.
communication

<b>What characteristics exist in our community that can be obstacles as we encounter forces of change? (Example: low education levels, high poverty rates, poor internet access)</b>
Drug use
Lack of young leaders with conservative or traditional values.
Low education levels
Community members who do not listen/read about issues - or pay more attention to Facebook posts or hearsay.
Low vaccine #s
Low education levels, poverty, lack of internet, lack of outdoor places for families (trails, bike paths, etc.) for exercise, limited public transportation
Inability of local leaders from townships to county to think outside the box. Continued drug use problem. Unsafe and horrible living conditions around RFL. Limited budget for law Enforcement. Poor internet.
Nothing new here.
poverty

## PUBLIC HEALTH SYSTEMS ASSESSMENT

The public health systems assessment is meant to measure the effectiveness of the public health system in the community. Questions were selected from a large group of potential assessment areas and aimed at measuring specific public health system components that are reflected in both the HCHD Strategic Plan and in the Highland County Community Health Improvement Plan.

Each question is presented with five potential response options, with “optimal activity” being the highest, and “no activity” being the lowest.

<b>Optimal Activity</b> (76-100%)	The public health system is doing absolutely everything possible for this activity and there is no room for improvement.
<b>Significant Activity</b> (51-75%)	The public health system participates a great deal in this activity and there is opportunity for minor improvement.
<b>Moderate Activity</b> (26-50%)	The public health system somewhat participates in this activity and there is opportunity for greater improvement.
<b>Minimal Activity</b> (1-25%)	The public health system provides limited activity and there is opportunity for substantial improvement.
<b>No Activity</b> (0%)	The public health system does not participate in this activity at all.

Figure 24

At what level does the local public health system use the best available technology and methods to display public health data?

6 responses

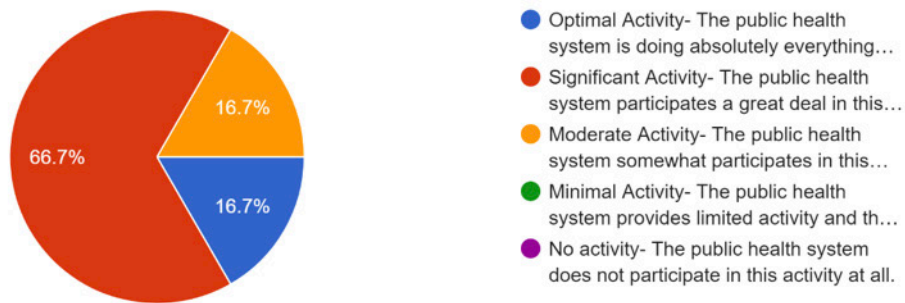


Figure 25

At what level does the local public health system use computer software to create charts, graphs, and maps to display complex public health data (trends over time, sub-population analyses, etc.)?

6 responses

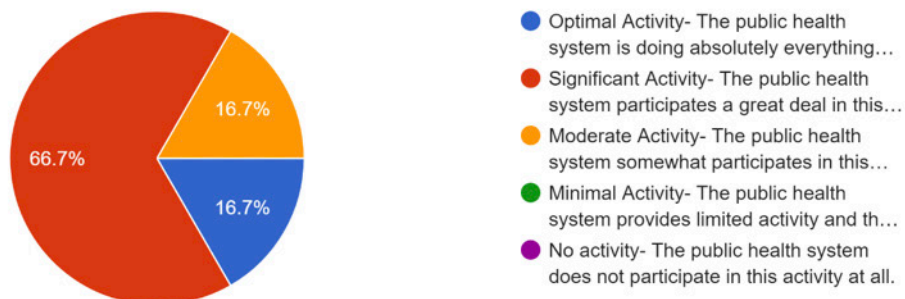
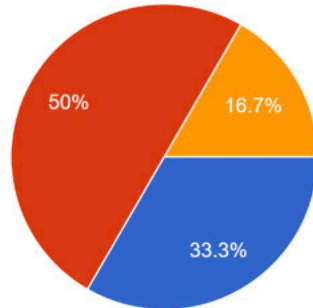


Figure 26

At what level does the local public health system provide and collect timely and complete information on reportable diseases and potential ...ies, and emerging threats (natural and manmade)?

6 responses

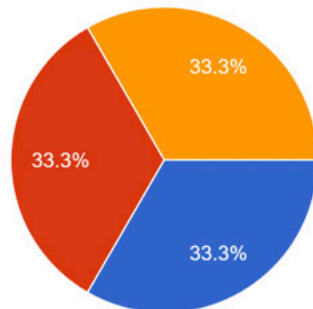


- Optimal Activity- The public health system is doing absolutely everything...
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- Moderate Activity- The public health system somewhat participates in this...
- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 27

At what level does the local public health system maintain written instructions on how to handle communicable disease outbreaks and toxic exposur...cing, and source identification and containment?

6 responses

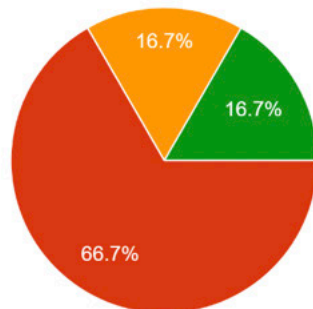


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- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 28

At what level does the local public health system provide policymakers, stakeholders, and the public with ongoing analyses of community health... recommendations for health promotion policies?

6 responses

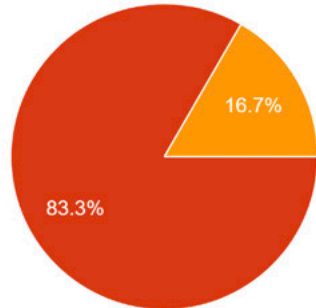


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- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 29

At what level does the local public health system coordinate health promotion and health education activities at the individual, interpersonal, community, and societal levels?

6 responses

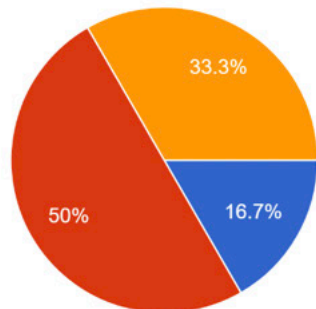


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- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 30

At what level does the local public health system use relationships with different media providers (e.g., print, radio, television, the Internet) to sh...tion, matching the message with the target audience?

6 responses

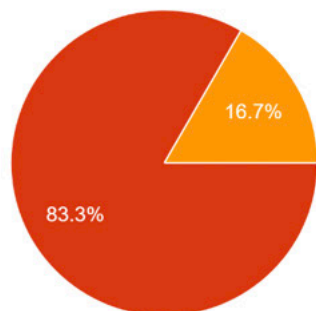


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- Significant Activity- The public health system participates a great deal in this...
- Moderate Activity- The public health system somewhat participates in this...
- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 31

At what level does the local public health system create forums for communication of public health issues?

6 responses

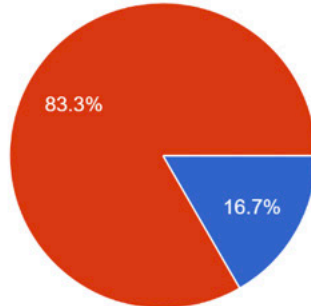


- Optimal Activity- The public health system is doing absolutely everything...
- Significant Activity- The public health system participates a great deal in this...
- Moderate Activity- The public health system somewhat participates in this...
- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 32

At what level does the local public health system establish community partnerships and strategic alliances to provide a comprehensive approach to improving health in the community?

6 responses

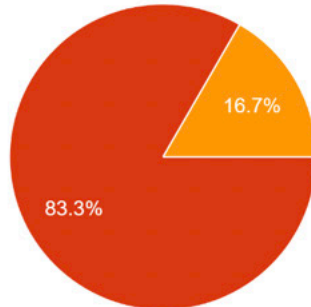


- Optimal Activity- The public health system is doing absolutely everything...
- Significant Activity- The public health system participates a great deal in this...
- Moderate Activity- The public health system somewhat participates in this...
- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 33

At what level does the local public health system ensure that the local health department has enough resources to do its part in providing essential public health services?

6 responses

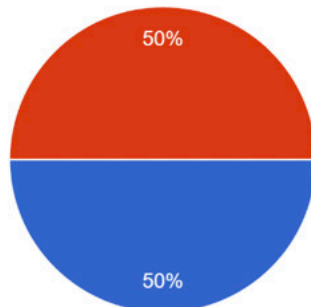


- Optimal Activity- The public health system is doing absolutely everything...
- Significant Activity- The public health system participates a great deal in this...
- Moderate Activity- The public health system somewhat participates in this...
- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 34

At what level does the local public health system ensure that all enforcement activities related to public health codes are done within the law?

6 responses

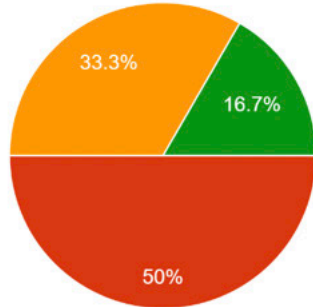


- Optimal Activity- The public health system is doing absolutely everything...
- Significant Activity- The public health system participates a great deal in this...
- Moderate Activity- The public health system somewhat participates in this...
- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 35

At what level does the local public health system educate individuals and organizations about relevant laws, regulations, and ordinances?

6 responses

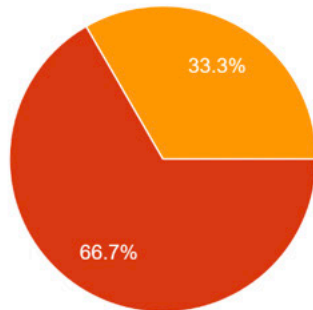


- Optimal Activity- The public health system is doing absolutely everything...
- Significant Activity- The public health system participates a great deal in this...
- Moderate Activity- The public health system somewhat participates in this...
- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 36

At what level does the local public health system use technology, like the Internet or electronic health records, to improve quality of care?

6 responses

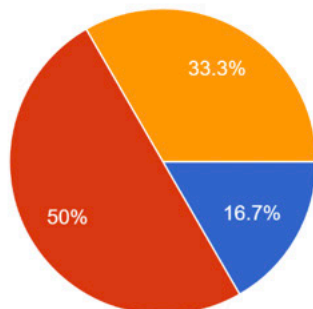


- Optimal Activity- The public health system is doing absolutely everything...
- Significant Activity- The public health system participates a great deal in this...
- Moderate Activity- The public health system somewhat participates in this...
- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

Figure 37

At what level does the local public health system partner with colleges, universities, or other research organizations to conduct public health r...including community-based participatory research?

6 responses



- Optimal Activity- The public health system is doing absolutely everything...
- Significant Activity- The public health system participates a great deal in this...
- Moderate Activity- The public health system somewhat participates in this...
- Minimal Activity- The public health system provides limited activity and th...
- No activity- The public health system does not participate in this activity at all.

**CONCLUSIONS AND NEXT STEPS**

As health outcomes and factors in Highland County, Ohio, have not changed since the last assessment, collaboration will be necessary around top health issues to have community impact. Data from this assessment will be useful for the community, as they develop and plan infrastructure that drives positive health outcomes.

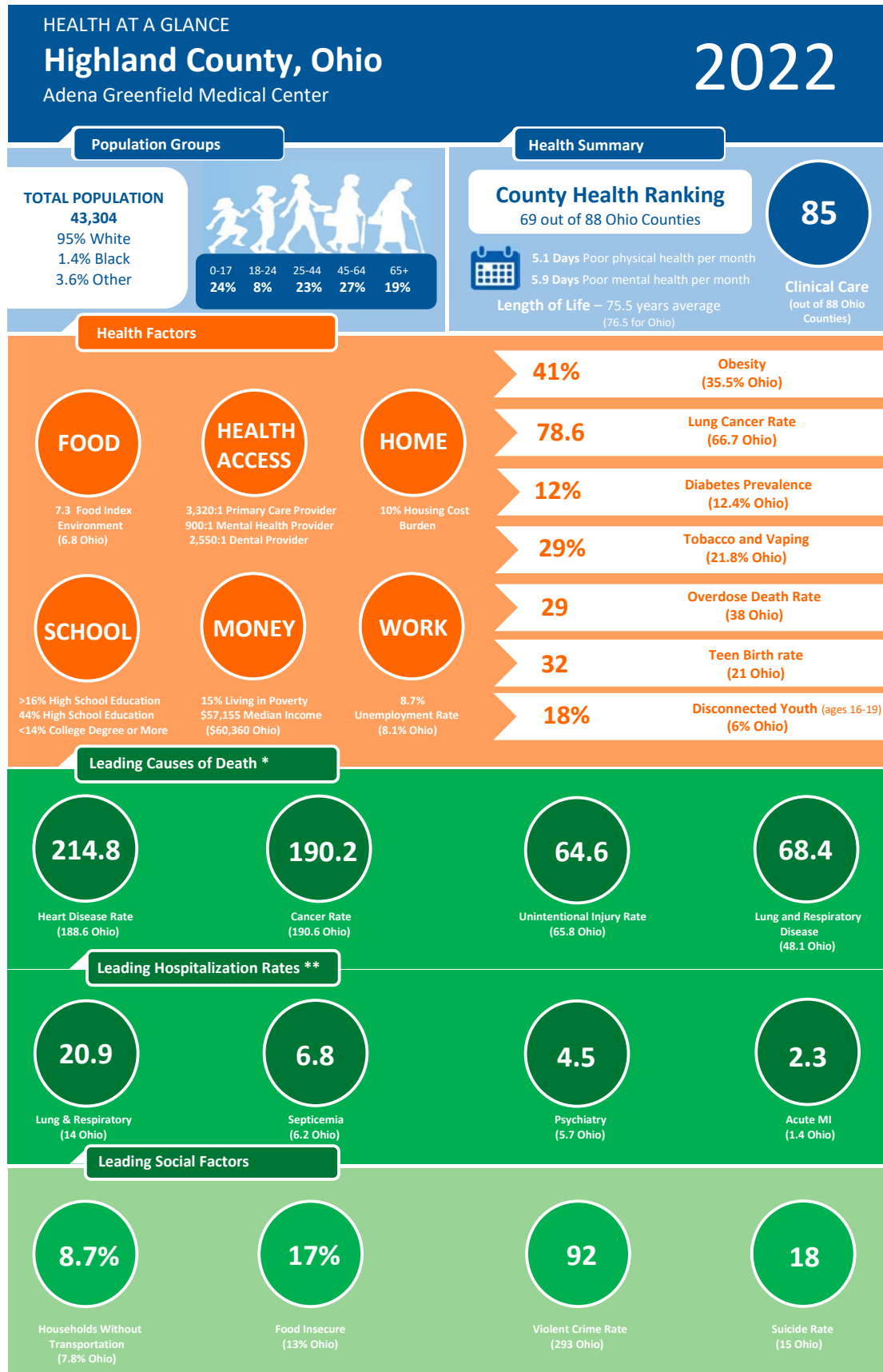
Next steps for the Highland County Health Collaborative will be to utilize this assessment to update and improve its 2019 community health improvement plan. Following the MAPP process, data will be further analyzed and prioritized, as well compared to the accomplishments from the last plan. Metric-driven goals can then be developed to further the efforts around improving priority health issues.



Figure 38: MAPP Strategic Planning Process



APPENDIX 1: HIGHLAND COUNTY INFOGRAPHIC



\*Rate per 100,000

\*\*Rate per 1000

Source1: ODH Public Health Data Warehouse, Lead Data, 2020

Source 2: Area Health Resource File, 2019, as compiled by County Health Rankings and Roadmaps, 2021





# Highland County Community Snapshot



## Population

Population:	43,304
White:	94.8%
Black:	1.4%
Hispanic:	1.3%
Asian:	0.5%
Other:	0.4%
% Below 18:	23.6%
% Above 65:	19.1%
% Rural	73.0%



## Education



No HS Diploma:	15.7%
HS Graduate:	43.7%
Some College:	16.3%
Associate's Degree:	10.5%
Bachelor's Degree or Higher	13.8%

## Income

Per Capita Income:	\$24,058
Median Household Income:	\$60,956
Individuals Below Poverty:	14.9%
Unemployment	8.7%



## Housing



Avg Monthly Rent:	\$679
Avg Mortgage:	\$1,062
Homeownership:	70.1%
Avg Home Age:	1977
Families w/Housing Cost Burden	10%

## Industry

Civilians Employed:	10,756
Workforce Participation:	56.9%
Education, Health, Social:	17.9%
Manufacturing:	11.4%
Retail Trade:	11.8%

